

CFE CANDIDATE NUMBER:

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**Common Final Examination
September 22, 2016 – Day 2
(Booklet #1 – Case)**

Total examination time: 5 hours.

Further details on the examination can be found on the next page.

GENERAL INSTRUCTIONS BEFORE THE EXAMINATION

1. Fill in your 7-digit candidate number on the booklets and the USB key. The exam booklets and the USB key (or paper response, as instructed) must be submitted before leaving the writing centre. They must **NOT BE REMOVED** from the writing centre. If these items are not received, the response may not be accepted.
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CANDIDATE NAME (Please print)

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Examination Details

The examination consists of:

Booklet #1 – Case (this booklet)

Booklet #2 – Rough notes

The case is developed to be four (4) hours. Candidates are allowed **five (5) hours** to respond.

The case should be answered in Securexam. Securexam has an answer tab and a spreadsheet tab to input your response. The main body of your response should be in the answer tab. Only supporting calculations should appear in the spreadsheet tab, **under Sheet 1**. A copy of the financial statements (balance sheet and income statement) from the case have been preloaded into the spreadsheet tab, **after Sheet 1**. The cells in this section are locked. You must copy and paste the financial statements into your **Sheet 1**, where you can then do all your calculations. You are responsible for clearly explaining all your calculations, as outlined in the Securexam tutorial.

Answers or part answers will not be evaluated if they are recorded on anything other than Securexam or the CPA Canada writing paper provided.

The CPA Canada Handbooks and the Income Tax Act, in the form of searchable PDF files, are available within Securexam throughout the entire examination. Securexam provides the standards in effect and tax laws enacted as at December 31, 2015.

A tax shield formula and other relevant tax information are available at the end of this booklet.

Rough-note paper is available in a separate booklet. Rough notes, and any other notations made in the exam booklet, will not be evaluated.

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Common Final Examination, September 2016

Chartered Professional Accountants of Canada
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Toronto, Ontario M5V 3H2

Case

Assume the pre-selected role in which you will be formulating your response. Answer all requirements as specifically directed in your role. Within the requirements for each role, candidates are directed to look at specific additional appendices, which are unique to each role. Use only the information you have been directed to refer to.

Information that is common to all roles is presented in the “Common Information” section. Additional information, customized to each role, is presented in the “Specific Information” section.

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**BACKGROUND
COMMON INFORMATION FOR ALL ROLES**

TankCo Limited (TankCo) is a privately-owned corporation that manufactures and sells steel tanks. TankCo was founded in 1984 by Lou Marshall, who built the company into its current successful position. TankCo has two divisions:

- Residential – Heating oil tanks are sold to distributors throughout northeastern North America, who then sell them to residential customers. TankCo is one of eight fabricators in the residential market, who are all dealing with the declining market. The key success factors for retaining distributor relationships are quality and service.
- Commercial – This division was created in 2012 when TankCo acquired a commercial tank manufacturer. Larger tanks, ranging from underground tanks for gas stations to large tanks situated at northern mining sites, are sold to commercial companies. There are dozens of metal fabrication shops that have the capacity to fabricate commercial tanks. The key success factor is delivering these large tanks to the customer on time.

Both residential and commercial tanks are manufactured in the same location. A small administrative office is leased in an office nearby.

The mission of TankCo has always been to produce reliable and safe steel tanks of the highest quality. The vision of TankCo is to become the leading manufacturer of steel tanks in the industry.

Lou was the driving force behind the company's growth and, until last year, had not missed a day of work in over thirty years. However, Lou's health began failing last year and he was forced to reduce his daily involvement. On January 24, 2016, Lou passed away at the age of 72.

Lou's two children, Rob and Sarah, each inherited 50% of his shares in TankCo. Rob is a doctor and Sarah has a business degree. Both are now in their late 40s and have never taken an interest in the business.

Lou established a Board of Directors years ago, which met semi-annually to advise Lou on business operations. Lou valued the board's advice on strategic, financial, and legal issues, as it compensated for his lack of a formal business education. With Lou's recent passing, the board is taking a more active role in representing the interest of the company and its new shareholders.

The current board chair is Rita McGuire, who until her retirement last year, was the engagement partner at CPA LLP, the company's public accountants. The other directors are comprised of a local city councillor, TankCo's outside legal counsellor, a local businessman and a retired executive with an international steel company.

BACKGROUND (continued)
COMMON INFORMATION FOR ALL ROLES

Today is January 28, 2016, and the board called an emergency meeting to review results and discuss the main issues. Rita commented:

“Last month, we hired Josh Hoppy for three months, to take Lou’s place on an interim basis, knowing there was a possibility that Lou might not be able to return to work. It’s unfortunate that Josh was unable to spend more time with Lou before he passed. While the board deliberates on TankCo’s future, Josh is managing the business. Josh has an operations background and was most recently a plant manager at a metal fabrication company.

“We have all just received the unaudited financial statements for 2015 (Appendix I), and the results indicate that, for the first time in its history, TankCo is losing money. This is probably a reflection of the limited amount of attention Lou paid to the business while his health was failing. Josh has performed an assessment of the current operations and developed the 2016 forecast (Appendix II), in preparation for the upcoming renewal of TankCo’s line of credit with the bank.”

REQUIREMENTS FOR YOUR ROLE
(READ ONLY THE ONE SPECIFIED FOR YOUR PRE-SELECTED ROLE)

ASSURANCE REQUIREMENTS

Today is January 28, 2016. You, CPA, are employed by CPA LLP and have just left the office of Madeline Murphy, the engagement partner who took over the TankCo file when Rita retired last year.

Given its private ownership, TankCo has never had an audit performed. CPA LLP has always performed a review engagement. However, given Lou's reduced involvement in operations over the past year, TankCo's board has requested an audit of its financial statements. As always, you attended the year-end inventory count. In anticipation of the audit, this year, you also met with management to gather information about the system of internal controls.

Based on a cursory review of TankCo's draft financial statements, Madeline thinks there are some accounting issues that will need to be addressed, including the financial reporting impact of the recent losses in the commercial division and whether these result in an impairment. She asks you to review TankCo's draft financial statements, discuss any accounting issues and propose any necessary adjusting entries. She would also like you to evaluate the impact of the adjusting entries on TankCo's compliance with the debt-to-equity covenant and its borrowing base.

Since this will be CPA LLP's first time auditing TankCo, Madeline would like you to prepare a memo discussing any engagement issues that you believe need to be considered, including a discussion of any potential issues with the firm's audit independence.

She then asks you to prepare the audit plan. Madeline suggests you look over the information you gathered and prepare a draft of the overall audit plan for 2015. She reminds you that the audit plan should include an assessment of the overall financial statement risk as well as a discussion of materiality and the audit approach. In addition, as part of your risk assessment, Madeline would like you to perform an analytical review of the income statement items to identify any changes that could raise additional risks. Finally, she would like you to document the procedures that you recommend be undertaken on the high-risk financial statement items. Canadian Bank has historically been the key user of TankCo's financial statements. Madeline instructs you to carefully consider the relevant extracts of the lending agreement and ensure that the bank's needs are considered in your audit plan.

Madeline also asks you to draft a memo, discussing any internal control deficiencies in the sales and purchasing cycles, so that she can include them in a management letter.

Finally, Madeline has recently been informed that the bank has invoked their right to a special report from the public accountants; therefore, she asks you to prepare a separate memo to her, explaining the reporting options available.

REQUIREMENTS FOR YOUR ROLE
(READ ONLY THE ONE SPECIFIED FOR YOUR PRE-SELECTED ROLE)

ASSURANCE REQUIREMENTS (continued)

In addition to the common appendices (I and II), the information provided in Appendix III (Assurance) is relevant for the year-end work that you have been asked to perform.

REQUIREMENTS FOR YOUR ROLE
(READ ONLY THE ONE SPECIFIED FOR YOUR PRE-SELECTED ROLE)

FINANCE REQUIREMENTS

You, CPA, work as a financial consultant for Family Business Consultants (FBC). Rich Mann, a principal at FBC, was called by Rita McGuire, asking that FBC help TankCo's board explore various issues.

TankCo experienced weak results in 2015 and lost money for the first time in its history. Rich has indicated that the results have not been reviewed or audited. Based on a cursory review of TankCo's draft financial statements, he thinks there are some accounting issues that will need to be addressed, including the financial reporting impact of the recent losses in the commercial division and whether these result in an impairment. Rich asks you to review TankCo's draft financial statements, discuss any accounting issues and propose any necessary adjusting entries. He would also like you to evaluate the impact of the adjusting entries on TankCo's compliance with the debt-to-equity covenant and its borrowing base.

Rich also asks you to compare TankCo's results to its historical performance and to industry statistics. To that end, he would like you to separately assess its financial performance for the year ended December 31, 2015, as well as its financial condition at December 31, 2015.

The board is currently evaluating the strategic options of the business, one of which might be to sell TankCo. To that end, the company has already prepared a valuation based on the fair market value of the net assets of TankCo, and has included this valuation for your information. To assist the board in its deliberations, Rich would like you to prepare valuations using two additional methods: 1) the capitalized cash flow approach; and 2) the transactional approach, assuming a multiple similar to recent transactions in the industry. Rich would then like you to conclude on an estimated value based on the entirety of your analyses.

The company is in the midst of developing a new line of fibreglass tanks. To help Rich assess the project, he asks you to use the gathered information to provide him with a capital budgeting analysis. You should provide your analysis from both a qualitative and quantitative perspective.

In terms of the lending arrangements and covenants, Rich asks you to use industry benchmarks and your quantitative analysis to identify possible savings and efficiencies, and to suggest ways to improve the company's liquidity and financial condition. He also asks you to provide an assessment of the financing options that have been presented.

In addition to the common appendices (I and II), the information provided in Appendix III (Finance) is relevant for the analyses that Rich would like you to perform.

REQUIREMENTS FOR YOUR ROLE
(READ ONLY THE ONE SPECIFIED FOR YOUR PRE-SELECTED ROLE)

PERFORMANCE MANAGEMENT REQUIREMENTS

You, CPA, work as a management consultant for Family Business Consultants (FBC). Rich Mann, a principal at FBC, was called by Rita McGuire, asking that FBC help TankCo's board address various issues and assess its strategic options.

TankCo experienced weak results in 2015 and lost money for the first time in its history. Rich has indicated that the results have not been reviewed or audited. Based on a cursory review of TankCo's draft financial statements, he thinks there are some accounting issues that will need to be addressed, including the financial reporting impact of the recent losses in the commercial division and whether these result in an impairment. Rich asks you to review TankCo's draft financial statements, discuss any accounting issues and propose any necessary adjusting entries. He would also like you to evaluate the impact of the adjusting entries on TankCo's compliance with the debt-to-equity covenant and its borrowing base.

Next, Rich would like you to qualitatively assess TankCo's current situation. He also asks you to compare the company's current performance and financial condition to its historical performance, and to industry statistics.

In its discussions with the board, management has been unable to explain why the commercial tank division appears to be unprofitable, and the accounting department is thinking about making an impairment adjustment. Rich believes the current costs are not appropriately allocated. He asks you to determine the best cost allocation method and use it to recalculate the costs and the resulting profits for each division, and then determine whether an impairment charge should be recorded.

TankCo is in the midst of developing a new line of fibreglass tanks. Information has been gathered on sales volumes, and TankCo would like FBC to analyze and recommend a pricing strategy for the new line.

As the new owners of TankCo, Rob and Sarah had Josh and his team provide a list of strategic priorities. Rob and Sarah would like you to critically assess whether each strategic priority is relevant based on your analysis of the company and industry.

Looking forward, Rob and Sarah are unsure what to do with the company: "Since we have never been involved with TankCo and, given the loss in 2015, we are open to different options for TankCo's future. We would be open to liquidating the company, selling the business or part of the business or continuing to operate TankCo. Could you evaluate these options and recommend our best course of action?"

**REQUIREMENTS FOR YOUR ROLE
(READ ONLY THE ONE SPECIFIED FOR YOUR PRE-SELECTED ROLE)**

PERFORMANCE MANAGEMENT REQUIREMENTS (continued)

In addition to the common appendices (I and II), the information provided in Appendix III (Performance Management) is relevant for the analyses that Rich would like you to perform.

REQUIREMENTS FOR YOUR ROLE
(READ ONLY THE ONE SPECIFIED FOR YOUR PRE-SELECTED ROLE)

TAXATION REQUIREMENTS

You, CPA, work for CPA LLP in the tax group. Madeline Murphy is the engagement partner who took over the TankCo file when Rita McGuire retired last year.

In addition to the normal tax compliance and planning work, Madeline asks you to perform some financial statement analysis. As TankCo is requesting an audit this year, Madeline would like you to address the accounting issues before the audit begins. Based on a cursory review of TankCo's draft financial statements, she thinks there are some accounting issues that will need to be addressed, including the financial reporting impact of the recent losses in the commercial division and whether these result in an impairment. She asks you to review TankCo's draft financial statements, discuss any accounting issues and propose any necessary adjusting entries. She would also like you to evaluate the impact of the adjusting entries on TankCo's compliance with the debt-to-equity covenant and its borrowing base.

TankCo has always relied on CPA LLP to calculate the income taxes payable. Madeline asks you to adjust for any accounting issues you identify and, based on the revised net income, to prepare an estimate of the taxable income and the taxes payable or refundable for 2015.

Next, TankCo is in the midst of developing a new fibreglass tank, which has involved a lot of research and development activities during the year. Management would like to know if there is special tax treatment for research and development costs, and has requested a report discussing how these costs should be treated for tax purposes.

In addition, assuming the fibreglass tank project goes ahead, management is unsure of whether to legally structure its operations as a division of TankCo Limited or in a corporation or a limited partnership. Madeline asks you to prepare a memo analyzing the options, being sure to consider tax planning and the company's objectives.

Lou's children had considered selling the company's shares but found no buyer. They have asked the board to consider selling the company's assets and distributing the after-tax proceeds between the two of them. Rob and Sarah have asked CPA LLP to estimate TankCo's net income for tax purposes resulting from the disposition of the corporation's assets, as well as the after-tax proceeds that would be available in the company after a sale of TankCo's assets (assume for this purpose that the fibreglass tank project remains inside TankCo, and is not moved into a separate entity before the sale). They would also like to know the amount of money each shareholder would be left with after the corporation's after-tax proceeds have been distributed and their personal taxes have been paid.

REQUIREMENTS FOR YOUR ROLE
(READ ONLY THE ONE SPECIFIED FOR YOUR PRE-SELECTED ROLE)

TAXATION REQUIREMENTS (continued)

Rita McGuire is the executor of Lou's estate. She has requested that CPA LLP explain the tax issues associated with Lou's death and estimate Lou's 2016 federal tax liability. She would also like to know what returns will need to be filed for Lou, and what opportunities may be available to minimize his taxes payable.

In addition to the common appendices (I and II), the information provided in Appendix III (Taxation) is relevant for the tax analyses that the partner would like you to perform.

APPENDIX I
EXCERPTS FROM DRAFT FINANCIAL STATEMENTS

Tankco Limited
Draft Balance Sheet
As at December 31
(in thousands of dollars)

	Note	2015 (unaudited)	2014 (unaudited)
Assets			
Current assets:			
Cash		\$ 89	\$ 51
Receivables, less allowance		1,930	1,891
Inventory	1	3,137	2,761
Prepaid expenses		248	250
		<u>5,404</u>	<u>4,953</u>
Property, plant and equipment, net	2	3,706	3,746
Development costs	3	564	0
Goodwill	4	2,000	2,000
		<u>\$ 11,674</u>	<u>\$ 10,699</u>
Liabilities			
Current liabilities:			
Bank indebtedness	5	\$ 2,883	\$ 1,091
Accounts payable and accruals	6	1,045	920
Current portion – long-term debt	5	500	500
		<u>4,428</u>	<u>2,511</u>
Long-term debt	5	3,000	3,500
		<u>7,428</u>	<u>6,011</u>
Shareholders' equity			
Share capital		100	100
Retained earnings		4,146	4,588
		<u>4,246</u>	<u>4,688</u>
		<u>\$ 11,674</u>	<u>\$ 10,699</u>

APPENDIX I (continued)
EXCERPTS FROM DRAFT FINANCIAL STATEMENTS

Tankco Limited
Draft Income Statement
For the Year ended December 31
(in thousands of dollars)

	Note	2015 (unaudited)	2014 (unaudited)
Sales, net of rebates	7	\$ 12,546	\$ 15,126
Operating expenses:			
Cost of sales, excluding depreciation	8	9,410	11,042
Selling, general and administrative		2,156	1,924
Depreciation		692	678
		<u>12,258</u>	<u>13,644</u>
Operating income		288	1,482
Interest expense		344	305
Earnings (loss) before taxes		(56)	1,177
Income taxes expense (recovery)	9	(14)	294
Net income (loss)		<u>\$ (42)</u>	<u>\$ 883</u>
Retained earnings, beginning of year		\$ 4,588	\$ 4,055
Net income (loss)		(42)	883
Dividends		(400)	(350)
Retained earnings, end of year		<u>\$ 4,146</u>	<u>\$ 4,588</u>

APPENDIX I (continued)
EXCERPTS FROM DRAFT FINANCIAL STATEMENTS

Additional Information and Notes

The financial statements for TankCo have been prepared using ASPE.

Note 1 – Inventory

	2015	2014
Raw materials	\$ 430,000	\$ 256,000
Work in progress	216,000	0
Finished goods	2,491,000	2,505,000
Total inventory	<u>\$ 3,137,000</u>	<u>\$ 2,761,000</u>

Note 2 – Property, plant and equipment

	Land	Building	Equipment	Total
Cost, January 1, 2015	\$ 500,000	\$ 5,175,000	\$ 9,968,000	\$ 15,643,000
Additions	0	10,000	642,000	652,000
Cost, December 31, 2015	<u>500,000</u>	<u>5,185,000</u>	<u>10,610,000</u>	<u>16,295,000</u>
Accumulated depreciation, January 1, 2015	0	4,227,500	7,669,600	11,897,100
Depreciation	0	103,700	588,080	691,780
Accumulated depreciation, December 31, 2015	<u>0</u>	<u>4,331,200</u>	<u>8,257,680</u>	<u>12,588,880</u>
Net book value, December 31, 2015	<u>\$ 500,000</u>	<u>\$ 853,800</u>	<u>\$ 2,352,320</u>	<u>\$ 3,706,120</u>

Note 3 – Development costs

All research and development costs are expensed as incurred in Selling, General, and Administrative expense, with the exception of the costs noted below.

Fibreglass tank project

The past year has been spent developing a next-generation, fibreglass oil tank. Discussions have been held with distributors, who are eager to start selling the tanks to their residential customers. A working prototype has been built, but we have three remaining steps to complete before proceeding with production:

- We need certification from the government, which we expect to receive within the next few months.
- We need the board's consent to proceed, in Lou's absence.
- We need to finance the start-up costs of the new business.

APPENDIX I (continued)
EXCERPTS FROM DRAFT FINANCIAL STATEMENTS

Additional Information and Notes (continued)

We anticipate being in commercial production, and shipping product, within one month of overcoming the three hurdles.

All \$564,000 of development costs related to the fibreglass tank project have been accumulated in a special balance sheet account, entitled Development Costs. The costs incurred to date include a \$120,000 non-refundable deposit on equipment and \$444,000 of design and other development costs.

Note 4 – Goodwill

Goodwill of \$2 million arose from the acquisition of a commercial tank manufacturer on January 1, 2012. The assets acquired became the commercial division at TankCo. The purchase price was based on four times earnings before interest, taxes, depreciation and amortization (EBITDA), which is the standard in the industry. The book value of the commercial division assets at December 31, 2015, was:

Working capital ¹	\$ 810,000
Production equipment ²	390,000
Goodwill	2,000,000

¹ The fair value of working capital approximates book value.

² Production equipment can be liquidated for approximately 60% of its carrying value.

APPENDIX I (continued)
EXCERPTS FROM DRAFT FINANCIAL STATEMENTS

Additional Information and Notes (continued)

Note 5 – Bank borrowing

The company has a credit facility with Canadian Bank, as follows:

a) Bank indebtedness – line of credit

The line of credit available is equal to, 80% of its accounts receivable 45 days and under plus 60% of its finished goods inventory, to a maximum of \$4 million. As at December 31, 2015, management calculated the borrowing base as follows:

	2015	2014
Receivables at 80%	\$ 1,544,000	\$ 1,512,800
Inventory at 60%	1,882,200	1,656,600
Borrowing base (maximum \$4 million)	<u>3,426,200</u>	<u>3,169,400</u>
Bank indebtedness	<u>2,883,031</u>	<u>1,090,637</u>
Available	<u>\$ 543,169</u>	<u>\$ 2,078,763</u>

b) Long-term debt – term loan

The term loan of \$3.5 million (2014 – \$4 million) is secured by equipment. It was arranged in 2011 in order to help pay for the commercial tank operation acquisition. The loan is being repaid over 11 years with equal annual principal payments.

Covenant

The credit facility requires maintenance of a debt-to-equity ratio of no more than 2:1 at each balance sheet date. Debt and equity are calculated as total liabilities and total equity, as measured using ASPE.

APPENDIX I (continued)
EXCERPTS FROM DRAFT FINANCIAL STATEMENTS

Additional Information and Notes (continued)

Note 6 – Lawsuits

It is common for the company to get named as a defendant in lawsuits pertaining to oil spills. TankCo is currently named in 21 such lawsuits, which is a significantly higher number than normal. To protect against exposure to payouts on successful claims, which typically range from \$255,000 to \$410,000 each, the company maintains annual insurance coverage of \$5 million with a \$20,000 deductible per claim, which has historically been sufficient. When named in a lawsuit, the cost of the deductible is accrued. If the lawsuit is subsequently dropped, the amount is reversed.

The continuity schedule of pending lawsuits, which is included in accounts payable and accruals, is as follows:

	Number of lawsuits	Accrued amount
Balance, December 31, 2013	8	\$ 160,000
New lawsuits in 2014	4	80,000
Deductibles paid out during the year	(2)	(40,000)
Lawsuits dropped	(1)	(20,000)
Balance, December 31, 2014	9	180,000
New lawsuits in 2015	19	380,000
Deductibles paid out during the year	(7)	(140,000)
Balance, December 31, 2015	21	\$ 420,000

Note 7 – Revenue

During the year, TankCo received a contract to manufacture four large commercial tanks for Goldie Corp, a mining customer, for delivery in 2015. As of December 31, 2015, three of the tanks have been completely manufactured and the remaining tank is 90% complete. Only one of the tanks has been delivered to the customer as the customer asked TankCo to keep the tanks at its plant until construction of the mine site is complete, which is anticipated to be by mid-2016. Each tank has a contract price of \$240,000 and is expected to generate a gross profit margin of 10%. Only one tank is manufactured at a time, and each tank takes three weeks to finish. The completed tanks are insured by the customer. As it has only collected payment for the tank that has been delivered, TankCo has only recognized the sale of one of the four tanks in the 2015 financials. The other three are included in inventory.

APPENDIX I (continued)
EXCERPTS FROM DRAFT FINANCIAL STATEMENTS

Additional Information and Notes (continued)

Note 8 – Cost of sales

TankCo has unionized plant workers. In February 2015, the workers went on strike for three weeks, and temporary contract workers were hired to replace the union workers during that time. It was subsequently determined that lower-quality units were produced by the temporary workers, and some tanks have since been confirmed to be defective. Thankfully, none of these defective tanks resulted in oil spills but some have been returned. Approximately 800 residential tanks were manufactured and shipped during that period, 32 of which have already been replaced at a cost of \$400 per tank. Management thinks that another 50 tanks might be defective and has committed to its distributors to replace any tanks with manufacturing defects for a period of one year after purchase.

Beyond an amount for those that have already been replaced, no amount has been included in the financial statements. In the past, it was rare for the company to experience returns from its distributors.

Note 9 – Income taxes

The taxes-payable method is used to account for income taxes. The combined effective tax rate has historically averaged 25%, and the company accrues income taxes throughout the year on this basis.

APPENDIX II
2015 OPERATIONS REPORT AND 2016 FORECAST

To: Board of Directors
 From: Josh Hoppy
 Re: 2015 – 2016 Operations review

The 2015 results were poor. I reviewed the results with the management team in order to develop the following forecast for 2016.

	Note	(in thousands of dollars)	
		2016 (forecast)	2015 (unaudited)
Sales	1	\$ 15,250	\$ 12,546
Operating expenses:			
Cost of sales, excluding depreciation	2	11,285	9,410
Selling, general and administrative	3	1,900	2,156
Depreciation	2	704	692
		<u>13,889</u>	<u>12,258</u>
Operating income		<u>\$ 1,361</u>	<u>\$ 288</u>

Note 1 – Sales by division

	(in thousands of dollars)		
	2016 (forecast)	2015 (unaudited)	2014 (unaudited)
Residential tanks	\$ 10,500	\$ 8,946	\$ 11,426
Commercial tanks	<u>4,750</u>	<u>3,600</u>	<u>3,700</u>
Total tank sales	<u>\$ 15,250</u>	<u>\$ 12,546</u>	<u>\$ 15,126</u>

APPENDIX II (continued)
2015 OPERATIONS REPORT AND 2016 FORECAST

2015 Sales review

The residential tank market is experiencing a slow decline, estimated at 2% per year. However, the decrease in sales for 2015 was also caused by the loss of a key distributor that switched suppliers due to TankCo's quality issues. In 2015, as a result of the defective tanks, TankCo offered existing distributors additional sales rebates of \$700,000.

Commercial tank sales were lower in 2015 than in 2014 as one less tank was sold. The tanks sold to Goldie Corp have been included in the 2016 forecast.

2016 Plan

Residential unit sales and selling prices are both forecasted to increase in 2016. I expect that we will get back the key distributor that we lost last year, and have included half of that lost volume in the forecast. The sales rebates expire in a few weeks and we expect to raise prices in line with the rest of the industry, resulting in an average selling price that is 7% higher than in 2015.

I also propose that we increase our average selling price of commercial tanks by \$10,000 per tank in 2016. We will complete the last tank and deliver it and the other two remaining tanks in the Goldie Corp contract. Otherwise, we anticipate selling volumes similar to 2014.

Note 2 – Cost of sales

	(in thousands of dollars)		
	2016	2015	2014
	(forecast)	(unaudited)	(unaudited)
Cost of sales – residential tanks	\$ 7,124	\$ 6,355	\$ 7,445
Cost of sales – commercial tanks	4,865	3,747	4,275
Cost of sales (includes depreciation)	<u>\$ 11,989</u>	<u>\$ 10,102</u>	<u>\$ 11,720</u>
Gross profit – residential tanks	\$ 3,376	\$ 2,591	\$ 3,980
Gross profit – commercial tanks	<u>(115)</u>	<u>(147)</u>	<u>(575)</u>
Gross profit	<u>\$ 3,261</u>	<u>\$ 2,444</u>	<u>\$ 3,405</u>

APPENDIX II (continued)
2015 OPERATIONS REPORT AND 2016 FORECAST

2015 Performance

The residential division experienced lower costs in 2015, largely due to 8% fewer unit sales in 2015 than in 2014. Lower volumes led to higher unit costs as fixed overhead was spread over fewer units.

Commercial tank costs were lower in 2015 than in 2014, due to efficiency savings achieved in each of direct materials, direct labour and variable overhead.

2016 Plan

Both divisions expect cost increases of 2%. We expect fixed overhead to increase slightly over 2015 due to inflation.

Note 3 – Selling, general, and administrative expenses

2015 Performance

Costs were higher in 2015 because there were additional costs associated with the delivery of replacement tanks for the defective ones, and a greater-than-normal number of lawsuits. All other expenses were comparable.

2016 Plan

Administrative overhead has been budgeted with no increase, and no incremental costs associated with shipping replacement tanks for defective products, or for increased lawsuits.

***ASSURANCE ROLE
ADDITIONAL INFORMATION***

APPENDIX III
ASSURANCE – ADDITIONAL INFORMATION

Information on the Control Environment
As Discussed with Josh Hoppy and Various Staff Members

Entity level controls

Prior to his illness, Lou was very involved in the business and approved all major decisions, including approval of all expenditures. However, as his involvement during 2015 was sporadic, Marvin Bell, TankCo's controller, was given authority to act on Lou's behalf. Marvin does not have a formal accounting designation but he is a conscientious, long-time employee. Marvin has one accounting clerk who supports him in his role.

Three years ago, TankCo converted to a cloud-based accounting system, which has resulted in the elimination of its IT department staff and its servers. The accounting system is well developed and widely used by organizations in a variety of manufacturing sectors. The system allows user roles to be configured, to enhance segregation of duties.

Sales cycle

TankCo sells its residential tanks through a distributor network of several hundred customers. These customers order tanks in batches of at least 10, which is the minimum number of tanks that TankCo will ship. Due to their size and customized nature, commercial tanks are sold in single quantities. The administrative process for invoicing and collection is the same for both divisions.

Orders are submitted through a secure website that is fully integrated with a module of the financial system. Each customer has a unique login and profile that specifies a credit limit and the terms of sale. These terms are populated by the controller, who is the only person with access.

Orders are received by the operations team and shipments are filled from inventory, or are scheduled on back order if the inventory has yet to be manufactured. Backlogged orders are typically shipped within a few weeks.

When orders are shipped, the operations people key in the quantity of tanks, and the system instantly and automatically generates an invoice that is sent to the customer electronically. Standard credit terms are net 45 days, although some customers have negotiated early payment discounts, which are tracked in the system.

Remittances from customers are made through electronic funds transfer. The accounting clerk reviews the deposits by viewing an online bank statement on a daily basis. A listing of customer receipts is prepared, and entries are made in the financial system to apply remittances against customers' accounts.

APPENDIX III (continued)
ASSURANCE – ADDITIONAL INFORMATION

Information on the Control Environment (continued)
As Discussed with Josh Hoppy and Various Staff Members

Purchasing cycle

TankCo purchases a variety of raw materials to manufacture its tanks, from steel to welding supplies. TankCo's five shop foremen and one production manager are all authorized to issue purchase orders for materials, as required, without approval. To solicit the best price, the company uses a number of suppliers and does not limit who their employees can purchase from as there is no list of pre-approved vendors.

Materials are delivered to the receiving area, where a warehouse employee receives the bill of lading and files it away. When the supplier invoice is received, which may be that day or a few days later, the accounting clerk enters the payable amount into the accounting system and selects a payment date.

Cheques are printed each week. The system selects all invoices scheduled for payment in that week and automatically prints the cheques.

The cheques typically require one signature, Lou's, but Marvin Bell has been the signer since June of last year. The accounting clerk mails the signed cheques to the suppliers.

The accounting clerk prepares a monthly bank reconciliation that is filed and available for review upon request.

APPENDIX III (continued)
ASSURANCE – ADDITIONAL INFORMATION

Extracts from the Lending Agreement with Canadian Bank

Covenants:

- The borrower will furnish the lender with financial statements that have had a review engagement performed by an independent public accountant within 45 days of the year-end reporting date.
- Upon request by the lender, the borrower will furnish a special report, audited by an independent public accountant, calculating the provisions of this agreement.
- The borrower shall not exceed a debt-to-equity ratio of more than 2:1.
- The borrower shall not draw on the line of credit facility in excess of its borrowing base, which shall be determined as the lesser of:
 - \$4 million
 - 80% of third-party receivables aged 45 days and under, plus 60% of finished goods inventory

Violation or default of any term under the lending agreement triggers a 30-day remedy period for the borrower. If the situation is remedied to the bank's satisfaction, the terms and conditions of the lending agreement shall remain in place. However, if the violation or default is not corrected within 30 days from when the financial statements are issued, all loans under both the term and line of credit facilities will become payable on demand.

APPENDIX III (continued)
ASSURANCE – ADDITIONAL INFORMATION

Extracts from Last Year's Review Engagement File

Key areas of discussion and inquiry

Receivables:

- Standard credit terms are net 45 days for all distributors. Other than for very rare exceptions, customers pay within this time frame. As it deals with a stable group of long-term distributors who are well capitalized, the company has experienced very few bad debts historically. The balance of receivables and the provision for bad debt appear plausible.

Inventory:

- At the request of the client, we attended the inventory count at year end, in case the bank exercises its option to request a special report. In 2014, the bank did not request a special assurance report on its security position.
- Inventory includes raw materials and any work in progress. At December 31, 2014, there was no work in progress. Raw materials largely consist of coiled sheets of rolled steel. We discussed the costing of the raw materials and are satisfied that management has recorded these at the appropriate value.

Property, plant and equipment:

- The company owns a large manufacturing plant in an industrial park. A separate office is leased for administration.
- The company uses specialized robotic equipment to streamline the assembly line and to perform tasks such as bending and forming the steel sheets for the residential tank operations.
- In 2014, the company spent \$776,000 in capital expenditures on the plant. These were discussed with management and all appear to be appropriately capitalized. There were no other costs that warranted capitalization.

APPENDIX III (continued)
ASSURANCE – ADDITIONAL INFORMATION

Extracts from Last Year's Review Engagement File (continued)

Accounts payable:

- We reviewed the listing of accounts payable and the various accrual balances. The company has been diligent in paying according to its terms of credit and nothing unusual was noted.
- The company's provision for lawsuits has followed the previous year's practice and appears suitable.

Cash, line of credit and term loan:

- These balances were all confirmed with Canadian Bank.
- Interest expense was recalculated to determine plausibility.
- The lending covenants were recalculated and no issues were noted. The result is as follows:

	Lending covenant	2014 Result
Debt-to-equity ratio (Total liabilities/total equity)	< 2:1	1.3:1

<p><i>FINANCE ROLE ADDITIONAL INFORMATION</i></p>
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APPENDIX III
FINANCE – ADDITIONAL INFORMATION

Industry Statistics for the Metal Fabrication Sector

The metal fabrication industry is comprised of a variety of manufacturers involved in the cutting, milling, pressing and forming of metal. Industry statistics for the metal fabrication industry are as follows:

Sales growth – residential (2015)	- 2.0%
Sales growth – commercial (2015)	3.1%
Gross profit margin	24%
Operating margin	10%
Return on equity	9.2%
Current ratio	1.45
Receivable turnover	9 times
Inventory turnover	6 times
Debt-to-equity ratio	1.02

The cost-of-equity statistics for this sector are as follows:

Beta	1.5
Risk-free return	4%
Risk premium	9%

A review of comparable transactions in the industry over the past 12 months indicate an enterprise value / EBITDA multiple of four times.

APPENDIX III (continued)
FINANCE – ADDITIONAL INFORMATION

Fair Market Value of Net Assets

All tanks are manufactured in one location. As at December 31, 2015, the carrying value and the appraised value of the company's property, plant and equipment for that single location are as follows:

(in thousands of dollars)	Carrying value	Appraised value
Land	\$ 500	\$ 2,000
Building	854	4,000
Equipment	2,352	1,500
Total	\$ 3,706	\$ 7,500

As at December 31, 2015, the estimated fair market value of the net assets (also known as the adjusted book value approach) is as follows:

(in thousands of dollars)	
Net book value of equity (unaudited)	\$ 4,246
Fair market value bump of PP&E (above)	3,794
Adjusted book value of net assets	\$ 8,040

APPENDIX III (continued)
FINANCE – ADDITIONAL INFORMATION

Fibreglass Tank Project

To: Board of Directors
From: Josh Hoppy
Re: Fibreglass tank project

Fibreglass tanks are more durable and last longer than traditional steel tanks. This project has been ongoing since the beginning of last year and considerable resources have been spent on developing a prototype that is ready for certification by the provincial Health and Safety Department.

The strategic rationale for developing a fibreglass tank is to protect our share in the residential tank market. Lou and the other managers believed it was necessary for us to continue to be a single-source supplier of all types of tanks for our existing distributors, and possibly others. In addition to the potential for an increased market share, these tanks should generate higher margins over our traditional steel tanks.

There is currently one competitor offering fibreglass tanks but we believe our product is superior to theirs. This competitor has been making significant penetration into the traditional steel tank market, even though fibreglass tanks cost the consumer almost twice as much as steel tanks.

The operations are not complex and the manufacturing process has already been designed. A suitable production site has been identified and we have equipment suppliers on standby, ready to install the production equipment.

APPENDIX III (continued)
FINANCE – ADDITIONAL INFORMATION

Fibreglass Tank Project (continued)

The business plan assumptions are as follows:

- Sales and gross profit margin:

		Year 1	Year 2	Year 3	Year 4	Year 5
Production capacity	units	6,000	6,000	6,000	6,000	6,000
Sales	units	2,000	4,000	6,000	6,000	6,000
Selling price		\$1,000	\$1,000	\$1,000	\$1,000	\$1,000
Gross profit margin (excluding depreciation)		40%	40%	40%	40%	40%
Gross profit		\$800,000	\$1,600,000	\$2,400,000	\$2,400,000	\$2,400,000

- Volume of sales: A conservative assumption would be that sales of fibreglass tanks replace steel tanks that would otherwise be sold by us. However, we realistically think that having the fibreglass tank in our product portfolio will increase the volume of our overall sales by 20%. Steel tanks are expected to sell for \$525 per unit, at a 28% gross profit margin (excluding depreciation), for the next five years.
- Direct selling, general and administrative costs: Management estimates incremental fixed costs of \$450,000 to support the new product line. Variable direct labour and materials and other fixed and variable manufacturing costs have been included in calculating gross profit.
- Capital costs: The new production equipment will cost \$1.6 million. The equipment qualifies for a 30% capital cost allowance. The equipment has an economic life of five years and supports annual production capacity of 6,000 tanks. The equipment will have no residual value after five years.
- Working capital: The new product line will require an additional working capital investment equivalent to 45 days of sales.
- Costs incurred: To date, the company has incurred \$564,000 on this project.

APPENDIX III (continued)
FINANCE – ADDITIONAL INFORMATION

Financing Options

In addition to the credit facility with Canadian Bank, the board has identified the following sources of financing.

Real estate mortgage

TankCo currently owns its real estate (land and building) without debt. The land and building have an appraised value of \$6 million. After soliciting interest from a number of lenders, the best proposal for using the real estate as collateral yielded a five-year term mortgage, with a 20-year amortization schedule of equal annual repayments, at a fixed rate of 4.75% and a loan-to-value ratio of 60% of the appraised value of the real estate. The company must maintain a debt service coverage ratio of greater than 1.2 each year.

Sale lease-back

TankCo could also sell its real estate (land and building) outright and lease it back. The term of the lease would be 10 years, which is approximately half of the remaining life of the building. Lease payments of \$500,000 would be due annually at the beginning of the year. The implicit lease rate is 5.45%. The lessee would still be responsible for all operating and maintenance costs of the property.

***PERFORMANCE MANAGEMENT ROLE
ADDITIONAL INFORMATION***

APPENDIX III
PERFORMANCE MANAGEMENT – ADDITIONAL INFORMATION

Product Costing Information

The controller, Marvin Bell, has provided the following costing information for 2015:

Residential tanks	Per unit	Total
Selling price	\$492	\$8,946,000
Direct materials	\$103	\$1,873,000
Direct labour	\$101	\$1,836,000
Variable OH	\$48	\$873,000
Fixed OH applied*	\$98	\$1,773,000
Cost of sales	\$350	\$6,355,000
Gross profit	\$142	\$2,591,000
Contribution margin	\$240	\$4,364,000

Commercial tanks	Per unit	Total
Selling price	\$240,000	\$3,600,000
Direct materials	\$97,467	\$1,462,000
Direct labour	\$72,867	\$1,093,000
Variable OH	\$9,133	\$137,000
Fixed OH applied*	\$70,333	\$1,055,000
Cost of sales	\$249,800	\$3,747,000
Gross profit	(\$9,800)	(\$147,000)
Contribution margin	\$60,600	\$909,000

* Fixed overhead is applied on direct labour hours and includes depreciation.

APPENDIX III (continued)
PERFORMANCE MANAGEMENT – ADDITIONAL INFORMATION

Product Costing Information (continued)

Cost allocation methodology

Tank fabrication has historically been a labour-intensive process; as a result, fixed plant overhead has always been allocated on the basis of direct labour hours.

Most raw material and direct labour costs can be easily attributed to either the residential-tank or the commercial-tank line.

The residential tanks are manufactured in an assembly-line format that uses 80% of the floor space of the plant and 90% of the equipment. The commercial tank uses a large, open space at the back of the plant, accounting for the other 20% of the floor space and 10% of the equipment.

Shipping and receiving expenses are driven by the number of orders; 75% of orders are for residential customers.

The manufacturing process of the residential tanks was modified three years ago to utilize a higher degree of robotic welders and mechanized equipment. The cost of this equipment was paid for by the direct-labour savings.

By comparison, the commercial tank production is still largely a manual process, where pre-formed steel slabs are assembled, welded and coated without ever moving the tank, which, due to its size, is impossible.

Costs that make up fixed plant overhead are as follows:

Fixed overhead	Cost driver	2015 (actual)
Plant depreciation	Equipment use	\$ 692
Production management – residential	Production volume	602
Production management – commercial	Production volume	158
Property taxes and insurance	Floor space	645
Shipping and receiving	Number of orders	437
Plant repairs and maintenance	Floor space	294
		<u>\$ 2,828</u>

Over/under applied fixed overhead have been allocated to cost of goods sold and finished goods inventory, using a pre-determined ratio.

APPENDIX III (continued)
PERFORMANCE MANAGEMENT – ADDITIONAL INFORMATION

Memo from Rob and Sarah Marshall

To: CPA
From: Rob and Sarah Marshall
Re: Strategic planning

Since we know little about the industry, Josh has provided us with the following brief overview, along with TankCo's priorities for the year.

Industry analysis

The tank fabrication sector is a subset of the metal fabrication industry. The tank fabrication sector is highly fragmented, with many small operators competing to produce oil tanks, propane tanks and water tanks, using various metal composites and fibreglass.

Residential heating oil tank sector

Residential heating oil tanks are predominately used in the northeastern market, where electricity has historically been expensive and natural gas penetration is low. It is estimated that there are two million residential tanks currently installed at homes across this region.

However, as heating with oil is no longer the favoured home heating source, this line is experiencing an estimated decline of 2% per year, as newer homes are built with alternative heating systems and existing homes are converting from oil systems. Also contributing to declining sales is the increasing life of an oil tank. Steel oil tanks need to be replaced every 10 years but fibreglass tanks made by the competition can currently last 15 years, and TankCo's new fibreglass tanks, that should be on the market soon, should last 20 years. These product enhancements have made the replacement cycle for new tanks longer. Any decline in sales due to volume has historically been offset by increases in pricing across the industry.

Commercial tank sector

Commercial tank volumes are sensitive to economic cycles. The industry is in a growth phase, which is expected to continue for years to come. Commercial tanks require a large, open space to construct, and specialized welding and forming expertise. The end uses of commercial tanks are wide, and vary from subterranean tanks for gas stations and commercial buildings to tanks used in northern mine sites.

APPENDIX III (continued)
PERFORMANCE MANAGEMENT – ADDITIONAL INFORMATION

Memo from Rob and Sarah Marshall (continued)

Industry statistics for the metal fabrication industry are as follows:

Sales growth – residential (2015)	- 2.0%
Sales growth – commercial (2015)	3.1%
Gross profit margin %	24%
Operating margin %	10%
Current ratio	1.45
Inventory turnover	6 times
Debt-to-equity ratio	1.02

Josh and his team have provided their strategic priorities for the coming year. We would like your thoughts on each of them, and whether their successful implementation would be enough to warrant continuing to own and operate TankCo.

- Regain the major residential tank distributor that was lost in 2015. We believe we can regain this particular distributor's business if we offer an additional 5% discount through 2016. Forecasted sales for 2016 are 19,950 units.
- Complete testing and obtain certification for the fibreglass tanks. These tanks sell at a premium in the market and offer the possibility of higher margins and a larger market share. We are still finalizing the pricing. The 2016 forecast excludes the fibreglass tank opportunity.
- Although we forecasted sales of 19 commercial tanks, we believe the commercial tank division should be phased out, as these tanks are contributing a negative gross profit in the 2016 forecast. This change would result in an upside change to the forecast circulated to the board, which assumes TankCo is continuing this line of business in 2016.

APPENDIX III (continued)
PERFORMANCE MANAGEMENT – ADDITIONAL INFORMATION

Fibreglass Tank Opportunity

To: FBC
 From: Josh Hoppy
 Re: Fibreglass tank opportunity

The strategic rationale for developing a fibreglass tank is to protect our share in the residential tank market. Lou believed it was necessary for us to continue to be a single-source supplier of all types of tanks for our existing distributors, and to encourage other distributors to switch to TankCo because of its product line diversification. Fibreglass tanks can be more profitable than steel tanks but generally sell for twice as much, which will limit their market penetration.

	Steel tanks	Fibreglass tanks
Useful life	10 years	20 years
Relevant manufacturing cost	\$375	\$600
Manufacturer's selling price	\$525 (2016 budget)	See below

There is currently one competitor offering fibreglass tanks but we believe our product will be superior, as our tank should last five years longer. This competitor has been making significant penetration into the residential tank market and is currently selling its fibreglass tanks for \$900 each.

Based on market research, estimates for market size and market share for fibreglass tanks at different price levels are as follows:

Manufacturer's price	Market demand (# of tanks)	TankCo's estimated market share	Replacement of TankCo steel tank volume *
\$700	50,000	80%	35%
\$800	20,000	75%	45%
\$900	15,000	65%	50%
\$1,000	12,000	60%	55%
\$1,100	6,000	35%	80%

* This is the amount of TankCo steel tank sales that would be replaced by fibreglass tank sales. For example, at \$700, TankCo would sell 14,000 fewer steel tanks (50,000 x 80% x 35%).

***TAXATION ROLE
ADDITIONAL INFORMATION***

APPENDIX III
TAXATION – ADDITIONAL INFORMATION

TankCo Limited Tax Information

Undepreciated capital cost

	December 31, 2014	Additions in 2015
Class 1	\$944,115	\$10,000
Class 8	\$80,211	\$1,013
Class 29	\$3,029,120	\$640,987
Cumulative eligible capital	\$1,206,536	\$0

There were no disposals during the year. The assets making up the December 31, 2014, balance in Class 29 were all acquired in 2014.

Tax attributes of the issued and outstanding shares

There are 1,000 common shares issued and outstanding, with a paid-up capital of \$100,000.

The company shares had always been owned by Lou Marshall and were inherited equally by his two children upon his death on January 24, 2016.

Other expenditures that were incurred in 2015

Meals and entertainment	\$2,421
Term life insurance on Lou Marshall	\$3,244
Country club dues for Lou Marshall	\$4,783

These items were all included in Selling, General and Administrative expenses. Due to its poor operating performance, TankCo made no tax instalments during the year.

APPENDIX III (continued)
TAXATION – ADDITIONAL INFORMATION

TankCo Limited Tax Information (continued)

Fibreglass tank project

The company saw an opportunity to enter the fibreglass tank market to further differentiate its value proposition to its customers. While other fibreglass tanks have previously been developed, the company looked to improve the durability and stability of the tank with a mix of resins that had not been used previously. TankCo contracted a chemical engineer to develop the resin formulation and to perform tests on the next-generation tank. TankCo used its own internal resources to design and build the tank prototype. The resulting tank should last five years longer than comparable fibreglass tanks currently on the market.

TankCo has not yet decided whether the line of business will remain within TankCo or whether it will be a separate entity. The manufacturing facility for the fibreglass tank is planned to be separate from the manufacturing facility for the steel tanks. The following project costs have been incurred, and recorded in a separate asset account on the financial statements.

	Costs expended to date
Tank design costs (contractor)	\$130,000
Direct labour hours attributed to the project	120,000
Direct material attributed to the project	70,000
Pre-marketing costs to obtain purchase orders	35,000
Overhead costs allocated to the project	89,000
Non-refundable deposits on equipment	120,000
Total	\$564,000

Combined federal and provincial tax rates and prior-year taxable income

	Active business income (eligible for small business deduction)	Active business income (ineligible for small business deduction)	Property income
Corporate tax rate	15%	28%	47%

TankCo's 2014 taxable income was \$1.18 million. The company has not previously claimed any investment tax credits and had no losses available to carry forward as at December 31, 2014. The opening balance in the GRIP account is \$600,000.

APPENDIX III (continued)
TAXATION – ADDITIONAL INFORMATION

Fair Market Value of Assets

The board provided the following fair value of all of TankCo's assets at January 24, 2016.

	Estimated value
Land	\$2,000,000
Building	\$4,000,000
Equipment	\$1,500,000
Development costs	\$0
Life insurance proceeds receivable	\$500,000

Costs to liquidate the inventory, real estate and equipment are expected to be 8% of the proceeds. In addition, CPA LLP and the company's lawyers have indicated that their total fees for winding up the company and preparing the associated tax filings would be \$50,000.

Other working capital accounts, such as receivables, prepaid expenses, and payables and accruals, would be settled at the amount recorded on the books. All the liabilities can be repaid without penalty. Rita has asked you to assume for now that TankCo's year-to-date income is nil.

TankCo has a term life insurance policy on Lou's life. In the event of death, the policy provides the company with a payout of \$500,000. The insurance was purchased with the intention of providing the company with funds to help during a period of transition.

Both Rob and Sarah earn income in excess of the top bracket. Accordingly, their combined federal and provincial marginal tax rate is 45%.

APPENDIX III (continued)
TAXATION – ADDITIONAL INFORMATION

Summary of Lou Marshall's Personal Tax Information

Lou is survived by his wife, Thelma, aged 64, his children Rob and Sarah, and three grandchildren. His will specifies the following distribution of his assets.

Thelma (wife):

Asset	Adjusted cost base	FMV at January 24, 2016
Personal residence	\$400,000	\$900,000
RRIF	\$600,000	\$1,300,000

Rob (son):

Asset	Adjusted cost base	FMV at January 24, 2016
500 shares of TankCo Limited	\$50,000	\$2,000,000
Boat	\$100,000	\$40,000
Personal stamp collection	\$60,000	\$10,000

Sarah (daughter):

Asset	Adjusted cost base	FMV at January 24, 2016
500 shares of TankCo Limited	\$50,000	\$2,000,000
Rare painting	\$25,000	\$50,000

Charitable bequests:

Lou made a special bequest of \$600,000 to Great Canadian University, a registered charity, to be paid out of the following assets of his estate:

Asset	Adjusted cost base	FMV at January 24, 2016
Cash on hand	\$482,000	\$482,000
TFSA	\$39,000	\$85,000
Utility company bond (unregistered) due 2024	\$30,000	\$33,000

APPENDIX III (continued)
TAXATION – ADDITIONAL INFORMATION

Summary of Lou Marshall's Personal Tax Information (continued)

Lou had the following sources of income:

	24 days in 2016
Old Age Security	\$574
Canada Pension Plan	\$876
Dividends (from TankCo)	\$0
Accrued interest income	\$138

Thelma had no sources of income in 2016. Before he died, Lou incurred medical expenses of \$5,420 and donations of \$120 in 2016.

Lou had never used his lifetime capital gains exemption. At his date of death, Lou did not have a cumulative net investment loss balance.

End of Exam

CPA COMMON FINAL EXAMINATION REFERENCE SCHEDULE

1. PRESENT VALUE OF TAX SHIELD FOR AMORTIZABLE ASSETS

Present Value of Total Tax Shield from CCA for a New Asset

$$= \frac{CTd}{(d+k)} \left(\frac{2+k}{2(1+k)} \right) = \frac{CdT}{(d+k)} \left(\frac{1+0.5k}{1+k} \right)$$

Notation for above formula:

C = net initial investment

T = corporate tax rate

k = discount rate or time value of money

d = maximum rate of capital cost allowance

2. SELECTED PRESCRIBED AUTOMOBILE AMOUNTS

	2015	2016
Maximum depreciable cost — Class 10.1	\$30,000 + sales tax	\$30,000 + sales tax
Maximum monthly deductible lease cost	\$800 + sales tax	\$800 + sales tax
Maximum monthly deductible interest cost	\$300	\$300
Operating cost benefit — employee	27¢ per km of personal use	26¢ per km of personal use
Non-taxable automobile allowance rates		
— first 5,000 kilometres	55¢ per km	54¢ per km
— balance	49¢ per km	48¢ per km

3. INDIVIDUAL FEDERAL INCOME TAX RATES

For 2015

If taxable income is between	Tax on base amount	Tax on excess
\$0 and \$44,701	\$0	15%
\$44,702 and \$89,401	\$6,705	22%
\$89,402 and \$138,586	\$16,539	26%
\$138,587 and any amount	\$29,327	29%

For 2016

If taxable income is between	Tax on base amount	Tax on excess
\$0 and \$45,282	\$0	15%
\$45,283 and \$90,563	\$6,792	20.5%
\$90,564 and \$140,388	\$16,075	26%
\$140,389 and \$200,000	\$29,029	29%
\$200,001 and any amount	\$46,316	33%

4. SELECTED INDEXED AMOUNTS FOR PURPOSES OF COMPUTING INCOME TAX

Personal tax credits are a maximum of 15% of the following amounts:

	2015	2016
Basic personal amount	\$11,327	\$11,474
Spouse, common-law partner, or eligible dependant amount	11,327	11,474
Amount for children under 18	N/A	N/A
Age amount if 65 or over in the year	7,033	7,125
Net income threshold for age amount	35,466	35,927
Canada employment amount	1,146	1,161
Disability amount	7,899	8,001
Infirm dependants 18 & over	6,700	6,788
Net income threshold for infirm dependants 18 & over	6,720	6,807
Adoption expense credit limit	15,255	15,453

Other indexed amounts are as follows:

	2015	2016
Medical expense tax credit — 3% of net income ceiling	\$2,208	\$2,237
Annual TFSA dollar limit	10,000	5,500
RRSP dollar limit	24,930	25,370
Lifetime capital gains exemption on qualified small business corporation shares	813,600	824,176

5. PRESCRIBED INTEREST RATES (base rates)

Year	Jan. 1 – Mar. 31	Apr. 1 – June 30	July 1 – Sep. 30	Oct. 1 – Dec. 31
2016	1	1	1	
2015	1	1	1	1
2014	1	1	1	1

This is the rate used for taxable benefits for employees and shareholders, low-interest loans, and other related-party transactions. The rate is 4 percentage points higher for late or deficient income tax payments and unremitted withholdings. The rate is 2 percentage points higher for tax refunds to taxpayers, with the exception of corporations, for which the base rate is used.

6. MAXIMUM CAPITAL COST ALLOWANCE RATES FOR SELECTED CLASSES

Class 1.....	4% for all buildings, except those below
Class 1.....	6% for new non-residential buildings acquired after March 18, 2007
Class 1.....	10% for new manufacturing and processing buildings acquired after March 18, 2007
Class 8.....	20%
Class 10.....	30%
Class 10.1.....	30%
Class 12.....	100%
Class 13.....	Original lease period plus one renewal period (minimum 5 years and maximum 40 years)
Class 14.....	Length of life of property
Class 17.....	8%
Class 29.....	50% straight-line
Class 43.....	30%
Class 44.....	25%
Class 45.....	45%
Class 50.....	55%
Class 53.....	50%

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