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9B21B005

EQUABILITY BY JEN CANDLE COMPANY: A MANUFACTURING INVENTORY ExerCiSE

Kaitlyn Oh wrote this exercise under the supervision of Ian Dunn solely to provide material for class discussion. The authors do not intend to illustrate either effective or ineffective handling of a managerial situation. The authors may have disguised certain names and other identifying information to protect confidentiality.

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In November 2020, Jen Levinton, owner of Equability by Jen Candle Company (EJCC), was reviewing her company’s financial performance for its third fiscal year (FY). To update the accounting records, Levinton gathered EJCC’s balance sheet for fiscal 2019 (see Exhibit 1) and the bookkeeper’s list of cash receipts and disbursements for fiscal 2020 (see Exhibit 2).

The bookkeeper had already recorded the fiscal 2020 cash transactions, but there was a chance that this was done incorrectly. Levinton recorded the opening balances, cash receipts, and cash disbursements to calculate the unadjusted trial balances for fiscal 2020 (see Exhibit 3). Levinton started with the unadjusted trial balances and planned to use the balance sheet and the list of cash receipts and disbursements for reference, if necessary. She would have to figure out where each entry had been posted, determine whether it required an adjustment, and make all necessary adjustments accordingly.

EQUABILITY BY JEN CANDLE COMPANY

EJCC was a candle manufacturer located in Canmore, Alberta, Canada. EJCC sold candles to local gift shops and directly to end consumers through its online web portal. All shipments were made free on board (FOB) shipping point.[[1]](#footnote-1) In fiscal 2020, EJCC sold a total of 16,560 candles. Gift shop customers purchased candles for the wholesale price of CA$12[[2]](#footnote-2) per candle in fiscal 2020, which accounted for 30 per cent of total unit sales. Gift shop customers always paid on account with credit terms of net 45. End consumers purchased candles from EJCC’s online store for $15 in fiscal 2020 and always paid with cash or cash equivalents at the time of purchase. Regardless of payment method, all sales were subject to a five per cent goods and services sales tax on the net invoice price.

EJCC had yet to record sales taxes for the credit sales at fiscal year-end. The bookkeeper had recorded the sales taxes on cash sales and the payment of all sales tax remittances. No finished goods were in transit at fiscal year-end.

THE MANUFACTURING PROCESS

EJCC manufactured wax candles with scents of bonfire, vanilla, and serenity. The first step in the production process was to measure the wax pellets that would be used to create the candle. The wax was then melted and fragrances were added. The melted wax was poured into a jar with a wick. Finally, before moving the candle to finished goods storage, the jar was labelled and packaged. Direct labour was required throughout the entire production process, so Levinton considered direct labour hours to be evenly distributed.

OPERATIONS

Upon incorporation, Levinton took out a $60,000, eight-year bank loan with an annual interest rate of 4.5 per cent. Equal payments of the principal were made on the last day of every month along with that month’s interest owing. Interest was calculated each month based on the amount outstanding on the first day of that month.

The existing insurance policy was an 18-month policy purchased on November 1, 2018. The insurance policy was both a product and period cost. Levinton estimated that 85 per cent of the policy’s cost was related to EJCC’s production facilities. The remaining 15 per cent covered a variety of non-production-related business risks. Upon expiration of the existing policy, Levinton purchased a new 18-month policy for $3,780 with the same coverage.

At fiscal year-end, EJCC had a utility bill in the amount of $718 that remained unpaid. EJCC paid its utility bills on the 15th day of each month for the previous month’s usage. Of the total utility expenses, 80 per cent was related to production activities.

LONG-LIVED ASSETS

On January 1, 2020, EJCC purchased the land and building that it had previously been renting.[[3]](#footnote-3) When Levinton first signed the rental agreement in fiscal 2019, she paid a deposit for the last month’s rent. The land and building had an agreed-upon purchase price of $300,000, which was paid with 40,000 common shares. On the date of purchase, EJCC’s common shares were trading at $10.45 per share.

Of the purchase price, 70 per cent related to the building. The building’s total size was 1,600 square feet. The purchase cost was depreciated using the straight-line method.[[4]](#footnote-4) The administrative office used 200 square feet of space, and the finished goods storage area used 280 square feet of space. The remainder of the building was used for production. On March 30, 2020, EJCC received a property tax bill relating to the building. The bill amounted to $6,000 for the 2020 calendar year. Levinton paid the property tax bill on April 17, 2020.

All other long-lived assets on the fiscal 2019 statement of financial position had been purchased on the date of incorporation and were depreciated using the straight-line method. No repairs, impairments, or changes to the residual value had occurred since the assets were purchased.

HUMAN RESOURCES

In fiscal 2020, Levinton worked a total of 2,000 hours and earned an annual salary of $60,000. Levinton spent 20 per cent of her time manufacturing candles, 50 per cent of her time working on administrative duties, and the remaining 30 per cent of her time supervising production workers.

EJCC employed three part-time production workers solely to manufacture the candles. Each worker was paid an hourly wage of $16.50. The three production workers worked a combined total of 2,979 hours in all of fiscal 2020. They were paid every Monday for the previous week’s work. However, at the end of fiscal 2020, the production workers had yet to be paid for 13 hours each.

INVENTORIES

EJCC had three raw materials: wax, jars, and wicks. EJCC purchased its wax from two suppliers: Tulip Apothecary and Wax World. All wax shipments were made FOB shipping point. EJCC used the first-in, first-out method to value the ending balance in all raw materials. A physical inventory count revealed that there were 4,092 pounds of wax on-hand at fiscal year-end (see Exhibit 4).

Jars were purchased from Swanson Jars, who shipped FOB destination. At fiscal year-end, a physical inventory count revealed that $3,511 worth of jars remained on hand. Wicks were purchased from Wick Worx, who shipped FOB destination and offered credit terms of eight end of month.

At fiscal year-end, a physical inventory count revealed that $822 worth of wicks remained on hand. During fiscal 2020, EJCC used $422 worth of production supplies. The production supplies consisted of candle fragrances, labels, and ribbons. Levinton found these production supplies difficult to trace to individual candles.

At fiscal year-end, the production workers had spent a total of 20 hours manufacturing the partially completed goods. Levinton had spent three hours of her own time manufacturing the partially completed goods. Levinton estimated that $244 worth of raw materials had been used to manufacture the partially completed goods. At fiscal year-end, a physical inventory count revealed that there were 2,400 completed candles in finished goods inventory. No units had been damaged or stolen during fiscal 2020. Finished goods on hand at fiscal year-end were valued using the average cost method.

REQUIRED

Jen Levinton had to post all unadjusted trial balances (opening balances and the list of cash receipts and disbursements), transactions, and adjusting entries required for Equability by Jen Candle Company’s FY ending October 31, 2020. Closing entries were not required.

Exhibit 1: Equability by Jen Candle Company STATEMENT OF FINANCIAL POSITION  
(As at October 31, 2019)

|  |  |  |  |
| --- | --- | --- | --- |
| **ASSETS** |  |  |  |
|  |  |  |  | |
| **Current assets:** |  |  |  | |
| Cash |  |  | $169,851 | |
| Accounts receivable |  |  | 7,779 | |
| Prepaid insurance |  |  | 1,080 | |
| Prepaid rent |  |  | 1,800 | |
| Inventory |  |  | 17,179 | |
| Production supplies |  |  | 57 | |
| Total current assets |  |  | 197,746 | |
|  |  |  |  | |
| **Long-lived assets:** |  |  |  | |
| Office equipment | 8,000 |  |  | |
| Accumulated depreciation—office equipment | 3,200 |  | 4,800 | |
| Production equipment | 7,000 |  |  | |
| Accumulated depreciation—production equipment | 3,500 |  | 3,500 | |
| Total long-lived assets |  |  | 8,300 | |
|  |  |  |  | |
| **Total assets** |  |  | $206,046 | |
|  |  |  |  | |
| **LIABILITIES AND SHAREHOLDERS’ EQUITY** |  |  |  | |
|  |  |  |  | |
| **Current liabilities:** |  |  |  | |
| Accounts payable |  |  | $5,604 | |
| Current portion, bank loan |  |  | 7,500 | |
| Income tax payable |  |  | 15,000 | |
| Sales tax payable |  |  | 370 | |
| Production wages payable |  |  | 495 | |
| Total current liabilities |  |  | 28,969 | |
|  |  |  |  | |
| **Long-term liabilities:** |  |  |  | |
| Long-term portion, bank loan |  |  | 37,500 | |
| Total long-term liabilities |  |  | 37,500 | |
|  |  |  |  | |
| Total liabilities |  |  | 66,469 | |
|  |  |  |  | |
| **Shareholders’ equity:** |  |  |  | |
| Common stock (12,000 outstanding, unlimited authorized) |  |  | 72,000 | |
| Retained earnings |  |  | 67,577 | |
| Total shareholders’ equity |  |  | 139,577 | |
| **Total liabilities and shareholders’ equity** |  |  | $206,046 | |

Notes: No bad debts had been experienced in fiscal 2019 and none were expected in fiscal 2020; there was $7,020 of wax, $1,531 of jars, and $266 of wicks in raw materials inventory and $777 of work-in-process inventory on October 31, 2019. There were also 960 candles, valued at $7,585 in finished goods inventory on October 31, 2019; the production equipment had a useful life of four years with no residual value; accounts payable included all applicable charges relating to utilities and raw materials inventory not yet paid for.

Source: Created by the authors.

Exhibit 2: Equability by Jen Candle Company BOOKKEEPER RECORDS: POSTING OF CASH RECEIPTS AND DISBURSEMENTS For Fiscal 2020

|  |  |  |
| --- | --- | --- |
| **CASH RECEIPTS** |  | **ACCOUNT POSTED TO** |
|  |  |  |
| Cash sales | $173,880 | Sales revenue |
| Accounts receivable collections | 64,116 | Accounts receivable |
| Sales tax collections | 8,694 | Sales tax payable |
| **Total** | **$246,690** | Cash |
|  |  |  |
| **CASH DISBURSEMENTS** |  |  |
|  |  |  |
| Rent | $1,800 | Rent expense |
| Bank loan | 9,370 | Current portion, bank loan |
| Sales tax remittances | 11,747 | Sales tax payable |
| Insurance | 3,780 | Insurance expense |
| Salaries | 60,000 | Salaries expense |
| Production wages | 49,005 | Production wages expense |
| Utilities | 4,070 | Utilities expense |
| Accounts payable | 5,604 | Accounts payable |
| Property taxes | 6,000 | Property tax expense |
| Raw materials payments, wax | 15,750 | Raw materials, wax |
| Raw materials payments, jars | 18,874 | Raw materials, jars |
| Raw materials payments, wicks | 3,130 | Raw materials, wicks |
| Production supplies | 429 | Production supplies |
| Income tax | 15,000 | Income tax payable |
| **Total** | **$204,559** | Cash |
|  |  |  |

Note: Bank loan includes accrued interest; production wages includes accrued wages from fiscal 2019; raw materials payments includes all applicable charges.

Source: Created by the authors.

Exhibit 3: Equability by Jen Candle Company UNADJUSTED TRIAL BALANCE  
(As at October 31, 2020)

|  |  |  |
| --- | --- | --- |
| Cash | $211,982 |  |
| Accounts receivable |  | $56,337 |
| Prepaid rent | 1,800 |  |
| Prepaid insurance | 1,080 |  |
| Raw material, wax | 22,770 |  |
| Raw material, jars | 20,405 |  |
| Raw material, wicks | 3,396 |  |
| Work in progress | 777 |  |
| Finished goods | 7,585 |  |
| Production supplies | 486 |  |
| Office equipment | 8,000 |  |
| Accumulated depreciation, office equipment |  | 3,200 |
| Production equipment | 7,000 |  |
| Accumulated depreciation, production equipment |  | 3,500 |
| Production wages payable |  | 495 |
| Sales tax payable | 2,683 |  |
| Current portion, bank loan | 1,870 |  |
| Long-term portion, bank loan |  | 37,500 |
| Common stock |  | 72,000 |
| Retained earnings |  | 67,577 |
| Sales |  | 173,880 |
| Salaries expense | 60,000 |  |
| Production wages expense | 49,005 |  |
| Insurance expense | 3,780 |  |
| Utilities expense | 4,070 |  |
| Property tax expense | 6,000 |  |
| Rent expense | 1,800 |  |
| **Total** | **$414,489** | **$414,489** |

Source: Created by the authors.

EXHIBIT 4: Equability by Jen Candle Company MOST RECENT WAX PURCHASES (in CA$)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Supplier** | **Date Shipped** | **Date Delivered** | **Date Paid** | **Quantity** | **Net Cost** |
| Tulip Apothecary | October 23, 2019 | October 29, 2019 | November 5, 2019 | 2,688 lb | $5,057 |
| Wax World | December 1, 2019 | December 3, 2019 | December 7, 2019 | 1,800 lb | $3,225 |
| Tulip Apothecary | February 11, 2020 | February 15, 2020 | March 3, 2020 | 2,520 lb | $4,415 |
| Wax World | May 29, 2020 | June 5, 2020 | June 8, 2020 | 900 lb | $2,327 |
| Tulip Apothecary | June 26, 2020 | June 29, 2020 | June 30, 2020 | 3,060 lb | $5,783 |
| Wax World | October 25, 2020 | October 28, 2020 | — | 1,080 lb | $2,441 |

Note: Net cost includes all applicable charges and discounts; October 23 order from Tulip Apothecary recorded as accounts payable in fiscal 2019 at the gross invoice price of $5,057; bookkeeper correctly recorded payment for the order in fiscal 2020 cash disbursements; lb = pound; 1 pound = 0.45 kilogram.

Source: Created by the authors.

1. Free on board shipping point indicated that the ownership and responsibility for loss or damage of the goods transferred from the seller to the buyer from the moment the goods are shipped; Steven Nickolas, “Free on Board Shipping Point vs. Free on Board Destination: What's the Difference?” Investopedia, January 13, 2021, accessed July 5, 2021, www.investopedia.com/ask/answers/052515/what-distinction-between-free-board-fob-shipping-point-and-destination.asp. [↑](#footnote-ref-1)
2. All currency amounts are in CA$ unless otherwise specified. [↑](#footnote-ref-2)
3. The rental agreement ended on December 31, 2019. [↑](#footnote-ref-3)
4. The building had a useful life of 20 years and a residual value of $30,000. [↑](#footnote-ref-4)