UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

Form 10-Q

☒ Quarterly report pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

For the quarterly period ended June 30, 2019

☐ Transition report pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

Commission File Number 1-7615

KIRBY CORPORATION

(Exact name of registrant as specified in its charter)

Nevada	**74-1884980**
(State or other jurisdiction of incorporation or organization)	**(IRS Employer Identification No.)**
55 Waugh Drive, Suite 1000	
Houston, TX	**77007**
(Address of principal executive offices)	**(Zip Code)**

(713) 435-1000
(Registrant's telephone number, including area code)

No Change
(Former name, former address and former fiscal year, if changed since last report)

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulations S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes ☒ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "Large Accelerated Filer," "Accelerated Filer," "Smaller Reporting Company," and "Emerging Growth Company" in Rule 12b-2 of the Exchange Act.

Large Accelerated Filer	☒	Accelerated Filer	☐
Non-Accelerated Filer	☐	Smaller Reporting Company	☐
		Emerging Growth Company	☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☒

Securities registered pursuant to Section 12(b) of the Exchange Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock	KEX	New York Stock Exchange LLC

The number of shares outstanding of the registrant's Common Stock, $0.10 par value per share, on August 1, 2019 was 59,902,000.

PART I – FINANCIAL INFORMATION

Item 1. Financial Statements

KIRBY CORPORATION AND CONSOLIDATED SUBSIDIARIES

CONDENSED BALANCE SHEETS
(Unaudited)

	June 30, 2019	December 31, 2018
	($ in thousands)	
ASSETS		
Current assets:		
Cash and cash equivalents	$ 22,521	$ 7,800
Accounts receivable:		
Trade – less allowance for doubtful accounts	450,958	417,644
Other	99,568	104,239
Inventories – net	428,264	507,441
Prepaid expenses and other current assets	52,953	59,365
Total current assets	1,054,264	1,096,489
Property and equipment	5,304,058	5,011,824
Accumulated depreciation	(1,507,640)	(1,472,022)
Property and equipment – net	3,796,418	3,539,802
Operating lease right-of-use assets	158,917	—
Goodwill	953,826	953,826
Other intangibles, net	214,972	224,197
Other assets	54,493	57,280
Total assets	$ 6,232,890	$ 5,871,594
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Bank notes payable	$ 11	$ 19
Income taxes payable	312	2,794
Accounts payable	212,147	278,057
Accrued liabilities	225,232	246,789
Current portion of operating lease liabilities	29,422	—
Deferred revenues	58,909	80,123
Total current liabilities	526,033	607,782
Long-term debt, net – less current portion	1,594,695	1,410,169
Deferred income taxes	570,954	542,785
Operating lease liabilities	136,970	—
Other long-term liabilities	82,066	94,557
Total long-term liabilities	2,384,685	2,047,511
Contingencies and commitments		
Equity:		
Kirby stockholders' equity:		
Common stock, $0.10 par value per share. Authorized 120,000,000 shares, issued 65,472,000 shares	6,547	6,547
Additional paid-in capital	829,460	823,347
Accumulated other comprehensive income – net	(26,967)	(33,511)
Retained earnings	2,815,175	2,723,592
Treasury stock – at cost, 5,570,000 shares at June 30, 2019 and 5,608,000 at December 31, 2018	(305,061)	(306,788)
Total Kirby stockholders' equity	3,319,154	3,213,187
Noncontrolling interests	3,018	3,114
Total equity	3,322,172	3,216,301
Total liabilities and equity	$ 6,232,890	$ 5,871,594

See accompanying notes to condensed financial statements.

KIRBY CORPORATION AND CONSOLIDATED SUBSIDIARIES

CONDENSED STATEMENTS OF EARNINGS
(Unaudited)

	Three months ended June 30, 2019	Three months ended June 30, 2018	Six months ended June 30, 2019	Six months ended June 30, 2018
	($ in thousands, except per share amounts)			
Revenues:				
Marine transportation	$ 404,286	$ 378,163	$ 772,407	$ 718,566
Distribution and services	366,756	424,508	743,256	825,793
Total revenues	771,042	802,671	1,515,663	1,544,359
Costs and expenses:				
Costs of sales and operating expenses	563,495	588,628	1,100,150	1,141,945
Selling, general and administrative	69,150	92,588	141,946	169,384
Taxes, other than on income	10,579	10,552	20,577	19,087
Depreciation and amortization	55,093	55,492	110,316	109,710
Gain on disposition of assets	(3,118)	(442)	(5,275)	(2,340)
Total costs and expenses	695,199	746,818	1,367,714	1,437,786
Operating income	75,843	55,853	147,949	106,573
Other income	2,381	1,541	1,813	3,132
Interest expense	(15,515)	(12,540)	(28,716)	(22,320)
Earnings before taxes on income	62,709	44,854	121,046	87,385
Provision for taxes on income	(15,269)	(16,061)	(29,149)	(25,926)
Net earnings	47,440	28,793	91,897	61,459
Less: Net earnings attributable to noncontrolling interests	(153)	(191)	(314)	(386)
Net earnings attributable to Kirby	$ 47,287	$ 28,602	$ 91,583	$ 61,073
Net earnings per share attributable to Kirby common stockholders:				
Basic	$ 0.79	$ 0.48	$ 1.53	$ 1.02
Diluted	$ 0.79	$ 0.48	$ 1.53	$ 1.02

See accompanying notes to condensed financial statements.

KIRBY CORPORATION AND CONSOLIDATED SUBSIDIARIES

CONDENSED STATEMENTS OF COMPREHENSIVE INCOME
(Unaudited)

	Three months ended June 30,		Six months ended June 30,	
	2019	2018	2019	2018
	($ in thousands)			
Net earnings	$ 47,440	$ 28,793	$ 91,897	$ 61,459
Other comprehensive income (loss), net of taxes:				
Pension and postretirement benefits	6,057	(13)	6,468	417
Foreign currency translation adjustments	(53)	(429)	76	(9)
Reclassification to retained earnings of stranded tax effects from tax reform	—	—	—	(7,925)
Total other comprehensive income (loss), net of taxes	6,004	(442)	6,544	(7,517)
Total comprehensive income, net of taxes	53,444	28,351	98,441	53,942
Net earnings attributable to noncontrolling interests	(153)	(191)	(314)	(386)
Comprehensive income attributable to Kirby	$ 53,291	$ 28,160	$ 98,127	$ 53,556

See accompanying notes to condensed financial statements.

KIRBY CORPORATION AND CONSOLIDATED SUBSIDIARIES

CONDENSED STATEMENTS OF CASH FLOWS
(Unaudited)

	Six months ended June 30, 2019	Six months ended June 30, 2018
	($ in thousands)	
Cash flows from operating activities:		
Net earnings	$ 91,897	$ 61,459
Adjustments to reconcile net earnings to net cash provided by operations:		
Depreciation and amortization	110,316	109,710
Provision for deferred income taxes	26,007	23,381
Amortization of unearned share-based compensation	7,907	13,551
Amortization of leases	(154)	—
Amortization of major maintenance costs	10,431	10,338
Amortization of debt issuance costs	719	578
Other	(5,806)	(1,778)
Decrease in cash flows resulting from changes in operating assets and liabilities, net	(53,120)	(63,484)
Net cash provided by operating activities	188,197	153,755
Cash flows from investing activities:		
Capital expenditures	(127,268)	(152,911)
Acquisitions of businesses and marine equipment, net of cash acquired	(252,840)	(499,227)
Proceeds from disposition of assets	23,364	25,208
Net cash used in investing activities	(356,744)	(626,930)
Cash flows from financing activities:		
Payments on bank credit facilities	(313,805)	(45,485)
Borrowings on long-term debt	500,000	499,295
Payments of debt issue costs	(2,397)	(4,263)
Proceeds from exercise of stock options	1,903	12,987
Payments related to tax withholding for share-based compensation	(2,023)	(4,813)
Other	(410)	(450)
Net cash provided by financing activities	183,268	457,271
Increase (decrease) in cash and cash equivalents	14,721	(15,904)
Cash and cash equivalents, beginning of year	7,800	20,102
Cash and cash equivalents, end of period	$ 22,521	$ 4,198
Supplemental disclosures of cash flow information:		
Cash paid (received) during the period:		
Interest paid	$ 29,271	$ 14,085
Income taxes paid (refunded)	$ 2,392	$ (132)
Operating cash outflow from operating leases	$ 19,786	$ —
Non-cash investing activity:		
Capital expenditures included in accounts payable	$ 5,377	$ (16,498)
Cash acquired in acquisition	$ —	$ 2,313
Right-of-use assets obtained in exchange for lease obligations	$ 2,537	$ —

See accompanying notes to condensed financial statements.

KIRBY CORPORATION AND CONSOLIDATED SUBSIDIARIES

CONDENSED STATEMENTS OF STOCKHOLDERS' EQUITY
(Unaudited)

	Common Stock		Additional Paid-in-Capital	Accumulated Other Comprehensive Income	Retained Earnings	Treasury Stock		Noncontrolling Interests	Total
	Shares	Amount				Shares	Amount		
					(in thousands)				
Balance at March 31, 2019	65,472	$ 6,547	$ 827,497	$ (32,971)	$ 2,767,888	(5,599)	$ (306,625)	$ 3,072	$ 3,265,408
Stock option exercises	—	—	66	—	—	9	474	—	540
Issuance of stock for equity awards	—	—	(1,110)	—	—	20	1,110	—	—
Tax withholdings on equity award vesting	—	—	—	—	—	—	(20)	—	(20)
Amortization of unearned share-based compensation	—	—	3,007	—	—	—	—	—	3,007
Total comprehensive income, net of taxes	—	—	—	6,004	47,287	—	—	153	53,444
Return of investment to noncontrolling interests	—	—	—	—	—	—	—	(207)	(207)
Balance at June 30, 2019	65,472	$ 6,547	$ 829,460	$ (26,967)	$ 2,815,175	(5,570)	$ (305,061)	$ 3,018	$ 3,322,172

	Common Stock		Additional Paid-in-Capital	Accumulated Other Comprehensive Income	Retained Earnings	Treasury Stock		Noncontrolling Interests	Total
	Shares	Amount				Shares	Amount		
					(in thousands)				
Balance at March 31, 2018	65,472	$ 6,547	$ 810,381	$ (39,480)	$ 2,677,611	(5,800)	$ (316,564)	$ 3,373	$ 3,141,868
Stock option exercises	—	—	2,242	—	—	196	10,501	—	12,743
Issuance of stock for equity awards	—	—	(1,014)	—	—	18	1,014	—	—
Tax withholdings on equity award vesting	—	—	—	—	—	(12)	(1,048)	—	(1,048)
Amortization of unearned share-based compensation	—	—	6,000	—	—	—	—	—	6,000
Total comprehensive income, net of taxes	—	—	—	(442)	28,602	—	—	191	28,351
Return of investment to noncontrolling interests	—	—	—	—	—	—	—	(223)	(223)
Balance at June 30, 2018	65,472	$ 6,547	$ 817,609	$ (39,922)	$ 2,706,213	(5,598)	$ (306,097)	$ 3,341	$ 3,187,691

See accompanying notes to condensed financial statements.

KIRBY CORPORATION AND CONSOLIDATED SUBSIDIARIES

CONDENSED STATEMENTS OF STOCKHOLDERS' EQUITY
(Unaudited)

	Common Stock		Additional Paid-in-Capital	Accumulated Other Comprehensive Income	Retained Earnings	Treasury Stock		Noncontrolling Interests	Total
	Shares	Amount				Shares	Amount		
					(in thousands)				
Balance at December 31, 2018	65,472	$ 6,547	$ 823,347	$ (33,511)	$ 2,723,592	(5,608)	$ (306,788)	$ 3,114	$ 3,216,301
Stock option exercises	—	—	118	—	—	34	1,838	—	1,956
Issuance of stock for equity awards	—	—	(1,912)	—	—	34	1,912	—	—
Tax withholdings on equity award vesting	—	—	—	—	—	(30)	(2,023)	—	(2,023)
Amortization of unearned share-based compensation	—	—	7,907	—	—	—	—	—	7,907
Total comprehensive income, net of taxes	—	—	—	6,544	91,583	—	—	314	98,441
Return of investment to noncontrolling interests	—	—	—	—	—	—	—	(410)	(410)
Balance at June 30, 2019	65,472	$ 6,547	$ 829,460	$ (26,967)	$ 2,815,175	(5,570)	$ (305,061)	$ 3,018	$ 3,322,172

	Common Stock		Additional Paid-in-Capital	Accumulated Other Comprehensive Income	Retained Earnings	Treasury Stock		Noncontrolling Interests	Total
	Shares	Amount				Shares	Amount		
					(in thousands)				
Balance at December 31, 2017	65,472	$ 6,547	$ 802,961	$ (32,405)	$ 2,646,937	(5,783)	$ (313,220)	$ 3,403	$ 3,114,223
Adoption of new accounting standards	—	—	—	—	(1,797)	—	—	—	(1,797)
Stock option exercises	—	—	2,111	—	—	228	10,923	—	13,034
Issuance of stock for equity awards	—	—	(1,014)	—	—	18	1,014	—	—
Tax withholdings on equity award vesting	—	—	—	—	—	(61)	(4,814)	—	(4,814)
Amortization of unearned share-based compensation	—	—	13,551	—	—	—	—	—	13,551
Total comprehensive income, net of taxes	—	—	—	(7,517)	61,073	—	—	386	53,942
Return of investment to noncontrolling interests	—	—	—	—	—	—	—	(448)	(448)
Balance at June 30, 2018	65,472	$ 6,547	$ 817,609	$ (39,922)	$ 2,706,213	(5,598)	$ (306,097)	$ 3,341	$ 3,187,691

See accompanying notes to condensed financial statements.

NOTES TO CONDENSED FINANCIAL STATEMENTS
(Unaudited)

(1) BASIS FOR PREPARATION OF THE CONDENSED FINANCIAL STATEMENTS

The condensed financial statements included herein have been prepared by Kirby Corporation (the "Company"), without audit, pursuant to the rules and regulations of the Securities and Exchange Commission. Although the Company believes that the disclosures are adequate to make the information presented not misleading, certain information and footnote disclosures, including significant accounting policies normally included in annual financial statements, have been condensed or omitted pursuant to such rules and regulations. It is suggested that these condensed financial statements be read in conjunction with the Company's Annual Report on Form 10-K for the year ended December 31, 2018.

(2) ACCOUNTING STANDARDS ADOPTIONS

In August 2018, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") 2018-14, "Compensation – Retirement Benefits - Defined Benefit Plans – General (Subtopic 715-20): Disclosure Framework – Changes to the Disclosure Requirements for Defined Benefit Plans" which amends the annual disclosure requirements for employers that sponsor defined benefit pension or other postretirement plans by removing certain requirements, providing clarification on existing requirements and adding new requirements including adding an explanation of the reasons for significant gains and losses related to changes in the benefit obligation for the period. The guidance is effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2020. Early adoption is permitted. The amendments in this update are required to be applied on a retrospective basis to all periods presented. The Company is currently evaluating this guidance to determine the impact on its disclosures.

In January 2017, the FASB issued ASU 2017-04, "Intangibles – Goodwill and Other (Topic 350): Simplifying the Test for Goodwill Impairment" ("ASU 2017-04") which simplifies the subsequent measurement of goodwill by eliminating Step 2 in the goodwill impairment test that required an entity to perform procedures to determine the fair value of its assets and liabilities at the testing date. An entity instead will perform its annual, or interim, goodwill impairment test by comparing the fair value of a reporting unit with its carrying value and record an impairment charge based on the excess of a reporting unit's carrying amount over its fair value. An entity still has the option to perform the qualitative assessment for a reporting unit to determine if the quantitative impairment test is necessary. ASU 2017-04 will be applied prospectively and is effective for annual and interim goodwill impairment tests conducted in fiscal years beginning after December 15, 2019. Early adoption is permitted for interim or annual goodwill impairment testing dates after January 1, 2017. The Company is currently evaluating the impact, if any, that the adoption of this standard will have on its consolidated financial statements.

In February 2016, the FASB issued ASU No. 2016-02, "Leases (Topic 842)" ("ASU 2016-02") to increase transparency and comparability among organizations by requiring recognition of lease assets and lease liabilities on the balance sheet and disclosure of key information about leasing arrangements. The Company adopted ASU 2016-02 on January 1, 2019 under the optional transition method that allows for a cumulative-effect adjustment to the opening balance of retained earnings in the period of adoption and will not restate prior periods. The Company also elected certain practical expedients permitted under the transition guidance which allows the Company to carryforward its historical lease classification and for the non-recognition of short-term leases. Adoption of ASU 2016-02 resulted in the recognition of operating lease right-of-use assets for operating leases of $168,149,000 and lease liabilities for operating leases of $175,778,000 on the Company's Condensed Balance Sheets as of January 1, 2019, with no material impact to the Condensed Statements of Earnings or Cash Flows. The Company did not have any financing leases as of January 1, 2019. See Note 3, Leases for additional information.

(3) LEASES

The Company currently leases various facilities and equipment under cancelable and noncancelable operating leases. The accounting for the Company's leases may require judgments, which include determining whether a contract contains a lease, the allocation between lease and non-lease components, and determining the incremental borrowing rates. Leases with an initial noncancelable term of 12 months or less are not recorded on the balance sheet and the related lease expense is recognized on a straight-line basis over the lease term. The Company has also elected to combine lease and non-lease components on all classes of leased assets, except for leased towing vessels for which the Company estimates approximately 75% of the costs relate to service costs and other non-lease components. Variable lease costs relate primarily to real estate executory costs (i.e. taxes, insurance and maintenance).

Future minimum lease payments under operating leases that have initial noncancelable lease terms in excess of one year at June 30, 2019 were as follows (in thousands):

	Total
2019	$ 18,826
2020	29,857
2021	24,685
2022	21,532
2023	17,583
Thereafter	94,907
Total lease payments	207,390
Less: imputed interest	(40,998)
Operating lease liabilities	$ 166,392

As of December 31, 2018, future total rentals on the Company's noncancellable operating leases were $278,602,000 in the aggregate, which consisted of the following: $97,091,000 in 2019; $30,062,000 in 2020; $21,818,000 in 2021; $20,263,000 in 2022; $17,429,000 in 2023; and $91,939,000 thereafter.

The following table summarizes lease cost for the three and six months ended June 30, 2019 (in thousands):

	Three months ended June 30, 2019	Six months ended June 30, 2019
Operating lease cost	$ 9,893	$ 19,971
Variable lease cost	515	1,031
Short-term lease cost	8,963	16,855
Sublease income	(318)	(558)
Total lease cost	$ 19,053	$ 37,299

The following table summarizes other supplemental information about the Company's operating leases as of June 30, 2019:

Weighted average discount rate	4.1%
Weighted average remaining lease term	10 years

(4) REVENUES

The following table sets forth the Company's revenues by major source for the three months and six months ended June 30, 2019 and 2018 (in thousands):

	Three months ended June 30,		Six months ended June 30,	
	2019	2018	2019	2018
Marine transportation segment:				
Inland transportation	$ 310,162	$ 286,920	$ 593,247	$ 539,275
Coastal transportation	94,124	91,243	179,160	179,291
	$ 404,286	$ 378,163	$ 772,407	$ 718,566
Distribution and services segment:				
Oil and gas	$ 198,864	$ 304,859	$ 421,965	$ 579,350
Commercial and industrial	167,892	119,649	321,291	246,443
	$ 366,756	$ 424,508	$ 743,256	$ 825,793

Contract Assets and Liabilities. Contract liabilities represent advance consideration received from customers, and are recognized as revenue over time as the related performance obligation is satisfied. The amount of revenue recognized in the first six months of 2019 that was included in the opening contract liability balance was $73,370,000. The Company has recognized all contract liabilities within the deferred revenues financial statement caption on the balance sheet. The Company did not have any contract assets at June 30, 2019 or December 31, 2018.

The Company applies the practical expedient that allows non-disclosure of information about remaining performance obligations that have original expected durations of one year or less.

(5) ACQUISITIONS

During the six months ended June 30, 2019, the Company purchased seven inland tank barges from a leasing company for $8,340,000 in cash. The Company had been leasing the barges prior to the purchases.

On March 14, 2019, the Company completed the acquisition of the marine transportation fleet of Cenac Marine Services, LLC ("Cenac") for $244,500,000 in cash. Cenac's fleet consisted of 63 inland 30,000 barrel tank barges with approximately 1,833,000 barrels of capacity, 34 inland towboats and two offshore tugboats. Cenac transported petrochemicals, refined products and black oil, including crude oil, residual fuels, feedstocks and lubricants on the lower Mississippi River, its tributaries, and the Gulf Intracoastal Waterway for major oil companies and refiners. The average age of the inland tank barges was approximately five years and the inland towboats had an average age of approximately seven years.

The Company considers Cenac to be a natural extension of the current marine transportation segment, expanding the capabilities of the Company's inland based marine transportation business and lowering the average age of its inland tank barge and towboat fleet.

The fair values of the assets acquired and liabilities assumed recorded at the acquisition date were as follows (in thousands):

Assets:	
Prepaid expenses	$ 1,138
Property and equipment	247,122
Other intangibles	340
Total assets	$ 248,600
Other long-term liabilities	4,100
Net assets acquired	$ 244,500

The Company acquired intangible assets with an amortization period of two years and incurred long-term intangible liabilities related to unfavorable contracts with a weighted average amortization period of approximately 1.3 years. The fair values have not been finalized and are provisional, pending completion of the tangible and intangible valuation studies. As additional information becomes known concerning the assets acquired, the Company may make adjustments to the fair value of assets acquired and liabilities assumed for up to one year following the acquisition date. Acquisition related costs of $392,000, consisting primarily of legal and other professional fees, were expensed as incurred to selling, general and administrative expense in the 2019 first six months.

Pro forma results of the acquisitions made in the 2019 first six months have not been presented as the pro forma revenues and net earnings attributable to Kirby would not be materially different from the Company's actual results.

(6) INVENTORIES

The following table presents the details of inventories as of June 30, 2019 and December 31, 2018 (in thousands):

	June 30, 2019	December 31, 2018
Finished goods	$ 333,472	$ 406,364
Work in process	94,792	101,077
	$ 428,264	$ 507,441

(7) LONG-TERM DEBT

On March 27, 2019, the Company entered into an amended and restated credit agreement (the “Credit Agreement”) with a group of commercial banks, with JPMorgan Chase Bank, N.A. as the administrative agent bank, that extends the term of the Company’s existing $850,000,000 revolving credit facility (“Revolving Credit Facility”) to March 27, 2024 and adds a five-year term loan (“Term Loan”) facility in an amount of $500,000,000. The Credit Agreement provides for a variable interest rate based on the London interbank offered rate (“LIBOR”) or a base rate calculated with reference to the agent bank’s prime rate, among other factors (the “Alternate Base Rate”). The interest rate varies with the Company’s credit rating and is currently 112.5 basis points over LIBOR or 12.5 basis points over the Alternate Base Rate. The Term Loan is repayable in quarterly installments commencing June 30, 2020, in increasing percentages of the original principal amount of the loan, with the remaining unpaid balance payable of 65% of the initial amount due on March 27, 2024. The Credit Agreement contains certain financial covenants including an interest coverage ratio and a debt-to-capitalization ratio. In addition to financial covenants, the Credit Agreement contains covenants that, subject to exceptions, restrict debt incurrence, mergers and acquisitions, sales of assets, dividends and investments, liquidations and dissolutions, capital leases, transactions with affiliates and changes in lines of business. The Credit Agreement specifies certain events of default, upon the occurrence of which the maturity of the outstanding loans may be accelerated, including the failure to pay principal or interest, violation of covenants and default on other indebtedness, among other events. Borrowings under the Credit Agreement may be used for general corporate purposes including acquisitions. As of June 30, 2019, the Company was in compliance with all Credit Agreement covenants and had outstanding borrowings of $103,577,000 under the Revolving Credit Facility and $500,000,000 under the Term Loan. The Revolving Credit Facility includes a $25,000,000 commitment which may be used for standby letters of credit. Outstanding letters of credit under the Revolving Credit Facility were $5,670,000 as of June 30, 2019.

The estimated fair value of total debt outstanding at June 30, 2019 and December 31, 2018 was $1,637,493,000 and $1,411,628,000, respectively, which differs from the carrying amounts of $1,594,706,000 and $1,410,188,000, respectively, included in the consolidated financial statements. The fair value of debt outstanding was determined using a Level 2 fair value measurement.

(8) STOCK AWARD PLANS

The Company has share-based compensation plans which are described below. The compensation cost that has been charged against earnings for the Company’s stock award plans and the income tax benefit recognized in the statement of earnings for stock awards for the three months and six months ended June 30, 2019 and 2018 were as follows (in thousands):

	Three months ended June 30,		Six months ended June 30,	
	2019	2018	2019	2018
Compensation cost	$ 3,007	$ 6,000	$ 7,907	$ 13,551
Income tax benefit	$ 740	$ 2,278	$ 1,909	$ 4,038

The Company has an employee stock award plan for selected officers and other key employees which provides for the issuance of stock options, restricted stock awards and performance awards. On February 19, 2018, the employee stock award plan was amended to also allow for the granting of restricted stock units (“RSUs”) to selected officers and other key employees. The amendment included a provision for the continued vesting of unvested stock options and RSUs for employees who meet certain years of service and age requirements at the time of their retirement. The vesting change resulted in shorter expense accrual periods on stock options and RSUs granted after February 19, 2018 to employees who are nearing retirement and meet the service and age requirements.

The exercise price for each option equals the fair market value per share of the Company's common stock on the date of grant. Substantially all stock options outstanding under the plan have terms of seven years and vest ratably over three years. No performance awards payable in stock have been awarded under the plan. At June 30, 2019, 1,348,971 shares were available for future grants under the employee plan and no outstanding stock options under the employee plan were issued with stock appreciation rights.

The following is a summary of the stock option activity under the employee plan described above for the six months ended June 30, 2019:

	Outstanding Non-Qualified or Nonincentive Stock Awards	Weighted Average Exercise Price
Outstanding at December 31, 2018	464,702	$ 69.85
Granted	114,429	$ 74.57
Exercised	(26,890)	$ 64.15
Canceled or expired	(16,498)	$ 72.56
Outstanding at June 30, 2019	535,743	$ 71.06

The following table summarizes information about the Company's outstanding and exercisable stock options under the employee plan at June 30, 2019:

	Options Outstanding				Options Exercisable		
Range of Exercise Prices	Number Outstanding	Weighted Average Remaining Contractual Life in Years	Weighted Average Exercise Price	Aggregate Intrinsic Value	Number Exercisable	Weighted Average Exercise Price	Aggregate Intrinsic Value
$51.23	83,329	3.6	$ 51.23		83,329	$ 51.23	
$64.65 - $68.50	100,757	5.0	$ 67.34		45,052	$ 68.47	
$70.65 - $75.50	307,671	4.9	$ 74.32		126,553	$ 73.96	
$84.90 - $101.46	43,986	2.4	$ 94.38		37,281	$ 96.08	
$51.23 - $101.46	535,743	4.5	$ 71.06	$4,929,000	292,215	$ 69.45	$3,426,000

The following is a summary of the restricted stock award activity under the employee plan described above for the six months ended June 30, 2019:

	Unvested Restricted Stock Award Shares	Weighted Average Grant Date Fair Value Per Share
Nonvested balance at December 31, 2018	214,216	$ 64.73
Vested	(62,406)	$ 68.30
Forfeited	(12,205)	$ 63.36
Nonvested balance at June 30, 2019	139,605	$ 63.26

The following is a summary of RSU activity under the employee plan described above for the six months ended June 30, 2019:

	Unvested RSUs	Weighted Average Grant Date Fair Value Per Unit
Nonvested balance at December 31, 2018	141,055	$ 75.59
Granted	146,005	$ 74.44
Vested	(25,484)	$ 75.60
Forfeited	(4,754)	$ 75.31
Nonvested balance at June 30, 2019	256,822	$ 74.94

The Company has a stock award plan for nonemployee directors of the Company which provides for the issuance of stock options and restricted stock. The director plan provides for automatic grants of restricted stock to nonemployee directors after each annual meeting of stockholders. In addition, the director plan allows for the issuance of stock options or restricted stock in lieu of cash for all or part of the annual director fee at the option of the director. The exercise prices for all options granted under the plan are equal to the fair market value per share of the Company's common stock on the date of grant. The terms of the options are ten years. The restricted stock issued after each annual meeting of stockholders vests six months after the date of grant. Options granted and restricted stock issued in lieu of cash director fees vest in equal quarterly increments during the year to which they relate. At June 30, 2019, 462,342 shares were available for future grants under the director plan. The director stock award plan is intended as an incentive to attract and retain qualified independent directors.

The following is a summary of the stock option activity under the director plan described above for the six months ended June 30, 2019:

	Outstanding Non-Qualified or Nonincentive Stock Options	Weighted Average Exercise Price
Outstanding at December 31, 2018	131,104	$ 70.14
Granted	2,652	$ 84.90
Exercised	(6,000)	$ 29.60
Outstanding at June 30, 2019	127,756	$ 72.35

The following table summarizes information about the Company's outstanding and exercisable stock options under the director plan at June 30, 2019:

	Options Outstanding				Options Exercisable		
Range of Exercise Prices	Number Outstanding	Weighted Average Remaining Contractual Life in Years	Weighted Average Exercise Price	Aggregate Intrinsic Value	Number Exercisable	Weighted Average Exercise Price	Aggregate Intrinsic Value
$41.24 – $56.45	31,276	1.4	$ 50.61		31,276	$ 50.61	
$61.89 – $62.48	28,000	3.1	$ 62.27		28,000	$ 62.27	
$70.65 – $99.52	68,480	4.9	$ 86.39		66,491	$ 86.44	
$41.24 – $99.52	127,756	3.6	$ 72.35	$1,498,000	125,767	$ 72.15	$ 1,498,000

The following is a summary of the restricted stock award activity under the director plan described above for the six months ended June 30, 2019:

	Unvested Restricted Stock Award Shares	Weighted Average Grant Date Fair Value Per Share
Nonvested balance at December 31, 2018	264	$ 85.30
Granted	21,064	$ 84.90
Vested	(794)	$ 85.03
Nonvested balance at June 30, 2019	20,534	$ 84.90

The total intrinsic value of all stock options exercised under all of the Company's plans was $592,000 and $6,623,000 for the six months ended June 30, 2019 and 2018, respectively. The actual tax benefit realized for tax deductions from stock option exercises was $143,000 and $1,974,000 for the six months ended June 30, 2019 and 2018, respectively.

The total intrinsic value of all the restricted stock vestings under all of the Company's plans was $4,269,000 and $11,406,000 for the six months ended June 30, 2019 and 2018, respectively. The actual tax benefit realized for tax deductions from restricted stock vestings was $1,031,000 and $3,399,000 for the six months ended June 30, 2019 and 2018, respectively.

The total intrinsic value of all the RSU vestings under the Company's employee plan was $1,727,000 for the six months ended June 30, 2019. The actual tax benefit realized for tax deductions from RSU vestings was $417,000 for the six months ended June 30, 2019. There were no RSU vestings for the six months ended June 30, 2018.

As of June 30, 2019, there was $3,307,000 of unrecognized compensation cost related to nonvested stock options, $7,312,000 related to nonvested restricted stock awards and $12,060,000 related to nonvested RSUs. The stock options are expected to be recognized over a weighted average period of approximately 1.8 years, restricted stock awards over approximately 1.7 years and RSUs over approximately 4.0 years. The total fair value of options vested was $1,883,000 and $3,143,000 during the six months ended June 30, 2019 and 2018, respectively. The fair value of the restricted stock vested was $4,269,000 and $11,406,000 for the six months ended June 30, 2019 and 2018, respectively. The fair value of the RSUs vested was $1,727,000 for the six months ended June 30, 2019.

The weighted average per share fair value of stock options granted during the six months ended June 30, 2019 and 2018 was $22.77 and $23.53, respectively. The fair value of the stock options granted during the six months ended June 30, 2019 and 2018 was $2,665,000 and $2,787,000, respectively. The Company currently uses treasury stock shares for restricted stock grants, RSU vestings, and stock option exercises. The fair value of each stock option was determined using the Black-Scholes option pricing model. The key input variables used in valuing the options during the six months ended June 30, 2019 and 2018 were as follows:

	Six months ended June 30,	
	2019	2018
Dividend yield	None	None
Average risk-free interest rate	2.5%	2.7%
Stock price volatility	28%	27%
Estimated option term	5.3 years	5.5 years

(9) OTHER COMPREHENSIVE INCOME

The Company's changes in other comprehensive income for the three months and six months ended June 30, 2019 and 2018 were as follows (in thousands):

	Three months ended June 30,					
	2019			2018		
	Gross Amount	Income Tax (Provision) Benefit	Net Amount	Gross Amount	Income Tax (Provision) Benefit	Net Amount
Pension and postretirement benefits (a):						
Amortization of net actuarial loss	$ (87)	$ 21	$ (66)	$ 591	$ (143)	$ 448
Actuarial gains (losses)	8,167	(2,044)	6,123	(609)	148	(461)
Foreign currency translation	(53)	—	(53)	(429)	—	(429)
Total	$ 8,027	$ (2,023)	$ 6,004	$ (447)	$ 5	$ (442)

	Six months ended June 30,					
	2019			2018		
	Gross Amount	Income Tax (Provision) Benefit	Net Amount	Gross Amount	Income Tax (Provision) Benefit	Net Amount
Pension and postretirement benefits (a):						
Amortization of net actuarial loss	$ 463	$ (118)	$ 345	$ 1,159	$ (281)	$ 878
Actuarial gains (losses)	8,167	(2,044)	6,123	(609)	148	(461)
Reclassification to retained earnings of stranded tax effects from tax reform	—	—	—	—	(7,925)	(7,925)
Foreign currency translation	76	—	76	(9)	—	(9)
Total	$ 8,706	$ (2,162)	$ 6,544	$ 541	$ (8,058)	$ (7,517)

(a) Actuarial gains/(losses) are amortized into other income (expense). (See Note 13 - Retirement Plans)

(10) SEGMENT DATA

The Company's operations are aggregated into two reportable business segments as follows:

Marine Transportation — Provides marine transportation principally by United States flag vessels of liquid cargoes throughout the United States inland waterway system, along all three United States coasts, in Alaska and Hawaii and, to a lesser extent, in United States coastal transportation of dry-bulk cargoes. The principal products transported include petrochemicals, black oil, refined petroleum products and agricultural chemicals.

Distribution and Services — Provides after-market services and parts for engines, transmissions, reduction gears and related equipment used in oilfield service, marine, power generation, mining, on-highway, and other industrial applications. The Company also rents equipment including generators, fork lifts, pumps and compressors for use in a variety of industrial markets, and manufactures and remanufactures oilfield service equipment, including pressure pumping units, for the oilfield service and oil and gas operator and producer markets.

The Company's two reportable business segments are managed separately based on fundamental differences in their operations. The Company evaluates the performance of its segments based on the contributions to operating income of the respective segments, and before income taxes, interest, gains or losses on disposition of assets, other nonoperating income, noncontrolling interests, accounting changes, and nonrecurring items. Intersegment revenues, based on market-based pricing, of the distribution and services segment from the marine transportation segment of $7,446,000 and $14,981,000 for the three months and six months ended June 30, 2019, respectively, and $7,770,000 and $15,920,000 for the three months and six months ended June 30, 2018, respectively, have been eliminated from the tables below. The related intersegment profit of $744,000 and $1,498,000 for the three months and six months ending June 30, 2019, respectively, and $777,000 and $1,592,000 for the three months and six months ended June 30, 2018, respectively, have also been eliminated from the tables below.

The following tables set forth the Company's revenues and profit or loss by reportable segment for the three months and six months ended June 30, 2019 and 2018 and total assets as of June 30, 2019 and December 31, 2018 (in thousands):

	Three months ended June 30,		Six months ended June 30	
	2019	2018	2019	2018
Revenues:				
Marine transportation	$ 404,286	$ 378,163	$ 772,407	$ 718,566
Distribution and services	366,756	424,508	743,256	825,793
	$ 771,042	$ 802,671	$ 1,515,663	$ 1,544,359
Segment profit (loss):				
Marine transportation	$ 53,243	$ 38,228	$ 88,667	$ 54,408
Distribution and services	23,128	40,190	60,737	77,155
Other	(13,662)	(33,564)	(28,358)	(44,178)
	$ 62,709	$ 44,854	$ 121,046	$ 87,385

	June 30, 2019	December 31, 2018
Total assets:		
Marine transportation	$ 4,550,455	$ 4,145,294
Distribution and services	1,571,861	1,653,636
Other	110,574	72,664
	$ 6,232,890	$ 5,871,594

The following table presents the details of "Other" segment loss for the three months and six months ended June 30, 2019 and 2018 (in thousands):

	Three months ended June 30,		Six months ended June 30,	
	2019	2018	2019	2018
General corporate expenses	$ (3,646)	$ (23,007)	$ (6,730)	$ (27,330)
Gain on disposition of assets	3,118	442	5,275	2,340
Interest expense	(15,515)	(12,540)	(28,716)	(22,320)
Other income	2,381	1,541	1,813	3,132
	$ (13,662)	$ (33,564)	$ (28,358)	$ (44,178)

The following table presents the details of "Other" total assets as of June 30, 2019 and December 31, 2018 (in thousands):

	June 30, 2019	December 31, 2018
General corporate assets	$ 108,786	$ 70,169
Investment in affiliates	1,788	2,495
	$ 110,574	$ 72,664

(11) TAXES ON INCOME

Earnings before taxes on income and details of the provision for taxes on income for the three months and six months ended June 30, 2019 and 2018 were as follows (in thousands):

	Three months ended June 30,		Six months ended June 30,	
	2019	2018	2019	2018
Earnings (loss) before taxes on income:				
United States	$ 62,903	$ 45,982	$ 121,655	$ 89,526
Foreign	(194)	(1,128)	(609)	(2,141)
	$ 62,709	$ 44,854	$ 121,046	$ 87,385
Provision for taxes on income:				
Federal:				
Current	$ —	$ —	$ —	$ —
Deferred	13,517	14,384	26,007	22,893
State and local:				
Current	1,686	1,599	3,145	2,406
Deferred	—	151	—	488
Foreign - current	66	(73)	(3)	139
	$ 15,269	$ 16,061	$ 29,149	$ 25,926

(12) EARNINGS PER SHARE

The following table presents the components of basic and diluted earnings per share for the three months and six months ended June 30, 2019 and 2018 (in thousands, except per share amounts):

	Three months ended June 30,		Six months ended June 30,	
	2019	2018	2019	2018
Net earnings attributable to Kirby	$ 47,287	$ 28,602	$ 91,583	$ 61,073
Undistributed earnings allocated to restricted shares	(122)	(116)	(241)	(269)
Income available to Kirby common stockholders – basic	47,165	28,486	91,342	60,804
Undistributed earnings allocated to restricted shares	122	116	241	269
Undistributed earnings reallocated to restricted shares	(122)	(115)	(240)	(269)
Income available to Kirby common stockholders – diluted	$ 47,165	$ 28,487	$ 91,343	$ 60,804
Shares outstanding:				
Weighted average common stock issued and outstanding	59,894	59,790	59,882	59,735
Weighted average unvested restricted stock	(154)	(242)	(157)	(263)
Weighted average common stock outstanding – basic	59,740	59,548	59,725	59,472
Dilutive effect of stock options and restricted stock units	167	172	140	137
Weighted average common stock outstanding – diluted	59,907	59,720	59,865	59,609
Net earnings per share attributable to Kirby common stockholders:				
Basic	$ 0.79	$ 0.48	$ 1.53	$ 1.02
Diluted	$ 0.79	$ 0.48	$ 1.53	$ 1.02

Certain outstanding options to purchase approximately 297,000 and 189,000 shares of common stock were excluded in the computation of diluted earnings per share as of June 30, 2019 and 2018, respectively, as such stock options would have been antidilutive. Certain outstanding RSUs to convert to 4,000 shares of common stock were also excluded in the computation of diluted earnings per share as of June 30, 2019 as such RSUs would have been antidilutive.

(13) RETIREMENT PLANS

The Company sponsors a defined benefit plan for its inland vessel personnel and shore based tankermen. The plan benefits are based on an employee's years of service and compensation. The plan assets consist primarily of equity and fixed income securities.

On April 12, 2017, the Company amended its pension plan to cease all benefit accruals for periods after May 31, 2017 for certain participants. Participants grandfathered and not impacted were those, as of the close of business on May 31, 2017, who either (a) had completed 15 years of pension service or (b) had attained age 50 and completed 10 years of pension service. Participants non-grandfathered are eligible to receive discretionary 401(k) plan contributions. The Company did not incur any one-time charges related to this amendment but the pension plan's projected benefit obligation decreased by $33,433,000.

The Company's pension plan funding strategy is to make annual contributions in amounts equal to or greater than amounts necessary to meet minimum government funding requirements. The plan's benefit obligations are based on a variety of demographic and economic assumptions, and the pension plan assets' returns are subject to various risks, including market and interest rate risk, making an accurate prediction of the pension plan contribution difficult. Based on current pension plan assets and market conditions, the Company does not expect to make a contribution to the Company's pension plan during 2019.

On February 14, 2018, with the acquisition of Higman Marine, Inc. and its affiliated companies ("Higman"), the Company assumed Higman's pension plan for its inland vessel personnel and office staff. On March 27, 2018, the Company amended the Higman pension plan to close it to all new entrants and cease all benefit accruals for periods after May 15, 2018 for all participants. The Company did not incur any one-time charges related to this amendment but the Higman pension plan's projected benefit obligation decreased by $3,081,000. The Company made contributions of $1,615,000 to the Higman pension plan in the first quarter of 2019 for the 2018 plan year and a contribution of $483,000 in the second quarter of 2019 for the 2019 plan year. The Company expects to make additional contributions of $966,000 to the Higman pension plan during 2019 for the 2019 plan year.

The Company sponsors an unfunded defined benefit health care plan that provides limited postretirement medical benefits to employees who meet minimum age and service requirements, and to eligible dependents. The plan limits cost increases in the Company's contribution to 4% per year. The plan is contributory, with retiree contributions adjusted annually. The plan eliminated coverage for future retirees as of December 31, 2011. The Company also has an unfunded defined benefit supplemental executive retirement plan ("SERP") that was assumed in an acquisition in 1999. That plan ceased to accrue additional benefits effective January 1, 2000.

The components of net periodic benefit cost for the Company's defined benefit plans for the three months and six months ended June 30, 2019 and 2018 were as follows (in thousands):

	Pension Benefits			
	Pension Plan		SERP	
	Three months ended June 30,		Three months ended June 30,	
	2019	2018	2019	2018
Components of net periodic benefit cost:				
Service cost	$ 1,914	$ 1,867	$ —	$ —
Interest cost	4,040	3,974	13	12
Expected return on plan assets	(5,254)	(5,693)	—	—
Amortization of actuarial loss	41	740	7	6
Net periodic benefit cost	$ 741	$ 888	$ 20	$ 18

	Pension Benefits			
	Pension Plan		SERP	
	Six months ended June 30,		Six months ended June 30,	
	2019	2018	2019	2018
Components of net periodic benefit cost:				
Service cost	$ 3,682	$ 4,094	$ —	$ —
Interest cost	8,247	7,605	26	24
Expected return on plan assets	(10,478)	(11,016)	—	—
Amortization of actuarial loss	719	1,445	14	12
Net periodic benefit cost	$ 2,170	$ 2,128	$ 40	$ 36

The components of net periodic benefit cost for the Company's postretirement benefit plan for the three months and six months ended June 30, 2019 and 2018 were as follows (in thousands):

	Other Postretirement Benefits			
	Postretirement Welfare Plan			
	Three months ended June 30,		Six months ended June 30,	
	2019	2018	2019	2018
Components of net periodic benefit cost:				
Service cost	$ —	$ —	$ —	$ —
Interest cost	8	6	16	12
Amortization of actuarial gain	(135)	(149)	(270)	(298)
Net periodic benefit cost	$ (127)	$ (143)	$ (254)	$ (286)

(14) CONTINGENCIES

On May 10, 2019, two tank barges and a towboat (the M/V Voyager), owned and operated by Kirby Inland Marine, LP, a wholly owned subsidiary of the Company, were struck by the LPG tanker, the Genesis River, in the Houston Ship Channel. The bow of the Genesis River penetrated the Kirby 30015T and capsized the MMI 3014. The collision caused the cargo, reformate, to be discharged into the water. The United States Coast Guard ("USCG") and the National Transportation Safety Board ("NTSB") designated the owner and pilot of the Genesis River as well as the subsidiary of the Company as parties of interest in their investigation as to the cause of the incident. The Company is participating in the investigation. On June 19, 2019, the Company filed a limitation action in Federal Court seeking limitation of liability and asserting the Genesis River and her owner/manager are at fault for damages including removal costs and claims under the Oil Pollution Act of 1990 and maritime law. The Company has various insurance policies covering liabilities including pollution, property, marine and general liability and believes that it has satisfactory insurance coverage for the cost of cleanup and salvage operations as well as other potential liabilities arising from the incident. The Company believes it has accrued adequate reserves for the incident and does not expect the incident to have a material adverse effect on its business or financial condition.

On October 13, 2016, the tug Nathan E. Stewart and barge DBL 55, an articulated tank barge and tugboat unit ("ATB") owned and operated by Kirby Offshore Marine, LLC, a wholly owned subsidiary of the Company, ran aground at the entrance to Seaforth Channel on Atholone Island, British Columbia. The grounding resulted in a breach of a portion of the Nathan E. Stewart's fuel tanks causing a discharge of diesel fuel into the water. The USCG and the NTSB designated the Company as a party of interest in their investigation as to the cause of the incident. The Canadian authorities including Transport Canada and the Canadian Transportation Safety Board investigated the cause of the incident. On October 10, 2018, the Heiltsuk First Nation filed a civil action against a subsidiary of the Company, the master and pilot of the tug, the vessels and the Canadian government seeking unquantified damages as a result of the incident. On the same date, the Canadian government filed charges against the subsidiary and the vessels for violations of the Canadian Fisheries Act, the Migratory Birds Convention Act, the Pilotage Act and the Shipping Act of 2001. On July 16, 2019, the Company and the Canadian government settled the charges against the subsidiary of the Company. The subsidiary of the Company agreed to pay the Canadian government a fine of approximately $2,900,000 Canadian dollars ($2,200,000 U.S. dollars) for violations of the Canadian Fisheries Act, the Migratory Birds Convention Act, the Pilotage Act and the Shipping Act of 2001. The Company filed a limitation action in Federal Court seeking limitation of liability relating to the incident as provided under admiralty law. The Company responded to the Heiltsuk First Nation's civil claim asserting that the Federal Court action is the appropriate forum for claims to be heard. The Company is unable to estimate the potential exposure in either proceeding. The Company has various insurance policies covering liabilities including pollution, property, marine and general liability and believes that it has satisfactory insurance coverage for the cost of cleanup and salvage operations as well as other potential liabilities arising from the incident. The Company believes it has accrued adequate reserves for the incident and does not expect the incident to have a material adverse effect on its business or financial condition.

On March 22, 2014, two tank barges and a towboat (the M/V Miss Susan), owned by Kirby Inland Marine, LP, a wholly owned subsidiary of the Company, were involved in a collision with the M/S Summer Wind on the Houston Ship Channel near Texas City, Texas. The lead tank barge was damaged in the collision resulting in a discharge of intermediate fuel oil from one of its cargo tanks. The Company is participating in the natural resource damage assessment and restoration process with federal and state government natural resource trustees. The Company believes it has adequate insurance coverage for pollution, marine and other potential liabilities arising from the incident. The Company believes it has accrued adequate reserves for the incident and does not expect the incident to have a material adverse effect on its business or financial condition.

In addition, the Company is involved in various legal and other proceedings which are incidental to the conduct of its business, none of which in the opinion of management will have a material effect on the Company's financial condition, results of operations or cash flows. Management believes that it has recorded adequate reserves and believes that it has adequate insurance coverage or has meritorious defenses for these other claims and contingencies.

The Company has issued guaranties or obtained standby letters of credit and performance bonds supporting performance by the Company and its subsidiaries of contractual or contingent legal obligations of the Company and its subsidiaries incurred in the ordinary course of business. The aggregate notional value of these instruments is $18,795,000 at June 30, 2019, including $7,061,000 in letters of credit and $11,734,000 in performance bonds. All of these instruments have an expiration date within two years. The Company does not believe demand for payment under these instruments is likely and expects no material cash outlays to occur regarding these instruments.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

Statements contained in this Form 10-Q that are not historical facts, including, but not limited to, any projections contained herein, are forward-looking statements and involve a number of risks and uncertainties. Such statements can be identified by the use of forward-looking terminology such as "may," "will," "expect," "anticipate," "estimate," or "continue," or the negative thereof or other variations thereon or comparable terminology. The actual results of the future events described in such forward-looking statements in this Form 10-Q could differ materially from those stated in such forward-looking statements. Among the factors that could cause actual results to differ materially are: adverse economic conditions, industry competition and other competitive factors, adverse weather conditions such as high water, low water, tropical storms, hurricanes, tsunamis, fog and ice, tornados, marine accidents, lock delays, fuel costs, interest rates, construction of new equipment by competitors, government and environmental laws and regulations, and the timing, magnitude and number of acquisitions made by the Company. For a more detailed discussion of factors that could cause actual results to differ from those presented in forward-looking statements, see Item 1A-Risk Factors found in the Company's Annual Report on Form 10-K for the year ended December 31, 2018. Forward-looking statements are based on currently available information and the Company assumes no obligation to update any such statements.

For purposes of the Management's Discussion, all net earnings per share attributable to Kirby common stockholders are "diluted earnings per share." The weighted average number of common shares applicable to diluted earnings per share for the three months and six months ended June 30, 2019 and 2018 were as follows (in thousands):

	Three months ended June 30,		Six months ended June 30,	
	2019	2018	2019	2018
Weighted average number of common stock - diluted	59,907	59,720	59,865	59,609

The increase in the weighted average number of common shares for the 2019 second quarter and first six months compared with the 2018 second quarter and first six months primarily reflects the issuance of restricted stock, RSUs, and stock options.

Overview

The Company is the nation's largest domestic tank barge operator, transporting bulk liquid products throughout the Mississippi River System, on the Gulf Intracoastal Waterway, coastwise along all three United States coasts, and in Alaska and Hawaii. The Company transports petrochemicals, black oil, refined petroleum products and agricultural chemicals by tank barge. As of June 30, 2019, the Company operated a fleet of 1,067 inland tank barges with 23.7 million barrels of capacity, and operated an average of 309 inland towboats. The Company's coastal fleet consisted of 49 tank barges with 4.7 million barrels of capacity and 47 coastal tugboats. The Company also owns and operates four offshore dry-bulk cargo barges, four offshore tugboats and one docking tugboat transporting dry-bulk commodities in United States coastal trade. Through its distribution and services segment, the Company provides after-market service and parts for engines, transmissions, reduction gears, and related equipment used in oilfield services, marine, mining, power generation, on-highway, and other industrial applications. The Company also rents equipment including generators, fork lifts, pumps and compressors for use in a variety of industrial markets, and manufactures and remanufactures oilfield service equipment, including pressure pumping units, for the oilfield service and oil and gas operator and producer markets.

For the 2019 second quarter, net earnings attributable to Kirby were $47,287,000, or $0.79 per share, on revenues of $771,042,000, compared with 2018 second quarter net earnings attributable to Kirby of $28,602,000, or $0.48 per share, on revenues of $802,671,000. For the 2019 first six months, net earnings attributable to Kirby were $91,583,000, or $1.53 per share, on revenues of $1,515,663,000, compared with 2018 first six months net earnings attributable to Kirby of $61,073,000, or $1.02 per share, on revenues of $1,544,359,000. The 2018 second quarter and first six months results included a one-time non-deductible expense of $18,057,000, or $0.30 per share, related to the retirement of Joseph H. Pyne as executive Chairman of the Board of Directors, effective April 30, 2018. The 2018 first quarter results reflected the acquisition of Higman on February 14, 2018 and included $3,261,000 before taxes, or $0.04 per share, of one-time transaction costs associated with the acquisition, as well as $2,912,000 before taxes, or $0.04 per share, of severance and retirement expenses, primarily related to cost reduction initiatives in the coastal marine transportation market and the integration of Higman.

Marine Transportation

For the 2019 second quarter and first six months, the Company's marine transportation segment generated 52% and 51%, respectively, of the Company's revenue. The segment's customers include many of the major petrochemical and refining companies that operate in the United States. Products transported include intermediate materials used to produce many of the end products used widely by businesses and consumers — plastics, fiber, paints, detergents, oil additives and paper, among others, as well as residual fuel oil, ship bunkers, asphalt, gasoline, diesel fuel, heating oil, crude oil, natural gas condensate and agricultural chemicals. Consequently, the Company's marine transportation business is directly affected by the volumes produced by the Company's petroleum, petrochemical and refining customer base.

The Company's marine transportation segment's revenues for both the 2019 second quarter and first six months increased 7%, and operating income increased 39% and 63%, respectively, compared with the 2018 second quarter and first six months revenues and operating income. The increases were primarily due to the addition of the Higman fleet acquired on February 14, 2018, the acquisition of the Targa Resources Corp ("Targa") pressure barge fleet on May 10, 2018, the CGBM 100, LLC ("CGBM") inland tank barges acquired on December 14, 2018, and the Cenac marine transportation fleet acquired on March 14, 2019, as well as improved barge utilization and spot and term contract pricing in the inland and coastal markets. Partially offsetting these increases during 2019 were unusually poor operating conditions due to heavy fog along the Gulf Coast, prolonged periods of ice on the Illinois River, high water on the Mississippi River System, closures of key waterways as a result of lock maintenance projects, extended delays in the Houston Ship Channel, and increased shipyard days on several large capacity coastal vessels during the 2019 first quarter. The 2018 first six months were impacted by the Higman transaction costs, and severance and retirement costs which were each incurred in the 2018 first quarter as discussed above. For the 2019 and 2018 second quarters, the inland tank barge fleet contributed 77% and 76%, respectively, and the coastal fleet contributed 23% and 24%, respectively, of marine transportation revenues. For the 2019 and 2018 first six months, the inland tank barge fleet contributed 77% and 75%, respectively, and the coastal fleet contributed 23% and 25%, respectively, of marine transportation revenues.

Tank barge utilization levels in the Company's inland marine transportation markets averaged in the mid-90% range during the 2019 first and second quarters compared with the high 80% to low 90% range during the 2018 second quarter. Strong demand from petrochemicals, black oil, refined petroleum products and agricultural chemicals customers, along with extensive delay days due to poor operating conditions which slowed the transport of customer cargoes, contributed to increased utilization during the 2019 second quarter compared to the 2018 second quarter.

Coastal tank barge utilization levels averaged in the mid-80% range during the 2019 second quarter compared with the low-80% range during the 2019 first quarter and the 80% range in the 2018 second quarter. The improvement in utilization in 2019 primarily reflected improved customer demand resulting in higher utilization of spot market capacity. Utilization in the coastal marine fleet continued to be impacted by the oversupply of tank barges in the coastal industry.

During both the 2019 second quarter and first six months and the 2018 second quarter and first six months, approximately 65% of inland revenues were under term contracts and 35% were spot contract revenues. Inland time charters during the 2019 second quarter and first six months represented 63% and 62%, respectively, of the inland revenues under term contracts compared with 62% and 60%, respectively, in the 2018 second quarter and first six months. Rates on inland term contracts renewed in the 2019 first quarter increased in the 4% to 6% average range compared with term contracts renewed in the first quarter of 2018. Rates on inland term contracts renewed in the 2019 second quarter increased in the 5% to 8% average range compared with term contracts renewed in the 2018 second quarter. Spot contract rates in the 2019 second quarter increased approximately 15% compared to the 2018 second quarter and increased in the 2% to 5% average range compared to the 2019 first quarter. Effective January 1, 2019, annual escalators for labor and the producer price index on a number of inland multi-year contracts resulted in rate increases on those contracts of approximately 1.7%, excluding fuel.

During the 2019 and 2018 second quarters and first six months, approximately 80% of the coastal revenues were under term contracts and 20% were spot contract revenues. Coastal time charters represented approximately 85% of coastal revenues under term contracts during the 2019 and 2018 second quarters and first six months. Spot and term contract pricing in the coastal market are contingent on various factors including geographic location, vessel capacity, vessel type and product serviced. Spot market rates in the 2019 second quarter improved in the 10% to 15% average range compared to the 2018 second quarter. Term contract pricing in both the 2019 first and second quarters was higher in the 4% to 6% average range compared to the 2018 first and second quarters.

The marine transportation segment operating margin was 13.2% for the 2019 second quarter compared with 10.1% for the 2018 second quarter and 11.5% for the 2019 first six months compared to 7.6% for the 2018 first six months.

Distribution and Services

For the 2019 second quarter and first six months, the distribution and services segment generated 48% and 49%, respectively, of the Company's revenue, of which 70% and 69%, respectively, was generated from service and parts and 30% and 31%, respectively, from manufacturing. The results of the distribution and services segment are largely influenced by the economic cycles of the oilfield service and oil and gas operator and producer markets, marine, mining, power generation, on-highway and other industrial markets.

Distribution and services revenues for the 2019 second quarter and first six months decreased 14% and 10%, respectively, when compared with the 2018 second quarter and first six months. Operating income for the distribution and services segment for the 2019 second quarter and first six months decreased 42% and 21%, respectively, compared with the 2018 second quarter and first six months. The decreases were primarily attributable to reduced activity in the oilfield which resulted in lower customer demand for new and remanufactured pressure pumping equipment and reduced demand for new and overhauled transmissions and related parts and service, partially offset by improved demand in the commercial and industrial market for the power generation sector. For the 2019 second quarter and first six months, the oil and gas market contributed 54% and 57%, respectively of the distribution and services revenues. The commercial and industrial market, which contributed 46% and 43% of the distribution and services revenues for the 2019 second quarter and first six months, respectively, saw increased demand from commercial customers for back-up power systems in the 2019 second quarter and first six months. Demand for marine diesel engines, parts and service was stable compared to the 2018 second quarter and first six months.

The distribution and services segment operating margin for the 2019 second quarter was 6.3% compared with 9.5% for the 2018 second quarter. For the 2019 first six months, the operating margin was 8.2% compared to 9.3% for the first six months of 2018.

Cash Flow and Capital Expenditures

The Company continued to generate favorable operating cash flow during the 2019 first six months with net cash provided by operating activities of $188,197,000 compared with $153,755,000 for the 2018 first six months, a 22% increase. The improvement was driven by increased revenues and operating income in the marine transportation segment driven by the Higman acquisition in February 2018, the Targa acquisition in May 2018, the CGBM acquisition in December 2018, and the Cenac acquisition in March 2019, as well as improved inland and coastal barge utilization and pricing. The improvement was also due to a net increase in cash flows from the change in operating assets and liabilities of $10,364,000 due to decrease in inventories in the distribution and services segment in the 2019 first six months compared to an increase in the 2018 first six months. The inventory decrease in the 2019 first six months was primarily due to reduced business activity levels in the oil and gas market as compared to higher inventory levels in the 2018 first six months required to support higher business activity levels. In addition, during the 2019 and 2018 first six months, the Company generated cash of $23,364,000 and $25,208,000, respectively, from proceeds from the disposition of assets, and $1,903,000 and $12,987,000, respectively, from proceeds from the exercise of stock options.

For the 2019 first six months, cash generated and borrowings under the Company's revolving credit facility were used for capital expenditures of $127,268,000, including $16,380,000 for inland towboat construction, $11,370,000 for progress payments on three 5000 horsepower coastal ATB tugboats, $2,211,000 for final costs on a 155,000 barrel coastal ATB under construction purchased from another operator that was delivered to the Company in the 2018 fourth quarter, and $97,307,000 primarily for upgrading existing marine equipment and marine transportation and distribution and services facilities. The Company also used $252,840,000 for acquisitions of businesses and marine equipment.

The Company's debt-to-capitalization ratio increased to 32.4% at June 30, 2019 from 30.5% at December 31, 2018, primarily due to borrowings under the Revolving Credit Facility and the Term Loan to purchase the Cenac fleet in the 2019 first quarter, offset by the increase in total equity from net earnings attributable to Kirby for the 2019 first six months of $91,583,000 and the exercise of stock options and the amortization of unearned equity compensation. As of June 30, 2019, the Company had $103,577,000 outstanding under its Revolving Credit Facility, $500,000,000 outstanding under the Term Loan, $500,000,000 of unsecured senior notes ("Senior Notes Series A" and "Senior Notes Series B") outstanding and $500,000,000 of 4.2% senior unsecured notes due March 1, 2028 (the "2028 Notes") outstanding, offset by $8,882,000 in unamortized debt discount and issuance costs.

During the 2019 first six months, the Company acquired 63 inland tank barges from Cenac with a total capacity of approximately 1,833,000 barrels, retired five inland tank barges, brought back into service four inland tank barges, and chartered two inland tank barges, increasing its capacity by approximately 78,000 barrels. The net result was an increase of 64 inland tank barges and approximately 1,911,000 barrels of capacity during the first six months of 2019.

The Company projects that capital expenditures for 2019 will be in the $225,000,000 to $245,000,000 range. The 2019 construction program will consist of progress payments on the construction of 13 inland towboats, eight of which will be placed in service in 2019 and the remaining five in 2020 and 2021, and progress payments on the construction of three 5000 horsepower coastal ATB tugboats to be placed in service in 2019. Based on current commitments, steel prices and projected delivery schedules, the Company's 2019 progress payments on the new inland towboats will be approximately $20,000,000 to $25,000,000 and 2019 progress payments on the construction of the three 5000 horsepower coastal ATB tugboats will be approximately $20,000,000. Approximately $155,000,000 to $165,000,000 is primarily capital upgrades and improvements to existing marine equipment and facilities. The balance of $30,000,000 to $35,000,000 will be for rental fleet growth, new machinery and equipment, and facilities improvements and information technology projects in the distribution and services segment.

Outlook

In the inland marine transportation market, the Company anticipates favorable market dynamics with continued growth in customer demand during 2019, driven by continued growth in U.S. GDP, new petrochemical plants which are expected to come on-line during the year, and new pipelines from the Permian Basin that will bring additional crude oil volumes to the Gulf Coast. These factors, combined with only modest inland barge additions, are expected to result in inland barge utilization rates in the mid-90% range during the year. Together with a full year of contribution from 2018 acquisitions, including Higman, Targa's pressure barge business and CGBM's tank barges, as well as the acquisition in March 2019 of Cenac's marine transportation fleet, inland revenues and operating income are expected to increase during 2019. In the 2019 third quarter, better weather should yield improved operating efficiencies on contracts of affreightment. However, the recent hurricane and continued high water conditions on the Mississippi River will impact the 2019 third quarter. Overall, inland revenue and operating income in the 2019 third quarter are expected to increase slightly compared to the 2019 second quarter.

As of June 30, 2019, the Company estimated there were approximately 3,850 inland tank barges in the industry fleet, of which approximately 350 were over 30 years old and approximately 240 of those over 40 years old. The Company estimates that approximately 200 tank barges have been ordered for delivery throughout 2019 and many older tank barges, including an expected 13 by the Company, will be retired, dependent on 2019 market conditions. Historically, 75 to 150 older inland tank barges are retired from service each year industry-wide, with the extent of the retirements dependent on petrochemical and refinery production levels, and crude oil and natural gas condensate movements, both of which can have a direct effect on industry-wide tank barge utilization, as well as term and spot contract rates.

In the coastal marine transportation market, the Company expects revenues and operating income to improve compared to 2018, with coastal tank barge utilization increasing modestly into the low to mid-80% range for 2019. Improving market conditions are expected to be driven by stable to slightly improving customer demand and expected additional industry retirements of aging barges due to ballast water management treatment systems regulations. For the 2019 third quarter, coastal revenues and operating income are expected to be similar to the 2019 second quarter. In the 2019 fourth quarter, however, seasonal activity declines in the Pacific and shipyard maintenance on several large capacity vessels will have an adverse impact on revenue and operating income.

As of June 30, 2019, the Company estimated there were approximately 290 tank barges operating in the 195,000 barrel or less coastal industry fleet, the sector of the market in which the Company operates, and approximately 15 of those were over 30 years old. The Company is aware of three announced coastal tank barge and tugboat units in the 195,000 barrel or less category under construction by competitors for delivery in 2019, two of which were delivered in the first six months of the year.

The results of the distribution and services segment are largely influenced by the economic cycles of the land-based oilfield service and oil and gas operator and producer markets, marine, mining, power generation, on-highway and other industrial markets.

Recent oilfield activity declines and crude oil price volatility have created some uncertainty for the Company's oil and gas market which will likely extend for the duration of 2019. Firm commitments and the pace of orders for new pressure pumping equipment have slowed considerably thus far in 2019. Additionally, maintenance on existing pressure pumping units, transmission overhauls, and parts sales have also declined to minimal levels. Based on current activity levels, deliveries of new pressure pumping equipment are expected to materially decline for the remainder of 2019, and maintenance activities are expected to remain very low. Transmission overhauls and parts sales are also expected to remain at the reduced levels. As a result, revenues and operating income for the Company's oil and gas businesses are expected to decline in the 2019 second half compared to the 2019 first half.

For the distribution and services commercial and industrial market, the Company anticipates revenues and operating income to be higher in 2019 than 2018 with higher anticipated demand for standby power generation and specialty equipment rentals. Activity in the nuclear standby power generation market and the commercial marine markets is expected to be stable in 2019. In the 2019 third quarter, revenues and operating income are expected to decline compared to the 2019 second quarter with fewer installations of major back-up power systems and reduced vessel repair service levels in marine. These should be partially offset by improved utilization in the rental power generation fleet during the summer storm season along the Gulf Coast.

Acquisitions

During the six months ended June 30, 2019, the Company purchased seven inland tank barges from a leasing company for $8,340,000 in cash. The Company had been leasing the barges prior to the purchases. Financing of the equipment acquisition was through borrowings under the Company's revolving credit facility.

On March 14, 2019, the Company completed the acquisition of the marine transportation fleet of Cenac for $244,500,000 in cash. Cenac's fleet consisted of 63 inland 30,000 barrel tank barges with approximately 1,833,000 barrels of capacity, 34 inland towboats and two offshore tugboats. Cenac transported petrochemicals, refined products and black oil, including crude oil, residual fuels, feedstocks and lubricants on the lower Mississippi River, its tributaries, and the Gulf Intracoastal Waterway for major oil companies and refiners. The average age of the inland tank barges was approximately five years and the inland towboats had an average age of approximately seven years. Financing of the acquisition was through borrowings under the Company's revolving credit facility.

Results of Operations

The Company reported 2019 second quarter net earnings attributable to Kirby of $47,287,000, or $0.79 per share, on revenues of $771,042,000, compared with 2018 second quarter net earnings attributable to Kirby of $28,602,000, or $0.48 per share, on revenues of $802,671,000. Net earnings attributable to Kirby for the 2019 first six months were $91,583,000, or $1.53 per share, on revenues of $1,515,663,000, compared with $61,073,000, or $1.02 per share, on revenues of $1,544,359,000 for the 2018 first six months. The 2018 second quarter and first six months results included a one-time non-deductible expense of $18,057,000, or $0.30 per share, related to the retirement of Joseph H. Pyne as executive Chairman of the Board of Directors, effective April 30, 2018. The 2018 first quarter results reflected the acquisition of Higman on February 14, 2018 and included $3,261,000 before taxes, or $0.04 per share, of one-time transaction costs associated with the acquisition, as well as $2,912,000 before taxes, or $0.04 per share, of severance and retirement expenses, primarily related to cost reduction initiatives in the coastal marine transportation market and the integration of Higman.

The following table sets forth the Company's marine transportation and distribution and services revenues for the 2019 second quarter compared with the second quarter of 2018, the first six months of 2019 compared with the first six months of 2018 and the percentage of each to total revenues for the comparable periods (dollars in thousands):

	Three months ended June 30,				Six months ended June 30,			
	2019	%	2018	%	2019	%	2018	%
Marine transportation	$ 404,286	52%	$ 378,163	47%	$ 772,407	51%	$ 718,566	47%
Distribution and services	366,756	48	424,508	53	743,256	49	825,793	53
	$ 771,042	100%	$ 802,671	100%	$ 1,515,663	100%	$ 1,544,359	100%

Marine Transportation

The Company, through its marine transportation segment, is a provider of marine transportation services, operating tank barges and towing vessels transporting bulk liquid products throughout the Mississippi River System, on the Gulf Intracoastal Waterway, coastwise along all three United States coasts and in Alaska and Hawaii. The Company transports petrochemicals, black oil, refined petroleum products and agricultural chemicals by tank barge. As of June 30, 2019, the Company operated 1,067 inland tank barges, including 26 leased barges, with a total capacity of 23.7 million barrels. This compares with 990 inland tank barges operated as of June 30, 2018, including 32 leased barges, with a total capacity of 21.7 million barrels. The Company operated an average of 309 inland towboats during the 2019 second quarter, of which an average of 78 were chartered, compared with 286 during the 2018 second quarter, of which an average of 74 were chartered. The Company's coastal tank barge fleet as of June 30, 2019, consisted of 49 tank barges, two of which were leased, with 4.7 million barrels of capacity, and 47 tugboats, five of which were chartered. This compares with 55 coastal tank barges operated as of June 30, 2018, seven of which were leased, with 5.2 million barrels of capacity, and 50 tugboats, four of which were chartered. The Company owns and operates four offshore dry-bulk cargo barge and tugboat units engaged in the offshore transportation of dry-bulk cargoes. The Company also owns shifting operations and fleeting facilities for dry cargo barges and tank barges on the Houston Ship Channel and in Freeport, Texas, a shipyard for building towboats and performing routine maintenance near the Houston Ship Channel, as well as a two-thirds interest in Osprey Line, L.L.C., which transports project cargoes and cargo containers by barge.

The following table sets forth the Company's marine transportation segment's revenues, costs and expenses, operating income and operating margins for the three months and six months ended June 30, 2019 compared with the three months and six months ended June 30, 2018 (dollars in thousands):

	Three months ended June 30,			Six months ended June 30,		
	2019	2018	% Change	2019	2018	% Change
Marine transportation revenues	$ 404,286	$ 378,163	7%	$ 772,407	$ 718,566	7%
Costs and expenses:						
Costs of sales and operating expenses	267,537	257,022	4	513,727	495,807	4
Selling, general and administrative	29,255	29,472	(1)	62,472	65,048	(4)
Taxes, other than on income	9,159	8,659	6	17,125	15,181	13
Depreciation and amortization	45,092	44,782	1	90,416	88,122	3
	351,043	339,935	3	683,740	664,158	3
Operating income	$ 53,243	$ 38,228	39%	$ 88,667	$ 54,408	63%
Operating margins	13.2%	10.1%		11.5%	7.6%	

Marine Transportation Revenues

The following table shows the marine transportation markets serviced by the Company, the marine transportation revenue distribution for the 2019 second quarter and first six months, products moved and the drivers of the demand for the products the Company transports:

Markets Serviced	2019 Second Quarter Revenue Distribution	2019 Six Months Revenue Distribution	Products Moved	Drivers
Petrochemicals	54%	55%	Benzene, Styrene, Methanol, Acrylonitrile, Xylene, Naphtha, Caustic Soda, Butadiene, Propylene	Consumer non-durables – 70%, Consumer durables – 30%
Black Oil	24%	23%	Residual Fuel Oil, Coker Feedstock, Vacuum Gas Oil, Asphalt, Carbon Black Feedstock, Crude Oil, Natural Gas Condensate, Ship Bunkers	Fuel for Power Plants and Ships, Feedstock for Refineries, Road Construction
Refined Petroleum Products	19%	19%	Gasoline, No. 2 Oil, Jet Fuel, Heating Oil, Diesel Fuel, Ethanol	Vehicle Usage, Air Travel, Weather Conditions, Refinery Utilization
Agricultural Chemicals	3%	3%	Anhydrous Ammonia, Nitrogen – Based Liquid Fertilizer, Industrial Ammonia	Corn, Cotton and Wheat Production, Chemical Feedstock Usage

Marine transportation revenues for both the 2019 second quarter and first six months increased 7% when compared with the 2018 second quarter and first six months. The increase was primarily due to the addition of the Higman fleet acquired on February 14, 2018, the Targa pressure barges acquired on May 10, 2018, the CGBM inland tank barges acquired on December 14, 2018, and the Cenac marine transportation fleet acquired on March 14, 2019, as well as improved barge utilization and spot and term contract pricing in the inland and coastal markets. Partially offsetting the increase were unusually poor operating conditions due to heavy fog along the Gulf Coast, prolonged periods of ice on the Illinois River, high water on the Mississippi River System, closures of key waterways as a result of lock maintenance projects, extended delays in the Houston Ship Channel, and increased shipyard days on several large capacity coastal vessels during the 2019 first quarter. For the 2019 and 2018 second quarters, the inland tank barge fleet contributed 77% and 76%, respectively, and the coastal fleet contributed 23% and 24%, respectively, of marine transportation revenues. For the 2019 and 2018 first six months, the inland tank barge fleet contributed 77% and 75%, respectively, and the coastal fleet contributed 23% and 25%, respectively, of marine transportation revenues.

Tank barge utilization levels in the Company's inland marine transportation markets averaged in the mid-90% range during the 2019 first and second quarters compared with the high 80% to low 90% range during the 2018 second quarter. Strong demand from petrochemicals, black oil, refined petroleum products and agricultural chemicals customers, along with extensive delay days due to poor operating conditions which slowed the transport of customer cargoes, contributed to increased utilization during the 2019 second quarter compared to the 2018 second quarter.

Coastal tank barge utilization levels averaged in the mid-80% range during the 2019 second quarter compared with the low 80% range during the 2019 first quarter and the 80% range in the 2018 second quarter. The improvement in utilization in 2019 primarily reflected improved customer demand resulting in higher utilization of spot market capacity. Utilization in the coastal marine fleet continued to be impacted by the oversupply of tank barges in the coastal industry.

The petrochemical market, the Company's largest market, contributed 54% and 55% of marine transportation revenues for the 2019 second quarter and first six months, respectively, reflecting continued stable volumes from Gulf Coast petrochemical plants for both domestic consumption and to terminals for export destinations plus the addition of the Targa pressure barges in May 2018. Low priced domestic natural gas, a basic feedstock for the United States petrochemical industry, provides the industry with a competitive advantage relative to naphtha-based foreign petrochemical producers. In addition, favorable commodity prices and the addition of new petrochemical industry capacity during 2018 and the 2019 first six months benefited the market.

The black oil market, which contributed 24% and 23% of marine transportation revenues for the 2019 second quarter and first six months, respectively, reflected continued stable demand from steady refinery production levels and the export of refined petroleum products and fuel oils. The Company continued to transport crude oil and natural gas condensate produced from the Eagle Ford and Permian Basin shale formations in Texas, both along the Gulf Intracoastal Waterway with inland vessels and in the Gulf of Mexico with coastal equipment. Additionally, the Company transported increased volumes of Utica natural gas condensate downriver from the Mid-Atlantic to the Gulf Coast and Canadian and Bakken crude downriver from the Midwest to the Gulf Coast.

The refined petroleum products market, which contributed 19% of marine transportation revenues for both the 2019 second quarter and first six months, respectively, reflected stable volumes in the inland market, partially offset by reduced volumes in coastal as a result of one barge retirement and the return of three leased barges which transported refined products.

The agricultural chemical market, which contributed 3% of marine transportation revenues for both the 2019 second quarter and first six months, respectively, saw typical seasonal demand for transportation of both domestically produced and imported products during the first six months.

For the second quarter of 2019, the inland operations incurred 3,331 delay days, 92% more than the 1,735 delay days that occurred during the 2018 second quarter. For the first six months of 2019, the inland operations incurred 7,944 delay days, 86% more than the 4,263 delay days that occurred during the first six months of 2018. Delay days measure the lost time incurred by a tow (towboat and one or more tank barges) during transit when the tow is stopped due to weather, lock conditions or other navigational factors. The increase in delay days for the 2019 second quarter and first six months compared to the 2018 second quarter and first six months reflected unusually poor operating conditions during the 2019 first six months due to heavy fog along the Gulf Coast, extended periods of ice on the Illinois River, near record high water conditions on the Mississippi River System, closures of key waterways as a result of lock maintenance projects and extended delays in the Houston Ship Channel.

During both the 2019 second quarter and first six months and the 2018 second quarter and first six months, approximately 65% of inland revenues were under term contracts and 35% were spot contract revenues. Inland time charters during the 2019 second quarter and first six months represented 63% and 62%, respectively, of the inland revenues under term contracts compared with 62% and 60%, respectively, in the 2018 second quarter and first six months. Rates on inland term contracts renewed in the 2019 first quarter increased in the 4% to 6% average range compared with term contracts renewed in the first quarter of 2018. Rates on inland term contracts renewed in the 2019 second quarter increased in the 5% to 8% average range compared with term contracts renewed in the 2018 second quarter. Spot contract rates in the 2019 second quarter increased approximately 15% compared to the 2018 second quarter and increased in the 2% to 5% average range compared to the 2019 first quarter. Effective January 1, 2019, annual escalators for labor and the producer price index on a number of inland multi-year contracts resulted in rate increases on those contracts of approximately 1.7%, excluding fuel.

During the 2019 and 2018 second quarters and first six months, approximately 80% of the coastal revenues were under term contracts and 20% were spot contract revenues. Coastal time charters represented approximately 85% of coastal revenues under term contracts during the 2019 and 2018 second quarters and first six months. Spot and term contract pricing in the coastal market are contingent on various factors including geographic location, vessel capacity, vessel type and product serviced. Spot market rates in the 2019 second quarter improved in the 10% to 15% average range compared to the 2018 second quarter. Term contract pricing in both the 2019 first and second quarters was higher in the 4% to 6% average range compared to the 2018 first and second quarters.

Marine Transportation Costs and Expenses

Costs and expenses for both the 2019 second quarter and first six months increased 3% when compared with the 2018 second quarter and first six months. Costs of sales and operating expenses for both the 2019 second quarter and first six months increased 4% compared with the 2018 second quarter and first six months, primarily due to the addition of the Higman fleet in February 2018 and the Cenac fleet in March 2019 and higher fuel costs.

The inland marine transportation fleet operated an average of 309 towboats during the 2019 second quarter, of which an average of 78 were chartered, compared with 286 during the 2018 second quarter, of which an average of 74 were chartered. The increase was primarily due to the addition of inland towboats with the Cenac acquisition on March 14, 2019. Generally, as demand, or anticipated demand, increases or decreases, as new tank barges are added to the fleet, or as weather or water conditions dictate, the Company charters in or releases chartered towboats in an effort to balance horsepower needs with current requirements. The Company has historically used chartered towboats for approximately one-fourth of its horsepower requirements.

During both the 2019 and 2018 second quarters, the inland operations consumed 12.6 million gallons of diesel fuel. The average price per gallon of diesel fuel consumed during the 2019 second quarter was $2.24 per gallon compared with $2.10 per gallon for the 2018 second quarter. For the 2019 first six months, the inland operations consumed 24.0 million gallons of diesel fuel compared to 23.9 million gallons consumed during the 2018 first six months. The average price per gallon of diesel fuel consumed during the 2019 first six months was $2.09 compared with $2.07 for the 2018 first six months. Fuel escalation and de-escalation clauses on term contracts are designed to rebate fuel costs when prices decline and recover additional fuel costs when fuel prices rise; however, there is generally a 30 to 90 day delay before the contracts are adjusted. Spot contracts do not have escalators for fuel.

Selling, general and administrative expenses for the 2019 second quarter and first six months decreased 1% and 4%, respectively, compared with the 2018 second quarter and first six months. The decrease was primarily due to transactions costs of $3,261,000, consisting primarily of legal, audit and other professional fees associated with the Higman acquisition and severance charges of $2,591,000 associated with the integration of Higman into the Company and further reduction in headcount in the coastal sector in order to manage costs, both of which were incurred in the 2018 first quarter. The Company also experienced higher costs in the 2019 first six months due to Cenac acquisition related costs of $392,000 and salaries as well as related costs of the acquired personnel of Higman.

Taxes, other than on income, for the 2019 second quarter and first six months increased 6% and 13%, respectively, compared with the 2018 second quarter and first six months, mainly due to higher property taxes on marine transportation equipment, including the Higman, Targa, CGBM, and Cenac fleets, and higher waterway use taxes due to higher business activity levels, mainly due to the Higman and Cenac acquisitions.

Marine Transportation Operating Income and Operating Margins

Marine transportation operating income for the 2019 second quarter and first six months increased 39% and 63%, respectively, compared with the 2018 second quarter and first six months. The operating margin was 13.2% for the 2019 second quarter compared with 10.1% for the 2018 second quarter and 11.5% for the 2019 first six months compared with 7.6% for the 2018 first six months. The operating income increase in the 2019 second quarter, compared to the 2018 second quarter, was primarily due to the acquisitions of Higman, Targa's pressure barge fleet, CGBM's inland tank barges, and Cenac's marine transportation fleet as well as improved barge utilization and spot and term contract pricing in the inland and coastal markets, partially offset by significant weather and navigational challenges in the 2019 first six months.

Distribution and Services

The Company, through its distribution and services segment, sells genuine replacement parts, provides service mechanics to overhaul and repair engines, transmissions, reduction gears and related oilfield services equipment, rebuilds component parts or entire diesel engines, transmissions and reduction gears, and related equipment used in oilfield services, marine, mining, power generation, on-highway and other industrial applications. The Company also rents equipment including generators, fork lifts, pumps and compressors for use in a variety of industrial markets, and manufactures and remanufactures oilfield service equipment, including pressure pumping units, for the oilfield service and oil and gas operator and producer markets.

The following table sets forth the Company's distribution and services segment's revenues, costs and expenses, operating income and operating margins for the three months and six months ended June 30, 2019 compared with the three months and six months ended June 30, 2018 (dollars in thousands):

	Three months ended June 30,			Six months ended June 30,		
	2019	2018	% Change	2019	2018	% Change
Distribution and services revenues	$ 366,756	$ 424,508	(14)%	$ 743,256	$ 825,793	(10)%
Costs and expenses:						
Costs of sales and operating expenses	295,958	331,606	(11)	586,423	646,138	(9)
Selling, general and administrative	37,195	40,963	(9)	74,586	78,717	(5)
Taxes, other than on income	1,411	1,872	(25)	3,428	3,874	(12)
Depreciation and amortization	9,064	9,877	(8)	18,082	19,909	(9)
	343,628	384,318	(11)	682,519	748,638	(9)
Operating income	$ 23,128	$ 40,190	(42)%	$ 60,737	$ 77,155	(21)%
Operating margins	6.3%	9.5%		8.2%	9.3%	

Distribution and Services Revenues

The following table shows the markets serviced by the Company's distribution and services segment, the revenue distribution for the 2019 second quarter and first six months, and the customers for each market:

Markets Serviced	**2019 Second Quarter Revenue Distribution**	**2019 Six Months Revenue Distribution**	**Customers**
Oil and Gas	54%	57%	Oilfield Services, Oil and Gas Operators and Producers
Commercial and Industrial	46%	43%	Inland River Carriers — Dry and Liquid, Offshore Towing — Dry and Liquid, Offshore Oilfield Services — Drilling Rigs & Supply Boats, Harbor Towing, Dredging, Great Lakes Ore Carriers, Pleasure Crafts, On and Off-Highway Transportation, Power Generation, Standby Power Generation, Pumping Stations, Mining

Distribution and services revenues for the 2019 second quarter and first six months decreased 14% and 10%, respectively, when compared with the second quarter and first six months of 2018. The decreased revenues were primarily attributable to reduced activity in the oilfield which resulted in lower customer demand for new and remanufactured pressure pumping equipment and reduced demand for new and overhauled transmissions and related parts and service, partially offset by improved demand in the commercial and industrial market for the power generation sector. For the 2019 second quarter and first six months, the oil and gas market contributed 54% and 57%, respectively, of the distribution and services revenues. The commercial and industrial market, which contributed 46% and 43%, of the distribution and services revenues for the 2019 second quarter and first six months, respectively, saw increased demand from commercial customers for back-up power systems in the 2019 second quarter and first six months. Demand for marine diesel engines, parts and service was stable compared to the 2018 second quarter and first six months.

Distribution and Services Costs and Expenses

Costs and expenses for the 2019 second quarter and first six months decreased 11% and 9%, respectively, compared with the 2018 second quarter and first six months. Costs of sales and operating expenses for the 2019 second quarter and first six months also decreased 11% and 9%, respectively, compared with the 2018 second quarter and first six months, reflecting lower demand for new and remanufactured pressure pumping equipment and reduced demand for new and overhauled transmissions and related parts and service in the oil and gas market.

Selling, general and administrative expenses for the 2019 second quarter and first six months decreased 9% and 5%, respectively, compared with the 2018 second quarter and first six months. The Company experienced lower costs in the 2019 second quarter and first six months mainly due to lower incentive compensation and professional fees.

Distribution and Services Operating Income and Operating Margins

Operating income for the distribution and services segment for the 2019 second quarter and first six months decreased 42% and 21%, respectively, compared with the 2018 second quarter and first six months. The operating margin for the 2019 second quarter was 6.3% compared with 9.5% for the 2018 second quarter and 8.2% for the 2019 first six months compared with 9.3% for the 2018 first six months. The results primarily reflected decreases in higher margin oil and gas related revenue and increased sales of lower margin power generation equipment.

General Corporate Expenses

General corporate expenses for the 2019 second quarter were $3,646,000 compared with $23,007,000 for the 2018 second quarter, primarily due to a one-time non-deductible expense of $18,057,000 in 2018 related to the retirement of the Company's executive Chairman, effective April 30, 2018. For the 2019 first six months, general corporate expenses were $6,730,000 compared with $27,330,000 for the 2018 first six months.

Gain on Disposition of Assets

The Company reported a net gain on disposition of assets of $3,118,000 for the 2019 second quarter compared to $442,000 for the 2018 second quarter. For the 2019 first six months, the Company reported a net gain on disposition of assets of $5,275,000 compared to $2,340,000 for the 2018 first six months. The net gains were predominantly from the sale or retirement of marine equipment and distribution and services facilities.

Other Income and Expenses

The following table sets forth other income, noncontrolling interests and interest expense for the three months and six months ended June 30, 2019 compared with the three months and six months ended June 30, 2018 (dollars in thousands):

	Three months ended June 30,			Six months ended June 30,		
	2019	2018	% Change	2019	2018	% Change
Other income	$ 2,381	$ 1,541	55%	$ 1,813	$ 3,132	(42)%
Noncontrolling interests	$ (153)	$ (191)	(20)%	$ (314)	$ (386)	(19)%
Interest expense	$ (15,515)	$ (12,540)	24%	$ (28,716)	$ (22,320)	29%

Other Income

Other income for the 2019 and 2018 second quarters include income of $1,280,000 and $1,104,000, respectively, and the 2019 and 2018 first six months include income of $1,726,000 and $2,216,000, respectively, for all components of net benefit costs except the service cost component related to the Company's defined benefit plans.

Interest Expense

Interest expense for the 2019 second quarter and first six months increased 24% and 29%, respectively, compared with the 2018 second quarter and first six months, primarily due to borrowings to finance the Higman acquisition in February 2018, the acquisition of Targa's pressure barge fleet in May 2018, the purchase of the 155,000 barrel coastal ATB under construction in June 2018, the acquisition of CGBM's tank barges in December 2018, and the acquisition of Cenac's marine transportation fleet in March 2019. During the 2019 and 2018 second quarters, the average debt and average interest rate (excluding capitalized interest) were $1,641,311,000 and 3.8%, and $1,411,603,000 and 3.6%, respectively. For the first six months of 2019 and 2018, the average debt and average interest rate (excluding capitalized interest) were $1,550,342,000 and 3.8%, and $1,339,012,000 and 3.4%, respectively. Interest expense excludes capitalized interest for the 2019 and 2018 second quarters of $182,000 and $311,000, respectively, and for the 2019 and 2018 first six months of $825,000 and $509,000, respectively.

Financial Condition, Capital Resources and Liquidity

Balance Sheet

Total assets as of June 30, 2019 were $6,232,890,000 compared with $5,871,594,000 as of December 31, 2018. The following table sets forth the significant components of the balance sheet as of June 30, 2019 compared with December 31, 2018 (dollars in thousands):

	June 30, 2019	December 31, 2018	% Change
Assets:			
Current assets	$ 1,054,264	$ 1,096,489	(4)%
Property and equipment, net	3,796,418	3,539,802	7
Operating lease right-of-use assets	158,917	—	100
Goodwill	953,826	953,826	—
Other intangibles, net	214,972	224,197	(4)
Other assets	54,493	57,280	(5)
	$ 6,232,890	$ 5,871,594	6%
Liabilities and stockholders' equity:			
Current liabilities	$ 526,033	$ 607,782	(13)%
Long-term debt, net – less current portion	1,594,695	1,410,169	13
Deferred income taxes	570,954	542,785	5
Operating lease liabilities	136,970	—	100
Other long-term liabilities	82,066	94,557	(13)
Total equity	3,322,172	3,216,301	3
	$ 6,232,890	$ 5,871,594	6%

Current assets as of June 30, 2019 decreased 4% compared with December 31, 2018. Trade accounts receivable increased 8% mainly due to increased activities in the inland marine transportation market and in the distribution and services commercial and industrial market. Inventories, net, decreased 16%, primarily reflecting lower inventory levels due to reduced business activity levels in the oil and gas market.

Property and equipment, net of accumulated depreciation, at June 30, 2019 increased 7% compared with December 31, 2018. The increase reflected $121,891,000 of capital expenditures for the first six months of 2019, more fully described under Capital Expenditures Reflected on the Balance Sheet below, the fair value of the property and equipment acquired in the Cenac acquisition of $247,122,000 and the seven inland tank barges purchased in the first six months of 2019 for $8,340,000, less $102,729,000 of depreciation expense and $18,007,000 of property disposals during the 2019 first six months.

Operating lease right-of-use assets increased due to the adoption of ASU 2016-02 on January 1, 2019.

Other intangibles, net, as of June 30, 2019 decreased 4% compared with December 31, 2018, primarily due to amortization of intangibles other than goodwill.

Current liabilities as of June 30, 2019 decreased 13% compared with December 31, 2018. Accounts payable decreased 24%, primarily due to reduced business activity levels in the distribution and services oil and gas market. Accrued liabilities decreased 9% primarily from payment during the 2019 first quarter of employee incentive compensation bonuses accrued during 2018. Current portion of operating lease liabilities increased due to the adoption of ASU 2016-02 on January 1, 2019. Deferred revenues decreased 26%, primarily reflecting reduced business activity levels in the distribution and services oil and gas market.

Long-term debt, net less current portion, as of June 30, 2019 increased 13% compared with December 31, 2018, primarily reflecting the addition of a five-year Term Loan in an amount of $500,000,000 on March 27, 2019, offset by net payments of $313,797,000 on the amended and restated Revolving Credit Facility. Net debt discount and deferred issuance costs were $8,882,000 and $7,204,000 at June 30, 2019 and December 31, 2018, respectively.

Deferred income taxes as of June 30, 2019 increased 5% compared with December 31, 2018, primarily reflecting the 2019 first six months deferred tax provision of $26,007,000.

Operating lease liabilities increased due to the adoption of ASU 2016-02 on January 1, 2019.

Other long-term liabilities as of June 30, 2019 decreased 13% compared with December 31, 2018. The decrease was primarily due to the adoption of ASU 2016-02 on January 1, 2019 and the resulting reclass of unfavorable leases to operating lease right-of-use assets and the reclass of deferred rent liabilities to long-term operating lease liabilities and contributions of $2,098,000 to the Higman pension plan during the 2019 first six months.

Total equity as of June 30, 2019 increased 3% compared with December 31, 2018. The increase was primarily the result of $91,583,000 of net earnings attributable to Kirby for the first six months of 2019, an increase in additional paid-in capital of $6,113,000, primarily due to the employee stock awards.

Long-Term Financing

On March 27, 2019, the Company entered into an amended and restated credit agreement (the “Credit Agreement”) with a group of commercial banks, with JPMorgan Chase Bank, N.A. as the administrative agent bank, that extends the term of the Company’s existing $850,000,000 revolving credit facility (“Revolving Credit Facility”) to March 27, 2024 and adds a five-year term loan (“Term Loan”) facility in an amount of $500,000,000. The Credit Agreement provides for a variable interest rate based on the London interbank offered rate (“LIBOR”) or a base rate calculated with reference to the agent bank’s prime rate, among other factors (the “Alternate Base Rate”). The interest rate varies with the Company’s credit rating and is currently 112.5 basis points over LIBOR or 12.5 basis points over the Alternate Base Rate. The Term Loan is repayable in quarterly installments commencing June 30, 2020, in increasing percentages of the original principal amount of the loan, with the remaining unpaid balance payable of 65% of the initial amount due on March 27, 2024. The Credit Agreement contains certain financial covenants including an interest coverage ratio and a debt-to-capitalization ratio. In addition to financial covenants, the Credit Agreement contains covenants that, subject to exceptions, restrict debt incurrence, mergers and acquisitions, sales of assets, dividends and investments, liquidations and dissolutions, capital leases, transactions with affiliates and changes in lines of business. The Credit Agreement specifies certain events of default, upon the occurrence of which the maturity of the outstanding loans may be accelerated, including the failure to pay principal or interest, violation of covenants and default on other indebtedness, among other events. Borrowings under the Credit Agreement may be used for general corporate purposes including acquisitions. As of June 30, 2019, the Company was in compliance with all Credit Agreement covenants and had outstanding borrowings of $103,577,000 under the Revolving Credit Facility and $500,000,000 under the Term Loan. The Revolving Credit Facility includes a $25,000,000 commitment which may be used for standby letters of credit. Outstanding letters of credit under the Revolving Credit Facility were $5,670,000 as of June 30, 2019.

On February 12, 2018, the Company issued $500,000,000 of the 2028 Notes with U.S. Bank National Association, as trustee. Interest payments of $10,500,000 are due semi-annually on March 1 and September 1 of each year. The 2028 Notes are unsecured and rank equally in right of payment with the Company’s other unsecured senior indebtedness. The 2028 Notes contain certain covenants on the part of the Company, including covenants relating to liens, sale-leasebacks, asset sales and mergers, among others. The 2028 Notes also specify certain events of default, upon the occurrence of which the maturity of the notes may be accelerated, including failure to pay principal and interest, violation of covenants or default on other indebtedness, among others. As of June 30, 2019, the Company was in compliance with all the 2028 Notes covenants and had $500,000,000 outstanding under the 2028 Notes.

The Company has $500,000,000 of Senior Notes Series A and Senior Notes Series B with a group of institutional investors, consisting of $150,000,000 of 2.72% Senior Notes Series A due February 27, 2020 and $350,000,000 of 3.29% Senior Notes Series B due February 27, 2023. No principal payments are required until maturity. The Senior Notes Series A and Series B contain certain covenants on the part of the Company, including an interest coverage covenant, a debt-to-capitalization covenant and covenants relating to liens, asset sales and mergers, among others. The Senior Notes Series A and Series B also specify certain events of default, upon the occurrence of which the maturity of the notes may be accelerated, including failure to pay principal and interest, violation of covenants or default on other indebtedness, among others. As of June 30, 2019, the Company was in compliance with all Senior Notes Series A and Series B covenants and had $150,000,000 of Senior Notes Series A outstanding and $350,000,000 of Senior Notes Series B outstanding.

The Company has a $10,000,000 line of credit ("Credit Line") with Bank of America, N.A. ("Bank of America") for short-term liquidity needs and letters of credit, with a maturity date of June 30, 2021. The Credit Line allows the Company to borrow at an interest rate agreed to by Bank of America and the Company at the time each borrowing is made or continued. The Company had no borrowings outstanding under the Credit Line as of June 30, 2019. Outstanding letters of credit under the Credit Line were $1,171,000 as of June 30, 2019.

Capital Expenditures Reflected on the Balance Sheet

Capital expenditures for the 2019 first six months were $121,891,000, including $16,380,000 for inland towboat construction, $11,370,000 for progress payments on three 5000 horsepower coastal ATB tugboats, $2,211,000 for final costs on a 155,000 barrel coastal ATB under construction purchased from another operator that was delivered to the Company in the 2018 fourth quarter, and $91,930,000 primarily for upgrading existing marine equipment and marine transportation and distribution and services facilities.

Financing of the construction of the inland towboats, coastal tugboats and the 155,000 barrel coastal ATB, plus upgrades of existing marine equipment and marine transportation and distribution and services facilities was through operating cash flows and available credit under the Company's Revolving Credit Facility.

During the 2019 first six months, the Company acquired 63 inland tank barges from Cenac with a total capacity of approximately 1,833,000 barrels, retired five inland tank barges, brought back into service four inland tank barges, and chartered two inland tank barges, increasing its capacity by approximately 78,000 barrels. The net result was an increase of 64 inland tank barges and approximately 1,911,000 barrels of capacity during the first six months of 2019.

The Company projects that capital expenditures for 2019 will be in the $225,000,000 to $245,000,000 range. The 2019 construction program will consist of progress payments on the construction of 13 inland towboats, eight of which will be placed in service in 2019 and the remaining five in 2020 and 2021, and progress payments on the construction of three 5000 horsepower coastal ATB tugboats to be placed in service in 2019. Based on current commitments, steel prices and projected delivery schedules, the Company's 2019 progress payments on the new inland towboats will be approximately $20,000,000 to $25,000,000 and 2019 progress payments on the construction of the three 5000 horsepower coastal ATB tugboats will be approximately $20,000,000. Approximately $155,000,000 to $165,000,000 is primarily capital upgrades and improvements to existing marine equipment and facilities. The balance of $30,000,000 to $35,000,000 will be for rental fleet growth, new machinery and equipment, and facilities improvements in the distribution and services segment.

Funding for future capital expenditures is expected to be provided through operating cash flows and available credit under the Company's Revolving Credit Facility.

Treasury Stock Purchases

The Company did not purchase any treasury stock during the 2019 first six months. As of August 1, 2019, the Company had approximately 1,400,000 shares available under its existing repurchase authorization. Historically, treasury stock purchases have been financed through operating cash flows and borrowing under the Company's Revolving Credit Facility. The Company is authorized to purchase its common stock on the New York Stock Exchange and in privately negotiated transactions. When purchasing its common stock, the Company is subject to price, trading volume and other market considerations. Shares purchased may be used for reissuance upon the exercise of stock options or the granting of other forms of incentive compensation, in future acquisitions for stock or for other appropriate corporate purposes.

Liquidity

The Company generated net cash provided by operating activities of $188,197,000 in the 2019 first six months compared with $153,755,000 for the 2018 first six months. The increase was driven by increased revenues and operating income in the marine transportation segment driven by the acquisitions of the Higman fleet in February 2018, the Targa fleet in May 2018, the CGBM barges in December 2018, and the Cenac fleet in March 2019, as well as improved inland and coastal barge utilization and pricing. The increase was also due to a net increase in cash flows from the change in operating assets and liabilities of $10,364,000 due to decrease in inventories in the distribution and services segment in the 2019 first six months compared to an increase in the 2018 first six months.

Funds generated from operations are available for acquisitions, capital expenditure projects, common stock repurchases, repayments of borrowings, and for other corporate and operating requirements. In addition to net cash flow provided by operating activities, the Company also had available as of August 1, 2019, $823,145,000 under its Revolving Credit Facility and $8,829,000 available under its Credit Line.

Neither the Company, nor any of its subsidiaries, is obligated on any debt instrument, swap agreement, or any other financial instrument or commercial contract which has a rating trigger, except for the pricing grid on its Credit Agreement.

The Company expects to continue to fund expenditures for acquisitions, capital construction projects, common stock repurchases, repayment of borrowings, and for other operating requirements from a combination of available cash and cash equivalents, funds generated from operating activities and available financing arrangements.

The Revolving Credit Facility's commitment is in the amount of $850,000,000 and expires March 27, 2024. As of June 30, 2019, the Company had $740,753,000 available under the Revolving Credit Facility. The Senior Notes Series A and Senior Notes Series B mature February 27, 2020 and February 27, 2023, respectively, and require no prepayments. The 2028 Notes mature March 1, 2028 and require no prepayments. The outstanding balance of the Term Loan is subject to quarterly amortization, beginning June 30, 2020, in increasing percentages of the original principal amount of the loan, with the remaining unpaid balance payable of 65% of the initial amount due on March 27, 2024. The Term Loan is prepayable, in whole or in part, without penalty.

There are numerous factors that may negatively impact the Company's cash flow in 2019. For a list of significant risks and uncertainties that could impact cash flows, see Note 14, Contingencies, in the financial statements, and Item 1A — Risk Factors and Note 15, Contingencies and Commitments, in the Company's Annual Report on Form 10-K for the year ended December 31, 2018. Amounts available under the Company's existing financial arrangements are subject to the Company continuing to meet the covenants of the credit facilities as described in Item 2, Management's Discussion and Analysis of Financial Condition and Results of Operations under Long-Term Financing.

The Company has issued guaranties or obtained standby letters of credit and performance bonds supporting performance by the Company and its subsidiaries of contractual or contingent legal obligations of the Company and its subsidiaries incurred in the ordinary course of business. The aggregate notional value of these instruments is $18,795,000 at June 30, 2019, including $7,061,000 in letters of credit and $11,734,000 in performance bonds. All of these instruments have an expiration date within two years. The Company does not believe demand for payment under these instruments is likely and expects no material cash outlays to occur in connection with these instruments.

All marine transportation term contracts contain fuel escalation clauses, or the customer pays for the fuel. However, there is generally a 30 to 90 day delay before contracts are adjusted depending on the specific contract. In general, the fuel escalation clauses are effective over the long-term in allowing the Company to recover changes in fuel costs due to fuel price changes. However, the short-term effectiveness of the fuel escalation clauses can be affected by a number of factors including, but not limited to, specific terms of the fuel escalation formulas, fuel price volatility, navigating conditions, tow sizes, trip routing, and the location of loading and discharge ports that may result in the Company over or under recovering its fuel costs. Spot contract rates generally reflect current fuel prices at the time the contract is signed but do not have escalators for fuel.

During the last three years, inflation has had a relatively minor effect on the financial results of the Company. The marine transportation segment has long-term contracts which generally contain cost escalation clauses whereby certain costs, including fuel as noted above, can be passed through to its customers. Spot contract rates include the cost of fuel and are subject to market volatility. The repair portion of the distribution and services segment is based on prevailing current market rates.

Item 3. Quantitative and Qualitative Disclosures about Market Risk

The Company is exposed to risk from changes in interest rates on certain of its outstanding debt. The outstanding loan balances under the Company's bank credit facilities bear interest at variable rates based on prevailing short-term interest rates in the United States and Europe. A 10% change in variable interest rates would impact the 2019 interest expense by $507,000 based on balances outstanding at December 31, 2018, and would change the fair value of the Company's debt by 1%.

Item 4. Controls and Procedures

Disclosure Controls and Procedures. The Company's disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended ("Exchange Act")) are designed to ensure that information required to be disclosed in the reports that are filed or submitted under the Exchange Act is recorded, processed, summarized, and reported within the time periods specified in the rules and forms of the Securities and Exchange Commission and to ensure that such information required to be disclosed is accumulated and communicated to management, including principal executive and financial officers, as appropriate to allow timely decisions regarding required disclosure. The Chief Executive Officer ("CEO") and the Chief Financial Officer ("CFO"), with assistance from other members of management, have evaluated the effectiveness of the Company's disclosure controls and procedures as of June 30, 2019 and, based on their evaluation, the CEO and CFO have concluded that the disclosure controls and procedures were not effective as of such date due to the material weakness in internal control over financial reporting as disclosed in the Company's Annual Report on Form 10-K for the year ended December 31, 2018.

Changes in Internal Control Over Financial Reporting. There were no changes in the Company's internal control over financial reporting during the quarter ended June 30, 2019 that have materially affected, or are reasonably likely to materially affect the Company's internal control over financial reporting.

Remediation Plan. As previously described in Part II, Item 9A, Controls and Procedures, of the Company's Annual Report on Form 10-K for the year ended December 31, 2018, the Company began implementing a remediation plan and removed all inappropriate privileged access rights as of March 31, 2019. The material weakness will not be considered remediated until the applicable controls operate for a sufficient period of time and management has concluded, through testing of the affected Information Technology operating systems, databases and applications, that these controls are operating effectively. The Company expects that the remediation of this material weakness will be completed during 2019.

PART II – OTHER INFORMATION

Item 1. Legal Proceedings

The discussion of the legal proceedings related to the M/V Voyager and the legal proceedings related to the tug Nathan E. Stewart and barge DBL 55 in Note (14) of the Notes to Unaudited Consolidated Financial Statements in this Quarterly Report are incorporated by reference into this Item 1.

Item 1A. Risk Factors

The Company continues to be subject to the risk factors previously disclosed in its "Risk Factors" in the Company's Annual Report on Form 10-K for the year ended December 31, 2018.

Item 6. Exhibits

10.1†*	–	2005 Stock and Incentive Plan
31.1	–	Certification of Chief Executive Officer Pursuant to Rule 13a-14(a)
31.2	–	Certification of Chief Financial Officer Pursuant to Rule 13a-14(a)
32	–	Certification Pursuant to 18 U.S.C. Section 1350
101.INS	–	XBRL Instance Document
101.SCH	–	XBRL Taxonomy Extension Schema Document
101.CAL	–	XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF	–	XBRL Taxonomy Extension Definition Linkbase Document
101.LAB	–	XBRL Taxonomy Extension Label Linkbase Document
101.PRE	–	XBRL Taxonomy Extension Presentation Linkbase Document

* This exhibit is furnished herewith. In accordance with Rule 406T of Regulation S-T, this exhibit is not deemed to be filed or part of a registration statement or prospectus for purposes of Sections 11 or 12 of the Securities Act of 1933, as amended, is not deemed to be filed for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, and otherwise is not subject to liability under those sections.

† Management contract, compensatory plan or arrangement.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

KIRBY CORPORATION
(Registrant)

By: /s/ WILLIAM G. HARVEY
William G. Harvey
Executive Vice President and
Chief Financial Officer

Dated: August 2, 2019

Exhibit 10.1

KIRBY CORPORATION

2005 Stock and Incentive Plan

ARTICLE I
GENERAL

Section 1.1. *Purpose*. The purpose of this Plan is to advance the interests of Kirby Corporation, a Nevada corporation (the “Company”), by providing an additional incentive to attract and retain qualified and competent employees for the Company and its Subsidiaries, upon whose efforts and judgment the success of the Company is largely dependent, through the award of (i) Options to purchase shares of Common Stock (which Options may be Incentive Stock Options or Nonincentive Stock Options); (ii) shares of Restricted Stock; (iii) Restricted Stock Units and (iv) Performance Awards.

Section 1.2. *Definitions*. As used herein, the following terms shall have the meaning indicated:

(a) “Award” means a grant under this Plan in the form of Options, Restricted Stock, Restricted Stock Units, Performance Awards or any combination of the foregoing.

(b) “Board” means the Board of Directors of the Company.

(c) “Cause” means, with respect to any Participant:

(i) conviction of, or plea of nolo contendere to, any felony or any crime or offense involving theft, fraud, embezzlement, moral turpitude or similar conduct;

(ii) malfeasance in the performance of the Participant’s duties, which shall mean (A) intentional misuse or diversion of Company assets, (B) theft or embezzlement or (C) fraudulent or willful and material misrepresentations or omissions in any reports or information submitted to the Company or a Subsidiary or any government agency or regulatory authority;

(iii) material failure to perform the duties of the Participant’s employment (other than as a result of the Participant’s Disability) or material failure to follow or comply with reasonable directives from any other employee of the Company who has direct or indirect supervisory authority over the Participant;

(iv) a material violation of the Company’s Business Ethics Guidelines or any other written policies of the Company applicable to the Participant; or

(v) a material violation of any federal, state or local laws or regulations.

(d) “Change in Control” means the occurrence of any of the following events:

(i) Any “person” (as such term is used in Sections 13(d) and 14(d)(2) of the Securities Exchange Act of 1934, as amended) becomes the beneficial owner, directly or indirectly, of voting securities representing thirty percent (30%) or more of the combined voting power of the Company’s then outstanding voting securities;

(ii) The Board ceases to consist of a majority of Continuing Directors, with the term “Continuing Director” meaning a Director who (A) is a Director on the effective date of the Plan or (B) is nominated or appointed to serve as a Director by a majority of the then Continuing Directors;

(iii) (A) Any consolidation or merger of the Company or any Subsidiary that results in the holders of the Company’s voting securities immediately prior to the consolidation or merger having (directly or indirectly) less than a majority ownership interest in the outstanding voting securities of the surviving entity immediately after the consolidation or merger, (B) any sale, lease, exchange or other transfer (in one transaction or a series of related transactions) of all or substantially all of the assets of the Company or (C) the liquidation or dissolution of the Company;

(iv) The stockholders of the Company accept a share exchange, with the result that stockholders of the Company immediately before such share exchange do not own, immediately following such share exchange, at least a majority of the voting securities of the entity resulting from such share exchange in substantially the same proportion as their ownership of the voting securities outstanding immediately before such share exchange; or

(v) Any tender or exchange offer is made to acquire thirty percent (30%) or more of the voting securities of the Company, other than an offer made by the Company, and shares are acquired pursuant to that offer.

For purposes of this definition, the term “voting securities” means equity securities, or securities that are convertible or exchangeable into equity securities, that have the right to vote generally in the election of Directors.

(e) “Code” means the Internal Revenue Code of 1986, as amended.

(f) “Committee” means the Compensation Committee, if any, appointed by the Board.

(g) “Date of Grant” means the date on which the Committee takes formal action to grant an Award to an Eligible Person or such later date as may be specified by the Committee when approving the Award.

(h) “Director” means a member of the Board.

(i) “Disability” means mental or physical disability as determined by a medical doctor satisfactory to the Committee.

(j) “Eligible Person” means an employee of the Company or a Subsidiary.

(k) “Exchange Act” means the Securities Exchange Act of 1934, as amended from time to time.

(l) “Existing Plan” means the 2005 Stock and Incentive Plan as approved by the stockholders of the Company on April 26, 2005 and as amended through July 23, 2019.

(m) “Fair Market Value” of a Share means the closing price on the New York Stock Exchange on the day of reference. If the Shares are not listed for trading on the New York Stock Exchange, the Fair Market Value on the date of reference shall be determined by any fair and reasonable means prescribed by the Committee.

(n) “Good Reason” means, with respect to any Participant:

(i) a material adverse change in the Participant’s duties and responsibilities at the Company or a Subsidiary or successor as in effect immediately prior to the Change in Control;

(ii) a material reduction in the Participant’s base salary or bonus opportunity compared to the base salary and bonus opportunity in effect immediately prior to the Change in Control; or

(iii) relocation of the Participant’s primary place of work by more than 35 miles from his or her primary place of work immediately prior to the Change in Control.

(o) “Incentive Stock Option” means an option that is an incentive stock option as defined in Section 422 of the Code.

(p) “Nonincentive Stock Option” means an option that is not an Incentive Stock Option.

(q) “Option” means any option granted under this Plan.

(r) “Optionee” means a person to whom a stock option is granted under this Plan or any successor to the rights of such person under this Plan by reason of the death of such person.

(s) “Participant” means a person to whom an Award is granted under the Plan.

(t) “Performance Award” means an Award granted pursuant to Article V.

(u) “Performance Objectives” means the objectives established by the Committee pursuant to Section 5.1(b).

(v) “Performance Period” means the period over which the performance of a holder of a Performance Award is measured.

(w) “Plan” means this Kirby Corporation 2005 Stock and Incentive Plan.

(x) “Restricted Stock” means Shares granted under this Plan that are subject to restrictions imposed by the Committee pursuant to Article III.

(y) "Restricted Stock Award" means an award of Restricted Stock under this Plan.

(z) "Restricted Stock Unit" means a restricted stock unit credited to a Participant's ledger account maintained by the Company pursuant to Article IV.

(aa) "Restricted Stock Unit Award" means an award of Restricted Stock Units under this Plan.

(bb) "Section 162(m) Participant" means each Participant who would be a "covered employee" under Section 162(m) of the Code as in effect prior to its amendment on December 22, 2017.

(cc) "Share" means a share of the common stock, par value ten cents ($0.10) per share, of the Company.

(dd) "Subsidiary" means any corporation (other than the Company) in any unbroken chain of corporations beginning with the Company if each of the corporations other than the last corporation in the unbroken chain owns stock possessing 50% or more of the total combined voting power of all classes of stock in one of the other corporations in the chain.

Section 1.3. *Total Shares and Limitations*.

(a) The maximum number of Shares that may be issued under the Plan shall be Five Million (5,000,000) Shares, which may be from Shares held in the Company's treasury or from authorized and unissued Shares. If any Award granted under the Plan shall terminate, expire or be cancelled or surrendered as to any Shares, or the Award is paid in cash in lieu of Shares, the Shares that were subject to such Award shall not count against the above limit and shall again be available for grants under the Plan. Shares equal in number to the Shares withheld in payment of the option price of an Option and Shares that are withheld in order to satisfy federal, state or local tax liability, shall not count against the above limit and shall be available for grants under the Plan. All Share numbers in the Plan reflect the 2-for-1 split of the common stock of the Company effected on May 31, 2006.

(b) The maximum number of Shares with respect to which Incentive Stock Options may be granted to a Participant during a calendar year is 500,000.

(c) The maximum number of Shares with respect to which Options may be granted to a Participant during a calendar year is 500,000.

(d) The maximum number of Shares that may be issued to any Participant pursuant to any Performance Award during the term of the Plan shall be 400,000.

(e) The maximum amount of cash that may be paid to any Participant pursuant to any Performance Award during any calendar year shall be $5,000,000.

Section 1.4. *Awards Under the Plan*.

(a) Only Eligible Persons may receive awards under the Plan. Awards to Eligible Persons may be in the form of (i) Options; (ii) shares of Restricted Stock; (iii) Performance Awards; or (iv) any combination of the foregoing. No Award shall confer on any person any right to continue as an employee of the Company or any Subsidiary.

(b) Each Award may be evidenced by an agreement containing any terms deemed necessary or desirable by the Committee that are not inconsistent with the Plan or applicable law.

ARTICLE II
STOCK OPTIONS

Section 2.1. *Grant of Options*. The Committee may from time to time grant Options to Eligible Persons. Options may be Incentive Stock Options or Nonincentive Stock Options as designated by the Committee on or before the Date of Grant. If no such designation is made by the Committee for an Option, the Option shall be a Nonincentive Stock Option. The aggregate Fair Market Value (determined as of the Date of Grant) of the Shares with respect to which Incentive Stock Options are exercisable for the first time by an Optionee during any calendar year under the Plan and all such plans of the Company and any parent or Subsidiary of the Company (as defined in Section 424 of the Code) shall not exceed $100,000.

Section 2.2. *Exercise Price*. The exercise price per Share for any Option shall be determined by the Committee, but shall not be less than the Fair Market Value on the Date of Grant and shall not be less than 110% of the Fair Market Value on the Date of Grant for any Incentive Stock Option if the Optionee is a person who owns directly or indirectly (within the meaning of Section 422(b)(6) of the Code) stock possessing more than 10% of the total combined voting power of all classes of stock of the Company.

Section 2.3. *Term of Option*. The term of an Option shall be determined by the Committee, provided that, in the case of an Incentive Stock Option, if the grant is to a person who owns directly or indirectly (within the meaning of Section 422(b)(6) of the Code) stock possessing more than 10% of the total combined voting power of all classes of stock of the Company, the term of the Option shall not exceed five years from the Date of Grant. Notwithstanding any other provision of this Plan, no Option shall be exercised after the expiration of its term.

Section 2.4. *Vesting*. Options shall become exercisable (or “vest”) as provided in Section 2.6, if applicable, or otherwise at such times and subject to such terms and conditions as the Committee shall specify. The Committee shall have discretion at any time to accelerate such times and otherwise waive or amend any conditions in respect of all or any portion of any Options. Notwithstanding the other provisions of this Section 2.4 and unless otherwise provided in the Option Award, in the event that an Optionee’s employment is terminated without Cause by the Company, a Subsidiary or successor entity, or is terminated by the Optionee for Good Reason, in either case in connection with or within 18 months after a Change in Control, all Options held by the Optionee immediately prior to such termination shall become immediately exercisable.

Section 2.5. *Termination of Options.*

(a) Except as otherwise provided in the Plan or the Option Award, the portion of an Option that is exercisable shall automatically and without notice terminate upon the earliest to occur of the following:

(i) thirty (30) days after the date on which the Optionee ceases to be an Employee for any reason other than (x) death, (y) Disability or (z) termination for Cause;

(ii) one (1) year after the date on which the Optionee ceases to be an Employee as a result of a Disability;

(iii) either (y) one (1) year after the death of the Optionee or (z) six (6) months after the death of the Optionee if the Optionee dies during the 30-day period described in Section 2.5(a)(i) or the one-year period described in Section 2.5(a)(ii);

(iv) the date on which the Optionee ceases to be an Employee as a result of a termination for Cause; and

(v) the tenth anniversary of the Date of Grant of the Option.

(b) Except as provided in Section 2.4 or Section 2.6, the portion of an Option that is not exercisable shall automatically and without notice terminate on the date on which the Optionee ceases to be an Employee for any reason.

(c) The Committee shall have discretion at any time to extend the term of any Nonincentive Stock Option to any date that is not later than the date described in Section 2.5(a)(v).

Section 2.6. *Retirement Credits.* Unless otherwise provided in an Option Award, if an Optionee retires as an employee of the Company or a Subsidiary with 80 or more Retirement Credits, unvested Options held by the Optionee that were granted after February 19, 2018 shall continue to vest after retirement on the schedule specified in the Option Award and all vested but unexercised Options held by the Optionee and all Options that vest after retirement pursuant to this Section 2.6 will terminate upon the earlier of (a) the expiration of the term specified in the Option Award or (b) the tenth anniversary of the Date of Grant; provided that, if the Optionee takes any action or engages in any activity that is detrimental to the Company, all vested but unexercised Options and all unvested Options held by the Optionee will automatically terminate and the Optionee shall cease to have any rights with respect to such Options. The number of Retirement Credits the Optionee has shall equal the sum of (i) the Optionee's age in whole years plus (ii) the Optionee's whole years of employment with the Company or a Subsidiary, in both cases determined as of the date of retirement. In the event of the death of the Optionee after retirement, any unvested portion of an Option that is subject to vesting pursuant to this Section 2.6 shall continue to vest on the schedule specified in the Option Award and will terminate upon the earlier of (x) the expiration of the term specified in the Option Award or (y) the tenth anniversary of the Date of Grant.

Section 2.7. *Exercise of Options*. An Option may be exercised in whole or in part to the extent exercisable in accordance with the Plan. An Option shall be deemed exercised when (i) the Company has received written notice of such exercise signed by the person or persons entitled to exercise the Option and, if the Option is being exercised by any person or persons other than the Optionee, accompanied by proof, satisfactory to the Company, of the right of such person or persons to exercise the Option and (ii) full payment of the aggregate exercise price of the Shares as to which the Option is exercised has been made. Unless further limited by the Committee for any Option, the exercise price of any Shares purchased shall be paid solely in cash, by certified or cashier's check, by money order, by personal check, by withholding Shares from an Award or with Shares owned by the Optionee for at least six months, or by a combination of the foregoing. If the exercise price is paid in whole or in part with Shares, the value of the Shares withheld shall be their Fair Market Value on the date received by the Company. An Optionee may elect to have Shares withheld to satisfy federal or state income tax withholding requirements applicable upon the exercise of an Option.

Section 2.8. *Restrictions on Exercise.*

(i) An Option may not be exercised if the issuance of the Shares upon such exercise would constitute a violation of any applicable federal or state securities or other law or valid regulation. As a condition to the exercise of the Option, the Company may require the person exercising the Option to make any agreements and undertakings that may be required by any applicable law or regulation.

(ii) Shares issued upon the exercise of an Option without registration of such Shares under the Securities Act of 1933, as amended (the "Act"), shall be restricted securities subject to the terms of Rule 144 under the Act. The certificates representing any such Shares shall bear an appropriate legend restricting transfer and the transfer agent of the Company shall be given stop transfer instructions with respect to such Shares.

Section 2.9. *Nontransferability of Option*. An Option may not be transferred by the Optionee otherwise than by will or the laws of descent and distribution and so long as the Optionee lives, only the Optionee or the Optionee's guardian or legal representative shall have the right to exercise the Option. The terms of an Option shall be binding upon the executors, administrators, heirs, successors and assigns of the Optionee.

Section 2.10. *Corporate Transactions*.

(a) In the event of a merger, consolidation or other reorganization of the Company in which the Company is not the surviving entity, the Board or the Committee may provide for payment in cash or in securities of the Company or the surviving entity in lieu of and in complete satisfaction of Options.

(b) Except as otherwise expressly provided herein, the issuance by the Company of shares of its capital stock of any class, or securities convertible into shares of capital stock of any class, either in connection with direct sale or upon the exercise of rights or warrants to subscribe therefor, or upon conversion of shares or obligations of the Company convertible into such shares or other securities, shall not affect, and no adjustment by reason thereof shall be made with respect to, the number of or exercise price of Shares then subject to outstanding Options granted under the Plan.

(c) Without limiting the generality of the foregoing, the existence of outstanding Options granted under the Plan shall not affect in any manner the right or power of the Company to make, authorize or consummate (i) any or all adjustments, recapitalizations, reorganizations or other changes in the Company's capital structure or its business; (ii) any merger or consolidation of the Company; (iii) any issue by the Company of debt securities, or preferred or preference stock that would rank above the Shares subject to outstanding Options; (iv) the dissolution or liquidation of the Company; (v) any sale, transfer or assignment of all or any part of the assets or business of the Company; or (vi) any other corporate act or proceeding, whether of a similar character or otherwise.

Section 2.11. *Issuance of Shares*. No person shall be, or have any of the rights or privileges of, a stockholder of the Company with respect to any of the Shares subject to any Option unless and until such Shares (whether represented by certificates or in book-entry or other electronic form) shall have been issued and delivered to such person.

ARTICLE III
RESTRICTED STOCK

Section 3.1. *Grant of Restricted Stock Awards*. The Committee may from time to time grant Restricted Stock Awards to Eligible Persons.

Section 3.2. *Terms and Conditions of Restricted Stock Awards*. Each Restricted Stock Award shall specify the number of shares of Restricted Stock awarded, the price, if any, to be paid by the Participant receiving the Restricted Stock Award, the date or dates on which the Restricted Stock will vest and any other terms and conditions that the Committee may determine. The vesting and number of shares of Restricted Stock may be conditioned upon the completion of a specified period of service with the Company or its Subsidiaries or upon the attainment of any performance goals established by the Committee, including without limitation goals related to the performance of the Company or any Subsidiary, division, department or other unit of the Company, the performance of the Company's common stock or other securities, the performance of the recipient of the Restricted Stock Award or any combination of the foregoing. A Participant may elect to have Shares withheld from a Restricted Stock Award to satisfy federal or state income tax withholding requirements applicable upon the vesting of Restricted Stock.

Section 3.3. *Restrictions on Transfer.* Unless otherwise provided in the grant relating to a Restricted Stock Award, the Restricted Stock granted to a Participant (whether represented by certificates or in book-entry or other electronic form) shall be registered in the Participant's name or, at the option of the Committee, not issued until such time as the Restricted Stock shall become vested or as otherwise determined by the Committee. If certificates are issued prior to the shares of Restricted Stock becoming vested, such certificates shall either be held by the Company on behalf of the Participant, or delivered to the Participant bearing a legend to restrict transfer of the certificate until the Restricted Stock has vested, as determined by the Committee. The Committee shall determine whether the Participant shall have the right to vote and/or receive dividends on the Restricted Stock before it has vested. Except as may otherwise be expressly permitted by the Committee, no share of Restricted Stock may be sold, transferred, assigned or pledged by the Participant until such share has vested in accordance with the terms of the Restricted Stock Award. Except as provided in Section 3.4 or unless the Restricted Stock Award specifies otherwise, in the event that a Participant ceases to be an Employee before all the Participant's Restricted Stock has vested, or in the event other conditions to the vesting of Restricted Stock have not been satisfied prior to any deadline for the satisfaction of such conditions set forth in the Award, the shares of Restricted Stock that have not vested shall be forfeited and any purchase price paid by the Participant for the forfeited Shares shall be returned to the Participant. At the time Restricted Stock vests (and, if the Participant has been issued legended certificates for Restricted Stock, upon the return of such certificates to the Company), such vested shares shall be issued to the Participant (or the beneficiary designated by the Participant in the event of death), in certificated or book entry or other electronic form, free of all restrictions.

Section 3.4. *Accelerated Vesting.* Notwithstanding the vesting conditions set forth in a Restricted Stock Award, unless the Restricted Stock Award specifies otherwise:

(a) the Committee may in its discretion at any time accelerate the vesting of Restricted Stock or otherwise waive or amend any conditions of a grant of a Restricted Stock Award, and

(b) in the event that a Participant's employment is terminated without Cause by the Company, a Subsidiary or successor, or is terminated by the Participant for Good Reason, in either case in connection with or within 18 months after a Change in Control, all shares of Restricted Stock held by the Participant immediately prior to such termination shall immediately become vested.

Section 3.5. *Section 83(b) Election*. If a Participant receives Restricted Stock that is subject to a "substantial risk of forfeiture," such Participant may elect under Section 83(b) of the Code to include in his or her gross income, for the taxable year in which the Restricted Stock is received, the excess of the Fair Market Value of such Restricted Stock on the Date of Grant (determined without regard to any restriction other than one which by its terms will never lapse), over the amount paid for the Restricted Stock. If the Participant makes the Section 83(b) election, the Participant shall (a) make such election in a manner that is satisfactory to the Committee, (b) provide the Company with a copy of such election, (c) agree to notify the Company promptly if any Internal Revenue Service or state tax agent, on audit or otherwise, questions the validity or correctness of such election or of the amount of income reportable on account of such election and (d) agree to such federal and state income tax withholding as the Committee may reasonably require in its sole discretion.

ARTICLE IV
RESTRICTED STOCK UNITS

Section 4.1. *Grant of Restricted Stock Unit Awards*. The Committee may from time to time grant Restricted Stock Unit Awards to Eligible Persons.

Section 4.2. *Restricted Stock Units.* A Restricted Stock Unit represents the Company's unsecured and unfunded promise to deliver Shares (or cash equal to the Fair Market Value of the Shares) to a Participant in the future, subject to the satisfaction of applicable vesting conditions and the other terms and conditions of the Plan and the Award.

Section 4.3. *Terms and Conditions of Restricted Stock Unit Awards*. Each Restricted Stock Unit Award shall specify the number of Restricted Stock Units awarded, the price, if any, to be paid by the Participant receiving the Restricted Stock Unit Award, the date or dates on which the Restricted Stock Units will vest and any other terms and conditions that the Committee may determine. The vesting and number of Restricted Stock Units may be conditioned upon the completion of a specified period of service with the Company or its Subsidiaries or upon the attainment of any performance goals established by the Committee, including without limitation goals related to the performance of the Company or any Subsidiary, division, department or other unit of the Company, the performance of the Company's common stock or other securities, the performance of the recipient of the Restricted Stock Unit Award or any combination of the foregoing. Except as provided in Section 4.6 or Section 4.7 or unless the Award specifies otherwise, in the event that a Participant ceases to be an employee of the Company or a Subsidiary before all the Participant's Restricted Stock Units have vested, or in the event other conditions to the vesting of Restricted Stock Units have not been satisfied prior to any deadline for the satisfaction of such conditions set forth in the Award, the Restricted Stock Units that have not vested shall be forfeited and any purchase price paid by the Participant for the forfeited Restricted Stock Units shall be refunded to the Participant.

Section 4.4. *Rights as Stockholder*. A recipient of a Restricted Stock Unit Award shall not have any rights as a stockholder with respect to Shares covered by a Restricted Stock Unit Award until the date, if any, such Shares are issued by the Company; and, except as otherwise provided in Section 4.5, no adjustment for dividends, or otherwise, shall be made if the record date therefor is prior to the date of issuance of such Shares.

Section 4.5. *Dividends*. Dividends and distributions (whether cash, stock or otherwise) on Shares underlying unvested Restricted Stock Units held by a Participant shall not be paid to the Participant, but the value thereof shall be credited by the Company for the benefit of the Participant. At such time as such Restricted Stock Units are settled, all accumulated credits for the value of dividends and distributions attributable to such vested Restricted Stock Units shall be paid to the recipient. Interest shall not be paid on any such credits for dividends or distributions made by the Company for the benefit of a Participant. The Company shall have the option of paying such credits for accumulated dividends or distributions in Shares or cash. If payment is made in Shares, the conversion to Shares shall be at the Fair Market Value on the date of payment. Credits for the value of dividends and distributions made by the Company on unvested Restricted Stock Units shall be forfeited in the same manner and at the same time as the respective Restricted Stock Units to which they are attributable are forfeited.

Section 4.6. *Accelerated Vesting*. Notwithstanding the vesting conditions set forth in a Restricted Stock Unit Award, unless the Restricted Stock Unit Award specifies otherwise:

(a) the Committee may in its discretion at any time accelerate the vesting of Restricted Stock Units or otherwise waive or amend any conditions of a grant of a Restricted Stock Unit Award, and

(b) in the event that a Participant's employment is terminated without Cause by the Company, a Subsidiary or successor, or is terminated by the Participant for Good Reason, in either case in connection with or within 18 months after a Change in Control, all Restricted Stock Units held by the Participant immediately prior to such termination shall immediately become vested and payable.

Section 4.7. *Retirement Credits*. Unless otherwise provided in a Restricted Stock Unit Award, if a Participant retires as an employee of the Company or a Subsidiary with 80 or more Retirement Credits, the Restricted Stock Units held by the Participant will continue to vest after retirement on the schedule specified in the Restricted Stock Unit Award; provided that, if the Participant takes any action or engages in any activity that is detrimental to the Company, all unvested Restricted Stock Units held by the Participant will automatically be forfeited and the Participant shall cease to have any rights with respect to such Restricted Stock Units. The number of Retirement Credits a Participant has shall equal the sum of (i) the Participant's age in whole years plus (ii) the Participant's whole years of employment with the Company or a Subsidiary, in both cases determined as of the date of retirement. In the event of the death of the Participant after retirement, any unvested Restricted Stock Units that are subject to vesting pursuant to this Section 4.7 shall continue to vest on the schedule specified in the Restricted Stock Unit Award.

Section 4.8. *Settlement of Restricted Stock Units*.

(a) Subject to the satisfaction of any withholding requirements, on the date on which a Restricted Stock Unit becomes vested in accordance with the terms of the Plan, the Participant shall be entitled to one Share or cash equal to the Fair Market Value of one Share, which shall be delivered, transferred or paid as soon as administratively practicable thereafter in exchange for such vested Restricted Stock Unit, after which the Participant shall have no further rights with respect to such Restricted Stock Unit.

(b) The Company shall have the sole discretion to determine whether any settlement of a Restricted Stock Unit will be effected in cash or Shares. If the settlement is effected in Shares, the Company shall cause to be delivered or transferred to the Participant (or the Participant's legal representative or heir) a stock certificate representing the Shares issued in exchange for Restricted Stock Units or shall cause the Shares to be registered on the stock transfer records of the Company in the Participant's name. For any Restricted Stock Units settled in Shares, a Participant may elect to have Shares withheld to satisfy federal or state income tax withholding requirements applicable upon the vesting of the Restricted Stock Units.

(c) (i) Except as provided in Section 4.8(c)(ii) and (iii), in no event shall any delivery of Shares or payment following a Participant's entitlement to such delivery or payment be made later than the March 15th following the end of the calendar year in which the Participant becomes entitled to such delivery or payment.

(ii) Subject to Section 4.8(c)(iii), with respect to Restricted Stock Units granted to a Participant who could reach 80 Retirement Credits prior to the final vesting date for such Restricted Stock Units, in no event shall any delivery of Shares or payment following such Participant's entitlement to such delivery or payment be made later than December 31 of the year in which the vesting date for such Restricted Stock Units occurs.

(iii) Notwithstanding any other provision of the Plan or any Award, if the Participant is a specified employee (within the meaning of Section 409A of the Code), and the Company determines that a payment hereunder is not permitted under Section 409A of the Code at the time set forth herein, no payments shall be made to the Participant due to a separation from service for any reason before the date that is six months after the date on which the Participant incurs a separation from service or, if earlier, the date of death of the Participant.

ARTICLE V
PERFORMANCE AWARDS

Section 5.1. *Terms and Conditions of Performance Awards*. The Committee may from time to time grant Awards that are intended to be "performance-based compensation," which are payable in stock, cash or a combination thereof, at the discretion of the Committee.

(a) Performance Period. The Committee shall establish a Performance Period for each Performance Award at the time such Performance Award is granted. A Performance Period may overlap with Performance Periods relating to other Performance Awards granted hereunder to the same Participant. Unless the Committee determines otherwise, the Committee shall not grant Performance Awards after the date on which the satisfaction of the Performance Objectives becomes substantially certain.

(b) Performance Objectives. The Committee shall establish written performance objectives for the Participant at the time of the grant of each Performance Award. Each Performance Award shall be contingent upon the achievement of the Performance Objectives established by the Committee. Performance Objectives shall be based on earnings, cash flow, economic value added, total stockholder return, return on equity, return on capital, return on assets, revenues, operating profit, EBITDA, net profit, earnings per share, stock price, cost reduction goals, debt to capital ratio, financial return ratios, profit or operating margins, working capital or any combination of the foregoing, for the Company on a consolidated basis or, if applicable, for one or more Subsidiaries, divisions, departments or other units of the Company or one or more of its Subsidiaries.

(c) Amount; Frequency. The Committee shall determine at the time of grant of Performance Awards the target and maximum values of Performance Awards and the date or dates when Performance Awards are earned.

(d) Payment. Following the end of each Performance Period, the holder of each Performance Award will be entitled to receive payment of an amount, not exceeding the maximum value of the Performance Award, based on the achievement of the Performance Objectives for such Performance Period, as determined in writing by the Committee. Unless otherwise provided in the Performance Award, if the Participant exceeds the specified minimum level of acceptable achievement but does not attain the Performance Objectives, the Participant shall be deemed to have partly earned the Performance Award, and shall become entitled to receive a portion of the total award, as determined by the Committee. Unless otherwise provided in the Performance Award, if a Performance Award is granted after the start of a Performance Period, the Performance Award shall be reduced to reflect the portion of the Performance Period during which the Performance Award was in effect.

(e) Termination of Employment. Unless otherwise provided in the Performance Award, a Participant who receives a Performance Award and who ceases to be an Employee as a result of death, Disability or retirement before the end of the applicable Performance Period shall be entitled to receive, to the extent earned as a result of the full or partial achievement of the Performance Objectives during the Performance Period, a portion of the Performance Award that is proportional to the portion of the Performance Period during which the Participant was employed, with payment to be made following the end of the Performance Period. Unless otherwise provided in the Performance Award, a Participant who receives a Performance Award who ceases to be an Employee for any reason other than death, Disability or retirement shall not be entitled to any part of the Performance Award.

(f) Accelerated Vesting. Notwithstanding the vesting conditions set forth in a Performance Award, unless the Performance Award specifies otherwise (i) the Committee may in its discretion at any time accelerate the time at which the Performance Award is considered to have been earned or otherwise waive or amend any conditions (including but not limited to Performance Objectives) in respect of a Performance Award, and (ii) all Performance Awards shall be considered earned upon a Change in Control of the Company. In addition, upon a Change in Control of the Company, unless a Performance Award specifies otherwise, each Participant shall receive the target Performance Award such Participant could have earned for the proportionate part of the Performance Period prior to the Change in Control, and shall retain the right to earn any additional portion of his or her Performance Award if such Participant remains in the Company's employ through the end of the Performance Period.

(g) Stockholder Rights. The holder of a Performance Award shall, as such, have none of the rights of a stockholder of the Company.

(h) Annual Incentive Plan. Cash awards based on the attainment of the performance objectives established under the Company's Annual Incentive Plan may, in the Committee's discretion, be considered Performance Awards granted under the Plan, provided that such awards are subject to the terms and conditions of this Article IV.

ARTICLE VI
ADDITIONAL PROVISIONS

Section 6.1. *Administration of the Plan*.

(a) The Plan shall be administered by the Committee. The Committee shall have the authority to interpret the provisions of the Plan, to adopt such rules and regulations for carrying out the Plan as it may deem advisable, to decide conclusively all questions arising with respect to the Plan, to establish performance criteria in respect of Awards under the Plan, to determine whether Plan requirements have been met for any Participant in the Plan and to make all other determinations and take all other actions necessary or desirable for the administration of the Plan. All decisions and acts of the Committee shall be final and binding upon all affected Participants. To the extent permitted by applicable law, the Committee may delegate authority to administer the Plan to members of the Committee, one or more subcommittees or other committees of the Board. If there is no Committee, the Board shall administer the Plan and in such case all references to the Committee shall be deemed to be references to the Board.

(b) Without limiting the generality of Section 6.1(a), for purposes of Section 2.6 and Section 4.7:

(i) The Committee shall determine in its sole discretion whether an action or activity is detrimental to the Company. Without limiting the immediately preceding sentence, actions or activities detrimental to the Company may include (A) a material breach of any contract between the holder of an Award and the Company or a Subsidiary, (B) any direct or indirect competition with the Company or a Subsidiary or solicitation of employees of the Company or a Subsidiary or (C) performance or acceptance by the holder of an Award of duties to a third party under circumstances that create a material conflict of interest or the appearance of a material conflict of interest, which may include being employed or otherwise engaged by an entity that regulates, engages in transactions with or competes with the Company or a Subsidiary.

(ii) The Committee shall determine in its sole discretion whether a termination of employment constitutes “retirement” for purposes of vesting of any Options or Restricted Stock Units.

(iii) The Committee shall determine in its sole discretion whether prior employment by an acquired company or prior noncontinuous employment by the Company or a Subsidiary shall be counted in calculating the Retirement Credits of the holder of an Award.

Section 6.2. *Adjustments for Changes in Capitalization*. In the event of any (a) stock dividends, stock splits, recapitalizations, combinations, exchanges of shares, mergers, consolidations, liquidations, split-ups, split-offs, spin-offs or other similar changes in capitalization, (b) distributions to stockholders, including a rights offering, other than regular cash dividends, (c) changes in the outstanding stock of the Company by reason of any increase or decrease in the number of issued Shares resulting from a split-up or consolidation of Shares or any similar capital adjustment or the payment of any stock dividend, (d) Share repurchase at a price in excess of the market price of the Shares at the time such repurchase is announced or (e) other similar increase or decrease in the number of the Shares, the Committee, in its sole discretion, shall make appropriate adjustment in the number and kind of shares authorized by the Plan in the number, price or kind of shares or units covered by the Awards and in any outstanding Awards under the Plan. In addition, upon the occurrence of any event described in this Section 6.2, the Committee, in its sole discretion, shall make appropriate adjustment in the limits specified in Section 1.3(b), (c) and (d) so that the effect of such limits is, as nearly as practicable, equivalent to the effect of such limits prior to the event in question, provided that any such adjustment complies with applicable laws and does not cause an award that is intended to satisfy the performance-based compensation exception under Section 162(m) of the Code in effect prior to December 22, 2017 to fail to satisfy the exception. In the event of any adjustment in the number of Shares covered by any Award, any fractional Shares resulting from such adjustment shall be disregarded and each such Award shall cover only the number of full Shares resulting from such adjustment.

Section 6.3. *Compliance With Section 409A***.** Awards shall be designed and operated in such a manner that they are either exempt from the application of, or comply with, the requirements of Section 409A of the Code. The Plan and each Award under the Plan are intended to meet the requirements of Section 409A of the Code and shall be construed and interpreted in accordance with such intent. To the extent that an Award or payment, or the settlement or deferral thereof, is subject to Section 409A of the Code, the Award shall be granted, paid, settled or deferred in a manner that will meet the requirements of Section 409A of the Code, including regulations or other guidance issued with respect thereto, such that the grant, payment, settlement or deferral shall not be subject to the additional tax or interest applicable under Section 409A. In addition, to the extent an Award is subject to Section 409A of the Code, payments under such an Award shall be made at such time as is specified in the Plan and the Award. The payment will be made (1) by a date that is no later than the date that is two and one-half (2 1/2) months after the end of the fiscal year in which the Award payment is no longer subject to a substantial risk of forfeiture or (2) at a time that is permissible under Section 409A of the Code such that the payment shall not be subject to the additional tax or interest applicable under Section 409A of the Code.

Section 6.4. *Amendment.*

(a) The Board may amend or modify the Plan in any respect at any time, subject to stockholder approval if required by applicable law or regulation or by applicable stock exchange rules. Such action shall not impair any of the rights of any Participant with respect to any Award outstanding on the date of the amendment or modification without the Participant's written consent.

(b) The Committee shall have the authority to amend any Award to include any provision which, at the time of such amendment, is authorized under the terms of the Plan; however, no outstanding Award may be revoked or altered in a manner unfavorable to the Participant without the written consent of the Participant.

Section 6.5. *Transferability of Awards*. An Award shall not be transferable by the Participant otherwise than by will or the laws of descent and distribution. So long as a Participant lives, only such Participant or his or her guardian or legal representative shall have the right to exercise such Award.

Section 6.6. *Beneficiary*. A Participant may file with the Company a written designation of beneficiary, on such form as may be prescribed by the Committee, to receive any Shares, Awards or payments that become deliverable to the Participant pursuant to the Plan after the Participant's death. A Participant may, from time to time, amend or revoke a designation of beneficiary. If no designated beneficiary survives the Participant, the executor or administrator of the Participant's estate shall be deemed to be the Participant's beneficiary.

Section 6.7. *Non-uniform Determinations*. Determinations by the Committee under the Plan (including, without limitation, determinations of the Eligible Persons to receive Awards, the form, amount and timing of Awards, the terms and provisions of Awards and any agreements evidencing Awards and provisions with respect to termination of employment) need not be uniform and may be made by the Committee selectively among persons who receive, or are eligible to receive, Awards under the Plan, whether or not such persons are similarly situated.

Section 6.8. *Duration and Termination.* No awards shall be made under the Plan after April 23, 2022, provided that no Incentive Stock Option shall be granted under the Plan on or after the tenth anniversary of the effective date of the Plan. The Board may suspend, discontinue or terminate the Plan at any time. The suspension, discontinuance or termination of the Plan shall not impair any of the rights of any holder of any Award outstanding on the date of the Plan's suspension, discontinuance or termination without the holder's written consent.

Section 6.9. *Withholding*. Prior to the issuance of any Shares under the Plan, arrangements satisfactory to the Committee in its sole discretion shall have been made for the Participant's payment to the Company of the amount, if any, that the Committee determines to be necessary for the Company or Subsidiary employing the Participant to withhold in accordance with applicable federal or state income tax withholding requirements. If Shares are withheld from an Award to satisfy withholding requirements, the Fair Market Value of the Shares withheld shall not exceed an amount determined based on the maximum statutory tax rate in the applicable jurisdictions. When payments under the Plan are made in cash, such payments shall be net of an amount sufficient to satisfy such withholding requirements.

Section 6.10. *Agreements and Undertakings*. As a condition of any issuance or transfer of Shares, the Committee may obtain such agreements or undertakings, if any, as it may deem necessary or advisable to assure compliance with any provision of the Plan, any agreement or any law or regulation including, but not limited to, the following:

(a) a representation, warranty or agreement by the Participant to the Company that the Participant is acquiring the Shares for investment and not with a view to, or for sale in connection with, the distribution of any such Shares; and

(b) a representation, warranty or agreement to be bound by any restrictions that are, in the opinion of the Committee, necessary or appropriate to comply with the provisions of any securities law deemed by the Committee to be applicable to the issuance of the Shares.

Section 6.11. *Uncertificated Shares.* In lieu of issuing stock certificates for Shares acquired pursuant to the Plan, the Company may issue such Shares in book-entry or other electronic or uncertificated form, unless prohibited by applicable law or regulation or by applicable stock exchange rules.

Section 6.12. *Governing Law*. The Plan shall be governed by the laws of the State of Texas except to the extent that federal law or Nevada corporate law is controlling.

Section 6.13. *Effective Date*. The Plan amends and restates the Existing Plan in its entirety, effective July 23, 2019.

Exhibit 31.1

Certification of Chief Executive Officer

In connection with the filing of the Quarterly Report on Form 10-Q for the quarter ended June 30, 2019 by Kirby Corporation, David W. Grzebinski certifies that:

1. I have reviewed this report on Form 10-Q of Kirby Corporation (the "registrant");

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f) for the registrant and have:

   a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

/S/ DAVID W. GRZEBINSKI

David W. Grzebinski
President and Chief Executive Officer

Dated: August 2, 2019

Exhibit 31.2

Certification of Chief Financial Officer

In connection with the filing of the Quarterly Report on Form 10-Q for the quarter ended June 30, 2019 by Kirby Corporation, William G. Harvey certifies that:

1. I have reviewed this report on Form 10-Q of Kirby Corporation (the "registrant");

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f) for the registrant and have:

   a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

/S/ WILLIAM G. HARVEY

William G. Harvey
Executive Vice President and
Chief Financial Officer

Dated: August 2, 2019

Exhibit 32

Certification Pursuant to Section 18 U.S.C. Section 1350

In connection with the filing of the Quarterly Report on Form 10-Q for the quarter ended June 30, 2019 (the "Report") by Kirby Corporation (the "Company"), each of the undersigned hereby certifies that:

1. The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and

2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/S/ DAVID W. GRZEBINSKI

David W. Grzebinski
President and Chief Executive Officer

/S/ WILLIAM G. HARVEY

William G. Harvey
Executive Vice President and
Chief Financial Officer

Dated: August 2, 2019