UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-Q

☑ QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OFTHE SECURITIES EXCHANGE ACT OF 1934

For the quarterly period ended September 30, 2019

OR

☐ TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from to Commission file number 1-31763

KRONOS WORLDWIDE, INC.

(Exact name of registrant as specified in its charter)

DELAWARE (State or other jurisdiction of incorporation or organization)

financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. \Box

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act). Yes □ No ⊠ Number of shares of the registrant's common stock, \$.01 par value per share, outstanding on November 1, 2019: 115,651,706.

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

76-0294959 (IRS Employer Identification No.)

5430 LBJ Freeway, Suite 1700 Dallas, Texas 75240-2620 (Address of principal executive offices)

Registrant's telephone number, including area code: (972) 233-1700

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common stock	KRO	NYSE
Indicate by check mark whether the registrant (1) 1934 during the preceding 12 months and (2) has be		ection 13 or 15(d) of the Securities Exchange Act of past 90 days. Yes \boxtimes No \square
, e	, , , , , , , , , , , , , , , , , , ,	Data File required to be submitted pursuant to Rule shorter period that the registrant was required to
v	s of "large accelerated filer," "accelerated fi	non-accelerated filer, smaller reporting company or iler," "smaller reporting company," and "emerging
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

INDEX

		Page number
Part I.	FINANCIAL INFORMATION	
Item 1.	Financial Statements	
	<u>Condensed Consolidated Balance Sheets -</u> <u>December 31, 2018; September 30, 2019 (unaudited)</u>	3
	<u>Condensed Consolidated Statements of Income (unaudited) -</u> <u>Three and nine months ended September 30, 2018 and 2019</u>	5
	Condensed Consolidated Statements of Comprehensive Income (unaudited) - Three and nine months ended September 30, 2018 and 2019	ϵ
	Condensed Consolidated Statements of Stockholders' Equity (unaudited) - Three and nine months ended September 30, 2018 and 2019	7
	Condensed Consolidated Statements of Cash Flows (unaudited) - Nine months ended September 30, 2018 and 2019	9
	Notes to Condensed Consolidated Financial Statements (unaudited)	11
Item 2.	Management's Discussion and Analysis of Financial Condition and Results of Operations	20
Item 3.	Quantitative and Qualitative Disclosure About Market Risk	30
Item 4.	Controls and Procedures	30
Part II.	OTHER INFORMATION	
Item 1.	<u>Legal Proceedings</u>	31
Item 1A.	Risk Factors	31
Item 2.	<u>Unregistered Sales of Equity Securities and Use of Proceeds</u>	31
Item 6.	<u>Exhibits</u>	31
Items 3, 4 a	and 5 of Part II are omitted because there is no information to report.	

KRONOS WORLDWIDE, INC. AND SUBSIDIARIES CONDENSED CONSOLIDATED BALANCE SHEETS

(In millions)

	December 31, 2018	September 30, 2019		
ASSETS		(unaudited)		
Current assets:				
Cash and cash equivalents	\$ 373.3	\$ 385.8		
Restricted cash	1.4	1.1		
Accounts and other receivables	312.5	348.3		
Inventories, net	497.9	434.9		
Prepaid expenses and other	16.3	16.8		
Total current assets	1,201.4	1,186.9		
Other assets:				
Investment in TiO ₂ manufacturing joint venture	81.3	83.1		
Marketable securities	3.4	3.3		
Note receivable from Valhi	-	5.0		
Operating lease right-of-use assets	-	30.1		
Deferred income taxes	122.0	107.7		
Other	3.6	3.3		
Total other assets	210.3	232.5		
Property and equipment:				
Land	41.0	39.3		
Buildings	211.7	206.1		
Equipment	1,102.6	1,079.6		
Mining properties	114.0	113.2		
Construction in progress	38.0	45.8		
	1,507.3	1,484.0		
Less accumulated depreciation and amortization	1,020.9	1,018.5		
Net property and equipment	486.4	465.5		
Total assets	\$ 1,898.1	\$ 1,884.9		

CONDENSED CONSOLIDATED BALANCE SHEETS (CONTINUED)

(In millions)

	December 31, 2018	September 30, 2019
LIABILITIES AND STOCKHOLDERS' EQUITY		(unaudited)
Current liabilities:		
Current maturities of long-term debt	\$ 1.5	\$ 1.5
Accounts payable and accrued liabilities	222.9	224.4
Income taxes	9.0	1.6
Total current liabilities	233.4	227.5
Noncurrent liabilities:		
Long-term debt	455.1	434.6
Accrued pension costs	262.9	249.3
Payable to affiliate - income taxes	56.6	56.6
Operating lease liabilities	-	23.1
Deferred income taxes	21.5	22.0
Other	28.8	24.9
Total noncurrent liabilities	824.9	810.5
Stockholders' equity:		
Common stock	1.2	1.2
Additional paid-in capital	1,399.1	1,397.8
Retained deficit	(136.2	(121.0)
Accumulated other comprehensive loss	(424.3	(429.5)
Treasury stock		(1.6)
Total stockholders' equity	839.8	846.9
Total liabilities and stockholders' equity	\$ 1,898.1	\$ 1,884.9

Commitments and contingencies (Notes 12 and 14)

KRONOS WORLDWIDE, INC. AND SUBSIDIARIES CONDENSED CONSOLIDATED STATEMENTS OF INCOME

(In millions, except per share data)

	Three months ended September 30,			Nine months ended September 30,				
		2018		2019		2018		2019
Net sales	\$	410.3	\$	(unau	dited) \$	1,312.5	\$	1,358.4
Cost of sales	Ψ	291.2	Ψ	349.7	Ψ	846.8	Ψ	1,051.9
Cost of sales		271.2		0.1517		0.10.0		1,001.5
Gross margin		119.1		87.7		465.7		306.5
2.0008								
Selling, general and administrative expense		57.3		56.9		173.7		172.5
Other operating income (expense):								
Currency transactions, net		(.6)		5.8		4.2		5.6
Other operating expense, net		(3.1)		(3.5)		(10.7)		(11.0)
Income from operations		58.1		33.1		285.5		128.6
•								
Other income (expense):								
Interest and dividend income		1.5		1.4		3.7		5.2
Marketable equity securities		(4.3)		(1.9)		(6.7)		(.1)
Other components of net periodic pension and OPEB cost		(3.7)		(3.8)		(11.3)		(11.4)
Interest expense		(4.9)		(4.6)		(14.7)		(14.1)
Income before income taxes		46.7		24.2		256.5		108.2
Income tax expense		14.1		6.3		75.5		30.5
Net income	\$	32.6	\$	17.9	\$	181.0	\$	77.7
Net income per basic and diluted share	\$.28	\$.16	\$	1.56	\$.67
Weighted average shares used in the calculation								
of net income per share		115.9		115.7		115.9		115.8
			_		_		_	

CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

(In millions)

	Three months ended September 30,			Nine months ended September 30,			
	 2018		2019		2018		2019
			(unau	dited)			
Net income	\$ 32.6	\$	17.9	\$	181.0	\$	77.7
Other comprehensive income (loss), net of tax:							
Currency translation	4.5		(18.7)		(10.0)		(11.7)
Defined benefit pension plans	2.4		2.2		7.3		6.7
Other postretirement benefit plans	-		(.1)		(.2)		(.2)
Total other comprehensive income (loss), net	6.9		(16.6)		(2.9)		(5.2)
Comprehensive income	\$ 39.5	\$	1.3	\$	178.1	\$	72.5

CONDENSED CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY

(In millions)

	Three and nine months ended September 30, 2018 (unaudited)									
				Additional		Retained	1	Accumulated other		
		mmon tock		paid-in capital		earnings (deficit)		omprehensive income (loss)		Total
Balance at December 31, 2017	\$	1.2	\$	1,399.0	\$	(267.2)	\$	(378.7)	\$	754.3
Change in accounting principle - ASU 2016-01		-		-		4.8		(4.8)		-
Balance at January 1, 2018, as adjusted	-	1.2		1,399.0		(262.4)		(383.5)		754.3
Net income		-		-		70.7		-		70.7
Other comprehensive income, net of tax		-		-		-		13.0		13.0
Dividends paid - \$.17 per share		-		-		(19.7)				(19.7)
Balance at March 31, 2018		1.2		1,399.0		(211.4)		(370.5)		818.3
Net income		-		-		77.7		-		77.7
Other comprehensive loss, net of tax		-		-		-		(22.8)		(22.8)
Issuance of common stock		-		.1		-		-		.1
Dividends paid - \$.17 per share		-		-		(19.7)				(19.7)
Balance at June 30, 2018		1.2		1,399.1		(153.4)		(393.3)		853.6
Net income		-		-		32.6		-		32.6
Other comprehensive income, net of tax		-		-		-		6.9		6.9
Dividends paid - \$.17 per share		-		-		(19.7)				(19.7)
						· · · · · · · · · · · · · · · · · · ·				
Balance at September 30, 2018	\$	1.2	\$	1,399.1	\$	(140.5)	\$	(386.4)	\$	873.4

CONDENSED CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY (CONTINUED)

(In millions)

Three and nine months ended September 30, 2019 (unaudited) Accumulated Additional Retained other Common paid-in earnings comprehensive Treasury . capital (deficit) income (loss) stock Total stock 1,399.1 Balance at December 31, 2018 \$ 1.2 \$ (136.2) \$ (424.3) \$ \$ 839.8 Net income 30.3 30.3 Other comprehensive income, net of tax 2.1 2.1 Dividends paid - \$.18 per share (20.9)(20.9)Balance at March 31, 2019 1.2 1,399.1 (126.8)(422.2)851.3 Net income 29.5 29.5 Other comprehensive income, net of tax 9.3 9.3 Issuance of common stock .1 .1 Dividends paid - \$.18 per share (20.8)(20.8)(1.4)Treasury stock acquired (1.4)(1.4)Balance at June 30, 2019 1.2 1,399.2 (118.1)(412.9)868.0 Net income 17.9 17.9 Other comprehensive loss, net of tax (16.6)(16.6)Dividends paid - \$.18 per share (20.8)(20.8)Treasury stock acquired (1.6)(1.6)Treasury stock retired (1.4)1.4

See accompanying notes to Condensed Consolidated Financial Statements.

1,397.8

1.2

Balance at September 30, 2019

(429.5)

(121.0)

846.9

(1.6)

CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS

(In millions)

	Nine months ended September 30,			
		2018		2019
Cash flows from operating activities:		(unau	dited)	
Net income	\$	181.0	\$	77.7
Depreciation	Ψ	36.9	Ψ	34.3
Amortization of operating lease right-of-use assets		-		5.1
Deferred income taxes		20.5		6.7
Benefit plan expense greater than cash funding		6.5		7.1
Marketable equity securities		6.7		.1
Distributions from (contributions to) TiO ₂ manufacturing joint venture, net		5.5		(1.8)
Other, net		1.8		1.7
Change in assets and liabilities:				
Accounts and other receivables		(25.6)		(59.9)
Inventories		(70.3)		52.1
Prepaid expenses		(8.1)		(1.9)
Accounts payable and accrued liabilities		13.0		5.0
Income taxes		11.9		(3.7)
Accounts with affiliates		17.1		2.1
Other, net		2.1		(.8)
· · · · · · · · · · · · · · · · · · ·				
Net cash provided by operating activities		199.0		123.8
Cash flows from investing activities:				
Capital expenditures		(35.4)		(34.2)
Loan to Valhi:		()		()
Loans		(2.6)		(10.9)
Collections		16.2		5.9
Net cash used in investing activities		(21.8)		(39.2)
č				
Cash flows from financing activities:				
Payments on long-term debt		(.5)		(.6)
Dividends paid		(59.1)		(62.5)
Treasury stock acquired		-		(3.0)
, ,				
Net cash used in financing activities		(59.6)		(66.1)
Cash, cash equivalents and restricted cash - net change from:				
Operating, investing and financing activities		117.6		18.5
Currency translation		(7.9)		(6.3)
Balance at beginning of period		323.7		374.7
Balance at end of period	\$	433.4	\$	386.9
			_	

CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS (CONTINUED)

(In millions)

		Nine months ended September 30,				
	_	2018		2019		
		(unau	dited)			
Supplemental disclosures:						
Cash paid for:						
Interest, net of amount capitalized	\$	18.3	\$	17.3		
Income taxes		36.4		32.3		
Accrual for capital expenditures		3.5		1.6		

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

September 30, 2019

(unaudited)

Note 1 - Organization and basis of presentation:

Organization - At September 30, 2019, Valhi, Inc. (NYSE: VHI) held approximately 50% of our outstanding common stock and a wholly-owned subsidiary of NL Industries, Inc. (NYSE: NL) held approximately 30% of our common stock. Valhi owned approximately 83% of NL's outstanding common stock and a wholly-owned subsidiary of Contran Corporation ("Contran") held approximately 92% of Valhi's outstanding common stock. At September 30, 2019, a majority of Contran's outstanding voting stock is held directly by Lisa K. Simmons and Serena Simmons Connelly and various family trusts established for the benefit of Ms. Simmons and Ms. Connelly and their children and for which Ms. Simmons or Ms. Connelly, as applicable, serves as trustee. In addition, each of Ms. Simmons and Ms. Connelly serves as co-chair of the Contran board of directors. The remainder of Contran's outstanding voting stock is held by another trust (the "Family Trust"), which was established for the benefit of Ms. Simmons and Ms. Connelly and their children and for which a third-party financial institution serves as trustee. Consequently, at September 30, 2019, Ms. Simmons, Ms. Connelly and the Family Trust may be deemed to control Contran, and therefore may be deemed to indirectly control the wholly-owned subsidiary of Contran, Valhi, NL and us.

Basis of presentation - The unaudited Condensed Consolidated Financial Statements contained in this Quarterly Report have been prepared on the same basis as the audited Consolidated Financial Statements in our Annual Report on Form 10-K for the year ended December 31, 2018 that we filed with the Securities and Exchange Commission (SEC) on March 11, 2019 (2018 Annual Report). In our opinion, we have made all necessary adjustments (which include only normal recurring adjustments), in order to state fairly, in all material respects, our consolidated financial position, results of operations and cash flows as of the dates and for the periods presented. We have condensed the Consolidated Balance Sheet at December 31, 2018 contained in this Quarterly Report as compared to our audited Consolidated Financial Statements at that date, and we have omitted certain information and footnote disclosures (including those related to the Consolidated Balance Sheet at December 31, 2018) normally included in financial statements prepared in accordance with accounting principles generally accepted in the United States of America (GAAP). Our results of operations for the interim periods ended September 30, 2019 may not be indicative of our operating results for the full year. The Condensed Consolidated Financial Statements contained in this Quarterly Report should be read in conjunction with our 2018 Consolidated Financial Statements contained in our 2018 Annual Report.

Unless otherwise indicated, references in this report to "we," "us" or "our" refer to Kronos Worldwide, Inc. and its subsidiaries (NYSE: KRO) taken as a whole.

Note 2 - Accounts and other receivables:

	nber 31, 018	;	September 30, 2019			
	(In millions)					
Trade receivables	\$ 273.3	\$	333.9			
Recoverable VAT and other receivables	23.8		14.3			
Receivables from affiliates:						
Louisiana Pigment Company, L.P. (LPC)	10.2		-			
Other	2.8		2.0			
Refundable income taxes	3.6		.1			
Allowance for doubtful accounts	(1.2)		(2.0)			
Total	\$ 312.5	\$	348.3			

Note 3 - Inventories, net:

	December 31, 2018			September 30, 2019
		(In mi	llions)	
Raw materials	\$	93.1	\$	117.2
Work in process		23.5		29.0
Finished products		316.8		222.9
Supplies		64.5		65.8
Total	\$	497.9	\$	434.9

Note 4 - Marketable securities:

Our marketable securities consist of investments in the publicly-traded shares of related parties: Valhi, NL and CompX International Inc. NL owns the majority of CompX's outstanding common stock. All of our marketable securities are accounted for as available-for-sale securities, which are carried at fair value using quoted market prices in active markets for each marketable security. Any unrealized gains or losses on the securities are recognized in Marketable equity securities on our Condensed Consolidated Statements of Income. The fair value of our equity securities represent a Level 1 input within the fair value hierarchy. See Note 15.

Marketable security	Fair value measurement level	1	Market value	(I	Cost basis (n millions)	Uni	ealized gain
December 31, 2018:							
Valhi common stock	1	\$	3.3	\$	3.2	\$.1
NL and CompX common stocks	1		.1		.1		-
Total		\$	3.4	\$	3.3	\$.1
September 30, 2019:							
Valhi common stock	1	\$	3.2	\$	3.2	\$	-
NL and CompX common stocks	1		.1		.1		-
Total		\$	3.3	\$	3.3	\$	-

At December 31, 2018 and September 30, 2019, we held approximately 1.7 million shares of Valhi's common stock. We also held a nominal number of shares of CompX and NL common stocks. At December 31, 2018 and September 30, 2019, the quoted per share market price of Valhi's common stock was \$1.93 and \$1.90, respectively.

The Valhi, CompX and NL common stocks we own are subject to the restrictions on resale pursuant to certain provisions of SEC Rule 144. In addition, as a majority-owned subsidiary of Valhi we cannot vote our shares of Valhi common stock under Delaware General Corporation law, but we do receive dividends from Valhi on these shares when declared and paid.

Note 5 - Leases:

We enter into various arrangements (or leases) that convey the rights to use and control identified underlying assets for a period of time in exchange for consideration. We lease various manufacturing facilities and equipment. In addition, our principal German operating subsidiary leases the land under its Leverkusen TiO₂ production facility pursuant to a lease with Bayer AG that expires in 2050. The Leverkusen facility itself, which we own and which represents approximately one-third of our current TiO₂ production capacity, is located within Bayer's extensive manufacturing complex. From time to time, we may also enter into an arrangement in which the right to use and control an identified underlying asset is embedded in another type of contract.

On January 1, 2019 we adopted Accounting Standards Update (ASU) 2016-02, *Leases (Topic 842)*. See Note 16. We determine if an arrangement is a lease (including leases embedded in another type of contract) at inception. All of our leases are classified as operating leases under this new ASU. Operating leases are included in operating lease right-of-use assets, current operating lease liabilities and noncurrent operating lease liabilities in our Condensed Consolidated Balance Sheet beginning January 1, 2019. See Note 8.

Right-of-use assets represent our right to use an underlying asset for the lease term and operating lease liabilities represent our obligation to make lease payments arising from the lease. For leases in effect as of the January 1, 2019 date of adoption of the new

ASU, the right-of-use operating lease assets and liabilities were recognized based on the estimated present value of remaining lease payments over the remaining lease term as of the adoption date. For new leases entered into subsequent to the date of adoption of the new ASU, the right-of-use operating lease assets and liabilities are recognized based on the estimated present value of lease payments over the lease term as of the respective lease commencement dates.

We use an estimated incremental borrowing rate to determine the present value of lease payments (unless we can determine the rate implicit in the lease, which is generally not the case). Our incremental borrowing rate for each of our leases is derived from available information, including our current debt and credit facilities and U.S. and European yield curves as well as publicly available data for instruments with similar characteristics, adjusted for factors such as collateralization and term. For leases in effect as of the January 1, 2019 date of adoption of the new ASU, we used an estimated incremental borrowing rate for each lease on the date of adoption. For new leases entered into subsequent to the date of adoption of the new ASU, we use an estimated incremental borrowing rate for each lease as of the respective lease commencement date.

Our leases generally do not include termination or purchase options. Certain of our leases include an option to renew the lease after expiration of the initial lease term, but we have not included such renewal periods in our lease term because it is not reasonably certain that we would exercise the renewal option. Our leases generally have fixed lease payments, with no contingent or incentive payments. Certain of our leases include variable lease payments that depend on a specified index or rate, and in accordance with ASU 2016-02 the determination of the operating lease liabilities is based on the index or rate existing at the date of adoption of the new ASU (for leases in effect as of January 1, 2019) or the index or rate in effect as of the lease commencement date (for leases entered into subsequent to the date of adoption of the new ASU). Our lease agreements do not contain any residual value guarantees.

With respect to our land lease associated with our Leverkusen facility, we periodically establish the amount of rent for such land lease by agreement with Bayer for periods of at least two years at a time. The lease agreement provides for no formula, index or other mechanism to determine changes in the rent of such land lease; rather, any change in the rent is subject solely to periodic negotiation between Bayer and us. As such, we will account for any change in the rent associated with such lease subsequent to the January 1, 2019 adoption of the new ASU as a lease modification.

During the first nine months of 2019, our operating lease expense approximated \$6.2 million (which amount approximates the amount of cash paid during the period for our operating leases included in the determination of our cash flows from operating activities). During the first nine months of 2019, variable lease expense and short-term lease expense were not material. During the first nine months of 2019, we entered into new operating leases which resulted in the recognition of \$1.4 million in right-of-use operating lease assets and corresponding liabilities on our Condensed Consolidated Balance Sheet. At September 30, 2019, the weighted average remaining lease term of our operating leases was approximately 13 years, and the weighted average discount rate associated with such leases was approximately 4.6%. Such average remaining lease term is weighted based on each arrangement's lease obligation, and such average discount rate is weighted based on each arrangement's total remaining lease payments.

At September 30, 2019, maturities of our operating lease liabilities were as follows:

Years ending December 31,	Amount
	(In millions)
2019 (remainder of year)	\$ 2.0
2020	6.9
2021	6.1
2022	3.5
2023	2.3
2024 and thereafter	20.8
Total remaining lease payments	41.6
Less imputed interest	12.1
Total lease obligations	29.5
Less current obligations	6.4
Long term lease obligations	\$ 23.1

Approximately \$6.9 million of the \$29.5 million total lease obligations at September 30, 2019 relates to our Leverkusen facility lease discussed above.

At September 30, 2019, we have no significant lease commitments that have not yet commenced.

Disclosures related to periods prior to adoption of the New Lease Standard

Net rent expense approximated \$14 million in 2016, \$16 million in 2017 and \$15 million in 2018. At December 31, 2018, future minimum payments under non-cancellable operating leases having an initial or remaining term of more than one year were as follows:

Years ending December 31,	Amount						
	(In millions)						
2019	\$ 6.2						
2020	5.0						
2021	4.2						
2022	3.2						
2023	2.4						
2024 and thereafter	21.5						
Long term lease obligations	\$ 42.5						

Approximately \$17 million of the \$42.5 million aggregate future minimum rental commitments at December 31, 2018 relates to our Leverkusen facility lease discussed above. The minimum commitment amounts for such lease included in the table above for each year through the 2050 expiration of the lease are based upon the current annual rental rate as of December 31, 2018.

Note 6 - Other noncurrent assets:

	Decer 2	September 30, 2019				
		(In millio	ns)			
Pension asset	\$.8	1.3			
Deferred financing costs, net		.9	.7			
Other		1.9	1.3			
Total	\$	3.6	3.3			

Note 7 - Long-term debt:

		December 31, 2018			
		llions)			
Kronos International, Inc. 3.75% Senior Secured Notes	\$	452.4	\$	432.3	
Other		4.2		3.8	
Total debt		456.6		436.1	
Less current maturities		1.5		1.5	
Total long-term debt	\$	455.1	\$	434.6	

Senior Secured Notes - At September 30, 2019, the carrying value of our 3.75% Senior Secured Notes due September 15, 2025 (€400 million aggregate principal amount outstanding) is stated net of unamortized debt issuance costs of \$5.3 million.

Revolving credit facilities - During the first nine months of 2019, we had no borrowings or repayments under our North American revolving credit facility and our European revolving credit facility. At September 30, 2019, approximately \$118.4 million was available for borrowing under the North American revolving credit facility. Our European revolving credit facility requires the maintenance of certain financial ratios, and one of such requirements is based on the ratio of net debt to last twelve months earnings before income tax, interest, depreciation and amortization expense (EBITDA) of the borrowers. Based upon the borrowers' last twelve months EBITDA as of September 30, 2019 and the net debt to EBITDA financial test, the full €90.0 million amount of the credit facility (\$98.5 million) is available for borrowing at September 30, 2019.

Other - We are in compliance with all of our debt covenants at September 30, 2019.

Note 8 - Accounts payable and accrued liabilities:

	mber 31, 2018	Sej	ptember 30, 2019
	 (In mi	llions)	
Accounts payable	\$ 103.2	\$	113.2
Employee benefits	27.9		25.1
Accrued sales discounts and rebates	29.7		25.0
Operating lease liabilities	-		6.4
Payables to affiliates:			
LPC	16.7		13.3
Income taxes, net - Valhi	10.4		5.4
Other	35.0		36.0
Total	\$ 222.9	\$	224.4

Note 9 - Other noncurrent liabilities:

		December 31, 2018						
			(In mi	llions)				
Accrued postretirement benefits	:	\$	7.4	\$	7.7			
Employee benefits			7.3		6.3			
Other			14.1		10.9			
Total		\$	28.8	\$	24.9			

Note 10 - Revenue recognition:

The following table disaggregates our net sales by place of manufacture (point of origin) and to the location of the customer (point of destination), which are the categories that depict how the nature, amount, timing and uncertainty of revenue and cash flows are affected by economic factors.

	 Three mor	nths end iber 30,	ed	Nine months ended September 30,			
	 2018		2019		2018		2019
			(In mi	llions)			
Net sales - point of origin:							
Germany	\$ 211.9	\$	238.3	\$	704.1	\$	706.0
United States	234.5		227.7		640.2		762.3
Canada	82.3		84.0		236.1		258.4
Belgium	66.4		58.3		205.0		205.7
Norway	49.8		46.0		159.4		145.2
Eliminations	(234.6)		(216.9)		(632.3)		(719.2)
Total	\$ 410.3	\$	437.4	\$	1,312.5	\$	1,358.4
Net sales - point of destination:							
Europe	\$ 191.8	\$	201.6	\$	664.2	\$	646.2
North America	142.0		147.8		412.6		456.1
Other	76.5		88.0		235.7		256.1
Total	\$ 410.3	\$	437.4	\$	1,312.5	\$	1,358.4

Note 11 - Employee benefit plans:

The components of net periodic defined benefit pension cost are presented in the table below.

	Three months ended September 30,					Nine months ended September 30,				
	2	018		2019		2018		2019		
				(In mi	llions)					
Service cost	\$	2.9	\$	2.7	\$	8.8	\$	8.3		
Interest cost		3.5		3.5		10.7		10.5		
Expected return on plan assets		(3.3)		(3.1)		(9.9)		(9.3)		
Amortization of prior service cost		.1		.1		.2		.2		
Recognized actuarial losses		3.3		3.3		10.3		10.0		
Total	\$	6.5	\$	6.5	\$	20.1	\$	19.7		

We expect our 2019 contributions for our pension plans to be approximately \$17 million.

Note 12 - Income taxes:

	Three months ended September 30,					ed		
		2018		2019 (In mil	lions)	2018		2019
Expected tax expense, at U.S. federal statutory				(111 1111	110113)			
income tax rate of 21%	\$	9.8	\$	5.1	\$	53.9	\$	22.7
Non-U.S. tax rates		3.6		1.2		18.6		5.9
Incremental net tax expense (benefit) on earnings								
and losses of U.S. and non-U.S. companies		1.8		(1.1)		2.9		(2.2)
Global intangible low-tax income, net		-		.1		-		1.6
Transition tax		(1.7)		-		(1.7)		-
Adjustment to reserve for uncertain tax positions, net		-		.2		1.4		.6
Canada-Germany APA		-		-		(1.4)		-
Other, net		.6		.8		1.8		1.9
Income tax expense	\$	14.1	\$	6.3	\$	75.5	\$	30.5
Comprehensive provision for income taxes allocable to:								
Net income	\$	14.1	\$	6.3	\$	75.5	\$	30.5
Other comprehensive income (loss):								
Pension plans		1.0		1.2		3.2		3.6
OPEB plans		-		-		(.1)		(.1)
Total	\$	15.1	\$	7.5	\$	78.6	\$	34.0

The amount shown in the above table of our income tax rate reconciliation for non-U.S. tax rates represents the result determined by multiplying the pre-tax earnings or losses of each of our non-U.S. subsidiaries by the difference between the applicable statutory income tax rate for each non-U.S. jurisdiction and the U.S. federal statutory tax rate of 21%. The amount shown on such table for incremental net tax expense (benefit) on earnings and losses of U.S. and non-U.S. companies includes, as applicable, (i) deferred state and non-U.S. income taxes (or deferred income tax benefits) and deferred withholding taxes, as applicable, associated with the current-year change in the aggregate amount of undistributed earnings of all of our non-U.S. subsidiaries, which earnings are not permanently reinvested and (ii) current U.S. income taxes (or current income tax benefit) attributable to current-year income (losses) of one of our non-U.S. subsidiaries, which subsidiary is treated as a dual resident for U.S. income tax purposes.

We record global intangible low-tax income (GILTI) tax as a current-period expense when incurred under the period cost method. We have evaluated the tax impact of GILTI and base erosion anti abuse tax (BEAT) provisions and related U.S. tax credit provisions applicable to tax years beginning in 2018 based on the relevant statutes, including final GILTI and foreign tax credit regulations issued by the IRS in June 2019 which did not materially impact our determinations with respect to such items.

None of our U.S. and non-U.S. tax returns are currently under examination. As a result of prior audits in certain jurisdictions, which are now settled, in 2008 we filed Advance Pricing Agreement Requests with the tax authorities in the U.S., Canada and Germany. During the first quarter of 2018, our German subsidiary executed and finalized the related Advance Pricing Agreement

with the Competent Authority for Germany (the "Canada-Germany APA") effective for tax years 2005 - 2017. In the first quarter of 2018, we recognized a net \$1.4 million non-cash income tax benefit related to an APA tax settlement payment between our German and Canadian subsidiaries.

We believe we have adequate accruals for additional taxes and related interest expense which could ultimately result from tax examinations. We believe the ultimate disposition of any future tax examinations should not have a material adverse effect on our consolidated financial position, results of operations or liquidity. We do not expect our unrecognized tax benefits to materially change during the next twelve months.

Note 13 – Stockholders' equity:

Changes in accumulated other comprehensive loss are presented in the table below. See Note 4 for further discussion of our marketable securities and Note 11 for discussion of our defined benefit pension plans.

		Three months ended September 30,				Nine months ended September 30,			
		2018		2019		2018		2019	
A commulated other community along not of toy				(In mi	llions)				
Accumulated other comprehensive loss, net of tax: Currency translation:									
Balance at beginning of period	\$	(226.4)	\$	(238.0)	\$	(211.9)	\$	(245.0)	
Other comprehensive income (loss)	Ψ	4.5	φ	(18.7)	Ψ	(10.0)	Ψ	(11.7)	
Balance at end of period	\$	(221.9)	\$	(256.7)	\$	(221.9)	\$	(256.7)	
Balance at end of period	Ψ	(221.)	Φ	(230.7)	Ψ	(221.7)	Ф	(230.7)	
Defined benefit pension plans:									
Balance at beginning of period	\$	(167.9)	\$	(175.5)	\$	(172.8)	\$	(180.0)	
Other comprehensive income - amortization	Ψ	(107.7)	Ф	(173.3)	ψ	(172.0)	Ф	(100.0)	
of prior service cost and net losses included in									
net periodic pension cost		2.4		2.2		7.3		6.7	
Balance at end of period	\$	(165.5)	\$	(173.3)	\$	(165.5)	\$	(173.3)	
and the first of t	<u> </u>	(1111)	÷		÷		÷	()	
OPEB plans:									
Balance at beginning of period	\$	1.0	\$.6	\$	1.2	\$.7	
Other comprehensive loss - amortization									
of prior service credit and net losses									
included in net periodic OPEB cost		-		(.1)		(.2)		(.2)	
Balance at end of period	\$	1.0	\$.5	\$	1.0	\$.5	
			-		-				
Marketable securities:									
Balance at beginning of period	\$	-	\$	-	\$	4.8	\$	-	
Change in accounting principle		<u>-</u>		<u>-</u>		(4.8)		<u>-</u>	
Balance at beginning of period, as adjusted		-		-		-		-	
Other comprehensive loss -									
unrealized losses arising during the period								_	
Balance at end of period	\$		\$		\$		\$	<u> </u>	
								_	
Total accumulated other comprehensive loss:									
Balance at beginning of period	\$	(393.3)	\$	(412.9)	\$	(378.7)	\$	(424.3)	
Change in accounting principle		<u>-</u>		_		(4.8)		<u>-</u>	
Balance at beginning of period, as adjusted		(393.3)		(412.9)		(383.5)		(424.3)	
Other comprehensive income (loss)		6.9		(16.6)		(2.9)		(5.2)	
Balance at end of period	\$	(386.4)	\$	(429.5)	\$	(386.4)	\$	(429.5)	

In December 2010, our board of directors authorized the repurchase of up to 2.0 million shares of our common stock in open market transactions, including block purchases, or in privately-negotiated transactions at unspecified prices and over an unspecified period of time. We may repurchase our common stock from time to time as market conditions permit. The stock repurchase program does not include specific price targets or timetables and may be suspended at any time. Depending on market conditions, we may terminate the program prior to its completion. We use cash on hand or other sources of liquidity to acquire the shares. Repurchased shares are added to our treasury and subsequently cancelled upon approval of the board of directors. At December 31, 2018, 1,951,000 shares were available for repurchase under this authorization.

During the first nine months of 2019, we acquired 264,992 shares of our common stock in market transactions for an aggregate purchase price of \$3.0 million and subsequently cancelled 110,303, representing \$1.4 million, of such shares. At September 30, 2019 an additional 1,686,008 shares are available for repurchase under this stock repurchase program.

Note 14 - Commitments and contingencies:

We are involved in various environmental, contractual, product liability, patent (or intellectual property), employment and other claims and disputes incidental to our business. At least quarterly our management discusses and evaluates the status of any pending litigation to which we are a party. The factors considered in such evaluation include, among other things, the nature of such pending cases, the status of such pending cases, the advice of legal counsel and our experience in similar cases (if any). Based on such evaluation, we make a determination as to whether we believe (i) it is probable a loss has been incurred, and if so if the amount of such loss (or a range of loss) is reasonably estimable, or (ii) it is reasonably possible but not probable a loss has been incurred, and if so if the amount of such loss (or a range of loss) is reasonably estimable, or (iii) the probability a loss has been incurred is remote. We have not accrued any amounts for litigation matters because it is not reasonably possible we have incurred a loss that would be material to our consolidated financial condition, results of operations or liquidity.

Note 15 - Financial instruments:

The following table summarizes the valuation of our financial instruments recorded on a fair value basis as of December 31, 2018 and September 30, 2019.

	Fair Value Measurements										
				Quoted		S	ignificant				
				prices in			other			Significant	
				active markets		0	bservable inputs			unobservable inputs	
	Total			(Level 1)			(Level 2)			(Level 3)	
					(In mi	lions)					
Asset:											
December 31, 2018 -											
Noncurrent marketable securities (See Note 4)	\$	3.4	\$		3.4	\$		-	\$		-
September 30, 2019 -											
Noncurrent marketable securities (See Note 4)	\$	3.3	\$		3.3	\$		-	\$		-

Our earnings and cash flows are subject to fluctuations due to changes in currency exchange rates and interest rates. Our risk management policy allows for the use of derivative financial instruments to prudently manage exposure to currency exchange rates and interest rates. Derivatives that we use are primarily currency forward contracts and interest rate swaps. We have not entered into these contracts for trading or speculative purposes in the past, nor do we currently anticipate entering into such contracts for trading or speculative purposes in the future.

The following table presents the financial instruments that are not carried at fair value but which require fair value disclosure:

	December 31, 2018					September 30, 2019			
	Fair Carrying amount value				Carry	ying amount	Fair value		
				(In mi	illions)				
Cash, cash equivalents and restricted cash	\$	374.7	\$	374.7	\$	386.9	\$	386.9	
Long-term debt - Fixed rate Senior Secured Notes		452.4		412.9		432.3		438.0	
Common stockholders' equity		839.8		1.335.3		846.9		1,430.6	

At September 30, 2019, the estimated market price of our Senior Secured Notes was $\in 1,001$ per $\in 1,000$ principal amount. The fair value of our Senior Secured Notes is based on quoted market prices; however, these quoted market prices represented Level 2 inputs because the markets in which the Senior Secured Notes trade are not active. The fair value of our common stockholders' equity is based upon quoted market prices at each balance sheet date, which represent Level 1 inputs. Due to their near-term maturities, the carrying amounts of accounts receivable and accounts payable are considered equivalent to fair value.

Note 16 - Recent accounting pronouncement:

On January 1, 2019, we adopted ASU 2016-02, *Leases (Topic 842)*, which is a comprehensive rewriting of the lease accounting guidance which aims to increase comparability and transparency with regard to lease transactions. The primary change was the recognition of lease assets for the right-of-use of the underlying asset and lease liabilities for the obligation to make payments by lessees on the balance sheet for leases previously classified as operating leases. ASU 2016-02, as amended, also requires increased qualitative disclosure about leases in addition to quantitative disclosures previously required. As permitted, we adopted this ASU prospectively as of January 1, 2019 with no restatement of prior period financial statements. This ASU permits companies to elect certain practical expedients upon adoption, and at adoption we elected the package of practical expedients related to, among other things, lease classification (in which existing leases classified as operating leases under prior GAAP are classified as an operating lease under the new ASU, and existing leases classified as a capital lease under prior GAAP are classified as a finance lease under the new ASU), nonlease components (in which nonlease components associated with a lease and paid by us to the lessor, such as property taxes, insurance and maintenance, are treated as a lease component and considered part of minimum lease rental payments), and short-term leases (in which leases with an original maturity of 12 months or less are excluded from the recognition requirements of the new ASU). Upon adoption of this new ASU, at January 1, 2019 we recognized an aggregate right-of-use operating lease asset of \$35.1 million and a corresponding aggregate operating lease liability of \$34.5 million (there was no impact to the opening balance of retained earnings at January 1, 2019 as a result of adopting this new ASU). See Note 5.

ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

RESULTS OF OPERATIONS

Business overview

We are a leading global producer and marketer of value-added titanium dioxide pigments (TiO₂). TiO₂ is used for a variety of manufacturing applications, including paints, plastics, paper and other industrial and specialty products. For the nine months ended September 30, 2019, approximately one-half of our sales volumes were sold into European markets. Our production facilities are located in Europe and North America.

We consider TiO₂ to be a "quality of life" product, with demand affected by gross domestic product, or GDP, and overall economic conditions in our markets located in various regions of the world. Over the long-term, we expect demand for TiO₂ will grow by 2% to 3% per year, consistent with our expectations for the long-term growth in GDP. However, even if we and our competitors maintain consistent shares of the worldwide market, demand for TiO₂ in any interim or annual period may not change in the same proportion as the change in global GDP, in part due to relative changes in TiO₂ inventory levels of our customers. We believe that our customers' inventory levels are influenced in part by their expectations for future changes in TiO₂ market selling prices as well as their expectations for future availability of product. Although certain of our TiO₂ grades are considered specialty pigments, the majority of our grades and substantially all of our production are considered commodity pigment products, with price and availability being the most significant competitive factors along with quality and customer service.

The factors having the most impact on our reported operating results are:

- TiO₂ selling prices.
- Our TiO₂ sales and production volumes,
- · Manufacturing costs, particularly raw materials such as third-party feedstock, maintenance and energy-related expenses, and
- Currency exchange rates (particularly the exchange rate for the U.S. dollar relative to the euro, Norwegian krone and the Canadian dollar).

Our key performance indicators are our TiO₂ average selling prices, our level of TiO₂ sales and production volumes and the cost of our third-party feedstock. TiO₂ selling prices generally follow industry trends and prices will increase or decrease generally as a result of competitive market pressures.

Executive summary

We reported net income of \$17.9 million, or \$.16 per share, in the third quarter of 2019 as compared to net income of \$32.6 million, or \$.28 per share, in the third quarter of 2018. For the first nine months of 2019, we reported net income of \$77.7 million, or \$.67 per share, compared to net income of \$181.0 million, or \$1.56 per share, in the first nine months of 2018. We reported lower net income in the 2019 periods as compared to the 2018 periods primarily due to lower income from operations resulting from the effects of lower average selling prices and higher raw materials and other production costs partially offset by higher sales volumes.

Forward-looking information

This report contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995, as amended. Statements in this Quarterly Report on Form 10-Q that are not historical facts are forward-looking in nature and represent management's beliefs and assumptions based on currently available information. Statements in this report including, but not limited to, statements found in Item 2 - "Management's Discussion and Analysis of Financial Condition and Results of Operations," are forward-looking statements that represent our management's beliefs and assumptions based on currently available information. In some cases you can identify forward-looking statements by the use of words such as "believes," "intends," "may," "should," "could," "anticipates," "expects" or comparable terminology, or by discussions of strategies or trends. Although we believe the expectations reflected in forward-looking statements are reasonable, we do not know if these expectations will be correct. Such statements by their nature involve substantial risks and uncertainties that could significantly impact expected results. Actual future results could differ materially from those predicted. The factors that could cause our actual future results to differ materially from those described herein are the risks and uncertainties discussed in this Quarterly Report and those described from time to time in our other filings with the SEC including, but are not limited to, the following:

- Future supply and demand for our products
- The extent of the dependence of certain of our businesses on certain market sectors
- The cyclicality of our business
- Customer and producer inventory levels
- Unexpected or earlier-than-expected industry capacity expansion
- Changes in raw material and other operating costs (such as energy and ore costs)
- Changes in the availability of raw materials (such as ore)
- General global economic and political conditions (such as changes in the level of gross domestic product in various regions of the world and the impact of such changes on demand for TiO₂)
- Competitive products and substitute products
- Customer and competitor strategies
- Potential consolidation of our competitors
- Potential consolidation of our customers
- The impact of pricing and production decisions
- Competitive technology positions
- Potential difficulties in upgrading or implementing accounting and manufacturing software systems
- The introduction of trade barriers
- Possible disruption of our business, or increases in our cost of doing business, resulting from terrorist activities or global conflicts
- Fluctuations in currency exchange rates (such as changes in the exchange rate between the U.S. dollar and each of the euro, the Norwegian krone and the Canadian dollar), or possible disruptions to our business resulting from potential instability resulting from uncertainties associated with the euro or other currencies
- Operating interruptions (including, but not limited to, labor disputes, leaks, natural disasters, fires, explosions, unscheduled or unplanned downtime, transportation interruptions and cyber-attacks)
- Our ability to renew or refinance credit facilities
- Our ability to maintain sufficient liquidity
- The ultimate outcome of income tax audits, tax settlement initiatives or other tax matters, including future tax reform
- Our ability to utilize income tax attributes, the benefits of which may or may not have been recognized under the more-likely-than-not recognition criteria
- Environmental matters (such as those requiring compliance with emission and discharge standards for existing and new facilities)

- · Government laws and regulations and possible changes therein including new environmental health and safety regulations
- The ultimate resolution of pending litigation
- Possible future litigation.

Should one or more of these risks materialize (or the consequences of such a development worsen), or should the underlying assumptions prove incorrect, actual results could differ materially from those forecasted or expected. We disclaim any intention or obligation to update or revise any forward-looking statement whether as a result of changes in information, future events or otherwise.

Results of operations

Current industry conditions

We started 2019 with average TiO₂ selling prices 3% lower than at the beginning of 2018. Our average TiO₂ selling prices declined in the first quarter of 2019 compared to the fourth quarter of 2018 before beginning to rise in the second and third quarters of 2019. Our average TiO₂ selling prices at the end of the third quarter of 2019 were 2% higher than at the end of the second quarter of 2019 and were comparable to the end of 2018. We experienced higher sales volumes in all major markets in the first nine months of 2019 as compared to the same period of 2018.

We operated our production facilities at overall average capacity utilization rates of 97% in the first nine months of 2019 compared to 95% in the first nine months of 2018. The table below lists our comparative quarterly production capacity utilization rates.

	Production Capacity Uti	Production Capacity Utilization Rates		
	2018	2019		
First quarter	95%	97%		
Second quarter	97%	97%		
Third quarter	92%	97%		

Primarily due to a rise in the cost of third-party feedstock we procured in 2018 and 2019, our cost of sales per metric ton of TiO₂ sold in the first nine months of 2019 was higher as compared to the first nine months of 2018 (excluding the effect of changes in currency exchange rates).

Quarter ended September 30, 2019 compared to the quarter ended September 30, 2018

	Three months ended September 30,			
	 2018		2019	
		(Dollars in millions)		
Net sales	\$ 410.3	100% \$	437.4	100%
Cost of sales	291.2	71	349.7	80
Gross margin	 119.1	29	87.7	20
Selling, general and administrative expense	57.3	14	56.9	13
Other operating income (expense):				
Currency transactions, net	(.6)	-	5.8	1
Other operating expense, net	(3.1)	(1)	(3.5)	-
Income from operations	\$ 58.1	14% \$	33.1	8%

		% Change
123	144	17%
131	136	4%
		(5)%
		17
		(3)
		(2)
	_	7%
	-	-

^{*} Thousands of metric tons

Net sales - Net sales in the third quarter of 2019 increased 7%, or \$27.1 million, compared to the third quarter of 2018 primarily due to the net effect of a 5% decrease in average TiO₂ selling prices (which decreased net sales by approximately \$21 million) and a 17% increase in sales volumes (which increased net sales by approximately \$70 million). TiO₂ selling prices will increase or decrease generally as a result of competitive market pressures, changes in the relative level of supply and demand as well as changes in raw material and other manufacturing costs.

Our sales volumes increased 17% in the third quarter of 2019 as compared to the third quarter of 2018 primarily due to higher sales in all major markets. In addition to the impact of changes in average TiO₂ selling prices and sales volumes, we estimate that changes in currency exchange rates (primarily the euro) decreased our net sales by approximately \$9 million in the third quarter of 2019 as compared to the third quarter of 2018.

Cost of sales and gross margin - Cost of sales increased \$58.5 million, or 20%, in the third quarter of 2019 compared to the third quarter of 2018 due to the net effect of a 17% increase in sales volumes, higher raw materials and other production costs of approximately \$24 million (primarily caused by higher third-party feedstock costs) and currency fluctuations (primarily the euro). Our cost of sales as a percentage of net sales increased to 80% in the third quarter of 2019 compared to 71% in the same period of 2018 primarily due to the unfavorable effects of lower average selling prices and higher raw materials and other production costs, as discussed above.

Gross margin as a percentage of net sales decreased to 20% in the third quarter of 2019 compared to 29% in the third quarter of 2018. As discussed and quantified above, our gross margin decreased primarily due to the net effect of lower average selling prices, higher sales volumes and higher raw materials and other production costs.

Selling, general and administrative expense - Selling, general and administrative expense in the third quarter of 2019 was comparable to the third quarter of 2018.

Income from operations - Income from operations decreased by \$25.0 million, or 43%, in the third quarter of 2019 compared to the third quarter of 2018. Income from operations as a percentage of net sales decreased to 8% in the third quarter of 2019 from 14% in the same period of 2018. This decrease was driven by the lower gross margin discussed above. We estimate that changes in currency exchange rates increased income from operations by approximately \$6 million in the third quarter of 2019 as compared to the same period in 2018, as discussed below.

Other non-operating income (expense) – Our loss on marketable equity securities was \$4.3 million and \$1.9 million in the third quarters of 2018 and 2019, respectively. See Note 4 to our Condensed Consolidated Financial Statements. Other components of net periodic pension and OPEB cost in the third quarter of 2019 was comparable to the third quarter of 2018 and we expect this comparability of pension and OPEB cost to continue throughout 2019. See Note 11 to our Condensed Consolidated Financial Statements. Interest expense in the third quarter of 2019 was also comparable to the third quarter of 2018 and we currently expect our interest expense for all of 2019 to be comparable to 2018.

Income tax expense - We recognized income tax expense of \$6.3 million in the third quarter of 2019 compared to income tax expense of \$14.1 million in the third quarter of 2018. The difference is primarily due to lower earnings in 2019. Our earnings are subject to income tax in various U.S. and non-U.S. jurisdictions, and the income tax rates applicable to the pre-tax earnings (losses) of our non-U.S. operations are generally higher than the income tax rates applicable to our U.S. operations. We would generally expect our overall effective tax rate to be higher than the U.S. federal statutory tax rate of 21% primarily because of our sizeable non-U.S. operations. See Note 12 to our Condensed Consolidated Financial Statements.

		Nine months ended Septe	ember 30,	
	2018		2019	
		(Dollars in millio		
Net sales	\$ 1,312.5	100 % \$	1,358.4	100%
Cost of sales	846.8	65	1,051.9	77
Gross margin	465.7	35	306.5	23
Selling, general and administrative expense	173.7	13	172.5	13
Other operating income (expense):				
Currency transactions, net	4.2	1	5.6	-
Other operating expense, net	(10.7)	(1)	(11.0)	(1)
Income from operations	\$ 285.5	22 % \$	128.6	9%
				% Change
TiO ₂ operating statistics:				
Sales volumes*	385		445	16%
Production volumes*	400		406	1%
Percentage change in net sales:				
TiO ₂ product pricing				(7)%
TiO ₂ sales volumes				16
TiO ₂ product mix/other				(3)

^{*} Thousands of metric tons

Total

Changes in currency exchange rates

Net sales - Net sales in the first nine months of 2019 increased 3%, or \$45.9 million, compared to the first nine months of 2018 primarily due to the net effect of a 7% decrease in average TiO₂ selling prices (which decreased net sales by approximately \$92 million) and a 16% increase in sales volumes (which increased net sales by approximately \$210 million). TiO₂ selling prices will increase or decrease generally as a result of competitive market pressures, changes in the relative level of supply and demand as well as changes in raw material and other manufacturing costs.

(3)

3%

Our sales volumes increased 16% in the first nine months of 2019 as compared to the first nine months of 2018 primarily due to higher sales in all major markets. In addition to the impact of changes in average TiO₂ selling prices and sales volumes, we estimate that changes in currency exchange rates decreased our net sales by approximately \$41 million as compared to the first nine months of 2018.

Cost of sales and gross margin - Cost of sales increased \$205.1 million, or 24%, in the first nine months of 2019 compared to the same period in 2018 primarily due to the net impact of a 16% increase in sales volumes, higher raw materials and other production costs of approximately \$101 million (including higher cost for third-party feedstock, energy and other raw materials) and currency fluctuations (primarily the euro). Our cost of sales as a percentage of net sales increased to 77% in the first nine months of 2019 compared to 65% in the same period of 2018 primarily due to the unfavorable effects of lower average selling prices and higher raw materials and other production costs, as discussed above.

Gross margin as a percentage of net sales decreased to 23% in the first nine months of 2019 compared to 35% in the first nine months of 2018. As discussed and quantified above, our gross margin decreased primarily due to the net effect of lower average selling prices, higher sales volumes and higher raw materials and other production costs.

Selling, general and administrative expense - Selling, general and administrative expense in the first nine months of 2019 was comparable to the first nine months of 2018.

Income from operations - Income from operations decreased by \$156.9 million, or 55%, in the first nine months of 2019 compared to the first nine months of 2018. Income from operations as a percentage of net sales decreased to 9% in the first nine months of 2019 from 22% in the same period of 2018. This decrease was driven by the decrease in gross margin discussed above. We estimate that changes in currency exchange rates increased income from operations by approximately \$5 million in the first nine months of 2019 as compared to the same period in 2018.

Other non-operating income (expense) - Our loss on marketable equity securities was \$6.7 million and \$.1 million for the first nine months of 2018 and 2019, respectively. See Note 4 to our Condensed Consolidated Financial Statements. Other components of net periodic pension and OPEB cost in the first nine months of 2019 was comparable to the first nine months of 2018. See Note 11 to our Condensed Consolidated Financial Statements. Interest expense in the first nine months of 2019 was comparable to the first nine months of 2018.

Income tax expense - We recognized income tax expense of \$30.5 million in the first nine months of 2019 compared to income tax expense of \$75.5 million in the first nine months of 2018. The difference is primarily due to lower earnings in 2019. Our earnings are subject to income tax in various U.S. and non-U.S. jurisdictions, and the income tax rates applicable to our pre-tax earnings (losses) of our non-U.S. operations are generally higher than the income tax rates applicable to our U.S. operations. We would generally expect our overall effective tax rate to be higher than the U.S. federal statutory tax rate of 21% primarily because of our sizeable non-U.S. operations. See Note 12 to our Condensed Consolidated Financial Statements.

Effects of Currency Exchange Rates

We have substantial operations and assets located outside the United States (primarily in Germany, Belgium, Norway and Canada). The majority of our sales from non-U.S. operations are denominated in currencies other than the U.S. dollar, principally the euro, other major European currencies and the Canadian dollar. A portion of our sales generated from our non-U.S. operations is denominated in the U.S. dollar (and consequently our non-U.S. operations will generally hold U.S. dollars from time to time). Certain raw materials used in all our production facilities, primarily titanium-containing feedstocks, are purchased in U.S. dollars, while labor and other production and administrative costs are incurred primarily in local currencies. Consequently, the translated U.S. dollar value of our non-U.S. sales and operating results are subject to currency exchange rate fluctuations which may favorably or unfavorably impact reported earnings and may affect the comparability of period-to-period operating results. In addition to the impact of the translation of sales and expenses over time, our non-U.S. operations also generate currency transaction gains and losses which primarily relate to (i) the difference between the currency exchange rates in effect when non-local currency sales or operating costs (primarily U.S. dollar denominated) are initially accrued and when such amounts are settled with the non-local currency, (ii) changes in currency exchange rates during time periods when our non-U.S. operations are holding non-local currency (primarily U.S. dollars), and (iii) relative changes in the aggregate fair value of currency forward contracts held from time to time. We periodically use currency forward contracts to manage a portion of our currency exchange risk, and relative changes in the aggregate fair value of any currency forward contracts we hold from time to time serve in part to mitigate the currency transaction gains or losses we would otherwise recognize from the first two items described above.

Overall, we estimate that fluctuations in currency exchange rates had the following effects on the reported amounts of our sales and income from operations for the periods indicated.

Impact of changes in currency exchange rates Three months ended September 30, 2019 vs September 30, 2018 Total Translation currency Transaction gains/(losses) recognized impact of impact 2018 Change 2019 rate changes (In millions) Impact on: Net sales \$ \$ \$ \$ (9) \$ (9)Income from operations

The \$9 million decrease in net sales (translation loss) was caused primarily by a strengthening of the U.S. dollar relative to the euro, as our euro-denominated sales were translated into fewer U.S. dollars in 2019 as compared to 2018. The strengthening of the U.S. dollar relative to the Canadian dollar and the Norwegian krone in 2019 did not have a significant effect on the reported amount of our net sales, as a substantial portion of the sales generated by our Canadian and Norwegian operations are denominated in the U.S. dollar.

The \$6 million increase in income from operations was comprised of the following:

- Approximately \$7 million from net currency transaction gains primarily caused by relative changes in currency exchange rates at each applicable balance sheet date between the U.S. dollar and the euro and the Norwegian krone, which causes increases or decreases, as applicable, in U.S. dollar-denominated receivables and payables and U.S. dollar currency held by our non-U.S. operations, and
- Approximately \$1 million from net currency translation losses primarily caused by the strengthening of the U.S. dollar relative to the euro, which had a negative effect on income from operations in 2019 as compared to 2018, as the negative impact of the stronger U.S. dollar on euro-denominated sales more than offset the favorable effect of euro-denominated operating costs being translated into fewer U.S. dollars in 2019 as compared to 2018, partially offset by such translation as it related to the U.S. dollar relative to the Norwegian krone, as its local currency-denominated operating costs were translated into fewer U.S. dollars in 2019 as compared to 2018.

Impact of changes in currency exchange rates Nine months ended September 30, 2019 vs September 30 2018

	Time months end	•	saction gains re	cognized	1	Transla gains (los impac	sses) -	Total currency impact
	2	018	2019		Change	rate cha		2019 vs 2018
					(In millions)			
Impact on:								
Net sales	\$	-	\$	- 5	-	\$	(41) \$	(41)
Income from operations		4		6	2		3	5

The \$41 million decrease in net sales (translation loss) was caused primarily by a strengthening of the U.S. dollar relative to the euro, as our euro-denominated sales were translated into fewer U.S. dollars in 2019 as compared to 2018. The strengthening of the U.S. dollar relative to the Canadian dollar and the Norwegian krone in 2019 did not have a significant effect on the reported amount of our net sales, as a substantial portion of the sales generated by our Canadian and Norwegian operations are denominated in the U.S. dollar.

The \$5 million increase in income from operations was comprised of the following:

- Approximately \$2 million from net currency transaction gains primarily caused by relative changes in currency exchange rates at each applicable balance sheet date between the U.S. dollar and the euro, which causes increases or decreases, as applicable, in U.S. dollar-denominated receivables and payables and U.S. dollar currency held by our non-U.S. operations, and
- Approximately \$3 million from net currency translation gains primarily caused by the strengthening of the U.S. dollar relative to the Canadian dollar and Norwegian krone, as its local currency-denominated operating costs were translated into fewer U.S. dollars in 2019 as compared to 2018, partially offset by such translation, as it related to the U.S. dollar relative to the euro, which had a negative effect on income from operations in 2019 as compared to 2018, as the negative impact of the stronger U.S. dollar on euro-denominated sales more than offset the favorable effect of euro-denominated operating costs being translated into fewer U.S. dollars in 2019 as compared to 2018.

Outlook

We expect our production volumes in 2019 to be slightly higher as compared to 2018 production volumes. Assuming global economic conditions remain stable and based on anticipated production levels, we also expect our 2019 sales volumes to be higher as compared to 2018 sales volumes. We will continue to monitor current and anticipated near-term customer demand levels and align our production and inventories accordingly.

The cost of third-party feedstock we purchased in the last half of 2018 and first nine months of 2019 was higher as compared to the first half of 2018 and such higher cost feedstock was reflected in our results of operations in 2019. Consequently, our cost of sales per metric ton of TiO₂ sold in the first nine months of 2019 was higher than our per-metric ton cost in the first nine months of 2018 (excluding the effect of changes in currency exchange rates). We expect our cost of sales per metric ton of TiO₂ sold in 2019 to be higher than our per-metric ton cost in 2018 primarily due to higher feedstock costs.

We started 2019 with average TiO₂ selling prices 3% lower than the beginning of 2018, and average selling prices at the end of the third quarter of 2019 were comparable to the end of 2018. Average TiO₂ selling prices declined by 4% in the first quarter of 2019, then improved by 2% in each of the second and third quarters of 2019. Supplies of certain grades of TiO₂ remain tight, while

inventories of certain other grades are adequate. Considering all of the foregoing factors, including rising raw material costs, and anticipating seasonal demand fluctuations as we enter the fourth calendar quarter, we expect selling prices to remain stable during the remainder of 2019.

Overall, we expect our sales in 2019 will be higher as compared to 2018, principally as a result of the favorable impact of higher expected sales volumes partially offset by the unfavorable impact of lower expected average selling prices (primarily during the first half of the year). In addition, we expect our income from operations in 2019 will be lower as compared to 2018, as the favorable impact of higher expected sales volumes would be more than offset by the unfavorable impact of lower expected average selling prices and higher raw material and other operating costs in 2019.

Due to the constraints of high capital costs and extended lead time associated with adding significant new TiO₂ production capacity, especially for premium grades of TiO2 products produced from the chloride process, we believe increased and sustained profit margins will be necessary to financially justify major expansions of TiO2 production capacity required to meet expected future growth in demand. Substantial expansions of TiO2 production capacity generally take several years before such production becomes available to meet demand growth.

Our expectations for our future operating results are based upon a number of factors beyond our control, including worldwide growth of gross domestic product, competition in the marketplace, continued operation of competitors, unexpected or earlier-than-expected capacity additions or reductions and technological advances. If actual developments differ from our expectations, our results of operations could be unfavorably affected.

LIQUIDITY AND CAPITAL RESOURCES

Consolidated cash flows

Operating activities

Trends in cash flows as a result of our operating activities (excluding the impact of significant asset dispositions and relative changes in assets and liabilities) are generally similar to trends in our earnings. In addition to the impact of the operating, investing and financing cash flows discussed below, changes in the amount of cash, cash equivalents and restricted cash we report from period to period can be impacted by changes in currency exchange rates, since a portion of our cash, cash equivalents and restricted cash is held by our non-U.S. subsidiaries.

Cash provided by operating activities was \$123.8 million in the first nine months of 2019 compared to \$199.0 million in the first nine months of 2018. This \$75.2 million decrease in the amount of cash provided was primarily due to the net effect of the following:

- lower income from operations in 2019 of \$156.9 million,
- lower amount of net cash used associated with relative changes in our inventories, receivables, payables and accruals in 2019 of \$84.6 million as compared to 2018,
- lower cash paid for taxes in 2019 of \$4.1 million due to the net effects of decreased profits in 2019 and the timing of tax payments, and
- net contributions of \$1.8 million in 2019 compared to net distributions of \$5.5 million in 2018 from our TiO₂ manufacturing joint venture.

Changes in working capital were affected by accounts receivable and inventory changes. As shown below:

- Our average days sales outstanding, or DSO, decreased from December 31, 2018 to September 30, 2019, primarily due to relative changes in the timing of collections, and
- Our average days sales in inventory, or DSI, decreased from December 31, 2018 to September 30, 2019, primarily due to lower inventory volumes attributable to sales volumes outpacing production volumes for the 2019 year-to-date period.

For comparative purposes, we have also provided comparable prior year numbers below.

	December 31, 2017	September 30, 2018	December 31, 2018	September 30, 2019
DSO	63 days	74 days	76 days	71 days
DSI	62 days	77 days	113 days	57 days

Investing activities

Our capital expenditures of \$35.4 million and \$34.2 million in the first nine months of 2018 and 2019, respectively, were primarily to maintain and improve the cost effectiveness of our manufacturing facilities.

In addition, during the first nine months of 2019 we loaned \$10.9 million and subsequently collected \$5.9 million under our unsecured revolving demand promissory note with Valhi.

Financing activities

During the first nine months of 2019, we paid quarterly dividends of \$.18 per share to stockholders aggregating \$62.5 million. We paid quarterly dividends of \$.17 per share to stockholders aggregating \$59.1 million during the first nine months of 2018.

In addition, during the first nine months of 2019, we acquired 264,992 shares of our common stock in market transactions for an aggregate purchase price of \$3.0 million.

Outstanding debt obligations

At September 30, 2019, our consolidated debt comprised:

- €400 million aggregate outstanding on our KII 3.75% Senior Secured Notes (\$432.3 million carrying amount, net of unamortized debt issuance costs) due in September 2025, and
- approximately \$3.8 million of other indebtedness.

Our North American and European revolvers and our Senior Secured Notes contain a number of covenants and restrictions which, among other things, restrict our ability to incur or guarantee additional debt, incur liens, pay dividends or make other restricted payments, or merge or consolidate with, or sell or transfer substantially all of our assets to, another entity, and contain other provisions and restrictive covenants customary in lending transactions of this type. Certain of our credit agreements contain provisions which could result in the acceleration of indebtedness prior to their stated maturity for reasons other than defaults for failure to comply with typical financial or payment covenants. For example, certain credit agreements allow the lender to accelerate the maturity of the indebtedness upon a change of control (as defined in the agreement) of the borrower. In addition, certain credit agreements could result in the acceleration of all or a portion of the indebtedness following a sale of assets outside the ordinary course of business. Our European revolving credit facility also requires the maintenance of certain financial ratios, and one of such requirements is based on the ratio of net debt to the last twelve months EBITDA of the borrowers. The terms of all of our debt instruments (including revolving lines of credit for which we have no outstanding borrowings at September 30, 2019) are discussed in Note 8 to our Consolidated Financial Statements included in our 2018 Annual Report. We are in compliance with all of our debt covenants at September 30, 2019. We believe that we will be able to continue to comply with the financial covenants contained in our credit facilities through their maturity.

Our assets consist primarily of investments in operating subsidiaries, and our ability to service our obligations, including the Senior Secured Notes, depends in part upon the distribution of earnings of our subsidiaries, whether in the form of dividends, advances or payments on account of intercompany obligations or otherwise. Our Senior Secured Notes are collateralized by, among other things, a first priority lien on (i) 100% of the common stock or other ownership interests of each existing and future direct domestic subsidiary of KII and the guarantors, and (ii) 65% of the voting common stock or other ownership interests and 100% of the non-voting common stock or other ownership interests of each non-U.S. subsidiary that is directly owned by KII or any guarantor. Our North American revolving credit facility is collateralized by, among other things, a first priority lien on the borrower's trade receivables and inventories. Our European revolving credit facility is collateralized by, among other things, the accounts receivable and inventories of the borrowers plus a limited pledge of all the other assets of the Belgian borrower.

Future cash requirements

Liquidity

Our primary source of liquidity on an ongoing basis is cash flows from operating activities which is generally used to (i) fund capital expenditures, (ii) repay any short-term indebtedness incurred for working capital purposes and (iii) provide for the payment of dividends. From time-to-time we will incur indebtedness, generally to (i) fund short-term working capital needs, (ii) refinance existing indebtedness or (iii) fund major capital expenditures or the acquisition of other assets outside the ordinary course of business. We will also from time-to-time sell assets outside the ordinary course of business and use the proceeds to (i) repay existing indebtedness, (ii) make investments in marketable and other securities, (iii) fund major capital expenditures or the acquisition of other assets outside the ordinary course of business or (iv) pay dividends.

The TiO_2 industry is cyclical, and changes in industry economic conditions significantly impact earnings and operating cash flows. Changes in TiO_2 pricing, production volumes and customer demand, among other things, could significantly affect our liquidity.

We routinely evaluate our liquidity requirements, alternative uses of capital, capital needs and availability of resources in view of, among other things, our dividend policy, our debt service and capital expenditure requirements and estimated future operating cash flows. As a result of this process, we have in the past and may in the future seek to reduce, refinance, repurchase or restructure indebtedness, raise additional capital, repurchase shares of our common stock, modify our dividend policy, restructure ownership interests, sell interests in our subsidiaries or other assets, or take a combination of these steps or other steps to manage our liquidity and capital resources. Such activities have in the past and may in the future involve related companies. In the normal course of our business, we may investigate, evaluate, discuss and engage in acquisition, joint venture, strategic relationship and other business combination opportunities in the TiO_2 industry. In the event of any future acquisition or joint venture opportunity, we may consider using then-available liquidity, issuing our equity securities or incurring additional indebtedness.

At September 30, 2019 we had aggregate cash, cash equivalents and restricted cash on hand of \$386.9 million, of which \$165.2 million was held by non-U.S. subsidiaries. Following implementation of a territorial tax system under the 2017 Tax Act, repatriation of any cash and cash equivalents held by our non-U.S. subsidiaries would not be expected to result in any material income tax liability as a result of such repatriation. At September 30, 2019, we had approximately \$118.4 million available for additional borrowing under our North American revolving credit facility. Based on the terms of our European revolving credit facility (including the net debt to EBITDA financial test discussed above) and the borrowers' EBITDA over the last twelve months ended September 30, 2019, the full €90.0 million amount of the credit facility (\$98.5 million) was available for borrowing at September 30, 2019. We could borrow all available amounts under each of our credit facilities without violating our existing debt covenants. Based upon our expectation for the TiO₂ industry and anticipated demands on cash resources, we expect to have sufficient liquidity to meet our short term obligations (defined as the twelve-month period ending September 30, 2020) and our long-term obligations (defined as the five-year period ending September 30, 2024, our time period for long-term budgeting). If actual developments differ from our expectations, our liquidity could be adversely affected.

Capital expenditures

We currently estimate that we will invest approximately \$75 million in capital expenditures primarily to maintain and improve our existing facilities during 2019, including the \$34.2 million we have spent through September 30, 2019.

Stock repurchase program

At September 30, 2019, we have 1,686,008 shares available for repurchase under a stock repurchase program authorized by our board of directors. See Note 13.

Off-balance sheet financing

Following the January 1, 2019 adoption of ASU 2016-02, *Leases (Topic 842)*, we do not have any off-balance sheet financing arrangements. See Notes 5 and 16.

Commitments and contingencies

See Notes 12 and 14 to the Condensed Consolidated Financial Statements for a description of certain income tax contingencies and legal proceedings.

Recent accounting pronouncements

See Note 16 to our Condensed Consolidated Financial Statements.

Critical accounting policies

For a discussion of our critical accounting policies, refer to Part I, Item 7 - "Management's Discussion and Analysis of Financial Condition and Results of Operations" in our 2018 Annual Report. There have been no changes in our critical accounting policies during the first nine months of 2019.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURE ABOUT MARKET RISK

General

We are exposed to market risk, including currency exchange rates, interest rates, equity security and raw material prices. There have been no material changes in these market risks since we filed our 2018 Annual Report. See also Part I, Item 7A. - "Quantitative and Qualitative Disclosure About Market Risk" in our 2018 Annual Report, and Note 15 to our Condensed Consolidated Financial Statements.

ITEM 4. CONTROLS AND PROCEDURES

Evaluation of disclosure controls and procedures

We maintain disclosure controls and procedures which, as defined in Exchange Act Rule 13a-15(e), means controls and other procedures that are designed to ensure that information required to be disclosed in the reports that we file or submit to the SEC under the Securities Exchange Act of 1934, as amended (the "Act"), is recorded, processed, summarized and reported, within the time periods specified in the SEC's rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information we are required to disclose in the reports we file or submit to the SEC under the Act is accumulated and communicated to our management, including our principal executive officer and our principal financial officer, or persons performing similar functions, as appropriate to allow timely decisions to be made regarding required disclosure. Each of Robert D. Graham, our Vice Chairman of the Board, President and Chief Executive Officer and James W. Brown, our Senior Vice President and Chief Financial Officer, have evaluated the design and effectiveness of our disclosure controls and procedures as of September 30, 2019. Based upon their evaluation, these executive officers have concluded that our disclosure controls and procedures are effective as of the date of such evaluation.

Internal control over financial reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting which, as defined by Exchange Act Rule 13a-15(f) means a process designed by, or under the supervision of, our principal executive and principal financial officers, or persons performing similar functions, and effected by the board of directors, management and other personnel, 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, and includes those policies and procedures that:

- Pertain to the maintenance of records that in reasonable detail accurately and fairly reflect the transactions and dispositions of our assets,
- Provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with GAAP, and that our receipts and expenditures are being made only in accordance with authorizations of our management and directors, and
- Provide reasonable assurance regarding prevention or timely detection of an unauthorized acquisition, use or disposition of our assets that could have a material effect on our Condensed Consolidated Financial Statements.

Other

As permitted by the SEC, our assessment of internal control over financial reporting excludes (i) internal control over financial reporting of our equity method investees and (ii) internal control over the preparation of any financial statement schedules which would be required by Article 12 of Regulation S-X. However, our assessment of internal control over financial reporting with respect to our equity method investees did include our controls over the recording of amounts related to our investment that are recorded in our Condensed Consolidated Financial Statements, including controls over the selection of accounting methods for our investments, the recognition of equity method earnings and losses and the determination, valuation and recording of our investment account balances.

Changes in internal control over financial reporting

There has been no change to our internal control over financial reporting during the quarter ended September 30, 2019 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

Part II. OTHER INFORMATION

Item 1. Legal Proceedings

Refer to Note 14 to our Condensed Consolidated Financial Statements and our 2018 Annual Report for descriptions of certain legal proceedings.

Item 1A. Risk Factors

For a discussion of the risk factors related to our businesses, refer to Part I, Item 1A, "Risk Factors," in our 2018 Annual Report. There have been no material changes to such risk factors during the nine months ended September 30, 2019.

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds

The following table discloses certain information regarding the shares of our common stock we purchased during the third quarter of 2019 (we made no purchases during July and September 2019). All of these purchases were made under the repurchase program in open market transactions. See Note 13.

				Maximum number
			Total number of shares	of shares that may
	Total number		purchased as part	yet be purchased
	of shares	Average price	of the publicly	under the publicly
Period	purchased (1)	paid per share	announced plan	announced plan
August 2019	154.689	\$10.52	154.689	1.686.008

(1) In December 2010, our board of directors authorized the repurchase of up to 2.0 million shares of our common stock in open market transactions, including block purchases, or in privately-negotiated transactions at unspecified prices and over an unspecified period of time.

Item 6. Exhibits

31.1	Certification
31.2	Certification
32.1	Certification
101.INS	XBRL Instance Document
101.SCH	XBRL Taxonomy Extension Schema
101.CAL	XBRL Taxonomy Extension Calculation Linkbase
101.DEF	XBRL Taxonomy Extension Definition Linkbase
101.LAB	XBRL Taxonomy Extension Label Linkbase
101.PRE	XBRL Taxonomy Extension Presentation Linkbase

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.

Kronos Worldwide, Inc.

(Registrant)

Date: November 7, 2019 /s/ James W. Brown

James W. Brown Senior Vice President and Chief Financial Officer (Principal Financial Officer)

Date: November 7, 2019 /s/ Tim C. Hafer

Tim C. Hafer Senior Vice President and C

Senior Vice President and Controller (Principal Accounting Officer)

CERTIFICATION

I, Robert D. Graham, certify that:

- 1) I have reviewed this quarterly report on Form 10-Q of Kronos Worldwide, Inc.;
- 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 (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
- 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.

Date: November 7, 2019

/s/ Robert D. Graham Robert D. Graham

Chief Executive Officer

CERTIFICATION

I, James W. Brown, certify that:

- 1) I have reviewed this quarterly report on Form 10-Q of Kronos Worldwide, Inc.;
- 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 (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
- 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.

Date: November 7, 2019

/s/ James W. Brown James W. Brown Chief Financial Officer

CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Quarterly Report of Kronos Worldwide, Inc. (the Company) on Form 10-Q for the quarter ended September 30, 2019 as filed with the Securities and Exchange Commission on the date hereof (the Report), I, Robert D. Graham, Chief Executive Officer of the Company, and I, James W. Brown, Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that:

- (1) The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934; 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/ Robert D. Granam	
Robert D. Graham	
Chief Executive Officer	
/s/ James W. Brown	
James W. Brown	
Chief Financial Officer	

November 7, 2019

Note: The certification the registrant furnishes in this exhibit is not deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, or otherwise subject to the liabilities of that Section. Registration Statements or other documents filed with the Securities and Exchange Commission shall not incorporate this exhibit by reference, except as otherwise expressly stated in such filing.