

Quad/Graphics Reports Second Quarter and Year-to-Date 2018 Results

Company Achieved Revenue Growth from Continuing Transformation to Marketing Solutions Provider; Board Authorizes New \$100 Million Share Repurchase Program

SUSSEX, WI, July 31, 2018 — Quad/Graphics, Inc. (NYSE: QUAD) ("Quad/Graphics" or the "Company") today reported results for its second quarter ending June 30, 2018. For full financial results, please see the accompanying information.

Second Quarter Financial Highlights

- Increased net sales 5% to \$1 billion.
- Increased net earnings by \$2 million to \$9 million and diluted earnings per share by \$0.05 to \$0.18.
- Achieved Non-GAAP Adjusted EBITDA and Margin of \$90 million and 8.8%, respectively, and generated Non-GAAP Adjusted Diluted Earnings Per Share of \$0.23.
- Repurchased \$37 million of Quad/Graphics stock and launches a new \$100 million share repurchase program authorized by the Board of Directors.
- Declares quarterly dividend of \$0.30 per share.

"Our results for the second quarter of 2018 were in-line with our expectations and reflect the positive impact on revenue from our transformation to a marketing solutions provider," said Joel Quadracci, Quad/Graphics Chairman, President & Chief Executive Officer. "Our integrated marketing platform is unique and enables our clients to strategically plan, produce, deploy, manage and measure their marketing content across traditional and digital channels. By having a fully integrated offering, we reduce complexity, improve process efficiencies and enhance marketing spend effectiveness for our clients."

Quadracci added: "Our investments in Ivie & Associates and Rise Interactive continue to strengthen our integrated marketing platform and the client value we create. Recent wins validate that our strategy is working, especially in the digital marketing and technology solutions spaces. For example, one of our large national retail clients recently partnered with Quad for digital services including paid search, social and display placement, spend optimization, and analytics reporting in addition to the traditional services we already provide for them including creative, production, media planning, printing and distribution. As we move ahead, we will continue to strengthen our integrated marketing platform to ensure our products and services continue to help our clients and generate additional revenue across all our businesses."

Summary Results

Net sales increased 5.4% during the second quarter 2018 to \$1 billion, reflecting the impact of the Ivie & Associates and Rise Interactive investments as part of the Company's transformation to a marketing solutions provider. Organic sales declined 2.2%, after excluding acquisition sales impact of 6.2%, increased pass-through paper sales of 1.6% and a -0.2% foreign exchange impact. The results reflect ongoing print industry volume and pricing pressures, and are consistent with the Company's previous guidance. Net earnings increased 40% during the second quarter 2018 to \$9 million and diluted earnings per share improved by \$0.05 to \$0.18 compared to \$0.13 in 2017. Non-GAAP Adjusted Diluted Earnings Per Share for the second quarter 2018 declined 4% to \$0.23 compared to \$0.24 in the second quarter of 2017. Second quarter 2018 Non-GAAP Adjusted EBITDA was \$90 million compared to \$94 million in second quarter 2017, and Adjusted EBITDA Margin was 8.8% compared to 9.7% in 2017.

Net sales increased 1.1% during the six months ended June 30, 2018. Organic sales declined 3.7%, after excluding acquisition sales impact of 4.1% and increased pass-through paper sales of 0.7%, reflecting print industry volume and pricing pressures. Net earnings for the six months ended June 30, 2018, decreased \$26 million to \$6 million, or \$0.11 per share, and included a special non-cash charge of \$22 million for an employee stock ownership plan contribution as part of the benefit of tax reform and \$21 million in higher restructuring charges. Excluding the special contribution and restructuring changes, Non-GAAP Adjusted Diluted Earnings Per Share improved 5% to \$0.80 during the six months ended June 30, 2018, compared to \$0.76 for 2017. Year-to-date Non-GAAP Adjusted EBITDA was \$200 million compared to \$213 million for 2017, and Adjusted EBITDA margin was 10.1% compared to 10.8% in 2017.

Net cash provided by operating activities was \$41 million for the first six months of 2018 compared to \$112 million in 2017, and Free Cash Flow was negative \$13 million. The decline to 2017 was primarily due to expected timing differences in 2018 versus 2017 for cash generated from working capital, which will be weighted more toward the fourth quarter, and includes an intentional build-up in paper inventories in anticipation of supply constraints. As a reminder, the Company generates the majority of its Free Cash Flow in the second half of the year.

"We delivered second quarter results in-line with our expectations and we remain on track to deliver on our 2018 financial guidance," said Dave Honan, Executive Vice President and Chief Financial Officer for Quad/Graphics. "Our Debt Leverage Ratio of 2.34x remains well within our long-term targeted range of 2.0x to 2.5x and includes the impacts from \$37 million of share repurchases in the quarter and \$71 million in strategic investments made for Ivie and Rise in 2018. We believe the strength of our balance sheet gives us the ability to balance our use of capital between investing back into our business and returning capital to our shareholders, including our consistent dividend and our share repurchases. We are pleased to announce our Board of Directors authorized a new \$100 million stock repurchase program to provide sufficient capacity for us to repurchase shares in the future. We remain stringently focused on transforming our business and driving shareholder value as we move forward."

Quad/Graphics' next quarterly dividend of \$0.30 per share will be payable on September 7, 2018, to shareholders of record as of August 20, 2018.

Quarterly Conference Call

Quad/Graphics (NYSE: QUAD) will hold a conference call at 10 a.m. ET on Wednesday, August 1, to discuss second quarter 2018 results. The call will be hosted by Joel Quadracci, Quad/Graphics Chairman, President & Chief Executive Officer, and Dave Honan, Quad/Graphics Executive Vice President & Chief Financial Officer. The full earnings release and slide presentation will be concurrently available on the Investors section of Quad/Graphics' website at http://investors.gg.com.

Participants can pre-register for the webcast by navigating to http://dpregister.com/10120920. Participants will be given a unique PIN to gain immediate access to the call on August 1, bypassing the live operator. Participants may pre-register at any time, including up to and after the call start time.

Alternatively, participants without internet access may dial in on the day of the call as follows:

U.S. Toll-Free: 1-877-328-5508
International Toll: 1-412-317-5424

Telephone playback will be available shortly after the conference call ends, accessible as follows:

U.S. Toll-Free: 1-877-344-7529
International Toll: 1-412-317-0088
Replay Access Code: 10120920

The playback will be available until September 1, 2018.

Forward-Looking Statements

This press release contains certain "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995. Forward-looking statements include statements regarding, among other things, our current expectations about the Company's future results, financial condition, revenue, earnings, free cash flow, margins, objectives, goals, strategies, beliefs, intentions, plans, estimates, prospects, projections and outlook of the Company and can generally be identified by the use of words or phrases such as "may," "will," "expect," "intend," "estimate," "anticipate," "plan," "foresee," "project," "believe," "continue" or the negatives of these terms, variations on them and other similar expressions. These forward-looking statements involve known and unknown risks, uncertainties and other factors which may cause actual results to be materially different from those expressed in or implied by such forward-looking statements. Forward-looking statements are based largely on the Company's expectations and judgments and are subject to a number of risks and uncertainties, many of which are unforeseeable and beyond our control.

The factors that could cause actual results to materially differ include, among others: the impact of decreasing demand for printed materials and significant overcapacity in the highly competitive commercial printing industry creates downward pricing pressures and potential underutilization of assets; the impact of electronic media and similar technological changes, including digital substitution by consumers; the inability of the Company to reduce costs and improve operating efficiency rapidly enough to meet market conditions; the impact of changing future economic conditions; the failure of clients to perform under contracts or to renew contracts with clients on favorable terms or at all; the impact of increased business complexity as a result of the Company's transformation into a marketing services provider; the impact of regulatory matters and legislative developments or changes in laws, including changes in cyber-security, privacy and environmental laws; the impact of fluctuations in costs (including labor and labor-related costs, energy costs, freight rates and raw materials) and the impact of fluctuations in the availability of raw materials; the failure to attract and retain qualified production personnel; the impact of changes in postal rates, service levels or regulations; the fragility and decline in overall distribution channels, including newspaper distribution channels; the failure to successfully identify, manage, complete and integrate acquisitions and investments; the impact of risks associated with the operations outside of the United States, including costs incurred or reputational damage suffered due to improper conduct of its employees, contractors or agents; significant capital expenditures may be needed to maintain the Company's platform and processes and to remain technologically and economically competitive; the impact of the various restrictive covenants in the Company's debt facilities on the Company's ability to operate its business; the impact on the holders of Quad/Graphics class A common stock of a limited active market for such shares and the inability to independently elect directors or control decisions due to the voting power of the class B common stock; the impact of an other than temporary decline in operating results and enterprise value that could lead to non-cash impairment charges due to the impairment of property, plant and equipment and other intangible assets; and the other risk factors identified in the Company's most recent Annual Report on Form 10-K, as such may be amended or supplemented by subsequent Quarterly Reports on Form 10-Q or other reports filed with the Securities and Exchange Commission.

Except to the extent required by the federal securities laws, the Company undertakes no obligation to publicly update or revise any forward-looking statements, whether as a result of new information, future events or otherwise.

Non-GAAP Financial Measures

This press release contains financial measures not prepared in accordance with generally accepted accounting principles (referred to as Non-GAAP), specifically Adjusted EBITDA, Adjusted EBITDA Margin, Free Cash Flow, Debt Leverage Ratio and Adjusted Diluted Earnings Per Share. Adjusted EBITDA is defined as net earnings (loss) attributable to Quad/Graphics common shareholders excluding interest expense, income tax expense (benefit), depreciation and amortization, restructuring, impairment and transaction-related charges, net pension income, employee stock ownership plan contributions, loss (gain) on debt extinguishment, and equity in (earnings) loss of unconsolidated entity. Adjusted EBITDA Margin is defined as Adjusted EBITDA divided by net sales. Free Cash Flow is defined as net cash provided by operating activities less purchases of property, plant and equipment. Debt Leverage Ratio is defined as total debt and capital lease obligations divided by the last twelve months of Adjusted EBITDA. Adjusted Diluted Earnings Per Share is defined as net earnings (loss) excluding restructuring, impairment and transaction-related charges, employee stock ownership plan contributions, loss (gain) on debt extinguishment, equity in (earnings) loss of unconsolidated entity, discrete income tax items and net (earnings) loss attributable to noncontrolling interests, divided by diluted weighted average number of common shares outstanding.

The Company believes that these Non-GAAP measures, when presented in conjunction with comparable GAAP measures, provide additional information for evaluating Quad/Graphics' performance and are important measures by which Quad/Graphics' management assesses the profitability and liquidity of its business. These Non-GAAP measures should be considered in addition to, not as a substitute for or superior to, net earnings (loss) as a measure of operating performance or to cash flows provided by operating activities as a measure of liquidity. These Non-GAAP measures may be different than Non-GAAP financial measures used by other companies. Reconciliation to the GAAP equivalent of these Non-GAAP measures are contained in tabular form on the attached unaudited financial statements.

About Quad/Graphics

Quad/Graphics (NYSE:QUAD) is a leading marketing solutions provider. The Company leverages its strong print foundation as part of a much larger, robust integrated marketing services platform that helps marketers and content creators improve the efficiency and effectiveness of their marketing spend across offline and online media channels. With a consultative approach, worldwide capabilities, leading-edge technology and single-source simplicity, Quad/Graphics has the resources and knowledge to help a wide variety of clients in multiple vertical industries, including retail, publishing and healthcare. Quad/Graphics provides a diverse range of digital and print and related products, services and solutions from multiple locations throughout North America, South America and Europe, and strategic partnerships in Asia and other parts of the world. For additional information visit www.QG.com.

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QUAD/GRAPHICS, INC.CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS

For the Three Months Ended June 30, 2018 and 2017 (in millions, except per share data) (UNAUDITED)

	Three Months Ended June 30		
		2018	2017
Net sales	\$	1,015.5	\$ 963.2
Cost of sales		0067	765.0
		826.7	765.0
Selling, general and administrative expenses		99.2	104.3
Depreciation and amortization		58.3	58.5
Restructuring, impairment and transaction-related charges		10.4	5.3
Total operating expenses		994.6	933.1
Operating income	\$	20.9	\$ 30.1
Interest expense		18.4	17.6
Pension income		(3.1)	(2.6
Earnings before income taxes and equity in (earnings) loss of unconsolidated entity		5.6	15.1
Income tax (benefit) expense		(3.7)	8.3
Earnings before equity in (earnings) loss of unconsolidated entity		9.3	6.8
Equity in (earnings) loss of unconsolidated entity		(0.2)	0.1
Net earnings		9.5	6.7
Net earnings attributable to noncontrolling interests		(0.1)	_
Net earnings attributable to Quad/Graphics common shareholders	\$	9.4	\$ 6.7
Earnings per share attributable to Quad/Graphics common shareholders			
Basic	\$	0.19	\$ 0.14
Diluted	\$		\$ 0.13
Weighted average number of common shares outstanding			
Basic		50.8	49.5
Diluted		52.5	51.7

CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS

For the Six Months Ended June 30, 2018 and 2017 (in millions, except per share data) (UNAUDITED)

	Six Months Ended Jun			June 30,
		2018		2017
Net sales	\$	1,983.0	\$	1,961.8
Cost of sales		1,619.1		1,546.1
Selling, general and administrative expenses		186.1		202.9
Depreciation and amortization		114.5		117.2
Restructuring, impairment and transaction-related charges		35.3		14.5
Total operating expenses		1,955.0		1,880.7
Operating income	\$	28.0	\$	81.1
Interest expense		35.7		35.8
Net pension income		(6.2)		(5.2)
Loss on debt extinguishment		<u> </u>		2.6
Earnings (loss) before income taxes and equity in (earnings) loss of unconsolidated entity		(1.5)		47.9
Income tax (benefit) expense		(7.0)		15.0
Earnings before equity in (earnings) loss of unconsolidated entity		5.5		32.9
Equity in (earnings) loss of unconsolidated entity		(0.5)		0.8
Net earnings		6.0		32.1
Net earnings attributable to noncontrolling interests		(0.1)		_
Net earnings attributable to Quad/Graphics common shareholders	\$	5.9	\$	32.1
Earnings per share attributable to Quad/Graphics common shareholders				
Basic	\$	0.12	\$	0.65
Diluted	\$	0.11	\$	0.62
Weighted average number of common shares outstanding				
Basic		50.5		49.3
Diluted		52.3		51.6

CONDENSED CONSOLIDATED BALANCE SHEETS

As of June 30, 2018 and December 31, 2017 (in millions) (UNAUDITED)

	 June 30, 2018		December 31, 2017	
ASSETS				
Cash and cash equivalents	\$ 8.9	\$	64.4	
Receivables, less allowances for doubtful accounts	510.4		552.5	
Inventories	290.7		246.5	
Prepaid expenses and other current assets	 68.1		45.1	
Total current assets	878.1		908.5	
Property, plant and equipment—net	1,306.8		1,377.6	
Goodwill	56.1		_	
Other intangible assets—net	128.5		43.4	
Equity method investment in unconsolidated entity	3.5		3.6	
Other long-term assets	96.9		119.3	
Total assets	\$ 2,469.9	\$	2,452.4	
LIABILITIES AND SHAREHOLDERS' EQUITY				
Accounts payable	\$ 396.1	\$	381.6	
Accrued liabilities	272.1		316.7	
Short-term debt and current portion of long-term debt	36.9		42.0	
Current portion of capital lease obligations	5.4		5.6	
Total current liabilities	 710.5		745.9	
Long-term debt	993.2		903.5	
Capital lease obligations	12.3		13.7	
Deferred income taxes	44.9		41.9	
Other long-term liabilities	205.7		225.0	
Total liabilities	 1,966.6		1,930.0	
Shareholders' equity				
Preferred stock	_		_	
Common stock	1.4		1.4	
Additional paid-in capital	854.5		861.1	
Treasury stock, at cost	(55.0)		(52.8)	
Accumulated deficit	(182.7)		(162.9)	
Accumulated other comprehensive loss	(133.4)		(124.4)	
Quad/Graphics' shareholders' equity	484.8		522.4	
Noncontrolling interests	18.5			
Total shareholders' equity and noncontrolling interests	503.3		522.4	
Total liabilities and shareholders' equity	\$ 2,469.9	\$	2,452.4	

CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS

For the Six Months Ended June 30, 2018 and 2017 (in millions) (UNAUDITED)

	Six Months Ended June 30,		
		2018	2017
OPERATING ACTIVITIES			
Net earnings	\$	6.0 \$	32.1
Adjustments to reconcile net earnings to net cash provided by operating activities:			
Depreciation and amortization		114.5	117.2
Employee stock ownership plan contribution		22.3	_
Impairment charges		11.5	0.7
Loss on debt extinguishment		_	2.6
Stock-based compensation		9.1	9.7
Gain from property insurance claims		(18.3)	(5.0)
Gain on the sale or disposal of property, plant and equipment		(2.1)	(7.1)
Deferred income taxes		1.1	6.4
Other non-cash adjustments to net earnings		1.2	2.6
Changes in operating assets and liabilities—net of acquisitions		(104.8)	(47.0)
Net cash provided by operating activities		40.5	112.2
INVESTING ACTIVITIES			
Purchases of property, plant and equipment		(53.8)	(42.8)
Proceeds from the sale of property, plant and equipment		8.9	21.8
Proceeds from property insurance claims		14.5	5.0
Loan to an unconsolidated entity		_	(5.0)
Acquisition of businesses—net of cash acquired		(71.4)	_
Net cash used in investing activities		(101.8)	(21.0)
FINANCING ACTIVITIES			
Proceeds from issuance of long-term debt		_	375.0
Payments of long-term debt		(21.5)	(409.2)
Payments of capital lease obligations		(3.4)	(4.2)
Borrowings on revolving credit facilities		896.6	270.6
Payments on revolving credit facilities		(791.9)	(287.4)
Payments of debt issuance costs and financing fees		_	(4.7)
Purchases of treasury stock		(36.7)	_
Proceeds from stock options exercised		4.0	2.4
Equity awards redeemed to pay employees' tax obligations		(7.5)	(5.9)
Payment of cash dividends		(32.2)	(31.7)
Other financing activities		_	(4.1)
Net cash provided by (used in) financing activities		7.4	(99.2)
Effect of exchange rates on cash and cash equivalents		(1.6)	(0.5)
Net decrease in cash and cash equivalents		(55.5)	(8.5)
Cash and cash equivalents at beginning of period		64.4	19.2
Cash and cash equivalents at end of period	\$	8.9 \$	10.7

SEGMENT FINANCIAL INFORMATION

For the Three and Six Months Ended June 30, 2018 and 2017 (in millions) (UNAUDITED)

	Net			perating ome (Loss)	Impai Transac	ructuring, rment and tion-Related arges ⁽¹⁾
Three months ended June 30, 2018			-			
United States Print and Related Services	\$	919.5	\$	33.3	\$	8.1
International		96.0		1.6		2.0
Total operating segments		1,015.5		34.9		10.1
Corporate		<u> </u>		(14.0)		0.3
Total	\$	1,015.5	\$	20.9	\$	10.4
Three months ended June 30, 2017						
United States Print and Related Services	\$	872.3	\$	40.7	\$	2.8
International		90.9		3.3		1.8
Total operating segments		963.2		44.0		4.6
Corporate		_		(13.9)		0.7
Total	\$	963.2	\$	30.1	\$	5.3
Six months ended June 30, 2018						
United States Print and Related Services	\$	1,787.3	\$	53.6	\$	28.5
International		195.7		7.3		3.0
Total operating segments		1,983.0		60.9		31.5
Corporate				(32.9)		3.8
Total	\$	1,983.0	\$	28.0	\$	35.3
Six months ended June 30, 2017						
United States Print and Related Services	\$	1,774.5	\$	103.2	\$	9.9
International		187.3		8.1		2.8
Total operating segments		1,961.8		111.3		12.7
Corporate		_		(30.2)		1.8
Total	\$	1,961.8	\$	81.1	\$	14.5

Restructuring, impairment and transaction-related charges are included within operating income (loss).

RECONCILIATION OF GAAP TO NON-GAAP MEASURES

EBITDA, EBITDA MARGIN, ADJUSTED EBITDA AND ADJUSTED EBITDA MARGIN For the Three Months Ended June 30, 2018 and 2017

(in millions, except margin data)
(UNAUDITED)

	Thr	Three Months Ended June 30,			
		2018		2017	
Net earnings attributable to Quad/Graphics common shareholders	\$	9.4	\$	6.7	
Interest expense		18.4		17.6	
Income tax (benefit) expense		(3.7)		8.3	
Depreciation and amortization		58.3		58.5	
EBITDA (Non-GAAP)	\$	82.4	\$	91.1	
EBITDA Margin (Non-GAAP)		8.1 %		9.5 %	
Restructuring, impairment and transaction-related charges (1)		10.4		5.3	
Net pension income (2)		(3.1)		(2.6)	
Equity in (earnings) loss of unconsolidated entity (3)		(0.2)		0.1	
Adjusted EBITDA (Non-GAAP)	\$	89.5	\$	93.9	
Adjusted EBITDA Margin (Non-GAAP)		8.8%		9.7%	

⁽¹⁾ Operating results for the three months ended June 30, 2018 and 2017, were affected by the following restructuring, impairment and transaction-related charges:

	Th	Three Months Ended June 30,			
	20	018		2017	
Employee termination charges (a)	\$	2.5	\$	3.0	
Impairment charges (b)		3.6		0.3	
Transaction-related charges (c)		0.1		0.4	
Integration costs (d)		0.1		_	
Other restructuring charges (e)		4.1		1.6	
Restructuring, impairment and transaction-related charges	\$	10.4	\$	5.3	

⁽a) Employee termination charges were related to workforce reductions through facility consolidations and announced separation programs.

⁽b) Impairment charges were for certain property, plant and equipment no longer being utilized in production as a result of facility consolidations.

⁽c) Transaction-related charges consisted of professional service fees related to business acquisition and divestiture activities.

⁽d) Integration costs were primarily costs related to the integration of acquired companies.

⁽e) Other restructuring charges were primarily from costs to maintain and exit closed facilities, as well as lease exit charges, net of a gain on the sale of facilities of \$3.4 million during the three months ended June 30, 2017.

⁽²⁾ Due to a change in United States GAAP that requires pension income to be excluded from operating income, the Company will report Adjusted EBITDA excluding net pension income. This change is reflected in all periods presented.

⁽³⁾ The equity in (earnings) loss of unconsolidated entity includes the results of operations for an investment in an entity where Quad/Graphics has the ability to exert significant influence, but not control, which is accounted for using the equity method of accounting.

RECONCILIATION OF GAAP TO NON-GAAP MEASURES

EBITDA, EBITDA MARGIN, ADJUSTED EBITDA AND ADJUSTED EBITDA MARGIN

For the Six Months Ended June 30, 2018 and 2017 (in millions, except margin data) (UNAUDITED)

	S	Six Months Ended June 30,			
		2018		2017	
Net earnings attributable to Quad/Graphics common shareholders	\$	5.9	\$	32.1	
Interest expense		35.7		35.8	
Income tax (benefit) expense		(7.0)		15.0	
Depreciation and amortization		114.5		117.2	
EBITDA (Non-GAAP)	\$	149.1	\$	200.1	
EBITDA Margin (Non-GAAP)		7.5 %		10.2 %	
Restructuring, impairment and transaction-related charges (1)		35.3		14.5	
Net pension income (2)		(6.2)		(5.2)	
Employee stock ownership plan contribution (3)		22.3		_	
Loss on debt extinguishment (4)		_		2.6	
Equity in (earnings) loss of unconsolidated entity (5)		(0.5)		0.8	
Adjusted EBITDA (Non-GAAP)	\$	200.0	\$	212.8	
Adjusted EBITDA Margin (Non-GAAP)		10.1%		10.8%	

⁽¹⁾ Operating results for the six months ended June 30, 2018 and 2017, were affected by the following restructuring, impairment and transaction-related charges:

	Six Mon	hs Ended June 30,
	2018	2017
Employee termination charges (a)	\$	3.1 \$ 5.9
Impairment charges (b)		1.5 0.7
Transaction-related charges (c)		0.8 1.2
Integration costs (d)		0.2 —
Other restructuring charges (e)		9.7 6.7
Restructuring, impairment and transaction-related charges	\$	5.3 \$ 14.5
	\$	

⁽a) Employee termination charges were related to workforce reductions through facility consolidations and separation programs.

⁽b) Impairment charges were for certain property, plant and equipment no longer being utilized in production as a result of facility consolidations.

⁽c) Transaction-related charges consisted of professional service fees related to business acquisition and divestiture activities.

⁽d) Integration costs were primarily costs related to the integration of acquired companies.

⁽e) Other restructuring charges were primarily from costs to maintain and exit closed facilities, as well as lease exit charges, net of gains on the sale of facilities of \$2.2 million and \$7.1 million during the six months ended June 30, 2018 and 2017, respectively.

⁽²⁾ Due to a change in United States GAAP that requires pension income to be excluded from operating income, the Company will report Adjusted EBITDA excluding net pension income. This change is reflected in all periods presented.

⁽³⁾ The Company made a \$22.3 million non-cash contribution to the Company's employee stock ownership plan during the six months ended June 30, 2018.

⁽⁴⁾ The \$2.6 million loss on debt extinguishment recorded during the six months ended June 30, 2017, relates to the second amendment to the Company's April 28, 2014 Senior Secured Credit Facility, completed on February 10, 2017.

⁽⁵⁾ The equity in (earnings) loss of unconsolidated entity includes the results of operations for an investment in an entity where Quad/Graphics has the ability to exert significant influence, but not control, which is accounted for using the equity method of accounting.

RECONCILIATION OF GAAP TO NON-GAAP MEASURES

FREE CASH FLOW

For the Six Months Ended June 30, 2018 and 2017 (in millions) (UNAUDITED)

	Six	Six Months Ended June 30,			
	20	18	2017		
Net cash provided by operating activities	\$	40.5 \$	112.2		
Less: purchases of property, plant and equipment		(53.8)	(42.8)		
Free Cash Flow (Non-GAAP)	\$	(13.3) \$	69.4		

RECONCILIATION OF GAAP TO NON-GAAP MEASURES

DEBT LEVERAGE RATIO

As of June 30, 2018 and December 31, 2017 (in millions, except ratio) (UNAUDITED)

	·	June 30, 2018	ember 31, 2017
Total debt and capital lease obligations on the condensed consolidated balance sheets	\$	1,047.8	\$ 964.8
Divided by:			
Trailing twelve months Adjusted EBITDA for Quad/Graphics (Non-GAAP) (1)	\$	435.4	\$ 448.2
Pro forma Adjusted EBITDA for Ivie & Associates (Non-GAAP) (2)		12.1	_
Trailing twelve months Adjusted EBITDA (Non-GAAP)	\$	447.5	\$ 448.2
Debt Leverage Ratio (Non-GAAP)		2.34x	2.15x

⁽¹⁾ The calculation of Adjusted EBITDA for the trailing twelve months ended June 30, 2018, and December 31, 2017, was as follows:

	Ves	ar Ended	 Add Six Mont	hs F	Subtract	railing Twelve Months Ended
	Dec	ember 31, 2017 ^(a)	June 30, 2018		June 30, 2017	 June 30, 2018
Net earnings attributable to Quad/Graphics common shareholders	\$	107.2	\$ 5.9	\$	32.1	\$ 81.0
Interest expense		71.1	35.7		35.8	71.0
Income tax (benefit) expense		(16.0)	(7.0)		15.0	(38.0)
Depreciation and amortization		232.5	114.5		117.2	229.8
EBITDA (Non-GAAP)	\$	394.8	\$ 149.1	\$	200.1	\$ 343.8
Restructuring, impairment and transaction-related charges		60.4	35.3		14.5	81.2
Net pension income (b)		(9.6)	(6.2)		(5.2)	(10.6)
Employee stock ownership plan contribution		_	22.3		_	22.3
Loss on debt extinguishment		2.6	_		2.6	_
Equity in (earnings) loss of unconsolidated entity		_	(0.5)		0.8	(1.3)
Adjusted EBITDA (Non-GAAP)	\$	448.2	\$ 200.0	\$	212.8	\$ 435.4

⁽a) Financial information for the year ended December 31, 2017, is included as reported in the Company's 2017 Annual Report on Form 10-K filed with the SEC on February 21, 2018.

⁽b) Due to a change in United States GAAP that requires pension income to be excluded from operating income, the Company will report Adjusted EBITDA excluding net pension income. This change is reflected in all periods presented.

As permitted by the Company's senior secured credit facility, certain pro forma financial information related to the acquisition of Ivie & Associates ("Ivie") was included in calculating the Debt Leverage Ratio as of June 30, 2018, and December 31, 2017. As the acquisition of Ivie was completed on February 21, 2018, the \$12.1 million pro forma Adjusted EBITDA represents the period from July 1, 2017, to February 20, 2018. Adjusted EBITDA for Ivie was calculated in a consistent manner with the calculation above for Quad/Graphics. Ivie's financial information has been consolidated within Quad/Graphics' financial results since the date of acquisition. If the eight months of pro forma Adjusted EBITDA for Ivie was not included in the calculation, the Company's Debt Leverage Ratio would have been 2.41x as of June 30, 2018.

RECONCILIATION OF GAAP TO NON-GAAP MEASURES

ADJUSTED DILUTED EARNINGS PER SHARE

For the Three Months Ended June 30, 2018 and 2017 (in millions, except per share data)

(UNAUDITED)

	Three Months Ended June 30,			
		2018		2017
Earnings before income taxes and equity in (earnings) loss of unconsolidated entity	\$	5.6	\$	15.1
Restructuring, impairment and transaction-related charges		10.4		5.3
		16.0		20.4
Income tax expense at normalized tax rate (1)		4.0		8.2
Adjusted net earnings (Non-GAAP)	\$	12.0	\$	12.2
Basic weighted average number of common shares outstanding		50.8		49.5
Plus: effect of dilutive equity incentive instruments		1.7		2.2
Diluted weighted average number of common shares outstanding		52.5		51.7
Adjusted diluted earnings per share (Non-GAAP) (2)	\$	0.23	\$	0.24
Diluted earnings per share attributable to Quad/Graphics common shareholders (GAAP)	\$	0.18	\$	0.13
Restructuring, impairment and transaction-related charges per share		0.20		0.11
Income tax (benefit) expense from condensed consolidated statement of operations per share		(0.07)		0.16
Income tax expense at normalized tax rate per share (1)		(0.08)		(0.16)
Equity in (earnings) loss of unconsolidated entity from condensed consolidated statement of operations per share		_		_
Adjusted diluted earnings per share (Non-GAAP) (2)	\$	0.23	\$	0.24

⁽¹⁾ A normalized income tax rate of 25% was used for the three months ended June 30, 2018, which reflects changes related to the Tax Cuts and Jobs Act that was enacted in December 2017. The Company used a normalized income tax rate of 40% for the three months ended June 30, 2017, consistent with the normalized rate used prior to the enactment of the Tax Cuts and Jobs Act.

Adjusted diluted earnings per share excludes the following: (i) restructuring, impairment and transaction-related charges; (ii) discrete income tax items; (iii) equity in (earnings) loss of unconsolidated entity; and (iv) net earnings attributable to noncontrolling interests.

RECONCILIATION OF GAAP TO NON-GAAP MEASURES ADJUSTED DILUTED EARNINGS PER SHARE

For the Six Months Ended June 30, 2018 and 2017 (in millions, except per share data) (UNAUDITED)

Six Months Ended June 30, 2018 2017 \$ Earnings (loss) before income taxes and equity in (earnings) loss of unconsolidated entity (1.5) \$ 47.9 Restructuring, impairment and transaction-related charges 35.3 14.5 22.3 Employee stock ownership plan contribution Loss on debt extinguishment 2.6 65.0 56.1 Income tax expense at normalized tax rate (1) 14.0 26.0 39.0 Adjusted net earnings (Non-GAAP) 42.1 Basic weighted average number of common shares outstanding 50.5 49.3 Plus: effect of dilutive equity incentive instruments 1.8 2.3 Diluted weighted average number of common shares outstanding 52.3 51.6 Adjusted diluted earnings per share (Non-GAAP) (2) 0.80 0.76 Diluted earnings (loss) per share attributable to Quad/Graphics common shareholders (GAAP) \$ 0.11 0.62 Restructuring, impairment and transaction-related charges per share 0.67 0.28 Employee stock ownership plan contribution per share 0.43 Loss on debt extinguishment per share 0.05 Income tax (benefit) expense from condensed consolidated statement of operations per share (0.13)0.29 Income tax expense at normalized tax rate per share (1) (0.27)(0.50)Equity in (earnings) loss of unconsolidated entity from condensed consolidated statement of 0.02 operations per share (0.01)Adjusted diluted earnings per share (Non-GAAP) (2) 0.80 0.76

A normalized income tax rate of 25% was used for the six months ended June 30, 2018, which reflects changes related to the Tax Cuts and Jobs Act that was enacted in December 2017. The Company used a normalized income tax rate of 40% for the six months ended June 30, 2017, consistent with the normalized rate used prior to the enactment of the Tax Cuts and Jobs Act.

Adjusted diluted earnings per share excludes the following: (i) restructuring, impairment and transaction-related charges; (ii) employee stock ownership plan contribution; (iii) loss on debt extinguishment; (iv) discrete income tax items; (v) equity in (earnings) loss of unconsolidated entity; and (vi) net earnings attributable to noncontrolling interests.