

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

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**SCHEDULE 13D**  
**UNDER THE SECURITIES EXCHANGE ACT OF 1934**  
**(Amendment No. 3)**

**HARVEST CAPITAL CREDIT CORPORATION**  
(Name of Issuer)

**Common Stock**  
(Title of Class of Securities)

**41753F109**  
(CUSIP Number)

**Walter Conroy**  
**Chief Legal Officer**  
**JMP Group LLC**  
**600 Montgomery Street, Suite 1100**  
**San Francisco, California 94111**  
**Telephone No. (415) 835-8900**  
(Name, Address and Telephone Number of Person  
Authorized to Receive Notices and Communications)

**December 27, 2017**  
(Date of Event Which Requires Filing of this Statement)

If the filing person has previously filed a statement on Schedule 13G to report the acquisition that is the subject of this Schedule 13D, and is filing this schedule because of §§240.13d-1(e), 240.13d-1(f) or 240.13d-1(g), check the following box.

**Note:** Schedules filed in paper format shall include a signed original and five copies of the schedule, including all exhibits. See Rule 13d-7 for other parties to whom copies are to be sent.

\* The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter disclosures provided in a prior cover page.

The information required on the remainder of this cover page shall not be deemed to be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934, as amended ("Act") or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes).

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**SCHEDULE 13D**

**CUSIP No. 41753F109**

<b>1</b>	NAMES OF REPORTING PERSONS <b>JMP Group LLC</b>	
<b>2</b>	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS) (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>	
<b>3</b>	SEC USE ONLY	
<b>4</b>	SOURCE OF FUNDS <b>Not applicable</b>	
<b>5</b>	CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM 2(d) or 2(e) <input type="checkbox"/>	
<b>6</b>	CITIZENSHIP OR PLACE OF ORGANIZATION <b>Delaware</b>	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	<b>7</b>	SOLE VOTING POWER <b>0</b>
	<b>8</b>	SHARED VOTING POWER (1)(2) <b>863,264</b>
	<b>9</b>	SOLE DISPOSITIVE POWER <b>0</b>
	<b>10</b>	SHARED DISPOSITIVE POWER (1)(2) <b>863,264</b>
<b>11</b>	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON (1)(2) <b>863,264</b>	
<b>12</b>	CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS) <input type="checkbox"/>	
<b>13</b>	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11) <b>13.31%</b>	
<b>14</b>	TYPE OF REPORTING PERSON <b>OO</b>	

- (1) Consists of 857,606 shares of common stock ("Common Shares") of Harvest Capital Credit Corporation (the "Issuer") held directly by JMP Investment Holdings LLC. JMP Investment Holdings LLC is a direct, wholly owned subsidiary of JMP Group LLC. Accordingly, JMP Group LLC may be deemed to share voting and dispositive power over these securities.
- (2) Consists of 5,658 Common Shares of the Issuer held directly by JMP Securities LLC pursuant to the Issuer's Dividend Reinvestment Plan. JMP Securities LLC is a wholly owned subsidiary of JMP Holding LLC, which is a wholly owned subsidiary of JMP Group Inc., which is a wholly owned subsidiary of JMP Investment Holdings LLC, which is a wholly owned subsidiary of JMP Group LLC. Accordingly, JMP Group LLC may be deemed to share voting and dispositive power over these securities.

CUSIP No. 41753F109

<b>1</b>	NAMES OF REPORTING PERSONS <b>JMP Investment Holdings LLC</b>	
<b>2</b>	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS) (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>	
<b>3</b>	SEC USE ONLY	
<b>4</b>	SOURCE OF FUNDS <b>OO</b>	
<b>5</b>	CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM 2(d) or 2(e) <input type="checkbox"/>	
<b>6</b>	CITIZENSHIP OR PLACE OF ORGANIZATION <b>Delaware</b>	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	<b>7</b>	SOLE VOTING POWER <b>0</b>
	<b>8</b>	SHARED VOTING POWER <b>863,264 (1)(2)</b>
	<b>9</b>	SOLE DISPOSITIVE POWER <b>0</b>
	<b>10</b>	SHARED DISPOSITIVE POWER <b>863,264 (1)(2)</b>
<b>11</b>	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON <b>863,264 (1)(2)</b>	
<b>12</b>	CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS) <input type="checkbox"/>	
<b>13</b>	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11) <b>13.31%</b>	
<b>14</b>	TYPE OF REPORTING PERSON <b>OO</b>	

- (1) JMP Investment Holdings LLC is the holder of record of the 857,606 Common Shares of the Issuer reported herein.
- (2) JMP Investment Holdings LLC may be deemed to share voting and dispositive power over 5,658 Common Shares of the Issuer held directly by JMP Securities LLC. JMP Securities LLC is a wholly owned subsidiary of JMP Holding LLC, which is a wholly owned subsidiary of JMP Group Inc., which is a wholly owned subsidiary of JMP Investment Holdings LLC, which is a wholly owned subsidiary of JMP Group LLC.

CUSIP No. 41753F109

<b>1</b>	NAMES OF REPORTING PERSONS	<b>JMP Group Inc.</b>
<b>2</b>	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS)	(a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>
<b>3</b>	SEC USE ONLY	
<b>4</b>	SOURCE OF FUNDS	<b>Not applicable</b>
<b>5</b>	CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM 2(d) or 2(e)	<input type="checkbox"/>
<b>6</b>	CITIZENSHIP OR PLACE OF ORGANIZATION	<b>Delaware</b>
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	<b>7</b>	SOLE VOTING POWER <b>0</b>
	<b>8</b>	SHARED VOTING POWER <b>5,658 (1)</b>
	<b>9</b>	SOLE DISPOSITIVE POWER <b>0</b>
	<b>10</b>	SHARED DISPOSITIVE POWER <b>5,658 (1)</b>
<b>11</b>	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON	<b>5,658 (1)</b>
<b>12</b>	CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS)	<input type="checkbox"/>
<b>13</b>	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)	<b>0.1 %</b>
<b>14</b>	TYPE OF REPORTING PERSON	<b>CO</b>

(1) See Item 5.

CUSIP No. 41753F109

<b>1</b>	NAMES OF REPORTING PERSONS <b>JMP Holding LLC</b>	
<b>2</b>	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS) (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>	
<b>3</b>	SEC USE ONLY	
<b>4</b>	SOURCE OF FUNDS <b>Not applicable</b>	
<b>5</b>	CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM 2(d) or 2(e) <input type="checkbox"/>	
<b>6</b>	CITIZENSHIP OR PLACE OF ORGANIZATION <b>Delaware</b>	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	<b>7</b>	SOLE VOTING POWER <b>0</b>
	<b>8</b>	SHARED VOTING POWER <b>5,658 (1)</b>
	<b>9</b>	SOLE DISPOSITIVE POWER <b>0</b>
	<b>10</b>	SHARED DISPOSITIVE POWER <b>5,658 (1)</b>
<b>11</b>	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON <b>5,658 (1)</b>	
<b>12</b>	CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS) <input type="checkbox"/>	
<b>13</b>	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11) <b>0.1%</b>	
<b>14</b>	TYPE OF REPORTING PERSON <b>OO</b>	

(1) See Item 5.

CUSIP No. 41753F109

<b>1</b>	NAMES OF REPORTING PERSONS <b>JMP Securities LLC</b>	
<b>2</b>	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS) (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>	
<b>3</b>	SEC USE ONLY	
<b>4</b>	SOURCE OF FUNDS <b>OO</b>	
<b>5</b>	CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM 2(d) or 2(e) <input type="checkbox"/>	
<b>6</b>	CITIZENSHIP OR PLACE OF ORGANIZATION <b>Delaware</b>	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	<b>7</b>	SOLE VOTING POWER <b>0</b>
	<b>8</b>	SHARED VOTING POWER <b>5,658 (1)</b>
	<b>9</b>	SOLE DISPOSITIVE POWER <b>0</b>
	<b>10</b>	SHARED DISPOSITIVE POWER <b>5,658 (1)</b>
<b>11</b>	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON <b>5,658 (1)</b>	
<b>12</b>	CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS) <input type="checkbox"/>	
<b>13</b>	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11) <b>0.1%</b>	
<b>14</b>	TYPE OF REPORTING PERSON <b>OO</b>	

(1) JMP Securities LLC is the holder of record of the 5,658 Common Shares of the Issuer reported herein.

## **SCHEDULE 13D**

**JMP Group LLC is eligible to report its beneficial ownership of the securities reported herein on Schedule 13G pursuant to the provisions of Rule 13d-1(d) and is voluntarily reporting on this Schedule 13D.**

### **Item 1. Security and Issuer.**

This Schedule 13D relates to the common stock (“Common Shares”) of Harvest Capital Credit Corporation (the “Issuer”), a Delaware corporation having its principal executive offices at 767 Third Avenue, 25<sup>th</sup> Floor, New York, NY 10017.

### **Item 2. Identity and Background.**

- (a) This Schedule 13D is filed by:
- (i) JMP Group LLC, a Delaware limited liability company;
  - (ii) JMP Investment Holdings LLC, a Delaware limited liability company;
  - (iii) JMP Group Inc., a Delaware corporation;
  - (iv) JMP Holding LLC, a Delaware limited liability company; and
  - (v) JMP Securities LLC, a Delaware limited liability company.

The foregoing persons are hereinafter sometimes collectively referred to as the “Reporting Persons.” All disclosures herein with respect to any Reporting Person are made only by such Reporting Person. Any disclosures herein with respect to persons other than the Reporting Persons are made on information and belief after making inquiry to the appropriate party. The Reporting Persons expressly disclaim status as a “group” for purposes of this Schedule 13D.

(b) JMP Investment Holdings LLC is a direct, wholly owned subsidiary of JMP Group LLC. JMP Securities LLC is a direct, wholly owned subsidiary of JMP Holding LLC, which is a direct, wholly owned subsidiary of JMP Group Inc., which is a direct, wholly owned subsidiary of JMP Investment Holdings LLC, which is a wholly owned subsidiary of JMP Group LLC. Accordingly, the Reporting Persons are hereby filing a joint Schedule 13D.

(c) JMP Group LLC is a publicly traded limited liability company, and together with its subsidiaries is a full-service investment banking and asset management firm.

(d) The address of the principal business and principal office of each of the Reporting Persons is 600 Montgomery Street, Suite 1100, San Francisco, California 94111.

(e) During the last five years, none of the Reporting Persons nor any other person identified in response to this Item 2 was convicted in a criminal proceeding (excluding traffic violations and similar misdemeanors) or was a party to a civil proceeding of a judicial or administrative body of competent jurisdiction and as a result of such proceeding was or is subject to a judgment, decree or final order enjoining future violations of, or prohibiting or mandating activities subject to, federal or state securities laws or finding any violation with respect to such laws.

(f) Not applicable.

In accordance with the provisions of General Instruction C to Schedule 13D, information concerning the managing members, executive officers, board of directors and each person controlling the Reporting Persons, as applicable (collectively, the “Covered Persons”), required by Item 2 of Schedule 13D is provided on Schedule I and is incorporated by reference herein. To the Reporting Persons’ knowledge, none of the Covered Persons listed on Schedule I as a director or executive officer of such Reporting Person has been, during the last five years, (i) convicted in a criminal proceeding (excluding traffic violations or similar misdemeanors), or (ii) a party to a civil proceeding of a judicial or administrative body of competent jurisdiction and as a result of such proceeding was or is subject to a judgment, decree or final order enjoining future violations of, or prohibiting or mandating activities subject to, federal or state securities laws or finding any violation with respect to such laws.

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**Item 3. Source and Amount of Funds or Other Consideration.**

After the filing of Amendment No. 2 to Schedule 13D through January 2, 2018, JMP Investment Holdings LLC acquired 100,878 Common Shares in various open market transactions for a total price of \$1,091,927.36 using funds available to it.

1. On November 29, 2017, JMP Investment Holdings LLC purchased 38,841 Common Shares at an average price of \$10.7457 per share in open market purchases.
2. On November 30, 2017, JMP Investment Holdings LLC purchased 9,351 Common Shares at an average price of \$10.7522 per share in open market purchases.
3. On December 1, 2017, JMP Investment Holdings LLC purchased 12,254 Common Shares at an average price of \$10.7388 per share in open market purchases.
4. On December 4, 2017, JMP Investment Holdings LLC purchased 8,803 Common Shares at an average price of \$10.9256 per share in open market purchases.
5. On December 5, 2017, JMP Investment Holdings LLC purchased 300 Common Shares at an average price of \$11.00 per share in open market purchases.
6. On December 6, 2017, JMP Investment Holdings LLC purchased 100 Common Shares at an average price of \$11.00 per share in open market purchases.
7. On December 7, 2017, JMP Investment Holdings LLC purchased 2,100 Common Shares at an average price of \$10.9971 per share in open market purchases.
8. On December 14, 2017, JMP Investment Holdings LLC purchased 580 Common Shares at an average price of \$11.00 per share in open market purchases pursuant to a Rule 10b5-1 trading plan.
9. On December 15, 2017, JMP Investment Holdings LLC purchased 5,324 Common Shares at an average price of \$10.9312 per share in open market purchases pursuant to a Rule 10b5-1 trading plan.
10. On December 26, 2017, JMP Investment Holdings LLC purchased 5,675 Common Shares at a price of \$10.9075 per share in open market purchases pursuant to a Rule 10b5-1 trading plan.
11. On December 27, 2017, JMP Investment Holdings LLC purchased 5,675 Common Shares at a price of \$10.8989 per share in open market purchases pursuant to a Rule 10b5-1 trading plan.
12. On December 28, 2017, JMP Investment Holdings LLC purchased 3,400 Common Shares at a price of \$10.967712.05 per share in open market purchases pursuant to a Rule 10b5-1 trading plan.
13. On December 29, 2017, JMP Investment Holdings LLC purchased 5,675 Common Shares at a price of \$10.9949 per share in open market purchases pursuant to a Rule 10b5-1 trading plan.
14. On January 2, 2018, JMP Investment Holdings LLC purchased 2,800 Common Shares at a price of \$10.9750 per share in open market purchases pursuant to a Rule 10b5-1 trading plan.

**Item 4. Purpose of Transaction.**

The Reporting Persons acquired the securities reported herein solely for investment purposes. JMP Securities LLC holds 5,658 Common Shares of the Issuer acquired under the Issuer's Dividend Reinvestment Plan (the "DRIP"). JMP Securities LLC opted out of the DRIP and will receive no additional Common Shares under the DRIP.

The Reporting Persons do not have, as of the date of this Schedule 13D, any other plans or proposals that relate to or would result in any of the actions or events specified in clauses (a) through (j) of Item 4 of Schedule 13D. The Reporting Persons may change their plans or proposals in the future. The Reporting Persons reserve the right to acquire additional securities of the Issuer in the open market, in privately negotiated transactions (which may be with the Issuer or with third parties) or otherwise, to dispose of all or a portion of their holdings of securities of the Issuer or to change their intention with respect to any or all of the matters referred to in this Item 4.

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**Item 5. Interest in Securities of the Issuer.**

(a), (b) See cover page for each Reporting Person. JMP Investment Holdings LLC is a direct, wholly owned subsidiary of JMP Group LLC and JMP Securities LLC is a direct, wholly owned subsidiary of JMP Holding LLC, which is a direct, wholly owned subsidiary of JMP Group Inc., which is a direct, wholly owned subsidiary of JMP Investment Holdings LLC, which is a direct, wholly owned subsidiary of JMP Group LLC. As a result of its ownership, directly or indirectly, of JMP Investment Holdings LLC and JMP Securities LLC, JMP Group LLC may be deemed to control JMP Investment Holdings LLC and JMP Securities LLC and may be deemed to share beneficial ownership and voting and dispositive power over the 863,264 Common Shares held by JMP Investment Holdings LLC and JMP Securities LLC, representing approximately 13.31% of the outstanding Common Shares.

As a result of their ownership, directly or indirectly, of JMP Securities LLC, JMP Group Inc., JMP Holding LLC and JMP Investment Holdings LLC may be deemed to share beneficial ownership and voting and dispositive power over the 5,658 Common Shares held by JMP Securities LLC.

All percentages reported herein are calculated based upon 6,487,874 Common Shares outstanding as of November 3, 2017, as reported in the Issuer's Form 10-Q filed with the Securities and Exchange Commission on November 7, 2017.

(c) The Reporting Persons have engaged in transactions in Common Shares in the past 60 days only as set forth in numbers 1 through 14 in Item 3 above.

(d) Not applicable.

**Item 6. Contracts, Arrangements, Understandings or Relationships with Respect to Securities of the Issuer.**

Joseph A. Jolson, the Chairman and Chief Executive Officer of JMP Group LLC, is the Chairman of the Board of Directors of the Issuer.

JMP Group LLC owns a 51% equity interest in and is the Manager of HCAP Advisors LLC, a Delaware limited liability company ("HCAP Advisors"). HCAP Advisors serves as the Issuer's investment advisor pursuant to the Investment Advisory and Management Agreement between the Issuer and HCAP Advisors, dated April 29, 2013.

**Item 7. Material to be Filed as Exhibits.**

Exhibit A: Joint Filing Agreement (filed herewith)

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**SIGNATURES**

After reasonable inquiry and to the best of their knowledge and belief, the undersigned certify that the information set forth in this statement is true, complete and correct.

Date: January 4, 2018

JMP GROUP LLC

/s/ Joseph A. Jolson

Joseph A. Jolson, Chief Executive Officer

JMP INVESTMENT HOLDINGS LLC

/s/ Raymond S. Jackson

Raymond S. Jackson, Chief Financial Officer

JMP GROUP INC.

/s/ Raymond S. Jackson

Raymond S. Jackson, Chief Financial Officer

JMP HOLDING LLC

/s/ Raymond S. Jackson

Raymond S. Jackson, Chief Financial Officer

JMP SECURITIES LLC

/s/ Raymond S. Jackson

Raymond S. Jackson, Chief Financial Officer

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**SCHEDULE I**

**DIRECTORS, MANAGERS AND EXECUTIVE OFFICERS**

**JMP GROUP LLC**

Unless otherwise noted, each of these persons is a citizen of the United States and has as his/her business address c/o JMP Group LLC, 600 Montgomery Street, Suite 1100, San Francisco, California, 94111.

Joseph A. Jolson  
Principal Occupation: Chairman and Chief Executive Officer

David M. DiPietro  
Principal Occupation: Director

Raymond S. Jackson  
Principal Occupation: Chief Financial Officer

Craig R. Johnson  
Principal Occupation: Vice Chairman

Kenneth M. Karmin  
Principal Occupation: Director

Thomas Wright  
Principal Occupation: Director of Equities of JMP Securities

Mark L. Lehmann  
Principal Occupation: Director; President of JMP Securities

H. Mark Lunenburg  
Principal Occupation: Director

Carter D. Mack  
Principal Occupation: Director; President

Jonathan M. Orszag  
Principal Occupation: Director

Glenn H. Tongue  
Principal Occupation: Director

Walter Conroy  
Principal Occupation: Chief Legal Officer and Secretary

**JMP INVESTMENT HOLDINGS LLC**

Unless otherwise noted, each of these persons is a citizen of the United States and has as his/her business address c/o JMP Investment Holdings LLC, 600 Montgomery Street, Suite 1100, San Francisco, California, 94111.

Joseph A. Jolson  
Principal Occupation: Chief Executive Officer

Raymond S. Jackson  
Principal Occupation: Chief Financial Officer

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Walter Conroy  
Principal Occupation: Secretary

**JMP GROUP INC.**

Unless otherwise noted, each of these persons is a citizen of the United States and has as his/her business address c/o JMP Group Inc., 600 Montgomery Street, Suite 1100, San Francisco, California, 94111.

Joseph A. Jolson  
Principal Occupation: Chairman and Chief Executive Officer

David M. DiPietro  
Principal Occupation: Director

Raymond S. Jackson  
Principal Occupation: Chief Financial Officer

Craig R. Johnson  
Principal Occupation: Vice Chairman

Kenneth M. Karmin  
Principal Occupation: Director

Thomas Wright  
Principal Occupation: Director of Equities of JMP Securities

Mark L. Lehmann  
Principal Occupation: Director; President of JMP Securities

H. Mark Lunenburg  
Principal Occupation: Director

Carter D. Mack  
Principal Occupation: Director; President

Jonathan M. Orszag  
Principal Occupation: Director

Glenn H. Tongue  
Principal Occupation: Director

Walter Conroy  
Principal Occupation: Chief Legal Officer and Secretary

**JMP HOLDING LLC**

Unless otherwise noted, each of these persons is a citizen of the United States and has as his/her business address c/o JMP Holding LLC, 600 Montgomery Street, Suite 1100, San Francisco, California, 94111.

Joseph A. Jolson  
Principal Occupation: Chief Executive Officer

Raymond S. Jackson  
Principal Occupation: Chief Financial Officer

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Walter Conroy  
Principal Occupation: Secretary

**JMP SECURITIES LLC**

Unless otherwise noted, each of these persons is a citizen of the United States and has as his/her business address c/o JMP Securities LLC, 600 Montgomery Street, Suite 1100, San Francisco, California, 94111.

Mark L. Lehmann  
Principal Occupation: President

Raymond S. Jackson  
Principal Occupation: Chief Financial Officer

Gil Mogavero  
Principal Occupation: Chief Compliance Officer

Walter Conroy  
Principal Occupation: Chief Legal Officer and Secretary

**EXHIBIT A**

**JOINT FILING AGREEMENT**

Each of the undersigned hereby agrees that the Schedule 13D, to which this Agreement is attached as Exhibit A, and all amendments thereto may be filed on behalf of each such person.

Date: January 4, 2018

JMP GROUP LLC

/s/ Joseph A. Jolson  
Joseph A. Jolson, Chief Executive Officer

JMP INVESTMENT HOLDINGS LLC

/s/ Raymond S. Jackson  
Raymond S. Jackson, Chief Financial Officer

JMP GROUP INC.

/s/ Raymond S. Jackson  
Raymond S. Jackson, Chief Financial Officer

JMP HOLDING LLC

/s/ Raymond S. Jackson  
Raymond S. Jackson, Chief Financial Officer

JMP SECURITIES LLC

/s/ Raymond S. Jackson  
Raymond S. Jackson, Chief Financial Officer