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

SCHEDULE 13D

Under the Securities Exchange Act of 1934 (Amendment No.)*

Antero Midstream GP LP

(Name of Issuer)

Common Shares Representing Limited Partnership Interests

(Title of Class of Securities)

001-38075

(CUSIP Number)

c/o Warburg Pincus & Co. **450 Lexington Avenue** New York, NY 10017 212-878-0600

With a copy to: Manuel A. Miranda Willkie Farr & Gallagher LLP 787 Seventh Avenue New York, New York 10019 212-728-8000

(Name, Address and Telephone Number of Person Authorized to Receive Notices and Communications)

May 12, 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 which is the subject of this statement on Schedule 13D (this "Schedule 13D"), and is filing this Schedule 13D because of Rule 13d-1(e), 13d-1(f) or 13d-1(g), check the following box. \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 (the "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).

SCHEDULE 13D

CUSIP No. 001-38075

1

Name of Reporting Persons I.R.S. Identification Nos. of Above Persons (Entities Only)

Warburg Pincus Private Equity VIII, L.P.

2 Check the Appropriate Box if a Member of a Group

> (a)

> > Х

(b)

3 SEC Use Only

4 Source of Funds OO

5 Check Box if Disclosure of Legal Proceedings Is Required Pursuant to Item 2(d) or 2(e)

6 Citizenship or Place of Organization Delaware 7 Sole Voting Power 0 Number of 8 Shared Voting Power Shares 17,873,221 Beneficially Owned by Each 9 Sole Dispositive Power Reporting 0 Person With 10 Shared Dispositive Power 17,873,221 11 Aggregate Amount Beneficially Owned by Each Reporting Person 17,873,221 12 Check Box if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions) 13 Percent of Class Represented by Amount in Row (11) 9.6% (1) 14 Type of Reporting Person PN

(1) Based on the 186,170,213 common shares representing limited partnership interests ("Shares") outstanding according to the prospectus filed by Antero Midstream GP LP (the "Issuer") with the U.S. Securities and Exchange Commission (the "SEC") on May 5, 2017 (the "Prospectus").

CUSIP No. 001-38075

1 Name of Reporting Persons I.R.S. Identification Nos. of Above Persons (Entities Only)

2 Check the Appropriate Box if a Member of a Group		Appropriate Box if a Member of a Group				
	(a)					
	(b)					
3	3 SEC Use Only					
	Source of	Funds				
	00	00				
5	Check Box if Disclosure of Legal Proceedings Is Required Pursuant to Item 2(d) or 2(e)					
	Citizenshi Delaware	p or Place of Organization				
	7	Sole Voting Power				
		0				
Number of Shares	8	Shared Voting Power 33,529,359				
Beneficially Owned by						
Each Reporting	9	Sole Dispositive Power				
Person With		0				
	10	Shared Dispositive Power 33,529,359				
11	Aggregate	Amount Beneficially Owned by Each Reporting Person				
	33,529,35					
12	Check Bo	x if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions)				
Percent of Class Represented by Amount in Row (11)18.0% (1)						
14	Type of R	eporting Person				
	PN					

1	Name of Reporting Persons I.R.S. Identification Nos. of Above Persons (Entities Only)			
	Warburg Pincus X, L.P.			
2	Check	he Appropriate Box if a Member of a Group		
2				
	(a) (b)	 ⊠		
	(0)			
3	SEC U	se Only		
4	Source OO	of Funds		
5	Check	Box if Disclosure of Legal Proceedings Is Required Pursuant to Item 2(d) or 2(e)		
6	Citizen Delawa	ship or Place of Organization re		
	7	Sala Vatian Demon		
	7	Sole Voting Power 0		
Number of Shares	8	Shared Voting Power 34,602,022		
Beneficially Owned by Each Reporting Person With	9	Sole Dispositive Power 0		
	10	Shared Dispositive Power 34,602,022		
11	Aggregate Amount Beneficially Owned by Each Reporting Person 34,602,022			
12	Check	Box if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions)		
13	Percent of Class Represented by Amount in Row (11) 18.6% (1)			

(1) Based on the 186,170,213 Shares outstanding according to the prospectus filed by the Issuer with the SEC on May 5, 2017.

		4
CUSIP No.	001-3807	5
1	Name of I I.R.S. Ide	Reporting Persons ntification Nos. of Above Persons (Entities Only)
	Warburg	Pincus X GP L.P.
2	Check the	Appropriate Box if a Member of a Group
	(a)	
	(b)	
3	SEC Use	Only
4	Source of OO	Funds
5	Check Bo	x if Disclosure of Legal Proceedings Is Required Pursuant to Item 2(d) or 2(e)
6	Citizenshi Delaware	p or Place of Organization
	7	Sole Voting Power 0
Number of Shares Beneficially	8	Shared Voting Power 34,602,022
Owned by Each		
Reporting Person With	9	Sole Dispositive Power 0
	10	Shared Dispositive Power 34,602,022

Aggregate Amount Beneficially Owned by Each Reporting Person 11 34,602,022

- Percent of Class Represented by Amount in Row (11) 18.6% (1)
- 14 Type of Reporting Person PN

	uie 100,1	5
CUSIP No.	001-380'	75
1	Name of I.R.S. Ide	Reporting Persons ntification Nos. of Above Persons (Entities Only)
	WPP GP	LLC
2	Check the	e Appropriate Box if a Member of a Group
	(a)	
	(b)	
3	SEC Use	Only
4	Source of OO	Funds
5	Check Bo	ox if Disclosure of Legal Proceedings Is Required Pursuant to Item $2(d)$ or $2(e)$
6	Citizensh Delaware	ip or Place of Organization
	7	Sole Voting Power 0
Number of Shares	8	Shared Voting Power 34,653,828
Beneficially Owned by Each Penorting	9	Sole Dispositive Power

Reporting Person With

0

- 11 Aggregate Amount Beneficially Owned by Each Reporting Person 34,653,828
- 12 Check Box if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions)
- Percent of Class Represented by Amount in Row (11) 18.6% (1)
- 14 Type of Reporting Person OO

6

CUSIP No. 001-38075

1	Name of Reporting Persons I.R.S. Identification Nos. of Above Persons (Entities Only)		
	Warburg Pincus Partners, L.P.		
2	Check th	e Appropriate Box if a Member of a Group	
	(a)		
	(b)		
3	SEC Use	e Only	
4	Source o	f Funds	
	00		
5	Check B	ox if Disclosure of Legal Proceedings Is Required Pursuant to Item $2(d)$ or $2(e)$	
6		hip or Place of Organization	
	Delawar	e	

	7	Sole Voting Power 0
Number of Shares Beneficially	8	Shared Voting Power 53,045,113
Owned by Each Reporting Person With	9	Sole Dispositive Power 0
	10	Shared Dispositive Power 53,045,113
	Aggregate 53,045,11	e Amount Beneficially Owned by Each Reporting Person 3
12	Check Bo	x if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions)
	Percent of 28.5% (1)	Class Represented by Amount in Row (11)
	Type of R PN	eporting Person
(1) Based on	the 186,17	70,213 Shares outstanding according to the prospectus filed by the Issuer with the SEC on May 5, 2017.
CUSIP No.	001-380	
	001-500	
1		Reporting Persons ntification Nos. of Above Persons (Entities Only)
	Warburg	Pincus Partners GP LLC
2	Check the	e Appropriate Box if a Member of a Group
	(a)	
	(b)	
3	SEC Use	Only
4	Source of OO	Funds

6	Citizenship or Place of Organization Delaware		
	7	Sole Voting Power 0	
Number of Shares Beneficially	8	Shared Voting Power 53,045,113	
Owned by Each Reporting Person With	9	Sole Dispositive Power 0	
	10	Shared Dispositive Power 53,045,113	
11	Aggregate 53,045,11	e Amount Beneficially Owned by Each Reporting Person 3	
12	Check Bo	x if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions)	
13	Percent of Class Represented by Amount in Row (11) 28.5% (1)		
14	Type of Reporting Person PN		
(1) Based on	the 186,17	0,213 Shares outstanding according to the prospectus filed by the Issuer with the SEC on May 5, 2017.	
CUSIP No.	001-3807	75	
1	I.R.S. Ider	Reporting Persons ntification Nos. of Above Persons (Entities Only)	
2		Pincus & Co. Appropriate Box if a Member of a Group	

(b)

X

3	SEC Use Only				
4	Source OO	of Funds			
5	Check Box if Disclosure of Legal Proceedings Is Required Pursuant to Item 2(d) or 2(e)				
6	6 Citizenship or Place of Organization New York				
	7	Sole Voting Power 0			
Number of Shares		Shared Voting Power 53,045,113			
Beneficially Owned by Each	у				
Reporting Person With	9 h	Sole Dispositive Power 0			
	10	Shared Dispositive Power 53,045,113			
11	Aggreg 53,045,	ate Amount Beneficially Owned by Each Reporting Person 113			
12	Check	Box if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions) □			
13	Percent 28.5%	of Class Represented by Amount in Row (11)			
	20.570	• /			
14	Type of PN	Reporting Person			
(1) Based on	the 186	170,213 Shares outstanding according to the prospectus filed by the Issuer with the SEC on May 5, 2017. 9			
		7			
CUSIP No.	001-3	5075			

 1
 Name of Reporting Persons

 I.R.S. Identification Nos. of Above Persons (Entities Only)

Warburg Pincus LLC

2	Check the Appropriate Box if a Member of a Group			
	(a)			
	(b)			
3	SEC Use Only			
4	Source of Funds OO			
5	Check Box if Disclosure of Legal Proceedings Is Required Pursuant to Item 2(d) or 2(e)			
6	Citizensh New Yor	ip or Place of Organization k		
	7	Sole Voting Power 0		
Number of Shares Beneficiall		Shared Voting Power 53,045,113		
Owned by Each Reporting Person Wit	9 h	Sole Dispositive Power 0		
	10	Shared Dispositive Power 53,045,113		
11	Aggregat 53,045,11	e Amount Beneficially Owned by Each Reporting Person		
12	Check Bo	ox if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions)		
13	Percent of Class Represented by Amount in Row (11) 28.5% (1)			
14	Type of Reporting Person OO			
(1) Based on	the 186,17	70,213 Shares outstanding according to the prospectus filed by the Issuer with the SEC on May 5, 2017.		

1	1 Name of Reporting Persons I.R.S. Identification Nos. of Above Persons (Entities Only)		
	Charles R.	Kaye	
2	Check the	Appropriate Box if a Member of a Group	
	(a)		
	(b)		
3	SEC Use Only		
4	Source of OO	Funds	
5	Check Box	x if Disclosure of Legal Proceedings Is Required Pursuant to Item 2(d) or 2(e)	
6		p or Place of Organization tes of America	
	7	Sole Voting Power 0	
Number of Shares Beneficially	8	Shared Voting Power 53,045,113	
Owned by Each Reporting Person With	9	Sole Dispositive Power 0	
	10	Shared Dispositive Power 53,045,113	
11	Aggregate 53,045,111	Amount Beneficially Owned by Each Reporting Person 3	
12	Check Box	x if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions)	
13	Percent of 28.5% (1)	Class Represented by Amount in Row (11)	
14		eporting Person	

11

CUSIP No. 001-38075

Jos	oseph P.	Landy
2 Ch	le a a la 4 la 4	Annarista Dan ifa Manhar afa Cana
		Appropriate Box if a Member of a Group
(a) (b)		
	,,	
3 SE	EC Use	Only
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5 Ch	heck Bo	is x if Disclosure of Legal Proceedings Is Required Pursuant to Item $2(d)$ or $2(e)$
6 Ci	itizensh	
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6 Ci Ur	itizensh nited St 7	ip or Place of Organization
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Ur ber of es eficially led by forting	7 8	ip or Place of Organization ates of America Sole Voting Power 0 Shared Voting Power 53,045,113 Sole Dispositive Power

12 Check Box if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions)

14 Type of Reporting Person IN

(1) Based on the 186,170,213 Shares outstanding according to the prospectus filed by the Issuer with the SEC on May 5, 2017.

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CUSIP No. 001-38075

Item 1. Security and Issuer.

This Schedule 13D relates to the common shares representing limited partnership interests (the "Shares"), issued by Antero Midstream GP LP (the "Issuer"). The address of the principal executive offices of the Issuer is 1615 Wynkoop Street, Denver, Colorado 80202.

Item 2. Identity and Background.

The persons filing this Schedule 13D (the "Reporting Persons") are Warburg Pincus Private Equity VIII, L.P., a Delaware limited partnership ("WP VIII," and together with its two affiliated partnerships, Warburg Pincus Netherlands Private Equity VIII C.V. I, a limited partnership formed under the laws of the Netherlands ("WP VIII CV I"), and WP-WPVIII Investors, L.P., a Delaware limited partnership ("WP-WPVIII Investors"), collectively, the "WP VIII Funds"), Warburg Pincus Private Equity X O&G, L.P., a Delaware limited partnership ("WP X O&G", and together with its affiliated partnership Warburg Pincus X Partners, L.P., a Delaware limited partnership the "WP X O&G Funds"); WP-WPVIII Investors GP L.P., a Delaware limited partnership ("WP-WPVIII GP"), which is the general partner of WP-WPVIII Investors; Warburg Pincus X, L.P., a Delaware limited partnership ("WP X GP"), which is the general partner of each of the WP X O&G Funds; Warburg Pincus X GP L.P., a Delaware limited partnership ("WP X GP LP"), which is the general partner of WP X GP; WPP GP LLC, a Delaware limited liability company ("WPP GP"), which is the general partner of WP-WPVIII GP and WP X GP LP; Warburg Pincus Partners, L.P., a Delaware limited partnership ("WP Partners"), which is (i) the managing member of WPP GP, and (ii) the general partner of WP VIII and WP VIII CV I; Warburg Pincus Partners GP LLC, a Delaware limited liability company ("WP Partners GP"), which is the general partner of WP Partners; Warburg Pincus & Co., a New York general partnership ("WP") which is the managing member of WP Partners GP; Warburg Pincus LLC, a New York limited liability company ("WP LLC") which is the manager of each of the WP VIII Funds and the WP X O&G Funds; and Charles R. Kaye and Joseph P. Landy who are the Managing General Partners of WP and Managing Members and Co-Chief Executive Officers of WP LLC and may be deemed to control the Warburg Pincus Entities (as defined below). The principal business address of the Reporting Persons and the Scheduled Persons (as defined below) is 450 Lexington Avenue, New York, NY 10017. Each of the WP VIII Funds, the WP X O&G Funds, WP-WPVIII GP, WP X GP, WP X GP LP, WPP GP, WP Partners, WP Partners GP, WP and WP LLC are collectively referred to herein as the "Warburg Pincus Entities."

<u>Schedule A</u> hereto sets forth lists of all the directors/managers and executive officers or persons holding equivalent positions (the "Scheduled Persons") of each Reporting Person.

The principal business of each of the WP VIII Funds and the WP X O&G Funds is making private equity and related investments. The principal business of WP-WPVIII GP is acting as the general partner of WP-WPVIII Investors. The principal business of WP X GP is acting as the general partner of the WP X O&G Funds. The principal business of WP X GP LP is acting as the general partner of WP X GP. The principal business of WPP GP is acting as the general partner of WP-WPVIII GP and WP X GP LP. The principal business of WP Partners is acting as the general partner of WPP GP and as the general partner of WP VIII and WP VIII CV I. The principal business of WP Partners GP is acting as the general partner of WP Partners. The principal business of WP is acting as the managing member of WP Partners GP. The principal business of WP LLC is acting as the manager of certain Warburg Pincus private equity funds, including each of the WP VIII Funds and the WP X O&G Funds. The principal business of each of Mssrs. Kaye and Landy is acting as the Managing General Partners of WP and the Managing Members and Co-Chief Executive Officers of WP LLC.

The Reporting Persons have entered into a Joint Filing Agreement, dated May 22, 2017, a copy of which is attached as Exhibit 99.1 hereto, pursuant to which the Reporting Persons have agreed to file this Schedule 13D jointly in accordance with the provisions of Rule 13d-1(k)(1) of the Act.

CUSIP No. 001-38075

None of the Reporting Persons nor any Scheduled Person, has, during the past five years, (a) been convicted in a criminal proceeding (excluding traffic violations or similar misdemeanors), or (b) been 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 a finding of any violation with respect to such laws.

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

The Shares of the Issuer were distributed pro rata to each of the members of Antero Resources Investment LLC, a Delaware limited liability company ("ARI"), by ARI no consideration.

Item 4. Purpose of Transaction.

None of the Reporting Persons nor, to the knowledge of the Reporting Persons, any of the Scheduled Persons has any present plans or proposals which relate to or which would result in any of the transactions described in subparagraphs (a) through (j) of Item 4 of this Schedule 13D. The Reporting Persons reserve the right to formulate other plans or make proposals which relate to or would result in a transaction, event or action enumerated in paragraphs (a) through (j) of Item 4 of the instructions to Schedule 13D with respect to the Issuer, and take action in connection therewith, including a disposition of all or a portion of their investment in the Issuer. The Reporting Persons may, at any time, reconsider and change their plans or proposals relating to the foregoing with respect to the Issuer.

Item 5. Interest in Securities of the Issuer.

The Reporting Persons listed below have the following beneficial ownership of Shares (percentages are based on 186,170,213 Shares outstanding according to the Issuer's prospectus filed with the U.S. Securities and Exchange Commission on May 5, 2017):

(i) WP VIII has shared dispositive and voting power over 17,873,221 Shares of the Issuer, representing 9.6% of the outstanding Shares of the Issuer.

(ii) WP X O&G has shared dispositive and voting power over 33,529,359 Shares of the Issuer, representing 18.0% of the outstanding Shares of the Issuer.

(iii) WP X GP has shared dispositive and voting power over 34,602,022 Shares of the Issuer, representing 18.6% of the outstanding Shares of the Issuer.

(iv) WP X GP LP has shared dispositive and voting power over 34,602,022 Shares of the Issuer, representing 18.6% of the outstanding Shares of the Issuer.

(v) WPP GP has shared dispositive and voting power over 34,653,828 Shares of the Issuer, representing 18.6% of the outstanding Shares of the Issuer.

(vi) WP Partners has shared dispositive and voting power over 53,045,113 Shares of the Issuer, representing 28.5% of the outstanding Shares of the Issuer.

(vii) WP Partners GP has shared dispositive and voting power over 53,045,113 Shares of the Issuer, representing 28.5% of the outstanding Shares of the Issuer.

(viii) WP has shared dispositive and voting power over 53,045,113 Shares of the Issuer, representing 28.5% of the outstanding Shares of the Issuer.

(ix) WP LLC has shared dispositive and voting power over 53,045,113 Shares of the Issuer, representing 28.5% of the outstanding Shares of the Issuer.

(x) Charles R. Kaye has shared dispositive and voting power over 53,045,113 Shares of the Issuer, representing 28.5% of the outstanding Shares of the Issuer.

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CUSIP No. 001-38075

(xi) Joseph P. Landy has shared dispositive and voting power over 53,045,113 Shares of the Issuer, representing 28.5% of the outstanding Shares of the Issuer.

Each of the Reporting Persons listed in this Item 5(i) through 5(xi) could be deemed to have beneficial ownership of all of the Shares reported in this Schedule 13D; nevertheless, each of the Reporting Persons disclaims beneficial ownership of shares in excess of that reported in this Item 5. Each of Messrs. Kaye and Landy disclaims beneficial ownership of the Shares owned by the other Reporting Persons.

Information with respect to each of the Reporting Persons is given solely by such Reporting Person, and no Reporting Person has responsibility for the accuracy or completeness of information supplied by another Reporting Person.

During the last sixty (60) days there were no transactions in the Shares effected by the Reporting Persons.

Except as set forth in this Item 5 and for persons referred to in Item 2 above, no person is known to have the right to receive or the power to direct the receipt of dividends from, or the proceeds from the sale of, the Shares that may be deemed to be beneficially owned by the Reporting Persons.

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

Each of the WP VIII Funds and the WP X O&G Funds entered into a "lock-up" arrangement in connection with the initial public offering of the Issuer pursuant to which the WP VIII Funds and the WP X O&G Funds have agreed not to offer, sell or agree to sell, directly or indirectly any Shares without the permission of the underwriters for a period of six months from May 12, 2017.

Pursuant to Rule 13d-1(k) promulgated under the Act, the Reporting Persons have entered into a Joint Filing Agreement, attached hereto as <u>Exhibit 99.1</u> and incorporated by reference herein, with respect to the joint filing of this Schedule 13D and any amendments hereto.

The information set forth, or incorporated by reference, in Items 3 through 5 of this Schedule 13D is hereby incorporated by reference into this Item 6. Except as otherwise described herein, there are no contracts, arrangements, understandings or relationships (legal or otherwise) among the persons named in Item 2 and between such persons and any person with respect to any securities of the Issuer, including but not limited to transfer or voting of any of the securities, finder's fees, joint ventures, loan or option arrangements, puts or calls, guarantees of profits, division of profits or loss, or the giving or withholding of proxies.

Item 7. Material to Be Filed as Exhibits.

Exhibit 99.1

Joint Filing Agreement, dated May 22, 2017, by and among the Reporting Persons.

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CUSIP No. 001-38075

SIGNATURES

After reasonable inquiry and to the best of my knowledge and belief, the undersigned certifies that the information set forth in this Schedule 13D is true, complete and correct.

Dated: May 22, 2017

WARBURG PINCUS PRIVATE EQUITY VIII, L.P.

- By: Warburg Pincus Partners, L.P., its general partner
- By: Warburg Pincus Partners GP LLC, its general partner
- By: Warburg Pincus & Co., its managing member

By:

Name: Robert B. Knauss Title: Partner

WARBURG PINCUS PRIVATE EQUITY X O&G, L.P.

- By: Warburg Pincus X, L.P., its general partner
- By: Warburg Pincus X GP L.P., its general partner
- By: WPP GP LLC, its general partner
- By: Warburg Pincus Partners, L.P., its managing member
- By: Warburg Pincus Partners GP LLC, its general partner
- By: Warburg Pincus & Co., its managing member
- By:

Name: Robert B. Knauss Title: Partner

WARBURG PINCUS X, L.P.

- By: Warburg Pincus X GP L.P., its general partner
- By: WPP GP LLC, its general partner
- By: Warburg Pincus Partners, L.P., its managing member

Date: May 22, 2017

Date: May 22, 2017

By: Warburg Pincus Partners GP LLC, its general partnerBy: Warburg Pincus & Co., its managing member	
By:	Date: May 22, 2017
Name: Robert B. Knauss	
Title: Partner	
WARBURG PINCUS X GP L.P.	
By: WPP GP LLC, its general partner	

- By: Warburg Pincus Partners, L.P., its managing member
- By: Warburg Pincus Partners GP LLC, its general partner
- By: Warburg Pincus & Co., its managing member
- By:

Name: Robert B. Knauss Title: Partner

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CUSIP No. 001-38075

WPP GP LLC

By: Warburg Pincus Partners, L.P., its managing member

- By: Warburg Pincus Partners GP LLC, its general partner
- By: Warburg Pincus & Co., its managing member
- By:

Name: Robert B. Knauss Title: Partner

WARBURG PINCUS PARTNERS, L.P.

- By: Warburg Pincus Partners GP LLC, its general partner
- By: Warburg Pincus & Co., its managing member

By:

Name: Robert B. Knauss Title: Partner

WARBURG PINCUS PARTNERS GP LLC

- By: Warburg Pincus & Co., its managing member
- By:

Name: Robert B. Knauss Title: Partner

WARBURG PINCUS & CO.

By:

Name: Robert B. Knauss Title: Partner

WARBURG PINCUS LLC

By:

Name: Robert B. Knauss Title: Managing Director Date: May 22, 2017

CUSIP No. 001-38075

CHARLES R. KAYE

By:

Name: Charles R. Kaye Title: Robert B. Knauss, Attorney-in-Fact*

JOSEPH P. LANDY

By:

Name: Joseph P. Landy Title: Robert B. Knauss, Attorney-in-Fact* Date: May 22, 2017

Date: May 22, 2017

* The Power of Attorney given by each of Mr. Kaye and Mr. Landy was previously filed with the SEC on July 12, 2016 as an exhibit to a beneficial ownership report on Schedule 13D filed by Warburg Pincus LLC with respect to WEX, Inc. and is hereby incorporated by reference.

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JOINT FILING AGREEMENT

The undersigned acknowledge and agree that the foregoing statement on Schedule 13D is filed on behalf of each of the undersigned and that all subsequent amendments to this Schedule 13D shall be filed on behalf of each of the undersigned without the necessity of filing additional joint filing agreements. The undersigned acknowledge that each shall be responsible for the timely filing of such amendments, and for the completeness and accuracy of the information concerning it contained therein, but shall not be responsible for the completeness and accuracy of the information concerning the others, except to the extent that it knows or has reason to believe that such information is inaccurate. This Joint Filing Agreement may be executed in any number of counterparts and all such counterparts taken together shall constitute one and the same instrument.

Dated: May 22, 2017

WARBURG PINCUS PRIVATE EQUITY VIII, L.P.

- By: Warburg Pincus Partners, L.P., its general partner
- By: Warburg Pincus Partners GP LLC, its general partner
- By: Warburg Pincus & Co., its managing member

By:

Name: Robert B. Knauss Title: Partner

WARBURG PINCUS PRIVATE EQUITY X O&G, L.P.

- By: Warburg Pincus X, L.P., its general partner
- By: Warburg Pincus X GP L.P., its general partner
- By: WPP GP LLC, its general partner
- By: Warburg Pincus Partners, L.P., its managing member
- By: Warburg Pincus Partners GP LLC, its general partner
- By: Warburg Pincus & Co., its managing member

By:

Name: Robert B. Knauss Title: Partner

WARBURG PINCUS X, L.P.

- By: Warburg Pincus X GP L.P., its general partner
- By: WPP GP LLC, its general partner
- By: Warburg Pincus Partners, L.P., its managing member
- By: Warburg Pincus Partners GP LLC, its general partner
- By: Warburg Pincus & Co., its managing member
- By:

Name: Robert B. Knauss Title: Partner

1

WARBURG PINCUS X GP L.P.

- By: WPP GP LLC, its general partner
- By: Warburg Pincus Partners, L.P., its managing member
- By: Warburg Pincus Partners GP LLC, its general partner
- By: Warburg Pincus & Co., its managing member

By:

Name: Robert B. Knauss Title: Partner Date: May 22, 2017

Date: May 22, 2017

Date: May 22, 2017

Date: May 22, 2017

By: By: By:	Warburg Pincus Partners, L.P., its managing member Warburg Pincus Partners GP LLC, its general partner Warburg Pincus & Co., its managing member		
By:		Date:	May 22, 2017
	Name: Robert B. Knauss Title: Partner		
WA	RBURG PINCUS PARTNERS, L.P.		
By: By:	Warburg Pincus Partners GP LLC, its general partner Warburg Pincus & Co., its managing member		
By:	Name: Robert B. Knauss	Date:	May 22, 2017
	Name: Robert B. Knauss Title: Partner		
WA	RBURG PINCUS PARTNERS GP LLC		
By:	Warburg Pincus & Co., its managing member		
By:		Date:	May 22, 2017
	Name: Robert B. Knauss Title: Partner		
WA	RBURG PINCUS & CO.		
By:		Date:	May 22, 2017
	Name: Robert B. Knauss Title: Partner		
WA	RBURG PINCUS LLC		
By:		Date:	May 22, 2017
_j.	Name: Robert B. Knauss Title: Managing Director		
		2	
CHA	ARLES R. KAYE		
By:		Date:	May 22, 2017
	Name: Charles R. Kaye Title: Robert B. Knauss, Attorney-in-Fact*	_	
JOS	EPH P. LANDY		
By:		Date:	May 22, 2017
	Name: Joseph P. Landy Title: Robert B. Knauss, Attorney-in-Fact*		

* The Power of Attorney given by each of Mr. Kaye and Mr. Landy was previously filed with the SEC on July 12, 2016 as an exhibit to a beneficial ownership report on Schedule 13D filed by Warburg Pincus LLC with respect to WEX, Inc. and is hereby incorporated by reference.

SCHEDULE A

Set forth below is the name, position and present principal occupation of each of the general partners of Warburg Pincus & Co. ("<u>WP</u>") and members of Warburg Pincus LLC (including its subsidiaries, "<u>WP LLC</u>"). Except as otherwise indicated, the business address of each of such persons is 450 Lexington Avenue, New York, New York 10017, and each of such persons is a citizen of the United States.

GENERAL PARTNERS OF WP

NAME	PRESENT PRINCIPAL OCCUPATION IN ADDITION TO POSITION WITH WP, AND POSITIONS WITH THE REPORTING ENTITIES
Gregory C. Baecher	Partner of WP; Member and Managing Director of WP LLC
Mark Begor	Partner of WP; Member and Managing Director of WP LLC
Alexander Berzofsky	Partner of WP; Member and Managing Director of WP LLC
Damon Beyer	Partner of WP; Member and Managing Director of WP LLC
Anthony Robert Buonanno	Partner of WP; Member and Managing Director of WP LLC
Thomas Carella	Partner of WP; Member and Managing Director of WP LLC
Mark M. Colodny	Partner of WP; Member and Managing Director of WP LLC
Cary J. Davis	Partner of WP; Member and Managing Director of WP LLC
Joseph Gagnon	Partner of WP; Member and Managing Director of WP LLC
Timothy F. Geithner	Partner of WP; Member, Managing Director and President of WP LLC
Stephanie Geveda	Partner of WP; Member and Managing Director of WP LLC
Steven G. Glenn	Partner of WP; Member and Managing Director of WP LLC
Jeffrey Goldfaden	Partner of WP; Member and Managing Director of WP LLC
Michael Graff	Partner of WP; Member and Managing Director of WP LLC
Christopher Gunther	Partner of WP; Member and Managing Director of WP LLC
Patrick T. Hackett	Partner of WP; Member and Managing Director of WP LLC
Fred Hassan	Partner of WP; Member and Managing Director of WP LLC
William Blake Holden	Partner of WP; Member and Managing Director of WP LLC
Edward Y. Huang	Partner of WP; Member and Managing Director of WP LLC
In Seon Hwang	Partner of WP; Member and Managing Director of WP LLC
Peter R. Kagan	Partner of WP; Member and Managing Director of WP LLC
Charles R. Kaye	Managing General Partner of WP; Managing Member and Co-Chief Executive Officer of WP LLC
Robert B. Knauss	Partner of WP; Member and Managing Director of WP LLC
David B. Krieger	Partner of WP; Member and Managing Director of WP LLC
Rajveer Kushwaha	Partner of WP; Member and Managing Director of WP LLC
Joseph P. Landy	Managing General Partner of WP; Managing Member and Co-Chief Executive Officer of WP LLC
James Levy	Partner of WP; Member and Managing Director of WP LLC
Frank Marinaro	Partner of WP; Member and Managing Director of WP LLC
Harsha Marti	Partner of WP; Member and Managing Director of WP LLC
Michael Martin	Partner of WP; Member and Managing Director of WP LLC
Vishnu Menon	Partner of WP; Member and Managing Director of WP LLC
James Neary	Partner of WP; Member and Managing Director of WP LLC
Jeffrey Perlman	Partner of WP; Member and Managing Director of WP LLC
Chandler Reedy	Partner of WP; Member and Managing Director of WP LLC
Annette Rodriguez-Ferrer	Partner of WP; Member and Managing Director of WP LLC
John Rowan	Partner of WP; Member and Managing Director of WP LLC
Justin L. Sadrian	Partner of WP; Member and Managing Director of WP LLC
Adarsh Sarma	Partner of WP; Member and Managing Director of WP LLC
John W. Shearburn	Partner of WP; Member and Managing Director of WP LLC
Ashutosh Somani	Partner of WP; Member and Managing Director of WP LLC
David Sreter	Partner of WP; Member and Managing Director of WP LLC
Christopher H. Turner	Partner of WP; Member and Managing Director of WP LLC
James W. Wilson	Partner of WP; Member and Managing Director of WP LLC
Daniel Zamlong	Partner of WP; Member and Managing Director of WP LLC
Daniel Zilberman	Partner of WP; Member and Managing Director of WP LLC Partner of WP; Member and Managing Director of WP LLC
WP & Co. Partners, L.P.*	raturer of wr, we more and wanaging Director of wr LLC
	**
Warburg Pincus Principal Partnership, L.P.	

^{*} New York limited partnership; primary activity is ownership interest in WP

^{**} Delaware limited partnership; primary activity is ownership interest in WP

MEMBERS OF WP LLC

PRESENT PRINCIPAL OCCUPATION IN ADDITION TO POSITION WITH WP LLC, AND POSITIONS

	TO POSITION WITH WP LLC, AND POSITIONS
NAME	WITH THE REPORTING ENTITIES
Saurabh Agarwal (1)	Member and Managing Director of WP LLC Member and Managing Director of WP LLC
Jonas Agesand (2) Gregory C. Baecher	Member and Managing Director of WP LLC; Partner of WP
Mark Begor	Member and Managing Director of WP LLC; Partner of WP
Alexander Berzofsky	Member and Managing Director of WP LLC; Partner of WP
Damon Beyer	Member and Managing Director of WP LLC; Partner of WP
Peder Bratt (3)	Member and Managing Director of WP LLC
Anthony Robert Buonanno	Member and Managing Director of WP LLC; Partner of WP
Thomas Carella	Member and Managing Director of WP LLC; Partner of WP
Michael Chen (4)	Member and Managing Director of WP LLC
ulian Cheng (5)	Member and Managing Director of WP LLC
Mark M. Colodny	Member and Managing Director of WP LLC; Partner of WP
Cary J. Davis	Member and Managing Director of WP LLC; Partner of WP
Yi Ding (4)	Member and Managing Director of WP LLC
Simon Eyers (3)	Member and Managing Director of WP LLC
Min Fang (4)	Member and Managing Director of WP LLC
Max Fowinkel (6)	Member and Managing Director of WP LLC
loseph Gagnon	Member and Managing Director of WP LLC; Partner of WP
Fimothy F. Geithner	Member, Managing Director and President of WP LLC; Partner of WP
Stephanie Geveda	Member and Managing Director of WP LLC; Partner of WP
Steven G. Glenn	Member and Managing Director of WP LLC; Partner of WP
Jeffrey G. Goldfaden	Member and Managing Director of WP LLC; Partner of WP
Michael Graff	Member and Managing Director of WP LLC; Partner of WP
Christopher Gunther	Member and Managing Director of WP LLC; Partner of WP
Patrick T. Hackett	Member and Managing Director of WP LLC; Partner of WP
Fred Hassan	Member and Senior Advisor of WP LLC; Partner of WP
William Blake Holden	Member and Managing Director of WP LLC; Partner of WP
Edward Y. Huang	Member and Managing Director of WP LLC; Partner of WP
n Seon Hwang	Member and Managing Director of WP LLC; Partner of WP
Peter R. Kagan	Member and Managing Director of WP LLC; Partner of WP
Charles R. Kaye	Managing Member and Co-Chief Executive Officer of WP LLC; Managing General Partner of WP
Robert B. Knauss	Member and Managing Director of WP LLC; Partner of WP
David B. Krieger	Member and Managing Director of WP LLC; Partner of WP
Rajveer Kushwaha	Member and Managing Director of WP LLC; Partner of WP
Joseph P. Landy	Managing Member and Co-Chief Executive Officer of WP LLC; Managing General Partner of WP
James Levy	Member and Managing Director of WP LLC; Partner of WP
Vishal Mahadevia	Member and Managing Director of WP LLC
Niten Malhan (1)	Member and Managing Director of WP LLC
Frank Marinaro	Member and Managing Director of WP LLC; Partner of WP
Harsha Marti	Member and Managing Director of WP LLC; Partner of WP
Michael Martin	Member and Managing Director of WP LLC; Partner of WP
Vishnu Menon	Member and Managing Director of WP LLC; Partner of WP
Piero Minardi (7)	Member and Managing Director of WP LLC
Nitin Nayar	Member and Managing Director of WP LLC
ames Neary	Member and Managing Director of WP LLC; Partner of WP
Hoi Ying Ng (5)	Member and Managing Director of WP LLC
René Obermann (6)	Member and Managing Director of WP LLC
Narendra Ostawal (1)	Member and Managing Director of WP LLC
effrey Perlman	Member and Managing Director of WP LLC; Partner of WP
Chandler Reedy	Member and Managing Director of WP LLC; Partner of WP
Annette Rodriguez-Ferrer	Member and Managing Director of WP LLC; Partner of WP
ohn Rowan	Member and Managing Director of WP LLC; Partner of WP
ustin L. Sadrian	Member and Managing Director of WP LLC; Partner of WP
Anish Saraf (1)	Member and Managing Director of WP LLC
Adarsh Sarma	Member and Managing Director of WP LLC; Partner of WP
Viraj Sawhney (1)	Member and Managing Director of WP LLC
ohn W. Shearburn	Member and Managing Director of WP LLC; Partner of WP
Ashutosh Somani	Member and Managing Director of WP LLC; Partner of WP
David Sreter	Member and Managing Director of WP LLC; Partner of WP
Biddanda N. Thimmaya (1)	Member and Managing Director of WP LLC
Christopher H. Turner	Member and Managing Director of WP LLC; Partner of WP
Somit Varma (1)	Member and Managing Director of WP LLC
Zhen Wei (5)	Member and Managing Director of WP LLC
James W. Wilson	Member and Managing Director of WP LLC; Partner of WP
Bo Xu (4) Daniel Zamlong	Member and Managing Director of WP LLC Member and Managing Director of WP LLC; Partner of WP

Member and Managing Director of WP LLC Member and Managing Director of WP LLC; Partner of WP

- (1) Citizen of India
- (2) Citizen of Sweden
- (3) Citizen of United Kingdom
- (4) Citizen of China
- (1) Citizen of Cinna(5) Citizen of Hong Kong(6) Citizen of Germany
- (6) Citizen of German(7) Citizen of Italy