# UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, DC 20549

# **SCHEDULE 13G**

(Amendment No. 2)

(Rule 13d-102)

INFORMATION TO BE INCLUDED IN STATEMENTS FILED PURSUANT TO RULES 13d-1(b), (c) AND (d) AND AMENDMENTS THERETO FILED PURSUANT TO RULE 13d-2(b)

		Antero Resources Corporation
		(Name of Issuer)
		Common Stock
		(Title of Class of Securities)
		03674X 106
		(CUSIP Number)
		December 31, 2015
		(Date of Event Which Requires Filing of this Statement)
Check the ap	ppropriate b	ox to designate the rule pursuant to which this Schedule is filed:
	Rule 13d-	1(b)
	Rule 13d-	1(c)
X	Rule 13d-	1(d)
The informa Securities Ex	nd for any so tion require exchange Ac	cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of absequent amendment containing information which would alter disclosures provided in a prior cover page.  d on the remainder of this cover page shall not be deemed to be "filed" for the purpose of Section 18 of the t of 1934 ("Act") or otherwise subject to the liabilities of that section of the Act but shall be subject to all other owever, see the Notes).
CUSIP No.	03674X 10	6 13G
	Name of R	6 13G eporting Persons incus Private Equity VIII, L.P.
1	Name of R Warburg P	eporting Persons incus Private Equity VIII, L.P.
1 2	Name of R Warburg P	eporting Persons incus Private Equity VIII, L.P.  Appropriate Box if a Member of a Group
1 2	Name of R Warburg P Check the A	eporting Persons incus Private Equity VIII, L.P.  Appropriate Box if a Member of a Group
1 2	Name of R Warburg P	eporting Persons incus Private Equity VIII, L.P.  Appropriate Box if a Member of a Group
1 2	Name of R Warburg P Check the A	eporting Persons incus Private Equity VIII, L.P.  Appropriate Box if a Member of a Group
2	Name of R Warburg P Check the A (a) (b) SEC Use C	eporting Persons incus Private Equity VIII, L.P.  Appropriate Box if a Member of a Group
2 3	Name of R Warburg P Check the A (a) (b) SEC Use C	eporting Persons incus Private Equity VIII, L.P.  Appropriate Box if a Member of a Group
2 3	Name of R Warburg P Check the A (a) (b) SEC Use C	eporting Persons incus Private Equity VIII, L.P.  Appropriate Box if a Member of a Group

Owned by Each

Reporting Person With	7 1	Sole Dispositive Power 0
	8	Shared Dispositive Power 32,281,948 (1)
9	Aggregate Ai 32,281,948 (1	mount Beneficially Owned by Each Reporting Person  1)
10	Check Box if	f the Aggregate Amount in Row (9) Excludes Certain Shares
11	Percent of Cl 11.7% (2)	ass Represented by Amount in Row 9
12	Type of Repo	orting Person
		rson expressly disclaims beneficial ownership with respect to any shares of Common Stock (as defined in Item dule 13G) in excess of its economic interest in the Common Stock.
		based upon 277,049,261 shares of common stock of the Issuer outstanding, as stated in the Form 10-Q of the the U.S. Securities and Exchange Commission on October 28, 2015.
		2
CUSIP No.	. 03674X 106	13G
1	Name of Rep Warburg Pine	oorting Persons cus Private Equity X, L.P.
2	•	propriate Box if a Member of a Group
	(a)	
	(b)	
3	SEC Use Onl	ly
4	Citizenship o Delaware	or Place of Organization
	5	Sole Voting Power 0
Number of Shares Beneficially Owned by	6	Shared Voting Power 11,790,102 (1)
Each Reporting Person With	7 n	Sole Dispositive Power 0
	8	Shared Dispositive Power 11,790,102 (1)
9	Aggregate Ai 11,790,102 (1	mount Beneficially Owned by Each Reporting Person  1)

11	Percent of Class Represented by Amount in Row 9 4.3%(2)		
12	Type of Reporting Person PN		
		rson expressly disclaims beneficial ownership with respect to any shares of Common Stock (as defined in Item dule 13G) in excess of its economic interest in the Common Stock.	
		based upon 277,049,261 shares of common stock of the Issuer outstanding, as stated in the Form 10-Q of the the U.S. Securities and Exchange Commission on October 28, 2015.	
		3	
CUSIP No.	. 03674X 106	13G	
1	Name of Rep Warburg Pine	oorting Persons cus X Partners, L.P.	
2		opropriate Box if a Member of a Group	
	(a) (b)		
3	SEC Use Onl	ly	
4	4 Citizenship or Place of Organization Delaware		
	5	Sole Voting Power 0	
Number of Shares Beneficiall	6	Shared Voting Power 1,758,730 (1)	
Owned by Each Reporting Person Wit	7 h	Sole Dispositive Power 0	
	8	Shared Dispositive Power 1,758,730 (1)	
9	Aggregate Amount Beneficially Owned by Each Reporting Person 1,758,730 (1)		
10	Check Box if the Aggregate Amount in Row (9) Excludes Certain Shares □		
11	Percent of Class than 1%	ass Represented by Amount in Row 9 (2)	
12	Type of Repo	orting Person	

<sup>(1)</sup> The reporting person expressly disclaims beneficial ownership with respect to any shares of Common Stock (as defined in Item 2(d) of this Schedule 13G) in excess of its economic interest in the Common Stock.

	(2) Calculations are based upon 277,049,261 shares of common stock of the Issuer outstanding, as stated in the Form 10-Q of the Issuer filed with the U.S. Securities and Exchange Commission on October 28, 2015.		
		4	
CUSIP 1	No. 03674X 106	13G	
1	Name of Reporting Persons Warburg Pincus Private Equity X O&G, L.P.		
2	Check the App	ropriate Box if a Member of a Group	
		⊐	
	(b)	XI.	
3	SEC Use Only		
4	Citizenship or Delaware	Place of Organization	
	5	Sole Voting Power 0	
Number Shares Benefici	6 ally	Shared Voting Power 43,158,261 (1)	
Owned I Each Reportin Person V	ng 7	Sole Dispositive Power 0	
	8	Shared Dispositive Power 43,158,261 (1)	
9	Aggregate Amount Beneficially Owned by Each Reporting Person 43,158,261 (1)		
10	Check Box if the	ne Aggregate Amount in Row (9) Excludes Certain Shares	
11	Percent of Clas	s Represented by Amount in Row 9	
12	Type of Report	ing Person	
		on expressly disclaims beneficial ownership with respect to any shares of Common Stock (as defined in Item le 13G) in excess of its economic interest in the Common Stock.	
		ased upon 277,049,261 shares of common stock of the Issuer outstanding, as stated in the Form 10-Q of the e U.S. Securities and Exchange Commission on October 28, 2015.	
		5	
CUSIP 1	No. 03674X 106	13G	

Name of Reporting Persons

	Warburg Pincus X, L.P.			
2	Check the Appropriate Box if a Member of a Group			
2	(a)			
	(b)			
	,			
3	SEC Use On	aly		
4	Citizenship of Delaware	or Place of Organization		
	5	Sole Voting Power 0		
Number of Shares Beneficially	6 V	Shared Voting Power 56,707,093 (1)		
Owned by Each Reporting Person With	7 h	Sole Dispositive Power 0		
	8	Shared Dispositive Power 56,707,093 (1)		
9	Aggregate A 56,707,093 (	amount Beneficially Owned by Each Reporting Person (1)		
10	Check Box i	f the Aggregate Amount in Row (9) Excludes Certain Shares		
11	Percent of C 20.5% (2)	lass Represented by Amount in Row 9		
12	Type of Rep PN	orting Person		
		erson expressly disclaims beneficial ownership with respect to any shares of Common Stock (as defined in Item edule 13G) in excess of its economic interest in the Common Stock.		
		based upon 277,049,261 shares of common stock of the Issuer outstanding, as stated in the Form 10-Q of the the U.S. Securities and Exchange Commission on October 28, 2015.		
		6		
CUSIP No.	03674X 106	13G		
1	Name of Rep Warburg Pin	porting Persons neus X GP L.P.		
2	Check the A (a)	ppropriate Box if a Member of a Group  □		
	(b)	$\boxtimes$		
3	SEC Use On	aly		

4	Citizenship or Place of Organization  -Delaware			
	Delaware			
	5	Sole Voting Power 0		
Number of Shares Beneficially Owned by	6	Shared Voting Power 56,707,093 (1)		
Each Reporting Person With	7 h	Sole Dispositive Power 0		
	8	Shared Dispositive Power 56,707,093 (1)		
9	Aggregate Am 56,707,093 (1)	nount Beneficially Owned by Each Reporting Person		
10	Check Box if	the Aggregate Amount in Row (9) Excludes Certain Shares		
11	Percent of Cla 20.5% (2)	ss Represented by Amount in Row 9		
12	Type of Repor	ting Person		
(2) Ca	lculations are b	ased upon 277,049,261 shares of common stock of the Issuer outstanding, as stated in the Form 10-Q of the U.S. Securities and Exchange Commission on October 28, 2015.		
CUSIP No	. 03674X 106	13G		
1	Name of Repo	orting Persons		
2	Check the Ann	propriate Box if a Member of a Group		
2				
	-			
3	SEC Use Only			
4	Citizenship or Delaware	Place of Organization		
	5	Sole Voting Power 0		
Number of Shares	6	Shared Voting Power 56,797,773 (1)		
Beneficially	7			

Each

Reporting Person With	7 1	Sole Dispositive Power 0
	8	Shared Dispositive Power 56,797,773 (1)
9	Aggregate A 56,797,773	amount Beneficially Owned by Each Reporting Person (1)
10	Check Box	if the Aggregate Amount in Row (9) Excludes Certain Shares
11	Percent of C 20.5% (2)	Class Represented by Amount in Row 9
12	Type of Rep	porting Person
		erson expressly disclaims beneficial ownership with respect to any shares of Common Stock (as defined in Item edule 13G) in excess of its economic interest in the Common Stock.
		based upon 277,049,261 shares of common stock of the Issuer outstanding, as stated in the Form 10-Q of the the U.S. Securities and Exchange Commission on October 28, 2015.
		8
CUSIP No.	03674X 106	porting Persons
	Warburg Pir	neus Partners, L.P.
2	Check the A	ppropriate Box if a Member of a Group
	(a)	
	(b)	$\boxtimes$
3	SEC Use Or	nly
4	Citizenship Delaware	or Place of Organization
	5	Sole Voting Power 0
Number of Shares Beneficially	6	Shared Voting Power 88,989,041 (1)
Owned by Each Reporting Person With	7 n	Sole Dispositive Power 0
	8	Shared Dispositive Power 88,989,041 (1)
9	Aggregate A 88,989,041	Amount Beneficially Owned by Each Reporting Person (1)

10	Check Box if	the Aggregate Amount in Row (9) Excludes Certain Shares	
11	Percent of Class Represented by Amount in Row 9 32.1% (2)		
12	Type of Repo	rting Person	
		rson expressly disclaims beneficial ownership with respect to any shares of Common Stock (as defined in Item ule 13G) in excess of its economic interest in the Common Stock.	
		pased upon 277,049,261 shares of common stock of the Issuer outstanding, as stated in the Form 10-Q of the he U.S. Securities and Exchange Commission on October 28, 2015.	
		,	
CUSIP No	. 03674X 106	13G	
1	Name of Repo Warburg Pinc	orting Persons us Partners GP LLC	
2	(a)	propriate Box if a Member of a Group	
3	SEC Use Only	y	
4 Citizenship or Place of Organization Delaware		Place of Organization	
	5	Sole Voting Power 0	
Number of Shares Beneficially	6	Shared Voting Power 88,989,041 (1)	
Owned by Each Reporting Person Wit	7 h	Sole Dispositive Power 0	
	8	Shared Dispositive Power 88,989,041 (1)	
9	Aggregate Amount Beneficially Owned by Each Reporting Person 88,989,041 (1)		
10	Check Box if	the Aggregate Amount in Row (9) Excludes Certain Shares	
11	Percent of Cla 32.1% (2)	ass Represented by Amount in Row 9	
12	Type of Repo	rting Person	

<sup>(1)</sup> The reporting person expressly disclaims beneficial ownership with respect to any shares of Common Stock (as defined in Item 2(d) of this Schedule 13G) in excess of its economic interest in the Common Stock.

	(2) Calculations are based upon 277,049,261 shares of common stock of the Issuer outstanding, as stated in the Form 10-Q of the Issuer filed with the U.S. Securities and Exchange Commission on October 28, 2015.		
		10	
CUSIP	No. 03674X 106	13G	
1	Name of Reporting Persons Warburg Pincus & Co.		
2	Check the Appr (a)  (b)   E		
3	SEC Use Only		
4	Citizenship or F New York	Place of Organization	
	5	Sole Voting Power 0	
Number Shares Benefici	6 ally	Shared Voting Power 88,989,041 (1)	
Owned   Each Reportir Person \	7	Sole Dispositive Power 0	
	8	Shared Dispositive Power 88,989,041 (1)	
9	Aggregate Amount Beneficially Owned by Each Reporting Person 88,989,041 (1)		
10	Check Box if th	ne Aggregate Amount in Row (9) Excludes Certain Shares	
11	Percent of Class 32.1% (2)	s Represented by Amount in Row 9	
12	Type of Reporti	ing Person	
		on expressly disclaims beneficial ownership with respect to any shares of Common Stock (as defined in Item e 13G) in excess of its economic interest in the Common Stock.	
		sed upon 277,049,261 shares of common stock of the Issuer outstanding, as stated in the Form 10-Q of the U.S. Securities and Exchange Commission on October 28, 2015.	
		11	
CUSIP 1	No. 03674X 106	13G	

Name of Reporting Persons

	Warburg Pincus LLC				
2	Check the Appropriate Box if a Member of a Group				
	(a)				
	(b)				
3	SEC Use On	ly			
•					
4	Citizenship o New York	or Place of Organization			
	5	Sole Voting Power 0			
Number of Shares Beneficially	6	Shared Voting Power 88,989,041 (1)			
Owned by Each Reporting Person With	7 n	Sole Dispositive Power 0			
	8	Shared Dispositive Power 88,989,041 (1)			
9	Aggregate A 88,989,041 (	mount Beneficially Owned by Each Reporting Person 1)			
10	Check Box if	f the Aggregate Amount in Row (9) Excludes Certain Shares			
11	Percent of Class Represented by Amount in Row 9 32.1% (2)				
12	Type of Reporting Person OO				
		erson expressly disclaims beneficial ownership with respect to any shares of Common Stock (as defined in Item dule 13G) in excess of its economic interest in the Common Stock.			
(2) Cal Issu	lculations are ner filed with	based upon 277,049,261 shares of common stock of the Issuer outstanding, as stated in the Form 10-Q of the the U.S. Securities and Exchange Commission on October 28, 2015.			
		12			
CUSIP No.	03674X 106	13G			
1	Name of Reporting Persons Charles R. Kaye				
2	Check the Ap	ppropriate Box if a Member of a Group  □			
	(b)				
3	SEC Use On	ly			

Citizenship or Place of Organization

4

	United States	
	5	Sole Voting Power 0
Number of Shares Beneficially	6	Shared Voting Power 88,989,041 (1)
Owned by Each Reporting Person With	7	Sole Dispositive Power 0
	8	Shared Dispositive Power 88,989,041 (1)
9	Aggregate Amo 88,989,041 (1)	ount Beneficially Owned by Each Reporting Person
10	Check Box if th	ne Aggregate Amount in Row (9) Excludes Certain Shares
	Percent of Class 32.1% (2)	s Represented by Amount in Row 9
	Type of Reporti	ing Person
1550	iei med wim the	e U.S. Securities and Exchange Commission on October 28, 2015.
CUSIP No.	03674X 106	13G
1	Name of Report	
	Joseph P. Landy	
	Check the Appr	ropriate Box if a Member of a Group
		opriate Box if a Member of a Group
	Check the Appr	opriate Box if a Member of a Group
3	Check the Appr (a)  (b)  SEC Use Only	opriate Box if a Member of a Group
3	Check the Appr (a)  (b)  SEC Use Only Citizenship or P	opriate Box if a Member of a Group
3	Check the Appr (a)   (b)   SEC Use Only  Citizenship or P United States	opriate Box if a Member of a Group    Sole Voting Power

8	Shared Dispositive Power
	88,989,041 (1)

- 9 Aggregate Amount Beneficially Owned by Each Reporting Person 88,989,041 (1)
- 10 Check Box if the Aggregate Amount in Row (9) Excludes Certain Shares  $\Box$
- Percent of Class Represented by Amount in Row 9 32.1% (2)
- 12 Type of Reporting Person IN
- (1) The reporting person expressly disclaims beneficial ownership with respect to any shares of Common Stock (as defined in Item 2(d) of this Schedule 13G) other than the common stock of the Issuer owned of record by such reporting person.
- (2) Calculations are based upon 277,049,261 shares of common stock of the Issuer outstanding, as stated in the Form 10-Q of the Issuer filed with the U.S. Securities and Exchange Commission on October 28, 2015.

#### **SCHEDULE 13G**

This Amendment No. 2 (this "Amendment") amends and restates in its entirety the Schedule 13G filed on February 17, 2015 (the "Prior Schedule 13G" and together with the Amendment, the "Schedule 13G").

Item 1(a) Name of Issuer.

The name of the issuer is Antero Resources Corporation, a Delaware corporation (the "Issuer").

Item 1(b) Address of Issuer's Principal Executive Offices.

The principal executive offices of the Issuer are located at 1615 Wynkoop Street, Denver, Colorado 80202.

Item 2(a) Name of Person Filing.

This Schedule 13G is filed on behalf of 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 company 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, L.P., a Delaware limited partnership ("WP X"), Warburg Pincus X Partners, L.P., a Delaware limited partnership ("WP X Partners," and together with WP X, the "WP X Funds") and Warburg Pincus Private Equity X O&G, L.P., a Delaware limited partnership ("WP X O&G"). WP-WPVIII Investors GP L.P., a Delaware limited partnership ("WP-WPVIII GP") is the general partner of WP-WPVIII Investors. Warburg Pincus X, L.P., a Delaware limited partnership ("WP X GP"), is the general partner of the WP X Funds and WP X O&G. Warburg Pincus X GP L.P., a Delaware limited partnership ("WP X GP LP"), is the general partner of WP X GP. WPP GP LLC, a Delaware limited liability company ("WPP GP"), is the general partner of WP X GP LP and WP-WPVIII GP. Warburg Pincus Partners, L.P., a Delaware limited partnership ("WP Partners"), 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"), is the general partner of WP Partners. Warburg Pincus & Co., a New York general partnership ("WP"), is the managing member of WP Partners GP. Warburg Pincus LLC, a New York limited liability company ("WP LLC"), is the manager of the WP VIII Funds, the WP X Funds and WP X O&G. Charles R. Kaye and Joseph P. Landy are each 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 Reporting Persons (as defined below). Messrs. Kaye and Landy disclaim beneficial ownership of all shares held by the Warburg Pincus Reporting Persons.

Each of Messrs. Kaye and Landy, together with the WP VIII Funds, the WP X Funds, WP X O&G, WP X GP, WP X GP LP, WP VIII Investors GP, WPP GP, WP Partners, WP Partners GP, WP and WP LLC are collectively referred to herein as the "Warburg Pincus Reporting Persons".

**Item 2(b)** Address of Principal Business Office.

The principal business address of each of the Warburg Pincus Reporting Persons is 450 Lexington Avenue, New York, New York 10017.

Item 2(c) Citizenship.

See Item 2(a).

Item 2(d) Title of Class of Securities.

Item 2(e) Item 3	Common Stock, par value \$0.01 per share (the "Common Stock").  03674X 106  If this statement is filed pursuant to §§240.13d-1(b) or 240.13d-2(b) or (c), check whether the person filing is a:		
		(a)	
	(b)		Bank as defined in section 3(a)(6) of the Act (15 U.S.C. 78c);
	(c)		Insurance company as defined in section 3(a)(19) of the Act (15 U.S.C. 78c);
	(d)		Investment company registered under section 8 of the Investment Company Act of 1940 (15 U.S.C 80a-8);
	(e)		An investment adviser in accordance with §240.13d-1(b)(1)(ii)(E);
	(f)		An employee benefit plan or endowment fund in accordance with §240.13d-1(b)(1)(ii)(F);
	(g)		A parent holding company or control person in accordance with §240.13d-1(b)(1)(ii)(G);
	(h)		A savings associations as defined in Section 3(b) of the Federal Deposit Insurance Act (12 U.S.C. 1813);
	(i)		A church plan that is excluded from the definition of an investment company under section 3(c)(14) of the Investment Company Act of 1940 (15 U.S.C. 80a-3);
	(j)		A non-U.S. institution in accordance with § 240.13d-1(b)(1)(ii)(J);
	(k)		Group, in accordance with § 240.13d–1(b)(1)(ii)(K).

#### Item 4 Ownership.

The information required by Items 4(a)-(c) is set forth in Rows 5-11 of the cover page hereto for each Warburg Pincus Reporting Person and is incorporated herein by reference for each such Warburg Pincus Reporting Person.

15

Each Warburg Pincus Reporting Person other than Messrs. Kaye and Landy expressly disclaims beneficial ownership with respect to any shares of Common Stock in excess of its economic interest in the Common Stock. Each of Messrs. Kaye and Landy expressly disclaims beneficial ownership with respect to any Common Stock, other than any Common Stock owned of record by Mr. Kaye or Mr. Landy, respectively.

# Item 5 Ownership of Five Percent or Less of a Class.

If this statement is being filed to report the fact that as of the date hereof the Warburg Pincus Reporting Persons have ceased to be the beneficial owner of more than 5 percent of the class of securities, check the following  $\Box$ .

# Item 6 Ownership of More than Five Percent on Behalf of Another Person.

Other than as set forth herein, no other person has the right to receive or the power to direct the receipt of dividends from, or the proceeds from the sale of, in excess of 5% of the total outstanding Common Stock.

# Item 7 Identification and Classification of the Subsidiary Which Acquired the Security Being Reported on By the Parent Holding Company.

Inapplicable.

# Item 8 Identification and Classification of Members of the Group.

The Warburg Pincus Reporting Persons are making this single, joint filing because they may be deemed to constitute a "group" within the meaning of Section 13(d)-3 of the Exchange Act. The joint filing agreement among the Warburg Pincus Reporting Persons to file this Schedule 13G jointly in accordance with Rule 13d-1(k) of the Exchange Act is attached hereto as Exhibit 99.1. Each Warburg Pincus Reporting Person other than Messrs. Kaye and Landy expressly disclaims beneficial ownership with respect to any shares of Common Stock in excess of its economic interest in the Common Stock. Each of Messrs. Kaye and Landy expressly disclaims beneficial ownership with respect to any Common Stock, other than any Common Stock owned of record by Mr. Kaye or Mr. Landy, respectively.

#### Item 10 Certification.

Inapplicable.

# **SIGNATURES**

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

Date: February 12, 2016

# 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: /s/ Robert B. Knauss

Name: Robert B. Knauss

Title: Partner

# WARBURG PINCUS PRIVATE EQUITY X, 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: /s/ Robert B. Knauss

Name: Robert B. Knauss

Title: Partner

# WARBURG PINCUS X PARTNERS, 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: /s/ Robert B. Knauss

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: /s/ Robert B. Knauss

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: /s/ Robert B. Knauss

Name: Robert B. Knauss

Title: Partner

18

#### 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: /s/ Robert B. Knauss

Name: Robert B. Knauss

Title: Partner

#### 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: /s/ Robert B. Knauss

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: /s/ Robert B. Knauss

Name: Robert B. Knauss

Title: Partner

# WARBURG PINCUS PARTNERS GP LLC

By: Warburg Pincus & Co., its managing member

By: /s/ Robert B. Knauss

Name: Robert B. Knauss

Title: Partner

# WARBURG PINCUS & CO.

By: /s/ Robert B. Knauss

Name: Robert B. Knauss

Title: Partner

19

# WARBURG PINCUS LLC

By: /s/ Robert B. Knauss

Name: Robert B. Knauss Title: Managing Director

#### CHARLES R. KAYE

By: /s/ Robert B. Knauss

Robert B. Knauss, Attorney-in-Fact\*

#### JOSEPH P. LANDY

By: /s/ Robert B. Knauss

Robert B. Knauss, Attorney-in-Fact\*

\* The Power of Attorney given by each of Warburg Pincus & Co., Mr. Kaye and Mr. Landy was previously filed with the U.S. Securities & Exchange Commission on November 26, 2013 as an exhibit to a statement on Form 4 filed by Warburg Pincus Private Equity IX, L.P. with respect to Laredo Petroleum Holdings, Inc. (now known as Laredo Petroleum, Inc.) and is hereby incorporated by reference.

Schedule 13G Signature Page

20

# JOINT FILING AGREEMENT PURSUANT TO RULE 13D-1(K)(1)

The undersigned acknowledge and agree that the foregoing statement on Schedule 13G is filed on behalf of each of the undersigned and that all subsequent amendments to this statement on Schedule 13G shall be filed on behalf of each of the undersigned without the necessity of filing an additional joint filing agreement. 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 of such counterparts taken together shall constitute one and the same instrument.

Date: February 12, 2016

# 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: /s/ Robert B. Knauss

Name: Robert B. Knauss

Title: Partner

# WARBURG PINCUS PRIVATE EQUITY X, 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: /s/ Robert B. Knauss

Name: Robert B. Knauss

Title: Partner

# WARBURG PINCUS X PARTNERS, 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: /s/ Robert B. Knauss

Name: Robert B. Knauss

Title: Partner

21

#### 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: /s/ Robert B. Knauss

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: /s/ Robert B. Knauss

Name: Robert B. Knauss

Title: Partner

22

# 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: /s/ Robert B. Knauss

Name: Robert B. Knauss

Title: Partner

#### 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: /s/ Robert B. Knauss

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: /s/ Robert B. Knauss

Name: Robert B. Knauss

# WARBURG PINCUS PARTNERS GP LLC

By: Warburg Pincus & Co., its managing member

By: /s/ Robert B. Knauss

Name: Robert B. Knauss

Title: Partner

# WARBURG PINCUS & CO.

By: /s/ Robert B. Knauss

Name: Robert B. Knauss

Title: Partner

# WARBURG PINCUS LLC

By: /s/ Robert B. Knauss

Name: Robert B. Knauss Title: Managing Director

23

# CHARLES R. KAYE

By: /s/ Robert B. Knauss

Robert B. Knauss, Attorney-in-Fact\*

# JOSEPH P. LANDY

By: /s/ Robert B. Knauss

Robert B. Knauss, Attorney-in-Fact\*

<sup>\*</sup> The Power of Attorney given by each of Warburg Pincus & Co., Mr. Kaye and Mr. Landy was previously filed with the U.S. Securities & Exchange Commission on November 26, 2013 as an exhibit to a statement on Form 4 filed by Warburg Pincus Private Equity IX, L.P. with respect to Laredo Petroleum Holdings, Inc. (now known as Laredo Petroleum, Inc.) and is hereby incorporated by reference.