

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

SCHEDULE 13D

Under the Securities Exchange Act of 1934

USA Compression Partners, LP

(Name of Issuer)

Common units representing limited partner interests

(Title of Class of Securities)

90290N109

(CUSIP Number)

**Dianna Rosser Aprile
c/o Riverstone Holdings LLC
712 Fifth Avenue, 36th Floor
New York, NY 10019
(212) 993-0076**

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

March 31, 2013

(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.

CUSIP No. N33462 107

1. Names of Reporting Person:
USA Compression Holdings, LLC

2. Check the Appropriate Box if a Member of a Group (See Instructions)

(a)

(b)

3. SEC Use Only

4. Source of Funds (See Instructions)
OO (See Item 3)

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

6. Citizenship or Place of Organization
Delaware

7. Sole Voting Power
0

Number of
Shares
Beneficially
Owned by
Each
Reporting
Person With

8. Shared Voting Power
5,337,977

9. Sole Dispositive Power
0

10. Shared Dispositive Power
5,337,977

11. Aggregate Amount Beneficially Owned by Each Reporting Person
5,337,977

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

13. Percent of Class Represented by Amount in Row (11)
22.2%

14. Type of Reporting Person (See Instructions)
OO

2

CUSIP No. N33462 107

1. Names of Reporting Person:
R/C IV USACP Holdings, L.P.

2. Check the Appropriate Box if a Member of a Group (See Instructions)

(a)

(b)

3. SEC Use Only

4. Source of Funds (See Instructions)
OO (See Item 3)

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

6. Citizenship or Place of Organization
Delaware

7. Sole Voting Power
0

Number of
Shares
Beneficially
Owned by
Each
Reporting
Person With

8. Shared Voting Power
5,337,977

9. Sole Dispositive Power
0

10. Shared Dispositive Power
5,337,977

11. Aggregate Amount Beneficially Owned by Each Reporting Person
5,337,977

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

13. Percent of Class Represented by Amount in Row (11)
22.2%

14. Type of Reporting Person (See Instructions)
PN

CUSIP No. N33462 107

1. Names of Reporting Person:
Riverstone/Carlyle Energy Partners IV, L.P.

2. Check the Appropriate Box if a Member of a Group (See Instructions)

(a)

(b)

3. SEC Use Only

4. Source of Funds (See Instructions)
OO (See Item 3)

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

6. Citizenship or Place of Organization
Delaware

7. Sole Voting Power
0

Number of
Shares
Beneficially
Owned by
Each
Reporting
Person With

8. Shared Voting Power
5,337,977

9. Sole Dispositive Power
0

10. Shared Dispositive Power
5,337,977

11. Aggregate Amount Beneficially Owned by Each Reporting Person
5,337,977

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

13. Percent of Class Represented by Amount in Row (11)
22.2%

14. Type of Reporting Person (See Instructions)
PN

CUSIP No. N33462 107

1. Names of Reporting Person:
R/C Energy GP IV, LLC

2. Check the Appropriate Box if a Member of a Group (See Instructions)

(a)

(b) o

3. SEC Use Only

4. Source of Funds (See Instructions)
OO (See Item 3)

5. Check if Disclosure of Legal Proceedings Is Required Pursuant to Items 2(d) or (e) o

6. Citizenship or Place of Organization
Delaware

7. Sole Voting Power
0

Number of
Shares
Beneficially
Owned by
Each
Reporting
Person With

8. Shared Voting Power
5,337,977

9. Sole Dispositive Power
0

10. Shared Dispositive Power
5,337,977

11. Aggregate Amount Beneficially Owned by Each Reporting Person
5,337,977

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

13. Percent of Class Represented by Amount in Row (11)
22.2%

14. Type of Reporting Person (See Instructions)
OO

Item 1. Security and Issuer

This statement on Schedule 13D (the "Schedule 13D") relates to common units representing limited partner interests (the "Common Units") of USA Compression Partners, LP, a Delaware limited partnership (the "Issuer"). The Issuer's principal executive offices are located at 100 Congress Avenue, Suite 450, Austin, Texas 78701.

Item 2. Identity and Background

(a), (f) This Schedule 13D is being filed jointly by (i) USA Compression Holdings, LLC, a Delaware limited liability company (“USA Compression Holdings”), (ii) R/C IV USACP Holdings, L.P., a Delaware limited partnership (“R/C IV Holdings”), (iii) Riverstone/Carlyle Energy Partners IV, L.P., a Delaware limited partnership (“R/C IV Partners”), and (iv) R/C Energy GP IV, LLC, a Delaware limited liability company (“R/C Energy GP IV”). The entities filing this Schedule 13D are collectively referred to herein as the “Reporting Persons.”

(b) The address of the principal office of each of the Reporting Persons other than USA Compression Holdings, is c/o Riverstone Holdings LLC, 712 Fifth Avenue, 36th Floor, New York, NY 10019. The address of the principal office of USA Compression Holdings is 100 Congress Avenue, Suite 450, Austin, Texas, 78701.

(c) Information with respect to the executive officers and directors of each of the Reporting Persons, including name, business address, present principal occupation or employment and the organization in which such employment is conducted, and citizenship is listed on the attached Schedule A, which is incorporated in this Schedule 13D by reference.

USA Compression Holdings is an entity formed for purposes of holding ownership in the Issuer. USA Compression Holdings also owns a 100% limited liability company interest in USA Compression GP, LLC, a Delaware limited liability company (“Issuer GP”) and the owner of a 2.0% general partner interest and incentive distribution rights representing limited partner interests (“IDRs”) in the Issuer. R/C IV Holdings was formed to be a member of Compression Holdings. R/C IV Partners’ principal business is serving as the general partner of Riverstone/Carlyle Global Energy and Power Fund IV L.P. and various other affiliated entities. R/C Energy GP IV’s principal business is serving as the general partner of R/C IV Partners.

(d)-(e) During the last five years, none of the Reporting Persons or, to the knowledge of the Reporting Persons, any executive officer or director of the Reporting Persons, has been 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.

Item 3. Source and Amount of Funds or Other Consideration

Prior to the Issuer’s initial public offering (the “IPO”), USA Compression Holdings was the owner of a 100% limited partner interest in the Issuer. Immediately prior to the closing of the IPO, the Issuer recapitalized its limited partner interests and issued 4,048,588 Common Units and 14,048,588 subordinated units representing limited partner interests in the Issuer (“Subordinated Units”) to USA Compression Holdings, and issued a 2.0% general partner interest and IDRs to Issuer GP.

USA Compression Holdings participates in the Issuer’s Dividend Reinvestment Program (“Issuer DRIP”), pursuant to which it uses the quarterly cash distributions that it receives on its Common Units and Subordinated Units to purchase additional Common Units. Accordingly, USA Compression Holdings purchased (i) 285,059 Common Units in respect of the pro-rated distribution for the quarter ended March 31, 2013; (ii) 316,439 Common Units in respect of the distribution for the quarter ended June 30, 2013; (iii) 348,841 Common Units in respect of the distribution for the quarter ended September 30, 2013 and (iv) 339,049 Common Units in respect of the distribution for the quarter ended December 31, 2013.

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Item 4. Purpose of Transaction

The acquisitions of Common Units by the Reporting Persons were undertaken for investment purposes. USA Compression Holdings is the sole member of Issuer GP and has the power to elect all of the members of the board of directors of Issuer GP.

(a) USA Compression Holdings intends to continue to participate in the Issuer DRIP, pursuant to which it will purchase additional Common Units from the Issuer. In addition, the Reporting Persons intend to review their investment in the Issuer on a continuing basis and, depending upon the price of and other market conditions relating to the Common Units or other securities of the Issuer, subsequent developments affecting the Issuer, the Issuer’s business and prospects, other investment and business opportunities available to the Reporting Persons, general stock market and economic conditions, tax considerations, and other factors deemed relevant, may decide to increase or decrease the size of their investment in the Issuer.

(b)-(j) The Reporting Persons have no plans or proposals which relate to, or could result in, any of the matters referred to in paragraphs (b) through (j) inclusive of the instructions to Item 4 of the Schedule 13D. The Reporting Persons may, at any time and from time to time, review or reconsider their position, change their purpose or formulate plans or proposals with respect thereto.

Item 5. Interest in Securities of the Issuer

(a)-(b) The percent of class provided for each reporting person below is based on 24,034,240 Common Units outstanding as of February 17, 2014.

1. USA Compression Holdings, LLC

- A. Amount beneficially owned: 5,337,977
- B. Percent of class: 22.2%
- C. Number of units as to which the person has:
 - i. Sole power to vote or to direct the vote: 0
 - ii. Shared power to vote or to direct the vote: 5,337,977
 - iii. Sole power to dispose or to direct the disposition of: 0
 - iv. Shared power to dispose or to direct the disposition of: 5,337,977

2. R/C IV USACP Holdings, L.P.

- A. Amount beneficially owned: 5,337,977
- B. Percent of class: 22.2%

- C. Number of units as to which the person has:
 - i. Sole power to vote or to direct the vote: 0
 - ii. Shared power to vote or to direct the vote: 5,337,977
 - iii. Sole power to dispose or to direct the disposition of: 0
 - iv. Shared power to dispose or to direct the disposition of: 5,337,977
3. **Riverstone/Carlyle Energy Partners IV, L.P.**
- A. Amount beneficially owned: 5,337,977
 - B. Percent of class: 22.2%
 - C. Number of units as to which the person has:
 - i. Sole power to vote or to direct the vote: 0
 - ii. Shared power to vote or to direct the vote: 5,337,977
 - iii. Sole power to dispose or to direct the disposition of: 0
 - iv. Shared power to dispose or to direct the disposition of: 5,337,977
4. **R/C Energy GP IV, LLC**
- A. Amount beneficially owned: 5,337,977
 - B. Percent of class: 22.2%
 - C. Number of units as to which the person has:
 - i. Sole power to vote or to direct the vote: 0

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- ii. Shared power to vote or to direct the vote: 5,337,977
- iii. Sole power to dispose or to direct the disposition of: 0
- iv. Shared power to dispose or to direct the disposition of: 5,337,977

R/C IV Holdings is the record holder of approximately 97.6% of the limited liability company interests of USA Compression Holdings, LLC and is entitled to elect a majority of the members of the board of managers of USA Compression Holdings, LLC. Management and control of R/C IV Holdings is vested in its general partner, R/C IV Partners, which is in turn managed and controlled by its general partner, R/C Energy GP IV. R/C Energy GP IV is managed by an eight person management committee. The reporting persons other than USA Compression Holdings, LLC may therefore be deemed to beneficially own securities of USA Compression Partners, LP owned directly or indirectly by USA Compression Holdings, LLC.

Each of (i) Eric D. Long, Joseph C. Tusa, Jr., William G. Manias, J. Gregory Holloway, David A. Smith and Matthew C. Liuzzi, each of whom are executive officers of Issuer GP, (ii) Aladdin Partners, L.P., a limited partnership affiliated with Mr. Long, and (iii) R/C IV Holdings, own equity interests in USA Compression Holdings.

USA Compression Holdings is managed by a three person board of managers consisting of Mr. Long, Mr. Ward and Ms. Wassenaar. The board of managers exercises investment discretion and control over the units held by USA Compression Holdings. Mr. Long, Mr. Ward and Ms. Wassenaar, each of whom is also a member of the board of directors of Issuer GP, disclaim beneficial ownership of the Common Units and Subordinated Units owned by USA Compression Holdings.

(c) On February 14, 2014, USA Compression Holdings purchased 339,049 pursuant to the Issuer DRIP.

(d) Not applicable.

(e) Not applicable.

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

Joint Filing Agreement

A Joint Filing Agreement, dated February 21, 2014, by and among the Reporting Persons has been executed. A copy of the Joint Filing Agreement is attached hereto as Exhibit 99.1 to this Schedule 13D and is incorporated herein by reference.

Partnership Agreement

Subject to the terms and conditions of the First Amended and Restated Agreement of Limited Partnership of the Issuer (the "Partnership Agreement"), the Issuer GP and its affiliates (including the Reporting Persons) have the right to cause the Issuer to register for resale under the Securities Act of 1933 and applicable state securities laws any units that they hold. The Issuer is obligated to pay all expenses incidental to the registration, excluding underwriting discounts and commissions. The Partnership Agreement additionally contains various provisions with respect to the Common Units and Subordinated Units governing, among other matters, distributions, transfers and allocations of profits and losses to the partners.

Pursuant to the Partnership Agreement, if at any time the Issuer GP and its affiliates own more than 80% of the then-issued and outstanding limited partner interests of any class, the Issuer GP will have the right, which it may assign in whole or in part to any of its affiliates or beneficial owners thereof or to us, to acquire all, but not less than all, of the limited partner interests of the class held by unaffiliated persons as of a record date to be selected by Issuer GP, on at least 10, but not more than 60, days' notice.

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Item 7. Material to be Filed as Exhibits

Exhibit Number	Description of Exhibit
99.1	Joint Filing Agreement.
99.2	First Amended and Restated Agreement of Limited Partnership of USA Compression, LP, dated January 18, 2013 (incorporated by reference to the Issuer's Current Report on Form 8-K (File No. 001-35779) filed with the Commission on January 18, 2013).

SIGNATURES

After reasonable inquiry and to the best of its knowledge and belief, each of the undersigned certifies that the information with respect to it set forth in this statement is true, complete and correct.

Dated: February 21, 2014

USA COMPRESSION HOLDINGS, LLC

By: /s/ J. Gregory Holloway
 Name: J. Gregory Holloway
 Title: Vice President, Secretary and General Counsel

R/C IV USACP HOLDINGS, L.P.

By: /s/ Thomas J. Walker
 Name: Thomas J. Walker
 Title: Authorized Person

RIVERSTONE/CARLYLE ENERGY PARTNERS IV, L.P. By R/C Energy GP IV, LLC, its general partner

By: /s/ Thomas J. Walker
 Name: Thomas J. Walker
 Title: Authorized Person

R/C ENERGY GP IV, LLC

By: /s/ Thomas J. Walker
 Name: Thomas J. Walker
 Title: Authorized Person

Schedule 13D — Signature Page

SCHEDULE A

The name and business address of each of the executive officers and directors of the Reporting Persons are set forth below. The present principal occupation or employment of each of the executive officer and directors of the Reporting Persons also set forth below (outside of similar positions held with respect to other entities directly or indirectly managed or advised by the Issuer or the Reporting Persons).

R/C Energy GP IV, LLC

Investment Committee Members

Name	Present Principal Occupation or Employment	Business Address	Citizenship
David Leuschen	Founder and Senior Managing Directors of Riverstone Holdings LLC	(1)	United States
Pierre F. Lapeyre, Jr.	Founder and Senior Managing Directors of Riverstone Holdings LLC	(1)	United States
Lord John Browne of Madingley	Partner of Riverstone Holdings LLC	(1)	United Kingdom
Michael B. Hoffman	Partner of Riverstone Holdings LLC	(1)	United States
N. John Lancaster	Partner of Riverstone Holdings LLC	(1)	United States
Andrew W. Ward	Partner of Riverstone Holdings LLC	(1)	United States
Daniel A. D'Aniello	Managing Director of The Carlyle Group	(2)	United States
Edward J. Mathias	Managing Director of The Carlyle Group	(2)	United States

USA Compression Holdings, LLC

Board of Managers

Name	Present Principal Occupation or Employment	Business Address	Citizenship
Eric D. Long	President, Chief Executive Officer and Director of USA Compression GP, LLC	(3)	United States
Andrew W. Ward	Partner of Riverstone Holdings LLC	(2)	United States
Olivia C. Wassenaar	Principal of Riverstone Holdings LLC	(2)	United States

Executive Officers

Name	Present Principal Occupation or Employment	Business Address	Citizenship
Eric D. Long	President, Chief Executive Officer and Director of USA Compression GP, LLC	(3)	United States
Joseph C. Tusa, Jr.	Vice President, Chief Financial Officer and Treasurer of USA Compression GP, LLC	(3)	United States
William G. Manias	Vice President and Chief Operating Officer of USA Compression GP, LLC	(3)	United States
J. Gregory Holloway	Vice President, General Counsel and Secretary of USA Compression GP, LLC	(3)	United States
Matthew C. Liuzzi	Vice President — Strategic Development of USA Compression GP, LLC	(3)	United States
David A. Smith	Vice President and President, Northeast Region of USA Compression GP, LLC	(3)	United States
Robin L. Williams	Controller of USA Compression GP, LLC	(3)	United States
Lauren E. Dean	Assistant General Counsel of USA Compression GP, LLC	(3)	United States

(1) c/o Riverstone Holdings LLC, 712 Fifth Avenue, 36th Floor, New York, New York 10019.

(2) c/o The Carlyle Group, 1001 Pennsylvania Avenue, N.W., Suite 200 South, Washington, D.C. 20004.

(3) 100 Congress Avenue, Suite 450, Austin, Texas, 78701.

Schedule 13D — Schedule A

JOINT FILING AGREEMENT

Pursuant to Rule 13d-1(k)(1)(iii) of the Securities Exchange Act of 1934, as amended, each of the undersigned agrees that a single joint Schedule 13D and any amendments thereto may be filed on behalf of each of the undersigned with respect to the securities held by each of them in USA Compression Partners, LP. This Joint Filing Agreement shall be included as an Exhibit to such Schedule 13D.

Dated: February 21, 2014

USA COMPRESSION HOLDINGS, LLC

By: /s/ J. Gregory Holloway
Name: J. Gregory Holloway
Title: Vice President, Secretary and General Counsel

R/C IV USACP HOLDINGS, L.P.

By: /s/ Thomas J. Walker
Name: Thomas J. Walker
Title: Authorized Person

**RIVERSTONE/CARLYLE ENERGY PARTNERS IV, L.P.
By R/C Energy GP IV, LLC, its general partner**

By: /s/ Thomas J. Walker
Name: Thomas J. Walker
Title: Authorized Person

R/C ENERGY GP IV, LLC

By: /s/ Thomas J. Walker
Name: Thomas J. Walker
Title: Authorized Person

Schedule 13D — Exhibit 99.1
