

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

SCHEDULE 13D

(Amendment No. 6)

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)

August 14, 2015

(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
6,581,328

9. Sole Dispositive Power
0

10. Shared Dispositive Power
6,581,328

11. Aggregate Amount Beneficially Owned by Each Reporting Person
6,581,328

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

13. Percent of Class Represented by Amount in Row (11)
19.6% (1)

14. Type of Reporting Person (See Instructions)
OO

(1) Based on 33,586,847 Common Units outstanding as of August 14, 2015.

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
6,581,328

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6,581,328

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

13. Percent of Class Represented by Amount in Row (11)
19.6% (1)

14. Type of Reporting Person (See Instructions)
PN

(1) Based on 33,586,847 Common Units outstanding as of August 14, 2015.

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
6,581,328

9. Sole Dispositive Power
0

10. Shared Dispositive Power
6,581,328

11. Aggregate Amount Beneficially Owned by Each Reporting Person
6,581,328

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

13. Percent of Class Represented by Amount in Row (11)
19.6% (1)

14. Type of Reporting Person (See Instructions)
PN

(1) Based on 33,586,847 Common Units outstanding as of August 14, 2015.

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)

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
6,581,328

9. Sole Dispositive Power
0

10. Shared Dispositive Power
6,581,328

11. Aggregate Amount Beneficially Owned by Each Reporting Person
6,581,328

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

13. Percent of Class Represented by Amount in Row (11)
19.6% (1)

14. Type of Reporting Person (See Instructions)
OO

(1) Based on 33,586,847 Common Units outstanding as of August 14, 2015.

This Amendment No. 6 (this "Amendment") amends and supplements the Schedule 13D filed on February 20, 2014, as amended and supplemented by Amendment No. 1 filed on May 21, 2014, by Amendment No. 2 filed on May 28, 2014, by Amendment No. 3 filed on December 31, 2014, by Amendment No. 4 filed on February 18, 2015 and by Amendment No. 5 filed on May 18, 2015 (as so amended, the "Original Schedule 13D") and, as further amended and supplemented by this Amendment, the "Schedule 13D"), by the Reporting Persons with respect to the Common Units of the Issuer. Capitalized terms used in this Amendment and not otherwise defined shall have the same meanings ascribed to them in the Original Schedule 13D.

Item 3. Source and Amount of Funds or Other Consideration

This Amendment amends and restates the second paragraph of Item 3 of the Original Schedule 13D as set forth below:

"USA Compression Holdings participates in the Issuer's Distribution 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; (iv) 339,049 Common Units in respect of the distribution for the quarter ended December 31, 2013; (v) 357,147 Common Units in respect of the distribution for the quarter ended March 31, 2014; (vi) 371,591 Common Units in respect of the distribution for the quarter ended June 30, 2014; (vii) 420,090 Common Units in respect of the distribution for the quarter ended September 30, 2014; (viii) 521,395 Common Units in respect of the distribution for the quarter ended December 31, 2014; (ix) 456,079 Common Units in respect of the distribution for the quarter ended March 31, 2015; and (x) 583,677 Common Units in respect of the distribution for the quarter ended June 30, 2015."

Item 5. Interest in Securities of the Issuer

This Amendment amends and restates Item 5 of the Original Schedule 13D in its entirety as set forth below:

"(a)-(b) The percent of class provided for each Reporting Person below is based on 33,586,847 Common Units outstanding as of August 14, 2015.

1. **USA Compression Holdings, LLC**
 - A. Amount beneficially owned: 6,581,328
 - B. Percent of class: 19.6%
 - 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: 6,581,328
 - iii. Sole power to dispose or to direct the disposition of: 0
 - iv. Shared power to dispose or to direct the disposition of: 6,581,328
2. **R/C IV USACP Holdings, L.P.**
 - A. Amount beneficially owned: 6,581,328
 - B. Percent of class: 19.6%
 - 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: 6,581,328
 - iii. Sole power to dispose or to direct the disposition of: 0
 - iv. Shared power to dispose or to direct the disposition of: 6,581,328
3. **Riverstone/Carlyle Energy Partners IV, L.P.**
 - A. Amount beneficially owned: 6,581,328
 - B. Percent of class: 19.6%
 - 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: 6,581,328
 - iii. Sole power to dispose or to direct the disposition of: 0
 - iv. Shared power to dispose or to direct the disposition of: 6,581,328

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4. **R/C Energy GP IV, LLC**
 - A. Amount beneficially owned: 6,581,328
 - B. Percent of class: 19.6%
 - 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: 6,581,328
 - iii. Sole power to dispose or to direct the disposition of: 0
 - iv. Shared power to dispose or to direct the disposition of: 6,581,328

R/C IV Holdings is the record holder of approximately 97.6% of the limited liability company interests of USA Compression Holdings and is entitled to elect a majority of the members of the board of managers of USA Compression Holdings. 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 may therefore be deemed to beneficially own securities of USA Compression Partners, LP owned directly or indirectly by USA Compression Holdings.

Each of (i) Eric D. Long, 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, Andrew W. Ward and Olivia C. 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 August 14, 2015, USA Compression Holdings purchased 583,677 Common Units under the Issuer DRIP.
- (d) Not applicable.
- (e) Not applicable.”

Item 7. Material to Be Filed as Exhibits

<u>Exhibit Number</u>	<u>Description</u>
99.1	Joint Filing Agreement (filed as Exhibit 99.1 to the Reporting Persons' Schedule 13D filed with the Commission on February 20, 2014).

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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: August 17, 2015

USA COMPRESSION HOLDINGS, LLC

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

R/C IV USACP HOLDINGS, L.P.

By Riverstone/Carlyle Energy Partners IV, L.P., its general partner

By R/C Energy GP IV, LLC, its general partner

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

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