

SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, DC 20549

SCHEDULE 13G
(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)

(Amendment No.)

InfuSystem Holdings, Inc.

(Name of Issuer)

Common Stock, \$.0001 Par Value

(Title of Class of Securities)

45685K102

(CUSIP Number)

June 30, 2009

(Date of Event Which Requires Filing of this Statement)

Check the appropriate box to designate the rule pursuant to which this
Schedule is filed:

Rule 13d-1(b)

Rule 13d-1(c)

Rule 13d-1(d)

CUSIP No. 45685K102

1. NAME OF REPORTING PERSONS
I.R.S. IDENTIFICATION NO. OF ABOVE PERSONS (ENTITIES ONLY)

Pine River Capital Management L.P.

2. CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP

(a)

(b)

3. SEC USE ONLY

4. CITIZENSHIP OR PLACE OF ORGANIZATION

Delaware, United States

NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH

5. SOLE VOTING POWER

0

6. SHARED VOTING POWER

2,734,976

7. SOLE DISPOSITIVE POWER

0

8. SHARED DISPOSITIVE POWER

2,734,976

9. AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

2,734,976

10. CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES

11. PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9

12.9%

12. TYPE OF REPORTING PERSON

IA

CUSIP No. 45685K102

1. NAME OF REPORTING PERSONS

I.R.S. IDENTIFICATION NO. OF ABOVE PERSONS (ENTITIES ONLY)

Brian Taylor

2. CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP

(a)

(b)

3. SEC USE ONLY

4. CITIZENSHIP OR PLACE OF ORGANIZATION

United States

NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH

5. SOLE VOTING POWER

0

6. SHARED VOTING POWER

2,734,976

7. SOLE DISPOSITIVE POWER

0

8. SHARED DISPOSITIVE POWER

2,734,976

9. AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

2,734,976

10. CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES

11. PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9

12.9%

12. TYPE OF REPORTING PERSON

IN

CUSIP No. 45685K102

Item 1(a). Name of Issuer:

InfuSystem Holdings, Inc.

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

1551 East Lincoln Avenue, Suite 200
Madison Heights, MI 48071

Item 2(a). Name of Persons Filing:

Pine River Capital Management L.P.
Brian Taylor

Item 2(b). Address of Principal Business Office, or if None, Residence:

Pine River Capital Management L.P.
601 Carlson Parkway
Suite 330
Minnetonka, MN 55305

Brian Taylor
Pine River Capital Management L.P.
601 Carlson Parkway
Suite 330
Minnetonka, MN 55305

Item 2(c). Citizenship:

Pine River Capital Management L.P. - Delaware, United States
Brian Taylor - United States

Item 2(d). Title of Class of Securities:

Common Stock, \$.0001 Par Value

Item 2(e). CUSIP Number:

45685K102

Item 3. If This Statement is Filed Pursuant to Rule 13d-1(b), or 13d-2(b) or (c), Check Whether the Person Filing is a:

- (a) Broker or dealer registered under Section 15 of the Exchange Act.
- (b) Bank as defined in Section 3(a)(6) of the Exchange Act.
- (c) Insurance company as defined in Section 3(a)(19) of the Exchange Act.
- (d) Investment company registered under Section 8 of the Investment Company Act.
- (e) An investment adviser in accordance with Rule 13d-1(b)(1)(ii)(E);
- (f) An employee benefit plan or endowment fund in accordance with Rule 13d-1(b)(1)(ii)(F);
- (g) A parent holding company or control person in accordance with Rule 13d-1(b)(1)(ii)(G);
- (h) A savings association as defined in Section 3(b) of the Federal Deposit Insurance Act;
- (i) A church plan that is excluded from the definition of an investment company under Section 3(c)(14) of the Investment Company Act;
- (j) Group, in accordance with Rule 13d-1(b)(1)(ii)(J).

Item 4. Ownership.

Provide the following information regarding the aggregate number and percentage of the class of securities of the issuer identified in Item 1.

(a) Amount beneficially owned:

Pine River Capital Management L.P. - 2,734,976
Brian Taylor - 2,734,976

(b) Percent of class:

Pine River Capital Management L.P. - 12.9%
Brian Taylor - 12.9%

(c) Number of shares as to which such person has:

(i) Sole power to vote or to direct the vote:

Pine River Capital Management L.P. - 0
Brian Taylor - 0

(ii) Shared power to vote or to direct the vote:

Pine River Capital Management L.P. - 2,734,976
Brian Taylor - 2,734,976

(iii) Sole power to dispose or to direct the disposition of:

Pine River Capital Management L.P. - 0
Brian Taylor - 0

(iv) Shared power to dispose or to direct the disposition of:

Pine River Capital Management L.P. - 2,734,976
Brian Taylor - 2,734,976

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

N/A

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

Various persons have the right to receive or the power to direct the receipt of dividends from, or the proceeds from the sale of, the common stock of InfuSystem Holdings, Inc. The interest of Nisswa Aquisition Master Fund Ltd., a Cayman Islands exempted company, in the common stock of InfuSystem Holdings, Inc. amounted to 1,272,476 shares or 6.4% of the outstanding common stock as of the date of this filing.

Item 7. Identification and Classification of the Subsidiary Which Acquired the Security Being Reported on by the Parent Holding Company or Control Person.

N/A

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

N/A

Item 9. Notice of Dissolution of Group.

N/A

Item 10. Certifications.

By signing below, each reporting person certifies that, to the best of its knowledge and belief, the securities referred to above were acquired and are held in the ordinary course of business and were not acquired and are not held for the purpose of or with the effect of changing or influencing the control of the issuer of the securities and were not acquired and are not held in connection with or as a participant in any transaction having that purpose or effect.

SIGNATURE

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.

PINE RIVER CAPITAL MANAGEMENT L.P.*

By: Pine River Capital Management LLC, its general partner

/s/ Brian Taylor

By: Brian Taylor

Title: Sole Member

/s/ Brian Taylor*

Brian Taylor

Date: July 10, 2009

*The Reporting Persons disclaim beneficial ownership in the common stock reported herein except to the extent of their pecuniary interest therein.

EXHIBIT A

AGREEMENT

The undersigned agree that this Schedule 13G dated July 10, 2009 relating to the Common Stock, \$.0001 Par Value of InfuSystem Holdings, Inc. shall be filed on behalf of the undersigned.

PINE RIVER CAPITAL MANAGEMENT L.P.

By: Pine River Capital Management LLC, its general partner

/s/ Brian Taylor

By: Brian Taylor

Title: Sole Member

/s/ Brian Taylor

Brian Taylor