

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, DC 20549

SCHEDULE 13D

(Amendment No. 1)*

Under the Securities Exchange Act of 1934

AQUABOUNTY TECHNOLOGIES, INC.

(Name of Issuer)

Common Stock, par value \$0.01 per share

(Title of Class of Securities)

U0387J108

(CUSIP Number)

Third Security, LLC

1881 Grove Avenue

Radford, Virginia 24141

Attention: Marcus E. Smith, Esq.

(540) 633-7900

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

Copy to:

Intrexon Corporation

Attention: Legal

20374 Seneca Meadows Parkway

Germantown, Maryland 20876

(301) 556-9809

July 24, 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 Schedule 13D, and is filing this schedule because of Rule 13d-1(b)(3) or (4), check the following box .

NOTE: Schedules filed in paper format shall include a signed original and five copies of the schedule, including all exhibits. See §240.13d-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 ("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).

1	NAMES OF REPORTING PERSONS I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY) RANDAL J. KIRK	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>	
3	SEC USE ONLY	
4	SOURCE OF FUNDS (SEE INSTRUCTIONS) PF	
5	CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM 2(D) OR 2(E) <input type="checkbox"/>	
6	CITIZENSHIP OR PLACE OF ORGANIZATION United States	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	7	SOLE VOTING POWER 837,554
	8	SHARED VOTING POWER 5,162,277
	9	SOLE DISPOSITIVE POWER 837,554
	10	SHARED DISPOSITIVE POWER 5,162,277
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 5,999,831	
12	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS) <input type="checkbox"/>	
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11) 67.5%	
14	TYPE OF REPORTING PERSON (SEE INSTRUCTIONS) IN	

1	NAMES OF REPORTING PERSONS I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY) INTREXON CORPORATION I.R.S. IDENTIFICATION NO.: 26-0084895	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>	
3	SEC USE ONLY	
4	SOURCE OF FUNDS (SEE INSTRUCTIONS) WC	
5	CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM 2(D) OR 2(E) <input type="checkbox"/>	
6	CITIZENSHIP OR PLACE OF ORGANIZATION Virginia	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	7	SOLE VOTING POWER 0
	8	SHARED VOTING POWER 5,162,277
	9	SOLE DISPOSITIVE POWER 0
	10	SHARED DISPOSITIVE POWER 5,162,277
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 5,162,277	
12	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS) <input type="checkbox"/>	
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11) 58.0%	
14	TYPE OF REPORTING PERSON (SEE INSTRUCTIONS) CO	

1	NAMES OF REPORTING PERSONS I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY) THIRD SECURITY, LLC I.R.S. IDENTIFICATION NO.: 54-1923091	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP	
3	SEC USE ONLY	
4	SOURCE OF FUNDS (SEE INSTRUCTIONS) WC	
5	CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM 2(D) OR 2(E)	
6	CITIZENSHIP OR PLACE OF ORGANIZATION Virginia	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	7	SOLE VOTING POWER 634,994
	8	SHARED VOTING POWER 0
	9	SOLE DISPOSITIVE POWER 634,994
	10	SHARED DISPOSITIVE POWER 0
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 634,994	
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) 7.1%	
14	TYPE OF REPORTING PERSON (SEE INSTRUCTIONS) OO – limited liability company	

This Amendment No. 1 (the "Amendment") amends and supplements the Statement on Schedule 13D, dated January 18, 2017 and filed on January 20, 2017 (the "Original Schedule 13D"), relating to the Common Stock, par value \$0.001 per share (the "Common Stock"), of AquaBounty Technologies, Inc., a Delaware corporation (the "Company"). Mr. Randal J. Kirk ("Mr. Kirk"), Intrexon Corporation, a Virginia corporation that is controlled by Mr. Kirk ("Intrexon"), and Third Security, LLC, a Virginia limited liability company that is managed by Mr. Kirk ("Third Security" and, together with Mr. Kirk and Intrexon, the "Reporting Persons") are filing this Amendment to disclose the distribution of 338,816 shares of Common Stock by New River Management V, LP, a Delaware limited partnership whose general partner is managed by Third Security ("NRM V") in connection with the liquidation at the end of its term, pursuant to its Agreement of Limited Partnership dated May 11, 2007. In connection with such liquidation, 245,840 of such shares are being distributed to entities under the common control of Mr. Kirk.

Item 4. Purpose of Transaction.

Item 4 of the Original Schedule 13D is hereby amended and supplemented as follows:

The Reporting Persons are filing this Amendment to disclose the distribution of 338,816 shares of Common Stock by NRM V in connection with the liquidation at the end of its term, pursuant to its Agreement of Limited Partnership dated May 11, 2007.

In connection with the liquidation, 245,840 of such shares are being distributed to entities under the common control of Mr. Kirk.

Item 5. Interest in Securities of the Issuer.

The information contained on the cover pages to this Statement and the information set forth or incorporated in Items 2, 3, 4 and 6 is incorporated herein by reference.

(a) and (b) See Items 11 and 13 of the cover pages to this Statement for the aggregate number of shares and percentage of issued and outstanding shares of Common Stock owned by the Reporting Persons. The percentage ownership is calculated based on 8,895,094 shares of Common Stock issued and outstanding as of May 1, 2017, as disclosed by the Company in its Quarterly Report on Form 10-Q for the period ended March 31, 2017 and filed on May 9, 2017.

Reporting Person	Amount of Common Stock Beneficially Owned	Percent of Class	Sole Power to Vote or Direct the Vote ⁽¹⁾	Shared Power to Vote or Direct the Vote	Sole Power to Dispose or to Direct the Disposition ⁽¹⁾	Shared Power to Dispose or to Direct the Disposition
Randal J. Kirk	5,999,831	67.5%	837,554	5,162,277	837,554	5,162,277
Intrexon Corporation	5,162,277	58.0%	--	5,162,277	--	5,162,277
Third Security, LLC ⁽¹⁾	634,994	7.1%	634,994	--	634,994	--

⁽¹⁾ The indicated shares are owned by various entities managed by Third Security, none of which beneficially owns more than 5.0% individually.

Mr. Kirk could be deemed to have indirect beneficial ownership of the shares of Common Stock directly beneficially owned by Intrexon and those shares held by entities managed by Third Security.

(c) Except as set forth in this Statement, none of the Reporting Persons have engaged in any transactions in the Common Stock in the past 60 days.

(d)-(e) Not Applicable

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

The Reporting Persons' responses to Items 3, 4 and 5 are incorporated herein by reference.

Item 7. Material to be Filed as Exhibits.

Exhibit 1 Joint Filing Agreement, dated as of July 26, 2017, by and among Mr. Kirk, Intrexon and Third Security

SIGNATURES

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

Date: July 26, 2017

/s/ Randal J. Kirk

Randal J. Kirk

INTREXON CORPORATION

By: /s/ Randal J. Kirk

Randal J. Kirk

Chief Executive Officer

THIRD SECURITY, LLC

By: /s/ Randal J. Kirk

Randal J. Kirk

Manager

EXHIBIT INDEX

[Exhibit 1](#)

Joint Filing Agreement, dated as of July 26, 2017, by and among Mr. Kirk, Intrexon and Third Security

Joint Filing Agreement

In accordance with Rule 13d-1(k) promulgated under the Securities Exchange Act of 1934, as amended, the persons named below agree to the joint filing on behalf of each of them a Statement on Schedule 13D (including amendments thereto) with regard to the common stock of AquaBounty Technologies, Inc., and further agree that this Joint Filing Agreement be included as an exhibit to such joint filings. In evidence thereof, the undersigned, being duly authorized, hereby execute this agreement as of the 26th day of July, 2017.

/s/ Randal J. Kirk

Randal J. Kirk

INTREXON CORPORATION

By: /s/ Randal J. Kirk

Randal J. Kirk
Chief Executive Officer

THIRD SECURITY, LLC

By: /s/ Randal J. Kirk

Randal J. Kirk
Manager
