

SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 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)

UNDER THE SECURITIES EXCHANGE ACT OF 1934*

Lexicon Genetics Incorporated

(Name of Issuer)

Common Stock, \$0.001 par value per share

(Title of Class of Securities)

528872 10 4

(CUSIP Number)

January 5, 2004

(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)

[X] Rule 13d-1(c)

[] Rule 13d-1(d)

*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 the
disclosures provided in a prior cover page.

The information required in 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).

CUSIP No. 528872 10 4

13G

Page 2 of 5 Pages

1 NAME OF REPORTING PERSON
S.S. OR I.R.S. IDENTIFICATION NO. OF ABOVE PERSON

Acqua Wellington Opportunity I Limited

2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP* (a) []

(b) []

3 SEC USE ONLY

4 CITIZENSHIP OR PLACE OF ORGANIZATION

Bahamas

5 SOLE VOTING POWER
NUMBER OF SHARES 3,500,000

6 SHARED VOTING POWER
BENEFICIALLY OWNED BY

EACH
REPORTING
PERSON
WITH

0

7

SOLE DISPOSITIVE POWER

3,500,000

8

SHARED DISPOSITIVE POWER

0

9 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

3,500,000

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

[]

11 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9

5.6%

12 TYPE OF REPORTING PERSON*

00 (A corporation organized under the laws of the Bahamas)

*SEE INSTRUCTIONS BEFORE FILLING OUT

ITEM 1.

- (a) Name of Issuer:
Lexicon Genetics Incorporated
- (b) Address of Issuer's Principal Executive Offices:
8800 Technology Forest Place
The Woodlands, Texas 77381

ITEM 2.

- (a) Name of Person Filing:
Acqua Wellington Opportunity I Limited
- (b) Address of Principal Business Office or, if none, Residence:
Acqua Wellington Opportunity I Limited
Shirlaw House
87 Shirley Street
Nassau, Bahamas
- (c) Citizenship:
Bahamas
- (d) Title of Class of Securities:
Common Stock, \$0.001 par value per share
- (e) CUSIP Number:
528872 10 4

ITEM 3. IF THIS STATEMENT IS FILED PURSUANT TO SS.SS.240.13D-1(b) OR 240.13D-2(b) OR (c), CHECK WHETHER THE PERSON FILING IS A:

Not applicable.

ITEM 4. OWNERSHIP.

The following is information regarding the aggregate number and percentage of the class of securities of the issuer identified in Item 1 as of January 7, 2004:

(a) Amount beneficially owned: 3,500,000

(b) Percent of class: 5.6%

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

(i) Sole power to vote or to direct the vote: 3,500,000

(ii) Shared power to vote or to direct the vote: None

(iii) Sole power to dispose or to direct the disposition of: 3,500,000

(iv) Shared power to dispose or to direct the disposition of: None

ITEM 5. OWNERSHIP OF FIVE PERCENT OR LESS OF A CLASS

Not applicable.

ITEM 6. OWNERSHIP OF MORE THAN FIVE PERCENT ON BEHALF OF ANOTHER PERSON

Not applicable.

ITEM 7. IDENTIFICATION AND CLASSIFICATION OF THE SUBSIDIARY WHICH ACQUIRED THE SECURITY BEING REPORTED ON BY THE PARENT HOLDING COMPANY OR CONTROL PERSON

Not applicable.

ITEM 8. IDENTIFICATION AND CLASSIFICATION OF MEMBERS OF THE GROUP

Not applicable.

ITEM 9. NOTICE OF DISSOLUTION OF GROUP

Not applicable.

ITEM 10. CERTIFICATION

Certification pursuant to ss.240.13d-1(c):

By signing below I certify that, to the best of my knowledge and belief, the securities referred to above 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.

Dated: January 8, 2004

ACQUA WELLINGTON OPPORTUNITY I LIMITED

By: /s/ Michael Taylor

Name: Michael Taylor
Title: Director