Instruction 1(b).

FORM 4

Check this box if no longer subject to Section 16. Form 4 or Form 5 obligations may continue. See

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

| STATEMENT OF CHAN | IGES IN BENEFIC | CIAL OWNERSHIP |
|-------------------|-----------------|----------------|
| | | |

OMB APPROVAL OMB Number: Estimated average burden hours per response: 0.5

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934 or Section 30(h) of the Investment Company Act of 1940

| 1. Name and Address of Reporting Person * Muller Edward M | | | | | 2. Issuer Name and Ticker or Trading Symbol METABOLIX, INC. [MBLX] | | | | | | | | | ionship o all applic Directo | , | | | | | |
|--|--|------------|--|---------|---|---|--------|-----------|---|---------------|-----------------|---|--|---|---|---|---|---|--|--|
| (Last) | (F | , | (Middle) | | | 3. Date of Earliest Transaction (Month/Day/Year) 06/07/2012 | | | | | | | | | Officer below) | (give title | | Other (s below) | pecify | |
| 21 ERIE STREET | | | | | 4. If | If Amendment, Date of Original Filed (Month/Day/Year) | | | | | | | | 6. Individual or Joint/Group Filing (Check Applicable | | | | | | |
| (Street) CAMBRIDGE MA 02139 | | | | | | | | | | | | X Form filed by One Reporting Person Form filed by More than One Reporting Person | | | | | | | | |
| (City) | (S | tate) | (Zip) | | | | | | | | | | | | | | | | | |
| | Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned | | | | | | | | | | | | | | | | | | | |
| 1. Title of Security (Instr. 3) 2. Transac Date (Month/Da | | | | | Execution I | | Date, | Code (Ins | | | | 4 and Secu Bene Own | | s Illy ollowing | Form: Direct (D) or Indirect (I) (Instr. 4) | | 7. Nature of Indirect Beneficial Ownership (Instr. 4) | | | |
| | | | | | | | Code V | | Amount | (A) or (D) | | | Reported Transacti (Instr. 3 a | tion(s) | | | insu. 4) | | | |
| | Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities) | | | | | | | | | | | | | | | | | | | |
| 1. Title of Derivative Security (Instr. 3) | 2. Conversion or Exercise Price of Derivative Security | | 3A. Deemed Execution Date if any (Month/Day/Yea | ite, Tr | Code (Inst | | | | 6. Date Exercisal Expiration Date (Month/Day/Year | | of Securities | | ies g Security | Derivative Security | | 9. Number derivative Securities Beneficial Owned Following Reported Transactio (Instr. 4) | ly | Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | 11. Nature of Indirect Beneficial Ownership (Instr. 4) | |
| | | | | Co | ode | v | (A) | (D) | Date Exercisable | Ex Da | piration ate | Title | Amount or Number of Shares | | | | | | | |
| Stock Option (right to buy) | \$2.16 | 06/07/2012 | | | A | | 10,000 | | 06/07/2013 | 06/ | /07/2022 | Common stock | 10,000 | | \$0 | 10,000 |) | D | | |

Explanation of Responses:

/s/ Sarah P. Cecil, attorney-in-

fact

** Signature of Reporting Person

Date

06/11/2012

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, see Instruction 6 for procedure.

Persons who respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB Number.

^{*} If the form is filed by more than one reporting person, see Instruction 4 (b)(v).

^{**} Intentional misstatements or omissions of facts constitute Federal Criminal Violations See 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).