

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

Check this box if no longer subject to Section 16. Form 4 or Form 5 obligations may continue. See Instruction 1(b).

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

| OMB APPROVAL | |
|--|-----------|
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| | | |
|---|--|---|
| 1. Name and Address of Reporting Person * <u>Peoples Oliver P</u> (Last) (First) (Middle) <u>C/O METABOLIX, INC.</u> <u>21 ERIE STREET</u> (Street) <u>CAMBRIDGE MA 02139</u> (City) (State) (Zip) | 2. Issuer Name and Ticker or Trading Symbol <u>METABOLIX, INC. [MBLX]</u> | 5. Relationship of Reporting Person(s) to Issuer (Check all applicable) <input checked="" type="checkbox"/> Director 10% Owner <input checked="" type="checkbox"/> Officer (give title below) Other (specify below) <u>VP Research, CSO</u> |
| | 3. Date of Earliest Transaction (Month/Day/Year) <u>10/01/2007</u> | |
| 4. If Amendment, Date of Original Filed (Month/Day/Year) | | |

Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned

| 1. Title of Security (Instr. 3) | 2. Transaction Date (Month/Day/Year) | 2A. Deemed Execution Date, if any (Month/Day/Year) | 3. Transaction Code (Instr. 8) | | 4. Securities Acquired (A) or Disposed Of (D) (Instr. 3, 4 and 5) | | | 5. Amount of Securities Beneficially Owned Following Reported Transaction(s) (Instr. 3 and 4) | 6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | 7. Nature of Indirect Beneficial Ownership (Instr. 4) |
|---------------------------------|--------------------------------------|--|--------------------------------|---|---|------------|------------------------|---|--|---|
| | | | Code | V | Amount | (A) or (D) | Price | | | |
| Common Stock | 12/06/2007 | | M ⁽¹⁾ | | 20,000 | A | \$3.3036 | 340,762 | D | |
| Common Stock | 12/06/2007 | | S ⁽¹⁾ | | 20,000 | D | \$21.08 ⁽³⁾ | 320,762 | D | |
| Common Stock | | | | | | | | 16,346 | I | By George Stormont Trust ⁽²⁾ |

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 | 3. Transaction Date (Month/Day/Year) | 3A. Deemed Execution Date, if any (Month/Day/Year) | 4. Transaction Code (Instr. 8) | | 5. Number of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5) | | 6. Date Exercisable and Expiration Date (Month/Day/Year) | | 7. Title and Amount of Securities Underlying Derivative Security (Instr. 3 and 4) | 8. Price of Derivative Security (Instr. 5) | 9. Number of derivative Securities Beneficially Owned Following Reported Transaction(s) (Instr. 4) | 10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | 11. Nature of Indirect Beneficial Ownership (Instr. 4) | |
|--|--|--------------------------------------|--|--------------------------------|---|--|--------|--|-----------------|---|--|--|---|--|-------|
| | | | | Code | V | (A) | (D) | Date Exercisable | Expiration Date | | | | | | Title |
| Stock Option (Right to Buy) | \$3.3036 | 12/06/2007 | | M ⁽¹⁾ | | | 20,000 | (4) | 03/08/2010 | Common Stock | 20,000 | \$0 | 51,922 | D | |

Explanation of Responses:

- Transaction effected pursuant to a rule 10b5-1 trading plan established by the reporting person on 11/28/07.
- Held by a trust for the benefit of certain family members. The reporting person disclaims beneficial ownership except to the extent of his pecuniary interest, if any.
- Price reflected is the average sale price for the shares sold. Please see attached Exhibit 99 for a complete list of all sales by sale price.
- This stock option is fully vested and exercisable.

/s/ Sarah P. Cecil, attorney-in-fact 12/10/2007

** Signature of Reporting Person Date

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

* 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).

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.

PRICE QUANTITY

| | |
|---------|-------|
| \$20.80 | 200 |
| \$20.82 | 300 |
| \$20.83 | 500 |
| \$20.85 | 962 |
| \$20.86 | 538 |
| \$20.87 | 700 |
| \$20.88 | 368 |
| \$20.89 | 319 |
| \$20.90 | 300 |
| \$20.91 | 71 |
| \$20.92 | 800 |
| \$20.93 | 213 |
| \$20.94 | 229 |
| \$20.95 | 100 |
| \$20.95 | 300 |
| \$20.96 | 200 |
| \$20.98 | 200 |
| \$20.99 | 1,700 |
| \$21.00 | 500 |
| \$21.01 | 200 |
| \$21.02 | 500 |
| \$21.03 | 400 |
| \$21.04 | 200 |
| \$21.05 | 100 |
| \$21.07 | 83 |
| \$21.08 | 500 |
| \$21.12 | 100 |
| \$21.14 | 17 |
| \$21.15 | 600 |
| \$21.17 | 917 |
| \$21.18 | 109 |
| \$21.20 | 1,000 |
| \$21.20 | 901 |
| \$21.21 | 800 |
| \$21.22 | 399 |
| \$21.23 | 459 |
| \$21.24 | 815 |
| \$21.25 | 427 |
| \$21.26 | 73 |
| \$21.29 | 300 |
| \$21.30 | 200 |
| \$21.32 | 100 |
| \$21.33 | 500 |
| \$21.35 | 200 |
| \$21.36 | 800 |
| \$21.37 | 600 |
| \$21.39 | 200 |
| \$24.26 | 400 |
| \$24.27 | 100 |
| \$24.28 | 100 |
| \$24.30 | 100 |
| \$23.44 | 100 |
| \$23.45 | 321 |
| \$23.46 | 200 |
| \$23.67 | 200 |
| \$23.69 | 200 |
| \$23.74 | 300 |
| \$23.85 | 100 |
| \$23.86 | 100 |
| \$23.88 | 200 |
| \$23.93 | 100 |
| \$23.94 | 279 |
| \$23.95 | 100 |
| \$23.97 | 300 |
| \$23.99 | 300 |
| \$24.00 | 100 |
| \$24.03 | 100 |
| \$24.24 | 200 |
| \$24.25 | 100 |
| \$24.27 | 193 |
| \$24.28 | 1,200 |
| \$24.33 | 300 |
| \$24.34 | 200 |
| \$24.36 | 100 |
| \$24.39 | 100 |
| \$24.41 | 207 |
| \$24.42 | 400 |

