FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

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

STATEMENT OF CHANGES IN BENEFICIAL 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]									Relationship of Reporting Person(s) to Issuer (Check all applicable) X Director 10% Owner					
(Last) (First) (Middle) C/O METABOLIX, INC.						3. Date of Earliest Transaction (Month/Day/Year) 06/04/2009									Officer below)	(give title		Other (s below)	·	
21 ERIE STREET						4. If Amendment, Date of Original Filed (Month/Day/Year)									6. Individual or Joint/Group Filing (Check Applicable Line)					
(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/Date)						Executio			Code (In:	Transaction Disposed Code (Instr. 5)		ties Acquir I Of (D) (Ins		and Securitie Beneficia Owned F		es For ally (D) following (I) (: Direct Indirect str. 4)	7. Nature of Indirect Beneficial Ownership	
									Code	,	Amount	(A) o (D)	r Price		Reported Transact (Instr. 3 a	on(s)			(Instr. 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	3. Transaction Date (Month/Day/Year)	3A. Deemee Execution I if any (Month/Day	Date,	4. Transa Code (8)		of		6. Date Exercisal Expiration Date (Month/Day/Year		of Securities		ties ig e Security	D	Price of erivative ecurity estr. 5)	9. Number derivative Securities Beneficial Owned Following Reported Transactio (Instr. 4)	lly	10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	Beneficial Ownership (Instr. 4)	
					Code	v	(A)	(D)	Date Exercisable		piration ate	Title	Amoun or Number of Shares							
Stock Option (right to buy)	\$7.31	06/04/2009			A		10,000		06/04/2010	06.	/04/2019	Common Stock	10,000		\$0	10,000		D		

Explanation of Responses:

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

fact

** Signature of Reporting Person

06/05/2009

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.