Harding David
Form 4
January 10, 2012

FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP OF SECURITIES

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934, Section 17(a) of the Public Utility Holding Company Act of 1935 or Section 30(h) of the Investment Company Act of 1940

OMB APPROVAL

OMB Number:	3235-0287
Expires:	January 31, 2005
Estimated average burden hours per response...	0.5

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

(Print or Type Responses)

1. Name and Address of Reporting Person *
Harding David

(Last) (First) (Middle)

35 CROSBY DRIVE

(Street)

BEDFORD, MA 01730

(City) (State) (Zip)

2. Issuer Name **and** Ticker or Trading Symbol
HOLOGIC INC [HOLX]

3. Date of Earliest Transaction (Month/Day/Year)
01/06/2012

4. If Amendment, Date Original Filed(Month/Day/Year)

5. Relationship of Reporting Person(s) to Issuer

(Check all applicable)

_____ Director _____ 10% Owner
__X__ Officer (give title below) _____ Other (specify below)
SVP, International

6. Individual or Joint/Group Filing(Check Applicable Line)
_X_ Form filed by One Reporting Person
___ Form filed by More than One Reporting Person

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 (1)	01/06/2012		M		5,416	A	$ 18.465	79,785	D	
Common Stock (2)	01/06/2012		S		5,416	D	$ 18.53	74,369	D	
Common Stock (1)	01/06/2012		M		36,850	A	$ 18.465	111,219	D	
Common Stock (2)	01/06/2012		S		36,850	D	$ 18.53	74,369	D	

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

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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 Underlying Securiti (Instr. 3 and 4)	
				Code	V	(A)	(D)	Date Exercisable	Expiration Date	Title	Amou or Numb of Sha
Non-qualified Stock Option (Right to Buy) (1) (3)	$ 18.465	01/06/2012		M		5,416		(4)	01/24/2012	Common Stock	5,41
Non-qualified Stock Option (Right to Buy) (1)	$ 18.465	01/06/2012		M		36,850		(4)	01/24/2012	Common Stock	36,8

Reporting Owners

Reporting Owner Name / Address	Relationships			
	Director	10% Owner	Officer	Other
Harding David 35 CROSBY DRIVE BEDFORD, MA 01730			SVP, International	

Signatures

/s/ Mark J. Casey, Attorney-In-Fact for David P. Harding	01/10/2012
**Signature of Reporting Person	Date

Explanation of Responses:

***** 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).

(1) This transaction constitutes a cashless exercise of a Non-Qualified Stock Option granted January 24, 2006 which would otherwise expire January 24, 2012.

(2) The sale reported on this Form 4 was made pursuant to a written trading plan adopted in accordance with SEC Rule 10b5-1 on 5/17/2011.

(3) Due to the acceleration of stock options in connection with the merger of Cytyc Corporation on October 22, 2007, any unvested Incentive Stock Options exceeding the guidelines set forth under Section 422(d) of the Internal Revenue Code shall be treated as Non-Qualified Stock Options.

(4) This non-qualified stock option was originally issued pursuant to Cytyc Corporation's 2004 Omnibus Stock Plan on January 24, 2006 and became fully exercisable on October 22, 2007 in connection with the merger.

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