

DIMICK NEIL F  
Form 4  
May 20, 2011

**FORM 4**

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

OMB APPROVAL

OMB Number: 3235-0287  
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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 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

(Print or Type Responses)

1. Name and Address of Reporting Person \*  
DIMICK NEIL F

(Last) (First) (Middle)

6035 STONERIDGE DRIVE

(Street)

PLEASANTON, CA 94588

(City) (State) (Zip)

2. Issuer Name and Ticker or Trading Symbol  
THORATEC CORP [THOR]

3. Date of Earliest Transaction  
(Month/Day/Year)  
05/18/2011

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

5. Relationship of Reporting Person(s) to Issuer

(Check all applicable)

Director  10% Owner  
 Officer (give title below)  Other (specify below)

6. Individual or Joint/Group Filing(Check Applicable Line)  
 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)	
Common Stock	05/18/2011 <sup>(1)</sup>		S	375	D	\$ 33.2133	33,580	D
						<sup>(2)</sup>		
Common Stock	05/19/2011 <sup>(1)</sup>		S	250	D	\$ 35	33,330	D
Common Stock	05/20/2011 <sup>(1)</sup>		S	625	D	\$ 35.6556	32,705	D
						<sup>(3)</sup>		

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

**Persons who respond to the collection of information contained in this form are not required to respond unless the form**

SEC 1474 (9-02)

displays a currently valid OMB control number.

**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 Underlying Securities (Instr. 3 and 4)	8. Price of Derivative Security (Instr. 5)	9. Number of Derivative Securities Owned Beneficially (Instr. 5)
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### Reporting Owners

Reporting Owner Name / Address	Relationships			
	Director	10% Owner	Officer	Other
DIMICK NEIL F 6035 STONERIDGE DRIVE PLEASANTON, CA 94588	X			

### Signatures

/s/ David A. Lehman, 05/20/2011  
Attorney-In-Fact

\*\*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) Shares of Common Stock sold pursuant to a Sales Plan established by the Reporting Person on May 3, 2010, which Sales Plan is intended to comply with the requirements of Rule 10b5-1(c)(1) under the Securities Exchange Act 1934, as amended.  
  
This transaction was executed in multiple trades in prices ranging from \$33.00 to \$33.57. The price reported above reflects the weighted average sale price. The Reporting Person hereby undertakes to provide upon request to the SEC staff, the Issuer, or a stockholder of the Issuer, information regarding the number of shares and prices at which the transaction was effected.
- (2) This transaction was executed in multiple trades in prices ranging from \$35.43 to \$35.82. The price reported above reflects the weighted average sale price. The Reporting Person hereby undertakes to provide upon request to the SEC staff, the Issuer, or a stockholder of the Issuer, information regarding the number of shares and prices at which the transaction was effected.
- (3)

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, see Instruction 6 for procedure. Potential persons who are to respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB number.