FORM 4

## UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

OMB APPROVAL
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OMB Number: 3235-0287 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).

## STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

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

Name and Address of Reporting Person*  Determ Mailliams D.  Determine The Company of the Co						2. Issuer Name <b>and</b> Ticker or Trading Symbol ADHEREX TECHNOLOGIES INC								Relationship of Reporting Person(s) to Issuer (Check all applicable)					
Peters William P						AMEX:ADH ]								X Director		10% Owner		ner	
(Last) (First) (Middle)					•								X	Officer (g below)	ive title	Other (specify below)		ecify	
4620 CREEKSTONE DRIVE, SUITE 200						3. Date of Earliest Transaction (Month/Day/Year) 12/03/2007								Chairman and CEO					
(Street) DURHAM NC 27703					4. If Amendment, Date of Original Filed (Month/Day/Year)								Individual or Joint/Group Filing (Check Applicable Line)     X Form filed by One Reporting Person						
(City) (State) (Zip)													Form filed by More than One Reporting Person					g Person	
Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned																			
1. Title of Security (Instr. 3)  2. Transa Date (Month/D						Execution if any	2A. Deemed Execution Date, if any (Month/Day/Year)		Transaction Disposed Code (Instr.			ies Acquired (A) or Of (D) (Instr. 3, 4 and		5. Amount of Securities Beneficially Following Reported	Owned	6. Own Form: (D) or I (I) (Inst	Direct Indirect B tr. 4) C	7. Nature of Indirect Beneficial Ownership	
									v	Amount	(A) or (D)	Price	- 1	Transaction (Instr. 3 and	action(s)			nstr. 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. 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)		ng	8. Price of Derivative Security (Instr. 5)	9. Number of derivative Securities Beneficially Owned Following Reported Transaction(s)	e s ally g	10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	11. Nature of Indirect Beneficial Ownership (Instr. 4)	
				Code	v	(A)		Date Exercisable		xpiration ate	Title	Amount of Number of Shares			(Instr. 4)				
Stock Options (Right to buy)	\$0.28	12/03/2007		A		1,000,000		12/03/2007 <sup>(</sup>	1) 1	2/03/2014	Common Stock	1,000,0	000	\$0	1,000,0	000	D		

## **Explanation of Responses:**

1. The options to which this note relates vest in three (3) equal installments beginning on the date reported above.

D. Scott Murray, Attorney-in-

\*\* Signature of Reporting Person

**Fact** 

12/05/2007

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.