

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

OMB APPROVAL	
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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).

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* <u>Mermelstein Fred H</u>			2. Issuer Name and Ticker or Trading Symbol <u>ADHEREX TECHNOLOGIES INC [AMEX:ADH]</u>			5. Relationship of Reporting Person(s) to Issuer (Check all applicable) <input checked="" type="checkbox"/> Director 10% Owner Officer (give title below) Other (specify below)		
(Last)	(First)	(Middle)	3. Date of Earliest Transaction (Month/Day/Year) <u>04/30/2007</u>			6. Individual or Joint/Group Filing (Check Applicable Line) <input checked="" type="checkbox"/> Form filed by One Reporting Person Form filed by More than One Reporting Person		
<u>4620 CREEKSTONE DRIVE, SUITE 200</u>			4. If Amendment, Date of Original Filed (Month/Day/Year)					
(Street) <u>DURHAM NC 27703</u>								
(City) (State) (Zip)								

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								35,591	D	
Common Stock								1,327,819	I	By Bymer, Inc.

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					
Stock Options (Right to buy)	\$0.28							02/28/2007	02/28/2014	Common Stock 50,000		50,000	D	
Stock Options (Right to buy)	\$1.2							05/18/2006	05/18/2012	Common Stock 18,621		18,621	D	
Stock Options (Right to buy)	\$1.2							09/21/2006	09/21/2012	Common Stock 30,000		30,000	D	
Stock Options (Right to buy)	\$1.7							11/22/2003	05/03/2010	Common Stock 7,800		7,800	D	
Stock Options (Right to buy)	\$2.9							05/21/2004	05/21/2011	Common Stock 4,000		4,000	D	
Stock Options (Right to buy)	\$3.25							03/01/2005	03/01/2011	Common Stock 18,621		18,621	D	
Stock Options (Right to buy)	\$0.63	04/30/2007		A		230,000		04/30/2007 ⁽¹⁾	04/30/2014	Common Stock 230,000	\$0	230,000	D	
Warrants (Right to buy)	\$2.15							12/19/2003	12/19/2008	Common Stock 23,078		23,078	D	
Warrants (Right to buy)	\$3.585							05/30/2003	11/20/2007	Common Stock 76,384		76,384	I	By Bymer, Inc.

Explanation of Responses:

1. The options to which this note relates are subject to vesting in three (3) installments with one-third vesting immediately and the remaining shares vesting on the first and second anniversary of the Grant Date reported above.

D. Scott Murray, Attorney-in-Fact

05/02/2007

** 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.

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