

INITIAL STATEMENT OF BENEFICIAL OWNERSHIP OF SECURITIES

OMB APPROVAL

OMB Number: 3235-0104

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* <u>KLEIN JAMES A JR</u> (Last) (First) (Middle) 4620 CREEKSTONE DRIVE, SUITE 200 (Street) DURHAM NC 27703 (City) (State) (Zip)	2. Date of Event Requiring Statement (Month/Day/Year) 02/21/2007	3. Issuer Name and Ticker or Trading Symbol <u>ADHEREX TECHNOLOGIES INC [AMEX:ADH]</u> 4. Relationship of Reporting Person(s) to Issuer (Check all applicable) Director _____ 10% Owner _____ <input checked="" type="checkbox"/> Officer (give title below) _____ Other (specify below) _____ <div style="text-align: center;">CFO</div>	5. If Amendment, Date of Original Filed (Month/Day/Year) 03/05/2007
			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

Table I - Non-Derivative Securities Beneficially Owned

1. Title of Security (Instr. 4)	2. Amount of Securities Beneficially Owned (Instr. 4)	3. Ownership Form: Direct (D) or Indirect (I) (Instr. 5)	4. Nature of Indirect Beneficial Ownership (Instr. 5)
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Table II - Derivative Securities Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)

1. Title of Derivative Security (Instr. 4)	2. Date Exercisable and Expiration Date (Month/Day/Year)		3. Title and Amount of Securities Underlying Derivative Security (Instr. 4)		4. Conversion or Exercise Price of Derivative Security	5. Ownership Form: Direct (D) or Indirect (I) (Instr. 5)	6. Nature of Indirect Beneficial Ownership (Instr. 5)
	Date Exercisable	Expiration Date	Title	Amount or Number of Shares			
Stock Options (Right to buy)	02/28/2007 ⁽¹⁾	02/28/2014	Common Stock	50,000	0.28	D	
Stock Options (Right to buy)	12/14/2006 ⁽²⁾	12/14/2012	Common Stock	39,000	0.88	D	
Stock Options (Right to buy)	09/21/2006 ⁽²⁾	09/21/2012	Common Stock	13,500	1.2	D	
Stock Options (Right to buy)	12/17/2005 ⁽²⁾	12/17/2011	Common Stock	5,000	1.95 ⁽³⁾	D	
Stock Options (Right to buy)	07/24/2004 ⁽⁴⁾⁽⁵⁾	04/26/2011	Common Stock	200,000	2.65 ⁽³⁾	D	
Stock Options (Right to buy)	12/17/2004 ⁽⁶⁾⁽⁵⁾	05/21/2011	Common Stock	15,000	2.9 ⁽³⁾	D	

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.
2. The options to which this note relates vest in three (3) equal installments beginning on the date reported above.
3. Exercise price for these options are in Canadian Dollars.
4. The options to which this note relates vest in four (4) equal installments on 7/24/2004, 4/26/2005, 4/26/2006 and 4/26/2007
5. This Form is being amended due to a miscalculation in the Exercisable Date/Vesting schedule previously reported for these options.
6. The options to which this note relates are subject to vesting in three (3) installments on 12/17/2004, 5/21/2006 and 5/21/2007.

D. Scott Murray, Attorney-in-Fact 03/16/2007

** 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 5 (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.