

### 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

<b>1. Name and Address of Reporting Person*</b> <u>Butts Robert W</u> <hr/> (Last) (First) (Middle) 1 BURTON HILLS BOULEVARD, SUITE 140 <hr/> (Street) NASHVILLE TN 37215 <hr/> (City) (State) (Zip)	<b>2. Date of Event Requiring Statement (Month/Day/Year)</b> 06/08/2010	<b>3. Issuer Name and Ticker or Trading Symbol</b> <u>ADHEREX TECHNOLOGIES INC [ ADHXF ]</u> <hr/> <b>4. Relationship of Reporting Person(s) to Issuer (Check all applicable)</b> <input checked="" type="checkbox"/> Director <span style="margin-left: 100px;"><input checked="" type="checkbox"/> 10% Owner</span> <input checked="" type="checkbox"/> Officer (give title below) <span style="margin-left: 100px;">Other (specify below)</span> <p style="text-align: center;">Chairman of Board</p>	<b>5. If Amendment, Date of Original Filed (Month/Day/Year)</b>  <hr/> <b>6. Individual or Joint/Group Filing (Check Applicable Line)</b> <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)
Common Stock	41,504,000	D	

#### 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				
Common Stock Warrants <sup>(1)</sup>	10/31/2010	04/30/2015	Common Stock 41,504,000	0.08	D	

**Explanation of Responses:**

1. Warrants are not registered and not exercisable until October 31, 2010.

/s/ Robert W. Butts

06/09/2010

\*\* 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.**