

INITIAL STATEMENT OF BENEFICIAL OWNERSHIP OF SECURITIES

OMB APPROVAL	
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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>Hall Jeffrey</u> <hr/> (Last) (First) (Middle) C/O KLA-TENCOR CORPORATION 160 RIO ROBLES <hr/> (Street) SAN JOSE CA 95130 <hr/> (City) (State) (Zip)	2. Date of Event Requiring Statement (Month/Day/Year) 07/27/2004	3. Issuer Name and Ticker or Trading Symbol <u>KLA TENCOR CORP [KLAC]</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) VP, Corporate Finance	5. If Amendment, Date of Original Filed (Month/Day/Year) <hr/> 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)
Common Stock	981	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	Title	Amount or Number of Shares			
Non-Qualified Stock Option (right to buy)	10/02/2002	10/02/2011	Common Stock	22,500	29.31	D	
Non-Qualified Stock Option (right to buy)	11/08/2003	01/28/2013	Common Stock	5,500	34.67	D	
Non-Qualified Stock Option (right to buy)	11/08/2003	11/08/2012	Common Stock	3,250	37.05	D	
Non-Qualified Stock Option (right to buy)	10/26/2004	04/26/2014	Common Stock	3,250	45.16	D	
Non-Qualified Stock Option (right to buy)	05/30/2002	07/10/2011	Common Stock	35,811	46.67	D	
Non-Qualified Stock Option (right to buy)	11/08/2003	07/30/2013	Common Stock	3,250	51.229	D	
Non-Qualified Stock Option (right to buy)	10/27/2004	10/27/2013	Common Stock	5,200	53.86	D	
Non-Qualified Stock Option (right to buy)	10/27/2004	01/27/2014	Common Stock	2,600	58.1	D	

Explanation of Responses:

By: Stuart J. Nichols For: Jeffrey Hall 08/03/2004
 ** 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.