UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

	OMB APPROVAL						
	OMB Number:	3235-0362					
Estimated average hurden							

subject to Section 16. Form 4 or Form 5 obligations may continue. See Instruction 1(b). Form 3 Holdings Reported

ANNUAL STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP OF SECURITIES

Estimated	d average	burde	en		
hours per	response	.		1	.0

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Form 4 Tran	sactio	ns
Reported		

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 * KAUFMAN STEPHEN P			2. Issuer Name and Ticker or Trading Symbol KLA TENCOR CORP [klac]					5. Relationship of Reporting Person(s) to Issuer (Check all applicable) X Director 10% Owner			
(Last)	(First)	(Middle)	3. Statement for Issuer's Fiscal Year Ended (Month/Day/Year) $06/30/2004$			Officer (give title below)	ther (specify belo	ow)			
160 RIO ROBLES (Street)		4	4. If Amendment, Date Original Filed(Month/Day/Year)					6. Individual or Joint/Group Reporting (check applicable line)			
SAN JOSE, CA 95134								_X_Form Filed by One Reporting Person Form Filed by More than One Reporting Person			
(City)	(State)	(Zip)	Table I - Non-Derivative Securities Acqu					red, Disposed of, or Beneficially Ow	ned		
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) (A) or Amount (D) Price		of (D)	5. Amount of Securities Beneficially Owned at end of Issuer's Fiscal Year (Instr. 3 and 4)	Ownership Form:	Beneficial Ownership	
Common Stock								1,000	D		

owned directly or indirectly.

Reminder: Report on a separate line for each class of securities beneficially 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 control number.

SEC 2270 (9-02)

Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)

Derivative	Conversion	Date (Month/Day/Year)	Execution Date, if	Code	of	vative rities aired or osed o) :. 3,	Expiration Date		Expiration Date		Expiration Date (Month/Day/Year)		Expiration Date		(Month/Day/Year)		Expiration Date		Expiration Date (Month/Day/Year)		Expiration Date (Month/Day/Year)		of Underlying Securities		Derivative Security (Instr. 5)	of Derivative Securities Beneficially Owned at End of	Derivative Security: Direct (D) or Indirect (I)	Beneficial
					(A)	(D)	Date Exercisable	Expiration Date	Title	Amount or Number of Shares																		
Non- Qualified Stock Option	\$ 37.05						11/08/2002	11/08/2012	Common Stock	10,000		10,000	D															
Non- Qualified Stock Option	\$ 59.44						11/05/2003	11/05/2013	Common Stock	10,000		10,000	D															

Reporting Owners

Reporting Owner Name /	Relationships						
	Director	10% Owner	Officer	Other			
KAUFMAN STEPHEN P 160 RIO ROBLES SAN JOSE, CA 95134	X						

Signatures

Stephen Kaufman	08/11/2004
**Signature of Reporting Person	Date

Explanation of Responses:

- * 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).

Remarks:

Form 5 filed to voluntarily report all holdings. No transactions to report.

Note: File three copies of this Form, one of which must be manually signed. If space provided is insufficient, see Instruction 6 for procedure.

Potential persons who are to respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB number.