KLA TENCOR CORP

Check this box

if no longer

subject to

Section 16.

Form 4 July 20, 2007

FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP OF **SECURITIES**

2005 Estimated average burden hours per response... 0.5

OMB APPROVAL

3235-0287

January 31,

OMB

Number:

Expires:

Form 4 or Form 5 obligations may continue. See Instruction

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934, Section 17(a) of the Public Utility Holding Company Act of 1935 or Section 30(h) of the Investment Company Act of 1940

1(b).

(Last)

(City)

Security

(Print or Type Responses)

1. Name and Address of Reporting Person * **URBANEK LIDA**

2. Issuer Name and Ticker or Trading

5. Relationship of Reporting Person(s) to Issuer

Symbol KLA TENCOR CORP [KLAC]

(First)

(State)

3. Date of Earliest Transaction

(Check all applicable)

C/O KLA-TENCOR

(Middle)

(Month/Day/Year) 07/18/2007

X_ Director 10% Owner Officer (give title Other (specify below)

CORPORATION, 160 RIO **ROBLES**

(Street)

4. If Amendment, Date Original

6. Individual or Joint/Group Filing(Check

Filed(Month/Day/Year)

Applicable Line) _X_ Form filed by One Reporting Person Form filed by More than One Reporting

SAN JOSE, CA 95130

1. Title of 2. Transaction Date 2A. Deemed (Month/Day/Year) Execution Date, if (Instr. 3) (Month/Day/Year)

(Zip)

3. 4. Securities TransactionAcquired (A) or Code Disposed of (D) (Instr. 3, 4 and 5) (Instr. 8)

Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned 5. Amount of 6. Ownership 7. Nature of Securities Form: Direct Indirect Beneficially (D) or Beneficial Ownership Owned Indirect (I) Following (Instr. 4) (Instr. 4)

Reported (A) Transaction(s) or (Instr. 3 and 4)

Code V Amount (D)

Price

Common 07/18/2007 \$ 29 6,946 M 5,000 Α D Stock

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

Persons who respond to the collection of SEC 1474 information contained in this form are not (9-02)required to respond unless the form displays a currently valid OMB control number.

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

Edgar Filing: KLA TENCOR CORP - Form 4

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. Transactic Code (Instr. 8)	5. Number of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4, and 5)	Expiration Date Und		7. Title and A Underlying S (Instr. 3 and	Securitie
				Code V	(A) (D)	Date Exercisable	Expiration Date	Title	Amour or Number of Shares
Non-Qualified Stock Option (Rights to Buy)	\$ 29	07/18/2007		M	5,000	<u>(1)</u>	07/22/2007	Common Stock	5,00

Reporting Owners

Reporting Owner Name / Address	Relationships					
• 9	Director	10% Owner	Officer	Other		
URBANEK LIDA C/O KLA-TENCOR CORPORATION 160 RIO ROBLES SAN JOSE, CA 95130	X					

Signatures

/s/ BRIAN MARTIN for Lida Urbanek 07/19/2007

**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).
- (1) The options were originally granted for 5,000 shares of the Issuer's common stock and were immediately excercisable for all the underlying shares on the date of grant.

Note: File three copies of this Form, one of which must be manually signed. If space 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.

Reporting Owners 2