

FORM 4

☐ Check this box if no longer subject to Section 16. Form 4 or Form 5 obligations may continue. See Instruction 1(b).

☐ Check this box to indicate that a transaction was made pursuant to a contract, instruction or written plan that is intended to satisfy the affirmative defense conditions of Rule 10b5-1(c). See Instruction 10.

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

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP OF  
SECURITIES

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934 or  
Section 30(h) of the Investment Company Act of 1940

OMB APPROVAL  
OMB Number: 3235-0287  
Estimated average burden  
hours per response... 0.5

1. Name and Address of Reporting Person *  <b>Sanvidge Kevin M.</b>  (Last) (First) (Middle)  <b>31 EAST FOURTH STREET</b>  (Street)  <b>DUNKIRK, NY 14048</b>  (City) (State) (Zip)	2. Issuer Name and Ticker or Trading Symbol  <b>LAKE SHORE BANCORP, INC. [LSBK]</b>  3. Date of Earliest Transaction (MM/DD/YYYY)  <b>4/25/2024</b>  4. If Amendment, Date Original Filed (MM/DD/YYYY)	5. Relationship of Reporting Person(s) to Issuer (Check all applicable)  <input checked="" type="checkbox"/> Director <input type="checkbox"/> 10% Owner  <input type="checkbox"/> Officer (give title below) <input type="checkbox"/> Other (specify below) <b>Chairman of the Board</b>  6. Individual or Joint/Group Filing (Check Applicable Line)  <input checked="" type="checkbox"/> Form filed by One Reporting Person <input type="checkbox"/> Form filed by More than One Reporting Person
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Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned

1. Title of Security (Instr. 3)	2. Trans. Date	2A. Deemed Execution Date, if any	3. Trans. Code (Instr. 8)		4. Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5)			5. Amount of Securities Beneficially Owned Following Reported Transaction(s) (Instr. 3 and 4)	6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	7. Nature of Indirect Beneficial Ownership (Instr. 4)
			Code	V	Amount	(A) or (D)	Price			
Common Stock	4/25/2024		P		3,000	A	\$10.814	18,536	D	
Common Stock								905	I	As Custodian for Grandchildren

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

1. Title of Derivate Security (Instr. 3)	2. Conversion or Exercise Price of Derivative Security	3. Trans. Date	3A. Deemed Execution Date, if any	4. Trans. Code (Instr. 8)		5. Number of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5)	6. Date Exercisable and Expiration Date		7. Title and Amount of Securities Underlying Derivative Security (Instr. 3 and 4)		8. Price of Derivative Security (Instr. 5)	9. Number of derivative Securities Beneficially Owned Following Reported Transaction(s) (Instr. 4)	10. Ownership Form of Derivative Security: Direct (D) or Indirect (I) (Instr. 4)	11. Nature of Indirect Beneficial Ownership (Instr. 4)
				Code	V		Date Exercisable	Expiration Date	Title	Amount or Number of Shares				
Stock Option (Right to Buy)	\$10.69						(1)	4/22/2034	Common Stock	1,897		12,646	D	
Stock Option (Right to Buy)	\$14.38						(2)	10/21/2026	Common Stock	10,749		12,646	D	

Explanation of Responses:

- (1) Stock options vest at a rate of 20% per year commencing on April 23, 2025
- (2) Options are fully vested

Reporting Owners

Reporting Owner Name / Address	Relationships			
	Director	10% Owner	Officer	Other
Sanvidge Kevin M. 31 EAST FOURTH STREET DUNKIRK, NY 14048	X			Chairman of the Board

Signatures

/s/ Taylor M. Gilden, Pursuant to Power of Attorney

4/29/2024

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 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).

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 control number.