FORM 4

Check this box if no longer subject to Section 16. Form 4 or Form 5 obligations may continue. See

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

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STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

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

Instruction 1(b). Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934 or Section 30(h) of the Investment Company Act of 1940 5. Relationship of Reporting Person(s) to Issuer (Check all applicable) 2. Issuer Name and Ticker or Trading Symbol 1. Name and Address of Reporting Person ARROWHEAD RESEARCH CORP [RAHN LEROY T Director 10% Owner ARWR Officer (give title Other (specify below) below) (Last) (First) (Middle) 3. Date of Earliest Transaction (Month/Day/Year) 10/11/2004 1118 EAST GREEN STREET 4. If Amendment, Date of Original Filed (Month/Day/Year) 6. Individual or Joint/Group Filing (Check Applicable (Street) Line) 91106 Form filed by One Reporting Person **PASADENA** CA Form filed by More than One Reporting Person (City) (State) (Zip) Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned 4. Securities Acquired (A) or Disposed Of (D) (Instr. 3, 4 and 5) 5. Amount of 1. Title of Security (Instr. 3) 2. Transaction 2A. Deemed 6. Ownership 7. Nature Form: Direct Execution Date, Transaction of Indirect Securities (Month/Day/Year) Beneficially if anv Code (Instr. (D) or Indirect Beneficial (Month/Day/Year) 8) Owned Following (I) (Instr. 4) (Instr. 4) Reported (A) or (D) Transaction(s) ν Price Code Amount (Instr. 3 and 4) Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities) 3A. Deemed 11. Nature of Indirect 1. Title of 5. Number 6. Date Exercisable and 7. Title and 9. Number of 3. Transaction 8. Price of Derivative Conversion Transaction Amount of Ownership **Execution Date Expiration Date** Derivative derivative

(Month/Day/Year)

Date

Exercisable

10/11/2004

(D)

Explanation of Responses:

\$2.02

or Exercise Price of

Derivative

Security

Security (Instr. 3)

Stock

option

LeRoy T. Rahn

stock

Securities Underlying

Derivative

and 4)

Title

Expiration

10/11/2014

Date

Security (Instr. 3

10/20/2004

60,000

Securities

Following Reported

Owned

Beneficially

Transaction(s) (Instr. 4) Form: Direct (D)

or Indirect

(I) (Instr. 4)

D

Beneficial Ownership

(Instr. 4)

Security (Instr. 5)

\$0.00

** Signature of Reporting Person

Amount or Number

Shares

10,000

Date

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

if any (Month/Day/Year)

* If the form is filed by more than one reporting person, see Instruction 4 (b)(v).

(Month/Day/Year)

10/11/2004

** Intentional misstatements or omissions of facts constitute Federal Criminal Violations See 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).

Code (Instr. 8)

Code

Α

Derivative

Securities Acquired (A) or Disposed

of (D) (Instr 3, 4 and 5)

(A)

10,000

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.