UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

SCHEDULE 13D

Under the Securities Exchange Act of 1934 (Amendment No. 4)*

Sphere 3D Corp.

(Name of Issuer)

Common shares, no par value

(Title of Class of Securities)

8481L100

(CUSIP Number)

Katharine Ryan-Weiss **MF Ventures, LLC** 201 Spear Street, 14th Floor San Francisco, CA 94105 415-356-2500

(Name, Address and Telephone Number of Person Authorized to Receive Notices and Communications)

> With copies to: Amanda Galton, Esq. **Orrick, Herrington & Sutcliffe LLP 405 Howard Street** San Francisco, CA 94105 415-773-5700

> > May 16, 2017

(Date of Event which Requires Filing of this Statement)

If the filing person has previously filed a statement on Schedule 13G to report the acquisition that is the subject of this Schedule 13D, and is filing this schedule because of \$240.13d-1(e), 240.13d-1(f) or 240.13d-1(g), check the following box \Box .

Note: Schedules filed in paper format shall include a signed original and five copies of the schedule, including all exhibits. See §240.13d-7 for other parties to whom copies are to be sent.

* The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter disclosures provided in a prior cover page.

The information required on the remainder of this cover page shall not be deemed to be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934 (the "Act") or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes).

	NAMES OF REPORTING PERSONS				
1	MF Ventures, LLC				
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a (b)				
3	SEC USE ONLY				
4	SOURCE OF FUNDS (SEE INSTRUCTIONS) WC				
5	CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM 2(D) OR 2(E)				
6	CITIZENSHIP OR PLACE OF ORGANIZATION State of Delaware				
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH		7 8 9 10	SOLE VOTING POWER 0 SHARED VOTING POWER 36,028,246 SOLE DISPOSITIVE POWER 0 SHARED DISPOSITIVE POWER 36,028,246		
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 36,028,246				
12	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS)				
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11) 29.2%*				
14 TYPE 00	OF REPO	ORTING	PERSON (SEE INSTRUCTIONS)		

^{*} See Item 5 for more information on calculating this percentage.

	NAMES OF REPORTING PERSONS				
1	Victor B. MacFarlane				
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a) (b)				
3	SEC USE ONLY				
4	SOURCE OF FUNDS (SEE INSTRUCTIONS) AF				
5	CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM 2(D) OR 2(E)				
6	CITIZENSHIP OR PLACE OF ORGANIZATION United States				
	1	7	SOLE VOTING POWER 0		
NUMBER OF S BENEFICIA OWNED BY I	LLY	8	SHARED VOTING POWER 36,208,246		
REPORTING P WITH		9	SOLE DISPOSITIVE POWER		
		10	SHARED DISPOSITIVE POWER 36,208,246		
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 36,208,246				
12	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS)				
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11) 29.2%*				
14	TYPE OF REPORTING PERSON (SEE INSTRUCTIONS) IN				

* See Item 5 for more information on calculating this percentage.

	NAMES OF REPORTING PERSONS					
1	Thaderine D. MacFarlane					
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP			(a) □ (b) ⊠		
3	SEC USE ONLY					
4	SOURCE OF FUNDS (SEE INSTRUCTIONS) AF					
5	CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM 2(D) OR 2(E)					
6	CITIZENSHIP OR PLACE OF ORGANIZATION United States					
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH		7 8 9 10	SOLE VOTING POWER 0 SHARED VOTING POWER 36,028,246 SOLE DISPOSITIVE POWER 0 SHARED DISPOSITIVE POWER 36,028,246			
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 36,028,246					
12	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS)					
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11) 29.2%*					
14 TYPE	OF REPO	DRTING	FPERSON (SEE INSTRUCTIONS)			

^{*} See Item 5 for more information on calculating this percentage.

Explanatory Note

This Amendment No. 4 ("Amendment No. 4") amends and supplements the statement on Schedule 13D initially filed with the SEC on February 1, 2017, as amended by:

- · Amendment No. 1 filed on March 7, 2017,
- · Amendment No. 2 filed on March 21, 2017, and
- Amendment No. 3 filed on March 31, 2017 (the initial filing and the first three amendments, collectively, are the "Statement").

Amendment No. 4 is filed by the Reporting Persons with respect to the common shares, no par value (the "**Common Shares**"), of Sphere 3D Corp., an Ontario corporation (the "**Issuer**"). Capitalized terms used, but not otherwise defined, herein have the meanings ascribed to them in the Statement.

Item 4. Purpose of Transaction.

Amendment No. 4 amends and supplements Item 4 of the Statement by deleting the disclosure under "*Further Matters*" and adding the following in its place:

"On May 11, 2017, MF Ventures filed a Form 144 with the SEC disclosing its intent to sell up to 1,481,245 Common Shares, and, from March 21, 2017 to May 18, 2017 (inclusive of both dates), MF Ventures has sold 1,393,269 Common Shares. Subject to applicable securities laws and regulations, market conditions and other factors, the Reporting Persons plan to sell Common Shares opportunistically, but reserve the right to acquire securities of the Issuer, including Common Shares. There can be no assurance, however, that any Reporting Person will take any such actions.

Notwithstanding anything in this Statement to the contrary, each Reporting Person specifically reserves the right to change its intention with respect to any and all matters disclosed or referenced herein. In reaching any decision with respect to any course of action, each Reporting Person expects it would take into consideration a variety of factors including, but not limited to, the Issuer's business and prospects, other business opportunities available to the Reporting Person, changes in applicable laws and regulations, general economic conditions, worldwide money and equity market conditions (including the market price of the securities of the Issuer), tax considerations, and any other factors deemed relevant. Further, the Reporting Persons intend to review their investment on a regular basis and, as a result of such review, may determine at any time or from time to time, either alone or as part of a group:

- to acquire additional securities of the Issuer through open market purchases, privately negotiated transactions, or otherwise;
- to dispose of all or a portion of the securities of the Issuer beneficially owned in the open market, privately negotiated transactions, or otherwise; or
- to take any other available course of action which may involve one or more of the transactions described in subparagraphs (a) through (j) of Item 4 of Schedule 13D or have the results described in those subparagraphs."

Item 5. Interest in Securities of the Issuer.

Amendment No. 4 amends and restates Item 5 of the Statement as follows:

"(a) and (b)

Per the Form F-1 (File No. 333-217548) filed on April 28, 2017, the Issuer has 102,708,418 Common Shares issued and outstanding as of April 24, 2017 (the "**Outstanding Shares**").

As of May 18, 2017, each Reporting Person may be deemed to beneficially own in the aggregate 40,573,700 Common Shares, which consists of: (i) 15,193,613 Common Shares issued and outstanding to MF Ventures, (ii) 4,545,454 Common Shares issuable under the March 2017 Warrant—assuming no 4.99% Blocker, and (iii) 20,834,633 Common Shares issuable under certain warrants, the One-Year Warrants, and the Five-Year Warrants (the "**Warrant Shares**").

As of May 18, 2017, assuming the 4.99% Blocker is effective, each Reporting Person may be deemed to beneficially own in the aggregate 36,028,246 Common Shares, which consists of: (i) 15,193,613 Common Shares issued and outstanding to MF Ventures and (ii) 20,834,633 Warrant Shares.

Further, as of May 18, 2017, each Reporting Person may be deemed to beneficially own 31.7% of the class of Common Shares, assuming 128,088,505 Common Shares outstanding, which consists of (i) the Outstanding Shares, (ii) 4,545,454 Common Shares issuable under the March 2017 Warrant—assuming no 4.99% Blocker, and (iii) and the Warrant Shares.

In addition, as of May 18, 2017 assuming the 4.99% Blocker is effective, each Reporting Person may be deemed to beneficially own 29.2% of the class of Common Shares, assuming 123,543,051 Common Shares outstanding, which consists of (i) the Outstanding Shares and (ii) and the Warrant Shares.

No Reporting Person has the sole power to vote or direct the vote or sole power to dispose or direct the disposition of the Common Shares. Each Reporting Person has the shared power to vote or to direct the vote or shared power to dispose or direct the disposition of the Common Shares.

Other than for purposes of Rule 13d-3, the foregoing statements will not be deemed to constitute an admission by each Reporting Person that such Reporting Person is the beneficial owner of any Common Shares disclosed under this Statement, and such beneficial ownership is expressly disclaimed.

(c)

The Reporting Persons have effected the following transactions in Common Shares in open market sales:

Date	No. of Common Shares	Average Common Share Sale Price	Sale Price Range for Common Shares
3/21/17	40,800	\$0.3001	\$0.30-\$0.3016
3/21/17	500	\$0.3022	\$0.3016-\$0.3032
3/22/17	11,800	\$0.2910	\$0.29-\$0.2950
5/3/17	100,000	\$0.1815	\$0.18-\$0.1842
5/4/17	100,000	\$0.1837	\$0.1825-\$0.189
5/5/17	93,774	\$0.1801	\$0.18-\$0.1810
5/8/17	6,600	\$0.1801	\$0.18-\$0.1810

5/9/17	100,000	\$0.1854	\$0.18-\$0.1992
5/10/17	200,000	\$0.1915	\$0.19-\$0.1979
5/11/17	200,000	\$0.2064	\$0.1925-\$0.2180
5/12/17	16,850	\$0.2103	\$0.21-\$0.2150
5/12/17	52,332	\$0.2432	\$0.24-\$0.25
5/15/17	89,355	\$0.1929	\$0.19-\$0.1971
5/16/17	200,000	\$0.1731	\$0.17-\$0.1799
5/17/17	145,968	\$0.1706	\$0.17-\$0.1744
5/18/17	35,290	\$0.18	\$0.18-\$0.1820

The Reporting Persons undertake to provide upon request by the staff of the SEC full information regarding the number of shares sold at each separate price within the ranges set forth above.

(d)

None.

(e)

Not Applicable."

Item 7. Material to be Filed as Exhibits.

Amendment No. 4 amends and supplements Item 7 of the Statement by adding the following:

"Exhibit Number

Description

12

Joint Filing Agreement to Amendment No. 4."

Page 7 of 7

SIGNATURES

After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement is true, complete and correct.

Dated: May 19, 2017

MF Ventures, LLC

By: <u>/s/ Victor B. MacFarlane</u> Name: Victor B. MacFarlane Title: Manager

Victor B. MacFarlane

/s/ Victor B. MacFarlane

Thaderine D. MacFarlane

/s/ Thaderine D. MacFarlane

Joint Filing Agreement to Amendment No. 4 Pursuant to Rule 13d-1(k)

This "Joint Filing Agreement" is made pursuant to Rule 13d-l(k)(1) under the Securities Exchange Act of 1934, as amended (the "Exchange Act"), by and among the parties listed below, each a "Joint Filer."

The Joint Filers agree that this Amendment No. 4 to the Statement on Schedule 13D, to which this Joint Filing Agreement is an exhibit (the "Amendment"), may be filed on each of their behalf and that the Amendment may thereafter be amended by further joint filings. The Joint Filers state that they each satisfy the requirements for making a joint filing under Rule 13d-1(k) of the Exchange Act.

IN WITNESS WHEREOF, each of the Joint Filers hereby execute this Joint Filing Agreement as of May 19, 2017.

MF Ventures, LLC

By: <u>/s/ Victor B. MacFarlane</u> Name: Victor B. MacFarlane Title: Manager

Victor B. MacFarlane

/s/ Victor B. MacFarlane

Thaderine D. MacFarlane

/s/ Thaderine D. MacFarlane