May 29, 2018			
UNITED STATES			
SECURITIES AND EXCHANGE COMMISSION			
WASHINGTON, D.C. 20549			
FORM CD			
FORM SD			
Specialized Disclosure Report			
ATRICURE, INC.			
(Exact name of registrant as specified in charter)			

AtriCure, Inc. Form SD

7.1	000 51470	24 1040205
Delaware	000-51470	34-1940305

(State or other jurisdiction of incorporation) (Commission File Number) (IRS Employer Identification No.)

7555 Innovation Way

Mason, OH 45040

(Address of principal executive offices) (Zip Code)

M. Andrew Wade (513) 755-4100 (Name and telephone number, including area code, of the person to contact in connection with this report.)

Check the appropriate box to indicate the rule pursuant to which this form is being filed, and provide the period to which the information in this form applies:

_X_Rule 13p-1 under the Securities Exchange Act (17 CFR 240.13p-1) for the reporting period from January 1 to December 31, 2017.

Section 1.Conflict Minerals Disclosure

Item 1.01.Conflict Minerals Disclosure and Report

AtriCure, Inc. (AtriCure or the Company) evaluated its products during the year ended December 31, 2017 and determined that certain products manufactured or contracted to be manufactured by the Company contain conflict minerals which are necessary to the functionality or production of such products. As is required, the Company has conducted a good faith reasonable country of origin inquiry (RCOI) designed to determine whether the necessary conflict minerals originated in the Democratic Republic of the Congo (DRC) or an adjoining country or came from recycled or scrap sources.

AtriCure's RCOI process included conducting an inquiry of our direct suppliers using the Conflict-Free Sourcing Initiative's Conflict Minerals Reporting Template. We relied upon our suppliers' representations regarding the origin of their minerals and their smelter data to determine the source of the conflict minerals within our supply chain. Based on the results of our RCOI, we exercised due diligence on the source and chain of custody of the conflict minerals.

The Company has filed a Conflict Minerals Report (CMR). A copy of the Company's CMR is furnished as Exhibit 1.01 to this Form SD and is incorporated herein by reference. A copy of the Company's CMR is also available on the Company's website at www.atricure.com.

Item 1.02Exhibit

A copy of the Company's Conflict Minerals Report required by Item 1.01 is provided as Exhibit 1.01 hereto.

Section 2.Exhibits

Item 2.01Exhibits

(d) Exhibits

No.Description

1.01 Conflict Minerals Report as required by Items 1.01 and 1.02 of this Form SD

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

ATRICURE, INC.

Dated: May 29, 2018 By: /s/ M. Andrew Wade

M. Andrew Wade

Senior Vice President and Chief Financial Officer