UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 8-K

CURRENT REPORT Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): August 1, 2014

Axcelis Technologies, Inc.

(Exact name of registrant as specified in its charter)

Delaware(State or other jurisdiction of incorporation)

000-30941 (Commission File Number)

34-1818596 (IRS Employer Identification No.)

108 Cherry Hill Drive, Beverly, Massachusetts

(Address of principal executive offices)

01915 (Zip Code)

Registrant's telephone number, including area code: (978) 787-4000

(Former name or former address, if changed since last report.)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

- o Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
- o Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
- o Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
- o Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Item 1.01 Amendment of a Material Definitive Agreement.

The Company has a revolving credit facility with Silicon Valley Bank (the "Bank") dated October 31, 2013. Under this revolving credit facility, the Company has the ability to borrow up to \$10.0 million on a revolving basis during its two year term. The Company's ability to borrow under this line of credit is limited to 80% of the then current amount of qualified accounts receivable. The Company's financial results for the quarter ended June 30, 2014 caused the Company not to meet the Minimum Adjusted Net Income covenant, which covenant was waived by the Bank. The Company was in compliance with all other covenants related to the credit facility.

The Company and the Bank have entered into a Waiver and First Amendment Agreement dated August 1, 2014, which waived compliance with the Minimum Adjusted Net Income covenant for the trailing six month period ended June 30, 2014 and adjusted this covenant for the periods remaining in the facility term. All other terms of the Loan and Security Agreement remain in effect.

Item 2.02 Results of Operations and Financial Condition

On August 4, 2014, Axcelis Technologies, Inc. (the "Company") issued a press release regarding its financial results for the quarter ended June 30, 2014. The Company's press release is attached as Exhibit 99.1 to this Current Report on Form 8-K and incorporated by reference herein.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits

99.1

Exhibit No. Description

Press Release dated August 4, 2014. Filed herewith.

SIGNATURE

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.

Date: August 4, 2014 Axcelis Technologies, Inc.

By: /s/ KEVIN J. BREWER

Kevin J. Brewer

Executive Vice President and Chief Financial Officer

News Release

AXCELIS ANNOUNCES FINANCIAL RESULTS FOR SECOND QUARTER 2014

First Purion H™ High Current Implanter Shipped

BEVERLY, Mass. — August 4, 2014—Axcelis Technologies, Inc. (Nasdaq: ACLS) today announced financial results for the second quarter ended June 30, 2014. Highlights for the quarter were:

- The first Purion HTM high current implanter was shipped to a leading Asia-Pacific chipmaker, where it will join Purion XETM and Purion MTM systems already in place. This customer now has all three members of the Purion product family and will be the first to truly see the benefit of the 'Power of Purion'.
- · Received the third order for the innovative Purion MTM medium current implanter from a large foundry after a successful evaluation.
- Achieved "Ranked 1st" Awards in the Annual VLSIresearch Customer Satisfaction Survey. Customers voted Axcelis #1 in THE BEST Suppliers of Fab Equipment, #1 in Implant Equipment, and the #1 10 BEST Focused Supplier.

The Company reported second quarter revenue of \$41.2 million, compared to \$60.8 million for the first quarter of 2014. Loss from operations for the quarter was \$6.1 million, compared to operating income of \$0.3 million for the first quarter of 2014. Net loss for the quarter was \$6.9 million, or \$(0.06) per share. This compares to net income for the first quarter of 2014 of \$0.2 million, or \$0.00 per share. Cash and cash equivalents were \$35.6 million at June 30, 2014 compared with \$43.0 million at March 31, 2014.

Chairman and CEO Mary Puma said, "Momentum for Purion products continues as customers recognize advantages in precision, purity and productivity the platform provides for advanced planar and 3D processes. The current industry pause gives Purion products additional time to be evaluated and adopted. When spending resumes, Axcelis will be better positioned to sell the full family of Purion products."

Kevin Brewer, executive vice president and CFO added, "In light of market conditions, we have implemented a series of cost cutting actions that in the third quarter bring our quarterly breakeven to under \$50M and our operating cash breakeven to under \$42M. We will continue to make investments in Purion platform development and product penetrations, and customer satisfaction, that will deliver top line growth."

Second Quarter 2014 Conference Call

The Company will host a conference call today at 5:00 pm ET to discuss results for the second quarter 2014. The call will be available to interested listeners via an audio webcast that can be accessed through the Investors page of Axcelis' website at www.axcelis.com, or by dialing 1.888.680.0879 (1.617.213.4856 outside North America). Participants calling into the conference call will be requested to provide the company name, Axcelis Technologies, and pass code: 57721554. Webcast replays will be available for 30 days following the call.

Safe Harbor Statement

The conference call will contain forward-looking statements under the SEC safe harbor provisions. These statements, which include our guidance for future financial performance, are based on management's current expectations and should be viewed with caution. They are subject to various risks and uncertainties, many of which are outside the control of the Company, including the timing of orders and shipments, the conversion of orders to revenue in any particular quarter, or at all, the continuing demand for semiconductor equipment, relative market growth, continuity of business relationships with and purchases by major customers, competitive pressure on sales and pricing, increases in material and other production costs that cannot be recouped in product pricing and global economic, political and financial conditions. These risks and other risk factors relating to Axcelis are described more fully in the most recent Form 10-K filed by Axcelis and in other documents filed from time to time with the Securities and Exchange Commission.

About Axcelis:

Axcelis (Nasdaq: ACLS), headquartered in Beverly, Mass., has been providing innovative, high-productivity solutions for the semiconductor industry for over 35 years. Axcelis is dedicated to developing enabling process applications through the design, manufacture and complete life cycle support of ion implantation systems, one of the most critical and enabling steps in the IC manufacturing process. Learn more about Axcelis at www.axcelis.com.

Company Contacts

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Editorial/Media: Maureen Hart 978.787.4266

Axcelis Technologies, Inc.
Consolidated Statements of Operations
(In thousands, except per share amounts)
(Unaudited)

		June	e 30.			June	e 30.	
		2014	,	2013		2014	,	2013
Revenue:								
Product	\$	34,795	\$	40,769	\$	89,810	\$	75,220
Services		6,355		6,732		12,180		13,006
Total revenue		41,150		47,501		101,990		88,226
Cost of revenue:	<u></u>							
Product		21,021		25,457		54,823		47,638
Services		5,645		5,307		10,943		10,910
Total cost of revenue		26,666		30,764		65,766		58,548
Gross profit		14,484		16,737		36,224		29,678
Operating expenses:								
Research and development		8,845		8,503		18,102		17,709
Sales and marketing		5,037		5,594		10,513		10,796
General and administrative		6,494		6,412		12,975		13,001
Gain on sale of dry strip assets and intellectual property		_		(799)				(1,167)
Restructuring charges		160		421		360		2,222
Total operating expenses		20,536		20,131		41,950		42,561
and the second s		20,000		20,131		.1,550		,501
Loss from operations		(6,052)		(3,394)		(5,726)		(12,883)
Other income (expense):								
Interest income		2		3		4		6
Interest expense		(257)		(51)		(508)		(115)
Other, net		(362)		(314)		(70)		` 580
Total other income (expense)		(617)	_	(362)		(574)		471
		```				<u> </u>		
Loss before income taxes		(6,669)		(3,756)		(6,300)		(12,412)
Income taxes		231		263		426		596
						_		
Net loss	\$	(6,900)	\$	(4,019)	\$	(6,726)	\$	(13,008)
Net loss per share								
Basic and Diluted	\$	(0.06)	\$	(0.04)	\$	(0.06)	\$	(0.12)
Charge yeard in computing not less now share								
Shares used in computing net loss per share:  Basic and diluted weighted average common shares		111,212		108,409		110,932		108,319
					_	,		

# Consolidated Balance Sheets (In thousands, except per share amounts) (Unaudited)

Axcelis Technologies, Inc.

		June 30, 2014		December 31, 2013	
ASSETS					
Current assets:					
Cash and cash equivalents	\$	35,588	\$	46,290	
Accounts receivable, net		32,067		36,587	
Inventories, net		106,650		95,789	
Prepaid expenses and other current assets		7,572		6,242	
Total current assets		181,877		184,908	
Property, plant and equipment, net		31,340		32,006	
Long-term restricted cash		825		825	
Other assets		12,539		15,810	
Total assets	\$	226,581	\$	233,549	
LIABILITIES AND STOCKHOLDERS' EQUITY					
Current liabilities:					
Accounts payable	\$	17,379	\$	19,451	
Accrued compensation		3,975		4,845	
Warranty		1,326		1,316	
Income taxes		430		417	
Deferred revenue		4,227		4,387	
Current portion of long-term debt		1,054		471	
Other current liabilities		3,681		4,573	
Total current liabilities		32,072		35,460	
Long-term debt		13,946		14,529	

Long-term deferred revenue	101	322
Other long-term liabilities	7,136	7,236
Total liabilities	53,255	57,547
Commitments and contingencies		
Stockholders' equity:		
Preferred stock, \$0.001 par value, 30,000 shares authorized; none issued or outstanding	_	_
Common stock, \$0.001 par value, 300,000 shares authorized; 111,643 shares issued and 111,523 shares		
outstanding at June 30, 2014; 110,225 shares issued and 110,105 shares outstanding at December 31,		
2013	112	110
Additional paid-in capital	514,946	510,992
Treasury stock, at cost, 120 shares at June 30, 2014 and December 31, 2013	(1,218)	(1,218)
Accumulated deficit	(346,347)	(339,621)
Accumulated other comprehensive income	5,833	5,739
Total stockholders' equity	173,326	176,002
Total liabilities and stockholders' equity	\$ 226,581	\$ 233,549

# Axcelis Technologies, Inc. Consolidated Statements of Cash Flows (In thousands) (Unaudited)

		Six months ended June 30,		
Code floor of the control of the code of t	2014		2013	
Cash flows from operating activities  Net loss	\$	(6,726)	¢ (12.00	
Adjustments to reconcile net loss to net cash used for operating activities:	Ф	(0,720)	\$ (13,00	
Depreciation and amortization		2,299	2,71	
Gain on sale of dry strip assets and intellectual property		2,233	(1,16	
Deferred taxes		334	(1,10	
Stock-based compensation expense		2.182	1.64	
Provision for excess and obsolete inventory		2,102	2,37	
Changes in operating assets & liabilities:		244	2,37	
Accounts receivable		4,493	(5,58	
Inventories		(10,917)	(3,30	
Prepaid expenses and other current assets		(1,334)	(1,04	
Accounts payable and other current liabilities		(3,860)	5,64	
Deferred revenue		(377)	(89	
Income taxes		13	(4	
Other assets and liabilities		1,794	(1,90	
Net cash used for operating activities		(11,855)	(10,79	
rece cash ased for operating activities		(11,055)	(10,75	
Cash flows from investing activities				
Proceeds from sale of dry strip assets and intellectual property		_	1,20	
Purchases of property, plant, and equipment		(567)	(33	
Decrease in restricted cash		`	,	
Net cash (used for) provided by investing activities		(567)	86	
Cash flows from financing activities				
Proceeds from exercise of stock options		1,583	20	
Proceeds from Employee Stock Purchase Plan		227	19	
Net cash provided by financing activities		1,810	40	
Effect of exchange rate changes on cash and cash equivalents		(90)	(81	
Net decrease in cash and cash equivalents		(10,702)	(10,34	
Cash and cash equivalents at beginning of period		46,290	44,98	
Cash and cash equivalents at end of period	\$	35,588	\$ 34,63	