

HOLOGIC INC
Form SC 13D
November 21, 2013

SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

SCHEDULE 13D

Under the Securities Exchange Act of 1934
(Amendment ____)*

Hologic, Inc.
(Name of Issuer)

Common Shares of no par value
(Title of Class of Securities)

436440101
(CUSIP Number)

Keith Schaitkin, Esq.
Icahn Capital LP
767 Fifth Avenue, 47th Floor
New York, New York 10153
(212) 702-4300
(Name, Address and Telephone Number of Person Authorized to
Receive Notices and Communications)

November 11, 2013
(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 Section 240.13d-1(e), 240.13d-1(f) or 240.13d-1(g), check the following box //.

NOTE: Schedules filed in paper format shall include a signed original and five copies of the schedule, including all exhibits. See Rule 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 ("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).

SCHEDULE 13D

CUSIP No. 436440101

1. NAME OF REPORTING PERSON

High River Limited Partnership

2. CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP

(a) //

(b) //

3. SEC USE ONLY

4. SOURCE OF FUNDS

WC

5. CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) or / 2(e)

6. CITIZENSHIP OR PLACE OF ORGANIZATION

Delaware

NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH:

7. SOLE VOTING POWER

6,830,974

8. SHARED VOTING POWER

0

9. SOLE DISPOSITIVE POWER

6,830,974

10. SHARED DISPOSITIVE POWER

0

11. AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

6,830,974

12. CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES //

13. PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)

2.53%

14. TYPE OF REPORTING PERSON

PN

SCHEDULE 13D

CUSIP No. 436440101

1. NAME OF REPORTING PERSON

Hopper Investments LLC

2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP

(a) //

(b) //

3 SEC USE ONLY

4 SOURCE OF FUNDS

OO

5 CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) or / 2(e)

6 CITIZENSHIP OR PLACE OF ORGANIZATION

Delaware

NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH:

7 SOLE VOTING POWER

0

8 SHARED VOTING POWER

6,830,974

9 SOLE DISPOSITIVE POWER

0

10 SHARED DISPOSITIVE POWER

6,830,974

11 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

6,830,974

12 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES //

13 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)

2.53%

14 TYPE OF REPORTING PERSON

OO

SCHEDULE 13D

CUSIP No. 436440101

1. NAME OF REPORTING PERSON

Barberry Corp.

2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP

(a) //

(b) //

3 SEC USE ONLY

4 SOURCE OF FUNDS

OO

5 CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) or /
2(e)

6 CITIZENSHIP OR PLACE OF ORGANIZATION

Delaware

NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH:

7 SOLE VOTING POWER

0

8 SHARED VOTING POWER

6,830,974

9 SOLE DISPOSITIVE POWER

0

10 SHARED DISPOSITIVE POWER

6,830,974

11 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

6,830,974

12 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES //

13 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)

2.53%

14 TYPE OF REPORTING PERSON

CO

SCHEDULE 13D

CUSIP No. 436440101

1. NAME OF REPORTING PERSON

Icahn Partners Master Fund LP

2. CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP

(a) //

(b) //

3. SEC USE ONLY

4. SOURCE OF FUNDS

WC

5. CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) or / 2(e)

6. CITIZENSHIP OR PLACE OF ORGANIZATION

Delaware

NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH:

7. SOLE VOTING POWER

11,104,817

8. SHARED VOTING POWER

0

9. SOLE DISPOSITIVE POWER

11,104,817

10. SHARED DISPOSITIVE POWER

0

11. AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

11,104,817

12. CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES //

13. PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)

4.11%

14. TYPE OF REPORTING PERSON

PN

SCHEDULE 13D

CUSIP No. 436440101

1. NAME OF REPORTING PERSON

Icahn Partners Master Fund II LP

2. CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP

(a) //

(b) //

3. SEC USE ONLY

4. SOURCE OF FUNDS

WC

5. CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) or / 2(e)

6. CITIZENSHIP OR PLACE OF ORGANIZATION

Delaware

NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH:

7. SOLE VOTING POWER

3,962,331

8. SHARED VOTING POWER

0

9. SOLE DISPOSITIVE POWER

3,962,331

10. SHARED DISPOSITIVE POWER

0

11. AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

3,962,331

12. CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES //

13. PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)

1.47%

14. TYPE OF REPORTING PERSON

PN

SCHEDULE 13D

CUSIP No. 436440101

1. NAME OF REPORTING PERSON

Icahn Partners Master Fund III LP

2. CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP

(a) //

(b) //

3. SEC USE ONLY

4. SOURCE OF FUNDS

WC

5. CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) or / 2(e)

6. CITIZENSHIP OR PLACE OF ORGANIZATION

Delaware

NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH:

7. SOLE VOTING POWER

1,744,043

8. SHARED VOTING POWER

0

9. SOLE DISPOSITIVE POWER

1,744,043

10. SHARED DISPOSITIVE POWER

0

11. AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

1,744,043

12. CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES //

13. PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)

0.64%

14. TYPE OF REPORTING PERSON

PN

SCHEDULE 13D

CUSIP No. 436440101

1. NAME OF REPORTING PERSON

Icahn Offshore LP

2. CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP

(a) //

(b) //

3. SEC USE ONLY

4. SOURCE OF FUNDS

OO

5. CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) or / 2(e)

6. CITIZENSHIP OR PLACE OF ORGANIZATION

Delaware

NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH:

7. SOLE VOTING POWER

0

8. SHARED VOTING POWER

16,811,191

9. SOLE DISPOSITIVE POWER

0

10. SHARED DISPOSITIVE POWER

16,811,191

11. AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

16,811,191

12. CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES //

13. PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)

6.22%

14. TYPE OF REPORTING PERSON

PN

SCHEDULE 13D

CUSIP No. 436440101

1. NAME OF REPORTING PERSON

Icahn Partners LP

2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP

(a) //

(b) //

3 SEC USE ONLY

4 SOURCE OF FUNDS

WC

5 CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) or /
2(e)

6 CITIZENSHIP OR PLACE OF ORGANIZATION

Delaware

NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH:

7 SOLE VOTING POWER

10,512,714

8 SHARED VOTING POWER

0

9 SOLE DISPOSITIVE POWER

10,512,714

10 SHARED DISPOSITIVE POWER

0

11 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

10,512,714

12 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES //

13 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)

3.89%

14 TYPE OF REPORTING PERSON

PN

SCHEDULE 13D

CUSIP No. 436440101

1. NAME OF REPORTING PERSON

Icahn Onshore LP

2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP

(a) //

(b) //

3 SEC USE ONLY

4 SOURCE OF FUNDS

OO

5 CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) or /
2(e)

6 CITIZENSHIP OR PLACE OF ORGANIZATION

Delaware

NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH:

7 SOLE VOTING POWER

0

8 SHARED VOTING POWER

10,512,714

9 SOLE DISPOSITIVE POWER

0

10 SHARED DISPOSITIVE POWER

10,512,714

11 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

10,512,714

12 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES //

13 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)

3.89%

14 TYPE OF REPORTING PERSON

PN

SCHEDULE 13D

CUSIP No. 436440101

1. NAME OF REPORTING PERSON

Icahn Capital LP

2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP

(a) //

(b) //

3 SEC USE ONLY

4 SOURCE OF FUNDS

OO

5 CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) or /
2(e)

6 CITIZENSHIP OR PLACE OF ORGANIZATION

Delaware

NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH:

7 SOLE VOTING POWER

0

8 SHARED VOTING POWER

27,323,905

9 SOLE DISPOSITIVE POWER

0

10 SHARED DISPOSITIVE POWER

27,323,905

11 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

27,323,905

12 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES //

13 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)

10.10%

14 TYPE OF REPORTING PERSON

PN

SCHEDULE 13D

CUSIP No. 436440101

1. NAME OF REPORTING PERSON
IPH GP LLC

2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP
(a) //
(b) //

3 SEC USE ONLY

4 SOURCE OF FUNDS
OO

5 CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) or /
2(e)

6 CITIZENSHIP OR PLACE OF ORGANIZATION
Delaware

NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH:

7 SOLE VOTING POWER
0

8 SHARED VOTING POWER
27,323,905

9 SOLE DISPOSITIVE POWER
0

10 SHARED DISPOSITIVE POWER
27,323,905

11 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON
27,323,905

12 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES //

13 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)
10.10%

14 TYPE OF REPORTING PERSON
OO

SCHEDULE 13D

CUSIP No. 436440101

1. NAME OF REPORTING PERSON

Icahn Enterprises Holdings L.P.

2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP

(a) //

(b) //

3 SEC USE ONLY

4 SOURCE OF FUNDS

OO

5 CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) or /
2(e)

6 CITIZENSHIP OR PLACE OF ORGANIZATION

Delaware

NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH:

7 SOLE VOTING POWER

0

8 SHARED VOTING POWER

27,323,905

9 SOLE DISPOSITIVE POWER

0

10 SHARED DISPOSITIVE POWER

27,323,905

11 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

27,323,905

12 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES //

13 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)

10.10%

14 TYPE OF REPORTING PERSON

PN

SCHEDULE 13D

CUSIP No. 436440101

1. NAME OF REPORTING PERSON

Icahn Enterprises G.P. Inc.

2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP

(a) //

(b) //

3 SEC USE ONLY

4 SOURCE OF FUNDS

OO

5