

HOLOGIC INC  
Form SC 13D/A  
April 04, 2016  
SECURITIES AND EXCHANGE COMMISSION  
Washington, D.C. 20549

SCHEDULE 13D

Under the Securities Exchange Act of 1934  
(Amendment No. 8)\*

Hologic, Inc.  
(Name of Issuer)

Common Stock, \$0.01 par value  
(Title of Class of Securities)

436440101  
(CUSIP Number)

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

April 4, 2016  
(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).

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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

3,164,902

8 SHARED VOTING POWER

0

9 SOLE DISPOSITIVE POWER

3,164,902

10 SHARED DISPOSITIVE POWER

0

11 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

3,164,902

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

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

1.12%

14 TYPE OF REPORTING PERSON

PN

2

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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

3,164,902

9 SOLE DISPOSITIVE POWER

0

10 SHARED DISPOSITIVE POWER

3,164,902

11 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

3,164,902

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

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

1.12%

14 TYPE OF REPORTING PERSON

OO

3

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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

3,164,902

9 SOLE DISPOSITIVE POWER

0

10 SHARED DISPOSITIVE POWER

3,164,902

11 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

3,164,902

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

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

1.12%

14 TYPE OF REPORTING PERSON

CO

4

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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

5,252,156

8 SHARED VOTING POWER

0

9 SOLE DISPOSITIVE POWER

5,252,156

10 SHARED DISPOSITIVE POWER

0

11 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

5,252,156

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

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

1.85%

14 TYPE OF REPORTING PERSON

PN

5

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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

5,252,156

9 SOLE DISPOSITIVE POWER

0

10 SHARED DISPOSITIVE POWER

5,252,156

11 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

5,252,156

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

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

1.85%

14 TYPE OF REPORTING PERSON

PN

6

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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

7,407,462

8 SHARED VOTING POWER

0

9 SOLE DISPOSITIVE POWER

7,407,462

10 SHARED DISPOSITIVE POWER

0

11 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

7,407,462

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

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

2.61%

14 TYPE OF REPORTING PERSON

PN

7

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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

7,407,462

9 SOLE DISPOSITIVE POWER

0

10 SHARED DISPOSITIVE POWER

7,407,462

11 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

7,407,462

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

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

2.61%

14 TYPE OF REPORTING PERSON

PN

8

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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

12,659,618

9 SOLE DISPOSITIVE POWER

0

10 SHARED DISPOSITIVE POWER

12,659,618

11 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

12,659,618

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

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

4.46%

14 TYPE OF REPORTING PERSON

PN

9

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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

12,659,618

9 SOLE DISPOSITIVE POWER

0

10 SHARED DISPOSITIVE POWER

12,659,618

11 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

12,659,618

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

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

4.46%

14 TYPE OF REPORTING PERSON

OO

10

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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

12,659,618

9 SOLE DISPOSITIVE POWER

0

10 SHARED DISPOSITIVE POWER

12,659,618

11 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

12,659,618

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

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

4.46%

14 TYPE OF REPORTING PERSON

PN

11

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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 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

12,659,618

9 SOLE DISPOSITIVE POWER

0

10 SHARED DISPOSITIVE POWER

12,659,618

11 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

12,659,618

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

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

4.46%

14 TYPE OF REPORTING PERSON

CO

12

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SCHEDULE 13D

CUSIP No. 436440101

1 NAME OF REPORTING PERSON

Beckton 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

12,659,618

9 SOLE DISPOSITIVE POWER

0

10 SHARED DISPOSITIVE POWER

12,659,618

11 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

12,659,618

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

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

4.46%

14 TYPE OF REPORTING PERSON

CO

13

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SCHEDULE 13D

CUSIP No. 436440101

1 NAME OF REPORTING PERSON

Carl C. Icahn

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

United States of America

NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH:

7 SOLE VOTING POWER

0

8 SHARED VOTING POWER

15,824,520

9 SOLE DISPOSITIVE POWER

0

10 SHARED DISPOSITIVE POWER

15,824,520

11 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

15,824,520

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

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

5.58%

14 TYPE OF REPORTING PERSON

IN

14

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SCHEDULE 13D

Item 1. Security and Issuer

The Schedule 13D filed with the Securities and Exchange Commission on November 21, 2013, as amended (the "Schedule 13D"), by the Reporting Persons with respect to the shares of Common Stock, \$0.01 par value ("Shares"), issued by Hologic, Inc. (the "Issuer"), as amended by Amendment No. 1 to the Schedule 13D filed on December 9, 2015, Amendment No. 2 to the Schedule 13D filed on December 12, 2013, Amendment No. 3 to the Schedule 13D filed on August 4, 2015, Amendment No. 4 to the Schedule 13D filed on March 4, 2016, Amendment No. 5 to the Schedule 13D filed on March 4, 2016, Amendment No. 6 to the Schedule 13D filed on March 14, 2016, and Amendment No. 7 to the Schedule 13D filed on March 29, 2016, is hereby further amended to furnish the additional information set forth herein. All capitalized terms contained herein but not otherwise defined shall have the meanings ascribed to such terms in the Schedule 13D.

Item 5. Interest in Securities of the Issuer

Item 5 of the Schedule 13D is hereby amended by replacing it in its entirety with the following:

(a) The Reporting Persons may be deemed to beneficially own, in the aggregate, 15,824,520 Shares, representing approximately 5.58% of the Issuer's outstanding Shares (based upon the 283,818,060 Shares stated to be outstanding as of January 22, 2016 by the Issuer in the Issuer's Form 10-Q filed with the Securities and Exchange Commission on January 27, 2016).

(b) For purposes of this Schedule 13D:

High River has sole voting power and sole dispositive power with regard to 3,164,902 Shares. Each of Hopper, Barberry and Mr. Icahn has shared voting power and shared dispositive power with regard to such Shares. Icahn Master has sole voting power and sole dispositive power with regard to 5,252,156 Shares. Each of Icahn Offshore, Icahn Capital, IPH, Icahn Enterprises Holdings, Icahn Enterprises GP, Beckton and Mr. Icahn has shared voting power and shared dispositive power with regard to such Shares. Icahn Partners has sole voting power and sole dispositive power with regard to 7,407,462 Shares. Each of Icahn Onshore, Icahn Capital, IPH, Icahn Enterprises Holdings, Icahn Enterprises GP, Beckton and Mr. Icahn has shared voting power and shared dispositive power with regard to such Shares.

Each of Hopper, Barberry and Mr. Icahn, by virtue of their relationships to High River (as disclosed in Item 2), may be deemed to indirectly beneficially own (as that term is defined in Rule 13d-3 under the Securities Exchange Act of 1934, as amended, the "Act") the Shares which High River directly beneficially owns. Each of Hopper, Barberry and Mr. Icahn disclaims beneficial ownership of such Shares for all other purposes. Each of Icahn Offshore, Icahn Capital, IPH, Icahn Enterprises Holdings, Icahn Enterprises GP, Beckton and Mr. Icahn, by virtue of their relationships to Icahn Master (as disclosed in Item 2), may be deemed to indirectly beneficially own (as that term is defined in Rule 13d-3 under the Act) the Shares which Icahn Master directly beneficially owns. Each of Icahn Offshore, Icahn Capital, IPH, Icahn Enterprises Holdings, Icahn Enterprises GP, Beckton and Mr. Icahn disclaims beneficial ownership of such Shares for all other purposes. Each of Icahn Onshore, Icahn Capital, IPH, Icahn Enterprises Holdings, Icahn Enterprises GP, Beckton and Mr. Icahn, by virtue of their relationships to Icahn Partners (as disclosed in Item 2), may be deemed to indirectly beneficially own (as that term is defined in Rule 13d-3 under the Act) the Shares which Icahn Partners directly beneficially owns. Each of Icahn Onshore, Icahn Capital, IPH, Icahn Enterprises Holdings, Icahn Enterprises GP, Beckton and Mr. Icahn disclaims beneficial ownership of such Shares for all other purposes.

(c) The following table sets forth all transactions with respect to Shares effected during the past sixty (60) days by any of the Reporting Persons and not previously reported on Schedule 13D. All such transactions were sales of Shares

effected in the open market.

Name of Reporting Person	Date of Transaction	Amount of Securities	Price Per Share (U.S. \$)
High River Limited Partnership	03/30/2016	(210,155.00)	34.60
High River Limited Partnership	03/31/2016	(146,643.00)	34.54
High River Limited Partnership	04/01/2016	(190,399.00)	34.62
High River Limited Partnership	04/04/2016	(122,157.00)	35.19
Icahn Partners LP	03/30/2016	(491,546.00)	34.60
Icahn Partners LP	03/31/2016	(342,992.00)	34.54
Icahn Partners LP	04/01/2016	(440,288.00)	34.62
Icahn Partners LP	04/04/2016	(285,907.00)	35.19
Icahn Partners Master Fund LP	03/30/2016	(349,074.00)	34.60
Icahn Partners Master Fund LP	03/31/2016	(243,579.00)	34.54
Icahn Partners Master Fund LP	04/01/2016	(321,308.00)	34.62
Icahn Partners Master Fund LP	04/04/2016	(202,719.00)	35.19



SIGNATURE

After reasonable inquiry and to the best of each of the undersigned knowledge and belief, each of the undersigned certifies that the information set forth in this statement is true, complete and correct.

Dated: April 4, 2016

ICAHN PARTNERS MASTER FUND LP

ICAHN OFFSHORE LP

ICAHN PARTNERS LP

ICAHN ONSHORE LP

BECKTON CORP.

HOPPER INVESTMENTS LLC

BARBERRY CORP.

HIGH RIVER LIMITED PARTNERSHIP

By: Hopper Investments LLC, general partner

By: Barberry Corp.

By: /s/ Edward E. Mattner

Name: Edward E. Mattner

Title: Authorized Signatory

ICAHN CAPITAL LP

By: IPH GP LLC, its general partner

By: Icahn Enterprises Holdings L.P., its sole member

By: Icahn Enterprises G.P. Inc., its general partner

IPH GP LLC

By: Icahn Enterprises Holdings L.P., its sole member

By: Icahn Enterprises G.P. Inc., its general partner

ICAHN ENTERPRISES HOLDINGS L.P.

By: Icahn Enterprises G.P. Inc., its general partner

ICAHN ENTERPRISES G.P. INC.

By: /s/ SungHwan Cho

Name: SungHwan Cho

Title: Chief Financial Officer

/s/ Carl C. Icahn

CARL C. ICAHN

