the standard in safety

Underwriters Laboratories

LABORATORY REPORT

This report contains 11 pages.
(including the cover page)

If you have any questions concerning this report, please do not hesitate to call us at (800) 332-4345 or (574) 233-4777.

Underwriters Laboratories Inc
110 S. Hill Street, South Bend, IN 46617-2702 USA
T: 800 332.4345 / F: 574.233.8207 / W: ul.com

Laboratory Report

Client: Pall Life Sciences

Attn: John Campbell
600 South Wagner Road
Ann Arbor, MI 48103

Report: 268724
Priority: Standard Written
Status: Final
PWS ID: Not Supplied

Copies to: Laurel Beyer

Sample Information

UL ID #	Client ID	Method	Collected Date / Time	Collected By:	Received Date / Time
2517734	Outfall 09-01-11	317.0	09/01/11 00:00	Client	09/20/11 09:15
2517735	Outfall 09-04-11	317.0	09/04/11 00:00	Client	09/20/11 09:15
2517736	Outfall 09-05-11	317.0	09/05/11 00:00	Client	09/20/11 09:15
2517737	Outfall 09-06-11	317.0	09/06/11 00:00	Client	09/20/11 09:15
2517738	Outfall 09-07-11	317.0	09/07/11 00:00	Client	09/20/11 09:15
2517739	Outfall 09-08-11	317.0	09/08/11 00:00	Client	09/20/11 09:15
2517740	Outfall 09-11-11	317.0	09/11/11 00:00	Client	09/20/11 09:15
2517741	Outfall 09-12-11	317.0	09/12/11 00:00	Client	09/20/11 09:15
2517742	Outfall 09-13-11	317.0	09/13/11 00:00	Client	09/20/11 09:15
2517743	Outfall 09-14-11	317.0	09/14/11 00:00	Client	09/20/11 09:15
2517744	Outfall 09-15-11	317.0	09/15/11 00:00	Client	09/20/11 09:15
2517745	Outfall 09-18-11	317.0	09/18/11 00:00	Client	09/20/11 09:15

Report Summary

Note: Sample containers were provided by the client.

Detailed quantitative results are presented on the following pages. The results presented relate only to the samples provided for analysis.

We appreciate the opportunity to provide you with this analysis. If you have any questions concerning this report, please do not hesitate to call Traci Chlebowski at (574) 233-4777.

Jessie Yarolt — Authorized Signature
Senior Project Manager — Title
10-1-11 — Date

Client Name: Pall Life Sciences
Report #: 268724

Underwriters Laboratories Inc.
110 S. Hill Street, South Bend, IN 46617-2702 USA
T: 800.332.4345 / F: 574.233.8207 / W: ul.com

Client Name: Pall Life Sciences Report #: 268724

Sampling Point: Outfall 09-01-11 PWS ID: Not Supplied

General Chemistry									
Analyte ID #	Analyte	Method	Reg Limit	MRL†	Result	Units	Preparation Date	Analyzed Date	UL ID #
15541-45-4	Bromate	317.0	10 *	1.0	5.2	ug/L	---	09/21/11 12:43	2517734

Sampling Point: Outfall 09-04-11 PWS ID: Not Supplied

General Chemistry									
Analyte ID #	Analyte	Method	Reg Limit	MRL†	Result	Units	Preparation Date	Analyzed Date	UL ID #
15541-45-4	Bromate	317.0	10 *	1.0	4.6	ug/L	---	09/21/11 13:06	2517735

Sampling Point: Outfall 09-05-11 PWS ID: Not Supplied

General Chemistry									
Analyte ID #	Analyte	Method	Reg Limit	MRL†	Result	Units	Preparation Date	Analyzed Date	UL ID #
15541-45-4	Bromate	317.0	10 *	1.0	5.4	ug/L	---	09/21/11 13:29	2517736

Sampling Point: Outfall 09-06-11 PWS ID: Not Supplied

General Chemistry									
Analyte ID #	Analyte	Method	Reg Limit	MRL†	Result	Units	Preparation Date	Analyzed Date	UL ID #
15541-45-4	Bromate	317.0	10 *	1.0	4.9	ug/L	---	09/23/11 16:44	2517737

Sampling Point: Outfall 09-07-11 PWS ID: Not Supplied

General Chemistry									
Analyte ID #	Analyte	Method	Reg Limit	MRL†	Result	Units	Preparation Date	Analyzed Date	UL ID #
15541-45-4	Bromate	317.0	10 *	1.0	5.1	ug/L	---	09/23/11 17:30	2517738

Client Name: Pall Life Sciences Report #: 268724

Sampling Point: Outfall 09-08-11 PWS ID: Not Supplied

General Chemistry									
Analyte ID #	Analyte	Method	Reg Limit	MRL†	Result	Units	Preparation Date	Analyzed Date	UL ID #
15541-45-4	Bromate	317.0	10 *	1.0	4.6	ug/L	---	09/23/11 17:53	2517739

Sampling Point: Outfall 09-11-11 PWS ID: Not Supplied

General Chemistry									
Analyte ID #	Analyte	Method	Reg Limit	MRL†	Result	Units	Preparation Date	Analyzed Date	UL ID #
15541-45-4	Bromate	317.0	10 *	1.0	4.9	ug/L	---	09/23/11 18:16	2517740

Sampling Point: Outfall 09-12-11 PWS ID: Not Supplied

General Chemistry									
Analyte ID #	Analyte	Method	Reg Limit	MRL†	Result	Units	Preparation Date	Analyzed Date	UL ID #
15541-45-4	Bromate	317.0	10 *	1.0	4.8	ug/L	---	09/23/11 18:39	2517741

Sampling Point: Outfall 09-13-11 PWS ID: Not Supplied

General Chemistry									
Analyte ID #	Analyte	Method	Reg Limit	MRL†	Result	Units	Preparation Date	Analyzed Date	UL ID #
15541-45-4	Bromate	317.0	10 *	1.0	4.8	ug/L	---	09/23/11 19:02	2517742

Sampling Point: Outfall 09-14-11 PWS ID: Not Supplied

General Chemistry									
Analyte ID #	Analyte	Method	Reg Limit	MRL†	Result	Units	Preparation Date	Analyzed Date	UL ID #
15541-45-4	Bromate	317.0	10 *	1.0	5.0	ug/L	---	09/23/11 19:25	2517743

Client Name: Pall Life Sciences

Report #: 268724

Sampling Point: Outfall 09-15-11

PWS ID: Not Supplied

General Chemistry									
Analyte ID #	Analyte	Method	Reg Limit	MRL†	Result	Units	Preparation Date	Analyzed Date	UL ID #
15541-45-4	Bromate	317.0	10 *	1.0	5.3	ug/L	---	09/23/11 19:48	2517744

Sampling Point: Outfall 09-18-11

PWS ID: Not Supplied

General Chemistry									
Analyte ID #	Analyte	Method	Reg Limit	MRL†	Result	Units	Preparation Date	Analyzed Date	UL ID #
15541-45-4	Bromate	317.0	10 *	1.0	5.1	ug/L	---	09/23/11 20:11	2517745

UL has demonstrated it can achieve these report limits in reagent water, but can not document them in all sample matrices.

Reg Limit Type:	MCL	SMCL	AL
Symbol:	*	^	!

Lab Definitions

Continuing Calibration Check Standard (CCC) / Continuing Calibration Verification (CCV) / Initial Calibration Verification Standard (ICV) / Initial Performance Check (IPC) - is a standard containing one or more of the target analytes that is prepared from the same standards used to calibrate the instrument. This standard is used to verify the calibration curve at the beginning of each analytical sequence, and may also be analyzed throughout and at the end of the sequence. The concentration of continuing standards may be varied, when prescribed by the reference method, so that the range of the calibration curve is verified on a regular basis.

Internal Standards (IS) - are pure compounds with properties similar to the analytes of interest, which are added to field samples or extracts, calibration standards, and quality control standards at a known concentration. They are used to measure the relative responses of the analytes of interest and surrogates in the sample, calibration standard or quality control standard.

Laboratory Duplicate (LD) - is a field sample aliquot taken from the same sample container in the laboratory and analyzed separately using identical procedures. Analysis of laboratory duplicates provides a measure of the precision of the laboratory procedures.

Laboratory Fortified Blank (LFB) / Laboratory Control Sample (LCS) - is an aliquot of reagent water to which known concentrations of the analytes of interest are added. The LFB is analyzed exactly the same as the field samples. LFBs are used to determine whether the method is in control.

Laboratory Method Blank (LMB) / Laboratory Reagent Blank (LRB) - is a sample of reagent water included in the sample batch analyzed in the same way as the associated field samples. The LMB is used to determine if method analytes or other background contamination have been introduced during the preparation or analytical procedure. The LMB is analyzed exactly the same as the field samples.

Laboratory Trip Blank (LTB) - is a sample of laboratory reagent water placed in a sample container in the laboratory and treated as a field sample, including storage, preservation, and all analytical procedures. The LTB container follows the collection bottles to and from the collection site, but the LTB is not opened at any time during the trip. LTB is not exposed to site conditions or pumping and collection equipment. The LTB is primarily a travel blank used to verify that the samples were not contaminated during shipment.

Matrix Spike Duplicate Sample (MSD) / Laboratory Fortified Matrix Duplicate (LFD) - is a sample aliquot taken from the same field sample source as the Matrix Spike Sample to which known quantities of the analytes of interest are added in the laboratory. The MSD is analyzed exactly the same as the field samples. Analysis of the MSD provides a measure of the precision of the laboratory procedures in a specific matrix.

Matrix Spike Sample (MS) / Laboratory Fortified Matrix (LFM) - is a sample aliquot taken from field sample source to which known quantities of the analytes of interest are added in the laboratory. The MS is analyzed exactly the same as the field samples. The purpose is to demonstrate recovery of the analytes from a sample matrix to determine if the specific matrix contributes bias to the analytical results.

Quality Control Standard (QCS) / Second Source Calibration Verification (SSCV) - is a solution containing known concentrations of the analytes of interest prepared from a source different from the source of the calibration standards. The solution is obtained from a second manufacturer or lot if the lot can be demonstrated by the manufacturer as prepared independently from other lots. The QCS sample is analyzed using the same procedures as field samples. The QCS is used as a check on the calibration standards used in the method on a routine basis.

Reporting Limit Check (RLC) / Initial Calibration Check Standard (ICCS) - is a procedural standard that is analyzed each day to evaluate instrument performance at or below the minimum reporting limit (MRL).

Surrogate Standard (SS) / Surrogate Analyte (SUR) - is a pure compound with properties similar to the analytes of interest, which is highly unlikely to be found in any field sample, that is added to the field samples, calibration standards, blanks and quality control standards before sample preparation. The SS is used to evaluate the efficiency of the sample preparation process.

UL Drinking Water Laboratory
Extended Result Record Sheet

Run Number: 160831 | Instrument: IC DP | Method(s): 317.0
PC File Name: 092111a | Analyst: J. Timm | Submitted By: J. Timm
Order Number: 213668 | Receipt Batch: 268724 | Today's Date: 09/30/2011

Client: Pall Life Sciences / John Campbell | Generated By: R. Polite

Sample ID: 2519989 | Type: Laboratory Reagent Blank
Extracted: N/A | Analyzed: 09/21/2011 08:07 | Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
15541-45-4	Bromate	1.0	0.0000	< 1.0	ug/L

Sample ID: 2519990 | Type: Instrument Performance Check
Extracted: N/A | Analyzed: 09/21/2011 08:30 | Dil Factor: 1.000

CAS Number	Parameter	Target	Amount	% Rec	Limits	P/F
15541-45-4	Bromate	1.0	1.2061	121	75-125	Pass

Sample ID: 2519991 | Type: Laboratory Fortified Blank
Extracted: N/A | Analyzed: 09/21/2011 08:53 | Dil Factor: 1.000

CAS Number	Parameter	Target	Amount	% Rec	Limits	P/F
15541-45-4	Bromate	5.0	5.5542	111	85-115	Pass

Sample ID: 2517734 | Type: Field Sample | Site: Outfall 09-01-11
Extracted: N/A | Analyzed: 09/21/2011 12:43 | Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
15541-45-4	Bromate	1.0	5.2149	5.2	ug/L

Sample ID: 2517735 | Type: Field Sample | Site: Outfall 09-04-11
Extracted: N/A | Analyzed: 09/21/2011 13:06 | Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
15541-45-4	Bromate	1.0	4.5548	4.6	ug/L

Sample ID: 2517736 | Type: Field Sample | Site: Outfall 09-05-11
Extracted: N/A | Analyzed: 09/21/2011 13:29 | Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
15541-45-4	Bromate	1.0	5.4246	5.4	ug/L

Sample ID: 2519994 | Type: Continuing Calibration Check
Extracted: N/A | Analyzed: 09/21/2011 14:59 | Dil Factor: 1.000

CAS Number	Parameter	Target	Amount	% Rec	Limits	P/F
15541-45-4	Bromate	10.0	11.2176	112	85-115	Pass

NOTE: The dilution factor is included in the percent recovery calculation.

Version 2.7.0.0

UL Drinking Water Laboratory
Extended Result Record Sheet

Run Number: 160880 | Instrument: IC DP | Method(s): 317.0
PC File Name: 092311A | Analyst: J. Timm | Submitted By: J. Timm
Order Number: 213668 | Receipt Batch: 268724 | Today's Date: 09/30/2011

Client: Pall Life Sciences / John Campbell | Generated By: R. Polite

Sample ID: 2521009 | Type: Laboratory Reagent Blank
Extracted: N/A | Analyzed: 09/23/2011 14:03 | Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
15541-45-4	Bromate	1.0	0.0000	< 1.0	ug/L

Sample ID: 2521010 | Type: Instrument Performance Check
Extracted: N/A | Analyzed: 09/23/2011 14:26 | Dil Factor: 1.000

CAS Number	Parameter	Target	Amount	% Rec	Limits	P/F
15541-45-4	Bromate	1.0	0.9350	94	75-125	Pass

Sample ID: 2521011 | Type: Laboratory Fortified Blank
Extracted: N/A | Analyzed: 09/23/2011 14:49 | Dil Factor: 1.000

CAS Number	Parameter	Target	Amount	% Rec	Limits	P/F
15541-45-4	Bromate	5.0	4.9628	99	85-115	Pass

Sample ID: 2521012 | Type: Quality Control Sample
Extracted: N/A | Analyzed: 09/23/2011 15:12 | Dil Factor: 1.000

CAS Number	Parameter	Target	Amount	% Rec	Limits	P/F
15541-45-4	Bromate	5.0	4.7719	95	85-115	Pass

Sample ID: 2517737 | Type: Field Sample | Site: Outfall 09-06-11
Extracted: N/A | Analyzed: 09/23/2011 16:44 | Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
15541-45-4	Bromate	1.0	4.8956	4.9	ug/L

Sample ID: 2519995 | Type: Matrix Spike of 2517737 | Site: Outfall 09-06-11
Extracted: N/A | Analyzed: 09/23/2011 17:07 | Dil Factor: 1.000

CAS Number	Parameter	Target	Amount	Parent Amt	%Rec	Limits	P/F
15541-45-4	Bromate	5.0	9.2692	4.8956	87	75-125	Pass

Sample ID: 2517738 | Type: Field Sample | Site: Outfall 09-07-11
Extracted: N/A | Analyzed: 09/23/2011 17:30 | Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
15541-45-4	Bromate	1.0	5.0832	5.1	ug/L

Sample ID: 2517739 | Type: Field Sample | Site: Outfall 09-08-11
Extracted: N/A | Analyzed: 09/23/2011 17:53 | Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
15541-45-4	Bromate	1.0	4.6427	4.6	ug/L

Sample ID: 2517740 | Type: Field Sample | Site: Outfall 09-11-11
Extracted: N/A | Analyzed: 09/23/2011 18:16 | Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
15541-45-4	Bromate	1.0	4.8605	4.9	ug/L

NOTE: The dilution factor is included in the percent recovery calculation.

UL Drinking Water Laboratory
Extended Result Record Sheet

Run Number: 160880 | Instrument: IC DP | Method(s): 317.0
PC File Name: 092311A | Analyst: J. Timm | Submitted By: J. Timm
Order Number: 213668 | Receipt Batch: 268724 | Today's Date: 09/30/2011

Client: Pall Life Sciences / John Campbell | Generated By: R. Polite

Sample ID: 2517741 | Type: Field Sample | Site: Outfall 09-12-11
Extracted: N/A | Analyzed: 09/23/2011 18:39 | Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
15541-45-4	Bromate	1.0	4.8131	4.8	ug/L

Sample ID: 2517742 | Type: Field Sample | Site: Outfall 09-13-11
Extracted: N/A | Analyzed: 09/23/2011 19:02 | Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
15541-45-4	Bromate	1.0	4.7776	4.8	ug/L

Sample ID: 2517743 | Type: Field Sample | Site: Outfall 09-14-11
Extracted: N/A | Analyzed: 09/23/2011 19:25 | Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
15541-45-4	Bromate	1.0	5.0422	5.0	ug/L

Sample ID: 2517744 | Type: Field Sample | Site: Outfall 09-15-11
Extracted: N/A | Analyzed: 09/23/2011 19:48 | Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
15541-45-4	Bromate	1.0	5.3072	5.3	ug/L

Sample ID: 2517745 | Type: Field Sample | Site: Outfall 09-18-11
Extracted: N/A | Analyzed: 09/23/2011 20:11 | Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
15541-45-4	Bromate	1.0	5.0684	5.1	ug/L

Sample ID: 2521013 | Type: Continuing Calibration Check
Extracted: N/A | Analyzed: 09/23/2011 20:34 | Dil Factor: 1.000

CAS Number	Parameter	Target	Amount	% Rec	Limits	P/F
15541-45-4	Bromate	10.0	9.6307	96	85-115	Pass

NOTE: The dilution factor is included in the percent recovery calculation.

213668

PALL Pall Corporation

Environmental Laboratory Services
600 South Wagner Rd. Ann Arbor, MI 48103-9019
Phone: (734)-913-6531 * Fax: (734)-913-6103

Chain of Custody Record

268724

Page 1 of 3

Company Pall Corp.
Name Susan E.O. Peters
Street 600 South Wagner Rd. Bldg #4
City Ann Arbor State Mi Zip 48103
Phone 734-913-6531 Fax 734-913-6103
Email Sue.Peters@Pall.com

Requested Turnaround: Standard * 4 business days * 3 business days
48 hours * 24 hours * ASAP / Same day
Project Name / Number:
Print Sampler Name:
Invoice To CLIENT PROVIDED
SAMPLE CONTAINER

	Sample Identification or Location (This will appear on the final report)	Sample Date	Sample Time	Water Matrix: Drinking	Ground	Waste	Other	Number of Containers	Requested Testing	Preservation: None	4 °C	HCl	HNO_3	H_2SO_4	Other	Lab ID
1	Outfall 09-01-11	09/01/11	composite				✓	1	317 Bromate		✓					251734
2	Outfall 09-04-11	09/04/11	composite				✓	1	317		✓					735
3	Outfall 09-05-11	09/05/11	composite				✓	1	317		✓					736
4	Outfall 09-06-11	09/06/11	composite				✓	1	317		✓					737
5	Outfall 09-07-11	09/07/11	composite				✓	1	317		✓					738
6	Outfall 09-08-11	09/08/11	composite				✓	1	317		✓					739
7	Outfall 09-11-11	09/11/11	composite				✓	1	317		✓					740
8	Outfall 09-12-11	09/12/11	composite				✓	1	317		✓					741
9	Outfall 09-13-11	09/13/11	composite				✓	1	317		✓					742
10	Outfall 09-14-11	09/14/11	composite				✓	1	317		✓					743

Released by Sampler: John C/CD	Date: Above	Time: above	Received by: Susan EO Peters	Date: above	Time: :
Released by: Susan EO Peters	Date: 09/19/11	Time: :	Received by: Keller Express	Date: 9/20/11	Time: 09:15

Within holding times Y N	Containers are intact Y N	Labels and COC agree Y N	Correct volume and container Y N	Ice remaining (Y) N	Temperature on receipt 4 °C

PINK Copy – Sampler

WHITE copy and YELLOW copy – Forward to laboratory with samples.

d135668

PALL Pall Corporation

Environmental Laboratory Services
600 South Wagner Rd. Ann Arbor, MI 48103-9019
Phone: (734)-913-6531 * Fax: (734)-913-6103

Chain of Custody Record

Page 2 of 3

Company Pall Corp
Name Susan E.D. Peters
Street 600S Wagner Road Bldg #4
City Ann Arbor State MI Zip 48103
Phone 734-913-6531 Fax 734-913-6103
Email Sue.Peters@PALL.com

Requested Turnaround: Standard * 4 business days * 3 business days
48 hours * 24 hours * ASAP / Same day
Project Name / Number:
Print Sampler Name:
Invoice To: CLIENT PROVIDED

SAMPLE CONTAINER

	Sample Identification or Location (This will appear on the final report)	Sample Date	Sample Time	Water Matrix: Drinking	Ground	Waste	Other	Number of Containers	Requested Testing	Preservation: None	4 °C	HCl	HNO_3	H_2SO_4	Other	Lab ID
1	Outfall 09-15-11	09/15/11	Composite				✓	1	317		✓					261744
2	Outfall 09-18-11	09/18/11	Composite				✓	1	317		✓					261745
3	HC/HR 9-2-11	09/2/11	08:15													
4	HC/HR 9-6-11	09/06/11	08:30													
5	HC/HR 09-7-11	09/07/11	08:30													
6	HC/HR 09-08-11	09/08/11	08:20													
7	HC/HR 09-09-11	09/09/11	08:10													
8	HC/HR 09-12-11	09/12/11	08:35													
9	HC/HR 09-13-11	09/13/11	08:25													
10	HC/HR 09-14-11	09/14/11	08:30													

Separate bottle

Released by Sampler: JMC / CD	Date: Abde	Time: :	Received by: Susan E.D. Peters	Date: Abde	Time: :
Released by: Susan E.D. Peters	Date: 9/19/11	Time: 10:30	Received by: Kellee Dupuis	Date: 9 20 11	Time: 09:15

Within holding times Y N	Containers are intact Y N	Labels and COC agree Y N	Correct volume and container Y N	Ice remaining (Y) N	Temperature on receipt 4 °C

PINK Copy – Sampler

WHITE copy and YELLOW copy – Forward to laboratory with samples.

LABORATORY REPORT

This report contains 11 pages.
(including the cover page)

If you have any questions concerning this report, please do not hesitate to call us at (800) 332-4345 or (574) 233-4777.

Underwriters Laboratories Inc
110 S. Hill Street, South Bend, IN 46617-2702 USA
T : 800 332.4345 / F : 574.233.8207 / W : ul.com

Laboratory Report

Client: Pall Life Sciences

Attn: John Campbell
600 South Wagner Road
Ann Arbor, MI 48103

Report: 268725
Priority: Standard Written
Status: Final
PWS ID: Not Supplied

Copies to: Laurel Beyer

Sample Information

UL ID #	Client ID	Method	Collected Date / Time	Collected By:	Received Date / Time
2517781	HC/HR 9-2-11	317.0	09/02/11 08:15	Client	09/20/11 09:15
2517782	HC/HR 9-6-11	317.0	09/06/11 08:30	Client	09/20/11 09:15
2517783	HC/HR 9-7-11	317.0	09/07/11 08:30	Client	09/20/11 09:15
2517784	HC/HR 9-08-11	317.0	09/08/11 08:20	Client	09/20/11 09:15
2517785	HC/HR 9-09-11	317.0	09/09/11 08:10	Client	09/20/11 09:15
2517786	HC/HR 9-12-11	317.0	09/12/11 08:35	Client	09/20/11 09:15
2517787	HC/HR 9-13-11	317.0	09/13/11 08:25	Client	09/20/11 09:15
2517788	HC/HR 9-14-11	317.0	09/14/11 08:30	Client	09/20/11 09:15
2517789	HC/HR 9-15-11	317.0	09/15/11 08:35	Client	09/20/11 09:15
2517790	HC/HR 9-16-11	317.0	09/16/11 08:30	Client	09/20/11 09:15
2517791	HC/HR 9-19-11	317.0	09/19/11 07:50	Client	09/20/11 09:15

Report Summary

Note: Sample containers were provided by the client.

Detailed quantitative results are presented on the following pages. The results presented relate only to the samples provided for analysis.

We appreciate the opportunity to provide you with this analysis. If you have any questions concerning this report, please do not hesitate to call Traci Chlebowski at (574) 233-4777.

Jessie Yahab — Authorized Signature
Senior Project Manager — Title
10-1-11 — Date

Client Name: Pall Life Sciences
Report #: 268725

Underwriters Laboratories Inc.
110 S. Hill Street, South Bend, IN 46617-2702 USA
T:: 800.332.4345 / F:: 574.233.8207 / W:: ul.com

Client Name: Pall Life Sciences

Report #: 268725

Sampling Point: HC/HR 9-2-11

PWS ID: Not Supplied

General Chemistry									
Analyte ID #	Analyte	Method	Reg Limit	MRL†	Result	Units	Preparation Date	Analyzed Date	UL ID #
15541-45-4	Bromate	317.0	10 *	1.0	< 1.0	ug/L	---	09/21/11 19:34	2517781

Sampling Point: HC/HR 9-6-11

PWS ID: Not Supplied

General Chemistry									
Analyte ID #	Analyte	Method	Reg Limit	MRL†	Result	Units	Preparation Date	Analyzed Date	UL ID #
15541-45-4	Bromate	317.0	10 *	1.0	< 1.0	ug/L	---	09/21/11 21:29	2517782

Sampling Point: HC/HR 9-7-11

PWS ID: Not Supplied

General Chemistry									
Analyte ID #	Analyte	Method	Reg Limit	MRL†	Result	Units	Preparation Date	Analyzed Date	UL ID #
15541-45-4	Bromate	317.0	10 *	1.0	< 1.0	ug/L	---	09/21/11 22:38	2517783

Sampling Point: HC/HR 9-08-11

PWS ID: Not Supplied

General Chemistry									
Analyte ID #	Analyte	Method	Reg Limit	MRL†	Result	Units	Preparation Date	Analyzed Date	UL ID #
15541-45-4	Bromate	317.0	10 *	1.0	< 1.0	ug/L	---	09/21/11 23:01	2517784

Sampling Point: HC/HR 9-09-11

PWS ID: Not Supplied

General Chemistry									
Analyte ID #	Analyte	Method	Reg Limit	MRL†	Result	Units	Preparation Date	Analyzed Date	UL ID #
15541-45-4	Bromate	317.0	10 *	1.0	< 1.0	ug/L	---	09/21/11 23:24	2517785

Client Name: Pall Life Sciences

Report #: 268725

Sampling Point: HC/HR 9-12-11

PWS ID: Not Supplied

General Chemistry									
Analyte ID #	Analyte	Method	Reg Limit	MRL†	Result	Units	Preparation Date	Analyzed Date	UL ID #
15541-45-4	Bromate	317.0	10 *	1.0	< 1.0	ug/L	---	09/21/11 23:47	2517786

Sampling Point: HC/HR 9-13-11

PWS ID: Not Supplied

General Chemistry									
Analyte ID #	Analyte	Method	Reg Limit	MRL†	Result	Units	Preparation Date	Analyzed Date	UL ID #
15541-45-4	Bromate	317.0	10 *	1.0	< 1.0	ug/L	---	09/22/11 00:10	2517787

Sampling Point: HC/HR 9-14-11

PWS ID: Not Supplied

General Chemistry									
Analyte ID #	Analyte	Method	Reg Limit	MRL†	Result	Units	Preparation Date	Analyzed Date	UL ID #
15541-45-4	Bromate	317.0	10 *	1.0	< 1.0	ug/L	---	09/22/11 00:33	2517788

Sampling Point: HC/HR 9-15-11

PWS ID: Not Supplied

General Chemistry									
Analyte ID #	Analyte	Method	Reg Limit	MRL†	Result	Units	Preparation Date	Analyzed Date	UL ID #
15541-45-4	Bromate	317.0	10 *	1.0	< 1.0	ug/L	---	09/22/11 00:56	2517789

Sampling Point: HC/HR 9-16-11

PWS ID: Not Supplied

General Chemistry									
Analyte ID #	Analyte	Method	Reg Limit	MRL†	Result	Units	Preparation Date	Analyzed Date	UL ID #
15541-45-4	Bromate	317.0	10 *	1.0	< 1.0	ug/L	---	09/22/11 01:19	2517790

Client Name: Pall Life Sciences

Report #: 268725

Sampling Point: HC/HR 9-19-11

PWS ID: Not Supplied

General Chemistry

Analyte ID #	Analyte	Method	Reg Limit	MRL†	Result	Units	Preparation Date	Analyzed Date	UL ID #
15541-45-4	Bromate	317.0	10 *	1.0	< 1.0	ug/L	---	09/22/11 01:42	2517791

UL has demonstrated it can achieve these report limits in reagent water, but can not document them in all sample matrices.

Reg Limit Type:	MCL	SMCL	AL
Symbol:	*	^	!

Lab Definitions

Continuing Calibration Check Standard (CCC) / Continuing Calibration Verification (CCV) / Initial Calibration Verification Standard (ICV) / Initial Performance Check (IPC) - is a standard containing one or more of the target analytes that is prepared from the same standards used to calibrate the instrument. This standard is used to verify the calibration curve at the beginning of each analytical sequence, and may also be analyzed throughout and at the end of the sequence. The concentration of continuing standards may be varied, when prescribed by the reference method, so that the range of the calibration curve is verified on a regular basis.

Internal Standards (IS) - are pure compounds with properties similar to the analytes of interest, which are added to field samples or extracts, calibration standards, and quality control standards at a known concentration. They are used to measure the relative responses of the analytes of interest and surrogates in the sample, calibration standard or quality control standard.

Laboratory Duplicate (LD) - is a field sample aliquot taken from the same sample container in the laboratory and analyzed separately using identical procedures. Analysis of laboratory duplicates provides a measure of the precision of the laboratory procedures.

Laboratory Fortified Blank (LFB) / Laboratory Control Sample (LCS) - is an aliquot of reagent water to which known concentrations of the analytes of interest are added. The LFB is analyzed exactly the same as the field samples. LFBs are used to determine whether the method is in control.

Laboratory Method Blank (LMB) / Laboratory Reagent Blank (LRB) - is a sample of reagent water included in the sample batch analyzed in the same way as the associated field samples. The LMB is used to determine if method analytes or other background contamination have been introduced during the preparation or analytical procedure. The LMB is analyzed exactly the same as the field samples.

Laboratory Trip Blank (LTB) - is a sample of laboratory reagent water placed in a sample container in the laboratory and treated as a field sample, including storage, preservation, and all analytical procedures. The LTB container follows the collection bottles to and from the collection site, but the LTB is not opened at any time during the trip. LTB is not exposed to site conditions or pumping and collection equipment. The LTB is primarily a travel blank used to verify that the samples were not contaminated during shipment.

Matrix Spike Duplicate Sample (MSD) / Laboratory Fortified Matrix Duplicate (LFD) - is a sample aliquot taken from the same field sample source as the Matrix Spike Sample to which known quantities of the analytes of interest are added in the laboratory. The MSD is analyzed exactly the same as the field samples. Analysis of the MSD provides a measure of the precision of the laboratory procedures in a specific matrix.

Matrix Spike Sample (MS) / Laboratory Fortified Matrix (LFM) - is a sample aliquot taken from field sample source to which known quantities of the analytes of interest are added in the laboratory. The MS is analyzed exactly the same as the field samples. The purpose is to demonstrate recovery of the analytes from a sample matrix to determine if the specific matrix contributes bias to the analytical results.

Quality Control Standard (QCS) / Second Source Calibration Verification (SSCV) - is a solution containing known concentrations of the analytes of interest prepared from a source different from the source of the calibration standards. The solution is obtained from a second manufacturer or lot if the lot can be demonstrated by the manufacturer as prepared independently from other lots. The QCS sample is analyzed using the same procedures as field samples. The QCS is used as a check on the calibration standards used in the method on a routine basis.

Reporting Limit Check (RLC) / Initial Calibration Check Standard (ICCS) - is a procedural standard that is analyzed each day to evaluate instrument performance at or below the minimum reporting limit (MRL).

Surrogate Standard (SS) / Surrogate Analyte (SUR) - is a pure compound with properties similar to the analytes of interest, which is highly unlikely to be found in any field sample, that is added to the field samples, calibration standards, blanks and quality control standards before sample preparation. The SS is used to evaluate the efficiency of the sample preparation process.

UL Drinking Water Laboratory
Extended Result Record Sheet

Run Number: 160831 | Instrument: IC DP | Method(s): 317.0
PC File Name: 092111a | Analyst: J. Timm | Submitted By: J. Timm
Order Number: 213668 | Receipt Batch: 268725 | Today's Date: 09/30/2011

Client: Pall Life Sciences / John Campbell | Generated By: R. Polite

Sample ID: 2519989 | Type: Laboratory Reagent Blank
Extracted: N/A | Analyzed: 09/21/2011 08:07 | Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
15541-45-4	Bromate	1.0	0.0000	< 1.0	ug/L

Sample ID: 2519990 | Type: Instrument Performance Check
Extracted: N/A | Analyzed: 09/21/2011 08:30 | Dil Factor: 1.000

CAS Number	Parameter	Target	Amount	% Rec	Limits	P/F
15541-45-4	Bromate	1.0	1.2061	121	75-125	Pass

Sample ID: 2519991 | Type: Laboratory Fortified Blank
Extracted: N/A | Analyzed: 09/21/2011 08:53 | Dil Factor: 1.000

CAS Number	Parameter	Target	Amount	% Rec	Limits	P/F
15541-45-4	Bromate	5.0	5.5542	111	85-115	Pass

Sample ID: 2519994 | Type: Continuing Calibration Check
Extracted: N/A | Analyzed: 09/21/2011 14:59 | Dil Factor: 1.000

CAS Number	Parameter	Target	Amount	% Rec	Limits	P/F
15541-45-4	Bromate	10.0	11.2176	112	85-115	Pass

Sample ID: 2517781 | Type: Field Sample | Site: HC/HR 9-2-11
Extracted: N/A | Analyzed: 09/21/2011 19:34 | Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
15541-45-4	Bromate	1.0	0.0000	< 1.0	ug/L

Sample ID: 2519997 | Type: Continuing Calibration Check
Extracted: N/A | Analyzed: 09/21/2011 19:57 | Dil Factor: 1.000

CAS Number	Parameter	Target	Amount	% Rec	Limits	P/F
15541-45-4	Bromate	15.0	17.4496	116	85-115	Fail

NOTE: The dilution factor is included in the percent recovery calculation.

Version 2.7.0.0

UL Drinking Water Laboratory
Extended Result Record Sheet

Run Number: 160832 | Instrument: IC DP | Method(s): 317.0
PC File Name: 092111B | Analyst: J. Timm | Submitted By: J. Timm
Order Number: 213668 | Receipt Batch: 268725 | Today's Date: 09/30/2011

Client: Pall Life Sciences / John Campbell | Generated By: R. Polite

Sample ID: 2520008 | Type: Laboratory Reagent Blank
Extracted: N/A | Analyzed: 09/21/2011 20:20 | Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
15541-45-4	Bromate	1.0	0.0000	< 1.0	ug/L

Sample ID: 2520009 | Type: Instrument Performance Check
Extracted: N/A | Analyzed: 09/21/2011 20:43 | Dil Factor: 1.000

CAS Number	Parameter	Target	Amount	% Rec	Limits	P/F
15541-45-4	Bromate	1.0	1.2386	124	75-125	Pass

Sample ID: 2520010 | Type: Laboratory Fortified Blank
Extracted: N/A | Analyzed: 09/21/2011 21:06 | Dil Factor: 1.000

CAS Number	Parameter	Target	Amount	% Rec	Limits	P/F
15541-45-4	Bromate	5.0	5.4839	110	85-115	Pass

Sample ID: 2517782 | Type: Field Sample | Site: HC/HR 9-6-11
Extracted: N/A | Analyzed: 09/21/2011 21:29 | Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
15541-45-4	Bromate	1.0	0.0000	< 1.0	ug/L

Sample ID: 2520011 | Type: Matrix Spike of 2517782 | Site: HC/HR 9-6-11
Extracted: N/A | Analyzed: 09/21/2011 21:52 | Dil Factor: 1.000

CAS Number	Parameter	Target	Amount	Parent Amt	%Rec	Limits	P/F
15541-45-4	Bromate	5.0	4.8219	< MRL	96	75-125	Pass

Sample ID: 2520012 | Type: Matrix Spike Duplicate of 2517782 | Site: HC/HR 9-6-11
Extracted: N/A | Analyzed: 09/21/2011 22:15 | Dil Factor: 1.000

CAS Number	Parameter	Target	Amount	Parent Amt	%Rec	Limits	P/F
15541-45-4	Bromate	5.0	5.0510	< MRL	101	75-125	Pass

Sample ID: 2517783 | Type: Field Sample | Site: HC/HR 9-7-11
Extracted: N/A | Analyzed: 09/21/2011 22:38 | Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
15541-45-4	Bromate	1.0	0.4532	< 1.0	ug/L

Sample ID: 2517784 | Type: Field Sample | Site: HC/HR 9-08-11
Extracted: N/A | Analyzed: 09/21/2011 23:01 | Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
15541-45-4	Bromate	1.0	0.4069	< 1.0	ug/L

Sample ID: 2517785 | Type: Field Sample | Site: HC/HR 9-09-11
Extracted: N/A | Analyzed: 09/21/2011 23:24 | Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
15541-45-4	Bromate	1.0	0.4074	< 1.0	ug/L

NOTE: The dilution factor is included in the percent recovery calculation.

UL Drinking Water Laboratory
Extended Result Record Sheet

Run Number: 160832 | Instrument: IC DP | Method(s): 317.0
PC File Name: 092111B | Analyst: J. Timm | Submitted By: J. Timm
Order Number: 213668 | Receipt Batch: 268725 | Today's Date: 09/30/2011

Client: Pall Life Sciences / John Campbell | Generated By: R. Polite

Sample ID: 2517786 | Type: Field Sample | Site: HC/HR 9-12-11
Extracted: N/A | Analyzed: 09/21/2011 23:47 | Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
15541-45-4	Bromate	1.0	0.6668	< 1.0	ug/L

Sample ID: 2517787 | Type: Field Sample | Site: HC/HR 9-13-11
Extracted: N/A | Analyzed: 09/22/2011 00:10 | Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
15541-45-4	Bromate	1.0	0.9075	< 1.0	ug/L

Sample ID: 2517788 | Type: Field Sample | Site: HC/HR 9-14-11
Extracted: N/A | Analyzed: 09/22/2011 00:33 | Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
15541-45-4	Bromate	1.0	0.7573	< 1.0	ug/L

Sample ID: 2517789 | Type: Field Sample | Site: HC/HR 9-15-11
Extracted: N/A | Analyzed: 09/22/2011 00:56 | Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
15541-45-4	Bromate	1.0	0.6752	< 1.0	ug/L

Sample ID: 2517790 | Type: Field Sample | Site: HC/HR 9-16-11
Extracted: N/A | Analyzed: 09/22/2011 01:19 | Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
15541-45-4	Bromate	1.0	0.7006	< 1.0	ug/L

Sample ID: 2517791 | Type: Field Sample | Site: HC/HR 9-19-11
Extracted: N/A | Analyzed: 09/22/2011 01:42 | Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
15541-45-4	Bromate	1.0	0.8036	< 1.0	ug/L

Sample ID: 2520013 | Type: Continuing Calibration Check
Extracted: N/A | Analyzed: 09/22/2011 06:25 | Dil Factor: 1.000

CAS Number	Parameter	Target	Amount	% Rec	Limits	P/F
15541-45-4	Bromate	10.0	11.2881	113	85-115	Pass

NOTE: The dilution factor is included in the percent recovery calculation.

213668

PALL Pall Corporation

Environmental Laboratory Services
600 South Wagner Rd. Ann Arbor, MI 48103-9019
Phone: (734)-913-6531 * Fax: (734)-913-6103

Chain of Custody Record

268725

Company Pall Corp
Name Susan E.O. Peters
Street 6005 Wagner Road Bldg #4
City Ann Arbor State Mi Zip 48103
Phone 734-913-6531 Fax 734-913-6103
Email Sue.Peters@PALL.COM

Requested Turnaround: Standard * 4 business days * 3 business days
48 hours * 24 hours * ASAP / Same day
Project Name / Number:
Print Sampler Name:
Invoice To: CLIENT PROVIDED

SAMPLE CONTAINER

	Sample Identification or Location (This will appear on the final report)	Sample Date	Sample Time	Water Matrix: Drinking	Ground	Waste	Other	Number of Containers	Requested Testing	Preservation: None	4 °C	HCl	HNO_3	H_2SO_4	Other	Lab ID
									Bromate							9-20-11 KD
1	~~Outfall 09-15-11~~ Seperate Batch	09/15/11	Composite				✓	1	317		✓					2517781
2	~~Outfall 09-18-11~~	09/18/11	Composite				✓	1	317		✓					782
3	HC/HR 9-2-11	09/2/11	08:15					25	17-781						25	17-781-783
4	HC/HR 9-6-11	09/06/11	08:30						782							782-784
5	HC/HR 09-7-11	09/07/11	08:30						783							783-78
6	HC/HR 09-08-11	09/08/11	08:20						784							784
7	HC/HR 09-09-11	09/09/11	08:10						785							784
8	HC/HR 09-12-11	09/12/11	08:35						786							785
9	HC/HR 09-13-11	09/13/11	08:25						787							786
10	HC/HR 09-14-11	09/14/11	08:30						788							787

Released by Sampler: JonC / CD	Date: Above	Time: :	Received by: Susan E.O. Peters	Date: Above	Time: :
Released by: Susan E.O. Peters	Date: 9/19/11	Time: 10:30	Received by: Kellie Dupuis	Date: 9 20 11	Time: 09:15

9-20-11

Within holding times Y N	Containers are intact Y N	Labels and COC agree Y N	Correct volume and container Y N	Ice remaining (Y) N	Temperature on receipt 4 °C

PINK Copy – Sampler

WHITE copy and YELLOW copy – Forward to laboratory with samples.

213668

PALL Pall Corporation

Environmental Laboratory Services
600 South Wagner Rd. Ann Arbor, MI 48103-9019
Phone: (734)-913-6531 * Fax: (734)-913-6103

Chain of Custody Record

Page 3 of 3

Company Pall Corporation
Name Susan E.O. Peters
Street 600 South Wagner Road Bldg #4
City Ann Arbor State MI Zip 48103
Phone 734-913-6531 Fax 734-913-6103
Email ~~sue~~ sue.peters@pall.com

Requested Turnaround: Standard * 4 business days * 3 business days
48 hours * 24 hours * ASAP / Same day

Project Name / Number:
Print Sampler Name:
Invoice To: CLIENT PROVIDED
SAMPLE CONTAINER

	Sample Identification or Location (This will appear on the final report)	Sample Date	Sample Time	Water Matrix: Drinking	Ground	Waste	Other	Number of Containers	Requested Testing	Preservation: None	4 °C	HCl	HNO_3	H_2SO_4	Other	Lab ID
1	HC/HR 09-15-11	09/15/11	08:35				✓	1	317 Bromate		✓					251788 89
2	HC/HR 09-16-11	09/16/11	08:30				✓	1	317		✓					✓ 789 90
3	HC/HR 09-19-11	09/19/11	~~EST~~ 0750				✓	1	317		✓					9-20-11 KJ
4		/ /	:													
5		/ /	:													
6		/ /	:													
7	NA 09-19-11 SEOP	/ /	:													
8		/ /	:													
9		/ /	:													
10		/ /	:													

Released by Sampler: John C/CD	Date: Above	Time: :	Received by: Susan E.O. Peters
Released by: Susan E.O. Peters	Date: 09/19/11	Time: 10:30	Received by: Kellie Dupuis

Date: Above Time: :
Date: 9/20/11 Time: 09:15

Within holding times Y N	Containers are intact Y N	Labels and COC agree Y N	Correct volume and container Y N	Ice remaining (Y) N	Temperature on receipt 4 °C

PINK Copy – Sampler

WHITE copy and YELLOW copy – Forward to laboratory with samples.

*

Laboratory Report

Client: *Pall Life Sciences*

Attn: John Campbell
600 South Wagner Road
Ann Arbor, MI 48103

Copies to: *Laurel Beyer*

Report: 269539
Priority: Standard Written
Status: Final
PWS ID: Not Supplied

Sample Information

UL ID #	Client ID	Method	Collected Date / Time	Collected By:	Received Date / Time
2526404	Outfall	317.0	09/19/11 00:00	Client	10/05/11 09:30
2526405	Outfall	317.0	09/20/11 00:00	Client	10/05/11 09:30
2526406	Outfall	317.0	09/21/11 00:00	Client	10/05/11 09:30
2526407	Outfall	317.0	09/22/11 00:00	Client	10/05/11 09:30
2526408	Outfall	317.0	09/25/11 00:00	Client	10/05/11 09:30
2526409	Outfall	317.0	09/26/11 00:00	Client	10/05/11 09:30
2526410	Outfall	317.0	09/27/11 00:00	Client	10/05/11 09:30
2526411	Outfall	317.0	09/28/11 00:00	Client	10/05/11 09:30
2526412	Outfall	317.0	09/29/11 00:00	Client	10/05/11 09:30
2526413	Outfall	317.0	10/02/11 00:00	Client	10/05/11 09:30
2526414	Outfall	317.0	10/03/11 00:00	Client	10/05/11 09:30
2526415	HC/HR	317.0	09/20/11 09:20	Client	10/05/11 09:30
2526416	HC/HR	317.0	09/21/11 09:50	Client	10/05/11 09:30
2526417	HC/HR	317.0	09/22/11 07:45	Client	10/05/11 09:30
2526418	HC/HR	317.0	09/23/11 09:00	Client	10/05/11 09:30
2526419	HC/HR	317.0	09/26/11 09:05	Client	10/05/11 09:30
2526420	HC/HR	317.0	09/27/11 08:30	Client	10/05/11 09:30
2526421	HC/HR	317.0	09/28/11 09:20	Client	10/05/11 09:30
2526422	HC/HR	317.0	09/29/11 08:30	Client	10/05/11 09:30
2526423	HC/HR	317.0	09/30/11 09:30	Client	10/05/11 09:30
2526424	HC/HR	317.0	10/03/11 09:10	Client	10/05/11 09:30
2526425	HC/HR	317.0	10/04/11 09:00	Client	10/05/11 09:30

Report Summary

Note: Sample containers were provided by the client.

Detailed quantitative results are presented on the following pages. The results presented relate only to the samples provided for analysis.

We appreciate the opportunity to provide you with this analysis. If you have any questions concerning this report, please do not hesitate to call Traci Chlebowski at (574) 233-4777.

Underwriters Laboratories Inc.
110 S. Hill Street, South Bend, IN 46617-2702 USA
T: 800.332.4345 / F: 574.233.8207 / W: ul.com

Authorized Signature | Project Mgr (Title) | 10-17-2011 (Date)

Client Name: Pall Life Sciences Report #: 269539

Sampling Point: Outfall PWS ID: Not Supplied

General Chemistry									
Analyte ID #	Analyte	Method	Reg Limit	MRL†	Result	Units	Preparation Date	Analyzed Date	UL ID #
15541-45-4	Bromate	317.0	10 *	1.0	3.3	ug/L	---	10/11/11 20:54	2526404

Sampling Point: Outfall PWS ID: Not Supplied

General Chemistry									
Analyte ID #	Analyte	Method	Reg Limit	MRL†	Result	Units	Preparation Date	Analyzed Date	UL ID #
15541-45-4	Bromate	317.0	10 *	1.0	3.7	ug/L	---	10/11/11 21:17	2526405

Sampling Point: Outfall PWS ID: Not Supplied

General Chemistry									
Analyte ID #	Analyte	Method	Reg Limit	MRL†	Result	Units	Preparation Date	Analyzed Date	UL ID #
15541-45-4	Bromate	317.0	10 *	1.0	3.2	ug/L	---	10/11/11 21:40	2526406

Sampling Point: Outfall PWS ID: Not Supplied

General Chemistry									
Analyte ID #	Analyte	Method	Reg Limit	MRL†	Result	Units	Preparation Date	Analyzed Date	UL ID #
15541-45-4	Bromate	317.0	10 *	1.0	4.1	ug/L	---	10/11/11 22:03	2526407

Sampling Point: Outfall PWS ID: Not Supplied

General Chemistry									
Analyte ID #	Analyte	Method	Reg Limit	MRL†	Result	Units	Preparation Date	Analyzed Date	UL ID #
15541-45-4	Bromate	317.0	10 *	1.0	4.5	ug/L	---	10/11/11 22:26	2526408

Client Name: Pall Life Sciences Report #: 269539

Sampling Point: Outfall PWS ID: Not Supplied

General Chemistry									
Analyte ID #	Analyte	Method	Reg Limit	MRL†	Result	Units	Preparation Date	Analyzed Date	UL ID #
15541-45-4	Bromate	317.0	10 *	1.0	4.3	ug/L	---	10/11/11 22:49	2526409

Sampling Point: Outfall PWS ID: Not Supplied

General Chemistry									
Analyte ID #	Analyte	Method	Reg Limit	MRL†	Result	Units	Preparation Date	Analyzed Date	UL ID #
15541-45-4	Bromate	317.0	10 *	1.0	4.6	ug/L	---	10/11/11 23:12	2526410

Sampling Point: Outfall PWS ID: Not Supplied

General Chemistry									
Analyte ID #	Analyte	Method	Reg Limit	MRL†	Result	Units	Preparation Date	Analyzed Date	UL ID #
15541-45-4	Bromate	317.0	10 *	1.0	4.2	ug/L	---	10/11/11 23:58	2526411

Sampling Point: Outfall PWS ID: Not Supplied

General Chemistry									
Analyte ID #	Analyte	Method	Reg Limit	MRL†	Result	Units	Preparation Date	Analyzed Date	UL ID #
15541-45-4	Bromate	317.0	10 *	1.0	4.2	ug/L	---	10/12/11 01:07	2526412

Sampling Point: Outfall PWS ID: Not Supplied

General Chemistry									
Analyte ID #	Analyte	Method	Reg Limit	MRL†	Result	Units	Preparation Date	Analyzed Date	UL ID #
15541-45-4	Bromate	317.0	10 *	1.0	4.7	ug/L	---	10/12/11 01:30	2526413

Client Name: Pall Life Sciences

Report #: 269539

Sampling Point: Outfall

PWS ID: Not Supplied

General Chemistry									
Analyte ID #	Analyte	Method	Reg Limit	MRL†	Result	Units	Preparation Date	Analyzed Date	UL ID #
15541-45-4	Bromate	317.0	10 *	1.0	4.5	ug/L	---	10/12/11 01:53	2526414

Sampling Point: HC/HR

PWS ID: Not Supplied

General Chemistry									
Analyte ID #	Analyte	Method	Reg Limit	MRL†	Result	Units	Preparation Date	Analyzed Date	UL ID #
15541-45-4	Bromate	317.0	10 *	1.0	< 1.0	ug/L	---	10/12/11 02:16	2526415

Sampling Point: HC/HR

PWS ID: Not Supplied

General Chemistry									
Analyte ID #	Analyte	Method	Reg Limit	MRL†	Result	Units	Preparation Date	Analyzed Date	UL ID #
15541-45-4	Bromate	317.0	10 *	1.0	< 1.0	ug/L	---	10/12/11 02:39	2526416

Sampling Point: HC/HR

PWS ID: Not Supplied

General Chemistry									
Analyte ID #	Analyte	Method	Reg Limit	MRL†	Result	Units	Preparation Date	Analyzed Date	UL ID #
15541-45-4	Bromate	317.0	10 *	1.0	< 1.0	ug/L	---	10/12/11 03:02	2526417

Sampling Point: HC/HR

PWS ID: Not Supplied

General Chemistry									
Analyte ID #	Analyte	Method	Reg Limit	MRL†	Result	Units	Preparation Date	Analyzed Date	UL ID #
15541-45-4	Bromate	317.0	10 *	1.0	< 1.0	ug/L	---	10/12/11 03:25	2526418

Client Name: Pall Life Sciences

Report #: 269539

Sampling Point: HC/HR

PWS ID: Not Supplied

General Chemistry									
Analyte ID #	Analyte	Method	Reg Limit	MRL†	Result	Units	Preparation Date	Analyzed Date	UL ID #
15541-45-4	Bromate	317.0	10 *	1.0	< 1.0	ug/L	---	10/12/11 03:48	2526419

Sampling Point: HC/HR

PWS ID: Not Supplied

General Chemistry									
Analyte ID #	Analyte	Method	Reg Limit	MRL†	Result	Units	Preparation Date	Analyzed Date	UL ID #
15541-45-4	Bromate	317.0	10 *	1.0	< 1.0	ug/L	---	10/12/11 04:11	2526420

Sampling Point: HC/HR

PWS ID: Not Supplied

General Chemistry									
Analyte ID #	Analyte	Method	Reg Limit	MRL†	Result	Units	Preparation Date	Analyzed Date	UL ID #
15541-45-4	Bromate	317.0	10 *	1.0	< 1.0	ug/L	---	10/12/11 12:54	2526421

Sampling Point: HC/HR

PWS ID: Not Supplied

General Chemistry									
Analyte ID #	Analyte	Method	Reg Limit	MRL†	Result	Units	Preparation Date	Analyzed Date	UL ID #
15541-45-4	Bromate	317.0	10 *	1.0	< 1.0	ug/L	---	10/12/11 14:03	2526422

Sampling Point: HC/HR

PWS ID: Not Supplied

General Chemistry									
Analyte ID #	Analyte	Method	Reg Limit	MRL†	Result	Units	Preparation Date	Analyzed Date	UL ID #
15541-45-4	Bromate	317.0	10 *	1.0	< 1.0	ug/L	---	10/12/11 14:26	2526423

Client Name: Pall Life Sciences

Report #: 269539

Sampling Point: HC/HR

PWS ID: Not Supplied

General Chemistry									
Analyte ID #	Analyte	Method	Reg Limit	MRL†	Result	Units	Preparation Date	Analyzed Date	UL ID #
15541-45-4	Bromate	317.0	10 *	1.0	< 1.0	ug/L	---	10/12/11 14:49	2526424

Sampling Point: HC/HR

PWS ID: Not Supplied

General Chemistry									
Analyte ID #	Analyte	Method	Reg Limit	MRL†	Result	Units	Preparation Date	Analyzed Date	UL ID #
15541-45-4	Bromate	317.0	10 *	1.0	< 1.0	ug/L	---	10/12/11 15:12	2526425

† UL has demonstrated it can achieve these report limits in reagent water, but can not document them in all sample matrices.

Reg Limit Type:	MCL	SMCL	AL
Symbol:	*	^	!

Lab Definitions

Continuing Calibration Check Standard (CCC) / Continuing Calibration Verification (CCV) / Initial Calibration Verification Standard (ICV) / Initial Performance Check (IPC) - is a standard containing one or more of the target analytes that is prepared from the same standards used to calibrate the instrument. This standard is used to verify the calibration curve at the beginning of each analytical sequence, and may also be analyzed throughout and at the end of the sequence. The concentration of continuing standards may be varied, when prescribed by the reference method, so that the range of the calibration curve is verified on a regular basis.

Internal Standards (IS) - are pure compounds with properties similar to the analytes of interest, which are added to field samples or extracts, calibration standards, and quality control standards at a known concentration. They are used to measure the relative responses of the analytes of interest and surrogates in the sample, calibration standard or quality control standard.

Laboratory Duplicate (LD) - is a field sample aliquot taken from the same sample container in the laboratory and analyzed separately using identical procedures. Analysis of laboratory duplicates provides a measure of the precision of the laboratory procedures.

Laboratory Fortified Blank (LFB) / Laboratory Control Sample (LCS) - is an aliquot of reagent water to which known concentrations of the analytes of interest are added. The LFB is analyzed exactly the same as the field samples. LFBs are used to determine whether the method is in control.

Laboratory Method Blank (LMB) / Laboratory Reagent Blank (LRB) - is a sample of reagent water included in the sample batch analyzed in the same way as the associated field samples. The LMB is used to determine if method analytes or other background contamination have been introduced during the preparation or analytical procedure. The LMB is analyzed exactly the same as the field samples.

Laboratory Trip Blank (LTB) - is a sample of laboratory reagent water placed in a sample container in the laboratory and treated as a field sample, including storage, preservation, and all analytical procedures. The LTB container follows the collection bottles to and from the collection site, but the LTB is not opened at any time during the trip. LTB is not exposed to site conditions or pumping and collection equipment. The LTB is primarily a travel blank used to verify that the samples were not contaminated during shipment.

Matrix Spike Duplicate Sample (MSD) / Laboratory Fortified Matrix Duplicate (LFD) - is a sample aliquot taken from the same field sample source as the Matrix Spike Sample to which known quantities of the analytes of interest are added in the laboratory. The MSD is analyzed exactly the same as the field samples. Analysis of the MSD provides a measure of the precision of the laboratory procedures in a specific matrix.

Matrix Spike Sample (MS) / Laboratory Fortified Matrix (LFM) - is a sample aliquot taken from field sample source to which known quantities of the analytes of interest are added in the laboratory. The MS is analyzed exactly the same as the field samples. The purpose is to demonstrate recovery of the analytes from a sample matrix to determine if the specific matrix contributes bias to the analytical results.

Quality Control Standard (QCS) / Second Source Calibration Verification (SSCV) - is a solution containing known concentrations of the analytes of interest prepared from a source different from the source of the calibration standards. The solution is obtained from a second manufacturer or lot if the lot can be demonstrated by the manufacturer as prepared independently from other lots. The QCS sample is analyzed using the same procedures as field samples. The QCS is used as a check on the calibration standards used in the method on a routine basis.

Reporting Limit Check (RLC) / Initial Calibration Check Standard (ICCS) - is a procedural standard that is analyzed each day to evaluate instrument performance at or below the minimum reporting limit (MRL).

Surrogate Standard (SS) / Surrogate Analyte (SUR) - is a pure compound with properties similar to the analytes of interest, which is highly unlikely to be found in any field sample, that is added to the field samples, calibration standards, blanks and quality control standards before sample preparation. The SS is used to evaluate the efficiency of the sample preparation process.

PALL Pall Corporation

Environmental Laboratory Services
600 South Wagner Rd. Ann Arbor, MI 48103-9019
Phone: (734)-913-6531 * Fax: (734)-913-6103

Chain of Custody Record

214228 269539

Company Pall Corp.
Name Susan. EO. Peters
Street 1600 South Wagner Road Bldg #4
City Ann Arbor State MI Zip 48103
Phone 734-913-6531 Fax 734-913-6103
Email

Requested Turnaround: Standard * 4 business days * 3 business days
48 hours * 24 hours * ASAP / Same day
Project Name / Number:
Print Sampler Name:
Invoice To:

	Sample Identification or Location (This will appear on the final report)	Sample Date	Sample Time	Water Matrix: Drinking	Ground	Waste	Other	Number of Containers	Requested Testing: Bromate	Preservation: None	4 °C	HCl	HNO_3	H_2SO_4	Other	Lab ID
1	Outfall	09/19/11	comp.				✓	1	317		✓					25326 404
2	Outfall	09/20/11	Comp				✓	1	317		✓					405
3	Outfall	09/21/11	Comp				✓	1	317		✓					406
4	Outfall	09/22/11	comp				✓	1	317		✓					407
5	Outfall	09/25/11	Comp				✓	1	317		✓					408
6	Outfall	09/26/11	Comp				✓	1	317		✓					409
7	Outfall	09/27/11	Comp				✓	1	317		✓					410
8	Outfall	09/28/11	Comp				✓	1	317		✓					411
9	Outfall	09/29/11	comp				✓	1	317		✓					412
10	Outfall 10-2-11	~~09/30/11~~ 9	comp				/	1	317		✓					413
Released by Sampler: J.C.		Date: / /	Time: :	Received by:									Date: / /			Time: :
Released by: Shawn Reed		Date: 10/04/11	Time: :	Received by:									Date: 10/5/11			Time: 09:30

Within holding times Y N	Containers are intact Y N	Labels and COC agree Y N	Correct volume and container Y N	Ice remaining (Y) N	Temperature on receipt N/A °C

PINK Copy – Sampler

WHITE copy and YELLOW copy – Forward to laboratory with samples.

Client Provided Sample Container

PALL Pall Corporation

Environmental Laboratory Services
600 South Wagner Rd. Ann Arbor, MI 48103-9019
Phone: (734)-913-6531 * Fax: (734)-913-6103

Chain of Custody Record

214228

Company Pall Corp.
Name Susan E.O. Peters
Street 600 South Wagner Road Bldg #4
City Ann Arbor State MI Zip 48103
Phone 734-913-6531 Fax 734-913-6103
Email

Requested Turnaround: Standard * 4 business days * 3 business days
48 hours * 24 hours * ASAP / Same day
Project Name / Number:
Print Sampler Name:
Invoice To:

	Sample Identification or Location (This will appear on the final report)	Sample Date	Sample Time	Water Matrix: Drinking	Ground	Waste	Other Treated Water	Number of Containers	Requested Testing Bromate	Preservation: None	4 °C	HCl	HNO_3	H_2SO_4	Other	Lab ID
1	Outfall	10/03/11	comp				✓	1	317		✓					2632414
2	HC/HR	09/20/11	09:20				✓	1	317		✓					415
3	HC/HR	09/21/11	09:50				✓	1	317		✓					416
4	HC/HR	09/22/11	07:45				✓	1	317		✓					417
5	HC/HR	09/23/11	09:00				✓	1	317		✓					418
6	HC/HR	09/26/11	09:05				✓	1	317		✓					419
7	HC/HR	09/27/11	08:30				✓	1	317		✓					420
8	HC/HR	09/28/11	09:20				✓	1	317		✓					421
9	HC/HR	09/29/11	08:30				✓	1	317		✓					422
10	HC/HR	09/30/11	09:30				✓	1	317		✓					423
Released by Sampler: John C. Bobll		Date: / /	Time: :	Received by:									Date: / /			Time: :
Released by: Susan E.O. Peters		Date: 10/04/11	Time: :	Received by:									Date: 10/5/11			Time: 09:30

Within holding times Y N	Containers are intact Y N	Labels and COC agree Y N	Correct volume and container Y N	Ice remaining Y N	Temperature on receipt N/A °C

PINK Copy – Sampler

WHITE copy and YELLOW copy – Forward to laboratory with samples.

Client Provided Sample Container

(PALL) Pall Corporation

Environmental Laboratory Services
600 South Wagner Rd. Ann Arbor, MI 48103-9019
Phone: (734)-913-6531 * Fax: (734)-913-6103

Chain of Custody Record

214228

Company: Pall Corp
Name: Susan E.O. Peters
Street: 600 South Wagner Road Bldg #4
City: Ann Arbor State: MI Zip: 48103
Phone: 734-913-6531 Fax: 734-913-6103
Email:

Requested Turnaround: Standard * 4 business days * 3 business days
48 hours * 24 hours * ASAP / Same day
Project Name / Number:
Print Sampler Name:
Invoice To:

	Sample Identification or Location (This will appear on the final report)	Sample Date	Sample Time	Water Matrix: Drinking	Ground	Waste	Other	Number of Containers	Requested Testing	Preservation: None	4 °C	HCl	HNO_3	H_2SO_4	Other	Lab ID
									Bromate							
1	HC/HR	10/03/11	09:10			~~X~~	✓	1	317		✓					2526424
2	HC/HR	10/04/11	09:00			~~X~~	✓	1	317		✓					2526425
3		/ /	:													
4		/ /	:													
5		/ /	:													
6		/ /	:													
7		/ /	:													
8		/ /	:													
9		/ /	:													
10		/ /	:													

Released by Sampler: John C / Robert U	Date: / /	Time: :	Received by:	Date: / /	Time: :
Released by: Susan EO Peters	Date: 10/04/11	Time: :	Received by: [signature]	Date: 10/5/11	Time: ~~10:55~~ 8:30

Within holding times Y N	Containers are intact Y N	Labels and COC agree Y N	Correct volume and container Y N	Ice remaining (Y) N	Temperature on receipt N/A °C

PINK Copy – Sampler

WHITE copy and YELLOW copy – Forward to laboratory with samples.

Client Provided Sample Container

UL Drinking Water Laboratory
Extended Result Record Sheet

Run Number: 161464 | Instrument: IC DP | Method(s): 317.0
PC File Name: 101211A | Analyst: J. Timm | Submitted By: J. Timm
Order Number: 214228 | Receipt Batch: 269539 | Today's Date: 10/14/2011

Client: Pall Life Sciences / John Campbell | Generated By: P. Mahler

Sample ID: 2526251 | Type: Laboratory Reagent Blank
Extracted: N/A | Analyzed: 10/11/2011 17:27 | Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
15541-45-4	Bromate	1.0	0.0000	< 1.0	ug/L

Sample ID: 2526252 | Type: Instrument Performance Check
Extracted: N/A | Analyzed: 10/11/2011 17:50 | Dil Factor: 1.000

CAS Number	Parameter	Target	Amount	% Rec	Limits	P/F
15541-45-4	Bromate	1.0	1.1623	116	75-125	Pass

Sample ID: 2526253 | Type: Laboratory Fortified Blank
Extracted: N/A | Analyzed: 10/11/2011 18:13 | Dil Factor: 1.000

CAS Number	Parameter	Target	Amount	% Rec	Limits	P/F
15541-45-4	Bromate	5.0	4.9406	99	85-115	Pass

Sample ID: 2530428 | Type: Quality Control Sample
Extracted: N/A | Analyzed: 10/11/2011 18:36 | Dil Factor: 1.000

CAS Number	Parameter	Target	Amount	% Rec	Limits	P/F
15541-45-4	Bromate	5.0	4.8285	97	85-115	Pass

Sample ID: 2526404 | Type: Field Sample | Site: Outfall
Extracted: N/A | Analyzed: 10/11/2011 20:54 | Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
15541-45-4	Bromate	1.0	3.3261	3.3	ug/L

Sample ID: 2526405 | Type: Field Sample | Site: Outfall
Extracted: N/A | Analyzed: 10/11/2011 21:17 | Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
15541-45-4	Bromate	1.0	3.6513	3.7	ug/L

Sample ID: 2526406 | Type: Field Sample | Site: Outfall
Extracted: N/A | Analyzed: 10/11/2011 21:40 | Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
15541-45-4	Bromate	1.0	3.2315	3.2	ug/L

Sample ID: 2526407 | Type: Field Sample | Site: Outfall
Extracted: N/A | Analyzed: 10/11/2011 22:03 | Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
15541-45-4	Bromate	1.0	4.0944	4.1	ug/L

Sample ID: 2526408 | Type: Field Sample | Site: Outfall
Extracted: N/A | Analyzed: 10/11/2011 22:26 | Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
15541-45-4	Bromate	1.0	4.4525	4.5	ug/L

NOTE: The dilution factor is included in the percent recovery calculation.

UL Drinking Water Laboratory
Extended Result Record Sheet

Run Number: 161464 | Instrument: IC DP | Method(s): 317.0
PC File Name: 101211A | Analyst: J. Timm | Submitted By: J. Timm
Order Number: 214228 | Receipt Batch: 269539 | Today's Date: 10/14/2011

Client: Pall Life Sciences / John Campbell | Generated By: P. Mahler

Sample ID: 2526409 | Type: Field Sample | Site: Outfall
Extracted: N/A | Analyzed: 10/11/2011 22:49 | Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
15541-45-4	Bromate	1.0	4.2956	4.3	ug/L

Sample ID: 2526410 | Type: Field Sample | Site: Outfall
Extracted: N/A | Analyzed: 10/11/2011 23:12 | Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
15541-45-4	Bromate	1.0	4.5527	4.6	ug/L

Sample ID: 2530429 | Type: Continuing Calibration Check
Extracted: N/A | Analyzed: 10/11/2011 23:35 | Dil Factor: 1.000

CAS Number	Parameter	Target	Amount	% Rec	Limits	P/F
15541-45-4	Bromate	10.0	9.1404	91	85-115	Pass

Sample ID: 2526411 | Type: Field Sample | Site: Outfall
Extracted: N/A | Analyzed: 10/11/2011 23:58 | Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
15541-45-4	Bromate	1.0	4.2350	4.2	ug/L

Sample ID: 2530409 | Type: Matrix Spike of 2526411 | Site: Outfall
Extracted: N/A | Analyzed: 10/12/2011 00:21 | Dil Factor: 1.000

CAS Number	Parameter	Target	Amount	Parent Amt	%Rec	Limits	P/F
15541-45-4	Bromate	5.0	8.1096	4.2350	77	75-125	Pass

Sample ID: 2530410 | Type: Matrix Spike Duplicate of 2526411 | Site: Outfall
Extracted: N/A | Analyzed: 10/12/2011 00:44 | Dil Factor: 1.000

CAS Number	Parameter	Target	Amount	Parent Amt	%Rec	Limits	P/F
15541-45-4	Bromate	5.0	8.1928	4.2350	79	75-125	Pass

Sample ID: 2526412 | Type: Field Sample | Site: Outfall
Extracted: N/A | Analyzed: 10/12/2011 01:07 | Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
15541-45-4	Bromate	1.0	4.1621	4.2	ug/L

Sample ID: 2526413 | Type: Field Sample | Site: Outfall
Extracted: N/A | Analyzed: 10/12/2011 01:30 | Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
15541-45-4	Bromate	1.0	4.6693	4.7	ug/L

Sample ID: 2526414 | Type: Field Sample | Site: Outfall
Extracted: N/A | Analyzed: 10/12/2011 01:53 | Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
15541-45-4	Bromate	1.0	4.4935	4.5	ug/L

NOTE: The dilution factor is included in the percent recovery calculation.

UL Drinking Water Laboratory
Extended Result Record Sheet

Run Number: 161464 | Instrument: IC DP | Method(s): 317.0
PC File Name: 101211A | Analyst: J. Timm | Submitted By: J. Timm
Order Number: 214228 | Receipt Batch: 269539 | Today's Date: 10/14/2011

Client: Pall Life Sciences / John Campbell | Generated By: P. Mahler

Sample ID: 2526415 | Type: Field Sample | Site: HC/HR
Extracted: N/A | Analyzed: 10/12/2011 02:16 | Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
15541-45-4	Bromate	1.0	0.5644	< 1.0	ug/L

Sample ID: 2526416 | Type: Field Sample | Site: HC/HR
Extracted: N/A | Analyzed: 10/12/2011 02:39 | Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
15541-45-4	Bromate	1.0	0.4385	< 1.0	ug/L

Sample ID: 2526417 | Type: Field Sample | Site: HC/HR
Extracted: N/A | Analyzed: 10/12/2011 03:02 | Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
15541-45-4	Bromate	1.0	0.5393	< 1.0	ug/L

Sample ID: 2526418 | Type: Field Sample | Site: HC/HR
Extracted: N/A | Analyzed: 10/12/2011 03:25 | Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
15541-45-4	Bromate	1.0	0.5783	< 1.0	ug/L

Sample ID: 2526419 | Type: Field Sample | Site: HC/HR
Extracted: N/A | Analyzed: 10/12/2011 03:48 | Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
15541-45-4	Bromate	1.0	0.4816	< 1.0	ug/L

Sample ID: 2526420 | Type: Field Sample | Site: HC/HR
Extracted: N/A | Analyzed: 10/12/2011 04:11 | Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
15541-45-4	Bromate	1.0	0.4940	< 1.0	ug/L

Sample ID: 2530430 | Type: Continuing Calibration Check
Extracted: N/A | Analyzed: 10/12/2011 04:34 | Dil Factor: 1.000

CAS Number	Parameter	Target	Amount	% Rec	Limits	P/F
15541-45-4	Bromate	15.0	14.5338	97	85-115	Pass

NOTE: The dilution factor is included in the percent recovery calculation.

UL Drinking Water Laboratory
Extended Result Record Sheet

Run Number: 161466 | Instrument: IC DP | Method(s): 317.0
PC File Name: 101211A | Analyst: J. Timm | Submitted By: J. Timm
Order Number: 214228 | Receipt Batch: 269539 | Today's Date: 10/14/2011

Client: Pall Life Sciences / John Campbell | Generated By: P. Mahler

Sample ID: 2530454 | Type: Laboratory Reagent Blank
Extracted: N/A | Analyzed: 10/12/2011 11:22 | Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
15541-45-4	Bromate	1.0	0.0000	< 1.0	ug/L

Sample ID: 2530455 | Type: Instrument Performance Check
Extracted: N/A | Analyzed: 10/12/2011 11:45 | Dil Factor: 1.000

CAS Number	Parameter	Target	Amount	% Rec	Limits	P/F
15541-45-4	Bromate	1.0	1.0649	106	75-125	Pass

Sample ID: 2530456 | Type: Laboratory Fortified Blank
Extracted: N/A | Analyzed: 10/12/2011 12:08 | Dil Factor: 1.000

CAS Number	Parameter	Target	Amount	% Rec	Limits	P/F
15541-45-4	Bromate	5.0	4.8554	97	85-115	Pass

Sample ID: 2530457 | Type: Quality Control Sample
Extracted: N/A | Analyzed: 10/12/2011 12:31 | Dil Factor: 1.000

CAS Number	Parameter	Target	Amount	% Rec	Limits	P/F
15541-45-4	Bromate	5.0	4.6283	93	85-115	Pass

Sample ID: 2526421 | Type: Field Sample | Site: HC/HR
Extracted: N/A | Analyzed: 10/12/2011 12:54 | Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
15541-45-4	Bromate	1.0	0.6127	< 1.0	ug/L

Sample ID: 2530458 | Type: Matrix Spike of 2526421 | Site: HC/HR
Extracted: N/A | Analyzed: 10/12/2011 13:17 | Dil Factor: 1.000

CAS Number	Parameter	Target	Amount	Parent Amt	%Rec	Limits	P/F
15541-45-4	Bromate	5.0	5.3773	< MRL	108	75-125	Pass

Sample ID: 2526422 | Type: Field Sample | Site: HC/HR
Extracted: N/A | Analyzed: 10/12/2011 14:03 | Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
15541-45-4	Bromate	1.0	0.7309	< 1.0	ug/L

Sample ID: 2526423 | Type: Field Sample | Site: HC/HR
Extracted: N/A | Analyzed: 10/12/2011 14:26 | Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
15541-45-4	Bromate	1.0	0.6484	< 1.0	ug/L

Sample ID: 2526424 | Type: Field Sample | Site: HC/HR
Extracted: N/A | Analyzed: 10/12/2011 14:49 | Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
15541-45-4	Bromate	1.0	0.6790	< 1.0	ug/L

NOTE: The dilution factor is included in the percent recovery calculation.

UL Drinking Water Laboratory
Extended Result Record Sheet

Run Number: 161466
PC File Name: 101211A
Order Number: 214228

Instrument: IC DP
Analyst: J. Timm
Receipt Batch: 269539

Method(s): 317.0
Submitted By: J. Timm
Today's Date: 10/14/2011

Client: Pall Life Sciences / John Campbell

Generated By: P. Mahler

Sample ID: 2526425
Extracted: N/A

Type: Field Sample
Analyzed: 10/12/2011 15:12

Site: HC/HR
Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
15541-45-4	Bromate	1.0	0.7554	< 1.0	ug/L

Sample ID: 2530459
Extracted: N/A

Type: Continuing Calibration Check
Analyzed: 10/12/2011 17:30

Dil Factor: 1.000

CAS Number	Parameter	Target	Amount	% Rec	Limits	P/F
15541-45-4	Bromate	10.0	9.8577	99	85-115	Pass

NOTE: The dilution factor is included in the percent recovery calculation.