

APPENDIX G

Section 6

Outfall 019 – March 14 & 15, 2013

Test America Analytical Laboratory Report

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Irvine

17461 Derian Ave

Suite 100

Irvine, CA 92614-5817

Tel: (949)261-1022

TestAmerica Job ID: 440-41016-1

Client Project/Site: Annual Outfall 019

Revision: 3

For:

MWH Americas Inc

618 Michillinda Avenue, Suite 200

Arcadia, California 91007

Attn: Bronwyn Kelly



Authorized for release by:

4/23/2013 9:58:11 PM

Debby Wilson

Project Manager I

debby.wilson@testamericainc.com

LINKS

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results through
TotalAccess

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www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

- 1
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I certify under penalty of perjury that the information contained in this report and all attachments was produced in accordance with the indicated methods and laboratory standard operating procedures, except as noted, and are complete and accurate to the best of my knowledge and belief. Subcontract laboratory reports that are attached have been evaluated for completeness and quality control acceptability.



Debby Wilson
Project Manager I
4/23/2013 9:58:11 PM



Table of Contents

Cover Page	1
Table of Contents	3
Sample Summary	4
Case Narrative	5
Client Sample Results	8
Method Summary	18
Chronicle	20
QC Sample Results	23
QC Association	61
Definitions	70
Certification Summary	71
Subcontract Data	73
Chain of Custody	106
Receipt Checklists	110
Tracer Carrier Summary	115
Isotope Dilution Summary	116

Sample Summary

45%Ä6!(789"#Ä\$%&' (,6&
:\$*,Ä&!<=%!Ä.66>'5(?>!@'55(02A

ÄÄ!"#Ä\$%&'()*+(-./01/202312

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
//01/0BB312	?>!@'55(02A	8 ' !Ä\$	0C<2/ <2CØC0	0C<2/ <2C(2B.//
//01/0BB31D	Ä\$%E(F5'6G	8 ' !Ä\$	0C<2/ <2CØC0	0C<2/ <2C(2B.//
//01/202312	?>!@'55(02A	8 ' !Ä\$	0C<2H<2CØ2H	0C<2H<2C(2I.00

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Case Narrative

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:2;!#<= #!\$%&'>~Ä%?>#@-ÄÄ%68A

O! .#)*!+ ,-%123%/4\$%55675868978

Job ID: 440-40886-1

Laboratory: TestAmerica Irvine

Narrative

Job Narrative
440-40886-1

Comments

B2%-CC # 2"-Ä%,2**!"#.D%

Receipt

0E!%.*FÄ!.%G!+!+!! HIC%2"%I<85<J68I%9\$55%:&K%#E!%.*FÄ!%L22C%,2"C # 2"M%F+2F!+ÄN%F+!!+HIC%-"CM%GÄ!%+!D%#CM
0E!%#!F!+ #>+!%2@%#E!%,22Ä!+%-#%+!,! F#%G-.%DIP%ÄD

GC/MS VOA

B2%-"-ÄN# ,-Ä%2+%O>-Ä #N% ..>!.%G!+!"2#!CD

GC VOA

B2%-"-ÄN# ,-Ä%2+%O>-Ä #N% ..>!.%G!+!"2#!CD

GC Semi VOA

&!#E2CQ.R%S68TUS\$@!%@.-*FÄ!%H2Ä>*!%G-.%-H- Ä-3Ä!%#2@2!%*3-#,E%* #+ V%#F#W!%.F W!%C>FÄ ,-%!%Q&=<&=4R%#I!C%
G #E%3-#,E%AI8XID%%0E!%Ä-32+#+2+N%,2"*#+2Ä%.*FÄ!%QÄÄ!%G%#FÄ@#!%#2F+2H C!%F+!, . 2"%C-#-%@2+%#E%#3-,ED%%Q
5567A18X!<J7)R

B2%2#E!+%-ÄN# ,-Ä%2+%O>-Ä #N% ..>!.%G!+!"2#!CD

General Chemistry

B2%-"-ÄN# ,-Ä%2+%O>-Ä #N% ..>!.%G!+!"2#!CD

Biology

B2%-"-ÄN# ,-Ä%2+%O>-Ä #N% ..>!.%G!+!"2#!CD

Subcontract non-Sister

B2%-"-ÄN# ,-Ä%2+%O>-Ä #N% ..>!.%G!+!"2#!CD

Organic Prep

B2%-"-ÄN# ,-Ä%2+%O>-Ä #N% ..>!.%G!+!"2#!CD

VOA Prep

B2%-"-ÄN# ,-Ä%2+%O>-Ä #N% ..>!.%G!+!"2#!CD

Job ID: 440-41016-1

Laboratory: TestAmerica Irvine

Narrative

Job Narrative
440-41016-1

Z!H !.C%+IF2+##%#2% ",Ä>C!%,2"C>,# H #N%F-.#%#E!%*!#E2C%22ÄG*Ä!%#556756SS978%FI+%Ä !"#%G+ ##!"%+!O>!.#E2Z!BQ%
E-+C"!..%#2%556758689%FI+%Ä !"#%+!O>!.#D

Receipt

0E!%.*FÄ!.%G!+!+!! HIC%2"%I<8T<J68I%T\$66%:&K%#E!%.*FÄ!%L22C%,2"C # 2"M%F+2F!+ÄN%F+!!+HIC%-"CM%GÄ!%+!D%#CM
0E!%#!F!+ #>+!%2@%#E!%J%,22Ä!+%-#%+!,! F#%# *!%G!%#DSP%ÄD-

GC/MS VOA

B2%-"-ÄN# ,-Ä%2+%O>-Ä #N% ..>!.%G!+!"2#!CD

Case Narrative

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: + ; ! , # < = # ! \$ % ' > - Ä % ? > # @ - Ä Ä % 68A

0! .#)*!+ ,-.%123%/4\$%55675868978

Job ID: 440-41016-1 (Continued)

Laboratory: TestAmerica Irvine (Continued)

GC/MS Semi VOA

&!#E2CQ.R%9JTS%>@>@#%.*FÄ!%H2Ä>*!%G-.%H-Ä-3Ä!%#2%#6B-@E%*#+V%.F<W# V%.F W!%C>FÄ ,#!%Q&=<=&4R%-!C%#E%
3-#E%AI9TJD%0E!%Ä-32+#+2+N%,2"#+2Ä%.*FÄ!%QYÄ=R%G-%#C#>@2+#!C%#2%F+2H C!%F+!, . 2"%C-#-%@2+%#E .%3-#ED

&!#E2CQ.R%9JTS%0E!%Ä-32+#+2+N%,2"#+2Ä%.*FÄ!%QYÄ=R%G-%#C#>@2+#!C%#2%F+2H C!%F+!, . 2"%C-#-%@2+%#E .%3-#ED
Ä * #.%@2+%#E!%@2ÄÄ2G "L%.-ÄN#!.\$%-%#E+!,!M%G-#!M%#@ÄÄE#E!"!-"C<2+%3![" C "ID%0E!%!-"ÄN#!.G#E#BE% "%E!%
YÄ=4%-"C%G!+!%"2%#C!#!,#!C% "%#E!%-..2, -#!C%.*FÄ!K%#E!M@2%#E-H!%3!!"%+!F2+#!CD

&!#E2CQ.R%9JTS%0E!%Ä-32+#+2+N%,2"#+2Ä%.*FÄ!%QYÄ=R%G-%#C#>@2+#!C%#2%F+2H C!%F+!, . 2"%C-#-%@2+%#E .%3-#ED
AI9TJ%V,!!C!C%,2"#+2Ä%Ä * #.%@2+%#E!%@2ÄÄ2G "L%.-ÄN#!.\$%3!"["

B2%2#E!+%-"ÄN# , -Ä%2+%O>-Ä #N% ..>!.%G!+!%"2#ICD

HPLC

&!#E2CQ.R%I66D6\$%0E!%*#+V%.F W!%<%*#+V%.F W!%G>#Ä%#!2Q&=;%@2+% #+#!%-"C%" #+#!% "%3-#E%AJ6C!%2"#+2Ä%
Ä * #.D%0E!%-..2, -#!C%Ä-32+#+2+N%,2"#+2Ä%.*FÄ!%QYÄ=R%G-%#C#>@2+#!C%#2%F+2H C!%F+!, . 2"%C-#-%@2+%#E .%3-#ED

B2%2#E!+%-"ÄN# , -Ä%2+%O>-Ä #N% ..>!.%G!+!%"2#ICD

GC Semi VOA

&!#E2CQ.R%96S\$%>@>@#%.*FÄ!%H2Ä>*!%G-.%H-Ä-3Ä!%#2%#6B-@E%*#+V%.F<W# V%.F W!%C>FÄ ,#!%Q&=<=&4R%-!C%#E%
3-#E%AJ5X5D%0E!%Ä-32+#+2+N%,2"#+2Ä%.*FÄ!%QYÄ=R%G-%#C#>@2+#!C%#2%F+2H C!%F+!, . 2"%C-#-%@2+%#E .%3-#ED

B2%2#E!+%-"ÄN# , -Ä%2+%O>-Ä #N% ..>!.%G!+!%"2#ICD

Dioxin

&!#E2CQ.R%898IU\$%/2"%-3>"C-",!%+# 2.%+!%2>#. C!%, + #E!%@2ÄÄ2G "L%.-ÄN#!.\$%-%#E+!,!M%G-#!M%#@ÄÄE#E!"!-"C<2+%3!["
]>-"# # 2"% .%3-!C%2"%#E!%#E!2+!# , -Ä% 2"%-3>"C-",!E#!@2+#!M%#E!%!-"ÄN#!.%E-H!%3!!"%+!F2+#!C%-%"!# * #!G%-V
F2.. 3Ä!%,2!"#+# 2"%Q&:ÄRD%0E!%Ä-32+#+2+N%,2"#+2Ä%.*FÄ!%QYÄ=R%G-%#C#>@2+#!C%#2%F+2H C!%F+!, . 2"%C-#-%@2+%#E .%3-#ED

B2%2#E!+%-"ÄN# , -Ä%2+%O>-Ä #N% ..>!.%G!+!%"2#ICD

RAD

0E!%@2ÄÄ2G "L%.-ÄN#!.\$%-%#E+!,!M%G-#!M%#@ÄÄE#E!"!-"C<2+%3!["
-, C!%#2%-F(%2@%#%#D%#)*!+ , -%=#%Y2> .%Ä-32+#+2+N%,2"#+2Ä%.*FÄ!%QYÄ=R%G-%#C#>@2+#!C%#2%F+2H C!%F+!, . 2"%C-#-%@2+%#E .%3-#ED

Metals

&!#E2CQ.R%J66DX%Z!H%5D5\$%0E!%*#+V%.F W!%<%*#+V%.F W!%G>#Ä%#!2Q&=;%@2+% #+#!%-"C%" #+#!% "%3-#E%AJ6C!%2"#+2Ä%
.*FÄ!Q.R%2"#!C%C!#!,#!.%@2+%#E .%-"ÄN#!.#-%,2!"#+#!#2%#E-%#86%#E!%H-Ä>!%@2>"C% "%#E!%*!#E2C%3ÄVWK%#E!+!@2+!
+!7!V#+, # 2"%-"C<2+%+!7-"ÄN. .%2@%.*FÄ!%G-%."2%#F!+@2+*!CD

&!#E2CQ.R%J5TD8\$%0E!%Ä-32+#+2+N%,2"#+2Ä%.*FÄ!%QYÄ=R%G-%#C#>@2+#!C%#2%F+2H C!%F+!, . 2"%C-#-%@2+%#E .%3-#ED
,2"#+2Ä%Ä * #.%@2+%#E!%@2ÄÄ2G "L%.-ÄN#!.\$%(LD%G%0E!3%!C%#E!E% "%#E!%YÄ=-"C%G!+!%"2%#C!#!,#!C% "%#E!%-..2,
.*FÄ!.%?>#@-ÄÄ%68A%Q55675868978RK%#E!+!@2+!M%#E!%G-#!M%#@ÄÄE#E!"!-"C<2+%3!["

B2%2#E!+%-"ÄN# , -Ä%2+%O>-Ä #N% ..>!.%G!+!%"2#ICD

General Chemistry

B2%-"ÄN# , -Ä%2+%O>-Ä #N% ..>!.%G!+!%"2#ICD

Subcontract non-Sister

B2%-"ÄN# , -Ä%2+%O>-Ä #N% ..>!.%G!+!%"2#ICD

Organic Prep

Case Narrative

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: +2;! ,#<= #!\$%&'>-Ä%?>#@-ÄÄ%68A

0! .#)*!+ ,-%123%/4\$%55675868978

Job ID: 440-41016-1 (Continued)

Laboratory: TestAmerica Irvine (Continued)

B2%-"-ÄN# , -Ä%2+%O>-Ä #N% ..>!.%G!+!%"2#!CD

VOA Prep

B2%-"-ÄN# , -Ä%2+%O>-Ä #N% ..>!.%G!+!%"2#!CD

Dioxin Prep

B2%-"-ÄN# , -Ä%2+%O>-Ä #N% ..>!.%G!+!%"2#!CD

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Client Sample Results

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:*\$;Ä&!<=%!Ä.66>'5(?>!@'55(02A

ÄÄ!"#Ä\$%&'()*+(-./01/202312

Client Sample ID: Outfall 019

Lab Sample ID: 440-40886-1

Date Collected: 03/14/13 11:30

Matrix: Water

Date Received: 03/14/13 18:44

Method: 624 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2B2B21-%&C5*\$*Ä!C'6Ä	D-		0EF0	0EG0	>H<I			0G<J3<2G(2J.2/	2
J14C5*\$*Ä!CL5(M%6L5(Ä!CÄ	D-		JE0	2EK	>H<I			0G<2F<2G(JJ.0A	2
2B2BJB1-%&C5*\$*Ä!C'6Ä	D-		0EF0	0EG0	>H<I			0G<J3<2G(2J.2/	2
"&\$*5Ä%6	D-		FE0	/E0	>H<I			0G<2F<2G(JJ.0A	2
2B2BJ1-%&C5*\$*Ä!C'6Ä	D-		0EF0	0EG0	>H<I			0G<J3<2G(2J.2/	2
"&\$L5*6!\$%5Ä	D-		JE0	2EJ	>H<I			0G<2F<2G(JJ.0A	2
2B21-%&C5*\$*Ä!C'6Ä	D-		0EF0	0E/0	>H<I			0G<J3<2G(2J.2/	2
Ä\$%&C5*\$*!\$%@5>*\$*Ä!C'6Ä	D-		JE0	0EF0	>H<I			0G<J3<2G(2J.2/	2
2B21-%&C5*\$*Ä!CÄ6Ä	D-		0EF0	0E/J	>H<I			0G<J3<2G(2J.2/	2
2BJ1-%&C5*\$*+Ä6QÄ6Ä	D-		0EF0	0EGJ	>H<I			0G<J3<2G(2J.2/	2
2BJ1-%&C5*\$*Ä!C'6Ä	D-		0EF0	0EJK	>H<I			0G<J3<2G(2J.2/	2
2BJ1-%&C5*\$*R\$*R'6Ä	D-		0EF0	0EGF	>H<I			0G<J3<2G(2J.2/	2
2BG1-%&C5*\$*+Ä6QÄ6Ä	D-		0EF0	0EGF	>H<I			0G<J3<2G(2J.2/	2
2B/1-%&C5*\$*+Ä6QÄ6Ä	D-		0EF0	0EGS	>H<I			0G<J3<2G(2J.2/	2
TÄ6QÄ6Ä	D-		0EF0	0EJK	>H<I			0G<J3<2G(2J.2/	2
2BJ1-%&C5*\$*12B2BJ1!\$%@5>*\$*Ä!C'6Ä	D-		JE0	2E2	>H<I			0G<J3<2G(2J.2/	2
T\$*#*Ä!C'6Ä	D-		0EF0	0E/J	>H<I			0G<J3<2G(2J.2/	2
4\$*+6(!Ä!\$&C5*\$*UÄ	D-		0EF0	0EJK	>H<I			0G<J3<2G(2J.2/	2
4C5*\$*+Ä6QÄ6Ä	D-		0EF0	0EG3	>H<I			0G<J3<2G(2J.2/	2
-%&\$*#*&C5*\$*#Ä!C'6Ä	D-		0EF0	0E/0	>H<I			0G<J3<2G(2J.2/	2
4C5*\$*Ä!C'6Ä	D-		0EF0	0E/0	>H<I			0G<J3<2G(2J.2/	2
4C5*\$*@*#	D-		0EF0	0EGG	>H<I			0G<J3<2G(2J.2/	2
4C5*\$*#Ä!C'6Ä	D-		0EF0	0E/0	>H<I			0G<J3<2G(2J.2/	2
&% 12BG1-%&C5*\$*R\$*RÄ6Ä	D-		0EF0	0EJJ	>H<I			0G<J3<2G(2J.2/	2
T\$*#*U%&C5*\$*#Ä!C'6Ä	D-		0EF0	0EG0	>H<I			0G<J3<2G(2J.2/	2
V!CL5+Ä6QÄ6Ä	D-		0EF0	0EJF	>H<I			0G<J3<2G(2J.2/	2
7Ä!CL5Ä6Ä(4C5*\$*UÄ	D-		2E0	0EAF	>H<I			0G<J3<2G(2J.2/	2
ÄÄ!\$&C5*\$*Ä!CÄ6Ä	D-		0EF0	0EGJ	>H<I			0G<J3<2G(2J.2/	2
Ä*5>Ä6Ä	D-		0EF0	0EG3	>H<I			0G<J3<2G(2J.2/	2
!\$*6 12BJ1-%&C5*\$*Ä!CÄ6Ä	D-		0EF0	0EG0	>H<I			0G<J3<2G(2J.2/	2
!\$*6 12BG1-%&C5*\$*R\$*RÄ6Ä	D-		0EF0	0EGJ	>H<I			0G<J3<2G(2J.2/	2
Ä\$%&C5*\$*@5>*\$*#Ä!C'6Ä	D-		0EF0	0EG/	>H<I			0G<J3<2G(2J.2/	2
W%6L5(&C5*\$*UÄ	D-		0EF0	0E/0	>H<I			0G<J3<2G(2J.2/	2
Ä\$%&C5*\$*Ä!CÄ6Ä	D-		0EF0	0EJ3	>H<I			0G<J3<2G(2J.2/	2
&% 12BJ1-%&C5*\$*Ä!CÄ6Ä	D-		0EF0	0EGJ	>H<I			0G<J3<2G(2J.2/	2
4L&5*CÄX'6Ä	D-		JE0	0E/0	>H<I			0G<J3<2G(2J.2/	2
YL5Ä6Ä Ä*!5	D-		2E0	0EA0	>H<I			0G<J3<2G(2J.2/	2

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	105		80 - 120		03/15/13 22:09	1
Dibromofluoromethane (Surr)	106		80 - 120		03/15/13 22:09	1
4-Bromofluorobenzene (Surr)	82		80 - 120		03/26/13 12:14	1
Dibromofluoromethane (Surr)	111		80 - 120		03/26/13 12:14	1
Toluene-d8 (Surr)	101		80 - 120		03/26/13 12:14	1

Method: 624 - Volatile Organic Compounds (GC/MS) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
T\$*#*@*#	D-		0EF0	0E/0	>H<I			0G<JS<2G(2G.F2	2

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Client Sample Results

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:.*;Ä&!<=%!Ä.66>'5(?>!@'55(02A

ÄÄ!"#Ä\$%&'()*+(-./01/202312

Client Sample ID: Outfall 019

Lab Sample ID: 440-40886-1

Date Collected: 03/14/13 11:30

Matrix: Water

Date Received: 03/14/13 18:44

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		80 - 120		03/27/13 13:51	1
Dibromofluoromethane (Surr)	100		80 - 120		03/27/13 13:51	1
Toluene-d8 (Surr)	108		80 - 120		03/27/13 13:51	1

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Z[?(N4/142JP	D-		0E0F0	0E0JF	#H<I			0G<JS<2G(0G.GA	2

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		65 - 140		03/27/13 03:39	1

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
42G14JK	D-		0E/A	0E0AK	#H<I		0G<J2<2G(0F.JG	0G<J2<2G(JG.FA	2

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
n-Octacosane	99		45 - 120	03/21/13 05:23	03/21/13 23:59	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
9V7	D-		/ ES	2EG	# H<I		0G<J3<2G(03.2J	0G<J3<2G(20.GJ	2

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	1500	BU	2E0	2E0	>#C* <#			0/<2A<2G(2/F	2
=Ä!!5Ä'+5Ä(=*5%U	D-		0E20	0E20	#I<I<9\$			0G<2F<2G(2G.F3	2

Method: SM 9221E - Coliforms, Fecal (Multiple-Tube Fermentation)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
4*5%#@*#B(OÄ&'5	D-		JE0	JE0	7:D<200#I			0G<2/<2G(2K.FA	2

Method: SM 9221F - E.Coli (Multiple-Tube Fermentation; EC-MUG)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
V &CÄ\$%&C%('(&*5%	D-		JE0	JE0	7:D<200#I			0G<2/<2G(2K.FA	2

Client Sample ID: Trip Blank

Lab Sample ID: 440-40886-2

Date Collected: 03/14/13 11:30

Matrix: Water

Date Received: 03/14/13 18:44

Method: 624 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2B2B2\$%&C5*\$Ä!C'6Ä	D-		0E0	0EG0	>H<I			0G<J3<2G(2F	2
J14C5*\$Ä!CL5(M%6L5(Ä!CÄ\$	D-		JE0	2EK	>H<I			0G<2F<2G(JG.GF	2
2B2B2B.JÄ!&C5*\$Ä!C'6Ä	D-		0E0	0EG0	>H<I			0G<J3<2G(2F	2
"&\$*5Ä%6	D-		FE0	/ E0	>H<I			0G<2F<2G(JG.GF	2
2B2B2B.JÄ!&C5*\$Ä!C'6Ä	D-		0E0	0EG0	>H<I			0G<J3<2G(2F	2
"&\$L5*6!\$%5Ä	D-		JE0	2EJ	>H<I			0G<2F<2G(JG.GF	2
2B21-%&C5*\$Ä!C'6Ä	D-		0E0	0E/0	>H<I			0G<J3<2G(2F	2
Ä\$%&C5*\$!\$%@5>*\$Ä!C'6ÄNO12	D-		JE0	0E0	>H<I			0G<J3<2G(2F	2
2B21-%&C5*\$Ä!C'6Ä	D-		0E0	0E/J	>H<I			0G<J3<2G(2F	2
2BJ1-%&C5*\$Ä6QÄ6Ä	D-		0E0	0EGJ	>H<I			0G<J3<2G(2F	2
2BJ1-%&C5*\$Ä!C'6Ä	D-		0E0	0EJK	>H<I			0G<J3<2G(2F	2
2BJ1-%&C5*\$ÄR\$R'6Ä	D-		0E0	0EGF	>H<I			0G<J3<2G(2F	2
2BG1-%&C5*\$Ä6QÄ6Ä	D-		0E0	0EGF	>H<I			0G<J3<2G(2F	2

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Client Sample Results

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Client Sample ID: Trip Blank

Lab Sample ID: 440-40886-2

Date Collected: 03/14/13 11:30

Matrix: Water

Date Received: 03/14/13 18:44

Method: 624 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2B/1-%&C5*\$*+Ä6QÄ6Ä	D-		0EF0	0EGS	>H<I			0G<J3<2G2F	2
TÄ6QÄ6Ä	D-		0EF0	0EJK	>H<I			0G<J3<2G2F	2
T\$*#*@\$#	D-		0EF0	0E/0	>H<I			0G<J3<2G2F	2
2BJ1-%&C5*\$*12B2BJ1!\$%@5>*\$*ÄIC'6Ä	D-		JE0	2E2	>H<I			0G<J3<2G2F	2
T\$*#*ÄIC'6Ä	D-		0EF0	0E/J	>H<I			0G<J3<2G2F	2
4\$*6(!Ä!\$&C5*\$%UÄ	D-		0EF0	0EJK	>H<I			0G<J3<2G2F	2
4C5*\$*+Ä6QÄ6Ä	D-		0EF0	0EG3	>H<I			0G<J3<2G2F	2
-%+\$*#*&C5*\$*ÄIC'6Ä	D-		0EF0	0E/0	>H<I			0G<J3<2G2F	2
4C5*\$*ÄIC'6Ä	D-		0EF0	0E/0	>H<I			0G<J3<2G2F	2
4C5*\$*@\$#	D-		0EF0	0EGG	>H<I			0G<J3<2G2F	2
4C5*\$*ÄIC'6Ä	D-		0EF0	0E/0	>H<I			0G<J3<2G2F	2
&% 12BG1-%&C5*\$*R\$*RÄ6Ä	D-		0EF0	0EJJ	>H<I			0G<J3<2G2F	2
T\$*#*U%&C5*\$*ÄIC'6Ä	D-		0EF0	0EG0	>H<I			0G<J3<2G2F	2
V!CL5+Ä6QÄ6Ä	D-		0EF0	0EJF	>H<I			0G<J3<2G2F	2
7Ä!CL5Ä6Ä(4C5*\$%UÄ	D-		2E0	0EAF	>H<I			0G<J3<2G2F	2
ÄÄ!\$&C5*\$*ÄICÄ6Ä	D-		0EF0	0EGJ	>H<I			0G<J3<2G2F	2
Ä*5>Ä6Ä	D-		0EF0	0EG3	>H<I			0G<J3<2G2F	2
!\$*6 12BJ1-%&C5*\$*ÄICÄ6Ä	D-		0EF0	0EG0	>H<I			0G<J3<2G2F	2
!\$*6 12BG1-%&C5*\$*R\$*RÄ6Ä	D-		0EF0	0EGJ	>H<I			0G<J3<2G2F	2
Ä\$%&C5*\$*@5>*\$*ÄIC'6Ä	D-		0EF0	0EG/	>H<I			0G<J3<2G2F	2
W%6L5(&C5*\$%UÄ	D-		0EF0	0E/0	>H<I			0G<J3<2G2F	2
Ä\$%&C5*\$*ÄICÄ6Ä	D-		0EF0	0EJ3	>H<I			0G<J3<2G2F	2
&% 12BJ1-%&C5*\$*ÄICÄ6Ä	D-		0EF0	0EGJ	>H<I			0G<J3<2G2F	2
4L&5*CÄX'6Ä	D-		JE0	0E/0	>H<I			0G<J3<2G2F	2
YL5Ä6Ä Ä*!5	D-		2E0	0EA0	>H<I			0G<J3<2G2F	2

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	104		80 - 120		03/15/13 23:35	1
Dibromofluoromethane (Surr)	111		80 - 120		03/15/13 23:35	1
4-Bromofluorobenzene (Surr)	82		80 - 120		03/26/13 11:45	1
Dibromofluoromethane (Surr)	108		80 - 120		03/26/13 11:45	1
Toluene-d8 (Surr)	100		80 - 120		03/26/13 11:45	1

Client Sample ID: Outfall 019

Lab Sample ID: 440-41016-1

Date Collected: 03/15/13 11:45

Matrix: Water

Date Received: 03/15/13 17:00

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2B/1-%*X'6Ä	D-		JE0	2E0	>H<I			0G<JJ<2G2I0	2

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	114		80 - 120		03/22/13 11:20	1

Method: 625 - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2B/1!\$%&C5*\$*+Ä6QÄ6Ä	D-		AE/K	JEGS	>H<I		0G<JJ<2G(2/.J2	0G<JK<2G(0/K	2
2BJ1-%&C5*\$*+Ä6QÄ6Ä	D-		AE/K	JEK/	>H<I		0G<JJ<2G(2/.J2	0G<JK<2G(0/.JK	2
2BJ1-%RCÄ6L5CLU\$'Q%6ÄN' ("Q*+Ä6QÄ6ÄP	D-		2AE0	JEGS	>H<I		0G<JJ<2G(2/.J2	0G<JK<2G(0/.JK	2
2BG1-%&C5*\$*+Ä6QÄ6Ä	D-		AE/K	JEK/	>H<I		0G<JJ<2G(2/.J2	0G<JK<2G(0/.JK	2

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Client Sample Results

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Client Sample ID: Outfall 019

Lab Sample ID: 440-41016-1

Date Collected: 03/15/13 11:45

Matrix: Water

Date Received: 03/15/13 17:00

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2B/1-%&C5*\$*+Ä6QÄ6Ä	D-		AE/K	JEGS	>H<I		0G<JJ<2G(2/.J2	0G<JK<2G(0/.JK	2
JB/B31#%&C5*\$*RCÄ6*5	D-		2AE0	/EJS	>H<I		0G<JJ<2G(2/.J2	0G<JK<2G(0/.JK	2
JB/1-%&C5*\$*RCÄ6*5	D-		AE/K	GEGJ	>H<I		0G<JJ<2G(2/.J2	0G<JK<2G(0/.JK	2
JB/1-%#ÄICL5RCÄ6*5	D-		2AE0	GEGJ	>H<I		0G<JJ<2G(2/.J2	0G<JK<2G(0/.JK	2
JB/1-%6%!\$*RCÄ6*5	D-		2AE0	SEFK	>H<I		0G<JJ<2G(2/.J2	0G<JK<2G(0/.JK	2
JB/1-%6%!\$*5>Ä6Ä	D-		AE/K	GEGJ	>H<I		0G<JJ<2G(2/.J2	0G<JK<2G(0/.JK	2
JB31-%6%!\$*5>Ä6Ä	D-		AE/K	2EA0	>H<I		0G<JJ<2G(2/.J2	0G<JK<2G(0/.JK	2
J14C5*\$*6'RC!C'5Ä6Ä	D-		AE/K	JEK/	>H<I		0G<JJ<2G(2/.J2	0G<JK<2G(0/.JK	2
J14C5*\$*RCÄ6*5	D-		AE/K	JEK/	>H<I		0G<JJ<2G(2/.J2	0G<JK<2G(0/.JK	2
J17Ä!CL56'RC!C'5Ä6Ä	D-		AE/K	2EA0	>H<I		0G<JJ<2G(2/.J2	0G<JK<2G(0/.JK	2
J17Ä!CL5RCÄ6*5	D-		AE/K	JEK/	>H<I		0G<JJ<2G(2/.J2	0G<JK<2G(0/.JK	2
J1D%!*\$*6%5%6Ä	D-		2AE0	2EA0	>H<I		0G<JJ<2G(2/.J2	0G<JK<2G(0/.JK	2
J1D%!*\$*RCÄ6*5	D-		AE/K	GEGJ	>H<I		0G<JJ<2G(2/.J2	0G<JK<2G(0/.JK	2
GBG\1-%&C5*\$*+Ä6Q%U%6Ä	D-		2AE0	SE2	>H<I		0G<JJ<2G(2/.J2	0G<JK<2G(0/.JK	2
G1D%!*\$*6%5%6Ä	D-		2AE0	JEK/	>H<I		0G<JJ<2G(2/.J2	0G<JK<2G(0/.JK	2
/B31-%6%!\$*1J1#ÄICL5RCÄ6*5	D-		2AE0	GESA	>H<I		0G<JJ<2G(2/.J2	0G<JK<2G(0/.JK	2
/1T\$*#*RCÄ6L5(RCÄ6L5(ÄICÄ\$	D-		AE/K	JEK/	>H<I		0G<JJ<2G(2/.J2	0G<JK<2G(0/.JK	2
/14C5*\$*1G1#ÄICL5RCÄ6*5	D-		2AE0	JEGS	>H<I		0G<JJ<2G(2/.J2	0G<JK<2G(0/.JK	2
/14C5*\$*6%5%6Ä	D-		AE/K	2EA0	>H<I		0G<JJ<2G(2/.J2	0G<JK<2G(0/.JK	2
/14C5*\$*RCÄ6L5(RCÄ6L5(ÄICÄ\$	D-		AE/K	JEGS	>H<I		0G<JJ<2G(2/.J2	0G<JK<2G(0/.JK	2
/17ÄICL5RCÄ6*5	D-		AE/K	JEK/	>H<I		0G<JJ<2G(2/.J2	0G<JK<2G(0/.JK	2
/1D%!*\$*6%5%6Ä	D-		2AE0	GESA	>H<I		0G<JJ<2G(2/.J2	0G<JK<2G(0/.JK	2
/1D%!*\$*RCÄ6*5	D-		2AE0	FEJ2	>H<I		0G<JJ<2G(2/.J2	0G<JK<2G(0/.JK	2
"&Ä6'RC!CÄ6Ä	D-		AE/K	JEK/	>H<I		0G<JJ<2G(2/.J2	0G<JK<2G(0/.JK	2
"&Ä6'RC!CL5Ä6Ä	D-		AE/K	JEK/	>H<I		0G<JJ<2G(2/.J2	0G<JK<2G(0/.JK	2
"6%5%6Ä	D-		AE/K	GEGJ	>H<I		0G<JJ<2G(2/.J2	0G<JK<2G(0/.JK	2
"6IC\$&Ä6Ä	D-	I]	AE/K	JEGS	>H<I		0G<JJ<2G(2/.J2	0G<JK<2G(0/.JK	2
TÄ6Q%U%6Ä	D-	I[(T"	2AE0	AE/K	>H<I		0G<JJ<2G(2/.J2	0G<JK<2G(0/.JK	2
TÄ6Q*^*_6IC\$&Ä6Ä	D-		AE/K	JEGS	>H<I		0G<JJ<2G(2/.J2	0G<JK<2G(0/.JK	2
TÄ6Q*^*_RL\$Ä6Ä	D-		AE/K	JEK/	>H<I		0G<JJ<2G(2/.J2	0G<JK<2G(0/.JK	2
TÄ6Q*^*_@5>\$*6!CÄ6Ä	D-		AE/K	2EA0	>H<I		0G<JJ<2G(2/.J2	0G<JK<2G(0/.JK	2
TÄ6Q*^*_HBCB%_RÄ\$Ä6Ä	D-		AE/K	GESA	>H<I		0G<JJ<2G(2/.J2	0G<JK<2G(0/.JK	2
TÄ6Q*^*_@5>\$*6!CÄ6Ä	D-		AE/K	JEGS	>H<I		0G<JJ<2G(2/.J2	0G<JK<2G(0/.JK	2
TÄ6Q*%&'(&%U	D-		2AE0	AE/K	>H<I		0G<JJ<2G(2/.J2	0G<JK<2G(0/.JK	2
TÄ6QL5('5&*C*5	D-		2AE0	GEGJ	>H<I		0G<JJ<2G(2/.J2	0G<JK<2G(0/.JK	2
T% NJ1&C5*\$*Ä!C*XLP#Ä!C'6Ä	D-		AE/K	JEK/	>H<I		0G<JJ<2G(2/.J2	0G<JK<2G(0/.JK	2
T% NJ1&C5*\$*Ä!CL5PÄ!CÄ\$	D-		AE/K	JEK/	>H<I		0G<JJ<2G(2/.J2	0G<JK<2G(0/.JK	2
+% (NJ1&C5*\$*% *R\$*RL5P(ÄICÄ\$	D-		AE/K	JEGS	>H<I		0G<JJ<2G(2/.J2	0G<JK<2G(0/.JK	2
T% NJ1Ä!CL5CÄXL5P(RC!C'5!Ä	D-		/SE/	GESA	>H<I		0G<JJ<2G(2/.J2	0G<JK<2G(0/.JK	2
T>IL5(+Ä6QL5(RC!C'5!Ä	D-		2AE0	GESA	>H<I		0G<JJ<2G(2/.J2	0G<JK<2G(0/.JK	2
4C\$L Ä6Ä	D-		AE/K	JEGS	>H<I		0G<JJ<2G(2/.J2	0G<JK<2G(0/.JK	2
-%161+>IL5(RC!C'5!Ä	D-	I]	2AE0	JEK/	>H<I		0G<JJ<2G(2/.J2	0G<JK<2G(0/.JK	2
-%161*&!L5(RC!C'5!Ä	D-		2AE0	GEGJ	>H<I		0G<JJ<2G(2/.J2	0G<JK<2G(0/.JK	2
-%+Ä6QN'BCP'6!C\$&Ä6Ä	D-		2AE0	JEK/	>H<I		0G<JJ<2G(2/.J2	0G<JK<2G(0/.JK	2
-%+Ä6Q*@>\$*6	D-		AE/K	GESA	>H<I		0G<JJ<2G(2/.J2	0G<JK<2G(0/.JK	2
-%Ä!CL5(RC!C'5!Ä	D-		AE/K	GEGJ	>H<I		0G<JJ<2G(2/.J2	0G<JK<2G(0/.JK	2
-%#Ä!CL5(RC!C'5!Ä	D-		AE/K	JEGS	>H<I		0G<JJ<2G(2/.J2	0G<JK<2G(0/.JK	2
O5>\$*6!CÄ6Ä	D-	I]	AE/K	JEK/	>H<I		0G<JJ<2G(2/.J2	0G<JK<2G(0/.JK	2
O5>\$*Ä6Ä	D-		AE/K	JEK/	>H<I		0G<JJ<2G(2/.J2	0G<JK<2G(0/.JK	2

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Client Sample Results

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:.*;Ä&!<=%!Ä.66>'5(?>!@'55(02A

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Client Sample ID: Outfall 019

Lab Sample ID: 440-41016-1

Date Collected: 03/15/13 11:45

Matrix: Water

Date Received: 03/15/13 17:00

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
9ÄX'&C5*\$+Ä6QÄ6Ä	D-		AE/K	JEK/	>H<I		0G<JJ<2G(2/.J2	0G<JK<2G(0/.JK	2
9ÄX'&C5*\$+!U%Ä6Ä	D-		AE/K	GESA>	H<I		0G<JJ<2G(2/.J2	0G<JK<2G(0/.JK	2
9ÄX'&C5*\$&L&5*RÄ6!U%Ä6Ä	D-		2AE0	/ ES/	>H<I		0G<JJ<2G(2/.J2	0G<JK<2G(0/.JK	2
9ÄX'&C5*\$Ä!C'6Ä	D-		AE/K	GEGJ>	H<I		0G<JJ<2G(2/.J2	0G<JK<2G(0/.JK	2
.6UÄ6*^2BJBG1&U_RL\$Ä6Ä	D-		2AE0	GEGJ>	H<I		0G<JJ<2G(2/.J2	0G<JK<2G(0/.JK	2
. *RC*\$*6Ä	D-		AE/K	JEK/	>H<I		0G<JJ<2G(2/.J2	0G<JK<2G(0/.JK	2
D1D%!\$* *U%#Ä!CL5#%6Ä	D-		2AE0	JEGS>	H<I		0G<JJ<2G(2/.J2	0G<JK<2G(0/.JK	2
D1D%!\$* *U%161R\$*RL5#%6Ä	D-		AE/K	GEGJ>	H<I		0G<JJ<2G(2/.J2	0G<JK<2G(0/.JK	2
D1D%!\$* *U%RCÄ6L5#%6Ä	D-		AE/K	2EA0	>H<I		0G<JJ<2G(2/.J2	0G<JK<2G(0/.JK	2
D'R!C'5Ä6Ä	D-		AE/K	JEK/	>H<I		0G<JJ<2G(2/.J2	0G<JK<2G(0/.JK	2
D%!*+Ä6QÄ6Ä	D-		2AE0	JEK/	>H<I		0G<JJ<2G(2/.J2	0G<JK<2G(0/.JK	2
:Ä6!'&C5*\$*RCÄ6*5	D-		2AE0	GEGJ>	H<I		0G<JJ<2G(2/.J2	0G<JK<2G(0/.JK	2
:CÄ6!C\$Ä6Ä	D-		AE/K	GEGJ>	H<I		0G<JJ<2G(2/.J2	0G<JK<2G(0/.JK	2
:CÄ6*5	D-		AE/K	2EA0	>H<I		0G<JJ<2G(2/.J2	0G<JK<2G(0/.JK	2
:L\$Ä6Ä	D-		AE/K	GESA>	H<I		0G<JJ<2G(2/.J2	0G<JK<2G(0/.JK	2

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	86		50 - 120	03/22/13 14:21	03/28/13 04:28	1
2-Fluorophenol	63		30 - 120	03/22/13 14:21	03/28/13 04:28	1
2,4,6-Tribromophenol	94		40 - 120	03/22/13 14:21	03/28/13 04:28	1
Nitrobenzene-d5	81		45 - 120	03/22/13 14:21	03/28/13 04:28	1
Terphenyl-d14	59		50 - 125	03/22/13 14:21	03/28/13 04:28	1
Phenol-d6	68		35 - 120	03/22/13 14:21	03/28/13 04:28	1

Method: 608 PCB LL - Polychlorinated Biphenyls (PCBs) Low level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
"\$*&5*(2023	D-		0E/S	0EJ/	>H<I		0G<2K<2G(2G.GJ0G<2A<2G(J2.F2		2
"\$*&5*(2JJ2	D-		0E/S	0EJ/	>H<I		0G<2K<2G(2G.GJ0G<2A<2G(J2.F2		2
"\$*&5*(2JGJ	D-		0E/S	0EJ/	>H<I		0G<2K<2G(2G.GJ0G<2A<2G(J2.F2		2
"\$*&5*(2JJ	D-		0E/S	0EJ/	>H<I		0G<2K<2G(2G.GJ0G<2A<2G(J2.F2		2
"\$*&5*(2JK	D-		0E/S	0EJ/	>H<I		0G<2K<2G(2G.GJ0G<2A<2G(J2.F2		2
"\$*&5*(2JF/	D-		0E/S	0EJ/	>H<I		0G<2K<2G(2G.GJ0G<2A<2G(J2.F2		2
"\$*&5*(2J30	D-		0E/S	0EJ/	>H<I		0G<2K<2G(2G.GJ0G<2A<2G(J2.F2		2

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	88		45 - 120	03/18/13 13:32	03/19/13 21:51	1

Method: 608 Pesticides - Organochlorine Pesticides Low level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
/B/1---	D-		0E00/S	0E00GK	>H<I		0G<2K<2G(2G.GJ0G<2A<2G(JG.2K		2
/B/1--V	D-		0E00/S	0E00JK	>H<I		0G<2K<2G(2G.GJ0G<2A<2G(JG.2K		2
/B/1--Ä	D-		0E00A/	0E00GK	>H<I		0G<2K<2G(2G.GJ0G<2A<2G(JG.2K		2
"5U\$%6	D-		0E00/S	0E002/	>H<I		0G<2K<2G(2G.GJ0G<2A<2G(JG.2K		2
'5RC'1T94	D-		0E00/S	0E00J/	>H<I		0G<2K<2G(2G.GJ0G<2A<2G(JG.2K		2
+Ä!'1T94	D-		0E00A/	0E00GK	>H<I		0G<2K<2G(2G.GJ0G<2A<2G(JG.2K		2
4C5*\$U'6Ä(NIÄ&C6%&'5P	D-		0E0A/	0E0SF	>H<I		0G<2K<2G(2G.GJ0G<2A<2G(JG.2K		2
UÄ5!'1T94	D-		0E00/S	0E00GG	>H<I		0G<2K<2G(2G.GJ0G<2A<2G(JG.2K		2
-%Ä5U\$%6	D-		0E00/S	0E002A	>H<I		0G<2K<2G(2G.GJ0G<2A<2G(JG.2K		2
V6U* >5@'6(,	D-		0E00/S	0E00JK	>H<I		0G<2K<2G(2G.GJ0G<2A<2G(JG.2K		2
V6U* >5@'6(,	D-		0E00/S	0E002A	>H<I		0G<2K<2G(2G.GJ0G<2A<2G(JG.2K		2

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Client Sample Results

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Client Sample ID: Outfall 019

Lab Sample ID: 440-41016-1

Date Collected: 03/15/13 11:45

Matrix: Water

Date Received: 03/15/13 17:00

Method: 608 Pesticides - Organochlorine Pesticides Low level (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
V6U* >5@'6(>5@'!Ä	D-		0E00A/	0E00JK	>H<I		0G<2K<2G(2G.GJ0G<2A<2G(JG.2K		2
V6U\$%6	D-		0E00/S	0E002A	>H<I		0G<2K<2G(2G.GJ0G<2A<2G(JG.2K		2
V6U\$%6('5UÄCLUÄ	D-		0E00A/	0E002A	>H<I		0G<2K<2G(2G.GJ0G<2A<2G(JG.2K		2
H'##1T94(NI%6U'6ÄP	D-		0E00A/	0E00JK	>H<I		0G<2K<2G(2G.GJ0G<2A<2G(JG.2K		2
9ÄR!'&C5*\$	D-		0E00A/	0E00JK	>H<I		0G<2K<2G(2G.GJ0G<2A<2G(JG.2K		2
9ÄR!'&C5*\$ (ÄR*X%UÄ	D-		0E00/S	0E00J/	>H<I		0G<2K<2G(2G.GJ0G<2A<2G(JG.2K		2
Ä X'RCÄ6Ä	D-		0E/S	0EJ/	>H<I		0G<2K<2G(2G.GJ0G<2A<2G(JG.2K		2

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	70		35 - 115	03/18/13 13:32	03/19/13 23:18	1

Method: 218.6 - Chromium, Hexavalent (Ion Chromatography)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	1.1		2E0	0EJF	>H<I			0G<2F<2G(JJ.2A	2

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	120		JF	J0	#H<I			0G<23<2G(0F.F3	F0
D%!\$!Ä(' (D	D-		0E2	0E0K0	#H<I			0G<23<2G(03.G3	2
D%!\$!Ä(D%!\$%!Ä(' (D	D-		0EJ3	0E2	#H<I			0G<23<2G(03.G3	2
Sulfate	250		JF	J0	#H<I			0G<23<2G(0F.F3	F0
D%!\$%!Ä(' (D	D-		0E2F	0E2	#H<I			0G<23<2G(03.G3	2

Method: 314.0 - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ä\$&C5*\$!Ä	D-		/ E0	0EAF	>H<I			0G<J3<2G(2G.22	2

Method: 1613B - Dioxins and Furans (HRGC/HRMS)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
JBGBSBK1Ä4--	D-		0E000020	0E000000/	>H<I		0G<J3<2G(0K.FJ	0G<JK<2G(2G.F/	2
JBGBSBK1Ä4-O	D-		0E000020	0E000000G	>H<I		0G<J3<2G(0K.FJ	0G<JK<2G(2G.F/	2
2BJBGBSBK1:Ä4--	D-		0E0000F0	0E000000S	>H<I		0G<J3<2G(0K.FJ	0G<JK<2G(2G.F/	2
2BJBGBSBK1:Ä4-O	D-		0E0000F0	0E000000S	>H<I		0G<J3<2G(0K.FJ	0G<JK<2G(2G.F/	2
JBGB/BSBK1:Ä4-O	D-		0E0000F0	0E000000S	>H<I		0G<J3<2G(0K.FJ	0G<JK<2G(2G.F/	2
2BJBGB/BSBK19X4--	D-		0E0000F0	0E000000J0	>H<I		0G<J3<2G(0K.FJ	0G<JK<2G(2G.F/	2
2BJBGB3BSBK19X4--	D-		0E0000F0	0E000000F	>H<I		0G<J3<2G(0K.FJ	0G<JK<2G(2G.F/	2
2BJBGBSBKBA19X4--	D-		0E0000F0	0E000000F	>H<I		0G<J3<2G(0K.FJ	0G<JK<2G(2G.F/	2
2BJBGB/BSBK19X4-O	D-		0E0000F0	0E000000G	>H<I		0G<J3<2G(0K.FJ	0G<JK<2G(2G.F/	2
2BJBGB3BSBK19X4-O	D-		0E0000F0	0E000000J	>H<I		0G<J3<2G(0K.FJ	0G<JK<2G(2G.F/	2
2BJBGBSBKBA19X4-O	D-		0E0000F0	0E000000/	>H<I		0G<J3<2G(0K.FJ	0G<JK<2G(2G.F/	2
JBGB/B3BSBK19X4-O	D-		0E0000F0	0E000000J	>H<I		0G<J3<2G(0K.FJ	0G<JK<2G(2G.F/	2
2BJBGB/B3BSBK19R4--	D-		0E0000F0	0E000000S	>H<I		0G<J3<2G(0K.FJ	0G<JK<2G(2G.F/	2

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Client Sample ID: Outfall 019

Lab Sample ID: 440-41016-1

Date Collected: 03/15/13 11:45

Matrix: Water

Date Received: 03/15/13 17:00

Method: 1613B - Dioxins and Furans (HRGC/HRMS) (Continued)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
2BJBGB/B3BSBK19R4-O	D-		0E0000F0	0E000000F	>H<I		0G<J3<2G(0K.FJ	0G<JK<2G(2K.GJ	2
2BJBGB/BSBKBA19R4-O	D-		0E0000F0	0E000000K	>H<I		0G<J3<2G(0K.FJ	0G<JK<2G(2K.GJ	2
OCDD	0.0000033	J,DX MB q	0E000020	0E000000A	>H<I		0G<J3<2G(0K.FJ	0G<JK<2G(2K.GJ	2
?4-O	D-		0E000020	0E000000A	>H<I		0G<J3<2G(0K.FJ	0G<JK<2G(2K.GJ	2
Ä*!5(Ä4--	D-		0E000020	0E000000I	>H<I		0G<J3<2G(0K.FJ	0G<JK<2G(2K.GJ	2
Ä*!5(Ä4-O	D-		0E000020	0E000000G	>H<I		0G<J3<2G(0K.FJ	0G<JK<2G(2K.GJ	2
Ä*!5(:Ä4--	D-		0E0000F0	0E000000S	>H<I		0G<J3<2G(0K.FJ	0G<JK<2G(2K.GJ	2
Ä*!5(:Ä4-O	D-		0E0000F0	0E000000S	>H<I		0G<J3<2G(0K.FJ	0G<JK<2G(2K.GJ	2
Ä*!5(9X4--	D-		0E0000F0	0E000000J	>H<I		0G<J3<2G(0K.FJ	0G<JK<2G(2K.GJ	2
Ä*!5(9X4-O	D-		0E0000F0	0E000000J	>H<I		0G<J3<2G(0K.FJ	0G<JK<2G(2K.GJ	2
Ä*!5(9R4--	D-		0E0000F0	0E000000S	>H<I		0G<J3<2G(0K.FJ	0G<JK<2G(2K.GJ	2
Ä*!5(9R4-O	D-		0E0000F0	0E000000F	>H<I		0G<J3<2G(0K.FJ	0G<JK<2G(2K.GJ	2
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C-2,3,7,8-TCDD	70		25 - 164				03/26/13 08:52	03/28/13 11:54	1
13C-2,3,7,8-TCDF	69		24 - 169				03/26/13 08:52	03/28/13 11:54	1
13C-1,2,3,7,8-PeCDD	73		25 - 181				03/26/13 08:52	03/28/13 11:54	1
13C-1,2,3,7,8-PeCDF	64		24 - 185				03/26/13 08:52	03/28/13 11:54	1
13C-2,3,4,7,8-PeCDF	66		21 - 178				03/26/13 08:52	03/28/13 11:54	1
13C-1,2,3,4,7,8-HxCDD	0		32 - 141				03/26/13 08:52	03/28/13 11:54	1
13C-1,2,3,6,7,8-HxCDD	80		28 - 130				03/26/13 08:52	03/28/13 11:54	1
13C-1,2,3,4,7,8-HxCDF	70		26 - 152				03/26/13 08:52	03/28/13 11:54	1
13C-1,2,3,6,7,8-HxCDF	83		26 - 123				03/26/13 08:52	03/28/13 11:54	1
13C-1,2,3,7,8,9-HxCDF	67		29 - 147				03/26/13 08:52	03/28/13 11:54	1
13C-2,3,4,6,7,8-HxCDF	79		28 - 136				03/26/13 08:52	03/28/13 11:54	1
13C-1,2,3,4,6,7,8-HpCDD	67		23 - 140				03/26/13 08:52	03/28/13 11:54	1
13C-1,2,3,4,6,7,8-HpCDF	66		28 - 143				03/26/13 08:52	03/28/13 11:54	1
13C-1,2,3,4,7,8,9-HpCDF	61		26 - 138				03/26/13 08:52	03/28/13 11:54	1
13C-OCDD	58		17 - 157				03/26/13 08:52	03/28/13 11:54	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
37Cl4-2,3,7,8-TCDD	86		35 - 197				03/26/13 08:52	03/28/13 11:54	1

Method: 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
"\$ Ä6%&	D-		20	SE0	>H<I		0G<J3<2G(0A.J3	0G<J3<2G(2K.GJ	2
Boron	0.021	J,DX	0E0F0	0E0J0	#H<I		0G<J3<2G(0A.J3	0G<J3<2G(2K.GJ	2
T\$%>#	D-		0E020	0E0030	#H<I		0G<J3<2G(0A.J3	0G<J3<2G(2K.GJ	2
TÄ\$55%>#	D-		JE0	0EA0	>H<I		0G<J3<2G(0A.J3	0G<J3<2G(2K.GJ	2
4*+5!	D-		20	JE0	>H<I		0G<J3<2G(0A.J3	0G<JS<2G(2F./F	2
4C\$*%>#	D-		FE0	JE0	>H<I		0G<J3<2G(0A.J3	0G<J3<2G(2K.GJ	2
Iron	0.075		0E0/0	0E02F	#H<I		0G<J3<2G(0A.J3	0G<J3<2G(2K.GJ	2

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Client Sample Results

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Client Sample ID: Outfall 019

Lab Sample ID: 440-41016-1

Date Collected: 03/15/13 11:45

Matrix: Water

Date Received: 03/15/13 17:00

Method: 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	24		J0	SE0	>H<I		0G<J3<2G(0A.J3	0G<J3<2G(2K.GJ	2
D%&`Ä5	D-		20	JE0	>H<I		0G<J3<2G(0A.J3	0G<J3<2G(2K.GJ	2
Vanadium	3.3	J,DX	20	GE0	>H<I		0G<J3<2G(0A.J3	0G<J3<2G(2K.GJ	2
Zinc	14	J,DX	J0	AE0	>H<I		0G<J3<2G(0A.J3	0G<J3<2G(2K.GJ	2
=%5MÄ\$	D-		20	3E0	>H<I		0G<J3<2G(0A.J3	0G<J3<2G(2K.GJ	2
Hardness, as CaCO3	110000		GG0	2S0	>H<I		0G<J3<2G(0A.J3	0G<J3<2G(2K.GJ	2

Method: 200.7 Rev 4.4 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
"\$ Ä6%&	D-		20	SE0	>H<I		0G<JS<2G(0S.F/	0G<JS<2G(23./F	2
T*\$*6	D-		0E0F0	0E0J0	#H<I		0G<JS<2G(0S.F/	0G<JS<2G(23./F	2
T'\$%>#	D-		0E020	0E0030	#H<I		0G<JS<2G(0S.F/	0G<JS<2G(23./F	2
TÄ\$55%>#	D-		JE0	0EA0	>H<I		0G<JS<2G(0S.F/	0G<JS<2G(23./F	2
4*+5!	D-		20	JE0	>H<I		0G<JS<2G(0S.F/	0G<JS<2G(23./K	2
4C\$*#%>#	D-		FE0	JE0	>H<I		0G<JS<2G(0S.F/	0G<JS<2G(23./F	2
Iron	0.020	J,DX MB	0E0/0	0E02F	#H<I		0G<JS<2G(0S.F/	0G<JS<2G(23./F	2
7'6H'6Ä Ä	D-		J0	SE0	>H<I		0G<JS<2G(0S.F/	0G<JS<2G(23./F	2
D%&`Ä5	D-		20	JE0	>H<I		0G<JS<2G(0S.F/	0G<JS<2G(23./F	2
Vanadium	3.2	J,DX	20	GE0	>H<I		0G<JS<2G(0S.F/	0G<JS<2G(23./F	2
Zinc	15	J,DX	J0	AE0	>H<I		0G<JS<2G(0S.F/	0G<JS<2G(23./F	2
=%5MÄ\$	D-		20	3E0	>H<I		0G<JS<2G(0S.F/	0G<JS<2G(23./F	2

Method: 200.8 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.12	J,DX	2E0	0E20	>H<I		0G<J3<2G(0A.JA	0G<JS<2G(2/.G2	2
Copper	5.2	MB	JE0	0EF0	>H<I		0G<J3<2G(0A.JA	0G<JS<2G(2/.G2	2
Lead	0.37	J,DX	2E0	0EJ0	>H<I		0G<J3<2G(0A.JA	0G<JS<2G(2/.G2	2
"6!%#*6L	D-		JE0	0EG0	>H<I		0G<J3<2G(0A.JA	0G<JS<2G(2/.G2	2
=Ä5Ä6%>#	D-		JE0	0EF0	>H<I		0G<J3<2G(0A.JA	0G<JS<2G(2/.G2	2
ÄC'55%>#	D-		2E0	0EJ0	>H<I		0G<J3<2G(0A.JA	0G<JS<2G(2/.G2	2

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4'U#%>#	D-		2E0	0E20	>H<I		0G<JS<2G(0S.FF	0G<JS<2G(2A.FS	2
Copper	1.2	J,DX	JE0	0EF0	>H<I		0G<JS<2G(0S.FF	0G<JS<2G(2A.FS	2
lÄ'U	D-		2E0	0EJ0	>H<I		0G<JS<2G(0S.FF	0G<JS<2G(2A.FS	2
"6!%#*6L	D-		JE0	0EG0	>H<I		0G<JS<2G(0S.FF	0G<JS<2G(2A.FS	2
=Ä5Ä6%>#	D-		JE0	0EF0	>H<I		0G<JS<2G(0S.FF	0G<JS<2G(2A.FS	2
ÄC'55%>#	D-		2E0	0EJ0	>H<I		0G<JS<2G(0S.FF	0G<JS<2G(2A.FS	2

Method: 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
7Ä\$&>\$L	D-	l|	0EJ0	0E20	>H<I		0G<J3<2G(2G.03	0G<J3<2G(2S.0A	2

Method: 245.1 - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
7Ä\$&>\$L	D-		0EJ0	0E20	>H<I		0G<JS<2G(2J	0G<JS<2G(2F.2/	2

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Turbidity	1.1		0E20	0E0/0	DÄa			0G<23<2G(23.00	2

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Client Sample Results

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Client Sample ID: Outfall 019

Lab Sample ID: 440-41016-1

Date Collected: 03/15/13 11:45

Matrix: Water

Date Received: 03/15/13 17:00

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	890		20	20	#H<I			0G<J2<2G(2F.2S	2
Ä"!'5(=> RÄ6UÄU(=*5%U	D-		20	20	#H<I			0G<2K<2G(23.J/	2
4L'6%UÄÄ('!5	D-		FE0	GE0	>H<I		0G<2K<2G(2K.J3	0G<2K<2G(JG.2J	2
Fluoride	0.31		0E20	0E0J0	#H<I			0G<2S<2G(2I.0G	2
Ammonia (as N)	0.280	J,DX	0E/00	0EJK0	#H<I		0G<J2<2G(2I./S	0G<J2<2G(2F.G3	2
Ä"!'5(?\$H'6%&(4'\$+*6	D-		2E0	0ESF	#H<I			0G<2A<2G(0F.JS	2
Methylene Blue Active Substances	0.12		0E20	0E0F0	#H<I			0G<23<2G(2I./F	2
T%*&CÄ#%&'5(?XLHÄ6(-Ä#6U	D-		JE0	0EF0	#H<I			0G<23<2G(2I.JK	2

Method: 900.0 - Gross Alpha and Gross Beta Radioactivity

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	MDC	Unit	Prepared	Analyzed	Dil Fac
Z\$* ("5RC'	2EJA	a	2E30	2E32	JEF3	R4%<I	0G<J0<2G(2J.00	0G<JF<2G(23.F0	J
Z\$* (TÄ!'	2EFS	a	2E2K	2E2A	2EK2	R4%<I	0G<J0<2G(2J.00	0G<JF<2G(23.F0	J

Method: 901.1 - Cesium 137 & Other Gamma Emitters (GS)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	MDC	Unit	Prepared	Analyzed	Dil Fac
4Ä %>#12GS	12EFKa		3EAS	3EAS	2JE/	R4%<I	0G<J3<2G(2G.FK	0G<JS<2G(0K.J3	2
:!' %>#1/0	13KEGa		/S/	/S/	2KF	R4%<I	0G<J3<2G(2G.FK	0G<JS<2G(0K.J3	2

Method: 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	MDC	Unit	Prepared	Analyzed	Dil Fac
[U%>#1JJ3	0E00J0J	a	0E0KKF	0E0KKF	0E2SJ	R4%<I	0G<J0<2G(2I.JF	0I<22<2G(0K.0J	2
Carrier	%Yield	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Ba Carrier	93.2		40 - 110				03/20/13 14:25	04/11/13 08:02	1

Method: 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	MDC	Unit	Prepared	Analyzed	Dil Fac
[U%>#1JJK	0E233	a	0EJ0/	0EJ0F	0EGGFR4%	<I	0G<J0<2G(2I.GK	0I<20<2G(20.G0	2
Carrier	%Yield	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Ba Carrier	93.2		40 - 110				03/20/13 14:38	04/10/13 10:30	1
Y Carrier	88.6		40 - 110				03/20/13 14:38	04/10/13 10:30	1

Method: 905 - Strontium-90 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	MDC	Unit	Prepared	Analyzed	Dil Fac
=!\$*6!%>#1A0	0E2FF	a	0E2K0	0E2K0	0EG/S	R4%<I	0G<J0<2G(2S.FA	0G<JK<2G(2S.GF	2
Carrier	%Yield	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Sr Carrier	83.3		40 - 110				03/20/13 17:59	03/28/13 17:35	1
Y Carrier	90.5		40 - 110				03/20/13 17:59	03/28/13 17:35	1

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Client Sample Results

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Client Sample ID: Outfall 019

Lab Sample ID: 440-41016-1

Date Collected: 03/15/13 11:45

Matrix: Water

Date Received: 03/15/13 17:00

Method: 906.0 - Tritium, Total (LSC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	MDC	Unit	Prepared	Analyzed	Dil Fac
Ä\$%!%>#	//E2	a	SAE0	SAE2	2GG	R4%<l	0G<J3<2G(0A.23	0G<JK<2G(20.0/	2

Method: A-01-R - Isotopic Uranium (Alpha Spectrometry)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	MDC	Unit	Prepared	Analyzed	Dil Fac
Ä*!5(a\$'6%>#	0E02KF	a	0E202J	0E202G	0E2FF	R4%<l	0G<J2<2G(0A.JG	0G<JJ<2G(2F.FF	2

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Method Summary

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:.*;Ä&!<=%!Ä.66>'5(?>!@'55(02A

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Method	Method Description	Protocol	Laboratory
3E/	F*5!%5Ä(?\$G'6%&(4*#H">6l (JK4<7=L	/04BC2D3"	Ä" M,CF
NE300(=,7	F*5!%5Ä(?\$G'6%&(4*#H">6l (JK4<7=L	=8N/3	Ä" M,CF
3EP	=Ä#%Q*5!%5Ä(?\$G'6%&(4*#H">6l (JK4<7=L	/04BC2D3"	Ä" M,CF
N02PO	K' *5%6Ä(C'6GÄ(?\$G'6%& (1(JK4L	=8N/3	Ä" M,CF
30N(:4O(MM	:*5R&S5*\$%6!Ä|O%HSÄ6R5 (J:4O L(M*T(5ÄQÄ5	/04BC2D3"	Ä" M,CF
30N(:Ä !%&%iÄ	?\$G'6*SS*\$%6Ä(:Ä !%&%iÄ ((M*T(5ÄQÄ5	/04BC2D3"	Ä" M,CF
N02PO	-%Ä Ä5(C'6GÄ(?\$G'6%& (J-C?L(JK4L	=8N/3	Ä" M,CF
E2NV3	4S\$*#%>#W(9ÄX'Q'5Ä6!(J.*6(4S\$*#!*G\$HSRL	U: "	Ä" M,CF
D00V0	" 6%*6 W(. *6(4S\$*#!*G\$HSR	74" 8 8	Ä" M,CF
D2/V0	: Ä&S5*\$!Ä(J,4L	U: "	Ä" M,CF
232DO	-%*X%6 ('6l(B>\$'6 (J9CK4<9C7=L	/04BC2D3"	Ä" M="4
E00VY(CÄQ(/V/	7Ä!5 (J,4:L	U: "	Ä" M,CF
E00VN	7 Ä!5 (J,4:<7=L	U: "	Ä" M,CF
E/PV2	7 Ä&>\$R(J4FL	U: "	Ä" M,CF
2E0V2	4*6l>&!%QW=HÄ&%@%&(4*6l>&!6&Ä	74" 8 8	Ä" M,CF
233/"	9U7('6l(=KÄ 19U7	233/"	Ä" M,CF
2N0V2	Ä>\$+%i%WZÄHSÄ5*#Ä!\$%&	74" 8 8	Ä" M,CF
=7(EP/04	=*5%i W(!5(-% *5QÄl(JÄ=L	=7	Ä" M,CF
=7(EP/0-	=*5%i W(!5(=> HÄ6lÄl(JÄ=L	=7	Ä" M,CF
=7(EP/0B	=*5%i W(=Ä!!5Ä'+5Ä	=7	Ä" M,CF
=7(IP00(4Z(U	4 R'6%iÄW!5(JM*T(MÄQÄ5L	=7	Ä" M,CF
=7(IP00(B(4	B5>*\$%lÄ	=7	Ä" M,CF
=7(IP00(Z9D(4	"##*6%'	=7	Ä" M,CF
=7(PD200	?\$G'6%&(4*\$+6W!5(JÄ? 4L	=7	Ä" M,CF
=7(PP/04	7ÄISR5Ä6Ä(O5*Ä!%QÄ(=>+ !'6&Ä (J7O"=L	=7	Ä" M,CF
=7PE200	O?-W(P(-R	=7	Ä" M,CF
A00V0	K\$* (" 5HS('6l(K\$* (OÄ!('C'1%*%&!%Q%lR	U: "	Ä" M=M
A02V2	4Ä %>#(2DY([(?!SÄ\$(K'##(U#%!!Ä\$ (JK=L	U: "	Ä" M=M
A0DV0	C'1%>#1EE3(JKB:4L	U: "	Ä" M=M
A0/V0	C'1%>#1EEN(JKB:4L	U: "	Ä" M=M
A0P	=!\$*6!%>#1A0(JKB:4L	U: "	Ä" M=M
A03V0	Ä\$%!%>#WÄ(JM=4L	U: "	Ä" M=M
"1021C	, *!H%&(\$'6%>#(J"5HS'(=HÄ&!\$*#Ä!\$Rl	-?U	Ä" M=M
=7(AEE2U	4*5%@*\$# W(BÄ&'5(J7>5!%HÄBÄS#Ä6!!%*6L	=7	Ä" M,CF
=7(AEE2B	UV4*5%(J7>5!%HÄBÄS#Ä6!!%*6l(U417KL	=7	Ä" M,CF
"&>lÄ(B9(	O%" "R	Z?ZU	=402EY
#%66*TW(
U: " NE21C0E102E			
4S\$*6%&(4Ä\$%*W(	O%" "R	Z?ZU	=402EY
U: " NE21C0E102D			
-Z"1S>#6(KÄ6Ä\$'5(=>+(4*6!\$&!l(7Ä!S*I	Z?ZU	U7=M
+&lÄ\$%*lÄ](
U7=M			
7*6*#Ä!SR5SRl\$'	KÄ6Ä\$'5(=>+(4*6!\$&!l(7Ä!S*I	Z?ZU	
^%6Ä			

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Method Summary

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Method	Method Description	Protocol	Laboratory
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Protocol References:

233/" _ (U: "1NE21AN100E
/04BC2D3 " _ ('7 Ä!S*I (@*\$(\$G'6%&(4SÄ#%'5R % (*@7>6%&'6!5!\$%'5(8 !ÄT'Ä\$ `W(/04BCW(:\$!(2D3W(HÄ6!%X(W((?!*+Ä\$6W(2AN/'6(
>+ Äa>Ä6!(ÄQ% %*6 V
-?U_(\V=V(-ÄH'#!Ä6!(*@U6Ä\$GR
U: " _ (\=(U6Q%\$*6#Ä6!5(:\$!Ä&!%*6Ä6&R
74" 88_ ('7Ä!S*I (B*\$ (4SÄ#%&'5("6'5R % (?@8Ä\$(" 6!(8 ' !Ä `W(U:"1300</1YA10E0W(7*\$&S(2A100f>+ Äa>Ä6!(CÄQ% %*6 V
Z?ZU_ (Z?ZU
=7_ ('='6!\$(7Ä!S*I (B*\$ (ÄSÄ(UX#%6!%*6(?@Ä\$(" 6!(8 ' !ÄT' !Ä\$`W
=8N/3_ (Ä Ä ! (7Ä!S*I (B*\$ (UQ'5>'!6G(=*5%(8!ÄW(:SR %&'5<4SÄ#%'5(7Ä!S*I `W(\$%\$(UI%!*6W(Z*QÄ#+Ä\$(ZAN3)H!Ä V

Laboratory References:

(Ä\$>Ä !%5(M'+*\$!*\$%Ä (.6&W(2/E02(BS'6B'5ÄW(!%6W(4AEYNO
U7=M_(U7=M(" 6'5R!%&'5W(.6&VW(E00(C!(2D0(Z*\$!SW(4%66#10608W(Ä)MUN00LEE01D3YP
=402EY_ ("a>'!%&ÄÄ !%6G(M'+*\$!*\$%Ä W(DÄH*\$(c20YW(Ä6>\$W(4YAD00D
Ä" M,CF_ (ÄÄ !"#Ä\$%&'(.,\$Q%6ÄW(2Y/32(-Ä\$'6W(=>%!Ä(2006Ä\$QÄ#AE32/1PN2YÄ)UMJA/ALE32120EE
Ä" M="4_ (ÄÄ !"#Ä\$%&'(=&\$#Ä6!*W(NN0(C%QÄ\$ %!Ä(:\$bWRÄ !('&\$#Ä6!*W(4" (AP30PÄ)UMJA23LDYD1P300
Ä" M=M_ (ÄÄ !"#Ä\$%&'(=!(M*>% W(2DY2P(CÄÄ\$(Z*\$!SW(U\$Ä\$R(7?(3D0/PÄ)UMJD2/LEAN1NP33

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Lab Chronicle

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Client Sample ID: Outfall 019
Date Collected: 03/14/13 11:30
Date Received: 03/14/13 18:44

Lab Sample ID: 440-40886-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
02#-Ä<J)	)"-ÄB..	9C5		8	86%*G	86%*G	AC855	6E<8F<8E%CC\$86		0) G%/H
02#-Ä<J)	)"-ÄB..	9C5		8	86%*G	86%*G	A5898	6E<C9<8E%8C\$86		0)G%/H
02#-Ä<J)	)"-ÄB..	9C5	H)	8	86%*G	86%*G	A55F9	6E<CK<8E%8E\$F8		0)G%/H
02#-Ä<J)	)"-ÄB..	L68FD		8	86%*G	86%*G	A55L9	6E<CK<8E%6E\$EÄ		0)G%/H
02#-Ä<J)	:+IM	EF86Ä			86CF%*G	8%*G	AE8KE	6E<C8<8E%6F\$QÄ		0)G%/H
02#-Ä<J)	)"-ÄB..	L68FD		8			AE5LL	6E<C8<8E%CE\$FÄ		0)G%/H
02#-Ä<J)	)"-ÄB..	=&%CF56O		8	86A6%*G	86A6%*G	AC6KL	6E<8F<8E%8E\$F8N		0)G%/H
02#-Ä<J)	:+IM	8995)			86FF%*G	8666%*G	A58F6	6E<C9<8E%69\$86C		0)G%/H
02#-Ä<J)	)"-ÄB..	8995)		8			A5CEK	6E<C9<8E%86\$E8C		0)G%/H
02#-Ä<J)	)"-ÄB..	8C6P8		8	%	%	AAE9F	65<8A<8E%86\$F QG		0)G%/H
02#-Ä<J)	)"-ÄB..	=&%ACC8R		8	866%*G	866%*G	ACL85		=0	0) G%/H
S=#-+#T 6E<85<8E%8L\$FA SR"UT 6E<8K<8E%8F\$86										
02#-Ä<J)	)"-ÄB..	=&%ACC8O		8	866%*G	866%*G	ACL89		=0	0) G%/H
S=#-+#T 6E<85<8E%8L\$FA SR"UT 6E<8K<8E%8F\$86										

Client Sample ID: Trip Blank
Date Collected: 03/14/13 11:30
Date Received: 03/14/13 18:44

Lab Sample ID: 440-40886-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
02#-Ä<J)	)"-ÄB..	9C5		8	86%*G	86%*G	AC855	6E<8F<8E%CE\$86		0) G%/H
02#-Ä<J)	)"-ÄB..	9C5		8	86%*G	86%*G	A5898	6E<C9<8E%8E\$8F ==		0)G%/H

Client Sample ID: Outfall 019
Date Collected: 03/15/13 11:45
Date Received: 03/15/13 17:00

Lab Sample ID: 440-41016-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
02#-Ä<J)	)"-ÄB..	LC96D%=&		8	86%*G	86%*G	AEF5C	6E<CC<8E%8E\$86	VN	0) G%/H
02#-Ä<J)	:+IM	9CF			86FF%*G	C%*G	AE9FC	6E<CC<8E%85\$Q8V		0)G%/H
02#-Ä<J)	)"-ÄB..	9CF		8			A59EE	6E<CL<8E%65\$CQJ		0)G%/H
02#-Ä<J)	:+IM	96L			8696%*G	C%*G	AC5K5	6E<8L<8E%8E\$EJDD		0)G%/H
02#-Ä<J)	)"-ÄB..	96L%! , U!		8			ACLCK	6E<8A<8E%CE\$8L&		0)G%/H
02#-Ä<J)	:+IM	96L			8696%*G	C%*G	AC5K5	6E<8L<8E%8E\$EJDD		0)G%/H
02#-Ä<J)	)"-ÄB..	96L%ÄD%GG		8			ACA85	6E<8A<8E%8E\$F8&		0)G%/H
02#-Ä<J)	)"-ÄB..	C8LP9		8	86%*G	%	A8AL5	6E<8F<8E%CC\$8&		0)G%/H
02#-Ä<J)	)"-ÄB..	E66P6		8	8%*G	%	AC66F	6E<89<8E%69\$E9 J		0)G%/H
02#-Ä<J)	)"-ÄB..	E66P6		F6	8%*G	%	AC669	6E<89<8E%6F\$F9 J		0)G%/H
02#-Ä<J))"-ÄB..	E85P6		8	8%*G	%	A58AF	6E<C9<8E%8E\$86 Ä(0)G%/H
02#-Ä<J)	:+IM	898ED			AAFPL%*G	C6%>G	8E6CC	6E<C9<8E%6L\$F8&		0)G%=>Ä

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Lab Chronicle

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Client Sample ID: Outfall 019

Lab Sample ID: 440-41016-1

Date Collected: 03/15/13 11:45

Matrix: Water

Date Received: 03/15/13 17:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
02#-Ä<J)	)"-ÄB..	898ED		8			8ECL	6E<CL<8E%85\$B5 &V		0) G%)Ä
02#-Ä<J)	:+IM	C5FP8			C6%*G	C6%*G	A5C9K	6E<C9<8E%8E\$68 &		0)G%/H
02#-Ä<J)	)"-ÄB..	C5FP8		8			A5EL5	6E<C9<8E%8K\$6AD		0)G%/H
02#-Ä%H!,2W!+-3Ä!	:+IM	C66PC			F6%*G	F6%*G	A5C6F	6E<C9<8E%6A\$C80		0)G%/H
02#-Ä%H!,2W!+-3Ä!	)"-ÄB..	C66PK%H!W%5P5		8			A55EK	6E<C9<8E%8L\$E0-		0)G%/H
02#-Ä%H!,2W!+-3Ä!	:+IM	C66PC			F6%*G	F6%*G	A5C6L	6E<C9<8E%6A\$C90		0)G%/H
02#-Ä%H!,2W!+-3Ä!	)"-ÄB..	C66PL		8			A596A	6E<CK<8E%85\$E8-		0)G%/H
4 ..2ÄW!U	:+IM	C5FP8			C6%*G	C6%*G	A5EK5	6E<CK<8E%85\$E8 &&		0)G%/H
4 ..2ÄW!U	)"-ÄB..	C5FP8		8			A598F	6E<CK<8E%8F\$85D		0)G%/H
02#-Ä%H!,2W!+-3Ä!	:+IM	C66PC			F6%*G	F6%*G	A5C6F	6E<C9<8E%6A\$C80		0)G%/H
02#-Ä%H!,2W!+-3Ä!	)"-ÄB..	C66PK%H!W%5P5		8			A59E8	6E<CK<8E%8F\$5FN		0)G%/H
4 ..2ÄW!U	:+IM	C66PC			F6%*G	F6%*G	A5598	6E<CK<8E%6K\$F80		0)G%/H
4 ..2ÄW!U	)"-ÄB..	C66PK%H!W%5P5		8			A59F6	6E<CK<8E%89\$5RJ		0)G%/H
4 ..2ÄW!U	:+IM	C66PC			F6%*G	F6%*G	A5598	6E<CK<8E%6K\$F80		0)G%/H
4 ..2ÄW!U	)"-ÄB..	C66PK%H!W%5P5		8			A5995	6E<CK<8E%89\$5RJ		0)G%/H
4 ..2ÄW!U	:+IM	C66PC			F6%*G	F6%*G	A559C	6E<CK<8E%6K\$F80		0)G%/H
4 ..2ÄW!U	)"-ÄB..	C66PL		8			A5K69	6E<CK<8E%8A\$F8-		0)G%/H
02#-Ä<J)	)"-ÄB..	=&FC86D		8	%	E66%*G	ACCC9	6E<89<8E%85\$CD)/		0) G%/H
02#-Ä<J)	)"-ÄB..	=&%FF56Ä		8	866%*G	866%*G	ACCFK	6E<89<8E%85\$5F:		0)G%/H
02#-Ä<J)	)"-ÄB..	8L6P8		8	%	C6%*G	ACC9C	6E<89<8E%89\$68N		0)G%/H
02#-Ä<J)	)"-ÄB..	=&%5F66%O%Ä		8	%	CF%*G	ACE8C	6E<8K<8E%85\$6E)/		0) G%/H
02#-Ä<J)	)"-ÄB..	=&%CF564		8	866%*G	866%*G	ACF55	6E<8L<8E%89\$C8N		0)G%/H
02#-Ä<J)	:+IM	4.# ÄÄ<ÄJ			F6%*G	F6%*G	ACFLE	6E<8L<8E%8L\$C80		0)G%/H
02#-Ä<J)	)"-ÄB..	=&%5F66%ÄJ%R		8			AC98E	6E<8L<8E%CE\$800		0)G%/H
02#-Ä<J)	)"-ÄB..	=&%FE86D		8	%	866%*G	AC95A	6E<8A<8E%6F\$CK		0)G%/H
02#-Ä<J)	)"-ÄB..	=&%CF56Ä		8	866%*G	866%*G	AEEK6	6E<C8<8E%8F\$86G		0)G%/H
02#-Ä<J)	:+IM	=&%5F66%J(E%D			F6%*G	F6%*G	AEE9C	6E<C8<8E%85\$5KÄ		0)G%/H
02#-Ä<J)	)"-ÄB..	=&%5F66%J(E%Ä		8			AEEL6	6E<C8<8E%8F\$E8Ä		0)G%/H
02#-Ä<J)	:+IM	RW-M2+# 2"			C66%*G	%	56AFE	6E<C6<8E%8C\$681=		0) G%G
02#-Ä<J)	)"-ÄB..	A66P6		C			58F9A	6E<CF<8E%89\$F8-		0)G%=G
02#-Ä<J)	:+IM	RY#ÄZ+2*			F66P56%*G	%	586L5	6E<C8<8E%6A\$C8E&		0)G%=G
02#-Ä<J)	)"-ÄB..	)7687H		8			58958	6E<CC<8E%8F\$F88		0)G%=G
02#-Ä<J)	:+IM	OÄÄVI276			8666%*G	%	5CC89	6E<C9<8E%8E\$F81=		0) G%G
02#-Ä<J)	)"-ÄB..	A68P8		8			5C58F	6E<CK<8E%6L\$C8		0)G%=G
02#-Ä<J)	:+IM	:+!,=IM7K			AIEFP5F%*G	%	5868K	6E<C6<8E%8K\$F8G		0)G%=G
02#-Ä<J)	)"-ÄB..	A6F		8			5CKA5	6E<CL<8E%8K\$E8FN		0)G%=G
02#-Ä<J)	:+IM	G=Ä[4.#[=>.M			866P8%*G	%	5C8FC	6E<C9<8E%6A\$88J		0)G%=G
02#-Ä<J)	)"-ÄB..	A69P6		8			5E6FE	6E<CL<8E%86\$68N		0)G%=G
02#-Ä<J)	:+IM	:+!,=IM[6			A96PE9%*G	%	56AAF	6E<C6<8E%85\$E8&		0)G%=G
02#-Ä<J)	)"-ÄB..	A65P6		8			5FEKC	65<86<8E%86\$E8-		0)G%=G
02#-Ä<J)	:+IM	:+!,=IM7C8			A96PE9%*G	%	56AAE	6E<C6<8E%85\$C8&		0)G%=G
02#-Ä<J))"-ÄB..	A6EP6		8			5FFAE	65<88<8E%6L\$6CG=		0) G%G

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Lab Chronicle

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:~2;!#<= #!\$%&'>-Ä%?>#@-ÄÄ%68A

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Laboratory References:

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- 0) G%G%0! .#)*!+ ,-%=#P%G2> .J%8EK8F%HU!+Ä%J2+~2]Ä#2!&?%9E65]RC%SE85TCAL7LF99

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QC Sample Results

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Method: 624 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 440-92144/5

Matrix: Water

Analysis Batch: 92144

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
B14C5*\$Ä!CD5(E%6D5(Ä!CÄ\$	F-		BG0	2GH	>I<J			0K<2L<2K(B2.20	2
*&\$*5Ä%6	F-		LG0	/G0	>I<J			0K<2L<2K(B2.20	2
*&\$D5*6%!\$%5Ä	F-		BG0	2GB	>I<J			0K<2L<2K(B2.20	2

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	108		80 - 120		03/15/13 21:10	1
Dibromofluoromethane (Surr)	115		80 - 120		03/15/13 21:10	1

Lab Sample ID: LCS 440-92144/6

Matrix: Water

Analysis Batch: 92144

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
B14C5*\$Ä!CD5(E%6D5(Ä!CÄ\$	BLG0	2MG3		>I<J		M0	BL 12M0

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Toluene-d8 (Surr)	100		80 - 120
Dibromofluoromethane (Surr)	113		80 - 120

Lab Sample ID: 440-40886-1 MS

Matrix: Water

Analysis Batch: 92144

Client Sample ID: Outfall 019

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
B14C5*\$Ä!CD5(E%6D5(Ä!CÄ\$	F-		BLG0	23GA		>I<J		3M	BL 12M0

Surrogate	MS %Recovery	MS Qualifier	Limits
Toluene-d8 (Surr)	103		80 - 120
Dibromofluoromethane (Surr)	111		80 - 120

Lab Sample ID: 440-40886-1 MSD

Matrix: Water

Analysis Batch: 92144

Client Sample ID: Outfall 019

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
B14C5*\$Ä!CD5(E%6D5(Ä!CÄ\$	F-		BLG0	2MG/		>I<J		3A	BL 12M0	K	BL

Surrogate	MSD %Recovery	MSD Qualifier	Limits
Toluene-d8 (Surr)	102		80 - 120
Dibromofluoromethane (Surr)	111		80 - 120

Lab Sample ID: MB 440-94161/5

Matrix: Water

Analysis Batch: 94161

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2N2N2ÄÄ&C5*\$Ä!C'6Ä	F-		0GL0	0GK0	>I<J			0K<B3<2K(0A.L0	2

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QC Sample Results

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Method: 624 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 440-94161/5
Matrix: Water
Analysis Batch: 94161

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2N2NB1-%&C5*\$*ÄIC'6Ä	F-		0GL0	0GK0	>I<J			0K<B3<2K(0A.L0	2
2N2NB1-%&C5*\$*ÄIC'6Ä	F-		0GL0	0GK0	>I<J			0K<B3<2K(0A.L0	2
2N21-%&C5*\$*ÄIC'6Ä	F-		0GL0	0G/0	>I<J			0K<B3<2K(0A.L0	2
Ä\$%&C5*\$*!\$%@5>*\$*ÄIC'6Ä	F-		BG0	0GL0	>I<J			0K<B3<2K(0A.L0	2
2N21-%&C5*\$*ÄICÄ6Ä	F-		0GL0	0G/B	>I<J			0K<B3<2K(0A.L0	2
2NB1-%&C5*\$*+Ä6RÄ6Ä	F-		0GL0	0GKB	>I<J			0K<B3<2K(0A.L0	2
2NB1-%&C5*\$*ÄIC'6Ä	F-		0GL0	0GBH	>I<J			0K<B3<2K(0A.L0	2
2NB1-%&C5*\$*S\$*S'6Ä	F-		0GL0	0GKL	>I<J			0K<B3<2K(0A.L0	2
2NK1-%&C5*\$*+Ä6RÄ6Ä	F-		0GL0	0GKL	>I<J			0K<B3<2K(0A.L0	2
2N/1-%&C5*\$*+Ä6RÄ6Ä	F-		0GL0	0GKM	>I<J			0K<B3<2K(0A.L0	2
TÄ6RÄ6Ä	F-		0GL0	0GBH	>I<J			0K<B3<2K(0A.L0	2
T\$*#*@\$#	F-		0GL0	0G/0	>I<J			0K<B3<2K(0A.L0	2
2NB1-%&C5*\$*12N2NB1!\$%@5>*\$*ÄIC'6Ä	F-		BG0	2G2	>I<J			0K<B3<2K(0A.L0	2
T\$*#*ÄIC'6Ä	F-		0GL0	0G/B	>I<J			0K<B3<2K(0A.L0	2
4\$*+*6(!Ä!\$&C5*\$*%UÄ	F-		0GL0	0GBH	>I<J			0K<B3<2K(0A.L0	2
4C5*\$*+Ä6RÄ6Ä	F-		0GL0	0GK3	>I<J			0K<B3<2K(0A.L0	2
-\$*#*&C5*\$*#ÄIC'6Ä	F-		0GL0	0G/0	>I<J			0K<B3<2K(0A.L0	2
4C5*\$*ÄIC'6Ä	F-		0GL0	0G/0	>I<J			0K<B3<2K(0A.L0	2
4C5*\$*@\$#	F-		0GL0	0GKK	>I<J			0K<B3<2K(0A.L0	2
4C5*\$*#ÄIC'6Ä	F-		0GL0	0G/0	>I<J			0K<B3<2K(0A.L0	2
&% 12NK1-%&C5*\$*S\$*SÄ6Ä	F-		0GL0	0GBB	>I<J			0K<B3<2K(0A.L0	2
T\$*#*U%&C5*\$*#ÄIC'6Ä	F-		0GL0	0GK0	>I<J			0K<B3<2K(0A.L0	2
V!CD5+Ä6RÄ6Ä	F-		0GL0	0GBL	>I<J			0K<B3<2K(0A.L0	2
7Ä!CD5Ä6Ä(4C5*\$*%UÄ	F-		2G0	0GAL	>I<J			0K<B3<2K(0A.L0	2
ÄÄ!\$&C5*\$*ÄICÄ6Ä	F-		0GL0	0GKB	>I<J			0K<B3<2K(0A.L0	2
Ä*5>Ä6Ä	F-		0GL0	0GK3	>I<J			0K<B3<2K(0A.L0	2
!\$*6 12NB1-%&C5*\$*ÄICÄ6Ä	F-		0GL0	0GK0	>I<J			0K<B3<2K(0A.L0	2
!\$*6 12NK1-%&C5*\$*S\$*SÄ6Ä	F-		0GL0	0GKB	>I<J			0K<B3<2K(0A.L0	2
Ä\$%&C5*\$*@5>*\$*ÄIC'6Ä	F-		0GL0	0GK/	>I<J			0K<B3<2K(0A.L0	2
W%6D5(&C5*\$*%UÄ	F-		0GL0	0G/0	>I<J			0K<B3<2K(0A.L0	2
Ä\$%&C5*\$*ÄICÄ6Ä	F-		0GL0	0GB3	>I<J			0K<B3<2K(0A.L0	2
&% 12NB1-%&C5*\$*ÄICÄ6Ä	F-		0GL0	0GKB	>I<J			0K<B3<2K(0A.L0	2
4D&5*CÄX'6Ä	F-		BG0	0G/0	>I<J			0K<B3<2K(0A.L0	2
YD5Ä6Ä Ä(!'5	F-		2G0	0GA0	>I<J			0K<B3<2K(0A.L0	2

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	86		80 - 120		03/26/13 09:50	1
Dibromofluoromethane (Surr)	105		80 - 120		03/26/13 09:50	1
Toluene-d8 (Surr)	94		80 - 120		03/26/13 09:50	1

Lab Sample ID: LCS 440-94161/6
Matrix: Water
Analysis Batch: 94161

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2N2NB1-%&C5*\$*ÄIC'6Ä	BLG0	B3GH		>I<J		20M	3L 12KL
2N2NB1-%&C5*\$*ÄIC'6Ä	BLG0	B0GA		>I<J		H	LL 12K0
2N2NB1-%&C5*\$*ÄIC'6Ä	BLG0	BBGB		>I<J		HA	M0 12BL

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QC Sample Results

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Method: 624 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 440-94161/6
Matrix: Water
Analysis Batch: 94161

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2N21-%&C5*\$*Ä!C'6Ä	BLG0	B/GM		>|<J		AA	M0 12BL
2N21-%&C5*\$*Ä!CÄ6Ä	BLG0	BKG0		>|<J		AB	M0 12BL
2NB1-%&C5*\$*+Ä6RÄ6Ä	BLG0	BKGA		>|<J		A3	M 12B0
2NB1-%&C5*\$*Ä!C'6Ä	BLG0	B/GH		>|<J		AA	30 12/0
2NB1-%&C5*\$*S\$*S'6Ä	BLG0	BKGB		>|<J		AK	M0 12BL
2NK1-%&C5*\$*+Ä6RÄ6Ä	BLG0	B/GL		>|<J		AH	M 12B0
2N/1-%&C5*\$*+Ä6RÄ6Ä	BLG0	B/G0		>|<J		A3	M 12B0
TÄ6RÄ6Ä	BLG0	B2G0		>|<J		H	M0 12B0
T\$*#*@\$*#	BLG0	B3GM		>|<J		20M	LL 12K0
T\$*#*#Ä!C'6Ä	BLG0	B3G/		>|<J		203	3L 12/0
4\$*+6(Ä!\$&C5*\$*UÄ	BLG0	BMG0		>|<J		20H	3L 12/0
4C5*\$*+Ä6RÄ6Ä	BLG0	BKG3		>|<J		A'	M 12B0
-%*\$*#*&C5*\$*#Ä!C'6Ä	BLG0	BHG/		>|<J		22/	M012/0
4C5*\$*Ä!C'6Ä	BLG0	BAG0		>|<J		223	30 12/0
4C5*\$*@\$*#	BLG0	B/G0		>|<J		A3	M0 12K0
4C5*\$*#Ä!C'6Ä	BLG0	BMGB		>|<J		20A	L0 12/0
&% 12NK1-%&C5*\$*S\$*SÄ6Ä	BLG0	B/GB		>|<J		AM	M 12BL
T\$*#*U%&C5*\$*#Ä!C'6Ä	BLG0	BLGH		>|<J		20K	M012KL
V!CD5+Ä6RÄ6Ä	BLG0	BKGA		>|<J		A3	M 12BL
7Ä!CD5Ä6Ä(4C5*\$*UÄ	BLG0	B2G2		>|<J		H	LL 12K0
ÄÄ!\$&C5*\$*Ä!CÄ6Ä	BLG0	B3GB		>|<J		20L	M012BL
Ä*5>Ä6Ä	BLG0	B/GH		>|<J		AA	M0 12B0
!\$*6 12NB1-%&C5*\$*Ä!CÄ6Ä	BLG0	BK GK		>|<J		AK	M0 12BL
!\$*6 12NK1-%&C5*\$*S\$*SÄ6Ä	BLG0	BKGA		>|<J		A3	M0 12BL
Ä\$%&C5*\$*@5>*\$*#Ä!C'6Ä	BLG0	BLGM		>|<J		20K	3L 12/L
W%6D5(&C5*\$*UÄ	BLG0	K2GH		>|<J		2BM	LL 12KL
Ä\$%&C5*\$*Ä!CÄ6Ä	BLG0	BLG/		>|<J		20B	M012BL
&% 12NB1-%&C5*\$*Ä!CÄ6Ä	BLG0	BLG3		>|<J		20B	M012BL
YD5Ä6Ä Ä!(!5	MLG0	H0GH		>|<J		20H	M012BL

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	99		80 - 120
Dibromofluoromethane (Surr)	104		80 - 120
Toluene-d8 (Surr)	99		80 - 120

Lab Sample ID: 440-41045-B-3 MS
Matrix: Water
Analysis Batch: 94161

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
2N2N2\$Ä!&C5*\$*Ä!C'6Ä	F-		BLG0	BLGL		>|<J		20B	3L 12/0
2N2NB1-%&C5*\$*Ä!C'6Ä	F-		BLG0	B2GL		>|<J		H3	LL 12KL
2N2NB1-%&C5*\$*Ä!C'6Ä	F-		BLG0	B2GA		>|<J		HH	3L 12K0
2N21-%&C5*\$*Ä!C'6Ä	F-		BLG0	BK GK		>|<J		AK	3L 12K0
2N21-%&C5*\$*Ä!CÄ6Ä	F-		BLG0	B2GA		>|<J		HM	30 12K0
2NB1-%&C5*\$*+Ä6RÄ6Ä	F-		BLG0	B/GA		> <J		AA	M 12BL
2NB1-%&C5*\$*Ä!C'6Ä	F-		BLG0	BBGL		> <J		A0	30 12/0
2NB1-%&C5*\$*S\$*S'6Ä	F-		BLG0	BBG2		> <J		HH	3L 12K0

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QC Sample Results

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Method: 624 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 440-41045-B-3 MS

Matrix: Water

Analysis Batch: 94161

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Analyte	Sample	Sample	Spike	MS MS		Unit	D	%Rec	%Rec. Limits
	Result	Qualifier	Added	Result	Qualifier				
2NK1-%&C5*\$*+Ä6RÄ6Ä	F-		BLG0	BLGM		>I<J		20K	ML12BL
2N/1-%&C5*\$*+Ä6RÄ6Ä	F-		BLG0	B/GH		>I<J		AA	M 12BL
TÄ6RÄ6Ä	F-		BLG0	B0G/		>I<J		HB	3L 12BL
T\$*#*@\$#	F-		BLG0	BMG2		>I<J		20H	LL 12KL
T\$*#*#ÄIC'6Ä	F-		BLG0	BBGA		>I<J		A2	LL 12/L
4\$*+6(!Ä!\$&C5*\$%UÄ	F-		BLG0	BLGH		>I<J		20K	3L 12/0
4C5*\$*+Ä6RÄ6Ä	F-		BLG0	B/GL		>I<J		AH	M 12BL
-%*\$*#&C5*\$*#ÄIC'6Ä	F-		BLG0	BHGK		>I<J		22K	3L 12/0
4C5*\$*ÄIC'6Ä	F-		BLG0	BLGB		>I<J		202	LL 12/0
4C5*\$*@\$#	F-		BLG0	BBGH		>I<J		A2	3L 12KL
4C5*\$*#ÄIC'6Ä	F-		BLG0	B/G/		>I<J		AH	/ L 12/L
&% 12NK1-%&C5*\$*S\$*SÄ6Ä	F-		BLG0	B2GM		>I<J		HM	M 12K0
T\$*#*U%&C5*\$*#ÄIC'6Ä	F-		BLG0	BKGA		>I<J		A3	M 12KL
VICD5+Ä6RÄ6Ä	F-		BLG0	BKGM		>I<J		AL	3L 12K0
7ÄICD5Ä6Ä(4C5*\$%UÄ	F-		BLG0	B0G3		>I<J		HB	L0 12KL
ÄÄ!\$&C5*\$*ÄICÄ6Ä	F-		BLG0	BMG2		>I<J		20A	3L 12K0
Ä5>Ä6Ä	F-		BLG0	BKGA		>I<J		A3	M 12BL
!\$'6 12NB1-%&C5*\$*ÄICÄ6Ä	F-		BLG0	BBG0		>I<J		HH	3L 12K0
!\$'6 12NK1-%&C5*\$*S\$*SÄ6Ä	F-		BLG0	BBGB		>I<J		HA	3L 12KL
Ä\$%&C5*\$*@5>*\$*#ÄIC'6Ä	F-		BLG0	B/G/		>I<J		AH	30 12/L
W%6D5(&C5*\$%UÄ	F-		BLG0	K0GL		>I<J		2BB	/L 12/0
Ä\$%&C5*\$*ÄICÄ6Ä	F-		BLG0	B/GM		>I<J		AA	3L 12BL
&% 12NB1-%&C5*\$*ÄICÄ6Ä	F-		BLG0	BLGM		>I<J		20K	3L 12K0
YD5Ä6Ä Ä(!'5	F-		MLG0	MHGK		>I<J		20/	30 12K0

Surrogate	MS MS %Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	101		80 - 120
Dibromofluoromethane (Surr)	100		80 - 120
Toluene-d8 (Surr)	95		80 - 120

Lab Sample ID: 440-41045-B-3 MSD

Matrix: Water

Analysis Batch: 94161

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Analyte	Sample	Sample	Spike	MSD MSD		Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
	Result	Qualifier	Added	Result	Qualifier						
2N2N2\$Ä&C5*\$*ÄIC'6Ä	F-		BLG0	B3GA		>I<J		20H	3L 12/0	L	B0
2N2NB1\$Ä&C5*\$*ÄIC'6Ä	F-		BLG0	B2GH		>I<J		HM	LL 12KL	2	K0
2N2NB1\$Ä&C5*\$*ÄIC'6Ä	F-		BLG0	B2GA		>I<J		HH	3L 12K0	0	BL
2N21-%&C5*\$*ÄIC'6Ä	F-		BLG0	B3GA		>I<J		20H	3L 12K0	2/	B0
2N21-%&C5*\$*ÄICÄ6Ä	F-		BLG0	BLG2		>I<J		200	30 12K0	2/	B0
2NB1-%&C5*\$*+Ä6RÄ6Ä	F-		BLG0	B/GL		>I<J		AH	M 12BL	2	B0
2NB1-%&C5*\$*ÄIC'6Ä	F-		BLG0	BLGA		>I<J		20/	30 12/0	2/	B0
2NB1-%&C5*\$*S\$*S'6Ä	F-		BLG0	B/GL		>I<J		AH	3L 12K0	20	B0
2NK1-%&C5*\$*+Ä6RÄ6Ä	F-		BLG0	B/GM		>I<J		AA	M 12BL	/	B0
2N/1-%&C5*\$*+Ä6RÄ6Ä	F-		BLG0	B/G0		>I<J		A3	M 12BL	K	B0
TÄ6RÄ6Ä	F-		BLG0	B0GH		>I<J		HK	3L 12BL	B	B0
T\$*#*@\$#	F-		BLG0	BMGH		>I<J		222	LL 12KL	K	BL
T\$*#*#ÄIC'6Ä	F-		BLG0	B/G3		>I<J		AH	LL 12/L	M	BL

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QC Sample Results

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Method: 624 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 440-41045-B-3 MSD

Matrix: Water

Analysis Batch: 94161

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4\$*6(!Ä!\$&C5*\$%UÄ	F-		BLG0	B3GM		>|<J		20M	3L 12/0	K	BL
4C5*\$*+Ä6RÄ6Ä	F-		BLG0	BKGH		>|<J		AL	M 12BL	K	B0
-\$*#&C5*\$*#Ä!C'6Ä	F-		BLG0	BHGM		>|<J		22L	3L 12/0	2	BL
4C5*\$*Ä!C'6Ä	F-		BLG0	BMGB		>|<J		20A	LL 12/0	H	BL
4C5*\$*@\$#	F-		BLG0	B3G0		>|<J		20/	3L 12KL	2K	B0
4C5*\$*#Ä!C'6Ä	F-		BLG0	BMG0		>|<J		20H	/L 12/L	20	BL
&% 12NK1-%&C5*\$*S\$*SÄ6Ä	F-		BLG0	B/G/		>|<J		AH	M 12K0	22	B0
T\$*#*U%&C5*\$*#Ä!C'6Ä	F-		BLG0	BLG3		>|<J		20B	M012KL	M	B0
V!CD5+Ä6RÄ6Ä	F-		BLG0	BBGH		>|<J		A2	3L 12K0	/	B0
7Ä!CD5Ä6Ä(4C5*\$%UÄ	F-		BLG0	BLGK		>|<J		202	L0 12KL	B0	B0
ÄÄ!\$&C5*\$*Ä!CÄ6Ä	F-		BLG0	BKG0		>|<J		AB	3L 12K0	2M	B0
Ä*5>Ä6Ä	F-		BLG0	BKGH		>|<J		AL	M 12BL	2	B0
!\$6 12NB1-%&C5*\$*Ä!CÄ6Ä	F-		BLG0	BLG2		>|<J		202	3L 12K0	2/	B0
!\$6 12NK1-%&C5*\$*S\$*SÄ6Ä	F-		BLG0	B/G/		>|<J		AM	3L 12KL	A	BL
Ä\$%&C5*\$*@5>*\$*#Ä!C'6Ä	F-		BLG0	B/G3		>|<J		AA	30 12/L	2	BL
W%6D5(&C5*\$%UÄ	F-		BLG0	K2GB		>|<J		2BL	/L 12/0	B	K0
Ä\$%&C5*\$*Ä!CÄ6Ä	F-		BLG0	B/GB		>|<J		AM	3L 12BL	B	B0
&% 12NB1-%&C5*\$*Ä!CÄ6Ä	F-		BLG0	BAG/		>|<J		22M	3L 12K0	2/	B0
YD5Ä6Ä Ä(!5	F-		MLG0	MMG0		>|<J		20K	30 12K0	B	B0

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	101		80 - 120
Dibromofluoromethane (Surr)	115		80 - 120
Toluene-d8 (Surr)	98		80 - 120

Lab Sample ID: MB 440-94456/12

Matrix: Water

Analysis Batch: 94456

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
T\$*#*@\$#	F-		OGL0	0G/0	>|<J			OK<BM<2R(2D	2

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		80 - 120		03/27/13 11:40	1
Dibromofluoromethane (Surr)	91		80 - 120		03/27/13 11:40	1
Toluene-d8 (Surr)	108		80 - 120		03/27/13 11:40	1

Lab Sample ID: LCS 440-94456/5

Matrix: Water

Analysis Batch: 94456

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
T\$*#*@\$#	BLG0	BLG2		>|<J		202	LL 12K0

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	103		80 - 120
Dibromofluoromethane (Surr)	103		80 - 120

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QC Sample Results

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Method: 624 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 440-94456/5
Matrix: Water
Analysis Batch: 94456

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
Toluene-d8 (Surr)	110		80 - 120

Lab Sample ID: 440-41430-B-4 MS
Matrix: Water
Analysis Batch: 94456

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
TS*#@*\$#	F-		BLG0	BHG/		>|<J		22/	LL 12KL

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	107		80 - 120
Dibromofluoromethane (Surr)	98		80 - 120
Toluene-d8 (Surr)	109		80 - 120

Lab Sample ID: 440-41430-B-4 MSD
Matrix: Water
Analysis Batch: 94456

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
TS*#@*\$#	F-		BLG0	B3GM		>|<J		20M	LL 12KL	3	BL

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	106		80 - 120
Dibromofluoromethane (Surr)	93		80 - 120
Toluene-d8 (Surr)	107		80 - 120

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 440-93542/2
Matrix: Water
Analysis Batch: 93542

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2N/1-%*X'6Ä	F-		BG0	2G0	>|<J			0K<BB<2K(20.BL	2

	MB	MB				
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	108		80 - 120		03/22/13 10:25	1

Lab Sample ID: LCS 440-93542/3
Matrix: Water
Analysis Batch: 93542

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2N/1-%*X'6Ä	20G0	AGML		> <J		AH	M0 12BL

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QC Sample Results

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Method: 8260B SIM - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 440-93542/3
Matrix: Water
Analysis Batch: 93542

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Surrogate	LCS		Limits
	%Recovery	Qualifier	
Dibromofluoromethane (Surr)	112		80 - 120

Lab Sample ID: 440-41179-D-1 MS
Matrix: Water
Analysis Batch: 93542

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
	2N/1-%*X'6Ä	F-		20G0	AGLH		>|<J		A3	M0 12K0

Surrogate	MS		Limits
	%Recovery	Qualifier	
Dibromofluoromethane (Surr)	111		80 - 120

Lab Sample ID: 440-41179-D-1 MSD
Matrix: Water
Analysis Batch: 93542

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
	2N/1-%*X'6Ä	F-		20G0	20GB		>|<J		20B	M0 12K0	3	K0

Surrogate	MSD		Limits
	%Recovery	Qualifier	
Dibromofluoromethane (Surr)	114		80 - 120

Method: 625 - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 440-93652/1-A
Matrix: Water
Analysis Batch: 94633

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 93652

Analyte	MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
2NBN/Ä%&C5*\$*+Ä6RÄ6Ä	F-		20G0	BGL0	>|<J		0K<BB<2K(2/.B2	0K<BM<2K(2H.B	2
2NB1-%&C5*\$*+Ä6RÄ6Ä	F-		20G0	KG00	>|<J		0K<BB<2K(2/.B2	0K<BM<2K(2H.B0	2
2NB1-%SCÄ6D5CDU\$'R%6Ä0' ("R*+Ä6RÄ6ÄQ	F-		B0G0	BGL0	>|<J		0K<BB<2K(2/.B2	0K<BM<2K(2H.B0	2
2NK1-%&C5*\$*+Ä6RÄ6Ä	F-		20G0	KG00	>|<J		0K<BB<2K(2/.B2	0K<BM<2K(2H.B0	2
2N/1-%&C5*\$*+Ä6RÄ6Ä	F-		20G0	BGL0	>|<J		0K<BB<2K(2/.B2	0K<BM<2K(2H.B0	2
BN/N3Ä%&C5*\$*SCÄ6*5	F-		B0G0	/GL0	>|<J		0K<BB<2K(2/.B2	0K<BM<2K(2H.B0	2
BN/1-%&C5*\$*SCÄ6*5	F-		20G0	KGL0	>|<J		0K<BB<2K(2/.B2	0K<BM<2K(2H.B0	2
BN/1-%#Ä!CD5SCÄ6*5	F-		B0G0	KGL0	>|<J		0K<BB<2K(2/.B2	0K<BM<2K(2H.B0	2
BN/1-%6%!\$*SCÄ6*5	F-		B0G0	HG00	>|<J		0K<BB<2K(2/.B2	0K<BM<2K(2H.B0	2
BN/1-%6%!\$*1*5>Ä6Ä	F-		20G0	KGL0	>|<J		0K<BB<2K(2/.B2	0K<BM<2K(2H.B0	2
BN31-%6%!\$*1*5>Ä6Ä	F-		20G0	BG00	>|<J		0K<BB<2K(2/.B2	0K<BM<2K(2H.B0	2
B14C5*\$*6'SC!C'5Ä6Ä	F-		20G0	KG00	>|<J		0K<BB<2K(2/.B2	0K<BM<2K(2H.B0	2
B14C5*\$*SCÄ6*5	F-		20G0	KG00	>|<J		0K<BB<2K(2/.B2	0K<BM<2K(2H.B0	2
B17Ä!CD56'SC!C'5Ä6Ä	F-		20G0	BG00	>|<J		0K<BB<2K(2/.B2	0K<BM<2K(2H.B0	2
B17Ä!CD5SCÄ6*5	F-		20G0	KG00	>|<J		0K<BB<2K(2/.B2	0K<BM<2K(2H.B0	2
B1F%!\$*6%5%6Ä	F-		B0G0	BG00	> <J		0K<BB<2K(2/.B2	0K<BM<2K(2H.B0	2
B1F%!\$*SCÄ6*5	F-		20G0	KGL0	> <J		0K<BB<2K(2/.B2	0K<BM<2K(2H.B0	2

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QC Sample Results

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Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 440-93652/1-A

Matrix: Water

Analysis Batch: 94633

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 93652

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
KNKZ1-%&C5*\$+Ä6R%U%6Ä	F-		B0G0	MGL0	>I<J		0K<BB<2K(2/.B2	0K<BM<2K(2H.B	2
K1F%!*6%5%6Ä	F-		B0G0	KG00	>I<J		0K<BB<2K(2/.B2	0K<BM<2K(2H.B0	2
/N31-%6%!\$*1B1#Ä!CD5SCÄ6*5	F-		B0G0	/G00	>I<J		0K<BB<2K(2/.B2	0K<BM<2K(2H.B0	2
/1T\$*#SCÄ6D5(SCÄ6D5(Ä!CÄ\$	F-		20G0	KG00	>I<J		0K<BB<2K(2/.B2	0K<BM<2K(2H.B0	2
/14C5*\$*1K1#Ä!CD5SCÄ6*5	F-		B0G0	BGL0	>I<J		0K<BB<2K(2/.B2	0K<BM<2K(2H.B0	2
/14C5*\$*6%5%6Ä	F-		20G0	BG00	>I<J		0K<BB<2K(2/.B2	0K<BM<2K(2H.B0	2
/14C5*\$*SCÄ6D5(SCÄ6D5(Ä!CÄ\$	F-		20G0	BGL0	>I<J		0K<BB<2K(2/.B2	0K<BM<2K(2H.B0	2
/17Ä!CD5SCÄ6*5	F-		20G0	KG00	>I<J		0K<BB<2K(2/.B2	0K<BM<2K(2H.B0	2
/1F%!*6%5%6Ä	F-		B0G0	/G00	>I<J		0K<BB<2K(2/.B2	0K<BM<2K(2H.B0	2
/1F%!*SCÄ6*5	F-		B0G0	LGL0	>I<J		0K<BB<2K(2/.B2	0K<BM<2K(2H.B0	2
"&Ä6'SC!CÄ6Ä	F-		20G0	KG00	>I<J		0K<BB<2K(2/.B2	0K<BM<2K(2H.B0	2
"&Ä6'SC!CD5Ä6Ä	F-		20G0	KG00	>I<J		0K<BB<2K(2/.B2	0K<BM<2K(2H.B0	2
"6%5%6Ä	F-		20G0	KGL0	>I<J		0K<BB<2K(2/.B2	0K<BM<2K(2H.B0	2
"6!C\$&Ä6Ä	F-		20G0	BGL0	>I<J		0K<BB<2K(2/.B2	0K<BM<2K(2H.B0	2
TÄ6R%U%6Ä	F-		B0G0	20G0	>I<J		0K<BB<2K(2/.B2	0K<BM<2K(2H.B0	2
TÄ6R*[\!6!C\$&Ä6Ä	F-		20G0	BGL0	>I<J		0K<BB<2K(2/.B2	0K<BM<2K(2H.B0	2
TÄ6R*[\!SD\$Ä6Ä	F-		20G0	KG00	>I<J		0K<BB<2K(2/.B2	0K<BM<2K(2H.B0	2
TÄ6R*[+!@5>*\$6!CÄ6Ä	F-		20G0	BG00	>I<J		0K<BB<2K(2/.B2	0K<BM<2K(2H.B0	2
TÄ6R*[!NCN%!SÄ\$D5Ä6Ä	F-		20G0	/G00	>I<J		0K<BB<2K(2/.B2	0K<BM<2K(2H.B0	2
TÄ6R*[]!@5>*\$6!CÄ6Ä	F-		20G0	BGL0	>I<J		0K<BB<2K(2/.B2	0K<BM<2K(2H.B0	2
TÄ6R*%&(!&%U	F-		B0G0	20G0	>I<J		0K<BB<2K(2/.B2	0K<BM<2K(2H.B0	2
TÄ6RD5('5&*C*5	F-		B0G0	KGL0	>I<J		0K<BB<2K(2/.B2	0K<BM<2K(2H.B0	2
T% OB1&C5*\$*Ä!C*XDQ#Ä!C'6Ä	F-		20G0	KG00	>I<J		0K<BB<2K(2/.B2	0K<BM<2K(2H.B0	2
T% OB1&C5*\$*Ä!CD5QÄ!CÄ\$	F-		20G0	KG00	>I<J		0K<BB<2K(2/.B2	0K<BM<2K(2H.B0	2
+% (OB1&C5*\$*% *S\$*SD5Q(Ä!CÄ\$	F-		20G0	BGL0	>I<J		0K<BB<2K(2/.B2	0K<BM<2K(2H.B0	2
T% OB1Ä!CD5CÄXD5Q(SC!C'5!Ä	F-		L0G0	/G00	>I<J		0K<BB<2K(2/.B2	0K<BM<2K(2H.B0	2
T>!D5(+Ä6RD5(SC!C'5!Ä	F-		B0G0	/G00	>I<J		0K<BB<2K(2/.B2	0K<BM<2K(2H.B0	2
4C\$D Ä6Ä	F-		20G0	BGL0	>I<J		0K<BB<2K(2/.B2	0K<BM<2K(2H.B0	2
-%161+>!D5(SC!C'5!Ä	F-		B0G0	KG00	>I<J		0K<BB<2K(2/.B2	0K<BM<2K(2H.B0	2
-%161*&!D5(SC!C'5!Ä	F-		B0G0	KGL0	>I<J		0K<BB<2K(2/.B2	0K<BM<2K(2H.B0	2
-%+Ä6RO'NCQ'6!C\$&Ä6Ä	F-		B0G0	KG00	>I<J		0K<BB<2K(2/.B2	0K<BM<2K(2H.B0	2
-%+Ä6R*@>\$'6	F-		20G0	/G00	>I<J		0K<BB<2K(2/.B2	0K<BM<2K(2H.B0	2
-%Ä!CD5(SC!C'5!Ä	F-		20G0	KGL0	>I<J		0K<BB<2K(2/.B2	0K<BM<2K(2H.B0	2
-%#Ä!CD5(SC!C'5!Ä	F-		20G0	BGL0	>I<J		0K<BB<2K(2/.B2	0K<BM<2K(2H.B0	2
P5>*\$6!CÄ6Ä	F-		20G0	KG00	>I<J		0K<BB<2K(2/.B2	0K<BM<2K(2H.B0	2
P5>*\$Ä6Ä	F-		20G0	KG00	>I<J		0K<BB<2K(2/.B2	0K<BM<2K(2H.B0	2
9ÄX'&C5*\$*+Ä6RÄ6Ä	F-		20G0	KG00	>I<J		0K<BB<2K(2/.B2	0K<BM<2K(2H.B0	2
9ÄX'&C5*\$*+!U%Ä6Ä	F-		20G0	/G00	>I<J		0K<BB<2K(2/.B2	0K<BM<2K(2H.B0	2
9ÄX'&C5*\$*D&5*SÄ6!U%Ä6Ä	F-		B0G0	LG00	>I<J		0K<BB<2K(2/.B2	0K<BM<2K(2H.B0	2
9ÄX'&C5*\$*Ä!C'6Ä	F-		20G0	KGL0	>I<J		0K<BB<2K(2/.B2	0K<BM<2K(2H.B0	2
.6UÄ6*[2NBNK1&U!SD\$Ä6Ä	F-		B0G0	KGL0	>I<J		0K<BB<2K(2/.B2	0K<BM<2K(2H.B0	2
. *SC*\$*6Ä	F-		20G0	KG00	>I<J		0K<BB<2K(2/.B2	0K<BM<2K(2H.B0	2
F1F%!* *U%#Ä!CD5#%6Ä	F-		B0G0	BGL0	>I<J		0K<BB<2K(2/.B2	0K<BM<2K(2H.B0	2
F1F%!* *U%161S\$*SD5#%6Ä	F-		20G0	KGL0	>I<J		0K<BB<2K(2/.B2	0K<BM<2K(2H.B0	2
F1F%!* *U%SCÄ6D5#%6Ä	F-		20G0	BG00	>I<J		0K<BB<2K(2/.B2	0K<BM<2K(2H.B0	2
F'SC!C'5Ä6Ä	F-		20G0	KG00	>I<J		0K<BB<2K(2/.B2	0K<BM<2K(2H.B0	2
F%!*+Ä6RÄ6Ä	F-		B0G0	KG00	>I<J		0K<BB<2K(2/.B2	0K<BM<2K(2H.B0	2
:Ä6!'&C5*\$*SCÄ6*5	F-		B0G0	KGL0	>I<J		0K<BB<2K(2/.B2	0K<BM<2K(2H.B0	2

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QC Sample Results

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Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 440-93652/1-A

Matrix: Water

Analysis Batch: 94633

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 93652

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
:CÄ6'6!C\$Ä6Ä	F-		20G0	KGL0	>I<J		0K<BB<2K(2/.B2	0K<BM<2K(2H.B0	2
:CÄ6*5	F-		20G0	BG00	>I<J		0K<BB<2K(2/.B2	0K<BM<2K(2H.B0	2
:D\$Ä6Ä	F-		20G0	/G00	>I<J		0K<BB<2K(2/.B2	0K<BM<2K(2H.B0	2

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	98		50 - 120	03/22/13 14:21	03/27/13 18:20	1
2-Fluorophenol	74		30 - 120	03/22/13 14:21	03/27/13 18:20	1
2,4,6-Tribromophenol	91		40 - 120	03/22/13 14:21	03/27/13 18:20	1
Nitrobenzene-d5	81		45 - 120	03/22/13 14:21	03/27/13 18:20	1
Terphenyl-d14	58		50 - 125	03/22/13 14:21	03/27/13 18:20	1
Phenol-d6	72		35 - 120	03/22/13 14:21	03/27/13 18:20	1

Lab Sample ID: LCS 440-93652/2-A

Matrix: Water

Analysis Batch: 94633

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 93652

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
2NBN1-%&C5*\$*+Ä6RÄ6Ä	200	MKG0M		>I<J		MK	/ L 12B0
2NB1-%&C5*\$*+Ä6RÄ6Ä	200	33G0M		>I<J		33	/ 0 12B0
2NB1-%SCÄ6D5CDU\$R%6Ä0' ("R*+Ä6RÄ6ÄQ	200	AKG00		>I<J		AK	30 12B0
2NK1-%&C5*\$*+Ä6RÄ6Ä	200	32GMA		>I<J		3B	KL 12B0
2N/1-%&C5*\$*+Ä6RÄ6Ä	200	3KG//		>I<J		3K	KL 12B0
BN/N3-%&C5*\$*SCÄ6*5	200	20LGK		>I<J		20L	LL 12B0
BN/1-%&C5*\$*SCÄ6*5	200	ABGHH		>I<J		AK	LL 12B0
BN/1-%#Ä!CD5SCÄ6*5	200	HHGM3		>I<J		HA	/ 0 12B0
BN/1-%6%!!\$*SCÄ6*5	200	HHG0L		>I<J		HH	/ 0 12B0
BN/1-%6%!!\$*!5>Ä6Ä	200	20LGA		>I<J		203	3L 12B0
BN31-%6%!!\$*!5>Ä6Ä	200	20BGK		>I<J		20B	3L 12B0
B14C5*\$*6\$*SC!C'5Ä6Ä	200	ABG3A		>I<J		AK	30 12B0
B14C5*\$*SCÄ6*5	200	H2GHM		>I<J		HB	/ L 12B0
B17Ä!CD56\$SC!C'5Ä6Ä	200	H3G20		>I<J		H3	LL 12B0
B17Ä!CD5SCÄ6*5	200	HG3M		>I<J		HL	LO 12B0
B1F%!!\$*6%5%6Ä	200	ALGHL		>I<J		A3	3L 12B0
B1F%!!\$*SCÄ6*5	200	A/GK2		>I<J		A/	LO 12B0
KNKZ1-%&C5*\$*+Ä6R%U%6Ä	200	3AGMB		>I<J		M0	/ L 12KL
K1F%!!\$*6%5%6Ä	200	200G3		>I<J		202	30 12B0
/N31-%6%!!\$*1B1#Ä!CD5SCÄ6*5	200	AHGK3		>I<J		AH	/ L 12B0
/1T\$*#SCÄ6D5(SCÄ6D5(Ä!CÄ\$	200	AKGB2		>I<J		AK	30 12B0
/14C5*\$*1K1#Ä!CD5SCÄ6*5	200	A3G3B		>I<J		AM	30 12B0
/14C5*\$*6%5%6Ä	200	AMG3K		>I<J		AH	LL 12B0
/14C5*\$*SCÄ6D5(SCÄ6D5(Ä!CÄ\$	200	ALG/K		>I<J		AL	// 12B0
/17Ä!CD5SCÄ6*5	200	HLGB/		>I<J		HL	LO 12B0
/1F%!!\$*6%5%6Ä	200	20KG3		>I<J		20/	LL 12BL
/1F%!!\$*SCÄ6*5	200	HMGL/		>I<J		HH	/ L 12B0
"&Ä6\$SC!CÄ6Ä	200	A2GLM		>I<J		AB	30 12B0
"&Ä6\$SC!CD5Ä6Ä	200	A/GH/		>I<J		AL	30 12B0
"6%5%6Ä	200	HLGLB		>I<J		H3	KL 12B0

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QC Sample Results

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Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 440-93652/2-A

Matrix: Water

Analysis Batch: 94633

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 93652

Analyte	Spike Added	LCS		Unit	D	%Rec	%Rec. Limits
		Result	Qualifier				
"6!C\$&Ä6Ä	200	20HGH	>|<J			20A	3L 12B0
TÄ6R%U%6Ä	200	2BAGA	>|<J			2K0	K0 1230
TÄ6R*[!V!C\$&Ä6Ä	200	AHGK2	>|<J			AH	3L 12B0
TÄ6R*[!SD\$Ä6Ä	200	AHGB0	>|<J			AH	LL 12K0
TÄ6R*[!+!@5>*\$'6!CÄ6Ä	200	A3GM0	>|<J			AM	LL 12BL
TÄ6R*[!INCN%!\SÄSD5Ä6Ä	200	20BGL	>|<J			20K	/L 12KL
TÄ6R*[!@5>*\$'6!CÄ6Ä	200	ALGAA	>|<J			A3	L0 12BL
TÄ6R*%&'&%U	200	M2GHB	>|<J			MB	BL 12B0
TÄ6RD5('5&*C*5	200	HAG2A	>|<J			HA	L0 12B0
T% OB1&C5*\$'Ä!C*XDQ#Ä!C'6Ä	200	A/G02	>|<J			A/	LL 12B0
T% OB1&C5*\$'Ä!CD5QÄ!CÄ\$	200	HMG3L	>|<J			HH	L0 12B0
+% (OB1&C5*\$' *S\$SD5Q(Ä!CÄ\$	200	MGAL	>|<J			M	/L 12B0
T% OB1Ä!CD5CÄXD5Q(SC!C'5!Ä	200	20/GL	>|<J			20L	// 12B/
T>!D5(+Ä6RD5(SC!C'5!Ä	200	AAQ2	>|<J			AA	LL 12K0
4C\$D Ä6Ä	200	AHG0H	>|<J			AH	3L 12B0
-%161+>!D5(SC!C'5!Ä	200	22/G2	>|<J			22/	30 12BL
-%161*&!D5(SC!C'5!Ä	200	203GH	>|<J			20M	3L 12KL
-%+Ä6RO'NCQ'6!C\$&Ä6Ä	200	20LG0	>|<J			20L	L0 12KL
-%+Ä6R*@>\$'6	200	ALGA/	>|<J			A3	3L 12B0
-%Ä!CD5(SC!C'5!Ä	200	20/GM	>|<J			20L	LL 12B0
-%#Ä!CD5(SC!C'5!Ä	200	202GM	>|<J			20B	K0 12B0
P5>*\$'6!CÄ6Ä	200	220G0	>|<J			220	30 12B0
P5>*\$Ä6Ä	200	AHGAH	>|<J			AA	3L 12B0
9ÄX'&C5*\$'+Ä6RÄ6Ä	200	AKGM3	>|<J			A/	30 12B0
9ÄX'&C5*\$'+!U%Ä6Ä	200	3LG/3	>|<J			3L	/O 12B0
9ÄX'&C5*\$'+D&5*SÄ6!U%Ä6Ä	200	M0GH/	>|<J			M2	BL 12B0
9ÄX'&C5*\$'Ä!C'6Ä	200	LBG2L	>|<J			LB	KL 12B0
.6UÄ6*[2NBNK1&U!SD\$Ä6Ä	200	AMGBL	>|<J			AM	/L 12KL
, *SC*\$'6Ä	200	A3GAM	>|<J			AM	L0 12B0
F1F!\$* *U%#Ä!CD5#%6Ä	200	H0G/M	>|<J			H0	/L 12B0
F1F!\$* *U%161S\$*SD5#%6Ä	200	HLG/A	>|<J			HL	/L 12B0
F1F!\$* *U%SCÄ6D5#%6Ä	200	A/GHM	>|<J			AL	30 12B0
F'SC!C'5Ä6Ä	200	HKG/B	>|<J			HK	LL 12B0
F%!*+Ä6RÄ6Ä	200	HMG2A	>|<J			HM	LL 12B0
:Ä6!'&C5*\$'SCÄ6*5	200	ALGML	>|<J			A3	B/ 12B2
:CÄ6'6!C\$Ä6Ä	200	20KG2	>|<J			20K	3L 12B0
:CÄ6*5	200	MMGA0	>|<J			MH	/O 12B0
:D\$Ä6Ä	200	AHGH/	>|<J			AA	LL 12BL

Surrogate	LCS		Limits
	%Recovery	Qualifier	
2-Fluorobiphenyl	92		50 - 120
2-Fluorophenol	74		30 - 120
2,4,6-Tribromophenol	97		40 - 120
Nitrobenzene-d5	85		45 - 120
Terphenyl-d14	64		50 - 125
Phenol-d6	75		35 - 120

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QC Sample Results

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Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 440-93652/3-A

Matrix: Water

Analysis Batch: 94633

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 93652

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec.		RPD	
							Limits	RPD	RPD	Limit
2NBN/1-%&C5*\$*+Ä6RÄ6Ä	200	MHGA/	>I<J			MA	/ L 12B0	H	B0	
2NB1-%&C5*\$*+Ä6RÄ6Ä	200	MKGL3	>I<J			M	/ O 12B0	22	BL	
2NB1-%SCÄ6D5CDU\$R%6ÄO' ("R*+Ä6RÄ6ÄQ	200	200GA	>I<J			202	30 12B0	H	BL	
2NK1-%&C5*\$*+Ä6RÄ6Ä	200	3AG0L	>I<J			3A	KL 12B0	22	BL	
2N/1-%&C5*\$*+Ä6RÄ6Ä	200	M0G/3	>I<J			M0	KL 12B0	20	BL	
BN/N3 3-%&C5*\$*SCÄ6*5	200	20/GK	>I<J			20/	LL 12B0	2	K0	
BN/1-%&C5*\$*SCÄ6*5	200	ABGK0	>I<J			AB	LL 12B0	2	B0	
BN/1-%#Ä!CD5SCÄ6*5	200	HMG0B	>I<J			HM	/ O 12B0	B	BL	
BN/1-%6%!*\$*SCÄ6*5	200	H2G2/	>I<J			H2	/ O 12B0	H	BL	
BN/1-%6%!*\$*5>Ä6Ä	200	22/G2	>I<J			22/	3L 12B0	H	B0	
BN31-%6%!*\$*5>Ä6Ä	200	20/G3	>I<J			20L	3L 12B0	B	B0	
B14C5*\$*6'SC!C'5Ä6Ä	200	AAG2	>I<J			AA	30 12B0	M	B0	
B14C5*\$*SCÄ6*5	200	H/G/H	>I<J			H/	/ L 12B0	K	BL	
B17Ä!CD56'SC!C'5Ä6Ä	200	ALGH0	>I<J			A3	LL 12B0	22	B0	
B17Ä!CD5SCÄ6*5	200	H3GLL	>I<J			HM	LO 12B0	B	B0	
B1F%!*\$*6%5%6Ä	200	AMG/L	>I<J			AM	3L 12B0	B	B0	
B1F%!*\$*SCÄ6*5	200	ABGAB	>I<J			AK	LO 12B0	2	BL	
KNKZ1-%&C5*\$*+Ä6R%U%6Ä	200	M0GHH	>I<J			M2	/ L 12KL	B	BL	
K1F%!*\$*6%5%6Ä	200	20BG3	>I<J			20K	30 12B0	B	BL	
/N31-%6%!*\$*1B1#Ä!CD5SCÄ6*5	200	A/GHK	>I<J			AL	/ L 12B0	/	BL	
/1T\$*#SCÄ6D5(SCÄ6D5(Ä!CÄ\$	200	AHGK0	>I<J			AH	30 12B0	L	BL	
/14C5*\$*1K1#Ä!CD5SCÄ6*5	200	200GM	>I<J			202	30 12B0	/	BL	
/14C5*\$*6%5%6Ä	200	A2GH/	>I<J			AB	LL 12B0	3	BL	
/14C5*\$*SCÄ6D5(SCÄ6D5(Ä!CÄ\$	200	20/GK	>I<J			20/	// 12B0	A	BK	
/17Ä!CD5SCÄ6*5	200	HMG0B	>I<J			HM	LO 12B0	B	B0	
/1F%!*\$*6%5%6Ä	200	20AGB	>I<J			20A	LL 12BL	L	B0	
/1F%!*\$*SCÄ6*5	200	HHGKH	>I<J			HH	/ L 12B0	2	K0	
"&Ä6'SC!CÄ6Ä	200	AHG2A	>I<J			AH	30 12B0	M	B0	
"&Ä6'SC!CD5Ä6Ä	200	20BGB	>I<J			20B	30 12B0	M	B0	
"6%5%6Ä	200	H0G2L	>I<J			HD	KL 12B0	3	K0	
"6!C\$*&Ä6Ä	200	2BBG2 J^	>I<J			2BB	3L 12B0	22	B0	
TÄ6R%U%6Ä	200	F- J_(T"	>I<J			M	K0 1230	2H0	KL	
TÄ6R*[V6!C\$*&Ä6Ä	200	20/G/	>I<J			20/	3L 12B0	3	B0	
TÄ6R*[VSD\$Ä6Ä	200	20/GM	>I<J			20L	LL 12K0	3	BL	
TÄ6R*[+!@5>\$*6!CÄ6Ä	200	20/GA	>I<J			20L	LL 12BL	H	BL	
TÄ6R*[!INCN%!\SÄ\$D5Ä6Ä	200	20MG0	>I<J			20M	/L 12KL	/	BL	
TÄ6R*[!@5>\$*6!CÄ6Ä	200	20BG3	>I<J			20K	LO 12BL	M	B0	
TÄ6R*%&'(&%U	200	M2GM2	>I<J			MB	BL 12B0	0	K0	
TÄ6RD5('5&*C*5	200	A0GBL	>I<J			A0	LO 12B0	2	B0	
T% OB1&C5*\$*Ä!C*XDQ#Ä!C'6Ä	200	AHGHB	>I<J			AA	LL 12B0	L	B0	
T% OB1&C5*\$*Ä!CD5QÄ!CÄ\$	200	A/GAH	>I<J			AL	LO 12B0	H	B0	
+% (OB1&C5*\$*% *\$*SD5Q(Ä!CÄ\$	200	H0G0M	>I<J			HD	/ L 12B0	M	B0	
T% OB1Ä!CD5CÄXD5Q(SC!C'5!Ä	200	20HGL	>I<J			20A	// 12B/	/	BL	
T>ID5(+Ä6RD5(SC!C'5!Ä	200	20BGB	>I<J			20B	LL 12K0	K	B0	
4C\$D Ä6Ä	200	20KG2	>I<J			20K	3L 12B0	L	B0	
-%161+>ID5(SC!C'5!Ä	200	2BAGKJ^	>I<J			2BA	30 12BL	2B	B0	
-%161*&!D5(SC!C'5!Ä	200	20MG3	>I<J			20H	3L 12KL	2	B0	

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QC Sample Results

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Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 440-93652/3-A
Matrix: Water
Analysis Batch: 94633

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 93652

Analyte	Spike Added	LCSD		Unit	D	%Rec	%Rec.		RPD	
		Result	Qualifier				Limits	RPD	Limit	
-%#Ä6RO'NCQ'6IC\$&Ä6Ä	200	222GB		>|<J		222	LO 12KL	3	BL	
-%#Ä6R*@>\$'6	200	20MGH		>|<J		20H	3L 12B0	2B	B0	
-%Ä!CD5(SC!C'5!Ä	200	222G0		>|<J		222	LL 12B0	3	K0	
-%#Ä!CD5(SC!C'5!Ä	200	20/GB		>|<J		20/	K0 12B0	B	K0	
P5>*\$'6ICÄ6Ä	200	2B3GHJ^		>|<J		2BM	30 12B0	2/	B0	
P5>*\$Ä6Ä	200	22BG3		>|<J		22K	3L 12B0	2K	B0	
9ÄX'&C5*\$+Ä6RÄ6Ä	200	AMGLH		>|<J		AH	30 12B0	/	B0	
9ÄX'&C5*\$+>!U%Ä6Ä	200	3MGMK		>|<J		3H	/ 0 12B0	K	BL	
9ÄX'&C5*\$&D&5*SÄ6!U%Ä6Ä	200	3HG/2		>|<J		3H	BL 12B0	K	K0	
9ÄX'&C5*\$ÄIC'6Ä	200	LMGH3		>|<J		LH	KL 12B0	20	BL	
,6UÄ6*[2NBNK1&U!SD\$Ä6Ä	200	AAGAL		>|<J		200	/L 12KL	K	BL	
,*SC*\$'6Ä	200	AHGKA		>|<J		AH	LO 12B0	2	B0	
F1F%!* *U%#Ä!CD5#%6Ä	200	H0G/A		>|<J		HD	/ L 12B0	0	B0	
F1F%!* *U%161S\$*SD5#%6Ä	200	A2GA2		>|<J		AB	/ L 12B0	M	B0	
F1F%!* *U%SCÄ6D5#%6Ä	200	AHG2/		>|<J		AH	30 12B0	K	B0	
F'SC!C'5Ä6Ä	200	HHGLM		>|<J		HA	LL 12B0	3	B0	
F%!*+Ä6RÄ6Ä	200	HAG2M		>|<J		HA	LL 12B0	B	BL	
:Ä6!'&C5*\$*SCÄ6*5	200	AMGMM		>|<J		AH	B/ 12B2	B	BL	
:CÄ6'6!C\$Ä6Ä	200	223GM		>|<J		22M	3L 12B0	2B	B0	
:CÄ6*5	200	MBGHH		>|<J		MK	/ 0 12B0	M	BL	
:D\$Ä6Ä	200	203G0		>|<J		203	LL 12BL	M	BL	

Surrogate	LCSD		Limits
	%Recovery	Qualifier	
2-Fluorobiphenyl	97		50 - 120
2-Fluorophenol	71		30 - 120
2,4,6-Tribromophenol	99		40 - 120
Nitrobenzene-d5	87		45 - 120
Terphenyl-d14	66		50 - 125
Phenol-d6	72		35 - 120

Method: 8015B - Gasoline Range Organics - (GC)

Lab Sample ID: MB 440-94486/28
Matrix: Water
Analysis Batch: 94486

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
_?(O4/142BQ	F-		0G0L0	0G0BL	#|<J			0K<B3<2K(B2./0	2

Surrogate	MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
4-Bromofluorobenzene (Surr)	90		65 - 140		03/26/13 21:40	1

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QC Sample Results

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Method: 8015B - Gasoline Range Organics - (GC) (Continued)

Lab Sample ID: LCS 440-94486/27
Matrix: Water
Analysis Batch: 94486

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
_(O4/142BQ	0GH00	0GHK/		#I<J		20/	H012B0
Surrogate		LCS	LCS			%Recovery	Qualifier
4-Bromofluorobenzene (Surr)		115					65 - 140

Lab Sample ID: 440-41297-A-4 MS
Matrix: Water
Analysis Batch: 94486

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
_(O4/142BQ	F-		0GH00	0GH0K		#I<J		200	3L 12/0
Surrogate		MS	MS					%Recovery	Qualifier
4-Bromofluorobenzene (Surr)		114							65 - 140

Lab Sample ID: 440-41297-A-4 MSD
Matrix: Water
Analysis Batch: 94486

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
_(O4/142BQ	F-		0GH00	0GMA3		#I<J		AA	3L 12/0	2	B0
Surrogate		MSD	MSD					%Recovery	Qualifier		Limits
4-Bromofluorobenzene (Surr)		114									65 - 140

Method: 608 PCB LL - Polychlorinated Biphenyls (PCBs) Low level

Lab Sample ID: MB 440-92474/1-A
Matrix: Water
Analysis Batch: 92914

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 92474

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
"\$&5\$(2023	F-		0GL0	0GBL	>I<J		0K<2H<2K(2K.KB	0K<2A<2K(23.K3	2
"\$&5\$(2BB2	F-		0GL0	0GBL	>I<J		0K<2H<2K(2K.KB	0K<2A<2K(23.K3	2
"\$&5\$(2BKB	F-		0GL0	0GBL	>I<J		0K<2H<2K(2K.KB	0K<2A<2K(23.K3	2
"\$&5\$(2B/B	F-		0GL0	0GBL	>I<J		0K<2H<2K(2K.KB	0K<2A<2K(23.K3	2
"\$&5\$(2B/H	F-		0GL0	0GBL	>I<J		0K<2H<2K(2K.KB	0K<2A<2K(23.K3	2
"\$&5\$(2BL/	F-		0GL0	0GBL	>I<J		0K<2H<2K(2K.KB	0K<2A<2K(23.K3	2
"\$&5\$(2B30	F-		0GL0	0GBL	>I<J		0K<2H<2K(2K.KB	0K<2A<2K(23.K3	2
Surrogate		MB	MB				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)		84					03/18/13 13:32	03/19/13 16:36	1

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QC Sample Results

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Method: 608 PCB LL - Polychlorinated Biphenyls (PCBs) Low level (Continued)

Lab Sample ID: LCS 440-92474/4-A
Matrix: Water
Analysis Batch: 92914

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 92474

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
"\$*&5*(2023	/G00	KGLL		>I<J		HA	LO 122L
"\$*&5*(2B30	/G00	KGL0		>I<J		HH	30 12B0
Surrogate		LCS	LCS				Limits
DCB Decachlorobiphenyl (Surr)		90					45 - 120

Lab Sample ID: LCSD 440-92474/5-A
Matrix: Water
Analysis Batch: 92914

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 92474

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
"\$*&5*(2023	/G00	KGB3		>I<J		HB	LO 122L	2	K0
"\$*&5*(2B30	/G00	KG/3		>I<J		HB	30 12B0	L	BL
Surrogate		LCSD	LCSD				Limits		
DCB Decachlorobiphenyl (Surr)		90					45 - 120		

Method: 608 Pesticides - Organochlorine Pesticides Low level

Lab Sample ID: MB 440-92474/1-A
Matrix: Water
Analysis Batch: 92827

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 92474

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
/N/Z1---	F-		0G00L0	0G00/0	>I<J		0K<2H<2K(2K.KB	0K<2A<2K(2A.K3	2
/N/Z1-V	F-		0G00L0	0G00K0	>I<J		0K<2H<2K(2K.KB	0K<2A<2K(2A.K3	2
/N/Z1-Ä	F-		0G020	0G00/0	>I<J		0K<2H<2K(2K.KB	0K<2A<2K(2A.K3	2
"5U\$%6	F-		0G00L0	0G002L	>I<J		0K<2H<2K(2K.KB	0K<2A<2K(2A.K3	2
'5SC'1T94	F-		0G00L0	0G00BL	>I<J		0K<2H<2K(2K.KB	0K<2A<2K(2A.K3	2
+Ä!'1T94	F-		0G020	0G00/0	>I<J		0K<2H<2K(2K.KB	0K<2A<2K(2A.K3	2
4C5*\$U'6Ä(O!Ä&C6%&'5Q	F-		0G20	0G0H0	>I<J		0K<2H<2K(2K.KB	0K<2A<2K(2A.K3	2
UÄ5!'1T94	F-		0G00L0	0G00KL	>I<J		0K<2H<2K(2K.KB	0K<2A<2K(2A.K3	2
-%Ä5U\$%6	F-		0G00L0	0G00B0	>I<J		0K<2H<2K(2K.KB	0K<2A<2K(2A.K3	2
V6U* >5@'6(,	F-		0G00L0	0G00K0	>I<J		0K<2H<2K(2K.KB	0K<2A<2K(2A.K3	2
V6U* >5@'6(,	F-		0G00L0	0G00B0	>I<J		0K<2H<2K(2K.KB	0K<2A<2K(2A.K3	2
V6U* >5@'6(>5@!'Ä	F-		0G020	0G00K0	>I<J		0K<2H<2K(2K.KB	0K<2A<2K(2A.K3	2
V6U\$%6	F-		0G00L0	0G00B0	>I<J		0K<2H<2K(2K.KB	0K<2A<2K(2A.K3	2
V6U\$%6('5UÄCDUÄ	F-		0G020	0G00B0	>I<J		0K<2H<2K(2K.KB	0K<2A<2K(2A.K3	2
I'##'1T94(OJ%6U'6ÄQ	F-		0G020	0G00K0	>I<J		0K<2H<2K(2K.KB	0K<2A<2K(2A.K3	2
9ÄS!'&C5*\$	F-		0G020	0G00K0	>I<J		0K<2H<2K(2K.KB	0K<2A<2K(2A.K3	2
9ÄS!'&C5*\$ (ÄS*X%UÄ	F-		0G00L0	0G00BL	>I<J		0K<2H<2K(2K.KB	0K<2A<2K(2A.K3	2
Ä* X'SCÄ6Ä	F-		0GL0	0GBL	>I<J		0K<2H<2K(2K.KB	0K<2A<2K(2A.K3	2
Surrogate		MB	MB				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene		78					03/18/13 13:32	03/19/13 19:36	1

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QC Sample Results

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Method: 608 Pesticides - Organochlorine Pesticides Low level (Continued)

Lab Sample ID: LCS 440-92474/2-A
Matrix: Water
Analysis Batch: 92827

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 92474

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
/N/Z1---	0GL00	0G/A0		>I<J		AH	LL 12B0
/N/Z1--V	0GL00	0G/A2		>I<J		AH	L0 12B0
/N/Z1--Ä	0GL00	0G/L0		>I<J		220	LL 12B0
"5U\$%6	0GL00	0G/KK		>I<J		HM	/ 0 122L
'5SC'1T94	0GL00	0G/AB		>I<J		AH	/ L 122L
+Ä!'1T94	0GL00	0G/3/		>I<J		AK	LL 122L
UÄ5!'1T94	0GL00	0GL0/		>I<J		202	LL 122L
-%Ä5U\$%6	0GL00	0G/A2		>I<J		AH	LL 122L
V6U* >5@'6(,	0GL00	0G/MK		>I<J		AL	LL 122L
V6U* >5@'6(,,	0GL00	0G/H0		>I<J		A3	LL 12B0
V6U* >5@'6(>5@'1Ä	0GL00	0G/HM		>I<J		AM	30 12B0
V6U\$%6	0GL00	0G/AH		>I<J		200	LL 122L
V6U\$%6('5UÄCDUÄ	0GL00	0G/M0		>I<J		A/	L0 12B0
I'##'1T94(OJ%6U'6ÄQ	0GL00	0G/HM		>I<J		AM	/ L 122L
9ÄS!'&C5*\$	0GL00	0G/MA		>I<J		A3	/ L 122L
9ÄS!'&C5*\$('ÄS*X%UÄ	0GL00	0G/HK		>I<J		AM	LL 122L

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Tetrachloro-m-xylene	84		35 - 115

Lab Sample ID: LCSD 440-92474/3-A
Matrix: Water
Analysis Batch: 92827

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 92474

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
/N/Z1---	0GL00	0GLB0		>I<J		20/	LL 12B0	/	K0
/N/Z1--V	0GL00	0GL0L		>I<J		202	L0 12B0	K	K0
/N/Z1--Ä	0GL00	0GL33		>I<J		22K	LL 12B0	K	K0
"5U\$%6	0GL00	0G/L/		>I<J		A2	/ 0 122L	L	K0
'5SC'1T94	0GL00	0GL0H		>I<J		20B	/L 122L	K	K0
+Ä!'1T94	0GL00	0G/MA		>I<J		A3	LL 122L	K	K0
UÄ5!'1T94	0GL00	0GLBB		>I<J		20/	LL 122L	/	K0
-%Ä5U\$%6	0GL00	0GL0L		>I<J		202	LL 122L	K	K0
V6U* >5@'6(,	0GL00	0G/HM		>I<J		AM	LL 122L	K	K0
V6U* >5@'6(,,	0GL00	0G/AK		>I<J		AA	LL 12B0	K	K0
V6U* >5@'6(>5@'1Ä	0GL00	0GL0B		>I<J		200	30 12B0	K	K0
V6U\$%6	0GL00	0G/AH		>I<J		200	LL 122L	K	K0
V6U\$%6('5UÄCDUÄ	0GL00	0G/HB		>I<J		A3	L0 12B0	K	K0
I'##'1T94(OJ%6U'6ÄQ	0GL00	0GL0/		>I<J		202	/L 122L	K	K0
9ÄS!'&C5*\$	0GL00	0G/A0		>I<J		AH	/ L 122L	B	K0
9ÄS!'&C5*\$('ÄS*X%UÄ	0GL00	0G/A3		>I<J		AA	LL 122L	K	K0

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Tetrachloro-m-xylene	84		35 - 115

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QC Sample Results

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Method: 8015B - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 440-93173/1-A
Matrix: Water
Analysis Batch: 93488

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 93173

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
42K14BH	F-		0GLO	0G20	#I<J		0K<B2<2K(0L.BK	0K<B2<2K(BB.2H	2
Surrogate	%Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
n-Octacosane	103		45 - 120				03/21/13 05:23	03/21/13 22:18	1

Lab Sample ID: LCS 440-93173/2-A
Matrix: Water
Analysis Batch: 93488

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 93173

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
42014BH	0GA00	0GH2M		#I<J		A2	/0 122L
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
n-Octacosane	103		45 - 120				

Lab Sample ID: LCSD 440-93173/3-A
Matrix: Water
Analysis Batch: 93488

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 93173

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
42014BH	0GA00	0GHKH		#I<J		AK	/0 122L	K	BL
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
n-Octacosane	103		45 - 120						

Method: 218.6 - Chromium, Hexavalent (Ion Chromatography)

Lab Sample ID: MB 440-91984/3
Matrix: Water
Analysis Batch: 91984

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4C\$*#%>#N(CÄX'E'5Ä6!	F-		2G0	0GBL	>I<J			0K<2L<2K(0H.2L	2

Lab Sample ID: LCS 440-91984/2
Matrix: Water
Analysis Batch: 91984

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4C\$*#%>#N(CÄX'E'5Ä6!	LOG0	LOGB		>I<J		200	A0 1220

Lab Sample ID: 440-41016-1 MS
Matrix: Water
Analysis Batch: 91984

Client Sample ID: Outfall 019
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
4C\$*#%>#N(CÄX'E'5Ä6!	2G2		LOG0	LBGB		>I<J		20B	A0 1220

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QC Sample Results

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Method: 218.6 - Chromium, Hexavalent (Ion Chromatography) (Continued)

Lab Sample ID: 440-41016-1 MSD
Matrix: Water
Analysis Batch: 91984

Client Sample ID: Outfall 019
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4C\$*#%>#N(CÄX'E'5Ä6!	2G2		LOG0	LBG0		>|<J		20K	A0 1220	2	20

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 440-92005/43
Matrix: Water
Analysis Batch: 92005

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
F%!\$!Ä'(F	F-		0G2	0G0H0	#|<J			0K<2L<2K(BB.KA	2
F%!\$!Ä(F%!\$%!Ä'(F	F-		0GB3	0G2	#|<J			0K<2L<2K(BB.KA	2
F%!\$%!Ä'(F	F-		0G2L	0G2	#|<J			0K<2L<2K(BB.KA	2

Lab Sample ID: LCS 440-92005/44
Matrix: Water
Analysis Batch: 92005

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
F%!\$!Ä'(F	2G2K	2G20		#|<J		AH	A0 1220
F%!\$!Ä(F%!\$%!Ä'(F	BG3L	BGLA		#|<J		AH	A0 1220
F%!\$%!Ä'(F	2GLB	2G/A		#|<J		AH	A0 1220

Lab Sample ID: 440-41002-R-17 MS
Matrix: Water
Analysis Batch: 92005

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
F%!\$!Ä'(F	F-		22GK	2KGH J7		#|<J		2BB	H0 12B0
F%!\$!Ä(F%!\$%!Ä'(F	F-		B3GL	KLGO J7		#|<J		2KB	H0 12B0
F%!\$%!Ä'(F	F-		2LGB	B2GB J7		#|<J		2KA	H0 12B0

Lab Sample ID: 440-41002-R-17 MSD
Matrix: Water
Analysis Batch: 92005

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
F%!\$!Ä'(F	F-		22GK	2BGA		#|<J		22/	H0 12B0	M	B0
F%!\$!Ä(F%!\$%!Ä'(F	F-		B3GL	KKGB J7		#|<J		2BL	H0 12B0	L	B0
F%!\$%!Ä'(F	F-		2LGB	B0GK J7		#|<J		2KK	H0 12B0	/	B0

Lab Sample ID: MB 440-92006/43
Matrix: Water
Analysis Batch: 92006

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4C5*\$%UÄ	F-		0GL0	0G/0	# <J			0K<2L<2K(BB.KA	2
=>5@!Ä	F-		0GL0	0G/0	# <J			0K<2L<2K(BB.KA	2

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QC Sample Results

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:;\$,Ä&!<=%!Ä.66>'5(?>!@'55(02A

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Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 440-92006/44
Matrix: Water
Analysis Batch: 92006

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4C5*\$%UÄ	LG00	/GML		#|<J		AL	A0 1220
=>5@'!Ä	20G0	AG3H		#|<J		AM	A0 1220

Lab Sample ID: 440-41002-R-17 MS
Matrix: Water
Analysis Batch: 92006

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
4C5*\$%UÄ	2/0		LOG0	2AK		#|<J		20H	H0 12B0
=>5@'!Ä	HB0		200	A2M TT		#|<J		A3	H0 12B0

Lab Sample ID: 440-41002-R-17 MSD
Matrix: Water
Analysis Batch: 92006

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4C5*\$%UÄ	2/0		LOG0	2A2		#|<J		20L	H0 12B0	2	B0
=>5@'!Ä	HB0		200	A2L TT		#|<J		A/	H0 12B0	0	B0

Method: 314.0 - Perchlorate (IC)

Lab Sample ID: MB 440-94195/5
Matrix: Water
Analysis Batch: 94195

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
:Ä\$&C5*\$'!Ä	F-		/ G0	0GAL	>|<J			0K<B3<2K200	2

Lab Sample ID: LCS 440-94195/4
Matrix: Water
Analysis Batch: 94195

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
:Ä\$&C5*\$'!Ä	BLG0	B/GH		>|<J		AA	HL 122L

Lab Sample ID: MRL 440-94195/2 MRL
Matrix: Water
Analysis Batch: 94195

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
:Ä\$&C5*\$'!Ä	/ G00	/ GKM		>|<J		20A	

Lab Sample ID: 440-41615-C-4 MS
Matrix: Water
Analysis Batch: 94195

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
:Ä\$&C5*\$'!Ä	20		BLG0	KLGL		> <J		200	H0 12B0

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QC Sample Results

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Method: 314.0 - Perchlorate (IC) (Continued)

Lab Sample ID: 440-41615-C-4 MSD
Matrix: Water
Analysis Batch: 94195

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
:Ä&C5*\$!Ä	20		BLG0	K/GL		>|<J		AM	HD 12B0	K	B0

Method: 1613B - Dioxins and Furans (HRGC/HRMS)

Lab Sample ID: MB 320-13022/1-A
Matrix: Water
Analysis Batch: 13283

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 13022

Analyte	MB Result	MB Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
BNKNMNH1Ä4--	F-		0G000020	0G000000L	>|<J		0K<B3<2K(0H.LB	0K<BH<2K(0H.LB	2
BNKNMNH1Ä4-P	F-		0G000020	0G000000K	>|<J		0K<B3<2K(0H.LB	0K<BH<2K(0H.LB	2
2NBNKNMNH1:Ä4--	F-		0G0000L0	0G000000H	>|<J		0K<B3<2K(0H.LB	0K<BH<2K(0H.LB	2
2NBNKNMNH1:Ä4-P	F-		0G0000L0	0G000000M	>|<J		0K<B3<2K(0H.LB	0K<BH<2K(0H.LB	2
BNKN/NMNH1:Ä4-P	F-		0G0000L0	0G000000M	>|<J		0K<B3<2K(0H.LB	0K<BH<2K(0H.LB	2
2NBNKN/NMNH19X4--	F-		0G0000L0	0G0000023	>|<J		0K<B3<2K(0H.LB	0K<BH<2K(0H.LB	2
2NBNKN3NMNH19X4--	F-		0G0000L0	0G000002K	>|<J		0K<B3<2K(0H.LB	0K<BH<2K(0H.LB	2
2NBNKNMNHNA19X4--	F-		0G0000L0	0G000000L	>|<J		0K<B3<2K(0H.LB	0K<BH<2K(0H.LB	2
2NBNKN/NMNH19X4-P	F-		0G0000L0	0G000000H	>|<J		0K<B3<2K(0H.LB	0K<BH<2K(0H.LB	2
2NBNKN3NMNH19X4-P	F-		0G0000L0	0G000000M	>|<J		0K<B3<2K(0H.LB	0K<BH<2K(0H.LB	2
2NBNKNMNHNA19X4-P	F-		0G0000L0	0G0000020	>|<J		0K<B3<2K(0H.LB	0K<BH<2K(0H.LB	2
BNKN/N3NMNH19X4-P	F-		0G0000L0	0G000000M	>|<J		0K<B3<2K(0H.LB	0K<BH<2K(0H.LB	2
2NBNKN/N3NMNH19S4--	F-		0G0000L0	0G000002B	>|<J		0K<B3<2K(0H.LB	0K<BH<2K(0H.LB	2
2NBNKN/N3NMNH19S4-P	0G00000BMH)	N-Y	0G0000L0	0G0000003	>|<J		0K<B3<2K(0H.LB	0K<BH<2K(0H.LB	2
2NBNKN/NMNHNA19S4-P	0G00000BLA)	N-Y(a	0G0000L0	0G000000A	>|<J		0K<B3<2K(0H.LB	0K<BH<2K(0H.LB	2
?4--	0G000003BK)	N-Y(a	0G000020	0G000002/	>|<J		0K<B3<2K(0H.LB	0K<BH<2K(0H.LB	2
?4-P	F-		0G000020	0G000002H	>|<J		0K<B3<2K(0H.LB	0K<BH<2K(0H.LB	2
Ä*!5(Ä4--	F-		0G000020	0G000000L	>|<J		0K<B3<2K(0H.LB	0K<BH<2K(0H.LB	2
Ä*!5(Ä4-P	F-		0G000020	0G000000K	>|<J		0K<B3<2K(0H.LB	0K<BH<2K(0H.LB	2
Ä*!5(:Ä4--	F-		0G0000L0	0G000000H	>|<J		0K<B3<2K(0H.LB	0K<BH<2K(0H.LB	2
Ä*!5(:Ä4-P	F-		0G0000L0	0G000000M	>|<J		0K<B3<2K(0H.LB	0K<BH<2K(0H.LB	2
Ä*!5(9X4--	F-		0G0000L0	0G000000L	>|<J		0K<B3<2K(0H.LB	0K<BH<2K(0H.LB	2
Ä*!5(9X4-P	F-		0G0000L0	0G000000M	>|<J		0K<B3<2K(0H.LB	0K<BH<2K(0H.LB	2
Ä*!5(9S4--	0G000002B0)	N-Y(a	0G0000L0	0G000002B	> <J		0K<B3<2K(0H.LB	0K<BH<2K(0H.LB	2
Ä*!5(9S4-P	0G00000LKM)	N-Y(a	0G0000L0	0G000000M	> <J		0K<B3<2K(0H.LB	0K<BH<2K(0H.LB	2

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QC Sample Results

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:*\$;Ä&!<=%!Ä.66>'5(?>!@'55(02A

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Method: 1613B - Dioxins and Furans (HRGC/HRMS) (Continued)

Lab Sample ID: MB 320-13022/1-A

Matrix: Water

Analysis Batch: 13283

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 13022

Isotope Dilution	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
13C-2,3,7,8-TCDD	63		25 - 164	03/26/13 08:52	03/28/13 11:11	1
13C-2,3,7,8-TCDF	67		24 - 169	03/26/13 08:52	03/28/13 11:11	1
13C-1,2,3,7,8-PeCDD	60		25 - 181	03/26/13 08:52	03/28/13 11:11	1
13C-1,2,3,7,8-PeCDF	53		24 - 185	03/26/13 08:52	03/28/13 11:11	1
13C-2,3,4,7,8-PeCDF	55		21 - 178	03/26/13 08:52	03/28/13 11:11	1
13C-1,2,3,4,7,8-HxCDD	46		32 - 141	03/26/13 08:52	03/28/13 11:11	1
13C-1,2,3,6,7,8-HxCDD	58		28 - 130	03/26/13 08:52	03/28/13 11:11	1
13C-1,2,3,4,7,8-HxCDF	46		26 - 152	03/26/13 08:52	03/28/13 11:11	1
13C-1,2,3,6,7,8-HxCDF	57		26 - 123	03/26/13 08:52	03/28/13 11:11	1
13C-1,2,3,7,8,9-HxCDF	48		29 - 147	03/26/13 08:52	03/28/13 11:11	1
13C-2,3,4,6,7,8-HxCDF	53		28 - 136	03/26/13 08:52	03/28/13 11:11	1
13C-1,2,3,4,6,7,8-HpCDD	46		23 - 140	03/26/13 08:52	03/28/13 11:11	1
13C-1,2,3,4,6,7,8-HpCDF	45		28 - 143	03/26/13 08:52	03/28/13 11:11	1
13C-1,2,3,4,7,8,9-HpCDF	40		26 - 138	03/26/13 08:52	03/28/13 11:11	1
13C-OCDD	42		17 - 157	03/26/13 08:52	03/28/13 11:11	1
Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
37Cl4-2,3,7,8-TCDD	93		35 - 197	03/26/13 08:52	03/28/13 11:11	1

Lab Sample ID: LCS 320-13022/2-A

Matrix: Water

Analysis Batch: 13283

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 13022

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
BNKNMNH1Ä4-P	0G000B00	0G0002A3		>I<J		AH	M 12LH
2NBNKNMNH1:Ä4--	0G00200	0G000AAH		>I<J		200	M012B
2NBNKNMNH1:Ä4-P	0G00200	0G0020B		>I<J		20B	H012K/
BNKN/NMNH1:Ä4-P	0G00200	0G0020/		>I<J		20/	3H1230
2NBNKN/NMNH19X4--	0G00200	0G0022		>I<J		222	M0123/
2NBNKN3NMNH19X4--	0G00200	0G000AAH		>I<J		200	M312K/
2NBNKNMNHNA19X4--	0G00200	0G0020K		>I<J		20K	3/ 123B
2NBNKN/NMNH19X4-P	0G00200	0G0020K		>I<J		20K	MB12K/
2NBNKN3NMNH19X4-P	0G00200	0G0020/		>I<J		20/	H/ 12K0
2NBNKNMNHNA19X4-P	0G00200	0G0020B		>I<J		20B	MH12K0
BNKN/N3NMNH19X4-P	0G00200	0G0020K		>I<J		20K	M012L3
2NBNKN/N3NMNH19S4--	0G00200	0G0020K		>I<J		20K	M012/0
2NBNKN/N3NMNH19S4-P	0G00200	0G0020A		>I<J		20A	HB12BB
2NBNKN/NMNHNA19S4-P	0G00200	0G0020A		>I<J		20A	MH12KH
?4--	0G00B00	0G00BB0		>I<J		220	MH12//
?4-P	0G00B00	0G00B2K		>I<J		203	3K 12M0
Isotope Dilution	LCS LCS		Limits				
	%Recovery	Qualifier					
13C-2,3,7,8-TCDD	72		20 - 175				
13C-2,3,7,8-TCDF	72		22 - 152				
13C-1,2,3,7,8-PeCDD	76		21 - 227				
13C-1,2,3,7,8-PeCDF	70		21 - 192				
13C-2,3,4,7,8-PeCDF	71		13 - 328				

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QC Sample Results

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Method: 1613B - Dioxins and Furans (HRGC/HRMS) (Continued)

Lab Sample ID: LCS 320-13022/2-A
Matrix: Water
Analysis Batch: 13283

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 13022

Isotope Dilution	LCS	LCS	Limits
	%Recovery	Qualifier	
13C-1,2,3,4,7,8-HxCDD	69		21 - 193
13C-1,2,3,6,7,8-HxCDD	75		25 - 163
13C-1,2,3,4,7,8-HxCDF	70		19 - 202
13C-1,2,3,6,7,8-HxCDF	76		21 - 159
13C-1,2,3,7,8,9-HxCDF	66		17 - 205
13C-2,3,4,6,7,8-HxCDF	73		22 - 176
13C-1,2,3,4,6,7,8-HpCDD	60		26 - 166
13C-1,2,3,4,6,7,8-HpCDF	61		21 - 158
13C-1,2,3,4,7,8,9-HpCDF	57		20 - 186
13C-OCDD	47		13 - 199

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
37Cl4-2,3,7,8-TCDD	89		35 - 197

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 440-94205/1-A
Matrix: Water
Analysis Batch: 94437

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 94205

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
"\$ Ä6%&	F-		20	MG0	>I<J		0K<B3<2K(0A.B3	0K<B3<2K(2H.BM	2
T*\$*6	F-		0G0L0	0G0B0	# I<J		0K<B3<2K(0A.B3	0K<B3<2K(2H.BM	2
T\$%>#	F-		0G020	0G0030	# I<J		0K<B3<2K(0A.B3	0K<B3<2K(2H.BM	2
TÄ\$D55%>#	F-		BG0	0GA0	>I<J		0K<B3<2K(0A.B3	0K<B3<2K(2H.BM	2
4C\$*#%>#	F-		LG0	BG0	>I<J		0K<B3<2K(0A.B3	0K<B3<2K(2H.BM	2
,\$*6	F-		0G0/0	0G02L	# I<J		0K<B3<2K(0A.B3	0K<B3<2K(2H.BM	2
7'6I'6Ä Ä	F-		B0	MG0	>I<J		0K<B3<2K(0A.B3	0K<B3<2K(2H.BM	2
F%&]Ä5	F-		20	BG0	>I<J		0K<B3<2K(0A.B3	0K<B3<2K(2H.BM	2
W6'U%>#	F-		20	KG0	>I<J		0K<B3<2K(0A.B3	0K<B3<2K(2H.BM	2
b%6&	F-		B0	AG0	>I<J		0K<B3<2K(0A.B3	0K<B3<2K(2H.BM	2
=%5EÄ\$	F-		20	3G0	>I<J		0K<B3<2K(0A.B3	0K<B3<2K(2H.BM	2
9\$U6Ä N(' (4'4?K	F-		KK0	2M0	>I<J		0K<B3<2K(0A.B3	0K<B3<2K(2H.BM	2

Lab Sample ID: MB 440-94205/1-A
Matrix: Water
Analysis Batch: 94631

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 94205

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
4*+5!	F-		20	BG0	>I<J		0K<B3<2K(0A.B3	0K<BM<2K(2L./0	2

Lab Sample ID: LCS 440-94205/2-A
Matrix: Water
Analysis Batch: 94437

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 94205

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec. Limits
		Result	Qualifier				
"\$ Ä6%&	L00	L0/		>I<J		202	HL 122L
T*\$*6	0GL00	0GLB0		# I<J		20/	HL 122L

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QC Sample Results

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Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: LCS 440-94205/2-A
Matrix: Water
Analysis Batch: 94437

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 94205

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
T\$%>#	0GL00	0GLKA		#I<J		20H	HL 122L
TÄ\$D55%>#	L00	LBL		>I<J		20L	HL 122L
4'5&%>#	BGL0	BG32		#I<J		20/	HL 122L
4C\$*#%>#	L00	LBK		>I<J		20L	HL 122L
,\$*6	0GL00	0GLBH		#I<J		203	HL 122L
7'16Ä %>#	BGL0	BG3K		#I<J		20L	HL 122L
7'6'6Ä Ä	L00	L2/		>I<J		20K	HL 122L
F%&]Ä5	L00	LB0		>I<J		20/	HL 122L
W6'U%>#	L00	L2L		>I<J		20K	HL 122L
b%6&	L00	L0B		>I<J		200	HL 122L
=%5EÄ\$	BLO	B3L		>I<J		203	HL 122L

Lab Sample ID: LCS 440-94205/2-A
Matrix: Water
Analysis Batch: 94631

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 94205

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4*+5!	L00	/ M2		>I<J		A/	HL 122L

Lab Sample ID: 440-41016-1 MS
Matrix: Water
Analysis Batch: 94437

Client Sample ID: Outfall 019
Prep Type: Total Recoverable
Prep Batch: 94205

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
"\$ Ä6%&	F-		L00	L2/		>I<J		20K	M012K0
T*\$*6	0G0B2	)N-Y	0GL00	0GL//		#I<J		20L	M012K0
T\$%>#	F-		0GL00	0GL0L		#I<J		202	M012K0
TÄ\$D55%>#	F-		L00	LKK		>I<J		20M	M012K0
4'5&%>#	//		BGL0	/3G/	TT	#I<J		20K	M012K0
4C\$*#%>#	F-		L00	L0A		>I<J		20B	M012K0
,\$*6	0G0ML		0GL00	0G30M		#I<J		203	M012K0
7'16Ä %>#	0G0MK		BGL0	BGLL		#I<J		AA	M012K0
7'6'6Ä Ä	B/		L00	L2L		>I<J		AH	M012K0
F%&]Ä5	F-		L00	L02		>I<J		200	M012K0
W6'U%>#	KGK	)N-Y	L00	LK2		>I<J		203	M012K0
b%6&	2/	)N-Y	L00	LBK		>I<J		20B	M012K0
=%5EÄ\$	F-		BLO	BLB		>I<J		202	M012K0

Lab Sample ID: 440-41016-1 MS
Matrix: Water
Analysis Batch: 94631

Client Sample ID: Outfall 019
Prep Type: Total Recoverable
Prep Batch: 94205

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
4*+5!	F-		L00	/ MM		>I<J		AL	M012K0

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QC Sample Results

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Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: 440-41016-1 MSD
Matrix: Water
Analysis Batch: 94437

Client Sample ID: Outfall 019
Prep Type: Total Recoverable
Prep Batch: 94205

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD		Unit	D	%Rec	%Rec.		RPD	Limit
				Result	Qualifier				Limits	RPD		
"\$ Ä6%&	F-		L00	LBM		>|<J		20L	M012K0	B	B0	
T*\$*6	0G0B2	)N-Y	0GL00	0GLKM		#|<J		20K	M012K0	2	B0
T\$%>#	F-		0GL00	0G/A3		#|<J		AA	M012K0	B	B0	
TÄ\$D55%>#	F-		L00	L/2		>|<J		20H	M012K0	2	B0	
4'5&%>#	//		BGL0	//G3 TT		#|<J		KB	M012K0	/	B0	
4C\$*#%>#	F-		L00	LB0		>|<J		20/	M012K0	B	B0	
,\$*6	0G0ML		0GL00	0G30/		#|<J		203	M012K0	0	B0	
7'6'Ä Ä %>#	0G0MK		BGL0	BGLH		#|<J		200	M012K0	2	B0	
7'6'6Ä Ä	B/		L00	L2A		>|<J		AA	M012K0	2	B0	
F%&jÄ5	F-		L00	L2/		>|<J		20K	M012K0	B	B0	
W6'U%>#	KGK)	N-Y	L00	LKA		>|<J		20M	M012K0	B	B0	
b%6&	2/	)N-Y	L00	LK2		>|<J		20K	M012K0	2	B0
=%5EÄ\$	F-		BL0	B/H		>|<J		AA	M012K0	2	B0	

Lab Sample ID: 440-41016-1 MSD
Matrix: Water
Analysis Batch: 94631

Client Sample ID: Outfall 019
Prep Type: Total Recoverable
Prep Batch: 94205

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD		Unit	D	%Rec	%Rec.		RPD	Limit
				Result	Qualifier				Limits	RPD		
4*+!5!	F-		L00	/ M/		>|<J		AL	M012K0	2	B0	

Lab Sample ID: MB 440-94283/1-D
Matrix: Water
Analysis Batch: 94664

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 94461

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
"\$ Ä6%&	F-		20	MG0	>|<J		0K<BM<2K(0M.L/	0K<BM<2K(2L.LH	2
T*\$*6	F-		0G0L0	0G0B0	# |<J		0K<BM<2K(0M.L/	0K<BM<2K(2L.LH	2
T\$%>#	F-		0G020	0G0030	# |<J		0K<BM<2K(0M.L/	0K<BM<2K(2L.LH	2
TÄ\$D55%>#	F-		BG0	0GA0	>|<J		0K<BM<2K(0M.L/	0K<BM<2K(2L.LH	2
4C\$*#%>#	F-		LG0	BG0	>|<J		0K<BM<2K(0M.L/	0K<BM<2K(2L.LH	2
,\$*6	0G0B0K)	N-Y	0G0/0	0G02L	# |<J		0K<BM<2K(0M.L/	0K<BM<2K(2L.LH	2
7'6'Ä Ä	F-		B0	MG0	>|<J		0K<BM<2K(0M.L/	0K<BM<2K(2L.LH	2
F%&jÄ5	F-		20	BG0	>|<J		0K<BM<2K(0M.L/	0K<BM<2K(2L.LH	2
W6'U%>#	F-		20	KG0	>|<J		0K<BM<2K(0M.L/	0K<BM<2K(2L.LH	2
b%6&	F-		B0	AG0	>|<J		0K<BM<2K(0M.L/	0K<BM<2K(2L.LH	2
=%5EÄ\$	F-		20	3G0	>|<J		0K<BM<2K(0M.L/	0K<BM<2K(2L.LH	2

Lab Sample ID: MB 440-94283/1-D
Matrix: Water
Analysis Batch: 94650

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 94461

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
4*+!5!	F-		20	BG0	> <J		0K<BM<2K(0M.L/	0K<BM<2K(23.KL	2

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QC Sample Results

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Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: LCS 440-94283/2-D
Matrix: Water
Analysis Batch: 94664

Client Sample ID: Lab Control Sample
Prep Type: Dissolved
Prep Batch: 94461

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
"\$ Ä6%&	L00	/ HB		>|<J		A3	HL 122L
T*\$*6	0GL00	0G/H/		# |<J		AM	HL 122L
T'\$%>#	0GL00	0GL0/		#|<J		202	HL 122L
TÄ\$D55%>#	L00	L02		>|<J		200	HL 122L
4'5&%>#	BGL0	BG32		#|<J		20L	HL 122L
4C\$*#%>#	L00	L0K		>|<J		202	HL 122L
,\$*6	0GL00	0GL//		#|<J		20A	HL 122L
7'16Ä %>#	BGL0	BG/M		#|<J		AA	HL 122L
7'61'6Ä Ä	L00	/HL		>|<J		AM	HL 122L
F%&jÄ5	L00	L0/		>|<J		202	HL 122L
W6'U%>#	L00	/ AL		>|<J		AA	HL 122L
b%6&	L00	/ M/		>|<J		AL	HL 122L
=%5EÄ\$	BL0	BLM		>|<J		20K	HL 122L

Lab Sample ID: LCS 440-94283/2-D
Matrix: Water
Analysis Batch: 94650

Client Sample ID: Lab Control Sample
Prep Type: Dissolved
Prep Batch: 94461

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4*+'5!	L00	/ 3L		>|<J		AK	HL 122L

Lab Sample ID: 440-41506-G-19-C MS
Matrix: Water
Analysis Batch: 94664

Client Sample ID: Matrix Spike
Prep Type: Dissolved
Prep Batch: 94461

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
"\$ Ä6%&	MG0)	N-Y	L00	/AH		>|<J		AH	M0 12K0
T*\$*6	0G2L		0GL00	0G3K3		# |<J		AM	M0 12K0
T'\$%>#	0G0BL		0GL00	0GL02		#|<J		AL	M0 12K0
TÄ\$D55%>#	F-		L00	L0H		>|<J		20B	M0 12K0
4'5&%>#	K/	7T	BGL0	KLG2 TT		#|<J		K0	M0 12K0
4C\$*#%>#	BGK)	N-Y	L00	L0B		>|<J		200	M0 12K0
,\$*6	0G03/	7T	0GL00	0GLH/		#|<J		20/	M0 12K0
7'16Ä %>#	HGB		BGL0	20G2		# |<J		M8	M0 12K0
7'61'6Ä Ä	B0		L00	/AB		>|<J		A/	M0 12K0
F%&jÄ5	2H		L00	L0K		>|<J		AM	M0 12K0
W6'U%>#	F-		L00	L03		>|<J		202	M0 12K0
b%6&	LM		L00	LK0		>|<J		AL	M0 12K0
=%5EÄ\$	F-		BL0	B/L		>|<J		AH	M0 12K0

Lab Sample ID: 440-41506-G-19-C MS
Matrix: Water
Analysis Batch: 94650

Client Sample ID: Matrix Spike
Prep Type: Dissolved
Prep Batch: 94461

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
4*+'5!	F-		L00	/ H0		> <J		A3	M0 12K0

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QC Sample Results

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Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: 440-41506-G-19-D MSD

Matrix: Water

Analysis Batch: 94664

Client Sample ID: Matrix Spike Duplicate

Prep Type: Dissolved

Prep Batch: 94461

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	Limit
	Result	Qualifier		Result	Qualifier				Limits		
"\$ Ä6%&	MG0)	N-Y	L00	L0K		>|<J		AA	M012K0	2	B0
T*\$*6	0G2L		0GL00	0G3L3		# |<J		202	M012K0	K	B0
T\$%>#	0G0BL		0GL00	0GL2H		#|<J		AA	M012K0	K	B0
TÄ\$D55%>#	F-		L00	LB2		>|<J		20/	M012K0	K	B0
4'5&%>#	K/ 7T		BGL0	KLGMTT		#|<J		LL	M012K0	B	B0
4C\$*#%>#	BGK)N-Y		L00	L03		>|<J		202	M012K0	2	B0
,\$*6	0G03/ 7T		0GL00	0GLMM		#|<J		20K	M012K0	2	B0
7'16Ä %>#	HGB		BGL0	20G/		# |<J		HH	M012K0	K	B0
7'61'6Ä Ä	B0		L00	L0K		>|<J		AM	M012K0	B	B0
F%&jÄ5	2H		L00	L0K		>|<J		AM	M012K0	0	B0
W6'U%>#	F-		L00	LB0		>|<J		20/	M012K0	K	B0
b%6&	LM		L00	L/2		>|<J		AM	M012K0	B	B0
=%5EÄ\$	F-		BL0	BLL		>|<J		20B	M012K0	/	B0

Lab Sample ID: 440-41506-G-19-D MSD

Matrix: Water

Analysis Batch: 94650

Client Sample ID: Matrix Spike Duplicate

Prep Type: Dissolved

Prep Batch: 94461

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	Limit
	Result	Qualifier		Result	Qualifier				Limits		
4*+'5!	F-		L00	/ 3H		>|<J		A/	M012K0	K	B0

Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 440-94208/1-A

Matrix: Water

Analysis Batch: 94609

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 94208

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
4'U#%>#	F-		2G0	0G20	>|<J		0K<B3<2K(0A.BA	0K<BM<2K(2/0/	2
4*SSÄ\$	2G20)N-Y		BG0	0GL0	>|<J		0K<B3<2K(0A.BA	0K<BM<2K(2/0/	2
JÄ'U	F-		2G0	0GB0	>|<J		0K<B3<2K(0A.BA	0K<BM<2K(2/0/	2
"6!%#*6D	F-		BG0	0GK0	>|<J		0K<B3<2K(0A.BA	0K<BM<2K(2/0/	2
=Ä5Ä6%>#	F-		BG0	0GL0	>|<J		0K<B3<2K(0A.BA	0K<BM<2K(2/0/	2
ÄC'55%>#	F-		2G0	0GB0	>|<J		0K<B3<2K(0A.BA	0K<BM<2K(2/0/	2

Lab Sample ID: LCS 440-94208/2-A

Matrix: Water

Analysis Batch: 94609

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 94208

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec.
							Added	Result	Qualifier	Limits
4'U#%>#	H0G0	H2G2		>|<J		202	HL 122L
4*SSÄ\$	H0G0	H2G/		>|<J		20B	HL 122L
JÄ'U	H0G0	MAGH		>|<J		200	HL 122L
"6!%#*6D	H0G0	H2G3		>|<J		20B	HL 122L
=Ä5Ä6%>#	H0G0	MAG0		>|<J		AA	HL 122L
ÄC'55%>#	H0G0	H0G2		>|<J		200	HL 122L

ÄÄ!"#Ä\$%&'(\$E%6Ä

QC Sample Results

45%Ä6!(.789(#Ä\$%' (.6&
:*\$;Ä&!<=%!Ä.66>'5(?>!@'55(02A

ÄÄ!"#Ä\$%&'()*+(-./01/202312

Method: 200.8 - Metals (ICP/MS) (Continued)

Lab Sample ID: 440-41522-A-6-C MS ^5

Matrix: Water

Analysis Batch: 94609

Client Sample ID: Matrix Spike

Prep Type: Total Recoverable

Prep Batch: 94208

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.	
	Result	Qualifier	Added	Result	Qualifier				Limits	Limits
4'U#%>#	BG0	)N-Y	H0G0	H0GA		>|<J		AA	M0	12K0
4*SSÄ\$	LGL	)N-Y(7T	H0G0	HMGH		>|<J		20K	M0	12K0
JÄ'U	F-		H0G0	HMGH		>|<J		AH	M0	12K0
"6!%#*6D	F-		H0G0	H'GL		>|<J		203	M0	12K0
=Ä5Ä6%>#	2K0		H0G0	B02		>|<J		AL	M0	12K0
ÄC'55%>#	F-		H0G0	MMGH		>|<J		AM	M0	12K0

Lab Sample ID: 440-41522-A-6-D MSD ^5

Matrix: Water

Analysis Batch: 94609

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total Recoverable

Prep Batch: 94208

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.		RPD	
	Result	Qualifier	Added	Result	Qualifier				Limits	Limits	RPD	Limit
4'U#%>#	BG0	)N-Y	H0G0	HKGK		>|<J		20B	M0	12K0	K	B0
4*SSÄ\$	LGL	)N-Y(7T	H0G0	H'LG0		>|<J		AA	M0	12K0	K	B0
JÄ'U	F-		H0G0	H0G2		>|<J		200	M0	12K0	B	B0
"6!%#*6D	F-		H0G0	H3G3		>|<J		20H	M0	12K0	B	B0
=Ä5Ä6%>#	2K0		H0G0	B03		>|<J		202	M0	12K0	B	B0
ÄC'55%>#	F-		H0G0	MAG/		>|<J		AA	M0	12K0	B	B0

Lab Sample ID: MB 440-94283/1-E

Matrix: Water

Analysis Batch: 94706

Client Sample ID: Method Blank

Prep Type: Dissolved

Prep Batch: 94462

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil	Fac
	Result	Qualifier								
4'U#%>#	F-		2G0	0G20	>|<J		0K<BM<2K(0M.LL 0K<BM<2K(2A.K0			2
4*SSÄ\$	F-		BG0	0GL0	>|<J		0K<BM<2K(0M.LL 0K<BM<2K(2A.K0			2
JÄ'U	F-		2G0	0GB0	>|<J		0K<BM<2K(0M.LL 0K<BM<2K(2A.K0			2
"6!%#*6D	F-		BG0	0GK0	>|<J		0K<BM<2K(0M.LL 0K<BM<2K(2A.K0			2
=Ä5Ä6%>#	F-		BG0	0GL0	>|<J		0K<BM<2K(0M.LL 0K<BM<2K(2A.K0			2
ÄC'55%>#	F-		2G0	0GB0	>|<J		0K<BM<2K(0M.LL 0K<BM<2K(2A.K0			2

Lab Sample ID: LCS 440-94283/2-E

Matrix: Water

Analysis Batch: 94706

Client Sample ID: Lab Control Sample

Prep Type: Dissolved

Prep Batch: 94462

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec.	
							Result	Qualifier	Limits	Limits
4'U#%>#	H0G0	MAG2		>|<J		AA	HL	122L
4*SSÄ\$	H0G0	MMGB		>|<J		AM	HL	122L
JÄ'U	H0G0	M8G/		>|<J		AL	HL	122L
"6!%#*6D	H0G0	H2G/		>|<J		20B	HL	122L
=Ä5Ä6%>#	H0G0	H0GM		>|<J		202	HL	122L
ÄC'55%>#	H0G0	MAG2		>|<J		AA	HL	122L

Lab Sample ID: 440-41606-F-3-C MS ^1000

Matrix: Water

Analysis Batch: 94706

Client Sample ID: Matrix Spike

Prep Type: Dissolved

Prep Batch: 94462

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.	
	Result	Qualifier	Added	Result	Qualifier				Limits	Limits
4'U#%>#	F-		/00	F-		>|<J		F4	M0	12K0

ÄÄ!"#Ä\$%&'(\$,SE%6Ä

QC Sample Results

45%Ä6!(.789(#Ä\$%&' (.6&
:*\$;Ä&!<=%!Ä.66>'5(?>!@'55(02A

ÄÄ!"#Ä\$%&'()*+(-./01/202312

Method: 200.8 - Metals (ICP/MS) (Continued)

Lab Sample ID: 440-41606-F-3-C MS ^1000
Matrix: Water
Analysis Batch: 94706

Client Sample ID: Matrix Spike
Prep Type: Dissolved
Prep Batch: 94462

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
4*SSÄ\$	KL00	)N-Y	/00	/ 2/0	)N-Y(TT	>|<J		2L3	M012K0
JÄ'U	F-		/00	F-		>|<J		F4	MD 12K0
"6!%#*6D	F-		/00	F-		>|<J		F4	MD 12K0
=Ä5Ä6%>#	F-		/00	F-		>|<J		F4	MD 12K0
ÄC'55%>#	F-		/00	F-		>|<J		F4	MD 12K0

Lab Sample ID: 440-41606-F-3-D MSD ^1000
Matrix: Water
Analysis Batch: 94706

Client Sample ID: Matrix Spike Duplicate
Prep Type: Dissolved
Prep Batch: 94462

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
4'U#%>#	F-		/00	F-		>|<J		F4	MD 12K0	F4	B0
4*SSÄ\$	KL00	)N-Y	/00	/ LB0	)N-Y(TT	>|<J		BLK	M012K0	A	B0
JÄ'U	F-		/00	F-		>|<J		F4	MD 12K0	F4	B0
"6!%#*6D	F-		/00	F-		>|<J		F4	MD 12K0	F4	B0
=Ä5Ä6%>#	F-		/00	F-		>|<J		F4	MD 12K0	F4	B0
ÄC'55%>#	F-		/00	F-		>|<J		F4	MD 12K0	F4	B0

Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 440-94267/1-A
Matrix: Water
Analysis Batch: 94384

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 94267

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
7Ä\$&>\$D	F-		0GB0	0G20	>|<J		0K<B3<2K(2K.03	0K<B3<2K(23.23	2

Lab Sample ID: LCS 440-94267/2-A
Matrix: Water
Analysis Batch: 94384

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 94267

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
7Ä\$&>\$D	HG00	AGLL	J^	>|<J		22A	HL 122L

Lab Sample ID: 440-40711-AN-3-F MS
Matrix: Water
Analysis Batch: 94384

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 94267

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
7Ä\$&>\$D	F-	J^	HG00	AGHH		>|<J		2B/	M012K0

Lab Sample ID: 440-40711-AN-3-G MSD
Matrix: Water
Analysis Batch: 94384

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 94267

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
7Ä\$&>\$D	F-	J^	HG00	AGLK		>|<J		22A	M012K0	/	B0

ÄÄ!"#Ä\$%&'(\$E%6Ä

QC Sample Results

45%Ä6!(.789(#Ä\$%&' (.6&
:;\$*,Ä&!<=%!Ä.66>'5(?>!@'55(02A

ÄÄ!"#Ä\$%&'()*+(-./01/202312

Method: 245.1 - Mercury (CVAA) (Continued)

Lab Sample ID: MB 440-94283/1-B
Matrix: Water
Analysis Batch: 94615

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 94374

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
7Ä\$&>\$D	F-		0GB0	0G20	>|<J		0K<BM<2K(2B	0K<BM<2K(2L.0A	2

Lab Sample ID: LCS 440-94283/2-B
Matrix: Water
Analysis Batch: 94615

Client Sample ID: Lab Control Sample
Prep Type: Dissolved
Prep Batch: 94374

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
7Ä\$&>\$D	HG00	HG/M		>|<J		203	HL 122L

Lab Sample ID: 440-41016-1 MS
Matrix: Water
Analysis Batch: 94615

Client Sample ID: Outfall 019
Prep Type: Dissolved
Prep Batch: 94374

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
7Ä\$&>\$D	F-		HG00	HGMH		>|<J		220	M012K0

Lab Sample ID: 440-41016-1 MSD
Matrix: Water
Analysis Batch: 94615

Client Sample ID: Outfall 019
Prep Type: Dissolved
Prep Batch: 94374

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
7Ä\$&>\$D	F-		HG00	HG3H		>|<J		20H	M012K0	2	B0

Method: 120.1 - Conductivity, Specific Conductance

Lab Sample ID: MB 440-99365/3
Matrix: Water
Analysis Batch: 99365

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
=SÄ&%@%&(4*6U>&!6&Ä	F-		2G0	2G0	>#C* <&#			0/<2A<2K(2/L	2

Lab Sample ID: LCS 440-99365/4
Matrix: Water
Analysis Batch: 99365

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
=SÄ&%@%&(4*6U>&!6&Ä	ML	MHL		>#C* <&#		20L	A0 1220

Lab Sample ID: 440-40886-1 DU
Matrix: Water
Analysis Batch: 99365

Client Sample ID: Outfall 019
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
=SÄ&%@%&(4*6U>&!6&Ä	2L00	Tc	2/30		>#C* <&#		0GK	L

ÄÄ!"#Ä\$%&'(\$E%6Ä

QC Sample Results

45%Ä6!(.789(#Ä\$%&' (.6&
:*\$;Ä&!<=%!Ä.66>'5(?>!@'55(02A

ÄÄ!"#Ä\$%&'()*+(-./01/202312

Method: 1664A - HEM and SGT-HEM

Lab Sample ID: MB 440-94150/1-A
Matrix: Water
Analysis Batch: 94237

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 94150

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
9V7	F-		LG0	2G/	# I<J		0K<B3<2K(03.2B	0K<B3<2K(20.KB	2

Lab Sample ID: LCS 440-94150/2-A
Matrix: Water
Analysis Batch: 94237

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 94150

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
9V7	B0G0	2MGL		# I<J		HH	MH122/

Lab Sample ID: LCSD 440-94150/3-A
Matrix: Water
Analysis Batch: 94237

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 94150

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
9V7	B0G0	2MG0		# I<J		HL	MH122/	K	22

Method: 180.1 - Turbidity, Nephelometric

Lab Sample ID: MB 440-92262/5
Matrix: Water
Analysis Batch: 92262

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ä>\$+%U%!D	F-		0G20	0G0/0	FÄc			0K<23<2K(23.00	2

Lab Sample ID: MRL 440-92262/3 MRL
Matrix: Water
Analysis Batch: 92262

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Ä>\$+%U%!D	0G200	0G200		FÄc		200	

Lab Sample ID: 440-41016-1 DU
Matrix: Water
Analysis Batch: 92262

Client Sample ID: Outfall 019
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Ä>\$+%U%!D	2G2		2G03		FÄc		0GA	B0

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 440-93370/1
Matrix: Water
Analysis Batch: 93370

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ä!5(-% *5EÄU(=*5%U	F-		20	20	#I<J			0K<B2<2K(2L.2M	2

ÄÄ!"#Ä\$%&'(\$E%6Ä

QC Sample Results

45%Ä6!(.789(#Ä\$%&' (.6&
:\$.Ä&!<=%!Ä.66>5(?>!@'55(02A

ÄÄ!"#Ä\$%&'()*+(-./01/202312

Method: SM 2540C - Solids, Total Dissolved (TDS) (Continued)

Lab Sample ID: LCS 440-93370/2
Matrix: Water
Analysis Batch: 93370

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ä"!'5(=> *5EÄU(=*5%U	2000	AM0		# I<J		AM	A0 1220

Lab Sample ID: 440-41151-A-4 DU
Matrix: Water
Analysis Batch: 93370

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Ä"!'5(=> *5EÄU(=*5%U	3M0		3MB		# I<J		0G3	20

Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 440-92544/1
Matrix: Water
Analysis Batch: 92544

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ä"!'5(=> SÄ6UÄU(=*5%U	F-		20	20	# I<J			0K<2H<2K(23.B/	2

Lab Sample ID: LCS 440-92544/2
Matrix: Water
Analysis Batch: 92544

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ä"!'5(=> SÄ6UÄU(=*5%U	2000	AA3		# I<J		200	HL 122L

Lab Sample ID: 440-41002-P-16 DU
Matrix: Water
Analysis Batch: 92544

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Ä"!'5(=> SÄ6UÄU(=*5%U	AM		A3G0		# I<J		2	20

Method: SM 4500 CN E - Cyanide, Total (Low Level)

Lab Sample ID: MB 440-92583/1-A
Matrix: Water
Analysis Batch: 92613

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 92583

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4D'6%UÄÄ"!'5	F-		LG0	KG0	>I<J		0K<2H<2K(2H.B3	0K<2H<2K(BB.2	2

Lab Sample ID: LCS 440-92583/2-A
Matrix: Water
Analysis Batch: 92613

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 92583

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4D'6%UÄÄ"!'5	200	203		>I<J		203	A0 1220

ÄÄ!"#Ä\$%&'(\$E%6Ä

QC Sample Results

45%Ä6!(.789(#Ä\$%&' (.6&
:*\$;Ä&!<=%!Ä.66>'5(?>!@'55(02A

ÄÄ!"#Ä\$%&'()*+(-./01/202312

Method: SM 4500 CN E - Cyanide, Total (Low Level) (Continued)

Lab Sample ID: 440-40646-A-1-B MS
Matrix: Water
Analysis Batch: 92613

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 92583

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
4D'6%UÄÄW'5	F-		200	20L		>|<J		20L	M0122L

Lab Sample ID: 440-40646-A-1-C MSD
Matrix: Water
Analysis Batch: 92613

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 92583

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4D'6%UÄÄW'5	F-		200	20/		>|<J		20/	M0122L	0	2L

Method: SM 4500 F C - Fluoride

Lab Sample ID: MB 440-92312/10
Matrix: Water
Analysis Batch: 92312

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
P5>*\$%UÄ	F-		0G20	0G0B0	#|<J			0K<2M<2K(2K./L	2

Lab Sample ID: LCS 440-92312/9
Matrix: Water
Analysis Batch: 92312

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
P5>*\$%UÄ	2G00	2G0B		#|<J		20B	A01220

Lab Sample ID: 440-40845-A-1 MS
Matrix: Water
Analysis Batch: 92312

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
P5>*\$%UÄ	0GK3		2G00	2GKM		#|<J		202	H012B0

Lab Sample ID: 440-40845-A-1 MSD
Matrix: Water
Analysis Batch: 92312

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
P5>*\$%UÄ	0GK3		2G00	2GKM		#|<J		202	H012B0	0	B0

Method: SM 4500 NH3 C - Ammonia

Lab Sample ID: MB 440-93362/2-A
Matrix: Water
Analysis Batch: 93380

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 93362

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
"##'6%(O' (FQ	F-		0G/00	0GBH0	#|<J		0K<B2<2K(2/./M	0K<B2<2K(2L.K3	2

ÄÄ!"#Ä\$%&'(\$E%6Ä

QC Sample Results

45%Ä6!(.789(#Ä\$%'(,6&
:*\$,Ä&!<=%!Ä.66>'5(?>!@'55(02A

ÄÄ!"#Ä\$%&'()*+(-./01/202312

Method: SM 4500 NH3 C - Ammonia (Continued)

Lab Sample ID: LCS 440-93362/1-A
Matrix: Water
Analysis Batch: 93380

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 93362

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
"##*6%(O' (FQ	20G0	AGB/0		#I<J		AB	HL122L

Lab Sample ID: 440-41016-1 MS
Matrix: Water
Analysis Batch: 93380

Client Sample ID: Outfall 019
Prep Type: Total/NA
Prep Batch: 93362

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
"##*6%(O' (FQ	0GBH0	N-Y	20G0	AGH00		#I<J		AL	M012B0

Lab Sample ID: 440-41016-1 MSD
Matrix: Water
Analysis Batch: 93380

Client Sample ID: Outfall 019
Prep Type: Total/NA
Prep Batch: 93362

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
"##*6%(O' (FQ	0GBH0	N-Y	20G0	20G0H		#I<J		AH	M012B0	K	2L

Method: SM 5310B - Organic Carbon, Total (TOC)

Lab Sample ID: MB 440-92649/7
Matrix: Water
Analysis Batch: 92649

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ä"!'5(?\$!6%&(4'\$+*6	F-		2G0	0GML#	I<J			0K<2H<2K(BK./K	2

Lab Sample ID: LCS 440-92649/6
Matrix: Water
Analysis Batch: 92649

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ä"!'5(?\$!6%&(4'\$+*6	20G0	20GA		#I<J		20A	A01220

Lab Sample ID: 440-40928-C-43 MS
Matrix: Water
Analysis Batch: 92649

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ä"!'5(?\$!6%&(4'\$+*6	F-		LG00	LGKH		#I<J		20H	H012B0

Lab Sample ID: 440-40928-C-43 MSD
Matrix: Water
Analysis Batch: 92649

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Ä"!'5(?\$!6%&(4'\$+*6	F-		LG00	LG/L		#I<J		20A	H012B0	2	B0

ÄÄ!"#Ä\$%&'(\$E%6Ä

QC Sample Results

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:*\$;Ä&!<=%!Ä.66>'5(?>!@'55(02A

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Method: SM 5540C - Methylene Blue Active Substances (MBAS)

Lab Sample ID: MB 440-92257/4
Matrix: Water
Analysis Batch: 92257

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
7Ä!CD5Ä6Ä(T5#Ä!%EÄ(=>+ !'6&Ä	F-		0G20	0G0L0	#I<J			0K<23<2K(2!./L	2

Lab Sample ID: LCS 440-92257/3
Matrix: Water
Analysis Batch: 92257

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
7Ä!CD5Ä6Ä(T5#Ä!%EÄ(=>+ !'6&Ä	0GBL0	0GB/K		#I<J		AM	A0 1220

Lab Sample ID: 440-41016-1 MS
Matrix: Water
Analysis Batch: 92257

Client Sample ID: Outfall 019
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
7Ä!CD5Ä6Ä(T5#Ä!%EÄ(=>+ !'6&Ä	0G2B		0GBL0	0GK3B		#I<J		AH	L0 12BL

Lab Sample ID: 440-41016-1 MSD
Matrix: Water
Analysis Batch: 92257

Client Sample ID: Outfall 019
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
7Ä!CD5Ä6Ä(T5#Ä!%EÄ(=>+ !'6&Ä	0G2B		0GBL0	0GKL3		#I<J		A3	L0 12BL	2	B0

Method: SM5210B - BOD, 5 Day

Lab Sample ID: USB 440-92226/1 USB
Matrix: Water
Analysis Batch: 92226

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	USB Result	USB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
T%*&CÄ#%&'5(?XDIÄ6(-Ä#6U	F-		BG0	0GL0	#I<J			0K<23<2K(0A.0L	2

Lab Sample ID: LCS 440-92226/4
Matrix: Water
Analysis Batch: 92226

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
T%*&CÄ#%&'5(?XDIÄ6(-Ä#6U	2AA	B0L		#I<J		20K	HL 122L

Lab Sample ID: LCSD 440-92226/5
Matrix: Water
Analysis Batch: 92226

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
T%*&CÄ#%&'5(?XDIÄ6(-Ä#6U	2AA	B0H		#I<J		20L	HL 122L	2	B0

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QC Sample Results

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:*\$,Ä&!<=%!Ä.66>'5(?>!@'55(02A

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Method: 900.0 - Gross Alpha and Gross Beta Radioactivity

Lab Sample ID: MB 160-40953/1-A
Matrix: Water
Analysis Batch: 41569

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 40953

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	MDC	Unit	Prepared	Analyzed	Dil Fac
`\$* ("5SC'	0G20M/	c	0GKAL	0GKAL	0GMKM64%<J		0K<B0<2K(2B.00	0K<BL<2K(23./H	2
`\$* (TÄ!'	10G0//2M	c	0G/LM	0G/LM	0GHBKS4%<J		0K<B0<2K(2B.00	0K<BL<2K(23./H	2

Lab Sample ID: LCS 160-40953/2-A
Matrix: Water
Analysis Batch: 41569

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 40953

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	MDC	Unit	%Rec	%Rec. Limits
`\$* ("5SC'	LKGA	LBGH2		MGLM	2GH3	S4%<J	AH	ML12BL

Lab Sample ID: LCSB 160-40953/3-A
Matrix: Water
Analysis Batch: 41569

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 40953

Analyte	Spike Added	LCSB Result	LCSB Qual	Total Uncert. (2σ+/-)	MDC	Unit	%Rec	%Rec. Limits
`\$* (TÄ!'	AAG/	HHG/L		AGKH	0GAHAS4%<J		HA	ML12BL

Lab Sample ID: 400-73138-AM-1-B MS
Matrix: Water
Analysis Batch: 41569

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 40953

Analyte	Sample Result	Sample Qual	Spike Added	MS Result	MS Qual	Total Uncert. (2σ+/-)	MDC	Unit	%Rec	%Rec. Limits
`\$* ("5SC'	0G32H	c	LKGA	/LGK2		3G33	2G/K	S4%<J	H/	KL 12L0

Lab Sample ID: 400-73138-AM-1-C MSBT
Matrix: Water
Analysis Batch: 41569

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 40953

Analyte	Sample Result	Sample Qual	Spike Added	MSBT Result	MSBT Qual	Total Uncert. (2σ+/-)	MDC	Unit	%Rec	%Rec. Limits
`\$* (TÄ!'	BGBB		AAG/	ABG23		AGML	2G0MS4%<J		A2	HA12/K

Lab Sample ID: 400-73138-AM-1-D DU
Matrix: Water
Analysis Batch: 41569

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 40953

Analyte	Sample Result	Sample Qual	DU Result	DU Qual	Total Uncert. (2σ+/-)	MDC	Unit	RER	RER Limit
`\$* ("5SC'	0G32H	c	10G0MBM0		0GHM2	2GM0S4%<J		0GKM	2
`\$* (TÄ!'	BGBB		BG3M0		0GH0H	0GAMLS4%<J		0GBA	2

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QC Sample Results

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Method: 901.1 - Cesium 137 & Other Gamma Emitters (GS)

Lab Sample ID: MB 160-42216/1-A
Matrix: Water
Analysis Batch: 42414

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 42216

Analyte	MB MB		Count	Total	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)					
4Ä %>#12KM	2G/HH	c	3GML	3GML	2KGK	S4%<J	0K<B3<2K(2K.LH	0K<BM<2K(2A.B2	2
:*! %>#1/0	1/AGAA	c	2L0	2L0	B0L	S4%<J	0K<B3<2K(2K.LH	0K<BM<2K(2A.B2	2

Lab Sample ID: LCS 160-42216/2-A
Matrix: Water
Analysis Batch: 42415

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 42216

Analyte	Spike Added	LCS Result	LCS Qual	Total	MDC	Unit	%Rec	%Rec.
				Uncert. (2σ+/-)				Limits
"#Ä\$%&'>#1B/2	2KA000	2K/00		2LL00	/0B	S4%<J	A3	A0 1222
4Ä %>#12KM	//M00	/BAB0		/K00	22H	S4%<J	A3	A0 1222
4*+'5!130	KBH00	K03M0		K0/0	M2GBS	S4%<J	AK	HA 1220

Lab Sample ID: 440-41016-1 DU
Matrix: Water
Analysis Batch: 42412

Client Sample ID: Outfall 019
Prep Type: Total/NA
Prep Batch: 42216

Analyte	Sample Sample		DU DU		Total	MDC	Unit	RER	Limit
	Result	Qual	Result	Qual	Uncert. (2σ+/-)				
4Ä %>#12KM	12GLHc		0G0L/AM	c	LGA2	22GK	S4%<J	0G2K	2
:*! %>#1/0	13HGKc		/LGAM	c	MHG2	2K/	S4%<J	0GB2	2

Method: 903.0 - Radium-226 (GFPC)

Lab Sample ID: MB 160-40993/1-A
Matrix: Water
Analysis Batch: 45593

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 40993

Analyte	MB MB		Count	Total	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)					
'U%>#1BB3	0GBL/A		0G2BA	0G2K2	0G23/	S4%<J	0K<B0<2K(2/.BL	0/<22<2K(0H.0B	2
Carrier	%Yield	Qualifier	Limits		Prepared	Analyzed	Dil Fac		
Ba Carrier	88.5		40 - 110		03/20/13 14:25	04/11/13 08:02	1		

Lab Sample ID: LCS 160-40993/2-A
Matrix: Water
Analysis Batch: 45593

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 40993

Analyte	Spike Added	LCS Result	LCS Qual	Total	MDC	Unit	%Rec	%Rec.
				Uncert. (2σ+/-)				Limits
'U%>#1BB3	22GB	22GBL		2GB0	0G232	S4%<J	202	3H 12KM
Carrier	%Yield	Qualifier	Limits					
Ba Carrier	98.2		40 - 110					

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QC Sample Results

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:*\$;Ä&!<=%!Ä.66>'5(?>!@'55(02A

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Method: 903.0 - Radium-226 (GFPC) (Continued)

Lab Sample ID: 440-41016-1 DU
Matrix: Water
Analysis Batch: 45593

Client Sample ID: Outfall 019
Prep Type: Total/NA
Prep Batch: 40993

Analyte	Sample Result	Sample Qual	DU Result	DU Qual	Total Uncert. (2σ+/-)	MDC	Unit	RER	Limit
_'U%>#1BB3	0G00B0B	c	0GB0L/		0G2BB	0G230	S4%<J	0GAM	2
Carrier	%Yield	Qualifier	Limits						
Ba Carrier	99.4		40 - 110						

Method: 904.0 - Radium-228 (GFPC)

Lab Sample ID: MB 160-40995/1-A
Matrix: Water
Analysis Batch: 45372

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 40995

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	MDC	Unit	Prepared	Analyzed	Dil Fac
_'U%>#1BBH	0GK3HB		0GBB2	0GBB/	0GKKKS4%<J		0K<B0<2K(2/.KH	0/<20<2K(20.K0	2
Carrier	%Yield	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Ba Carrier	88.5		40 - 110				03/20/13 14:38	04/10/13 10:30	1
Y Carrier	90.5		40 - 110				03/20/13 14:38	04/10/13 10:30	1

Lab Sample ID: LCS 160-40995/2-A
Matrix: Water
Analysis Batch: 45372

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 40995

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	MDC	Unit	%Rec	Limits
_'U%>#1BBH	/G/0	LG0KH		0G3L0	0GBHAS4%<J		22/	L3 12/0
Carrier	%Yield	Qualifier	Limits					
Ba Carrier	98.2		40 - 110					
Y Carrier	86.7		40 - 110					

Lab Sample ID: 440-41016-1 DU
Matrix: Water
Analysis Batch: 45372

Client Sample ID: Outfall 019
Prep Type: Total/NA
Prep Batch: 40995

Analyte	Sample Result	Sample Qual	DU Result	DU Qual	Total Uncert. (2σ+/-)	MDC	Unit	RER	Limit
_'U%>#1BBH	0G233	c	0G2KK3	c	0GB2B	0GKLS4%<J		0G0H	2
Carrier	%Yield	Qualifier	Limits						
Ba Carrier	99.4		40 - 110						
Y Carrier	90.1		40 - 110						

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QC Sample Results

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Method: 905 - Strontium-90 (GFPC)

Lab Sample ID: MB 160-41017/1-A
Matrix: Water
Analysis Batch: 42794

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 41017

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	MDC	Unit	Prepared	Analyzed	Dil Fac
=!\$*6!%>#1A0	0G0K02L	c	0GB0B	0GB0B	0GKLB	S4%<J	0K<B0<2K(2M.LA	0K<BH<2K(2M.KL	2
Carrier	MB %Yield	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
Sr Carrier	88.0		40 - 110				03/20/13 17:59	03/28/13 17:35	1
Y Carrier	85.2		40 - 110				03/20/13 17:59	03/28/13 17:35	1

Lab Sample ID: LCS 160-41017/2-A
Matrix: Water
Analysis Batch: 42794

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 41017

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	MDC	Unit	%Rec	%Rec. Limits
=!\$*6!%>#1A0	AGK/	AG/M0		0GAML	0GK2	S4%<J	202	A0 12K/
Carrier	LCS %Yield	LCS Qualifier	Limits					
Sr Carrier	89.3		40 - 110					
Y Carrier	89.0		40 - 110					

Lab Sample ID: 440-41016-1 DU
Matrix: Water
Analysis Batch: 42794

Client Sample ID: Outfall 019
Prep Type: Total/NA
Prep Batch: 41017

Analyte	Sample Result	Sample Qual	DU Result	DU Qual	Total Uncert. (2σ+/-)	MDC	Unit	RER	Limit
=!\$*6!%>#1A0	10G2LL	c	0G02/2	c	0GB0B	0GKL3	S4%<J	0G//	2
Carrier	DU %Yield	DU Qualifier	Limits						
Sr Carrier	81.4		40 - 110						
Y Carrier	92.3		40 - 110						

Method: 906.0 - Tritium, Total (LSC)

Lab Sample ID: MB 160-42152/1-A
Matrix: Water
Analysis Batch: 43053

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 42152

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	MDC	Unit	Prepared	Analyzed	Dil Fac
Ä\$%!%>#	1KG30/	c	3LG0	3LG0	2BK	S4%<J	0K<B3<2K(0A.23	0K<BH<2K(0A.23	2

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QC Sample Results

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:*\$;Ä&!<=%!Ä.66>'5(?>!@'55(02A

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Method: 906.0 - Tritium, Total (LSC) (Continued)

Lab Sample ID: LCS 160-42152/2-A
Matrix: Water
Analysis Batch: 43053

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 42152

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	MDC	Unit	%Rec	%Rec. Limits
Ä\$!%>#	KH20	KML3		/HL	2KH	S4%<J	AA	M/ 122/

Lab Sample ID: 440-41016-1 MS
Matrix: Water
Analysis Batch: 43053

Client Sample ID: Outfall 019
Prep Type: Total/NA
Prep Batch: 42152

Analyte	Sample Result	Sample Qual	Spike Added	MS Result	MS Qual	Total Uncert. (2σ+/-)	MDC	Unit	%Rec	%Rec. Limits
Ä\$!%>#	//G2	c	KH00	KA0A		L0M	2/M	S4%<J	20K	3M12K0

Lab Sample ID: 440-41016-1 DU
Matrix: Water
Analysis Batch: 43053

Client Sample ID: Outfall 019
Prep Type: Total/NA
Prep Batch: 42152

Analyte	Sample Result	Sample Qual	DU Result	DU Qual	Total Uncert. (2σ+/-)	MDC	Unit	RER	RER Limit
Ä\$!%>#	//G2	c	2KG03	c	MGA	2KA	S4%<J	0GB0	2

Method: A-01-R - Isotopic Uranium (Alpha Spectrometry)

Lab Sample ID: MB 160-41084/1-A
Matrix: Water
Analysis Batch: 41699

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 41084

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	MDC	Unit	Prepared	Analyzed	Dil Fac
Ä'!5(c\$'6%>#	0G2BLM		0G203	0G20A	0G0ALB	S4%<J	0K<B2<2K(0A.BK	0K<BB<2K(2L.LL	2

Lab Sample ID: LCS 160-41084/2-A
Matrix: Water
Analysis Batch: 41592

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 41084

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	MDC	Unit	%Rec	%Rec. Limits
c\$'6%>#1BK/	2KG2	2/GKL		2G3L	0G2A	S4%<J	220	H/ 12B0
c\$'6%>#1BKH	2KG3	2KGA/		2G32	0G0LAHS	S4%<J	20K	HK12B2

Tracer	LCS %Yield	LCS Qualifier	Limits
Uranium-232	83.3		30 - 110

Lab Sample ID: 440-41016-1 DU
Matrix: Water
Analysis Batch: 41657

Client Sample ID: Outfall 019
Prep Type: Total/NA
Prep Batch: 41084

Analyte	Sample Result	Sample Qual	DU Result	DU Qual	Total Uncert. (2σ+/-)	MDC	Unit	RER	RER Limit
Ä'!5(c\$'6%>#	0G02HL	c	0G0/A3M	c	0G2A3	0G2MAS	S4%<J	0G2/	2

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QC Association Summary

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GC/MS VOA

Analysis Batch: 92144

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
//01/0CC312	?>!@'55(02A	Ä*!'5<D"	8 ' IÄ\$	3B/	
//01/0CC312(7=	?>!@'55(02A	Ä*!'5<D"	8 ' IÄ\$	3B/	
//01/0CC312(7=-	?>!@'55(02A	Ä*!'5<D"	8 ' IÄ\$	3B/	
//01/0CC31B	Ä\$%E(F5'6G	Ä*!'5<D"	8 ' IÄ\$	3B/	
H4=(//01AB2//<3	H'+(4*6!\$*5(=#E5Ä	Ä*!'5<D"	8 ' IÄ\$	3B/	
7F(//01AB2//<1	7 ÄJ*K(F5'6G	Ä*!'5<D"	8 ' IÄ\$	3B/	

Analysis Batch: 93542

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
//01/202312	?>!@'55(02A	Ä*!'5<D"	8 ' IÄ\$	CB30F(=,7	
//01/2 2LA1-12(7=	7!\$%M(=E%GÄ	Ä*!'5<D"	8 ' IÄ\$	CB30F(=,7	
//01/2 2LA1-12(7=-	7!\$%M(=E%GÄ(->E5%&!Ä	Ä*!'5<D"	8 ' IÄ\$	CB30F(=,7	
H4=(//01ANI/B<N	H'+(4*6!\$*5(=#E5Ä	Ä*!'5<D"	8 ' IÄ\$	CB30F(=,7	
7F(//01ANI/B<B	7 ÄJ*K(F5'6G	Ä*!'5<D"	8 ' IÄ\$	CB30F(=,7	

Analysis Batch: 94161

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
//01/0CC312	?>!@'55(02A	Ä*!'5<D"	8 ' IÄ\$	3B/	
//01/0CC31B	Ä\$%E(F5'6G	Ä*!'5<D"	8 ' IÄ\$	3B/	
//01/20/11F1N(7=	7 !'\$%M(=E%GÄ	Ä*!'5<D"	8 ' IÄ\$	3B/	
//01/20/11F1N(7=-	7!\$%M(=E%GÄ(->E5%&!Ä	Ä*!'5<D"	8 ' IÄ\$	3B/	
H4=(//01A/232<3	H'+(4*6!\$*5(=#E5Ä	Ä*!'5<D"	8 ' IÄ\$	3B/	
7F(//01A/232<1	7 ÄJ*K(F5'6G	Ä*!'5<D"	8 ' IÄ\$	3B/	

Analysis Batch: 94456

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
//01/0CC312(1(O"	?>!@'55(02A	Ä*!'5<D"	8 ' IÄ\$	3B/	
//01/2/N01F1/(7=	7 !'\$%M(=E%GÄ	Ä*!'5<D"	8 ' IÄ\$	3B/	
//01/2/N01F1/(7=-	7!\$%M(=E%GÄ(->E5%&!Ä	Ä*!'5<D"	8 ' IÄ\$	3B/	
H4=(//01A//I3<1	H'+(4*6!\$*5(=#E5Ä	Ä*!'5<D"	8 ' IÄ\$	3B/	
7F(//01A//I3<2B	7 ÄJ*K(F5'6G	Ä*!'5<D"	8 ' IÄ\$	3B/	

GC/MS Semi VOA

Prep Batch: 93652

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
//01/202312	?>!@'55(02A	Ä*!'5<D"	8 ' IÄ\$	3BI	
H4=(//01AN3IB<B1"	H'+(4*6!\$*5(=#E5Ä	Ä*!'5<D"	8 ' IÄ\$	3BI	
H4=(//01AN3IB<N1"	H'+(4*6!\$*5(=#E5Ä(->E	Ä*!'5<D"	8 ' IÄ\$	3BI	
7F(//01AN3IB<21"	7 ÄJ*K(F5'6G	Ä*!'5<D"	8 ' IÄ\$	3BI	

Analysis Batch: 94633

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
//01/202312	?>!@'55(02A	Ä*!'5<D"	8 ' IÄ\$	3BI	AN3IB
H4=(//01AN3IB<B1"	H'+(4*6!\$*5(=#E5Ä	Ä*!'5<D"	8 ' IÄ\$	3BI	AN3IB
H4=(//01AN3IB<N1"	H'+(4*6!\$*5(=#E5Ä(->E	Ä*!'5<D"	8 ' IÄ\$	3BI	AN3IB
7F(//01AN3IB<21"	7 ÄJ*K(F5'6G	Ä*!'5<D"	8 ' IÄ\$	3BI	AN3IB

ÄÄ!"#Ä\$%&'(\$P%6Ä

QC Association Summary

45%Ä6!(.789(#Ä\$%&'(.6&
:\$*Ä&!<=%!Ä.66>5(?>!@/55(02A

ÄÄ!"#Ä\$%&'()*+(-./01/202312

GC VOA

Analysis Batch: 94486

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
//01/0CC312	?>!@/55(02A	Ä*!5<D"	8 ' IÄ\$	C02IF	
//01/2BAL1"1/(7=	7 !\$%M(=E%GÄ	Ä*!5<D"	8 ' IÄ\$	C02IF	
//01/2BAL1"1/(7=-	7 !\$%M(=E%GÄ(->E5%&!Ä	Ä*!5<D"	8 ' IÄ\$	C02IF	
H4=(//01A/C3<BL	H'+(4*6!\$*5(=#E5Ä	Ä*!5<D"	8 ' IÄ\$	C02IF	
7F(//01A/C3<BC	7 ÄJ*K(F5'6G	Ä*!5<D"	8 ' IÄ\$	C02IF	

GC Semi VOA

Prep Batch: 92474

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
//01/202312	?>!@/55(02A	Ä*!5<D"	8 ' IÄ\$	30C	
H4=(//01AB/L/<B1"	H'+(4*6!\$*5(=#E5Ä	Ä*!5<D"	8 ' IÄ\$	30C	
H4=(//01AB/L/<1"	H'+(4*6!\$*5(=#E5Ä	Ä*!5<D"	8 ' IÄ\$	30C	
H4=(//01AB/L/<N1"	H'+(4*6!\$*5(=#E5Ä(->E	Ä*!5<D"	8 ' IÄ\$	30C	
H4=(//01AB/L/<I1"	H'+(4*6!\$*5(=#E5Ä(->E	Ä*!5<D"	8 ' IÄ\$	30C	
7F(//01AB/L/<21"	7 ÄJ*K(F5'6G	Ä*!5<D"	8 ' IÄ\$	30C	

Analysis Batch: 92827

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
//01/202312	?>!@/55(02A	Ä*!5<D"	8 ' IÄ\$	30C(:Ä !%&%KÄ	AB/L/
H4=(//01AB/L/<B1"	H'+(4*6!\$*5(=#E5Ä	Ä*!5<D"	8 ' IÄ\$	30C(:Ä !%&%KÄ	AB/L/
H4=(//01AB/L/<N1"	H'+(4*6!\$*5(=#E5Ä(->E	Ä*!5<D"	8 ' IÄ\$	30C(:Ä !%&%KÄ	AB/L/
7F(//01AB/L/<21"	7 ÄJ*K(F5'6G	Ä*!5<D"	8 ' IÄ\$	30C(:Ä !%&%KÄ	AB/L/

Analysis Batch: 92914

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
//01/202312	?>!@/55(02A	Ä*!5<D"	8 ' IÄ\$	30C(:4F(HH	AB/L/
H4=(//01AB/L/<1"	H'+(4*6!\$*5(=#E5Ä	Ä*!5<D"	8 ' IÄ\$	30C(:4F(HH	AB/L/
H4=(//01AB/L/<I1"	H'+(4*6!\$*5(=#E5Ä(->E	Ä*!5<D"	8 ' IÄ\$	30C(:4F(HH	AB/L/
7F(//01AB/L/<21"	7 ÄJ*K(F5'6G	Ä*!5<D"	8 ' IÄ\$	30C(:4F(HH	AB/L/

Prep Batch: 93173

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
//01/0CC312	?>!@/55(02A	Ä*!5<D"	8 ' IÄ\$	NI204	
H4=(//01AN2LN<B1"	H'+(4*6!\$*5(=#E5Ä	Ä*!5<D"	8 ' IÄ\$	NI204	
H4=(//01AN2LN<N1"	H'+(4*6!\$*5(=#E5Ä(->E	Ä*!5<D"	8 ' IÄ\$	NI204	
7F(//01AN2LN<21"	7 ÄJ*K(F5'6G	Ä*!5<D"	8 ' IÄ\$	NI204	

Analysis Batch: 93488

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
//01/0CC312	?>!@/55(02A	Ä*!5<D"	8 ' IÄ\$	C02IF	AN2LN
H4=(//01AN2LN<B1"	H'+(4*6!\$*5(=#E5Ä	Ä*!5<D"	8 ' IÄ\$	C02IF	AN2LN
H4=(//01AN2LN<N1"	H'+(4*6!\$*5(=#E5Ä(->E	Ä*!5<D"	8 ' IÄ\$	C02IF	AN2LN
7F(//01AN2LN<21"	7 ÄJ*K(F5'6G	Ä*!5<D"	8 ' IÄ\$	C02IF	AN2LN

HPLC/IC

Analysis Batch: 91984

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
//01/202312	?>!@/55(02A	Ä*!5<D"	8 ' IÄ\$	B2CQ3	

ÄÄ!"#Ä\$%&'(\$P%6Ä

QC Association Summary

45%Ä6!(.789(#Ä\$%&' (.6&
:\$*,Ä&!<=%!Ä.66>'5(?>!@'55(02A

ÄÄ!"#Ä\$%&'()*+(-./01/202312

HPLC/IC (Continued)

Analysis Batch: 91984 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
//01/202312(7=	?>!@'55(02A	Ä*!'5<D"	8 ' !Ä\$	B2CQ3	
//01/202312(7=-	?>!@'55(02A	Ä*!'5<D"	8 ' !Ä\$	B2CQ3	
H4=(//01A2AC/<B	H'+(4*6!\$*5(=#E5Ä	Ä*!'5<D"	8 ' !Ä\$	B2CQ3	
7F(//01A2AC/<N	7 ÄJ*K(F5'6G	Ä*!'5<D"	8 ' !Ä\$	B2CQ3	

Analysis Batch: 92005

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
//01/200B1O12L(7=	7!\$%M(=E%GÄ	Ä*!'5<D"	8 ' !Ä\$	N00Q0	
//01/200B1O12L(7=-	7!\$%M(=E%GÄ(->E5%&!Ä	Ä*!'5<D"	8 ' !Ä\$	N00Q0	
//01/202312	?>!@'55(02A	Ä*!'5<D"	8 ' !Ä\$	N00Q0	
H4=(//01AB001<//	H'+(4*6!\$*5(=#E5Ä	Ä*!'5<D"	8 ' !Ä\$	N00Q0	
7F(//01AB001</N	7ÄJ*K(F5'6G	Ä*!'5<D"	8 ' !Ä\$	N00Q0	

Analysis Batch: 92006

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
//01/200B1O12L(7=	7!\$%M(=E%GÄ	Ä*!'5<D"	8 ' !Ä\$	N00Q0	
//01/200B1O12L(7=-	7!\$%M(=E%GÄ(->E5%&!Ä	Ä*!'5<D"	8 ' !Ä\$	N00Q0	
//01/202312	?>!@'55(02A	Ä*!'5<D"	8 ' !Ä\$	N00Q0	
H4=(//01AB003<//	H'+(4*6!\$*5(=#E5Ä	Ä*!'5<D"	8 ' !Ä\$	N00Q0	
7F(//01AB003</N	7ÄJ*K(F5'6G	Ä*!'5<D"	8 ' !Ä\$	N00Q0	

Analysis Batch: 94195

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
//01/202312	?>!@'55(02A	Ä*!'5<D"	8 ' !Ä\$	N2/Q0	
//01/2321141/(7=	7!\$%M(=E%GÄ	Ä*!'5<D"	8 ' !Ä\$	N2/Q0	
//01/2321141/(7=-	7!\$%M(=E%GÄ(->E5%&!Ä	Ä*!'5<D"	8 ' !Ä\$	N2/Q0	
H4=(//01A/2AI</	H'+(4*6!\$*5(=#E5Ä	Ä*!'5<D"	8 ' !Ä\$	N2/Q0	
7F(//01A/2AI</	7 ÄJ*K(F5'6G	Ä*!'5<D"	8 ' !Ä\$	N2/Q0	
7OH(//01A/2AI<B(7OH	H'+(4*6!\$*5(=#E5Ä	Ä*!'5<D"	8 ' !Ä\$	N2/Q0	

Specialty Organics

Prep Batch: 13022

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
//01/202312	?>!@'55(02A	Ä*!'5<D"	8 ' !Ä\$	232NF	
H4=(NB012N0BB<B1"	H'+(4*6!\$*5(=#E5Ä	Ä*!'5<D"	8 ' !Ä\$	232NF	
7F(NB012N0BB<21"	7 ÄJ*K(F5'6G	Ä*!'5<D"	8 ' !Ä\$	232NF	

Analysis Batch: 13283

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
//01/202312	?>!@'55(02A	Ä*!'5<D"	8 ' !Ä\$	232NF	2N0BB
H4=(NB012N0BB<B1"	H'+(4*6!\$*5(=#E5Ä	Ä*!'5<D"	8 ' !Ä\$	232NF	2N0BB
7F(NB012N0BB<21"	7 ÄJ*K(F5'6G	Ä*!'5<D"	8 ' !Ä\$	232NF	2N0BB

Metals

Prep Batch: 94205

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
//01/202312	?>!@'55(02A	Ä*!'5(OÄ&*PÄ\$'+5Ä	8 ' !Ä\$	B00QB	
//01/202312(7=	?>!@'55(02A	Ä*!'5(OÄ&*PÄ\$'+5Ä	8 ' !Ä\$	B00QB	

ÄÄ!"#Ä\$%&'(\$P%6Ä

QC Association Summary

45%Ä6!(.789(#Ä\$%' (.6&
:.*;Ä&!<=%!Ä.66>'5(?>!@'55(02A

ÄÄ!"#Ä\$%&'()*+(-./01/202312

Metals (Continued)

Prep Batch: 94205 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
//01/202312(7=-	?>!@'55(02A	Ä*!'5(OÄ&*PÄ\$'+5Ä	8 ' IÄ\$	B00QB	
H4=(//01A/B0I<B1"	H'+(4*6!\$*5(=#E5Ä	Ä*!'5(OÄ&*PÄ\$'+5Ä	8 ' IÄ\$	B00QB	
7F(//01A/B0I<21"	7 ÄJ*K(F5'6G	Ä*!'5(OÄ&*PÄ\$'+5Ä	8 ' IÄ\$	B00QB	

Prep Batch: 94208

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
//01/202312	?>!@'55(02A	Ä*!'5(OÄ&*PÄ\$'+5Ä	8 ' IÄ\$	B00QB	
//01/2IBB1"1314(7=(RI	7 !\$%M(=E%GÄ	Ä*!'5(OÄ&*PÄ\$'+5Ä	8 ' IÄ\$	B00QB	
//01/2IBB1"131-(7=- (RI	7 !\$%M(=E%GÄ(->E5%&'!Ä	Ä*!'5(OÄ&*PÄ\$'+5Ä	8 ' IÄ\$	B00QB	
H4=(//01A/B0C<B1"	H'+(4*6!\$*5(=#E5Ä	Ä*!'5(OÄ&*PÄ\$'+5Ä	8 ' IÄ\$	B00QB	
7F(//01A/B0C<21"	7 ÄJ*K(F5'6G	Ä*!'5(OÄ&*PÄ\$'+5Ä	8 ' IÄ\$	B00QB	

Prep Batch: 94267

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
//01/202312	?>!@'55(02A	Ä*!'5<D"	8 ' IÄ\$	B/IQ2	
//01/0L2 21"D1N1S(7=	7 !\$%M(=E%GÄ	Ä*!'5<D"	8 ' IÄ\$	B/IQ2	
//01/0L2 21"D1N1T(7=-	7 !\$%M(=E%GÄ(->E5%&'!Ä	Ä*!'5<D"	8 ' IÄ\$	B/IQ2	
H4=(//01A/B3L<B1"	H'+(4*6!\$*5(=#E5Ä	Ä*!'5<D"	8 ' IÄ\$	B/IQ2	
7F(//01A/B3L<21"	7 ÄJ*K(F5'6G	Ä*!'5<D"	8 ' IÄ\$	B/IQ2	

Prep Batch: 94374

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
//01/202312	?>!@'55(02A	-% *5PÄK	8 ' IÄ\$	B/IQ2	
//01/202312(7=	?>!@'55(02A	-% *5PÄK	8 ' IÄ\$	B/IQ2	
//01/202312(7=-	?>!@'55(02A	-% *5PÄK	8 ' IÄ\$	B/IQ2	
H4=(//01A/BCN<B1F	H'+(4*6!\$*5(=#E5Ä	-% *5PÄK	8 ' IÄ\$	B/IQ2	
7F(//01A/BCN<21F	7 ÄJ*K(F5'6G	-% *5PÄK	8 ' IÄ\$	B/IQ2	

Analysis Batch: 94384

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
//01/202312	?>!@'55(02A	Ä*!'5<D"	8 ' IÄ\$	B/IQ2	A/B3L
//01/0L2 21"D1N1S(7=	7 !\$%M(=E%GÄ	Ä*!'5<D"	8 ' IÄ\$	B/IQ2	A/B3L
//01/0L2 21"D1N1T(7=-	7 !\$%M(=E%GÄ(->E5%&'!Ä	Ä*!'5<D"	8 ' IÄ\$	B/IQ2	A/B3L
H4=(//01A/B3L<B1"	H'+(4*6!\$*5(=#E5Ä	Ä*!'5<D"	8 ' IÄ\$	B/IQ2	A/B3L
7F(//01A/B3L<21"	7 ÄJ*K(F5'6G	Ä*!'5<D"	8 ' IÄ\$	B/IQ2	A/B3L

Analysis Batch: 94437

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
//01/202312	?>!@'55(02A	Ä*!'5(OÄ&*PÄ\$'+5Ä	8 ' IÄ\$	B00QL(OÄP(/Q/	A/B0I
//01/202312(7=	?>!@'55(02A	Ä*!'5(OÄ&*PÄ\$'+5Ä	8 ' IÄ\$	B00QL(OÄP(/Q/	A/B0I
//01/202312(7=-	?>!@'55(02A	Ä*!'5(OÄ&*PÄ\$'+5Ä	8 ' IÄ\$	B00QL(OÄP(/Q/	A/B0I
H4=(//01A/B0I<B1"	H'+(4*6!\$*5(=#E5Ä	Ä*!'5(OÄ&*PÄ\$'+5Ä	8 ' IÄ\$	B00QL(OÄP(/Q/	A/B0I
7F(//01A/B0I<21"	7 ÄJ*K(F5'6G	Ä*!'5(OÄ&*PÄ\$'+5Ä	8 ' IÄ\$	B00QL(OÄP(/Q/	A/B0I

Prep Batch: 94461

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
//01/202312	?>!@'55(02A	-% *5PÄK	8 ' IÄ\$	B00QB	
//01/2I031T12A14(7=	7 !\$%M(=E%GÄ	-% *5PÄK	8 ' IÄ\$	B00QB	
//01/2I031T12A1-(7=-	7 !\$%M(=E%GÄ(->E5%&'!Ä	-% *5PÄK	8 ' IÄ\$	B00QB	
H4=(//01A/BCN<B1-	H'+(4*6!\$*5(=#E5Ä	-% *5PÄK	8 ' IÄ\$	B00QB	
7F(//01A/BCN<21-	7 ÄJ*K(F5'6G	-% *5PÄK	8 ' IÄ\$	B00QB	

ÄÄ!"#Ä\$%&'(\$P%6Ä

QC Association Summary

45%Ä6!(.789(#Ä\$%' (.6&
:\$*Ä&!<=%!Ä.66>5(?>!@'55(02A

ÄÄ!"#Ä\$%&'()*+(-./01/202312

Metals (Continued)

Prep Batch: 94462

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
//01/202312	?>!@'55(02A	-% *5PÄK	8 ' IÄ\$	B00QB	
//01/23031S1N14(7=(R2000	7!\$%M(=E%GÄ	-% *5PÄK	8 ' IÄ\$	B00QB	
//01/23031S1N1-(7=- (R2000	7!\$%M(=E%GÄ(->E5%&'IÄ	-% *5PÄK	8 ' IÄ\$	B00QB	
H4=(//01A/BCN<B1U	H'+(4*6!\$*5(=#E5Ä	-% *5PÄK	8 ' IÄ\$	B00QB	
7F(//01A/BCN<21U	7 ÄJ*K(F5'6G	-% *5PÄK	8 ' IÄ\$	B00QB	

Analysis Batch: 94609

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
//01/202312	?>!@'55(02A	Ä *'5(OÄ&*PÄ\$'+5Ä	8 ' IÄ\$	B00QC	A/BOC
//01/2IBB1"1314(7=(RI	7!\$%M(=E%GÄ	Ä *'5(OÄ&*PÄ\$'+5Ä	8 ' IÄ\$	B00QC	A/BOC
//01/2IBB1"131-(7=- (RI	7 !\$%M(=E%GÄ(->E5%&'IÄ	Ä *'5(OÄ&*PÄ\$'+5Ä	8 ' IÄ\$	B00QC	A/BOC
H4=(//01A/BOC<B1"	H'+(4*6!\$*5(=#E5Ä	Ä *'5(OÄ&*PÄ\$'+5Ä	8 ' IÄ\$	B00QC	A/BOC
7F(//01A/BOC<21"	7 ÄJ*K(F5'6G	Ä *'5(OÄ&*PÄ\$'+5Ä	8 ' IÄ\$	B00QC	A/BOC

Analysis Batch: 94615

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
//01/202312	?>!@'55(02A	-% *5PÄK	8 ' IÄ\$	B/IQ2	A/NL/
//01/202312(7=	?>!@'55(02A	-% *5PÄK	8 ' IÄ\$	B/IQ2	A/NL/
//01/202312(7=-	?>!@'55(02A	-% *5PÄK	8 ' IÄ\$	B/IQ2	A/NL/
H4=(//01A/BCN<B1F	H'+(4*6!\$*5(=#E5Ä	-% *5PÄK	8 ' IÄ\$	B/IQ2	A/NL/
7F(//01A/BCN<21F	7 ÄJ*K(F5'6G	-% *5PÄK	8 ' IÄ\$	B/IQ2	A/NL/

Analysis Batch: 94631

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
//01/202312	?>!@'55(02A	Ä *'5(OÄ&*PÄ\$'+5Ä	8 ' IÄ\$	B00QL(OÄP(/Q/	A/BOI
//01/202312(7=	?>!@'55(02A	Ä *'5(OÄ&*PÄ\$'+5Ä	8 ' IÄ\$	B00QL(OÄP(/Q/	A/BOI
//01/202312(7=-	?>!@'55(02A	Ä *'5(OÄ&*PÄ\$'+5Ä	8 ' IÄ\$	B00QL(OÄP(/Q/	A/BOI
H4=(//01A/BOI<B1"	H'+(4*6!\$*5(=#E5Ä	Ä *'5(OÄ&*PÄ\$'+5Ä	8 ' IÄ\$	B00QL(OÄP(/Q/	A/BOI
7F(//01A/BOI<21"	7 ÄJ*K(F5'6G	Ä *'5(OÄ&*PÄ\$'+5Ä	8 ' IÄ\$	B00QL(OÄP(/Q/	A/BOI

Analysis Batch: 94650

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
//01/202312	?>!@'55(02A	-% *5PÄK	8 ' IÄ\$	B00QL(OÄP(/Q/	A//32
//01/21031T12A14(7=	7!\$%M(=E%GÄ	-% *5PÄK	8 ' IÄ\$	B00QL(OÄP(/Q/	A//32
//01/21031T12A1-(7=-	7!\$%M(=E%GÄ(->E5%&'IÄ	-% *5PÄK	8 ' IÄ\$	B00QL(OÄP(/Q/	A//32
H4=(//01A/BCN<B1-	H'+(4*6!\$*5(=#E5Ä	-% *5PÄK	8 ' IÄ\$	B00QL(OÄP(/Q/	A//32
7F(//01A/BCN<21-	7 ÄJ*K(F5'6G	-% *5PÄK	8 ' IÄ\$	B00QL(OÄP(/Q/	A//32

Analysis Batch: 94664

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
//01/202312	?>!@'55(02A	-% *5PÄK	8 ' IÄ\$	B00QL(OÄP(/Q/	A//32
//01/21031T12A14(7=	7!\$%M(=E%GÄ	-% *5PÄK	8 ' IÄ\$	B00QL(OÄP(/Q/	A//32
//01/21031T12A1-(7=-	7!\$%M(=E%GÄ(->E5%&'IÄ	-% *5PÄK	8 ' IÄ\$	B00QL(OÄP(/Q/	A//32
H4=(//01A/BCN<B1-	H'+(4*6!\$*5(=#E5Ä	-% *5PÄK	8 ' IÄ\$	B00QL(OÄP(/Q/	A//32
7F(//01A/BCN<21-	7 ÄJ*K(F5'6G	-% *5PÄK	8 ' IÄ\$	B00QL(OÄP(/Q/	A//32

Analysis Batch: 94706

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
//01/202312	?>!@'55(02A	-% *5PÄK	8 ' IÄ\$	B00QC	A//3B
//01/23031S1N14(7=(R2000	7!\$%M(=E%GÄ	-% *5PÄK	8 ' IÄ\$	B00QC	A//3B
//01/23031S1N1-(7=- (R2000	7!\$%M(=E%GÄ(->E5%&'IÄ	-% *5PÄK	8 ' IÄ\$	B00QC	A//3B

ÄÄ!"#Ä\$%&'(\$P%6Ä

QC Association Summary

45%Ä6!(.789*#Ä\$%&' (.6&
:\$*,Ä&!<=%!Ä.66>5(?>!@*55(02A

ÄÄ!"#Ä\$%&'()*+(-./01/202312

Metals (Continued)

Analysis Batch: 94706 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
H4=(//01A/BCN<B1U	H'+(4*6!\$*5(=#E5Ä	-% *5PÄK	8 ' !Ä\$	B00QC	A//3B
7F(//01A/BCN<21U	7 ÄJ*K(F5'6G	-% *5PÄK	8 ' !Ä\$	B00QC	A//3B

General Chemistry

Analysis Batch: 92078

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
//01/0CC312	? >!@*55(02A	Ä* !'5<D"	8 ' !Ä\$	=7(BI/0S	

Analysis Batch: 92226

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
//01/202312	? >!@*55(02A	Ä* !'5<D"	8 ' !Ä\$	=7IB20F	
H4=(//01ABBB3</	H'+(4*6!\$*5(=#E5Ä	Ä* !'5<D"	8 ' !Ä\$	=7IB20F	
H4=(//01ABBB3<I	H'+(4*6!\$*5(=#E5Ä(->E	Ä* !'5<D"	8 ' !Ä\$	=7IB20F	
V=F(//01ABBB3<2(V=F	7 ÄJ*K(F5'6G	Ä* !'5<D"	8 ' !Ä\$	=7IB20F	

Analysis Batch: 92257

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
//01/202312	? >!@*55(02A	Ä* !'5<D"	8 ' !Ä\$	=7(II/04	
//01/202312(7=	?>!@*55(02A	Ä* !'5<D"	8 ' !Ä\$	=7(II/04	
//01/202312(7=-	?>!@*55(02A	Ä* !'5<D"	8 ' !Ä\$	=7(II/04	
H4=(//01ABBIL<N	H'+(4*6!\$*5(=#E5Ä	Ä* !'5<D"	8 ' !Ä\$	=7(II/04	
7F(//01ABBIL</	7 ÄJ*K(F5'6G	Ä* !'5<D"	8 ' !Ä\$	=7(II/04	

Analysis Batch: 92262

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
//01/202312	? >!@*55(02A	Ä* !'5<D"	8 ' !Ä\$	2C0Q2	
//01/202312(-V	?>!@*55(02A	Ä* !'5<D"	8 ' !Ä\$	2C0Q2	
7F(//01ABB3B<I	7 ÄJ*K(F5'6G	Ä* !'5<D"	8 ' !Ä\$	2C0Q2	
7ÖH(//01ABB3B<N(7ÖH	H'+(4*6!\$*5(=#E5Ä	Ä* !'5<D"	8 ' !Ä\$	2C0Q2	

Analysis Batch: 92312

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
//01/0C/I1"12(7=	7 !'\$%M(=E%GÄ	Ä* !'5<D"	8 ' !Ä\$	=7(/I00(S(4	
//01/0C/I1"12(7=-	7!\$%M(=E%GÄ(->E5%&!Ä	Ä* !'5<D"	8 ' !Ä\$	=7(/I00(S(4	
//01/202312	? >!@*55(02A	Ä* !'5<D"	8 ' !Ä\$	=7(/I00(S(4	
H4=(//01ABN2B<A	H'+(4*6!\$*5(=#E5Ä	Ä* !'5<D"	8 ' !Ä\$	=7(/I00(S(4	
7F(//01ABN2B<20	7 ÄJ*K(F5'6G	Ä* !'5<D"	8 ' !Ä\$	=7(/I00(S(4	

Analysis Batch: 92544

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
//01/200B1:123(-V	->E5%&!Ä	Ä* !'5<D"	8 ' !Ä\$	=7(BI/0-	
//01/202312	? >!@*55(02A	Ä* !'5<D"	8 ' !Ä\$	=7(BI/0-	
H4=(//01ABI//<B	H'+(4*6!\$*5(=#E5Ä	Ä* !'5<D"	8 ' !Ä\$	=7(BI/0-	
7F(//01ABI//<2	7 ÄJ*K(F5'6G	Ä* !'5<D"	8 ' !Ä\$	=7(BI/0-	

Prep Batch: 92583

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
//01/03/31"121F(7=	7!\$%M(=E%GÄ	Ä* !'5<D"	8 ' !Ä\$	-% !'55<4D	
//01/03/31"1214(7=-	7!\$%M(=E%GÄ(->E5%&!Ä	Ä* !'5<D"	8 ' !Ä\$	-% !'55<4D	

ÄÄ!"#Ä\$%&'(\$P%6Ä

QC Association Summary

45%Ä6!(.789(#Ä\$%&'(.6&
:\$*,:Ä&!<=%!Ä.66>'5(?>!@*55(02A

ÄÄ!"#Ä\$%&'()*+(-./01/202312

General Chemistry (Continued)

Prep Batch: 92583 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
//01/202312	?>!@*55(02A	Ä*!'5<D"	8 ' !Ä\$	-% !%55<4D	
H4=(//01ABICN<B1"	H'+(4*6!\$*5(=#E5Ä	Ä*!'5<D"	8 ' !Ä\$	-% !%55<4D	
7F(//01ABICN<21"	7 ÄJ*K(F5'6G	Ä*!'5<D"	8 ' !Ä\$	-% !%55<4D	

Analysis Batch: 92613

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
//01/03/31"121F(7=	7!\$%M(=E%GÄ	Ä*!'5<D"	8 ' !Ä\$	=7(//100(4D(U	ABICN
//01/03/31"1214(7=-	7!\$%M(=E%GÄ(->E5%&!Ä	Ä*!'5<D"	8 ' !Ä\$	=7(//100(4D(U	ABICN
//01/202312	?>!@*55(02A	Ä*!'5<D"	8 ' !Ä\$	=7(//100(4D(U	ABICN
H4=(//01ABICN<B1"	H'+(4*6!\$*5(=#E5Ä	Ä*!'5<D"	8 ' !Ä\$	=7(//100(4D(U	ABICN
7F(//01ABICN<21"	7 ÄJ*K(F5'6G	Ä*!'5<D"	8 ' !Ä\$	=7(//100(4D(U	ABICN

Analysis Batch: 92649

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
//01/0ABC141/N(7=	7!\$%M(=E%GÄ	Ä*!'5<D"	8 ' !Ä\$	=7(//IN20F	
//01/0ABC141/N(7=-	7!\$%M(=E%GÄ(->E5%&!Ä	Ä*!'5<D"	8 ' !Ä\$	=7(//IN20F	
//01/202312	?>!@*55(02A	Ä*!'5<D"	8 ' !Ä\$	=7(//IN20F	
H4=(//01AB3/A<3	H'+(4*6!\$*5(=#E5Ä	Ä*!'5<D"	8 ' !Ä\$	=7(//IN20F	
7F(//01AB3/A<L	7 ÄJ*K(F5'6G	Ä*!'5<D"	8 ' !Ä\$	=7(//IN20F	

Prep Batch: 93362

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
//01/202312	?>!@*55(02A	Ä*!'5<D"	8 ' !Ä\$	=7(//100(D9N(F	
//01/202312(7=	?>!@*55(02A	Ä*!'5<D"	8 ' !Ä\$	=7(//100(D9N(F	
//01/202312(7=-	?>!@*55(02A	Ä*!'5<D"	8 ' !Ä\$	=7(//100(D9N(F	
H4=(//01ANN3B<21"	H'+(4*6!\$*5(=#E5Ä	Ä*!'5<D"	8 ' !Ä\$	=7(//100(D9N(F	
7F(//01ANN3B<B1"	7 ÄJ*K(F5'6G	Ä*!'5<D"	8 ' !Ä\$	=7(//100(D9N(F	

Analysis Batch: 93370

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
//01/202312	?>!@*55(02A	Ä*!'5<D"	8 ' !Ä\$	=7(B//04	
//01/2 2I21"1/(-V	->E5%&!Ä	Ä*!'5<D"	8 ' !Ä\$	=7(B//04	
H4=(//01ANNL0<B	H'+(4*6!\$*5(=#E5Ä	Ä*!'5<D"	8 ' !Ä\$	=7(B//04	
7F(//01ANNL0<2	7 ÄJ*K(F5'6G	Ä*!'5<D"	8 ' !Ä\$	=7(B//04	

Analysis Batch: 93380

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
//01/202312	?>!@*55(02A	Ä*!'5<D"	8 ' !Ä\$	=7(//100(D9N(4	ANN3B
//01/202312(7=	?>!@*55(02A	Ä*!'5<D"	8 ' !Ä\$	=7(//100(D9N(4	ANN3B
//01/202312(7=-	?>!@*55(02A	Ä*!'5<D"	8 ' !Ä\$	=7(//100(D9N(4	ANN3B
H4=(//01ANN3B<21"	H'+(4*6!\$*5(=#E5Ä	Ä*!'5<D"	8 ' !Ä\$	=7(//100(D9N(4	ANN3B
7F(//01ANN3B<B1"	7 ÄJ*K(F5'6G	Ä*!'5<D"	8 ' !Ä\$	=7(//100(D9N(4	ANN3B

Prep Batch: 94150

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
//01/0CC312	?>!@*55(02A	Ä*!'5<D"	8 ' !Ä\$	233"	
H4=(//01A/2I0<B1"	H'+(4*6!\$*5(=#E5Ä	Ä*!'5<D"	8 ' !Ä\$	233"	
H4=(//01A/2I0<N1"	H'+(4*6!\$*5(=#E5Ä(->E	Ä*!'5<D"	8 ' !Ä\$	233"	
7F(//01A/2I0<21"	7 ÄJ*K(F5'6G	Ä*!'5<D"	8 ' !Ä\$	233"	

ÄÄ!"#Ä\$%&'(\$P%6Ä

QC Association Summary

45%Ä6!(.789*#Ä\$%&'(.6&
:\$*,:Ä&!<=%!Ä.66>'5(?>!@'55(02A

ÄÄ!"#Ä\$%&'()*+(-./01/202312

General Chemistry (Continued)

Analysis Batch: 94237

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
//01/0CC312	?>!@'55(02A	Ä*!'5<D"	8 ' IÄ\$	233/"	A/210
H4=(//01A/210<B1"	H'+(4*6!\$*5(=#E5Ä	Ä*!'5<D"	8 ' IÄ\$	233/"	A/210
H4=(//01A/210<N1"	H'+(4*6!\$*5(=#E5Ä(->E	Ä*!'5<D"	8 ' IÄ\$	233/"	A/210
7F(//01A/210<21"	7 ÄJ*K(F5'6G	Ä*!'5<D"	8 ' IÄ\$	233/"	A/210

Analysis Batch: 99365

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
//01/0CC312	?>!@'55(02A	Ä*!'5<D"	8 ' IÄ\$	2B0Q2	
//01/0CC312(-V	?>!@'55(02A	Ä*!'5<D"	8 ' IÄ\$	2B0Q2	
H4=(//01AAN31</	H'+(4*6!\$*5(=#E5Ä	Ä*!'5<D"	8 ' IÄ\$	2B0Q2	
7F(//01AAN31<N	7 ÄJ*K(F5'6G	Ä*!'5<D"	8 ' IÄ\$	2B0Q2	

Rad

Prep Batch: 40953

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
/001LN2NC1*7121F(7=	7!\$%M(=E%GÄ	Ä*!'5<D"	8 ' IÄ\$	UP'E*\$!'%*6	
/001LN2NC1*71214(7=FÄ	7!\$%M(=E%GÄ	Ä*!'5<D"	8 ' IÄ\$	UP'E*\$!'%*6	
/001LN2NC1*7121(-V	->E5%&!Ä	Ä*!'5<D"	8 ' IÄ\$	UP'E*\$!'%*6	
//01/202312	?>!@'55(02A	Ä*!'5<D"	8 ' IÄ\$	UP'E*\$!'%*6	
H4=(2301/0AIN<B1"	H'+(4*6!\$*5(=#E5Ä	Ä*!'5<D"	8 ' IÄ\$	UP'E*\$!'%*6	
H4=F(2301/0AIN<N1"	H'+(4*6!\$*5(=#E5Ä	Ä*!'5<D"	8 ' IÄ\$	UP'E*\$!'%*6	
7F(2301/0AIN<21"	7 ÄJ*K(F5'6G	Ä*!'5<D"	8 ' IÄ\$	UP'E*\$!'%*6	

Prep Batch: 40993

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
//01/202312	?>!@'55(02A	Ä*!'5<D"	8 ' IÄ\$	:\$Ä&=ÄE1B2	
//01/202312(-V	?>!@'55(02A	Ä*!'5<D"	8 ' IÄ\$	:\$Ä&=ÄE1B2	
H4=(2301/0AAN<B1"	H'+(4*6!\$*5(=#E5Ä	Ä*!'5<D"	8 ' IÄ\$	:\$Ä&=ÄE1B2	
7F(2301/0AAN<21"	7 ÄJ*K(F5'6G	Ä*!'5<D"	8 ' IÄ\$	:\$Ä&=ÄE1B2	

Prep Batch: 40995

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
//01/202312	?>!@'55(02A	Ä*!'5<D"	8 ' IÄ\$	:\$Ä&=ÄEW0	
//01/202312(-V	?>!@'55(02A	Ä*!'5<D"	8 ' IÄ\$	:\$Ä&=ÄEW0	
H4=(2301/0AAI<B1"	H'+(4*6!\$*5(=#E5Ä	Ä*!'5<D"	8 ' IÄ\$	:\$Ä&=ÄEW0	
7F(2301/0AAI<21"	7 ÄJ*K(F5'6G	Ä*!'5<D"	8 ' IÄ\$	:\$Ä&=ÄEW0	

Prep Batch: 41017

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
//01/202312	?>!@'55(02A	Ä*!'5<D"	8 ' IÄ\$	:\$Ä&=ÄE1L	
//01/202312(-V	?>!@'55(02A	Ä*!'5<D"	8 ' IÄ\$	:\$Ä&=ÄE1L	
H4=(2301/202L<B1"	H'+(4*6!\$*5(=#E5Ä	Ä*!'5<D"	8 ' IÄ\$	:\$Ä&=ÄE1L	
7F(2301/202L<21"	7 ÄJ*K(F5'6G	Ä*!'5<D"	8 ' IÄ\$	:\$Ä&=ÄE1L	

Prep Batch: 41084

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
//01/202312	?>!@'55(02A	Ä*!'5<D"	8 ' IÄ\$	UMI4JS*#	
//01/202312(-V	?>!@'55(02A	Ä*!'5<D"	8 ' IÄ\$	UMI4JS*#	
H4=(2301/20C<B1"	H'+(4*6!\$*5(=#E5Ä	Ä*!'5<D"	8 ' IÄ\$	UMI4JS*#	

ÄÄ!"#Ä\$%&'(\$P%6Ä

QC Association Summary

45%Ä6!(789*#Ä\$%&' (,6&
:*\$;Ä&!<=%!Ä.66>'5(?>!@'55(02A

ÄÄ!"#Ä\$%&'()*+(-./01/202312

Rad (Continued)

Prep Batch: 41084 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
7F(2301/20C/<21"	7 ÄJ*K(F5'6G	Ä*!'5<D"	8 ' !Ä\$	UMI4J\$*#	

Prep Batch: 42152

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
//01/202312	?>!@'55(02A	Ä*!'5<D"	8 ' !Ä\$	H=4W-% !W=> E	
//01/202312(-V	?>!@'55(02A	Ä*!'5<D"	8 ' !Ä\$	H=4W-% !W=> E	
//01/202312(7=	?>!@'55(02A	Ä*!'5<D"	8 ' !Ä\$	H=4W-% !W=> E	
H4=(2301/B2IB<B1"	H'+(4*6!\$*5(=#E5Ä	Ä*!'5<D"	8 ' !Ä\$	H=4W-% !W=> E	
7F(2301/B2IB<21"	7 ÄJ*K(F5'6G	Ä*!'5<D"	8 ' !Ä\$	H=4W-% !W=> E	

Prep Batch: 42216

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
//01/202312	?>!@'55(02A	Ä*!'5<D"	8 ' !Ä\$	S%55WTÄ*10	
//01/202312(-V	?>!@'55(02A	Ä*!'5<D"	8 ' !Ä\$	S%55WTÄ*10	
H4=(2301/BB23<B1"	H'+(4*6!\$*5(=#E5Ä	Ä*!'5<D"	8 ' !Ä\$	S%55WTÄ*10	
7F(2301/BB23<21"	7 ÄJ*K(F5'6G	Ä*!'5<D"	8 ' !Ä\$	S%55WTÄ*10	

Biology

Analysis Batch: 92814

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
//01/0CC312	?>!@'55(02A	Ä*!'5<D"	8 ' !Ä\$	=7(ABB2U	

Analysis Batch: 92816

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
//01/0CC312	?>!@'55(02A	Ä*!'5<D"	8 ' !Ä\$	=7(ABB2S	

ÄÄ!"#Ä\$%&'(\$P%6Ä

Definitions/Glossary

45%Ä6!(.789(#Ä\$%' (.6&
:*\$;Ä&!<=%!Ä.66>'5(?>!@'55(02A

ÄÄ!"#Ä\$%&'()*+(-./01/202312

Qualifiers

GC/MS Semi VOA

Qualifier	Qualifier Description
BC	B4=<B4--(\$Ä&*DÄ\$E(+*DÄ(#Ä!F*G(&*6!\$*5(5%#%!
H"	IÄ5'!%DÄ(JÄ\$&Ä6!@Ä&Ä6&Ä(*>!(* @ (&*6!\$*5
BI	B4=<B4--(\$Ä&*DÄ\$E(+Ä5*K(#Ä!F*G(&*6!\$*5(5%#%!

HPLC/IC

Qualifier	Qualifier Description
B7	7=(6G<*\$(7=-('+*DÄ('&&ÄJ!'6&Ä(5%#%! L(=ÄÄ(H5'6M(=J%MÄ(NB4=O
HH	=#J5Ä(P/(Q(J%MÄ(&*6&Ä6!\$!*%*6

Dioxin

Qualifier	Qualifier Description
JR-Q	S !%#!ÄG(D'5>ÄT(D'5>Ä(U(5*KÄ ! (!6G*\$G(N7CBOR(+>!(P!F\$B(7
7H	"6'5E!Ä(J\$Ä Ä6!(%6(!FÄ(#Ä!F*G(+5'6M
V	ÄFÄ(% *#Ä\$(% (V>5% @%ÄG(' (J* %!%DÄ5E(%GÄ6!% @%ÄG(Ä*+>!(P!F\$B(7 !FÄ Ä(#J5Ä L

Metals

Qualifier	Qualifier Description
BC	B4=<B4--(\$Ä&*DÄ\$E(+*DÄ(#Ä!F*G(&*6!\$*5(5%#%!
JR-Q	S !%#!ÄG(D'5>ÄT(D'5>Ä(U(5*KÄ ! (!6G*\$G(N7CBOR(+>!(P!F\$B(7
7H	"6'5E!Ä(J\$Ä Ä6!(%6(!FÄ(#Ä!F*G(+5'6M
HH	=#J5Ä(P/(Q(J%MÄ(&*6&Ä6!\$!*%*6

General Chemistry

Qualifier	Qualifier Description
JR-Q	S !%#!ÄG(D'5>ÄT(D'5>Ä(U(5*KÄ ! (!6G*\$G(N7CBOR(+>!(P!F\$B(7
HW	"6'5EXÄG(*>!(* @ (F*5G%6Y(!%#Ä

Rad

Qualifier	Qualifier Description
W	,6G%&!Ä (!FÄ('6'5E!Ä(K' ('6'5EXÄG(@*\$+(+>!(6*!(GÄ!Ä&!ÄGL

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
Z	B% !ÄG(>6GÄ\$(IFÄ(-[&*>#6(!*(GÄ %Y6!Ä!(F!(IFÄ(\$Ä >5U%ÄÄ) *6'(G\$E(KÄ%YF!(+ ' %
II	:Ä\$&Ä6!(IÄ&*DÄ\$E
4J^	4*6!%6 (6*(^\$ÄÄ(B%V>%G
-SI	->J5%&!Ä(Ä\$*\$(\$!*%*(N6*\$#5%XÄG(+ *5 @Ä/6\$Ä6
-BR(I"R(ISR,.)	,6G%&!Ä ('(-%5>!%*6R(IÄ'6'5E % R(IÄ1Ä_!\$&Ä6!%*6'5(6%!'5(#Ä!5 <6%*6(6'5E % (*@(IFÄ(#J5Ä
-B4	-Ä&% %*6(5ÄDÄ5(&*6&Ä6!\$!*%*6
7-"	7 %6%#>#(GÄ!Ä&!' +5Ä('&!%D%IE
S-B	S !%#!ÄG(-Ä!Ä&!%*6(B%#%!
7-4	7 %6%#>#(GÄ!Ä&!' +5Ä(&*6&Ä6!\$!*%*6
7-B	7 Ä!F*G(-Ä!Ä&!%*6(B%#%!
7B	7%6%#>#(BÄDÄ5(N-%*_%6O
J-	J*(GÄ!Ä&!ÄG!(IFÄ(\$ÄJ*\$!%6Y(5%#%!(N*\$\$(S\$B(%@(F*K6O
:CB	:\$&!%&5(C>'6!%!!%*6(B%#%!
C4	C>'5!E(4*6!\$*5
ISI	IÄ5'!%DÄ(Ä\$*\$(\$!*%*
IB	IÄJ*\$!%6Y(B%#%!(IÄV>Ä !ÄG(B%#%!(N!G%*&FÄ#% !\$EO
I:-	IÄ5'!%DÄ(Ä\$&Ä6!(@Ä&Ä6&ÄR('(#Ä' >\$Ä(*@(IFÄ(\$Ä5!@ÄÄ6&Ä)Ä!KÄÄ6!(K*(J*%6!
ÄS^	Ä*_%&#&IE(SV>%D'5Ä6!(^&!*\$(N-%*_%6O
ÄSC	Ä*_%&#&IE(SV>%D'5Ä6!(C>!*%Ä6!(N-%*_%6O

ÄÄ!"#Ä\$%&'(\$D%6Ä

Certification Summary

ÄÄ !"#\$\$%&'()*+,-./:;
:2;!,#<=#!\$%&'>-Ä%?>#@-ÄÄ%68A

O! .#)*!+ ,-%123%/4\$%55675868978

Laboratory: TestAmerica Irvine

ÄÄ%,!+# @ ,# 2".%B!ÄC%3D%B .%Ä-32+ -#2+D%-+!%Ä+#!@E-#F2#%IÄGGÄ , -3Ä!%#2%B .%+!G2+#E

Authority	Program	EPA Region	Certification ID	Expiration Date
)Ä-.H-	==#!%:+2K+*	86	Ä)68IJ8	697J678J
) + L2"-	==#!%:+2K+*	A	) M69N8	8678J78J
Ä-Ä @2+" -	O)%Ä#D%=-"## 2"%4 .#+ ,#.	A	86P19	687J8785
Ä-Ä @2+" -	FQO):	A	886RÄ)	687J8785
Ä-Ä @2+" -	==#!%:+2K+*	A	PN69	697J6785
S>-*	==#!%:+2K+*	A	Ä!+#E%F2E%8PE66P+	6J7PR78J%T
(-U-	==#!%:+2K+*	A	F<)	687J8785
FIV-C-	==#!%:+2K+*	A	Ä)68IJ8P66N)	6N7J878J
F2+#B!+"%&-+ "-.%/Ä-"C.	==#!%:+2K+*	A	&:666P	687J8785
?+IK2"	FQO):	86	566I	6A78P78J
W=4)	XIC!+-Ä		:JJ676A7666R6	69769785
W=Q:) %MÄ&Y	XIC!+-Ä	8	Ä)68IJ8	687J878I

Laboratory: TestAmerica Sacramento

ÄÄ%,!+# @ ,# 2".%B!ÄC%3D%B .%Ä-32+ -#2+D%-+!%Ä+#!@E-#F2#%IÄGGÄ , -3Ä!%#2%B .%+!G2+#E

Authority	Program	EPA Region	Certification ID	Expiration Date
)PO)	424%QO):		PAPR768	687J8785
)Ä-.H-%ZW=0[	==#!%:+2K+*	86	W=076I	8P78R78J
) + L2"-	==#!%:+2K+*	A	) M6N6R	6R7878J%T
) + H."-.%4Q\	==#!%:+2K+*	9	RR769A8	6978N78J
Ä-Ä @2+" -	FQO):	A	888AÄ)	687J8785
Ä2Ä2+-C2	==#!%:+2K+*	R	F<)	6R7J878J
Ä2""! ,# ,>#	==#!%:+2K+*	8	: (769A8	697J678J
XÄ2+ C-	FQO):	5	QRNIN6	697J678J
S>-*	==#!%:+2K+*	A	F<)	6R7J878J
(-U-	==#!%:+2K+*	A	F<)	687J8785
/ÄÄ "2 .	FQO):	I	P66696	6J78N785
] "-.-	FQO):	N	Q786JNI	867J878J
O2> . "-	FQO):	9	J698P	697J678J
& ,B K"	==#!%:+2K+*	I	AA5N	687J8785
FIV-C-	==#!%:+2K+*	A	Ä)55	6N7J878J
FIU%1!+.ID	FQO):	P	Ä)66I	697J678J
FIU%2+H	FQO):	P	88999	65768785
F2+#B!+"%&-+ "-.%/Ä-"C.	==#!%:+2K+*	A	&:666N	6P768785
?+IK2"	FQO):	86	Ä)P6666I	6J7PR785
:!""DÄV-" -	FQO):	J	9R768PNP	6J7J8785
=2>#B%Ä-+2Ä "-	==#!%:+2K+*	5	RN685	697J678J
O! _-	FQO):	9	0865N65JAA76R70`	6I7J878J
W=%X .B%a%' ÄCÄ @!	XIC!+-Ä		OQ85RJRR76	8P7J878J
W=4)	XIC!+-Ä		:JJ678 87665J9	8P7J6785
W=Q:) %MÄ&Y	XIC!+-Ä	8	Ä)66655	88769785
W#-B	FQO):	R	\W)F8	687J8785
' - .B "K#2"	==#!%:+2K+*	86	ÄIR8	6I76I78J
' !.#%bK "-	==#!%:+2K+*	J	AAJ6Ä	8P7J878J
' !.#%bK " -%4Q:	==#!%:+2K+*	J	JJ5	6N7J878J
' D2* "K	==#!%:+2K+*	R	R0&=7\	687J8785

Laboratory: TestAmerica St. Louis

ÄÄ%,!+# @ ,# 2".%B!ÄC%3D%B .%Ä-32+ -#2+D%-+!%Ä+#!@E-#F2#%IÄGGÄ , -3Ä!%#2%B .%+!G2+#E

T%Q_G +IC%,!+# @ ,# 2"% .%,>+!#ÄD%GI"C "K%+!"IU-ÄÄ%ÄÄ%ÄÄ%

O! .#)*!+ ,-%/ +V "!

Certification Summary

ÄÄ !"#%&'()*+,-./:;
:2;!#<=#!\$%&'>-Ä%?>#@-ÄÄ%68A

O! .#)*!+ ,-%123%/4\$%55675868978

Laboratory: TestAmerica St. Louis (Continued)

)ÄÄ%,!+# @ ,# 2".%B!ÄC%3D%#B .%Ä-32+ -#2+D%-+!%Ä+#!@-#%#2#%!ÄÄGGÄ , -3Ä!%#2%#B .%+!G2+#E

Authority	Program	EPA Region	Certification ID	Expiration Date
)Ä-.H-	=#-#!%:+2K+*-	86	&?666I5	697J678J
Ä-Ä @2+" -	FQO):	A	PI5P	6J7J8785%T
Ä2""!,# ,>#	=#-#!%:+2K+*-	8	: (76P58	6J7J878J%T
XÄ2+ C-	FQO):	5	QRN9RA	697J678J
/ÄÄ "2 .	FQO):	I	P666PJ	887J678J
/2U-	=#-#!%:+2K+*-	N	JNJ	8P768785
]-"-.	FQO):	N	Q786PJ9	867J878J
]|"#>,HD	=#-#!%:+2K+*-	5	A68PI	8P7J878J
O7)7c	424%QO):		OPJ6I	6978678J
O2> ."-	FQO):	9	8698I8	697J678J
O2> ."-	FQO):	9	O)6N6689	8P7J878J
&-+DÄ-"C	=#-#!%:+2K+*-	J	J86	6A7J678J%T
& ..2>+	=#-#!%:+2K+*-	N	NR6	697J678J
F!V-C-	=#-#!%:+2K+*-	A	& ?666I5P68J78	6N7J878J
F!U%1!+.!ID	FQO):	P	& ?66P	697J678J
F!U%2+H	FQO):	P	88989	65768785
FYÄ	FYÄ		P57P5R8N768	8P7J87PP
?HÄ-B2*-	=#-#!%:+2K+*-	9	AAAN	6R7J878J
:!""DÄV"-	FQO):	J	9R766I56	6P7PR785
=2>#B%Ä-+2Ä "-	=#-#!%:+2K+*-	5	R66P	697J678J
O! _-	FQO):	9	0865N658AJ	6N7J878J
W=4)	XICI+-Ä		:JJ676N7668PP	6876J785
W=Q:) %!K%b%=4')	XICI+-Ä	8	F<)	6R7J6785
W#-B	FQO):	R	&?666I5P68P75	697J678J
b +K " -	FQO):	J	596PJ6	6978578J
' - .B "K#2"	=#-#!%:+2K+*-	86	Ä8J86	6R7J878J
' ! .#%b+K " -%4Q:	=#-#!%:+2K+*-	J	JR8	6R7J678J

T%Q_G +IC%,!+# @ ,# 2"% .%,>+#!#ÄD%G! "K%+!"IU-ÄÄ!C%V%ÄCE

O! .#)*!+ ,-%/+V "!

EMSL Analytical, Inc.

200 Route 130 North, Cinnaminson, NJ 08077

Phone/Fax: (800) 220-3675/ 786-0262

<http://www.emsl.com> E-mail: MicrobiologyLab@emsl.com



Client: Test America - Irvine, CA 17461 Derian Avenue, Suite 100 Irvine, CA 92614	EMSL Order ID: 611300369
Attn: Debby Wilson	Date Received: 3/19/2013
Project: Boeing SSFL Outfalls - 44002624	Date Analyzed: 3/25/2013
	Date Reported: 3/25/2013
	Date Amended:

Real-Time PCR Analysis for Human *Bacteroides*

Based on a published method SAM: 348 - 357, 2010), EMSL Test Code: M199, Revision No. 3, 04/18/2011

Lab Sample Number	Client Sample ID	Location	Amount Received	Amount Sampled	CEs /100 mL
611300369-1	Outfall 019 (440-40886-1)	Boeing SSFL	125 ml	125 ml	None Detected

EMSL maintains liability limited to cost of analysis. Interpretation of the data contained in this report is the responsibility of the client. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. The above test report relates only to the items tested. EMSL bears no responsibility for sample collection activities or analytical method limitations.

Note: The PCR primer is HF183 and the qPCR probe and primer was evaluated in 2010 by EPA scientists. The real-time PCR based on HF183 detects human specific bacteroides predominantly with minor cross-detections on chicken and dog fecal materials. CEs: Cell Equivalents, measured by PCR using genomic DNA standards.

Quany L.
Quanyi "Charlie" Li, Ph.D.
Director, DNA Analysis Laboratory



TRUESDAIL LABORATORIES, INC.

EXCELLENCE IN INDEPENDENT TESTING



Established 1931

April 3, 2013

14201 FRANKLIN AVENUE
TUSTIN, CALIFORNIA 92780-7008
(714) 730-6239 · FAX (714) 730-6462
www.truesdail.com

Client: Test America
17461 Derian Avenue, Suite 100
Irvine, CA 92614
Attention: Debby Wilson

Project Name: Annual Outfall 019
Project Number: 44002624

Date Received: 03/21/13
Truesdail Project: 806990

Case Narrative

Sample Receipt The sample was received at 5.1 °C and in good condition. It was kept in a refrigerator until analysis. Thereafter, it will be kept in ambient storage for an additional 2 months before disposal. Any anomalies would be noted in the "Comments" section.

Analysis The analysis was performed as requested on the chain-of-custody.

Quality Control The analytical results for each batch of samples performed include one set of laboratory control sample/laboratory control sample duplicate (LCS/LCSD), one set of matrix spike/matrix spike duplicate (MS/MSD), and a reagent blank (Method blank). Any exceptions or problems would be noted in the "Comments" section.

Comments Matrix spike and Matrix spike duplicate were performed on sample 806990-001. All quality assurance requirements set forth by the method specification and all quality control recoveries were within the laboratory acceptance limits. The sample was received past method specified hold time. Ms. Debby Wilson approved the analysis of the sample. No anomalies or nonconformance events occurred during the course of analysis.

Jeff Lee
Project Manager

TRUESDAIL LABORATORIES, INC.

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www.truesdail.com

REPORT

Client: TestAmerica Analytical - Irvine

17461 Derian Avenue, Suite 100

Irvine, CA 92614

Attention: Debby Wilson

Project Name: Annual Outfall 019

Project Number: 44002624

P.O. Number: 44002624

Release Number:

Laboratory No. 806990

Page 1 of 2

Printed 4/4/2013

Samples Received on 3/21/2013 8:16:00 AM

Field ID	Lab ID	Collected	Matrix
Outfall 019	806990-001	03/15/2013 11:45	Water

EPA 8315 M-Hydrazines (water)

Batch 710341

Parameter	Unit	Analyzed	DF	MDL	RL	Result
806990-001 Hydrazine	ug/L	03/22/2013 19:28	1	0.510	1.00	ND
Monomethyl Hydrazine	ug/L	03/22/2013 19:28	1	3.41	5.00	ND
Unsymmetrical Dimethyl Hydrazine	ug/L	03/22/2013 19:28	1	2.05	5.00	ND

Method Blank

Parameter	Unit	DF	Result
Hydrazine	ug/L	1	ND
Monomethyl Hydrazine	ug/L	1	ND
Unsymmetrical Dimethyl Hydr:	ug/L	1	ND

Lab Control Sample

Parameter	Unit	DF	Result	Expected	Recovery	Acceptance Range
Hydrazine	ug/L	1	7.18	10.0	71.8	50 - 150
Monomethyl Hydrazine	ug/L	1	44.2	50.0	88.4	50 - 150
Unsymmetrical Dimethyl Hydr:	ug/L	1	45.6	50.0	91.2	50 - 150

Lab Control Sample Duplicate

Parameter	Unit	DF	Result	Expected	Recovery	Acceptance Range
Hydrazine	ug/L	1	7.81	10.0	78.1	50 - 150
Monomethyl Hydrazine	ug/L	1	44.8	50.0	89.6	50 - 150
Unsymmetrical Dimethyl Hydr:	ug/L	1	45.9	50.0	91.8	50 - 150

This report applies only to the sample, or samples, investigated and is not necessarily indicative of the quality or condition of apparently identical or similar products. As a mutual protection to clients, the public, and these laboratories, this report is submitted and accepted for the exclusive use of the client to whom it is addressed and upon the condition that it is not to be used, in whole or in part, in any advertising or publicity matter without prior written authorization from Truesdail Laboratories.



Report Continued

Client: TestAmerica Analytical - Irvine

Project Name: Annual Outfall 019

Page 2 of 2

Project Number: 44002624

Printed 4/4/2013

Matrix Spike

Lab ID = 806990-001

Parameter	Unit	DF	Result	Expected/Added	Recovery	Acceptance Range
Hydrazine	ug/L	1	8.50	10.0(10.0)	85.0	45 - 146
Monomethyl Hydrazine	ug/L	1	44.4	50.0(50.0)	88.8	7 - 149
Unsymmetrical Dimethyl Hydr:	ug/L	1	48.2	50.0(50.0)	96.4	45 - 137

Matrix Spike Duplicate

Lab ID = 806990-001

Parameter	Unit	DF	Result	Expected/Added	Recovery	Acceptance Range
Hydrazine	ug/L	1	8.60	10.0(10.0)	86.0	146 - 146
Monomethyl Hydrazine	ug/L	1	42.8	50.0(50.0)	85.6	149 - 149
Unsymmetrical Dimethyl Hydr:	ug/L	1	48.4	50.0(50.0)	96.8	137 - 137

MRCSS - Secondary

Parameter	Unit	DF	Result	Expected	Recovery	Acceptance Range
Hydrazine	ug/L	1	8.64	10.0	86.4	85 - 115
Monomethyl Hydrazine	ug/L	1	48.4	50.0	96.8	85 - 115
Unsymmetrical Dimethyl Hydr:	ug/L	1	51.4	50.0	103	85 - 115

MRCVS - Primary

Parameter	Unit	DF	Result	Expected	Recovery	Acceptance Range
Hydrazine	ug/L	1	10.1	10.0	101	85 - 115
Monomethyl Hydrazine	ug/L	1	51.9	50.0	104	85 - 115
Unsymmetrical Dimethyl Hydr:	ug/L	1	55.1	50.0	110	85 - 115

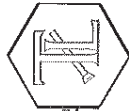
Respectfully submitted,

TRUESDAIL LABORATORIES, INC.

Jeff Lee

Assistant Project Manager

This report applies only to the sample, or samples, investigated and is not necessarily indicative of the quality or condition of apparently identical or similar products. As a mutual protection to clients, the public, and these laboratories, this report is submitted and accepted for the exclusive use of the client to whom it is addressed and upon the condition that it is not to be used, in whole or in part, in any advertising or publicity matter without prior written authorization from Truesdail Laboratories.



Client: Test America
 17461 Derian Avenue, Suite 100
 Irvine, CA 92614

Attention: Debby Wilson
Project Name: Annual Outfall 019
Method Number: 8315 (Modified)
Investigation: Hydrazines

Laboratory No: 806990
Report Date: April 3, 2013
Sampling Date: March 15, 2013
Receiving Date: March 21, 2013
Analysis Date: March 22, 2013
Reported By: JS

Qualifier Codes and Definitions

<u>Code</u>	<u>Definition</u>
MDL	Method Detection Limit
PQL	Practical Quantitation Limit
ND	Not Detected: Analyte is not detected at or above the method detection limit.
N/A	Not Applicable
ICV	Initial Calibration Verification: First source calibration standard run at a mid-level spike prior to samples.
QCS	Quality Control Standard: Second source calibration standard run at a mid-level spike after all samples.
MB	Method Blank: Reagent water extracted and run with each batch of 20 samples to demonstrate that all analytes are not detected from the extraction process.
LCS (D)	Laboratory Control Spike: Second source standard spiked into blank matrix and extracted and run with each batch of 20 samples (run in duplicate).
MS (D)	Matrix Spike: Second source standard spiked into sample matrix and extracted and run with each batch of 20 samples (run in duplicate).
RPD	Relative Percent Difference: A calculated value of the deviation between the spikes and spike duplicates to measure precision.
J	J-flags: Any result found between the MDL and the PQL will be reported with a "J" attached.
Flag	Pass if within Control Limits; otherwise "Fail"



LABORATORY REPORT



**Aquatic
Testing
Laboratories**

"dedicated to providing quality aquatic toxicity testing"

4350 Transport Street, Unit 107
Ventura, CA 93003
(805) 650-0546 FAX (805) 650-0756
CA DOHS ELAP Cert. No.: 1775

Date: March 24, 2013
Client: TestAmerica, Irvine
17461 Derian Ave., Suite 100
Irvine, CA 92614
Attn: Debby Wilson

Laboratory No.: A-13031508-001
Job No.: 440-41016-1
Sample I.D.: Outfall 019 (440-41016-1)

Sample Control: The sample was received by ATL chilled, within the recommended hold time and with the chain of custody record attached. Testing conducted on only one sample per client instruction.

Date Sampled: 03/15/13
Date Received: 03/15/13
Temp. Received: 1.6°C
Chlorine (TRC): 0.0 mg/l
Date Tested: 03/16/13 to 03/23/13

Sample Analysis: The following analyses were performed on your sample:

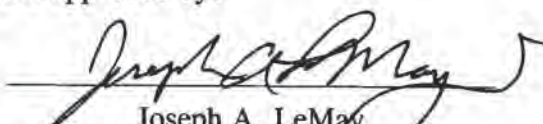
Fathead Minnow 96hr Percent Survival Bioassay (EPA Method 2000.0).
Ceriodaphnia dubia Survival and Reproduction Test (EPA Method 1002).

Attached are the test data generated from the analysis of your sample. All testing was conducted under the direct supervision of Joseph A. LeMay. Daily test readings were taken by Joseph A. LeMay (initialed: JAL) and Jacob LeMay (initialed: J).

Result Summary:

Acute:	Survival	TUa
Fathead Minnow:	100%	0.0
Chronic:	NOEC	TUc
<i>Ceriodaphnia</i> Survival:	100%	1.0
<i>Ceriodaphnia</i> Reproduction:	100%	1.0

Quality Control: Reviewed and approved by:


Joseph A. LeMay
Laboratory Director

FATHEAD MINNOW PERCENT SURVIVAL TEST
EPA Method 2000.0



Lab No.: A-13031508-001

Client/ID: TestAmerica - Outfall 019

Start Date: 03/16/2013

TEST SUMMARY

Species: *Pimephales promelas*.

Age: 14 (1-14) days.

Regulations: NPDES.

Test solution volume: 250 ml.

Feeding: prior to renewal at 48 hrs.

Number of replicates: 2.

Control water: Moderately hard reconstituted water.

Photoperiod: 16/8 hrs light/dark.

Source: In-laboratory Culture.

Test type: Static-Renewal.

Test Protocol: EPA-821-R-02-012.

Endpoints: Percent Survival at 96 hrs.

Test chamber: 600 ml beakers.

Temperature: 20 +/- 1°C.

Number of fish per chamber: 10.

QA/QC No.: RT-130301.

TEST DATA

		°C	DO	pH	# Dead		Analyst & Time/Date of Readings
					A	B	
INITIAL	Control	20.6	9.4	7.9	0	0	J 1220 3-16-13
	100%	20.5	9.3	7.7	0	0	
24 Hr	Control	20.3	8.8	8.5	0	0	J 1220 3-17-13
	100%	20.2	8.5	8.4	0	0	
48 Hr	Control	19.9	8.6	7.8	0	0	J 1220 3-18-13
	100%	20.0	8.3	8.3	0	0	
Renewal	Control	19.9	9.0	8.2	0	0	J 1220 3-18-13
	100%	20.0	9.4	7.8	0	0	
72 Hr	Control	20.3	8.3	8.2	0	0	J 1220 3-19-13
	100%	20.3	8.1	8.4	0	0	
96 Hr	Control	20.4	8.3	7.9	0	0	J 1220 3-20-13
	100%	20.7	8.0	8.4	0	0	

Comments:

Sample as received: Chlorine: 0.0 mg/l; pH: 7.7; Conductivity: 1187 umho; Temp: 1.6°C;

DO: 9.3 mg/l; Alkalinity: 282 mg/l; Hardness: 44 mg/l; NH₃-N: 0.3 mg/l

Sample aerated moderately (approx. 500 ml/min) to raise or lower DO? Yes (No)

Control: Alkalinity: 67 mg/l; Hardness: 94 mg/l; Conductivity: 315 umho.

Test solution aerated (not to exceed 100 bubbles/min) to maintain DO >4.0 mg/l? Yes (No)

Sample used for renewal is the original sample kept at 0-6°C with minimal headspace.

Dissolved Oxygen (DO) readings in mg/l O₂.

RESULTS

Percent Survival In: Control: 100 % 100% Sample: 100 %

CERIODAPHNIA SURVIVAL AND REPRODUCTION TEST

- ***Test and Results Summary***
- ***Data Summary and Statistical Analyses***
- ***Raw Test Data: Water Quality & Test Organism Measurements***

**CERIODAPHNIA CHRONIC BIOASSAY
EPA METHOD 1002.0**



Lab No.: A-13031508-001
Client/ID: TestAmerica – Outfall 019

Date Tested: 03/16/13 to 03/23/13

TEST SUMMARY

Test type: Daily static-renewal.	Endpoints: Survival and Reproduction.
Species: <i>Ceriodaphnia dubia</i> .	Source: In-laboratory culture.
Age: < 24 hrs; all released within 8 hrs.	Food: .1 ml YTC, algae per day.
Test vessel size: 30 ml.	Test solution volume: 15 ml.
Number of test organisms per vessel: 1.	Number of replicates: 10.
Temperature: 25 +/- 1°C.	Photoperiod: 16/8 hrs. light/dark cycle.
Dilution water: Mod. hard reconstituted (MHRW).	Test duration: 7 days.
QA/QC Batch No.: RT-130304.	Statistics: ToxCalc computer program.

RESULTS SUMMARY

Sample Concentration	Percent Survival	Mean Number of Young Per Female
Control	100%	22.6
100% Sample	100%	22.4
Sample not statistically significantly less than Control for either endpoint.		

CHRONIC TOXICITY

Survival NOEC	100%
Survival TUc	1.0
Reproduction NOEC	100%
Reproduction TUc	1.0

QA/QC TEST ACCEPTABILITY

Parameter	Result
Control survival ≥ 80%	Pass (100% survival)
≥ 15 young per surviving control female	Pass (22.6 young)
≥ 60% surviving controls had 3 broods	Pass (100% with 3 broods)
PMSD < 47% for reproduction; if > 47% and no toxicity at IWC, the test must be repeated	Pass (PMSD = 6.8%)
Statistically significantly different concentrations relative difference > 13%	Pass (no concentration significantly different)
Concentration response relationship acceptable	Pass (no significant response at concentration tested)

Ceriodaphnia Survival and Reproduction Test-7 Day Survival

Start Date: 3/16/2013 13:00 Test ID: A13031508c Sample ID: Outfall 019
 End Date: 3/23/2013 13:30 Lab ID: CAATL-Aquatic Testing Labs Sample Type: EFF2-Industrial
 Sample Date: 3/15/2013 11:45 Protocol: FWCH EPA Test Species: CD-Ceriodaphnia dubia
 Comments:

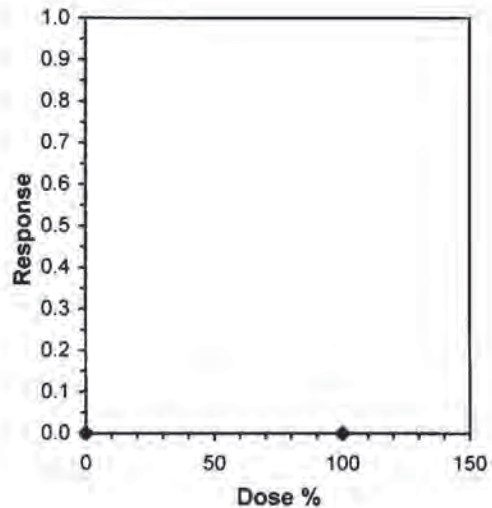
Conc-%	1	2	3	4	5	6	7	8	9	10
D-Control	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
100	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

Conc-%	Mean	N-Mean	Resp	Not Resp	Total	N	Fisher's 1-Tailed		Isotonic	
							Exact P	Critical	Mean	N-Mean
D-Control	1.0000	1.0000	0	10	10	10	1.0000	0.0500	1.0000	1.0000
100	1.0000	1.0000	0	10	10	10	1.0000	0.0500	1.0000	1.0000

Hypothesis Test (1-tail, 0.05)	NOEC	LOEC	ChV	TU
Fisher's Exact Test	100	>100		1
Treatments vs D-Control				

Linear Interpolation (200 Resamples)

Point	%	SD	95% CL	Skew
IC05	>100			
IC10	>100			
IC15	>100			
IC20	>100			
IC25	>100			
IC40	>100			
IC50	>100			



Ceriodaphnia Survival and Reproduction Test-Reproduction

Start Date: 3/16/2013 13:00 Test ID: A13031508c Sample ID: Outfall 019
 End Date: 3/23/2013 13:30 Lab ID: CAATL-Aquatic Testing Labs Sample Type: EFF2-Industrial
 Sample Date: 3/15/2013 11:45 Protocol: FWCH EPA Test Species: CD-Ceriodaphnia dubia
 Comments:

Conc-%	1	2	3	4	5	6	7	8	9	10
D-Control	21.000	25.000	23.000	26.000	21.000	21.000	25.000	20.000	23.000	21.000
100	20.000	22.000	23.000	23.000	27.000	22.000	22.000	22.000	21.000	22.000

Conc-%	Mean	N-Mean	Transform: Untransformed					N	t-Stat	1-Tailed Critical	MSD	Isotonic	
			Mean	Min	Max	CV%	Mean					N-Mean	
D-Control	22.600	1.0000	22.600	20.000	26.000	9.375	10				22.600	1.0000	
100	22.400	0.9912	22.400	20.000	27.000	8.205	10	0.225	1.734	1.538	22.400	0.9912	

Auxiliary Tests

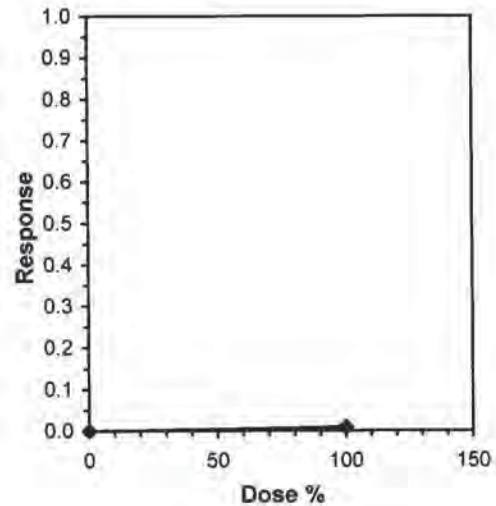
	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates normal distribution (p > 0.05)	0.91176	0.905	0.92681	0.39964
F-Test indicates equal variances (p = 0.68)	1.32895	6.54109		

Hypothesis Test (1-tail, 0.05)

	MSDu	MSDp	MSB	MSE	F-Prob	df
Homoscedastic t Test indicates no significant differences Treatments vs D-Control	1.53801	0.06805	0.2	3.93333	0.82414	1, 18

Linear Interpolation (200 Resamples)

Point	%	SD	95% CL	Skew
IC05	>100			
IC10	>100			
IC15	>100			
IC20	>100			
IC25	>100			
IC40	>100			
IC50	>100			



CERIODAPHNIA DUBIA CHRONIC BIOASSAY

EPA METHOD 1002.0 Raw Data Sheet



Lab No.: A-13031508-001

Client ID: TestAmerica - Outfall 019

Start Date: 03/16/2013

	DAY 1		DAY 2		DAY 3		DAY 4		DAY 5		DAY 6		DAY 7		
	0 hr	24hr	0 hr	24hr	0 hr	24hr	0 hr	24hr	0 hr	24hr	0 hr	24hr	0 hr	24hr	
Analyst Initials:	Z Z		Z Z		Z Z		Z Z		Z Z		Z Z		Z Z		
Time of Readings:	1300	1300	1300	1230	1230	1230	1230	1300	1300	1300	1300	1330	1400	1330	
Control	DO	9.0	8.1	8.6	8.5	8.3	8.0	8.4	8.3	8.4	8.2	8.7	8.1	8.8	8.7
	pH	7.8	8.5	7.9	8.3	8.2	8.2	8.2	8.5	8.3	8.5	8.2	8.5	8.3	8.5
	Temp	24.8	24.6	24.5	24.9	25.4	24.9	25.0	24.7	24.7	24.7	24.7	24.7	24.6	24.8
100%	DO	9.2	8.3	7.6	8.4	9.4	8.7	9.2	9.4	9.0	8.5	8.4	8.3	8.7	8.6
	pH	7.7	8.2	7.7	8.2	7.7	8.1	7.9	8.3	8.2	8.2	8.0	8.3	8.1	8.4
	Temp	24.7	24.7	24.5	24.9	24.2	24.1	25.0	24.7	24.7	24.8	24.7	24.7	24.5	24.7

Additional Parameters	Control	100% Sample
Conductivity (umohms)	298	1215
Alkalinity (mg/l CaCO ₃)	65	289
Hardness (mg/l CaCO ₃)	91	94
Ammonia (mg/l NH ₃ -N)	0.1	0.3

Source of Neonates										
Replicate:	A	B	C	D	E	F	G	H	I	J
Brood ID:	3A	2F	3F	1L	2L	3L	1H	3H	1J	2J

Sample	Day	Number of Young Produced										Total Live Young	No. Live Adults	Analyst Initials
		A	B	C	D	E	F	G	H	I	J			
Control	1	0	0	0	0	0	0	0	0	0	0	0	10	Z
	2	0	0	0	0	0	0	0	0	0	0	0	10	Z
	3	0	0	0	4	0	0	0	0	0	0	4	10	Z
	4	5	4	5	0	3	4	5	4	3	4	37	10	Z
	5	0	7	0	7	0	6	8	0	7	7	42	10	Z
	6	6	0	6	0	7	0	12	6	0	10	47	10	Z
	7	10	14	12	15	11	11	0	10	13	0	96	10	Z
	Total	21	25	23	26	21	21	25	20	23	21	226	10	Z
100%	1	0	0	0	0	0	0	0	0	0	0	0	10	Z
	2	0	0	0	0	0	0	0	0	0	0	0	10	Z
	3	0	0	0	0	0	0	0	0	0	0	0	10	Z
	4	3	5	4	5	4	5	4	3	4	5	42	10	Z
	5	5	7	6	0	9	6	7	5	0	0	45	10	Z
	6	12	0	0	6	0	0	0	0	7	7	32	10	Z
	7	0	10	13	12	14	11	11	14	10	10	105	10	Z
	Total	20	22	23	23	27	22	22	22	21	22	224	10	Z

Circled fourth brood not used in statistical analysis.

7th day only used if <60% of the surviving control females have produced their third brood.



CHAIN OF CUSTODY

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Client Name/Address:
 MWH-Arcadia
 618 Michillinda Ave, Suite 200
 Arcadia, CA 91007

Project:
 Boeing-SSFL NPDES
 Annual Outfall 019
 COMPOSITE
TIME WEIGHTED

Test America Contact: Debby Wilson

Project Manager: Bronwyn Kelly

Sampler: **RICK BANAUGH**

Phone Number:
 (626) 568-6691
 Fax Number:
 (626) 568-6515

ANALYSIS REQUIRED

Sample Description	Sample Matrix	Container Type	# of Cont.	Sampling Date/Time	Preservative	Bottle #	Total Recoverable Metals: Cu, Pb, Hg, B, Ba, Fe, Mn, Sb, As, Be, Cd, Cr, Ni, Se, Ag, Tl, Zn, Co, V	TCDD (and all congeners)	BOD ₅ (20 degrees C)	Surfactants (MBAS)	Cl ⁻ , SO ₄ , NO ₃ +NO ₂ -N, F, Perchlorate	Nitrate-N, Nitrite-N	Turbidity, TDS, TSS	Ammonia-N (350.2)	Alpha BHC (608) + Pesticides + PP	2,4,6 TCP, 2,4 Dinitrotoluene, Bis(2-ethylhexyl)phthalate, NDMA, PCP (SVOCs 625) + PP	Comments
Outfall 019	W	1L Poly	1	3-15-2013 11:45	HNO ₃	12A	X										
Outfall 019 Dup	W	1L Poly	1		HNO ₃	12B	X										
Outfall 019	W	1L Amber	2		None	13A, 13B		X									
Outfall 019	W	1L Poly	1		None	14			X								
Outfall 019	W	500 mL Poly	2		None	15A, 15B				X							
Outfall 019	W	500 mL Poly	2		None	16A, 16B					X						
Outfall 019	W	500 mL Poly	1		None	17						X					
Outfall 019	W	500 mL Poly	2		None	18A, 18B							X				
Outfall 019	W	1L Amber	2		None	20A, 20B								X			
Outfall 019	W	1L Amber	2		None	21A, 21B									X		

COC Page 2 of 3 and Page 3 of 3 are the composite samples for Outfall 019 for this storm event. These must be added to the same work order for COC Page 1 of 3 for Outfall 019 for the same event.

Relinquished By: *Rick Banaugh* Date/Time: 3-15-2013 12:15

Relinquished By: *Debby Wilson* Date/Time: 3-15-13 14:40

Relinquished By: *[Signature]* Date/Time: 3-15-13 4:00

Received By: *Michael [Signature]* Date/Time: 3-15-12 12:15

Received By: *[Signature]* Date/Time: 3-15-13 14:40

Received By: *[Signature]* Date/Time: 3-15-13 16:00

Turn-around time (Check):
 24 Hour: 72 Hour: 10 Day:
 48 Hour: 5 Day: Normal:

Sample Integrity (Check):
 Intact: On Ice:

Data Requirements (Check):
 No Level IV: All Level IV: NPDES Level IV:

Client Name/Address: MWVH-Arcadia
618 Michillinda Ave, Suite 200
Arcadia, CA 91007

Project: Boeing-SSFL NPDES
Annual Outfall 019
COMPOSITE
TIME WEIGHTED

Test America Contact: Debby Wilson

Project Manager: Bronwyn Kelly
Phone Number: (626) 568-6691
Fax Number: (626) 568-6515

Sampler: Rick BAÑAGA

Sample Description	Sample Matrix	Container Type	# of Cont.	Sampling Date/Time	Preservative	Bottle #	ANALYSIS REQUIRED	Comments
Outfall 019	W	VOCs	3	3-15-2013 11:45	HCl	22A, 22B, 22C	X	
Outfall 019	W	250 mL Glass	1		HCl	23	X	
Outfall 019	W	2.5 Gal Cube	1		None	24A		
Outfall 019	W	500 mL Amber	1		None	24B		
Outfall 019	W	1L Amber	2		None	25A, 25B	X	
Outfall 019	W	1L Amber	2		None	26A, 26B	X	
Outfall 019	W	1 Gal Cube	1		None	27	X	
Outfall 019	W	1L Poly	1		None	28	X	
Outfall 019	W	500 mL Poly	1		None	29	X	
Outfall 019	W	500 mL Poly	1		NaOH	30	X	
Outfall 019	W	1 Gal Cube	1		None	31	X	

COC Page 2 of 3 and Page 3 of 3 are the composite samples for Outfall 019 for this storm event.

Relinquished By: *[Signature]* Date/Time: 3-15-2013 12:15
Received By: *[Signature]* Date/Time: 3-15-13 12:15

Relinquished By: *[Signature]* Date/Time: 3-15-13 14:40
Received By: *[Signature]* Date/Time: 3-15-13 1440

Relinquished By: *[Signature]* Date/Time: 3-15-13 4:00pm
Received By: *[Signature]* Date/Time: 3-15-13 1600

Turn-around time (Check):
24 Hour ___ 72 Hour ___ 10 Day ___ X
48 Hour ___ 5 Day ___ Normal ___

Sample Integrity (Check):
Intact ___ On Ice ___ X

Data Requirements (Check):
No Level IV ___ All Level IV ___ NPDES Level IV ___ X



REFERENCE TOXICANT DATA

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***Fathead Minnow
Acute Toxicity Test
Reference
Toxicant
Data***

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FATHEAD MINNOW ACUTE Reference Toxicant - SDS



QA/QC Batch No.: RT-130301

TEST SUMMARY

Species: *Pimephales promelas*.
 Age: 14 days old.
 Regulations: NPDES.
 Test chamber volume: 250 ml.
 Feeding: Prior to renewal at 48 hrs.
 Temperature: 20 +/- 1°C.
 Number of replicates: 2.
 Dilution water: MHSF.

Source: In-lab culture.
 Test type: Static-Renewal.
 Test Protocol: EPA-821-R-02-012.
 Endpoints: LC50 at 96 hrs.
 Test chamber: 600 ml beakers.
 Aeration: None.
 Number of organisms per chamber: 10.
 Photoperiod: 16/8 hrs light/dark.

TEST DATA

Date/Time: Analyst:	INITIAL			24 Hr						48 Hr					
	<u>3-1-13 1200</u>			<u>3-2-13</u>			<u>1200</u>			<u>3-3-13</u>			<u>1200</u>		
	<u>J</u>			<u>J</u>			<u>J</u>			<u>J</u>			<u>J</u>		
	°C	DO	pH	°C	DO	pH	# Dead		°C	DO	pH	# Dead			
A							B	A				B			
Control	<u>20.5</u>	<u>9.0</u>	<u>8.0</u>	<u>20.2</u>	<u>8.7</u>	<u>8.1</u>	<u>0</u>	<u>0</u>	<u>20.4</u>	<u>8.3</u>	<u>7.8</u>	<u>0</u>	<u>0</u>		
1.0 mg/l	<u>20.4</u>	<u>9.0</u>	<u>8.0</u>	<u>20.2</u>	<u>8.6</u>	<u>8.1</u>	<u>0</u>	<u>0</u>	<u>20.5</u>	<u>8.1</u>	<u>7.8</u>	<u>0</u>	<u>0</u>		
2.0 mg/l	<u>20.4</u>	<u>9.1</u>	<u>8.0</u>	<u>20.4</u>	<u>8.5</u>	<u>8.1</u>	<u>0</u>	<u>0</u>	<u>20.3</u>	<u>8.1</u>	<u>7.8</u>	<u>0</u>	<u>0</u>		
4.0 mg/l	<u>20.3</u>	<u>9.1</u>	<u>8.0</u>	<u>20.4</u>	<u>8.5</u>	<u>8.0</u>	<u>3</u>	<u>0</u>	<u>20.4</u>	<u>8.1</u>	<u>7.9</u>	<u>1</u>	<u>0</u>		
8.0 mg/l	<u>20.3</u>	<u>9.2</u>	<u>8.0</u>	<u>20.5</u>	<u>8.6</u>	<u>8.1</u>	<u>10</u>	<u>10</u>	-	-	-	-	-		
16.0 mg/l	<u>20.3</u>	<u>9.1</u>	<u>8.0</u>	<u>20.4</u>	<u>8.7</u>	<u>8.1</u>	<u>10</u>	<u>10</u>	-	-	-	-	-		

Date/Time: Analyst:	RENEWAL			72 Hr						96 Hr					
	<u>3-3-13 1200</u>			<u>3-4-13</u>			<u>1130</u>			<u>3-5-13</u>			<u>1130</u>		
	<u>J</u>			<u>J</u>			<u>J</u>			<u>J</u>			<u>J</u>		
	°C	DO	pH	°C	DO	pH	# Dead		°C	DO	pH	# Dead			
A							B	A				B			
Control	<u>20.6</u>	<u>8.6</u>	<u>8.1</u>	<u>20.5</u>	<u>8.2</u>	<u>8.0</u>	<u>0</u>	<u>0</u>	<u>20.4</u>	<u>8.1</u>	<u>7.8</u>	<u>0</u>	<u>0</u>		
1.0 mg/l	<u>20.6</u>	<u>8.6</u>	<u>8.0</u>	<u>20.4</u>	<u>7.0</u>	<u>7.9</u>	<u>0</u>	<u>0</u>	<u>20.5</u>	<u>7.8</u>	<u>7.8</u>	<u>0</u>	<u>0</u>		
2.0 mg/l	<u>20.5</u>	<u>8.6</u>	<u>8.0</u>	<u>20.4</u>	<u>8.1</u>	<u>7.9</u>	<u>0</u>	<u>0</u>	<u>20.4</u>	<u>8.0</u>	<u>7.8</u>	<u>0</u>	<u>0</u>		
4.0 mg/l	<u>20.5</u>	<u>8.6</u>	<u>8.0</u>	<u>20.3</u>	<u>8.0</u>	<u>7.9</u>	<u>0</u>	<u>0</u>	<u>20.3</u>	<u>8.0</u>	<u>7.8</u>	<u>0</u>	<u>0</u>		
8.0 mg/l	-	-	-	-	-	-	-	-	-	-	-	-	-		
16.0 mg/l	-	-	-	-	-	-	-	-	-	-	-	-	-		

Comments: Control: Alkalinity: 63 mg/l; Hardness: 95 mg/l; Conductivity: 321 umho.
 SDS: Alkalinity: 64 mg/l; Hardness: 98 mg/l; Conductivity: 317 umho.

Concentration-response relationship acceptable? (see attached computer analysis):

Yes (response curve normal)
 No (dose interrupted indicated or non-normal)

Acute Fish Test-96 Hr Survival

Start Date: 3/1/2013 12:00	Test ID: RT130301f	Sample ID: REF-Ref Toxicant
End Date: 3/5/2013 11:30	Lab ID: CAATL-Aquatic Testing Labs	Sample Type: SDS-Sodium dodecyl sulfate
Sample Date: 3/1/2013	Protocol: ACUTE-EPA-821-R-02-012	Test Species: PP-Pimephales promelas

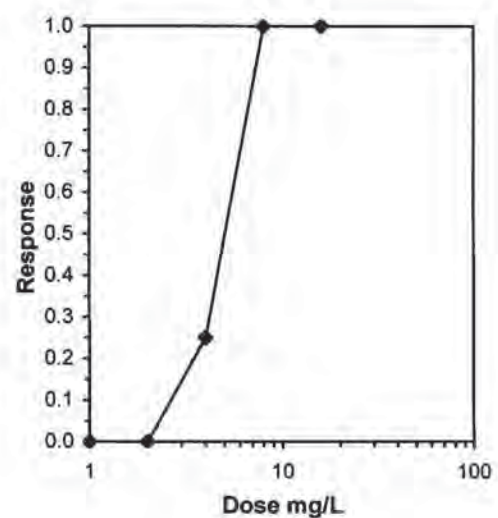
Comments:

Conc-mg/L	1	2
D-Control	1.0000	1.0000
1	1.0000	1.0000
2	1.0000	1.0000
4	0.6000	0.9000
8	0.0000	0.0000
16	0.0000	0.0000

Conc-mg/L	Mean	N-Mean	Transform: Arcsin Square Root				CV%	N	Number Resp	Total Number
			Mean	Min	Max					
D-Control	1.0000	1.0000	1.4120	1.4120	1.4120	0.000	2			
1	1.0000	1.0000	1.4120	1.4120	1.4120	0.000	2			
2	1.0000	1.0000	1.4120	1.4120	1.4120	0.000	2			
4	0.7500	0.7500	1.0676	0.8861	1.2490	24.041	2			
8	0.0000	0.0000	0.1588	0.1588	0.1588	0.000	2			
16	0.0000	0.0000	0.1588	0.1588	0.1588	0.000	2			

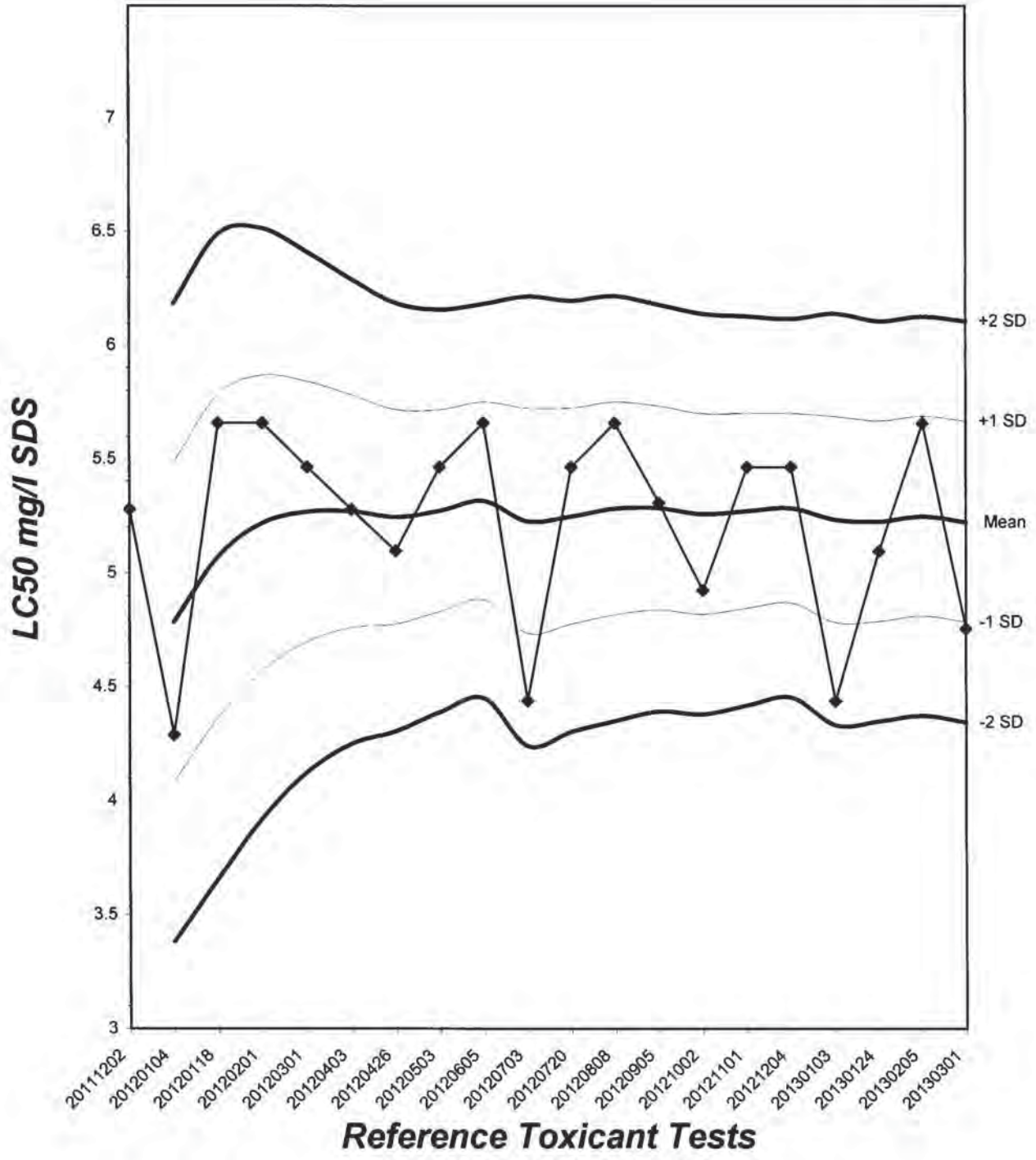
Auxiliary Tests	Statistic	Critical	Skew	Kurt
Normality of the data set cannot be confirmed				
Equality of variance cannot be confirmed				

Trim Level	Trimmed Spearman-Kärber		
	EC50	95% CL	
0.0%	4.7568	4.1593	5.4402
5.0%	4.8369	4.1557	5.6297
10.0%	4.9104	4.1027	5.8771
20.0%	5.0203	3.7665	6.6915
Auto-0.0%	4.7568	4.1593	5.4402



Fathead Minnow Acute Laboratory Control Chart

CV% = 8.43



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TEST ORGANISM LOG

FATHEAD MINNOW - LARVAL
(*Pimephales promelas*)



QA/QC BATCH NO.: RT-130301

SOURCE: In-Lab Culture

DATE HATCHED: 2-15-13

APPROXIMATE QUANTITY: 400

GENERAL APPEARANCE: good

MORTALITIES 48 HOURS PRIOR TO
TO USE IN TESTING: 0

DATE USED IN LAB: 3/11/13

AVERAGE FISH WEIGHT: 0.006 gm

LOADING LIMITS: 0.65 gm/liter @ 20°C, 0.40 gm/liter @ 25°C

Approximately 1000 fish per 10 liters limit if held overnight for acclimation without filtration @ 20°C for fish with a mean weight of 0.006 gm.

Approximately 650 fish per 10 liters limit if held overnight for acclimation without filtration @ 25°C for fish with a mean weight of 0.006 gm.

200 ml test solution volume = 0.013 gm mean fish weight limit @ 20°C; 0.008 @ 25°C

250 ml test solution volume = 0.016 gm mean fish weight limit @ 20°C; 0.010 @ 25°C

ACCLIMATION WATER QUALITY:

Temp.: 20.5 °C

pH: 8.0

Ammonia: 0 mg/l NH₃-N

DO: 9.0 mg/l

Alkalinity: 63 mg/l

Hardness: 95 mg/l

READINGS RECORDED BY: [Signature]

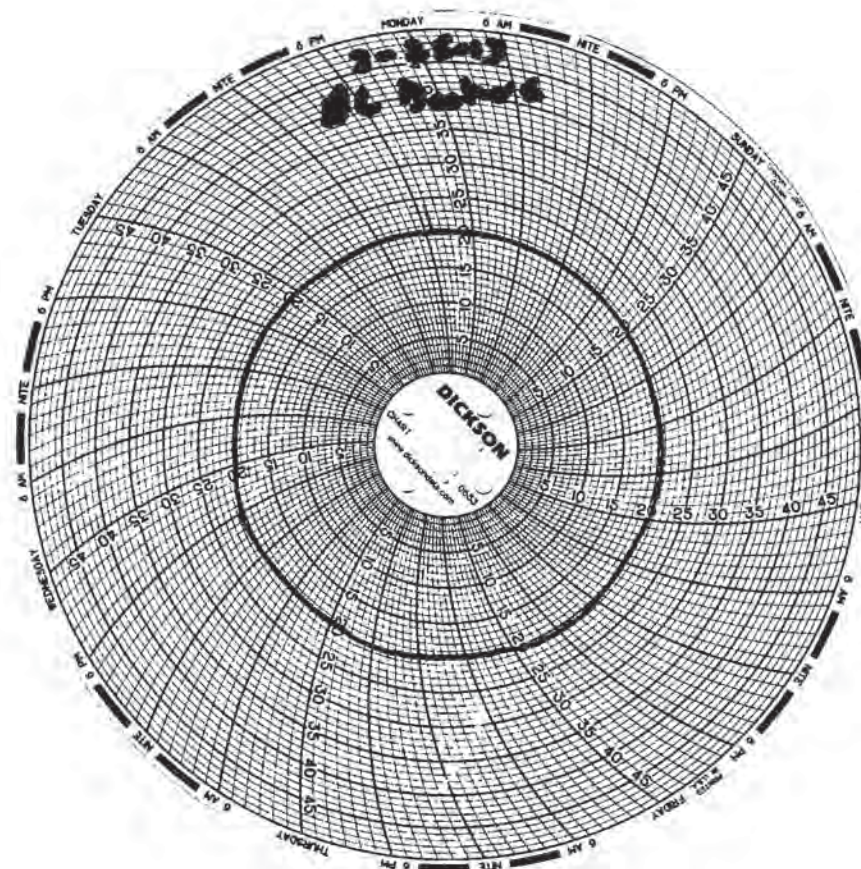
DATE: 3-2-13

Test Temperature Chart

Test No: RT-130301

Date Tested: 03/01/13 to 03/05/13

Acceptable Range: 20 +/- 1°C



CERIODAPHNIA SURVIVAL AND REPRODUCTION TEST

- ***Test and Results Summary***
- ***Data Summary and Statistical Analyses***
- ***Raw Test Data: Water Quality & Test Organism Measurements***

CERIODAPHNIA CHRONIC BIOASSAY
EPA METHOD 1002.0
REFERENCE TOXICANT - NaCl



QA/QC Batch No.: RT-130305

Date Tested: 03/05/13 to 03/12/13

TEST SUMMARY

Test type: Daily static-renewal.
 Species: *Ceriodaphnia dubia*.
 Age: < 24 hrs; all released within 8 hrs.
 Test vessel size: 30 ml.
 Number of test organisms per vessel: 1.
 Temperature: 25 +/- 1°C.
 Dilution water: Mod. hard reconstituted (MHRW).
 Reference Toxicant: Sodium chloride (NaCl).

Endpoints: Survival and Reproduction.
 Source: In-laboratory culture.
 Food: .1 ml YTC, algae per day.
 Test solution volume: 20 ml.
 Number of replicates: 10.
 Photoperiod: 16/8 hrs. light/dark cycle.
 Test duration: 7 days.
 Statistics: ToxCalc computer program.

RESULTS SUMMARY

Sample Concentration	Percent Survival		Mean Number of Young Per Female	
Control	100%		24.3	
0.25 g/l	100%		24.9	
0.5 g/l	100%		23.8	
1.0 g/l	100%		15.3	*
2.0 g/l	90%		2.5	*
4.0 g/l	0%	*	0	**

* Statistically significantly less than control at P = 0.05 level
 ** Reproduction data from concentrations greater than survival NOEC are excluded from statistical analysis.

CHRONIC TOXICITY

Survival LC50	2.6 g/l
Reproduction IC25	0.81 g/l

QA/QC TEST ACCEPTABILITY

Parameter	Result
Control survival ≥ 80%	Pass (100% Survival)
≥ 15 young per surviving control female	Pass (24.3 young)
≥ 60% surviving controls had 3 broods	Pass (100% with 3 broods)
PMSD < 47% for reproduction	Pass (PMSD = 12.8%)
Stat. sig. diff. conc. relative difference > 13%	Pass (Stat. sig. diff. conc. Relative difference = 37.0%)
Concentration response relationship acceptable	Pass (Response curve normal)

Ceriodaphnia Survival and Reproduction Test-7 Day Survival

Start Date: 3/5/2013 13:30 Test ID: RT130305c Sample ID: REF-Ref Toxicant
 End Date: 3/12/2013 13:30 Lab ID: CAATL-Aquatic Testing Labs Sample Type: NACL-Sodium chloride
 Sample Date: 3/5/2013 Protocol: FWCH-EPA-821-R-02-013 Test Species: CD-Ceriodaphnia dubia

Comments:

Conc-gm/L	1	2	3	4	5	6	7	8	9	10
D-Control	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
0.25	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
0.5	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
2	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000	1.0000	1.0000	1.0000	1.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Conc-gm/L	Mean	N-Mean	Resp	Not Resp	Total	N	Fisher's Exact P	1-Tailed Critical	Number Resp	Total Number
D-Control	1.0000	1.0000	0	10	10	10			0	10
0.25	1.0000	1.0000	0	10	10	10	1.0000	0.0500	0	10
0.5	1.0000	1.0000	0	10	10	10	1.0000	0.0500	0	10
1	1.0000	1.0000	0	10	10	10	1.0000	0.0500	0	10
2	0.9000	0.9000	1	9	10	10	0.5000	0.0500	1	10
4	0.0000	0.0000	10	0	10	10			10	10

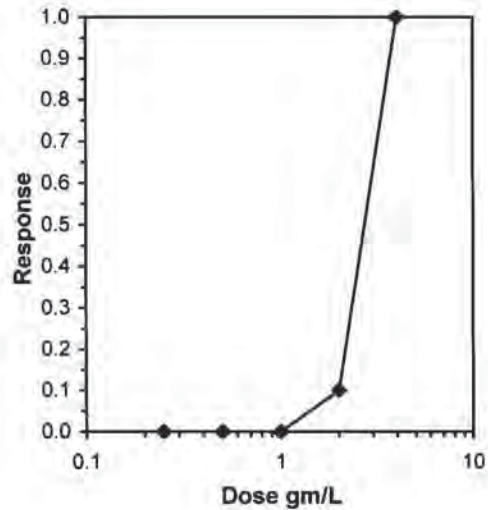
Hypothesis Test (1-tail, 0.05) NOEC LOEC ChV TU

Fisher's Exact Test 2 4 2.82843

Treatments vs D-Control

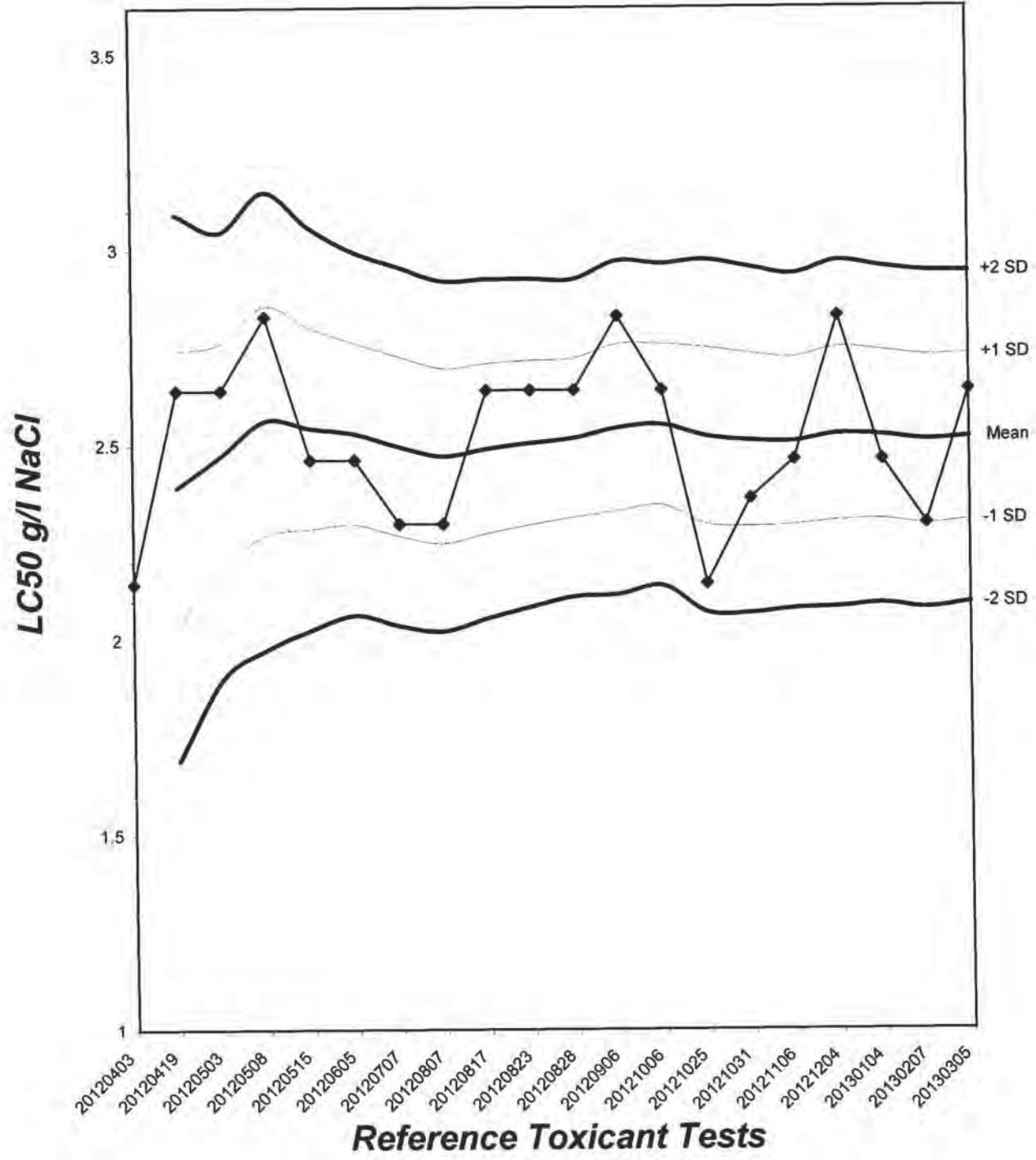
Trimmed Spearman-Kärber

Trim Level	EC50	95% CL	
0.0%	2.6390	2.3138	3.0099
5.0%	2.6984	2.2899	3.1798
10.0%	2.7216	2.5094	2.9517
20.0%	2.7216	2.5094	2.9517
Auto-0.0%	2.6390	2.3138	3.0099



Ceriodaphnia Chronic Survival Laboratory Control Chart

CV% = 8.43



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Ceriodaphnia Survival and Reproduction Test-Reproduction

Start Date: 3/5/2013 13:30 Test ID: RT130305c Sample ID: REF-Ref Toxicant
 End Date: 3/12/2013 13:30 Lab ID: CAATL-Aquatic Testing Labs Sample Type: NACL-Sodium chloride
 Sample Date: 3/5/2013 Protocol: FWCH-EPA-821-R-02-013 Test Species: CD-Ceriodaphnia dubia

Comments:

Conc-gm/L	1	2	3	4	5	6	7	8	9	10
D-Control	25.000	23.000	22.000	24.000	23.000	27.000	27.000	22.000	28.000	22.000
0.25	28.000	24.000	26.000	27.000	27.000	24.000	25.000	20.000	24.000	24.000
0.5	25.000	20.000	24.000	27.000	22.000	24.000	27.000	27.000	19.000	23.000
1	22.000	7.000	8.000	16.000	17.000	21.000	18.000	9.000	18.000	17.000
2	2.000	2.000	3.000	4.000	3.000	0.000	3.000	3.000	3.000	2.000
4	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

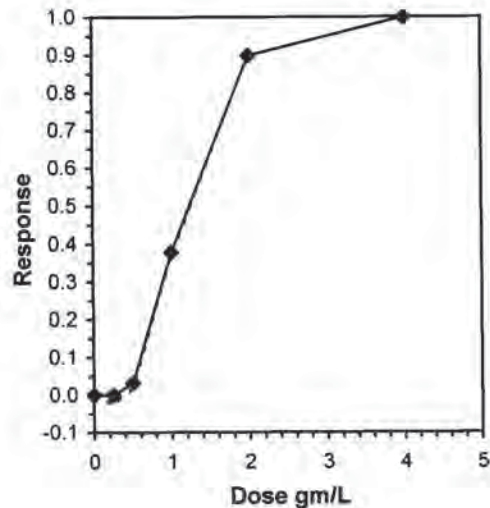
Conc-gm/L	Transform: Untransformed							Rank Sum	1-Tailed Critical	Isotonic	
	Mean	N-Mean	Mean	Min	Max	CV%	N			Mean	N-Mean
D-Control	24.300	1.0000	24.300	22.000	28.000	9.514	10			24.600	1.0000
0.25	24.900	1.0247	24.900	20.000	28.000	9.168	10	116.00	76.00	24.600	1.0000
0.5	23.800	0.9794	23.800	19.000	27.000	12.015	10	102.00	76.00	23.800	0.9675
*1	15.300	0.6296	15.300	7.000	22.000	35.136	10	56.50	76.00	15.300	0.6220
*2	2.500	0.1029	2.500	0.000	4.000	43.205	10	55.00	76.00	2.500	0.1016
4	0.000	0.0000	0.000	0.000	0.000	0.000	10			0.000	0.0000

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates normal distribution (p > 0.05)	0.9596	0.947	-0.6184	0.98827
Bartlett's Test indicates unequal variances (p = 3.07E-04)	21.0703	13.2767		

Hypothesis Test (1-tail, 0.05)	NOEC	LOEC	ChV	TU
Steel's Many-One Rank Test	0.5	1	0.70711	
Treatments vs D-Control				

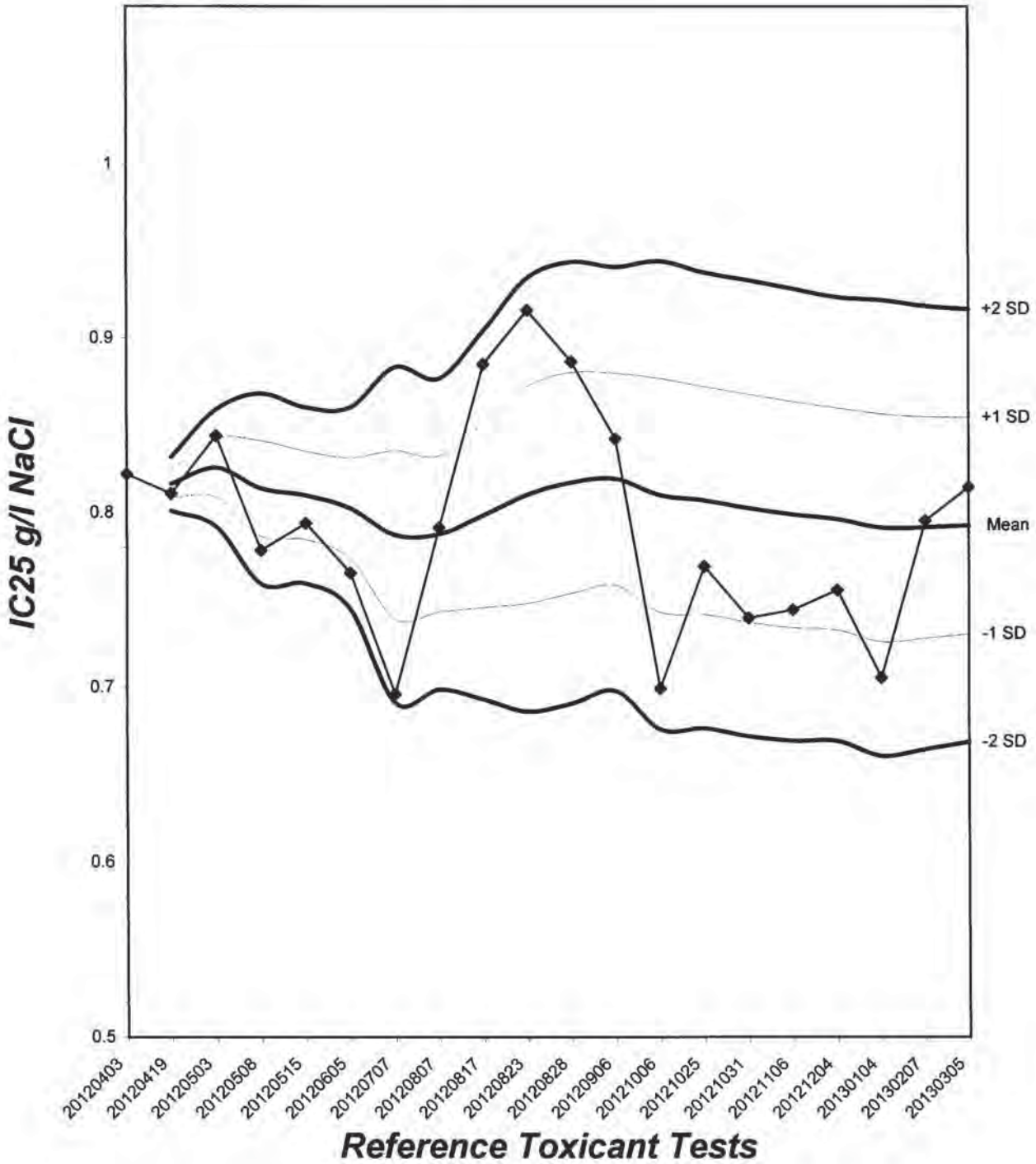
Linear Interpolation (200 Resamples)

Point	gm/L	SD	95% CL		Skew
IC05	0.5253	0.0843	0.2880	0.5810	-1.3448
IC10	0.5976	0.0517	0.4579	0.6789	-0.5487
IC15	0.6700	0.0546	0.5695	0.7759	0.2093
IC20	0.7424	0.0652	0.6333	0.8844	0.8087
IC25	0.8147	0.0766	0.7077	1.0026	0.9120
IC40	1.0422	0.1000	0.8732	1.2360	0.2561
IC50	1.2344	0.1046	0.9834	1.3955	-0.4538



Ceriodaphnia Chronic Reproduction Laboratory Control Chart

CV% = 7.81



- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15
- 16

Ceriodaphnia Survival and Reproduction Test-Reproduction

Start Date: 3/5/2013 13:30 Test ID: RT130305c Sample ID: REF-Ref Toxicant
 End Date: 3/12/2013 13:30 Lab ID: CAATL-Aquatic Testing Labs Sample Type: NACL-Sodium chloride
 Sample Date: 3/5/2013 Protocol: FWCH-EPA-821-R-02-013 Test Species: CD-Ceriodaphnia dubia
 Comments:

Conc-gm/L	1	2	3	4	5	6	7	8	9	10
D-Control	25.000	23.000	22.000	24.000	23.000	27.000	27.000	22.000	28.000	22.000
0.25	28.000	24.000	26.000	27.000	27.000	24.000	25.000	20.000	24.000	24.000
0.5	25.000	20.000	24.000	27.000	22.000	24.000	27.000	27.000	19.000	23.000
1	22.000	7.000	8.000	16.000	17.000	21.000	18.000	9.000	18.000	17.000
2	2.000	2.000	3.000	4.000	3.000	0.000	3.000	3.000	3.000	2.000
4	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Conc-gm/L	Mean	N-Mean	Transform: Untransformed					N	t-Stat	1-Tailed	
			Mean	Min	Max	CV%	Critical			MSD	
D-Control	24.300	1.0000	24.300	22.000	28.000	9.514	10				
0.25	24.900	1.0247	24.900	20.000	28.000	9.168	10	-0.429	2.223	3.106	
0.5	23.800	0.9794	23.800	19.000	27.000	12.015	10	0.358	2.223	3.106	
*1	15.300	0.6296	15.300	7.000	22.000	35.136	10	6.442	2.223	3.106	
*2	2.500	0.1029	2.500	0.000	4.000	43.205	10	15.603	2.223	3.106	
4	0.000	0.0000	0.000	0.000	0.000	0.000	10				

Auxiliary Tests	Statistic	Critical	Skew	Kurt						
Shapiro-Wilk's Test indicates normal distribution (p > 0.05)	0.9596	0.947	-0.6184	0.98827						
Bartlett's Test indicates unequal variances (p = 3.07E-04)	21.0703	13.2767								
Hypothesis Test (1-tail, 0.05)	NOEC	LOEC	ChV	TU	MSDu	MSDp	MSB	MSE	F-Prob	df
Dunnett's Test	0.5	1	0.70711		3.10631	0.12783	920.88	9.76	2.8E-21	4, 45
Treatments vs D-Control										

CERIODAPHNIA DUBIA CHRONIC BIOASSAY
Reference Toxicant - NaCl
Reproduction and Survival Raw Data Sheet



QA/QC No.: RT-130305

Start Date: 03/05/2013

Sample	Day	Number of Young Produced										Total Live Young	No. Live Adults	Analyst Initials
		A	B	C	D	E	F	G	H	I	J			
Control	1	0	0	0	0	0	0	0	0	0	0	0	10	JK
	2	0	0	0	0	0	0	0	0	0	0	0	10	JK
	3	0	0	0	0	0	0	0	0	4	0	4	10	JK
	4	4	3	4	4	3	5	3	4	0	4	34	10	JK
	5	0	0	0	0	8	7	0	0	8	0	23	10	JK
	6	7	8	8	7	0	0	9	8	0	7	53	10	JK
	7	14	12	10	13	12	15	15	10	16	11	128	10	JK
	Total	25	23	22	24	23	27	27	22	28	24	243	10	JK
0.25 g/l	1	0	0	0	0	0	0	0	0	0	0	10	JK	
	2	0	0	0	0	0	0	0	0	0	0	10	JK	
	3	0	0	0	0	5	0	0	0	0	5	10	JK	
	4	4	4	3	5	0	4	3	3	4	4	34	10	JK
	5	9	0	9	0	7	0	9	0	8	0	42	10	JK
	6	0	8	14	7	0	8	0	7	0	9	53	10	JK
	7	15	12	0	15	15	12	13	10	12	11	115	10	JK
	Total	28	24	26	27	27	24	25	20	24	24	249	10	JK
0.5 g/l	1	0	0	0	0	0	0	0	0	0	0	10	JK	
	2	0	0	0	0	0	0	0	0	0	0	10	JK	
	3	0	0	0	0	3	0	0	0	3	0	6	10	JK
	4	4	3	4	5	0	4	4	5	0	3	32	10	JK
	5	7	0	8	0	7	8	9	8	5	0	52	10	JK
	6	0	7	0	9	0	0	0	14	0	7	37	10	JK
	7	14	10	12	13	12	12	14	0	11	13	111	10	JK
	Total	25	20	24	27	22	24	27	27	19	23	236	10	JK

Circled fourth brood not used in statistical analysis.
 7th day only used if <60% of the surviving control females have produced their third brood.

CERIODAPHNIA DUBIA CHRONIC BIOASSAY
Reference Toxicant - NaCl
Reproduction and Survival Raw Data Sheet



QA/QC No.: RT-130305

Start Date: 03/05/2013

Sample	Day	Number of Young Produced										Total Live Young	No. Live Adults	Analyst Initials
		A	B	C	D	E	F	G	H	I	J			
1.0 g/l	1	0	0	0	0	0	0	0	0	0	0	0	10	[Signature]
	2	0	0	0	0	0	0	0	0	0	0	0	10	
	3	0	0	0	0	0	0	4	0	0	0	4	10	
	4	4	3	2	2	4	3	0	4	3	4	29	10	
	5	6	0	0	0	0	0	4	0	6	5	21	10	
	6	0	4	6	4	5	6	0	5	0	0	30	10	
	7	12	0	0	10	8	12	10	0	9	8	69	10	
	Total	22	7	8	16	17	21	18	9	18	17	153	10	
2.0 g/l	1	0	0	0	0	0	0	0	0	0	0	0	10	[Signature]
	2	0	0	0	0	0	0	0	0	0	0	0	10	
	3	0	0	0	0	0	0	0	0	0	0	0	10	
	4	0	0	0	0	0	0	0	0	0	0	0	10	
	5	2	0	3	2	0	X	0	3	0	0	10	9	
	6	0	2	0	0	3	-	3	0	3	0	11	9	
	7	0	0	0	2	0	-	0	0	0	2	4	9	
	Total	2	2	3	4	3	0	3	3	3	2	25	9	
4.0 g/l	1	X	X	X	X	X	X	X	X	X	X	0	0	[Signature]
	2	-	-	-	-	-	-	-	-	-	-	-	-	
	3	-	-	-	-	-	-	-	-	-	-	-	-	
	4	-	-	-	-	-	-	-	-	-	-	-	-	
	5	-	-	-	-	-	-	-	-	-	-	-	-	
	6	-	-	-	-	-	-	-	-	-	-	-	-	
	7	-	-	-	-	-	-	-	-	-	-	-	-	
	Total	0	0	0	0	0	0	0	0	0	0	0	0	

Circled fourth brood not used in statistical analysis.
 7th day only used if <60% of the surviving control females have produced their third brood.

CERIODAPHNIA DUBIA CHRONIC BIOASSAY
Reference Toxicant - NaCl
Water Chemistries Raw Data Sheet



QA/QC No.: RT-130305

Start Date: 03/05/2013

		DAY 1		DAY 2		DAY 3		DAY 4		DAY 5		DAY 6		DAY 7	
		Initial	Final	Initial	Final	Initial	Final	Initial	Final	Initial	Final	Initial	Final	Initial	Final
Analyst Initials:		J	J	J	J	J	J	J	J	J	J	J	J	J	J
Time of Readings:		1330	1330	1330	1330	1330	1330	1330	1330	1330	1330	1330	1330	1330	1330
Control	DO	9.1	8.2	9.1	8.0	8.9	8.7	8.6	8.5	8.8	8.3	8.9	8.7	8.4	8.0
	pH	8.0	7.9	8.0	8.1	8.1	8.2	8.0	7.7	8.1	8.0	8.0	7.9	8.1	8.1
	Temp	25.2	24.7	25.0	24.9	25.0	25.0	25.1	24.7	24.7	24.7	25.0	24.6	24.5	24.7
0.25 g/l	DO	9.0	8.1	8.8	8.1	8.9	8.5	8.5	8.6	8.9	8.7	8.4	8.6	8.4	8.0
	pH	8.0	7.9	8.6	7.9	8.1	8.0	8.0	7.9	8.1	8.1	8.0	7.8	8.0	8.0
	Temp	25.1	25.0	25.0	24.9	24.9	24.9	25.2	24.6	25.1	24.8	25.0	24.4	25.5	24.7
0.5 g/l	DO	9.0	8.2	8.9	8.3	8.9	8.5	8.5	8.2	9.0	8.5	8.8	8.4	8.5	8.3
	pH	8.0	7.9	8.0	7.8	8.1	7.1	8.0	7.6	8.1	8.1	8.0	7.8	8.0	8.2
	Temp	25.1	24.9	24.9	24.7	24.6	24.9	25.1	24.7	24.9	24.8	25.0	24.6	25.5	24.7
1.0 g/l	DO	9.0	8.4	8.8	8.4	9.0	8.4	8.5	8.2	9.0	8.7	8.4	8.2	8.5	8.2
	pH	8.0	7.9	8.0	7.9	8.1	7.8	8.0	7.4	8.1	8.0	8.0	7.8	8.1	8.1
	Temp	25.0	24.5	24.8	24.8	24.8	24.9	25.0	24.8	24.7	24.8	25.0	24.7	25.5	24.9
2.0 g/l	DO	9.0	8.4	8.7	8.4	9.0	8.3	8.4	8.3	8.7	8.6	8.9	8.1	8.4	8.4
	pH	8.0	8.0	8.0	8.1	8.1	7.9	8.0	7.5	8.1	8.0	8.1	7.8	8.0	8.0
	Temp	24.7	24.6	24.7	23.0	24.8	25.1	25.1	24.6	24.9	24.7	24.9	24.8	25.4	24.7
4.0 g/l	DO	8.4	8.5	-	-	-	-	-	-	-	-	-	-	-	-
	pH	8.0	7.9	-	-	-	-	-	-	-	-	-	-	-	-
	Temp	24.5	24.2	-	-	-	-	-	-	-	-	-	-	-	-

Dissolved Oxygen (DO) readings are in mg/l O₂; Temperature (Temp) readings are in °C.

Additional Parameters	Control			High Concentration		
	Day 1	Day 3	Day 5	Day 1	Day 3	Day 5
Conductivity (µS)	221	335	321	6310	2960	2780
Alkalinity (mg/l CaCO ₃)	67	62	61	64	63	61
Hardness (mg/l CaCO ₃)	94	93	91	93	92	92

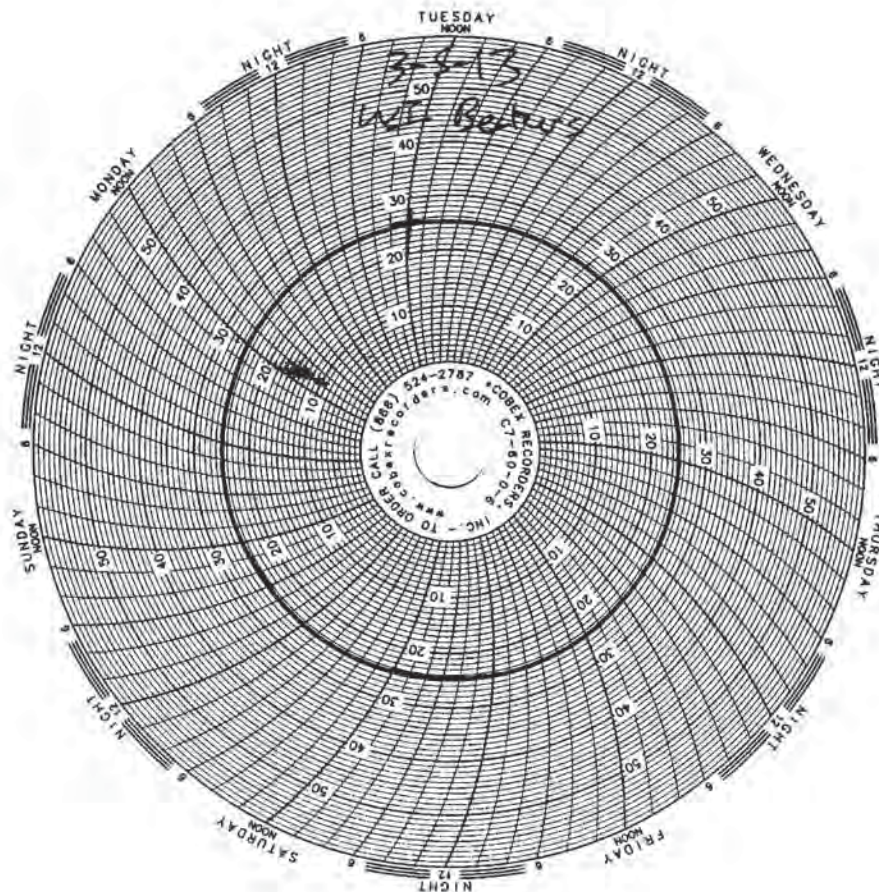
Source of Neonates										
Replicate:	A	B	C	D	E	F	G	H	I	J
Brood ID:	2A	2B	1E	2G	1I	2I	3J	4B	5B	1B

Test Temperature Chart

Test No: RT-130305

Date Tested: 03/05/13 to 03/12/13

Acceptable Range: 25 +/- 1°C



CHAIN OF CUSTODY FORM

Client Name/Address: MWH-Arcadia
618 Mitchellinda Ave, Suite 200
Arcadia, CA 91007

Project: Boeing-SSFL NPDES Annual Outfall 019 GRAB

Project: Phone Number: (626) 568-6691
Fax Number: (626) 568-6515

Test America Contact: Debby Wilson

Project Manager: Bronwyn Kelly

Sampler: **Rick Branigan**

ANALYSIS REQUIRED

Sample Description	Sample Matrix	Container Type	# of Cont.	Sampling Date/Time	Preservative	Bottle #	VOCs 624 + xylenes + Freon 123A, Cyclohexane + PP	VOCs 624 +A+A+2CVE	Settleable Solids	Oil & Grease (1664-HEM)	8015 - gas (GRO(C4-C12))	8015 - diesel/jet fuel (DRO (C13-C28))	Fecal coliform (SM9221)	E. coli (SM9221)	Field readings: (Log in and include in report Temp and pH)
Outfall 019	W	VOAs	5	3-14-2013 11:30	HCl	1A, 1B, 1C, 1D, 1E	X								Temp of = 22.36 °C - 71.6 F pH = 7.5 DO = 4.28 mg/L Total Residual Chlorine = 0.0
Outfall 019	W	VOAs	3		None	2A, 2B, 2C	X								Time of readings = 11:30
Outfall 019	W	1L Poly	1		None	3			X						Comments
Outfall 019	W	500 mL Poly	2		None	4A, 4B									
Outfall 019	W	1L Amber	2		HCl	5A, 5B			X						
Trip Blanks	W	VOAs	3		HCl	6A, 6B, 6C	X								
Trip Blanks	W	VOAs	3		None	7A, 7B, 7C		X							
Outfall 019	W	VOAs	1		HCl	8A				X					
Outfall 019 Dup	W	VOAs	2		HCl	8B, 8C				X					
Outfall 019	W	1L Amber	1		None	9A				X					
Outfall 019 Dup	W	1L Amber	1		None	9B				X					
Outfall 019	W	125mL Poly	1		Na2S2O3	10					X				
Outfall 019	W	125mL Poly	1	3-14-2013 11:30	Na2S2O3	11						X			
Outfall 019	W	125P	1		None	12							X		

These Samples are the Grab Portion of Outfall 019 for this storm event. Composite samples will follow and are to be added to this work order.

Relinquished By: **Pin Bas** Date/Time: 3/14/13 12:00
Received By: **Matt Powell** Date/Time: 3/14/13 5:12

Relinquished By: **Scott Powell** Date/Time: 3/14/13 18:44
Received By: **Gene D** Date/Time: 03/14/13 4:30

Sample Integrity: (Check) In tact: On Ice:

Data Requirements: (Check) No Level IV: All Level IV:

NPDES Level IV:

MST Batenodales, Hunn
4410-10884

AS
03/14/13
22:35

CHAIN OF CUSTODY FORM

Client Name/Address:
 MWH-Arcadia
 618 Michilinda Ave, Suite 200
 Arcadia, CA 91007

Project:
 Boeing-SSFL NPDES
 Annual Outfall 019
 GRAB

Test America Contact: Debby Wilson

Project Manager: Bronwyn Kelly

Phone Number:
 (626) 568-6691
 Fax Number:
 (626) 568-6515

Sampler: **PICK BANAGAN**

ANALYSIS REQUIRED

Sample Description	Sample Matrix	Container Type	# of Cont.	Sampling Date/Time	Preservative	Bottle #	VOCs 624 + xylenes + Freon 123A, Cyclohexane + PP	VOCs 624 +A+A+2CVE	Settleable Solids	Oil & Grease (1664-HEM)	8015 - gas (GRO(C4-C12))	8015 - diesel/jet fuel (DRO (C13-C28))	Fecal coliform (SM9221)	E. coli (SM9221)	Field readings: (Log in and include in report Temp and pH)	Comments
Outfall 019	W	VOAs	5	3-14-2013 11:30	HCl	1A, 1B, 1C, 1D, 1E	X								Temp °F = 22.26 - 71.6 F pH = 7.58 mg/L DO = 4.28 mg/L Total Residual Chlorine = 0.0	Time of readings = 11:30
Outfall 019	W	VOAs	3		None	2A, 2B, 2C		X								
Outfall 019	W	1L Poly	1		None	3			X							
Outfall 019	W	500 mL Poly	2		None	4A, 4B										
Outfall 019	W	1L Amber	2		HCl	5A, 5B			X							
Trip Blanks	W	VOAs	3		HCl	6A, 6B, 6C	X									
Trip Blanks	W	VOAs	3		None	7A, 7B, 7C		X								
Outfall 019	W	VOAs	1		HCl	8A			X							
Outfall 019 Dup	W	VOAs	2		HCl	8B, 8C			X							
Outfall 019	W	1L Amber	1		None	9A			X							
Outfall 019 Dup	W	1L Amber	1		None	9B			X							
Outfall 019	W	125mL Poly	1		Na2SS2O3	10				X						
Outfall 019	W	125mL Poly	1		Na2SS2O3	11					X					
Outfall 019	W	125P	1		None	12						X				

These Samples are the Grab Portion of Outfall 019 for this storm event. Composite samples will follow and are to be added to this work order.

Relinquished By: **Pick Bagan** Date/Time: **3/14/2013 12:00** Received By: **Mark Dwyer** Date/Time: **3-14-2013 5:40**

Relinquished By: **Mark Dwyer** Date/Time: **3-14-13 12:00** Received By: **Mark Dwyer** Date/Time: **3-14-13 12:00**

Relinquished By: **Mark Dwyer** Date/Time: **12:00** Received By: **Gene D** Date/Time: **03/14/13 4:30**

Relinquished By: **Mark Dwyer** Date/Time: **12:00** Received By: **Gene D** Date/Time: **03/14/13 4:30**

Turn-around time: (Check) 24 Hour: 72 Hour: 48 Hour: 5 Day: 10 Day: Normal:

Sample Integrity: (Check) Intact: On Ice:

Data Requirements: (Check) No Level IV: All Level IV: NPDES Level IV:

Field readings:
 (Log in and include in report Temp and pH)
 Temp °F = 22.26 - 71.6 F
 pH = 7.58 mg/L
 DO = 4.28 mg/L
 Total Residual Chlorine = 0.0

Time of readings = 11:30

Comments

MST Bacteroidales, Human

4413-40884

AS
 03/14/13
 20:35

CHAIN OF CUSTODY FORM

Client Name/Address: MWH-Arcadia 618 Michilinda Ave, Suite 200 Arcadia, CA 91007				Project: Boeing-SSFL NPDES Annual Outfall 019 COMPOSITE TIME WEIGHTED				ANALYSIS REQUIRED												Comments
Test America Contact: Debby Wilson				Phone Number: (626) 568-6691 Fax Number: (626) 568-6515				Total Recoverable Metals: Cu, Pb, Hg, B, Ba, Fe, Mn, Sb, As, Be, Cd, Cr, Ni, Se, Ag, Tl, Zn, Co, V	TCDD (and all congeners)	BOD ₅ (20 degrees C)	Surfactants (MBAS)	Cl ⁻ , SO ₄ ²⁻ , NO ₃ ⁻ , F ⁻ , Perchlorate	Nitrate-N, Nitrite-N	Turbidity, TDS, TSS	Ammonia-N (350.2)	Alpha BHC (608) + Pesticides + PP	2,4,6 TCP, 2,4 Dinitrofluorene, Bis(2-ethylhexyl)phthalate, NDMA, PCP (SVOCs 625) + PP			
Sample Description	Sample Matrix	Container Type	# of cont.	Sampling Date/Time	Preservative	Bottle #														
Outfall 019	W	1L Poly	1	3-15-2013 11:45	HNO ₃	12A	X													
Outfall 019 Dup	W	1L Poly	1		HNO ₃	12B	X													
Outfall 019	W	1L Amber	2		None	13A, 13B		X												
Outfall 019	W	1L Poly	1		None	14		X												
Outfall 019	W	500 mL Poly	2		None	15A, 15B			X											
Outfall 019	W	500 mL Poly	2		None	16A, 16B			X											
Outfall 019	W	500 mL Poly	1		None	17				X										
Outfall 019	W	500 mL Poly	2		None	18A, 18B					X									
Outfall 019	W	500 mL Poly	1		H ₂ SO ₄	19						X								
Outfall 019	W	1L Amber	2		None	20A, 20B							X							
Outfall 019	W	1L Amber	2	3-15-2013 11:45	None	21A, 21B								X						

COC Page 2 of 3 and Page 3 of 3 are the composite samples for Outfall 019 for this storm event.

Relinquished By: <i>Rick Banaga</i>	Date/Time: 3-15-2013 12:15	Received By: <i>Matt Clancy</i>	Date/Time: 3-15-2013 12:15
Relinquished By: <i>Matt Clancy</i>	Date/Time: 3-15-2013 17:00	Received By: <i>Tina Saldaña</i>	Date/Time: 3-15-2013 17:00
Relinquished By:	Date/Time:	Received By:	Date/Time:

Turn-around time: (Check)
 24 Hour: 72 Hour: 10 Day:
 48 Hour: 5 Day: Normal:

Sample integrity: (Check)
 Intact: On Ice:

Data Requirements: (Check)
 No Level IV: All Level IV: NPDES Level IV:

2.4/1.8 4.4/3.8



Login Sample Receipt Checklist

Client: MWH Americas Inc

Job Number: 440-41016-1

Login Number: 41016

List Number: 1

Creator: Perez, Angel

List Source: TestAmerica Irvine

Question	Answer	Comment
Radioactivity wasn't checked or is <=/ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	N/A	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	Rick Baniaga
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	N/A	
Samples do not require splitting or compositing.	N/A	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: MWH Americas Inc

Job Number: 440-41016-1

Login Number: 41016

List Number: 1

Creator: Tecson, Jeffrey

List Source: TestAmerica Sacramento

List Creation: 03/19/13 04:23 PM

Question	Answer	Comment
Radioactivity wasn't checked or is <=/ background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	0.1
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: MWH Americas Inc

Job Number: 440-41016-1

Login Number: 41016

List Number: 1

Creator: McNairy, Jason

List Source: TestAmerica St. Louis

List Creation: 03/19/13 03:32 PM

Question	Answer	Comment
Radioactivity wasn't checked or is <=/ background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	False	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: MWH Americas Inc

Job Number: 440-41016-1

Login Number: 41016

List Number: 1

Creator: Perez, Angel

List Source: TestAmerica Irvine

Question	Answer	Comment
Radioactivity wasn't checked or is <=/ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	N/A	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	Rick Baniaga
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	N/A	
Samples do not require splitting or compositing.	N/A	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: MWH Americas Inc

Job Number: 440-41016-1

Login Number: 41016

List Number: 1

Creator: Tecson, Jeffrey

List Source: TestAmerica Sacramento

List Creation: 03/19/13 04:23 PM

Question	Answer	Comment
Radioactivity wasn't checked or is <=/ background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	0.1
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Tracer/Carrier Summary

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Method: 903.0 - Radium-226 (GFPC)

Matrix: Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)	
Lab Sample ID	Client Sample ID	Ba (40-110)	
//01/202312	?>!@'55(02A	ABCD	
//01/202312(-E	?>!@'55(02A	AAC/	
G4=(2301/0AAB<D1"	G'+(4*6!\$*5(=#H5Ä	AFCD	
7J(2301/0AAB<21"	7 Ä!K*L(J5'6M	FFCI	
Tracer/Carrier Legend			
J'(N(J'(4'\$\$\$%Ä\$			

Method: 904.0 - Radium-228 (GFPC)

Matrix: Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)	
Lab Sample ID	Client Sample ID	Ba (40-110)	Y (40-110)
//01/202312	?>!@'55(02A	ABCD	FFC3
//01/202312(-E	?>!@'55(02A	AAC/	A0C2
G4=(2301/0AAI<D1"	G'+(4*6!\$*5(=#H5Ä	AFCD	F3CO
7J(2301/0AAI<21"	7 Ä!K*L(J5'6M	FFCI	A0CI
Tracer/Carrier Legend			
J'(N(J'(4'\$\$\$%Ä\$			
P(NP(4'\$\$\$%Ä\$			

Method: 905 - Strontium-90 (GFPC)

Matrix: Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)	
Lab Sample ID	Client Sample ID	Sr (C) (40-110)	Y (40-110)
//01/202312	?>!@'55(02A	FBCB	A0CI
//01/202312(-E	?>!@'55(02A	F2C/	ADCB
G4=(2301/2020<D1"	G'+(4*6!\$*5(=#H5Ä	FACB	FAC0
7J(2301/2020<21"	7 Ä!K*L(J5'6M	FFC0	FICD
Tracer/Carrier Legend			
=(Q4R(N(=#(4'\$\$\$%Ä\$			
P(NP(4'\$\$\$%Ä\$			

Method: A-01-R - Isotopic Uranium (Alpha Spectrometry)

Matrix: Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)	
Lab Sample ID	Client Sample ID	U-232 (30-110)	
//01/202312(-E	?>!@'55(02A	FOC/	
G4=(2301/20F/<D1"	G'+(4*6!\$*5(=#H5Ä	FBCB	
7J(2301/20F/<21"	7 Ä!K*L(J5'6M	F/CB	
Tracer/Carrier Legend			
E1DBD(N(ES'6%>#1DBD			

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Isotope Dilution Summary

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Method: 1613B - Dioxins and Furans (HRGC/HRMS)

Matrix: Water

Prep Type: Total/NA

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	TCDD (25-164)	TCDF (24-169)	PeCDD (25-181)	PeCDF1 (24-185)	PeCDF2 (21-178)	HxCDD1 (32-141)	HxCDD2 (28-130)	HxCDF1 (26-152)
//01/202312	?>!@'55(02A	B0	3A	BC	3/	33	0	D0	B0
7F(CG012C0GG<21"	7 ÄIH*(F'5'6J	3C	3B	30	EC	EE	/3	ED	/3

		Percent Isotope Dilution Recovery (Acceptance Limits)						
Lab Sample ID	Client Sample ID	HxCDF2 (26-123)	HxCDF4 (29-147)	HxCDF3 (28-136)	HpCDD (23-140)	HpCDF1 (28-143)	HpCDF2 (26-138)	OCDD (17-157)
//01/202312	?>!@'55(02A	DC	3B	BA	3B	33	32	ED
7F(CG012C0GG<21"	7 ÄIH*(F'5'6J	EB	/D	EC	/3	/E	/0	/G

Surrogate Legend

- Ä4--(K(2C41GLCLBLD1Ä4--
- Ä4-M(K(2C41GLCLBLD1Ä4-M
- :Ä4--(K(2C412LGLCLBLD1:Ä4--
- :Ä4-M2(K(2C412LGLCLBLD1:Ä4-M
- :Ä4-MG(K(2C41GLCL/LBLD1:Ä4-M
- 9N4--2(K(2C412LGLCL/LBLD19N4--
- 9N4--G(K(2C412LGLCL3LBD19N4--
- 9N4-M2(K(2C412LGLCL/LBLD19N4-M
- 9N4-MG(K(2C412LGLCL3LBD19N4-M
- 9N4-M/(K(2C412LGLCLBLDLA19N4-M
- 9N4-MC(K(2C41GLCL/L3LBD19N4-M
- 9O4--(K(2C412LGLCL/L3LBD19O4--
- 9O4-M2(K(2C412LGLCL/L3LBD19O4-M
- 9O4-MG(K(2C412LGLCL/LBLDLA19O4-M
- ?4--(K(2C41?4--

Method: 1613B - Dioxins and Furans (HRGC/HRMS)

Matrix: Water

Prep Type: Total/NA

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	TCDD (20-175)	TCDF (22-152)	PeCDD (21-227)	PeCDF1 (21-192)	PeCDF2 (13-328)	HxCDD1 (21-193)	HxCDD2 (25-163)	HxCDF1 (19-202)
P4=(CG012C0GG<G1"	P'+(4*6!\$*5(=#05Ä	BG	BG	B3	B0	B2	3A	BE	B0

		Percent Isotope Dilution Recovery (Acceptance Limits)						
Lab Sample ID	Client Sample ID	HxCDF2 (21-159)	HxCDF4 (17-205)	HxCDF3 (22-176)	HpCDD (26-166)	HpCDF1 (21-158)	HpCDF2 (20-186)	OCDD (13-199)
P4=(CG012C0GG<G1"	P'+(4*6!\$*5(=#05Ä	B3	33	BC	30	32	EB	/B

Surrogate Legend

- Ä4--(K(2C41GLCLBLD1Ä4--
- Ä4-M(K(2C41GLCLBLD1Ä4-M
- :Ä4--(K(2C412LGLCLBLD1:Ä4--
- :Ä4-M2(K(2C412LGLCLBLD1:Ä4-M
- :Ä4-MG(K(2C41GLCL/LBLD1:Ä4-M
- 9N4--2(K(2C412LGLCL/LBLD19N4--
- 9N4--G(K(2C412LGLCL3LBD19N4--
- 9N4-M2(K(2C412LGLCL/LBLD19N4-M
- 9N4-MG(K(2C412LGLCL3LBD19N4-M
- 9N4-M/(K(2C412LGLCLBLDLA19N4-M
- 9N4-MC(K(2C41GLCL/L3LBD19N4-M

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Isotope Dilution Summary

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9O4--(K(2C412LGLCL/L3LBLD19O4--
9O4-M2(K(2C412LGLCL/L3LBLD19O4-M
9O4-MG(K(2C412LGLCL/LBLDLA19O4-M
?4--(K(2C41?4--

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
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- 10
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- 15
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APPENDIX G

Section 7

Arroyo Simi-Frontier Park – February 11, 2013

MEC^X Data Validation Reports



DATA VALIDATION REPORT

Boeing SSFL NPDES

SAMPLE DELIVERY GROUP: 440-37740-1

Prepared by

MEC^x, LP
12269 East Vassar Drive
Aurora, CO 80014

I. INTRODUCTION

Task Order Title: Boeing SSFL NPDES
Contract Task Order: 1261.100D.00
Sample Delivery Group: 440-37740-1
Project Manager: B. Kelly
Matrix: Solid
QC Level: IV
No. of Samples: 1
No. of Reanalyses/Dilutions: 0
Laboratory: TestAmerica-Irvine

Table 1. Sample Identification

Client ID	Laboratory ID	Sub-Laboratory ID	Matrix	Collected	Method
Arroyo Simi-FP	440-37740-3	N/A	Soild	2/11/2013 12:00:00 PM	8081A, SM 4500 NH3 D

II. Sample Management

No anomalies were observed regarding sample management. The samples in this SDG were received at the laboratory within the temperature limits of 4°C ±2°C. According to the case narrative for this SDG, the samples were received intact, on ice, and properly preserved, if applicable. The COCs were appropriately signed and dated by field and/or laboratory personnel. As the samples were couriered to the laboratory, custody seals were not utilized.

Data Qualifier Reference Table

Qualifier	Organics	Inorganics
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit. The associated value is the quantitation limit or the estimated detection limit for dioxins or PCB congeners.	The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit. The associated value is the sample detection limit or the quantitation limit for perchlorate only.
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.	The associated value is an estimated quantity.
N	The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification."	Not applicable.
NJ	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.	Not applicable.
UJ	The analyte was not deemed above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.	The material was analyzed for, but was not detected. The associated value is an estimate and may be inaccurate or imprecise.
R	The data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte cannot be verified.	The data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte cannot be verified.

Qualification Code Reference Table

Qualifier	Organics	Inorganics
H	Holding times were exceeded.	Holding times were exceeded.
S	Surrogate recovery was outside QC limits.	The sequence or number of standards used for the calibration was incorrect
C	Calibration %RSD or %D was noncompliant.	Correlation coefficient is <0.995.
R	Calibration RRF was <0.05.	%R for calibration is not within control limits.
B	Presumed contamination as indicated by the preparation (method) blank results.	Presumed contamination as indicated by the preparation (method) or calibration blank results.
L	Laboratory Blank Spike/Blank Spike Duplicate %R was not within control limits.	Laboratory Control Sample %R was not within control limits.
Q	MS/MSD recovery was poor or RPD high.	MS recovery was poor.
E	Not applicable.	Duplicates showed poor agreement.
I	Internal standard performance was unsatisfactory.	ICP ICS results were unsatisfactory.
A	Not applicable.	ICP Serial Dilution %D were not within control limits.
M	Tuning (BFB or DFTPP) was noncompliant.	Not applicable.
T	Presumed contamination as indicated by the trip blank results.	Not applicable.
+	False positive – reported compound was not present.	Not applicable.
-	False negative – compound was present but not reported.	Not applicable.
F	Presumed contamination as indicated by the FB or ER results.	Presumed contamination as indicated by the FB or ER results.
\$	Reported result or other information was incorrect.	Reported result or other information was incorrect.
?	TIC identity or reported retention time has been changed.	Not applicable.

Qualification Code Reference Table Cont.

D	The analysis with this flag should not be used because another more technically sound analysis is available.	The analysis with this flag should not be used because another more technically sound analysis is available.
P	Instrument performance for pesticides was poor.	Post Digestion Spike recovery was not within control limits.
DNQ	The reported result is above the method detection limit but is less than the reporting limit.	The reported result is above the method detection limit but is less than the reporting limit.
*II, *III	Unusual problems found with the data that have been described in Section II, "Sample Management," or Section III, "Method Analyses." The number following the asterisk (*) will indicate the report section where a description of the problem can be found.	Unusual problems found with the data that have been described in Section II, "Sample Management," or Section III, "Method Analyses." The number following the asterisk (*) will indicate the report section where a description of the problem can be found.

III. Method Analyses

A. EPA METHOD 8081A—Organochlorine Pesticides

Reviewed By: L. Calvin

Date Reviewed: March 28, 2013

The sample listed in Table 1 for this analysis was validated based on the guidelines outlined in the *MEC^x Data Validation Procedure for Organophosphorus Pesticides (DVP-11, Rev. 0)*, *EPA SW-846 Method 8081A*, and the *National Functional Guidelines for Organic Data Review (10/99)*.

- Holding Times: Extraction and analytical holding times were met. The unpreserved water sample was extracted within seven days of collection and analyzed within 40 days of extraction.
- Calibration: Initial calibration %RSDs were within the control limit of $\leq 20\%$ or $r^2 \geq 0.990$, and ICV and bracketing CCV %Ds or %drift were within the control limit of $\leq 15\%$ for target compounds of interest.
- Blanks: The method blank associated with the sample had no target compound detects above the MDL.
- Blank Spikes and Laboratory Control Samples: Recoveries were within the laboratory-established control limits.
- Surrogate Recovery: The surrogate recoveries were within the laboratory-established control limits.
- Matrix Spike/Matrix Spike Duplicate: MS/MSD analyses were not performed on the sample in this SDG. Evaluation of method accuracy was based on the LCS results.
- Field QC Samples: Field QC samples were evaluated, and if necessary, qualified based on method blanks and other laboratory QC results affecting the usability of the field QC data. Any remaining detects were used to evaluate the associated site samples. Following are findings associated with field QC samples:
 - Field Blanks and Equipment Rinsates: This SDG had no identified field blank or equipment rinsate samples.
 - Field Duplicates: This SDG had no identified field duplicate samples.
- Compound Identification: Compound identification was verified. The laboratory analyzed for pesticides by EPA Method 8081A on two analytical columns for confirmation. The intercolumn RPD for 4,4'-DDE reported in sample Arroyo Simi-FP exceeded 100%, at 137%; therefore, the result was qualified as tentatively identified, "N." Review of the

sample chromatograms and retention times indicated no problems with target compound identification.

- Compound Quantification and Reported Detection Limits: Calculations were verified and the sample results reported on the sample result summary were verified against the raw data. No transcription errors or calculation errors were noted. The intercolumn RPD for 4,4'-DDE reported in sample Arroyo Simi-FP exceeded 40%, at 137%; therefore, the result was qualified as estimated, "J." Any result reported between the MDL and the reporting limit was qualified as estimated, "J," and coded with "DNQ" in order to comply with the NPDES permit. Any reported nondetect is valid to the reporting limit.

B. VARIOUS EPA METHODS—General Minerals

Reviewed By: M. Cherny

Date Reviewed: March 28, 2013

The samples listed in Table 1 for this analysis were validated based on the guidelines outlined in the *MEC^X Data Validation Procedure for General Minerals (DVP-6, Rev. 0)*, *Standard Method SM 4500 NH3 D*, and the *National Functional Guidelines for Inorganic Data Review (7/02)*.

- Holding Times: Analytical holding times, 28 days from collection for ammonia, was met.
- Calibration: Calibration criteria were met. The ammonia initial calibration r^2 value was ≥ 0.995 and all initial and continuing calibration recoveries were within 90-110%.
- Blanks: Method blanks and CCBs had no detects above the MDL.
- Blank Spikes and Laboratory Control Samples: Recoveries were within laboratory-established QC limits and were confirmed.
- Laboratory Duplicates: No laboratory duplicate analyses were performed on the sample in this SDG.
- Matrix Spike/Matrix Spike Duplicate: MS/MSD analyses were performed on the sample in this SDG. Recoveries and the RPD were within laboratory-established QC limits.
- Sample Result Verification: Calculations were verified and the sample results reported on the sample result summary were verified against the raw data. No transcription errors or calculation errors were noted. When the sample results were qualified and the reviewer was able to clearly determine bias, detected results were qualified as either "J+" or "J-"; otherwise, bias was not indicated in the qualification. Any detects between the method detection limit and the reporting limit were qualified as estimated, "J," and coded with "DNQ," in order to comply with the NPDES permit. Reported nondetects are valid to the MDL.

- Field QC Samples: Field QC samples were evaluated, and if necessary, qualified based on method blanks and other laboratory QC results affecting the usability of the field QC data. Any remaining detects were used to evaluate the associated site samples. Following are findings associated with field QC samples:
 - Field Blanks and Equipment Rinsates: This SDG had no identified field blank or equipment rinsate samples.
 - Field Duplicates: There were no field duplicate samples identified for this SDG.

Validated Sample Result Forms 440-37740-1

Analysis Method 8081A

Sample Name Arroyo Simi-FP **Matrix Type:** Solid **Validation Level:** IV

Lab Sample Name: 440-37740-3 **Sample Date:** 2/11/2013 12:00:00 PM

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
4,4'-DDD	72-54-8	ND	5.0	1.5	ug/Kg		U	
4,4'-DDE	72-55-9	2.2	5.0	1.5	ug/Kg	J,DX	NJ	DNQ, *III
4,4'-DDT	50-29-3	ND	5.0	1.5	ug/Kg		U	
Chlordane (technical)	57-74-9	ND	50	10	ug/Kg		U	
Dieldrin	60-57-1	ND	5.0	1.5	ug/Kg		U	
Toxaphene	8001-35-2	ND	200	50	ug/Kg		U	

Analysis Method SM 4500 NH3 D

Sample Name Arroyo Simi-FP **Matrix Type:** Solid **Validation Level:** IV

Lab Sample Name: 440-37740-3 **Sample Date:** 2/11/2013 12:00:00 PM

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Ammonia (as N)	7664-41-7	4.37	10.0	2.00	mg/Kg	J,DX	J	DNQ

