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Lab Number: L1623305 Client: AMEC Foster Wheeler E & I, Inc. ATTN: Rod Pendleton Project Name: PENOBSCOT RIVER ESTUARY Project Number: 3616166052

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Sample Delivery Group Information





Sample Delivery Group Form

Laboratory Project Mar	Job number: L16233 nager: Elizabeth Porta		R	eview Date:	07/28/20	16	
Project Nur	mber: 3616166052						
Project Nar		VER ESTU				Received: 07/2	27/2016 09:56
-	ount: AMEC Foster Wh			Roceiv	ved by: C		172010 05.50
	AWEC FOSIEI WII		, mc.	Necen	reu by. C	IVI/JK	
Samples De	elivered by: FEDEX				Call Tra	acker #	
Bill Of Lade	en Yes		Tracking	num 8045440	56941		
Coc Preser	t Present						
Container S	Status Intact		Sample	IDs			
All Contain	ers Accounted For?	Yes					
Were Extra	Samples Received?	No					
Do Sample	Labels and COC agree	? Yes					
Are Sample	es in Appropriate Conta	iners?	Yes				
Are Sample	es Received within Hold	ling time?	Yes				
pH of Samp	bles upon Receipt 8		Α	re samples P	roperly Pr	eserved? Ye	s
Initial pH	preserved in	house witl	h		Final pH		
Other Issue	es						
Chlorine Cl	heck N/A						
Are VOA/VI	PH Vials Present? No)					
Aqueous: D	Do Vials Contain Head S	space?	N/A				
Soils: Is Me	OHCovering the Soil?	N/A					
	20 Preserved vials Froz		N/A				
Frozen by (
							Delivered
Cooler	Seal	lce Present	Blue Ice Present	Temp. (Cels	ius)	Frozen upon Receipt	Direct from Site
A	Present/Intact	Yes	No	5.4 - IR Gun		No	No

LIMS Chain of Custody



ALPHA ANALYTICAL LABORATORIES, INC. LOGIN CHAIN OF CUSTODY REPORT Aug 03 2016, 12:04 pm Login Number: L1623305 Account: AMEC-ME AMEC Foster Wheeler E & I, Inc.Project: 3616166052 Received: 27JUL16 Due Date: 03AUG16 Sample # Client ID Mat PR Collected Container

L1623305-01 ADD-02_072216_SW_10 1 S0 22JUL16 16:38 1-Plastic-A1,1-Vial-D | DPKG-FULL Package Due Date: 08/03/16 DOC-9060,DPKG-FULL,TSS-2540

> Page 1 Logged By: Brett Read

Container Tracking



ALPHA ANALYTICAL LABORATORIES Container Tracking Report

Container ID Type	Status	Transaction Date	From Response	Location	To Operator	Response	Location	Operator
L1623305-01A Vial-D	INTACT	02-AUG-16	CUSTODY	RETURN WALK-IN	CUSTODY Deb Whelan	WETCHEM	WETCHEM	Deb Whelan
L1623305-01A Vial-D	INTACT	28-JUL-16		CUSTODY	Fred Ababio	RETURN WALK-IN C	USTODY RETURN	WALK-IN CUSTODY Fred Ababio
L1623305-01A Vial-D	INTACT	27-JUL-16	LOGIN	LOGIN	Brett Read	CUSTODY	CUSTODY	Brett Read
L1623305-01B Plastic-Al	INTACT	29-JUL-16		RETURN WALK-IN	CUSTODY Nunya Gozey	W11-S5-C	CUSTODY W11-S5	-C CUSTODY Nunya Gozey
L1623305-01B Plastic-Al	INTACT	29-JUL-16	CUSTODY	WETCHEM	Minh Ly	RETURN WALK-IN C	USTODY RETURN	WALK-IN CUSTODY Minh Ly
L1623305-01B Plastic-Al	INTACT	28-JUL-16	CUSTODY	W11-S3-A CUSTO	DY Minh Ly	WETCHEM	WETCHEM	Minh Ly
L1623305-01B Plastic-Al	INTACT	28-JUL-16		CUSTODY	Fred Ababio	W11-S3-A CUSTODY	W11-S3-A CUST	ODY Fred Ababio
L1623305-01B Plastic-Al	INTACT	27-JUL-16	LOGIN	LOGIN	Brett Read	CUSTODY	CUSTODY	Brett Read

Chain of Custody





Chain Of Custody/Analysis Request Form

AN		te 200, 5	in congress	rk# 770-421		е		Luu Proj Chemist 508-789-1738	D: Alpho Denise King	1	AMEC Job Number = 3616166052	
Samp #	Sample Date	Sample Time	Field Sample ID	QC Code	Qty Total	Qty Eacl	1	Bottle Size and Materia	l Preservative	Media	Method	Fraction
1601	7/22/2016	5 16:38	ADD-02_072216_SW_1	0	2			· ·		X Kat	n en	
	1 vial	cap broke	- only 1 of 2 sent	FS		1 40) mL	Glass Vial	H2SO4/4 deg C	SW	DOC (SW846 9060)	т
				FS		1 1	L	Plastic	4 deg C	SW	TSS (Mod 2450D)	т

Relinquished: al Date: 7 26 / 2016 Time: 1030 Received: Date: _____ 127 12016 Time: 09:56

AIRBILL: 8045 4405 6941

ONE COOLER

Tuesday, July 26, 2016

Page 1 of 1

Wet Chemistry



Total Suspended Solids Analysis

Sample Raw Data

			ALPHA AN				Last Change 3/4/13				
	WE		EMISTR			NT	File tss.xlt			2540D (I	PPB)
			TOTAL SU	filter lot pa							
S	ample Number:			in 104 3:32	2	Product:	TSS-2540			2540	
				out 6:05		•	Solids, Total Suspen	ded		Get Sa	mlas
	Client:			in 9:15 out 9:55		Technician:	7/29/2016 0:46 MCL			Get 54	
	Analysis:			in 10:45		ork group:	WG918076			Save to]	LIMS
	Method:	SM 254	0 D	out 11:45 in 12:45	out 13:00	RDL:	5.0 mg/l			MET	HODS
	2		Tare	Sample	Net	Net	Net	Net			
			Weight	Volume	Weight(1)	Weight(2)	Weight(3)	Weight(4)	RDL	RESULT	
	Sample Number			(ml)	(gm)	(gm)	(gm)	(gm)	MULT.	mg/l]
BLANK	WG918076-1	31	0.42885	1000	0.42893	0.42874				0.00	
DUP	WG918076-2	45	0.4363	500	0.9041	0.9038			2	935.00	L1623305-01
SAMP	L1623305-01	44	0.4317	500	0.6304	0.6306			2	397.40	
	L1623346-01	43	0.4316	1060	0.4470	0.4474				14.53	
SAMP	L1623355-01	46	0.4299	1010	0.4486	0.4489				18.51	
SAMP	L1623360-01	47	0.4308	250	0.5152	0.5158	0.5150		4	336.80	
SAMP	L1623364-01	48	0.4318	750	0.5022	0.5020			2	93.60	
	L1623408-01	49	0.4309	750	0.7230	0.7238	0.7227		2	389.07	
	L1623408-02	50	0.4308	1075	0.4469	0.4470				14.98	
	L1623444-01	51	0.4311	1140	0.4664	0.4664				30.96	
SAMP	L1623488-01	52	0.4324	1125	0.4475	0.4468	0.4453	0.4453		11.47	
SAMP	L1623488-02	53	0.4326	1150	0.4319	0.4318				0.00	
		DUP-TA	ARE:	0.90380	0.43630	0.46750	-			482739.54	
		Sample	-TARE:	0.63040	0.43170	0.19870				315196.70	
		DUP we	eight (g) on	the filter:		0.46750					
		Sample	weight (g)	on the filter		0.19870					
		Ave wei	ight (g) on tl	ne filter:		0.33310					
		DUP%:				140.3					
		Sample	%:			59.7					

Work Group

ALPHA ANALYTICAL LABORATORIES, INC.

Alpha WORK GROUP REPORT (wk02)

Aug 03 2016, 10:59 am

Work Group: WG918076 for Department: 7 Wet Chemistry

	Creat	ed: 28-JUL-16	Due: Operato	or: MCL	
Sample	Client ID	C Product	Matrix	Stat UA HOLD DUE PR Location	
1623305-01	ADD-02_072216_SW_10	S TSS-2540	WATER	DONE U 0729 0803 S0 Plastic-A1	
1623346-01	0401 COMPOSITE	S TSS-2540	WATER	DONE U 0803 0804 S0 Plastic-A1	
1623355-01	0301 COMPOSITE	S TSS-2540	WATER	DONE U 0803 0804 S0 Plastic-Al	
1623360-01	0201 COMPOSITE	S TSS-2540	WATER	DONE U 0803 0804 S0 Plastic-A1	
1623364-01	0101 COMPOSITE	S TSS-2540	WATER	DONE U 0803 0804 S0 Plastic-A1	
1623408-01	INF 072716	C TSS-2540	WATER	DONE U 0803 0803 S0 Plastic-A1	
1623408-02	EFF 072716	C TSS-2540	WATER	DONE U 0803 0803 S0 Plastic-Al	
1623444-01	A,B,C,D	S TSS-2540	WATER	DONE U 0803 0808 S0 Plastic-Al	
1623488-01	20160728 INFLUENT	S TSS-2540	WATER	DONE U 0804 0729 1A Plastic-Al	
1623488-02	20160728 EFFLUENT	S TSS-2540	WATER	DONE U 0804 0729 1A Plastic-A1	
VG918076-1	Laboratory Method Bl		WATER	DONE U	
VG918076-2	Duplicate Sample	S TSS-2540	WATER	DONE U	
Comments:					
VG918076-2	L1623305-01				

Page 1

Organic Carbon Analysis

Sequence Logs

. admiry. ++ corporougny

Department: Wet Chemistry

Title: TOC 3 Run Log - Shimadzu Zebra

Published Date: 3/10/2016 10:26:50 AM

DATE:	THE OZOUL		STOCK	(STDS ID INFO:			WORKING ST	DS ID IN	IFO:	
NALYST			LOT #				LOT #'s:			
URVEIN	NFO:			PM CURVE SLN: アレー	05091	6-C	2 PPM ICV:	NG	0302	16- ± cv
URVE IN	USE: OSUQUE DUC-	3	2000 P	PM ICV/LCS/SPK SLN : -	00-050	916-W	2 PPM LCS :	TUC-	0307	me-rcs
										16- sinh
					060216	- ICHN	10 PPM IC CK	STD:	マレーク	180716- IC
OSITION	SAMPLE	DIL X	PH	COMMENTS	POSITION	SAMPLE		DIL X	PH	COMMENTS
1	DE									
2	TUCK SID LOMM	0								
3	ECV young									
Ч	FUR									
5	MB									
4	Les 2mm									
7	23305.1 DUC	2	2	US + DOC PF		<u> </u>				
8	23420.1	1	2							
9	2	1	2			ļ				
10	3	1	2			ļ				
-14	Ч	<u> </u>	2						ł	
12	23616.3	20	2							
13	ч	80	1-2-	<u>.</u>						
14	6	30	2	16-0-14						
15	Civ zypon + rv		<u> </u>	remun Forger via				+		
16	us	1								
17	23305.1 dup PL	L	2	Urs,						
18	23016.240	400	2	conc.						
19_	23616.3 dup		2	160 × = 640,2mm				+	+	
20	23733.1	30		160 - 070,000				-	1	
21		+	2			+		1	1.	
12	23		2						<u> </u>	
24		<u>+ `-</u>	14							
25	cer zypom	1				1		1		
~>	P	1.		1					1	

Document Type: Form

~

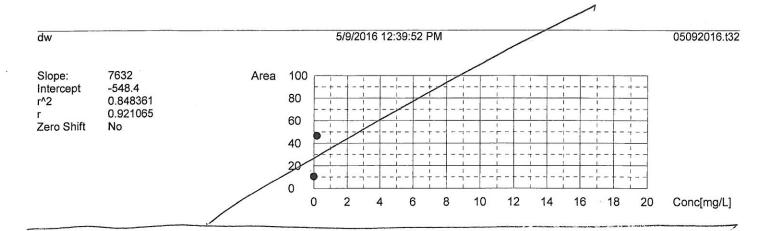
Pre-Qualtrax Document ID: N/A

Sample Raw Data

ALPHA ANALYTICAL LABS BACTERIA DEPARTMENT DISSOLVED ORGANIC CARBON

Last Change 03/4/13 GFF File TOC/DOC.xlt

Sample Number: Client: Analysis: TOC Instrument ID: Method:	DOC 3 EPA-9060 LCS	- Conc. (ppm): [V Pa	Analyte: alysis Date: Technician: Vork group: MDL: ge Number:	wg919141 1.0 mg/l	c Carbon,
		e Conc(ppm):		MDL Multiplion	RESULT		
DUP	Sample Number WG919141-3			Multiplier 2	mg/L 3.16	L1623305-01	
SAMP	L1623305-01	docs	ff	2	3.26		
BLANK	WG919141-1		Someria	1 Spike	0.01		
		Comments	Sample Result	Spike Conc	Spike Result	% Rec	
				4		0	
LCS	WG919141-2			2	1.96	98	



05092016 toc-3 curve

Completed

05092016 toc-3.2016_05_09_09_55_51.cal

Cal. Curve

Sample Name: Sample ID: Cal. Curve: Status

Туре	Anal.
Standard	NPOC

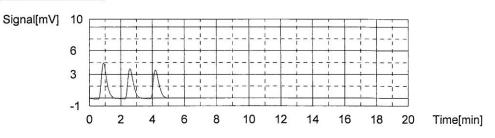
Conc: 0.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	11.55	2500uL	1	******	E	5/9/2016 10:04:29 AM
2	9.448	2500uL	1	******		5/9/2016 10:09:05 AM
3	9.120	2500uL	1	******		5/9/2016 10:13:42 AM

Acid Add. Sp. Time Mean Area

180.0sec 9.284

3.000%



TOC-3 curve 050916

Conc: 0.2000mg/L

No. Ar	ea	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Ti	me													
	.87 .35	2500ul		******		5/9/2016 10:24 5/9/2016 10:28														
Acid Add Sp. Time Mean Ar	d. e		3.000 180.0 46.61	lsec	1	Signal[mV]	20 14 7													
							-2	년: 0	2	4	6	8	لــــــــــــــــــــــــــــــــــــ	0	12	14	+ 1	6 6	18	<u>-</u> 20

Conc: 0.5000mg/L

05092016.t32

0.	Area	Inj. Vol. Aut. Dil.	Rem.	Ex.	Date / Ti	me
	98.92	2500uL 1 2500uL 1	******		5/9/2016 10:39 5/9/2016 10:43	
2	96.85	2000UL 1	-]	01912010 10.43	J.42 A
Acid / Sp. T Mean		3.000 180.0 97.89	sec		Signal[mV]	40 30 20 10 -4
Conc	: 1.000	mg/L				Ū

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	168.5	2500uL	1	******		5/9/2016 10:54:43 AM
2	174.4	2500uL	1	******	E	5/9/2016 10:59:04 AM
3	171.1	2500uL	1	******		5/9/2016 11:03:17 AM

Acid Add.	
Sp. Time	
Mean Area	

dw

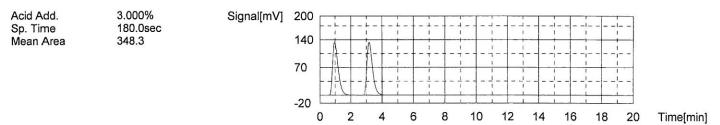
180.0sec 169.8

3.000%

Signal[mV]	80	·				-1						
	60		+ - + -	<u>+</u>			L I			 - -	!	
	40		+ - +1-	1-11		-			+ ~ -			
	20		+-#-	+		-			$\frac{1}{1} = \frac{1}{1} = -\frac{1}{1}$		¹ 1	
	-8		<u>+ -/; </u>	1-1-1					+ - +		 	
		0	2	4	6	8	10	12 1	14 1	6 1	8 20	Time[min]

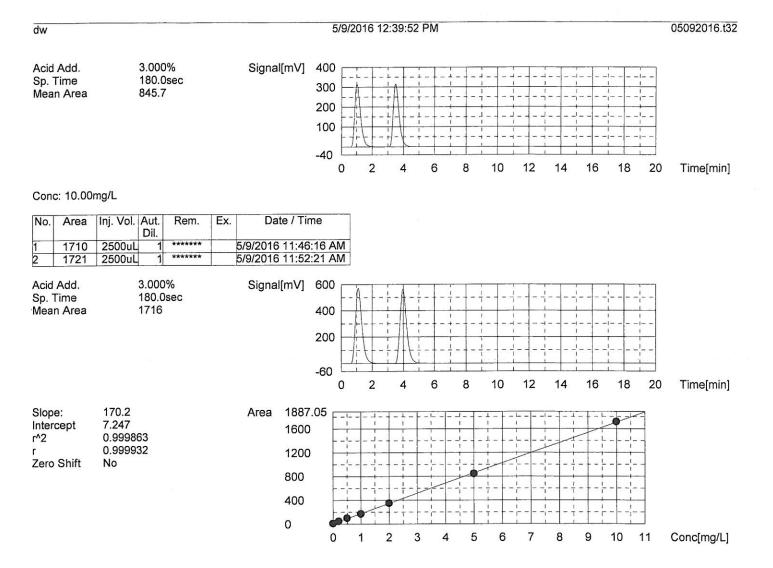
Conc: 2.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	346.8	2500uL	1	******		5/9/2016 11:14:09 AM
2	349.8	2500uL	1	******		5/9/2016 11:18:27 AM



Conc: 5.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	850.0	2500uL	1	******		5/9/2016 11:29:52 AM
2	841.4	2500uL	1	******		5/9/2016 11:34:29 AM



Instr.Information

System	TOC-VW
Detector	Wet Chemical

Sample

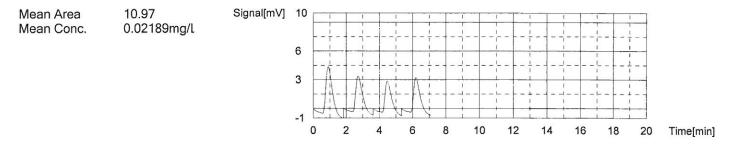
Sample Name:	di
Sample ID:	
Origin:	toc-3 4 reps method.met
Status	Completed
Chk. Result	

Туре	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:0.02189mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	lnj. Vol.	Aut. E Dil.	Ex.	Cal. Curve	Date / Time
1	13.99	0.03962mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_	8/2/2016 6:45:12 AN
2	10.94	0.02170mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_	8/2/2016 6:50:07 AN
3	9.061	0.01066mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_	8/2/2016 6:55:11 AN
4	9.897	0.01557mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_	8/2/2016 6:59:54 AN



Sample

Sample Name: Sample ID: Origin: Status Chk. Result ic ck std 10ppm

toc-3 4 reps method.met Completed

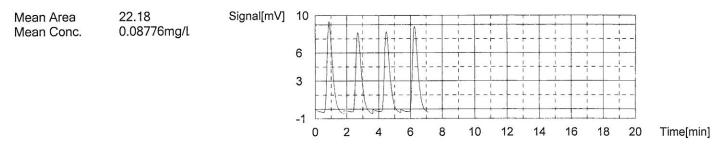
08022016.t32

Туре	Anal.	Dil.	Result	
Jnknown	NPOC	1.000	NPOC:0.08776mg/L	

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut.	Ex.	Cal. Curve	Date / Time
				Dil.			
1	24.32	0.1003mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_	
2	21.21	0.08205mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_	
3	20.85	0.07993mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_	
4	22.35	0.08875mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_	8/2/2016 7:25:40 AN



Sample

Sample Name:	icv 2ppm
Sample ID:	
Origin:	toc-3 4 reps method.met
Status	Completed
Chk. Result	

Туре	Anal.	Dil.	Result	
Inknown	NPOC	1.000	NPOC:2.007mg/L	

1. Det

Anal: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. E	Ēx.		Cal.	Curve)	1			Date	/ Ti	me		
				Dil.													
	341.4	1.964mg/L	2500uL	1		05092016	toc-3	2016_	_05_	Ø9_	09_	8/2/2	2016	7:36	5:57	A٨	
2	349.9	2.013mg/L	2500uL	1		05092016											
3	350.3	2.016mg/L	2500uL	. 1		05092016	toc-3	2016	_05_	09_	09_	8/2/2	2016	7:4	5:53	AN	
4	353.3	2.033mg/L	2500uL	1		05092016	toc-3	2016	_05_	09_	09	8/2/2	2016	7:50):24	AN	
										1							1
																/	/
										/						/	

dw			8/3/2016 6:09:22 AM	08022016.t32
Mean Area Mean Conc.	348.7 2.007mg/L	Signal[mV]	$\begin{array}{c} 200 \\ 140 \\ -0 \\ -20 \\ 0 \\ 2 \\ 4 \\ 6 \\ 8 \\ 10 \\ 12 \\ 14 \\ 16 \\ 18 \\ 2 \end{array}$	0 Time[min]
Sample				
Sample Name: Sample ID: Origin: Status Chk. Result		icb toc-3 4 reps Completed	method.met)

Туре	Anal.	Dil.	Result
Jnknown	NPOC	1.000	NPOC:0.00804mg/L

1. Det

Anal.: NPOC

1 8.779 0.00900mg/L2500uL 1 05092016 toc-3.2016_05_09_09_8/2/2016 8:00:59 AN 2 8.647 0.00823mg/L2500uL 1 05092016 toc-3.2016_05_09_09_8/2/2016 8:05:32 AN 3 8.699 0.00853mg/L2500uL 1 05092016 toc-3.2016_05_09_09_8/2/2016 8:10:08 AN 4 8.332 0.00638mg/L2500uL 1 05092016 toc-3.2016_05_09_09_8/2/2016 8:14:44 AN Mean Area 8.614 Signal[mV] 10 6 3	No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.		С	al. C	urve				Date	e / Ti	me			
3 8.699 0.00853mg/L2500uL 1 05092016 toc-3.2016_05_09_09_8/2/2016 8:10:08 AN 4 8.332 0.00638mg/L2500uL 1 05092016 toc-3.2016_05_09_09_8/2/2016 8:14:44 AN Mean Area 8.614 Signal[mV] 10 Mean Conc. 0.00804mg/L 6 6	1																		
4 8.332 0.00638mg/L2500uL 1 05092016 toc-3.2016_05_09_09_8/2/2016 8:14:44 AN Mean Area 8.614 Signal[mV] 10 Mean Conc. 0.00804mg/L 6	2																		
Mean Area 8.614 Mean Conc. 0.00804mg/L 6	3																		
Mean Conc. 0.00804mg/L 6	4	8.332	0.00638mg/L	_2500uL	1		050920	16 too	-3.2	016_	05_0	9_09	8/2/	2016	8:14	4:44 /	AN		
						Sig	nal[mV]												
																L - I			

Sample

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08022016.t32

0.01

Lace

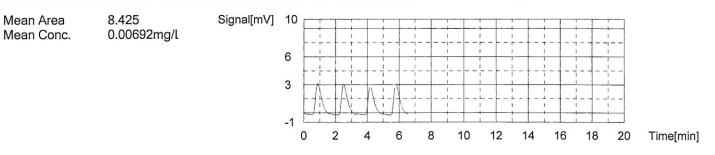
Sample Name:	mb
Sample ID: Origin:	toc-3 4 reps method.met
Status	Completed
Chk. Result	

Туре	Anal.	Dil.	Result
Jnknown	NPOC	1.000	NPOC:0.00692mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve		Date / Time
1	8.713	0.00862mg/l	L2500uL			05092016 toc-3.2016_05_09_0	9_8	8/2/2016 8:25:18 AN
2	8.667	0.00835mg/l	L2500uL	1		05092016 toc-3.2016_05_09_0	9_8	8/2/2016 8:29:56 AN
		0.00288mg/l				05092016 toc-3.2016_05_09_0	9_8	8/2/2016 8:34:28 AN
4	8.583	0.00785mg/l	L2500uL	1		05092016 toc-3.2016_05_09_0	9_8	8/2/2016 8:39:00 AN



Sample

Sample Name:Ics 2ppmSample ID:toc-3 4 reps method.metOrigin:toc-3 4 reps method.metStatusCompletedChk. Result

Туре	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:1.956mg/L

1. Det

Anal.: NPOC

dw

08022016.t32

300

No.	Area	Conc.	Inj. Vol.	Aut.	Ex.	Cal. Curve	Date / Time
				Dil.			
1	339.2	1.951mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_	8/2/2016 8:50:15 AN
2	346.0	1.991mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_	8/2/2016 8:55:38 AN
3	341.6	1.965mg/L	2500uL	1		05092016 toc-3.2016_05_09_09	8/2/2016 9:00:04 AN
4	333.4	1.917mg/L	2500uL	1		05092016 toc-3.2016_05_09_09	8/2/2016 9:04:27 AN

340.1 Signal[mV] 200 Mean Area 1.956mg/L Mean Conc. 140 70 -20 6 8 10 12 14 16 20 Time[min] 0 2 4 18

Sample

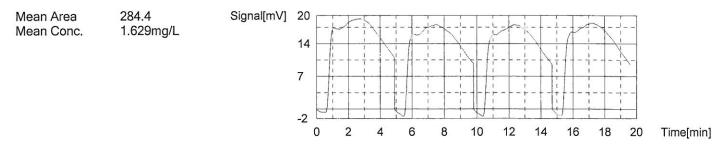
Sample Name:	23305-01 2x doc
Sample ID:	
Origin:	toc-3 4 reps method.met
Status	Completed
Chk. Result	

Туре	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:1.629mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut.	Ex.	Cal. Curve	Date / Time
				Dil.			
1	285.4	1.634mg/l	2500uL	1		05092016 toc-3.2016_05_09_09_	8/2/2016 9:22:11 AN
2	283.2	1.622mg/l	2500uL	1		05092016 toc-3.2016_05_09_09_	8/2/2016 9:30:16 AN
3	279.3	1.599mg/l	2500uL	1		05092016 toc-3.2016_05_09_09_	8/2/2016 9:38:20 AN
4	289.8	1.660mg/l	2500uL	1		05092016 toc-3.2016_05_09_09_	8/2/2016 9:46:20 AN



dw

08022016.t32

0,0%

Sample

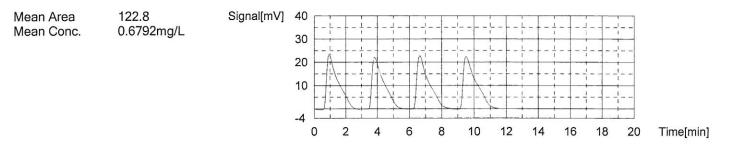
Sample Name:	23420-01
Sample ID:	
Origin:	toc-3 4 reps method.met
Status	Completed
Chk. Result	

Туре	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:0.6792mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	lnj. Vol.	Aut. I Dil.	Ex.	Cal. Curve	Date / Time
1	125.4	0.6943mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_	8/2/2016 9:58:07 AN
2	118.6	0.6543mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_	8/2/2016 10:03:01 A
3	121.1	0.6690mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_	8/2/2016 10:08:00 A
4	126.2	0.6990mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_	8/2/2016 10:13:02 A



Sample

Sample Name:	23420-02
Sample ID:	
Origin:	toc-3 4 reps method.met
Status	Completed
Chk. Result	

Туре	Anal.	Dil.	Result	
Unknown	NPOC	1.000	NPOC:3.666mg/L	NX
				7

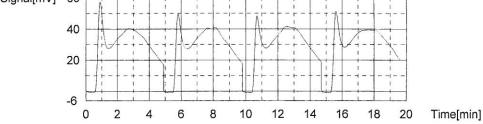
08022016.t32

Q.Y.

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut.	Ex.	C	al. Ci	urve				[Date	/ Ti	ime				
				Dil.															
1	634.4	3.685mg/L	2500uL	1	05092)16 too	c-3.20	016_	05_	09_	09_	8/2/2	016	10:	26:5	1 A			
2	634.3	3.685mg/L			05092														
3	622.3	3.614mg/L			05092														
4	633.2	3.678mg/L	2500uL	1	05092)16 too	c-3.20	016_	05_	09_	09_	8/2/2	016	10:	51:47	7 A			
	an Area an Conc.	631.0 3.666			Signal[mV]	60		+ -	<u> </u>	- 1							 	i -	



Sample

Sample Name:	23420-03
Sample ID:	
Origin:	toc-3 4 reps method.met
Status	Completed
Chk. Result	

Туре	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:9.769mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	lnj. Vol.	Aut. Ex. Dil.	Cal. Curve	Date / Time
1	1664	9.735mg/l	2500uL	1	05092016 toc-3.2016_05_09_09_	8/2/2016 11:04:09 A
2	1621	9.483mg/l	2500uL	1	05092016 toc-3.2016_05_09_09_	8/2/2016 11:11:15 A
3	1685	9.859mg/l	2500uL	1	05092016 toc-3.2016_05_09_09_	8/2/2016 11:17:01 A
4	1709	10.000mg/L	2500uL	1	05092016 toc-3.2016_05_09_09_	8/2/2016 11:23:49 A

8/3/2016 6:09:22 AM 08022016.t32 dw 1670 9.769mg/L Signal[mV] 400 Mean Area Mean Conc. 300 200 100 -40 0 2 4 6 8 10 12 14 16 18 20 Time[min]

Sample

Sample Name:	23420-04
Sample ID: Origin:	toc-3 4 reps method.met
Status	Completed
Chk. Result	

Туре	Anal.	Dil.	Result
Jnknown	NPOC	1.000	NPOC:3.967mg/L

zet

1. Det

Anal.: NPOC

No. Area	Conc. Inj. Vol	Aut. Ex.	C	Cal. Cu	urve		D	ate / Ti	me		
1 661.7 2 690.2 3 684.0 4 693.7	3.846mg/L2500ul 4.013mg/L2500ul 3.977mg/L2500ul 4.034mg/L2500ul	1	05092016 to 05092016 to 05092016 to 05092016 to	c-3.20 c-3.20	016_05_ 016_05_	09_09 09_09	8/2/20 8/2/20)16 11:4)16 11:4	40:00 A 46:01 A		
Mean Area Mean Conc.	682.4 3.967mg/L	Sig	nal[mV] 400 300 200 100 -40			6	8	10	12 14	16	 20 Time[min]

Sample

08022016.t32

247 Dot

Sample Name:	23616-03 80x
Sample ID:	
Origin:	toc-3 4 reps method.met
Status	Completed
Chk. Result	

Туре	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:3.084mg/L

1. Det

Anal.: NPOC

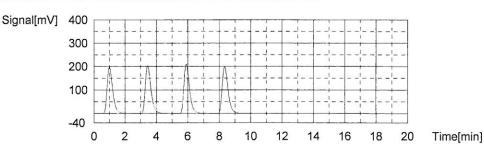
Mean Area

Mean Conc.

532.1

3.084mg/L

No.	Area	Conc.	Inj. Vol.	Aut. Ex.	Cal. Curve	Date / Time
1	521.6	3.022mg/L	2500uL	Dil.	05092016 toc-3.2016_05_09_09	8/2/2016 12:02:10 P
2	535.5	3.104mg/L	2500uL	1	05092016 toc-3.2016_05_09_09_	8/2/2016 12:06:44 P
3	532.5	3.086mg/L	2500uL	1	05092016 toc-3.2016_05_09_09_	8/2/2016 12:11:15 P
4	538.9	3.124mg/L	2500uL	1	05092016 toc-3.2016 05 09 09	8/2/2016 12:15:59 P



Sample

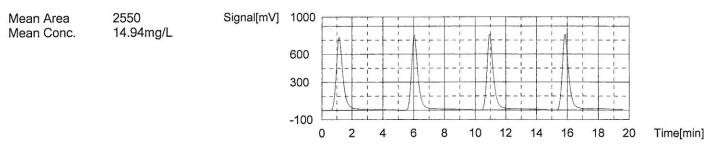
Sample Name:23616-04 80xSample ID:toc-3 4 reps method.metOrigin:toc-3 4 reps method.metStatusCompletedChk. ResultCompleted

Туре	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:14.94mg/L
1. Det			

Anal.: NPOC

08022016.t32

No.	Area	Conc.	Inj. Vol.	Aut.	Ex.	Cal. Curve	Date / Time		
				Dil.					
1	2531	14.83mg/l				05092016 toc-3.2016_05_09_09_			
2	2528	14.81mg/l	2500uL	1		05092016 toc-3.2016_05_09_09_	8/2/2016 12:37:09 P		
3	2565	15.03mg/l				05092016 toc-3.2016_05_09_09	8/2/2016 12:45:56 P		
4	2574	15.08mg/l	2500uL	. 1		05092016 toc-3.2016_05_09_09_	8/2/2016 12:54:46 P		



Sample

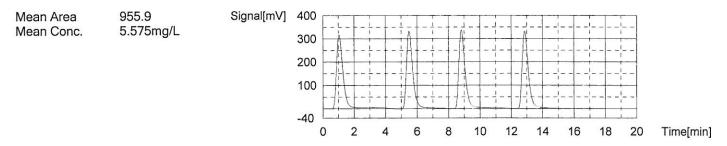
Sample Name:	23616-06 80x
Sample ID:	
Origin:	toc-3 4 reps method.met
Status	Completed
Chk. Result	

Туре	Anal.	Dil.	Result	
Unknown	NPOC	1.000	NPOC:5.575mg/L	yule
1. Det				dot-

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	965.0	5.628mg/	L2500uL			05092016 toc-3.2016_05_09_09_	8/2/2016 1:08:09 PN
2	935.9	5.457mg/	L2500uL	1		05092016 toc-3.2016_05_09_09	8/2/2016 1:14:09 PN
3	968.1	5.646mg/	L2500uL	1		05092016 toc-3.2016_05_09_09_	8/2/2016 1:20:39 PN
4	954.7	5.567mg/	L2500uL	1		05092016 toc-3.2016_05_09_09_	8/2/2016 1:26:18 PN



dw

Sample

Sample Name:	ccv 2ppm
Sample ID:	
Origin:	toc-3 4 reps method.met
Status	Aborted
Chk. Result	

Type Anal. Dil. Jnknown NPOC 1.000	Result		
Unknown	NPOC	1.000	!!Failed!! NPOC:-0.01537mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol	.Aut. Dil.	Ex.		Cal. Curve			D	ate / T	Time					
1	5.337	-0.01122mg/L	2500ul	1			oc-3.2016_										
2	3.926	-0.01951mg/L	2500ui		050920	16 0	pc-3.2016_	05_09	_09	8/2/20	101:	51:14	PI				
	n Area n Conc	4.632 -0.015	537mg/		Signal[mV]	10						+				+ +	
						6											
						3						L .			 		
						-1	0 2	4	6	 8	10	12	14	16	18	20	Time[min]

Sample

Sample Name: Sample ID: Origin: Status Chk. Result

toc-3 4 reps method.met Completed

ccv 2ppm(rr

Туре	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:2.007mg/L

1. Det

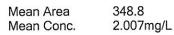
nple



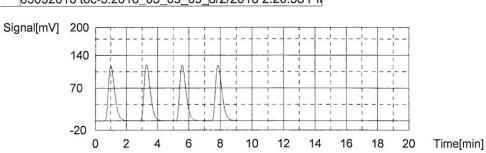
08022016.t32

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	348.4	2.005mg/l	2500uL	1		05092016 toc-3.2016_05_09_09_	8/2/2016 2:07:53 PM
2	350.6	2.018mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_	8/2/2016 2:12:16 PM
3	347.9	2.002mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_	8/2/2016 2:16:39 PM
4	348.1	2.003mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_	8/2/2016 2:20:58 PM



na/L



Sample

Sample Name: Sample ID:	ccb
Origin:	toc-3 4 reps method.met
Status	Completed
Chk. Result	

Туре	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:0.02007mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut.	Ex.	Cal. Curve	Date / Time
				Dil.			
1	8.676	0.00840mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_	8/2/2016 2:31:32 PN
2	8.445	0.00704mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_	8/2/2016 2:36:07 PN
3	11.48	0.02487mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_	8/2/2016 2:40:41 PN
		0.03998mg/L				05092016 toc-3.2016_05_09_09	8/2/2016 2:45:18 PN

dw

8/3/2016 6:09:22 AM 08022016.t32 dw Mean Area Mean Conc. Signal[mV] 10 10.66 0.02007mg/l 6 3 -1 2 4 6 8 10 12 14 16 20 Time[min] 0 18

Sample

Sample Name:	23305-01 dup 2x doc
Sample ID:	
Origin:	toc-3 4 reps method.met
Status	Completed
Chk. Result	2

Туре	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:1.580mg/L

1. Det

Anal.: NPOC

1 287.7 1.648mg/L 2500uL 1 05092016 toc-3.2016_05_09_09_8/2/2016 2:59:07 PN 2 273.4 1.564mg/L 2500uL 1 05092016 toc-3.2016_05_09_09_8/2/2016 3:07:10 PN 3 265.3 1.516mg/L 2500uL 1 05092016 toc-3.2016_05_09_09_8/2/2016 3:15:15 PN 4 277.8 1.590mg/L 2500uL 1 05092016 toc-3.2016_05_09_09_8/2/2016 3:23:18 PN Mean Area 276.1 Signal[mV] 20 14 1.580mg/L 14	No.	Area	Conc.	Inj. Vo	I. Aut. Dil.	Ex.	Cal. Curve Date / Time	
3 265.3 1.516mg/L2500uL 1 05092016 toc-3.2016_05_09_09_8/2/2016 3:15:15 PN 4 277.8 1.590mg/L2500uL 1 05092016 toc-3.2016_05_09_09_8/2/2016 3:23:18 PN Mean Area 276.1 Signal[mV] 20 Mean Conc. 1.580mg/L 1.580mg/L	1	287.7	1.648mg/L	2500u	1		05092016 toc-3.2016_05_09_09_8/2/2016 2:59:07 PN	
4 277.8 1.590mg/L2500uL 1 05092016 toc-3.2016_05_09_09_8/2/2016 3:23:18 PN Mean Area 276.1 Signal[mV] 20 Mean Conc. 1.580mg/L 14	2	273.4	1.564mg/L	2500u	_ 1			
Mean Area 276.1 Signal[mV] 20 Mean Conc. 1.580mg/L 14	3	265.3	1.516mg/L	2500u	L 1			
Mean Conc. 1.580mg/L 14	4	277.8	1.590mg/L	2500u	∟ 1		05092016 toc-3.2016_05_09_09_8/2/2016 3:23:18 PN	
-2				mg/L		Sig	14 1 </td <td></td>	

3.14

Sample

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08022016.t32

102-1 102-1

247

Sample Name:	23616-04 400x
Sample ID:	
Origin:	toc-3 4 reps method.met
Status	Completed
Chk. Result	

Туре	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:2.710mg/L

1. Det

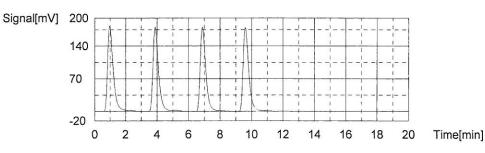
Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	489.2	2.832mg/L	2500uL			05092016 toc-3.2016 05 09 09	8/2/2016 3:35:08 PN
2	464.3	2.686mg/L	2500uL	1		05092016 toc-3.2016_05_09_09	8/2/2016 3:40:14 PN
3	458.9	2.654mg/l	2500uL	1		05092016 toc-3.2016_05_09_09_	8/2/2016 3:45:03 PN
4	461.6	2.670mg/L	2500uL	1		05092016 toc-3.2016_05_09_09	8/2/2016 3:49:49 PN

Mean Area Mean Conc.

2.710mg/L

468.5



Sample

Sample Name:23616-03 dup 80xSample ID:0rigin:Origin:toc-3 4 reps method.metStatusCompletedChk. ResultCompleted

Туре	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:3.086mg/L

1. Det

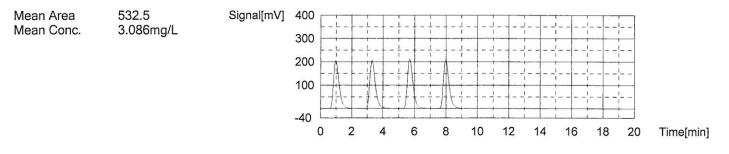
Anal.: NPOC

dw

08022016.t32

0,02 1407

No.	Area	Conc.	Inj. Vol.	Aut.	Ex.	Cal. Curve	Date / Time
				Dil.			
1	527.9	3.059mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_	8/2/2016 4:01:04 PN
2	530.7	3.076mg/L	2500uL	1		05092016 toc-3.2016 05 09 09	8/2/2016 4:05:45 PN
3	532.7	3.088mg/L	2500uL	1		05092016 toc-3.2016_05_09_09	8/2/2016 4:10:08 PN
4	538.5	3.122mg/L	2500uL	1		05092016 toc-3.2016_05_09_09	8/2/2016 4:14:43 PN



Sample

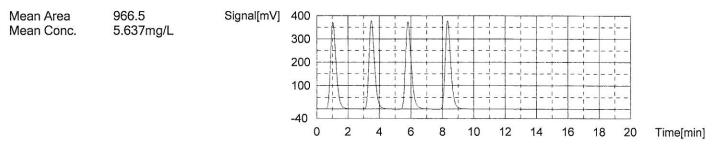
Sample Name: Sample ID:	23616-03 spk 640ppm 160x
Origin: Status Chk. Result	toc-3 4 reps method.met Completed

Туре	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:5.637mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut.	Ex.	Cal. Curve	Date / Time
				Dil.			
1	956.2	5.576mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_	8/2/2016 4:26:06 PN
2	961.9	5.610mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_	8/2/2016 4:30:31 PN
3	979.6	5.714mg/L	2500uL	1		05092016 toc-3.2016_05_09_09	8/2/2016 4:35:23 PN
4	968.4	5.648mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_	8/2/2016 4:40:01 PN



08022016.t32

Sample

Sample Name:	23738-01
Sample ID:	
Origin:	toc-3 4 reps method.met
Status	Completed
Chk. Result	

Туре	Anal.	Dil.	Result	
Unknown	NPOC	1.000	NPOC:2.842mg/L	14
onatom	11.00			°V

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol	Aut. Dil.	Ex.		Cal.	Curve				D	ate /	/ Tim	пе					
1	492.0	2.848mg/L	2500uL	1		05092016 to	oc-3.	2016	05	09	09	8/2/20	016 4	4:51	:37 F	٧N				
2	491.2	2.844mg/L	2500uL	1		05092016 to	oc-3.	2016	05_	09_	09_	8/2/20	016 4	4:57	:35 F	٧٩				
3	490.9	2.842mg/L				05092016 to														
4	489.7	2.835mg/L	2500uL	1		05092016 to)c-3.	2016_	05_	09_	09_	8/2/20	016 \$	5:07	:08 F	٧٢				
	n Area n Conc.	491.0 2.842			Sig	nal[mV] 200 140 70														
						-20	0	2	4	6	5 5	8	10	12	2 1	11 4	16	18	 20	Time[m

Sample

Sample Name:	23738-02
Sample ID:	
Origin:	toc-3 4 reps method.met
Status	Completed
Chk. Result	

Туре	Anal.	Dil.	Result	
Unknown	NPOC	1.000	NPOC:3.605mg/L	
				3.0.

dw

17/19

8/3/2016 6:09:22 AM

1. Det

dw

Anal.: NPOC

No.	Area	Conc.	Inj. Vol		Ex.		Ca	I. Cur	/e				Date	/ Time)			
				Dil.														
1	628.8	3.652mg/L	2500ul	1		050920	16 toc-	3.201	6_05	5_09	_09_	8/2/2	016 5	5:18:5	7 PN			
2	612.7	3.558mg/L	2500ul	1		050920	16 toc-	3.201	6_05	5_09	_09_	8/2/2	016 5	5:23:4	2 PN			
3	625.4	3.632mg/L	2500uL	1		050920	16 toc-	3.201	6_05	5_09	_09_	8/2/2	016 5	5:28:3	5 PN			
4	616.3	3.579mg/L	2500ul	1		050920	16 toc-	3.201	6_05	5_09	_09_	8/2/2	016 5	5:33:2	8 PN			
	an Area an Conc.	620.8 3.605			Sig	nal[mV]	200		- 1 -				·				! !	
							140					1	$\left \right $		1	1	I	1
							70			1 - T -	TTV]	1		1

2

4

6

8

10

12

14

16

18

20

Time[min]

Sample

Sample Name:	23738-03
Sample ID:	
Origin:	toc-3 4 reps method.met
Status	Completed
Chk. Result	

Туре	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:3.241mg/L

-20 0

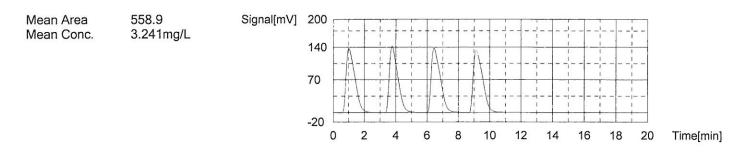
1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Ex Dil.	c. Cal. Curve	Date / Time
1	555.6	3.222mg/L	2500ul		05092016 toc-3.2016 05 09 09	8/2/2016 5:45:08 PN
2	551.9	3.200mg/L			05092016 toc-3.2016_05_09_09_	
3	565.8	3.282mg/L			05092016 toc-3.2016_05_09_09_	
4	562.2	3.261mg/L	2500uL	1	05092016 toc-3.2016_05_09_09_	

	. 1	
1	11	
4	,0	

08022016.t32



Sample

dw

Sample Name: Sample ID:	ccv2ppm
Origin:	toc-3 4 reps method.met
Status	Completed
Chk. Result	

Туре	Anal.	Dil.	Result	
Unknown	NPOC	1.000	NPOC:2.011mg/L	

1. Det

Anal.: NPOC

1 351.3 2.022mg/L 2500uL 1 05092016 toc-3.2016_05_09_09_8/2/2016 6:41:03 PN 2 348.4 2.005mg/L 2500uL 1 05092016 toc-3.2016_05_09_09_8/2/2016 6:45:24 PN 3 347.1 1.997mg/L 2500uL 1 05092016 toc-3.2016_05_09_09_8/2/2016 6:49:45 PN 4 351.3 2.022mg/L 2500uL 1 05092016 toc-3.2016_05_09_09_8/2/2016 6:54:08 PN Mean Area 349.5 Signal[mV] 200 Mean Conc. 2.011mg/L 140 70 140 140	No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	0	Cal. C	urve			Dat	te / Tim	ie		
2 348.4 2.005mg/L2500uL 1 05092016 toc-3.2016_05_09_09_8/2/2016 6:45:24 PN 3 347.1 1.997mg/L2500uL 1 05092016 toc-3.2016_05_09_09_8/2/2016 6:49:45 PN 4 351.3 2.022mg/L2500uL 1 05092016 toc-3.2016_05_09_09_8/2/2016 6:54:08 PN Mean Area 349.5 Signal[mV] 200 Mean Conc. 2.011mg/L 140 70 70 140	1	351.3	2.022mg/L	2500uL			05092016 to	c-3.2	016 05	5 09	09	8/2/201	6 6:41:	03 PN		
4 351.3 2.022mg/L2500uL 1 05092016 toc-3.2016_05_09_09_8/2/2016 6:54:08 PN Mean Area Mean Conc. 349.5 2.011mg/L Signal[mV] 200 140 70	2	348.4					05092016 to	c-3.2	016_05	09	09_	8/2/201	6 6:45:	24 PN		
Mean Area 349.5 Signal[mV] 200 Mean Conc. 2.011mg/L 140 70	3															
Mean Conc. 2.011mg/L 140 70	4	351.3	2.022mg/L	2500uL	. 1		05092016 to	c-3.2	016_05	5_09_	_09_	8/2/201	6 6:54:	08 PN		
						Sig	140									

Sample

Page 42 of 61

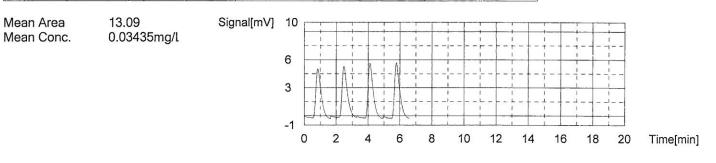
08022016.t32

Sample Na Sample ID			ccb		
Origin: Status Chk. Resu			toc-3 4 reps method.met Completed		(
Туре	Anal.	Dil.	Result		
Unknown	NPOC	1.00	0	NPOC:0.03435mg/L	\sim

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	12.50	0.03087mg/L	2500uL	1		05092016 toc-3.2016 05 09 09	8/2/2016 7:04:42 PN
2	12.84	0.03287mg/L	2500uL	1		05092016 toc-3.2016_05_09_09	8/2/2016 7:09:17 PN
3	13.36	0.03592mg/L	2500uL	1		05092016 toc-3.2016_05_09_09	8/2/2016 7:13:53 PN
4	13.67	0.03774mg/L	2500uL	1		05092016 toc-3.2016 05 09 09	8/2/2016 7:18:27 PN



dw

Work Group

ALPHA ANALYTICAL LABORATORIES, INC.

Alpha WORK GROUP REPORT (wk02)

Aug 03 2016, 10:57 am

Work Group: WG919141 for Department: 7 Wet Chemistry

Sample Client ID C Product Matrix Stat UA MOLD DUM PR Incention 1623305-01 ADD-02_072316_SM_1D & DOC-9660 WATTER DORN D DB39 DB32 88 Vial-D W0393141-3 Laboratory Nethod IB & DOC-9660 WATTER DORN D DB39 DB32 88 Vial-D W0393141-3 Laboratory Ontool & S DOC-9660 WATTER DORN D DB39 DB32 88 Vial-D W0393141-3 L1623305-01 WATTER DORN D DB39 DB32 88 Vial-D W0393141-3 L1623305-01 Honore Note Note Note Note Note Note Note Not		Create	ed: 02-AUG-16 Due:	Operator: dw	
WG919141-1Laboratory Method Bl S DOC-9060WATERDONE UWG919141-2Laboratory Control S S DOC-9060WATERDONE UWG919141-3Duplicate SampleS DOC-9060WATERDONE UComments:Comments:Comments:Comments:Comments:	Sample Cl	lient ID	C Product	Matrix Stat W	UA HOLD DUE PR Location
	WG919141-1 La WG919141-2 La WG919141-3 Du	aboratory Method Bl aboratory Control S	S DOC-9060 S DOC-9060	WATER DONE U WATER DONE U	
		0.1			

Page 1

Alpha Report





ANALYTICAL REPORT

Lab Number:	L1623305
Client:	AMEC Foster Wheeler E & I, Inc.
	511 Congress Street
	P.O. Box 7050
	Portland, ME 04112-7050
ATTN:	Rod Pendleton
Phone:	(207) 828-3692
Project Name:	PENOBSCOT RIVER ESTUARY
Project Number:	3616166052
Report Date:	08/03/16

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NY (11148), CT (PH-0574), NH (2003), NJ NELAP (MA935), RI (LAO00065), ME (MA00086), PA (68-03671), VA (460195), MD (348), IL (200077), NC (666), TX (T104704476), DOD (L2217), USDA (Permit #P-330-11-00240).

Eight Walkup Drive, Westborough, MA 01581-1019 508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



Serial	No:08031610:43
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Project Name:PENOBSCOT RIVER ESTUARYProject Number:3616166052

 Lab Number:
 L1623305

 Report Date:
 08/03/16

Alpha	•		Sample	Collection		
Sample ID			Location	Date/Time Receive Date		
L1623305-01	ADD-02_072216_SW_10	WATER	PENOBSCOT RIVER	07/22/16 16:38	07/27/16	



Project Name:PENOBSCOT RIVER ESTUARYProject Number:3616166052

 Lab Number:
 L1623305

 Report Date:
 08/03/16

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

HOLD POLICY

For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Client Services at 800-624-9220 with any questions.



Project Name: PENOBSCOT RIVER ESTUARY Project Number: 3616166052
 Lab Number:
 L1623305

 Report Date:
 08/03/16

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Dissolved Organic Carbon

The sample was field filtered; a filter blank was not received.

WG919141: A matrix spike could not be performed due to insufficient sample volume available for analysis.

Solids, Total Suspended

The WG918076-2 Laboratory Duplicate RPD (81%), performed on L1623305-01, is outside the acceptance criteria. The elevated RPD has been attributed to the non-homogeneous nature of the native sample.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Juna L Im Lura L Troy

Authorized Signature:

Title: Technical Director/Representative

Date: 08/03/16



INORGANICS & MISCELLANEOUS



Project Name:	PENOBSCOT RIVER ESTUARY	Lab Number:	L1623305
Project Number:	3616166052	Report Date:	08/03/16
	SAMPLE RESULTS		

Lab ID:	L1623305-01	Date Collected:	07/22/16 16:38
Client ID:	ADD-02_072216_SW_10	Date Received:	07/27/16
Sample Location:	PENOBSCOT RIVER	Field Prep:	Not Specified
Matrix:	Water		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Wes	tborough Lab	ı								
Solids, Total Suspended	400		mg/l	10	NA	2	-	07/29/16 00:46	121,2540D	MC
Dissolved Organic Carbon	3.3		mg/l	2.0	0.08	2	08/02/16 07:36	08/02/16 07:36	1,9060A	DW



Project Name:PENOBSCOT RIVER ESTUARYProject Number:3616166052

 Lab Number:
 L1623305

 Report Date:
 08/03/16

Method Blank Analysis Batch Quality Control

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry -	Westborough Lab for sai	mple(s): 01	Batch:	WG91	8076-1				
Solids, Total Suspended	ND	mg/l	5.0	NA	1	-	07/29/16 00:46	121,2540D	MC
General Chemistry -	Westborough Lab for sar	mple(s): 01	Batch:	WG91	9141-1				
Dissolved Organic Carbon	ND	mg/l	1.0	0.04	1	08/02/16 07:36	08/02/16 07:36	1,9060A	DW



Lab Control Sample Analysis Batch Quality Control

Project Name: PENOBSCOT RIVER ESTUARY

Project Number: 3616166052

 Lab Number:
 L1623305

 Report Date:
 08/03/16

Parameter	LCS %Recovery Q	LCSD ual %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab	Associated sample(s): 0	1 Batch: WG919141-2					
Dissolved Organic Carbon	98	-		90-110	-		



Project Name: Project Number:	PENOBSCOT R 3616166052	IVER ESTUARY		Lab Duplicate Batch Quality (b Number: port Date:	L1623305 08/03/16
Parameter		Nativ	ve Sample	Duplicate Sa	mple Units	RPD	Qual	RPD Limits
General Chemistry - Wes 02_072216_SW_10	stborough Lab As	sociated sample(s):	01 QC Bate	ch ID: WG918076-2	QC Sample: L162	3305-01 Clie	nt ID: ADD-	
Solids, Total Suspended			400	940	mg/l	81	Q	29
General Chemistry - Wes 02_072216_SW_10	stborough Lab As	sociated sample(s):	01 QC Bat	ch ID: WG919141-3	QC Sample: L162	3305-01 Clie	nt ID: ADD-	
Dissolved Organic Carbon			3.3	3.2	mg/l	3		20

- -



Serial_No:08031610:43

Project Name: PENOBSCOT RIVER ESTUARY Project Number: 3616166052 Lab Number: L1623305 Report Date: 08/03/16

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information Custody Seal

Cooler

A Present/Intact

Container Info	rmation			Temp			
Container ID	Container Type	Cooler	рН	deg C	Pres	Seal	Analysis(*)
L1623305-01A	Vial H2SO4 preserved	А	N/A	5.4	Y	Present/Intact	DOC-9060(28)
L1623305-01B	Plastic 950ml unpreserved	А	8	5.4	Y	Present/Intact	TSS-2540(7)



Serial_No:08031610:43

Project Name: PENOBSCOT RIVER ESTUARY

Project Number: 3616166052

Lab Number: L1623305

Report Date: 08/03/16

GLOSSARY

Acronyms

EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound

TIC - Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Data Qualifiers

- A Spectra identified as "Aldol Condensation Product".
- B The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration of the analyte at less than ten times (10x) the concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For NDD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte able to explore the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the

Report Format: DU Report with 'J' Qualifiers



Project Name: PENOBSCOT RIVER ESTUARY

Project Number: 3616166052

Lab Number: L1623305

Report Date: 08/03/16

Data Qualifiers

reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

- C Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- **D** Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- G The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.
- H The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I The lower value for the two columns has been reported due to obvious interference.
- M Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- NJ Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P The RPD between the results for the two columns exceeds the method-specified criteria.
- Q The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- **R** Analytical results are from sample re-analysis.
- RE Analytical results are from sample re-extraction.
- S Analytical results are from modified screening analysis.
- J Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- ND Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.



Project Name:PENOBSCOT RIVER ESTUARYProject Number:3616166052

 Lab Number:
 L1623305

 Report Date:
 08/03/16

REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.
- 121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation: Westborough Facility EPA 524.2: 1,2-Dibromo-3-chloropropane, 1,2-Dibromoethane, m/p-xylene, o-xylene EPA 624: 2-Butanone (MEK), 1,4-Dioxane, tert-Amylmethyl Ether, tert-Butyl Alcohol, m/p-xylene, o-xylene EPA 625: Aniline, Benzoic Acid, Benzyl Alcohol, 4-Chloroaniline, 3-Methylphenol, 4-Methylphenol. EPA 1010A: NPW: Ignitability EPA 6010C: NPW: Strontium; SCM: Strontium EPA 8151A: NPW: 2,4-DB, Dicamba, Dichloroprop, MCPA, MCPP; SCM: 2,4-DB, Dichloroprop, MCPA, MCPP EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene, Isopropanol; SCM: Iodomethane (methyl iodide), Methyl methacrylate (soil); 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene. EPA 8270D: NPW: Pentachloronitrobenzene, 1-Methylnaphthalene, Dimethylnaphthalene,1,4-Diphenylhydrazine; SCM: Pentachloronitrobenzene, 1-Methylnaphthalene, Dimethylnaphthalene,1,4-Diphenylhydrazine. EPA 9010: <u>NPW:</u> Amenable Cyanide Distillation, Total Cyanide Distillation EPA 9038: <u>NPW:</u> Sulfate EPA 9050A: NPW: Specific Conductance EPA 9056: NPW: Chloride, Nitrate, Sulfate EPA 9065: NPW: Phenols EPA 9251: NPW: Chloride SM3500: NPW: Ferrous Iron SM4500: NPW: Amenable Cyanide, Dissolved Oxygen; SCM: Total Phosphorus, TKN, NO2, NO3. SM5310C: DW: Dissolved Organic Carbon **Mansfield Facility** EPA 8270D: NPW: Biphenyl; SCM: Biphenyl, Caprolactam EPA 8270D-SIM Isotope Dilution: SCM: 1,4-Dioxane SM 2540D: TSS SM2540G: SCM: Percent Solids EPA 1631E: SCM: Mercury EPA 7474: SCM: Mercury EPA 8081B: NPW and SCM: Mirex, Hexachlorobenzene. EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187. EPA 8270-SIM: NPW and SCM: Alkylated PAHs. EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene, n-Butylbenzene, n-Propylbenzene, sec-Butylbenzene, tert-Butylbenzene. Biological Tissue Matrix: 8270D-SIM; 3050B; 3051A; 7471B; 8081B; 8082A; 6020A: Lead; 8270D: bis(2-ethylhexyl)phthalate, Butylbenzylphthalate, Diethyl phthalate, Dimethyl phthalate, Di-n-butyl phthalate, Di-n-octyl phthalate, Fluoranthene, Pentachlorophenol. The following analytes are included in our Massachusetts DEP Scope of Accreditation, Westborough Facility: Drinking Water EPA 200.8: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl; EPA 200.7: Ba,Be,Ca,Cd,Cr,Cu,Na; EPA 245.1: Mercury; EPA 300.0: Nitrate-N, Fluoride, Sulfate; EPA 353.2: Nitrate-N, Nitrite-N; SM4500NO3-F: Nitrate-N, Nitrite-N; SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B EPA 332: Perchlorate. Microbiology: SM9215B; SM9223-P/A, SM9223B-Colilert-QT, Enterolert-QT. Non-Potable Water EPA 200.8: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn; EPA 200.7: AI,Sb,As,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Mo,Ni,K,Se,Ag,Na,Sr,Ti,TI,V,Zn; EPA 245.1, SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2340B, SM2320B, SM4500CL-E, SM4500F-BC, SM426C, SM4500NH3-BH, EPA 350.1: Ammonia-N, LACHAT 10-107-06-1-B: Ammonia-N, SM4500NO3-F, EPA 353.2: Nitrate-N, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, SM4500P-B, E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, SM14 510AC, EPA 420.1, SM4500-CN-CE, SM2540D. EPA 624: Volatile Halocarbons & Aromatics, EPA 608: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs EPA 625: SVOC (Acid/Base/Neutral Extractables), EPA 600/4-81-045: PCB-Oil. Microbiology: SM9223B-Colilert-QT; Enterolert-QT, SM9222D-MF.

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

Document Type: Form

Serial_No:08031610:43

1623300

Chain Of Custody/Analysis Request Form

AM		te 200, 5	11 COngress	VEF h Lead - Lou rk# 770-421		e			Lab Proj Chemist - 508-789-1738	D: Alphe Denise King	A	AMEC Job Number = 3616166052	, e
Samp #	Sample Date	Sample Time	Field Sample ID	QC Code	Qty Total	Qt Ea			Bottle Size and Materia	l Preservative	Media	Method	Fraction
1601	7/22/2016	5 16:38	ADD-02_072216_SW_1	0	2							· · ·	
	1 vial	cap broke	- only 1 of 2 sent	FS		1 4	40	mL	Glass Vial	H2SO4/4 deg C	SW	DOC (SW846 9060)	т
				FS		1	1	L	Plastic	4 deg C	SW	TSS (Mod 2450D)	т

Relinquished: 26 / 2016 Time: 1636 Date: 7 a Received: Date: 7 127 12016 Time: 09:56

AIRBILL: 8045 4405 6941

ONE COOLER

Tuesday, July 26, 2016

Page 1 of 1



Frontier Global Sciences

11720 Northcreek Pkwy N, Suite 400 Bothell, WA 98011 425.686.1996 Phone 425.686.3096 Fax

30 September 2016

Rod Pendleton AMEC Foster Wheeler 511 Congress Street Portland, ME 04101

RE: Penobscot Seawater Total And Diss Hg and MMHg

Enclosed are the analytical results for samples received by Eurofins Frontier Global Sciences. All quality control measurements are within established control limits and there were no analytical difficulties encountered with the exception of those listed in the case narrative section of this report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Patrik Stulled

Patrick Garcia-Strickland Laboratory Director



11720 Northcreek Pkwy N, Suite 400 Bothell, WA 98011 425.686.1996 Phone 425.686.3096 Fax

Frontier Global Sciences

AMEC Foster Wheeler	Project: Penobscot Seawater Total And Diss Hg and MMH	Ig
511 Congress Street	Project Number: 3616166052	Reported:
Portland ME, 04101	Project Manager: Rod Pendleton	30-Sep-16 15:08

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
EB_083016_SW_QC	1608981-01	Water	30-Aug-16 15:15	31-Aug-16 09:20
EB_083016_SW_QC Dissolved	1608981-02	Water	30-Aug-16 15:15	31-Aug-16 09:20
WQ_1b-c_083016_SW_10	1608981-03	Water	30-Aug-16 13:25	31-Aug-16 09:20
WQ_1b-c_083016_SW_10 Dissolved	1608981-04	Water	30-Aug-16 13:25	31-Aug-16 09:20
WQ-2-C_083016_SW_10	1608981-05	Water	30-Aug-16 12:20	31-Aug-16 09:20
WQ-2-C_083016_SW_10 Dissolved	1608981-06	Water	30-Aug-16 12:20	31-Aug-16 09:20
WQ-3-L_083016_SW_10	1608981-07	Water	30-Aug-16 11:20	31-Aug-16 09:20
WQ-3-L_083016_SW_10 Dissolved	1608981-08	Water	30-Aug-16 11:20	31-Aug-16 09:20
WQ_FPT_083016_SW_10	1608981-09	Water	30-Aug-16 10:20	31-Aug-16 09:20
WQ_FPT_083016_SW_10 Dissolved	1608981-10	Water	30-Aug-16 10:20	31-Aug-16 09:20
WQ-ECH_082916_SW_10	1608981-11	Water	29-Aug-16 11:50	31-Aug-16 09:20
WQ-ECH_082916_SW_10 Dissolved	1608981-12	Water	29-Aug-16 11:50	31-Aug-16 09:20
ES-15_082916_SW_10	1608981-13	Water	29-Aug-16 14:00	31-Aug-16 09:20
ES-15_082916_SW_10 Dissolved	1608981-14	Water	29-Aug-16 14:00	31-Aug-16 09:20
OV02_082916_SW_10	1608981-15	Water	29-Aug-16 17:00	31-Aug-16 09:20
OV02_082916_SW_10 Dissolved	1608981-16	Water	29-Aug-16 17:00	31-Aug-16 09:20
OV02_082916_SW_10_DUP	1608981-17	Water	29-Aug-16 17:00	31-Aug-16 09:20
OV02_082916_SW_10_DUP Dissolved	1608981-18	Water	29-Aug-16 17:00	31-Aug-16 09:20

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Patrick Garcia-Strickland, Laboratory Director

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AMEC Foster Wheeler	Project: Penobscot Seawater Total And Diss Hg and MMH	Ig
511 Congress Street	Project Number: 3616166052	Reported:
Portland ME, 04101	Project Manager: Rod Pendleton	30-Sep-16 15:08

SAMPLE RECEIPT

Samples were received at Eurofins Frontier Global Sciences (EFGS) on 8/31/2016 9:20:00 AM. The samples were received intact, on-ice within a sealed cooler at 0.2 degrees Celsius.

SAMPLE PREPARATION AND ANALYSIS

Samples were prepared and analyzed for total mercury by flow injection atomic fluorescence spectrometry (FI-AFS) in accordance with EPA 1631E.

Samples were prepared and analyzed for methyl mercury by cold vapor gas chromatography atomic fluorescence spectrometry (CV-GC-AFS) in accordance with EPA 1630 (EFGS-070).

ANALYTICAL AND QUALITY CONTROL ISSUES

Method blanks were prepared for every preparation to assess possible blank contribution from the sample preparation procedure. The method blanks were carried through the entire analytical procedure. All blanks fell within the established acceptance criteria with the exception of any items narrated above or flagged and described in the notes and definitions section of the report.

Liquid spikes, certified reference material (CRM) or a quality control samples (QCS) were prepared for every preparation as a measure of accuracy. All liquid spikes, CRMs and/or QCS samples fell within the established acceptance criteria with the exception of any items narrated above or flagged and described in the notes and definitions section of the report.

As an additional measure of the accuracy of the methods used and to check for matrix interference, matrix spikes (MS) and matrix spike duplicates (MSD) were digested and analyzed. All of the matrix spike recoveries fell within the established acceptance criteria with the exception of any items flagged and described in the notes and definitions section of the report.

A reasonable measure of the precision of the analytical methods is the relative percent difference (RPD) between a matrix spike recovery and a matrix spike duplicate recovery and between laboratory control sample recovery and laboratory control sample duplicate recoveries. All of the relative percent differences established acceptance criteria with the exception of any items flagged and described in the notes and definitions section of the report.

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Eurofins Frontier Global Sciences, Inc. IG08981 Eurofins Frontier Global Sciences, Inc. IG08981 Eurofins Frontier Global Sciences, Inc. IG08981 Eurofins Frontier Global Sciences, Inc. II720 North Creek Parkway North, Suite 400 Buthell, WA 98011 Do pot Helport Prove Herord, Suite 400 Bothell, WA 98011 Distribution for the Ford Westborough, MA 01. Prove Herord Prove Herord <th colspan<="" th=""><th>A A 581 0 6 Lab ID: 1608981-03 9 C Analysis by Alpha Anal</th></th>	<th>A A 581 0 6 Lab ID: 1608981-03 9 C Analysis by Alpha Anal</th>	A A 581 0 6 Lab ID: 1608981-03 9 C Analysis by Alpha Anal
	EFGS Lab ID: 1608981-05 Sampled: 30-Aug-16 12:20 TOC Analysis by Alpha Analytical- Billing O nly	
Sample ID: WQ-3-L_083016_SW_10 Misc. Subcontract 1 Containers Supplied: 40 mL Glass Vial (C) 40 mL Glass Vial (D)	EFGS Lab ID: 1608981-07 Sampled: 30-Aug-16 11:20 TOC Analysis by Alpha Analytical Billing Only	
Sample ID: WQ_FPT_083016_SW_10 Misc. Subcontract 1 Containers Supplied: 40 mL Glass Vial (C) 40 mL Glass Vial (D)	EFGS Lab ID: 1608981-09 Sampled: 30-Aug-16 10:20 TOC Analysis by Alpha Analytical Billing Only	
Direct Fornad Form A Deale Contact Denise Kun Bate 8/20/16 Received By Date 8/20/16 Received By Bate 10	A AMER Farter Wheeler. King at AMER. Received by Date Date Date Page 1 of 2 Page 1 of 2	

SUBCONTRACT ORDER

	Inc.
SUBCONTRACT ORDER	Eurofins Frontier Global Sciences. Inc.
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	1608981	81
Analysis D	Due: 22-Sep-16 19:00	Comments
Sample ID: WQ-ECH_082916_SW_10		EFGS Lab ID: 1608981-11 Sampled: 29-Aug-16 11:50
Misc. Subcontract 1Containers Supplied:40 mL Glass Vial (C)40 mL Glass Vial (D)	s Vial (D)	TOC Analysis by Alpha Analytical Billing Only
Sample ID: OV02_082916_SW_10		EFGS Lab ID: 1608981-15 Sampled: 29-Aug-16 17:00 MS/MSD
Mise. Subcontract 1Containers Supplied:40 mL Glass Vial (G)40 mL Glass Vial (G)	s Vial (H)	TOC Analysis by Alpha Analytical Billing Only-
Sample ID: OV02_082916_SW_10_DUP		EFGS Lab ID: 1608981-17 Sampled: 29-Aug-16 17:00
Mise. Subcontract 1 Containers Supplied: 40 mL Glass Vial (C) 40 mL Glass Vial (D)	s Vial (D)	TOC Analysis by Alpha Analytical Billing Only
Direct Fu	Forward Fram	am AMEC Foste Wheeler.
please contact	ct Denise ki	Denise King at AMEC
		86W060 SEP 20, 2016 ACT WT 18.9 LBS #PK 1 SVC 1DA BL WT TRACKING# 1286W0500150898493 ALL CURRENCY USD DEPT NO.: OVERHEAD REF 2:DIRECT FORWARD
Page 5 c	Date Recei	HC 0.00 CNS 0.00 FRT: SHP SUC 43.97 USD SHIPMENT NR RATE CHARGES: SUC 43.97 USD SUC 0.00 RS 0.00 RS 0.00 RS 0.00 RS 0.00 RS 0.00 ROD 0.00 ROD 0.00 ROD 0.00 ROD 0.00 ROD 0.00 TOT NR CHG 43.97 NR + HC43.87
of 264		Page 2 of 2



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Frontier Global Sciences

AMEC Foster Wheeler 511 Congress Street Portland ME, 04101				umber:	361616605	2	otal And Di	ss Hg and M	IMHg	Reported: 30-Sep-16 15:	08
			_	083016 160898	5_SW_Q 81-01	С					
Analyte Sample Preparation: EFGS-013 N	Result	Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Methyl Mercury (as Mercury)	ND	0.026	0.050	ng/L	1.25	F609484	22-Sep-16	6I23010	23-Sep-16	EPA 1630/FGS-070	U
Sample Preparation: EPA 1631E	BrCl Oxidation	1									
Mercury	ND	0.08	0.50	ng/L	1	F609420	31-Aug-16	6120007	19-Sep-16	EPA 1631E	U

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Patrick Garcia-Strickland, Laboratory Director

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AMEC Foster Wheeler 511 Congress Street Portland ME, 04101		ŀ		umber: 1 anager: 1	361616605 Rod Pendle	52 eton	otal And Di	ss Hg and M	IMHg	Reported: 30-Sep-16 15:	08
				160898	81-02						
Analyte Sample Preparation: EFGS-013	Result Methyl Hg Disti	Limit	Reporting Limit r Water	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Methyl Mercury (as Mercury)	ND	0.026	0.050	ng/L	1.25	F609484	22-Sep-16	6I23010	23-Sep-16	EPA 1630/FGS-070	Ŭ
Sample Preparation: EPA 1631E	BrCl Oxidation	1									
Mercury	ND	0.08	0.50	ng/L	1	F609420	31-Aug-16	6120007	19-Sep-16	EPA 1631E	U

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AMEC Foster Wheeler 511 Congress Street Portland ME, 04101	Project: Penobscot Seawater Total And Diss Hg and MMHg Project Number: 3616166052 Project Manager: Rod Pendleton WQ 1b-c 083016 SW 10									Reported: 30-Sep-16 15:08		
			_	160898	_	_10						
Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes	
Sample Preparation: EFGS-013 N	Methyl Hg Disti	llation fo	r Water									
Methyl Mercury (as Mercury)	0.336	0.026	0.050	ng/L	1.25	F609484	22-Sep-16	6I23010	23-Sep-16	EPA 1630/FGS-070		
Sample Preparation: EPA 1631E	BrCl Oxidation	1										
Mercury	7.83	0.08	0.50	ng/L	1	F609420	31-Aug-16	6120007	19-Sep-16	EPA 1631E		

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AMEC Foster Wheeler 511 Congress Street Portland ME, 04101		Project: Penobscot Seawater Total And Diss Hg and MMHg Project Number: 3616166052 Project Manager: Rod Pendleton								Reported: 30-Sep-16 15:08	
		WQ	_1b-c_08	83016_ 160898		Dissolve	d				
Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EFGS-013	Methyl Hg Disti	llation fo	r Water								
Methyl Mercury (as Mercury)	0.129	0.026	0.050	ng/L	1.25	F609484	22-Sep-16	6I23010	23-Sep-16	EPA 1630/FGS-070	
Sample Preparation: EPA 1631E	BrCl Oxidation	1									
Mercury	1.23	0.08	0.50	ng/L	1	F609420	31-Aug-16	6120007	19-Sep-16	EPA 1631E	

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AMEC Foster Wheeler 511 Congress Street Portland ME, 04101	Project: Penobscot Seawater Total And Diss Hg and MMHg Project Number: 3616166052 Project Manager: Rod Pendleton								Reported: 30-Sep-16 15:08		
			WQ-2-	-	016_SW	_10					
				160898	81-05						
Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EFGS-013 M	ethyl Hg Dist	illation fo	r Water								
Methyl Mercury (as Mercury)	0.118	0.026	0.050	ng/L	1.25	F609484	22-Sep-16	6123010	23-Sep-16	EPA 1630/FGS-070	
Sample Preparation: EPA 1631E B	orCl Oxidation	1									
Mercury	3.72	0.08	0.50	ng/L	1	F609420	31-Aug-16	6120007	19-Sep-16	EPA 1631E	

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AMEC Foster Wheeler		Р	roject:	Penobscot	Seawater T						
511 Congress Street		umber:	3616166052					Reported:			
Portland ME, 04101	Project Manager:				Rod Pendle	eton	30-Sep-16 15:0	8			
		WQ	Q-2-C_08	3016_	SW_10 I	Dissolved	l				
				16089	81-06						
Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EFGS-013 M	ethyl Hg Distil	llation for	r Water								
Methyl Mercury (as Mercury)	0.058	0.026	0.050	ng/L	1.25	F609484	22-Sep-16	6I23010	23-Sep-16	EPA 1630/FGS-070	
Sample Preparation: EPA 1631E B	rCl Oxidation										
Mercury	1.10	0.08	0.50	ng/L	1	F609420	31-Aug-16	6120007	19-Sep-16	EPA 1631E	

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AMEC Foster Wheeler 511 Congress Street Portland ME, 04101		1MHg	Reported: 30-Sep-16 15:0	08							
			-	_	016_SW	_10					
				160898	81-07						
Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EFGS-013 M	Aethyl Hg Disti	llation for	r Water								
Methyl Mercury (as Mercury)	0.106	0.026	0.050	ng/L	1.25	F609484	22-Sep-16	6123010	23-Sep-16	EPA 1630/FGS-070	
Sample Preparation: EPA 1631E	BrCl Oxidation	l									
Mercury	6.00	0.08	0.50	ng/L	1	F609420	31-Aug-16	6120007	19-Sep-16	EPA 1631E	

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AMEC Foster Wheeler Project: Penobscot Seawater Total And Diss Hg and MMHg											
511 Congress Street			Project N	umber:	361616605	52				Reported:	
Portland ME, 04101			Project Ma	anager:	Rod Pendle	eton				30-Sep-16 15:0	08
		W	Q-3-L_08	3016_	SW_10 I	Dissolved	I				
				16089	81-08						
Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EFGS-013	Methyl Hg Disti	llation for	r Water								
Methyl Mercury (as Mercury)	ND	0.026	0.050	ng/L	1.25	F609484	22-Sep-16	6I23010	23-Sep-16	EPA 1630/FGS-070	U
Sample Preparation: EPA 16311	E BrCl Oxidation	l									
Mercury	0.59	0.08	0.50	ng/L	1	F609420	31-Aug-16	6120007	19-Sep-16	EPA 1631E	

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AMEC Foster Wheeler 511 Congress Street Portland ME, 04101	Project: Penobscot Seawater Total And Diss Hg and MMHg Project Number: 3616166052 Project Manager: Rod Pendleton WQ_FPT_083016_SW_10 1608981-09										
				160898	81-09						
Analyte	Result	Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EFGS-013 Methyl Mercury (as Mercury)	0.040	0.026	0.050	ng/L	1.25	F609484	22-Sep-16	6I23010	23-Sep-16	EPA 1630/FGS-070	J
Sample Preparation: EPA 1631E	BrCl Oxidation	1									
Mercury	1.87	0.08	0.50	ng/L	1	F609420	31-Aug-16	6I20007	19-Sep-16	EPA 1631E	

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AMEC Foster Wheeler 511 Congress Street Portland ME, 04101		Project: Penobscot Seawater Total And Diss Hg and MMHg Project Number: 3616166052 Project Manager: Rod Pendleton WQ_FPT_083016_SW_10 Dissolved									
				160898		21550170	u				
Analyte Sample Preparation: EFGS-013	Result Methyl Hg Disti	Limit	Reporting Limit r Water	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Methyl Mercury (as Mercury)	ND	0.026	0.050	ng/L	1.25	F609484	22-Sep-16	6123010	23-Sep-16	EPA 1630/FGS-070	U
Sample Preparation: EPA 1631E	BrCl Oxidation	l									
Mercury	0.50	0.08	0.50	ng/L	1	F609420	31-Aug-16	6120007	19-Sep-16	EPA 1631E	

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AMEC Foster Wheeler 511 Congress Street Portland ME, 04101		IMHg	Reported: 30-Sep-16 15:0)8							
			WQ-EC	CH_082 160898	2916_SV	V_10					
				100070	51-11						
Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EFGS-013	Methyl Hg Disti	illation fo	r Water								
Methyl Mercury (as Mercury)	0.155	0.026	0.050	ng/L	1.25	F609484	22-Sep-16	6I23010	23-Sep-16	EPA 1630/FGS-070	
Sample Preparation: EPA 1631E	BrCl Oxidation	1									
Mercury	9.14	0.08	0.50	ng/L	1	F609420	31-Aug-16	6120007	19-Sep-16	EPA 1631E	

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		Р	Project:	Penobscot	Seawater T	otal And Di	ss Hg and M	1MHg		
		Project N	umber:	361616605	52				Reported:	
		Project Ma	anager:	Rod Pendle	eton				30-Sep-16 15:0)8
	WQ	-ECH_0	82916	_SW_10	Dissolve	d				
			16089	81-12						
Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
l Hg Disti	illation fo	r Water								
ND	0.026	0.050	ng/L	1.25	F609569	27-Sep-16	6I29013	28-Sep-16	EPA 1630/FGS-070	U
Oxidatio	n									
0.94	0.08	0.50	ng/L	1	F609427	31-Aug-16	6120007	19-Sep-16	EPA 1631E	
	v l Hg Dist ND Oxidatio	Detection Result Limit vI Hg Distillation for ND 0.026 Oxidation	Project N Project Ma WQ-ECH_0 Detection Reporting Result Limit Limit VI Hg Distillation for Water ND 0.026 0.050 Oxidation	Project Number: Project Manager: WQ-ECH_082916_ 160892 Detection Reporting Result Limit Limit Units VI Hg Distillation for Water ND 0.026 0.050 ng/L Oxidation	Project Number: 361616605 Project Manager: Rod Pendle WQ-ECH_082916_SW_10 1608981-12 Detection Reporting Result Limit Limit Units Dilution VI Hg Distillation for Water ND 0.026 0.050 ng/L 1.25 Oxidation	Project Number: 3616166052 Project Manager: Rod Pendleton WQ-ECH_082916_SW_10 Dissolve 1608981-12 Detection Reporting Result Limit Units Dilution Batch VI Hg Distillation for Water ND 0.026 0.050 ng/L 1.25 F609569 Oxidation	Project Number: 3616166052 Project Manager: Rod Pendleton WQ-ECH_082916_SW_10 Dissolved 1608981-12 Detection Reporting Result Limit Units Dilution Batch Prepared H Hg Distillation for Water ND 0.026 0.050 ng/L 1.25 F609569 27-Sep-16 Oxidation	Project Number: 3616166052 Project Manager: Rod Pendleton WQ-ECH_082916_SW_10 Dissolved 1608981-12 Detection Reporting Result Limit Limit Units Dilution Batch Prepared Sequence H Hg Distillation for Water ND 0.026 0.050 ng/L 1.25 F609569 27-Sep-16 6129013 Oxidation	Project Manager: Rod Pendleton WQ-ECH_082916_SW_10 Dissolved 1608981-12 Detection Reporting Limit Dilution Batch Prepared Sequence Analyzed ND 0.026 0.050 ng/L 1.25 F609569 27-Sep-16 6129013 28-Sep-16 Oxidation Limit Limit Limit 1.25 F609569 27-Sep-16 6129013 28-Sep-16	Project Number: 3616166052 Reported: Project Manager: Rod Pendleton 30-Sep-16 15:0 WQ-ECH_082916_SW_10 Dissolved I608981-12 Detection Reporting Method Imit Units Dilution Batch Prepared Sequence Analyzed Method It Hg Distillation for Water ND 0.026 0.050 ng/L 1.25 F609569 27-Sep-16 6129013 28-Sep-16 EPA 1630/FGS-070 Oxidation

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Patrick Garcia-Strickland, Laboratory Director



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AMEC Foster Wheeler 511 Congress Street Portland ME, 04101		ſMHg	Reported: 30-Sep-16 15:0	08							
			ES-15	5_0829 160898	16_SW_ 31-13	10					
Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EFGS-013 M	lethyl Hg Disti	llation fo	r Water								
Methyl Mercury (as Mercury)	0.345	0.026	0.050	ng/L	1.25	F609569	27-Sep-16	6I29013	28-Sep-16	EPA 1630/FGS-070	
Sample Preparation: EPA 1631E I	BrCl Oxidation	1									
Mercury	21.0	0.08	0.50	ng/L	1	F609427	31-Aug-16	6120007	19-Sep-16	EPA 1631E	

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Patrick Garcia-Strickland, Laboratory Director



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AMEC Foster Wheeler 511 Congress Street Portland ME, 04101		IMHg	Reported: 30-Sep-16 15:	08							
		E	S-15_082	916_S 160898	_	ssolved					
Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EFGS-013	Methyl Hg Disti	llation for	r Water								
Methyl Mercury (as Mercury)	0.055	0.026	0.050	ng/L	1.25	F609569	27-Sep-16	6I29013	28-Sep-16	EPA 1630/FGS-070	
Sample Preparation: EPA 1631E	BrCl Oxidation	l									
Mercury	2.70	0.08	0.50	ng/L	1	F609427	31-Aug-16	6120007	19-Sep-16	EPA 1631E	

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AMEC Foster Wheeler 511 Congress Street Portland ME, 04101		IMHg	Reported: 30-Sep-16 15:0	08							
			OV02	2_0829 160898	16_SW_	10					
				100070	51-15						
Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EFGS-013 N	lethyl Hg Disti	illation fo	r Water								
Methyl Mercury (as Mercury)	0.205	0.026	0.050	ng/L	1.25	F609569	27-Sep-16	6129013	28-Sep-16	EPA 1630/FGS-070	
Sample Preparation: EPA 1631E I	BrCl Oxidation	1									
Mercury	2.16	0.08	0.50	ng/L	1	F609427	31-Aug-16	6120007	19-Sep-16	EPA 1631E	

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AMEC Foster Wheeler			Р	roject:	Penobscot	Seawater T	otal And Di	ss Hg and M	1MHg		
511 Congress Street			Project N	umber:	361616605	52				Reported:	
Portland ME, 04101			Project Ma	inager:	Rod Pendle	eton				30-Sep-16 15:0	8
		0	V02_082	916_S	W_10 Di	issolved					
				16089	81-16						
Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EFGS-013 Meth	ıyl Hg Disti	llation for	r Water								
Methyl Mercury (as Mercury)	0.127	0.026	0.050	ng/L	1.25	F609569	27-Sep-16	6129013	28-Sep-16	EPA 1630/FGS-070	
Sample Preparation: EPA 1631E BrC	l Oxidation	l									
Mercury	1.27	0.08	0.50	ng/L	1	F609427	31-Aug-16	6120007	19-Sep-16	EPA 1631E	

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AMEC Foster Wheeler 511 Congress Street Portland ME, 04101	Project: Penobscot Seawater Total And Diss Hg and MMHg Project Number: 3616166052 Project Manager: Rod Pendleton OV02_082916_SW_10_DUP 1608981-17									Reported: 30-Sep-16 15:	08
				160898	81-17						
Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EFGS-013	Methyl Hg Disti	llation fo	r Water								
Methyl Mercury (as Mercury)	0.167	0.026	0.050	ng/L	1.25	F609569	27-Sep-16	6I29013	28-Sep-16	EPA 1630/FGS-070	
Sample Preparation: EPA 1631E	BrCl Oxidation	1									
Mercury	1.62	0.08	0.50	ng/L	1	F609427	31-Aug-16	6120007	19-Sep-16	EPA 1631E	

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AMEC Foster Wheeler Project: Penobscot Seawater Total And Diss Hg and M											
511 Congress Street			Project N	umber:	361616605	52				Reported:	
Portland ME, 04101			Project Ma	anager:	Rod Pendle	eton				30-Sep-16 15:0)8
		OV0	2_082916	6_SW_	10_DUP	Dissolv	ed				
				16089	81-18						
Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EFGS-013 N	Methyl Hg Disti	llation for	r Water								
Methyl Mercury (as Mercury)	0.105	0.026	0.050	ng/L	1.25	F609569	27-Sep-16	6129013	28-Sep-16	EPA 1630/FGS-070	
Sample Preparation: EPA 1631E	BrCl Oxidation	l									
Mercury	1.18	0.08	0.50	ng/L	1	F609427	31-Aug-16	6120007	19-Sep-16	EPA 1631E	

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AMEC Foster Wheeler	Project: Penobscot Seawater Total And Diss Hg and	d MMHg
511 Congress Street	Project Number: 3616166052	Reported:
Portland ME, 04101	Project Manager: Rod Pendleton	30-Sep-16 15:08

Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6120007 - F609420											
Cal Standard (6120007-CAL1)					Prepared &	Analyzed:	19-Sep-16				
Mercury	0.46	-		ng/L	0.50100		91.6				
Cal Standard (6I20007-CAL2)					Prepared &	Analyzed:	19-Sep-16				
Mercury	0.96	-		ng/L	1.0020		95.3				
Cal Standard (6120007-CAL3)					Prepared &	Analyzed:	19-Sep-16				
Mercury	5.37	-		ng/L	5.0100		107				
Cal Standard (6120007-CAL4)					Prepared &	Analyzed:	19-Sep-16				
Mercury	20.72	-		ng/L	20.040		103				
Cal Standard (6120007-CAL5)					Prepared &	Analyzed:	19-Sep-16				
Mercury	40.66	-		ng/L	40.080		101				
Calibration Blank (6I20007-CCB1)					Prepared &	Analyzed:	19-Sep-16				
Mercury	0.11	-		ng/L							
Calibration Blank (6I20007-CCB2)					Prepared &	Analyzed:	19-Sep-16				
Mercury	0.06	-		ng/L							
Calibration Blank (6I20007-CCB3)					Prepared &	Analyzed:	19-Sep-16				
Mercury	0.22	-		ng/L	÷						
Calibration Blank (6120007-CCB4)					Prepared &	Analyzed:	19-Sep-16				
Mercury	0.13	-		ng/L							
Calibration Blank (6120007-CCB5)					Prepared &	Analyzed:	19-Sep-16				
Mercury	0.10	-		ng/L			· ~·r 10				

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AMEC Foster Wheeler	Project: Penobscot Seawater Total And Diss Hg and	nd MMHg
511 Congress Street	Project Number: 3616166052	Reported:
Portland ME, 04101	Project Manager: Rod Pendleton	30-Sep-16 15:08

Quality Control Data

		Detection	Reporting		Spike	Source	AVDEC.	%REC	DDD	RPD	N .
Analyte	Result	Limit	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 6I20007 - F609420											
Calibration Blank (6I20007-CCB6)					Prepared &	Analyzed:	19-Sep-16				
Mercury	0.15	-		ng/L							
Calibration Blank (6I20007-CCB7)					Prepared &	Analyzed:	19-Sep-16				
Mercury	0.20	-		ng/L							
Calibration Blank (6120007-CCB8)					Prepared &	Analyzed:	19-Sep-16				
Mercury	0.14	-		ng/L							
Calibration Blank (6120007-CCB9)					Prepared &	Analyzed:	19-Sep-16				
Mercury	0.16	-		ng/L							
Calibration Blank (6120007-CCBA)					Prepared &	Analyzed:	19-Sep-16				
Mercury	0.09	-		ng/L							
Calibration Blank (6I20007-CCBB)					Prepared &	Analyzed:	19-Sep-16				
Mercury	0.18	-		ng/L							
Calibration Check (6120007-CCV1)					Prepared &	Analyzed:	19-Sep-16				
Mercury	5.49	-		ng/L	5.0000		110	77-123			
Calibration Check (6I20007-CCV2)					Prepared &	Analyzed:	19-Sep-16				
Mercury	5.29	-		ng/L	5.0000		106	77-123			
Calibration Check (6I20007-CCV3)					Prepared &	Analyzed:	19-Sep-16				
Mercury	5.91	-		ng/L	5.0000		118	77-123			
Calibration Check (6I20007-CCV4)					Prepared &	Analyzed.	19-Sep-16				
Mercury	5.67	-		ng/L	5.0000		113	77-123			

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AMEC Foster Wheeler	Project: Penobscot Seawater Total And Diss Hg an	id MMHg
511 Congress Street	Project Number: 3616166052	Reported:
Portland ME, 04101	Project Manager: Rod Pendleton	30-Sep-16 15:08

Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6120007 - F609420	ittouit	2	2	emis	Lever	Itesuit	, unde	2	14.2		1.000
Calibration Check (6120007-CCV5)					Prepared &	Analyzed:	19-Sep-16				
Mercury	5.59	-		ng/L	5.0000		112	77-123			
Calibration Check (6120007-CCV6)					Prepared &	Analyzed:	19-Sep-16				
Mercury	5.52	-		ng/L	5.0000		110	77-123			
Calibration Check (6120007-CCV7)					Prepared &	Analyzed:	19-Sep-16				
Mercury	5.79	-		ng/L	5.0000		116	77-123			
Calibration Check (6I20007-CCV8)					Prepared &	Analyzed:	19-Sep-16				
Mercury	5.28	-		ng/L	5.0000		106	77-123			
Calibration Check (6120007-CCV9)					Prepared &	Analyzed:	19-Sep-16				
Mercury	5.85	-		ng/L	5.0000		117	77-123			
Calibration Check (6I20007-CCVA)					Prepared &	Analyzed:	19-Sep-16				
Mercury	5.59	-		ng/L	5.0000		112	77-123			
Calibration Check (6I20007-CCVB)					Prepared &	Analyzed:	19-Sep-16				
Mercury	5.09	-		ng/L	5.0000		102	77-123			
Instrument Blank (6I20007-IBL1)					Prepared &	Analyzed:	19-Sep-16				
Mercury	ND	0.08	0.50	ng/L							
Instrument Blank (6I20007-IBL2)					Prepared &	Analyzed	19-Sen-16				
Mercury	ND	0.08	0.50	ng/L	1 iopuied d		1, 50p 10				
Instrument Blank (6I20007-IBL3)					Prepared &	Analyzed	19-Sen-16				
Mercury	ND	0.08	0.50	ng/L	i icpaicu a	. Anaryzeu.	17-5cp-10				

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AMEC Foster Wheeler	Project: Penobscot Seawater Total And Diss Hg an	d MMHg
511 Congress Street	Project Number: 3616166052	Reported:
Portland ME, 04101	Project Manager: Rod Pendleton	30-Sep-16 15:08

Quality Control Data

		D ()	р. (:		G 1			A/DEC		DDD	
Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6I20007 - F609420											
Batch 0120007 - F009420											
Initial Cal Check (6I20007-ICV1)					Prepared &	Analyzed:	19-Sep-16				
Mercury	5.70	-		ng/L	5.0000		114	77-123			
Batch 6123010 - F609484											
Cal Standard (6123010-CAL1)					Prepared &	Analyzed:	23-Sep-16				
Methyl Mercury (as Mercury)	0.048	-		ng/L	0.050050		95.1				
Cal Standard (6I23010-CAL2)					Prepared &	Analyzed:	23-Sep-16				
Methyl Mercury (as Mercury)	0.211	-		ng/L	0.20020		105				
Cal Standard (6I23010-CAL3)					Prepared &	Analyzed:	23-Sep-16				
Methyl Mercury (as Mercury)	0.978	-		ng/L	1.0010		97.7				
Cal Standard (6I23010-CAL4)					Prepared &	Analyzed:	23-Sep-16				
Methyl Mercury (as Mercury)	1.966	-		ng/L	2.0020		98.2				
Cal Standard (6123010-CAL5)					Prepared &	Analyzed:	23-Sep-16				
Methyl Mercury (as Mercury)	4.127	-		ng/L	4.0040		103				
Calibration Blank (6I23010-CCB1)					Prepared &	Analyzed:	23-Sep-16				
Methyl Mercury (as Mercury)	0.005	-		ng/L							
Calibration Blank (6I23010-CCB2)					Prepared &	Analyzed:	23-Sep-16				
Methyl Mercury (as Mercury)	0.0002	-		ng/L							
Calibration Blank (6123010-CCB3)					Prepared &	Analyzed:	23-Sep-16				
Methyl Mercury (as Mercury)	0.002	-		ng/L							

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AMEC Foster Wheeler	Project: Penobscot Seawater Total And Diss Hg an	nd MMHg
511 Congress Street	Project Number: 3616166052	Reported:
Portland ME, 04101	Project Manager: Rod Pendleton	30-Sep-16 15:08

Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6I23010 - F609484											
Calibration Blank (6123010-CCB4)					Prepared &	Analyzed:	23-Sep-16				
Methyl Mercury (as Mercury)	0.002	-		ng/L							
Calibration Blank (6123010-CCB5)					Prepared &	Analyzed:	23-Sep-16				
Methyl Mercury (as Mercury)	0.001	-		ng/L							
Calibration Check (6I23010-CCV1)					Prepared &	Analyzed:	23-Sep-16				
Methyl Mercury (as Mercury)	0.642	-		ng/L	0.50049		128	67-133			
Calibration Check (6I23010-CCV3)					Prepared &	Analyzed:	23-Sep-16				
Methyl Mercury (as Mercury)	0.534	-		ng/L	0.50049		107	67-133			
Calibration Check (6123010-CCV4)					Prepared &	Analyzed:	23-Sep-16				
Methyl Mercury (as Mercury)	0.490	-		ng/L	0.50049		97.9	67-133			
Calibration Check (6123010-CCV6)					Prepared &	Analyzed:	23-Sep-16				
Methyl Mercury (as Mercury)	0.488	-		ng/L	0.50049		97.6	67-133			
Calibration Check (6I23010-CCV7)					Prepared &	Analyzed:	23-Sep-16				
Methyl Mercury (as Mercury)	0.500	-		ng/L	0.50049		99.8	67-133			
Instrument Blank (6I23010-IBL1)					Prepared &	Analyzed:	23-Sep-16				
Methyl Mercury (as Mercury)	ND	0.021	0.040	ng/L	-		-				
Initial Cal Blank (6I23010-ICB1)					Prepared &	Analyzed:	23-Sep-16				
Methyl Mercury (as Mercury)	0.011	-		ng/L			*				
Initial Cal Check (6I23010-ICV1)					Prepared &	Analyzed:	23-Sep-16				
Methyl Mercury (as Mercury)	0.556	-		ng/L	0.50049	2	111	67-133			

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AMEC Foster Wheeler	Project: Penobscot Seawater Total And Diss Hg	and MMHg
511 Congress Street	Project Number: 3616166052	Reported:
Portland ME, 04101	Project Manager: Rod Pendleton	30-Sep-16 15:08

Quality Control Data

Analyta	Degult	Detection Limit	Reporting	Units	Spike Level	Source	%REC	%REC	RPD	RPD Limit	Not
Analyte	Result	Limit	Limit	Units	Levei	Result	%KEU	Limits	KPD	Limit	Notes
Batch 6I29013 - F609569											
Cal Standard (6I29013-CAL1)					Prepared &	Analyzed:	28-Sep-16				
Methyl Mercury (as Mercury)	0.052	-		ng/L	0.050050		103				
Cal Standard (6I29013-CAL2)					Prepared &	Analyzed:	28-Sep-16				
Methyl Mercury (as Mercury)	0.200	-		ng/L	0.20020		100				
Cal Standard (6I29013-CAL3)					Prepared &	Analyzed:	28-Sep-16				
Methyl Mercury (as Mercury)	1.002	-		ng/L	1.0010	5	100				
Cal Standard (6I29013-CAL4)					Prepared &	Analyzed:	28-Sep-16				
Methyl Mercury (as Mercury)	1.821	-		ng/L	2.0020		91.0				
Cal Standard (6I29013-CAL5)					Prepared &	Analyzed:	28-Sep-16				
Methyl Mercury (as Mercury)	4.211	-		ng/L	4.0040		105				
Calibration Blank (6I29013-CCB1)					Prepared &	Analyzed:	28-Sep-16				
Methyl Mercury (as Mercury)	0.007	-		ng/L		*					
Calibration Blank (6I29013-CCB2)					Prepared &	Analyzed:	28-Sep-16				
Methyl Mercury (as Mercury)	0.003	-		ng/L	1		1				
Calibration Blank (6I29013-CCB3)					Prepared &	Analyzed:	28-Sep-16				
Methyl Mercury (as Mercury)	0.003	-		ng/L	· r · · · · · · ·		r				
Calibration Check (6I29013-CCV1)					Prepared &	Analyzed	28-Sen-16				
Methyl Mercury (as Mercury)	0.653	-		ng/L	0.50049		130	67-133			
Calibratian Check (120012 CCV2)					Dranarad 6	Analyzed	20 San 16				
Calibration Check (6129013-CCV2) Methyl Mercury (as Mercury)	0.586			ng/L	Prepared & 0.50049	Analyzed:	28-Sep-16 117	67-133			

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AMEC Foster Wheeler	Project: Penobscot Seawater Total And Diss Hg and	d MMHg
511 Congress Street	Project Number: 3616166052	Reported:
Portland ME, 04101	Project Manager: Rod Pendleton	30-Sep-16 15:08

Quality Control Data

		Detection	Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 6I29013 - F609569											
Calibration Check (6I29013-CCV3)					Prepared &	Analyzed:	28-Sep-16				
Methyl Mercury (as Mercury)	0.585	-		ng/L	0.50049		117	67-133			
Instrument Blank (6I29013-IBL1)					Prepared &	Analyzed:	28-Sep-16				
Methyl Mercury (as Mercury)	ND	0.021	0.040	ng/L							U
Initial Cal Blank (6I29013-ICB1)					Prepared &	Analyzed:	28-Sep-16				
Methyl Mercury (as Mercury)	0.010	-		ng/L							
Initial Cal Check (6I29013-ICV1)					Prepared &	Analyzed:	28-Sep-16				
Methyl Mercury (as Mercury)	0.625	-		ng/L	0.50049		125	67-133			
Batch F609420 - EPA 1631E BrCl Oxid	dation										
Blank (F609420-BLK1)					Prepared &	Analyzed:	19-Sep-16				
Mercury	0.18	0.08	0.50	ng/L							J
Blank (F609420-BLK2)					Prepared &	Analyzed:	19-Sep-16				
Mercury	ND	0.08	0.50	ng/L							U
Blank (F609420-BLK3)					Prepared &	Analyzed:	19-Sep-16				
				-	•						
Mercury	ND	0.08	0.50	ng/L							U
. ,	ND	0.08	0.50	ng/L	Prepared &	Analyzed:	19-Sep-16				U
Mercury	ND 16.48	0.08	0.50	ng/L ng/L	Prepared & 15.679	Analyzed:	19-Sep-16 105	80-120			U
Mercury LCS (F609420-BS1)							105	80-120			U

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AMEC Foster Wheeler	Project: Penobscot Seawater Total And Diss Hg and MMHg											
511 Congress Street			Project Num	ber: 36	16166052					Reporte	ed:	
Portland ME, 04101		1	Project Mana	ger: Ro	d Pendleton					30-Sep-16 15:08		
			Quality	y Cont	rol Data							
Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes	
Batch F609420 - EPA 1631E BrCl Ox	idation											
Duplicate (F609420-DUP1)	Source: 1608742-01			Prepared &	Analyzed:	19-Sep-16						
Mercury	0.86	0.08	0.50	ng/L		1.00			14.8	24		
Matrix Spike (F609420-MS1)		Source:	1608742-05		Prepared &	Analyzed:	19-Sep-16					
Mercury	6.06	0.08	0.50	ng/L	5.0601	1.01	99.9	71-125				
Matrix Spike (F609420-MS2)		Source: 1608981-03			Prepared &	Analyzed:	19-Sep-16					
Mercury	29.10	0.08	0.50	ng/L	20.240	7.83	105	71-125				
Matrix Spike Dup (F609420-MSD1)		Source:	1608742-05		Prepared &	Analyzed:	19-Sep-16					
Mercury	6.24	0.08	0.50	ng/L	5.0601	1.01	104	71-125	3.02	24		
Matrix Spike Dup (F609420-MSD2)		Source:	1608981-03		Prepared &	Analyzed:	19-Sep-16					
Mercury	29.48	0.08	0.50	ng/L	20.240	7.83	107	71-125	1.29	24		
Batch F609427 - EPA 1631E BrCl Ox	idation											
Blank (F609427-BLK1)					Prepared &	Analyzed:	19-Sep-16					
Mercury	0.08	0.08	0.50	ng/L								
Blank (F609427-BLK2)					Prepared &	Analyzed:	19-Sep-16					
Mercury	ND	0.08	0.50	ng/L								
Blank (F609427-BLK3)					Prepared &	Analyzed:	19-Sep-16					
Mercury	ND	0.08	0.50	ng/L								
Blank (F609427-BLK4)					Prepared &	Analyzed:	19-Sep-16					
Mercury	2.79	1.65	9.90	ng/L							QB-08	

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AMEC Foster Wheeler	Project: Penobscot Seawater Total And Diss Hg	and MMHg
511 Congress Street	Project Number: 3616166052	Reported:
Portland ME, 04101	Project Manager: Rod Pendleton	30-Sep-16 15:08

Quality Control Data

		Detecti	Denertin		0.1	9		0/DEC		DDD	
Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch F609427 - EPA 1631E BrCl Oxi	dation										
LCS (F609427-BS1)					Prepared &	Analyzed:	19-Sep-16				
Mercury	15.76	0.08	0.50	ng/L	15.679		101	80-120			
LCS Dup (F609427-BSD1)					Prepared &	Analyzed:	19-Sep-16				
Mercury	16.88	0.08	0.50	ng/L	15.679		108	80-120	6.85	24	
Duplicate (F609427-DUP1)		Source:	1608981-15		Prepared &	Analyzed:	19-Sep-16				
Mercury	2.33	0.08	0.50	ng/L		2.16			7.50	24	
Matrix Spike (F609427-MS1)		Source:	1608981-15		Prepared &	Analyzed:	19-Sep-16				
Mercury	12.99	0.08	0.50	ng/L	10.120	2.16	107	71-125			
Matrix Spike (F609427-MS2)		Source:	1608981-16		Prepared &	Analyzed:	19-Sep-16				
Mercury	6.40	0.08	0.50	ng/L	5.0601	1.27	101	71-125			
Matrix Spike Dup (F609427-MSD1)		Source:	1608981-15		Prepared & Analyzed: 19-Sep-16						
Mercury	12.92	0.08	0.50	ng/L	10.120	2.16	106	71-125	0.541	24	
Matrix Spike Dup (F609427-MSD2)		Source:	1608981-16		Prepared & Analyzed: 19-Sep-16						
Mercury	6.51	0.08	0.50	ng/L	5.0601	1.27	104	71-125	1.77	24	
Batch F609484 - EFGS-013 Methyl H	g Distillatio	on for Wate	r								
Blank (F609484-BLK1)					Prepared: 2	2-Sep-16 A	analyzed: 2	3-Sep-16			
Methyl Mercury (as Mercury)	ND	0.026	0.050	ng/L	*	*	•	*			
Blank (F609484-BLK2)					Prepared: 2	2-Sep-16 A	analyzed: 2	3-Sep-16			
Methyl Mercury (as Mercury)	ND	0.026	0.050	ng/L							

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AMEC Foster Wheeler	Project: Penobscot Seawater Total And Diss Hg and	d MMHg
511 Congress Street	Project Number: 3616166052	Reported:
Portland ME, 04101	Project Manager: Rod Pendleton	30-Sep-16 15:08

Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Analyte	Result	LIIIII	LIIIII	Units	Level	Result	70KEU	Linns	KrD	LIIIII	indies
Batch F609484 - EFGS-013 Methyl I	Hg Distillatio	on for Wate	r								
Blank (F609484-BLK3)					Prepared: 2	2-Sep-16 A	nalyzed: 2	3-Sep-16			
Methyl Mercury (as Mercury)	ND	0.026	0.050	ng/L							
LCS (F609484-BS1)					Prepared: 2	2-Sep-16 A	analyzed: 2	3-Sep-16			
Methyl Mercury (as Mercury)	1.106	0.026	0.050	ng/L	1.0010		110	70-130			
LCS Dup (F609484-BSD1)					Prepared: 2	2-Sep-16 A	analyzed: 2	3-Sep-16			
Methyl Mercury (as Mercury)	1.158	0.026	0.050	ng/L	1.0010	-	116	70-130	4.64	25	
Duplicate (F609484-DUP1)		Source:	1608741-01		Prepared: 2	2-Sep-16 A	analyzed: 2	3-Sep-16			
Methyl Mercury (as Mercury)	0.053	0.026	0.050	ng/L		0.053			0.674	35	
Matrix Spike (F609484-MS1)		Source:	1608742-05		Prepared: 2	2-Sep-16 A	analyzed: 2	3-Sep-16			
Methyl Mercury (as Mercury)	1.261	0.026	0.050	ng/L	1.0010	0.129	113	65-130			
Matrix Spike (F609484-MS2)		Source:	1608981-01		Prepared: 22-Sep-16 Analyzed: 23-Sep-16						
Methyl Mercury (as Mercury)	1.111	0.026	0.050	ng/L	1.0010	ND	111	65-130			
Matrix Spike Dup (F609484-MSD1)		Source:	1608742-05		Prepared: 2	2-Sep-16 A	analyzed: 2	3-Sep-16			
Methyl Mercury (as Mercury)	1.266	0.026	0.050	ng/L	1.0010	0.129	114	65-130	0.388	35	
Matrix Spike Dup (F609484-MSD2)		Source:	1608981-01		Prepared: 2	2-Sep-16 A	analyzed: 2	3-Sep-16			
Methyl Mercury (as Mercury)	1.052	0.026	0.050	ng/L	1.0010	ND	105	65-130	5.47	35	

Blank (F609569-BLK1)			Prepared: 26-Sep-16 Analyzed: 28-Sep-16			
Methyl Mercury (as Mercury)	ND	0.026	0.050	ng/L		U

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AMEC Foster Wheeler	Project: Penobscot Seawater Total And Diss Hg an	d MMHg
511 Congress Street	Project Number: 3616166052	Reported:
Portland ME, 04101	Project Manager: Rod Pendleton	30-Sep-16 15:08

Quality Control Data

	Detection	Reporting		Spiles	Source		% DEC		PPD	
Result	Limit	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
g Distillatio	on for Wate	r								
				Prepared: 2	6-Sep-16 A	analyzed: 2	8-Sep-16			
ND	0.026	0.050	ng/L							
					26-Sep-16 A	analyzed: 2	8-Sep-16			
ND	0.026	0.050	ng/L							
				Prepared: 26-Sep-16 Analyzed: 28-Sep-16						
0.977	0.026	0.050	ng/L	1.0010		97.6	70-130			
				Prepared: 2	26-Sep-16 A	analyzed: 2	8-Sep-16			
0.956	0.026	0.050	ng/L	1.0010		95.5	70-130	2.15	25	
	Source:	1608980-03	BRE1	Prepared: 2	26-Sep-16 A	analyzed: 2	8-Sep-16			
0.091	0.026	0.050	ng/L		0.099			8.44	35	
	Source:	1608981-15	SRE1	Prepared: 2	6-Sep-16 A	analyzed: 2	8-Sep-16			
1.313	0.026	0.050	ng/L	1.0010	0.205	111	65-130			
	Source:	1608981-16	6RE1	Prepared: 26-Sep-16 Analyzed: 28-Sep-16						
1.273	0.026	0.050	ng/L	1.0010	0.127	114	65-130			
	Source:	1608981-15	SRE1	Prepared: 2	6-Sep-16 A	analyzed: 2	8-Sep-16			
1.297	0.026	0.050	ng/L	1.0010	0.205	109	65-130	1.17	35	
	Source:	1608981-16	6RE1	Prepared: 2	6-Sep-16 A	analyzed: 2	8-Sep-16			
	g Distillation ND ND 0.977 0.956 0.091 1.313 1.273	g Distillation for Wate ND 0.026 ND 0.026 ND 0.026 0.977 0.026 0.956 0.026 Source: 0.091 0.091 0.026 Source: 1.313 1.273 0.026	Result Limit Limit g Distillation for Water	Result Limit Limit Units g Distillation for Water <	Result Limit Limit Units Level g Distillation for Water Prepared: 2 ND 0.026 0.050 ng/L Prepared: 2 ND 0.026 0.050 ng/L Prepared: 2 ND 0.026 0.050 ng/L Prepared: 2 0.977 0.026 0.050 ng/L 1.0010 Prepared: 2 0.956 0.026 0.050 ng/L 1.0010 Source: 1608980-03RE1 Prepared: 2 0.091 0.026 0.050 ng/L 1.0010 Source: 1608981-15RE1 Prepared: 2 1.313 0.026 0.050 ng/L 1.0010 Source: 1608981-16RE1 Prepared: 2 1.273 0.026 0.050 ng/L 1.0010	Result Limit Limit Units Level Result g Distillation for Water Prepared: 26-Sep-16 A Prepared: 26-Sep-16 A Prepared: 26-Sep-16 A ND 0.026 0.050 ng/L Prepared: 26-Sep-16 A ND 0.026 0.050 ng/L Prepared: 26-Sep-16 A ND 0.026 0.050 ng/L Prepared: 26-Sep-16 A 0.977 0.026 0.050 ng/L 1.0010 Prepared: 26-Sep-16 A 0.977 0.026 0.050 ng/L 1.0010 Source: 1608980-03RE1 Prepared: 26-Sep-16 A 0.091 0.026 0.050 ng/L 0.099 Source: 1608981-15RE1 Prepared: 26-Sep-16 A 1.313 0.026 0.050 ng/L 1.0010 0.205 Source: 1608981-15RE1 Prepared: 26-Sep-16 A 1.273 0.026 0.050 ng/L 1.0010 0.127 Source: 1608981-15RE1 Prepared: 26-Sep-16 A	Result Limit Limit Units Level Result %REC g Distillation for Water Prepared: 26-Sep-16 Analyzed: 23 Prepared: 26-Sep-16 Analyzed: 23 ND 0.026 0.050 ng/L Prepared: 26-Sep-16 Analyzed: 23 ND 0.026 0.050 ng/L Prepared: 26-Sep-16 Analyzed: 23 ND 0.026 0.050 ng/L 1.0010 97.6 0.977 0.026 0.050 ng/L 1.0010 97.6 0.976 0.026 0.050 ng/L 1.0010 95.5 Source: 1608980-03RE1 Prepared: 26-Sep-16 Analyzed: 24 0.099 0.099 24 0.091 0.026 0.050 ng/L 1.0010 0.205 111 Source: 1608981-15RE1 Prepared: 26-Sep-16 Analyzed: 24 11.1 114 Source: 1608981-16RE1 Prepared: 26-Sep-16 Analyzed: 24 114 Source: 1608981-15RE1 Prepared: 26-Sep-16 Analyzed: 24 24	Result Limit Limit Units Level Result %REC Limits g Distillation for Water Prepared: 26-Sep-16 Analyzed: 28-Sep-16 ND 0.026 0.050 ng/L 1.0010 97.6 70-130 Prepared: 26-Sep-16 Analyzed: 28-Sep-16 Analyzed: 28-Sep-16 Analyzed: 28-Sep-16 Analyzed: 28-Sep-16 0.977 0.026 0.050 ng/L 1.0010 95.5 70-130 Prepared: 26-Sep-16 Analyzed: 28-Sep-16 Analyzed: 28-Sep-16 Analyzed: 28-Sep-16 Analyzed: 28-Sep-16 0.091 0.026 0.050 ng/L Prepared: 26-Sep-16 Analyzed: 28-Sep-16 Source: 1608981-15RE1 Prepared: 26-Sep-16 Analyzed: 28-Sep-16 1.313 0.026 0.050 ng/L 1.0010 0.127 114 65-130	Result Limit Units Level Result %REC Limits RPD g Distillation for Water Prepared: 26-Sep-16 Analyzed: 28-Sep-16 Prepared: 26-Sep-16 Analyzed: 28-Sep-16 ND 0.026 0.050 ng/L 1.0010 97.6 70-130 Prepared: 26-Sep-16 Analyzed: 28-Sep-16 Prepared: 26-Sep-16 Analyzed: 28-Sep-16 28-Sep-16 0.956 0.026 0.050 ng/L 1.0010 95.5 70-130 2.15 Source: I608980-03RE1 Prepared: 26-Sep-16 Analyzed: 28-Sep-16 Nalyzed: 28-Sep-16 8.44 Source: I608981-15RE1 Prepared: 26-Sep-16 Analyzed: 28-Sep-16 8.44 Source: I608981-16RE1 Prepared: 26-Sep-16 Analyzed: 28-Sep-16 8.44 Source: I608981-16RE1 Prepared: 26-Sep-16 Analyzed: 28-Sep-16 1.313 0.026 0.050 ng/L 1.0010 0.	Result Limit Limit Units Level Result %REC Limits RPD Limit g Distillation for Water Prepared: 26-Sep-16 Analyzed: 28-Sep-16 Prepared: 26-Sep-16 Analyzed: 28-Sep-16 Sep-16 Sep-16

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AMEC Foster Wheeler		Project: Penobscot Seawater Total And Diss H	Ig and MMHg				
511 Cong	ress Street	Project Number: 3616166052	Reported:				
Portland N	ME, 04101	Project Manager: Rod Pendleton	30-Sep-16 15:08				
		Notes and Definitions					
U Analyte was not detected and is reported as less than the LOD or as defined by the client. The LOD has been adjusted for any dilution or concentration of the sample.							
QB-08	The blank was preserved to 50% BrCl rather than 1%. The control limit for blanks preserved to greater than 1% BrCl is the preservation percentage multiplied by the MRL.						
J	The result is an estimated concentration.						
FB	This blank is a filtration blank. Data is reported for informational purposes only.						
DET	Analyte DETECTED						
ND	Analyte NOT DETECTED at or above	ve the reporting limit					
NR	Not Reported						
dry	Sample results reported on a dry wei	ght basis					
RPD	Relative Percent Difference						

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THg26002-160919-1

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Analysis Datasheet for Total Mercury

Date of Analysis: September	19, 2016 Analyst: DM2
Instrument #: Hg2600-2	Units ng/L
LIMS Sequence #: 6120016, 612	0007

Calibration Statistics:

				Uncorrected Response	Corrected Peak	Corrected	
LabNumber	n	True Val	Area	Factor	Height	Response Factor	% Recovery
SEQ-CAL1	1	0.50 ng/l.	114.45 units	228.89	93.03 units	186.06	91.8 %Rec
SEQ-CAL2	1	1.00 ng/L	215.04 units	215.04	193.63 units	193.63	95.5 %Rec
SEQ-CAL3	1	5.00 ng/L	1110.72 units	222.14	1089.31 units	217.86	107.5 %Rec
SEQ-CAL4	1	20.00 ng/L	4221.52 units	211.08	4200.10 units	210.01	103.6 %Rec
SEQ-CAL5	1	40.00 ng/L	8263.15 units	206.58	8241.74 units	206.04	101.6 %Rec
SEQ-CAL6	0						
SEQ-CAL7	0						
SEQ-CAL8	0						
SEQ-CAL9	0						
Corr. Mean RF 202.72	Corr. St Dev RF +/- 12.78	Corr. RSD CF 6.3% RSD	Uncorr. Mean RF 216.75				

Blanks:

LabNumber	n	Mean	Std Dev	Mean (ng/L)	Std Dev (ng/L)
SEQ-IBL	3	21.41 units	±3.42	0.10 ng/L	±0.02

Preparation Blanks

Sample Type	Batch ID	n	Mean	Std Dev
BLK	1	3	0.104 ng/l.	±0.061
BLK	2	3	0.055 ng/L	±0.030
BLK	3	1	1.394 ng/L	
BLK	4	3	2.077 ng/L	±0.602
BLK	5	0	0.000 ng/L	
BLK	6	0	0.000 ng/L	

		Sample	<u></u>	:		1993	J		Uncorrected	Batch	No PB	2003232				
nstrument	Analyst	Type	LabNumber	Dilution	Analyzed	1999) - F	ieID	RunEnd	Response	ID	Correction?	RESP	InitialResult	FinalResult	InitialUnits	Commente
Hg2600-2	DM2	CAL	SEQ-IBL1	- 1	9/19/2016	5:48:10 61081	1.RAW *	5:48:10 AM	21.94		:	0.5	0.003	0.003	ng/L	
lg2600-2	DM2	CAL	SEQ-IBL2 🥐	1	9/19/2016 (5:52:18 61082	-1.RAW	5:52:18 AM	17.76		T	-3.7	-0.018	-0.018	ng/L	
lg2600-2	DM2	CAL	SEQ-IBL3 -	1	9/19/2016 :	5:56:27 61083	1.RAW	5:56:27 AM	24.54,		1	3.1	0.015	0.015	ng/L	
g2600-2	DM2	CAL.	SEQ-CAL1	1	9/19/2016 (5:00:35 61084	1.RAW	6:00:35 AM	114.45			93.0	0.459	0.459	ng/L	
lg2600-2	DM2	CAL	SEQ-GAL2	1	9/19/2016 6	5:04:44 61085	1.RAW	6:04:44 AM	215.04		1	193.6	0.955	0.955	ng/L	
lg2600-2	DM2	CAL	SEQ-CAL3 -	1	9/19/2016 6	5:08:52 61086	1.RAW	6:08:52 AM	1110.72	-		1089.3	5.373	5.373	ng/L	
lg2600-2	DM2	CAL	SEQ-CAL4	1	9/19/2016 6	5:13:01 61087	1.RAW	6:13:01 AM	4221.52	-	1	4200.1	20.719	20,719	ng/L	
g2600-2	DM2	CAL	SEQ-CAL5 _	1	9/19/2016 6	5:17:10 61088	1.RAW	6:17:10 AM	8263.15-	•		8241.7	40.656	40.656	ng/L	
g2600-2	DM2	CAL	SEQ-ICV1 -	1	9/19/2016 6	61089	1.RAW	6:21:18 AM	1176.55			1155.1	5.698	5.698	ng/L	
g2600-2	DM2	BLK	-F609420-BLK1	1.	9/19/2016 6	5:25:27 61090	1.RAW	6:25:27 AM	56.78	1		35.4	0.174	0.174	ng/L	
g2600-2	DM2	BLK	F609420-BLK2	14.	9/19/2016 €	5:29:35 61091	1.RAW	6:29:35 AM	36.05	1		14.6	0.072	0.072	ng/L	
ig2600-2	DM2	BLK	F609420-BLK3	1,	9/19/2016 6	33:44 61092	1.RAW	6:33:44 AM	34.91	1	1	13.5	0.067	. 0.067	ng/L	
lg2600-2	DM2	SAM	-F609420-BS1-	1.	9/19/2016 6	5:37:52 61093	1.RAW	6:37:52 AM	3349.36	1		3327.9	16.312	16.312	ng/L	
g2600-2	DM2	SAM	-F609420-BSD1	1+	9/19/2016 6	3:42:01 61094	1.RAW	6:42:01 AM	3383.46	1		3362.0	16.480	16.480	ng/L	
g2600-2	DM2	SAM	-1608742-01	1+	9/19/2016 6	61095-	1.RAW	6:46:09 AM	243.69	1	1	222.3	0.992	0.992	ng/L	
g2600-2	DM2	SAM	1608742-02	1.	9/19/2016 6	50:18 61096-	1.RAW	6:50:18 AM	76.87	1		55.5	0.169	0.169	ng/L	
g2600-2	DM2	SAM	1608742-03	1-	9/19/2016 6	54:26 61097-	1.RAW	6:54:26 AM	180.71	1	+	159.3	0.681	0.681	ng/L	
g2600-2	DM2	SAM	+1608742-04	1-	9/19/2016 6	:58:34 61098-	1.RAW	6:58:34 AM	143.43	1	++	122.0	0.497	0.497	ng/L	
g2600-2	DM2	SAM	+1608742-05 -	1-	9/19/2016 7	:02:43 61099	1.RAW	7:02:43 AM	244.52	1		223.1	0.996	0.996	ng/L	
g2600-2	DM2	CAL	SEQ-CCV1	1	9/19/2016 7	:06:51 61100-	1.RAW	7:06:51 AM	1134.52		÷	1113.1	5.491	5.491	ng/L	
g2600-2	DM2	CAL	SEQ-CCB1	1	9/19/2016 7	:11:00 61101-	1.RAW	7:11:00 AM	44.15			22.7	0.112	0.112	ng/L	
g2600-2	DM2	SAM	1608742-06	1		15:08 61102-		7:15:08 AM	83.35	1		61.9	0.201	0.201	ng/L	
2600-2	DM2	SAM	1608742-07 🗸	1.		19:17 61103-		7:19:17 AM	352.56	1	1	331.1	1.529	1.529	ng/L	
12600-2	DM2	SAM	1608742-08 /	1-		:23:25 61104-		7:23:25 AM	38.44	1		17.0	-0.020	-0.020	ng/L	
2600-2	DM2	SAM	-1608742-10 🗸	1-		:27:34 61105-		7:27:34 AM	34.13	1		12.7	-0.042	-0.042	ng/L	
2600-2	DM2	SAM	+1608981-01 ×	14		31:42 61106-		7:31:42 AM	30.87	1		9.5	-0.058	-0.058	ng/L	
2600-2	DM2	SAM	+1608981-02	1		:35:50 61107-		7:35:50 AM	34.82	1		13.4	-0.038	-0.038	ng/L	
2600-2	DM2	SAM	1608981-03	1		:39:59 61108-		7:39:59 AM	1614.44	1		1593.0	7.754	7.754	ng/L	
2600-2	DM2	SAM	1608981-04 🗸	1+		:44:07 61109-		7:44:07 AM	289.97	1		268.6	1.220	1.220	ng/L	··· · · · · · · · · · · · · · · · · ·
2600-2	DM2	SAM	1608981-05 -	1		48:16 61110-		7:48:16 AM	789.04	1		767.6	3.682	3.682	ng/L	
2600~2	DM2	SAM	1608981-06 2	1	9/19/2016 7	52:24 61111-	I.RAW	7:52:24 AM	263.25	1		241.8	1.089	1.089	ng/L	
2600-2	DM2	CAL	SEQ-CCV2	1	9/19/2016 7	56:33 61112-	I.RAW	7:56:33 AM	1093.42		······································	1072.0	5.288	5.288	ng/L	
2600-2	DM2	CAL	SEQ-CCB2	1		:00:41 61113-		8:00:41 AM	33.38	1		12.0	0.059	0.059	ng/L	
2600-2	DM2	SAM	-1608981-07 🗸	1+	9/19/2016 8:	04:50 61114-	.RAW	8:04:50 AM	1245.86	1		1224.4	5.936	5.936	ng/L	
2600-2	DM2	SAM	-1608981-08	1-		08:58 61115-		8:08:58 AM	161.87	1		140.5	0.588	0.588	ng/L	
2600-2	DM2	SAM	1608981-09 🖌	1-		13:06 61116-		8:13:06 AM	418.22	1	·····	396.8	1.853	1.853	ng/L	
2600-2	DM2	SAM	1608981-10 🗸	1		17:15 61117-		8:17:15 AM	142.50	1		121.1	0.493	0.493	ng/L	
2600-2	DM2	SAM	1608981-11 🗸	1		21:23 61118-		8:21:23 AM	1876.51	1		1855.1	9.047	9.047	ng/L	
2600-2	DM2	SAM -	F609420-DUP1	1.		25:32 61119-		8:25:32 AM	215,90	1		194.5	0.855	0.855	ng/L	
2600-2	DM2	SAM "	F609420-MS1	1.	9/19/2016 8:	29:40 61120-1	.RAW	8:29:40 AM	1258.64	1		1237.2	5.999	5.999	ng/L	
2600-2	DM2	SAM	F609420-MSD1	1+		33:49 61121-1		8:33:49 AM	1295.87	1		1274.5	6.182	6.182	ng/L	
2600-2	DM2	SAM	F609420-MS2	1+	9/19/2016 8:	37:57 61122-1	.RAW	8:37:57 AM	5883.37	1		5862.0	28.812	28.812	ng/L	
2600-Z	DM2	SAM .	F609420-MSD2	1		42:06 61123-		8:42:06 AM	5959.42	1	+-	5938.0	29.187	29.187	ng/L	
2600-2	DM2	CAL	SEQ-CCV3	1	9/19/2016 8:	46:14 61124-1	.RAW	8:46:14 AM	1218.88			1197.5	5.907	5.907	ng/L	
2600-2	DM2	CAL	SEQ-CCB3	1	9/19/2016 8:	50:22 61125-1	.RAW	8:50:22 AM	65.48			44.1	0.217	0.217	ng/L	
2600-2	DM2	BLK	F609427-BLK1	1+	9/19/2016 8:	54:32 61126-1	RAW	8:54:32 AM	36.95	2		15.5	0.077	0.077	ng/L	
2600-2	DM2	BLK -	F609427-BLK2	1_	9/19/2016 8:	58:40 61127-1	.RAW	8:58:40 AM	35.28	2 2		13.9	0.068	0.068	ng/L	
2600-2	DM2	BLK -	F609427-BLK3	1+	9/19/2016 9:	02:49 61128-1	.RAW	9:02:49 AM	25.59	2		4.2	0.021	0.021	ng/L	
2600-2	DM2	BLK -	F609427-BLK4	10		06:56 61129-1		9:06:56 AM	49.67	3		28.3	0.139	1.394	ng/L	
2600-2	DM2	SAM	F609427-BS1 -	1		11:04 61130-1		9:11:04 AM	3195.681	2		3174.3	15.603	15.603	ng/L	
600-2	DM2	SAM	F609427-BSD1	1-		15:12 61131-1		9:15:12 AM	3420.18	Z		3398.8	16.711	16.711	ng/L	
600-2	DM2		1608981-12 🗸	1-		19:21 61132-1		9:19:21 AM	220.73	Z		199.3	0.928	0.928	ng/L	
600-2	DM2		1608981-13	1		23:29 61133-1		9:23:29 AM	4248.79	2	-`-`	4227.4	20.798	20.798	ng/L	
600-2	DM2		1608981-14	1-		27:38 61134-1		9:27:38 AM	575.01	2		553.6	2.676	2.676	ng/L	
600-2	DM2		1608981-15 -	1.		31:46 61135-1		9:31:46 AM	467.12	2	·····	445.7	2.143	2.143	ng/L	
600-2	DM2		SEQ-CCV4	1		35:54 61136-1		9:35:54 AM	1170.67	* ‡		1149.3	5.669	5.669	ng/L	
600-2	DM2		SEQ-CCB4	1	9/19/2016 9:4			9:40:03 AM	47.21			25.8	0.127	0.127	ng/L	

Instrument	Analyst	Sample Type	LabNumber	Dilution	Analyzed	FileID	RunEnd	Uncorrected Response	Batch ID	No PB Correction?	RESP	InitialResult	FinalResult	InitialUnits	Comment
Hg2600-2	DM2	SAM	↓1608981-16 √	1	9/19/2016 9:44:11 6	· · · · · · · · · · · · · · · · · · ·	9:44:11 AM	287.60			266.2	1.258	1.258		Comment
Hg2600-2	DM2	SAM	-1608981-17-/	1	9/19/2016 9:48:20 6		9:44.11 AM 9:48:20 AM	357.27		2	335.9	1.602	1.258	ng/L	
Hg2600-2	DM2	SAM	41608981-18 -/	1	9/19/2016 9:52:28 6		9:52:28 AM	270.21		1	248.8	1.172	1.172	ng/L ng/L	
Hg2600-2	DM2		- 1609078-01 🗸	1,-	9/19/2016 9:56:36 6		9:56:36 AM	29,13		2	7.7	-0.017	-0.017	ng/L	
Hg2600-2	DM2	SAM	~1609195-02 1	10_	9/19/2016 10:00:45 6	A THE REPORT OF A	10:00:45 AM	942.85	2	2	921.4	4.540	45.398	ng/L	
Hg2600-2	DM2	SAM	1609195-04 🗸	1	9/19/2016 10:04:53 6		10:04:53 AM	284.77	2		263.4	1.244	1.244	ng/L	
Hg2600-2	DM2	SAM	41609300-01 -	1.	9/19/2016 10:09:02 6		10:09:02 AM	21.10	2		-0.3	-0.057	-0.057	ng/L	
Hg2600-2	DM2	SAM	1609390-01	1	9/19/2016 10:13:10 6	And particular contract and we have a sub-	10:13:10 AM	623.08	2		601.7	2.913	2.913	ng/L	
Hg2600-2	DM2	SAM	1609390-02	1	9/19/2016 10:17:19 6		10:17:19 AM	52.49	2		31.1	0.098	0.098	ng/L	
Hg2600-2	DM2	SAM	+1609390-03 *	1 ⊷	9/19/2016 10:21:27 6		10:21:27 AM	867,12	2	2	845.7	4.117	4.117	ng/L	
Hg2600-2	DM2	CAL	SEQ-CCV5	1	9/19/2016 10:25:35 6	1148-1.RAW	10:25:35 AM	1153.961892			1132.5	5.587	5.587	ng/L	
Hg2600-2	DM2	CAL	SEQ-CCB5	1	9/19/2016 10:29:44 6	149-1.RAW	10:29:44 AM	42.36			20.9	0.103	0.103	ng/L	
Hg2600-2	DM2	SAM	1609390-04	1	9/19/2016 10:33:52 6	1150-1.RAW	10:33:52 AM	35.46	2	······································	14.0	0.014	0.014	ng/L	
Hg2600-2	DM2	SAM	1609390-05	10,	9/19/2016 10:38:01 6	1151-1.RAW	10:38:01 AM	1951.06	3		1929.6	9.379	93.794	ng/L	
Hg2600-2	DM2	SAM	1609390-06	1	9/19/2016 10:42:09 6	152-1.RAW	10:42:09 AM	47.72	2		26.3	0.075	0.075	ng/L	
Hg2600-2	DM2	SAM	<u>,</u> 1609422-01 🗸	1-	9/19/2016 10:46:17 6	153-1.RAW	10:46:17 AM	2231.17	2		2209.8	10.845	10.845	ng/L	
Hg2600-2	DM2	SAM	d 1609423-01	1	9/19/2016 10:50:26 6	154-1.RAW	10:50:26 AM	6006.90	2		5985.5	29.471	29.471	ng/L	
Hg2600-2	DM2	SAM	F609427-DUP1	1	9/19/2016 10:54:34 6	155-1.RAW	10:54:34 AM	501.00	2		479.6	2.311	2.311	ng/L	
Hg2600-2	DM2	SAM	F609427-MS1	1-	9/19/2016 10:58:43 61		10:58:43 AM	2639.06	Ż		2617.6	12.857	12.857	ng/L	
Hg2600-2	DM2	And the state of the state of the state	-F609427-MSD1	1.	9/19/2016 11:02:51 6		11:02:51 AM	2624.99	2	the second	2603.6	12.788	12.788	ng/L	
lg2600-2	DM2	SAM	-F609427-MS2	1-	9/19/2016 11:07:00 61	158-1.RAW	11:07:00 AM	1317.12	2		1295.7	6.336	6.336	ng/L	
lg2600-2	DM2	SAM	F609427-MSD2	1	9/19/2016 11:11:08 61	159-1.RAW	11:11:08 AM	1340.10	2		1318.7	6.450	6.450	ng/L	
lg2600-2	DM2	CAL	SEQ-CCV6	1	9/19/2016 11:15:16 61	160-1.RAW	11:15:16 AM	1140.96			1119.5	5.523	5.523	ng/L	
lg2600-2	DM2	CAL	SEQ-CCB6	1	9/19/2016 11:19:25 61	161-1.RAW	11:19:25 AM	52.44			31.0	0.153	0.153	ng/L	
lg2600-2	DM2	BŁK	E609416-BLK1	20	9/19/2016 11:23:33 61	162-1.RAW	11:23:33 AM	40.12	4		18.7	0.092	1.846	ng/L	
ig2600-2	DM2	BLK	F609416-BLK2	20	9/19/2016 11:27:42 61	.163-1.RAW	11:27:42 AM	49.39	4		28.0	0.138	2.760	ng/L	
g2600-2	DM2	BLK	F609416-BLK3	20	9/19/2016 11:31:50 61		11:31:50 AM	37.89	4		16.5	0.081	1.625	ng/L	
g2600-2	DM2	SAM	F609416-BS1	20-	9/19/2016 11:36:00 61		11:36:00 AM	1107.62	4		1086.2	5.254	105.086	ng/L	
12600-2	DM2	SAM	+F609416-BSD1	20+	9/19/2016 11:40:08 61	166-1.RAW	11:40:08 AM	1099.96	4		1078.5	5.216	104.330	ng/L	
12600-2	DM2		-1608071-05	100	9/19/2016 11:44:16 61	167-1.RAW	11:44:16 AM	11097.88	4		11076.5	54.618	5461.831	ng/L	
12600-2	DM2	SAM	1608071-06 2-01	100 -	9/19/2016 11:48:25 61	168-1.RAW	11:48:25 AM	1039.84	4	, 	1018.4	5.003	500.304	ng/L	
2600-2	DM2	SAM	1608071-07	100	9/19/2016 11:52:33 61		11:52:33 AM	838.08	4		816.7	4.008	400.777	ng/L	
g2600-2	DM2	SAM	1608071-10	100	9/19/2016 11:56:42 61	170~1.RAW	11:56:42 AM	6402.13	4		6380.7	31.455	3145.466	ng/L	
g2600-2	DM2	SAM	-1608071-11	100	9/19/2016 12:00:50 61	171-1.RAW	12:00:50 PM	1822.03	4		1800.6	8.861	886.150	ng/L	
g2600-2	DM2	CAL	SEQ-CCV7	1	9/19/2016 12:04:58 61		12:04:58 PM	1194.77			1173.4	5.788	5.788	ng/L	
lg2600-2	DM2	CAL	SEQ-CCB7	1	9/19/2016 12:09:07 61	173-1.RAW	12:09:07 PM	62.16			40.7	0.201	0.201	ng/L	
g2600-2	DM2		- 1608072-01 -/	500	9/19/2016 12:13:15 61	174-1.RAW	12:13:15 PM	498.16	4		476.7	2.348	1173.797	ng/L	
g2600-2	DM2	SAM -	- 1608072-02 🧹	5004	9/19/2016 12:17:24 61	175-1.RAW	12:17:24 PM	351.17	4		329.8	1.622	811.245	ng/L	
g2600-2	DM2		+1608361-05 ~	500,	9/19/2016 12:21:32 61	176-1.RAW	12:21:32 PM	492.47	4		471.1	2.320	1159.750	ng/L	•
g2600-2	DM2		+1608361-06 ^	500	9/19/2016 12:25:40 61	177-1.RAW	12:25:40 PM	71.29	4		49.9	0.242	120.951	ກg/L	
g2600-2	DM2		+1608361-07 4	500	9/19/2016 12:29:49 61	178-1.RAW	12:29:49 PM	52.14	4		30.7	0.147	73.712	ng/L	
g2600-2	DM2	SAM	+1608361-08 🗸	500	9/19/2016 12:33:57 61	179-1.RAW	12:33:57 PM	227.81	4		206.4	1.014	506.993	ng/L	
g2600-2	DM2	SAM	+1608361-09 🗸	500	9/19/2016 12:38:06 61	180-1.RAW	12:38:06 PM	295.52	4		274.1	1.348	674.005	ng/L	
2600-2	DM2	SAM	1608361-10	500	9/19/2016 12:42:14 61	181-1.RAW	12:42:14 PM	561.43	4		540.0	2.660	1329.858	ng/L	
2600-2	DM2	SAM	1608361-11 🖌	500	9/19/2016 12:46:23 61	182-1.RAW	12:46:23 PM	906.76	4		885.3	4.363	2181.587	ng/L	
g2600-2	DM2		-1608361-12 🛩	500	9/19/2016 12:50:31 61		12:50:31 PM	1407.56	4		1386.1	6.834	3416.775	ng/L	
2600-2	DM2	CAL	SEQ-CCV8	1	9/19/2016 12:54:39 61		12:54:39 PM	1090.85	 		1069.4	5.275	5.275	ng/L	
2600-2	DM2	CAL	SEQ-CCB8	1	9/19/2016 12:58:48 61		12:58:48 PM	49.72			28.3	0.140	0.140	ng/L	
2600-2	DM2		-1608361-13 🏑	500 🛩	9/19/2016 13:02:56 61		1:02:56 PM	1430.86	4		1409.5	6.949	3474.264	ng/L	
2600-2	DM2		1608361-14	500~	9/19/2016 13:07:05 61		1:07:05 PM	1414.87	4		1393.5	6.870	3434.814	ng/L	
2600-2	DM2		+1608361-15	500 _F	9/19/2016 13:11:13 61		1:11:13 PM	5576.68	4		5555.3	27.399	13699.712	ng/L	
2600-2	DM2		-1608361-16	500-	9/19/2016 13:15:21 61		1:15:21 PM	876.26	4		854.8	4.213	2106.350	ng/L	
2600-2	DM2		+1608361-17	500	9/19/2016 13:19:30 61		1:19:30 PM	854.08	4		832.7	4.103	2051.648	ng/L	
2600-2	DM2		F609416-DUP1	100 ~	9/19/2016 13:23:38 61		1:23:38 PM	976.88	4		955.5	4.692	469.243	ng/L	
2600-2	DM2		F609416-MS1	500	9/19/2016 13:27:47 61		1:27:47 PM	2366.53-	4		2345.1	11.564	5782.025	ng/L	
2600-2	DM2		F609416-MSD1	500	9/19/2016 13:31:55 61		1:31:55 PM	2351.31	4		2329.9	11.489	5744.502	ng/L	
2600-2	DM2		F609416-MS2	500-	9/19/2016 13:36:04 61		1:36:04 PM	2415.60	4		2394.2	11.806	5903.054	ng/L	
2600-2	DM2		F609416-MSD2	500-	9/19/2016 13:40:12 61		1:40:12 PM	2547.71	4	· · ·	2526.3	12.458	6228.908	ng/L	
2600-2	DM2	CAL	SEQ-CCV9	1	9/19/2016 13:44:20 61	· · · · · · · · · · · · · · · · · · ·	1:44:20 PM	1207.93	:		1186.5	5.853	5.853	ng/L	
2600-2	DM2		SEQ-CCB9	1	9/19/2016 13:48:29 61		1:48:29 PM	53.15	l		31.7	0.157	0.157	ng/L	
2600-2	DM2		1608071-05RE1 🗸	500-	9/19/2016 13:52:37 61		1:52:37 PM	2268.56	4		2247.1	11.081	5540.400	ng/L	
2600-2	DM2		1608071-06RE1 🗸	100	9/19/2016 13:56:46 61:		1:56:46 PM	955.01	4		933.6	4.585	458.457	ng/L	
2600-2	DM2		1608361-06RE1	20	9/19/2016 14:00:54 612		2:00:54 PM	1151.60	4		1140.2	5.521	110.412	ng/L	
2600-2	DM2		1608361-07RE1 🗸	20	9/19/2016 14:05:03 612	201-1.RAW	2:05:03 PM	543.05	4		521.6	2.469	49.386	ng/L	
2600-2	DM2	CAL	SEQ-CCVA	1	9/19/2016 14:09:11 612	07-1 RAW	2:09:11 PM	1153.62	4		1132.2	5.585	5.585	ng/L	

A NAMA A	n egenetet	Sample						Uncorrected	Batch	No PB	66866		STATES ST	A CEREMANE	<u></u>
Instrument	Analyst	Type	LabNumber	Dilution	Analyzed	FileID	RunEnd	Response	ID	Correction?	RESP	InitiaiResult	FinalResult	InitialUnits	Comments
Hg2600-2	DM2	CAL	SEQ-CCBA	1	9/19/2016 14:13:19 6	51203-1.RAW	2:13:19 PM	39.55			18.1	0.089	0.089	ng/L	
Hg2600-2	DM2	SAM	SNCL 1605421	1	9/19/2016 14:17:28 6	51204-1.RAW	2:17:28 PM	35.26			13.8	Error	#VALUE!	ng/L	
Hg2600-2	DM2	SAM	CLEAN		9/19/2016 14:20:19 6	51205-1.RAW	2:20:19 PM	14.45		X	-7.0	-0.034	0.000	ng/L	
Hg2600-2	DM2	SAM	WS		9/19/2016 14:24:28 6	51206-1.RAW	2:24:28 PM	38.92		X	17.5	0.086	0.000	ng/L	
Hg2600-2	DM2	SAM	WS		9/19/2016 14:28:36 6	51207-1.RAW	2:28:36 PM	27.00		X	5.6	0.028	0.000	ng/L	
Hg2600-2	DM2	CAL	SEQ-CCVB	1	9/19/2016 14:32:44	51208-1.RAW	2:32:44 PM	1052.70			1031.3	5.087	5.087	ng/L	
Hg2600-2	DM2	CAL	SEQ-CCBB ·	1	9/19/2016 14:36:53 6	51209-1.RAW	2:36:53 PM	57.40			36.0	0.178	0.178	ng/L	

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TotalMercury EPA1631	Operate DM Worksh THg260 Method #### Descrip THg260	CalibFa R:	202.72 0.9999		Conc = (Area-21.41 Run Date: QC Warnings:14/QC Run Time: 0.9999	9/19/2016 Blank SD: 5:25:53 Blank RSD%: CF SD: CF RSD%:	3.419088303 15.96714572 12.78152002 6.304994588			
Sample/ID	Location Rinse			Conc (ppt)	MB% FinalConc Rec% (DA RawData		Peak (Raw) Control (etf)	Flags	RunCount
Clean			0.00		יים איז	61076-1.RAW	5:28:45	1264.16 Clean	FB	1
clean			0.00	0.05		61077-1.RAW	5:31:36	9.47 Clean	FB	1
WS			21.41	0.14		61078-1.RAW	5:35:45	50.71 Sample	FB	1
WS			21.41	0.05		61079-1.RAW	5:39:53	31.60 Sample	FB	1
ws			21.41	0.03		61080-1.RAW	5:44:01	27.99 Sample	OK	1
SEQ-IBL1	A1	1	0.00	0.11		61081-1.RAW	5:48:10	21.94 Sample	FB	1
SEQ-IBL2	A2	1	0.00	0.09		61082-1.RAW	5:52:18	17.76 Sample	FB	1
SEQ-IBL3	A3	1	0.00	0.12		61083-1.RAW	5:56:27	24.54 Sample	FB	1
SEQ-CAL1	A4	1	21.41	0.46	91.78	61084-1.RAW	6:00:35	114.45 Sample	FB	1
SEQ-CAL2	A5	1	21.41	0.96	95.51	61085-1.RAW	6:04:44	215.04 Sample	ок	1
SEQ-CAL3	A6	1	21.41	5.37	107.47	61086-1.RAW	6:08:52	1110.72 Sample	FB	1
SEQ-CAL4	A7	1	21.41	20.72	103.59	61087-1.RAW	6:13:01	4221.52 Sample	FB	1
SEQ-CAL5	A8	1	21.41	40.66	101.64	61088-1.RAW	6:17:10	8263.15 Sample	OK	1
SEQ-ICV1	A9	1	21.41	5.70	113.96	61089-1.RAW	6:21:18	1176.55 Sample	FB	1
F609420-BLK1	A10	1	21.41	0.17		61090-1.RAW	6:25:27	56.78 Sample	FB	1
F609420-BLK2	A11	1	21.41	0.07		61091-1.RAW	6:29:35	36.05 Sample	FB	1
F609420-BLK3	A12	1	21.41	0.07		61092-1.RAW	6:33:44	34.91 Sample	FB	1
F609420-BS1	A13	1	21.41	16.42		61093-1.RAW	6:37:52	3349.36 Sample	OK	1
F609420-BSD1	A14	1	21.41	16.58		61094-1.RAW	6:42:01	3383.46 Sample	FB	1
1608742-01	A15	1	21.41	1.10		61095-1.RAW	6:46:09	243.69 Sample	OK	1
1608742-02	A16	1	21.41	0.27		61096-1.RAW	6:50:18	76.87 Sample	FB	1
1608742-03	A17	1	21.41	0.79		61097-1.RAW	6:54:26	180.71 Sample	FB	1
1608742-04	A18	1	21.41	0.60		61098-1.RAW	6:58:34	143.43 Sample	FB	1
1608742-05	A19	1	21.41	1.10		61099-1.RAW	7:02:43	244.52 Sample	FB	1
SEQ-CCV1	A20	1	21.41	5.49	109.82	61100-1.RAW	7:06:51	1134.52 Sample	FB	1
SEQ-CCB1	A21	1	21.41	0.11	0.00	61101-1.RAW	7:11:00	44.15 Sample	FB	1
1608742-06	B1	1	21.41	0.31		61102-1.RAW	7:15:08	83.35 Sample	FB	1
1608742-07	B2	1	21.41	1.63		61103-1.RAW	7:19:17	352.56 Sample	FB	1
1608742-08	B3	1	21.41	0.08		61104-1.RAW	7:23:25	38.44 Sample	FB	1
1608742-10	B4	1	21.41	0.06		61105-1.RAW	7:27:34	34.13 Sample	FB	1
1608981-01	B5	1	21.41	0.05		61106-1.RAW	7:31:42	30.87 Sample	FB	1.
1608981-02	B6	1	21.41	0.07		61107-1.RAW	7:35:50	34.82 Sample	OK	1
1608981-03	B7	1	21.41	7.86		61108-1.RAW	7:39:59	1614.44 Sample	OK	1
1608981-04	B8	1	21.41	1.32		61109-1.RAW	7:44:07	289.97 Sample	OK	1
1608981-05	B9	1	21.41	3.79		61110-1.RAW	7:48:16	789.04 Sample	FB	1
1608981-06	B10	1	21.41	1.19		61111-1.RAW	7:52:24	263.25 Sample	FB	1
SEQ-CCV2	B11	1	21.41	5.29	105.76	61112-1.RAW	7:56:33	1093.42 Sample	FB	1
SEQ-CCB2	B12	1	21.41	0.06	0.00	61113-1.RAW	8:00:41	33.38 Sample	FB	1
1608981-07	B13	1	21.41	6.04		61114-1.RAW	8:04:50	1245.86 Sample	FB	1
1608981-08	B14	1	21.41	0.69		61115-1.RAW	8:08:58	161.87 Sample	FB	1
1608981-09	B15	1	21.41	1.96		61116-1.RAW	8:13:06	418.22 Sample	OK	1 .
1608981-10	B16	1	21.41	0.60		61117-1.RAW	8:17:15	142.50 Sample	FB	1
1608981-11	B17	1	21.41	9.15		61118-1.RAW	8:21:23	1876.51 Sample	FB	1

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F609420-DUP1	B18	1	21.41	0.96		61119-1.RAW	8:25:32	215.90 Sample	FB	1
F609420-MS1	B19	1	21.41	6.10	311.48	61120-1.RAW	8:29:40	1258.64 Sample	OK	1
F609420-MSD1	B20	1	21.41	6.29		61121-1.RAW	8:33:49	1295.87 Sample	FB	1
F609420-MS2	B21	1	21.41	28.92	348.95	61122-1.RAW	8:37:57	5883.37 Sample	OK	1
F609420-MSD2		1	21.41	29.29		61123-1.RAW	8:42:06	5959.42 Sample	OK	1
SEQ-CCV3	C2	1	21.41	5.91	118.14	61124-1.RAW	8:46:14	1218.88 Sample	FB	1
SEQ-CCB3	C3	1	21.41	0.22	0.00	61125-1.RAW	8:50:22	65.48 Sample	FB	1
F609427-BLK1	C4	1	21.41	0.08	0.00	61126-1.RAW	8:54:32	36.95 Sample	FB	1
F609427-BLK2	C5	1	21.41	0.07		61127-1.RAW	8:58:40	35.28 Sample	FB	1
F609427-BLK3	Č6	1	21.41	0.02		61128-1.RAW	9:02:49	25.59 Sample	FB	1
F609427-BLK4	Č7	10	21.41	1.39		61129-1.RAW	9:06:56	49.67 Sample	FB	1
F609427-BS1	C8	1	21.41	15.66		61130-1.RAW	9:11:04	3195.68 Sample	FB	, 1
F609427-BSD1	C9	1	21.41	16.77		61131-1.RAW	9:15:12	3420.18 Sample	FB	1
1608981-12	C10	1	21.41	0.98		61132-1.RAW	9:19:21	220.73 Sample	fΒ	1
1608981-12	C11	1	21.41	20.85		61133-1.RAW	9:23:29	4248.79 Sample	FB	1
1608981-13	C12	1	21.41	2.73		61134-1.RAW	9:27:38	575.01 Sample	OK FB	1
1608981-14	C12	1	21.41	2.20		61135-1.RAW	9:31:46	467.12 Sample	FB	1
SEQ-CCV4	C13	1	21.41	5.67	113.38	61136-1.RAW	9:35:54	1170.67 Sample	FB	1
SEQ-CCB4	C14	. 1	21.41	0.13	0.00		9:40:03			
	C15	1	21.41		0.00	61137-1.RAW		47.21 Sample	FB	1
1608981-16		1		1.31		61138-1.RAW	9:44:11	287.60 Sample	FB	1
1608981-17	C17		21.41	1.66		61139-1.RAW	9:48:20	357.27 Sample	FB	1
1608981-18	C18	1	21.41	1.23		61140-1.RAW	9:52:28	270.21 Sample	FB	1
1609078-01	C19	1	21.41	0.04		61141-1.RAW	9:56:36	29.13 Sample	OK	1
1609195-02	C20	10	21.41	45.45		61142-1.RAW	10:00:45	942.85 Sample	FB	1
1609195-04	C21	1	21.41	1.30		61143-1.RAW	10:04:53	284.77 Sample	FB	1
1609300-01	A1	1	21.41	0.00		61144-1.RAW	10:09:02	21.10 Sample	FB	1
1609390-01	A2	1	21.41	2.97		61145-1.RAW	10:13:10	623.08 Sample	FB	1
1609390-02	A3	1	21.41	0.15		61146-1.RAW	10:17:19	52.49 Sample	FB	1
1609390-03	A4	1	21.41	4.17		61147-1.RAW	10:21:27	867.12 Sample	FB	1
SEQ-CCV5	A5	1	21.41	5.59	111.73	61148-1.RAW	10:25:35	1153.96 Sample	FB	1
SEQ-CCB5	A6	1	21.41	0.10	0.00	61149-1.RAW	10:29:44	42.36 Sample	FB	1
1609390-04	A7	1	21.41	0.07		61150-1.RAW	10:33:52	35.46 Sample	FB	1
1609390-05	A8	10	21.41	95.19		61151-1.RAW	10:38:01	1951.06 Sample	OK	1
1609390-06	A9	1	21.41	0.13		61152-1.RAW	10:42:09	47.72 Sample	FB	1
1609422-01	A10	1	21.41	10.90		61153-1.RAW	10:46:17	2231.17 Sample	FB	1
1609423-01	A11	1	21.41	29.53		61154-1.RAW	10:50:26	6006.90 Sample	FB	1
F609427-DUP1	A12	1	21.41	2.37		61155-1.RAW	10:54:34	501.00 Sample	FB	1
F609427-MS1	A13	1	21.41	12.91	383.65	61156-1.RAW	10:58:43	2639.06 Sample	FB	1
F609427-MSD1		1	21.41	12.84		61157-1.RAW	11:02:51	2624.99 Sample	FB	1
F609427-MS2	A15	1	21.41	6.39	43.06	61158-1.RAW	11:07:00	1317.12 Sample	FB	1
F609427-MSD2		1	21.41	6.50		61159-1.RAW	11:11:08	1340.10 Sample	FB	1
SEQ-CCV6	A17	1	21.41	5.52	110.45	61160-1.RAW	11:15:16	1140.96 Sample	FB	1
SEQ-CCB6	A18	1	21.41	0.15	0.00	61161-1.RAW	11:19:25	52.44 Sample	FB	1
F609416-BLK1	A19	20	21.41	1.85		61162-1.RAW	11:23:33	40.12 Sample	FB	1
F609416-BLK2	A20	20	21.41	2.76		61163-1.RAW	11:27:42	49.39 Sample	OK	1
F609416-BLK3	A21	20	21.41	1.63		61164-1.RAW	11:31:50	37.89 Sample	FB	1
F609416-BS1	B1	20	21.41	107.16		61165-1.RAW	11:36:00	1107.62 Sample	FB	1
F609416-BSD1	B2	20	21.41	106.41		61166-1.RAW	11:40:08	1099.96 Sample	FB	1

1608071-05	B3	100	21.41	5463.91		61167-1.RAW	11:44:16	11097.88 Sample	FB	1
1608071-06	B4	100	21.41	502.38		61168-1.RAW	11:48:25	1039.84 Sample	FB	1
1608071-07	B5	100	21.41	402.85		61169-1.RAW	11:52:33	838.08 Sample	FB	1
1608071-10	B6	100	21.41	3147.54		61170-1.RAW	11:56:42	6402.13 Sample	FB	1
1608071-11	B7	100	21.41	888.23		61171-1.RAW	12:00:50	1822.03 Sample	FB	1
SEQ-CCV7	B8	1	21.41	5.79	115.76	61172-1.RAW	12:04:58	1194.77 Sample	FB	1
SEQ-CCB7	B9	1	21.41	0.20	0.00	61173-1.RAW	12:09:07	62.16 Sample	FB	1
1608072-01	B10	500	21.41	1175.87		61174-1.RAW	12:13:15	498.16 Sample	FB	1
1608072-02	B11	500	21.41	813.32		61175-1.RAW	12:17:24	351.17 Sample	OK	1
1608361-05	B12	500	21.41	1161.83		61176-1.RAW	12:21:32	492.47 Sample	FB	1
1608361-06	B13	500	21.41	123.03		61177-1.RAW	12:25:40	71.29 Sample	FB	1
1608361-07	B14	500	21.41	75.79		61178-1.RAW	12:29:49	52.14 Sample	FB	1
1608361-08	815	500	21.41	509.07		61179-1.RAW	12:33:57	227.81 Sample	FB	1
1608361-08	B16	500	21.41	676.08		61180-1.RAW	12:38:06	295.52 Sample	FB	1
							12:38:08	561.43 Sample	FB	1
1608361-10	B17	500	21.41	1331.93		61181-1.RAW				
1608361-11	B18	500	21.41	2183.66		61182-1.RAW	12:46:23	906.76 Sample	FB	1 1
1608361-12	B19	500	21.41	3418.85		61183-1.RAW	12:50:31	1407.56 Sample	FB	
SEQ-CCV8	B20	1	21.41	5.28	105.51	61184-1.RAW	12:54:39	1090.85 Sample	FB	1
SEQ-CCB8	B21	1	21.41	0.14	0.00	61185-1.RAW	12:58:48	49.72 Sample	FB	1
1608361-13	C1	500	21.41	3476.34		61186-1.RAW	13:02:56	1430.86 Sample	OK	1
1608361-14	C2	500	21.41	3436.89		61187-1.RAW	13:07:05	1414.87 Sample	OK	1
1608361-15	C3	500	21.41	13701.79		61188-1.RAW	13:11:13	5576.68 Sample	FB	1
1608361-16	C4	500	21.41	2108.43		61189-1.RAW	13:15:21	876.26 Sample	FB	1
1608361-17	C5	500	21.41	2053.73		61190-1.RAW	13:19:30	854.08 Sample	OK	1
F609416-DUP1	C6	100	21.41	471.32		61191-1.RAW	13:23:38	976.88 Sample	FB	1
F609416-MS1	C7	500	21.41	5784.10	1224.62	61192-1.RAW	13:27:47	2366.53 Sample	FB	1
F609416-MSD1	C8	500	21.41	5746.58		61193-1.RAW	13:31:55	2351.31 Sample	FB	1
F609416-MS2	C9	500	21.41	5905.13	102.72	61194-1.RAW	13:36:04	2415.60 Sample	FB	1
F609416-MSD2	C10	500	21.41	6230.99		61195-1.RAW	13:40:12	2547.71 Sample	FB	1
SEQ-CCV9	C11	1	21.41	5.85	117.06	61196-1.RAW	13:44:20	1207.93 Sample	FB	1
SEQ-CCB9	C12	1	21.41	0.16	0.00	61197-1.RAW	13:48:29	53.15 Sample	OK	1
1608071-05RE1	C13	500	21.41	5542.48		61198-1.RAW	13:52:37	2268.56 Sample	FB	1
1608071-06RE1	C14	100	21.41	460.53		61199-1.RAW	13:56:46	955.01 Sample	FB	1
1608361-06RE1	C15	20	21.41	112.49		61200-1.RAW	14:00:54	1161.60 Sample	FB	1
1608361-07RE1	C16	20	21.41	51.46		61201-1.RAW	14:05:03	543.05 Sample	FB	1
SEQ-CCVA	C17	1	21.41	5.59		61202-1.RAW	14:09:11	1153.62 Sample	FB	1
SEQ-CCBA	C18	1	21.41	0.09		61203-1.RAW	14:13:19	39.55 Sample	FB	1
SNCL 1605421	C19	1	21.41	0.07		61204-1.RAW	14:17:28	35.26 Sample	FB	1
CLEAN	0.0	,	0.00	0.07		61205-1.RAW	14:20:19	14.45 Clean	OK	1
WS			21.41	0.09		61206-1.RAW	14:24:28	38.92 Sample	FB	1
ws			21.41	0.03		61207-1.RAW	14:28:36	27.00 Sample	FB	1
SEQ-CCVB	C20	1	21.41	5.09		61208-1.RAW	14:32:44	1052.70 Sample	FB	1
SEQ-CCBB	C21	1	21.41	0.18		61209-1.RAW	14:36:53	57.40 Sample	FB	1
3EQ-CCBB	021	1	21.41	0.10		01203-1.1040	14.00.00	57.40 Sample	1D	1

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Data Papart - 6120007

Failing Da	ata Report - 6120007 Analysis	Result MRL Dup Sourc Result Resul	e True Units % Rec. Rec. Rec. t Value LCL UCL	RPD RPD Over Cal Limit	Failure Qualifier
	<u></u>	0/20/14		9-20-16	
Analyst Revi	N heren	Date	Peer Reviewed By	Date	
Page 4					
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Failing Data Report - 6I20016

Sample ID	Analysis	Result	MRL	Dup Result	Source Result	True Value	Units	% Rec.	Rec. LCL	Rec. UCL	RPD	RPD Limit	Over Cal	Failure	Qualifier
1608071-05	Hg-CVAFS-S-AR	1080	12.3		<u> </u>		ng/g						FAIL-OVER	PASS	E
Don Analyst Review	Wed By	Q 2 Dat)			Ĩ	Peer Rev	iewed By					9-20-16 Date		

6120007

Instrument: Hg2600-2

Calibration ID: UNASSIGNED

Analyzed: 9/19/2016

Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
6I20007-IBL1	QC	1			
6I20007-IBL2	QC	2			
6I20007-IBL3	QC	3			
6120007-CAL1	QC	4	1605412		
6I20007-CAL2	QC	5	1605413		
6I20007-CAL3	QC	6	1605414		
6120007-CAL4	QC	, 7	1605415		
6120007-CAL5	QC	8	1605416		
6120007-ICV1	QC	9	1603625		
F609420-BLK1	QC	10			
F609420-BLK2	QC	11			
F609420-BLK3	QC	12		:	
F609420-BS1	QC	13			
F609420-BSD1	QC	14			
1608742-01	Hg-CVAFS-W-1631	15			Scan all data for level IV report
1608742-02	Hg-CVAFS-W-1631	16			Scan all data for level IV report
1608742-03	Hg-CVAFS-W-1631	17			Scan all data for level IV report
1608742-04	Hg-CVAFS-W-1631	18			Scan all data for level IV report
1608742-05	Hg-CVAFS-W-1631	19			Scan all data for level IV report
6I20007-CCV1	QC	20	1603625		
6I20007-CCB1	QC	21			
1608742-06	Hg-CVAFS-W-1631	22			Scan all data for level IV report
1608742-07	Hg-CVAFS-W-1631	23			Scan all data for level IV report
1608742-08	Hg-CVAFS-W-1631	24			Scan all data for level IV report
1608742-10	Hg-CVAFS-W-1631	25			Scan all data for level IV report
1608981-01	Hg-CVAFS-W-1631	26		†	Scan all data - Level IV
1608981-02	Hg-CVAFS-W-1631	27			Scan all data - Level IV
1608981-03	Hg-CVAFS-W-1631	28			Scan all data - Level IV
1608981-04	Hg-CVAFS-W-1631	29			Scan all data - Level IV
1608981-05	Hg-CVAFS-W-1631	30	1		Scan all data - Level IV
1608981-06	Hg-CVAFS-W-1631	31			Scan all data - Level IV
6120007-CCV2	QC	32	1603625	†	
6I20007-CCB2	QC	33			
1608981-07	Hg-CVAFS-W-1631	34			Scan all data - Level IV
1608981-08	Hg-CVAFS-W-1631	35		1	Scan all data - Level IV

Due Date: 9/19/2016

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6120007

Instrument: Hg2600-2

Calibration ID: UNASSIGNED

				1	Analyzed: 9/19/2010
Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
1608981-09	Hg-CVAFS-W-1631	36			Scan all data - Level IV
1608981-10	Hg-CVAFS-W-1631	37			Scan all data - Level IV
1608981-11	Hg-CVAFS-W-1631	38	Ĩ		Scan all data - Level IV
F609420-DUP1	QC	39			nan 1991 - Anna - Andri 199 - Anna anna an Airistia - Anna anna an Airistia
F609420-MS1	QC	40			
F609420-MSD1	QC	41			
F609420-MS2	QC	42			
F609420-MSD2	QC	43			
6120007-CCV3	QC	44	1603625		
6I20007-CCB3	QC	45			
F609427-BLK1	QC	46			
F609427-BLK2	QC	47	4		
F609427-BLK3	QC	48			
F609427-BLK4	QC	49			
F609427-BS1	QC	50			
F609427-BSD1	QC	51			
1608981-12	Hg-CVAFS-W-1631	52			Scan all data - Level IV
1608981-13	Hg-CVAFS-W-1631	53			Scan all data - Level IV
1608981-14	Hg-CVAFS-W-1631	54			Scan all data - Level IV
1608981-15	Hg-CVAFS-W-1631	55			Scan all data - Level IV
6I20007-CCV4	QC	56	1603625		
6I20007-CCB4	QC	57			
1608981-16	Hg-CVAFS-W-1631	58			Scan all data - Level IV
1608981-17	Hg-CVAFS-W-1631	59			Scan all data - Level IV
1608981-18	Hg-CVAFS-W-1631	60			Scan all data - Level IV
1609078-01	Hg-CVAFS-W-1631	61			Do not oven samples (CCV 90-110%, CCB <), <1/2 POL
1609195-02	Hg-CVAFS-W-1631	62	1		give data to PM for scanning
1609195-04	Hg-CVAFS-W-1631	63			give data to PM for scanning
1609300-01	Hg-CVAFS-W-1631	64			
1609390-01	Hg-CVAFS-W-1631	65	1		
1609390-02	Hg-CVAFS-W-1631	66			
1609390-03	Hg-CVAFS-W-1631	67			
6l20007-CCV5	QC	68	1603625		
6I20007-CCB5	QC	69		-	
1609390-04	Hg-CVAFS-W-1631	70			

Due Date: 9/19/2016

<u>កនាវនីស្លារ្យន៍នៅទៀតមិនទៀតមិនចំណេចដែលដែលដែលដែលដែលខែត្រូវក្មេងក្មេងនេះអាមាលពេលដែលក្មេងក្មេងក្មេងក្មេងក្មេងក្មេងក</u>

Analyzed: 9/19/2016

ANALYSIS SEQUENCE

6120007

Instrument: Hg2600-2

Calibration ID: UNASSIGNED

Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
1609390-05	Hg-CVAFS-W-1631	71			
1609390-06	Hg-CVAFS-W-1631	72			
1609422-01	Hg-CVAFS-W-1631	73			
1609423-01	Hg-CVAFS-W-1631	74			
F609427-DUP1	QC	75			
F609427-MS1	QC	76			
F609427-MSD1	QC	77	<u> </u>		
F609427-MS2	QC	78			
F609427-MSD2	QC	79			
6I20007-CCV6	QC	80	1603625		
6I20007-CCB6	QC	81			
6120007-CCV7	QC	82	1603625		
6120007-CCB7	QC	83			
6I20007-CCV8	QC	84	1603625		
6120007-CCB8	QC	85			
6120007-CCV9	QC	86	1603625		
6120007-CCB9	QC	87			
6I20007-CCVA	QC	88	1603625		
6I20007-CCBA	QC	89	1		
6120007-CCVB	QC	90	1603625		
6I20007-CCBB	QC	91			

Samples Loaded By oren

Date Data Processed By Date 9/20/16

Analyzed: 9/19/2016

Due Date: 9/19/2016

ANALYSIS SEQUENCE

6120016

Instrument: Hg2600-2

Calibration ID: UNASSIGNED

Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
6120016-IBL1	QC	1			
6I20016-IBL2	QC	2			
6I20016-IBL3	QC	3			
6I20016-CAL1	QC	4	1603274		
6120016-CAL2	QC	5	1603275		
6120016-CAL3	QC	6	1603276		
6l20016-CAL4	QC	7	1603277		
6I20016-CAL5	QC	8	1603278		
6I20016-ICV1	QC	9	1603625		
6120016-CCV1	QC	10	1603625		
6120016-CCB1	QC	H			
6120016-CCV2	QC	12	1603625		
6I20016-CCB2	QC	13			
6I20016-CCV3	QC	14	1603625		
6I20016-CCB3	QC	15			
6I20016-CCV4	QC	16	1603625		
6I20016-CCB4	QC	17			
6I20016-CCV5	QC	18	1603625		
6I20016-CCB5	QC	19			
6I20016-CCV6	QC	20	1603625		
6I20016-CCB6	QC	21			
F609416-BLK1	QC	22	1		
F609416-BLK2	QC	23			
F609416-BLK3	QC	24			
F609416-BS1	QC	25			
F609416-BSD1	QC	26			
1608071-05	Hg-CVAFS-S-AR	27	1		r
1608071-06	Hg-CVAFS-S-AR	28	<u> </u>		
1608071-07	Hg-CVAFS-S-AR	29			
1608071-10	Hg-CVAFS-S-AR	30			
1608071-11	Hg-CVAFS-S-AR	31			
6I20016-CCV7	QC	32	1603625		
6I20016-CCB7	QC	33			
1608072-01	Hg-CVAFS-S-AR	34			
1608072-02	Hg-CVAFS-S-AR	35	1		

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Due Date: 9/8/2016

Analyzed: 9/19/2016

ANALYSIS SEQUENCE

6120016

Instrument: Hg2600-2

Calibration ID: UNASSIGNED

Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
1608361-05	Hg-CVAFS-S-AR	36			
1608361-06	Hg-CVAFS-S-AR	37			
1608361-07	Hg-CVAFS-S-AR	38			
1608361-08	Hg-CVAFS-S-AR	39			
1608361-09	Hg-CVAFS-S-AR	40			
1608361-10	Hg-CVAFS-S-AR	41			
1608361-11	Hg-CVAFS-S-AR	42			
1608361-12	Hg-CVAFS-S-AR	43			
6I20016-CCV8	QC	44	1603625		
6I20016-CCB8	QC	45			
1608361-13	Hg-CVAFS-S-AR	46			
1608361-14	Hg-CVAFS-S-AR	47			
1608361-15	Hg-CVAFS-S-AR	48			
1608361-16	Hg-CVAFS-S-AR	49			
1608361-17	Hg-CVAFS-S-AR	50			
F609416-DUP1	QC	51			
F609416-MS1	QC	52			
F609416-MSD1	QC	53		[
F609416-MS2	QC	54			
F609416-MSD2	QC	55			
6I20016-CCV9	QC	56	1603625		
6I20016-CCB9	QC	57			
1608071-05RE1	Hg-CVAFS-S-AR	58			Added 9/20/2016 by DM2
1608071-06RE1	Hg-CVAFS-S-AR	59		<u> </u>	Added 9/20/2016 by DM2
1608361-06RE1	Hg-CVAFS-S-AR	60			Added 9/20/2016 by DM2
1608361-07RE1	Hg-CVAFS-S-AR	61			Added 9/20/2016 by DM2
6I20016-CCVA	QC	62	1603625		
6120016-CCBA	QC	63			
6I20016-CCVB	QC	64	1603625	1	
6I20016-CCBB	QC	65			

Samples Loaded By

91 19/16 Date

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9/20/16

Data Processed By

Date

Due Date: 9/8/2016

Analyzed: 9/19/2016

F609420

Eurofins Frontier Global Sciences, Inc.

Matrix: Water

Prepared using: AFS - EPA 1631E BrCl Oxidation

Prepared: 9/19/2016

Lab Number	Sample ID and Source Sample	Initial (mL)	Final (mL)	Spike1 ID	µl Spikel	Spike2 ID	μl Spike2	Extraction Comments
F609420-BLK1	Blank	100	101					
F609420-BLK2	Blank	100	101					
F609420-BLK3	Blank	100	101					
F609420-BS1	LCS	50	50.5	1604715	100			
F609420-BSD1	LCS Dup	50	50.5	1604715	100			
F609420-DUP1	Duplicate [1608742-01]	100	101					
F609420-MS1	Matrix Spike [1608742-05]	49.50495	50	1605272	25			[Spk] 100mL->101mL; 101mL->101mL; Spiked 50mL
F609420-MS2	Matrix Spike [1608981-03]	49.50495	50	1605272	100			[Spk] 100mL->101mL; 101mL->101mL; Spiked 50mL
F609420-MSD1	Matrix Spike Dup [1608742-05]	49.50495	50	1605272	25			[Spk] 100mL->101mL; 101mL->101mL; Spiked 50mL
F609420-MSD2	Matrix Spike Dup [1608981-03]	49.50495	50	1605272	100			[Spk] 100mL->101mL; 101mL->101mL; Spiked 50mL

Standard ID(s):	Description:
1604715	Nist 1641D 200X
1605272	THg 10ng/mL Calibration Standard

Expiration: 18-Aug-17 00:00 10-Dec-16 00:00 10-Dec-16 00:00

Reagent ID(s):	Description:	Expiration:
1602941	25% Hydroxylamine-HCl working solution	03-Dec-16 00:00
1604595	0.2 N BRCL AUGUST 2016	09-Feb-17 00:00
1605112	THg Dilute 1% BrCl	11-Jan-17 00:00
1605113	THg Washstation (0.5% BrCl)	03-Dec-16 00:00
1605348	3% SnCl2 THg reductant	09-Mar-17 00:00

F609420

Eurofins Frontier Global Sciences, Inc.

Matrix: Water

Prepared using: AFS - EPA 1631E BrCl Oxidation

Prepared: 9/19/2016

Lab Number	Sample ID	Initial (mL)	Final (mL)	QC Sample	Sample Specs.	Raw Data	Sample Comments	Analysis Comments
1608742-01	OL-2453-01	100	101	-	-	-	Scan all data for level IV report	
1608742-02	OL-2453-01 Dissolved	100	101	· ·	-	-	Scan all data for level IV report	
1608742-03	OL-2453-02	100	101	-	-	-	Scan all data for level IV report	
1608742-04	OL-2453-03	100	101	-	-	-	Scan all data for level IV report	
1608742-05	OL-2453-04	100	101	-	-	-	Scan all data for level IV report	· · · · · · · · · · · · · · · · · · ·
1608742-06	OL-2453-04 Dissolved	100	101	-	-	-	Scan all data for level IV report	
1608742-07	OL-2453-05	100	101	-	-	-	Scan all data for level IV report	
1608742-08	OL-2453-06	100	101	-	-	-	Scan all data for level IV report	
1608742-10	Laboratory Filter Blank	100	101	-	-	-	Scan all data for level IV report	
1608981-01	EB_083016_SW_QC	100	101	-	-	-	Scan all data - Level IV	
1608981-02	EB_083016_SW_QC Dissolved	100	101	-	-	-	Scan all data - Level IV	
1608981-03	WQ_1b-c_083016_SW_10	100	101	•	-	-	Scan all data - Level IV	
1608981-04	WQ_1b-c_083016_SW_10 Dissolved	100	101	-	-	-	Scan all data - Level IV	
1608981-05	WQ-2-C_083016_SW_10	100	101	-	-	÷	Scan all data - Level IV	
1608981-06	WQ-2-C_083016_SW_10 Dissolved	100	101	-	-	-	Scan all data - Level IV	
1608981-07	WQ-3-L_083016_SW_10	100	101	-	-	-	Scan all data - Level IV	
981-08	WQ-3-L_083016_SW_10 Dissolved	100	101	-	-	-	Scan all data - Level IV	
Page 51 981-09 51 981-10 0f 28	WQ_FPT_083016_SW_10	100	101	-	-	-	Scan all data - Level IV	
රා	WQ_FPT_083016_SW_10 Dissolved	100	101	-	-	-	Scan all data - Level IV	
26							······································	

²e Date: 9/22/2016

F609420

Eurofins Frontier Global Sciences, Inc.

Matrix: Water

Prepared using: AFS - EPA 1631E BrCl Oxidation

1608981-11	WQ-ECH_082916_SW_10	100	101	-	-	-	Scan all data - Level IV	

F609427

Eurofins Frontier Global Sciences, Inc.

Matrix: Water

Prepared using: AFS - EPA 1631E BrCl Oxidation

Prepared: 9/19/2016

Lab Number	Sample ID and Source Sample	Initial (mL)	Final (mL)	Spikel ID	µl Spikel	Spike2 ID	μl Spike2	Extraction Comments
F609427-BLK1	Blank	100	101					
F609427-BLK2	Blank	100	101					
F609427-BLK3	Blank	100	101					
F609427-BLK4	Blank	25	50					
F609427-BS1	LCS	50	50.5	1604715	100			
F609427-BSD1	LCS Dup	50	50.5	1604715	100			
F609427-DUP1	Duplicate [1608981-15]	100	101					
F609427-MS1	Matrix Spike [1608981-15]	49.50495	50	1605272	50			[Spk] 100mL->101mL; 101mL->101mL; Spiked 50mL
F609427-MS2	Matrix Spike [1608981-16]	49.50495	50	1605272	25			[Spk] 100mL->101mL; 101mL->101mL; Spiked 50mL
F609427-MSD1	Matrix Spike Dup [1608981-15]	49.50495	50	1605272	50			[Spk] 100mL->101mL; 101mL->101mL; Spiked 50mL
F609427-MSD2	Matrix Spike Dup [1608981-16]	49.50495	50	1605272	25			[Spk] 100mL->101mL; 101mL->101mL; Spiked 50mL

Standard ID(s):Description:1604715Nist 1641D 200X1605272THg 10ng/mL Calibration Standard

Expiration: 18-Aug-17 00:00 10-Dec-16 00:00 10-Dec-16 00:00

Reagent ID(s):	Description:	Expiration:
1602941	25% Hydroxylamine-HCl working solution	03-Dec-16 00:00
1604595	0.2 N BRCL AUGUST 2016	09-Feb-17 00:00
1605112	THg Dilute 1% BrCl	11-Jan-17 00:00
1605113	THg Washstation (0.5% BrCl)	03-Dec-16 00:00
1605348	3% SnC12 THg reductant	09-Mar-17 00:00

F609427

Eurofins Frontier Global Sciences, Inc.

Matrix: Water

Prepared using: AFS - EPA 1631E BrCl Oxidation

Lab Number	Sample ID	Initial (mL)	Final (mL)	QC Sample	Sample Specs.	Raw Data	Sample Comments	Analysis Comments
1608981-12	WQ-ECH_082916_SW_10 Dissolved	100	101	-	-	-	Scan all data - Level IV	
1608981-13	ES-15_082916_SW_10	100	101		-	-	Scan all data - Level IV	
1608981-14	ES-15_082916_SW_10 Dissolved	100	101	-	-	-	Scan all data - Level IV	
1608981-15	OV02_082916_SW_10	100	101	QC	-	-	MS/MSD Scan all data - Level IV	
1608981-16	OV02_082916_SW_10 Dissolved	100	101	QC	-	-	MS/MSD Scan all data - Level IV	
1608981-17	OV02_082916_SW_10_DUP	100	101	-	-	-	Scan all data - Level IV	
1608981-18	OV02_082916_SW_10_DUP Dissolved	100	101	-	-	-	Scan all data - Level IV	
1609078-01	September 2016 Monthly Water ICPMS Sink 1	100	101	-	-	-	Do not oven samples (CCV 90-110%, t	en e
1609195-02	B-160424 PLANT INFLUENT #16-14030	100	101	-	-	can Dat	give data to PM for scanning	
1609195-04	B-160397 PLANT EFFLUENT #16-14032	100	101	-	-	can Dat	give data to PM for scanning	
1609300-01	Rinse Blank 9/13/16	100	101	-	-	-	Rinse blank for tubing sent to AMEC F	
1609390-01	Lagoons	100	101	-	-	-		
1609390-02	Lagoons Field Blank	100	101	-	-	-		
1609390-03	Clarifier	100	101	-	-	-	*****	
1609390-04	Clarifier Field Blank	100	101	-	-	-		
1609390-05	A149	25	50	-	÷	-		
390-06	A149 Blank	100	101	-	-	-		
Page 422-01	802W-090816-01H	100	101	-	-	-		<u>- , </u>
51 4 9 9	802W-091216-01H	100	101	-	-	-		

F609427

Eurofins Frontier Global Sciences, Inc.

Matrix: Water

Prepared using: AFS - EPA 1631E BrCl Oxidation



F609416

Eurofins Frontier Global Sciences, Inc.

Matrix: Soil/Sediment

Prepared using: AFS - EFGS-066 Cold Aqua Regia Digestion for Hg

Prepared: 9/16/2016

Lab Number	Sample ID and Source Sample	Initial (g)	Final (mL)	Spike1 ID	µl Spikel	Spike2 ID	µl Spike2	Extraction Comments
F609416-BLK1	Blank	0.5	40					
F609416-BLK2	Blank	0.5	40					
F609416-BLK3	Blank	0.5	40					
F609416-BS1	Blank Spike	0.5	40	1605270	40			
F609416-BSD1	Blank Spike Dup	0.5	40	1605270	40			
F609416-DUP1	Duplicate [1608071-06RE1]	0.527	40					
F609416-MS1	Matrix Spike [1608071-06RE1]	0.539	40	1601846	200			· ·
F609416-MS2	Matrix Spike [1608072-01]	0.553	40	1601846	200			
F609416-MSD1	Matrix Spike Dup [1608071-06RE1]	0.56	40	1601846	200			
F609416-MSD2	Matrix Spike Dup [1608072-01]	0.563	40	1601846	200			

Description:
THg 1,000ng/ml
THg 100ng/mL F

<u>on:</u>)Ong/mL Secondary Spiking Standard ng/mL Primary Spiking Standard Expiration: 11-Oct-16 00:00 10-Dec-16 00:00

Reagent ID(s):	Description:	Expiration:
1602941	25% Hydroxylamine-HCl working solution	03-Dec-16 00:00
1603399	Boiling Chips for AFS prep	01-Jun-17 00:00
1604378	Omnitrace Hydrochloric Acid	04-Aug-19 00:00
1604810	Fisher Nitric Acid, Tracemetal Grade	24-Mar-18 00:00
1605112	THg Dilute 1% BrCl	11-Jan-17 00:00
1605113	THg Washstation (0.5% BrCl)	03-Dec-16 00:00
1605348	3% SnCl2 THg reductant	09-Mar-17 00:00
1605394	5% BrCl	09-Feb-17 00:00

F609416

Eurofins Frontier Global Sciences, Inc.

Matrix: Soil/Sediment

Prepared using: AFS - EFGS-066 Cold Aqua Regia Digestion for Hg

Prepared: 9/16/2016

Lab Number	Sample ID	Initial (g)	Final (mL)	QC Sample	Sample Specs.	Raw Data	Sample Comments	Analysis Comments
1608071-05	ES-03_072816_SED_03	0.53	40	-	-	-		
1608071-05RE1	ES-03_072816_SED_03	0.53	40	-	-	-	Added 9/20/2016 by DM2	Added 9/20/2016 by DM2
1608071-06	ES-FP_072816_SED_03	0.564	40	QC	-	-	MS/MSD	
1608071-06REI	ES-FP_072816_SED_03	0.564	40	QC	-	-	MS/MSD Added 9/20/2016 by DM2	Added 9/20/2016 by DM2
1608071-07	ES-FP_072816_SED_03_DUP	0.569	40	~	-	-		
1608071-10	MMPOLY_072916_SED_03	0.552	40	-	-	-	2 2	
1608071-11	L9-45_072816_SED_03	0.534	40	-	-	-		
1608072-01	BO-04_072516_SED_03	0.543	40	QC	-	<i>.</i> -	MS/MSD	
1608072-02	BO-04_072516_SED_03_DUP	0.576	40	-	-	-	*****	
1608361-05	OCE-11	0.554	40	-	-	-		
1608361-06	OCE-14	0.543	40	-	~	-		
1608361-06RE1	OCE-14	0.543	40	-	-	-	Added 9/20/2016 by DM2	Added 9/20/2016 by DM2
1608361-07	OCE-15	0.571	40	-	-	-		
1608361-07RE1	OCE-15	0.571	40	-	-	-	Added 9/20/2016 by DM2	Added 9/20/2016 by DM2
1608361-08	OCE-11-1	0.569	40	-	-	-		· · · · · · · · · · · · · · · · · · ·
1608361-09	OCE-11-2	0.57	40	-	-	•		
361-10	OCE-11-3	0.591	40	-	-	-		
Page 361-11	OCE-11-4	0.547	40	-	-	-		
∽ 361-12	OCE-11-5	0.558	40	-	-	÷		
of 26							2	

L²e Date: 9/8/2016

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F609416

Eurofins Frontier Global Sciences, Inc.

Matrix: Soil/Sediment

Prepared using: AFS - EFGS-066 Cold Aqua Regia Digestion for Hg

Prepared: 9/16/2016

1608361-13	OCE-11-6	0.547	40	I -	-	-		
1608361-14	OCE-11-7	0.524	40	-	-	-		
1608361-15	OCE-11-8	0.58	40	-	-	-	· · · · · · · · · · · · · · · · · · ·	
1608361-16	OCE-13	0.559	40	-	-	-		
1608361-17	OCE-13-1	0.531	40	-	-	-		

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Page 1 of 3

Lab Number	Sample ID and Source Sample	Initial (mL)	Final (mL)	Spikel ID	µl Spikel	Spike2 ID	µl Spike2	Extraction Comments
F609420-BLK1	Blank	100	101					17
F609420-BLK2	Blank	100	101					j×
F609420-BLK3	Blank	100	101					X
F609420-BS1	LCS	ኇ ₊₀₀	50.5 ₁₀₁	1004715	8			XI
F609420-BSD1	LCS Dup	50-100	50.5 ₁₀₁	1004715	100			1×
F609420-DUP1	Duplicate 105742-01	100	101					1X
F609420-MS1	Matrix Spike (108742.05	100	101	1605272	25			рХ-
F609420-MS2	Matrix Spike 10000001-03	100	101	1605272	100			או
F609420-MSD1	Matrix Spike Dup 1000742-05	100	101	1005272	25			١X
F609420-MSD2	Matrix Spike Dup 109991-03	100	101	10-5272	18			1X

Standard ID(s): Description:

Date: 9/22/2016

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Expiration:

1605113

1605112

102941

-1005260

105348

PREPARATION BENCH SHEET

F609420

Prepared using: AFS - EPA 1631E BrCl Oxidation

Eurofins Frontier Global Sciences, Inc.

Matrix: Water

Prepared: 9/16/2016



2000.2 9/19/16 DM

F609420

Eurofins Frontier Global Sciences, Inc.

Matrix: Water

Prepared using: AFS - EPA 1631E BrCl Oxidation

		Initial	Final	QC Sample	Sample Specs.	Raw Data			
Lab Number	Sample ID	(mL)	(mL)	Dampie	spa.s.	Data	Sample Comments	Analysis Comments	
1608742-01	OL-2453-01	100	101	-	-	-	Scan all data for level IV report	1×	1532
1608742-02	OL-2453-01 Dissolved	100	101	-	-	-	Scan all data for level IV report	X	
1608742-03	OL-2453-02	100	101	-	•	•	Scan all data for level IV report	×1	
1608742-04	OL-2453-03	100	101	-	-	-	Scan all data for level IV report	IX	
1608742-05	OL-2453-04	100	101	-	-	-	Scan all data for level IV report	١x	
1608742-06	OL-2453-04 Dissolved	100	101	-	-	-	Scan all data for level IV report	12	
1608742-07	OL-2453-05	100	101	-	-	-	Scan all data for level IV report	XI	******
1608742-08	OL-2453-06	100	101	_	-	-	Scan all data for level IV report	1X	
1608742-10	Laboratory Filter Blank	100	101	-	-	-	Scan all data for level IV report	1×	, , , , , , , , , , , , , , , , , , , ,
1608981-01	EB_083016_SW_QC	100	101	-	-	-	Scan ali data - Level IV	1X	કડ ડ્રેટ્ટ
1608981-02	EB_083016_SW_QC Dissolved	100	101	-	-	-	Scan all data - Level IV	1x	
1608981-03	WQ_1b-c_083016_SW_10	100	101	-	-	-	Scan all data - Level IV	łX.	
1608981-04	WQ_1b-c_083016_SW_10 Dissolved	100	101	-	-	-	Scan all data - Level IV	×۱	
1608981-05	WQ-2-C_083016_SW_10	100	101	-	-	-	Scan all data - Level IV	×	
1608981-06	WQ-2-C_083016_SW_10 Dissolved	100	101	-	-	-	Scan all data - Level IV	IX .	
1608981-07	WQ-3-L_083016_SW_10	100	101	-	-	-	Scan all data - Level IV	1)%	
1608981-08	WQ-3-L_083016_SW_10 Dissolved	100	101	-	-	-	Scan all data - Level IV	1X	
Page 981-09 8981-10	WQ_FPT_083016_SW_10	100	101	-	-	-	Scan all data - Level IV	1x	
8 981-10 of 26	WQ_FPT_083016_SW_10 Dissolved	100	101	-	-	-	Scan all data - Level IV	XI	

⁴e Date: 9/22/2016

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F609420

Eurofins Frontier Global Sciences, Inc.

Prepared using: AFS - EPA 1631E BrCl Oxidation Matrix: Water Prepared: 9/16/2016 WQ-ECH_082916_SW_10 100 1608981-11 101 Scan all data - Level IV -ίX,



2600.2 9/19/16 DM

Total Mercury Preservation Logbook

Additional preservation a Technician: <u>CS</u> Technician:	Date: 0/25/16 <i>C</i> /221/16 <i>C</i> /221/16 <i>C</i> /221/16 Date:	Time Completed: _ Time Completed: _	1120	Pipette Cal. Da	us id: <u>16030</u> sn: <u>MU 32</u> te: <u>\$75716</u>	229, MU 8/5/16
					nal preservation (a	Treates come contraction with the second of the
Sample ID	Sample Volume (mL)	Reagent added (mL)	Oxidized? Y / N	Oxidized? Y/N	Reagent added (mL)	Oxidized? Y/N
1608735-01A	200	3,00	Y			
1608725-02A	300	3.00	Ý			
608735-07A	300	3.00	I,			
1608735-04A	300	3.00	Ý			
1608735-05A	300	15.00	Y	N	9.00	y
608735-06A	300	3.00	Y			
1608741-01A	300	7.00	4			
1608741-024	300	3.00	Y			
1608741-634	300	3.00				
608741-044	300	3.00	<u> </u>			
1608742-09A	300	7.00	<u> </u>			
1608 + 2-01A	170	1,70				
1608742-02A	150	1,50	<u> </u>			
608742-03A	300	3.00	ľ.	·····	e^*	
608742-04A	300	3.00	<u> </u>			
1608742-054	160	1.60	ĻΥ			
16087-12-06A	150	1.52)				
1608742-07A	300	3.00	Y			
1608742-08A	300	3.00	<u> </u>			
1008742-10A	300	3,00	D(
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		en 8/24	111			
		win of the	100			· · · · · ·

Eurofins Frontier Global Sciences / THg Preservation / LOG-PR-010.02 / Effective: Sept. 26, 2013 / QA2016-077 / Page 61 of 100

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Reviewed

Total Mercury Preservation Logbook

Dave

Initial	preservation	and/or	verificati

Technician: LM Date: 87116 Time Completed: 18:50

Additional preservation and/or verification (as needed)

on

Technician: ______ Date: _____ Time Completed: _____ Technician: _____ Date: _____ Time Completed: _____

Work Orders: 1608977 1608980 160898 BICI LIMS ID: 1603825, 1604545 Pipette SN: MU32224 Cal. Date: _______51516

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	Sample ID	Sample Volume	Reagent added	Oxidized?	Additio Oxidized?	nal preservation (as	needed)
	Macada	<u>(mL)</u>	(mi)	Y/N	V/N	Reagent added	Oxidized?
	608977 -01A	300	3.00	Ý		(mL)	Y/N
	1608977-02A	300	3.00	V	<u>├</u>	í ·······	
	1008777-034	300	7.00	J J			
¥	1608977-044	300	3.00	v	[
7	100 11 - 03 A	300	10.00	Y			
	10080777-06A	300	3.00	7			
	100890-01A	300	3.00				
	1008-80-02A	300	7.00				
	608980-07A	300	3.00				
	160898U-04A	300	3.00				
	(608481-05A	300	3.00				
	(60KASU - 00A	300	3.00				
	608980-07A	300	7.00				
	16050181-0A	300	3.00	4		·····	
	1608-121-024	300	7.00	4			
	1608981-03A	300	3.00				
	1608181-04A	300	3.00		<u> </u>		
ļ	608981-05A	700	3.00	$-\frac{1}{v}$			
ŀ	1608981-0BA		7,00	- 1 -1-			
4	COSSI-OTA	700	2.00	V I			·
ļ	605-051-08VA	700	7.00	4			
ļ	605181-09A	300	3.00	- <u>-</u>			
	508981-10A	300	3.00	v V			
ļ	608987-11A	300	300	\rightarrow			
Į	60549-12A	300	7.00	J			
	60E981-13A	300	2 (8)	J			
	Dxidation with BrCl is confir	med by a yellow colo	r change of the san	nple and/or a r	ournle color d		
Ċ	1000 1 F	-USA was	taken du	1 A		ичиве in Ki starch pap	er.
	1608977-051	2 1/1 1	pkt 10 nl		4 50	50 Split 1	nto_
ß,	El 1603825 used	on WO 1608			UM 873	<i>416 '</i>	
	1604595 use	t on wo	160899				
	Eurofins Frontier Global Scien	ces / THg Preservation /	LOG-PR-010.02 / Fffor	tive: Sont DC on	10 1	Rev	icned
			,		13 / QA2016-07	7 / Page 66 of 100 🛛 🔥 🔥	0/16 0

F609427

Eurofins Frontier Global Sciences, Inc.

Matrix: Water

Prepared using: AFS - EPA 1631E BrCl Oxidation

Initial Final μ μł Lab Number Sample ID and Source Sample (mL) (mL) Spikel ID Spike1 Spike2 ID Spike2 Extraction Comments F609427-BLK1 Blank 100 101 12 F609427-BLK2 Blank 100 101 17 F609427-BLK3 Blank 100 101 12 50 101. 25-100 10X F609427-BLK4 Blank क्र-इ-101 \sim 1% مهد KB4715 F609427-BS1 LCS 300 55_100 50.5 OF 109715 100 LCS Dup F609427-BSD1 13 Duplicate 1608051-15 101 F609427-DUP1 100 X 1X F609427-MS1 Matrix Spike [1608981-15] 100 101 K05272 60 25 1005272 1% F609427-MS2 Matrix Spike [1608981-16] 100 101 105272 50 14 F609427-MSD1 Matrix Spike Dup [1608981-15] 100 101 25 1635272 认 100 101 F609427-MSD2 Matrix Spike Dup [1608981-16]

Standard ID(s): Description: Expiration:

Page 64 of 264 Date: 9/19/2016 •

2100.2 9/19/16 0m

F609427

Eurofins Frontier Global Sciences, Inc.

Matrix: Water

Prepared using: AFS - EPA 1631E BrCl Oxidation

Lab Number	Sample ID	Initial (mL)	Final (mL)	QC Sample	Sample Specs.	Raw Data	Sample Comments	Analysis Comments
1608981-12	WQ-ECH_082916_SW_10 Dissolved	100	101	-	-	-	Scan all data - Level IV	١×
1608981-13	ES-15_082916_SW_10	100	101	-	-	-	Scan all data - Level IV)X
1608981-14	ES-15_082916_SW_10 Dissolved	100	101	-	-	-	Scan all data - Level IV	1×
1608981-15	OV02_082916_SW_10	100	101	QC	-	-	MS/MSD Scan all data - Level IV	<u>بر</u> ر
1608981-16	OV02_082916_SW_10 Dissolved	100	101	QC	-	-	MS/MSD Scan ali data - Levei IV	1×
1608981-17	OV02_082916_SW_10_DUP	100	101	-	-	~	Scan all data - Level IV	ĸ
1608981-18	OV02_082916_SW_10_DUP Dissolved	100	101	-	-	-	Scan all data - Level IV	١x
1609078-01	September 2016 Monthly Water ICPMS Sink 1	100	101	-	-	-	Do not oven samples (CCV 90-110%, (1×
1609195-02	B-160424 PLANT INFLUENT #16-14030	100	101	-	-	can Dat	give data to PM for scanning	10%
1609195-04	B-160397 PLANT EFFLUENT #16-14032	100	101	-	-	can Dat	give data to PM for scanning	١x
1609300-01	Rinse Blank 9/13/16	100	101	-	-	-	Rinse blank for tubing sent to AMEC Fe	1X
1609390-01	Lagoons	100	101	-	-	-		iX
1609390-02	Lagoons Field Blank	100	101	-	-	-		١X
1609390-03	Clarifier	100	101	-	-	-		ı×
1609390-04	Clarifier Field Blank	100	101	-	-	-		1×
1609390-05	A149	25	¢ ¢	-	-	-	Vente de la constante de la const	lox
390-06	A149 Blank	100	101	-	-	-	· · · · · · · · · · · · · · · · · · ·	١X
Page 422-01	802W-090816-01H	100	101	-		-	· · · · · · · · · · · · · · · · · · ·	٢×
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F609427

Eurofins Frontier Global Sciences, Inc.

Matrix: Water

Prepared using: AFS - EPA 1631E BrCl Oxidation



	Tota	Mercury Prese	ervation Lo	ogbook				
Initial preservation and Technician:	d /or verification Date: 813//L	Work (Drders: <u>160848</u>	1				
Additional preservation	n and/or verification	BrCl Li	MS ID: 1604 5	75				
Technician:	_ Date:	Time Completed:		Pipette SN: MU32229				
Technician:				Cal. Da	te: 815116			
				Additio	nal preservation (as	needed		
Sample ID	Sample Volume (mL)	Reagent added (mL)	Oxidized? Y/N	Oxidized?	Reagent added	Oxidized?		
1608981-14A	300	3.00		Y/N	<u>(mL)</u>	Y/N		
1608981-15A	300	3.00	Ý					
1608981-15C	300	3.00		•				
608981-15E	300	3.00	v,					
16089F1-16A	300	7.00		<u> </u>				
1608981-160	700	3.06						
608981-16E	300	3.00			······································			
1603981-17A	300	7.00						
608981-18-14	300	3.00	4					
<u></u>								
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	Inn	FIZILI,						
······································	L	011110						
	sfirmed by a vellow o							

Oxidation with BrCl is confirmed by a yellow color change of the sample and/or a purple color change in KI starch paper.

Comments:

ຈຸ່ກັງແມ່ນັ້ນເຫັນບໍ່ມີເປັນຫຼືເຮັບເມື່ອງການເຫັນເຮັດເປັນແຫຼກແຫຼກແຮງແຮງແຮງແຮງແຮງແຮງແຮງແຮງແຮງແຮງແຮງແຮງແຮງ

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Total Mercury	Preservation	Logbook
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Initiai	preservation	and/c	or verification,
	Δ.		17.17

Technician: \underline{MM} Date: $\underline{9/6/16}$ Time Completed: $\underline{17:00}$

Additional preservation and/or verification (as needed)

Technician: ______ Date: _____ Time Completed: ______

Technician: ______ Date: _____ Time Completed: _____

Work Orders: 160906 8	
1609078,1609112	
Brci LIMS ID: 1604595	
Pipette SN: 1032229	
Cal. Date: 8/5/16	

				Additional preservation (as needed)			
Sample ID	Sample Volume (mL)	Reagent added (mL)	Oxidized? Y/N	Oxidized? Y/N	Reagent added (mL)	Oxidized?	
1609068-01A	300	3.00	Y		(D)LJ	¥/N	
1609068-02A	300	3.00	4	·			
1609068-03A	300	3.00	Y				
1609068-04A	300	3.00	Ŷ				
1609068-05A	300		~				
1609068-06A	300	3.00 3.00	<u> </u>				
1609068-07A	300	3-00	V				
1609078-01A	300	3.00	1				
1609112-02A	550	5.80	Y				
1604112-04A	600	6.00	Υ		······	· · · · · · · · · · · · · · · · · · ·	
1609112-0617	600	6.00	Ý				
1609112-08A	550	5.50	Ŷ		······		
1609/12-10A	500	5.00	Ý		······		
< <u></u>							
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·			1111	-¢	······		
		Um g	6/16		· · · · · · · · · · · · · · · · · · ·		
		-	l				
Ovidation with D. alt							
Oxidation with BrCl is confi	rmed by a yellow col	or change of the sa	mple and/or a	purple color	change in KI starch p	aper.	

Comments:

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rofins Frontier Global Sciences / THg Preservation / LOG-PR-010.02 / Effective: Sept. 26, 2013 / QA2016-077 / Page 71 of	100 Olalic 0
rofins Frontier Global Sciences / THg Preservation / LOG-PR-010.02 / Effective: Sept. 26, 2013 / QA2016-077 / Page / 20	Page 69 of 264

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Eurofins Frontier Global Sciences / THg Preservation / LOG-PR-010.02 / Effective: Sept. 26, 2013 / QA2016-077 / Page / 10 Pag	ge (
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Comments: _____

Total Mercury	Preservation	Logbook
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itial preservation and,	or verification			Work Or	ders: 1609 195	
echnician: $\frac{(5)}{(1)}$	Date: <u>4/8/16</u>	Time Completed: _	1635	16041 (589.181	16 04 16 04 98	
dditional preservation	and/or verification (as needed)				
echnician:	Date:	Time Completed: _		Pipette	sn: <u>MU322-2</u> :e: <u>9/8/16</u>	·(
echnician:	Date:	Time Completed: _	<u></u>			
				STATISTICAL PROPERTY AND	al preservation (as	needed) Oxidized?
Sample ID	Sample Volume (mL)	Reagent added (mL)	Oxidized? Y/N	Oxidized? Y/N	Reagent added (mi.)	Y/N
609195-02A	300	3.00	<u>η</u>			
609195-04A	300	3.00	1η		· · · · · · · · · · · · · · · · · · ·	
609198-01A	300	3.00	<u> n</u> "			
609198-02A	300	3.00	νγ_			
609198-03A	300	3.00	vy "			
609198-04A	300	3.00	<u>νγ</u>	·		
609198-05A	300	3.00	W .			
609198-06A	300	3.00	Y W			
609198-07A	300	3.00	W'			
00-11-0						
		11				
	(1)	116				
		1				
		<u>}</u>				
·						
		<u>i</u>				
						·
						and a second
	is confirmed by a yell		the sample ar	nd/or a purple	color change in KI s	tarch paper.

Technician: <u>(9</u>	Date:13/16	Jor verification Date: <u>9/13/16</u> Time Completed: <u>1730</u>			Work Orders: <u>1609300</u>		
Additional preservatio				BrCl LI	MS ID: 1604595	~	
Technician:							
Technician:	Date:	Time Completed:		Pipette	SN: <u>Mn 32229</u> te: <u>9/8/16</u>	<u></u>	
					Additional preservation (as needed)		
Sample ID	Sample Volume (mL)	Reagent added (mL)	Oxidized? Y/N	Addition Oxidized? Y / N	pal preservation (as Reagent added (mL)	Oxidized?	
609300-01A	300	3,00	n		(HIL)	<u> </u>	
			7				
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<u></u>							
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		P					
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	$+ \frac{1}{3}$	11-					
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	+						
idation with BrCI is col	nfirmed by a yellow co	lor change of the s	ample and/or a	purple color	change in KI starch	paper.	
mments:							
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	······································					<i>keviewal</i>	

Total Mercury Preservation Logbook

Initial preservation and/or verification

Technician: <u>၂၀၁</u> ၇	Date: <u>9/15/16</u>	Time Completed:	15	28
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Work Orders: 1609390 1609393 BrCI LIMS ID: 115/16 -1604595

Additional	preservation and/or	verification	(as needed

Technician: <u>CSP</u> Date: <u>9/15/16</u> Time Completed: <u>1535</u> Technician: _____ Date: _____ Time Completed: _____

Pipette SN: MU32229 Cal. Date: 9/14/16

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Total Mercury Preservation Logbook

Technician: <u>CSP</u>	Date: 9/6/16	Time Completed:	1535	160	Drders: <u>160942:</u> 4438	/
Additional preservation	and/or verification	(as needed)		BrCl Ll	MS ID: 160459	5
Technician:	Date:	Time Completed:				
Technician:	Date:	Time Completed:		Pipette SN: <u>1/132229</u> Cal. Date: <u>9/16/16</u>		
				Additional preservation (as needed)		
Sample ID	Sample Volume (mL)	Reagent added (mL)	Oxidized? Y/N	Oxidized? Y/N	Reagent added	Oxidized
609-122-01A	500	5.00	γ		<u>(mi.)</u>	<u> </u>
6099722-02A		CSP a/16,	16		······	
609423-01A	500	5.00	i)			
609438-01A	300	3,00	I.W			
609438-02A	300	3.00	W			
*						
	<u> </u>	58				
	()	16/16				
	1					
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	1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999					

Comments:

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Oxidation with BrCl is confirmed by a yellow color change of the sample and/or a purple color change in KI starch paper.

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F609416

2100-2 9/19/16 DM

Eurofins Frontier Global Sciences, Inc.

Matrix: Soil/Sediment

Prepared using: AFS - EFGS-066 Cold Aqua Regia Digestion for Hg

Prepared: 9/16/2016

Lab Number	Sample ID and Source Sample	Initial (g)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F609416-BLK1	Blank	0.5	40					2aX
F609416-BLK2	Blank	0.5	40					<u>ع</u> ×د
F609416-BLK3	Blank	0.5	40					29X
F609416-BS1	Blank Spike	0.5	40	1605270	40			æx
F609416-BSD1	Blank Spike Dup	0.5	40	1605270	40			20×
F609416-DUP1	Duplicate [1608071-06]	0.527	40					1000X
F609416-MS1	Matrix Spike [1608071-06] RE1	0.539	40	1601846	200			600x
F609416-MS2	Matrix Spike [1608072-01]	0.553	40	1601846	200			530x
F609416-MSD1	Matrix Spike Dup [1608071-06]	0.56	40	1601846	200		a	600x
F609416-MSD2	Matrix Spike Dup [1608072-01]	0.563	40	1601846	200			g oox

Standard ID(s): 1601846 1605270

Description: THg 1,000ng/mL Secondary Spiking Standard THg 100ng/mL Primary Spiking Standard

Expiration: 11-Oct-16 00:00 10-Dec-16 00:00 Reagent ID(s): 1603399

1604378

1604810

1605394

Description: Boiling Chips for AFS prep Omnitrace Hydrochloric Acid Fisher Nitric Acid, Tracemetal Grade 5% BrCl

Expiration: 01-Jun-17 00:00 04-Aug-19 00:00 24-Mar-18 00:00 09-Feb-17 00:00

1605113

- 1605112 1602941 1605348

F609416

Eurofins Frontier Global Sciences, Inc.

Matrix: Soil/Sediment

Prepared using: AFS - EFGS-066 Cold Aqua Regia Digestion for Hg

	Initial	Final	QC	Sample			
Sample ID	(g)	(mL)	Sample	Specs.	Data	Sample Comments	Analysis Comments
ES-03_072816_SED_03	0.53	40	-	-	-		100× 3 500×
ES-FP_072816_SED_03	0.564	40	QC	-	-	MS/MSD	X001 & XCOI
ES-FP_072816_SED_03_DUP	0.569	40	-	-	-		100X
MMPOLY_072916_SED_03	0.552	40	-	•	-		100X
L9-45_072816_SED_03	0.534	40	-	-	-		100X
BO-04_072516_SED_03	0.543	40	QC	-	*	MS/MSD	500%
BO-04_072516_SED_03_DUP	0.576	40	-	-	-		500X
OCE-11	0.554	40	-	-	-		SDOX
OCE-14	0.543	40	-	-	-		500× 320×
OCE-15	0.571	40	-	-	-		500X = 20X
OCE-11-1	0.569	40	-	-	-		500×
OCE-11-2	0.57	40	-	-	•		500X
OCE-11-3	0.591	40	-	-	-	******	500 X
OCE-11-4	0.547	40	-	-			500 X
OCE-11-5	0.558	40	-	-	-		500×
OCE-11-6	0.547	40	-	-	-		€xox
OCE-11-7	0.524	40	-	-	-		500×
OCE-11-8	0.58	40	-	-	•		Soox
OCE-13	0.559	40	-	-	-		Soox
	ES-03_072816_SED_03 ES-FP_072816_SED_03 ES-FP_072816_SED_03_DUP MMPOLY_072916_SED_03 L9-45_072816_SED_03 BO-04_072516_SED_03_DUP OCE-11 OCE-14 OCE-14 OCE-15 OCE-11-1 OCE-11-2 OCE-11-3 OCE-11-4 OCE-11-5 OCE-11-7 OCE-11-8	Sample ID (g) ES-03_072816_SED_03 0.53 ES-FP_072816_SED_03 0.564 ES-FP_072816_SED_03_DUP 0.569 MMPOLY_072916_SED_03 0.552 L9-45_072816_SED_03 0.534 BO-04_072516_SED_03 0.543 BO-04_072516_SED_03_DUP 0.576 OCE-11 0.554 OCE-14 0.543 OCE-15 0.571 OCE-11-1 0.569 OCE-11-2 0.571 OCE-11-3 0.591 OCE-11-3 0.591 OCE-11-5 0.558 OCE-11-6 0.547 OCE-11-7 0.524	Sample ID (g) (mL) ES-03_072816_SED_03 0.53 40 ES-FP_072816_SED_03 0.564 40 ES-FP_072816_SED_03_DUP 0.569 40 MMPOLY_072916_SED_03 0.552 40 L9-45_072816_SED_03 0.534 40 BO-04_072516_SED_03 0.543 40 BO-04_072516_SED_03_DUP 0.576 40 OCE-11 0.554 40 OCE-14 0.543 40 OCE-15 0.571 40 OCE-11-1 0.569 40 OCE-11-2 0.571 40 OCE-11-3 0.591 40 OCE-11-3 0.591 40 OCE-11-3 0.514 40 OCE-11-3 0.591 40 OCE-11-4 0.547 40 OCE-11-5 0.578 40 OCE-11-6 0.547 40 OCE-11-7 0.524 40	Sample ID(g)(mL)SampleES-03_072816_SED_03 0.53 40.ES-FP_072816_SED_03 0.53 40QCES-FP_072816_SED_03_DUP 0.569 40.MMPOLY_072916_SED_03 0.552 40.L9-45_072816_SED_03 0.534 40QCBO-04_072516_SED_03 0.543 40.DCE-11 0.576 40.OCE-14 0.543 40.OCE-15 0.571 40.OCE-11-1 0.569 40.OCE-11-2 0.57 40.OCE-11-3 0.591 40.OCE-11-4 0.547 40.OCE-11-5 0.574 40.OCE-11-6 0.547 40.OCE-11-7 0.524 40.OCE-11-8 0.58 40.	Sample ID (g) (mL) Sample Specs. ES-03_072816_SED_03 0.53 40 . . ES-FP_072816_SED_03 0.564 400 QC . ES-FP_072816_SED_03_DUP 0.569 400 . . MMPOLY_072916_SED_03 0.552 400 . . L9-45_072816_SED_03 0.534 400 . . BO-04_072516_SED_03 0.534 400 . . BO-04_072516_SED_03_DUP 0.576 400 . . OCE-11 0.554 400 . . . OCE-14 0.571 400 . . . OCE-15 0.571 400 . . . OCE-11-1 0.569 400 . . . OCE-11-2 0.571 400 . . . OCE-11-1 0.569 400 . . . OCE-11-2 0.577 400	Sample ID (g) (mL) Sample Specs Data ES-03_072816_SED_03 0.53 40 - - - ES-FP_072816_SED_03_DUP 0.569 40 QC - - MMPOLY_072916_SED_03 0.552 40 - - - MMPOLY_072916_SED_03 0.534 40 QC - - BO-04_072516_SED_03 0.534 40 - - - BO-04_072516_SED_03 0.543 40 - - - DO-04_072516_SED_03_DUP 0.576 40 - - - OCE-11 0.554 40 - - - - OCE-11 0.554 40 - - - - OCE-14 0.543 40 - - - - OCE-15 0.571 40 - - - - OCE-11-2 0.571 40 - - -	Sample ID (g) (mL) Sample (p) Data Sample Comments ES-03_072816_SED_03 0.53 400 QC 1.0 1.0 MS/MSD ES-FP_072816_SED_03 0.564 400 QC 1.0 1.0 MS/MSD ES-FP_072816_SED_03_DUP 0.569 400 1.0 1.0 1.0 1.0 MMPOLY_072916_SED_03 0.552 400 1.0

²⁴e Date: 9/8/2016

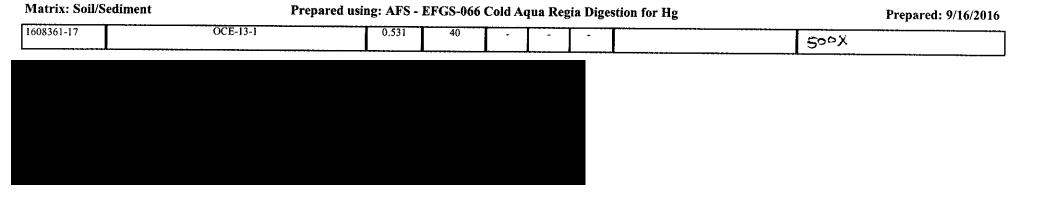
2600.2 9/19/16 DM

9/19/16 DM

PREPARATION BENCH SHEET

F609416

Eurofins Frontier Global Sciences, Inc.



Page 75 of 264 Date: 9/8/2016

Technic	ian: <u>Duyen</u> 1	Batch#:	6094	16 Date: 9/16	5/16	
EFGS EFGS EFGS Other: 944 Balance Time in: Time ou Final vol Spike W HCI LIMS HNO ₃ LIM 70/30 LIM	5-010 Tissues - Methyl Mercu 5-011 Tissues - Total Mercu 5-045 Sediments - Methyl M 5-066 Solids - Total Mercury 16/16 #:	ury - KOH/M ry - 70:30: H ercury - KBr - Cold AR: 1 ted?	lethanol: H lot plate : /CH ₂ Cl ₂ : H L8-25°C f \mathbb{D} No \mathbb{D} <i>No</i> \mathbb{D}	lot plate 75±5°C for 2-4 75±5°C for two hours. eat Block 45°C (nitrogen or over four hours. Therm.#:	hours. purge for 3 Vial Type: Calibration Calibration Calibration Calibration	$\Box Glass \Box Teflon$ $dted? \Box Yes \Box No$ $dted? \Box 6 0/8 46$ Date: $\frac{6}{14/4}$ Date: $\frac{6}{3}/14$ Pate: $\frac{16}{3}/16$ No
	#_00065315	 Boiling Chip I	Dis ot #/	penser #: <u>02 <274</u> 0 03399 *Hotblo	ck Position:	Yes N/A
Vial #	Sample ID Number	Sample			Sample	CRM LIMS ID
	10.000	Size	Vial #	Sample ID Number	Size	UNA UNA
1	F609416 Blank 1	0-510	23	1608361-09	0-570	
3	E609416 Blanker	0503	24	160876 - 10	0591	•
	F609416 Blank3	0498	25	1608261-11	0547	
4	E609416 BS1	0.523	26	160836 -12	0358	Comments
6	F609416 BJD1	0.518	27	160836 -13	0-547	Dupl. 1751. 11501
	F609416 pup	0727	28	1608361-14	0-724	source
8	F609416 HS1	0.539	29	160FJ61-15	0580.	1608071-06
	E609416 HSDI	0.560	30	1608361-16	0-559	MS2MS02 source 1608072-01
9	F609416 MSZ	0.553	31	1608361-12	0571	1608072-01
10	F609416 AS02	0°563	32	Ma		BSI. BJOT.
11	1608071-10	0552	33			1605270
13	160807 -11	9116116	34	······································		= 100 mg 1.6 = 40ml
14	+6080121-06	12.48	35		/ 9/16/15	1605270 = 100 mg 1: L= 40ml 9/19/16 60
15	1608071-05	0530	36	/	14	9//1//000
16	160807-06	U-564	37			
17	160001 - 0-103	0.569	38			
18	1608072-01-00000 1608072-02 -0000	0.542	39			
19		0.576	40	/		
20	1608361= 05	0.554	41			
21	1608361 - 06	U.543	42			
22	(60836) - 07	<u>U.57</u>	43			
	1602361 -08	0.569	44	۲		
Eurofins From *Hotblock di	ntier Global Sciences / Mercury San agram located in back of logbook	nple Digestions ((LOG-HG-013	.13) / Effective 05/25/16 / QA201	6-093 Verified I	3v: BC 9/19/16

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Peer Review Check List for THg by 2600 CV-AFS (FGS-121) 2016 Rev 1 (04/1/2016)

	alyst: /iewer:	DAN WEIKART 9.20.14	_Sequence(s) #: Dataset ID(s):	6/20016, 6/20007 THg26002-160919-1
Dat Bat	-	<u>9/20/2016</u> F609420, F609427, F609416	WO (s) #:	Various
	un #(5).	1009420, P009427, P009416	_	

Select the correct preparation method.

Analyte	Prep Method		Matrix
П тнд	EFAFS-T-AFS-SOP2985	FSTM Trap 70:30 Digest	Air/Gas
🖸 Тна	EFAFS-T-AFS-SOP2807	Modified Cold Aqua Regia	Sed/Soil
🗌 тну	EFAFS-T-AFS-SOP2821	Shared Bomb- HF/HNO3/HCI Digest	Sed/Soil
🗌 ТН9	EFTM-T-TM-SOP2825	Nitric Acid Oven Bomb	Sed/Soil
🗆 ТНд	EFAFS-T-AFS-SOP2795	70:30 Digest	Tissue
🗌 ТНg	EFAFS-T-AFS-SOP2800	KCI Trap BrCl Oxidation	Air/Gas
ТН9	EFTM-T-TM-SOP2837	Shared Nitric	Tissue
✓ тнg	EFSR-P-SP-SOP2796	BrCI Oxidation	Water
🗋 Hg0	NA	NA	Water
inorg Hg	NA	NA	Water

45330

Analyst Initials:	Reviewer Initials	DML	/	
1. Compare SampleID with Benchsheet/Sequence/Raw Data (Have all samples been imported?)	VES	□ №0		P
2. Check for transcription errors from Excel spreadsheet (or Prep Benchsheet)/Raw data	VES			9
(a) On raw data (instrument print-out), does correct file (dataset ID#) name appear in description?	🗹 YES			2
Naming convention: THg26001-yymmdd-1 or THg26002-yymmdd-1				
(b) Check 5% of transcription from Instrument print-out and Excel file	⊡ YES	🗋 NO		Ц
Compare the "Dilute" and "Peak (raw)" columns to "Dilution" and "Uncorrected Result" in Excel				_
(c) Check standards & reagents in sequence & bench sheet for correct usage (expiries).	🗹 YES	NO NO	□ N/A	Z
(d) Check and compare masses (review prep benchsheet)	🗹 YES	NO NO	N/A	ভ
(e) Check & compare initial & final volumes	M YES	NO NO	□ N/A	ভ
(f) Do aliquots and dilutions written on benchsheet match those in Excet?	🗹 YES	NO	 □ N/A	e
50 ml / aliquot = Excel dilution value				
(g) Is the sequence #, analyst, date, and instrument # on the QC page?	🗹 YES	NO NO		
(h) Is the analysis status correct? (analyzed/initial review/reviewed)	🖌 YES	D NO		Ø
(i) Original prep bench sheet added to data package?	🗹 YES	🗌 NO		<u> </u>
(j) Benchsheet prep date MUST match actual prep date (check if re-shot vs re-extract)	YES	NO		- V
3. High QA? WO#(s)/Client(s):	TES	NO NO		Ø
4. Client specific QC? (if Yes, refer to Project Notes/LIMS)	YES	NO NO		<u> </u>
(a) Have the QC requirements been met for all WO#s?	YES			
(b) Prep blanks corrections/assigned properly	VES			Ø
5a. 20 or fewer samples in batch?	✓ YES			Ľ
(i) 3 PBs, 1 LCS(or BS), 1 LCSD(or BSD), 1 DUP/Batch 1 MS/MSD (or AS/ASD)/10 samples?	✓ YES			ত্র
(ii) 1 CCV and 1 CCB every 10 analytical runs?	YES			U U

Peer Review Check List for THg by 2600 CV-AFS (FGS-121) 2016 Rev 1 (04/1/2016)

Analyst:	DM	Sequence(s) #:	6120016, 6120007				
Reviewer:	0	Dataset ID(s):	THg26002-160919-1				
Date:	9/20/2016	WO (s) #:	Various				
Batch #(s):	<u>F609420, F609427, F609416</u>		0				
		Analyst Initials	om	Reviewer	Di	yw.	
5b. Has the B/0	C section data been uploaded?			YES	DN []	✓ N/A	g
QA/QC Data C	hecked						
6. RSD CF (≤ 1	15%)			✓ PASS	FAIL		e
Comments:							
7. The calibrati Comments:	on curve included a minimum of 5 Standards			VES	NO NO		ľ
8. 1st Calibratio	on Standard % Recoveries EPA 1631E (75-125%)			PASS	FAIL	·	N
	√ % Recoveries EPA 1631E (77-123%)			PASS	FAIL		ভ
Comments:							L
10. Do all calib	ration points pass acceptance criteria?			✓ YES	ON []		
Comments:				_			K)
11.Are qualifier	s consistant with the data review flowcharts?			✓ YES	NO NO	□ N/A	2
Comments:							
12. Explain any	items on the failed data report from Element					·	
Comments:	Sample off curve						2.0
13. Are the indiv	idual Preparation Blanks < PQL or <2.2xMDL for WI (re	efer to appropriate prep met	hod PQL list)	PASS	FAIL	······································	
	QL or <2.2xMDL for WI, note which PB(s) are abo						
(b) is the me	an PB < PQL or <2.2xMDL for WI (for appropriate	qualification)?		✓ YES	🗌 NO		
(c) Was a Br	CI Blank analyzed for each preservation level?			YES	NO	N/A	
(d) Are Prepa	aration Blanks summarized on QC page?			✓ YES	 NO	L	2
14. Filtration Bl	ank Prepared (if yes, use FB qualifier)			VES			
(a) Filtration	Blank prep date same as associated samples' pre	p date		V YES		🗌 N/A	Ŋ
(b) Filtration	Blank absolute value < PQL or <2.2xMDL for WI			고 YES		🗌 N/A	Ľ
15. IBLs (3 min Comments:	imum) individually < 0.50 ng/L, mean < 0.25 ng/L	and STD of 0.10 ng/L?		PASS	🗍 FAIL		
16. CCBs individ	lually < 0.50 ng/L or 2.2 x MDL for WI?			PASS	FAIL		Ø
Comments:							L <i>.</i>
17. Have Total	Solids been applied? (If NO, please ensure that th	ey are done or nearly do	ne)	VES		□ N/A	
	ct 'Source' designated for MD/MS/MSD?			✓ YES			N
19. For digested	d preps: was there a spike witness signature & dat	e on the prep bench she	et?	YES		🗌 N/A	_ 1

ព្មធ្លន្ធនៅឆ្នាំដែលដែលនៅស្ថានដែលជាសាកាយបានស្ថានស្ថានសាកាយហា

Peer Review Check List for THg by 2600 CV-AFS (FGS-121) 2016 Rev 1 (04/1/2016)

Analyst:	DM	Sequence(s) #:	6120016, 6120007				
Reviewer:	0	Dataset ID(s):	THg26002-160919-1				
Date:	9/20/2016	WO (s) #:	Various				
Batch #(s):	F609420, F609427, F609416		0				
		Analyst Initials	DM	Reviewer Initials	DM	W	
20. MS/MSD S Comments:	piked at least 1-5 X ambient or 5x MRL (whichever is h			VES	NO NO		Ø
	ples within instrument calibration range? (or at minimur	m dilution size)		PASS	FAIL		
22. Are the sar	nples run at the correct dilution level for the method?	· · · · · · · · · · · · · · · · · · ·		✓ YES	NO NO		1
	< Total (if applicable)			YES	NO NO	✓ N/A	ব
24. Effluent < 1	Influent (visually confirm if needed)			YES	NO NO	✓ N/A	Q/
25. Are re-runs Comments:	noted with reason?			VES	NO NO	□ N/A	Ø
26. FSTM Data the FSTM A (in	isets: Check to ensure the 'Response' & 'Initial Result' o sequence) & B/C (in batch) traps?	columns match in b	oth the Excel dataset & LIMS for	YES	□ NO	✓ N/A	<u> </u>
Comments:							
	ap <5% A Traps			YES	NO NO	V/A	ľ
	trap recoveries75-125% of true value?			YES	🗌 NO	✓ N/A	Ď
29.Have non-re	eportable samples been imported into LIMS and clicked)	YES	NO NO	☑ N/A	7
	racts been created for non-reportable samples?			YES	NO	☑ N/A	<u> </u>
	ny HIGH QA projects within the data? If so, place data i	package in QA		YES	NO NO	☑ N/A	ľ
32. Does the da	ita set need scanning?			YES		□ N/A	
33. Does the da	taset have an LOQ/LOQ or DOC?			YES		⊡ N/A	
34. Water samp	les: has the preservation log been included in dataset f	or final volume veri	fication?	 ☑ YES	NO	□ N/A	Ø
	ples-is the final volume correct in the sequence?	or final volume ven	ncouon:	V YES			Ø
	at: \\Cuprum\gen_admin\Quality Assurance\Training	Master\DOCe				□ N/A	Ľ
	lyst IDOC/CDOC: 11516		C/CDOC within last 12 months?	VES	NO		R
	lyst's SOP reading for method: 52016	iDC	Current SOP revision read?	V YES			1 I
38. Date of LOD			LOD within last 3 months?	YES			
39. Date of LOC			LOQ within last 3 months?	✓ YES			

Data can not be reported without a current IDOC/CDOC, LOD or LOQ.

រដ្ឋានជាមានពីដំណើរដ្ឋានដែលមានសំព័ន់ចំណាមពីដែលនាមជាដែនអាមាសម៉ាន់អាមាយមាន

Door Bowiew	Charle Lint for	TH				
Feel Review	Check List for	THG DY 2600	CV-AFS	(FGS-121)	2016 Rev 1	(04/1/2016)

Analyst:	DM	Sequence(s) #:	6120016, 6120007
Reviewer:	0	Dataset ID(s):	THg26002-160919-1
Date:	9/20/2016	WO (s) #:	Various
Batch #(s):	F609420, F609427, F609416		0

050 40. Peer Reviewer's comments (use Peer Review Checklist Additional Comments form if necessary):

Additional Page (s)? YES

លកាលពាលបានខ្លាំនាំនាំនាយជាដោយ

MMHg27001-160923-1

🖑 eurofins

Frontier Global Sciences

Analysis Datasheet for Methyl Mercury in Waters	
Date of Analysis: September 23, 2016	Analyst: RN
Instrument #: Hg2700-1	Units ng/L
LIMS Sequence #: 6123010	

Calibration Statistics:

[1		[Uncorrected			
			-	Response	Corrected Peak	Corrected	
LabNumber	n	True Val	Area	Factor	Height	Response Factor	% Recovery
SEQ-CAL1	1	0.05 ng/L	26.47 units	529.46	24.79 units	495.87	95.2 %Rec
SEQ-CAL2	1	0.20 ng/L	111.66 units	558.32	109.98 units	549.92	105.6 %Rec
SEQ-CAL3	1	1.00 ng/L	510.84 units	510.84	509.16 units	509.16	97.8 %Rec
SEQ-CAL4	1	2.00 ng/L	1025.51 units	512.75 -	1023.83 units	511.91	98.3 %Rec
SEQ-CAL5	1	4.00 ng/L	2151.11 units	537.78	2149.43 units	537.36	103.2 %Rec
SEQ-CAL6	0						
SEQ-CAL7	0						
SEQ-CAL8	0						
SEQ-CAL9	0						
Corr. Mean RF	Corr. St Dev RF	Corr. RSD CF	Uncorr. Mean RF	Eff Factor			
520.85	+/- 22.13	4.2% RSD	529.83	0.8046			
Blanks:							
LabNumber	n	Mean	Std Dev	Mean (ng/L)	Std Dev (ng/L)		
SEQ-1BL	1	1.68 units		0.00 ng/L	#VALUE!	•	

Preparation Blanks

Sample Type	Batch ID	n	Mean	Std Dev
BLK	1	3	0.007 ng/L	±0.003
BLK	2	0	0.000 ng/L	
BLK	3	0	0.000 ng/L	
BLK	4	0	0.000 ng/L	
BLK	5	0	0.000 ng/L	

QUALITY ASSURANCE PEER - REVIEWED INITIALS: DAW 9-23-16

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MDN Only

NA

NA

NA

NA

SEQ-CAL1 SEQ-CAL2 SEQ-CAL3 SEQ-CAL4 SEQ-CAL5 SEQ-CAL6

SEQ-CAL7

SEQ-CAL8

SEQ-CAL9

SEQ-ICV/CCV Acetate Buffer Ethylating Agent

Sample			N. N. (1997)			Uncorrected			No PB	Televa,					
Instrument	Analyst	Туре	LabNumber	Dilution	Analyzed	FileID	Run End	Response	Batch ID	Correction?	RESP	InitialResult	FinalResult	InitialUnits	Comments
Ha2700-1 :	RN	CAL	SEQ-IBL1	1	9/23/16 5:50	15893-1.RAW	5:50	1.68	r		0.0	0.000	0.000	ng/L	
Hg2700-1	RN	CAL	SEQ-CAL1	1	9/23/16 6:00	15894-1.RAW	6:00	26.47	r	1	24.8	0.048	0.048	ng/L	
Hg2700-1	RN	CAL	SEQ-CAL2	1	9/23/16 6:11	15895-1.RAW	6:11	111.66	-		110.0	0.211	0.211	ng/L	
Hg2700-1	RN	CAL	SEQ-CAL3	1	9/23/16 6:21	15896-1.RAW	6:21	510.84	-		509.2	0.978	0.978	ng/L	
Hg2700-1	RN	CAL	SEQ-CAL4	1	9/23/16 6:32	15897-1.RAW	6:32	1025.51			1023.8	1.966	1.966	ng/L	
Hq2700-1	RN	CAL	SEQ-CALS	1	9/23/16 6:42	15898-1.RAW	6:42	2151.11	-		2149.4	4.127	4.127	na/L	
Hg2700-1	RN	CAL	SEQ-ICV1	1	9/23/16 6:53	15899-1.RAW	6:53	291.45			289.8	0.556	0.556	nq/L	
Hq2700-1	RN	CAL	SEQ-ICB1	1	9/23/16 7:03	15900-1.RAW	7:03	7.64	-		6.0	0.011	0.011	ng/L	
Hq2700-1	RN	BLK	F609484-BLK1	1.25	9/23/16 7:14	15901-1.RAW	7:14	4.58			2.9	0.007	0.009	ng/L	
Hg2700-1	RN	BLK	+F609484-BLK2	1.25	9/23/16 7:24	15902-1.RAW	7:24	4.29			2.6	0.006	0.008	nq/L	
Hg2700-1	RN	8LK	7609484-BLK3	1.25	9/23/16 7:35	15903-1.RAW	7:35	2.96			1.3	0.003	0.004	ng/L	
Hg2700-1	RN	SAM	4F609484-B51	1.25	9/23/16 7:45	15904-1.RAW	7:45	420.94			419.3	0.995	1.244	ng/L	
Hg2700-1	RN	SAM	+F609484-B5D1	1.25	9/23/16 7:56	15905-1.RAW	7:56	440.73			439.1	1.042	1.303	ng/L	
Hq2700-1	RN	SAM	~F609484-DUP1	1.25	9/23/16 8:06	15906-1.RAW	8:06	23.89	1	£	22.2	0.048	0.059	ng/L	
Hg2700-1	RN	SAM	F609484-MS1	1.25	9/23/16 8:17	15907-1.RAW	8:17	479.42	1		477.7	1.135	1.418	ng/L	
Hg2700-1	RN	SAM	- F609484-MSD1	1.25	9/23/16 8:27	15908-1.RAW	8:27	481.27	1		479.6	1.139	1.424	ng/L	
Hq2700-1	ŔŇ	SAM	F609484-MS2	1.25	9/23/16 8:38	15909-1.RAW	8:38	422.92-			421.2	1.000	1.250	ng/L	
Hg2700-1	RN	SAM	+F609484-MSD2	1.25	9/23/16 8:48	15910-1.RAW	8:48	400.61			398.9	0.947	1.183	ng/L	
Hq2700-1	RN	CAL	SEQ-CCV1	1	9/23/16 8:59	15911-1.RAW	8:59	335.94			334.3	0.642	0.642	ng/L	
Hq2700-1	RN	CAL	SEQ-CCB1	1	9/23/16 9:09	15912-1.RAW	9:09	4.53			2.9	0.005	0.005	ng/L	
Hq2700-1	RN	SAM	+1608741-01	1.25	9/23/16 9:20	15913-1.RAW	9:20	24.02			22.3	0.048	0.060	ng/L	
Hq2700-1	RN	SAM	1608741-02	1.25	9/23/16 9:30	15914-1.RAW	9:30	23.38			21.7	0.046	0.058	ng/L	
Hg2700-1	RN	SAM	1608741-03	1.25	9/23/16 9:41	15915-1.RAW	9:41	21.13			19.4	0.041	0.051	ng/L	
Hq2700-1	RN	SAM	1608742-01	1.25	9/23/16 9:51	15916-1.RAW	9:51	46.98-			45.3	0.103	0.128	ng/L	
Hq2700-1	RN	SAM	+1608742-03	1.25	9/23/16 10:02	15917-1.RAW	10:02	51.82			50.1	0.114	0.143	ng/L	
Hq2700-1	RN		• 1608742-04	1.25	9/23/16 10:12	15918-1.RAW	10:12	53.85			52.2	0.119	0.149	<u>ng/L</u>	
Hg2700-1	RN	SAM	+1608742-05	1.25	9/23/16 10:23	15919-1.RAW	10:23	52.49			50.8	0.116	0.145	<u>nq/L</u>	
Hq2700-1	RN		- 1608742-07	1.25	9/23/16 10:33	15920-1.RAW	10:33	82.15			80.5	0.187	0.233	ng/L	
Hq2700-1	RN	SAM	<1608742-08	1.25	9/23/16 10:44	15921-1.RAW	10:44	24.32			22.6	0.049	0.061	ng/L	
Hq2700-1	RN	SAM	+1608981-01	1.25	9/23/16 10:54	15922-1.RAW	10:54	7.57			5.9	0.009	0.011	ng/L	
Hq2700-1	RN	CAL	SEQ-CCV2	1	9/23/16 11:05	15923-1.RAW	11:05	353.87-			352.2	0.676	0.676	ng/L	
Hq2700-1	RN	CAL	SEQ-CCB2	<u> </u>	9/23/16 11:15	15924-1.RAW	11:15	1.81			0.1	0.000	0.000	ng/L	
Hq2700-1	RN	CAL	SEQ-CCV3	1	9/23/16 11:59	15925-1.RAW	11:59	280.01-			278.3	0.534	0.534	ng/L	
Hq2700-1	RN	CAL	SEQ-CCV4	1	9/23/16 12:10	15926-1.RAW	12:10	256.87			255.2	0.490	0.490	ng/L	
Hq2700-1	RN	CAL	SEQ-CC83	1	9/23/16 12:20	15927-1.RAW	12:20	2.69			1.0	0.002	0.002	ng/L	
Hg2700-1	RN		1608981-02	1.25	9/23/16 12:31	15928-1.RAW	12:31	1.92			0.2	-0.005	-0.006	ng/L	
Hq2700-1	RN		+1608981-03	1.25	9/23/16 12:42	15929-1.RAW	12:42	130.79			129.1	0.303	0.378	ng/L	
Hq2700-1	RN		-1608981-04	1.25	9/23/16 12:52	15930-1.RAW	12:52	52.46			50.8	0.116	0.145	ng/L	
Hg2700-1	RN		- 1608981-05	1.25	9/23/16 13:03	15931-1.RAW	13:03	48.58			46.9	0.106	0.133	ng/L	
Hq2700-1	RN		- 1608981-06	1.25	9/23/16 13:13	15932-1.RAW	13:13	25.82-			24.1	0.052	0.065	ng/L	
Hq2700-1	RN		- 1608981-07	1.25	9/23/16 13:24	15933-1.RAW	13:24	43.76.			42.1	0.095	0.119	ng/L	
Hg2700-1	RN		4608981-08	1.25	9/23/16 13:34	15934-1.RAW	13:34	11.59			9.9	0.018	0.023	ng/L	
Hq2700-1	RN		+ 1608981-09	1.25	9/23/16 13:45	15935-1.RAW	13:45	19.18			17.5	0.036	0.045	ng/L	
Hq2700-1	RN		+1608981-10	1.25	9/23/16 13:55	15936-1.RAW	13:55	5.82			4.1	0.004	0.006	ng/L	
Hq2700-1	RN		- 1608981-11	1.25	9/23/16 14:06	15937-1.RAW	14:06	62.52		······	60.8	0.140	0.175	ng/L	
Hg2700-1	RN	CAL	SEQ-CCV5	1	9/23/16 14:16	15938-1.RAW	14:16	387.45	-		385.8	0.741	0.741	ng/L	

Construction Allowed	Sample		1 N 1 1 1 1			Uncorrected			No PB	1.111		Standard States and Stat		
Instrument Analyst	Type	LabNumber	Dilution	Analyzed	FileID	Run End	Response	Batch ID	Correction?	RESP	InitialResult	FinalResult	InitialUnits	Comments
Hq2700-1 RN	CAL	SEQ-CCB4	1	9/23/16 14:27	15939-1.RAW	14:27	2.50			0.8	0.002	0.002	ng/L	
Hq2700-1 RN	CAL	SEQ-CCV6	1	9/23/16 14:37	15940-1.RAW	14:37	256.08			254.4	0.488	0.488	ng/L	
Hq2700-1 RN	CAL	SEQ-CCV7	1	9/23/16 14:48	15941-1.RAW	14:48	261.95-			260.3	0.500	0.500	ng/L	
Hg2700-1 RN	CAL	SEQ-CCB5	1	9/23/16 14:58	15942-1.RAW	14:58	2.38	•		0.7	0.001	0,001	ng/t	

MethylMercury	Operat RN	BlankS	1.6796	Calib Eqn:	Conc = (Area-1.680) /	520.846	Run Date:			c	•						
EPA1630	Worksh MHg27				OK,1 Warnings				5 Blank RSC	0							
	Methoc 2010-0		0.9997	R2:	0.999354403		CalibAnaly !	ieHg	CF SD:	22.12590298							
en a herende	Descrip MHg27			an transitione		~	Course later		CF RSD%	4.248068909 RawData	RunEnd	DeakHof /Pa	PostMoHa (P. Pa	akHo7(Pau P	eakPrHg(Ray Control (etf	N Selanc	RunCount
Sample/ID	Location Rinse	Dilute		ConcHg0(p)			ConcPrHg(g F	ecm		15891-1.RAW	Runcho		0.62467262 6		0 cleandry	OK	1 and 1
Clean			0	0.04614	0.001199342 0.00271966					15892-1.RAW			3.09616477		0 psample10	σ	1
WS	A1		1.6796 0		0.00322483	0.053165				15893-1.RAW			1.67964015 - 2		0 psample10	CT	1
SEQ-IBL1 +	A2	1	1.6796		0.047602557	0.053103		95.21		15894-1.RAW		67.2845562			0 psample10	Ċ	- 1
SEQ-CAL1-	A3		1.6796		0.211165898	0.073876		105.58		15895-1.RAW		85.1515388			0 psample10	CT	1
SEQ-CAL2 -	A4		1.6796	0.325195	0.97756487	0.069365		97.76		15896-1.RAW		171.056068			0 psample10	ĊT	1
SEQ-CAL3	A5		1.6796	0.515419	1.965704571			98.29		15897-1.RAW		270.133569			0 psample10	сī	1
SEQ-CAL4-	A6 A7		1.6796		4.126808882	0.113927		103.17		15898-1.RAW		506.960284			0 psample10	СТ	1
SEQ-CALS-	A7 A8		1.6796		0.556339865	0.411814		111.41		15899-1.RAW		887.29277			0 psample10	ĊT	t
SEQ-ICV1+ SEQ-ICB1 -	A9		1.6796		0.0114404	0.054508		0.00		15900-1.RAW		81.4946496			0 psample10	CT	1
F609484-BLK1-			1.6796		0.006971874	0.082346		0100		15901-1.RAW		63.6035654		5.9915009	0 psample10	ί	1
F609484-BLK2 -			1.6796		0.006256096	0.075491				15902-1.RAW		63.3900568	4.28641098 - 3	3.1349669	0 psample10	0K	1
F609484-BLK3			1.6796	0.111121	0.003082311	0.066058				15903-1.RAW		47.981179	2.9639678 - 2	9.2043087	0 psample10	СТ	1
F609484-BS1**			1.6796	0.117879	1.006190711					15904-1.RAW		50.7969223	420.93608 - 3	0.8147727	0 psample10	СТ	1
F609484-BSD1 -			1.6796		1.053696418	0.095923				15905-1.RAW		53.4457386	440.730611- 4	1.6486269	0 psample10	CT	1
F609484-DUP1 -			1.6796	0.078634	0.053302098	0.086069				15906-1.RAW		34.4444839	23.8893939- 3	7.5425663	0 psample10	0K	1
F609484-M51			1.6796	0.154429	1.146540328	0.106502		108.85		15907-1.RAW		66.0266098	479.416525 - 4	6.0564394	0 psample10	CT	1
F609484-MSD1 -			1.6796	0.247534	1.150979651	0.156613				15908-1.RAW		104.821527	481.265288 - 6	6.9365243	0 psample10	CT	1
F609484-MS2-			1.6796	0.125917	1.010945822	0.09907		32.08		15909-1.RAW		54.1464015	422.917424- 4	2.9600142	0 psampie10	ст	1
F609484-MSD2 -			1.6796	0.10961	0.95742032	0.089463				15910-1.RAW		47.3516572	400.614583 - 3	8.9566103	0 psample10	CT	1
SEO-CCV1	A20	1	1.6796	0.709619	0.641757128	0.542363		128.51	1	15911-1.RAW		371.281848	335.936364 - 2	84.167472	0 psample10	CT	1
SEO-CCB1 +	A21	1	1.6796	0.07477	0.005478593	0.08239		0.00	;	15912-1.RAW		40.6233902	4.53314394 - 4	4.5922348	0 psample10	ĊŤ	1
1608741-01 ~	81		1.6796	0.075074	0.053625784	0.085015			:	15913-1.RAW		32.9612216	24.0242661 3	7.1033617	0 psample10	OK	1
1608741-02-	82	1.25	1.6796	0.074009	0.052084401	0.091326			:	15914-1.RAW		32.517589			0 psample10	СТ	1
1608741-03-	83	1.25	1.6796	0.060744	0.046673455	0.09374			:	15915-1.RAW		26.9902225			0 psample10	OK	1
1608742-01-	B4	1.25	1.6796	0.087165	0.108712327	0.145592			:	15916-1.RAW			46.9775568 - 6		0 psample10	ÖK	1
1608742-03-	85	1.25	1.6796	0.112252	0.120324996	0.150889			:	15917-1.RAW			51.8162879 * 6		0 psample10	СТ	1
1608742-04 -	B6	1.25	1.6796	0.076301	0.125217489	0.137316				15918-1.RAW		33.4724669			0 psample10	ОК	1
1608742-05 -	87	1.25	1.6796	0.155513	0.121945297	0.120915				15919-1.RAW		66.4784564			0 psample10	ĊT	1
1608742-07~	88	1.25	1.6796	0.149538	0.193120194	0.137752				15920-1.RAW		63.9884943			0 psample10	OK	1
1608742-08-	B9	1.25	1.6796	0.124906	0.054338039	0.086515				15921-1.RAW			24.3210464 - 3		0 psample10	СТ	1
1608981-01-	810	1.25	1.6796	0.085367	0.014129255	0.100616				15922-1.RAW		37.2502043			0 psample10	СТ	1
SEQ-CCV2-	611		1.6796	0.374065	0.676183645	0.594188		135.40		15923-1.RAW		196.50988			0 psample10	CT	1
SEQ-CCB2-	B12		1.6796	0.057069	0.000246903	0.064648		0.00		15924-1.RAW	11:15:59		1.80823864		0 psample10	CT CT	1
SEQ-CCV3 -	C4		1.6796	1.092727	0.534382223	0.434219		107.01		15925-1.RAW		570.822453			0 psample10 0 psample10	CT	1
SEQ-CCV4 -	C5		1.6796	0.835467	0.48995577	0.401647		98.11		15926-1.RAW		436.82954 44.9992491			0 psample10	ОК	1
SEQ-CCB3 -	Ç6	-	1.6796	0.083172	0.001947816	0.06168		0.00		15927-1.RAW		40.1629735			0 psample10	ст СТ	1
1608981-02~	813		1.6796	0.092358	0.000566804	0.182861				15928-1.RAW 15929-1.RAW		61.4924716			0 psample10	CT CT	1
1608981-03-	814		1.6796	0.143547	0.309845562	1.762647				15929-1.RAW			52.4640862 - 6		0 psample10	a	1
1608981-04-	B15		1.6796	0.078356	0.121879673	0.160353				15930-1.RAW			48.5756155 1		0 psample10	сı ст	1
1608981-05-	816		1.6796	0.067074	0.112547573	0.100519				15932-1.RAW		20.9004261			0 psample10	OK	1
1608981-06 ~	817		1.6796	0.046129	0.057940337					15933-1.RAW		23.6648437			0 psample10	CT	1
1608981-07*	B18		1.6796	0.052763	0.100992517					15934-1.RAW			11.5893466 -		0 psample10	cr	1
1608981-08 -	B19		1.6796	0.051304	0.023782711					15935-1.RAW			19.1796165 - 4		0 psample10	OK	1
1608981-09	820		1.6796	0.046028	0.04199891 0.009927142	0.111541				15936-1.RAW		20.0300411			0 psample10	OK	1
1608981-10	821		1.6796	0.045833						15937-1.RAW		22.3715076			0 psample10	ÖK	1
1608981-11~	C1		1.6796 1.6796	0.049659 0.636155	0.146017432 0.740659605			148.32		15938-1.RAW		333.018365			0 psample10	ст	1
SEQ-CCV5 -	C2			0.042319	0.001581325	0.082736		0.00		15939-1.RAW			2.50326705- 4		0 psample10	OK	1
SEQ-CCB4-	C3		1.6796 1.6796	1.455898	0.488434625	0.487325		97.81		15940-1.RAW		759.978371	256.07893 • 2		0 psample10	CT	1
SEQ-CCV6	C4 C5		1.6796	1.455898	0.499703303	0.461682		100.06		15941-1.RAW		640.860439			0 psample10	α	1
SEQ-CCV7+ SEQ-CCB5 -	C6		1.6796		0.00135033			0.00		15942-1.RAW	14:58:41		2.38295455 + 3		0 psample10	OK	1
Sey cost																	

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MethylMercury	Operat: RN	BlankS	1.6796	Calib Eqn:	Conc = (Area-1.680) /	520.846	Run Date: ##				~							
EPA1630	Workst MHg27				OK,1 Warnings		Run Time: 1			22.12500200	~							
	Methoc 2010-0		0.9997	R2:	0.999354403		CalibAnaly Mei	٩g	CF SD: CF RSD%:	22.1259029/ 4.24806890								
Consula (2D) (2000)	Descrip MHg27			Concilion(o	ConcMeHg(ppt)	ConcHalla	ConcPrHg(r Rec	06		RawData	RunEnd		PeakHoft (Ray	PeakMeHin (R	PeakHo2/Raw P	PeakPrHg(Ray Control (etf)	Flags	RanCount
Sample/ID Clean	Cocanos Kinise	- Daiute	Didiini 🖓	CUNCINGO(D)	0.001199342					15891-1.RAW		5:29:04		0.62467262		0 cleandry	OK	1
WS	A1		1.6796	0.04614	0.00271966					15892-1.RAW				3.09616477		0 psample10	CT	1
SEQ-IBL1	A2	1	1.0790		0.00322483	0.053165				15893-1.RAW		5:50:05		1.67964015		0 psample10	CT	1
SEQ-CAL1	A2 A3	1	1.6796		0.047602557			95.21		15894-1.RAW		6:00:36				0 psample10	CT	1
SEQ-CAL2	A3 A4		1.6796		0.211165898	0.073876		05.58		15895-1.RAW		6:11:07			40.1577888	0 psample10	ά	1
SEQ-CAL3	A5		1.6796		0.97756487	0.069365		7.76		15896-1.RAW		6:21:37			37.808286	0 psample10	СТ	1
SEQ-CAL4	A6		1.6796		1.965704571			98.29		15897-1.RAW		6:32:08			43.4648674	0 psample10	CT	1
SEQ-CAL5	A7		1.6796		4.126808882			03.17		15898-1.RAW		6:42:39	506.960284	2151.11212	61.0181345	0 psample10	CT .	1
SEQ-ICV1	AB		1.6796		0.556339865	0.411814		11.41		15899-1.RAW		6:53:09	887.29277	291.447112	216.171591	0 psample10	CT	1
SEQ-ICB1	A9		1.6796		0.0114404	0.054508		0.00		15900-1.RAW		7:03:40	81.4946496	7.6383286	30.0701705	0 psample10	ĊT	1
F609484-BLK1	A10		1.6796		0.006971874					15901-1.RAW		7:14:12	63.6035654	4.58465909	35.9910038	0 psample10	ст	1
F609484-BLK2	A11		1.6796		0.006256096	0.075083				15902-1.RAW		7:24:43	63.3705729	4.28641098	32.9651042	0 psample10	ОK	1
	A12		1.6796		0.003082311					15903-1.RAW		7:35:14	47.981179	2.9639678	29.2043087	0 psample10	CT	1
F609484-BS1	A13		1.6796		1.006190711					15904-1.RAW		7:45:44	50.7969223	420.93608	30.8147727	0 psample10	CT	1
	A14		1.6796		1.053696418					15905-1.RAW		7:56:15	53.4457386	440.730611	41.6486269	0 psample10	a	1
	A15		1.6796		0.053302098	0.086069			:	15906-1.RAW		8:06:46	34.4444839	23.8893939	37.5425663	0 psample10	OK	1
F609484-MS1	A16		1.6796		1.146540328	0.106502	1	08.85	:	15907-1.RAW		8:17:17	66.0266098	479.416525	46.0564394	0 psample10	CT	1
	A17		1.6796		1.150979651	0.156662			:	15908-1.RAW		8:27:47	104.821527	481.266288	66.956918	0 psample10	СТ	1
F609484-MS2	A18		1.6796		1.010945822	0.09907	3	82.08	:	15909-1.RAW		8:38:18	54.1464015	422.917424	42.9600142	0 psample10	CT	1
F609484-MSD2	A19	1.25	1.6796	0.10961	0.957431115	0.089463			1	15910-1.RAW		8:48:49	47.3516572	400.619081	38.9566103	0 psample10	CT	1
SEQ-CCV1	A20	1	1.6796	0.709437	0.641757128	0.542363	1	28.51	1	15911-1.RAW		8:59:20	371.187252	335.936364	284.167472	0 psample10	CT	1
SEO-CCB1	A21	1	1.6796	0.073514	0.005472684	0.06239		0.00	1	15912-1.RAW		9:09:50	39.9691525	4.53006629	44.5922348	0 psample10	CT	1
1608741-01	B1	1.25	1.6796	0.075074	0.053625784	0.085015			i	15913-1.RAW		9:20:21		24.0242661		0 psample10	OK	1
1608741-02	B2	1.25	1.6796	0.074009	0.052084401	0.091326			1	15914-1.RAW		9:30:52		23.3820076		0 psample10	¢Τ	1
1608741-03	B3	1.25	1.6796	0.060744	0.046673455	0.09374			i	15915-1.RAW		9:41:23		21.1273911		0 psample10	ОК	1
1608742-01	B4	1.25	1.6796	0.087165	0.108712327	0.145592				15916-1.RAW		9:51:53		46.9775568		0 psample10	ОК	1
1608742-03	B5	1.25	1.6796	0.112252	0.120324996	0.150861			1	15917-1.RAW		10:02:24		51.8162879		0 psample10	a	1
1608742-04	B6	1.25	1.6796	0.076194	0.125217489	0.137316				15918-1.RAW				53.8548769		0 psample10	ОК	1
1608742-05	B 7	1.25	1.6796		0.121945297	0.120915				15919-1.RAW				52.4914299		0 psample10	CT	1
1608742-07	B8	1.25	1.6796		0.192726056	0.137752				15920-1.RAW		10:33:56				0 psample10	OK	1
1608742-08	89	1.25	1.6796		0.054338039	0.086515				5921-1.RAW		10:44:27		24.3210464		0 psample10	ст	1
1608981-01	B10		1.6796		0.014129255	0.100616				15922-1.RAW				7.56697443		0 psample10	a	1
SEQ-CCV2	811		1.6796		0.676183645	0.594188		35.40		15923-1.RAW		11:05:28		353.867282		0 psampie10	CT CT	1
SEQ-CCB2	812		1.6796		0.000246903	0.064648		0.00		15924-1.RAW		11:15:59			35.35116	0 psample10	ст ст	1
SEQ-CCV3	C4		1.6796		0.534382223	0.434219		07.01		5925-1.RAW				280.010559		0 psample10	a	1
SEQ-CCV4	C5		1.6796		0.48995577	0.401647		8.11		15926-1.RAW		12:10:28		256.871212		0 psample10	OK	1
SEQ-CCB3	C6		1.6796		0.001947816	0.06168		0.00		5927-1.RAW		12:20:59		2.69415246 1.91581439		0 psample10 0 psample10	CT CT	1
1608981-02	B13		1.6796		0.000566804	0.182861				15928-1.RAW		12:31:30		130.785133		0 psample10	ជ	1
1608981-03	B14		1.6796		0.309845562	1.762647				15929-1.RAW				52.4640862		0 psample10	cr	1
1608981-04	815		1.6796		0.121879673	0.160353				15930-1.RAW				48.5756155		0 psample10	CT .	1
1608981-05	B16		1.6796		0.112547573	0.413974				5931-1.RAW		13:13:33		25.8220407		0 psample10	ок	1
1608981-06	817		1.6796		0.057940337	0.100519				15932-1.RAW		13:24:03			72.453267	0 psampie10	ст	1
1608981-07	B18	1.25			0.101382052	0.169853				5933-1.RAW		13:34:34			54.6357008	0 psampie10	CT .	1
1608981-08	B19		1.6796		0.023782711	0.127091				15935-1.RAW		13:45:05		19.1796165	47.7488636	0 psample10	OK	1
1608981-09	B20		1.6796		0.04199891	0.110563				15935-1.RAW		13:55:36		6.26714015		0 psample10	OK	1
1608981-10	B21	1.25		0.045833	0.011009729 0.146017432	0.12149				5930-1.RAW		14:06:06			81.567661	0 psample10	OK	1
1608981-11	C1		1.6796		0.740659605	0.696089	1.	48.32		5938-1.RAW		14:16:37				0 psample10	ά.	1
SEQ-CCV5	C2 C3		1.6796		0.001517417	0.082736		0.00		5939-1.RAW		4:27:08				0 psample10	ок	1
SEQ-CCB4	C4		1.6796		0.488434625	0.487325		7.81		5940-1.RAW		4:37:39	759.649376		255.500784	0 psample10	ст	1
SEQ-CCV6 SEQ-CCV7	C5		1.6796	1.455266	0.499703303	0.461682		00.06		5941-1.RAW		4:48:10				0 psample10	CT	1
-	C6			0.078801	0.00135033			0.00		5942-1.RAW				2.38295455		0 psampie10	ок	1
SEQ-CCB5		1	1.0730	0.070001	0.0010000	0.0100000			-		-							

Failing Data Report - 6I23010

Sample ID	Analysis	Result	MRL	Dup Result	Source Result		Units	% Rec.	Rec. LCL	Rec. UCL	RPD	RPD Limit	Over Cal	Failure	Qualifier
6123010-CCV2	MHg-CVAFS-W-Dist	0.676	0.045			0.50049	ng/L	135	67.00	133.00			PASS-OVER	FAIL-CCV	PNR
6123010-CCV5	MHg-CVAFS-W-Dist	0.741	0.045			0.50049	ng/l.	148	67.00	133.00			PASS-OVER	FAIL-CCV	DNR

Analyst Reviewed By NL

9/23/16 Date

Peer Reviewed By

9-23.16 Date

ANALYSIS SEQUENCE

6123010

Instrument: Hg2700-1

Calibration ID: UNASSIGNED

Calibration ID: U	NASSIGNED			r	Analyzed: 9/23/2016
Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
6123010-IBL1	QC	1	· · · · ·		
6123010-CAL1	QC	2	1604163		
6123010-CAL2	QC	3	1604164		
6123010-CAL3	QC	4	1604165		
6l23010-CAL4	QC	5	1604166		
6I23010-CAL5	QC	6	1604167		
6123010-1CV1	QC	7	1605079		
6123010-ICB1	QC	8			
F609484-BLK1	QC	9			
F609484-BLK2	QC	10			ni de antige a spille spil
F609484-BLK3	QC	11			
F609484-BS1	QC	12			
F609484-BSD1	QC	13	1		
F609484-DUP1	QC	14			
F609484-MS1	QC	15			
F609484-MSD1	QC	16			
F609484-MS2	QC	17			
F609484-MSD2	QC	18			· · · · · · · · · · · · · · · · · · ·
6I23010-CCV1	QC	19	1605079		
6l23010-CCB1	QC	20			
1608741-01	MHg-CVAFS-W-Dist	21			Scan all data for level IV report
1608741-02	MHg-CVAFS-W-Dist	22			Scan all data for level IV report
1608741-03	MHg-CVAFS-W-Dist	23			Sean all data for level IV report
1608742-01	MHg-CVAFS-W-Dist	24		<u> </u>	Scan all data for level IV report
1608742-03	MHg-CVAFS-W-Dist	25			Scan all data for level IV report
1608742-04	MHg-CVAFS-W-Dist	26			Scan all data for level IV report
1608742-05	MHg-CVAFS-W-Dist	27			Scan all data for level IV report
1608742-07	MHg-CVAFS-W-Dist	28			Scan all data for level IV report
1608742-08	MHg-CVAFS-W-Dist	29			Sean all data for level IV report
1608981-01	MHg-CVAFS-W-Dist	30			Scan all data - Level IV
6123010-CCV2	QC	31	1605079		······································
6I23010-CCB2	QC	32			
6123010-CCV3	QC	33	1605079		Anna ann an Ann
6l23010-CCV4	QC	34	1605079		
6I23010-CCB3	QC	35			

Due Date: 9/22/2016

Page 1 of 2 Page 87 of 264

ANALYSIS SEQUENCE

6I23010

Instrument: Hg2700-1

Calibration ID: UNASSIGNED

Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
1608981-02	MHg-CVAFS-W-Dist	36			Scan all data - Level IV
1608981-03	MHg-CVAFS-W-Dist	37			Scan all data - Level IV
1608981-04	MHg-CVAFS-W-Dist	38			Scan all data - Level IV
1608981-05	MHg-CVAFS-W-Dist	39			Scan all data - Level IV
1608981-06	MHg-CVAFS-W-Dist	40			Scan all data - Level IV
1608981-07	MHg-CVAFS-W-Dist	41			Scan all data - Level IV
1608981-08	MHg-CVAFS-W-Dist	42			Scan all data - Level IV
1608981-09	MHg-CVAFS-W-Dist	43			Scan all data - Level IV
1608981-10	MHg-CVAFS-W-Dist	44			Scan all data - Level IV
1608981-11	MHg-CVAFS-W-Dist	45			Scan all data - Level IV
6123010-CCV5	QC	46	1605079		
6123010-ССВ4	QC	47			
6l23010-CCV6	QC	48	1605079		
6123010-CCV7	QC	49	1605079		
6I23010-CCB5	QC	50	İ.		

Samples Logded By Date Date Data Processed By Date

Analyzed: 9/23/2016

F609484

Eurofins Frontier Global Sciences, Inc.

Matrix: Water

Prepared using: Hg Aquatic/Solids - EFGS-013 Methyl Hg Distillation for Water

Prepared: 9/22/2016

Lab Number	Sample ID and Source Sample	Initial (mL)	Final (mL)	Spike1 ID	µl Spikeł	Spike2 1D	μl Spike2	Extraction Comments
F609484-BLK1	Blank	45	40					
F609484-BLK2	Blank	45	40					
F609484-BLK3	Blank	45	40					
F609484-BS1	Blank Spike	45	40	1603908	45			
F609484-BSD1	Blank Spike Dup	45	40	1603908	45			
F609484-DUP1	Duplicate [1608741-01]	45	40					
F609484-MS1	Matrix Spike [1608742-05]	45	40	1603908	45			
F609484-MS2	Matrix Spike [1608981-01]	45	40	1603908	45			
F609484-MSD1	Matrix Spike Dup [1608742-05]	45	40	1603908	45			
F609484-MSD2	Matrix Spike Dup [1608981-01]	45	40	1603908	45			

Standard ID(s): 1603908

Description: MHg New Primary 1.0 ng/mŁ CAL Expiration: 19-Oct-16 00:00

Reagent ID(s):	Description:	Expiration:
1604614	Acetate Buffer	15-Feb-17 00:00
1605166	Ethylating Agent (For Methyl Mercury Analysis)	05-Mar-17 00:00
1605512	APDC	21-Mar-17 00:00
1605513	0.5% Distillation Dilute (Made Daily)	
1605520	2.5% Ascorbic Acid	30-Sep-16 00:00

F609484

Eurofins Frontier Global Sciences, Inc.

Matrix: Water

Prepared using: Hg Aquatic/Solids - EFGS-013 Methyl Hg Distillation for Water

Prepared: 9/22/2016

Lab Number	Sample ID	Initial (mL)	Final (ml.)	QC Sample	Sample Specs.	Raw Data	Sample Comments	Analysis Comments
1608741-01	OL-2446-01	45	40	-	-	-	Scan all data for level IV report	
1608741-02	OL-2446-02	45	40	-	-	-	Scan all data for level IV report	
1608741-03	OL-2446-03	45	40	-	-	-	Scan all data for level IV report	
1608742-01	OL-2453-01	45	40	-	-	-	Scan all data for level IV report	
1608742-03	OL-2453-02	45	40	~	-	-	Scan all data for level IV report	
1608742-04	OL-2453-03	45	40	-	-	-	Scan all data for level IV report	
1608742-05	OL-2453-04	45	40	-	-	-	Scan all data for level IV report	
1608742-07	OL-2453-05	45	40	-	-	-	Scan all data for level IV report	
1608742-08	OL-2453-06	45	40	-	-	-	Scan all data for level IV report	
1608981-01	EB_083016_SW_QC	45	40	-	-	-	Scan all data - Level IV	
1608981-02	EB_083016_SW_QC Dissolved	45	40	-	-	-	Scan all data - Level IV	
1608981-03	WQ_1b-c_083016_SW_10	45	40	-	-	-	Scan all data - Level IV	
1608981-04	WQ_1b-c_083016_SW_10 Dissolved	45	40	-	-	-	Scan all data - Level IV	
1608981-05	WQ-2-C_083016_SW_10	45	40	-	-	-	Scan all data - Level IV	
1608981-06	WQ-2-C_083016_SW_10 Dissolved	45	40	-	-	-	Scan all data - Level IV	
1608981-07	WQ-3-1_083016_SW_10	45	40	-	-	-	Scan all data - Level IV	
1608981-08	WQ-3-L_083016_SW_10 Dissolved	45	40	-	-	-	Scan all data - Level IV	
8981-09 98981-10	WQ_FPT_083016_SW_10	45	40	-	-	•	Scan all data - Level IV	
0 981-10	WQ_FPT_083016_SW_10 Dissolved	45	40	-	-	-	Scan all data - Level IV	
of 26								

² e Date: 9/22/2016

F609484

Eurofins Frontier Global Sciences, Inc.

Matrix: Water

Prepared using: Hg Aquatic/Solids - EFGS-013 Methyl Hg Distillation for Water

Prepared: 9/22/2016

1608981-11	WQ-ECH_082916_SW_10	45	40	I -	-	-	Scan all data - Level IV	
			1	.	1		4	.

A 27001 9/23/16

F609484

Eurofins Frontier Global Sciences, Inc.

Matrix: Water

Prepared using: Hg Aquatic/Solids - EFGS-013 Methyl Hg Distillation for Water

Prepared: 9/22/2016

Lab Number	Sample ID and Source Sample	Initial (mL)	Final (mL)	Spikel ID	µl Spike1	Spike2 ID	μl Spike2	Extraction Comments
F609484-BLK1	Blank	45	40					1.250
F609484-BLK2	Blank	45	40		······································			1.25x
F609484-BLK3	Blank	45	40					1.25x
F609484-BS1	Blank Spike	45	40	1603908	45			1.252
F609484-BSD1	Blank Spike Dup	45	40	1603908	45			1.25.
F609484-DUP1	Duplicate [1608741-01]	45	40					1.25.
F609484-MS1	Matrix Spike [1608742-05]	45	40	1603908	45			1.25.
F609484-MS2	Matrix Spike [1608981-01]	45	40	1603908	45			1.25x
F609484-MSD1	Matrix Spike Dup [1608742-05]	45	40	1603908	45			1.25~
F609484-MSD2	Matrix Spike Dup [1608981-01]	45	40	1603908	45			1,255

Standard ID(s): 1603908

Description:

MHg New Primary 1.0 ng/mL CAL

Expiration: 19-Oct-16 00:00 Reagent ID(s): 1605512

1605513

Description: APDC 0.5% Distillation Dilute (Made Daily)

Expiration: 21-Mar-17 00:00

1604166 5166 Mg/23/16 1604614

1605520

F609484

Eurofins Frontier Global Sciences, Inc.

Matrix: Water

Prepared using: Hg Aquatic/Solids - EFGS-013 Methyl Hg Distillation for Water

Prepared: 9/22/2016

Lab Number	Sample ID	Initial (mL)	Final (mL)	QC Sample	Sample Specs.	Raw Data	Sample Comments	Analysis Comments
1608741-01	OL-2446-01	45	40	-	-	-	Scan all data for level IV report	1.25.
1608741-02	OL-2446-02	45	40	-	-	-	Scan all data for level IV report	1.25~
1608741-03	OL-2446-03	45	40	-	-	-	Scan all data for level IV report	1.252
608742-01	OL-2453-01	45	40	-	-	-	Scan all data for level IV report	1.25.
608742-03	OL-2453-02	45	40	-	-	-	Scan all data for level IV report	1.254
608742-04	OL-2453-03	45	40	-	-	-	Scan all data for level IV report	1.252
608742-05	OL-2453-04	45	40	-	-	-	Scan all data for level IV report	1.25.
608742-07	OL-2453-05	45	40	-	-	-	Scan all data for level IV report	1.25x
608742-08	OL-2453-06	45	40	-	-	-	Scan all data for level IV report	1.25x
608981-01	EB_083016_SW_QC	45	40	-	-	-	Scan all data - Level IV	1.25×
608981-02	EB_083016_SW_QC Dissolved	45	40	-	-	-	Scan all data - Level IV	1.25.
608981-03	WQ_1b-c_083016_SW_10	45	40	-	-	-	Scan all data - Level IV	1.25.
608981-04	WQ_1b-c_083016_SW_10 Dissolved	45	40	- 1	-	-	Scan all data - Level IV	1.254
608981-05	WQ-2-C_083016_SW_10	45	40	-	-	-	Scan all data - Level IV	1.25.
608981-06	WQ-2-C_083016_SW_10 Dissolved	45	40	-	-	-	Scan all data - Level IV	1.25*
608981-07	WQ-3-L_083016_SW_10	45	40	-	-		Scan all data - Level IV	1.25x
508981-08	WQ-3-L_083016_SW_10 Dissolved	45	40	-	-	-	Scan all data - Level IV	1.25x
Pa 981-09	WQ_FPT_083016_SW_10	45	40	-	•	-	Scan all data - Level IV	1.254
o 93 981-10 0	WQ_FPT_083016_SW_10 Dissolved	45	40	-	-	-	Scan all data - Level IV	1.252

I [₽]e Date: 9/22/2016

F609484

Eurofins Frontier Global Sciences, Inc.

Matrix: Water	Prepared using: I	Prepared using: Hg Aquatic/Solids - EFGS-013 Methyl Hg Distillation for Water									
1608981-11	WQ-ECH_082916_SW_10	45	40	-	-	-	Scan all data - Level IV	1.25x			



Methyl Mercury Distillations (EPA 1630)

Date: $\frac{9/22/16}{1608742}$ Batch #: $\frac{F609484}{1608742}$ Sample Matrix: Water Name: Duft WO#: 6

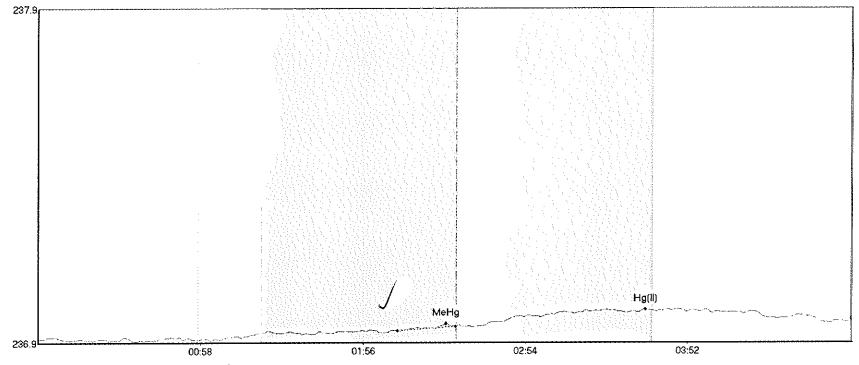
The pH of the preserved sample must be documented before an aliquot is removed for preparation.

Digest #	Sample ID N	lumber	Preserved pH	Sample Size (mL)	Final pH (23)	
BUKI	F609484 B	SanK/	1.0	45	3.0	
BlK2		Slank 2	1-0	45	3.0	Spike ID: 1603908
Blk3		Blank]	1.0	45	30	Spike Amount: 45 µL
1351	F609484	BSI	1.0	45	3.0	Spike Witness: <u> </u>
BSP	F609484	BSDI	1.0	45	3.0	Balance #: 2-
Dup	F609484	pup/	1-2	45		Calibrated? Pres 🗌 No
MSI	F609484	MST	ĺΨ	45	3.0	
Hsn1	F669484	HIGH	$ \mathcal{N} $	45	3.0	Pipette #: <u>C.1/7087</u> Cal. Date: <u>9/21/16</u>
MSZ	F609484	MS2	1-0	45	4.0	cui. Dute
MS02	F609484	H502	100	45		Pipette #: <u>N27707</u>
	1608741-0	0 B	100	45	3.0	Cal. Date: <u>9/22/16</u>
2	1608741-	-02 B	1-0	45	7.0	Pipette #: <u> </u>
3	1608741.	-03 B	1.0	45	4.0	Cal. Date: <u>9/22/16</u>
4		-01 B	1.0	45	400	
5		-02 A	1.0	-45-		APDC ID: 1605512
5 192	<u>4 1608742</u>	-03 B	1-0	45	3-0	HCI ID: <u>/6055/3</u>
67	1608742	-04 B	1.0	45	3.0	Temperature: No set range as
78.	1608742	-OS B	1-0	45	3.0	the temp. may be changed to
84	1608742	-07 B	100	45	3.0	keep flow rate of ≥10 mL per
9 ip	1608742	-08 B	1-0	45	4.0	hour. Temperature is recorded
101	1608981 -	-0 B	1.0	45	£.0	for informational purposes only.
1112	164981	-02 B	1-0	45	5.0	Unit 1: 20.7
1217	160898	-03 B	1-0	45	5.0	Unit 2: <u>122</u>
131F	60898	-04 B	1.0	45	5.0	Unit 3: 1 20.2
14 15	1668981	-05 B	1-0	45	4-0	Unit 4: <u>120,3</u>
1516	1608981	-06	1.0	45	3.0	Unit 5: (22.
1617	1608981	-07	1-0	45	4.0	(2.1
1718	1608981	_08	100	45	4.0	Unit 6:(<i>UL</i> •
1819	1608981	-09	1-0	45	3.0	
19200	1608981	-10	100	45	4.5	Comments:
20	1608981	-11	1.0	45	4.0	1608741-01B
	1	·····	- [2			Dupl, source 1608741-018 MSI, MSDI 1608742-05B
						MSZ HSDL 1608981-01B
				9(22/16	618	1608981-013
\leq					<u>!</u>	

EFGS / Methyl Mercury Distillations / LOG-PR-029.03 / Effective: Aug. 4, 2014 / QA2016-036 Venfield

verfied AMB 9/22/1 Page 95 of 264 AD readings, mV

#1: Clean

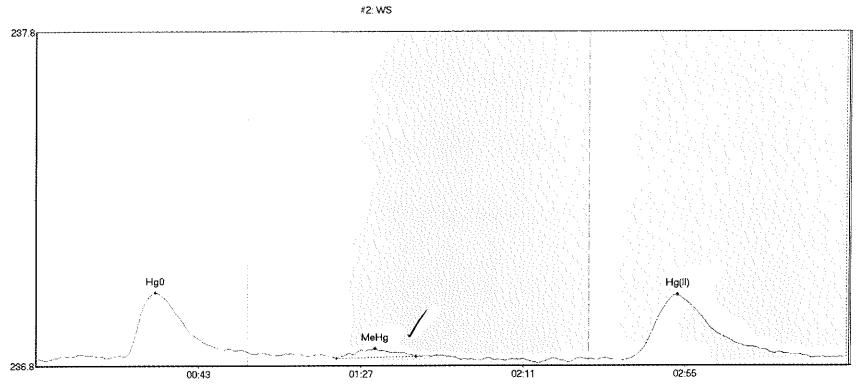


CVAFS Detector (mV) Extra Peaks MainPeak baseline

ALL CHROMATOGRAMS REVIEWED 9.23.16 DWW

Name Area Start Time EndTime StartValue EndValue Peak Max Peak Clean MeHg 0.625 128.7 149.8 236.95 236.96 146.3 0.022 Clean Hg(II) 6.553 159.4 219.0 236.97 237.01 217.7 0.049	021 OK 236.9261 0.00 0.05 016
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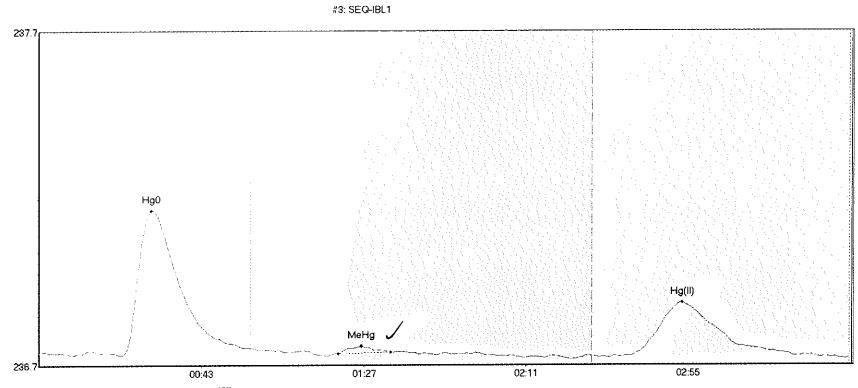
AD readings, mV



CVAFS Detector (mV)	Extra Peaks	MainPeak baseline
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Page 97	Name WS Hgû WS MeHg WS Hg(II)	Area 25.712 3.096 35.817	Start Time 19.3 81.5 159.3	EndTime 57.5 103.0 210.4	StartValue 236.84 236.83 236.83	EndValue 236.85 236.84 236.84	Peak Max 32.3 91.9 174.1	PeakHeight 0.197 0.029 0.195	Flags CT OK OK	Baseline 236.8326 236.8326 236.8326	B1Dev 0.00 0.00 0.00	BlShift 0.01 0.01 0.01 0.01	Comment	016
7 of 264														

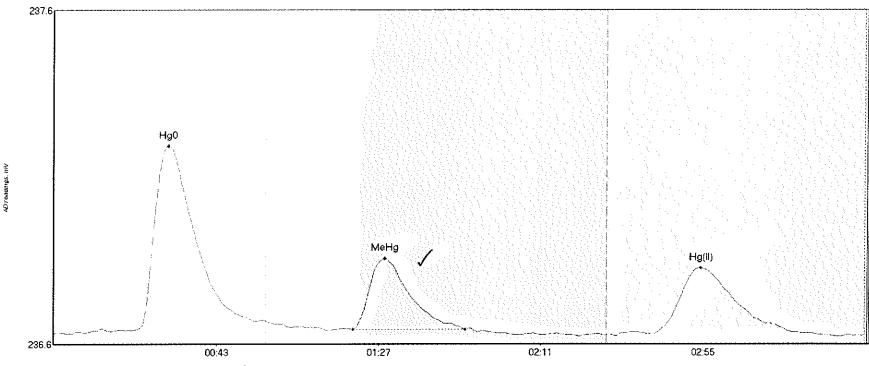
Vin senies. W



CVAFS Detector (mV) * Extra	Peaks 🔝 MainPeak baseline
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Name SEQ-IBL1 Hg0 SEQ-IBL1 MeH SEQ-IBL1 Hg(g 1.680	Start Time 22.2 81.0 160.2	e EndTime 57.5 95.3 204.5	StartValı 236.75 236.75 236.75	ue EndValue 236.77 236.76 236.75	Peak Max 30.5 87.3 174.4	PeakHeig 0.433 0.022 0.159	ht Flags CT OK OK	Baseline 236.7589 236.7589 236.7589	0.00	BlShift -0.02 -0.02 -0.02	Comment	016
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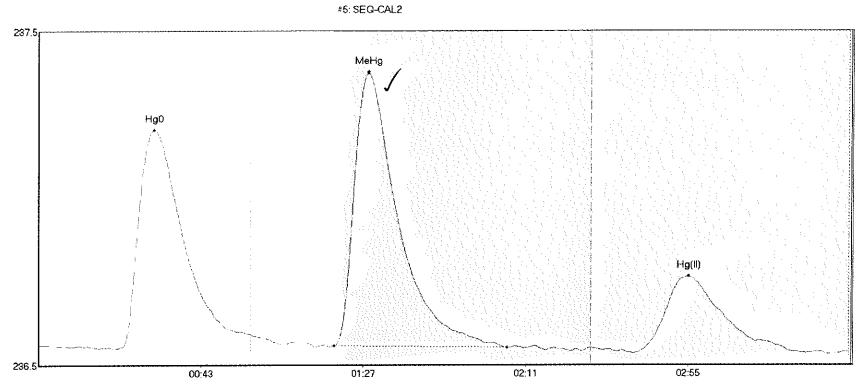




CVAFS Detector (mV)	Extra Peaks	MainPeak baseline
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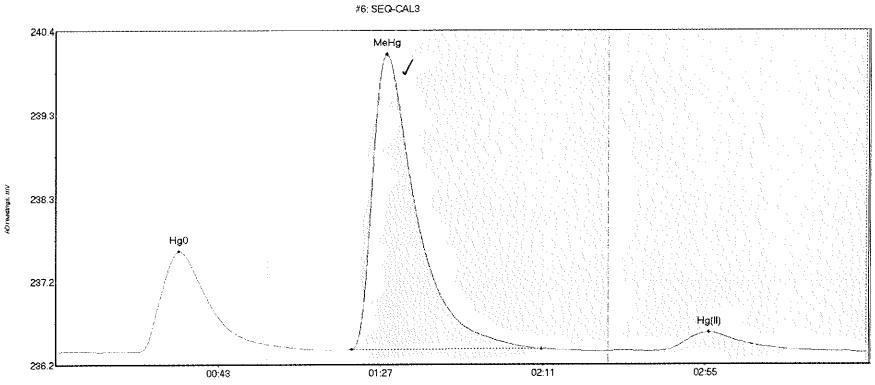
Pan	Name SEQ-CAL1 Hg0 SEQ-CAL1 MeHg SEQ-CAL1 Hg(l1)		81.2	EndTime 57.5 111.5 206.3		EndValue 236.67 236.65 236.64	Peak Max 30.9 89.8 175.4	0.558 0.212	Flags CT OK OK	Baseline 236.6397 236.6397 236.6397	0.00 0.00	BlShift -0.01 -0.01 -0.01	Comment	016
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AD readings, mV



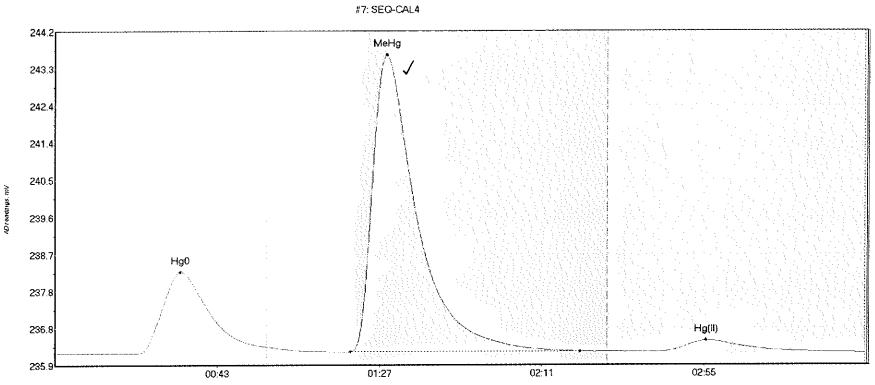
CVAFS Detector	(mV) Extra Peaks	MainPeak baseline

Name SEQ-CAL2 Hg0 SEQ-CAL2 MeHg SEQ-CAL2 Hg(1	111.665	21.5	ne EndTime 57.5 127.0 204.8	StartVal 236.51 236.52 236.50	ue EndValue 236.55 236.51 236.50	Peak Max 31.4 89.4 176.2	PeakHeig 0.654 0.817 0.230	ht Flags CT OK OK	Baseline 236.5198 236.5198 236.5198	0.00 0.00	B1Shift -0.02 -0.02 -0.02	Comment.	016
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CVAFS Detector (mV)	🗄 Extra Peaks 🔄 MainPeak baseline
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Name SEQ-CAL3 Hg0 SEQ-CAL3 MeHg SEQ-CAL3 Hg(1)		Start Time 22.3 80.1 161.6	EndTime 57.5 131.6 202.8	StartValu 236.37 236.39 236.37	e EndValue 236.45 236.40 236.38	Peak Max 33.5 89.7 177.0	PeakHeigh 1.258 3.705 0.235	t Flags CT OK OK	Baseline 236.3655 236.3655 236.3655	0.00 0.00	BlShift -0.01 -0.01 -0.01	Comment	016
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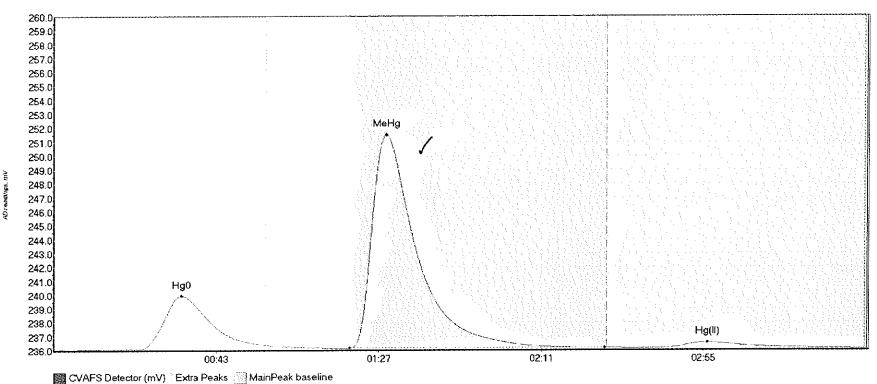


CVAFS Detector (mV) Extra Peaks MainPeak baselin	Image: CVAES Detector	(mV)	Extra Peaks	MainPeak baseline
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Ċ	Page 102 of 264	Name SEQ-CAL4 Hg0 SEQ-CAL4 MeHg SEQ-CAL4 Hg(II)	Area 270.134 1025.509 43.469	Start Time 22.5 80.1 163.8	EndTime 57.5 142.5 201.5	StartValue 236.22 236.25 236.25	EndValue 236.37 236.26 236.26	Peak Max 34.2 90.0 176.6	PeakHeight 2.024 7.365 0.278	Flags CT OK OK	Baseline 236.2269 236.2269 236.2269	BlDev 0.00 0.00 0.00	BlShift 0.00 0.00 0.00	Comment	016
	264														

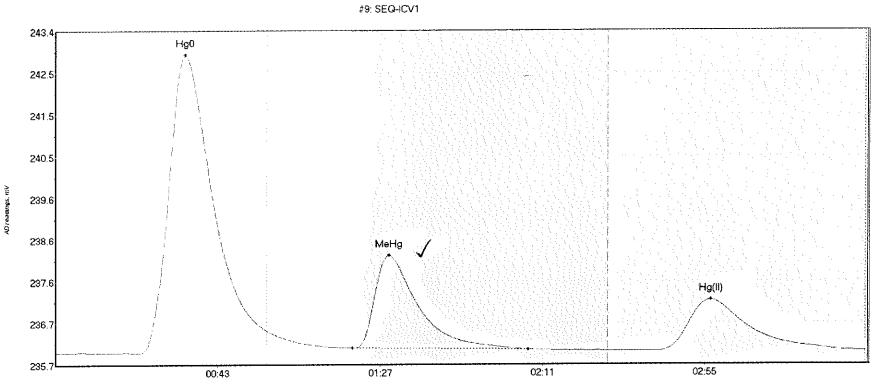


#8: SEQ-CAL5



Name SEQ-CAL5 Hg0 SEQ-CAL5 MeHg SEQ-CAL5 Hg(II)		Start Time 22.0 80.1 163.2	EndTime 57.5 149.3 201.9	StartValue 236.09 236.16 236.16	EndValue 236.38 236.19 236.18	Peak Max 34.7 90.1 177.2	PeakHeight 3.842 15.351 0.386	Flags CT OK OK	Baseline 236.0946 236.0946 236.0946	BlDev C.00 O.00 C.00	BlShift 0.04 0.04 0.04	Comment) 16
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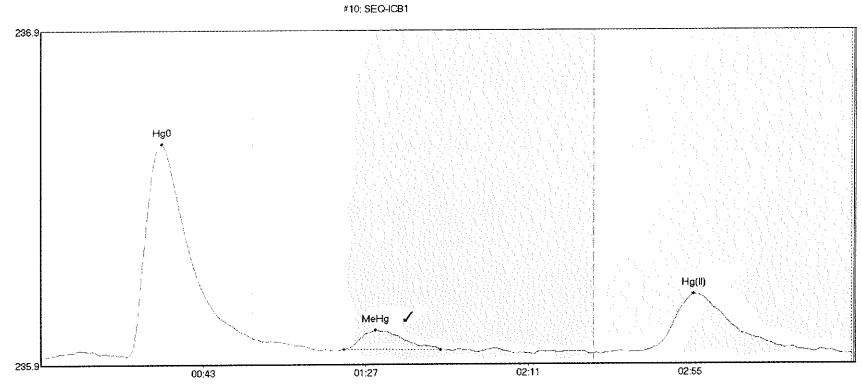




CVAFS Detector (mV) Extra Peaks 🔝 MainPeak baseline

Name SEQ-ICV1 Hg0 SEQ-ICV1 MeHo SEQ-ICV1 Hg(1	887.293 291.447	80.4	EndTime 57.5 128.1 217.7		e EndValue 236.48 236.06 236.03		PeakHeight 6.886 2.144 1.177	Flags CT OK OK	Baseline 235.9884 235.9884 235.9884	0.00 0.00	BlShift 0.04 0.04 0.04 0.04	Comment	016
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AD readings. mV



CVAFS Detector (mV) Extra Peaks 🔝 MainPeak baseline

SEQ-ICB1 Hg0 81.495 23.1 57.5 235.88 SEQ-ICB1 MeHg 7.638 82.2 108.4 235.90	EndValue Peak Max 235.94 32.8 235.90 90.8 235.89 177.0	PeakHeight Flags 0.636 CT 0.058 OK 0.173 OK	Baseline 235.8846 235.8846 235.8846	0.00	BlShift Comment 0.00 0.00 0.00	016
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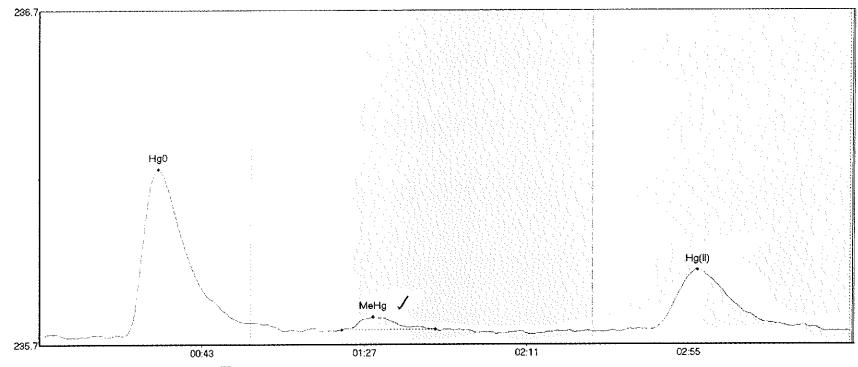


P11: F609484-BLK1

CVAFS Detector (mV) Extra Peaks 🧾 MainPeak baseline

F609484-BLX1 Hg 63.604 18.2 57.5 23 F609484-BLX1 Me 4.585 83.0 104.1 23	StartValue EndValue Peak Max 235.81 235.85 31.7 235.83 235.83 90.8 235.82 235.82 178.5	0.509 CT 235.8108 0.040 OK 235.8108	e BlDev BlShift 18 0.00 0.00 18 0.00 0.00 18 0.00 0.00 18 0.00 0.00	Comment 016
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CVAFS Detector (mV) Extra Peaks MainPeak baseline	CVAFS Detector (m)) Extra Peaks	MainPeak baseline
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222	Name F609484-BLK2 Hg F609484-BLK2 Me F609484-BLK2 Hg	4.286	Start Time 22.7 82.0 157.2	EndTime 56.6 107.5 213.2	StartValue 235.73 235.75 235.75	EndValue 235.77 235.75 235.75	Peak Max 32.1 90.4 178.5	PeakHeight 0.500 0.038 0.185	Flags OK OK OK	Baseline 235.7361 235.7361 235.7361	0.00 0.00	BlShift 0.01 0.01 0.01	Comment	016
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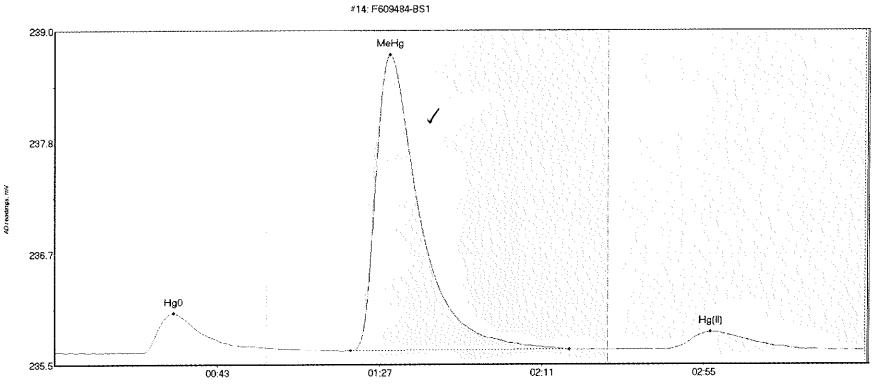
AD readings, mV

AD readings. mV

Hg0 Hg0 Hg0 Hg0 Hg1 U 25.7 U 0.43 U 127 U 21 U 225.7 U 0.21 U 225.7

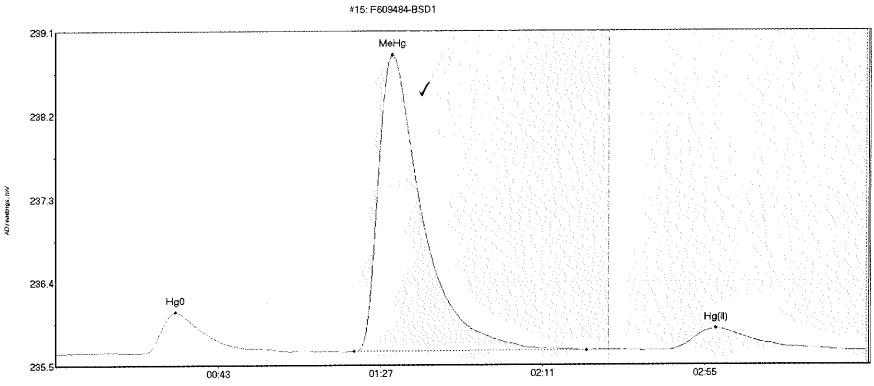
CVAFS Detector (mV) Extra Peaks 🔛 MainPeak baseline

F609484-BLK3 Me 2.964 83.8 100.5 235.71 23	ndValue Feak Max 35.72 32.1 35.71 89.2 35.70 178.6	PeakHeight Flags 0.390 CT 0.027 OK 0.173 OK	235.6851 235.6851	BlDev 0.00 0.00 0.00	BlShift Commer 0.02 0.02 0.02 0.02	1t 016
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CVAFS Detector (mV) Extra Peaks [MainPeak baseline

F6094	Area 4-BS1 Hg0 50.797 4-BS1 MeH 420.936 4-BS1 Hg(30.815	Start Time 23.2 80.1 165.7	EndTime 57.5 139.4 203.1		e EndValue 235.71 235.68 235.69	Peak Max 32.2 90.8 177.9	PeakHeight 0.407 3.034 0.180	Flags CT OK OK	Baseline 235.6619 235.6619 235.6619	0.00 0.00	BlShift 0.02 0.02 0.02	Comment	016
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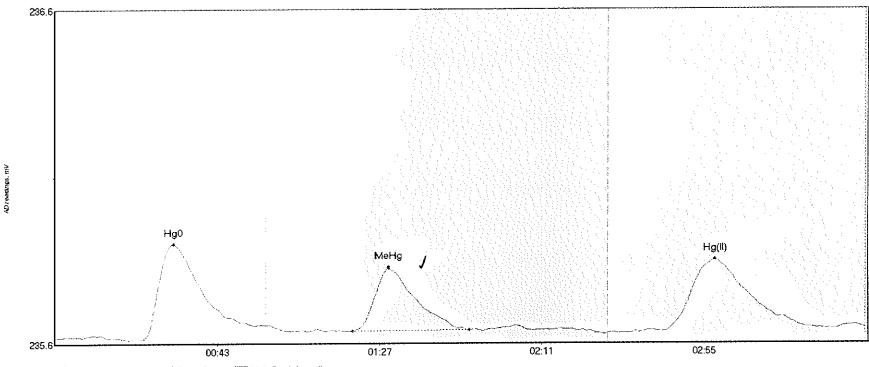


CVAFS Detector (m)	/) Extra Peaks	MainPeak baseline
	j LAudreaka	a main car buotine

F609484	Area -BSD1 Hg 53.446 -BSD1 Me 440.731 -BSD1 Hg 41.649	Start Time 21.3 80.9 165.0	EndTime 57.5 143.9 212.2	StartValue 235.62 235.64 235.65	EndValue 235.66 235.65 235.65	Peak Max 32.4 91.2 179.1	PeakHeight 0.440 3.184 0.232	Flags CT OK OK	Baseline 235.6196 235.6196 235.6196	0.00 0.00	BlShift 0.03 0.03 0.03	Comment	016
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#16: F609484-DUP1

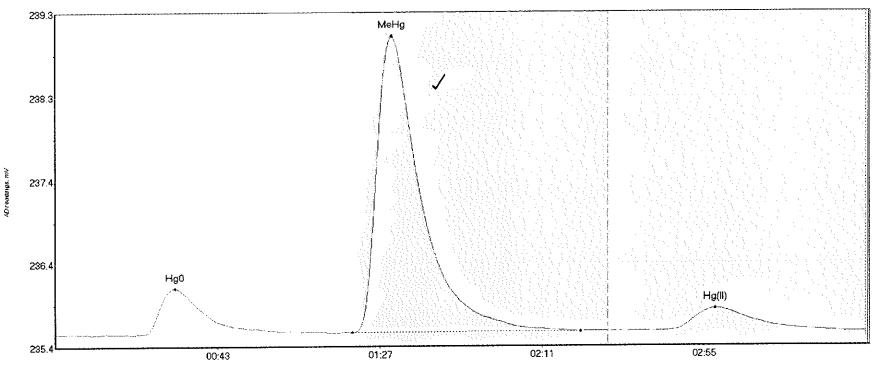


CVAFS Detector (mV) * Extra Peaks 💹 MainPeak baseline

Name F609484-DUP1 H F609484-DUP1 M F609484-DUP1 H	ē 23.889	Start Time 23.4 80.7 164.4	EndTime 54.2 112.4 211.3	StartValue 235.60 235.62 235.62	EndValue 235.64 235.62 235.63	Peak Max 32.1 90.4 179.1	PeakHeight 0.287 0.189 0.216	Flags OK OK OK	Baseline 235.6014 235.6014 235.6014	0.00	BlShift 0.03 0.03 0.03	Comment	316
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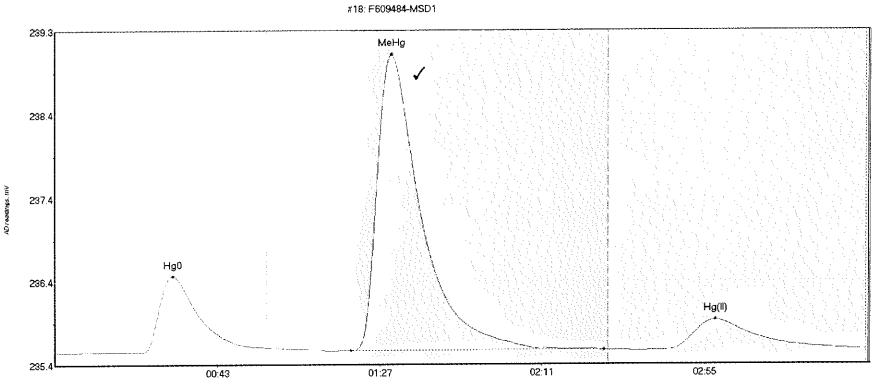
#17: F609484-MS1





👹 CVAFS Detector (mV) 🗄 Extra Peaks 🧾 MainPeak baseline

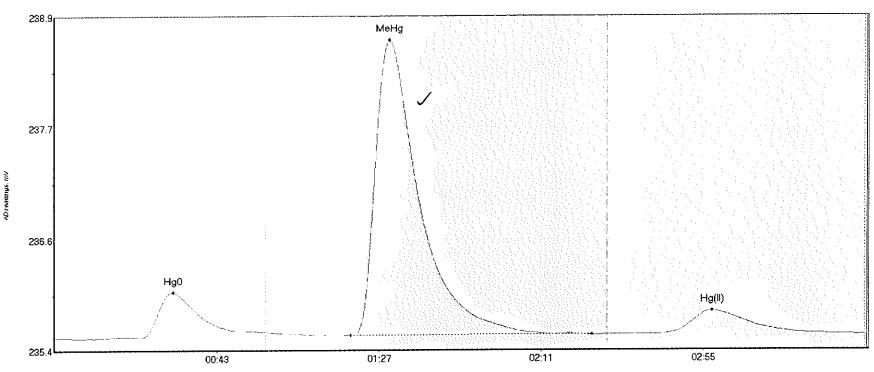
Name F609484-MS1 Hg0 F609484-MS1 MeH F609484-MS1 Hg	H 479.417	Start Time 23.1 80.6 164.8	EndTime 57.5 142.5 211.9	StartValue 235.57 235.69 235.61	e EndValue 235.62 235.60 235.60	Peak Max 32.4 91.1 179.1	PeakHeight 0.538 3.452 0.257	Flags CT OK OK	Baseline 235.5758 235.5758 235.5758	0.00 0.00	B]Shift 0.02 0.02 0.02	Comment	016
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CVAFS Detector (mV) Éxtra Peaks 🔤 MainPeak baseline

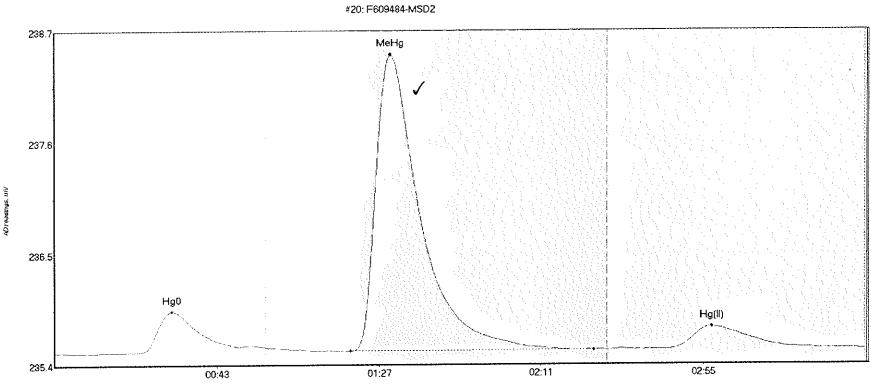
Name F609484-MSD1 H F609484-MSD1 M F609484-MSD1 H	e 481.266	Start Time 23.4 80.2 165.2	EndTime 57.5 148.7 219.8	StartValue 235.57 235.59 235.59	e EndValue 235.62 235.59 235.60	Peak Max 31.8 91.1 179.0	PeakHeight 0.894 3.463 0.352	Flags CT OK CT	Baseline 235.5684 235.5684 235.5684	0.00 0.00	BlShift 0.03 0.03 0.03	Comment	316
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#19: F609484-MS2



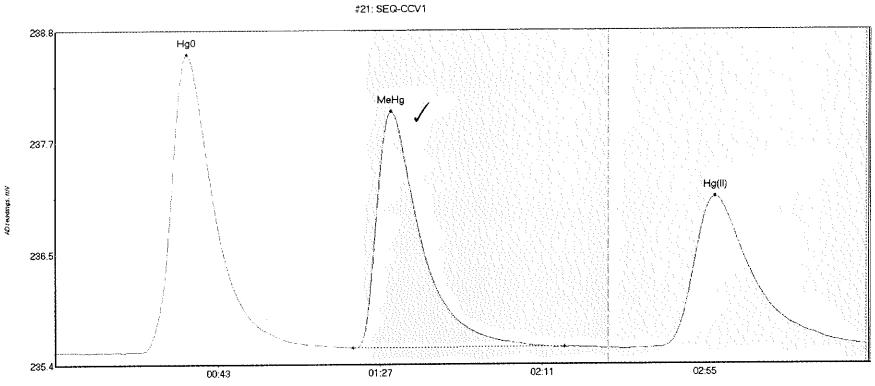
CVAFS Detector (mV)	Extra Peaks	MainPeak baseline
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2000	Name F609484-MS2 Hg0 F609484-MS2 MeH F609484-MS2 Hg(422.917	Start Time 23.4 80.3 163.5	EndTime 57.5 145.8 210.1	StartValu 235.56 235.57 235.58	e EndValue 235.60 235.58 235.58	Peak Max 32.1 90.9 178.5	PeakHeight 0.466 3.060 0.243	Flags CT OK OK	Baseline 235.5519 235.5519 235.5519	0.00	BlShift 0.03 0.03 0.03	Comment	016
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CVAFS Detector (mV) Extra Peaks 🔄 MainPeak baseline

Name F609484-MSD2 Hg F609484-MSD2 Me F609484-MSD2 Hg	400.615	Start Time 23.2 80.3 166.0	EndTime 57.5 146.3 219.8	StartValue 235.54 235.55 235.56	e EndValue 235.59 235.56 235.56	Peak Max 31.8 91.0 178.3	PeakHeight 0.398 2.892 0.217	Flags CT OK CT	Baseline 235.5406 235.5406 235.5406	0.00	B1Shift 0.02 0.02 0.02 0.02	Comment	316
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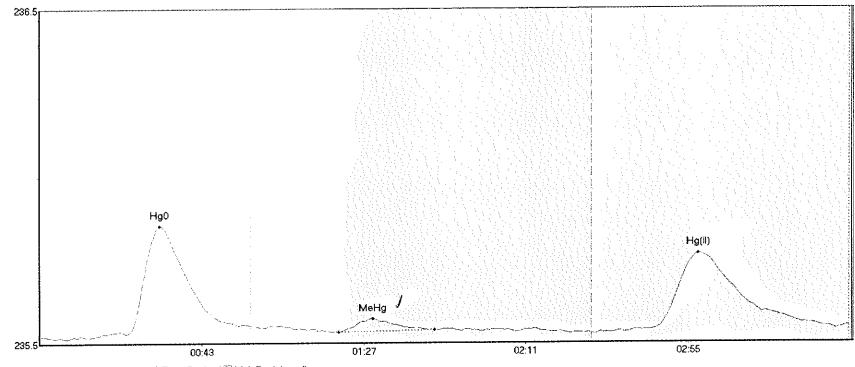
CVAFS Detector (mV) Extra Peaks 🛄 MainPeak baseline

Name SEQ-CCV1 Hg0 SEQ-CCV1 MeHg SEQ-CCV1 Hg(II)			EndTime 57.5 138.2 219.8	StartValue 235.53 235.57 235.56	e EndValue 235.73 235.57 235.60	Peak Max 35.4 91.0 178.9	PeakHeight 3.063 2.438 1.559	Flags CT OK CT	235.5289		BlShift 0.07 0.07 0.07	Comment	016
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AD readings. mV

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#22: SEQ-CCB1

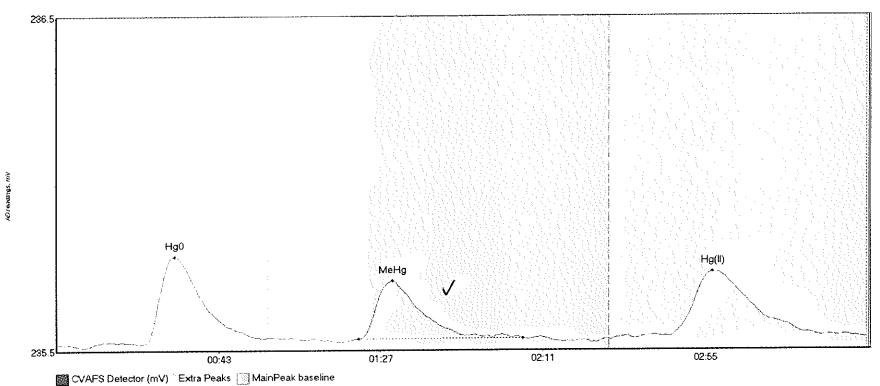


CVAFS Detector (mV) Extra Peaks MainPeak baseline

Name SEQ-CCB1 Hg0 SEQ-CCB1 MeHg SEQ-CCB1 Hg(11		Start Time 14.7 81.3 158.9	EndTime 57.5 107.2 216.2	StartValue 235.52 235.53 235.53	e EndValue 235.55 235.53 235.54	Peak Max 32.6 90.4 178.8	PeakHeight 0.332 0.041 0.235	Flags CT OK OK	Baseline 235.5190 235.5190 235.5190	0.00 0.00	BlShift 0.03 0.03 0.03	Comment	016
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EPA1630

#23: 1608741-01

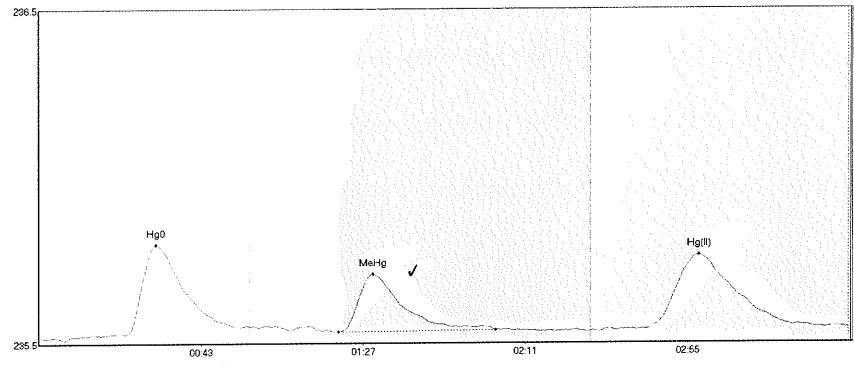


Name 1608741-01 Hg0 1608741-01 MeHo 1608741-01 Hg(J	g 24.024	Start Tim 22.9 82.2 157.4	e EndTime 56.0 126.6 218.8	StartValue 235.52 235.54 235.54	e EndValue 235.54 235.54 235.54	Peak Max 32.1 91.3 178.0	PeakHeight 0.264 0.175 0.199	Flags CK OK CK	Baseline 235.5242 235.5242 235.5242	BlDev 0.00 0.00 0.00	Bl\$hift 0.02 0.02 0.02 0.02	Comment	016
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AD readings. mV

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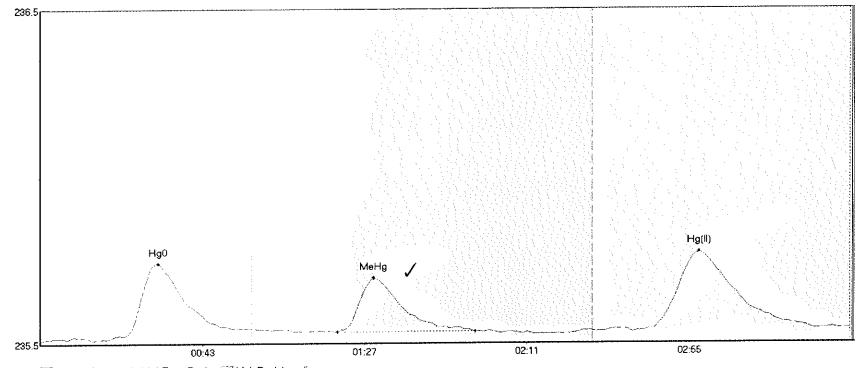
#24: 1608741-02



CVAFS Detector (mV) Extra Peaks MainPeak baseline

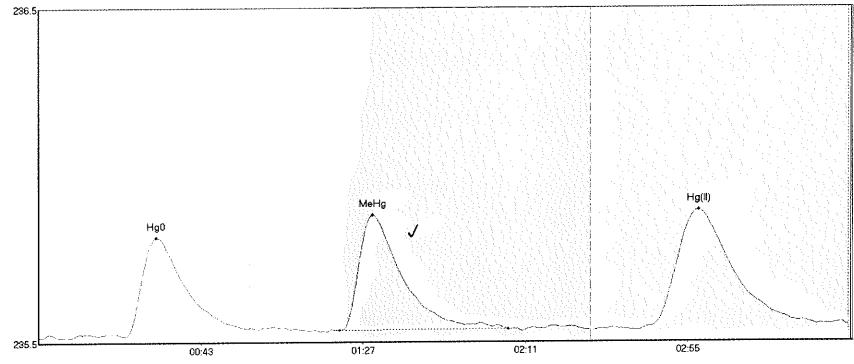
Name 1608741-02 Hg0 1608741-02 MeHg 1608741-02 Hg(1	23.382	Start Time 10.7 81.4 165.4	EndTime 53.8 124.0 219.8	StartValue 235.51 235.53 235.54	EndValue 235.54 235.53 235.54	Peak Max 31.9 90.7 179.2	PeakHeight C.276 C.173 C.220	Flags OK OK CT	Baseline 235.5104 235.5104 235.5104	0.00 0.00	BlShift 0.03 0.03 0.03	Comment	016
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#25: 1608741-03



	Page 120 of 264	Name 1608741-03 Hg0 1608741-03 MeHg 1608741-03 Hg(I	21.127	Start Time 17.9 80.8 163.6	EndTime 53.3 118.0 210.4	StartValue 235.51 235.53 235.54	EndValue 235.54 235.54 235.54 235.54	Peak Max 32.1 90.6 178.7	PeakHeight C.227 O.162 O.234	Flags OK CK OK	Baseline 235.5109 235.5109 235.5109 235.5109	BlDev 0.00 0.00 0.00	Blshift 0.03 0.03 0.03 0.03	Comment	016
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#26: 1608742-01



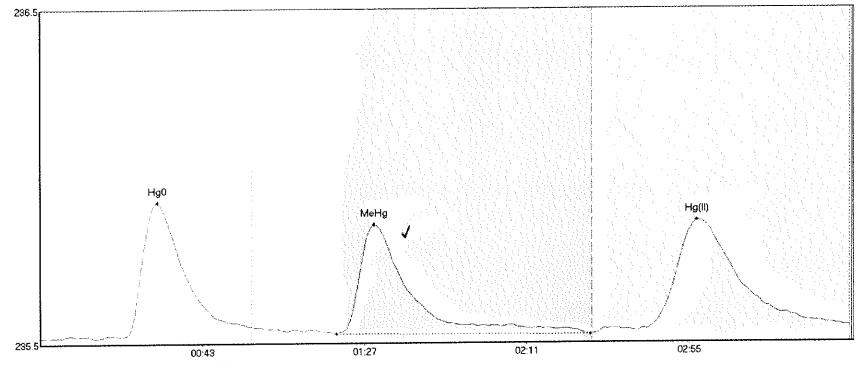
🗱 CVAFS Detector (mV) 🕆 Extra Peaks 🔝 MainPeak baseline

Name Area Start 1608742-01 Hg0 37.999 23.6 1608742-01 Hg4 46.978 81.7 1608742-01 Hg(I 62.344 162.9	Time EndTime 56.4 127.3 219.6	StartValı 235.52 235.53 235.53	ue EndValue 235.54 235.54 235.55	Peak Max 31.8 90.8 179.0	PeakHeight 0.296 0.346 0.358	E Flags OK OK OK	Baseline 235.5129 235.5129 235.5129	0.00 0.00	BlShift 0.03 0.03 0.03	Comment	016
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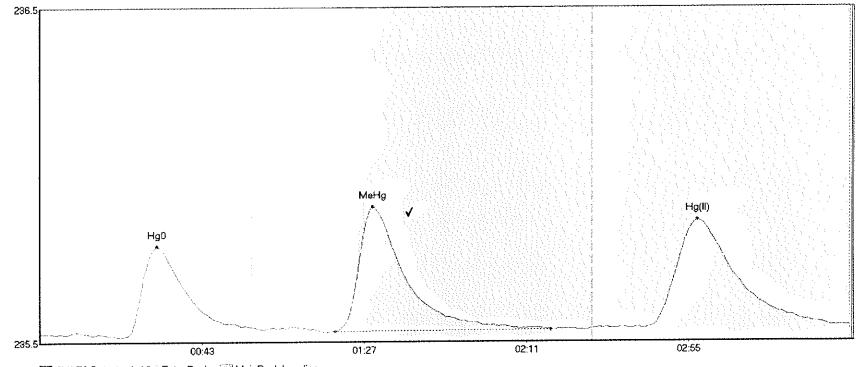
#27: 1608742-03



CVAFS Detector (mV) Extra Peaks MainPeak baseline

Name Area Start Time EndTime 1608742-03 Hg0 48.453 22.1 57.5 1608742-03 MeHg 51.816 80.4 149.5 1608742-03 Hg(1 64.552 150.1 218.7	StartValueEndValuePeak235.53235.5632.0235.54235.5390.8235.54235.56178.	0 0.402 CT 8 0.326 OK	Baseline BlDev 235.5275 0.00 235.5275 0.00 235.5275 0.00 235.5275 0.00	BlShift Comment 0.03 D16 0.03 0.03
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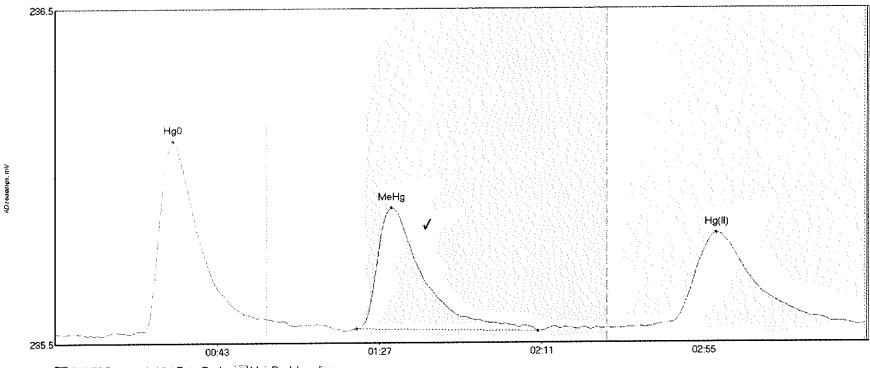
#28: 1608742-04



CVAFS Detector	(mV)	Extra Peaks	MainPeak baseline
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Name 1608742-04 Hg0 1608742-04 MeHg 1608742-04 Hg()	j 53.8 55	Start Time 22.4 80.1 163.9	EndTime 57.4 138.6 216.3	StartValue 235.53 235.54 235.55	EndValue 235.56 235.55 235.56	Peak Max 31.8 90.5 178.5	PeakHeight 0.271 0.373 0.323	Flags OK OK OK	Baseline 235.5384 235.5384 235.5384	C.00 0.00	BlShift 0.02 0.02 0.02 0.02	Comment	016
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#29: 1608742-05

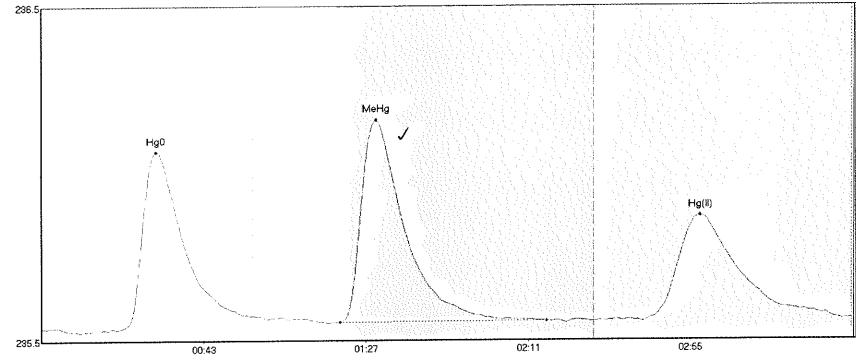


CVAFS Detector (mV) Extra Peaks MainPeak	CVAFS Detector (mV) E>	dra Peaks	MainPeak baseline
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Name 1608742-05 1608742-05 1608742-05 1608742-05	MeHg 52.491	Start Tim 19.9 81.9 161.9	e EndTime 57.5 131.0 217.9	StartValue 235.54 235.55 235.56	e EndValue 235.58 235.54 235.56	Peak Max 32.1 91.4 179.4	PeakBeight 0.578 0.363 0.281	Flags CT OK OK	Baseline 235.5367 235.5367 235.5367	0.00 0.00	BlShift 0.02 0.02 0.02	Comment	316
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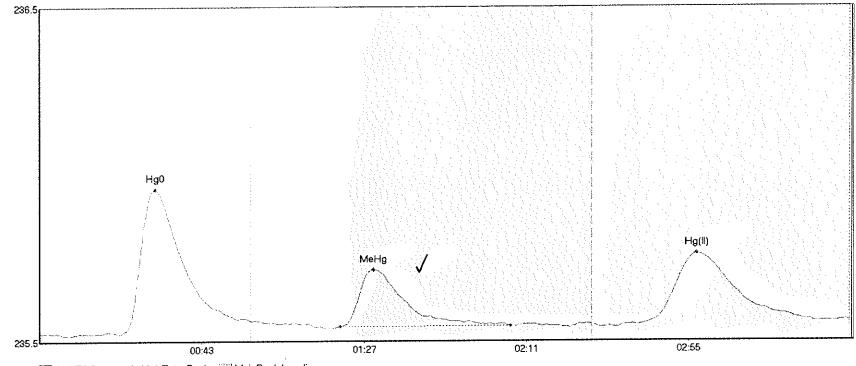
CVAFS Detector (mV) * Extra Peaks 🦳 MainPeak baseline

Name 1608742-07 Hg0 1608742-07 MeHg 1608742-07 Hg(I	82.148	Start Time 20.5 81.0 163.3	EndTime 56.9 137.0 217.3	StartValu 235.54 235.56 235.56	e EndValue 235.58 235.56 235.56	Peak Max 31.2 90.9 178.7	PeakHeight 0.535 0.605 0.316	Flags OK OK OK	Baseline 235.5407 235.5407 235.5407	0.00 0.00	BlShift 0.03 0.03 0.03 0.03	Comment	016
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AD rendings. InV

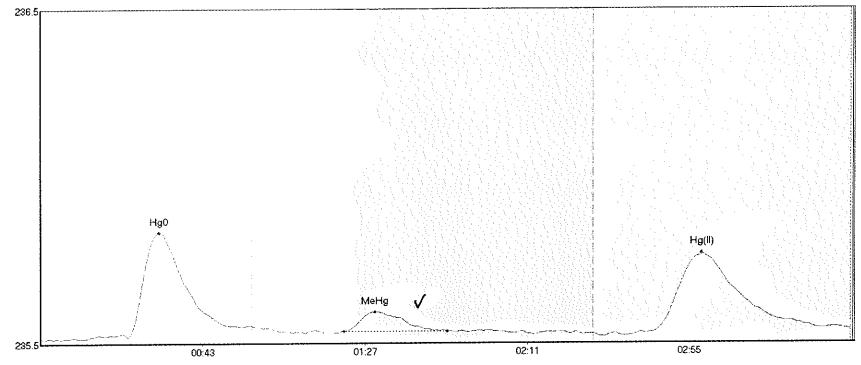
#31: 1608742-08



CVAFS Detector (mV)	Extra Peaks	MainPeak baseline
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Page 126 of 2	Name 1608742-08 Hg0 1608742-08 MeHg 1608742-08 Hg(I	24.321	Start Time 21.8 81.6 163.5	EndTime 57.5 127.8 210.9	StartValue 235.54 235.56 235.57	EndValue 235.58 235.56 235.58	Peak Max 31.4 90.6 178.3	PeakHeight 0.433 0.171 0.211	Flags CT OK OK	Baseline 235.5430 235.5430 235.5430 235.5430	BlDev 0.00 0.00 0.00	BlShift 0.04 0.04 0.04 0.04	Comment	016
of 264														

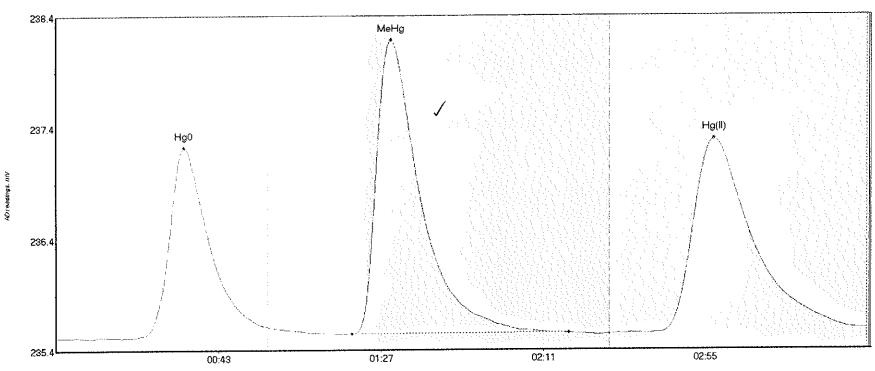
#32: 1608981-01



CVAFS Detector (mV) Extra Peaks MainPeak baseline

Page 127	7.567	Start Time 12.7 82.3 164.3	EndTime 54.6 110.5 219.8	StartValue 235.55 235.57 235.57	EndValue 235.59 235.57 235.58	Peak Max 32.2 90.8 179.4	PeakHeight 0.320 0.058 0.238	Flags OK OK CT	Baseline 235.5538 235.5538 235.5538	B1Dev 0.00 0.00 0.00 0.00	BlShift 0.03 0.03 0.03 0.03	Comment	016
of 264													

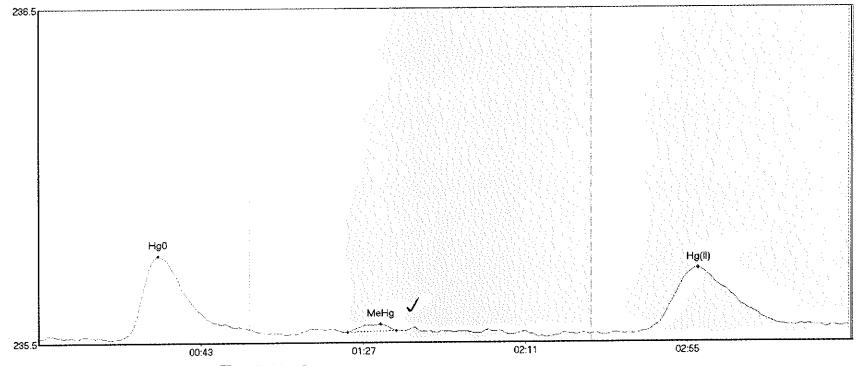
#33: SEQ-CCV2



CVAFS Detector (mV) Extra Peaks MainPeak baseline

лана на	Page 128 of 264	SEQ-CCV2 Hg(II)	Area 196.510 353.867 311.160	Start Time 19.7 80.1 160.8	End?ime 57.5 138.9 219.8	StartValue 235.55 235.58 235.58 235.58	EndValue 235.64 235.59 235.62	Peak Max 34.6 90.8 178.5	PeakHeight 1.660 2.564 1.696	Flags CT OK CT	Baseline 235.5509 235.5509 235.5509	BlDev 0.00 0.00 0.00	BlShift 0.07 0.07 0.07 0.07	Comment	316
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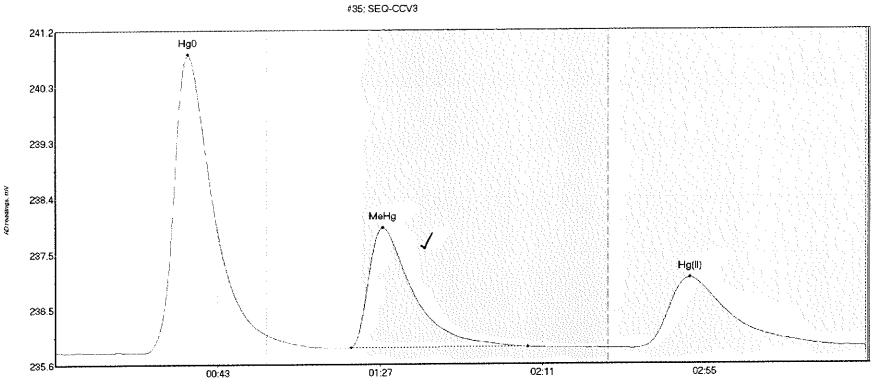
#34: SEQ-CCB2



CVAFS Detector (mV) Extra Peaks MainPeak baseline

Name SEQ-CCB2 Hg0 SEQ-CCB2 MeHg SEQ-CCB2 Hg(II	Area 31.404 1.808) 35.351	Start Time 22.3 83.7 162.2	e EndTime 57.5 97.0 213.8	StartValu 235.55 235.57 235.56	ae EndValue 235.58 235.57 235.58	Peak Max 32.4 92.8 179.0	PeakHeigh 0.246 0.024 0.196	it Flags CT CK CK	Baseline 235.5527 235.5527 235.5527	BlDev 0.00 0.00 0.00	BlShift 0.03 0.03 0.03	Comment	016
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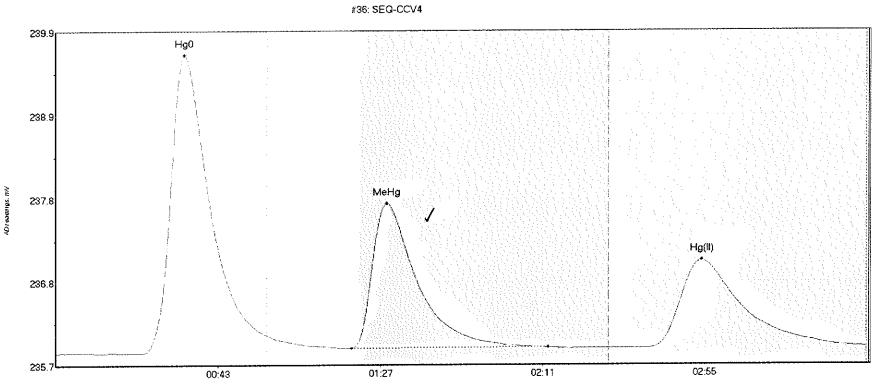
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CVAFS Detector (mV) Extra Peaks MainPeak baseline

Name SEQ-CCV3 Hg0 SEQ-CCV3 MeHg SEQ-CCV3 Hg(II			e EndTime 57.5 128.2 219.8	StartValu 235.80 235.87 235.85	e EndValue 236.08 235.88 235.88	Peak Max 35.9 88.8 172.2	PeakHeig) 5.000 2.017 1.187	ht Flags CT OK CT	Baseline 235.8002 235.8002 235.8002	0.00	BlShift 0.08 0.08 0.08 0.08	Comment	016
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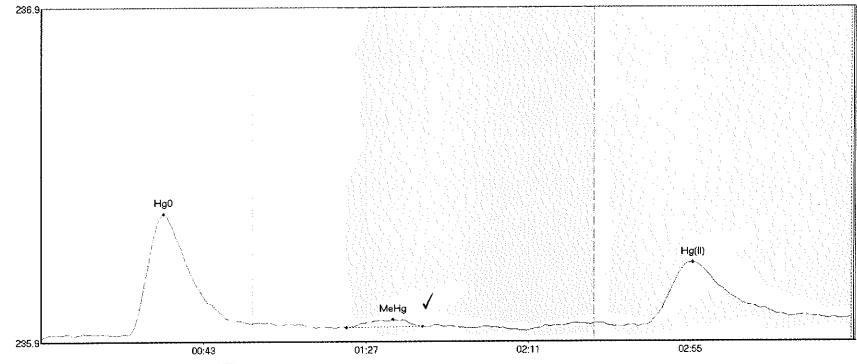


CVAFS Detector (mV) Extra Peaks MainPeak baseline

Name SEQ-CCV4 Hg0 SEQ-CCV4 MeHg SEQ-CCV4 Hg(II		Start Tim 22.9 80.1 160.7	e EndTime 57.5 133.4 219.7	StartValu 235.86 235.92 235.92	e EndValue 236.07 235.93 235.93	Peak Max 34.9 89.8 175.3	PeakHeigh 3.762 1.831 1.105	IT Flags CT OK OK	Baseline 235.8633 235.8633 235.8633	0.00 0.00	Bl\$hift 0.07 0.07 0.07 0.07	Comment	016
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#37: SEQ-CCB3



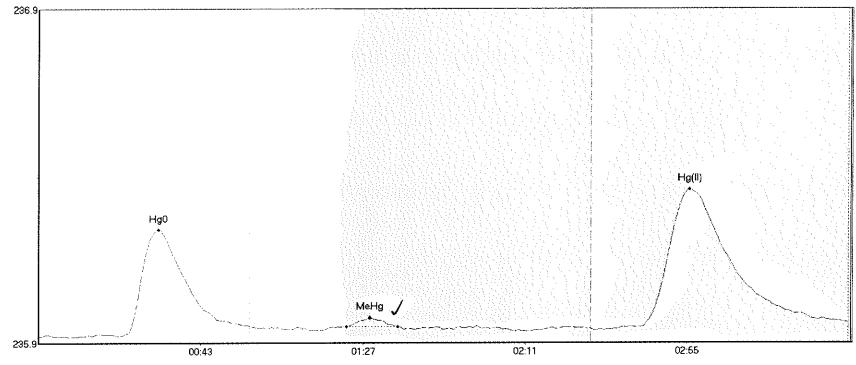
CVAFS Detector (mV) * Extra Peaks 🔟 MainPeak baseline

Name SEQ-CCB3 Hg0 SEQ-CCB3 MeHg SEQ-CCB3 Hg(II		Start Time 20.3 82.8 163.9	EndTime 56.9 103.4 216.5	StartValu 235.93 235.95 235.96	e EndValue 235.96 235.95 235.97	Peak Max 33.2 95.5 176.7	PeakHeigh C.364 C.025 C.188	t Flags OK OK OK	Baseline 235.9224 235.9224 235.9224	0.00 0.00	BlShift 0.06 0.06 0.06 0.06	Comment	016
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#38: 1608981-02

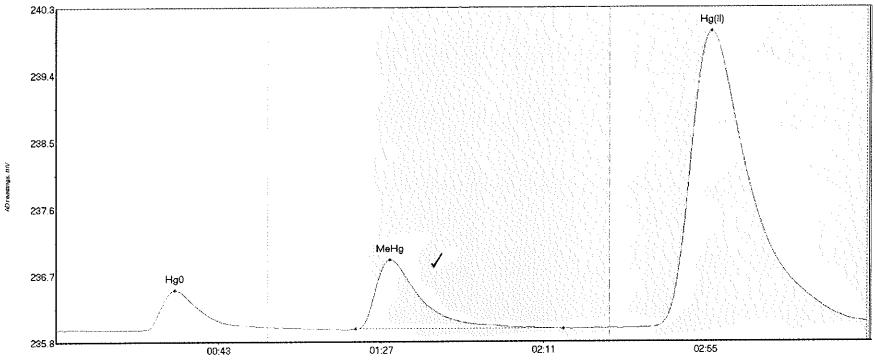


CVAFS Detector (mV)	🕆 Extra Peaks 🦳 MainPeak baseline
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2020	Name 1608981-02 Hg0 1608981-02 MeHg 1608981-02 Hg(I	1.916		EndTime 57.5 97.5 219.7	StartValue 235.97 236.00 235.99	EndValue 236.00 236.00 236.01	Peak Max 32.6 89.9 176.8	PeakHeight 0.318 0.025 0.416	Flags CT OK OK	Baseline 235.9697 235.9697 235.9697	0.00 0.00	BlShift 0.04 0.04 0.04 0.04	Comment	016
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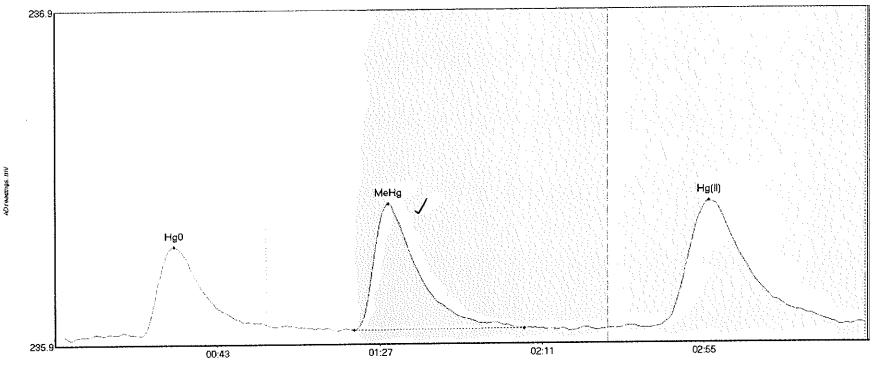
#39: 1608981-03



CVAFS Detector	(mV)	Extra Peaks	MainPeak baseline
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Name 1608981-03 Hg 1608981-03 Me 1608981-03 Hg	Area) 61.492 Hg 130.785 (1 736.134	Start Time 22.8 81.1 157.0	EndTime 57.5 137.4 219.8	StartValue 235.99 236.00 236.01	e EndValue 236.02 236.00 236.09	Peak Max 32.2 90.5 177.8	PeakHeight 0.530 0.930 3.972	Flags CT OK CT	Baseline 235.9911 235.9911 235.9911	0.00 0.00	BlShift 0.10 0.10 0.10	Comment	016
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#40: 1608981-04

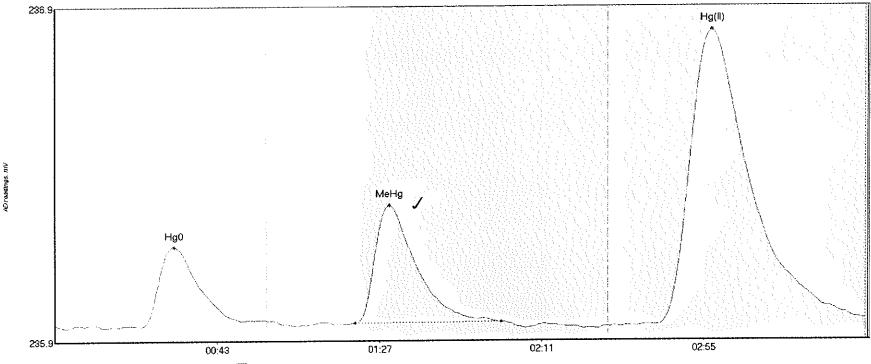


CVAFS Detector (mV) * Extra Peaks 🔟 MainPeak baseline

Name Area Start Time EndTime 1608981-04 Hg0 34.329 23.3 57.5 1608981-04 MeHg 52.464 81.0 127.2 1608981-04 Hg(I 68.495 163.9 213.1	StartValue EndValue 235.96 235.99 235.97 235.97 235.98 235.98	Peak Max 32.3 90.3 177.5	PeakHeight Flags 6.267 CT 6.379 OK 6.374 OK	235.9564	0.00 0.00	Bl\$hift 0.03 0.03 0.03	Comment	316
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EPA1630

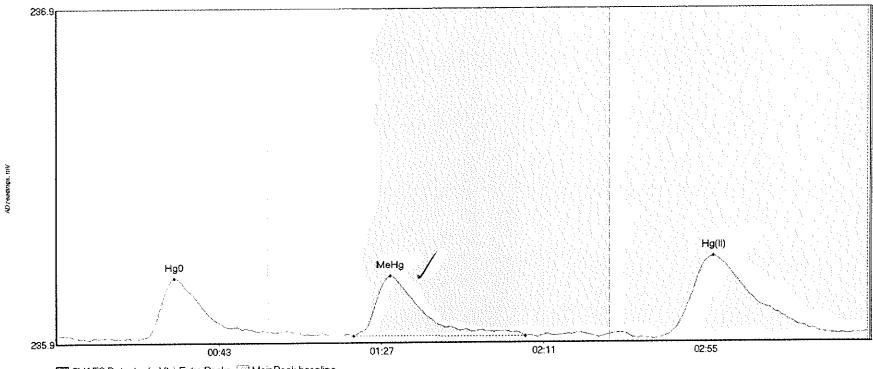
#41: 1608981-05



CVAFS Detector (mV) * Extra Peaks 🔤 MainPeak baseline

Name Area Start Time EndTime 1608981-05 Hg0 29.628 23.6 51.0 1608981-05 MeHg 48.576 81.5 121.2 1608981-05 Hg(i 174.173 158.1 219.8	StartValueEndValuePeakMax235.92235.9432.4235.93235.9490.7235.93235.95178.3	PeakHeight Flags 0.256 OK 0.376 OK 0.940 CT	Baseline E 235.9278 (235.9278 (235.9278 (0.00 0.02 0.00 0.02	Comment 016
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#42: 1608981-06

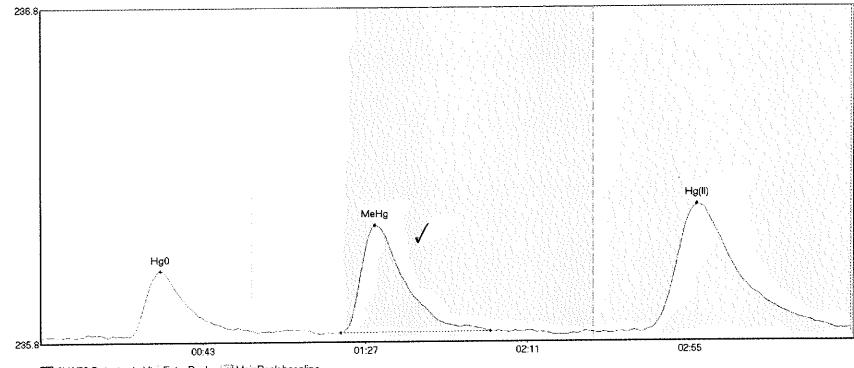


Name 1608981-06 Hg0 1608981-06 MeHg 1608981-06 Hg()	g 25.822	Start Time 23.3 80.4 163.1	EndTime 54.8 127.0 207.9	StartValu 235.87 235.87 235.86	e EndValue 235.88 235.87 235.88	Peak Max 31.9 90.5 178.2	PeakHeigh 0.178 0.180 0.245	CK OK OK OK	Baseline 235.8730 235.8730 235.8730	0.00	BlShift 0.01 0.01 0.01	Comment	016
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VIII . SQUIDHAI UV

#43: 1608981-07



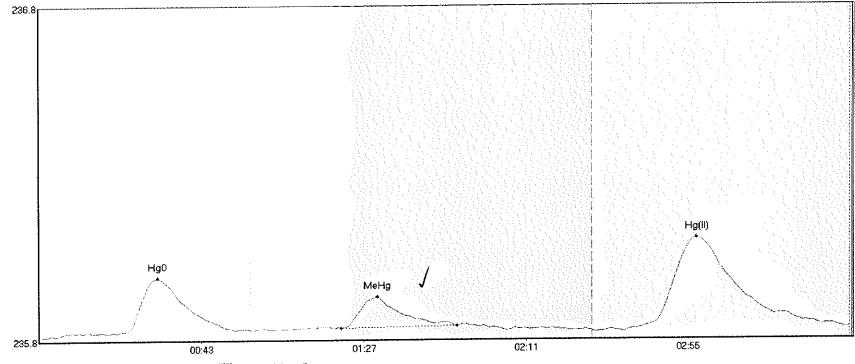
CVAFS Detector (mV)	Extra Peaks	🔄 MainPeak baseline
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Name 1608981-07 Hg0 1608981-07 MeHo 1608981-07 Hg(.	3 43.761	Start Time 24.1 81.3 163.2	EndTime 57.5 122.0 218.1	StartValc 235.83 235.83 235.83	ne EndValue 235.84 235.84 235.84 235.84	Peak Max 32.4 90.6 178.1	PeakHeig 0.196 0.322 0.381	ht Flags CT OK OK	Baseline 235.8223 235.8223 235.8223	0.00 0.00	BlShift 0.02 0.02 0.02	Comment	016
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EPA1630

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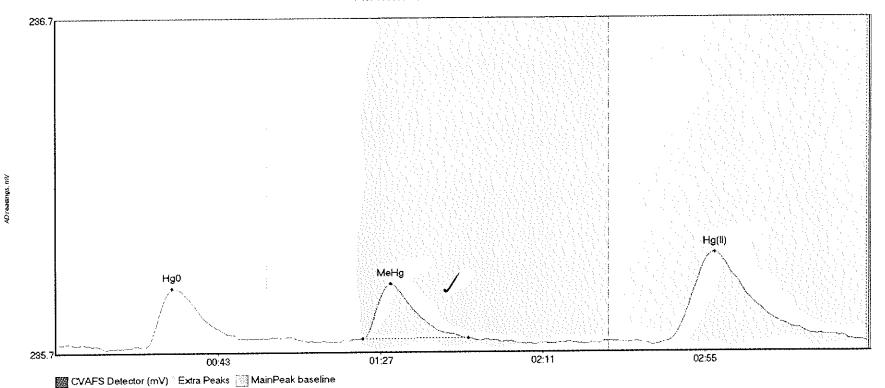
#44: 1608981-08



👹 CVAFS Detector (mV) 🕆 Extra Peaks 🛄 MainPeak baseline

Name Area Start Time EndTi 1608981-08 Hg0 23.057 4.5 57.5 1608981-08 MeHg 11.589 81.9 113.4 1608981-08 Hg(I 54.630 158.4 219.6	StartValue EndValue 235.76 235.80 235.86 235.81 235.79 235.80	Peak Max 32.1 91.7 178.4	PeakHeight Flac 0.173 CT 0.093 OK 0.282 OK	gs Baseline 235.7763 235.7763 235.7763	0.00 0.00	BlShift 0.02 0.02 0.02	Comment	J16
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Name Area Start Ti: 1608981-09 HgC 20.859 24.0 1608981-09 MeEg 19.180 83.1 1608981-09 Hg(I 48.156 165.4	e EndTime StartValue EndValue 52.0 235.75 235.78 111.9 235.78 235.78 215.4 235.76 235.77	Peak Max Peak 31.5 0.17 90.7 0.16 178.8 0.26	74 OK 23 66 OK 23	aseline 1 35.7625 35.7625 35.7625	0.00 0.00	BlShift Comment 0.00 0.00 0.00	016
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#46: 1608981-10

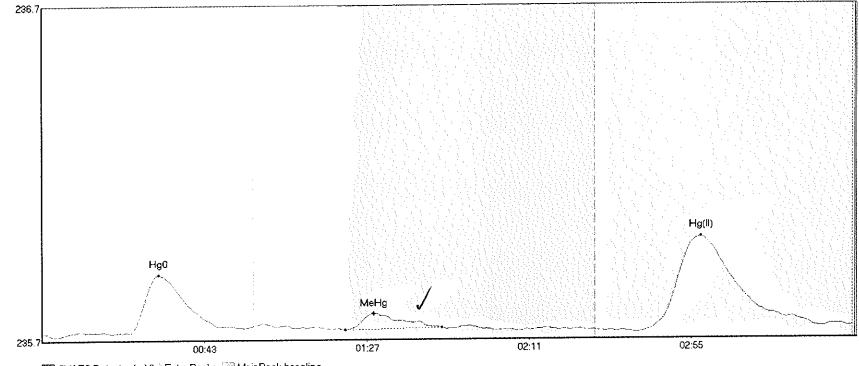


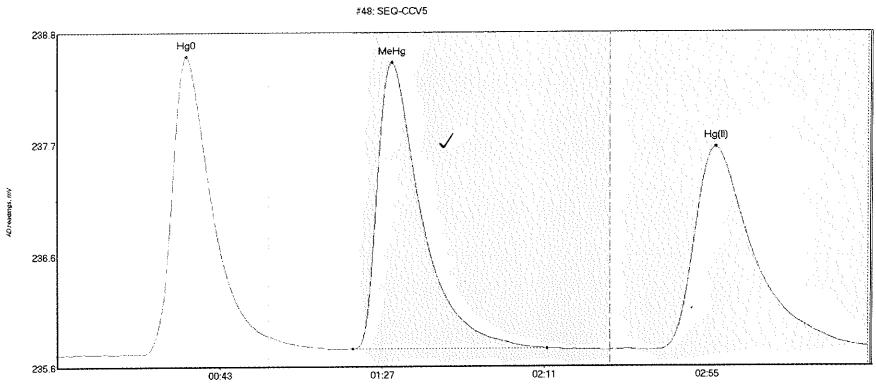
Image CVAES Detector	(mV)	Extra Peaks	MainPeak baseline

NameAreaStart Time EndTime1608981-10 Hg020.77723.654.61608981-10 MeHg5.81682.1108.41608981-10 Hg(I52.225161.6218.8	235.73 235.74 3 235.74 235.74 8	Peak Max PeakHeight Flags 11.6 0.175 OK 19.9 0.050 OK .78.7 0.286 OK	Baseline BlDev 235.7296 0.00 235.7296 0.00 235.7296 0.00	BlShift Comment 0.02 016 0.02 016 0.02
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285.7 00:43 01:27 02:11 02:55

CVAFS Detector (mV)	Extra Peaks	MainPeak baseline
CVAFS Detector (mV)	Extra Peaks	MainPeak baseline

P 1608981-11 Hg (I 81.568 163.6 215.7 235.71 235.72 179.0 0.450 OK 235.6990 0.00 0 1608981-11 Hg (I 81.568 163.6 215.7 235.71 235.72 179.0 0.450 OK 235.6990 0.00 0	BlShift Com 0.03 0.03 0.03	0.00 0.03 0.00 0.03	Baseline BlDev 235.6990 0.00 235.6990 0.00 235.6990 0.00	OK OK	PeakHeight 0.195 0.455 0.450	Peak Max 32.0 90.7 179.0	235.71 235.71	StartValue 235.70 235.71 235.71	50.9 129.5	Start Time 23.3 86.8 163.6	62.522	Name 1608981-11 HgC 1608981-11 MeHg 1608981-11 Hg(I	Page 142 of 26
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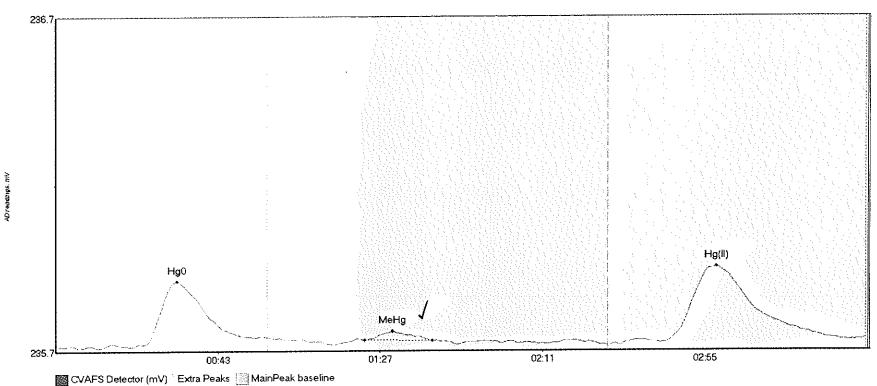


🗱 CVAFS Detector (mV) ° Extra Peaks 🔝 MainPeak baseline

Name SEQ-CCV5 Hg0 SEQ-CCV5 MeHg SEQ-CCV5 Hg(II	Area 333.018 387.449) 364.235	80.1	EndTime 57.5 132.9 219.7	StartValue 235.68 235.73 235.72	e EndValue 235.85 235.73 235.75	Peak Max 34.8 90.7 178.4	2.913	Flags CT OK OK	Baseline 235.6739 235.6739 235.6739	0.00	BlShift 0.08 0.08 0.08 0.08	Comment	316
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#49: SEQ-CCB4



Name Area SEQ-CCB4 Hg0 23.721 SEQ-CCB4 MeHg 2.503 SEQ-CCB4 Hg(II) 44.772	Start Time EndTime 20.9 54.1 83.9 102.2 153.3 215.2	StartValue EndValue 235.67 235.70 235.69 235.69 235.68 235.69	Peak Max 33.0 91.4 179.2	PeakHeight Flags 0.198 OK 0.026 OK 0.235 OK	235.6714	BlDev 0.00 0.00 0.00	BlShift 0.02 0.02 0.02	Comment)16
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02:55

236.4

235.4

00:43

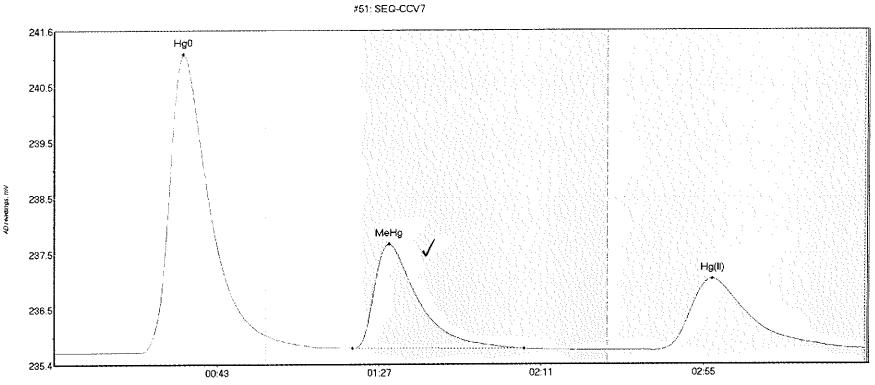
CVAFS Detector (mV) Extra Peaks 🔄 MainPeak baseline

242.8 241.7 240.7 239.6 238.6 237.5 MeHg Hg(II)

01:27

Name SEQ-CCV6 Hg0 SEQ-CCV6 MeHg SEQ-CCV6 Hg(II)		Start Time 22.6 81.1 160.9	EndTime 57.5 129.1 219.8	StartValue 235.65 235.73 235.70	EndValue 236.03 235.72 235.73	Peak Max 35.2 90.9 178.8	PeakHeight 6.629 1.869 1.402	Flags CT OK CT	Baseline 235.6599 235.6599 235.6599	0.00 0.00	BlShift 0.07 0.07 0.07 0.07	Comment	016
--	--	-------------------------------------	-----------------------------------	--	--	-----------------------------------	---------------------------------------	-------------------------	--	--------------	---	---------	-----

02:11



🗱 CVAFS Detector (mV) 🕆 Extra Peaks 📋 MainPeak baseline

Name SEQ-CCV7 Hg0 SEQ-CCV7 MeHg SEQ-CCV7 Hg(11)	261.948		EndTime 57.5 127.5 219.8		EndValue 235.96 235.72 235.71	Peak Max 34.9 90.7 178.4	5.482	Flags CT OK CT	Baseline 235.6486 235.6486 235.6486	0.00	BlShift 0.06 0.06 0.06 0.06	Comment	016
--	---------	--	-----------------------------------	--	--	-----------------------------------	-------	-------------------------	--	------	---	---------	-----

AD roadings. mV

#52: SEO-CCB5

📷 CVAFS Detector (mV) 🗄 Extra Peaks 🔝 MainPeak baseline

Name SEQ-CCB5 Hg0 SEQ-CCB5 MeHg SEQ-CCB5 Hg(II)		Start Time 23.1 83.7 165.3	EndTime 56.7 100.4 219.2	StartValu 235.64 235.65 235.66	e EndValue 235.67 235.6€ 235.66	Peak Max 33.8 92.3 179.0	PeakHeight 0.344 0.026 0.204	Flags OK OK OK	Baseline 235.6420 235.6420 235.6420	0.00	BlShift 0.02 C.02 0.02	Comment	016
--	--	-------------------------------------	-----------------------------------	---	--	-----------------------------------	---------------------------------------	-------------------------	--	------	---------------------------------	---------	-----

Peer Review Check List for MHg for CV-GC-AFS (FGS-070) 2015 Rev 5 (08/06/2015)

Analyst:	Ryan Nelson		Sequence #:	6123010	
Reviewer:	DAN	WEIKART	Dataset ID #:	MHg27001-160923-1	
Date:		9.23.16	WO #:	Various	
Batch #(s):	F609484		Client(s):	NA	

Analyte	Prep Method		Matrix
✓ MHg	FGS-013	MHg Distillation	Water
🗌 МНд	FGS-010	KOH/MeOH Digest	Tissue
MHg	FG5-045	MeCI Extraction	Sed/Soil

Additional Comments:

	Analyst In سار		Reviewer	
. Compare Sample ID with Bench sheet/Sequence/Raw Data (Have all samples been imported?)	VES	NO NO		
. Check for transcription errors from Excel spreadsheet (or Prep Bench sheet)/Raw data	VES	NO NO		T
(a) Reviewer: 100% of peak heights checked	VES	NO NO		
(b) Are there peak height errors?	YES	V NO		
(c) Error on a sample: Do peak heights, responses, & initial results match corrected data?	YES	NO NO	N/A	\mathbf{A}
(d) Error on a Cal Pt, ICB/CCB, or PB: Has the data been reimported?	YES	NO	✓ N/A	
(e) Check standards & reagents in sequence & bench sheet for correct usage (i.e. expiries).	🗹 YES	NO NO	🛄 N/A	2
(f) Check and compare masses (review prep bench sheet)	YES	NO NO	N/A	T
(g) Check and compare initial and final volumes	YES	NO NO	N/A	ľ
(h) Do aliquots and dilutions written on benchsheet match those in Excel?	YES	NO	N/A	
(i) Is the pH>3.0 for all distilled samples?	YES	NO NO	N/A	2
(j) Is the sequence #, analyst, date, and instrument # on the QC page?	YES	NO NO		9
(k) Is the analysis status correct? (analyzed/initial review/reviewed)	VES	NO NO		7
(I) Original prep bench sheet added to data package?	YES	NO NO		
(m) Benchsheet prep date MUST match actual prep date (check if re-shot vs re-extract)	✓ YES	NO NO		
3. High QA? WO#(s)/Client(s):	YES	VO 🔽		J
4. Client specific QC? (if Yes, refer to Project Notes/LIMS)	YES	V NO		
(a) Have the QC requirements been met for all WO#s?	VES	NO NO		
5. 20 or fewer samples in batch?	VES	NO		2
(a) 3 PBs, 1 LCS/LCSD (or BS/BSD), 2 MS/MSD/MD per batch?	V YES	NO NO		I
(b) 1 CCV and 1 CCB every 10 analytical runs?	VES	NO		Ľ
QA/QC Data Checked				
6. The calibration curve included a minimum of 5 Standards	🗹 PASS	🗌 FAIL	N/A	7
Comments:				
7. 1st Calibration Standard % Recoveries (65-135%)	🗸 PASS	🗌 FAIL	N/A	2
Comments:				
8. RSD CF (≤ 15%)	PASS	FAIL		Q
Comments:				

Analyst:	Ryan Nelson	Sequence #:	6123010				
Reviewer:	0	· ·	MHg27001-160923-1				
Date:	9/23/2016	WO #:	Various				
Batch #(s):	F609484	Client(s):	NA				*
				Analyst In	iitials:	Reviewer	Initials: Mw
9. ICV % Reco	veries 67-133%			PASS	FAIL		2
	coveries 67-133%			PASS	FAIL		7
	CCV2 and CCV4 were high but in	vestigation showed the instrum	ent in control				
	solute value of the ICB and CC			PASS	FAIL		7
	/CRM/BS/BSD % Recoveries (7			PASS	FAIL		2
					turnal		<u>ц</u>
				PASS	FAIL		2
	or BS/BSD RPD (< 25%)			<u> </u>			
	erage of Preparation Blanks <		raition of 0.015 pg/12	PASS	FAIL	N/A	2
	5	2.	-				
				PASS	FAII.	✓ N/A	
	Tissue: Individually, are the Pr			PASS	FAIL		Ē
Comments				YES		✓ N/A	
	al Solids been applied? (If NO,		ione or nearly done)	YES			
	rect 'Source' designated for ME					N/A	
-	ed preps: was there a spike wi	tness signature & date on ti	he prep bench sheet?				<u> </u>
	4T RSD(< 35%)			✓ PASS	FAIL		Ľ
	•			DACC	FAIL		ĨŸ
	ne set of MS/MSD per every 10			PASS	FAIL		L.
	•						
21. MS/MSD	RPD(< 35%)			PASS	FAIL		
Comments	:						
	% Recoveries (65-130%)			PASS	FAIL		•
Comments							(~~ 7
23. MSD (ASI	D) % Recoveries (65-130%)			PASS	FAIL		2
Comments	:						
24. Spiked 1-	5X ambient or 1-5X PQL (whicl	never is higher) (from EPA 10	530)	YES	NO 🖸		G
25. Are all sa	mples within instrument calibra	ation range (or at maximum	aliquot size)?	VES	🗌 NO		P
Comments							
26. For instru	mental dilutions, is the dilution	factor in excel correct?		PASS	NO NO	✓ N/A	
Is the sar	nple volume, diluents, and fina	I volume of the dilution note	d on benchsheet?	PASS	NO	✓ N/A	2
27. Dissolved	<pre>< Total metals (if applicable)</pre>			PASS	NO NO	✓ N/A	Ľ
Comment	s:					<u> </u>	
28. Effluent	< Influent metals (visually conf			PASS	NO	☑ N/A	ľ
Comment							

Analyst:	Ryan Nelson	Sequence #:	6123010						
Reviewer:	0	Dataset ID #:	MHg27001-160923-1						
Date:	9/23/2016	WO #:	Various						
Batch #(s):	F609484	Client(s):	NA						
				Analyst I		Reviewer	Initials: _イ w		
29. Are re-run	s noted with reason?			V YES	NO NO	□ N/A	\square		
Comments:	CCV investigation				,				
30. For failing	QC (CCV, CCB, PB, BS/BSD, CAL):			VES	NO NO	N/A			
Was a bubl	pler and trap test run before the an	alytical run continued?							
Comments									
31. Do re-run	results compare to initial analysis (< 35% RPD)?		YES	NO	✓ N/A	V		
Comments						·····			
32. Are qualifi	ers consistent with the data review	flowcharts?		YES	NO NO	✓ N/A	N		
Comments									
33. Have non-	reportable samples been imported	into LIMS and clicked to	non-reportable?	YES	NO NO	V/A	\checkmark		
Comments	ō								
34. Have re-e	xtracts been created for non-report	able samples?		YES	NO NO	✓ N/A	\mathbf{V}		
35. Narrations	s in MMO box in LIMS?								
Comment	S:								
36. Are there	any HIGH QA projects within the da	ata?		YES	NO 🖸		1		
If so, płac	e dataset to the QA office.								
37. Does the	data set need scanning?			✓ YES		N/A	Y		
Files locate	d at: \\Cuprum\gen_admin\Quality	Assurance\Training N	laster\DOCs						
38. Date of a	nalyst IDOC/CDOC: 7/19/2	016 IDOC/CDOC w	ithin last 12 months?	YES	NO NO				
39. Date of a	nalyst's SOP reading:6	/8/2016 Current SOP re	vision?	YES	NO		2		
40. Date of L	OD: <u>7/7/2016</u> LOD withi	n last 3 months (within 1	2 months for MDN)?	YES	NO	N/A			
41. Date of L	OQ: 7/7/2016 LOQ with	in last 3 months (within 1	2 months for MDN)?	VES	NO NO	N/A	V		
42. If MDN sa	amples, date of last MDL study:						\sim		
43. MDL stuc	y within last 12 months?			YES	NO NO	🗹 N/A	X		
Data can no	t be reported without a current ID	OC/CDOC, LOD or LO	ຊ.						
Additional Co	mments:			YES	NO NO		K Mg		

MMHg27001-160928-1 WATERS

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Analysis Datasheet for Methyl Mercury in Waters

Date of Analysis: September 28, 20	16 Analyst: DM2
Instrument #: Hg2700-1	Units ng/L
LIMS Sequence #: 6129013. (452°)	7018 (SUMPS) DEN 9.3010 -

Calibration Statistics:

				Uncorrected Response	Corrected Peak	Corrected	
LabNumber	n	True Val	Area	Factor	Height	Response Factor	% Recovery
SEQ-CAL1	1	0.05 ng/L	31.77 units	635.32	30.38 units	607.52	103.4 %Rec
SEQ-CAL2	1	0.20 ng/L	119.00 units	594.98	117.61 units	588.03	100.1 %Rec
SEQ-CAL3	1	1.00 ng/L	589.88 units	589.88	588.49 units	588.49	100.2 %Rec
SEQ-CAL4	1	2.00 ng/L	1071.38 units	535.69	1069.99 units	534.99	91.1 %Rec
SEQ-CAL5	1	4.00 ng/L	2475.03 units	618.76	2473.64 units	618.41	105.3 %Rec
SEQ-CAL6	0						
SEQ-CAL7	0						
SEQ-CAL8	0						
SEQ-CAL9	0						
Corr. Mean RF 587.49	Corr. St Dev RF +/- 32.07	Corr. RSD CF 5.5% RSD	Uncorr. Mean RF 594.92	Eff Factor 0.8046			
Blanks:							
LabNumber	<u>л</u>	Mean	Std Dev	Mean (ng/L)	Std Dev (ng/L)		
SEQ-IBL	1	1.39 units		0.00 ng/L	#VALUE!		

Preparation Blanks

Sample Type	Batch ID	n	Mean	Std Dev
BLK	1	3	0.009 ng/L	±0.002
BLK	2	0	0.000 ng/L	
BLK	3	0	0.000 ng/L	
BLK	4	0	0.000 ng/L	
BLK	5	0	0.000 ng/L	

GUALITY ASSURANCE PEER - REVIEWED INITIALS: DAW 9-30-16

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MDN Only

NA

NA

NA

NA

SEQ-CAL1 SEQ-CAL2 SEQ-CAL3 SEQ-CAL4 SEQ-CAL5 SEQ-CAL6

SEQ-CAL7

SEQ-CAL8

SEQ-CAL9

SEQ-ICV/CCV Acetate Buffer Ethylating Agent

ta telefo	가 사망하다	Sample				· 1		Uncorrected		No PB		122A N.S.A	Not a suburba e la	a sha galar	
Instrument	Analyst	Туре	LabNumber	Dilution	Analyzed	FileID	Run End	Response	8atch ID	Correction?	RESP	InitialResult	FinalResult	InitialUnits	Comments
Hq2700-1	DM2	CAL	SEQ-IBL1 -	1	9/28/16 7:21	16078-1.RAW	7:21	1.39	<i>v</i>		0.0	0.000	0.000	ng/L	
Hq2700-1	DM2	CAL	SEQ-CAL1+	1	9/28/16 7:32	16079-1.RAW	#######	31.77			30.4	0.052	0.052	ng/L	
Hg2700-1	DM2	CAL	SEQ-CAL2 -	1	9/28/16 7:42	16080-1.RAW	#######	119.00	•		117.6	0.200	0.200	ng/L	
Hq2700-1	DM2	CAL	SEQ-CAL3 -	1	9/28/16 7:53	16081-1.RAW	#######	589.88	-		588.5	1.002	1.002	ng/L	
Hg2700-1	DM2	CAL	SEQ-CAL4	1	9/28/16 8:03	16082-1.RAW	#######	1071.38			1070.0	1.821	1.821	ng/L	
Hg2700-1	DM2	CAL	SEQ-CAL5	1	9/28/16 8:14	16083-1.RAW	#######	2475.03			2473.6	4.211	4.211	nq/L	
Hq2700-1	DM2	CAL	SEQ-ICV1 -	1	9/28/16 8:24	16084-1.RAW	#######	368.78			367.4	0.625	0.625	ng/L	
Hg2700-1	DM2	CAL	SEQ-ICB1 -	1	9/28/16 8:35	16085-1.RAW	#######	7.37			6.0	0.010	0.010	ng/L	
Hq2700-1	DM2		+F609569-851 -	1.25	9/28/16 8:45	16086-1.RAW	#######	420.61			419.2	0.879	1.099	ng/L	· · · · · · · · · · · · · · · · · · ·
Hq2700-1	DM2		+F609569-BSD1 •	1.25	9/28/16 8:56	16087-1.RAW	,######	411.77			410.4	0.861	1.076	ng/L	
Hq2700-1	DM2		F609569-BLK1 -	1.25	9/28/16 9:06	16088-1.RAW	#######	5.40			4.0	0.008	0.011	ng/L	
Hg2700-1	DM2		- F609569-BLK2 -	1.25	9/28/16 9:17	16089-1.RAW	******	5.44	·1		4.0	0.009	0.011	ng/L	
Hq2700-1	DM2		F609569-BLK3 -	1.25	9/28/16 9:27	16090-1.RAW	#######	4.08+	1		2.7	0.006	0.007	ng/L	
Hq2700-1	DM2		*F609569-DUP1 -	1.25	9/28/16 9:38	16091-1.RAW	######	43.65			42.3	0.082	0.102	ng/L	
Hq2700-1	DM2		TF609569-MS1 -	1.25	9/28/16 9:48	16092-1.RAW	#######	563.41	1		562.0	1.181	1.477	ng/L	
Hq2700-1	DM2		+F609569-MSD1 -	1.25	9/28/16 9:59	16093-1.RAW	#######	556.92+			555.5	1.168	1.460	ng/L	
Hq2700-1	DM2		F609569-MS2	1.25	9/28/16 10:09	16094-1.RAW	######	546.59	. 1	1	545.2	1.146	1.432	ng/L	
Hg2700-1	DM2	SAM	~ F609569-MSD2 -	1.25	9/28/16 10:20	16095-1.RAW	######	575.92	. 1		574.5	1.208	1.510	ng/L	
Hq2700-1	DM2	CAL	SEQ-CCV1 -	1	9/28/16 10:30	16096-1.RAW	#######	384.88-			383.5	0.653	0.653	ng/L	
Hq2700-1	DM2	CAL	SEQ-CC81 -	1	9/28/16 10:41	16097-1.RAW	#######	5.56	-	-	4.2	0.007	0.007	ng/L	
Hq2700-1	DM2		+1608980-01RE1 -	1.25	9/28/16 10:51	16098-1.RAW	######	49.37-	1		48.0	0.094	0.117	ng/L	
Hq2700-1	DM2	SAM ·	-1608980-02RE1-	1.25	9/28/16 11:02	16099-1.RAW	######	52.78	• 1		51.4	0.101	0.126	ng/L	
Hg2700-1	DM2	SAM	+1608980-03RE1-	1.25	9/28/16 11:12	16100-1.RAW	#######	47.06	- 1		45.7	0.089	0.111	ng/L	
Hg2700-1	DM2	SAM	1608980-04RE1+	1.25	9/28/16 11:23	16101-1.RAW	#######	54.83+	1		53.4	0.105	0.132	nq/L	
Hq2700-1	DM2	SAM	[1608980-05RE1-	1.25	9/28/16 11:33	16102-1.RAW	#######	68.80+	• 1		67.4	0.135	0.169	ng/L	
Hq2700-1	DM2	SAM	+1608980-06RE1 -	1.25	9/28/16 11:44	16103-1.RAW	#######	25.96	1		24.6	0.044	0.055	ng/L	
Hg2700-1	DM2	SAM	-1608981-12RE1 -	1.25	9/28/16 11:54	16104-1.RAW	#######	12.57	1		11.2	0.016	0.020	ng/L	
Hq2700-1	DM2	SAM *	1608981-13RE1 -	1.25	9/28/16 12:05	16105-1.RAW	#######	151.74+	1		150.4	0.311	0.388	ng/L	
Hq2700-1	DM2	SAM *	1608981-14RE1 -	1.25	9/28/16 12:15	16106-1.RAW	****	28.51	1		27.1	0.050	0.062	ng/L	
Hq2700-1	DM2	SAM	1608981-15RE1 -	1.25	9/28/16 12:26	16107-1.RAW	#######	92.37	1	47 of all all all and an end of a second	91.0	0.185	0.231	ng/L	
Hq2700-1	DM2	CAL	SEQ-CCV2 -	1	9/28/16 12:37	16108-1.RAW	#######	345.88		1	344.5	0.586	0.586	ng/L	
Hq2700-1	DM2	CAL	SEQ-CCB2 -	1	9/28/16 12:47	16109-1.RAW	#######	3.35			2.0	0.003	0.003	ng/L	
Hq2700-1	DM2	SAM .	1608981-16RE1 _	1.25	9/28/16 12:58	16110-1.RAW	#######	59.05+	1	·····	57.7	0.114	0.143	ng/L	
Hq2700-1	DM2	SAM	1608981-17RE1 -	1.25	9/28/16 13:08	16111-1.RAW	#######	76.19-	1		74.8	0.151	0.188	na/L	
Hq2700-1	DM2	SAM	1608981-18RE1 -	1.25	9/28/16 13:19	16112-1.RAW	#######	49.45	1		48.1	0.094	0.118	ng/L	
Hq2700-1	DM2	SAM	1609068-01RE1 -	1.25	9/28/16 13:29		#######	1.66*	1		0.3	-0.007	-0.009	ng/L	
Hg2700-1	DM2	SAM	1609068-02RE1 -	1.25	9/28/16 13:40	16114-1.RAW	#######	51.45	1	Ť	50.1	0.098	0.123	ng/L	
Hg2700-1	DM2		1609068-03RE1	1.25	9/28/16 13:50	16115-1.RAW	#######	44.32+	1	+-	42.9	0.083	0.104	ng/L	
Hq2700-1	DM2	SAM	-1609068-04RE1 -	1.25	9/28/16 14:01	16116-1.RAW	######	40.03	1		38.6	0.074	0.093	ng/L	
Hq2700-1	DM2	SAM	1609068-05RE1 ~	1.25	9/28/16 14:11	16117-1.RAW	#######	57.22-	1		55.8	0.111	0.138	ng/L	
Hq2700-1	DM2	SAM ·	-1609068-06RE1 -	1.25	9/28/16 14:22	16118-1.RAW	#######	60.56	1		59.2	0.118	0.147	ng/L	
Hq2700-1	DM2	SAM ·	-1609068-07RE1 -	1.25	9/28/16 14:32	16119-1.RAW	#######	8.38 -	· 1		7.0	0.007	0.009	ng/L	· · · · · · · · · · · · · · · · · · ·
Hq2700-1	DM2	CAL	SEQ-CCV3	1	9/28/16 14:43		######	344.874		1	343.5	0.585	0.585	ng/L	
Hq2700-1	DM2	CAL	SEQ-CCB3	1	9/28/16 14:53	16121-1.RAW	#######	3.41			2.0	0.003	0.003	ng/L	

MMHg27001-160928-1 SOLIDS

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Analysis Datasheet for Methyl Mercury in Soil/Tissue

Date of Analysis: Se	eptember 28, 2016	Analyst: DM2
Instrument #: Hg	g2700-1	Units ng/L
LIMS Sequence #: 6I	29018	

Calibration Statistics:

LabNumber	n	True Val	Area	Uncorrected Response	Corrected Peak	Corrected	A/
	<u>''</u>	1	I	Factor	Height	Response Factor	% Recovery
SEQ-CAL1	1	0.05 ng/L	31.77 units	635.32	30.38 units	607.52	103.4 %Rec
SEQ-CAL2	1	0.20 ng/L	119.00 units	594.98	117.61 units	588.03	100.1 %Rec
SEQ-CAL3	1	1.00 ng/L	589.88 units	589.88	588.49 units	588.49	100.2 %Rec
SEQ-CAL4	1	2.00 ng/L	1071.38 units	535.69	1069.99 units	534.99	91.1 %Rec
SEQ-CAL5	1	4.00 ng/L	2475.03 units	618.76	2473.64 units	618.41	105.3 %Rec
SEQ-CAL6	0						
SEQ-CAL7	0						
SEQ-CAL8	0						
SEQ-CAL9	0						
Corr. Mean RF	Corr. St Dev RF	Corr. RSD CF	Uncorr. Mean RF				
EQ7 40	1 22 02		504.00				

Corr. Mean RF	Corr. St Dev RF	Corr. RSD CF	Uncorr. Mean RF
587.49	+/- 32.07	5.5% RSD	594.92

Blanks:

LabNumber	n	Mean	Std Dev	Mean (ng/L)	Std Dev (ng/L)
SEQ-IBL	1	1.39 units		0.00 ng/L	#VALUE!

Preparation Blanks

Sample Type	Batch ID	n	Mean	Std Dev
BLK	1	3	0.231 ng/L	±0.424
BLK	2	0	0.000 ng/L	
BLK	3	0	0.000 ng/L	
BLK	4	0	0.000 ng/L	
BLK	5	0	0.000 ng/L	

Service Sample		· · · · · · · · · · · · · · · · · · ·		Uncorrected No PB											
Instrument	Analyst	Type	LabNumber	Dilution	Analyzed	FileID	Run End	Response	Batch ID	Correction?	RESP	InitialResult	FinalResult	InitialUnits	Comments
Hg2700-1	DM2	CAL	SEQ-IBL1	1!	9/28/16 7:21	16078-1 RAW	7:21:38	1.39			0.0	0.000	0.000	ng/L	
Hg2700-1	DM2	CAL	SEQ-CAL1	1	9/28/16 7:32	16079-1.RAW	7:32:09	31.77		1	30.4	0.052	0.052	ng/L	
Hq2700-1	DM2	CAL	SEQ-CAL2	1	9/28/16 7:42	16080-1.RAW	7:42:40	119.00			117.6	0.200	0.200	ng/L	
Hg2700-1	DM2	CAL	SEQ-CAL3	1	9/28/16 7:53	16081-1.RAW	7:53:10	589.88			588.5	1.002	1.002	ng/L	
Hq2700-1	DM2	CAL	SEQ-CAL4		9/28/16 8:03	16082-1.RAW	8.03.41	1071.38	·	ļ	1070.0	1.821	1.821	ng/L	
Hg2700-1	DM2	CAL	SEQ-CAL5	1	9/28/16 8:14	16083-1 RAW	8:14:12	2475.03		1	2473.6	4.211	4.211	ng/L	
Hg2700-1	DM2	CAL	SEQ-ICV1	1	9/28/16 8:24	16084-1.RAW	8:24:42	368.78			367.4	0.625	0.625	ng/L	
Hg2700-1	DM2	CAL	SEQ-ICB1	1	9/28/16 8:35	16085-1.RAW	8:35:13	7.37		l .	6.0	0.010	0.010	ng/L	
Hg2700-1	DM2	SAM	F609569-BS1	1.25	9/28/16 8:45	16086-1.RAW	8:45:44	420.61		X	419.2	0.714	0.892	ng/L	
Hg2700-1	DM2	SAM	F609569-BSD1	1.25	9/28/16 8:56	16087-1.RAW	8:56:14	411.77		x	410.4	0.699	0.873	ng/L	
Hg2700-1	DM2	BLK	F609569-BLK1	1.25	9/28/16 9:06	16088-1.RAW	9:06:45	5.40		X	4.0	0.007	0.009	ng/L	
Hg2700-1	DM2	BLK	F609569-BLK2	1.25	9/28/16 9:17	16089-1.RAW	9:17:17	5.44		x	4.0	0.007	0.009	ng/L	
Hg2700-1	DM2	BLK	F609569-BLK3	1.25	9/28/16 9:27	16090-1.RAW	9:27:48	4.08		×	2.7	0.005	0.006	ng/L	
Hq2700-1	DM2	SAM	F609569-DUP1	1.25	9/28/16 9:38	16091-1.RAW	9:38:19	43.65		x	42.3	0.072	0.090	ng/L	
Hq2700-1	DM2	SAM	F609569-MS1	1.25	9/28/16 9:48	16092-1.RAW	9:48:49	563.41		x	562.0	0.957	1.196	ng/L	
Hg2700-1	DM2	SAM	F609569-MSD1	1.25	9/28/16 9:59	16093-1.RAW	9:59:20	556.92		x	555.5	0.946	1.190	ng/L	
Hg2700-1	DM2	SAM	F609569-MS2	1.25	9/28/16 10:09	16094-1.RAW	10:09:51	546.59		x	545.2	0.928	1.160	ng/L	
Hg2700-1	DM2	SAM	F609569-MSD2	1.25	9/28/16 10:20	16095-1.RAW	10:20:21	575.92	and the first free from the stand on the set of	x	574.5	0.978	1.222	ng/L	
Hq2700-1	DM2	CAL	SEQ-CCV1	1	9/28/16 10:30	16096-1.RAW	10:30:52	384.88			383.5	0.653	0.653	ng/L	
Hg2700-1	DM2	CAL	SEQ-CCB1	1	9/28/16 10:41	16097-1.RAW	10:41:23	5.56			4.2	0.007	0.007	ng/L	
Hg2700-1	DM2	SAM	1608980-01RE1	1.25	9/28/16 10:51	16098-1.RAW	10:51:53	49.37		x	48.0	0.082	0.102	ng/L	
Hg2700-1	DM2	SAM	1608980-02RE1	1.25	9/28/16 11:02	16099-1.RAW	11:02:24	52.78		x	51.4	0.087	0.102	ng/L	
Hg2700-1	DM2	SAM	1608980-03RE1	1.25	9/28/16 11:12	16100-1.RAW	11:12:55	47.06		x	45.7	0.078	0.097	ng/L	
Hg2700-1	DM2	SAM	1608980-04RE1	1.25	9/28/16 11:23	16101-1.RAW	11:23:25	54.83		x	53.4	0.091	0.114	ng/L	
Hg2700-1	DM2	SAM	1608980-05RE1	1.25	9/28/16 11:33	16102-1.RAW	11:33:56	68.80		x	67.4	0.115	0.143	ng/L	
Hg2700-1	DM2	SAM	1608980-06RE1	1.25	9/28/16 11:44	16103-1.RAW	11:44:27	25.96		x	24.6	0.042	0.052	ng/L	
Hg2700-1	DM2	SAM	1608981-12RE1	1.25	9/28/16 11:54	16104-1.RAW	11:54:57	12.57		x	11.2	0.019	0.024	ng/L	
Hg2700-1	DM2	SAM	1608981-13RE1	1.25	9/28/16 12:05	16105-1.RAW	12:05:28	151.74		x	150.4	0.256	0.320	ng/L	
Hg2700-1	DM2	SAM	1608981-14RE1	1.25	9/28/16 12:15	16106-1.RAW	12:15:59	28.51		X	27.1	0.046	0.058	ng/L	
Hg2700-1	DM2	SAM	1608981-15RE1	1.25	9/28/16 12:26	16107-1.RAW	12:26:29	92.37		x	91.0	0.155	0.194	ng/L	
Hg2700-1	DM2	CAL	SEQ-CCV2	1	9/28/16 12:37	16108-1.RAW	12:37:00	345.88		·····	344.5	0.586	0.586	ng/L	
Hg2700-1	DM2	CAL	SEQ-CCB2	1	9/28/16 12:47	16109-1.RAW	12:47:31	3.35			2.0	0.003	0.003	ng/L	
Hg2700-1	DM2	SAM	1608981-16RE1	1.25	9/28/16 12:58	16110-1.RAW	12:58:01	59.05		x	57.7	0.098	0.123	ng/L	
Hg2700-1	DM2	SAM	1608981-17RE1	1.25	9/28/16 13:08	16111-1.RAW	13:08:32	76.19		X	74.8	0.127	0.159	ng/L	
Hg2700-1	DM2	SAM	1608981-18RE1	1.25	9/28/16 13:19	16112-1.RAW	13:19:03	49.45		x	48.1	0.082	0.102	ng/L	• • • • • • • • • • • • • • • • • • • •
Hg2700-1	DM2	SAM	1609068-01RE1	1.25	9/28/16 13:29	16113-1.RAW	13:29:33	1.66		x	0.3	0.000	0.001	ng/L	
Hg2700-1	DM2	SAM	1609068-02RE1	1.25	9/28/16 13:40	16114-1.RAW	13:40:04	51.45		x	50.1	0.085	0.107	ng/L	
Hq2700-1	DM2	SAM	1609068-03RE1	1.25	9/28/16 13:50	16115-1.RAW	13:50:35	44.32		x	42.9	0.073	0.091	ng/L	
Hg2700-1	DM2	SAM	1609068-04RE1	1.25	9/28/16 14:01	16116-1 RAW	14:01:06	40.03		x	38.6	0.066	0.082	ng/L	
Hg2700-1	DM2	SAM	1609068-05RE1	1.25	9/28/16 14:11	16117-1.RAW	14:11:36	57.22		x	55.8	0.095	0.119	ng/L	
Hq2700-1	DM2	SAM	1609068-06RE1	1.25	9/28/16 14:22	16118-1.RAW	14:22:07	60.56		x	59.2	0.101	0.126	ng/L	
Hg2700-1	DM2	SAM	1609068-07RE1	1.25	9/28/16 14:32	16119-1.RAW	14:32:38	8.38		x	7.0	0.012	0.015	ng/L	
Hg2700-1	DM2	CAL	SEQ-CCV3	1	9/28/16 14:43	16120-1.RAW	14:43:08	344.87			343.5	0.585	0.585	ng/L	
Hg2700-1	DM2	CAL	SEQ-CCB3	1	9/28/16 14:53	16121-1.RAW	14:53:39	3.41	i		2.0	0.003	0.003	ng/L	
Hg2700-1	DM2		F609558-BLK1	500	9/28/16 15:04	16122-1.RAW	15:04:10	2.12	1		0.7	0.001	0.619	ng/L	
Hg2700-1	DM2		F609558-BLK2 -	500	9/28/16 15:14	16123-1.RAW	15:14:40	1.13	1		-0.3	0.000	-0.222	ng/L	
			1			47447 \$13V19	1. 19.17.7/		·	i-	<u> </u>	0.000	-V.424		

State State Sample			per en el composition de la composition La composition de la c		1	Uncorrected	•••••••	No PB				a, essante			
Instrument	Analyst	Түре	LabNumber	Dilution	Analyzed	FileID	Run End	Response	Batch ID	Correction?	RESP	InitialResult	FinalResult	1	Comments
Hg2700-1	DM2	BLK	∔F609558-BLK3 ~	500 🖕	9/28/16 15:25	16124-1.RAW	15:25:11	1.74 🛏	1		0.3	0.001	0.295	ng/L	
Hg2700-1	DM2	SAM	+F609558-BS1	10004	9/28/16 15:35	16125-1.RAW	15:35:42	1091.58	1		1090.2	1.855	1855.456	ng/L	
Hg2700-1	DM2	SAM	†F609558-BSD1	1000-	9/28/16 15:46	16126-1.RAW	15:46:12	1121.18	1		1119.8	1.906	1905.836	ng/L	
Hg2700-1	DM2	SAM	- 1608793-07 -	1000	9/28/16 15:56	16127-1.RAW	15:56:43	386.70+	i		385.3	0.656	655.626	ng/L	
Hg2700-1	DM2		† 1608793-08 -	1000	9/28/16 16:07	16128-1.RAW	16:07:14	608.81.	1		607.4	1.034	1033.696	ng/L	
Hg2700-1	DM2	SAM	† 1608793-09 →	1000+	9/28/16 16:17	16129-1.RAW	16:17:44	275.97+	1		274.6	0,467	467.157	ng/L	
Hg2700-1	DM2	SAM	-1608793-10 -	1000-	9/28/16 16:28	16130-1.RAW	16:28:15	512.84	1		511.5	0.870	870.339	ng/L	
Hg2700-1	DM2	SAM	-1608793-11 -	1000	9/28/16 16:38	16131-1.RAW	16 38 46	647.58	1		646.2	1.100	1099.694	ng/L	
Hg2700-1	DM2	CAL	SEQ-CCV4 -	1	9/28/16 16:49	16132-1.RAW	16:49:16	332.47			331.1	0.564	0.564	i ng/L	
Hg2700-1	DM2	CAL	SEQ-CCB4 🖌	1	9/28/16 16:59	16133-1.RAW	16:59:47	5.24+			3.8	0.007	0.007	ng/L	
Hg2700-1	DM2	SAM	↓ 1608793-12 ↓	1000 -	9/28/16 17:10	16134-1.RAW	17:10:18	325.52 -	1		324.1	0.551	551.492	ng/L	
Hg2700-1	DM2	SAM	H608793-13 -	1000	9/28/16 17:20	16135-1.RAW	17:20:48	764.79	1	····	763.4	1.299	1299.199	ng/L	
Hg2700-1	DM2	SAM	+1608793-14 -	1000+	9/28/16 17:31	16136-1.RAW	17:31:19	810.50	1		809.1	1.377	1377.011	ng/L	
Hg2700-1	DM2	SAM	1608793-15 -	1000*	9/28/16 17:41	16137-1.RAW	17:41:50	846.07	1		844.7	1.438	1437.555	ng/L	
Hg2700-1	DM2	SAM	1608793-16	1000	9/28/16 17:52	16138-1.RAW	17:52:20	1419.50+	1	1	1418.1	2.414	2413.625	ng/L	
Hg2700-1	DM2	SAM	+1608793-17 -	1000	9/28/16 18:02	16139-1.RAW	18:02:51	1594.20	1		1592.8	2.711	2710.983	ng/L	
Hg2700-1	DM2	SAM	+1608793-18 -	1000	9/28/16 18:13	16140-1.RAW	18:13:22	688.60+	1		687.2	1.170	1169.511	ng/i.	
Hg2700-1	DM2	SAM	1608793-19 _	1000 -	9/28/16 18:23	16141-1.RAW	18:23:53	1255.55	1		1254.2	2.135	2134.552	ng/L	
Hg2700-1	DM2	SAM	+1608793-20 -	1000+	9/28/16 18:34	16142-1.RAW	18:34:24	433.68	1		432.3	0.736	735.589	ng/L	
Hg2700-1	DM2	SAM	-1608793-21 -	1000-	9/28/16 18:44	16143-1.RAW	18:44:55	1409.78	1		1408.4	2.397	2397.071	ng/L	
Hg2700-1	DM2	CAL	SEQ-CCV5	1	9/28/16 18:55	16144-1.RAW	18:55:26;	348.35			347.0	0.591	0.591	ng/L	
Hg2700-1	DM2	CAL	SEQ-CCB5 -	1	9/28/16 19:05	16145-1.RAW	19:05:57	6.86+	1	1	5.5	0.009	0.009	ng/L	
Hg2700-1	DM2		↓1608793-22 ~	1000+	9/28/16 19:16	16146-1.RAW	19:16:27	573.18	1		571.8	0.973	973.044	ng/L	
Hg2700-1	DM2		÷1608793-23 ⊨	1000-	9/28/16 19:26	16147-1.RAW	19:26:58	844.73	1		843.3	1.435	1435.263	ng/L ;	
Hg2700-1	DM2	SAM	1608793-24	1000-	9/28/16 19:37	16148-1.RAW	19:37:29	446.22+	1		444.8	0.757	756.946	ng/L	
Hg2700-1	DM2	SAM	1608793-25 -	1000	9/28/16 19:48	16149-1.RAW	19:48:00	776.91+	1	-	775.5	1.320	1319.827	ng/L	
Hg2700-1	DM2	SAM	1608793-26*	1000	9/28/16 19:58	16150-1.RAW	19:58:30	663.71-	1		662.3	1.127	1127.136	ng/L	
Hg2700-1	DM2		-F609558-DUP1 -	1000 -	9/28/16 20:09	16151-1.RAW	20:09:01	816.89	1		815.5	1.388	1387.879	ng/L	
Hg2700-1	DM2		+F609558-MS1_	1000	9/28/16 20:19	16152-1.RAW	20:19:32	970.38+	1	1	969.0	1.649	1649.147	ng/L	
Hg2700-1	DM2		+F609558-MSD1 -	1000	9/28/16 20:30	16153-1.RAW	20:30:02	1041.42	1		1040.0	1.770	1770.045	ng/L	
Hg2700-1	DM2		+F609558-MS2 -	1000+	9/28/16 20:40	16154-1.RAW	20:40:33	860.57-	1		859.2	1.462	1462.228	ng/L	
Hg2700-1	DM2	SAM	+F609558-MSD2 -	1000	9/28/16 20:51	16155-1.RAW	20:51:04	811.56	1		810.2	1.379	1378.802	ng/L	
Hg2700-1	DM2	CAL	SEQ-CCV6	1	9/28/16 21:01	16156-1.RAW	21:01:35	369.22			367.8	0.626	0.626	ng/L	
Hg2700-1	DM2	CAL	SEQ-CCB6	1	9/28/16 21:12	16157-1.RAW	21:12:05	8.51			7.1	0.012	0.012	ng/L	

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	MethylMercury EPA1630	Operat DM Workst MHg270	i CalibFa	587,49	Status:	Conc = (Area-1.3 OK,1 Warnings		Run Time:	6:55:06	Blank RSD	0 0						
		Methoc 2010-01 Descrip MHg270		0.9977	R2:	0.995468452		CalibAnah Me	łg	CF SD: CF RSD%	32.07154477 5.459091188						
	Sample/ID				ConcHa0(p	ConcMeHg(ppt)	ConcHa2(p	ConcPrHa/r Rec	% %	en e	 A standard stand standard standard stand standard standard stand standard standard st Standard standard stand standard standard st Standard standard stand standard standard stand standard standard stan	and the set of a first state of the set of t	PeakMelio (P	DeskHa7(Day D	eakPrHg(Ra) Control (etf) Flags	RunCount
	Clean			0		0.002714188					16076-1.RAW		1.59455492		0 cleandry	ctions (u:	No. Count
	WS	A1									16077-1.RAW	16.3890152		23.9560606	0 psample1		1
		A2	1		0.0553734		0.0443899				16078-1.RAW	32.5312263	1.38986742		0 psample1		1
		A3			0.0629559				03.41		16079-1.RAW	38.3757339			0 psample1		1
		A4			0.078095			1	00.09		16080-1.RAW	47.2697917			0 psample1	0 СТ	1
	•	A5			0.1570805				00.17		16081-1.RAW	93.6729167	589.876894.	28.0560133	0 psample1	0 CT	1
		A6			0.375109				1.06		16082-1.RAW	221.762177			0 psample1	0 ст	1
	•	A7			0.5549873				05.26		16083-1.RAW	327.438657			0 psample1	0 СТ	1
		A8			0.4569913				25.23		16084-1.RAW		368.779451		0 psample1	0 CT	1
	-	A9		1.3899	0.059225			I	0.00		6085-1.RAW		7.37097538		0 psample1		1
	-609569-851 - -609569-85D1 -				0.0850779	0.891981237					6086-1.RAW		420.612997		0 psample1		1
	609569-BLK1-			1.3899	0.117372 0.0458025	0.873176022					6087-1.RAW	56.5536439			0 psample1		1
	609569-BLK2 -				0.0459806	0.008530346 0.008609933					6088-1.RAW	22.916643			0 psample1		1
	609569-BLK3 -				0.0384243	0.005724441					6089-1.RAW		5.43645833-		0 psample1		1
	609569-DUP1 -				0.0474308	0.089909145					6090-1.RAW		4.08030303 -		0 psample1		1
	609569-MS1-				0.0769658	1.195804921		11	9.58		6091-1.RAW 6092-1.RAW		43.6463542 +		0 psample1		1
	609569-MSD1-				0.0752467	1.181999248		11	9.30		6093-1.RAW	37.5631155	563.407386- 556.918845-		0 psample1		1
	609569-MS2				0.0465786	1.160026711		5	8.00		6094-1.RAW		546.591951 +		0 psample1		1
	609569-MSD2 -				0.0504162	1.222420721		5	0.00		6095-1.RAW		575.916572		0 psample10 0 psample10		1
ş	EQ-CCV1 🖌 🖌	A20			0.4347912	0.652767211		13	0.72		6096-1.RAW	256.824803			0 psample10		1
2	EQ-CCB1 -	421			0.0312412	0.007091287			.00		6097-1.RAW	19.7437027	5.55591856-		0 psample1		1
1	608980-01RE1 + 1	31	1.25	1.3899	0.0584464	0.102096376					6098-1.RAW		49.3742424 -		0 psample10		1
1	608980-02RE1-1	32	1.25	1.3899	0.043065	0.10934179					6099-1.RAW		52.7795218		0 psample10		1
1	608980-03RE1 +	33	1.25	1.3899	0.0348036	0.097164332	0.083308				6100-1.RAW		47.0562263+		0 psample1		1
	608980-04RE1 · 8				0.0347985	0.113708412	0.1021954			1	6101-1.RAW	17.7448627	54.8317945 -		0 psample10		1
	608980-05RE1-6				0.0364985	0.143420056				1	6102-1.RAW	18.543824	68.7959991 -	78.4947443	0 psample10		1
	608980-06RE1F				0.0271381	0.052271515				1	6103-1.RAW	14.1445313	25.9570076*	30.8752367	0 psample10		1
	608981-12RE1+E				0.0288262	0.023791056				1	6104-1.RAW	14.9379261	12.5714489 -	35.5336884	0 psample10	OK	1
	608981-13RE1 -				0.0508425	0.319907317				1	6105-1.RAW	25.2853693	151.743419 🖬	139.863149	0 psample10	СТ	1
	608981-14RE1-E				0.0323209	0.057703649					6106-1.RAW	16.58038	28.5100616	39.5384943	0 psample10	OK	1
	608981-15RE1 ~E				0.0460382	0.193568353					5107-1.RAW		92.3652462		0 psample10	СТ	1
	•	311			0.7790973	0.586372359			7.42		5108-1.RAW		345.877012 -		0 psampie10	СТ	1
	EQ-CCB2 - E 608981-16RE1 • E	312			0.031061	0.003335251		0	.00		5109-1.RAW		3.34928977-		0 psample10	OK	1
	608981-17RE1- E				0.0460895	0.122673516 0.159149625					5110-1.RAW		59.0453125 -		0 psample10	CT	1
	608981-18RE1- E				0.0722956	0.102254895					5111-1.RAW		76.1887547		0 psample10	CT	1
	609068-01RE1~ E				0.0233305	0.000565271					5112-1.RAW		49.4487453 -		0 psample10	ĊT	1
	609068-02RE1 - E				0.0340701	0.106517399					5113-1.RAW 5114-1.RAW		1.65553977 -		0 psample10	OK	1
	509068-03RE1~B				0.0269428	0.091333657					5115-1.RAW		51.4520833 - 44.3158617 -		0 psample10	CT	İ
	509068-04RE1+ B				0.0235326	0.082212955					116-1.RAW	12.45	40.029214		0 psampie10 0 psample10	OK	1
	509068-05RE1 9B				0.0406893	0.118784418					5117-1.RAW		57.2174716-		0 psample10	OK CT	1
10	509068-06RE1* B	21			0.0273768	0.125895189 (5118-1.RAW		60.5594697 - 3		0 psample10	СТ	1
10	509068-07RE1 C	1	1.25	1.3899 (0.0238917	0.014867206 (119-1.RAW		8.37732008-		0 psample10	СТ	1
Si	EQ-CCV3 🖉 🖸 C	2	1	1.3899 0	0.5540254	0.584650775 (0.4729104	117	7.08		120-1.RAW		344.865601 • 1		0 psample10	CT	1
SI	EQ-CCB3 🗕 🛛 C	3	1	1.3899 0	0.0216627	0.003443812	0.051178		00		121-1.RAW		3.41306818		0 psample10	cr	1
	509558-BLK1- C		500	1.3899 9	9.0958388	0.619189036	42.38746				122-1.RAW		2.11740057~ !		0 psampie10	OK	1
	509558-BLK2 🖵 C				1.484505	0.222421261	16.324209			16	123-1.RAW		1.12852746 -		0 psample10	OK	1
	09558-BLK3 - C				0.080223	0.29515799				16	124-1.RAW	13.2339015	1.7366714-		0 psample10	OK	1
	609558-BS1 - C				.77.65844	1855.686751				16	125-1.RAW	105.762195	1091.5849 - 3	34.835768	0 psample10	СТ	1
	09558-BSD1 - C				00.48193	1906.066829					126-1.RAW	119.170739	1121.18262- 3	41.225837	0 psampie10	CT	1
	508793-07 - C				3.231102	655.856487 1					127-1.RAW		386.6981536		0 psample10	OK	1
	608793-08 🛥 C				11.00697	1033.926933 1					128-1.RAW		608.810275 -		0 psample10	СТ	1
	08793-09 - C 08793-10 C				3.958768 4.879079	467.3876433					129-1.RAW		275.974834 - 5		0 psample10	CT	1
10	00735-10 C	14	1000 1	1.2033 9	9.0619019	870.5701126 1	14.13074			16	130-1.RAW	57.1302557	512.839986 + 6	8.4403883	0 psample10	OK	1

1608793-11 +	C13	1000 1.3899 112.522	51 1099.924735 104.80327		16131-1.RAW	67.4955729	647.583239- 62.9606061	0 psample10	СТ	1
SEQ-CCV4 -	C14	1 1.3899 0.72790	26 0.563544833 0.4959941	112.85	16132-1.RAW	429.024449	332,456098 292,780806	0 psample10	CT	1
SEQ-CCB4 🖛	C15	1 1.3899 0.05763	28 0.006545419 0.048527	0.00	16133-1.RAW	35.2484848	5.23522727 - 29.8989583	0 psample10	a	1
1608793-12 -	C16	1000 1.3899 84.0192	64 551.7223546 104.46735		16134-1.RAW	50.7502367	325.520526 - 62.7632576	0 psample10	Ċ	1
1608793-13 🕳	C17	1000 1.3899 110.672	34 1299.429292 105.73688		16135-1.RAW	66.4086174	764,789915- 63,5090909	0 psample10	ά	1
1608793-14-	C18	1000 1.3899 103.280	45 1377.242118 129.39804		16136-1.RAW	17:31:19 62.0659636	810.504072- 77.4097538	0 psample10	OK	1
1608793-15 🛥	C19	1000 1.3899 106.696	68 1437.78535 110.58973		16137-1.RAW	64.072964	846.072538 - 66.3600852	0 psampie10	CT	1
1608793-16 🕶	C20	1000 1.3899 163.522	89 2413.855756 134.71422		16138-1.RAW	97,4577178	1419.50289 = 80.5329545	0 psample10	CT CT	1
1608793-17-	C21	1000 1.3899 164.460	04 2711.21374 131.14501		16139-1.RAW	98.008286	1594.19735- 78.4360795	0 psample10	CT	1
1608793-18-	A1	1000 1.3899 97.1070	04 1169.742082 104.13224		16140-1.RAW	58.4391577	688.600142+ 62.5663826	0 psample10	ок	1
1608793-19,	A2	1000 1.3899 137.2634	46 2134.782376 131.33569		16141-1.RAW	82.0306041	1255.55043 - 78.5481061	0 psample10	CT	1
1608793-20 +	A3	1000 1.3899 94.97905	58 735.8199827 123.64285		16142-1.RAW	57,1889926	433.675805 - 74.0286458	0 psample10	ОК	1
1608793-21 👻	A4	1000 1.3899 154.7409	96 2397.301441 132.39382		16143-1.RAW	92.2984375	1409.77741 - 79.1697443	0 psample10	CT	1
SEQ-CCV5 🛩	A5	1 1.3899 0.516284	0.590583473 0.5224188	118.26	16144-1.RAW	304.701121	348.350994 - 308.305012	0 psample10	cī	1
SEQ-CCB5 🖌	A6	1 1.3899 0.051438	39 0.009309536 0.0532049	0.00	16145-1.RAW	31.6096591	6.85911458 - 32.6471354	0 psample10	OK	1
1608793-22-	A7	1000 1.3899 94.95012	23 973.2748172 135.07549		16146-1.RAW	57.1719934	573.177841 - 80.7451941	0 psample10	СТ	1
1608793-23-	A8	1000 1.3899 110.4755	53 1435.493881 162.69961		16147-1.RAW	66.2929924	844.726326 - 96.974053	0 psample10	ά α	1
1608793-24 -	A9	1000 1.3899 83.45322	24 757.1770177 127.54528		16148-1.RAW	50,417695	446.222822 - 76.3212831	0 psample10	CT CT	1
1608793-25 -	A10	1000 1.3899 115.9402	1 1320.057348 126.048		16149-1.RAW		776.908665 75.441643	0 psample10	OK	1
1608793-26	A11	1000 1.3899 103.9011			16150-1.RAW		663.705206 - 71.2121212	0 psample10	CT	1
F609558-DUP1 -	A12	1000 1.3899 117.8303	1388.109267 157.03646		16151-1.RAW	70.6138849	816.8884 - 93.647017	0 psample10	сı ст	1
F609558-MS1-	A13	1000 1.3899 131.8683		164937.79	16152-1.RAW	78.8610559	970.380753 * 87.6378551	0 psample10	OK	1
F609558-MSD1 -	A14	1000 1.3899 144.6726	7 1770.275617 165.13736		16153-1.RAW	86.383428	1041.40682+ 98.4062027	0 psample10	OK	1
F609558-MS2	A15	1000 1.3899 129.6108	1 1462.458858 157.7249	73122.94	16154-1.RAW		860.567945+ 94.0514678		CT	1
F609558-MSD2-	A16	1000 1.3899 120.0929		, , , , , , , , , , , , , , , , , , , ,	16155-1.RAW		811.555966 92.5170928	0 psample10		1
SEQ-CCV6-	A17	1 1.3899 0.383415		125.38	16156-1.RAW		369.220975 301.803874	0 psample10	CT CT	1
SEQ-CCB6-	A18	1 1.3899 0.052038		0.00	16157-1.RAW		8.50785985 37.8596591	0 psample10	ст ст	1
-				0.00		21112.05 51.5017050	0.30/03/03 37.030031	0 psample10	C1	1

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MethylMercury EPA1630	Worksi MH Methox 201 Descrit MH	0270 CalibFa .0-01 R: 027001-1609	587.49 0.9977 28-1	Status: Rª:	D.995468452	2	Run Time: CalibAnal: N	6:55:0 4eHo	CF SD: CF SD: CF 850%	32.071 5.4590								
Clean	Location Rin	se Dilute	Blank D	ConcHap	(pi ConcHeHq(ppt) 0.002714188	ConcHq2(p 0.010249	: ConcPrHq(r R	tec%	QA	RawData 16076-1.R	RunEn	d 7:00:37		n PeakMeHa (R 0 1.59455492		PeakPrHo(Rai Control (et 0 cleandry) Flaos CT	RunCount
WS	A1	ť								16077-1 R		7:11:08				0 psample10	OK	1
SEQ-IBL1 SEQ-CAL1	A2 A3			0.055373				103.41		16078-1.R		7:21:38		3 1.38986742		0 psample10	OK	1
SEQ-CAL2	A4		1.3899					100.09		16080-1.RJ		7:32:09				0 psample10 0 psample10	OK	1
SEQ-CAL3	A5			D.157060				100.17		16081-1.R		7:53:10				0 psampie10	a a	1
SEQ-CAL4	A6	1	1.3899	0.37510	9 1.821294368	0.0605718		95.06		16082-1.R/		8:03:41			36.975142	0 psample10	ĆT	1
SEQ-CALS	A7	1		0.554987				105.26		16083-1.R/	w	8:14:12			48.4983191	0 psample10	ດ	1
SEQ-ICV1 SEO-ICB1	A9 A9	1		0.456991				125.23		16084-1.RJ		8:24:42			292.026437	0 psample10	a	1
F609569-B\$1	A9 A1D		1.3899	0.05972 0.085077				0.00		16085-1.R/		8:35:13			28.833286	© psample10	CT	1
F609569-BSD1	A11		1.3899							16086-1.RA 16087-1.RA		8:45:44	41.375710		29.3222538 24.1701705	0 psample10	СТ СТ	1
F609569-8LK1	A12	1.25		0.045802	5 0.008530346					16088-1.R/		9:06:45			29.93043	D psample10 O psample10	ст СТ	1
F609569-8LK2	A13	1 25				0.0648963				16089-1.RA		9:17:17			31.890554	C psampie10	OK	1
F609569-BLK3	A14	1.25		0.038424						16090-1.RA	w	9:27:48	19.4489342			0 psample20	CT	1
F609569-DUP1 F609569-MS1	A15	1.25		0.047430						16091-1.RA		9:38:19	23.6819129		50.212642	0 psample10	Оĸ	1
F609569-MSD1	A15 A17	1.25		0.076965				119.58		16092-1.RA		9:48:49			176.874905	0 psample10	сī	1
F609569-MS2	A18	1.25		0.046578				58.00		16093-1.RA 16094-1.RA		9:59:20 10:09:51	36.7551373		175.467934	6 psample10	Ċī	1
P609569-MSD2				0.050416				00.00		16095-1.RA		10:20:21	25.0850142		68.6263258 87.6774621	0 psample30 0 psample10	CT	1
SEQ-CCV1	A20	3		0.434793		0.5188581		130.72		16095-1.RA		10:30:52			306.213117	0 psample10	CT	1
SEQ-CCB1	A21	1		0.0312412	2 0.00709:287	0.0576424		0.00		16097-1.RA	w	10:41:23	19.7437027		35.2541193	0 psampre10	ÖK	i
3608980-01RE1		1.25		0.058446						16098-1.RA		10:51:53			61.3499527	0 psample10	OK	1
1608980-02RE1 1608980-03RE1			1.3899	0.043065						16099-1.RA		11:02:24			55.8799715	0 psample10	OK	1
1608980-04RE1				0.0347985						16100-1.RA 16101-1.RA		11:12:55 11:23:25	17.7472538		40.5438886	0 psample10	CT	1
1608980-05RE1				0.0364985						16102-1.RA		11:23:25	17.7448627		49.420786 78.4947443	0 psample10 0 psample10	OK OK	1
1608980-06RE1		1.25	1.3899	0.0271381						16103-1.RA		11:44:27		25.9570076	30.8752367	0 psample10 0 psample10	ĆT.	1
1508981-12RE1				0.0288262	0.023791056	0.0726478				16104-1.RA		11:54:57	14.9379261	12.5714489	35.5336884	0 psample10	ÖK.	1
1608981-13RE1				0.0508425						16105-1.RA		12:05:28	25.2853693	151.741098	139.863149	0 psample10	Ċ	i
1608961-14RE1 1608981-15RE1				0.0323209						16106-1.RA		12:15:59	16.58038		39.5384943	0 psample10	OK	1
5EQ-CCV2	813			0.0460382		0.51327		117.42		16107-1.RA		2:26:29	23.027391:	92.3652462	192.475941	0 psample10	CT	1
SEQ-CCB2	612		1.3899	0.031061				0.00		16108-1.RA		12:37:00 12:47:31	459.100758	345.877012 3.34928977	302.930199	0 psample10	CT Ar	1
1608981-16RE1				0.0460895				0.00		16110-1.RA		12:58:01	23.0515233	59.0453125	39.5247159 113.133132	0 psample10 0 psample10	ок ст	1
1608981-17RE1				0.0722956	0.159149625					16111-1.RA			35.3681345	76.1887547	139.937308	0 psample10	G	1
1608961-18RE1				0.0416284	0.102254895				:	16112-1.RA	N 1	13:19:03	20.9548207	49.4487453	54.6981534	D psample10	CT	1
1609068-01RE1 1609068-02RE1				0.0229968 0.0340701	0.000565271					16113-1.RA			12.1981534	1.65553977	24.4753788	0 psample10	OK	1
	517 518			0.0340701	0.106517399 0.091333657					16114-1.RAN		13:40:04	17.4025095		67.1431084	0 psample10	ĊT	1
1609068-04RE1				0.0235326	0.082212955					16115-1.RA		14:01:06	14.0527462 12.45	44.3158617 40.029214	46.4453835 40.0398911	0 psampte10	ÖK OK	1
1609068-05RE1	B20			0.0406893						6117-1.RA		4:11:36	20.5134943	57.2174716	67.3304356	0 psample10 D psample10	ĊT	1
1609068-06RE1				0.0273259	D.125895189					5118-1.RA			14.2327833	60.5594697	78.0197379	0 psample10	a	1
1609068-07RE1				0.0238917						6119-1.RAV		4:32:38	12.61875	8.37732008	38.6655264	© psample1D	Ċ,	1
	62			0.5540254				17.08		6120-1.RAV			326.873565		279.219408	0 psample10	Ċī	1
	C3 C4			0.0216103 9.1043617		0.051178 42.38746		0.D0		6121-1.RAV			14.0857008		31.4563679	0 psample10	CT	1
	C5			11.484505	-0.222421251				-	5123-1.RAV			12.0872869 14.8839015	2.11740057	51.1941761 55.819768	0 psample10	OK OK	1
	C6	500	1.3899	10.080223	0.29515799	49.04555				6124-1.RAV			13.2339015		59.0172822	© psample10 © psample10	OK	1
	C7			177.65844	1855.71633					6125-1.RAV			105.762195		334.835768	0 psample10	CT CT	1
	C8			200.48193	1906.066829				1	6126-1.RAV	v 1	5:46:12	119.170739	1121.18262	341.225837	0 psample10	CT .	ĩ
	C9			93.231102	655.856487					6127-1.RAV			56.1620879		54.4684185	0 psample10	ΟK	1
	C10 C11			110.97969 93.958768	1033.926933					6128-1.RAV		6:07:14	66.589:82		63.2914299	0 psample10	с т	1
	C12			94.879079	467.3876433 870.5701126					6129-1.RAV 6130-1.RAV			56.5895833 57 1302557		54.4847536 68.4403883	0 psample10	CT .	1
	C13			112.52251	1099.924735					6131-1.RAV			67.4955729		62,9606061	0 psample10 0 psample10	OK CT	1
SEQ-CCV4	C14			0.7279026	0.563595286		1	12.86		6132-1.RAV			429.024449		292.780806	0 psample10 0 psample10	ά .	1
	C15			0.0576328	0.006545419			D.00		6133-1.RAV			35.2484848		29.8989583	0 psampie10	C1	1
	C16			84.019264	551.7223546					6134-1.Rav			50.7502367	325.520526	62.7632576	0 psample10	ä	1
	C17 C18			110.98694 103.24941	1299.429292					6135-1.RAV			66.5934409		63.5090909	0 psample10	ĹТ	1
	C19			105.24941	1377.242118 1 1437.78535 1					6136-1.RAM			62.0477324		77.4036458	0 psample10	OK	1
	C20			163.52289	2413.855756 1					6137-1.RAM 6138-J.RAW		7:41:50 7:52:20	64.072964 97.4577178		66.3600852 80.5329545	0 psample10	đ	1
1608793-17	C21			64,46004	2711.21374					6139-1.RAW		8:02:51	98.008286		78.1278172	G psample10 O psample10	CT CT	1
	A1			97.10704	1169.695417 1	05.92281				5140-1.RAW			58.4391577		63.6183239	0 psample10	OK	1
	A2			137.26346	2134.782376 1	31.64107			10	5141-1.RAW	/ 18	8:23:53	82.0306041	1255.55043	78.7275095	D psample10	CT CT	1
	A3			×.979058	735.8199827 1				1	5142-1.RAM	í 18	8:34:24	57.1889926	433.675805	74.0286458	0 psample10	OK	1
	A4 A5			54.74096	2397.301441 1		_			5143-1.RAV			92.2984375		78.5553977	0 psample10	a	1
	А5 Аб			0.5162844 0.0514389	0.590583473 0 0.009309536 0			18.26 6.00		6144-1.RAW					308.305012	0 psample10	СТ	1
	A7			4.950123	973.2748172 1		,	J. JU		5145-1.RAW					32.6471354 80.7451941	0 psample10	OK C	1
	A8			10.47953	1435.493881 1					5140-1.RAW				844.726326	96.974053	0 psample10 0 osample10	CT CT	3
	A9			3.362156	757.1770177 1					148-1.RAW					76.3212831	0 psample10	G	1
	A10			15.94021	1320.057348 1					149-1.RAW	19	9:48:00			74.4886837	D psample10	OK	1
	A11			03.90117	1127.366908 1					150-1.RAW					71.2121212	0 psample10	ст	1
	A12 A13			17.83038 31.86839	1368.109267 1 1649.377865			937.79		151-1.RAW			70.6138849		3.1695076	0 psampie10	a	1
F609558-MSD1				44.57257	1049.377865		164	257.79		152-1.RAW				970.380753 1 1041.40682 5	87.6378551	0 psample10	OK DK	1
											20			2012.1002	NJ. TUUZUZ/	0 psample10	UK	1

F609558-MS2	A15	1000 1.3899 129.61081	1462.458858 157.7249	73122.94	16154-1.RAW	20:40:33	77.5347538 8	560.567945	94.0514678	0 psample10	ព	1
F609558+MSD2	A16	1000 1.3899 120.09293	1379.03261 155.11315		16155-1.RAW	20:51:04	71.9431081 8	E11.555966	92.5170928	0 psample10	a	,
SEQ-CCV6	A17	1 1.3899 0.3834153	0 626107528 0.512064	125.38	16156-1.RAW	21:0::35	225.542036 3	369 220975	302 221691	0 psampie10	17	
SEQ-CCB6	A28	1.3899 0.0520669	0.012115964 0.0621084	D.0C	16157-1.RAW		31.9785985 8			0 psample10	CT.	1

Failing Data Report - 6129018

Sample ID	Analysis	Result	MRL	Dup Result	Source Result	True Value	Units	% Rec.	Rec. LCL	Rec. UCL	RPD	RPD Limit	Over Cal	Failure	Qualifier
F609558-BS1	MHg-CVAFS-T-KOH	147.3	4.0			330.28	ng/g	44.6	70.00	130.00			PASS-OVER	FAIL-BS	DNR
F609558-BSD1	MHg-CVAFS-T-KOH	152.5	4.0	147.3		330.28	ng/g	46.2	70.00	130.00	3.48	25.00	PASS-OVER	FAIL-BSD (Rec.)	ONR

Dan Marem Analyst Reviewed By

9 29 1C Date

Peer Reviewed By

9-30-16 Date

Failing Data Report - 6I29013

Sample ID	Analysis	Result	MRI.	Dup Result	Source Result	True Value	Units	% Rec.	Rec. LCL	Rec. UCL	RPD	RPD Limit	Over Cal	Failure	Qualifier
Analyst Review	Moran ved By	9/20 Da		•		Ĭ	Peer Kev	lewed By					9-29.16 Date	<u></u>	

6129013

Instrument: Hg2700-1

Calibration ID: UNASSIGNED

Analyzed: 9/28/2016

			1		Analyzeu: 9/28/2010
Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
6I29013-IBL1	QC	1			
6129013-CAL1	QC	2	1604163		
6129013-CAL2	QC	3	1604164		
6129013-CAL3	QC	4	1604165		
6129013-CAL4	QC	5	1604166		
6129013-CAL5	QC	6	1604167		
6129013-ICV1	QC	7	1605079		anna an an anna an anna an anna an anna an an
6129013-ICB1	QC	8			
F609569-BS1	QC	9			
F609569-BSD1	QC	10			
F609569-BLK1	QC	11			
F609569-BLK2	QC	12			· · · · · · · · · · · · · · · · · · ·
F609569-BLK3	QC	13			
F609569-DUP1	QC	14			
F609569-MS1	QC	15			
F609569-MSD1	QC	16			
F609569-MS2	QC	17			
F609569-MSD2	QC	18			
6129013-CCV1	QC	19	1605079		
6129013-CCB1	QC	20			
1608980-01RE1	MHg-CVAFS-W-Dist	21			From F609509 by DMH on 26-Sep-16
1608980-02RE1	MHg-CVAFS-W-Dist	22			From F609509 by DMH on 26-Sep-16
1608980-03RE1	MHg-CVAFS-W-Dist	23			From F609509 by DMH on 26-Sep-16
1608980-04RE1	MHg-CVAFS-W-Dist	24			From F609509 by DMH on 26-Sep-16
1608980-05RE1	MHg-CVAFS-W-Dist	25			From F609509 by DMH on 26-Scp-16
1608980-06RE1	MHg-CVAFS-W-Dist	26			From F609509 by DMH on 26-Sep-16
1608981-12RE1	MHg-CVAFS-W-Dist	27			From F609509 by DMH on 26-Sep-16
1608981-13RE1	MHg-CVAFS-W-Dist	28			From F609509 by DMH on 26-Sep-16
1608981-14REI	MHg-CVAFS-W-Dist	29			From F609509 by DMH on 26-Sep-16
1608981-15RE1	MHg-CVAFS-W-Dist	30			From F609509 by DMH on 26-Sep-16
6I29013-CCV2	QC	31	1605079		
6129013-CCB2	QC	32			
1608981-16RE1	MHg-CVAFS-W-Dist	33			From F609509 by DMH on 26-Sep-16
1608981-17RE1	MHg-CVAFS-W-Dist	34			From F609509 by DMH on 26-Sep-16
1608981-18RE1	MHg-CVAFS-W-Dist	35		<u> </u>	From F609509 by DMH on 26-Sep-16

Due Date: 9/22/2016

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ANALYSIS SEQUENCE

6I29013

Instrument: Hg2700-1

Calibration ID: UNASSIGNED

Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
1609068-01RE1	MHg-CVAFS-W-Dist	36			From F609509 by DMH on 26-Sep-16
1609068-02RE1	MHg-CVAFS-W-Dist	37	1	<u> </u>	From F609509 by DMH on 26-Sep-16
1609068-03RE1	MHg-CVAFS-W-Dist	38			From F609509 by DMH on 26-Sep-16
1609068-04RE1	MHg-CVAFS-W-Dist	39			From F609509 by DMH on 26-Sep-16
1609068-05RE1	MHg-CVAFS-W-Dist	40			From F609509 by DMH on 26-Sep-16
1609068-06RE1	MHg-CVAFS-W-Dist	41			From F609509 by DMH on 26-Sep-16
1609068-07RE1	MHg-CVAFS-W-Dist	42			From F609509 by DM11 on 26-Sep-16
6I29013-CCV3	QC	43	1605079		······································
6129013-CCB3	QC	44			w

Samples Loaded By

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1000 9/29/16 Date

Due Date: 9/22/2016

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Analyzed: 9/28/2016

ANALYSIS SEQUENCE

6129018

Instrument: Hg2700-1

Calibration ID: UNASSIGNED

			States and states and states and states	-	
Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
6I29018-IBL1	QC	1			
6129018-CALI	QC	2	1604163		
6129018-CAL2	QC	3	1604164		
6I29018-CAL3	QC	4	1604165		
6129018-CAL4	QC	5	1604166		
6129018-CAL5	QC	6	1604167		
6l29018-ICVI	QC	7	1605079		
6I29018-ICB1	QC	8			
6I29018-CCV1	QC	9	1605079		
6129018-CCB1	QC	10			
6I29018-CCV2	QC	11	1605079		
6l29018-CCB2	QC	12			
6I29018-CCV3	QC	13	1605079		
6l29018-CCB3	QC	14			
F609558-BLK1	QC	15			
F609558-BLK2	QC	16			
F609558-BLK3	QC	17			
F609558-BS1	QC	18			
F609558-BSD1	QC	19			
1608793-07	MHg-CVAFS-T-KOH	20			
1608793-08	MHg-CVAFS-T-KOH	21			
1608793-09	MHg-CVAFS-T-KOH	22			
1608793-10	MHg-CVAFS-T-KOH	23			
1608793-11	MHg-CVAFS-T-KOH	24			
6I29018-CCV4	QC	25	1605079		
6I29018-CCB4	QC	26			
1608793-12	MHg-CVAFS-T-KOH	27			
1608793-13	MHg-CVAFS-T-KOH	28			
1608793-14	MHg-CVAFS-T-KOH	29			
1608793-15	MHg-CVAFS-T-KOH	30			
1608793-16	MHg-CVAFS-T-KOH	31			
1608793-17	MHg-CVAFS-T-KOH	32			
1608793-18	MHg-CVAFS-T-KOH	33			
1608793-19	MHg-CVAFS-T-KOH	34			
1608793-20	MHg-CVAFS-T-KOH	35			

Due Date: 9/20/2016

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Page 164 of 264

Analyzed: 9/28/2016

ANALYSIS SEQUENCE

6129018

Instrument: Hg2700-1

Calibration ID: UNASSIGNED

Calibration ID: U	NASSIGNED			·	Analyzed: 9/28/2016
Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
1608793-21	MHg-CVAFS-T-KOH	36			
6129018-CCV5	QC	37	1605079		
6129018-CCB5	QC	38			
1608793-22	MHg-CVAFS-T-KOH	39			
1608793-23	MHg-CVAFS-T-KOH	40			
1608793-24	MHg-CVAFS-T-KOH	41		······	
1608793-25	MHg-CVAFS-T-KOH	42	<u> </u>		
1608793-26	MHg-CVAFS-T-KOH	43			
F609558-DUP1	QC	44			
F609558-MS1	QC	45			
F609558-MSD1	QC	46			
F609558-MS2	QC	47			
F609558-MSD2	QC	48			
6I29018-CCV6	QC	49	1605079		
6I29018-CCB6	QC	50			

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pren 9/29/16 Date Data Processed By

Due Date: 9/20/2016

F609569

Eurofins Frontier Global Sciences, Inc.

Matrix: Water

Prepared using: Hg Aquatic/Solids - EFGS-013 Methyl Hg Distillation for Water

Prepared: 9/27/2016

Lab Number	Sample ID and Source Sample	Initial (mL)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	μl Spike2	Extraction Comments
F609569-BLK1	Blank	45	40					
F609569-BLK2	Blank	45	40					
F609569-BLK3	Błank	45	40					
F609569-BS1	Blank Spike	45	40	1603908	45			
F609569-BSD1	Blank Spike Dup	45	40	1603908	45			
F609569-DUP1	Duplicate [1608980-03RE1]	45	40					
F609569-MS1	Matrix Spike [1608981-15RE1]	45	40	1603908	45			
F609569-MS2	Matrix Spike [1608981-16RE1]	45	40	1603908	45			
F609569-MSD1	Matrix Spike Dup [1608981-15RE1]	45	40	1603908	45			
F609569-MSD2	Matrix Spike Dup [1608981-16RE1]	45	40	1603908	45			

Standard ID(s): 1603908

Description:

MHg New Primary 1.0 ng/mL CAL

Expiration: 19-Oct-16 00:00

Reagent ID(s):	Description:	Expiration:
1604614	Acetate Buffer	15-Feb-17 00:00
1605166	Ethylating Agent (For Methyl Mercury Analysis)	05-Mar-17 00:00
1605520	2.5% Ascorbic Acid	30-Sep-16 00:00
1605632	0.5% Distillation Dilute (Made Daily)	26-Mar-17 00:00
1605633	APDC	

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F609569

Eurofins Frontier Global Sciences, Inc.

Matrix: Water

Prepared using: Hg Aquatic/Solids - EFGS-013 Methyl Hg Distillation for Water

Lab Number	Sample ID	Initial (mL)	Final (mL)	QC Sample	Sample Specs.	Raw Data	Sample Comments	Analysis Comments
1608980-01RE1	OL-2457-01	45	40	<u> </u>	-	-	From F609509 by DMH on 26-Sep-16	From F609509 by DMH on 26-Sep-16
1608980-02RE1	OL-2457-02	45	40	-	-		From F609509 by DMH on 26-Sep-16	From F609509 by DMH on 26-Sep-16
1608980-03RE1	OL-2457-03	45	40	-	-	-	From F609509 by DMH on 26-Sep-16	From F609509 by DMH on 26-Sep-16
1608980-04RE1	OL-2457-04	45	40	-	-	-	From F609509 by DMH on 26-Sep-16	From F609509 by DMH on 26-Sep-16
1608980-05RE1	OL-2457-05	45	40	-	-	-	From F609509 by DMH on 26-Sep-16	From F609509 by DMH on 26-Sep-16
1608980-06RE1	OL-2457-06	45	40	-	-	-	From F609509 by DMH on 26-Sep-16	From F609509 by DMH on 26-Sep-16
1608981-12RE1	WQ-ECH_082916_SW_10 Dissolved	45	40	-	-	-	From F609509 by DMH on 26-Sep-16	From F609509 by DMH on 26-Sep-16
1608981-13RE1	ES-15_082916_SW_10	45	40	-	-	-	From F609509 by DMH on 26-Sep-16	From F609509 by DMH on 26-Sep-16
1608981-14RE1	ES-15_082916_SW_10 Dissolved	45	40	-	-	-	From F609509 by DMH on 26-Sep-16	From F609509 by DMH on 26-Sep-16
1608981-15RE1	OV02_082916_SW_10	45	40	QC	-	-	MS/MSD From F609509 by DMH on 2	From F609509 by DMH on 26-Sep-16
1608981-16RE1	OV02_082916_SW_10 Dissolved	45	40	QC	-	-	MS/MSD From F609509 by DMH on 2	From F609509 by DMH on 26-Sep-16
1608981-17RE1	OV02_082916_SW_10_DUP	45	40	-	-	-	From F609509 by DMH on 26-Sep-16	From F609509 by DMH on 26-Sep-16
1608981-18RE1	OV02_082916_SW_10_DUP Dissolved	45	40	-	-	-	From F609509 by DMH on 26-Sep-16	From F609509 by DMH on 26-Sep-16
1609068-01RE1	P85499-1	45	40	-	-	-	From F609509 by DMH on 26-Sep-16	From F609509 by DMH on 26-Sep-16
1609068-02RE1	P85499-2	45	40	-	-	-	From F609509 by DMH on 26-Sep-16	From F609509 by DMH on 26-Sep-16
1609068-03RE1	P85499-3	45	40	-	-	-	From F609509 by DMH on 26-Sep-16	From F609509 by DMH on 26-Sep-16
1609068-04RE1	P85499-4	45	40	-	-	-	From F609509 by DMH on 26-Sep-16	From F609509 by DMH on 26-Sep-16
Page 068-05RE1	P85499-5	45	40	~	-	•	From F609509 by DMH on 26-Sep-16	From F609509 by DMH on 26-Sep-16
167 068-06RE1	P85499-6	45	40	-	-	-	From F609509 by DMH on 26-Sep-16	From F609509 by DMH on 26-Sep-16
9								

F609569

Eurofins Frontier Global Sciences, Inc.

Matrix: Water Prepared using: Hg Aquatic/Solids - EFGS-013 Methyl Hg Distillation for Water Prepared: 9/27/2016 1609068-07RE1 P85499-7 45 40 From F609509 by DMH on 26-Sep-16 From F609509 by DMH on 26-Sep-16

Work Order	Client	Project
1608980		
1608981		
1609068		
From F609509 on 9/.	26/2016 by DMH	

F609558

Eurofins Frontier Global Sciences, Inc.

Matrix: Tissue

Prepared using: Hg Aquatic/Solids - EFGS-010 KOH/Methanol Hg Digestion

Prepared: 9/27/2016

Lab Number	Sample ID and Source Sample	Initial (g)	Final (mL)	Spikel ID	µl Spikel	Spike2 1D	µl Spike2	Extraction Comments
F609558-BLK1	Blank	0.25	20					, entreficient , en ante é d'air
F609558-BLK2	Blank	0.25	20					
F609558-BLK3	Blank	0.25	20					WE (1)
F609558-BS1	LCS	0.252	20	1605470	252			an 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 199
F609558-BSD1	LCS Dup	0.25	20	1605470	250			
F609558-DUP1	Duplicate [1608793-11]	0.263	20					
F609558-MS1	Matrix Spike [1608793-11]	0.279	20	1506872	100			······································
F609558-MS2	Matrix Spike [1608793-22]	0.296	20	1506872	100			······································
F609558-MSD1	Matrix Spike Dup [1608793-11]	0.307	20	1506872	100			
F609558-MSD2	Matrix Spike Dup [1608793-22]	0.295	20	1506872	100			ini γα ανώ ήγκατ

Standard ID(s):	Description:
1506872	MHg New Primary 100 ng/mL spike
1605470	DORM-4

Expiration: 03-Nov-16 00:00 19-Mar-17 00:00 19-Mar-17 00:00

Reagent ID(s):	Description:	Expiration:
1602119	Methanol, HPLC Grade	15-Apr-19 00:00
1603399	Boiling Chips for AFS prep	01-Jun-17 00:00
1603805	25% KOH/Methanol	10-Jan-17 00:00
1604614	Acetate Buffer	15-Feb-17 00:00
1605166	Ethylating Agent (For Methyl Mercury Analysis)	05-Mar-17 00:00

F609558

Eurofins Frontier Global Sciences, Inc.

Matrix: Tissue

Prepared using: Hg Aquatic/Solids - EFGS-010 KOH/Methanol Hg Digestion

Prepared: 9/27/2016

Lab Number	Sample ID	Initial (g)	Final (mL)	QC Sample	Sample Specs.	Raw Data	Sample Comments	Analysis Comments
1608793-07	GBN-F-7	0.275	20	<u> </u>	-	-		
1608793-08	GBN-F-8	0.283	20	-	-	-		*****
1608793-09	GBN-F-9	0.272	20	-	-	-	· · · · · · · · · · · · · · · · · · ·	
1608793-10	GBN-F-10	0.287	20	-	-	-		Vet
1608793-11	GBN-F-11	0.293	20	-	-	-		
1608793-12	GBN-F-12	0.266	20	-	-	-	· · · · · · · · · · · · · · · · · · ·	
1608793-13	GBN-F-13	0.298	20	-	-	-		
1608793-14	GBN-F-14	0.29	20	-	-	-	· · · · · · · · · · · · · · · · · · ·	
1608793-15	GBN-F-15	0.269	20	-	-			
1608793-16	GBN-F-16	0.293	20	-	-	-		
1608793-17	GBN-F-17	0.288	20	-	-	•		
1608793-18	GBN-F-18	0.278	20	-	-	-	WWW.M .M.	
1608793-19	GBN-F-19	0.292	20	-	-	-		
608793-20	GBN-F-20	0.29	20	-	-	·		
608793-21	GBN-F-21	0.297	20	-	-	-	· · · · · · · · · · · · · · · · · · ·	
608793-22	GBN-F-22	0.296	20	-	-	-	·······	
608793-23	GBN-F-23	0.273	20	-	- †	-		······································
Page 793-24	GBN-F-24	0.282	20		-	•	818.0 8	
77 193-25	GBN-F-25	0.298	20	-	-	-		
of 26	· · · · · · · · · · · · · · · · · · ·			ł				

I² Date: 9/20/2016

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F609558

Eurofins Frontier Global Sciences, Inc.

Matrix: Tissue

Prepared using: Hg Aquatic/Solids - EFGS-010 KOH/Methanol Hg Digestion

1608793-26	GBN-F-26	0.288	20	-	-	-	
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Work Order	Client	Project
1608793		



F609569

Eurofins Frontier Global Sciences, Inc.

Matrix: Water

Prepared using: Hg Aquatic/Solids - EFGS-013 Methyl Hg Distillation for Water

Prepared: 9/27/2016

Lab Number	Sample ID and Source Sample	Initial (mL)	Final (mL)	Spikel ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F609569-BLK1	Blank	45	40					1.257
F609569-BLK2	Blank	45	40		<u></u>			1.25%
F609569-BLK3	Blank	45	40		******			1.25×
F609569-BS1	Blank Spike	45	40	1603908	45			1.25×
F609569-BSD1	Blank Spike Dup	45	40	1603908	45			1.25×
F609569-DUP1	Duplicate [1608980-03RE1]	45	40					1.25×
F609569-MS1	Matrix Spike [1608981-15RE1]	45	40	1603908	45			J. 26X
F609569-MS2	Matrix Spike [1608981-16RE1]	45	40	1603908	45			j.25x
F609569-MSD1	Matrix Spike Dup [1608981-15RE1]	45	40	1603908	45			1.25×
F609569-MSD2	Matrix Spike Dup [1608981-16RE1]	45	40	1603908	45			1.25%

Standard ID(s): 1603908

Description:

MHg New Primary 1.0 ng/mL CAL

Expiration: 19-Oct-16 00:00 Reagent ID(s): 1605632

1605633

Description: 0.5% Distillation Dilute (Made Daily) APDC

Expiration: 26-Mar-17 00:00

160552D 1604614 1605166

Page 172 of Date: 9/22/2016

F609569

Eurofins Frontier Global Sciences, Inc.

Matrix: Water

Prepared using: Hg Aquatic/Solids - EFGS-013 Methyl Hg Distillation for Water

Lab Number	Sample ID	Initial (mL)	Final (mL)	QC Sample	Sample Specs.	Raw Data	Sample Comments	Analysis Comments
1608980-01REI	OL-2457-01	45	40	<u> </u> -	-	-	From F609509 by DMH on 26-Sep-16	From F609509 by DMH on 26-Sep-16 1. 2
1608980-02RE1	OL-2457-02	45	40	-	-	-	From F609509 by DMH on 26-Sep-16	From F609509 by DMH on 26-Sep-16
1608980-03RE1	OL-2457-03	45	40	-	-	-	From F609509 by DMH on 26-Sep-16	From F609509 by DMH on 26-Sep-16
1608980-04RE1	OL-2457-04	45	40	-	-	-	From F609509 by DMH on 26-Sep-16	From F609509 by DMH (in 26-Sep-16
608980-05RE1	OL-2457-05	45	40	-	-	-	From F609509 by DMH on 26-Sep-16	From F609509 by DMH on 26-Sep-16
608980-06RE1	OL-2457-06	45	40	- T	-	-	From F609509 by DMH on 26-Sep-16	From F609509 by DMH on 26-Sep-16
1608981-12RE1	WQ-ECH_082916_SW_10 Dissolved	45	40	-	-	-	From F609509 by DMH on 26-Sep-16	From F609509 by DMH on 26-Sep-16
608981-13RE1	ES-15_082916_SW_10	45	40	-	-	-	From F609509 by DMH on 26-Sep-16	From F609509 by DMH on 26-Sep-16
608981-14RE1	ES-15_082916_SW_10 Dissolved	45	40	-	-	-	From F609509 by DMH on 26-Sep-16	From F609509 by DMH on 26-Sep-16
608981-15RE1	OV02_082916_SW_10	45	40	QC	-	-	MS/MSD From F609509 by DMH on 2	From F609509 by DMH on 26-Sep-16 1 25
608981-16RE1	OV02_082916_SW_10 Dissolved	45	40	QC	-	-	MS/MSD From F609509 by DMH on 2	From F609509 by DMH on 26-Sep-16
608981-17RE1	OV02_082916_SW_10_DUP	45	40	-	-	-	From F609509 by DMH on 26-Sep-16	From F609509 by DMH on 26-Sep-16
608981-18RE1	OV02_082916_SW_10_DUP Dissolved	45	40		-	-	From F609509 by DMH on 26-Sep-16	From F609509 by DMH on 26-Sep-16
609068-01RE1	P85499-1	45	40	-	-	-	From F609509 by DMH on 26-Sep-16	From F609509 by DMH on 26-Sep-16
609068-02RE1	P85499-2	45	40	-	-	-	From F609509 by DMH on 26-Sep-16	From F609509 by DMH on 26-Sep-16
609068-03REI	P85499-3	45	40	-	-	-	From F609509 by DMH on 26-Sep-16	From F609509 by DMH on 26-Sep-16
609068-04RE1	P85499-4	45	40	-	-	-	From F609509 by DMH on 26-Sep-16	From F609509 by DMH on 26-Sep-16
068-05RE1	P85499-5	45	40	-	-	-	From F609509 by DMH on 26-Sep-16	From F609509 by DMH on 26-Sep-16
1 3 068-06RE1	P85499-6	45	40	-	-	-	From F609509 by DMH on 26-Sep-16	From F609509 by DMH on 26-Sep-16

¹ e Date: 9/22/2016

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Eurofins Frontier Global Sciences, Inc.

Matrix: Water

Prepared using: Hg Aquatic/Solids - EFGS-013 Methyl Hg Distillation for Water

	1609068-07RE1	P85499-7	45	40		-	-	From F609509 by DMH on 26-Sep-16	From F609509 by DMH on 26-Sep-16 1.257
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Work Order	Client	Project
1608980		
1608981		
1609068		
From F609509 on 9/2		

Methyl Mercury Distillations (EPA 1630)

Name: Duyen Date: 9/27/16 Batch #: <u>F609569</u> Sample Matrix: Water 1608980 160898 WO#: 60

The pH of the preserved sample must be documented before an aliquot is removed for preparation.

Digest #	Sample ID Number	Preserved pH	Sample Size (mL)	Final pH (≥3)	
Blk I	F609569 Klanic T	1-2	45	3.0	
Blez	F609569 Klark2	1.0	45	3.0	Spike ID: 1603908
VSUK >	F609569 Blank3	1-0	45	3.0	Spike Amount: 43 µL
BSI	F609569 BS1	1.0	45	3.0	Spike Witness: On 9 21 14
BSO	F609569 BSD1	1.0,	. 45	3.0	Balance #:
Jup!	F609569 Dup/	1.0 1.2 4	45	3.0	Calibrated? Yes 🗆 No
MSI	F609569 MS1	1.0	45	5.0	Dington the CTID OFT
MOI	F609569 MSD	1.0	45	5.0	Pipette #: <u>CJ12087</u> Cal. Date: <u>9/21/16</u>
MSZ.	F609569 H12	1.0	45	500	
MIQZ		1.0	45	5.0	Pipette #: <u> </u>
	1608980-01 REI	1.0	45	3.0	Cal. Date: <u>7/22/16</u>
2	1608980-02 REI	1.0	45	7.0	Pipette #: <u>N 27707</u>
3	1608980-03 RE/	1.0	45	4.0	Cal Date: 9/22/16
4	1608980-04 REI	1.0	45	4.0	APDC ID: $\frac{16056323}{12316}$
	1608980-05RE1	1.0	45	4-0	APDC ID: <u>7605638</u> HCI ID: <u>76055632</u>
6	1608480-06 REI	1.0	45	4.0	Her ID:
7	160898 12 REI	1.0	45	4.0	Temperature: No set range as
8	1608981-13RE	1.0	45	400	the temp. may be changed to
9	1608981 14REI	1.0	45	4-0	keep flow rate of ≥10 mL per
0	1608981 - 15 REI	1.0	45	4.0	hour. Temperature is recorded for informational purposes only.
	160898/-16R21	10	45	5.0	
12	160898/-17RE1	1-0	45	5.0	Unit 1: $/20.9$
17	160898/-18RE	1-0	45		Unit 2: <u>122</u> .
14	1609068 -01RE/	1.0	45	400	Unit 3: <u>120.3</u>
15	1609068 -02 RG[[.)	45	4.0	Unit 4:(20.5
16	1609068-03 REL	10	45	4.0	Unit 5: / 2 Z .
17	1609068 04 MEL	1.0		3.0	Unit 6: 122-
18	1609068-05 Ral	1.0	45	2.0	
(9	1609068-06 Ra	1-0	45	3.0	Comments: 9/27/16
20	1609068-07 MEL	1-0	45	3.0	Pup1. 1608980-034
					MCI MINI ILDAGAL
					Comments: PUP1. 1608980-034 REI MS1.MSN 1608981- ISNZ
			9-2716	<i>bu</i>	MSDI MSDI 1608981-16RZ1
					9/27/1600
					11110110
<u> </u>					

EFGS / Methyl Mercury Distillations / LOG-PR-029.03 / Effective: Aug. 4, 2014 / QA2016-036

Virifind A 9/2.7/ Page 175 of 264

F609558

Eurofins Frontier Global Sciences, Inc.

Matrix: Tissue

Prepared using: Hg Aquatic/Solids - EFGS-010 KOH/Methanol Hg Digestion

Prepared:	9/27/2016
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2709-1 9/28/16 DM

Lab Number	Sample ID and Source Sample	Initial (g)	Final (mL)	Spikel ID	µl Spikel	Spike2 ID	µl Spike2	Extraction Comments
F609558-BLK1	Blank	0.25	20					XœE
F609558-BLK2	Blank	0.25	20					Stark
F609558-BLK3	Blank	0.25	20		*			50xX
F609558-BS1	LCS	0.252	20	1605470	252		2112-22-22-22-22-22-22-22-22-22-22-22-22	1000%
F609558-BSD1	LCS Dup	0.25	20	1605470	250			1000)X
F609558-DUP1	Duplicate [1608793-11]	0.263	20					10002
F609558-MS1	Matrix Spike [1608793-11]	0.279	20	1506872	100			1000%
F609558-MS2	Matrix Spike [1608793-22]	0.296	20	1506872	100			Xecol
F609558-MSD1	Matrix Spike Dup [1608793-11]	0.307	20	1506872	100	Í		Xcooj
F609558-MSD2	Matrix Spike Dup [1608793-22]	0.295	20	1506872	100			1000X

Standard ID(s):	Description:
1506872	MHg New Primary 100 ng/mL spike
1605470	DORM-4

Expiration: 03-Nov-16 00:00 19-Mar-17 00:00 19-Mar-17 00:00 Reagent ID(s): 1602119 1603399 1603805

Description: Methanol, HPLC Grade Boiling Chips for AFS prep 25% KOH/Methanol

Expiration: 15-Apr-19 00:00 01-Jun-17 00:00 10-Jan-17 00:00

1604614

F609558

Eurofins Frontier Global Sciences, Inc.

Matrix: Tissue

Prepared using: Hg Aquatic/Solids - EFGS-010 KOH/Methanol Hg Digestion

		Initial	Final	QC	Sample	Raw		
Lab Number	Sample ID	(g)	(mL)	Sample	Specs.	Data	Sample Comments	Analysis Comments
1608793-07	GBN-F-7	0.275	20	-	-	-		Kacol
1608793-08	GBN-F-8	0.283	20	-	-	-		10002
1608793-09	GBN-F-9	0.272	20	-	-	-		XCCGI
1608793-10	GBN-F-10	0.287	20	-	-	-		Xccd
1608793-11	GBN-F-11	0.293	20	-	-	-		1020%
1608793-12	GBN-F-12	0.266	20	-	-	-		xccoj
1608793-13	GBN-F-13	0.298	20	-	-	-		1000X
1608793-14	GBN-F-14	0.29	20	-	-	-		XCOO1
1608793-15	GBN-F-15	0.269	20	-	-	-		10001
1608793-16	GBN-F-16	0.293	20	-	-	-		1000X
1608793-17	GBN-F-17	0.288	20	-	-	-	· · · · · · · · · · · · · · · · · · ·	1000 X
1608793-18	GBN-F-18	0.278	20	-	-	-		JODOX
1608793-19	GBN-F-19	0.292	20	-	-	-		1000%
1608793-20	GBN-F-20	0.29	20	-	-	-	· · · · · · · · · · · · · · · · · · ·	1000X
1608793-21	GBN-F-21	0.297	20	-	-	-	1999-1998-1994	1000×
608793-22	GBN-F-22	0.296	20	-	-	-		אכבטן
608793-23	GBN-F-23	0.273	20	-	-	-		jaan
Page 793-24 177 793-25 of 26	GBN-F-24	0.282	20	-	-	•		1000%
793-25 of 26	GBN-F-25	0.298	20	-	-	-		Xaadi

I² Date: 9/20/2016

2700-1 9/28/16 DW

F609558

Eurofins Frontier Global Sciences, Inc.

Matrix: Tissue

Prepared using: Hg Aquatic/Solids - EFGS-010 KOH/Methanol Hg Digestion

1608793-26	GBN-F-26	0.288	20	-	-	- 1	
							10007

Work Order	Client	Project
1608793		

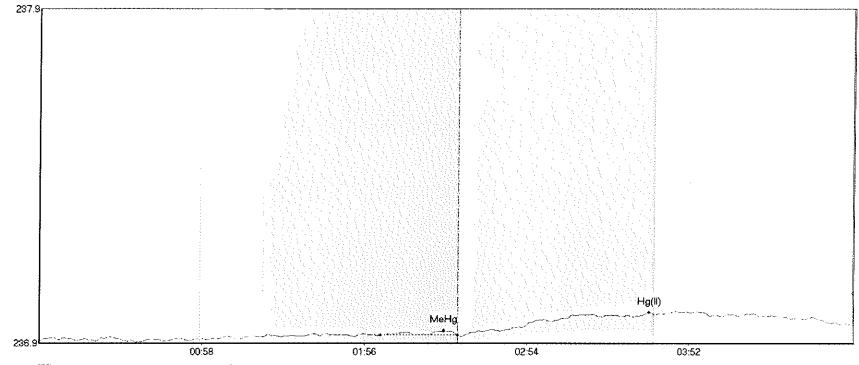
2700.1 2700.1

EFGS-045 Sediments - Total Mercule EFGS-045 Sediments - Methyl I EFGS-066 Solids - Total Mercule Other:	ury - 70:30: Hot plate Mercury - KBr/CH ₂ Cl ₂ : I y - Cold AR: 18-25°C	Heat Block 45°C (nitroge for over four hours.	n purge for Vial Type:	Glass 🗌 Teflon
Balance#: 10 CalibrTime in: 1800 Actual TTime out: 2100 Actual	emp. (raw): <u>72-</u> Temp. (raw): <u>11</u> 11	<u>O</u> °C w/ CF: <u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u></u>	<u>18</u> Calibr 2°C ⊂°C	ated? 🗗 Yes 🔲 No
Final vol.: <u>20</u> mL (LIMS Spike Witness: <u>PL</u> 927	ID: <u>1602//9</u> 16 (initial and da) Spike vol.: 100 te) 17^{16}	µL (LIMS II	: 1506872
HCI LIMS ID: N/A HNO ₃ LIMS ID: N/A 70/30 LIMS ID: N/A Other Acid LIMS ID: 25% KOH/M Glass Vial #_00065276	<i>ICO3805</i> D <i>EMunol</i> Dispenser Boiling Chip lot #	te) $q^{2}M^{6}$ V1732 ipette SN#: <u>N27707</u> ipette SN#: <u>MU11619</u> ispenser #: <u>02N4842</u> #: <u>N/A</u> \sim 3399 *Hotble	Calibration	n Date: <u>9/21/16</u> ?
Vial # Sample ID Number	Sample Size Vial #	Sample ID Number	Sample Size ImL Øg	
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	1608793-19A 1608793-20A 1608793-21A 1608793-22A 1608793-23A 1608793-24A 1608793-24A 1608793-25A 1608793-26A	U.292 0290 U.297 U.297 U.296 U.273 U.282 U.282 U-298	ВЗГВЗ0/ рори-4 1605470 Comments Dupl. HS/HS0/ SUMCe 1608793-11

Page	179	of	26^{2}

VD readings, mV

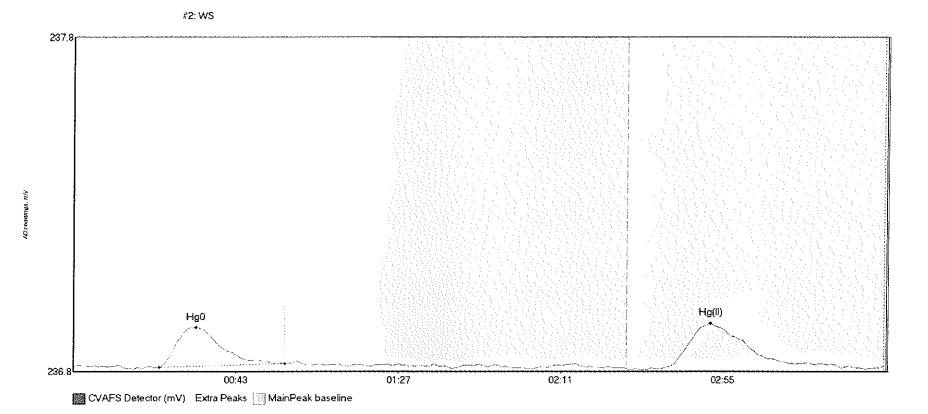
#1: Clean



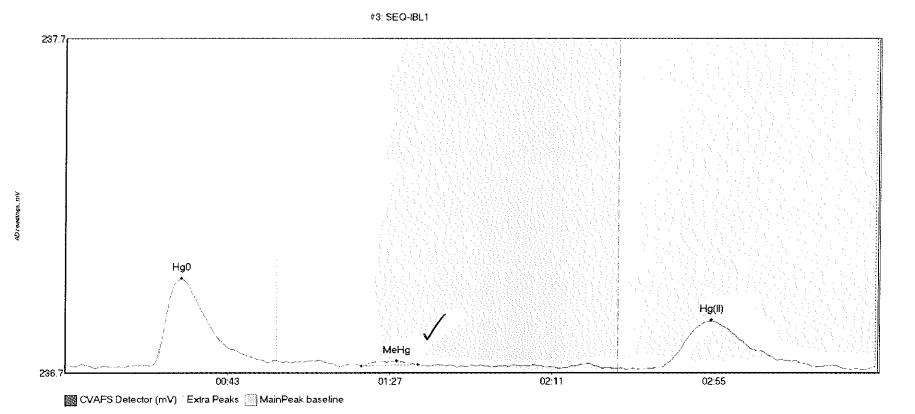
CVAFS Detector (mV) Extra Peaks MainPeak baseline

(HROMATOGRAMS VENFIED 9.29.16DMW

Page 18	Name Clean MeHg Clean Hg(II	Area 1.595 3) 6.021	Start Ti 122.2 153.5	me EndTime 150.0 219.8	StartValue 236.92 236.92	EndValue 236.92 236.98	Peak Max 145.0 218.4	PeakHeight 0.013 0.065	Flags CT CT	Baseline 236.9028 236.9028	BlDev 0.00 0.00	BlShift 0.05 0.05	Comment)16
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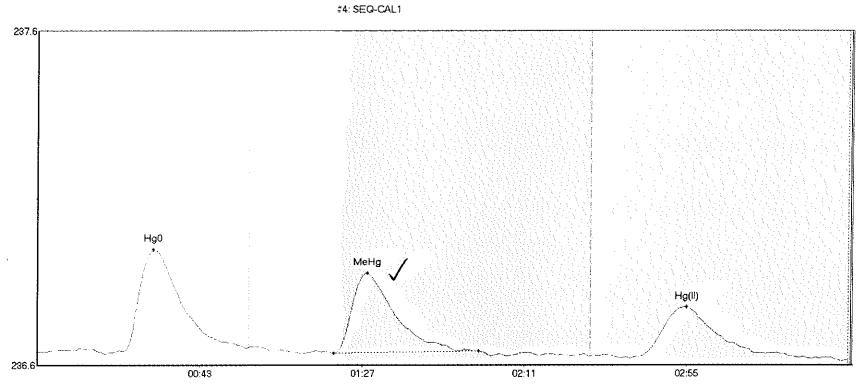


Name Area Start Time EndTime StartValue EndValue Peak Max WS Hg0 16.389 23.2 57.4 236.82 236.84 33.2 WS Hq(II) 23.956 160.4 212.9 236.82 236.82 172.8	x PeakHeight Flags Baseline BlDev BlShift Comment 0.121 OK 236.8295 0.00 0.00 016 0.132 OK 236.8295 0.00 0.00
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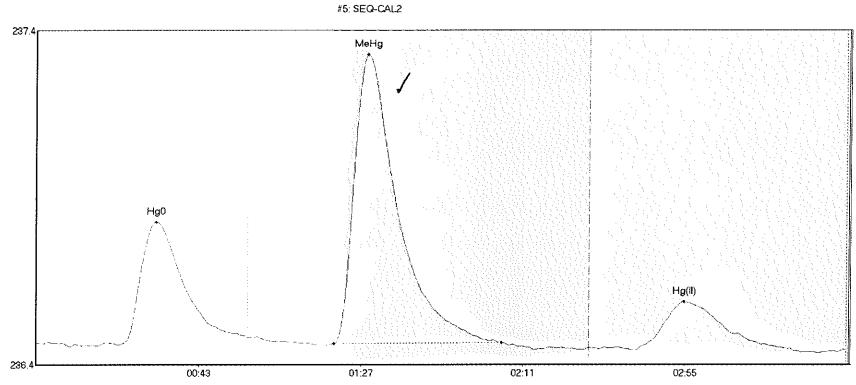
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment	
SEQ-IBL1 Hg0	32.531	23.1	55.1	236.74	236.75	31.4	0.262	OK	236.7434	0.00	0.00		016
SEQ-IBL1 MeHg	1.390	80.3	95.6	236.74	236.74	89.9	0.016	OK	236.7434	0.00	0.00		710
SEQ-IBL1 Hg(II)	26.079	161.7	203.3	236.74	236.74	175.3	0.139	OK	236.7434	0.00	0.00		

Vin sealings, mV



CVAFS Detector (mV) É Extra Peaks 💹 MainPeak baseline

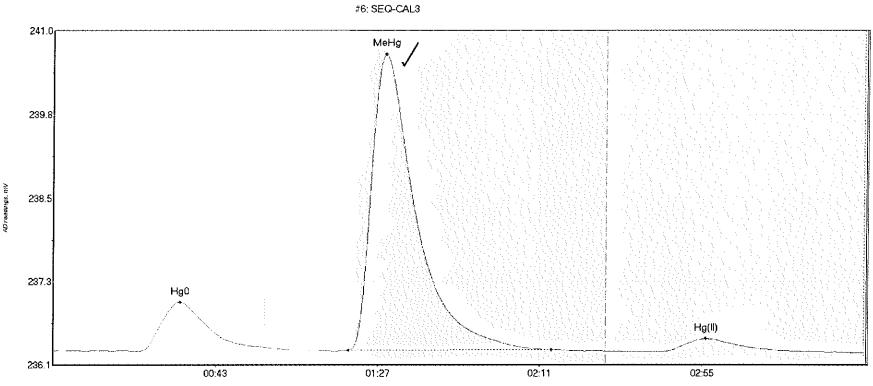
AD roadings, mV



CVAFS Detector (mV) Extra Peaks MainPeak baseline

SE SE		47.270 118.996	Start Time 22.4 80.7 162.1	EndTime 57.5 126.3 201.5	236.49 236.49	EndValue 236.51 236.49 236.48	Peak Max 32.5 89.8 175.8	0.372	CT	Baseline 236.4919 236.4919 236.4919	0.00 0.00	BlShift -0.02 -0.02 -0.02	Comment	016
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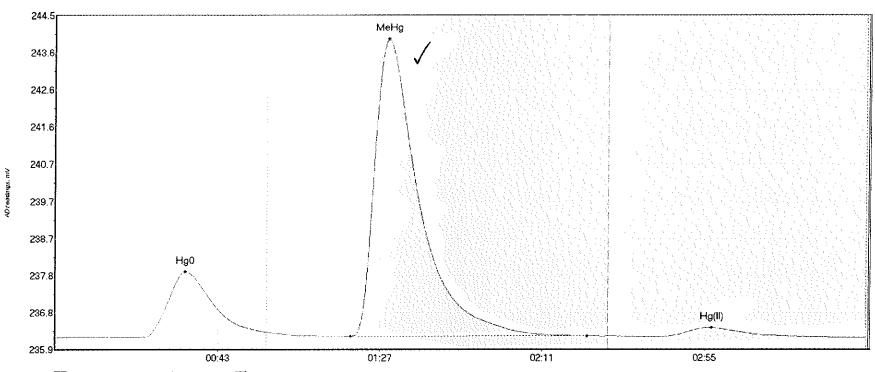
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CVAFS Detector	(m\/) Evtra	Dooks 1	MainPeak baseline
		I cans	Main Car Dascine

	Page 185 of 264	SEQ-CAL3 Hg0 SEQ-CAL3 MeHg SEQ-CAL3 Hg(II)	Area 93.673 589.877 28.056	Start Time 23.4 80.1 162.8	EndTime 57.5 135.3 198.2	StartValue 236.34 236.34 236.32	EndValue 236.39 236.36 236.34	Peak Max 34.4 90.0 177.1	PeakEeight 0.707 4.271 0.191	Flags CT OK CX	Baseline 236.3432 236.3432 236.3432	BlDev 0.00 0.00 0.00	BlShift -0.03 -0.03 -0.03	Comment	016
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#7: SEQ-CAL4

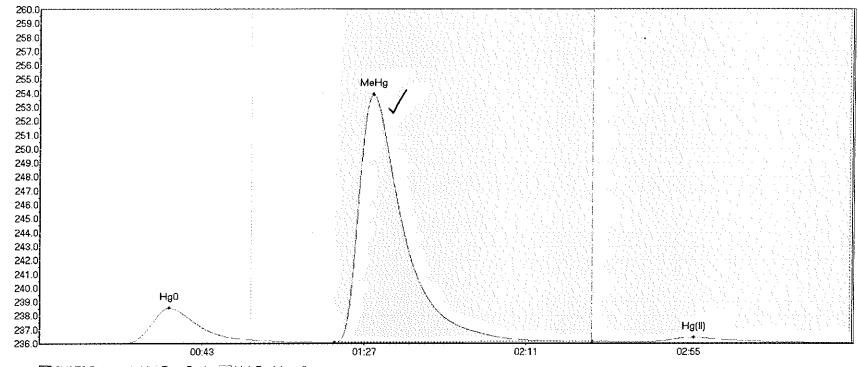


CVAFS Detector (mV)	⁵ E x tra Peaks	MainPeak baseline
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2	Name SEQ-CAL4 Hg0 SEQ-CAL4 MeHg SEQ-CAL4 Hg(II)	221.762 1071.380	80.1	57.5 144.3	236.19 236.20		Peak Max 35.2 90.3 178.1	1.690	CT OK	Baseline 236.1832 236.1832 236.1832	0.00 0.00	BlShift -0.01 -0.01 -0.01	Comment	016
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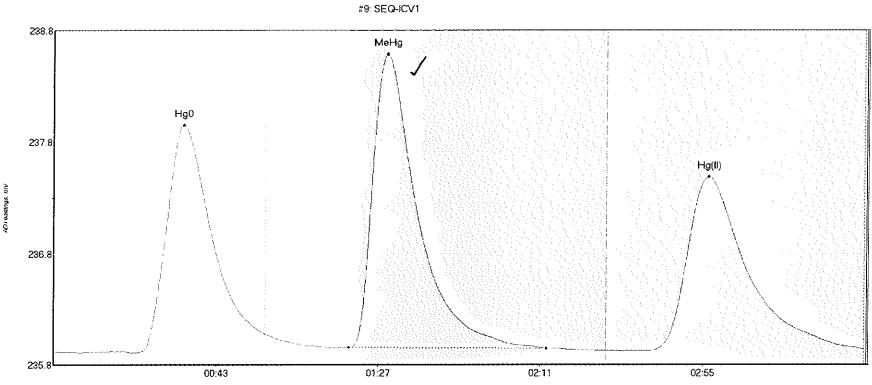
AD readings, InV

#8: SEQ-CAL5



CVAFS Detector (m)	V) Extra	Peaks	MainPeak baseline
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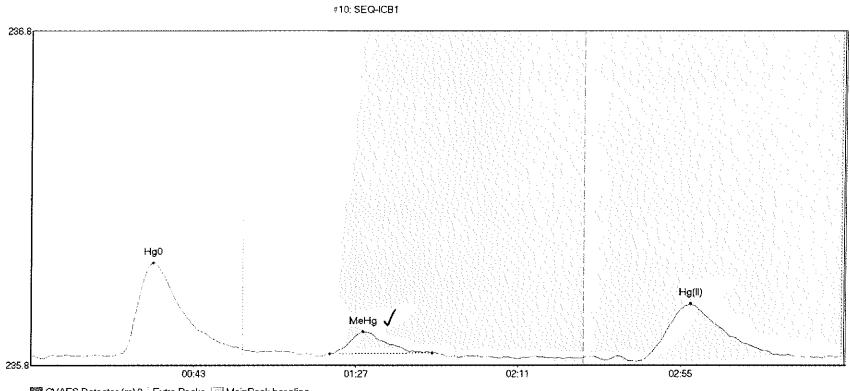
Page Na SE SE	me Q-CAL5 Hg0 Q-CAL5 MeHg Q-CAL5 Hg(II)	Area 327.439 2475.028 48.498	Start Time 21.3 80.1 164.0	57.5			Peak Max 35.2 90.3 177.4	2.516	СТ	Baseline 236.0467 236.0467 236.0467	0.00 0.00	BlShift 0.03 0.03 0.03	Comment	216
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CVAFS Detector (mV) * Extra Peaks MainPeak baseline

CF	SEQ-ICV1 MeHg	368.779	80.1	57.5 133.7	235.93 235.97	236.10 235.97	35.2 90.4	2.063 2.658	Flags CT CK CT	Baseline 235.9386 235.9386 235.9386	0.00 0.00	BlShift 0.03 6.03 0.03	Comment	ΟI
<u>, </u> , , , , , , , , , , , , , , , , , ,	SEQ-ICV1 Hg(II)	292.026	161.9	219.8	235.95	235.96	177.6	1.575	CT	235.9386	0.00	0.03		

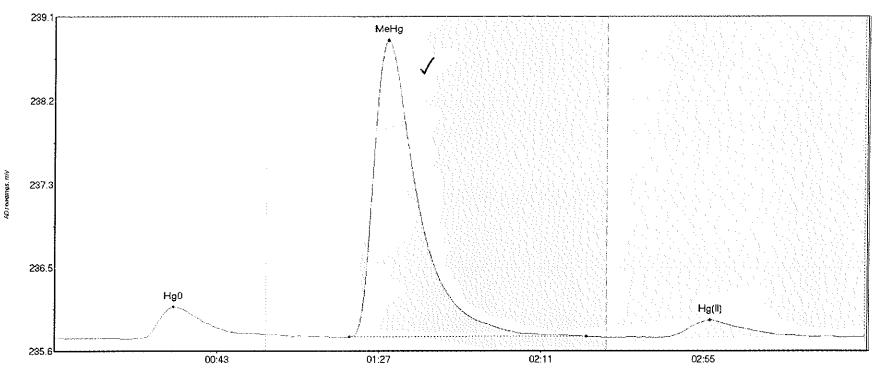
AD readings, mV



CVAFS Detector (mV) Extra Peaks	MainPeak baseline
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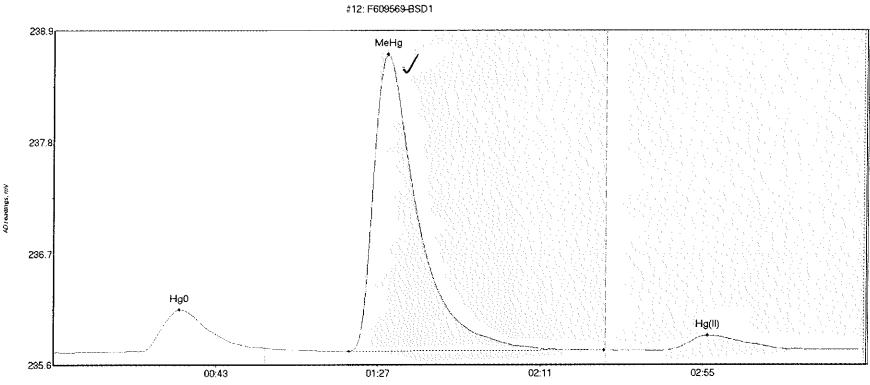
Page 189	Name SEQ-ICB1 SEQ-ICB1 SEQ-ICB1	MeHg	Area 36.184 7.371 28.833	Start Time 22.0 81.0 165.4	EndTime 57.5 108.7 207.7	StartValue 235.84 235.85 235.83	EndValue 235.86 235.85 235.84	Peak Max 33.0 90.0 178.7	PeakHeight 0.281 0.067 0.169	Flags CT OK OK	Baseline 235.8396 235.8396 235.8396	B1Dev 0.00 0.00 0.00	BlShift 0.00 0.00 0.00 0.00	Comment	016
of 264															

#11: F609569-BS1



CVAFS Detector (mV) Extra Peaks 🔄 MainPeak baseline

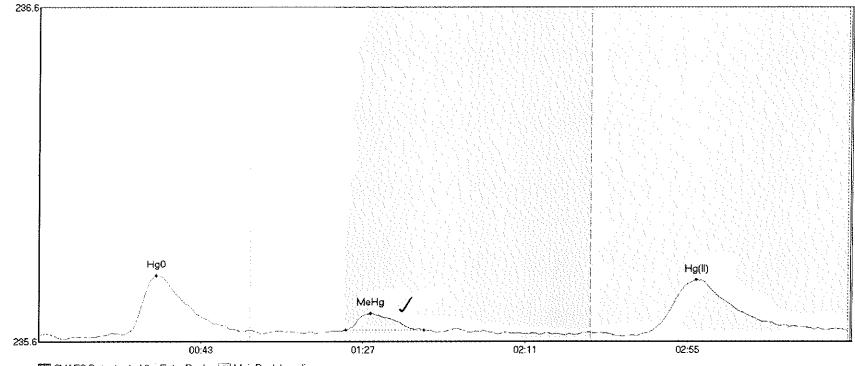
Page 190	Name F609569-BS1 Hg0 F609569-BS1 MeH F609569-BS1 Hg(420.613	Start Time 23.4 80.1 164.7	EndTime 57.5 144.5 205.8	StartValue 235.76 235.77 235.77	EndValue 235.80 235.78 235.77	Peak Max 32.3 90.5 177.9	PeakHeight 0.321 3.040 0.175	Flags CT OK OK	Baseline 235.7641 235.7641 235.7641	BlDev 0.00 0.00 0.00	BlShift 0.01 0.01 0.01	Comment	016
0 of 264														



CVAFS Detector (mV)	Extra Peaks	MainPeak baseline
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- 29c	Page 191	Name F609569-BSD1 Hg F609569-BSD1 Me F609569-BSD1 Hg	411.775	Start Time 18.6 80.1 166.0	EndTime 57.5 149.5 207.3	StartValue 235.70 235.70 235.71	EndValue 235.73 235.71 235.72	Peak Max 34.2 90.6 177.3	2.969	Flags CT OK OK	Baseline 235.6920 235.6920 235.6920	BlDev 0.00 0.00 0.00 0.00	BlShift 0.02 0.02 0.02 0.02	Comment	016
	of 264														

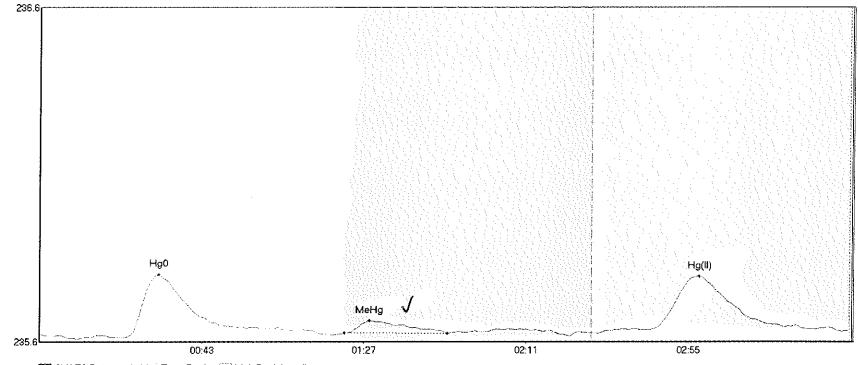
#13: F609569-BLK1



CVAFS Detector (mV)	Extra Peaks	MainPeak baseline
	Exila Feaks	Man Feat Daseinte

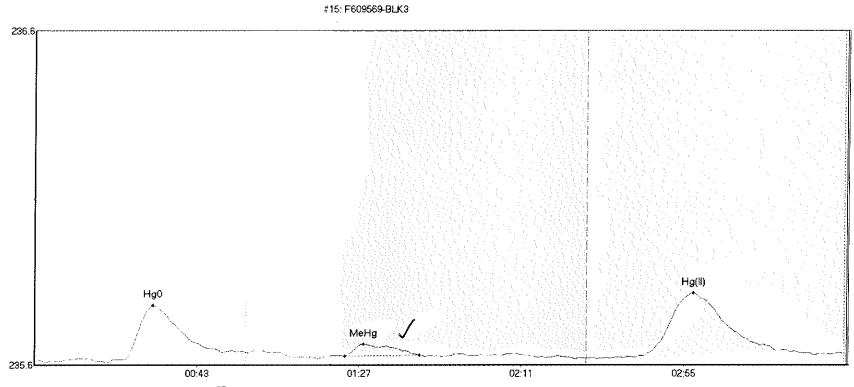
Page 192 o	F609569-BLK1 Hg F609569-BLK1 Me F609569-BLK1 Hg	5.399	Start Time 23.2 83.4 164.9	EndTime 55.0 104.6 219.8	StartValue 235.64 235.66 235.65	EndValue 235.65 235.66 235.66	Peak Max 32.0 90.2 178.4	PeakHeight 0.176 0.050 0.159	Flags OK OK CT	Baseline 235.6445 235.6445 235.6445	BlDev 0.00 0.00 0.00	BlShift 0.01 0.01 0.01 0.01	Comment	016
of 264														

#14: F609569-BLK2



關 CVAES Detector	(mV)	Extra Peaks	MainPeak baseline
	(1218)	LAUAFEANS	a wide in ear Daseinie

Page 193 of 264	Name F609569-BLK2 Hg F609569-BLK2 Me F609569-BLK2 Hg	5.436	Start Time 23.0 82.9 151.5	EndTime 56.1 110.6 217.8	StartValue 235.60 235.62 235.62	EndValue 235.63 235.62 235.62	Peak Max 32.4 89.6 179.1	PeakHeight 0.189 0.037 0.171	Flags OK OK OK	Baseline 235.6125 235.6125 235.6125 235.6125	BlDev 0.00 0.00 0.00 0.00	BlShift 0.01 0.01 0.01	Comment	016
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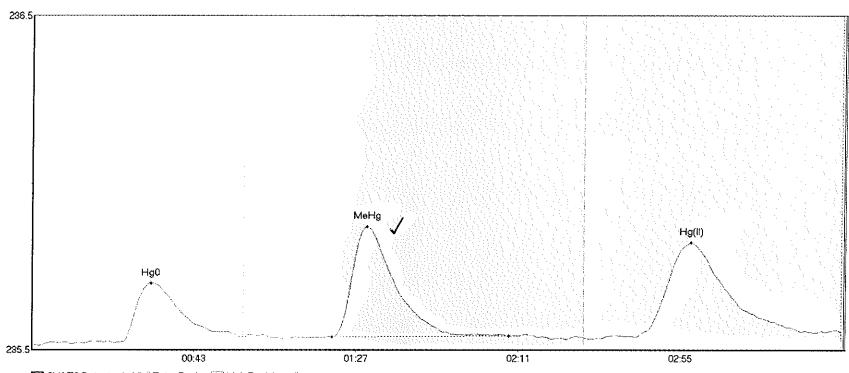


CVAFS Detector (mV)	Extra Peaks	MainPeak baseline
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Name F609569-BLK3 Hg	Start Time 23.9	57.5	235.61	32.2	0.162	CT	Baseline 235.5811	0.00	0.02	Comment	516
F609569-BLK3 Me F609569-BLK3 Hg	84.1 162.9	104.4 211.8	235.60 235.60	89.3 178.6		OK OK	235.5811 235.5811		0.02 0.02		

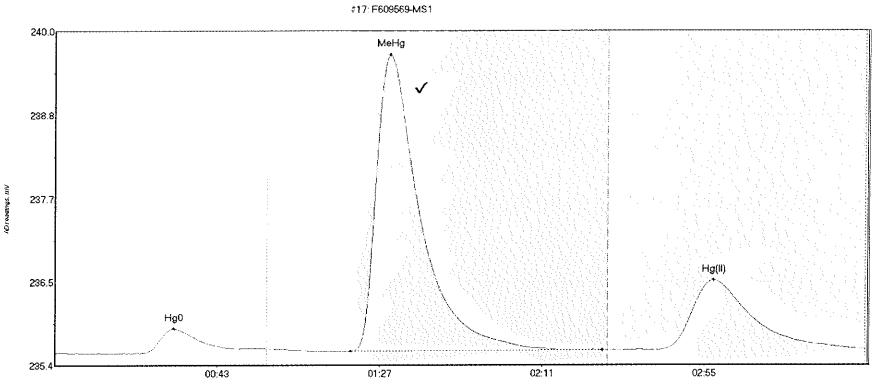
#16: F609569-DUP1

AD reaungs, mV



CVAFS Detector (mV)	° Extra Peaks	MainPeak baseline
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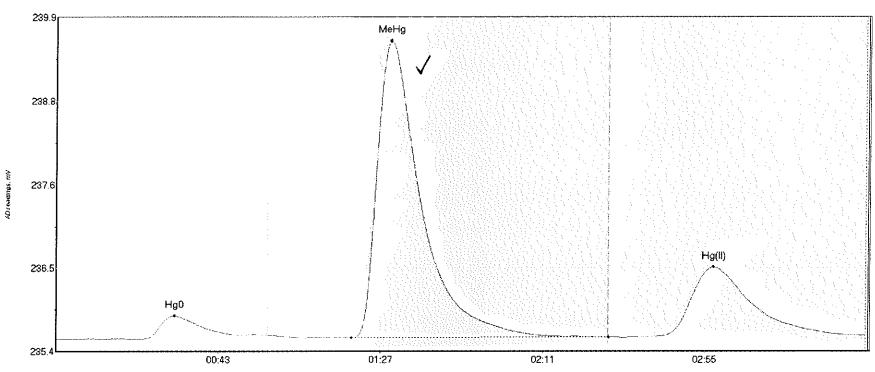
Name Area Start Time EndTime Start F609569-DUP1 Hg 23.682 22.6 57.2 235.5 F609569-DUP1 Me 43.646 81.6 129.5 235.5 F609569-DUP1 Hg 50.213 164.2 212.5 235.5	235.58 91.0 0.331	: Flags Baseline BlDev BlShift Comment OK 235.5565 0.00 0.04 316 OK 235.5565 0.00 0.04 316 OK 235.5565 0.00 0.04
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CVAFS Detector (mV)	Extra Peaks	MainPeak baseline
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ge	Name F609569-MS1 Hg0 F609569-MS1 MeH F609569-MS1 Hg(563.407	Start Time 23.8 80.1 163.0	EndTime 57.5 148.5 218.8	StartValue 235.54 235.57 235.58	EndValue 235.60 235.58 235.60	Peak Max 32.4 90.9 178.6	PeakHeight 0.335 4.073 0.963	Flags CT OK OK	Baseline 235.5443 235.5443 235.5443 235.5443	BlDev 6.00 0.00 0.00 0.00	Bl\$hift 0.05 0.05 0.05	Comment	016
of 264														

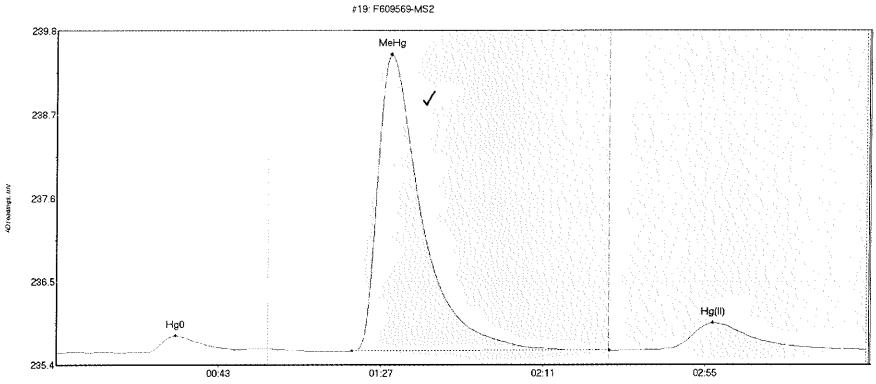
#18: F609569-MSD1



CVAFS Detector (mV) Extra Peaks MainPeak baseline

0	Name ≌609569-MSD1 Hg F609569-MSD1 Me F609569-MSD1 Hg	556.919	80.1	EndTime 57.5 150.0 219.8	235.53	EndValue 235.58 235.56 235.58	Peak Max 32.3 90.8 178.5	PeakHeight 0.315 4.030 0.956	Flags CT CT CT	Baseline 235.5298 235.5298 235.5298	0.00 0.00	BlShift 0.05 0.05 0.05	Comment	016
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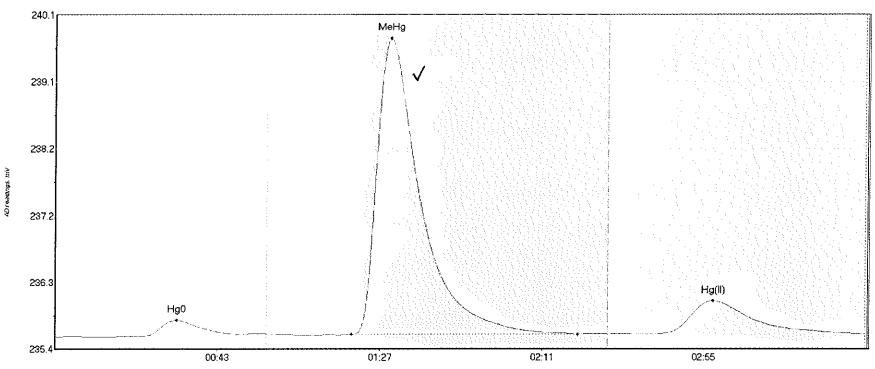
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CVAFS Detector (mV)	Extra Peaks	MainPeak baseline
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Paye i 90 0i ∠04	F609569-MS2 F F609569-MS2 F F609569-MS2 F	MeH 546.592	Start Time 17.5 80.1 151.7	EndTime 48.9 150.0 218.8	StartValue 235.52 235.55 235.55 235.55	EndValue 235.56 235.55 235.57	Peak Max 32.5 90.8 178.2	PeakHeight 0.229 3.951 0.371	Flags OK CT OK	Baseline 235.5205 235.5205 235.5205 235.5205	BlDev 6.00 0.00 0.00 0.00	BlShift C.05 O.05 O.05	Comment	216
204														

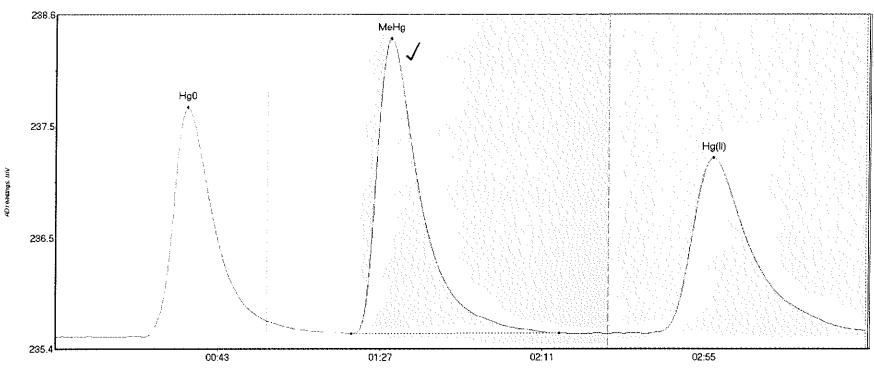
#20: F609569-MSD2



CVAFS Detector (mV) Extra Peaks 🔄 MainPeak baseline

Page 199	Name F609569-MSD2 Hg F609569-MSD2 Me F609569-MSD2 Hg	575.917	Start Time 23.7 80.3 163.2	EndTime 49.7 141.7 218.9	StartValue 235.53 235.56 235.57	EndValue 235.56 235.56 235.57	Peak Max 33.0 90.9 178.6	PeakHeight 0.225 4.179 0.470	Flags OK OK OK	Baseline 235.5291 235.5291 235.5291 235.5291	BlDev 0.00 0.00 0.00	BlShift 0.04 0.04 0.04 0.04	Comment	016
9 of 264														

#21: SEQ-CCV1



CVAFS Detector (mV) Extra Peaks MainPeak baseline

Page 200 of	Name SEQ-CCV1 Hg0 SEQ-CCV3 MeHg SEQ-CCV1 Hg(II)	Area 256.825 384.883 306.213	Start Time 24.0 80.1 160.1	EndTime 57.5 136.7 219.8	StartValue 235.53 235.55 235.55	EndValue 235.67 235.56 235.58	Peak Max 35.7 90.8 178.5	PeakHeight 2.167 2.789 1.662	Flags CT OK CT	Baseline 235.5248 235.5248 235.5248	BlDev 0.00 0.00 0.00	BlShift 0.06 0.06 0.06 0.06	Comment	016
of 264														

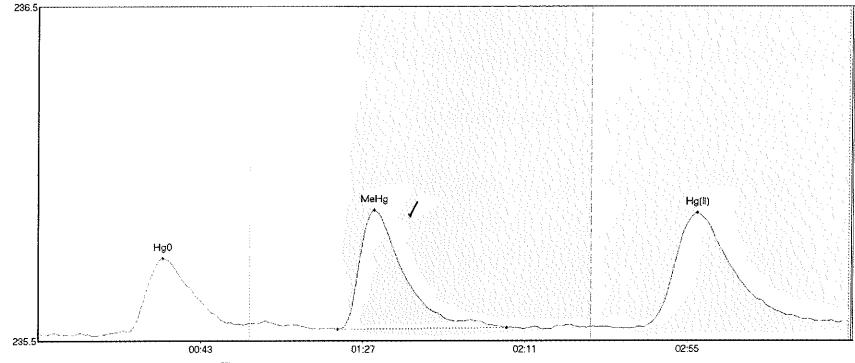
AD Fondings. mV

F22: SEO-CCB1

CVAFS Detector (mV) * Extra Peaks 🔯 MainPeak baseline

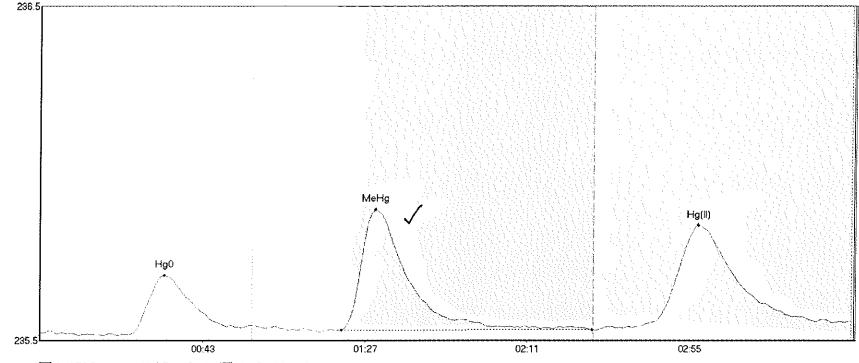
ne 201	Name SEQ-CCB1 SEQ-CCB1 SEQ-CCB1	MeHg	Area 19.744 5.556 35.254	Start Time 10.8 83.6 165.1	EndTime 54.4 110.3 216.4	StartValue 235.51 235.53 235.53	EndValue 235.54 235.53 235.54	Peak Max 34.2 90.4 178.9	PeakHeight 0.166 0.051 0.200	Flags OK OK OK	Baseline 235.5104 235.5104 235.5104 235.5104	BlDev 0.00 0.00 0.00	BlShift 0.03 0.03 0.03	Comment	016
of 264															

#23: 1608980-01RE1



CVAFS Detector (mV) ` Extra Peaks 🔯 MainPeak baseline

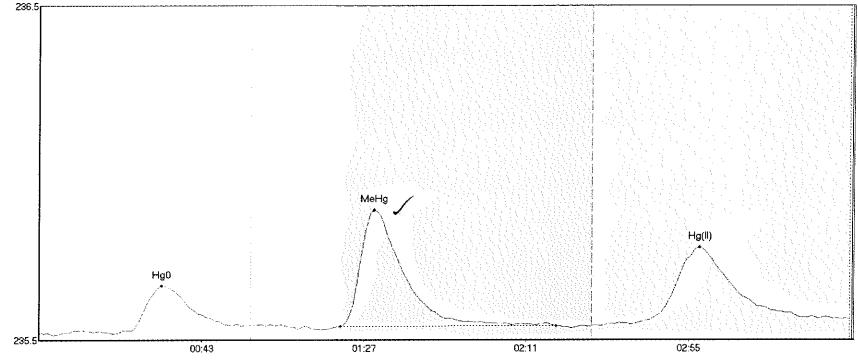
#24: 1608980-02RE1



CVAFS Detector (mV) Extra Peaks MainPeak baseline

ane(Name 1608980-02RE1 F 1608980-02RE1 N	4 52.780	Start Time 23.9 81.6	54.1 149.6	235.50 235.51	235.52 235.51	33.4 90.8	0.361	OK OK	Baseline 235.5006 235.5006	0.00 0.00	0.04 0.04	Comment	216
	1608980-02RE1 H					235.53	178.3	0.314	-	235.5006		0.04		

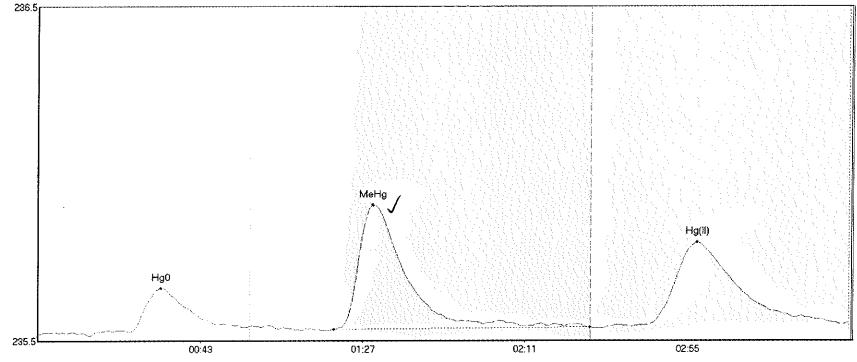
#25: 1608980-03RE1



CVAFS Detector (mV) 🗍 Extra Peaks 💹 MainPeak baseline

NameAreaStart Time EndTimeStartValueEndValuePeak MaxPeakHeight1608980-03RE1 H 17.74721.354.9235.50235.5233.20.1431608980-03RE1 M 47.05681.7140.3235.52235.5290.70.3491608980-03RE1 H 40.544160.8219.8235.53235.54179.10.229	OK 2	235.5042 235.5042 235.5042	0.00	BlShift 0.04 0.04 0.04	Comment	016
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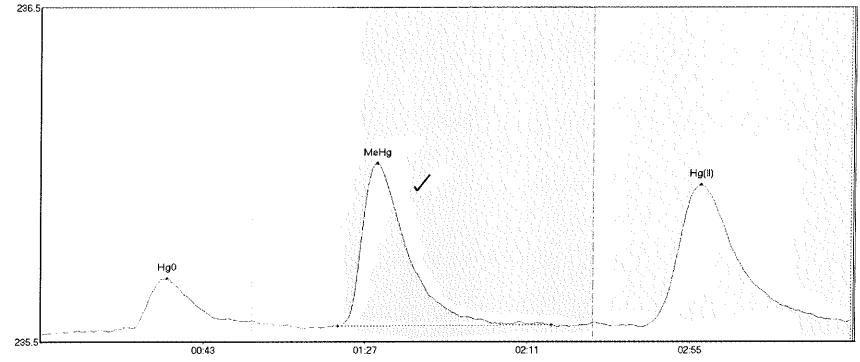
#26: 1608980-04RE1



CVAFS Detector (mV) Extra Peaks 🔄 MainPeak baseline

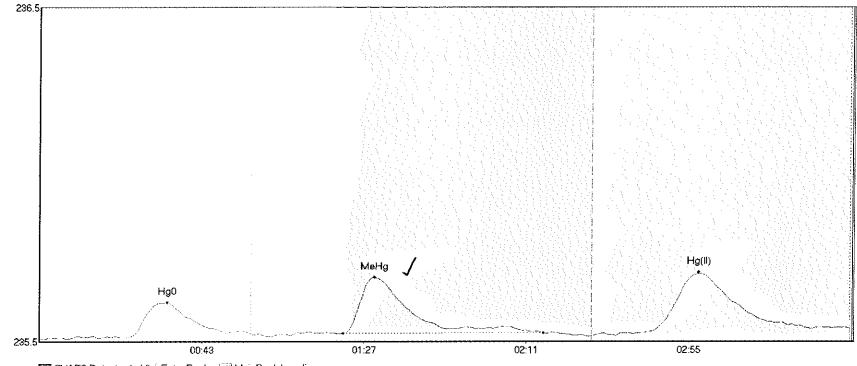
2	Name 1608980-04RE1 ⊨ 1608980-04RE1 ⊨ 1608980-04RE1 ⊨	4 54.832	Start Time 14.0 80.1 153.2	EndTime 55.8 149.7 217.7	235.52	EndValue 235.53 235.53 235.54	Peak Max 33.3 90.0 178.6	PeakHeight 0.143 0.374 0.256	Flags OX OK OK	Baseline 235.5060 235.5060 235.5060	0.00 0.00	BlShift 0.03 0.03 0.03	Comment	016
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#27: 1608980-05RE1



CVAFS Detector (mV) * Extra Peaks MainPeak baseline

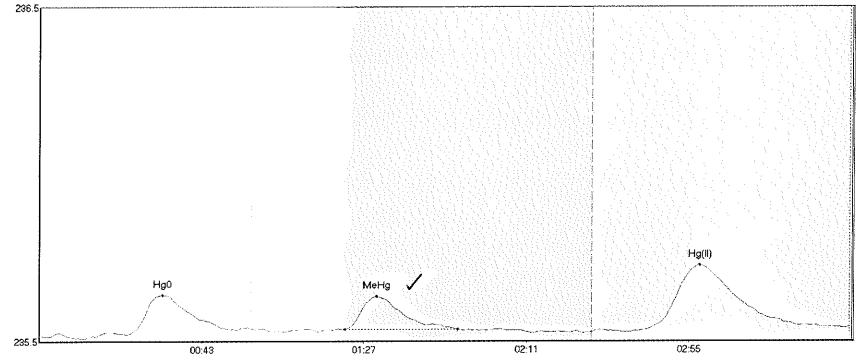
#28: 1608980-06RE1



CVAFS Detector (mV)	Extra Peaks []] MainPeak baseline 🛛
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c	Page 207 of 264	Name 1608980-06RE1 H 1608980-06RE1 M 1608980-06RE1 H	1 25.957	Start Time 24.5 82.4 161.1	EndTime 57.5 136.8 209.4	StartValue 235.51 235.52 235.52	EndValue 235.52 235.53 235.54	Peak Max 34.7 90.9 178.8	PeakHeight 0.104 0.168 0.182	Flags CT OK OK	Baseline 235.5083 235.5083 235.5083 235.5083	BlDev 0.00 0.00 0.00	BlShift 0.03 0.03 0.03	Comment	J16
	264														

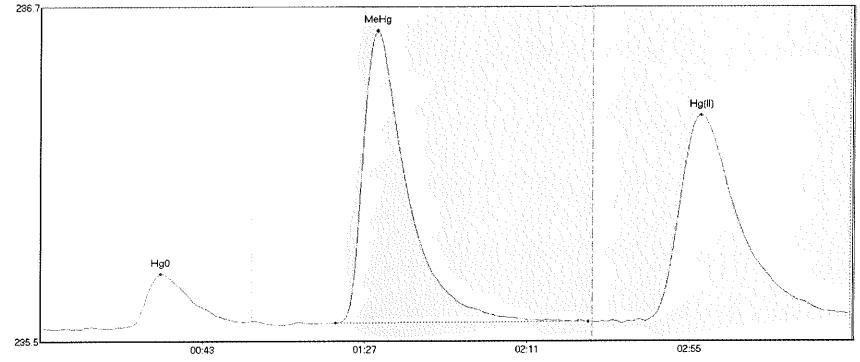
#29: 1608981-12RE1



CVAFS Detector (mV) * Extra Peaks MainPeak baseline

Page 208	Name 1608981-12RE1 H 1608981-12RE1 M 1608981-12RE1 H	1 12,571	Start Time 24.1 83.0 164.4	EndTime 53.3 113.5 218.4	StartValue 235.51 235.52 235.53	EndValue 235.52 235.52 235.53	Peak Max 33.5 91.6 179.1	PeakHeight 0.118 0.099 0.193	Flags OK OK OK	Baseline 235.5063 235.5063 235.5063	BlDev 0.00 0.00 0.00 0.00	BlShift 0.03 0.03 0.03	Comment	016
of 264														

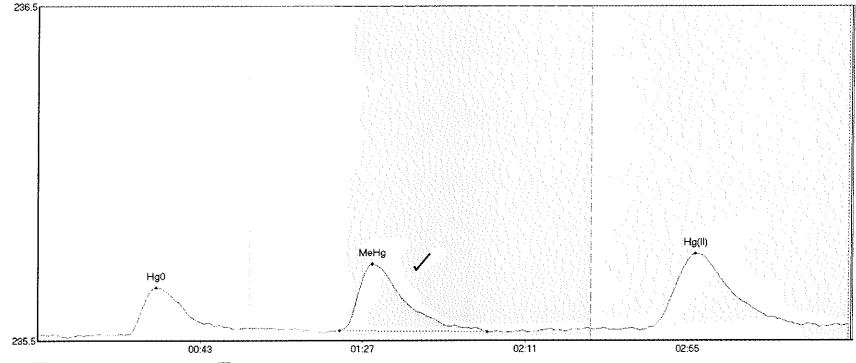
#30: 1608981-13RE1



CVAFS Detector (mV) Extra Peaks MainPeak basetine

r age zus	16 16	ame 608981-13RE1 608981-13RE1 608981-13RE1	M 151.743	Start Time 22.5 80.1 164.5	EndTime 55.5 148.7 219.8	StartValue 235.51 235.53 235.54	EndValue 235.53 235.53 235.56	Peak Max 32.9 91.4 179.2	PeakHeight 0.200 1.091 0.769	Flags OK OK CT	Baseline 235.5094 235.5094 235.5094	BlDev 0.00 0.00 0.00 0.00	BlShift C.05 C.05 O.05 O.05	Comment	016
01 204	2														

#31: 1608981-14RE1



CVAFS Detector (mV) Extra Peaks MainPeak baseline

	Name 1608981-14RE1 H 1608981-14RE1 M 1608981-14RE1 H	28.510	Start Time 24.6 81.9 164.4	EndTime 54.4 121.7 212.0	StartValue 235.52 235.53 235.54	EndValue 235.54 235.53 235.55	Feak Max 32.1 90.8 178.2	PeakHeight 0.138 0.199 0.227	Flags OK OX OK	Baseline 235.5222 235.5222 235.5222	BlDev 0.00 0.00 0.00	BlShift 0.03 0.03 0.03	Comment	016
4	064													

235.5

Hg0

01:27

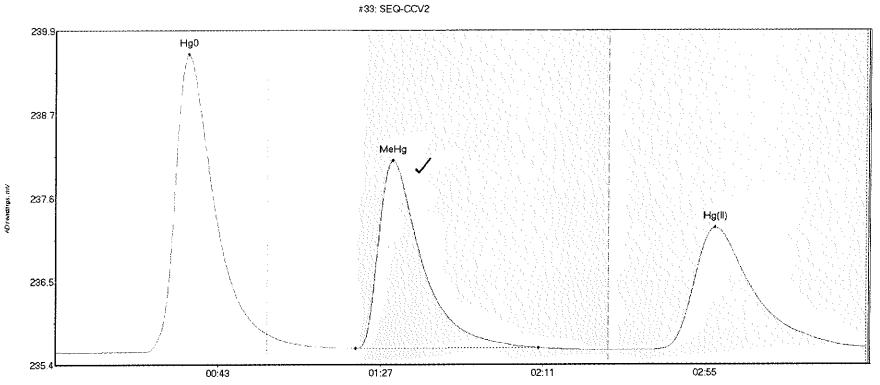
🗱 CVAFS Detector (mV) 🗄 Extra Peaks 🧾 MainPeak baseline

00:43

п	Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	,	Baseline		BlShift	Comment	
ນັ	1608981~15RE1 H	23.027	24.5	57.5	235.52	235.54	32.5	0.190	CT	235.5194	0.00	0.05		116
2	1608981-15RE1 M	92.365	80.6	143.3	235.53	235.53	91.1	0.654	OK	235,5194		0.05		510
S.	1608981-15RE1 H	192.476	152.1	219.6	235.54	235.56	178.6	1.044	OK	235.5194	0.00	0.05		

02:11

02:55

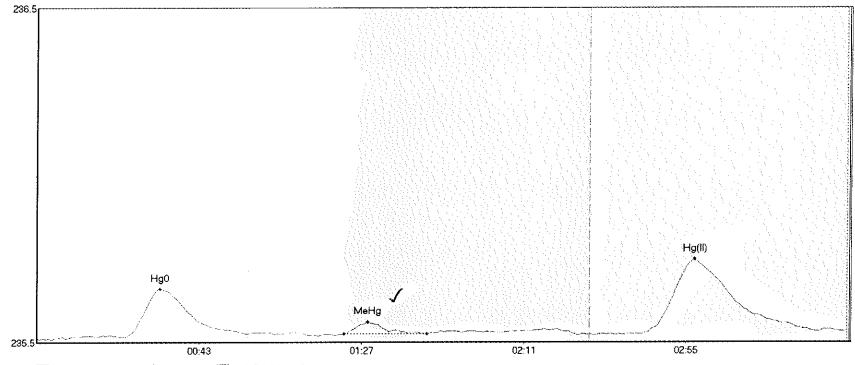


CVAFS Detector (mV) Extra Peaks 🛄 MainPeak baseline

i	ge 212	Name SEQ-CCV2 HgO SEQ-CCV2 MeHg SEQ-CCV2 Hg(II)	Area 459.101 345.877 302.930	Start Time 24.2 81.3 159.8	EndTime 57.5 130.9 219.8	StartValue 235.52 235.57 235.55	EndValue 235.76 235.58 235.58	Peak Max 36.0 91.3 178.8	PeakHeight 4.014 2.533 1.653	Flags CT OK CT	Baseline 235.5212 235.5212 235.5212	BlDev 0.00 0.00 0.00	BlShift 0.06 0.06 0.06	Comment	016
	of 264														

VDreadings, mV

#34: SEQ-CCB2

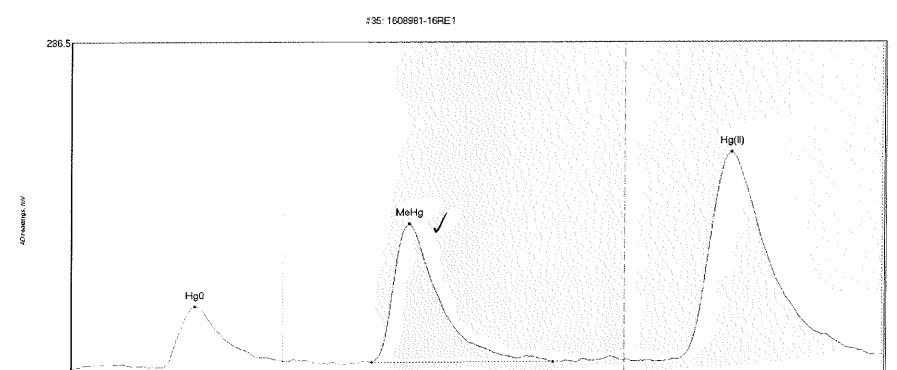


CVAFS Detector (mV) * Extra Peaks 🔝 MainPeak baseline

Name SEQ-CCB2 Hg0 SEQ-CCB2 MeHg SEQ-CCB2 Hg(II		Start Time 8.2 83.3 164.3	EndTime 57.2 105.9 212.2	StartValue 235.51 235.52 235.52	EndValue 235.52 235.52 235.53	Peak Max 33.5 89.7 178.4	PeakHeight 0.148 0.036 0.225	Flags OK OK OK	Baseline 235.5078 235.5078 235.5078	0.00 0.00	BlShift 0.02 0.02 0.02 0.02	Comment	016
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235.5

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01:27

🞆 CVAFS Detector (mV) 🛛 Extra Peaks 🔯 MainPeak baseline

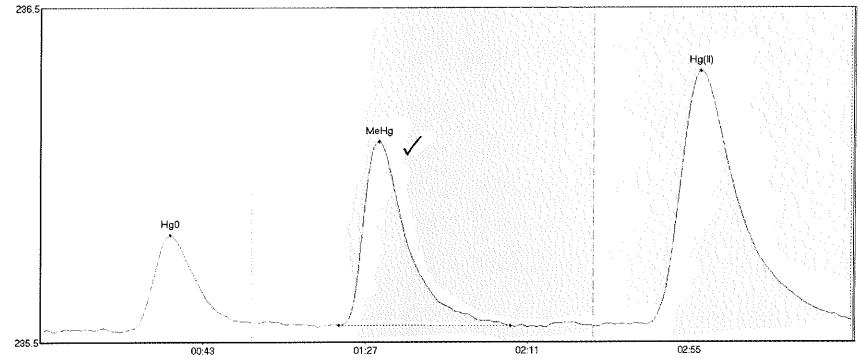
00:43

Name 1608981-16RE1 1608981-16RE1 1608981-16RE1	M 59.045	Start Time 24.1 81.4 164.4	EndTime 57.5 130.6 217.4	StartValu 235.52 235.53 235.54	e EndValue 235.53 235.53 235.55	Peak Max 33.6 91.6 179.0	PeakHeight 0.183 0.415 0.620	Flags CT OK OK	Baseline 235.5131 235.5131 235.5131	BlDev 0.00 0.00 0.00	BlShift 0.04 0.04 0.04	Comment	016
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02:11

02:55

#36: 1608981-17RE1



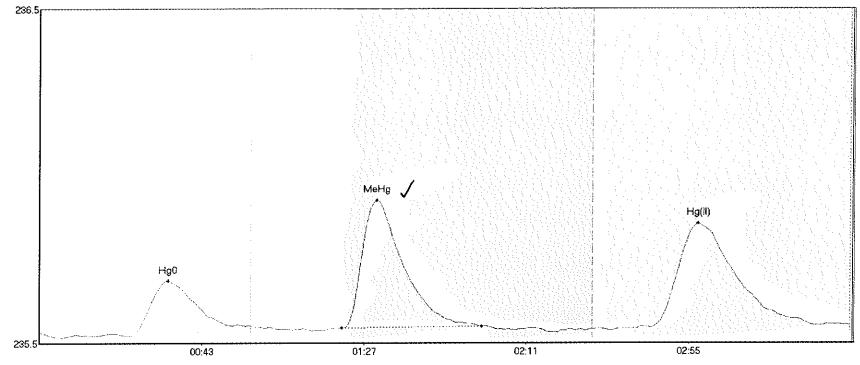
CVAFS Detector (mV) Extra Peaks 🔄 MainPeak baseline

Page 215 of 264	Name 1608981-17RE1 H 1608981-17RE1 M 1608981-17RE1 H	1 76.189	Start Time 22.9 80.9 151.2	EndTime 57.4 127.5 219.8	StartValue 235.51 235.53 235.53	EndValue 235.54 235.53 235.55	Peak Max 35.2 91.7 179.1	PeakHeight 0.287 0.550 0.763	Flags OK OK CT	Baseline 235.5147 235.5147 235.5147 235.5147	BlDev 0.00 0.00 0.00 0.00	BlShift 0.03 0.03 0.03 0.03	Comment	016
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VD1 eadings, mV

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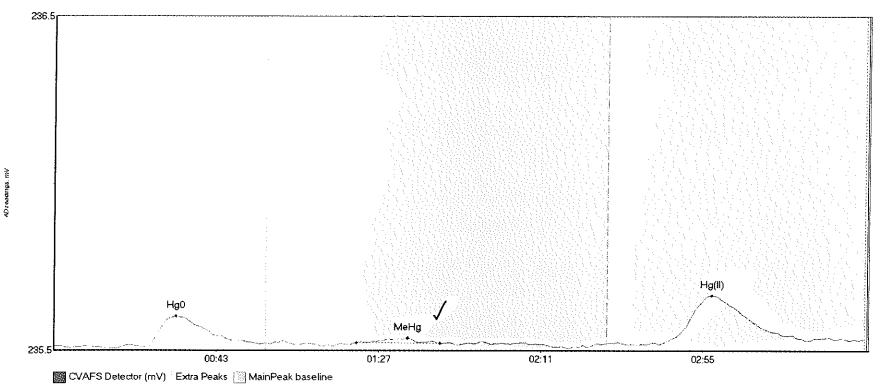
#37: 1608981-18RE1



CVAFS Detector (mV) Extra Peaks 🔯 MainPeak baseline

1608981-18RE1 H 20.955 2 1608981-18RE1 M 49.449 8	Start Time EndTime 24.7 57.5 32.0 120.0 166.0 211.1	StartValue EndValue 235.51 235.54 235.53 235.53 235.53 235.54	Peak Max 34.8 91.5 178.6	0.166 0.383	Flags CT OK OK	Baseline 235.5183 235.5183 235.5183	0.00 0.00	BlShift 0.02 0.02 0.02 0.02	Comment	016
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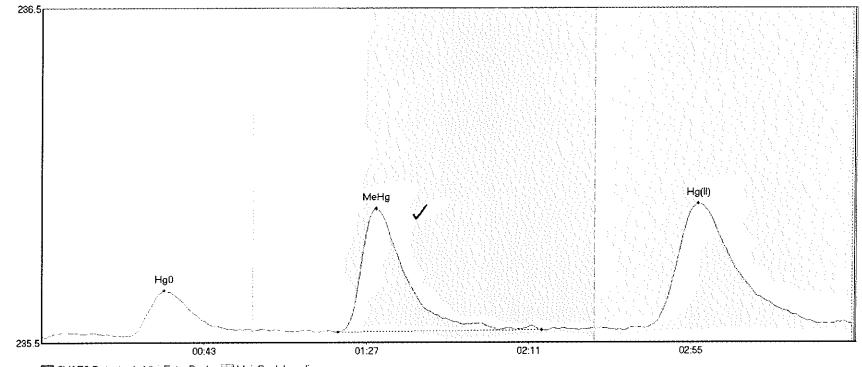
#38: 1609068-01RE1



	Name 1609068-01RE1 H 1609068-01RE1 M 1609068-01RE1 H	1.656	Start Time 24.6 82.0 164.1	EndTime 55.7 104.6 204.1	235.53	EndValue 235.53 235.53 235.54	Peak Max 33.0 95.9 178.4	PeakHeight 0.091 0.013 0.146	Flags OK OK OK	Baseline 235.5225 235.5225 235.5225	BlDev 0.00 0.00 0.00	BlShift 0.02 0.02 0.02	Comment	016
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AD Feddings, mV

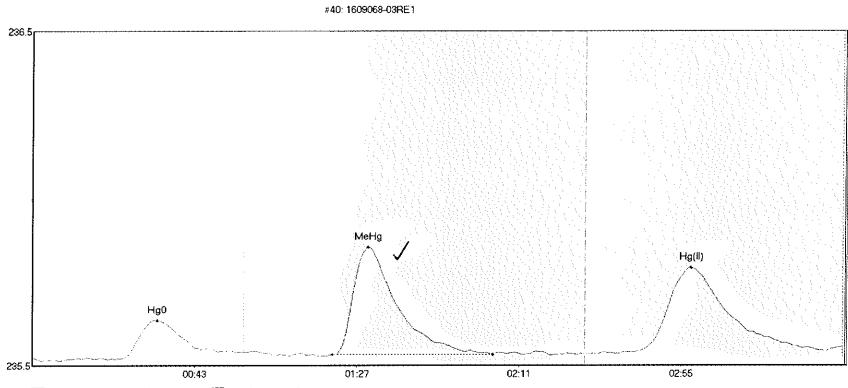
#39: 1609068-02RE1



CVAFS Detector	(mV)	Extra Peaks	MainPeak baseline
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Page 218 of 264	Name 1609068-02RE1 H 1609068-02RE1 M 1609068-02RE1 H	51.452	Start Time 23.5 80.2 163.5	EndTime 57.4 135.6 219.8	StartValue 235.52 235.53 235.54	EndValue 235.53 235.54 235.56	Peak Max 33.2 90.6 178.1	PeakHeight 0.136 0.369 0.373	Flags OK OK CT	Baseline 235.5180 235.5180 235.5180 235.5180	BlDev 0.00 0.00 0.00	BlShift 0.04 0.04 0.04 0.04	Comment	016
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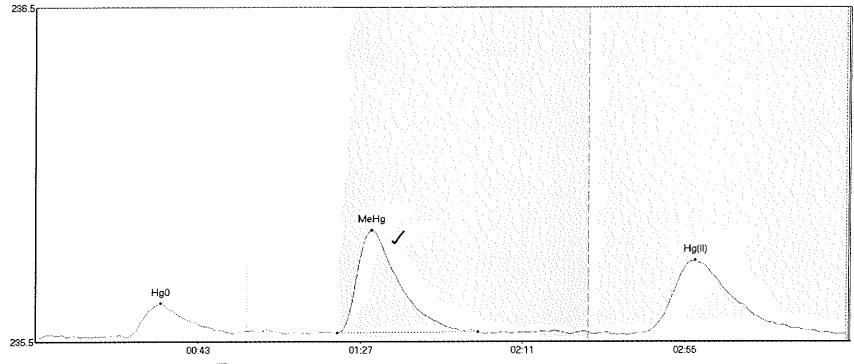
АD гезандз, тУ



CVAFS Detector (mV) Extra Peaks MainPeak baseline	CVAFS Detector	(mV) Extra Peaks	MainPeak baseline
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ו מאפ דוי	Name 1609068-03R 1609068-03R 1609068-03R	E1 M 44.316	Start Time 24.4 81.5 162.8	EndTime 55.5 125.0 215.2	StartValue 235.53 235.54 235.54	EndValue 235.54 235.54 235.55	Peak Max 33.8 91.0 178.8	PeakHeight 0.115 0.323 0.254	Flags OK OK OK	Baseline 235.5275 235.5275 235.5275	BlDev 0.00 0.00 0.00	BlShift 0.03 0.03 0.03 0.03	Comment	916
9	0 of 264													

#41: 1609068-04RE1

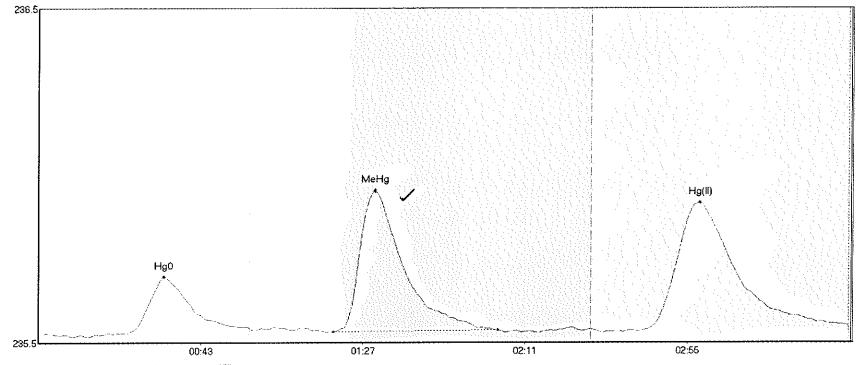


CVAFS Detector (mV) Extra Peaks MainPeak baseline

Ū	Name 1609068-04RE1 H		Start Time 24.8	EndTime 53.2	StartValue 235.52		Peak Max 33.8	PeakHeight 0.101	Flags OK	Baseline 235.5238		BlShift 0.01	Comment	
P	1609068-04RE1 M 1609068-04RE1 M 1609068-04RE1 H	40.029	81.7	120.0 213.5		235.54 235.54	91.0 178.9		OK OK	235.5238 235.5238	0.00	0.01 0.01		016

AD readings, niv

#42:1609068-05RE1

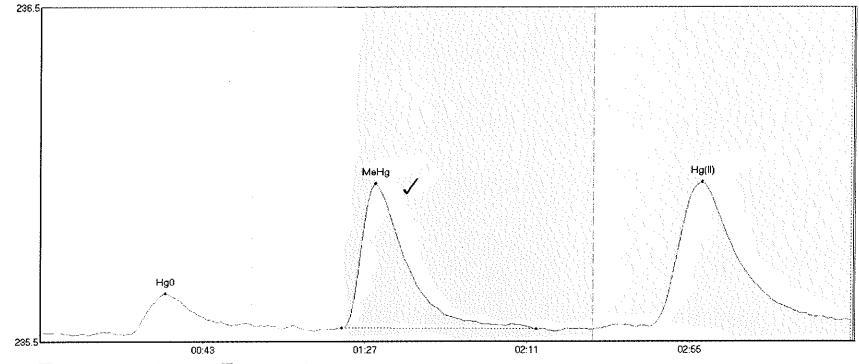


CVAFS Detector (mV) * Extra Peaks 🔯 MainPeak baseline

Page 221	Name 1609068-05RE1 H 1609068-05RE1 M 1609068-05RE1 H	M 57.217	Start Time 23.9 80.1 162.9	EndTime 57.5 124.8 219.8	StartValue 235.52 235.52 235.53	EndValue 235.53 235.53 235.54	Peak Max 34.0 91.3 179.4	PeakHeight C.171 O.422 O.386	Flags CT OK CT	Baseline 235.5191 235.5191 235.5191 235.5191	BlDev 0.00 0.00 0.00	BiShift 0.03 0.03 0.03	Comment	016
of 264														

AD readings. n/V

#43: 1609068-06RE1



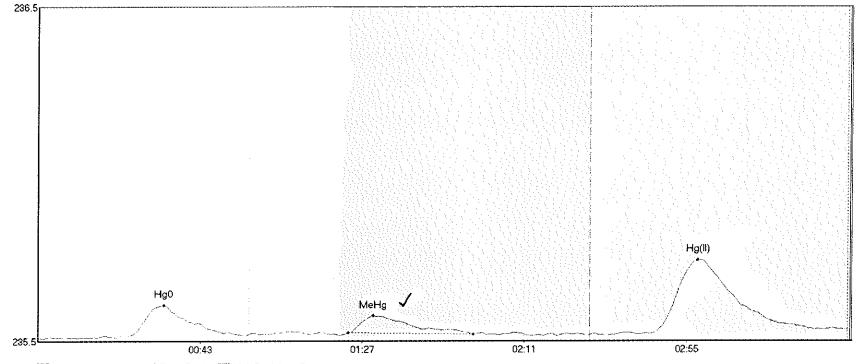
CVAFS Detector (mV) Éxtra Peaks 🔡 MainPeak baseline

Page 222	Name 1609068-06RE1 H 1609068-06RE1 M 1609068-06RE1 H	60.559	Start Time 23.3 81.9 161.5	EndTime 51.7 134.6 219.8	StartValue 235.51 235.53 235.53	EndValue 235.54 235.52 235.55	Peak Max 33.9 90.9 179.5	PeakHeight 6.121 0.432 0.434	Flags OK OK CT	Baseline 235.5153 235.5153 235.5153	BlDev 0.00 0.00 0.00 0.00	BlShift C.04 C.04 O.04	Comment	016
of 264														

EPA1630

AD readings, mV

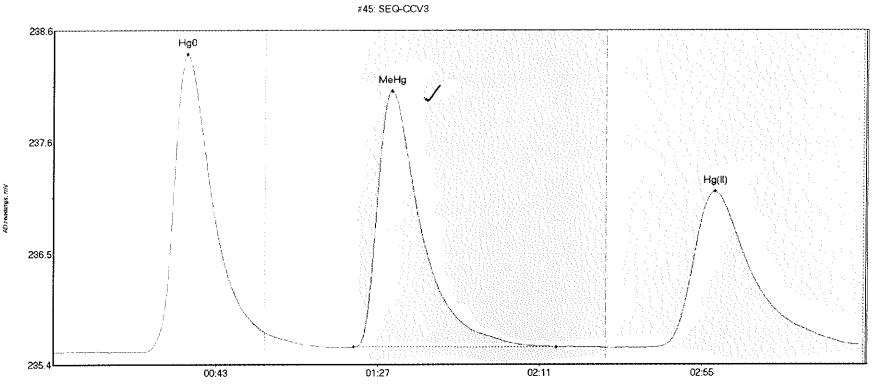
#44: 1609068-07RE1



CVAFS Detector (mV) Éxtra Peaks []] MainPeak baseline

160906	A 8-07RE1 H 1 8-07RE1 M 8 8-07RE1 H 3	2.619 21 .377 84	art Time .2 .3 6.0	EndTime 56.3 118.2 219.8	StartValue 235.51 235.53 235.53	EndValue 235.52 235.52 235.54	Peak Max 34.1 91.0 179.0	-	Flags OK OK CT	235.5129	0.00	BlShift 0.02 0.02 0.02	Comment	016
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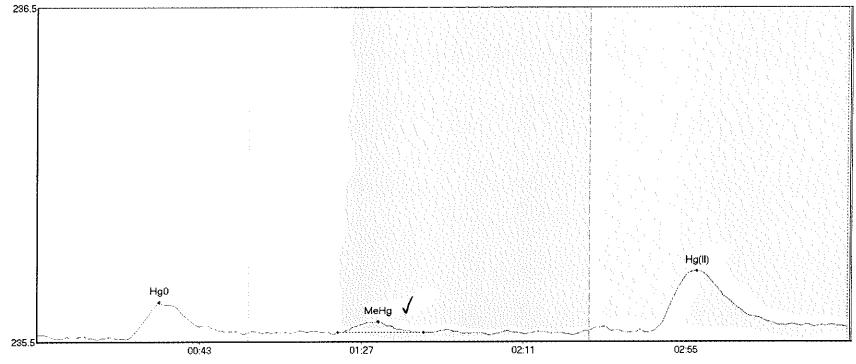


CVAFS Detector (mV) Extra Peaks MainPeak baseline

- 90 	SEQ-CCV3 Hg(II	Area 326.874 344.866) 279.219	Start Time 24.7 81.6 160.5	EndTime 57.5 136.6 219.7	StartValue 235.50 235.55 235.55	EndValue 235.69 235.55 235.57	Peak Max 36.2 91.7 179.4	PeakHeight 2.911 2.506 1.527	Flags CT OK OK	Baseline 235.4987 235.4987 235.4987 235.4987	BlDev 0.00 0.00 0.00	BlShift 0.07 0.07 0.07	Comment	016
	of 264													

AD readings. InV

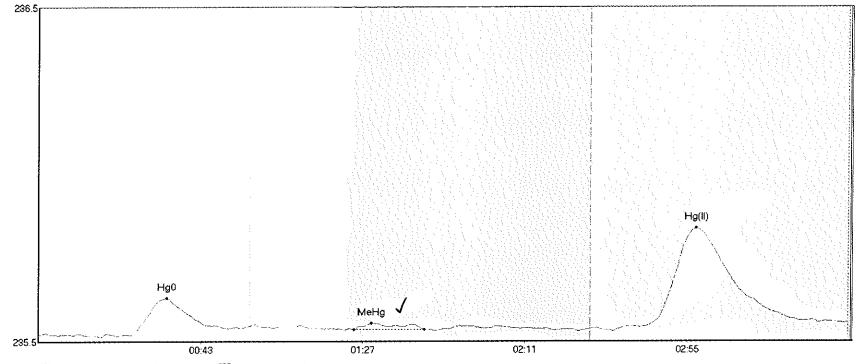
#46: SEQ-CCB3



CVAFS Detector (mV) Extra Peaks MainPeak baseline

R S	ame EQ-CCB3 Hg0 EQ-CCB3 MeHg EQ-CCB3 Hg(II)	14.116 3.413	Start Time 24.1 81.8 166.6	EndTime 56.1 104.7 219.8	235.51		Peak Max 33.2 92.6 179.0	-	OK OK	Baseline 235.5067 235.5067 235.5067	0.00 0.00	ElShift 0.02 0.02 0.02	Comment	016
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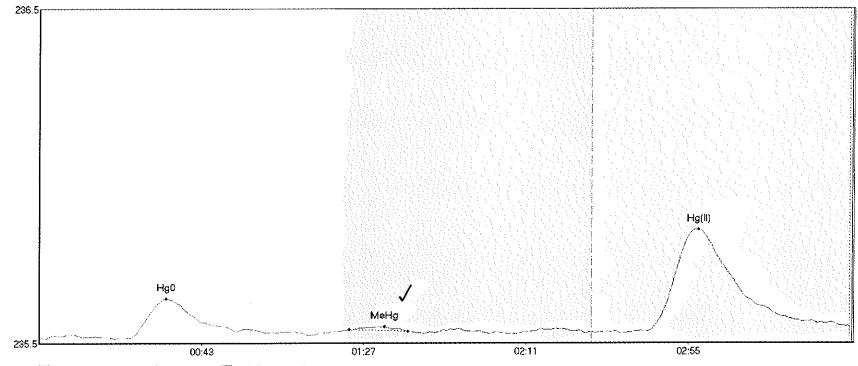
#47: F609558-BLK1



CVAFS Detector (mV) * Extra Peaks 🔄 MainPeak baseline

226	Name F609558-BLK1 Hg F609558-BLK1 Me F609558-BLK1 Hg	2.117	Start Time 25.2 85.7 163.2	EndTime 51.5 104.7 218.6	StartValue 235.50 235.52 235.52	EndValue 235.52 235.52 235.54	Peak Max 34.8 90.4 178.5	PeakHeight 0.112 0.018 0.295	Flags OK OK OK	Baseline 235.5017 235.5017 235.5017	BlDev 0.00 0.00 0.00 0.00	BlShift 0.04 0.04 0.04 0.04	Comment	016
of 264														

#48: F609558-BLK2

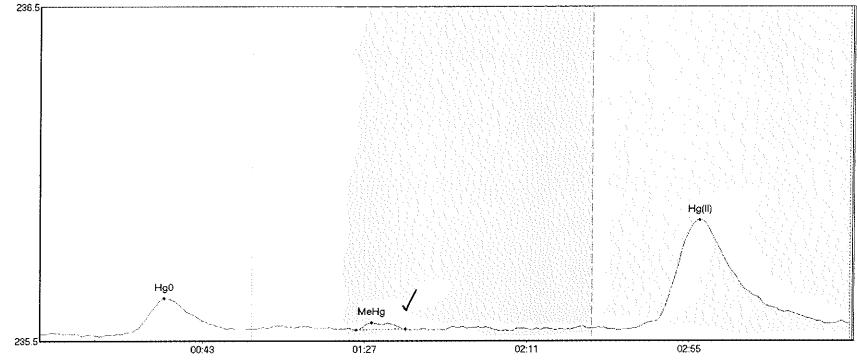


CVAFS Detector (mV) Extra Peaks MainPeak baseline

7 of 264	227	Name Area F609558-BLK2 Hg 14.884 F609558-BLK2 Me 1.129 F609558-BLK2 Hg 55.820	Start Time EndTime 24.5 53.3 84.2 100.0 164.2 218.8	StartValue EndValue 235.50 235.52 235.53 235.52 235.52 235.54	Peak Max 34.4 93.7 178.7	PeakHeight 0.118 0.010 0.306	Flags OK OK OK	Baseline 235.5058 235.5058 235.5058	BlDev 0.00 0.00 0.00	BlShift 0.03 0.03 0.03 0.03	Comment .	316
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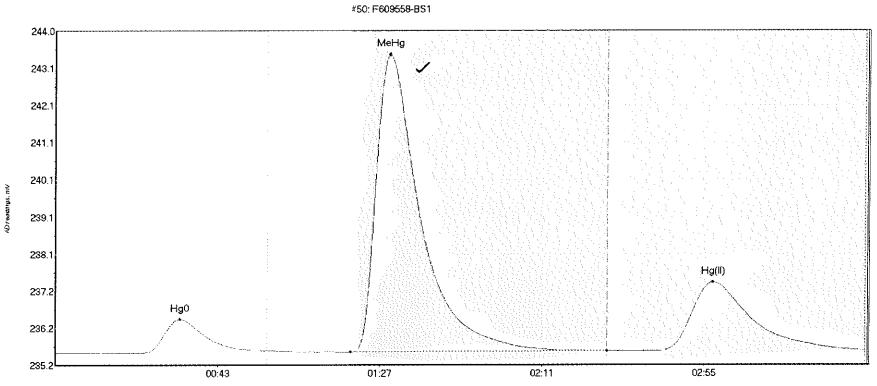
VD readings, mV

#49: F609558-BLK3

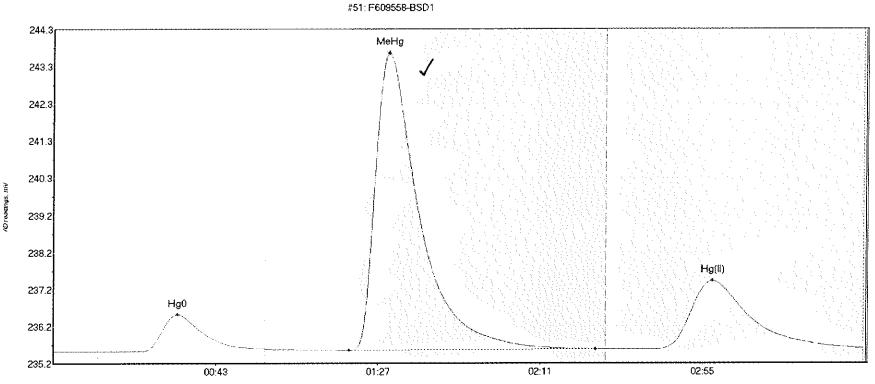


CVAFS Detector (mV) Extra Peaks MainPeak baseline

	Name F609558-BLK3 Hg F609558-BLK3 Me F609558-BLK3 Hg	13.234 1.737	Start Time 22.3 85.9 161.6	55.3 99.1	235.51	EndValue 235.51 235.52 235.53	Peak Max 33.7 90.0 178.9		Flags OK OK OK	Baseline 235.5005 235.5005 235.5005	0.00 0.00	BlShift 0.03 0.03 0.03	Comment	016
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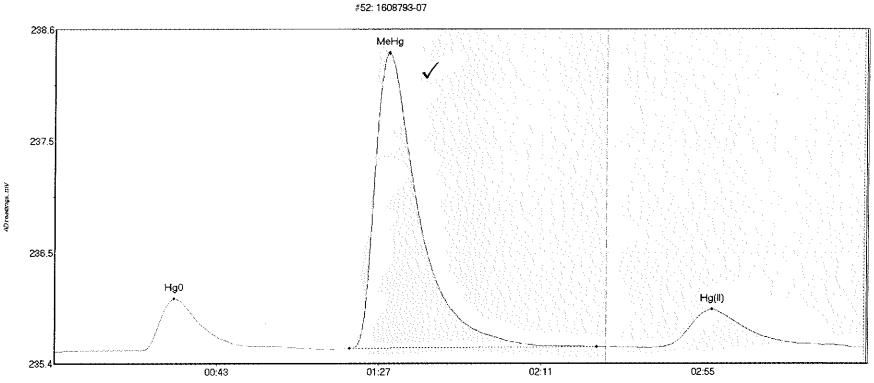


CVAFS Detector (mV) Extra Peaks MainPeak baseline



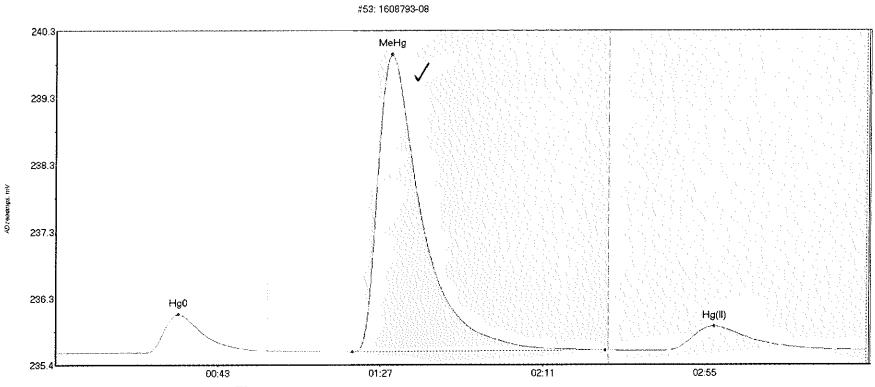
CVAFS Detector (mV) Extra Peaks 🔡 MainPeak baseline

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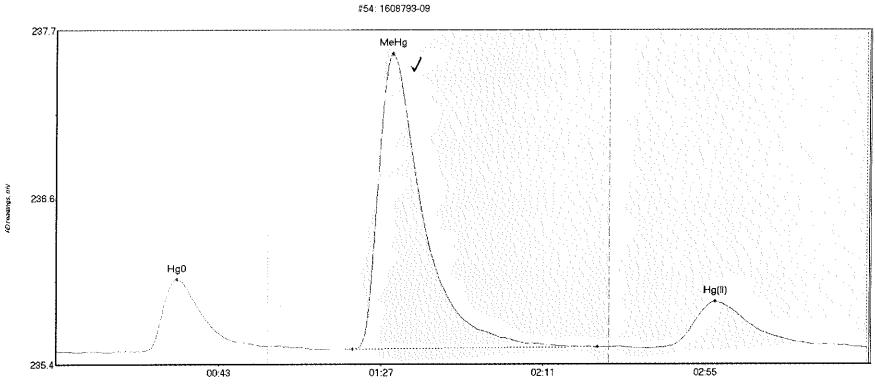
CVAFS Detector	(mV) Extra	Peaks 👘 Mair	Peak baseline
		r cars jinai	i car basenne

90 - - -	Page 231 of	Name 1608793-07 HgC 1608793-07 MeHg 1608793-07 Hg(I	386.698	Start Time 2.5 80.1 164.0	EndTime 55.9 147.3 217.6	StartValue 235.53 235.55 235.56	EndValue 235.57 235.56 235.56 235.56	Peak Max 32.6 90.7 178.5	PeakHeight 0.496 2.794 0.357	Flags OK OK OK	Baseline 235.5214 235.5214 235.5214 235.5214	BlDev 0.00 0.00 0.00	BlShift C.O4 C.O4 O.O4 O.O4	Comment	016
ļ	of 264														



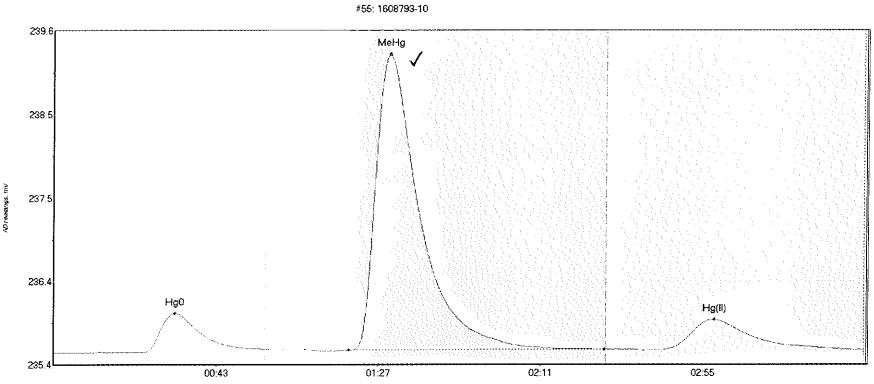
CVAFS Detector (mV) * Extra F	Peaks 🔄 MainPeak baseline
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ר מטב דטד	3 160	ne 08793-08 Hç 08793-08 Me 08793-08 Hç	30 eHg	608.810	Start Time 24.0 80.5 165.1	EndTime 57.5 149.0 211.4	StartValue 235.53 235.54 235.56	EndValue 235.57 235.57 235.57 235.57	Peak Max 33.3 91.0 178.6	PeakHeight 0.566 4.393 0.358	Flags CT OK OK	Baseline 235.5307 235.5307 235.5307	BlDev 0.00 0.00 0.00	BlShift 0.04 0.04 0.04 0.04	Comment	216
	vac to c															



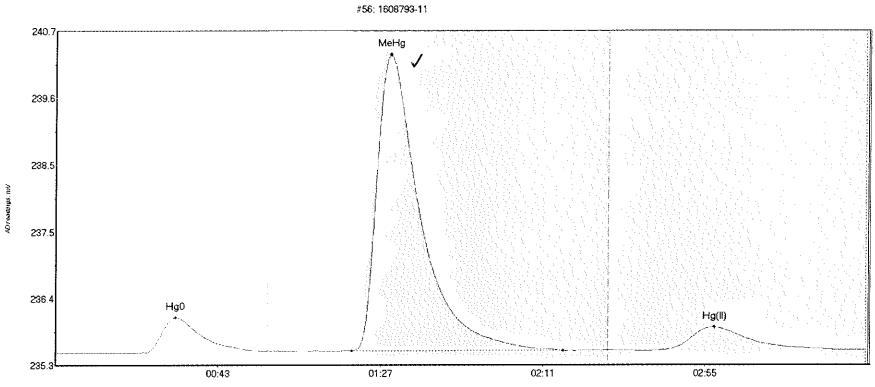
CVAFS Detector (mV) Extra Peaks 🔄 MainPeak baseline

Page 233 of 264	1608/93-09 Hg(1	275.975	Start Time 22.4 80.3 164.7	EndTime 57.5 146.7 216.7	StartValue 235.53 235.54 235.56	EndValue 235.56 235.55 235.56	Peak Max 32.7 91.0 178.7	PeakHeight 0.485 1.974 0.304	Flags CT OK CK	Baseline 235.5269 235.5269 235.5269	BlDev 0.00 0.00 0.00	BlShift 0.03 0.03 0.03	Comment.	016
264														



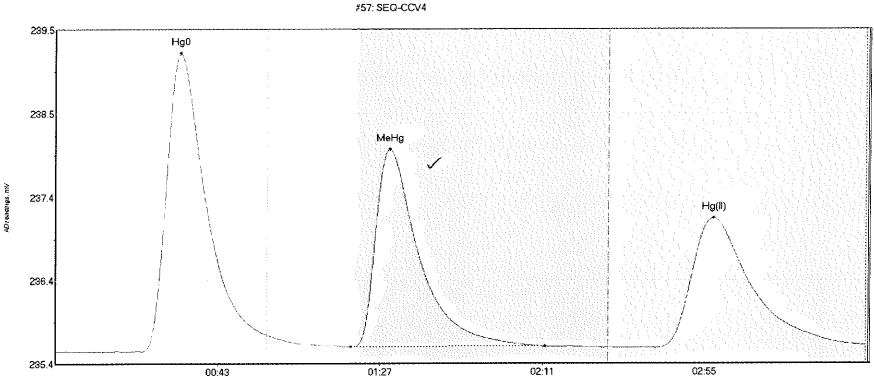
CVAFS Detector (mV) Extra Peaks 🧐 MainPeak baseline

П	Name	λrea	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment	
ŭ	Name 1608793-10 Hg0	57.130	24.3	57.0	235.54	235.58	32.8	0.497	OK	235.5388	0.00	0.04		316
	1608793-10 MeHg			149.5	235.57	235.58	91.1	3.732	ОК	235.5388	0.00	0.04		316
S S	1608793-10 Hg(I	68.440	165.1	214.7	235.57	235.58	179.2	0.381	OK	235.5388	0.00	0.04		



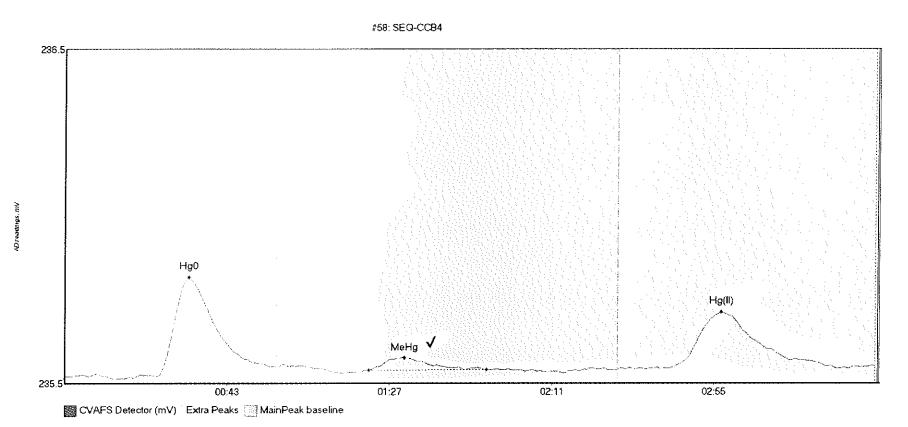
March (AES Detector (m) ()	¹ Evtra Doalio	Main Dook bacolino
CVAFS Detector (mV)	Exila Peaks	Mail Feak Daseline

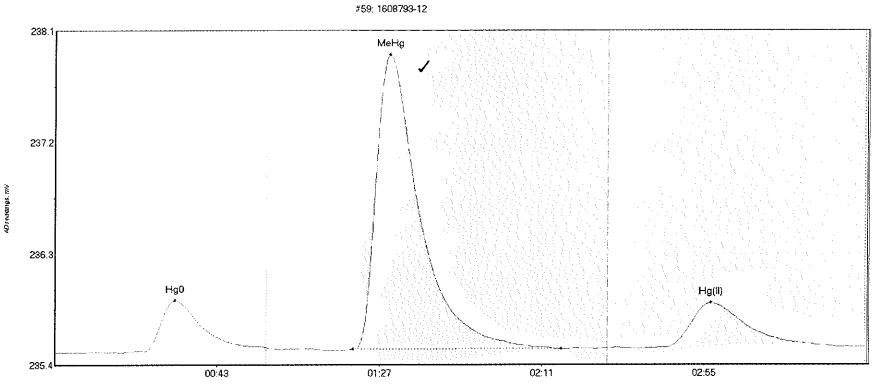
	Name 1608793-11 Hg0 1608793-11 MeHg 1608793-11 Hg(I	67.496		EndTime 57.5 137.6 211.9			32.6	0.568 4.720	Flags CT OK OK	Baseline 235.5375 235.5375 235.5375	0.00 0.00	BlShift 0.05 0.05 0.05	Comment	016
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CVAFS Detector (mV) * Extra Peaks 💮 MainPeak baseline

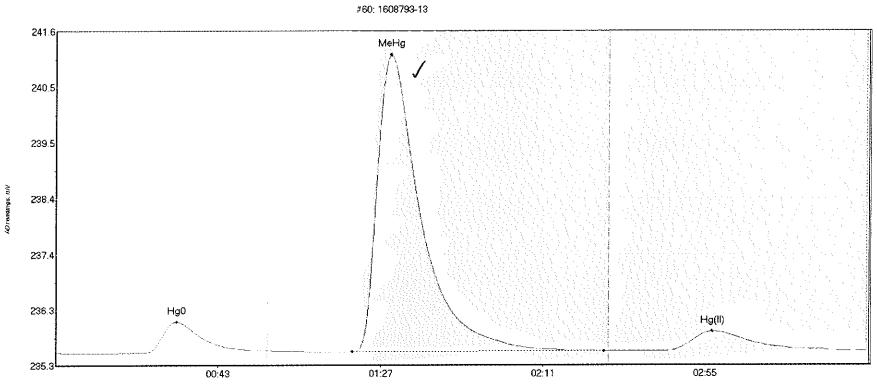
Name SEQ-CCV SEQ-CCV SEQ-CCV	/4 Hg0 /4 MeHg /4 Hg(II)	Area 429.024 332.466 292.781	Start Time 23.5 80.1 162.8		235.53	235.73		3.660 2.428		Baseline 235.5347 235.5347 235.5347	0.00 0.00	BlShift 0.08 0.08 0.08	Comment	016
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CVAFS Detector (mV) 🕆 Extra Peaks 📓 MainPeak baseline

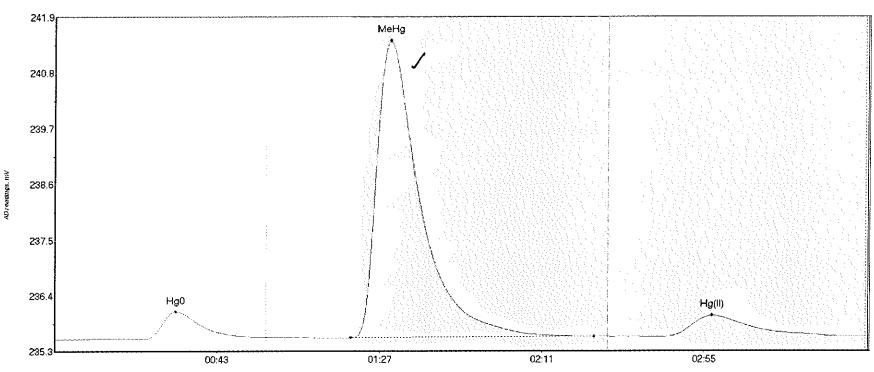
c	Page 238 o	Name 1608793-12 Hg0 1608793-12 MeHg 1608793-12 Hg(I	325.521	Start Time 17.9 80.9 163.3	EndTime 57.5 137.3 217.7	StartValue 235.53 235.56 235.57	EndValue 235.57 235.56 235.58	Peak Max 32.7 90.8 177.9	PeakHeight 0.425 2.374 0.363	Flags CT OK OK	Baseline 235.5311 235.5311 235.5311	BIDev 0.00 0.00 0.00	BlShift 0.05 0.05 0.05 0.05	Comment	016
	of 264														



CVAFS Detector (mV) Extra Peaks 🔣 MainPeak baseline

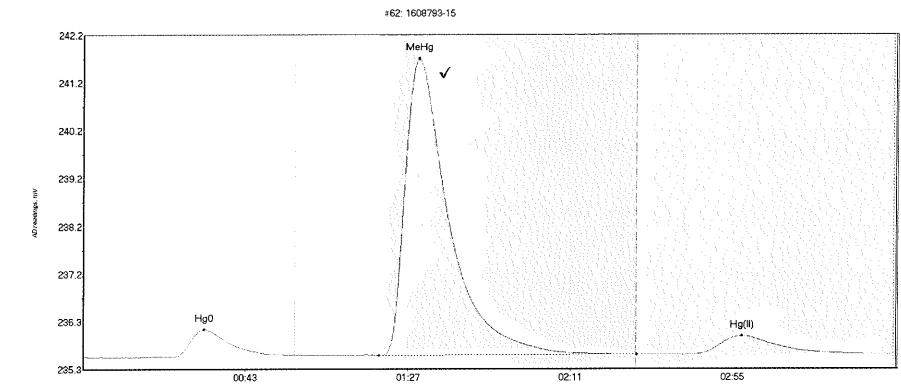
Page 239 o	Name 1608793-13 Hg0 1608793-13 MeHg 1608793-13 Hg(I	764.790	Start Time 23.9 80.3 165.4	EndTime 57.5 148.6 211.2	StartValue 235.54 235.56 235.58	EndValue 235.58 235.57 235.58	Peak Max 32.8 90.8 178.0	PeakHeight 0.581 5.558 0.364	Flags CT OK OK	Baseline 235.5393 235.5393 235.5393	B1Dev 0.00 0.00 0.00 0.00	BlShift 0.03 0.03 0.03	Comment	016
of 264														

#61: 1608793-14



CVAFS Detector (mV) Extra Peaks 🔯 MainPeak baseline

Page 240 of 264	1608/93-14 Hg(1	810.504	Start Time 7.0 80.1 163.2	EndTime 57.4 146.2 214.2	StartValue 235.52 235.55 235.56	EndValue 235.56 235.57 235.58	Peak Max 32.9 90.9 178.2	PeakHeight 0.550 5.917 0.427	Flags OK OK OK	Baseline 235.5208 235.5208 235.5208	B1Dev 0.00 0.00 0.00 0.00	BlShift 0.06 0.06 0.06	Comment)16
264														

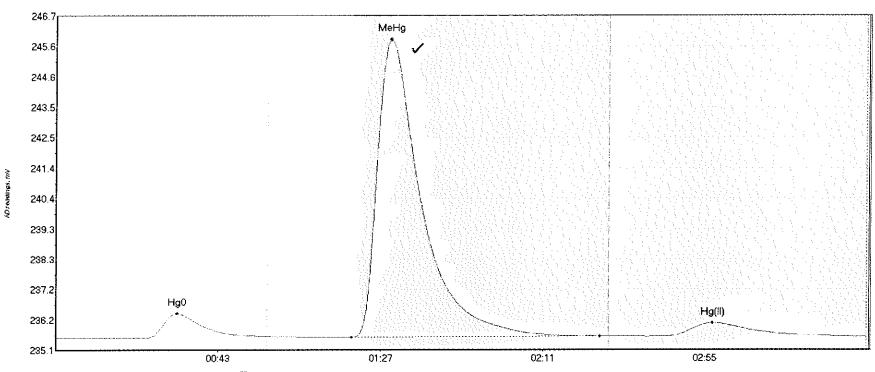


🛛 📷 CVAFS Detector (mV) 🕆 Extra Peaks 🔝 MainPeak baseline	ne
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Name 1608793-15 Ha 1608793-15 Ma 1608793-15 Ha	Area g0 64.073 eHg 846.073 g(1 66.360	Start Time 24.4 80.2 162.6	EndTime 55.5 150.0 216.9		e EndValue 235.57 235.57 235.58	Peak Max 32.9 90.9 178.6	PeakHeight 0.562 6.131 0.382	Flags OK CT OK	Baseline 235.5330 235.5330 235.5330	0.00 0.00	BIShift 0.04 0.04 0.04	Comment	016
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#63: 1608793-16

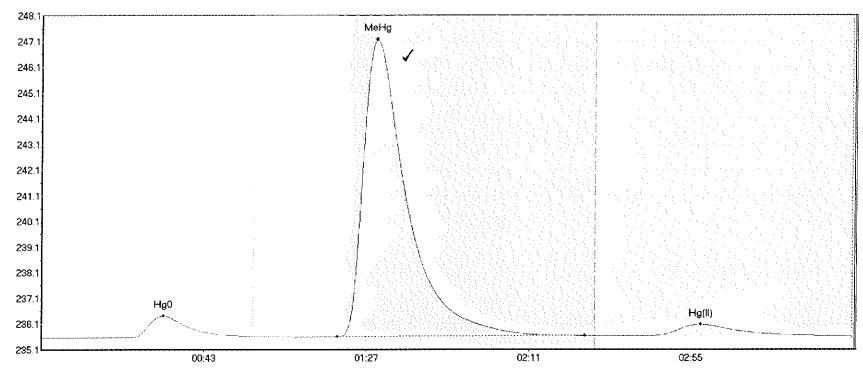


CVAFS Detector (mV	Extra Peaks	MainPeak baseline
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Page 242 of 264	Name 1608793-16 Hg0 1608793-16 MeHg 1608793-16 Hg(I	1419.503	Start Time 24.2 80.1 165.4	EndTime 57.5 147.4 211.3	StartValue 235.53 235.55 235.58	EndValue 235.58 235.59 235.59 235.59	Peak Max 33.0 90.8 178.2	PeakHeight 0.849 10.290 0.462	Flags CT OK OK	Baseline 235.5351 235.5351 235.5351 235.5351	BlDev 0.00 0.00 0.00	BlShift 0.04 0.04 0.04 0.04	Comment	016
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AD readings, mV

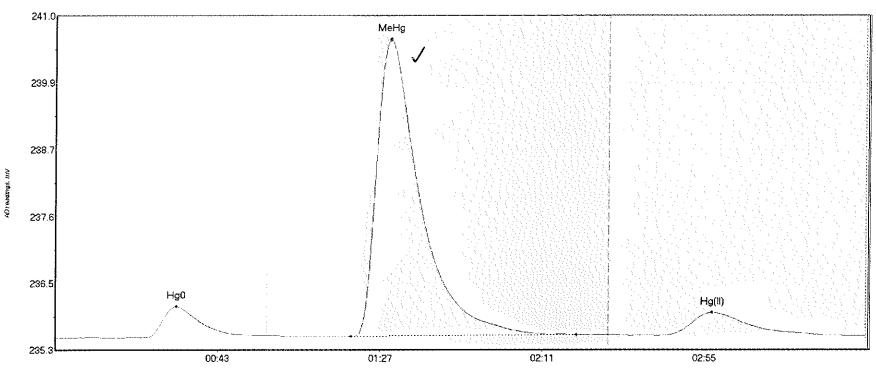
#64: 1608793-17



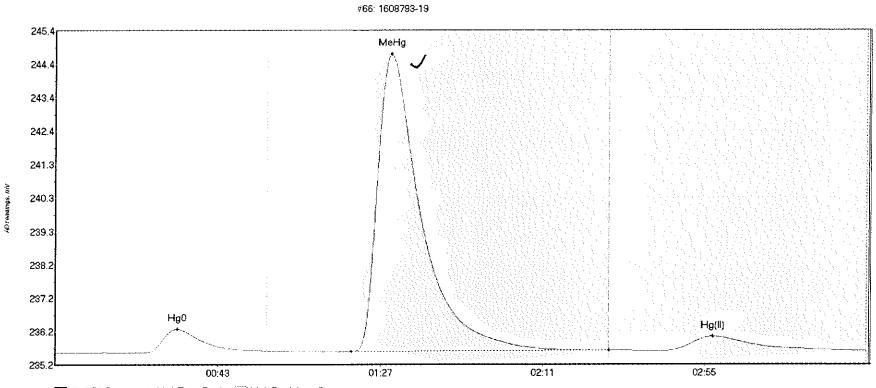
			a hand may
B CVAFS Detector	(mV)	: Extra Peaks	MainPeak baseline

age z		Name 1608793-17 Hg0 1608793-17 MeHg 1608793-17 Hg(I	1594.197	Start Time 24.3 80.1 164.5	EndTime 57.5 147.2 213.4	StartValue 235.53 235.55 235.59	EndValue 235.57 235.59 235.59	Peak Max 33.0 90.8 178.8	PeakHeight 0.850 11.586 0.446	Flags CT OK OK	Baseline 235.5241 235.5241 235.5241	BlDev C.CO O.CC O.CC	BlShift 0.05 0.05 0.05	Comment	016
	43 of 264														

#65: 1608793-18

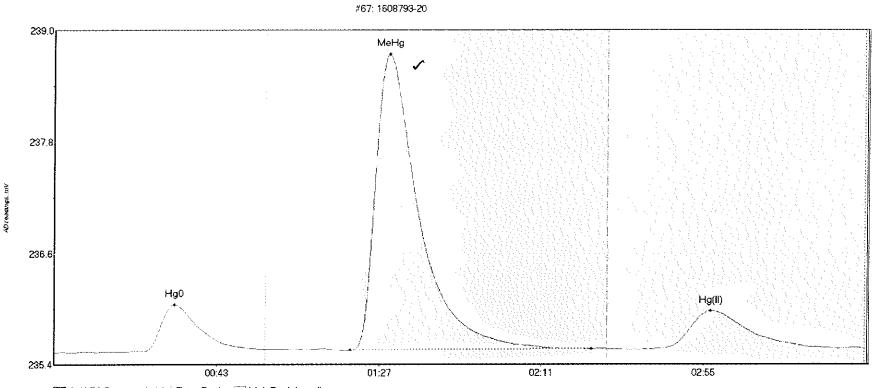


岡田 CVAES Detector (m)	/) Extra Peaks 🔤 MainPeak baseline 👘
	() LATA FEARS AND MAINFEAR DASENNE



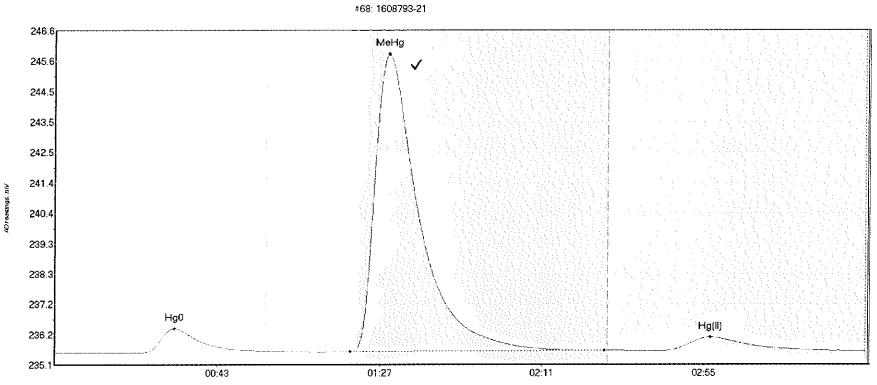
CVAFS Detector (mV)	🕆 Extra Peaks 🔄 MainPeak base	line
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Page 245 of	Name 1608793-19 HgC 1608793-19 MeHg 1608793-19 Hg(I	1255.550	Start Time 21.5 80.1 164.1	EndTime 57.5 150.0 213.4	StartValue 235.53 235.56 235.58	EndValue 235.59 235.60 235.60	Peak Max 33.0 90.9 178.3	PeakHeight 0.721 9.152 0.440	Flags CT CT OK	Baseline 235.5289 235.5289 235.5289 235.5289	BlDev 0.00 0.00 0.00	BlShift C.06 O.06 O.06 O.06	Comment	016
of 264														



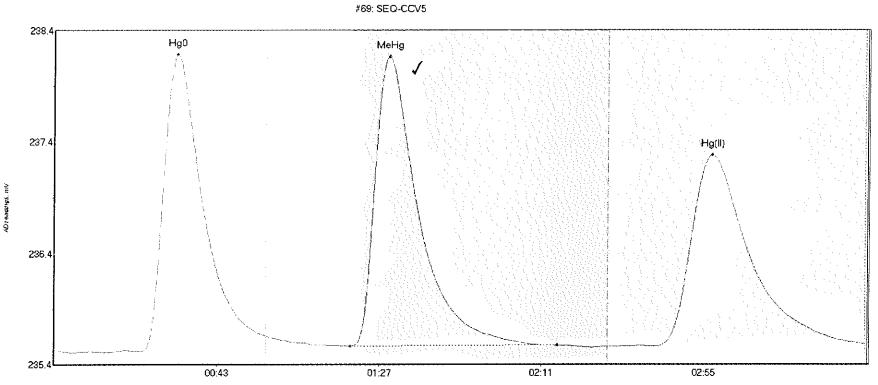
CVAFS Detector (mV)	Extra Peaks	MainPeak baseline
		intern car bacesite

Page 246	Name 1608793-20 Hg0 1608793-20 MeHg 1608793-20 Hg(1	433.676	Start Time 11.5 80.1 161.5	EndTime 55.6 145.6 212.8	StartValue 235.53 235.56 235.56	EndValue 235.57 235.57 235.57 235.57	Peak Max 32.6 90.7 178.1	PeakHeight 0.509 3.162 0.410	Flags OK OK OK	Baseline 235.5294 235.5294 235.5294 235.5294	BlDev 0.00 0.00 0.00 0.00	BlShift 0.05 0.05 0.05 0.05	Comment	316
of 264														



CVAFS Detector (mV) Éxtra Peaks MainPeak baseline

Page 247 of 264	Name 1608793-21 Hg0 1608793-21 MeHg 1608793-21 Hg(I	1409.777	Start Time 22.6 80.1 164.7	EndTime 57.5 149.0 208.8	StartValue 235.53 235.56 235.59	EndValue 235.59 235.60 235.60	Peak Max 32.5 90.4 177.9	PeakHeight 0.822 10.257 0.471	Flags CT CK OK	Baseline 235.5307 235.5307 235.5307	BlDev 0.00 0.00 0.00 0.00	BlShift 0.06 0.06 0.06 0.06	Comment	016
of														
264														

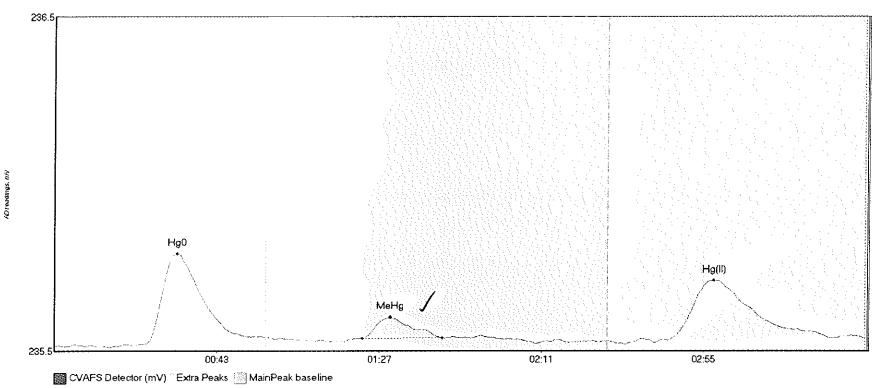


CVAFS Detector (mV) Éxtra Peaks 🔄 MainPeak baseline

	me 2-CCV5 Hg0 2-CCV5 MeHg 2-CCV5 Hg(II)	Area 304.701 348.351 308.305	Start Time 16.6 80.1 162.9	EndTime 57.5 136.4 219.8	235.54 235.58	235.67 235.59		2.631		Baseline 235.5347 235.5347 235.5347	0.00 0.00	BlShift 0.07 0.07 0.07	Comment	016
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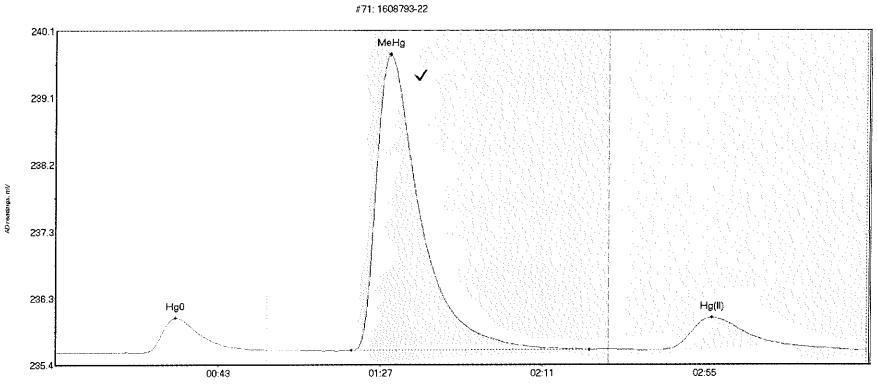
016

#70: SEQ-CCB5



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CCB5 Hg0	31.610	24.1	57.4	235.55	235.57	33.1	0.271	OK	235.5478	0.00	0.02	
SEQ-CCB5 MeHg	6.859	83.4	105.2	235.57	235.57	91.0	0.062	OK	235.5478	0.00	0.02	
SEQ-CCB5 Hg(II)	32.647	166.3	211.3	235.56	235.57	178.9	0.179	OK	235.5478	0.00	0.02	

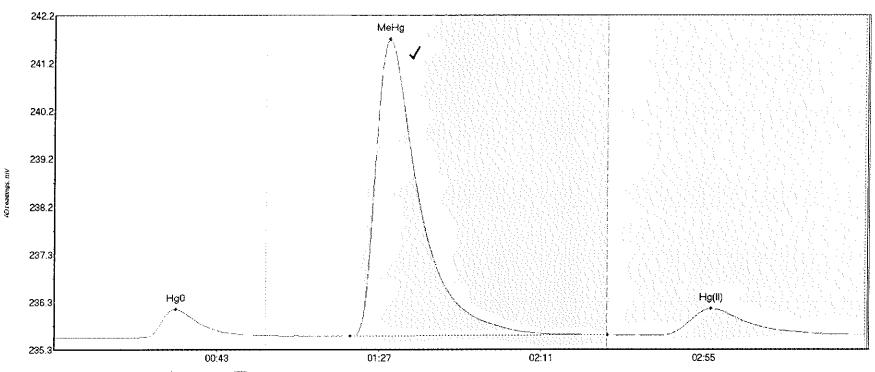
Page 249 of 264



CVAFS Detector (mV) * Extra Peaks MainPeak baseline

Page 250	Name 1608793-22 HgO 1608793-22 MeHg 1608793-22 Hg(I	573.178	Start Time 23.5 80.1 164.7	EndTime 57.5 144.7 213.7	StartValue 235.54 235.58 235.58	EndValue 235.58 235.59 235.59	Peak Max 32.5 90.6 178.1	PeakHeight 0.492 4.168 0.455	Flags CT OK OK	Baseline 235.5457 235.5457 235.5457 235.5457	BlDev 0.00 0.00 0.00	Bl\$hift 0.03 0.03 0.03 0.03	Comment	016
of 264														

#72: 1608793-23



CVAES Detector	(mV) [†] Extra Peaks	MainPeak baseline
	(IIIV) LAUAFCARS	THAT I CAN DASCING

Page 251	1608793-23 Hg0 1608793-23 MeHg	844.726	Start Time 22.0 80.1 164.8	EndTime 57.5 150.0 217.5	StartValue 235.54 235.56 235.59	EndValue 235.58 235.59 235.59	₽eak Max 32.8 90.7 178.0	PeakHeight 0.587 6.138 0.547	Flags CT CT OK	Baseline 235.5411 235.5411 235.5411 235.5411	B1Dev 0.00 0.00 0.00	BlShift 0.05 0.05 0.05 0.05	Comment	316
of 264														

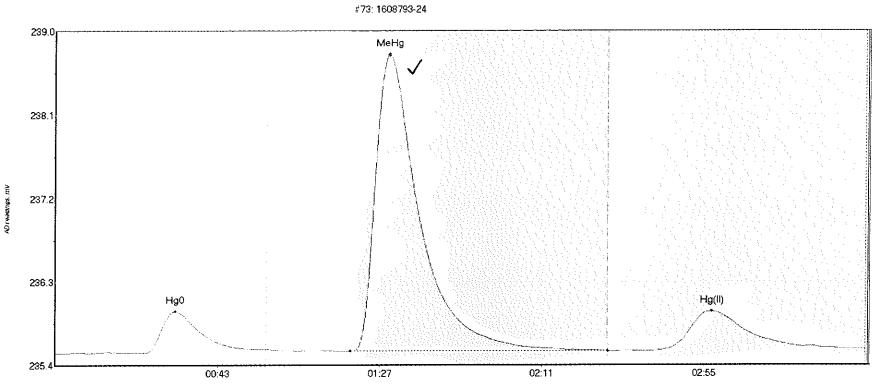
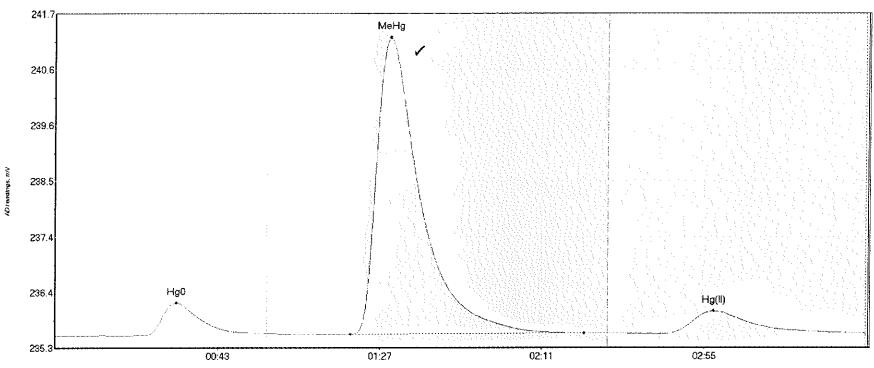


Image: CV/AES Detector I	(mV)	Extra Peaks	MainPeak baseline
	(11) •)		in than a car buochto

Pane	Name 1608793-24 Hg0 1608793-24 MeHg 1608793-24 Hg(I	50.418	24.1	EndTime 55.9 150.0 217.0	235.56	235,58	Peak Max 32.6 90.6 178.2		Flags OK CT OK	Baseline 235.5399 235.5399 235.5399	0.00 0.00	BlShift 0.04 0.04 0.04	Comment	016
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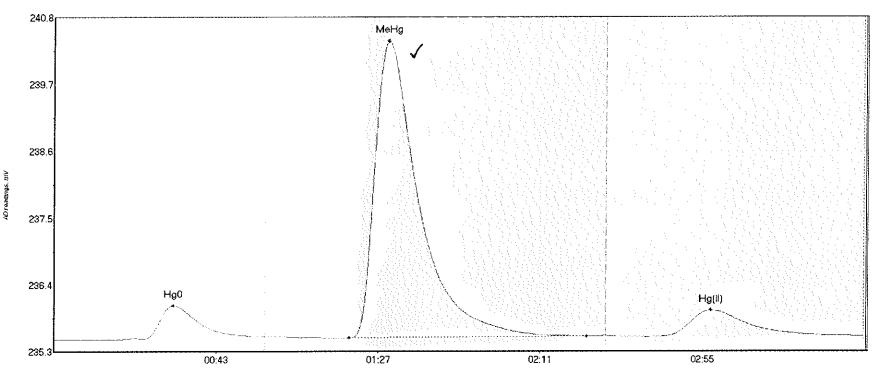
#74: 1608793-25



🛛 🞯 CVAFS Detector (mV) 🕆 Extra Peaks 👘 MainPeak I
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3 of 264	Page 253 of 26	Name 1608793-25 HgC 1608793-25 MeHg 1608793-25 Hg(1	776.909	Start Time 23.6 80.1 163.7	EndTime 57.4 143.6 213.9	StartValue 235.55 235.57 235.58	EndValue 235.59 235.59 235.60	Peak Max 32.9 90.9 178.6	PeakHeight C.625 5.664 O.436	Flags OK OK OX	Baseline 235.5495 235.5495 235.5495 235.5495	BlDev 0.00 0.00 0.00	BlShift 0.04 0.04 0.04 0.04	Comment	916
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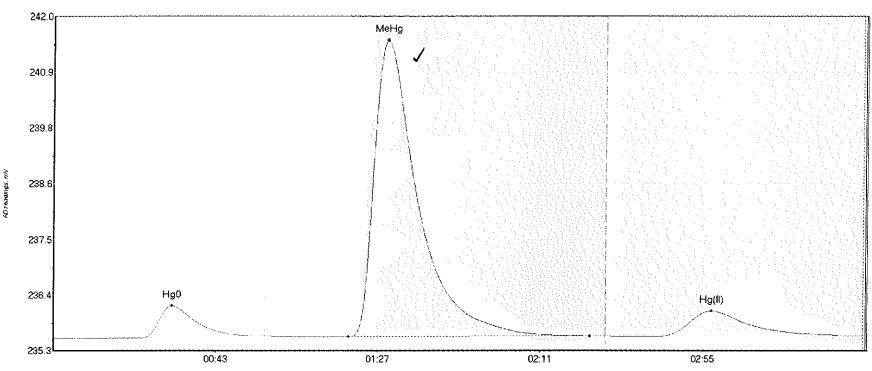
#75: 1608793-26



CVAFS Detector (mV) Extra Peaks MainPeak baseline

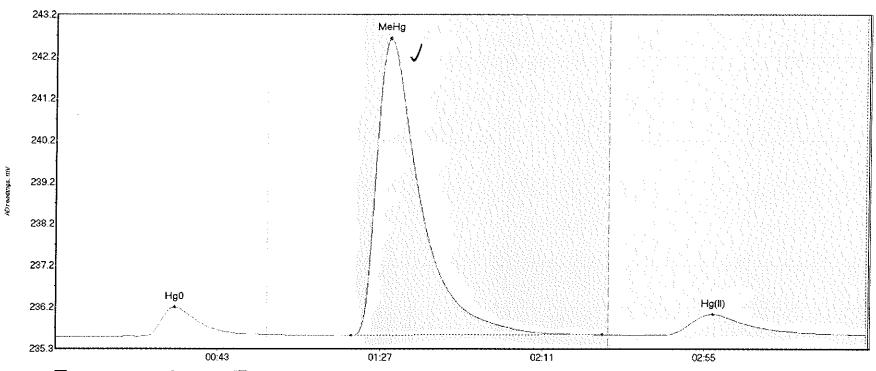
c	Page 254	Name 1608793-26 Hg0 1608793-26 MeHg 1608793-26 Hg(1	663.705	Start Time 17.4 80.3 165.8	EndTime 57.5 144.8 209.9	StartValue 235.54 235.56 235.59	EndValue 235.59 235.59 235.61	Peak Max 32.5 90.8 178.3	PeakHeight 0.554 4.826 0.421	Flags CT OK OK	Baseline 235.5450 235.5450 235.5450 235.5450	BlDev 0.00 0.00 0.00 0.00	BlShift 0.05 0.05 0.05	Comment	016
	of 264														
	264														

#76: F609558-DUP1



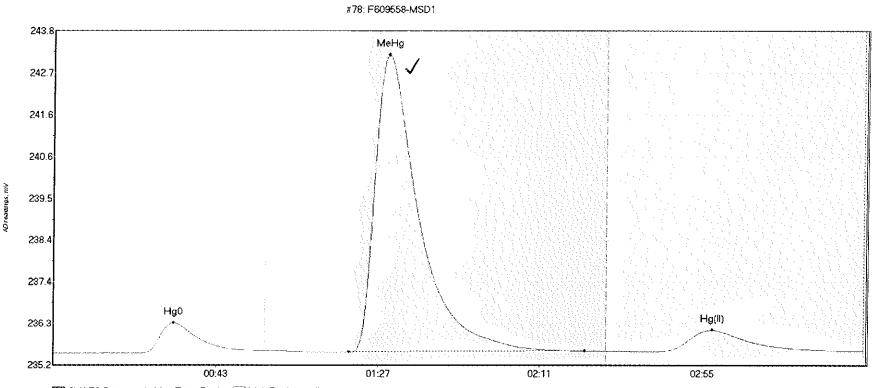
CVAFS Detector ((mV)	🕆 Extra Peaks 👘	MainPeak baseline
		Exault Curve :	Then I car basen to

#77: F609558-MS1



CVAFS Detector (mV) Extra Peaks	unPeak baseline
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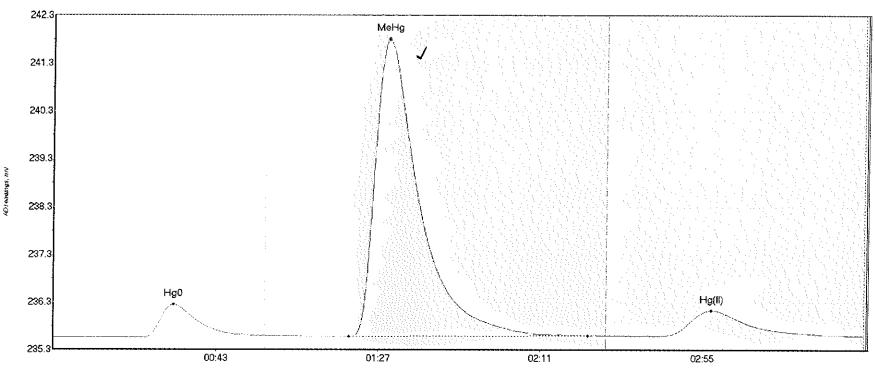
,	Page 256	Name F609558-MS1 Hg0 F609558-MS1 MeH F609558-MS1 Hg(970.381	Start Time 22.9 80.1 163.8	EndTime 57.1 148.3 216.0	StartValue 235.55 235.57 235.59	EndValue 235.60 235.60 235.60 235.60	Peak Max 32.3 90.6 178.4	PeakHeight 0.697 7.055 0.493	Flags OK OK OK	Baseline 235.5490 235.5490 235.5490	BlDev 0.00 0.00 0.00 0.00	BlShift 0.05 0.05 0.05	Comment	016
	6 of 264														



CVAFS Detector (mV)	Extra Peaks 👘 MainPeak baseline
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Page 257	Name F609558-MSD1 Hg F609558-MSD1 Me F609558-MSD1 Hg	1041.407	Start Time 23.5 80.1 163.4	EndTime 57.4 144.2 213.9	StartValue 235.55 235.57 235.59	EndValue 235.60 235.60 235.60	Peak Max 32.6 90.8 178.7	PeakHeight 0.770 7.603 0.552	Flags OK OK CK	Baseline 235.5434 235.5434 235.5434	B1Dev C.00 C.00 C.00	BlShift 0.05 C.05 0.05	Comment	016
7 of 264														

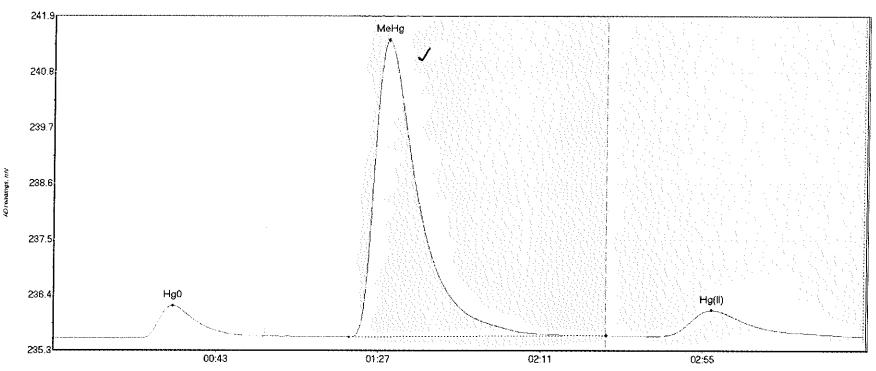
#79: F609558-MS2



CVAFS Detector (mV)	Extra Peaks	MainPeak baseline
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Page 258 of	Name F609558-MS2 Hg0 F609558-MS2 MeH F609558-MS2 Hg(860.568	Start Time 23.6 80.1 163.4	EndTime 57.5 145.0 215.7	StartValue 235.54 235.57 235.58	EndValue 235.59 235.59 235.59 235.59	Peak Max 32.4 90.8 178.5	PeakHeight 0.699 6.269 0.537	Flags CT OK OK	Baseline 235.5417 235.5417 235.5417	BlDev 0.00 0.00 0.00 0.00	BlShift 0.04 0.04 0.04 0.04	Comment	016
of 264														

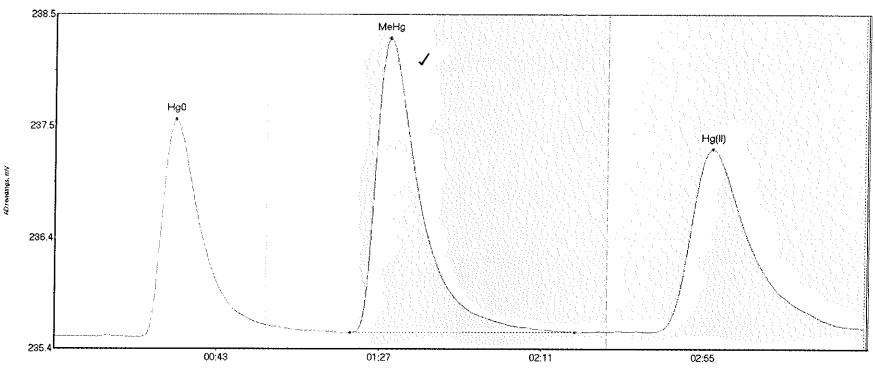
#80: F609558-MSD2



		(1777) A. A. A. A. A. A. A. A. A. A. A. A. A.
■ CVAFS Detector (mV) Extra Peaks	MainPeak baseline

c	Page 259	Name F609558-MSD2 Hg F609558-MSD2 Me F609558-MSD2 Hg	811.556	Start Time 23.7 80.1 164.5	EndTime 56.9 150.0 214.8	StartValue 235.55 235.57 235.59	EndValue 235.59 235.59 235.60	Peak Max 32.5 90.8 178.5	PeakHeight 0.641 5.876 0.516	Flags OK CT OK	Baseline 235.5457 235.5457 235.5457	BlDev 0.00 0.00 0.00	BlShift 0.03 0.03 0.03	Comment)16
) of 264														

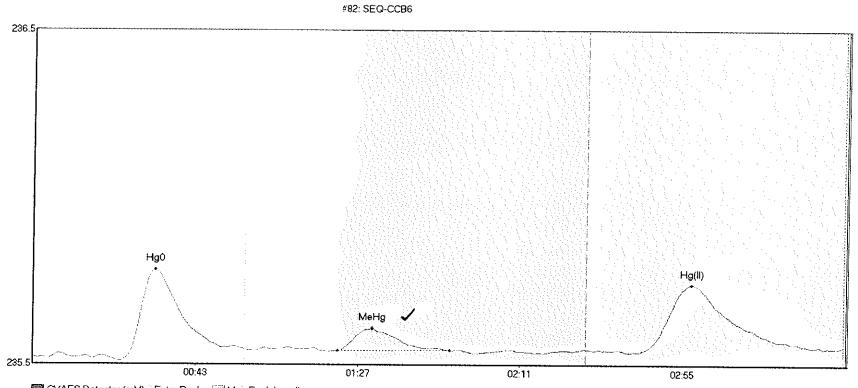
#81: SEQ-CCV6



CVAFS Detector	(mV) [°]	Extra Peaks	MainPeak baseline
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Page 260	Name SEQ-CCV6 Hg0 SEQ-CCV6 MeHg SEQ-CCV6 Hg(ll)	Area 226.642 369.221 301.804	Start Time 22.6 80.1 163.1	EndTime 57.5 141.1 219.8	StartValue 235.55 235.59 235.60	EndValue 235.66 235.59 235.63	Feak Max 32.9 90.8 178.5	PeakHeight 1.967 2.661 1.656	Flags CT OK CT	Baseline 235.5546 235.5546 235.5546	B1Dev 0.00 0.00 0.00	BlShift 0.07 0.07 6.07 6.07	Comment	016
of 264														

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raye zoi	SEQ-CCE SEQ-CCE SEQ-CCE	Area 31.962 8.508 37.860	Start Time 23.8 82.6 163.7	EndTime 57.5 113.0 214.2	StartValue 235.55 235.58 235.57	EndValue 235.58 235.58 235.58	Peak Max 33.0 91.9 178.5	PeakHeight 0.273 0.065 0.204	Flags CT CK OK	Baseline 235.5557 235.5557 235.5557	BlDev 0.00 0.00 0.00	Blshift 0.03 0.03 0.03	Comment	016
01 204														

Peer Review Check List for MHg for CV-GC-AFS (FGS-070) 2015 Rev 5 (08/06/2015)

Analyst:	DON MORAN	<u> </u>	Sequence #:	· · · · · · · · · · · · · · · · · · ·	(1000-1			
Reviewer:	DAN	WEIKAPT	9.24.1 Dataset ID #:	······································		3, 6129013 01-160928-1		·
Date:	9.29-1		WO #:	16087), 1608981.		
Batch #(s):	F609558, F6095	·····	Client(s):					
• Select	the correct pre	eparation meth		Additional Comment	s:			
Analyte	Prep Method	Matrix						
MHg		stillation Water						
	FGS-010 KOH/	меон тіссца						
🗌 мнд	Dig	raction Sed/Soil						
	rds-045 Meci Ex	(dation Sed/Soli)						
ДМН 9	FGS-098 (None Act method)	credited ALL						
	5				Analyst I	nitials:	Reviewer	Initials:
1.00000					<u> </u>		Dm	
			nce/Raw Data (Have all sa		YES			
			adsheet (or Prep Bench s	heet)/Raw data	✓ YES	NO		g
	er: 100% of peak				YES	NO		2
	re peak height eri				∐ YES	NO 🖸		2
			oonses, & initial results ma		YES	NO NO	[] ∕ N/A	Ø
			he data been reimported?				□ 1 N/A	T
			& bench sheet for correct	usage (i.e. expiries).	YES	NO NO	🗌 N/A	Ľ
	nd compare mass				V YES	NO	🗌 N/A	₫
	nd compare initia				YES	NO NO	🗌 N/A	2
			hsheet match those in Exc	el?	YES	NO NO	N/A	
	I>3.0 for all distil	· -			YES	🗌 NO	🗋 N/A	Ŀ
(j) Is the se	quence #, analys	st, date, and inst	rument # on the QC page	?	YES	🗌 NO		
(k) Is the ar	nalysis status corr	rect? (analyzed/i	nitial review/reviewed)		YES	NO NO		Ø
(I) Original (prep bench sheet	added to data p	ackage?		YES YES	NO NO		Ľ
(m) Benchsl	heet prep date M	UST match actua	al prep date (check if re-sl	not vs re-extract)	YES	NO NO		g
3. High QA?	WC)#(s)/Client(s): _			YES	V NO		
4. Client specif	fic QC? (if Yes, re	fer to Project No	ites/LIMS)		YES	V NO		V
(a) Have the	e QC requirement	ts been met for a	all WO#s?		✓ YES	NO NO		\square
5. 20 or fewer	samples in batch	l? _			VES	NO I		Ø
(a) 3 PBs, 1	LCS/LCSD (or BS	S/BSD), 2 MS/MS	D/MD per batch?		YES	NO		
(b) 1 CCV a	nd 1 CCB every 1	0 analytical runs	;?		V YES	NO		Z
QA/QC Data	Checked				-			
6. The calibrat	ion curve include	d a minimum of	5 Standards		PASS	🔲 FAIL	□ N/A	Ø
Comments:	<u> </u>							
7. 1st Calibrati	on Standard % R	ecoveries (65-13	35%)		PASS	FAIL	N/A	V
Comments:								
8. RSD CF (≤ 1				·····	PASS	FAIL		
Comments:								

	Peer Review Check Lis	t for MHg for CV-GC	-AFS (FGS-070) 2	2013 Rev 4	4 (08/22/	2013)	
Analyst:	DON MORAN	Sequence #:	6129018, 6129013			<i>4</i>	
Reviewer:	0	Dataset ID #:	MMHG27001-160928-	1			
Date:	9/29/2016	WO #:	1608793, 1608980, 16	08981_1609	068		
Batch #(s):	F609558, F609569	Client(s):					
		· .		Analyst I	nitials:	Reviewer	Initials:
9. ICV % Reco	overies 67-133%			PASS	FAIL		
Comments:							
10. CCV % Re	coveries 67-133%			✓ PASS	FAIL	1	ন্দ্র
Comments:							
11. Are the ab	solute value of the ICB and CCBs	< PQL?		PASS	FAIL		Z
Comments:							
12. LCS/LCSD/	CRM/BS/BSD % Recoveries (70-	130%)		PASS	🗸 FAIL		Z
Comments:	F609558-BS1, BSD1 FAILED. LOW	RECOVERY					
13. LCS/LCSD	or BS/BSD RPD (< 25%)			PASS	🗌 FAIL		Z
Comments:							
14. Water: Ave	erage of Preparation Blanks < 0.0)45 ng/L and standard dev	aition of 0.015 ng/L?	✓ PASS	FAIL	N/A	<u> </u>
							_
	Tissue: Individually, are the Prep			✓ PASS	FAIL	🗌 N/A	<u> </u>
Comments:				V PASS	FAIL		
	Solids been applied? (If NO, ple			YES	🗌 NO	✓ N/A	Í
17. Is the corr	ect 'Source' designated for MD/M	S/MSD?		VES	NO NO		2
18. For digeste	ed preps: was there a spike witne	ss signature & date on the	e prep bench sheet?	🗸 YES	NO	□ N/A	ľ
19. MD RPD/M	T RSD(< 35%)			PASS	🔲 FAIL		٦
Comments:							
	ne set of MS/MSD per every 10 sa			PASS	🗌 FAIL		Ľ
Comments:	·····						
21. MS/MSD R	PD(< 35%)			🗸 PASS	FAIL		Y
Comments:							
22. MS (AS) %	Recoveries (65-130%)			PASS	FAIL		9
Comments:		· · · · · · · · · · · · · · · · · · ·					
23. MSD (ASD)) % Recoveries (65-130%)			PASS	FAIL		2
Comments:							
24. Spiked 1-5	X ambient or 1-5X PQL (whicheve	er is higher) (from EPA 163	0)	VES	NO		Ð
25. Are all sam	ples within instrument calibration	n range (or at maximum ali	iquot size)?	YES	NO		ľ
Comments:							
26. For instrun	nental dilutions, is the dilution fac	tor in excel correct?		PASS	NO	N/A	Z
Is the samp	ble volume, diluents, and final vo	lume of the dilution noted	on benchsheet?	PASS	NO	🗌 N/A	\square
27. Dissolved <	< Total metals (if applicable)			PASS	NO	N/A	
Comments:							
28. Effluent <	Influent metals (visually confirm	if needed)	· · · · · · · · · · · · · · · · · · ·	D PASS	NO	✓ N/A	đ
Comments:							_

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สมปฏิทยภายที่มีผู้ผู้ผู้ผู้และเห็นการสมบัติเสียงและเลี้ยงการสะเจา

	Peer Review Chec	k List for MHg for CV-GC	-AFS (FGS-070) 2	2013 Rev /	4 (08/22/	2013)	
Analyst:	DON MORAN	Sequence #:	6129018, 6129013				
Reviewer:	0	Dataset ID #:	MMHG27001-160928-	1			
Date:	9/29/2016	WO #:	1608793, 1608980, 10	608981 1609	068		
Batch #(s):	<u>F609558, F609569</u>	Client(s):				·	
				Analyst I	nitials:	Reviewer Dm	
29. Are re-rur	s noted with reason?			YES	NO NO	☑ N/A	2
Comments							
30. For failing	QC (CCV, CCB, PB, BS/BSC), CAL):		YES	NO	✓ N/A	ď
Was a bubi	oler and trap test run befor	e the analytical run continued?					
Comments							
31. Do re-run	results compare to initial a	nalysis (< 35% RPD)?		YES	NO	✓ N/A	P
Comments							
32. Are qualifi	ers consistent with the dat	a review flowcharts?		🖌 YES	NO NO	🗌 N/A	D
Comments							
33. Have non-	reportable samples been ir	nported into LIMS and clicked to	non-reportable?	√ YES	NO	□ N/A	7
Comments	S:						
	xtracts been created for no			YES	DNO	✓ N/A	2
35. Narrations	in MMO box in LIMS?						
Comments	S:						
36. Are there	any HIGH QA projects with	in the data?		YES	V NO		~
If so, place	e dataset to the QA office.						
37. Does the	data set need scanning?			YES		🗸 N/A	
Files located	fat: \\Cuprum\gen_admin	Quality Assurance\Training M	aster\DOCs				
38. Date of ar	alyst IDOC/CDOC:	7/9/2015 IDOC/CDOC wit	hin last 12 months?	YES	V NO		
39. Date of an	alyst's SOP reading:	5/23/2016 Current SOP rev	vision?	VES	NO		\square
40. Date of LO	DD: <u>6/24/16, 7/7/16</u> L0	OD within last 3 months (within 12	2 months for MDN)?	YES	DNO	🗌 N/A	P
41. Date of LO	DQ: <u>6/24/16, 7/7/16</u> L0	DQ within last 3 months (within 1	2 months for MDN)?	YES	NO	🗌 N/A	V
42. If MDN sa	mples, date of last MDL stu	ıdy:					
43. MDL stud	y within last 12 months?			YES	🔲 NO	🗹 N/A	\square
Data can not	be reported without a cu	rrent IDOC/CDOC, LOD or LOQ	ł.				
Additional Cor	nments:			—	Ē		
				YES	NO NO		



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Lab Number: L1627358 Client: AMEC Foster Wheeler E & I, Inc. ATTN: Rod Pendleton Project Name: USDC PENOBSCOT Project Number: 3616166052

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Sample Delivery Group Information





Laboratory Project Mar	Job number: L16273 nager: Elizabeth Porta		R	eview Date:	09/01/20	16	
Project Nur	nber: 3616166052						
Project Nan	ne: USDC PENOBSC	OT				Received: 08/3	31/2016 10:06
Client Acco	ount: AMEC Foster Whe	eeler E & I	, Inc.	Receiv	ved by: C	M/RS	
Samples De	elivered by: FEDEX				Call Tra	acker #	
Bill Of Lade	en Yes		Tracking	num 8086189	18692		
Coc Presen	t Present						
Container S	Status Broken		Sample			3016_SW_10" T tached, sample s	
All Contain	ers Accounted For?	Yes		cooler.			
Were Extra	Samples Received?	No					
Do Sample	Labels and COC agree?	Yes					
Are Sample	es in Appropriate Contai	ners?	Yes				
Are Sample	es Received within Hold	ing time?	Yes				
pH of Samp	les upon Receipt 7		Α	re samples P	roperly P	reserved? Ye	s
Initial pH	preserved in h	nouse with	า	1	Final pH		
Other Issue	S						
Chlorine Ch	neck N/A						
Are VOA/VF	PH Vials Present? No	1					
Aqueous: D	o Vials Contain Head S	pace?	N/A				
Soils: Is Me	OHCovering the Soil?	N/A					
Reagent H2	O Preserved vials Froz	en on	N/A				
Frozen by C	Client N/A						
Cooler	Seal	lce Present	Blue Ice Present	Temp. (Cels	ius)	Frozen upon Receipt	Delivered Direct from Site
A	Present/Intact	Yes	No	4.3 - IR Gun		No	No

LIMS Chain of Custody



ALPHA ANALYTICAL LABORATORIES, INC. LOGIN CHAIN OF CUSTODY REPORT Sep 08 2016, 02:23 pm Login Number: L1627358 Account: AMEC-ME AMEC Foster Wheeler E & I, Inc.Project: 3616166052 Received: 31AUG16 Mat PR Collected Due Date: 08SEP16 Sample # Client ID Container L1627358-01 WO 1B-C 083016 SW 1 1 S0 30AUG16 13:25 1-Plastic-A1,2-Vial-D DPKG-FULL Package Due Date: 08/03/16 DOC-9060, DPKG-FULL, HOLD-WETCHEM L1627358-02 WO 2-C 083016 SW 10 1 SO 30AUG16 12:20 1-Plastic-A1,2-Vial-D Package Due Date: 08/03/16 DOC-9060, TSS-2540 L1627358-03 WQ_3-L_083016_SW_10 1 S0 30AUG16 11:20 1-Plastic-A1,2-Vial-D Package Due Date: 08/03/16 DOC-9060, TSS-2540 L1627358-04 WQ_FTP_083016_SW_10 1 S0 30AUG16 10:20 1-Plastic-A1,2-Vial-D Package Due Date: 08/03/16 DOC-9060, TSS-2540 L1627358-05 WQ_EC4_082916_SW_10 1 S0 29AUG16 11:50 1-Plastic-A1,2-Vial-D Package Due Date: 08/03/16 DOC-9060, TSS-2540 1 S0 29AUG16 14:00 1-Plastic-A1, 2-Vial-D L1627358-06 CS_15_082916_SW_10 Package Due Date: 08/03/16 DOC-9060, TSS-2540 L1627358-07 OV02_082916_SW_10 1 S0 29AUG16 17:00 3-Plastic-A1,6-Vial-D L1627358-07 MS L1627358-07 MSD Package Due Date: 08/03/16

Page 1

ALPHA ANALYTICAL LABORATORIES, INC. LOGIN CHAIN OF CUSTODY REPORT Sep 08 2016, 02:23 pm Login Number: L1627358 Account: AMEC-ME AMEC Foster Wheeler E & I, Inc.Project: 3616166052 Received: 31AUG16 Due Date: 08SEP16 Sample # Client ID Mat PR Collected Container

DOC-9060, MS/MSD, TSS-2540

L1627358-08 OV02_082916_SW_10_D 1 S0 29AUG16 17:00 1-Plastic-A1,2-Vial-D

Package Due Date: 08/03/16

DOC-9060,TSS-2540

Page 2 Logged By: Michelle Morris

Container Tracking



ALPHA ANALYTICAL LABORATORIES Container Tracking Report

Container ID Type	Status	Transaction Date	From Response	Location	To Operator	Response	Location	Operator
L1627358-01A Vial-D	INTACT	08-SEP-16	WETCHEM	WETCHEM	Marc Pollard	CUSTODY	WALK-IN CUSTODY	Marc Pollard
L1627358-01A Vial-D	INTACT	07-SEP-16	CUSTODY	WALK-IN CUSTOD	Y Deb Whelan	WETCHEM	WETCHEM	Deb Whelan
L1627358-01A Vial-D	INTACT	01-SEP-16		CUSTODY	Roobenso Romain	WALK-IN CUSTODY	WALK-IN CUSTODY	Roobenso Romain
L1627358-01A Vial-D	INTACT	31-AUG-16	LOGIN	LOGIN	Elizabeth Porta	CUSTODY	CUSTODY	Elizabeth Porta
L1627358-01B Vial-D	INTACT	08-SEP-16	WETCHEM	WETCHEM	Marc Pollard	CUSTODY	WALK-IN CUSTODY	Marc Pollard
L1627358-01B Vial-D	INTACT	07-SEP-16	CUSTODY	WALK-IN CUSTOD	Y Deb Whelan	WETCHEM	WETCHEM	Deb Whelan
L1627358-01B Vial-D	INTACT	01-SEP-16		CUSTODY	Roobenso Romain	WALK-IN CUSTODY	WALK-IN CUSTODY	Roobenso Romain
L1627358-01B Vial-D	INTACT	31-AUG-16	LOGIN	LOGIN	Elizabeth Porta	CUSTODY	CUSTODY	Elizabeth Porta
L1627358-01C Plastic-A1	INTACT	06-SEP-16		W14-S3-C CUSTO	DY Sam Bardsley	W14-S5-D CUSTO	DY W14-S5-D CUST	TODY Sam Bardsley
L1627358-01C Plastic-A1	INTACT	01-SEP-16	W13-S2-A CUSTOD	CUSTODY	Roobenso Romain	W14-S3-C CUSTO	DY W14-S3-C CUST	TODY Roobenso Romain
L1627358-01C Plastic-A1	INTACT	01-SEP-16	LOGIN	LOGIN	Christina Mazza	CUSTODY	CUSTODY	Christina Mazza
L1627358-02A Vial-D	INTACT	08-SEP-16	WETCHEM	WETCHEM	Marc Pollard	CUSTODY	WALK-IN CUSTODY	Marc Pollard
L1627358-02A Vial-D	INTACT	07-SEP-16	CUSTODY	WALK-IN CUSTOD	Y Deb Whelan	WETCHEM	WETCHEM	Deb Whelan
L1627358-02A Vial-D	INTACT	01-SEP-16		CUSTODY	Roobenso Romain	WALK-IN CUSTODY	WALK-IN CUSTODY	Roobenso Romain
L1627358-02A Vial-D	INTACT	31-AUG-16	LOGIN	LOGIN	Elizabeth Porta	CUSTODY	CUSTODY	Elizabeth Porta
L1627358-02B Vial-D	INTACT	08-SEP-16	WETCHEM	WETCHEM	Marc Pollard	CUSTODY	WALK-IN CUSTODY	Marc Pollard
L1627358-02B Vial-D	INTACT	07-SEP-16	CUSTODY	WALK-IN CUSTOD	Y Deb Whelan	WETCHEM	WETCHEM	Deb Whelan
L1627358-02B Vial-D	INTACT	01-SEP-16		CUSTODY	Roobenso Romain	WALK-IN CUSTODY	WALK-IN CUSTODY	Roobenso Romain
L1627358-02B Vial-D	INTACT	31-AUG-16	LOGIN	LOGIN	Elizabeth Porta	CUSTODY	CUSTODY	Elizabeth Porta
L1627358-02C Plastic-A1	EMPTY	04-SEP-16	CUSTODY	WETCHEM	Samantha Garner	CUSTODY	CUSTODY	Samantha Garner
L1627358-02C Plastic-A1	INTACT	04-SEP-16	CUSTODY	W14-S3-C CUSTO	DY Samantha Garner	WETCHEM	WETCHEM	Samantha Garner
L1627358-02C Plastic-A1	INTACT	01-SEP-16	W13-S2-A CUSTOD	CUSTODY	Roobenso Romain	W14-S3-C CUSTO	DY W14-S3-C CUST	TODY Roobenso Romain
L1627358-02C Plastic-A1	INTACT	31-AUG-16	LOGIN	LOGIN	Elizabeth Porta	CUSTODY	CUSTODY	Elizabeth Porta
L1627358-03A Vial-D	INTACT	08-SEP-16	WETCHEM	WETCHEM	Marc Pollard	CUSTODY	WALK-IN CUSTODY	Marc Pollard
L1627358-03A Vial-D	INTACT	07-SEP-16	CUSTODY	WALK-IN CUSTOD	Y Deb Whelan	WETCHEM	WETCHEM	Deb Whelan

Container ID Type	Status	Transaction Date	From Response	Location	To Operator	Response	Location	Operator
L1627358-03A Vial-D	INTACT	01-SEP-16		CUSTODY	Roobenso Romain	WALK-IN CUSTODY	WALK-IN CUSTODY	? Roobenso Romain
L1627358-03A Vial-D	INTACT	31-AUG-16	LOGIN	LOGIN	Elizabeth Porta	CUSTODY	CUSTODY	Elizabeth Porta
L1627358-03B Vial-D	INTACT	08-SEP-16	WETCHEM	WETCHEM	Marc Pollard	CUSTODY	WALK-IN CUSTODY	Marc Pollard
L1627358-03B Vial-D	INTACT	07-SEP-16	CUSTODY	WALK-IN CUSTODY	Y Deb Whelan	WETCHEM	WETCHEM	Deb Whelan
L1627358-03B Vial-D	INTACT	01-SEP-16		CUSTODY	Roobenso Romain	WALK-IN CUSTODY	WALK-IN CUSTODY	Roobenso Romain
L1627358-03B Vial-D	INTACT	31-AUG-16	LOGIN	LOGIN	Elizabeth Porta	CUSTODY	CUSTODY	Elizabeth Porta
L1627358-03C Plastic-A1	EMPTY	04-SEP-16	CUSTODY	WETCHEM	Samantha Garner	CUSTODY	CUSTODY	Samantha Garner
L1627358-03C Plastic-A1	INTACT	04-SEP-16	CUSTODY	W14-S3-C CUSTO	DY Samantha Garner	WETCHEM	WETCHEM	Samantha Garner
L1627358-03C Plastic-A1	INTACT	01-SEP-16	W13-S2-A CUSTOD	Y CUSTODY	Roobenso Romain	W14-S3-C CUSTO	DY W14-S3-C CUST	CODY Roobenso Romain
L1627358-03C Plastic-Al	INTACT	31-AUG-16	LOGIN	LOGIN	Elizabeth Porta	CUSTODY	CUSTODY	Elizabeth Porta
L1627358-04A Vial-D	INTACT	08-SEP-16	WETCHEM	WETCHEM	Marc Pollard	CUSTODY	WALK-IN CUSTODY	Marc Pollard
L1627358-04A Vial-D	INTACT	07-SEP-16	CUSTODY	WALK-IN CUSTODY	Y Deb Whelan	WETCHEM	WETCHEM	Deb Whelan
L1627358-04A Vial-D	INTACT	01-SEP-16		CUSTODY	Roobenso Romain	WALK-IN CUSTODY	WALK-IN CUSTODY	Roobenso Romain
L1627358-04A Vial-D	INTACT	31-AUG-16	LOGIN	LOGIN	Elizabeth Porta	CUSTODY	CUSTODY	Elizabeth Porta
L1627358-04B Vial-D	INTACT	08-SEP-16	WETCHEM	WETCHEM	Marc Pollard	CUSTODY	WALK-IN CUSTODY	Marc Pollard
L1627358-04B Vial-D	INTACT	07-SEP-16	CUSTODY	WALK-IN CUSTODY	Y Deb Whelan	WETCHEM	WETCHEM	Deb Whelan
L1627358-04B Vial-D	INTACT	01-SEP-16		CUSTODY	Roobenso Romain	WALK-IN CUSTODY	WALK-IN CUSTODY	Z Roobenso Romain
L1627358-04B Vial-D	INTACT	31-AUG-16	LOGIN	LOGIN	Elizabeth Porta	CUSTODY	CUSTODY	Elizabeth Porta
L1627358-04C Plastic-Al	EMPTY	04-SEP-16	CUSTODY	WETCHEM	Samantha Garner	CUSTODY	CUSTODY	Samantha Garner
L1627358-04C Plastic-Al	INTACT	04-SEP-16	CUSTODY	W14-S3-C CUSTO	DY Samantha Garner	WETCHEM	WETCHEM	Samantha Garner
L1627358-04C Plastic-Al	INTACT	01-SEP-16	W13-S2-A CUSTOD	Y CUSTODY	Roobenso Romain	W14-S3-C CUSTO	DY W14-S3-C CUST	CODY Roobenso Romain
L1627358-04C Plastic-Al	INTACT	31-AUG-16	LOGIN	LOGIN	Elizabeth Porta	CUSTODY	CUSTODY	Elizabeth Porta
L1627358-05A Vial-D	INTACT	08-SEP-16	WETCHEM	WETCHEM	Marc Pollard	CUSTODY	WALK-IN CUSTODY	Marc Pollard
L1627358-05A Vial-D	INTACT	07-SEP-16	CUSTODY	WALK-IN CUSTODY	Y Deb Whelan	WETCHEM	WETCHEM	Deb Whelan
L1627358-05A Vial-D	INTACT	01-SEP-16		CUSTODY	Roobenso Romain	WALK-IN CUSTODY	WALK-IN CUSTODY	Roobenso Romain

Container ID Type	Status	Transaction Date	From Response	Location	To Operator	Response	Location	Operator
L1627358-05A Vial-D	INTACT	31-AUG-16	LOGIN	LOGIN	Elizabeth Porta	CUSTODY	CUSTODY	Elizabeth Porta
L1627358-05B Vial-D	INTACT	08-SEP-16	WETCHEM	WETCHEM	Marc Pollard	CUSTODY	WALK-IN CUSTOD	Y Marc Pollard
L1627358-05B Vial-D	INTACT	07-SEP-16	CUSTODY	WALK-IN CUSTOD	Y Deb Whelan	WETCHEM	WETCHEM	Deb Whelan
L1627358-05B Vial-D	INTACT	01-SEP-16		CUSTODY	Roobenso Romain	WALK-IN CUSTODY	WALK-IN CUSTOD	Y Roobenso Romain
L1627358-05B Vial-D	INTACT	31-AUG-16	LOGIN	LOGIN	Elizabeth Porta	CUSTODY	CUSTODY	Elizabeth Porta
L1627358-05C Plastic-A1	EMPTY	02-SEP-16	CUSTODY	WETCHEM	Deb Whelan	RETURN WALK-IN	CUSTODY RETURN	WALK-IN CUSTODY Deb Whelan
L1627358-05C Plastic-A1	INTACT	02-SEP-16	CUSTODY	W14-S3-C CUSTO	DY Deb Whelan	WETCHEM	WETCHEM	Deb Whelan
L1627358-05C Plastic-A1	INTACT	01-SEP-16	W13-S2-A CUSTODY	CUSTODY	Roobenso Romain	W14-S3-C CUSTO	DY W14-S3-C CUS	TODY Roobenso Romain
L1627358-05C Plastic-A1	INTACT	31-AUG-16	LOGIN	LOGIN	Elizabeth Porta	CUSTODY	CUSTODY	Elizabeth Porta
L1627358-06A Vial-D	INTACT	08-SEP-16	WETCHEM	WETCHEM	Marc Pollard	CUSTODY	WALK-IN CUSTOD	Y Marc Pollard
L1627358-06A Vial-D	INTACT	07-SEP-16	CUSTODY	WALK-IN CUSTOD	Y Deb Whelan	WETCHEM	WETCHEM	Deb Whelan
L1627358-06A Vial-D	INTACT	01-SEP-16		CUSTODY	Roobenso Romain	WALK-IN CUSTODY	WALK-IN CUSTOD	Y Roobenso Romain
L1627358-06A Vial-D	INTACT	31-AUG-16	LOGIN	LOGIN	Elizabeth Porta	CUSTODY	CUSTODY	Elizabeth Porta
L1627358-06B Vial-D	INTACT	08-SEP-16	WETCHEM	WETCHEM	Marc Pollard	CUSTODY	WALK-IN CUSTOD	Y Marc Pollard
L1627358-06B Vial-D	INTACT	07-SEP-16	CUSTODY	WALK-IN CUSTOD	Y Deb Whelan	WETCHEM	WETCHEM	Deb Whelan
L1627358-06B Vial-D	INTACT	01-SEP-16		CUSTODY	Roobenso Romain	WALK-IN CUSTODY	WALK-IN CUSTOD	Y Roobenso Romain
L1627358-06B Vial-D	INTACT	31-AUG-16	LOGIN	LOGIN	Elizabeth Porta	CUSTODY	CUSTODY	Elizabeth Porta
L1627358-06C Plastic-Al	EMPTY	02-SEP-16	CUSTODY	WETCHEM	Deb Whelan	RETURN WALK-IN	CUSTODY RETURN	WALK-IN CUSTODY Deb Whelan
L1627358-06C Plastic-Al	INTACT	02-SEP-16	CUSTODY	W14-S3-C CUSTO	DY Deb Whelan	WETCHEM	WETCHEM	Deb Whelan
L1627358-06C Plastic-Al	INTACT	01-SEP-16	W13-S2-A CUSTODY	CUSTODY	Roobenso Romain	W14-S3-C CUSTO	DY W14-S3-C CUS	TODY Roobenso Romain
L1627358-06C Plastic-A1	INTACT	31-AUG-16	LOGIN	LOGIN	Elizabeth Porta	CUSTODY	CUSTODY	Elizabeth Porta
L1627358-07A Vial-D	INTACT	08-SEP-16	WETCHEM	WETCHEM	Marc Pollard	CUSTODY	WALK-IN CUSTOD	Y Marc Pollard
L1627358-07A Vial-D	INTACT	07-SEP-16	CUSTODY	WALK-IN CUSTOD	Y Deb Whelan	WETCHEM	WETCHEM	Deb Whelan
L1627358-07A Vial-D	INTACT	01-SEP-16		CUSTODY	Roobenso Romain	WALK-IN CUSTODY	WALK-IN CUSTOD	Y Roobenso Romain
L1627358-07A Vial-D	INTACT	31-AUG-16	LOGIN	LOGIN	Elizabeth Porta	CUSTODY	CUSTODY	Elizabeth Porta

Container ID Type	Status	Transaction Date	From Response	Location	To Operator	Response	Location	Operator
L1627358-07A1 Vial-D	INTACT	08-SEP-16	WETCHEM	WETCHEM	Marc Pollard	CUSTODY	WALK-IN CUSTO	DY Marc Pollard
L1627358-07A1 Vial-D	INTACT	07-SEP-16	CUSTODY	WALK-IN CUSTO	DY Deb Whelan	WETCHEM	WETCHEM	Deb Whelan
L1627358-07A1 Vial-D	INTACT	01-SEP-16		CUSTODY	Roobenso Romain	WALK-IN CUSTOD	Y WALK-IN CUSTO	DY Roobenso Romain
L1627358-07A1 Vial-D	INTACT	31-AUG-16	LOGIN	LOGIN	Elizabeth Porta	CUSTODY	CUSTODY	Elizabeth Porta
L1627358-07A2 Vial-D	INTACT	08-SEP-16	WETCHEM	WETCHEM	Marc Pollard	CUSTODY	WALK-IN CUSTO	DY Marc Pollard
L1627358-07A2 Vial-D	INTACT	07-SEP-16	CUSTODY	WALK-IN CUSTO	DY Deb Whelan	WETCHEM	WETCHEM	Deb Whelan
L1627358-07A2 Vial-D	INTACT	01-SEP-16		CUSTODY	Roobenso Romain	WALK-IN CUSTOD	Y WALK-IN CUSTO	DY Roobenso Romain
L1627358-07A2 Vial-D	INTACT	31-AUG-16	LOGIN	LOGIN	Elizabeth Porta	CUSTODY	CUSTODY	Elizabeth Porta
L1627358-07B Vial-D	INTACT	08-SEP-16	WETCHEM	WETCHEM	Marc Pollard	CUSTODY	WALK-IN CUSTODY	/ Marc Pollard
L1627358-07B Vial-D	INTACT	07-SEP-16	CUSTODY	WALK-IN CUSTOD	Y Deb Whelan	WETCHEM	WETCHEM	Deb Whelan
L1627358-07B Vial-D	INTACT	01-SEP-16		CUSTODY	Roobenso Romain	WALK-IN CUSTODY	WALK-IN CUSTODY	I Roobenso Romain
L1627358-07B Vial-D	INTACT	31-AUG-16	LOGIN	LOGIN	Elizabeth Porta	CUSTODY	CUSTODY	Elizabeth Porta
L1627358-07B1 Vial-D	INTACT	08-SEP-16	WETCHEM	WETCHEM	Marc Pollard	CUSTODY	WALK-IN CUSTO	DY Marc Pollard
L1627358-07B1 Vial-D	INTACT	07-SEP-16	CUSTODY	WALK-IN CUSTO	DY Deb Whelan	WETCHEM	WETCHEM	Deb Whelan
L1627358-07B1 Vial-D	INTACT	01-SEP-16		CUSTODY	Roobenso Romain	WALK-IN CUSTOD	Y WALK-IN CUSTO	OY Roobenso Romain
L1627358-07B1 Vial-D	INTACT	31-AUG-16	LOGIN	LOGIN	Elizabeth Porta	CUSTODY	CUSTODY	Elizabeth Porta
L1627358-07B2 Vial-D	INTACT	08-SEP-16	WETCHEM	WETCHEM	Marc Pollard	CUSTODY	WALK-IN CUSTO	DY Marc Pollard
L1627358-07B2 Vial-D	INTACT	07-SEP-16	CUSTODY	WALK-IN CUSTO	DY Deb Whelan	WETCHEM	WETCHEM	Deb Whelan
L1627358-07B2 Vial-D	INTACT	01-SEP-16		CUSTODY	Roobenso Romain	WALK-IN CUSTOD	Y WALK-IN CUSTO	OY Roobenso Romain
L1627358-07B2 Vial-D	INTACT	31-AUG-16	LOGIN	LOGIN	Elizabeth Porta	CUSTODY	CUSTODY	Elizabeth Porta
L1627358-07C Plastic-A1	EMPTY	02-SEP-16	CUSTODY	WETCHEM	Deb Whelan	RETURN WALK-IN	CUSTODY RETURN W	WALK-IN CUSTODY Deb Whelan
L1627358-07C Plastic-A1	INTACT	02-SEP-16	CUSTODY	W14-S3-C CUSTO	DY Deb Whelan	WETCHEM	WETCHEM	Deb Whelan
L1627358-07C Plastic-A1	INTACT	01-SEP-16	W13-S2-A CUSTODY	CUSTODY	Roobenso Romain	W14-S3-C CUSTO	DY W14-S3-C CUST	TODY Roobenso Romain
L1627358-07C Plastic-A1	INTACT	31-AUG-16	LOGIN	LOGIN	Elizabeth Porta	CUSTODY	CUSTODY	Elizabeth Porta
L1627358-07D Plastic-A1	INTACT	06-SEP-16		W14-S3-C CUSTO	DY Sam Bardsley	W14-S5-D CUSTO	DY W14-S5-D CUST	TODY Sam Bardsley

Container ID Type	Status	Transaction Date	From Response	Location	To Operator	Response	Location	Operator
L1627358-07D Plastic-A1	INTACT	01-SEP-16	W13-S2-A CUSTODY	CUSTODY	Roobenso Romain	W14-S3-C CUSTO	DY W14-S3-C CUS	TODY Roobenso Romain
L1627358-07D Plastic-A1	INTACT	31-AUG-16	LOGIN	LOGIN	Elizabeth Porta	CUSTODY	CUSTODY	Elizabeth Porta
L1627358-07E Plastic-A1	EMPTY	02-SEP-16	CUSTODY	WETCHEM	Deb Whelan	RETURN WALK-IN	CUSTODY RETURN	WALK-IN CUSTODY Deb Whelan
L1627358-07E Plastic-A1	INTACT	02-SEP-16	CUSTODY	W14-S3-C CUSTO	DY Deb Whelan	WETCHEM	WETCHEM	Deb Whelan
L1627358-07E Plastic-A1	INTACT	01-SEP-16	W13-S2-A CUSTODY	CUSTODY	Roobenso Romain	W14-S3-C CUSTO	DY W14-S3-C CUS	TODY Roobenso Romain
L1627358-07E Plastic-A1	INTACT	31-AUG-16	LOGIN	LOGIN	Elizabeth Porta	CUSTODY	CUSTODY	Elizabeth Porta
L1627358-08A Vial-D	INTACT	08-SEP-16	WETCHEM	WETCHEM	Marc Pollard	CUSTODY	WALK-IN CUSTOR	Y Marc Pollard
L1627358-08A Vial-D	INTACT	07-SEP-16	CUSTODY	WALK-IN CUSTODY	Y Deb Whelan	WETCHEM	WETCHEM	Deb Whelan
L1627358-08A Vial-D	INTACT	01-SEP-16		CUSTODY	Roobenso Romain	WALK-IN CUSTODY	WALK-IN CUSTOR	Y Roobenso Romain
L1627358-08A Vial-D	INTACT	31-AUG-16	LOGIN	LOGIN	Elizabeth Porta	CUSTODY	CUSTODY	Elizabeth Porta
L1627358-08B Vial-D	INTACT	08-SEP-16	WETCHEM	WETCHEM	Marc Pollard	CUSTODY	WALK-IN CUSTOR	Y Marc Pollard
L1627358-08B Vial-D	INTACT	07-SEP-16	CUSTODY	WALK-IN CUSTODY	Y Deb Whelan	WETCHEM	WETCHEM	Deb Whelan
L1627358-08B Vial-D	INTACT	01-SEP-16		CUSTODY	Roobenso Romain	WALK-IN CUSTODY	WALK-IN CUSTOR	Y Roobenso Romain
L1627358-08B Vial-D	INTACT	31-AUG-16	LOGIN	LOGIN	Elizabeth Porta	CUSTODY	CUSTODY	Elizabeth Porta
L1627358-08C Plastic-A1	EMPTY	02-SEP-16	CUSTODY	WETCHEM	Deb Whelan	RETURN WALK-IN	CUSTODY RETURN	WALK-IN CUSTODY Deb Whelan
L1627358-08C Plastic-A1	INTACT	02-SEP-16	CUSTODY	W14-S3-C CUSTOR	DY Deb Whelan	WETCHEM	WETCHEM	Deb Whelan
L1627358-08C Plastic-A1	INTACT	01-SEP-16	W13-S2-A CUSTODY	CUSTODY	Roobenso Romain	W14-S3-C CUSTO	DY W14-S3-C CUS	TODY Roobenso Romain
L1627358-08C Plastic-A1	INTACT	31-AUG-16	LOGIN	LOGIN	Elizabeth Porta	CUSTODY	CUSTODY	Elizabeth Porta

Communications



Call Tracker Report

Call # 87821

Call #: 87821 Call Date: 09/01/16 14:02 Status: NEED Date: 09/01/16 14:02 Operator: LPORTA Type: Live Contact: Company: AMEC Foster Wheeler E & I, Inc. Acct #: AMEC-ME Project #: 3616166052 Client Proj: USDC PENOBSCOT Login #: L1627358

Call Details

Hi Denise and Rod,

Sample: "WQ_1B-C_083016_SW_10" for the TSS container was rec'd with cap unattached, and the sample spilled into cooler. Unfortunately, we will not be able to run TSS on this sample.

Please let me know if there are any questions. Thank you, Liz Porta Project Manager

Email: eporta@alphalab.com Direct: 508-844-4124 Main: 508-844-4100

Chain of Custody



Дерна	CHA	IN OF CU	ISTODY	PAGE	OF Z	- Date	Rec'd in	Lab:	813	31/1	6		ALP	HA J	ob #:[1627	1358
8 Walkup Drive	320 Forbes Blvd	Projec	t Information			Rep	ort Info	rmatio	on - Da	ta Deliv	verab	all sten	Contraction of the local division of the loc	of the other designs of the local division o	formatio	The second second second second second second second second second second second second second second second s	
Westboro, MA Tel: 508-898-9	01581 Mansfield, MA 0		Name: USPC PE	NOBSCO	T	DA	DEx	Å		Ľ			Sa	me as (Client inf	fo PO #:	
Client Information	on		Location: wimtel			Regulatory Requirements & Project Information Requirements											
Client: Amec F	FOSTER WHEELE		#361616605				s 🗆 No I					8DC3				RCP Analytic	al Methods
	NGRESS ST		Manager: 200 P	ONDLETE	2	Ye Ye	s 🗆 No 🤇	GW1 St	andards							norganics) gets)	
	NO ME 041		Quote #:				s □ No I her State							Crite	eria		
Phone: Zo7- 7	175-5401	Turn-	Around Time				/		1 1	1	1.1	1	k.	1 1	1	111	
Email: ROD, PE	ND LETON @ AM	ECFW. Com				1		/ /	IRCP	s only	Nino :	/	K T	U			
Additional P Fed SK -	ICOGLE			0 ABN 0 524.2	METALS: DACP 13 DMCP 14	EPH: DRanges & Taroat	D PCB D PCC Angles & Targets D Ranges Only	nt Only C.	E. E. Byllo	2450D LP USON	12 al		SAMP Filtratio G Field Lab	d #			
SB- SALT - FW-FRESHW	TER					[] 82en		13:0	DRang	DRang B	DQual	12	24			Presen	T
ALPHA Lab ID (Lab Use Only)	Sam	ple ID	Collection Date Time	Sample Matrix	Sampler Initials		SVOC: METALS	META	Hag I	Jan Call	Ha	2 4	7 /		14	Sample Co	E
	EB_003016.	-54-10	08/30/16 151	5 FW	F.61.									Fre	S DO 12		
27358-01	wa_16-c_0	B3016_5W-10	08/30/16 132		1/						2	1				1/16	
	WR_26_083		06/30/16 122								Z						
	CVQ-3-2_083		08/30/16 1120	- X - X			_		1		Z	1		-			
-04	WR_FTP DE	13016_SUL_10							\square		Z						
-05	W/D K(W O	62016-SW-10	Plach NED		+-+			/				1					
-06	S 15 0829	16_5W-10	B/29/16/190					1			2	$\frac{1}{1}$	-				
-07	OV02 0829	16_ SW-10	B/29/10 1700										+				
-08	0VOZ _0629	016 - SW-DOP	0/29/16 1705		1-		-/-				2			-			
	0V07_ 0197	916-SW-MS	8/29/16 1700					-			2		_				
Container Type	Preservative	,	1-116 1700		inor Type						-	4					
P= Plastic A= Amber glass V= Vial	A= None B= HCI C= HNO ₃				iner Type servative	\square		_			A	1					
G= Glass B= Bacteria cup C= Cube	$D = H_2SO_4$ E = NaOH F = MeOH	Relingu	iished By:	1	/Time			ooluard	Du:		D		ima				
O= Other E= Encore D= BOD Bottle	VOR		16 1730	<u> </u>	S	ceived		42		Date/T		Alp	ha's Terr	s submitted are ms and Condi e side. 01 (rev. 12-Mar-20	tions.		
	O= Other										- I			FOR	THE DE UT	01 (rev. 12-Mar-20	12)

CHAIN C	OF CUSTODY	PAGE Z OF Z	Date Rec'd in Lab: 83	1/16 AL	PHA Job #: 1627358			
	Project Information		Report Information - Data		lling Information			
8 Walkup Drive 320 Forbes Blvd Westboro, MA 01581 Mansfield, MA 02048 Tel: 508-898-9220 Tel: 508-822-9300	Project Name: USP G	POT OBS COT		9.8	ame as Client info PO #:			
Client Information	Project Location: Ling	alfort he	Regulatory Requirements	& Project Inform	nation Requirements			
Client: Amer FOSTER WHEELER ES	/ Project #: 36161660		Yes No MA MCP Analytica		□ Yes □ No CT RCP Analytical Methods			
Address: 511 CONGRESS ST STEZ	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	PONDLETON	 □ Yes □ No Matrix Spike Required on this SDG? (Required for MCP Inorganics) □ Yes □ No GW1 Standards (Info Required for Metals & EPH with Targets) 					
PORTAND ME BY101	ALPHA Quote #:		□ Yes □ No NPDES RGP □ Other State /Fed Program		Criteria			
Phone: 207-775-5401	Turn-Around Time		2 2					
Email: Roy. PONDLCTON @ AMECFW.C Additional Project Information:	OM C Standard □ RUS Date Due:	SH (only confirmed if pre-approved!)	ANALYSIS 24 D524.2 D PAH 1 DMCP 14 DRCP DRCRAB DPP1 19815 D Ran	10 Ranges Only 11 Ranges Only 19 of 40 mint	SAMPLE INFO			
FED UX # 8086 1891 8692 5B - SALT - BRACKISH	- 100	ole	VOC: D8260 D624 D524,2 SVOC: D4BN D624 D524,2 METALS: DMCP 13 DMCP 14 DRCP 15 VPH: DRANGES & TATGELS DRCR48 DPP13 VPH: DRANGES & TATGELS DRCA	D PCB D PEST angels D Ranges TPH: D Quant Only D Fingerprint DoL SJ 8469 06 4	Filtration			
ALPHA Lab ID (Lab Use Only) Sample ID	Collection Date T	Sample Sampler ime Matrix Initials	VOC: 08, SVOC: 0, METALS: 0 METALS: 0 EPH: 0Ram, VPH: 0Ram,	D PCB DOL	Sample Comments S			
27358 cm 0 V02 _ 082916 - 50	- MD 08/29/16 17	00 5°B KcB/1		21				
27358-07								
Container Type Preservative P= Plastic A= None		Container Type		AP				
A= Amber glass B= HCI V= Vial C= HNO ₃		Preservative		DN				
B= Bacteria cup E= NaOH C= Cube F= MeOH	Relinquished By:	Date/Time	Received By:	Date/Time				
O= Other G= NaHSO4 E= Encore H = Na25 ₂ O ₃ D= BOD Bottle I= Ascorbic Acid J = NH ₄ CI	2A BAVOR	8/30/16 1730	Sind AN	m 5/31/14	All samples submitted are subject to Alpha's Terms and Conditions.			

SHIP DATE: 30AUG16 ACTWGT: 55.20 LB CAD: /POS1721 DIMS: 25x14x14 IN an # 15623 Fed EX. NEW ORIGIN ID: BGRA (207) 828-3627 AMEC FOSTER WHEELER FedEx Tracking Number 8086 1917 9915 Express 511 CONGRESS ST BILL SENDER 1 From PORTLAND, ME 041013482 UNITED STATES US 13 - 500 Date LIZ PORTER TO Sender's ALPHA ANANTICA Sea de Availa 1 13 Name 2 5401 Phone 7745 51 WALK UP DR MEE 0 STOR Company 1.0.14 1 D WESTBOURGH MA 01581 SIL- CONGRESS 51 275 200 Address . REF : (111) 111-1111 Dept/Floor/Suite/Room DEPT THU: PO: PORTLAND City 04/30 195 5 State ZIP Pouch Here FedEx 1. ו.מטט.שטרפעבי 2 Your Internal Billing Reference Express 3616166052.04.04 3 To 6 S **Recipient's** Name POR TER Sele 244 4124 Phone SA ILIND'YANAI PHW FNALYNER Company No Pack obta HOLD Weekday FedEx location address REQUIRED. NOT available for FedEx First Overnight 1 31 AUG 10:30A Align FedEx WALKUP DRIVE Does C Address WED -We cannot deliver to P.O. boxes or P.O. ZIP codes Dept/Floor/Suite/Ro No HOLD Saturday FedEx location address REDURED. Available ONLY for FedEx Priority Overnight and FadEx 2Day to select locations. PRIORITY OVERNIGHT - and the Address 8086 1891 8692 **TRK#** Dangerous go or placed in a Use this line for the HOLD location address or for continuation of your shipping address. 7 Payi WE ST BORSULN F. 7IP OH 01581 State Send Acet N 1 Will be BBFA MA-US BOS Total Packa Tour liability is limit Rev. Date 1/12 . P. SEAT TSTONY MHHI 1 -5 - inte Not Lift Using This SCI = The state -÷ -Samiatura -----13 -1M R Date. 20 F 5 CIENTI C Simatura . 0 90009 Page 19 of 93

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Wet Chemistry



Total Suspended Solids Analysis

Sample Raw Data

			ALPHA AN	ALYTICA	L LABS		Last Change 3/4/13					
	WE	ЕТ СН	EMISTR	Y DEPA	RTMEN	T	File tss.xlt			2540D (I	vPB)	
			TOTAL SU	SPENDED	SOLIDS							
			filter lot pall	t60808						2540	B	
S	ample Number		oven C				TSS-2540			2040		
			in 104 04:5	0			Solids, Total Susper	ided		Catea	miss	
	Client:		out 8:40 in 9:15		Analysis Date: 9/2/2016 4:30 Technician: DW					Get Samples		
	Analysis:		out 9:45				WG928360			Save to I	TMS	
	Method:						5.0 mg/l			34.965		
							-			MET	HODS	
			Tare	Sample	Net	Net	Net	Net				
			Weight	Volume	Weight(1)	Weight(2)	Weight(3)	Weight(4)	RDL	RESULT		
l	Sample Number	Symbol	(gm)	(ml)	(gm)	(gm)	(gm)	(gm)	MULT.	mg/l	1	
BLANK	WG928360-1	61	0.4311	1000	0.4294	0.4297				0.00		
DUP	WG928360-2	62	0.4281	1100	0.4323	0.4325				3.82	L1627358-07	
SAMP	L1627358-05	63	0.4294	1150	0.4579	0.4579				24.78		
SAMP	L1627358-06	64	0.4297	1120	0.4878	0.4881				51.88		
SAMP	L1627358-07	65	0.4274	1105	0.4327	0.4328				4.80		
SAMP	L1627358-08	66	0.4282	1100	0.4327	0.4328				4.09		
	L1627533-01	67	0.4323	1090	0.4373	0.4371				4.40		
	L1627533-02	68	0.4304	1080	0.4406	0.4411				9.44		
	L1627550-01	69	0.4306	1080	0.4508	0.4513				18.70		
	L1627550-02	70	0.432	1095	0.4410	0.4414				8.22		
	L1627550-03	71	0.4327	1135	0.4386	0.4383				4.93		
	L1627550-04	72	0.4305	1085	0.4476	0.4479				15.76		
		DUP-TA	ARE:	0.43230	0.42810	0.00420				9715.48		
		Sample	-TARE:	0.43270	0.42740	0.00530				12248.67		
		DUP we	eight (g) on t	he filter:		0.00420						
		Sample	weight (g) o	on the filter:		0.00530						
			ight (g) on th			0.00475						
		DUP%:				88.4						
		Sample	mple%:									

ALPHA ANALYTIC					L LABS		Last Change 3/4/13					
	WE	Т СН	IEMISTR	Y DEPA	ARTME	NT	File tss.xlt			2540D (I	PPB)	
			TOTAL SU Filter Lot#:						1	254(
S	ample Number:		In 104: 09/0		C		TSS-2540			2341		
	Client:		Out: 09/06/ In: 08:50	16 06:00	4	•	Solids, Total Suspen	ded		Cet Sa	mples	
	Chent:		Out: 09:50		Analysis Date: 9/4/2016 14:25 Technician: SG					Get Samples		
	Analysis:	TSS					WG928893			Save to	LIMS	
	Method:	SM 254	0D				5.0 mg/l					
										MET	HODS	
	3											
			Tare Weight	Sample Volume	Net	Net Weight(2)	Net Weight(3)	Net Weight(4)	RDL	RESULT		
	Sample Number	Symbol	-	(ml)	(gm)	(gm)	(gm)	(gm)	MULT.	mg/l		
BLANK	WG928893-1	39	0.4391	1000	0.4378	0.4377				0.00		
DUP	WG928893-2	40	0.4393	10	0.4777	0.4781			100	3840.00	L1627351-01	
	L1627281-01	41	0.4387	1030	0.5044	0.5041				63.50		
	L1627281-02	42	0.4373	1030	0.4424	0.4427				4.95		
	L1627351-01	43	0.4373	10	0.4702	0.4697			100	3240.00		
SAMP	L1627358-02	44	0.4394	1130	0.4474	0.4471				6.81		
SAMP	L1627358-03	45	0.4398	1140	0.4515	0.4516				10.26		
SAMP	L1627358-04	46	0.4383	1100	0.4503	0.4508				10.91		
	L1627403-01	47	0.4366	1120	0.4381	0.4383				1.34		
	L1627466-01	118	0.4379	20	0.4501	0.4499			50	600.00		
SAMP	L1627751-01	49	0.4388	1130	0.4402	0.4407				1.24		
SAMP	L1627751-02	50	0.4394	1070	0.4400	0.4395				0.09		
			DUP-TARE	:	0.47770	0.43930	0.03840					
			Sample-TA	RE:	0.46970	0.43730	0.03240					
			DUP weigh	t (g) on the	e filter:		0.03840					
			Sample we	ight (g) on	the filter:		0.03240					
			Ave weight	(g) on the	filter:		0.03540					
			DUP%:				108.5					
			Sample%:				91.5					
]	

Work Group

ALPHA ANALYTICAL LABORATORIES, INC.

Alpha WORK GROUP REPORT (wk02)

Sep 07 2016, 04:13 pm

Work Group: WG928360 for Department: 7 Wet Chemistry

	Work Group	: WG928360 for Depart	ment: 7 Wet Chemi	stry
	Create	ed: 02-SEP-16 Due:	Operator: dw	
Sample	Client ID	C Product	Matrix Stat	UA HOLD DUE PR Location
L1627358-05 L1627358-06 L1627358-07 L1627358-08 L1627533-01 L1627550-01 L1627550-02 L1627550-03 L1627550-04 WG928360-1 WG928360-2		S TSS-2540 S TSS-2540 S TSS-2540 S TSS-2540 S TSS-2540 S TSS-2540 S TSS-2540 S TSS-2540 S TSS-2540 S TSS-2540	WATER DONE WATER DONE	<pre>U 0905 0908 S0 Plastic-Al U 0905 0908 S0 Plastic-Al U 0905 0908 S0 Plastic-Al U 0908 0906 lB Plastic-Al U 0908 0906 lB Plastic-Al U 0908 0913 lA Plastic-Al U 0908 0913 lA Plastic-Al U 0908 0913 lA Plastic-Al U 0908 0913 lA Plastic-Al U 0908 0913 lA Plastic-Al</pre>
Comments:				
WG928360-2 L162735	8-07			

ALPHA ANALYTICAL LABORATORIES, INC.

Alpha WORK GROUP REPORT (wk02)

Sep 07 2016, 04:13 pm

Work Group: WG928893 for Department: 7 Wet Chemistry

	Creat	ed: 04-SEP-16 Due:	Operator: SG	
Sample	Client ID	C Product	Matrix Stat U	JA HOLD DUE PR Location
L1627281-01	OUTFALL 001	S TSS-2540	WATER DONE U	0906 0908 SO Plastic-A1
L1627281-02	OUTFALL 002	S TSS-2540		J 0906 0908 S0 Plastic-A1
L1627351-01	CW-1	S TSS-2540	WATER DONE U	0907 0908 S0 Plastic-A1
L1627358-02	WQ_2-C_083016_SW_10			0906 0908 S0 Plastic-Al
L1627358-03	WQ_3-L_083016_SW_10			J 0906 0908 SO Plastic-Al
L1627358-04	WQ_FTP_083016_SW_10			J 0906 0908 SO Plastic-Al J 0907 0908 SO Plastic-Al
L1627403-01 L1627466-01	G1_SPDES_E-03B_08311 WEIR EFFLUENT	S TSS-2540	WATER DONE U WATER DONE U	
L1627751-01	20160902 INFLUENT	S TSS-2540	WATER DONE U	
L1627751-02	20160902 EFFLUENT	S TSS-2540	WATER DONE U	
WG928893-1	Laboratory Method Bl	S TSS-2540	WATER DONE U	J
WG928893-2	Duplicate Sample	S TSS-2540	WATER DONE U	Ţ
Comments:				
commerces.				
WG928893-2	L1627351-01			

Page 1

Organic Carbon Analysis

Sequence Logs

Alpha Analytical, Inc.

Facility: Westborough, MA

Department: Wet Chemistry

Title: TOC 4 Run Log

Published Date: 5/26/2016 5:13:01 AM

Page 34 of 51

DC 4 Run I			STOCK	STDS ID INFO:		WORKING S	TDS ID IN	FO:	and the second second second second second second second second second second second second second second secon		
and the second s	··· 040 0-10410					LOT #'s:					
NALYST		and the second se			050916	-	TUC-	090	tub- Icv		
URVE IN		a second second	2000 PE	M CURVE SLN: TOCA	K- asus	16-W 2PPMLCS	: TOC- (2907	16- 105		
URVE IN	USE: 052516 TR-	4	2000 FF	PM IC CK STD SLN: TOC	- DIADZ	ILAN 4PPINISPA	. 100	- 0-1	0/10		
			4000 Pr		2400 2400	10 PPM IC C	K STD:	かしー	090616-IC		
					POSITION	SAMPLE	DIL X	PH	COMMENTS		
OSITION	SAMPLE	DIL X	РН	COMMENTS		27431-4					
1	DC				26	-5					
2	FCULSON 10 DAW				28	-6	1				
3	Zer zomm				29	-7	1				
Ч	Fers	-			30	-8	1				
5	mis				31	-4	1				
4	is zam				37	-12	1				
7	27358.1 DUC		2	Field Filtered	35	-11	1				
3	2	2	2		34	-12	1				
9	3	5	2			r13	1				
10	i.	5	2		35	Cer 2000					
î (5	5	2			1.0.10					
12	4	5	2		37	101	1				
13	7	1	2		34		10 0				
14	-8	Í	12	1	20						
15	GV 2pm				- y		~ <u>}</u>	-			
	cels				41	cas					
14	27358.2	1	2		14	cch	0				
18	3	1	2				N	-			
19	4	1	2				M	1			
20	5.	1	2			1 1					
21	6	1	Z			+		-			
22	7 dug) (1		`	+					
23	FSM	2	2	= 8,3Mm		+					
m	CCV 2000					/					
25						/					

Document Type: Form

Pre-Qualtrax Document ID: N/A

Sample Raw Data

ALPHA ANALYTICAL LABS BACTERIA DEPARTMENT DISSOLVED ORGANIC CARBON

Last Change 03/4/13 GFF File TOC/DOC.xlt

Sample Number:					Analyte:	DOC-9060 Dissolved Organi	c Carbon,
Client:					alysis Date: Technician:	9/7/2016 7:17 dw	
Analysis:	DOC				ork group:		
TOC Instrument ID:				_		1.0 mg/l	
Method:	EPA-9060	Como (mmm)	2		ge Number:	9/7/2016 7:17	
		Conc. (ppm): conc(ppm):		Prepar	ation Date:	9/1/2010 7:17	
	opine	conc(ppm).	0	MDL	RESULT		
	Sample Number	COMM	ENTS	Multiplier	mg/L		
DUP	WG929404-3			1	6.90	L1627358-07	
SAMP	L1627358-01	DOCS	S FF	1	6.76		
SAMP	L1627358-02			1	1.34		
SAMP	L1627358-03			1	0.23		
SAMP	L1627358-04			1	0.17		
SAMP	L1627358-05			1	0.41		
SAMP	L1627358-06			1	0.19		
SAMP	L1627358-07			1	7.36		
SAMP	L1627358-08			1	6.97		
BLANK	WG929404-1			1	0.00		
		_	Sample	Spike	Spike	1	
		Comments	Result	Conc	Result	% Rec	1 40070
MS	WG929404-4		7.36	8	15.6	103	L16273
LCS	WG929404-2			2	1.99	100	

TOC-V Cal Curve Information C:\u00e4T0C3201\u00e4CalCurves\u00e405252016 toc-4 curve. 2016_05_25_11_52_33. cal

Date of Creation User System

1:50:02 PM 5/25/2016 dw TOC-VW

Cal. Curve

Sample Name: Sample ID: Object ID Cal. Curve: Status Comment:

05252016 toc-4 curve

0A-103073-10101000-133A00D1BDD8-0000 05252016 toc-4 curve.cal Completed

Type	Anal.	
Standard	NPOC	-

Conc: 0.000mg/L

No.	Area	Inj. Aut. Vol. Dil.	. Rem.	Ex.	Date / Time
1	6.156	2500uL	1 ******	E	5/25/2016 12:00:56
2	6.706	2500uL	1 ******		5/25/2016 12:05:53
3	6.693	2500uL	1 ******	-	5/25/2016 12:10:46

Acid Add.	0.000%
Sp. Time	180. Osec
Mean Area	6.700
SD Area	0.00919
CV Area	0.14%
Vial	1
WetChem Oxid.	1.5mL

Conc: 0.2000mg/L

No.	Area	Inj. ,	Aut.	Rem.	Ex.	Date / Time
		Vol. I	Dil.			
1	46.95	2500uL	1	******	E	5/25/2016 12:21:02
2	48.30	2500uL	1	******		5/25/2016 12:26:05
3	49.49	2500uL	1	******		5/25/2016 12:31:04

Acid Add.	0.000%
Sp. Time	180. 0sec
Mean Area	48.90
SD Area	0.8415
CV Area	1.72%
Vial	2
WetChem Oxid.	1. 5mL

Conc: 0.5000mg/L

No.	Area	Inj. Aut Vol. Dil	. Rem.	Ex.	Date / Time
1	84.18	2500uL	1 ******		5/25/2016 12:41:23
2	85.60	2500uL	1 ******		5/25/2016 12:46:36

Acid Add.	0.000%				
Sp. Time	180. 0sec				
Mean Area	84.89				
SD Area	1.004				
CV Area	1.18%				
Vial	3				
WetChem Oxid.	1.5mL				

Conc: 1.000mg/L

No.	Area	Inj. A Vol. D	ut. Dil.	Rem.	Ex.	Date / Time
1	155.5	2500uL	1	******		5/25/2016 12:57:13
2	157.0	2500uL	1	******		5/25/2016 1:02:17 F

TDC-4 curve 052516

Acid Add.	0.000%
Sp. Time	180. Osec
Mean Area	156.3
SD Area	1.061
CV Area	0.68%
Vial	4
WetChem Oxid.	1.5mL

Conc: 2.000mg/L

No.	Area	Inj. A Vol. D	Aut. Dil.	Rem.	Ex.	Date / Time
1	314.5	2500uL	1	******		5/25/2016 1:13:15 F
2	315.7	2500uL	1	******		5/25/2016 1:18:33 F

Acid Add.	0.000%
Sp. Time	180. Osec
Mean Area	315. 1
SD Area	0.8485
CV Area	0. 27%
Vial	5
WetChem Oxid.	1.5mL

Conc: 5.000mg/L

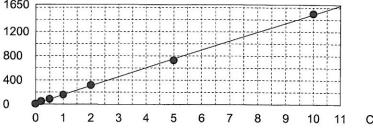
No.	Area	Inj. / Vol. [Aut. Dil.	Rem.	Ex.	Date / Time
1	724.5	2500uL	1	******		5/25/2016 1:29:50 F
2	727.8	2500uL	1	*****		5/25/2016 1:33:55 F

Acid Add.	0. 000%	
Sp. Time	180. 0sec	
Mean Area	726. 2	
SD Area	2. 333	
CV Area	0. 32%	
Vial	6	
WetChem Oxid.	1.5mL	

Conc: 10.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	1499	2500uL	1	******		5/25/2016 1:45:22 F
2	1501	2500uL	1	******		5/25/2016 1:50:02 F

Acid Add. Sp. Time Mean Area SD Area CV Area Vial WetChem Oxi	0.000% 180.0sec 1500 1.414 0.09% 7 id. 1.5mL			
Slope: Intercept r^2 r Zero Shift	148.0 10.11 0.9995 0.9998 No	Area	1650 1200 800	



Conc[mg/L]

9/8/2016 5:37:34 AM

16

20

Time[min]

18

Instr.Information

dw

System	TOC-VW
Instrument Options	TOC/ASI/

•

Sample

Sample Name:

di toc doc 4 reps method.met Completed

Sample ID:	
Origin:	
Status	
Chk. Result	

Туре	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:-0.01066mg/L

1. Det

Anal.: NPOC

1 9.017 -0.00736mg/L 2500ul 1 05252016 toc-4 curve.2016_05_2!9/7/2016 6:21:34 AN 2 8.428 -0.01134mg/L 2500ul 1 05252016 toc-4 curve.2016_05_2!9/7/2016 6:27:01 AN 3 8.200 -0.01288mg/L 2500ul 1 05252016 toc-4 curve.2016_05_2!9/7/2016 6:32:23 AN 4 8.466 -0.01108mg/L 2500ul 1 05252016 toc-4 curve.2016_05_2!9/7/2016 6:37:44 AN Mean Area 8.528 Signal[mV] 10 6	No.	Area	Conc.	Inj. Vol	.Aut.	Ex.		(Cal.	Curve				Da	ate /	Tim	е]				
2 8.428 -0.01134mg/L 2500uL 1 05252016 toc-4 curve.2016_05_2 9/7/2016 6:27:01 AN 3 8.200 -0.01288mg/L 2500uL 1 05252016 toc-4 curve.2016_05_2 9/7/2016 6:32:23 AN 4 8.466 -0.01108mg/L 2500uL 1 05252016 toc-4 curve.2016_05_2 9/7/2016 6:32:23 AN 4 8.466 -0.01108mg/L 2500uL 1 05252016 toc-4 curve.2016_05_2 9/7/2016 6:37:44 AN Mean Area 8.528 Signal[mV] 10 6 6 6					Dil.																	
3 8.200 -0.01288mg/L 2500uL 1 05252016 toc-4 curve.2016_05_2 9/7/2016 6:32:23 AN 4 8.466 -0.01108mg/L 2500uL 1 05252016 toc-4 curve.2016_05_2 9/7/2016 6:37:44 AN Mean Area 8.528 Signal[mV] 10 6 0 0 6 0	1						052520)16 to	c-4	curve.2	2016	_05_	2.9/	7/20	16 6	5:21:3	34 AI	V				
4 8.466 -0.01108mg/L2500uL 1 05252016 toc-4 curve.2016_05_29/7/2016 6:37:44 AN Mean Area 8.528 Signal[mV] 10 Mean Conc. -0.01066mg/ 6	2	8.428	-0.01134mg/L	2500uL	1																	
Mean Area 8.528 Signal[mV] 10 Mean Conc. -0.01066mg/ 6	3																					
Mean Conc0.01066mg/	4	8.466	-0.01108mg/L	2500uL	_ 1		052520)16 to	c-4	curve.2	2016	_05_	2.9/	7/20	166	6:37:4	14 AI	V				
Mean Conc0.01066mg/						~ .																
6	Mea	in Area	8.528			Sig	nal[mV]	10	1			1		1	1.1		1	1	1	1		
	Mac	0	0.010	Gemal					1			1			1 1		1 1			1	1	
	Infec	an Conc	0.010	/oomg/					i	1 1 1	in the second second	1		1	1 1		1 1	lesses less	1	1	1 1	
	wee	an Conc	0.01C	oomg/				6												1		
	Nec	an Conc	0.0 IC	oonig/				6														

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14

Sample

Sample Name: Sample ID: Origin: Status Chk. Result

ic ck std 10ppm

toc doc 4 reps method.met Completed

-1

0

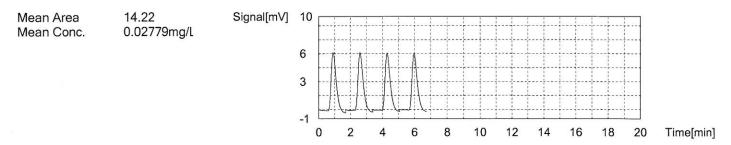
2016_09_07_001.t32

Туре	Anal.	Manual Dilution	Result	
Unknown	NPOC	1.000	NPOC:0.02779mg/L	

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut.	Ex.	Cal. Curve	Date / Time
			5	Dil.			
1	14.49	0.02963mg/L	2500uL	1		05252016 toc-4 curve.2016_05_2	9/7/2016 6:48:26 AN
2	14.41	0.02909mg/L	2500uL	1		05252016 toc-4 curve.2016_05_2	9/7/2016 6:54:30 AN
3	13.95	0.02598mg/L	2500uL	1		05252016 toc-4 curve.2016_05_2	9/7/2016 7:00:25 AN
4	14.02	0.02645mg/L	2500uL	1		05252016 toc-4 curve.2016_05_2	9/7/2016 7:06:21 AN



Sample

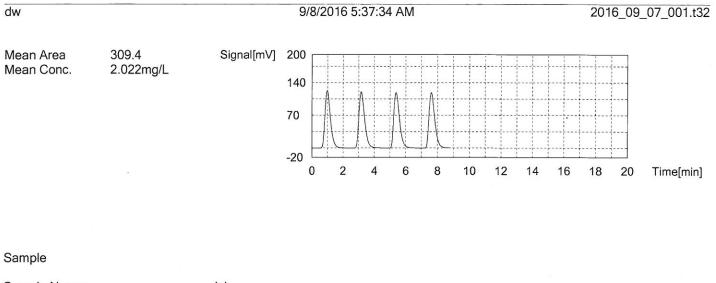
Sample Name:	icv 2ppm
Sample ID:	
Origin:	toc doc 4 reps method.met
Status	Completed
Chk. Result	let Brateliner 🗰 ale analysis de le san

Туре	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.022mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Ex.	Cal. Curve	1	Date / T	ime
				Dil.		/		
1	307.6	2.010mg/L	2500uL	1	05252016 toc-4 curve.2016	_05_	29/7/2016 7:1	17:32 AN
2	310.4	2.029mg/L	2500uL	1	05252016 toc-4 curve.2016	_05_	29/7/2016 7:2	21:54 AN
3	309.6	2.024mg/L	2500uL	1	05252016 toc-4 curve.2016	_05_	29/7/2016 7:2	26:12 AN
4	309.8	2.025mg/L	2500uL	1	05252016 toc-4 curve.2016	_05_	29/7/2016 7:3	30:30 AN



Sample Name: Sample ID:	icb
Origin:	toc doc 4 reps method.met
Status	Completed
Chk. Result	

Туре	Anal.	Manual Dilution	Result	
Unknown	NPOC	1.000	NPOC:-0.02383mg/L	\cup

1. Det

Anal.: NPOC

1 6.346 -0.02541mg/L 2500uL 1 05252016 toc-4 curve.2016_05_2 9/7/2016 7:41:06 AN 2 6.622 -0.02354mg/L 2500uL 1 05252016 toc-4 curve.2016_05_2 9/7/2016 7:46:16 AN 3 6.665 -0.02325mg/L 2500uL 1 05252016 toc-4 curve.2016_05_2 9/7/2016 7:51:35 AN 4 6.686 -0.02311mg/L 2500uL 1 05252016 toc-4 curve.2016_05_2 9/7/2016 7:56:53 AN Mean Area 6.580 Signal[mV] 10 6 6 6 6 3 -0.02383mg/ 6 -0.02383mg/ -0.02383mg/ -1 -1 -1	No.	Area	Conc.	Inj. Vol	Aut. Dil.	Ex.		Ca	I. Curve)			Date	/ Time	•		
3 6.665 -0.02325mg/L 2500uL 1 05252016 toc-4 curve.2016_05_2 9/7/2016 7:51:35 AN 4 6.686 -0.02311mg/L2500uL 1 05252016 toc-4 curve.2016_05_2 9/7/2016 7:56:53 AN Mean Area 6.580 -0.02383mg/ Signal[mV] 10 6 3 -0.02383mg/ -0.02383mg/ -0.02383mg/ -0.02383mg/	1	6.346	-0.02541mg/L	2500uL	1		05252016	6 toc-	4 curve	.2016	_05_	29/7/2	2016	7:41:0	6 AN		
4 6.686 -0.02311mg/L2500uL 1 05252016 toc-4 curve.2016_05_249/7/2016 7:56:53 AN Mean Area 6.580 Signal[mV] 10 Mean Conc. -0.02383mg/ 6 3 A A	2						05252016	6 toc-	4 curve	.2016	_05_	29/7/2	2016	7:46:1	6 AN		
Mean Area 6.580 Mean Conc0.02383mg/ 6 3	3						-				-						
Mean Conc0.02383mg/ 6 3 	4	6.686	-0.02311mg/L	2500uL	. 1		05252016	S toc-	4 curve	.2016	_05_	2,9/7/2	2016	7:56:5	3 AN		
0 2 4 6 8 10 12 14 16 18 20 Timel						Sig	(6 7		A	Ą						Time[min]

Sample

1,29

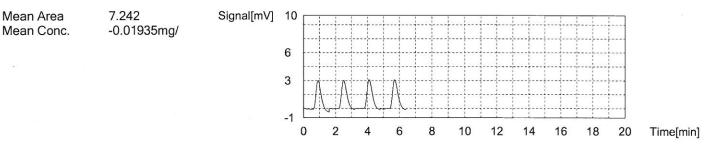
Sample Name:	mb
Sample ID:	
Origin:	toc doc 4 reps method.met
Status	Completed
Chk. Result	

Туре	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:-0.01935mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	lnj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	7.164	-0.01988mg/L	2500uL	1		05252016 toc-4 curve.2016_05_2	9/7/2016 8:07:30 AN
2	7.125	-0.02014mg/L	2500uL	1		05252016 toc-4 curve.2016_05_2	9/7/2016 8:12:49 AN
3	7.328	-0.01877mg/L	2500uL	1		05252016 toc-4 curve.2016_05_2	9/7/2016 8:18:03 AN
4	7.350	-0.01862mg/L	2500uL	1		05252016 toc-4 curve.2016_05_2	9/7/2016 8:23:22 AN



Sample

Sample Name:Ics 2ppmSample ID:Ics 2ppmOrigin:toc doc 4 reps method.metStatusCompletedChk. ResultImage: Completed

Туре	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.991mg/L

1. Det

Anal.: NPOC

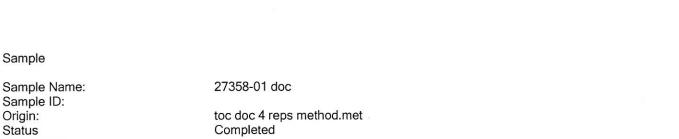
2016_09_07_001.t32

No.	Area	Conc.	Inj. Vol.		Ex.		Ca	. Curv	/e	2			Da	te	/ Tir	ne			
<u> </u>				Dil.									7/00		0.01	05			
1	302.0	1.973mg/L				052520 ⁻													
2	304.8	1.991mg/L				052520													
3	306.0	2.000mg/L	2500uL	1		052520													
4	306.3	2.002mg/L	2500uL	1		052520	16 toc-4	1 curv	e.201	16_0)5_	2.9/	7/201	6	8:47	:31	AN		
200	an Area an Conc.	304.8 1.991i	mg/L		Sig	nal[mV]	200											 	

70

-20

0



2

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14

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18

20

Time[min]

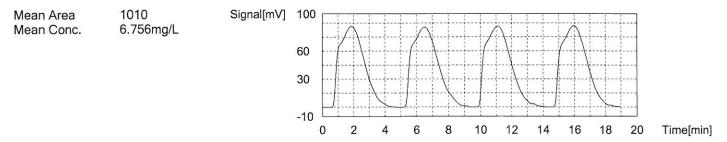
Sample Nam
Sample ID:
Origin:
Status
Chk. Result

Туре	Anal.	Manual Dilution	Result	
Jnknown	NPOC	1.000	NPOC:6.756mg/L	6

1. Det

Anal.: NPOC

No.	Area	Conc.	lnj. Vol.	Aut. E Dil.	x. Cal. Curve	Date / Time
1	991.5	6.632mg/L	2500uL		05252016 toc-4 curve.2016_05_2	9/7/2016 9:04:42 AN
2	996.7	6.667mg/L	2500uL	. 1	05252016 toc-4 curve.2016_05_2	9/7/2016 9:12:57 AM
3	1021	6.831mg/L	2500uL	1	05252016 toc-4 curve.2016_05_2	9/7/2016 9:20:10 AN
4	1030	6.892mg/L	2500uL	1	05252016 toc-4 curve.2016_05_2	9/7/2016 9:27:07 AN



Sample

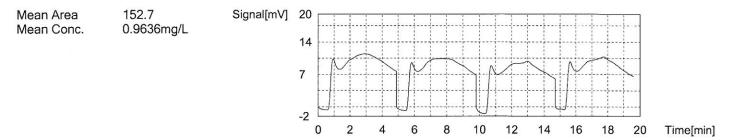
Sample Name:	27358-02 2x doc
Sample ID: Origin:	toc doc 4 reps method.met
Status	Completed
Chk. Result	

Туре	Anal.	Manual Dilution	Result	
Jnknown	NPOC	1.000	NPOC:0.9636mg/L	

1. Det

Anal.: NPOC

No.	Area	Conc.	lnj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	157.1	0.9933mg/L	2500uL	1	1	05252016 toc-4 curve.2016_05_2	9/7/2016 9:41:02 AN
2	154.9	0.9785mg/L	2500uL	1		05252016 toc-4 curve.2016_05_2	9/7/2016 9:48:57 AN
3	147.1	0.9258mg/L	2500uL	1		05252016 toc-4 curve.2016_05_2	9/7/2016 9:57:05 AN
4	151.7	0.9568mg/L	2500uL	1		05252016 toc-4 curve.2016_05_2	9/7/2016 10:06:28 A



Sample

Sample Name: Sample ID:	27358-03 5x doc
Origin:	toc doc 4 reps method.met Completed
Status Chk. Result	Completed

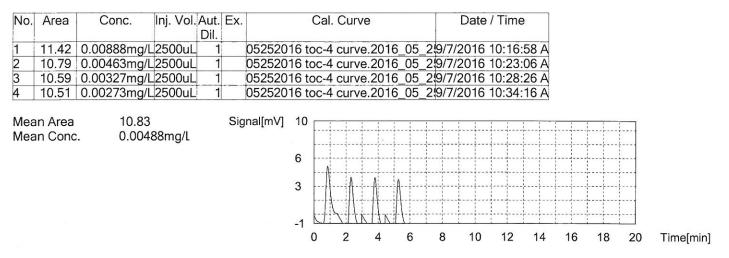
Туре	Anal.	Manual Dilution	Result	/
Unknown	NPOC	1.000	NPOC:0.00488mg/L	

dw

9/8/2016 5:37:34 AM

1. Det

Anal.: NPOC



Sample

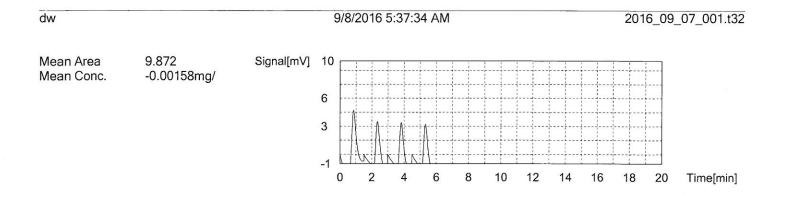
Sample Name: Sample ID:	27358-04 5x doc
Origin:	toc doc 4 reps method.met
Status	Completed
Chk. Result	

Туре	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:-0.00158mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut.	Ex.	Cal. Curve	Date / Time
				Dil.			
1	11.56	0.00983mg/L	2500uL	1		05252016 toc-4 curve.2016_05_2	9/7/2016 10:44:46 A
2	9.471	-0.00429mg/L	2500uL	1		05252016 toc-4 curve.2016_05_2	9/7/2016 10:50:33 A
3	9.471	-0.00429mg/L	2500uL	1		05252016 toc-4 curve.2016_05_2	9/7/2016 10:56:19 A
4	8.987	-0.00756mg/L	2500uL	1		05252016 toc-4 curve.2016_05_2	9/7/2016 11:02:09 A



Sample

Sample Name: Sample ID:	27358-05 5x doc
Origin:	toc doc 4 reps method.met
Status	Completed
Chk. Result	

Туре	Anal.	Manual Dilution	Result
Inknown	NPOC	1.000	NPOC:0.00203mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Constant States	Ex.		Ca	al. Curve	Э			Date	/ Time	•				
				Dil.														
1	11.32	0.00821mg/L	2500uL	. 1		0525201	6 toc	-4 curve	.2016_	05_2	9/7/2	2016	11:12:	40 A				
2	10.41	0.00206mg/L	2500uL	. 1		0525201	6 toc	-4 curve	.2016_	_05_2	9/7/2	2016	11:18:	20 A			*	
3	10.06	-0.00031mg/L	2500uL	1		0525201	6 toc	-4 curve	.2016_	05_2	9/7/2	2016	11:24:	02 A				
4	9.833	-0.00184mg/L	2500uL	. 1		0525201	6 toc	-4 curve	.2016	05_2	9/7/2	2016	11:29:	29 A				
	an Area an Conc	10.41 . 0.002	03mg/L		Sig		10 6 3 -1											
							0	2	4	6	8	10	12	14	16	18	20	Time[min]

Sample

2016_09_07_001.t32

2,30

Sample Name:	27538-06 5x doc
Sample ID:	
Origin:	toc doc 4 reps method.met
Status	Completed
Chk. Result	

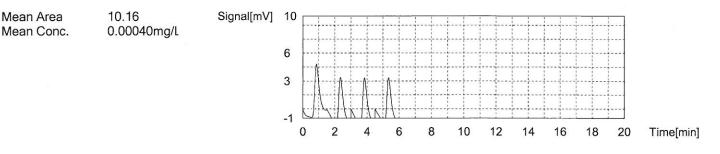
Туре	Anal.	Manual Dilution	Result	
Unknown	NPOC	1.000	NPOC:0.00040mg/L	/

1. Det

dw

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	10.96	0.00577mg/L	2500uL	1		05252016 toc-4 curve.2016_05_2	9/7/2016 11:40:01 A
2	10.01	-0.00065mg/L	2500uL	1		05252016 toc-4 curve.2016_05_2	9/7/2016 11:45:59 A
3	10.09	-0.00011mg/L	2500uL	. 1		05252016 toc-4 curve.2016_05_2	9/7/2016 11:51:47 A
4	9.598	-0.00343mg/L	2500uL	1		05252016 toc-4 curve.2016_05_2	9/7/2016 11:57:39 A



Sample

Sample Name:27358-07 docSample ID:Origin:toc doc 4 reps method.metStatusCompletedChk. Result

Туре	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:7.357mg/L

1. Det

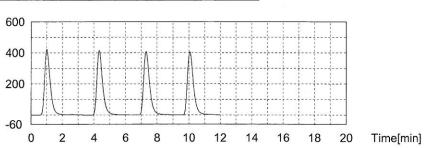
Anal.: NPOC

2016_09_07_001.t32

No.	Area	Conc.	lnj. Vol.	Aut. Ex Dil.	. Cal. Curve	Date / Time
1	1087	7.277mg/L	2500uL	1	05252016 toc-4 curve.2016_05_2	0/7/2016 12:09:59 P
2	1097	7.345mg/L	2500uL	1	05252016 toc-4 curve.2016_05_29	0/7/2016 12:15:03 P
3	1100	7.365mg/L	2500uL	1	05252016 toc-4 curve.2016_05_29)/7/2016 12:21:26 P
4	1111	7.439mg/L	2500uL	1	05252016 toc-4 curve.2016_05_29)/7/2016 12:27:57 P

Mean Area Mean Conc. 1099 7.357mg/L

Signal[mV] 600



Sample

Sample Name:	27358-08 doc
Sample ID:	
Origin:	toc doc 4 reps method.met
Status	Completed
Chk. Result	

Туре	Anal.	Manual Dilution	Result	0.2
Unknown	NPOC	1.000	NPOC:6.966mg/L	10.

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	С	al. Curve		Date	/ Time	
1	1017	6.804mg/L	2500uL	. 1)5252016 too	-4 curve.201	6_05_2	29/7/2016	12:39:36 P	
2	1036	6.933mg/L	2500uL	. 1			-4 curve.201				
3	1041	6.966mg/l	2500uL	. 1			-4 curve.201				
4	1070	7.162mg/L	2500uL	_ 1		05252016 too	-4 curve.201	5_05_2	29/7/2016	12:57:15 P	
	an Area an Conc.	1041 6.966	mg/L		Sigi	nal[mV] 400 300 200 100					

-40

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Time[min]

Sample

Sample Name:	ccv 2ppm
Sample ID:	
Origin:	toc doc 4 reps method.met
Status	Completed
Chk. Result	

Туре	Anal.	Manual Dilution	Result	
Unknown	NPOC	1.000	NPOC:2.056mg/L	\sim

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Dil.		10000	. Curve				Time					
1	315.5	2.064mg/L					curve.201									
2 3	313.0	2.047mg/L					curve.201									
	313.9	2.053mg/L	2500uL	1			curve.201									
4	315.3	2.062mg/L	2500uL	1	05252	016 toc-4	curve.201	6_05	_2!9/7/20	016 1	1:27:24	- PN				
	n Area n Conc.	314.4 2.056	mg/L		Signal[mV	200 140 70 -20 0	2 4	6	8	10	12	14	16	18	20	Time[min]
Sam	ple															
~	ple Nam	ie:			ccb											
	DIE ID:				v av a		12									
Sam Orig State	in:				toc doc 4 r Completed		nod.met									1
Sam Orig Statu Chk.	in: us	Anal.	Manu		Completed		nod.met		Resul	t						

2016_09_07_001.t32

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.			Cal.	Curve	0			D	ate	/ Time					
1	11.21	0.00746mg/L	2500uL			0525201	6 to	oc-4	curve.	2016	05	219	/7/20	16	1:38:0	3 PN				
2		0.00611mg/L				0525201	6 to	oc-4	curve.	2016	_05_	219	7/20	16	1:43:1	1 PN				
3		0.00449mg/L			-	0525201						-								
4	11.21	0.00746mg/L	2500uL	. 1		0525201	6 to	pc-4	curve.	2016	_05_	249	9/7/20	16	1:53:1	4 PN				
	an Area an Conc	11.05 . 0.0063	38mg/L		Sig	nal[mV]	10 6 3 -1													
							(0	2	4	6	1	8	10	12	14	16	18	20	Time[min]

Sample

Sample Name:	2735802 1x doc
Sample ID:	
Origin:	toc doc 4 reps method.met
Status	Completed
Chk. Result	

Туре	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.335mg/L

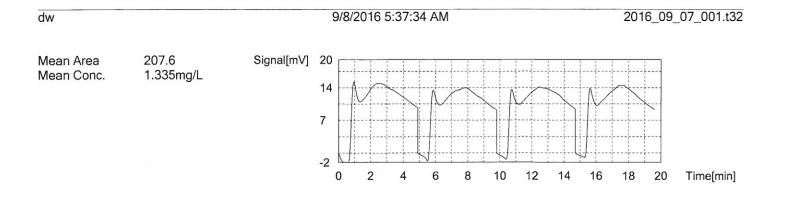
1. Det

Anal.: NPOC

No.	Area	Conc.	lnj. Vol.	Aut. E Dil.	Ex.	Cal. Curve	Date / Time
1	224.1	1.446mg/L	2500uL			05252016 toc-4 curve.2016 05 2	9/7/2016 2:07:08 PN
2	203.6	1.308mg/L				05252016 toc-4 curve.2016_05_2	
3	201.5	1.293mg/L	2500uL	1		05252016 toc-4 curve.2016_05_2	9/7/2016 2:24:31 PN
4	201.2	1.291mg/L	2500uL	1		05252016 toc-4 curve.2016_05_2	9/7/2016 2:33:25 PN



 $(,)^{\prime}$



Sample

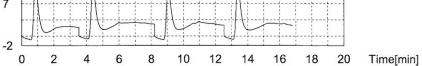
Sample Name: Sample ID:	27358-03 1x doc
Origin:	toc doc 4 reps method.met
Status	Completed
Chk. Result	

Туре	Anal.	Manual Dilution	Result	. 1
Jnknown	NPOC	1.000	NPOC:0.2340mg/L	0.0

1. Det

Anal.: NPOC

No.	Area	Conc.	lnj. Vol.	Aut. Dil.	Ex.	Cal. C	Curve		Date	/ Time			
1	36.39	0.1776mg/L	2500uL	1		05252016 toc-4 c	urve.2016_0)5_2	9/7/2016	2:45:58 PI	V		
2	49.69	0.2675mg/L	2500uL	. 1		05252016 toc-4 c							
3	48.14	0.2570mg/L				05252016 toc-4 c							
4	44.74	0.2340mg/L	2500uL	1		05252016 toc-4 c	urve.2016_0)5_2	9/7/2016	3:05:31 PI	V		
	in Area in Conc.	44.74 0.234			Sig	nal[mV] 20 14							
								1	- E - B - E	1 1 1 1 1 1	- E - E -	1.1.1	



Sample

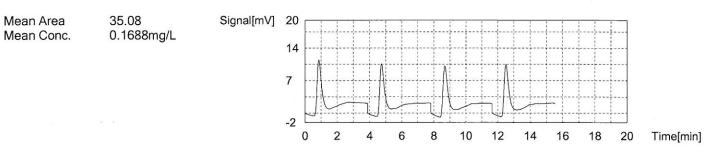
Sample Name:27358-04 1x docSample ID:toc doc 4 reps method.metOrigin:toc doc 4 reps method.metStatusCompletedChk. ResultCompleted

Туре	Anal.	Manual Dilution	Result	x X
Unknown	NPOC	1.000	NPOC:0.1688mg/L	0.64

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut.	Ex.	Cal. Curve	Date / Time
				Dil.		96131.0354.030 - 660,03.350.054,430	
1	37.71	0.1865mg/L	2500uL	1		05252016 toc-4 curve.2016_05_	29/7/2016 3:18:25 PN
2	35.27	0.1701mg/L	2500uL	. 1		05252016 toc-4 curve.2016_05_	29/7/2016 3:24:27 PN
3	33.68	0.1593mg/L	2500uL	. 1		05252016 toc-4 curve.2016_05_	29/7/2016 3:30:23 PN
4	33.66	0.1592mg/L	2500uL	. 1		05252016 toc-4 curve.2016_05_	29/7/2016 3:36:22 PN



Sample

Sample Name: Sample ID:	27358-05 1x doc	
Origin: Status Chk. Result	toc doc 4 reps method.met Completed	

Туре	Anal.	Manual Dilution	Result	2	
Unknown	NPOC	1.000		NPOC:0.4074mg/L	120
					\mathcal{O}

1. Det

Anal.: NPOC

14/30

2016_09_07_001.t32

1 71.16 0.4126mg/L 2500uL 1 05252016 toc-4 curve.2016_05_2 9/7/2016 3:50:17 PN 2 69.70 0.4027mg/L 2500uL 1 05252016 toc-4 curve.2016_05_2 9/7/2016 3:57:31 PN 3 72.00 0.4183mg/L 2500uL 1 05252016 toc-4 curve.2016_05_2 9/7/2016 4:04:30 PN 4 68.70 0.3960mg/L 2500uL 1 05252016 toc-4 curve.2016_05_2 9/7/2016 4:11:30 PN Mean Area 70.39 Signal[mV] 20	No.	Area	Conc.	lnj. Vol.	Aut. Dil.	Ex.		Ca	al. Curv	e			Date	e / Tim	ne		
3 72.00 0.4183mg/L 2500uL 1 05252016 toc-4 curve.2016_05_2 9/7/2016 4:04:30 PN 4 68.70 0.3960mg/L 2500uL 1 05252016 toc-4 curve.2016_05_2 9/7/2016 4:11:30 PN Mean Area 70.39 Signal[mV] 20 Mean Conc. 0.4074mg/L 20	1	71.16	0.4126mg/L	2500uL		0	525201	6 toc	-4 curve	.2016	_05_	2,9/7	/2016	3:50:	17 PI	V	
4 68.70 0.3960mg/L2500uL 1 05252016 toc-4 curve.2016_05_2\$9/7/2016 4:11:30 PN Mean Area 70.39 Signal[mV] 20 Mean Conc. 0.4074mg/L Signal[mV] 20	2	69.70	0.4027mg/L	2500uL	. 1												
Mean Area 70.39 Signal[mV] 20 Mean Conc. 0.4074mg/L	3	72.00	0.4183mg/L	2500uL	. 1												
Mean Conc. 0.4074mg/L	4	68.70	0.3960mg/L	2500uL	. 1	0	525201	6 toc	4 curve	.2016	_05_	_2(9/7	/2016	4:11:	30 PI	V	
						Sign	al[mV]										

Time[min]

-2

Sample

Sample Name:	27358-06 1x doc
Sample ID:	
Origin:	toc doc 4 reps method.met
Status	Completed
Chk. Result	

Туре	Anal.	Manual Dilution	Result	19
Unknown	NPOC	1.000	NPOC:0.1936mg/L	0,

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol. A	ut. Ex. Dil.		C	Cal. Curve		Da	ate / Tim	е		
1	37.39 37.63	0.1844mg/L 0.1860mg/L	2500uL	1			c-4 curve.2016 c-4 curve.2016						
2 3 4	39.26 40.74	0.1970mg/L 0.2070mg/L	2500uL	1	052520	16 too	c-4 curve.2016 c-4 curve.2016	_05_3	29/7/20	16 4:36:	17 PN		
	in Area in Conc.	38.76 0.193	6mg/L	Sig	nal[mV]	20 14						-	
						7				A			

-2 C

Time[min]

Sample

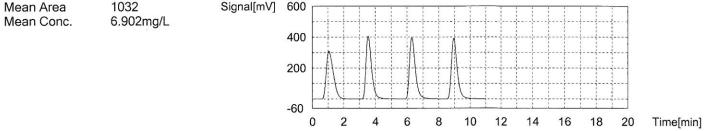
Sample Name:	27358-07 dup doc
Sample ID:	
Origin:	toc doc 4 reps method.met
Status	Completed
Chk. Result	

Туре	Anal.	Manual Dilution	Result	690
Unknown	NPOC	1.000	NPOC:6.902mg/L	0,

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut.	Ex.	Cal. Curve	Date / Time
				Dil.			
1	1004	6.716mg/L	2500uL	1		05252016 toc-4 curve.2016_05_2	9/7/2016 4:53:47 PN
2	1030	6.892mg/L	2500uL	1		05252016 toc-4 curve.2016_05_2	9/7/2016 5:00:02 PN
3	1041	6.966mg/L	2500uL	1		05252016 toc-4 curve.2016_05_2	9/7/2016 5:04:46 PN
4	1051	7.034mg/L	2500uL	1		05252016 toc-4 curve.2016_05_2	9/7/2016 5:11:06 PN



Sample

Sample Name: Sample ID:	27358-07 spk 8ppm 2x doc
Origin: Status Chk. Result	toc doc 4 reps method.met Completed

Туре	Anal.	Manual Dilution	Result	.5.4
Unknown	NPOC	1.000	NPOC:7.821mg/L	ale

15.0

1	1
	4

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05252016 toc-4 curve.2016_05_29/7/2016 5:22:52 PN 05252016 toc-4 curve.2016_05_29/7/2016 5:27:57 PN 05252016 toc-4 curve.2016_05_29/7/2016 5:34:13 PN 05252016 toc-4 curve.2016_05_29/7/2016 5:39:11 PN



Sample Name:	ccv 2ppm	
Sample ID:		
Origin:	toc doc 4 reps method.met	
Status	Completed	
Chk. Result		

Inj. Vol. Aut. Ex.

Dil.

1

1

1

1

Signal[mV] 600

400

200

-60

0

Туре	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.161mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Ex. Dil.	Cal. Curve	Date / Time
1	330.5	2.165mg/L	2500uL	1	05252016 toc-4 curve.2016_05_2	9/7/2016 6:12:59 PN
2	329.5	2.158mg/L			05252016 toc-4 curve.2016_05_2	9/7/2016 6:17:27 PN
3	330.5	2.165mg/L	2500uL	1	05252016 toc-4 curve.2016_05_2	9/7/2016 6:21:45 PN
4	328.9	2.154mg/L	2500uL	1	05252016 toc-4 curve.2016_05_2	9/7/2016 6:26:03 PN

Date / Time

16

18

20

Time[min]

Cal. Curve

2016_09_07_001.t32

dw

1

2 3

4

1. Det

Anal.: NPOC

1167

1159

1168

1176

Mean Area

Mean Conc.

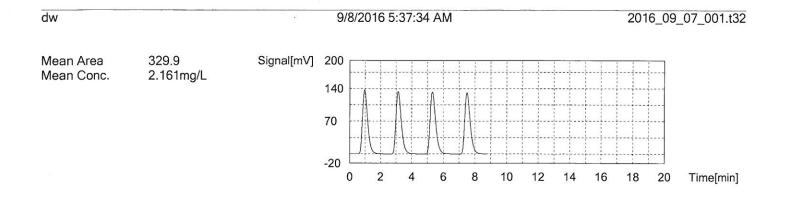
Conc.

7.818mg/L 2500uL 7.764mg/L 2500uL 7.825mg/L 2500uL 7.879mg/L 2500uL

7.821mg/L

1168

No. Area



Sam	p	le

Sample Name: Sample ID:	ccb
Origin:	toc doc 4 reps method.met
Status	Completed
Chk. Result	

Туре	Anal.	Manual Dilution	Result	$\langle \rangle$
Unknown	NPOC	1.000	NPOC:0.02584mg/L	0

.

1. Det

Anal.: NPOC

No. Area	Conc.	lnj. Vol.	Aut. Dil.	Ex.		Cal	. Curve			D	ate /	/ Time			
1 14.19 2 14.64 3 14.01	0.03064mg/L	2500uL 2500uL	1		05252016 05252016 05252016	toc-4 toc-4	curve.	2016_0 2016_0	5_2 5_2	29/7/20 9/7/20	016 6 016 6	5:41:3 5:46:3	7 PN 1 PN		
4 12.88 Mean Are Mean Cor			1	Sig	05252016		curve.	2016_0	5_2	29/7/20	016 6	5:51:20	6 PN	 	
					6 3									 	
					-1		to to						· · · · · · · · · · · · · · · · · · ·		

Sample

2016_09_07_001.t32

1,63

Sample Name:	27431-4
Sample ID:	
Origin:	toc doc 2 reps method.met
Status	Completed
Chk. Result	

				241
Туре	Anal.	Manual Dilution	Result	1 cer
Unknown	NPOC	1.000	NPOC:1.660mg/L	~

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.		(Cal. Cu	rve				Date	/ Time					
1	258.5	1.679mg/L				052520			Property Designed Value										
2	245.6 252.9	1.591mg/L 1.641mg/L				052520 052520													
0	202.5	1.04 mg/L	20004			002020	10 10		VE.20	10_0	0_2	3/1/2	2010	/.0/.1	JFN				
	in Area in Conc.	255.7 1.660			Sig	nal[mV]	200 140												
							70			A									
							-20	0 2		<u>↓</u> 4	6	8	10	12	14	16	18	20	Time[min]

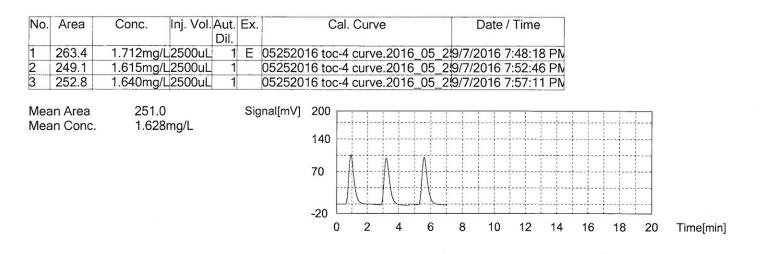
Sample

Sample Name: Sample ID:	27431-5
Origin:	toc doc 2 reps method.met
Status	Completed
Chk. Result	

Туре	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.628mg/L

1. Det

Anal.: NPOC



Sample

dw

Sample Name:	27431-6
Sample ID:	
Origin:	toc doc 2 reps method.met
Status	Completed
Chk. Result	

Туре	Anal.	Manual Dilution	Result	0
Unknown	NPOC	1.000	NPOC:1.685mg/L	16

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.		(Cal. Curve		1	Date /	Time					
1	276.9	1.803mg/L	2500uL	1	E	052520	16 to	c-4 curve.2016	05	2.9/7/2	016 8	:08:13	3 PN				
2	259.7	1.687mg/L	2500uL	1		052520	16 to	c-4 curve.2016	_05_	2.9/7/2	016 8	:12:3	7 PN				52
3	259.2	1.683mg/L	2500uL	. 1		052520	16 to	c-4 curve.2016	_05_	2.9/7/2	016 8	:17:0	1 PN				
	n Area n Conc.	259.4 1.685			Sig	nal[mV]	200 140 70		<u> </u>								
							-20	0 2 4	6	8	10	12	14	16	18	 20	Time[min]

2016_09_07_001.t32

1.32

NPOC:1.815mg/L

Sample

Sample Name: Sample ID:	27431-7
Origin:	toc doc 2 reps method.met
Status	Completed
Chk. Result	

Туре	Anal.	Manual Dilution	Result	174
Unknown	NPOC	1.000	NPOC:2.247mg/L	-L.U

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.		(Cal.	Curve			0	Date /	Time					
1	363.3	2.387mg/L	2500uL		E	052520	16 to	c-4	curve.2	2016_	05_2	9/7/2	016 8	:28:09	PN				
2	342.4	2.246mg/L				052520													
3	342.7	2.248mg/L	2500uL	1		052520	16 to	c-4	curve.2	2016_	05_2	9/7/2	016 8	:37:23	B PN				
	an Area an Conc.	342.6 2.247			Sig	nal[mV]	200 140 70												
							-20	0	2	4	6	8	10	12	14	16	18	20	Time[min]

Sample	
oumpio	

Sample Nam Sample ID:	ie:	27431	-8
Origin: Status		toc do Compl	c 2 reps method.met eted
Chk. Result		Comp	
Туре	Anal.	Manual Dilution	Result

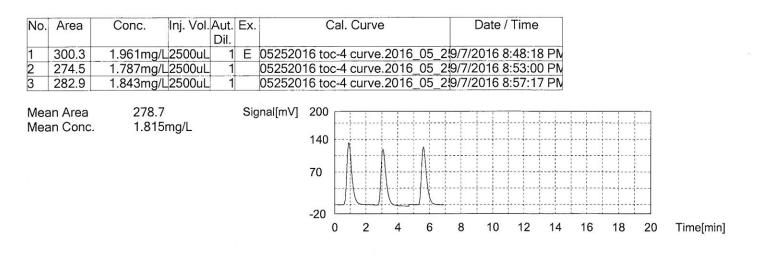
1.000

1. Det

Unknown

NPOC

Anal.: NPOC



Sample

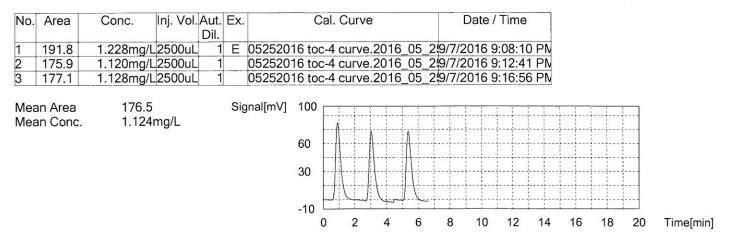
dw

Sample Name:	27431-9
Sample ID:	
Origin:	toc doc 2 reps method.met
Status	Completed
Chk. Result	

Туре	Anal.	Manual Dilution	Result	1.2
Unknown	NPOC	1.000	NPOC:1.124mg/L	V.

1. Det

Anal.: NPOC



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Sample

Sample Name:	27431-10
Sample ID:	
Origin:	toc doc 2 reps method.met
Status	Completed
Chk. Result	

Туре	Anal.	Manual Dilution	Result	,11
Unknown	NPOC	1.000	NPOC:1.226mg/L	(.0

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal	. Curve		Date	/ Time	•		
)	191.2 191.8	1.224mg/L 1.228mg/L)16 toc-4)16 toc-4							
	an Area an Conc.	191.5 1.226i		·	Signal[mV]	100		 				 	
100		1.2201	ing, L				-A	 		-44	<u> </u>	 	

2

4

6

12

14

16

18

20

Time[min]

2.28

10

8

30

-10

0



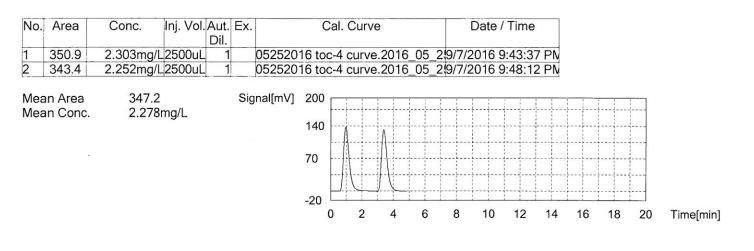
Sample Name:	27431-11	
Sample ID:		
Origin:	toc doc 2 reps method.met	
Status	Completed	
Chk. Result		
onne noodae		

Туре	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.278mg/L

1. Det

Anal.: NPOC

2016_09_07_001.t32



Sample

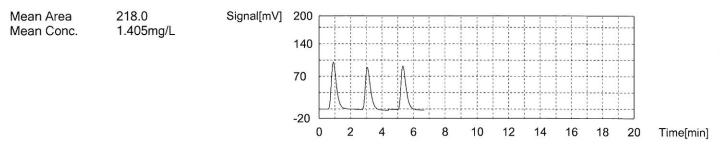
Sample Name: Sample ID:	27431-12
Origin:	toc doc 2 reps method.met
Status Chk. Result	Completed

Туре	Anal.	Manual Dilution	Result	1 W 1
Unknown	NPOC	1.000	NPOC:1.405mg/L	

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	234.8	1.518mg/L	2500uL	1	E	05252016 toc-4 curve.2016_05_2	9/7/2016 9:59:23 PM
2	213.9	1.377mg/L	2500uL	1		05252016 toc-4 curve.2016_05_2	9/7/2016 10:03:48 P
3	222.1	1.433mg/L	2500uL	1		05252016 toc-4 curve.2016_05_2	9/7/2016 10:08:09 P



X

Sample

Sample Name:	27431-13
Sample ID:	
Origin:	toc doc 2 reps method.met
Status	Completed
Chk. Result	Source musicipation of grant data classification

Туре	Anal.	Manual Dilution	Result	
Unknown	NPOC	1.000	NPOC:1.768mg/L	l

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. E Dil.	Ex.	С	al. Curve	Date	e / Time	
1	282.2	1.839mg/L	2500uL	. 1	E 052520	16 too	-4 curve.2016_05	29/7/2016	10:19:21 P	
2	269.4	1.752mg/L	2500uL	. 1	052520	16 too	-4 curve.2016_05_	29/7/2016	10:24:00 P	
3	274.0	1.783mg/L	2500uL	. 1	052520	16 too	-4 curve.2016_05_	29/7/2016	10:28:36 P	
	n Area n Conc.	271.7 1.768			Signal[mV]	200				 -
						140				
						70 [.]	ALAA			

NPOC:2.079mg/L

Co.	m	n	0
Sa	111	μı	e

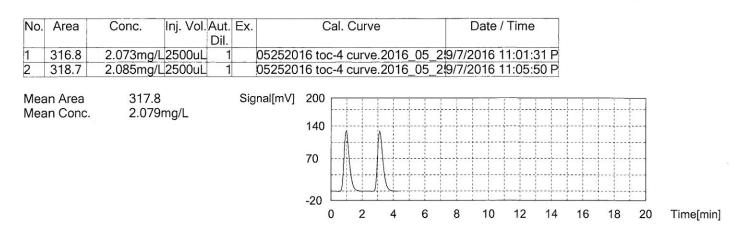
Sample Nam Sample ID:	ne:	ccv 2ppm		
Origin: Status Chk. Result		toc doc 2 rep Completed	os method.met	
Туре	Anal.	Manual Dilution	Result	

1.000

Unknown						
1.	Det					

Anal.: NPOC

NPOC



Sample

dw

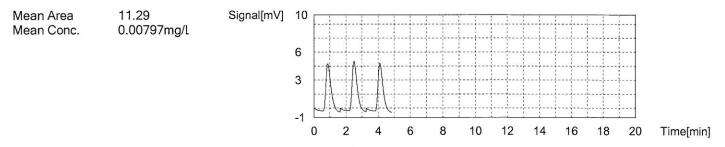
Sample Name	0	ccb		
Sample ID: Origin:		toc doc 2 reps metho	d.met	
Status Chk. Result		Completed		
	Anal.	Manual Dilution	Result	

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.00797mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut.	Ex.	Cal. Curve	Date / Time
				Dil.			
1	11.35	0.00841mg/L	2500uL	1		05252016 toc-4 curve.2016_05	29/7/2016 11:16:30 P
2	11.71	0.01084mg/L	2500uL	1	Е	05252016 toc-4 curve.2016_05_	2,9/7/2016 11:21:25 P
3	11.22	0.00753mg/L	2500uL	1		05252016 toc-4 curve.2016_05_:	2,9/7/2016 11:26:20 P



Sample

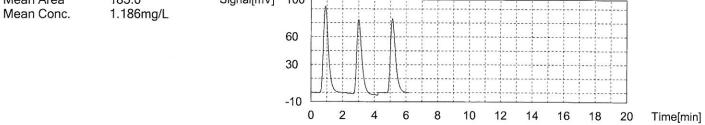
Sample Name: Sample ID:	27431-14
Origin:	toc doc 2 reps method.met
Status	Completed
Chk. Result	

Туре	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.186mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	lnj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	211.0	1.358mg/L	2500uL	1	Е	05252016 toc-4 curve.2016 05	29/7/2016 11:37:11 P
2	186.3	1.191mg/L	2500uL	1		05252016 toc-4 curve.2016 05	2 9/7/2016 11:41:32 P
3	184.9	1.181mg/L	2500uL	. 1		05252016 toc-4 curve.2016_05	2,9/7/2016 11:49:41 P
Mea	an Area	185.6			Sig	nal[mV] 100	



ole

Sample Name Sample ID:	9:	27431	5 5533 .	
Origin: Status Chk. Result		toc do Compl	c 2 reps method.met eted	
Туре	Anal.	Manual Dilution	Result	

Unknown NPOC	1.000	NIDOC:1 599mg
Unknown NPOC	1.000	NPOC

1. Det

Anal.: NPOC

5.76

No. Area	Conc. Inj. Vol. Aut. Ex. Dil.	Cal. Curve	Date / Time		
1 259.7	1.687mg/L2500uL 1 E (05252016 toc-4 curve.2016 05 2	9/8/2016 12:00:35 A		
2 243.3		05252016 toc-4 curve.2016 05 2			
3 247.0		05252016 toc-4 curve.2016 05 2			
Mean Area Mean Conc.	245.2 Sigr 1.588mg/L	nal[mV] 200 140 70			
		$-20 \begin{array}{c} \hline 1 \\ -20 \\ 0 \\ 2 \\ 4 \\ 6 \end{array}$	8 10 12 14	16 18 20 T	ime[min]

Sample

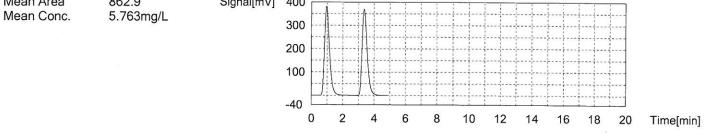
Sample Name: Sample ID:	27431-5 ms
Origin: Status Chk. Result	toc doc 2 reps method.met Completed

Туре	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:5.763mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut.	Ex.	Cal. Curve	Date / Time
				Dil.			
1	867.6	5.795mg/L	2500uL	_ 1		05252016 toc-4 curve.2016_05	2 9/8/2016 12:20:33 A
2	858.2	5.731mg/L	2500uL	. 1		05252016 toc-4 curve.2016 05	2.9/8/2016 12:25:09 A



Sample

Sample Name:	ccv 2ppm
Sample ID:	
Origin:	toc doc 2 reps method.met
Status	Completed
Chk. Result	

Туре	Anal.	Manual Dilution	Result
Jnknown	NPOC	1.000	NPOC:2.047mg/

1. Det

Anal.: NPOC

No. Area	Conc. Inj. Vol.Aut. Dil.	Ex.	Cal. Curve	Date / Time		
1 312.7 2 313.2	2.045mg/L2500uL 1 2.048mg/L2500uL 1			5_2!9/8/2016 12:53:42 A 5_2!9/8/2016 12:58:04 A		
Mean Area Mean Conc.	312.9 2.047mg/L	Signal[mV]	200 140 70 -20			
			0 2 4 6	6 8 10 12 14	16 18 20	Time[min]

Sample

Sample Nam Sample ID:	e:	ccb		
Origin: Status Chk. Result		toc doc 2 reps metho Completed	d.met	
Type	Anal	Manual Dilution	Result	

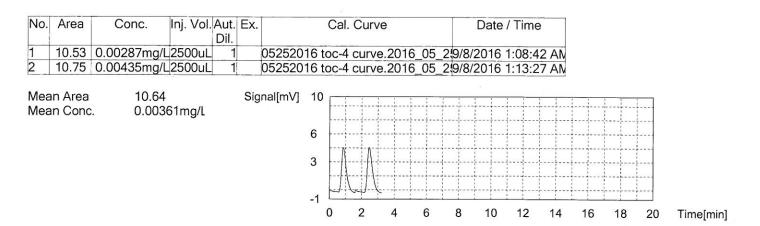
Type	Anai.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.00361mg/L

1. Det

Anal.: NPOC

\$

2016_09_07_001.t32



Work Group

ALPHA ANALYTICAL LABORATORIES, INC.

Alpha WORK GROUP REPORT (wk02)

Sep 08 2016, 11:33 am

Work Group: WG929404 for Department: 7 Wet Chemistry

Created:	07-SEP-16	Due:	Operator:	dw

Sample	Client ID	C Product	Matrix	Stat UA HOLD DUE PR Location
L1627358-01 L1627358-02 L1627358-03 L1627358-04 L1627358-05 L1627358-06 L1627358-07 L1627358-07 L1627358-08 WG929404-1 WG929404-2 WG929404-3	WQ_1B-C_083016_SW_10 WQ_2-C_083016_SW_10 WQ_FTP_083016_SW_10 WQ_EC4_082916_SW_10 CS_15_082916_SW_10 OV02_082916_SW_10 OV02_082916_SW_10 OV02_082916_SW_10_DU Laboratory Method B1 Laboratory Control S Duplicate Sample	S DOC-9060 S DOC-9060 S DOC-9060 S DOC-9060 S DOC-9060 S DOC-9060 S DOC-9060 S DOC-9060 S DOC-9060 S DOC-9060	WATER WATER WATER WATER WATER WATER WATER WATER WATER WATER WATER	DONE U 0927 0908 S0 Vial-D DONE U 0926 0908 S0 Vial-D DONE U 0926 0908 S0 Vial-D DONE U 0926 0908 S0 Vial-D DONE U 0926 0908 S0 Vial-D DONE U 0926 0908 S0 Vial-D DONE U 0926 0908 S0 Vial-D DONE U
WG929404-4	Matrix Spike	S DOC-9060	WATER	DONE U
Comments:				
WG929404-3 L16273 WG929404-4 L16273				

Page 1

Alpha Report





ANALYTICAL REPORT

Lab Number:	L1627358
Client:	AMEC Foster Wheeler E & I, Inc.
	511 Congress Street
	P.O. Box 7050
	Portland, ME 04112-7050
ATTN:	Rod Pendleton
Phone:	(207) 828-3692
Project Name:	USDC PENOBSCOT
Project Number:	3616166052
Report Date:	09/08/16

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NY (11148), CT (PH-0574), NH (2003), NJ NELAP (MA935), RI (LAO00065), ME (MA00086), PA (68-03671), VA (460195), MD (348), IL (200077), NC (666), TX (T104704476), DOD (L2217), USDA (Permit #P-330-11-00240).

Eight Walkup Drive, Westborough, MA 01581-1019 508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



Serial_No:09081612:32

Project Name:USDC PENOBSCOTProject Number:3616166052

 Lab Number:
 L1627358

 Report Date:
 09/08/16

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1627358-01	WQ_1B-C_083016_SW_10	WATER	WINTERPORT, ME	08/30/16 13:25	08/31/16
L1627358-02	WQ_2-C_083016_SW_10	WATER	WINTERPORT, ME	08/30/16 12:20	08/31/16
L1627358-03	WQ_3-L_083016_SW_10	WATER	WINTERPORT, ME	08/30/16 11:20	08/31/16
L1627358-04	WQ_FTP_083016_SW_10	WATER	WINTERPORT, ME	08/30/16 10:20	08/31/16
L1627358-05	WQ_EC4_082916_SW_10	WATER	WINTERPORT, ME	08/29/16 11:50	08/31/16
L1627358-06	CS_15_082916_SW_10	WATER	WINTERPORT, ME	08/29/16 14:00	08/31/16
L1627358-07	OV02_082916_SW_10	WATER	WINTERPORT, ME	08/29/16 17:00	08/31/16
L1627358-08	OV02_082916_SW_10_DUP	WATER	WINTERPORT, ME	08/29/16 17:00	08/31/16



Project Name: USDC PENOBSCOT Project Number: 3616166052
 Lab Number:
 L1627358

 Report Date:
 09/08/16

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

HOLD POLICY

For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Client Services at 800-624-9220 with any questions.



Project Name: USDC PENOBSCOT Project Number: 3616166052

 Lab Number:
 L1627358

 Report Date:
 09/08/16

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Sample Receipt

L1627358-01: The sample for TSS analysis was received with cap unattached, and the sample had spilled into cooler. Results for TSS are not available for this sample.

Dissolved Organic Carbon

The samples were field filtered; a filter blank was not received.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:

Michelle M. Unonig Michelle M. Morris

Title: Technical Director/Representative

Date: 09/08/16



INORGANICS & MISCELLANEOUS



Serial	No:09081612:32
o o nai	

 Lab Number:
 L1627358

 Report Date:
 09/08/16

Project Name:USDC PENOBSCOTProject Number:3616166052

SAMPLE RESULTS

Lab ID:	L1627358-01	Date Collected:	08/30/16 13:25
Client ID:	WQ_1B-C_083016_SW_10	Date Received:	08/31/16
Sample Loc	ation: WINTERPORT, ME	Field Prep:	Field Filtered (DOC)
Matrix:	Water		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - West	borough Lab)								
Dissolved Organic Carbon	6.8		mg/l	1.0	0.04	1	09/07/16 07:17	09/07/16 07:17	1,9060A	DW



Serial_No:09081612:32

Lab Number: L1627358 Report Date: 09/08/16

Project Name:USDC PENOBSCOTProject Number:3616166052

SAMPLE RESULTS

Lab ID:	L1627358-02	Date Collected:	08/30/16 12:20
Client ID:	WQ_2-C_083016_SW_10	Date Received:	08/31/16
Sample Location:	WINTERPORT, ME	Field Prep:	Field Filtered (DOC)
Matrix:	Water		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - West	borough Lal)								
Solids, Total Suspended	6.8		mg/l	5.0	NA	1	-	09/04/16 14:25	121,2540D	SG
Dissolved Organic Carbon	1.3		mg/l	1.0	0.04	1	09/07/16 07:17	09/07/16 07:17	1,9060A	DW



Serial No:09081612:32

Lab Number: L1627358 Report Date: 09/08/16

Project Name:USDC PENOBSCOTProject Number:3616166052

SAMPLE RESULTS

Lab ID:	L1627358-03	Date Collected:	08/30/16 11:20
Client ID:	WQ_3-L_083016_SW_10	Date Received:	08/31/16
Sample Location:	WINTERPORT, ME	Field Prep:	Field Filtered (DOC)
Matrix:	Water		

Parameter	Resul	t Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Wes	tborough L	ab								
Solids, Total Suspended	10.		mg/l	5.0	NA	1	-	09/04/16 14:25	121,2540D	SG
Dissolved Organic Carbon	0.23	J	mg/l	1.0	0.04	1	09/07/16 07:17	09/07/16 07:17	1,9060A	DW

