APPENDIX B-2
2016 WATER QUALITY SAMPLES

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

13 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,

Amy Goodall

Amy Goodall
Project Manager

eurofins | Frontier Global Sciences

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

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	13-Sep-16 13:08

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
OV02_052616_SW_10	1605775-01	Water	26-May-16 13:00	27-May-16 09:50
OV02_052616_SW_10 DISSOLOVED	1605775-02	Water	26-May-16 13:00	27-May-16 09:50
ES-15_052616_SW_10	1605775-03	Water	26-May-16 08:50	27-May-16 09:50
ES-15_052616_SW_10 DISSOLVED	1605775-04	Water	26-May-16 08:50	27-May-16 09:50
WQ-ECH_052616_SW_10	1605775-05	Water	26-May-16 07:05	27-May-16 09:50
WQ-ECH_052616_SW_10 DISSOLVED	1605775-06	Water	26-May-16 07:05	27-May-16 09:50
WQ-FPT_052616_SW_10	1605775-07	Water	26-May-16 08:10	27-May-16 09:50
WQ-FPT_052616_SW_10 DISSOLVED	1605775-08	Water	26-May-16 08:10	27-May-16 09:50
WQ1B-C_052616_SW_10	1605775-09	Water	26-May-16 16:20	27-May-16 09:50
WQ1B-C_052616_SW_10 DISSOLVED	1605775-10	Water	26-May-16 16:20	27-May-16 09:50
WQ1B-C_052616_SW_10_DUP	1605775-11	Water	26-May-16 16:20	27-May-16 09:50
WQ1B-C_052616_SW_10_DUP DISSOLVED	1605775-12	Water	26-May-16 16:20	27-May-16 09:50
WQ3-L_052616_SW_10	1605775-17	Water	26-May-16 15:10	27-May-16 09:50
WQ3-L_052616_SW_10_MD DISSOLVED	1605775-18	Water	26-May-16 15:10	27-May-16 09:50
Laboratory Filter Blank	1605775-19	Water	27-May-16 16:00	27-May-16 09:50

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REVISED REPORT (9/13/16)

Report revised per client request. This revised report has all results reported down to the MDL. The original report had all the results reported to the MRL.

SAMPLE RECEIPT

Samples were received at Eurofins Frontier Global Sciences (EFGS) on 5/27/2016 9:50:00 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

The samples 1605775-09 and 1605775-10 were used as the source QC per the client request. There were no issues with the Total or Dissolved Mercury results. The lab used 1605775-09 as the source QC in the original batch for Methyl Mercury. Due to failing high Blank Spike/Blank Spike Dup; some of the samples from the original batch had to be reprepped including 1605775-09. The second Methyl Mercury prep batch used 1605775-10 as the source QC for the MS/MSD.

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

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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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Sample Receipt Checklist

EFGS Work Order: 1605775

Client: Amec Foster Date & Time Received: 5/27/16 950 Date Labeled: 5/27/16 Labeled By: CSP

Project: Received By: CSP Label Verified By: LM

# of Coolers Received: 1 Samples Arrived By: ✓ Shipping Service ____ Courier ____ Hand ____ Other (Specify:____)

Coolant: ☐ None/Ambient ☑ Loose Ice ☐ Gel Ice ☐ Dry Ice Coolant Required: (Y) / N Temp Blank Used: Y (N) for Cooler(s):____

Notify Project Manager if packages/coolers are received without coolant or with thawed coolant and at a temperature in excess of 6°C. PM notified: Y/N

Cooler Information:	Y/N/NA	Comments
The coolers do not appear to be tampered with:	y	
Custody Seals are present and intact:	y	
Custody seals signed:	y	

TID: 5225	CF: +0.1 °C			Date/time: 5/27/16 950	By: CSP		
Cooler 1: -0.3 °C	w/ CF: -0.2 °C			Cooler 4:	°C	w/ CF:	°C
Cooler 2: °C	w/ CF: °C			Cooler 5:	°C	w/ CF:	°C
Cooler 3: °C	w/ CF: °C			Cooler 6:	°C	w/ CF:	°C

Chain of Custody:	Y/N/NA	Comments
Sample ID/Description:	y	
Date and time of collection:	y	
Sampled by:	y	
Preservation type:	y	
Requested analyses:	y	
Required signatures:	y	
Internal COC required:	NA	

Sample Condition/Integrity:	Y/N/NA	Comments
Sample containers intact/present:	y	
Sample labels are present and legible:	y	
Sample ID on container/bag matches COC:	y	
Correct sample containers used:	y	
Samples received within holding times:	y	
Sample volume sufficient for requested analyses:	y	
Correct preservative used for requested analyses:	y	

Anomalies/Non-conformances (attach additional pages if needed):

1605775

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Chain of Custody Record & Laboratory Analysis Request: Air, Water, Sediments, Plant and Animal Tissue, Hydrocarbon & Other Samples

11720 Northcreek Pkwy N, Suite 400
Bothell, WA 98011
Phone: 425-686-1996
Fax: 425-686-3096
info@frontiergs.com
http://www.frontiergs.com

Client: AMEC FOSTER WHEELER	Contact: DENISE KING
Address: 511 CONGRESS ST PORTLAND, ME 04101	Phone: 5087891738 Fax: 9786926633
	E-mail: denise.king@amecfw.com
Project Name: PENOBSCOT RIVER	Contract/PO:
Report To: DENISE KING	Invoice To: ROD PENDLETON
Address: 271 MILL RD CHELMSFORD, MA 01824	Address: 511 CONGRESS ST PORTLAND, ME 04101
Phone: 5087891738 Fax: 978 692 6633	Phone: (207) 7755401 Fax: (207) 772 4762
E-mail: denise.king@amecfw.com	E-mail: rod.pendleton@amecfw.com

EFGS PM:
Date:
TAT (business days): **20** (std) **15 10 5 4 3 2 24 hrs.**
(For TAT < 10 days, contact PM. Surcharges apply for expedited TAT)
Saturday delivery? ☐ Y ☒ N (If yes, please contact PM)
EDD ☒ Y ☐ N
QA ☐ Standard ☒ High

No.	Engraved Bottle ID	Sample ID	# of Bottles	Matrix	Date & Time	Sampled By	Field Filtered (Y/N)	Field Preserved: HNO_3 HCl BrCl Other (%)	TOTAL Hg 1631e	DISSOLVED Hg 1631e	TOTAL MeHg 1630 H_2SO_4	DISSOLVED MeHg 1630			Comments
1		OV02_052616_SW_10	4	SB	5/26/16 1300	KB	N		X	X	X	X			QA per contract questions to Denise King.
2		ES-15_052616_SW_10	4	SB	5/26/16 0850	↓	N		X	X	X	X			
3		WQ-ECH_052616_SW_10	4	SB	5/26/16 0705	↓	N		X	X	X	X			
4		WQ-FPT_052616_SW_10	4	SB	5/26/16 0810	↓	N		X	X	X	X			
5		WQ16-C_052616_SW_10	4	SB	5/26/16 1620	↓	N		X	X	X	X			
6		WQ16-C_052616_SW_10_DUP	4	↓	↓	↓	N		X	X	X	X			
7		WQ16-C_052616_SW_10_MS	4	↓	↓	↓	N		X	X	X	X			
8		WQ16-C_052616_SW_10_MD	4	↓	↓	↓	N		X	X	X	X			
9		WQ3-L_052616_SW_10	4	SB	5/26/16 1510	↓	N		X	X	X	X			KB - KENDRA BAVOR
10															
11															
12															

For Laboratory Use Only
COC Seal: NA CSP 5/27/16 | Comments: yes
Cooler Temp: NA CSP 5/27/16 -0.2°C
Carrier: FedEx
VTSR: 950
# of Coolers:

Matrix Codes:
FW: Fresh Water
WW: Waste Water
SB: Sea and Brackish Water
SS: Soil and Sediment
TS: Plant and Animal Tissue
HC: Hydrocarbons
TR: Trap
OT: Other

Relinquished By:	Received By:	Received By:
JULIE PALLOZZI	[signature]	
Name: JULIE PALLOZZI	Name: Corbin Powell	Name:
Organization: AMEC FW	Organization: EFGS	Organization:
Date & Time: 5/26/16 1800	Date & Time: 5/27/16 950	Date & Time:

Tracking number: 8756 4740 9194

Sample Disposal:
☐ Return (shipping fees may apply)
☒ Standard Disposal – 30 Days after report
☐ Retain for ____ weeks after report (storage fees may apply)

By signing, you declare that you agree with EFGS' terms and conditions, and that you authorize EFGS to perform the specified analyses.

Customer Approval: Julie Pallozzi Date: 5/26/16

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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	13-Sep-16 13:08

OV02_052616_SW_10

1605775-01

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EFGS-013 Methyl Hg Distillation for Water											
Methyl Mercury (as Mercury)	**0.113**	0.026	0.050	ng/L	1.25	F606147	09-Jun-16	6F10008	10-Jun-16	EPA 1630/FGS-070	
Sample Preparation: EPA 1631E BrCl Oxidation											
Mercury	**2.18**	0.08	0.50	ng/L	1	F605348	27-May-16	6E31005	31-May-16	EPA 1631E	

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Bothell, WA 98011
425.686.1996 Phone
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511 Congress Street	Project Number: 3616166052	**Reported:**
Portland ME, 04101	Project Manager: Rod Pendleton	13-Sep-16 13:08

OV02_052616_SW_10 DISSOLOVED

1605775-02

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EFGS-013 Methyl Hg Distillation for Water											
Methyl Mercury (as Mercury)	**0.078**	0.026	0.050	ng/L	1.25	F606147	09-Jun-16	6F10008	10-Jun-16	EPA 1630/FGS-070	
Sample Preparation: EPA 1631E BrCl Oxidation											
Mercury	**1.63**	0.08	0.50	ng/L	1	F605348	27-May-16	6E31005	31-May-16	EPA 1631E	

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Bothell, WA 98011
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511 Congress Street	Project Number: 3616166052	**Reported:**
Portland ME, 04101	Project Manager: Rod Pendleton	13-Sep-16 13:08

ES-15_052616_SW_10

1605775-03

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EFGS-013 Methyl Hg Distillation for Water											
Methyl Mercury (as Mercury)	**0.037**	0.026	0.050	ng/L	1.25	F606147	09-Jun-16	6F10008	10-Jun-16	EPA 1630/FGS-070	J
Sample Preparation: EPA 1631E BrCl Oxidation											
Mercury	**6.13**	0.08	0.50	ng/L	1	F605348	27-May-16	6E31005	31-May-16	EPA 1631E	

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Bothell, WA 98011
425.686.1996 Phone
425.686.3096 Fax

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511 Congress Street	Project Number: 3616166052	**Reported:**
Portland ME, 04101	Project Manager: Rod Pendleton	13-Sep-16 13:08

ES-15_052616_SW_10 DISSOLVED

1605775-04

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EFGS-013 Methyl Hg Distillation for Water											
Methyl Mercury (as Mercury)	ND	0.026	0.050	ng/L	1.25	F606074	02-Jun-16	6F03016	03-Jun-16	EPA 1630/FGS-070	U
Sample Preparation: EPA 1631E BrCl Oxidation											
Mercury	**0.74**	0.08	0.50	ng/L	1	F605348	27-May-16	6E31005	31-May-16	EPA 1631E	

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Bothell, WA 98011
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Portland ME, 04101	Project Manager: Rod Pendleton	13-Sep-16 13:08

WQ-ECH_052616_SW_10

1605775-05

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EFGS-013 Methyl Hg Distillation for Water											
Methyl Mercury (as Mercury)	ND	0.026	0.050	ng/L	1.25	F606147	09-Jun-16	6F10008	10-Jun-16	EPA 1630/FGS-070	U
Sample Preparation: EPA 1631E BrCl Oxidation											
Mercury	**6.90**	0.08	0.50	ng/L	1	F605348	27-May-16	6E31005	31-May-16	EPA 1631E	

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WQ-ECH_052616_SW_10 DISSOLVED

1605775-06

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EFGS-013 Methyl Hg Distillation for Water											
Methyl Mercury (as Mercury)	ND	0.026	0.050	ng/L	1.25	F606074	02-Jun-16	6F03016	03-Jun-16	EPA 1630/FGS-070	U
Sample Preparation: EPA 1631E BrCl Oxidation											
Mercury	**0.74**	0.08	0.50	ng/L	1	F605348	27-May-16	6E31005	31-May-16	EPA 1631E	

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WQ-FPT_052616_SW_10

1605775-07

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EFGS-013 Methyl Hg Distillation for Water											
Methyl Mercury (as Mercury)	ND	0.026	0.050	ng/L	1.25	F606074	02-Jun-16	6F03016	03-Jun-16	EPA 1630/FGS-070	U
Sample Preparation: EPA 1631E BrCl Oxidation											
Mercury	**1.67**	0.08	0.50	ng/L	1	F605348	27-May-16	6E31005	31-May-16	EPA 1631E	

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WQ-FPT_052616_SW_10 DISSOLVED

1605775-08

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EFGS-013 Methyl Hg Distillation for Water											
Methyl Mercury (as Mercury)	ND	0.026	0.050	ng/L	1.25	F606074	02-Jun-16	6F03016	03-Jun-16	EPA 1630/FGS-070	U
Sample Preparation: EPA 1631E BrCl Oxidation											
Mercury	**0.49**	0.08	0.50	ng/L	1	F605348	27-May-16	6E31005	31-May-16	EPA 1631E	J

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WQ1B-C_052616_SW_10

1605775-09

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EFGS-013 Methyl Hg Distillation for Water											
Methyl Mercury (as Mercury)	**0.214**	0.026	0.050	ng/L	1.25	F606147	09-Jun-16	6F10008	10-Jun-16	EPA 1630/FGS-070	
Sample Preparation: EPA 1631E BrCl Oxidation											
Mercury	**9.85**	0.08	0.50	ng/L	1	F605348	27-May-16	6E31005	31-May-16	EPA 1631E	

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WQ1B-C_052616_SW_10 DISSOLVED

1605775-10

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EFGS-013 Methyl Hg Distillation for Water											
Methyl Mercury (as Mercury)	**0.031**	0.026	0.050	ng/L	1.25	F606147	09-Jun-16	6F10008	10-Jun-16	EPA 1630/FGS-070	J
Sample Preparation: EPA 1631E BrCl Oxidation											
Mercury	**1.35**	0.08	0.50	ng/L	1	F605348	27-May-16	6E31005	31-May-16	EPA 1631E	

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WQ1B-C_052616_SW_10_DUP

1605775-11

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EFGS-013 Methyl Hg Distillation for Water											
Methyl Mercury (as Mercury)	**0.164**	0.026	0.050	ng/L	1.25	F606147	09-Jun-16	6F10008	10-Jun-16	EPA 1630/FGS-070	
Sample Preparation: EPA 1631E BrCl Oxidation											
Mercury	**7.30**	0.08	0.50	ng/L	1	F605348	27-May-16	6E31005	31-May-16	EPA 1631E	

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Portland ME, 04101	Project Manager: Rod Pendleton	13-Sep-16 13:08

WQ1B-C_052616_SW_10_DUP DISSOLVED

1605775-12

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EFGS-013 Methyl Hg Distillation for Water											
Methyl Mercury (as Mercury)	**0.029**	0.026	0.050	ng/L	1.25	F606147	09-Jun-16	6F10008	10-Jun-16	EPA 1630/FGS-070	J
Sample Preparation: EPA 1631E BrCl Oxidation											
Mercury	**1.41**	0.08	0.50	ng/L	1	F605348	27-May-16	6E31005	31-May-16	EPA 1631E	

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425.686.1996 Phone
425.686.3096 Fax

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	13-Sep-16 13:08

WQ3-L_052616_SW_10

1605775-17

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EFGS-013 Methyl Hg Distillation for Water											
Methyl Mercury (as Mercury)	**0.029**	0.026	0.050	ng/L	1.25	F606147	09-Jun-16	6F10008	10-Jun-16	EPA 1630/FGS-070	J
Sample Preparation: EPA 1631E BrCl Oxidation											
Mercury	**3.04**	0.08	0.50	ng/L	1	F605348	27-May-16	6E31005	31-May-16	EPA 1631E	

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Bothell, WA 98011
425.686.1996 Phone
425.686.3096 Fax

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511 Congress Street	Project Number: 3616166052	**Reported:**
Portland ME, 04101	Project Manager: Rod Pendleton	13-Sep-16 13:08

WQ3-L_052616_SW_10_MD DISSOLVED

1605775-18

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EFGS-013 Methyl Hg Distillation for Water											
Methyl Mercury (as Mercury)	ND	0.026	0.050	ng/L	1.25	F606074	02-Jun-16	6F03016	03-Jun-16	EPA 1630/FGS-070	U
Sample Preparation: EPA 1631E BrCl Oxidation											
Mercury	**0.73**	0.08	0.50	ng/L	1	F605348	27-May-16	6E31005	31-May-16	EPA 1631E	

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Bothell, WA 98011
425.686.1996 Phone
425.686.3096 Fax

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	13-Sep-16 13:08

Laboratory Filter Blank

1605775-19

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EFGS-013 Methyl Hg Distillation for Water											
Methyl Mercury (as Mercury)	ND	0.026	0.050	ng/L	1.25	F606074	02-Jun-16	6F03016	03-Jun-16	EPA 1630/FGS-070	U
Sample Preparation: EPA 1631E BrCl Oxidation											
Mercury	ND	0.08	0.50	ng/L	1	F605348	27-May-16	6E31005	31-May-16	EPA 1631E	FB, U

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Bothell, WA 98011
425.686.1996 Phone
425.686.3096 Fax

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511 Congress Street	Project Number: 3616166052	**Reported:**
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Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6E31005 - F605342											
Cal Standard (6E31005-CAL1)					Prepared & Analyzed: 31-May-16						
Mercury	0.52	-		ng/L	0.50100		103				
Cal Standard (6E31005-CAL2)					Prepared & Analyzed: 31-May-16						
Mercury	0.99	-		ng/L	1.0020		98.7				
Cal Standard (6E31005-CAL3)					Prepared & Analyzed: 31-May-16						
Mercury	4.91	-		ng/L	5.0100		98.0				
Cal Standard (6E31005-CAL4)					Prepared & Analyzed: 31-May-16						
Mercury	20.13	-		ng/L	20.040		100				
Cal Standard (6E31005-CAL5)					Prepared & Analyzed: 31-May-16						
Mercury	39.59	-		ng/L	40.080		98.8				
Calibration Blank (6E31005-CCB1)					Prepared & Analyzed: 31-May-16						
Mercury	0.34	-		ng/L							
Calibration Blank (6E31005-CCB2)					Prepared & Analyzed: 31-May-16						
Mercury	0.14	-		ng/L							
Calibration Blank (6E31005-CCB3)					Prepared & Analyzed: 31-May-16						
Mercury	0.09	-		ng/L							
Calibration Blank (6E31005-CCB4)					Prepared & Analyzed: 31-May-16						
Mercury	0.09	-		ng/L							
Calibration Blank (6E31005-CCB5)					Prepared & Analyzed: 31-May-16						
Mercury	0.14	-		ng/L							

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511 Congress Street	Project Number: 3616166052	**Reported:**
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Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6E31005 - F605342											
Calibration Blank (6E31005-CCB6)					Prepared & Analyzed: 31-May-16						
Mercury	0.14	-		ng/L							
Calibration Blank (6E31005-CCB7)					Prepared & Analyzed: 31-May-16						
Mercury	0.15	-		ng/L							
Calibration Blank (6E31005-CCB8)					Prepared & Analyzed: 31-May-16						
Mercury	0.19	-		ng/L							
Calibration Blank (6E31005-CCB9)					Prepared & Analyzed: 31-May-16						
Mercury	0.28	-		ng/L							
Calibration Check (6E31005-CCV1)					Prepared & Analyzed: 31-May-16						
Mercury	5.33	-		ng/L	5.0000		107	77-123			
Calibration Check (6E31005-CCV2)					Prepared & Analyzed: 31-May-16						
Mercury	5.24	-		ng/L	5.0000		105	77-123			
Calibration Check (6E31005-CCV3)					Prepared & Analyzed: 31-May-16						
Mercury	5.13	-		ng/L	5.0000		103	77-123			
Calibration Check (6E31005-CCV4)					Prepared & Analyzed: 31-May-16						
Mercury	5.24	-		ng/L	5.0000		105	77-123			
Calibration Check (6E31005-CCV5)					Prepared & Analyzed: 31-May-16						
Mercury	4.96	-		ng/L	5.0000		99.2	77-123			
Calibration Check (6E31005-CCV6)					Prepared & Analyzed: 31-May-16						
Mercury	5.33	-		ng/L	5.0000		107	77-123			

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Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6E31005 - F605342											
Calibration Check (6E31005-CCV7)					Prepared & Analyzed: 31-May-16						
Mercury	5.54	-		ng/L	5.0000		111	77-123			
Calibration Check (6E31005-CCV8)					Prepared & Analyzed: 31-May-16						
Mercury	5.79	-		ng/L	5.0000		116	77-123			
Calibration Check (6E31005-CCV9)					Prepared & Analyzed: 31-May-16						
Mercury	5.99	-		ng/L	5.0000		120	77-123			
Instrument Blank (6E31005-IBL1)					Prepared & Analyzed: 31-May-16						
Mercury	ND	0.08	0.50	ng/L							U
Instrument Blank (6E31005-IBL2)					Prepared & Analyzed: 31-May-16						
Mercury	ND	0.08	0.50	ng/L							U
Instrument Blank (6E31005-IBL3)					Prepared & Analyzed: 31-May-16						
Mercury	ND	0.08	0.50	ng/L							U
Initial Cal Check (6E31005-ICV1)					Prepared & Analyzed: 31-May-16						
Mercury	5.42	-		ng/L	5.0000		108	77-123			
Batch 6F03016 - F606074											
Cal Standard (6F03016-CAL1)					Prepared & Analyzed: 03-Jun-16						
Methyl Mercury (as Mercury)	0.050	-		ng/L	0.050050		100				
Cal Standard (6F03016-CAL2)					Prepared & Analyzed: 03-Jun-16						
Methyl Mercury (as Mercury)	0.197	-		ng/L	0.20020		98.5				

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511 Congress Street	Project Number: 3616166052	**Reported:**
Portland ME, 04101	Project Manager: Rod Pendleton	13-Sep-16 13:08

Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6F03016 - F606074											
Cal Standard (6F03016-CAL3)					Prepared & Analyzed: 03-Jun-16						
Methyl Mercury (as Mercury)	1.058	-		ng/L	1.0010		106				
Cal Standard (6F03016-CAL4)					Prepared & Analyzed: 03-Jun-16						
Methyl Mercury (as Mercury)	2.011	-		ng/L	2.0020		100				
Cal Standard (6F03016-CAL5)					Prepared & Analyzed: 03-Jun-16						
Methyl Mercury (as Mercury)	3.782	-		ng/L	4.0040		94.4				
Calibration Blank (6F03016-CCB1)					Prepared & Analyzed: 03-Jun-16						
Methyl Mercury (as Mercury)	0.002	-		ng/L							
Calibration Blank (6F03016-CCB2)					Prepared & Analyzed: 03-Jun-16						
Methyl Mercury (as Mercury)	0.010	-		ng/L							
Calibration Blank (6F03016-CCB3)					Prepared & Analyzed: 03-Jun-16						
Methyl Mercury (as Mercury)	0.002	-		ng/L							
Calibration Blank (6F03016-CCB4)					Prepared: 03-Jun-16 Analyzed: 04-Jun-16						
Methyl Mercury (as Mercury)	-0.0009	-		ng/L							U
Calibration Check (6F03016-CCV1)					Prepared & Analyzed: 03-Jun-16						
Methyl Mercury (as Mercury)	0.571	-		ng/L	0.50049		114	67-133			
Calibration Check (6F03016-CCV2)					Prepared & Analyzed: 03-Jun-16						
Methyl Mercury (as Mercury)	0.618	-		ng/L	0.50049		124	67-133			
Calibration Check (6F03016-CCV3)					Prepared & Analyzed: 03-Jun-16						
Methyl Mercury (as Mercury)	0.532	-		ng/L	0.50049		106	67-133			

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Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6F03016 - F606074											
Calibration Check (6F03016-CCV4)					Prepared: 03-Jun-16 Analyzed: 04-Jun-16						
Methyl Mercury (as Mercury)	0.546	-		ng/L	0.50049		109	67-133			
Instrument Blank (6F03016-IBL1)					Prepared & Analyzed: 03-Jun-16						
Methyl Mercury (as Mercury)	ND	0.021	0.040	ng/L							U
Initial Cal Blank (6F03016-ICB1)					Prepared & Analyzed: 03-Jun-16						
Methyl Mercury (as Mercury)	0.004	-		ng/L							
Initial Cal Check (6F03016-ICV1)					Prepared & Analyzed: 03-Jun-16						
Methyl Mercury (as Mercury)	0.525	-		ng/L	0.50049		105	67-133			
Batch 6F10008 - F606147											
Cal Standard (6F10008-CAL1)					Prepared & Analyzed: 10-Jun-16						
Methyl Mercury (as Mercury)	0.046	-		ng/L	0.050050		91.9				
Cal Standard (6F10008-CAL2)					Prepared & Analyzed: 10-Jun-16						
Methyl Mercury (as Mercury)	0.175	-		ng/L	0.20020		87.6				
Cal Standard (6F10008-CAL3)					Prepared & Analyzed: 10-Jun-16						
Methyl Mercury (as Mercury)	0.975	-		ng/L	1.0010		97.4				
Cal Standard (6F10008-CAL4)					Prepared & Analyzed: 10-Jun-16						
Methyl Mercury (as Mercury)	2.179	-		ng/L	2.0020		109				
Cal Standard (6F10008-CAL5)					Prepared & Analyzed: 10-Jun-16						
Methyl Mercury (as Mercury)	4.552	-		ng/L	4.0040		114				

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Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6F10008 - F606147											
Calibration Blank (6F10008-CCB1)					Prepared & Analyzed: 10-Jun-16						
Methyl Mercury (as Mercury)	0.007	-		ng/L							
Calibration Blank (6F10008-CCB2)					Prepared & Analyzed: 10-Jun-16						
Methyl Mercury (as Mercury)	0.006	-		ng/L							
Calibration Blank (6F10008-CCB3)					Prepared & Analyzed: 10-Jun-16						
Methyl Mercury (as Mercury)	0.004	-		ng/L							
Calibration Check (6F10008-CCV1)					Prepared & Analyzed: 10-Jun-16						
Methyl Mercury (as Mercury)	0.370	-		ng/L	0.50049		74.0	67-133			
Calibration Check (6F10008-CCV2)					Prepared & Analyzed: 10-Jun-16						
Methyl Mercury (as Mercury)	0.373	-		ng/L	0.50049		74.6	67-133			
Calibration Check (6F10008-CCV3)					Prepared & Analyzed: 10-Jun-16						
Methyl Mercury (as Mercury)	0.390	-		ng/L	0.50049		78.0	67-133			
Instrument Blank (6F10008-IBL1)					Prepared & Analyzed: 10-Jun-16						
Methyl Mercury (as Mercury)	ND	0.021	0.040	ng/L							U
Initial Cal Blank (6F10008-ICB1)					Prepared & Analyzed: 10-Jun-16						
Methyl Mercury (as Mercury)	0.014	-		ng/L							
Initial Cal Check (6F10008-ICV1)					Prepared & Analyzed: 10-Jun-16						
Methyl Mercury (as Mercury)	0.534	-		ng/L	0.50049		107	67-133			
Batch F605348 - EPA 1631E BrCl Oxidation											
Blank (F605348-BLK1)					Prepared & Analyzed: 31-May-16						
Mercury	0.19	0.08	0.50	ng/L							J

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Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch F605348 - EPA 1631E BrCl Oxidation											
Blank (F605348-BLK2)					Prepared & Analyzed: 31-May-16						
Mercury	0.21	0.08	0.50	ng/L							J
Blank (F605348-BLK3)					Prepared & Analyzed: 31-May-16						
Mercury	0.09	0.08	0.50	ng/L							J
LCS (F605348-BS1)					Prepared & Analyzed: 31-May-16						
Mercury	15.82	0.08	0.50	ng/L	15.679		101	80-120			
LCS Dup (F605348-BSD1)					Prepared & Analyzed: 31-May-16						
Mercury	15.79	0.08	0.50	ng/L	15.679		101	80-120	0.190	24	
Duplicate (F605348-DUP1)		**Source: 1605775-03**			Prepared & Analyzed: 31-May-16						
Mercury	6.18	0.08	0.50	ng/L		6.13			0.658	24	
Matrix Spike (F605348-MS1)		**Source: 1605775-10**			Prepared & Analyzed: 31-May-16						
Mercury	6.74	0.08	0.50	ng/L	5.0601	1.35	106	71-125			
Matrix Spike (F605348-MS2)		**Source: 1605775-09**			Prepared & Analyzed: 31-May-16						
Mercury	31.74	0.08	0.50	ng/L	20.240	9.85	108	71-125			
Matrix Spike Dup (F605348-MSD1)		**Source: 1605775-10**			Prepared & Analyzed: 31-May-16						
Mercury	6.86	0.08	0.50	ng/L	5.0601	1.35	109	71-125	1.77	24	
Matrix Spike Dup (F605348-MSD2)		**Source: 1605775-09**			Prepared & Analyzed: 31-May-16						
Mercury	31.54	0.08	0.50	ng/L	20.240	9.85	107	71-125	0.641	24	
Batch F606074 - EFGS-013 Methyl Hg Distillation for Water											
Blank (F606074-BLK1)					Prepared: 02-Jun-16 Analyzed: 03-Jun-16						
Methyl Mercury (as Mercury)	ND	0.026	0.050	ng/L							U

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Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch F606074 - EFGS-013 Methyl Hg Distillation for Water											
Blank (F606074-BLK2)					Prepared: 02-Jun-16 Analyzed: 03-Jun-16						
Methyl Mercury (as Mercury)	ND	0.026	0.050	ng/L							U
Blank (F606074-BLK3)					Prepared: 02-Jun-16 Analyzed: 03-Jun-16						
Methyl Mercury (as Mercury)	ND	0.026	0.050	ng/L							U
LCS (F606074-BS1)					Prepared: 02-Jun-16 Analyzed: 03-Jun-16						
Methyl Mercury (as Mercury)	1.584	0.026	0.050	ng/L	1.0010		158	70-130			QM-12
LCS Dup (F606074-BSD1)					Prepared: 02-Jun-16 Analyzed: 03-Jun-16						
Methyl Mercury (as Mercury)	1.570	0.026	0.050	ng/L	1.0010		157	70-130	0.905	25	QM-12
Duplicate (F606074-DUP1)		**Source: 1605389-03**			Prepared: 02-Jun-16 Analyzed: 03-Jun-16						
Methyl Mercury (as Mercury)	0.061	0.026	0.050	ng/L		0.063			2.79	35	
Matrix Spike (F606074-MS1)		**Source: 1605389-05**			Prepared: 02-Jun-16 Analyzed: 03-Jun-16						
Methyl Mercury (as Mercury)	2.149	0.026	0.050	ng/L	1.0010	0.505	164	65-130			QM-07
Matrix Spike (F606074-MS2)		**Source: 1605775-09**			Prepared: 02-Jun-16 Analyzed: 03-Jun-16						
Methyl Mercury (as Mercury)	2.089	0.026	0.050	ng/L	1.0010	0.387	170	65-130			QM-07
Matrix Spike Dup (F606074-MSD1)		**Source: 1605389-05**			Prepared: 02-Jun-16 Analyzed: 03-Jun-16						
Methyl Mercury (as Mercury)	2.481	0.026	0.050	ng/L	1.0010	0.505	197	65-130	14.3	35	QM-07
Matrix Spike Dup (F606074-MSD2)		**Source: 1605775-09**			Prepared: 02-Jun-16 Analyzed: 03-Jun-16						
Methyl Mercury (as Mercury)	2.078	0.026	0.050	ng/L	1.0010	0.387	169	65-130	0.507	35	QM-07
Batch F606147 - EFGS-013 Methyl Hg Distillation for Water											
Blank (F606147-BLK1)					Prepared: 09-Jun-16 Analyzed: 10-Jun-16						
Methyl Mercury (as Mercury)	0.039	0.026	0.050	ng/L							J

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Bothell, WA 98011
425.686.1996 Phone
425.686.3096 Fax

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511 Congress Street	Project Number: 3616166052	**Reported:**
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Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch F606147 - EFGS-013 Methyl Hg Distillation for Water											
Blank (F606147-BLK2)					Prepared: 09-Jun-16 Analyzed: 10-Jun-16						
Methyl Mercury (as Mercury)	0.032	0.026	0.050	ng/L							J
Blank (F606147-BLK3)					Prepared: 09-Jun-16 Analyzed: 10-Jun-16						
Methyl Mercury (as Mercury)	ND	0.026	0.050	ng/L							U
LCS (F606147-BS1)					Prepared: 09-Jun-16 Analyzed: 10-Jun-16						
Methyl Mercury (as Mercury)	0.826	0.026	0.050	ng/L	1.0010		82.6	70-130			
LCS Dup (F606147-BSD1)					Prepared: 09-Jun-16 Analyzed: 10-Jun-16						
Methyl Mercury (as Mercury)	0.709	0.026	0.050	ng/L	1.0010		70.9	70-130	15.2	25	
Duplicate (F606147-DUP1)		**Source: 1605688-02**			Prepared: 09-Jun-16 Analyzed: 10-Jun-16						
Methyl Mercury (as Mercury)	0.725	0.026	0.050	ng/L		1.157			46.0	35	QR-07
Matrix Spike (F606147-MS1)		**Source: 1605775-05RE1**			Prepared: 09-Jun-16 Analyzed: 10-Jun-16						
Methyl Mercury (as Mercury)	0.799	0.026	0.050	ng/L	1.0010	ND	79.8	65-130			
Matrix Spike (F606147-MS2)		**Source: 1605775-10**			Prepared: 09-Jun-16 Analyzed: 10-Jun-16						
Methyl Mercury (as Mercury)	0.945	0.026	0.050	ng/L	1.0010	0.031	91.3	65-130			
Matrix Spike Dup (F606147-MSD1)		**Source: 1605775-05RE1**			Prepared: 09-Jun-16 Analyzed: 10-Jun-16						
Methyl Mercury (as Mercury)	0.933	0.026	0.050	ng/L	1.0010	ND	93.2	65-130	15.5	35	
Matrix Spike Dup (F606147-MSD2)		**Source: 1605775-10**			Prepared: 09-Jun-16 Analyzed: 10-Jun-16						
Methyl Mercury (as Mercury)	1.059	0.026	0.050	ng/L	1.0010	0.031	103	65-130	11.4	35	

Eurofins Frontier Global Sciences, Inc.

The results in this report only apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Amy Goodall, Project Manager

eurofins | Frontier Global Sciences

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

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	13-Sep-16 13:08

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.
QR-07	The RPD/RSD value for the matrix duplicate/triplicate was outside of acceptance limits. Batch QC acceptable based on MS/MSD and/or LCS/LCSD RPD values within control limits.
QM-12	Continuing calibration verification (CCV) and/or blank spike/blank spike duplicate (BS/BSD) recoveries above upper control limits. All reported sample concentrations were below the reporting limit.
QM-07	The spike recovery was outside control limits for the MS and/or MSD. The batch was accepted based on LCS and LCSD recoveries within control limits and, when analysis permits, acceptable AS/ASD.
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.
QB-04	The blank was preserved to 2% 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.
E-01	Sample was preceded by a sample exceeding the calibration curve and was reanalyzed for confirmation.
E	The concentration indicated for this analyte is an estimated value above the calibration range of the instrument. This value is considered an estimate (CLP E-flag).
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

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Analysis Datasheet for Total Mercury

Date of Analysis: May 31, 2016 Analyst: DM2

Instrument #: Hg2600-3 Units ng/L

LIMS Sequence #: 6E31005, 6E31004

Calibration Statistics:

LabNumber	n	True Val	Area	Uncorrected Response Factor	Corrected Peak Height	Corrected Response Factor	% Recovery
SEQ-CAL1	1	0.50 ng/L	54.25 units	108.50	51.00 units	102.00	103.3 %Rec
SEQ-CAL2	1	1.00 ng/L	100.93 units	100.93	97.68 units	97.68	98.9 %Rec
SEQ-CAL3	1	5.00 ng/L	488.28 units	97.66	485.04 units	97.01	98.2 %Rec
SEQ-CAL4	1	20.00 ng/L	1991.60 units	99.58	1988.35 units	99.42	100.7 %Rec
SEQ-CAL5	1	40.00 ng/L	3913.48 units	97.84	3910.24 units	97.76	99.0 %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
98.77	+/- 2.01	2.0% RSD	100.90

Blanks:

LabNumber	n	Mean	Std Dev	Mean (ng/L)	Std Dev (ng/L)
SEQ-IBL	3	3.25 units	±2.84	0.03 ng/L	±0.03

Preparation Blanks

Sample Type	Batch ID	n	Mean	Std Dev
BLK	1	3	50.437 ng/L	±12.160
BLK	2	3	0.141 ng/L	±0.092
BLK	3	1	0.053 ng/L	
BLK	4	3	0.163 ng/L	±0.062
BLK	5	1	0.328 ng/L	
BLK	6	0	0.000 ng/L	

QUALITY ASSURANCE

PEER - REVIEWED

INITIALS: 5/31/16

Instrument	Analyst	Sample Type	LabNumber	Dilution	Analyzed	FileID	RunEnd	Uncorrected Response	Batch ID	No PB Correction?	RESP	InitialResult	FinalResult	InitialUnits	Comments
Hg2600-3	DM2	CAL	SEQ-IBL1	1	5/31/2016 5:52:40	42938-1.RAW	5:52:40 AM	4.51			1.3	0.013	0.013	ng/L	
Hg2600-3	DM2	CAL	SEQ-IBL2	1	5/31/2016 5:56:48	42939-1.RAW	5:56:48 AM	0.00			-3.2	-0.033	-0.033	ng/L	
Hg2600-3	DM2	CAL	SEQ-IBL3	1	5/31/2016 6:00:57	42940-1.RAW	6:00:57 AM	5.23			2.0	0.020	0.020	ng/L	
Hg2600-3	DM2	CAL	SEQ-CAL1	1	5/31/2016 6:05:05	42941-1.RAW	6:05:05 AM	54.25			51.0	0.516	0.516	ng/L	
Hg2600-3	DM2	CAL	SEQ-CAL2	1	5/31/2016 6:09:13	42942-1.RAW	6:09:13 AM	100.93			97.7	0.989	0.989	ng/L	
Hg2600-3	DM2	CAL	SEQ-CAL3	1	5/31/2016 6:13:22	42943-1.RAW	6:13:22 AM	488.28			485.0	4.911	4.911	ng/L	
Hg2600-3	DM2	CAL	SEQ-CAL4	1	5/31/2016 6:17:30	42944-1.RAW	6:17:30 AM	1991.60			1988.4	20.130	20.130	ng/L	
Hg2600-3	DM2	CAL	SEQ-CAL5	1	5/31/2016 6:21:39	42945-1.RAW	6:21:39 AM	3913.48			3910.2	39.588	39.588	ng/L	
Hg2600-3	DM2	CAL	SEQ-ICV1	1	5/31/2016 6:25:47	42946-1.RAW	6:25:47 AM	538.36			535.1	5.418	5.418	ng/L	
Hg2600-3	DM2	SAM	EFGS05427 20NG	100	5/31/2016 6:29:56	42947-1.RAW	6:29:56 AM	492.61		X	489.4	4.954	495.438	ng/L	
Hg2600-3	DM2	SAM	EFGS TV 20NG	100	5/31/2016 6:34:04	42948-1.RAW	6:34:04 AM	497.34		X	494.1	5.002	500.226	ng/L	
Hg2600-3	DM2	BLK	F605269-BLK7	100	5/31/2016 6:38:13	42949-1.RAW	6:38:13 AM	66.37	1		63.1	0.639	63.907	ng/L	
Hg2600-3	DM2	BLK	F605269-BLK8	100	5/31/2016 6:42:21	42950-1.RAW	6:42:21 AM	49.80	1		46.6	0.471	47.134	ng/L	
Hg2600-3	DM2	BLK	F605269-BLK9	100	5/31/2016 6:46:29	42951-1.RAW	6:46:29 AM	43.02	1		39.8	0.403	40.269	ng/L	
Hg2600-3	DM2	SAM	F605269-BS2	100	5/31/2016 6:50:38	42952-1.RAW	6:50:38 AM	1992.65	1		1989.4	19.637	1963.675	ng/L	
Hg2600-3	DM2	SAM	F605269-BSD2	100	5/31/2016 6:54:46	42953-1.RAW	6:54:46 AM	2105.80	1		2102.6	20.782	2078.233	ng/L	
Hg2600-3	DM2	SAM	1605524-01RE1	100	5/31/2016 6:58:55	42954-1.RAW	6:58:55 AM	292.46	1		289.2	2.424	242.367	ng/L	
Hg2600-3	DM2	SAM	1605524-02RE2	100	5/31/2016 7:03:03	42955-1.RAW	7:03:03 AM	14385.01	1		14381.8	145.100	14509.956	ng/L	
Hg2600-3	DM2	SAM	1605524-03RE2	100	5/31/2016 7:07:12	42956-1.RAW	7:07:12 AM	259.49	1		256.2	2.090	208.992	ng/L	
Hg2600-3	DM2	CAL	SEQ-CCV1	1	5/31/2016 7:11:20	42957-1.RAW	7:11:20 AM	529.83			526.6	5.331	5.331	ng/L	
Hg2600-3	DM2	CAL	SEQ-CCB1	1	5/31/2016 7:15:29	42958-1.RAW	7:15:29 AM	36.96			33.7	0.341	0.341	ng/L	
Hg2600-3	DM2	SAM	1605524-04RE1	100	5/31/2016 7:19:37	42959-1.RAW	7:19:37 AM	850.03	1		846.8	8.069	806.860	ng/L	
Hg2600-3	DM2	SAM	1605524-05RE1	100	5/31/2016 7:23:45	42960-1.RAW	7:23:45 AM	188.17	1		184.9	1.368	136.779	ng/L	
Hg2600-3	DM2	SAM	1605524-06RE1	100	5/31/2016 7:27:54	42961-1.RAW	7:27:54 AM	158.55	1		155.3	1.068	106.798	ng/L	
Hg2600-3	DM2	SAM	F605269-DUP2	100	5/31/2016 7:32:02	42962-1.RAW	7:32:02 AM	281.13	1		277.9	2.309	230.897	ng/L	
Hg2600-3	DM2	SAM	F605269-MS2	100	5/31/2016 7:36:11	42963-1.RAW	7:36:11 AM	1306.68	1		1303.4	12.692	1269.185	ng/L	
Hg2600-3	DM2	SAM	F605269-MSD2	100	5/31/2016 7:40:19	42964-1.RAW	7:40:19 AM	1296.25	1		1293.0	12.586	1258.629	ng/L	
Hg2600-3	DM2	SAM	1605524-02RE3	500	5/31/2016 7:44:28	42965-1.RAW	7:44:28 AM	2894.99	1		2891.7	29.176	14587.869	ng/L	
Hg2600-3	DM2	SAM	1605524-03RE3	100	5/31/2016 7:48:36	42966-1.RAW	7:48:36 AM	210.30	1		207.1	1.592	159.185	ng/L	
Hg2600-3	DM2	BLK	F605342-BLK1	1	5/31/2016 7:52:44	42967-1.RAW	7:52:44 AM	26.92	2		23.7	0.240	0.240	ng/L	
Hg2600-3	DM2	BLK	F605342-BLK2	1	5/31/2016 7:56:53	42968-1.RAW	7:56:53 AM	15.56	2		12.3	0.125	0.125	ng/L	
Hg2600-3	DM2	CAL	SEQ-CCV2	1	5/31/2016 8:01:01	42969-1.RAW	8:01:01 AM	520.38			517.1	5.236	5.236	ng/L	
Hg2600-3	DM2	CAL	SEQ-CCB2	1	5/31/2016 8:05:10	42970-1.RAW	8:05:10 AM	17.36			14.1	0.143	0.143	ng/L	
Hg2600-3	DM2	BLK	F605342-BLK3	1	5/31/2016 8:09:18	42971-1.RAW	8:09:18 AM	9.00	2		5.7	0.058	0.058	ng/L	
Hg2600-3	DM2	BLK	F605342-BLK4	1	5/31/2016 8:13:27	42972-1.RAW	8:13:27 AM	20.69		X	17.4	0.177	0.177	ng/L	
Hg2600-3	DM2	BLK	F605342-BLK5	1	5/31/2016 8:17:35	42973-1.RAW	8:17:35 AM	8.47	3		5.2	0.053	0.053	ng/L	
Hg2600-3	DM2	SAM	F605342-BS1	1	5/31/2016 8:21:44	42974-1.RAW	8:21:44 AM	1532.80	2		1529.6	15.345	15.345	ng/L	
Hg2600-3	DM2	SAM	F605342-BSD1	1	5/31/2016 8:25:52	42975-1.RAW	8:25:52 AM	1554.68	2		1551.4	15.566	15.566	ng/L	
Hg2600-3	DM2	SAM	1605687-01	1	5/31/2016 8:30:00	42976-1.RAW	8:30:00 AM	348.61	2		345.6	3.358	3.358	ng/L	
Hg2600-3	DM2	SAM	1605687-02	1	5/31/2016 8:34:09	42977-1.RAW	8:34:09 AM	14.75	2		11.5	-0.024	-0.024	ng/L	
Hg2600-3	DM2	SAM	1605687-03	1	5/31/2016 8:38:17	42978-1.RAW	8:38:17 AM	1265.22	2		1262.0	12.636	12.636	ng/L	
Hg2600-3	DM2	SAM	1605687-04	1	5/31/2016 8:42:26	42979-1.RAW	8:42:26 AM	22.60	2		19.4	0.055	0.055	ng/L	
Hg2600-3	DM2	SAM	1605687-06	1	5/31/2016 8:46:34	42980-1.RAW	8:46:34 AM	15.42	2		12.2	-0.018	-0.018	ng/L	
Hg2600-3	DM2	CAL	SEQ-CCV3	1	5/31/2016 8:50:43	42981-1.RAW	8:50:43 AM	510.26			507.0	5.133	5.133	ng/L	
Hg2600-3	DM2	CAL	SEQ-CCB3	1	5/31/2016 8:54:51	42982-1.RAW	8:54:51 AM	11.67			8.4	0.085	0.085	ng/L	
Hg2600-3	DM2	CAL	SEQ-CCV4	1	5/31/2016 9:37:45	42983-1.RAW	9:37:45 AM	520.63			517.4	5.238	5.238	ng/L	
Hg2600-3	DM2	CAL	SEQ-CCB4	1	5/31/2016 9:41:53	42984-1.RAW	9:41:53 AM	12.50			9.3	0.094	0.094	ng/L	
Hg2600-3	DM2	SAM	1605688-01	10	5/31/2016 9:46:02	42985-1.RAW	9:46:02 AM	593.15	3		589.9	5.967	59.670	ng/L	
Hg2600-3	DM2	SAM	1605688-03	1	5/31/2016 9:50:10	42986-1.RAW	9:50:10 AM	40.37	2		37.1	0.235	0.235	ng/L	
Hg2600-3	DM2	SAM	1605688-05	1	5/31/2016 9:54:18	42987-1.RAW	9:54:18 AM	16064.01	2		16060.8	162.462	162.462	ng/L	
Hg2600-3	DM2	SAM	1605688-07	1	5/31/2016 9:58:27	42988-1.RAW	9:58:27 AM	164.17	2		160.9	1.488	1.488	ng/L	
Hg2600-3	DM2	SAM	1605731-03	1	5/31/2016 10:02:35	42989-1.RAW	10:02:35 AM	97.12	2		93.9	0.809	0.809	ng/L	
Hg2600-3	DM2	SAM	1605731-07	1	5/31/2016 10:06:44	42990-1.RAW	10:06:44 AM	47.63	2		44.4	0.308	0.308	ng/L	
Hg2600-3	DM2	SAM	F605342-DUP1	1	5/31/2016 10:10:52	42991-1.RAW	10:10:52 AM	357.51	2		354.3	3.446	3.446	ng/L	
Hg2600-3	DM2	SAM	F605342-MS1	1	5/31/2016 10:15:01	42992-1.RAW	10:15:01 AM	1118.97	2		1115.7	11.155	11.155	ng/L	
Hg2600-3	DM2	SAM	F605342-MSD1	1	5/31/2016 10:19:09	42993-1.RAW	10:19:09 AM	1029.77	2		1026.5	10.252	10.252	ng/L	
Hg2600-3	DM2	SAM	F605342-MS2	10	5/31/2016 10:23:18	42994-1.RAW	10:23:18 AM	2039.37	3		2036.1	20.609	206.089	ng/L	

Instrument	Analyst	Sample Type	LabNumber	Dilution	Analyzed	FileID	RunEnd	Uncorrected Response	Batch ID	No PB Correction?	RESP	InitialResult	FinalResult	InitialUnits	Comments
Hg2600-3	DM2	CAL	SEQ-CCV5	1	5/31/2016 10:27:26	42995-1.RAW	10:27:26 AM	493.41			490.2	4.962	4.962	ng/L	
Hg2600-3	DM2	CAL	SEQ-CCB5	1	5/31/2016 10:31:34	42996-1.RAW	10:31:34 AM	17.52			14.3	0.144	0.144	ng/L	
Hg2600-3	DM2	SAM	F605342-MSD2	10	5/31/2016 10:35:43	42997-1.RAW	10:35:43 AM	2481.69	3		2478.4	25.087	250.870	ng/L	
Hg2600-3	DM2	SAM	1605688-05RE1	10	5/31/2016 10:39:51	42998-1.RAW	10:39:51 AM	1874.93	2		1871.7	18.935	189.352	ng/L	
Hg2600-3	DM2	SAM	1605688-07RE1	1	5/31/2016 10:44:00	42999-1.RAW	10:44:00 AM	73.91	2		70.7	0.575	0.575	ng/L	
Hg2600-3	DM2	BLK	F605348-BLK1	1	5/31/2016 10:48:08	43000-1.RAW	10:48:08 AM	22.23	4		19.0	0.192	0.192	ng/L	
Hg2600-3	DM2	BLK	F605348-BLK2	1	5/31/2016 10:52:17	43001-1.RAW	10:52:17 AM	23.59	4		20.3	0.206	0.206	ng/L	
Hg2600-3	DM2	BLK	F605348-BLK3	1	5/31/2016 10:56:25	43002-1.RAW	10:56:25 AM	12.33	4		9.1	0.092	0.092	ng/L	
Hg2600-3	DM2	SAM	F605348-BS1	1	5/31/2016 11:00:34	43003-1.RAW	11:00:34 AM	1566.12	4		1562.9	15.660	15.660	ng/L	
Hg2600-3	DM2	SAM	F605348-BSD1	1	5/31/2016 11:04:42	43004-1.RAW	11:04:42 AM	1563.18	4		1559.9	15.630	15.630	ng/L	
Hg2600-3	DM2	SAM	1605775-01	1	5/31/2016 11:08:50	43005-1.RAW	11:08:50 AM	232.1195572	4		228.9	2.154	2.154	ng/L	
Hg2600-3	DM2	SAM	1605775-02	1	5/31/2016 11:12:57	43006-1.RAW	11:12:57 AM	179.03	4		175.8	1.616	1.616	ng/L	
Hg2600-3	DM2	CAL	SEQ-CCV6	1	5/31/2016 11:17:06	43007-1.RAW	11:17:06 AM	529.42			526.2	5.327	5.327	ng/L	
Hg2600-3	DM2	CAL	SEQ-CCB6	1	5/31/2016 11:21:14	43008-1.RAW	11:21:14 AM	17.52			14.3	0.144	0.144	ng/L	
Hg2600-3	DM2	SAM	1605775-03	1	5/31/2016 11:25:22	43009-1.RAW	11:25:22 AM	619.34	4		616.1	6.074	6.074	ng/L	
Hg2600-3	DM2	SAM	1605775-04	1	5/31/2016 11:29:31	43010-1.RAW	11:29:31 AM	91.85	4		88.6	0.734	0.734	ng/L	
Hg2600-3	DM2	SAM	1605775-05	1	5/31/2016 11:33:39	43011-1.RAW	11:33:39 AM	694.47	4		691.2	6.835	6.835	ng/L	
Hg2600-3	DM2	SAM	1605775-06	1	5/31/2016 11:37:47	43012-1.RAW	11:37:47 AM	91.38	4		88.1	0.729	0.729	ng/L	
Hg2600-3	DM2	SAM	1605775-07	1	5/31/2016 11:41:56	43013-1.RAW	11:41:56 AM	182.65	4		179.4	1.653	1.653	ng/L	
Hg2600-3	DM2	SAM	1605775-08	1	5/31/2016 11:46:04	43014-1.RAW	11:46:04 AM	67.19	4		63.9	0.484	0.484	ng/L	
Hg2600-3	DM2	SAM	1605775-09	1	5/31/2016 11:50:13	43015-1.RAW	11:50:13 AM	982.24	4		979.0	9.748	9.748	ng/L	
Hg2600-3	DM2	SAM	1605775-10	1	5/31/2016 11:54:21	43016-1.RAW	11:54:21 AM	151.77	4		148.5	1.340	1.340	ng/L	
Hg2600-3	DM2	SAM	1605775-11	1	5/31/2016 11:58:30	43017-1.RAW	11:58:30 AM	732.97	4		729.7	7.225	7.225	ng/L	
Hg2600-3	DM2	SAM	1605775-12	1	5/31/2016 12:02:38	43018-1.RAW	12:02:38 PM	156.95	4		153.7	1.393	1.393	ng/L	
Hg2600-3	DM2	CAL	SEQ-CCV7	1	5/31/2016 12:06:46	43019-1.RAW	12:06:46 PM	550.94			547.7	5.545	5.545	ng/L	
Hg2600-3	DM2	CAL	SEQ-CCB7	1	5/31/2016 12:10:55	43020-1.RAW	12:10:55 PM	17.80			14.6	0.147	0.147	ng/L	
Hg2600-3	DM2	SAM	1605775-17	1	5/31/2016 12:15:03	43021-1.RAW	12:15:03 PM	316.25	4		313.0	3.006	3.006	ng/L	
Hg2600-3	DM2	SAM	1605775-18	1	5/31/2016 12:19:12	43022-1.RAW	12:19:12 PM	91.05	4		87.8	0.726	0.726	ng/L	
Hg2600-3	DM2	SAM	1605775-19	1	5/31/2016 12:23:20	43023-1.RAW	12:23:20 PM	4.80	4		1.5	-0.148	-0.148	ng/L	
Hg2600-3	DM2	SAM	1605778-01	1	5/31/2016 12:27:28	43024-1.RAW	12:27:28 PM	3432.07	4		3428.8	34.551	34.551	ng/L	
Hg2600-3	DM2	SAM	1605778-02	1	5/31/2016 12:31:37	43025-1.RAW	12:31:37 PM	158.16	4		154.9	1.405	1.405	ng/L	
Hg2600-3	DM2	SAM	1605778-03	1	5/31/2016 12:35:45	43026-1.RAW	12:35:45 PM	18.34	4		15.1	-0.011	-0.011	ng/L	
Hg2600-3	DM2	SAM	F605348-DUP1	1	5/31/2016 12:39:54	43027-1.RAW	12:39:54 PM	623.30	4		620.1	6.114	6.114	ng/L	
Hg2600-3	DM2	SAM	F605348-MS1	1	5/31/2016 12:44:02	43028-1.RAW	12:44:02 PM	678.21	4		675.0	6.670	6.670	ng/L	
Hg2600-3	DM2	SAM	F605348-MSD1	1	5/31/2016 12:48:10	43029-1.RAW	12:48:10 PM	689.96	4		686.7	6.789	6.789	ng/L	
Hg2600-3	DM2	SAM	F605348-MS2	1	5/31/2016 12:52:19	43030-1.RAW	12:52:19 PM	3123.42	4		3120.2	31.426	31.426	ng/L	
Hg2600-3	DM2	CAL	SEQ-CCV8	1	5/31/2016 12:56:27	43031-1.RAW	12:56:27 PM	575.48			572.2	5.793	5.793	ng/L	
Hg2600-3	DM2	CAL	SEQ-CCB8	1	5/31/2016 13:00:36	43032-1.RAW	1:00:36 PM	21.77			18.5	0.187	0.187	ng/L	
Hg2600-3	DM2	SAM	F605348-MSD2	1	5/31/2016 13:04:44	43033-1.RAW	1:04:44 PM	3103.61	4		3100.4	31.225	31.225	ng/L	
Hg2600-3	DM2	BLK	F605342-BLK6	10	5/31/2016 13:08:53	43034-1.RAW	1:08:53 PM	35.65	5		32.4	0.328	3.280	ng/L	
Hg2600-3	DM2	SAM	1605687-05	10	5/31/2016 13:13:01	43035-1.RAW	1:13:01 PM	1411.74	5		1408.5	13.932	139.319	ng/L	
Hg2600-3	DM2	SAM	F605342-MS3	1	5/31/2016 13:17:10	43036-1.RAW	1:17:10 PM	1293.53	2		1290.3	12.922	12.922	ng/L	
Hg2600-3	DM2	SAM	F605342-MSD3	1	5/31/2016 13:21:18	43037-1.RAW	1:21:18 PM	1251.68	2		1248.4	12.499	12.499	ng/L	
Hg2600-3	DM2	SAM	F605342-MS4	10	5/31/2016 13:25:26	43038-1.RAW	1:25:26 PM	2204.75	3		2201.5	22.283	222.832	ng/L	
Hg2600-3	DM2	SAM	F605342-MSD4	10	5/31/2016 13:29:35	43039-1.RAW	1:29:35 PM	2680.68	3		2677.4	27.102	271.015	ng/L	
Hg2600-3	DM2	CAL	SEQ-CCV9	1	5/31/2016 13:33:43	43040-1.RAW	1:33:43 PM	595.15			591.9	5.993	5.993	ng/L	
Hg2600-3	DM2	CAL	SEQ-CCB9	1	5/31/2016 13:37:52	43041-1.RAW	1:37:52 PM	30.68			27.4	0.278	0.278	ng/L	

TotalMercury	**Operat** DM	**BlankSl**	3.2476	**Calib Eqn:**	Conc = (Area-3.247	**Run Date:**	5/31/2016	**Blank SD:**	2.835654207					
EPA1631	**Worksh** WS0000	**CalibFa**	98.773	**Status:**	QC Warnings:6/QC E	**Run Time:**	9:33:36	**Blank RSD%:**	87.31409313					
	Method ####	**R:**	1	**R²:**	0.9999			**CF SD:**	2.012136038					
	Descrip THg26003-160531-1							**CF RSD%:**	2.037127296					

Sample/ID	Location	Rinse	Dilute	Blank	Conc (ppt)	MB%	FinalConc	Rec%	QA	RawData	RunEnd	Peak (Raw)	Control (etf)	Flags	RunCount
Clean				0.00	0.69					42933-1.RAW	5:33:15	68.12	Clean	OK	1
clean										42934-1.RAW	5:36:06	0.00	Clean	NP	1
ws				3.25	0.04					42935-1.RAW	5:40:14	7.26	Sample	OK	1
ws				3.25	0.00					42936-1.RAW	5:44:23	1.73	Sample	OK	1
ws										42937-1.RAW	5:48:31	0.00	Sample	NP	1
SEQ-IBL1	A1		1	0.00	0.05					42938-1.RAW	5:52:40	4.51	Sample	OK	1
SEQ-IBL2	A2		1							42939-1.RAW	5:56:48	0.00	Sample	NP	1
SEQ-IBL3	A3		1	0.00	0.05					42940-1.RAW	6:00:57	5.23	Sample	OK	1
SEQ-CAL1	A4		1	3.25	0.52			103.27		42941-1.RAW	6:05:05	54.25	Sample	OK	1
SEQ-CAL2	A5		1	3.25	0.99			98.90		42942-1.RAW	6:09:13	100.93	Sample	OK	1
SEQ-CAL3	A6		1	3.25	4.91			98.21		42943-1.RAW	6:13:22	488.28	Sample	OK	1
SEQ-CAL4	A7		1	3.25	20.13			100.65		42944-1.RAW	6:17:30	1991.60	Sample	OK	1
SEQ-CAL5	A8		1	3.25	39.59			98.97		42945-1.RAW	6:21:39	3913.48	Sample	OK	1
SEQ-ICV1	A9		1	3.25	5.42			108.35		42946-1.RAW	6:25:47	538.36	Sample	OK	1
EFGS05427 20NG	A10		100	3.25	495.44					42947-1.RAW	6:29:56	492.61	Sample	OK	1
EFGS TV 20NG	A11		100	3.25	500.23					42948-1.RAW	6:34:04	497.34	Sample	OK	1
F605269-BLK7	A12		100	3.25	63.91					42949-1.RAW	6:38:13	66.37	Sample	OK	1
F605269-BLK8	B1		100	3.25	47.13					42950-1.RAW	6:42:21	49.80	Sample	OK	1
F605269-BLK9	B2		100	3.25	40.27					42951-1.RAW	6:46:29	43.02	Sample	OK	1
F605269-BS2	B3		100	3.25	2014.11					42952-1.RAW	6:50:38	1992.65	Sample	OK	1
F605269-BSD2	B4		100	3.25	2128.67					42953-1.RAW	6:54:46	2105.80	Sample	OK	1
1605524-01RE1	B5		100	3.25	292.80					42954-1.RAW	6:58:55	292.46	Sample	OK	1
1605524-02RE2	B6		100	3.25	14560.39					42955-1.RAW	7:03:03	14385.01	Sample	FB	1
1605524-03RE2	B7		100	3.25	259.43					42956-1.RAW	7:07:12	259.49	Sample	OK	1
SEQ-CCV1	B8		1	3.25	5.33			106.63		42957-1.RAW	7:11:20	529.83	Sample	OK	1
SEQ-CCB1	B9		1	3.25	0.34			0.00		42958-1.RAW	7:15:29	36.96	Sample	OK	1
1605524-04RE1	B10		100	3.25	857.30					42959-1.RAW	7:19:37	850.03	Sample	OK	1
1605524-05RE1	B11		100	3.25	187.22					42960-1.RAW	7:23:45	188.17	Sample	OK	1
1605524-06RE1	B12		100	3.25	157.23					42961-1.RAW	7:27:54	158.55	Sample	OK	1
F605269-DUP2	C1		100	3.25	281.33					42962-1.RAW	7:32:02	281.13	Sample	OK	1
F605269-MS2	C2		100	3.25	1319.62			465.75		42963-1.RAW	7:36:11	1306.68	Sample	OK	1
F605269-MSD2	C3		100	3.25	1309.07					42964-1.RAW	7:40:19	1296.25	Sample	OK	1
1605524-02RE3	C4	5/31/16 500 x		3.25	29.28					42965-1.RAW	7:44:28	2894.99	Sample	OK	1
1605524-03RE3	C5	100 x		3.25	2.10					42966-1.RAW	7:48:36	210.30	Sample	OK	1
F605342-BLK1	C6		1	3.25	0.24					42967-1.RAW	7:52:44	26.92	Sample	OK	1
F605342-BLK2	C7		1	3.25	0.12					42968-1.RAW	7:56:53	15.56	Sample	OK	1
SEQ-CCV2	C8		1	3.25	5.24			104.71		42969-1.RAW	8:01:01	520.38	Sample	OK	1
SEQ-CCB2	C9		1	3.25	0.14			0.00		42970-1.RAW	8:05:10	17.36	Sample	OK	1
F605342-BLK3	C10		1	3.25	0.06					42971-1.RAW	8:09:18	9.00	Sample	OK	1
F605342-BLK4	C11		1	3.25	0.18					42972-1.RAW	8:13:27	20.69	Sample	OK	1
F605342-BLK5	C12		1	3.25	0.05					42973-1.RAW	8:17:35	8.47	Sample	OK	1
F605342-BS1	D1		1	3.25	15.49					42974-1.RAW	8:21:44	1532.80	Sample	OK	1
F605342-BSD1	D2		1	3.25	15.71					42975-1.RAW	8:25:52	1554.68	Sample	OK	1
1605687-01	D3		1	3.25	3.50					42976-1.RAW	8:30:00	348.81	Sample	OK	1
1605687-02	D4		1	3.25	0.12					42977-1.RAW	8:34:09	14.75	Sample	OK	1

1605687-03	D5	1	3.25	12.78		42978-1.RAW	8:38:17	1265.22	Sample	OK	1
1605687-04	D6	1	3.25	0.20		42979-1.RAW	8:42:26	22.60	Sample	OK	1
1605687-06	D7	1	3.25	0.12		42980-1.RAW	8:46:34	15.42	Sample	OK	1
SEQ-CCV3	D8	1	3.25	5.13	102.66	42981-1.RAW	8:50:43	510.26	Sample	OK	1
SEQ-CCB3	D9	1	3.25	0.09	0.00	42982-1.RAW	8:54:51	11.67	Sample	OK	1
SEQ-CCV4	A1	1	3.25	5.24	104.76	42983-1.RAW	9:37:45	520.63	Sample	OK	1
SEQ-CCB4	A2	1	3.25	0.09	0.00	42984-1.RAW	9:41:53	12.50	Sample	OK	1
1605688-01	A3	10	3.25	59.72		42985-1.RAW	9:46:02	593.15	Sample	OK	1
1605688-03	A4	1	3.25	0.38		42986-1.RAW	9:50:10	40.37	Sample	OK	1
1605688-05	A5	1	3.25	162.60		42987-1.RAW	9:54:18	16064.01	Sample	FB	1
1605688-07	A6	1	3.25	1.63		42988-1.RAW	9:58:27	164.17	Sample	OK	1
1605731-03	A7	1	3.25	0.95		42989-1.RAW	10:02:35	97.12	Sample	OK	1
1605731-07	A8	1	3.25	0.45		42990-1.RAW	10:06:44	47.63	Sample	OK	1
F605342-DUP1	A9	1	3.25	3.59		42991-1.RAW	10:10:52	357.51	Sample	OK	1
F605342-MS1	A10	1	3.25	11.30	246.28	42992-1.RAW	10:15:01	1118.97	Sample	OK	1
F605342-MSD1	A11	1	3.25	10.39		42993-1.RAW	10:19:09	1029.77	Sample	OK	1
F605342-MS2	A12	10	3.25	206.14	1663.41	42994-1.RAW	10:23:18	2039.37	Sample	OK	1
SEQ-CCV5	B1	1	3.25	4.96	99.25	42995-1.RAW	10:27:26	493.41	Sample	OK	1
SEQ-CCB5	B2	1	3.25	0.14	0.00	42996-1.RAW	10:31:34	17.52	Sample	OK	1
F605342-MSD2	B3	10	3.25	250.92		42997-1.RAW	10:35:43	2481.69	Sample	OK	1
1605688-05RE1	B4	10	3.25	189.49		42998-1.RAW	10:39:51	1874.93	Sample	OK	1
1605688-07RE1	B5	1	3.25	0.72		42999-1.RAW	10:44:00	73.91	Sample	OK	1
F605348-BLK1	B6	1	3.25	0.19		43000-1.RAW	10:48:08	22.23	Sample	OK	1
F605348-BLK2	B7	1	3.25	0.21		43001-1.RAW	10:52:17	23.59	Sample	OK	1
F605348-BLK3	B8	1	3.25	0.09		43002-1.RAW	10:56:25	12.33	Sample	OK	1
F605348-BS1	B9	1	3.25	15.82		43003-1.RAW	11:00:34	1566.12	Sample	OK	1
F605348-BSD1	B10	1	3.25	15.79		43004-1.RAW	11:04:42	1563.18	Sample	OK	1
1605775-01	B11	1	3.25	2.32		43005-1.RAW	11:08:50	232.12	Sample	OK	1
1605775-02	B12	1	3.25	1.78		43006-1.RAW	11:12:57	179.03	Sample	OK	1
SEQ-CCV6	C1	1	3.25	5.33	106.54	43007-1.RAW	11:17:06	529.42	Sample	OK	1
SEQ-CCB6	C2	1	3.25	0.14	0.00	43008-1.RAW	11:21:14	17.52	Sample	OK	1
1605775-03	C3	1	3.25	6.24		43009-1.RAW	11:25:22	619.34	Sample	OK	1
1605775-04	C4	1	3.25	0.90		43010-1.RAW	11:29:31	91.85	Sample	OK	1
1605775-05	C5	1	3.25	7.00		43011-1.RAW	11:33:39	694.47	Sample	OK	1
1605775-06	C6	1	3.25	0.89		43012-1.RAW	11:37:47	91.38	Sample	OK	1
1605775-07	C7	1	3.25	1.82		43013-1.RAW	11:41:56	182.65	Sample	OK	1
1605775-08	C8	1	3.25	0.65		43014-1.RAW	11:46:04	67.19	Sample	OK	1
1605775-09	C9	1	3.25	9.91		43015-1.RAW	11:50:13	982.24	Sample	OK	1
1605775-10	C10	1	3.25	1.50		43016-1.RAW	11:54:21	151.77	Sample	OK	1
1605775-11	C11	1	3.25	7.39		43017-1.RAW	11:58:30	732.97	Sample	OK	1
1605775-12	C12	1	3.25	1.56		43018-1.RAW	12:02:38	156.95	Sample	OK	1
SEQ-CCV7	D1	1	3.25	5.54	110.90	43019-1.RAW	12:06:46	550.94	Sample	OK	1
SEQ-CCB7	D2	1	3.25	0.15	0.00	43020-1.RAW	12:10:55	17.80	Sample	OK	1
1605775-17	D3	1	3.25	3.17		43021-1.RAW	12:15:03	316.25	Sample	OK	1
1605775-18	D4	1	3.25	0.89		43022-1.RAW	12:19:12	91.05	Sample	OK	1
1605775-19	D5	1	3.25	0.02		43023-1.RAW	12:23:20	4.80	Sample	OK	1
1605778-01	D6	1	3.25	34.71		43024-1.RAW	12:27:28	3432.07	Sample	OK	1
1605778-02	D7	1	3.25	1.57		43025-1.RAW	12:31:37	158.16	Sample	OK	1
1605778-03	D8	1	3.25	0.15		43026-1.RAW	12:35:45	18.34	Sample	OK	1
F605348-DUP1	D9	1	3.25	6.28		43027-1.RAW	12:39:54	623.30	Sample	OK	1

F605348-MS1	D10	1	3.25	6.83	93.90	43028-1.RAW	12:44:02	678.21	Sample	OK	1
F605348-MSD1	D11	1	3.25	6.95		43029-1.RAW	12:48:10	689.96	Sample	OK	1
F605348-MS2	D12	1	3.25	31.59	352.86	43030-1.RAW	12:52:19	3123.42	Sample	OK	1
SEQ-CCV8	A1	1	3.25	5.79	115.87	43031-1.RAW	12:56:27	575.48	Sample	OK	1
SEQ-CCB8	A2	1	3.25	0.19	0.00	43032-1.RAW	13:00:36	21.77	Sample	OK	1
F605348-MSD2	A3	1	3.25	31.39		43033-1.RAW	13:04:44	3103.61	Sample	FB	1
F605342-BLK6	A4	10	3.25	0.33		43034-1.RAW	13:08:53	35.65	Sample	OK	1
1605687-05	A5	10	3.25	142.60		43035-1.RAW	13:13:01	1411.74	Sample	OK	1
F605342-MS3	A6	1	3.25	13.06	8.97	43036-1.RAW	13:17:10	1293.53	Sample	OK	1
F605342-MSD3	A7	1	3.25	12.64		43037-1.RAW	13:21:18	1251.68	Sample	OK	1
F605342-MS4	A8	10	3.25	222.89	1339.50	43038-1.RAW	13:25:26	2204.75	Sample	OK	1
F605342-MSD4	A9	10	3.25	271.07		43039-1.RAW	13:29:35	2680.68	Sample	FB	1
SEQ-CCV9	A10	1	3.25	5.99	119.85	43040-1.RAW	13:33:43	595.15	Sample	OK	1
SEQ-CCB9	A11	1	3.25	0.28	0.00	43041-1.RAW	13:37:52	30.68	Sample	OK	1

ANALYSIS SEQUENCE

6E31005

Instrument: Hg2600-3

Calibration ID: UNASSIGNED

Analyzed: 5/31/2016

Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
6E31005-IBL1	QC	1			
6E31005-IBL2	QC	2			
6E31005-IBL3	QC	3			
6E31005-CAL1	QC	4	1601524		
6E31005-CAL2	QC	5	1601525		
6E31005-CAL3	QC	6	1601526		
6E31005-CAL4	QC	7	1601527		
6E31005-CAL5	QC	8	1601528		
6E31005-ICV1	QC	9	1601925		
6E31005-CCV1	QC	10	1601925		
6E31005-CCB1	QC	11			
F605342-BLK1	QC	12			
F605342-BLK2	QC	13			
6E31005-CCV2	QC	14	1601925		
6E31005-CCB2	QC	15			
F605342-BLK3	QC	16			
F605342-BLK5	QC	17			
F605342-BS1	QC	18			
F605342-BSD1	QC	19			
1605687-01	Hg-CVAFS-W-1631	20			
1605687-02	Hg-CVAFS-W-1631	21			
1605687-03	Hg-CVAFS-W-1631	22			
1605687-04	Hg-CVAFS-W-1631	23			
1605687-06	Hg-CVAFS-W-1631	24			
6E31005-CCV3	QC	25	1601925		
6E31005-CCB3	QC	26			
6E31005-CCV4	QC	27	1601925		
6E31005-CCB4	QC	28			
1605688-01	Hg-CVAFS-W-1631	29			
1605688-03	Hg-CVAFS-W-1631	30			
1605688-05	Hg-CVAFS-W-1631	31			
1605688-07	Hg-CVAFS-W-1631	32			
1605731-03	Hg-CVAFS-W-1631	33			
1605731-07	Hg-CVAFS-W-1631	34			
F605342-DUP1	QC	35			

Due Date: 5/31/2016

ANALYSIS SEQUENCE

6E31005

Instrument: Hg2600-3

Calibration ID: UNASSIGNED

Analyzed: 5/31/2016

Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
F605342-MS1	QC	36			
F605342-MSD1	QC	37			
F605342-MS2	QC	38			
6E31005-CCV5	QC	39	1601925		
6E31005-CCB5	QC	40			
F605342-MSD2	QC	41			
1605688-05RE1	Hg-CVAFS-W-1631	42			Added 5/31/2016 by DM2
1605688-07RE1	Hg-CVAFS-W-1631	43			Added 5/31/2016 by DM2
F605348-BLK1	QC	44			
F605348-BLK2	QC	45			
F605348-BLK3	QC	46			
F605348-BS1	QC	47			
F605348-BSD1	QC	48			
1605775-01	Hg-CVAFS-W-1631	49			Scan all data - Level IV
1605775-02	Hg-CVAFS-W-1631	50			Scan all data - Level IV
6E31005-CCV6	QC	51	1601925		
6E31005-CCB6	QC	52			
1605775-03	Hg-CVAFS-W-1631	53			Scan all data - Level IV
1605775-04	Hg-CVAFS-W-1631	54			Scan all data - Level IV
1605775-05	Hg-CVAFS-W-1631	55			Scan all data - Level IV
1605775-06	Hg-CVAFS-W-1631	56			Scan all data - Level IV
1605775-07	Hg-CVAFS-W-1631	57			Scan all data - Level IV
1605775-08	Hg-CVAFS-W-1631	58			Scan all data - Level IV
1605775-09	Hg-CVAFS-W-1631	59			Scan all data - Level IV
1605775-10	Hg-CVAFS-W-1631	60			Scan all data - Level IV
1605775-11	Hg-CVAFS-W-1631	61			Scan all data - Level IV
1605775-12	Hg-CVAFS-W-1631	62			Scan all data - Level IV
6E31005-CCV7	QC	63	1601925		
6E31005-CCB7	QC	64			
1605775-17	Hg-CVAFS-W-1631	65			Scan all data - Level IV
1605775-18	Hg-CVAFS-W-1631	66			Scan all data - Level IV
1605775-19	Hg-CVAFS-W-1631	67			Scan all data - Level IV
1605778-01	Hg-CVAFS-W-1631	68			Scan all data - Level IV
1605778-02	Hg-CVAFS-W-1631	69			Scan all data - Level IV
1605778-03	Hg-CVAFS-W-1631	70			Scan all data - Level IV

Due Date: 5/31/2016

ANALYSIS SEQUENCE

6E31005

Instrument: Hg2600-3

Calibration ID: UNASSIGNED

Analyzed: 5/31/2016

Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
F605348-DUP1	QC	71			
F605348-MS1	QC	72			
F605348-MSD1	QC	73			
F605348-MS2	QC	74			
6E31005-CCV8	QC	75	1601925		
6E31005-CCB8	QC	76			
F605348-MSD2	QC	77			
F605342-BLK6	QC	78			
1605687-05	Hg-CVAFS-W-1631	79			
F605342-MS3	QC	80			
F605342-MSD3	QC	81			
F605342-MS4	QC	82			
F605342-MSD4	QC	83			
6E31005-CCV9	QC	84	1601925		
6E31005-CCB9	QC	85			

Dan Moten 5/31/16
Samples Loaded By Date

Dan Moten 5/31/16
Data Processed By Date

Due Date: 5/31/2016

Failing Data Report - 6E31005

Sample ID	Analysis	Result	MRL	Dup Result	Source Result	True Value	Units	% Rec.	Rec. LCL	Rec. UCL	RPD	RPD Limit	Over Cal	Failure	Qualifier
1605688-05	Hg-CVAFS-W-1631	164	0.50				ng/L						FAIL-OVER	PASS	E
F605342-MSD1	Hg-CVAFS-W-1631	10.35	0.50	11.27	3.39	10.120	ng/L	68.8	71.00	125.00	8.44	24.00	PASS-OVER	FAIL-MSD (Rec.)	QM-07

Don Mokam 5/31/16
Analyst Reviewed By Date

Peer Reviewed By 5/31/16
Peer Reviewed By Date

ANALYSIS SEQUENCE

6E31004

Instrument: Hg2600-3

Calibration ID: UNASSIGNED

Analyzed: 5/31/2016

Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
6E31004-IBL1	QC	1			
6E31004-IBL2	QC	2			
6E31004-IBL3	QC	3			
6E31004-CAL1	QC	4	1601524		
6E31004-CAL2	QC	5	1601525		
6E31004-CAL3	QC	6	1601526		
6E31004-CAL4	QC	7	1601527		
6E31004-CAL5	QC	8	1601528		
6E31004-ICV1	QC	9	1601925		
F605269-BLK7	QC	10			
F605269-BLK8	QC	11			
F605269-BLK9	QC	12			
F605269-BS2	QC	13			
F605269-BSD2	QC	14			
1605524-01RE1	Hg_Passive_OSHAID140	15			Added 5/26/2016 by JRH
1605524-02RE2	Hg_Passive_OSHAID140	16			Added 5/26/2016 by JRH
1605524-03RE2	Hg_Passive_OSHAID140	17			Added 5/26/2016 by JRH
6E31004-CCV1	QC	18	1601925		
6E31004-CCB1	QC	19			
1605524-04RE1	Hg_Passive_OSHAID140	20			Added 5/26/2016 by JRH
1605524-05RE1	Hg_Passive_OSHAID140	21			Added 5/26/2016 by JRH
1605524-06RE1	Hg_Passive_OSHAID140	22			Added 5/26/2016 by JRH
F605269-DUP2	QC	23			
F605269-MS2	QC	24			
F605269-MSD2	QC	25			
1605524-02RE3	Hg_Passive_OSHAID140	26			Added 5/31/2016 by DM2
1605524-03RE3	Hg_Passive_OSHAID140	27			Added 5/31/2016 by DM2
6E31004-CCV2	QC	28	1601925		
6E31004-CCB2	QC	29			
6E31004-CCV3	QC	30	1601925		
6E31004-CCB3	QC	31			
6E31004-CCV4	QC	32	1601925		
6E31004-CCB4	QC	33			
6E31004-CCV5	QC	34	1601925		
6E31004-CCB5	QC	35			

Due Date: 6/3/2016

ANALYSIS SEQUENCE

6E31004

Instrument: Hg2600-3

Calibration ID: UNASSIGNED

Analyzed: 5/31/2016

Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
6E31004-CCV6	QC	36	1601925		
6E31004-CCB6	QC	37			
6E31004-CCV7	QC	38	1601925		
6E31004-CCB7	QC	39			
6E31004-CCV8	QC	40	1601925		
6E31004-CCB8	QC	41			
6E31004-CCV9	QC	42	1601925		
6E31004-CCB9	QC	43			

Don Moran 5/31/16
Samples Loaded By Date

Don Moran 5/31/16
Data Processed By Date

Due Date: 6/3/2016

Failing Data Report - 6E31004

Sample ID	Analysis	Result	MRL	Dup Result	Source Result	True Value	Units	% Rec.	Rec. LCL	Rec. UCL	RPD	RPD Limit	Over Cal	Failure	Qualifier
1605524-02RE2	Hg_Passive_OSHAID140	363	1.25				ng/Trap						FAIL-OVER	PASS	E
F605269-BLK7	Hg_Passive_OSHAID140	1.60	1.25				ng/Trap						PASS-OVER	FAIL-BLK	

Don Moran 5/31/16
Analyst Reviewed By Date

Ryan N 5/31/16
Peer Reviewed By Date

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PREPARATION BENCH SHEET

F605348

Eurofins Frontier Global Sciences, Inc.

Matrix: Water **Prepared using: AFS - EPA 1631E BrCl Oxidation** **Prepared: 5/31/2016**

Lab Number	Sample ID and Source Sample	Initial (mL)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F605348-BLK1	Blank	100	101					
F605348-BLK2	Blank	100	101					
F605348-BLK3	Blank	100	101					
F605348-BS1	LCS	50	50.5	1505246	100			
F605348-BSD1	LCS Dup	50	50.5	1505246	100			
F605348-DUP1	Duplicate [1605775-03]	100	101					
F605348-MS1	Matrix Spike [1605775-10]	49.50495	50	1601450	25			[Spk] 100mL->101mL; 101mL->101mL; Spiked 50mL
F605348-MS2	Matrix Spike [1605775-09]	49.50495	50	1601450	100			[Spk] 100mL->101mL; 101mL->101mL; Spiked 50mL
F605348-MSD1	Matrix Spike Dup [1605775-10]	49.50495	50	1601450	25			[Spk] 100mL->101mL; 101mL->101mL; Spiked 50mL
F605348-MSD2	Matrix Spike Dup [1605775-09]	49.50495	50	1601450	100			[Spk] 100mL->101mL; 101mL->101mL; Spiked 50mL

Standard ID(s):	Description:	Expiration:
1505246	Nist 1641D 200X	20-Aug-16 00:00
1601450	THg 10ng/mL Calibration Standard	18-Jun-16 00:00
		18-Jun-16 00:00

Reagent ID(s):	Description:	Expiration:
1507461	25% Hydroxylamine-HCl working solution	08-Jun-16 00:00
1601950	0.2 N BRCL APRIL 2016	11-Oct-16 00:00
1602077	THg Dilute 1% BrCl	24-Jul-16 00:00
1602078	THg Washstation (0.5% BrCl)	19-Jul-16 00:00
1602724	3% SnCl2 THg reductant	11-Oct-16 00:00

PREPARATION BENCH SHEET

F605348

Eurofins Frontier Global Sciences, Inc.

Matrix: Water **Prepared using: AFS - EPA 1631E BrCl Oxidation** **Prepared: 5/31/2016**

Lab Number	Sample ID	Initial (mL)	Final (mL)	QC Sample	Sample Specs.	Raw Data	Sample Comments	Analysis Comments
1605775-01	OV02_052616_SW_10	100	101	-	-	-	Scan all data - Level IV	
1605775-02	OV02_052616_SW_10 DISSOLOVED	100	101	-	-	-	Scan all data - Level IV	
1605775-03	ES-15_052616_SW_10	100	101	-	-	-	Scan all data - Level IV	
1605775-04	ES-15_052616_SW_10 DISSOLVED	100	101	-	-	-	Scan all data - Level IV	
1605775-05	WQ-ECH_052616_SW_10	100	101	-	-	-	Scan all data - Level IV	
1605775-06	WQ-ECH_052616_SW_10 DISSOLVED	100	101	-	-	-	Scan all data - Level IV	
1605775-07	WQ-FPT_052616_SW_10	100	101	-	-	-	Scan all data - Level IV	
1605775-08	WQ-FPT_052616_SW_10 DISSOLVED	100	101	-	-	-	Scan all data - Level IV	
1605775-09	WQ16-C_052616_SW_10	100	101	-	-	-	MS/MSD Scan all data - Level IV	
1605775-10	WQ16-C_052616_SW_10 DISSOLVED	100	101	QC	-	-	MS/MSD Scan all data - Level IV	
1605775-11	WQ16-C_052616_SW_10_DUP	100	101	-	-	-	Scan all data - Level IV	
1605775-12	WQ16-C_052616_SW_10_DUP DISSOLVED	100	101	-	-	-	Scan all data - Level IV	
1605775-17	WQ3-L_052616_SW_10	100	101	-	-	-	Scan all data - Level IV	
1605775-18	WQ3-L_052616_SW_10_MD DISSOLVED	100	101	-	-	-	Scan all data - Level IV	
1605775-19	Laboratory Filter Blank	100	101	-	-	-	Scan all data - Level IV	
1605778-01	WQ2-C_052716_SW_10	100	101	-	-	-	Scan all data - Level IV	
1605778-02	WQ2-C_052716_SW_10 DISSLOVED	100	101	-	-	-	Scan all data - Level IV	
[illegible]778-03	Laboratory Filter Blank	100	101	-	-	-	Scan all data - Level IV	

I[illegible]e Date: 6/20/2016

PREPARATION BENCH SHEET

F605348

Eurofins Frontier Global Sciences, Inc.

Matrix: Water **Prepared using: AFS - EPA 1631E BrCl Oxidation** **Prepared: 5/31/2016**

[redacted]

Issue Date: 6/20/2016

PREPARATION BENCH SHEET

F605342

Eurofins Frontier Global Sciences, Inc.

Matrix: Water **Prepared using: AFS - EPA 1631E BrCl Oxidation** **Prepared: 5/31/2016**

Lab Number	Sample ID and Source Sample	Initial (mL)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F605342-BLK1	Blank	100	101					
F605342-BLK2	Blank	100	101					
F605342-BLK3	Blank	100	101					
F605342-BLK4	Blank	100	105					
F605342-BLK5	Blank	100	102					
F605342-BLK6	Blank	50	100					
F605342-BS1	LCS	50	50.5	1505246	100			
F605342-BSD1	LCS Dup	50	50.5	1505246	100			
F605342-DUP1	Duplicate [1605687-01]	100	101					
F605342-MS1	Matrix Spike [1605687-01]	49.50495	50	1601450	50			[Spk] 100mL->101mL; 101mL->101mL; Spiked 50mL
F605342-MS2	Matrix Spike [1605688-01]	4.901961	5	1601450	100			[Spk] 100mL->102mL; 101mL->101mL; Spiked 5mL
F605342-MS3	Matrix Spike [1605687-01]	49.50495	50	1601450	50			[Spk] 100mL->101mL; 101mL->101mL; Spiked 50mL
F605342-MS4	Matrix Spike [1605688-01]	4.901961	5	1601450	100			[Spk] 100mL->102mL; 101mL->101mL; Spiked 5mL
F605342-MSD1	Matrix Spike Dup [1605687-01]	49.50495	50	1601450	50			[Spk] 100mL->101mL; 101mL->101mL; Spiked 50mL
F605342-MSD2	Matrix Spike Dup [1605688-01]	4.901961	5	1601450	100			[Spk] 100mL->102mL; 101mL->101mL; Spiked 5mL
F605342-MSD3	Matrix Spike Dup [1605687-01]	49.50495	50	1601450	50			[Spk] 100mL->101mL; 101mL->101mL; Spiked 50mL
F605342-MSD4	Matrix Spike Dup [1605688-01]	4.901961	5	1601450	100			[Spk] 100mL->102mL; 101mL->101mL; Spiked 5mL

Standard ID(s):	Description:	Expiration:
1505246	Nist 1641D 200X	20-Aug-16 00:00
1601450	THg 10ng/mL Calibration Standard	18-Jun-16 00:00
		18-Jun-16 00:00

Reagent ID(s):	Description:	Expiration:
1507461	25% Hydroxylamine-HCl working solution	08-Jun-16 00:00
1601950	0.2 N BRCL APRIL 2016	11-Oct-16 00:00
1602077	THg Dilute 1% BrCl	24-Jul-16 00:00
1602078	THg Washstation (0.5% BrCl)	19-Jul-16 00:00
1602724	3% SnCl2 THg reductant	11-Oct-16 00:00

I e Date: 5/31/2016

PREPARATION BENCH SHEET

F605342

Eurofins Frontier Global Sciences, Inc.

Matrix: Water **Prepared using: AFS - EPA 1631E BrCl Oxidation** **Prepared: 5/31/2016**

Lab Number	Sample ID	Initial (mL)	Final (mL)	QC Sample	Sample Specs.	Raw Data	Sample Comments	Analysis Comments
1605687-01	001	100	101	-	-	-		
1605687-02	001 Field Blank	100	101	-	-	-		
1605687-03	002	100	101	-	-	-		
1605687-04	002 Field Blank	100	101	-	-	-		
1605687-05	A149	50	100	-	-	-		
1605687-06	A149 Blank	100	101	-	-	-		
1605688-01	B157957 DALE MABRY INF	100	102	-	-	-		
1605688-03	B159132 DALE MABRY EFF	100	101	-	-	-		
1605688-05	B157840 NORTHWEST INF	100	101	-	-	-		
1605688-05RE1	B157840 NORTHWEST INF	100	101	-	-	-	Added 5/31/2016 by DM2	Added 5/31/2016 by DM2
1605688-07	B159133 NORTHWEST EFF	100	101	-	-	-		
1605688-07RE1	B159133 NORTHWEST EFF	100	101	-	-	-	Added 5/31/2016 by DM2	Added 5/31/2016 by DM2
1605731-03	B159138 Dunn Eff	100	101	-	-	-		
1605731-07	B157951 South Cross Eff	100	101	-	-	-		

[redacted]

I[illegible]e Date: 5/31/2016

PREPARATION BENCH SHEET

F605269

Eurofins Frontier Global Sciences, Inc.

Matrix: Air **Prepared using: AFS - EFGS-009 FSTM Trap Nitric/Sulfuric Digestion** **Prepared: 5/23/2016**

Lab Number	Sample ID and Source Sample	Initial (Trap)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F605269-BLK1	Blank	1	25					
F605269-BLK2	Blank	1	25					
F605269-BLK3	Blank	1	25					
F605269-BLK4	Blank	1	25					
F605269-BLK5	Blank	1	25					
F605269-BLK6	Blank	1	25					
F605269-BLK7	Blank	1	25					
F605269-BLK8	Blank	1	25					
F605269-BLK9	Blank	1	25					
F605269-BS1	LCS	1	25	1507758	50			
F605269-BS2	LCS	1	25	1507758	50			
F605269-BSD1	LCS Dup	1	25	1507758	50			
F605269-BSD2	LCS Dup	1	25	1507758	50			
F605269-DUP1	Duplicate [1605524-01]	1	25					
F605269-DUP2	Duplicate [1605524-01RE1]	1	25					
F605269-MS1	Matrix Spike [1605524-01]	0.02	0.5	1601450	50			[Spk] 1Trap->25mL; 25mL->25mL; Spiked 0.5mL
F605269-MS2	Matrix Spike [1605524-01RE1]	0.02	0.5	1601450	50			[Spk] 1Trap->25mL; 25mL->25mL; Spiked 0.5mL
F605269-MSD1	Matrix Spike Dup [1605524-01]	0.02	0.5	1601450	50			[Spk] 1Trap->25mL; 25mL->25mL; Spiked 0.5mL
F605269-MSD2	Matrix Spike Dup [1605524-01RE1]	0.02	0.5	1601450	50			[Spk] 1Trap->25mL; 25mL->25mL; Spiked 0.5mL

Issue Date: 6/3/2016

PREPARATION BENCH SHEET

F605269

Eurofins Frontier Global Sciences, Inc.

Matrix: Air **Prepared using: AFS - EFGS-009 FSTM Trap Nitric/Sulfuric Digestion** **Prepared: 5/23/2016**

Standard ID(s):	Description:	Expiration:
1507758	THg 1,000ng/mL Primary Spiking Standard	23-Jun-16 00:00
1601450	THg 10ng/mL Calibration Standard	18-Jun-16 00:00

Reagent ID(s):	Description:	Expiration:
1507461	25% Hydroxylamine-HCl working solution	08-Jun-16 00:00
1602077	THg Dilute 1% BrCl	24-Jul-16 00:00
1602078	THg Washstation (0.5% BrCl)	19-Jul-16 00:00
1602145	Omnitrace Hydrochloric Acid	21-Apr-19 00:00
1602381	Fisher Nitric Acid, Tracemetal Grade	16-Sep-17 00:00
1602548	3% SnCl2 THg reductant	08-Nov-16 00:00
1602724		11-Oct-16 00:00

Issue Date: 6/3/2016

PREPARATION BENCH SHEET

F605269

Eurofins Frontier Global Sciences, Inc.

Matrix: Air **Prepared using: AFS - EFGS-009 FSTM Trap Nitric/Sulfuric Digestion** **Prepared: 5/23/2016**

Lab Number	Sample ID	Initial (Trap)	Final (mL)	QC Sample	Sample Specs.	Raw Data	Sample Comments	Analysis Comments
1605524-01	24181H160505-1 2JVMUJKO	1	25	-	-	-		
1605524-01RE1	24181H160505-1 2JVMUJKO	1	25	-	-	-	Added 5/26/2016 by JRH	Added 5/26/2016 by JRH
1605524-02	24181H160510-1 2JVMUJKW	1	25	-	-	-		
1605524-02RE1	24181H160510-1 2JVMUJKW	1	25	-	-	-	Added 5/25/2016 by DM2	Added 5/25/2016 by DM2
1605524-02RE2	24181H160510-1 2JVMUJKW	1	25	-	-	-	Added 5/26/2016 by JRH	Added 5/26/2016 by JRH
1605524-02RE3	24181H160510-1 2JVMUJKW	1	25	-	-	-	Added 5/31/2016 by DM2	Added 5/31/2016 by DM2
1605524-03	24181H160510-2 2JVMUJL3	1	25	-	-	-		
1605524-03RE1	24181H160510-2 2JVMUJL3	1	25	-	-	-	Added 5/25/2016 by DM2	Added 5/25/2016 by DM2
1605524-03RE2	24181H160510-2 2JVMUJL3	1	25	-	-	-	Added 5/26/2016 by JRH	Added 5/26/2016 by JRH
1605524-03RE3	24181H160510-2 2JVMUJL3	1	25	-	-	-	Added 5/31/2016 by DM2	Added 5/31/2016 by DM2
1605524-04	24181H160511-1 2JVMUJKX	1	25	-	-	-		
1605524-04RE1	24181H160511-1 2JVMUJKX	1	25	-	-	-	Added 5/26/2016 by JRH	Added 5/26/2016 by JRH
1605524-05	24181H160512-1 2JVMUJL0	1	25	-	-	-		
1605524-05RE1	24181H160512-1 2JVMUJL0	1	25	-	-	-	Added 5/26/2016 by JRH	Added 5/26/2016 by JRH
1605524-06	24181H160512-2 2JVMUJL1	1	25	-	-	-		
1605524-06RE1	24181H160512-2 2JVMUJL1	1	25	-	-	-	Added 5/26/2016 by JRH	Added 5/26/2016 by JRH

[redacted]

I[illegible]e Date: 6/3/2016

PREPARATION BENCH SHEET

F605269

Eurofins Frontier Global Sciences, Inc.

Matrix: Air **Prepared using: AFS - EFGS-009 FSTM Trap Nitric/Sulfuric Digestion** **Prepared: 5/23/2016**

Issue Date: 6/3/2016

PREPARATION BENCH SHEET

2000.3

5/31/16 TM

F605342

Eurofins Frontier Global Sciences, Inc.

Matrix: Water **Prepared using: AFS - EPA 1631E BrCl Oxidation** **Prepared: 5/31/2016**

Lab Number	Sample ID and Source Sample	Initial (mL)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F605342-BLK1	Blank	100	101					1x
F605342-BLK2	Blank	100	101					1x
F605342-BLK3	Blank	100	101					1x
F605342-BLK4	Blank	100	105 ~~101~~					1x
F605342-BS1	LCS	50 ~~100~~	50.5 ~~101~~	1505246	100			1x
F605342-BSD1	LCS Dup	50 ~~100~~	50.5 ~~101~~	1505246	100			1x
F605342-DUP1	Duplicate 1605667-01	100	101					1x
F605342-MS1	Matrix Spike 1605667-01	100	101	1601450	50			1x
F605342-MS2	Matrix Spike 1605667-01	100	102 ~~101~~	1601450	100			10x
F605342-MSD1	Matrix Spike Dup 1605667-01	100	101	1601450	56			1x
F605342-MSD2	Matrix Spike Dup 1605658-01	100	102 ~~101~~	1601450	100			10x

Standard ID(s): Description: Expiration:

1601950
1602077
1602078
1602124
1507461

BLK 5 Final 102

MS3, MSD3 Re-run of MS1, MSD1

MS4, MSD4 Re-run of MS2, MSD2

BLK 6 IN: 50 F = 100

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e Date: 5/31/2016

2000.3
5/31/16 DM

PREPARATION BENCH SHEET

F605342

Eurofins Frontier Global Sciences, Inc.

Matrix: Water **Prepared using: AFS - EPA 1631E BrCl Oxidation** **Prepared: 5/31/2016**

Lab Number	Sample ID	Initial (mL)	Final (mL)	QC Sample	Sample Specs.	Raw Data	Sample Comments	Analysis Comments
1605687-01	001	100	101	-	-	-		1X
1605687-02	001 Field Blank	100	101	-	-	-		1X
1605687-03	002	100	101	-	-	-		1X
1605687-04	002 Field Blank	100	101	-	-	-		1X
1605687-05	A149	~~100~~ 50	~~101~~ ~~105~~ 105	-	-	-		~~Not Preserved~~ 10X
1605687-06	A149 Blank	100	101	-	-	-		1X DM 5/31/16
1605688-01	B157957 DALE MABRY INF	100	~~101~~ 102	-	-	-		10X
1605688-03	B159132 DALE MABRY EFF	100	101	-	-	-		1X
1605688-05	B157840 NORTHWEST INF	100	101	-	-	-		1X → 10X
1605688-07	B159133 NORTHWEST EFF	100	101	-	-	-		1X → 1X
~~1605731-01~~	~~B159139 Dunn Inf~~	100	101	-	-	-		Not Preserved
1605731-03	B159138 Dunn Eff	100	101	-	-	-		1X
~~1605731-05~~	~~B159125 South Cross Inf~~	100	101	-	-	-		Not Preserved
1605731-07	B157951 South Cross Eff	100	101	-	-	-		1X

[redacted]

1001950
1002077
1002078
1507401
1002724

ue Date: 5/31/2016

2600-3

5/31/16 DM

PREPARATION BENCH SHEET

F605348

Eurofins Frontier Global Sciences, Inc.

Matrix: Water **Prepared using: AFS - EPA 1631E BrCl Oxidation** **Prepared: 5/31/2016**

Lab Number	Sample ID and Source Sample	Initial (mL)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F605348-BLK1	Blank	100	101					1X
F605348-BLK2	Blank	100	101					1X
F605348-BLK3	Blank	100	101					1X
F605348-BS1	LCS	~~100~~ 50	~~101~~ 50.5	1505246	100			1X
F605348-BSD1	LCS Dup	~~100~~ 50	~~101~~ 50.5	1505246	100			1X
F605348-DUP1	Duplicate 1605775-03	100	101					1X
F605348-MS1	Matrix Spike [1605775-10]	100	101	1601450	25			1X
F605348-MS2	Matrix Spike 1605775-09	100	101	1601450	100			1X
F605348-MSD1	Matrix Spike Dup [1605775-10]	100	101	1601450	25			1X
F605348-MSD2	Matrix Spike Dup 1605775-09	100	101	1601450	100			1X

Standard ID(s): Description: Expiration:

1601950

1602077

1602078

1602724

1507461

2600.3

5/31/16 DN

PREPARATION BENCH SHEET

F605348

Eurofins Frontier Global Sciences, Inc.

Matrix: Water **Prepared using: AFS - EPA 1631E BrCl Oxidation** **Prepared: 5/31/2016**

Lab Number	Sample ID	Initial (mL)	Final (mL)	QC Sample	Sample Specs.	Raw Data	Sample Comments	Analysis Comments
1605775-01	OV02_052616_SW_10	100	101	-	-	-	Scan all data - Level IV	1X
1605775-02	OV02_052616_SW_10 DISSOLOVED	100	101	-	-	-	Scan all data - Level IV	1X
1605775-03	ES-15_052616_SW_10	100	101	-	-	-	Scan all data - Level IV	1X
1605775-04	ES-15_052616_SW_10 DISSOLVED	100	101	-	-	-	Scan all data - Level IV	1X
1605775-05	WQ-ECH_052616_SW_10	100	101	-	-	-	Scan all data - Level IV	1X
1605775-06	WQ-ECH_052616_SW_10 DISSOLVED	100	101	-	-	-	Scan all data - Level IV	1X
1605775-07	WQ-FPT_052616_SW_10	100	101	-	-	-	Scan all data - Level IV	1X
1605775-08	WQ-FPT_052616_SW_10 DISSOLVED	100	101	-	-	-	Scan all data - Level IV	1X
1605775-09	WQ16-C_052616_SW_10	100	101	-	-	-	MS/MSD Scan all data - Level IV	1X
1605775-10	WQ16-C_052616_SW_10 DISSOLVED	100	101	QC	-	-	MS/MSD Scan all data - Level IV	1X
1605775-11	WQ16-C_052616_SW_10_DUP	100	101	-	-	-	Scan all data - Level IV	1X
1605775-12	WQ16-C_052616_SW_10_DUP DISSOLVED	100	101	-	-	-	Scan all data - Level IV	1X
1605775-17	WQ3-L_052616_SW_10	100	101	-	-	-	Scan all data - Level IV	1X
1605775-18	WQ3-L_052616_SW_10_MD DISSOLVED	100	101	-	-	-	Scan all data - Level IV	1X
1605775-19	Laboratory Filter Blank	100	101	-	-	-	Scan all data - Level IV	1X
1605778-01	WQ2-C_052716_SW_10	100	101	-	-	-	Scan all data - Level IV	1X
1605778-02	WQ2-C_052716_SW_10 DISSLOVED	100	101	-	-	-	Scan all data - Level IV	1X
778-03	Laboratory Filter Blank	100	101	-	-	-	Scan all data - Level IV	1X

e Date: 6/20/2016

PREPARATION BENCH SHEET

F605348

Eurofins Frontier Global Sciences, Inc.

Matrix: Water **Prepared using: AFS - EPA 1631E BrCl Oxidation** **Prepared: 5/31/2016**

[redacted]

e Date: 6/20/2016

2000.3

5/31/16 DM

PREPARATION BENCH SHEET

F605269

Eurofins Frontier Global Sciences, Inc.

Matrix: Air **Prepared using: AFS - EFGS-009 FSTM Trap Nitric/Sulfuric Digestion** **Prepared: 5/23/2016**

Lab Number	Sample ID and Source Sample	Initial (Trap)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F605269-BLK1	Blank	1	25					
F605269-BLK2	Blank	1	25					
F605269-BLK3	Blank	1	25					
F605269-BLK4	Blank	1	25					
F605269-BLK5	Blank	1	25					
F605269-BLK6	Blank	1	25					
F605269-BLK7	Blank	1	25					100X
F605269-BLK8	Blank	1	25					100X
F605269-BLK9	Blank	1	25					100X
F605269-BS1	LCS	1	25	1507758	50			
F605269-BS2	LCS	1	25	1507758	50			100X
F605269-BSD1	LCS Dup	1	25	1507758	50			
F605269-BSD2	LCS Dup	1	25	1507758	50			100X
F605269-DUP1	Duplicate [1605524-01]	1	25					
F605269-DUP2	Duplicate [1605524-01RE1]	1	25					100X
F605269-MS1	Matrix Spike [1605524-01]	0.02	0.5	1601450	50			[Spk] 1Trap->25mL; 25mL->25mL; Spiked 0.5mL
F605269-MS2	Matrix Spike [1605524-01RE1]	1	25	1601450	50			100X
F605269-MSD1	Matrix Spike Dup [1605524-01]	0.02	0.5	1601450	50			[Spk] 1Trap->25mL; 25mL->25mL; Spiked 0.5mL
F605269-MSD2	Matrix Spike Dup [1605524-01RE1]	1	25	1601450	50			100X

Date: 6/3/2016

2600.3
5/31/16 DM

PREPARATION BENCH SHEET

F605269

Eurofins Frontier Global Sciences, Inc.

Matrix: Air **Prepared using: AFS - EFGS-009 FSTM Trap Nitric/Sulfuric Digestion** **Prepared: 5/23/2016**

Lab Number	Sample ID	Initial (Trap)	Final (mL)	QC Sample	Sample Specs.	Raw Data	Sample Comments	Analysis Comments
1605524-01	24181H160505-1 2JVMUJKO	1	25	-	-	-		
1605524-01RE1	24181H160505-1 2JVMUJKO	1	25	-	-	-	Added 5/26/2016 by JRH	Added 5/26/2016 by JRH 100X
1605524-02	24181H160510-1 2JVMUJKW	1	25	-	-	-		
1605524-02RE1	24181H160510-1 2JVMUJKW	1	25	-	-	-	Added 5/25/2016 by DM2	Added 5/25/2016 by DM2
1605524-02RE2	24181H160510-1 2JVMUJKW	1	25	-	-	-	Added 5/26/2016 by JRH	Added 5/26/2016 by JRH 100X → 500X
1605524-03	24181H160510-2 2JVMUJL3	1	25	-	-	-		
1605524-03RE1	24181H160510-2 2JVMUJL3	1	25	-	-	-	Added 5/25/2016 by DM2	Added 5/25/2016 by DM2
1605524-03RE2	24181H160510-2 2JVMUJL3	1	25	-	-	-	Added 5/26/2016 by JRH	Added 5/26/2016 by JRH 100X → 100X
1605524-04	24181H160511-1 2JVMUJKX	1	25	-	-	-		
1605524-04RE1	24181H160511-1 2JVMUJKX	1	25	-	-	-	Added 5/26/2016 by JRH	Added 5/26/2016 by JRH 100X
1605524-05	24181H160512-1 2JVMUJL0	1	25	-	-	-		
1605524-05RE1	24181H160512-1 2JVMUJL0	1	25	-	-	-	Added 5/26/2016 by JRH	Added 5/26/2016 by JRH 100X
1605524-06	24181H160512-2 2JVMUJL1	1	25	-	-	-		
1605524-06RE1	24181H160512-2 2JVMUJL1	1	25	-	-	-	Added 5/26/2016 by JRH	Added 5/26/2016 by JRH 100X

[redacted]

Issue Date: 6/3/2016

PREPARATION BENCH SHEET

F605269

Eurofins Frontier Global Sciences, Inc.

Matrix: Air **Prepared using: AFS - EFGS-009 FSTM Trap Nitric/Sulfuric Digestion** **Prepared: 5/23/2016**

Standard ID(s):	Description:	Expiration:
1507758	THg 1,000ng/mL Primary Spiking Standard	23-Jun-16 00:00
1601450	THg 10ng/mL Calibration Standard	18-Jun-16 00:00

Reagent ID(s):	Description:	Expiration:
1507461	25% Hydroxylamine-HCl working solution	08-Jun-16 00:00
1602077	THg Dilute 1% BrCl	24-Jul-16 00:00
1602078	THg Washstation (0.5% BrCl)	19-Jul-16 00:00
1602145	Omnitrace Hydrochloric Acid	21-Apr-19 00:00
1602381	Fisher Nitric Acid, Tracemetal Grade	16-Sep-17 00:00
1602548	3% SnCl2 THg reductant	08-Nov-16 00:00

1602724

Total Mercury Preservation Logbook

Initial preservation and/or verification

Technician: CSP Date: 5/28/16 Time Completed: 1218

Additional preservation and/or verification (as needed)

Technician: _____ Date: _____ Time Completed: _____

Technician: _____ Date: _____ Time Completed: _____

Work Orders: 1605778

BrCl LIMS ID: 1601950

Pipette SN: MU32224

Cal. Date: 5/25/16

Sample ID	Sample Volume (mL)	Reagent added (mL)	Oxidized? Y / N	Additional preservation (as needed) Oxidized? Y / N	Reagent added (mL)	Oxidized? Y / N
1605778-01A	290	~~3.00~~ 2.90	y			
1605778-02C	300	3.00	y			
1605778-03A	300	3.00	y			

CSP 5/28/16

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

Comments: _____

Total Mercury Preservation Logbook

Initial preservation and/or verification

Technician: CSB, LM Date: 5/27/16 Time Completed: 17:30

Work Orders: 1605776

Additional preservation and/or verification (as needed)

Technician: _____ Date: _____ Time Completed: _____

Technician: _____ Date: _____ Time Completed: _____

BrCl LIMS ID: 1601950

Pipette SN: MU32229

Cal. Date: 5/25/16

Sample ID	Sample Volume (mL)	Reagent added (mL)	Oxidized? Y / N	Additional preservation (as needed) Oxidized? Y / N	Reagent added (mL)	Oxidized? Y / N
1605775-01A	300	3.00	Y			
1605775-03A	300	3.00	Y			
1605775-05A	300	3.00	Y			
1605775-07A	300	3.00	Y			
1605775-09A	300	3.00	Y			
1605775-11A	300	3.00	Y			
1605775-13A	300	3.00	Y			
1605775-15A	300	3.00	Y			
1605775-17A	300	3.00	Y			
1605775-02C	300	3.00	Y			
1605775-04C	300	3.00	Y			
1605775-06C	300	3.00	Y			
1605775-08C	300	3.00	Y			
1605775-10C	300	3.00	Y			
1605775-12C	300	3.00	Y			
1605775-14C	300	3.00	Y			
1605775-16C	300	3.00	Y			
1605775-18C	300	3.00	Y			
1605775-19A	300	3.00	Y			
		LM 5/27/16				

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

Comments: _____

DM 5/31/16

Total Mercury Preservation Logbook

Initial preservation and/or verification

Technician: CSP Date: 5/25/16 Time Completed: 1405

Additional preservation and/or verification (as needed)

Technician: CMC Date: 5/31/16 Time Completed: 1030

Technician: _____ Date: _____ Time Completed: _____

Work Orders: 1605688, 1605687

BrCl LIMS ID: 1601950

Pipette SN: MU32229

Cal. Date: 5/25/16

Sample ID	Sample Volume (mL)	Reagent added (mL)	Oxidized? Y / N	Additional preservation (as needed) Oxidized? Y / N	Reagent added (mL)	Oxidized? Y / N
1605688-01A	300	3.00 +3.00	y			
1605688-03A	300	3.00	y			
1605688-05A	270	2.70	y			
1605688-07A	300	3.00	y			
1605687-01A	300	3.00	y			
1605687-02A	300	3.00	y			
1605687-03A	300	3.00	y			
1605687-04A	300	3.00	y			
*1605687-05A	300	15.00	y	N	9.00	Y
1605687-06A	300	3.00	y			

CSP 5/25/16

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

Comments: *1605687-05A was made into a 50/50 split in a 20mL glass vial (1605687-05B) 9mL BrCl was added to 11mL of sample 5/31/16 CMC

Total Mercury Preservation Logbook

Initial preservation and/or verification

Technician: CMK Date: 5/26/16 Time Completed: 1510

Additional preservation and/or verification (as needed)

Technician: CMK Date: 5/31/16 Time Completed: 10:38

Technician: _____ Date: _____ Time Completed: _____

Work Orders: 1605731

BrCl LIMS ID: 1601950

Pipette SN: MU32229

Cal. Date: 5/25/16

Sample ID	Sample Volume (mL)	Reagent added (mL)	Oxidized? Y / N	Additional preservation (as needed) Oxidized? Y / N	Reagent added (mL)	Oxidized? Y / N
1605731-01A	2.60	2.60	Y	N	10.40	Y
1605731-03A	2.80	2.80	Y			
1605731-05A	3.00	3.00	Y	N	12.00	Y
1605731-07A	3.00	3.00	Y			

5/26/16 CMK

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

Comments: _____

DM 5/31/16

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

Analyst:	DON MORAN	**Sequence(s) #:**	6E31005, 6E31004
Reviewer:		**Dataset ID(s):**	THG26003-160531-1
Date:	5/31/2016	**WO (s) #:**	VARIOUS
Batch #(s):	F605342, F605348, F605269		

• **Select the correct preparation method.**

	Analyte	Prep Method		Matrix
☑	THg	EFAFS-T-AFS-SOP2985	FSTM Trap 70:30 Digest	Air/Gas
☐	THg	EFAFS-T-AFS-SOP2807	Modified Cold Aqua Regia	Sed/Soil
☐	THg	EFAFS-T-AFS-SOP2821	Shared Bomb-HF/HNO3/HCl Digest	Sed/Soil
☐	THg	EFTM-T-TM-SOP2825	Nitric Acid Oven Bomb	Sed/Soil
☐	THg	EFAFS-T-AFS-SOP2795	70:30 Digest	Tissue
☐	THg	EFAFS-T-AFS-SOP2800	KCl Trap BrCl Oxidation	Air/Gas
☐	THg	EFTM-T-TM-SOP2837	Shared Nitric	Tissue
☑	THg	EFSR-P-SP-SOP2796	BrCl Oxidation	Water
☐	Hg0	NA	NA	Water
☐	Inorg Hg	NA	NA	Water

	Analyst Initials: DM	Reviewer Initials:			
1. Compare SampleID with Benchsheet/Sequence/Raw Data (Have all samples been imported?)	☑ YES	☐ NO		☑
2. Check for transcription errors from Excel spreadsheet (or Prep Benchsheet)/Raw data	☑ YES	☐ NO		☑
(a) On raw data (instrument print-out), does correct file (dataset ID#) name appear in description?	☑ YES	☐ NO		☑
Naming convention: THg26001-yymmdd-1 or THg26002-yymmdd-1				
(b) Check 5% of transcription from Instrument print-out and Excel file	☑ YES	☐ NO		☑
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	☐ N/A	☑
(d) Check and compare masses (review prep benchsheet)	☑ YES	☐ NO	☐ N/A	☑
(e) Check & compare initial & final volumes	☑ YES	☐ NO	☐ N/A	☑
(f) Do aliquots and dilutions written on benchsheet match those in Excel?	☑ YES	☐ NO	☐ N/A	☑
50 ml / aliquot = Excel dilution value				
(g) Is the sequence #, analyst, date, and instrument # on the QC page?	☑ YES	☐ NO		☑
(h) Is the analysis status correct? (analyzed/initial review/reviewed)	☑ YES	☐ NO		☑
(i) Original prep bench sheet added to data package?	☑ YES	☐ NO		☑
(j) Benchsheet prep date MUST match actual prep date (check if re-shot vs re-extract)	☑ YES	☐ NO		☑
3. High QA? WO#(s)/Client(s):	☐ YES	☑ NO		☑
4. Client specific QC? (if Yes, refer to Project Notes/LIMS)	☑ YES	☐ NO		☑
(a) Have the QC requirements been met for all WO#s?	☑ YES	☐ NO		
(b) Prep blanks corrections/assigned properly	☑ YES	☐ NO		☑
5a. 20 or fewer samples in batch?	☑ YES	☐ NO		☑
(i) 3 PBs, 1 LCS(or BS), 1 LCSD(or BSD), 1 DUP/Batch 1 MS/MSD (or AS/ASD)/10 samples?	☑ YES	☐ NO		☑
(ii) 1 CCV and 1 CCB every 10 analytical runs?	☑ YES	☐ NO		☑

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

Analyst:	DON MORAN	**Sequence(s) #:**	6E31005, 6E31004
Reviewer:	0	**Dataset ID(s):**	THG26003-160531-1
Date:	5/31/2016	**WO (s) #:**	VARIOUS
Batch #(s):	F605342, F605348, F605269		0

Analyst Initials DM **Reviewer Initials** L

5b. Has the B/C section data been uploaded?	☐ YES	☐ NO	☑ N/A	☑
QA/QC Data Checked				
6. RSD CF (≤ 15%)	☑ PASS	☐ FAIL		☑
Comments:				
7. The calibration curve included a minimum of 5 Standards	☑ YES	☐ NO		☑
Comments:				
8. 1st Calibration Standard % Recoveries EPA 1631E (75-125%)	☑ PASS	☐ FAIL		☑
9. ICV and CCV % Recoveries EPA 1631E (77-123%)	☑ PASS	☐ FAIL		☑
Comments:				
10. Do all calibration points pass acceptance criteria?	☑ YES	☐ NO		☑
Comments:				
11.Are qualifiers consistant with the data review flowcharts?	☑ YES	☐ NO	☐ N/A	☑
Comments:				
12. Explain any items on the failed data report from Element				☑
Comments: *1605688-05, 1605524-02RE2 HIGH. RE-ANALYZED AT A DILUTION. F605269-BLK7 HIGH. F605342 MSD1 LOW RECOVERY. RE-ANALYZED AND PASSED*				
13. Are the individual Preparation Blanks < PQL or <2.2xMDL for WI (refer to appropriate prep method PQL list)	☑ PASS	☐ FAIL		☑
(a) If not < PQL or <2.2xMDL for WI, note which PB(s) are above control limit:				
(b) Is the mean PB < PQL or <2.2xMDL for WI (for appropriate qualification)?	☑ YES	☐ NO		☑
(c) Was a BrCl Blank analyzed for each preservation level?	☑ YES	☐ NO	☐ N/A	☑
(d) Are Preparation Blanks summarized on QC page?	☑ YES	☐ NO		☑
14. Filtration Blank Prepared (if yes, use FB qualifier)	☑ YES	☐ NO		☑
(a) Filtration Blank prep date same as associated samples' prep date	☑ YES	☐ NO	☐ N/A	☑
(b) Filtration Blank absolute value < PQL or <2.2xMDL for WI	☑ YES	☐ NO	☐ N/A	☑
15. IBLs (3 minimum) individually < 0.50 ng/L, mean < 0.25 ng/L and STD of 0.10 ng/L?	☑ PASS	☐ FAIL		☑
Comments:				
16. CCBs individually < 0.50 ng/L or 2.2 x MDL for WI?	☑ PASS	☐ FAIL		☑
Comments:				
17. Have Total Solids been applied? (If NO, please ensure that they are done or nearly done)	☐ YES	☐ NO	☑ N/A	☑
18. Is the correct 'Source' designated for MD/MS/MSD?	☑ YES	☐ NO		☑
19. For digested preps: was there a spike witness signature & date on the prep bench sheet?	☑ YES	☐ NO	☐ N/A	☑

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

Analyst:	DON MORAN	**Sequence(s) #:**	6E31005, 6E31004
Reviewer:	0	**Dataset ID(s):**	THG26003-160531-1
Date:	5/31/2016	**WO (s) #:**	VARIOUS
Batch #(s):	F605342, F605348, F605269		0

Analyst Initials DM **Reviewer Initials**

20. MS/MSD Spiked at least 1-5 X ambient or 5x MRL (whichever is higher) ?	☑ YES	☐ NO		☑
Comments:				
21. Are all samples within instrument calibration range? (or at minimum dilution size)	☑ PASS	☐ FAIL		☑
Comments:				
22. Are the samples run at the correct dilution level for the method?	☑ YES	☐ NO		
Comments:				
23. Dissolved < Total (if applicable)	☑ YES	☐ NO	☐ N/A	☑
Comments:				
24. Effluent < Influent (visually confirm if needed)	☑ YES	☐ NO	☐ N/A	☑
Comments:				
25. Are re-runs noted with reason?	☑ YES	☐ NO	☐ N/A	☑
Comments:				
26. FSTM Datasets: Check to ensure the 'Response' & 'Initial Result' columns match in both the Excel dataset & LIMS for the FSTM A (in sequence) & B/C (in batch) traps?	☐ YES	☐ NO	☑ N/A	☑
Comments:				
27. Is the B trap <5% A Traps	☐ YES	☐ NO	☑ N/A	☑
Comments:				
28. Are spiked trap recoveries75-125% of true value?	☐ YES	☐ NO	☑ N/A	☑
Comments:				
29.Have non-reportable samples been imported into LIMS and clicked to non-reportable?	☑ YES	☐ NO	☐ N/A	
Comments:				
30. Have re-extracts been created for non-reportable samples?	☐ YES	☐ NO	☑ N/A	☑
31. Are there any HIGH QA projects within the data? If so, place data package in QA office before scanning.	☐ YES	☐ NO	☑ N/A	☑
32. Does the data set need scanning?	☑ YES		☐ N/A	☑
33. Does the dataset have an LOQ/LOQ or DOC?	☐ YES		☑ N/A	☑
34. Water samples: has the preservation log been included in dataset for final volume verification?	☑ YES	☐ NO	☐ N/A	☑
35. Water samples-is the final volume correct in the sequence?	☑ YES	☐ NO	☐ N/A	☑

Files located at: \\Cuprum\gen_admin\Quality Assurance\Training Master\DOCs

36. Date of analyst IDOC/CDOC:		1/18/2016	IDOC/CDOC within last 12 months?	☑ YES	☐ NO
37. Date of analyst's SOP reading for method:		3/23/2015	Current SOP revision read?	☑ YES	☐ NO
38. Date of LOD:	1/14/2016		LOD within last 3 months?	☑ YES	☐ NO
39. Date of LOQ:	1/14/2016		LOQ within last 3 months?	☑ YES	☐ NO

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

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

Analyst:	DON MORAN	**Sequence(s) #:**	6E31005, 6E31004
Reviewer:	0	**Dataset ID(s):**	THG26003-160531-1
Date:	5/31/2016	**WO (s) #:**	VARIOUS
Batch #(s):	F605342, F605348, F605269		0

DM

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

Additional Page (s)? ☐ YES

MMHg27001-160603-1 SOLIDS

eurofins | Frontier Global Sciences

Analysis Datasheet for Methyl Mercury in Soil/Tissue

Date of Analysis: June 03, 2016
Instrument #: Hg2700-1
LIMS Sequence #: 6F03017

Analyst: JH
Units ng/L

Calibration Statistics:

LabNumber	n	True Val	Area	Uncorrected Response Factor	Corrected Peak Height	Corrected Response Factor	% Recovery
SEQ-CAL1	1	0.05 ng/L	28.62 units	572.35	25.90 units	517.94	100.5 %Rec
SEQ-CAL2	1	0.20 ng/L	104.36 units	521.82	101.64 units	508.21	98.6 %Rec
SEQ-CAL3	1	1.00 ng/L	548.04 units	548.04	545.32 units	545.32	105.8 %Rec
SEQ-CAL4	1	2.00 ng/L	1039.26 units	519.63	1036.54 units	518.27	100.6 %Rec
SEQ-CAL5	1	4.00 ng/L	1951.77 units	487.94	1949.05 units	487.26	94.5 %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
515.40	+/- 20.94	4.1% RSD	529.96

Blanks:

LabNumber	n	Mean	Std Dev	Mean (ng/L)	Std Dev (ng/L)
SEQ-IBL	1	2.72 units		0.01 ng/L	#VALUE!

Preparation Blanks

Sample Type	Batch ID	n	Mean	Std Dev
BLK	1	3	-0.001 ng/L	±0.004
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: JH 6/7/16

Instrument	Analyst	Sample Type	LabNumber	Dilution	Analyzed	FileID	Run End	Uncorrected Response	Batch ID	No PB Correction?	RESP	InitialResult	FinalResult	InitialUnits	Comments
Hg2700-1	JH	CAL	SEQ-IBL1	1	6/3/16 14:51	12923-1.RAW	14:51:34	2.72			0.0	0.000	0.000	ng/L	
Hg2700-1	JH	CAL	SEQ-CAL1	1	6/3/16 15:02	12924-1.RAW	15:02:05	28.62			25.9	0.050	0.050	ng/L	
Hg2700-1	JH	CAL	SEQ-CAL2	1	6/3/16 15:12	12925-1.RAW	15:12:36	104.36			101.6	0.197	0.197	ng/L	
Hg2700-1	JH	CAL	SEQ-CAL3	1	6/3/16 15:23	12926-1.RAW	15:23:06	548.04			545.3	1.058	1.058	ng/L	
Hg2700-1	JH	CAL	SEQ-CAL4	1	6/3/16 15:33	12927-1.RAW	15:33:37	1039.26			1036.5	2.011	2.011	ng/L	
Hg2700-1	JH	CAL	SEQ-CAL5	1	6/3/16 15:44	12928-1.RAW	15:44:08	1951.77			1949.0	3.782	3.782	ng/L	
Hg2700-1	JH	CAL	SEQ-ICV1	1	6/3/16 15:54	12929-1.RAW	15:54:38	273.55			270.8	0.525	0.525	ng/L	
Hg2700-1	JH	CAL	SEQ-ICB1	1	6/3/16 16:05	12930-1.RAW	16:05:09	5.02			2.3	0.004	0.004	ng/L	
Hg2700-1	JH	SAM	F606099-BS1	1	6/3/16 16:15	12931-1.RAW	16:15:40	269.70		x	267.0	0.518	0.518	ng/L	
Hg2700-1	JH	SAM	F606099-BS4	1	6/3/16 16:26	12932-1.RAW	16:26:11	282.92		x	280.2	0.544	0.544	ng/L	
Hg2700-1	JH	SAM	F606099-BS2	1	6/3/16 16:36	12933-1.RAW	16:36:41	279.16		x	276.4	0.536	0.536	ng/L	
Hg2700-1	JH	SAM	F606099-BS5	1	6/3/16 16:47	12934-1.RAW	16:47:12	284.28		x	281.6	0.546	0.546	ng/L	
Hg2700-1	JH	SAM	F606099-BS3	1	6/3/16 16:57	12935-1.RAW	16:57:43	296.66		x	293.9	0.570	0.570	ng/L	
Hg2700-1	JH	SAM	F606099-BS6	1	6/3/16 17:08	12936-1.RAW	17:08:14	277.09		x	274.4	0.532	0.532	ng/L	
Hg2700-1	JH	BLK	F606099-BLK1	1	6/3/16 17:18	12937-1.RAW	17:18:44	4.18	1		1.5	0.003	0.003	ng/L	
Hg2700-1	JH	BLK	F606099-BLK2	1	6/3/16 17:29	12938-1.RAW	17:29:15	2.13	1		-0.6	-0.001	-0.001	ng/L	
Hg2700-1	JH	BLK	F606099-BLK3	1	6/3/16 17:39	12939-1.RAW	17:39:46	0.58	1		-2.1	-0.004	-0.004	ng/L	
Hg2700-1	JH	CAL	SEQ-CCV1	1	6/3/16 17:50	12940-1.RAW	17:50:17	296.94			294.2	0.571	0.571	ng/L	
Hg2700-1	JH	CAL	SEQ-CCB1	1	6/3/16 18:00	12941-1.RAW	18:00:47	3.74			1.0	0.002	0.002	ng/L	

MMHg27001-160603-1 WATERS

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Analysis Datasheet for Methyl Mercury in Waters

Date of Analysis: June 03, 2016
Instrument #: Hg2700-1
LIMS Sequence #: 6F03016

Analyst: JRH
Units ng/L

Calibration Statistics:

LabNumber	n	True Val	Area	Uncorrected Response Factor	Corrected Peak Height	Corrected Response Factor	% Recovery
SEQ-CAL1	1	0.05 ng/L	28.62 units	572.35	25.90 units	517.94	100.5 %Rec
SEQ-CAL2	1	0.20 ng/L	104.36 units	521.82	101.64 units	508.21	98.6 %Rec
SEQ-CAL3	1	1.00 ng/L	548.04 units	548.04	545.32 units	545.32	105.8 %Rec
SEQ-CAL4	1	2.00 ng/L	1039.26 units	519.63	1036.54 units	518.27	100.6 %Rec
SEQ-CAL5	1	4.00 ng/L	1951.77 units	487.94	1949.05 units	487.26	94.5 %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
515.40	+/- 20.94	4.1% RSD	529.96	**0.8046**

MDN Only	
SEQ-CAL1	
SEQ-CAL2	
SEQ-CAL3	
SEQ-CAL4	
SEQ-CAL5	
SEQ-CAL6	NA
SEQ-CAL7	NA
SEQ-CAL8	NA
SEQ-CAL9	NA
SEQ-ICV/CCV	
Acetate Buffer	
Ethylating Agent	

Blanks:

LabNumber	n	Mean	Std Dev	Mean (ng/L)	Std Dev (ng/L)
SEQ-IBL	1	2.72 units		0.01 ng/L	#VALUE!

Preparation Blanks

Sample Type	Batch ID	n	Mean	Std Dev
BLK	1	3	0.015 ng/L	±0.010
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	

Instrument	Analyst	Sample Type	LabNumber	Dilution	Analyzed	FileID	Run End	Uncorrected Response	Batch ID	No PB Correction?	RESP	InitialResult	FinalResult	InitialUnits	Comments
Hg2700-1	JRH	CAL	SEQ-IBL1	1	6/3/16 14:51	12923-1.RAW	14:51:34	2.72			0.0	0.000	0.000	ng/L	
Hg2700-1	JRH	CAL	SEQ-CAL1	1	6/3/16 15:02	12924-1.RAW	15:02:05	28.62			25.9	0.050	0.050	ng/L	
Hg2700-1	JRH	CAL	SEQ-CAL2	1	6/3/16 15:12	12925-1.RAW	15:12:36	104.36			101.6	0.197	0.197	ng/L	
Hg2700-1	JRH	CAL	SEQ-CAL3	1	6/3/16 15:23	12926-1.RAW	15:23:06	548.04			545.3	1.058	1.058	ng/L	
Hg2700-1	JRH	CAL	SEQ-CAL4	1	6/3/16 15:33	12927-1.RAW	15:33:37	1039.26			1036.5	2.011	2.011	ng/L	
Hg2700-1	JRH	CAL	SEQ-CAL5	1	6/3/16 15:44	12928-1.RAW	15:44:08	1951.77			1949.0	3.782	3.782	ng/L	
Hg2700-1	JRH	CAL	SEQ-ICV1	1	6/3/16 15:54	12929-1.RAW	15:54:38	273.55			270.8	0.525	0.525	ng/L	
Hg2700-1	JRH	CAL	SEQ-ICB1	1	6/3/16 16:05	12930-1.RAW	16:05:09	5.02			2.3	0.004	0.004	ng/L	
Hg2700-1	JRH	SAM	F606099-BS1	1	6/3/16 16:15	12931-1.RAW	16:15:40	269.70		x	267.0	0.644	0.644	ng/L	
Hg2700-1	JRH	SAM	F606099-BS4	1	6/3/16 16:26	12932-1.RAW	16:26:11	282.92		x	280.2	0.676	0.676	ng/L	
Hg2700-1	JRH	SAM	F606099-BS2	1	6/3/16 16:36	12933-1.RAW	16:36:41	279.16		x	276.4	0.667	0.667	ng/L	
Hg2700-1	JRH	SAM	F606099-BS5	1	6/3/16 16:47	12934-1.RAW	16:47:12	284.28		x	281.6	0.679	0.679	ng/L	
Hg2700-1	JRH	SAM	F606099-BS3	1	6/3/16 16:57	12935-1.RAW	16:57:43	296.66		x	293.9	0.709	0.709	ng/L	
Hg2700-1	JRH	SAM	F606099-BS6	1	6/3/16 17:08	12936-1.RAW	17:08:14	277.09		x	274.4	0.662	0.662	ng/L	
Hg2700-1	JRH	BLK	F606099-BLK1	1	6/3/16 17:18	12937-1.RAW	17:18:44	4.18		x	1.5	0.004	0.004	ng/L	
Hg2700-1	JRH	BLK	F606099-BLK2	1	6/3/16 17:29	12938-1.RAW	17:29:15	2.13		x	-0.6	-0.001	-0.001	ng/L	
Hg2700-1	JRH	BLK	F606099-BLK3	1	6/3/16 17:39	12939-1.RAW	17:39:46	0.58		x	-2.1	-0.005	-0.005	ng/L	
Hg2700-1	JRH	CAL	SEQ-CCV1	1	6/3/16 17:50	12940-1.RAW	17:50:17	296.94			294.2	0.571	0.571	ng/L	
Hg2700-1	JRH	CAL	SEQ-CCB1	1	6/3/16 18:00	12941-1.RAW	18:00:47	3.74			1.0	0.002	0.002	ng/L	
Hg2700-1	JRH	BLK	F606074-BLK1	1.25	6/3/16 18:11	12942-1.RAW	18:11:18	10.92	1		8.2	0.020	0.025	ng/L	
Hg2700-1	JRH	BLK	F606074-BLK2	1.25	6/3/16 18:21	12943-1.RAW	18:21:49	7.88	1		5.2	0.012	0.016	ng/L	
Hg2700-1	JRH	BLK	F606074-BLK3	1.25	6/3/16 18:32	12944-1.RAW	18:32:20	4.27	1		1.5	0.004	0.005	ng/L	
Hg2700-1	JRH	SAM	F606074-BS1	1.25	6/3/16 18:42	12945-1.RAW	18:42:50	598.95	1		596.2	1.426	1.782	ng/L	
Hg2700-1	JRH	SAM	F606074-BSD1	1.25	6/3/16 18:53	12946-1.RAW	18:53:21	593.63	1		590.9	1.413	1.766	ng/L	
Hg2700-1	JRH	SAM	F606074-DUP1	1.25	6/3/16 19:03	12947-1.RAW	19:03:52	30.61	1		27.9	0.055	0.069	ng/L	
Hg2700-1	JRH	SAM	F606074-MS1	1.25	6/3/16 19:14	12948-1.RAW	19:14:23	809.92	1		807.2	1.935	2.418	ng/L	
Hg2700-1	JRH	SAM	F606074-MSD1	1.25	6/3/16 19:24	12949-1.RAW	19:24:53	933.70	1		931.0	2.233	2.791	ng/L	
Hg2700-1	JRH	SAM	F606074-MS2	1.25	6/3/16 19:35	12950-1.RAW	19:35:24	787.24	1		784.5	1.880	2.350	ng/L	
Hg2700-1	JRH	SAM	F606074-MSD2	1.25	6/3/16 19:45	12951-1.RAW	19:45:55	783.30	1		780.6	1.870	2.338	ng/L	
Hg2700-1	JRH	CAL	SEQ-CCV2	1	6/3/16 19:56	12952-1.RAW	19:56:26	321.34			318.6	0.618	0.618	ng/L	
Hg2700-1	JRH	CAL	SEQ-CCB2	1	6/3/16 20:06	12953-1.RAW	20:06:56	8.04			5.3	0.010	0.010	ng/L	
Hg2700-1	JRH	SAM	1605389-03	1.25	6/3/16 20:17	12954-1.RAW	20:17:27	31.26	1		28.5	0.057	0.071	ng/L	
Hg2700-1	JRH	SAM	1605389-04	1.25	6/3/16 20:27	12955-1.RAW	20:27:58	185.41	1		182.7	0.429	0.536	ng/L	
Hg2700-1	JRH	SAM	1605389-05	1.25	6/3/16 20:38	12956-1.RAW	20:38:28	196.34	1		193.6	0.455	0.569	ng/L	
Hg2700-1	JRH	SAM	1605389-06	1.25	6/3/16 20:48	12957-1.RAW	20:48:59	7.88	1		5.2	0.000	0.001	ng/L	
Hg2700-1	JRH	SAM	1605571-05	1.25	6/3/16 20:59	12958-1.RAW	20:59:30	26.22	1		23.5	0.045	0.056	ng/L	
Hg2700-1	JRH	SAM	1605571-06	1.25	6/3/16 21:10	12959-1.RAW	21:10:01	4.91	1		2.2	-0.007	-0.008	ng/L	
Hg2700-1	JRH	SAM	1605775-01	1.25	6/3/16 21:20	12960-1.RAW	21:20:31	78.79	1		76.1	0.171	0.214	ng/L	
Hg2700-1	JRH	SAM	1605775-02	1.25	6/3/16 21:31	12961-1.RAW	21:31:01	74.57	1		71.9	0.161	0.202	ng/L	
Hg2700-1	JRH	SAM	1605775-03	1.25	6/3/16 21:41	12962-1.RAW	21:41:31	55.90	1		53.2	0.116	0.145	ng/L	
Hg2700-1	JRH	SAM	1605775-04	1.25	6/3/16 21:52	12963-1.RAW	21:52:02	16.75	1		14.0	0.022	0.027	ng/L	
Hg2700-1	JRH	CAL	SEQ-CCV3	1	6/3/16 22:02	12964-1.RAW	22:02:32	276.71			274.0	0.532	0.532	ng/L	
Hg2700-1	JRH	CAL	SEQ-CCB3	1	6/3/16 22:13	12965-1.RAW	22:13:03	3.99			1.3	0.002	0.002	ng/L	
Hg2700-1	JRH	SAM	1605775-05	1.25	6/3/16 22:23	12966-1.RAW	22:23:34	41.05	1		38.3	0.080	0.101	ng/L	
Hg2700-1	JRH	SAM	1605775-06	1.25	6/3/16 22:34	12967-1.RAW	#######	12.98	1		10.3	0.013	0.016	ng/L	
Hg2700-1	JRH	SAM	1605775-07	1.25	6/3/16 22:44	12968-1.RAW	#######	14.33	1		11.6	0.016	0.020	ng/L	
Hg2700-1	JRH	SAM	1605775-08	1.25	6/3/16 22:55	12969-1.RAW	#######	5.84	1		3.1	-0.004	-0.006	ng/L	
Hg2700-1	JRH	SAM	1605775-09	1.25	6/3/16 23:05	12970-1.RAW	#######	152.30	1		149.6	0.349	0.436	ng/L	
Hg2700-1	JRH	SAM	1605775-19	1.25	6/3/16 23:16	12971-1.RAW	#######	3.43	1		0.7	-0.010	-0.013	ng/L	
Hg2700-1	JRH	SAM	1605775-11	1.25	6/3/16 23:26	12972-1.RAW	#######	141.66	1		138.9	0.323	0.404	ng/L	
Hg2700-1	JRH	SAM	1605775-12	1.25	6/3/16 23:37	12973-1.RAW	#######	36.14	1		33.4	0.069	0.086	ng/L	
Hg2700-1	JRH	SAM	1605775-17	1.25	6/3/16 23:47	12974-1.RAW	#######	31.88	1		29.2	0.058	0.073	ng/L	
Hg2700-1	JRH	SAM	1605775-18	1.25	6/3/16 23:58	12975-1.RAW	#######	7.30	1		4.6	-0.001	-0.001	ng/L	
Hg2700-1	JRH	CAL	SEQ-CCV4	1	6/4/16 0:08	12976-1.RAW	#######	283.96			281.2	0.546	0.546	ng/L	
Hg2700-1	JRH	CAL	SEQ-CCB4	1	6/4/16 0:19	12977-1.RAW	#######	2.27			-0.5	-0.001	-0.001	ng/L	

MethylMercury | **Operat** JH | **BlankS** 3.8684 | **Calib Eqn:** Conc = (Area-3.868) / 509 | **Run Date:** ####### | **Blank SD:** 1.623332358
EPA1630 | **Worksl** WS0008 | **CalibFa** 509.26 | **Status:** CF w. Blank Sub Calib. OK | **Run Time:** 14:25:01 | **Blank RSD** 41.96372053
Metho 2010-01 | **R:** 0.9992 | **R²:** 0.998480953 | **CalibAnal** MeHg | **CF SD:** 22.56266585
Descrip MMHg27001-160603-3 | **CF RSD%:** 4.430486054

Sample/ID	Location	Rinse	Dilute	Blank	ConcHg0(pg	ConcMeHg(ppt	ConcHg2(pg	ConcPrHg(p	Rec%	QA	RawData	RunEnd	PeakHg0 (Rav	PeakMeHg (Ra	PeakHg2(Raw	PeakPrHg(Rav	Control (etf)	Flags	RunCount
Clean				0		0.00217002	0.0095708				12921-1.RAW	14:30:33	0	1.105102908	4.874040718	0	cleandry	OK	1
ws	C1			3.8684	0.0055419	-0.00602879	-0.000954				12922-1.RAW	14:41:03	6.690672348	0.798200758	3.382386364	0	psample10	OK	1
SEQ-TBL1	C2		1	0	0.0308676	0.005342168	0.111039				12923-1.RAW	14:51:34	15.71960227	2.720549242	56.54765837	0	psample10	CT	1
SEQ-CAL1	C3		1	3.8684	0.0558071	0.048598499	0.0933906		97.20		12924-1.RAW	15:02:05	32.28868371	28.61766098	51.47848011	0	psample10	OK	1
SEQ-CAL2	C4		1	3.8684	0.1810797	0.197334939	0.1118908		98.67		12925-1.RAW	15:12:36	96.08493624	104.3630919	60.84985795	0	psample10	OK	1
SEQ-CAL3	C5		1	3.8684	0.6541265	1.068550638	0.1482298		106.86		12926-1.RAW	15:23:06	336.9885097	548.0378788	79.35584754	0	psample10	CT	1
SEQ-CAL4	C6		1	3.8684	1.4833845	2.033128061	0.2146243		101.66		12927-1.RAW	15:33:37	759.2959403	1039.258002	113.1678646	0	psample10	CT	1
SEQ-CAL5	C7		1	3.8684	3.0081863	3.824962657	0.2972632		95.62		12928-1.RAW	15:44:08	1535.815591	1951.766619	155.2525095	0	psample10	CT	1
SEQ-ICV1	C8		1	3.8684	0.7994731	0.529564592	0.166285		106.04		12929-1.RAW	15:54:38	411.007624	273.5541667	88.55061553	0	psample10	CT	1
SEQ-ICB1	C9		1	0	0.0621784	0.009850163	0.1242082				12930-1.RAW	16:05:09	31.66493845	5.016287879	63.25420547	0	psample10	CT	1
F606099-BS1	C10		1	3.8684	0.7822014	0.522004222	0.1748965				12931-1.RAW	16:15:40	402.2118134	269.7039773	92.93610322	0	psample10	CT	1
F606099-BS4	C11		1	3.8684	2.0260309	0.547949783	0.4326019				12932-1.RAW	16:26:11	1035.543708	282.9169981	224.1750091	0	psample10	CT	1
F606099-BS2	C12		1	3.8684	0.7438663	0.5405815	0.1738326				12933-1.RAW	16:36:41	382.6893085	279.1646307	92.3942968	0	psample10	CT	1
F606099-BS5	C13		1	3.8684	1.6522497	0.550633883	0.4112047				12934-1.RAW	16:47:12	845.2921108	284.2839015	213.2782867	0	psample10	CT	1
F606099-BS3	C14		1	3.8684	0.7379155	0.574926671	0.1834411				12935-1.RAW	16:57:43	379.6588068	296.655232	97.2875	0	psample10	CT	1
F606099-BS6	C15		1	3.8684	1.7739638	0.536515091	0.4202652				12936-1.RAW	17:08:14	907.276165	277.0937737	217.892445	0	psample10	CT	1
F606099-BLK1	C16		1	3.8684	0.0548401	0.000607593	0.1135735				12937-1.RAW	17:18:44	31.79623777	4.177840909	61.70677083	0	psample10	OK	1
F606099-BLK2	C17		1	3.8684	0.0344194	-0.003415676	0.1121524				12938-1.RAW	17:29:15	21.39682765	2.128953598	60.98308028	0	psample10	OK	1
F606099-BLK3	C18		1	3.8684	0.0386634	-0.006462193	0.1129949				12939-1.RAW	17:39:46	23.55812027	0.577485795	61.41212121	0	psample10	OK	1
SEQ-CCV1	C19		1	3.8684	0.6658755	0.575482198	0.1755992		115.24		12940-1.RAW	17:50:17	342.9717803	296.9381392	93.29422875	0	psample10	CT	1
SEQ-CCB1	C20		1	3.8684	0.03825	-0.000252009	0.1031341		0.00		12941-1.RAW	18:00:47	23.34758523	3.740080492	56.39043059	0	psample10	CT	1
F606074-BLK1	C21		1.25	3.8684	0.0516886	0.017315233	0.2042997				12942-1.RAW	18:11:18	24.92675189	10.92277462	87.1016572	0	psample10	OK	1
F606074-BLK2	A1		1.25	3.8684	0.0426843	0.009845026	0.1685329				12943-1.RAW	18:21:49	21.25833333	7.879356061	72.52998427	0	psample10	CT	1
F606074-BLK3	A2		1.25	3.8684	0.0316049	0.000984142	0.1556819				12944-1.RAW	18:32:20	16.74450758	4.26936553	67.2943796	0	psample10	CT	1
F606074-BS1	A3		1.25	3.8684	0.1123674	1.460662222	0.1721094				12945-1.RAW	18:42:50	49.64772727	598.953196	73.98707386	0	psample10	CT	1
F606074-BSD1	A4		1.25	3.8684	0.0764352	1.447585089	0.1621258				12946-1.RAW	18:53:21	35.00868845	593.6254735	69.91958466	0	psample10	CT	1
F606074-DUP1	A5		1.25	3.8684	0.053921	0.065641872	0.2124686				12947-1.RAW	19:03:52	25.83622159	30.61141098	90.42970881	0	psample10	OK	1
F606074-MS1	A6		1.25	3.8684	0.1764976	1.978479993	0.2537195		197.85		12948-1.RAW	19:14:23	75.77484868	809.9160511	107.2356707	0	psample10	CT	1
F606074-MSD1	A7		1.25	3.8684	0.1500507	2.282309284	0.2666216				12949-1.RAW	19:24:53	65.00018939	933.6983902	112.4920758	0	psample10	CT	1
F606074-MS2	A8		1.25	3.8684	0.368189	1.922828653	1.2835736		96.14		12950-1.RAW	19:35:24	153.8713778	787.2432765	526.8059704	0	psample10	CT	1
F606074-MSD2	A9		1.25	3.8684	0.3151237	1.913160164	1.2141501				12951-1.RAW	19:45:55	132.252178	783.3042614	498.5223112	0	psample10	CT	1
SEQ-CCV2	A10		1	3.8684	0.7681813	0.623395051	0.2082614		124.83		12952-1.RAW	19:56:26	395.0719697	321.3382102	109.9274858	0	psample10	CT	1
SEQ-CCB2	A11		1	3.8684	0.0396128	0.008197203	0.1041455		0.00		12953-1.RAW	20:06:56	24.04161932	8.042921402	56.90549558	0	psample10	OK	1
1605389-03	A12		1.25	3.8684	0.0445596	0.06723142	0.1838022				12954-1.RAW	20:17:27	22.02234848	31.25970644	78.75080492	0	psample10	OK	1
1605389-04	A13		1.25	3.8684	0.0698753	0.445590292	0.1965122				12955-1.RAW	20:27:58	32.33612689	185.4052557	83.9289536	0	psample10	OK	1
1605389-05	A14		1.25	3.8684	0.0818497	0.472429728	0.2373159				12956-1.RAW	20:38:28	37.21460701	196.3398437	100.5526989	0	psample10	OK	1
1605389-06	A15		1.25	3.8684	0.039983	0.009852464	0.140871				12957-1.RAW	20:48:59	20.1578125	7.882386364	61.26032197	0	psample10	OK	1
1605571-05	A16		1.25	3.8684	0.0946727	0.054863027	0.3583641				12958-1.RAW	20:59:30	42.43880208	26.22002841	149.8686474	0	psample10	CT	1
1605571-06	A17		1.25	3.8684	0.0337492	0.002567161	0.1581192				12959-1.RAW	21:10:01	17.6181108	4.914299242	68.28736098	0	psample10	CT	1
1605775-01	A18		1.25	3.8684	0.168041	0.183889566	0.319891				12960-1.RAW	21:20:31	72.3295928	78.78641098	134.1944274	0	psample10	CT	1
1605775-02	A19		1.25	3.8684	0.106433	0.173544566	0.2413974				12961-1.RAW	21:31:01	47.23001894	74.5717803	102.2155303	0	psample10	OK	1
1605775-03	A20		1.25	3.8684	0.0669295	0.127720179	0.2315995				12962-1.RAW	21:41:31	31.13598485	55.90258049	98.22381629	0	psample10	OK	1
1605775-04	A21		1.25	3.8684	0.0428718	0.031612026	0.1790052				12963-1.RAW	21:52:02	21.33470644	16.74739583	76.79649162	0	psample10	OK	1
SEQ-CCV3	B1		1	3.8684	0.7969865	0.535763991	0.1971071		107.29		12964-1.RAW	22:02:32	409.7412879	276.7112689	104.2470516	0	psample10	CT	1
SEQ-CCB3	B2		1	3.8684	0.0289904	0.000243223	0.0941637		0.00		12965-1.RAW	22:13:03	18.63205492	3.992282197	51.82215593	0	psample10	CT	1
1605775-05	B3		1.25	3.8684	0.0766369	0.091276059	0.2395254				12966-1.RAW	22:23:34	35.09088542	41.05497159	101.4528497	0	psample10	OK	1
1605775-06	B4		1.25	3.8684	0.0320817	0.022369422	0.1698537				12967-1.RAW	22:34:04	16.93873106	12.9818892	73.06807574	0	psample10	OK	1
1605775-07	B5		1.25	3.8684	0.0716861	0.025675735	0.2138923				12968-1.RAW	22:44:35	33.07386364	14.32890625	91.00975379	0	psample10	OK	1
1605775-08	B6		1.25	3.8684	0.0301219	0.004836453	0.1673959				12969-1.RAW	22:55:06	16.14031723	5.838825758	72.06676001	0	psample10	CT	1
1605775-09	B7		1.25	3.8684	0.16309	0.36432952	0.9741409				12970-1.RAW	23:05:36	70.3125	152.2990057	400.7407537	0	psample10	CT	1
1605775-19	B8		1.25	3.8684	0.0296459	-0.001086066	0.2108696				12971-1.RAW	23:16:07	15.94640152	3.42594697	89.77826705	0	psample10	CT	1
1605775-11	B9		1.25	3.8684	0.1692089	0.33821593	1.3957566				12972-1.RAW	23:26:38	72.80539773	141.6601326	572.510158	0	psample10	CT	1
1605775-12	B10		1.25	3.8684	0.0453176	0.079201024	0.2665497				12973-1.RAW	23:37:08	22.33113163	36.13551136	112.4627841	0	psample10	OK	1
1605775-17	B11		1.25	3.8684	0.0675437	0.068753693	0.2271097				12974-1.RAW	23:47:39	31.38624527	31.87919034	96.39462341	0	psample10	CT	1
1605775-18	B12		1.25	3.8684	0.0400968	0.008430989	0.1840548				12975-1.RAW	23:58:10	20.20414299	7.303267045	78.85374053	0	psample10	OK	1
SEQ-CCV4	B13		1	3.8684	0.899943	0.549990914	0.1902203		110.13		12976-1.RAW	0:08:41	462.1728626	283.9564631	100.7399149	0	psample10	CT	1
SEQ-CCB4	B14		1	3.8684	0.028837	-0.003142933	0.1207275		0.00		12977-1.RAW	0:19:11	18.55392992	2.267850379	65.35004735	0	psample10	OK	1

MethylMercury	Operat	JH	BlankS	3.8684	Calib Eqn:	Conc = (Area-3.868) / 50	Run Date:	######	Blank SD:	1.623332358
EPA1630	Worksl	WS000	CalibFa	509.26	Status:	CF w. Blank Sub Calib. OK	Run Time:	14:25:01	Blank RSD:	41.96372063
	Methoc	2010-01	R:	0.9992	R^2:	0.998481002	CalibAnaly	MeHg	CF SD:	22.55257019
	Descrip	MMHg27001-160603-3							CF RSD%:	4.430465653

Sample/ID	Location	Rinse	Dilute	Blank	ConcHg0(pg	ConcMeHg(ppt)	ConcHg2(pg	ConcPrHg(p	Rec%	QA
Clean				0		0.002210065	0.0095708			
ws	C1			3.8684	0.0054989	-0.006028788	-0.000954			
SEQ-IBL1	C2		1	0	0.0308676	0.005342166	0.111039			
SEQ-CAL1	C3		1	3.8684	0.055807	0.048598483	0.0933906		97.20	
SEQ-CAL2	C4		1	3.8684	0.1811068	0.197334876	0.1118908		98.67	
SEQ-CAL3	C5		1	3.8684	0.6541263	1.06855062	0.1482298		106.86	
SEQ-CAL4	C6		1	3.8684	1.4833841	2.033127409	0.2146242		101.66	
SEQ-CAL5	C7		1	3.8684	3.0081854	3.824966544	0.2972631		95.62	
SEQ-ICV1	C8		1	3.8684	0.7994729	0.529564422	0.1662849		106.04	
SEQ-ICB1	C9		1	0	0.0671784	0.009850159	0.1242082			
F606099-BS1	C10		1	3.8684	0.7822011	0.522004055	0.1748964			
F606099-BS4	C11		1	3.8684	2.0260303	0.547949607	0.4324297			
F606099-BS2	C12		1	3.8684	0.743866	0.540581326	0.1736373			
F606099-BS5	C13		1	3.8684	1.6522492	0.550633707	0.4112046			
F606099-BS3	C14		1	3.8684	0.7379152	0.574926487	0.1834636			
F606099-BS6	C15		1	3.8684	1.7739632	0.536514919	0.4203266			
F606099-BLK1	C16		1	3.8684	0.05484	0.000607593	0.1135734			
F606099-BLK2	C17		1	3.8684	0.0344194	-0.003415675	0.1121524			
F606099-BLK3	C18		1	3.8684	0.0366634	-0.006462191	0.1129948			
SEQ-CCV1	C19		1	3.8684	0.6658753	0.575482013	0.1754872		115.24	
SEQ-CCB1	C20		1	3.8684	0.03825	-0.000252009	0.1031341		0.00	
F606074-BLK1	C21		1.25	3.8684	0.0516886	0.017315227	0.2042996			
F606074-BLK2	A1		1.25	3.8684	0.0426843	0.009845022	0.1685328			
F606074-BLK3	A2		1.25	3.8684	0.0316049	0.00170714	0.1556818			
F606074-BS1	A3		1.25	3.8684	0.1125088	1.460661754	0.1721093			
F606074-BSD1	A4		1.25	3.8684	0.0764352	1.447584624	0.1621257			
F606074-DUP1	A5		1.25	3.8684	0.0539209	0.065641851	0.2124685			
F606074-MS1	A6		1.25	3.8684	0.1764975	1.978479358	0.2537195		197.85	
F606074-MSD1	A7		1.25	3.8684	0.1500506	2.282308552	0.2666215			
F606074-MS2	A8		1.25	3.8684	0.3681889	1.922828036	1.2835732		96.14	
F606074-MSD2	A9		1.25	3.8684	0.3151236	1.91315955	1.2141497			
SEQ-CCV2	A10		1	3.8684	0.7681811	0.623394851	0.2082613		124.83	
SEQ-CCB2	A11		1	3.8684	0.0396128	0.008197201	0.1041455		0.00	
1605389-03	A12		1.25	3.8684	0.0445596	0.067233121	0.1838021			
1605389-04	A13		1.25	3.8684	0.0698752	0.445590149	0.1965121			
1605389-05	A14		1.25	3.8684	0.0817389	0.472429577	0.2373158			
1605389-06	A15		1.25	3.8684	0.039983	0.00985246	0.140871			
1605571-05	A16		1.25	3.8684	0.0946727	0.054863009	0.358364			
1605571-06	A17		1.25	3.8684	0.0337492	0.00256716	0.1581191			
1605775-01	A18		1.25	3.8684	0.168041	0.183889507	0.3198909			
1605775-02	A19		1.25	3.8684	0.106433	0.17326297	0.2413973			
1605775-03	A20		1.25	3.8684	0.0669294	0.127951007	0.2315995			
1605775-04	A21		1.25	3.8684	0.0428718	0.031612016	0.1790052			
SEQ-CCV3	B1		1	3.8684	0.7969862	0.535763819	0.197107		107.29	
SEQ-CCB3	B2		1	3.8684	0.0289904	0.000824597	0.0941636		0.00	
1605775-05	B3		1.25	3.8684	0.0766344	0.09127603	0.2395253			
1605775-06	B4		1.25	3.8684	0.0320888	0.022369414	0.1698536			
1605775-07	B5		1.25	3.8684	0.071686	0.025675204	0.2138922			
1605775-08	B6		1.25	3.8684	0.0301219	0.004836451	0.1673958			
1605775-09	B7		1.25	3.8684	0.1630899	0.364329403	0.9741406			
1605775-19	B8		1.25	3.8684	0.0296459	-0.001086066	0.2108695			
1605775-11	B9		1.25	3.8684	0.1692088	0.338215821	1.3957562			
1605775-12	B10		1.25	3.8684	0.0453175	0.079200998	0.2665496			
1605775-17	B11		1.25	3.8684	0.0675437	0.068753671	0.2271096			
1605775-18	B12		1.25	3.8684	0.0400968	0.010538327	0.1840548			
SEQ-CCV4	B13		1	3.8684	0.8999427	0.549990737	0.1902203		110.13	
SEQ-CCB4	B14		1	3.8684	0.028837	-0.003142932	0.1207275		0.00	

RawData	RunEnd	PeakHg0 (Rav	PeakMeHg (R	PeakHg2(Raw	PeakPrHg(Rav	Control (etf)	Flags	RunCount
12921-1.RAW		0	1.125496586	4.87404718	0	cleandry	OK	1
12922-1.RAW		6.668797349	0.798200758	3.382386364	0	psample10	OK	1
12923-1.RAW		15.71960227	2.720549242	56.54765837	0	psample10	CT	1
12924-1.RAW		32.28868371	28.61766098	51.42848011	0	psample10	OK	1
12925-1.RAW		96.09681144	104.3630919	60.84985795	0	psample10	OK	1
12926-1.RAW		336.9885097	548.0380445	79.35584754	0	psample10	CT	1
12927-1.RAW		759.2959403	1039.258002	113.1678646	0	psample10	CT	1
12928-1.RAW		1535.815591	1951.769223	155.2525095	0	psample10	CT	1
12929-1.RAW		411.0076624	273.5541667	88.55061553	0	psample10	CT	1
12930-1.RAW		31.66493845	5.016287879	63.25420547	0	psample10	CT	1
12931-1.RAW		402.2118134	269.7039773	92.93610322	0	psample10	CT	1
12932-1.RAW		1035.643708	282.9169981	224.0874042	0	psample10	CT	1
12933-1.RAW		382.6893085	279.1646307	92.29487175	0	psample10	CT	1
12934-1.RAW		845.2921108	284.2839015	213.2782867	0	psample10	CT	1
12935-1.RAW		379.6588068	296.655232	97.29900568	0	psample10	CT	1
12936-1.RAW		907.276166	277.0937737	217.9237453	0	psample10	CT	1
12937-1.RAW		31.79623777	4.177840909	61.70677083	0	psample10	OK	1
12938-1.RAW		21.39682765	2.128953598	60.98308028	0	psample10	OK	1
12939-1.RAW		23.55812027	0.577485795	61.41212121	0	psample10	OK	1
12940-1.RAW		342.9717803	296.9381392	93.23696075	0	psample10	CT	1
12941-1.RAW		23.34758523	3.740080492	56.39043059	0	psample10	CT	1
12942-1.RAW		24.92675189	10.92277462	87.1016572	0	psample10	OK	1
12943-1.RAW		21.25833333	7.879356061	72.52998427	0	psample10	CT	1
12944-1.RAW		16.74450758	4.563920455	67.2943796	0	psample10	CT	1
12945-1.RAW		49.70537405	598.953196	73.98707386	0	psample10	CT	1
12946-1.RAW		35.00868845	593.6254735	69.91968466	0	psample10	CT	1
12947-1.RAW		25.83622159	30.61141098	90.42970881	0	psample10	OK	1
12948-1.RAW		75.77484868	809.9160511	107.2356707	0	psample10	CT	1
12949-1.RAW		65.00018939	933.6983902	112.4920758	0	psample10	CT	1
12950-1.RAW		153.8713778	787.2432765	526.8059704	0	psample10	CT	1
12951-1.RAW		132.252178	783.3042614	498.5223112	0	psample10	CT	1
12952-1.RAW		395.0719697	321.3382102	109.9274858	0	psample10	CT	1
12953-1.RAW		24.04161932	8.042921402	56.90549558	0	psample10	OK	1
12954-1.RAW		22.02234848	31.25970644	78.75080492	0	psample10	OK	1
12955-1.RAW		32.33612689	185.4052557	83.9289536	0	psample10	OK	1
12956-1.RAW		37.16946023	196.3398437	100.5526989	0	psample10	OK	1
12957-1.RAW		20.1578125	7.882386364	61.26032197	0	psample10	OK	1
12958-1.RAW		42.43880208	26.22002841	149.8686474	0	psample10	CT	1
12959-1.RAW		17.6181108	4.914299242	68.28736098	0	psample10	CT	1
12960-1.RAW		72.3295928	78.78641098	134.1944274	0	psample10	CT	1
12961-1.RAW		47.23001894	74.4570786	102.2155303	0	psample10	OK	1
12962-1.RAW		31.13598485	55.99663826	98.22381629	0	psample10	OK	1
12963-1.RAW		21.33470644	16.74739583	76.79649152	0	psample10	OK	1
12964-1.RAW		409.7412879	276.7112689	104.2470516	0	psample10	CT	1
12965-1.RAW		18.63205492	4.288352273	51.82215593	0	psample10	CT	1
12966-1.RAW		35.08986742	41.05497159	101.4528497	0	psample10	OK	1
12967-1.RAW		16.94164299	12.9818892	73.06807574	0	psample10	OK	1
12968-1.RAW		33.07386364	14.32869318	91.00975379	0	psample10	OK	1
12969-1.RAW		16.14031723	5.838825758	72.06676001	0	psample10	CT	1
12970-1.RAW		70.3125	152.2990057	400.7407537	0	psample10	CT	1
12971-1.RAW		15.94640152	3.42594697	89.77826705	0	psample10	CT	1
12972-1.RAW		72.80539773	141.6601326	572.510158	0	psample10	CT	1
12973-1.RAW		22.33113163	36.13551136	112.4627841	0	psample10	OK	1
12974-1.RAW		31.38624527	31.87919034	96.39462341	0	psample10	CT	1
12975-1.RAW		20.20414299	8.161813447	78.85374053	0	psample10	OK	1
12976-1.RAW		462.1728626	283.9564631	100.7399149	0	psample10	CT	1
12977-1.RAW	0:19:11	18.55392992	2.267850379	65.35004735	0	psample10	OK	1

Failing Data Report - 6F03016

Sample ID	Analysis	Result	MRL	Dup Result	Source Result	True Value	Units	% Rec.	Rec. LCL	Rec. UCL	RPD	RPD Limit	Over Cal	Failure	Qualifier
F606074-BS1	MHg-CVAFS-W-Dist	1.584	0.050			1.0010	ng/L	158	70.00	130.00			PASS-OVER	FAIL-BS	QM-12
F606074-BSD1	MHg-CVAFS-W-Dist	1.570	0.050	1.584		1.0010	ng/L	157	70.00	130.00	0.905	25.00	PASS-OVER	FAIL-BSD (Rec.)	QM-12
F606074-MS1	MHg-CVAFS-W-Dist	2.149	0.050		0.505	1.0010	ng/L	164	65.00	130.00			PASS-OVER	FAIL-MS	QM-07
F606074-MSD1	MHg-CVAFS-W-Dist	2.481	0.050	2.149	0.505	1.0010	ng/L	197	65.00	130.00	14.3	35.00	PASS-OVER	FAIL-MSD (Rec.)	QM-07
F606074-MS2	MHg-CVAFS-W-Dist	2.089	0.050		0.387	1.0010	ng/L	170	65.00	130.00			PASS-OVER	FAIL-MS	QM-07
F606074-MSD2	MHg-CVAFS-W-Dist	2.078	0.050	2.089	0.387	1.0010	ng/L	169	65.00	130.00	0.507	35.00	PASS-OVER	FAIL-MSD (Rec.)	QM-07

Don Matson 6/6/16
Analyst Reviewed By Date

Peer Reviewed By 6/7/16
Date

ANALYSIS SEQUENCE

6F03016

Instrument: Hg2700-1

Calibration ID: UNASSIGNED **Analyzed: 6/3/2016**

Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
6F03016-IBL1	QC	1			
6F03016-CAL1	QC	2	1602252		
6F03016-CAL2	QC	3	1602253		
6F03016-CAL3	QC	4	1602254		
6F03016-CAL4	QC	5	1602255		
6F03016-CAL5	QC	6	1602256		
6F03016-ICV1	QC	7	1601285		
6F03016-ICB1	QC	8			
6F03016-CCV1	QC	9	1601285		
6F03016-CCB1	QC	10			
F606074-BLK1	QC	11			
F606074-BLK2	QC	12			
F606074-BLK3	QC	13			
F606074-BS1	QC	14			
F606074-BSD1	QC	15			
F606074-DUP1	QC	16			
F606074-MS1	QC	17			
F606074-MSD1	QC	18			
F606074-MS2	QC	19			
F606074-MSD2	QC	20			
6F03016-CCV2	QC	21	1601285		
6F03016-CCB2	QC	22			
1605389-03	MHg-CVAFS-W-Dist	23			
1605389-04	MHg-CVAFS-W-Dist	24			
1605389-05	MHg-CVAFS-W-Dist	25			
1605389-06	MHg-CVAFS-W-Dist	26			
1605571-05	MHg-CVAFS-W-Dist	27			Scan all data for level IV report
1605571-06	MHg-CVAFS-W-Dist	28			Scan all data for level IV report
1605775-01	MHg-CVAFS-W-Dist	29			Scan all data - Level IV
1605775-02	MHg-CVAFS-W-Dist	30			Scan all data - Level IV
1605775-03	MHg-CVAFS-W-Dist	31			Scan all data - Level IV
1605775-04	MHg-CVAFS-W-Dist	32			Scan all data - Level IV
6F03016-CCV3	QC	33	1601285		
6F03016-CCB3	QC	34			
1605775-05	MHg-CVAFS-W-Dist	35			Scan all data - Level IV

Due Date: 6/13/2016

ANALYSIS SEQUENCE

6F03016

Instrument: Hg2700-1

Calibration ID: UNASSIGNED **Analyzed: 6/3/2016**

Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
1605775-06	MHg-CVAFS-W-Dist	36			Scan all data - Level IV
1605775-07	MHg-CVAFS-W-Dist	37			Scan all data - Level IV
1605775-08	MHg-CVAFS-W-Dist	38			Scan all data - Level IV
1605775-09	MHg-CVAFS-W-Dist	39			Scan all data - Level IV
1605775-19	MHg-CVAFS-W-Dist	40			Scan all data - Level IV
1605775-11	MHg-CVAFS-W-Dist	41			Scan all data - Level IV
1605775-12	MHg-CVAFS-W-Dist	42			Scan all data - Level IV
1605775-17	MHg-CVAFS-W-Dist	43			Scan all data - Level IV
1605775-18	MHg-CVAFS-W-Dist	44			Scan all data - Level IV
6F03016-CCV4	QC	45	1601285		
6F03016-CCB4	QC	46			

Samples Loaded By 06/06/16 Date

Data Processed By 6/6/16 Date

samples loaded 6/3/16

Due Date: 6/13/2016

PREPARATION BENCH SHEET

F606074

Eurofins Frontier Global Sciences, Inc.

Matrix: Water **Prepared using: Hg Aquatic/Solids - EFGS-013 Methyl Hg Distillation for Water** **Prepared: 6/2/2016**

Lab Number	Sample ID and Source Sample	Initial (mL)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F606074-BLK1	Blank	45	40					
F606074-BLK2	Blank	45	40					
F606074-BLK3	Blank	45	40					
F606074-BS1	Blank Spike	45	40	1602184	45			
F606074-BSD1	Blank Spike Dup	45	40	1602184	45			
F606074-DUP1	Duplicate [1605389-03]	45	40					
F606074-MS1	Matrix Spike [1605389-05]	45	40	1602184	45			
F606074-MS2	Matrix Spike [1605775-09]	45	40	1602184	45			
F606074-MSD1	Matrix Spike Dup [1605389-05]	45	40	1602184	45			
F606074-MSD2	Matrix Spike Dup [1605775-09]	45	40	1602184	45			

Standard ID(s):	Description:	Expiration:
1602184	MHg New Primary 1.0 ng/mL CAL	25-Jul-16 00:00

Reagent ID(s):	Description:	Expiration:
1602282	Ethylating Agent (For Methyl Mercury Analysis)	25-Oct-16 00:00
1602604	Acetate Buffer	15-Nov-16 00:00
1602894	0.5% Distillation Dilute (Made Daily)	29-Nov-16 00:00
1602895	APDC	
1602945	2.5% Ascorbic Acid	11-Jun-16 00:00

ue Date: 6/13/2016

PREPARATION BENCH SHEET

F606074

Eurofins Frontier Global Sciences, Inc.

Matrix: Water **Prepared using: Hg Aquatic/Solids - EFGS-013 Methyl Hg Distillation for Water** **Prepared: 6/2/2016**

Lab Number	Sample ID	Initial (mL)	Final (mL)	QC Sample	Sample Specs.	Raw Data	Sample Comments	Analysis Comments
1605389-03	P83476-5	45	40	-	-	-		
1605389-04	P83476-6	45	40	-	-	-		
1605389-05	P83476-7	45	40	-	-	-		
1605389-06	P83476-8	45	40	-	-	-		
1605571-05	OL-2410-04	45	40	-	-	-	Scan all data for level IV report	
1605571-06	OL-2410-05	45	40	-	-	-	Scan all data for level IV report	
1605775-01	OV02_052616_SW_10	45	40	-	-	-	Scan all data - Level IV	
1605775-02	OV02_052616_SW_10 DISSOLOVED	45	40	-	-	-	Scan all data - Level IV	
1605775-03	ES-15_052616_SW_10	45	40	-	-	-	Scan all data - Level IV	
1605775-04	ES-15_052616_SW_10 DISSOLVED	45	40	-	-	-	Scan all data - Level IV	
1605775-05	WQ-ECH_052616_SW_10	45	40	-	-	-	Scan all data - Level IV	
1605775-06	WQ-ECH_052616_SW_10 DISSOLVED	45	40	-	-	-	Scan all data - Level IV	
1605775-07	WQ-FPT_052616_SW_10	45	40	-	-	-	Scan all data - Level IV	
1605775-08	WQ-FPT_052616_SW_10 DISSOLVED	45	40	-	-	-	Scan all data - Level IV	
1605775-09	WQ1B-C_052616_SW_10	45	40	-	-	-	MS/MSD Scan all data - Level IV	
1605775-11	WQ1B-C_052616_SW_10_DUP	45	40	-	-	-	Scan all data - Level IV	
1605775-12	WQ1B-C_052616_SW_10_DUP DISSOLVED	45	40	-	-	-	Scan all data - Level IV	
605775-17	WQ3-L_052616_SW_10	45	40	-	-	-	Scan all data - Level IV	
605775-18	WQ3-L_052616_SW_10_MD DISSOLVED	45	40	-	-	-	Scan all data - Level IV	

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Due Date: 6/13/2016

PREPARATION BENCH SHEET

F606074

Eurofins Frontier Global Sciences, Inc.

Matrix: Water **Prepared using: Hg Aquatic/Solids - EFGS-013 Methyl Hg Distillation for Water** **Prepared: 6/2/2016**

1605775-19	Laboratory Filter Blank	45	40	-	-	-	Scan all data - Level IV	

[redacted]

Due Date: 6/13/2016

2700-1 6/3/16 JH

PREPARATION BENCH SHEET

F606074

Eurofins Frontier Global Sciences, Inc.

Matrix: Water **Prepared using: Hg Aquatic/Solids - EFGS-013 Methyl Hg Distillation for Water** GF030160 **Prepared: 6/2/2016**

Lab Number	Sample ID and Source Sample	Initial (mL)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F606074-BLK1	Blank	45	40					1.25
F606074-BLK2	Blank	45	40					1.25
F606074-BLK3	Blank	45	40					1.25
F606074-BS1	Blank Spike	45	40	1602184	45			1.25
F606074-BSD1	Blank Spike Dup	45	40	1602184	45			1.25
F606074-DUP1	Duplicate [1605389-03]	45	40					1.25
F606074-MS1	Matrix Spike [1605389-05]	45	40	1602184	45			1.25
F606074-MS2	Matrix Spike [1605775-09]	45	40	1602184	45			1.25
F606074-MSD1	Matrix Spike Dup [1605389-05]	45	40	1602184	45			1.25
F606074-MSD2	Matrix Spike Dup [1605775-09]	45	40	1602184	45			1.25

Standard ID(s):	Description:	Expiration:	Reagent ID(s):	Description:	Expiration:
1602184	MHg New Primary 1.0 ng/mL CAL	25-Jul-16 00:00	1602894	0.5% Distillation Dilute (Made Daily)	29-Nov-16 00:00
			1602895	APDC	

1602604
1602282
1602945

Page 82 of 211

Due Date: 6/13/2016

PREPARATION BENCH SHEET

F606074

Eurofins Frontier Global Sciences, Inc.

Matrix: Water **Prepared using: Hg Aquatic/Solids - EFGS-013 Methyl Hg Distillation for Water** **Prepared: 6/2/2016**

Lab Number	Sample ID	Initial (mL)	Final (mL)	QC Sample	Sample Specs.	Raw Data	Sample Comments	Analysis Comments
1605389-03	P83476-5	45	40	-	-	-		1.25
1605389-04	P83476-6	45	40	-	-	-		1.25
1605389-05	P83476-7	45	40	-	-	-		1.25
1605389-06	P83476-8	45	40	-	-	-		1.25
1605571-05	OL-2410-04	45	40	-	-	-	Scan all data for level IV report	1.25
1605571-06	OL-2410-05	45	40	-	-	-	Scan all data for level IV report	1.25
1605775-01	OV02_052616_SW_10	45	40	-	-	-	Scan all data - Level IV	1.25
1605775-02	OV02_052616_SW_10 DISSOLOVED	45	40	-	-	-	Scan all data - Level IV	1.25
1605775-03	ES-15_052616_SW_10	45	40	-	-	-	Scan all data - Level IV	1.25
1605775-04	ES-15_052616_SW_10 DISSOLVED	45	40	-	-	-	Scan all data - Level IV	1.25
1605775-05	WQ-ECH_052616_SW_10	45	40	-	-	-	Scan all data - Level IV	1.25
1605775-06	WQ-ECH_052616_SW_10 DISSOLVED	45	40	-	-	-	Scan all data - Level IV	1.25
1605775-07	WQ-FPT_052616_SW_10	45	40	-	-	-	Scan all data - Level IV	1.25
1605775-08	WQ-FPT_052616_SW_10 DISSOLVED	45	40	-	-	-	Scan all data - Level IV	1.25
1605775-09	WQ1B-C_052616_SW_10	45	40	-	-	-	MS/MSD Scan all data - Level IV	1.25
1605775-11	WQ1B-C_052616_SW_10_DUP	45	40	-	-	-	Scan all data - Level IV	1.25
1605775-12	WQ1B-C_052616_SW_10_DUP DISSOLVED	45	40	-	-	-	Scan all data - Level IV	1.25
05775-17	WQ3-L_052616_SW_10	45	40	-	-	-	Scan all data - Level IV	1.25
05775-18	WQ3-L_052616_SW_10_MD DISSOLVED	45	40	-	-	-	Scan all data - Level IV	1.25

ue Date: 6/13/2016

PREPARATION BENCH SHEET

F606074

Eurofins Frontier Global Sciences, Inc.

Matrix: Water **Prepared using: Hg Aquatic/Solids - EFGS-013 Methyl Hg Distillation for Water** **Prepared: 6/2/2016**

1605775-19	Laboratory Filter Blank	45	40	-	-	-	Scan all data - Level IV	1-25

[redacted]

ue Date: 6/13/2016

Methyl Mercury Distillations (EPA 1630)

Name: Dwyer Date: 6/2/16 Batch #: F606074 Sample Matrix: Water

WO#: 1605389, 1605571, 1605775

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)
Blk1	F606074 Blank1	1.0	45	3.0
Blk2	F606074 Blank2	1.0	45	3.0
Blk3	F606074 Blank3	1.0	45	3.0
BS	F606074 BS	1.0	45	3.0
BSD	F606074 BSD	1.0	45	3.0
MD	F606074 MD	1.0	45	4.0
MS1	F606074 MS1	1.0	45	4.0
MSD1	F606074 MSD1	1.0	45	4.0
MS2	F606074 MS2	1.0	45	4.0
MSD2	F606074 MSD2	1.0	45	4.0
1	1605389-03	1.0	45	4.0
2	1605389-04	1.0	45	4.0
3	1605389-05	1.0	45	4.0
4	1605389-06	1.0	45	4.0
5	1605571-05	1.0	45	4.0
6	1605571-06	1.0	45	4.0
7	1605775-01	1.0	45	4.0
8	1605775 -02	1.0	45	4.0
9	1605775 -03	1.0	45	3.0
10	1605775 -04	1.0	45	3.0
11	1605775 -05	1.0	45	4.0
12	1605775 -06	1.0	45	4.0
13	1605775 -07	1.0	45	3.0
14	1605775 -08	1.0	45	4.0
15	1605775 -09	1.0	45	4.0
16	1605775 -19 -10 6/2/16	1.0	45	4.0
17	1605775 -11	1.0	45	4.0
18	1605775 -12	1.0	45	4.0
19	1605775 -17	1.0	45	3.0
20	1605775 -18	1.0	45	3.0
			6-2-16 VV	

Spike ID: 160284
Spike Amount: 45 µL
Spike Witness: DM 6-2-16

Balance #: 2
Calibrated? ☑ Yes ☐ No

Pipette #: CJ17087
Cal. Date: 6/1/16

Pipette #: LU24486
Cal. Date: 6-1-16

Pipette #: N27707
Cal. Date: 6-2-16

APDC ID: 1602895
HCl ID: 1602894

Temperature: No set range as the temp. may be changed to keep flow rate of ≥10 mL per hour. Temperature is recorded for informational purposes only.

Unit 1: 120.3
Unit 2: 122.
Unit 3: 120.8
Unit 4: 120.5
Unit 5: 122.
Unit 6: 122.

Comments:
MD
1605389-03
MS1, MSD1
1605389-05
MS2 MSD2
1605775-10 9
6/2/16 VV

Failing Data Report - 6F03017

Sample ID	Analysis	Result	MRL	Dup Result	Source Result	True Value	Units	% Rec.	Rec. LCL	Rec. UCL	RPD	RPD Limit	Over Cal	Failure	Qualifier

Dan Marcum 6/4/16
Analyst Reviewed By Date

Peer Reviewed By 6/7/16
Date

ANALYSIS SEQUENCE

6F03017

Instrument: Hg2700-1

Calibration ID: UNASSIGNED **Analyzed: 6/3/2016**

Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
6F03017-IBL1	QC	1			
6F03017-CAL1	QC	2	1602252		
6F03017-CAL2	QC	3	1602253		
6F03017-CAL3	QC	4	1602254		
6F03017-CAL4	QC	5	1602255		
6F03017-CAL5	QC	6	1602256		
6F03017-ICV1	QC	7	1601285		
6F03017-ICB1	QC	8			
F606099-BS1	QC	9			
F606099-BS4	QC	10			
F606099-BS2	QC	11			
F606099-BS5	QC	12			
F606099-BS3	QC	13			
F606099-BS6	QC	14			
F606099-BLK1	QC	15			
F606099-BLK2	QC	16			
F606099-BLK3	QC	17			
6F03017-CCB1	QC	18			
6F03017-CCV1	QC	19	1601285		

Samples Loaded By — 6/6/16 Date

Data Processed By — 6/4/16 Date

samples ~~uploaded~~ 6/3/16
loaded on 6/6/16

PREPARATION BENCH SHEET

F606099

Eurofins Frontier Global Sciences, Inc.

Matrix: Water **Prepared using: Hg Aquatic/Solids - EFGS-013 Methyl Hg Distillation for Water** **Prepared: 6/3/2016**

Lab Number	Sample ID and Source Sample	Initial (mL)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F606099-BLK1	Blank	50	50					
F606099-BLK2	Blank	50	50					
F606099-BLK3	Blank	50	50					
F606099-BS1	old ICV	50	50	1601241	50			
F606099-BS2	old ICV	50	50	1601241	50			
F606099-BS3	old ICV	50	50	1601241	50			
F606099-BS4	new ICV	50	50	1602896	50			
F606099-BS5	new ICV	50	50	1602896	50			
F606099-BS6	new ICV	50	50	1602896	50			

Standard ID(s):	Description:	Expiration:	Reagent ID(s):	Description:	Expiration:
1601241	MHg Secondary ICV	07-Jun-16 00:00	1602282	Ethylating Agent (For Methyl Mercury Analysis)	25-Oct-16 00:00
1602896		02-Sep-16 00:00	1602604	Acetate Buffer	15-Nov-16 00:00

2700-1 6/3/16 JH

PREPARATION BENCH SHEET

F606099

Eurofins Frontier Global Sciences, Inc.

Matrix: Water **Prepared using: Hg Aquatic/Solids - EFGS-013 Methyl Hg Distillation for Water** 61F03017 **Prepared: 6/3/2016**

Lab Number	Sample ID and Source Sample	Initial (mL)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F606099-BLK1	Blank	50	50					1x
F606099-BLK2	Blank	50	50					1x
F606099-BLK3	Blank	50	50					1x
F606099-BS1	old ICV	50	50	1601241	50			1x
F606099-BS2	old ICV	50	50	1601241	50			1x
F606099-BS3	old ICV	50	50	1601241	50			1x
F606099-BS4	new ICV	50	50	1602896	50			1x
F606099-BS5	new ICV	50	50	1602896	50			1x
F606099-BS6	new ICV	50	50	1602896	50			1x

Standard ID(s):
1601241
1602896

Description:
MHg Secondary ICV

Expiration:
07-Jun-16 00:00
02-Sep-16 00:00

1602604
1602282

Analytical Standard Record

Eurofins Frontier Global Sciences, Inc.

1602896

Description:	MHg Secondary ICV	Expires:	02-Sep-16
Standard Type:	Analyte Spike	Prepared:	02-Jun-16
Solvent:	0.2% HCL 1600743/ 0.5% Acetic	Prepared By:	Don Moran
Final Volume (mls):	100	Department:	AFS
Vials:	1	Last Edit:	07-Jun-16 17:45 by JRH
Vendor:	N/A	Lot Number:	n/a

Tested in MMHg27001-160603-1 Solids. Old ICV avg = 108.2%, New ICV avg = 108.0%. JH 6/7/16

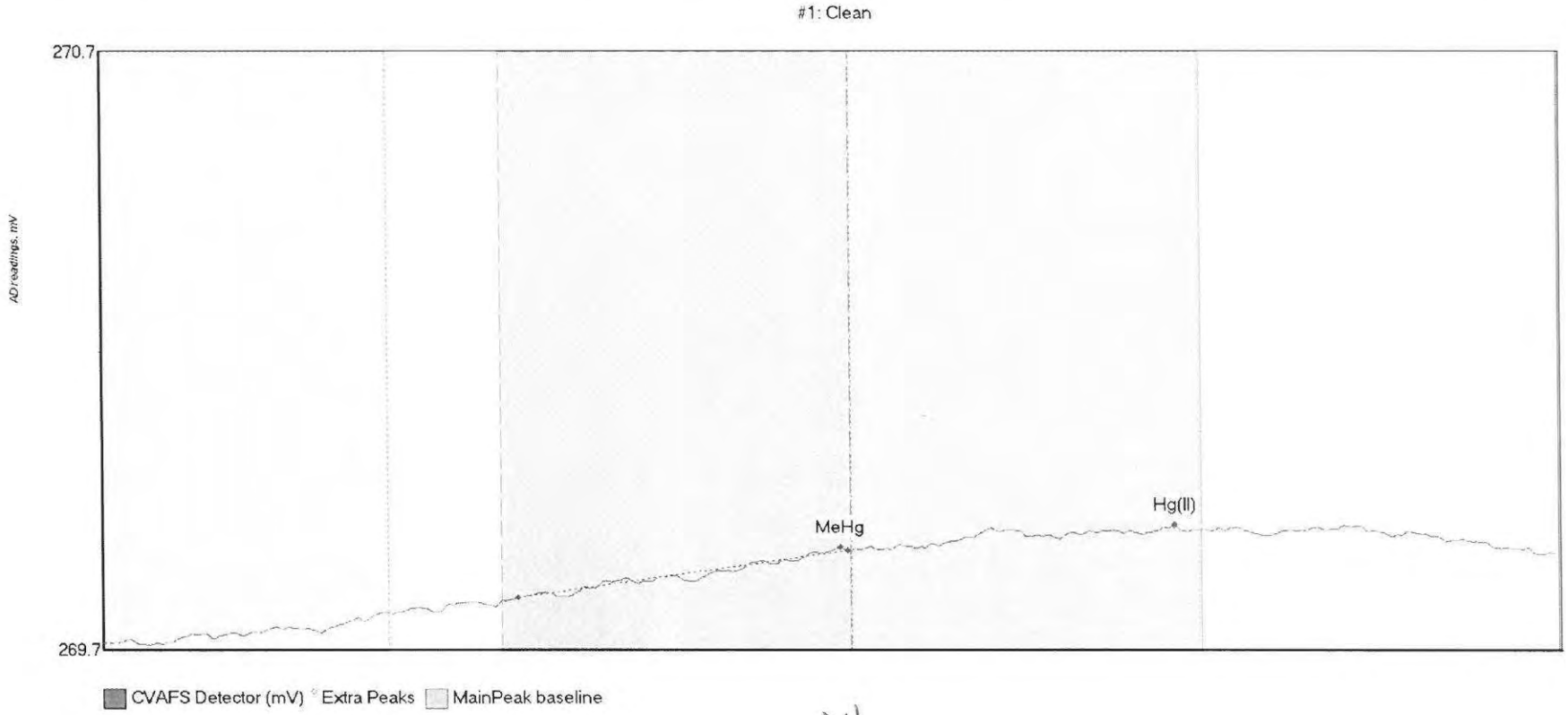
Analyte	CAS Number	Concentration	Units
Methyl Mercury (as Mercury)	22967-92-6	0.00050049	ug/mL

Parent Standards used in this standard:

Standard	Vendor	Lot Number	Description	Prepared	Prepared By	Expires	(mls)
1600507	Fisher Scientific	157795	Acetic Acid, Glacial	29-Jan-16	Colton Kanstrup	29-Jan-19	0.5
1600743	VWR	55006	Omnitrace Hydrochloric Acid	10-Feb-16	Colton Kanstrup	10-Feb-19	0.2
1601240	Sigma-Aldrich	018699	MHg Secondary 93.027ng/mL	07-Mar-16	Jeanne Harrel	07-Sep-16	0.538

Reviewed By

6/7/16
Date

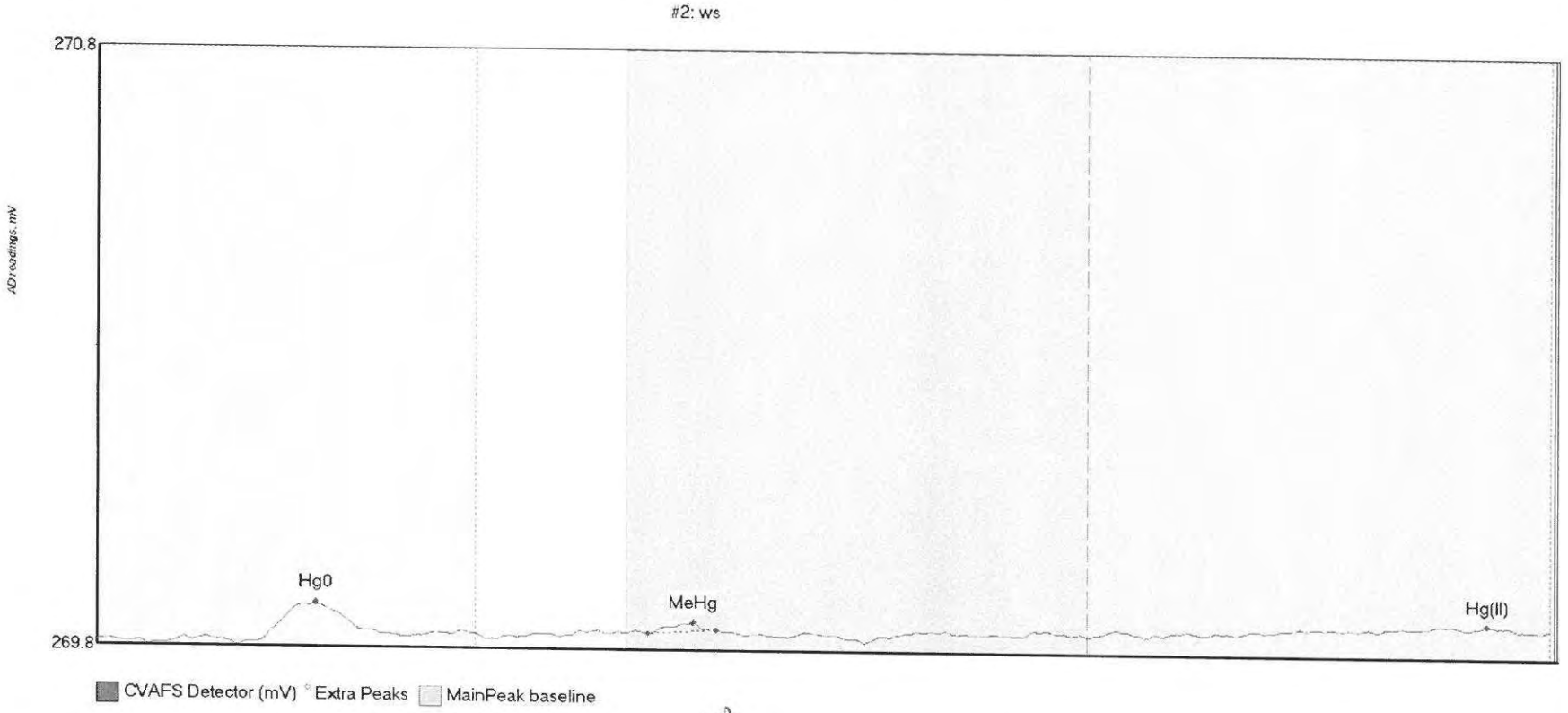


JLH
6/7/16

Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
Clean MeHg	1.125	83.2	149.4	269.74	269.82	147.8	0.086	OK	269.6673	0.00	0.15	
Clean Hg(II)	4.874	164.8	217.2	269.83	269.86	214.7	0.037	OK	269.6673	0.00	0.15	

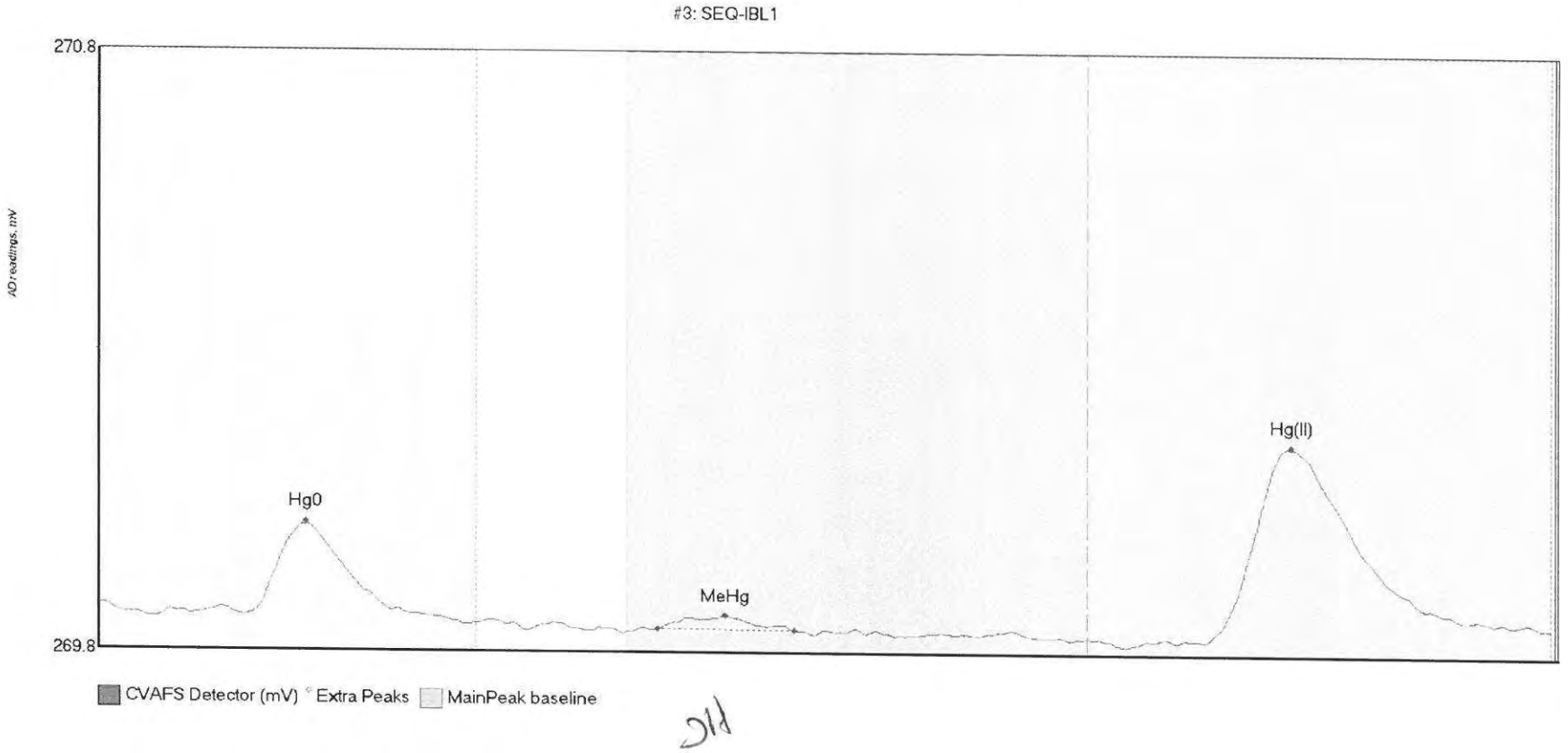
JLH 6/7/16

Peak Chart for WS00000318

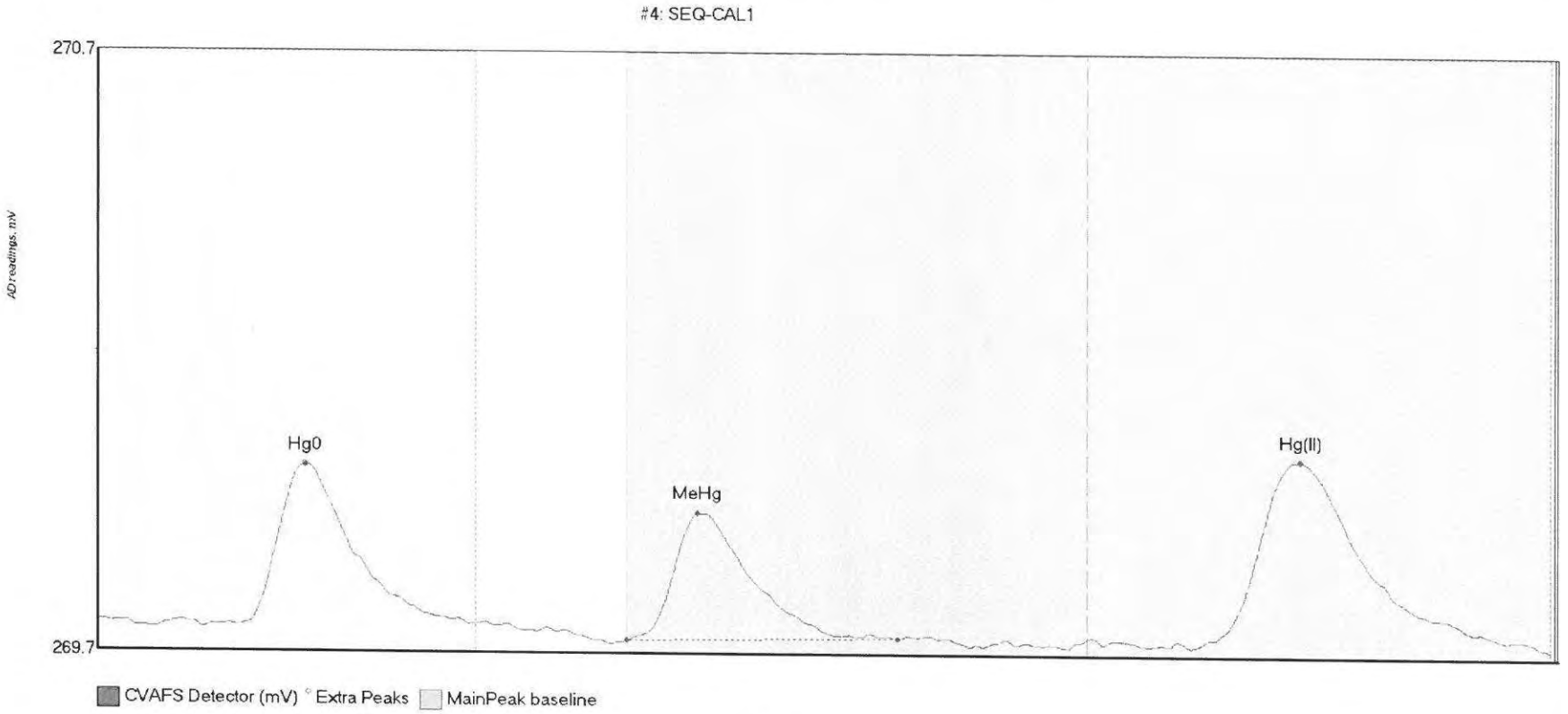


Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
ws Hg0	6.669	23.9	46.5	269.79	269.80	33.2	0.065	OK	269.7939	0.00	0.04	
ws MeHg	0.798	83.4	93.7	269.81	269.82	90.3	0.018	OK	269.7939	0.00	0.04	
ws Hg(II)	3.382	168.1	218.4	269.82	269.83	210.3	0.021	OK	269.7939	0.00	0.04	

Peak Chart for WS00000318



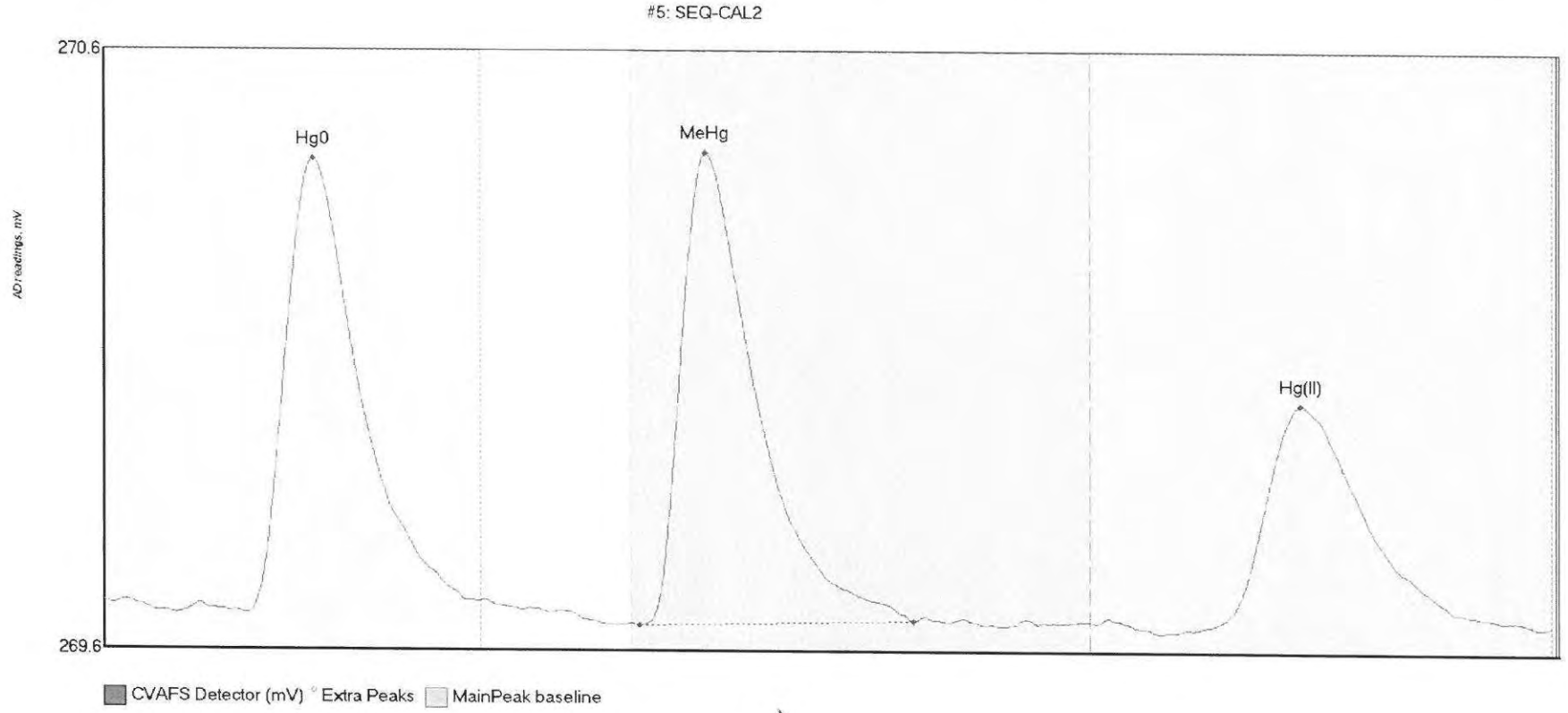
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-IBL1 Hg0	15.720	22.5	44.5	269.86	269.86	31.4	0.152	OK	269.8732	0.00	-0.03	
SEQ-IBL1 MeHg	2.721	84.7	105.4	269.83	269.83	95.0	0.023	OK	269.8732	0.00	-0.03	
SEQ-IBL1 Hg(II)	56.548	167.5	219.8	269.82	269.84	180.6	0.325	CT	269.8732	0.00	-0.03	



018

Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CAL1 Hg0	32.289	21.3	53.7	269.78	269.79	31.5	0.268	OK	269.7916	0.00	-0.04	
SEQ-CAL1 MeHg	28.618	80.1	121.1	269.76	269.76	90.9	0.212	OK	269.7916	0.00	-0.04	
SEQ-CAL1 Hg(II)	51.428	169.1	213.3	269.77	269.77	182.1	0.298	OK	269.7916	0.00	-0.04	

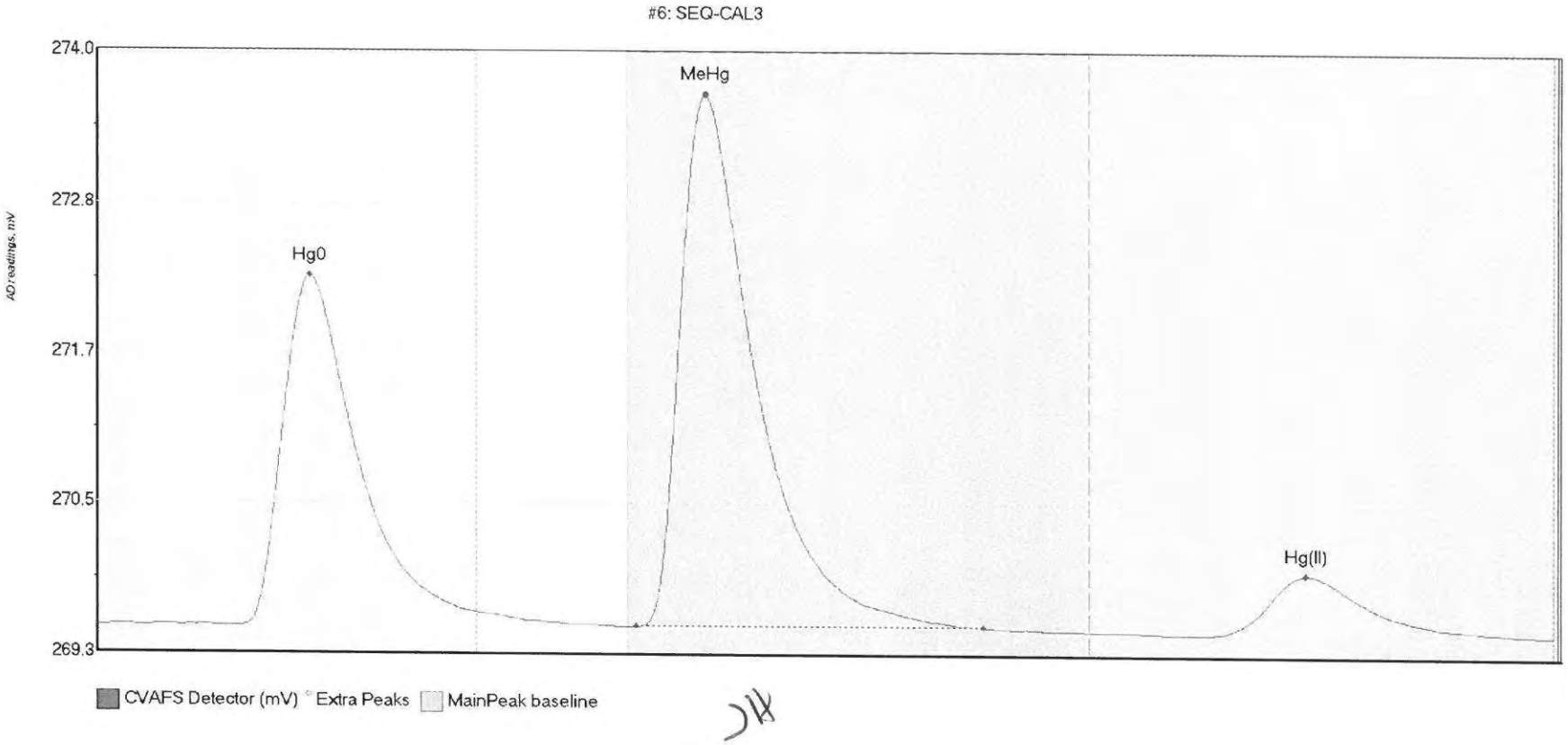
016



JH

Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CAL2 Hg0	96.099	21.8	55.1	269.66	269.68	31.8	0.757	OK	269.6800	0.00	-0.04	
SEQ-CAL2 MeHg	104.363	81.4	123.0	269.64	269.65	91.5	0.789	OK	269.6800	0.00	-0.04	
SEQ-CAL2 Hg(II)	60.850	168.0	212.7	269.64	269.65	181.7	0.370	OK	269.6800	0.00	-0.04	

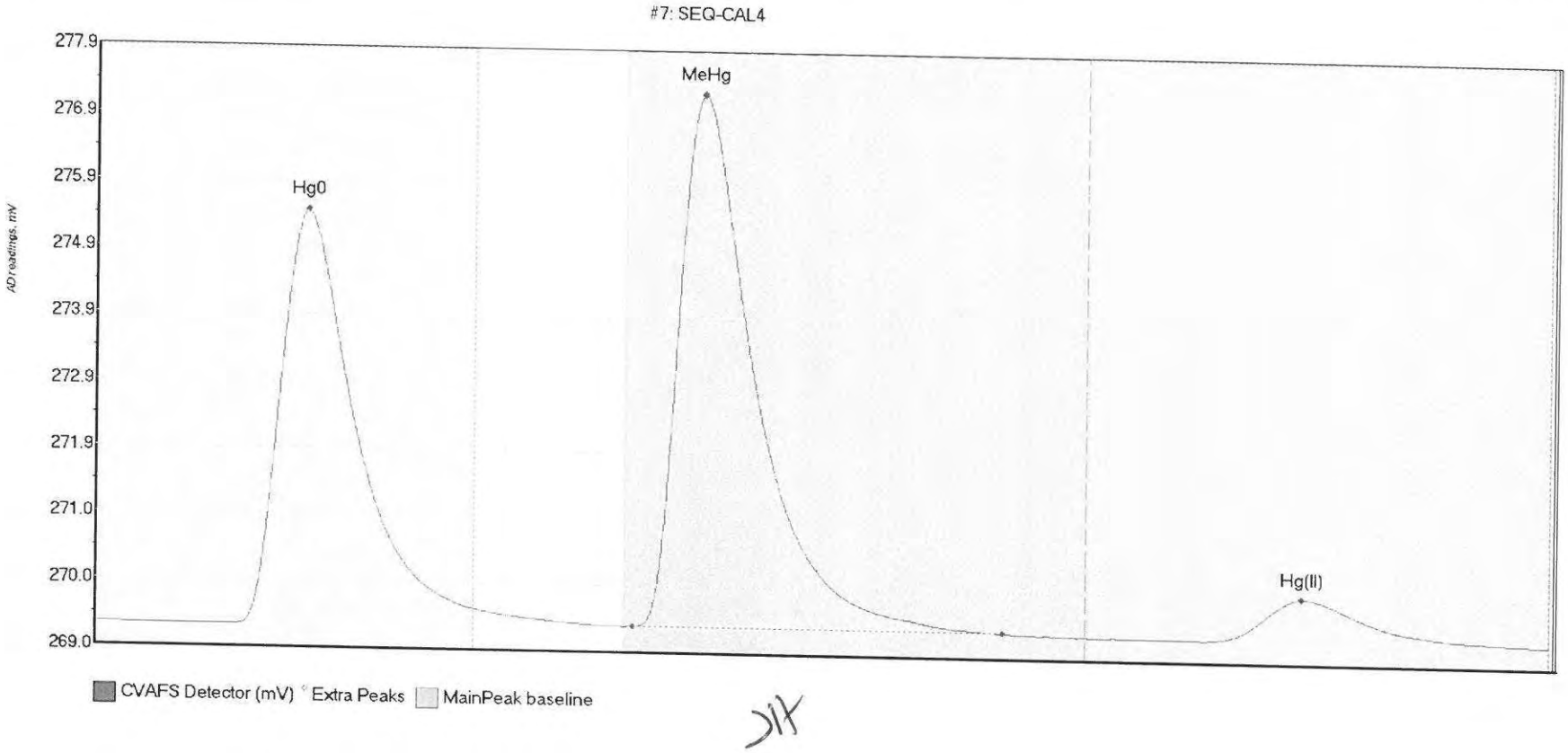
016



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CAL3 Hg0	336.989	21.6	57.5	269.52	269.63	32.2	2.732	CT	269.5248	0.00	-0.05	
SEQ-CAL3 MeHg	548.038	81.5	133.9	269.53	269.53	92.0	4.135	OK	269.5248	0.00	-0.05	
SEQ-CAL3 Hg(II)	79.356	167.6	215.4	269.48	269.48	182.5	0.471	OK	269.5248	0.00	-0.05	

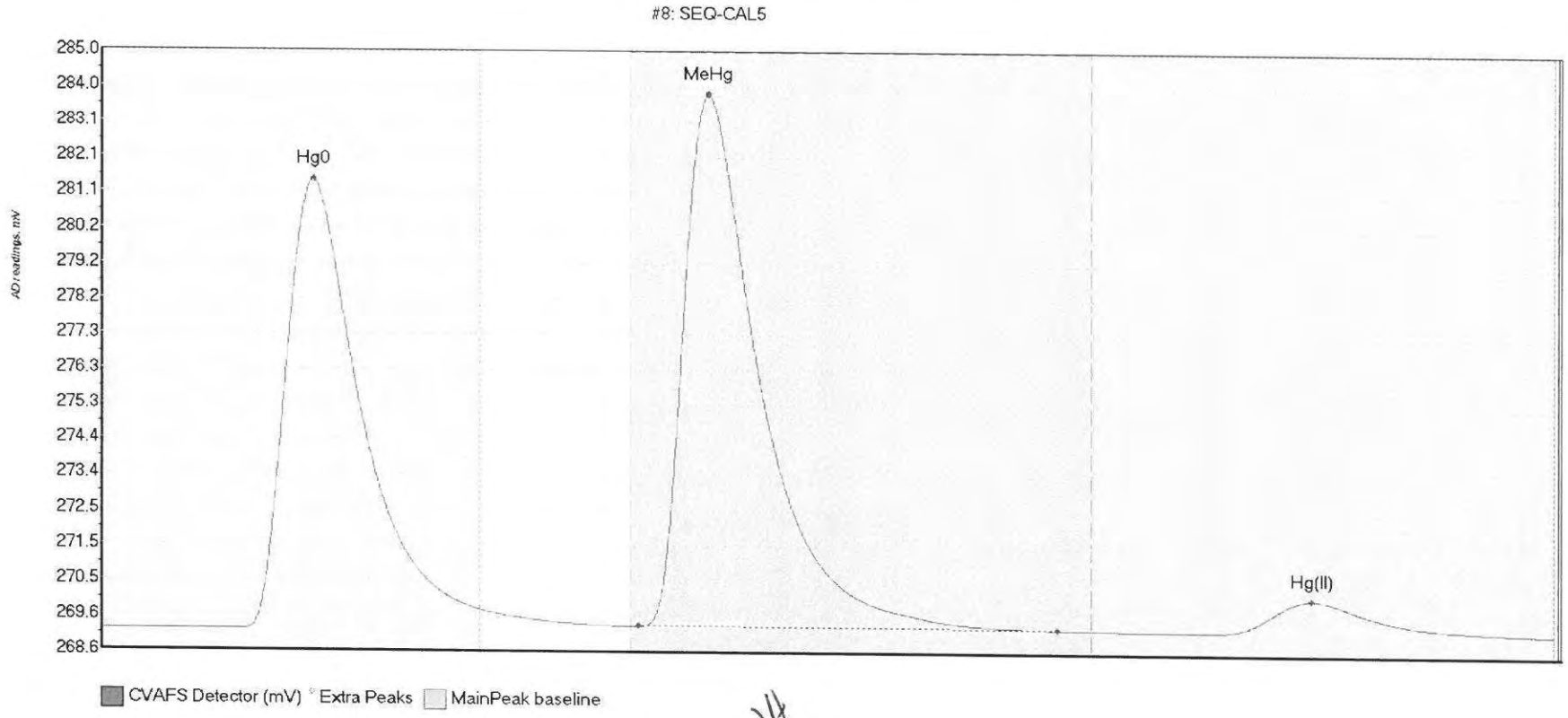
016

Peak Chart for WS00000318



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CAL4 Hg0	759.296	20.5	57.5	269.33	269.60	32.0	6.116	CT	269.3480	0.00	-0.03	
SEQ-CAL4 MeHg	1039.258	81.4	137.3	269.39	269.38	91.9	7.833	OK	269.3480	0.00	-0.03	
SEQ-CAL4 Hg(II)	113.168	167.8	219.8	269.32	269.31	182.5	0.637	CT	269.3480	0.00	-0.03	

Peak Chart for WS00000318



JH

Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CAL5 Hg0	1535.816	21.0	57.5	269.18	269.72	32.1	12.291	CT	269.1898	0.00	0.01	
SEQ-CAL5 MeHg	1951.769	81.3	144.7	269.29	269.25	92.0	14.538	OK	269.1898	0.00	0.01	
SEQ-CAL5 Hg(II)	155.253	166.3	216.5	269.21	269.20	183.2	0.899	OK	269.1898	0.00	0.01	

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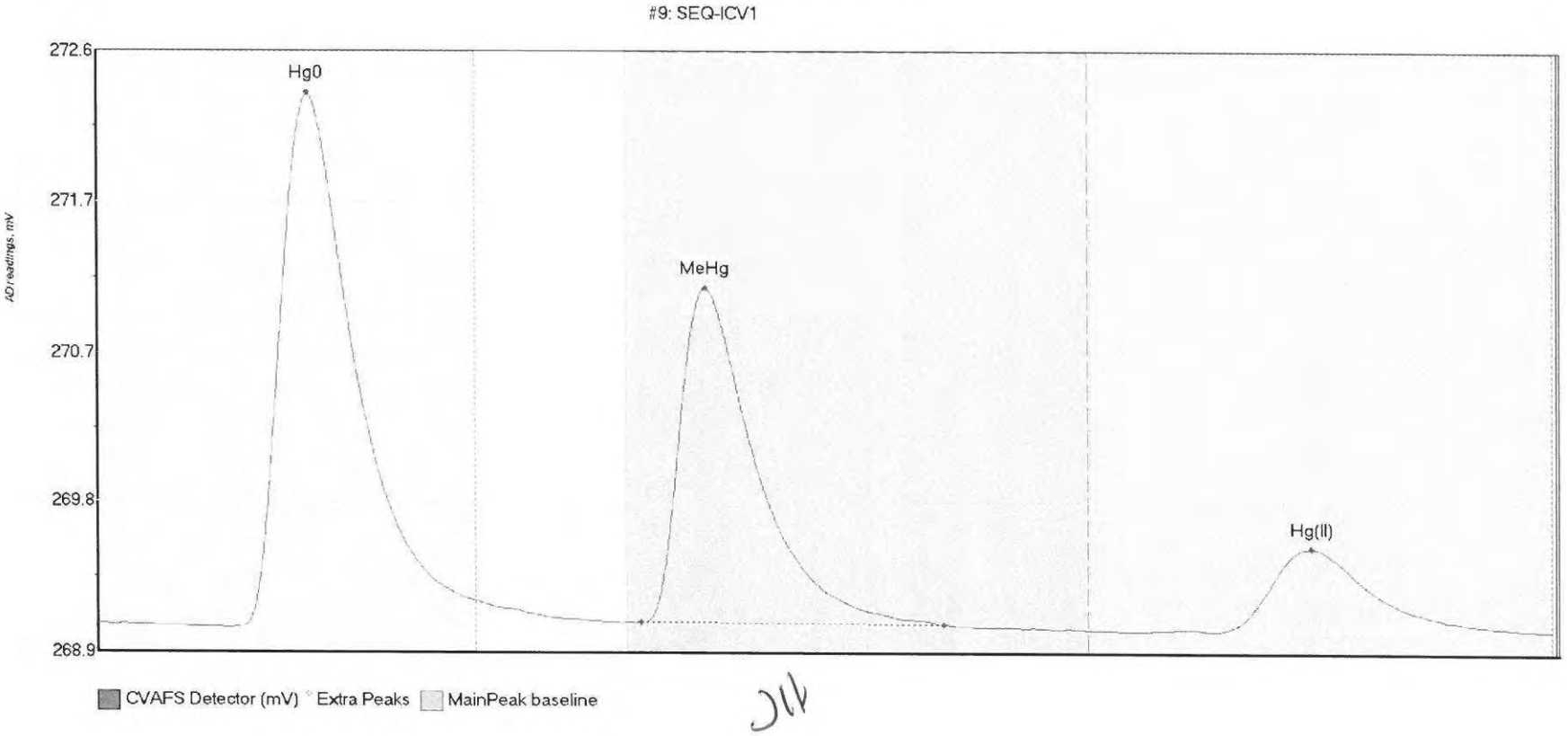

Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-ICV1 Hg0	411.008	20.0	57.5	269.03	269.20	31.9	3.303	CT	269.0557	0.00	-0.03	
SEQ-ICV1 MeHg	273.554	82.3	128.0	269.07	269.06	92.1	2.073	OK	269.0557	0.00	-0.03	
SEQ-ICV1 Hg(II)	88.551	168.9	217.9	269.02	269.02	183.6	0.512	OK	269.0557	0.00	-0.03	

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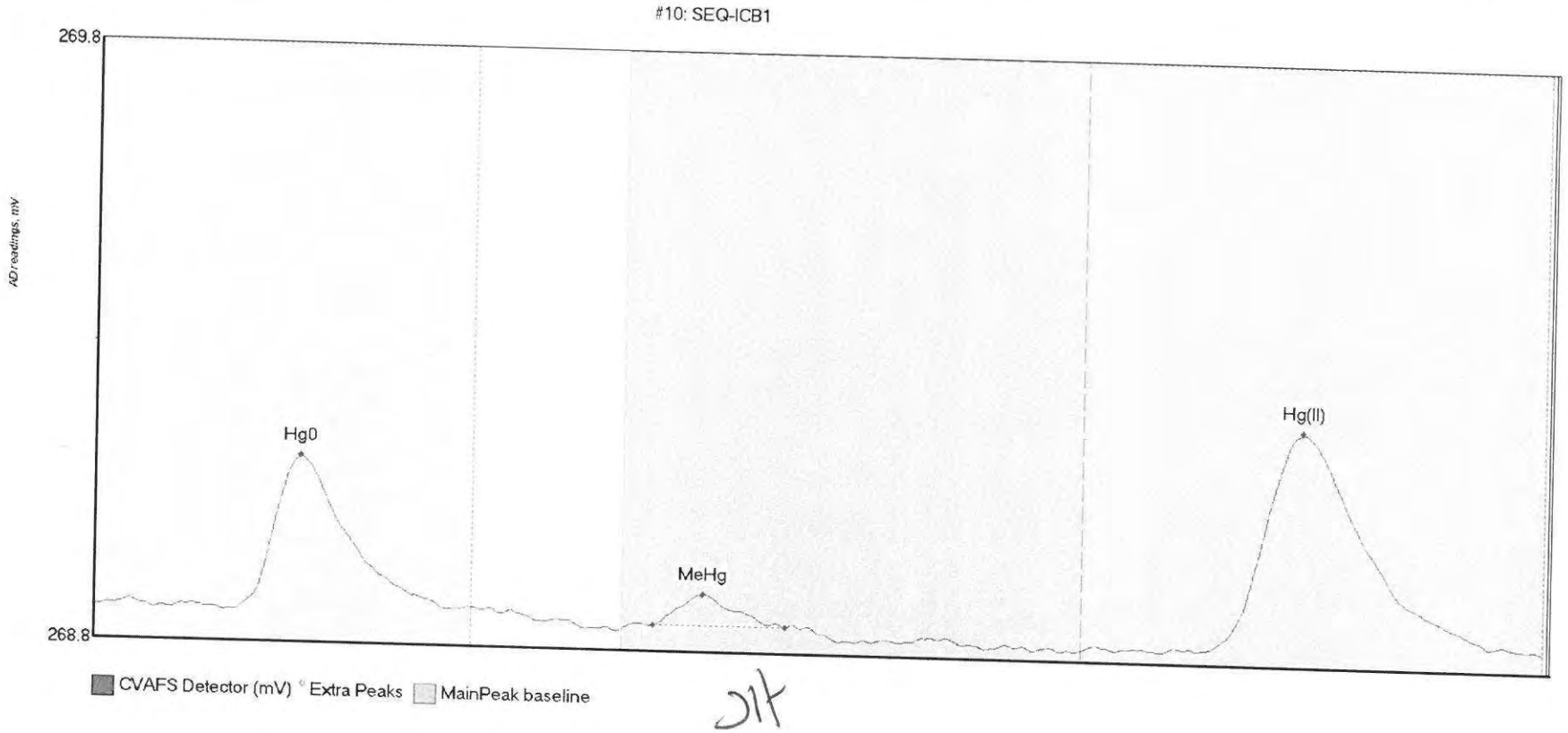
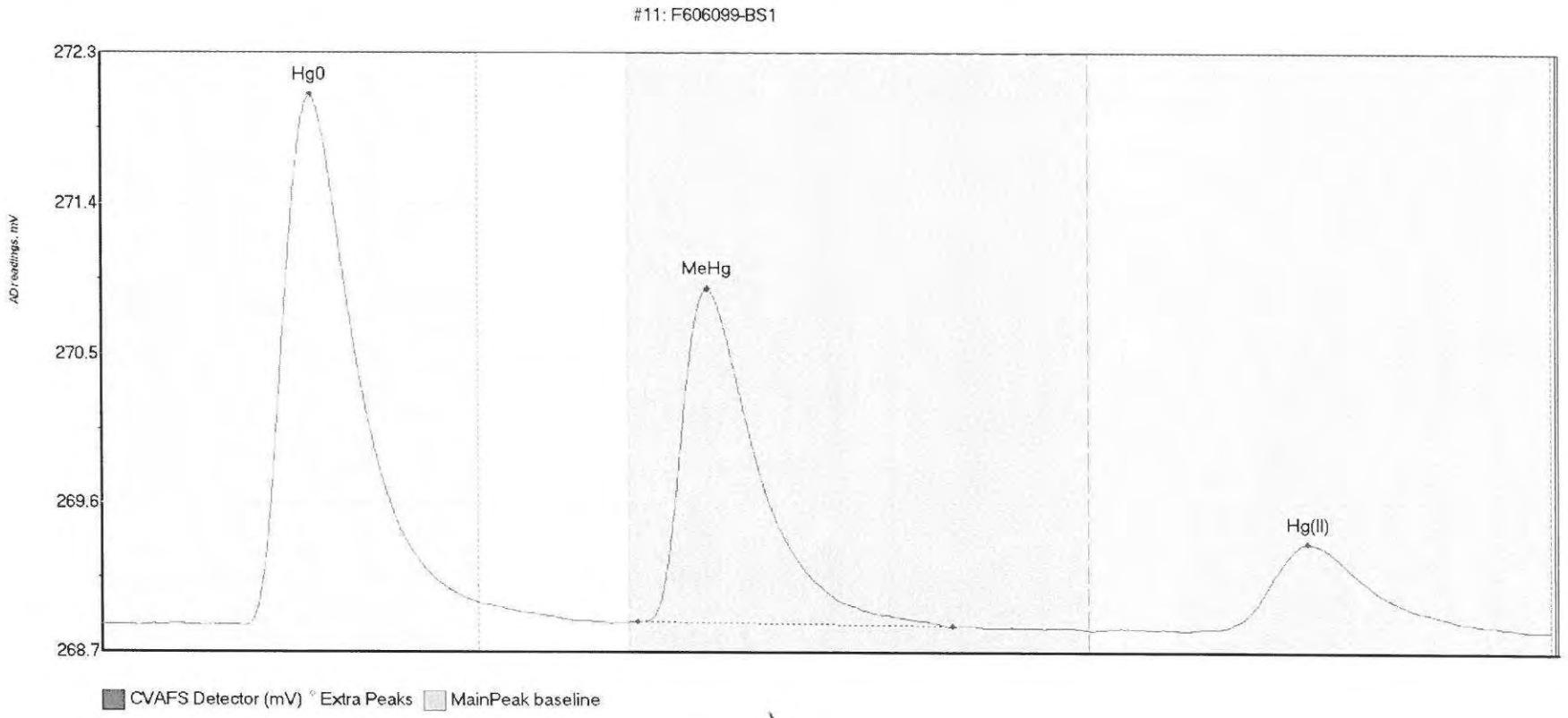
Peak Chart for WS00000318

WS00000318

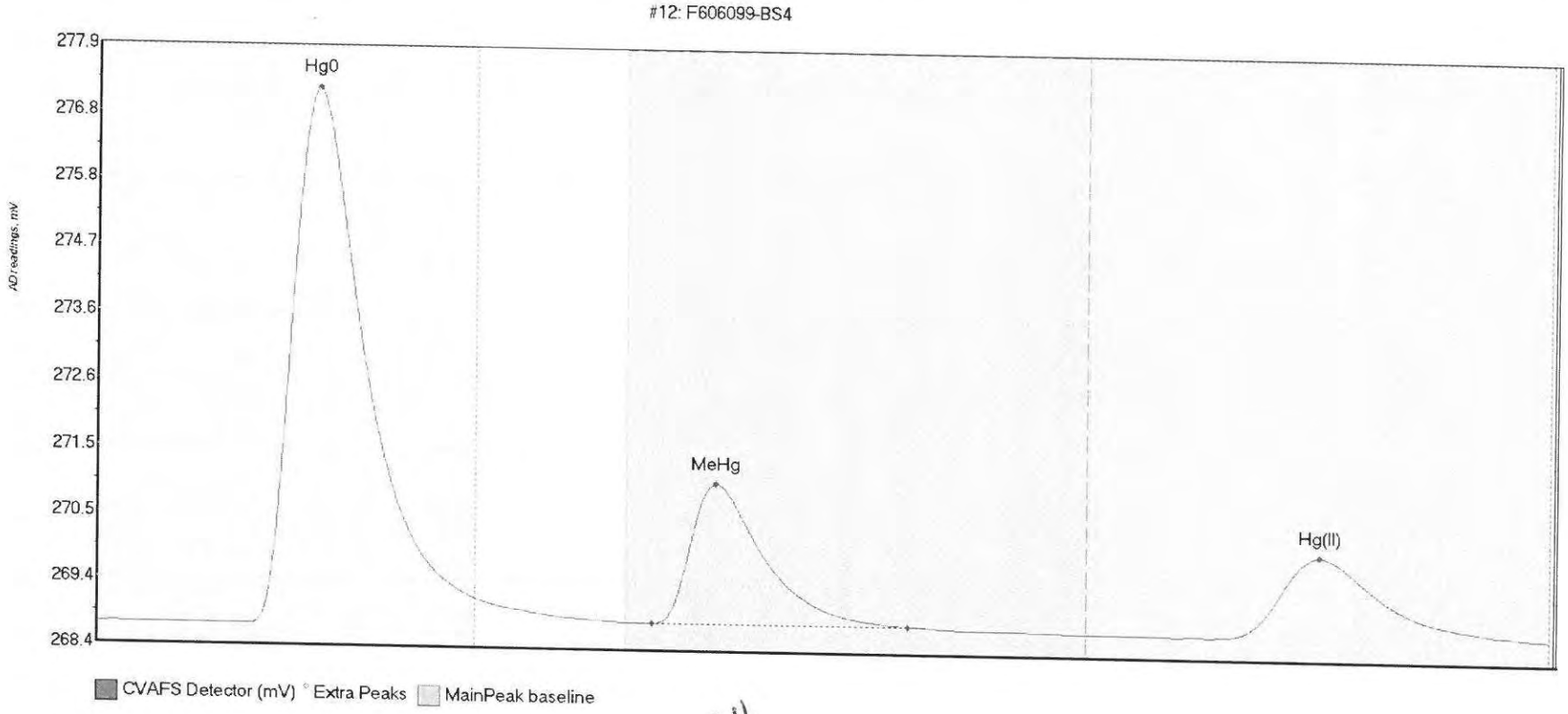


Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-ICB1 Hg0	31.665	21.4	53.4	268.90	268.91	31.2	0.259	OK	268.9042	0.00	-0.02	
SEQ-ICB1 MeHg	5.016	84.9	105.0	268.89	268.89	92.5	0.051	OK	268.9042	0.00	-0.02	
SEQ-ICB1 Hg(II)	63.254	168.6	219.8	268.87	268.88	183.1	0.366	CT	268.9042	0.00	-0.02	



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F606099-BS1 Hg0	402.212	21.5	57.5	268.82	268.95	31.8	3.216	CT	268.8250	0.00	-0.04	
F606099-BS1 MeH	269.704	81.4	129.1	268.84	268.81	92.1	2.027	OK	268.8250	0.00	-0.04	
F606099-BS1 Hg(	92.936	164.9	215.9	268.79	268.79	183.0	0.533	OK	268.8250	0.00	-0.04	

Peak Chart for WS00000318



JH

Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F606099-BS4 Hg0	1035.644	23.0	57.5	268.71	269.14	33.4	8.473	CT	268.7210	0.00	0.03	
F606099-BS4 MeH	282.917	84.2	122.9	268.80	268.80	93.8	2.233	OK	268.7210	0.00	0.03	
F606099-BS4 Hg(	224.087	170.5	219.8	268.72	268.75	185.0	1.306	CT	268.7210	0.00	0.03	

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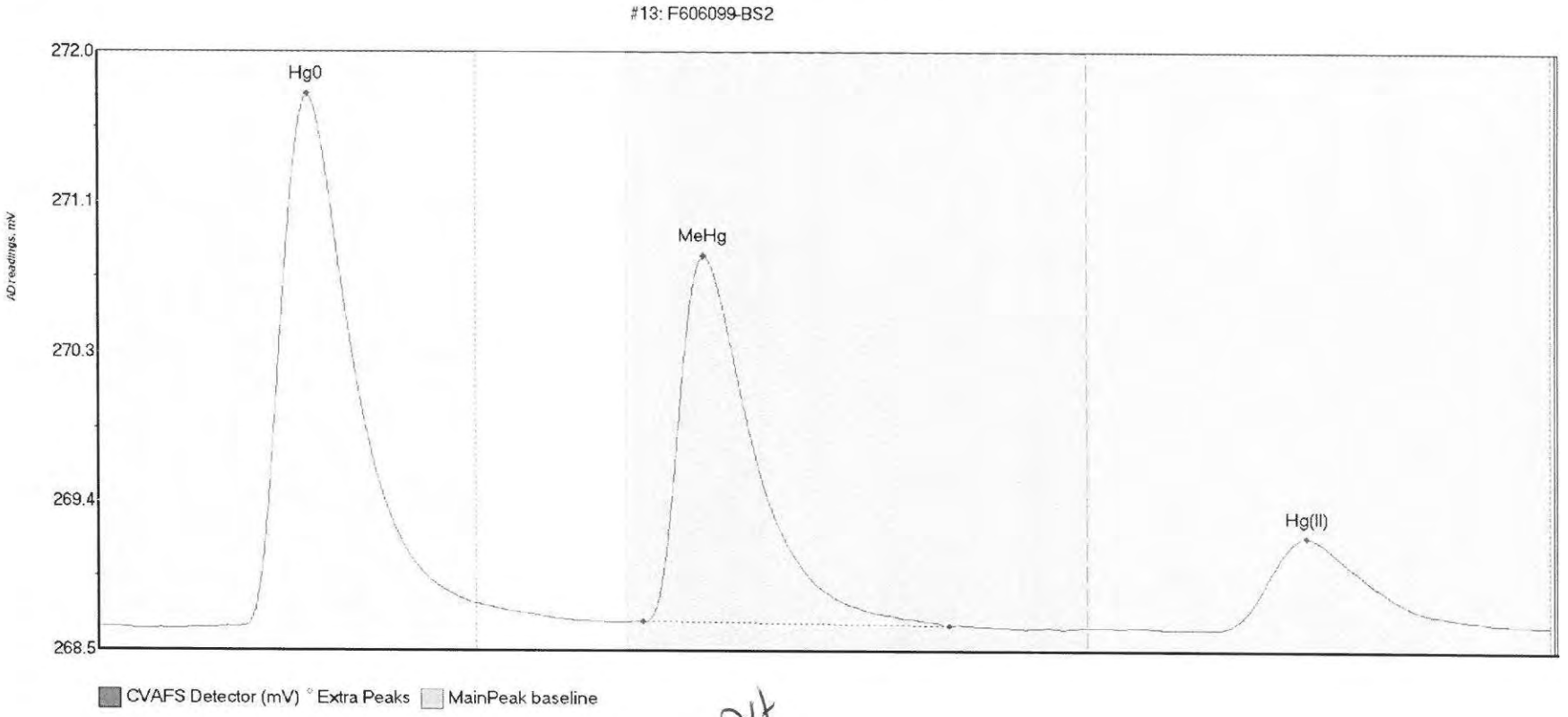
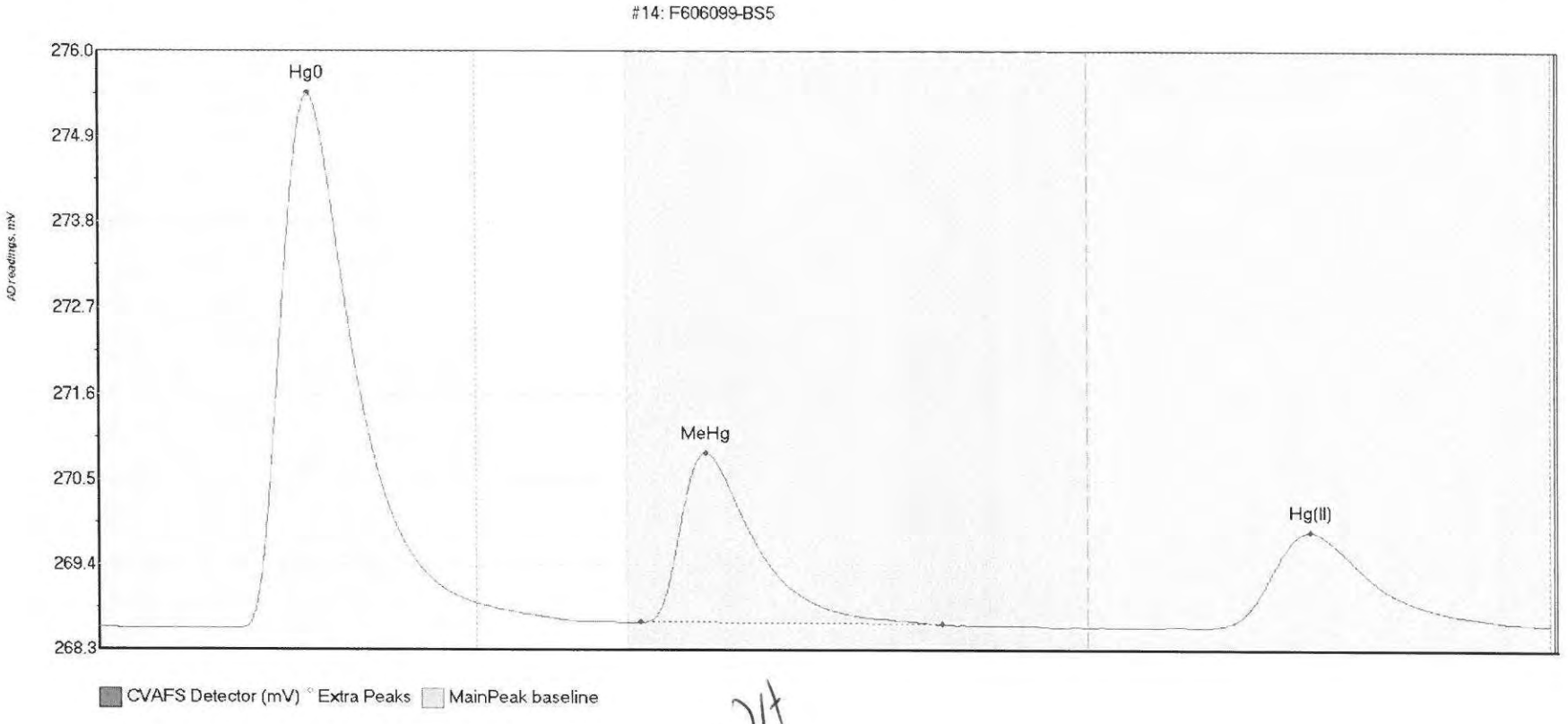
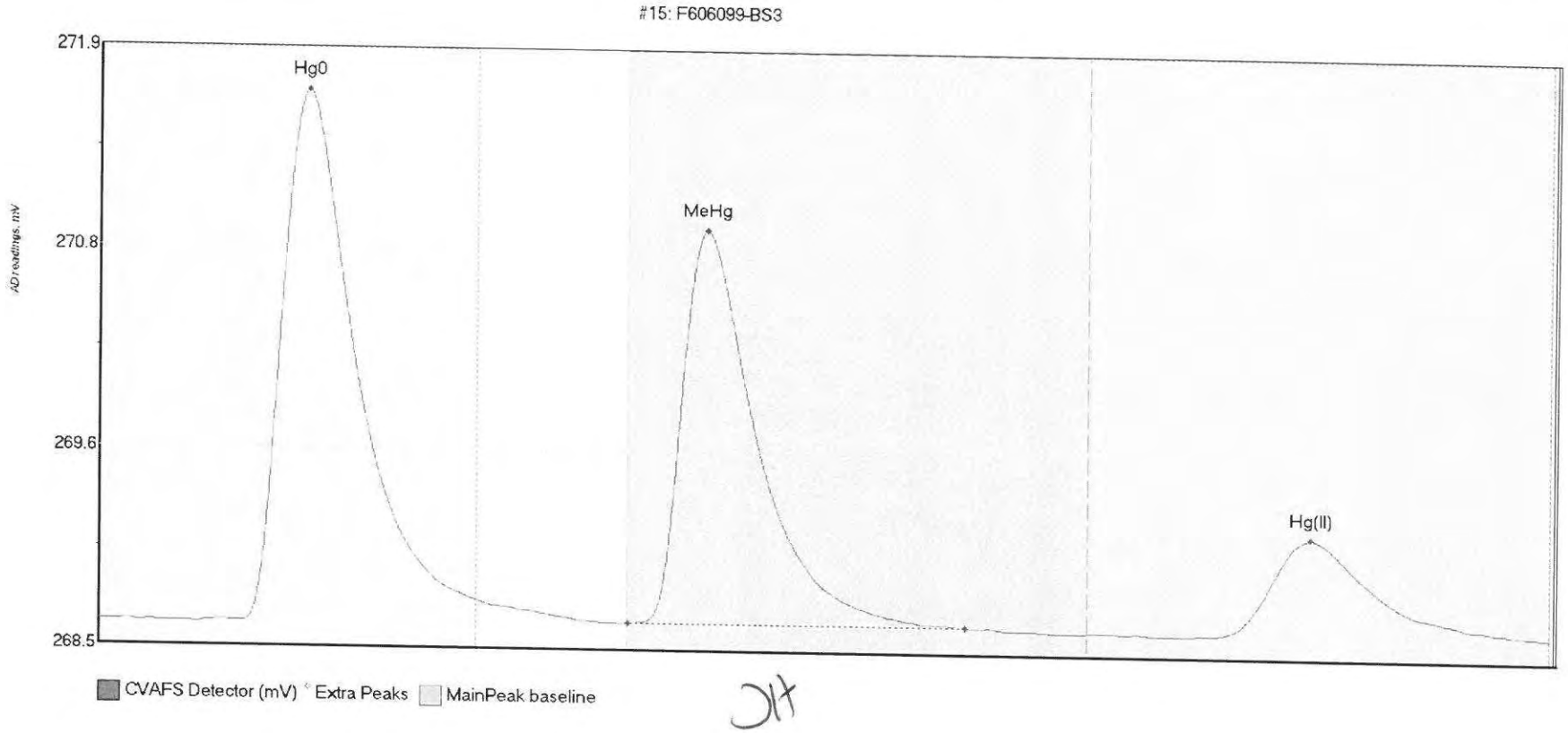


Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F606099-BS2 Hg0	382.689	20.7	57.5	268.66	268.80	31.7	3.110	CT	268.6607	0.00	0.01	
F606099-BS2 MeH	279.165	82.6	128.9	268.69	268.67	91.9	2.135	OK	268.6607	0.00	0.01	
F606099-BS2 Hg(	92.295	169.4	219.8	268.65	268.67	183.0	0.545	CT	268.6607	0.00	0.01	

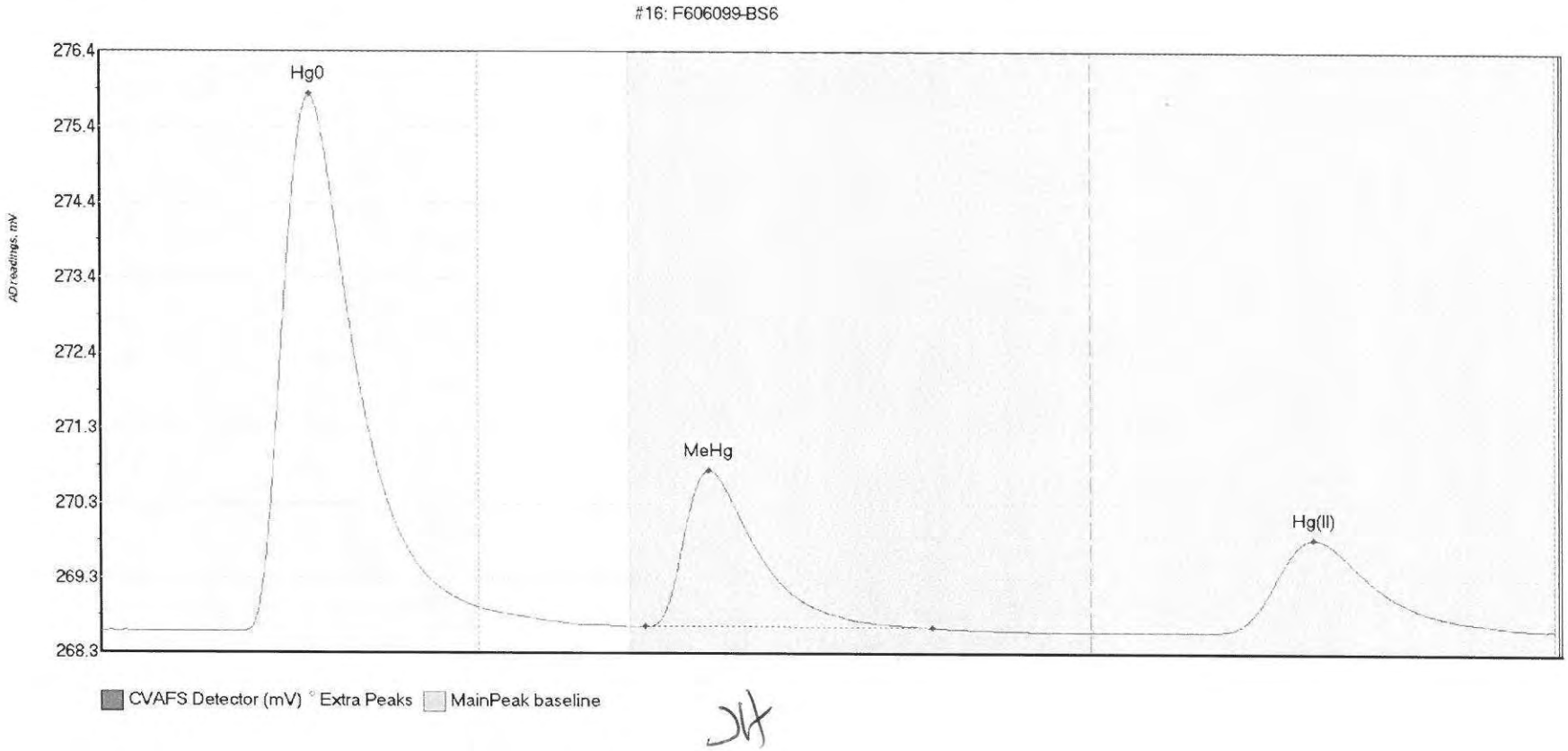


Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F606099-BS5 Hg0	845.292	20.8	57.5	268.62	268.93	31.8	6.813	CT	268.6275	0.00	0.04	
F606099-BS5 MeH	284.284	82.1	127.9	268.69	268.67	92.1	2.168	OK	268.6275	0.00	0.04	
F606099-BS5 Hg(	213.278	167.1	219.8	268.63	268.66	183.6	1.223	CT	268.6275	0.00	0.04	

Peak Chart for WS00000318



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F606099-BS3 Hg0	379.659	21.7	57.5	268.61	268.74	31.7	3.053	CT	268.6116	0.00	0.00	
F606099-BS3 MeH	296.655	80.3	131.5	268.62	268.62	92.2	2.260	OK	268.6116	0.00	0.00	
F606099-BS3 Hg(	97.299	169.1	219.1	268.60	268.61	183.6	0.566	OK	268.6116	0.00	0.00	



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F606099-BS6 Hg0	907.276	20.9	57.5	268.56	268.89	31.7	7.301	CT	268.5673	0.00	0.03	
F606099-BS6 MeH	277.094	82.5	125.9	268.63	268.62	92.2	2.144	OK	268.5673	0.00	0.03	
F606099-BS6 Hg(	217.924	168.1	218.5	268.56	268.59	183.5	1.275	OK	268.5673	0.00	0.03	

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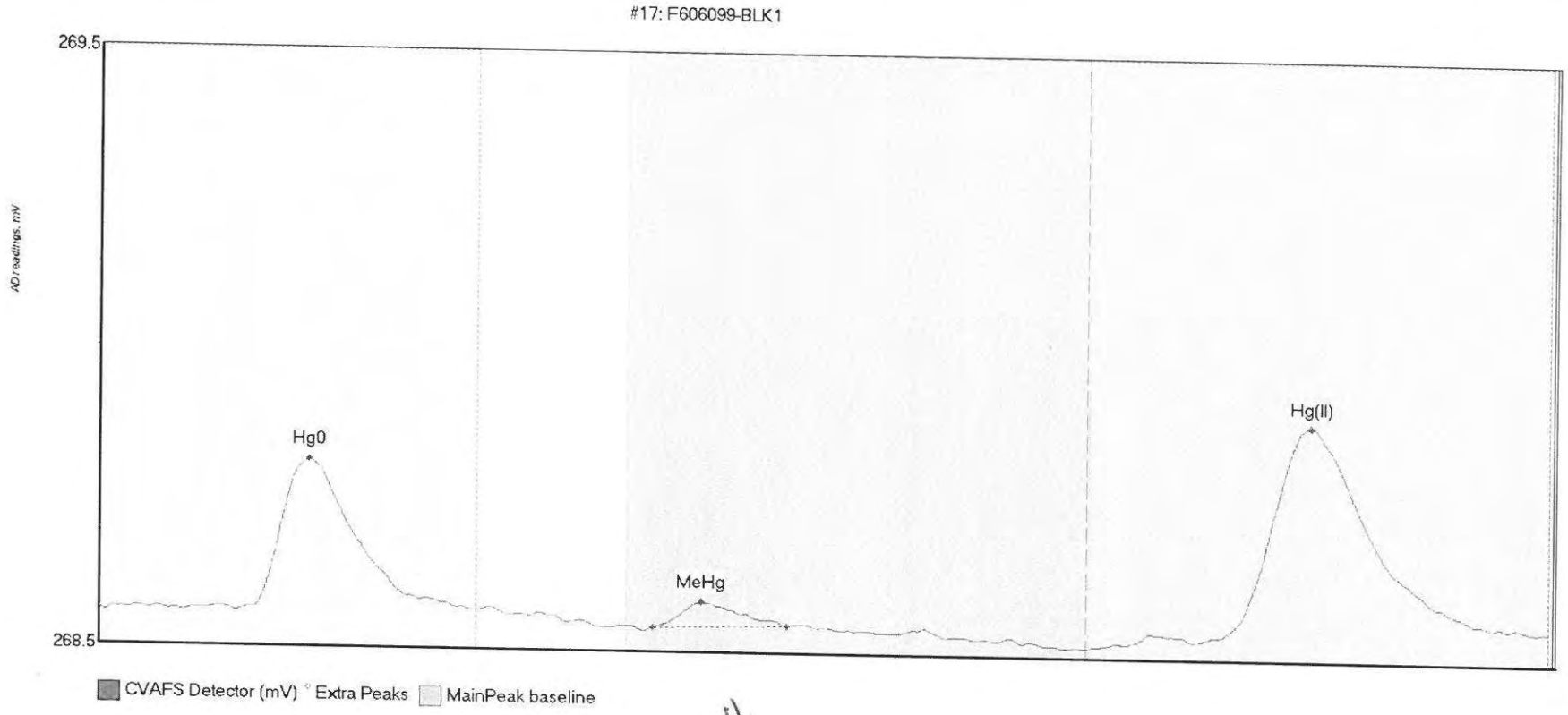
Peak Chart for WS00000318



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Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F606099-BLK1 Hg	31.796	20.5	56.6	268.53	268.54	31.9	0.254	OK	268.5322	0.00	-0.01	
F606099-BLK1 Me	4.178	84.2	104.4	268.51	268.52	91.5	0.043	OK	268.5322	0.00	-0.01	
F606099-BLK1 Hg	61.707	153.1	218.0	268.49	268.53	183.8	0.371	OK	268.5322	0.00	-0.01	

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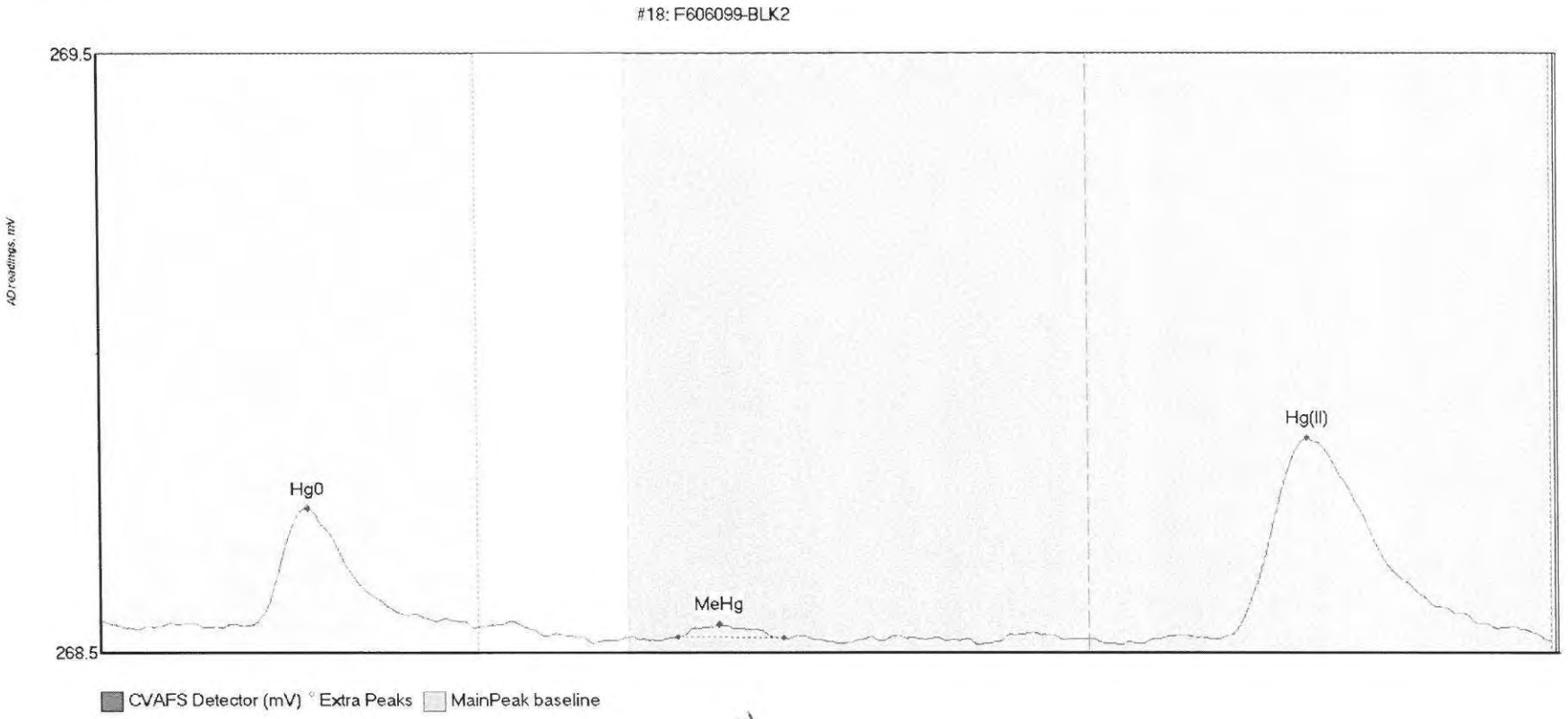
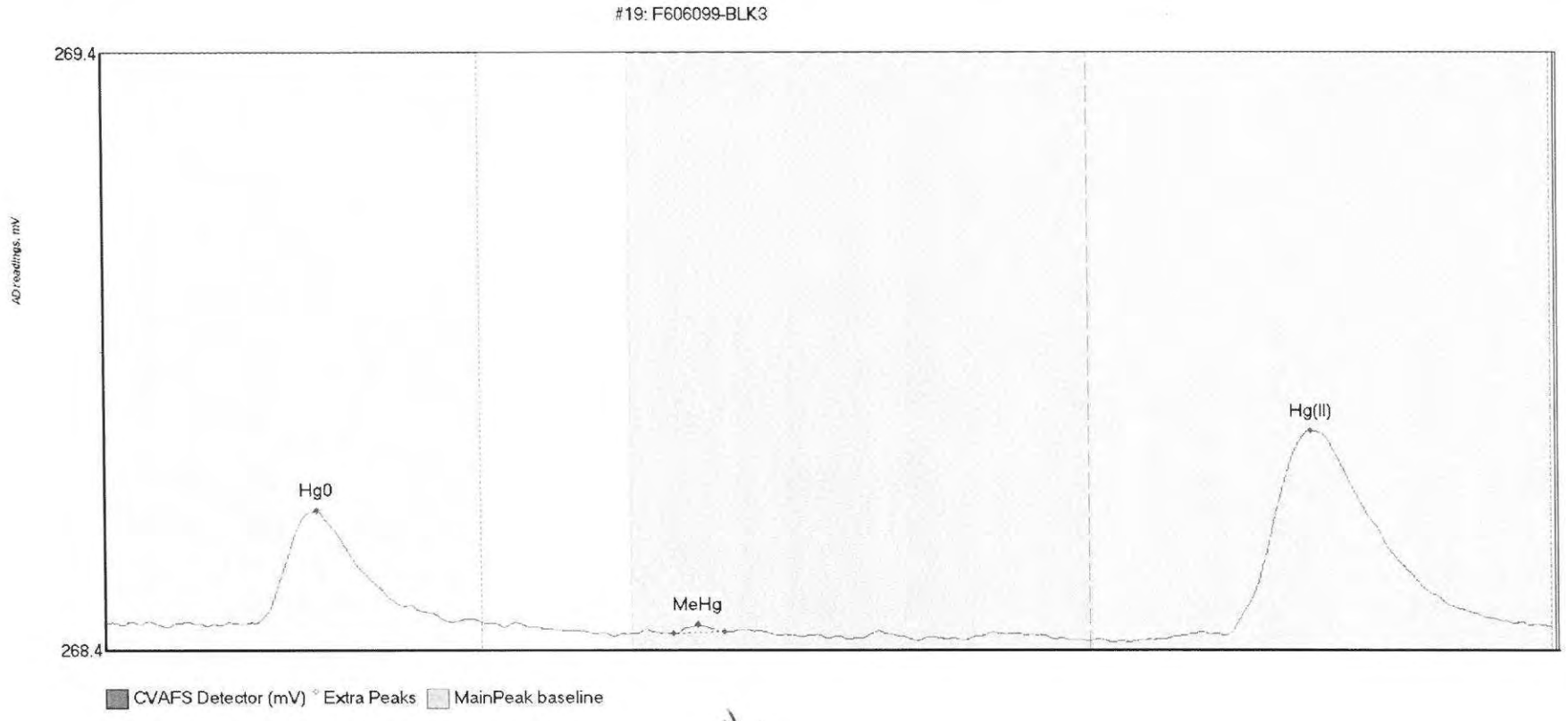


Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F606099-BLK2 Hg	21.397	23.1	50.8	268.50	268.51	31.6	0.196	OK	268.5060	0.00	-0.03	
F606099-BLK2 Me	2.129	87.6	103.6	268.48	268.48	93.9	0.021	OK	268.5060	0.00	-0.03	
F606099-BLK2 Hg	60.983	169.8	219.6	268.48	268.47	183.0	0.334	OK	268.5060	0.00	-0.03	

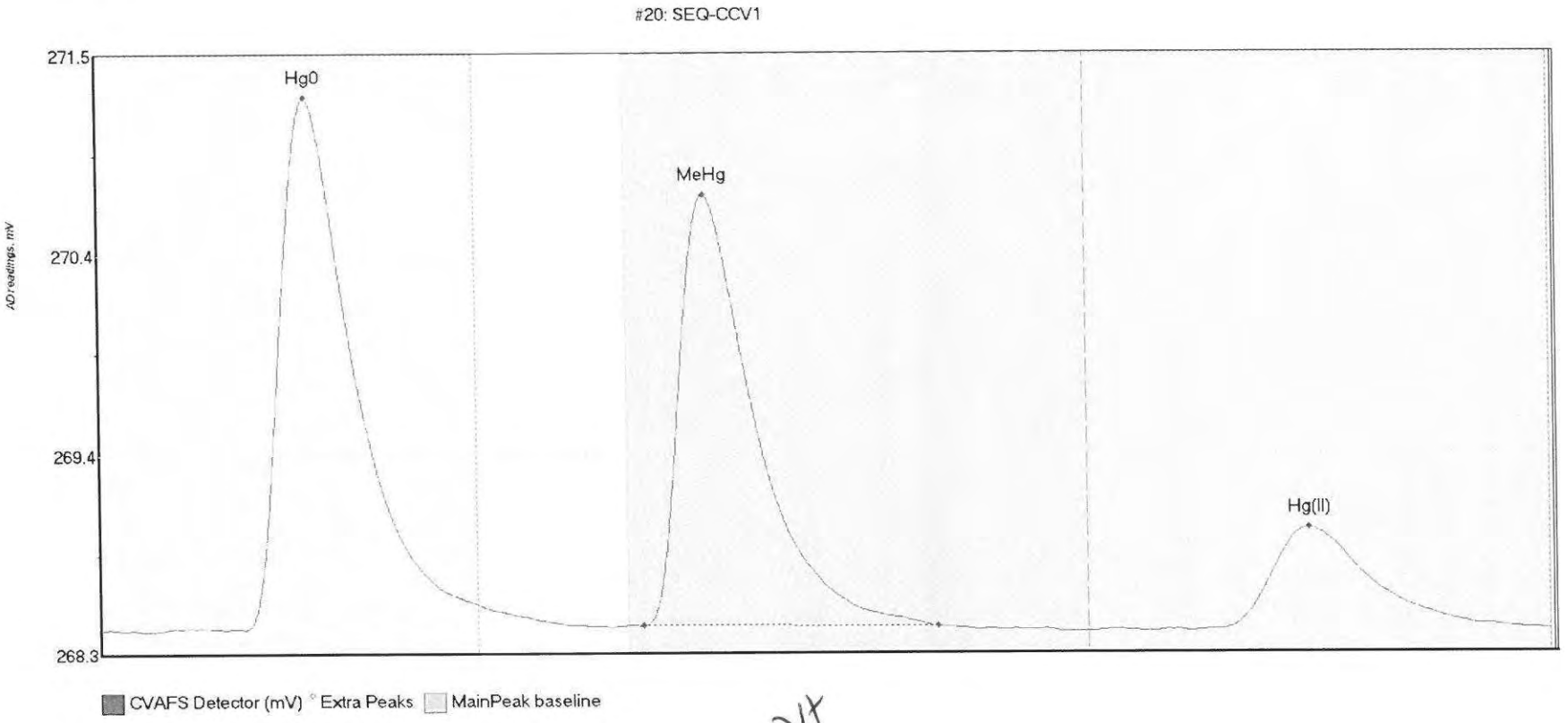
016



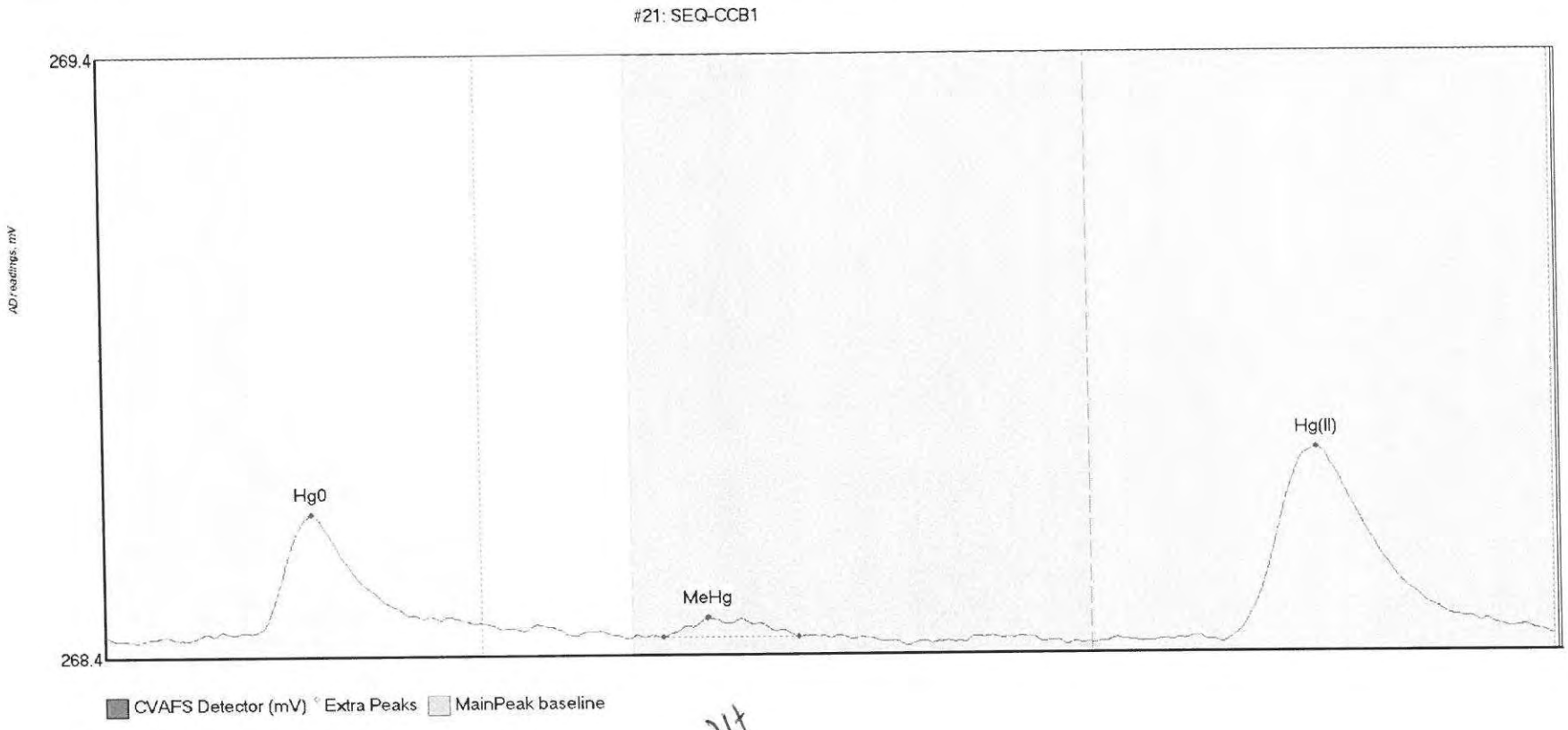
JH

Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F606099-BLK3 Hg	23.558	22.8	52.8	268.46	268.46	32.3	0.188	OK	268.4573	0.00	0.00	
F606099-BLK3 Me	0.577	86.4	94.2	268.44	268.44	90.2	0.015	OK	268.4573	0.00	0.00	
F606099-BLK3 Hg	61.412	161.2	219.3	268.43	268.45	183.5	0.349	OK	268.4573	0.00	0.00	

016



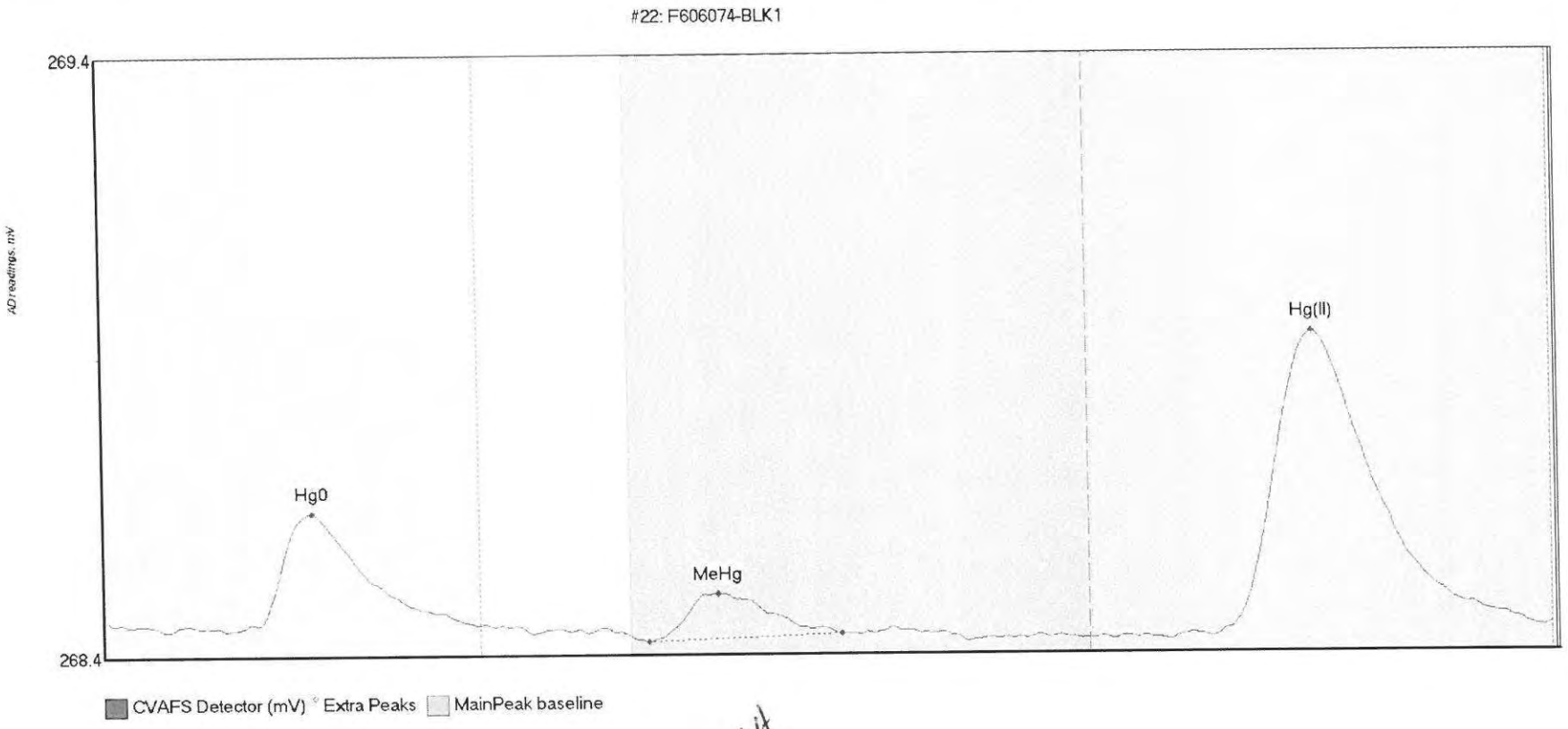
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CCV1 Hg0	342.972	21.9	57.5	268.46	268.59	31.7	2.793	CT	268.4559	0.00	0.00	
SEQ-CCV1 MeHg	296.938	82.4	127.0	268.48	268.47	92.1	2.264	OK	268.4559	0.00	0.00	
SEQ-CCV1 Hg(II)	93.237	166.8	219.8	268.45	268.45	183.4	0.539	CT	268.4559	0.00	0.00	



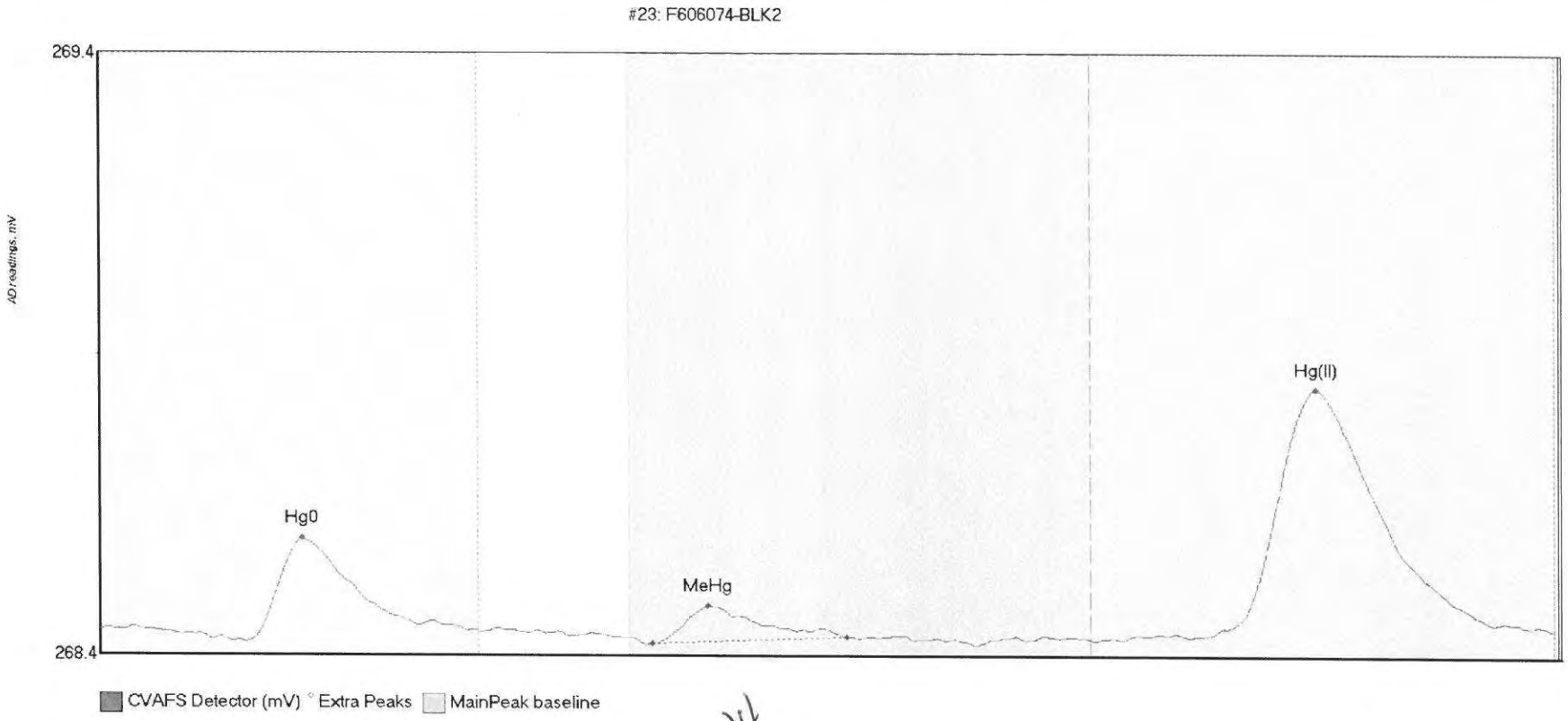
JLH

Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CCB1 Hg0	23.348	19.9	56.2	268.45	268.46	31.6	0.200	OK	268.4421	0.00	-0.01	
SEQ-CCB1 MeHg	3.740	84.7	105.3	268.44	268.44	91.6	0.031	OK	268.4421	0.00	-0.01	
SEQ-CCB1 Hg(II)	56.390	169.5	219.8	268.42	268.44	184.2	0.325	CT	268.4421	0.00	-0.01	

JJ6



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F606074-BLK1 Hg	24.927	23.4	55.6	268.44	268.44	31.8	0.187	OK	268.4482	0.00	-0.01	
F606074-BLK1 Me	10.923	82.9	112.2	268.41	268.42	93.4	0.081	OK	268.4482	0.00	-0.01	
F606074-BLK1 Hg	87.102	168.4	218.7	268.42	268.43	184.0	0.508	OK	268.4482	0.00	-0.01	



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F606074-BLK2 Hg	21.258	22.3	55.8	268.41	268.43	30.7	0.171	OK	268.4278	0.00	0.00	
F606074-BLK2 Me	7.879	83.6	113.0	268.40	268.42	92.0	0.063	OK	268.4278	0.00	0.00	
F606074-BLK2 Hg	72.530	154.7	219.8	268.41	268.43	183.9	0.417	CT	268.4278	0.00	0.00	

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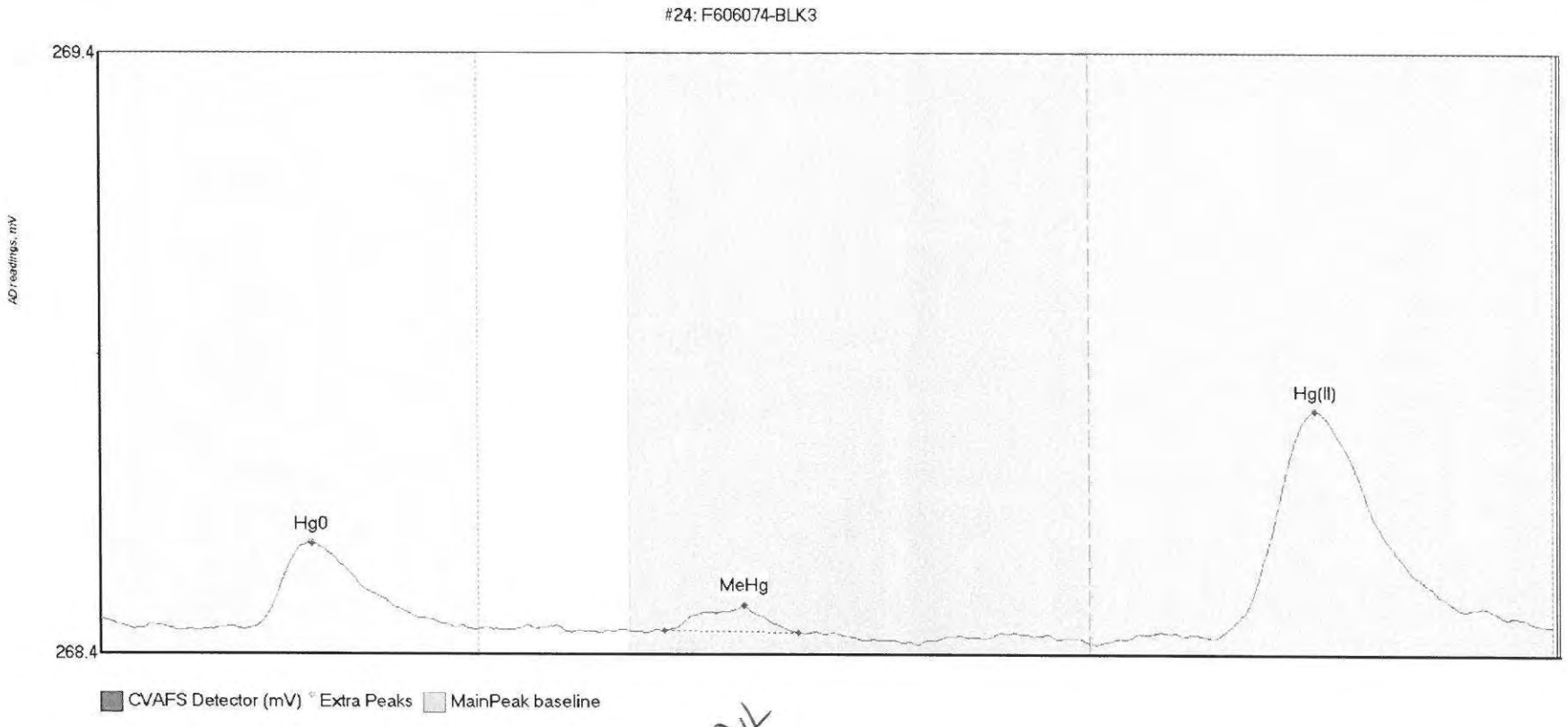
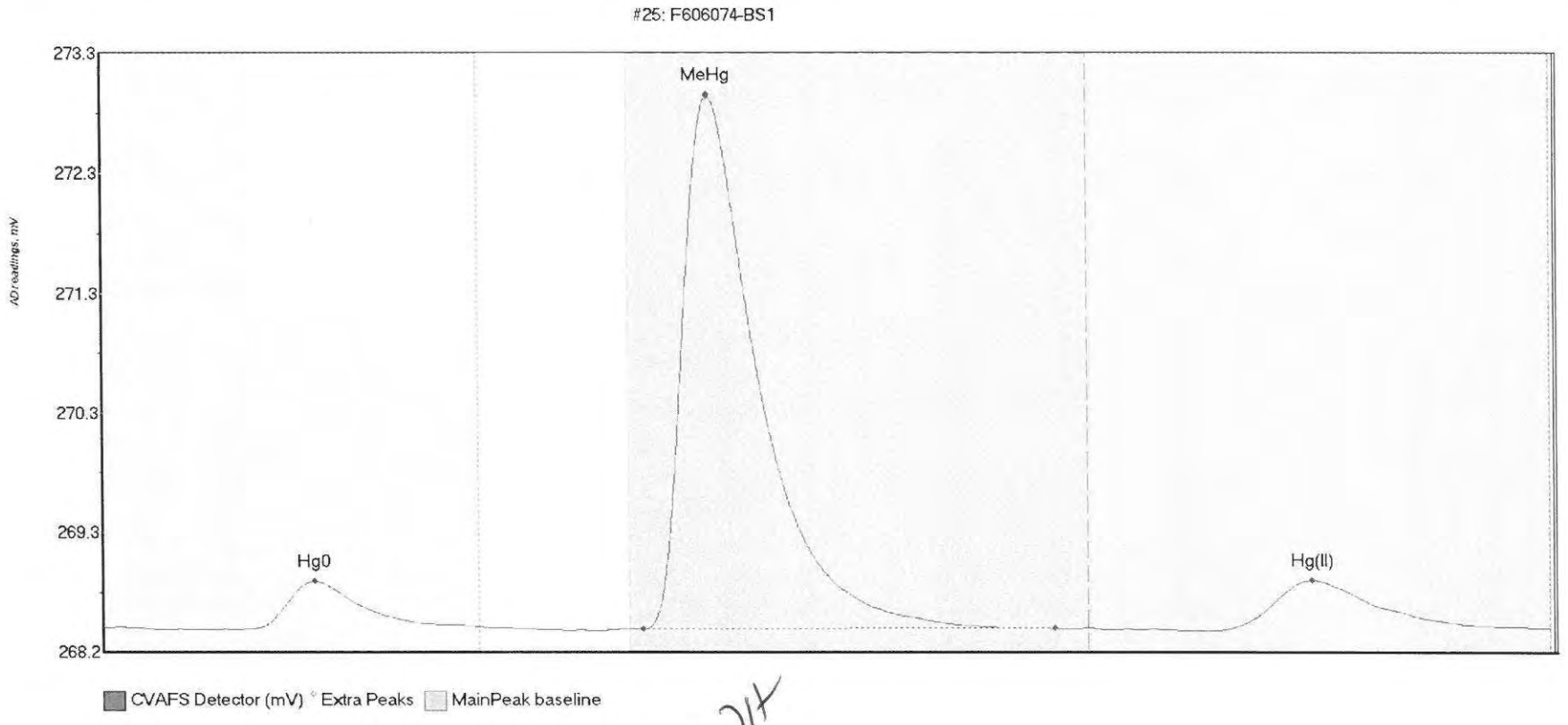
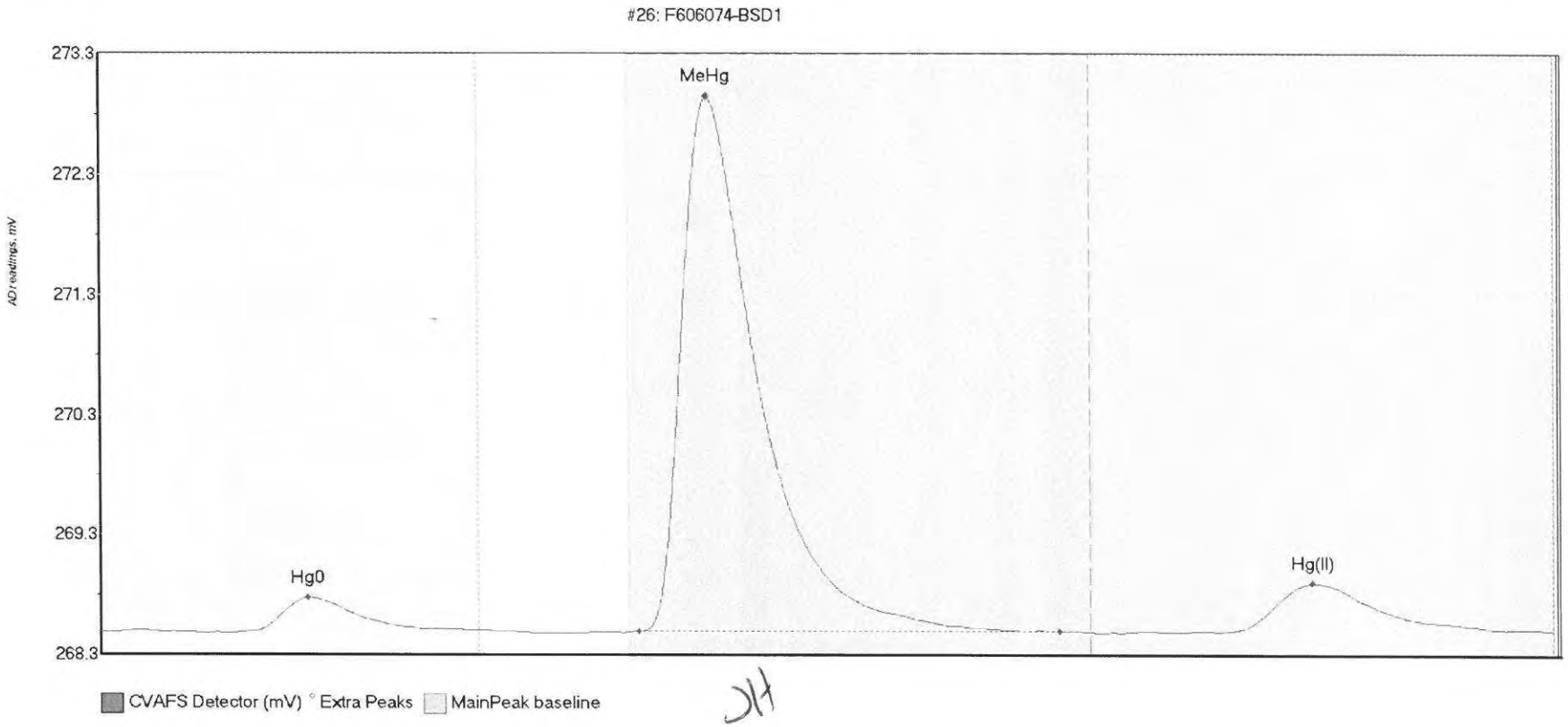


Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F606074-BLK3 Hg	16.745	22.0	48.5	268.41	268.43	32.0	0.144	OK	268.4282	0.00	-0.01	
F606074-BLK3 Me	4.564	85.4	105.7	268.41	268.41	97.6	0.041	OK	268.4282	0.00	-0.01	
F606074-BLK3 Hg	67.294	152.5	219.8	268.39	268.42	184.0	0.387	CT	268.4282	0.00	-0.01	

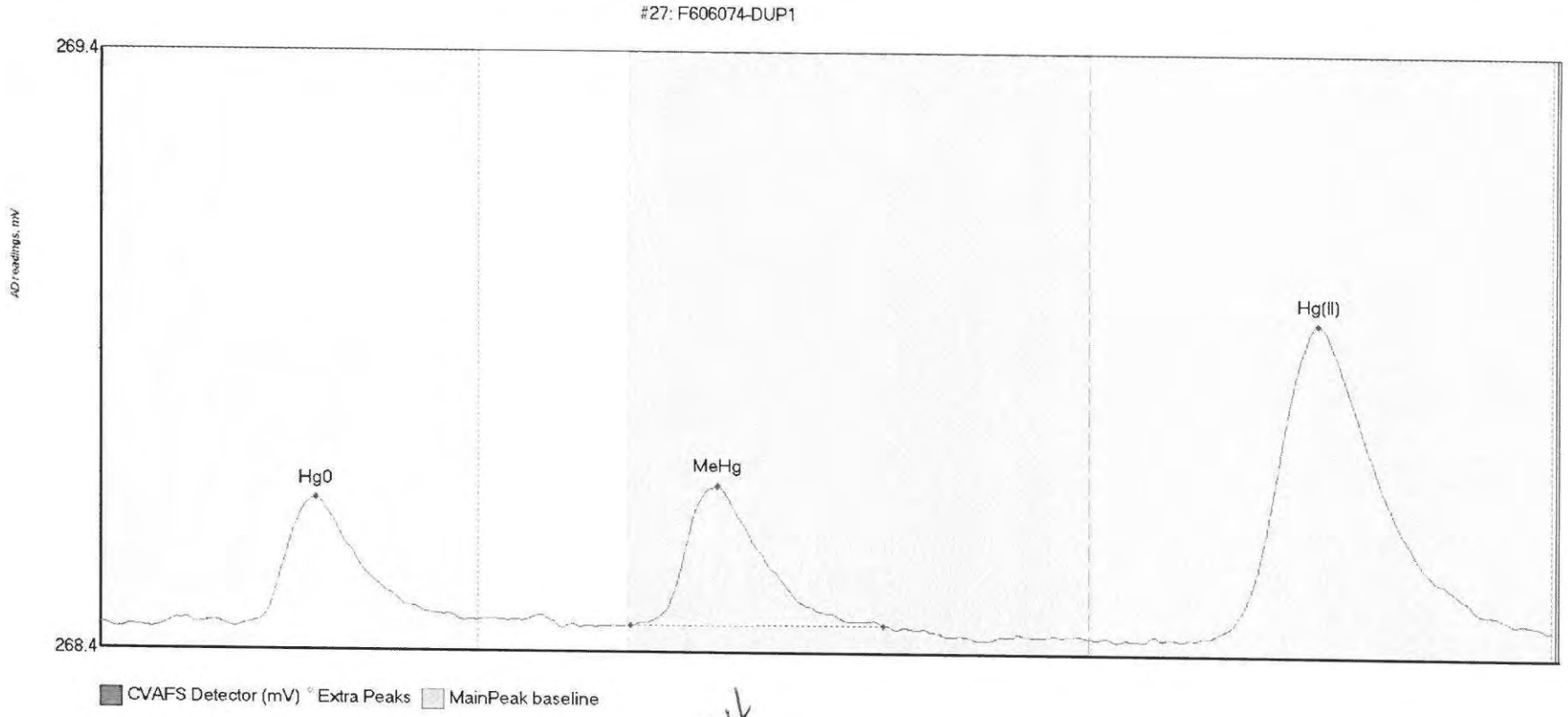


Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F606074-BS1 Hg0	49.705	21.3	57.5	268.44	268.46	32.3	0.402	CT	268.4573	0.00	-0.01	
F606074-BS1 MeH	598.953	82.1	144.7	268.44	268.45	92.3	4.510	OK	268.4573	0.00	-0.01	
F606074-BS1 Hg(	73.987	169.1	218.7	268.43	268.45	183.7	0.424	OK	268.4573	0.00	-0.01	

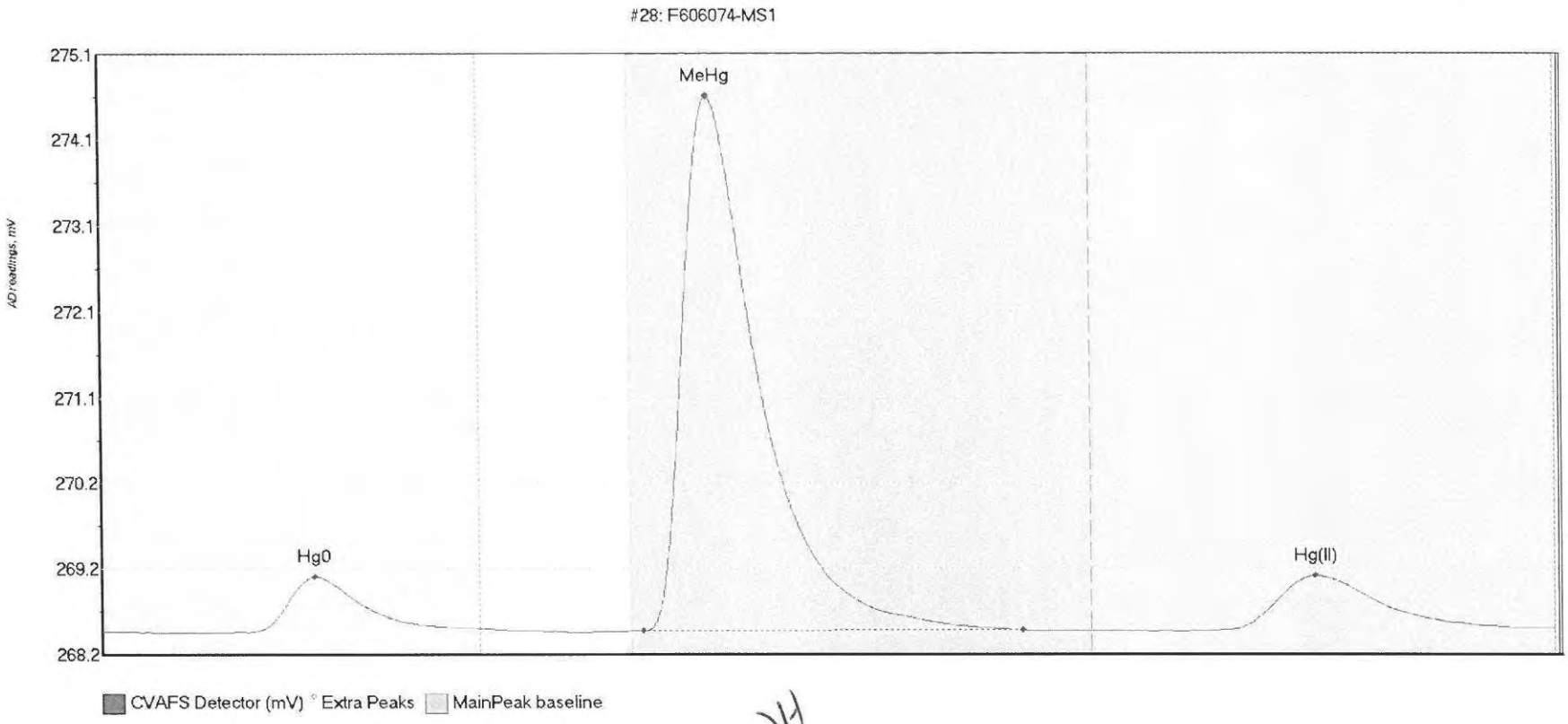


Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F606074-BSD1 Hg	35.009	20.2	56.2	268.46	268.48	31.5	0.287	OK	268.4670	0.00	0.01	
F606074-BSD1 Me	593.625	81.6	145.1	268.47	268.47	92.2	4.437	OK	268.4670	0.00	0.01	
F606074-BSD1 Hg	69.920	163.9	219.8	268.46	268.48	183.5	0.404	CT	268.4670	0.00	0.01	

Peak Chart for WS00000318



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F606074-DUP1 Hg	25.836	22.3	57.2	268.49	268.50	32.7	0.212	OK	268.4897	0.00	0.00	
F606074-DUP1 Me	30.611	80.4	118.7	268.49	268.49	93.6	0.233	OK	268.4897	0.00	0.00	
F606074-DUP1 Hg	90.430	167.7	219.5	268.48	268.49	184.4	0.525	OK	268.4897	0.00	0.00	



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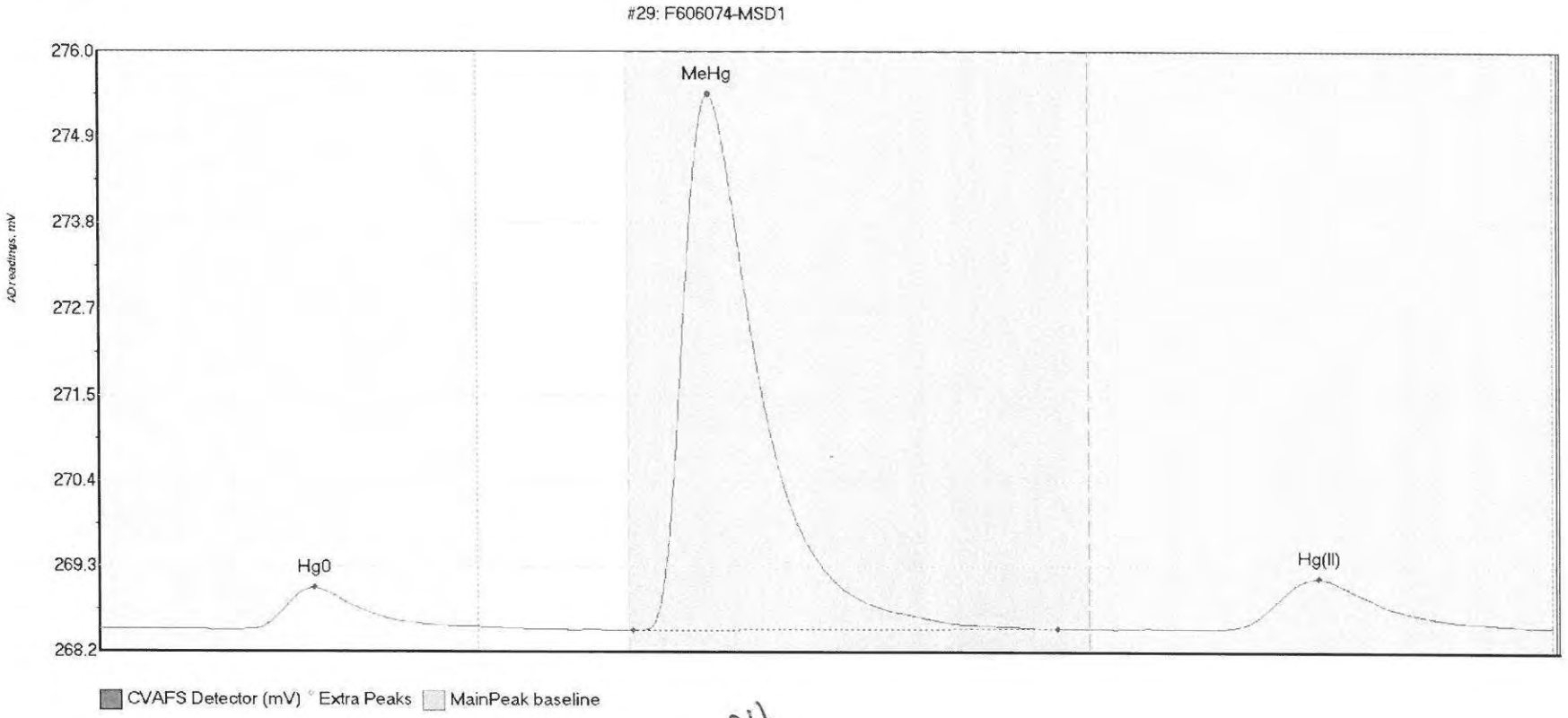
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F606074-MS1 Hg0	75.775	21.9	57.5	268.47	268.51	32.3	0.628	CT	268.4850	0.00	0.03	
F606074-MS1 MeH	809.916	82.0	139.5	268.49	268.49	92.2	6.075	OK	268.4850	0.00	0.03	
F606074-MS1 Hg(	107.236	168.2	219.8	268.49	268.52	183.8	0.619	CT	268.4850	0.00	0.03	

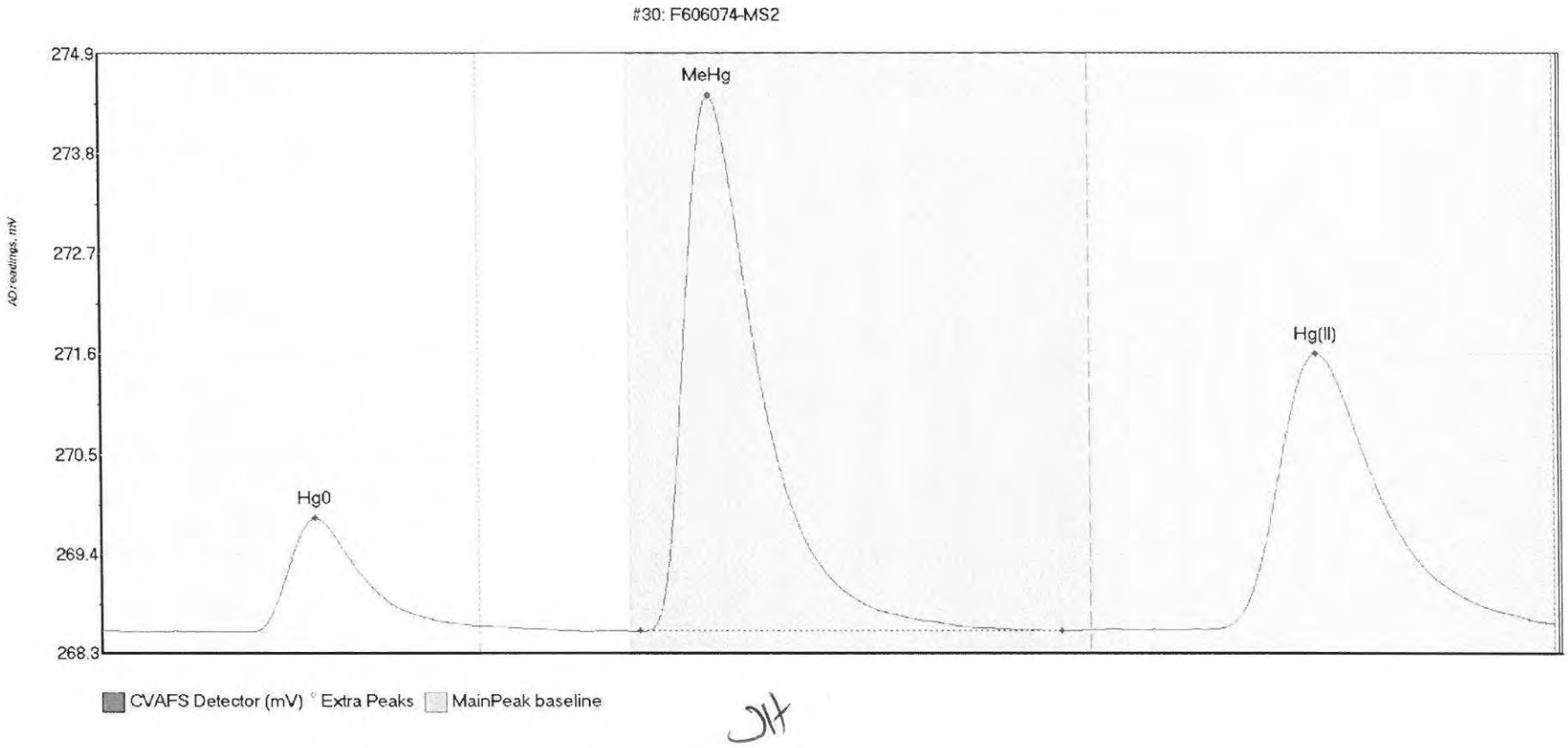
016



DH

Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F606074-MSD1 Hg	65.000	22.6	57.5	268.51	268.54	32.6	0.536	CT	268.5096	0.00	0.04	
F606074-MSD1 Me	933.698	80.8	145.0	268.49	268.52	92.4	6.940	OK	268.5096	0.00	0.04	
F606074-MSD1 Hg	112.492	170.2	219.8	268.53	268.54	184.6	0.650	CT	268.5096	0.00	0.04	

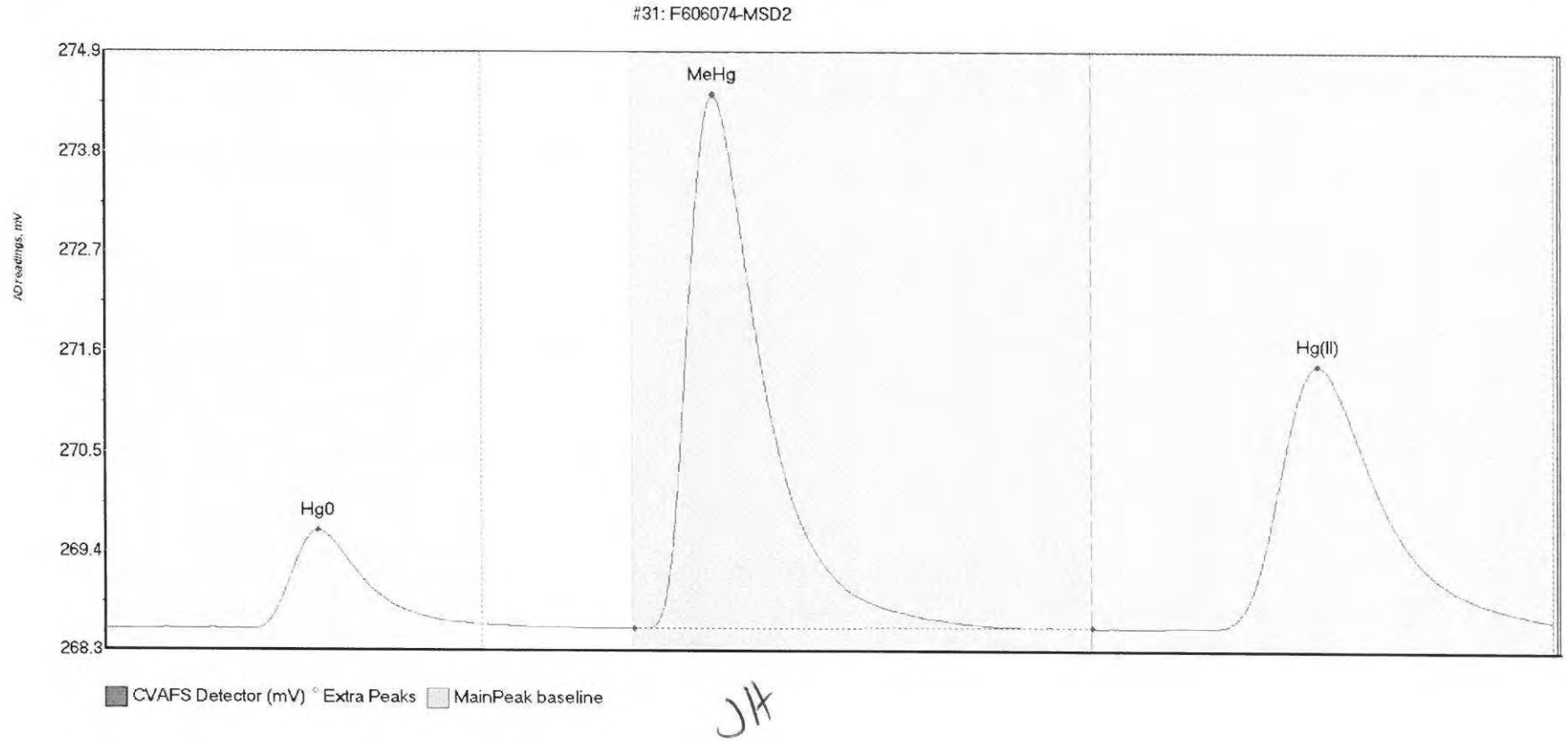
016



JH

Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F606074-MS2 Hg0	153.871	22.8	57.4	268.54	268.60	32.5	1.255	OK	268.5485	0.00	0.09	
F606074-MS2 MeH	787.243	81.6	145.4	268.54	268.55	92.4	5.887	OK	268.5485	0.00	0.09	
F606074-MS2 Hg(	526.806	167.2	219.8	268.57	268.63	184.1	3.035	CT	268.5485	0.00	0.09	

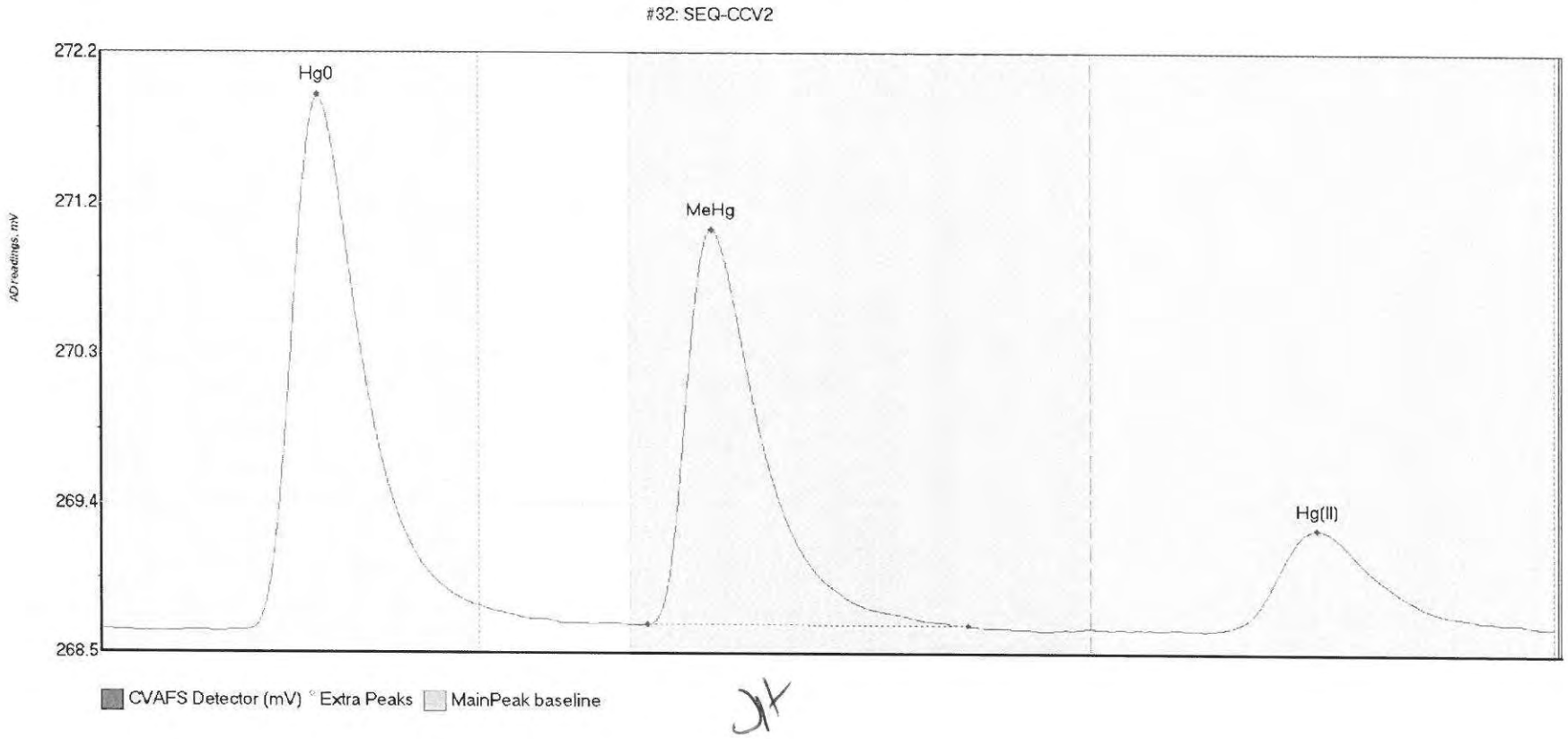
016



JH

Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F606074-MSD2 Hg	132.252	22.5	57.5	268.57	268.63	32.4	1.087	CT	268.5791	0.00	0.11	
F606074-MSD2 Me	783.304	80.5	150.0	268.59	268.59	92.6	5.834	CT	268.5791	0.00	0.11	
F606074-MSD2 Hg	498.522	167.6	219.8	268.60	268.68	184.2	2.877	CT	268.5791	0.00	0.11	

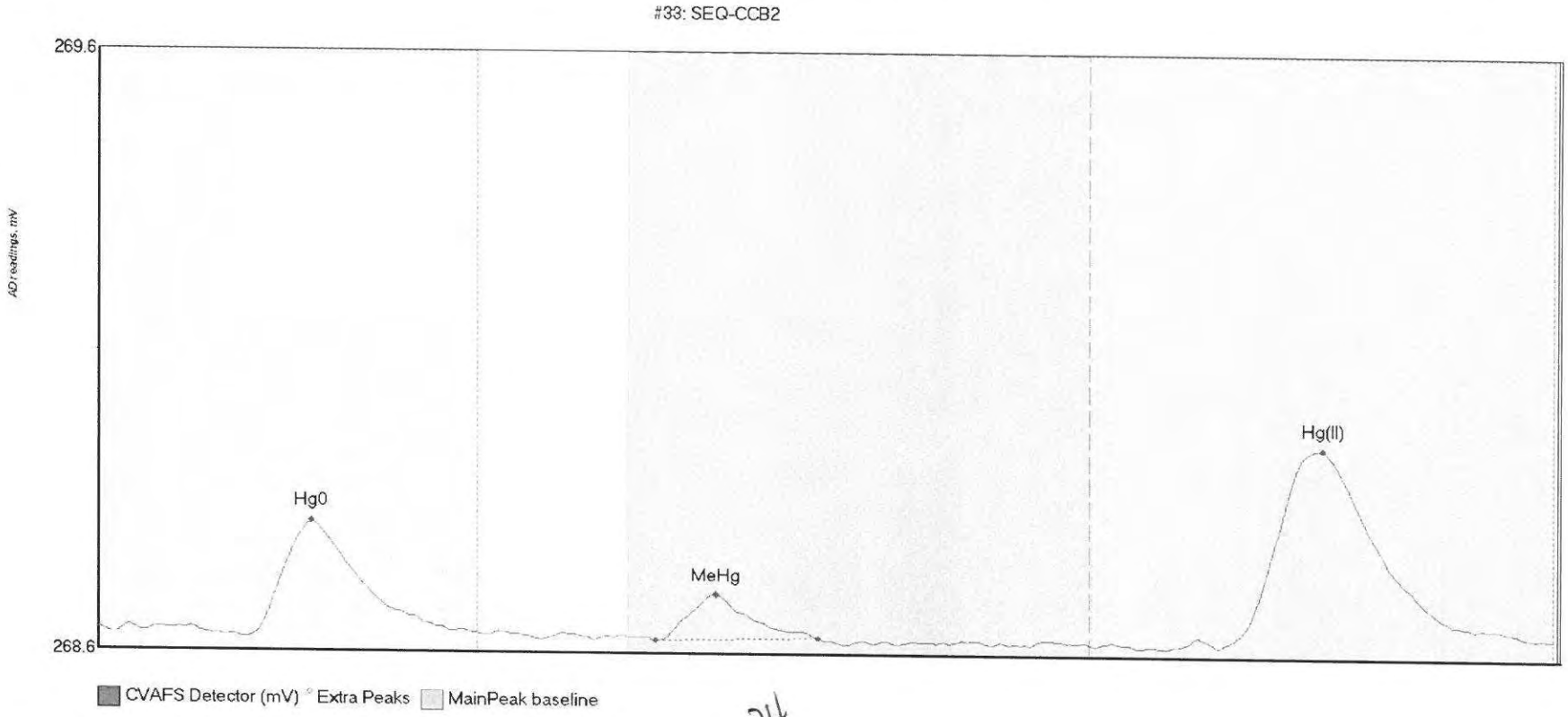
016



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CCV2 Hg0	395.072	21.9	57.5	268.60	268.75	32.9	3.294	CT	268.6052	0.00	0.02	
SEQ-CCV2 MeHg	321.338	82.8	131.3	268.64	268.63	92.6	2.432	OK	268.6052	0.00	0.02	
SEQ-CCV2 Hg(II)	109.927	167.1	219.3	268.60	268.63	184.1	0.629	OK	268.6052	0.00	0.02	

016

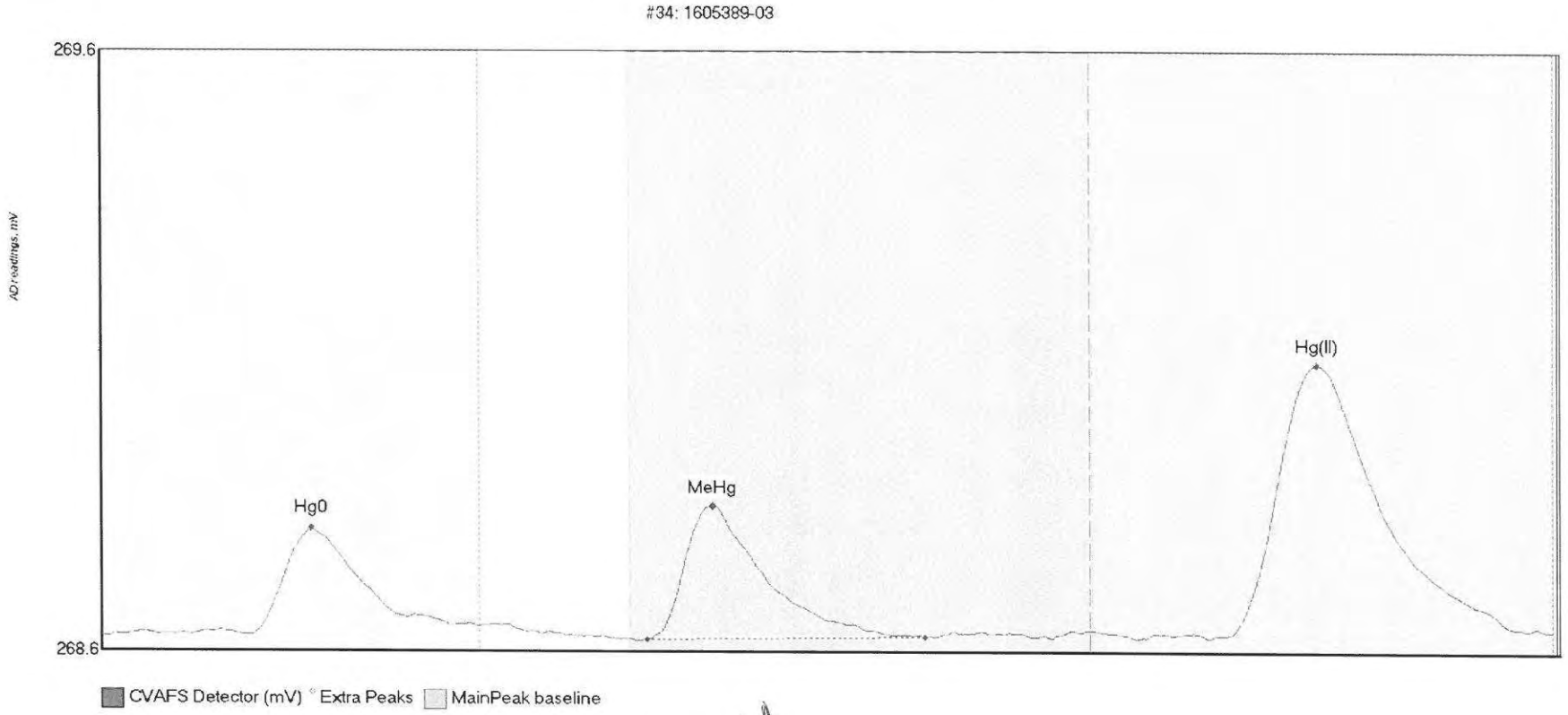
Peak Chart for WS00000318



DH

Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CCB2 Hg0	24.042	22.5	53.6	268.60	268.62	32.2	0.194	OK	268.6179	0.00	0.00	
SEQ-CCB2 MeHg	8.043	84.3	108.9	268.60	268.61	93.4	0.079	OK	268.6179	0.00	0.00	
SEQ-CCB2 Hg(II)	56.905	169.2	219.7	268.60	268.61	185.0	0.331	OK	268.6179	0.00	0.00	

016

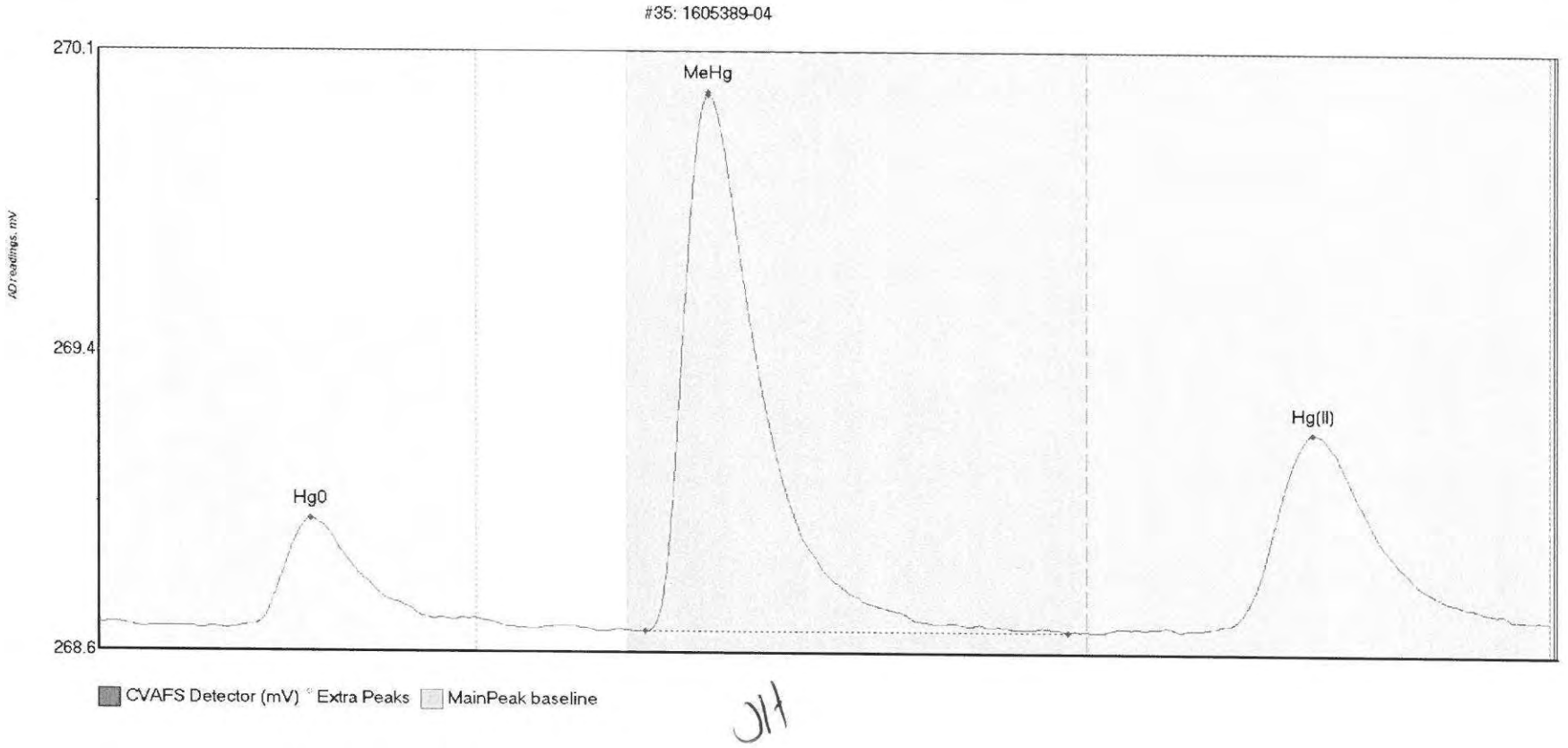


JA

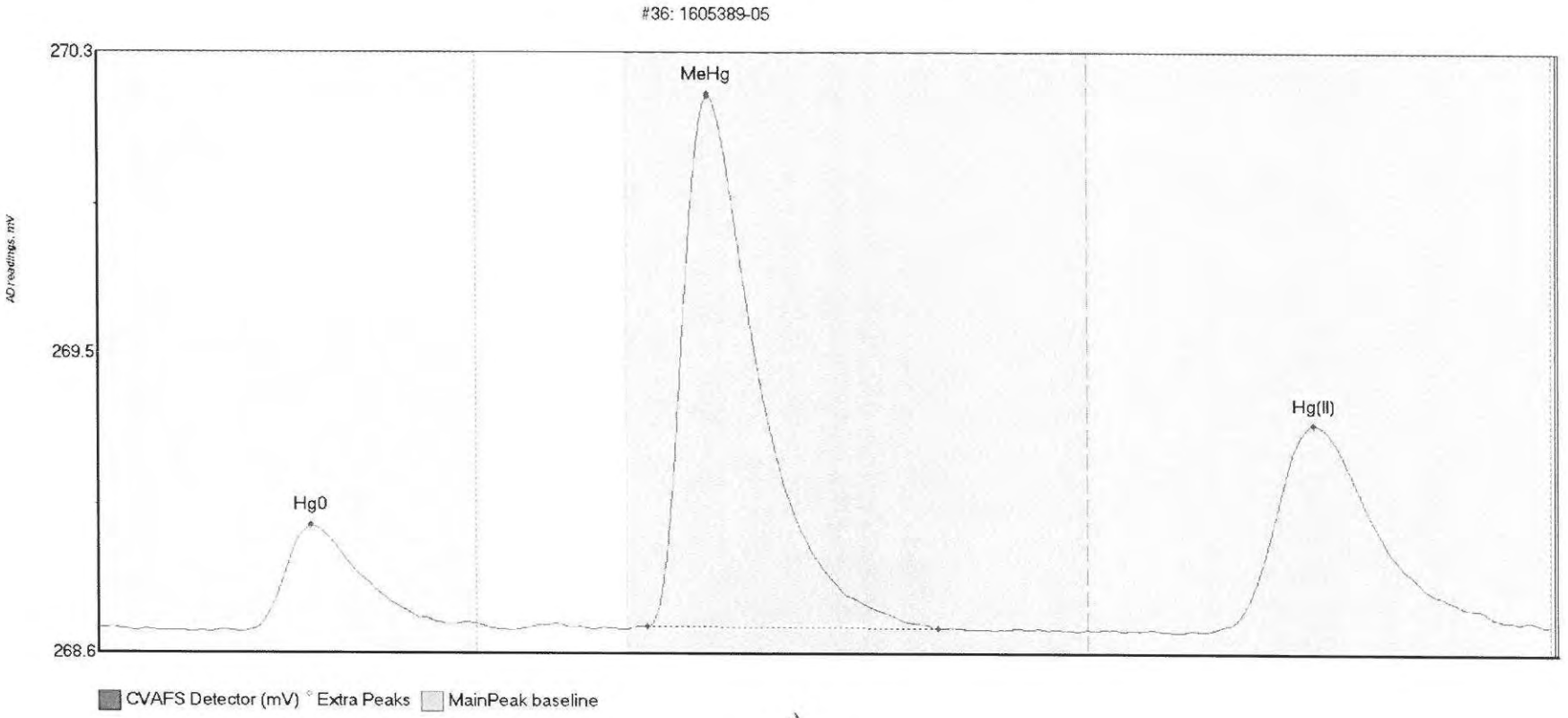
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1605389-03 Hg0	22.022	22.6	57.1	268.63	268.65	31.9	0.176	OK	268.6297	0.00	0.01	
1605389-03 MeHg	31.260	82.7	124.9	268.62	268.63	92.8	0.224	OK	268.6297	0.00	0.01	
1605389-03 Hg(I	78.751	170.9	215.6	268.63	268.64	184.2	0.452	OK	268.6297	0.00	0.01	

JI6

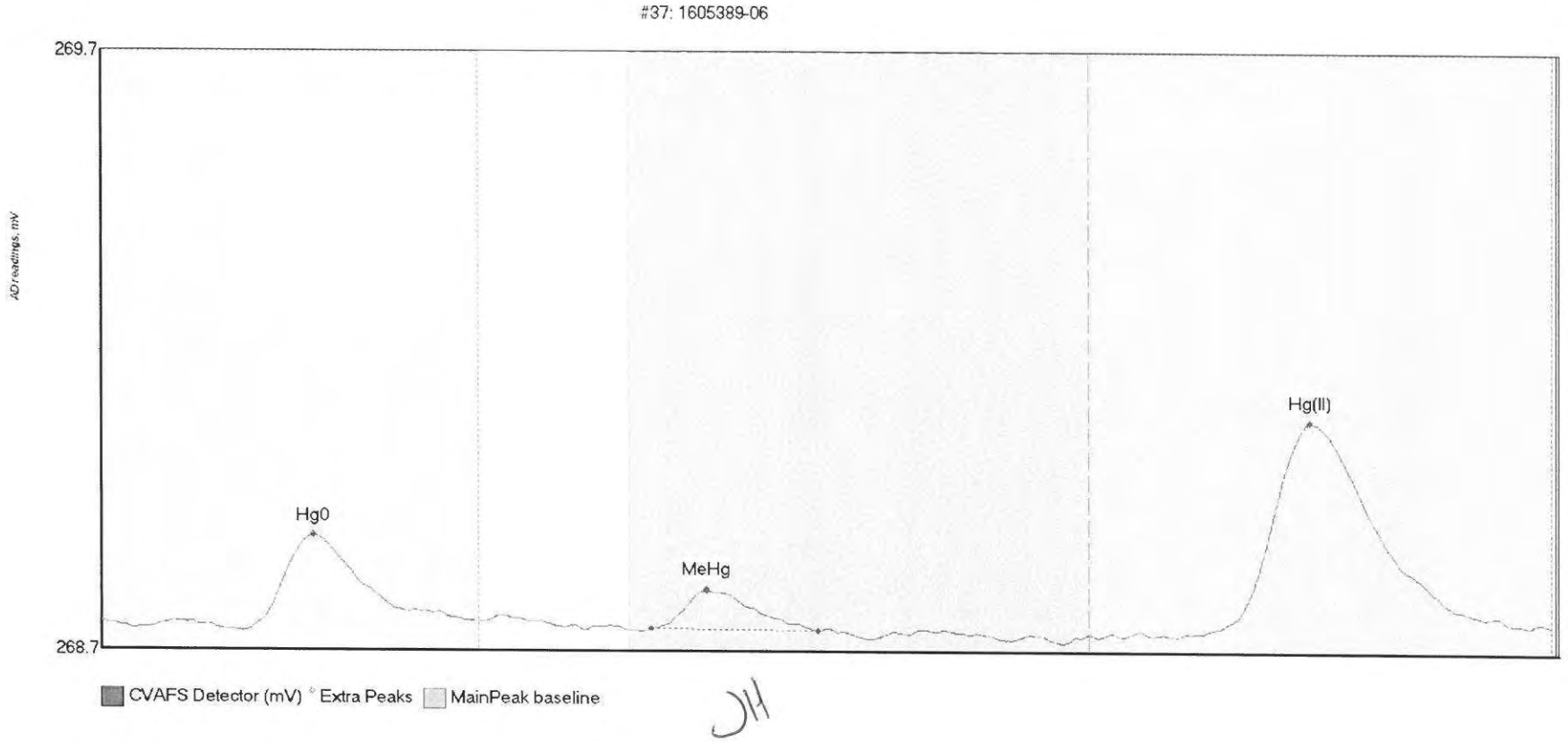
Peak Chart for WS00000318



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1605389-04 Hg0	32.336	23.6	54.0	268.67	268.68	32.2	0.269	OK	268.6711	0.00	0.02	
1605389-04 MeHg	185.405	82.9	147.0	268.65	268.66	92.6	1.361	OK	268.6711	0.00	0.02	
1605389-04 Hg(I	83.929	164.0	217.2	268.66	268.69	184.1	0.503	OK	268.6711	0.00	0.02	



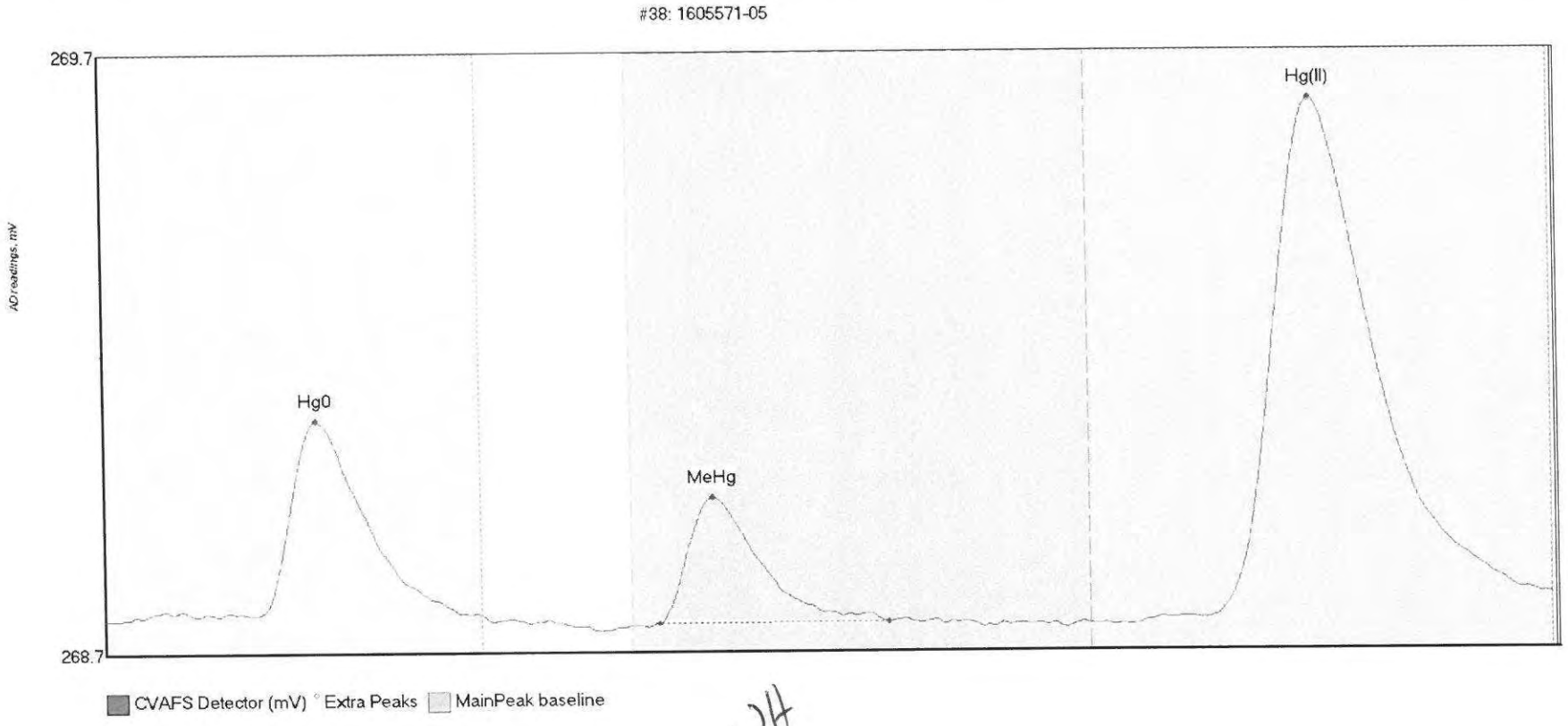
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1605389-05 Hg0	37.169	22.0	53.3	268.71	268.73	32.3	0.296	OK	268.7190	0.00	0.01	
1605389-05 MeHg	196.340	83.2	127.2	268.72	268.72	92.5	1.485	OK	268.7190	0.00	0.01	
1605389-05 Hg(I	100.553	167.3	219.0	268.71	268.73	184.0	0.578	OK	268.7190	0.00	0.01	



JH

Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1605389-06 Hg0	20.158	21.4	55.5	268.73	268.75	32.1	0.160	OK	268.7445	0.00	0.00	
1605389-06 MeHg	7.882	83.5	108.8	268.73	268.73	91.9	0.065	OK	268.7445	0.00	0.00	
1605389-06 Hg(I	61.260	167.1	216.5	268.73	268.74	183.3	0.353	OK	268.7445	0.00	0.00	

016

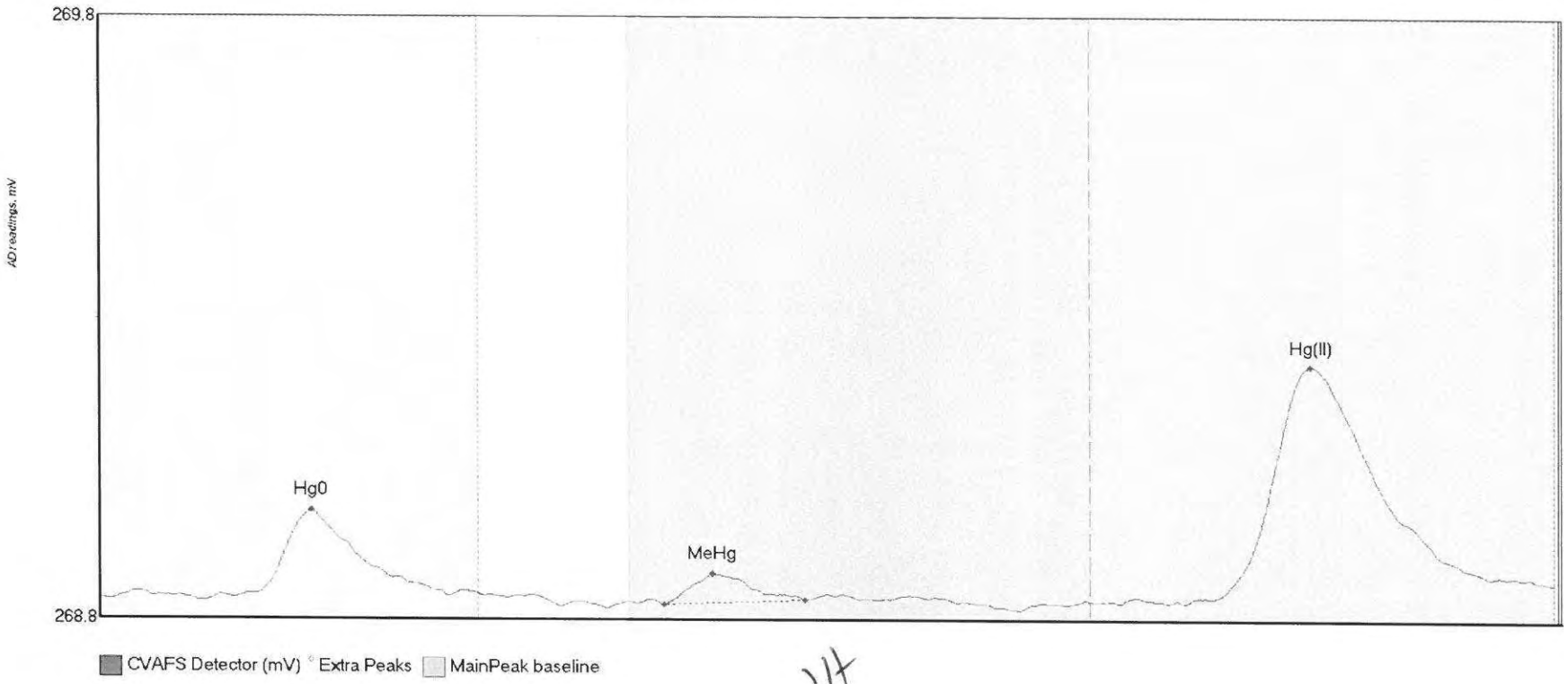


JH

Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1605571-05 Hg0	42.439	5.7	57.5	268.78	268.78	32.4	0.327	CT	268.7759	0.00	0.04	
1605571-05 MeHg	26.220	84.3	119.2	268.77	268.77	92.6	0.209	OK	268.7759	0.00	0.04	
1605571-05 Hg(I	149.869	156.9	219.8	268.76	268.81	183.8	0.874	CT	268.7759	0.00	0.04	

JJ6

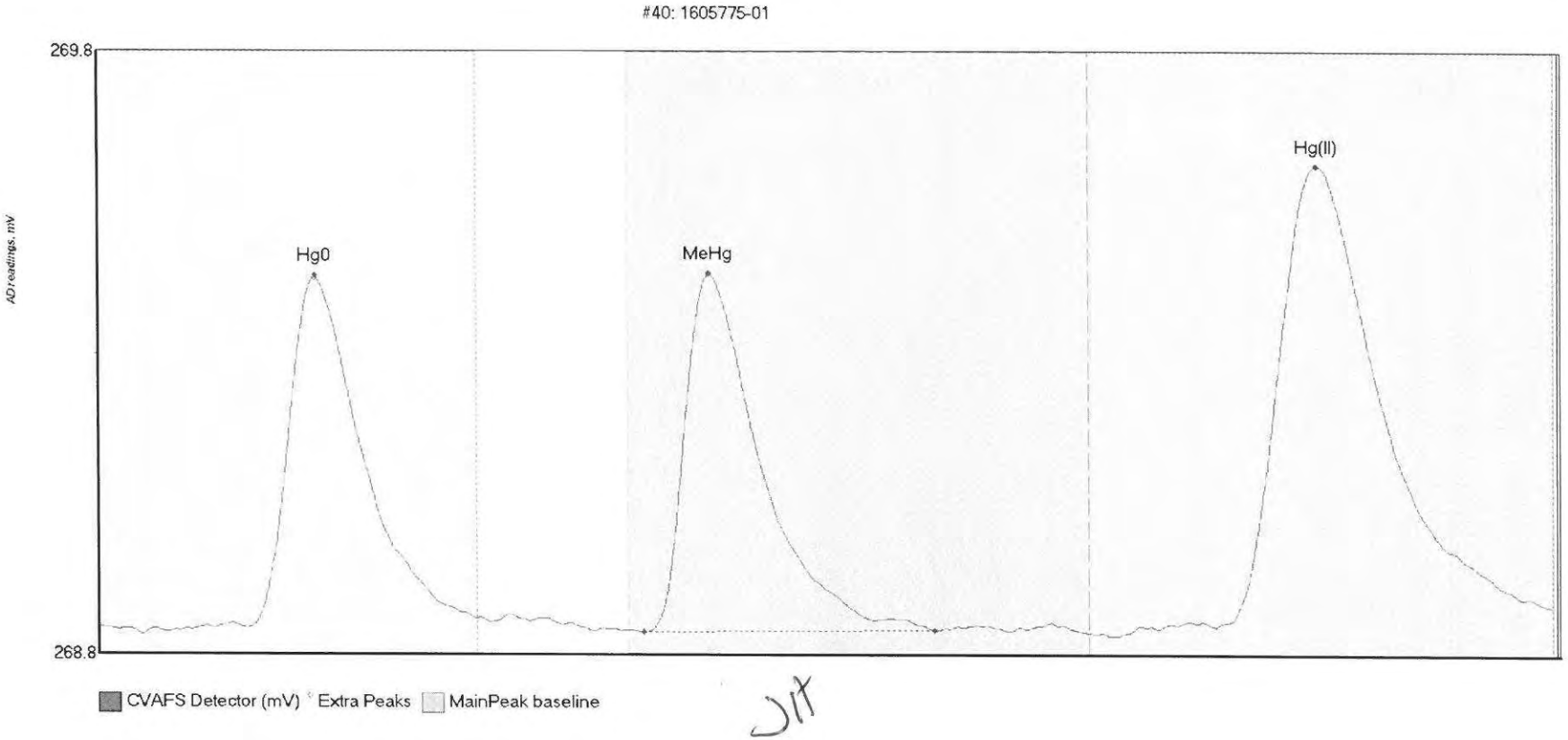
#39: 1605571-06



JH

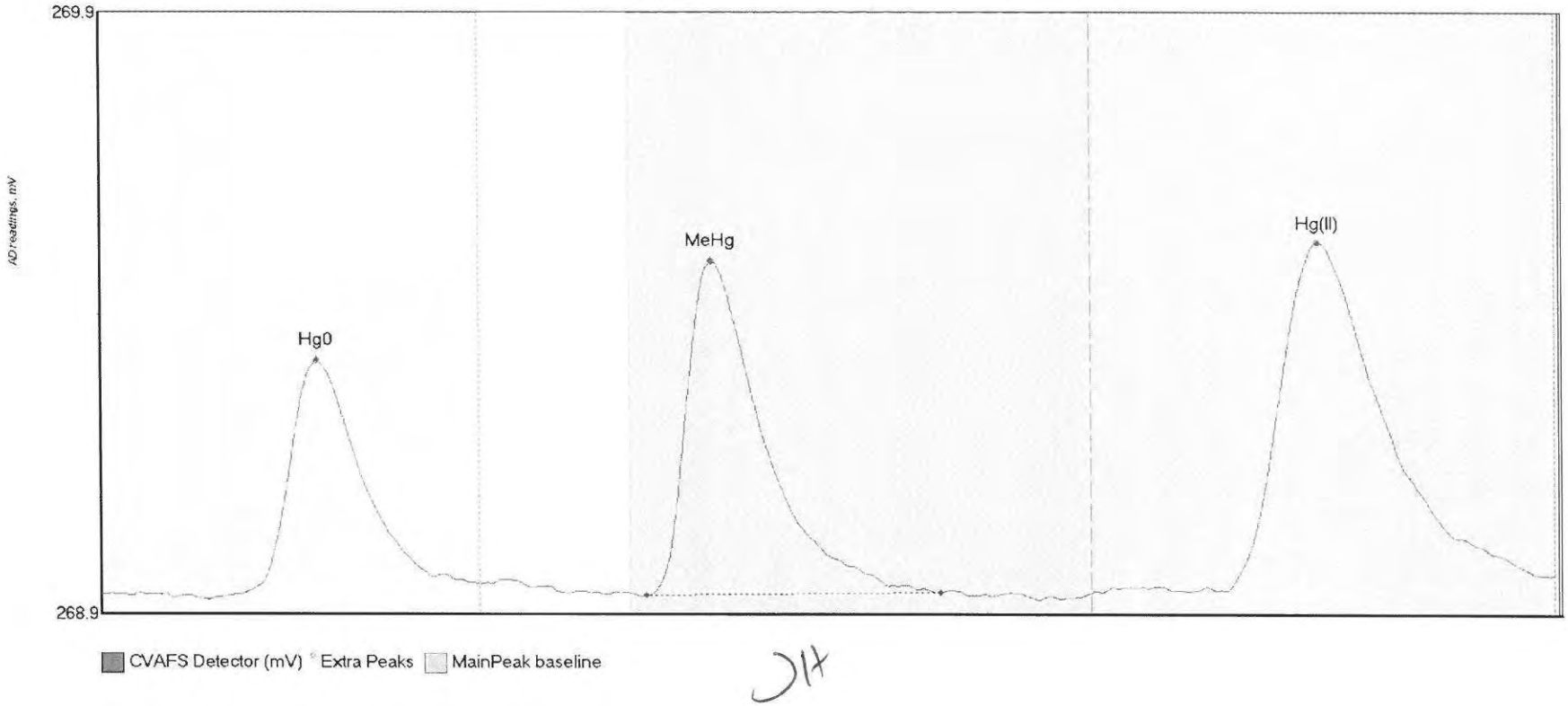
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1605571-06 Hg0	17.618	20.3	52.7	268.81	268.81	32.0	0.143	OK	268.8091	0.00	0.03	
1605571-06 MeHg	4.914	85.5	106.8	268.80	268.81	92.8	0.050	OK	268.8091	0.00	0.03	
1605571-06 Hg(I	68.287	164.2	219.8	268.80	268.84	183.2	0.395	CT	268.8091	0.00	0.03	

016

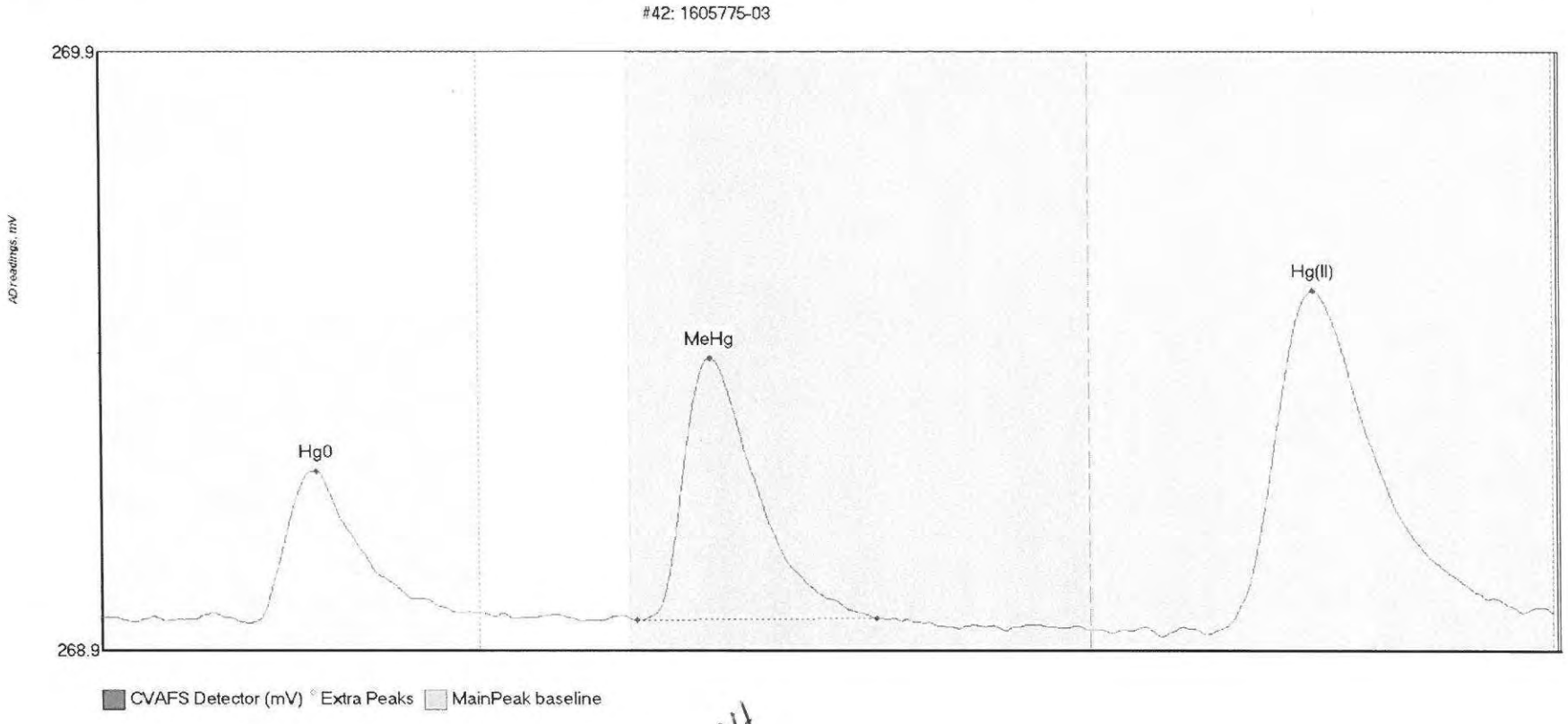


Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1605775-01 Hg0	72.330	22.6	57.1	268.86	268.88	32.8	0.582	OK	268.8621	0.00	0.04	
1605775-01 MeHg	78.786	82.4	126.5	268.85	268.86	92.5	0.596	OK	268.8621	0.00	0.04	
1605775-01 Hg(I	134.194	155.4	219.8	268.85	268.90	184.2	0.777	CT	268.8621	0.00	0.04	

#41: 1605775-02

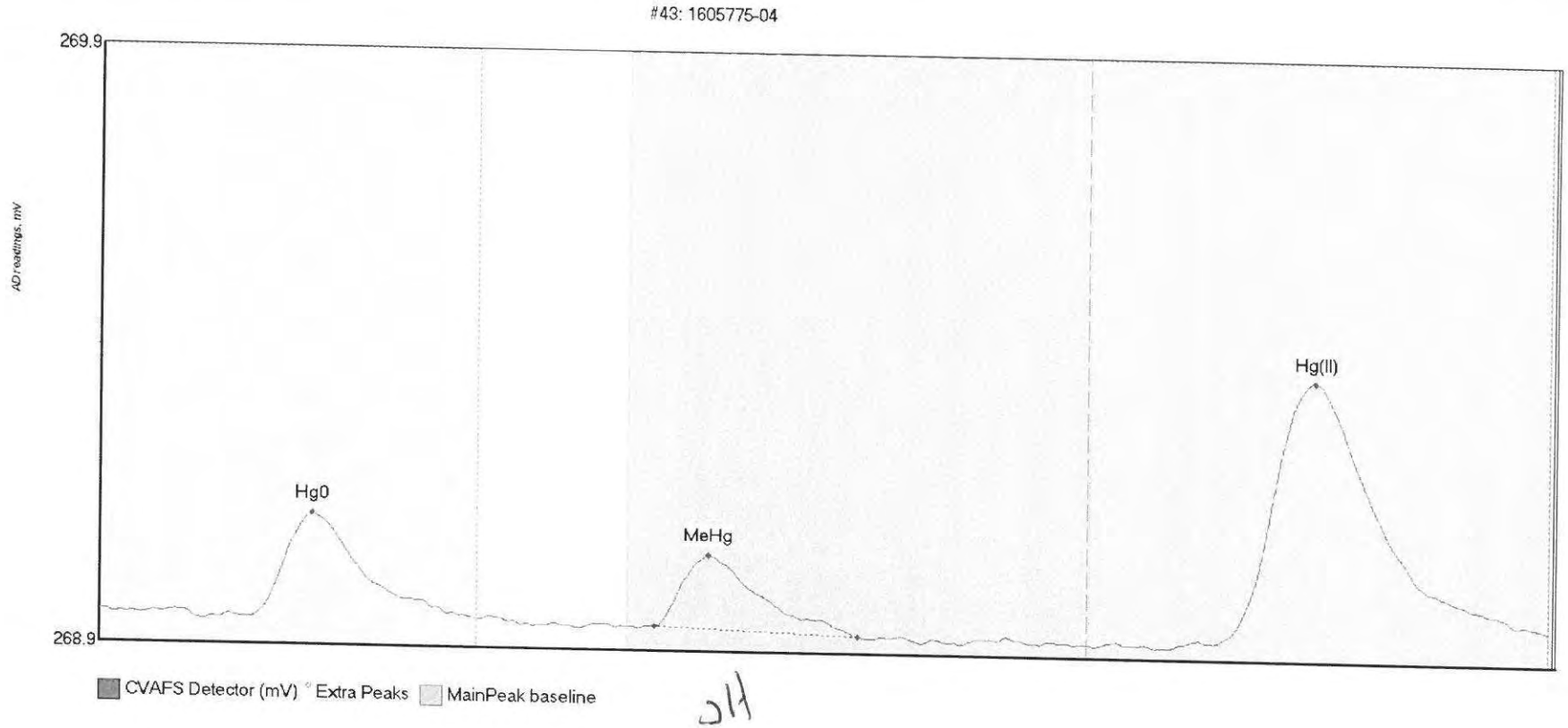


Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1605775-02 Hg0	47.230	21.6	57.4	268.91	268.93	32.7	0.387	OK	268.9088	0.00	0.03	
1605775-02 MeHg	74.457	82.6	127.0	268.91	268.91	92.6	0.557	OK	268.9088	0.00	0.03	
1605775-02 Hg(I	102.216	170.5	219.2	268.92	268.94	184.2	0.582	OK	268.9088	0.00	0.03	

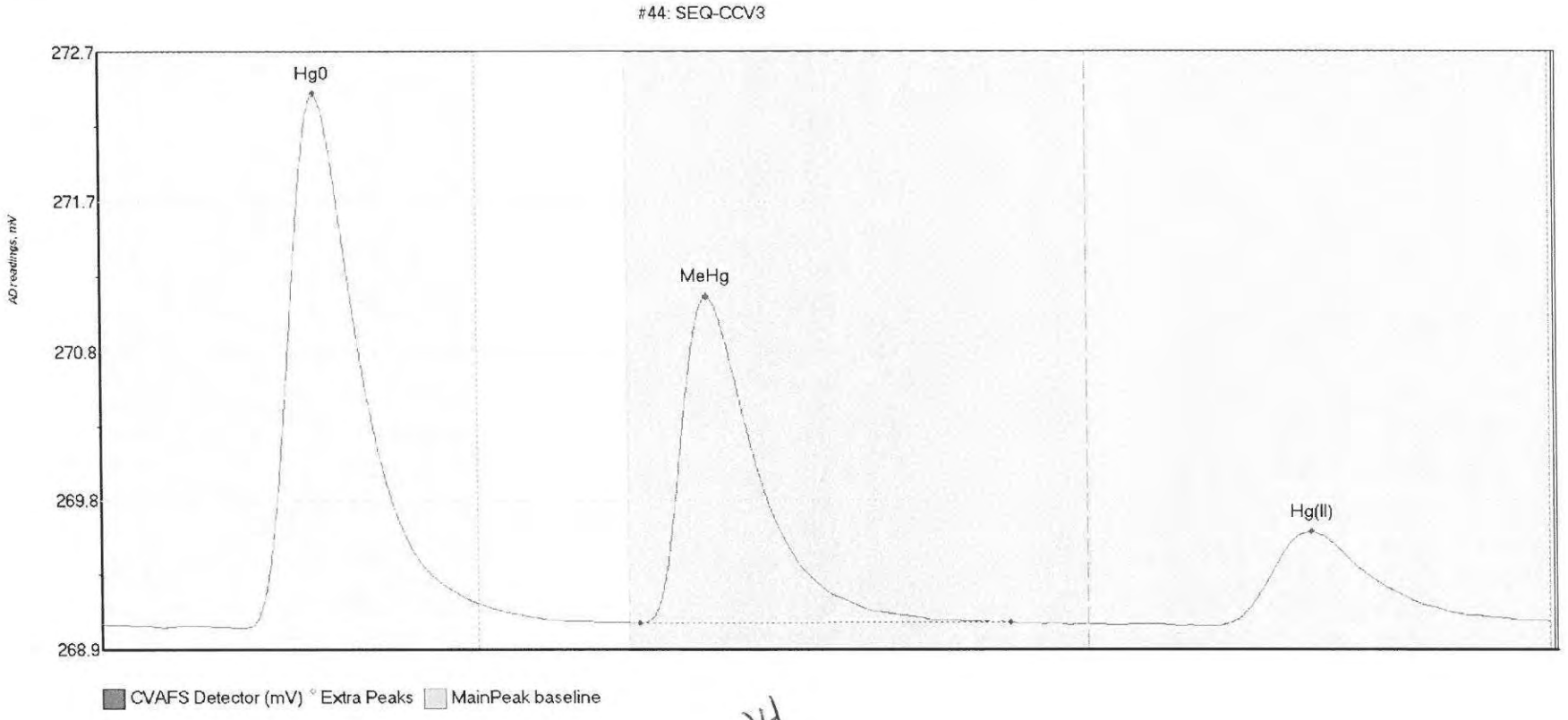


Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1605775-03 Hg0	31.136	22.6	54.8	268.94	268.96	32.7	0.255	OK	268.9490	0.00	0.01	
1605775-03 MeHg	55.997	81.2	117.5	268.94	268.95	92.5	0.440	OK	268.9490	0.00	0.01	
1605775-03 Hg(I	98.224	167.6	215.4	268.92	268.96	183.8	0.574	OK	268.9490	0.00	0.01	

Peak Chart for WS00000318



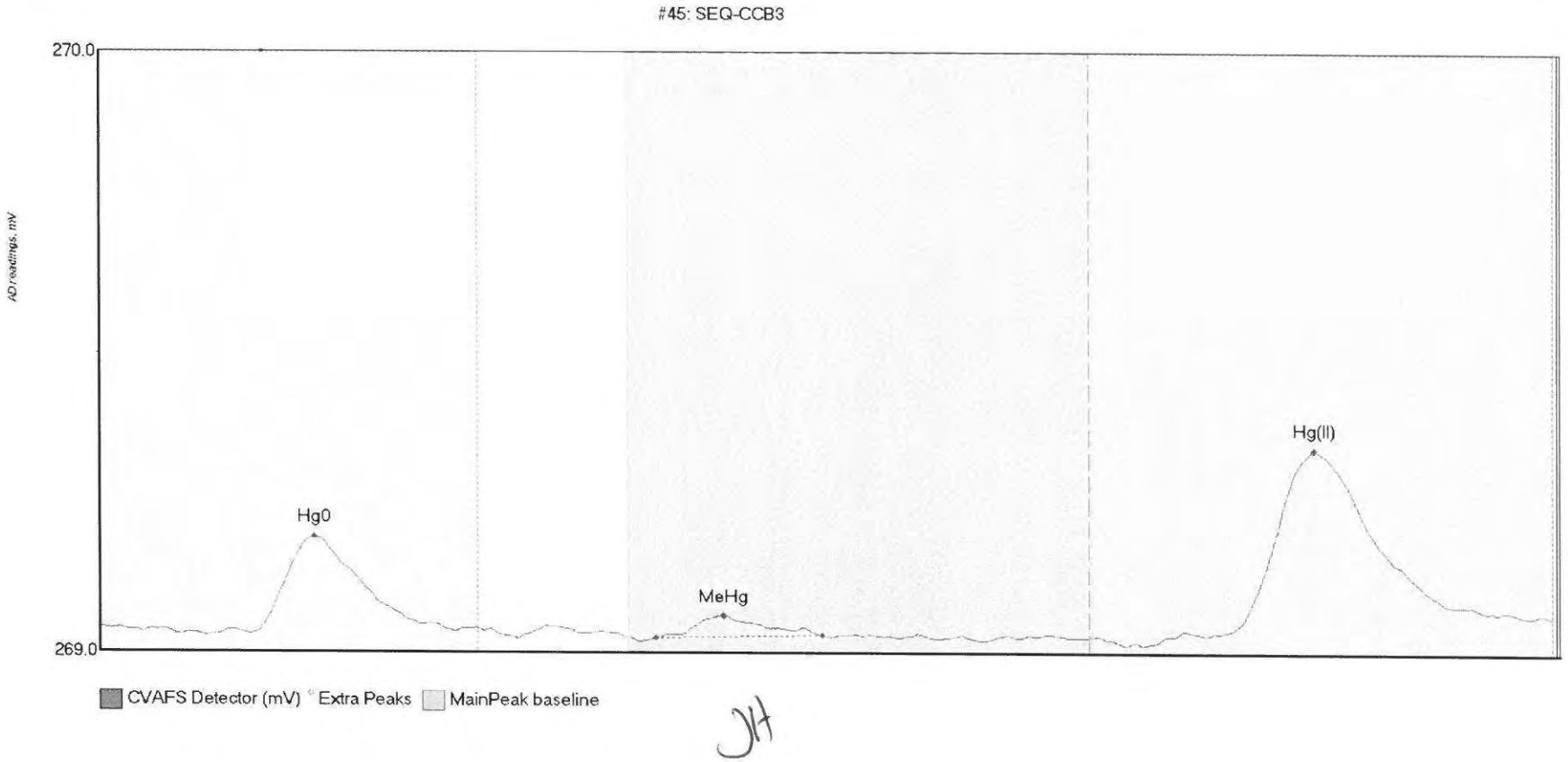
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1605775-04 Hg0	21.335	23.2	52.9	268.96	268.97	32.3	0.174	OK	268.9724	0.00	0.00	
1605775-04 MeHg	16.747	84.3	115.2	268.96	268.94	92.5	0.119	OK	268.9724	0.00	0.00	
1605775-04 Hg(I	76.796	164.4	219.6	268.94	268.97	184.3	0.443	OK	268.9724	0.00	0.00	



JH

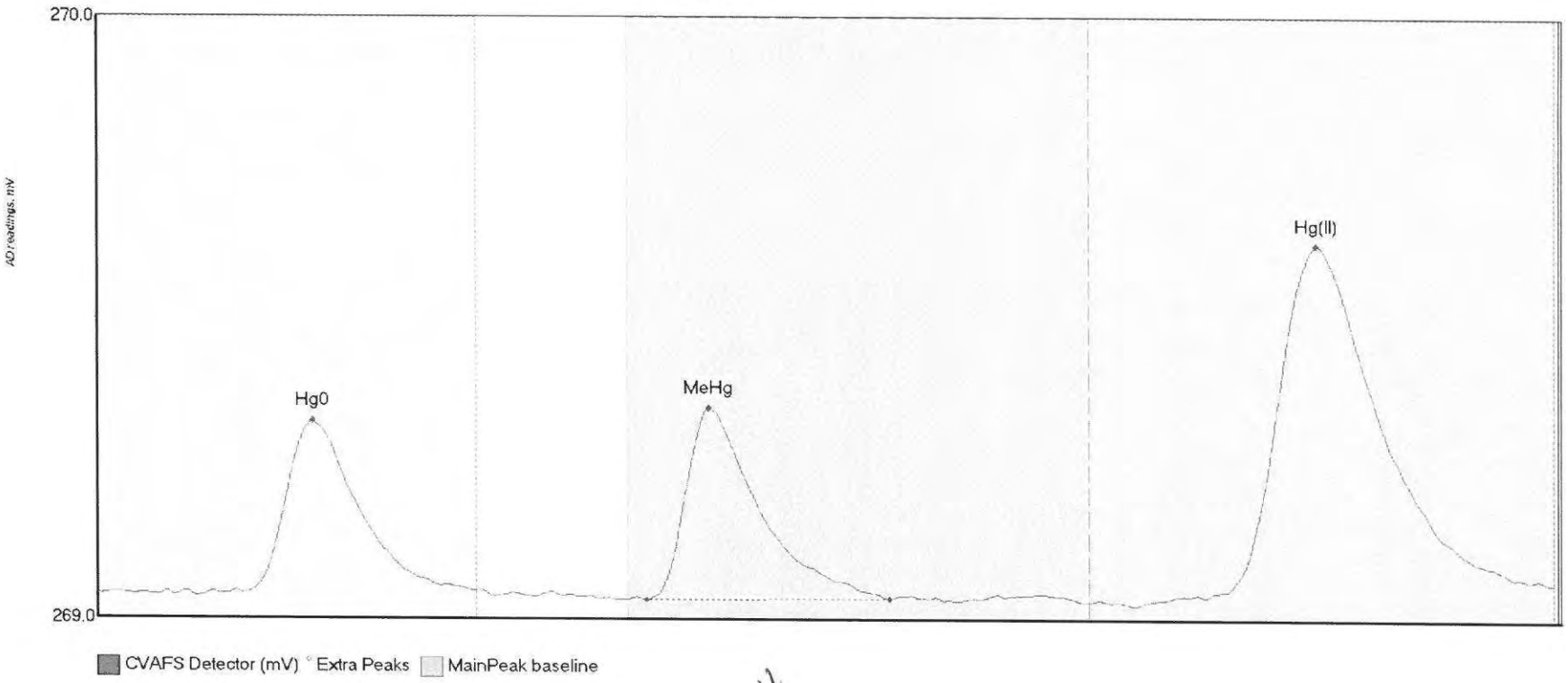
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CCV3 Hg0	409.741	21.3	57.5	268.99	269.14	32.7	3.392	CT	269.0113	0.00	0.02	
SEQ-CCV3 MeHg	276.711	81.8	138.0	269.02	269.02	92.1	2.074	OK	269.0113	0.00	0.02	
SEQ-CCV3 Hg(II)	104.247	169.0	219.8	269.00	269.03	183.7	0.599	CT	269.0113	0.00	0.02	

016



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CCB3 Hg0	18.632	22.9	49.0	269.04	269.05	32.6	0.161	OK	269.0458	0.00	0.02	
SEQ-CCB3 MeHg	4.288	84.3	109.5	269.03	269.03	94.6	0.037	OK	269.0458	0.00	0.02	
SEQ-CCB3 Hg(II)	51.822	167.6	219.8	269.03	269.06	183.9	0.310	CT	269.0458	0.00	0.02	

#46: 1605775-05



JH

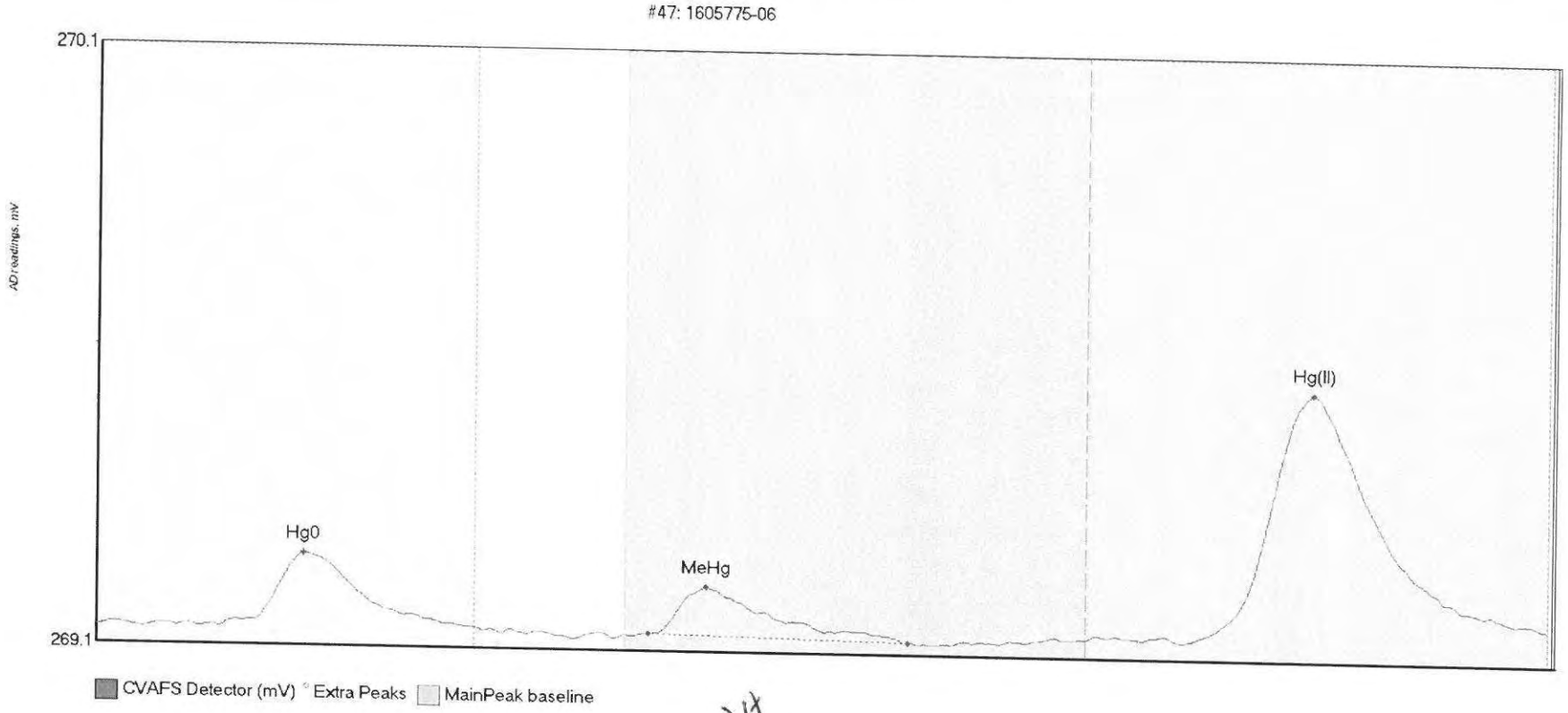
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1605775-05 Hg0	35.090	22.9	56.8	269.09	269.10	32.6	0.283	OK	269.0913	0.00	0.02	
1605775-05 MeHg	41.055	83.0	119.7	269.08	269.08	92.4	0.317	OK	269.0913	0.00	0.02	
1605775-05 Hg(I	101.453	161.7	219.7	269.08	269.11	184.1	0.588	OK	269.0913	0.00	0.02	

016

EPA1630

Peak Chart for WS00000318

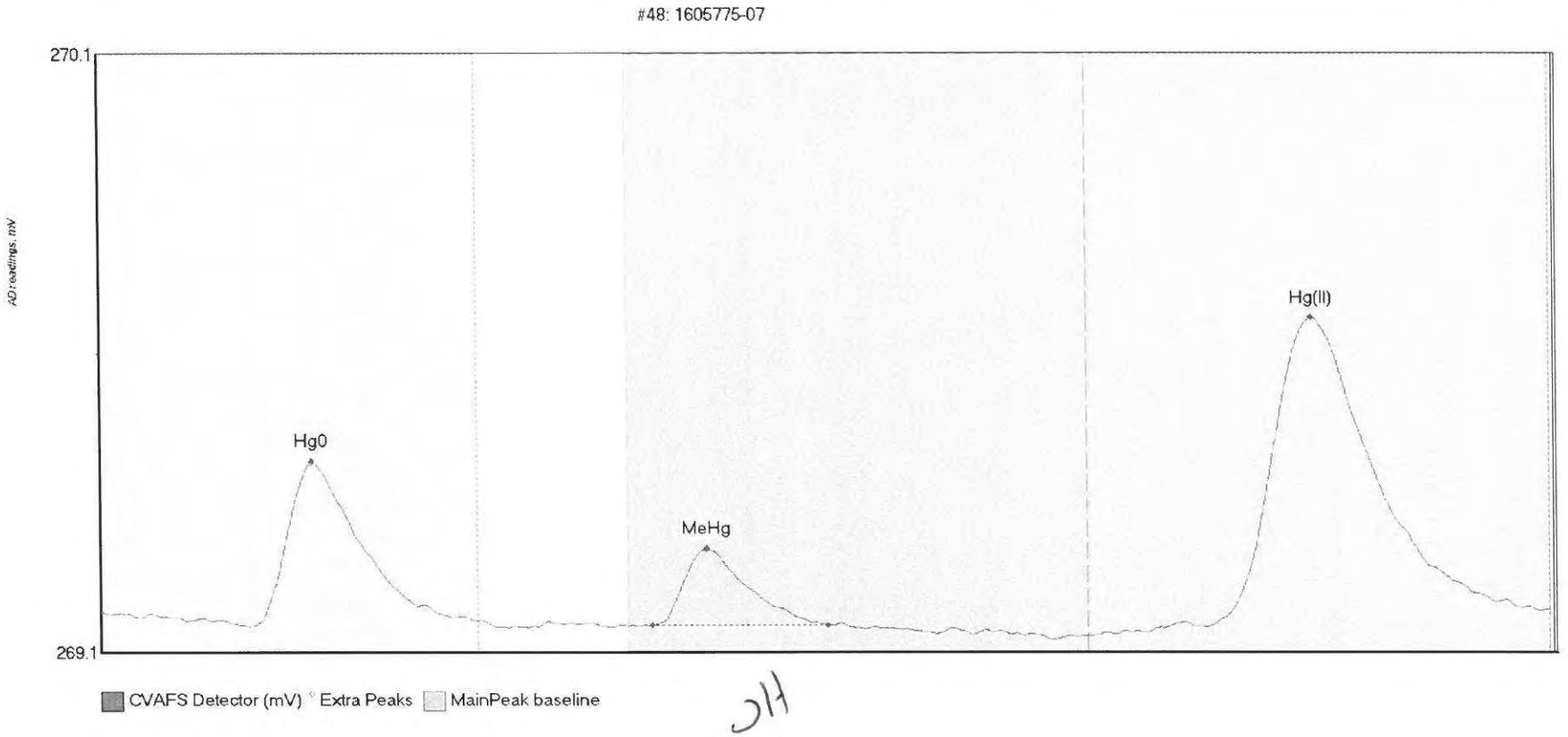
WS00000318



JH

Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1605775-06 Hg0	16.942	18.7	56.3	269.11	269.12	31.3	0.126	OK	269.1142	0.00	0.03	
1605775-06 MeHg	12.982	83.8	123.0	269.11	269.10	92.4	0.079	OK	269.1142	0.00	0.03	
1605775-06 Hg(I	73.068	165.3	219.7	269.11	269.14	184.2	0.414	OK	269.1142	0.00	0.03	

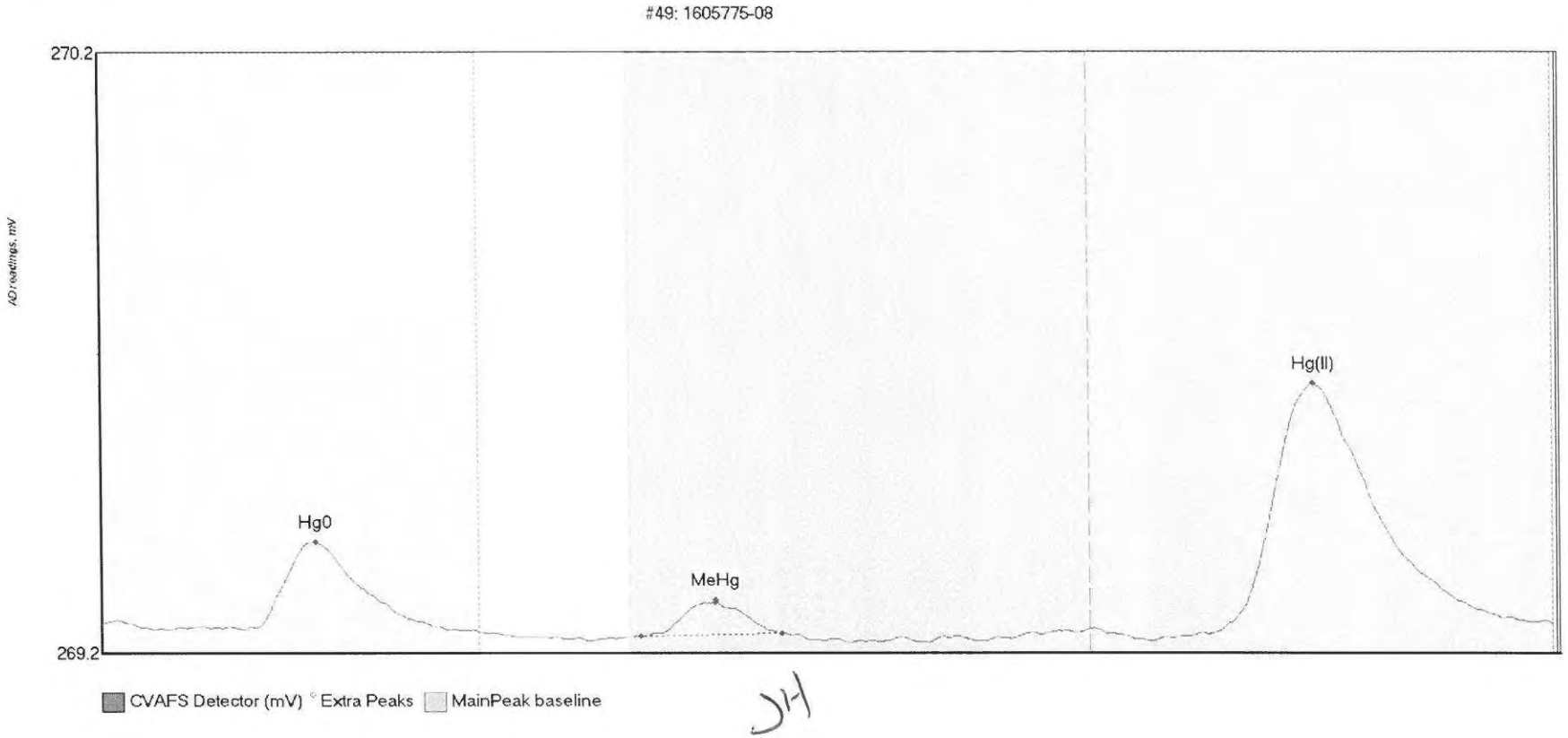
JJ6



JH

Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1605775-07 Hg0	33.074	22.7	53.6	269.18	269.19	32.2	0.275	OK	269.2020	0.00	0.01	
1605775-07 MeHg	14.329	83.7	110.4	269.18	269.18	92.2	0.129	OK	269.2020	0.00	0.01	
1605775-07 Hg(I	91.010	154.4	218.3	269.17	269.21	183.9	0.527	OK	269.2020	0.00	0.01	

016

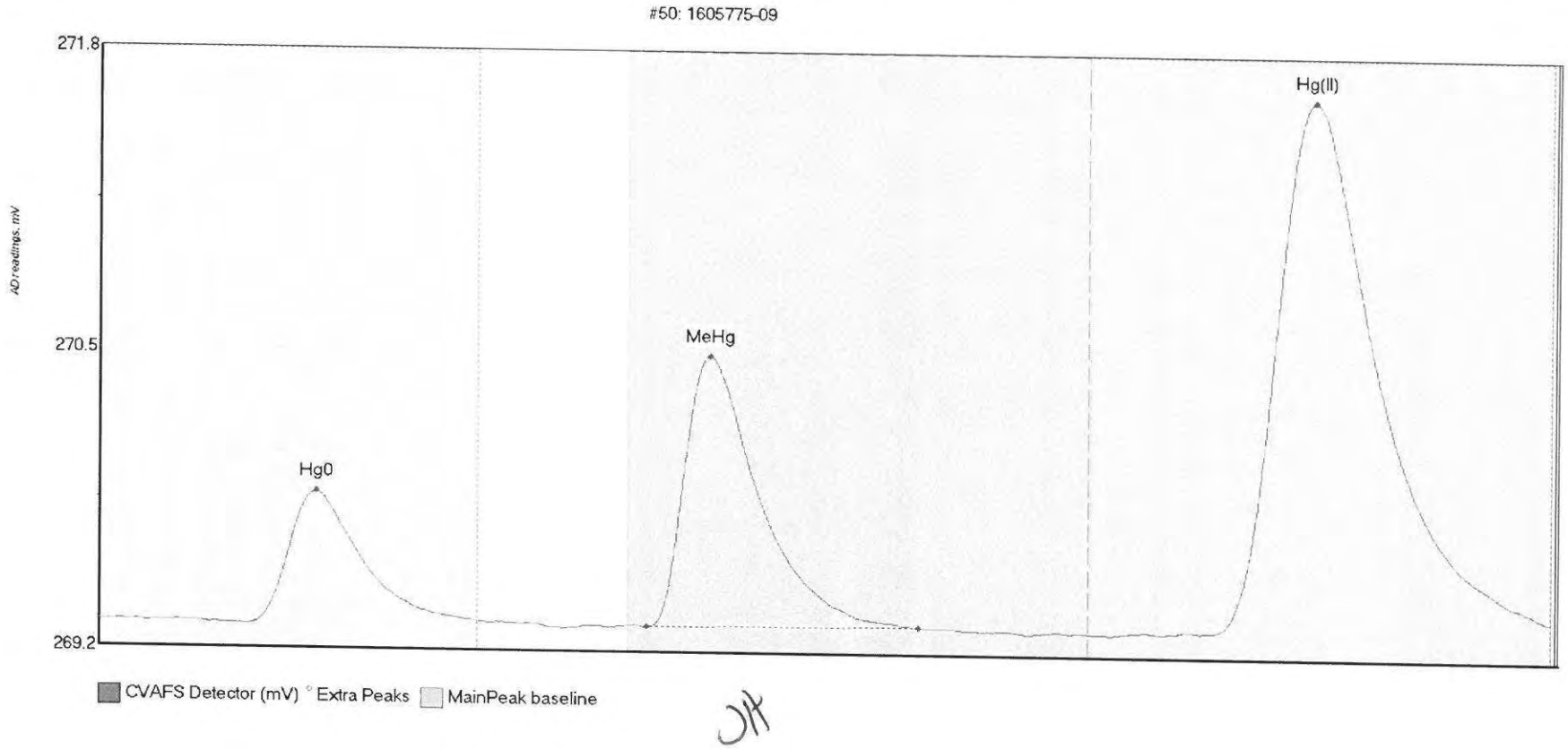


JH

Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1605775-08 Hg0	16.140	23.3	48.1	269.24	269.25	32.6	0.143	OK	269.2424	0.00	0.00	
1605775-08 MeHg	5.839	81.8	103.2	269.22	269.23	93.1	0.057	OK	269.2424	0.00	0.00	
1605775-08 Hg(I	72.067	168.5	219.8	269.23	269.24	183.7	0.416	CT	269.2424	0.00	0.00	

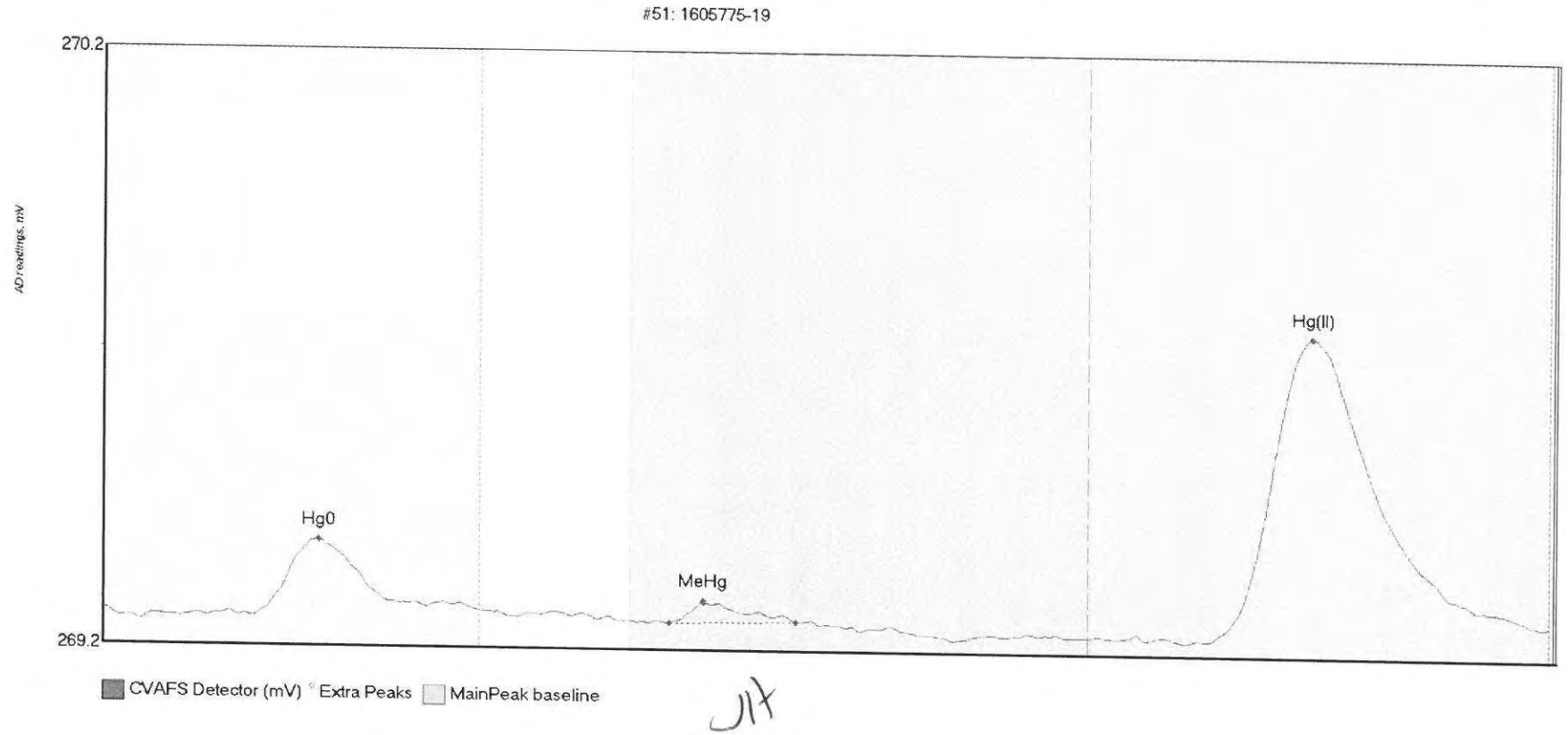
JJ16

Peak Chart for WS00000318



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1605775-09 Hg0	70.312	22.3	57.5	269.27	269.30	32.8	0.574	CT	269.2884	0.00	0.06	
1605775-09 MeHg	152.299	83.0	124.1	269.28	269.29	92.6	1.175	OK	269.2884	0.00	0.06	
1605775-09 Hg(I	400.741	161.2	219.8	269.27	269.34	184.0	2.304	CT	269.2884	0.00	0.06	

Peak Chart for WS00000318



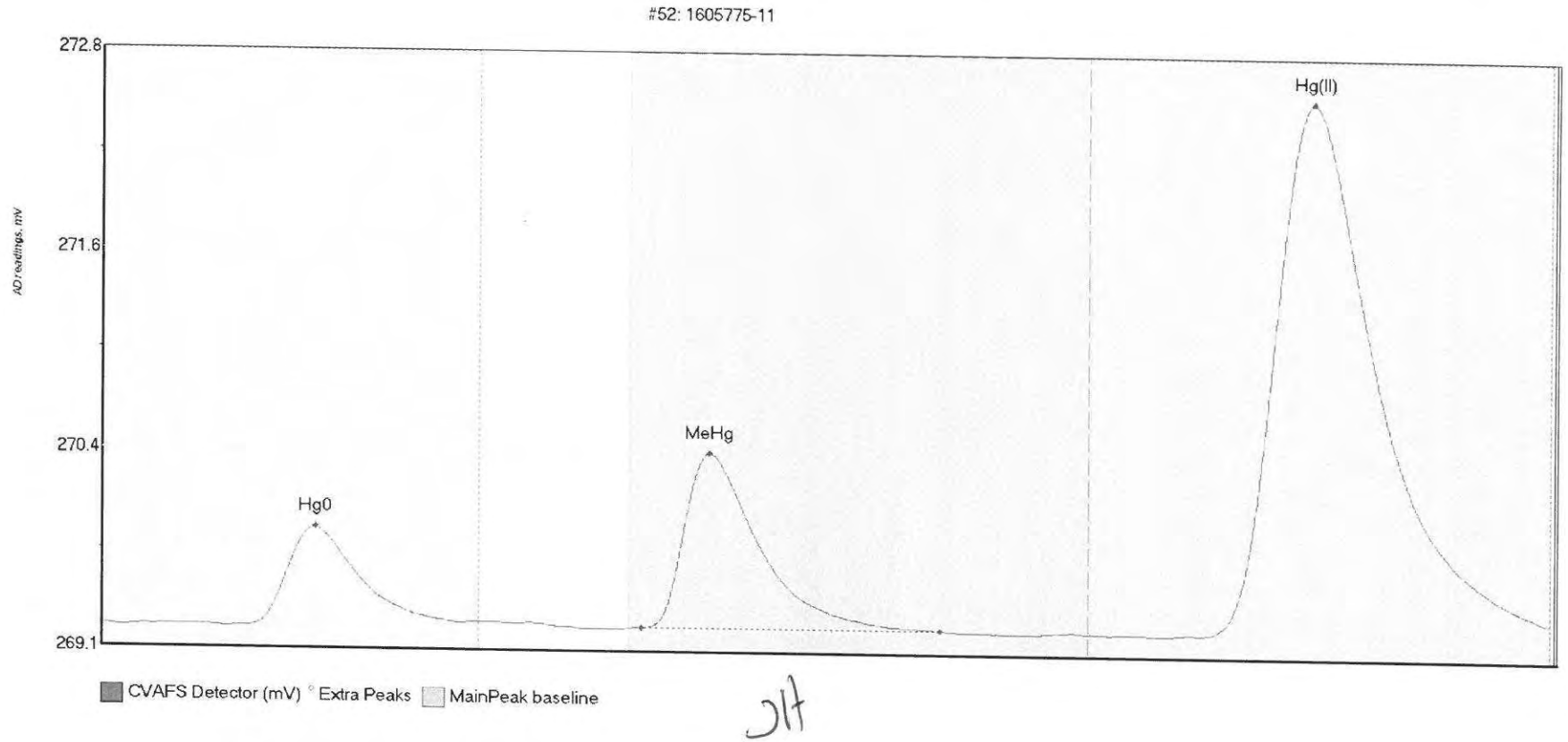
JLK

Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1605775-19 Hg0	15.946	22.6	57.5	269.28	269.30	32.9	0.130	CT	269.2937	0.00	0.00	
1605775-19 MeHg	3.426	86.1	105.5	269.28	269.28	91.3	0.036	OK	269.2937	0.00	0.00	
1605775-19 Hg(I	89.778	168.0	218.6	269.26	269.29	183.7	0.511	OK	269.2937	0.00	0.00	

016

Peak Chart for WS00000318

WS00000318



JLH

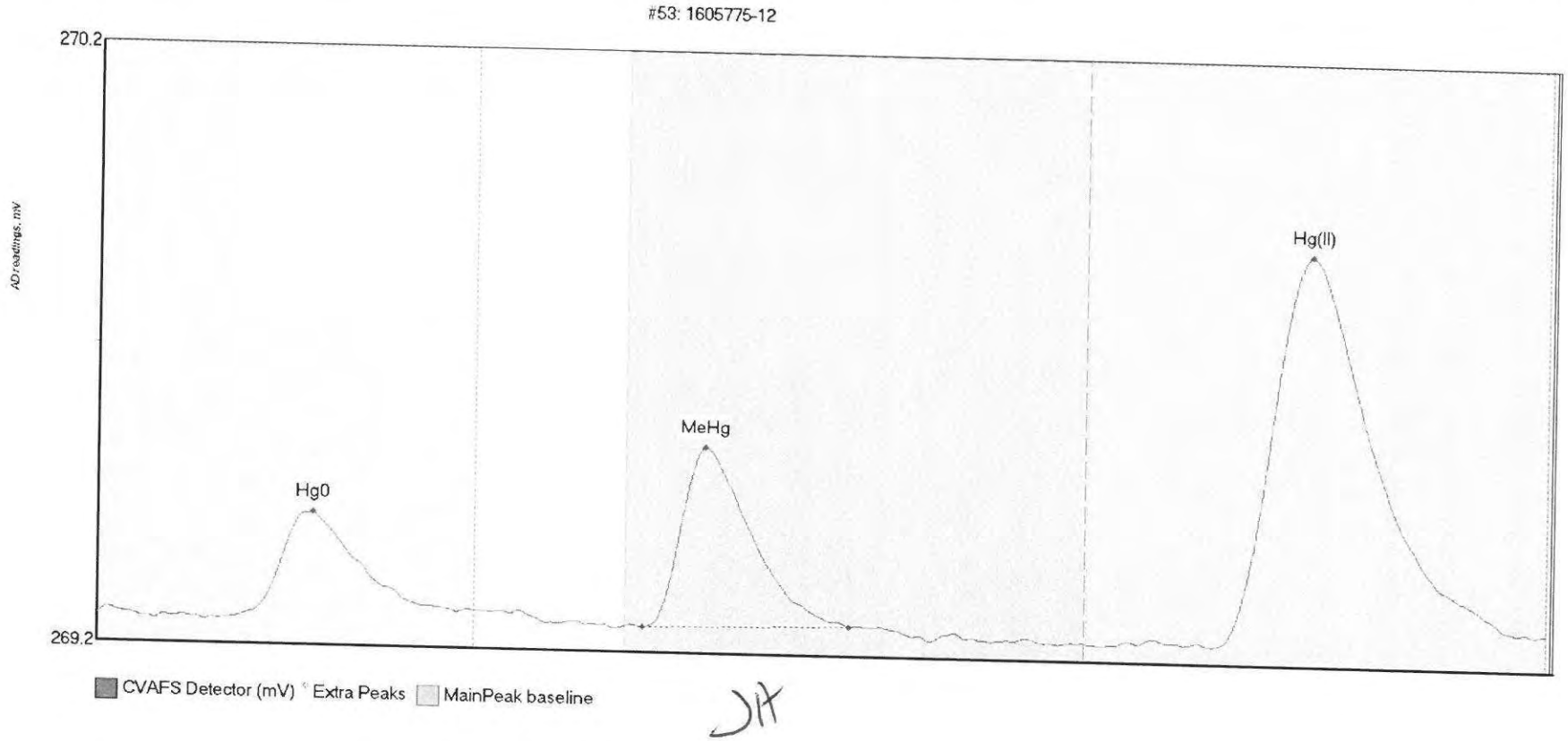
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1605775-11 Hg0	72.805	21.7	54.2	269.28	269.31	32.4	0.611	OK	269.2798	0.00	0.09	
1605775-11 MeHg	141.660	82.0	127.3	269.28	269.28	92.3	1.079	OK	269.2798	0.00	0.09	
1605775-11 Hg(I	572.510	167.1	219.8	269.28	269.37	183.9	3.280	CT	269.2798	0.00	0.09	

JJ6

EPA1630

Peak Chart for WS00000318

WS00000318

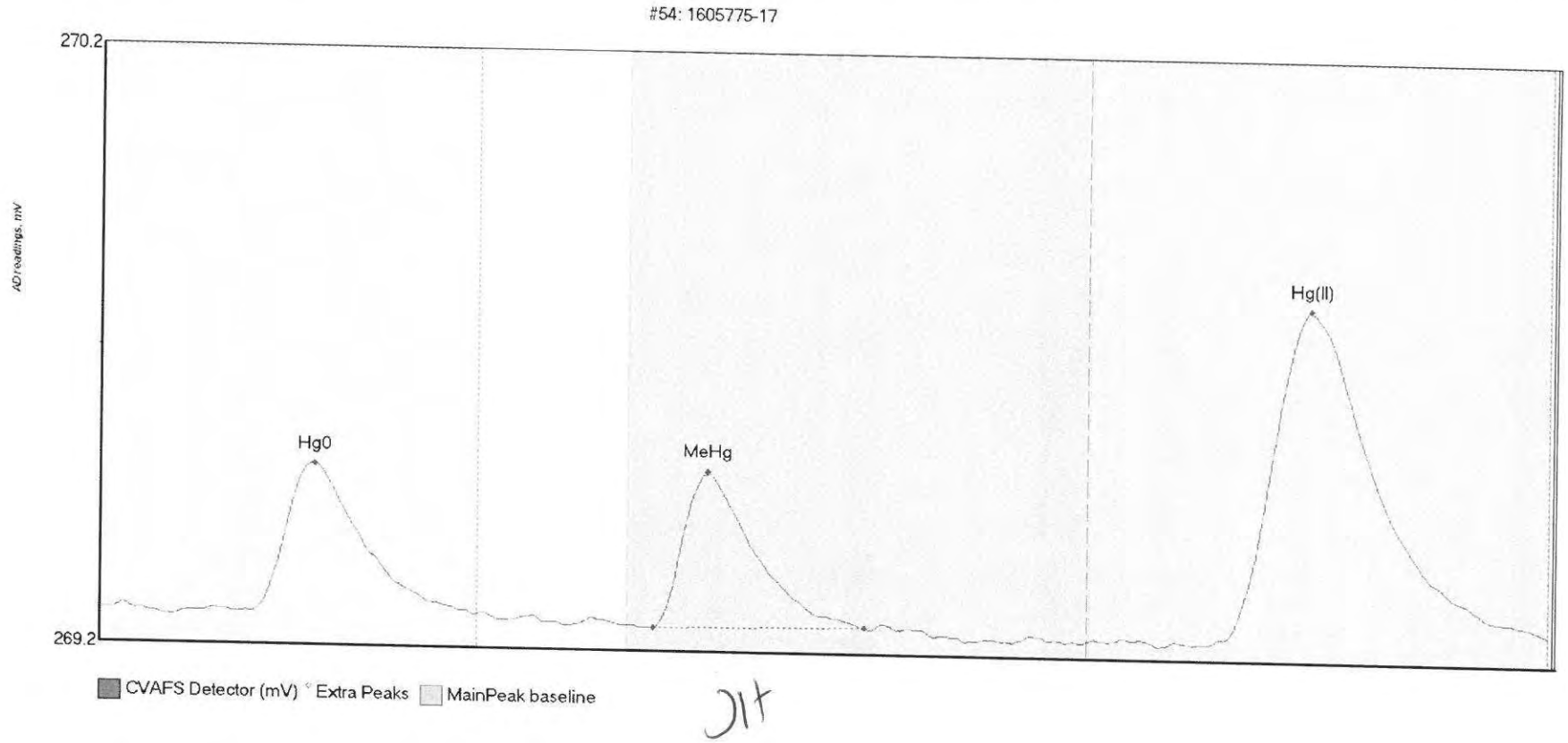


JH

Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1605775-12 Hg0	22.331	20.9	54.7	269.29	269.30	32.7	0.176	OK	269.2915	0.00	0.01	
1605775-12 MeHg	36.136	82.9	114.1	269.28	269.29	92.2	0.300	OK	269.2915	0.00	0.01	
1605775-12 Hg(I	112.463	169.2	218.3	269.27	269.30	183.9	0.654	OK	269.2915	0.00	0.01	

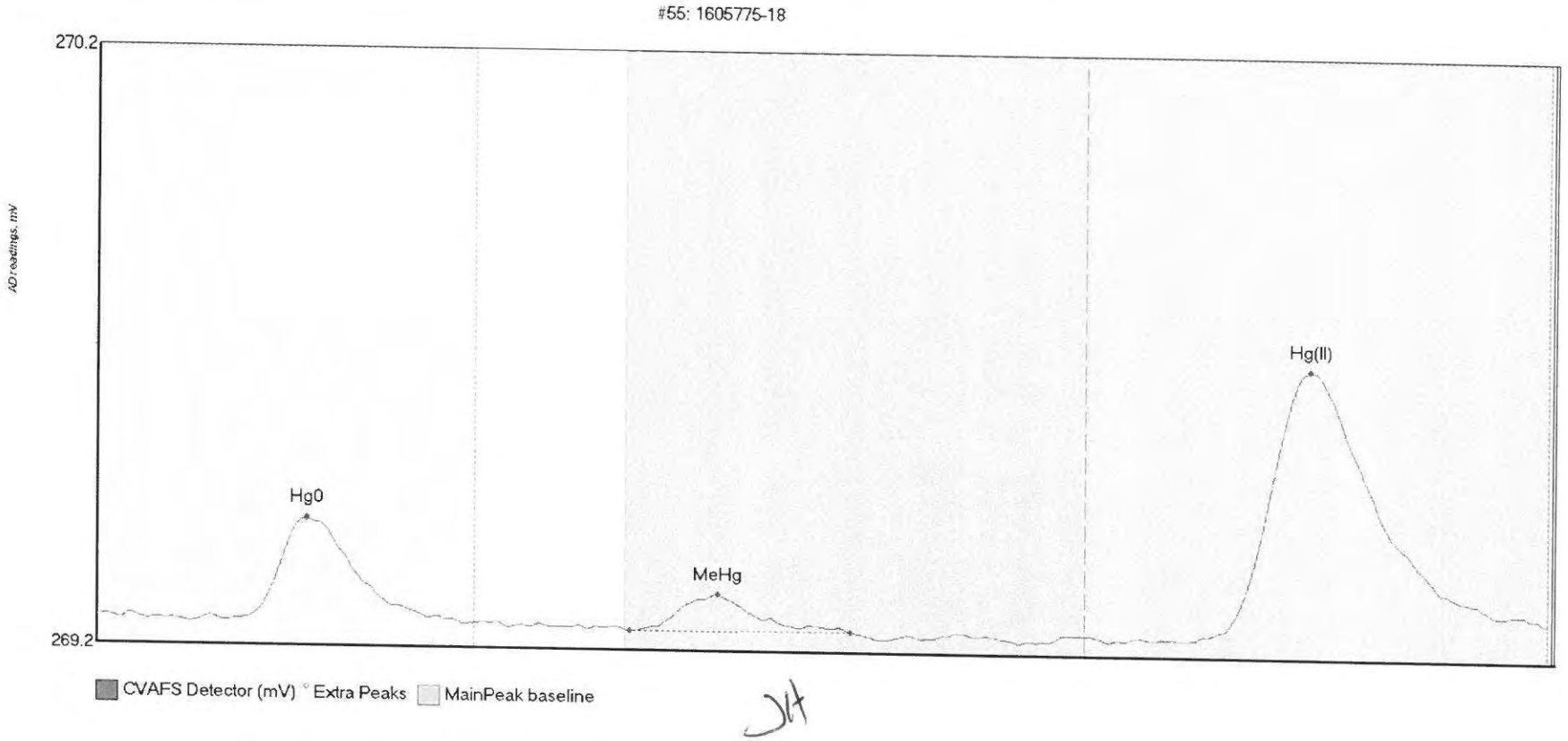
016

Peak Chart for WS00000318



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1605775-17 Hg0	31.386	23.2	54.8	269.28	269.28	32.6	0.249	OK	269.2825	0.00	-0.01	
1605775-17 MeHg	31.879	84.1	116.1	269.26	269.27	92.3	0.261	OK	269.2825	0.00	-0.01	
1605775-17 Hg(I	96.395	170.6	219.8	269.26	269.27	183.6	0.552	CT	269.2825	0.00	-0.01	

Peak Chart for WS00000318

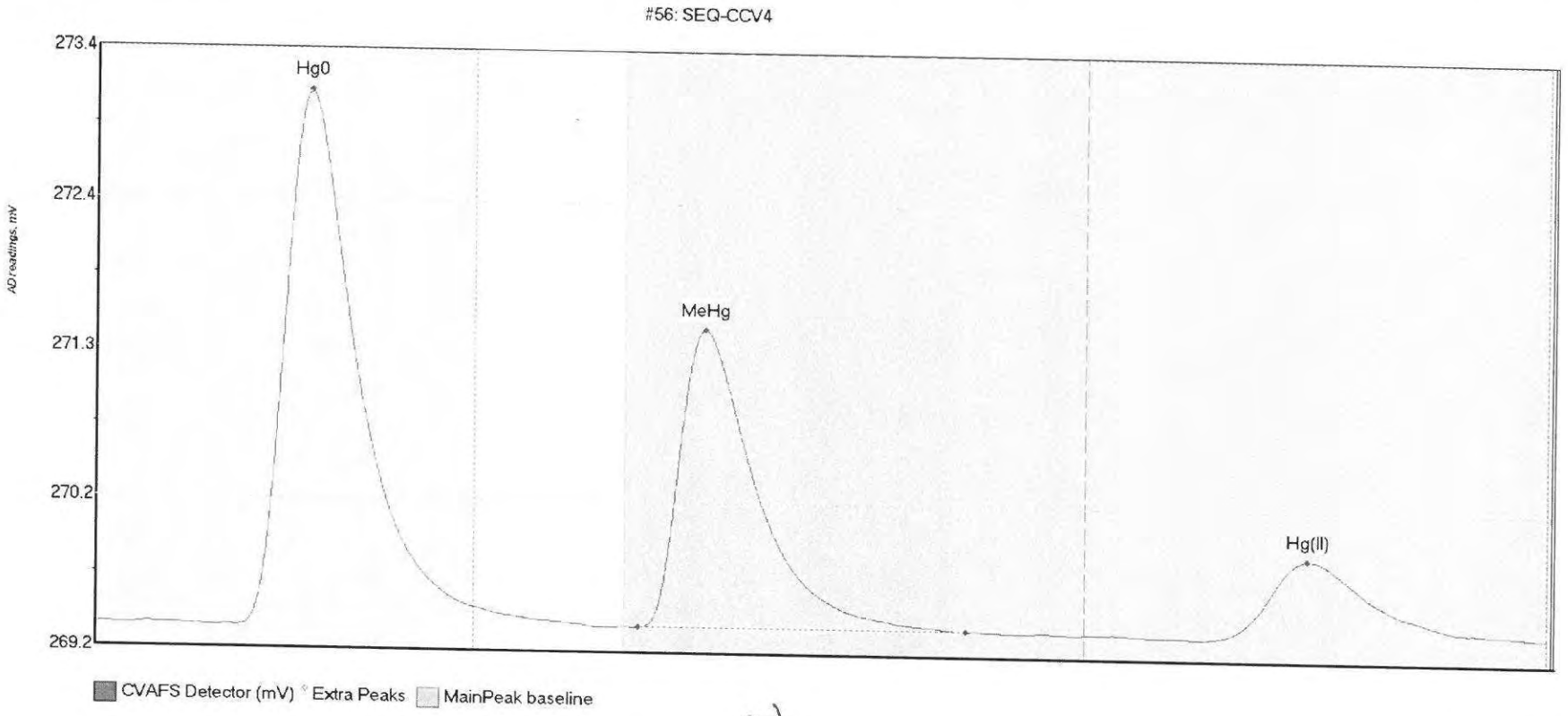


JLH

Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1605775-18 Hg0	20.204	22.8	50.2	269.28	269.28	31.8	0.167	OK	269.2833	0.00	0.01	
1605775-18 MeHg	8.162	80.9	114.3	269.27	269.27	94.2	0.063	OK	269.2833	0.00	0.01	
1605775-18 Hg(I	78.854	168.2	219.3	269.27	269.30	183.8	0.446	OK	269.2833	0.00	0.01	

JL6

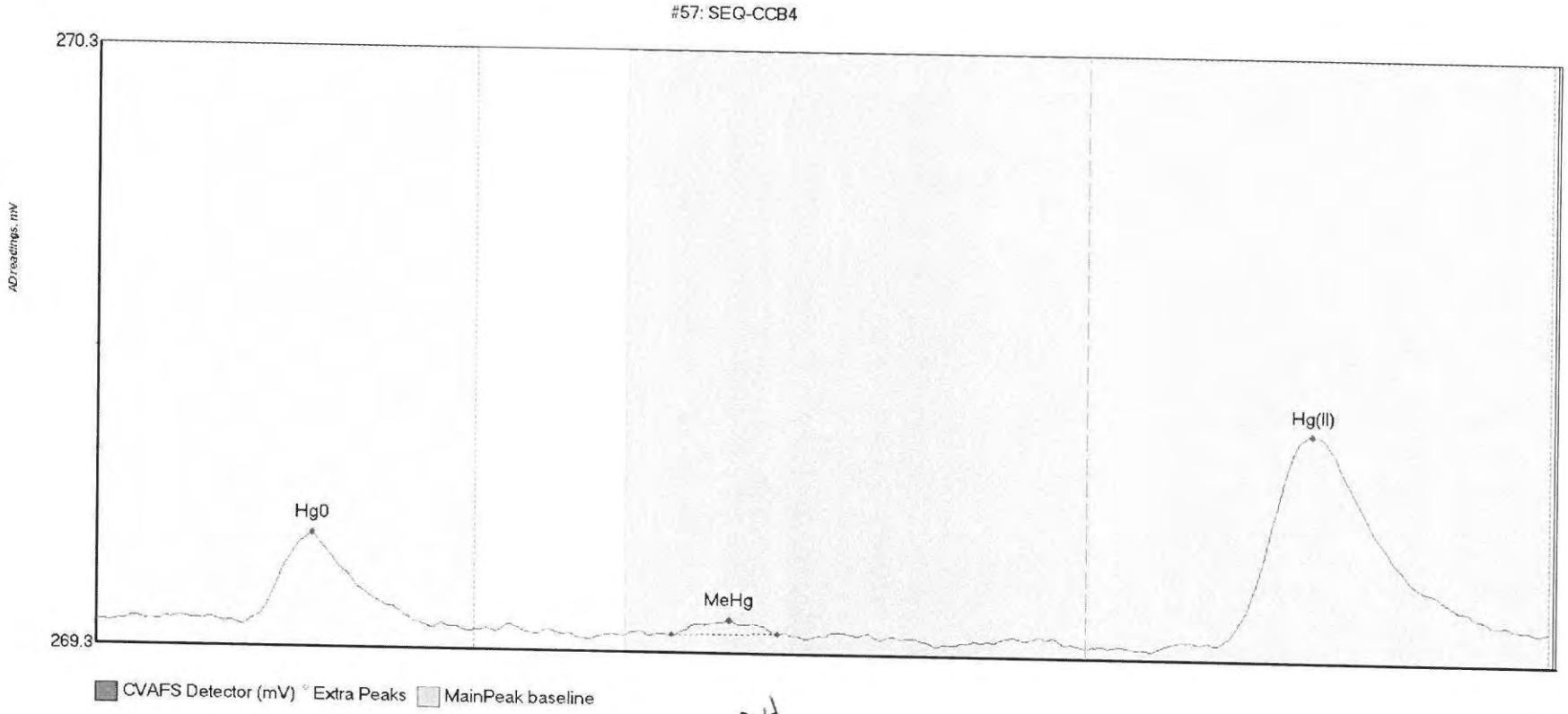
Peak Chart for WS00000318



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CCV4 Hg0	462.173	21.2	57.5	269.32	269.46	32.4	3.819	CT	269.3241	0.00	0.02	
SEQ-CCV4 MeHg	283.956	82.3	131.9	269.34	269.34	92.3	2.127	OK	269.3241	0.00	0.02	
SEQ-CCV4 Hg(II)	100.740	167.6	219.8	269.30	269.34	183.6	0.581	CT	269.3241	0.00	0.02	

Peak Chart for WS00000318

WS00000318



JH

Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CCB4 Hg0	18.554	22.3	50.8	269.35	269.35	32.7	0.151	OK	269.3558	0.00	0.01	
SEQ-CCB4 MeHg	2.268	87.2	103.2	269.34	269.35	95.9	0.024	OK	269.3558	0.00	0.01	
SEQ-CCB4 Hg(II)	65.350	159.9	218.4	269.33	269.37	183.9	0.363	OK	269.3558	0.00	0.01	

016

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

Analyst:	DON MORAN	**Sequence #:**	6F03017, 6F03016
Reviewer:	Jeanne Harrel	**Dataset ID #:**	MHG27001-160603-1
Date:	6/6/16	**WO #:**	[redacted]
Batch #(s):	F606074, F606099	**Client(s):**	

Additional Comments:

- **Select the correct preparation method.**

Analyte	Prep Method		Matrix
☑ MHg	FGS-013	MHg Distillation	Water
☐ MHg	FGS-010	KOH/MeOH Digest	Tissue
☐ MHg	FGS-045	MeCl Extraction	Sed/Soil
☐ DMHg	FGS-098 (None Accredited method)		ALL

	Analyst Initials: DM		Reviewer Initials: JH	
1. Compare Sample ID with Bench sheet/Sequence/Raw Data (Have all samples been imported?)	☑ YES	☐ NO		☑
2. Check for transcription errors from Excel spreadsheet (or Prep Bench sheet)/Raw data	☑ YES	☐ NO		☐
(a) Reviewer: 100% of peak heights checked	☑ YES	☐ NO		☑
(b) Are there peak height errors?	☐ YES	☑ NO		☐
(c) Error on a sample: Do peak heights, responses, & initial results match corrected data?	☐ YES	☐ NO	☑ N/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	☐ N/A	☑
(f) Check and compare masses (review prep bench sheet)	☑ YES	☐ NO	☐ N/A	☑
(g) Check and compare initial and final volumes	☑ YES	☐ NO	☐ N/A	☑
(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	☐ N/A	☐
(j) Is the sequence #, analyst, date, and instrument # on the QC page?	☑ YES	☐ NO		☑
(k) Is the analysis status correct? (analyzed/initial review/reviewed)	☑ YES	☐ NO		☑
(l) Original prep bench sheet added to data package?	☑ YES	☐ NO		☐
(m) Benchsheet prep date MUST match actual prep date (check if re-shot vs re-extract)	☑ YES	☐ NO		☑
3. High QA? WO#(s)/Client(s):	☐ YES	☑ NO		☑
4. Client specific QC? (if Yes, refer to Project Notes/LIMS)	☑ YES	☑ NO DM 6/7/16		☐
(a) Have the QC requirements been met for all WO#s?	☑ YES	☑ NO DM 6/7/16		☐
5. 20 or fewer samples in batch?	☑ YES	☐ NO		☑
(a) 3 PBs, 1 LCS/LCSD (or BS/BSD), 2 MS/MSD/MD per batch?	☑ YES	☐ NO		☑
(b) 1 CCV and 1 CCB every 10 analytical runs?	☑ YES	☐ NO		☑
QA/QC Data Checked				
6. The calibration curve included a minimum of 5 Standards	☑ PASS	☐ FAIL	☐ N/A	☑
Comments:				
7. 1st Calibration Standard % Recoveries (65-135%)	☑ PASS	☐ FAIL	☐ N/A	☑
Comments:				
8. RSD CF (≤ 15%)	☑ PASS	☐ FAIL		☐
Comments:				

Peer Review Check List for MHg for CV-GC-AFS (FGS-070) 2013 Rev 4 (08/22/2013)

Analyst:	DON MORAN	**Sequence #:**	6F03017, 6F03016
Reviewer:	Jeanne Harrod	**Dataset ID #:**	MHG27001-160603-1
Date:	6/6/2016	**WO #:**	[redacted]
Batch #(s):	F606074, F606099	**Client(s):**	

	Analyst Initials: DM		Reviewer Initials: JH
9. ICV % Recoveries 67-133%	☑ PASS	☐ FAIL	☑
Comments:			
10. CCV % Recoveries 67-133%	☑ PASS	☐ FAIL	☑
Comments:			
11. Are the absolute value of the ICB and CCBs < PQL?	☑ PASS	☐ FAIL	☑
Comments:			
12. LCS/LCSD/CRM/BS/BSD % Recoveries (70-130%)	☐ PASS	☑ FAIL	☐
Comments: ***F606074 BS1, BSD1 FAILED. HIGH RECOVERY*** QM-12, only ND samples reportable. JH 6/7/16			
13. LCS/LCSD or BS/BSD RPD (< 25%)	☑ PASS	☐ FAIL	☑
Comments:			
14. Water: Average of Preparation Blanks < 0.045 ng/L and standard devaition of 0.015 ng/L?	☑ PASS	☐ FAIL ☐ N/A	☑
Comments:			
15. Sediment/Tissue: Individually, are the Preparation Blanks < PQL for the matrix?	☐ PASS	☐ FAIL ☑ N/A	☑
Comments:	☐ PASS	☐ FAIL	☑
16. Have Total Solids been applied? (If NO, please ensure that they are done or nearly done)	☐ YES	☐ NO ☑ N/A	☑
17. Is the correct 'Source' designated for MD/MS/MSD?	☑ YES	☐ NO	☑
18. For digested preps: was there a spike witness signature & date on the prep bench sheet?	☑ YES	☐ NO ☐ N/A	☑
19. MD RPD/MT RSD(< 35%)	☑ PASS	☐ FAIL	☑
Comments:			
20. Is there one set of MS/MSD per every 10 samples?	☑ PASS	☐ FAIL	☑
Comments:			
21. MS/MSD RPD(< 35%)	☑ PASS	☐ FAIL	☑
Comments:			
22. MS (AS) % Recoveries (65-130%)	☐ PASS	☑ FAIL	☑
Comments: ***F606074 MS1, MS2 FAILED. HIGH RECOVERY*** QM-07			
23. MSD (ASD) % Recoveries (65-130%)	☐ PASS	☑ FAIL	☑
Comments: ***F606074 MSD1, MSD2 FAILED. HIGH RECOVERY*** QM07			
24. Spiked 1-5X ambient or 1-5X PQL (whichever is higher) (from EPA 1630)	☑ YES	☐ NO	☑
25. Are all samples within instrument calibration range (or at maximum aliquot size)?	☑ YES	☐ NO	☑
Comments:			
26. For instrumental dilutions, is the dilution factor in excel correct?	☑ PASS	☐ NO ☐ N/A	☑
Is the sample volume, diluents, and final volume of the dilution noted on benchsheet?	☑ PASS	☐ NO ☐ N/A	☑
27. Dissolved < Total metals (if applicable)	☑ PASS JH 6/7/16	☐ NO ☑ N/A	☑
Comments:			
28. Effluent < Influent metals (visually confirm if needed)	☐ PASS	☐ NO ☑ N/A	☑
Comments:			

Peer Review Check List for MHg for CV-GC-AFS (FGS-070) 2013 Rev 4 (08/22/2013)

Analyst:	DON MORAN	**Sequence #:**	6F03017, 6F03016
Reviewer:	Jeanne Hamel	**Dataset ID #:**	MHG27001-160603-1
Date:	6/6/2016	**WO #:**	
Batch #(s):	F606074, F606099	**Client(s):**	[redacted]

	Analyst Initials: DM		Reviewer Initials: JH	
29. Are re-runs noted with reason?	☐ YES	☐ NO	☑ N/A	☑
Comments:				
30. For failing QC (CCV, CCB, PB, BS/BSD, CAL):	☐ YES	☐ NO	☑ N/A	☑
Was a bubbler and trap test run before the analytical run continued?				
Comments:				
31. Do re-run results compare to initial analysis (< 35% RPD)?	☐ YES	☐ NO	☑ N/A	☑
Comments:				
32. Are qualifiers consistent with the data review flowcharts?	☑ YES	☐ NO	☐ N/A	☑
Comments:				
33. Have non-reportable samples been imported into LIMS and clicked to non-reportable?	☑ YES	☐ NO	☐ N/A	☑
Comments:				
34. Have re-extracts been created for non-reportable samples?	☑ YES	☐ NO	☑ N/A	☑
35. Narrations in MMO box in LIMS? JH 6/7/16				
Comments:				
36. Are there any HIGH QA projects within the data?	☐ YES	☑ NO		
If so, place dataset to the QA office.				
37. Does the data set need scanning?	☑ YES		☐ N/A	☑
Files located at: \\Cuprum\gen_admin\Quality Assurance\Training Master\DOCs				
38. Date of analyst IDOC/CDOC: 7/9/15 IDOC/CDOC within last 12 months?	☑ YES	☐ NO		☑
39. Date of analyst's SOP reading: 6/29/15 Current SOP revision?	☑ YES	☐ NO		☑
40. Date of LOD: 1/22/16 JH 6/7/16 ~~4/21/2016~~ LOD within last 3 months (within 12 months for MDN)?	☑ YES	☐ NO	☐ N/A	☑
41. Date of LOQ: 1/22/16 JH 6/7/16 ~~4/27/2016~~ LOQ within last 3 months (within 12 months for MDN)?	☑ YES	☐ NO	☐ N/A	☑
42. If MDN samples, date of last MDL study:				
43. MDL study within last 12 months?	☐ YES	☐ NO	☑ N/A	☑

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

Additional Comments:	☑ YES	☐ NO	☑

Re-extract for NR samples created. JH 6/7/16

eurofins

Frontier Global Sciences

Analysis Datasheet for Methyl Mercury in Waters

Date of Analysis: June 10, 2016
Instrument #: Hg2700-1
LIMS Sequence #: 6F10008

Analyst: JRH
Units ng/L

Calibration Statistics:

LabNumber	n	True Val	Area	Uncorrected Response Factor	Corrected Peak Height	Corrected Response Factor	% Recovery
SEQ-CAL1	1	0.05 ng/L	41.12 units	822.45	40.26 units	805.22	92.0 %Rec
SEQ-CAL2	1	0.20 ng/L	154.34 units	771.71	153.48 units	767.41	87.7 %Rec
SEQ-CAL3	1	1.00 ng/L	854.15 units	854.15	853.29 units	853.29	97.5 %Rec
SEQ-CAL4	1	2.00 ng/L	1907.67 units	953.83	1906.81 units	953.40	109.0 %Rec
SEQ-CAL5	1	4.00 ng/L	3983.93 units	995.98	3983.07 units	995.77	113.8 %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
875.02	+/- 97.02	11.1% RSD	879.63	**0.8046**

MDN Only

SEQ-CAL1	
SEQ-CAL2	
SEQ-CAL3	
SEQ-CAL4	
SEQ-CAL5	
SEQ-CAL6	NA
SEQ-CAL7	NA
SEQ-CAL8	NA
SEQ-CAL9	NA
SEQ-ICV/CCV	
Acetate Buffer	
Ethylating Agent	

Blanks:

LabNumber	n	Mean	Std Dev	Mean (ng/L)	Std Dev (ng/L)
SEQ-IBL	1	0.86 units		0.00 ng/L	#VALUE!

Preparation Blanks

Sample Type	Batch ID	n	Mean	Std Dev
BLK	1	3	0.033 ng/L	±0.012
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: JW 6/23/16

Instrument	Analyst	Sample Type	LabNumber	Dilution	Analyzed	FileID	Run End	Uncorrected Response	Batch ID	No PB Correction?	RESP	InitialResult	FinalResult	InitialUnits	Comments
Hg2700-1	JRH	CAL	SEQ-IBL1	1	6/10/16 11:59	13029-1.RAW	11:59:35	0.861505682			0.0	0.000	0.000	ng/L	
Hg2700-1	JRH	CAL	SEQ-CAL1	1	6/10/16 12:10	13030-1.RAW	12:10:06	41.12272727			40.3	0.046	0.046	ng/L	
Hg2700-1	JRH	CAL	SEQ-CAL2	1	6/10/16 12:20	13031-1.RAW	12:20:37	154.3427794			153.5	0.175	0.175	ng/L	
Hg2700-1	JRH	CAL	SEQ-CAL3	1	6/10/16 12:31	13032-1.RAW	12:31:07	854.1491004			853.3	0.975	0.975	ng/L	
Hg2700-1	JRH	CAL	SEQ-CAL4	1	6/10/16 12:41	13033-1.RAW	12:41:49	1907.66733			1906.8	2.179	2.179	ng/L	
Hg2700-1	JRH	CAL	SEQ-CAL5	1	6/10/16 12:52	13034-1.RAW	12:52:20	3983.927888			3983.1	4.552	4.552	ng/L	
Hg2700-1	JRH	CAL	SEQ-ICV1	1	6/10/16 13:02	13035-1.RAW	13:02:51	468.0550663			467.2	0.534	0.534	ng/L	
Hg2700-1	JRH	CAL	SEQ-ICB1	1	6/10/16 13:13	13036-1.RAW	13:13:22	13.20172822			12.3	0.014	0.014	ng/L	
Hg2700-1	JRH	BLK	F606147-BLK1	1.25	6/10/16 13:25	13037-1.RAW	13:25:02	25.47982955	1		24.6	0.035	0.044	ng/L	
Hg2700-1	JRH	BLK	F606147-BLK2	1.25	6/10/16 13:35	13038-1.RAW	13:35:33	21.11429924	1		20.3	0.029	0.036	ng/L	
Hg2700-1	JRH	BLK	F606147-BLK3	1.25	6/10/16 13:46	13039-1.RAW	13:46:04	12.29150095	1		11.4	0.016	0.020	ng/L	
Hg2700-1	JRH	SAM	F606147-BS1	1.25	6/10/16 13:56	13040-1.RAW	13:56:35	543.2598011	1		542.4	0.744	0.930	ng/L	
Hg2700-1	JRH	SAM	F606147-BSD1	1.25	6/10/16 14:07	13041-1.RAW	14:07:05	469.1513731	1		468.3	0.638	0.798	ng/L	
Hg2700-1	JRH	SAM	F606147-DUP1	1.25	6/10/16 14:17	13042-1.RAW	14:17:36	478.9274148	1		478.1	0.652	0.815	ng/L	
Hg2700-1	JRH	SAM	F606147-MS1	1.25	6/10/16 14:28	13043-1.RAW	14:28:07	525.7335938	1		524.9	0.719	0.899	ng/L	
Hg2700-1	JRH	SAM	F606147-MSD1	1.25	6/10/16 14:38	13044-1.RAW	14:38:38	610.5203835	1		609.7	0.839	1.049	ng/L	
Hg2700-1	JRH	SAM	F606147-MS2	1.25	6/10/16 14:49	13045-1.RAW	14:49:08	618.3660985	1		617.5	0.850	1.063	ng/L	
Hg2700-1	JRH	SAM	F606147-MSD2	1.25	6/10/16 14:59	13046-1.RAW	14:59:39	690.9035985	1		690.0	0.953	1.192	ng/L	
Hg2700-1	JRH	CAL	SEQ-CCV1	1	6/10/16 15:10	13047-1.RAW	15:10:10	324.9661458			324.1	0.370	0.370	ng/L	
Hg2700-1	JRH	CAL	SEQ-CCB1	1	6/10/16 15:20	13048-1.RAW	15:20:41	7.229971591			6.4	0.007	0.007	ng/L	
Hg2700-1	JRH	SAM	1605389-03RE1	1.25	6/10/16 15:31	13049-1.RAW	15:31:11	22.47485795	1		21.6	0.004	0.005	ng/L	
Hg2700-1	JRH	SAM	1605389-04RE1	1.25	6/10/16 15:41	13050-1.RAW	15:41:42	139.1270833	1		138.3	0.170	0.212	ng/L	
Hg2700-1	JRH	SAM	1605389-05RE1	1.25	6/10/16 15:52	13051-1.RAW	15:52:13	35.53607955	1		34.7	0.023	0.028	ng/L	
Hg2700-1	JRH	SAM	1605571-05RE1	1.25	6/10/16 16:02	13052-1.RAW	16:02:44	10.4438447	1		9.6	-0.013	-0.016	ng/L	
Hg2700-1	JRH	SAM	1605688-02	1.25	6/10/16 16:13	13053-1.RAW	16:13:14	753.0317472	1		752.2	1.042	1.302	ng/L	
Hg2700-1	JRH	SAM	1605688-04	1.25	6/10/16 16:23	13054-1.RAW	16:23:45	11.7045928	1		10.8	-0.011	-0.014	ng/L	
Hg2700-1	JRH	SAM	1605688-06	1.25	6/10/16 16:34	13055-1.RAW	16:34:16	366.4768229	1		365.6	0.493	0.616	ng/L	
Hg2700-1	JRH	SAM	1605688-08	1.25	6/10/16 16:44	13056-1.RAW	16:44:47	8.431439394	1		7.6	-0.016	-0.020	ng/L	
Hg2700-1	JRH	SAM	1605731-02	1.25	6/10/16 16:55	13057-1.RAW	16:55:17	964.2548295	1		963.4	1.342	1.677	ng/L	
Hg2700-1	JRH	SAM	1605731-04	1.25	6/10/16 17:05	13058-1.RAW	17:05:48	20.77391098	1		19.9	0.002	0.002	ng/L	
Hg2700-1	JRH	CAL	SEQ-CCV2	1	6/10/16 17:16	13059-1.RAW	17:16:19	327.5607008			326.7	0.373	0.373	ng/L	
Hg2700-1	JRH	CAL	SEQ-CCB2	1	6/10/16 17:26	13060-1.RAW	17:26:48	6.012168561			5.2	0.006	0.006	ng/L	
Hg2700-1	JRH	SAM	1605731-06	1.25	6/10/16 17:37	13061-1.RAW	17:37:18	749.6649384	1		748.8	1.037	1.296	ng/L	
Hg2700-1	JRH	SAM	1605775-01RE1	1.25	6/10/16 17:47	13062-1.RAW	17:47:49	91.42713068	1		90.6	0.102	0.127	ng/L	
Hg2700-1	JRH	SAM	1605775-02RE1	1.25	6/10/16 17:58	13063-1.RAW	17:58:20	68.75807292	1		67.9	0.070	0.087	ng/L	
Hg2700-1	JRH	SAM	1605775-03RE1	1.25	6/10/16 18:08	13064-1.RAW	18:08:50	42.84469697	1		42.0	0.033	0.041	ng/L	
Hg2700-1	JRH	SAM	1605775-05RE1	1.25	6/10/16 18:19	13065-1.RAW	18:19:21	33.93562973	1		33.1	0.020	0.025	ng/L	
Hg2700-1	JRH	SAM	1605775-09RE1	1.25	6/10/16 18:29	13066-1.RAW	18:29:52	154.9674953	1		154.1	0.192	0.240	ng/L	
Hg2700-1	JRH	SAM	1605775-10	1.25	6/10/16 18:40	13067-1.RAW	18:40:23	39.54881629	1		38.7	0.028	0.035	ng/L	
Hg2700-1	JRH	SAM	1605775-11RE1	1.25	6/10/16 18:50	13068-1.RAW	18:50:53	123.8494555	1		123.0	0.148	0.185	ng/L	
Hg2700-1	JRH	SAM	1605775-12RE1	1.25	6/10/16 19:01	13069-1.RAW	19:01:24	37.70374053	1		36.8	0.026	0.032	ng/L	
Hg2700-1	JRH	SAM	1605775-17RE1	1.25	6/10/16 19:11	13070-1.RAW	19:11:54	38.24739583	1		37.4	0.026	0.033	ng/L	
Hg2700-1	JRH	CAL	SEQ-CCV3	1	6/10/16 19:22	13071-1.RAW	19:22:25	342.4506629			341.6	0.390	0.390	ng/L	
Hg2700-1	JRH	CAL	SEQ-CCB3	1	6/10/16 19:32	13072-1.RAW	19:32:56	4.347537879			3.5	0.004	0.004	ng/L	

MethylMercury
EPA1630

Operat JH **BlankS** 0.8615 **Calib Eqn:** Conc = (Area-0.862) / 875.8 **Run Date:** ###### **Blank SD:** 0
Workst MMHg2: **CalibFa** 875.81 **Status:** OK,1 Warnings **Run Time:** 13:14:29 **Blank RSD** 0
Methoc 2010-01 **R:** 0.9993 **R²:** 0.998664424 **CalibAnal** MeHg **CF SD:** 95.93024995
Description: **CF RSD%:** 10.95334852

Sample/ID	Location	Rinse	Dilute	Blank	ConcHg0(pi	ConcMeHg(ppt)	ConcHg2(pi	ConcPrHg(r	Rec%	QA
Clean				0		0.00	0.006309			
ws	A1									
SEQ-IBL1	A2		1	0	0.013096	0.00	0.05511			
SEQ-CAL1	A3		1	0.8615	0.018911	0.05	0.055471		91.94	
SEQ-CAL2	A4		1	0.8615	0.023972	0.18	0.063268		88.07	
SEQ-CAL3	A5		1	0.8615	0.237014	0.97	0.100389		97.43	
SEQ-CAL4	A6		1	0.8615	0.175842	2.18	0.129782		108.86	
SEQ-CAL5	A7		1	0.8615	0.321604	4.55	0.189597		113.70	
SEQ-ICV1	A8		1	0.8615	0.84305	0.53	0.370378		106.82	
SEQ-ICB1	A9		1	0.8615	0.032353	0.01	0.070896		0.00	
F606147-BLK1	A10		1.25	0.8615	0.028987	0.035136607	0.098014			
F606147-BLK2	A11		1.25	0.8615	0.037019	0.028905886	0.226483			
F606147-BLK3	A12		1.25	0.8615	0.022604	0.016313509	0.086711			
F606147-BS1	A13		1.25	0.8615	0.10583	0.77414027	0.108641			
F606147-BSD1	A14		1.25	0.8615	0.176739	0.668368702	0.162178			
F606147-DUP1	A15		1.25	0.8615	0.157131	0.682321599	0.153373			
F606147-MS1	A16		1.25	0.8615	0.198132	0.749156563	0.186889		74.92	
F606147-MSD1	A17		1.25	0.8615	0.115852	0.870138222	0.147651			
F606147-MS2	A18		1.25	0.8615	0.053939	0.881320577	0.117698		44.07	
F606147-MSD2	A19		1.25	0.8615	0.085623	0.984865507	0.1961			
SEQ-CCV1	A20		1	0.8615	0.924749	0.370063779	0.352808		74.10	
SEQ-CCB1	A21		1	0.8615	0.0341	0.007271536	0.067731		0.00	
1605389-03RE1	B1		1.25	0.8615	0.034487	0.030847749	0.119315			
1605389-04RE1	B2		1.25	0.8615	0.076357	0.197340133	0.159598			
1605389-05RE1	B3		1.25	0.8615	0.063039	0.049489433	0.209905			
1605571-05RE1	B4		1.25	0.8615	0.019695	0.013676434	0.085752			
1605688-02	B5		1.25	0.8615	0.10173	1.073538171	0.087076			
1605688-04	B6		1.25	0.8615	0.056798	0.015475842	0.159366			
1605688-06	B7		1.25	0.8615	0.172638	0.521810809	0.170999			
1605688-08	B8		1.25	0.8615	0.165575	0.01080422	0.355558			
1605731-02	B9		1.25	0.8615	0.160237	1.375007212	0.080586			
1605731-04	B10		1.25	0.8615	0.055794	0.028420065	0.11413			
SEQ-CCV2	B11		1	0.8615	1.068156	0.373026251	0.314225		74.70	
SEQ-CCB2	B12		1	0.8615	0.04499	0.005881044	0.057661		0.00	
1605731-06	B13		1.25	0.8615	0.188952	1.068732879	0.100034			
1605775-01RE1	B14		1.25	0.8615	0.168326	0.128832503	0.268291			
1605775-02RE1	B15		1.25	0.8615	0.118874	0.09694246	0.258596			
1605775-03RE1	B16		1.25	0.8615	0.055882	0.059920688	0.135595			
1605775-05RE1	B17		1.25	0.8615	0.337542	0.047205184	1.150888			
1605775-09RE1	B18		1.25	0.8615	0.101948	0.219888182	0.898172			
1605775-10	B19		1.25	0.8615	0.049137	0.055216628	0.178063			
1605775-11RE1	B20		1.25	0.8615	0.15439	0.175535074	1.244547			
1605775-12RE1	B21		1.25	0.8615	0.037326	0.052583236	0.216442			
1605775-17RE1	C1		1.25	0.8615	0.055753	0.05335917	0.168303			
SEQ-CCV3	C2		1	0.8615	0.94506	0.39002766	0.294132		78.10	
SEQ-CCB3	C3		1							

RawData	RunEnd	PeakHg0 (Ra	PeakMeHg (R	PeakHg2(Raw	PeakPrHg(Ra	Control (etf)	Flags	RunCount
13027-1.RAW	11:38:34	0	1.49793163	5.52554451	0	cleandry	OK	1
13028-1.RAW	11:49:05	0	0	0.36221591	0	psample10	OK	1
13029-1.RAW	11:59:35	11.4698864	0.86150568	48.2653883	0	psample10	OK	1
13030-1.RAW	12:10:06	17.4236269	41.1227273	49.4431108	0	psample10	OK	1
13031-1.RAW	12:20:37	21.8564394	155.132718	56.271875	0	psample10	OK	1
13032-1.RAW	12:31:07	208.439749	854.1491	88.7825758	0	psample10	CT	1
13033-1.RAW	12:41:49	154.865104	1907.66733	114.525568	0	psample10	CT	1
13034-1.RAW	12:52:20	282.524701	3983.92789	166.912074	0	psample10	CT	1
13035-1.RAW	13:02:51	739.211175	468.055066	325.241109	0	psample10	CT	1
13036-1.RAW	13:13:22	29.1968277	13.2017282	62.9526515	0	psample10	OK	1
13037-1.RAW	13:25:02	21.1714489	25.4798295	69.5345644	0	psample10	OK	1
13038-1.RAW	13:35:33	26.799053	21.1142992	159.545639	0	psample10	CT	1
13039-1.RAW	13:46:04	16.6990767	12.2915009	61.6149148	0	psample10	OK	1
13040-1.RAW	13:56:35	75.0108902	543.259801	76.9805871	0	psample10	CT	1
13041-1.RAW	14:07:05	124.693087	469.151373	114.490791	0	psample10	CT	1
13042-1.RAW	14:17:36	110.95442	478.927415	108.321567	0	psample10	CT	1
13043-1.RAW	14:28:07	139.682008	525.755066	131.804451	0	psample10	CT	1
13044-1.RAW	14:38:38	82.0329545	610.520384	104.312689	0	psample10	CT	1
13045-1.RAW	14:49:08	38.6533144	618.355256	83.3262405	0	psample10	CT	1
13046-1.RAW	14:59:39	60.8530416	690.903598	138.258395	0	psample10	CT	1
13047-1.RAW	15:10:10	810.763849	324.966146	309.852975	0	psample10	CT	1
13048-1.RAW	15:20:41	30.7268939	7.22997159	60.1806426	0	psample10	CT	1
13049-1.RAW	15:31:11	25.0245265	22.474858	84.459233	0	psample10	OK	1
13050-1.RAW	15:41:42	54.3605114	139.127083	112.682931	0	psample10	CT	1
13051-1.RAW	15:52:13	45.0297868	35.5360795	147.930818	0	psample10	CT	1
13052-1.RAW	16:02:44	14.6605587	10.4438447	60.9433712	0	psample10	OK	1
13053-1.RAW	16:13:14	72.1380793	753.031747	61.8712831	0	psample10	CT	1
13054-1.RAW	16:23:45	40.6567708	11.7045928	112.520455	0	psample10	OK	1
13055-1.RAW	16:34:16	121.819697	366.46617	120.671449	0	psample10	CT	1
13056-1.RAW	16:44:47	116.870644	8.43143939	249.982075	0	psample10	CT	1
13057-1.RAW	16:55:17	113.130634	964.25483	57.3234375	0	psample10	CT	1
13058-1.RAW	17:05:48	39.9533144	20.773911	80.826089	0	psample10	OK	1
13059-1.RAW	17:16:19	936.360885	327.560701	276.062099	0	psample10	CT	1
13060-1.RAW	17:26:48	40.2639205	6.01216856	51.3613226	0	psample10	OK	1
13061-1.RAW	17:37:18	133.250071	749.664938	70.9500279	0	psample10	CT	1
13062-1.RAW	17:47:49	118.798722	91.1274858	188.838873	0	psample10	CT	1
13063-1.RAW	17:58:20	84.1502367	68.7838542	182.045881	0	psample10	OK	1
13064-1.RAW	18:08:50	40.0147254	42.844697	95.865857	0	psample10	CT	1
13065-1.RAW	18:19:21	237.358783	33.9356297	807.226553	0	psample10	CT	1
13066-1.RAW	18:29:52	72.2911222	154.925284	630.161795	0	psample10	CT	1
13067-1.RAW	18:40:23	35.2890388	39.5488163	125.620557	0	psample10	CT	1
13068-1.RAW	18:50:53	109.033998	123.849455	872.848723	0	psample10	CT	1
13069-1.RAW	19:01:24	27.0137883	37.7037405	152.510843	0	psample10	OK	1
13070-1.RAW	19:11:54	39.9243845	38.2473958	118.782519	0	psample10	OK	1
13071-1.RAW	19:22:25	828.551959	342.450663	258.464712	0	psample10	CT	1
13072-1.RAW	19:32:56	30.7933712	4.34753788	59.603054	0	psample10	CT	1

MethylMercury
EPA1630

Operat: JH **BlankS:** 0.8615 **Calib Eqn:** Conc = (Area-0.862) / 875.0 **Run Date:** ###### **Blank SD:** 0
Workst MMHg2 **CalibFa** 875.02 **Status:** OK,1 Warnings **Run Time:** 13:14:29 **Blank RSD** 0
Methoc 2010-01 **R:** 0.9993 **R²:** 0.998665024 **CalibAnal** MeHg **CF SD:** 97.01550611
Description: **CF RSD%:** 11.08726365

Sample/ID	Location	Rinse	Dilute	Blank	ConcHg0(pi	ConcMeHg(ppt)	ConcHg2(pi	ConcPrHg(r	Rec%	QA	RawData	RunEnd	PeakHg0 (Ra	PeakMeHg (R	PeakHg2(Raw	PeakPrHg(Ra	Control (etf)	Flags	RunCount
Clean				0		0.00	0.006315				13027-1.RAW		0	1.49793163	5.52554451	0	cleandry	OK	1
ws	A1										13028-1.RAW		0	0	0.36221591	0	psample10	OK	1
SEQ-IBL1	A2		1	0	0.013108	0.00	0.054451				13029-1.RAW		11.4698864	0.86150568	47.6454072	0	psample10	OK	1
SEQ-CAL1	A3		1	0.8615	0.018935	0.05	0.055521		92.02		13030-1.RAW		17.4303504	41.1227273	49.4431818	0	psample10	OK	1
SEQ-CAL2	A4		1	0.8615	0.023994	0.18	0.063325		87.70		13031-1.RAW		21.8564394	154.342779	56.271875	0	psample10	OK	1
SEQ-CAL3	A5		1	0.8615	0.237228	0.98	0.100479		97.52		13032-1.RAW		208.439749	854.1491	88.7825758	0	psample10	CT	1
SEQ-CAL4	A6		1	0.8615	0.176001	2.18	0.129889		108.96		13033-1.RAW		154.865104	1907.66733	114.516761	0	psample10	CT	1
SEQ-CAL5	A7		1	0.8615	0.321894	4.55	0.189768		113.80		13034-1.RAW		282.524701	3983.92789	166.912074	0	psample10	CT	1
SEQ-ICV1	A8		1	0.8615	0.843811	0.53	0.370712		106.92		13035-1.RAW		739.211175	468.055066	325.241109	0	psample10	CT	1
SEQ-ICB1	A9		1	0.8615	0.032438	0.01	0.07096		0.00		13036-1.RAW	13:13:22	29.2449811	13.2017282	62.9526515	0	psample10	OK	1
F606147-BLK1	A10		1.25	0.8615	0.029014	0.035168327	0.098102				13037-1.RAW		21.1714489	25.4798295	69.5345644	0	psample10	OK	1
F606147-BLK2	A11		1.25	0.8615	0.037053	0.028931981	0.226687				13038-1.RAW		26.799053	21.1142992	159.545639	0	psample10	CT	1
F606147-BLK3	A12		1.25	0.8615	0.022625	0.016328237	0.086789				13039-1.RAW		16.6990767	12.2915009	61.6149148	0	psample10	OK	1
F606147-BS1	A13		1.25	0.8615	0.105926	0.77483914	0.108739				13040-1.RAW		75.0108902	543.259801	76.9805871	0	psample10	CT	1
F606147-BSD1	A14		1.25	0.8615	0.176899	0.668972084	0.162319				13041-1.RAW		124.693087	469.151373	114.487311	0	psample10	CT	1
F606147-DUP1	A15		1.25	0.8615	0.157311	0.682937577	0.153511				13042-1.RAW		110.981439	478.927415	108.321567	0	psample10	CT	1
F606147-MS1	A16		1.25	0.8615	0.198311	0.749802204	0.187058		74.98		13043-1.RAW		139.682008	525.733594	131.804451	0	psample10	CT	1
F606147-MSD1	A17		1.25	0.8615	0.116268	0.870923755	0.147784				13044-1.RAW		82.2509943	610.520384	104.312689	0	psample10	CT	1
F606147-MS2	A18		1.25	0.8615	0.053987	0.882131695	0.117823		44.11		13045-1.RAW		38.6533144	618.366098	83.3394218	0	psample10	CT	1
F606147-MSD2	A19		1.25	0.8615	0.0857	0.985754613	0.196277				13046-1.RAW		60.8530416	690.903598	138.258395	0	psample10	CT	1
SEQ-CCV1	A20		1	0.8615	0.925584	0.370397861	0.353126		74.17		13047-1.RAW		810.763849	324.966146	309.852975	0	psample10	CT	1
SEQ-CCB1	A21		1	0.8615	0.034131	0.007278101	0.067792		0.00		13048-1.RAW		30.7268939	7.22997159	60.1806426	0	psample10	CT	1
1605389-03RE1	B1		1.25	0.8615	0.034518	0.030875597	0.119423				13049-1.RAW		25.0245265	22.474858	84.459233	0	psample10	OK	1
1605389-04RE1	B2		1.25	0.8615	0.076426	0.197518285	0.159742				13050-1.RAW		54.3605114	139.127083	112.682931	0	psample10	CT	1
1605389-05RE1	B3		1.25	0.8615	0.063108	0.04953411	0.210095				13051-1.RAW		45.0380445	35.5360795	147.930818	0	psample10	CT	1
1605571-05RE1	B4		1.25	0.8615	0.019713	0.013688781	0.08583				13052-1.RAW		14.6605587	10.4438447	60.9433712	0	psample10	OK	1
1605688-02	B5		1.25	0.8615	0.101822	1.074507327	0.087155				13053-1.RAW		72.1380793	753.031747	61.8712831	0	psample10	CT	1
1605688-04	B6		1.25	0.8615	0.056849	0.015489813	0.15951				13054-1.RAW		40.6567708	11.7045928	112.520455	0	psample10	OK	1
1605688-06	B7		1.25	0.8615	0.172794	0.522297102	0.171154				13055-1.RAW		121.819697	366.476823	120.671449	0	psample10	CT	1
1605688-08	B8		1.25	0.8615	0.165724	0.010813974	0.355879				13056-1.RAW		116.870644	8.43143939	249.982075	0	psample10	CT	1
1605731-02	B9		1.25	0.8615	0.160548	1.376248525	0.080658				13057-1.RAW		113.247443	964.25483	57.3234375	0	psample10	CT	1
1605731-04	B10		1.25	0.8615	0.055844	0.028445722	0.114233				13058-1.RAW		39.9533144	20.773911	80.826089	0	psample10	OK	1
SEQ-CCV2	B11		1	0.8615	1.069121	0.373363007	0.314509		74.77		13059-1.RAW		936.360885	327.560701	276.062099	0	psample10	CT	1
SEQ-CCB2	B12		1	0.8615	0.04503	0.005886354	0.057713		0.00		13060-1.RAW		40.2639205	6.01216856	51.3613226	0	psample10	OK	1
1605731-06	B13		1.25	0.8615	0.189099	1.069697697	0.100124				13061-1.RAW		133.233736	749.664938	70.9500279	0	psample10	CT	1
1605775-01RE1	B14		1.25	0.8615	0.168478	0.129376865	0.268534				13062-1.RAW		118.798722	91.4271307	188.838873	0	psample10	CT	1
1605775-02RE1	B15		1.25	0.8615	0.118982	0.096993147	0.258865				13063-1.RAW		84.1502367	68.7580729	182.070857	0	psample10	OK	1
1605775-03RE1	B16		1.25	0.8615	0.055932	0.059974783	0.135718				13064-1.RAW		40.0147254	42.844697	95.865857	0	psample10	CT	1
1605775-05RE1	B17		1.25	0.8615	0.337846	0.047247799	1.151927				13065-1.RAW		237.358783	33.9356297	B07.226553	0	psample10	CT	1
1605775-09RE1	B18		1.25	0.8615	0.10204	0.22014699	0.898982				13066-1.RAW		72.2911222	154.967495	630.161795	0	psample10	CT	1
1605775-10	B19		1.25	0.8615	0.049181	0.055266476	0.178224				13067-1.RAW		35.2890388	39.5488163	125.620557	0	psample10	CT	1
1605775-11RE1	B20		1.25	0.8615	0.154529	0.175693541	1.245671				13068-1.RAW		109.033998	123.849455	872.848723	0	psample10	CT	1
1605775-12RE1	B21		1.25	0.8615	0.037375	0.052630707	0.216638				13069-1.RAW		27.0245739	37.7037405	152.510843	0	psample10	OK	1
1605775-17RE1	C1		1.25	0.8615	0.055803	0.053407341	0.168455				13070-1.RAW		39.9243845	38.2473958	118.782519	0	psample10	OK	1
SEQ-CCV3	C2		1	0.8615	0.945913	0.390379765	0.294398		78.17		13071-1.RAW		828.551959	342.450663	258.464712	0	psample10	CT	1
SEQ-CCB3	C3		1	0.8615	0.034207	0.003983957	0.067132		0.00		13072-1.RAW	19:32:56	30.7933712	4.34753788	59.603054	0	psample10	CT	1

Failing Data Report - 6F10008

Sample ID	Analysis	Result	MRL	Dup Result	Source Result	True Value	Units	% Rec.	Rec. LCL	Rec. UCL	RPD	RPD Limit	Over Cal	Failure	Qualifier
F606147-DUP1	MHg-CVAFS-W-Dist	0.725	0.050	1.157	1.157		ng/L				46.0	35.00	PASS-OVER	FAIL-DUP	QR-07

Analyst Reviewed By 06/13/16 Date

Peer Reviewed By 6/13/16 Date

ANALYSIS SEQUENCE

6F10008

Instrument: Hg2700-1

Calibration ID: UNASSIGNED **Analyzed: 6/10/2016**

Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
6F10008-IBL1	QC	1			
6F10008-CAL1	QC	2	1602252		
6F10008-CAL2	QC	3	1602253		
6F10008-CAL3	QC	4	1602254		
6F10008-CAL4	QC	5	1602255		
6F10008-CAL5	QC	6	1602256		
6F10008-ICV1	QC	7	1603001		
6F10008-ICB1	QC	8			
F606147-BLK1	QC	9			
F606147-BLK2	QC	10			
F606147-BLK3	QC	11			
F606147-BS1	QC	12			
F606147-BSD1	QC	13			
F606147-DUP1	QC	14			
F606147-MS1	QC	15			
F606147-MSD1	QC	16			
F606147-MS2	QC	17			
F606147-MSD2	QC	18			
6F10008-CCV1	QC	19	1603001		
6F10008-CCB1	QC	20			
1605389-03RE1	MHg-CVAFS-W-Dist	21			Re-extract added 6/7/2016 by JRH
1605389-04RE1	MHg-CVAFS-W-Dist	22			Re-extract added 6/7/2016 by JRH
1605389-05RE1	MHg-CVAFS-W-Dist	23			Re-extract added 6/7/2016 by JRH
1605571-05RE1	MHg-CVAFS-W-Dist	24			Re-extract added 6/7/2016 by JRH
1605688-02	MHg-CVAFS-W-Dist	25			
1605688-04	MHg-CVAFS-W-Dist	26			
1605688-06	MHg-CVAFS-W-Dist	27			
1605688-08	MHg-CVAFS-W-Dist	28			
1605731-02	MHg-CVAFS-W-Dist	29			
1605731-04	MHg-CVAFS-W-Dist	30			
6F10008-CCV2	QC	31	1603001		
6F10008-CCB2	QC	32			
1605731-06	MHg-CVAFS-W-Dist	33			
1605775-01RE1	MHg-CVAFS-W-Dist	34			Re-extract added 6/7/2016 by JRH
1605775-02RE1	MHg-CVAFS-W-Dist	35			Re-extract added 6/7/2016 by JRH

Due Date: 6/13/2016

ANALYSIS SEQUENCE

6F10008

Instrument: Hg2700-1

Calibration ID: UNASSIGNED **Analyzed: 6/10/2016**

Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
1605775-03RE1	MHg-CVAFS-W-Dist	36			Re-extract added 6/7/2016 by JRH
1605775-05RE1	MHg-CVAFS-W-Dist	37			Re-extract added 6/7/2016 by JRH
1605775-09RE1	MHg-CVAFS-W-Dist	38			Re-extract added 6/7/2016 by JRH
1605775-10	MHg-CVAFS-W-Dist	39			Scan all data - Level IV
1605775-11RE1	MHg-CVAFS-W-Dist	40			Re-extract added 6/7/2016 by JRH
1605775-12RE1	MHg-CVAFS-W-Dist	41			Re-extract added 6/7/2016 by JRH
1605775-17RE1	MHg-CVAFS-W-Dist	42			Re-extract added 6/7/2016 by JRH
6F10008-CCV3	QC	43	1603001		
6F10008-CCB3	QC	44			

Samples Loaded By 06/13/16 Date

Data Processed By 06/13/16 Date

Samples logged 06/10/16
OVT 06/13/16

Due Date: 6/13/2016

PREPARATION BENCH SHEET

F606147

Eurofins Frontier Global Sciences, Inc.

Matrix: Water **Prepared using: Hg Aquatic/Solids - EFGS-013 Methyl Hg Distillation for Water** **Prepared: 6/9/2016**

Lab Number	Sample ID and Source Sample	Initial (mL)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F606147-BLK1	Blank	45	40					
F606147-BLK2	Blank	45	40					
F606147-BLK3	Blank	45	40					
F606147-BS1	Blank Spike	45	40	1602184	45			
F606147-BSD1	Blank Spike Dup	45	40	1602184	45			
F606147-DUP1	Duplicate [1605688-02]	45	40					
F606147-MS1	Matrix Spike [1605775-05RE1]	45	40	1602184	45			
F606147-MS2	Matrix Spike [1605775-10]	45	40	1602184	45			
F606147-MSD1	Matrix Spike Dup [1605775-05RE1]	45	40	1602184	45			
F606147-MSD2	Matrix Spike Dup [1605775-10]	45	40	1602184	45			

Standard ID(s):	Description:	Expiration:
1602184	MHg New Primary 1.0 ng/mL CAL	25-Jul-16 00:00

Reagent ID(s):	Description:	Expiration:
1602604	Acetate Buffer	15-Nov-16 00:00
1602944	Ethylating Agent (For Methyl Mercury Analysis)	30-Nov-16 00:00
1602945	2.5% Ascorbic Acid	11-Jun-16 00:00
1602980	APDC	03-Dec-16 00:00
1603101	0.5% Distillation Dilute (Made Daily)	10-Jun-16 00:00

ue Date: 6/13/2016

PREPARATION BENCH SHEET

F606147

Eurofins Frontier Global Sciences, Inc.

Matrix: Water **Prepared using: Hg Aquatic/Solids - EFGS-013 Methyl Hg Distillation for Water** **Prepared: 6/9/2016**

Lab Number	Sample ID	Initial (mL)	Final (mL)	QC Sample	Sample Specs.	Raw Data	Sample Comments	Analysis Comments
1605389-03RE1	P83476-5	45	40	-	-	-	Re-extract added 6/7/2016 by JRH	
1605389-04RE1	P83476-6	45	40	-	-	-	Re-extract added 6/7/2016 by JRH	
1605389-05RE1	P83476-7	45	40	-	-	-	Re-extract added 6/7/2016 by JRH	
1605571-05RE1	OL-2410-04	45	40	-	-	-	Re-extract added 6/7/2016 by JRH	
1605688-02	B158891 DALE MABRY INF	45	40	-	-	-		
1605688-04	B159126 DALE MABRY EFF	45	40	-	-	-		
1605688-06	B159137 NORTHWEST INF	45	40	-	-	-		
1605688-08	B159135 NORTHWEST EFF	45	40	-	-	-		
1605731-02	B159129 Dunn Inf	45	40	-	-	-		
1605731-04	B159136 Dunn Eff	45	40	-	-	-		
1605731-06	B159140 South Cross Inf	45	40	-	-	-		
1605775-01RE1	OV02_052616_SW_10	45	40	-	-	-	Re-extract added 6/7/2016 by JRH	
1605775-02RE1	OV02_052616_SW_10 DISSOLOVED	45	40	-	-	-	Re-extract added 6/7/2016 by JRH	
1605775-03RE1	ES-15_052616_SW_10	45	40	-	-	-	Re-extract added 6/7/2016 by JRH	
1605775-05RE1	WQ-ECH_052616_SW_10	45	40	-	-	-	Re-extract added 6/7/2016 by JRH	
1605775-09RE1	WQ1B-C_052616_SW_10	45	40	-	-	-	MS/MSD Re-extract added 6/7/2016 by	
5775-10	WQ1B-C_052616_SW_10 DISSOLVED	45	40	QC	-	-	MS/MSD Sean all data - Level IV	
5775-11RE1	WQ1B-C_052616_SW_10_DUP	45	40	-	-	-	Re-extract added 6/7/2016 by JRH	
5775-12RE1	WQ1B-C_052616_SW_10_DUP DISSOLVED	45	40	-	-	-	Re-extract added 6/7/2016 by JRH	

ue Date: 6/13/2016

PREPARATION BENCH SHEET

F606147

Eurofins Frontier Global Sciences, Inc.

Matrix: Water **Prepared using: Hg Aquatic/Solids - EFGS-013 Methyl Hg Distillation for Water** **Prepared: 6/9/2016**

1605775-17RE1	WQ3-L_052616_SW_10	45	40	-	-	-	Re-extract added 6/7/2016 by JRH	

[redacted]

ue Date: 6/13/2016

6/10/16 JH 2700-1

PREPARATION BENCH SHEET

F606147

Eurofins Frontier Global Sciences, Inc.

Matrix: Water **Prepared using: Hg Aquatic/Solids - EFGS-013 Methyl Hg Distillation for Water** GF 10008 **Prepared: 6/9/2016**

Lab Number	Sample ID and Source Sample	Initial (mL)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F606147-BLK1	Blank	45	40					1.25
F606147-BLK2	Blank	45	40					1.25
F606147-BLK3	Blank	45	40					1.25
F606147-BS1	Blank Spike	45	40	1602184	45			1.25
F606147-BSD1	Blank Spike Dup	45	40	1602184	45			1.25
F606147-DUP1	Duplicate [1605688-02]	45	40					1.25
F606147-MS1	Matrix Spike [1605775-05RE1]	45	40	1602184	45			1.25
F606147-MS2	Matrix Spike [1605775-10]	45	40	1602184	45			1.25
F606147-MSD1	Matrix Spike Dup [1605775-05RE1]	45	40	1602184	45			1.25
F606147-MSD2	Matrix Spike Dup [1605775-10]	45	40	1602184	45			1.25

Standard ID(s):	Description:	Expiration:
1602184	MHg New Primary 1.0 ng/mL CAL	25-Jul-16 00:00

Reagent ID(s):	Description:	Expiration:
1602980	APDC	03-Dec-16 00:00
1603101	0.5% Distillation Dilute (Made Daily)	10-Jun-16 00:00

1602945
1602604
1602944

Due Date: 6/13/2016

PREPARATION BENCH SHEET

F606147

Eurofins Frontier Global Sciences, Inc.

Matrix: Water **Prepared using: Hg Aquatic/Solids - EFGS-013 Methyl Hg Distillation for Water** **Prepared: 6/9/2016**

Lab Number	Sample ID	Initial (mL)	Final (mL)	QC Sample	Sample Specs.	Raw Data	Sample Comments	Analysis Comments
1605389-03RE1	P83476-5	45	40	-	-	-	Re-extract added 6/7/2016 by JRH	1.25
1605389-04RE1	P83476-6	45	40	-	-	-	Re-extract added 6/7/2016 by JRH	1.25
1605389-05RE1	P83476-7	45	40	-	-	-	Re-extract added 6/7/2016 by JRH	1.25
1605571-05RE1	OL-2410-04	45	40	-	-	-	Re-extract added 6/7/2016 by JRH	1.25
1605688-02	B158891 DALE MABRY INF	45	40	-	-	-		1.25
1605688-04	B159126 DALE MABRY EFF	45	40	-	-	-		1.25
1605688-06	B159137 NORTHWEST INF	45	40	-	-	-		1.25
1605688-08	B159135 NORTHWEST EFF	45	40	-	-	-		1.25
1605731-02	B159129 Dunn Inf	45	40	-	-	-		1.25
1605731-04	B159136 Dunn Eff	45	40	-	-	-		1.25
1605731-06	B159140 South Cross Inf	45	40	-	-	-		1.25
1605775-01RE1	OV02_052616_SW_10	45	40	-	-	-	Re-extract added 6/7/2016 by JRH	1.25
1605775-02RE1	OV02_052616_SW_10 DISSOLOVED	45	40	-	-	-	Re-extract added 6/7/2016 by JRH	1.25
1605775-03RE1	ES-15_052616_SW_10	45	40	-	-	-	Re-extract added 6/7/2016 by JRH	1.25
1605775-05RE1	WQ-ECH_052616_SW_10	45	40	-	-	-	Re-extract added 6/7/2016 by JRH	1.25
1605775-09RE1	WQ1B-C_052616_SW_10	45	40	-	-	-	MS/MSD Re-extract added 6/7/2016 by	1.25
[illegible]775-10	WQ1B-C_052616_SW_10 DISSOLVED	45	40	QC	-	-	MS/MSD Scan all data - Level IV	1.25
[illegible]775-11RE1	WQ1B-C_052616_SW_10_DUP	45	40	-	-	-	Re-extract added 6/7/2016 by JRH	1.25
[illegible]775-12RE1	WQ1B-C_052616_SW_10_DUP DISSOLVED	45	40	-	-	-	Re-extract added 6/7/2016 by JRH	1.25

Due Date: 6/13/2016

PREPARATION BENCH SHEET

F606147

Eurofins Frontier Global Sciences, Inc.

Matrix: Water **Prepared using: Hg Aquatic/Solids - EFGS-013 Methyl Hg Distillation for Water** **Prepared: 6/9/2016**

1605775-17RE1	WQ3-L_052616_SW_10	45	40	-	-	-	Re-extract added 6/7/2016 by JRH	1.25

[redacted]

Methyl Mercury Distillations (EPA 1630)

Reviewed 6/7/16 DM

Name: Dwyer Date: 6/9/16 Batch #: F606147 Sample Matrix: Water

WO#: 1605389, 1605571, 1605688, 1605731, 1605775

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

Spike Witness: DM 6/9/16

Digest #	Sample ID Number	Preserved pH	Sample Size (mL)	Final pH (≥3)
BLK1	F606147 Blank1	1.0	45	3.0
BLK2	F606147 Blank2	1.0	45	3.0
BLK3	F606147 Blank3	1.0	45	3.0
BS	F606147 BS	1.0	45	3.0
BSD	F606147 BSD	1.0	45	3.0
MD	F606147 MD	1.0	45	3.0
MS1	F606147 MS1	1.0	45	4.0
MSD1	F606147 MSD1	1.0	45	4.0
MS2	F606147 MSD2	1.0	45	4.0
MSD2	F606147 MSD2	1.0	45	4.0
1	1605389-03RE1	1.0	45	4.0
2	1605389-04RE1	1.0	45	3.0
3	1605389-05RE1	1.0	45	4.0
4	1605571-05RE1	1.0	45	4.0
5	1605688-02	1.0	45	4.0
6	1605688-04	1.0	45	4.0
7	1605688-06	1.0	45	4.0
8	1605688-08	1.0	45	4.0
9	1605731-02	1.0	45	4.0
10	1605731-04	1.0	45	4.0
11	1605731-06	1.0	45	4.0
12	1605775-01RE1	1.0	45	4.0
13	1605775-02RE1	1.0	45	4.0
14	1605775-03RE1	1.0	45	4.0
15	1605775-05RE1	1.0	45	4.0
16	1605775-09RE1	1.0	45	4.0
17	1605775-10	1.0	45	4.0
18	1605775-11RE1	1.0	45	4.0
19	1605775-12RE1	1.0	45	4.0
20	1605775-17RE1	1.0	45	4.0

6/9/16 DM

Spike ID: 160284
Spike Amount: 45 µL
Spike Witness:

Balance #: 2
Calibrated? ☑ Yes ☐ No

Pipette #: CJ17087
Cal. Date: 6/8/16

Pipette #: N27707
Cal. Date: 6/9/16

Pipette #: LWL4486
Cal. Date: 6/7/16

APDC ID: 160 2980
HCl ID: 160301

Temperature: No set range as the temp. may be changed to keep flow rate of ≥10 mL per hour. Temperature is recorded for informational purposes only.

Unit 1: 120.9
Unit 2: 122.
Unit 3: 120.5
Unit 4: 120.6
Unit 5: 122.
Unit 6: 122.

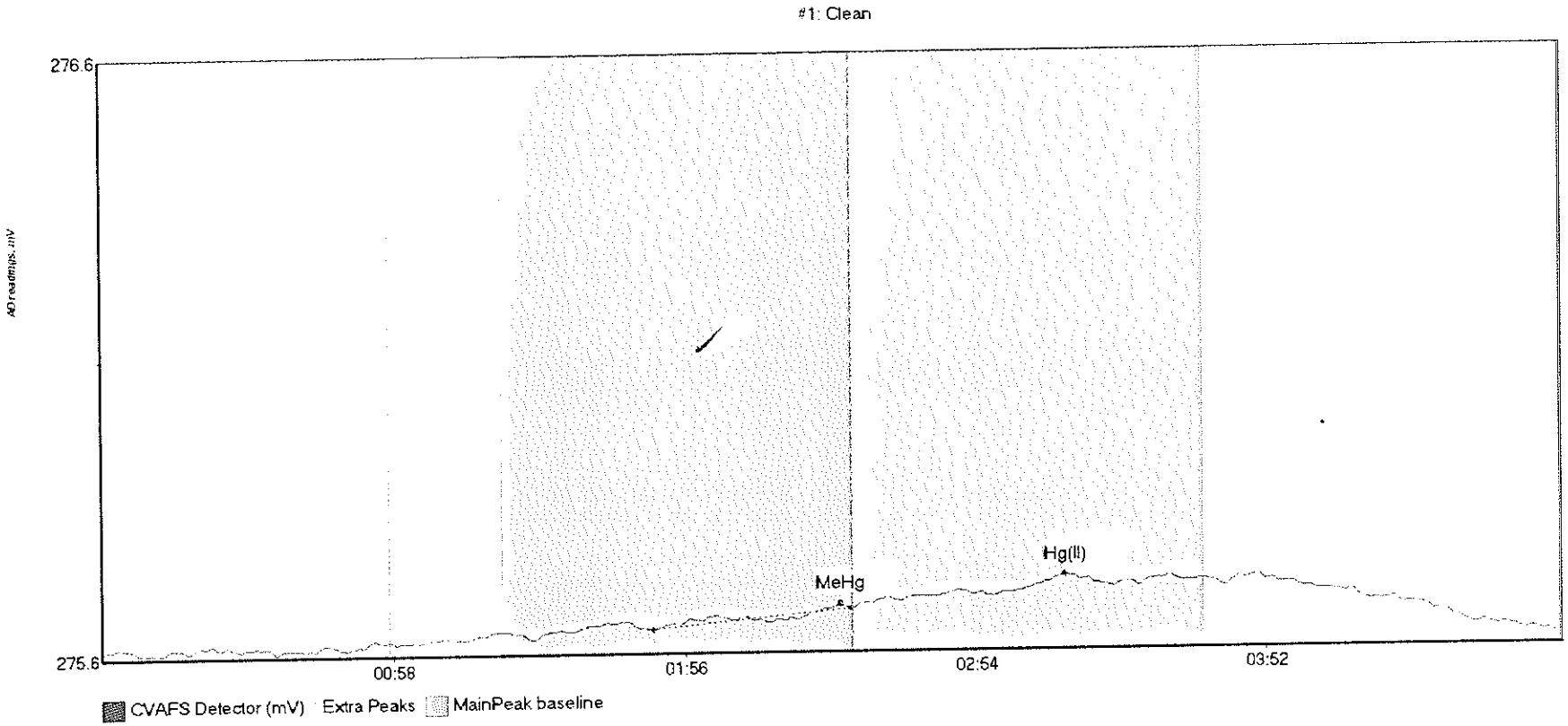
Comments:
MD: source 1605688-02
MS1, MSD1
1605731-02 6/9/16 DM
MS2 MSD2 6/9/16 DM
1605775-10 6/9/16 DM
1605775-09RE1 05RE1
6/9/16 pH

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

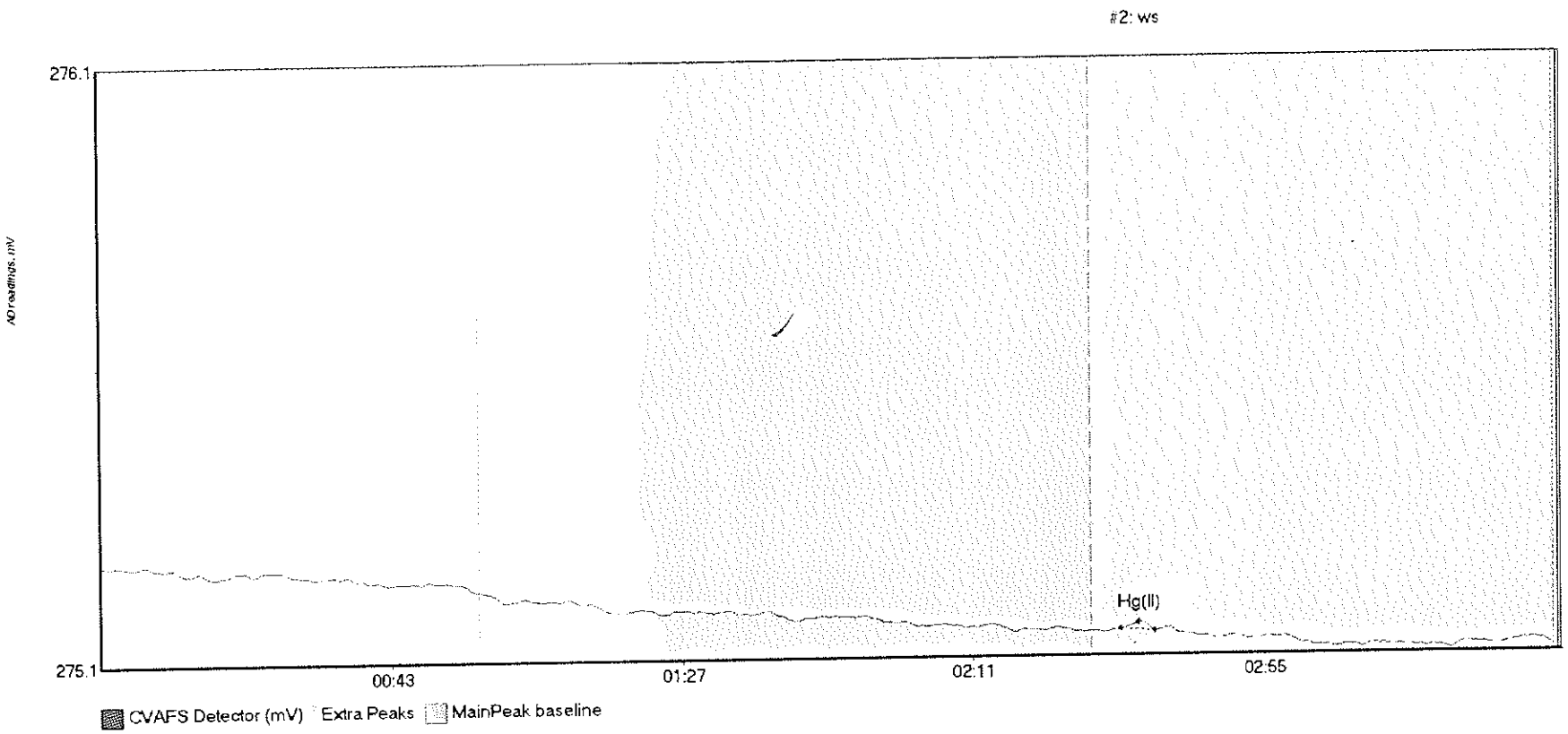
EPA1630

Peak Chart for MMHg27001-160610-1

MMHg27001-160610-1



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
Clean MeHg	1.498	110.0	149.8	275.62	275.65	147.6	0.038	OK	275.5936	0.00	0.01	
Clean Hg(II)	5.526	150.1	202.1	275.66	275.69	192.4	0.053	OK	275.5936	0.00	0.01	

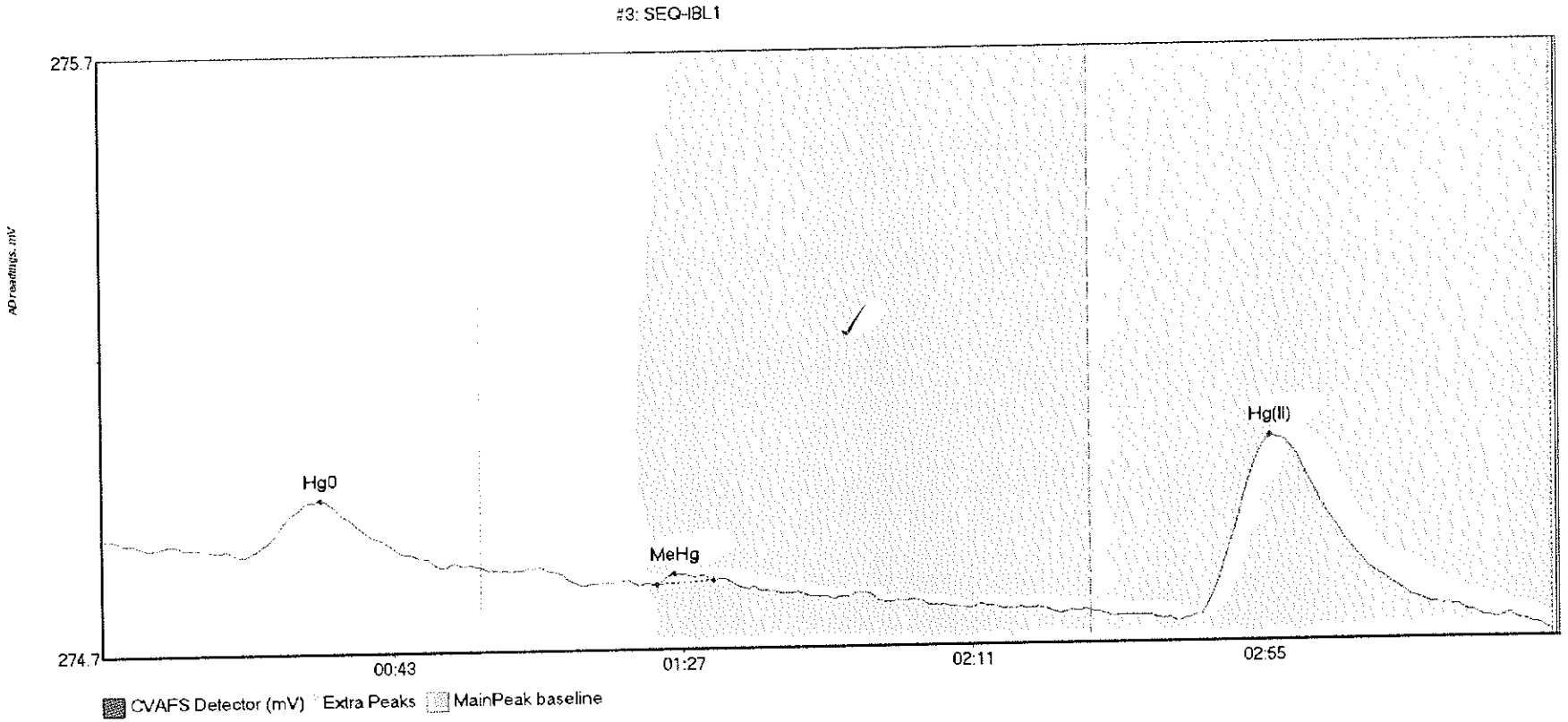


Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
ws	0.362	154.3	159.5	275.17	275.17	157.1	0.011	OK	275.2984	0.00	-0.15	

EPA1630

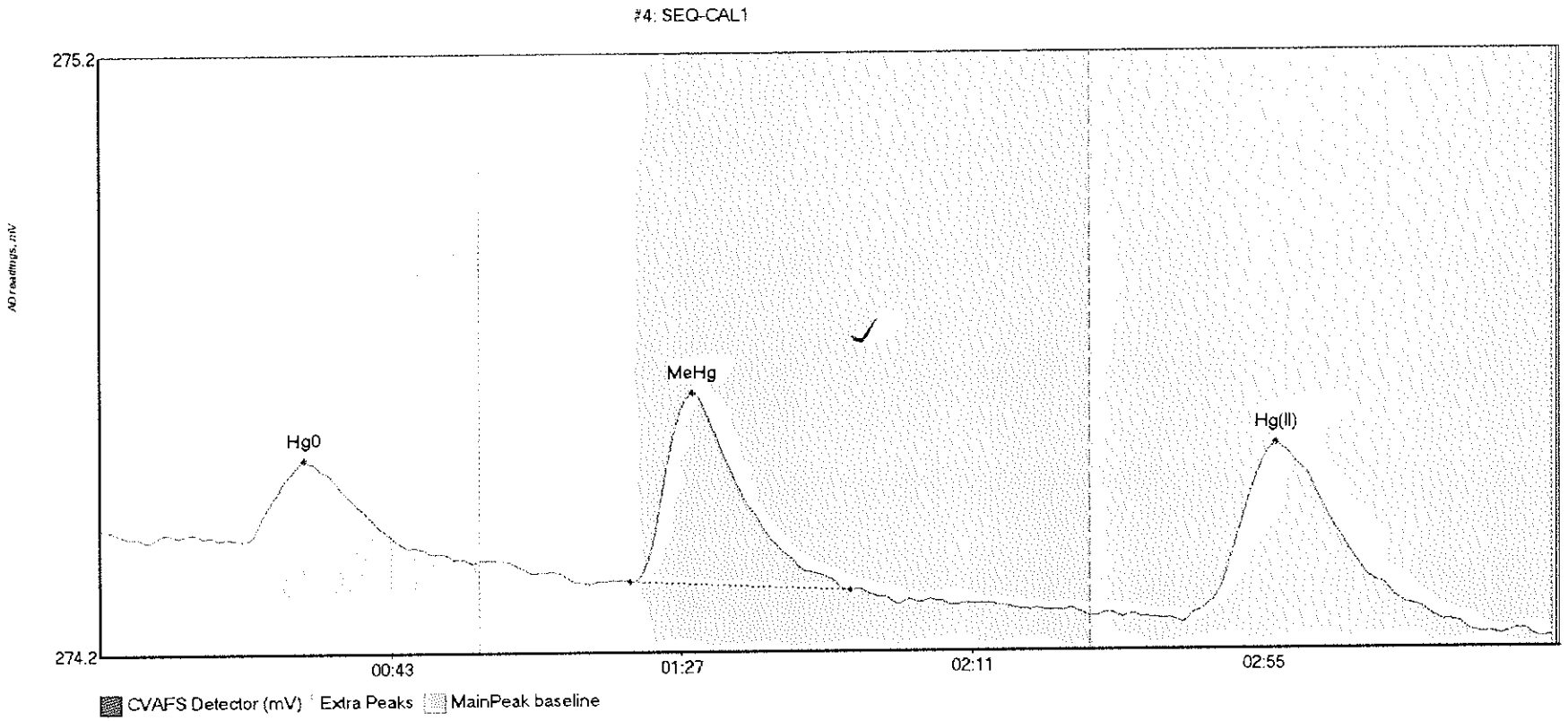
Peak Chart for MMHg27001-160610-1

MMHg27001-160610-1



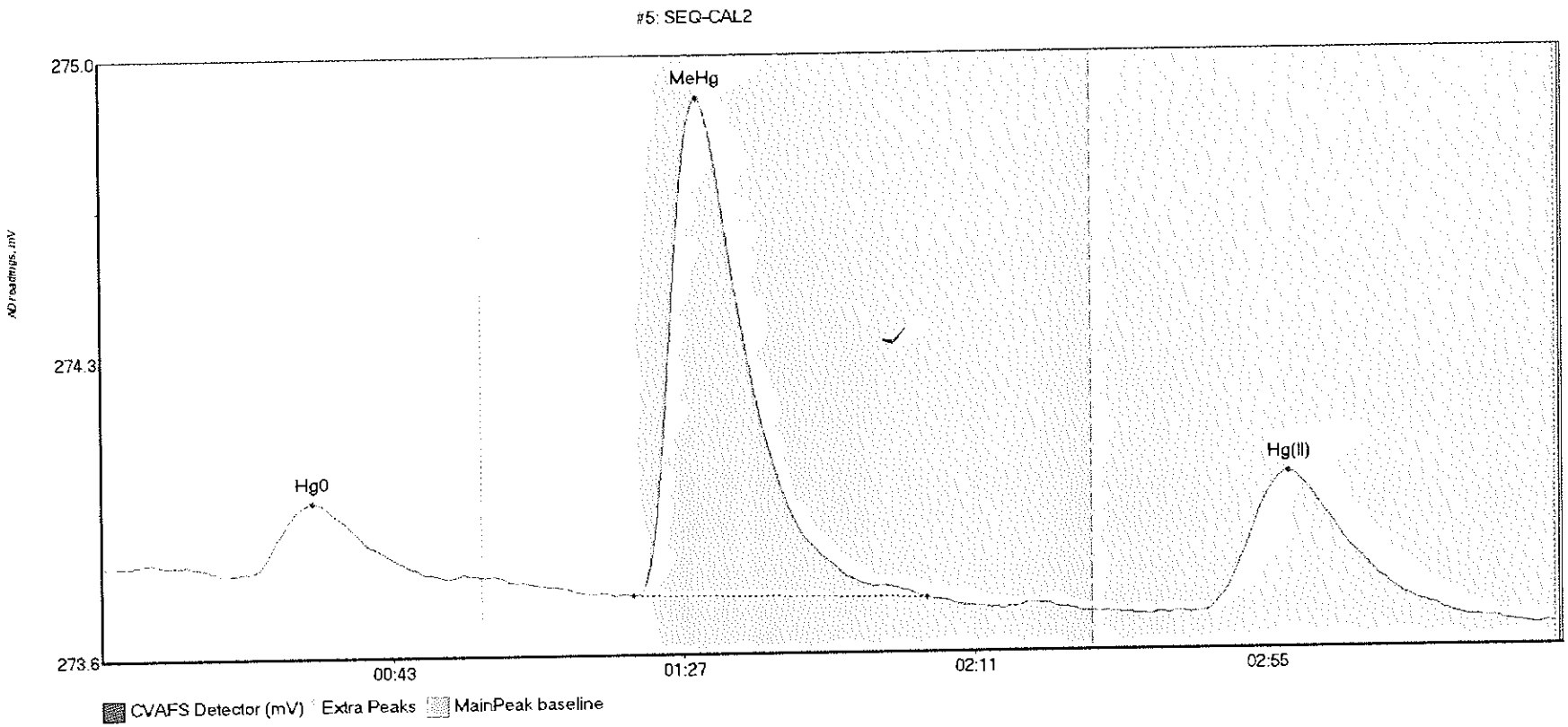
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-IBL1 Hg0	11.470	21.5	46.0	274.84	274.84	33.2	0.094	OK	274.8665	0.00	-0.18	
SEQ-IBL1 MeHg	0.862	84.2	92.7	274.78	274.79	86.9	0.018	OK	274.8665	0.00	-0.18	
SEQ-IBL1 Hg(II)	47.645	166.4	203.5	274.72	274.73	177.2	0.298	OK	274.8665	0.00	-0.18	

016



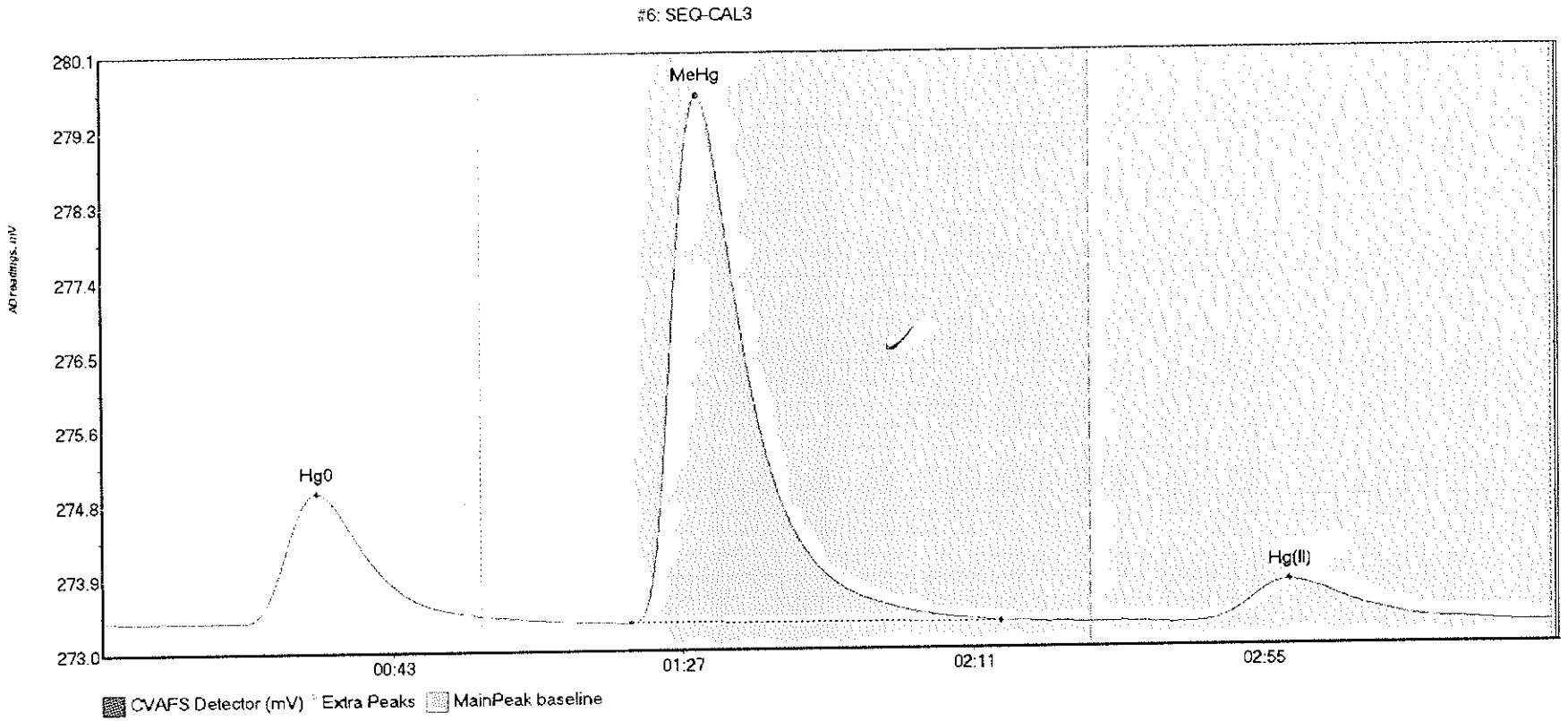
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CAL1 Hg0	17.430	21.5	46.6	274.37	274.36	30.8	0.134	OK	274.3889	0.00	-0.19	
SEQ-CAL1 MeHg	41.123	80.3	113.4	274.30	274.28	89.8	0.316	OK	274.3889	0.00	-0.19	
SEQ-CAL1 Hg(II)	49.443	163.9	203.6	274.23	274.23	178.1	0.297	OK	274.3889	0.00	-0.19	

016



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CAL2 Hg0	21.856	22.4	49.1	273.83	273.82	32.0	0.165	OK	273.8485	0.00	-0.16	
SEQ-CAL2 MeHg	154.343	80.5	124.7	273.77	273.76	90.3	1.177	OK	273.8485	0.00	-0.16	
SEQ-CAL2 Hg(II)	56.272	165.6	206.6	273.72	273.70	179.4	0.330	OK	273.8485	0.00	-0.16	

016



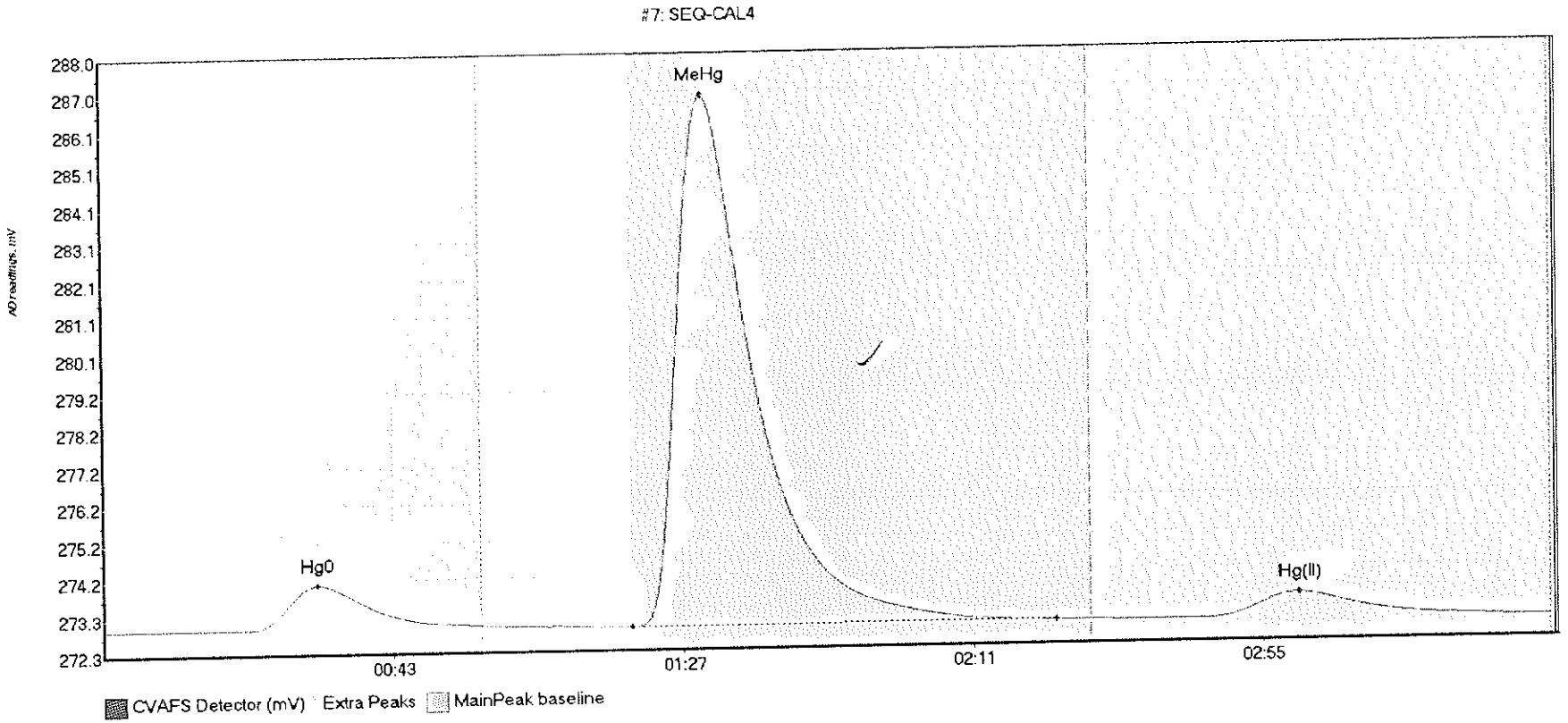
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CAL3 Hg0	208.440	21.1	57.5	273.35	273.40	32.6	1.541	CT	273.3610	0.00	-0.12	
SEQ-CAL3 MeHg	854.149	80.1	136.2	273.31	273.29	90.5	6.276	OK	273.3610	0.00	-0.12	
SEQ-CAL3 Hg(II)	88.783	164.1	213.0	273.26	273.25	180.0	0.497	OK	273.3610	0.00	-0.12	

016

EPA1630

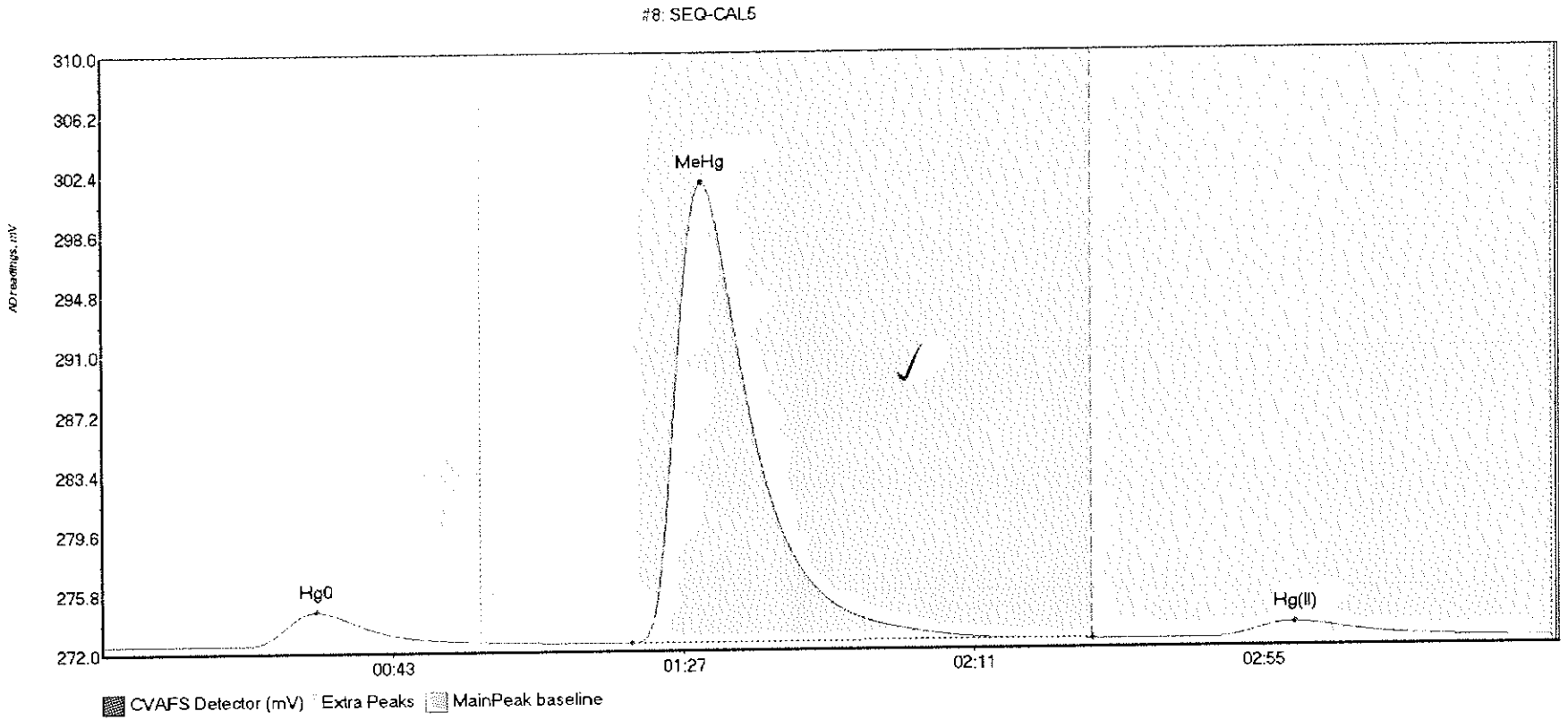
Peak Chart for MMHg27001-160610-1

MMHg27001-160610-1



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CAL4 Hg0	154.865	21.6	57.5	272.93	272.98	32.6	1.169	CT	272.9510	0.00	-0.12	
SEQ-CAL4 MeHg	1907.667	80.1	144.6	272.89	272.89	91.3	14.008	OK	272.9510	0.00	-0.12	
SEQ-CAL4 Hg(II)	114.517	166.5	213.6	272.86	272.84	181.6	0.650	OK	272.9510	0.00	-0.12	

016



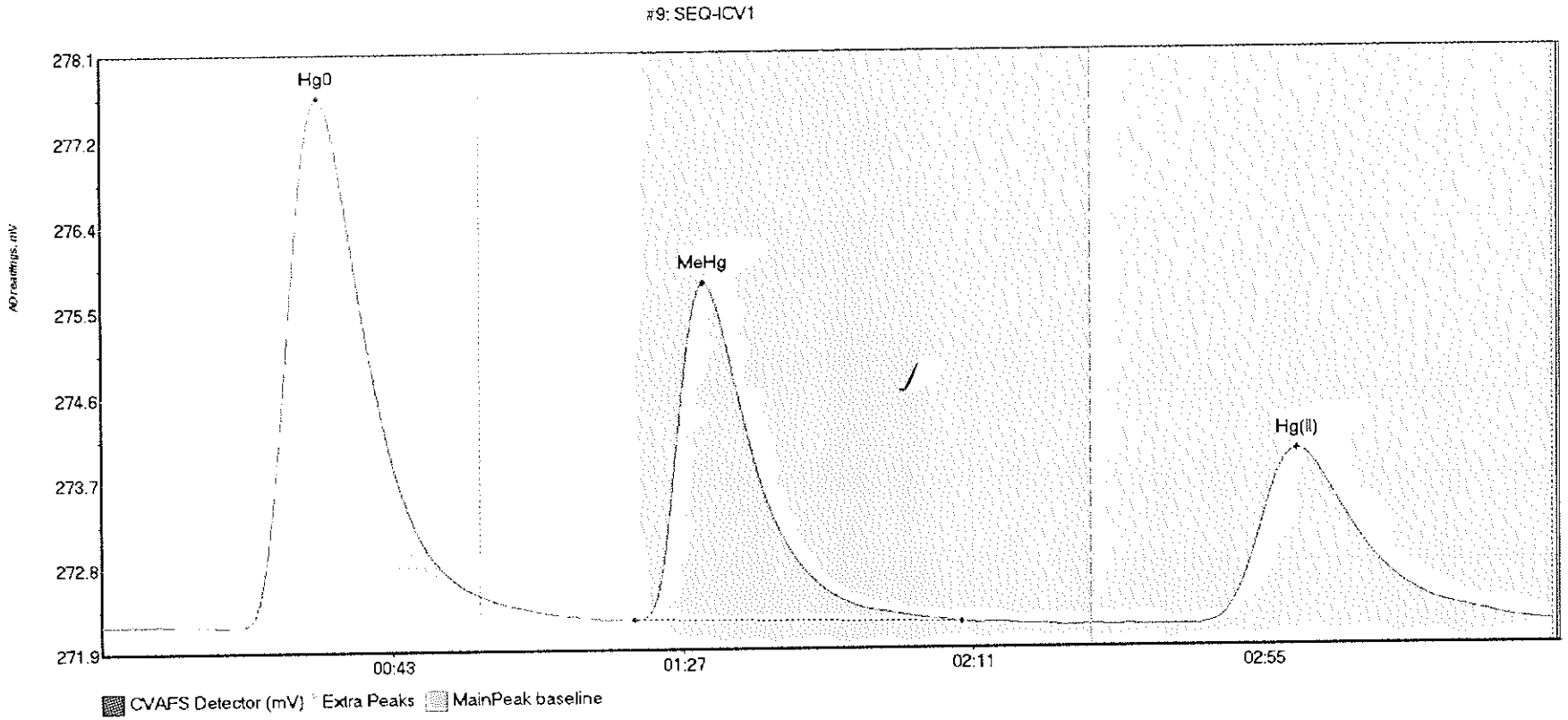
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CAL5 Hg0	282.525	21.7	57.5	272.54	272.65	32.5	2.100	CT	272.5642	0.00	-0.08	
SEQ-CAL5 MeHg	3983.928	80.1	150.0	272.52	272.57	90.9	29.255	CT	272.5642	0.00	-0.08	
SEQ-CAL5 Hg(II)	166.912	165.9	215.0	272.53	272.50	180.9	0.944	OK	272.5642	0.00	-0.08	

016

EPA1630

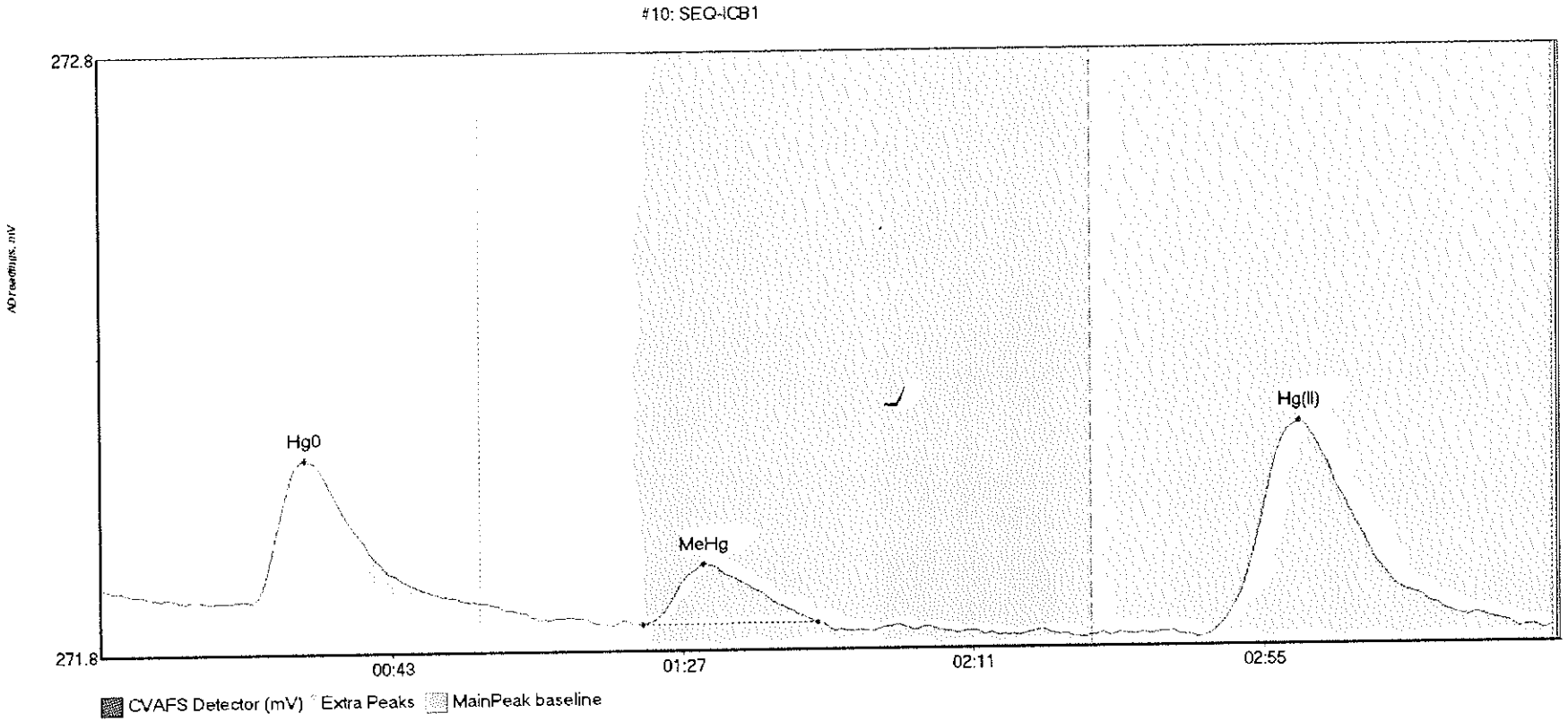
Peak Chart for MMHg27001-160610-1

MMHg27001-160610-1



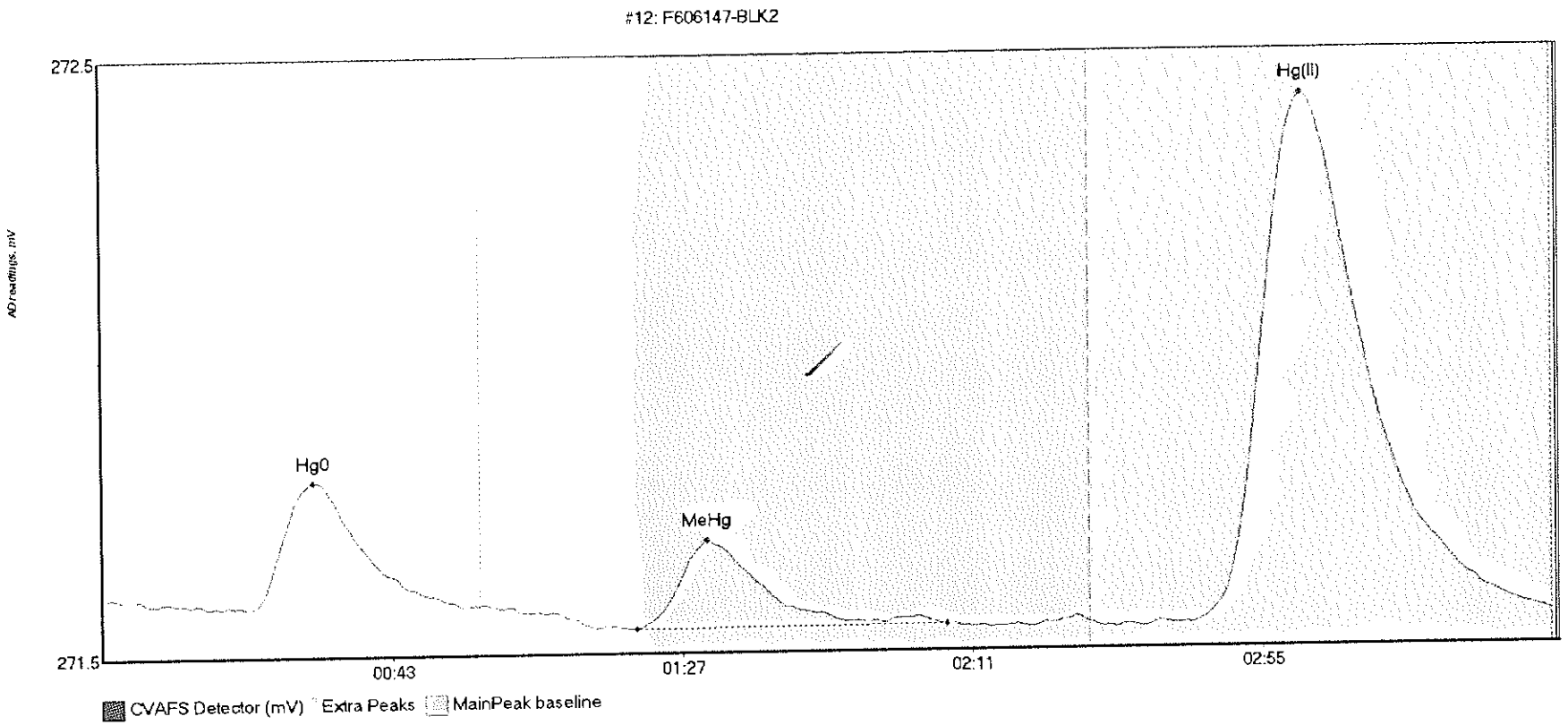
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-ICV1 Hg0	739.211	19.8	57.5	272.19	272.49	32.7	5.488	CT	272.2095	0.00	-0.05	
SEQ-ICV1 MeHg	468.055	80.6	130.3	272.23	272.19	91.2	3.500	OK	272.2095	0.00	-0.05	
SEQ-ICV1 Hg(II)	325.241	165.6	219.8	272.15	272.16	181.2	1.811	CT	272.2095	0.00	-0.05	

016



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-ICB1 Hg0	29.245	22.7	52.7	271.92	271.92	30.8	0.237	OK	271.9397	0.00	-0.08	
SEQ-ICB1 MeHg	13.202	82.0	108.4	271.87	271.87	91.2	0.101	OK	271.9397	0.00	-0.08	
SEQ-ICB1 Hg(II)	62.953	166.3	218.5	271.84	271.85	181.5	0.359	OK	271.9397	0.00	-0.08	

016



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F606147-BLK2 Hg	26.799	22.3	52.8	271.53	271.54	32.2	0.213	OK	271.5491	0.00	-0.04	
F606147-BLK2 Me	21.114	81.2	128.1	271.49	271.49	91.7	0.147	OK	271.5491	0.00	-0.04	
F606147-BLK2 Hg	159.546	165.4	219.8	271.49	271.51	182.1	0.883	CT	271.5491	0.00	-0.04	

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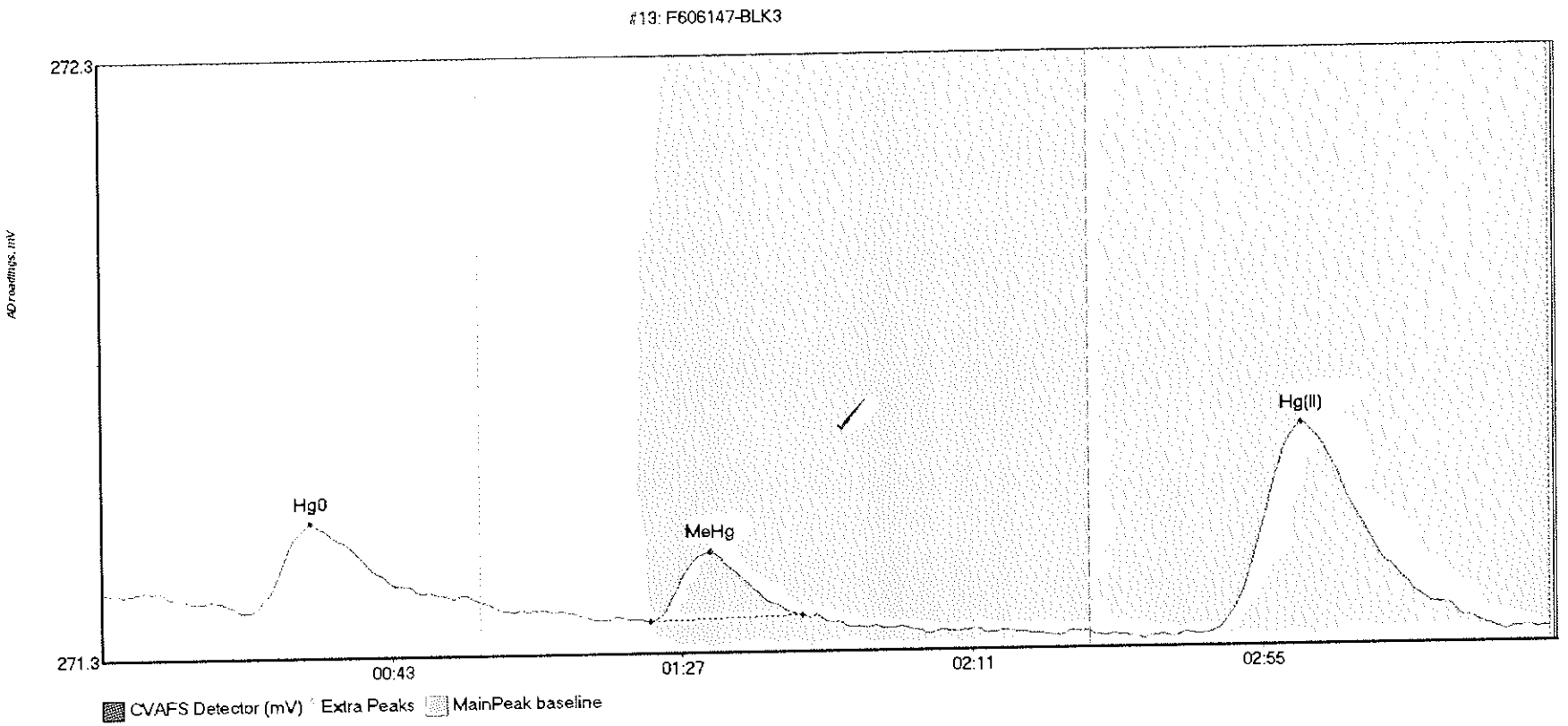
Peak Chart for MMHg27001-160610-1

MMHg27001-160610-1



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F606147-BLK3 Hg	16.699	22.3	48.1	271.37	271.40	31.9	0.149	OK	271.4043	0.00	-0.09	
F606147-BLK3 Me	12.292	83.3	106.1	271.35	271.35	92.4	0.115	OK	271.4043	0.00	-0.09	
F606147-BLK3 Hg	61.615	167.5	213.1	271.32	271.31	182.1	0.351	OK	271.4043	0.00	-0.09	

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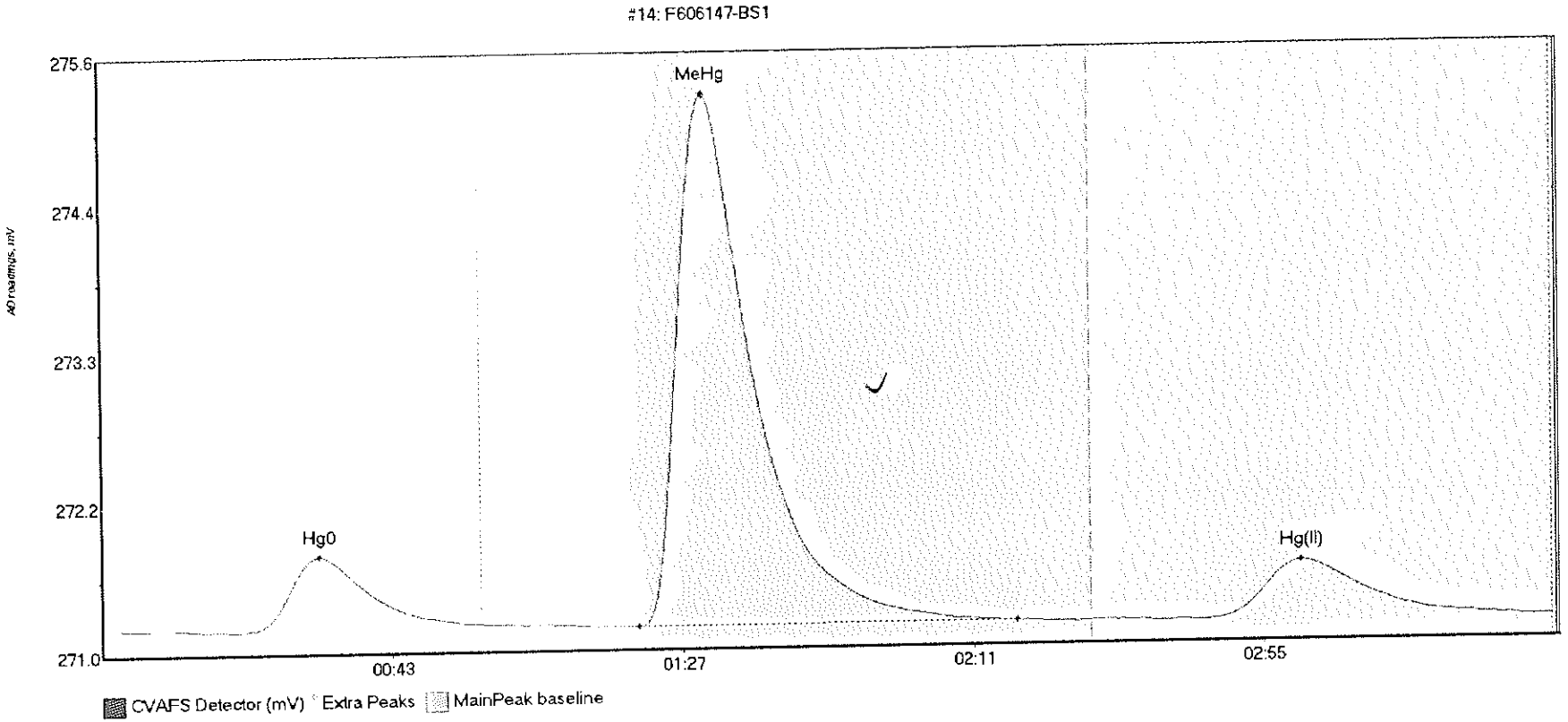
Peak Chart for MMHg27001-160610-1

MMHg27001-160610-1



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F606147-BS1 Hg0	75.011	20.2	57.5	271.19	271.23	33.0	0.572	CT	271.2243	0.00	-0.03	
F606147-BS1 MeH	543.260	81.3	138.6	271.20	271.20	91.4	4.067	OK	271.2243	0.00	-0.03	
F606147-BS1 Hg(	76.981	167.4	215.7	271.19	271.19	181.7	0.443	OK	271.2243	0.00	-0.03	

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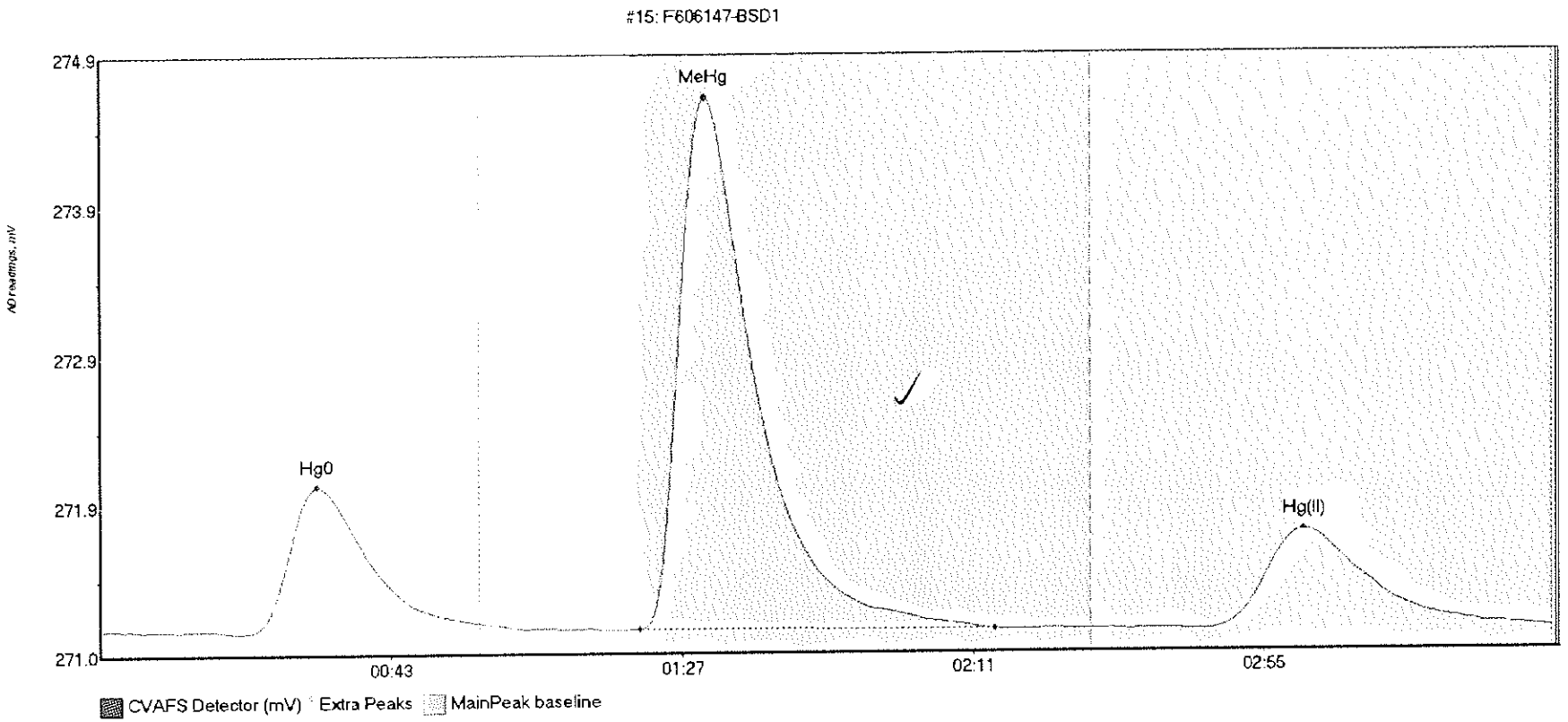
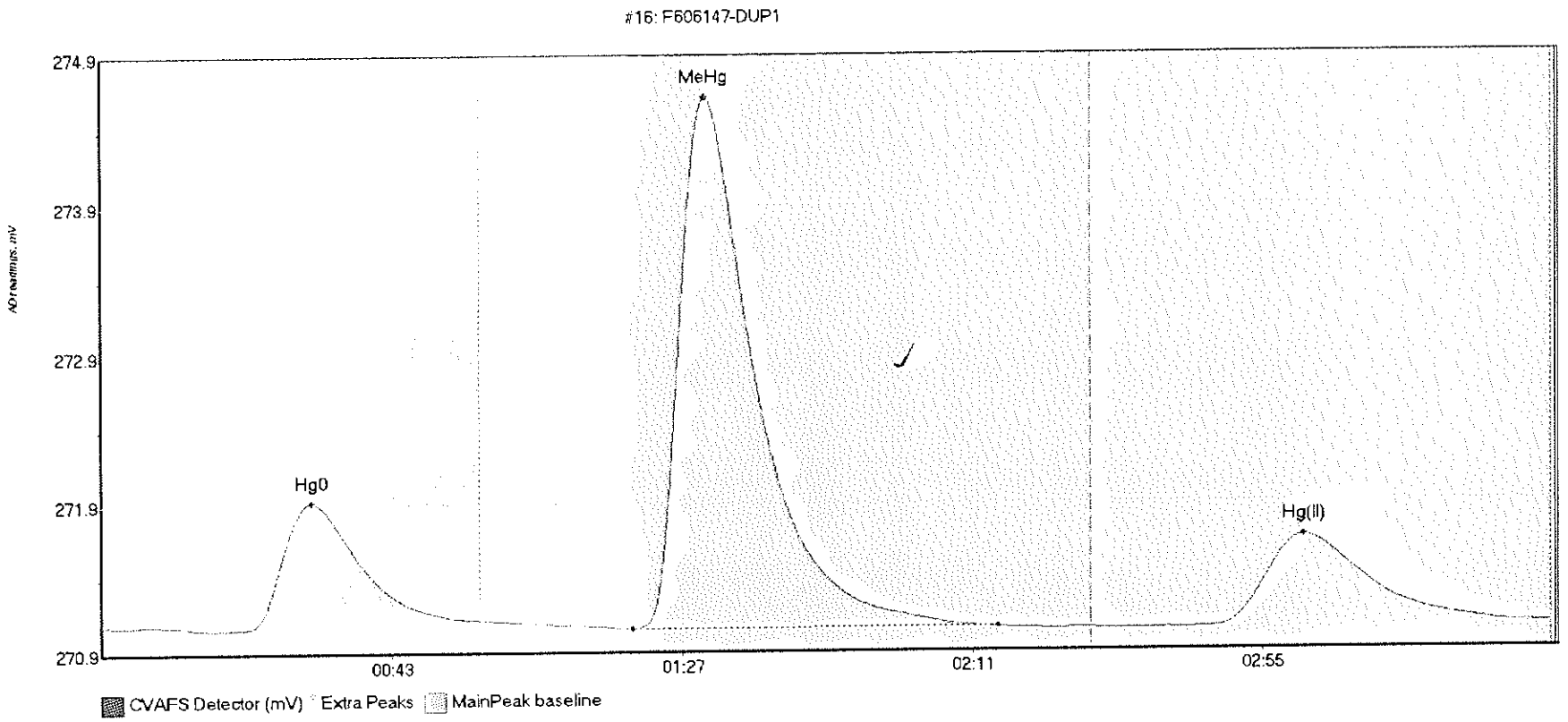


Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F606147-BSD1 Hg	124.693	22.3	57.5	271.11	271.17	32.9	0.962	CT	271.1288	0.00	-0.01	
F606147-BSD1 Me	469.151	81.6	135.3	271.12	271.11	91.5	3.502	OK	271.1288	0.00	-0.01	
F606147-BSD1 Hg	114.487	167.8	219.1	271.11	271.11	182.2	0.652	OK	271.1288	0.00	-0.01	



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F606147-DUP1 Hg	110.981	20.8	57.5	271.03	271.09	31.8	0.855	CT	271.0590	0.00	-0.02	
F606147-DUP1 Me	478.927	80.5	135.9	271.02	271.03	91.5	3.575	OK	271.0590	0.00	-0.02	
F606147-DUP1 Hg	108.322	167.5	218.3	271.02	271.04	182.3	0.614	OK	271.0590	0.00	-0.02	

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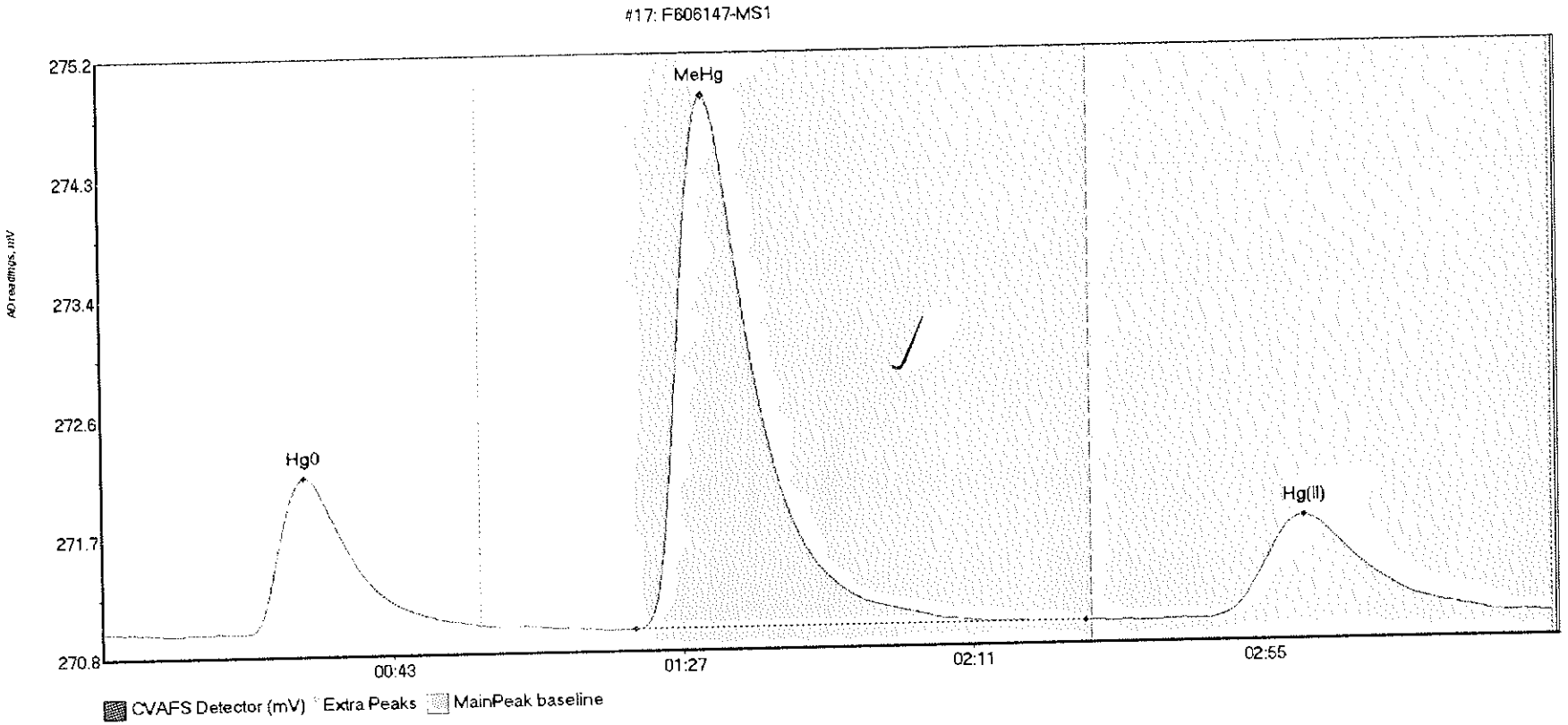
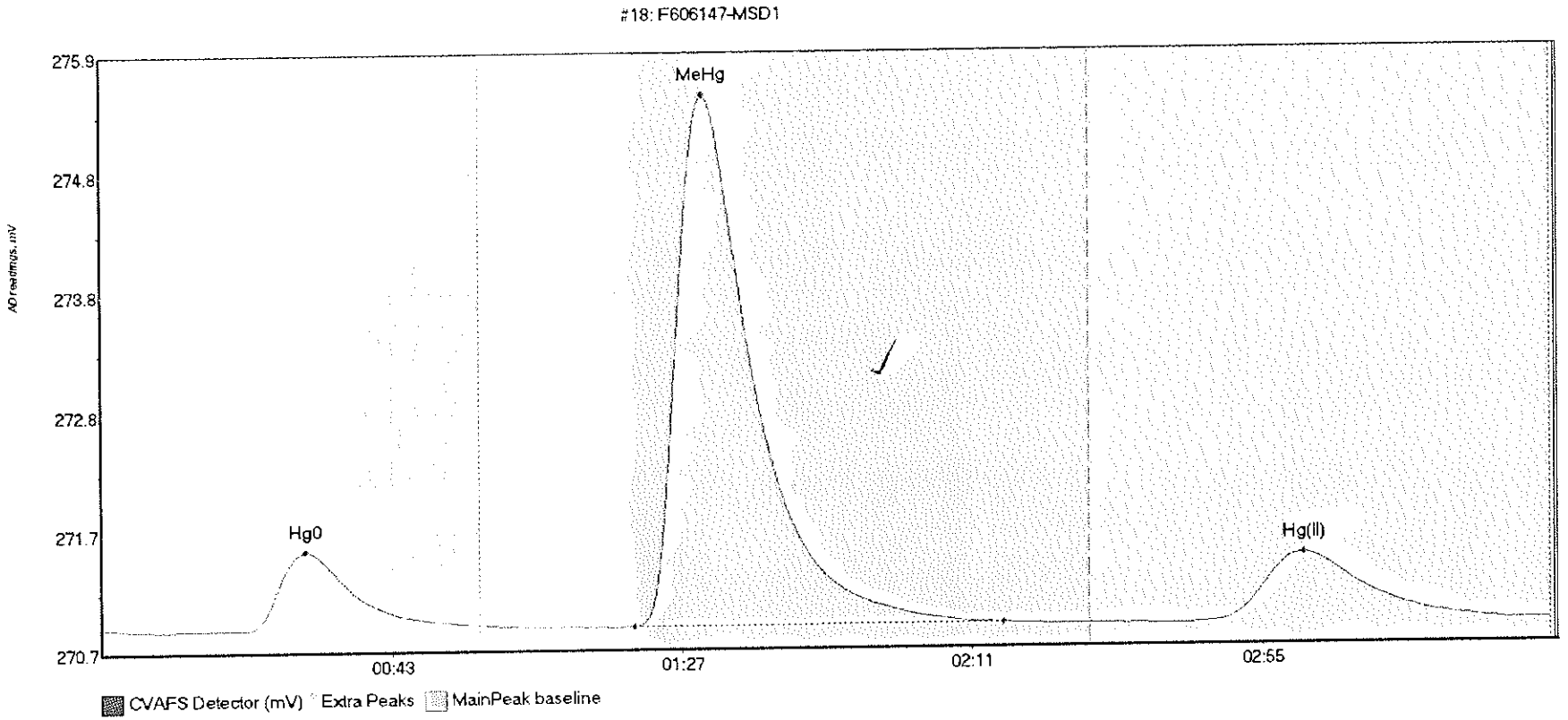
Peak Chart for MMHg27001-160610-1

MMHg27001-160610-1



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F606147-MS1 Hg0	139.682	21.2	57.5	270.98	271.01	30.6	1.138	CT	270.9920	0.00	-0.01	
F606147-MS1 MeH	525.734	80.7	149.1	270.96	270.97	91.4	3.904	OK	270.9920	0.00	-0.01	
F606147-MS1 Hg(	131.804	166.3	219.3	270.97	270.98	182.3	0.744	OK	270.9920	0.00	-0.01	

016



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F606147-MSD1 Hg	82.251	21.0	57.5	270.91	270.94	31.0	0.675	CT	270.9249	0.00	-0.01	
F606147-MSD1 Me	610.520	80.9	136.9	270.92	270.92	91.3	4.572	OK	270.9249	0.00	-0.01	
F606147-MSD1 Hg	104.313	167.2	217.5	270.91	270.91	182.3	0.587	OK	270.9249	0.00	-0.01	

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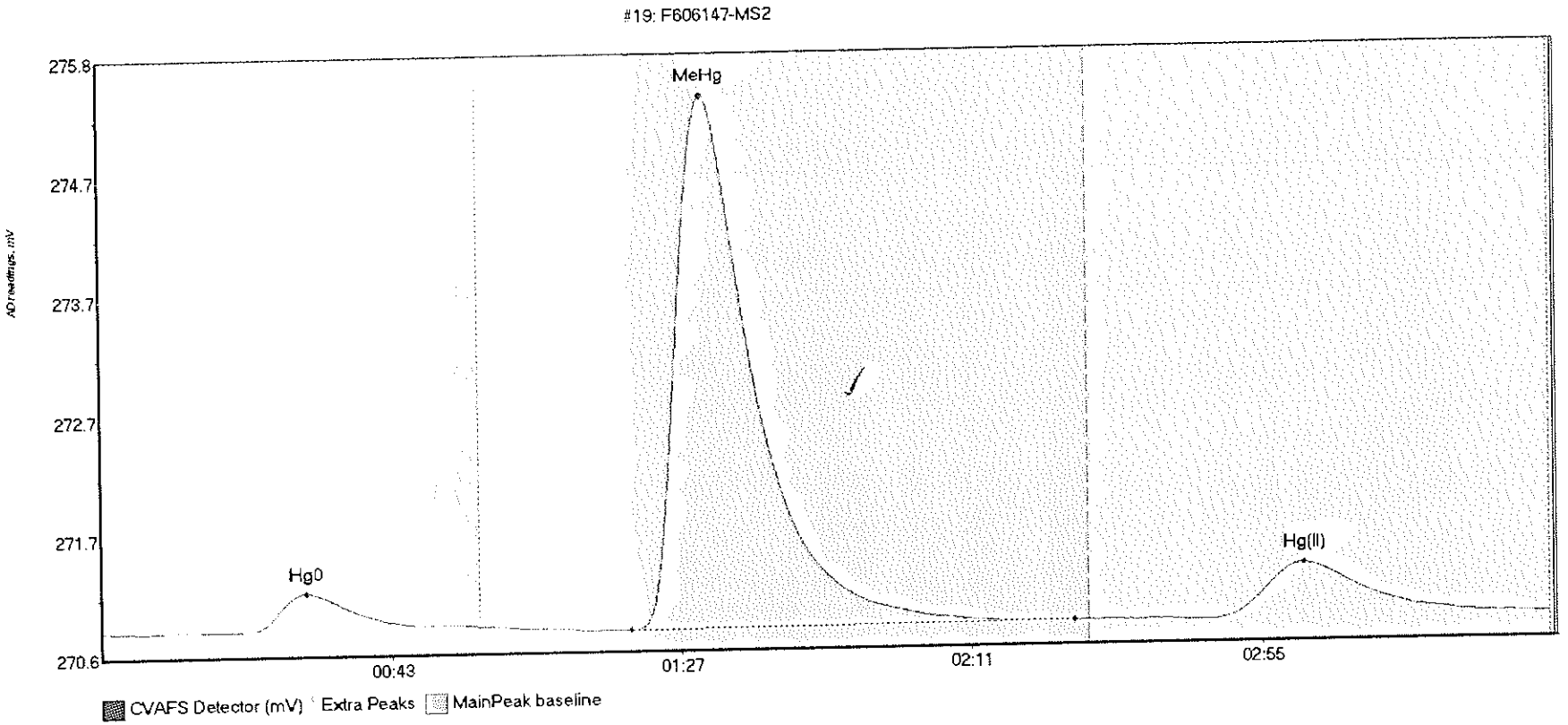
Peak Chart for MMHg27001-160610-1

MMHg27001-160610-1



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F606147-MS2 Hg0	38.653	22.8	57.5	270.86	270.87	31.1	0.320	CT	270.8623	0.00	-0.01	
F606147-MS2 MeH	618.366	80.5	147.8	270.82	270.84	91.5	4.566	OK	270.8623	0.00	-0.01	
F606147-MS2 Hg(	83.339	167.8	219.6	270.83	270.85	182.4	0.475	OK	270.8623	0.00	-0.01	

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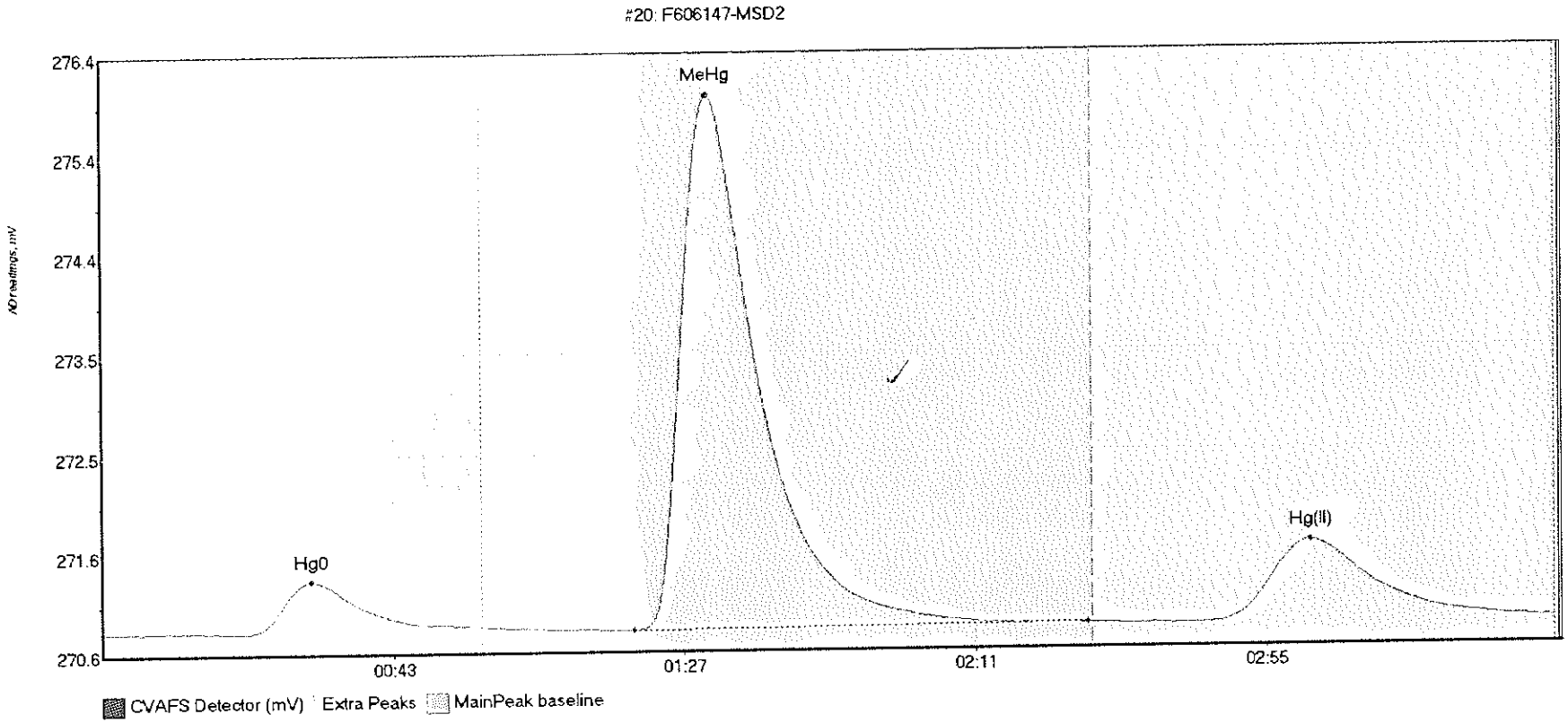
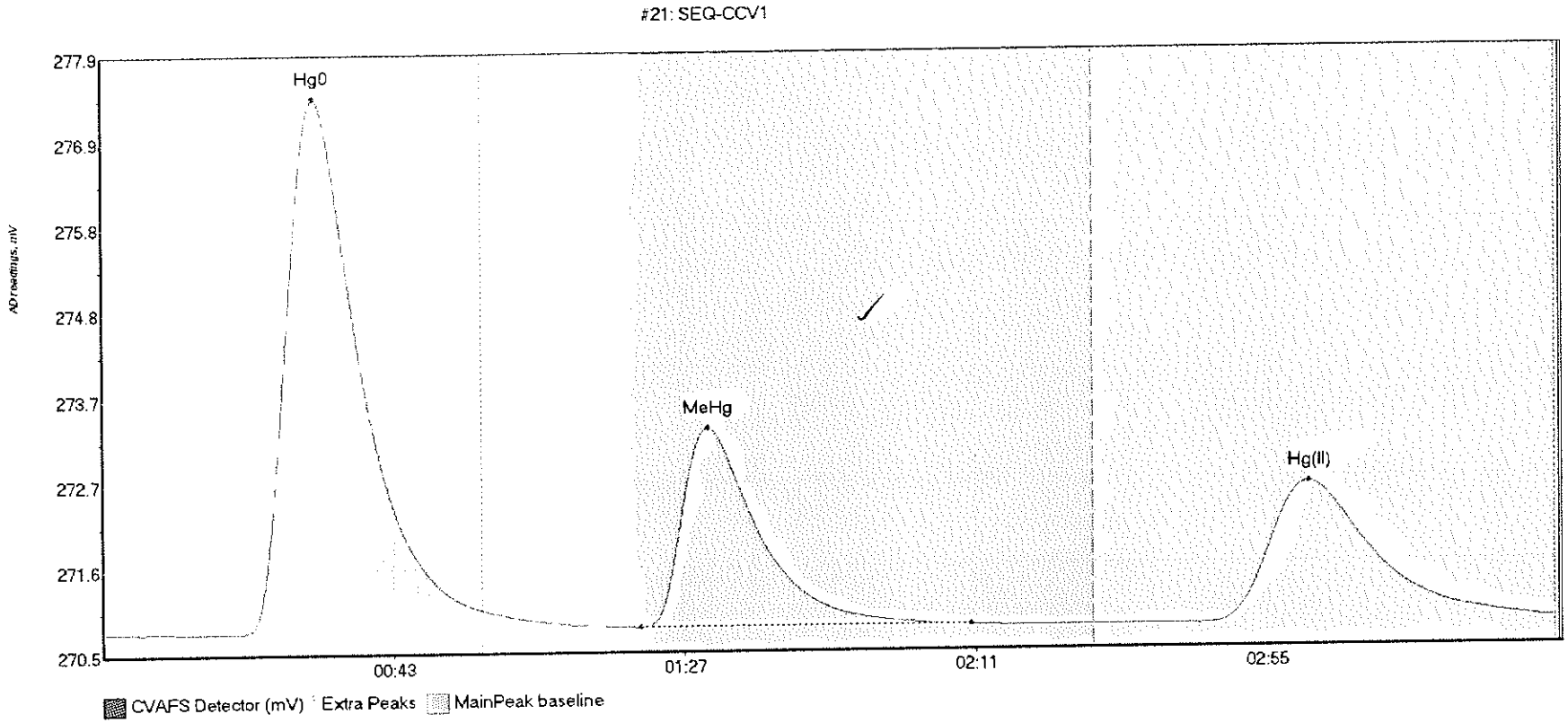


Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F606147-MSD2 Hg	60.853	21.3	57.5	270.81	270.86	31.7	0.496	CT	270.8197	0.00	0.04	
F606147-MSD2 Me	690.904	80.5	149.2	270.81	270.84	91.7	5.148	OK	270.8197	0.00	0.04	
F606147-MSD2 Hg	138.258	167.1	219.8	270.82	270.86	182.7	0.788	CT	270.8197	0.00	0.04	

016



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CCV1 Hg0	810.764	20.2	57.5	270.82	271.08	32.2	6.571	CT	270.8302	0.00	0.05	
SEQ-CCV1 MeHg	324.966	81.4	131.3	270.85	270.86	91.7	2.449	OK	270.8302	0.00	0.05	
SEQ-CCV1 Hg(II)	309.853	166.1	219.6	270.83	270.88	182.4	1.736	OK	270.8302	0.00	0.05	

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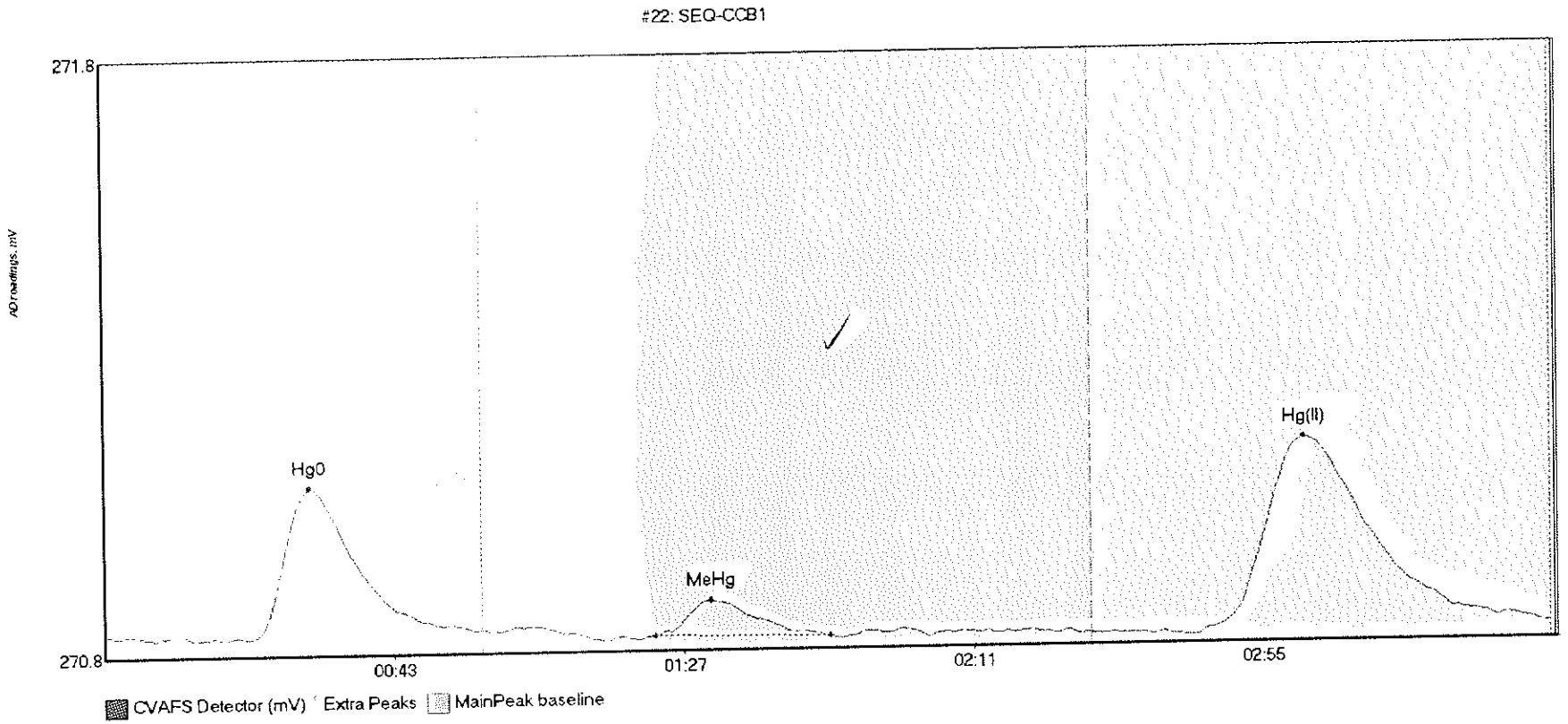
Peak Chart for MMHg27001-160610-1

MMHg27001-160610-1



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CCB1 Hg0	30.727	22.0	56.2	270.79	270.80	31.3	0.254	OK	270.8027	0.00	-0.01	
SEQ-CCB1 MeHg	7.230	83.6	110.3	270.79	270.79	92.1	0.059	OK	270.8027	0.00	-0.01	
SEQ-CCB1 Hg(II)	60.181	165.9	219.8	270.78	270.79	182.3	0.331	CT	270.8027	0.00	-0.01	

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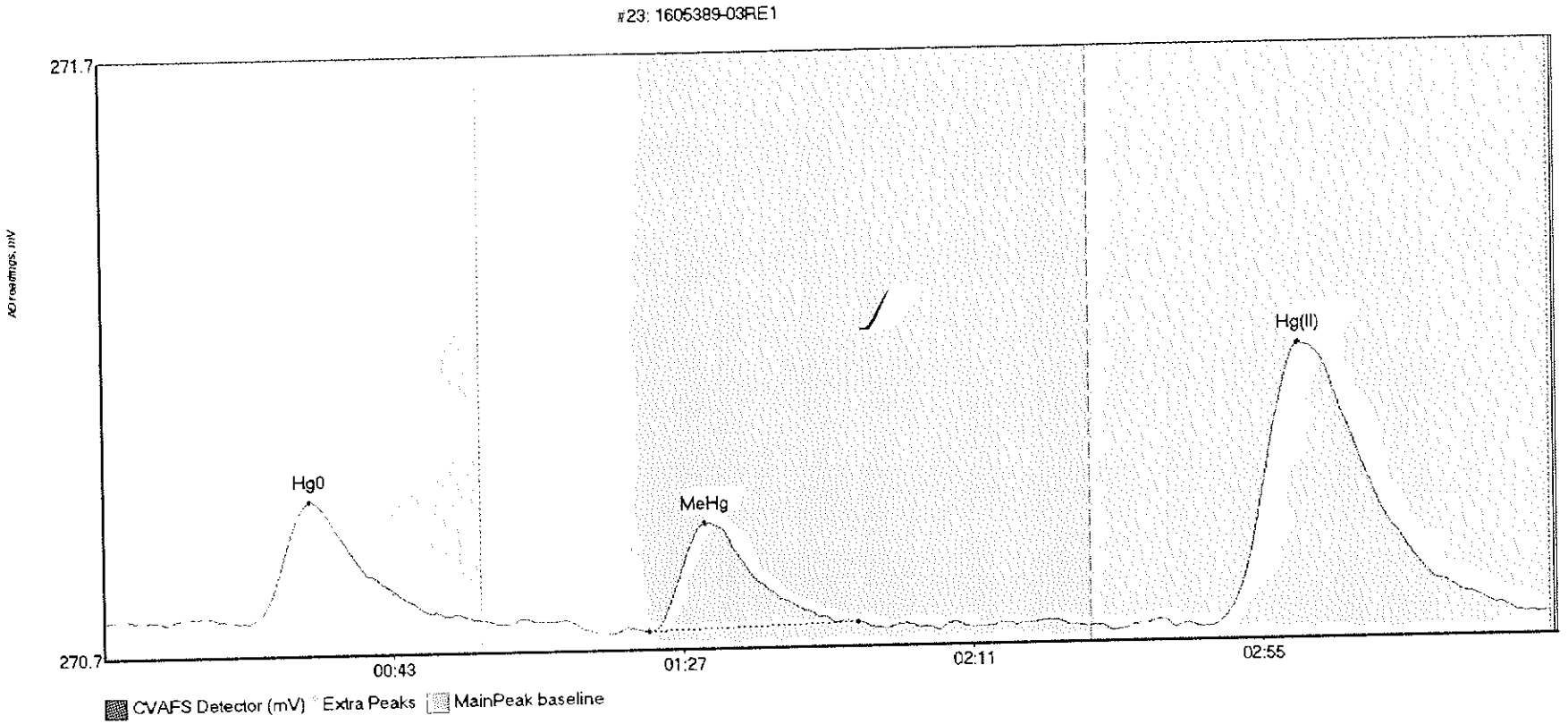
Peak Chart for MMHg27001-160610-1

MMHg27001-160610-1



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1605389-03RE1 H	25.025	22.3	52.2	270.77	270.77	31.5	0.202	OK	270.7742	0.00	-0.02	
1605389-03RE1 M	22.475	82.8	114.6	270.74	270.75	91.5	0.182	OK	270.7742	0.00	-0.02	
1605389-03RE1 H	84.459	168.6	218.5	270.74	270.75	181.7	0.471	OK	270.7742	0.00	-0.02	

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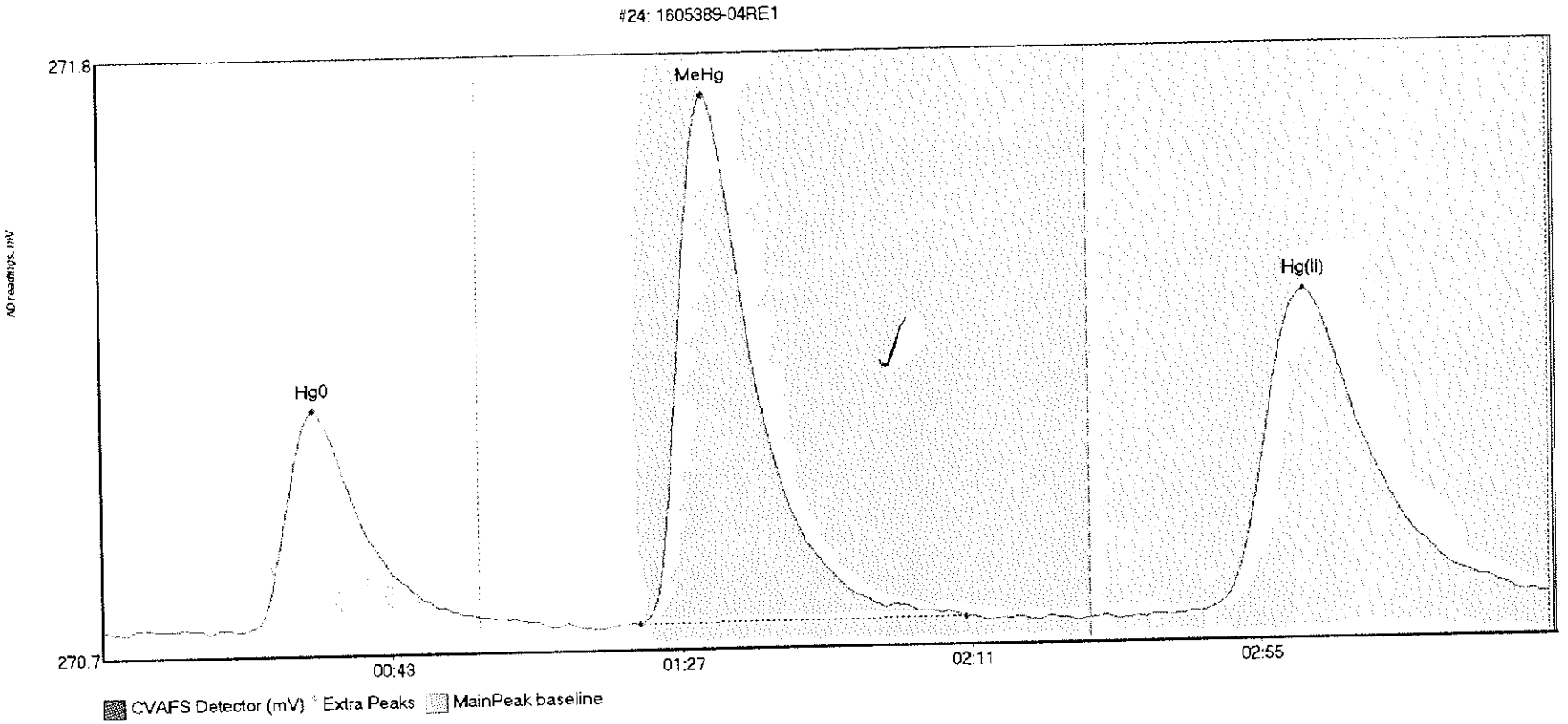
Peak Chart for MMHg27001-160610-1

MMHg27001-160610-1



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1605389-04RE1 H	54.361	20.9	57.5	270.72	270.74	32.1	0.435	CT	270.7217	0.00	0.03	
1605389-04RE1 M	139.127	81.6	131.1	270.72	270.72	91.8	1.040	OK	270.7217	0.00	0.03	
1605389-04RE1 H	112.683	163.9	218.9	270.72	270.75	182.9	0.637	OK	270.7217	0.00	0.03	

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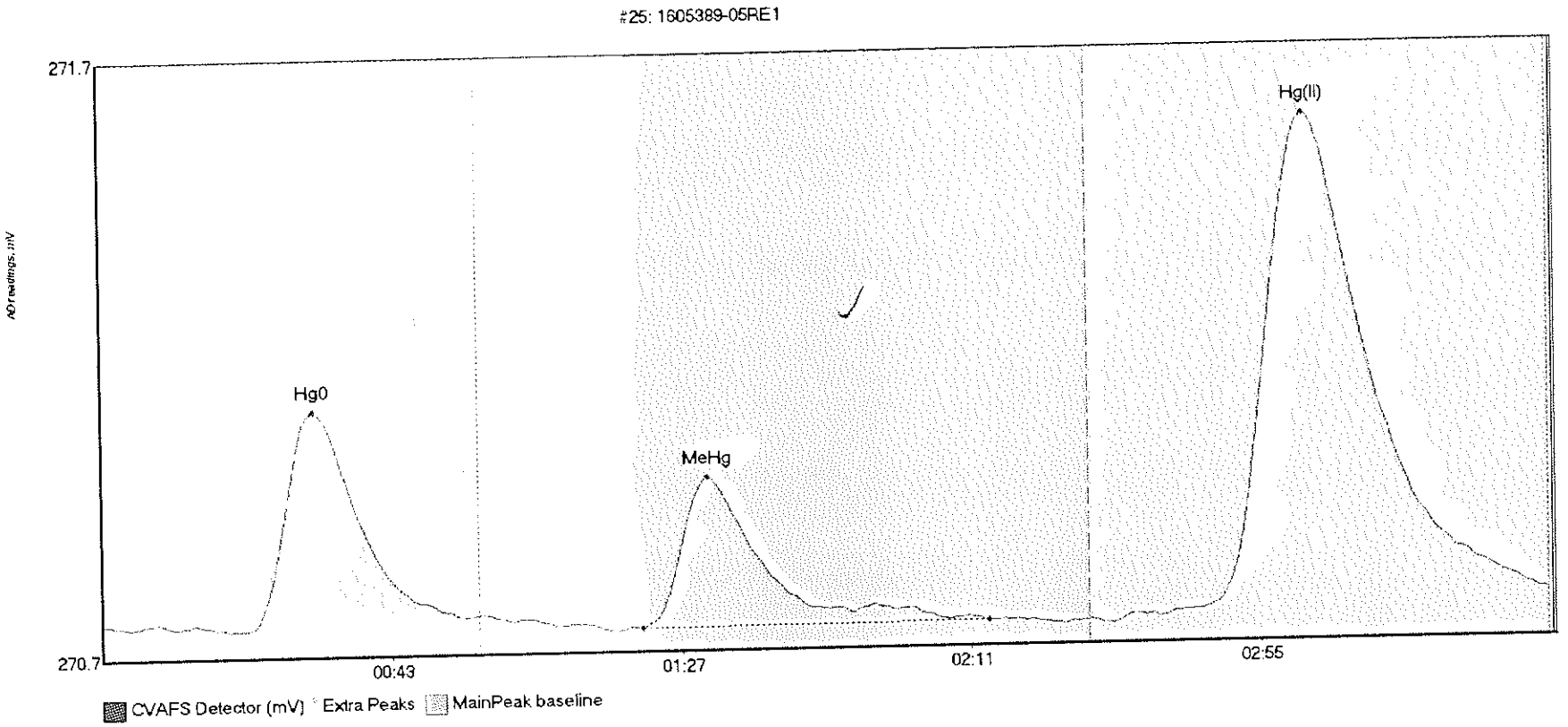
Peak Chart for MMHg27001-160610-1

MMHg27001-160610-1



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1605389-05RE1 H	45.038	21.5	55.5	270.73	270.74	32.2	0.366	OK	270.7377	0.00	0.02	
1605389-05RE1 M	35.536	82.0	134.8	270.72	270.72	92.0	0.251	OK	270.7377	0.00	0.02	
1605389-05RE1 H	147.931	160.9	219.8	270.72	270.76	183.1	0.838	CT	270.7377	0.00	0.02	

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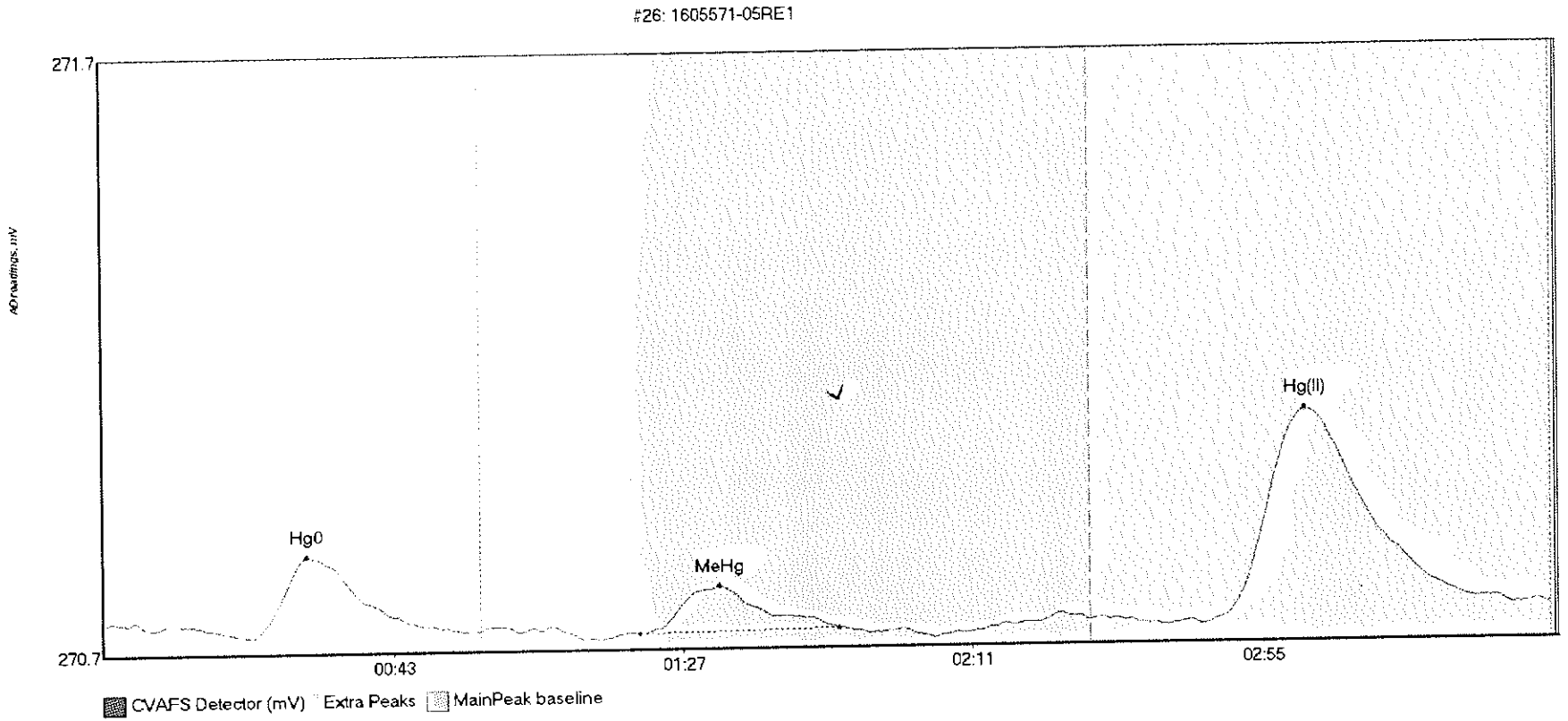
Peak Chart for MMHg27001-160610-1

MMHg27001-160610-1



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1605571-05RE1 H	14.661	22.4	46.7	270.72	270.74	30.9	0.136	OK	270.7440	0.00	0.01	
1605571-05RE1 M	10.444	81.4	111.8	270.72	270.73	93.6	0.080	OK	270.7440	0.00	0.01	
1605571-05RE1 H	60.943	167.3	214.2	270.72	270.75	182.6	0.357	OK	270.7440	0.00	0.01	

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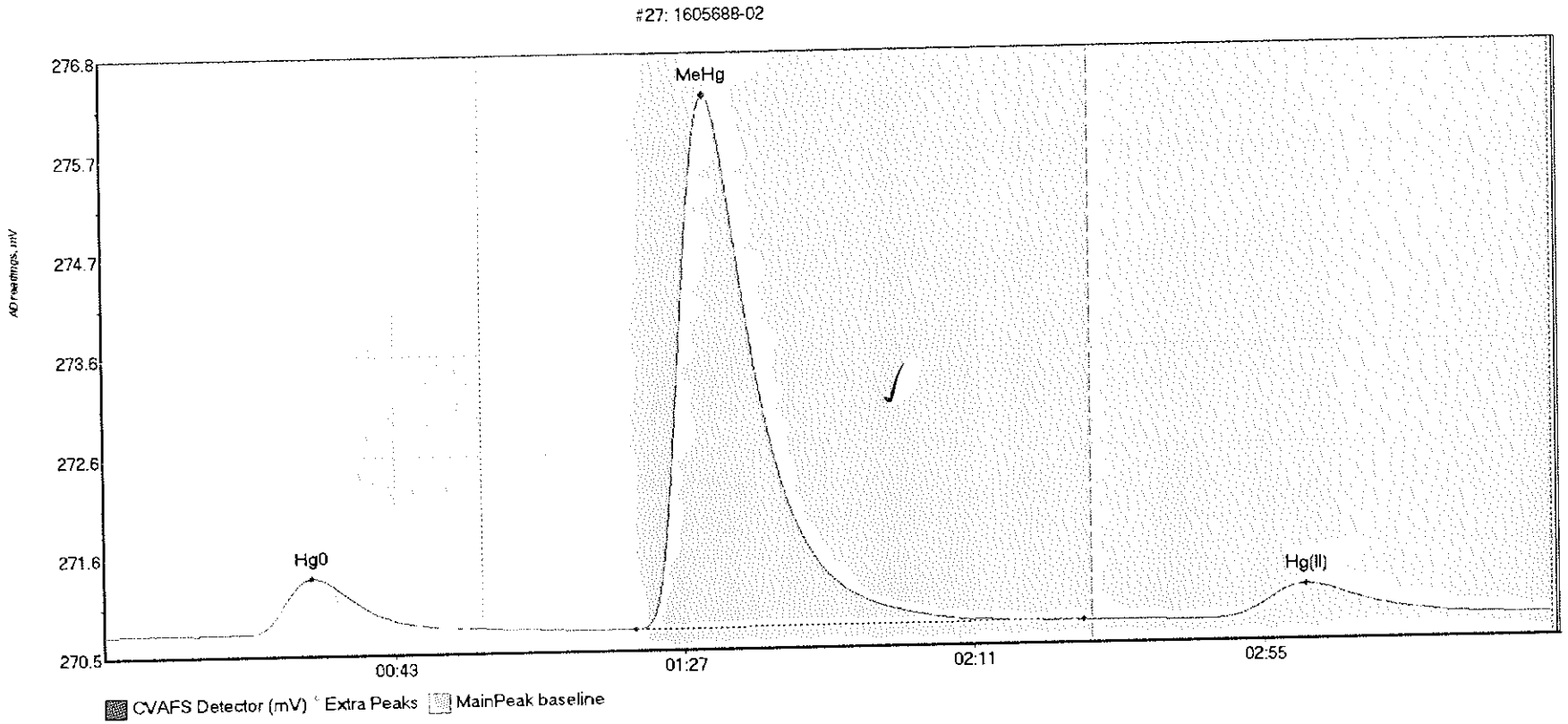
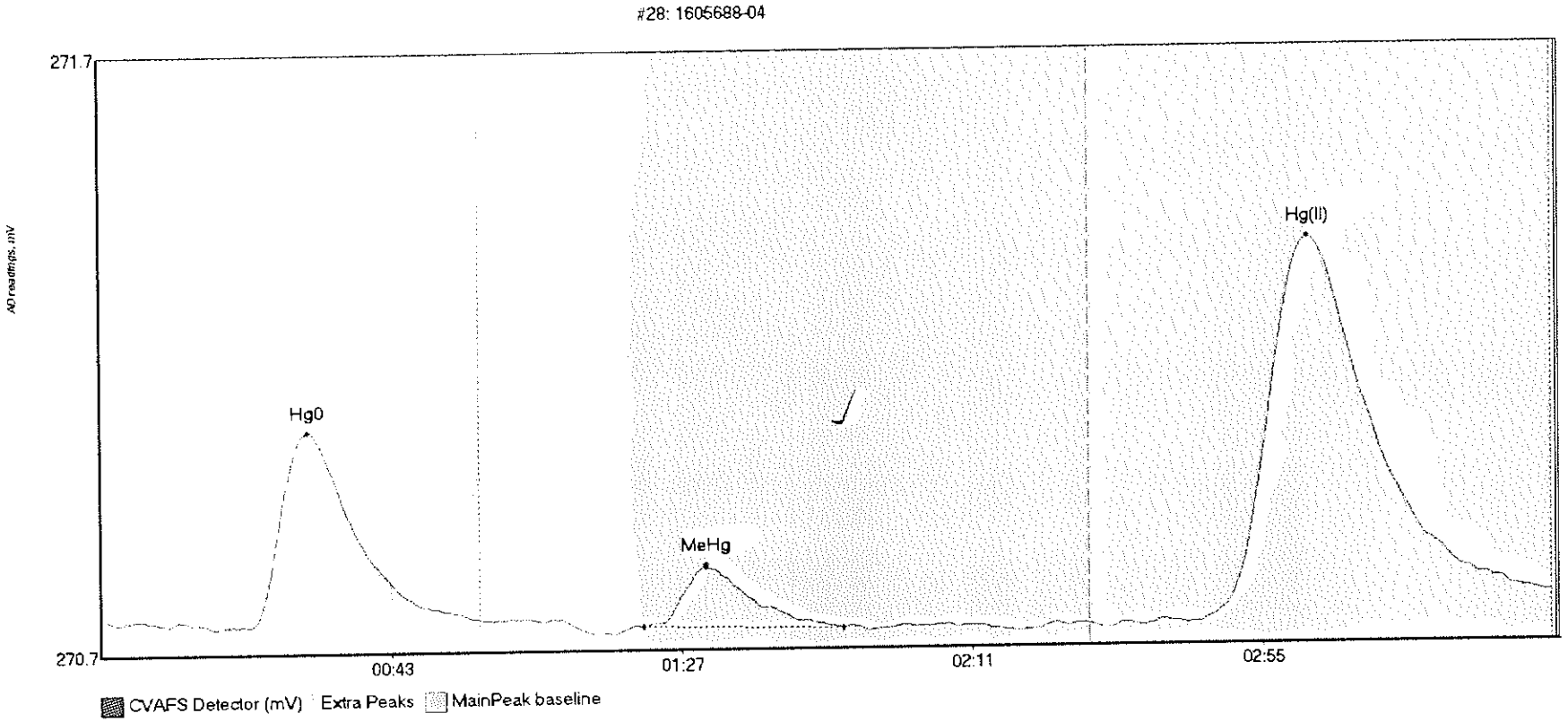
Peak Chart for MMHg27001-160610-1

MMHg27001-160610-1



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1605688-02 Hg0	72.138	14.1	57.5	270.74	270.77	31.5	0.586	CT	270.7347	0.00	0.02	
1605688-02 MeHg	753.032	80.6	148.6	270.73	270.75	91.5	5.595	OK	270.7347	0.00	0.02	
1605688-02 Hg(I	61.871	167.9	217.1	270.73	270.75	182.5	0.352	OK	270.7347	0.00	0.02	

016



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1605688-04 Hg0	40.657	22.4	56.7	270.72	270.73	31.4	0.326	OK	270.7318	0.00	0.03	
1605688-04 MeHg	11.705	82.3	112.4	270.71	270.71	91.7	0.100	OK	270.7318	0.00	0.03	
1605688-04 Hg(I	112.520	166.5	218.8	270.71	270.76	183.0	0.642	OK	270.7318	0.00	0.03	

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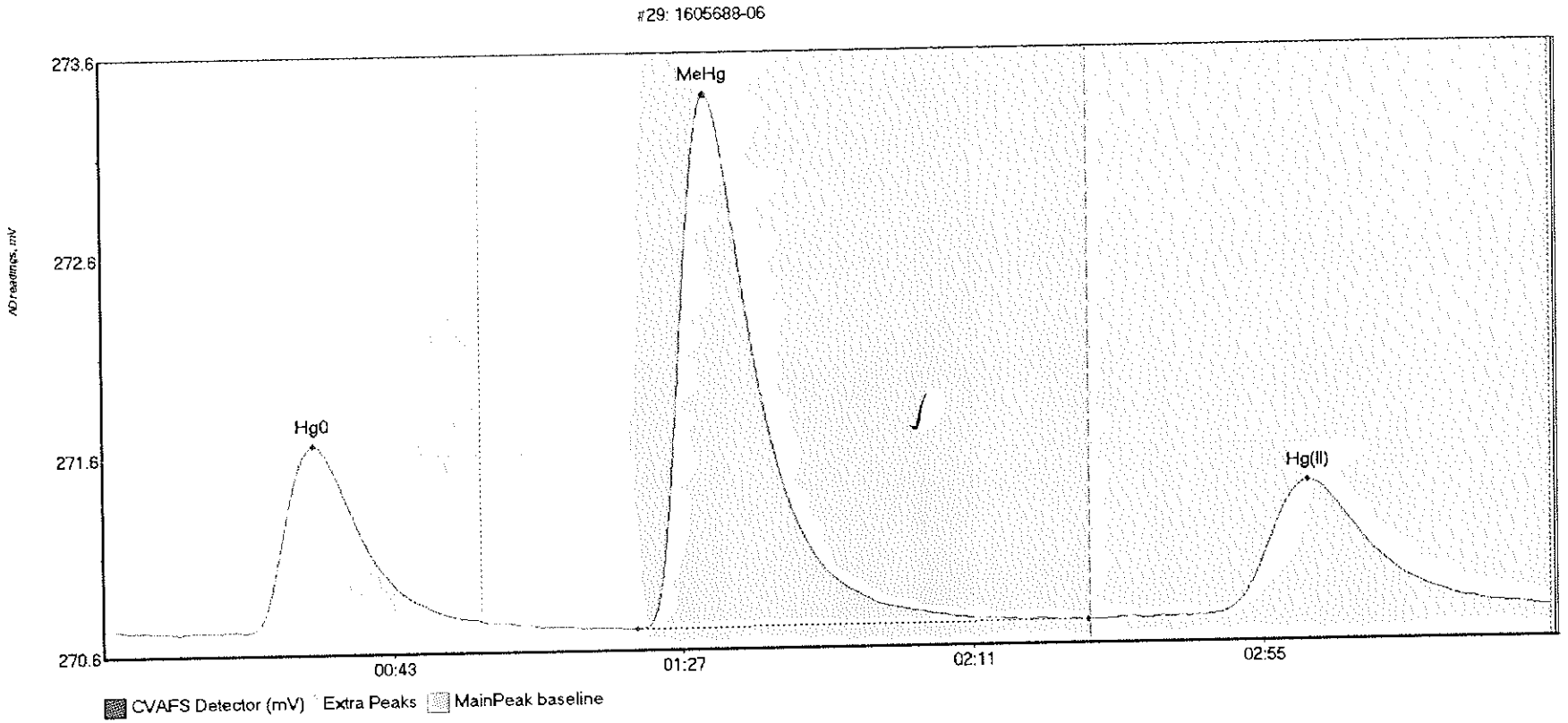
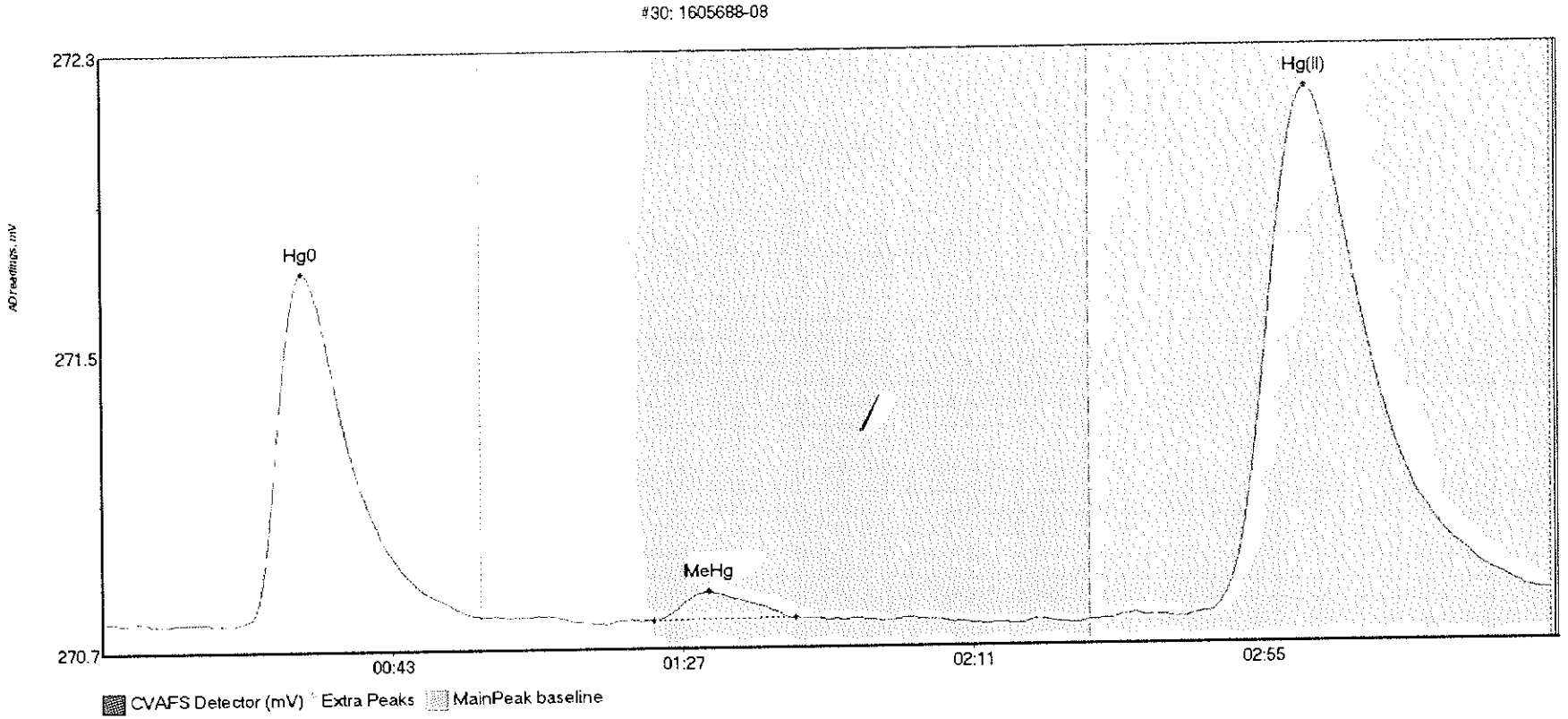
Peak Chart for MMHg27001-160610-1

MMHg27001-160610-1



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1605688-06 Hg0	121.820	21.6	57.5	270.73	270.77	32.0	0.944	CT	270.7441	0.00	0.03	
1605688-06 MeHg	366.477	81.0	149.6	270.72	270.73	91.8	2.699	OK	270.7441	0.00	0.03	
1605688-06 Hg(I	120.671	158.8	218.9	270.74	270.77	182.9	0.686	OK	270.7441	0.00	0.03	

016



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1605688-08 Hg0	116.871	19.8	57.5	270.75	270.76	30.4	0.942	CT	270.7586	0.00	0.05	
1605688-08 MeHg	8.431	83.6	105.1	270.75	270.75	92.0	0.075	OK	270.7586	0.00	0.05	
1605688-08 Hg(I	249.982	164.3	219.8	270.75	270.81	182.6	1.414	CT	270.7586	0.00	0.05	

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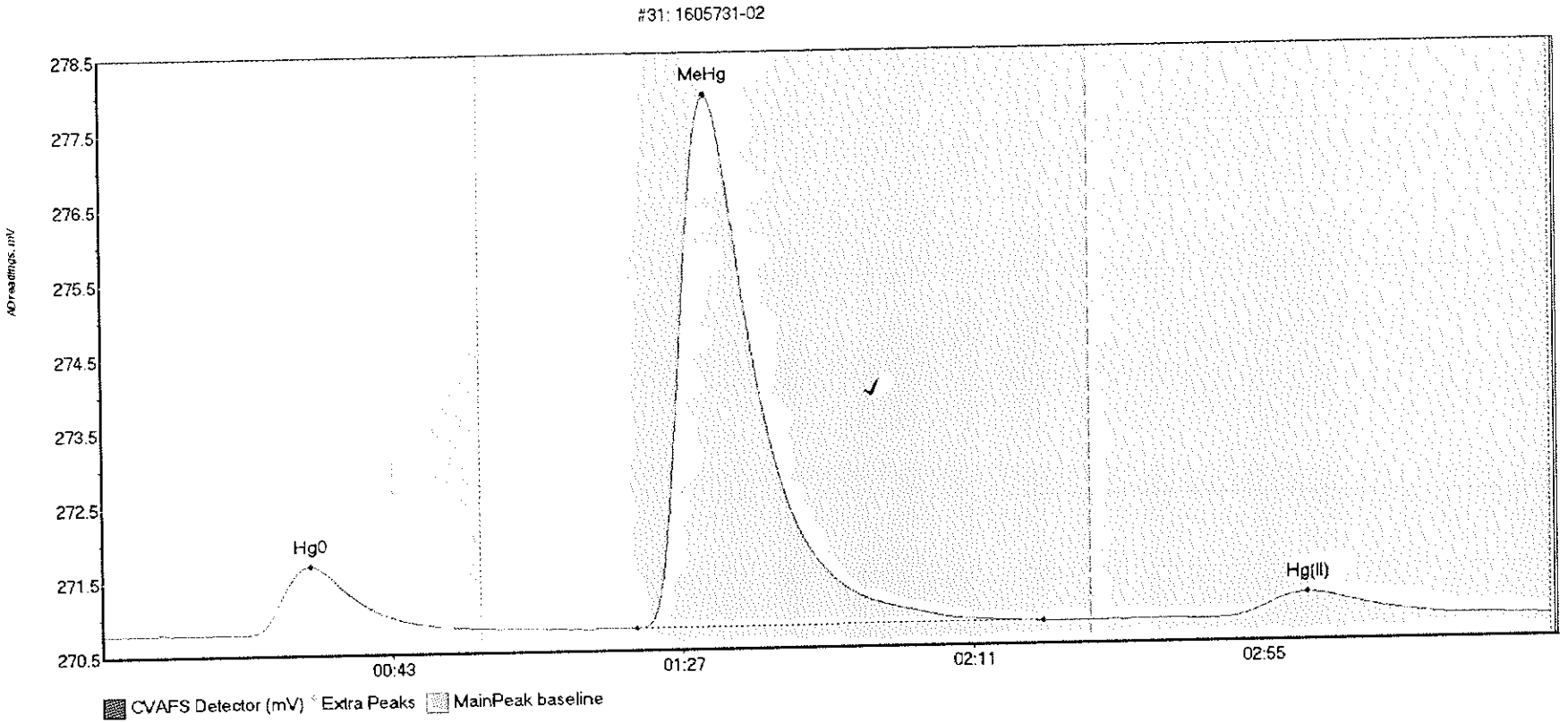
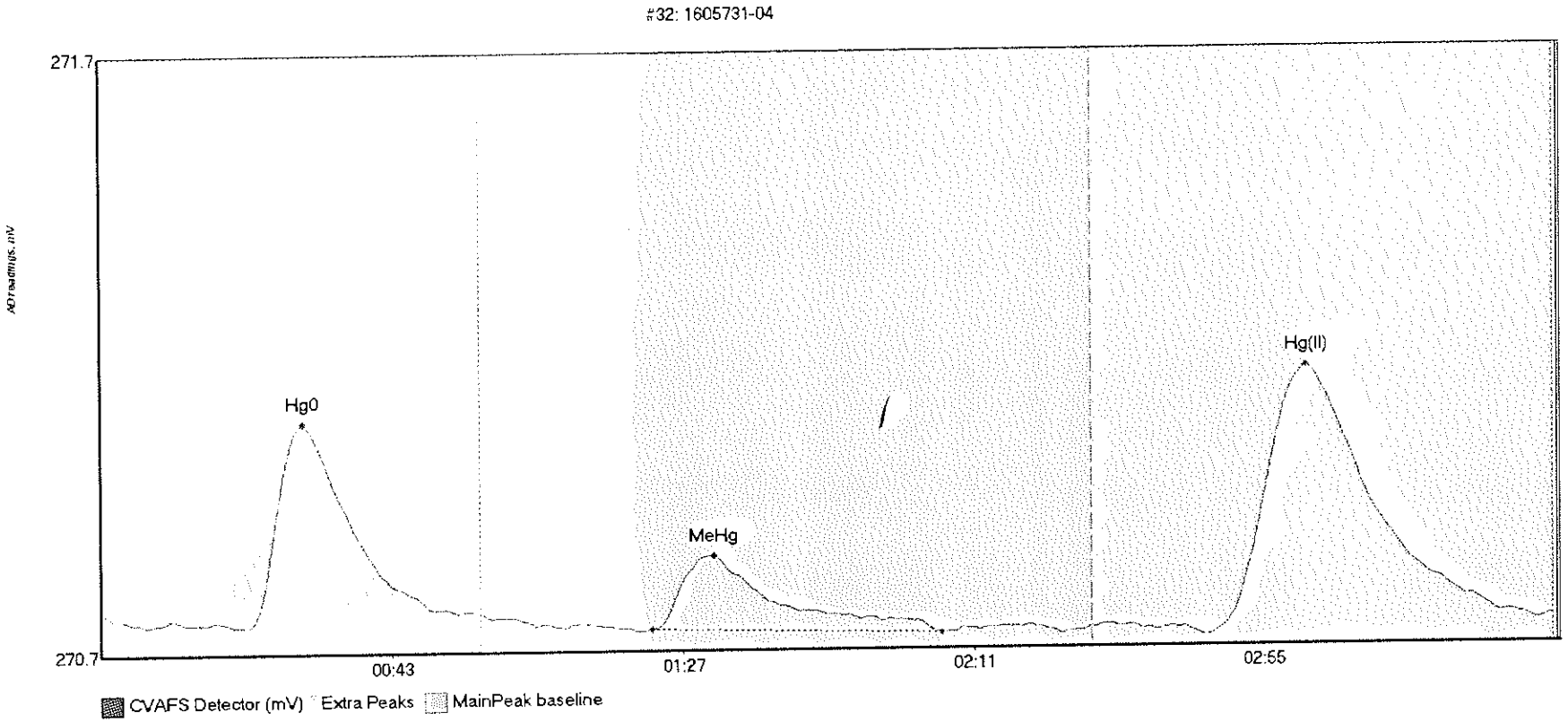
Peak Chart for MMHg27001-160610-1

MMHg27001-160610-1



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1605731-02 Hg0	113.247	19.6	57.5	270.77	270.81	31.7	0.910	CT	270.7794	0.00	0.01	
1605731-02 MeHg	964.255	81.0	142.6	270.79	270.79	91.9	7.134	OK	270.7794	0.00	0.01	
1605731-02 Hg(I	57.323	168.1	217.3	270.79	270.80	182.7	0.333	OK	270.7794	0.00	0.01	

016



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1605731-04 Hg0	39.953	22.1	50.4	270.75	270.78	30.6	0.341	OK	270.7750	0.00	-0.02	
1605731-04 MeHg	20.774	83.3	127.2	270.74	270.73	92.7	0.122	OK	270.7750	0.00	-0.02	
1605731-04 Hg(I	80.826	167.3	217.2	270.72	270.75	182.6	0.450	OK	270.7750	0.00	-0.02	

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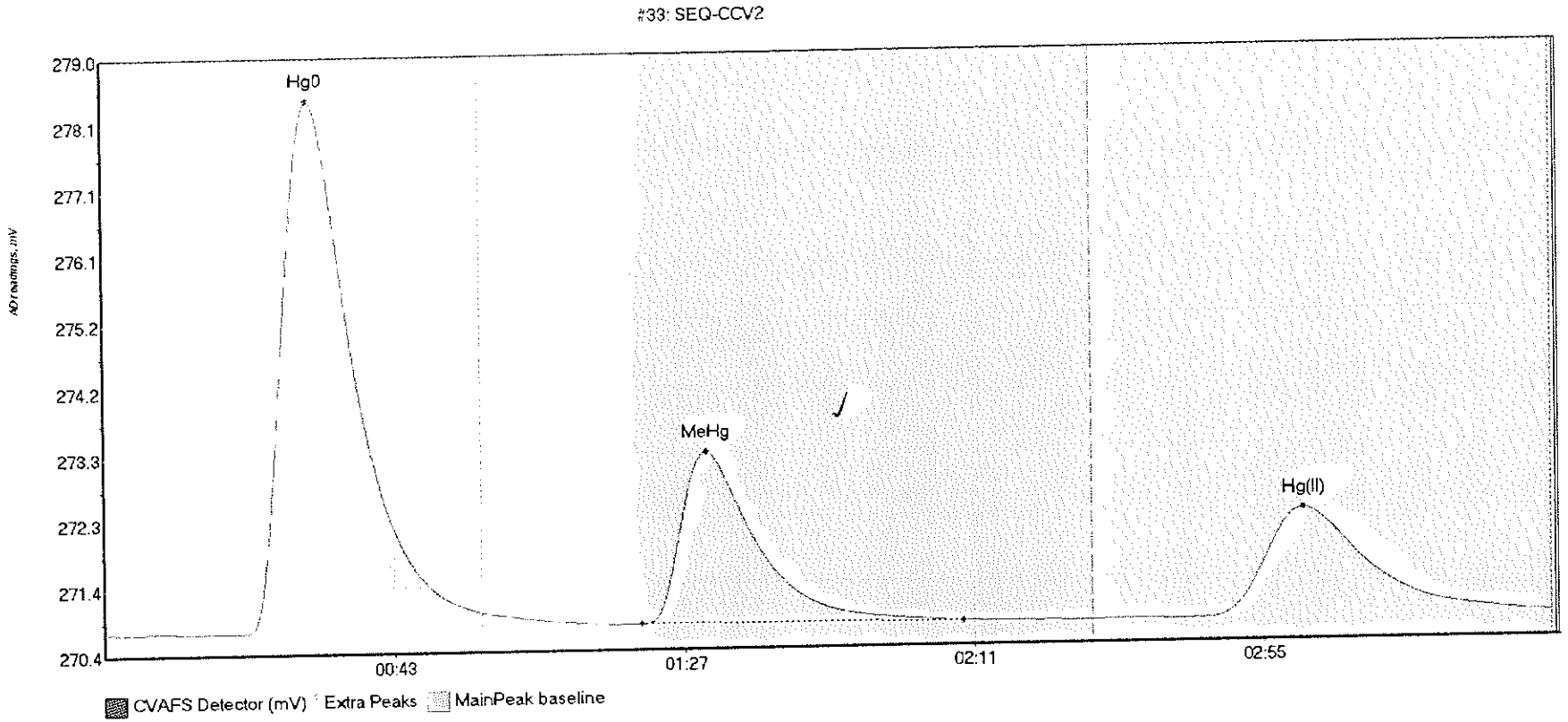
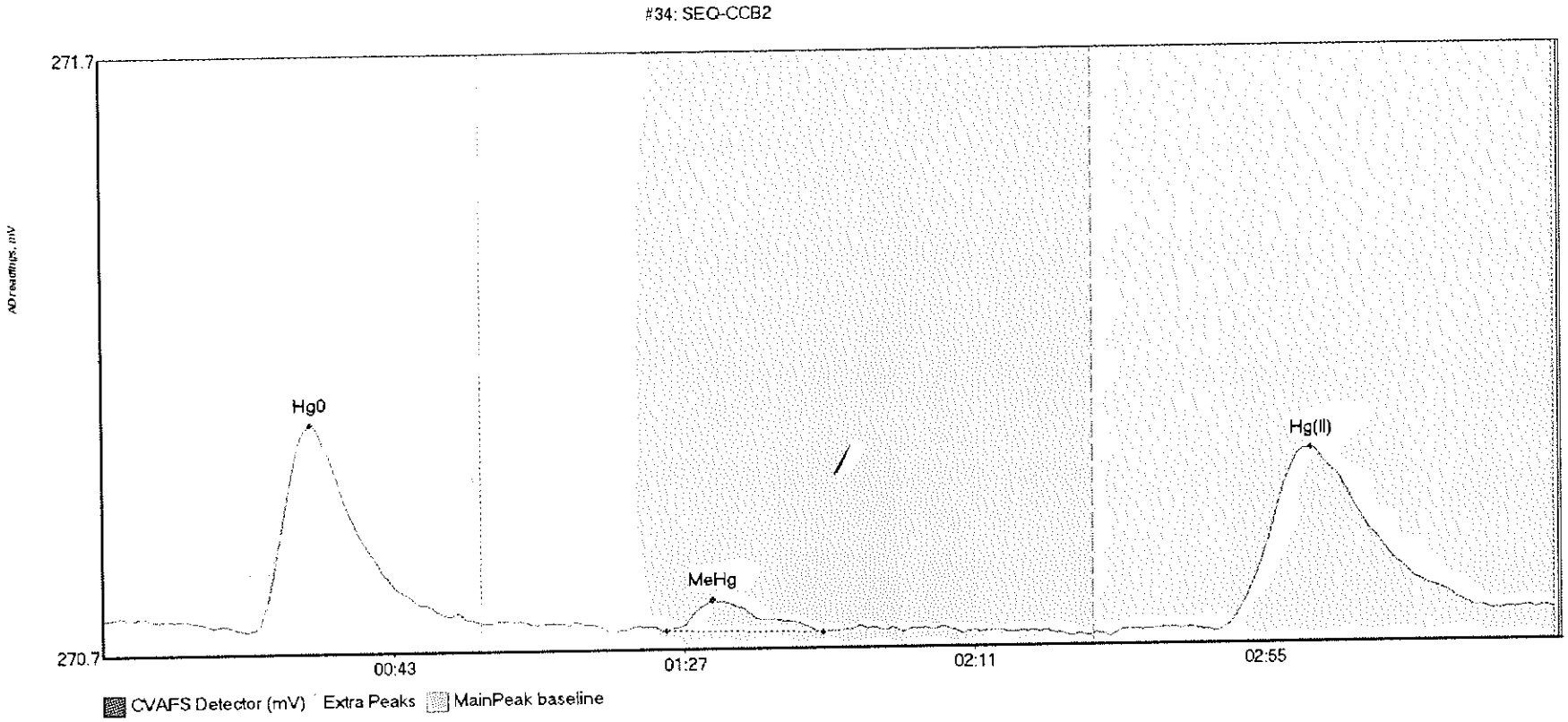
Peak Chart for MMHg27001-160610-1

MMHg27001-160610-1



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CCV2 Hg0	936.361	21.0	57.5	270.73	270.98	31.2	7.668	CT	270.7435	0.00	0.04	
SEQ-CCV2 MeHg	327.561	81.4	130.3	270.79	270.77	91.4	2.471	OK	270.7435	0.00	0.04	
SEQ-CCV2 Hg(II)	276.062	167.0	219.8	270.75	270.78	182.2	1.567	CT	270.7435	0.00	0.04	

016



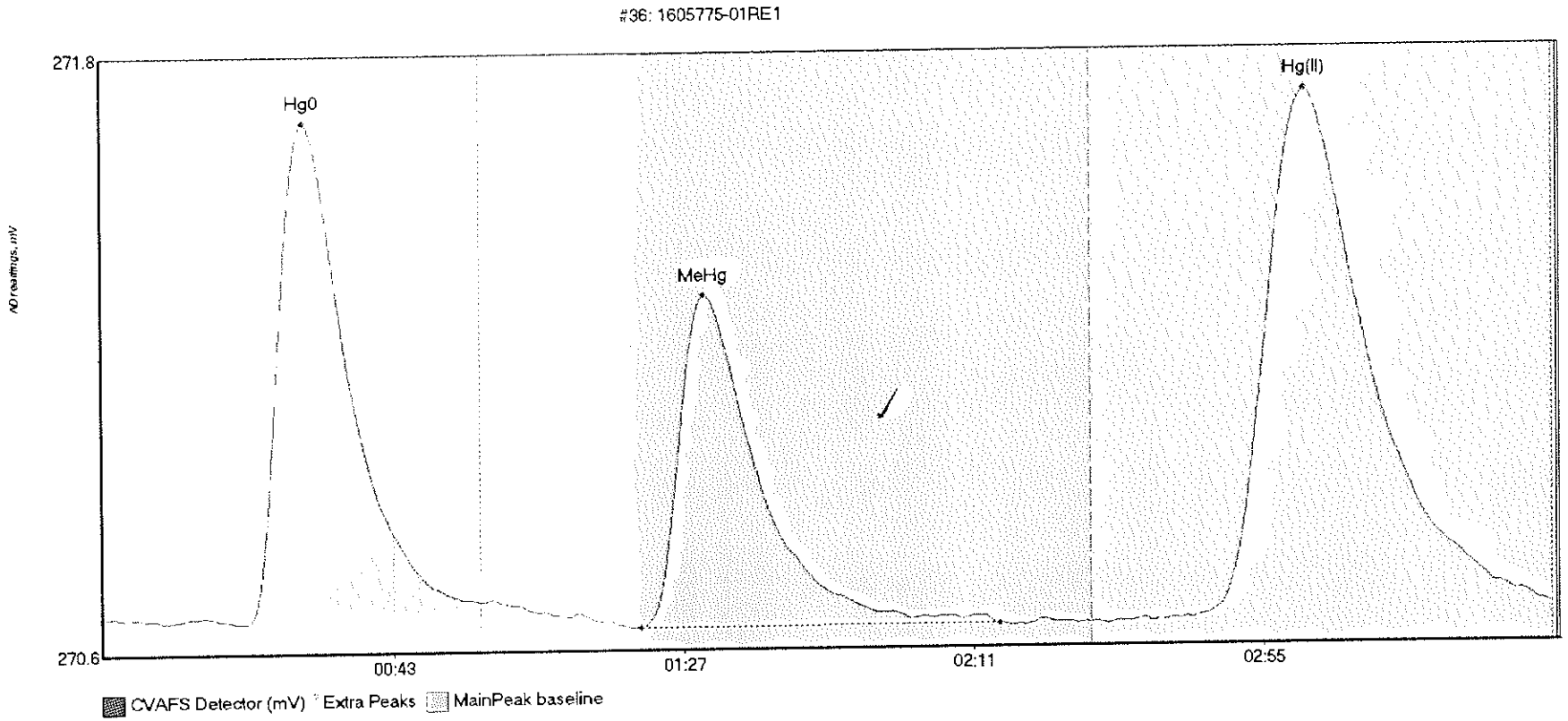
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CCB2 Hg0	40.264	22.8	52.4	270.71	270.72	31.5	0.343	OK	270.7246	0.00	-0.01	
SEQ-CCB2 MeHg	6.012	85.3	109.0	270.70	270.69	92.3	0.050	OK	270.7246	0.00	-0.01	
SEQ-CCB2 Hg(II)	51.361	168.6	210.7	270.68	270.72	183.2	0.305	OK	270.7246	0.00	-0.01	

016

EPA1630

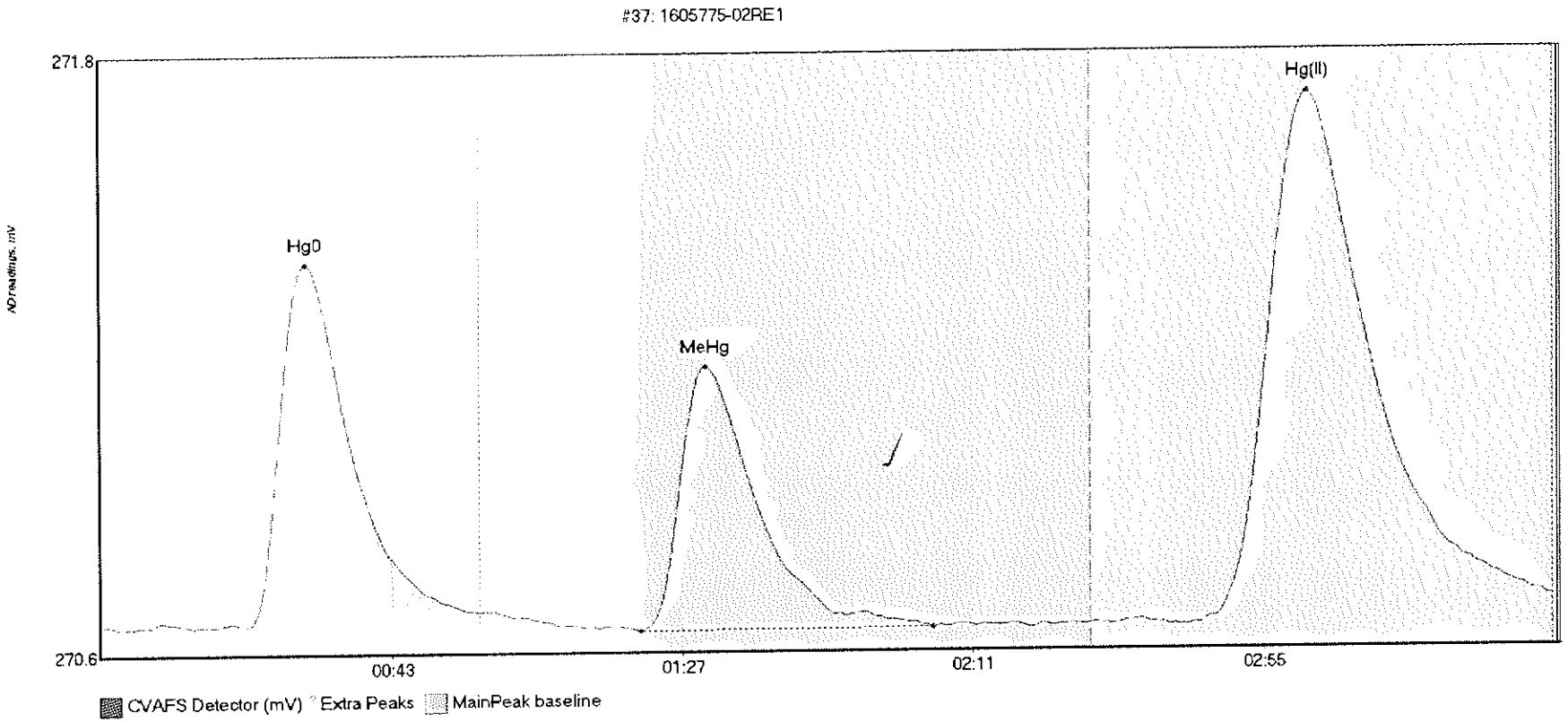
Peak Chart for MMHg27001-160610-1

MMHg27001-160610-1



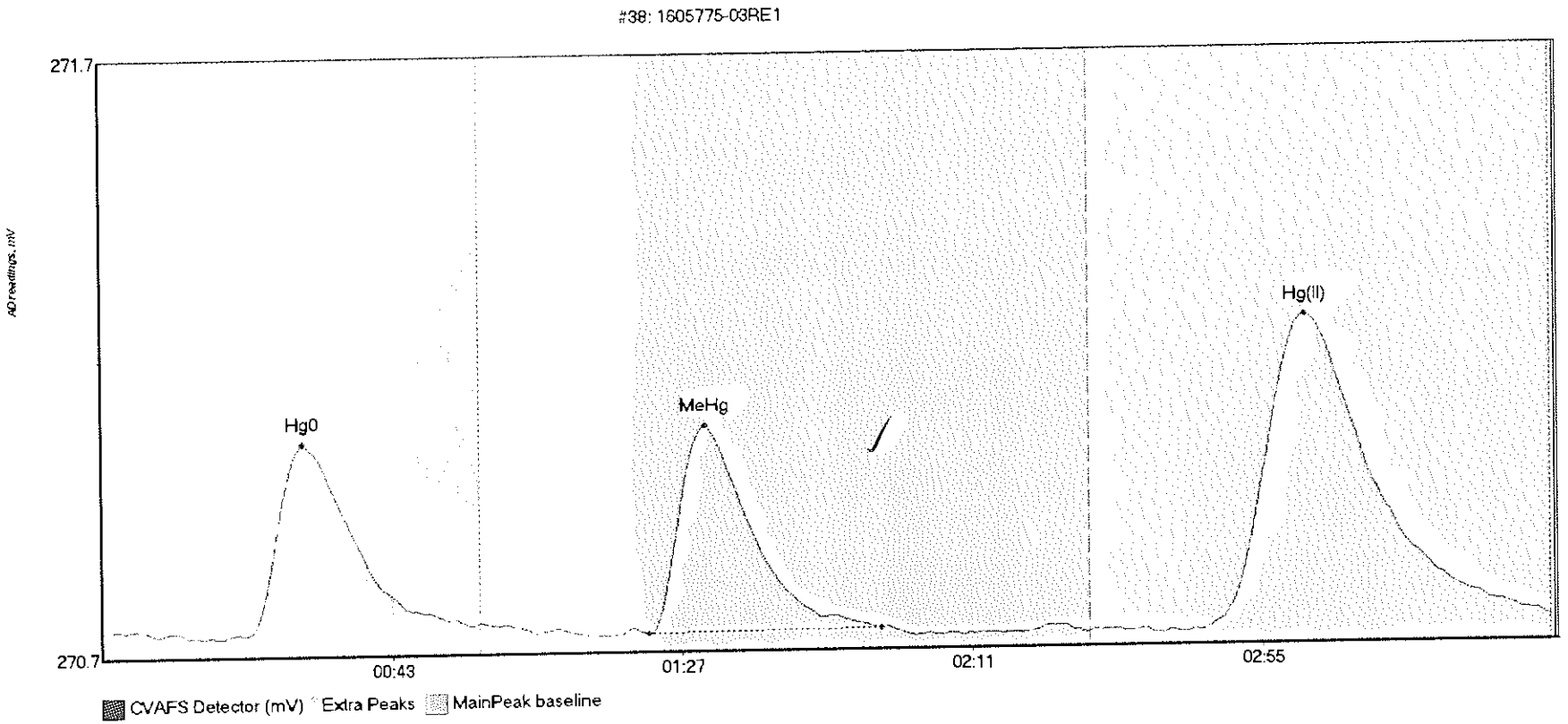
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1605775-01RE1 H	118.799	21.8	57.5	270.66	270.70	30.4	0.999	CT	270.6736	0.00	0.01	
1605775-01RE1 M	91.427	81.6	136.0	270.64	270.65	91.2	0.663	OK	270.6736	0.00	0.01	
1605775-01RE1 H	188.839	163.5	219.8	270.65	270.68	182.4	1.053	CT	270.6736	0.00	0.01	

016



Name		Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1605775-02RE1	H	84.150	22.3	57.1	270.68	270.70	31.1	0.707	OK	270.6779	0.00	0.04	
1605775-02RE1	M	68.758	81.8	126.0	270.66	270.67	91.6	0.516	OK	270.6779	0.00	0.04	
1605775-02RE1	H	182.071	166.4	219.4	270.67	270.72	182.7	1.034	OK	270.6779	0.00	0.04	

016

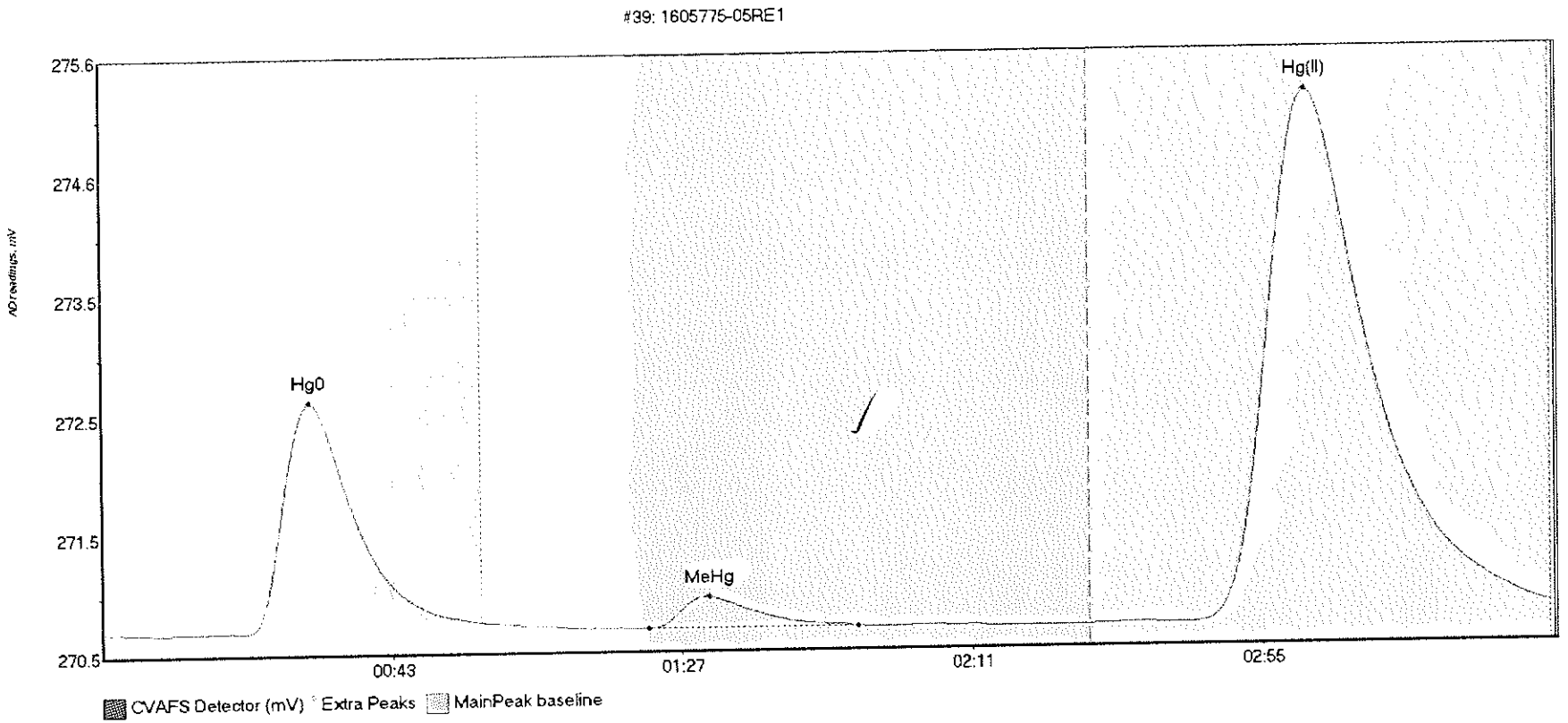


Name		Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1605775-03RE1	B	40.015	21.8	56.0	270.69	270.70	30.6	0.319	OK	270.6995	0.00	0.00	
1605775-03RE1	M	42.845	83.0	118.1	270.69	270.69	91.6	0.348	OK	270.6995	0.00	0.00	
1605775-03RE1	H	95.866	167.1	219.8	270.68	270.70	182.6	0.526	CT	270.6995	0.00	0.00	

016

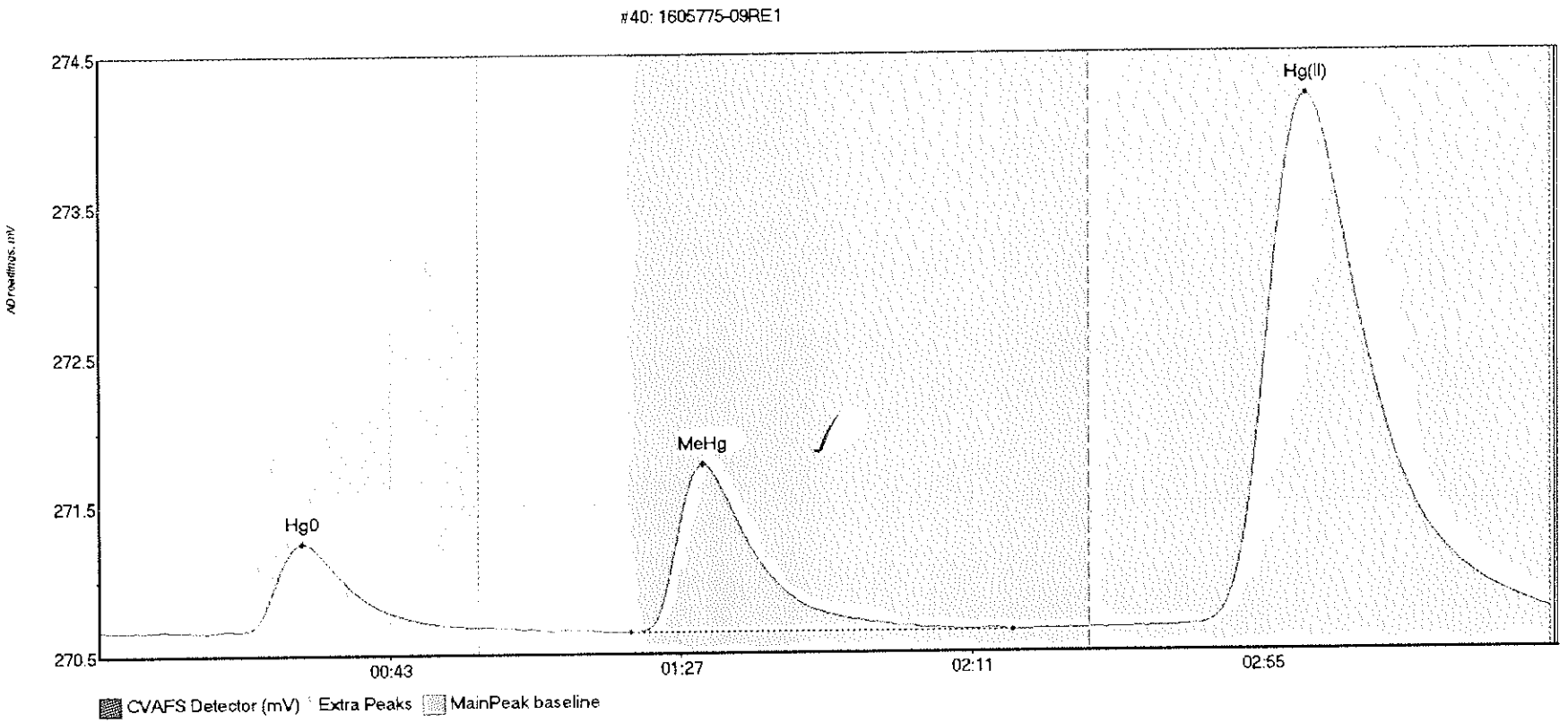
Peak Chart for MMHg27001-160610-1

MMHg27001-160610-1



Name		Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1605775-05RE1	H	237.359	21.7	57.5	270.69	270.76	31.6	1.962	CT	270.7020	0.00	0.13	
1605775-05RE1	M	33.936	83.0	114.6	270.69	270.69	92.1	0.267	OK	270.7020	0.00	0.13	
1605775-05RE1	H	807.227	164.7	219.8	270.69	270.83	182.8	4.530	CT	270.7020	0.00	0.13	

016



Name		Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1605775-09RE1	H	72.291	21.3	57.5	270.71	270.73	30.9	0.584	CT	270.7171	0.00	0.11	
1605775-09RE1	M	154.967	80.5	138.3	270.69	270.69	91.4	1.120	OK	270.7171	0.00	0.11	
1605775-09RE1	H	630.162	158.6	219.8	270.71	270.82	182.6	3.553	CT	270.7171	0.00	0.11	

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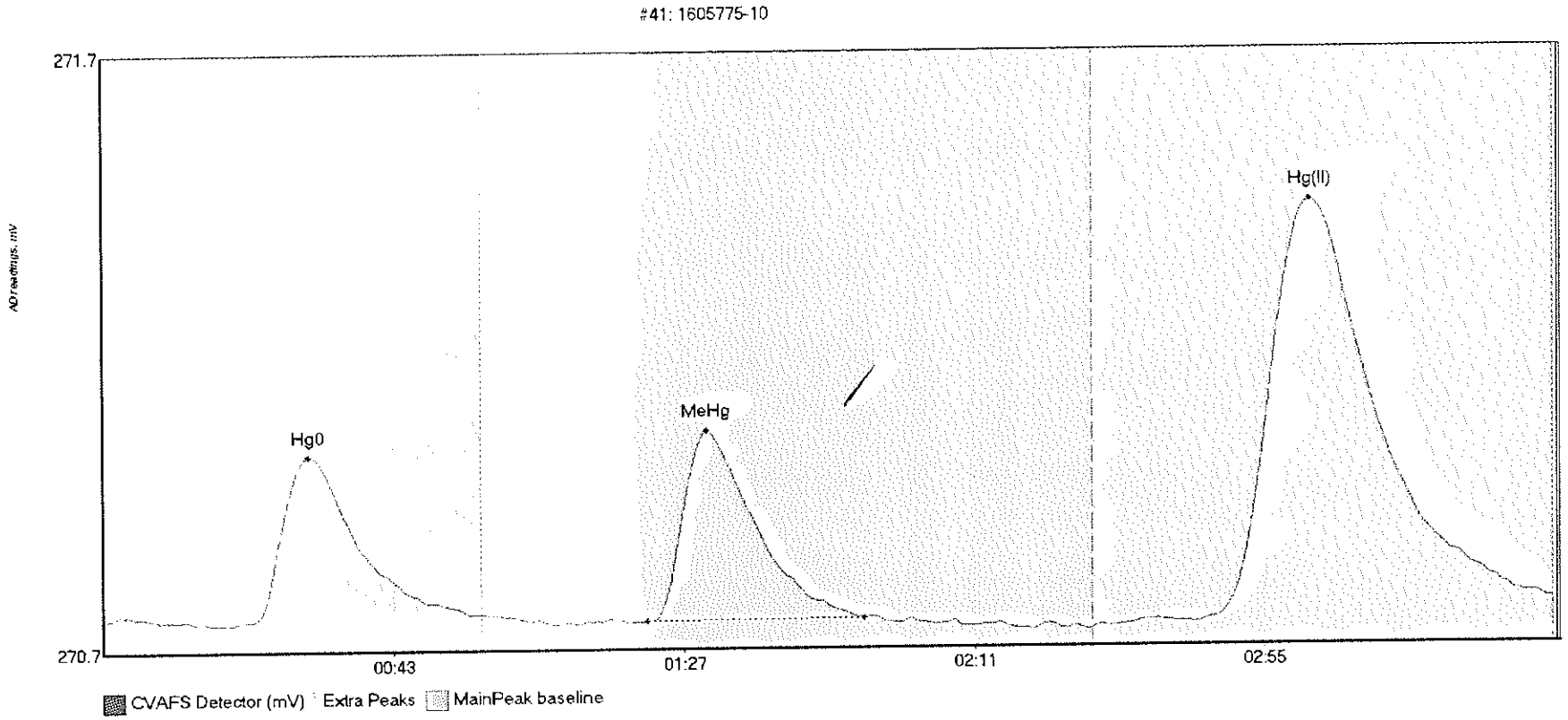
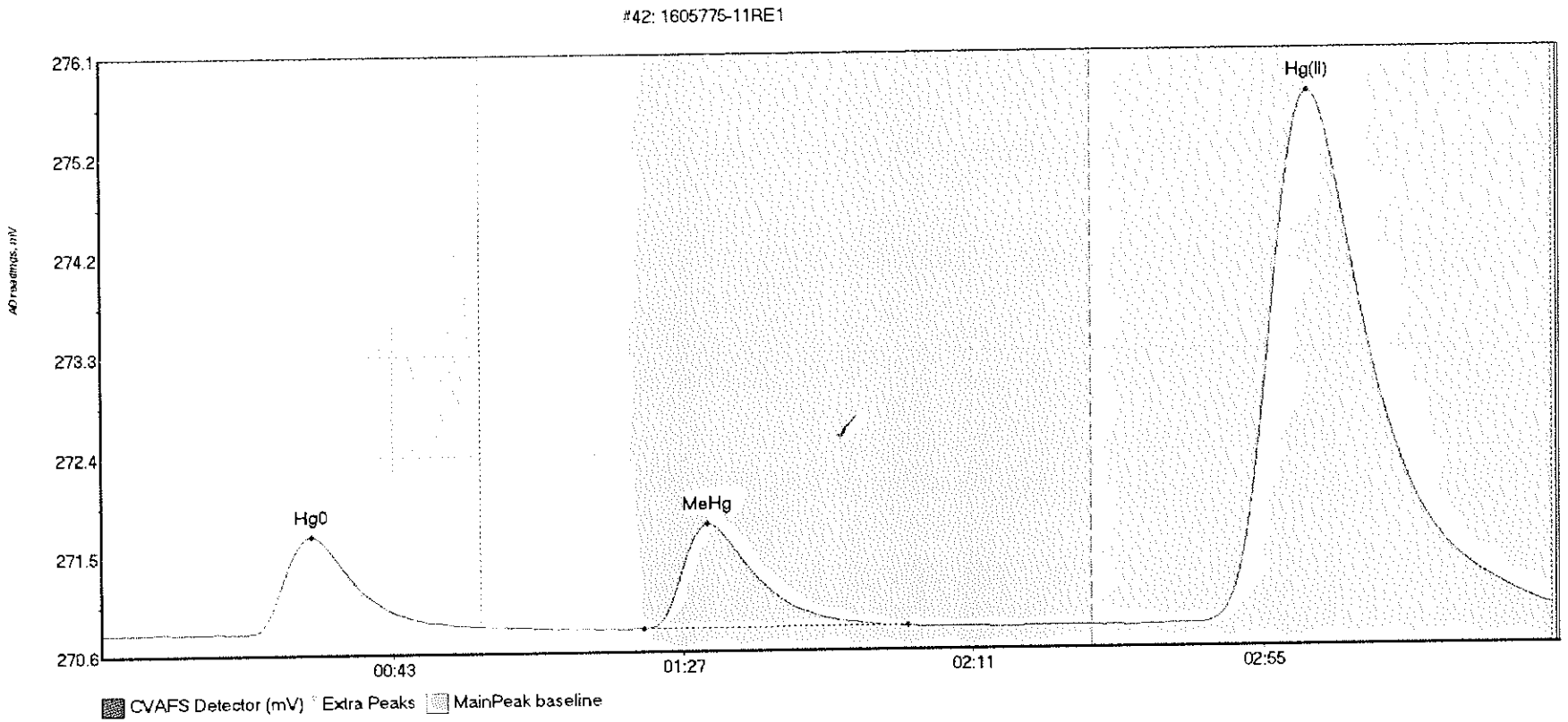
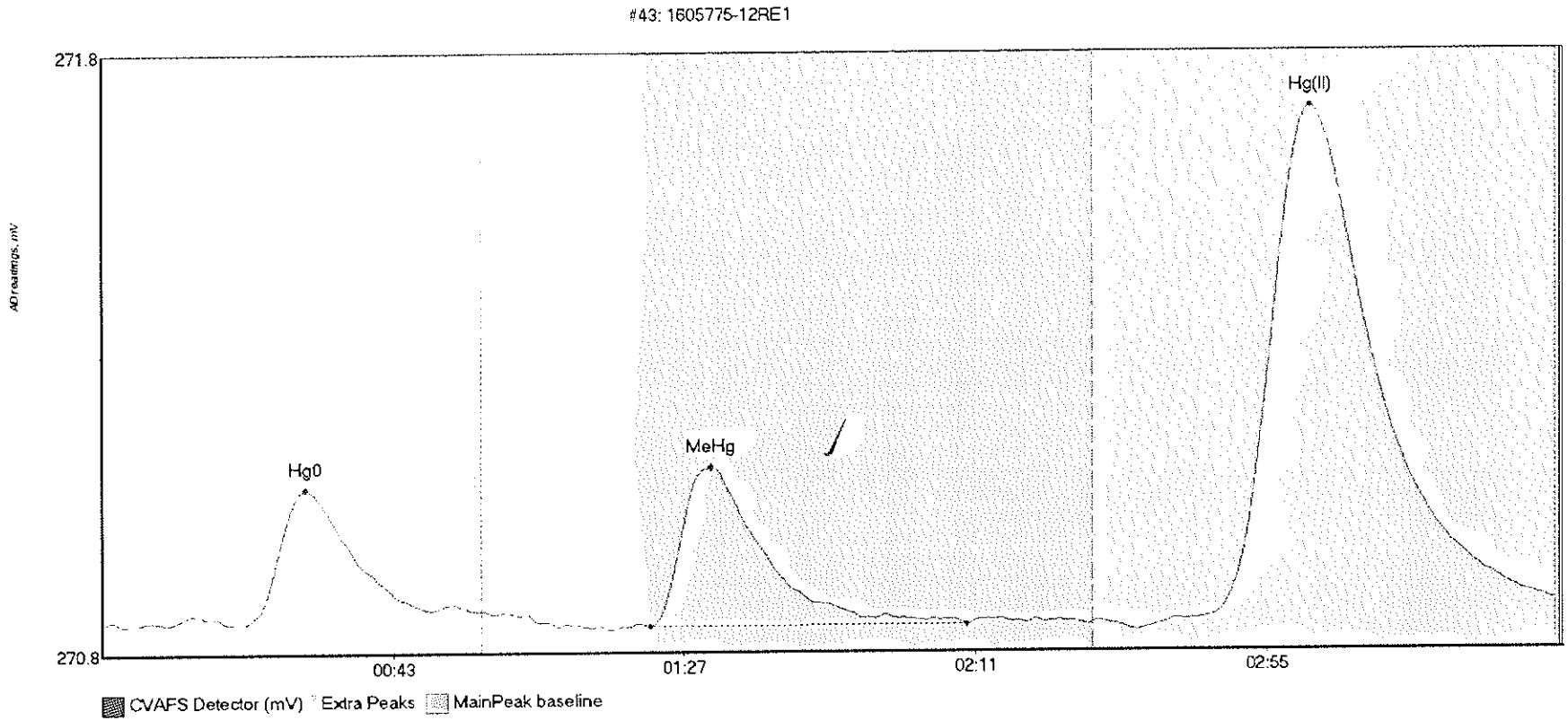


Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1605775-10 Hg0	35.289	22.4	55.8	270.73	270.74	31.2	0.278	OK	270.7349	0.00	0.02	
1605775-10 MeHg	39.549	82.4	115.3	270.73	270.73	91.5	0.320	OK	270.7349	0.00	0.02	
1605775-10 Hg(I	125.621	155.8	219.8	270.72	270.76	183.1	0.708	CT	270.7349	0.00	0.02	

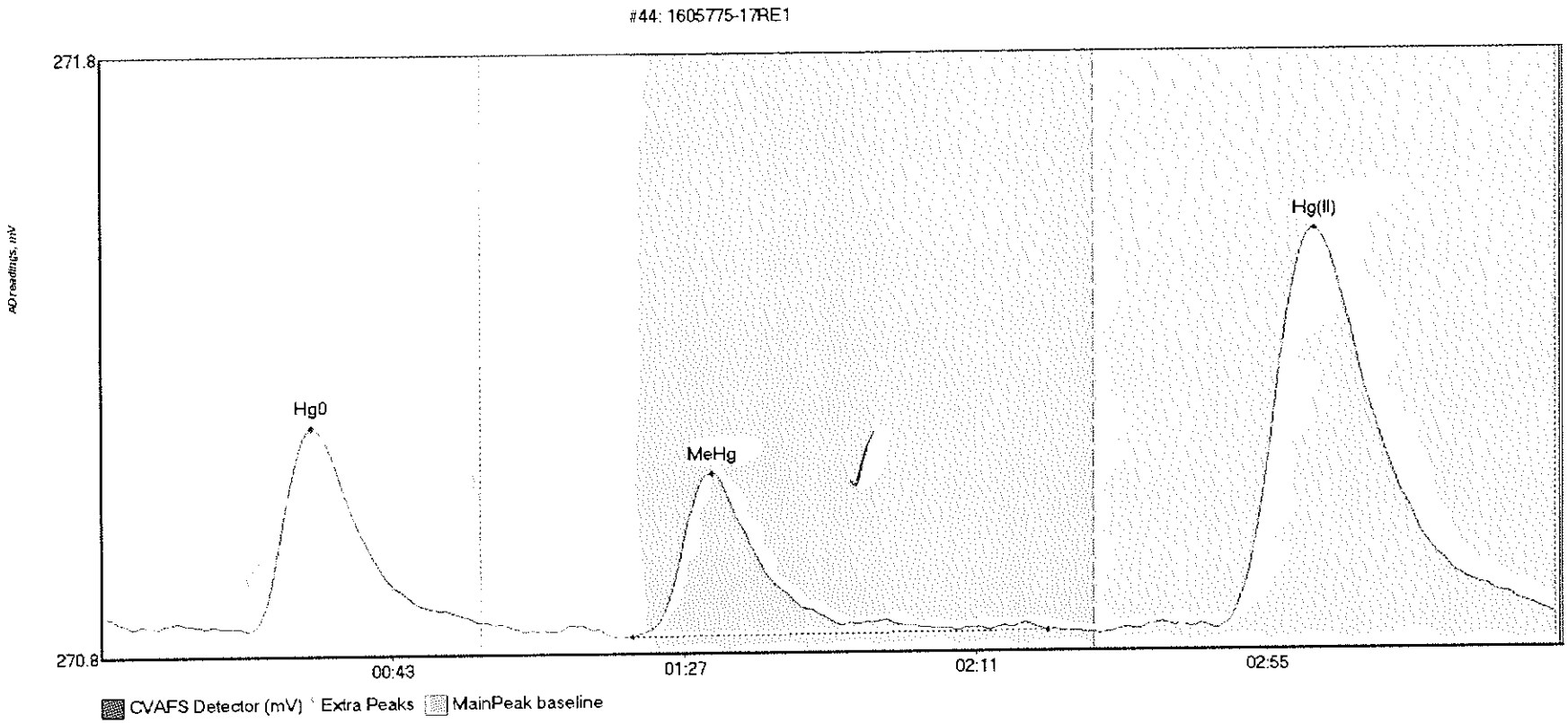


Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1605775-11RE1	H 109.034	20.1	57.5	270.75	270.80	31.7	0.902	CT	270.7527	0.00	0.17	
1605775-11RE1	M 123.849	82.2	122.2	270.77	270.77	91.8	0.966	OK	270.7527	0.00	0.17	
1605775-11RE1	H 872.849	159.3	219.8	270.76	270.92	182.9	4.925	CT	270.7527	0.00	0.17	



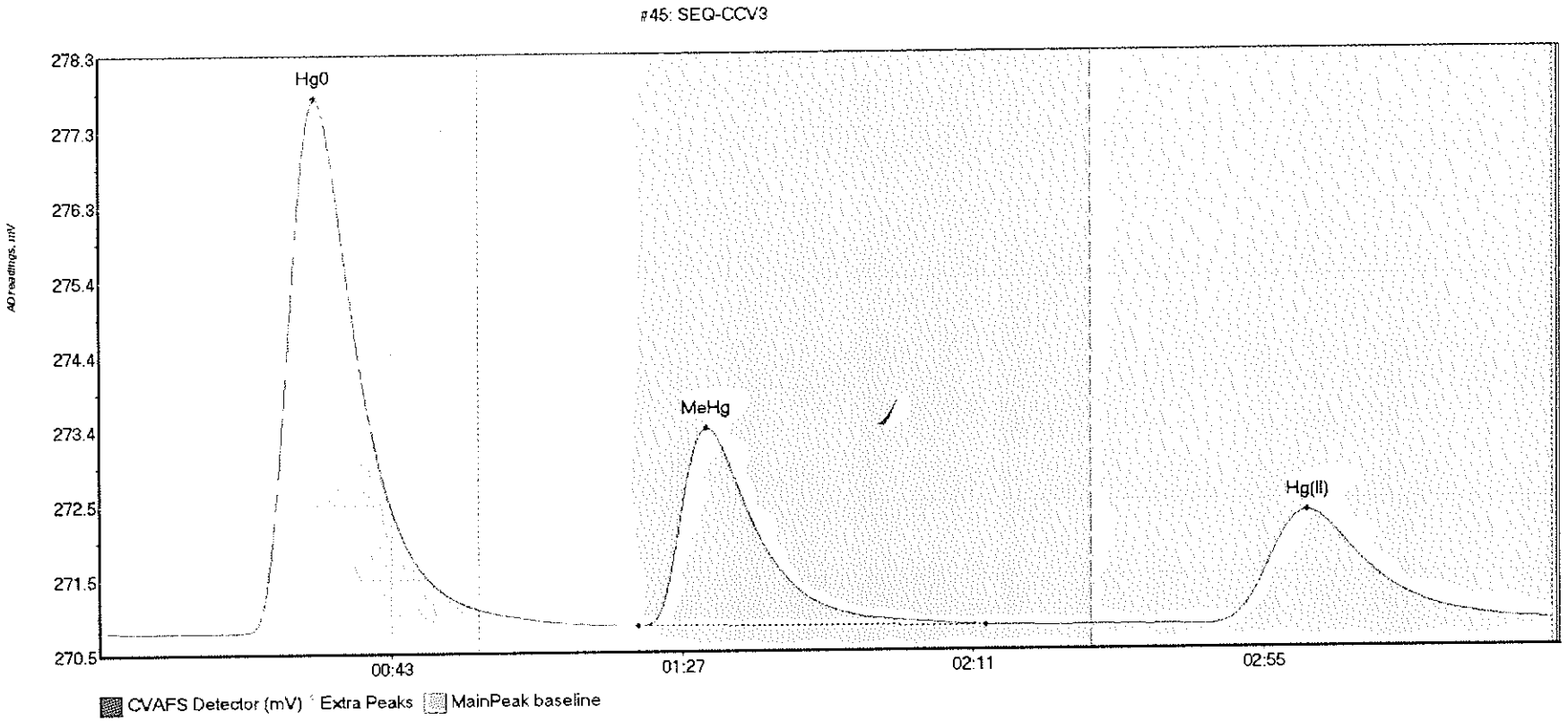
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1605775-12RE1 H	27.025	21.5	57.0	270.81	270.83	30.9	0.225	OK	270.8068	0.00	0.03	
1605775-12RE1 M	37.704	83.0	130.7	270.80	270.80	92.1	0.265	OK	270.8068	0.00	0.03	
1605775-12RE1 H	152.511	166.3	219.4	270.81	270.84	182.6	0.853	OK	270.8068	0.00	0.03	

016



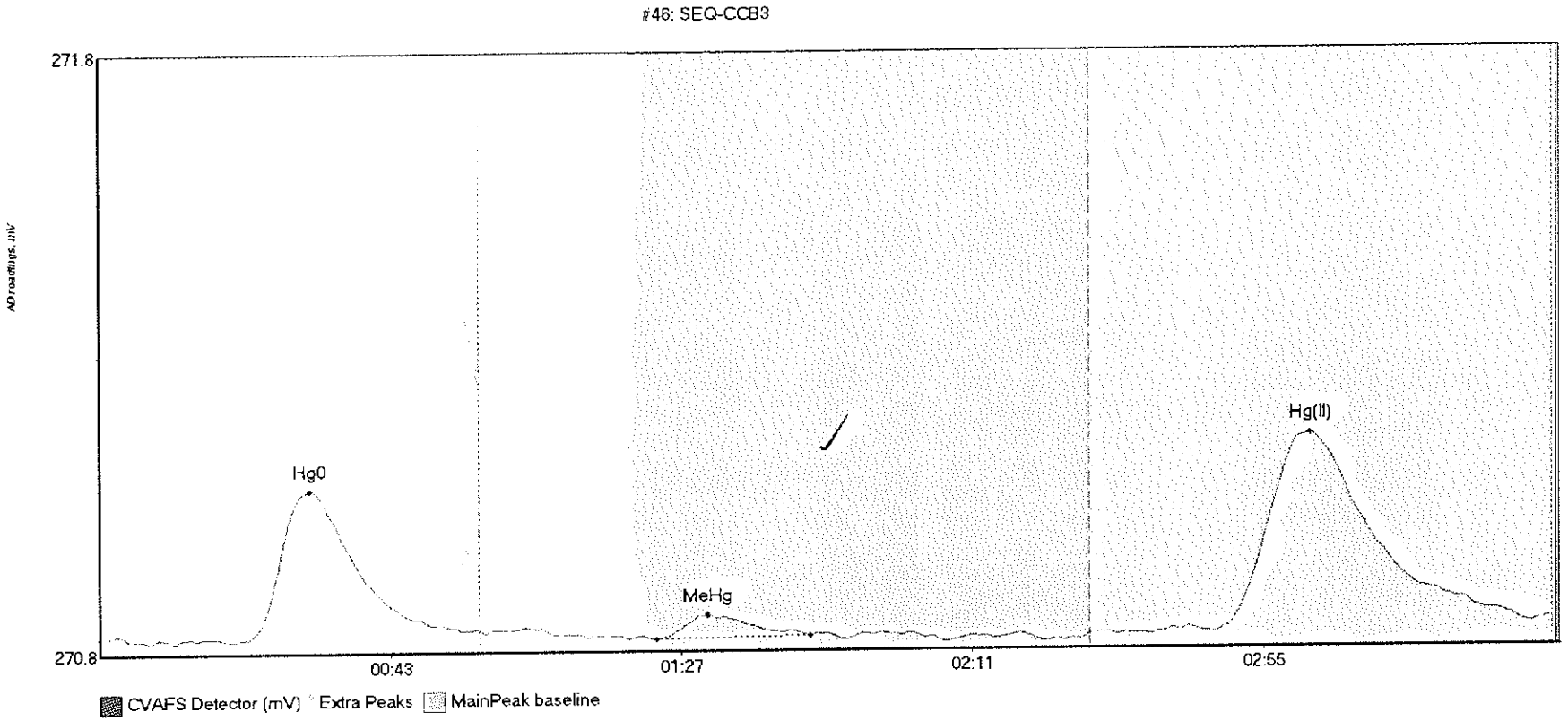
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1605775-17RE1 H	39.924	22.2	53.3	270.81	270.84	31.9	0.338	OK	270.8339	0.00	-0.01	
1605775-17RE1 M	38.247	80.1	142.9	270.80	270.80	92.3	0.273	OK	270.8339	0.00	-0.01	
1605775-17RE1 H	118.783	152.7	219.7	270.80	270.83	183.3	0.670	OK	270.8339	0.00	-0.01	

016



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CCV3 Hg0	828.552	20.4	57.5	270.81	271.10	32.5	6.911	CT	270.8369	0.00	0.05	
SEQ-CCV3 MeHg	342.451	81.4	134.0	270.87	270.85	91.8	2.559	OK	270.8369	0.00	0.05	
SEQ-CCV3 Hg(II)	258.465	166.6	219.8	270.84	270.88	182.8	1.469	CT	270.8369	0.00	0.05	

016



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CCB3 Hg0	30.793	22.3	57.5	270.86	270.87	31.8	0.248	CT	270.8639	0.00	0.02	
SEQ-CCB3 MeHg	4.348	84.3	107.4	270.85	270.86	92.0	0.041	OK	270.8639	0.00	0.02	
SEQ-CCB3 Hg(II)	59.603	168.7	216.7	270.86	270.87	183.2	0.332	OK	270.8639	0.00	0.02	

016

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

Analyst:	JEANNE HARREL	**Sequence #:**	6F10008
Reviewer:		**Dataset ID #:**	MMHg27001-160610-1 WATERS
Date:	6/13/16	**WO #:**	[redacted]
Batch #(s):	F606147	**Client(s):**	

- **Select the correct preparation method.**

Analyte	Prep Method		Matrix
☑ MHg	FGS-013	MHg Distillation	Water
☐ MHg	FGS-010	KOH/MeOH Digest	Tissue
☐ MHg	FGS-045	MeCl Extraction	Sed/Soil
☐ DMHg	FGS-098 (None Accredited method)		ALL

Additional Comments:

	Analyst Initials: JM		Reviewer Initials:
1. Compare Sample ID with Bench sheet/Sequence/Raw Data (Have all samples been imported?)	☑ YES	☐ NO	☑
2. Check for transcription errors from Excel spreadsheet (or Prep Bench sheet)/Raw data	☑ YES	☐ NO	☑
(a) Reviewer: 100% of peak heights checked	☑ YES	☐ NO	☑
(b) Are there peak height errors?	☐ YES	☑ NO	☑
(c) Error on a sample: Do peak heights, responses, & initial results match corrected data?	☐ YES	☐ NO	☐ N/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	☐ N/A ☑
(f) Check and compare masses (review prep bench sheet)	☐ YES	☐ NO	☑ N/A ☐
(g) Check and compare initial and final volumes	☑ YES	☐ NO	☐ N/A ☑
(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	☐ N/A ☑
(j) Is the sequence #, analyst, date, and instrument # on the QC page?	☑ YES	☐ NO	☑
(k) Is the analysis status correct? (analyzed/initial review/reviewed)	☑ YES	☐ NO	☑
(l) Original prep bench sheet added to data package?	☑ YES	☐ NO	☑
(m) Benchsheet prep date MUST match actual prep date (check if re-shot vs re-extract)	☑ YES	☐ NO	☑
3. High QA? WO#(s)/Client(s):	☐ YES	☑ NO	☑
4. Client specific QC? (if Yes, refer to Project Notes/LIMS)	☑ YES	☐ NO	☑
(a) Have the QC requirements been met for all WO#s?	☑ YES	☐ NO	☑
5. 20 or fewer samples in batch?	☑ YES	☐ NO	☑
(a) 3 PBs, 1 LCS/LCSD (or BS/BSD), 2 MS/MSD/MD per batch?	☑ YES	☐ NO	☑
(b) 1 CCV and 1 CCB every 10 analytical runs?	☑ YES	☐ NO	☑
QA/QC Data Checked			
6. The calibration curve included a minimum of 5 Standards	☑ PASS	☐ FAIL	☐ N/A ☑
Comments:			
7. 1st Calibration Standard % Recoveries (65-135%)	☑ PASS	☐ FAIL	☐ N/A ☑
Comments:			
8. RSD CF (≤ 15%)	☑ PASS	☐ FAIL	☑
Comments:			

Peer Review Check List for MHg for CV-GC-AFS (FGS-070) 2013 Rev 4 (08/22/2013)

Analyst:	JEANNE HARREL	**Sequence #:**	6F10008
Reviewer:	O	**Dataset ID #:**	MMHg27001-160610-1 WATERS
Date:	6/13/2016	**WO #:**	[redacted]
Batch #(s):	F606147	**Client(s):**	

	Analyst Initials:	Reviewer Initials:
9. ICV % Recoveries 67-133%	☑ PASS ☐ FAIL	☑
Comments:		
10. CCV % Recoveries 67-133%	☑ PASS ☐ FAIL	☑
Comments:		
11. Are the absolute value of the ICB and CCBs < PQL?	☑ PASS ☐ FAIL	☑
Comments:		
12. LCS/LCSD/CRM/BS/BSD % Recoveries (70-130%)	☑ PASS ☐ FAIL	☑
Comments:		
13. LCS/LCSD or BS/BSD RPD (< 25%)	☑ PASS ☐ FAIL	☑
Comments:		
14. Water: Average of Preparation Blanks < 0.045 ng/L and standard devaition of 0.015 ng/L?	☑ PASS ☐ FAIL ☐ N/A	☑
Comments:		
15. Sediment/Tissue: Individually, are the Preparation Blanks < PQL for the matrix?	☐ PASS ☐ FAIL ☑ N/A	☑
	☐ PASS ☐ FAIL	☐
Comments:		
16. Have Total Solids been applied? (If NO, please ensure that they are done or nearly done)	☐ YES ☐ NO ☑ N/A	☑
17. Is the correct 'Source' designated for MD/MS/MSD?	☑ YES ☐ NO	☑
18. For digested preps: was there a spike witness signature & date on the prep bench sheet?	☑ YES ☐ NO ☐ N/A	☑
19. MD RPD/MT RSD(< 35%)	☐ PASS ☑ FAIL	☑
Comments: ***RPD high. QR-07***		
20. Is there one set of MS/MSD per every 10 samples?	☑ PASS ☐ FAIL	☑
Comments:		
21. MS/MSD RPD(< 35%)	☑ PASS ☐ FAIL	☑
Comments:		
22. MS (AS) % Recoveries (65-130%)	☑ PASS ☐ FAIL	☑
Comments:		
23. MSD (ASD) % Recoveries (65-130%)	☑ PASS ☐ FAIL	☑
Comments:		
24. Spiked 1-5X ambient or 1-5X PQL (whichever is higher) (from EPA 1630)	☑ YES ☐ NO	☑
25. Are all samples within instrument calibration range (or at maximum aliquot size)?	☑ YES ☐ NO	☑
Comments:		
26. For instrumental dilutions, is the dilution factor in excel correct?	☑ PASS ☐ NO ☐ N/A	☑
Is the sample volume, diluents, and final volume of the dilution noted on benchsheet?	☑ PASS ☐ NO ☐ N/A	☑
27. Dissolved < Total metals (if applicable)	☐ PASS ☐ NO ☑ N/A	☑
Comments:		
28. Effluent < Influent metals (visually confirm if needed)	☐ PASS ☐ NO ☑ N/A	☑
Comments:		

Peer Review Check List for MHg for CV-GC-AFS (FGS-070) 2013 Rev 4 (08/22/2013)

Analyst:	JEANNE HARREL	**Sequence #:**	6F10008
Reviewer:	0	**Dataset ID #:**	MMHg27001-160610-1 WATERS
Date:	6/13/2016	**WO #:**	[redacted]
Batch #(s):	F606147	**Client(s):**	

	Analyst Initials: JH		Reviewer Initials:	
29. Are re-runs noted with reason?	☐ YES	☐ NO	☑ N/A	☑
Comments:				
30. For failing QC (CCV, CCB, PB, BS/BSD, CAL):	☐ YES	☐ NO	☑ N/A	☑
Was a bubbler and trap test run before the analytical run continued?				
Comments:				
31. Do re-run results compare to initial analysis (< 35% RPD)?	☐ YES	☐ NO	☑ N/A	☐
Comments:				
32. Are qualifiers consistent with the data review flowcharts?	☑ YES	☐ NO	☐ N/A	☑
Comments:				
33. Have non-reportable samples been imported into LIMS and clicked to non-reportable?	☐ YES	☐ NO	☑ N/A	☐
Comments:				
34. Have re-extracts been created for non-reportable samples?	☐ YES	☐ NO	☑ N/A	☑
35. Narrations in MMO box in LIMS?				
Comments:				
36. Are there any HIGH QA projects within the data?	☐ YES	☑ NO		
If so, place dataset to the QA office.				
37. Does the data set need scanning?	☑ YES		☐ N/A	☑
Files located at: \\Cuprum\gen_admin\Quality Assurance\Training Master\DOCs				
38. Date of analyst IDOC/CDOC: 1/15/2016 IDOC/CDOC within last 12 months?	☑ YES	☐ NO		☐
39. Date of analyst's SOP reading: 6/27/2015 Current SOP revision?	☑ YES	☐ NO		☑
40. Date of LOD: *1/22/2016* LOD within last 3 months (within 12 months for MDN)?	☑ YES	☐ NO	☐ N/A	☑
41. Date of LOQ: *1/22/2016* LOQ within last 3 months (within 12 months for MDN)?	☑ YES	☐ NO	☐ N/A	☑
42. If MDN samples, date of last MDL study:				
43. MDL study within last 12 months?	☐ YES	☐ NO	☑ N/A	☑
Data can not be reported without a current IDOC/CDOC, LOD or LOQ.				
Additional Comments:	☐ YES	☑ NO		☑

eurofins | Frontier Global Sciences

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

13 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,

Amy Goodall

Amy Goodall
Project Manager

eurofins | Frontier Global Sciences

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

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	13-Sep-16 13:13

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
WQ2-C_052716_SW_10	1605778-01	Water	27-May-16 08:00	28-May-16 09:20
WQ2-C_052716_SW_10 DISSLOVED	1605778-02	Water	27-May-16 08:00	28-May-16 09:20
Laboratory Filter Blank	1605778-03	Water	28-May-16 12:00	28-May-16 09:20

Eurofins Frontier Global Sciences, Inc.

The results in this report only apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Amy Goodall, Project Manager

eurofins | Frontier Global Sciences

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

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	13-Sep-16 13:13

REVISED REPORT (9/13/16)

Report revised per client request. This revised report has all results reported down to the MDL. The original report had all the results reported to the MRL.

SAMPLE RECEIPT

Samples were received at Eurofins Frontier Global Sciences (EFGS) on 5/28/2016 9:20:00 AM . The samples were received intact, on-ice within a sealed cooler at 3.8 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.

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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	13-Sep-16 13:13

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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CSP 5/28/16

Sample Receipt Checklist

EFGS Work Order: 1605778

Client: ~~MA~~ AMEC

Date & Time Received: 5/28/16 920

Date Labeled: 5/28/16 Labeled By: CSP

Project: _____

Received By: CSP

Label Verified By: AB

# of Coolers Received: 1

Samples Arrived By: ✓ Shipping Service _____ Courier _____ Hand _____ Other (Specify: _____)

Coolant: ☐ None/Ambient ☑ Loose Ice ☐ Gel Ice ☐ Dry Ice Coolant Required: (Y) / N Temp Blank Used: (Y)/N for Cooler(s): _____

Notify Project Manager if packages/coolers are received without coolant or with thawed coolant and at a temperature in excess of 6°C. PM notified: Y/N

Cooler Information:	Y/N/NA	Comments
The coolers do not appear to be tampered with:	y	
Custody Seals are present and intact:	y	
Custody seals signed:	y	

TID: 5225	CF: +0.1 °C		Date/time: 5/28/16 920	By: CSP	
Cooler 1: 3.7 °C	w/ CF: 3.8 °C		Cooler 4: °C	w/ CF:	°C
Cooler 2: °C	w/ CF:	°C	Cooler 5: °C	w/ CF:	°C
Cooler 3: °C	w/ CF:	°C	Cooler 6: °C	w/ CF:	°C

Chain of Custody:	Y/N/NA	Comments
Sample ID/Description:	y	
Date and time of collection:	y	
Sampled by:	y	
Preservation type:	y	
Requested analyses:	y	
Required signatures:	y	
Internal COC required:	NA	

Sample Condition/Integrity:	Y/N/NA	Comments
Sample containers intact/present:	y	
Sample labels are present and legible:	y	
Sample ID on container/bag matches COC:	y	
Correct sample containers used:	y	
Samples received within holding times:	y	
Sample volume sufficient for requested analyses:	y	
Correct preservative used for requested analyses:	y	

Anomalies/Non-conformances (attach additional pages if needed):

1605778

Chain of Custody Record & Laboratory Analysis Request: Air, Water, Sediments, Plant and Animal Tissue, Hydrocarbon & Other Samples

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Bothell, WA 98011
Phone: 425-686-1996
Fax: 425-686-3096
info@frontiergs.com
http://www.frontiergs.com

Page 1 of 1

Client: AMEC FOSTER WHEELER	Contact: DENISE KING
Address: 511 CONGRESS ST PORTLAND ME 04101	Phone: 9786929090 Fax: 978 692 66633
Project Name: PENOBSCOT RIVER	E-mail: denise.king@amecfw.com
Report To: DENISE KING	Contract/PO:
Address: 271 MILL RD CHELMSFORD, MA 01824	Invoice To: ROD PENDLETON
Phone: 978 692 890 Fax: 978 692 66633	Address: 511 CONGRESS ST PORTLAND, ME 04101
E-mail: denise.king@amecfw.com	Phone: 207 775 5401 Fax: 207 772 4762
	E-mail: rod.pendleton@amecfw.com

Analyses Requested

EFGS PM:
Date:
TAT (business days): **20** (std)
15 10 5 4 3 2 24 hrs.
(For TAT < 10 days, contact PM. Surcharges apply for expedited TAT)
Saturday delivery? ☒ Y ☐ N
(If yes, please contact PM)
EDD ☒ Y ☐ N
QA ☐ Standard ☐ High

No.	Engraved Bottle ID	Sample ID	# of Bottles	Matrix	Date & Time	Sampled By	Field Filtered (Y/N)	Field Preserved: HNO_3 HCl BrCl Other (%)	T/D Hg 1631e 250mL 2 BrCl	T/D MeHg 1630e 250mL 2 H_2SO_4					Comments
1		WQ2-C_052716_SW10	4	SB	5/27/16 0800	KB	N	X	2	2					per contract - questions Denise King • Total MeHg preserved w/ H_2SO_4
2															
3															
4															
5															
6															
7															
8															
9															
10															
11															
12															

5/27/16

For Laboratory Use Only

COC Seal: yes	Comments:
Cooler Temp: 3.8°C	
Carrier: Fedex	
VTSR: 420	
# of Coolers:	

Matrix Codes:
FW: Fresh Water
WW: Waste Water
SB: Sea and Brackish Water
SS: Soil and Sediment
TS: Plant and Animal Tissue
HC: Hydrocarbons
TR: Trap
OT: Other

Relinquished By:	Received By:	Received By:
Julie Pallozzi		
Name: JULIE PALLOZZI	Name: Corbin Powell	Name:
Organization: AMEC FW	Organization: EFGS	Organization:
Date & Time: 5/27/16	Date & Time: 5/28/16 420	Date & Time:

Tracking number: 8756 4740 4209

Sample Disposal:
☐ Return (shipping fees may apply)
☒ Standard Disposal – 30 Days after report
☐ Retain for ____ weeks after report (storage fees may apply)

By signing, you declare that you agree with EFGS' terms and conditions, and that you authorize EFGS to perform the specified analyses.

Customer Approval: Julie Pallozzi Date: 5/27/16

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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	13-Sep-16 13:13

WQ2-C_052716_SW_10

1605778-01

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EFGS-013 Methyl Hg Distillation for Water											
Methyl Mercury (as Mercury)	**0.423**	0.026	0.050	ng/L	1.25	F606232	20-Jun-16	6F21008	21-Jun-16	EPA 1630/FGS-070	
Sample Preparation: EPA 1631E BrCl Oxidation											
Mercury	**34.9**	0.08	0.50	ng/L	1	F605348	28-May-16	6E31005	31-May-16	EPA 1631E	

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511 Congress Street	Project Number: 3616166052	**Reported:**
Portland ME, 04101	Project Manager: Rod Pendleton	13-Sep-16 13:13

WQ2-C_052716_SW_10 DISSLOVED

1605778-02

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EFGS-013 Methyl Hg Distillation for Water											
Methyl Mercury (as Mercury)	**0.040**	0.026	0.050	ng/L	1.25	F606211	16-Jun-16	6F18001	17-Jun-16	EPA 1630/FGS-070	QM-12, J
Sample Preparation: EPA 1631E BrCl Oxidation											
Mercury	**1.42**	0.08	0.50	ng/L	1	F605348	28-May-16	6E31005	31-May-16	EPA 1631E	

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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	13-Sep-16 13:13

Laboratory Filter Blank

1605778-03

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EFGS-013 Methyl Hg Distillation for Water											
Methyl Mercury (as Mercury)	ND	0.026	0.050	ng/L	1.25	F606211	16-Jun-16	6F18001	17-Jun-16	EPA 1630/FGS-070	FB, QM-12, U
Sample Preparation: EPA 1631E BrCl Oxidation											
Mercury	ND	0.08	0.50	ng/L	1	F605348	28-May-16	6E31005	31-May-16	EPA 1631E	FB, U

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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	13-Sep-16 13:13

Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6E31005 - F605342											
Cal Standard (6E31005-CAL1)					Prepared & Analyzed: 31-May-16						
Mercury	0.52	-		ng/L	0.50100		103				
Cal Standard (6E31005-CAL2)					Prepared & Analyzed: 31-May-16						
Mercury	0.99	-		ng/L	1.0020		98.7				
Cal Standard (6E31005-CAL3)					Prepared & Analyzed: 31-May-16						
Mercury	4.91	-		ng/L	5.0100		98.0				
Cal Standard (6E31005-CAL4)					Prepared & Analyzed: 31-May-16						
Mercury	20.13	-		ng/L	20.040		100				
Cal Standard (6E31005-CAL5)					Prepared & Analyzed: 31-May-16						
Mercury	39.59	-		ng/L	40.080		98.8				
Calibration Blank (6E31005-CCB1)					Prepared & Analyzed: 31-May-16						
Mercury	0.34	-		ng/L							
Calibration Blank (6E31005-CCB2)					Prepared & Analyzed: 31-May-16						
Mercury	0.14	-		ng/L							
Calibration Blank (6E31005-CCB3)					Prepared & Analyzed: 31-May-16						
Mercury	0.09	-		ng/L							
Calibration Blank (6E31005-CCB4)					Prepared & Analyzed: 31-May-16						
Mercury	0.09	-		ng/L							
Calibration Blank (6E31005-CCB5)					Prepared & Analyzed: 31-May-16						
Mercury	0.14	-		ng/L							

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511 Congress Street	Project Number: 3616166052	**Reported:**
Portland ME, 04101	Project Manager: Rod Pendleton	13-Sep-16 13:13

Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6E31005 - F605342											
Calibration Blank (6E31005-CCB6)					Prepared & Analyzed: 31-May-16						
Mercury	0.14	-		ng/L							
Calibration Blank (6E31005-CCB7)					Prepared & Analyzed: 31-May-16						
Mercury	0.15	-		ng/L							
Calibration Blank (6E31005-CCB8)					Prepared & Analyzed: 31-May-16						
Mercury	0.19	-		ng/L							
Calibration Blank (6E31005-CCB9)					Prepared & Analyzed: 31-May-16						
Mercury	0.28	-		ng/L							
Calibration Check (6E31005-CCV1)					Prepared & Analyzed: 31-May-16						
Mercury	5.33	-		ng/L	5.0000		107	77-123			
Calibration Check (6E31005-CCV2)					Prepared & Analyzed: 31-May-16						
Mercury	5.24	-		ng/L	5.0000		105	77-123			
Calibration Check (6E31005-CCV3)					Prepared & Analyzed: 31-May-16						
Mercury	5.13	-		ng/L	5.0000		103	77-123			
Calibration Check (6E31005-CCV4)					Prepared & Analyzed: 31-May-16						
Mercury	5.24	-		ng/L	5.0000		105	77-123			
Calibration Check (6E31005-CCV5)					Prepared & Analyzed: 31-May-16						
Mercury	4.96	-		ng/L	5.0000		99.2	77-123			
Calibration Check (6E31005-CCV6)					Prepared & Analyzed: 31-May-16						
Mercury	5.33	-		ng/L	5.0000		107	77-123			

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Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6E31005 - F605342											
Calibration Check (6E31005-CCV7)					Prepared & Analyzed: 31-May-16						
Mercury	5.54	-		ng/L	5.0000		111	77-123			
Calibration Check (6E31005-CCV8)					Prepared & Analyzed: 31-May-16						
Mercury	5.79	-		ng/L	5.0000		116	77-123			
Calibration Check (6E31005-CCV9)					Prepared & Analyzed: 31-May-16						
Mercury	5.99	-		ng/L	5.0000		120	77-123			
Instrument Blank (6E31005-IBL1)					Prepared & Analyzed: 31-May-16						
Mercury	ND	0.08	0.50	ng/L							U
Instrument Blank (6E31005-IBL2)					Prepared & Analyzed: 31-May-16						
Mercury	ND	0.08	0.50	ng/L							U
Instrument Blank (6E31005-IBL3)					Prepared & Analyzed: 31-May-16						
Mercury	ND	0.08	0.50	ng/L							U
Initial Cal Check (6E31005-ICV1)					Prepared & Analyzed: 31-May-16						
Mercury	5.42	-		ng/L	5.0000		108	77-123			
Batch 6F18001 - F606211											
Cal Standard (6F18001-CAL1)					Prepared & Analyzed: 17-Jun-16						
Methyl Mercury (as Mercury)	0.047	-		ng/L	0.050050		92.9				
Cal Standard (6F18001-CAL2)					Prepared & Analyzed: 17-Jun-16						
Methyl Mercury (as Mercury)	0.174	-		ng/L	0.20020		86.8				

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Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6F18001 - F606211											
Cal Standard (6F18001-CAL3)					Prepared & Analyzed: 17-Jun-16						
Methyl Mercury (as Mercury)	1.077	-		ng/L	1.0010		108				
Cal Standard (6F18001-CAL4)					Prepared & Analyzed: 17-Jun-16						
Methyl Mercury (as Mercury)	2.111	-		ng/L	2.0020		105				
Cal Standard (6F18001-CAL5)					Prepared & Analyzed: 17-Jun-16						
Methyl Mercury (as Mercury)	4.273	-		ng/L	4.0040		107				
Calibration Blank (6F18001-CCB1)					Prepared & Analyzed: 17-Jun-16						
Methyl Mercury (as Mercury)	0.001	-		ng/L							
Calibration Blank (6F18001-CCB2)					Prepared & Analyzed: 17-Jun-16						
Methyl Mercury (as Mercury)	0.013	-		ng/L							
Calibration Blank (6F18001-CCB3)					Prepared & Analyzed: 17-Jun-16						
Methyl Mercury (as Mercury)	0.013	-		ng/L							
Calibration Check (6F18001-CCV1)					Prepared & Analyzed: 17-Jun-16						
Methyl Mercury (as Mercury)	0.509	-		ng/L	0.50049		102	67-133			
Calibration Check (6F18001-CCV2)					Prepared & Analyzed: 17-Jun-16						
Methyl Mercury (as Mercury)	0.478	-		ng/L	0.50049		95.5	67-133			
Calibration Check (6F18001-CCV3)					Prepared & Analyzed: 17-Jun-16						
Methyl Mercury (as Mercury)	0.483	-		ng/L	0.50049		96.4	67-133			
Instrument Blank (6F18001-IBL1)					Prepared & Analyzed: 17-Jun-16						
Methyl Mercury (as Mercury)	ND	0.021	0.040	ng/L							U

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511 Congress Street	Project Number: 3616166052	**Reported:**
Portland ME, 04101	Project Manager: Rod Pendleton	13-Sep-16 13:13

Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6F18001 - F606211											
Initial Cal Blank (6F18001-ICB1)					Prepared & Analyzed: 17-Jun-16						
Methyl Mercury (as Mercury)	0.007	-		ng/L							
Initial Cal Check (6F18001-ICV1)					Prepared & Analyzed: 17-Jun-16						
Methyl Mercury (as Mercury)	0.523	-		ng/L	0.50049		104	67-133			
Batch 6F21008 - F606232											
Cal Standard (6F21008-CAL1)					Prepared & Analyzed: 21-Jun-16						
Methyl Mercury (as Mercury)	0.047	-		ng/L	0.050050		93.3				
Cal Standard (6F21008-CAL2)					Prepared & Analyzed: 21-Jun-16						
Methyl Mercury (as Mercury)	0.187	-		ng/L	0.20020		93.6				
Cal Standard (6F21008-CAL3)					Prepared & Analyzed: 21-Jun-16						
Methyl Mercury (as Mercury)	1.060	-		ng/L	1.0010		106				
Cal Standard (6F21008-CAL4)					Prepared & Analyzed: 21-Jun-16						
Methyl Mercury (as Mercury)	2.097	-		ng/L	2.0020		105				
Cal Standard (6F21008-CAL5)					Prepared & Analyzed: 21-Jun-16						
Methyl Mercury (as Mercury)	4.082	-		ng/L	4.0040		102				
Calibration Blank (6F21008-CCB1)					Prepared & Analyzed: 21-Jun-16						
Methyl Mercury (as Mercury)	0.016	-		ng/L							
Calibration Blank (6F21008-CCB2)					Prepared & Analyzed: 21-Jun-16						
Methyl Mercury (as Mercury)	0.006	-		ng/L							

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511 Congress Street	Project Number: 3616166052	**Reported:**
Portland ME, 04101	Project Manager: Rod Pendleton	13-Sep-16 13:13

Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6F21008 - F606232											
Calibration Blank (6F21008-CCB3)					Prepared & Analyzed: 21-Jun-16						
Methyl Mercury (as Mercury)	0.015	-		ng/L							
Calibration Check (6F21008-CCV1)					Prepared & Analyzed: 21-Jun-16						
Methyl Mercury (as Mercury)	0.522	-		ng/L	0.50049		104	67-133			
Calibration Check (6F21008-CCV2)					Prepared & Analyzed: 21-Jun-16						
Methyl Mercury (as Mercury)	0.488	-		ng/L	0.50049		97.6	67-133			
Calibration Check (6F21008-CCV3)					Prepared & Analyzed: 21-Jun-16						
Methyl Mercury (as Mercury)	0.489	-		ng/L	0.50049		97.7	67-133			
Instrument Blank (6F21008-IBL1)					Prepared & Analyzed: 21-Jun-16						
Methyl Mercury (as Mercury)	ND	0.021	0.040	ng/L							U
Initial Cal Blank (6F21008-ICB1)					Prepared & Analyzed: 21-Jun-16						
Methyl Mercury (as Mercury)	0.010	-		ng/L							
Initial Cal Check (6F21008-ICV1)					Prepared & Analyzed: 21-Jun-16						
Methyl Mercury (as Mercury)	0.529	-		ng/L	0.50049		106	67-133			
Batch F605348 - EPA 1631E BrCl Oxidation											
Blank (F605348-BLK1)					Prepared & Analyzed: 31-May-16						
Mercury	0.19	0.08	0.50	ng/L							J
Blank (F605348-BLK2)					Prepared & Analyzed: 31-May-16						
Mercury	0.21	0.08	0.50	ng/L							J

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Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch F605348 - EPA 1631E BrCl Oxidation											
Blank (F605348-BLK3)					Prepared & Analyzed: 31-May-16						
Mercury	0.09	0.08	0.50	ng/L							J
LCS (F605348-BS1)					Prepared & Analyzed: 31-May-16						
Mercury	15.82	0.08	0.50	ng/L	15.679		101	80-120			
LCS Dup (F605348-BSD1)					Prepared & Analyzed: 31-May-16						
Mercury	15.79	0.08	0.50	ng/L	15.679		101	80-120	0.190	24	
Duplicate (F605348-DUP1)		**Source: 1605775-03**			Prepared & Analyzed: 31-May-16						
Mercury	6.18	0.08	0.50	ng/L		6.13			0.658	24	
Matrix Spike (F605348-MS1)		**Source: 1605775-10**			Prepared & Analyzed: 31-May-16						
Mercury	6.74	0.08	0.50	ng/L	5.0601	1.35	106	71-125			
Matrix Spike (F605348-MS2)		**Source: 1605775-09**			Prepared & Analyzed: 31-May-16						
Mercury	31.74	0.08	0.50	ng/L	20.240	9.85	108	71-125			
Matrix Spike Dup (F605348-MSD1)		**Source: 1605775-10**			Prepared & Analyzed: 31-May-16						
Mercury	6.86	0.08	0.50	ng/L	5.0601	1.35	109	71-125	1.77	24	
Matrix Spike Dup (F605348-MSD2)		**Source: 1605775-09**			Prepared & Analyzed: 31-May-16						
Mercury	31.54	0.08	0.50	ng/L	20.240	9.85	107	71-125	0.641	24	
Batch F606211 - EFGS-013 Methyl Hg Distillation for Water											
Blank (F606211-BLK1)					Prepared: 16-Jun-16 Analyzed: 17-Jun-16						
Methyl Mercury (as Mercury)	0.035	0.026	0.050	ng/L							J

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Amy Goodall, Project Manager

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

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	13-Sep-16 13:13

Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch F606211 - EFGS-013 Methyl Hg Distillation for Water											
Blank (F606211-BLK2)					Prepared: 16-Jun-16 Analyzed: 17-Jun-16						
Methyl Mercury (as Mercury)	ND	0.026	0.050	ng/L							U
Blank (F606211-BLK3)					Prepared: 16-Jun-16 Analyzed: 17-Jun-16						
Methyl Mercury (as Mercury)	ND	0.026	0.050	ng/L							U
LCS (F606211-BS1)					Prepared: 16-Jun-16 Analyzed: 17-Jun-16						
Methyl Mercury (as Mercury)	1.271	0.026	0.050	ng/L	1.0010		127	70-130			
LCS Dup (F606211-BSD1)					Prepared: 16-Jun-16 Analyzed: 17-Jun-16						
Methyl Mercury (as Mercury)	1.328	0.026	0.050	ng/L	1.0010		133	70-130	4.40	25	QM-12
Matrix Spike (F606211-MS1)		**Source: 1606097-03**			Prepared: 16-Jun-16 Analyzed: 17-Jun-16						
Methyl Mercury (as Mercury)	0.362	0.026	0.050	ng/L	1.0010	ND	36.1	65-130			QM-07
Matrix Spike (F606211-MS2)		**Source: 1606175-01**			Prepared: 16-Jun-16 Analyzed: 17-Jun-16						
Methyl Mercury (as Mercury)	1.934	0.026	0.050	ng/L	1.0010	0.131	180	65-130			QM-07
Matrix Spike Dup (F606211-MSD1)		**Source: 1606097-03**			Prepared: 16-Jun-16 Analyzed: 17-Jun-16						
Methyl Mercury (as Mercury)	0.902	0.026	0.050	ng/L	1.0010	ND	90.1	65-130	85.5	35	QR-07
Matrix Spike Dup (F606211-MSD2)		**Source: 1606175-01**			Prepared: 16-Jun-16 Analyzed: 17-Jun-16						
Methyl Mercury (as Mercury)	2.029	0.026	0.050	ng/L	1.0010	0.131	190	65-130	4.79	35	QM-07
Batch F606232 - EFGS-013 Methyl Hg Distillation for Water											
Blank (F606232-BLK1)					Prepared: 20-Jun-16 Analyzed: 21-Jun-16						
Methyl Mercury (as Mercury)	0.035	0.026	0.050	ng/L							J

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

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	13-Sep-16 13:13

Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch F606232 - EFGS-013 Methyl Hg Distillation for Water											
Blank (F606232-BLK2)					Prepared: 20-Jun-16 Analyzed: 21-Jun-16						
Methyl Mercury (as Mercury)	ND	0.026	0.050	ng/L							U
Blank (F606232-BLK3)					Prepared: 20-Jun-16 Analyzed: 21-Jun-16						
Methyl Mercury (as Mercury)	ND	0.026	0.050	ng/L							U
LCS (F606232-BS1)					Prepared: 20-Jun-16 Analyzed: 21-Jun-16						
Methyl Mercury (as Mercury)	1.014	0.026	0.050	ng/L	1.0010		101	70-130			
LCS Dup (F606232-BSD1)					Prepared: 20-Jun-16 Analyzed: 21-Jun-16						
Methyl Mercury (as Mercury)	1.063	0.026	0.050	ng/L	1.0010		106	70-130	4.69	25	
Duplicate (F606232-DUP1)		**Source: 1606294-01**			Prepared: 20-Jun-16 Analyzed: 21-Jun-16						
Methyl Mercury (as Mercury)	ND	0.026	0.050	ng/L		0.031				35	U
Matrix Spike (F606232-MS1)		**Source: 1606294-01**			Prepared: 20-Jun-16 Analyzed: 21-Jun-16						
Methyl Mercury (as Mercury)	1.285	0.026	0.050	ng/L	1.0010	0.031	125	65-130			
Matrix Spike (F606232-MS2)		**Source: 1606416-01**			Prepared: 20-Jun-16 Analyzed: 21-Jun-16						
Methyl Mercury (as Mercury)	1.575	0.026	0.050	ng/L	1.0010	0.107	147	65-130			QM-07
Matrix Spike Dup (F606232-MSD1)		**Source: 1606294-01**			Prepared: 20-Jun-16 Analyzed: 21-Jun-16						
Methyl Mercury (as Mercury)	1.300	0.026	0.050	ng/L	1.0010	0.031	127	65-130	1.17	35	
Matrix Spike Dup (F606232-MSD2)		**Source: 1606416-01**			Prepared: 20-Jun-16 Analyzed: 21-Jun-16						
Methyl Mercury (as Mercury)	1.485	0.026	0.050	ng/L	1.0010	0.107	138	65-130	5.88	35	QM-07

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Bothell, WA 98011
425.686.1996 Phone
425.686.3096 Fax

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	13-Sep-16 13:13

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.
QR-07	The RPD/RSD value for the matrix duplicate/triplicate was outside of acceptance limits. Batch QC acceptable based on MS/MSD and/or LCS/LCSD RPD values within control limits.
QM-12	Continuing calibration verification (CCV) and/or blank spike/blank spike duplicate (BS/BSD) recoveries above upper control limits. All reported sample concentrations were below the reporting limit.
QM-07	The spike recovery was outside control limits for the MS and/or MSD. The batch was accepted based on LCS and LCSD recoveries within control limits and, when analysis permits, acceptable AS/ASD.
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.
QB-04	The blank was preserved to 2% 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.
E-01	Sample was preceded by a sample exceeding the calibration curve and was reanalyzed for confirmation.
E	The concentration indicated for this analyte is an estimated value above the calibration range of the instrument. This value is considered an estimate (CLP E-flag).
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

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Analysis Datasheet for Total Mercury

Date of Analysis: May 31, 2016 Analyst: DM2

Instrument #: Hg2600-3 Units ng/L

LIMS Sequence #: 6E31005, 6E31004

Calibration Statistics:

LabNumber	n	True Val	Area	Uncorrected Response Factor	Corrected Peak Height	Corrected Response Factor	% Recovery
SEQ-CAL1	1	0.50 ng/L	54.25 units	108.50	51.00 units	102.00	103.3 %Rec
SEQ-CAL2	1	1.00 ng/L	100.93 units	100.93	97.68 units	97.68	98.9 %Rec
SEQ-CAL3	1	5.00 ng/L	488.28 units	97.66	485.04 units	97.01	98.2 %Rec
SEQ-CAL4	1	20.00 ng/L	1991.60 units	99.58	1988.35 units	99.42	100.7 %Rec
SEQ-CAL5	1	40.00 ng/L	3913.48 units	97.84	3910.24 units	97.76	99.0 %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
98.77	+/- 2.01	2.0% RSD	100.90

Blanks:

LabNumber	n	Mean	Std Dev	Mean (ng/L)	Std Dev (ng/L)
SEQ-IBL	3	3.25 units	±2.84	0.03 ng/L	±0.03

Preparation Blanks

Sample Type	Batch ID	n	Mean	Std Dev
BLK	1	3	50.437 ng/L	±12.160
BLK	2	3	0.141 ng/L	±0.092
BLK	3	1	0.053 ng/L	
BLK	4	3	0.163 ng/L	±0.062
BLK	5	1	0.328 ng/L	
BLK	6	0	0.000 ng/L	

QUALITY ASSURANCE

PEER - REVIEWED

INITIALS: 5/31/16

Instrument	Analyst	Sample Type	LabNumber	Dilution	Analyzed	FileID	RunEnd	Uncorrected Response	Batch ID	No PB Correction?	RESP	InitialResult	FinalResult	InitialUnits	Comments
Hg2600-3	DM2	CAL	SEQ-IBL1	1	5/31/2016 5:52:40	42938-1.RAW	5:52:40 AM	4.51			1.3	0.013	0.013	ng/L	
Hg2600-3	DM2	CAL	SEQ-IBL2	1	5/31/2016 5:56:48	42939-1.RAW	5:56:48 AM	0.00			-3.2	-0.033	-0.033	ng/L	
Hg2600-3	DM2	CAL	SEQ-IBL3	1	5/31/2016 6:00:57	42940-1.RAW	6:00:57 AM	5.23			2.0	0.020	0.020	ng/L	
Hg2600-3	DM2	CAL	SEQ-CAL1	1	5/31/2016 6:05:05	42941-1.RAW	6:05:05 AM	54.25			51.0	0.516	0.516	ng/L	
Hg2600-3	DM2	CAL	SEQ-CAL2	1	5/31/2016 6:09:13	42942-1.RAW	6:09:13 AM	100.93			97.7	0.989	0.989	ng/L	
Hg2600-3	DM2	CAL	SEQ-CAL3	1	5/31/2016 6:13:22	42943-1.RAW	6:13:22 AM	488.28			485.0	4.911	4.911	ng/L	
Hg2600-3	DM2	CAL	SEQ-CAL4	1	5/31/2016 6:17:30	42944-1.RAW	6:17:30 AM	1991.60			1988.4	20.130	20.130	ng/L	
Hg2600-3	DM2	CAL	SEQ-CAL5	1	5/31/2016 6:21:39	42945-1.RAW	6:21:39 AM	3913.48			3910.2	39.588	39.588	ng/L	
Hg2600-3	DM2	CAL	SEQ-ICV1	1	5/31/2016 6:25:47	42946-1.RAW	6:25:47 AM	538.36			535.1	5.418	5.418	ng/L	
Hg2600-3	DM2	SAM	EFGS05427 20NG	100	5/31/2016 6:29:56	42947-1.RAW	6:29:56 AM	492.61		X	489.4	4.954	495.438	ng/L	
Hg2600-3	DM2	SAM	EFGS TV 20NG	100	5/31/2016 6:34:04	42948-1.RAW	6:34:04 AM	497.34		X	494.1	5.002	500.226	ng/L	
Hg2600-3	DM2	BLK	F605269-BLK7	100	5/31/2016 6:38:13	42949-1.RAW	6:38:13 AM	66.37	1		63.1	0.639	63.907	ng/L	
Hg2600-3	DM2	BLK	F605269-BLK8	100	5/31/2016 6:42:21	42950-1.RAW	6:42:21 AM	49.80	1		46.6	0.471	47.134	ng/L	
Hg2600-3	DM2	BLK	F605269-BLK9	100	5/31/2016 6:46:29	42951-1.RAW	6:46:29 AM	43.02	1		39.8	0.403	40.269	ng/L	
Hg2600-3	DM2	SAM	F605269-BS2	100	5/31/2016 6:50:38	42952-1.RAW	6:50:38 AM	1992.65	1		1989.4	19.637	1963.675	ng/L	
Hg2600-3	DM2	SAM	F605269-BSD2	100	5/31/2016 6:54:46	42953-1.RAW	6:54:46 AM	2105.80	1		2102.6	20.782	2078.233	ng/L	
Hg2600-3	DM2	SAM	1605524-01RE1	100	5/31/2016 6:58:55	42954-1.RAW	6:58:55 AM	292.46	1		289.2	2.424	242.367	ng/L	
Hg2600-3	DM2	SAM	1605524-02RE2	100	5/31/2016 7:03:03	42955-1.RAW	7:03:03 AM	14385.01	1		14381.8	145.100	14509.956	ng/L	
Hg2600-3	DM2	SAM	1605524-03RE2	100	5/31/2016 7:07:12	42956-1.RAW	7:07:12 AM	259.49	1		256.2	2.090	208.992	ng/L	
Hg2600-3	DM2	CAL	SEQ-CCV1	1	5/31/2016 7:11:20	42957-1.RAW	7:11:20 AM	529.83			526.6	5.331	5.331	ng/L	
Hg2600-3	DM2	CAL	SEQ-CCB1	1	5/31/2016 7:15:29	42958-1.RAW	7:15:29 AM	36.96			33.7	0.341	0.341	ng/L	
Hg2600-3	DM2	SAM	1605524-04RE1	100	5/31/2016 7:19:37	42959-1.RAW	7:19:37 AM	850.03	1		846.8	8.069	806.860	ng/L	
Hg2600-3	DM2	SAM	1605524-05RE1	100	5/31/2016 7:23:45	42960-1.RAW	7:23:45 AM	188.17	1		184.9	1.368	136.779	ng/L	
Hg2600-3	DM2	SAM	1605524-06RE1	100	5/31/2016 7:27:54	42961-1.RAW	7:27:54 AM	158.55	1		155.3	1.068	106.798	ng/L	
Hg2600-3	DM2	SAM	F605269-DUP2	100	5/31/2016 7:32:02	42962-1.RAW	7:32:02 AM	281.13	1		277.9	2.309	230.897	ng/L	
Hg2600-3	DM2	SAM	F605269-MS2	100	5/31/2016 7:36:11	42963-1.RAW	7:36:11 AM	1306.68	1		1303.4	12.692	1269.185	ng/L	
Hg2600-3	DM2	SAM	F605269-MSD2	100	5/31/2016 7:40:19	42964-1.RAW	7:40:19 AM	1296.25	1		1293.0	12.586	1258.629	ng/L	
Hg2600-3	DM2	SAM	1605524-02RE3	500	5/31/2016 7:44:28	42965-1.RAW	7:44:28 AM	2894.99	1		2891.7	29.176	14587.869	ng/L	
Hg2600-3	DM2	SAM	1605524-03RE3	100	5/31/2016 7:48:36	42966-1.RAW	7:48:36 AM	210.30	1		207.1	1.592	159.185	ng/L	
Hg2600-3	DM2	BLK	F605342-BLK1	1	5/31/2016 7:52:44	42967-1.RAW	7:52:44 AM	26.92	2		23.7	0.240	0.240	ng/L	
Hg2600-3	DM2	BLK	F605342-BLK2	1	5/31/2016 7:56:53	42968-1.RAW	7:56:53 AM	15.56	2		12.3	0.125	0.125	ng/L	
Hg2600-3	DM2	CAL	SEQ-CCV2	1	5/31/2016 8:01:01	42969-1.RAW	8:01:01 AM	520.38			517.1	5.236	5.236	ng/L	
Hg2600-3	DM2	CAL	SEQ-CCB2	1	5/31/2016 8:05:10	42970-1.RAW	8:05:10 AM	17.36			14.1	0.143	0.143	ng/L	
Hg2600-3	DM2	BLK	F605342-BLK3	1	5/31/2016 8:09:18	42971-1.RAW	8:09:18 AM	9.00	2		5.7	0.058	0.058	ng/L	
Hg2600-3	DM2	BLK	F605342-BLK4	1	5/31/2016 8:13:27	42972-1.RAW	8:13:27 AM	20.69		X	17.4	0.177	0.177	ng/L	
Hg2600-3	DM2	BLK	F605342-BLK5	1	5/31/2016 8:17:35	42973-1.RAW	8:17:35 AM	8.47	3		5.2	0.053	0.053	ng/L	
Hg2600-3	DM2	SAM	F605342-BS1	1	5/31/2016 8:21:44	42974-1.RAW	8:21:44 AM	1532.80	2		1529.6	15.345	15.345	ng/L	
Hg2600-3	DM2	SAM	F605342-BSD1	1	5/31/2016 8:25:52	42975-1.RAW	8:25:52 AM	1554.68	2		1551.4	15.566	15.566	ng/L	
Hg2600-3	DM2	SAM	1605687-01	1	5/31/2016 8:30:00	42976-1.RAW	8:30:00 AM	348.61	2		345.6	3.358	3.358	ng/L	
Hg2600-3	DM2	SAM	1605687-02	1	5/31/2016 8:34:09	42977-1.RAW	8:34:09 AM	14.75	2		11.5	-0.024	-0.024	ng/L	
Hg2600-3	DM2	SAM	1605687-03	1	5/31/2016 8:38:17	42978-1.RAW	8:38:17 AM	1265.22	2		1262.0	12.636	12.636	ng/L	
Hg2600-3	DM2	SAM	1605687-04	1	5/31/2016 8:42:26	42979-1.RAW	8:42:26 AM	22.60	2		19.4	0.055	0.055	ng/L	
Hg2600-3	DM2	SAM	1605687-06	1	5/31/2016 8:46:34	42980-1.RAW	8:46:34 AM	15.42	2		12.2	-0.018	-0.018	ng/L	
Hg2600-3	DM2	CAL	SEQ-CCV3	1	5/31/2016 8:50:43	42981-1.RAW	8:50:43 AM	510.26			507.0	5.133	5.133	ng/L	
Hg2600-3	DM2	CAL	SEQ-CCB3	1	5/31/2016 8:54:51	42982-1.RAW	8:54:51 AM	11.67			8.4	0.085	0.085	ng/L	
Hg2600-3	DM2	CAL	SEQ-CCV4	1	5/31/2016 9:37:45	42983-1.RAW	9:37:45 AM	520.63			517.4	5.238	5.238	ng/L	
Hg2600-3	DM2	CAL	SEQ-CCB4	1	5/31/2016 9:41:53	42984-1.RAW	9:41:53 AM	12.50			9.3	0.094	0.094	ng/L	
Hg2600-3	DM2	SAM	1605688-01	10	5/31/2016 9:46:02	42985-1.RAW	9:46:02 AM	593.15	3		589.9	5.967	59.670	ng/L	
Hg2600-3	DM2	SAM	1605688-03	1	5/31/2016 9:50:10	42986-1.RAW	9:50:10 AM	40.37	2		37.1	0.235	0.235	ng/L	
Hg2600-3	DM2	SAM	1605688-05	1	5/31/2016 9:54:18	42987-1.RAW	9:54:18 AM	16064.01	2		16060.8	162.462	162.462	ng/L	
Hg2600-3	DM2	SAM	1605688-07	1	5/31/2016 9:58:27	42988-1.RAW	9:58:27 AM	164.17	2		160.9	1.488	1.488	ng/L	
Hg2600-3	DM2	SAM	1605731-03	1	5/31/2016 10:02:35	42989-1.RAW	10:02:35 AM	97.12	2		93.9	0.809	0.809	ng/L	
Hg2600-3	DM2	SAM	1605731-07	1	5/31/2016 10:06:44	42990-1.RAW	10:06:44 AM	47.63	2		44.4	0.308	0.308	ng/L	
Hg2600-3	DM2	SAM	F605342-DUP1	1	5/31/2016 10:10:52	42991-1.RAW	10:10:52 AM	357.51	2		354.3	3.446	3.446	ng/L	
Hg2600-3	DM2	SAM	F605342-MS1	1	5/31/2016 10:15:01	42992-1.RAW	10:15:01 AM	1118.97	2		1115.7	11.155	11.155	ng/L	
Hg2600-3	DM2	SAM	F605342-MSD1	1	5/31/2016 10:19:09	42993-1.RAW	10:19:09 AM	1029.77	2		1026.5	10.252	10.252	ng/L	
Hg2600-3	DM2	SAM	F605342-MS2	10	5/31/2016 10:23:18	42994-1.RAW	10:23:18 AM	2039.37	3		2036.1	20.609	206.089	ng/L	

Instrument	Analyst	Sample Type	LabNumber	Dilution	Analyzed	FileID	RunEnd	Uncorrected Response	Batch ID	No PB Correction?	RESP	InitialResult	FinalResult	InitialUnits	Comments
Hg2600-3	DM2	CAL	SEQ-CCV5	1	5/31/2016 10:27:26	42995-1.RAW	10:27:26 AM	493.41			490.2	4.962	4.962	ng/L	
Hg2600-3	DM2	CAL	SEQ-CCB5	1	5/31/2016 10:31:34	42996-1.RAW	10:31:34 AM	17.52			14.3	0.144	0.144	ng/L	
Hg2600-3	DM2	SAM	F605342-MSD2	10	5/31/2016 10:35:43	42997-1.RAW	10:35:43 AM	2481.69	3		2478.4	25.087	250.870	ng/L	
Hg2600-3	DM2	SAM	1605688-05RE1	10	5/31/2016 10:39:51	42998-1.RAW	10:39:51 AM	1874.93	2		1871.7	18.935	189.352	ng/L	
Hg2600-3	DM2	SAM	1605688-07RE1	1	5/31/2016 10:44:00	42999-1.RAW	10:44:00 AM	73.91	2		70.7	0.575	0.575	ng/L	
Hg2600-3	DM2	BLK	F605348-BLK1	1	5/31/2016 10:48:08	43000-1.RAW	10:48:08 AM	22.23	4		19.0	0.192	0.192	ng/L	
Hg2600-3	DM2	BLK	F605348-BLK2	1	5/31/2016 10:52:17	43001-1.RAW	10:52:17 AM	23.59	4		20.3	0.206	0.206	ng/L	
Hg2600-3	DM2	BLK	F605348-BLK3	1	5/31/2016 10:56:25	43002-1.RAW	10:56:25 AM	12.33	4		9.1	0.092	0.092	ng/L	
Hg2600-3	DM2	SAM	F605348-BS1	1	5/31/2016 11:00:34	43003-1.RAW	11:00:34 AM	1566.12	4		1562.9	15.660	15.660	ng/L	
Hg2600-3	DM2	SAM	F605348-BSD1	1	5/31/2016 11:04:42	43004-1.RAW	11:04:42 AM	1563.18	4		1559.9	15.630	15.630	ng/L	
Hg2600-3	DM2	SAM	1605775-01	1	5/31/2016 11:08:50	43005-1.RAW	11:08:50 AM	232.1195572	4		228.9	2.154	2.154	ng/L	
Hg2600-3	DM2	SAM	1605775-02	1	5/31/2016 11:12:57	43006-1.RAW	11:12:57 AM	179.03	4		175.8	1.616	1.616	ng/L	
Hg2600-3	DM2	CAL	SEQ-CCV6	1	5/31/2016 11:17:06	43007-1.RAW	11:17:06 AM	529.42			526.2	5.327	5.327	ng/L	
Hg2600-3	DM2	CAL	SEQ-CCB6	1	5/31/2016 11:21:14	43008-1.RAW	11:21:14 AM	17.52			14.3	0.144	0.144	ng/L	
Hg2600-3	DM2	SAM	1605775-03	1	5/31/2016 11:25:22	43009-1.RAW	11:25:22 AM	619.34	4		616.1	6.074	6.074	ng/L	
Hg2600-3	DM2	SAM	1605775-04	1	5/31/2016 11:29:31	43010-1.RAW	11:29:31 AM	91.85	4		88.6	0.734	0.734	ng/L	
Hg2600-3	DM2	SAM	1605775-05	1	5/31/2016 11:33:39	43011-1.RAW	11:33:39 AM	694.47	4		691.2	6.835	6.835	ng/L	
Hg2600-3	DM2	SAM	1605775-06	1	5/31/2016 11:37:47	43012-1.RAW	11:37:47 AM	91.38	4		88.1	0.729	0.729	ng/L	
Hg2600-3	DM2	SAM	1605775-07	1	5/31/2016 11:41:56	43013-1.RAW	11:41:56 AM	182.65	4		179.4	1.653	1.653	ng/L	
Hg2600-3	DM2	SAM	1605775-08	1	5/31/2016 11:46:04	43014-1.RAW	11:46:04 AM	67.19	4		63.9	0.484	0.484	ng/L	
Hg2600-3	DM2	SAM	1605775-09	1	5/31/2016 11:50:13	43015-1.RAW	11:50:13 AM	982.24	4		979.0	9.748	9.748	ng/L	
Hg2600-3	DM2	SAM	1605775-10	1	5/31/2016 11:54:21	43016-1.RAW	11:54:21 AM	151.77	4		148.5	1.340	1.340	ng/L	
Hg2600-3	DM2	SAM	1605775-11	1	5/31/2016 11:58:30	43017-1.RAW	11:58:30 AM	732.97	4		729.7	7.225	7.225	ng/L	
Hg2600-3	DM2	SAM	1605775-12	1	5/31/2016 12:02:38	43018-1.RAW	12:02:38 PM	156.95	4		153.7	1.393	1.393	ng/L	
Hg2600-3	DM2	CAL	SEQ-CCV7	1	5/31/2016 12:06:46	43019-1.RAW	12:06:46 PM	550.94			547.7	5.545	5.545	ng/L	
Hg2600-3	DM2	CAL	SEQ-CCB7	1	5/31/2016 12:10:55	43020-1.RAW	12:10:55 PM	17.80			14.6	0.147	0.147	ng/L	
Hg2600-3	DM2	SAM	1605775-17	1	5/31/2016 12:15:03	43021-1.RAW	12:15:03 PM	316.25	4		313.0	3.006	3.006	ng/L	
Hg2600-3	DM2	SAM	1605775-18	1	5/31/2016 12:19:12	43022-1.RAW	12:19:12 PM	91.05	4		87.8	0.726	0.726	ng/L	
Hg2600-3	DM2	SAM	1605775-19	1	5/31/2016 12:23:20	43023-1.RAW	12:23:20 PM	4.80	4		1.5	-0.148	-0.148	ng/L	
Hg2600-3	DM2	SAM	1605778-01	1	5/31/2016 12:27:28	43024-1.RAW	12:27:28 PM	3432.07	4		3428.8	34.551	34.551	ng/L	
Hg2600-3	DM2	SAM	1605778-02	1	5/31/2016 12:31:37	43025-1.RAW	12:31:37 PM	158.16	4		154.9	1.405	1.405	ng/L	
Hg2600-3	DM2	SAM	1605778-03	1	5/31/2016 12:35:45	43026-1.RAW	12:35:45 PM	18.34	4		15.1	-0.011	-0.011	ng/L	
Hg2600-3	DM2	SAM	F605348-DUP1	1	5/31/2016 12:39:54	43027-1.RAW	12:39:54 PM	623.30	4		620.1	6.114	6.114	ng/L	
Hg2600-3	DM2	SAM	F605348-MS1	1	5/31/2016 12:44:02	43028-1.RAW	12:44:02 PM	678.21	4		675.0	6.670	6.670	ng/L	
Hg2600-3	DM2	SAM	F605348-MSD1	1	5/31/2016 12:48:10	43029-1.RAW	12:48:10 PM	689.96	4		686.7	6.789	6.789	ng/L	
Hg2600-3	DM2	SAM	F605348-MS2	1	5/31/2016 12:52:19	43030-1.RAW	12:52:19 PM	3123.42	4		3120.2	31.426	31.426	ng/L	
Hg2600-3	DM2	CAL	SEQ-CCV8	1	5/31/2016 12:56:27	43031-1.RAW	12:56:27 PM	575.48			572.2	5.793	5.793	ng/L	
Hg2600-3	DM2	CAL	SEQ-CCB8	1	5/31/2016 13:00:36	43032-1.RAW	1:00:36 PM	21.77			18.5	0.187	0.187	ng/L	
Hg2600-3	DM2	SAM	F605348-MSD2	1	5/31/2016 13:04:44	43033-1.RAW	1:04:44 PM	3103.61	4		3100.4	31.225	31.225	ng/L	
Hg2600-3	DM2	BLK	F605342-BLK6	10	5/31/2016 13:08:53	43034-1.RAW	1:08:53 PM	35.65	5		32.4	0.328	3.280	ng/L	
Hg2600-3	DM2	SAM	1605687-05	10	5/31/2016 13:13:01	43035-1.RAW	1:13:01 PM	1411.74	5		1408.5	13.932	139.319	ng/L	
Hg2600-3	DM2	SAM	F605342-MS3	1	5/31/2016 13:17:10	43036-1.RAW	1:17:10 PM	1293.53	2		1290.3	12.922	12.922	ng/L	
Hg2600-3	DM2	SAM	F605342-MSD3	1	5/31/2016 13:21:18	43037-1.RAW	1:21:18 PM	1251.68	2		1248.4	12.499	12.499	ng/L	
Hg2600-3	DM2	SAM	F605342-MS4	10	5/31/2016 13:25:26	43038-1.RAW	1:25:26 PM	2204.75	3		2201.5	22.283	222.832	ng/L	
Hg2600-3	DM2	SAM	F605342-MSD4	10	5/31/2016 13:29:35	43039-1.RAW	1:29:35 PM	2680.68	3		2677.4	27.102	271.015	ng/L	
Hg2600-3	DM2	CAL	SEQ-CCV9	1	5/31/2016 13:33:43	43040-1.RAW	1:33:43 PM	595.15			591.9	5.993	5.993	ng/L	
Hg2600-3	DM2	CAL	SEQ-CCB9	1	5/31/2016 13:37:52	43041-1.RAW	1:37:52 PM	30.68			27.4	0.278	0.278	ng/L	

TotalMercury	**Operat** DM	**BlankSl**	3.2476	**Calib Eqn:**	Conc = (Area-3.247	**Run Date:**	5/31/2016	**Blank SD:**	2.835654207					
EPA1631	**Worksh** WS0000	**CalibFa**	98.773	**Status:**	QC Warnings:6/QC E	**Run Time:**	9:33:36	**Blank RSD%:**	87.31409313					
	Method ####	**R:**	1	**R²:**	0.9999			**CF SD:**	2.012136038					
	Descrip THg26003-160531-1							**CF RSD%:**	2.037127296					

Sample/ID	Location	Rinse	Dilute	Blank	Conc (ppt)	MB%	FinalConc	Rec%	QA	RawData	RunEnd	Peak (Raw)	Control (etf)	Flags	RunCount
Clean				0.00	0.69					42933-1.RAW	5:33:15	68.12	Clean	OK	1
clean										42934-1.RAW	5:36:06	0.00	Clean	NP	1
ws				3.25	0.04					42935-1.RAW	5:40:14	7.26	Sample	OK	1
ws				3.25	0.00					42936-1.RAW	5:44:23	1.73	Sample	OK	1
ws										42937-1.RAW	5:48:31	0.00	Sample	NP	1
SEQ-IBL1	A1		1	0.00	0.05					42938-1.RAW	5:52:40	4.51	Sample	OK	1
SEQ-IBL2	A2		1							42939-1.RAW	5:56:48	0.00	Sample	NP	1
SEQ-IBL3	A3		1	0.00	0.05					42940-1.RAW	6:00:57	5.23	Sample	OK	1
SEQ-CAL1	A4		1	3.25	0.52			103.27		42941-1.RAW	6:05:05	54.25	Sample	OK	1
SEQ-CAL2	A5		1	3.25	0.99			98.90		42942-1.RAW	6:09:13	100.93	Sample	OK	1
SEQ-CAL3	A6		1	3.25	4.91			98.21		42943-1.RAW	6:13:22	488.28	Sample	OK	1
SEQ-CAL4	A7		1	3.25	20.13			100.65		42944-1.RAW	6:17:30	1991.60	Sample	OK	1
SEQ-CAL5	A8		1	3.25	39.59			98.97		42945-1.RAW	6:21:39	3913.48	Sample	OK	1
SEQ-ICV1	A9		1	3.25	5.42			108.35		42946-1.RAW	6:25:47	538.36	Sample	OK	1
EFGS05427 20NG	A10		100	3.25	495.44					42947-1.RAW	6:29:56	492.61	Sample	OK	1
EFGS TV 20NG	A11		100	3.25	500.23					42948-1.RAW	6:34:04	497.34	Sample	OK	1
F605269-BLK7	A12		100	3.25	63.91					42949-1.RAW	6:38:13	66.37	Sample	OK	1
F605269-BLK8	B1		100	3.25	47.13					42950-1.RAW	6:42:21	49.80	Sample	OK	1
F605269-BLK9	B2		100	3.25	40.27					42951-1.RAW	6:46:29	43.02	Sample	OK	1
F605269-BS2	B3		100	3.25	2014.11					42952-1.RAW	6:50:38	1992.65	Sample	OK	1
F605269-BSD2	B4		100	3.25	2128.67					42953-1.RAW	6:54:46	2105.80	Sample	OK	1
1605524-01RE1	B5		100	3.25	292.80					42954-1.RAW	6:58:55	292.46	Sample	OK	1
1605524-02RE2	B6		100	3.25	14560.39					42955-1.RAW	7:03:03	14385.01	Sample	FB	1
1605524-03RE2	B7		100	3.25	259.43					42956-1.RAW	7:07:12	259.49	Sample	OK	1
SEQ-CCV1	B8		1	3.25	5.33			106.63		42957-1.RAW	7:11:20	529.83	Sample	OK	1
SEQ-CCB1	B9		1	3.25	0.34			0.00		42958-1.RAW	7:15:29	36.96	Sample	OK	1
1605524-04RE1	B10		100	3.25	857.30					42959-1.RAW	7:19:37	850.03	Sample	OK	1
1605524-05RE1	B11		100	3.25	187.22					42960-1.RAW	7:23:45	188.17	Sample	OK	1
1605524-06RE1	B12		100	3.25	157.23					42961-1.RAW	7:27:54	158.55	Sample	OK	1
F605269-DUP2	C1		100	3.25	281.33					42962-1.RAW	7:32:02	281.13	Sample	OK	1
F605269-MS2	C2		100	3.25	1319.62			465.75		42963-1.RAW	7:36:11	1306.68	Sample	OK	1
F605269-MSD2	C3		100	3.25	1309.07					42964-1.RAW	7:40:19	1296.25	Sample	OK	1
1605524-02RE3	C4	5/31/16 500 x		3.25	29.28					42965-1.RAW	7:44:28	2894.99	Sample	OK	1
1605524-03RE3	C5	100 x		3.25	2.10					42966-1.RAW	7:48:36	210.30	Sample	OK	1
F605342-BLK1	C6		1	3.25	0.24					42967-1.RAW	7:52:44	26.92	Sample	OK	1
F605342-BLK2	C7		1	3.25	0.12					42968-1.RAW	7:56:53	15.56	Sample	OK	1
SEQ-CCV2	C8		1	3.25	5.24			104.71		42969-1.RAW	8:01:01	520.38	Sample	OK	1
SEQ-CCB2	C9		1	3.25	0.14			0.00		42970-1.RAW	8:05:10	17.36	Sample	OK	1
F605342-BLK3	C10		1	3.25	0.06					42971-1.RAW	8:09:18	9.00	Sample	OK	1
F605342-BLK4	C11		1	3.25	0.18					42972-1.RAW	8:13:27	20.69	Sample	OK	1
F605342-BLK5	C12		1	3.25	0.05					42973-1.RAW	8:17:35	8.47	Sample	OK	1
F605342-BS1	D1		1	3.25	15.49					42974-1.RAW	8:21:44	1532.80	Sample	OK	1
F605342-BSD1	D2		1	3.25	15.71					42975-1.RAW	8:25:52	1554.68	Sample	OK	1
1605687-01	D3		1	3.25	3.50					42976-1.RAW	8:30:00	348.81	Sample	OK	1
1605687-02	D4		1	3.25	0.12					42977-1.RAW	8:34:09	14.75	Sample	OK	1

1605687-03	D5	1	3.25	12.78		42978-1.RAW	8:38:17	1265.22	Sample	OK	1
1605687-04	D6	1	3.25	0.20		42979-1.RAW	8:42:26	22.60	Sample	OK	1
1605687-06	D7	1	3.25	0.12		42980-1.RAW	8:46:34	15.42	Sample	OK	1
SEQ-CCV3	D8	1	3.25	5.13	102.66	42981-1.RAW	8:50:43	510.26	Sample	OK	1
SEQ-CCB3	D9	1	3.25	0.09	0.00	42982-1.RAW	8:54:51	11.67	Sample	OK	1
SEQ-CCV4	A1	1	3.25	5.24	104.76	42983-1.RAW	9:37:45	520.63	Sample	OK	1
SEQ-CCB4	A2	1	3.25	0.09	0.00	42984-1.RAW	9:41:53	12.50	Sample	OK	1
1605688-01	A3	10	3.25	59.72		42985-1.RAW	9:46:02	593.15	Sample	OK	1
1605688-03	A4	1	3.25	0.38		42986-1.RAW	9:50:10	40.37	Sample	OK	1
1605688-05	A5	1	3.25	162.60		42987-1.RAW	9:54:18	16064.01	Sample	FB	1
1605688-07	A6	1	3.25	1.63		42988-1.RAW	9:58:27	164.17	Sample	OK	1
1605731-03	A7	1	3.25	0.95		42989-1.RAW	10:02:35	97.12	Sample	OK	1
1605731-07	A8	1	3.25	0.45		42990-1.RAW	10:06:44	47.63	Sample	OK	1
F605342-DUP1	A9	1	3.25	3.59		42991-1.RAW	10:10:52	357.51	Sample	OK	1
F605342-MS1	A10	1	3.25	11.30	246.28	42992-1.RAW	10:15:01	1118.97	Sample	OK	1
F605342-MSD1	A11	1	3.25	10.39		42993-1.RAW	10:19:09	1029.77	Sample	OK	1
F605342-MS2	A12	10	3.25	206.14	1663.41	42994-1.RAW	10:23:18	2039.37	Sample	OK	1
SEQ-CCV5	B1	1	3.25	4.96	99.25	42995-1.RAW	10:27:26	493.41	Sample	OK	1
SEQ-CCB5	B2	1	3.25	0.14	0.00	42996-1.RAW	10:31:34	17.52	Sample	OK	1
F605342-MSD2	B3	10	3.25	250.92		42997-1.RAW	10:35:43	2481.69	Sample	OK	1
1605688-05RE1	B4	10	3.25	189.49		42998-1.RAW	10:39:51	1874.93	Sample	OK	1
1605688-07RE1	B5	1	3.25	0.72		42999-1.RAW	10:44:00	73.91	Sample	OK	1
F605348-BLK1	B6	1	3.25	0.19		43000-1.RAW	10:48:08	22.23	Sample	OK	1
F605348-BLK2	B7	1	3.25	0.21		43001-1.RAW	10:52:17	23.59	Sample	OK	1
F605348-BLK3	B8	1	3.25	0.09		43002-1.RAW	10:56:25	12.33	Sample	OK	1
F605348-BS1	B9	1	3.25	15.82		43003-1.RAW	11:00:34	1566.12	Sample	OK	1
F605348-BSD1	B10	1	3.25	15.79		43004-1.RAW	11:04:42	1563.18	Sample	OK	1
1605775-01	B11	1	3.25	2.32		43005-1.RAW	11:08:50	232.12	Sample	OK	1
1605775-02	B12	1	3.25	1.78		43006-1.RAW	11:12:57	179.03	Sample	OK	1
SEQ-CCV6	C1	1	3.25	5.33	106.54	43007-1.RAW	11:17:06	529.42	Sample	OK	1
SEQ-CCB6	C2	1	3.25	0.14	0.00	43008-1.RAW	11:21:14	17.52	Sample	OK	1
1605775-03	C3	1	3.25	6.24		43009-1.RAW	11:25:22	619.34	Sample	OK	1
1605775-04	C4	1	3.25	0.90		43010-1.RAW	11:29:31	91.85	Sample	OK	1
1605775-05	C5	1	3.25	7.00		43011-1.RAW	11:33:39	694.47	Sample	OK	1
1605775-06	C6	1	3.25	0.89		43012-1.RAW	11:37:47	91.38	Sample	OK	1
1605775-07	C7	1	3.25	1.82		43013-1.RAW	11:41:56	182.65	Sample	OK	1
1605775-08	C8	1	3.25	0.65		43014-1.RAW	11:46:04	67.19	Sample	OK	1
1605775-09	C9	1	3.25	9.91		43015-1.RAW	11:50:13	982.24	Sample	OK	1
1605775-10	C10	1	3.25	1.50		43016-1.RAW	11:54:21	151.77	Sample	OK	1
1605775-11	C11	1	3.25	7.39		43017-1.RAW	11:58:30	732.97	Sample	OK	1
1605775-12	C12	1	3.25	1.56		43018-1.RAW	12:02:38	156.95	Sample	OK	1
SEQ-CCV7	D1	1	3.25	5.54	110.90	43019-1.RAW	12:06:46	550.94	Sample	OK	1
SEQ-CCB7	D2	1	3.25	0.15	0.00	43020-1.RAW	12:10:55	17.80	Sample	OK	1
1605775-17	D3	1	3.25	3.17		43021-1.RAW	12:15:03	316.25	Sample	OK	1
1605775-18	D4	1	3.25	0.89		43022-1.RAW	12:19:12	91.05	Sample	OK	1
1605775-19	D5	1	3.25	0.02		43023-1.RAW	12:23:20	4.80	Sample	OK	1
1605778-01	D6	1	3.25	34.71		43024-1.RAW	12:27:28	3432.07	Sample	OK	1
1605778-02	D7	1	3.25	1.57		43025-1.RAW	12:31:37	158.16	Sample	OK	1
1605778-03	D8	1	3.25	0.15		43026-1.RAW	12:35:45	18.34	Sample	OK	1
F605348-DUP1	D9	1	3.25	6.28		43027-1.RAW	12:39:54	623.30	Sample	OK	1

F605348-MS1	D10	1	3.25	6.83	93.90	43028-1.RAW	12:44:02	678.21	Sample	OK	1
F605348-MSD1	D11	1	3.25	6.95		43029-1.RAW	12:48:10	689.96	Sample	OK	1
F605348-MS2	D12	1	3.25	31.59	352.86	43030-1.RAW	12:52:19	3123.42	Sample	OK	1
SEQ-CCV8	A1	1	3.25	5.79	115.87	43031-1.RAW	12:56:27	575.48	Sample	OK	1
SEQ-CCB8	A2	1	3.25	0.19	0.00	43032-1.RAW	13:00:36	21.77	Sample	OK	1
F605348-MSD2	A3	1	3.25	31.39		43033-1.RAW	13:04:44	3103.61	Sample	FB	1
F605342-BLK6	A4	10	3.25	0.33		43034-1.RAW	13:08:53	35.65	Sample	OK	1
1605687-05	A5	10	3.25	142.60		43035-1.RAW	13:13:01	1411.74	Sample	OK	1
F605342-MS3	A6	1	3.25	13.06	8.97	43036-1.RAW	13:17:10	1293.53	Sample	OK	1
F605342-MSD3	A7	1	3.25	12.64		43037-1.RAW	13:21:18	1251.68	Sample	OK	1
F605342-MS4	A8	10	3.25	222.89	1339.50	43038-1.RAW	13:25:26	2204.75	Sample	OK	1
F605342-MSD4	A9	10	3.25	271.07		43039-1.RAW	13:29:35	2680.68	Sample	FB	1
SEQ-CCV9	A10	1	3.25	5.99	119.85	43040-1.RAW	13:33:43	595.15	Sample	OK	1
SEQ-CCB9	A11	1	3.25	0.28	0.00	43041-1.RAW	13:37:52	30.68	Sample	OK	1

ANALYSIS SEQUENCE

6E31005

Instrument: Hg2600-3

Calibration ID: UNASSIGNED

Analyzed: 5/31/2016

Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
6E31005-IBL1	QC	1			
6E31005-IBL2	QC	2			
6E31005-IBL3	QC	3			
6E31005-CAL1	QC	4	1601524		
6E31005-CAL2	QC	5	1601525		
6E31005-CAL3	QC	6	1601526		
6E31005-CAL4	QC	7	1601527		
6E31005-CAL5	QC	8	1601528		
6E31005-ICV1	QC	9	1601925		
6E31005-CCV1	QC	10	1601925		
6E31005-CCB1	QC	11			
F605342-BLK1	QC	12			
F605342-BLK2	QC	13			
6E31005-CCV2	QC	14	1601925		
6E31005-CCB2	QC	15			
F605342-BLK3	QC	16			
F605342-BLK5	QC	17			
F605342-BS1	QC	18			
F605342-BSD1	QC	19			
1605687-01	Hg-CVAFS-W-1631	20			
1605687-02	Hg-CVAFS-W-1631	21			
1605687-03	Hg-CVAFS-W-1631	22			
1605687-04	Hg-CVAFS-W-1631	23			
1605687-06	Hg-CVAFS-W-1631	24			
6E31005-CCV3	QC	25	1601925		
6E31005-CCB3	QC	26			
6E31005-CCV4	QC	27	1601925		
6E31005-CCB4	QC	28			
1605688-01	Hg-CVAFS-W-1631	29			
1605688-03	Hg-CVAFS-W-1631	30			
1605688-05	Hg-CVAFS-W-1631	31			
1605688-07	Hg-CVAFS-W-1631	32			
1605731-03	Hg-CVAFS-W-1631	33			
1605731-07	Hg-CVAFS-W-1631	34			
F605342-DUP1	QC	35			

Due Date: 5/31/2016

ANALYSIS SEQUENCE

6E31005

Instrument: Hg2600-3

Calibration ID: UNASSIGNED

Analyzed: 5/31/2016

Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
F605342-MS1	QC	36			
F605342-MSD1	QC	37			
F605342-MS2	QC	38			
6E31005-CCV5	QC	39	1601925		
6E31005-CCB5	QC	40			
F605342-MSD2	QC	41			
1605688-05RE1	Hg-CVAFS-W-1631	42			Added 5/31/2016 by DM2
1605688-07RE1	Hg-CVAFS-W-1631	43			Added 5/31/2016 by DM2
F605348-BLK1	QC	44			
F605348-BLK2	QC	45			
F605348-BLK3	QC	46			
F605348-BS1	QC	47			
F605348-BSD1	QC	48			
1605775-01	Hg-CVAFS-W-1631	49			Scan all data - Level IV
1605775-02	Hg-CVAFS-W-1631	50			Scan all data - Level IV
6E31005-CCV6	QC	51	1601925		
6E31005-CCB6	QC	52			
1605775-03	Hg-CVAFS-W-1631	53			Scan all data - Level IV
1605775-04	Hg-CVAFS-W-1631	54			Scan all data - Level IV
1605775-05	Hg-CVAFS-W-1631	55			Scan all data - Level IV
1605775-06	Hg-CVAFS-W-1631	56			Scan all data - Level IV
1605775-07	Hg-CVAFS-W-1631	57			Scan all data - Level IV
1605775-08	Hg-CVAFS-W-1631	58			Scan all data - Level IV
1605775-09	Hg-CVAFS-W-1631	59			Scan all data - Level IV
1605775-10	Hg-CVAFS-W-1631	60			Scan all data - Level IV
1605775-11	Hg-CVAFS-W-1631	61			Scan all data - Level IV
1605775-12	Hg-CVAFS-W-1631	62			Scan all data - Level IV
6E31005-CCV7	QC	63	1601925		
6E31005-CCB7	QC	64			
1605775-17	Hg-CVAFS-W-1631	65			Scan all data - Level IV
1605775-18	Hg-CVAFS-W-1631	66			Scan all data - Level IV
1605775-19	Hg-CVAFS-W-1631	67			Scan all data - Level IV
1605778-01	Hg-CVAFS-W-1631	68			Scan all data - Level IV
1605778-02	Hg-CVAFS-W-1631	69			Scan all data - Level IV
1605778-03	Hg-CVAFS-W-1631	70			Scan all data - Level IV

Due Date: 5/31/2016

ANALYSIS SEQUENCE

6E31005

Instrument: Hg2600-3

Calibration ID: UNASSIGNED

Analyzed: 5/31/2016

Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
F605348-DUP1	QC	71			
F605348-MS1	QC	72			
F605348-MSD1	QC	73			
F605348-MS2	QC	74			
6E31005-CCV8	QC	75	1601925		
6E31005-CCB8	QC	76			
F605348-MSD2	QC	77			
F605342-BLK6	QC	78			
1605687-05	Hg-CVAFS-W-1631	79			
F605342-MS3	QC	80			
F605342-MSD3	QC	81			
F605342-MS4	QC	82			
F605342-MSD4	QC	83			
6E31005-CCV9	QC	84	1601925		
6E31005-CCB9	QC	85			

Dan Moten 5/31/16
Samples Loaded By Date

Dan Moten 5/31/16
Data Processed By Date

Due Date: 5/31/2016

Failing Data Report - 6E31005

Sample ID	Analysis	Result	MRL	Dup Result	Source Result	True Value	Units	% Rec.	Rec. LCL	Rec. UCL	RPD	RPD Limit	Over Cal	Failure	Qualifier
1605688-05	Hg-CVAFS-W-1631	164	0.50				ng/L						FAIL-OVER	PASS	E
F605342-MSD1	Hg-CVAFS-W-1631	10.35	0.50	11.27	3.39	10.120	ng/L	68.8	71.00	125.00	8.44	24.00	PASS-OVER	FAIL-MSD (Rec.)	QM-07

Don Mokam 5/31/16
Analyst Reviewed By Date

Peer Reviewed By 5/31/16
Peer Reviewed By Date

ANALYSIS SEQUENCE

6E31004

Instrument: Hg2600-3

Calibration ID: UNASSIGNED

Analyzed: 5/31/2016

Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
6E31004-IBL1	QC	1			
6E31004-IBL2	QC	2			
6E31004-IBL3	QC	3			
6E31004-CAL1	QC	4	1601524		
6E31004-CAL2	QC	5	1601525		
6E31004-CAL3	QC	6	1601526		
6E31004-CAL4	QC	7	1601527		
6E31004-CAL5	QC	8	1601528		
6E31004-ICV1	QC	9	1601925		
F605269-BLK7	QC	10			
F605269-BLK8	QC	11			
F605269-BLK9	QC	12			
F605269-BS2	QC	13			
F605269-BSD2	QC	14			
1605524-01RE1	Hg_Passive_OSHAID140	15			Added 5/26/2016 by JRH
1605524-02RE2	Hg_Passive_OSHAID140	16			Added 5/26/2016 by JRH
1605524-03RE2	Hg_Passive_OSHAID140	17			Added 5/26/2016 by JRH
6E31004-CCV1	QC	18	1601925		
6E31004-CCB1	QC	19			
1605524-04RE1	Hg_Passive_OSHAID140	20			Added 5/26/2016 by JRH
1605524-05RE1	Hg_Passive_OSHAID140	21			Added 5/26/2016 by JRH
1605524-06RE1	Hg_Passive_OSHAID140	22			Added 5/26/2016 by JRH
F605269-DUP2	QC	23			
F605269-MS2	QC	24			
F605269-MSD2	QC	25			
1605524-02RE3	Hg_Passive_OSHAID140	26			Added 5/31/2016 by DM2
1605524-03RE3	Hg_Passive_OSHAID140	27			Added 5/31/2016 by DM2
6E31004-CCV2	QC	28	1601925		
6E31004-CCB2	QC	29			
6E31004-CCV3	QC	30	1601925		
6E31004-CCB3	QC	31			
6E31004-CCV4	QC	32	1601925		
6E31004-CCB4	QC	33			
6E31004-CCV5	QC	34	1601925		
6E31004-CCB5	QC	35			

Due Date: 6/3/2016

ANALYSIS SEQUENCE

6E31004

Instrument: Hg2600-3

Calibration ID: UNASSIGNED

Analyzed: 5/31/2016

Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
6E31004-CCV6	QC	36	1601925		
6E31004-CCB6	QC	37			
6E31004-CCV7	QC	38	1601925		
6E31004-CCB7	QC	39			
6E31004-CCV8	QC	40	1601925		
6E31004-CCB8	QC	41			
6E31004-CCV9	QC	42	1601925		
6E31004-CCB9	QC	43			

Don Morgan 5/31/16
Samples Loaded By Date

Don Morgan 5/31/16
Data Processed By Date

Due Date: 6/3/2016

Failing Data Report - 6E31004

Sample ID	Analysis	Result	MRL	Dup Result	Source Result	True Value	Units	% Rec.	Rec. LCL	Rec. UCL	RPD	RPD Limit	Over Cal	Failure	Qualifier
1605524-02RE2	Hg_Passive_OSHAID140	363	1.25				ng/Trap						FAIL-OVER	PASS	E
F605269-BLK7	Hg_Passive_OSHAID140	1.60	1.25				ng/Trap						PASS-OVER	FAIL-BLK	

Don Morem 5/31/16
Analyst Reviewed By Date

Ryan M 5/31/16
Peer Reviewed By Date

PREPARATION BENCH SHEET

F605348

Eurofins Frontier Global Sciences, Inc.

Matrix: Water **Prepared using: AFS - EPA 1631E BrCl Oxidation** **Prepared: 5/31/2016**

Lab Number	Sample ID and Source Sample	Initial (mL)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F605348-BLK1	Blank	100	101					
F605348-BLK2	Blank	100	101					
F605348-BLK3	Blank	100	101					
F605348-BS1	LCS	50	50.5	1505246	100			
F605348-BSD1	LCS Dup	50	50.5	1505246	100			
F605348-DUP1	Duplicate [1605775-03]	100	101					
F605348-MS1	Matrix Spike [1605775-10]	49.50495	50	1601450	25			[Spk] 100mL->101mL; 101mL->101mL; Spiked 50mL
F605348-MS2	Matrix Spike [1605775-09]	49.50495	50	1601450	100			[Spk] 100mL->101mL; 101mL->101mL; Spiked 50mL
F605348-MSD1	Matrix Spike Dup [1605775-10]	49.50495	50	1601450	25			[Spk] 100mL->101mL; 101mL->101mL; Spiked 50mL
F605348-MSD2	Matrix Spike Dup [1605775-09]	49.50495	50	1601450	100			[Spk] 100mL->101mL; 101mL->101mL; Spiked 50mL

Standard ID(s):	Description:	Expiration:
1505246	Nist 1641D 200X	20-Aug-16 00:00
1601450	THg 10ng/mL Calibration Standard	18-Jun-16 00:00
		18-Jun-16 00:00

Reagent ID(s):	Description:	Expiration:
1507461	25% Hydroxylamine-HCl working solution	08-Jun-16 00:00
1601950	0.2 N BRCL APRIL 2016	11-Oct-16 00:00
1602077	THg Dilute 1% BrCl	24-Jul-16 00:00
1602078	THg Washstation (0.5% BrCl)	19-Jul-16 00:00
1602724	3% SnCl2 THg reductant	11-Oct-16 00:00

PREPARATION BENCH SHEET

F605348

Eurofins Frontier Global Sciences, Inc.

Matrix: Water **Prepared using: AFS - EPA 1631E BrCl Oxidation** **Prepared: 5/31/2016**

Lab Number	Sample ID	Initial (mL)	Final (mL)	QC Sample	Sample Specs.	Raw Data	Sample Comments	Analysis Comments
1605775-01	OV02_052616_SW_10	100	101	-	-	-	Scan all data - Level IV	
1605775-02	OV02_052616_SW_10 DISSOLOVED	100	101	-	-	-	Scan all data - Level IV	
1605775-03	ES-15_052616_SW_10	100	101	-	-	-	Scan all data - Level IV	
1605775-04	ES-15_052616_SW_10 DISSOLVED	100	101	-	-	-	Scan all data - Level IV	
1605775-05	WQ-ECH_052616_SW_10	100	101	-	-	-	Scan all data - Level IV	
1605775-06	WQ-ECH_052616_SW_10 DISSOLVED	100	101	-	-	-	Scan all data - Level IV	
1605775-07	WQ-FPT_052616_SW_10	100	101	-	-	-	Scan all data - Level IV	
1605775-08	WQ-FPT_052616_SW_10 DISSOLVED	100	101	-	-	-	Scan all data - Level IV	
1605775-09	WQ16-C_052616_SW_10	100	101	-	-	-	MS/MSD Scan all data - Level IV	
1605775-10	WQ16-C_052616_SW_10 DISSOLVED	100	101	QC	-	-	MS/MSD Scan all data - Level IV	
1605775-11	WQ16-C_052616_SW_10_DUP	100	101	-	-	-	Scan all data - Level IV	
1605775-12	WQ16-C_052616_SW_10_DUP DISSOLVED	100	101	-	-	-	Scan all data - Level IV	
1605775-17	WQ3-L_052616_SW_10	100	101	-	-	-	Scan all data - Level IV	
1605775-18	WQ3-L_052616_SW_10_MD DISSOLVED	100	101	-	-	-	Scan all data - Level IV	
1605775-19	Laboratory Filter Blank	100	101	-	-	-	Scan all data - Level IV	
1605778-01	WQ2-C_052716_SW_10	100	101	-	-	-	Scan all data - Level IV	
1605778-02	WQ2-C_052716_SW_10 DISSLOVED	100	101	-	-	-	Scan all data - Level IV	
[illegible]778-03	Laboratory Filter Blank	100	101	-	-	-	Scan all data - Level IV	

I[illegible]e Date: 6/20/2016

PREPARATION BENCH SHEET

F605348

Eurofins Frontier Global Sciences, Inc.

Matrix: Water **Prepared using: AFS - EPA 1631E BrCl Oxidation** **Prepared: 5/31/2016**

[redacted]

Issue Date: 6/20/2016

PREPARATION BENCH SHEET

F605342

Eurofins Frontier Global Sciences, Inc.

Matrix: Water **Prepared using: AFS - EPA 1631E BrCl Oxidation** **Prepared: 5/31/2016**

Lab Number	Sample ID and Source Sample	Initial (mL)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F605342-BLK1	Blank	100	101					
F605342-BLK2	Blank	100	101					
F605342-BLK3	Blank	100	101					
F605342-BLK4	Blank	100	105					
F605342-BLK5	Blank	100	102					
F605342-BLK6	Blank	50	100					
F605342-BS1	LCS	50	50.5	1505246	100			
F605342-BSD1	LCS Dup	50	50.5	1505246	100			
F605342-DUP1	Duplicate [1605687-01]	100	101					
F605342-MS1	Matrix Spike [1605687-01]	49.50495	50	1601450	50			[Spk] 100mL->101mL; 101mL->101mL; Spiked 50mL
F605342-MS2	Matrix Spike [1605688-01]	4.901961	5	1601450	100			[Spk] 100mL->102mL; 101mL->101mL; Spiked 5mL
F605342-MS3	Matrix Spike [1605687-01]	49.50495	50	1601450	50			[Spk] 100mL->101mL; 101mL->101mL; Spiked 50mL
F605342-MS4	Matrix Spike [1605688-01]	4.901961	5	1601450	100			[Spk] 100mL->102mL; 101mL->101mL; Spiked 5mL
F605342-MSD1	Matrix Spike Dup [1605687-01]	49.50495	50	1601450	50			[Spk] 100mL->101mL; 101mL->101mL; Spiked 50mL
F605342-MSD2	Matrix Spike Dup [1605688-01]	4.901961	5	1601450	100			[Spk] 100mL->102mL; 101mL->101mL; Spiked 5mL
F605342-MSD3	Matrix Spike Dup [1605687-01]	49.50495	50	1601450	50			[Spk] 100mL->101mL; 101mL->101mL; Spiked 50mL
F605342-MSD4	Matrix Spike Dup [1605688-01]	4.901961	5	1601450	100			[Spk] 100mL->102mL; 101mL->101mL; Spiked 5mL

Standard ID(s):	Description:	Expiration:
1505246	Nist 1641D 200X	20-Aug-16 00:00
1601450	THg 10ng/mL Calibration Standard	18-Jun-16 00:00
		18-Jun-16 00:00

Reagent ID(s):	Description:	Expiration:
1507461	25% Hydroxylamine-HCl working solution	08-Jun-16 00:00
1601950	0.2 N BRCL APRIL 2016	11-Oct-16 00:00
1602077	THg Dilute 1% BrCl	24-Jul-16 00:00
1602078	THg Washstation (0.5% BrCl)	19-Jul-16 00:00
1602724	3% SnCl2 THg reductant	11-Oct-16 00:00

I e Date: 5/31/2016

PREPARATION BENCH SHEET

F605342

Eurofins Frontier Global Sciences, Inc.

Matrix: Water **Prepared using: AFS - EPA 1631E BrCl Oxidation** **Prepared: 5/31/2016**

Lab Number	Sample ID	Initial (mL)	Final (mL)	QC Sample	Sample Specs.	Raw Data	Sample Comments	Analysis Comments
1605687-01	001	100	101	-	-	-		
1605687-02	001 Field Blank	100	101	-	-	-		
1605687-03	002	100	101	-	-	-		
1605687-04	002 Field Blank	100	101	-	-	-		
1605687-05	A149	50	100	-	-	-		
1605687-06	A149 Blank	100	101	-	-	-		
1605688-01	B157957 DALE MABRY INF	100	102	-	-	-		
1605688-03	B159132 DALE MABRY EFF	100	101	-	-	-		
1605688-05	B157840 NORTHWEST INF	100	101	-	-	-		
1605688-05RE1	B157840 NORTHWEST INF	100	101	-	-	-	Added 5/31/2016 by DM2	Added 5/31/2016 by DM2
1605688-07	B159133 NORTHWEST EFF	100	101	-	-	-		
1605688-07RE1	B159133 NORTHWEST EFF	100	101	-	-	-	Added 5/31/2016 by DM2	Added 5/31/2016 by DM2
1605731-03	B159138 Dunn Eff	100	101	-	-	-		
1605731-07	B157951 South Cross Eff	100	101	-	-	-		

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I[illegible]e Date: 5/31/2016

PREPARATION BENCH SHEET

F605269

Eurofins Frontier Global Sciences, Inc.

Matrix: Air **Prepared using: AFS - EFGS-009 FSTM Trap Nitric/Sulfuric Digestion** **Prepared: 5/23/2016**

Lab Number	Sample ID and Source Sample	Initial (Trap)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F605269-BLK1	Blank	1	25					
F605269-BLK2	Blank	1	25					
F605269-BLK3	Blank	1	25					
F605269-BLK4	Blank	1	25					
F605269-BLK5	Blank	1	25					
F605269-BLK6	Blank	1	25					
F605269-BLK7	Blank	1	25					
F605269-BLK8	Blank	1	25					
F605269-BLK9	Blank	1	25					
F605269-BS1	LCS	1	25	1507758	50			
F605269-BS2	LCS	1	25	1507758	50			
F605269-BSD1	LCS Dup	1	25	1507758	50			
F605269-BSD2	LCS Dup	1	25	1507758	50			
F605269-DUP1	Duplicate [1605524-01]	1	25					
F605269-DUP2	Duplicate [1605524-01RE1]	1	25					
F605269-MS1	Matrix Spike [1605524-01]	0.02	0.5	1601450	50			[Spk] 1Trap->25mL; 25mL->25mL; Spiked 0.5mL
F605269-MS2	Matrix Spike [1605524-01RE1]	0.02	0.5	1601450	50			[Spk] 1Trap->25mL; 25mL->25mL; Spiked 0.5mL
F605269-MSD1	Matrix Spike Dup [1605524-01]	0.02	0.5	1601450	50			[Spk] 1Trap->25mL; 25mL->25mL; Spiked 0.5mL
F605269-MSD2	Matrix Spike Dup [1605524-01RE1]	0.02	0.5	1601450	50			[Spk] 1Trap->25mL; 25mL->25mL; Spiked 0.5mL

PREPARATION BENCH SHEET

F605269

Eurofins Frontier Global Sciences, Inc.

Matrix: Air **Prepared using: AFS - EFGS-009 FSTM Trap Nitric/Sulfuric Digestion** **Prepared: 5/23/2016**

Standard ID(s):	Description:	Expiration:
1507758	THg 1,000ng/mL Primary Spiking Standard	23-Jun-16 00:00
1601450	THg 10ng/mL Calibration Standard	18-Jun-16 00:00

Reagent ID(s):	Description:	Expiration:
1507461	25% Hydroxylamine-HCl working solution	08-Jun-16 00:00
1602077	THg Dilute 1% BrCl	24-Jul-16 00:00
1602078	THg Washstation (0.5% BrCl)	19-Jul-16 00:00
1602145	Omnitrace Hydrochloric Acid	21-Apr-19 00:00
1602381	Fisher Nitric Acid, Tracemetal Grade	16-Sep-17 00:00
1602548	3% SnCl2 THg reductant	08-Nov-16 00:00
1602724		11-Oct-16 00:00

I[illegible]e Date: 6/3/2016

PREPARATION BENCH SHEET

F605269

Eurofins Frontier Global Sciences, Inc.

Matrix: Air **Prepared using: AFS - EFGS-009 FSTM Trap Nitric/Sulfuric Digestion** **Prepared: 5/23/2016**

Lab Number	Sample ID	Initial (Trap)	Final (mL)	QC Sample	Sample Specs.	Raw Data	Sample Comments	Analysis Comments
1605524-01	24181H160505-1 2JVMUJKO	1	25	-	-	-		
1605524-01RE1	24181H160505-1 2JVMUJKO	1	25	-	-	-	Added 5/26/2016 by JRH	Added 5/26/2016 by JRH
1605524-02	24181H160510-1 2JVMUJKW	1	25	-	-	-		
1605524-02RE1	24181H160510-1 2JVMUJKW	1	25	-	-	-	Added 5/25/2016 by DM2	Added 5/25/2016 by DM2
1605524-02RE2	24181H160510-1 2JVMUJKW	1	25	-	-	-	Added 5/26/2016 by JRH	Added 5/26/2016 by JRH
1605524-02RE3	24181H160510-1 2JVMUJKW	1	25	-	-	-	Added 5/31/2016 by DM2	Added 5/31/2016 by DM2
1605524-03	24181H160510-2 2JVMUJL3	1	25	-	-	-		
1605524-03RE1	24181H160510-2 2JVMUJL3	1	25	-	-	-	Added 5/25/2016 by DM2	Added 5/25/2016 by DM2
1605524-03RE2	24181H160510-2 2JVMUJL3	1	25	-	-	-	Added 5/26/2016 by JRH	Added 5/26/2016 by JRH
1605524-03RE3	24181H160510-2 2JVMUJL3	1	25	-	-	-	Added 5/31/2016 by DM2	Added 5/31/2016 by DM2
1605524-04	24181H160511-1 2JVMUJKX	1	25	-	-	-		
1605524-04RE1	24181H160511-1 2JVMUJKX	1	25	-	-	-	Added 5/26/2016 by JRH	Added 5/26/2016 by JRH
1605524-05	24181H160512-1 2JVMUJL0	1	25	-	-	-		
1605524-05RE1	24181H160512-1 2JVMUJL0	1	25	-	-	-	Added 5/26/2016 by JRH	Added 5/26/2016 by JRH
1605524-06	24181H160512-2 2JVMUJL1	1	25	-	-	-		
1605524-06RE1	24181H160512-2 2JVMUJL1	1	25	-	-	-	Added 5/26/2016 by JRH	Added 5/26/2016 by JRH

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I e Date: 6/3/2016

PREPARATION BENCH SHEET

F605269

Eurofins Frontier Global Sciences, Inc.

Matrix: Air **Prepared using: AFS - EFGS-009 FSTM Trap Nitric/Sulfuric Digestion** **Prepared: 5/23/2016**

Issue Date: 6/3/2016

PREPARATION BENCH SHEET

2000.3

5/31/16 TM

F605342

Eurofins Frontier Global Sciences, Inc.

Matrix: Water **Prepared using: AFS - EPA 1631E BrCl Oxidation** **Prepared: 5/31/2016**

Lab Number	Sample ID and Source Sample	Initial (mL)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F605342-BLK1	Blank	100	101					1x
F605342-BLK2	Blank	100	101					1x
F605342-BLK3	Blank	100	101					1x
F605342-BLK4	Blank	100	105 ~~101~~					1x
F605342-BS1	LCS	50 ~~100~~	50.5 ~~101~~	1505246	100			1x
F605342-BSD1	LCS Dup	50 ~~100~~	50.5 ~~101~~	1505246	100			1x
F605342-DUP1	Duplicate 1605667-01	100	101					1x
F605342-MS1	Matrix Spike 1605667-01	100	101	1601450	50			1x
F605342-MS2	Matrix Spike 1605667-01	100	102 ~~101~~	1601450	100			10x
F605342-MSD1	Matrix Spike Dup 1605667-01	100	101	1601450	50			1x
F605342-MSD2	Matrix Spike Dup 1605658-01	100	102 ~~101~~	1601450	100			10x

Standard ID(s): Description: Expiration:

1601950
1602077
1602078
1602124
1507461

BLK 5 Final 102

MS3, MSD3 Re-run of MS1, MSD1

MS4, MSD4 Re-run of MS2, MSD2

BLK 6 IN: 50 F = 100

e Date: 5/31/2016

2000.3
5/31/16 DM

PREPARATION BENCH SHEET

F605342

Eurofins Frontier Global Sciences, Inc.

Matrix: Water **Prepared using: AFS - EPA 1631E BrCl Oxidation** **Prepared: 5/31/2016**

Lab Number	Sample ID	Initial (mL)	Final (mL)	QC Sample	Sample Specs.	Raw Data	Sample Comments	Analysis Comments
1605687-01	001	100	101	-	-	-		1X
1605687-02	001 Field Blank	100	101	-	-	-		1X
1605687-03	002	100	101	-	-	-		1X
1605687-04	002 Field Blank	100	101	-	-	-		1X
1605687-05	A149	~~100~~ 50	~~101~~ ~~105~~ 105	-	-	-		~~Not Preserved~~ 10X
1605687-06	A149 Blank	100	101	-	-	-		1X DM 5/31/16
1605688-01	B157957 DALE MABRY INF	100	~~101~~ 102	-	-	-		10X
1605688-03	B159132 DALE MABRY EFF	100	101	-	-	-		1X
1605688-05	B157840 NORTHWEST INF	100	101	-	-	-		1X → 10X
1605688-07	B159133 NORTHWEST EFF	100	101	-	-	-		1X → 1X
~~1605731-01~~	~~B159139 Dunn Inf~~	100	101	-	-	-		Not Preserved
1605731-03	B159138 Dunn Eff	100	101	-	-	-		1X
~~1605731-05~~	~~B159125 South Cross Inf~~	100	101	-	-	-		Not Preserved
1605731-07	B157951 South Cross Eff	100	101	-	-	-		1X

[redacted]

1001950
1002077
1002078
1507401
1002724

ue Date: 5/31/2016

1600.3

5/31/16 DM

PREPARATION BENCH SHEET

F605348

Eurofins Frontier Global Sciences, Inc.

Matrix: Water **Prepared using: AFS - EPA 1631E BrCl Oxidation** **Prepared: 5/31/2016**

Lab Number	Sample ID and Source Sample	Initial (mL)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F605348-BLK1	Blank	100	101					1X
F605348-BLK2	Blank	100	101					1X
F605348-BLK3	Blank	100	101					1X
F605348-BS1	LCS	~~100~~ 50	~~101~~ 50.5	1505246	100			1X
F605348-BSD1	LCS Dup	~~100~~ 50	~~101~~ 50.5	1505246	100			1X
F605348-DUP1	Duplicate 1605775-03	100	101					1X
F605348-MS1	Matrix Spike [1605775-10]	100	101	1601450	25			1X
F605348-MS2	Matrix Spike 1605775-09	100	101	1601450	100			1X
F605348-MSD1	Matrix Spike Dup [1605775-10]	100	101	1601450	25			1X
F605348-MSD2	Matrix Spike Dup 1605775-09	100	101	1601450	100			1X

Standard ID(s): Description: Expiration:

1601950

1602077

1602078

1602724

1507461

e Date: 6/20/2016

2600.3
5/31/16 DN

PREPARATION BENCH SHEET

F605348

Eurofins Frontier Global Sciences, Inc.

Matrix: Water **Prepared using: AFS - EPA 1631E BrCl Oxidation** **Prepared: 5/31/2016**

Lab Number	Sample ID	Initial (mL)	Final (mL)	QC Sample	Sample Specs.	Raw Data	Sample Comments	Analysis Comments
1605775-01	OV02_052616_SW_10	100	101	-	-	-	Scan all data - Level IV	1X
1605775-02	OV02_052616_SW_10 DISSOLOVED	100	101	-	-	-	Scan all data - Level IV	1X
1605775-03	ES-15_052616_SW_10	100	101	-	-	-	Scan all data - Level IV	1X
1605775-04	ES-15_052616_SW_10 DISSOLVED	100	101	-	-	-	Scan all data - Level IV	1X
1605775-05	WQ-ECH_052616_SW_10	100	101	-	-	-	Scan all data - Level IV	1X
1605775-06	WQ-ECH_052616_SW_10 DISSOLVED	100	101	-	-	-	Scan all data - Level IV	1X
1605775-07	WQ-FPT_052616_SW_10	100	101	-	-	-	Scan all data - Level IV	1X
1605775-08	WQ-FPT_052616_SW_10 DISSOLVED	100	101	-	-	-	Scan all data - Level IV	1X
1605775-09	WQ16-C_052616_SW_10	100	101	-	-	-	MS/MSD Scan all data - Level IV	1X
1605775-10	WQ16-C_052616_SW_10 DISSOLVED	100	101	QC	-	-	MS/MSD Scan all data - Level IV	1X
1605775-11	WQ16-C_052616_SW_10_DUP	100	101	-	-	-	Scan all data - Level IV	1X
1605775-12	WQ16-C_052616_SW_10_DUP DISSOLVED	100	101	-	-	-	Scan all data - Level IV	1X
1605775-17	WQ3-L_052616_SW_10	100	101	-	-	-	Scan all data - Level IV	1X
1605775-18	WQ3-L_052616_SW_10_MD DISSOLVED	100	101	-	-	-	Scan all data - Level IV	1X
1605775-19	Laboratory Filter Blank	100	101	-	-	-	Scan all data - Level IV	1X
1605778-01	WQ2-C_052716_SW_10	100	101	-	-	-	Scan all data - Level IV	1X
1605778-02	WQ2-C_052716_SW_10 DISSLOVED	100	101	-	-	-	Scan all data - Level IV	1X
778-03	Laboratory Filter Blank	100	101	-	-	-	Scan all data - Level IV	1X

e Date: 6/20/2016

PREPARATION BENCH SHEET

F605348

Eurofins Frontier Global Sciences, Inc.

Matrix: Water **Prepared using: AFS - EPA 1631E BrCl Oxidation** **Prepared: 5/31/2016**

[redacted]

e Date: 6/20/2016

200.3

5/31/16 DM

PREPARATION BENCH SHEET

F605269

Eurofins Frontier Global Sciences, Inc.

Matrix: Air **Prepared using: AFS - EFGS-009 FSTM Trap Nitric/Sulfuric Digestion** **Prepared: 5/23/2016**

Lab Number	Sample ID and Source Sample	Initial (Trap)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F605269-BLK1	Blank	1	25					
F605269-BLK2	Blank	1	25					
F605269-BLK3	Blank	1	25					
F605269-BLK4	Blank	1	25					
F605269-BLK5	Blank	1	25					
F605269-BLK6	Blank	1	25					
F605269-BLK7	Blank	1	25					100X
F605269-BLK8	Blank	1	25					100X
F605269-BLK9	Blank	1	25					100X
F605269-BS1	LCS	1	25	1507758	50			
F605269-BS2	LCS	1	25	1507758	50			100X
F605269-BSD1	LCS Dup	1	25	1507758	50			
F605269-BSD2	LCS Dup	1	25	1507758	50			100X
F605269-DUP1	Duplicate [1605524-01]	1	25					
F605269-DUP2	Duplicate [1605524-01RE1]	1	25					100X
F605269-MS1	Matrix Spike [1605524-01]	0.02	0.5	1601450	50			[Spk] 1Trap->25mL; 25mL->25mL; Spiked 0.5mL
F605269-MS2	Matrix Spike [1605524-01RE1]	1	25	1601450	50			100X
F605269-MSD1	Matrix Spike Dup [1605524-01]	0.02	0.5	1601450	50			[Spk] 1Trap->25mL; 25mL->25mL; Spiked 0.5mL
F605269-MSD2	Matrix Spike Dup [1605524-01RE1]	1	25	1601450	50			100X

Issue Date: 6/3/2016

2200.3
5/31/16 DM

PREPARATION BENCH SHEET

F605269

Eurofins Frontier Global Sciences, Inc.

Matrix: Air **Prepared using: AFS - EFGS-009 FSTM Trap Nitric/Sulfuric Digestion** **Prepared: 5/23/2016**

Lab Number	Sample ID	Initial (Trap)	Final (mL)	QC Sample	Sample Specs.	Raw Data	Sample Comments	Analysis Comments
1605524-01	24181H160505-1 2JVMUJKO	1	25	-	-	-		
1605524-01RE1	24181H160505-1 2JVMUJKO	1	25	-	-	-	Added 5/26/2016 by JRH	Added 5/26/2016 by JRH 100X
1605524-02	24181H160510-1 2JVMUJKW	1	25	-	-	-		
1605524-02RE1	24181H160510-1 2JVMUJKW	1	25	-	-	-	Added 5/25/2016 by DM2	Added 5/25/2016 by DM2
1605524-02RE2	24181H160510-1 2JVMUJKW	1	25	-	-	-	Added 5/26/2016 by JRH	Added 5/26/2016 by JRH 100X → 500X
1605524-03	24181H160510-2 2JVMUJL3	1	25	-	-	-		
1605524-03RE1	24181H160510-2 2JVMUJL3	1	25	-	-	-	Added 5/25/2016 by DM2	Added 5/25/2016 by DM2
1605524-03RE2	24181H160510-2 2JVMUJL3	1	25	-	-	-	Added 5/26/2016 by JRH	Added 5/26/2016 by JRH 100X → 100X
1605524-04	24181H160511-1 2JVMUJKX	1	25	-	-	-		
1605524-04RE1	24181H160511-1 2JVMUJKX	1	25	-	-	-	Added 5/26/2016 by JRH	Added 5/26/2016 by JRH 100X
1605524-05	24181H160512-1 2JVMUJL0	1	25	-	-	-		
1605524-05RE1	24181H160512-1 2JVMUJL0	1	25	-	-	-	Added 5/26/2016 by JRH	Added 5/26/2016 by JRH 100X
1605524-06	24181H160512-2 2JVMUJL1	1	25	-	-	-		
1605524-06RE1	24181H160512-2 2JVMUJL1	1	25	-	-	-	Added 5/26/2016 by JRH	Added 5/26/2016 by JRH 100X

[redacted]

Issue Date: 6/3/2016

PREPARATION BENCH SHEET

F605269

Eurofins Frontier Global Sciences, Inc.

Matrix: Air **Prepared using: AFS - EFGS-009 FSTM Trap Nitric/Sulfuric Digestion** **Prepared: 5/23/2016**

Standard ID(s):	Description:	Expiration:
1507758	THg 1,000ng/mL Primary Spiking Standard	23-Jun-16 00:00
1601450	THg 10ng/mL Calibration Standard	18-Jun-16 00:00

Reagent ID(s):	Description:	Expiration:
1507461	25% Hydroxylamine-HCl working solution	08-Jun-16 00:00
1602077	THg Dilute 1% BrCl	24-Jul-16 00:00
1602078	THg Washstation (0.5% BrCl)	19-Jul-16 00:00
1602145	Omnitrace Hydrochloric Acid	21-Apr-19 00:00
1602381	Fisher Nitric Acid, Tracemetal Grade	16-Sep-17 00:00
1602548	3% SnCl2 THg reductant	08-Nov-16 00:00

1602724

Total Mercury Preservation Logbook

Initial preservation and/or verification

Technician: CSP Date: 5/28/16 Time Completed: 1218

Work Orders: 1605778

Additional preservation and/or verification (as needed)

Technician: ______ Date: ______ Time Completed: ______

Technician: ______ Date: ______ Time Completed: ______

BrCl LIMS ID: 1601950

Pipette SN: MU32224

Cal. Date: 5/25/16

Sample ID	Sample Volume (mL)	Reagent added (mL)	Oxidized? Y / N	Additional preservation (as needed) Oxidized? Y / N	Reagent added (mL)	Oxidized? Y / N
1605778-01A	290	~~3.00~~ 2.90 CSP 5/28/16	Y			
1605778-02 C	300	3.00	Y			
1605778-03 A	300	3.00	Y			

CSP 5/28/16

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

Comments: ______

OM

Total Mercury Preservation Logbook

Initial preservation and/or verification

Technician: CSB, LM Date: 5/27/16 Time Completed: 17:30

Work Orders: 1605776

Additional preservation and/or verification (as needed)

Technician: _____ Date: _____ Time Completed: _____

Technician: _____ Date: _____ Time Completed: _____

BrCl LIMS ID: 1601950

Pipette SN: MU32229

Cal. Date: 5/25/16

Sample ID	Sample Volume (mL)	Reagent added (mL)	Oxidized? Y / N	Additional preservation (as needed) Oxidized? Y / N	Reagent added (mL)	Oxidized? Y / N
1605775-01A	300	3.00	Y			
1605775-03A	300	3.00	Y			
1605775-05A	300	3.00	Y			
1605775-07A	300	3.00	Y			
1605775-09A	300	3.00	Y			
1605775-11A	300	3.00	Y			
1605775-13A	300	3.00	Y			
1605775-15A	300	3.00	Y			
1605775-17A	300	3.00	Y			
1605775-02C	300	3.00	Y			
1605775-04C	300	3.00	Y			
1605775-06C	300	3.00	Y			
1605775-08C	300	3.00	Y			
1605775-10C	300	3.00	Y			
1605775-12C	300	3.00	Y			
1605775-14C	300	3.00	Y			
1605775-16C	300	3.00	Y			
1605775-18C	300	3.00	Y			
1605775-19A	300	3.00	Y			
		LM 5/27/16				

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

Comments: _____

DM 5/31/16

Total Mercury Preservation Logbook

Initial preservation and/or verification

Technician: CSP Date: 5/25/16 Time Completed: 1405

Additional preservation and/or verification (as needed)

Technician: CMC Date: 5/31/16 Time Completed: 1030

Technician: _____ Date: _____ Time Completed: _____

Work Orders: 1605688, 1605687

BrCl LIMS ID: 1601950

Pipette SN: MU32229

Cal. Date: 5/25/16

Sample ID	Sample Volume (mL)	Reagent added (mL)	Oxidized? Y / N	Additional preservation (as needed)		
				Oxidized? Y / N	Reagent added (mL)	Oxidized? Y / N
1605688-01A	300	3.00 + 3.00	y			
1605688-03A	300	3.00	y			
1605688-05A	270	2.70	y			
1605688-07A	300	3.00	y			
1605687-01A	300	3.00	y			
1605687-02A	300	3.00	y			
1605687-03A	300	3.00	y			
1605687-04A	300	3.00	y			
* 1605687-05A	300	15.00	y	N	9.00	Y
1605687-06A	300	3.00	y			

CSP 5/25/16

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

Comments: *1605687-05A was made into a 50/50 split in a 20mL glass vial (1605687-05B) 9mL BrCl was added to 11mL of sample 5/31/16 CMC

Total Mercury Preservation Logbook

Initial preservation and/or verification

Technician: CMK Date: 5/26/16 Time Completed: 1510

Additional preservation and/or verification (as needed)

Technician: CMK Date: 5/31/16 Time Completed: 10:38

Technician: _____ Date: _____ Time Completed: _____

Work Orders: 1605731

BrCl LIMS ID: 1601950

Pipette SN: MU32229

Cal. Date: 5/25/16

				Additional preservation (as needed)		
Sample ID	**Sample Volume (mL)**	**Reagent added (mL)**	**Oxidized? Y / N**	**Oxidized? Y / N**	**Reagent added (mL)**	**Oxidized? Y / N**
1605731-01A	2.60	2.60	Y	N	10.40	Y
1605731-03A	2.80	2.80	Y			
1605731-05A	3.00	3.00	Y	N	12.00	Y
1605731-07A	3.00	3.00	Y			

5/26/16 CMK

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

Comments: _____

DM 5/31/16

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

Analyst:	DON MORAN	**Sequence(s) #:**	6E31005, 6E31004
Reviewer:		**Dataset ID(s):**	THG26003-160531-1
Date:	5/31/2016	**WO (s) #:**	VARIOUS
Batch #(s):	F605342, F605348, F605269		

• **Select the correct preparation method.**

	Analyte	Prep Method		Matrix
☑	THg	EFAFS-T-AFS-SOP2985	FSTM Trap 70:30 Digest	Air/Gas
☐	THg	EFAFS-T-AFS-SOP2807	Modified Cold Aqua Regia	Sed/Soil
☐	THg	EFAFS-T-AFS-SOP2821	Shared Bomb-HF/HNO3/HCl Digest	Sed/Soil
☐	THg	EFTM-T-TM-SOP2825	Nitric Acid Oven Bomb	Sed/Soil
☐	THg	EFAFS-T-AFS-SOP2795	70:30 Digest	Tissue
☐	THg	EFAFS-T-AFS-SOP2800	KCl Trap BrCl Oxidation	Air/Gas
☐	THg	EFTM-T-TM-SOP2837	Shared Nitric	Tissue
☑	THg	EFSR-P-SP-SOP2796	BrCl Oxidation	Water
☐	Hg0	NA	NA	Water
☐	Inorg Hg	NA	NA	Water

	Analyst Initials: DM	**Reviewer Initials**	

1. Compare SampleID with Benchsheet/Sequence/Raw Data (Have all samples been imported?)	☑ YES	☐ NO		☑
2. Check for transcription errors from Excel spreadsheet (or Prep Benchsheet)/Raw data	☑ YES	☐ NO		☑
(a) On raw data (instrument print-out), does correct file (dataset ID#) name appear in description?	☑ YES	☐ NO		☑
Naming convention: THg26001-yymmdd-1 or THg26002-yymmdd-1				
(b) Check 5% of transcription from Instrument print-out and Excel file	☑ YES	☐ NO		☑
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	☐ N/A	☑
(d) Check and compare masses (review prep benchsheet)	☑ YES	☐ NO	☐ N/A	☑
(e) Check & compare initial & final volumes	☑ YES	☐ NO	☐ N/A	☑
(f) Do aliquots and dilutions written on benchsheet match those in Excel?	☑ YES	☐ NO	☐ N/A	☑
50 ml / aliquot = Excel dilution value				
(g) Is the sequence #, analyst, date, and instrument # on the QC page?	☑ YES	☐ NO		☑
(h) Is the analysis status correct? (analyzed/initial review/reviewed)	☑ YES	☐ NO		☑
(i) Original prep bench sheet added to data package?	☑ YES	☐ NO		☑
(j) Benchsheet prep date MUST match actual prep date (check if re-shot vs re-extract)	☑ YES	☐ NO		☑
3. High QA? WO#(s)/Client(s):	☐ YES	☑ NO		☑
4. Client specific QC? (if Yes, refer to Project Notes/LIMS)	☑ YES	☐ NO		☑
(a) Have the QC requirements been met for all WO#s?	☑ YES	☐ NO		
(b) Prep blanks corrections/assigned properly	☑ YES	☐ NO		☑
5a. 20 or fewer samples in batch?	☑ YES	☐ NO		☑
(i) 3 PBs, 1 LCS(or BS), 1 LCSD(or BSD), 1 DUP/Batch 1 MS/MSD (or AS/ASD)/10 samples?	☑ YES	☐ NO		☑
(ii) 1 CCV and 1 CCB every 10 analytical runs?	☑ YES	☐ NO		☑

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

Analyst:	DON MORAN	**Sequence(s) #:**	6E31005, 6E31004
Reviewer:	0	**Dataset ID(s):**	THG26003-160531-1
Date:	5/31/2016	**WO (s) #:**	VARIOUS
Batch #(s):	F605342, F605348, F605269		0

Analyst Initials DM **Reviewer Initials** L

5b. Has the B/C section data been uploaded?	☐ YES	☐ NO	☑ N/A	☑
QA/QC Data Checked				
6. RSD CF (≤ 15%)	☑ PASS	☐ FAIL		☑
Comments:				
7. The calibration curve included a minimum of 5 Standards	☑ YES	☐ NO		☑
Comments:				
8. 1st Calibration Standard % Recoveries EPA 1631E (75-125%)	☑ PASS	☐ FAIL		☑
9. ICV and CCV % Recoveries EPA 1631E (77-123%)	☑ PASS	☐ FAIL		☑
Comments:				
10. Do all calibration points pass acceptance criteria?	☑ YES	☐ NO		☑
Comments:				
11.Are qualifiers consistant with the data review flowcharts?	☑ YES	☐ NO	☐ N/A	☑
Comments:				
12. Explain any items on the failed data report from Element				☑
Comments: ***1605688-05, 1605524-02RE2 HIGH. RE-ANALYZED AT A DILUTION. F605269-BLK7 HIGH. F605342 MSD1 LOW RECOVERY. RE-ANALYZED AND PASSED***				
13. Are the individual Preparation Blanks < PQL or <2.2xMDL for WI (refer to appropriate prep method PQL list)	☑ PASS	☐ FAIL		☑
(a) If not < PQL or <2.2xMDL for WI, note which PB(s) are above control limit:				
(b) Is the mean PB < PQL or <2.2xMDL for WI (for appropriate qualification)?	☑ YES	☐ NO		☑
(c) Was a BrCl Blank analyzed for each preservation level?	☑ YES	☐ NO	☐ N/A	☑
(d) Are Preparation Blanks summarized on QC page?	☑ YES	☐ NO		☑
14. Filtration Blank Prepared (if yes, use FB qualifier)	☑ YES	☐ NO		☑
(a) Filtration Blank prep date same as associated samples' prep date	☑ YES	☐ NO	☐ N/A	☑
(b) Filtration Blank absolute value < PQL or <2.2xMDL for WI	☑ YES	☐ NO	☐ N/A	☑
15. IBLs (3 minimum) individually < 0.50 ng/L, mean < 0.25 ng/L and STD of 0.10 ng/L?	☑ PASS	☐ FAIL		☑
Comments:				
16. CCBs individually < 0.50 ng/L or 2.2 x MDL for WI?	☑ PASS	☐ FAIL		☑
Comments:				
17. Have Total Solids been applied? (If NO, please ensure that they are done or nearly done)	☐ YES	☐ NO	☑ N/A	☑
18. Is the correct 'Source' designated for MD/MS/MSD?	☑ YES	☐ NO		☑
19. For digested preps: was there a spike witness signature & date on the prep bench sheet?	☑ YES	☐ NO	☐ N/A	☑

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

Analyst:	DON MORAN	**Sequence(s) #:**	6E31005, 6E31004
Reviewer:	0	**Dataset ID(s):**	THG26003-160531-1
Date:	5/31/2016	**WO (s) #:**	VARIOUS
Batch #(s):	F605342, F605348, F605269		0

Analyst Initials DM **Reviewer Initials**

20. MS/MSD Spiked at least 1-5 X ambient or 5x MRL (whichever is higher) ?	☑ YES	☐ NO		☑
Comments:				
21. Are all samples within instrument calibration range? (or at minimum dilution size)	☑ PASS	☐ FAIL		☑
Comments:				
22. Are the samples run at the correct dilution level for the method?	☑ YES	☐ NO		
Comments:				
23. Dissolved < Total (if applicable)	☑ YES	☐ NO	☐ N/A	☑
Comments:				
24. Effluent < Influent (visually confirm if needed)	☑ YES	☐ NO	☐ N/A	☑
Comments:				
25. Are re-runs noted with reason?	☑ YES	☐ NO	☐ N/A	☑
Comments:				
26. FSTM Datasets: Check to ensure the 'Response' & 'Initial Result' columns match in both the Excel dataset & LIMS for the FSTM A (in sequence) & B/C (in batch) traps?	☐ YES	☐ NO	☑ N/A	☑
Comments:				
27. Is the B trap <5% A Traps	☐ YES	☐ NO	☑ N/A	☑
Comments:				
28. Are spiked trap recoveries75-125% of true value?	☐ YES	☐ NO	☑ N/A	☑
Comments:				
29.Have non-reportable samples been imported into LIMS and clicked to non-reportable?	☑ YES	☐ NO	☐ N/A	
Comments:				
30. Have re-extracts been created for non-reportable samples?	☐ YES	☐ NO	☑ N/A	☑
31. Are there any HIGH QA projects within the data? If so, place data package in QA office before scanning.	☐ YES	☐ NO	☑ N/A	☑
32. Does the data set need scanning?	☑ YES		☐ N/A	☑
33. Does the dataset have an LOQ/LOQ or DOC?	☐ YES		☑ N/A	☑
34. Water samples: has the preservation log been included in dataset for final volume verification?	☑ YES	☐ NO	☐ N/A	☑
35. Water samples-is the final volume correct in the sequence?	☑ YES	☐ NO	☐ N/A	☑

Files located at: \\Cuprum\gen_admin\Quality Assurance\Training Master\DOCs

36. Date of analyst IDOC/CDOC:	1/18/2016	IDOC/CDOC within last 12 months?	☑ YES	☐ NO	☑
37. Date of analyst's SOP reading for method:	3/23/2015	Current SOP revision read?	☑ YES	☐ NO	☑
38. Date of LOD:	1/14/2016	LOD within last 3 months?	☑ YES	☐ NO	☑
39. Date of LOQ:	1/14/2016	LOQ within last 3 months?	☑ YES	☐ NO	☑

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

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

Analyst:	DON MORAN	**Sequence(s) #:**	6E31005, 6E31004
Reviewer:	0	**Dataset ID(s):**	THG26003-160531-1
Date:	5/31/2016	**WO (s) #:**	VARIOUS
Batch #(s):	F605342, F605348, F605269		0

DM

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

Additional Page (s)? ☐ YES

MMHg27001-160617-1 WATERS

eurofins

Frontier Global Sciences

Analysis Datasheet for Methyl Mercury in Waters

Date of Analysis: June 17, 2016
Instrument #: Hg2700-1
LIMS Sequence #: 6F18001

Analyst: DM2
Units ng/L

Calibration Statistics:

LabNumber	n	True Val	Area	Uncorrected Response Factor	Corrected Peak Height	Corrected Response Factor	% Recovery
SEQ-CAL1	1	0.05 ng/L	24.32 units	486.45	21.92 units	438.39	93.0 %Rec
SEQ-CAL2	1	0.20 ng/L	84.35 units	421.74	81.95 units	409.73	86.9 %Rec
SEQ-CAL3	1	1.00 ng/L	509.96 units	509.96	507.56 units	507.56	107.7 %Rec
SEQ-CAL4	1	2.00 ng/L	997.17 units	498.59	994.77 units	497.38	105.5 %Rec
SEQ-CAL5	1	4.00 ng/L	2016.43 units	504.11	2014.03 units	503.51	106.8 %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
471.31	+/- 44.46	9.4% RSD	484.17	**0.8046**

MDN Only	
SEQ-CAL1	
SEQ-CAL2	
SEQ-CAL3	
SEQ-CAL4	
SEQ-CAL5	
SEQ-CAL6	NA
SEQ-CAL7	NA
SEQ-CAL8	NA
SEQ-CAL9	NA
SEQ-ICV/CCV	
Acetate Buffer	
Ethylating Agent	

Blanks:

LabNumber	n	Mean	Std Dev	Mean (ng/L)	Std Dev (ng/L)
SEQ-IBL	1	2.40 units		0.00 ng/L	#VALUE!

Preparation Blanks

Sample Type	Batch ID	n	Mean	Std Dev
BLK	1	3	0.021 ng/L	±0.017
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: JH 6/24/16

Instrument	Analyst	Sample Type	LabNumber	Dilution	Analyzed	FileID	Run End	Uncorrected Response	Batch ID	No PB Correction?	RESP	InitialResult	FinalResult	InitialUnits	Comments
Hq2700-1	DM2	CAL	SEQ-IBL1	1	6/17/16 5:59	13093-1.RAW	5:59	2.40			0.0	0.000	0.000	ng/L	
Hq2700-1	DM2	CAL	SEQ-CAL1	1	6/17/16 6:10	13094-1.RAW	#######	24.32			21.9	0.047	0.047	ng/L	
Hq2700-1	DM2	CAL	SEQ-CAL2	1	6/17/16 6:20	13095-1.RAW	#######	84.35			81.9	0.174	0.174	ng/L	
Hq2700-1	DM2	CAL	SEQ-CAL3	1	6/17/16 6:31	13096-1.RAW	#######	509.96			507.6	1.077	1.077	ng/L	
Hq2700-1	DM2	CAL	SEQ-CAL4	1	6/17/16 6:41	13097-1.RAW	#######	997.17			994.8	2.111	2.111	ng/L	
Hq2700-1	DM2	CAL	SEQ-CAL5	1	6/17/16 6:52	13098-1.RAW	#######	2016.43			2014.0	4.273	4.273	ng/L	
Hq2700-1	DM2	CAL	SEQ-ICV1	1	6/17/16 7:02	13099-1.RAW	#######	248.78			246.4	0.523	0.523	ng/L	
Hq2700-1	DM2	CAL	SEQ-ICB1	1	6/17/16 7:13	13100-1.RAW	#######	5.87			3.5	0.007	0.007	ng/L	
Hq2700-1	DM2	SAM	F606211-BS1	1.25	6/17/16 7:31	13101-1.RAW	#######	442.51	1		440.1	1.144	1.430	ng/L	
Hq2700-1	DM2	SAM	F606211-BSD1	1.25	6/17/16 7:41	13102-1.RAW	#######	462.01	1		459.6	1.195	1.494	ng/L	
Hq2700-1	DM2	BLK	F606211-BLK1	1.25	6/17/16 7:52	13103-1.RAW	#######	14.19	1		11.8	0.031	0.039	ng/L	
Hq2700-1	DM2	BLK	F606211-BLK2	1.25	6/17/16 8:02	13104-1.RAW	#######	8.70	1		6.3	0.017	0.021	ng/L	
Hq2700-1	DM2	BLK	F606211-BLK3	1.25	6/17/16 8:13	13105-1.RAW	#######	3.58	1		1.2	0.003	0.004	ng/L	
Hq2700-1	DM2	SAM	1605731-08	1.25	6/17/16 8:23	13106-1.RAW	#######	4.99	1		2.6	-0.010	-0.013	ng/L	
Hq2700-1	DM2	SAM	1605731-09	1.25	6/17/16 8:34	13107-1.RAW	#######	4.35	1		1.9	-0.012	-0.015	ng/L	
Hq2700-1	DM2	SAM	1605778-01	1.25	6/17/16 8:44	13108-1.RAW	#######	160.53	1		158.1	0.400	0.500	ng/L	
Hq2700-1	DM2	SAM	1605778-02	1.25	6/17/16 8:55	13109-1.RAW	#######	22.61	1		20.2	0.036	0.045	ng/L	
Hq2700-1	DM2	SAM	1605778-03	1.25	6/17/16 9:05	13110-1.RAW	#######	2.98	1		0.6	-0.015	-0.019	ng/L	
Hq2700-1	DM2	CAL	SEQ-CCV1	1	6/17/16 9:16	13111-1.RAW	#######	242.15			239.7	0.509	0.509	ng/L	
Hq2700-1	DM2	CAL	SEQ-CCB1	1	6/17/16 9:26	13112-1.RAW	#######	3.07			0.7	0.001	0.001	ng/L	
Hq2700-1	DM2	SAM	1606097-03	1.25	6/17/16 9:37	13113-1.RAW	#######	11.65	1		9.2	0.007	0.009	ng/L	
Hq2700-1	DM2	SAM	1606097-08	1.25	6/17/16 9:47	13114-1.RAW	#######	12.53	1		10.1	0.010	0.012	ng/L	
Hq2700-1	DM2	SAM	1606097-13	1.25	6/17/16 9:58	13115-1.RAW	#######	9.38	1		7.0	0.001	0.002	ng/L	
Hq2700-1	DM2	SAM	1606097-18	1.25	6/17/16 10:08	13116-1.RAW	#######	27.19	1		24.8	0.048	0.061	ng/L	
Hq2700-1	DM2	SAM	1606097-23	1.25	6/17/16 10:19	13117-1.RAW	#######	169.97	1		167.6	0.425	0.531	ng/L	
Hq2700-1	DM2	SAM	1606097-28	1.25	6/17/16 10:29	13118-1.RAW	#######	363.14	1		360.7	0.934	1.168	ng/L	
Hq2700-1	DM2	SAM	1606097-31	1.25	6/17/16 10:40	13119-1.RAW	#######	24.44	1		22.0	0.041	0.051	ng/L	
Hq2700-1	DM2	SAM	1606097-36	1.25	6/17/16 10:50	13120-1.RAW	#######	409.83	1		407.4	1.057	1.322	ng/L	
Hq2700-1	DM2	SAM	1606097-39	1.25	6/17/16 11:01	13121-1.RAW	#######	284.33	1		281.9	0.726	0.908	ng/L	
Hq2700-1	DM2	SAM	1606097-42	1.25	6/17/16 11:11	13122-1.RAW	#######	154.07	1		151.7	0.383	0.479	ng/L	
Hq2700-1	DM2	CAL	SEQ-CCV2	1	6/17/16 11:22	13123-1.RAW	#######	227.57			225.2	0.478	0.478	ng/L	
Hq2700-1	DM2	CAL	SEQ-CCB2	1	6/17/16 11:32	13124-1.RAW	#######	8.44			6.0	0.013	0.013	ng/L	
Hq2700-1	DM2	SAM	1606097-45	1.25	6/17/16 11:43	13125-1.RAW	#######	9.06	1		6.7	0.001	0.001	ng/L	
Hq2700-1	DM2	SAM	1606097-48	1.25	6/17/16 11:53	13126-1.RAW	#######	0.31	1		-2.1	-0.022	-0.028	ng/L	
Hq2700-1	DM2	SAM	1606175-01	1.25	6/17/16 12:04	13127-1.RAW	#######	53.37	1		51.0	0.117	0.147	ng/L	
Hq2700-1	DM2	SAM	1606256-01	1.25	6/17/16 12:14	13128-1.RAW	#######	4.41	1		2.0	-0.012	-0.015	ng/L	
Hq2700-1	DM2	SAM	1606256-02	1.25	6/17/16 12:25	13129-1.RAW	#######	0.00	1		-2.4	-0.023	-0.029	ng/L	
Hq2700-1	DM2	SAM	F606211-DUP1	1.25	6/17/16 12:35	13130-1.RAW	#######	169.38	1		167.0	0.423	0.529	ng/L	
Hq2700-1	DM2	SAM	F606211-MS1	1.25	6/17/16 12:46	13131-1.RAW	#######	132.32	1		129.9	0.326	0.407	ng/L	
Hq2700-1	DM2	SAM	F606211-MSD1	1.25	6/17/16 12:56	13132-1.RAW	#######	316.79	1		314.4	0.812	1.015	ng/L	
Hq2700-1	DM2	SAM	F606211-MS2	1.25	6/17/16 13:07	13133-1.RAW	#######	668.99	1		666.6	1.741	2.176	ng/L	
Hq2700-1	DM2	SAM	F606211-MSD2	1.25	6/17/16 13:17	13134-1.RAW	#######	701.42	1		699.0	1.826	2.283	ng/L	
Hq2700-1	DM2	CAL	SEQ-CCV3	1	6/17/16 13:28	13135-1.RAW	#######	229.85			227.5	0.483	0.483	ng/L	
Hq2700-1	DM2	CAL	SEQ-CCB3	1	6/17/16 13:38	13136-1.RAW	#######	8.40			6.0	0.013	0.013	ng/L	

MethylMercury	Operat	DM	BlankS	4.1351	Calib Eqn:	Conc = (Area-4.135) / 461.	Run Date:	#######	Blank SD:	2.449378333
EPA1630	Workst	MMHgZ	CalibFa	461.28	Status:	CF w. Blank Sub Calib. OK	Run Time:	7:20:27	Blank RSC	59.23353967
	Metho	2010-01	R:	0.9999	R²:	0.999866342	CalibAnal	MeHg	CF SD:	55.50219696
	Descrip	MMHg27001-160517-1							CF RSD%:	12.03214348

Sample/ID	Location	Rinse	Dilute	Blank:	ConcHg0(pr	ConcMeHg(ppt)	ConcHg2(pr	ConcPrHg(r	Rec%	QA
Clean				0		0.004002627	0.0179809			
ws	A1			4.1351	0.0119924	-0.008013336	0.0689787			
SEQ-IBL1	A2		1	0	0.0325937	0.005209709	0.105609			
SEQ-CAL1	A3		1	4.1351	0.0575458	0.04376386	0.0856345		87.53	
SEQ-CAL2	A4		1	4.1351	0.160621	0.172368624	0.0923673		86.18	
SEQ-CAL3	A5		1	4.1351	0.6007975	1.096567279	0.142554		109.66	
SEQ-CAL4	A6		1	4.1351	1.2830904	2.151429814	0.1843774		107.57	
SEQ-CAL5	A7		1	4.1351	2.5453595	4.362389955	0.33816		109.06	
SEQ-ICV1	A8		1	4.1351	1.973377	0.530353475	0.4245085		106.20	
SEQ-ICB1	A9		1	0	0.0564195	0.012719083	0.0998504			
F606211-BS1	A10		1.25	4.1351	0.5458497	1.18792021	0.1855232			
F606211-BSD1	A11		1.25	4.1351	0.5267717	1.240764045	0.1530503			
F606211-BLK1	A12		1.25	4.1351	0.0543438	0.027253119	0.1409946			
F606211-BLK2	A13		1.25	4.1351	0.0335413	0.01236622	0.1406911			
F606211-BLK3	A14		1.25	4.1351	0.0398705	-0.001500449	0.137867			
1605731-08	A15		1.25	4.1351	0.0344443	0.002309679	0.164187			
1605731-09	A16		1.25	4.1351	0.0229616	0.000576257	0.1387431			
1605778-01	A17		1.25	4.1351	0.6789524	0.423803207	1.1304987			
1605778-02	A18		1.25	4.1351	0.0531264	0.050086991	0.162614			
1605778-03	A19		1.25	4.1351	0.0234894	-0.00312943	0.131471			
SEQ-CCV1	A20		1	4.1351	2.1095654	0.515981445	0.4458324		103.32	
SEQ-CCB1	A21		1	4.1351	0.0286042	-0.002268127	0.0830089		0.00	
1606097-03	B1		1.25	4.1351	0.0723954	0.020390193	0.1641423			
1606097-08	B2		1.25	4.1351	0.1112126	0.022760721	0.3405484			
1606097-13	B3		1.25	4.1351	0.082994	0.014215505	0.1506934			
1606097-18	B4		1.25	4.1351	0.0951167	0.062479049	0.3005523			
1606097-23	B5		1.25	4.1351	0.097891	0.449372207	0.2431804			
1606097-28	B6		1.25	4.1351	0.3736498	0.972851246	0.2691941			
1606097-31	B7		1.25	4.1351	0.0774369	0.055027196	0.2162649			
1606097-36	B8		1.25	4.1351	0.3368197	1.09937661	0.1857469			
1606097-39	B9		1.25	4.1351	0.2605004	0.759268458	0.2404085			
1606097-42	B10		1.25	4.1351	0.1701148	0.40630899	0.3887081			
SEQ-CCV2	B11		1	4.1351	1.9658105	0.4843821	0.4420112		97.00	
SEQ-CCB2	B12		1	4.1351	0.0354243	0.009322217	0.0843425		0.00	
1606097-45	B13		1.25	4.1351	0.0368215	0.013332882	0.0955493			
1606097-48	B14		1.25	4.1351	0.0338073	-0.010369962	0.1109496			
1606175-01	B15		1.25	4.1351	0.0573705	0.133426878	0.3036932			
1606256-01	B16		1.25	4.1351	0.025704	0.000756271	0.154894			
1606256-02	B17		1.25							
F606211-DUP1	B18		1.25	4.1351	0.4964083	0.447774854	1.9793236			
F606211-MS1	B19		1.25	4.1351	0.1029158	0.347364434	0.1353048		34.74	
F606211-MSD1	B20		1.25	4.1351	0.309836	0.847236603	0.4365081			
F606211-MS2	B21		1.25	4.1351	0.1307993	1.801644068	0.3818073		90.08	
F606211-MSD2	C1		1.25	4.1351	0.1430143	1.889516047	0.7868788			
SEQ-CCV3	C2		1	4.1351	2.7219908	0.489327754	0.3955923		97.99	
SEQ-CCB3	C3		1	4.1351	0.0495539	0.009238407	0.0855336		0.00	

RawData	RunEnd	PeakHg0 (Rav	PeakMeHg (Ra	PeakHg2(Raw	PeakPrHg(Rav	Control (etf)	Flags	RunCount
13091-1.RAW		0	1.846342653	8.294270833	0	cleandry	OK	1
13092-1.RAW		9.482481061	0.438707386	35.95376788	0	psample10	OK	1
13093-1.RAW		15.03489583	2.403148674	48.71560131	0	psample10	OK	1
13094-1.RAW		30.67999527	24.32263258	43.63683712	0	psample10	OK	1
13095-1.RAW		78.22682292	83.64578598	46.74254261	0	psample10	OK	1
13096-1.RAW		281.2725983	509.962642	69.89280303	0	psample10	CT	1
13097-1.RAW		596.0025481	996.5524858	89.18522727	0	psample10	CT	1
13098-1.RAW		1178.265459	2016.430161	160.1224905	0	psample10	CT	1
13099-1.RAW		914.4198121	248.7780066	199.9535738	0	psample10	CT	1
13100-1.RAW	7:13:05	26.02535511	5.867092803	46.05925663	0	psample10	OK	1
13101-1.RAW		205.56793	442.5087595	72.59803504	0	psample10	CT	1
13102-1.RAW		198.5276515	462.009517	60.6147017	0	psample10	CT	1
13103-1.RAW		24.18939394	14.19223485	56.16581439	0	psample10	OK	1
13104-1.RAW		16.51273674	8.698579545	56.05381155	0	psample10	OK	1
13105-1.RAW		18.84836648	3.58141572	55.01164386	0	psample10	OK	1
13106-1.RAW		16.84597538	4.987452652	64.72440814	0	psample10	OK	1
13107-1.RAW		12.6085464	4.347774621	55.33496686	0	psample10	OK	1
13108-1.RAW		254.6863163	160.5295928	421.3187116	0	psample10	CT	1
13109-1.RAW		23.74015152	22.61115057	64.14393939	0	psample10	OK	1
13110-1.RAW		12.80331439	2.980279356	52.65137311	0	psample10	OK	1
13111-1.RAW		977.2411558	242.1484375	209.7898972	0	psample10	CT	1
13112-1.RAW		17.32973485	3.088873106	42.42571023	0	psample10	OK	1
13113-1.RAW	9:37:09	30.8509233	11.65963542	64.70791047	0	psample10	OK	1
13114-1.RAW		45.17547348	12.53442235	129.8063968	0	psample10	CT	1
13115-1.RAW		34.76207386	9.381013934	59.74492922	0	psample10	CT	1
13116-1.RAW		39.23565341	27.19152462	115.0467862	0	psample10	CT	1
13117-1.RAW		40.2594697	169.9652225	93.87504487	0	psample10	CT	1
13118-1.RAW		142.0216856	363.1426847	103.4747869	0	psample10	CT	1
13119-1.RAW		32.71136364	24.44159564	83.94254261	0	psample10	OK	1
13120-1.RAW		128.4304111	409.8338542	72.68058712	0	psample10	CT	1
13121-1.RAW		100.266572	284.3250473	92.85214397	0	psample10	CT	1
13122-1.RAW		66.91193182	154.0737689	147.5785739	0	psample10	CT	1
13123-1.RAW		910.9295008	227.5722064	208.0272254	0	psample10	CT	1
13124-1.RAW		20.47575758	8.435298295	43.04086174	0	psample10	OK	1
13125-1.RAW		17.72320076	5.05530303	39.3953125	0	psample10	OK	1
13126-1.RAW		16.61089015	0.308333333	45.07844028	0	psample10	CT	1
13127-1.RAW		25.3063447	53.37312973	116.2058665	0	psample10	OK	1
13128-1.RAW		13.62057292	4.414204545	61.29505208	0	psample10	OK	1
13129-1.RAW		32.34093277	0	75.12601433	0	psample10	CT	1
13130-1.RAW		187.3227899	169.3757576	734.5573212	0	psample10	CT	1
13131-1.RAW		42.11375473	132.3216856	54.06611769	0	psample10	CT	1
13132-1.RAW		118.4727273	316.7875947	165.2180224	0	psample10	CT	1
13133-1.RAW		52.40348011	668.9889205	145.0320077	0	psample10	CT	1
13134-1.RAW		56.9111277	701.4159801	294.5139995	0	psample10	CT	1
13135-1.RAW		1259.742414	229.8535511	186.6150095	0	psample10	CT	1
13136-1.RAW	13:38:56	26.99346591	8.396638258	43.59029356	0	psample10	OK	1

MethylMercury
EPA1630

Operat DM | **BlankS** 4.1351 | **Calib Eqn:** Conc = (Area-4.135) / 462. | **Run Date:** ####### | **Blank SD:** 2.449378383
Worksl MMHg2 | **CalibFa** 462.05 | **Status:** CF w. Blank Sub Calib. OK | **Run Time:** 7:20:27 | **Blank RSD** 59.23353967
Methoc 2010-01 | **R:** 0.9999 | **R²:** 0.999875687 | **CalibAnaly** MeHg | **CF SD:** 54.55524688
Descrip MMHg27001-160617-1 | **CF RSD%:** 11.80727307

Sample/ID	Location	Rinse	Dilute	Blank	ConcHg0(p	ConcMeHg(ppt)	ConcHg2(p	ConcPrHg(	Rec%	QA	RawData	RunEnd	PeakHg0 (Rav	PeakMeHg (R	PeakHg2(Raw	PeakPrHg(Rav	Control (etf)	Flags	RunCount
Clean				0		0.003995999	0.0179511				13091-1.RAW	5:38:28	0	1.846342653	8.294270833	0	cleandry	OK	1
WS	A1			4.1351	0.0115732	-0.008000067	0.0688644				13092-1.RAW	5:48:59	9.482481061	0.438707386	35.95378788	0	psample10	OK	1
SEQ-IBL1	A2		1	0	0.0325397	0.005201082	0.1054341				13093-1.RAW	5:59:30	15.03489583	2.403148674	48.71560133	0	psample10	OK	1
SEQ-CAL1	A3		1	4.1351	0.0574505	0.043691391	0.0854927		87.38		13094-1.RAW	6:10:01	30.67999527	24.32263258	43.63683712	0	psample10	OK	1
SEQ-CAL2	A4		1	4.1351	0.1603551	0.173604854	0.0922143		86.80		13095-1.RAW	6:20:31	78.22682292	84.34886364	46.74254261	0	psample10	OK	1
SEQ-CAL3	A5		1	4.1351	0.5998026	1.09475147	0.1423179		109.48		13096-1.RAW	6:31:02	281.2725983	509.962642	69.89280303	0	psample10	CT	1
SEQ-CAL4	A6		1	4.1351	1.2809658	2.149209732	0.1849682		107.46		13097-1.RAW	6:41:33	596.0025481	997.1727746	89.59928977	0	psample10	CT	1
SEQ-CAL5	A7		1	4.1351	2.5411447	4.355166259	0.3376001		108.88		13098-1.RAW	6:52:03	1178.265459	2016.430161	160.1224905	0	psample10	CT	1
SEQ-ICV1	A8		1	4.1351	1.9701093	0.529475261	0.4238056		106.03		13099-1.RAW	7:02:34	914.4198121	248.7780066	199.9535738	0	psample10	CT	1
SEQ-ICB1	A9		1	0	0.0563261	0.012698021	0.099685				13100-1.RAW	7:13:05	26.02535511	5.867092803	46.05925663	0	psample10	OK	1
F606211-BS1	A10		1.25	4.1351	0.5449458	1.185953129	0.185216				13101-1.RAW	7:31:00	205.56793	442.5087595	72.59803504	0	psample10	CT	1
F606211-BSD1	A11		1.25	4.1351	0.5258994	1.23870946	0.1527969				13102-1.RAW	7:41:31	198.5276515	462.009517	60.6147017	0	psample10	CT	1
F606211-BLK1	A12		1.25	4.1351	0.0542538	0.027207991	0.1407611				13103-1.RAW	7:52:01	24.18939394	14.19223485	56.16581439	0	psample10	OK	1
F606211-BLK2	A13		1.25	4.1351	0.0334858	0.012345743	0.1403023				13104-1.RAW	8:02:32	16.51273674	8.698579545	55.9962358	0	psample10	OK	1
F606211-BLK3	A14		1.25	4.1351	0.0398044	-0.001497965	0.1376387				13105-1.RAW	8:13:03	18.84836648	3.58141572	55.01164386	0	psample10	OK	1
1605731-08	A15		1.25	4.1351	0.033606	0.002305854	0.1639151				13106-1.RAW	8:23:34	16.55719697	4.987452652	64.72440814	0	psample10	OK	1
1605731-09	A16		1.25	4.1351	0.0229236	0.000575303	0.1385134				13107-1.RAW	8:34:04	12.6085464	4.347774621	55.33496686	0	psample10	OK	1
1605778-01	A17		1.25	4.1351	0.6776277	0.42310143	1.1286267				13108-1.RAW	8:44:35	254.6122289	160.5295928	421.3187116	0	psample10	CT	1
1605778-02	A18		1.25	4.1351	0.0530384	0.049984085	0.1623447				13109-1.RAW	8:55:06	23.74015152	22.61115057	64.14393939	0	psample10	OK	1
1605778-03	A19		1.25	4.1351	0.0234505	-0.003124248	0.1312533				13110-1.RAW	9:05:36	12.80331439	2.980279356	52.65137311	0	psample10	OK	1
SEQ-CCV1	A20		1	4.1351	2.1064234	0.515127029	0.4450941		103.15		13111-1.RAW	9:16:07	977.4034288	242.1484375	209.7898972	0	psample10	CT	1
SEQ-CCB1	A21		1	4.1351	0.0283717	-0.002314328	0.0828715		0.00		13112-1.RAW	9:26:38	17.24419981	3.06579072	42.42571023	0	psample10	OK	1
1606097-03	B1		1.25	4.1351	0.0722755	0.02033414	0.1638705				13113-1.RAW	9:37:09	30.8509233	11.65139678	64.70791047	0	psample10	OK	1
1606097-08	B2		1.25	4.1351	0.1110284	0.022723032	0.3399845				13114-1.RAW	9:47:40	45.17547348	12.53442235	129.8063968	0	psample10	CT	1
1606097-13	B3		1.25	4.1351	0.0828566	0.014200033	0.1504439				13115-1.RAW	9:58:10	34.76207386	9.383996212	59.74492922	0	psample10	CT	1
1606097-18	B4		1.25	4.1351	0.0949591	0.06237559	0.3000546				13116-1.RAW	10:08:41	39.23565341	27.19152462	115.0467862	0	psample10	CT	1
1606097-23	B5		1.25	4.1351	0.0976403	0.44862809	0.2427777				13117-1.RAW	10:19:12	40.22670455	169.9652225	93.87504487	0	psample10	CT	1
1606097-28	B6		1.25	4.1351	0.3730311	0.971240299	0.2687483				13118-1.RAW	10:29:42	142.0216856	363.1426847	103.4747869	0	psample10	CT	1
1606097-31	B7		1.25	4.1351	0.0773087	0.054936076	0.2159068				13119-1.RAW	10:40:13	32.71136364	24.44159564	83.94254261	0	psample10	OK	1
1606097-36	B8		1.25	4.1351	0.336262	1.097556148	0.1854826				13120-1.RAW	10:50:44	128.4304111	409.8338542	72.69656723	0	psample10	CT	1
1606097-39	B9		1.25	4.1351	0.260069	0.758011182	0.2400104				13121-1.RAW	11:01:15	100.266572	284.3250473	92.85214397	0	psample10	CT	1
1606097-42	B10		1.25	4.1351	0.1698331	0.405636182	0.3880644				13122-1.RAW	11:11:45	66.91193182	154.0737689	147.5785739	0	psample10	CT	1
SEQ-CCV2	B11		1	4.1351	1.9625553	0.48358001	0.4410979		96.84		13123-1.RAW	11:22:16	910.9295008	227.5722064	207.9434186	0	psample10	CT	1
SEQ-CCB2	B12		1	4.1351	0.0353657	0.00930678	0.0842028		0.00		13124-1.RAW	11:32:47	20.47575758	8.435298295	43.04086174	0	psample10	OK	1
1606097-45	B13		1.25	4.1351	0.0367605	0.01331375	0.0954156				13125-1.RAW	11:43:18	17.72320076	9.056392045	39.40437973	0	psample10	OK	1
1606097-48	B14		1.25	4.1351	0.0337513	-0.010352791	0.1113723				13126-1.RAW	11:53:48	16.61089015	0.308333333	45.30257448	0	psample10	CT	1
1606175-01	B15		1.25	4.1351	0.0572755	0.133205936	0.3031903				13127-1.RAW	12:04:19	25.3063447	53.37312973	116.2058665	0	psample10	OK	1
1606256-01	B16		1.25	4.1351	0.0257138	0.000755019	0.1546375				13128-1.RAW	12:14:50	13.63991477	4.414204545	61.29505208	0	psample10	OK	1
1606256-02	B17		1.25								13129-1.RAW	12:25:21	32.34093277	0	75.12601433	0	psample10	CT	1
F606211-DUP1	B18		1.25	4.1351	0.4955863	0.447033382	1.976046				13130-1.RAW	12:35:51	187.3227899	169.3757576	734.5573212	0	psample10	CT	1
F606211-MS1	B19		1.25	4.1351	0.1027454	0.346789233	0.1350807		34.68		13131-1.RAW	12:46:22	42.11375473	132.3216856	54.06611769	0	psample10	CT	1
F606211-MSD1	B20		1.25	4.1351	0.3069819	0.845833661	0.4357853				13132-1.RAW	12:56:53	117.6073864	316.7875947	165.2180224	0	psample10	CT	1
F606211-MS2	B21		1.25	4.1351	0.1305827	1.798660719	0.3811751		89.93		13133-1.RAW	13:07:24	52.40348011	668.9889205	145.0320077	0	psample10	CT	1
F606211-MSD2	C1		1.25	4.1351	0.1427775	1.886387191	0.7855758				13134-1.RAW	13:17:54	56.9111277	701.4159801	294.5139995	0	psample10	CT	1
SEQ-CCV3	C2		1	4.1351	2.7174835	0.488517475	0.3949372		97.82		13135-1.RAW	13:28:25	1259.742414	229.8535511	186.6150095	0	psample10	CT	1
SEQ-CCB3	C3		1	4.1351	0.0494718	0.009223109	0.085392		0.00		13136-1.RAW	13:38:56	26.99346591	8.396638258	43.59029356	0	psample10	OK	1

Failing Data Report - 6F18001

Sample ID	Analysis	Result	MRL	Dup Result	Source Result	True Value	Units	% Rec.	Rec. LCL	Rec. UCL	RPD	RPD Limit	Over Cal	Failure	Qualifier
F606211-BSD1	MHg-CVAFS-W-Dist	1.328	0.050	1.271		1.0010	ng/L	133	70.00	130.00	4.40	25.00	PASS-OVER	FAIL-BSD (Rec.)	QM-12
F606211-MS1	MHg-CVAFS-W-Dist	0.362	0.050		ND	1.0010	ng/L	36.1	65.00	130.00			PASS-OVER	FAIL-MS	QM-07
F606211-MSD1	MHg-CVAFS-W-Dist	0.902	0.050	0.362	ND	1.0010	ng/L	90.1	65.00	130.00	85.5	35.00	PASS-OVER	FAIL-MSD (RPD)	QR-07
F606211-MS2	MHg-CVAFS-W-Dist	1.934	0.050		0.131	1.0010	ng/L	180	65.00	130.00			PASS-OVER	FAIL-MS	QM-07
F606211-MSD2	MHg-CVAFS-W-Dist	2.029	0.050	1.934	0.131	1.0010	ng/L	190	65.00	130.00	4.79	35.00	PASS-OVER	FAIL-MSD (Rec.)	QM-07

Don Moream 6/16/16
Analyst Reviewed By Date

Peer Reviewed By 6/21/16
Date

ANALYSIS SEQUENCE

6F18001

Instrument: Hg2700-1

Calibration ID: UNASSIGNED **Analyzed: 6/17/2016**

Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
6F18001-IBL1	QC	1			
6F18001-CAL1	QC	2	1602252		
6F18001-CAL2	QC	3	1602253		
6F18001-CAL3	QC	4	1602254		
6F18001-CAL4	QC	5	1602255		
6F18001-CAL5	QC	6	1602256		
6F18001-ICV1	QC	7	1603001		
6F18001-ICB1	QC	8			
F606211-BS1	QC	9			
F606211-BSD1	QC	10			
F606211-BLK1	QC	11			
F606211-BLK2	QC	12			
F606211-BLK3	QC	13			
1605731-08	MHg-CVAFS-W-Dist	14			
1605731-09	MHg-CVAFS-W-Dist	15			
1605778-01	MHg-CVAFS-W-Dist	16			Scan all data - Level IV
1605778-02	MHg-CVAFS-W-Dist	17			Scan all data - Level IV
1605778-03	MHg-CVAFS-W-Dist	18			Scan all data - Level IV
6F18001-CCV1	QC	19	1603001		
6F18001-CCB1	QC	20			
1606097-03	MHg-CVAFS-W-Dist	21			
1606097-08	MHg-CVAFS-W-Dist	22			
1606097-13	MHg-CVAFS-W-Dist	23			
1606097-18	MHg-CVAFS-W-Dist	24			
1606097-23	MHg-CVAFS-W-Dist	25			
1606097-28	MHg-CVAFS-W-Dist	26			
1606097-31	MHg-CVAFS-W-Dist	27			
1606097-36	MHg-CVAFS-W-Dist	28			
1606097-39	MHg-CVAFS-W-Dist	29			
1606097-42	MHg-CVAFS-W-Dist	30			
6F18001-CCV2	QC	31	1603001		
6F18001-CCB2	QC	32			
1606097-45	MHg-CVAFS-W-Dist	33			
1606097-48	MHg-CVAFS-W-Dist	34			
1606175-01	MHg-CVAFS-W-Dist	35			

Due Date: 6/21/2016

ANALYSIS SEQUENCE

6F18001

Instrument: Hg2700-1

Calibration ID: UNASSIGNED **Analyzed: 6/17/2016**

Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
1606256-01	MHg-CVAFS-W-Dist	36			
1606256-02	MHg-CVAFS-W-Dist	37			
F606211-DUP1	QC	38			
F606211-MS1	QC	39			
F606211-MSD1	QC	40			
F606211-MS2	QC	41			
F606211-MSD2	QC	42			
6F18001-CCV3	QC	43	1603001		
6F18001-CCB3	QC	44			

Dan Moran 6/17/16
Samples Loaded By Date

Dan Moran 6/18/16
Data Processed By Date

Due Date: 6/21/2016

PREPARATION BENCH SHEET

F606211

Eurofins Frontier Global Sciences, Inc.

Matrix: Water **Prepared using: Hg Aquatic/Solids - EFGS-013 Methyl Hg Distillation for Water** **Prepared: 6/16/2016**

Lab Number	Sample ID and Source Sample	Initial (mL)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F606211-BLK1	Blank	45	40					
F606211-BLK2	Blank	45	40					
F606211-BLK3	Blank	45	40					
F606211-BS1	Blank Spike	45	40	1602184	45			
F606211-BSD1	Blank Spike Dup	45	40	1602184	45			
F606211-DUP1	Duplicate [1605778-01]	45	40					
F606211-MS1	Matrix Spike [1606097-03]	45	40	1602184	45			
F606211-MS2	Matrix Spike [1606175-01]	45	40	1602184	45			
F606211-MSD1	Matrix Spike Dup [1606097-03]	45	40	1602184	45			
F606211-MSD2	Matrix Spike Dup [1606175-01]	45	40	1602184	45			

Standard ID(s):	Description:	Expiration:
1602184	MHg New Primary 1.0 ng/mL CAL	25-Jul-16 00:00

Reagent ID(s):	Description:	Expiration:
1602604	Acetate Buffer	15-Nov-16 00:00
1602944	Ethylating Agent (For Methyl Mercury Analysis)	30-Nov-16 00:00
1603193	APDC	22-Jun-16 00:00
1603210	0.5% Distillation Dilute (Made Daily)	17-Jun-16 00:00
1603215	2.5% Ascorbic Acid	24-Jun-16 00:00

ue Date: 6/21/2016

PREPARATION BENCH SHEET

F606211

Eurofins Frontier Global Sciences, Inc.

Matrix: Water **Prepared using: Hg Aquatic/Solids - EFGS-013 Methyl Hg Distillation for Water** **Prepared: 6/16/2016**

Lab Number	Sample ID	Initial (mL)	Final (mL)	QC Sample	Sample Specs.	Raw Data	Sample Comments	Analysis Comments
1605731-08	B159131 South Cross Eff	45	40	-	-	-		
1605731-09	B159127 Blank - South Cross Eff	45	40	-	-	-		
1605778-01	WQ2-C_052716_SW_10	45	40	-	-	-	Scan all data - Level IV	
1605778-02	WQ2-C_052716_SW_10 DISSLOVED	45	40	-	-	-	Scan all data - Level IV	
1605778-03	Laboratory Filter Blank	45	40	-	-	-	Scan all data - Level IV	
1606097-03	G16164 Sample Site 1 (Me-Hg)	45	40	-	-	-		
1606097-08	G16167 Sample Site 2 Me-Hg	45	40	-	-	-		
1606097-13	G16168 Sample Site 3 Me-Hg	45	40	-	-	-		
1606097-18	G16171 Sample Site 4 Me-Hg	45	40	-	-	-		
1606097-23	G16166 Sample Site 5 Me-Hg	45	40	-	-	-		
1606097-28	G16170 Sample Site 6 Central	45	40	-	-	-		
1606097-31	G16162 Sample Site 7 Me-Hg	45	40	-	-	-		
1606097-36	G16169 Sample Site 6 North	45	40	-	-	-		
1606097-39	G16173 Sample Site 6 South	45	40	-	-	-		
1606097-42	G16163 Sample Site 8 Me-Hg	45	40	-	-	-		
1606097-45	G16165 Blank 1 Me-Hg	45	40	-	-	-		
1606097-48	G16172 Blank 2 Me-Hg	45	40	-	-	-		
06175-01	1606208-003A E1606009g	45	40	-	-	-		
06256-01	B160079 GSL Discharge Field Blank	45	40	-	-	-		

ue Date: 6/21/2016

PREPARATION BENCH SHEET

F606211

Eurofins Frontier Global Sciences, Inc.

Matrix: Water **Prepared using: Hg Aquatic/Solids - EFGS-013 Methyl Hg Distillation for Water** **Prepared: 6/16/2016**

1606256-02	B160080 GSL Discharge	45	40	-	-	-		

[redacted]

ue Date: 6/21/2016

2700-1
6/17/16 DM

PREPARATION BENCH SHEET

F606211

Eurofins Frontier Global Sciences, Inc.

Matrix: Water **Prepared using: Hg Aquatic/Solids - EFGS-013 Methyl Hg Distillation for Water** **Prepared: 6/16/2016**

Lab Number	Sample ID and Source Sample	Initial (mL)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F606211-BLK1	Blank	45	40					1.25X
F606211-BLK2	Blank	45	40					1.25X
F606211-BLK3	Blank	45	40					1.25X
F606211-BS1	Blank Spike	45	40	1602184	45			1.25X
F606211-BSD1	Blank Spike Dup	45	40	1602184	45			1.25X
F606211-DUP1	Duplicate [1605778-01]	45	40					1.25X
F606211-MS1	Matrix Spike [1606097-03]	45	40	1602184	45			1.25X
F606211-MS2	Matrix Spike [1606175-01]	45	40	1602184	45			1.25X
F606211-MSD1	Matrix Spike Dup [1606097-03]	45	40	1602184	45			1.25X
F606211-MSD2	Matrix Spike Dup [1606175-01]	45	40	1602184	45			1.25X

Standard ID(s):	Description:	Expiration:
1602184	MHg New Primary 1.0 ng/mL CAL	25-Jul-16 00:00

Reagent ID(s):	Description:	Expiration:
1603193	APDC	22-Jun-16 00:00
1603210	0.5% Distillation Dilute (Made Daily)	17-Jun-16 00:00

1602944
1603215
1602604

Due Date: 6/21/2016

2700-1
6/17/16 DM

PREPARATION BENCH SHEET

F606211

Eurofins Frontier Global Sciences, Inc.

Matrix: Water **Prepared using: Hg Aquatic/Solids - EFGS-013 Methyl Hg Distillation for Water** **Prepared: 6/16/2016**

Lab Number	Sample ID	Initial (mL)	Final (mL)	QC Sample	Sample Specs.	Raw Data	Sample Comments	Analysis Comments
1605731-08	B159131 South Cross Eff	45	40	-	-	-		1.25X
1605731-09	B159127 Blank - South Cross Eff	45	40	-	-	-		1.25X
1605778-01	WQ2-C_052716_SW_10	45	40	-	-	-	Scan all data - Level IV	1.25X
1605778-02	WQ2-C_052716_SW_10 DISSLOVED	45	40	-	-	-	Scan all data - Level IV	1.25X
1605778-03	Laboratory Filter Blank	45	40	-	-	-	Scan all data - Level IV	1.25X
1606097-03	G16164 Sample Site 1 (Me-Hg)	45	40	-	-	-		1.25X
1606097-08	G16167 Sample Site 2 Me-Hg	45	40	-	-	-		1.25X
1606097-13	G16168 Sample Site 3 Me-Hg	45	40	-	-	-		1.25X
1606097-18	G16171 Sample Site 4 Me-Hg	45	40	-	-	-		1.25X
1606097-23	G16166 Sample Site 5 Me-Hg	45	40	-	-	-		1.25X
1606097-28	G16170 Sample Site 6 Central	45	40	-	-	-		1.25X
1606097-31	G16162 Sample Site 7 Me-Hg	45	40	-	-	-		1.25X
1606097-36	G16169 Sample Site 6 North	45	40	-	-	-		1.25X
1606097-39	G16173 Sample Site 6 South	45	40	-	-	-		1.25X
1606097-42	G16163 Sample Site 8 Me-Hg	45	40	-	-	-		1.25X
1606097-45	G16165 Blank 1 Me-Hg	45	40	-	-	-		1.25X
1606097-48	G16172 Blank 2 Me-Hg	45	40	-	-	-		1.25X
)6175-01	1606208-003A E1606009g	45	40	-	-	-		1.25X
)6256-01	B160079 GSL Discharge Field Blank	45	40	-	-	-		1.25X

ue Date: 6/21/2016

2700-1

6/17/16 DM

PREPARATION BENCH SHEET

F606211

Eurofins Frontier Global Sciences, Inc.

Matrix: Water **Prepared using: Hg Aquatic/Solids - EFGS-013 Methyl Hg Distillation for Water** **Prepared: 6/16/2016**

1606256-02	B160080 GSL Discharge	45	40	-	-	-		1.25X

[redacted]

ue Date: 6/21/2016

Methyl Mercury Distillations (EPA 1630)

Name: Dwyer **Date:** 6-16-16 **Batch #:** F606211 **Sample Matrix:** Water

WO#: 1605731, 1605778, 1606097, 1606175, 1606256

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)
Blk1	F606211 Blank1	1.0	45	3.0
Blk2	F606211 Blank2	1.0	45	3.0
Blk3	F606211 Blank3	1.0	45	3.0
BS1	F606211 BS1	1.0	45	3.0
BSD1	F606211 BSD1	1.0	45	3.0
MD	F606211 MD	1.0	45	3.0
MS1	F606211 MS1	1.0	45	4.0
MSD1	F606211 MSD1	1.0	45	4.0
MS2	F606211 MS2	1.0	45	3.0
MSD2	F606211 MSD2	1.0	45	3.0
1	1605731-08 A	1.0	45	3.0
2	1605731-09 A	1.0	45	3.0
3	1605778-01 B	1.0	45	3.0
4	1605778-02 B	1.0	45	3.0
5	1605778-03 B	1.0	45	3.0
6	1606097-03 A	1.0	45	4.0
7	1606097-08 A	1.0	45	4.0
8	1606097-13 A	1.0	45	4.0
9	1606097-18 A	1.0	45	4.0
10	1606097-23 A	1.0	45	4.0
11	1606097-28 A	1.0	45	4.0
12	1606097-31 A	1.0	45	3.0
13	1606097-36 A	1.0	45	3.0
14	1606097-39 A	1.0	45	3.0
15	1606097-42A	1.0	45	3.0
16	1606097-45A	1.0	45	3.0
17	1606097-48A	1.0	45	4.0
6/16/16 gs	1606097-	6/16/16	DI	
18	1606175-01 A	1.0	45	4.0
19	1606256-01 B	1.0	45	4.0
20	1606256-02B	1.0	45	4.0
			6-16-16 DS	

Spike ID: 1602184
Spike Amount: 45 µL
Spike Witness: 45 6/16/16 DS
DM CK-16
Balance #: 2
Calibrated? ☑ Yes ☐ No

Pipette #: CJ17687
Cal. Date: 6/15/16

Pipette #: N27707
Cal. Date: 6/15/16

Pipette #: LM24486
Cal. Date: 6-14-16

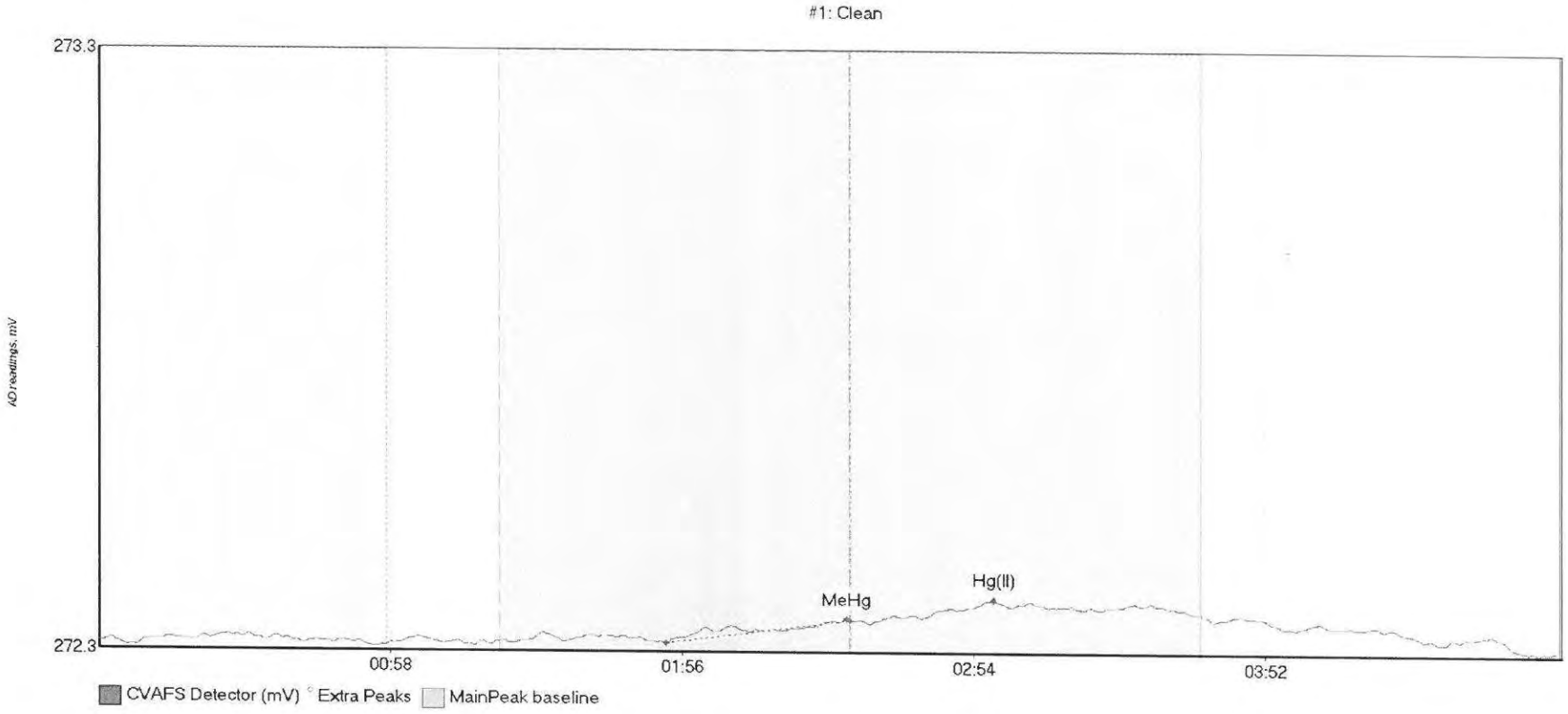
APDC ID: 1603193
HCl ID: 1603210

Temperature: No set range as the temp. may be changed to keep flow rate of ≥10 mL per hour. Temperature is recorded for informational purposes only.

Unit 1: 120.3
Unit 2: 122.
Unit 3: 120.9
Unit 4: 120.6
Unit 5: 122.
Unit 6: 122.

Comments: MD Source
1605778-01
MS1, MSD1
1606097-03
MS2 MSD2
1606175-01
6/16/16
gs

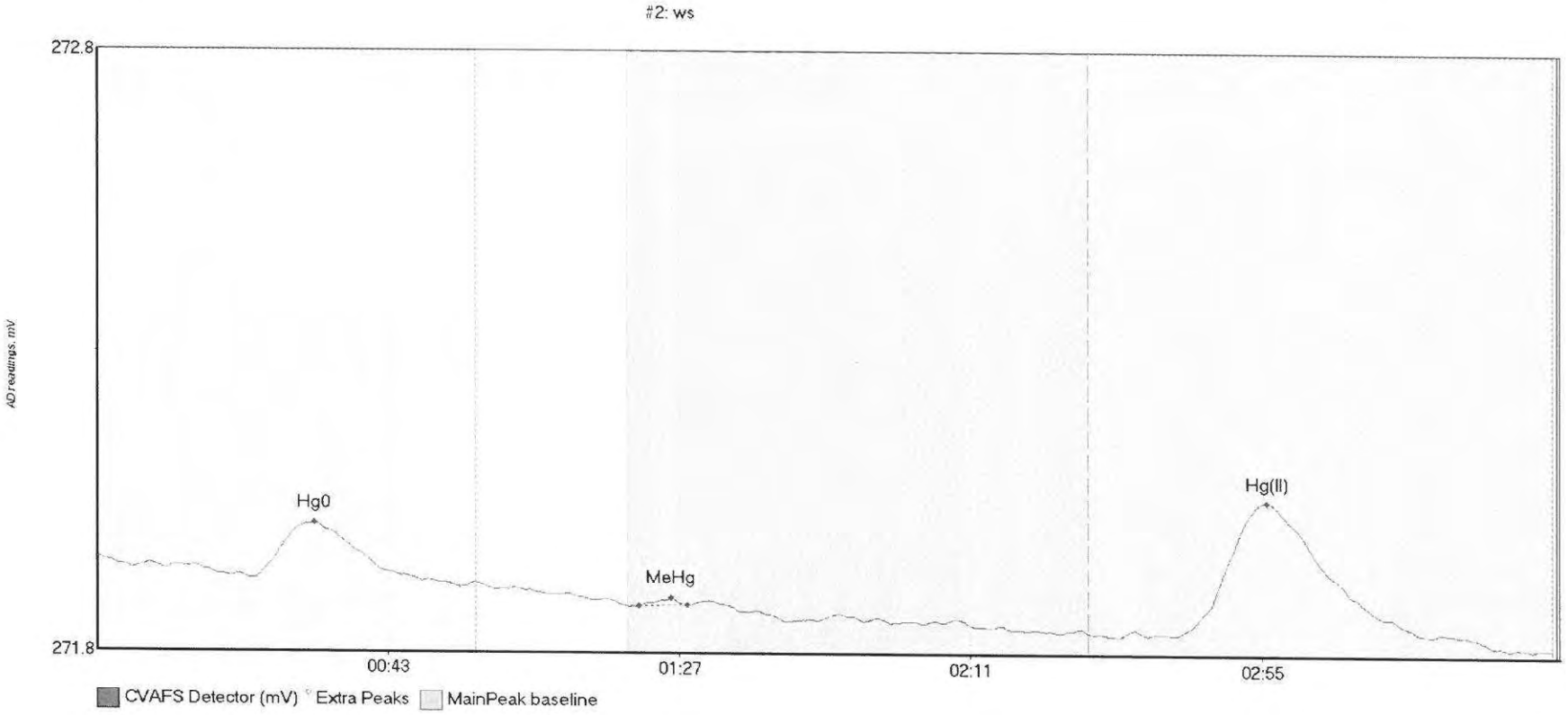
Reviewed by 6/16/16



JH 6/24/16

Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
Clean MeHg	1.846	113.2	149.9	272.27	272.31	149.3	0.041	OK	272.2747	0.00	-0.01	
Clean Hg(II)	8.294	164.3	218.5	272.32	272.33	178.6	0.031	OK	272.2747	0.00	-0.01	

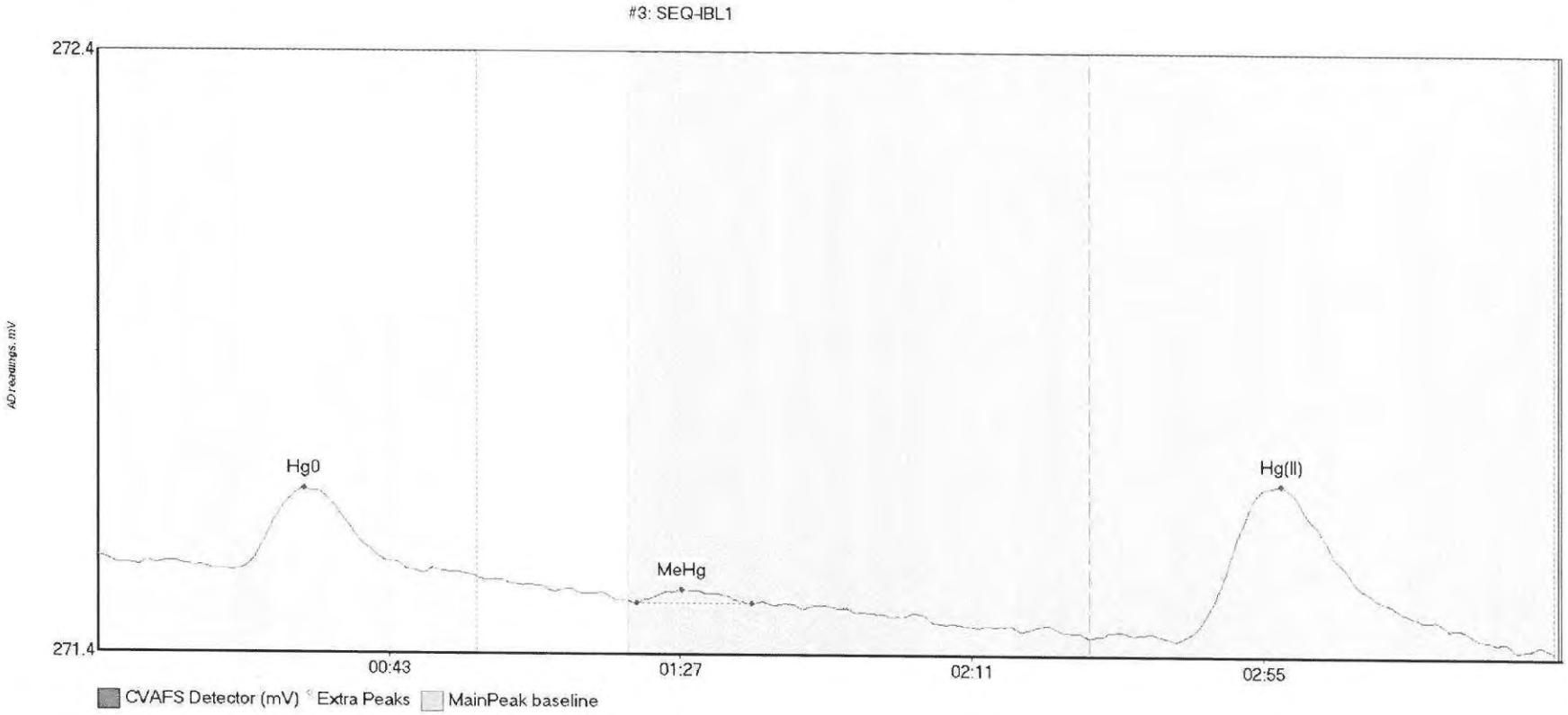
016



JH

Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
ws Hg0	9.482	23.5	43.6	271.93	271.94	32.9	0.093	OK	271.9611	0.00	-0.14	
ws MeHg	0.439	81.9	89.1	271.88	271.89	86.8	0.013	OK	271.9611	0.00	-0.14	
ws Hg(II)	35.954	163.1	200.6	271.84	271.84	176.7	0.222	OK	271.9611	0.00	-0.14	

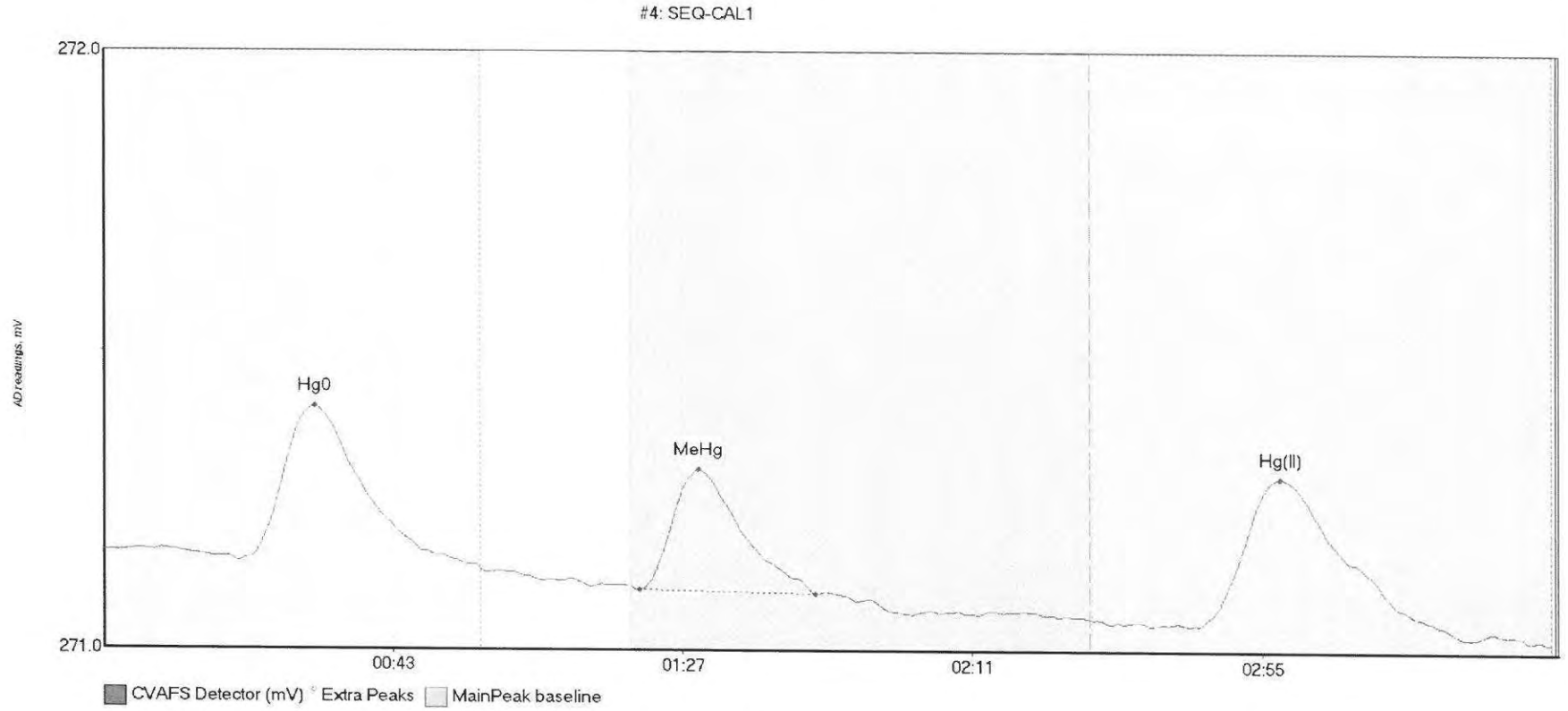
016



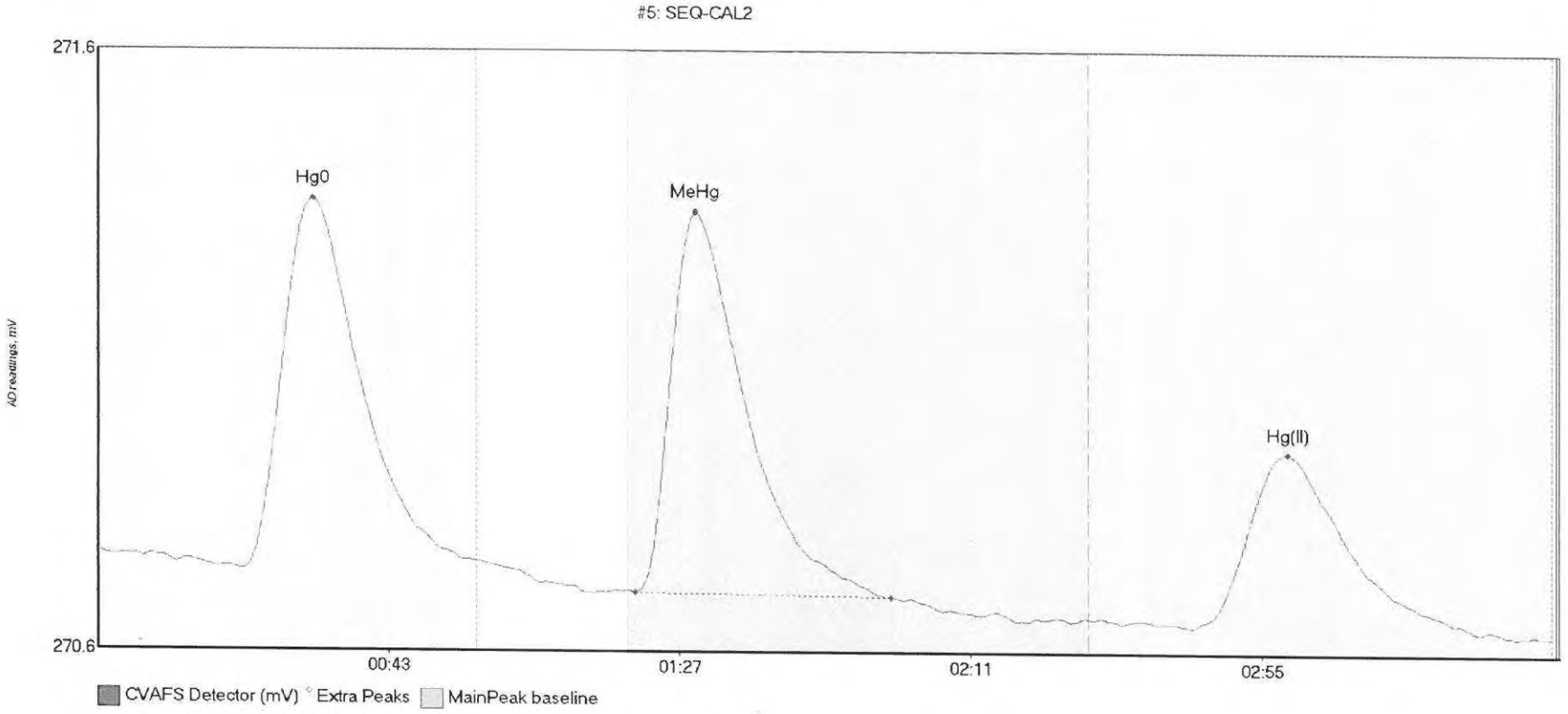
JH

Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-IBL1 Hg0	15.035	21.5	43.8	271.53	271.54	31.1	0.132	OK	271.5508	0.00	-0.15	
SEQ-IBL1 MeHg	2.403	81.5	98.9	271.48	271.47	88.3	0.022	OK	271.5508	0.00	-0.15	
SEQ-IBL1 Hg(II)	48.716	162.9	208.9	271.42	271.42	178.7	0.259	OK	271.5508	0.00	-0.15	

016



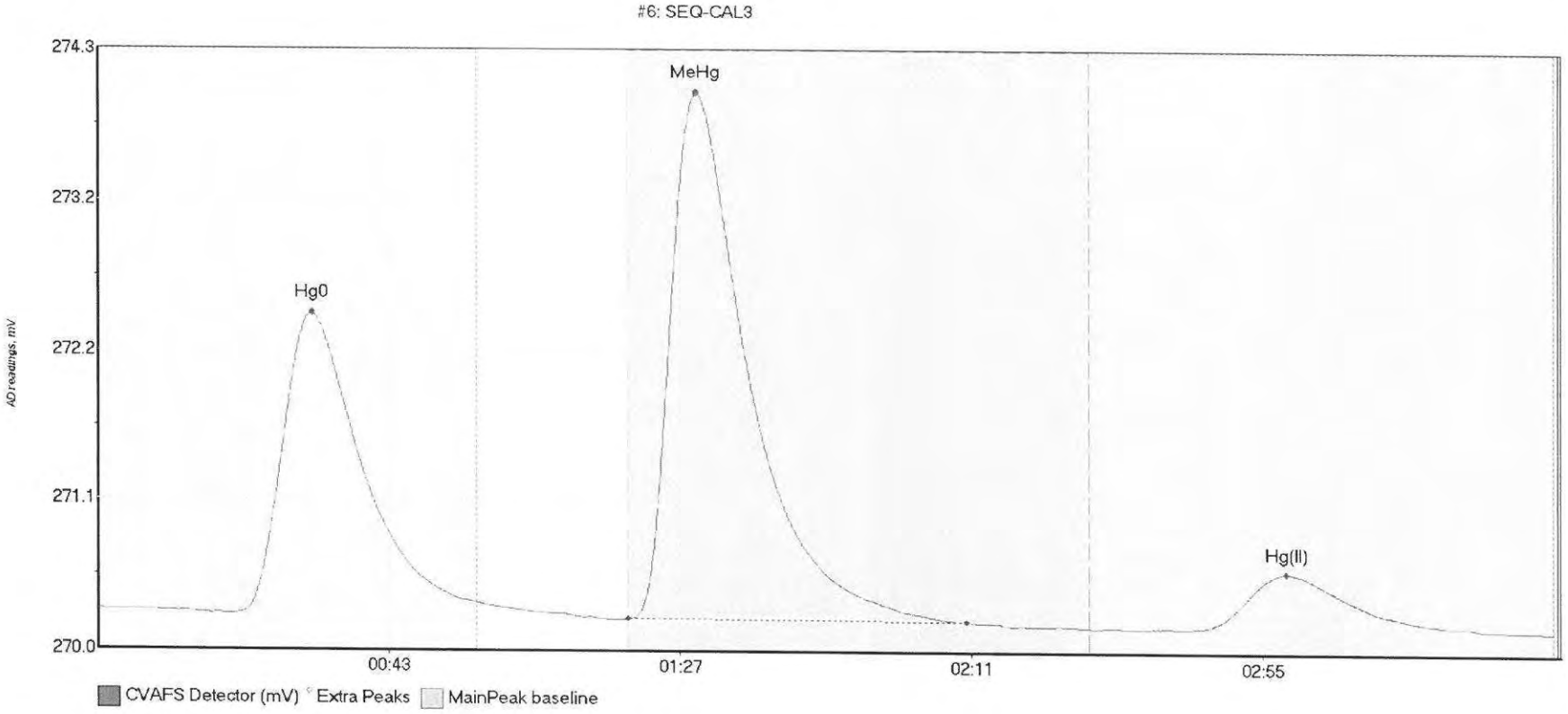
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CAL1 Hg0	30.680	22.1	48.5	271.12	271.13	32.1	0.251	OK	271.1280	0.00	-0.15	
SEQ-CAL1 MeHg	24.323	81.5	108.2	271.06	271.06	90.4	0.201	OK	271.1280	0.00	-0.15	
SEQ-CAL1 Hg(II)	43.637	166.2	206.4	271.01	270.99	178.7	0.245	OK	271.1280	0.00	-0.15	



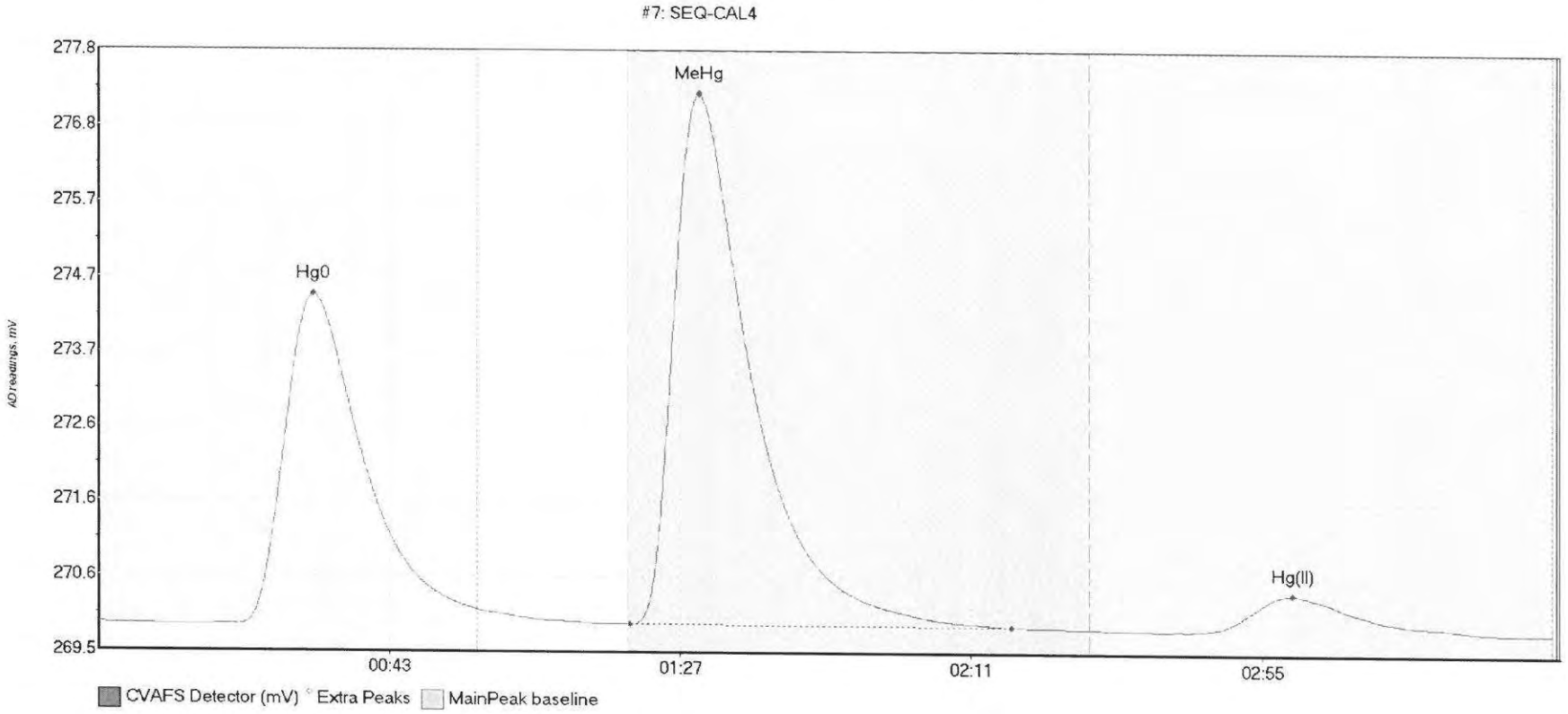
JH

Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CAL2 Hg0	78.227	21.9	52.7	270.70	270.73	32.6	0.618	OK	270.7306	0.00	-0.13	
SEQ-CAL2 MeHg	83.646	81.3	120.0	270.66	270.66	90.4	0.634	OK	270.7306	0.00	-0.13	
SEQ-CAL2 Hg(II)	46.743	165.6	205.2	270.61	270.62	179.9	0.289	OK	270.7306	0.00	-0.13	

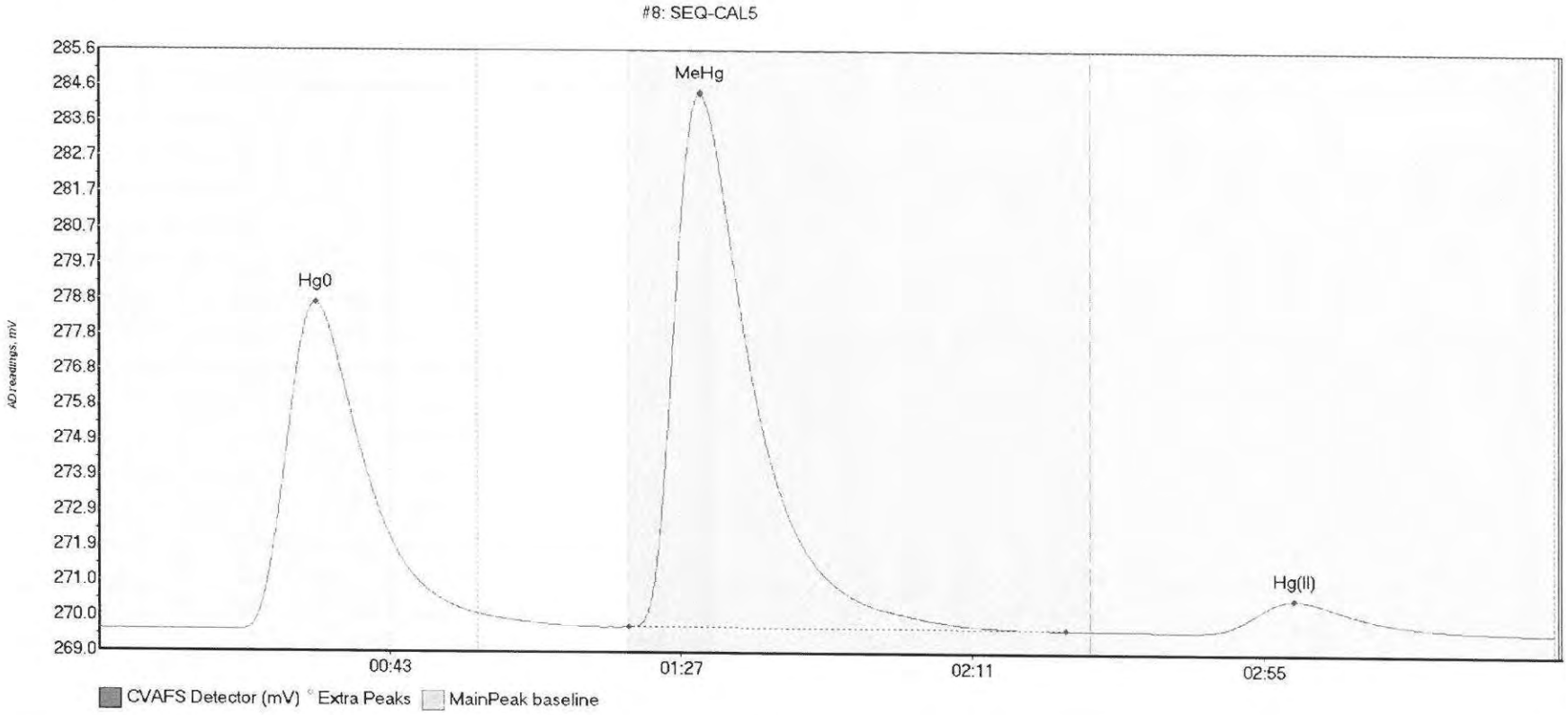
016



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CAL3 Hg0	281.273	19.8	57.5	270.28	270.37	32.4	2.145	CT	270.3161	0.00	-0.14	
SEQ-CAL3 MeHg	509.963	80.1	131.3	270.25	270.24	90.5	3.746	OK	270.3161	0.00	-0.14	
SEQ-CAL3 Hg(II)	69.893	164.6	210.1	270.20	270.19	179.6	0.398	OK	270.3161	0.00	-0.14	

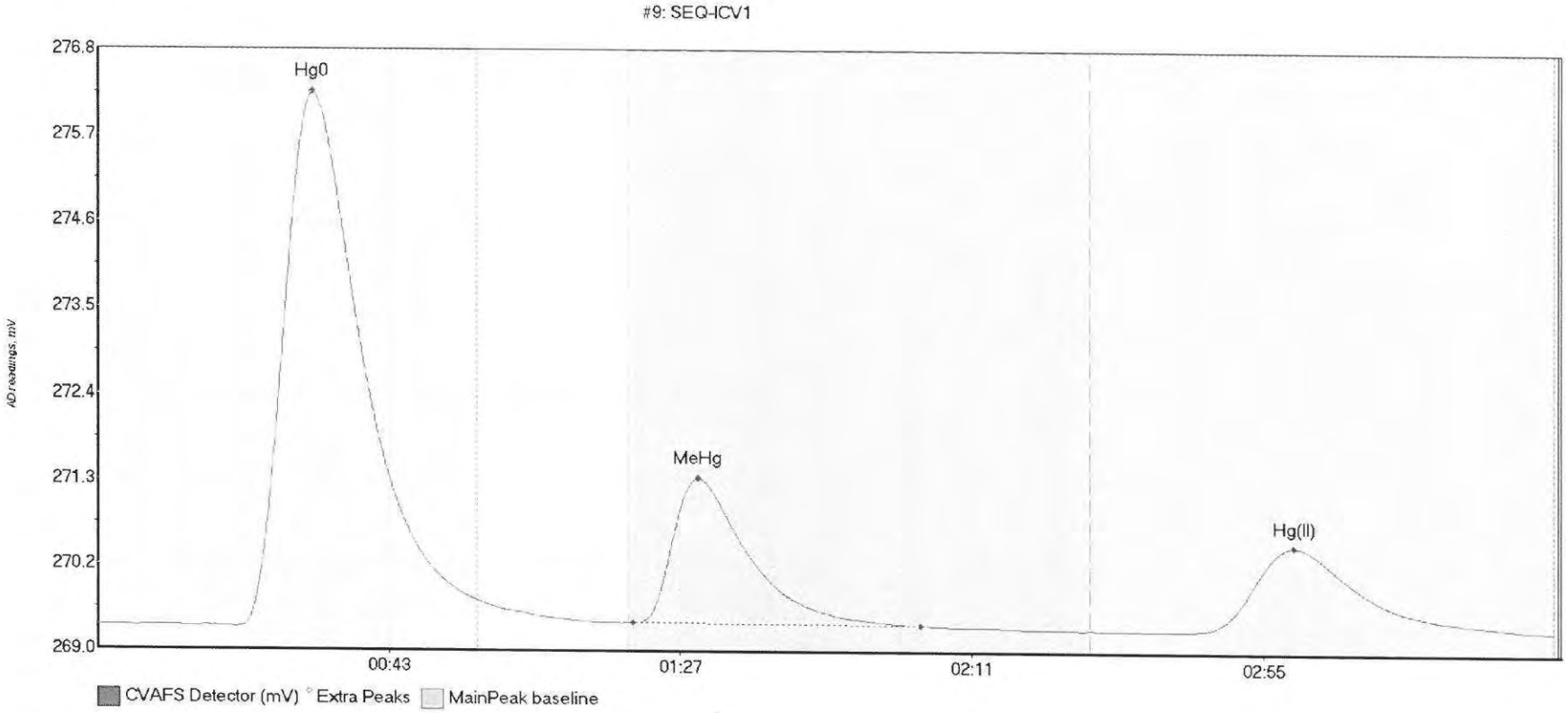


Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CAL4 Hg0	596.003	21.1	57.5	269.92	270.12	32.6	4.558	CT	269.9304	0.00	-0.09	
SEQ-CAL4 MeHg	996.552	80.4	138.2	269.93	269.91	91.0	7.293	OK	269.9304	0.00	-0.09	
SEQ-CAL4 Hg(II)	89.185	165.6	210.3	269.86	269.86	180.6	0.505	OK	269.9304	0.00	-0.09	

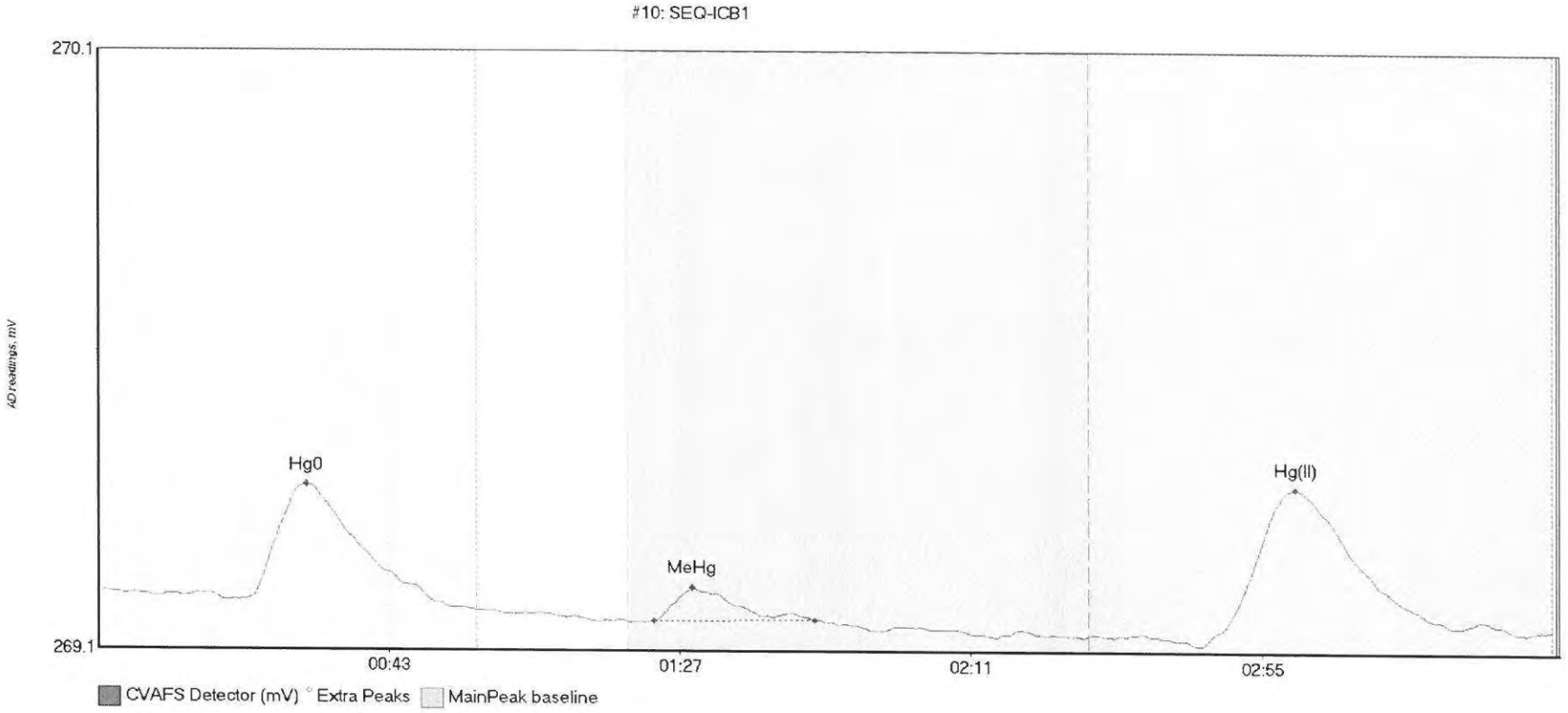


Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CAL5 Hg0	1178.265	21.0	57.5	269.60	270.06	32.8	9.055	CT	269.6166	0.00	-0.02	
SEQ-CAL5 MeHg	2016.430	80.1	146.2	269.70	269.63	91.0	14.718	OK	269.6166	0.00	-0.02	
SEQ-CAL5 Hg(II)	160.122	166.1	217.0	269.61	269.60	180.6	0.890	OK	269.6166	0.00	-0.02	

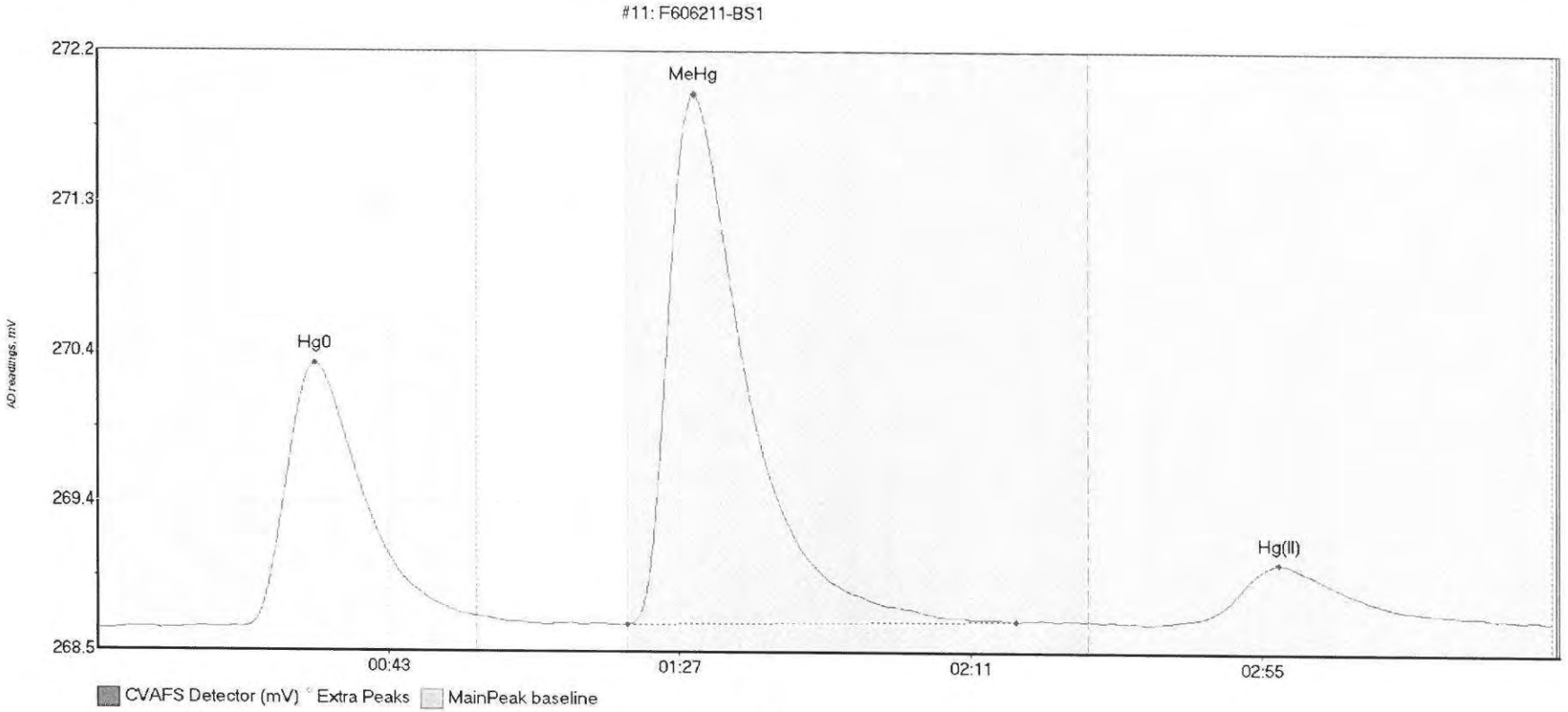
016



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-ICV1 Hg0	914.420	21.0	57.5	269.34	269.69	32.5	6.927	CT	269.3630	0.00	-0.03	
SEQ-ICV1 MeHg	248.778	80.9	124.3	269.41	269.38	90.8	1.889	OK	269.3630	0.00	-0.03	
SEQ-ICV1 Hg(II)	199.954	165.3	219.6	269.33	269.34	180.6	1.104	OK	269.3630	0.00	-0.03	



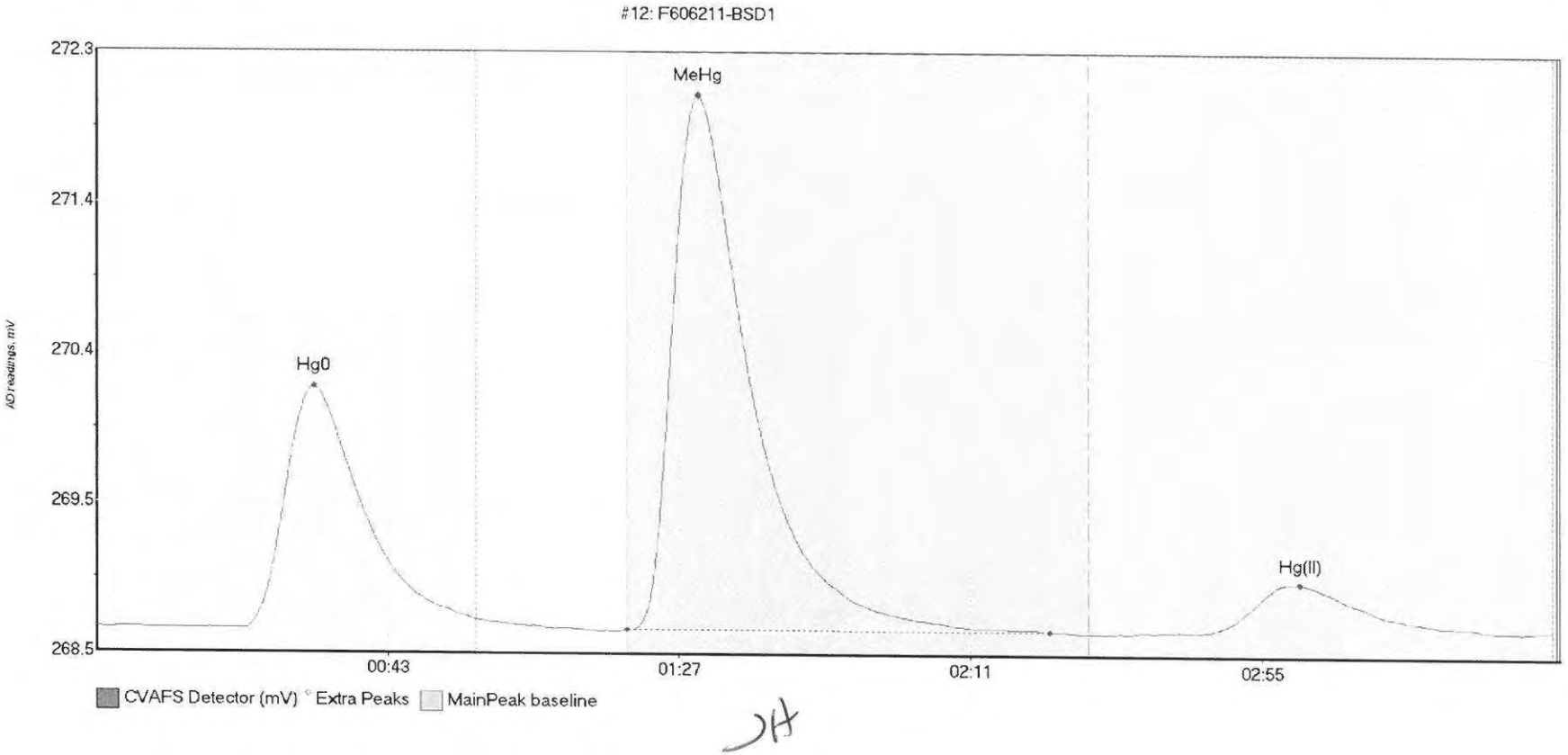
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-ICB1 Hg0	26.025	22.1	51.3	269.14	269.14	31.6	0.193	OK	269.1542	0.00	-0.06	
SEQ-ICB1 MeHg	5.867	84.2	108.5	269.10	269.11	89.9	0.057	OK	269.1542	0.00	-0.06	
SEQ-ICB1 Hg(II)	46.059	166.9	214.7	269.07	269.09	181.1	0.263	OK	269.1542	0.00	-0.06	



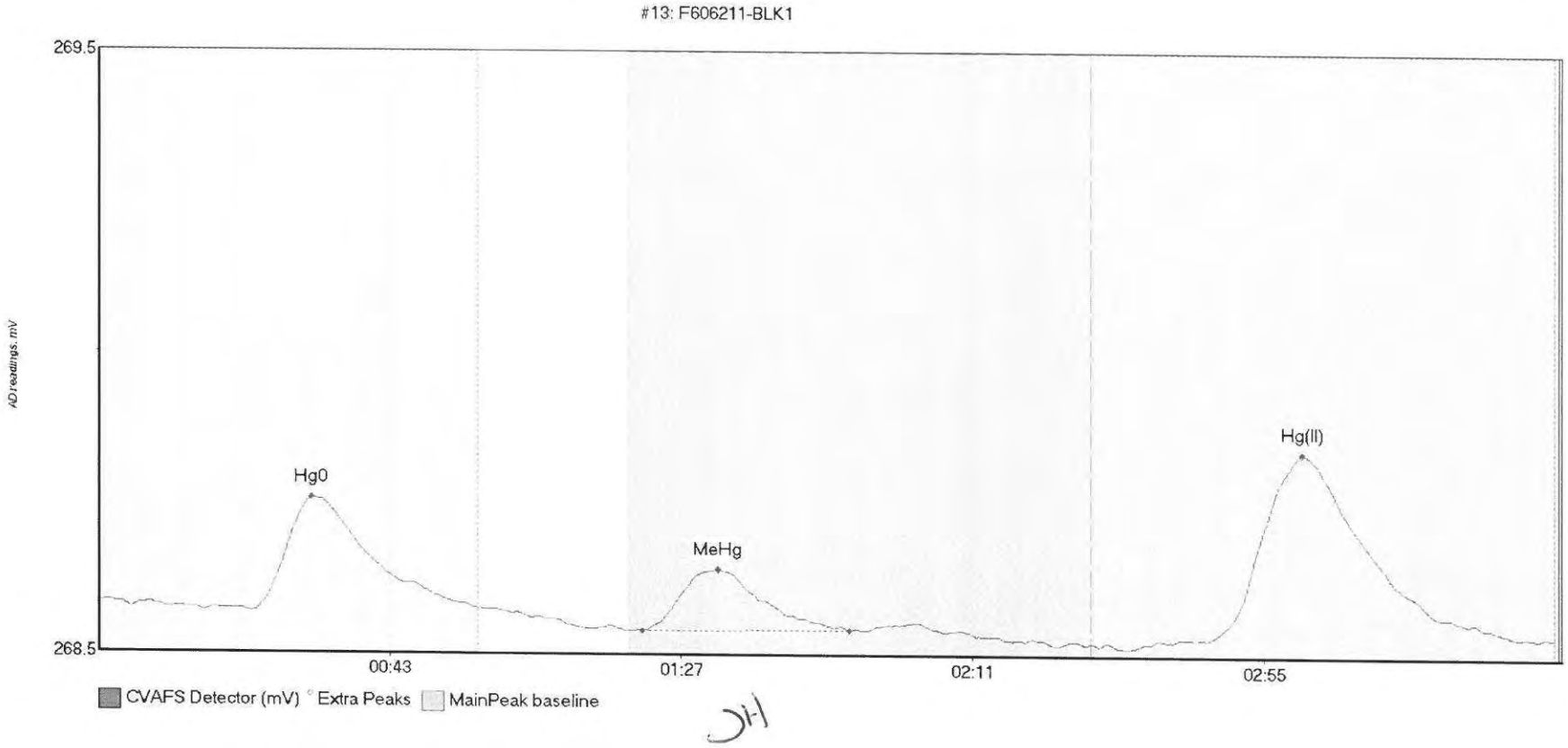
DH

Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F606211-BS1 Hg0	205.568	9.6	57.5	268.67	268.75	32.8	1.617	CT	268.6657	0.00	0.07	
F606211-BS1 MeH	442.509	80.1	138.9	268.70	268.73	90.3	3.225	OK	268.6657	0.00	0.07	
F606211-BS1 Hg(	72.598	158.9	219.3	268.71	268.73	178.6	0.377	OK	268.6657	0.00	0.07	

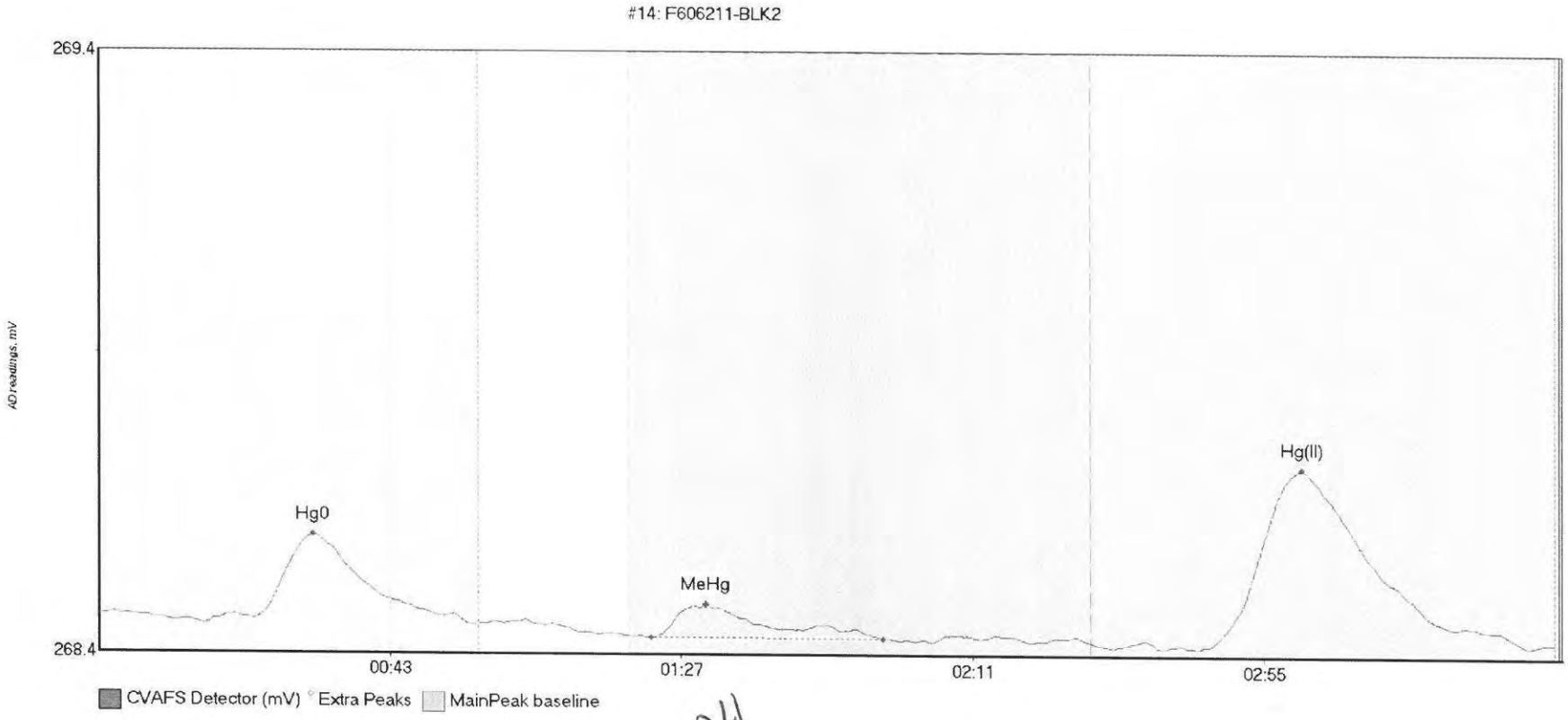
016



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F606211-BSD1 Hg	198.528	22.1	57.5	268.68	268.74	32.8	1.519	CT	268.6890	0.00	0.01	
F606211-BSD1 Me	462.010	80.1	144.0	268.68	268.68	91.0	3.365	OK	268.6890	0.00	0.01	
F606211-BSD1 Hg	60.615	156.1	215.3	268.67	268.69	181.8	0.322	OK	268.6890	0.00	0.01	



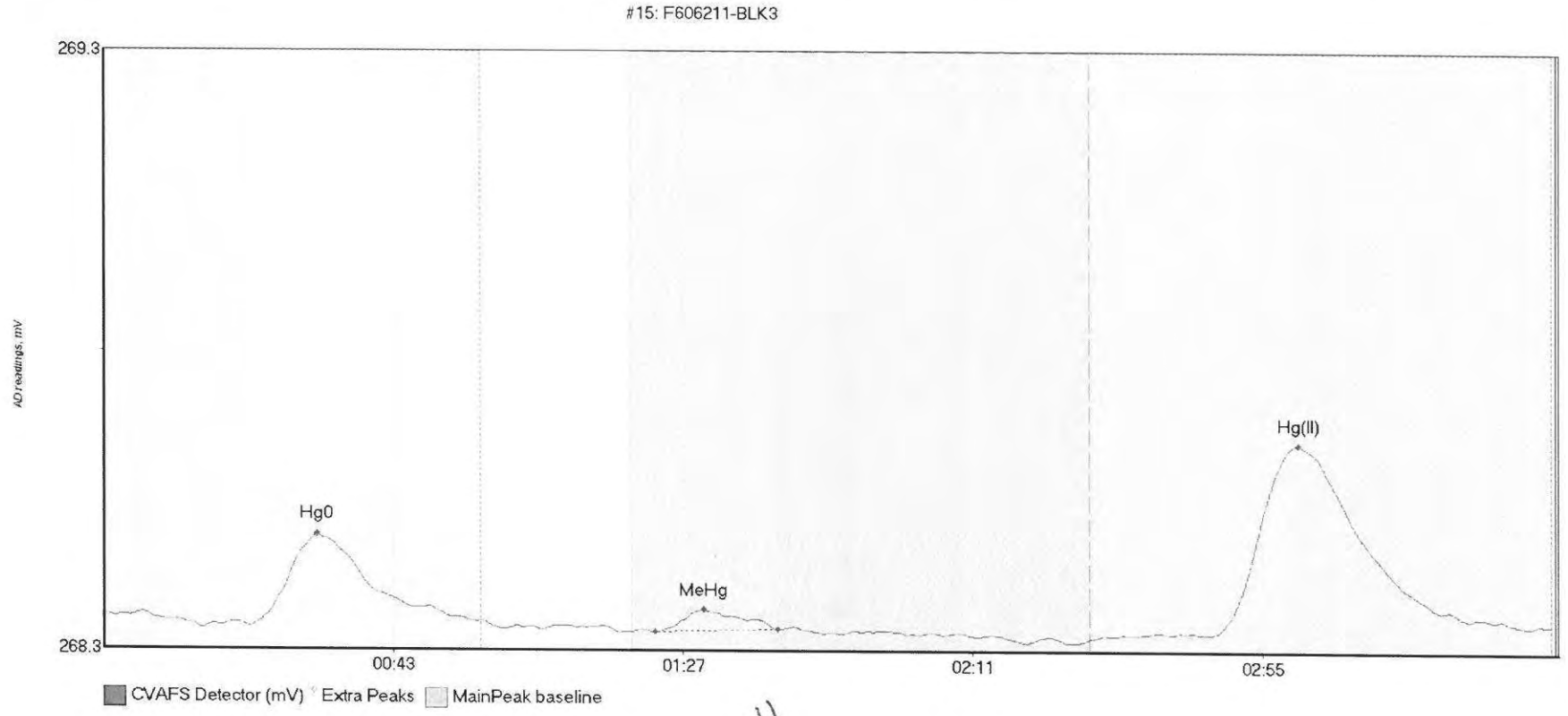
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F606211-BLK1 Hg	24.189	23.1	53.8	268.60	268.62	32.1	0.187	OK	268.6162	0.00	-0.05	
F606211-BLK1 Me	14.192	82.2	113.5	268.57	268.57	93.6	0.101	OK	268.6162	0.00	-0.05	
F606211-BLK1 Hg	56.166	161.4	217.3	268.55	268.56	181.8	0.312	OK	268.6162	0.00	-0.05	



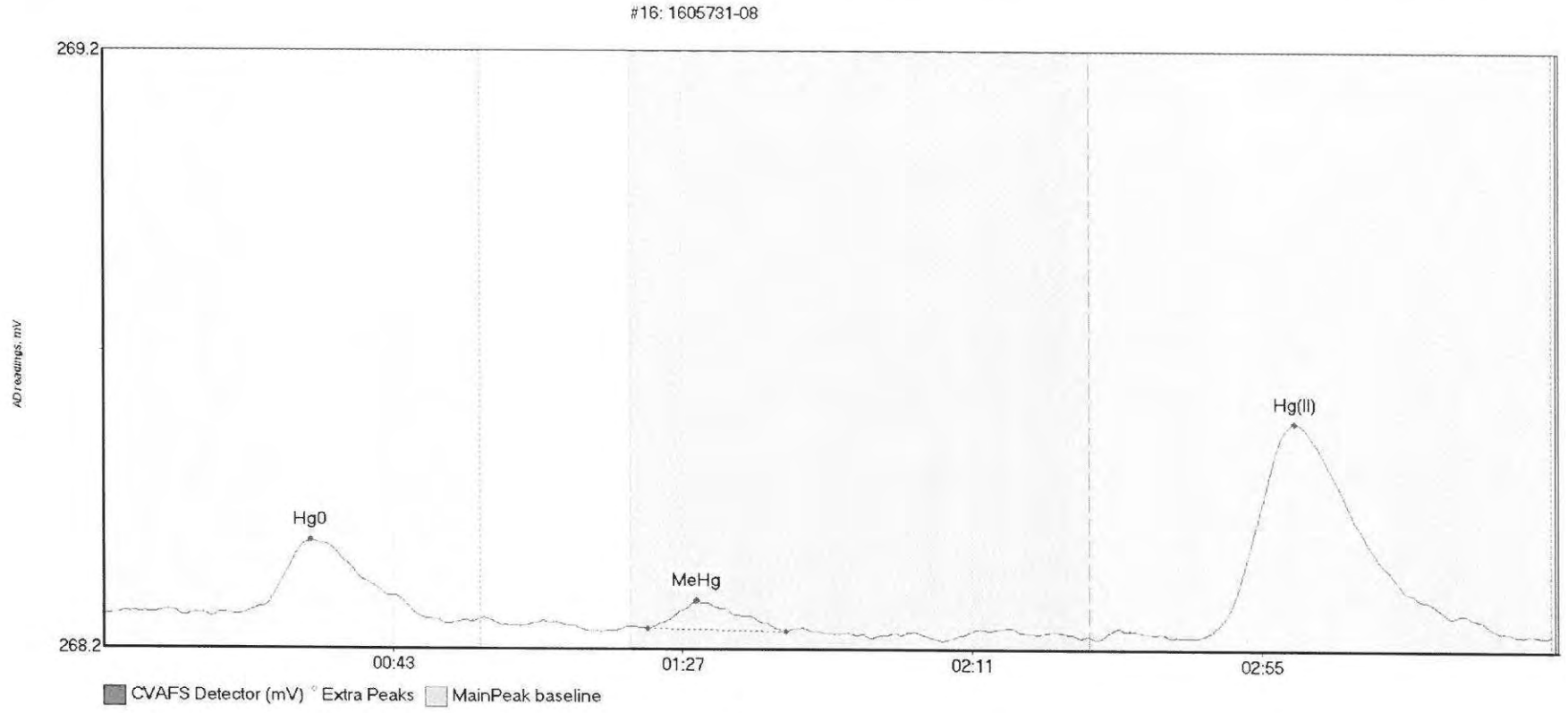
JH

Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F606211-BLK2 Hg	16.513	23.3	51.7	268.49	268.50	32.3	0.138	OK	268.5012	0.00	-0.04	
F606211-BLK2 Me	8.699	83.5	118.4	268.46	268.46	91.7	0.054	OK	268.5012	0.00	-0.04	
F606211-BLK2 Hg	56.054	166.0	216.2	268.45	268.45	181.7	0.298	OK	268.5012	0.00	-0.04	

016



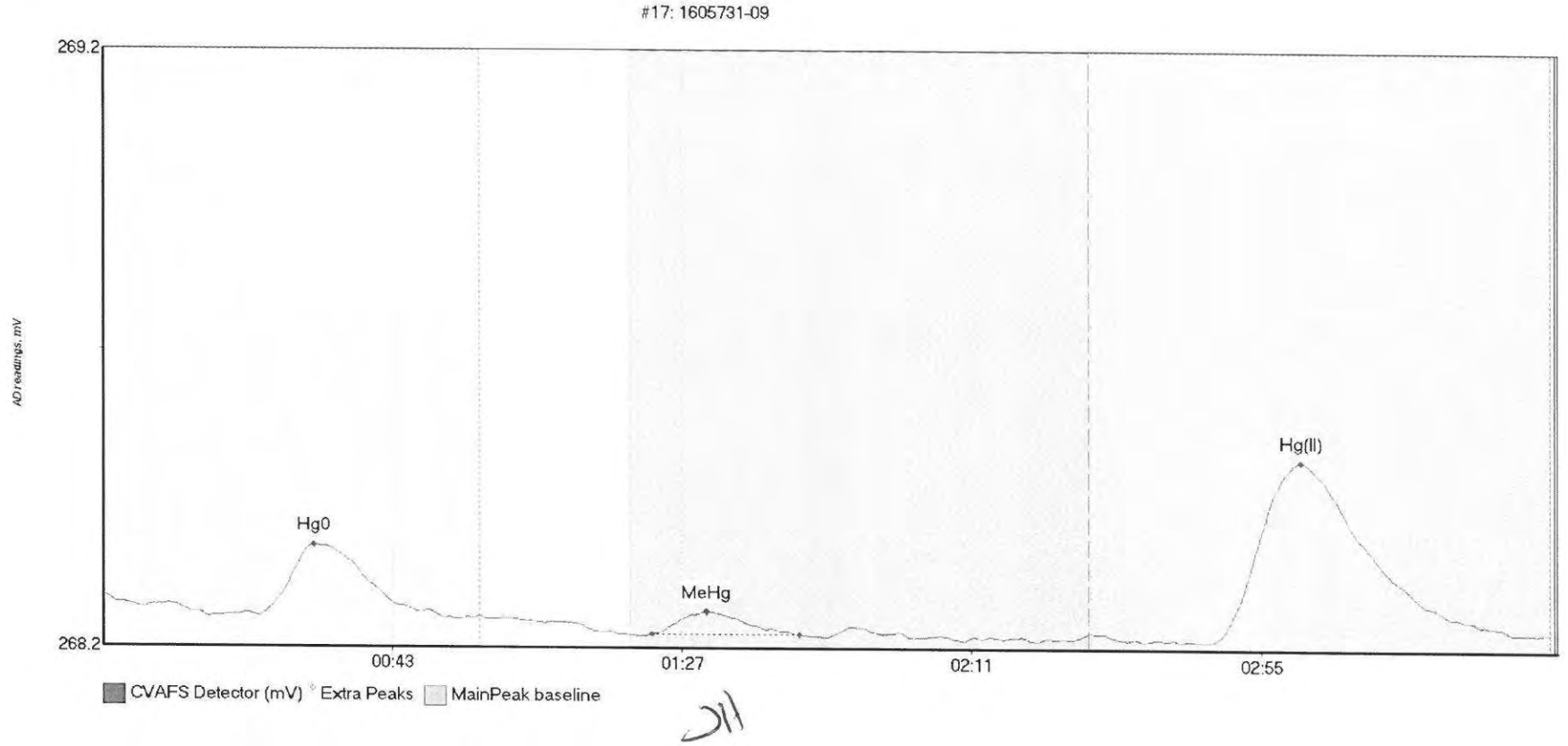
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F606211-BLK3 Hg	18.848	22.1	52.7	268.38	268.40	32.4	0.152	OK	268.4018	0.00	-0.01	
F606211-BLK3 Me	3.581	83.8	102.4	268.37	268.38	91.1	0.038	OK	268.4018	0.00	-0.01	
F606211-BLK3 Hg	55.012	157.2	216.1	268.37	268.39	181.4	0.320	OK	268.4018	0.00	-0.01	



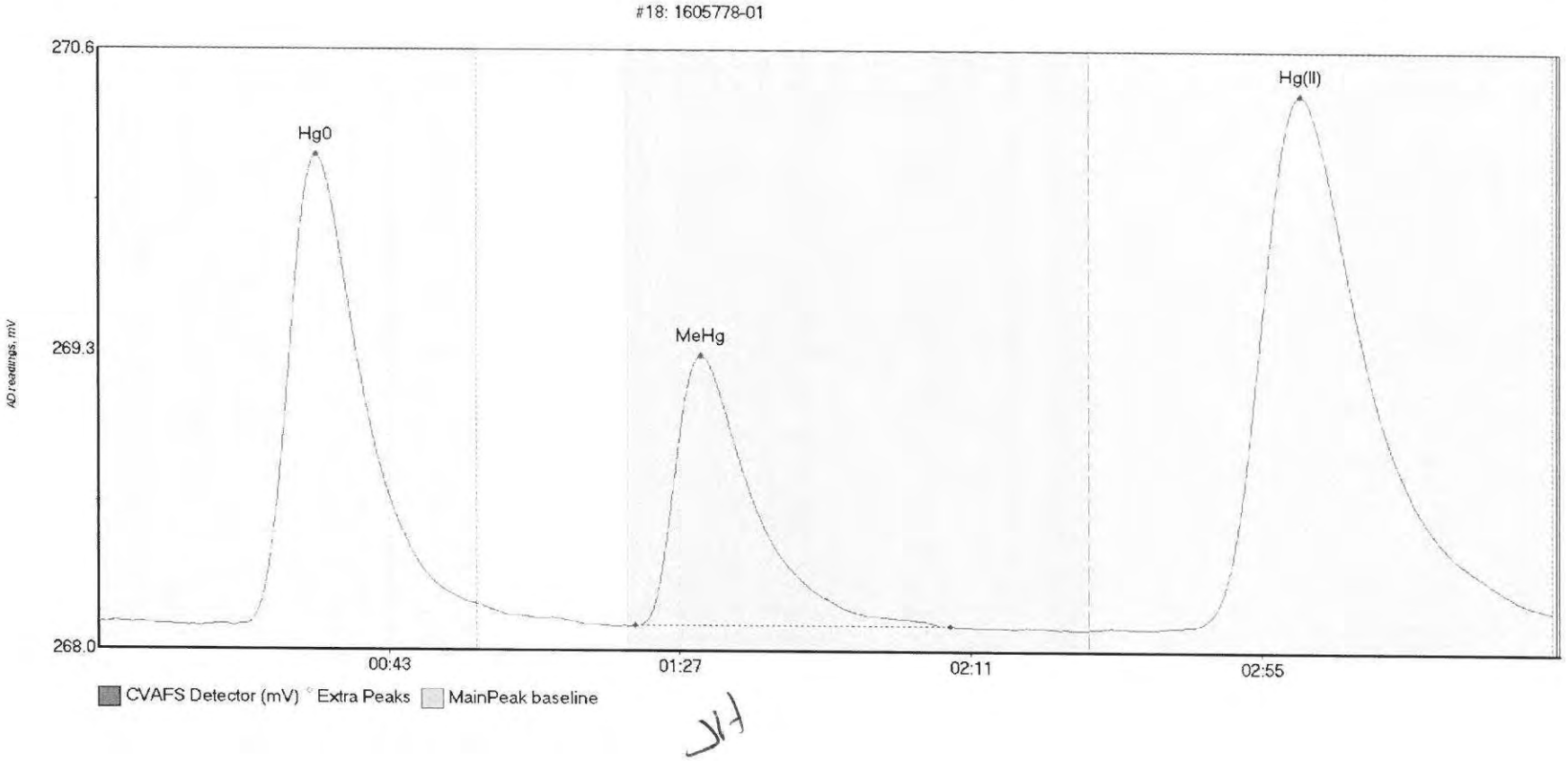
JH

Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1605731-08 Hg0	16.846	20.6	49.1	268.30	268.29	31.5	0.123	OK	268.3012	0.00	-0.03	
1605731-08 MeHg	4.987	82.8	103.7	268.28	268.27	90.2	0.045	OK	268.3012	0.00	-0.03	
1605731-08 Hg(I	64.724	166.8	218.4	268.27	268.27	181.0	0.360	OK	268.3012	0.00	-0.03	

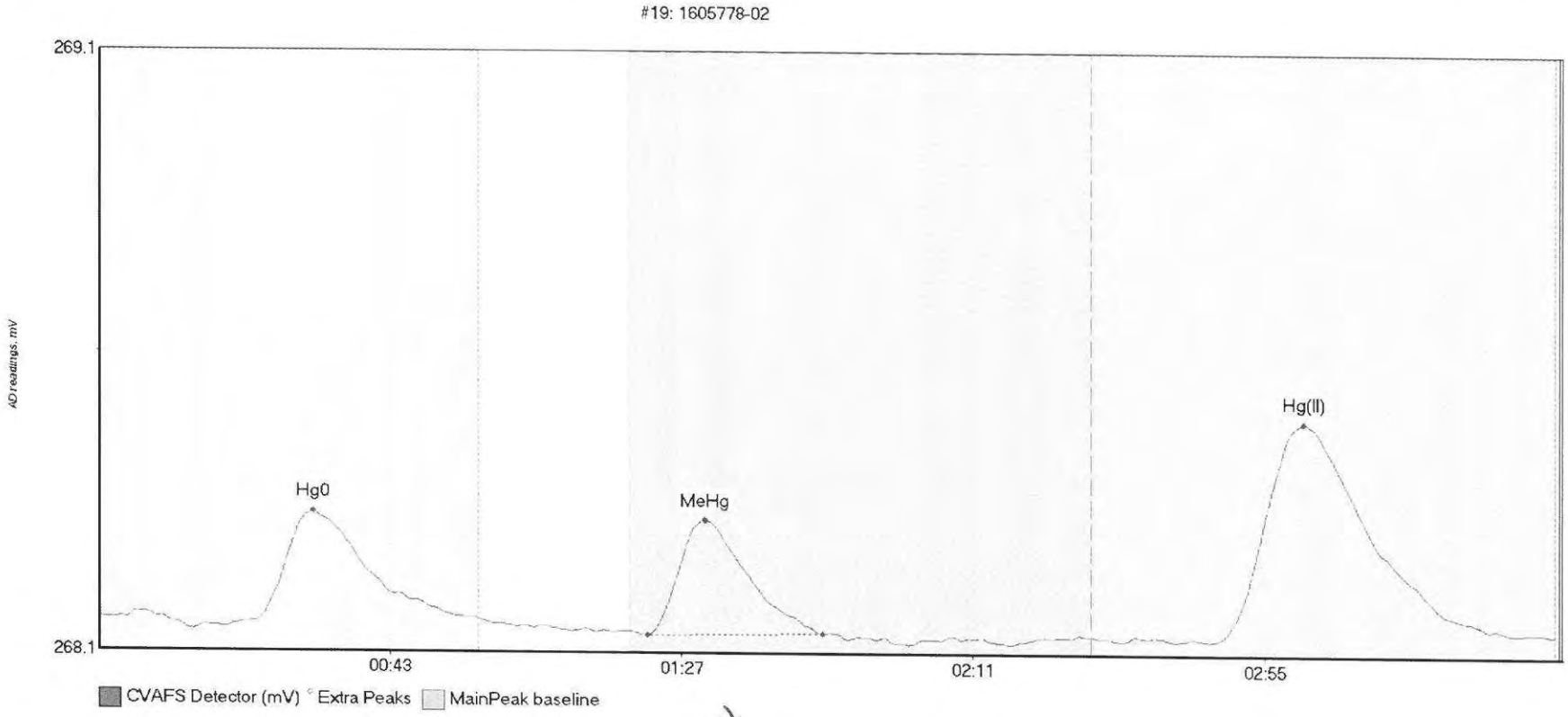
)16



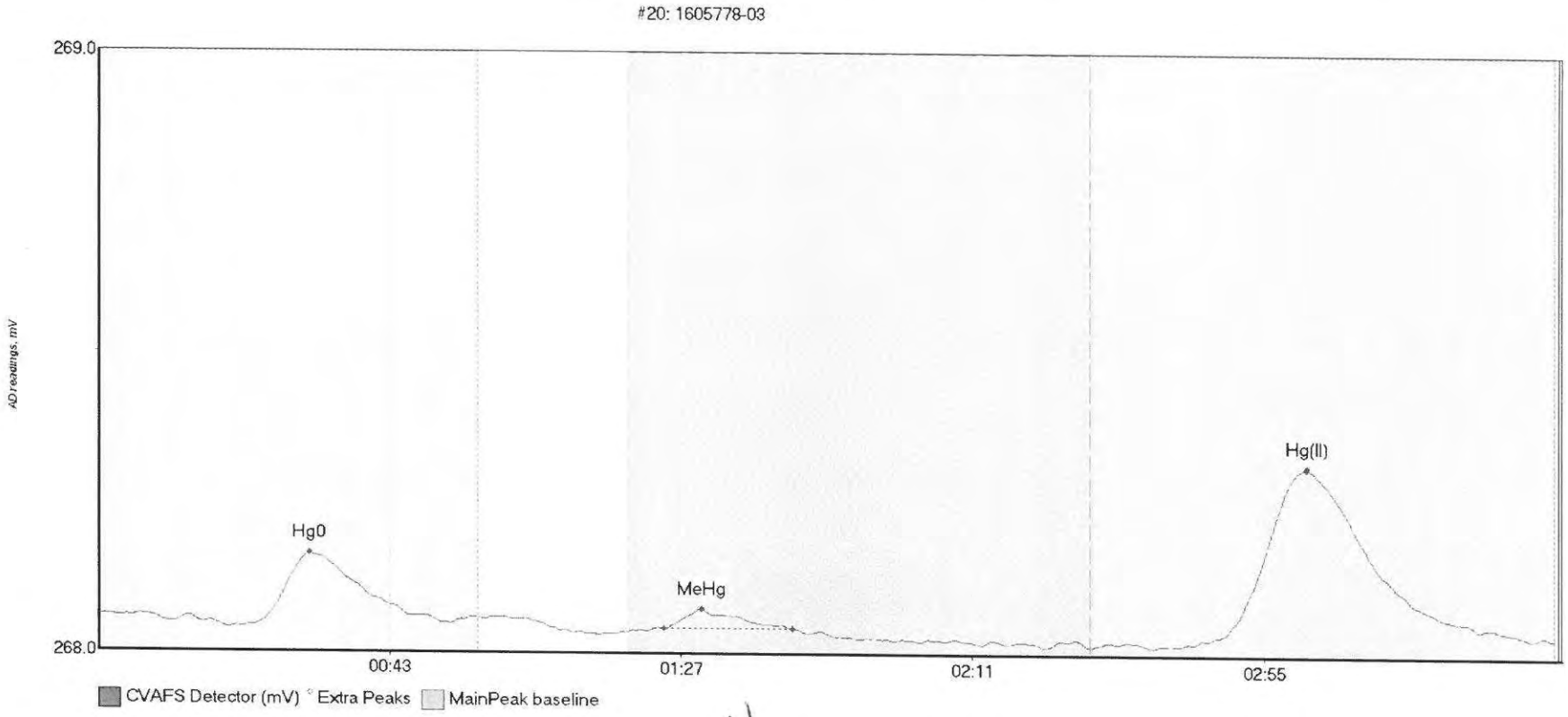
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1605731-09 Hg0	12.609	23.8	45.2	268.21	268.23	32.2	0.119	OK	268.2465	0.00	-0.05	
1605731-09 MeHg	4.348	83.4	105.9	268.18	268.18	91.7	0.038	OK	268.2465	0.00	-0.05	
1605731-09 Hg(I	55.335	167.9	214.1	268.17	268.19	182.1	0.304	OK	268.2465	0.00	-0.05	



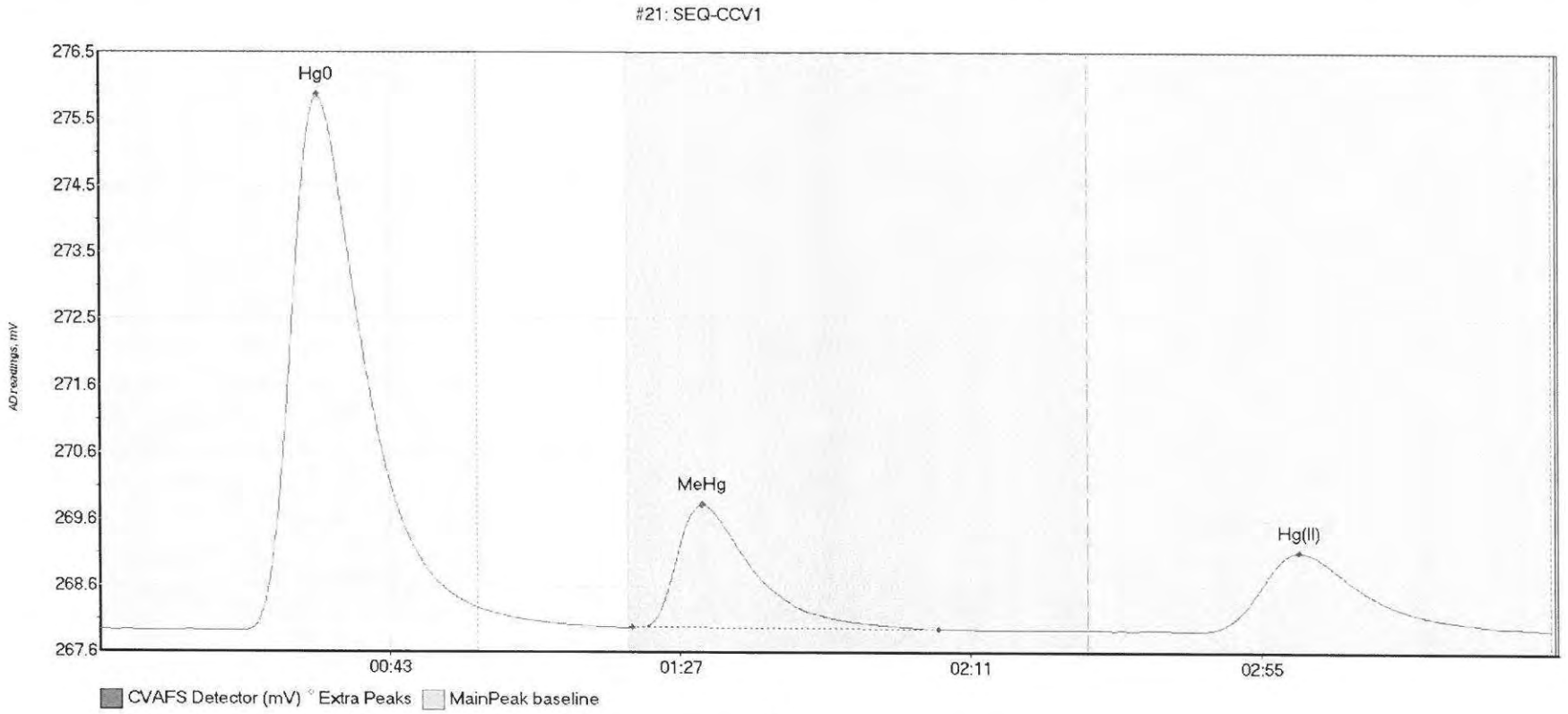
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1605778-01 Hg0	254.686	22.2	57.5	268.14	268.23	33.0	2.040	CT	268.1468	0.00	0.06	
1605778-01 MeHg	160.530	81.3	128.9	268.13	268.14	91.3	1.179	OK	268.1468	0.00	0.06	
1605778-01 Hg(I	421.319	159.5	219.8	268.12	268.21	181.9	2.326	CT	268.1468	0.00	0.06	



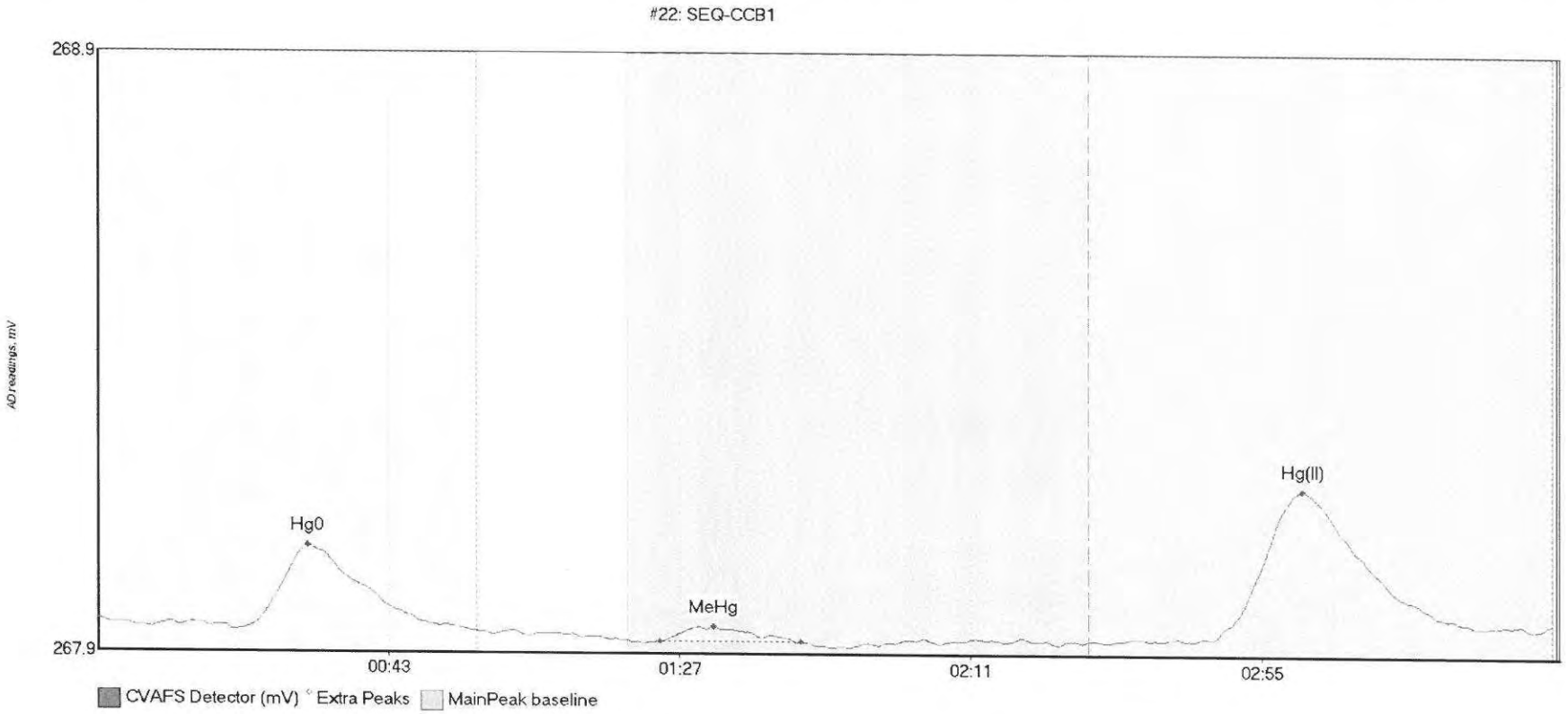
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1605778-02 Hg0	23.740	23.2	54.1	268.11	268.12	32.5	0.183	OK	268.1154	0.00	-0.02	
1605778-02 MeHg	22.611	82.9	109.3	268.09	268.09	91.6	0.193	OK	268.1154	0.00	-0.02	
1605778-02 Hg(I	64.144	168.5	219.2	268.08	268.10	181.9	0.365	OK	268.1154	0.00	-0.02	



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1605778-03 Hg0	12.803	23.4	47.0	268.02	268.04	31.9	0.119	OK	268.0353	0.00	-0.03	
1605778-03 MeHg	2.980	85.5	104.9	268.02	268.01	91.1	0.033	OK	268.0353	0.00	-0.03	
1605778-03 Hg(I	52.651	165.3	216.7	267.99	268.00	182.5	0.295	OK	268.0353	0.00	-0.03	



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CCV1 Hg0	977.241	21.7	57.5	267.96	268.29	33.1	7.883	CT	267.9770	0.00	0.02	
SEQ-CCV1 MeHg	242.148	80.8	127.1	268.01	267.99	91.4	1.807	OK	267.9770	0.00	0.02	
SEQ-CCV1 Hg(II)	209.790	166.4	219.8	267.96	267.99	181.7	1.170	CT	267.9770	0.00	0.02	



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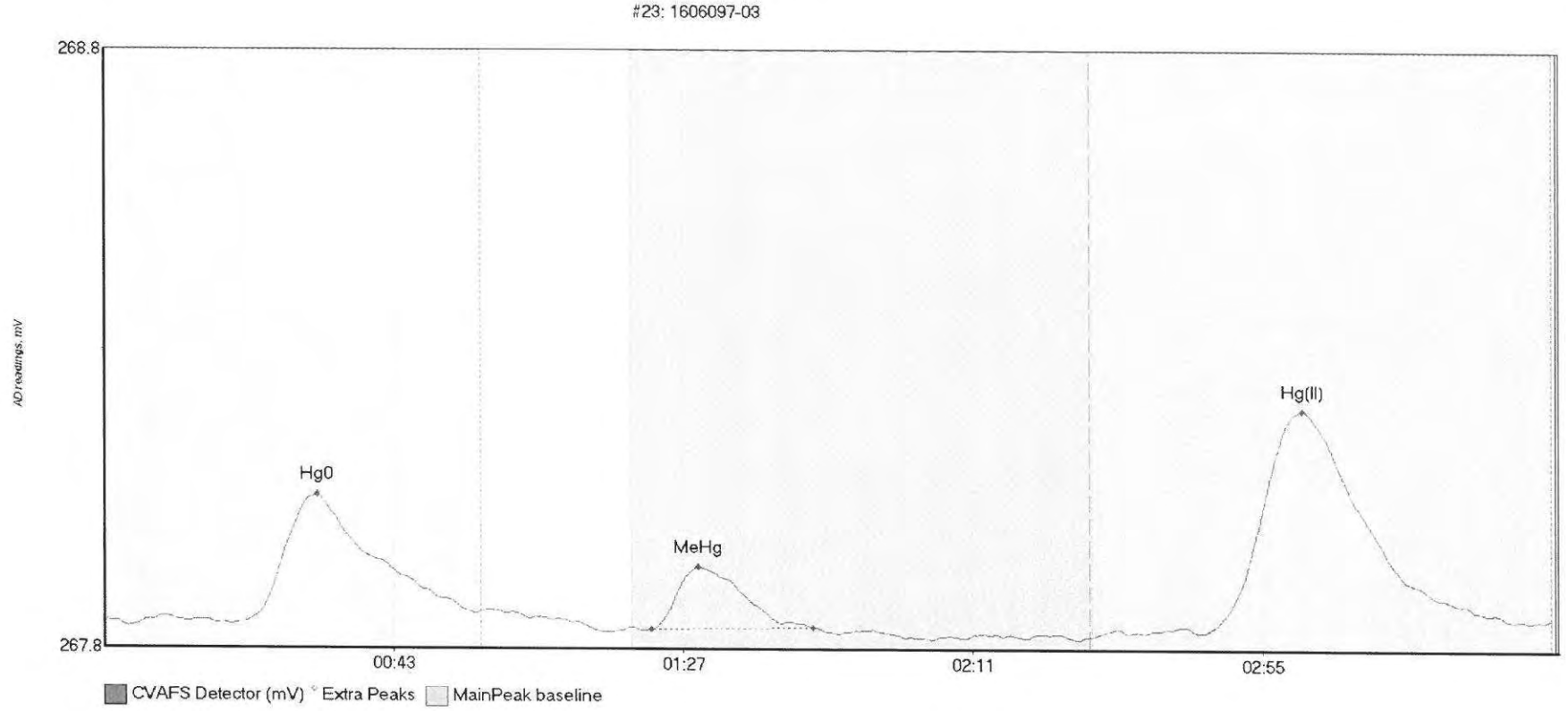
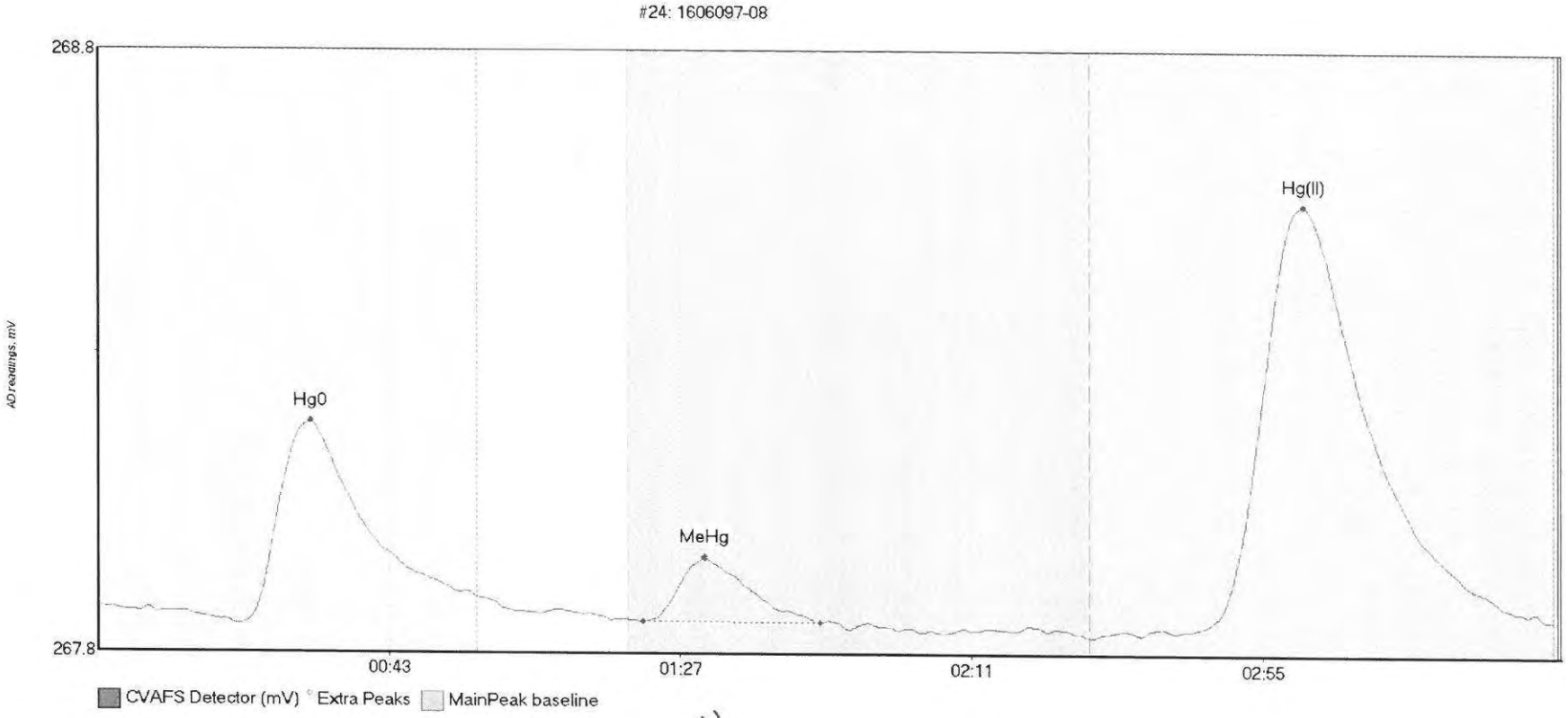
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CCB1 Hg0	17.330	21.4	50.4	267.91	267.92	31.7	0.140	OK	267.9292	0.00	0.00	
SEQ-CCB1 MeHg	3.089	85.0	106.3	267.89	267.89	93.2	0.026	OK	267.9292	0.00	0.00	
SEQ-CCB1 Hg(II)	42.426	168.5	217.2	267.90	267.92	182.2	0.250	OK	267.9292	0.00	0.00	

016



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1606097-03 Hg0	30.851	21.4	56.4	267.88	267.90	32.4	0.211	OK	267.8851	0.00	0.00	
1606097-03 MeHg	11.660	83.1	107.7	267.87	267.87	90.3	0.105	OK	267.8851	0.00	0.00	
1606097-03 Hg(I	64.708	158.2	216.8	267.86	267.88	182.0	0.373	OK	267.8851	0.00	0.00	



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Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1606097-08 Hg0	45.175	21.2	57.5	267.82	267.87	32.1	0.336	CT	267.8523	0.00	-0.02	
1606097-08 MeHg	12.534	82.5	109.2	267.83	267.83	91.8	0.105	OK	267.8523	0.00	-0.02	
1606097-08 Hg(I	129.806	157.6	219.5	267.81	267.84	182.2	0.715	OK	267.8523	0.00	-0.02	

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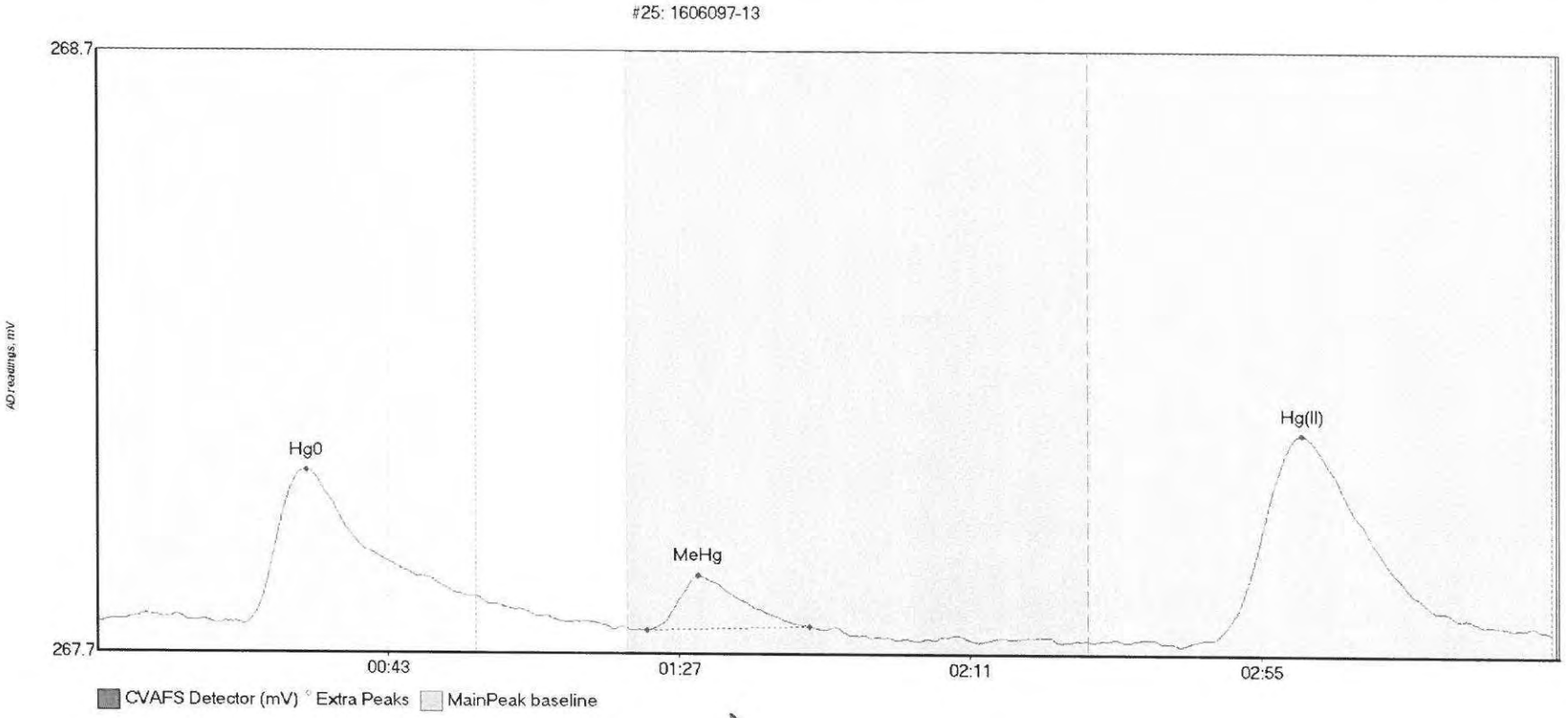
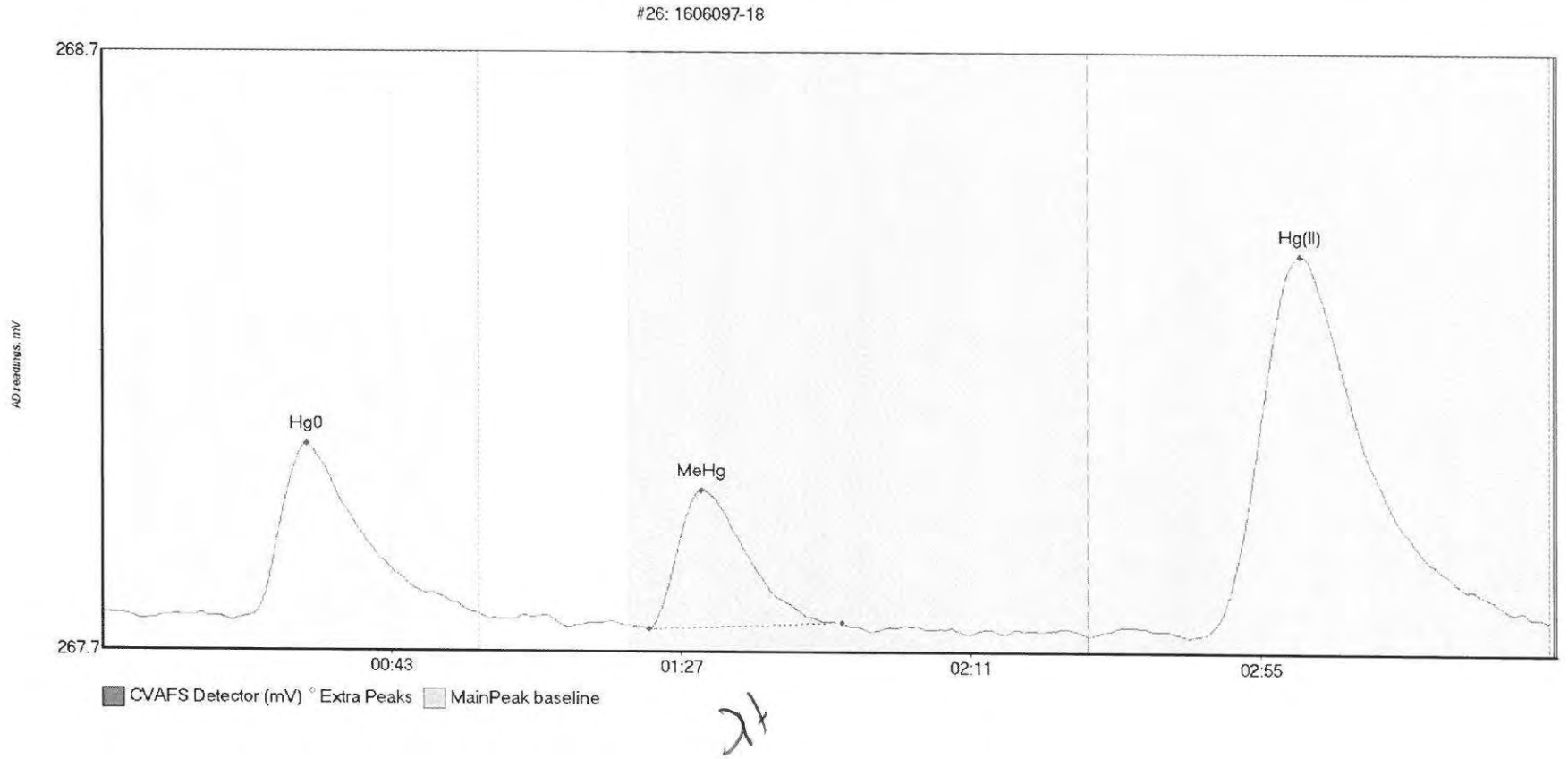
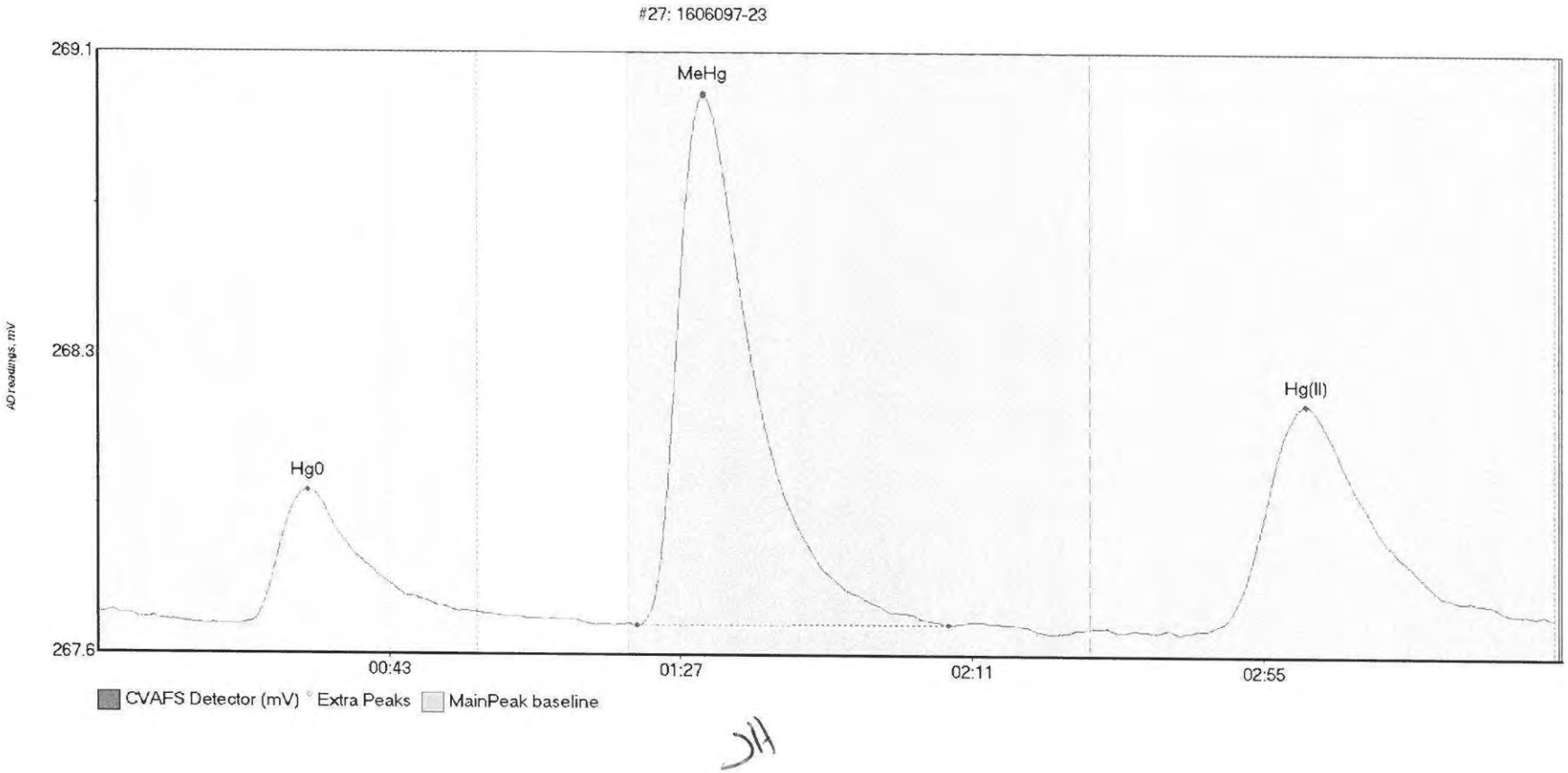


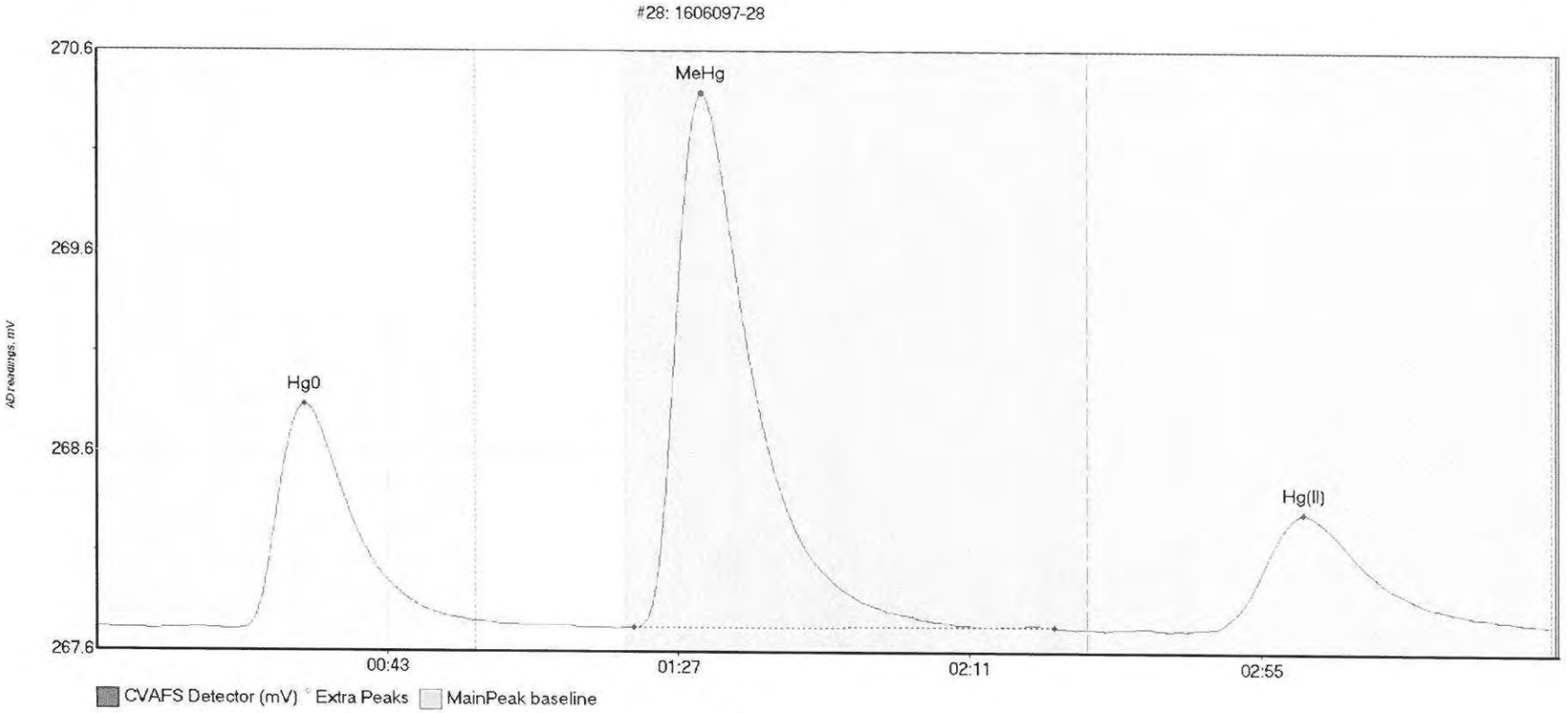
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1606097-13 Hg0	34.762	22.4	57.5	267.78	267.83	31.7	0.255	CT	267.7867	0.00	-0.01	
1606097-13 MeHg	9.381	83.1	107.7	267.78	267.78	90.9	0.090	OK	267.7867	0.00	-0.01	
1606097-13 Hg(I	59.745	168.4	219.8	267.76	267.77	182.2	0.341	CT	267.7867	0.00	-0.01	



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1606097-18 Hg0	39.236	22.5	57.5	267.74	267.74	31.1	0.286	CT	267.7426	0.00	-0.01	
1606097-18 MeHg	27.192	83.2	112.4	267.72	267.73	91.2	0.230	OK	267.7426	0.00	-0.01	
1606097-18 Hg(I	115.047	167.2	219.8	267.71	267.74	182.0	0.636	CT	267.7426	0.00	-0.01	



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1606097-23 Hg0	40.259	21.5	54.6	267.69	267.72	31.7	0.319	OK	267.7155	0.00	0.00	
1606097-23 MeHg	169.965	81.5	128.5	267.69	267.69	91.6	1.263	OK	267.7155	0.00	0.00	
1606097-23 Hg(I	93.875	166.5	219.8	267.68	267.71	182.4	0.538	CT	267.7155	0.00	0.00	



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Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1606097-28 Hg0	142.022	21.0	57.5	267.67	267.71	31.5	1.135	CT	267.6811	0.00	0.03	
1606097-28 MeHg	363.143	81.3	144.9	267.68	267.69	91.6	2.690	OK	267.6811	0.00	0.03	
1606097-28 Hg(I	103.475	167.3	219.3	267.68	267.71	182.4	0.580	OK	267.6811	0.00	0.03	

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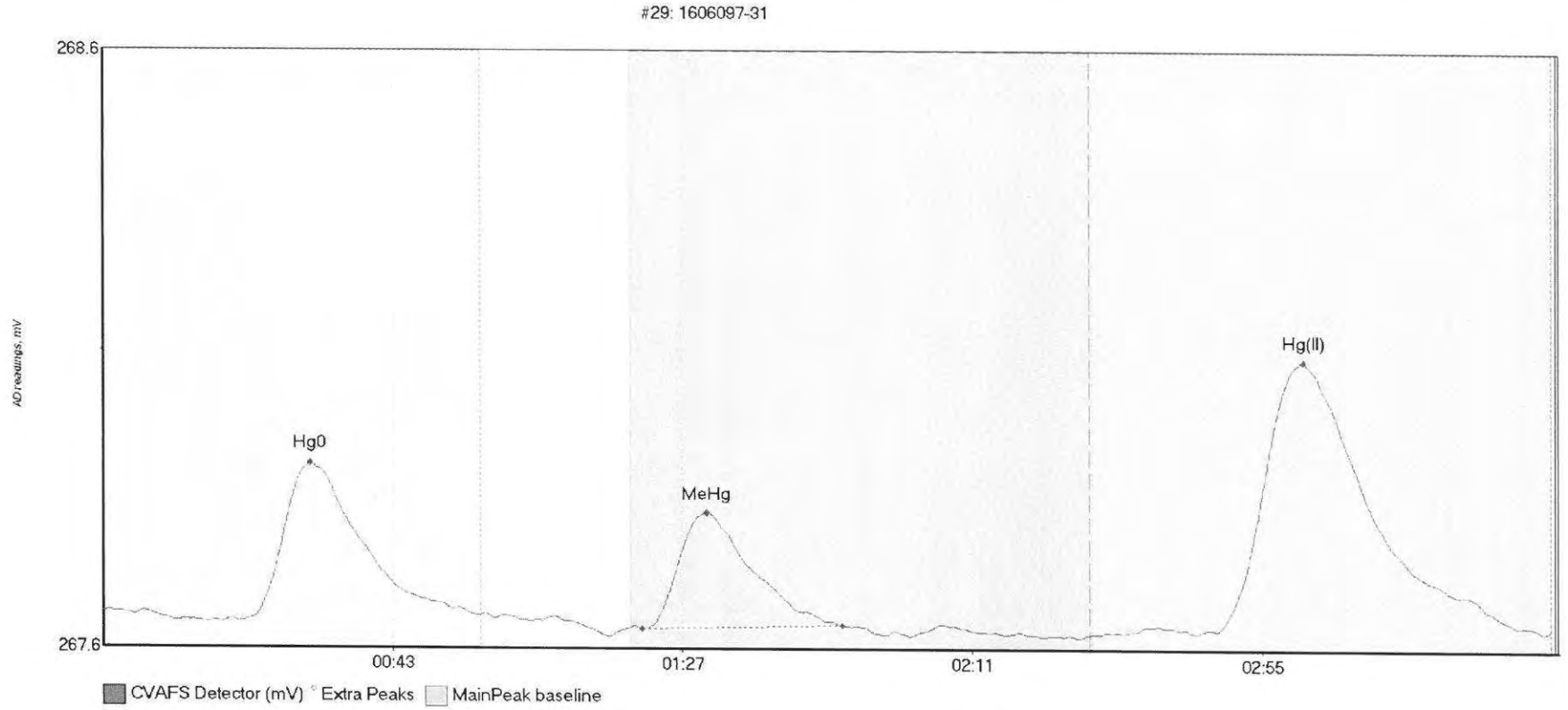
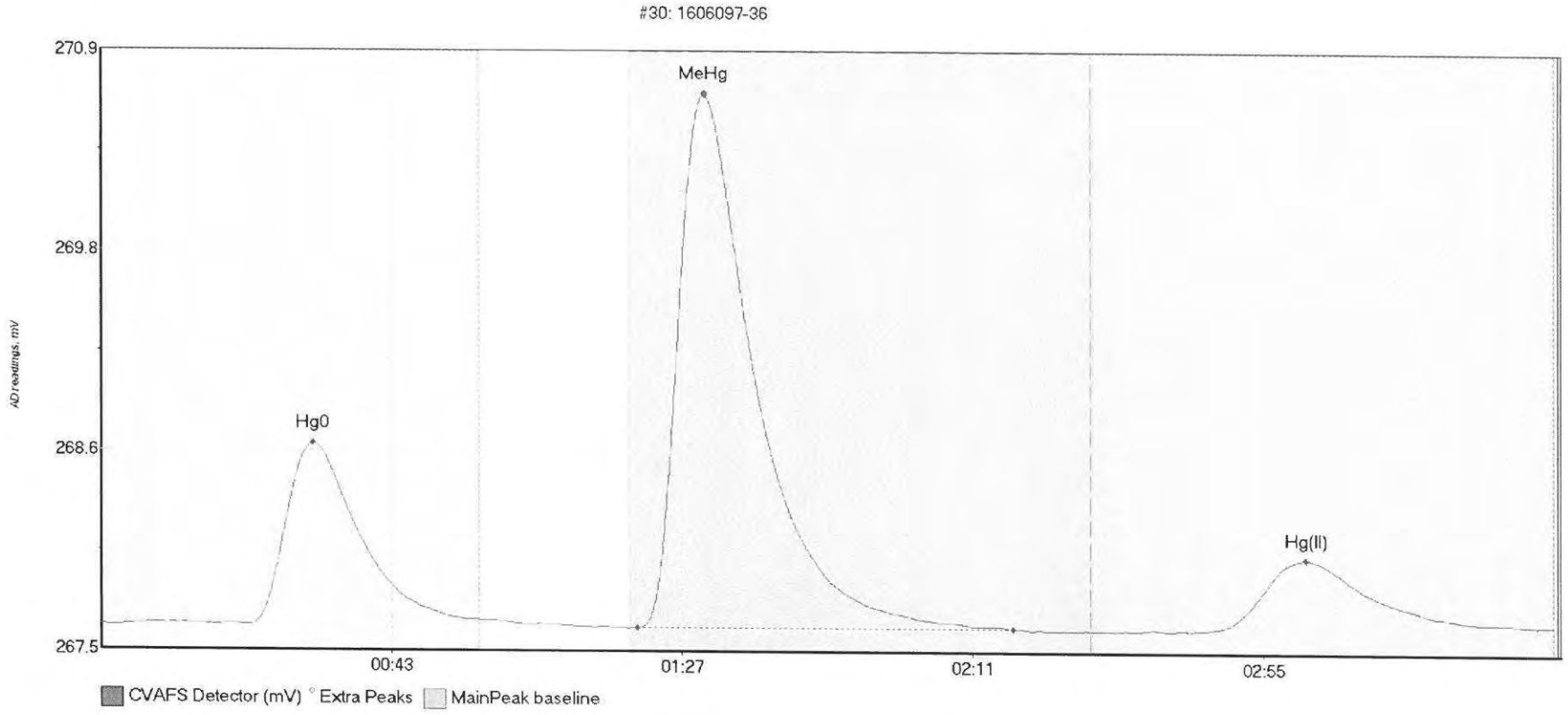


Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1606097-31 Hg0	32.711	21.0	53.1	267.66	267.68	31.5	0.263	OK	267.6745	0.00	-0.03	
1606097-31 MeHg	24.442	81.9	112.3	267.65	267.65	91.8	0.194	OK	267.6745	0.00	-0.03	
1606097-31 Hg(I	83.943	166.0	218.8	267.64	267.64	182.3	0.457	OK	267.6745	0.00	-0.03	



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Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1606097-36 Hg0	128.430	22.3	57.5	267.62	267.65	32.2	1.040	CT	267.6147	0.00	0.02	
1606097-36 MeHg	409.834	81.3	138.2	267.60	267.61	91.4	3.051	OK	267.6147	0.00	0.02	
1606097-36 Hg(I	72.681	166.6	217.3	267.60	267.63	182.5	0.409	OK	267.6147	0.00	0.02	

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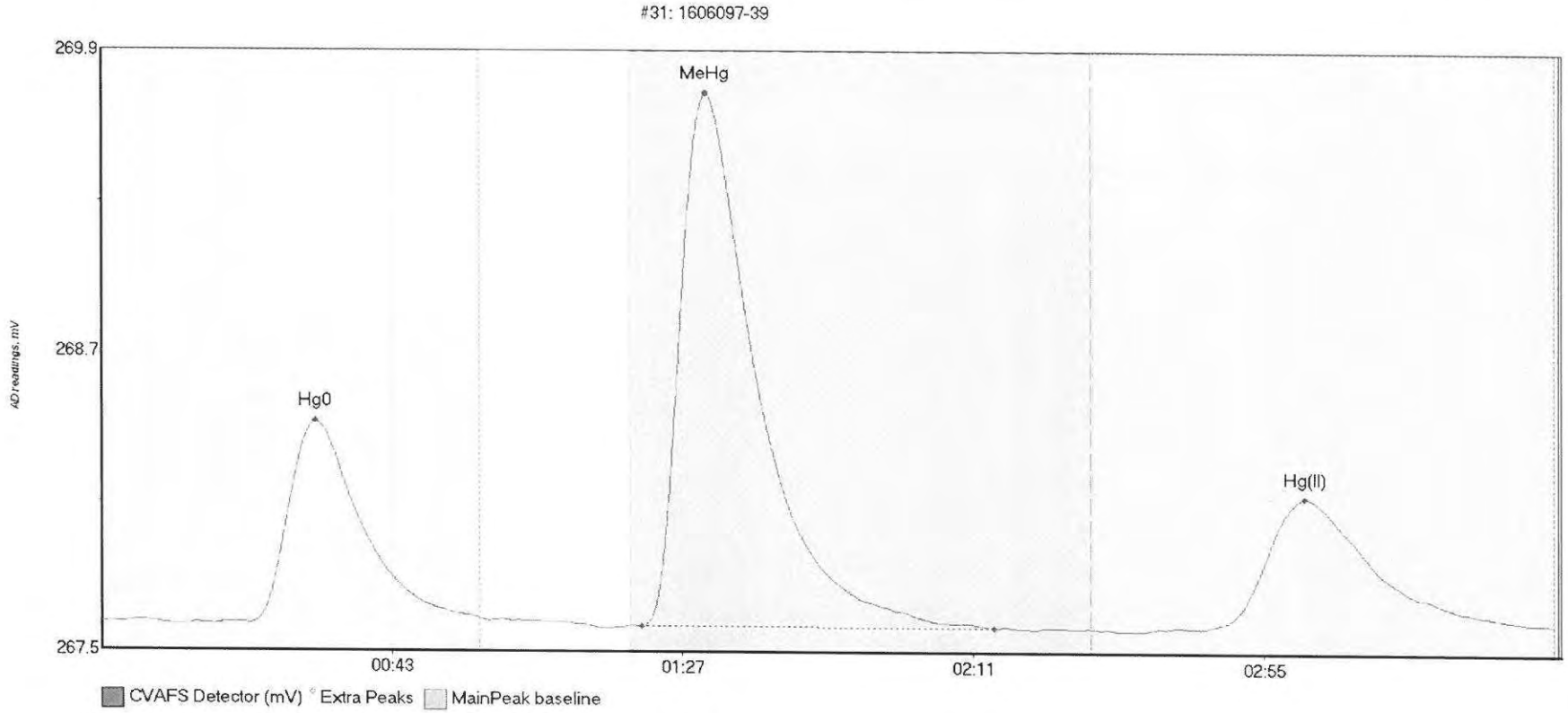
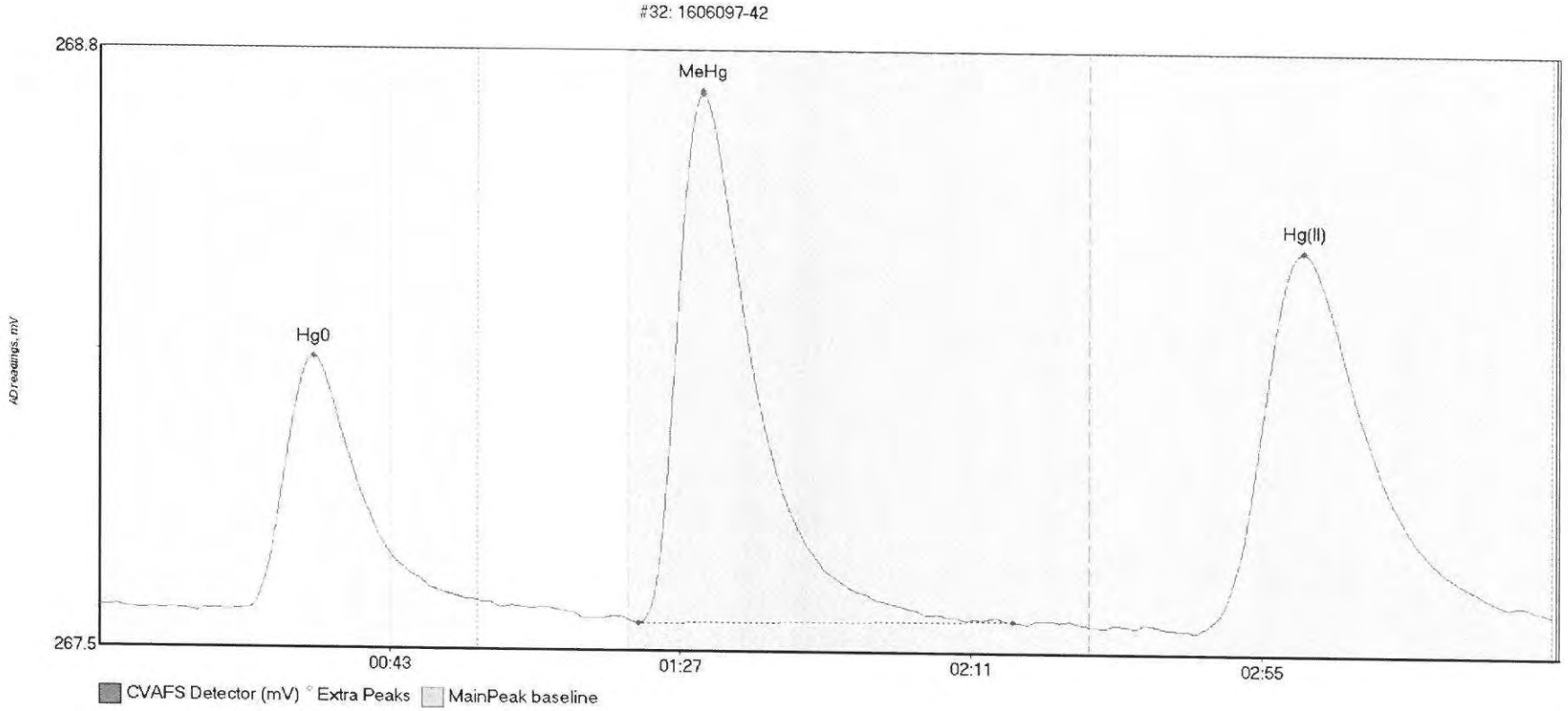


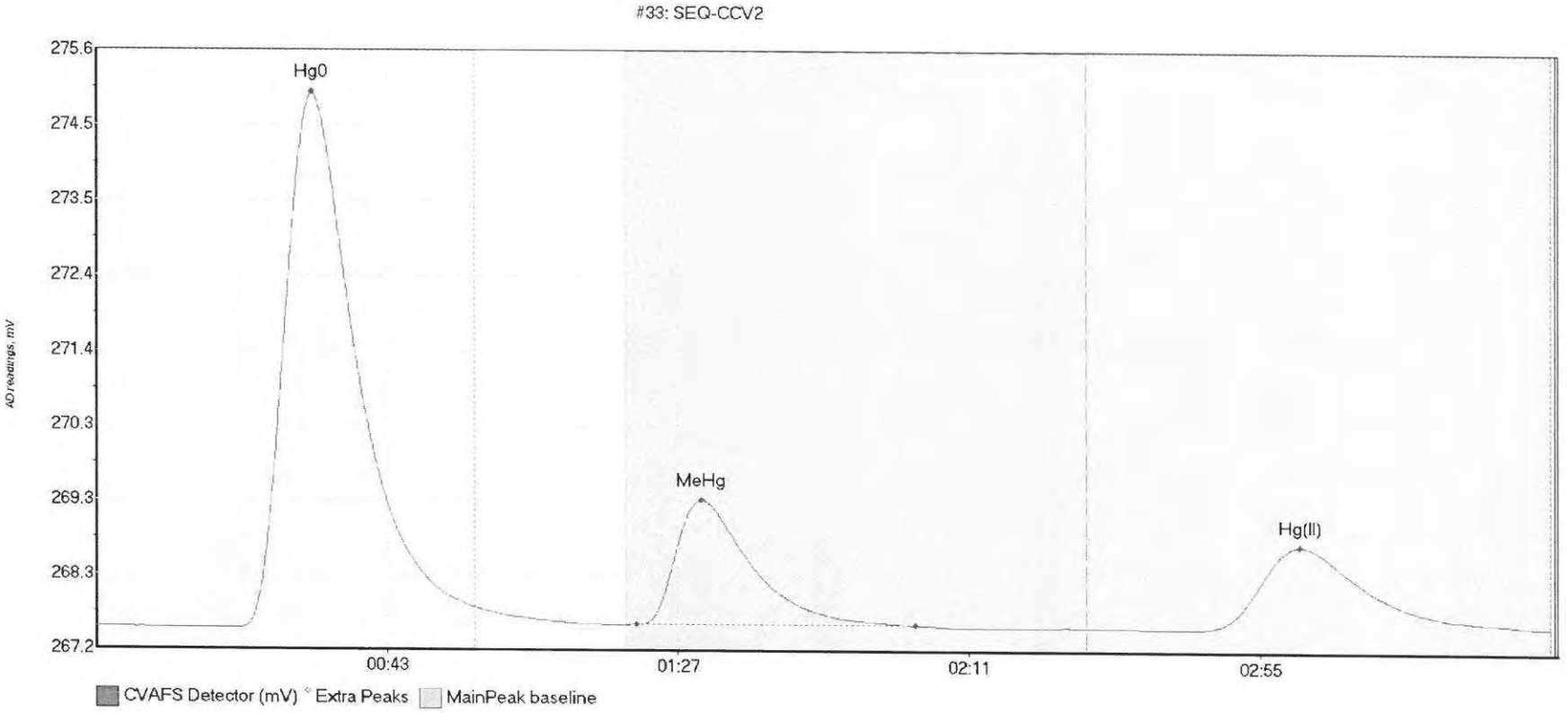
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1606097-39 Hg0	100.267	22.4	57.5	267.58	267.59	32.5	0.804	CT	267.5793	0.00	0.00	
1606097-39 MeHg	284.325	81.9	135.2	267.57	267.56	91.6	2.118	OK	267.5793	0.00	0.00	
1606097-39 Hg(I	92.852	166.5	219.8	267.56	267.58	182.2	0.522	CT	267.5793	0.00	0.00	

Peak Chart for MMHg270011606171

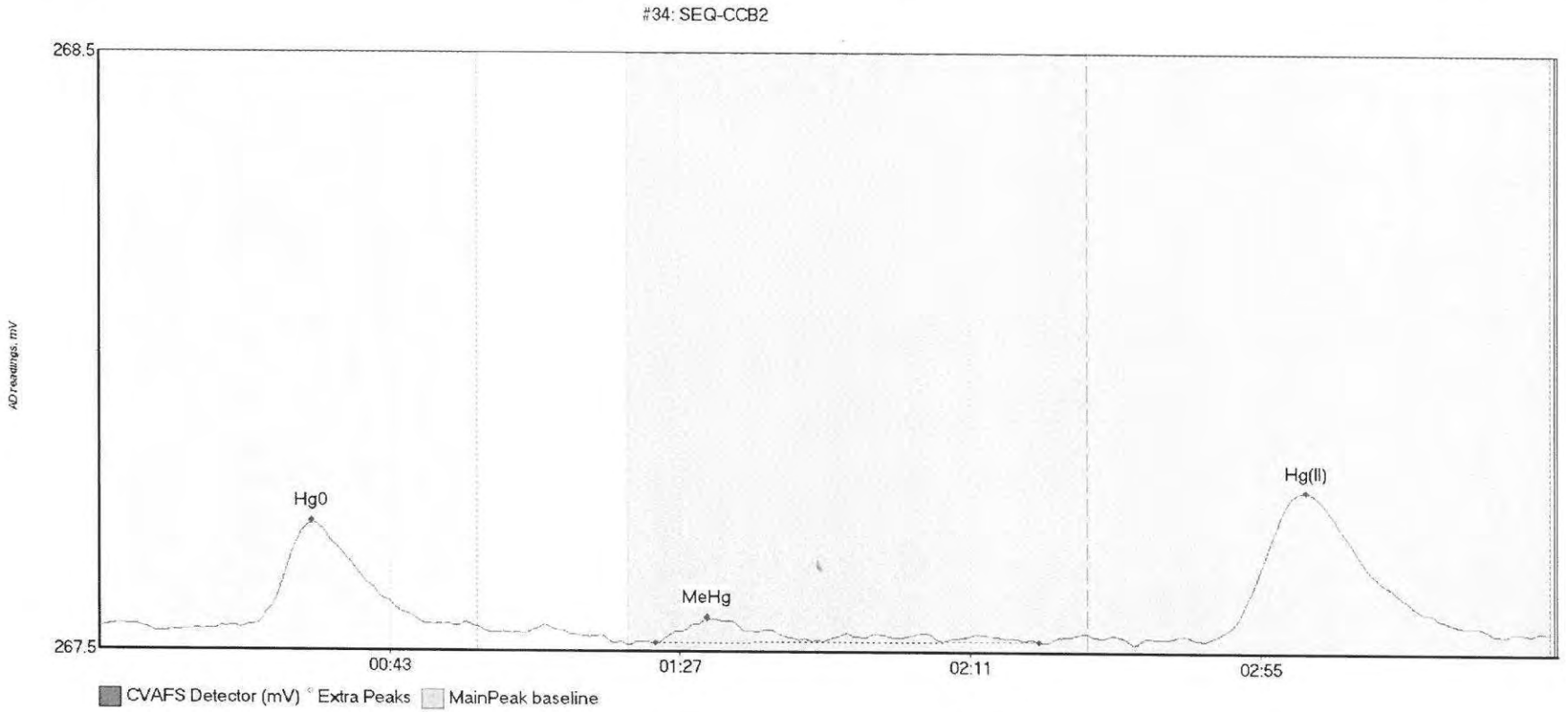


Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1606097-42 Hg0	66.912	22.4	57.5	267.55	267.57	32.4	0.543	CT	267.5541	0.00	0.00	
1606097-42 MeHg	154.074	81.8	138.3	267.52	267.53	91.5	1.137	OK	267.5541	0.00	0.00	
1606097-42 Hg(I	147.579	166.0	219.8	267.51	267.55	182.3	0.818	CT	267.5541	0.00	0.00	

016



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CCV2 Hg0	910.930	21.1	57.5	267.52	267.81	32.6	7.451	CT	267.5314	0.00	0.05	
SEQ-CCV2 MeHg	227.572	81.7	123.9	267.58	267.58	91.6	1.743	OK	267.5314	0.00	0.05	
SEQ-CCV2 Hg(II)	208.027	166.0	218.2	267.53	267.58	182.0	1.173	OK	267.5314	0.00	0.05	



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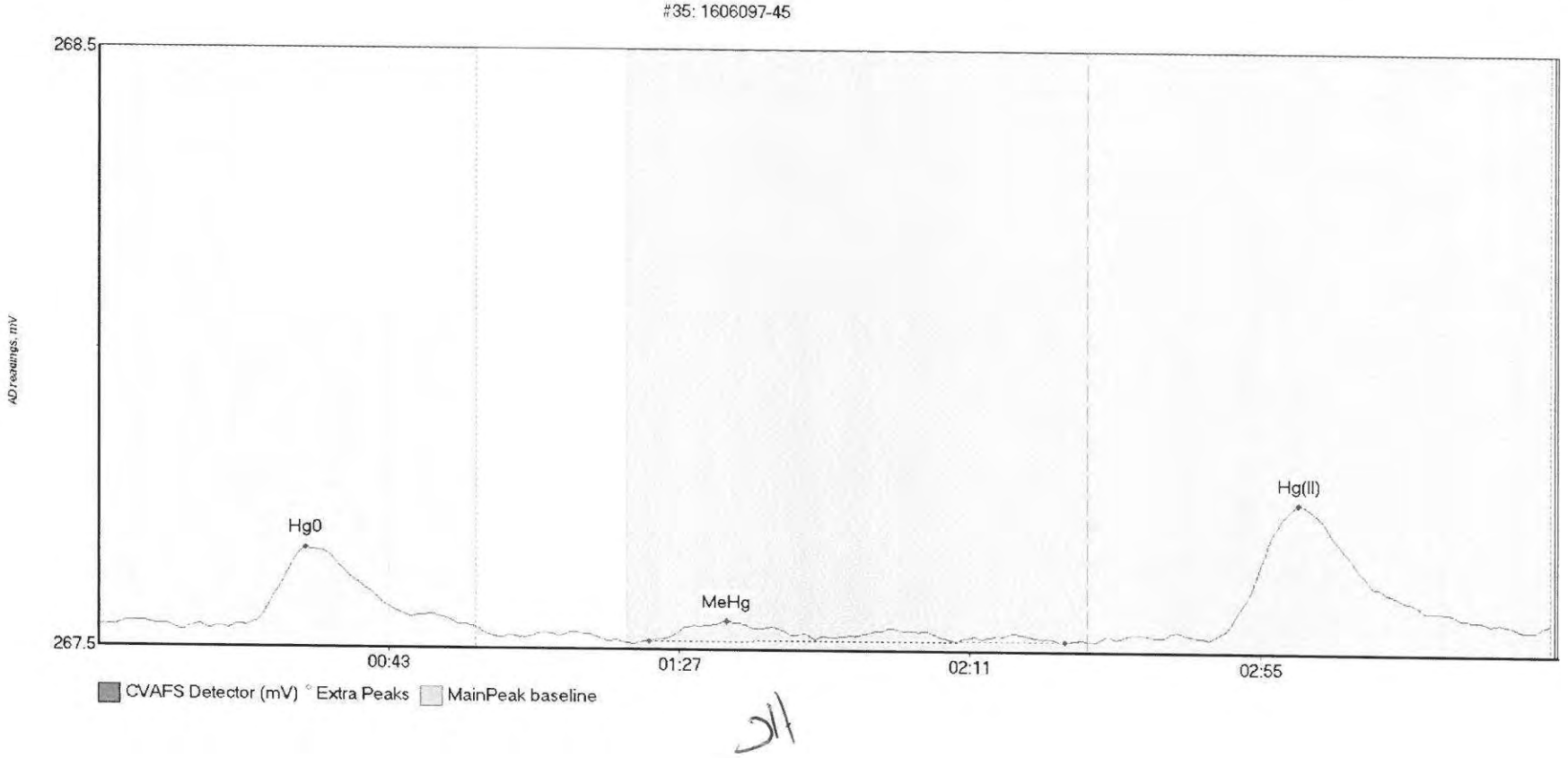
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CCB2 Hg0	20.476	23.2	50.9	267.51	267.51	32.2	0.172	OK	267.5075	0.00	-0.01	
SEQ-CCB2 MeHg	8.435	84.3	142.5	267.48	267.48	92.2	0.042	OK	267.5075	0.00	-0.01	
SEQ-CCB2 Hg(II)	43.041	167.8	211.7	267.49	267.50	182.9	0.251	OK	267.5075	0.00	-0.01	

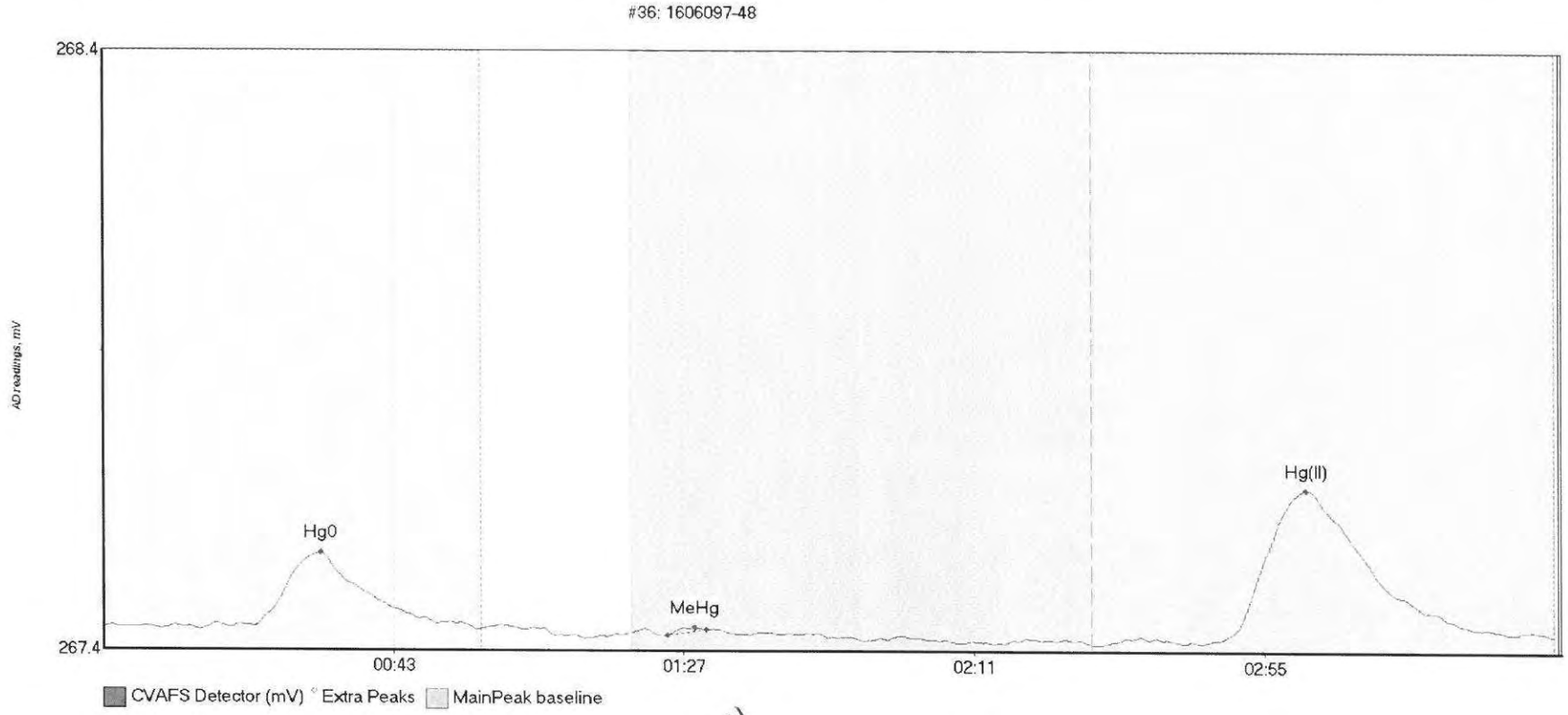
016

Peak Chart for MMHg270011606171



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1606097-45 Hg0	17.723	22.3	54.9	267.51	267.51	31.4	0.129	OK	267.5079	0.00	0.01	
1606097-45 MeHg	9.055	83.4	146.5	267.49	267.49	95.1	0.034	OK	267.5079	0.00	0.01	
1606097-45 Hg(I	39.395	168.2	215.7	267.49	267.51	181.8	0.226	OK	267.5079	0.00	0.01	

016



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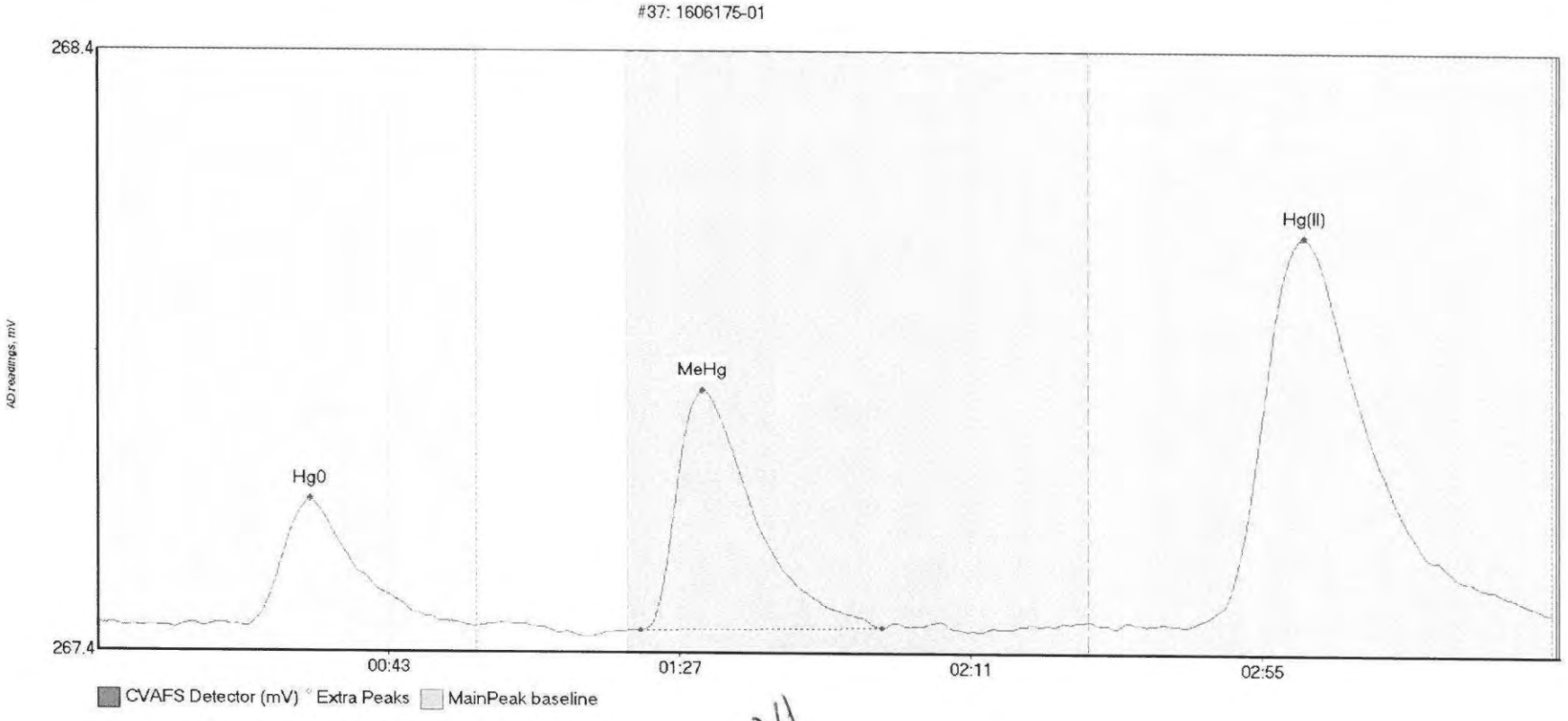
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1606097-48 Hg0	16.611	22.9	56.8	267.47	267.47	33.0	0.122	OK	267.4738	0.00	-0.01	
1606097-48 MeHg	0.308	85.6	91.5	267.46	267.47	89.8	0.013	OK	267.4738	0.00	-0.01	
1606097-48 Hg(I	45.078	167.3	219.8	267.45	267.46	182.3	0.257	CT	267.4738	0.00	-0.01	

016



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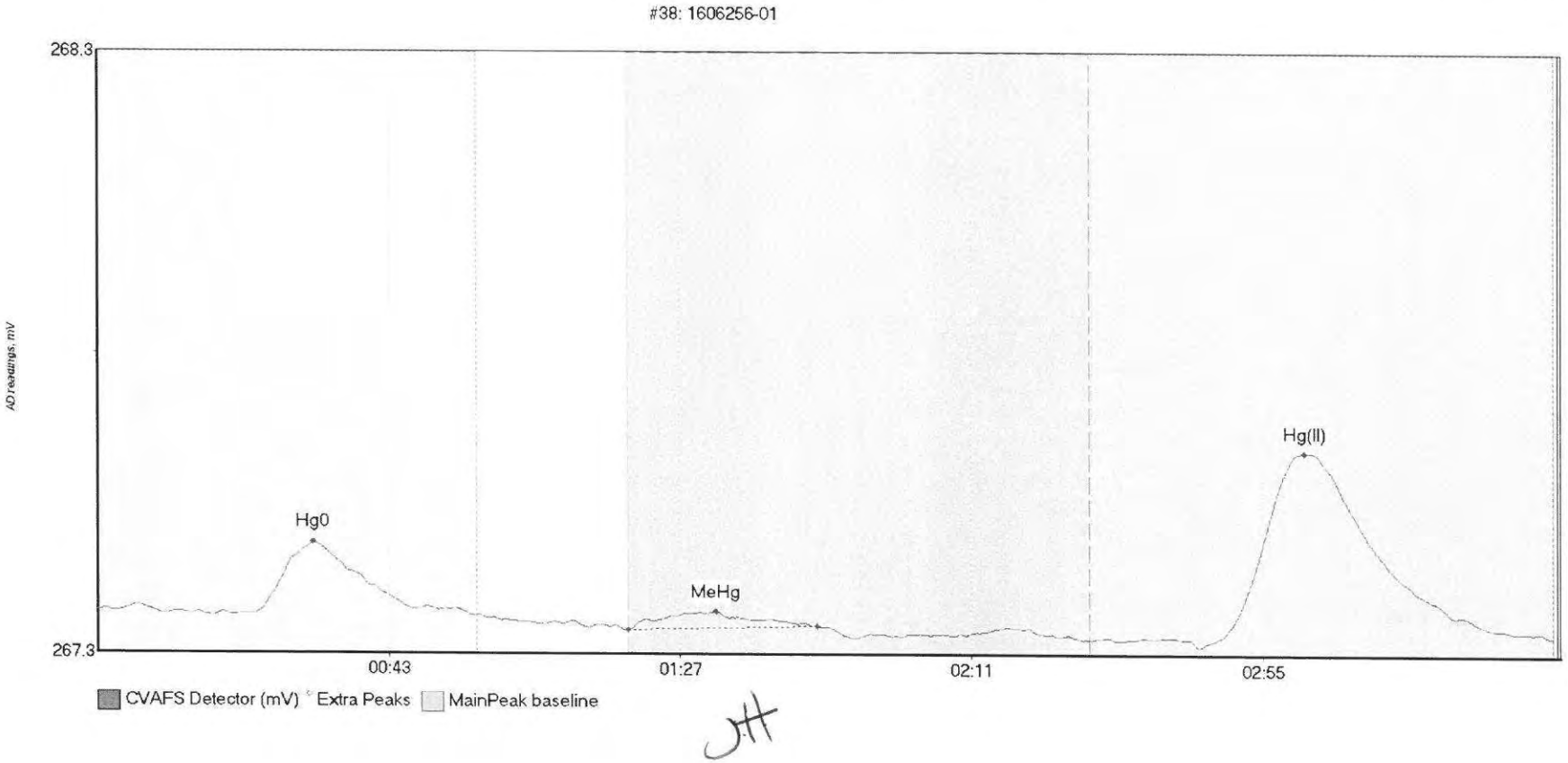
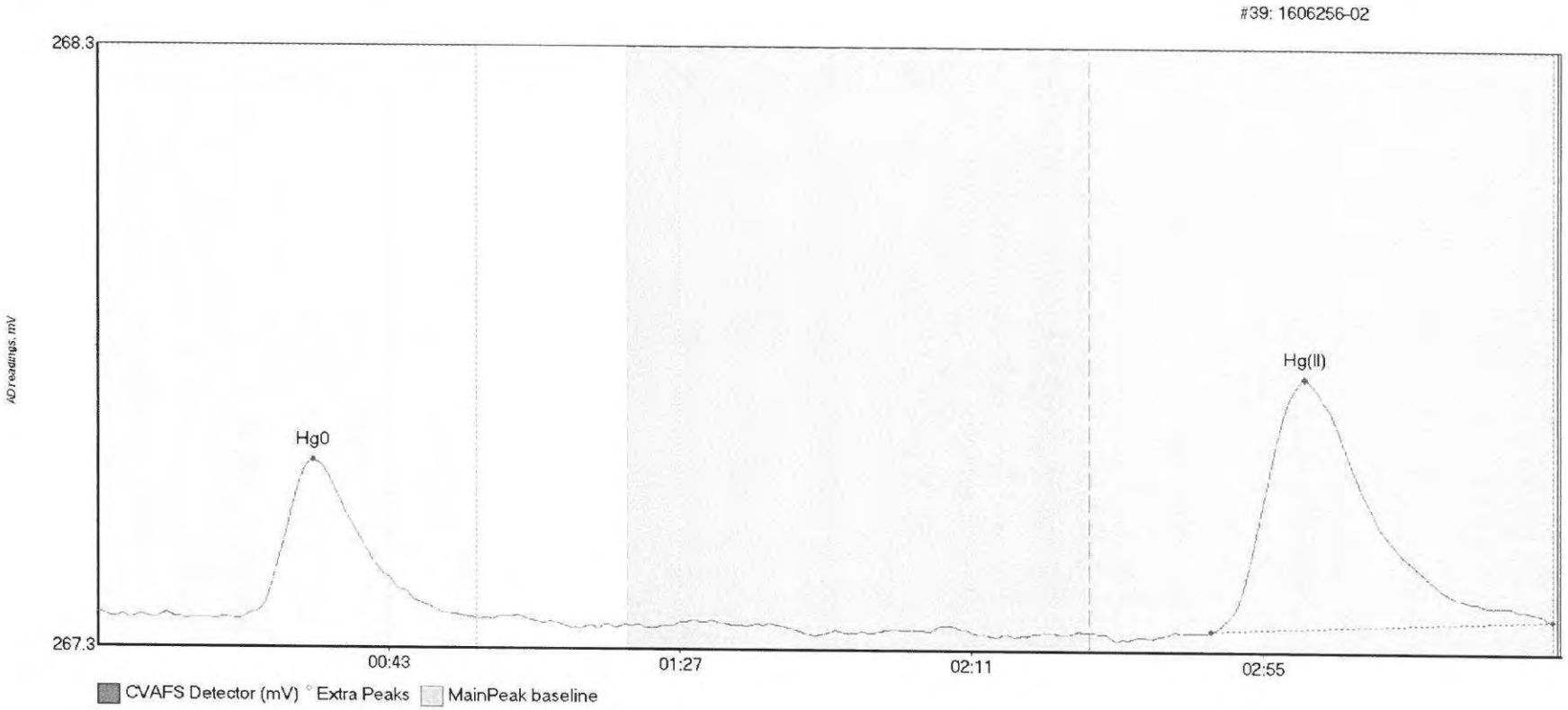
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1606175-01 Hg0	25.306	22.2	53.3	267.44	267.45	32.2	0.212	OK	267.4426	0.00	0.03	
1606175-01 MeHg	53.373	82.2	118.6	267.43	267.44	91.6	0.398	OK	267.4426	0.00	0.03	
1606175-01 Hg(I	116.206	164.5	219.5	267.44	267.47	182.4	0.646	OK	267.4426	0.00	0.03	

016

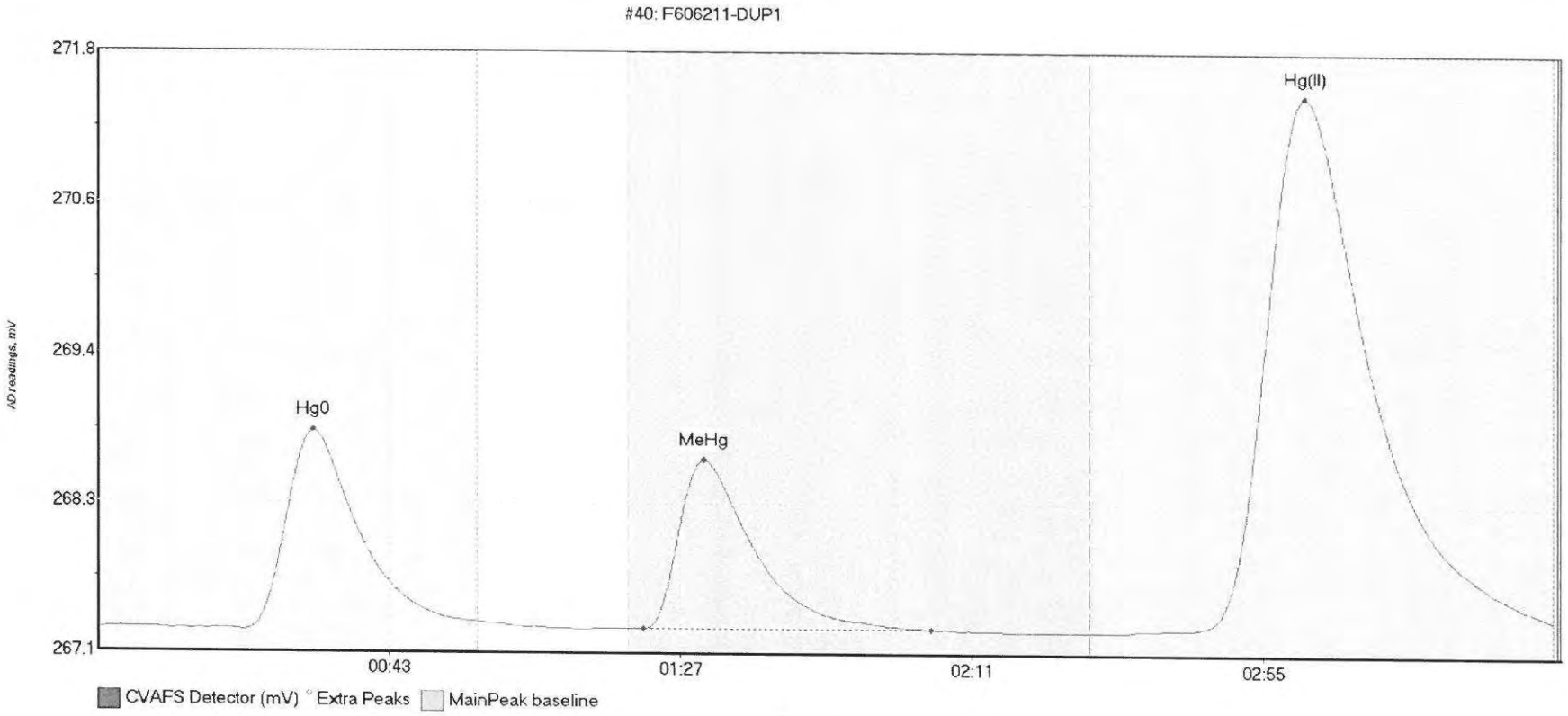


Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1606256-01 Hg0	13.621	23.8	47.6	267.41	267.42	32.6	0.119	OK	267.4179	0.00	-0.04	
1606256-01 MeHg	4.414	80.2	108.7	267.39	267.39	93.4	0.031	OK	267.4179	0.00	-0.04	
1606256-01 Hg(I	61.295	166.4	219.5	267.36	267.38	182.3	0.325	OK	267.4179	0.00	-0.04	

016



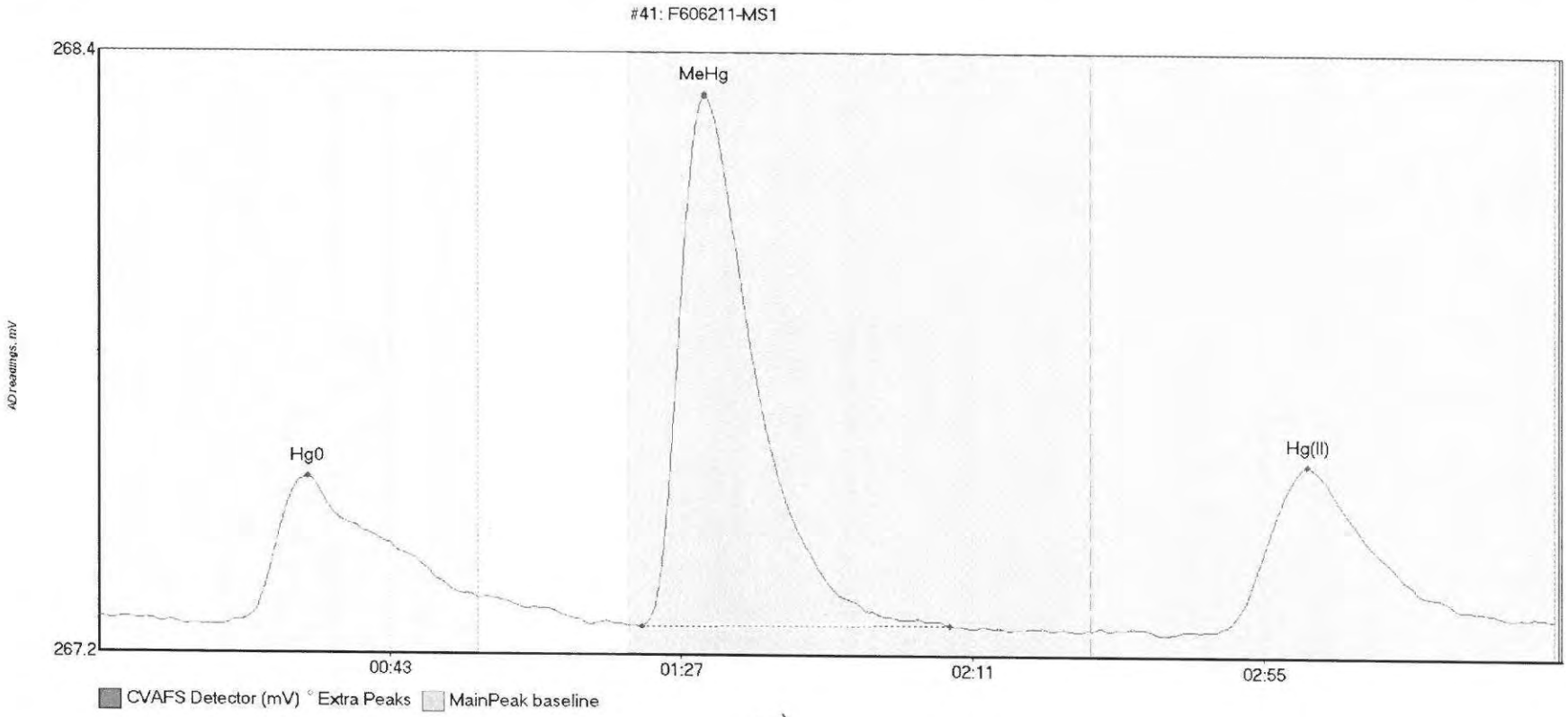
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1606256-02 Hg0	32.341	21.5	52.9	267.34	267.35	32.6	0.263	OK	267.3504	0.00	0.00	
1606256-02 Hg(I	75.126	168.2	219.8	267.33	267.35	182.3	0.421	CT	267.3504	0.00	0.00	



DH

Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F606211-DUP1 Hg	187.323	21.9	57.5	267.31	267.37	32.6	1.541	CT	267.3228	0.00	0.10	
F606211-DUP1 Me	169.376	82.4	125.9	267.33	267.33	91.6	1.306	OK	267.3228	0.00	0.10	
F606211-DUP1 Hg	734.557	154.3	219.8	267.30	267.42	182.3	4.126	CT	267.3228	0.00	0.10	

016



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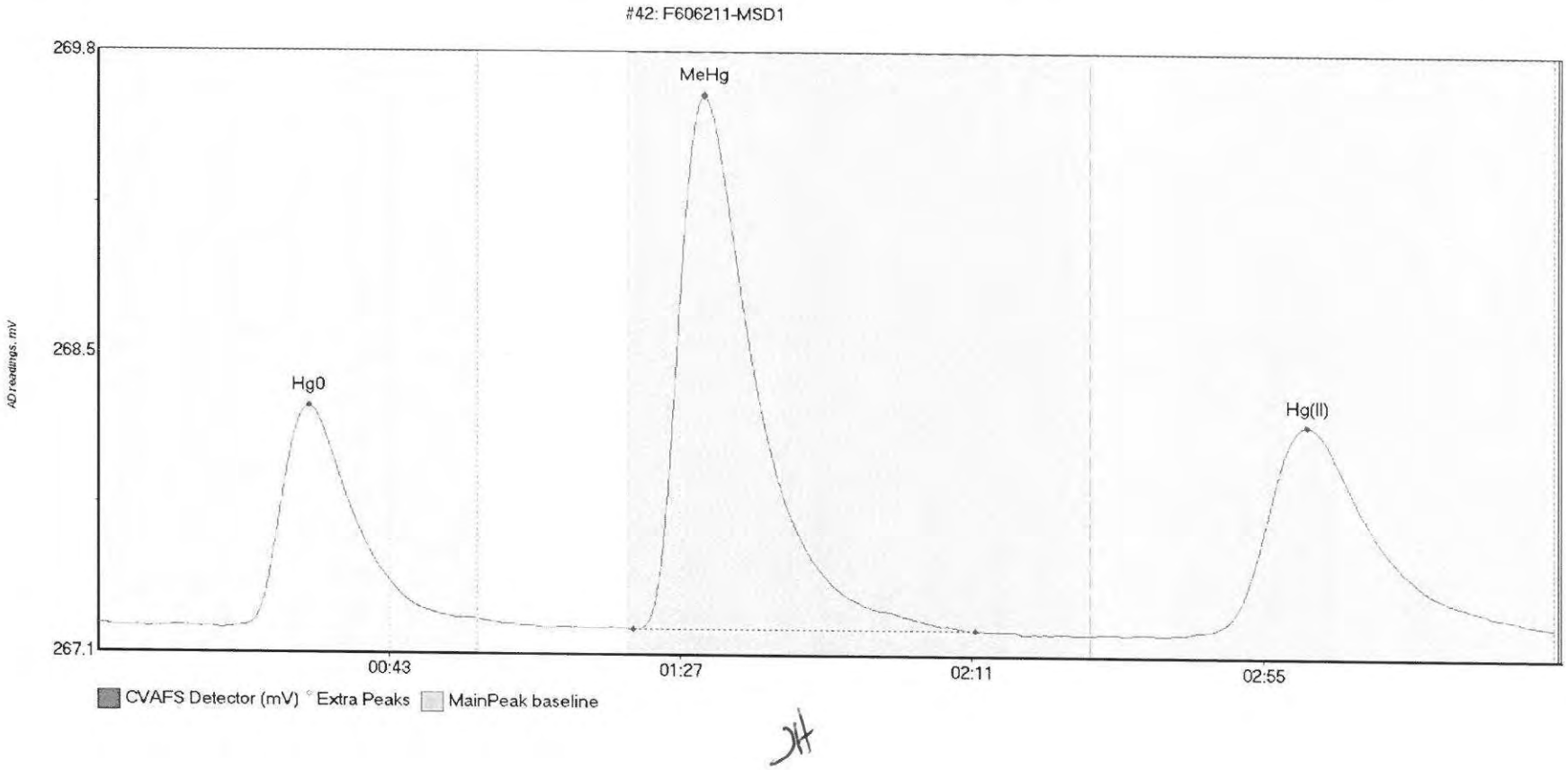
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F606211-MS1 Hg0	42.114	21.1	57.5	267.30	267.35	31.6	0.274	CT	267.3108	0.00	0.01	
F606211-MS1 MeH	132.322	82.1	128.6	267.30	267.30	91.6	1.009	OK	267.3108	0.00	0.01	
F606211-MS1 Hg(	54.066	168.6	219.7	267.29	267.32	182.6	0.317	OK	267.3108	0.00	0.01	

016

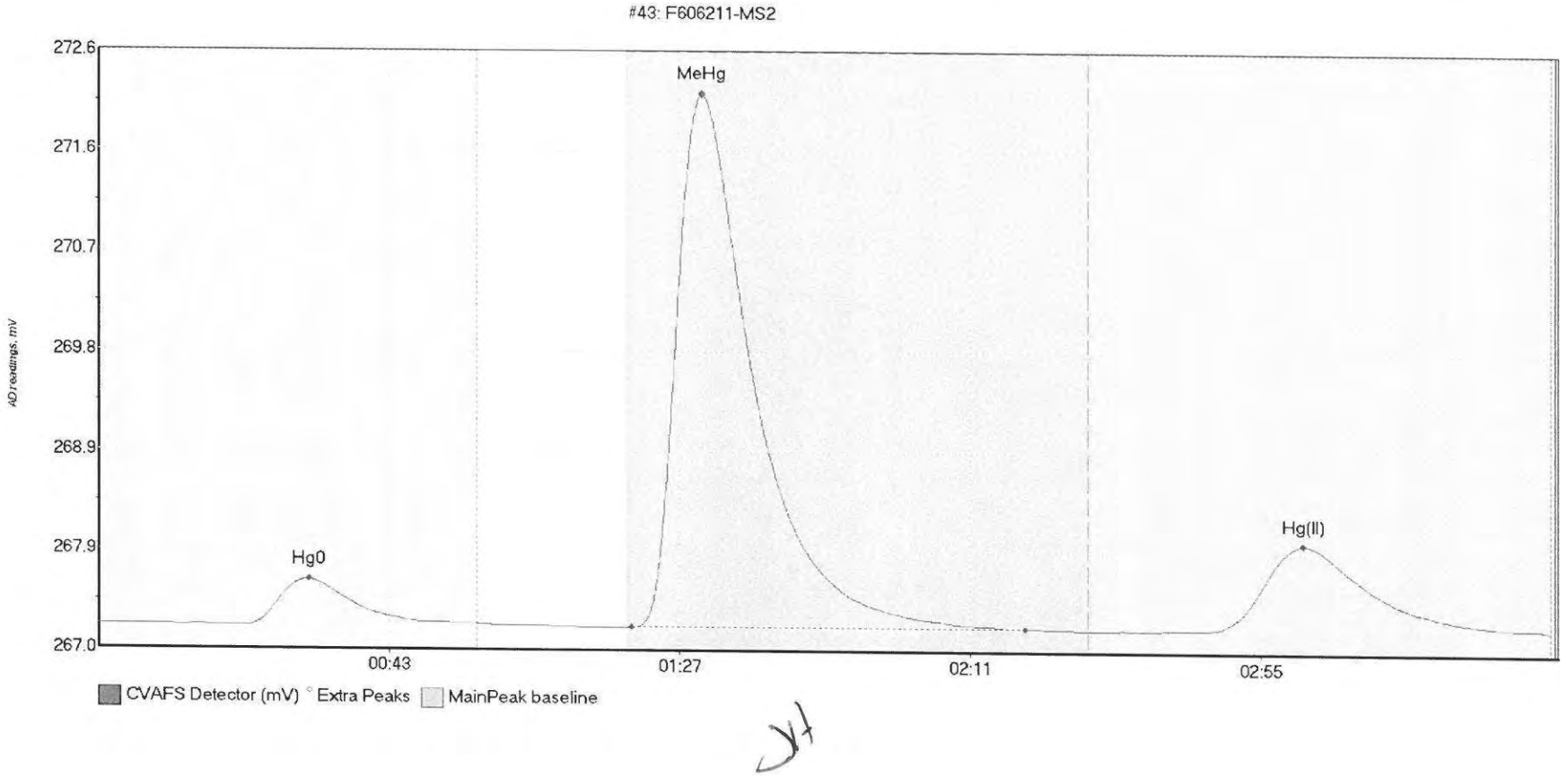
Peak Chart for MMHg270011606171

MMHg270011606171



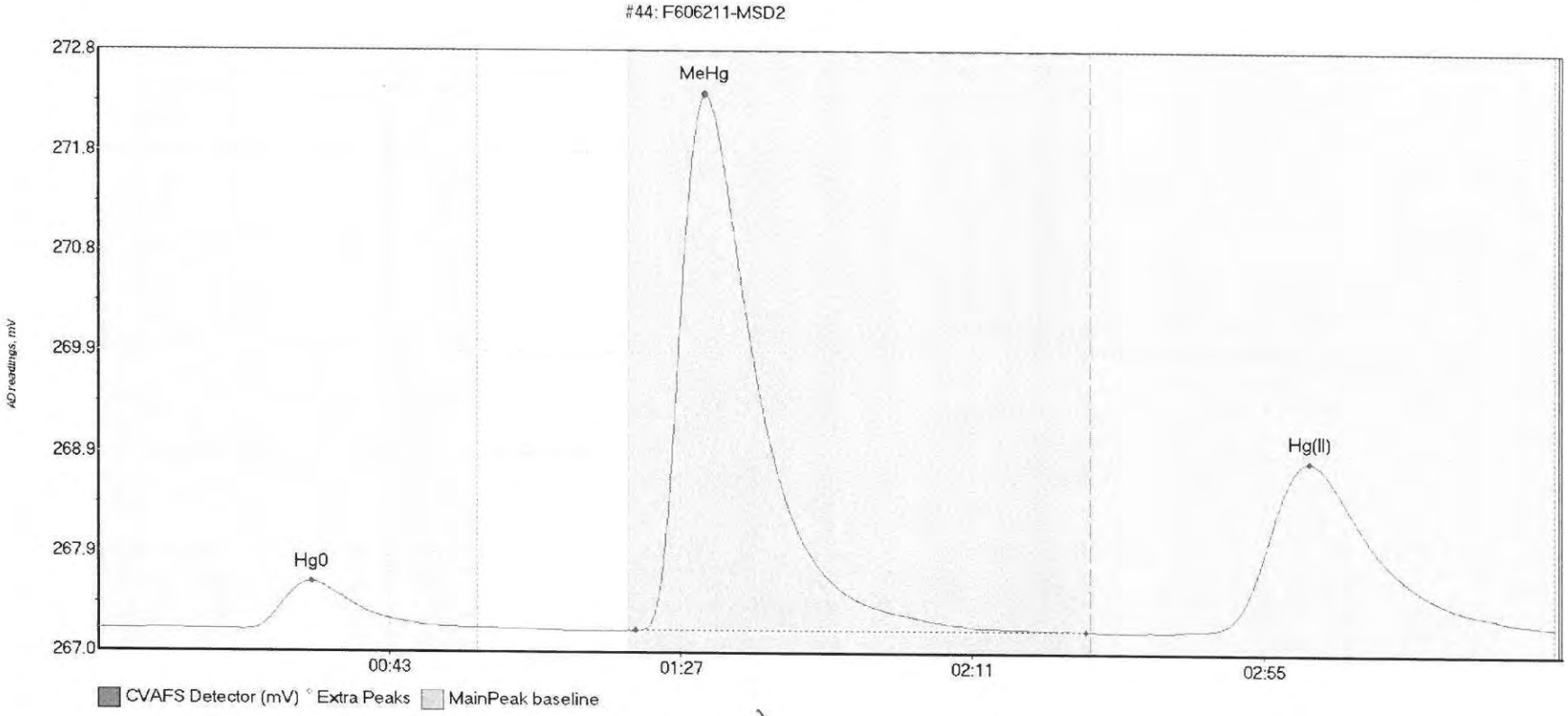
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F606211-MSD1 Hg	118.473	20.3	57.5	267.26	267.30	31.9	0.973	CT	267.2756	0.00	0.01	
F606211-MSD1 Me	316.788	80.9	132.6	267.26	267.26	91.7	2.351	OK	267.2756	0.00	0.01	
F606211-MSD1 Hg	165.218	164.3	219.8	267.25	267.29	182.6	0.918	CT	267.2756	0.00	0.01	

016



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F606211-MS2 Hg0	52.403	21.9	57.5	267.21	267.24	31.8	0.430	CT	267.2273	0.00	-0.01	
F606211-MS2 MeH	668.989	80.8	140.3	267.21	267.21	91.5	4.968	OK	267.2273	0.00	-0.01	
F606211-MS2 Hg(	145.032	159.4	219.7	267.19	267.22	182.5	0.814	OK	267.2273	0.00	-0.01	

016



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Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F606211-MSD2 Hg	56.911	22.1	57.4	267.17	267.19	32.3	0.463	OK	267.1750	0.00	0.05	
F606211-MSD2 Me	701.416	81.2	149.2	267.17	267.17	91.8	5.175	OK	267.1750	0.00	0.05	
F606211-MSD2 Hg	294.514	162.0	219.8	267.17	267.23	182.9	1.649	CT	267.1750	0.00	0.05	

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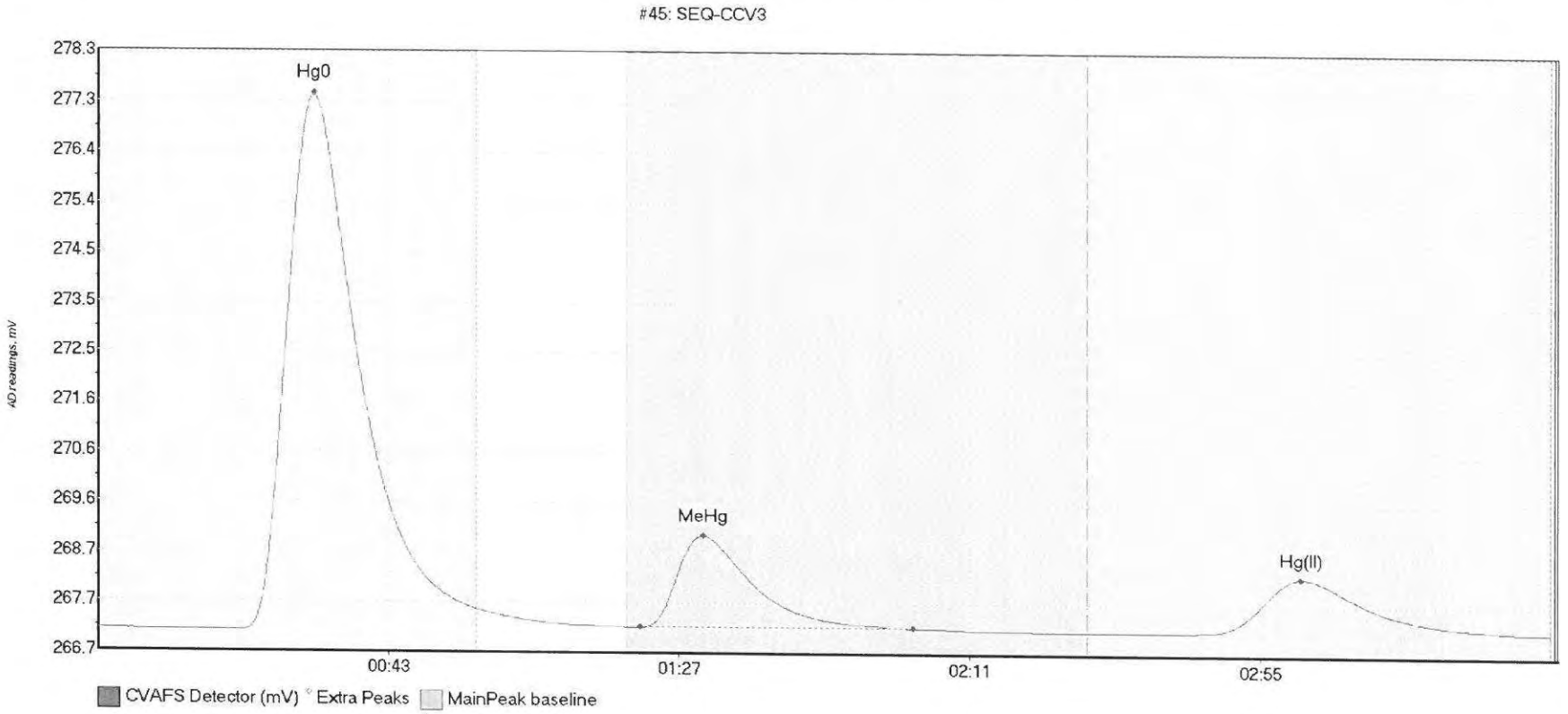
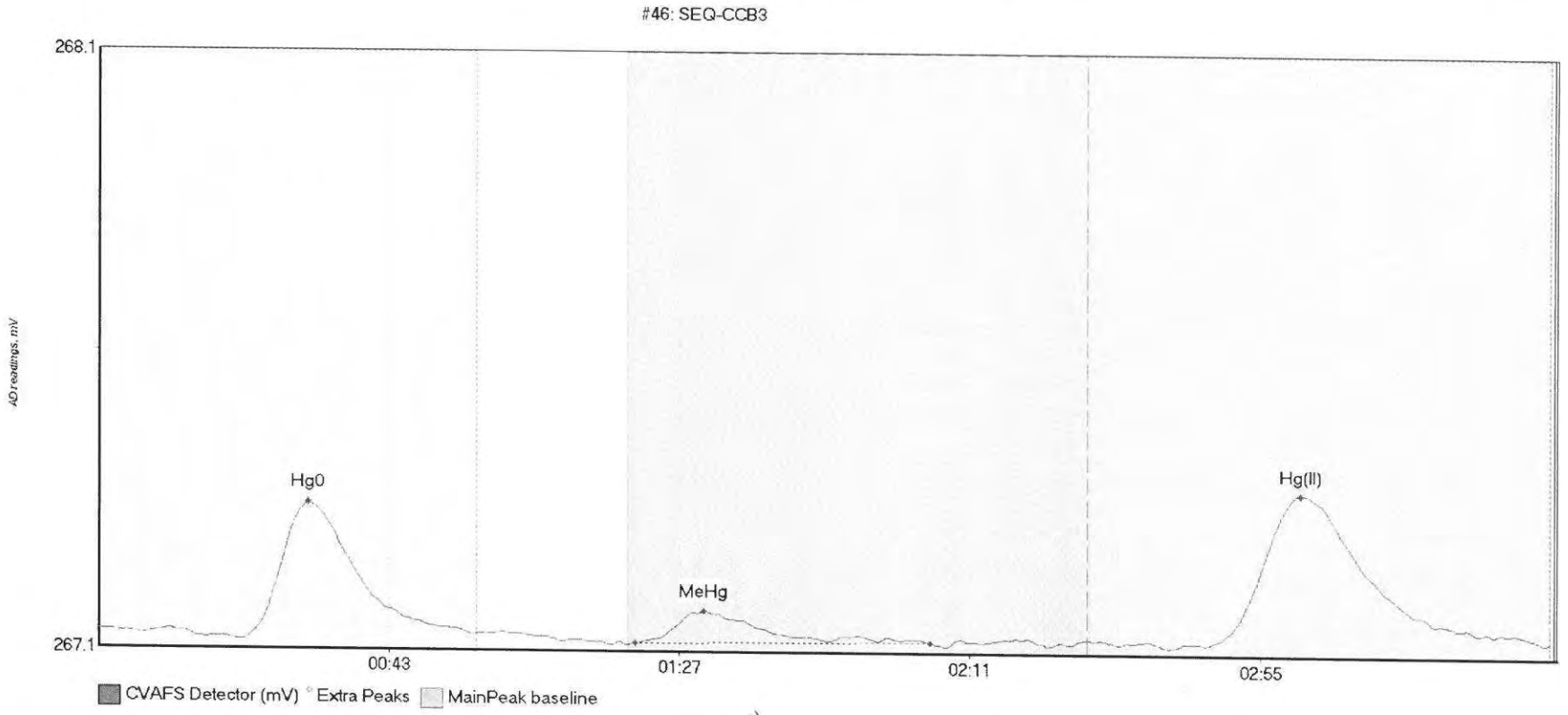


JH

Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CCV3 Hg0	1259.742	20.0	57.5	267.15	267.57	32.7	10.337	CT	267.1711	0.00	0.04	
SEQ-CCV3 MeHg	229.854	82.1	123.5	267.23	267.23	91.7	1.771	OK	267.1711	0.00	0.04	
SEQ-CCV3 Hg(II)	186.615	165.5	217.8	267.18	267.21	182.2	1.059	OK	267.1711	0.00	0.04	

016



JH

Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CCB3 Hg0	26.993	21.7	53.2	267.15	267.17	31.7	0.229	OK	267.1649	0.00	-0.01	
SEQ-CCB3 MeHg	8.397	81.3	126.0	267.15	267.15	91.7	0.053	OK	267.1649	0.00	-0.01	
SEQ-CCB3 Hg(II)	43.590	169.6	219.1	267.16	267.16	182.0	0.248	OK	267.1649	0.00	-0.01	

016

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

Analyst:	DON MORAN	**Sequence #:**	6F18001
Reviewer:	Jeanne Harrel	**Dataset ID #:**	MMHG27001-160617-1
Date:	7/15/16	**WO #:**	[redacted]
Batch #(s):	F606211	**Client(s):**	

- **Select the correct preparation method.**

Additional Comments:

Analyte	Prep Method		Matrix
☑ MHg	FGS-013	MHg Distillation	Water
☐ MHg	FGS-010	KOH/MeOH Digest	Tissue
☐ MHg	FGS-045	MeCl Extraction	Sed/Soil
☐ DMHg	FGS-098 (None Accredited method)		ALL

	Analyst Initials: DM		Reviewer Initials: JH	
1. Compare Sample ID with Bench sheet/Sequence/Raw Data (Have all samples been imported?)	☑ YES	☐ NO		☑
2. Check for transcription errors from Excel spreadsheet (or Prep Bench sheet)/Raw data	☑ YES	☐ NO		☑
(a) Reviewer: 100% of peak heights checked	☑ YES	☐ NO		☑
(b) Are there peak height errors?	☐ YES	☑ NO		☑
(c) Error on a sample: Do peak heights, responses, & initial results match corrected data?	☐ YES	☐ NO	☑ N/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	☐ N/A	☑
(f) Check and compare masses (review prep bench sheet)	☐ YES	☐ NO	☑ N/A	☑
(g) Check and compare initial and final volumes	☑ YES	☐ NO	☐ N/A	☑
(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	☐ N/A	☑
(j) Is the sequence #, analyst, date, and instrument # on the QC page?	☑ YES	☐ NO		☑
(k) Is the analysis status correct? (analyzed/initial review/reviewed)	☑ YES	☐ NO		☐
(l) Original prep bench sheet added to data package?	☑ YES	☐ NO		☑
(m) Benchsheet prep date MUST match actual prep date (check if re-shot vs re-extract)	☑ YES	☐ NO		☑
3. High QA? WO#(s)/Client(s): _____	☐ YES	☑ NO		☑
4. Client specific QC? (if Yes, refer to Project Notes/LIMS)	☐ YES	☑ NO		☑
(a) Have the QC requirements been met for all WO#s?	☐ YES	☑ NO		☑
5. 20 or fewer samples in batch? _____	☑ YES	☐ NO		☑
(a) 3 PBs, 1 LCS/LCSD (or BS/BSD), 2 MS/MSD/MD per batch?	☑ YES	☐ NO		☑
(b) 1 CCV and 1 CCB every 10 analytical runs? _____	☑ YES	☐ NO		☑
QA/QC Data Checked				
6. The calibration curve included a minimum of 5 Standards	☑ PASS	☐ FAIL	☐ N/A	☑
Comments: _____				
7. 1st Calibration Standard % Recoveries (65-135%)	☑ PASS	☐ FAIL	☐ N/A	☑
Comments: _____				
8. RSD CF (≤ 15%)	☑ PASS	☐ FAIL		☑
Comments: _____				

Peer Review Check List for MHg for CV-GC-AFS (FGS-070) 2013 Rev 4 (08/22/2013)

Analyst:	DON MORAN	**Sequence #:**	6F18001
Reviewer:	Jeanne Burrell	**Dataset ID #:**	MMHG27001-160617-1
Date:	6/18/2016	**WO #:**	[redacted]
Batch #(s):	F606211	**Client(s):**	

	Analyst Initials: DM			Reviewer Initials: JB
9. ICV % Recoveries 67-133%	☑ PASS	☐ FAIL		☑
Comments:				
10. CCV % Recoveries 67-133%	☑ PASS	☐ FAIL		☑
Comments:				
11. Are the absolute value of the ICB and CCBs < PQL?	☑ PASS	☐ FAIL		☑
Comments:				
12. LCS/LCSD/CRM/BS/BSD % Recoveries (70-130%)	☑ PASS	☑ FAIL		☑
Comments: ***F606211-BSD1 FAILED. HIGH RECOVERY***				
13. LCS/LCSD or BS/BSD RPD (< 25%)	☑ PASS	☐ FAIL		☑
Comments:				
14. Water: Average of Preparation Blanks < 0.045 ng/L and standard devaition of 0.015 ng/L?	☑ PASS	☐ FAIL	☐ N/A	☑
Comments:				
15. Sediment/Tissue: Individually, are the Preparation Blanks < PQL for the matrix?	☐ PASS	☐ FAIL	☑ N/A	☑
Comments:	☐ PASS	☐ FAIL		☑
16. Have Total Solids been applied? (If NO, please ensure that they are done or nearly done)	☐ YES	☐ NO	☑ N/A	☑
17. Is the correct 'Source' designated for MD/MS/MSD?	☑ YES	☐ NO		☑
18. For digested preps: was there a spike witness signature & date on the prep bench sheet?	☑ YES	☐ NO	☐ N/A	☑
19. MD RPD/MT RSD(< 35%)	☑ PASS	☐ FAIL		☑
Comments:				
20. Is there one set of MS/MSD per every 10 samples?	☑ PASS	☐ FAIL		☑
Comments:				
21. MS/MSD RPD(< 35%)	☑ PASS	☑ FAIL		☑
Comments: ***F606211-MSD1 FAILED. HIGH RPD***				
22. MS (AS) % Recoveries (65-130%)	☐ PASS	☑ FAIL		☑
Comments: ***F606211-MS1, MS2 FAILED. LOW AND HIGH RECOVERY***				
23. MSD (ASD) % Recoveries (65-130%)	☑ PASS	☐ FAIL		☑
Comments: ***F606211-MSD2 FAILED. HIGH REOCVERY***				
24. Spiked 1-5X ambient or 1-5X PQL (whichever is higher) (from EPA 1630)	☑ YES	☐ NO		☑
25. Are all samples within instrument calibration range (or at maximum aliquot size)?	☑ YES	☐ NO		☑
Comments:				
26. For instrumental dilutions, is the dilution factor in excel correct?	☑ PASS	☐ NO	☐ N/A	☑
Is the sample volume, diluents, and final volume of the dilution noted on benchsheet?	☑ PASS	☐ NO	☐ N/A	☑
27. Dissolved < Total metals (if applicable)	☐ PASS	☐ NO	☑ N/A	☑
Comments:				
28. Effluent < Influent metals (visually confirm if needed)	☐ PASS	☐ NO	☑ N/A	☐
Comments:				

Peer Review Check List for MHg for CV-GC-AFS (FGS-070) 2013 Rev 4 (08/22/2013)

Analyst:	DON MORAN	**Sequence #:**	6F18001
Reviewer:	Jeanne Harrel	**Dataset ID #:**	MMHG27001-160617-1
Date:	6/18/2016	**WO #:**	[redacted]
Batch #(s):	F606211	**Client(s):**	

	Analyst Initials: DM		Reviewer Initials: JH	
29. Are re-runs noted with reason?	☐ YES	☐ NO	☑ N/A	☑
Comments:				
30. For failing QC (CCV, CCB, PB, BS/BSD, CAL):	☐ YES	☐ NO	☑ N/A	☑
Was a bubbler and trap test run before the analytical run continued?				
Comments:				
31. Do re-run results compare to initial analysis (< 35% RPD)?	☐ YES	☐ NO	☑ N/A	☑
Comments:				
32. Are qualifiers consistent with the data review flowcharts?	☑ YES	☐ NO	☐ N/A	☑
Comments:				
33. Have non-reportable samples been imported into LIMS and clicked to non-reportable?	☑ YES	☐ NO	☐ N/A	☑
Comments:				
34. Have re-extracts been created for non-reportable samples?	☑ YES	☐ NO	☐ N/A	☑
35. Narrations in MMO box in LIMS?				
Comments:				
36. Are there any HIGH QA projects within the data?	☐ YES	☑ NO		✓
If so, place dataset to the QA office.				
37. Does the data set need scanning?	☑ YES		☐ N/A	☑
Files located at: \\Cuprum\gen admin\Quality Assurance\Training Master\DOCs				
38. Date of analyst IDOC/CDOC: 7/9/2015 IDOC/CDOC within last 12 months?	☑ YES	☐ NO		☑
39. Date of analyst's SOP reading: 6/29/2015 Current SOP revision?	☑ YES	☐ NO		☐
40. Date of LOD: ~~1/8/2016~~ 1/22/16 JH 6/21/16 LOD within last 3 months (within 12 months for MDN)?	☑ YES	☐ NO	☐ N/A	☐
41. Date of LOQ: ~~1/8/2016~~ 1/22/16 JH 6/21/16 LOQ within last 3 months (within 12 months for MDN)?	☑ YES	☐ NO	☐ N/A	☐
42. If MDN samples, date of last MDL study:				
43. MDL study within last 12 months?	☐ YES	☐ NO	☐ N/A	☐
Data can not be reported without a current IDOC/CDOC, LOD or LOQ.				
Additional Comments:	☐ YES	☐ NO		☑

All reportable samples have QM-12 qualifier. JH 6/21/16

MMHg27001-160621-1 WATERS

eurofins

Frontier Global Sciences

Analysis Datasheet for Methyl Mercury in Waters

Date of Analysis: June 21, 2016
Instrument #: Hg2700-1
LIMS Sequence #: 6F21008

Analyst: DM2
Units ng/L

Calibration Statistics:

LabNumber	n	True Val	Area	Uncorrected Response Factor	Corrected Peak Height	Corrected Response Factor	% Recovery
SEQ-CAL1	1	0.05 ng/L	33.83 units	676.70	33.83 units	676.70	93.3 %Rec
SEQ-CAL2	1	0.20 ng/L	135.88 units	679.42	135.88 units	679.42	93.7 %Rec
SEQ-CAL3	1	1.00 ng/L	768.52 units	768.52	768.52 units	768.52	106.0 %Rec
SEQ-CAL4	1	2.00 ng/L	1520.37 units	760.18	1520.37 units	760.18	104.9 %Rec
SEQ-CAL5	1	4.00 ng/L	2959.05 units	739.76	2959.05 units	739.76	102.0 %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
724.92	+/- 44.05	6.1% RSD	724.92	**0.8046**

	MDN Only
SEQ-CAL1	
SEQ-CAL2	
SEQ-CAL3	
SEQ-CAL4	
SEQ-CAL5	
SEQ-CAL6	NA
SEQ-CAL7	NA
SEQ-CAL8	NA
SEQ-CAL9	NA
SEQ-ICV/CCV	
Acetate Buffer	
Ethylating Agent	

Blanks:

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

Preparation Blanks

Sample Type	Batch ID	n	Mean	Std Dev
BLK	1	3	0.027 ng/L	±0.011
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: JH 6/21/16

Instrument	Analyst	Sample Type	LabNumber	Dilution	Analyzed	FileID	Run End	Uncorrected Response	Batch ID	No PB Correction?	RESP	InitialResult	FinalResult	InitialUnits	Comments
Hq2700-1	DM2	CAL	SEQ-IBL1	1	6/21/16 6:16	13173-1.RAW	6:16	0.00			0.0	0.000	0.000	ng/L	
Hq2700-1	DM2	CAL	SEQ-CAL1	1	6/21/16 6:27	13174-1.RAW	#######	33.83			33.8	0.047	0.047	ng/L	
Hq2700-1	DM2	CAL	SEQ-CAL2	1	6/21/16 6:37	13175-1.RAW	#######	135.88			135.9	0.187	0.187	ng/L	
Hq2700-1	DM2	CAL	SEQ-CAL3	1	6/21/16 6:48	13176-1.RAW	#######	768.52			768.5	1.060	1.060	ng/L	
Hq2700-1	DM2	CAL	SEQ-CAL4	1	6/21/16 6:58	13177-1.RAW	#######	1520.37			1520.4	2.097	2.097	ng/L	
Hq2700-1	DM2	CAL	SEQ-CAL5	1	6/21/16 7:09	13178-1.RAW	#######	2959.05			2959.1	4.082	4.082	ng/L	
Hq2700-1	DM2	CAL	SEQ-ICV1	1	6/21/16 7:20	13179-1.RAW	#######	383.20			383.2	0.529	0.529	ng/L	
Hq2700-1	DM2	CAL	SEQ-ICB1	1	6/21/16 7:30	13180-1.RAW	#######	7.45			7.5	0.010	0.010	ng/L	
Hq2700-1	DM2	BLK	F606232-BLK1	1.25	6/21/16 7:41	13181-1.RAW	#######	18.29	1		18.3	0.031	0.039	ng/L	
Hq2700-1	DM2	BLK	F606232-BLK2	1.25	6/21/16 7:51	13182-1.RAW	#######	11.44	1		11.4	0.020	0.025	ng/L	
Hq2700-1	DM2	BLK	F606232-BLK3	1.25	6/21/16 8:02	13183-1.RAW	#######	8.29	1		8.3	0.014	0.018	ng/L	
Hq2700-1	DM2	SAM	F606232-BS1	1.25	6/21/16 8:12	13184-1.RAW	#######	544.92	1		544.9	0.913	1.141	ng/L	
Hq2700-1	DM2	SAM	F606232-BSD1	1.25	6/21/16 8:23	13185-1.RAW	#######	570.50	1		570.5	0.956	1.195	ng/L	
Hq2700-1	DM2	SAM	1605778-01RE1	1.25	6/21/16 8:33	13186-1.RAW	#######	234.86	1		234.9	0.381	0.476	ng/L	
Hq2700-1	DM2	SAM	1606097-18RE1	1.25	6/21/16 8:44	13187-1.RAW	#######	53.29	1		53.3	0.070	0.087	ng/L	
Hq2700-1	DM2	SAM	1606097-23RE1	1.25	6/21/16 8:54	13188-1.RAW	#######	313.86	1		313.9	0.516	0.645	ng/L	
Hq2700-1	DM2	SAM	1606097-28RE1	1.25	6/21/16 9:05	13189-1.RAW	#######	475.42	1		475.4	0.793	0.992	ng/L	
Hq2700-1	DM2	SAM	1606097-31RE1	1.25	6/21/16 9:15	13190-1.RAW	#######	31.43	1		31.4	0.032	0.040	ng/L	
Hq2700-1	DM2	CAL	SEQ-CCV1	1	6/21/16 9:26	13191-1.RAW	#######	378.42			378.4	0.522	0.522	ng/L	
Hq2700-1	DM2	CAL	SEQ-CCB1	1	6/21/16 9:36	13192-1.RAW	#######	11.24			11.2	0.016	0.016	ng/L	
Hq2700-1	DM2	SAM	1606097-36RE1	1.25	6/21/16 9:47	13193-1.RAW	#######	507.86	1		507.9	0.849	1.061	ng/L	
Hq2700-1	DM2	SAM	1606097-39RE1	1.25	6/21/16 9:57	13194-1.RAW	#######	348.49	1		348.5	0.576	0.720	ng/L	
Hq2700-1	DM2	SAM	1606097-42RE1	1.25	6/21/16 10:08	13195-1.RAW	#######	170.01	1		170.0	0.270	0.337	ng/L	
Hq2700-1	DM2	SAM	1606175-01RE1	1.25	6/21/16 10:18	13196-1.RAW	#######	63.34	1		63.3	0.087	0.109	ng/L	
Hq2700-1	DM2	SAM	1606256-04	1.25	6/21/16 10:29	13197-1.RAW	#######	4.88	1		4.9	-0.013	-0.017	ng/L	
Hq2700-1	DM2	SAM	1606256-05	1.25	6/21/16 10:39	13198-1.RAW	#######	8.40	1		8.4	-0.007	-0.009	ng/L	
Hq2700-1	DM2	SAM	1606294-01	1.25	6/21/16 10:50	13199-1.RAW	#######	28.78	1		28.8	0.028	0.035	ng/L	
Hq2700-1	DM2	SAM	1606416-01	1.25	6/21/16 11:00	13200-1.RAW	#######	68.91	1		68.9	0.096	0.121	ng/L	
Hq2700-1	DM2	SAM	1606416-03	1.25	6/21/16 11:11	13201-1.RAW	#######	70.67	1		70.7	0.099	0.124	ng/L	
Hq2700-1	DM2	SAM	1606416-04	1.25	6/21/16 11:21	13202-1.RAW	#######	42.03	1		42.0	0.050	0.063	ng/L	
Hq2700-1	DM2	CAL	SEQ-CCV2	1	6/21/16 11:32	13203-1.RAW	#######	354.12			354.1	0.488	0.488	ng/L	
Hq2700-1	DM2	CAL	SEQ-CCB2	1	6/21/16 11:42	13204-1.RAW	#######	4.33			4.3	0.006	0.006	ng/L	
Hq2700-1	DM2	SAM	1606416-05	1.25	6/21/16 11:53	13205-1.RAW	#######	25.43	1		25.4	0.022	0.027	ng/L	
Hq2700-1	DM2	SAM	1606416-06	1.25	6/21/16 12:03	13206-1.RAW	#######	7.09	1		7.1	-0.010	-0.012	ng/L	
Hq2700-1	DM2	SAM	1606417-01	1.25	6/21/16 12:14	13207-1.RAW	#######	28.12	1		28.1	0.026	0.033	ng/L	
Hq2700-1	DM2	SAM	1606417-02	1.25	6/21/16 12:24	13208-1.RAW	#######	31.90	1		31.9	0.033	0.041	ng/L	
Hq2700-1	DM2	SAM	1606417-03	1.25	6/21/16 12:35	13209-1.RAW	#######	32.17	1		32.2	0.033	0.042	ng/L	
Hq2700-1	DM2	SAM	F606232-DUP1	1.25	6/21/16 12:45	13210-1.RAW	#######	23.18	1		23.2	0.018	0.023	ng/L	
Hq2700-1	DM2	SAM	F606232-MS1	1.25	6/21/16 12:56	13211-1.RAW	#######	687.09	1		687.1	1.156	1.445	ng/L	
Hq2700-1	DM2	SAM	F606232-MSD1	1.25	6/21/16 13:06	13212-1.RAW	#######	695.02	1		695.0	1.170	1.462	ng/L	
Hq2700-1	DM2	SAM	F606232-MS2	1.25	6/21/16 13:17	13213-1.RAW	#######	839.54	1		839.5	1.418	1.772	ng/L	
Hq2700-1	DM2	SAM	F606232-MSD2	1.25	6/21/16 13:27	13214-1.RAW	#######	792.32	1		792.3	1.337	1.671	ng/L	
Hq2700-1	DM2	CAL	SEQ-CCV3	1	6/21/16 13:38	13215-1.RAW	#######	354.47			354.5	0.489	0.489	ng/L	
Hq2700-1	DM2	CAL	SEQ-CCB3	1	6/21/16 13:48	13216-1.RAW	#######	10.67			10.7	0.015	0.015	ng/L	

MethylMercury	Operat	DM	BlankS	7.4515	Calib Eqn:	Conc = (Area-7.451) / 685.0	Run Date:	######	Blank SD:	0
EPA1630	Worksl	MMHg2	CalibFa	685.05	Status:	OK,1 Warnings	Run Time:	5:50:23	Blank RSI	0
	Metho	2010-01	R:	0.9999	R²:	0.999707726	CalibAnal	MeHg	CF SD:	100.3476266
	Descrip	MMHg27001-160621-1							CF RSD%	14.64816576

Sample/ID	Locatior	Rinse	Dilute	Blank	ConcHg0(pi	ConcMeHg(ppt)	ConcHg2(pi	ConcPrHg(p	Rec%	QA	RawData	RunEnd	PeakHg0 (Raw	PeakMeHg (R	PeakHg2(Raw	PeakPrHg(Ra	Control (etf)	Flags	RunCount
Clean				0		0.00					13171-1.RAW	5:55:54	0	2.8070079	0	0	cleandry	CT	1
ws	A1										13172-1.RAW	6:06:25	10.3237689	0	88.8506155	0	psample10	OK	1
SEQ-IBL1	A2		1								13173-1.RAW	6:16:56	16.0977273	0	40.577036	0	psample10	OK	1
SEQ-CAL1	A3		1	7.4515	0.0227026	0.04	0.0529255		77.03		13174-1.RAW	6:27:27	23.0039536	33.8349905	43.7082386	0	psample10	OK	1
SEQ-CAL2	A4		1	7.4515	0.0553037	0.19	0.0638157		93.74		13175-1.RAW	6:37:57	45.3374053	135.884683	51.168608	0	psample10	OK	1
SEQ-CAL3	A5		1	7.4515	0.1756562	1.11	0.0788801		111.10		13176-1.RAW	6:48:28	127.785227	768.521425	61.4884943	0	psample10	CT	1
SEQ-CAL4	A6		1	7.4515	0.3643172	2.21	0.1034994		110.42		13177-1.RAW	6:58:59	257.027888	1520.36532	78.3540483	0	psample10	CT	1
SEQ-CAL5	A7		1	7.4515	0.9574974	4.31	0.1449689		107.71		13178-1.RAW	7:09:30	663.3875	2959.05047	106.762784	0	psample10	CT	1
SEQ-ICV1	A8		1	7.4515	0.8243766	0.55	0.3579119		109.83		13179-1.RAW	7:20:00	572.192719	383.198343	252.639916	0	psample10	CT	1
SEQ-ICB1	A9		1	0	0.0376947	0.01	0.0658859				13180-1.RAW	7:30:31	25.8228693	7.45149148	45.1352746	0	psample10	OK	1
F606232-BLK1	A10		1.25	7.4515	0.0909518	0.02	0.3596254				13181-1.RAW	7:41:02	57.2969223	18.2925426	204.541292	0	psample10	OK	1
F606232-BLK2	A11		1.25	7.4515	0.1092267	0.01	0.09151				13182-1.RAW	7:51:33	67.3123106	11.4435606	57.6028409	0	psample10	OK	1
F606232-BLK3	A12		1.25	7.4515	0.3738941	0.00	0.0939864				13183-1.RAW	8:02:03	212.361174	8.29185606	58.9599905	0	psample10	CT	1
F606232-BS1	A13		1.25	7.4515	0.240003	0.98	0.0922938				13184-1.RAW	8:12:34	138.983239	544.924242	58.0323627	0	psample10	CT	1
F606232-BSD1	A14		1.25	7.4515	0.1307309	1.03	0.123537				13185-1.RAW	8:23:05	79.0975403	570.497727	75.1549716	0	psample10	CT	1
1605778-01RE1	A15		1.25	7.4515	0.2168196	0.41	1.1881287				13186-1.RAW	8:33:36	126.277746	234.863187	658.595912	0	psample10	CT	1
1606097-18RE1	A16		1.25	7.4515	0.1039524	0.08	0.3435866				13187-1.RAW	8:44:06	64.4217566	53.2864583	195.751406	0	psample10	CT	1
1606097-23RE1	A17		1.25	7.4515	0.2123509	0.56	0.162576				13188-1.RAW	8:54:37	123.828693	313.857907	96.5499527	0	psample10	CT	1
1606097-28RE1	A18		1.25	7.4515	0.3539633	0.85	0.168281				13189-1.RAW	9:05:06	201.438259	475.423106	99.676565	0	psample10	CT	1
1606097-31RE1	A19		1.25	7.4515	0.1450147	0.04	0.2977925				13190-1.RAW	9:15:37	86.9256155	31.4333807	170.654313	0	psample10	CT	1
SEQ-CCV1	A20		1	7.4515	0.9128713	0.54	0.3664368		108.44		13191-1.RAW	9:26:07	632.816254	378.424195	258.479924	0	psample10	CT	1
SEQ-CCB1	A21		1	7.4515	0.017224	0.01	0.0626982		0.00		13192-1.RAW	9:36:38	19.2508049	11.2394413	50.4030777	0	psample10	OK	1
1606097-36RE1	B1		1.25	7.4515	0.6947794	0.913076474	0.1934384				13193-1.RAW	9:47:09	388.219808	507.855753	113.463873	0	psample10	CT	1
1606097-39RE1	B2		1.25	7.4515	0.3269959	0.622277156	0.1495801				13194-1.RAW	9:57:39	186.658996	348.485511	89.4276515	0	psample10	CT	1
1606097-42RE1	B3		1.25	7.4515	0.3657389	0.296619539	0.461958				13195-1.RAW	10:08:10	207.891763	170.011458	260.623869	0	psample10	CT	1
1606175-01RE1	B4		1.25	7.4515	0.1236304	0.101982936	0.3337767				13196-1.RAW	10:18:41	75.2061553	63.3424242	190.375165	0	psample10	CT	1
1606256-04	B5		1.25	7.4515	0.0723397	-0.004693188	0.1046962				13197-1.RAW	10:29:11	47.0966856	4.87942708	64.8294034	0	psample10	OK	1
1606256-05	B6		1.25	7.4515	0.2555383	0.001728303	1.4019837				13198-1.RAW	10:39:42	147.497206	8.39867424	775.797427	0	psample10	CT	1
1606294-01	B7		1.25	7.4515	0.0849489	0.038919243	0.0952782				13199-1.RAW	10:50:13	54.0070549	28.7808712	59.6679465	0	psample10	CT	1
1606416-01	B8		1.25	7.4515	0.2319261	0.11213776	0.5099694				13200-1.RAW	11:00:43	134.556723	68.9076941	286.936125	0	psample10	CT	1
1606416-03	B9		1.25	7.4515	0.6810009	0.115351162	0.4975942				13201-1.RAW	11:11:14	380.668608	70.6687737	260.153994	0	psample10	CT	1
1606416-04	B10		1.25	7.4515	0.3735147	0.063102658	0.2122594				13202-1.RAW	11:21:45	212.153234	42.0343987	123.778546	0	psample10	CT	1
SEQ-CCV2	B11		1	7.4515	1.1352525	0.506040861	0.3995396		101.33		13203-1.RAW	11:32:15	785.159076	354.116051	281.157089	0	psample10	CT	1
SEQ-CCB2	B12		1	7.4515	0.023883	-0.004560139	0.0657892		0.00		13204-1.RAW	11:42:46	23.8125947	4.32755682	52.5205492	0	psample10	OK	1
1606416-05	B13		1.25	7.4515	0.1730661	0.032807177	0.1970014				13205-1.RAW	11:53:17	102.299006	25.4312027	115.416548	0	psample10	CT	1
1606416-06	B14		1.25	7.4515	0.0222729	-0.000666327	0.1475677				13206-1.RAW	12:03:47	19.6580019	7.08631629	88.3248106	0	psample10	OK	1
1606417-01	B15		1.25	7.4515	0.1608904	0.037707759	0.1059208				13207-1.RAW	12:14:18	95.6262074	28.1169271	65.5005208	0	psample10	CT	1
1606417-02	B16		1.25	7.4515	0.0702533	0.044606846	0.1053585				13208-1.RAW	12:24:49	45.953267	31.8979167	65.192379	0	psample10	CT	1
1606417-03	B17		1.25	7.4515	0.2013276	0.045099561	0.1079675				13209-1.RAW	12:35:19	117.7875	32.1679451	66.6222065	0	psample10	CT	1
F606232-DUP1	B18		1.25	7.4515	0.1581521	0.028697549	0.0931651				13210-1.RAW	12:45:50	94.1254972	23.1789536	58.5098581	0	psample10	CT	1
F606232-MS1	B19		1.25	7.4515	0.0739251	1.24012666	0.311742		124.01		13211-1.RAW	12:56:21	47.965554	687.092992	178.299217	0	psample10	CT	1
F606232-MSD1	B20		1.25	7.4515	0.0521508	1.254599585	0.3349747				13212-1.RAW	13:06:52	36.032339	695.024763	191.031676	0	psample10	OK	1
F606232-MS2	B21		1.25	7.4515	0.6488179	1.518293974	0.3630794		75.91		13213-1.RAW	13:17:22	363.030968	839.540365	206.434271	0	psample10	CT	1
F606232-MSD2	C1		1.25	7.4515	0.1539061	1.432134976	0.4873832				13214-1.RAW	13:27:53	91.7984848	792.321615	274.55796	0	psample10	CT	1
SEQ-CCV3	C2		1	7.4515	0.9683552	0.506564004	0.3658186		101.44		13215-1.RAW	13:38:24	670.825673	354.474432	258.056439	0	psample10	CT	1
SEQ-CCB3	C3		1	7.4515	0.0153919	0.004692152	0.0620521		0.00		13216-1.RAW	13:48:54	17.9957623	10.6658617	49.9604676	0	psample10	CT	1

MethylMercury EPA1630	Operat: DM Worksl MMHg2 Metho 2010-01 Descrip MMHg27001-160621-1	BlankS 7.4515 CalibFa 685.07 R: 0.9999	Calib Eqn: Conc = (Area-7.451) / 685.0 Status: OK,1 Warnings R²: 0.999707845	Run Date: ###### Run Time: 5:50:23 CalibAnal MeHg	Blank SD: 0 Blank RSI 0 CF SD: 100.3365071 CF RSD% 14.64609719

Sample/ID	Locatior	Rinse	Dilute	Blank	ConcHg0(pi	ConcMeHg(pot)	ConcHg2(pi	ConcPrHg(p	Rec%	QA	RawData	RunEnd	PeakHg0 (Rav	PeakMeHg (R	PeakHg2(Raw	PeakPrHg(Ra	Control (etf)	Flags	RunCount
Clean				0		0.00					13171-1.RAW		0	2.8070079	0	0	cleandry	CT	1
ws	A1										13172-1.RAW		10.3237689	0	88.8506155	0	psample10	OK	1
SEQ-IBL1	A2		1								13173-1.RAW		16.0977273	0	40.577036	0	psample10	OK	1
SEQ-CAL1	A3		1	7.4515	0.0227019	0.04	0.0529242		77.02		13174-1.RAW		23.0039536	33.8349905	43.7084754	0	psample10	OK	1
SEQ-CAL2	A4		1	7.4515	0.055302	0.19	0.0638199		93.75		13175-1.RAW		45.3374053	135.905516	51.172822	0	psample10	OK	1
SEQ-CAL3	A5		1	7.4515	0.1756509	1.11	0.0788777		111.09		13176-1.RAW		127.785227	768.521425	61.4884943	0	psample10	CT	1
SEQ-CAL4	A6		1	7.4515	0.3643061	2.21	0.1034963		110.42		13177-1.RAW		257.027888	1520.36532	78.3540483	0	psample10	CT	1
SEQ-CAL5	A7		1	7.4515	0.9574683	4.31	0.1449645		107.71		13178-1.RAW		663.3875	2959.05047	106.762784	0	psample10	CT	1
SEQ-ICV1	A8		1	7.4515	0.8243515	0.55	0.357901		109.83		13179-1.RAW		572.192719	383.198343	252.639916	0	psample10	CT	1
SEQ-ICB1	A9		1	0	0.0376936	0.01	0.0658839				13180-1.RAW		25.8228693	7.45149148	45.1352746	0	psample10	OK	1
F606232-BLK1	A10		1.25	7.4515	0.0909491	0.02	0.3596144				13181-1.RAW		57.2969223	18.2925426	204.541292	0	psample10	OK	1
F606232-BLK2	A11		1.25	7.4515	0.1092234	0.01	0.0912579				13182-1.RAW		67.3123106	11.50116	57.4661932	0	psample10	OK	1
F606232-BLK3	A12		1.25	7.4515	0.3738827	0.00	0.0939835				13183-1.RAW		212.361174	8.29185606	58.9599905	0	psample10	CT	1
F606232-BS1	A13		1.25	7.4515	0.2399957	0.98	0.0938178				13184-1.RAW		138.983239	544.924242	58.8691288	0	psample10	CT	1
F606232-BSD1	A14		1.25	7.4515	0.130727	1.03	0.1235333				13185-1.RAW		79.0975403	570.497727	75.1549716	0	psample10	CT	1
1605778-01RE1	A15		1.25	7.4515	0.216813	0.42	1.1880925				13186-1.RAW		126.277746	234.972633	658.595912	0	psample10	CT	1
1606097-18RE1	A16		1.25	7.4515	0.1039492	0.08	0.3435762				13187-1.RAW		64.4217566	53.2864583	195.751406	0	psample10	CT	1
1606097-23RE1	A17		1.25	7.4515	0.2123444	0.56	0.162571				13188-1.RAW		123.828693	313.857907	96.5499527	0	psample10	CT	1
1606097-28RE1	A18		1.25	7.4515	0.3539526	0.85	0.1682543				13189-1.RAW		201.438259	475.423106	99.6646968	0	psample10	CT	1
1606097-31RE1	A19		1.25	7.4515	0.1450102	0.04	0.2977835				13190-1.RAW		86.9256155	31.4333807	170.654313	0	psample10	CT	1
SEQ-CCV1	A20		1	7.4515	0.9128435	0.54	0.3664256		108.44		13191-1.RAW		632.816254	378.424195	258.479924	0	psample10	CT	1
SEQ-CCB1	A21		1	7.4515	0.0172234	0.01	0.0626718		0.00		13192-1.RAW		19.2508049	11.2394413	50.3862429	0	psample10	OK	1
1606097-36RE1	B1		1.25	7.4515	0.6947583	0.913048707	0.1934325				13193-1.RAW		388.219808	507.855753	113.463873	0	psample10	CT	1
1606097-39RE1	B2		1.25	7.4515	0.326986	0.622258232	0.1495755				13194-1.RAW		186.658996	348.485511	89.4276515	0	psample10	CT	1
1606097-42RE1	B3		1.25	7.4515	0.365779	0.296610519	0.4619439				13195-1.RAW		207.919859	170.011458	260.623869	0	psample10	CT	1
1606175-01RE1	B4		1.25	7.4515	0.1236267	0.101979835	0.3337666				13196-1.RAW		75.2061553	63.3424242	190.375165	0	psample10	CT	1
1606256-04	B5		1.25	7.4515	0.0728782	-0.004693046	0.1046684				13197-1.RAW		47.3930398	4.87942708	64.8159091	0	psample10	OK	1
1606256-05	B6		1.25	7.4515	0.2555305	0.001728251	1.401941				13198-1.RAW		147.497206	8.39867424	775.797427	0	psample10	CT	1
1606294-01	B7		1.25	7.4515	0.0849463	0.038918059	0.0952753				13199-1.RAW		54.0070549	28.7808712	59.6679465	0	psample10	CT	1
1606416-01	B8		1.25	7.4515	0.231919	0.11213435	0.5099539				13200-1.RAW		134.556723	68.9076941	286.936125	0	psample10	CT	1
1606416-03	B9		1.25	7.4515	0.6809802	0.115347654	0.497579				13201-1.RAW		380.668608	70.6687737	280.153994	0	psample10	CT	1
1606416-04	B10		1.25	7.4515	0.3735033	0.063100739	0.2122529				13202-1.RAW		212.153234	42.0343987	123.778546	0	psample10	CT	1
SEQ-CCV2	B11		1	7.4515	1.135218	0.506025472	0.3995274		101.33		13203-1.RAW		785.159076	354.116051	281.157089	0	psample10	CT	1
SEQ-CCB2	B12		1	7.4515	0.0238823	-0.00456	0.0657622		0.00		13204-1.RAW		23.8125947	4.32755682	52.5034091	0	psample10	OK	1
1606416-05	B13		1.25	7.4515	0.1730609	0.03280618	0.1970531				13205-1.RAW		102.299006	25.4312027	115.448177	0	psample10	CT	1
1606416-06	B14		1.25	7.4515	0.0222723	-0.000666307	0.1475633				13206-1.RAW		19.6580019	7.08631629	88.3248106	0	psample10	OK	1
1606417-01	B15		1.25	7.4515	0.1608855	0.037706612	0.1059175				13207-1.RAW		95.6262074	28.1169271	65.5005208	0	psample10	CT	1
1606417-02	B16		1.25	7.4515	0.0702512	0.044605489	0.1053553				13208-1.RAW		45.953267	31.8979167	65.192379	0	psample10	CT	1
1606417-03	B17		1.25	7.4515	0.2013215	0.045098189	0.1087479				13209-1.RAW		117.7875	32.1679451	67.0517283	0	psample10	CT	1
F606232-DUP1	B18		1.25	7.4515	0.1581473	0.028382248	0.0931622				13210-1.RAW		94.1254972	23.0066288	58.5098581	0	psample10	CT	1
F606232-MS1	B19		1.25	7.4515	0.0739229	1.240088947	0.3117325		124.01		13211-1.RAW		47.965554	687.092992	178.299217	0	psample10	CT	1
F606232-MSD1	B20		1.25	7.4515	0.0521492	1.254561432	0.3349645				13212-1.RAW		36.032339	695.024763	191.031676	0	psample10	OK	1
F606232-MS2	B21		1.25	7.4515	0.6487982	1.518247802	0.3630684		75.91		13213-1.RAW		363.030966	839.540365	206.434271	0	psample10	CT	1
F606232-MSD2	C1		1.25	7.4515	0.1539014	1.432096046	0.4873684				13214-1.RAW		91.7984848	792.324148	274.55796	0	psample10	CT	1
SEQ-CCV3	C2		1	7.4515	0.9683258	0.506548599	0.3658075		101.44		13215-1.RAW	13:38:24	670.825673	354.474432	258.056439	0	psample10	CT	1
SEQ-CCB3	C3		1	7.4515	0.0153856	0.004692009	0.0620503		0.00		13216-1.RAW	13:48:54	17.9917614	10.6658617	49.9604676	0	psample10	CT	1

Failing Data Report - 6F21008

Sample ID	Analysis	Result	MRL	Dup Result	Source Result	True Value	Units	% Rec.	Rec. LCL	Rec. UCL	RPD	RPD Limit	Over Cal	Failure	Qualifier
F606232-MS2	MHg-CVAFS-W-Dist	1.575	0.050		0.107	1.0010	ng/L	147	65.00	130.00			PASS-OVER	FAIL-MS	QM-07
F606232-MSD2	MHg-CVAFS-W-Dist	1.485	0.050	1.575	0.107	1.0010	ng/L	138	65.00	130.00	5.88	35.00	PASS-OVER	FAIL-MSD (Rec.)	QM-07

Dan Moran 6/21/16
Analyst Reviewed By Date

6/21/16
Peer Reviewed By Date

ANALYSIS SEQUENCE

6F21008

Instrument: Hg2700-1

Calibration ID: UNASSIGNED

Analyzed: 6/21/2016

Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
6F21008-IBL1	QC	1			
6F21008-CAL1	QC	2	1602252		
6F21008-CAL2	QC	3	1602253		
6F21008-CAL3	QC	4	1602254		
6F21008-CAL4	QC	5	1602255		
6F21008-CAL5	QC	6	1602256		
6F21008-ICV1	QC	7	1603001		
6F21008-ICB1	QC	8			
F606232-BLK1	QC	9			
F606232-BLK2	QC	10			
F606232-BLK3	QC	11			
F606232-BS1	QC	12			
F606232-BSD1	QC	13			
1605778-01RE1	MHg-CVAFS-W-Dist	14			Re-extract added 6/17/2016 by JRH
1606097-18RE1	MHg-CVAFS-W-Dist	15			Re-extract added 6/18/2016 by DM2
1606097-23RE1	MHg-CVAFS-W-Dist	16			Re-extract added 6/18/2016 by DM2
1606097-28RE1	MHg-CVAFS-W-Dist	17			Re-extract added 6/18/2016 by DM2
1606097-31RE1	MHg-CVAFS-W-Dist	18			Re-extract added 6/18/2016 by DM2
6F21008-CCV1	QC	19	1603001		
6F21008-CCB1	QC	20			
1606097-36RE1	MHg-CVAFS-W-Dist	21			Re-extract added 6/18/2016 by DM2
1606097-39RE1	MHg-CVAFS-W-Dist	22			Re-extract added 6/18/2016 by DM2
1606097-42RE1	MHg-CVAFS-W-Dist	23			Re-extract added 6/18/2016 by DM2
1606175-01RE1	MHg-CVAFS-W-Dist	24			Re-extract added 6/17/2016 by JRH
1606256-04	MHg-CVAFS-W-Dist	25			
1606256-05	MHg-CVAFS-W-Dist	26			
1606294-01	MHg-CVAFS-W-Dist	27			
1606416-01	MHg-CVAFS-W-Dist	28			Scan all data for level IV report
1606416-03	MHg-CVAFS-W-Dist	29			Scan all data for level IV report
1606416-04	MHg-CVAFS-W-Dist	30			Scan all data for level IV report
6F21008-CCV2	QC	31	1603001		
6F21008-CCB2	QC	32			
1606416-05	MHg-CVAFS-W-Dist	33			Scan all data for level IV report
1606416-06	MHg-CVAFS-W-Dist	34			Scan all data for level IV report
1606417-01	MHg-CVAFS-W-Dist	35			Scan all data for level IV report

Due Date: 6/21/2016

ANALYSIS SEQUENCE

6F21008

Instrument: Hg2700-1

Calibration ID: UNASSIGNED

Analyzed: 6/21/2016

Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
1606417-02	MHg-CVAFS-W-Dist	36			Scan all data for level IV report
1606417-03	MHg-CVAFS-W-Dist	37			Scan all data for level IV report
F606232-DUP1	QC	38			
F606232-MS1	QC	39			
F606232-MSD1	QC	40			
F606232-MS2	QC	41			
F606232-MSD2	QC	42			
6F21008-CCV3	QC	43	1603001		
6F21008-CCB3	QC	44			

Dan Moreau 6/21/16
Samples Loaded By Date

Dan Moreau 6/21/16
Data Processed By Date

Due Date: 6/21/2016

PREPARATION BENCH SHEET

F606232

Eurofins Frontier Global Sciences, Inc.

Matrix: Water **Prepared using: Hg Aquatic/Solids - EFGS-013 Methyl Hg Distillation for Water** **Prepared: 6/20/2016**

Lab Number	Sample ID and Source Sample	Initial (mL)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F606232-BLK1	Blank	45	40					
F606232-BLK2	Blank	45	40					
F606232-BLK3	Blank	45	40					
F606232-BS1	Blank Spike	45	40	1602184	45			
F606232-BSD1	Blank Spike Dup	45	40	1602184	45			
F606232-DUP1	Duplicate [1606294-01]	45	40					
F606232-MS1	Matrix Spike [1606294-01]	45	40	1602184	45			
F606232-MS2	Matrix Spike [1606416-01]	45	40	1602184	45			
F606232-MSD1	Matrix Spike Dup [1606294-01]	45	40	1602184	45			
F606232-MSD2	Matrix Spike Dup [1606416-01]	45	40	1602184	45			

Standard ID(s):	Description:	Expiration:
1602184	MHg New Primary 1.0 ng/mL CAL	25-Jul-16 00:00

Reagent ID(s):	Description:	Expiration:
1602604	Acetate Buffer	15-Nov-16 00:00
1602944	Ethylating Agent (For Methyl Mercury Analysis)	30-Nov-16 00:00
1603215	2.5% Ascorbic Acid	24-Jun-16 00:00
1603288	0.5% Distillation Dilute (Made Daily)	22-Jun-16 00:00
1603289	APDC	27-Jun-16 00:00

PREPARATION BENCH SHEET

F606232

Eurofins Frontier Global Sciences, Inc.

Matrix: Water **Prepared using: Hg Aquatic/Solids - EFGS-013 Methyl Hg Distillation for Water** **Prepared: 6/20/2016**

Lab Number	Sample ID	Initial (mL)	Final (mL)	QC Sample	Sample Specs.	Raw Data	Sample Comments	Analysis Comments
1605778-01RE1	WQ2-C_052716_SW_10	45	40	-	-	-	Re-extract added 6/17/2016 by JRH	
1606097-18RE1	G16171 Sample Site 4 Me-Hg	45	40	-	-	-	Re-extract added 6/18/2016 by DM2	
1606097-23RE1	G16166 Sample Site 5 Me-Hg	45	40	-	-	-	Re-extract added 6/18/2016 by DM2	
1606097-28RE1	G16170 Sample Site 6 Central	45	40	-	-	-	Re-extract added 6/18/2016 by DM2	
1606097-31RE1	G16162 Sample Site 7 Me-Hg	45	40	-	-	-	Re-extract added 6/18/2016 by DM2	
1606097-36RE1	G16169 Sample Site 6 North	45	40	-	-	-	Re-extract added 6/18/2016 by DM2	
1606097-39RE1	G16173 Sample Site 6 South	45	40	-	-	-	Re-extract added 6/18/2016 by DM2	
1606097-42RE1	G16163 Sample Site 8 Me-Hg	45	40	-	-	-	Re-extract added 6/18/2016 by DM2	
1606175-01RE1	1606208-003A E1606009g	45	40	-	-	-	Re-extract added 6/17/2016 by JRH	
1606256-04	B160070 SW-ByProduct@Plant	45	40	-	-	-		
1606256-05	B160075 SW-ByProduct@Plant	45	40	-	-	-		
1606294-01	201605130313	45	40	-	-	-		
1606416-01	OL-2418-01	45	40	-	-	-	Scan all data for level IV report	
1606416-03	OL-2418-02	45	40	-	-	-	Scan all data for level IV report	
1606416-04	OL-2418-03	45	40	-	-	-	Scan all data for level IV report	
1606416-05	OL-2418-04	45	40	-	-	-	Scan all data for level IV report	
1606416-06	OL-2418-05	45	40	-	-	-	Scan all data for level IV report	
[illegible]417-01	OL-2415-01	45	40	-	-	-	Scan all data for level IV report	
[illegible]417-02	OL-2415-02	45	40	-	-	-	Scan all data for level IV report	

[illegible]e Date: 6/21/2016

PREPARATION BENCH SHEET

F606232

Eurofins Frontier Global Sciences, Inc.

Matrix: Water **Prepared using: Hg Aquatic/Solids - EFGS-013 Methyl Hg Distillation for Water** **Prepared: 6/20/2016**

1606417-03	OL-2415-03	45	40	-	-	-	Scan all data for level IV report	

[redacted]

e Date: 6/21/2016

2700-1
6/21/16 DM

PREPARATION BENCH SHEET

F606232

Eurofins Frontier Global Sciences, Inc.

Matrix: Water **Prepared using: Hg Aquatic/Solids - EFGS-013 Methyl Hg Distillation for Water** **Prepared: 6/20/2016**

Lab Number	Sample ID and Source Sample	Initial (mL)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F606232-BLK1	Blank	45	40					1.25X
F606232-BLK2	Blank	45	40					1.25X
F606232-BLK3	Blank	45	40					1.25X
F606232-BS1	Blank Spike	45	40	1602184	45			1.25X
F606232-BSD1	Blank Spike Dup	45	40	1602184	45			1.25X
F606232-DUP1	Duplicate [1606294-01]	45	40					1.25X
F606232-MS1	Matrix Spike [1606294-01]	45	40	1602184	45			1.25X
F606232-MS2	Matrix Spike [1606416-01]	45	40	1602184	45			1.25X
F606232-MSD1	Matrix Spike Dup [1606294-01]	45	40	1602184	45			1.25X
F606232-MSD2	Matrix Spike Dup [1606416-01]	45	40	1602184	45			1.25X

Standard ID(s):	Description:	Expiration:	Reagent ID(s):	Description:	Expiration:
1602184	MHg New Primary 1.0 ng/mL CAL	25-Jul-16 00:00	1603288	0.5% Distillation Dilute (Made Daily)	22-Jun-16 00:00
			1603289	APDC	27-Jun-16 00:00

1602024

1603215

1602944

Date: 6/21/2016

2700-1
6/21/16 DM

PREPARATION BENCH SHEET

F606232

Eurofins Frontier Global Sciences, Inc.

Matrix: Water **Prepared using: Hg Aquatic/Solids - EFGS-013 Methyl Hg Distillation for Water** **Prepared: 6/20/2016**

Lab Number	Sample ID	Initial (mL)	Final (mL)	QC Sample	Sample Specs.	Raw Data	Sample Comments	Analysis Comments
1605778-01RE1	WQ2-C_052716_SW_10	45	40	-	-	-	Re-extract added 6/17/2016 by JRH	1.25X
1606097-18RE1	G16171 Sample Site 4 Me-Hg	45	40	-	-	-	Re-extract added 6/18/2016 by DM2	1.25x
1606097-23RE1	G16166 Sample Site 5 Me-Hg	45	40	-	-	-	Re-extract added 6/18/2016 by DM2	1.25x
1606097-28RE1	G16170 Sample Site 6 Central	45	40	-	-	-	Re-extract added 6/18/2016 by DM2	1.25X
1606097-31RE1	G16162 Sample Site 7 Me-Hg	45	40	-	-	-	Re-extract added 6/18/2016 by DM2	1.25X
1606097-36RE1	G16169 Sample Site 6 North	45	40	-	-	-	Re-extract added 6/18/2016 by DM2	1.25X
1606097-39RE1	G16173 Sample Site 6 South	45	40	-	-	-	Re-extract added 6/18/2016 by DM2	1.25X
1606097-42RE1	G16163 Sample Site 8 Me-Hg	45	40	-	-	-	Re-extract added 6/18/2016 by DM2	1.25X
1606175-01RE1	1606208-003A E1606009g	45	40	-	-	-	Re-extract added 6/17/2016 by JRH	1.25X
1606256-04	B160070 SW-ByProduct@Plant	45	40	-	-	-		1.25X
1606256-05	B160075 SW-ByProduct@Plant	45	40	-	-	-		1.25X
1606294-01	201605130313	45	40	-	-	-		1.25X
1606416-01	OL-2418-01	45	40	-	-	-	Scan all data for level IV report	1.25X
1606416-03	OL-2418-02	45	40	-	-	-	Scan all data for level IV report	1.25X
1606416-04	OL-2418-03	45	40	-	-	-	Scan all data for level IV report	1.25X
1606416-05	OL-2418-04	45	40	-	-	-	Scan all data for level IV report	1.25X
1606416-06	OL-2418-05	45	40	-	-	-	Scan all data for level IV report	1.25X
[illegible]417-01	OL-2415-01	45	40	-	-	-	Scan all data for level IV report	1.25X
[illegible]417-02	OL-2415-02	45	40	-	-	-	Scan all data for level IV report	1.25X

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[illegible] Date: 6/21/2016

2700-1

6/21/16 DM

PREPARATION BENCH SHEET

F606232

Eurofins Frontier Global Sciences, Inc.

Matrix: Water **Prepared using: Hg Aquatic/Solids - EFGS-013 Methyl Hg Distillation for Water** **Prepared: 6/20/2016**

1606417-03	OL-2415-03	45	40	-	-	-	Scan all data for level IV report	1 25X

[redacted]

Date: 6/21/2016

Methyl Mercury Distillations (EPA 1630)

Name: Duyen **Date:** 6/20/16 **Batch #:** F606232 **Sample Matrix:** Water

WO#: 1605778, 1606097, 1606175, 1606256, ~~1606416~~ 6/20/16 out, 1606416, 160641

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)
Blk1	F606232 Blank1	1.0	45	3.0
Blk2	F606232 Blank2	1.0	45	3.0
Blk3	F606232 Blank3	1.0	45	3.0
BS	F606232 BS1	1.0	45	3.0
BSD	F606232 BSD1	1.0	45	3.0
MD	F606232 MD	1.0	45	3.0
MS1	F606232 MS1	1.0	45	3.0
MSD1	F606232 MSD1	1.0	45	3.0
MS2	F606232 MS2	1.0	45	3.0
MSD2	F606232 MSD2	1.0	45	3.0
1	1605778-01 RE1	1.0	45	3.0
2	1606097-18 RE1	1.0	45	3.0
3	1606097-23 RE1	1.0	45	3.0
4	1606097-28 RE1	1.0	45	4.0
5	1606097-31 RE1	1.0	45	3.0
6	1606097-36 RE1	1.0	45	3.0
7	1606097-39 RE1	1.0	45	3.0
8	1606097-42 RE1	1.0	45	3.0
9	1606175-01 RE1	1.0	45	4.0
10	1606256-04 B	1.0	45	4.0
11	1606256-05 B	1.0	45	3.0
12	1606294-01 A	1.0	45	3.0
6/20/16 out 13	1606416-01 B	1.0	45	4.0
14	1606416-03 B	1.0	45	4.0
15	1606416-04 B	1.0	45	4.0
16	1606416-05 B	1.0	45	4.0
17	1606416-06 B	1.0	45	4.0
18	1606417-01 B	1.0	45	4.0
19	1606417-02 B	1.0	45	4.0
20	1606417-03 B	1.0	45	4.0
			6-20-16	

Spike ID: 1602184
Spike Amount: 45 µL
Spike Witness: BC 6-20-16

Balance #: 2
Calibrated? ☑ Yes ☐ No

Pipette #: CJ17087
Cal. Date: 6/15/16

Pipette #: M24486
Cal. Date: 6/14/16

Pipette #: N27707
Cal. Date: 6/15/16

APDC ID: 1602289
HCl ID: 1603288

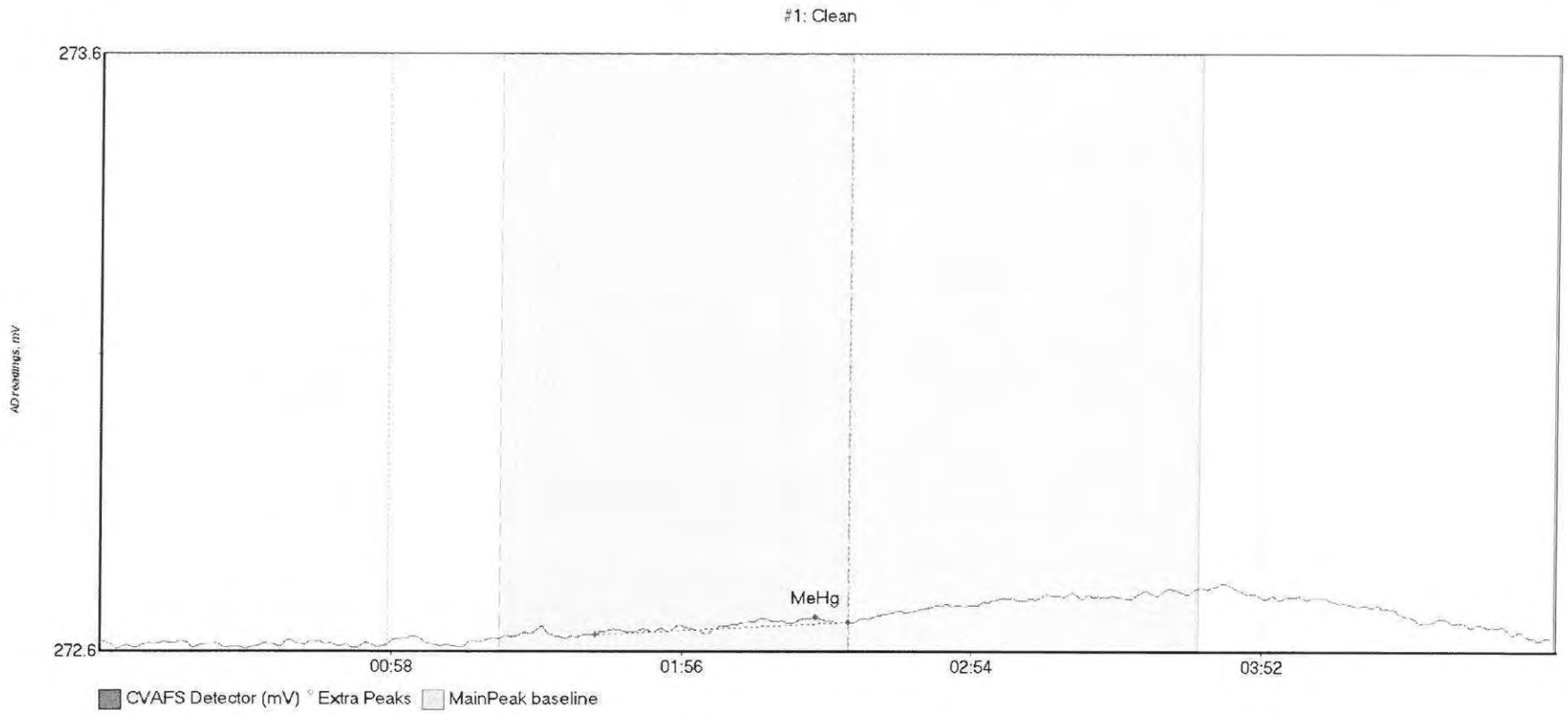
Temperature: No set range as the temp. may be changed to keep flow rate of ≥10 mL per hour. Temperature is recorded for informational purposes only.

Unit 1: 120.9
Unit 2: 122.
Unit 3: 120.5
Unit 4: 120.4
Unit 5: 122.
Unit 6: 122.

Comments:
MD, source is 1606294-01
MS1, MSD1 1606175-01 RE1
MS2 MSD2 1606416-01

6/20/16

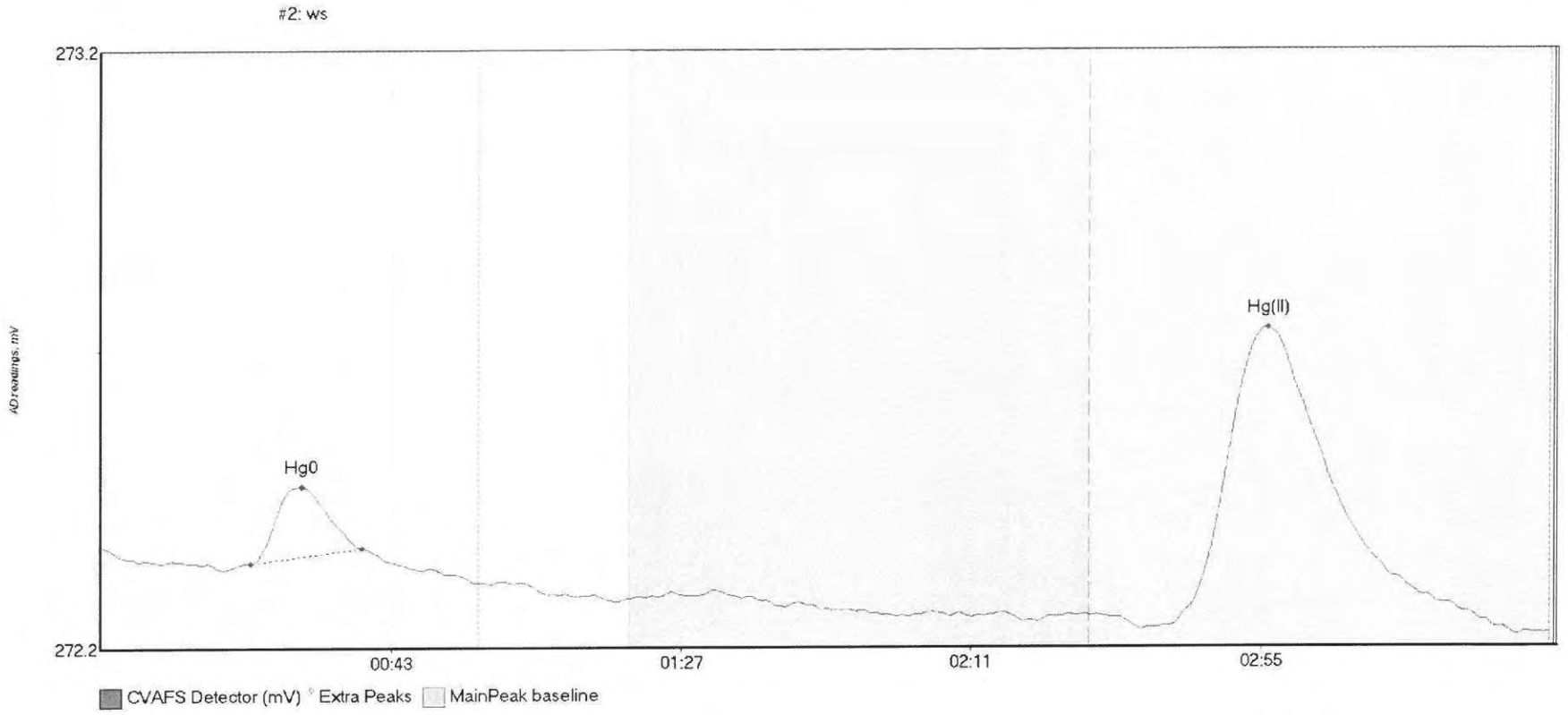
Rev 6/20/16 Removed



JH
06/21/16

Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
Clean	2.807	99.2	150.0	272.66	272.68	143.3	0.029	CT	272.6486	0.00	0.01	

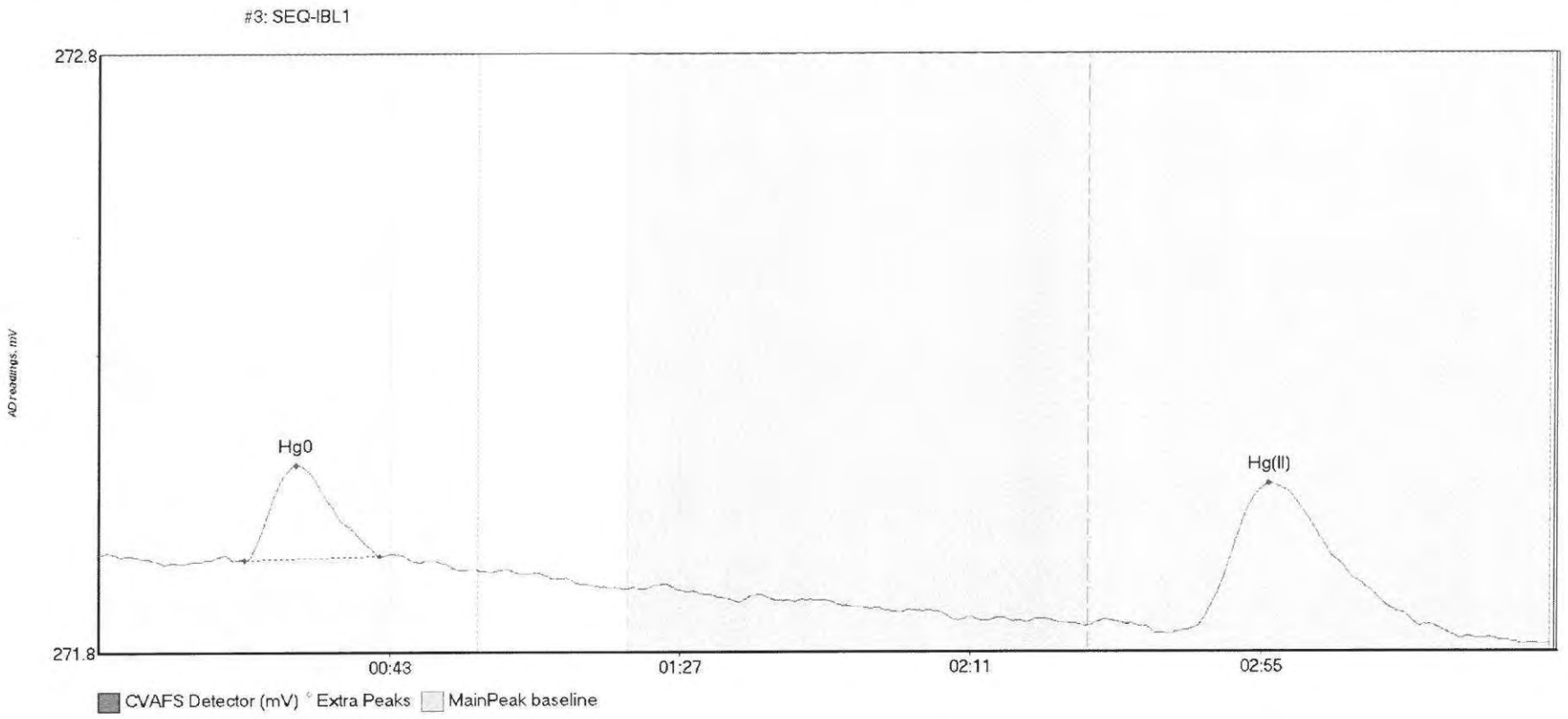
016



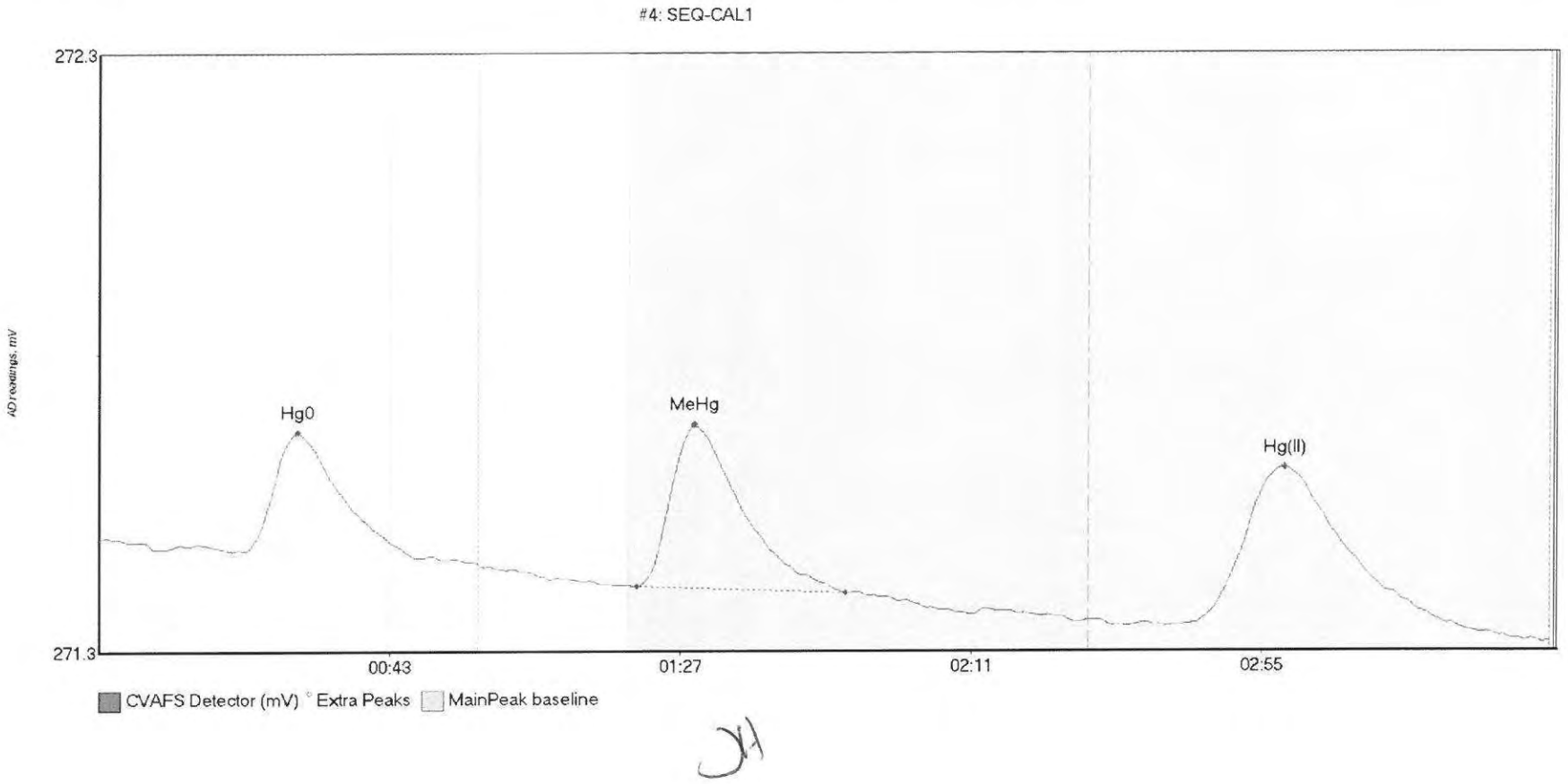
JH

Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
ws Hg0	10.324	22.7	39.6	272.34	272.36	30.5	0.129	OK	272.3618	0.00	-0.15	
ws Hg(II)	88.851	162.1	209.5	272.23	272.24	177.0	0.499	OK	272.3618	0.00	-0.15	

JH 6



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-IBL1 Hg0	16.098	22.2	42.5	271.93	271.93	29.9	0.159	OK	271.9386	0.00	-0.15	
SEQ-IBL1 Hg(II)	40.577	164.6	200.5	271.81	271.82	177.2	0.246	OK	271.9386	0.00	-0.15	



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CAL1 Hg0	23.004	21.9	48.1	271.47	271.45	30.1	0.197	OK	271.4857	0.00	-0.17	
SEQ-CAL1 MeHg	33.835	81.5	113.0	271.40	271.39	90.1	0.270	OK	271.4857	0.00	-0.17	
SEQ-CAL1 Hg(II)	43.708	165.9	204.0	271.34	271.34	179.5	0.262	OK	271.4857	0.00	-0.17	

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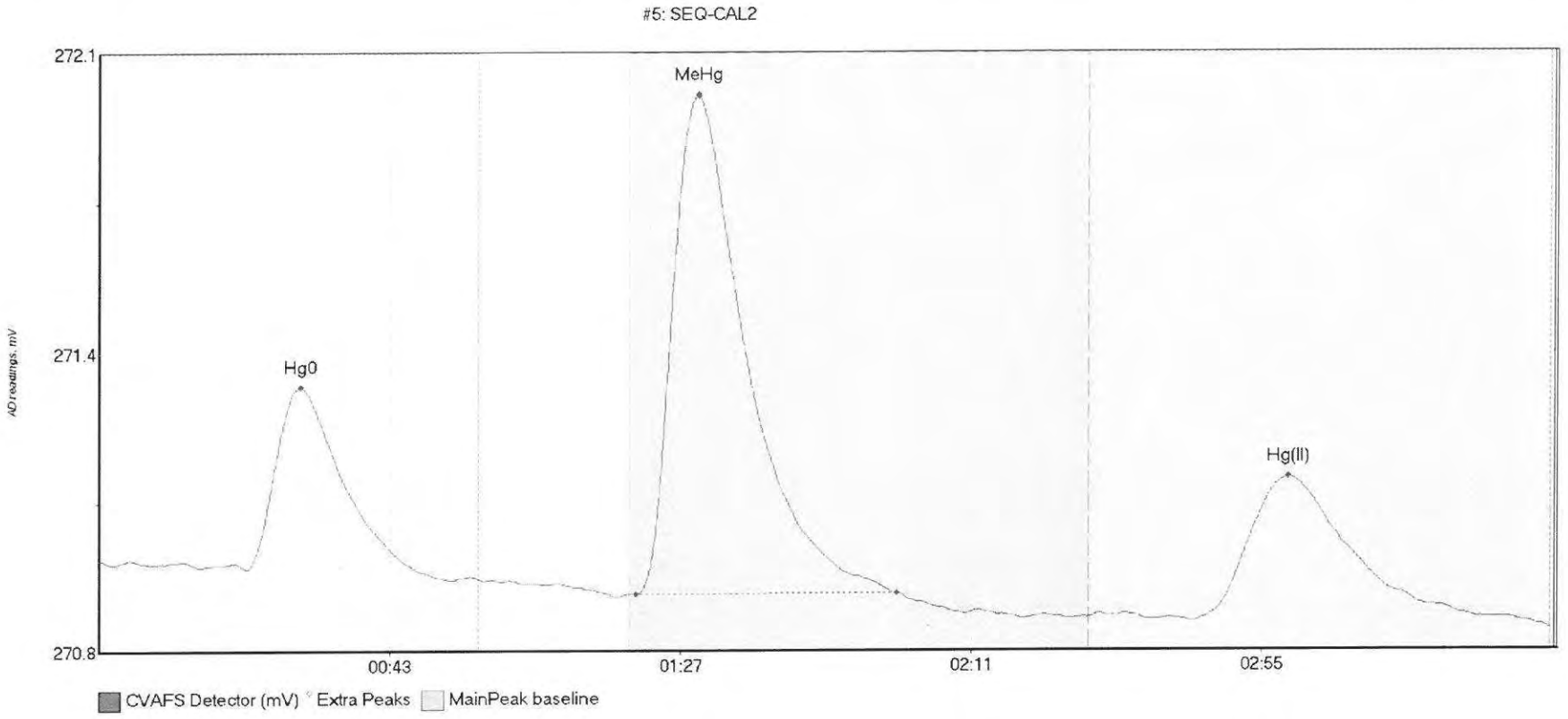
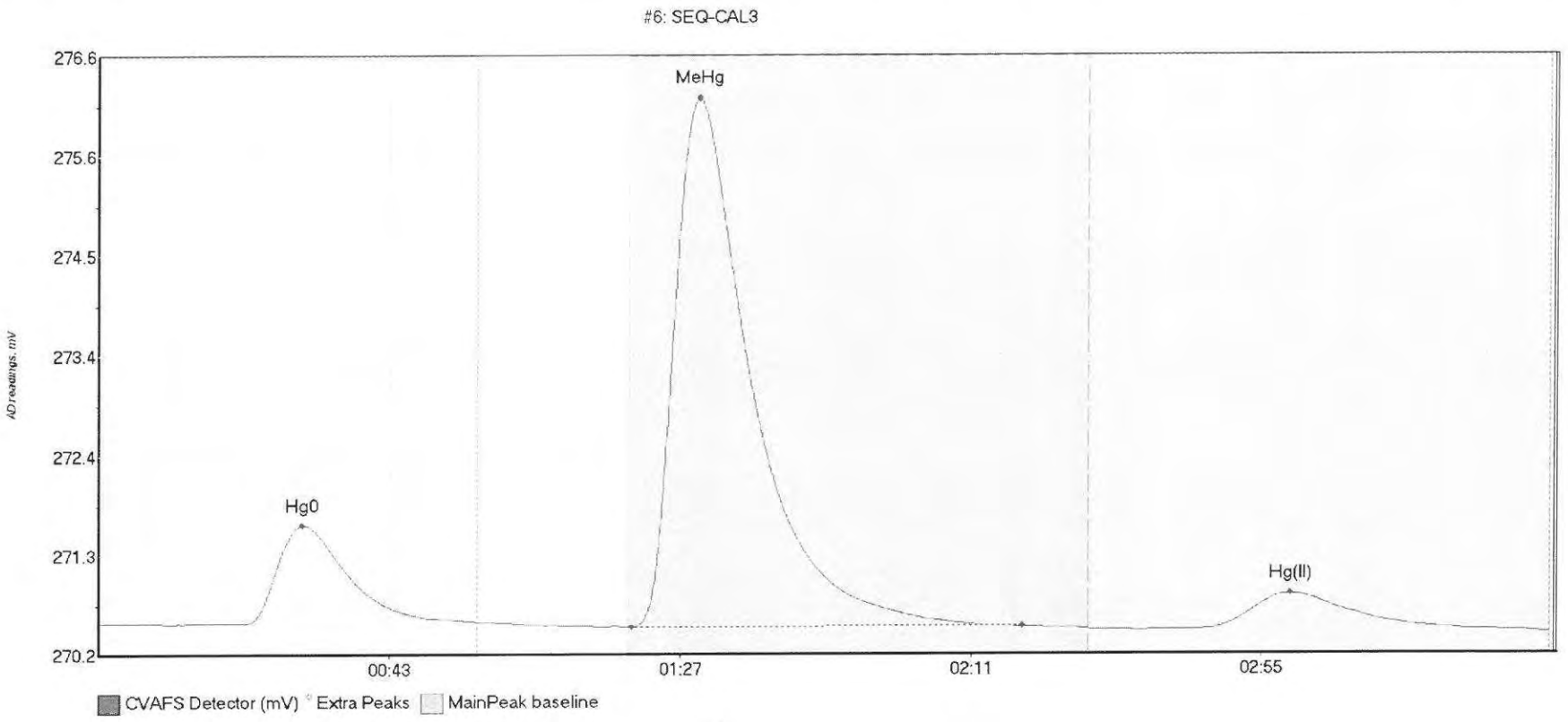


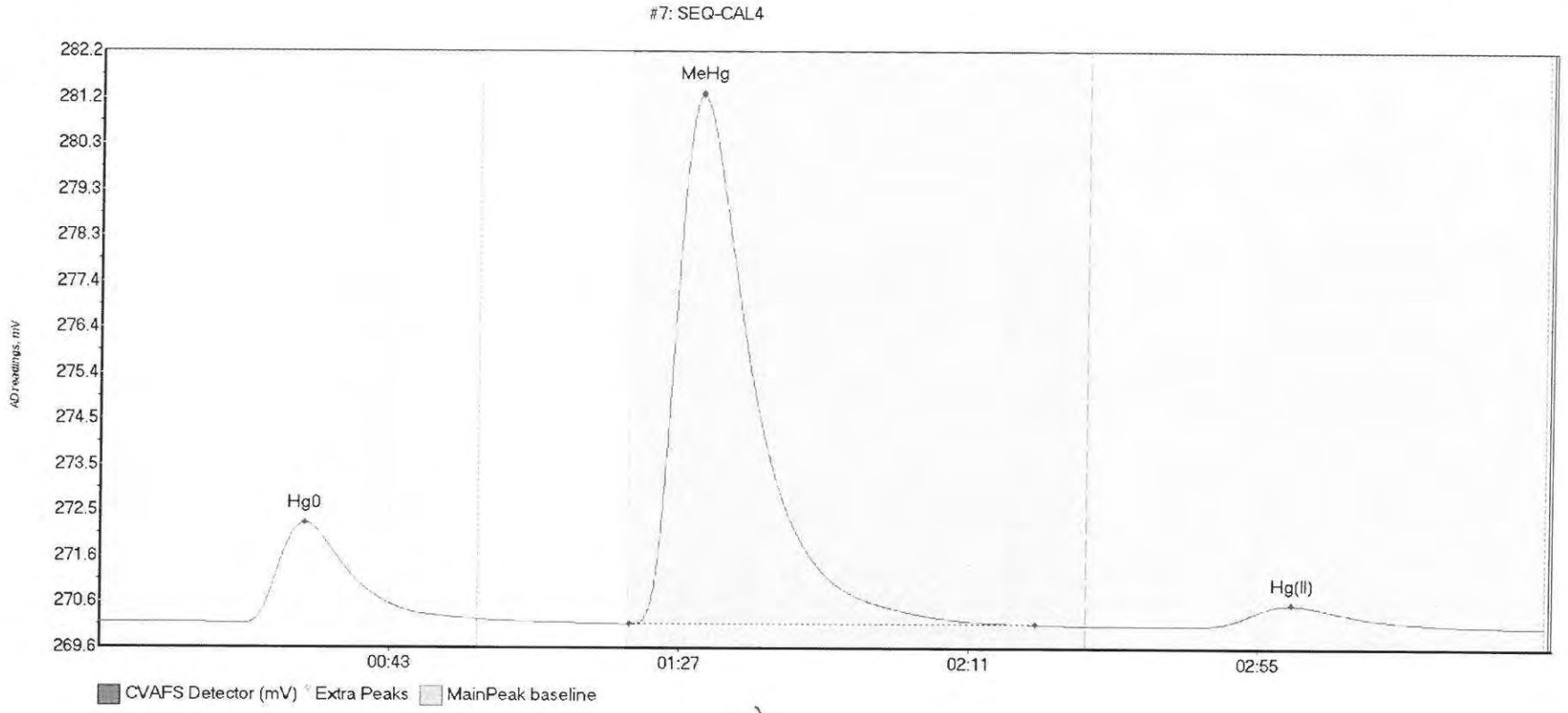
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CAL2 Hg0	45.337	22.5	51.2	270.98	270.96	30.6	0.381	OK	271.0003	0.00	-0.14	
SEQ-CAL2 MeHg	135.906	81.1	120.7	270.93	270.93	90.7	1.048	OK	271.0003	0.00	-0.14	
SEQ-CAL2 Hg(II)	51.173	165.8	208.9	270.87	270.88	180.1	0.304	OK	271.0003	0.00	-0.14	



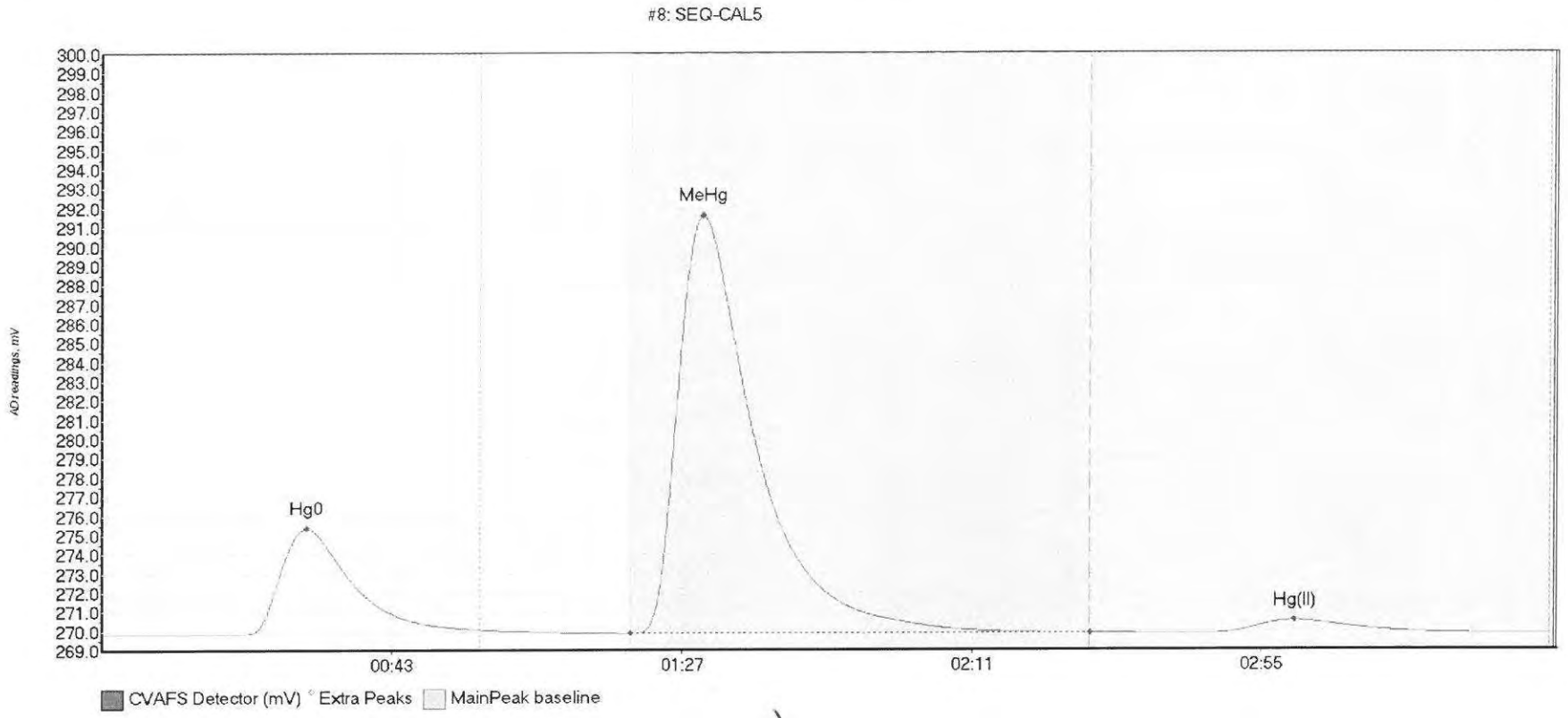
JH

Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CAL3 Hg0	127.785	20.9	57.5	270.56	270.57	30.9	1.056	CT	270.5624	0.00	-0.11	
SEQ-CAL3 MeHg	768.521	80.6	139.8	270.51	270.52	90.9	5.650	OK	270.5624	0.00	-0.11	
SEQ-CAL3 Hg(II)	61.488	167.6	207.5	270.49	270.49	180.5	0.376	OK	270.5624	0.00	-0.11	

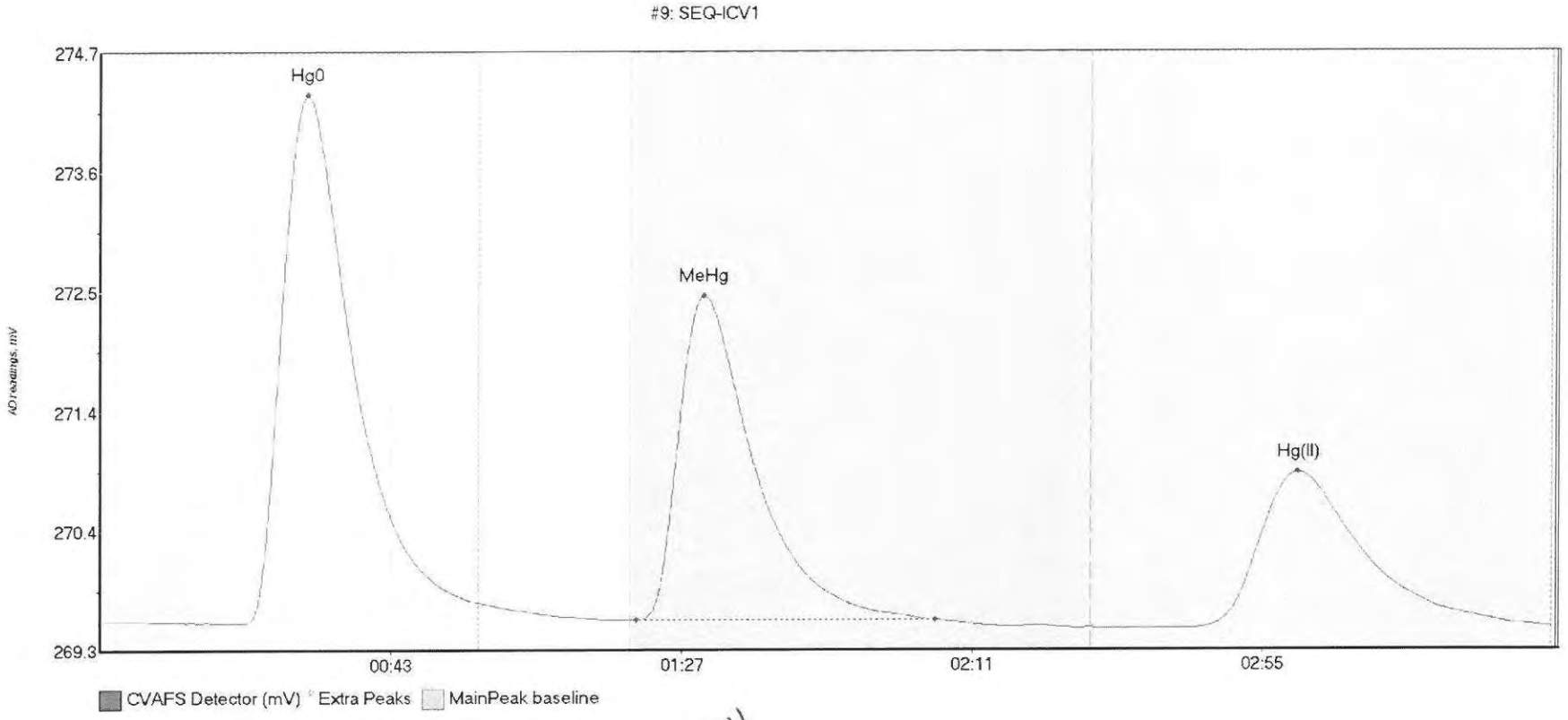
016



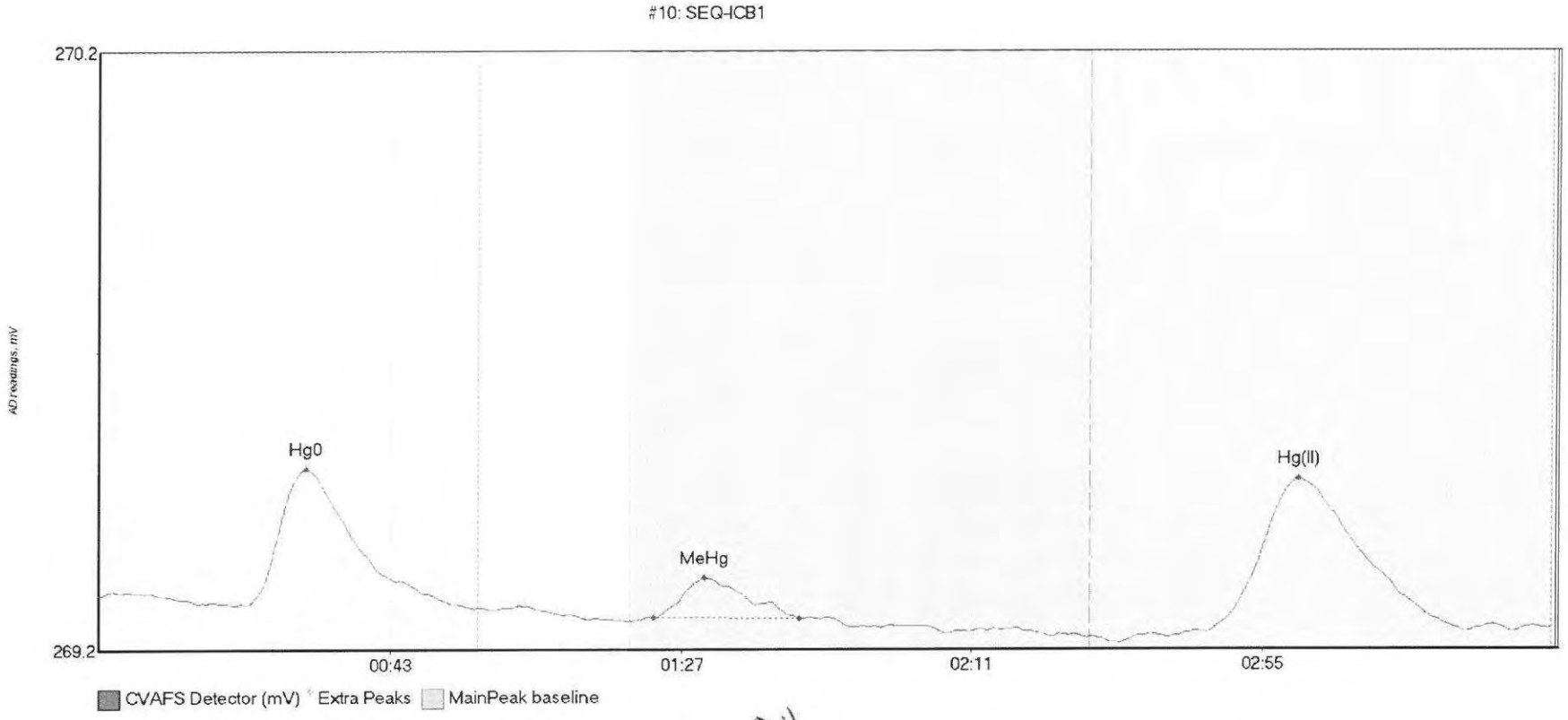
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CAL4 Hg0	257.028	22.0	57.5	270.16	270.24	31.2	2.113	CT	270.1855	0.00	-0.09	
SEQ-CAL4 MeHg	1520.365	80.5	142.1	270.14	270.15	91.2	11.147	OK	270.1855	0.00	-0.09	
SEQ-CAL4 Hg(II)	78.354	166.9	212.3	270.11	270.11	181.2	0.453	OK	270.1855	0.00	-0.09	



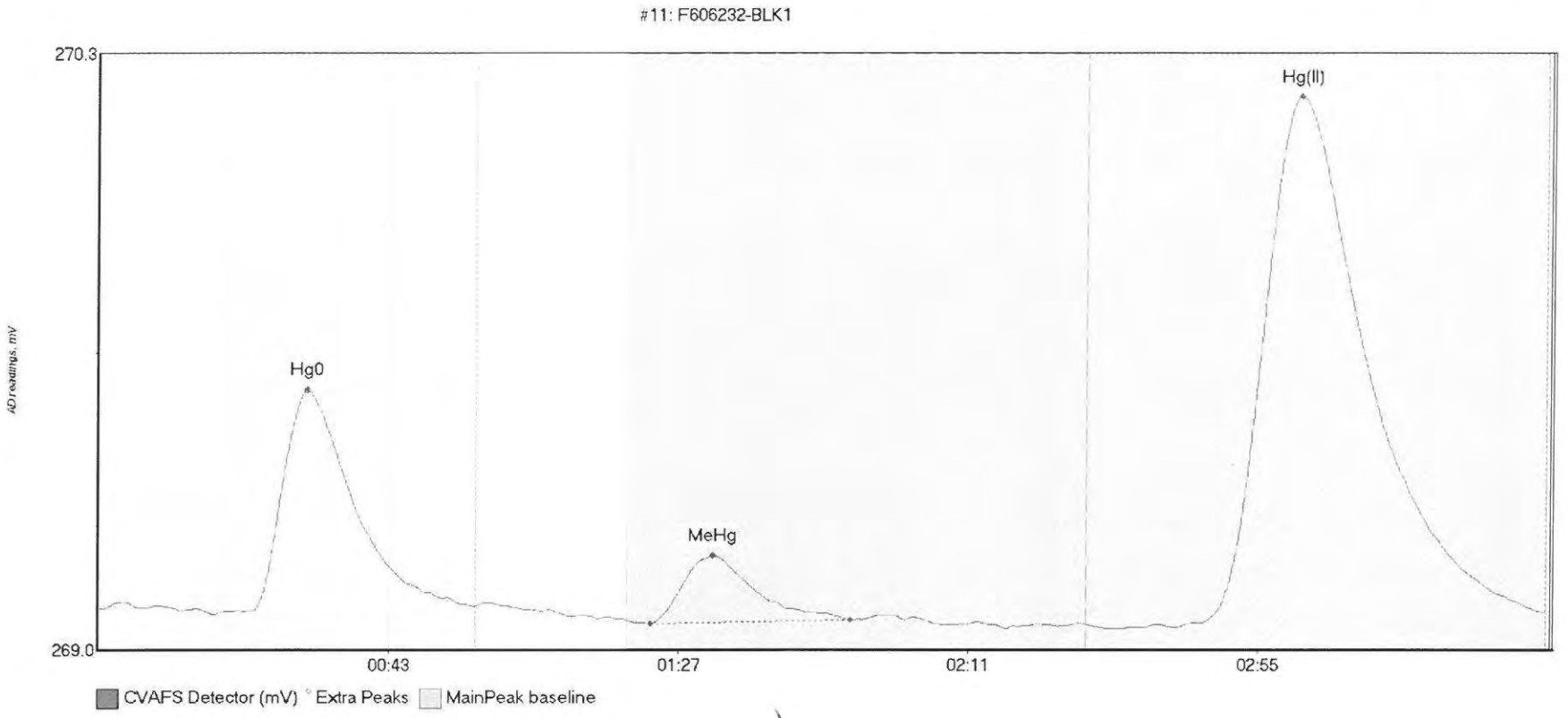
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CAL5 Hg0	663.387	21.7	57.5	269.85	270.06	31.1	5.472	CT	269.8561	0.00	-0.04	
SEQ-CAL5 MeHg	2959.050	80.1	150.0	269.86	269.87	91.2	21.701	CT	269.8561	0.00	-0.04	
SEQ-CAL5 Hg(II)	106.763	167.9	206.6	269.84	269.86	181.1	0.668	OK	269.8561	0.00	-0.04	



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-ICV1 Hg0	572.193	21.6	57.5	269.55	269.73	31.3	4.718	CT	269.5718	0.00	-0.05	
SEQ-ICV1 MeHg	383.198	81.1	126.4	269.58	269.58	91.3	2.903	OK	269.5718	0.00	-0.05	
SEQ-ICV1 Hg(II)	252.640	165.2	219.8	269.50	269.52	181.5	1.398	CT	269.5718	0.00	-0.05	



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-ICB1 Hg0	25.823	22.2	49.3	269.30	269.32	31.1	0.227	OK	269.3156	0.00	-0.06	
SEQ-ICB1 MeHg	7.451	83.7	105.9	269.28	269.28	91.5	0.068	OK	269.3156	0.00	-0.06	
SEQ-ICB1 Hg(II)	45.135	163.0	206.9	269.25	269.25	181.4	0.262	OK	269.3156	0.00	-0.06	



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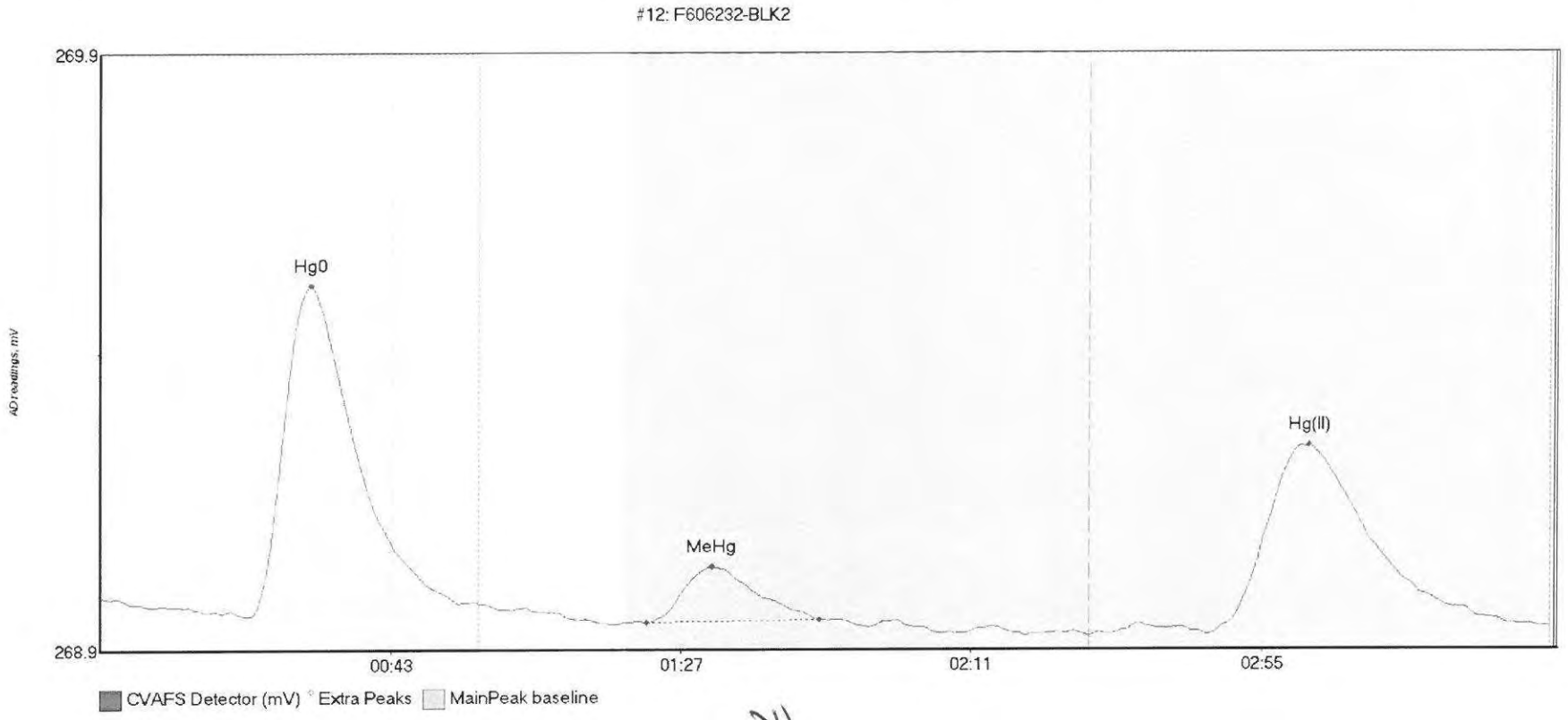
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F606232-BLK1 Hg	57.297	23.4	57.0	269.12	269.12	31.6	0.474	OK	269.1212	0.00	-0.01	
F606232-BLK1 Me	18.293	83.7	114.1	269.09	269.09	93.2	0.146	OK	269.1212	0.00	-0.01	
F606232-BLK1 Hg	204.541	167.0	219.7	269.09	269.11	182.4	1.133	OK	269.1212	0.00	-0.01	

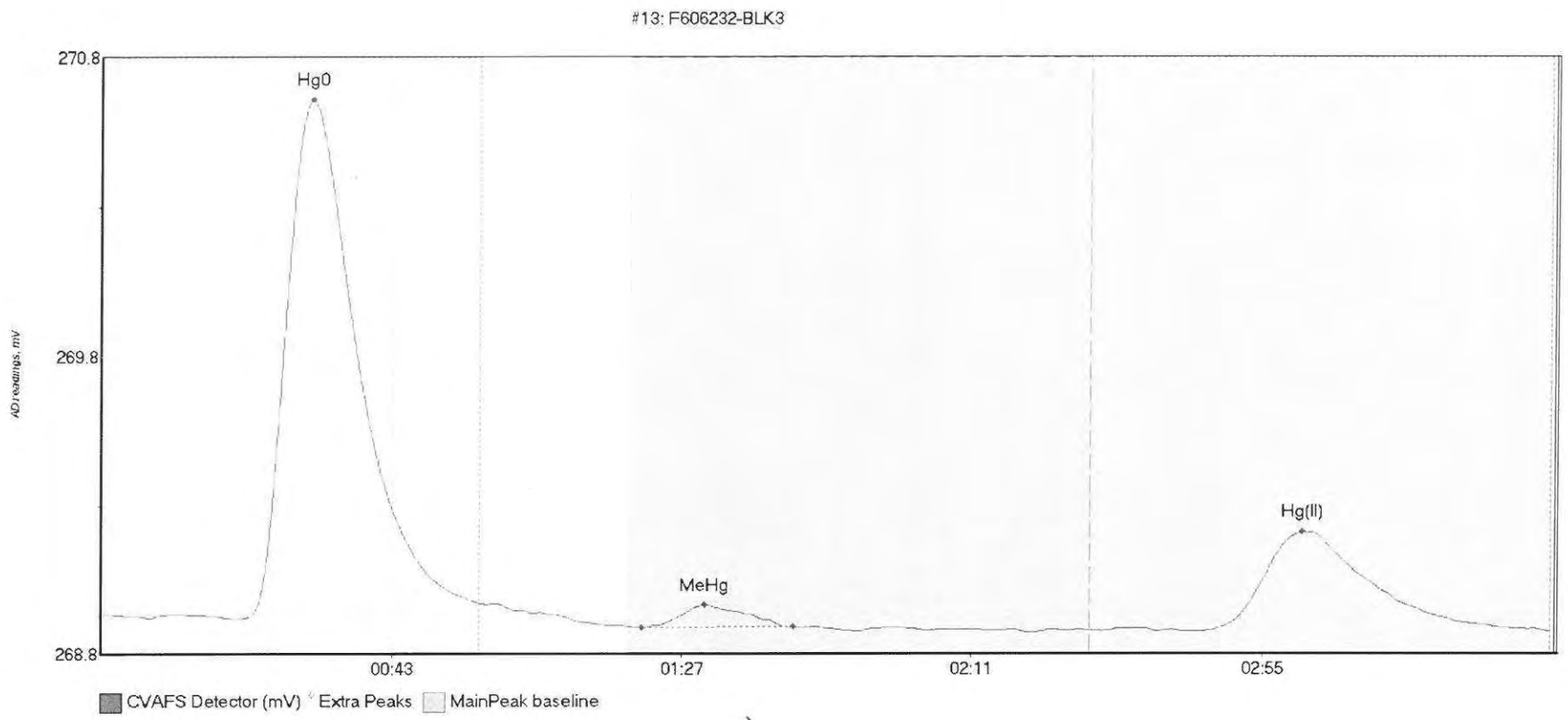
016



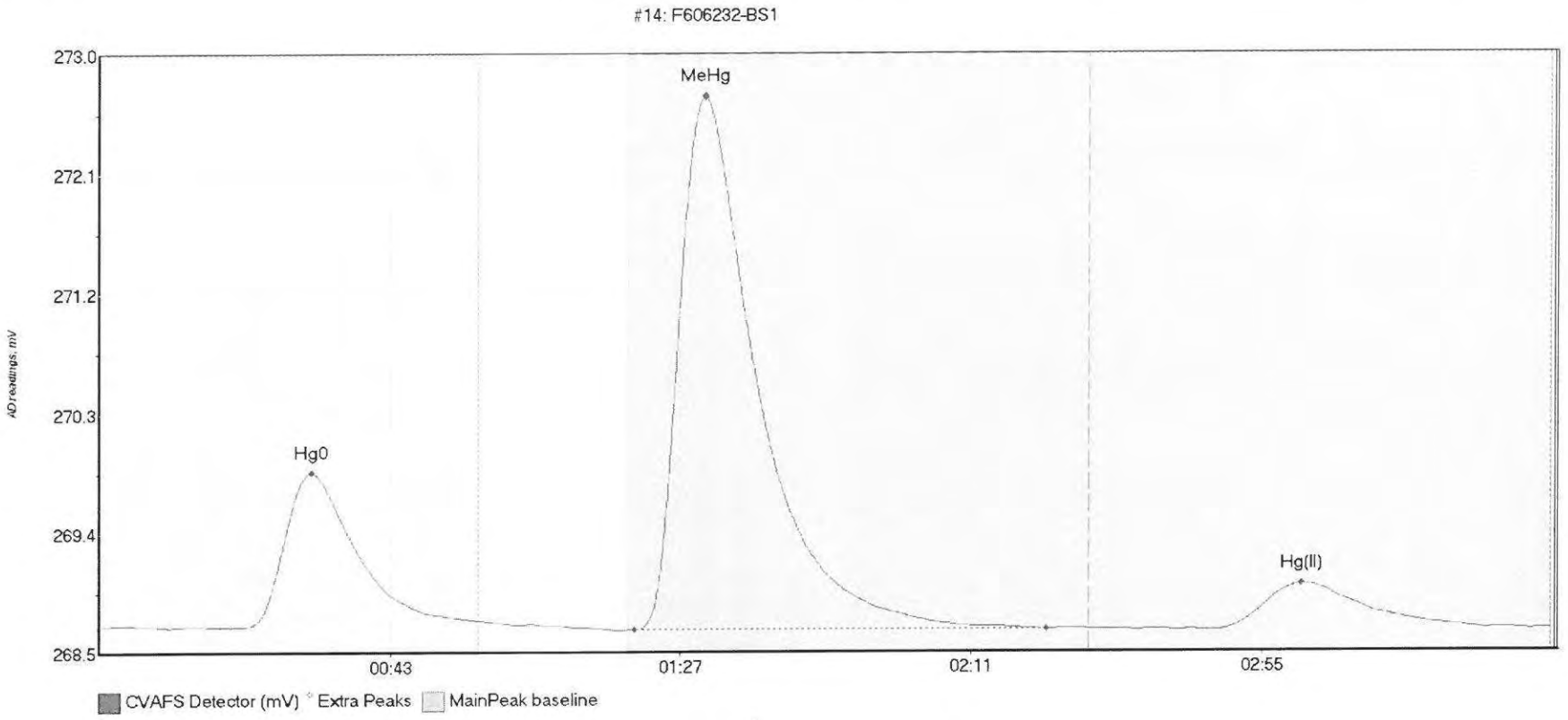
JH

Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F606232-BLK2 Hg	67.312	22.6	54.3	268.98	269.00	31.9	0.554	OK	269.0096	0.00	-0.05	
F606232-BLK2 Me	11.501	82.9	108.9	268.97	268.97	92.6	0.095	OK	269.0096	0.00	-0.05	
F606232-BLK2 Hg	57.466	168.2	218.6	268.95	268.96	183.2	0.316	OK	269.0096	0.00	-0.05	

JJ6

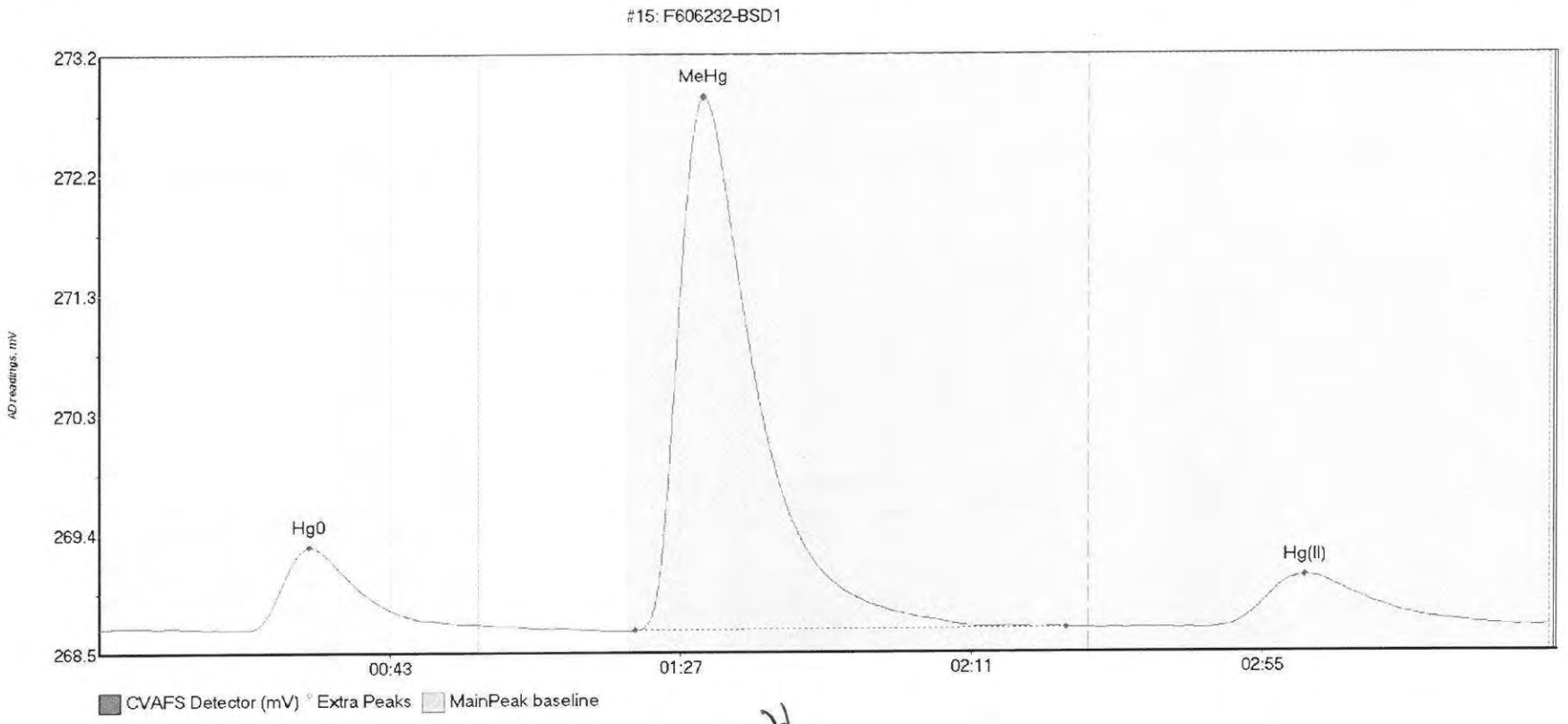


Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F606232-BLK3 Hg	212.361	20.6	57.5	268.88	268.93	31.8	1.731	CT	268.8940	0.00	-0.05	
F606232-BLK3 Me	8.292	82.0	104.9	268.85	268.85	91.5	0.075	OK	268.8940	0.00	-0.05	
F606232-BLK3 Hg	58.960	167.9	216.3	268.84	268.85	182.0	0.329	OK	268.8940	0.00	-0.05	

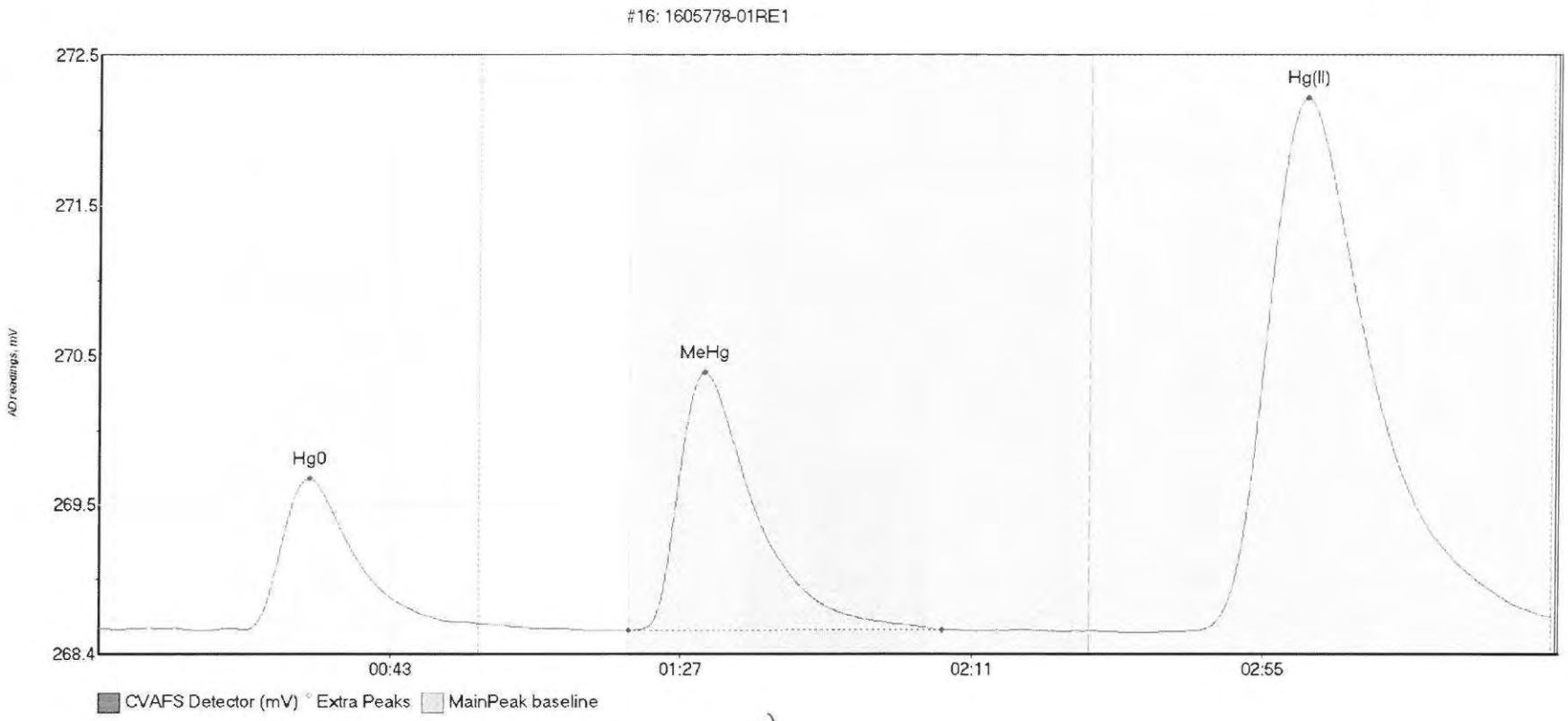


Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F606232-BS1 Hg0	138.983	20.1	57.5	268.73	268.78	32.1	1.163	CT	268.7442	0.00	-0.03	
F606232-BS1 MeH	544.924	81.1	143.4	268.71	268.72	91.7	4.001	OK	268.7442	0.00	-0.03	
F606232-BS1 Hg(	58.869	168.2	210.0	268.71	268.72	182.1	0.348	OK	268.7442	0.00	-0.03	

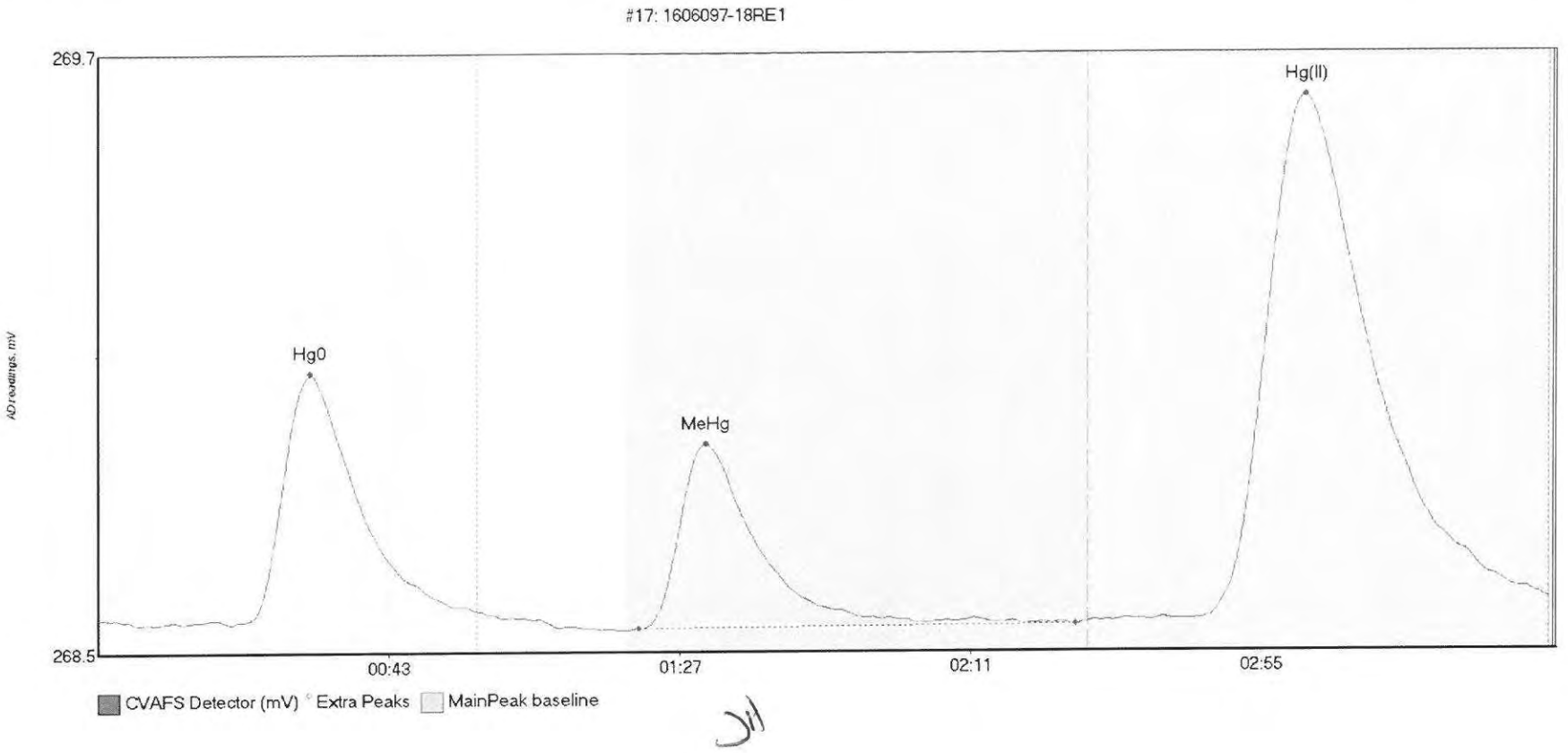
016



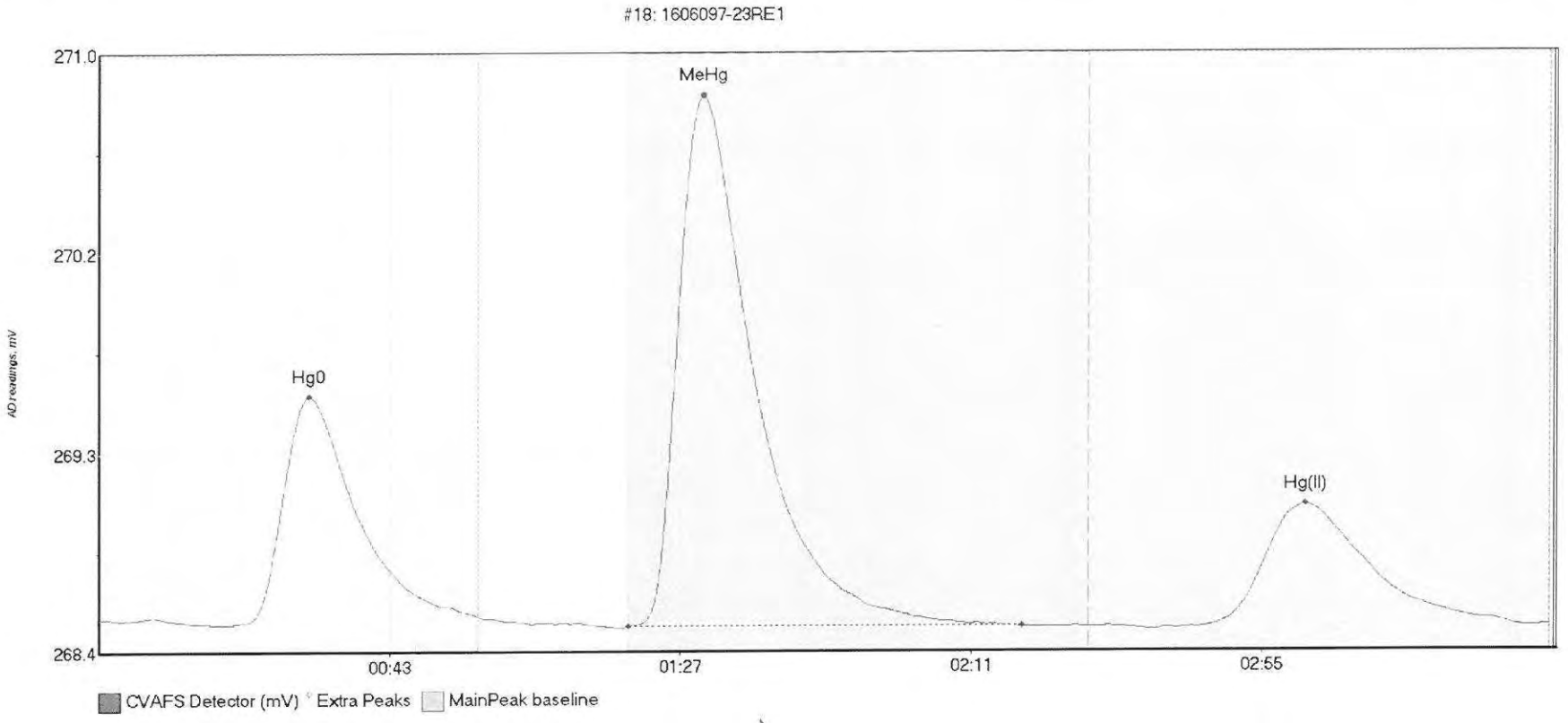
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F606232-BSD1 Hg	79.098	22.5	57.5	268.64	268.67	31.9	0.649	CT	268.6479	0.00	0.01	
F606232-BSD1 Me	570.498	81.1	146.4	268.63	268.64	91.5	4.194	OK	268.6479	0.00	0.01	
F606232-BSD1 Hg	75.155	167.8	217.7	268.64	268.65	182.4	0.412	OK	268.6479	0.00	0.01	



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1605778-01RE1 H	126.278	22.3	57.5	268.61	268.65	31.8	1.038	CT	268.6156	0.00	0.08	
1605778-01RE1 M	234.973	80.1	127.4	268.60	268.60	91.6	1.767	OK	268.6156	0.00	0.08	
1605778-01RE1 H	658.596	165.6	219.8	268.60	268.69	182.5	3.649	CT	268.6156	0.00	0.08	



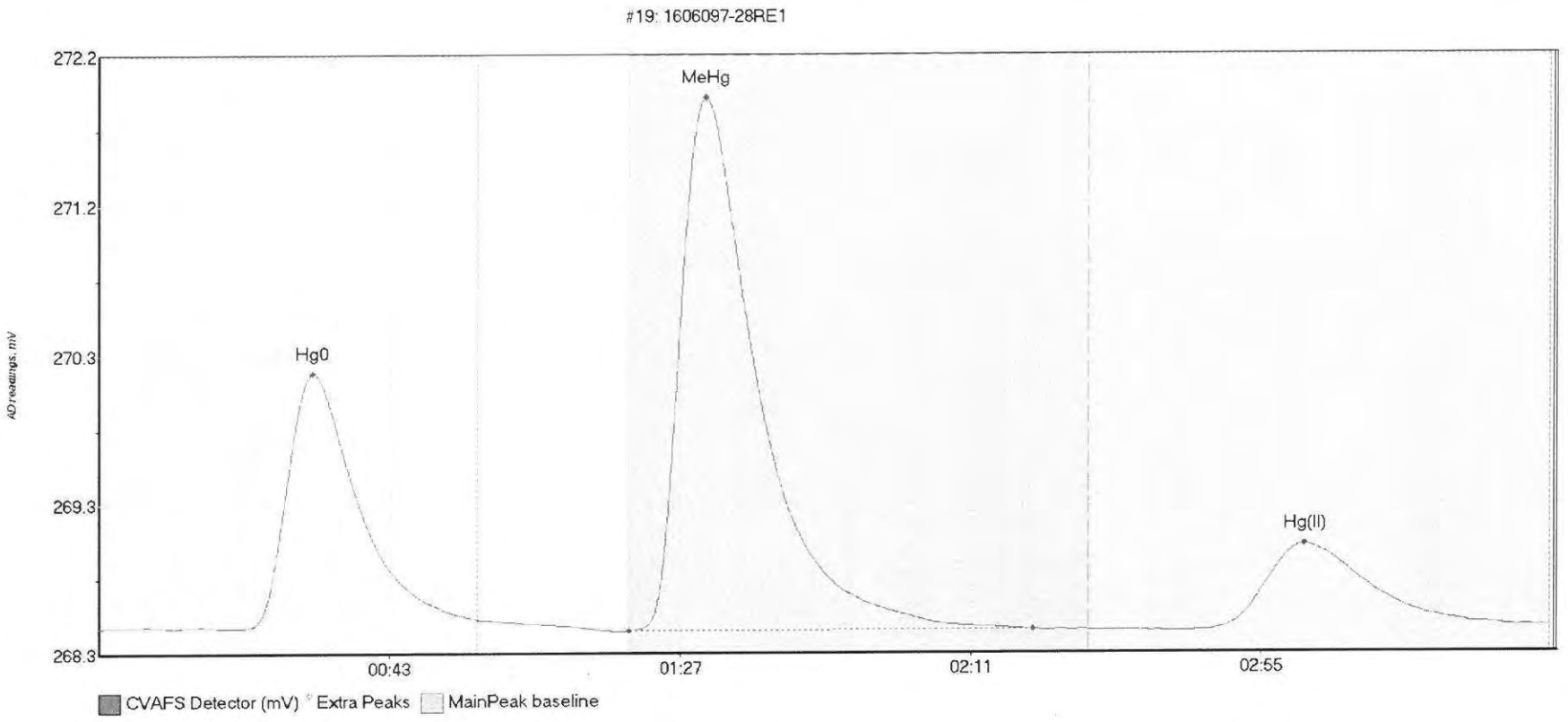
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1606097-18RE1 H	64.422	21.9	57.5	268.56	268.58	32.2	0.515	CT	268.5687	0.00	0.04	
1606097-18RE1 M	53.286	81.8	148.1	268.55	268.55	92.0	0.385	OK	268.5687	0.00	0.04	
1606097-18RE1 H	195.751	166.7	219.8	268.57	268.61	182.7	1.086	CT	268.5687	0.00	0.04	



JH

Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1606097-23RE1 H	123.829	22.0	57.5	268.55	268.57	31.9	0.993	CT	268.5628	0.00	-0.03	
1606097-23RE1 M	313.858	80.1	139.7	268.53	268.53	91.6	2.322	OK	268.5628	0.00	-0.03	
1606097-23RE1 H	96.550	166.3	215.4	268.52	268.53	182.6	0.538	OK	268.5628	0.00	-0.03	

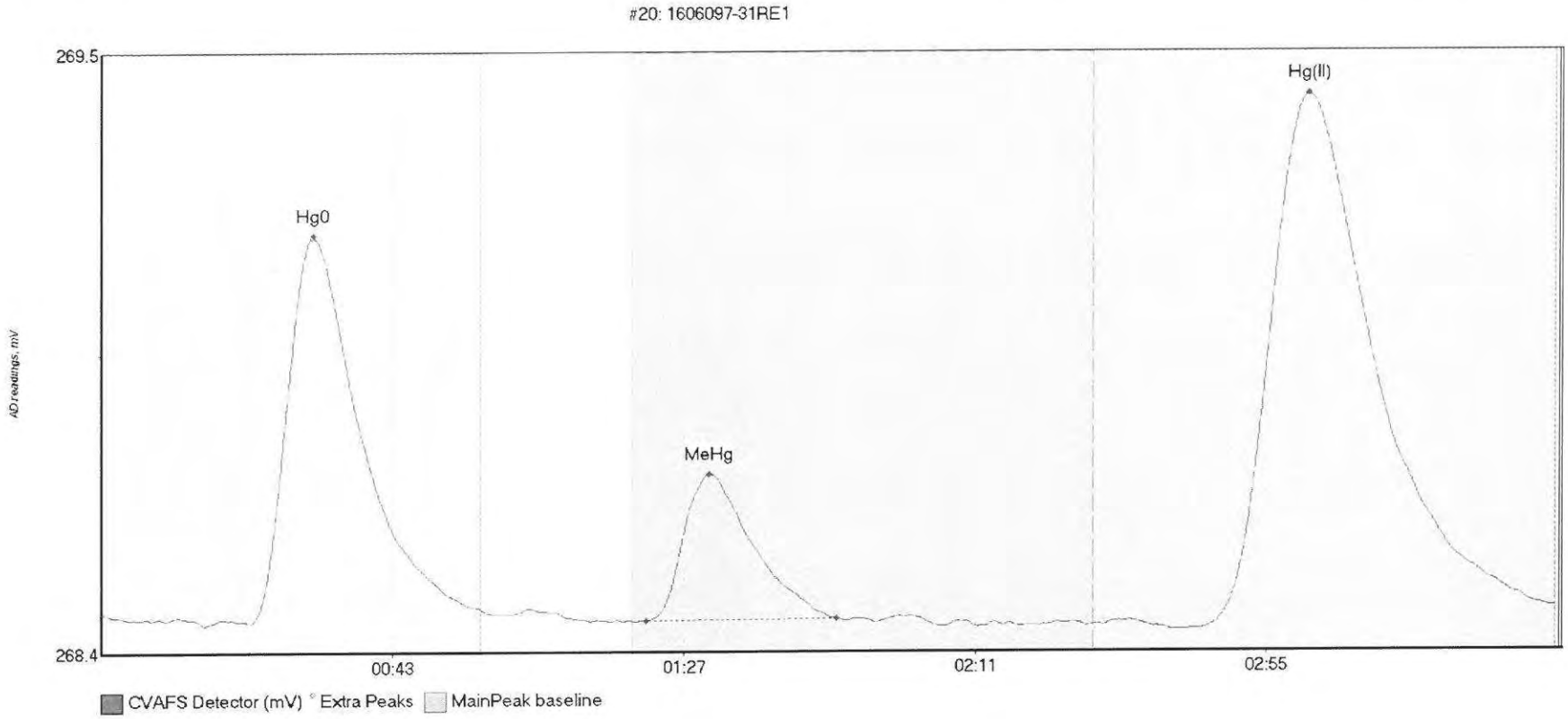
016



JH

Name		Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1606097-28RE1	H	201.438	20.7	57.5	268.48	268.54	32.5	1.665	CT	268.4857	0.00	0.00	
1606097-28RE1	M	475.423	80.1	141.4	268.46	268.47	91.9	3.479	OK	268.4857	0.00	0.00	
1606097-28RE1	H	99.665	167.2	219.8	268.46	268.49	182.6	0.560	CT	268.4857	0.00	0.00	

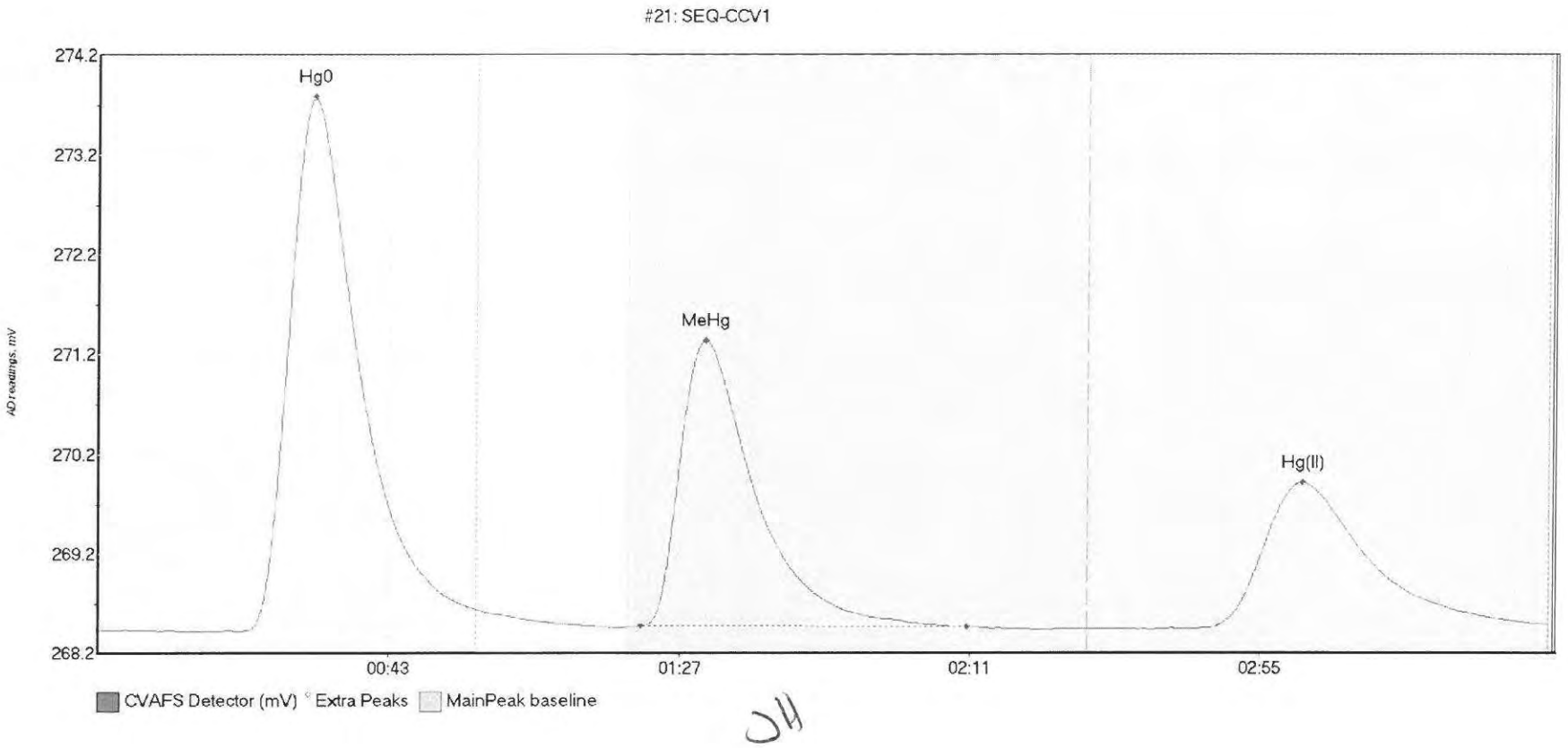
016



JH

Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1606097-31RE1 H	86.926	22.4	57.5	268.44	268.46	32.0	0.690	CT	268.4569	0.00	0.01	
1606097-31RE1 M	31.433	82.3	111.1	268.44	268.45	91.9	0.262	OK	268.4569	0.00	0.01	
1606097-31RE1 H	170.654	166.5	219.8	268.43	268.47	182.4	0.953	CT	268.4569	0.00	0.01	

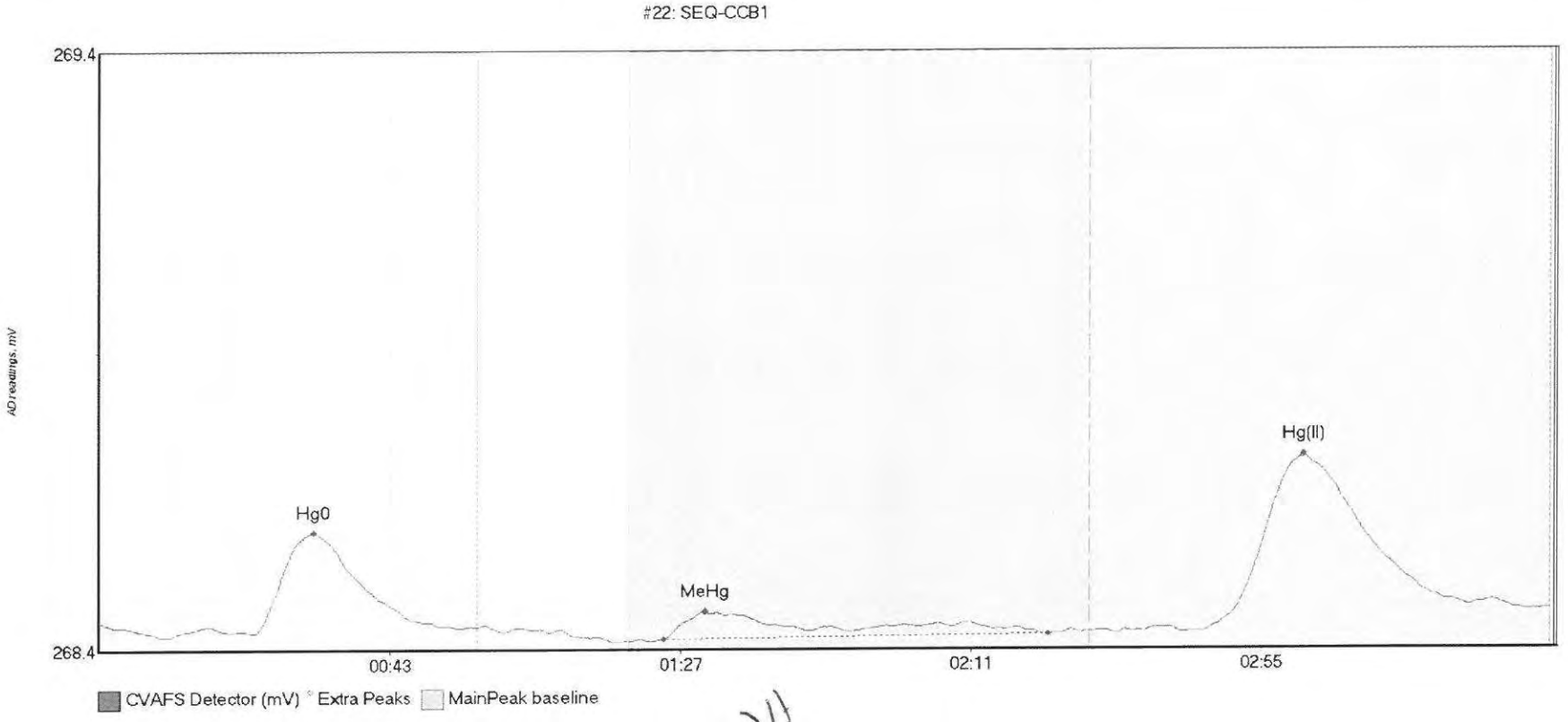
016



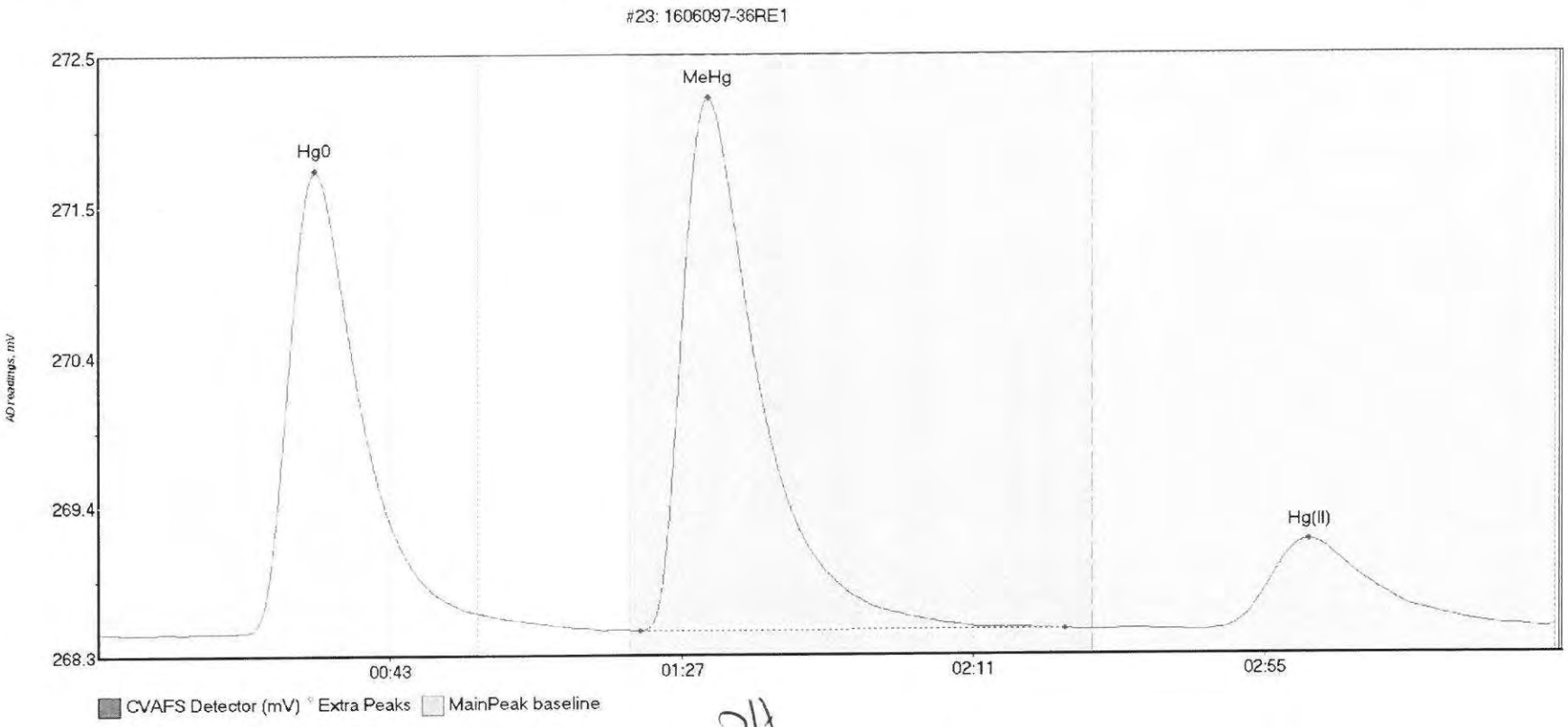
JH

Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CCV1 Hg0	632.816	21.7	57.5	268.45	268.66	32.7	5.333	CT	268.4607	0.00	0.06	
SEQ-CCV1 MeHg	378.424	82.1	131.6	268.50	268.49	91.9	2.861	OK	268.4607	0.00	0.06	
SEQ-CCV1 Hg(II)	258.480	166.0	218.5	268.48	268.52	182.4	1.463	OK	268.4607	0.00	0.06	

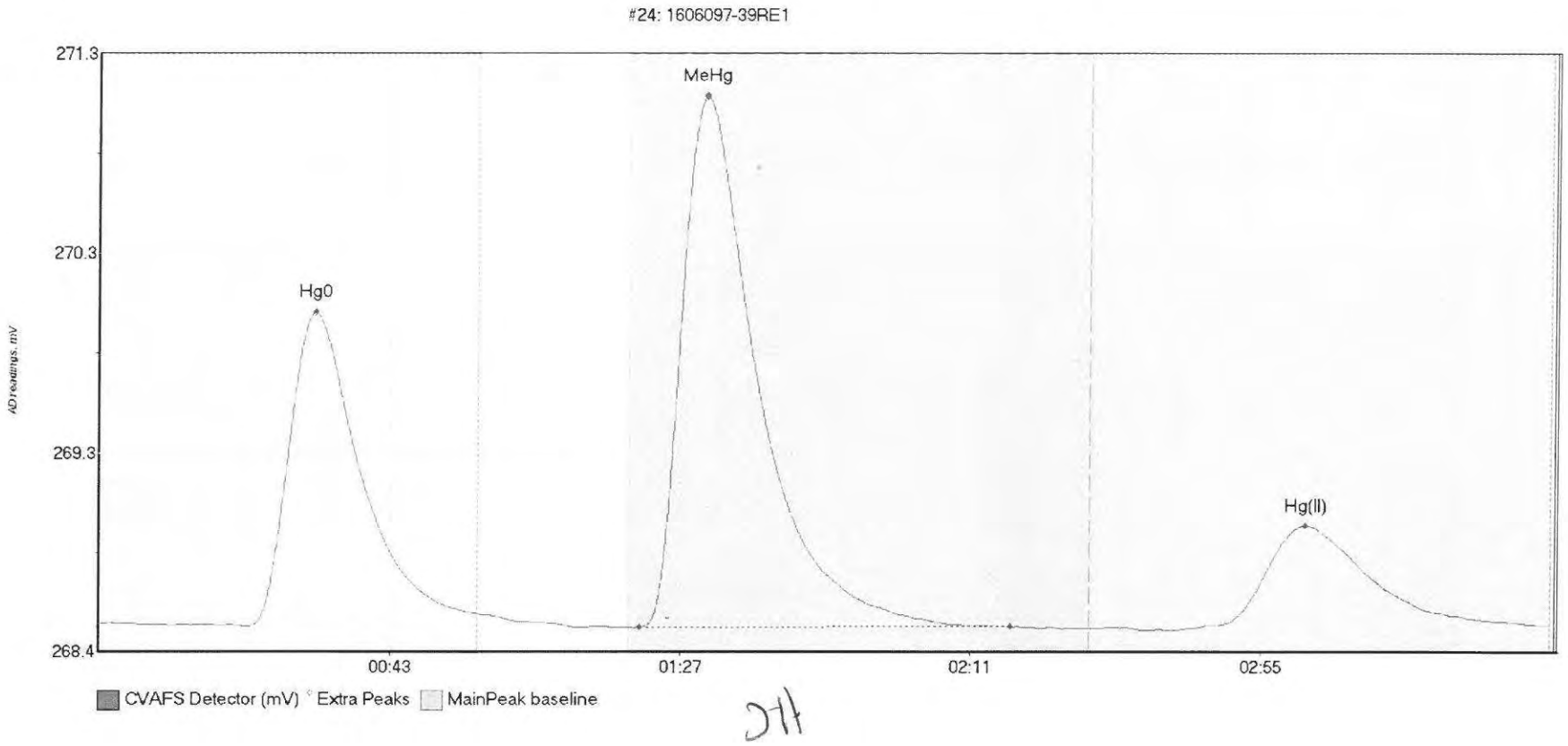
JJ6



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CCB1 Hg0	19.251	23.1	47.3	268.46	268.48	32.4	0.168	OK	268.4733	0.00	0.02	
SEQ-CCB1 MeHg	11.239	85.5	143.6	268.44	268.45	91.7	0.045	OK	268.4733	0.00	0.02	
SEQ-CCB1 Hg(II)	50.386	167.2	216.4	268.46	268.49	182.4	0.292	OK	268.4733	0.00	0.02	



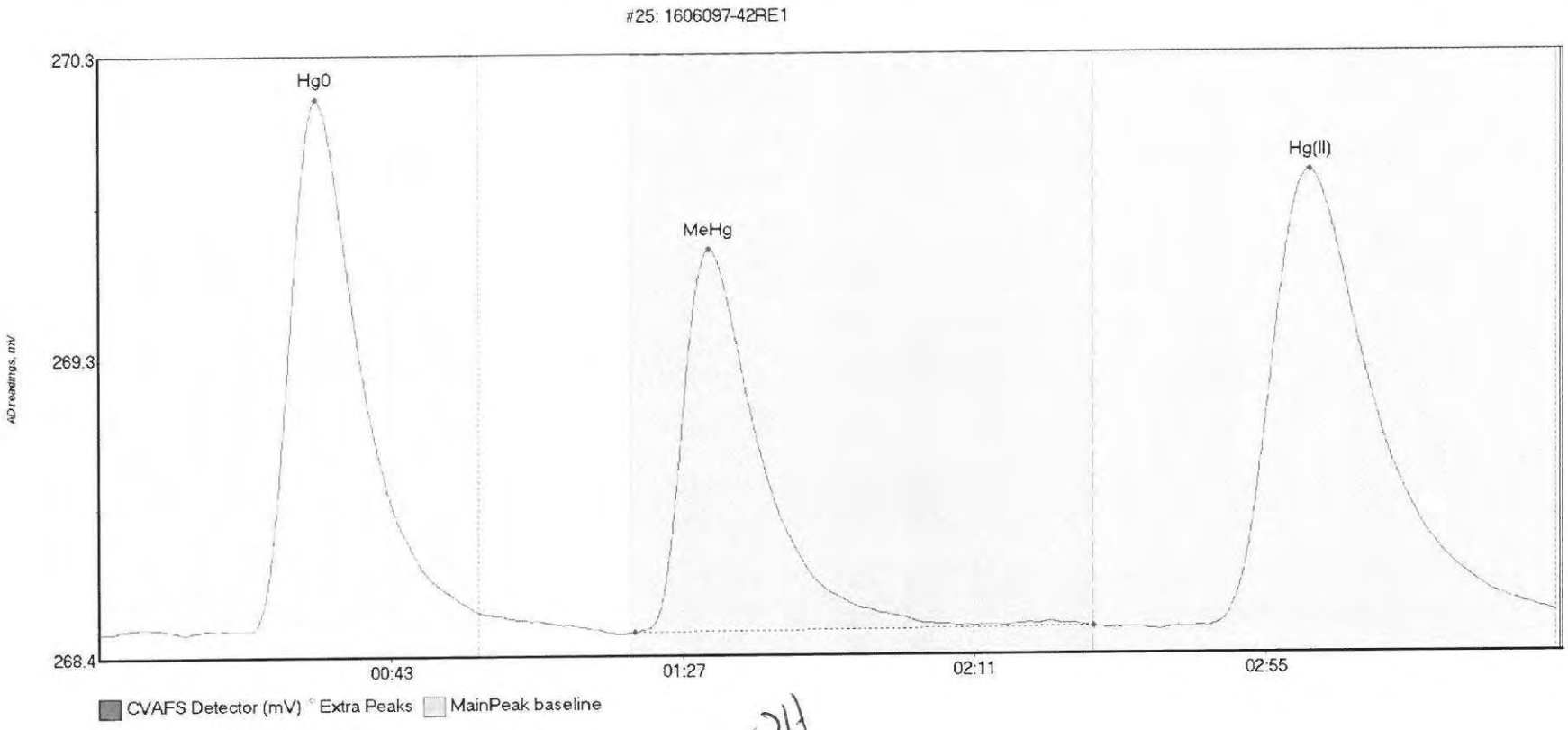
Name		Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1606097-36RE1	H	388.220	20.1	57.5	268.49	268.62	32.6	3.241	CT	268.4899	0.00	0.02	
1606097-36RE1	M	507.856	81.7	145.7	268.50	268.50	91.9	3.737	OK	268.4899	0.00	0.02	
1606097-36RE1	H	113.464	165.8	218.2	268.49	268.51	182.8	0.634	OK	268.4899	0.00	0.02	



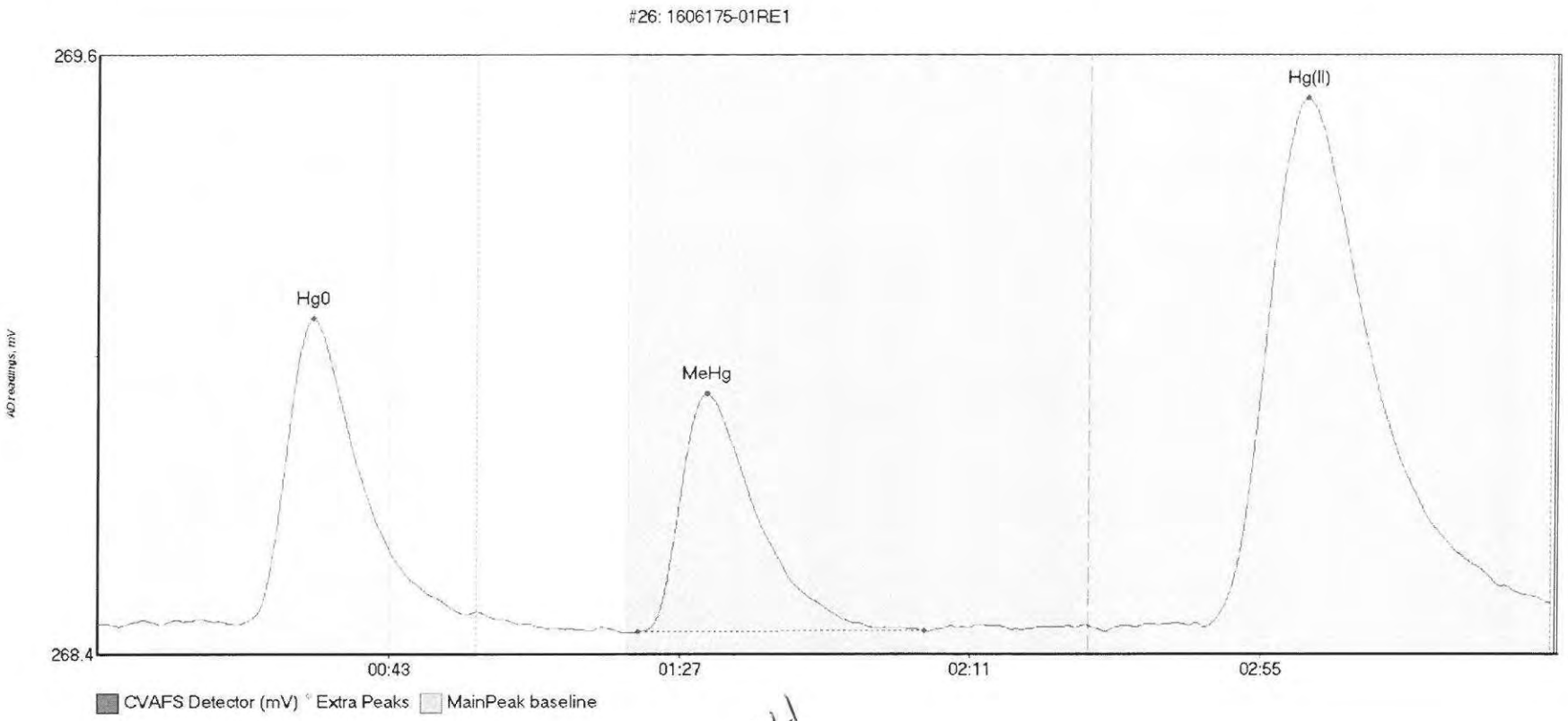
DH

Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1606097-39RE1 H	186.659	22.4	57.5	268.48	268.54	32.6	1.544	CT	268.4931	0.00	-0.01	
1606097-39RE1 M	348.486	81.9	138.0	268.47	268.48	91.8	2.612	OK	268.4931	0.00	-0.01	
1606097-39RE1 H	89.428	165.5	218.8	268.47	268.48	182.7	0.504	OK	268.4931	0.00	-0.01	

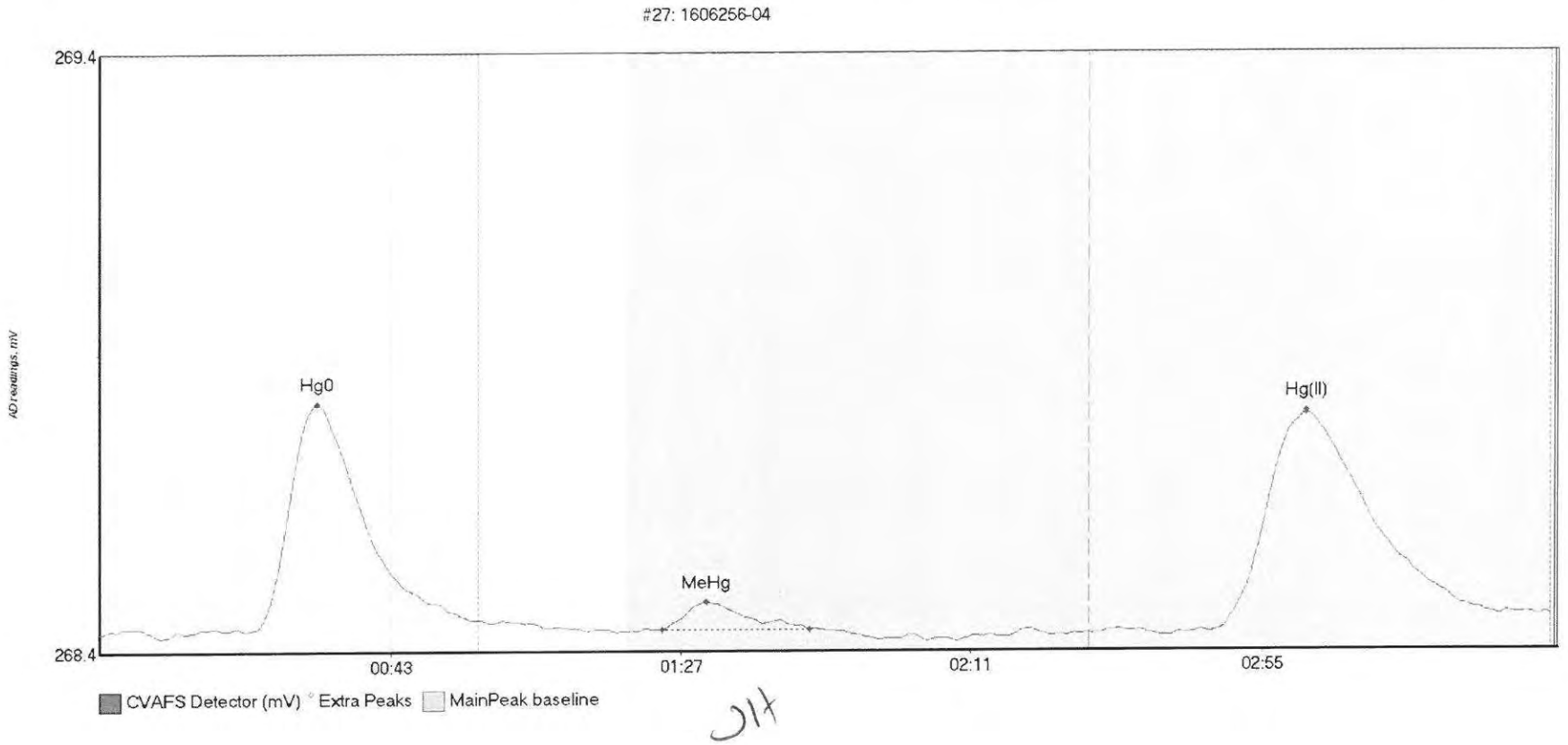
016



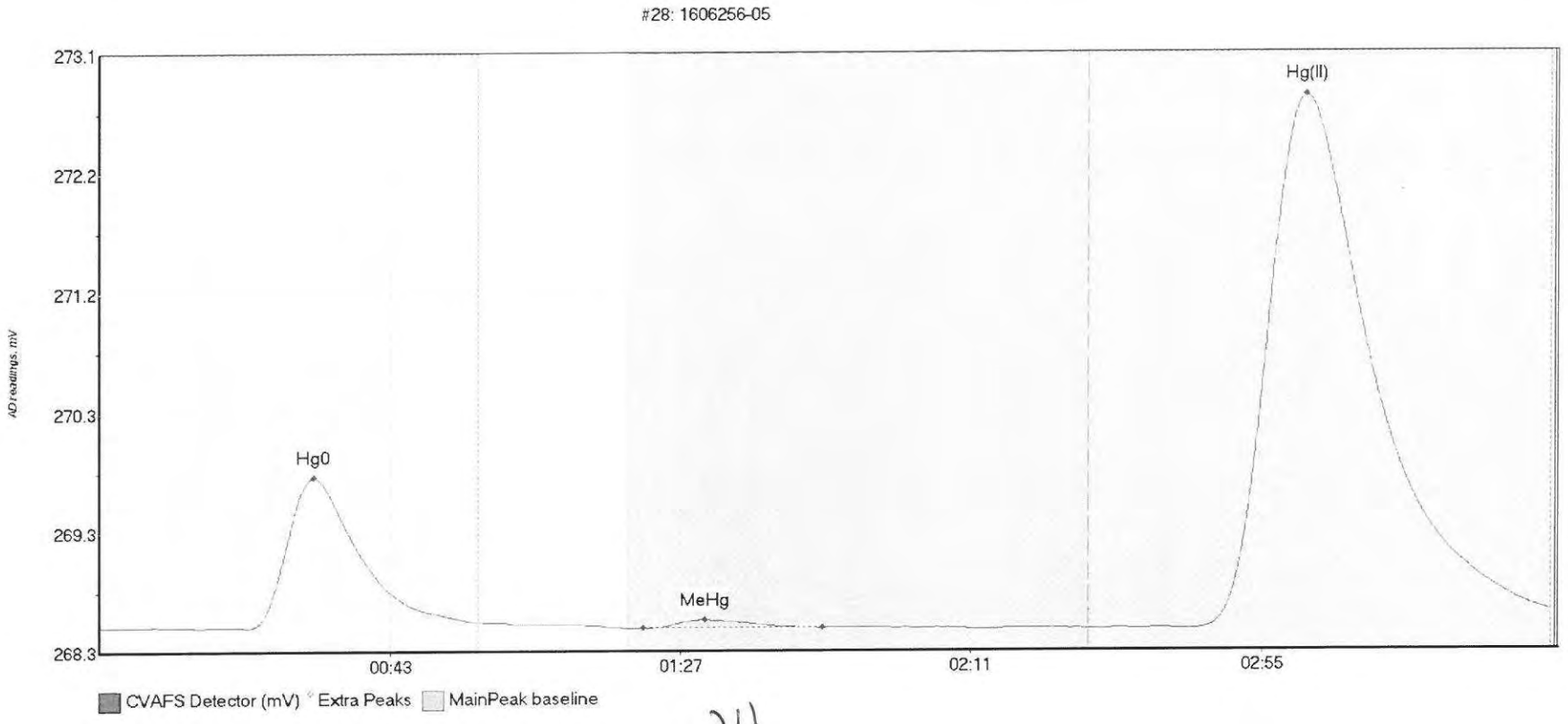
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1606097-42RE1 H	207.920	21.8	57.5	268.45	268.51	32.6	1.720	CT	268.4493	0.00	0.05	
1606097-42RE1 M	170.011	80.7	150.0	268.45	268.46	91.9	1.239	CT	268.4493	0.00	0.05	
1606097-42RE1 H	260.624	167.2	219.7	268.46	268.50	182.7	1.473	OK	268.4493	0.00	0.05	



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1606175-01RE1 H	75.206	21.2	55.8	268.47	268.49	32.4	0.610	OK	268.4750	0.00	0.04	
1606175-01RE1 M	63.342	81.8	125.1	268.46	268.46	92.0	0.474	OK	268.4750	0.00	0.04	
1606175-01RE1 H	190.375	167.6	219.8	268.47	268.52	182.9	1.053	CT	268.4750	0.00	0.04	



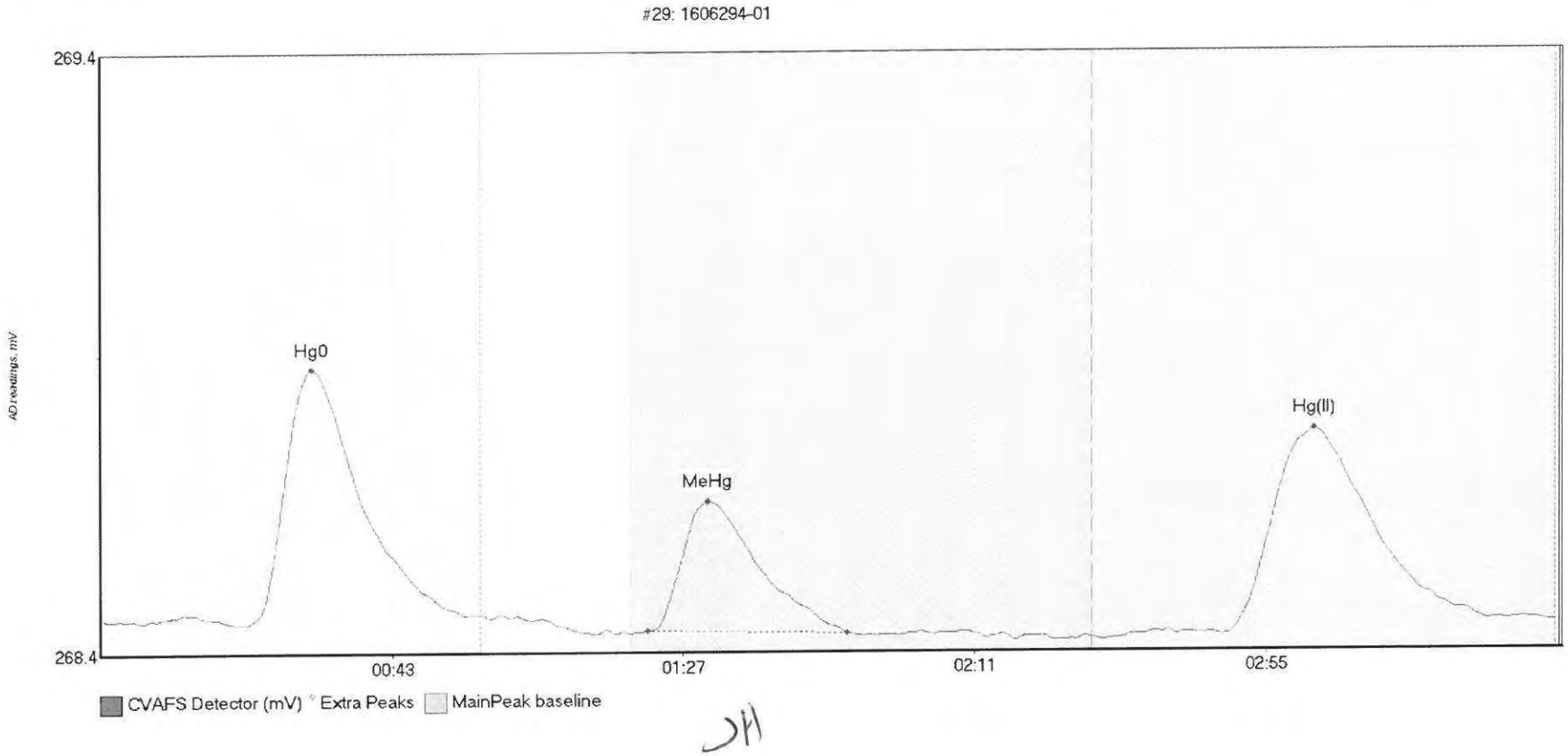
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1606256-04 Hg0	47.393	22.3	56.4	268.48	268.50	32.8	0.381	OK	268.4818	0.00	0.03	
1606256-04 MeHg	4.879	85.2	107.4	268.48	268.49	91.9	0.046	OK	268.4818	0.00	0.03	
1606256-04 Hg(I	64.816	168.1	218.0	268.48	268.51	182.8	0.365	OK	268.4818	0.00	0.03	



D17

Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1606256-05 Hg0	147.497	22.6	57.3	268.52	268.56	32.4	1.210	OK	268.5227	0.00	0.13	
1606256-05 MeHg	8.399	82.5	109.4	268.51	268.51	91.7	0.066	OK	268.5227	0.00	0.13	
1606256-05 Hg(I	775.797	165.7	219.8	268.50	268.65	182.8	4.291	CT	268.5227	0.00	0.13	

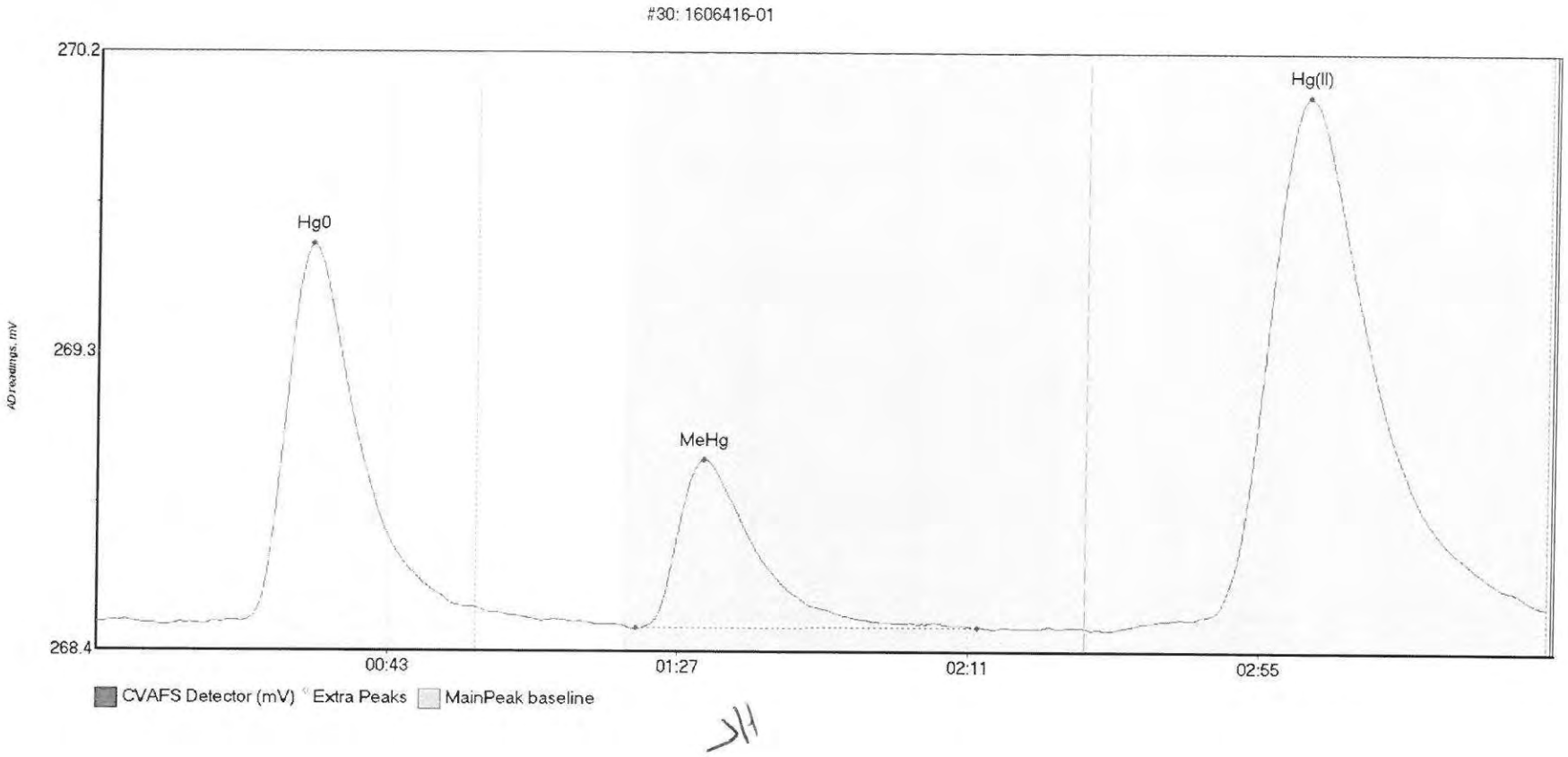
D16



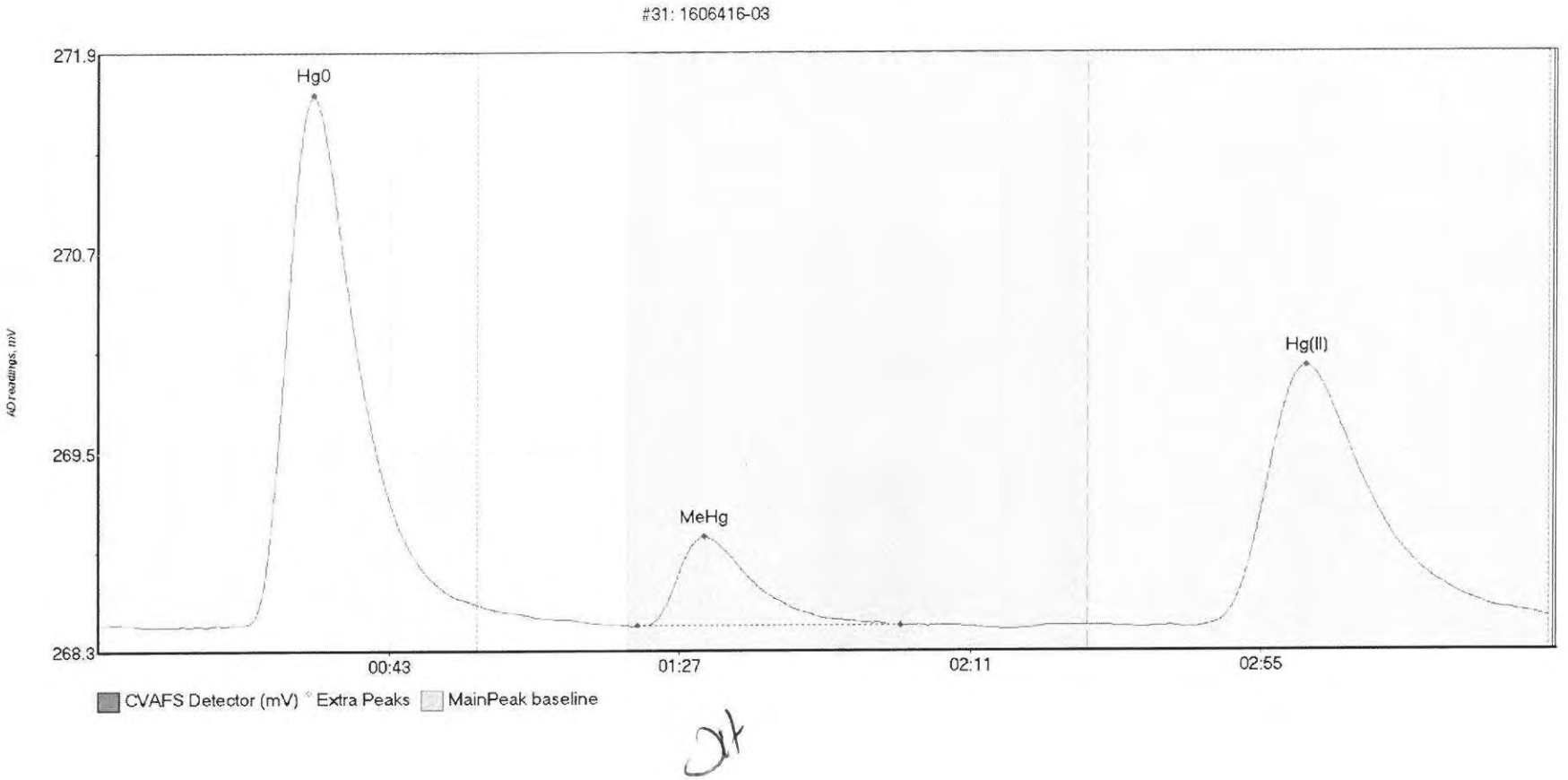
JH

Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1606294-01 Hg0	54.007	22.2	55.0	268.49	268.51	31.8	0.427	OK	268.5031	0.00	-0.01	
1606294-01 MeHg	28.781	82.7	112.8	268.48	268.48	91.8	0.216	OK	268.5031	0.00	-0.01	
1606294-01 Hg(I	59.668	154.2	219.8	268.47	268.49	183.3	0.347	CT	268.5031	0.00	-0.01	

016

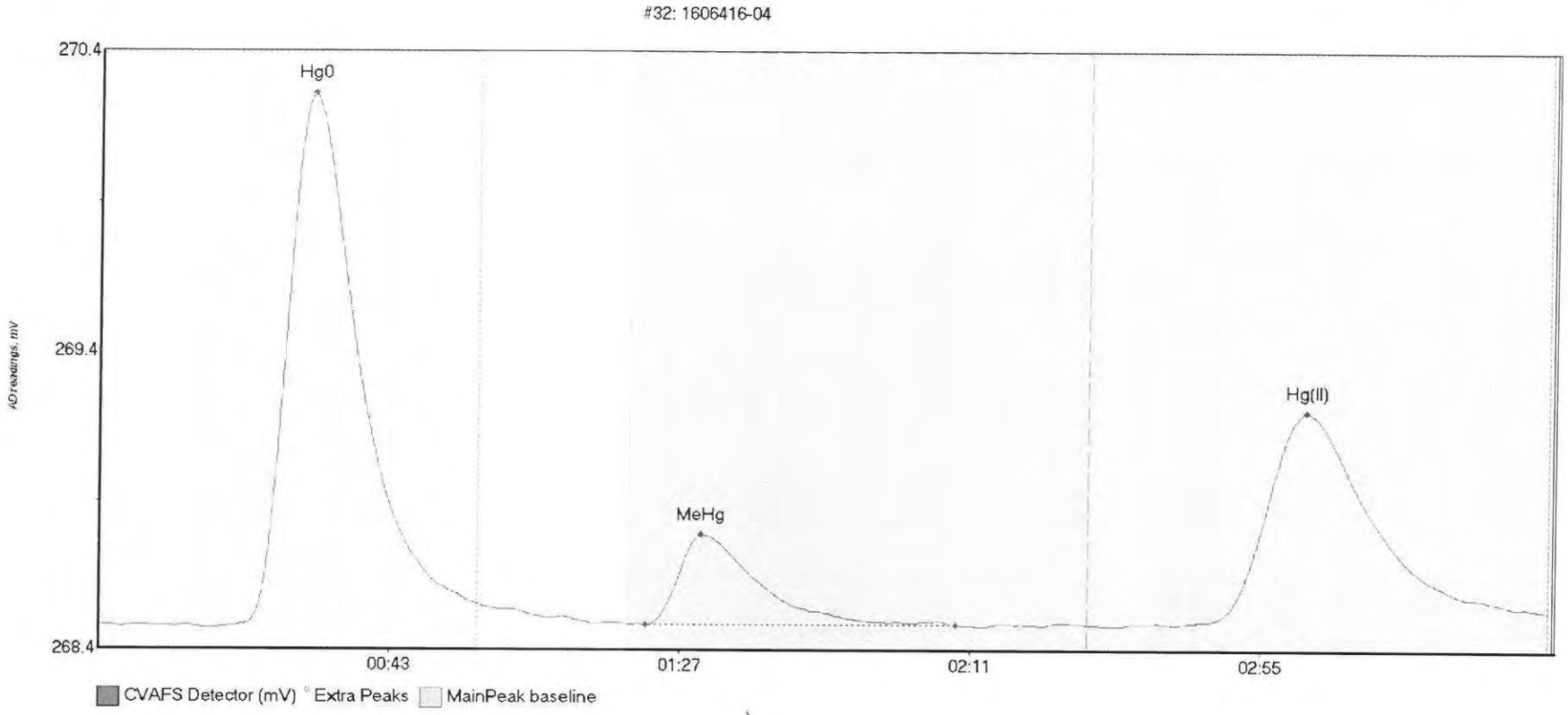


Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1606416-01 Hg0	134.557	22.1	57.5	268.49	268.53	32.5	1.122	CT	268.4868	0.00	0.05	
1606416-01 MeHg	68.908	81.8	133.4	268.47	268.47	91.9	0.503	OK	268.4868	0.00	0.05	
1606416-01 Hg(I	286.936	153.3	219.8	268.47	268.54	183.0	1.591	CT	268.4868	0.00	0.05	

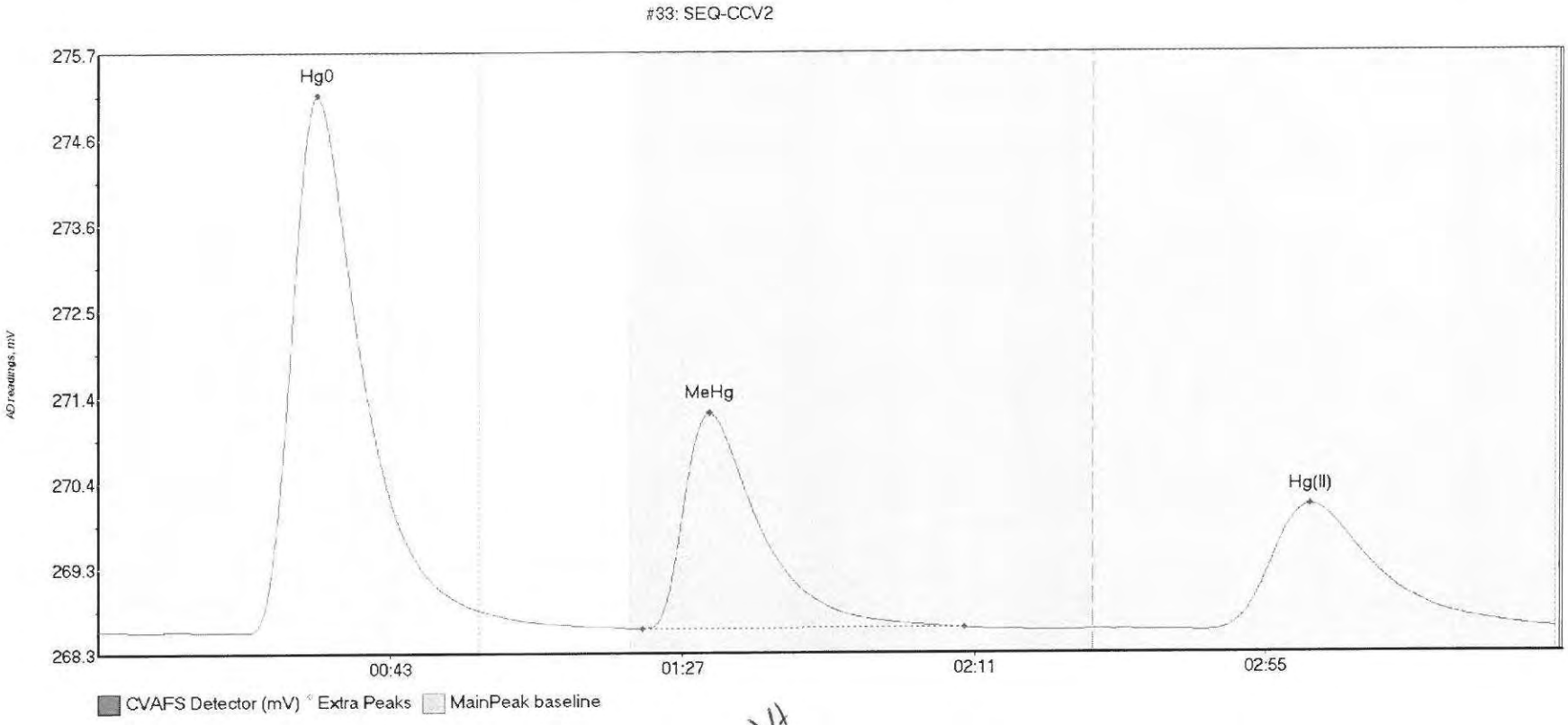


Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1606416-03 Hg0	380.669	22.1	57.5	268.51	268.62	32.6	3.154	CT	268.5062	0.00	0.05	
1606416-03 MeHg	70.669	81.7	121.5	268.50	268.50	91.9	0.532	OK	268.5062	0.00	0.05	
1606416-03 Hg(I	280.154	165.6	219.8	268.49	268.55	182.9	1.559	CT	268.5062	0.00	0.05	

016



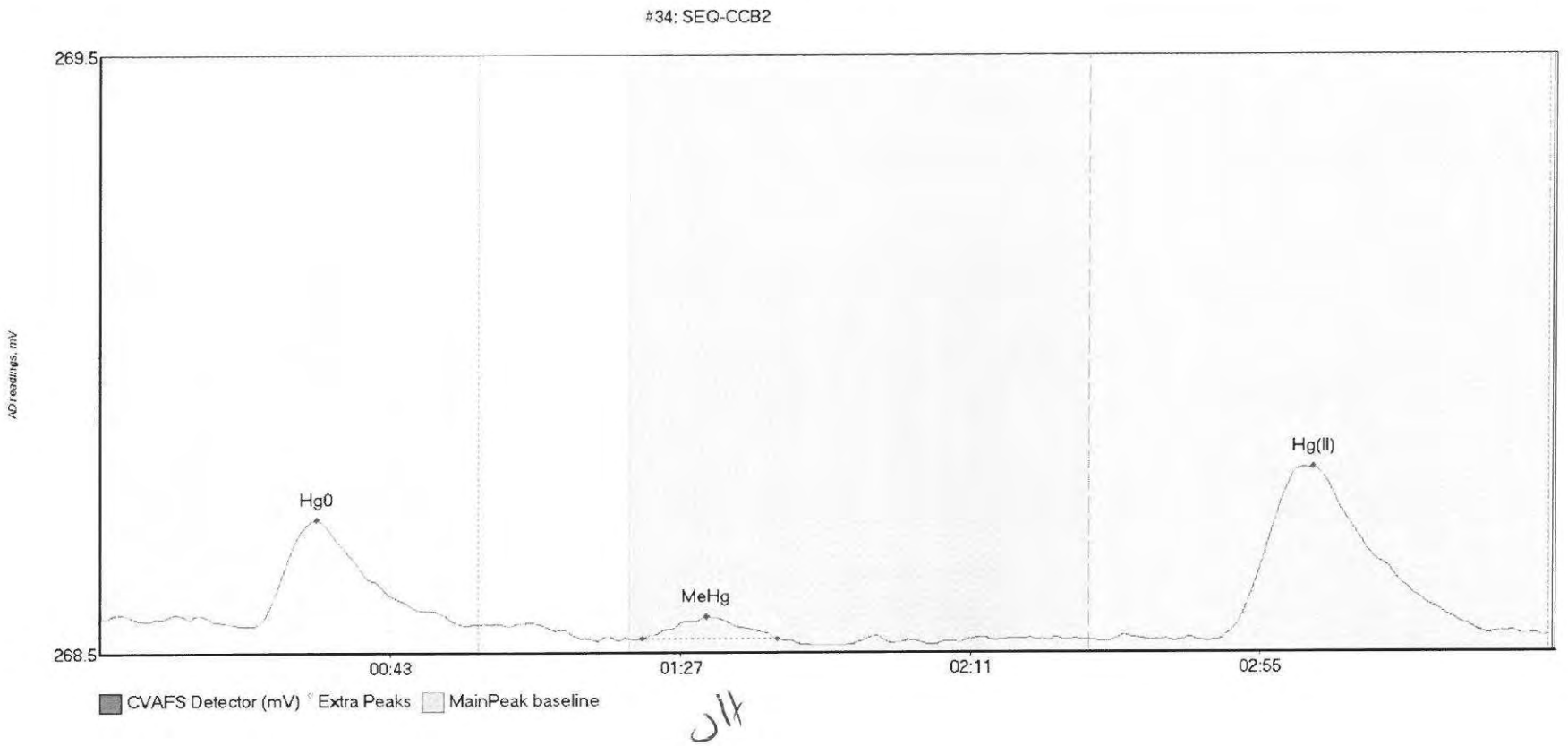
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1606416-04 Hg0	212.153	19.9	57.5	268.50	268.58	32.4	1.762	CT	268.5043	0.00	0.05	
1606416-04 MeHg	42.034	82.9	129.9	268.51	268.51	91.2	0.300	OK	268.5043	0.00	0.05	
1606416-04 Hg(I	123.779	163.5	219.8	268.51	268.55	182.8	0.706	CT	268.5043	0.00	0.05	



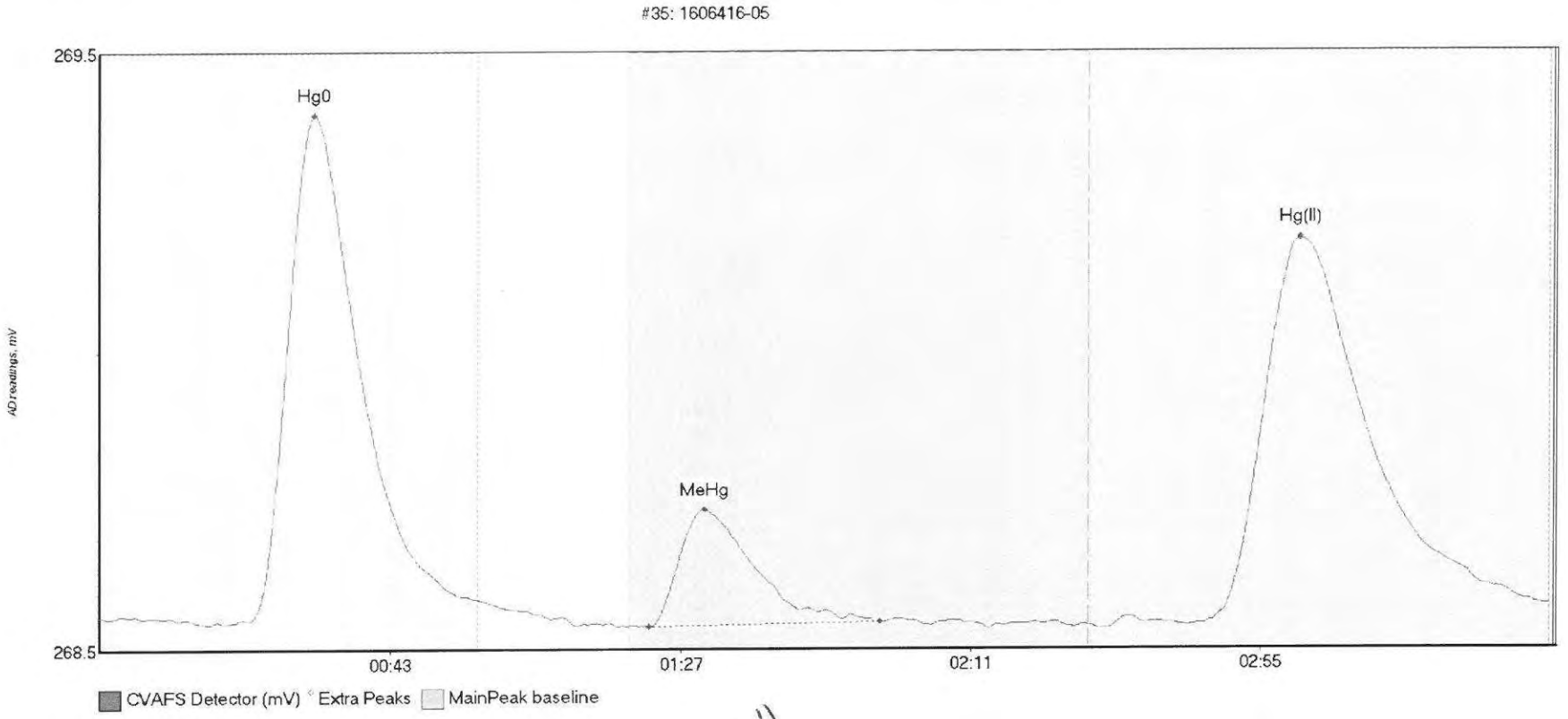
JH

Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CCV2 Hg0	785.159	22.3	57.5	268.53	268.79	33.0	6.630	CT	268.5445	0.00	0.03	
SEQ-CCV2 MeHg	354.116	82.0	130.5	268.57	268.57	92.1	2.668	OK	268.5445	0.00	0.03	
SEQ-CCV2 Hg(II)	281.157	166.6	219.8	268.53	268.57	182.8	1.558	CT	268.5445	0.00	0.03	

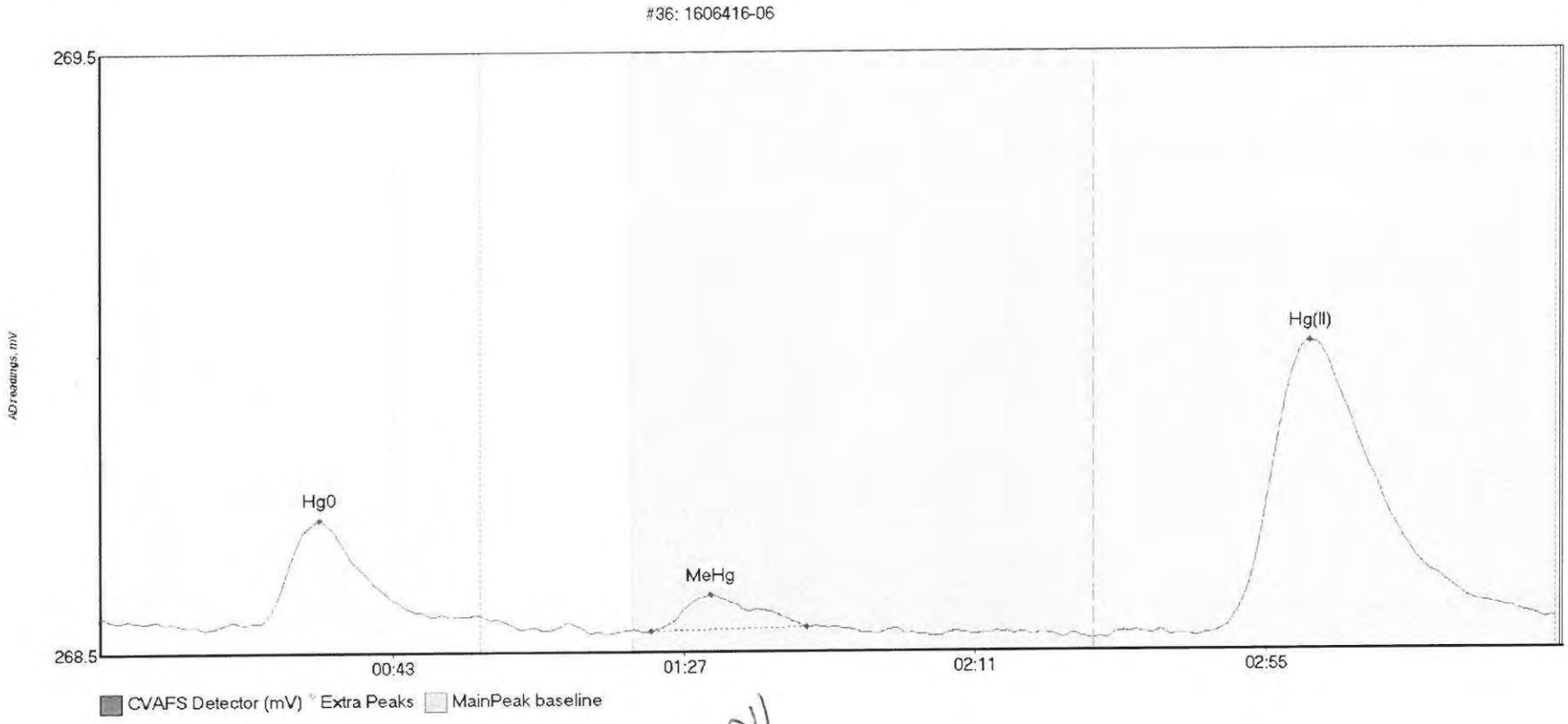
016



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CCB2 Hg0	23.813	23.8	55.1	268.52	268.52	32.8	0.176	OK	268.5292	0.00	-0.03	
SEQ-CCB2 MeHg	4.328	82.1	102.7	268.49	268.49	91.9	0.038	OK	268.5292	0.00	-0.03	
SEQ-CCB2 Hg(II)	52.503	169.6	219.1	268.49	268.50	184.1	0.290	OK	268.5292	0.00	-0.03	



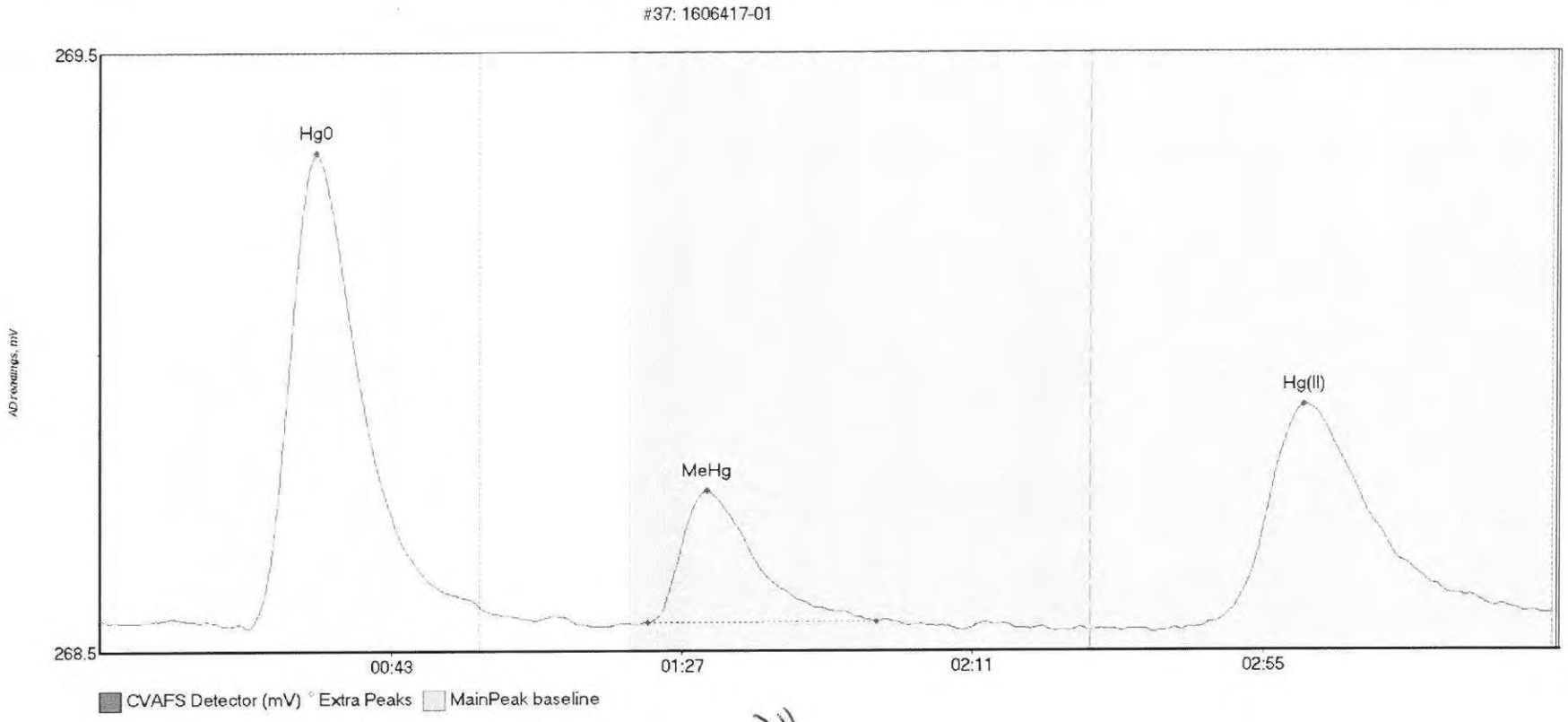
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1606416-05 Hg0	102.299	22.6	57.5	268.50	268.54	32.5	0.847	CT	268.5080	0.00	0.02	
1606416-05 MeHg	25.431	83.2	118.3	268.49	268.50	91.6	0.196	OK	268.5080	0.00	0.02	
1606416-05 Hg(I	115.448	167.3	219.3	268.50	268.53	182.1	0.644	OK	268.5080	0.00	0.02	



OH

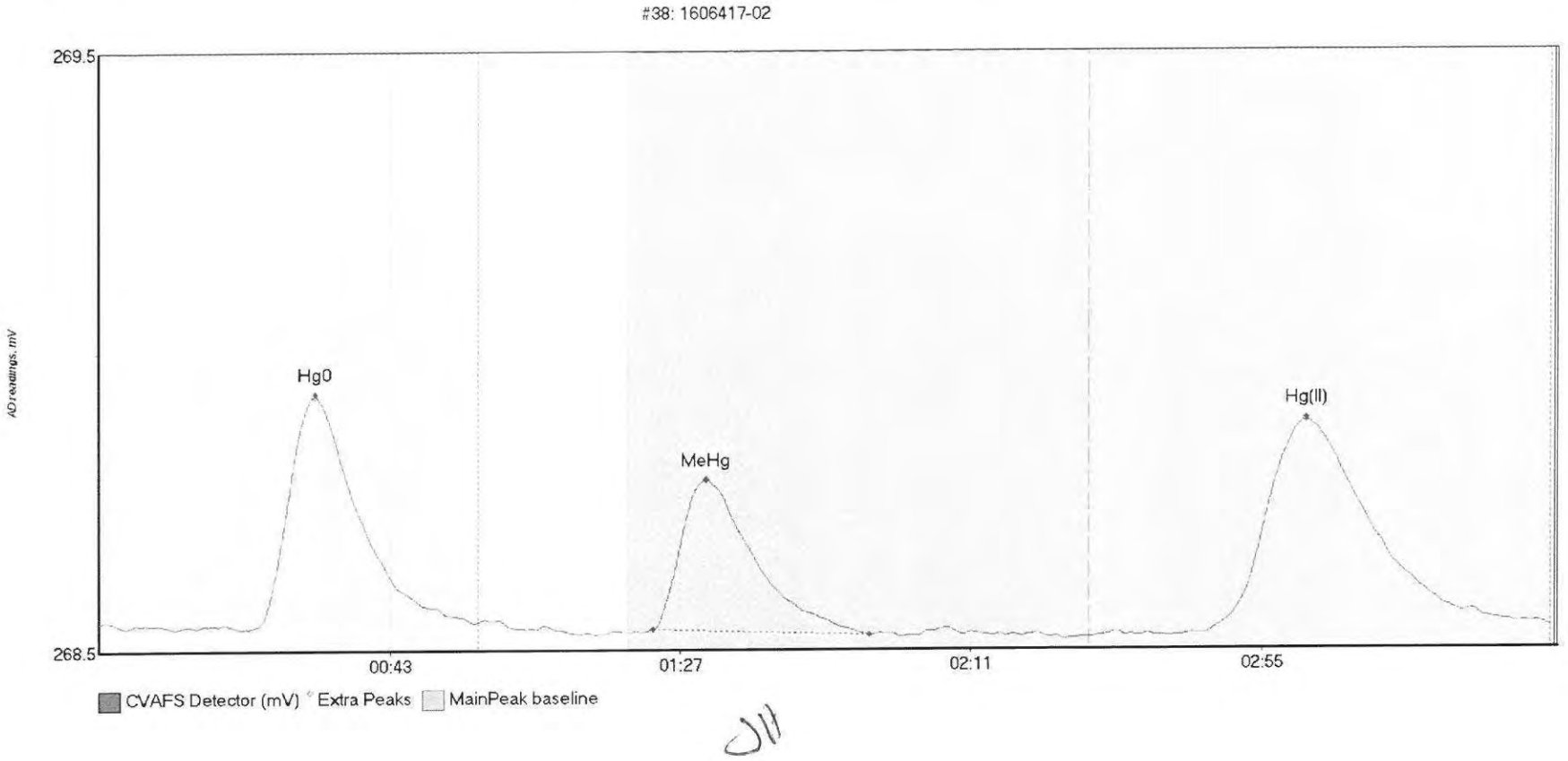
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1606416-06 Hg0	19.658	24.0	50.3	268.50	268.51	33.0	0.172	OK	268.5115	0.00	-0.01	
1606416-06 MeHg	7.086	83.0	106.6	268.49	268.49	92.0	0.061	OK	268.5115	0.00	-0.01	
1606416-06 Hg(I	88.325	165.6	218.3	268.48	268.50	182.7	0.491	OK	268.5115	0.00	-0.01	

016

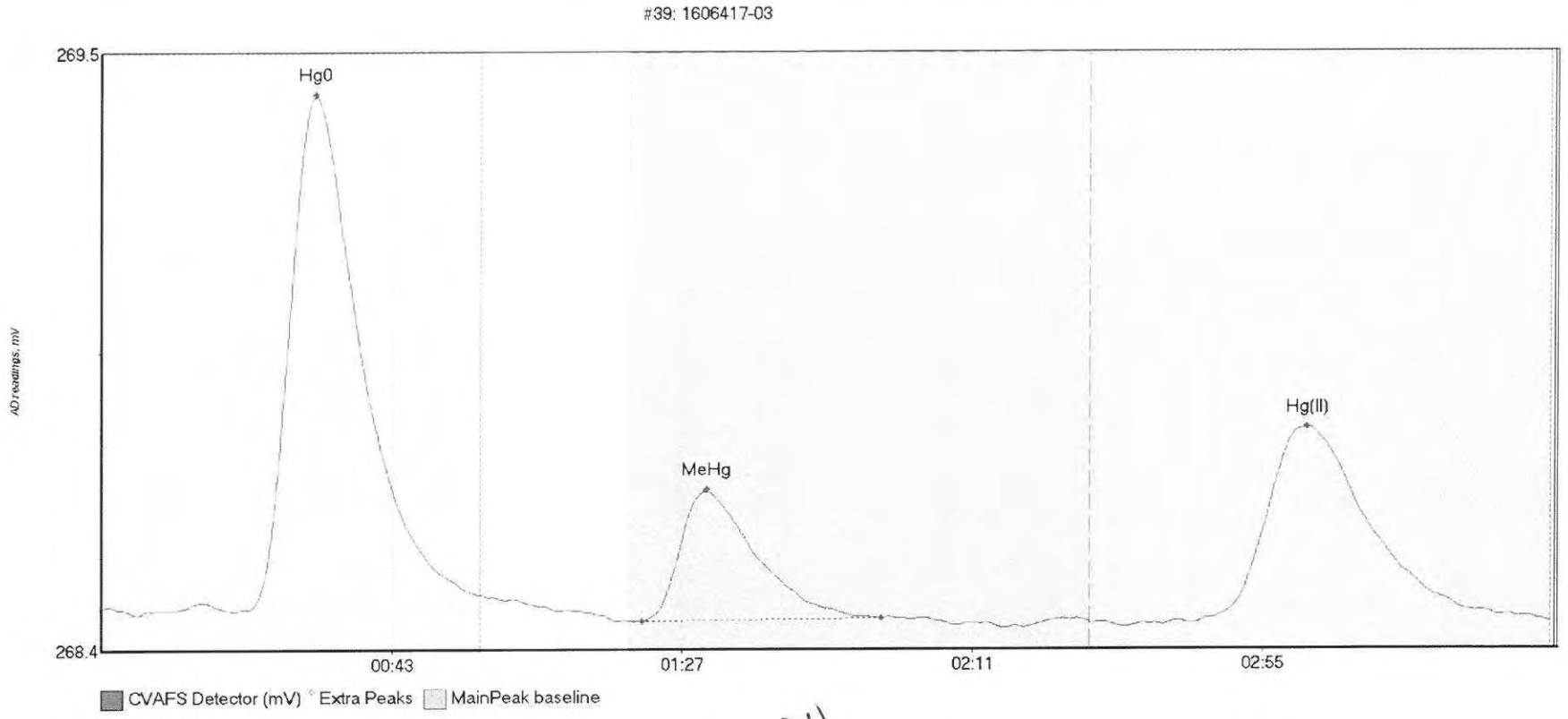


Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1606417-01 Hg0	95.626	22.5	57.5	268.49	268.52	32.6	0.792	CT	268.5034	0.00	0.01	
1606417-01 MeHg	28.117	82.9	117.5	268.50	268.50	91.7	0.220	OK	268.5034	0.00	0.01	
1606417-01 Hg(I	65.501	166.5	218.8	268.49	268.51	182.2	0.371	OK	268.5034	0.00	0.01	

016

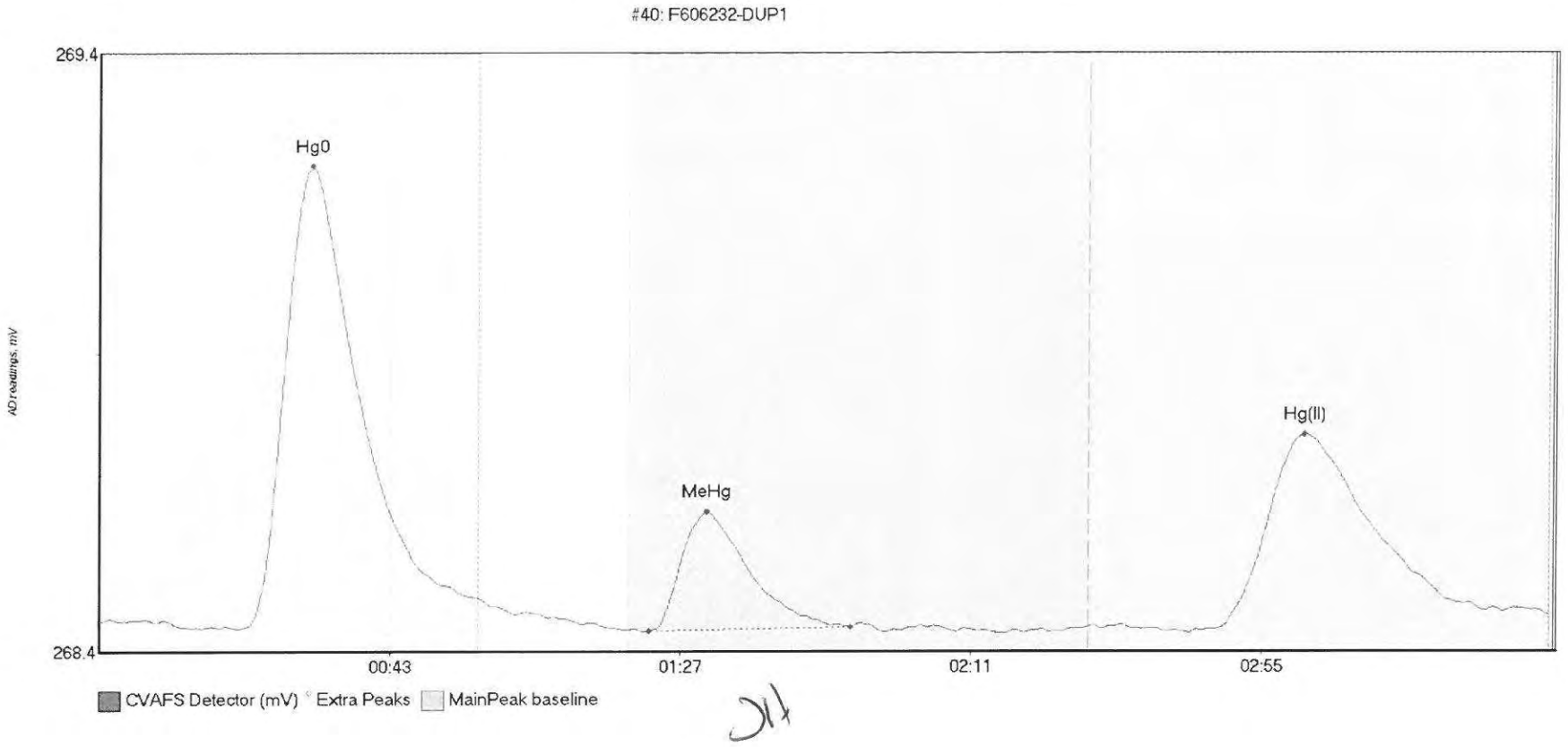


Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1606417-02 Hg0	45.953	23.5	56.6	268.49	268.50	32.7	0.388	OK	268.5010	0.00	-0.01	
1606417-02 MeHg	31.898	83.9	116.6	268.49	268.48	91.9	0.251	OK	268.5010	0.00	-0.01	
1606417-02 Hg(I	65.192	163.8	219.8	268.48	268.49	182.8	0.359	CT	268.5010	0.00	-0.01	

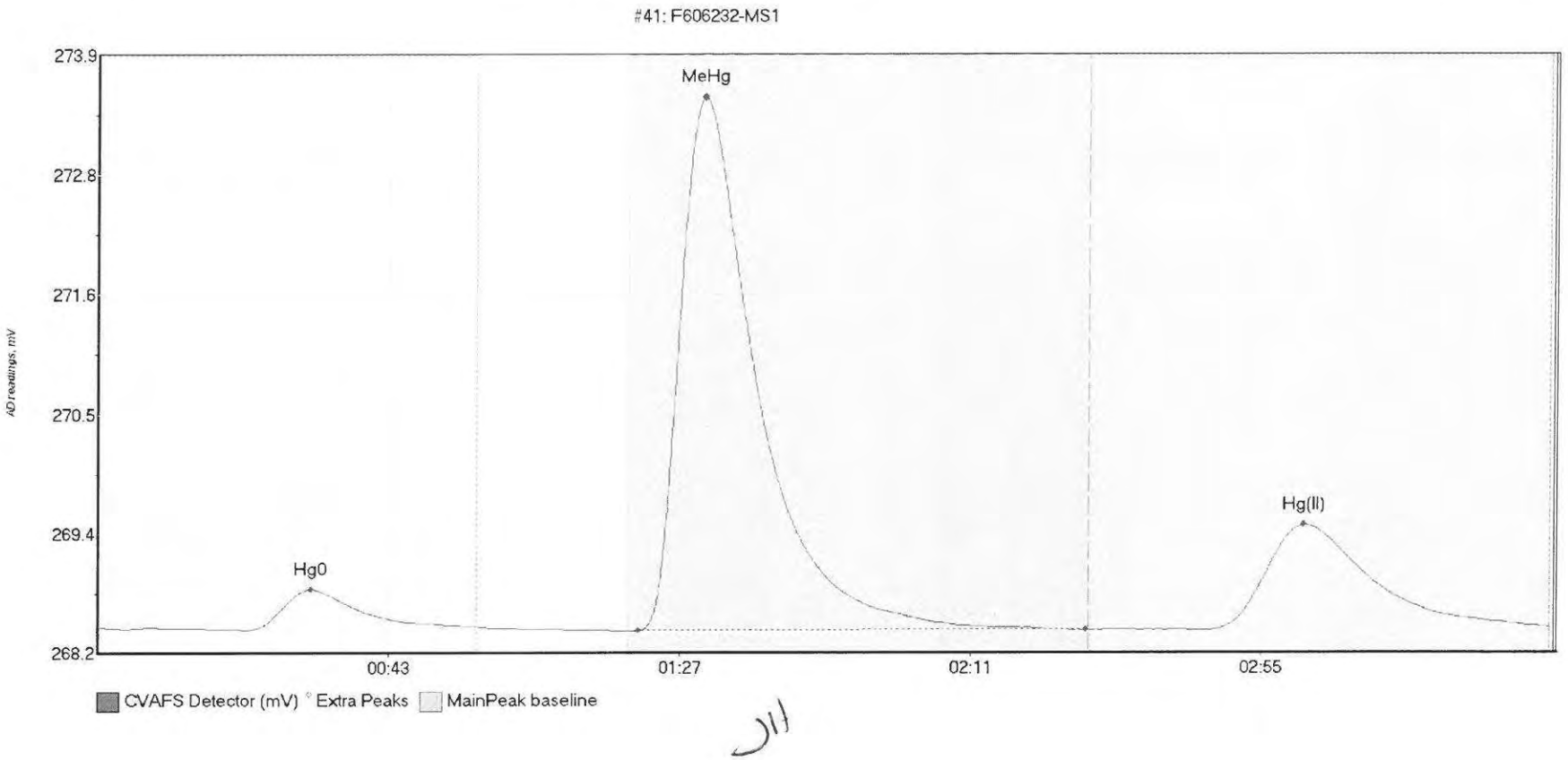


Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1606417-03 Hg0	117.787	22.1	57.5	268.48	268.51	32.5	0.970	CT	268.4836	0.00	-0.03	
1606417-03 MeHg	32.168	82.0	118.1	268.46	268.46	91.8	0.247	OK	268.4836	0.00	-0.03	
1606417-03 Hg(I	67.052	165.3	219.7	268.45	268.45	182.8	0.370	OK	268.4836	0.00	-0.03	

016

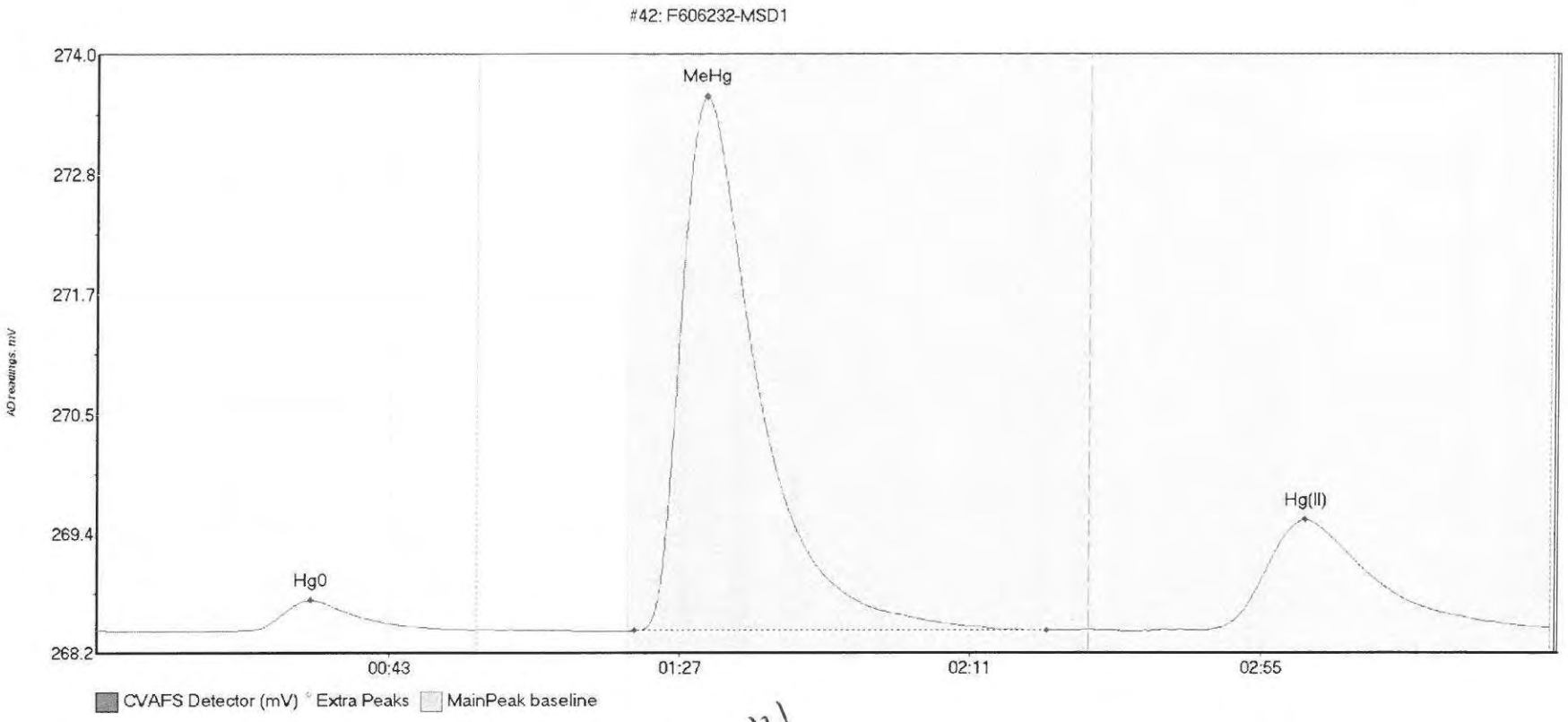


Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F606232-DUP1 Hg	94.125	21.3	57.5	268.44	268.49	32.3	0.772	CT	268.4549	0.00	0.01	
F606232-DUP1 Me	23.007	83.3	113.8	268.44	268.44	92.0	0.198	OK	268.4549	0.00	0.01	
F606232-DUP1 Hg	58.510	168.6	219.8	268.44	268.47	182.4	0.326	CT	268.4549	0.00	0.01	



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F606232-MS1 Hg0	47.966	22.3	57.5	268.44	268.47	32.2	0.386	CT	268.4631	0.00	0.01	
F606232-MS1 MeH	687.093	81.8	149.5	268.43	268.44	91.8	5.052	OK	268.4631	0.00	0.01	
F606232-MS1 Hg(	178.299	167.9	219.8	268.44	268.47	182.5	0.999	CT	268.4631	0.00	0.01	

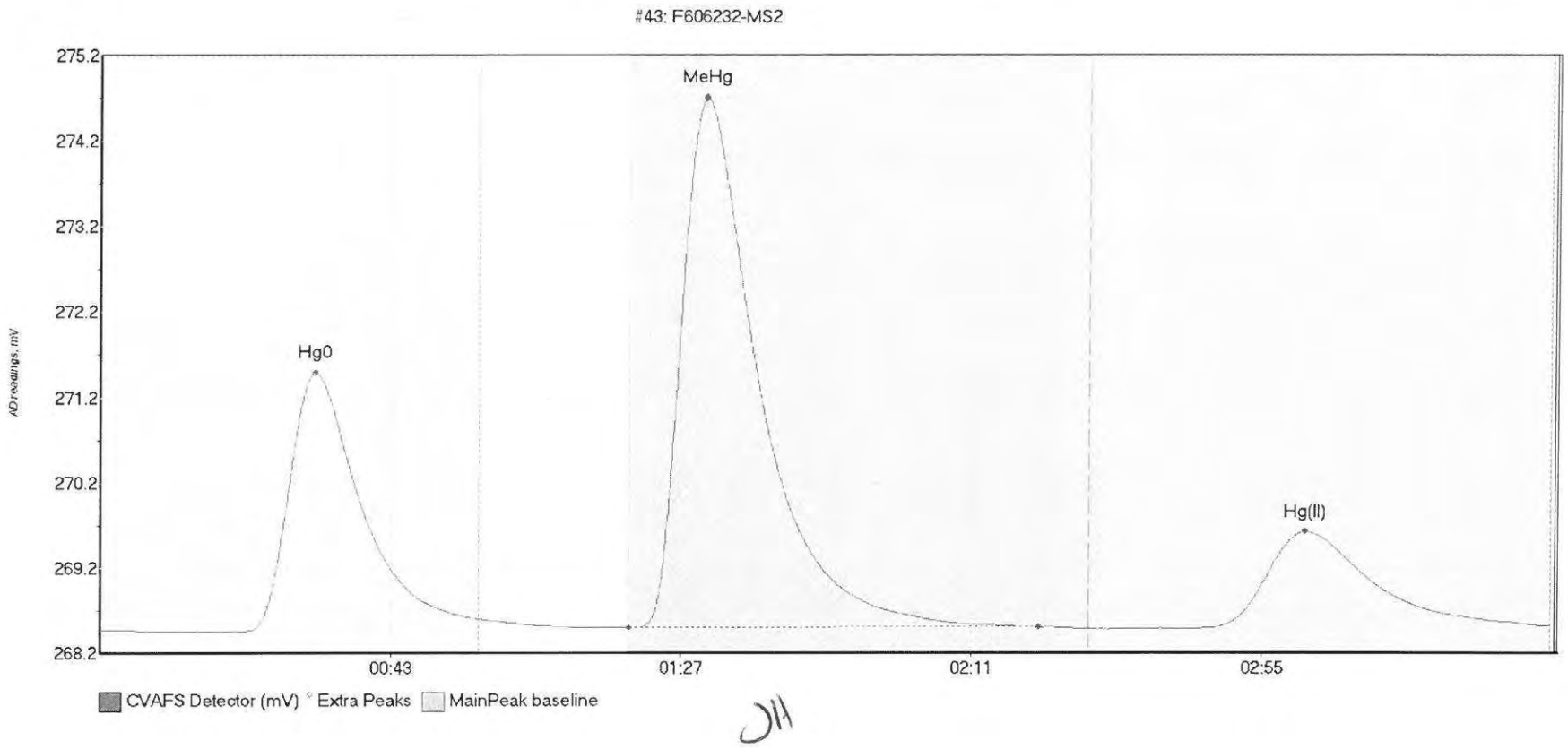
016



JH

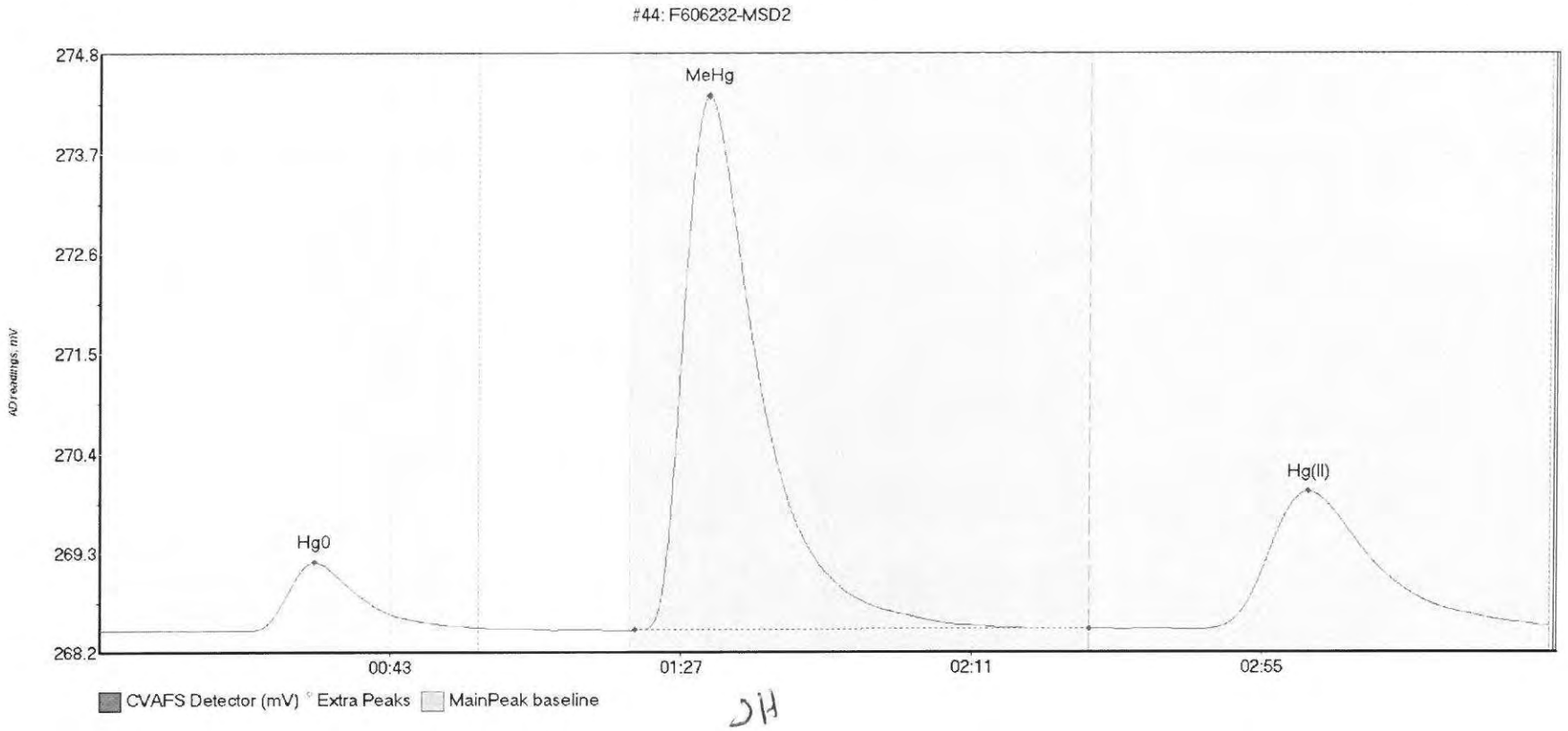
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F606232-MSD1 Hg	36.032	22.0	56.3	268.45	268.45	32.1	0.291	OK	268.4504	0.00	0.03	
F606232-MSD1 Me	695.025	81.2	143.6	268.44	268.45	91.9	5.139	OK	268.4504	0.00	0.03	
F606232-MSD1 Hg	191.032	167.5	219.2	268.45	268.48	182.7	1.064	OK	268.4504	0.00	0.03	

016



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F606232-MS2 Hg0	363.031	22.0	57.5	268.45	268.59	32.6	3.046	CT	268.4559	0.00	0.05	
F606232-MS2 MeH	839.540	80.1	142.3	268.49	268.49	91.8	6.241	OK	268.4559	0.00	0.05	
F606232-MS2 Hg(	206.434	164.2	219.7	268.47	268.51	182.5	1.149	OK	268.4559	0.00	0.05	

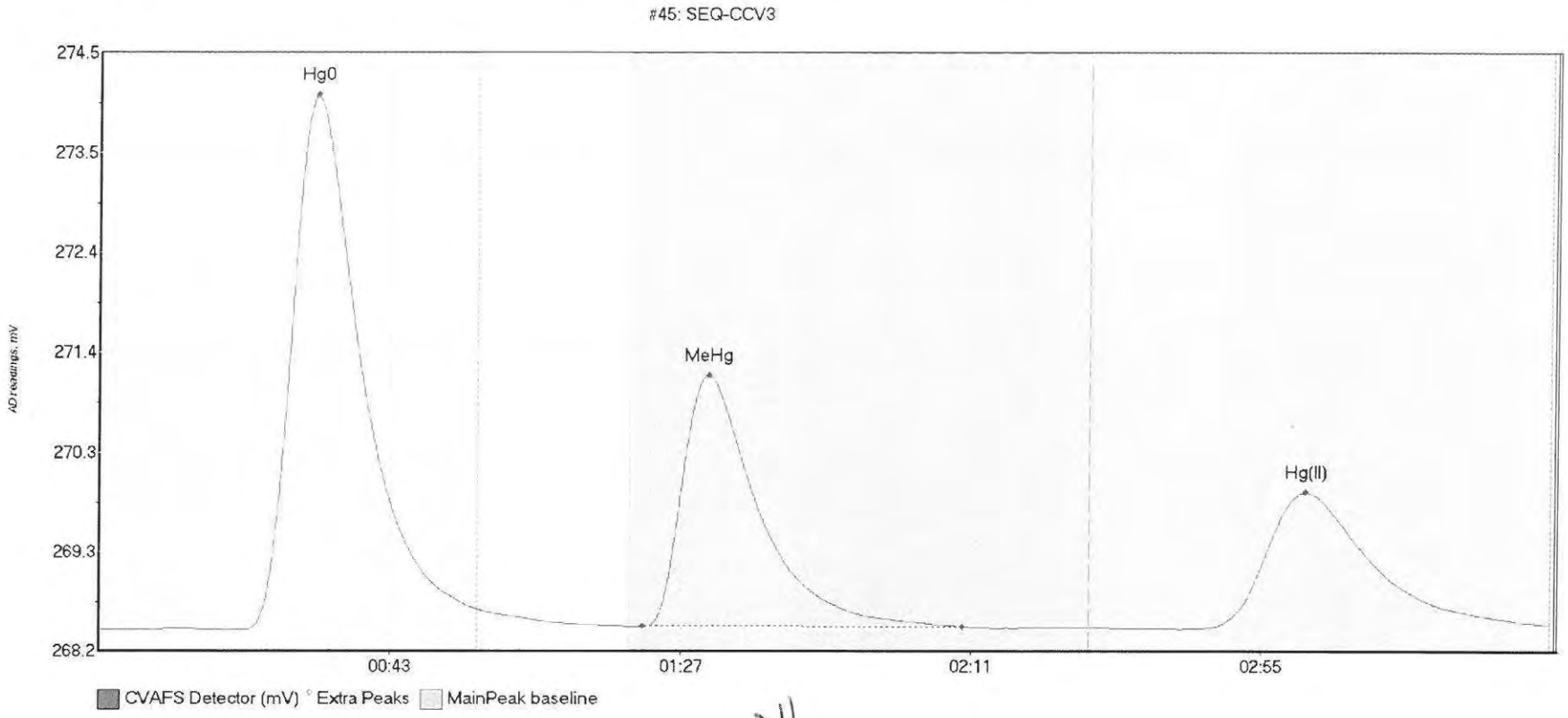
016



JH

Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F606232-MSD2 Hg	91.798	22.5	57.5	268.46	268.50	32.6	0.756	CT	268.4675	0.00	0.05	
F606232-MSD2 Me	792.324	81.0	149.9	268.47	268.48	92.2	5.872	OK	268.4675	0.00	0.05	
F606232-MSD2 Hg	274.558	166.1	219.8	268.47	268.52	183.1	1.523	CT	268.4675	0.00	0.05	

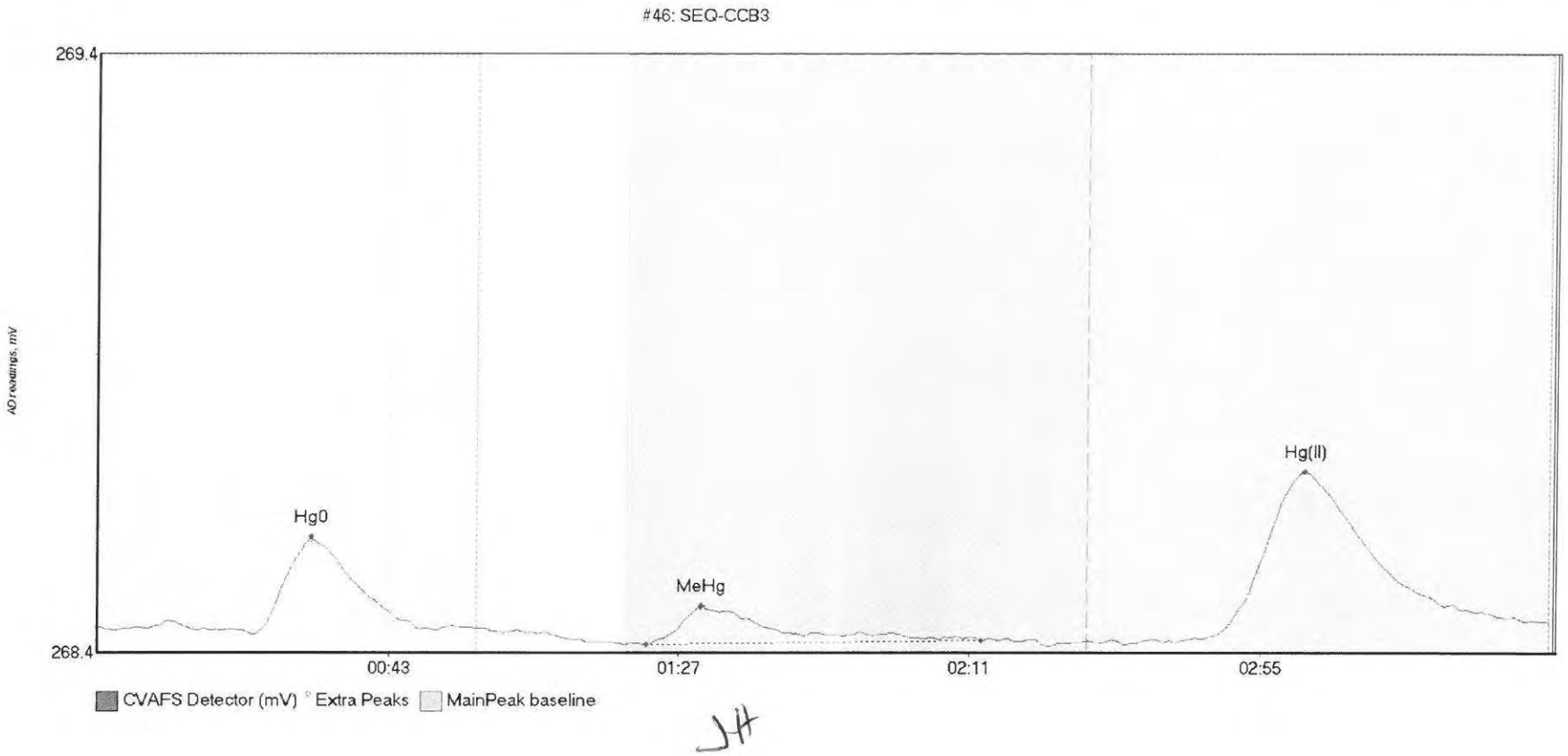
016



JH

Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CCV3 Hg0	670.826	21.8	57.5	268.46	268.67	32.8	5.638	CT	268.4629	0.00	0.05	
SEQ-CCV3 MeHg	354.474	82.1	130.7	268.49	268.49	92.1	2.653	OK	268.4629	0.00	0.05	
SEQ-CCV3 Hg(II)	258.056	166.3	219.0	268.47	268.51	182.7	1.441	OK	268.4629	0.00	0.05	

016



JH

Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CCB3 Hg0	17.992	23.7	48.8	268.45	268.46	32.3	0.159	OK	268.4597	0.00	0.01	
SEQ-CCB3 MeHg	10.666	83.2	133.9	268.43	268.44	91.4	0.063	OK	268.4597	0.00	0.01	
SEQ-CCB3 Hg(II)	49.960	167.2	219.8	268.44	268.47	182.8	0.279	CT	268.4597	0.00	0.01	

JI6

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

Analyst:	DON MORAN	**Sequence #:**	6F21008
Reviewer:	Jeanne Haire	**Dataset ID #:**	MMHG27001-160621-1
Date:	6/21/16	**WO #:**	VARIOUS
Batch #(s):	F606232	**Client(s):**	VARIOUS

- **Select the correct preparation method.**

Analyte	Prep Method		Matrix
☑ MHg	FGS-013	MHg Distillation	Water
☐ MHg	FGS-010	KOH/MeOH Digest	Tissue
☐ MHg	FGS-045	MeCl Extraction	Sed/Soil
☐ DMHg	FGS-098 (None Accredited method)		ALL

Additional Comments:

	Analyst Initials: DM		Reviewer Initials: JH
1. Compare Sample ID with Bench sheet/Sequence/Raw Data (Have all samples been imported?)	☑ YES	☐ NO	☑
2. Check for transcription errors from Excel spreadsheet (or Prep Bench sheet)/Raw data	☑ YES	☐ NO	☑
(a) Reviewer: 100% of peak heights checked	☑ YES	☐ NO	☑
(b) Are there peak height errors?	☐ YES	☑ NO	☑
(c) Error on a sample: Do peak heights, responses, & initial results match corrected data?	☐ YES	☐ NO ☑ N/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 ☐ N/A	☑
(f) Check and compare masses (review prep bench sheet)	☐ YES	☐ NO ☑ N/A	☑
(g) Check and compare initial and final volumes	☑ YES	☐ NO ☐ N/A	☑
(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 ☐ N/A	☑
(j) Is the sequence #, analyst, date, and instrument # on the QC page?	☑ YES	☐ NO	☑
(k) Is the analysis status correct? (analyzed/initial review/reviewed)	☑ YES	☐ NO	☑
(l) Original prep bench sheet added to data package?	☑ YES	☐ NO	☑
(m) Benchsheet prep date MUST match actual prep date (check if re-shot vs re-extract)	☑ YES	☐ NO	☑
3. High QA? WO#(s)/Client(s): _____	☐ YES	☑ NO	☑
4. Client specific QC? (if Yes, refer to Project Notes/LIMS)	☑ YES	☑ NO JH 6/21/16	☑
(a) Have the QC requirements been met for all WO#s?	☑ YES	☐ NO	☑
5. 20 or fewer samples in batch? _____	☑ YES	☐ NO	☑
(a) 3 PBs, 1 LCS/LCSD (or BS/BSD), 2 MS/MSD/MD per batch?	☑ YES	☐ NO	☑
(b) 1 CCV and 1 CCB every 10 analytical runs? _____	☑ YES	☐ NO	☑
QA/QC Data Checked			
6. The calibration curve included a minimum of 5 Standards	☑ PASS	☐ FAIL ☐ N/A	☑
Comments: _____			
7. 1st Calibration Standard % Recoveries (65-135%)	☑ PASS	☐ FAIL ☐ N/A	☑
Comments: _____			
8. RSD CF (≤ 15%)	☑ PASS	☐ FAIL	☑
Comments: _____			

Peer Review Check List for MHg for CV-GC-AFS (FGS-070) 2013 Rev 4 (08/22/2013)

Analyst:	DON MORAN	**Sequence #:**	6F21008
Reviewer:	Jeanne Harel	**Dataset ID #:**	MMHG27001-160621-1
Date:	6/21/2016	**WO #:**	VARIOUS
Batch #(s):	F606232	**Client(s):**	VARIOUS

	Analyst Initials: DM			Reviewer Initials: JH
9. ICV % Recoveries 67-133%	☑ PASS	☐ FAIL		☑
Comments:				
10. CCV % Recoveries 67-133%	☑ PASS	☐ FAIL		☑
Comments:				
11. Are the absolute value of the ICB and CCBs < PQL?	☑ PASS	☐ FAIL		☑
Comments:				
12. LCS/LCSD/CRM/BS/BSD % Recoveries (70-130%)	☑ PASS	☐ FAIL		☑
Comments:				
13. LCS/LCSD or BS/BSD RPD (< 25%)	☑ PASS	☐ FAIL		☑
Comments:				
14. Water: Average of Preparation Blanks < 0.045 ng/L and standard devaition of 0.015 ng/L?	☑ PASS	☐ FAIL	☐ N/A	☑
Comments:				
15. Sediment/Tissue: Individually, are the Preparation Blanks < PQL for the matrix?	☐ PASS	☐ FAIL	☑ N/A	☑
Comments:	☐ PASS	☐ FAIL		☐
16. Have Total Solids been applied? (If NO, please ensure that they are done or nearly done)	☐ YES	☐ NO	☑ N/A	☑
17. Is the correct 'Source' designated for MD/MS/MSD?	☑ YES	☐ NO		☑
18. For digested preps: was there a spike witness signature & date on the prep bench sheet?	☑ YES	☐ NO	☐ N/A	☑
19. MD RPD/MT RSD(< 35%)	☑ PASS	☐ FAIL		☑
Comments:				
20. Is there one set of MS/MSD per every 10 samples?	☑ PASS	☐ FAIL		☑
Comments:				
21. MS/MSD RPD(< 35%)	☑ PASS	☐ FAIL		☑
Comments:				
22. MS (AS) % Recoveries (65-130%)	☑ PASS	☑ FAIL		☑
Comments: ***F606232-MS2 FAILED. HIGH RECOVERY***				
23. MSD (ASD) % Recoveries (65-130%)	☑ PASS	☑ FAIL		☑
Comments: ***F606232-MSD2 FAILED. HIGH RECOVERY***				
24. Spiked 1-5X ambient or 1-5X PQL (whichever is higher) (from EPA 1630)	☑ YES	☐ NO		☑
25. Are all samples within instrument calibration range (or at maximum aliquot size)?	☑ YES	☐ NO		☑
Comments:				
26. For instrumental dilutions, is the dilution factor in excel correct?	☑ PASS	☐ NO	☐ N/A	☑
Is the sample volume, diluents, and final volume of the dilution noted on benchsheet?	☑ PASS	☐ NO	☐ N/A	☑
27. Dissolved < Total metals (if applicable)	☐ PASS	☐ NO	☑ N/A	☑
Comments:				
28. Effluent < Influent metals (visually confirm if needed)	☐ PASS	☐ NO	☑ N/A	☐
Comments:				

Peer Review Check List for MHg for CV-GC-AFS (FGS-070) 2013 Rev 4 (08/22/2013)

Analyst:	DON MORAN	**Sequence #:**	6F21008
Reviewer:	Jeanne Harel	**Dataset ID #:**	MMHG27001-160621-1
Date:	6/21/2016	**WO #:**	VARIOUS
Batch #(s):	F606232	**Client(s):**	VARIOUS

	Analyst Initials: DM		Reviewer Initials: JH	
29. Are re-runs noted with reason?	☐ YES	☐ NO	☑ N/A	☑
Comments:				
30. For failing QC (CCV, CCB, PB, BS/BSD, CAL):	☐ YES	☐ NO	☑ N/A	☑
Was a bubbler and trap test run before the analytical run continued?				
Comments:				
31. Do re-run results compare to initial analysis (< 35% RPD)?	☐ YES	☐ NO	☑ N/A	☑
Comments:				
32. Are qualifiers consistent with the data review flowcharts?	☑ YES	☐ NO	☐ N/A	☑
Comments:				
33. Have non-reportable samples been imported into LIMS and clicked to non-reportable?	☑ YES	☐ NO	~~☑~~ N/A	☐
Comments: JH 6/21/16				
34. Have re-extracts been created for non-reportable samples?	☐ YES	☐ NO	☑ N/A	☑
35. Narrations in MMO box in LIMS?				
Comments:				
36. Are there any HIGH QA projects within the data?	☐ YES	☑ NO		☑
If so, place dataset to the QA office.				
37. Does the data set need scanning?	☑ YES		☐ N/A	☑
Files located at: \\Cuprum\gen_admin\Quality Assurance\Training Master\DOCs				
38. Date of analyst IDOC/CDOC: 7/9/2015 IDOC/CDOC within last 12 months?	☑ YES	☐ NO		☑
39. Date of analyst's SOP reading: 6/29/2015 Current SOP revision?	☑ YES	☐ NO		☑
40. Date of LOD: 1/24/16 ~~1/8/2016~~ LOD within last 3 months (within 12 months for MDN)? JH 6/21/16	~~☑~~ YES	☑ NO	☐ N/A	☑
41. Date of LOQ: 1/22/16 ~~1/8/2016~~ LOQ within last 3 months (within 12 months for MDN)? JH 6/21/16	☑ YES	☑ NO	☐ N/A	☐
42. If MDN samples, date of last MDL study:				
43. MDL study within last 12 months?	☐ YES	☐ NO	~~☑~~ N/A	☐
Data can not be reported without a current IDOC/CDOC, LOD or LOQ.				
Additional Comments:	☐ YES	~~☑~~ NO		☐

ALPHA ANALYTICAL

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Lab Number: L1616303

Client: AMEC Foster Wheeler E & I, Inc.

ATTN: Rod Pendleton

Project Name: PENOBSCOT RIVER

Project Number: 3616166052

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Sample Delivery Group Information

Sample Delivery Group Form

Laboratory Job number: L1616303
Project Manager: Elizabeth Porta **Review Date:** 05/31/2016
Project Number: 3616166052
Project Name: PENOBSCOT RIVER **Received:** 05/27/2016 09:48
Client Account: AMEC Foster Wheeler E & I, Inc. **Received by:** WM/GP

Samples Delivered by: FEDEX **Call Tracker #**
Bill Of Laden Yes **Trackingnum** 875647409161
Coc Present Present

Container Status Intact **Sample IDs**

All Containers Accounted For? Yes

Were Extra Samples Received? No

Do Sample Labels and COC agree? Yes

Are Samples in Appropriate Containers? Yes

Are Samples Received within Holding time? Yes

pH of Samples upon Receipt 7 **Are samples Properly Preserved?** Yes
Initial pH **preserved in house with** **Final pH**
Other Issues
Chlorine Check N/A

Are VOA/VPH Vials Present? No
Aqueous: Do Vials Contain Head Space? N/A
Soils: Is MeOHCovering the Soil? N/A
Reagent H2O Preserved vials Frozen on N/A
Frozen by Client N/A

Cooler	Seal	Ice Present	Blue Ice Present	Temp. (Celsius)	Frozen upon Receipt	Delivered Direct from Site
A	Absent	Yes	No	3.7 - IR Gun	No	No

LIMS Chain of Custody

ALPHA ANALYTICAL LABORATORIES, INC.
LOGIN CHAIN OF CUSTODY REPORT
Jun 06 2016, 02:00 pm

Login Number: L1616303
Account: AMEC-ME AMEC Foster Wheeler E & I, Inc.Project: 3616166052
Received: 27MAY16 Due Date: 06JUN16

Sample #	Client ID	Mat	PR	Collected	Container
L1616303-01	OV02_052616_SW_10	S0	1	26MAY16 13:00	1-Plastic-A1,2-Vial-D

Full Narration All Relogs Must Include Container Info (Even When Report is Reporting Existing Data From An Original Report) DPKG-FULL Package Due Date: 06/06/16

DOC-9060,DPKG-FULL,TSS-2540

Sample #	Client ID	Mat	PR	Collected	Container
L1616303-02	ES-15_052616_SW_10	S0	1	26MAY16 08:50	1-Plastic-A1,1-Vial-D

Full Narration All Relogs Must Include Container Info (Even When Report is Reporting Existing Data From An Original Report) DOC: LImited volume, only 1 vial. Package Due Date: 06/06/16

DOC-9060,TSS-2540

Sample #	Client ID	Mat	PR	Collected	Container
L1616303-03	WQ-ECH_052616_SW_10	S0	1	26MAY16 07:05	1-Plastic-A1,2-Vial-D

Full Narration All Relogs Must Include Container Info (Even When Report is Reporting Existing Data From An Original Report) Package Due Date: 06/06/16

DOC-9060,TSS-2540

Sample #	Client ID	Mat	PR	Collected	Container
L1616303-04	WQ-FPT_052616_SW_10	S0	1	26MAY16 08:10	1-Plastic-A1,2-Vial-D

Full Narration All Relogs Must Include Container Info (Even When Report is Reporting Existing Data From An Original Report) Package Due Date: 06/06/16

DOC-9060,TSS-2540

Sample #	Client ID	Mat	PR	Collected	Container
L1616303-05	WQ3-L_052616_SW_10	S0	1	26MAY16 15:10	1-Plastic-A1,2-Vial-D

Full Narration All Relogs Must Include Container Info (Even When Report is Reporting Existing Data From An Original Report) Package Due Date: 06/06/16

DOC-9060,TSS-2540

Sample #	Client ID	Mat	PR	Collected	Container
L1616303-06	WQ1B-C_052616_SW_10	S0	1	26MAY16 16:20	3-Plastic-A1,6-Vial-D

Full Narration All Relogs Must Include Container Info (Even When Report is Reporting Existing Data From An Original Report) L1616303-06 MS L1616303-06 MSD Package Due Date: 06/06/16

ALPHA ANALYTICAL LABORATORIES, INC.
LOGIN CHAIN OF CUSTODY REPORT
Jun 06 2016, 02:00 pm

Login Number: L1616303

Account: AMEC-ME AMEC Foster Wheeler E & I, Inc.Project: 3616166052

Received: 27MAY16 Due Date: 06JUN16

Sample #	Client ID	Mat	PR	Collected	Container
DOC-9060,MS/MSD,TSS-2540					
L1616303-07	WQ1B-C_052616_SW_10	1	S0	26MAY16 16:20	1-Plastic-A1,2-Vial-D
Full Narration All Relogs Must Include Container Info (Even When Report is Reporting Existing Data From An Original Report) Package Due Date: 06/06/16					
DOC-9060,TSS-2540					
L1616303-08	WQ2-C_052716_SW_10	1	S0	27MAY16 08:00	1-Plastic-A1,2-Vial-D
Full Narration All Relogs Must Include Container Info (Even When Report is Reporting Existing Data From An Original Report) Package Due Date: 06/06/16					
DOC-9060,TSS-2540					

Logged By: Elizabeth Porta

Container Tracking

ALPHA ANALYTICAL LABORATORIES
Container Tracking Report

Container ID	Type	Status	Transaction Date	From Response	From Location	From Operator	To Response	To Location	To Operator
L1616303-01A	Vial-D	INTACT	03-JUN-16	CUSTODY	WALK-IN CUSTODY	Deb Whelan	WETCHEM	WETCHEM	Deb Whelan
L1616303-01A	Vial-D	INTACT	30-MAY-16	CUSTODY	CUSTODY	Graham Phillips	WALK-IN CUSTODY	WALK-IN CUSTODY	Graham Phillips
L1616303-01A	Vial-D	INTACT	30-MAY-16	LOGIN	LOGIN	William McClendon	CUSTODY	CUSTODY	William McClendon
L1616303-01B	Vial-D	INTACT	03-JUN-16	CUSTODY	WALK-IN CUSTODY	Deb Whelan	WETCHEM	WETCHEM	Deb Whelan
L1616303-01B	Vial-D	INTACT	30-MAY-16	CUSTODY	CUSTODY	Graham Phillips	WALK-IN CUSTODY	WALK-IN CUSTODY	Graham Phillips
L1616303-01B	Vial-D	INTACT	30-MAY-16	LOGIN	LOGIN	William McClendon	CUSTODY	CUSTODY	William McClendon
L1616303-01C	Plastic-A1	EMPTY	01-JUN-16	CUSTODY	WETCHEM	Samantha Garner	CUSTODY	CUSTODY	Samantha Garner
L1616303-01C	Plastic-A1	INTACT	01-JUN-16	CUSTODY	W14-S4-C CUSTODY	Deb Whelan	WETCHEM	WETCHEM	Deb Whelan
L1616303-01C	Plastic-A1	INTACT	30-MAY-16	CUSTODY	CUSTODY	Graham Phillips	W14-S4-C CUSTODY	W14-S4-C CUSTODY	Graham Phillips
L1616303-01C	Plastic-A1	INTACT	30-MAY-16	LOGIN	LOGIN	William McClendon	CUSTODY	CUSTODY	William McClendon
L1616303-02A	Vial-D	INTACT	03-JUN-16	CUSTODY	WALK-IN CUSTODY	Deb Whelan	WETCHEM	WETCHEM	Deb Whelan
L1616303-02A	Vial-D	INTACT	30-MAY-16	CUSTODY	CUSTODY	Graham Phillips	WALK-IN CUSTODY	WALK-IN CUSTODY	Graham Phillips
L1616303-02A	Vial-D	INTACT	30-MAY-16	LOGIN	LOGIN	William McClendon	CUSTODY	CUSTODY	William McClendon
L1616303-02C	Plastic-A1	EMPTY	01-JUN-16	CUSTODY	WETCHEM	Samantha Garner	CUSTODY	CUSTODY	Samantha Garner
L1616303-02C	Plastic-A1	INTACT	01-JUN-16	CUSTODY	W14-S4-C CUSTODY	Deb Whelan	WETCHEM	WETCHEM	Deb Whelan
L1616303-02C	Plastic-A1	INTACT	30-MAY-16	CUSTODY	CUSTODY	Graham Phillips	W14-S4-C CUSTODY	W14-S4-C CUSTODY	Graham Phillips
L1616303-02C	Plastic-A1	INTACT	30-MAY-16	LOGIN	LOGIN	William McClendon	CUSTODY	CUSTODY	William McClendon
L1616303-03A	Vial-D	INTACT	03-JUN-16	CUSTODY	WALK-IN CUSTODY	Deb Whelan	WETCHEM	WETCHEM	Deb Whelan
L1616303-03A	Vial-D	INTACT	30-MAY-16	CUSTODY	CUSTODY	Graham Phillips	WALK-IN CUSTODY	WALK-IN CUSTODY	Graham Phillips
L1616303-03A	Vial-D	INTACT	30-MAY-16	LOGIN	LOGIN	William McClendon	CUSTODY	CUSTODY	William McClendon
L1616303-03B	Vial-D	INTACT	03-JUN-16	CUSTODY	WALK-IN CUSTODY	Deb Whelan	WETCHEM	WETCHEM	Deb Whelan
L1616303-03B	Vial-D	INTACT	30-MAY-16	CUSTODY	CUSTODY	Graham Phillips	WALK-IN CUSTODY	WALK-IN CUSTODY	Graham Phillips
L1616303-03B	Vial-D	INTACT	30-MAY-16	LOGIN	LOGIN	William McClendon	CUSTODY	CUSTODY	William McClendon
L1616303-03C	Plastic-A1	EMPTY	01-JUN-16	CUSTODY	WETCHEM	Samantha Garner	CUSTODY	CUSTODY	Samantha Garner
L1616303-03C	Plastic-A1	INTACT	01-JUN-16	CUSTODY	W14-S4-C CUSTODY	Deb Whelan	WETCHEM	WETCHEM	Deb Whelan

Container ID	Type	Status	Transaction Date	From Response	Location	To Operator	Response	Location	Operator
L1616303-03C	Plastic-A1	INTACT	30-MAY-16	CUSTODY	CUSTODY	Graham Phillips	W14-S4-C CUSTODY	W14-S4-C CUSTODY	Graham Phillips
L1616303-03C	Plastic-A1	INTACT	30-MAY-16	LOGIN	LOGIN	William McClendon	CUSTODY	CUSTODY	William McClendon
L1616303-04A	Vial-D	INTACT	03-JUN-16	CUSTODY	WALK-IN CUSTODY	Deb Whelan	WETCHEM	WETCHEM	Deb Whelan
L1616303-04A	Vial-D	INTACT	30-MAY-16	CUSTODY	CUSTODY	Graham Phillips	WALK-IN CUSTODY	WALK-IN CUSTODY	Graham Phillips
L1616303-04A	Vial-D	INTACT	30-MAY-16	LOGIN	LOGIN	William McClendon	CUSTODY	CUSTODY	William McClendon
L1616303-04B	Vial-D	INTACT	03-JUN-16	CUSTODY	WALK-IN CUSTODY	Deb Whelan	WETCHEM	WETCHEM	Deb Whelan
L1616303-04B	Vial-D	INTACT	30-MAY-16	CUSTODY	CUSTODY	Graham Phillips	WALK-IN CUSTODY	WALK-IN CUSTODY	Graham Phillips
L1616303-04B	Vial-D	INTACT	30-MAY-16	LOGIN	LOGIN	William McClendon	CUSTODY	CUSTODY	William McClendon
L1616303-04C	Plastic-A1	EMPTY	01-JUN-16	CUSTODY	WETCHEM	Samantha Garner	CUSTODY	CUSTODY	Samantha Garner
L1616303-04C	Plastic-A1	INTACT	01-JUN-16	CUSTODY	W14-S4-C CUSTODY	Deb Whelan	WETCHEM	WETCHEM	Deb Whelan
L1616303-04C	Plastic-A1	INTACT	30-MAY-16	CUSTODY	CUSTODY	Graham Phillips	W14-S4-C CUSTODY	W14-S4-C CUSTODY	Graham Phillips
L1616303-04C	Plastic-A1	INTACT	30-MAY-16	LOGIN	LOGIN	William McClendon	CUSTODY	CUSTODY	William McClendon
L1616303-05A	Vial-D	INTACT	03-JUN-16	CUSTODY	WALK-IN CUSTODY	Deb Whelan	WETCHEM	WETCHEM	Deb Whelan
L1616303-05A	Vial-D	INTACT	30-MAY-16	CUSTODY	CUSTODY	Graham Phillips	WALK-IN CUSTODY	WALK-IN CUSTODY	Graham Phillips
L1616303-05A	Vial-D	INTACT	30-MAY-16	LOGIN	LOGIN	William McClendon	CUSTODY	CUSTODY	William McClendon
L1616303-05B	Vial-D	INTACT	03-JUN-16	CUSTODY	WALK-IN CUSTODY	Deb Whelan	WETCHEM	WETCHEM	Deb Whelan
L1616303-05B	Vial-D	INTACT	30-MAY-16	CUSTODY	CUSTODY	Graham Phillips	WALK-IN CUSTODY	WALK-IN CUSTODY	Graham Phillips
L1616303-05B	Vial-D	INTACT	30-MAY-16	LOGIN	LOGIN	William McClendon	CUSTODY	CUSTODY	William McClendon
L1616303-05C	Plastic-A1	EMPTY	02-JUN-16	CUSTODY	WETCHEM	Deb Whelan	WETCHEM CUSTODY	WETCHEM CUSTODY	Deb Whelan
L1616303-05C	Plastic-A1	INTACT	02-JUN-16	CUSTODY	W14-S4-C CUSTODY	Deb Whelan	WETCHEM	WETCHEM	Deb Whelan
L1616303-05C	Plastic-A1	INTACT	30-MAY-16	CUSTODY	CUSTODY	Graham Phillips	W14-S4-C CUSTODY	W14-S4-C CUSTODY	Graham Phillips
L1616303-05C	Plastic-A1	INTACT	30-MAY-16	LOGIN	LOGIN	William McClendon	CUSTODY	CUSTODY	William McClendon
L1616303-06A	Vial-D	INTACT	03-JUN-16	CUSTODY	WALK-IN CUSTODY	Deb Whelan	WETCHEM	WETCHEM	Deb Whelan
L1616303-06A	Vial-D	INTACT	30-MAY-16	CUSTODY	CUSTODY	Graham Phillips	WALK-IN CUSTODY	WALK-IN CUSTODY	Graham Phillips
L1616303-06A	Vial-D	INTACT	30-MAY-16	LOGIN	LOGIN	William McClendon	CUSTODY	CUSTODY	William McClendon

Container ID Type	Status	Transaction Date	From Response	Location	To Operator	Response	Location	Operator
L1616303-06A1 Vial-D	INTACT	03-JUN-16	CUSTODY	WALK-IN CUSTODY	Deb Whelan	WETCHEM	WETCHEM	Deb Whelan
L1616303-06A1 Vial-D	INTACT	30-MAY-16	CUSTODY	CUSTODY	Graham Phillips	WALK-IN CUSTODY	WALK-IN CUSTODY	Graham Phillips
L1616303-06A1 Vial-D	INTACT	30-MAY-16	LOGIN	LOGIN	William McClendon	CUSTODY	CUSTODY	William McClendon
L1616303-06A2 Vial-D	INTACT	03-JUN-16	CUSTODY	WALK-IN CUSTODY	Deb Whelan	WETCHEM	WETCHEM	Deb Whelan
L1616303-06A2 Vial-D	INTACT	30-MAY-16	CUSTODY	CUSTODY	Graham Phillips	WALK-IN CUSTODY	WALK-IN CUSTODY	Graham Phillips
L1616303-06A2 Vial-D	INTACT	30-MAY-16	LOGIN	LOGIN	William McClendon	CUSTODY	CUSTODY	William McClendon
L1616303-06B Vial-D	INTACT	03-JUN-16	CUSTODY	WALK-IN CUSTODY	Deb Whelan	WETCHEM	WETCHEM	Deb Whelan
L1616303-06B Vial-D	INTACT	30-MAY-16	CUSTODY	CUSTODY	Graham Phillips	WALK-IN CUSTODY	WALK-IN CUSTODY	Graham Phillips
L1616303-06B Vial-D	INTACT	30-MAY-16	LOGIN	LOGIN	William McClendon	CUSTODY	CUSTODY	William McClendon
L1616303-06B1 Vial-D	INTACT	03-JUN-16	CUSTODY	WALK-IN CUSTODY	Deb Whelan	WETCHEM	WETCHEM	Deb Whelan
L1616303-06B1 Vial-D	INTACT	30-MAY-16	CUSTODY	CUSTODY	Graham Phillips	WALK-IN CUSTODY	WALK-IN CUSTODY	Graham Phillips
L1616303-06B1 Vial-D	INTACT	30-MAY-16	LOGIN	LOGIN	William McClendon	CUSTODY	CUSTODY	William McClendon
L1616303-06B2 Vial-D	INTACT	03-JUN-16	CUSTODY	WALK-IN CUSTODY	Deb Whelan	WETCHEM	WETCHEM	Deb Whelan
L1616303-06B2 Vial-D	INTACT	30-MAY-16	CUSTODY	CUSTODY	Graham Phillips	WALK-IN CUSTODY	WALK-IN CUSTODY	Graham Phillips
L1616303-06B2 Vial-D	INTACT	30-MAY-16	LOGIN	LOGIN	William McClendon	CUSTODY	CUSTODY	William McClendon
L1616303-06C Plastic-A1	EMPTY	02-JUN-16	CUSTODY	WETCHEM	Deb Whelan	WETCHEM CUSTODY	WETCHEM CUSTODY	Deb Whelan
L1616303-06C Plastic-A1	INTACT	02-JUN-16	CUSTODY	W14-S4-C CUSTODY	Deb Whelan	WETCHEM	WETCHEM	Deb Whelan
L1616303-06C Plastic-A1	INTACT	30-MAY-16	CUSTODY	CUSTODY	Graham Phillips	W14-S4-C CUSTODY	W14-S4-C CUSTODY	Graham Phillips
L1616303-06C Plastic-A1	INTACT	30-MAY-16	LOGIN	LOGIN	William McClendon	CUSTODY	CUSTODY	William McClendon
L1616303-06C1 Plastic-A1	EMPTY	02-JUN-16	CUSTODY	WETCHEM	Deb Whelan	WETCHEM CUSTODY	WETCHEM CUSTODY	Deb Whelan
L1616303-06C1 Plastic-A1	INTACT	02-JUN-16	CUSTODY	W14-S4-C CUSTODY	Deb Whelan	WETCHEM	WETCHEM	Deb Whelan
L1616303-06C1 Plastic-A1	INTACT	30-MAY-16	CUSTODY	CUSTODY	Graham Phillips	W14-S4-C CUSTODY	W14-S4-C CUSTODY	Graham Phillips
L1616303-06C1 Plastic-A1	INTACT	30-MAY-16	LOGIN	LOGIN	William McClendon	CUSTODY	CUSTODY	William McClendon
L1616303-06C2 Plastic-A1	INTACT	30-MAY-16	CUSTODY	CUSTODY	Graham Phillips	W14-S4-C CUSTODY	W14-S4-C CUSTODY	Graham Phillips
L1616303-06C2 Plastic-A1	INTACT	30-MAY-16	LOGIN	LOGIN	William McClendon	CUSTODY	CUSTODY	William McClendon

Container ID	Type	Status	Transaction Date	From Response	Location	To Operator	Response	Location	Operator
L1616303-07A	Vial-D	INTACT	03-JUN-16	CUSTODY	WALK-IN CUSTODY	Deb Whelan	WETCHEM	WETCHEM	Deb Whelan
L1616303-07A	Vial-D	INTACT	30-MAY-16	CUSTODY	CUSTODY	Graham Phillips	WALK-IN CUSTODY	WALK-IN CUSTODY	Graham Phillips
L1616303-07A	Vial-D	INTACT	30-MAY-16	LOGIN	LOGIN	William McClendon	CUSTODY	CUSTODY	William McClendon
L1616303-07B	Vial-D	INTACT	03-JUN-16	CUSTODY	WALK-IN CUSTODY	Deb Whelan	WETCHEM	WETCHEM	Deb Whelan
L1616303-07B	Vial-D	INTACT	30-MAY-16	CUSTODY	CUSTODY	Graham Phillips	WALK-IN CUSTODY	WALK-IN CUSTODY	Graham Phillips
L1616303-07B	Vial-D	INTACT	30-MAY-16	LOGIN	LOGIN	William McClendon	CUSTODY	CUSTODY	William McClendon
L1616303-07C	Plastic-A1	EMPTY	02-JUN-16	CUSTODY	WETCHEM	Deb Whelan	WETCHEM CUSTODY	WETCHEM CUSTODY	Deb Whelan
L1616303-07C	Plastic-A1	INTACT	02-JUN-16	CUSTODY	W14-S4-C CUSTODY	Deb Whelan	WETCHEM	WETCHEM	Deb Whelan
L1616303-07C	Plastic-A1	INTACT	30-MAY-16	CUSTODY	CUSTODY	Graham Phillips	W14-S4-C CUSTODY	W14-S4-C CUSTODY	Graham Phillips
L1616303-07C	Plastic-A1	INTACT	30-MAY-16	LOGIN	LOGIN	William McClendon	CUSTODY	CUSTODY	William McClendon
L1616303-08A	Vial-D	INTACT	03-JUN-16	CUSTODY	WALK-IN CUSTODY	Deb Whelan	WETCHEM	WETCHEM	Deb Whelan
L1616303-08A	Vial-D	INTACT	30-MAY-16	CUSTODY	CUSTODY	Graham Phillips	WALK-IN CUSTODY	WALK-IN CUSTODY	Graham Phillips
L1616303-08A	Vial-D	INTACT	30-MAY-16	LOGIN	LOGIN	William McClendon	CUSTODY	CUSTODY	William McClendon
L1616303-08B	Vial-D	INTACT	03-JUN-16	CUSTODY	WALK-IN CUSTODY	Deb Whelan	WETCHEM	WETCHEM	Deb Whelan
L1616303-08B	Vial-D	INTACT	30-MAY-16	CUSTODY	CUSTODY	Graham Phillips	WALK-IN CUSTODY	WALK-IN CUSTODY	Graham Phillips
L1616303-08B	Vial-D	INTACT	30-MAY-16	LOGIN	LOGIN	William McClendon	CUSTODY	CUSTODY	William McClendon
L1616303-08C	Plastic-A1	EMPTY	02-JUN-16	CUSTODY	WETCHEM	Deb Whelan	WETCHEM CUSTODY	WETCHEM CUSTODY	Deb Whelan
L1616303-08C	Plastic-A1	INTACT	02-JUN-16	CUSTODY	W14-S4-C CUSTODY	Deb Whelan	WETCHEM	WETCHEM	Deb Whelan
L1616303-08C	Plastic-A1	INTACT	30-MAY-16	CUSTODY	CUSTODY	Graham Phillips	W14-S4-C CUSTODY	W14-S4-C CUSTODY	Graham Phillips
L1616303-08C	Plastic-A1	INTACT	30-MAY-16	LOGIN	LOGIN	William McClendon	CUSTODY	CUSTODY	William McClendon

Chain of Custody

CHAIN OF CUSTODY

ALPHA ANALYTICAL

PAGE 1 OF 1

Date Rec'd in Lab: 5/28/16

ALPHA Job #: L1616303

8 Walkup Drive
Westboro, MA 01581
Tel: 508-898-9220

320 Forbes Blvd
Mansfield, MA 02048
Tel: 508-822-9300

Project Information

Project Name: PENOBSCOT RIVER
Project Location: PENOBSCOT RIVER
Project #: 3616166052
Project Manager: ROD PENDLETON
ALPHA Quote #:

Report Information - Data Deliverables

☐ ADEx ☒ EMAIL

Billing Information

☒ Same as Client info PO #:

Client Information

Client: AMEC FOSTER WHEELER
Address: 511 CONGRESS ST
PORTLAND, ME 04101
Phone: 207 775 5401
Email: rod.pendleton@amecfw.com

Regulatory Requirements & Project Information Requirements

☐ Yes ☐ No MA MCP Analytical Methods
☐ Yes ☐ No CT RCP Analytical Methods
☐ Yes ☐ No Matrix Spike Required on this SDG? (Required for MCP Inorganics)
☐ Yes ☐ No GW1 Standards (Info Required for Metals & EPH with Targets)
☐ Yes ☐ No NPDES RGP
☐ Other State /Fed Program ______ Criteria ______

Turn-Around Time

☒ Standard ☐ RUSH *(only confirmed if pre-approved!)*

Date Due:

Additional Project Information:

CONTACT DENISE KING W/ QUESTIONS
TEL: 978-692-9090

ANALYSIS: VOC: ☐ 8260 ☐ 624 ☐ 524.2; SVOC: ☐ ABN ☐ PAH; METALS: ☐ MCP 13 ☐ MCP 14 ☐ RCP 15; METALS: ☐ RCRA5 ☐ RCRA8 ☐ PP13; EPH: ☐ Ranges & Targets ☐ Ranges Only; VPH: ☐ Ranges & Targets ☐ Ranges Only; ☐ PCB ☐ PEST; TPH: ☐ Quant Only ☐ Fingerprint; DOC SW-846 9060 2-Year LAC; TSS 2450D 1 L/P 40°C

SAMPLE INFO: Filtration ☒ Field ☐ Lab to do; Preservation ☐ Lab to do

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler Initials	DOC SW-846 9060	TSS 2450D	Sample Comments	TOTAL # BOTTLES
16303-01	OV02_052616_SW_10	5/26/16	1300	SW	KB	X	X		3
02	ES-15_052616_SW_10	5/26/16	0850	↓	↓	X	X	1 DOC VIAL BROKE	2
03	WQ-ECH_052616_SW_10	5/26/16	0705			X	X		3
04	WQ-FPT_052616_SW_10	5/26/16	0810			X	X		3
05	WQ3-L_052616_SW_10	5/26/16	1510			X	X		3
06	WQ16-C_052616_SW_10	5/26/16	1620			X	X		3
07	WQ16-C_052616_SW_10_DUP	↓	↓			X	X		3
06	WQ16-C_052616_SW_10_MS	↓	↓			X	X		3
06	WQ16-C_052616_SW_10_MD	↓	↓			X	X		3
08	WQ2-C_052716_SW_10	5/27/16	0800	↓	↓	X	X		3
	Container Type					A	P		
	Preservative					D	A	TOTAL	29

Container Type
P= Plastic
A= Amber glass
V= Vial
G= Glass
B= Bacteria cup
C= Cube
O= Other
E= Encore
D= BOD Bottle

Preservative
A= None
B= HCl
C= HNO_3
D= H_2SO_4
E= NaOH
F= MeOH
G= $NaHSO_4$
H = $Na_2S_2O_3$
I= Ascorbic Acid
J = NH_4Cl
K= Zn Acetate
O= Other

Relinquished By:	Date/Time	Received By:	Date/Time
Julie Paleozzo	5/27/16 948	[illegible signature]	5/28/16 0948

FORM NO: 01-01 (rev. 12-Mar-2012)

Wet Chemistry

Total Suspended Solids Analysis

Sample Raw Data

ALPHA ANALYTICAL LABS

WET CHEMISTRY DEPARTMENT

TOTAL SUSPENDED SOLIDS

Last Change 3/4/13
File tss.xlt

2540D (PPB)

2540D

Get Samples

Save to LIMS

METHODS

Filter Lot T61664

Sample Number: _____ Oven C
In104 15:25
Client: _____ Out 11:05
In104 12:25
Analysis: T S S Out 2:19
Method: SM 2540D

Product: TSS-2540
Analyte: Solids, Total Suspended
Analysis Date: 6/1/2016 14:05
Technician: DW
Work group: WG899337
RDL: 5.0 mg/l

	Sample Number	Symbol	Tare Weight (gm)	Sample Volume (ml)	Net Weight(1) (gm)	Net Weight(2) (gm)	Net Weight(3) (gm)	Net Weight(4) (gm)	RDL MULT.	RESULT mg/l	
BLANK	WG899337-1	24	0.4349	1000	0.4343	0.4344				0.00	
DUP	WG899337-2	36	0.4367	300	0.4689	0.4691			3	107.33	L1616043-01
SAMP	L1616043-01	37	0.4352	300	0.4549	0.4550			3	65.67	
SAMP	L1616043-02	38	0.4346	1080	0.4404	0.4405				5.37	
	L1616071-01	39	0.434	990	0.4728	0.4724				38.79	
	L1616080-01	40	0.4295	200	0.4592	0.4595			5	148.50	
	L1616080-02	41	0.4323	1040	0.4489	0.4492				15.96	
	L1616080-03	42	0.4308	1050	0.4555	0.4560				23.52	
	L1616080-04	43	0.4309	750	0.4472	0.4476				21.73	
	L1616303-01	44	0.4316	1170	0.4330	0.4333				1.20	
	L1616303-02	45	0.4306	1165	0.4449	0.4452				12.27	
	L1616303-04	46	0.4314	1150	0.4409	0.4409				8.26	

Dup weight (gm) on the filter: 0.0322

Avg: 0.02595

Sample weight (gm) on the filte 0.0197

Dup: (wt on filter/ave)* 100 = % 124

Sample: (wt on filter/ave)* 100= % 76

ALPHA ANALYTICAL LABS

WET CHEMISTRY DEPARTMENT

TOTAL SUSPENDED SOLIDS

Last Change 3/4/13
File tss.xlt

2540D (PPB)

2540D

Get Samples

Save to LIMS

METHODS

Filter Lot T61664

Sample Number: _____ Oven C
In104 15:25
Client: _____ Out 11:05
In104 12:25
Analysis: T S S Out 2:19
Method: SM 2540D

Product: TSS-2540
Analyte: Solids, Total Suspended
Analysis Date: 6/1/2016 14:05
Technician: DW
Work group: WG899336
RDL: 5.0 mg/l

	Sample Number	Symbol	Tare Weight (gm)	Sample Volume (ml)	Net Weight(1) (gm)	Net Weight(2) (gm)	Net Weight(3) (gm)	Net Weight(4) (gm)	RDL MULT.	RESULT mg/l	
BLANK	WG899336-1	24	0.4349	1000	0.4343	0.4344				0.00	
DUP	WG899336-2	25	0.4344	450	0.4560	0.4561			2	47.96	L1615855-01
SAMP	L1615855-01	26	0.4352	450	0.4566	0.4567			2	47.56	
	L1615953-01	27	0.4356	1050	0.4424	0.4425				6.51	
	L1615953-02	28	0.4347	900	0.4479	0.4480				14.71	
	L1615953-03	29	0.4344	955	0.4393	0.4393				5.12	
	L1615953-04	30	0.4349	1135	0.4425	0.4426				6.70	
	L1615953-05	31	0.4352	890	0.4608	0.4609				28.76	
	L1615953-06	32	0.4346	1120	0.4430	0.4430				7.50	
	L1616030-01	33	0.4359	1130	0.4385	0.4386				2.30	
	L1616032-01	34	0.4352	100	0.4677	0.4678			10	325.00	
	L1616303-03	35	0.434	1160	0.4425	0.4426				7.33	

Dup weight (gm) on the filter: 0.0216

Avg: 0.0215

Sample weight (gm) on the filte 0.0214

Dup: (wt on filter/ave)* 100 = % 100

Sample: (wt on filter/ave)* 100= % 100

ALPHA ANALYTICAL LABS

WET CHEMISTRY DEPARTMENT

TOTAL SUSPENDED SOLIDS

Last Change 3/4/13
File tss.xlt

2540D (PPB)

2540D

Get Samples

Save to LIMS

METHODS

Filter Lot T60274

Sample Number: _____ Oven C
In104 16:05
Client: _____ Out 23:01
In104 23:51
Analysis: T S S Out 1:51 6/3/16
Method: SM 2540D

Product: TSS-2540
Analyte: Solids, Total Suspended
Analysis Date: 6/2/2016 15:45
Technician: DW
Work group: WG899697
RDL: 5.0 mg/l

2

	Sample Number	Symbol	Tare Weight (gm)	Sample Volume (ml)	Net Weight(1) (gm)	Net Weight(2) (gm)	Net Weight(3) (gm)	Net Weight(4) (gm)	RDL MULT.	RESULT mg/l	
BLANK	WG899697-1	49	0.436	1000	0.4353	0.4354				0.00	
DUP	WG899697-2	53	0.4336	1030	0.4418	0.4419				7.96	L1616303-06
	L1616303-05	54	0.4331	1140	0.4418	0.4419				7.63	
	L1616303-06	55	0.4336	1090	0.4408	0.4407				6.51	
	L1616303-07	56	0.4323	1155	0.4413	0.4414				7.80	
	L1616303-08	57	0.4325	1065	0.4806	0.4808				45.16	
	L1616304-01	58	0.432	1110	0.4548	0.4549				20.54	
	L1616351-01	59	0.4319	950	0.4499	0.4499				18.95	
	L1616597-01	60	0.4333	1040	0.4566	0.4564				22.21	
	L1616597-02	25	0.4309	1100	0.4339	0.4340				2.73	

Dup weight (gm) on the filter: 0.0082

Avg: 0.00765

Sample weight (gm) on the filte 0.0071

Dup: (wt on filter/ave)* 100 = % 107

Sample: (wt on filter/ave)* 100= % 93

Work Group

ALPHA ANALYTICAL LABORATORIES, INC.

Alpha WORK GROUP REPORT (wk02)

Jun 06 2016, 01:14 pm

Work Group: WG899336 for Department: 7 Wet Chemistry

Created: 01-JUN-16 Due: Operator: dw

Sample	Client ID	C	Product	Matrix	Stat	UA	HOLD	DUE	PR	Location
L1615855-01	PCB052516-M14-R02CD	S	TSS-2540	WATER	DONE	U	0601	0616	S0	Plastic-A1
L1615953-01	AA 892	S	TSS-2540	WATER	DONE	U	0602	0610	S0	Plastic-A1
L1615953-02	AA 893	S	TSS-2540	WATER	DONE	U	0602	0610	S0	Plastic-A1
L1615953-03	AA 894	S	TSS-2540	WATER	DONE	U	0602	0610	S0	Plastic-A1
L1615953-04	AA 895	S	TSS-2540	WATER	DONE	U	0602	0610	S0	Plastic-A1
L1615953-05	AA 896	S	TSS-2540	WATER	DONE	U	0602	0610	S0	Plastic-A1
L1615953-06	AA 897	S	TSS-2540	WATER	DONE	U	0602	0610	S0	Plastic-A1
L1616030-01	LAGOON SAMPLE	S	TSS-2540	WATER	DONE	U	0602	0603	S0	Plastic-A1
L1616032-01	MH COMPOSITE	S	TSS-2540	WATER	DONE	U	0601	0606	S0	Plastic-A1
L1616303-03	WQ-ECH_052616_SW_10	S	TSS-2540	WATER	DONE	U	0602	0606	S0	Plastic-A1
WG899336-1	Laboratory Method Bl	S	TSS-2540	WATER	DONE	U				
WG899336-2	Duplicate Sample	S	TSS-2540	WATER	DONE	U				

Comments:

WG899336-2 L1615855-01

ALPHA ANALYTICAL LABORATORIES, INC.

Alpha WORK GROUP REPORT (wk02)

Jun 06 2016, 01:14 pm

Work Group: WG899337 for Department: 7 Wet Chemistry

Created: 01-JUN-16 Due: Operator: dw

Sample	Client ID	C	Product	Matrix	Stat	UA	HOLD	DUE	PR	Location
L1616043-01	INFLUENT	S	TSS-2540	WATER	DONE	U	0602	0603	S0	Plastic-A1
L1616043-02	EFFLUENT	S	TSS-2540	WATER	DONE	U	0602	0603	S0	Plastic-A1
L1616071-01	TW-2	C	TSS-2540	WATER	DONE	U	0602	0603	S0	Plastic-A1
L1616080-01	1,2,3,4 COUNIHAN	S	TSS-2540	WATER	DONE	U	0602	0610	S0	Plastic-A1
L1616080-02	5,6,7 JURKOWSKI	S	TSS-2540	WATER	DONE	U	0602	0610	S0	Plastic-A1
L1616080-03	8,9,10 MCMAHON	S	TSS-2540	WATER	DONE	U	0602	0610	S0	Plastic-A1
L1616080-04	11,12,13 HUM	S	TSS-2540	WATER	DONE	U	0602	0610	S0	Plastic-A1
L1616303-01	OV02_052616_SW_10	S	TSS-2540	WATER	DONE	U	0602	0606	S0	Plastic-A1
L1616303-02	ES-15_052616_SW_10	S	TSS-2540	WATER	DONE	U	0602	0606	S0	Plastic-A1
L1616303-04	WQ-FPT_052616_SW_10	S	TSS-2540	WATER	DONE	U	0602	0606	S0	Plastic-A1
WG899337-1	Laboratory Method Bl	S	TSS-2540	WATER	DONE	U				
WG899337-2	Duplicate Sample	S	TSS-2540	WATER	DONE	U				

Comments:

WG899337-2 L1616043-01

ALPHA ANALYTICAL LABORATORIES, INC.

Alpha WORK GROUP REPORT (wk02)

Jun 06 2016, 01:14 pm

Work Group: WG899697 for Department: 7 Wet Chemistry

Created: 02-JUN-16 Due: Operator: dw

Sample	Client ID	C	Product	Matrix	Stat	UA	HOLD	DUE	PR	Location
L1616303-05	WQ3-L_052616_SW_10	S	TSS-2540	WATER	DONE	U	0602	0606	S0	Plastic-A1
L1616303-06	WQ1B-C_052616_SW_10	S	TSS-2540	WATER	DONE	U	0602	0606	S0	Plastic-A1
L1616303-07	WQ1B-C_052616_SW_10_	S	TSS-2540	WATER	DONE	U	0602	0606	S0	Plastic-A1
L1616303-08	WQ2-C_052716_SW_10	S	TSS-2540	WATER	DONE	U	0603	0606	S0	Plastic-A1
L1616304-01	SD-6	S	TSS-2540	WATER	DONE	U	0606	0606	S0	Plastic-A1
L1616351-01	OUTFALL 02 FIRST FLU	S	TSS-2540	WATER	DONE	U	0606	0607	S0	Plastic-A1
L1616597-01	INFLUENT-6116	S	TSS-2540	WATER	DONE	U	0608	0603	1B	Plastic-A1
L1616597-02	EFFLUENT-6116	S	TSS-2540	WATER	DONE	U	0608	0603	1B	Plastic-A1
WG899697-1	Laboratory Method Bl	S	TSS-2540	WATER	DONE	U				
WG899697-2	Duplicate Sample	S	TSS-2540	WATER	DONE	U				

Comments:

WG899697-2 L1616303-06

Organic Carbon Analysis

Sequence Logs

DATE: FRI 060316	STOCK STDS ID INFO:	WORKING STDS ID INFO:	
ANALYST: (TM)	LOT #'s:	LOT #'s:	
CURVE INFO:	2000 PPM CURVE SLN: TOC-050916-C	2 PPM ICV: TOC-060316-ICV	
CURVE IN USE: 050916 TOC-3	2000 PPM ICV/LCS/SPK SLN: TOC-050916-W	2 PPM LCS: TOC-060316-LCS	
	4000 PPM IC CK STD SLN: TOC-060216-IC	4 PPM SPK: TOC-060316-SPK	
	400	10 PPM IC CK STD: TOC-060216-IC10	

POSITION	SAMPLE	DIL X	PH	COMMENTS
1	TM			
2	IC CK STD 10ppm			
3	ICV 2ppm			
4	ICB			
5	MB			
6	LCS 2ppm			
7	16229.2	40	2	
8	3	2	2	
9	4	2	2	
10	5	2	2	
11	16232.8 dup	~~40~~ 1	2	QC 6/2
12	.8 Spk	1	2	↓ Spk = 4ppm
13	16232.7	400	2	> rerun for 6/2
14	7 dup	400	2	
15	CCV 2ppm			
16	CCB			
17	16232.7 Spk	800	2	= 3200 ppm
18	16229.2 dp	40x		
19	.2 Spk	40x		
20	16302.1	1x		
21	.2	5x		
22	.3	10x		
23	.4	10x		
24	.5	10x		
25	.6	1x		
26	.7	1x		

POSITION	SAMPLE	DIL X	PH	COMMENTS
27	2ppm CCV	1	2	
28	CCB	1	2	
29	-6 DUP	1	2	
30	-6 MS	1	2	
31	-2	1	2	
32	-3	1	2	
33	-4	1	2	
34	-5	1	2	
35	-8	1	2	
36	CCV	1	2	
37	CCB	1	2	

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: DOC
TOC Instrument ID: 3
Method: EPA-9060

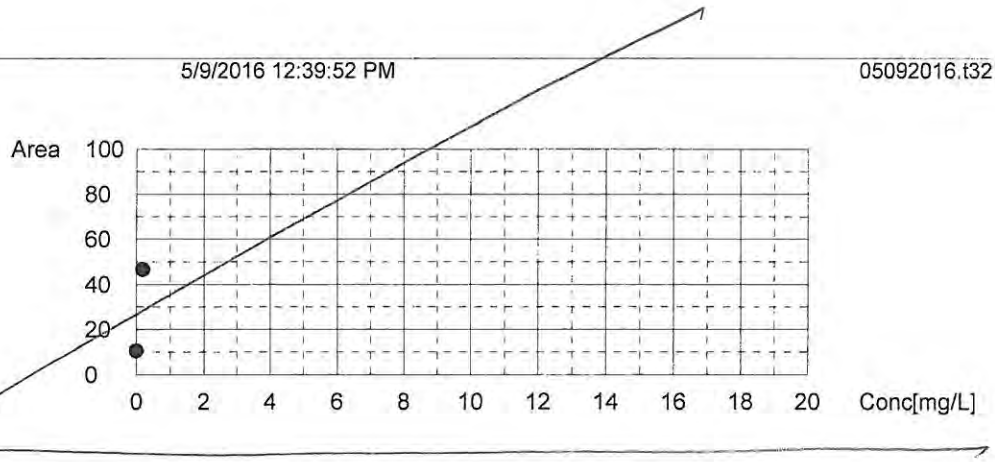
Product: DOC-9060
Analyte: Dissolved Organic Carbon,
Analysis Date: 6/3/2016 8:55
Technician: dw
Work group: wg900204
MDL: 1.0 mg/l
Page Number:
Preparation Date: 6/3/2016 8:55

LCS Conc. (ppm): 2
Spike Conc(ppm): 4

	Sample Number	COMMENTS	MDL Multiplier	RESULT mg/L	
DUP	WG900204-3		1	4.41	L1616303-06
	L1616303-01		1	6.81	
	L1616303-02		1	0.46	
	L1616303-03		1	0.40	
	L1616303-04		1	0.28	
	L1616303-05		1	0.40	
	L1616303-06		1	4.64	
	L1616303-07		1	4.78	
	L1616303-08		1	1.22	
BLANK	WG900204-1		1	0.02	

		Comments	Sample Result	Spike Conc	Spike Result	% Rec	
MS	WG900204-4		4.64	4	8.37	93	L16163
LCS	WG900204-2			2	1.99	100	

Slope:	7632
Intercept	-548.4
r^2	0.848361
r	0.921065
Zero Shift	No



Cal. Curve

Sample Name: 05092016 toc-3 curve
Sample ID:
Cal. Curve: 05092016 toc-3.2016_05_09_09_55_51.cal
Status Completed

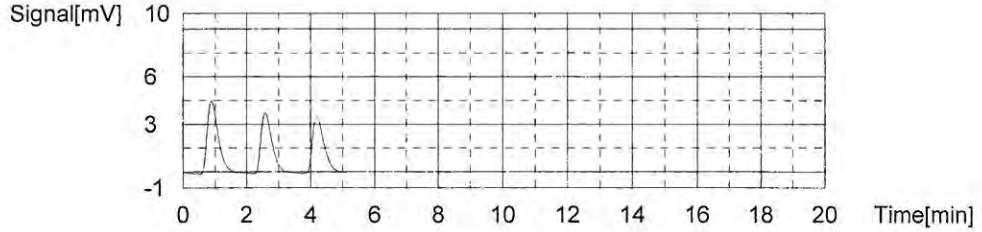
TOC-3 curve 050916

Type	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

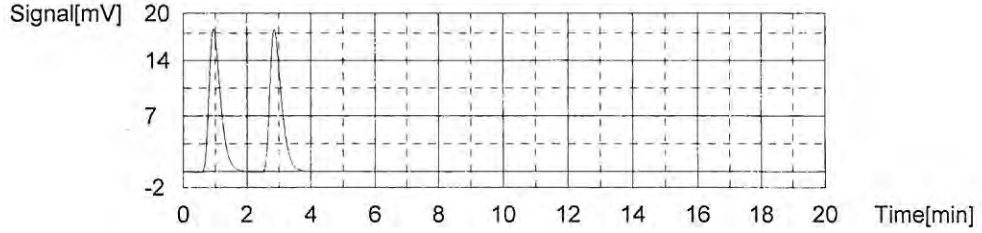
Acid Add. 3.000%
Sp. Time 180.0sec
Mean Area 9.284



Conc: 0.2000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	46.87	2500uL	1	*******		5/9/2016 10:24:17 AM
2	46.35	2500uL	1	*******		5/9/2016 10:28:33 AM

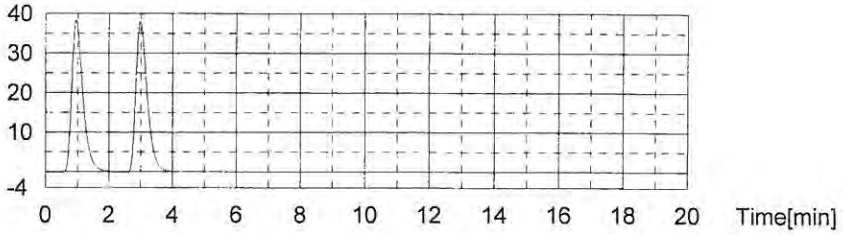
Acid Add. 3.000%
Sp. Time 180.0sec
Mean Area 46.61



Conc: 0.5000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	98.92	2500uL	1	*******		5/9/2016 10:39:31 AM
2	96.85	2500uL	1	*******		5/9/2016 10:43:42 AM

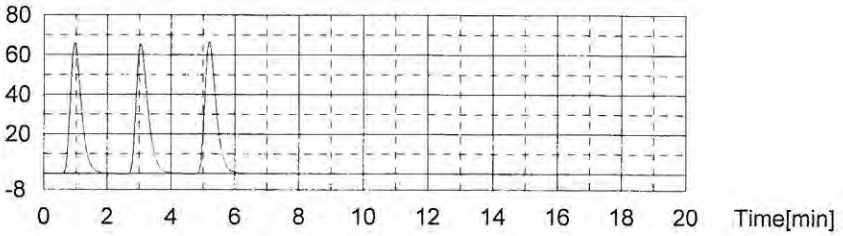
Acid Add. 3.000%
Sp. Time 180.0sec
Mean Area 97.89



Conc: 1.000mg/L

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

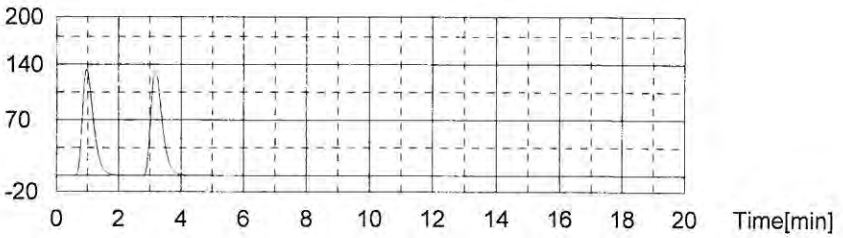
Acid Add. 3.000%
Sp. Time 180.0sec
Mean Area 169.8



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

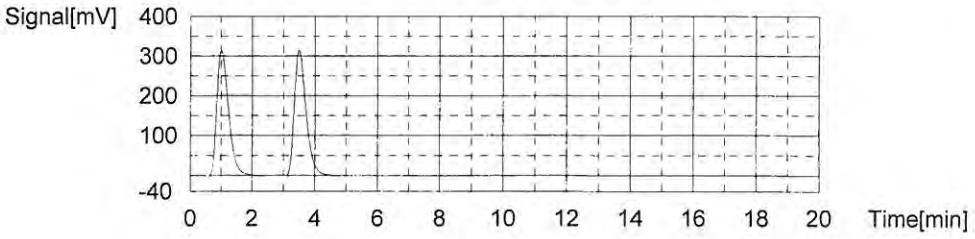
Acid Add. 3.000%
Sp. Time 180.0sec
Mean Area 348.3



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

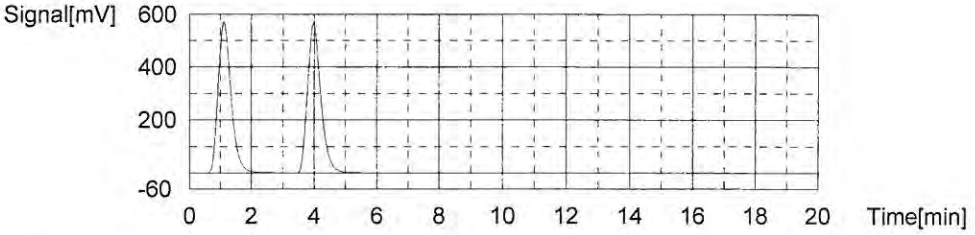
Acid Add. 3.000%
Sp. Time 180.0sec
Mean Area 845.7



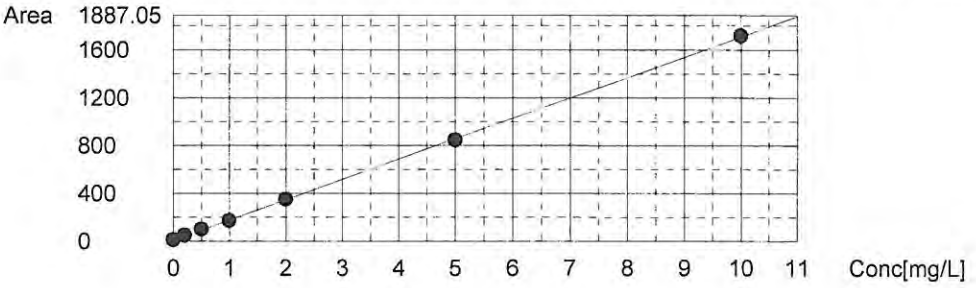
Conc: 10.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	1710	2500uL	1	*******		5/9/2016 11:46:16 AM
2	1721	2500uL	1	*******		5/9/2016 11:52:21 AM

Acid Add. 3.000%
Sp. Time 180.0sec
Mean Area 1716



Slope: 170.2
Intercept 7.247
r^2 0.999863
r 0.999932
Zero Shift No



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

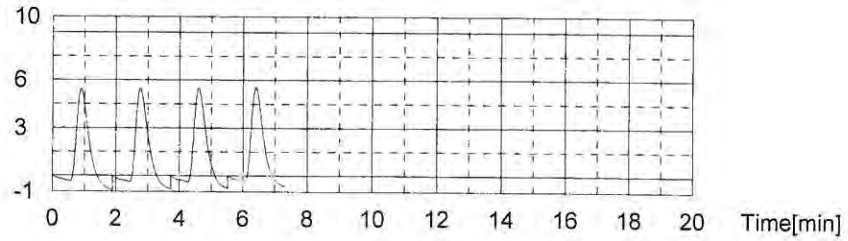
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:0.05199mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	16.42	0.05390mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_5	6/3/2016 6:52:03 AM
2	16.16	0.05238mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_5	6/3/2016 6:56:17 AM
3	16.08	0.05191mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_5	6/3/2016 7:00:32 AM
4	15.72	0.04979mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_5	6/3/2016 7:05:24 AM

Mean Area 16.09
Mean Conc. 0.05199mg/L



Sample

Sample Name: ic ck std 10ppm
Sample ID:
Origin: toc-3 4 reps method.met
Status Completed
Chk. Result

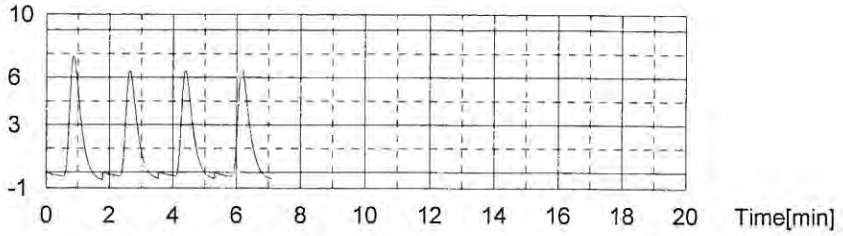
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:0.05998mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	19.44	0.07165mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_5	6/3/2016 7:16:06 AM
2	16.48	0.05426mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_5	6/3/2016 7:21:01 AM
3	16.34	0.05343mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_5	6/3/2016 7:25:59 AM
4	17.56	0.06060mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_5	6/3/2016 7:30:56 AM

Mean Area 17.46
Mean Conc. 0.05998mg/L



Sample

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

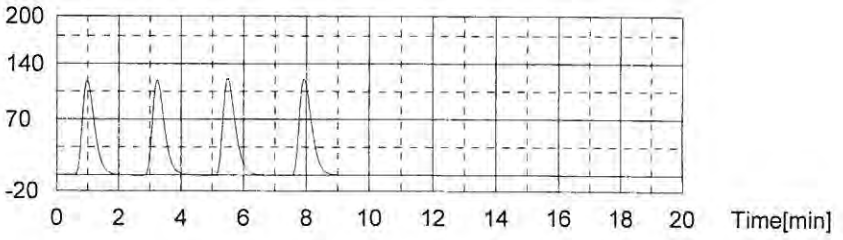
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:1.962mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	333.3	1.916mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_5	6/3/2016 7:42:06 AM
2	334.3	1.922mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_5	6/3/2016 7:46:28 AM
3	349.1	2.009mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_5	6/3/2016 7:51:00 AM
4	348.1	2.003mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_5	6/3/2016 7:55:25 AM

Mean Area 341.2
Mean Conc. 1.962mg/L



Sample

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

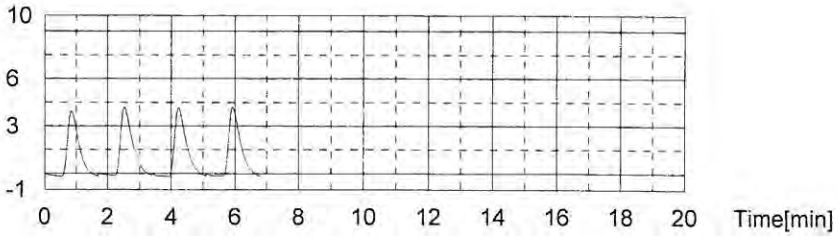
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:0.02161mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	10.46	0.01888mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_56	6/3/2016 8:06:01 AM
2	11.19	0.02317mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_56	6/3/2016 8:10:40 AM
3	11.02	0.02217mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_56	6/3/2016 8:15:19 AM
4	11.03	0.02223mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_56	6/3/2016 8:19:57 AM

Mean Area 10.93
Mean Conc. 0.02161mg/L



Sample

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

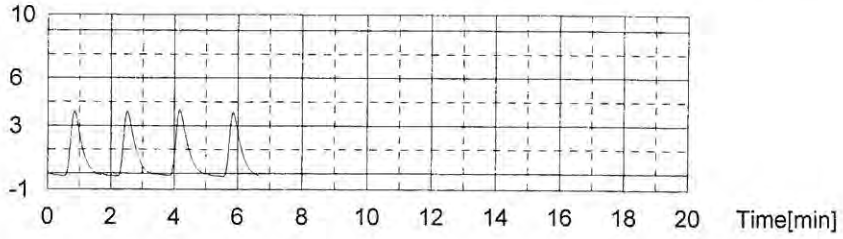
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:0.01604mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	10.03	0.01635mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_56	6/3/2016 8:30:33 AM
2	9.865	0.01538mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_56	6/3/2016 8:35:08 AM
3	10.31	0.01800mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_56	6/3/2016 8:39:44 AM
4	9.704	0.01444mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_56	6/3/2016 8:44:21 AM

Mean Area 9.977
Mean Conc. 0.01604mg/L



Sample

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

Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:1.985mg/L

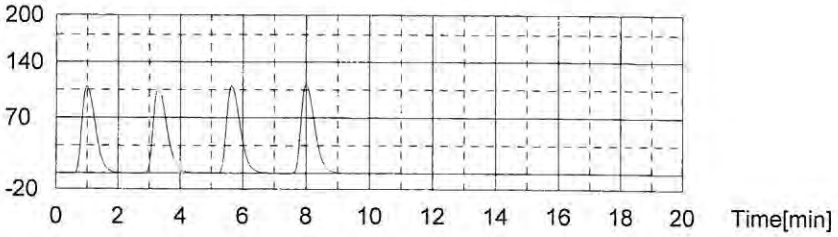
1.99

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	341.7	1.965mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_5	6/3/2016 8:55:34 AM
2	346.0	1.991mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_5	6/3/2016 9:00:01 AM
3	346.8	1.995mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_5	6/3/2016 9:04:29 AM
4	346.0	1.991mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_5	6/3/2016 9:08:53 AM

Mean Area 345.1
Mean Conc. 1.985mg/L



Sample

Sample Name: 16229-02 40x
Sample ID:
Origin: toc-3 4 reps method.met
Status Completed
Chk. Result

Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:3.658mg/L

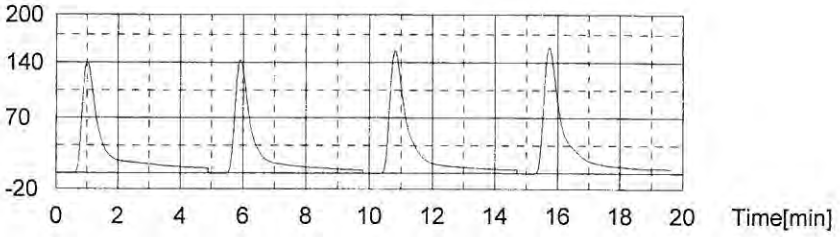
146.32

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	594.4	3.450mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_5	6/3/2016 9:31:05 AM
2	579.3	3.361mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_5	6/3/2016 9:38:06 AM
3	642.0	3.730mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_5	6/3/2016 9:45:06 AM
4	703.2	4.090mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_5	6/3/2016 9:52:28 AM

Mean Area 629.7
Mean Conc. 3.658mg/L



Sample

Sample Name: 16229-03 2x
Sample ID:
Origin: toc-3 4 reps method.met
Status Completed
Chk. Result

Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:0.7779mg/L

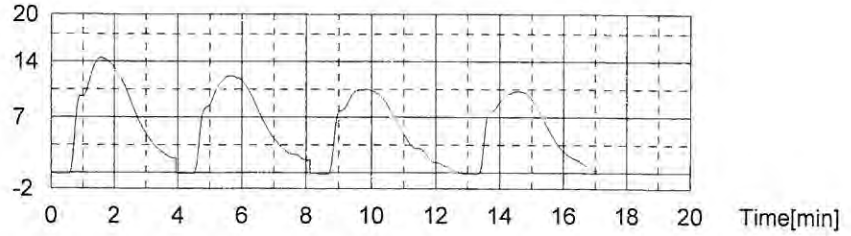
1.56

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	152.9	0.8559mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_5	6/3/2016 10:05:19 AM
2	136.7	0.7607mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_5	6/3/2016 10:12:00 AM
3	140.0	0.7801mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_5	6/3/2016 10:19:01 AM
4	128.9	0.7149mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_5	6/3/2016 10:25:25 AM

Mean Area 139.6
Mean Conc. 0.7779mg/L



Sample

Sample Name: 16229-04 2x
Sample ID:
Origin: toc-3 4 reps method.met
Status Completed
Chk. Result

Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:8.836mg/L

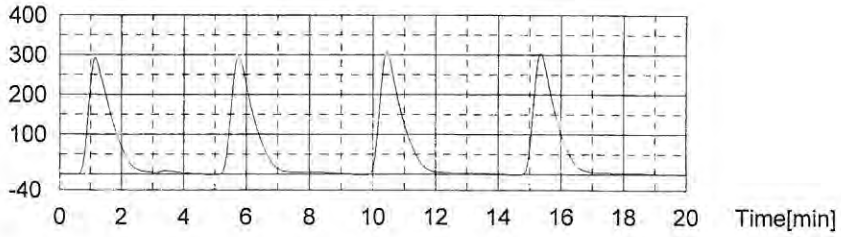
17.67

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1513	8.848mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_5	6/3/2016 10:38:55 AM
2	1489	8.707mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_5	6/3/2016 10:45:59 AM
3	1521	8.895mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_5	6/3/2016 10:53:20 AM
4	1521	8.895mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_5	6/3/2016 11:00:39 AM

Mean Area 1511
Mean Conc. 8.836mg/L



Sample

Sample Name: 16229-05 2x
Sample ID:
Origin: toc-3 4 reps method.met
Status Completed
Chk. Result

Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:9.161mg/L

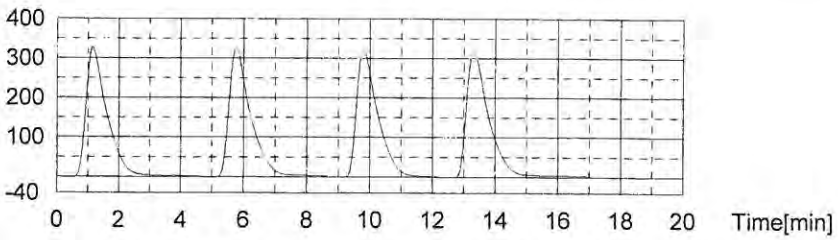
18.32

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1570	9.183mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_5	6/3/2016 11:14:10 AM
2	1565	9.154mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_5	6/3/2016 11:20:19 AM
3	1528	8.936mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_5	6/3/2016 11:25:59 AM
4	1602	9.371mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_5	6/3/2016 11:32:59 AM

Mean Area 1566
Mean Conc. 9.161mg/L



Sample

Sample Name: 16282-08 dup qc 6/2
Sample ID:
Origin: toc-3 4 reps method.met
Status Completed
Chk. Result

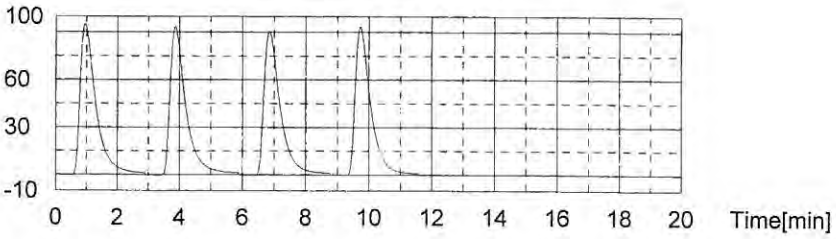
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:1.905mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	343.0	1.973mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_5	6/3/2016 11:48:05 AM
2	332.0	1.908mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_5	6/3/2016 11:53:10 AM
3	326.5	1.876mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_5	6/3/2016 11:59:19 AM
4	324.4	1.864mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_5	6/3/2016 12:04:13 PM

Mean Area 331.5
Mean Conc. 1.905mg/L



Sample

Sample Name: 16282-08 spk 4ppm qc 6/2
Sample ID:
Origin: toc-3 4 reps method.met
Status Completed
Chk. Result

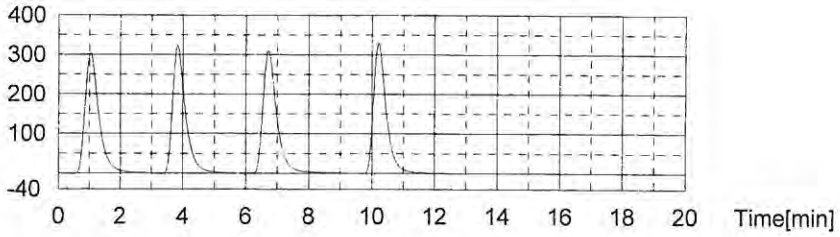
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:5.605mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	965.1	5.628mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_56	6/3/2016 12:15:57 PM
2	948.0	5.528mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_56	6/3/2016 12:20:55 PM
3	972.5	5.672mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_56	6/3/2016 12:27:44 PM
4	958.8	5.591mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_56	6/3/2016 12:32:54 PM

Mean Area 961.1
Mean Conc. 5.605mg/L



Sample

Sample Name: 16282-07 400x rr for 6/2
Sample ID:
Origin: toc-3 4 reps method.met
Status Completed
Chk. Result

Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:6.771mg/L

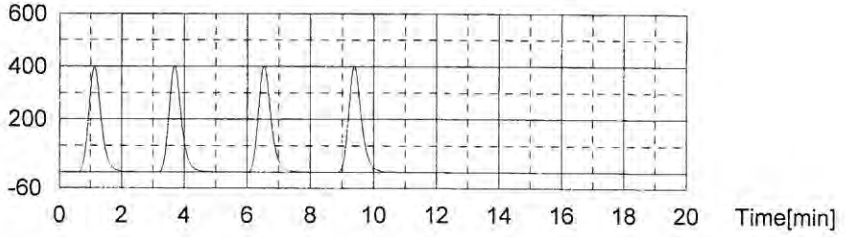
2708.4

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1145	6.686mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_56	6/3/2016 12:44:24 PM
2	1147	6.697mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_56	6/3/2016 12:49:35 PM
3	1175	6.862mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_56	6/3/2016 12:54:32 PM
4	1171	6.838mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_56	6/3/2016 12:59:27 PM

Mean Area 1160
Mean Conc. 6.771mg/L



Sample

Sample Name: 16282-07 dup 400x
Sample ID:
Origin: toc-3 4 reps method.met
Status Completed
Chk. Result

Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:7.238mg/L

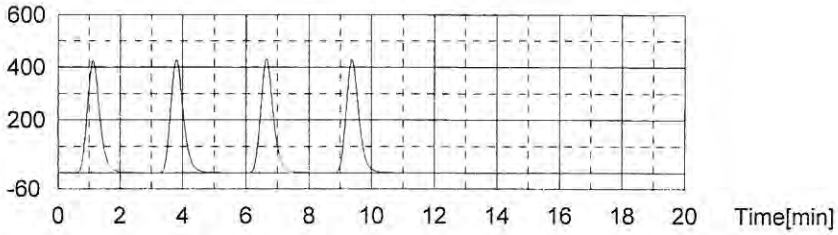
2895.2

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1221	7.132mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_5	6/3/2016 1:11:03 PM
2	1249	7.297mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_5	6/3/2016 1:15:59 PM
3	1240	7.244mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_5	6/3/2016 1:20:49 PM
4	1246	7.279mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_5	6/3/2016 1:25:38 PM

Mean Area 1239
Mean Conc. 7.238mg/L



Sample

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

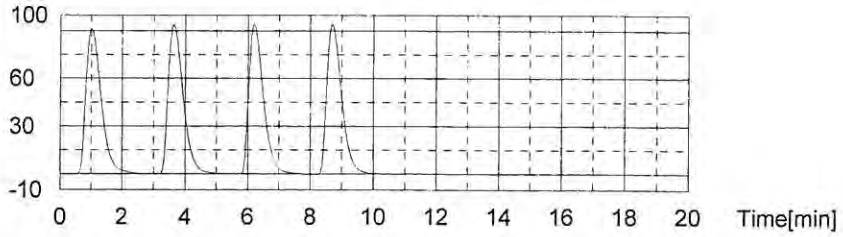
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:1.821mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	319.3	1.834mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_5	6/3/2016 1:37:11 PM
2	317.6	1.824mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_5	6/3/2016 1:41:51 PM
3	316.4	1.817mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_5	6/3/2016 1:46:27 PM
4	315.3	1.810mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_5	6/3/2016 1:51:02 PM

Mean Area 317.2
Mean Conc. 1.821mg/L



Sample

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

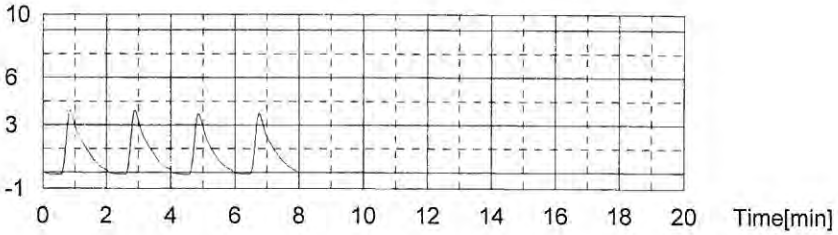
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:0.03420mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	14.24	0.04109mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_5	6/3/2016 2:02:01 PM
2	13.19	0.03492mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_5	6/3/2016 2:06:13 PM
3	12.08	0.02840mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_5	6/3/2016 2:10:26 PM
4	12.76	0.03240mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_5	6/3/2016 2:14:50 PM

Mean Area 13.07
Mean Conc. 0.03420mg/L



Sample

Sample Name: 16282-07 spk 3200ppm 800x
Sample ID:
Origin: toc-3 4 reps method.met
Status Completed
Chk. Result

Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:8.316mg/L

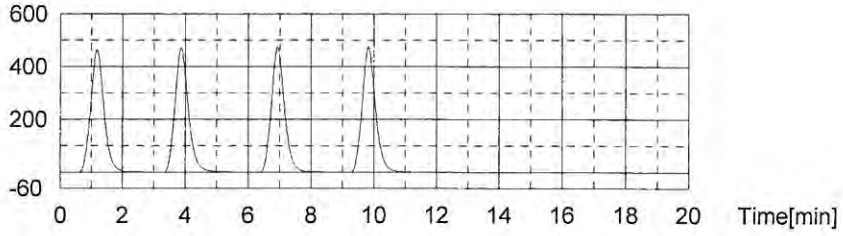
6652.8

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1416	8.278mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_5	6/3/2016 2:26:28 PM
2	1435	8.390mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_5	6/3/2016 2:31:38 PM
3	1405	8.213mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_5	6/3/2016 2:36:37 PM
4	1434	8.384mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_5	6/3/2016 2:41:29 PM

Mean Area 1423
Mean Conc. 8.316mg/L



Sample

Sample Name: 16229.2dp 40x
Sample ID:
Origin: toc-3 4 reps method.met
Status Completed
Chk. Result

Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:3.107mg/L

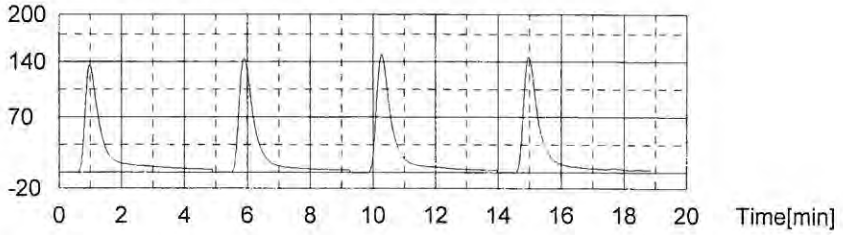
124.28

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	518.6	3.005mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_5	6/3/2016 3:06:57 PM
2	520.4	3.015mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_5	6/3/2016 3:13:44 PM
3	550.6	3.193mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_5	6/3/2016 3:20:32 PM
4	554.1	3.213mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_5	6/3/2016 3:27:43 PM

Mean Area 535.9
Mean Conc. 3.107mg/L



Sample

Sample Name: 16229.2sp 40x
Sample ID:
Origin: toc-3 4 reps method.met
Status Completed
Chk. Result

Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:7.307mg/L

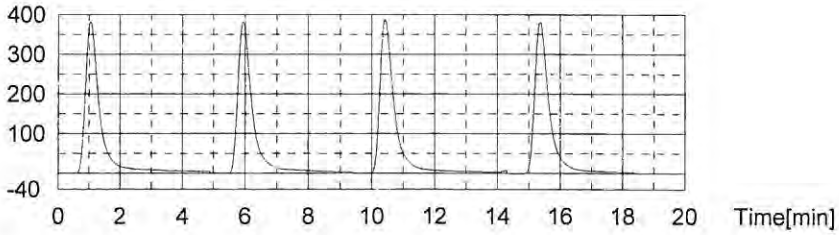
292.28

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1263	7.379mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_5	6/3/2016 3:41:32 PM
2	1258	7.350mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_5	6/3/2016 3:48:24 PM
3	1230	7.185mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_5	6/3/2016 3:55:24 PM
4	1252	7.314mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_5	6/3/2016 4:02:52 PM

Mean Area 1251
Mean Conc. 7.307mg/L



Sample

Sample Name: 16303.1
Sample ID:
Origin: toc-3 4 reps method.met
Status Completed
Chk. Result

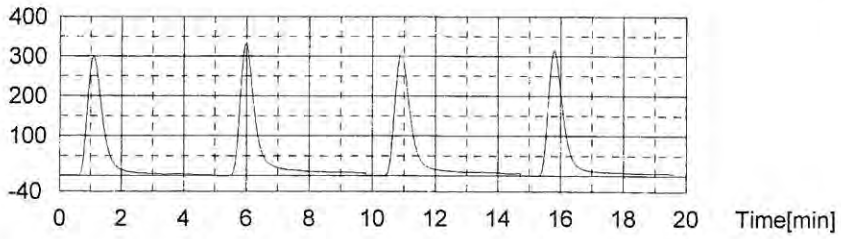
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:6.813mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1108	6.468mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_5	6/3/2016 4:16:42 PM
2	1226	7.162mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_5	6/3/2016 4:24:02 PM
3	1174	6.856mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_5	6/3/2016 4:32:39 PM
4	1159	6.768mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_5	6/3/2016 4:39:54 PM

Mean Area 1167
Mean Conc. 6.813mg/L



Sample

Sample Name: 16303.2 5x
Sample ID:
Origin: toc-3 4 reps method.met
Status Completed
Chk. Result

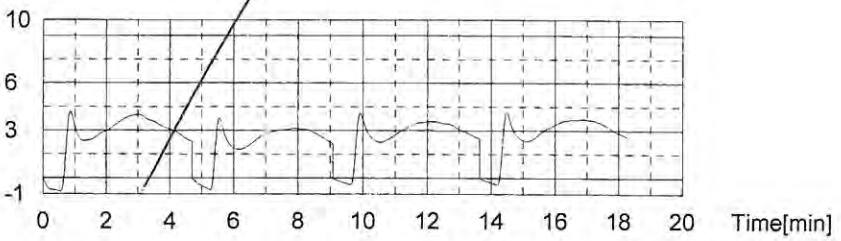
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:0.2525mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	59.35	0.3062mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_56	3/2016 4:53:31 PM
2	42.95	0.2098mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_56	3/2016 4:59:59 PM
3	47.79	0.2382mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_56	3/2016 5:06:39 PM
4	50.78	0.2558mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_56	3/2016 5:13:28 PM

Mean Area 50.22
Mean Conc. 0.2525mg/L



Sample

Sample Name: 16303.3 10x
Sample ID:
Origin: toc-3 4 reps method.met
Status Completed
Chk. Result

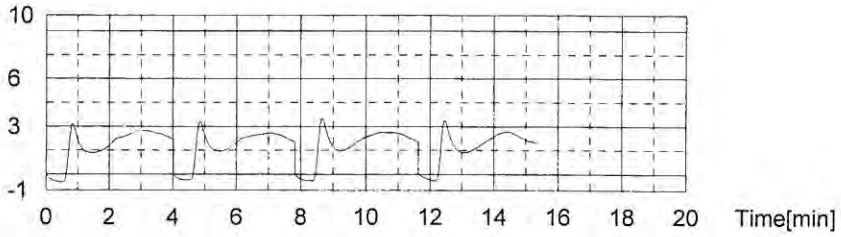
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:0.1119mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	27.31	0.1179mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_56	6/3/2016 5:26:24 PM
2	25.48	0.1071mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_56	6/3/2016 5:32:18 PM
3	27.73	0.1204mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_56	6/3/2016 5:38:13 PM
4	24.67	0.1024mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_56	6/3/2016 5:44:19 PM

Mean Area 26.30
Mean Conc. 0.1119mg/L



Sample

Sample Name: 16303.4 10x
Sample ID:
Origin: toc-3 4 reps method.met
Status Completed
Chk. Result

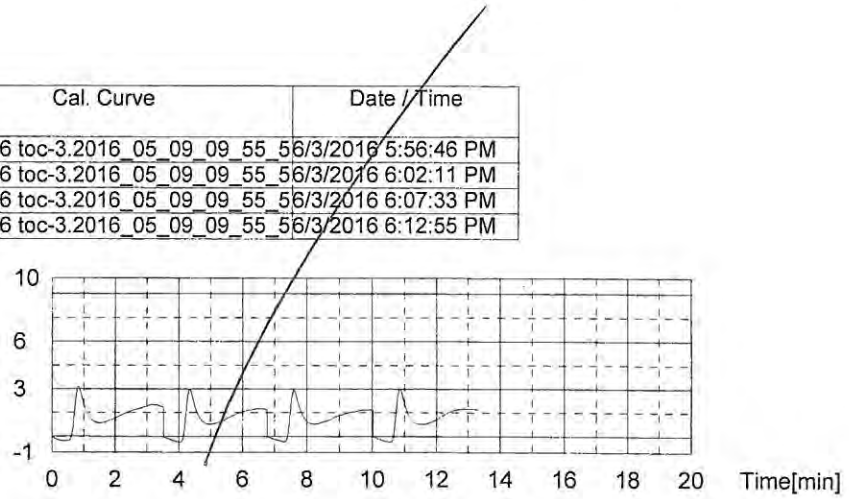
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:0.02836mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	13.17	0.03481mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_56	6/3/2016 5:56:46 PM
2	11.86	0.02711mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_56	6/3/2016 6:02:11 PM
3	11.16	0.02299mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_56	6/3/2016 6:07:33 PM
4	12.10	0.02852mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_56	6/3/2016 6:12:55 PM

Mean Area 12.07
Mean Conc. 0.02836mg/L



Sample

Sample Name: 16303.5 10x
Sample ID:
Origin: toc-3 4 reps method.met
Status Completed
Chk. Result

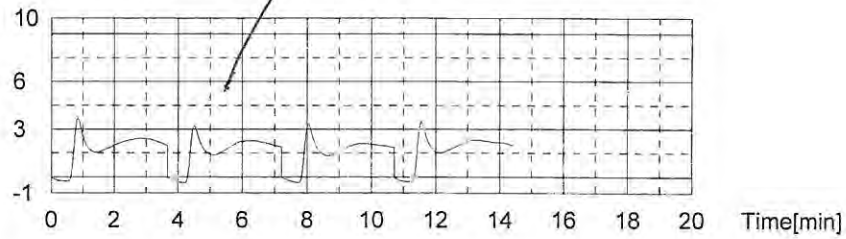
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:0.08840mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	24.01	0.09850mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_5	6/3/2016 6:25:30 PM
2	21.81	0.08558mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_5	6/3/2016 6:31:27 PM
3	19.98	0.07482mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_5	6/3/2016 6:37:04 PM
4	23.36	0.09468mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_5	6/3/2016 6:42:53 PM

Mean Area 22.29
Mean Conc. 0.08840mg/L



Sample

Sample Name: 16303.6
Sample ID:
Origin: toc-3 4 reps method.met
Status Completed
Chk. Result

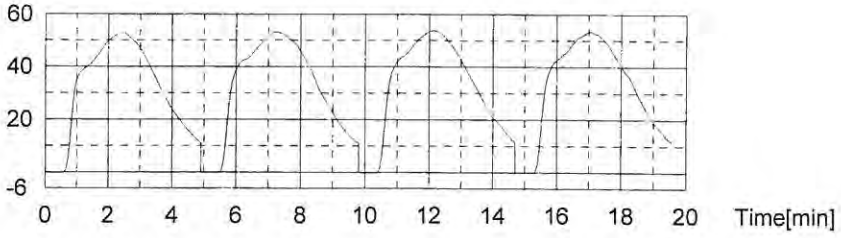
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:4.644mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	776.3	4.519mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_5	6/3/2016 6:56:43 PM
2	805.0	4.688mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_5	6/3/2016 7:04:54 PM
3	799.6	4.656mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_5	6/3/2016 7:13:31 PM
4	809.4	4.714mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_5	6/3/2016 7:22:01 PM

Mean Area 797.6
Mean Conc. 4.644mg/L



Sample

Sample Name: 16303.7
Sample ID:
Origin: toc-3 4 reps method.met
Status Completed
Chk. Result

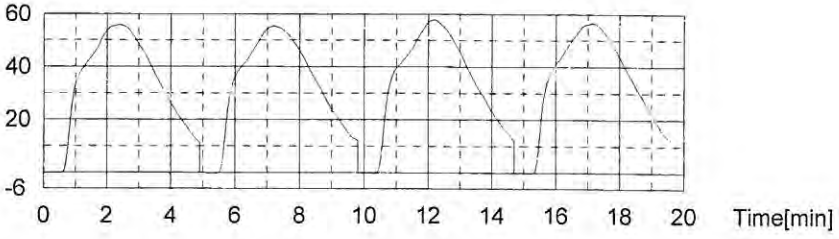
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:4.783mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	817.4	4.761mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_5	6/3/2016 7:35:51 PM
2	808.4	4.708mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_5	6/3/2016 7:44:16 PM
3	822.2	4.789mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_5	6/3/2016 7:52:35 PM
4	837.1	4.876mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_5	6/3/2016 8:00:57 PM

Mean Area 821.3
Mean Conc. 4.783mg/L



Sample

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

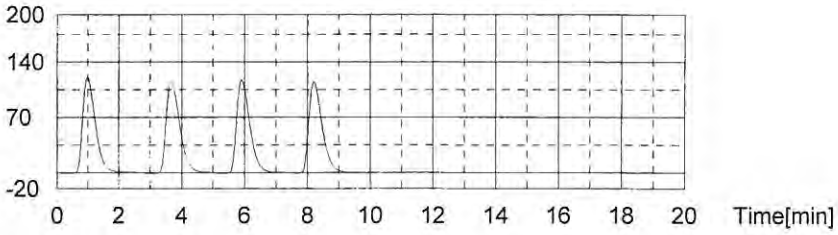
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:2.012mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	355.4	2.046mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_5	6/3/2016 8:17:50 PM
2	350.3	2.016mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_5	6/3/2016 8:23:16 PM
3	345.0	1.985mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_5	6/3/2016 8:27:42 PM
4	347.6	2.000mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_5	6/3/2016 8:32:03 PM

Mean Area 349.6
Mean Conc. 2.012mg/L



Sample

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

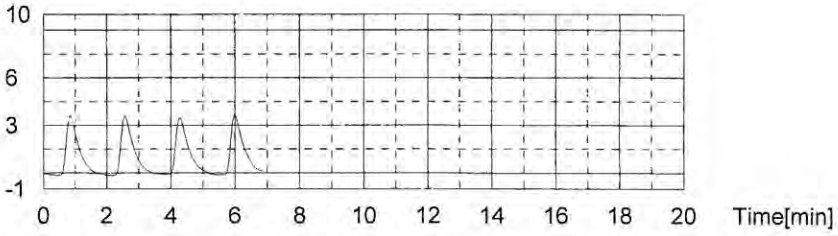
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:0.01509mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	10.15	0.01706mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_5	6/3/2016 8:42:44 PM
2	9.706	0.01445mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_5	6/3/2016 8:47:22 PM
3	9.545	0.01350mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_5	6/3/2016 8:51:59 PM
4	9.861	0.01536mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_5	6/3/2016 8:56:45 PM

Mean Area 9.816
Mean Conc. 0.01509mg/L



Sample

Sample Name: 16303-6 dup
Sample ID:
Origin: toc-3 4 reps method.met
Status Completed
Chk. Result

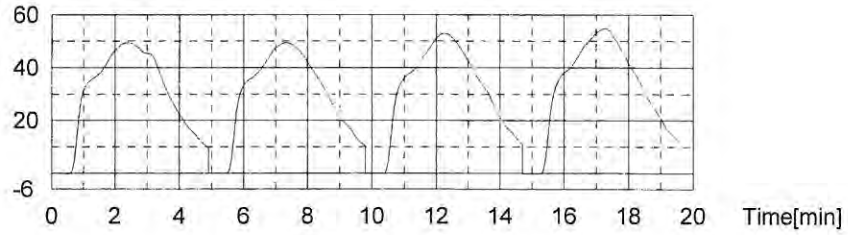
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:4.412mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	736.7	4.286mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_56	6/3/2016 9:10:35 PM
2	739.1	4.300mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_56	6/3/2016 9:18:42 PM
3	763.7	4.445mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_56	6/3/2016 9:26:56 PM
4	792.9	4.617mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_56	6/3/2016 9:35:19 PM

Mean Area 758.1
Mean Conc. 4.412mg/L



Sample

Sample Name: 16303-6 ms
Sample ID:
Origin: toc-3 4 reps method.met
Status Completed
Chk. Result

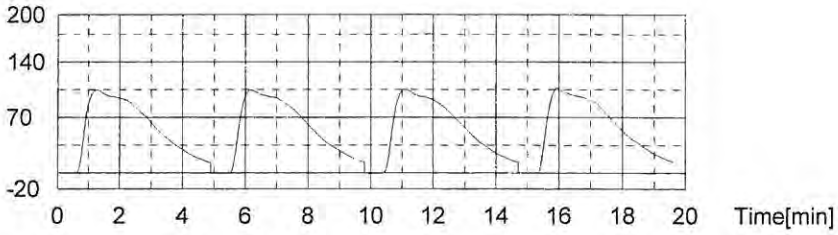
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:8.368mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1416	8.278mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_56	6/3/2016 9:49:10 PM
2	1433	8.378mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_56	6/3/2016 9:57:25 PM
3	1419	8.296mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_56	6/3/2016 10:05:46 PM
4	1457	8.519mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_56	6/3/2016 10:14:02 PM

Mean Area 1431
Mean Conc. 8.368mg/L



Sample

Sample Name: 16303-2
Sample ID:
Origin: toc-3 4 reps method.met
Status Completed
Chk. Result

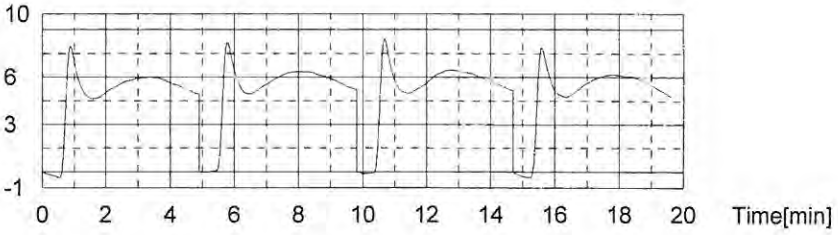
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:0.4564mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	83.13	0.4459mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_5	6/3/2016 10:27:52 PM
2	83.35	0.4472mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_5	6/3/2016 10:34:57 PM
3	85.24	0.4583mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_5	6/3/2016 10:41:57 PM
4	87.95	0.4742mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_5	6/3/2016 10:48:59 PM

Mean Area 84.92
Mean Conc. 0.4564mg/L



Sample

Sample Name: 16303-3
Sample ID:
Origin: toc-3 4 reps method.met
Status Completed
Chk. Result

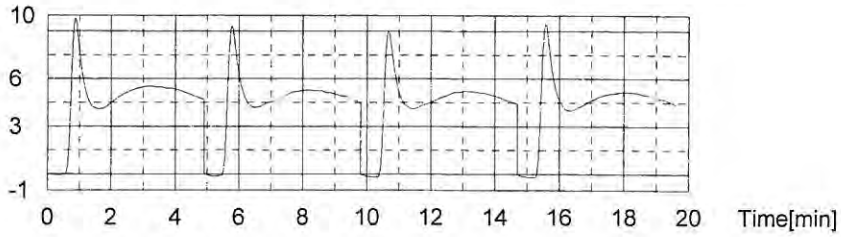
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:0.3993mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	75.40	0.4005mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_56	6/3/2016 11:02:50 PM
2	75.86	0.4032mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_56	6/3/2016 11:09:53 PM
3	74.09	0.3928mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_56	6/3/2016 11:16:53 PM
4	75.48	0.4009mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_56	6/3/2016 11:23:53 PM

Mean Area 75.21
Mean Conc. 0.3993mg/L



Sample

Sample Name: 16303-4
Sample ID:
Origin: toc-3 4 reps method.met
Status Completed
Chk. Result

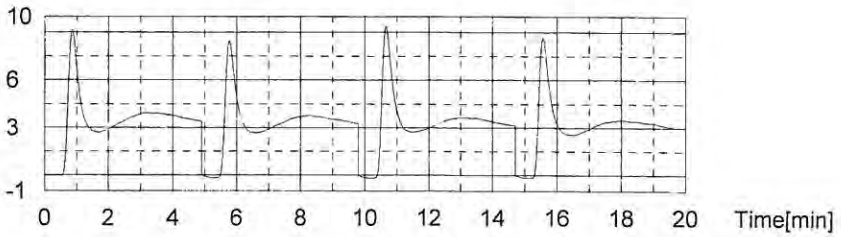
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:0.2819mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	55.33	0.2825mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_56	6/3/2016 11:37:44 PM
2	55.33	0.2825mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_56	6/3/2016 11:44:44 PM
3	56.66	0.2904mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_56	6/3/2016 11:51:44 PM
4	53.57	0.2722mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_56	6/3/2016 11:58:44 PM

Mean Area 55.22
Mean Conc. 0.2819mg/L



Sample

Sample Name: 16303-5
Sample ID:
Origin: toc-3 4 reps method.met
Status Completed
Chk. Result

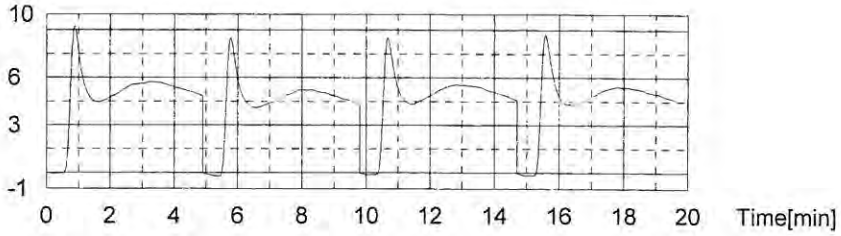
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:0.4032mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	77.03	0.4101mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_5	6/4/2016 12:12:34 AM
2	74.79	0.3969mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_5	6/4/2016 12:19:34 AM
3	76.08	0.4045mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_5	6/4/2016 12:26:39 AM
4	75.54	0.4013mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_5	6/4/2016 12:33:39 AM

Mean Area 75.86
Mean Conc. 0.4032mg/L



Sample

Sample Name: 16303-8
Sample ID:
Origin: toc-3 4 reps method.met
Status Completed
Chk. Result

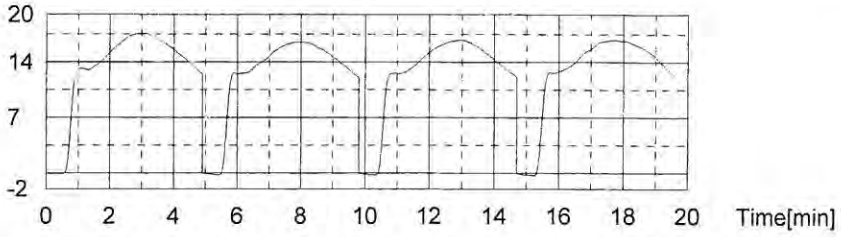
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:1.224mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	219.5	1.247mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_5	6/4/2016 12:47:29 AM
2	213.3	1.211mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_5	6/4/2016 12:55:41 AM
3	210.4	1.194mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_5	6/4/2016 1:04:03 AM
4	218.9	1.244mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_5	6/4/2016 1:12:16 AM

Mean Area 215.5
Mean Conc. 1.224mg/L



Sample

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

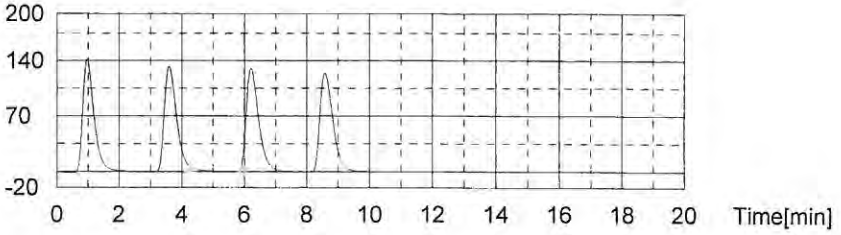
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:2.140mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	373.7	2.153mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_5	6/4/2016 1:29:19 AM
2	378.4	2.181mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_5	6/4/2016 1:34:02 AM
3	370.1	2.132mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_5	6/4/2016 1:38:31 AM
4	363.6	2.094mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_5	6/4/2016 1:42:56 AM

Mean Area 371.5
Mean Conc. 2.140mg/L



Sample

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

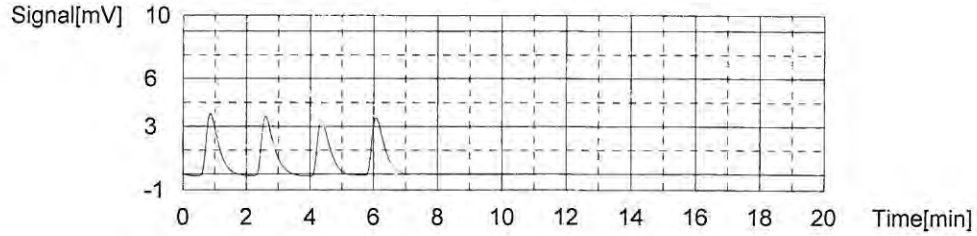
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:0.01691mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	10.80	0.02088mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_5	6/4/2016 1:53:37 AM
2	10.12	0.01688mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_5	6/4/2016 1:58:19 AM
3	9.741	0.01466mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_5	6/4/2016 2:03:01 AM
4	9.838	0.01523mg/L	2500uL	1		05092016 toc-3.2016_05_09_09_55_5	6/4/2016 2:07:39 AM

Mean Area 10.12
Mean Conc. 0.01691mg/L



Work Group

ALPHA ANALYTICAL LABORATORIES, INC.

Alpha WORK GROUP REPORT (wk02)

Jun 06 2016, 01:14 pm

Work Group: WG900204 for Department: 7 Wet Chemistry

Created: 03-JUN-16 Due: Operator: dw

Sample	Client ID	C	Product	Matrix	Stat	UA	HOLD	DUE	PR	Location
L1616303-01	OV02_052616_SW_10	S	DOC-9060	WATER	DONE	U	0623	0606	S0	Vial-D
L1616303-02	ES-15_052616_SW_10	S	DOC-9060	WATER	DONE	U	0623	0606	S0	Vial-D
L1616303-03	WQ-ECH_052616_SW_10	S	DOC-9060	WATER	DONE	U	0623	0606	S0	Vial-D
L1616303-04	WQ-FPT_052616_SW_10	S	DOC-9060	WATER	DONE	U	0623	0606	S0	Vial-D
L1616303-05	WQ3-L_052616_SW_10	S	DOC-9060	WATER	DONE	U	0623	0606	S0	Vial-D
L1616303-06	WQ1B-C_052616_SW_10	S	DOC-9060	WATER	DONE	U	0623	0606	S0	Vial-D
L1616303-07	WQ1B-C_052616_SW_10_	S	DOC-9060	WATER	DONE	U	0623	0606	S0	Vial-D
L1616303-08	WQ2-C_052716_SW_10	S	DOC-9060	WATER	DONE	U	0624	0606	S0	Vial-D
WG900204-1	Laboratory Method Bl	S	DOC-9060	WATER	DONE	U				
WG900204-2	Laboratory Control S	S	DOC-9060	WATER	DONE	U				
WG900204-3	Duplicate Sample	S	DOC-9060	WATER	DONE	U				
WG900204-4	Matrix Spike	S	DOC-9060	WATER	DONE	U				

Comments:

WG900204-3	L1616303-06
WG900204-4	L1616303-06

Alpha Report

ANALYTICAL REPORT

Lab Number:	L1616303
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
Project Number:	3616166052
Report Date:	06/06/16

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

Project Name: PENOBSCOT RIVER
Project Number: 3616166052

Lab Number: L1616303
Report Date: 06/06/16

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1616303-01	OV02_052616_SW_10	SURFACE WATER	PENOBSCOT RIVER	05/26/16 13:00	05/27/16
L1616303-02	ES-15_052616_SW_10	SURFACE WATER	PENOBSCOT RIVER	05/26/16 08:50	05/27/16
L1616303-03	WQ-ECH_052616_SW_10	SURFACE WATER	PENOBSCOT RIVER	05/26/16 07:05	05/27/16
L1616303-04	WQ-FPT_052616_SW_10	SURFACE WATER	PENOBSCOT RIVER	05/26/16 08:10	05/27/16
L1616303-05	WQ3-L_052616_SW_10	SURFACE WATER	PENOBSCOT RIVER	05/26/16 15:10	05/27/16
L1616303-06	WQ1B-C_052616_SW_10	SURFACE WATER	PENOBSCOT RIVER	05/26/16 16:20	05/27/16
L1616303-07	WQ1B-C_052616_SW_10_DUP	SURFACE WATER	PENOBSCOT RIVER	05/26/16 16:20	05/27/16
L1616303-08	WQ2-C_052716_SW_10	SURFACE WATER	PENOBSCOT RIVER	05/27/16 08:00	05/27/16

Project Name: PENOBSCOT RIVER
Project Number: 3616166052

Lab Number: L1616303
Report Date: 06/06/16

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
Project Number: 3616166052
Lab Number: L1616303
Report Date: 06/06/16

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.

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: Cristin Walker

Title: Technical Director/Representative Date: 06/06/16

INORGANICS
&
MISCELLANEOUS

Project Name: PENOBSCOT RIVER
Project Number: 3616166052

Lab Number: L1616303
Report Date: 06/06/16

SAMPLE RESULTS

Lab ID: L1616303-01
Client ID: OV02_052616_SW_10
Sample Location: PENOBSCOT RIVER
Matrix: Surface Water

Date Collected: 05/26/16 13:00
Date Received: 05/27/16
Field Prep: Field Filtered (Dissolved Metals)

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total Suspended	ND		mg/l	5.0	NA	1	-	06/01/16 14:05	121,2540D	DW
Dissolved Organic Carbon	6.8		mg/l	1.0	0.04	1	06/03/16 08:55	06/03/16 08:55	1,9060A	DW

Project Name: PENOBSCOT RIVER
Project Number: 3616166052

Lab Number: L1616303
Report Date: 06/06/16

SAMPLE RESULTS

Lab ID: L1616303-02
Client ID: ES-15_052616_SW_10
Sample Location: PENOBSCOT RIVER
Matrix: Surface Water

Date Collected: 05/26/16 08:50
Date Received: 05/27/16
Field Prep: Field Filtered (Dissolved Metals)

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total Suspended	12.		mg/l	5.0	NA	1	-	06/01/16 14:05	121,2540D	DW
Dissolved Organic Carbon	0.46	J	mg/l	1.0	0.04	1	06/03/16 08:55	06/03/16 08:55	1,9060A	DW

Project Name: PENOBSCOT RIVER
Project Number: 3616166052

Lab Number: L1616303
Report Date: 06/06/16

SAMPLE RESULTS

Lab ID: L1616303-03
Client ID: WQ-ECH_052616_SW_10
Sample Location: PENOBSCOT RIVER
Matrix: Surface Water

Date Collected: 05/26/16 07:05
Date Received: 05/27/16
Field Prep: Field Filtered (Dissolved Metals)

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total Suspended	7.3		mg/l	5.0	NA	1	-	06/01/16 14:05	121,2540D	DW
Dissolved Organic Carbon	0.40	J	mg/l	1.0	0.04	1	06/03/16 08:55	06/03/16 08:55	1,9060A	DW

Project Name: PENOBSCOT RIVER
Project Number: 3616166052

Lab Number: L1616303
Report Date: 06/06/16

SAMPLE RESULTS

Lab ID: L1616303-04
Client ID: WQ-FPT_052616_SW_10
Sample Location: PENOBSCOT RIVER
Matrix: Surface Water

Date Collected: 05/26/16 08:10
Date Received: 05/27/16
Field Prep: Field Filtered (Dissolved Metals)

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total Suspended	8.3		mg/l	5.0	NA	1	-	06/01/16 14:05	121,2540D	DW
Dissolved Organic Carbon	0.28	J	mg/l	1.0	0.04	1	06/03/16 08:55	06/03/16 08:55	1,9060A	DW

Project Name: PENOBSCOT RIVER
Project Number: 3616166052

Lab Number: L1616303
Report Date: 06/06/16

SAMPLE RESULTS

Lab ID: L1616303-05
Client ID: WQ3-L_052616_SW_10
Sample Location: PENOBSCOT RIVER
Matrix: Surface Water

Date Collected: 05/26/16 15:10
Date Received: 05/27/16
Field Prep: Field Filtered (Dissolved Metals)

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total Suspended	7.6		mg/l	5.0	NA	1	-	06/02/16 15:45	121,2540D	DW
Dissolved Organic Carbon	0.40	J	mg/l	1.0	0.04	1	06/03/16 08:55	06/03/16 08:55	1,9060A	DW

Project Name: PENOBSCOT RIVER
Project Number: 3616166052

Lab Number: L1616303
Report Date: 06/06/16

SAMPLE RESULTS

Lab ID: L1616303-06
Client ID: WQ1B-C_052616_SW_10
Sample Location: PENOBSCOT RIVER
Matrix: Surface Water

Date Collected: 05/26/16 16:20
Date Received: 05/27/16
Field Prep: Field Filtered (Dissolved Metals)

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total Suspended	6.5		mg/l	5.0	NA	1	-	06/02/16 15:45	121,2540D	DW
Dissolved Organic Carbon	4.6		mg/l	1.0	0.04	1	06/03/16 08:55	06/03/16 08:55	1,9060A	DW

Project Name: PENOBSCOT RIVER
Project Number: 3616166052
Lab Number: L1616303
Report Date: 06/06/16

SAMPLE RESULTS

Lab ID: L1616303-07
Client ID: WQ1B-C_052616_SW_10_DUP
Sample Location: PENOBSCOT RIVER
Matrix: Surface Water

Date Collected: 05/26/16 16:20
Date Received: 05/27/16
Field Prep: Field Filtered (Dissolved Metals)

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total Suspended	7.8		mg/l	5.0	NA	1	-	06/02/16 15:45	121,2540D	DW
Dissolved Organic Carbon	4.8		mg/l	1.0	0.04	1	06/03/16 08:55	06/03/16 08:55	1,9060A	DW

Project Name: PENOBSCOT RIVER
Project Number: 3616166052

Lab Number: L1616303
Report Date: 06/06/16

SAMPLE RESULTS

Lab ID: L1616303-08
Client ID: WQ2-C_052716_SW_10
Sample Location: PENOBSCOT RIVER
Matrix: Surface Water

Date Collected: 05/27/16 08:00
Date Received: 05/27/16
Field Prep: Field Filtered (Dissolved Metals)

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total Suspended	45.		mg/l	5.0	NA	1	-	06/02/16 15:45	121,2540D	DW
Dissolved Organic Carbon	1.2		mg/l	1.0	0.04	1	06/03/16 08:55	06/03/16 08:55	1,9060A	DW

Project Name: PENOBSCOT RIVER
Project Number: 3616166052
Lab Number: L1616303
Report Date: 06/06/16

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 sample(s): 03 Batch: WG899336-1										
Solids, Total Suspended	ND		mg/l	5.0	NA	1	-	06/01/16 14:05	121,2540D	DW
General Chemistry - Westborough Lab for sample(s): 01-02,04 Batch: WG899337-1										
Solids, Total Suspended	ND		mg/l	5.0	NA	1	-	06/01/16 14:05	121,2540D	DW
General Chemistry - Westborough Lab for sample(s): 05-08 Batch: WG899697-1										
Solids, Total Suspended	ND		mg/l	5.0	NA	1	-	06/02/16 15:45	121,2540D	DW
General Chemistry - Westborough Lab for sample(s): 01-08 Batch: WG900204-1										
Dissolved Organic Carbon	ND		mg/l	1.0	0.04	1	06/03/16 08:55	06/03/16 08:55	1,9060A	DW

Lab Control Sample Analysis

Batch Quality Control

Project Name: PENOBSCOT RIVER

Project Number: 3616166052

Lab Number: L1616303

Report Date: 06/06/16

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-08 Batch: WG900204-2								
Dissolved Organic Carbon	100		-		90-110	-		

Matrix Spike Analysis
Batch Quality Control

Project Name: PENOBSCOT RIVER
Project Number: 3616166052

Lab Number: L1616303
Report Date: 06/06/16

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-08 QC Batch ID: WG900204-4 QC Sample: L1616303-06 Client ID: WQ1B-C_052616_SW_10												
Dissolved Organic Carbon	4.6	4	8.4	94		-	-		79-120	-		20

Lab Duplicate Analysis
Batch Quality Control

Project Name: PENOBSCOT RIVER
Project Number: 3616166052

Lab Number: L1616303
Report Date: 06/06/16

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 03 QC Batch ID: WG899336-2 QC Sample: L1615855-01 Client ID: DUP Sample						
Solids, Total Suspended	48.	48	mg/l	0		29
General Chemistry - Westborough Lab Associated sample(s): 01-02,04 QC Batch ID: WG899337-2 QC Sample: L1616043-01 Client ID: DUP Sample						
Solids, Total Suspended	66.	110	mg/l	**50**	Q	29
General Chemistry - Westborough Lab Associated sample(s): 05-08 QC Batch ID: WG899697-2 QC Sample: L1616303-06 Client ID: WQ1B-C_052616_SW_10						
Solids, Total Suspended	6.5	8.0	mg/l	21		29
General Chemistry - Westborough Lab Associated sample(s): 01-08 QC Batch ID: WG900204-3 QC Sample: L1616303-06 Client ID: WQ1B-C_052616_SW_10						
Dissolved Organic Carbon	4.6	4.4	mg/l	4		20

Project Name: PENOBSCOT RIVER
Project Number: 3616166052

Lab Number: L1616303
Report Date: 06/06/16

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information Custody Seal

Cooler	
A	Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1616303-01A	Vial H2SO4 preserved	A	N/A	3.7	Y	Absent	DOC-9060(28)
L1616303-01B	Vial H2SO4 preserved	A	N/A	3.7	Y	Absent	DOC-9060(28)
L1616303-01C	Plastic 950ml unpreserved	A	7	3.7	Y	Absent	TSS-2540(7)
L1616303-02A	Vial H2SO4 preserved	A	N/A	3.7	Y	Absent	DOC-9060(28)
L1616303-02C	Plastic 950ml unpreserved	A	7	3.7	Y	Absent	TSS-2540(7)
L1616303-03A	Vial H2SO4 preserved	A	N/A	3.7	Y	Absent	DOC-9060(28)
L1616303-03B	Vial H2SO4 preserved	A	N/A	3.7	Y	Absent	DOC-9060(28)
L1616303-03C	Plastic 950ml unpreserved	A	7	3.7	Y	Absent	TSS-2540(7)
L1616303-04A	Vial H2SO4 preserved	A	N/A	3.7	Y	Absent	DOC-9060(28)
L1616303-04B	Vial H2SO4 preserved	A	N/A	3.7	Y	Absent	DOC-9060(28)
L1616303-04C	Plastic 950ml unpreserved	A	7	3.7	Y	Absent	TSS-2540(7)
L1616303-05A	Vial H2SO4 preserved	A	N/A	3.7	Y	Absent	DOC-9060(28)
L1616303-05B	Vial H2SO4 preserved	A	N/A	3.7	Y	Absent	DOC-9060(28)
L1616303-05C	Plastic 950ml unpreserved	A	7	3.7	Y	Absent	TSS-2540(7)
L1616303-06A	Vial H2SO4 preserved	A	N/A	3.7	Y	Absent	DOC-9060(28)
L1616303-06A1	Vial H2SO4 preserved	A	N/A	3.7	Y	Absent	DOC-9060(28)
L1616303-06A2	Vial H2SO4 preserved	A	N/A	3.7	Y	Absent	DOC-9060(28)
L1616303-06B	Vial H2SO4 preserved	A	N/A	3.7	Y	Absent	DOC-9060(28)
L1616303-06B1	Vial H2SO4 preserved	A	N/A	3.7	Y	Absent	DOC-9060(28)
L1616303-06B2	Vial H2SO4 preserved	A	N/A	3.7	Y	Absent	DOC-9060(28)
L1616303-06C	Plastic 950ml unpreserved	A	7	3.7	Y	Absent	TSS-2540(7)
L1616303-06C1	Plastic 950ml unpreserved	A	7	3.7	Y	Absent	TSS-2540(7)
L1616303-06C2	Plastic 950ml unpreserved	A	7	3.7	Y	Absent	TSS-2540(7)
L1616303-07A	Vial H2SO4 preserved	A	N/A	3.7	Y	Absent	DOC-9060(28)
L1616303-07B	Vial H2SO4 preserved	A	N/A	3.7	Y	Absent	DOC-9060(28)
L1616303-07C	Plastic 950ml unpreserved	A	7	3.7	Y	Absent	TSS-2540(7)
L1616303-08A	Vial H2SO4 preserved	A	N/A	3.7	Y	Absent	DOC-9060(28)
L1616303-08B	Vial H2SO4 preserved	A	N/A	3.7	Y	Absent	DOC-9060(28)
L1616303-08C	Plastic 950ml unpreserved	A	7	3.7	Y	Absent	TSS-2540(7)

*Values in parentheses indicate holding time in days

Project Name:	PENOBSCOT RIVER	**Lab Number:**	L1616303
Project Number:	3616166052	**Report Date:**	06/06/16

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 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 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 AND 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 above 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	**Lab Number:**	L1616303
Project Number:	3616166052	**Report Date:**	06/06/16

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.

Report Format: DU Report with 'J' Qualifiers

Project Name: PENOBSCOT RIVER
Project Number: 3616166052
Lab Number: L1616303
Report Date: 06/06/16

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: NPW: Amenable Cyanide Distillation, Total Cyanide Distillation
EPA 9038: NPW: 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, SM4500Cl-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: Al,Sb,As,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Mo,Ni,K,Se,Ag,Na,Sr,Ti,Tl,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.

ALPHA ANALYTICAL

CHAIN OF CUSTODY

PAGE 1 OF 1

Date Rec'd in Lab: 5/28/16

ALPHA Job #: L1616303

8 Walkup Drive
Westboro, MA 01581
Tel: 508-898-9220

320 Forbes Blvd
Mansfield, MA 02048
Tel: 508-822-9300

Client Information

Client: AMEC FOSTER WHEELER

Address: 511 CONGRESS ST
PORTLAND, ME 04101

Phone: 207 775 5401

Email: rod.pendleton@amecfw.com

Project Information

Project Name: PENOBSCOT RIVER

Project Location: PENOBSCOT RIVER

Project #: 3616166052

Project Manager: ROD PENDLETON

ALPHA Quote #:

Turn-Around Time

☒ Standard ☐ RUSH (only confirmed if pre-approved!)

Date Due:

Report Information - Data Deliverables

☐ ADEx ☒ EMAIL

Billing Information

☒ Same as Client info PO #:

Regulatory Requirements & Project Information Requirements

☐ Yes ☐ No MA MCP Analytical Methods ☐ Yes ☐ No CT RCP Analytical Methods
☐ Yes ☐ No Matrix Spike Required on this SDG? (Required for MCP Inorganics)
☐ Yes ☐ No GW1 Standards (Info Required for Metals & EPH with Targets)
☐ Yes ☐ No NPDES RGP
☐ Other State /Fed Program ______ Criteria ______

Additional Project Information:

CONTACT DENISE KING W/ QUESTIONS
TEL: 978-692-9090

ANALYSIS: VOC: ☐ 8260 ☐ 624 ☐ 524.2; SVOC: ☐ ABN ☐ PAH; METALS: ☐ MCP 13 ☐ MCP 14 ☐ RCP 15; METALS: ☐ RCRA5 ☐ RCRA8 ☐ PP13; EPH: ☐ Ranges & Targets ☐ Ranges Only; VPH: ☐ Ranges & Targets ☐ Ranges Only; ☐ PCB ☐ PEST; TPH: ☐ Quant Only ☐ Fingerprint; DOC SW-846 9060 2-Yok AC; TSS 2450D 1LP 4oC

SAMPLE INFO — Filtration: ☒ Field ☐ Lab to do; Preservation: ☐ Lab to do

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler Initials	DOC SW-846 9060	TSS 2450D	Sample Comments	TOTAL # BOTTLES
16303-01	OV02_052616_SW_10	5/26/16	1300	SW	KB	X	X		3
02	ES-15_052616_SW_10	5/26/16	0850	↓	↓	X	X	1 DOC VIAL BROKE	2
03	WQ-ECH_052616_SW_10	5/26/16	0705			X	X		3
04	WQ-FPT_052616_SW_10	5/26/16	0810			X	X		3
05	WQ3-L_052616_SW_10	5/26/16	1510			X	X		3
06	WQ16-C_052616_SW_10	5/26/16	1620			X	X		3
07	WQ16-C_052616_SW_10_DUP	↓	↓			X	X		3
06	WQ16-C_052616_SW_10_MS	↓	↓			X	X		3
06	WQ16-C_052616_SW_10_MD	↓	↓			X	X		3
08	WQ2-C_052716_SW_10	5/27/16	0800	↓	↓	X	X		3
								TOTAL	29

	DOC	TSS
Container Type	A	P
Preservative	D	A

Container Type
P= Plastic
A= Amber glass
V= Vial
G= Glass
B= Bacteria cup
C= Cube
O= Other
E= Encore
D= BOD Bottle

Preservative
A= None
B= HCl
C= HNO_3
D= H_2SO_4
E= NaOH
F= MeOH
G= $NaHSO_4$
H = $Na_2S_2O_3$
I= Ascorbic Acid
J = NH_4Cl
K= Zn Acetate
O= Other

Relinquished By:	Date/Time	Received By:	Date/Time
Julie Palozzo	5/27/16 948	[signature]	5/28/16 0948

FORM NO: 01-01 (rev. 12-Mar-2012)

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

13 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,

Amy Goodall

Amy Goodall
Project Manager

eurofins | Frontier Global Sciences

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

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	13-Sep-16 13:26

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
OV-02_062916_SW_10	1607042-01	Water	29-Jun-16 15:00	01-Jul-16 09:30
OV-02_062916_SW_10 Dissolved	1607042-02	Water	29-Jun-16 15:00	01-Jul-16 09:30
WQ1b-c_062916_SW_10	1607042-03	Water	29-Jun-16 10:40	01-Jul-16 09:30
WQ1b-c_062916_SW_10 Dissolved	1607042-04	Water	29-Jun-16 10:40	01-Jul-16 09:30
WQ2-c_063016_SW_10	1607042-05	Water	30-Jun-16 09:00	01-Jul-16 09:30
WQ2-c_063016_SW_10 Dissolved	1607042-06	Water	30-Jun-16 09:00	01-Jul-16 09:30
WQ3-L_062916_SW_10	1607042-07	Water	29-Jun-16 09:35	01-Jul-16 09:30
WQ3-L_062916_SW_10 Dissolved	1607042-08	Water	29-Jun-16 09:35	01-Jul-16 09:30
ES-15_062916_SW_10	1607042-09	Water	29-Jun-16 09:00	01-Jul-16 09:30
ES-15_062916_SW_10 Dissolved	1607042-10	Water	29-Jun-16 09:00	01-Jul-16 09:30
WQ-ECH_062916_SW_10	1607042-11	Water	29-Jun-16 07:45	01-Jul-16 09:30
WQ-ECH_062916_SW_10 Dissolved	1607042-12	Water	29-Jun-16 07:45	01-Jul-16 09:30
WQ-FPT_062916_SW_10	1607042-13	Water	29-Jun-16 08:25	01-Jul-16 09:30
WQ-FPT_062916_SW_10 Dissolved	1607042-14	Water	29-Jun-16 08:25	01-Jul-16 09:30
WQ-ECH_062916_SW_10_DUP	1607042-15	Water	29-Jun-16 07:45	01-Jul-16 09:30
WQ-ECH_062916_SW_10_DUP Dissolved	1607042-16	Water	29-Jun-16 07:45	01-Jul-16 09:30
EB_062916_SW_QC Dissolved	1607042-21	Water	29-Jun-16 12:20	01-Jul-16 09:30

Eurofins Frontier Global Sciences, Inc.

The results in this report only apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Amy Goodall, Project Manager

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

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	13-Sep-16 13:26

REVISED REPORT (9/13/16)

Report revised per client request. This revised report has all results reported down to the MDL. The original report had all the results reported to the MRL.

SAMPLE RECEIPT

Samples were received at Eurofins Frontier Global Sciences (EFGS) on 7/1/2016 9:30:00 AM . The samples were received intact, on-ice within a sealed cooler at 1.3 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

Per the client's request, samples 1607042-11 and 1607042-12 were used as the source QC for the MS/MSD for both Mercury and Methyl Mercury.

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.

Eurofins Frontier Global Sciences, Inc.

Amy Goodall, Project Manager

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Bothell, WA 98011
425.686.1996 Phone
425.686.3096 Fax

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	13-Sep-16 13:26

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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Sample Receipt Checklist

EFGS Work Order: 1607042

Client: AMEC Foster Wheeler

Date & Time Received: 7/1/16 9:30 Date Labeled: 7/1/16 Labeled By: LMM

Project:

Received By: LMM Label Verified By: CSP

# of Coolers Received: 1 Samples Arrived By: ✓ Shipping Service ____ Courier ____ Hand ____ Other (Specify:____)

Coolant: ☐ None/Ambient ☑ Loose Ice ☐ Gel Ice ☐ Dry Ice Coolant Required: (Y) / N Temp Blank Used: Y/N for Cooler(s):____

Notify Project Manager if packages/coolers are received without coolant or with thawed coolant and at a temperature in excess of 6°C. PM notified: Y/N

Cooler Information:	Y/N/NA	Comments
The coolers do not appear to be tampered with:	Y	
Custody Seals are present and intact:	N	
Custody seals signed:	N	

TID: 4350	CF: +0.3 °C		Date/time: 7/1/16 9:30	By: LMM	
Cooler 1: 1.0 °C	w/ CF: 1.3 °C		Cooler 4: °C	w/ CF:	°C
Cooler 2: °C	w/ CF:	°C	Cooler 5: °C	w/ CF:	°C
Cooler 3: °C	w/ CF:	°C	Cooler 6: °C	w/ CF:	°C

Chain of Custody:	Y/N/NA	Comments
Sample ID/Description:	Y	
Date and time of collection:	Y	
Sampled by:	Y	
Preservation type:	Y	
Requested analyses:	Y	
Required signatures:	Y	
Internal COC required:	N	

Sample Condition/Integrity:	Y/N/NA	Comments
Sample containers intact/present:	Y	
Sample labels are present and legible:	Y	
Sample ID on container/bag matches COC:	Y	
Correct sample containers used:	Y	
Samples received within holding times:	Y	
Sample volume sufficient for requested analyses:	Y	
Correct preservative used for requested analyses:	Y	

Anomalies/Non-conformances (attach additional pages if needed):

1607042

Chain of Custody Record & Laboratory Analysis Request: Air, Water, Sediments, Plant and Animal Tissue, Hydrocarbon & Other Samples

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11720 Northcreek Pkwy N, Suite 400
Bothell, WA 98011
Phone: 425-686-1996
Fax: 425-686-3096
info@frontiergs.com
http://www.frontiergs.com

Page 1 of 1

Client: AMEC FOSTER WHEELER	Contact: DENISE KING	EFGS PM:	
Address: 511 CONGRESS ST STE 200 PORTLAND ME 04101	Phone: 9786929090 Fax: 9786926633	Date:	
	E-mail: denise.king@amecfw.com	TAT (business days) (20) (std) 15 10 5 4 3 2 24 hrs. (For TAT < 10 days, contact PM. Surcharges apply for expedited TAT)	
Project Name: PENOBSCOT RIVER	Contract/PO:	Saturday delivery? ☐ Y ☐ N (If yes, please contact PM)	
Report To: DENISE KING	Invoice To: ROD PENDLETON	EDD ☒ Y ☐ N	
Address: 271 MILL RD CHELMSFORD MA 01824	Address: 511 CONGRESS ST STE 200 PORTLAND ME 04101	QA ☒ Standard ☐ High	
Phone: 978 692 9090 Fax: 978 692 6633	Phone: 2077755401 Fax: 2077724762		
E-mail: denise.king@amecfw.com	E-mail: rod.pendleton@amecfw.com		

No.	Engraved Bottle ID	Sample ID	# of Bottles	Matrix	Date & Time	Sampled By	Field Filtered (Y/N) DISSOLVED Hg/MeHg ONLY	Field Preserved: H_2SO_4 (TOTAL + DISSOLVED MeHg) HNO_3 HCl BrCl Other (%)	T/D Hg 1631E (250 mL PETG)	T/D MeHg 1630 (250 mL BSG)	Comments
1		OV-02_062916_SW-10	4	SB	6/29/16 1500	KB	Y	Y	2	2	• DISSOLVED Hg/MeHg FIELD FILTERED
2		WQ16-C_062916_SW-10	4	"	6/29/16 1040	"	"	"	2	2	• TOTAL + DISSOLVED MeHg PRESERVED WITH H_2SO_4
3		WQ2-C_063016_SW-10	4	"	6/30/16 0900	"	"	"	2	2	
4		WQ3-L_062916_SW-10	4	"	6/29/16 0935	"	"	"	2	2	
5		ES-15_062916_SW-10	4	"	6/29/16 0900	"	"	"	2	2	
6		WQ-ECH_062916_SW-10	4	"	6/29/16 0745	"	"	"	2	2	
7		WQ-FPT_062916_SW-10	4	"	6/29/16 0825	"	"	"	2	2	
8		WQ-ECH_062916_SW-10_DUP	4	"	6/29/16 0745	"	"	"	2	2	
9		WQ-ECH_062916_SW-10_MS	4	"	6/29/16	"	"	"	2	2	→ MATRIX SPIKE
10		WQ-ECH_062916_SW-10_MD	4	"	6/29/16	"	"	"	2	2	→ MATRIX SPIKE DUP
11		EB_062916_SW_QC	2	OT	6/29/16 1220	"	"	"	1	1	→ DISSOLVED ONLY
12											AIRBILL: 8094 0561 9717

For Laboratory Use Only		Matrix Codes:	Relinquished By:	Received By:	Received By:
COC Seal: NA	Comments:	**FW:** Fresh Water	Julie Pallozzi		
Cooler Temp: 1.3°C		**WW:** Waste Water	Name: JULIE PALLOZZI	Name: Lars Mather	Name:
Carrier: FedEx		**SB:** Sea and Brackish Water	Organization: AMEC FW	Organization: EFGS	Organization:
VTSR: 9:30		**SS:** Soil and Sediment	Date & Time: 6/30/16 1130	Date & Time: 7/1/16 9:30	Date & Time:
# of Coolers:		**TS:** Plant and Animal Tissue	Tracking number: 8094 0561 9717		
		HC: Hydrocarbons			
		TR: Trap			
		OT: Other – BLANK WATER			

Sample Disposal:
☐ Return (shipping fees may apply)
☒ Standard Disposal – 30 Days after report
☐ Retain for ____ weeks after report (storage fees may apply)

By signing, you declare that you agree with EFGS' terms and conditions, and that you authorize EFGS to perform the specified analyses.

Customer Approval: Julie Pallozzi Date: 6/30/16

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

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	13-Sep-16 13:26

OV-02_062916_SW_10

1607042-01

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EFGS-013 Methyl Hg Distillation for Water											
Methyl Mercury (as Mercury)	**0.169**	0.026	0.050	ng/L	1.25	F607177	12-Jul-16	6G19009	13-Jul-16	EPA 1630/FGS-070	
Sample Preparation: EPA 1631E BrCl Oxidation											
Mercury	**1.82**	0.08	0.50	ng/L	1	F607098	01-Jul-16	6G05009	05-Jul-16	EPA 1631E	

Eurofins Frontier Global Sciences, Inc.

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Amy Goodall, Project Manager

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

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	13-Sep-16 13:26

OV-02_062916_SW_10 Dissolved

1607042-02

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EFGS-013 Methyl Hg Distillation for Water											
Methyl Mercury (as Mercury)	**0.127**	0.026	0.050	ng/L	1.25	F607177	12-Jul-16	6G19009	13-Jul-16	EPA 1630/FGS-070	
Sample Preparation: EPA 1631E BrCl Oxidation											
Mercury	**1.19**	0.08	0.50	ng/L	1	F607098	01-Jul-16	6G05009	05-Jul-16	EPA 1631E	

Eurofins Frontier Global Sciences, Inc.

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Amy Goodall, Project Manager

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Bothell, WA 98011
425.686.1996 Phone
425.686.3096 Fax

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	13-Sep-16 13:26

WQ1b-c_062916_SW_10

1607042-03

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EFGS-013 Methyl Hg Distillation for Water											
Methyl Mercury (as Mercury)	**0.617**	0.026	0.050	ng/L	1.25	F607177	12-Jul-16	6G19009	13-Jul-16	EPA 1630/FGS-070	
Sample Preparation: EPA 1631E BrCl Oxidation											
Mercury	**37.2**	0.08	0.50	ng/L	1	F607098	01-Jul-16	6G05009	05-Jul-16	EPA 1631E	

Eurofins Frontier Global Sciences, Inc.

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Amy Goodall, Project Manager

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Bothell, WA 98011
425.686.1996 Phone
425.686.3096 Fax

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	13-Sep-16 13:26

WQ1b-c_062916_SW_10 Dissolved

1607042-04

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EFGS-013 Methyl Hg Distillation for Water											
Methyl Mercury (as Mercury)	**0.066**	0.026	0.050	ng/L	1.25	F607177	12-Jul-16	6G19009	13-Jul-16	EPA 1630/FGS-070	
Sample Preparation: EPA 1631E BrCl Oxidation											
Mercury	**1.87**	0.08	0.50	ng/L	1	F607098	01-Jul-16	6G05009	05-Jul-16	EPA 1631E	

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Bothell, WA 98011
425.686.1996 Phone
425.686.3096 Fax

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511 Congress Street	Project Number: 3616166052	**Reported:**
Portland ME, 04101	Project Manager: Rod Pendleton	13-Sep-16 13:26

WQ2-c_063016_SW_10

1607042-05

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EFGS-013 Methyl Hg Distillation for Water											
Methyl Mercury (as Mercury)	**0.060**	0.026	0.050	ng/L	1.25	F607177	12-Jul-16	6G19009	13-Jul-16	EPA 1630/FGS-070	
Sample Preparation: EPA 1631E BrCl Oxidation											
Mercury	**3.31**	0.08	0.50	ng/L	1	F607098	01-Jul-16	6G05009	05-Jul-16	EPA 1631E	

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Bothell, WA 98011
425.686.1996 Phone
425.686.3096 Fax

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511 Congress Street	Project Number: 3616166052	**Reported:**
Portland ME, 04101	Project Manager: Rod Pendleton	13-Sep-16 13:26

WQ2-c_063016_SW_10 Dissolved

1607042-06

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EFGS-013 Methyl Hg Distillation for Water											
Methyl Mercury (as Mercury)	**0.041**	0.026	0.050	ng/L	1.25	F607309	18-Jul-16	6G21004	20-Jul-16	EPA 1630/FGS-070	J
Sample Preparation: EPA 1631E BrCl Oxidation											
Mercury	**1.38**	0.08	0.50	ng/L	1	F607098	01-Jul-16	6G05009	05-Jul-16	EPA 1631E	

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Bothell, WA 98011
425.686.1996 Phone
425.686.3096 Fax

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511 Congress Street	Project Number: 3616166052	**Reported:**
Portland ME, 04101	Project Manager: Rod Pendleton	13-Sep-16 13:26

WQ3-L_062916_SW_10

1607042-07

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EFGS-013 Methyl Hg Distillation for Water											
Methyl Mercury (as Mercury)	**0.058**	0.026	0.050	ng/L	1.25	F607309	18-Jul-16	6G21004	20-Jul-16	EPA 1630/FGS-070	
Sample Preparation: EPA 1631E BrCl Oxidation											
Mercury	**2.50**	0.08	0.50	ng/L	1	F607098	01-Jul-16	6G05009	05-Jul-16	EPA 1631E	

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Bothell, WA 98011
425.686.1996 Phone
425.686.3096 Fax

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WQ3-L_062916_SW_10 Dissolved

1607042-08

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EFGS-013 Methyl Hg Distillation for Water											
Methyl Mercury (as Mercury)	ND	0.026	0.050	ng/L	1.25	F607309	18-Jul-16	6G21004	20-Jul-16	EPA 1630/FGS-070	U
Sample Preparation: EPA 1631E BrCl Oxidation											
Mercury	**0.97**	0.08	0.50	ng/L	1	F607098	01-Jul-16	6G05009	05-Jul-16	EPA 1631E	

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Bothell, WA 98011
425.686.1996 Phone
425.686.3096 Fax

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ES-15_062916_SW_10

1607042-09

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EFGS-013 Methyl Hg Distillation for Water											
Methyl Mercury (as Mercury)	**0.050**	0.026	0.050	ng/L	1.25	F607309	18-Jul-16	6G21004	20-Jul-16	EPA 1630/FGS-070	
Sample Preparation: EPA 1631E BrCl Oxidation											
Mercury	**1.87**	0.08	0.50	ng/L	1	F607098	01-Jul-16	6G05009	05-Jul-16	EPA 1631E	

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Bothell, WA 98011
425.686.1996 Phone
425.686.3096 Fax

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ES-15_062916_SW_10 Dissolved

1607042-10

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EFGS-013 Methyl Hg Distillation for Water											
Methyl Mercury (as Mercury)	ND	0.026	0.050	ng/L	1.25	F607309	18-Jul-16	6G21004	20-Jul-16	EPA 1630/FGS-070	U
Sample Preparation: EPA 1631E BrCl Oxidation											
Mercury	**0.59**	0.08	0.50	ng/L	1	F607098	01-Jul-16	6G05009	05-Jul-16	EPA 1631E	

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Bothell, WA 98011
425.686.1996 Phone
425.686.3096 Fax

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511 Congress Street	Project Number: 3616166052	**Reported:**
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WQ-ECH_062916_SW_10

1607042-11

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EFGS-013 Methyl Hg Distillation for Water											
Methyl Mercury (as Mercury)	**0.071**	0.026	0.050	ng/L	1.25	F607309	18-Jul-16	6G21004	20-Jul-16	EPA 1630/FGS-070	
Sample Preparation: EPA 1631E BrCl Oxidation											
Mercury	**2.30**	0.08	0.50	ng/L	1	F607098	01-Jul-16	6G05009	05-Jul-16	EPA 1631E	

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Bothell, WA 98011
425.686.1996 Phone
425.686.3096 Fax

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WQ-ECH_062916_SW_10 Dissolved

1607042-12

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EFGS-013 Methyl Hg Distillation for Water											
Methyl Mercury (as Mercury)	**0.036**	0.026	0.050	ng/L	1.25	F607309	18-Jul-16	6G21004	20-Jul-16	EPA 1630/FGS-070	J
Sample Preparation: EPA 1631E BrCl Oxidation											
Mercury	**1.06**	0.08	0.50	ng/L	1	F607098	01-Jul-16	6G05009	05-Jul-16	EPA 1631E	

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Bothell, WA 98011
425.686.1996 Phone
425.686.3096 Fax

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WQ-FPT_062916_SW_10

1607042-13

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EFGS-013 Methyl Hg Distillation for Water											
Methyl Mercury (as Mercury)	**0.044**	0.026	0.050	ng/L	1.25	F607309	18-Jul-16	6G21004	20-Jul-16	EPA 1630/FGS-070	J
Sample Preparation: EPA 1631E BrCl Oxidation											
Mercury	**1.67**	0.08	0.50	ng/L	1	F607098	01-Jul-16	6G05009	05-Jul-16	EPA 1631E	

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Bothell, WA 98011
425.686.1996 Phone
425.686.3096 Fax

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WQ-FPT_062916_SW_10 Dissolved

1607042-14

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EFGS-013 Methyl Hg Distillation for Water											
Methyl Mercury (as Mercury)	ND	0.026	0.050	ng/L	1.25	F607309	18-Jul-16	6G21004	20-Jul-16	EPA 1630/FGS-070	U
Sample Preparation: EPA 1631E BrCl Oxidation											
Mercury	**0.68**	0.08	0.50	ng/L	1	F607098	01-Jul-16	6G05009	05-Jul-16	EPA 1631E	

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Bothell, WA 98011
425.686.1996 Phone
425.686.3096 Fax

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511 Congress Street	Project Number: 3616166052	**Reported:**
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WQ-ECH_062916_SW_10_DUP

1607042-15

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EFGS-013 Methyl Hg Distillation for Water											
Methyl Mercury (as Mercury)	**0.063**	0.026	0.050	ng/L	1.25	F607309	18-Jul-16	6G21004	20-Jul-16	EPA 1630/FGS-070	
Sample Preparation: EPA 1631E BrCl Oxidation											
Mercury	**2.37**	0.08	0.50	ng/L	1	F607098	01-Jul-16	6G05009	05-Jul-16	EPA 1631E	

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Bothell, WA 98011
425.686.1996 Phone
425.686.3096 Fax

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WQ-ECH_062916_SW_10_DUP Dissolved

1607042-16

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EFGS-013 Methyl Hg Distillation for Water											
Methyl Mercury (as Mercury)	**0.028**	0.026	0.050	ng/L	1.25	F607309	18-Jul-16	6G21004	20-Jul-16	EPA 1630/FGS-070	J
Sample Preparation: EPA 1631E BrCl Oxidation											
Mercury	**1.18**	0.08	0.50	ng/L	1	F607098	01-Jul-16	6G05009	05-Jul-16	EPA 1631E	

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Bothell, WA 98011
425.686.1996 Phone
425.686.3096 Fax

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511 Congress Street	Project Number: 3616166052	**Reported:**
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EB_062916_SW_QC Dissolved

1607042-21

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EFGS-013 Methyl Hg Distillation for Water											
Methyl Mercury (as Mercury)	ND	0.026	0.050	ng/L	1.25	F607309	18-Jul-16	6G21004	20-Jul-16	EPA 1630/FGS-070	U
Sample Preparation: EPA 1631E BrCl Oxidation											
Mercury	ND	0.08	0.50	ng/L	1	F607098	01-Jul-16	6G05009	05-Jul-16	EPA 1631E	U

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Bothell, WA 98011
425.686.1996 Phone
425.686.3096 Fax

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511 Congress Street	Project Number: 3616166052	**Reported:**
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Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6G05009 - F607087											
Cal Standard (6G05009-CAL1)					Prepared & Analyzed: 05-Jul-16						
Mercury	0.54	-		ng/L	0.50100		108				
Cal Standard (6G05009-CAL2)					Prepared & Analyzed: 05-Jul-16						
Mercury	1.00	-		ng/L	1.0020		100				
Cal Standard (6G05009-CAL3)					Prepared & Analyzed: 05-Jul-16						
Mercury	4.77	-		ng/L	5.0100		95.2				
Cal Standard (6G05009-CAL4)					Prepared & Analyzed: 05-Jul-16						
Mercury	19.40	-		ng/L	20.040		96.8				
Cal Standard (6G05009-CAL5)					Prepared & Analyzed: 05-Jul-16						
Mercury	39.90	-		ng/L	40.080		99.6				
Calibration Blank (6G05009-CCB1)					Prepared & Analyzed: 05-Jul-16						
Mercury	0.16	-		ng/L							
Calibration Blank (6G05009-CCB2)					Prepared & Analyzed: 05-Jul-16						
Mercury	0.19	-		ng/L							
Calibration Blank (6G05009-CCB3)					Prepared & Analyzed: 05-Jul-16						
Mercury	0.29	-		ng/L							
Calibration Blank (6G05009-CCB4)					Prepared & Analyzed: 05-Jul-16						
Mercury	0.13	-		ng/L							
Calibration Blank (6G05009-CCB5)					Prepared & Analyzed: 05-Jul-16						
Mercury	0.30	-		ng/L							

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425.686.1996 Phone
425.686.3096 Fax

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Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6G05009 - F607087											
Calibration Blank (6G05009-CCB6)					Prepared & Analyzed: 05-Jul-16						
Mercury	0.10	-		ng/L							
Calibration Blank (6G05009-CCB7)					Prepared & Analyzed: 05-Jul-16						
Mercury	0.32	-		ng/L							
Calibration Blank (6G05009-CCB8)					Prepared & Analyzed: 05-Jul-16						
Mercury	0.23	-		ng/L							
Calibration Blank (6G05009-CCB9)					Prepared & Analyzed: 05-Jul-16						
Mercury	0.17	-		ng/L							
Calibration Blank (6G05009-CCBA)					Prepared & Analyzed: 05-Jul-16						
Mercury	0.23	-		ng/L							
Calibration Check (6G05009-CCV1)					Prepared & Analyzed: 05-Jul-16						
Mercury	5.20	-		ng/L	5.0000		104	77-123			
Calibration Check (6G05009-CCV2)					Prepared & Analyzed: 05-Jul-16						
Mercury	5.21	-		ng/L	5.0000		104	77-123			
Calibration Check (6G05009-CCV3)					Prepared & Analyzed: 05-Jul-16						
Mercury	5.17	-		ng/L	5.0000		103	77-123			
Calibration Check (6G05009-CCV4)					Prepared & Analyzed: 05-Jul-16						
Mercury	5.03	-		ng/L	5.0000		101	77-123			
Calibration Check (6G05009-CCV5)					Prepared & Analyzed: 05-Jul-16						
Mercury	5.27	-		ng/L	5.0000		105	77-123			

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Bothell, WA 98011
425.686.1996 Phone
425.686.3096 Fax

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511 Congress Street	Project Number: 3616166052	**Reported:**
Portland ME, 04101	Project Manager: Rod Pendleton	13-Sep-16 13:26

Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6G05009 - F607087											
Calibration Check (6G05009-CCV6)					Prepared & Analyzed: 05-Jul-16						
Mercury	5.18	-		ng/L	5.0000		104	77-123			
Calibration Check (6G05009-CCV7)					Prepared & Analyzed: 05-Jul-16						
Mercury	5.03	-		ng/L	5.0000		101	77-123			
Calibration Check (6G05009-CCV8)					Prepared & Analyzed: 05-Jul-16						
Mercury	4.81	-		ng/L	5.0000		96.1	77-123			
Calibration Check (6G05009-CCV9)					Prepared & Analyzed: 05-Jul-16						
Mercury	4.94	-		ng/L	5.0000		98.8	77-123			
Calibration Check (6G05009-CCVA)					Prepared & Analyzed: 05-Jul-16						
Mercury	5.03	-		ng/L	5.0000		101	77-123			
Instrument Blank (6G05009-IBL1)					Prepared & Analyzed: 05-Jul-16						
Mercury	ND	0.08	0.50	ng/L							U
Instrument Blank (6G05009-IBL2)					Prepared & Analyzed: 05-Jul-16						
Mercury	ND	0.08	0.50	ng/L							U
Instrument Blank (6G05009-IBL3)					Prepared & Analyzed: 05-Jul-16						
Mercury	ND	0.08	0.50	ng/L							U
Initial Cal Check (6G05009-ICV1)					Prepared & Analyzed: 05-Jul-16						
Mercury	5.47	-		ng/L	5.0000		109	77-123			
Batch 6G19009 - F607177											
Cal Standard (6G19009-CAL1)					Prepared & Analyzed: 13-Jul-16						
Methyl Mercury (as Mercury)	0.048	-		ng/L	0.050050		95.9				

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425.686.1996 Phone
425.686.3096 Fax

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511 Congress Street	Project Number: 3616166052	**Reported:**
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Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6G19009 - F607177											
Cal Standard (6G19009-CAL2)					Prepared & Analyzed: 13-Jul-16						
Methyl Mercury (as Mercury)	0.200	-		ng/L	0.20020		99.8				
Cal Standard (6G19009-CAL3)					Prepared & Analyzed: 13-Jul-16						
Methyl Mercury (as Mercury)	1.027	-		ng/L	1.0010		103				
Cal Standard (6G19009-CAL4)					Prepared & Analyzed: 13-Jul-16						
Methyl Mercury (as Mercury)	1.986	-		ng/L	2.0020		99.2				
Cal Standard (6G19009-CAL5)					Prepared & Analyzed: 13-Jul-16						
Methyl Mercury (as Mercury)	4.082	-		ng/L	4.0040		102				
Calibration Blank (6G19009-CCB1)					Prepared & Analyzed: 13-Jul-16						
Methyl Mercury (as Mercury)	0.014	-		ng/L							
Calibration Blank (6G19009-CCB2)					Prepared & Analyzed: 13-Jul-16						
Methyl Mercury (as Mercury)	0.011	-		ng/L							
Calibration Blank (6G19009-CCB3)					Prepared & Analyzed: 13-Jul-16						
Methyl Mercury (as Mercury)	0.044	-		ng/L							
Calibration Check (6G19009-CCV1)					Prepared & Analyzed: 13-Jul-16						
Methyl Mercury (as Mercury)	0.361	-		ng/L	0.50049		72.0	67-133			
Calibration Check (6G19009-CCV2)					Prepared & Analyzed: 13-Jul-16						
Methyl Mercury (as Mercury)	0.411	-		ng/L	0.50049		82.1	67-133			
Calibration Check (6G19009-CCV3)					Prepared & Analyzed: 13-Jul-16						
Methyl Mercury (as Mercury)	0.481	-		ng/L	0.50049		96.1	67-133			

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

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	13-Sep-16 13:26

Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6G19009 - F607177											
Calibration Check (6G19009-CCV4)					Prepared & Analyzed: 13-Jul-16						
Methyl Mercury (as Mercury)	0.399	-		ng/L	0.50049		79.7	67-133			
Calibration Check (6G19009-CCV5)					Prepared & Analyzed: 13-Jul-16						
Methyl Mercury (as Mercury)	0.549	-		ng/L	0.50049		110	67-133			
Instrument Blank (6G19009-IBL1)					Prepared & Analyzed: 13-Jul-16						
Methyl Mercury (as Mercury)	ND	0.021	0.040	ng/L							U
Initial Cal Blank (6G19009-ICB1)					Prepared & Analyzed: 13-Jul-16						
Methyl Mercury (as Mercury)	0.012	-		ng/L							
Initial Cal Check (6G19009-ICV1)					Prepared & Analyzed: 13-Jul-16						
Methyl Mercury (as Mercury)	0.549	-		ng/L	0.50049		110	67-133			
Batch 6G21004 - F607309											
Cal Standard (6G21004-CAL1)					Prepared & Analyzed: 20-Jul-16						
Methyl Mercury (as Mercury)	0.049	-		ng/L	0.050050		97.1				
Cal Standard (6G21004-CAL2)					Prepared & Analyzed: 20-Jul-16						
Methyl Mercury (as Mercury)	0.226	-		ng/L	0.20020		113				
Cal Standard (6G21004-CAL3)					Prepared & Analyzed: 20-Jul-16						
Methyl Mercury (as Mercury)	0.981	-		ng/L	1.0010		98.0				
Cal Standard (6G21004-CAL4)					Prepared & Analyzed: 20-Jul-16						
Methyl Mercury (as Mercury)	2.141	-		ng/L	2.0020		107				

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Portland ME, 04101	Project Manager: Rod Pendleton	13-Sep-16 13:26

Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6G21004 - F607309											
Cal Standard (6G21004-CAL5)					Prepared & Analyzed: 20-Jul-16						
Methyl Mercury (as Mercury)	3.387	-		ng/L	4.0040		84.6				
Calibration Blank (6G21004-CCB1)					Prepared & Analyzed: 20-Jul-16						
Methyl Mercury (as Mercury)	0.016	-		ng/L							
Calibration Blank (6G21004-CCB2)					Prepared & Analyzed: 20-Jul-16						
Methyl Mercury (as Mercury)	0.001	-		ng/L							
Calibration Blank (6G21004-CCB3)					Prepared & Analyzed: 20-Jul-16						
Methyl Mercury (as Mercury)	0.004	-		ng/L							
Calibration Check (6G21004-CCV1)					Prepared & Analyzed: 20-Jul-16						
Methyl Mercury (as Mercury)	0.516	-		ng/L	0.50049		103	67-133			
Calibration Check (6G21004-CCV2)					Prepared & Analyzed: 20-Jul-16						
Methyl Mercury (as Mercury)	0.568	-		ng/L	0.50049		113	67-133			
Calibration Check (6G21004-CCV3)					Prepared & Analyzed: 20-Jul-16						
Methyl Mercury (as Mercury)	0.439	-		ng/L	0.50049		87.8	67-133			
Instrument Blank (6G21004-IBL1)					Prepared & Analyzed: 20-Jul-16						
Methyl Mercury (as Mercury)	ND	0.021	0.040	ng/L							U
Initial Cal Blank (6G21004-ICB1)					Prepared & Analyzed: 20-Jul-16						
Methyl Mercury (as Mercury)	0.011	-		ng/L							
Initial Cal Check (6G21004-ICV1)					Prepared & Analyzed: 20-Jul-16						
Methyl Mercury (as Mercury)	0.579	-		ng/L	0.50049		116	67-133			

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511 Congress Street	Project Number: 3616166052	**Reported:**
Portland ME, 04101	Project Manager: Rod Pendleton	13-Sep-16 13:26

Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch F607098 - EPA 1631E BrCl Oxidation											
Blank (F607098-BLK1)					Prepared & Analyzed: 05-Jul-16						
Mercury	0.40	0.08	0.50	ng/L							J
Blank (F607098-BLK2)					Prepared & Analyzed: 05-Jul-16						
Mercury	0.15	0.08	0.50	ng/L							J
Blank (F607098-BLK3)					Prepared & Analyzed: 05-Jul-16						
Mercury	0.16	0.08	0.50	ng/L							J
LCS (F607098-BS1)					Prepared & Analyzed: 05-Jul-16						
Mercury	14.02	0.08	0.50	ng/L	15.679		89.4	80-120			
LCS Dup (F607098-BSD1)					Prepared & Analyzed: 05-Jul-16						
Mercury	14.21	0.08	0.50	ng/L	15.679		90.6	80-120	1.38	24	
Duplicate (F607098-DUP1)		**Source: 1607042-11**			Prepared & Analyzed: 05-Jul-16						
Mercury	2.36	0.08	0.50	ng/L		2.30			2.56	24	
Matrix Spike (F607098-MS1)		**Source: 1607042-11**			Prepared & Analyzed: 05-Jul-16						
Mercury	11.20	0.08	0.50	ng/L	10.120	2.30	88.0	71-125			
Matrix Spike (F607098-MS2)		**Source: 1607042-12**			Prepared & Analyzed: 05-Jul-16						
Mercury	5.73	0.08	0.50	ng/L	5.0601	1.06	92.3	71-125			
Matrix Spike Dup (F607098-MSD1)		**Source: 1607042-11**			Prepared & Analyzed: 05-Jul-16						
Mercury	11.26	0.08	0.50	ng/L	10.120	2.30	88.5	71-125	0.469	24	
Matrix Spike Dup (F607098-MSD2)		**Source: 1607042-12**			Prepared & Analyzed: 05-Jul-16						
Mercury	5.71	0.08	0.50	ng/L	5.0601	1.06	91.9	71-125	0.371	24	

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511 Congress Street	Project Number: 3616166052	**Reported:**
Portland ME, 04101	Project Manager: Rod Pendleton	13-Sep-16 13:26

Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch F607177 - EFGS-013 Methyl Hg Distillation for Water											
Blank (F607177-BLK1)					Prepared: 12-Jul-16 Analyzed: 13-Jul-16						
Methyl Mercury (as Mercury)	ND	0.026	0.050	ng/L							U
Blank (F607177-BLK2)					Prepared: 12-Jul-16 Analyzed: 13-Jul-16						
Methyl Mercury (as Mercury)	ND	0.026	0.050	ng/L							U
Blank (F607177-BLK3)					Prepared: 12-Jul-16 Analyzed: 13-Jul-16						
Methyl Mercury (as Mercury)	ND	0.026	0.050	ng/L							U
LCS (F607177-BS1)					Prepared: 12-Jul-16 Analyzed: 13-Jul-16						
Methyl Mercury (as Mercury)	0.798	0.026	0.050	ng/L	1.0010		79.7	70-130			
LCS Dup (F607177-BSD1)					Prepared: 12-Jul-16 Analyzed: 13-Jul-16						
Methyl Mercury (as Mercury)	0.990	0.026	0.050	ng/L	1.0010		99.0	70-130	21.6	25	
Duplicate (F607177-DUP1)		**Source: 1606810-15RE1**			Prepared: 12-Jul-16 Analyzed: 13-Jul-16						
Methyl Mercury (as Mercury)	1.013	0.026	0.050	ng/L		1.266			22.2	35	
Matrix Spike (F607177-MS1)		**Source: 1607040-01**			Prepared: 12-Jul-16 Analyzed: 13-Jul-16						
Methyl Mercury (as Mercury)	1.676	0.026	0.050	ng/L	1.0010	1.285	39.0	65-130			QM-02
Matrix Spike (F607177-MS2)		**Source: 1607042-01**			Prepared: 12-Jul-16 Analyzed: 13-Jul-16						
Methyl Mercury (as Mercury)	1.093	0.026	0.050	ng/L	1.0010	0.169	92.3	65-130			
Matrix Spike Dup (F607177-MSD1)		**Source: 1607040-01**			Prepared: 12-Jul-16 Analyzed: 13-Jul-16						
Methyl Mercury (as Mercury)	1.890	0.026	0.050	ng/L	1.0010	1.285	60.4	65-130	12.0	35	QM-02
Matrix Spike Dup (F607177-MSD2)		**Source: 1607042-01**			Prepared: 12-Jul-16 Analyzed: 13-Jul-16						
Methyl Mercury (as Mercury)	1.071	0.026	0.050	ng/L	1.0010	0.169	90.0	65-130	2.09	35	

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511 Congress Street	Project Number: 3616166052	**Reported:**
Portland ME, 04101	Project Manager: Rod Pendleton	13-Sep-16 13:26

Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch F607309 - EFGS-013 Methyl Hg Distillation for Water											
Blank (F607309-BLK1)					Prepared: 18-Jul-16 Analyzed: 20-Jul-16						
Methyl Mercury (as Mercury)	ND	0.026	0.050	ng/L							U
Blank (F607309-BLK2)					Prepared: 18-Jul-16 Analyzed: 20-Jul-16						
Methyl Mercury (as Mercury)	ND	0.026	0.050	ng/L							U
Blank (F607309-BLK3)					Prepared: 18-Jul-16 Analyzed: 20-Jul-16						
Methyl Mercury (as Mercury)	ND	0.026	0.050	ng/L							U
LCS (F607309-BS1)					Prepared: 18-Jul-16 Analyzed: 20-Jul-16						
Methyl Mercury (as Mercury)	1.065	0.026	0.050	ng/L	1.0010		106	70-130			
LCS Dup (F607309-BSD1)					Prepared: 18-Jul-16 Analyzed: 20-Jul-16						
Methyl Mercury (as Mercury)	1.171	0.026	0.050	ng/L	1.0010		117	70-130	9.50	25	
Duplicate (F607309-DUP1)		**Source: 1607158-01**			Prepared: 18-Jul-16 Analyzed: 20-Jul-16						
Methyl Mercury (as Mercury)	0.081	0.026	0.050	ng/L		0.078			4.68	35	
Matrix Spike (F607309-MS1)		**Source: 1607042-11**			Prepared: 18-Jul-16 Analyzed: 20-Jul-16						
Methyl Mercury (as Mercury)	1.188	0.026	0.050	ng/L	1.0010	0.071	112	65-130			
Matrix Spike (F607309-MS2)		**Source: 1607042-12**			Prepared: 18-Jul-16 Analyzed: 20-Jul-16						
Methyl Mercury (as Mercury)	1.225	0.026	0.050	ng/L	1.0010	0.036	119	65-130			
Matrix Spike Dup (F607309-MSD1)		**Source: 1607042-11**			Prepared: 18-Jul-16 Analyzed: 20-Jul-16						
Methyl Mercury (as Mercury)	1.190	0.026	0.050	ng/L	1.0010	0.071	112	65-130	0.174	35	
Matrix Spike Dup (F607309-MSD2)		**Source: 1607042-12**			Prepared: 18-Jul-16 Analyzed: 20-Jul-16						
Methyl Mercury (as Mercury)	1.192	0.026	0.050	ng/L	1.0010	0.036	115	65-130	2.78	35	

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511 Congress Street	Project Number: 3616166052	**Reported:**
Portland ME, 04101	Project Manager: Rod Pendleton	13-Sep-16 13:26

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.
QM-02	The MS and/or MSD recoveries outside acceptance limits, due to spike concentration less than 1 times the sample concentration. The batch was accepted based on LCS and LCSD recoveries within control limits and, when analysis permits, acceptable AS/ASD.
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.
QB-06	The blank was preserved to 5% 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.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

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Analysis Datasheet for Total Mercury

Date of Analysis: July 05, 2016
Instrument #: Hg2600-3
LIMS Sequence #: 6G05007, 6G05008, 6G05009

Analyst: DM2
Units ng/L

Calibration Statistics:

LabNumber	n	True Val	Area	Uncorrected Response Factor	Corrected Peak Height	Corrected Response Factor	% Recovery
SEQ-CAL1	1	0.50 ng/L	79.60 units	159.19	70.42 units	140.84	107.7 %Rec
SEQ-CAL2	1	1.00 ng/L	140.11 units	140.11	130.93 units	130.93	100.2 %Rec
SEQ-CAL3	1	5.00 ng/L	632.42 units	126.48	623.24 units	124.65	95.3 %Rec
SEQ-CAL4	1	20.00 ng/L	2545.97 units	127.30	2536.79 units	126.84	97.0 %Rec
SEQ-CAL5	1	40.00 ng/L	5226.18 units	130.65	5217.00 units	130.42	99.8 %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
130.74	+/- 6.21	4.8% RSD	136.75

Blanks:

LabNumber	n	Mean	Std Dev	Mean (ng/L)	Std Dev (ng/L)
SEQ-IBL	3	9.18 units	±0.49	0.07 ng/L	±0.00

Preparation Blanks

Sample Type	Batch ID	n	Mean	Std Dev
BLK	1	3	19.612 ng/L	±3.321
BLK	2	3	0.077 ng/L	±0.069
BLK	3	1	0.046 ng/L	
BLK	4	1	0.134 ng/L	
BLK	5	3	0.234 ng/L	±0.138
BLK	6	0	0.000 ng/L	

QUALITY ASSURANCE
PEER - REVIEWED
INITIALS: JH 7/6/16

Instrument	Analyst	Sample Type	LabNumber	Dilution	Analyzed	FileID	RunEnd	Uncorrected Response	Batch ID	No PB Correction?	RESP	InitialResult	FinalResult	InitialUnits	Comments
Hg2600-3	DM2	CAL	SEQ-IBL1	1	7/5/2016 5:47:33	44699-1.RAW	5:47:33 AM	8.85			-0.3	-0.003	-0.003	ng/L	
Hg2600-3	DM2	CAL	SEQ-IBL2	1	7/5/2016 5:51:42	44700-1.RAW	5:51:42 AM	9.74			0.6	0.004	0.004	ng/L	
Hg2600-3	DM2	CAL	SEQ-IBL3	1	7/5/2016 5:55:50	44701-1.RAW	5:55:50 AM	8.95			-0.2	-0.002	-0.002	ng/L	
Hg2600-3	DM2	CAL	SEQ-CAL1	1	7/5/2016 5:59:58	44702-1.RAW	5:59:58 AM	79.60			70.4	0.539	0.539	ng/L	
Hg2600-3	DM2	CAL	SEQ-CAL2	1	7/5/2016 6:04:07	44703-1.RAW	6:04:07 AM	140.11			130.9	1.002	1.002	ng/L	
Hg2600-3	DM2	CAL	SEQ-CAL3	1	7/5/2016 6:08:15	44704-1.RAW	6:08:15 AM	632.42			623.2	4.767	4.767	ng/L	
Hg2600-3	DM2	CAL	SEQ-CAL4	1	7/5/2016 6:12:24	44705-1.RAW	6:12:24 AM	2545.97			2536.8	19.404	19.404	ng/L	
Hg2600-3	DM2	CAL	SEQ-CAL5	1	7/5/2016 6:16:32	44706-1.RAW	6:16:32 AM	5226.18			5217.0	39.905	39.905	ng/L	
Hg2600-3	DM2	CAL	SEQ-ICV1	1	7/5/2016 6:20:41	44707-1.RAW	6:20:41 AM	724.37			715.2	5.471	5.471	ng/L	
Hg2600-3	DM2	BLK	F606366-BLK1	100	7/5/2016 6:27:16	44708-1.RAW	6:27:16 AM	39.80	1		30.6	0.234	23.421	ng/L	
Hg2600-3	DM2	BLK	F606366-BLK2	100	7/5/2016 6:31:24	44709-1.RAW	6:31:24 AM	32.84	1		23.7	0.181	18.099	ng/L	
Hg2600-3	DM2	BLK	F606366-BLK3	100	7/5/2016 6:35:33	44710-1.RAW	6:35:33 AM	31.82	1		22.6	0.173	17.317	ng/L	
Hg2600-3	DM2	SAM	F606366-BS1	500	7/5/2016 6:39:41	44711-1.RAW	6:39:41 AM	489.02	1		479.8	3.631	1815.541	ng/L	
Hg2600-3	DM2	SAM	F606366-BSD1	500	7/5/2016 6:43:49	44712-1.RAW	6:43:49 AM	511.59	1		502.4	3.804	1901.867	ng/L	
Hg2600-3	DM2	SAM	1606775-01	2500	7/5/2016 6:47:58	44713-1.RAW	6:47:58 AM	228.10	1		218.9	1.667	4166.706	ng/L	
Hg2600-3	DM2	SAM	1606775-02	2500	7/5/2016 6:52:06	44714-1.RAW	6:52:06 AM	235.70	1		226.5	1.725	4312.104	ng/L	
Hg2600-3	DM2	SAM	1606804-01	2500	7/5/2016 6:56:15	44715-1.RAW	6:56:15 AM	1548.05	1		1538.9	11.763	29407.347	ng/L	
Hg2600-3	DM2	SAM	1606804-02	2500	7/5/2016 7:00:23	44716-1.RAW	7:00:23 AM	1297.36	1		1288.2	9.845	24613.505	ng/L	
Hg2600-3	DM2	SAM	1606804-03	2500	7/5/2016 7:04:31	44717-1.RAW	7:04:31 AM	903.98	1		894.8	6.836	17091.094	ng/L	
Hg2600-3	DM2	CAL	SEQ-CCV1	1	7/5/2016 7:08:40	44718-1.RAW	7:08:40 AM	689.14			680.0	5.201	5.201	ng/L	
Hg2600-3	DM2	CAL	SEQ-CCB1	1	7/5/2016 7:12:48	44719-1.RAW	7:12:48 AM	30.37			21.2	0.162	0.162	ng/L	
Hg2600-3	DM2	SAM	1606804-04	2500	7/5/2016 7:16:57	44720-1.RAW	7:16:57 AM	1108.46	1		1099.3	8.401	21001.386	ng/L	
Hg2600-3	DM2	SAM	1606775-01B	100	7/5/2016 7:21:05	44721-1.RAW	7:21:05 AM	36.35	1		27.2	0.012	1.168	ng/L	
Hg2600-3	DM2	SAM	1606775-02B	100	7/5/2016 7:25:14	44722-1.RAW	7:25:14 AM	27.71	1		18.5	-0.054	-5.434	ng/L	
Hg2600-3	DM2	SAM	1606804-01B	100	7/5/2016 7:29:22	44723-1.RAW	7:29:22 AM	165.41	1		156.2	0.999	99.889	ng/L	
Hg2600-3	DM2	SAM	1606804-02B	100	7/5/2016 7:33:30	44724-1.RAW	7:33:30 AM	35.96	1		26.8	0.009	0.870	ng/L	
Hg2600-3	DM2	SAM	1606804-03B	100	7/5/2016 7:37:39	44725-1.RAW	7:37:39 AM	25.51	1		16.3	-0.071	-7.119	ng/L	
Hg2600-3	DM2	SAM	1606804-04B	100	7/5/2016 7:41:47	44726-1.RAW	7:41:47 AM	27.66	1		18.5	-0.055	-5.478	ng/L	
Hg2600-3	DM2	SAM	1606775-01C	500	7/5/2016 7:45:56	44727-1.RAW	7:45:56 AM	1914.03	1		1904.9	14.531	7265.487	ng/L	
Hg2600-3	DM2	SAM	1606775-02C	500	7/5/2016 7:50:04	44728-1.RAW	7:50:04 AM	1856.06	1		1846.9	14.088	7043.773	ng/L	
Hg2600-3	DM2	SAM	1606804-01C	2500	7/5/2016 7:54:12	44729-1.RAW	7:54:12 AM	1385.39	1		1376.2	10.519	26296.904	ng/L	
Hg2600-3	DM2	CAL	SEQ-CCV2	1	7/5/2016 7:58:21	44730-1.RAW	7:58:21 AM	690.21			681.0	5.209	5.209	ng/L	
Hg2600-3	DM2	CAL	SEQ-CCB2	1	7/5/2016 8:02:29	44731-1.RAW	8:02:29 AM	34.58			25.4	0.194	0.194	ng/L	
Hg2600-3	DM2	SAM	1606804-02C	2500	7/5/2016 8:06:38	44732-1.RAW	8:06:38 AM	1343.01	1		1333.8	10.195	25486.503	ng/L	
Hg2600-3	DM2	SAM	1606804-03C	2500	7/5/2016 8:10:46	44733-1.RAW	8:10:46 AM	1436.16	1		1427.0	10.907	27267.687	ng/L	
Hg2600-3	DM2	SAM	1606804-04C	2500	7/5/2016 8:14:55	44734-1.RAW	8:14:55 AM	1357.19	1		1348.0	10.303	25757.632	ng/L	
Hg2600-3	DM2	SAM	F606366-DUP1	2500	7/5/2016 8:19:03	44735-1.RAW	8:19:03 AM	905.03	1		895.9	6.845	17111.340	ng/L	
Hg2600-3	DM2	SAM	F606366-MS1	2500	7/5/2016 8:23:11	44736-1.RAW	8:23:11 AM	3533.19	1		3524.0	26.947	67368.131	ng/L	
Hg2600-3	DM2	SAM	F606366-MSD1	2500	7/5/2016 8:27:20	44737-1.RAW	8:27:20 AM	3543.26	1		3534.1	27.024	67560.704	ng/L	
Hg2600-3	DM2	SAM	*F607086-BLK1	1	7/5/2016 8:31:28	44738-1.RAW	8:31:28 AM	91.31		X	82.1	0.628	0.628	ng/L	
Hg2600-3	DM2	BLK	F607086-BLK2	1	7/5/2016 8:35:37	44739-1.RAW	8:35:37 AM	50.09		X	40.9	0.313	0.313	ng/L	
Hg2600-3	DM2	BLK	F607086-BLK3	1	7/5/2016 8:39:45	44740-1.RAW	8:39:45 AM	42.68		X	33.5	0.256	0.256	ng/L	
Hg2600-3	DM2	SAM	F607086-BS1	1	7/5/2016 8:43:53	44741-1.RAW	8:43:53 AM	1937.76		X	1928.6	14.752	14.752	ng/L	
Hg2600-3	DM2	CAL	SEQ-CCV3	1	7/5/2016 8:48:02	44742-1.RAW	8:48:02 AM	685.33			676.1	5.172	5.172	ng/L	
Hg2600-3	DM2	CAL	SEQ-CCB3	1	7/5/2016 8:52:10	44743-1.RAW	8:52:10 AM	47.40			38.2	0.292	0.292	ng/L	
Hg2600-3	DM2	SAM	F607086-BSD1	1	7/5/2016 8:56:19	44744-1.RAW	8:56:19 AM	1940.82		X	1931.6	14.775	14.775	ng/L	
Hg2600-3	DM2	SAM	1606506-01	1	7/5/2016 9:00:27	44745-1.RAW	9:00:27 AM	148.94		X	139.8	1.069	1.069	ng/L	
Hg2600-3	DM2	SAM	1606506-02	1	7/5/2016 9:04:36	44746-1.RAW	9:04:36 AM	34.16		X	25.0	0.191	0.191	ng/L	
Hg2600-3	DM2	BLK	F607086-BLK4	1	7/5/2016 9:08:44	44747-1.RAW	9:08:44 AM	26.24		X	17.1	0.131	0.131	ng/L	
Hg2600-3	DM2	SAM	F607086-DUP1	1	7/5/2016 9:12:52	44748-1.RAW	9:12:52 AM	127.96		X	118.8	0.909	0.909	ng/L	
Hg2600-3	DM2	SAM	F607086-MS1	1	7/5/2016 9:17:01	44749-1.RAW	9:17:01 AM	749.35		X	740.2	5.662	5.662	ng/L	
Hg2600-3	DM2	SAM	F607086-MSD1	1	7/5/2016 9:21:09	44750-1.RAW	9:21:09 AM	754.70		X	745.5	5.702	5.702	ng/L	
Hg2600-3	DM2	BLK	F607087-BLK1	1	7/5/2016 9:25:18	44751-1.RAW	9:25:18 AM	29.56	2		20.4	0.156	0.156	ng/L	
Hg2600-3	DM2	BLK	F607087-BLK2	1	7/5/2016 9:29:26	44752-1.RAW	9:29:26 AM	15.58	2		6.4	0.049	0.049	ng/L	
Hg2600-3	DM2	BLK	F607087-BLK3	1	7/5/2016 9:33:34	44753-1.RAW	9:33:34 AM	12.52	2		3.3	0.026	0.026	ng/L	
Hg2600-3	DM2	CAL	SEQ-CCV4	1	7/5/2016 9:37:43	44754-1.RAW	9:37:43 AM	667.28			658.1	5.034	5.034	ng/L	
Hg2600-3	DM2	CAL	SEQ-CCB4	1	7/5/2016 9:41:51	44755-1.RAW	9:41:51 AM	26.16			17.0	0.130	0.130	ng/L	

Instrument	Analyst	Sample Type	LabNumber	Dilution	Analyzed	FileID	RunEnd	Uncorrected Response	Batch ID	No PB Correction?	RESP	InitialResult	FinalResult	InitialUnits	Comments
Hg2600-3	DM2	BLK	F607087-BLK4	1	7/5/2016 9:46:00	44756-1.RAW	9:46:00 AM	15.13	3		6.0	0.046	0.046	ng/L	
Hg2600-3	DM2	SAM	F607087-BS1	1	7/5/2016 9:50:08	44757-1.RAW	9:50:08 AM	1775.37	2		1766.2	13.433	13.433	ng/L	
Hg2600-3	DM2	SAM	F607087-BSD1	1	7/5/2016 9:54:17	44758-1.RAW	9:54:17 AM	1856.68	2		1847.5	14.055	14.055	ng/L	
Hg2600-3	DM2	SAM	1606805-01	1	7/5/2016 9:58:25	44759-1.RAW	9:58:25 AM	548.98	2		539.8	4.052	4.052	ng/L	
Hg2600-3	DM2	SAM	1606805-02	1	7/5/2016 10:02:33	44760-1.RAW	10:02:33 AM	40.48	2		31.3	0.163	0.163	ng/L	
Hg2600-3	DM2	SAM	1606805-03	1	7/5/2016 10:06:42	44761-1.RAW	10:06:42 AM	496.66	2		487.5	3.652	3.652	ng/L	
Hg2600-3	DM2	SAM	1606805-04	1	7/5/2016 10:10:50	44762-1.RAW	10:10:50 AM	24.59	2		15.4	0.041	0.041	ng/L	
Hg2600-3	DM2	SAM	1606805-05	10	7/5/2016 10:14:59	44763-1.RAW	10:14:59 AM	448.26	3		439.1	3.354	33.540	ng/L	
Hg2600-3	DM2	SAM	1606805-06	1	7/5/2016 10:19:07	44764-1.RAW	10:19:07 AM	19.95	2		10.8	0.006	0.006	ng/L	
Hg2600-3	DM2	SAM	1606808-02	1	7/5/2016 10:23:16	44765-1.RAW	10:23:16 AM	4659.69	2		4650.5	35.495	35.495	ng/L	
Hg2600-3	DM2	CAL	SEQ-CCV5	1	7/5/2016 10:27:25	44766-1.RAW	10:27:25 AM	698.3740059			689.2	5.272	5.272	ng/L	
Hg2600-3	DM2	CAL	SEQ-CCB5	1	7/5/2016 10:31:33	44767-1.RAW	10:31:33 AM	48.00			38.8	0.297	0.297	ng/L	
Hg2600-3	DM2	SAM	1606808-04	1	7/5/2016 10:40:52	44768-1.RAW	10:40:52 AM	238.51	2		229.3	1.677	1.677	ng/L	
Hg2600-3	DM2	SAM	1606812-01	1	7/5/2016 10:45:01	44769-1.RAW	10:45:01 AM	230.43	2		221.3	1.616	1.616	ng/L	
Hg2600-3	DM2	SAM	1606812-02	1	7/5/2016 10:49:09	44770-1.RAW	10:49:09 AM	54.03	2		44.8	0.266	0.266	ng/L	
Hg2600-3	DM2	SAM	1606813-01	1	7/5/2016 10:53:18	44771-1.RAW	10:53:18 AM	270.70	2		261.5	1.924	1.924	ng/L	
Hg2600-3	DM2	SAM	1606813-02	1	7/5/2016 10:57:26	44772-1.RAW	10:57:26 AM	70.42	2		61.2	0.392	0.392	ng/L	
Hg2600-3	DM2	SAM	1607002-01	1	7/5/2016 11:01:35	44773-1.RAW	11:01:35 AM	24.25	2		15.1	0.038	0.038	ng/L	
Hg2600-3	DM2	SAM	1607040-04	1	7/5/2016 11:05:43	44774-1.RAW	11:05:43 AM	162.45	2		153.3	1.096	1.096	ng/L	
Hg2600-3	DM2	SAM	1607040-08	1	7/5/2016 11:09:51	44775-1.RAW	11:09:51 AM	55.14	2		46.0	0.275	0.275	ng/L	
Hg2600-3	DM2	SAM	1607041-01	10	7/5/2016 11:14:00	44776-1.RAW	11:14:00 AM	25.47	4		16.3	0.111	1.113	ng/L	
Hg2600-3	DM2	SAM	1607045-01	1	7/5/2016 11:18:08	44777-1.RAW	11:18:08 AM	1546.77	2		1537.6	11.684	11.684	ng/L	
Hg2600-3	DM2	CAL	SEQ-CCV6	1	7/5/2016 11:22:17	44778-1.RAW	11:22:17 AM	686.45			677.3	5.180	5.180	ng/L	
Hg2600-3	DM2	CAL	SEQ-CCB6	1	7/5/2016 11:32:50	44779-2.RAW	11:32:50 AM	22.59			13.4	0.103	0.103	ng/L	
Hg2600-3	DM2	SAM	1607041-01RE1	10	7/5/2016 11:36:58	44780-1.RAW	11:36:58 AM	409.46	4		400.3	3.048	30.484	ng/L	
Hg2600-3	DM2	SAM	F607087-DUP1	1	7/5/2016 11:41:07	44781-1.RAW	11:41:07 AM	508.51	2		499.3	3.743	3.743	ng/L	
Hg2600-3	DM2	SAM	F607087-MS1	1	7/5/2016 11:45:15	44782-1.RAW	11:45:15 AM	2744.36	2		2735.2	20.845	20.845	ng/L	
Hg2600-3	DM2	SAM	F607087-MSD1	1	7/5/2016 11:49:24	44783-1.RAW	11:49:24 AM	2757.91	2		2748.7	20.948	20.948	ng/L	
Hg2600-3	DM2	SAM	F607087-MS2	1	7/5/2016 11:53:32	44784-1.RAW	11:53:32 AM	1610.42	2		1601.2	12.171	12.171	ng/L	
Hg2600-3	DM2	SAM	F607087-MSD2	1	7/5/2016 11:57:41	44785-1.RAW	11:57:41 AM	1570.85	2		1561.7	11.868	11.868	ng/L	
Hg2600-3	DM2	BLK	F607098-BLK1	1	7/5/2016 12:01:49	44786-1.RAW	12:01:49 PM	60.49	5		51.3	0.392	0.392	ng/L	
Hg2600-3	DM2	BLK	F607098-BLK2	1	7/5/2016 12:05:57	44787-1.RAW	12:05:57 PM	28.88	5		19.7	0.151	0.151	ng/L	
Hg2600-3	DM2	BLK	F607098-BLK3	1	7/5/2016 12:10:06	44788-1.RAW	12:10:06 PM	29.75	5		20.6	0.157	0.157	ng/L	
Hg2600-3	DM2	SAM	F607098-BS1	1	7/5/2016 12:14:14	44789-1.RAW	12:14:14 PM	1853.93	5		1844.7	13.877	13.877	ng/L	
Hg2600-3	DM2	CAL	SEQ-CCV7	1	7/5/2016 12:18:23	44790-1.RAW	12:18:23 PM	667.27			658.1	5.034	5.034	ng/L	
Hg2600-3	DM2	CAL	SEQ-CCB7	1	7/5/2016 12:22:31	44791-1.RAW	12:22:31 PM	50.39			41.2	0.315	0.315	ng/L	
Hg2600-3	DM2	BLK	F607087-BLK5	1	7/5/2016 12:26:39	44792-1.RAW	12:26:39 PM	26.66	4		17.5	0.134	0.134	ng/L	
Hg2600-3	DM2	SAM	F607098-BSD1	1	7/5/2016 12:30:48	44793-1.RAW	12:30:48 PM	1879.18	5		1870.0	14.070	14.070	ng/L	
Hg2600-3	DM2	SAM	1607042-01	1	7/5/2016 12:34:56	44794-1.RAW	12:34:56 PM	275.73	5		266.6	1.805	1.805	ng/L	
Hg2600-3	DM2	SAM	1607042-02	1	7/5/2016 12:39:05	44795-1.RAW	12:39:05 PM	193.85	5		184.7	1.179	1.179	ng/L	
Hg2600-3	DM2	SAM	1607042-03	1	7/5/2016 12:43:13	44796-1.RAW	12:43:13 PM	4855.38	5		4846.2	36.835	36.835	ng/L	
Hg2600-3	DM2	SAM	1607042-04	1	7/5/2016 12:47:22	44797-1.RAW	12:47:22 PM	281.16	5		272.0	1.847	1.847	ng/L	
Hg2600-3	DM2	SAM	1607042-05	1	7/5/2016 12:51:30	44798-1.RAW	12:51:30 PM	468.68	5		459.5	3.281	3.281	ng/L	
Hg2600-3	DM2	SAM	1607042-06	1	7/5/2016 12:55:38	44799-1.RAW	12:55:38 PM	218.01	5		208.8	1.364	1.364	ng/L	
Hg2600-3	DM2	SAM	1607042-07	1	7/5/2016 12:59:47	44800-1.RAW	12:59:47 PM	363.83	5		354.7	2.479	2.479	ng/L	
Hg2600-3	DM2	SAM	1607042-08	1	7/5/2016 13:03:55	44801-1.RAW	1:03:55 PM	165.41	5		156.2	0.962	0.962	ng/L	
Hg2600-3	DM2	CAL	SEQ-CCV8	1	7/5/2016 13:08:04	44802-1.RAW	1:08:04 PM	637.45			628.3	4.806	4.806	ng/L	
Hg2600-3	DM2	CAL	SEQ-CCB8	1	7/5/2016 13:12:12	44803-1.RAW	1:12:12 PM	39.89			30.7	0.235	0.235	ng/L	
Hg2600-3	DM2	SAM	1607042-09	1	7/5/2016 13:16:21	44804-1.RAW	1:16:21 PM	282.14	5		273.0	1.854	1.854	ng/L	
Hg2600-3	DM2	SAM	1607042-10	1	7/5/2016 13:20:29	44805-1.RAW	1:20:29 PM	115.85	5		106.7	0.582	0.582	ng/L	
Hg2600-3	DM2	SAM	1607042-11	1	7/5/2016 13:24:37	44806-1.RAW	1:24:37 PM	337.64	5		328.5	2.279	2.279	ng/L	
Hg2600-3	DM2	SAM	1607042-12	1	7/5/2016 13:28:46	44807-1.RAW	1:28:46 PM	176.57	5		167.4	1.047	1.047	ng/L	
Hg2600-3	DM2	SAM	1607042-13	1	7/5/2016 13:32:54	44808-1.RAW	1:32:54 PM	256.39	5		247.2	1.657	1.657	ng/L	
Hg2600-3	DM2	SAM	1607042-14	1	7/5/2016 13:37:03	44809-1.RAW	1:37:03 PM	128.13	5		119.0	0.676	0.676	ng/L	
Hg2600-3	DM2	SAM	1607042-15	1	7/5/2016 13:41:11	44810-1.RAW	1:41:11 PM	346.93	5		337.8	2.350	2.350	ng/L	
Hg2600-3	DM2	SAM	1607042-16	1	7/5/2016 13:45:19	44811-1.RAW	1:45:19 PM	193.03	5		183.9	1.173	1.173	ng/L	
Hg2600-3	DM2	SAM	1607042-21	1	7/5/2016 13:49:28	44812-1.RAW	1:49:28 PM	25.32	5		16.1	-0.110	-0.110	ng/L	
Hg2600-3	DM2	SAM	F607098-DUP1	1	7/5/2016 13:53:36	44813-1.RAW	1:53:36 PM	345.37	5		336.2	2.338	2.338	ng/L	
Hg2600-3	DM2	CAL	SEQ-CCV9	1	7/5/2016 13:57:45	44814-1.RAW	1:57:45 PM	655.09			645.9	4.941	4.941	ng/L	
Hg2600-3	DM2	CAL	SEQ-CCB9	1	7/5/2016 14:01:53	44815-1.RAW	2:01:53 PM	30.76			21.6	0.165	0.165	ng/L	
Hg2600-3	DM2	SAM	F607098-MS1	1	7/5/2016 14:06:02	44816-1.RAW	2:06:02 PM	1489.95	5		1480.8	11.093	11.093	ng/L	
Hg2600-3	DM2	SAM	F607098-MSD1	1	7/5/2016 14:10:10	44817-1.RAW	2:10:10 PM	1496.77	5		1487.6	11.145	11.145	ng/L	
Hg2600-3	DM2	SAM	F607098-MS2	1	7/5/2016 14:14:18	44818-1.RAW	2:14:18 PM	781.33	5		772.2	5.673	5.673	ng/L	
Hg2600-3	DM2	SAM	F607098-MSD2	1	7/5/2016 14:18:27	44819-1.RAW	2:18:27 PM	778.58	5		769.4	5.652	5.652	ng/L	
Hg2600-3	DM2	CAL	SEQ-CCVA	1	7/5/2016 14:22:35	44820-1.RAW	2:22:35 PM	666.81			657.6	5.030	5.030	ng/L	

Instrument	Analyst	Sample Type	LabNumber	Dilution	Analyzed	FileID	RunEnd	Uncorrected Response	Batch ID	No PB Correction?	RESP	InitialResult	FinalResult	InitialUnits	Comments
Hg2600-3	DM2	CAL	SEQ-CCBA	1	7/5/2016 14:26:44	44821-1.RAW	2:26:44 PM	39.22			30.0	0.230	0.230	ng/L	

TotalMercury
EPA1631

Operat DM **BlankS** 9.1783 **Calib Eqn:** Conc = (Area-9.178 **Run Date:** 7/5/2016 **Blank SD:** 0.48868076
Worksh THg260(**CalibFa** 130.74 **Status:** QC Warnings:6/QC E **Run Time:** 11:28:41 **Blank RSD%:** 5.32431998
Method #### **R:** 0.9999 **R²:** 0.9998 **CF SD:** 6.212265535
Descrip THg26003-160705-1 **CF RSD%:** 4.751746149

Sample/ID	Location	Rinse	Dilute	Blank	Conc (ppt)	MB%	FinalConc	Rec%	QA	RawData	RunEnd	Peak (Raw)	Control (etf)	Flags	RunCount
Clean				0.00	3.85					44694-1.RAW	5:28:08	503.95	Clean	OK	1
clean				0.00	0.05					44695-1.RAW	5:31:00	6.66	Clean	OK	1
ws				9.18	0.00					44696-1.RAW	5:35:08	6.48	Sample	OK	1
ws										44697-1.RAW	5:39:16	0.00	Sample	NP	1
ws				9.18	0.00					44698-1.RAW	5:43:25	6.84	Sample	OK	1
SEQ-IBL1	A1		1	0.00	0.07					44699-1.RAW	5:47:33	8.85	Sample	OK	1
SEQ-IBL2	A2		1	0.00	0.07					44700-1.RAW	5:51:42	9.74	Sample	OK	1
SEQ-IBL3	A3		1	0.00	0.07					44701-1.RAW	5:55:50	8.95	Sample	OK	1
SEQ-CAL1	A4		1	9.18	0.54			107.72		44702-1.RAW	5:59:58	79.60	Sample	OK	1
SEQ-CAL2	A5		1	9.18	1.00			100.15		44703-1.RAW	6:04:07	140.11	Sample	OK	1
SEQ-CAL3	A6		1	9.18	4.77			95.34		44704-1.RAW	6:08:15	632.42	Sample	OK	1
SEQ-CAL4	A7		1	9.18	19.40			97.02		44705-1.RAW	6:12:24	2545.97	Sample	OK	1
SEQ-CAL5	A8		1	9.18	39.90			99.76		44706-1.RAW	6:16:32	5226.18	Sample	OK	1
SEQ-ICV1	A9		1	9.18	5.47			109.41		44707-1.RAW	6:20:41	724.37	Sample	OK	1
F606366-BLK1	A10		100	9.18	23.42					44708-1.RAW	6:27:16	39.80	Sample	OK	1
F606366-BLK2	A11		100	9.18	18.10					44709-1.RAW	6:31:24	32.84	Sample	OK	1
F606366-BLK3	A12		100	9.18	17.32					44710-1.RAW	6:35:33	31.82	Sample	OK	1
F606366-BS1	B1		500	9.18	1835.15					44711-1.RAW	6:39:41	489.02	Sample	OK	1
F606366-BSD1	B2		500	9.18	1921.48					44712-1.RAW	6:43:49	511.59	Sample	OK	1
1606775-01	B3		2500	9.18	4186.32					44713-1.RAW	6:47:58	228.10	Sample	OK	1
1606775-02	B4		2500	9.18	4331.72					44714-1.RAW	6:52:06	235.70	Sample	OK	1
1606804-01	B5		2500	9.18	29426.96					44715-1.RAW	6:56:15	1548.05	Sample	OK	1
1606804-02	B6		2500	9.18	24633.12					44716-1.RAW	7:00:23	1297.36	Sample	OK	1
1606804-03	B7		2500	9.18	17110.71					44717-1.RAW	7:04:31	903.98	Sample	OK	1
SEQ-CCV1	B8		1	9.18	5.20			104.02		44718-1.RAW	7:08:40	689.14	Sample	OK	1
SEQ-CCB1	B9		1	9.18	0.16			0.00		44719-1.RAW	7:12:48	30.37	Sample	OK	1
1606804-04	B10		2500	9.18	21021.00					44720-1.RAW	7:16:57	1108.46	Sample	OK	1
1606775-01B	B11		100	9.18	20.78					44721-1.RAW	7:21:05	36.35	Sample	OK	1
1606775-02B	B12		100	9.18	14.18					44722-1.RAW	7:25:14	27.71	Sample	OK	1
1606804-01B	C1		100	9.18	119.50					44723-1.RAW	7:29:22	165.41	Sample	OK	1
1606804-02B	C2		100	9.18	20.48					44724-1.RAW	7:33:30	35.96	Sample	OK	1
1606804-03B	C3		100	9.18	12.49					44725-1.RAW	7:37:39	25.51	Sample	OK	1
1606804-04B	C4		100	9.18	14.13					44726-1.RAW	7:41:47	27.66	Sample	OK	1
1606775-01C	C5		500	9.18	7285.10					44727-1.RAW	7:45:56	1914.03	Sample	OK	1
1606775-02C	C6		500	9.18	7063.39					44728-1.RAW	7:50:04	1856.06	Sample	OK	1
1606804-01C	C7		2500	9.18	26316.52					44729-1.RAW	7:54:12	1385.39	Sample	OK	1
SEQ-CCV2	C8		1	9.18	5.21			104.18		44730-1.RAW	7:58:21	690.21	Sample	OK	1
SEQ-CCB2	C9		1	9.18	0.19			0.00		44731-1.RAW	8:02:29	34.58	Sample	OK	1
1606804-02C	C10		2500	9.18	25506.12					44732-1.RAW	8:06:38	1343.01	Sample	OK	1
1606804-03C	C11		2500	9.18	27287.30					44733-1.RAW	8:10:46	1436.16	Sample	OK	1
1606804-04C	C12		2500	9.18	25777.24					44734-1.RAW	8:14:55	1357.19	Sample	OK	1
F606366-DUP1	D1		2500	9.18	17130.95					44735-1.RAW	8:19:03	905.03	Sample	OK	1
F606366-MS1	D2		2500	9.18	67387.74			393.35		44736-1.RAW	8:23:11	3533.19	Sample	FB	1
F606366-MSD1	D3		2500	9.18	67580.32					44737-1.RAW	8:27:20	3543.26	Sample	OK	1

*F607086-BLK1	D4	1	9.18	0.63		44738-1.RAW	8:31:28	91.31	Sample	OK	1
F607086-BLK2	D5	1	9.18	0.31		44739-1.RAW	8:35:37	50.09	Sample	OK	1
F607086-BLK3	D6	1	9.18	0.26		44740-1.RAW	8:39:45	42.68	Sample	OK	1
F607086-BS1	D7	1	9.18	14.75		44741-1.RAW	8:43:53	1937.76	Sample	OK	1
SEQ-CCV3	D8	1	9.18	5.17	103.44	44742-1.RAW	8:48:02	685.33	Sample	OK	1
SEQ-CCB3	D9	1	9.18	0.29	0.00	44743-1.RAW	8:52:10	47.40	Sample	OK	1
F607086-BSD1	D10	1	9.18	14.78		44744-1.RAW	8:56:19	1940.82	Sample	OK	1
1606506-01	D11	1	9.18	1.07		44745-1.RAW	9:00:27	148.94	Sample	OK	1
1606506-02	D12	1	9.18	0.19		44746-1.RAW	9:04:36	34.16	Sample	OK	1
F607086-BLK4	A1	1	9.18	0.13		44747-1.RAW	9:08:44	26.24	Sample	OK	1
F607086-DUP1	A2	1	9.18	0.91		44748-1.RAW	9:12:52	127.96	Sample	OK	1
F607086-MS1	A3	1	9.18	5.66	296.64	44749-1.RAW	9:17:01	749.35	Sample	OK	1
F607086-MSD1	A4	1	9.18	5.70		44750-1.RAW	9:21:09	754.70	Sample	OK	1
F607087-BLK1	A5	1	9.18	0.16		44751-1.RAW	9:25:18	29.56	Sample	OK	1
F607087-BLK2	A6	1	9.18	0.05		44752-1.RAW	9:29:26	15.58	Sample	OK	1
F607087-BLK3	A7	1	9.18	0.03		44753-1.RAW	9:33:34	12.52	Sample	OK	1
SEQ-CCV4	A8	1	9.18	5.03	100.68	44754-1.RAW	9:37:43	667.28	Sample	OK	1
SEQ-CCB4	A9	1	9.18	0.13	0.00	44755-1.RAW	9:41:51	26.16	Sample	OK	1
F607087-BLK4	A10	1	9.18	0.05		44756-1.RAW	9:46:00	15.13	Sample	OK	1
F607087-BS1	A11	1	9.18	13.51		44757-1.RAW	9:50:08	1775.37	Sample	OK	1
F607087-BSD1	A12	1	9.18	14.13		44758-1.RAW	9:54:17	1856.68	Sample	OK	1
1606805-01	B1	1	9.18	4.13		44759-1.RAW	9:58:25	548.98	Sample	OK	1
1606805-02	B2	1	9.18	0.24		44760-1.RAW	10:02:33	40.48	Sample	OK	1
1606805-03	B3	1	9.18	3.73		44761-1.RAW	10:06:42	496.66	Sample	OK	1
1606805-04	B4	1	9.18	0.12		44762-1.RAW	10:10:50	24.59	Sample	OK	1
1606805-05	B5	10	9.18	33.59		44763-1.RAW	10:14:59	448.26	Sample	OK	1
1606805-06	B6	1	9.18	0.08		44764-1.RAW	10:19:07	19.95	Sample	OK	1
1606808-02	B7	1	9.18	35.57		44765-1.RAW	10:23:16	4659.69	Sample	FB	1
SEQ-CCV5	B8	1	9.18	5.27	105.43	44766-1.RAW	10:27:25	698.37	Sample	OK	1
SEQ-CCB5	B9	1	9.18	0.30	0.00	44767-1.RAW	10:31:33	48.00	Sample	OK	1
1606808-04	B10	1	9.18	1.75		44768-1.RAW	10:40:52	238.51	Sample	OK	1
1606812-01	B11	1	9.18	1.69		44769-1.RAW	10:45:01	230.43	Sample	OK	1
1606812-02	B12	1	9.18	0.34		44770-1.RAW	10:49:09	54.03	Sample	OK	1
1606813-01	C1	1	9.18	2.00		44771-1.RAW	10:53:18	270.70	Sample	OK	1
1606813-02	C2	1	9.18	0.47		44772-1.RAW	10:57:26	70.42	Sample	OK	1
1607002-01	C3	1	9.18	0.12		44773-1.RAW	11:01:35	24.25	Sample	OK	1
1607040-04	C4	1	9.18	1.17		44774-1.RAW	11:05:43	162.45	Sample	OK	1
1607040-08	C5	1	9.18	0.35		44775-1.RAW	11:09:51	55.14	Sample	OK	1
1607041-01	C6	10	9.18	1.25		44776-1.RAW	11:14:00	25.47	Sample	OK	1
1607045-01	C7	1	9.18	11.76		44777-1.RAW	11:18:08	1546.77	Sample	OK	1
SEQ-CCV6	C8	1	9.18	5.18	103.61	44778-1.RAW	11:22:17	686.45	Sample	OK	1
SEQ-CCB6	C9	1	9.18	0.10	0.00	44779-2.RAW	11:32:50	22.59	Sample	OK	1
1607041-01RE1	C10	10	9.18	30.62		44780-1.RAW	11:36:58	409.46	Sample	OK	1
F607087-DUP1	C11	1	9.18	3.82		44781-1.RAW	11:41:07	508.51	Sample	OK	1
F607087-MS1	C12	1	9.18	20.92	434.11	44782-1.RAW	11:45:15	2744.36	Sample	OK	1
F607087-MSD1	D1	1	9.18	21.02		44783-1.RAW	11:49:24	2757.91	Sample	OK	1
F607087-MS2	D2	1	9.18	12.25	53.19	44784-1.RAW	11:53:32	1610.42	Sample	OK	1
F607087-MSD2	D3	1	9.18	11.95		44785-1.RAW	11:57:41	1570.85	Sample	OK	1
F607098-BLK1	D4	1	9.18	0.39		44786-1.RAW	12:01:49	60.49	Sample	OK	1

F607098-BLK2	D5	1	9.18	0.15		44787-1.RAW	12:05:57	28.88	Sample	OK	1
F607098-BLK3	D6	1	9.18	0.16		44788-1.RAW	12:10:06	29.75	Sample	OK	1
F607098-BS1	D7	1	9.18	14.11		44789-1.RAW	12:14:14	1853.93	Sample	OK	1
SEQ-CCV7	D8	1	9.18	5.03	100.67	44790-1.RAW	12:18:23	667.27	Sample	OK	1
SEQ-CCB7	D9	1	9.18	0.32	0.00	44791-1.RAW	12:22:31	50.39	Sample	OK	1
F607087-BLK5	D10	1	9.18	0.13		44792-1.RAW	12:26:39	26.66	Sample	OK	1
F607098-BSD1	D11	1	9.18	14.30		44793-1.RAW	12:30:48	1879.18	Sample	OK	1
1607042-01	D12	1	9.18	2.04		44794-1.RAW	12:34:56	275.73	Sample	OK	1
1607042-02	A1	1	9.18	1.41		44795-1.RAW	12:39:05	193.85	Sample	OK	1
1607042-03	A2	1	9.18	37.07		44796-1.RAW	12:43:13	4855.38	Sample	OK	1
1607042-04	A3	1	9.18	2.08		44797-1.RAW	12:47:22	281.16	Sample	OK	1
1607042-05	A4	1	9.18	3.51		44798-1.RAW	12:51:30	468.68	Sample	OK	1
1607042-06	A5	1	9.18	1.60		44799-1.RAW	12:55:38	218.01	Sample	OK	1
1607042-07	A6	1	9.18	2.71		44800-1.RAW	12:59:47	363.83	Sample	OK	1
1607042-08	A7	1	9.18	1.20		44801-1.RAW	13:03:55	165.41	Sample	OK	1
SEQ-CCV8	A8	1	9.18	4.81	96.11	44802-1.RAW	13:08:04	637.45	Sample	OK	1
SEQ-CCB8	A9	1	9.18	0.23	0.00	44803-1.RAW	13:12:12	39.89	Sample	OK	1
1607042-09	A10	1	9.18	2.09		44804-1.RAW	13:16:21	282.14	Sample	OK	1
1607042-10	A11	1	9.18	0.82		44805-1.RAW	13:20:29	115.85	Sample	OK	1
1607042-11	A12	1	9.18	2.51		44806-1.RAW	13:24:37	337.64	Sample	OK	1
1607042-12	B1	1	9.18	1.28		44807-1.RAW	13:28:46	176.57	Sample	OK	1
1607042-13	B2	1	9.18	1.89		44808-1.RAW	13:32:54	256.39	Sample	OK	1
1607042-14	B3	1	9.18	0.91		44809-1.RAW	13:37:03	128.13	Sample	OK	1
1607042-15	B4	1	9.18	2.58		44810-1.RAW	13:41:11	346.93	Sample	OK	1
1607042-16	B5	1	9.18	1.41		44811-1.RAW	13:45:19	193.03	Sample	OK	1
1607042-21	B6	1	9.18	0.12		44812-1.RAW	13:49:28	25.32	Sample	OK	1
F607098-DUP1	B7	1	9.18	2.57		44813-1.RAW	13:53:36	345.37	Sample	OK	1
SEQ-CCV9	B8	1	9.18	4.94	98.81	44814-1.RAW	13:57:45	655.09	Sample	OK	1
SEQ-CCB9	B9	1	9.18	0.17	0.00	44815-1.RAW	14:01:53	30.76	Sample	OK	1
F607098-MS1	B10	1	9.18	11.33	972.15	44816-1.RAW	14:06:02	1489.95	Sample	OK	1
F607098-MSD1	B11	1	9.18	11.38		44817-1.RAW	14:10:10	1496.77	Sample	OK	1
F607098-MS2	B12	1	9.18	5.91	44.15	44818-1.RAW	14:14:18	781.33	Sample	OK	1
F607098-MSD2	C1	1	9.18	5.89		44819-1.RAW	14:18:27	778.58	Sample	OK	1
SEQ-CCVA	C2	1	9.18	5.03		44820-1.RAW	14:22:35	666.81	Sample	OK	1
SEQ-CCBA	C3	1	9.18	0.23		44821-1.RAW	14:26:44	39.22	Sample	OK	1

Failing Data Report - 6G05007

Sample ID	Analysis	Result	MRL	Dup Result	Source Result	True Value	Units	% Rec.	Rec. LCL	Rec. UCL	RPD	RPD Limit	Over Cal	Failure	Qualifier
F607086-BLK1	Hg-CVAFS-W-1631-WI DNR	0.63	0.50				ng/L						PASS-OVER	FAIL-BLK	Re-Analyzed

Dan Moeam 7/5/16
Analyst Reviewed By Date

Peer Reviewed By 7/6/16
Date

ANALYSIS SEQUENCE

6G05007

Instrument: Hg2600-3

Calibration ID: UNASSIGNED **Analyzed: 7/5/2016**

Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
6G05007-IBL1	QC	1			
6G05007-IBL2	QC	2			
6G05007-IBL3	QC	3			
6G05007-CAL1	QC	4	1603274		
6G05007-CAL2	QC	5	1603275		
6G05007-CAL3	QC	6	1603276		
6G05007-CAL4	QC	7	1603277		
6G05007-CAL5	QC	8	1603278		
6G05007-ICV1	QC	9	1601925		
6G05007-CCV1	QC	10	1601925		
6G05007-CCB1	QC	11			
6G05007-CCV2	QC	12	1601925		
6G05007-CCB2	QC	13			
F607086-BLK1	QC	14			
F607086-BLK2	QC	15			
F607086-BLK3	QC	16			
F607086-BS1	QC	17			
6G05007-CCV3	QC	18	1601925		
6G05007-CCB3	QC	19			
F607086-BSD1	QC	20			
1606506-01	Hg-CVAFS-W-1631-WI DNR	21			
1606506-02	Hg-CVAFS-W-1631-WI DNR	22			
F607086-BLK4	QC	23			
F607086-DUP1	QC	24			
F607086-MS1	QC	25			
F607086-MSD1	QC	26			
6G05007-CCV4	QC	27	1601925		
6G05007-CCB4	QC	28			
6G05007-CCV5	QC	29	1601925		
6G05007-CCB5	QC	30			
6G05007-CCV6	QC	31	1601925		
6G05007-CCB6	QC	32			
6G05007-CCV7	QC	33	1601925		
6G05007-CCB7	QC	34			
6G05007-CCV8	QC	35	1601925		

Due Date: 7/5/2016

ANALYSIS SEQUENCE

6G05007

Instrument: Hg2600-3

Calibration ID: UNASSIGNED **Analyzed: 7/5/2016**

Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
6G05007-CCB8	QC	36			
6G05007-CCV9	QC	37	1601925		
6G05007-CCB9	QC	38			
6G05007-CCVA	QC	39	1601925		
6G05007-CCBA	QC	40			

Don Moteen 7/5/16
Samples Loaded By Date

Don Moteen 7/5/16
Data Processed By Date

Due Date: 7/5/2016

PREPARATION BENCH SHEET

F607086

Eurofins Frontier Global Sciences, Inc.

Matrix: Water **Prepared using: AFS - EPA 1631E BrCl Oxidation** **Prepared: 7/5/2016**

Lab Number	Sample ID and Source Sample	Initial (mL)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F607086-BLK1	Blank	100	101					SOURCE 1606506-03
F607086-BLK2	Blank	100	101					SOURCE 1606506-03
F607086-BLK3	Blank	100	101					SOURCE 1606506-03
F607086-BLK4	Blank	100	101					SOURCE 1606506-03
F607086-BS1	LCS	50	50.5	1505246	100			
F607086-BSD1	LCS Dup	50	50.5	1505246	100			
F607086-DUP1	Duplicate [1606506-01]	100	101					
F607086-MS1	Matrix Spike [1606506-01]	49.50495	50	1603190	25			[Spk] 100mL->101mL; 101mL->101mL; Spiked 50mL
F607086-MSD1	Matrix Spike Dup [1606506-01]	49.50495	50	1603190	25			[Spk] 100mL->101mL; 101mL->101mL; Spiked 50mL

Standard ID(s):	Description:	Expiration:
1505246	Nist 1641D 200X	20-Aug-16 00:00
1603190	THg 10ng/mL Calibration Standard	15-Sep-16 00:00

Reagent ID(s):	Description:	Expiration:
1602941	25% Hydroxylamine-HCl working solution	03-Dec-16 00:00
1603279	THg Dilute 1% BrCl	11-Oct-16 00:00
1603280	THg Washstation (0.5% BrCl)	
1603449	3% SnCl2 THg reductant	24-Dec-16 00:00

ue Date: 7/5/2016

PREPARATION BENCH SHEET

F607086

Eurofins Frontier Global Sciences, Inc.

Matrix: Water **Prepared using: AFS - EPA 1631E BrCl Oxidation** **Prepared: 7/5/2016**

Lab Number	Sample ID	Initial (mL)	Final (mL)	QC Sample	Sample Specs.	Raw Data	Sample Comments	Analysis Comments
1606506-01	SZF0440-02 Effluent	100	101	-	-	-		
1606506-02	SZF0440-03 Effluent - Blank	100	101	-	-	-		

[redacted]

ue Date: 7/5/2016

2600.3
7/5/16 DM

PREPARATION BENCH SHEET

F607086

Eurofins Frontier Global Sciences, Inc.

Matrix: Water **Prepared using: AFS - EPA 1631E BrCl Oxidation** WI-DNR **Prepared: 7/5/2016**

Lab Number	Sample ID and Source Sample	Initial (mL)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F607086-BLK1	Blank	100	101					1X Source 1604606-03
F607086-BLK2	Blank	100	101					1X " "
F607086-BLK3	Blank	100	101					1X " "
F607086-BS1	LCS	~~100~~ 50	~~101~~ 50.5	1505246	100			1X
F607086-BSD1	LCS Dup	~~100~~ 50	~~101~~ 50.5	1505246	100			1X
F607086-DUP1	Duplicate 1604606-01	100	101					1X
F607086-MS1	Matrix Spike 1604606-01	100	101	1603190	25			1X
F607086-MSD1	Matrix Spike Dup 1604606-01	100	101	1603190	25			1X

Standard ID(s): Description: Expiration:

BLK 4 re-run of BLK 1

1602941

1603449

1603260

1603279

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Due Date: 7/5/2016

1600.3

7/5/16 DM

PREPARATION BENCH SHEET

F607086

Eurofins Frontier Global Sciences, Inc.

Matrix: Water **Prepared using: AFS - EPA 1631E BrCl Oxidation** **Prepared: 7/5/2016**

Lab Number	Sample ID	Initial (mL)	Final (mL)	QC Sample	Sample Specs.	Raw Data	Sample Comments	Analysis Comments
1606506-01	SZF0440-02 Effluent	100	101	-	-	-		1X
1606506-02	SZF0440-03 Effluent - Blank	100	101	-	-	-		1X

[redacted]

ue Date: 7/5/2016

Total Mercury Preservation Logbook

Initial preservation and/or verification

Technician: CMA Date: 6/20/16 Time Completed: 13:15

Additional preservation and/or verification (as needed)

Technician: _____ Date: _____ Time Completed: _____

Technician: _____ Date: _____ Time Completed: _____

Work Orders: 1606506

BrCl LIMS ID: 1601950

Pipette SN: MU32229

Cal. Date: 6/17/16

Sample ID	Sample Volume (mL)	Reagent added (mL)	Oxidized? Y / N	Additional preservation (as needed) Oxidized? Y / N	Reagent added (mL)	Oxidized? Y / N
1606506-01A	300	3.00	Y			
1606506-02A	300	3.00	Y			
1606506-03A	300	3.00	Y			

6/20/16 CMA

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

Comments: _____

Reviewed

Failing Data Report - 6G05008

Sample ID	Analysis	Result	MRL	Dup Result	Source Result	True Value	Units	% Rec.	Rec. LCL	Rec. UCL	RPD	RPD Limit	Over Cal	Failure	Qualifier

Dan Marean 7/5/16
Analyst Reviewed By Date

Peer Reviewed By 7/6/16
Date

ANALYSIS SEQUENCE

6G05008

Instrument: Hg2600-3

Calibration ID: UNASSIGNED **Analyzed: 7/5/2016**

Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
6G05008-IBL1	QC	1			
6G05008-IBL2	QC	2			
6G05008-IBL3	QC	3			
6G05008-CAL1	QC	4	1603274		
6G05008-CAL2	QC	5	1603275		
6G05008-CAL3	QC	6	1603276		
6G05008-CAL4	QC	7	1603277		
6G05008-CAL5	QC	8	1603278		
6G05008-ICV1	QC	9	1601925		
F606366-BLK1	QC	10			
F606366-BLK2	QC	11			
F606366-BLK3	QC	12			
F606366-BS1	QC	13			
F606366-BSD1	QC	14			
1606775-01	Hg_FSTM_TRAP_A	15			
1606775-02	Hg_FSTM_TRAP_A	16			
1606804-01	Hg_FSTM_TRAP_A	17			
1606804-02	Hg_FSTM_TRAP_A	18			
1606804-03	Hg_FSTM_TRAP_A	19			
6G05008-CCV1	QC	20	1601925		
6G05008-CCB1	QC	21			
1606804-04	Hg_FSTM_TRAP_A	22			
6G05008-CCV2	QC	23	1601925		
6G05008-CCB2	QC	24			
F606366-DUP1	QC	25			
F606366-MS1	QC	26			
F606366-MSD1	QC	27			
6G05008-CCV3	QC	28	1601925		
6G05008-CCB3	QC	29			
6G05008-CCV4	QC	30	1601925		
6G05008-CCB4	QC	31			
6G05008-CCV5	QC	32	1601925		
6G05008-CCB5	QC	33			
6G05008-CCV6	QC	34	1601925		
6G05008-CCB6	QC	35			

Due Date: 7/6/2016

ANALYSIS SEQUENCE

6G05008

Instrument: Hg2600-3

Calibration ID: UNASSIGNED **Analyzed: 7/5/2016**

Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
6G05008-CCV7	QC	36	1601925		
6G05008-CCB7	QC	37			
6G05008-CCV8	QC	38	1601925		
6G05008-CCB8	QC	39			
6G05008-CCV9	QC	40	1601925		
6G05008-CCB9	QC	41			
6G05008-CCVA	QC	42	1601925		
6G05008-CCBA	QC	43			

Dan Moran 7/5/16
Samples Loaded By Date

Dan Moran 7/5/16
Data Processed By Date

Due Date: 7/6/2016

PREPARATION BENCH SHEET

F606366

Eurofins Frontier Global Sciences, Inc.

Matrix: Air **Prepared using: AFS - EFGS-009 FSTM Trap Nitric/Sulfuric Digestion** **Prepared: 6/30/2016**

Lab Number	Sample ID and Source Sample	Initial (Trap)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F606366-BLK1	Blank	1	100					
F606366-BLK2	Blank	1	100					
F606366-BLK3	Blank	1	100					
F606366-BS1	LCS	1	100	1601846	200			
F606366-BSD1	LCS Dup	1	100	1601846	200			
F606366-DUP1	Duplicate [1606804-03]	1	100					
F606366-MS1	Matrix Spike [1606804-03]	0.0002	0.02	1603190	100			[Spk] 1Trap->100mL; 20mL->20mL; Spiked 0.02mL
F606366-MSD1	Matrix Spike Dup [1606804-03]	0.0002	0.02	1603190	100			[Spk] 1Trap->100mL; 20mL->20mL; Spiked 0.02mL

Standard ID(s):	Description:	Expiration:
1601846	THg 1,000ng/mL Secondary Spiking Standard	11-Oct-16 00:00
1603190	THg 10ng/mL Calibration Standard	15-Sep-16 00:00

Reagent ID(s):	Description:	Expiration:
1602941	25% Hydroxylamine-HCl working solution	03-Dec-16 00:00
1603279	THg Dilute 1% BrCl	11-Oct-16 00:00
1603280	THg Washstation (0.5% BrCl)	
1603449	3% SnCl2 THg reductant	24-Dec-16 00:00
1603452	70/30 Digestion Acid	25-Dec-16 00:00
1603510	5% BrCl	12-Dec-16 00:00

ue Date: 7/6/2016

PREPARATION BENCH SHEET

F606366

Eurofins Frontier Global Sciences, Inc.

Matrix: Air **Prepared using: AFS - EFGS-009 FSTM Trap Nitric/Sulfuric Digestion** **Prepared: 6/30/2016**

Lab Number	Sample ID	Initial (Trap)	Final (mL)	QC Sample	Sample Specs.	Raw Data	Sample Comments	Analysis Comments
1606775-01	EFGS05760	1	100	-	-	-		
1606775-02	EFGS05786	1	100	-	-	-		
1606804-01	EFGS02499 31/32 Trap A 6/20/16-6/23/16	1	100	-	-	-		
1606804-02	EFGS02584 31/32 Trap B 6/20/16-6/23/16	1	100	-	-	-		
1606804-03	EFGS02093 33 Trap A 6/20/16-6/23/16	1	100	-	-	-		
1606804-04	EFGS02427 33 Trap B 6/20/16-6/23/16	1	100	-	-	-		

[redacted]

ue Date: 7/6/2016

2600.3
7/5/16 DM

PREPARATION BENCH SHEET

F606366

Eurofins Frontier Global Sciences, Inc.

Matrix: Air **Prepared using: AFS - EFGS-009 FSTM Trap Nitric/Sulfuric Digestion** **Prepared: 6/30/2016**

Lab Number	Sample ID and Source Sample	Initial (Trap)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F606366-BLK1	Blank	1	100					100X
F606366-BLK2	Blank	1	100					100X
F606366-BLK3	Blank	1	100					100X
F606366-BS1	LCS	1	100	1601846	200			500X
F606366-BSD1	LCS Dup	1	100	1601846	200			500X
F606366-DUP1	Duplicate 1606804-03	1	100					250X
F606366-MS1	Matrix Spike 1606804-03	1	100	1603190	100			250X
F606366-MSD1	Matrix Spike Dup 1606804-03	1	100	1603190	100			250X

Standard ID(s):	Description:	Expiration:
1601846	THg 1,000ng/mL Secondary Spiking Standard	11-Oct-16 00:00

Reagent ID(s):	Description:	Expiration:
1603452	70/30 Digestion Acid	25-Dec-16 00:00
1603510	5% BrCl	12-Dec-16 00:00

1602941
1602 DM 7/5/16
1603449
1603280
1603279

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ue Date: 7/6/2016

2600.3
7/5/16 DM

PREPARATION BENCH SHEET

F606366

Eurofins Frontier Global Sciences, Inc.

Matrix: Air **Prepared using: AFS - EFGS-009 FSTM Trap Nitric/Sulfuric Digestion** **Prepared: 6/30/2016**

Lab Number	Sample ID	Initial (Trap)	Final (mL)	QC Sample	Sample Specs.	Raw Data	A Sample Comments	B Analysis Comments	C
1606775-01	EFGS05760	1	100	-	-	-	2500X	100X	500X
1606775-02	EFGS05786	1	100	-	-	-	2500X	100X	500X
1606804-01	EFGS02499 31/32 Trap A 6/20/16-6/23/16 1258	1	100	-	-	-	2500X	100X	2500X
1606804-02	EFGS02584 31/32 Trap B 6/20/16-6/23/16 1035	1	100	-	-	-	2500X	100X	2500X
1606804-03	EFGS02093 33 Trap A 6/20/16-6/23/16 3298	1	100	-	-	-	2500X	100X	2500X
1606804-04	EFGS02427 33 Trap B 6/20/16-6/23/16 4194	1	100	-	-	-	2500X	100X	2500X

[redacted]

DM 7-5-16

ue Date: 7/6/2016

Name: AMB Date: 6/30/16 Batch ID: F606366

Work Order(s): 1606775, 1606804 Analysis: ☑ Total Hg ☐ Other _____

Sample Matrix: ☑ FSTM ☐ KCl ☐ PHg Plug ☐ Other _____

Prep: ☑ 70/30 Digestion, 2 hr. @ ~55°C (EFAFS-T-AFS-SOP2985)

start time: 1720, start temp (°C): 58.0 (raw) 57.6 (w/ CF)

end time: 1920, end temp (°C): 62.0 (raw) 61.4 (w/ CF) Timer? ☐ Yes ☑ No

☐ 5% BrCl Oxidation (EFGS-031) start time: _____ (allow samples to sit for at least 4 hr before analysis)

☐ Other _____

Sample ID Number	Digest vol. (mL)
F606366-BLK1	100
F606366-BLK2	100
F606366-BLK3	100
F606366-BS1	100
F606366-BSD1	100
1606775-01A	100
1606775-01B	100
1606775-01C	100
1606775-02A	100
1606775-02B	100
1606775-02C	100
1606804-01A	100
1606804-01B	100
1606804-01C	100
1606804-02A	100
1606804-02B	100
1606804-02C	100
1606804-03A	100
1606804-03B	100
1606804-03C	100
1606804-04A	100
1606804-04B	100
1606804-04C	100

Spike ID: 1601846

Spike Amount (µL): 200

Spike Witness: AMB 6/30/16

BrCl ID: 1603467

70/30: 1603452

Other: N/A

Thermometer: 13698

Dispensers: 02K27494 ☑

O4N73497 ☑

Other N/A

Pipette ID: MU11607

Cal. Date: 6/30/16

Vials and Jars lot# 00064654

Loader Mass Verification: Y

Trap Material Lot#: 1602165

Comments:

Samples 1606804-02A and 1606804-03A had clumped FSTM. AMB 6/30/16

AMB 6/30/16

reviewed 7-1-16 BC

Failing Data Report - 6G05009

Sample ID	Analysis	Result	MRL	Dup Result	Source Result	True Value	Units	% Rec.	Rec. LCL	Rec. UCL	RPD	RPD Limit	Over Cal	Failure	Qualifier

Dan Moran 7/5/16
Analyst Reviewed By Date

Peer Reviewed By 7/6/16
Date

ANALYSIS SEQUENCE

6G05009

Instrument: Hg2600-3

Calibration ID: UNASSIGNED **Analyzed: 7/5/2016**

Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
6G05009-IBL1	QC	1			
6G05009-IBL2	QC	2			
6G05009-IBL3	QC	3			
6G05009-CAL1	QC	4	1603274		
6G05009-CAL2	QC	5	1603275		
6G05009-CAL3	QC	6	1603276		
6G05009-CAL4	QC	7	1603277		
6G05009-CAL5	QC	8	1603278		
6G05009-ICV1	QC	9	1601925		
6G05009-CCV1	QC	10	1601925		
6G05009-CCB1	QC	11			
6G05009-CCV2	QC	12	1601925		
6G05009-CCB2	QC	13			
6G05009-CCV3	QC	14	1601925		
6G05009-CCB3	QC	15			
F607087-BLK1	QC	16			
F607087-BLK2	QC	17			
F607087-BLK3	QC	18			
6G05009-CCV4	QC	19	1601925		
6G05009-CCB4	QC	20			
F607087-BLK4	QC	21			
F607087-BS1	QC	22			
F607087-BSD1	QC	23			
1606805-01	Hg-CVAFS-W-1631	24			
1606805-02	Hg-CVAFS-W-1631	25			
1606805-03	Hg-CVAFS-W-1631	26			
1606805-04	Hg-CVAFS-W-1631	27			
1606805-05	Hg-CVAFS-W-1631	28			
1606805-06	Hg-CVAFS-W-1631	29			
1606808-02	Hg-CVAFS-W-1631	30			give data to PM for scanning
6G05009-CCV5	QC	31	1601925		
6G05009-CCB5	QC	32			
1606808-04	Hg-CVAFS-W-1631	33			give data to PM for scanning
1606812-01	Hg-CVAFS-W-1631	34			
1606812-02	Hg-CVAFS-W-1631	35			

Due Date: 7/6/2016

ANALYSIS SEQUENCE

6G05009

Instrument: Hg2600-3

Calibration ID: UNASSIGNED **Analyzed: 7/5/2016**

Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
1606813-01	Hg-CVAFS-W-1631	36			
1606813-02	Hg-CVAFS-W-1631	37			
1607002-01	Hg-CVAFS-W-1631	38			Do not oven samples (CCV 90-110%, CCB <), <1/2 PQL
1607040-04	Hg-CVAFS-W-1631	39			
1607040-08	Hg-CVAFS-W-1631	40			
1607041-01	Hg-CVAFS-W-1631	41			
1607045-01	Hg-CVAFS-W-1631	42			
6G05009-CCV6	QC	43	1601925		
6G05009-CCB6	QC	44			
1607041-01RE1	Hg-CVAFS-W-1631	45			Added 7/5/2016 by DM2
F607087-DUP1	QC	46			
F607087-MS1	QC	47			
F607087-MSD1	QC	48			
F607087-MS2	QC	49			
F607087-MSD2	QC	50			
F607098-BLK1	QC	51			
F607098-BLK2	QC	52			
F607098-BLK3	QC	53			
F607098-BS1	QC	54			
6G05009-CCV7	QC	55	1601925		
6G05009-CCB7	QC	56			
F607087-BLK5	QC	57			
F607098-BSD1	QC	58			
1607042-01	Hg-CVAFS-W-1631	59			Scan all data - Level IV
1607042-02	Hg-CVAFS-W-1631	60			Scan all data - Level IV
1607042-03	Hg-CVAFS-W-1631	61			Scan all data - Level IV
1607042-04	Hg-CVAFS-W-1631	62			Scan all data - Level IV
1607042-05	Hg-CVAFS-W-1631	63			Scan all data - Level IV
1607042-06	Hg-CVAFS-W-1631	64			Scan all data - Level IV
1607042-07	Hg-CVAFS-W-1631	65			Scan all data - Level IV
1607042-08	Hg-CVAFS-W-1631	66			Scan all data - Level IV
6G05009-CCV8	QC	67	1601925		
6G05009-CCB8	QC	68			
1607042-09	Hg-CVAFS-W-1631	69			Scan all data - Level IV
1607042-10	Hg-CVAFS-W-1631	70			Scan all data - Level IV

Due Date: 7/6/2016

ANALYSIS SEQUENCE

6G05009

Instrument: Hg2600-3

Calibration ID: UNASSIGNED **Analyzed: 7/5/2016**

Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
1607042-11	Hg-CVAFS-W-1631	71			Scan all data - Level IV
1607042-12	Hg-CVAFS-W-1631	72			Scan all data - Level IV
1607042-13	Hg-CVAFS-W-1631	73			Scan all data - Level IV
1607042-14	Hg-CVAFS-W-1631	74			Scan all data - Level IV
1607042-15	Hg-CVAFS-W-1631	75			Scan all data - Level IV
1607042-16	Hg-CVAFS-W-1631	76			Scan all data - Level IV
1607042-21	Hg-CVAFS-W-1631	77			Scan all data - Level IV
F607098-DUP1	QC	78			
6G05009-CCV9	QC	79	1601925		
6G05009-CCB9	QC	80			
F607098-MS1	QC	81			
F607098-MSD1	QC	82			
F607098-MS2	QC	83			
F607098-MSD2	QC	84			
6G05009-CCVA	QC	85	1601925		
6G05009-CCBA	QC	86			

Dan Marean 7/5/16
Samples Loaded By Date

Dan Marean 7/5/16
Data Processed By Date

Due Date: 7/6/2016

PREPARATION BENCH SHEET

F607087

Eurofins Frontier Global Sciences, Inc.

Matrix: Water **Prepared using: AFS - EPA 1631E BrCl Oxidation** **Prepared: 7/5/2016**

Lab Number	Sample ID and Source Sample	Initial (mL)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F607087-BLK1	Blank	100	101					
F607087-BLK2	Blank	100	101					
F607087-BLK3	Blank	100	101					
F607087-BLK4	Blank	50	100					
F607087-BLK5	Blank	100	105					
F607087-BS1	LCS	50	50.5	1505246	100			
F607087-BSD1	LCS Dup	50	50.5	1505246	100			
F607087-DUP1	Duplicate [1606805-01]	100	101					
F607087-MS1	Matrix Spike [1606805-01]	49.50495	50	1603190	100			[Spk] 100mL->101mL; 101mL->101mL; Spiked 50mL
F607087-MS2	Matrix Spike [1606805-03]	49.50495	50	1603190	50			[Spk] 100mL->101mL; 101mL->101mL; Spiked 50mL
F607087-MSD1	Matrix Spike Dup [1606805-01]	49.50495	50	1603190	100			[Spk] 100mL->101mL; 101mL->101mL; Spiked 50mL
F607087-MSD2	Matrix Spike Dup [1606805-03]	49.50495	50	1603190	50			[Spk] 100mL->101mL; 101mL->101mL; Spiked 50mL

Standard ID(s):	Description:	Expiration:
1505246	Nist 1641D 200X	20-Aug-16 00:00
1603190	THg 10ng/mL Calibration Standard	15-Sep-16 00:00
		15-Sep-16 00:00

Reagent ID(s):	Description:	Expiration:
1601950	0.2 N BRCL APRIL 2016	11-Oct-16 00:00
1602941	25% Hydroxylamine-HCl working solution	03-Dec-16 00:00
1603196	0.2 N BRCL JUNE 2016	12-Dec-16 00:00
1603279	THg Dilute 1% BrCl	11-Oct-16 00:00
1603280	THg Washstation (0.5% BrCl)	
1603449	3% SnCl2 THg reductant	24-Dec-16 00:00

ue Date: 7/6/2016

PREPARATION BENCH SHEET

F607087

Eurofins Frontier Global Sciences, Inc.

Matrix: Water **Prepared using: AFS - EPA 1631E BrCl Oxidation** **Prepared: 7/5/2016**

Lab Number	Sample ID	Initial (mL)	Final (mL)	QC Sample	Sample Specs.	Raw Data	Sample Comments	Analysis Comments
1606805-01	001	100	101	-	-	-		
1606805-02	001 Field Blank	100	101	-	-	-		
1606805-03	002	100	101	-	-	-		
1606805-04	002 Field Blank	100	101	-	-	-		
1606805-05	A149	50	100	-	-	-		
1606805-06	A149 Blank	100	101	-	-	-		
1606808-02	B-158784 Plant Influent #16-10401	100	101	-	-	can Dat	give data to PM for scanning	
1606808-04	B-158789 Plant Effluent #16-10403	100	101	-	-	can Dat	give data to PM for scanning	
1606812-01	L844234-01	100	101	-	-	-		
1606812-02	L844234-02	100	101	-	-	-		
1606813-01	L844064-01	100	101	-	-	-		
1606813-02	L844064-02	100	101	-	-	-		
1607002-01	June 2016 Monthly Water ICPMS Sink 1	100	101	-	-	-	Do not oven samples (CCV 90-110%, (	
1607040-04	B159759 Dale Mabry EFF	100	101	-	-	-		
1607040-08	B159768 Northwest Eff	100	101	-	-	-		
1607041-01	B157036 World Class Tech 42247	100	105	-	-	-		
1607041-01RE1	B157036 World Class Tech 42247	100	105	-	-	-	Added 7/5/2016 by DM2	Added 7/5/2016 by DM2
07045-01	16-10028-BCV0A SS-07-012016	100	101	-	-	-		

ue Date: 7/6/2016

PREPARATION BENCH SHEET

F607087

Eurofins Frontier Global Sciences, Inc.

Matrix: Water **Prepared using: AFS - EPA 1631E BrCl Oxidation** **Prepared: 7/5/2016**

[redacted]

ue Date: 7/6/2016

PREPARATION BENCH SHEET

F607087

Eurofins Frontier Global Sciences, Inc.

Matrix: Water **Prepared using: AFS - EPA 1631E BrCl Oxidation** **Prepared: 7/5/2016**

Lab Number	Sample ID and Source Sample	Initial (mL)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F607087-BLK1	Blank	100	101					
F607087-BLK2	Blank	100	101					
F607087-BLK3	Blank	100	101					
F607087-BLK4	Blank	50	100					
F607087-BLK5	Blank	100	105					
F607087-BS1	LCS	50	50.5	1505246	100			
F607087-BSD1	LCS Dup	50	50.5	1505246	100			
F607087-DUP1	Duplicate [1606805-01]	100	101					
F607087-MS1	Matrix Spike [1606805-01]	49.50495	50	1603190	100			[Spk] 100mL->101mL; 101mL->101mL; Spiked 50mL
F607087-MS2	Matrix Spike [1606805-03]	49.50495	50	1603190	50			[Spk] 100mL->101mL; 101mL->101mL; Spiked 50mL
F607087-MSD1	Matrix Spike Dup [1606805-01]	49.50495	50	1603190	100	JH 7/6/16		[Spk] 100mL->101mL; 101mL->101mL; Spiked 50mL
F607087-MSD2	Matrix Spike Dup [1606805-03]	49.50495	50	1603190	50			[Spk] 100mL->101mL; 101mL->101mL; Spiked 50mL

Standard ID(s):	Description:	Expiration:
1505246	Nist 1641D 200X	20-Aug-16 00:00
1603190	THg 10ng/mL Calibration Standard	15-Sep-16 00:00
		15-Sep-16 00:00

Reagent ID(s):	Description:	Expiration:
1602941	25% Hydroxylamine-HCl working solution	03-Dec-16 00:00
1603196	0.2 N BRCL JUNE 2016	12-Dec-16 00:00
1603279	THg Dilute 1% BrCl	11-Oct-16 00:00
1603280	THg Washstation (0.5% BrCl)	
1603449	3% SnCl2 THg reductant	24-Dec-16 00:00

1601950
~~1603196~~
~~1603196~~ JH 7/6/16
JH 7/6/16

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ue Date: 7/6/2016

PREPARATION BENCH SHEET

F607087

Eurofins Frontier Global Sciences, Inc.

Matrix: Water **Prepared using: AFS - EPA 1631E BrCl Oxidation** **Prepared: 7/5/2016**

Lab Number	Sample ID	Initial (mL)	Final (mL)	QC Sample	Sample Specs.	Raw Data	Sample Comments	Analysis Comments
1606805-01	001	100	101	-	-	-		
1606805-02	001 Field Blank	100	101	-	-	-		
1606805-03	002	100	101	-	-	-		
1606805-04	002 Field Blank	100	101	-	-	-		
1606805-05	A149	50	100	-	-	-		
1606805-06	A149 Blank	100	101	-	-	-		
1606808-02	B-158784 Plant Influent #16-10401	100	101	-	-	Scan Dat	give data to PM for scanning	
1606808-04	B-158789 Plant Effluent #16-10403	100	101	-	-	Scan Dat	give data to PM for scanning	
1606812-01	L844234-01	100	101	-	-	-		
1606812-02	L844234-02	100	101	-	-	-		
1606813-01	L844064-01	100	101	-	-	-		
1606813-02	L844064-02	100	101	-	-	-		
1607002-01	June 2016 Monthly Water ICPMS Sink 1	100	101	-	-	-	Do not oven samples (CCV 90-110%, (	
1607040-04	B159759 Dale Mabry EFF	100	101	-	-	-	JH 7/6/16	
1607040-08	B159768 Northwest Eff	100	101	-	-	-		
1607041-01	B157036 World Class Tech 42247	100	105	-	-	-		
1607041-01RE1	B157036 World Class Tech 42247	100	105	-	-	-	Added 7/5/2016 by DM2	Added 7/5/2016 by DM2
7045-01	16-10028-BCV0A SS-07-012016	100	101	-	-	-		

e Date: 7/6/2016

PREPARATION BENCH SHEET

F607087

Eurofins Frontier Global Sciences, Inc.

Matrix: Water **Prepared using: AFS - EPA 1631E BrCl Oxidation** **Prepared: 7/5/2016**

[redacted]

JH 7/6/16

ıe Date: 7/6/2016

2600.3
7/5/16 DM

PREPARATION BENCH SHEET

F607087

Eurofins Frontier Global Sciences, Inc.

Matrix: Water **Prepared using: AFS - EPA 1631E BrCl Oxidation** **Prepared: 7/5/2016**

Lab Number	Sample ID and Source Sample	Initial (mL)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F607087-BLK1	Blank	100	101					1X
F607087-BLK2	Blank	100	101					1X
F607087-BLK3	Blank	100	101					1X
F607087-BLK4	Blank	5 ~~100~~	~~100~~ 101					1X
F607087-BS1	LCS	5 ~~100~~	50.5 ~~101~~	100	1505246			1X
F607087-BSD1	LCS Dup	5 ~~100~~	50.5 ~~101~~	100	1505246			1X
F607087-DUP1	Duplicate 1606505.01	100	101					1X
F607087-MS1	Matrix Spike 1606505.01	100	101	1603190	100			1X
F607087-MS2	Matrix Spike 1606505.03	100	101	1603190	50			1X
F607087-MSD1	Matrix Spike Dup 1606505.01	100	101	1603190	100			1X
F607087-MSD2	Matrix Spike Dup 1606505.03	100	101	1603190	50			1X

Standard ID(s): Description: Expiration:

BLK 5 Final 105

1603196
1602941
1603149
1603280
1603279

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ue Date: 7/6/2016

PREPARATION BENCH SHEET

200.3
7/5/16 DM

F607087

Eurofins Frontier Global Sciences, Inc.

Matrix: Water **Prepared using: AFS - EPA 1631E BrCl Oxidation** **Prepared: 7/5/2016**

Lab Number	Sample ID	Initial (mL)	Final (mL)	QC Sample	Sample Specs.	Raw Data	Sample Comments	Analysis Comments
1606805-01	001	100	101	-	-	-		1X
1606805-02	001 Field Blank	100	101	-	-	-		1X
1606805-03	002	100	101	-	-	-		1X
1606805-04	002 Field Blank	100	101	-	-	-		1X
1606805-05	A149	~~100~~ 50	~~101~~ ~~52~~ 100	-	-	-		10X
1606805-06	A149 Blank	100	101	-	-	-		1X
1606808-02	B-158784 Plant Influent #16-10401	100	101	-	-	Scan Dat	give data to PM for scanning	1X
1606808-04	B-158789 Plant Effluent #16-10403	100	101	-	-	Scan Dat	give data to PM for scanning	1X
1606812-01	L844234-01	100	101	-	-	-		1X
1606812-02	L844234-02	100	101	-	-	-		1X
1606813-01	L844064-01	100	101	-	-	-		1X
1606813-02	L844064-02	100	101	-	-	-		1X
1607002-01	June 2016 Monthly Water ICPMS Sink 1	100	101	-	-	-	Do not oven samples (CCV 90-110%, (	1X
~~1607040-02~~	B159756 Dale Mabry INF	100	101	-	-	-		Not Prepared
1607040-04	B159759 Dale Mabry EFF	100	101	-	-	-		1X
~~1607040-06~~	B159764 Northwest Inf	100	101	-	-	-		Not Prepared
1607040-08	B159768 Northwest Eff	100	101	-	-	-		1X
7041-01	B157036 World Class Tech 42247	100	~~101~~ 105	-	-	-	DM 7/5/16	1X 10X → 7X 10X
7045-01	16-10028-BCV0A SS-07-012016	100	101	-	-	-		1X

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ue Date: 7/6/2016

PREPARATION BENCH SHEET

F607087

Eurofins Frontier Global Sciences, Inc.

Matrix: Water

Prepared using: AFS - EPA 1631E BrCl Oxidation

Prepared: 7/5/2016

[redacted]

ue Date: 7/6/2016

Total Mercury Preservation Logbook

Initial preservation and/or verification

Technician: CSP Date: 6/30/16 Time Completed: 1515

Additional preservation and/or verification (as needed)

Technician: _____ Date: _____ Time Completed: _____

Technician: _____ Date: _____ Time Completed: _____

CSP 6/29/16

Work Orders: ~~1606778~~ 1606813, 1606812, 1606808, 1606805, 1606810

CSP 6/30/16

BrCl LIMS ID: ~~AA~~ 1601950, 1606196

Pipette SN: MU32229

Cal. Date: 6/29/16

Sample ID	Sample Volume (mL)	Reagent added (mL)	Oxidized? Y / N	Additional preservation (as needed) Oxidized? Y / N	Reagent added (mL)	Oxidized? Y / N
1606813-01A	250	2.50	y			
1606813-02A	250	2.50	y			
1606812-01A	250	2.50	y			
1606812-02A	250	2.50	y			
1606808-02A	300	3.00	y			
1606808-04A	300	3.00	y			
1606805-01A	300	3.00	y			
1606805-02A	300	3.00	y			
1606805-03A	300	3.00	y			
1606805-09A	300	3.00	y			
1606805-05A	300	15.00	y			
1606805-06A	300	3.00	y			
CSP 6/30/16 ~~1606810~~ 1606810-02A	300	3.00	y			
1606810-04A	2.75	2.75 +2.75	y			
1606810-06A	270	2.70 +2.70	y			
1606810-08A	300	3.00	y			
1606810-10A	285	2.85	y			
1606810-12A	270	2.70	y			
1606810-14A	300	3.00	y			
1606810-16A	280	2.80	y			

CSP 6/30/16

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

Comments: Used BrCl 1603196 for WO's 1606805 & 1606810

Used BrCl 1601950 for WO's 1606813, 1606812, & 1606808

Rev. CWLD

Total Mercury Preservation Logbook

Initial preservation and/or verification

Technician: CSP Date: 7/1/16 Time Completed: 1654

Additional preservation and/or verification (as needed)

Technician: _____ Date: _____ Time Completed: _____

Technician: _____ Date: _____ Time Completed: _____

Work Orders: 1607045, 1607002, 1607042, 1607040

BrCl LIMS ID: 1603196

Pipette SN: J07631

Cal. Date: 6/27/16

	Sample ID	Sample Volume (mL)	Reagent added (mL)	Oxidized? Y / N	Additional preservation (as needed) Oxidized? Y / N	Reagent added (mL)	Oxidized? Y / N
CSP 7/1/16	~~1606~~1607045-01A	300	3.00	y			
	1607002-01A	300	3.00	y			
	1607042-01A	300	3.00	y			
	1607042-02A	300	3.00	y			
	1607042-03A	300	3.00	y			
	1607042-04A	300	3.00	y			
	1607042-05A	300	3.00	n			
	1607042-06A	300	3.00	y			
	1607042-07A	300	3.00	y			
	1607042-08A	300	3.00	y			
CSP 7/1/16	~~1606~~ 1607042-09A	300	3.00	y			
	1607042-10A	300	3.00	y			
	1607042-11A	300	3.00	y			
	1607042-12A	300	3.00	y			
	1607042-13A	300	3.00	y			
	1607042-14A	300	3.00	y			
	1607042-15A	300	3.00	y			
	1607042-16A	300	3.00	y			
	1607042-17A	300	3.00	y			
	1607042-18A	300	3.00	y			
	1607042-19A	300	3.00	y			
	1607042-20A	300	3.00	y			
	1607042-21A	300	3.00	y			
	1607040-02A	270	2.70	y			
	1607040-04A	290	2.90	y			
	1607040-06A	290	2.90	y			

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

Comments: _____

Reviewed 7/5/16

Total Mercury Preservation Logbook

Initial preservation and/or verification

Technician: CSP Date: 7/1/16 Time Completed: 1705

Work Orders: 1607040, 1607041
1606805

Additional preservation and/or verification (as needed)

Technician: _____ Date: _____ Time Completed: _____

Technician: _____ Date: _____ Time Completed: _____

BrCl LIMS ID: 1603196

Pipette SN: 507631

Cal. Date: 6/27/16

Sample ID	Sample Volume (mL)	Reagent added (mL)	Oxidized? Y / N	Additional preservation (as needed) Oxidized? Y / N	Reagent added (mL)	Oxidized? Y / N
1607040-08A	2.90	2.90	y			
1607041-01A	12.5	6.25	y			
		CSP 7/1/16				
1606805-05B	10.5	9.5	y			

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

Comments: _____

Reviewed

PREPARATION BENCH SHEET

F607098

Eurofins Frontier Global Sciences, Inc.

Matrix: Water **Prepared using: AFS - EPA 1631E BrCl Oxidation** **Prepared: 7/5/2016**

Lab Number	Sample ID and Source Sample	Initial (mL)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F607098-BLK1	Blank	100	101					
F607098-BLK2	Blank	100	101					
F607098-BLK3	Blank	100	101					
F607098-BS1	LCS	50	50.5	1505246	100			
F607098-BSD1	LCS Dup	50	50.5	1505246	100			
F607098-DUP1	Duplicate [1607042-11]	100	101					
F607098-MS1	Matrix Spike [1607042-11]	49.50495	50	1603190	50			[Spk] 100mL->101mL; 101mL->101mL; Spiked 50mL
F607098-MS2	Matrix Spike [1607042-12]	49.50495	50	1603190	25			[Spk] 100mL->101mL; 101mL->101mL; Spiked 50mL
F607098-MSD1	Matrix Spike Dup [1607042-11]	49.50495	50	1603190	50			[Spk] 100mL->101mL; 101mL->101mL; Spiked 50mL
F607098-MSD2	Matrix Spike Dup [1607042-12]	49.50495	50	1603190	25			[Spk] 100mL->101mL; 101mL->101mL; Spiked 50mL

Standard ID(s):	Description:	Expiration:
1505246	Nist 1641D 200X	20-Aug-16 00:00
1603190	THg 10ng/mL Calibration Standard	15-Sep-16 00:00
		15-Sep-16 00:00

Reagent ID(s):	Description:	Expiration:
1601950	0.2 N BRCL APRIL 2016	11-Oct-16 00:00
1602941	25% Hydroxylamine-HCl working solution	03-Dec-16 00:00
1603196	0.2 N BRCL JUNE 2016	12-Dec-16 00:00
1603279	THg Dilute 1% BrCl	11-Oct-16 00:00
1603280	THg Washstation (0.5% BrCl)	
1603449	3% SnCl2 THg reductant	24-Dec-16 00:00

ue Date: 7/25/2016

PREPARATION BENCH SHEET

F607098

Eurofins Frontier Global Sciences, Inc.

Matrix: Water **Prepared using: AFS - EPA 1631E BrCl Oxidation** **Prepared: 7/5/2016**

Lab Number	Sample ID	Initial (mL)	Final (mL)	QC Sample	Sample Specs.	Raw Data	Sample Comments	Analysis Comments
1607042-01	OV-02_062916_SW_10	100	101	-	-	-	Scan all data - Level IV	
1607042-02	OV-02_062916_SW_10 Dissolved	100	101	-	-	-	Scan all data - Level IV	
1607042-03	WQ1b-c_062916_SW_10	100	101	-	-	-	Scan all data - Level IV	
1607042-04	WQ1b-c_062916_SW_10 Dissolved	100	101	-	-	-	Scan all data - Level IV	
1607042-05	WQ2-c_063016_SW_10	100	101	-	-	-	Scan all data - Level IV	
1607042-06	WQ2-c_063016_SW_10 Dissolved	100	101	-	-	-	Scan all data - Level IV	
1607042-07	WQ3-L_062916_SW_10	100	101	-	-	-	Scan all data - Level IV	
1607042-08	WQ3-L_062916_SW_10 Dissolved	100	101	-	-	-	Scan all data - Level IV	
1607042-09	ES-15_062916_SW_10	100	101	-	-	-	Scan all data - Level IV	
1607042-10	ES-15_062916_SW_10 Dissolved	100	101	-	-	-	Scan all data - Level IV	
1607042-11	WQ-ECH_062916_SW_10	100	101	QC	-	-	MS/MSD Scan all data - Level IV	
1607042-12	WQ-ECH_062916_SW_10 Dissolved	100	101	QC	-	-	MS/MSD Scan all data - Level IV	
1607042-13	WQ-FPT_062916_SW_10	100	101	-	-	-	Scan all data - Level IV	
1607042-14	WQ-FPT_062916_SW_10 Dissolved	100	101	-	-	-	Scan all data - Level IV	
1607042-15	WQ-ECH_062916_SW_10_DUP	100	101	-	-	-	Scan all data - Level IV	
1607042-16	WQ-ECH_062916_SW_10_DUP Dissolved	100	101	-	-	-	Scan all data - Level IV	
1607042-21	EB_062916_SW_QC Dissolved	100	101	-	-	-	Scan all data - Level IV	

ue Date: 7/25/2016

PREPARATION BENCH SHEET

F607098

Eurofins Frontier Global Sciences, Inc.

Matrix: Water

Prepared using: AFS - EPA 1631E BrCl Oxidation

Prepared: 7/5/2016

[redacted]

ue Date: 7/25/2016

PREPARATION BENCH SHEET

F607098

Eurofins Frontier Global Sciences, Inc.

Matrix: Water **Prepared using: AFS - EPA 1631E BrCl Oxidation** **Prepared: 7/5/2016**

Lab Number	Sample ID and Source Sample	Initial (mL)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F607098-BLK1	Blank	100	101					
F607098-BLK2	Blank	100	101					
F607098-BLK3	Blank	100	101					
F607098-BS1	LCS	50	50.5	1505246	100			
F607098-BSD1	LCS Dup	50	50.5	1505246	100			
F607098-DUP1	Duplicate [1607042-11]	100	101					
F607098-MS1	Matrix Spike [1607042-11]	49.50495	50	1603190	50			[Spk] 100mL->101mL; 101mL->101mL; Spiked 50mL
F607098-MS2	Matrix Spike [1607042-12]	49.50495	50	1603190	25			[Spk] 100mL->101mL; 101mL->101mL; Spiked 50mL
F607098-MSD1	Matrix Spike Dup [1607042-11]	49.50495	50	1603190	50			[Spk] 100mL->101mL; 101mL->101mL; Spiked 50mL
F607098-MSD2	Matrix Spike Dup [1607042-12]	49.50495	50	1603190	25			[Spk] 100mL->101mL; 101mL->101mL; Spiked 50mL

Standard ID(s):	Description:	Expiration:
1505246	Nist 1641D 200X	20-Aug-16 00:00
1603190	THg 10ng/mL Calibration Standard	15-Sep-16 00:00
		15-Sep-16 00:00

Reagent ID(s):	Description:	Expiration:
1601950	0.2 N BRCL APRIL 2016	11-Oct-16 00:00
1602941	25% Hydroxylamine-HCl working solution	03-Dec-16 00:00
1603279	THg Dilute 1% BrCl	11-Oct-16 00:00
1603280	THg Washstation (0.5% BrCl)	
1603449	3% SnCl2 THg reductant	24-Dec-16 00:00

1603196

DH 7/6/16

ue Date: 7/25/2016

PREPARATION BENCH SHEET

F607098

Eurofins Frontier Global Sciences, Inc.

Matrix: Water **Prepared using: AFS - EPA 1631E BrCl Oxidation** **Prepared: 7/5/2016**

Lab Number	Sample ID	Initial (mL)	Final (mL)	QC Sample	Sample Specs.	Raw Data	Sample Comments	Analysis Comments
1607042-01	OV-02_062916_SW_10	100	101	-	-	-	Scan all data - Level IV	
1607042-02	OV-02_062916_SW_10 Dissolved	100	101	-	-	-	Scan all data - Level IV	
1607042-03	WQ1b-c_062916_SW_10	100	101	-	-	-	Scan all data - Level IV	
1607042-04	WQ1b-c_062916_SW_10 Dissolved	100	101	-	-	-	Scan all data - Level IV	
1607042-05	WQ2-c_063016_SW_10	100	101	-	-	-	Scan all data - Level IV	
1607042-06	WQ2-c_063016_SW_10 Dissolved	100	101	-	-	-	Scan all data - Level IV	
1607042-07	WQ3-L_062916_SW_10	100	101	-	-	-	Scan all data - Level IV	
1607042-08	WQ3-L_062916_SW_10 Dissolved	100	101	-	-	-	Scan all data - Level IV	
1607042-09	ES-15_062916_SW_10	100	101	-	-	-	Scan all data - Level IV	
1607042-10	ES-15_062916_SW_10 Dissolved	100	101	-	-	-	Scan all data - Level IV	
1607042-11	WQ-ECH_062916_SW_10	100	101	QC	-	-	MS/MSD Scan all data - Level IV	
1607042-12	WQ-ECH_062916_SW_10 Dissolved	100	101	QC	-	-	MS/MSD Scan all data - Level IV	
1607042-13	WQ-FPT_062916_SW_10	100	101	-	-	-	Scan all data - Level IV	
1607042-14	WQ-FPT_062916_SW_10 Dissolved	100	101	-	-	-	Scan all data - Level IV	JH 7/6/16
1607042-15	WQ-ECH_062916_SW_10_DUP	100	101	-	-	-	Scan all data - Level IV	
1607042-16	WQ-ECH_062916_SW_10_DUP Dissolved	100	101	-	-	-	Scan all data - Level IV	
1607042-21	EB_062916_SW_QC Dissolved	100	101	-	-	-	Scan all data - Level IV	

e Date: 7/25/2016

PREPARATION BENCH SHEET

F607098

Eurofins Frontier Global Sciences, Inc.

Matrix: Water

Prepared using: AFS - EPA 1631E BrCl Oxidation

[redacted]

Prepared: 7/5/2016

JH 7/6/16

e Date: 7/25/2016

PREPARATION BENCH SHEET

F607098

Eurofins Frontier Global Sciences, Inc.

2600.3
7/5/16 DM

Matrix: Water **Prepared using: AFS - EPA 1631E BrCl Oxidation** **Prepared: 7/5/2016**

Lab Number	Sample ID and Source Sample	Initial (mL)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F607098-BLK1	Blank	100	101					1X
F607098-BLK2	Blank	100	101					1X
F607098-BLK3	Blank	100	101					1X
F607098-BS1	LCS	~~100~~ 50	~~101~~ 50.5	100	1505246			1X
F607098-BSD1	LCS Dup	~~100~~ 50	~~101~~ 50.5	100	1505246			1X
F607098-DUP1	Duplicate 1607042-11	100	101					1X
F607098-MS1	Matrix Spike [1607042-11]	100	101	1603190	50			1X
F607098-MS2	Matrix Spike [1607042-12]	100	101	1603190	25			1X
F607098-MSD1	Matrix Spike Dup [1607042-11]	100	101	1603190	50			1X
F607098-MSD2	Matrix Spike Dup [1607042-12]	100	101	1603190	25			1X

Standard ID(s): Description: Expiration:

1602941
1603449
1603280
1603279
1601950

Page 79 of 211

e Date: 7/25/2016

2600.3
7/5/16 DM

PREPARATION BENCH SHEET

F607098

Eurofins Frontier Global Sciences, Inc.

Matrix: Water **Prepared using: AFS - EPA 1631E BrCl Oxidation** **Prepared: 7/5/2016**

Lab Number	Sample ID	Initial (mL)	Final (mL)	QC Sample	Sample Specs.	Raw Data	Sample Comments	Analysis Comments
1607042-01	OV-02_062916_SW_10	100	101	-	-	-	Scan all data - Level IV	1X
1607042-02	OV-02_062916_SW_10 Dissolved	100	101	-	-	-	Scan all data - Level IV	1X
1607042-03	WQ1b-c_062916_SW_10	100	101	-	-	-	Scan all data - Level IV	1X
1607042-04	WQ1b-c_062916_SW_10 Dissolved	100	101	-	-	-	Scan all data - Level IV	1X
1607042-05	WQ2-c_063016_SW_10	100	101	-	-	-	Scan all data - Level IV	1X
1607042-06	WQ2-c_063016_SW_10 Dissolved	100	101	-	-	-	Scan all data - Level IV	1X
1607042-07	WQ3-L_062916_SW_10	100	101	-	-	-	Scan all data - Level IV	1X
1607042-08	WQ3-L_062916_SW_10 Dissolved	100	101	-	-	-	Scan all data - Level IV	1X
1607042-09	ES-15_062916_SW_10	100	101	-	-	-	Scan all data - Level IV	1X
1607042-10	ES-15_062916_SW_10 Dissolved	100	101	-	-	-	Scan all data - Level IV	1X
1607042-11	WQ-ECH_062916_SW_10	100	101	QC	-	-	MS/MSD Scan all data - Level IV	1X
1607042-12	WQ-ECH_062916_SW_10 Dissolved	100	101	QC	-	-	MS/MSD Scan all data - Level IV	1X
1607042-13	WQ-FPT_062916_SW_10	100	101	-	-	-	Scan all data - Level IV	1X
1607042-14	WQ-FPT_062916_SW_10 Dissolved	100	101	-	-	-	Scan all data - Level IV	1X
1607042-15	WQ-ECH_062916_SW_10_DUP	100	101	-	-	-	Scan all data - Level IV	1X
1607042-16	WQ-ECH_062916_SW_10_DUP Dissolved	100	101	-	-	-	Scan all data - Level IV	1X
1607042-21	EB_062916_SW_QC Dissolved	100	101	-	-	-	Scan all data - Level IV	1X

e Date: 7/25/2016

PREPARATION BENCH SHEET

F607098

Eurofins Frontier Global Sciences, Inc.

Matrix: Water

Prepared using: AFS - EPA 1631E BrCl Oxidation

Prepared: 7/5/2016

[redacted]

e Date: 7/25/2016

Total Mercury Preservation Logbook

Initial preservation and/or verification

Technician: CSP Date: 7/1/16 Time Completed: 1654

Additional preservation and/or verification (as needed)

Technician: _____ Date: _____ Time Completed: _____

Technician: _____ Date: _____ Time Completed: _____

Work Orders: 1607095, 1607002, 1607092, 1607040

BrCl LIMS ID: 1603196

Pipette SN: J07631

Cal. Date: 6/27/16

	Sample ID	Sample Volume (mL)	Reagent added (mL)	Oxidized? Y / N	Additional preservation (as needed) Oxidized? Y / N	Reagent added (mL)	Oxidized? Y / N
CSP 7/1/16	~~1606~~ 1607095-01A	300	3.00	y			
	1607002-01A	300	3.00	y			
	1607092-01A	300	3.00	y			
	1607092-02A	300	3.00	y			
	1607092-03A	300	3.00	y			
	1607092-04A	300	3.00	n			
	1607092-05A	300	3.00	n			
	1607092-06A	300	3.00	y			
	1607092-07A	300	3.00	n			
	1607092-08A	300	3.00	y			
CSP 7/1/16	~~1606~~ 1607092-09A	300	3.00	y			
	1607092-10A	300	3.00	y			
	1607092-11A	300	3.00	y			
	1607092-12A	300	3.00	y			
	1607092-13A	300	3.00	n			
	1607092-14A	300	3.00	y			
	1607092-15A	300	3.00	y			
	1607092-16A	300	3.00	n			
	1607092-17A	300	3.00	n			
	1607092-18A	300	3.00	y			
	1607092-19A	300	3.00	y			
	1607092-20A	300	3.00	y			
	1607092-21A	300	3.00	y			
	1607040-02A	270	2.70	n			
	1607040-04A	290	2.90	n			
	1607040-06A	290	2.90	n			

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

Comments: _____

Reviewed 7/5/16

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

Analyst:	DON MORAN	**Sequence(s) #:**	6G05008, 6G05007, 6G05009
Reviewer:	Jeanne Harrel	**Dataset ID(s):**	THG26003-160705-1
Date:	7/5/2016	**WO (s) #:**	VARIOUS
Batch #(s):	F607087, F607098, F607086, F606366		

• **Select the correct preparation method.**

Analyte	Prep Method		Matrix
☑ THg	EFAFS-T-AFS-SOP2985	FSTM Trap 70:30 Digest	Air/Gas
☐ THg	EFAFS-T-AFS-SOP2807	Modified Cold Aqua Regia	Sed/Soil
☐ THg	EFAFS-T-AFS-SOP2821	Shared Bomb-HF/HNO3/HCl Digest	Sed/Soil
☐ THg	EFTM-T-TM-SOP2825	Nitric Acid Oven Bomb	Sed/Soil
☐ THg	EFAFS-T-AFS-SOP2795	70:30 Digest	Tissue
☐ THg	EFAFS-T-AFS-SOP2800	KCl Trap BrCl Oxidation	Air/Gas
☐ THg	EFTM-T-TM-SOP2837	Shared Nitric	Tissue
☑ THg	EFSR-P-SP-SOP2796	BrCl Oxidation	Water
☐ Hg0	NA	NA	Water
☐ Inorg Hg	NA	NA	Water

	Analyst Initials: DM	**Reviewer Initials** JH	
1. Compare SampleID with Benchsheet/Sequence/Raw Data (Have all samples been imported?)	☑ YES	☐ NO	☑
2. Check for transcription errors from Excel spreadsheet (or Prep Benchsheet)/Raw data	☑ YES	☐ NO	☑
(a) On raw data (instrument print-out), does correct file (dataset ID#) name appear in description?	☑ YES	☐ NO	☑
Naming convention: THg26001-yymmdd-1 or THg26002-yymmdd-1			
(b) Check 5% of transcription from Instrument print-out and Excel file	☑ YES	☐ NO	☑
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 ☐ N/A	☑
(d) Check and compare masses (review prep benchsheet)	☑ YES	☐ NO ☐ N/A	☑
(e) Check & compare initial & final volumes	☑ YES	☐ NO ☐ N/A	☑
(f) Do aliquots and dilutions written on benchsheet match those in Excel?	☑ YES	☐ NO ☐ N/A	☐
50 ml / aliquot = Excel dilution value			
(g) Is the sequence #, analyst, date, and instrument # on the QC page?	☑ YES	☐ NO	☑
(h) Is the analysis status correct? (analyzed/initial review/reviewed)	☑ YES	☐ NO	☑
(i) Original prep bench sheet added to data package?	☑ YES	☐ NO	☑
(j) Benchsheet prep date MUST match actual prep date (check if re-shot vs re-extract)	☑ YES	☐ NO	☐
3. High QA? WO#(s)/Client(s): _____	☐ YES	☑ NO	☑
4. Client specific QC? (if Yes, refer to Project Notes/LIMS)	☑ YES	☐ NO	☐
(a) Have the QC requirements been met for all WO#s?	☑ YES	☐ NO JH 7/6/16	✓
(b) Prep blanks corrections/assigned properly	☑ YES	☐ NO	☐
5a. 20 or fewer samples in batch?	☑ YES	☐ NO	☐
(i) 3 PBs, 1 LCS(or BS), 1 LCSD(or BSD), 1 DUP/Batch 1 MS/MSD (or AS/ASD)/10 samples?	☑ YES	☐ NO	☐
(ii) 1 CCV and 1 CCB every 10 analytical runs? _____	☑ YES	☐ NO	☐

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

Analyst:	DON MORAN	**Sequence(s) #:**	6G05008, 6G05007, 6G05009
Reviewer:	Jeanne Hayes	**Dataset ID(s):**	THG26003-160705-1
Date:	7/5/2016	**WO (s) #:**	VARIOUS
Batch #(s):	F607087, F607098, F607086, F606366		0

Analyst Initials DM **Reviewer Initials** JH

5b. Has the B/C section data been uploaded?	☑ YES	☐ NO	☐ N/A	☑
QA/QC Data Checked				
6. RSD CF (≤ 15%)	☑ PASS	☐ FAIL		☑
Comments:				
7. The calibration curve included a minimum of 5 Standards	☑ YES	☐ NO		☑
Comments:				
8. 1st Calibration Standard % Recoveries EPA 1631E (75-125%)	☑ PASS	☐ FAIL		☑
9. ICV and CCV % Recoveries EPA 1631E (77-123%)	☑ PASS	☐ FAIL		☑
Comments:				
10. Do all calibration points pass acceptance criteria?	☑ YES	☐ NO		☐
Comments:				
11.Are qualifiers consistant with the data review flowcharts?	☑ YES	☐ NO	☐ N/A	☑
Comments:				
12. Explain any items on the failed data report from Element				☑
Comments: ***F607086 BLK1 HIGH. RE-ANALYZED AND PASSED***				
13. Are the individual Preparation Blanks < PQL or <2.2xMDL for WI (refer to appropriate prep method PQL list)	☑ PASS	☑ FAIL		☑
(a) If not < PQL or <2.2xMDL for WI, note which PB(s) are above control limit: F607086 BLK1/2/3 high. Reanalysis needed JH 7/6/16				
(b) Is the mean PB < PQL or <2.2xMDL for WI (for appropriate qualification)?	☑ YES	☑ NO		☑
(c) Was a BrCl Blank analyzed for each preservation level?	☑ YES	☐ NO	☐ N/A	☑
(d) Are Preparation Blanks summarized on QC page?	☑ YES	☐ NO		☑
14. Filtration Blank Prepared (if yes, use FB qualifier)	☐ YES	☑ NO		☑
(a) Filtration Blank prep date same as associated samples' prep date	☐ YES	☐ NO	☑ N/A	☑
(b) Filtration Blank absolute value < PQL or <2.2xMDL for WI	☐ YES	☐ NO	☑ N/A	☐
15. IBLs (3 minimum) individually < 0.50 ng/L, mean < 0.25 ng/L and STD of 0.10 ng/L?	☑ PASS	☐ FAIL		☑
Comments:				
16. CCBs individually < 0.50 ng/L or 2.2 x MDL for WI?	☑ PASS	☑ FAIL		☑
Comments: ***CCB HIGH FOR WI-DNR.***				
17. Have Total Solids been applied? (If NO, please ensure that they are done or nearly done)	☐ YES	☐ NO	☑ N/A	☐
18. Is the correct 'Source' designated for MD/MS/MSD?	☑ YES	☐ NO		☑
19. For digested preps: was there a spike witness signature & date on the prep bench sheet?	☑ YES	☐ NO	☐ N/A	☐

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

Analyst:	DON MORAN	**Sequence(s) #:**	6G05008, 6G05007, 6G05009
Reviewer:	0 Jeanne Hirel	**Dataset ID(s):**	THG26003-160705-1
Date:	7/5/2016	**WO (s) #:**	VARIOUS
Batch #(s):	F607087, F607098, F607086, F606366		0

Analyst Initials DM **Reviewer Initials** JH

20. MS/MSD Spiked at least 1-5 X ambient or 5x MRL (whichever is higher) ?	☑ YES	☐ NO		☑
Comments:				
21. Are all samples within instrument calibration range? (or at minimum dilution size)	☑ PASS	☐ FAIL		☐
Comments:				
22. Are the samples run at the correct dilution level for the method?	☑ YES	☐ NO		
Comments:				
23. Dissolved < Total (if applicable)	☑ YES	☐ NO	☐ N/A	☐
Comments:				
24. Effluent < Influent (visually confirm if needed)	☑ YES	☐ NO	☐ N/A	☐
Comments:				
25. Are re-runs noted with reason?	☑ YES	☐ NO	☐ N/A	☐
Comments:				
26. FSTM Datasets: Check to ensure the 'Response' & 'Initial Result' columns match in both the Excel dataset & LIMS for the FSTM A (in sequence) & B/C (in batch) traps?	☑ YES	☐ NO	☐ N/A	☐
Comments:				
27. Is the B trap <5% A Traps	☑ YES	☐ NO	☐ N/A	☐
Comments:				
28. Are spiked trap recoveries75-125% of true value?	☑ YES	☐ NO	☐ N/A	☐
Comments:				
29.Have non-reportable samples been imported into LIMS and clicked to non-reportable?	☑ YES	☐ NO	☐ N/A	
Comments:				
30. Have re-extracts been created for non-reportable samples?	☐ YES	☐ NO	☑ N/A	☐
31. Are there any HIGH QA projects within the data? If so, place data package in QA office before scanning.	☐ YES	☐ NO	☑ N/A	☐
32. Does the data set need scanning?	☑ YES		☐ N/A	☐
33. Does the dataset have an LOQ/LOQ or DOC?	☐ YES		☑ N/A	☐
34. Water samples: has the preservation log been included in dataset for final volume verification?	☑ YES	☐ NO	☐ N/A	☐
35. Water samples-is the final volume correct in the sequence?	☑ YES	☐ NO	☐ N/A	☐

Files located at: \\Cuprum\gen_admin\Quality Assurance\Training Master\DOCs

36. Date of analyst IDOC/CDOC: _____ 1/18/2016 _____ IDOC/CDOC within last 12 months?	☑ YES	☐ NO		☐
37. Date of analyst's SOP reading for metho ~~3/23/2015~~ 5/20/16 DM 7/7/16 Current SOP revision read?	☑ YES	☐ NO		☐
38. Date of LOD: 6/15/16, 6/27/16 JH 7/6/16 LOD within last 3 months?	☑ YES	☐ NO		☐
39. Date of LOQ: 6/15/16, 6/27/16 JH 7/6/16 LOQ within last 3 months?	☑ YES	☐ NO		☐

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

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

Analyst:	DON MORAN	**Sequence(s) #:**	6G05008, 6G05007, 6G05009
Reviewer:	0	**Dataset ID(s):**	THG26003-160705-1
Date:	7/5/2016	**WO (s) #:**	VARIOUS
Batch #(s):	F607087, F607098, F607086, F606366		0

DM

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

Additional Page (s)? ☐ YES

eurofins

Frontier Global Sciences

Analysis Datasheet for Methyl Mercury in Waters

Date of Analysis: July 13, 2016
Instrument #: Hg2700-1
LIMS Sequence #: 6619009

Analyst: DM2
Units ng/L

Calibration Statistics:

LabNumber	n	True Val	Area	Uncorrected Response Factor	Corrected Peak Height	Corrected Response Factor	% Recovery
SEQ-CAL1	1	0.05 ng/L	38.43 units	768.53	38.43 units	768.53	96.0 %Rec
SEQ-CAL2	1	0.20 ng/L	159.95 units	799.76	159.95 units	799.76	99.9 %Rec
SEQ-CAL3	1	1.00 ng/L	822.50 units	822.50	822.50 units	822.50	102.7 %Rec
SEQ-CAL4	1	2.00 ng/L	1590.31 units	795.15	1590.31 units	795.15	99.3 %Rec
SEQ-CAL5	1	4.00 ng/L	3267.79 units	816.95	3267.79 units	816.95	102.0 %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
800.58	+/- 21.25	2.7% RSD	800.58	**0.8046**

MDN Only	
SEQ-CAL1	
SEQ-CAL2	
SEQ-CAL3	
SEQ-CAL4	
SEQ-CAL5	
SEQ-CAL6	NA
SEQ-CAL7	NA
SEQ-CAL8	NA
SEQ-CAL9	NA
SEQ-ICV/CCV	
Acetate Buffer	
Ethylating Agent	

Blanks:

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

Preparation Blanks

Sample Type	Batch ID	n	Mean	Std Dev
BLK	1	3	0.019 ng/L	±0.006
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: 7/25/16

Signed 7/27/16

Instrument	Analyst	Sample Type	LabNumber	Dilution	Analyzed	FileID	Run End	Uncorrected Response	Batch ID	No PB Correction?	RESP	InitialResult	FinalResult	InitialUnits	Comments
Hg2700-1	DM2	CAL	SEQ-IBL1	1	7/13/16 11:54	13471-1.RAW	11:54	0.00			0.0	0.000	0.000	ng/L	
Hg2700-1	DM2	CAL	SEQ-CAL1	1	7/13/16 12:05	13472-1.RAW	12:05:14	38.43			38.4	0.048	0.048	ng/L	
Hg2700-1	DM2	CAL	SEQ-CAL2	1	7/13/16 12:15	13473-1.RAW	12:15:45	159.95			160.0	0.200	0.200	ng/L	
Hg2700-1	DM2	CAL	SEQ-CAL3	1	7/13/16 12:26	13474-1.RAW	12:26:15	822.50			822.5	1.027	1.027	ng/L	
Hg2700-1	DM2	CAL	SEQ-CAL4	1	7/13/16 12:36	13475-1.RAW	12:36:46	1590.31			1590.3	1.986	1.986	ng/L	
Hg2700-1	DM2	CAL	SEQ-CAL5	1	7/13/16 12:47	13476-1.RAW	12:47:17	3267.79			3267.8	4.082	4.082	ng/L	
Hg2700-1	DM2	CAL	SEQ-ICV1	1	7/13/16 12:57	13477-1.RAW	12:57:48	439.65			439.6	0.549	0.549	ng/L	
Hg2700-1	DM2	CAL	SEQ-ICB1	1	7/13/16 13:08	13478-1.RAW	13:08:18	9.87			9.9	0.012	0.012	ng/L	
Hg2700-1	DM2	BLK	F607177-BLK1	1.25	7/13/16 13:18	13479-1.RAW	13:18:49	13.18	1		13.2	0.020	0.026	ng/L	
Hg2700-1	DM2	BLK	F607177-BLK2	1.25	7/13/16 13:29	13480-1.RAW	13:29:20	9.94	1		9.9	0.015	0.019	ng/L	
Hg2700-1	DM2	BLK	F607177-BLK3	1.25	7/13/16 13:39	13481-1.RAW	13:39:51	6.57	1		6.6	0.010	0.013	ng/L	
Hg2700-1	DM2	SAM	F607177-BS1	1.25	7/13/16 13:50	13482-1.RAW	13:50:21	472.34	1		472.3	0.718	0.897	ng/L	
Hg2700-1	DM2	SAM	F607177-BSD1	1.25	7/13/16 14:00	13483-1.RAW	14:00:52	584.12	1		584.1	0.891	1.114	ng/L	
Hg2700-1	DM2	SAM	1606778-04RE1	1.25	7/13/16 14:11	13484-1.RAW	14:11:23	21.12	1		21.1	0.017	0.022	ng/L	
Hg2700-1	DM2	SAM	1606778-05RE1	1.25	7/13/16 14:21	13485-1.RAW	14:21:54	12.53	1		12.5	0.004	0.005	ng/L	
Hg2700-1	DM2	SAM	1606778-06RE1	1.25	7/13/16 14:32	13486-1.RAW	14:32:24	17.90	1		17.9	0.012	0.016	ng/L	
Hg2700-1	DM2	SAM	1606810-01RE1	1.25	7/13/16 14:42	13487-1.RAW	14:42:55	9.24	1		9.2	-0.001	-0.001	ng/L	
Hg2700-1	DM2	SAM	1606810-03RE1	1.25	7/13/16 14:53	13488-1.RAW	14:53:26	832.83	1		832.8	1.278	1.597	ng/L	
Hg2700-1	DM2	CAL	SEQ-CCV1	1	7/13/16 15:03	13489-1.RAW	15:03:57	288.68			288.7	0.361	0.361	ng/L	
Hg2700-1	DM2	CAL	SEQ-CCB1	1	7/13/16 15:14	13490-1.RAW	15:14:27	11.06			11.1	0.014	0.014	ng/L	
Hg2700-1	DM2	SAM	F607177-DUP1	1.25	7/13/16 15:24	13491-1.RAW	15:24:58	597.24	1		597.2	0.912	1.140	ng/L	
Hg2700-1	DM2	SAM	F607177-MS1	1.25	7/13/16 15:35	13492-1.RAW	15:35:29	981.34	1		981.3	1.508	1.885	ng/L	
Hg2700-1	DM2	SAM	F607177-MSD1	1.25	7/13/16 15:45	13493-1.RAW	15:45:59	1105.46	1		1105.5	1.701	2.126	ng/L	
Hg2700-1	DM2	SAM	F607177-MS2	1.25	7/13/16 15:56	13494-1.RAW	15:56:30	643.75	1		643.7	0.984	1.230	ng/L	
Hg2700-1	DM2	SAM	F607177-MSD2	1.25	7/13/16 16:07	13495-1.RAW	16:07:01	630.63	1		630.6	0.964	1.205	ng/L	
Hg2700-1	DM2	SAM	1606810-05RE1	1.25	7/13/16 16:17	13496-1.RAW	16:17:32	13.12	1		13.1	0.005	0.006	ng/L	
Hg2700-1	DM2	SAM	1606810-07RE1	1.25	7/13/16 16:30	13497-1.RAW	16:30:36	9.40	1		9.4	-0.001	-0.001	ng/L	
Hg2700-1	DM2	SAM	1606810-09RE1	1.25	7/13/16 16:41	13498-1.RAW	16:41:07	7.58	1		7.6	-0.004	-0.005	ng/L	
Hg2700-1	DM2	SAM	1606810-11RE1	1.25	7/13/16 16:51	13499-1.RAW	16:51:38	518.46	1		518.5	0.790	0.987	ng/L	
Hg2700-1	DM2	SAM	1606810-13RE1	1.25	7/13/16 17:02	13500-1.RAW	17:02:09	504.57	1		504.6	0.768	0.960	ng/L	
Hg2700-1	DM2	CAL	SEQ-CCB2	1	7/13/16 17:12	13501-1.RAW	17:12:39	8.93			8.9	0.011	0.011	ng/L	
Hg2700-1	DM2	CAL	SEQ-CCV2	1	7/13/16 17:23	13502-1.RAW	17:23:10	329.10			329.1	0.411	0.411	ng/L	
Hg2700-1	DM2	CAL	SEQ-CCV3	1	7/13/16 17:33	13503-1.RAW	17:33:41	384.99			385.0	0.481	0.481	ng/L	
Hg2700-1	DM2	CAL	SEQ-CCV4	1	7/13/16 17:44	13504-1.RAW	17:44:12	319.41			319.4	0.399	0.399	ng/L	
Hg2700-1	DM2	SAM	1606810-15RE1	1.25	7/13/16 17:54	13505-1.RAW	17:54:42	743.99	1		744.0	1.140	1.425	ng/L	
Hg2700-1	DM2	SAM	1607040-01	1.25	7/13/16 18:05	13506-1.RAW	18:05:13	754.74	1		754.7	1.156	1.445	ng/L	
Hg2700-1	DM2	SAM	1607040-03	1.25	7/13/16 18:15	13507-1.RAW	18:15:44	18.14	1		18.1	0.013	0.016	ng/L	
Hg2700-1	DM2	SAM	1607040-05	1.25	7/13/16 18:26	13508-1.RAW	18:26:15	517.73	1		517.7	0.788	0.985	ng/L	
Hg2700-1	DM2	SAM	1607040-07	1.25	7/13/16 18:36	13509-1.RAW	18:36:45	12.62	1		12.6	0.004	0.005	ng/L	
Hg2700-1	DM2	SAM	1607042-01	1.25	7/13/16 18:47	13510-1.RAW	18:47:15	108.14	1		108.1	0.153	0.191	ng/L	
Hg2700-1	DM2	SAM	1607042-02	1.25	7/13/16 18:57	13511-1.RAW	18:57:45	83.35	1		83.4	0.114	0.143	ng/L	
Hg2700-1	DM2	SAM	1607042-03	1.25	7/13/16 19:08	13512-1.RAW	19:08:16	367.39	1		367.4	0.555	0.694	ng/L	
Hg2700-1	DM2	SAM	1607042-04	1.25	7/13/16 19:18	13513-1.RAW	19:18:46	48.29	1		48.3	0.060	0.075	ng/L	
Hg2700-1	DM2	SAM	1607042-05	1.25	7/13/16 19:29	13514-1.RAW	19:29:17	44.64	1		44.6	0.054	0.067	ng/L	
Hg2700-1	DM2	CAL	SEQ-CCV5	1	7/13/16 19:39	13515-1.RAW	19:39:48	439.77			439.8	0.549	0.549	ng/L	
Hg2700-1	DM2	CAL	SEQ-CCB3	1	7/13/16 19:50	13516-1.RAW	19:50:18	35.03			35.0	0.044	0.044	ng/L	
Hg2700-1	DM2	CAL	SEQ-CCV6	1	7/13/16 20:00	13517-1.RAW	20:00:49	572.24			572.2	0.715	0.715	ng/L	
Hg2700-1	DM2	CAL	SEQ-CCV7	1	7/13/16 20:11	13518-1.RAW	20:11:20	594.15			594.2	0.742	0.742	ng/L	

MethylMercury **Operat** RN **BlankSub:** **Calib Eqn:** **Run Date:** ###### **Blank SD:**
EPA1630 **Workst** MMHg2; **CalibFactor:** **Status:** Calblank error: Zero Pea **Run Time:** 16:20:03 **Blank RSD%:**
Metho 2010-01 **R:** **R²:** **CalibAnaly** MeHg **CF SD:**
Descrip MMHg27001-160713-2 **CF RSD%:**

Sample/ID	Location	Rinse	Dilute	Blank	ConcHg0(pg	ConcMeHg(	ConcHg2(pg	ConcPrHg(p	Rec%	QA	RawData	RunEnd	PeakHg0 (Raw)	PeakMeHg (Raw)	P	Control (etf)	Flags	RunCount
Clean				0			0.0034707				13470-1.RAW	11:44:13	0	0.803760113		cleandry	CT	1
SEQ-IBL1	B1		1								13471-1.RAW	11:54:43	10.45975379	0		psample10	OK	1
SEQ-CAL1	B2		1	9.868371212	0.0095027		0.0419584		76.38		13472-1.RAW	12:05:14	16.97433712	38.42670455		psample10	OK	1
SEQ-CAL2	B3		1	9.868371212	0.0176319		0.043108		100.35		13473-1.RAW	12:15:45	23.05317235	159.9514441		psample10	OK	1
SEQ-CAL3	B4		1	9.868371212	0.1057163		0.057769		108.67		13474-1.RAW	12:26:15	88.92118845	822.5000473		psample10	CT	1
SEQ-CAL4	B5		1	9.868371212	0.2267063		0.0733426		105.67		13475-1.RAW	12:36:46	179.3954506	1590.307102		psample10	CT	1
SEQ-CAL5	B6		1	9.868371212	0.4410715		0.1044667		108.92		13476-1.RAW	12:47:17	339.6940437	3267.792472		psample10	CT	1
SEQ-ICV1	B7		1	9.868371212	0.6977543		0.4093603		115.09		13477-1.RAW	12:57:48	531.6370746	439.6450521		psample10	CT	1
SEQ-ICB1	B8		1	0	0.0286612		0.0578641				13478-1.RAW	13:08:18	21.43233902	9.868371212		psample10	OK	1
F607177-BLK1	B9		1.25								13479-1.RAW	13:18:49	31.11283144	13.1795928		psample10	OK	1
F607177-BLK2	B10		1.25								13480-1.RAW	13:29:20	18.31846591	9.938920455		psample10	OK	1
F607177-BLK3	B11		1.25								13481-1.RAW	13:39:51	14.41285511	6.573745265		psample10	OK	1
F607177-BS1	B12		1.25								13482-1.RAW	13:50:21	24.3257339	472.3387784		psample10	OK	1
F607177-BSD1	B13		1.25								13483-1.RAW	14:00:52	23.58210227	584.1152936		psample10	OK	1
1606778-04RE1	B14		1.25								13484-1.RAW	14:11:23	14.52485795	21.12400568		psample10	OK	1
1606778-05RE1	B15		1.25								13485-1.RAW	14:21:54	19.04857955	12.53030303		psample10	OK	1
1606778-06RE1	B16		1.25								13486-1.RAW	14:32:24	8.641524621	17.90142045		psample10	OK	1
1606810-01RE1	B17		1.25								13487-1.RAW	14:42:55	10.05795455	9.237357955		psample10	OK	1
1606810-03RE1	B18		1.25								13488-1.RAW	14:53:26	100.3017045	832.8319129		psample10	CT	1
SEQ-CCV1	B19		1								13489-1.RAW	15:03:57	938.8434895	288.6833333		psample10	CT	1
SEQ-CCB1	B20		1								13490-1.RAW	15:14:27	40.80918561	11.06444129		psample10	OK	1
F607177-DUP1	B21		1.25								13491-1.RAW	15:24:58	82.15364583	597.2434659		psample10	CT	1
F607177-MS1	C1		1.25								13492-1.RAW	15:35:29	81.25113636	981.3382576		psample10	CT	1
F607177-MSD1	C2		1.25								13493-1.RAW	15:45:59	81.31510159	1105.463733		psample10	OK	1
F607177-MS2	C3		1.25								13494-1.RAW	15:56:30	43.14642519	643.7476326		psample10	CT	1
F607177-MSD2	C4		1.25								13495-1.RAW	16:07:01	55.07225379	630.6309896		psample10	CT	1
1606810-05RE1	C5		1.25								13496-1.RAW	16:17:32	24.36290246	13.11751894		psample10	OK	1
1606810-07RE1	C6		1.25								13497-1.RAW	16:30:36	23.44621212	9.399076705		psample10	OK	1
1606810-09RE1	C7		1.25								13498-1.RAW	16:41:07	18.37102273	7.576373106		psample10	CT	1
1606810-11RE1	C8		1.25								13499-1.RAW	16:51:38	89.25331439	518.4644886		psample10	CT	1
1606810-13RE1	C9		1.25								13500-1.RAW	17:02:09	78.08006629	504.5739583		psample10	CT	1
SEQ-CCB2	C10		1								13501-1.RAW	17:12:39	28.34235322	8.931723485		psample10	CT	1
SEQ-CCV2	C11		1								13502-1.RAW	17:23:10	813.3020615	329.1028883		psample10	CT	1
SEQ-CCV3	C15		1								13503-1.RAW	17:33:41	621.0334656	384.9896307		psample10	CT	1
SEQ-CCV4	C16		1								13504-1.RAW	17:44:12	770.9602166	319.4090672		psample10	CT	1
1606810-15RE1	A1		1.25								13505-1.RAW	17:54:42	111.4793797	743.9889678		psample10	CT	1
1607040-01	A2		1.25								13506-1.RAW	18:05:13	83.29973958	754.7366951		psample10	CT	1
1607040-03	A3		1.25								13507-1.RAW	18:15:44	37.10591856	18.14308712		psample10	OK	1
1607040-05	A4		1.25								13508-1.RAW	18:26:15	88.30345644	517.7257576		psample10	CT	1
1607040-07	A5		1.25								13509-1.RAW	18:36:45	26.85918745	12.61699811		psample10	CT	1
1607042-01	A6		1.25								13510-1.RAW	18:47:15	33.27301136	108.1422348		psample10	CT	1
1607042-02	A7		1.25								13511-1.RAW	18:57:45	31.04541033	83.35430871		psample10	CT	1
1607042-03	A8		1.25								13512-1.RAW	19:08:16	154.1428977	367.3877131		psample10	CT	1
1607042-04	A9		1.25								13513-1.RAW	19:18:46	57.82367424	48.28894413		psample10	CT	1
1607042-05	A10		1.25								13514-1.RAW	19:29:17	41.40075758	44.64043561		psample10	CT	1
SEQ-CCV5	A11		1								13515-1.RAW	19:39:48	472.9388501	439.7659801		psample10	CT	1
SEQ-CCB3	A12		1								13516-1.RAW	19:50:18	35.03347538	6.243560606		psample10	OK	1
SEQ-CCV6	C17		1								13517-1.RAW	20:00:49	572.2444806	428.5855587		psample10	CT	1
SEQ-CCV7	C18		1								13518-1.RAW	20:11:20	594.150249	385.0065341		psample10	CT	1

MethylMercury **Operat** RN **BlankSub:** **Calib Eqn:** **Run Date:** ******* **Blank SD:**
EPA1630 **Workst** MMHg2 **CalibFactor:** **Status:** Calibank error: Zero Pe **Run Time:** 16:20:03 **Blank RSD%:**
Metho 2010-01 **R:** **R²:** **CalibAnaly** MeHg **CF SD:**
Descrip MMHg27001-160713-2 **CF RSD%:**

Sample/ID	Location	Rinse	Dilute	Blank	ConcHg0(pg	ConcMeHg(	ConcHg2(pg	ConcPrHg(p	Rec%	QA	RawDate	RunEnd	PeakHg0 (Raw)	PeakMeHg (Raw)	F	Control (etf)	Flags	RunCount
Clean				0		0.0034707					13470-1.RAW		0	0.8037601 13		cleandry	CT	1
SEQ-IBL1	B1		1								13471-1.RAW		10.45975379	0		psample10	OK	1
SEQ-CAL1	B2		1	9.868371212	0.0095027	0.0419584			76.38		13472-1.RAW		16.97433712	38.42670455		psample10	OK	1
SEQ-CAL2	B3		1	9.868371212	0.0176319	0.043108			100.35		13473-1.RAW		23.08982008	159.9514441		psample10	OK	1
SEQ-CAL3	B4		1	9.868371212	0.1057163	0.057769			108.67		13474-1.RAW		88.92118845	822.5000473		psample10	CT	1
SEQ-CAL4	B5		1	9.868371212	0.2267063	0.0733426			105.67		13475-1.RAW		179.3954505	1590.307102		psample10	CT	1
SEQ-CAL5	B6		1	9.868371212	0.4410715	0.1044667			108.92		13476-1.RAW		339.6940437	3267.792472		psample10	CT	1
SEQ-ICV1	B7		1	9.868371212	0.6977543	0.4093503			115.09		13477-1.RAW		531.6370746	439.6450521		psample10	CT	1
SEQ-ICB1	B8		1	0	0.0286612	0.0578641					13478-1.RAW		21.43233902	9.869128788		psample10	OK	1
F607177-BLK1	B9		1.25								13479-1.RAW		31.11283144	13.1795928		psample10	OK	1
F607177-BLK2	B10		1.25								13480-1.RAW		18.31846591	9.938920455		psample10	OK	1
F607177-BLK3	B11		1.25								13481-1.RAW		14.41285511	6.410369318		psample10	OK	1
F607177-BS1	B12		1.25								13482-1.RAW		24.32362689	472.3387784		psample10	OK	1
F607177-BSD1	B13		1.25								13483-1.RAW		23.58210227	584.1152936		psample10	OK	1
1606778-04RE1	B14		1.25								13484-1.RAW		14.52485795	21.12400568		psample10	OK	1
1606778-05RE1	B15		1.25								13485-1.RAW		19.04857955	12.53030303		psample10	OK	1
1606778-06RE1	B16		1.25								13486-1.RAW		8.641524621	17.90142045		psample10	OK	1
1606810-01RE1	B17		1.25								13487-1.RAW		10.05795455	9.237357955		psample10	OK	1
1606810-03RE1	B18		1.25								13488-1.RAW		100.3017045	832.8223958		psample10	CT	1
SEQ-CCV1	B19		1								13489-1.RAW		938.8434895	288.6833333		psample10	CT	1
SEQ-CCB1	B20		1								13490-1.RAW		40.60918561	11.06444129		psample10	OK	1
F607177-DUP1	B21		1.25								13491-1.RAW		82.15364583	597.2434659		psample10	CT	1
F607177-MS1	C1		1.25								13492-1.RAW		81.25113636	981.3382576		psample10	CT	1
F607177-MSD1	C2		1.25								13493-1.RAW		81.31510159	1105.463733		psample10	OK	1
F607177-MS2	C3		1.25								13494-1.RAW		43.14642519	643.7476326		psample10	CT	1
F607177-MSD2	C4		1.25								13495-1.RAW		55.07225379	630.6305896		psample10	CT	1
1606810-05RE1	C5		1.25								13496-1.RAW	16:17:32	24.35879947	13.11751894		psample10	OK	1
1606810-07RE1	C6		1.25								13497-1.RAW		23.44621212	9.397253788		psample10	OK	1
1606810-09RE1	C7		1.25								13498-1.RAW		18.37102273	7.576373106		psample10	CT	1
1606810-11RE1	C8		1.25								13499-1.RAW		89.25331439	518.4644886		psample10	CT	1
1606810-13RE1	C9		1.25								13500-1.RAW		78.06006629	504.5739583		psample10	CT	1
SEQ-CCB2	C10		1								13501-1.RAW		28.34235322	8.931723485		psample10	CT	1
SEQ-CCV2	C11		1								13502-1.RAW		813.3020515	329.1028883		psample10	CT	1
SEQ-CCV3	C15		1								13503-1.RAW		621.0334656	384.9896307		psample10	CT	1
SEQ-CCV4	C16		1								13504-1.RAW		770.9602166	316.7886127		psample10	CT	1
1606810-15RE1	A1		1.25								13505-1.RAW		111.4793797	744.0039773		psample10	CT	1
1607040-01	A2		1.25								13506-1.RAW		83.2946733	754.7366951		psample10	CT	1
1607040-03	A3		1.25								13507-1.RAW		37.10591856	18.14308712		psample10	OK	1
1607040-05	A4		1.25								13508-1.RAW		68.30345644	517.7257576		psample10	CT	1
1607040-07	A5		1.25								13509-1.RAW		26.85918745	12.61699811		psample10	CT	1
1607042-01	A6		1.25								13510-1.RAW		33.27301136	108.1422348		psample10	CT	1
1607042-02	A7		1.25								13511-1.RAW		31.04541033	83.35430871		psample10	CT	1
1607042-03	A8		1.25								13512-1.RAW		154.1428977	367.3877131		psample10	CT	1
1607042-04	A9		1.25								13513-1.RAW		57.82367424	48.28894413		psample10	CT	1
1607042-05	A10		1.25								13514-1.RAW		41.40075758	44.64043561		psample10	CT	1
SEQ-CCV5	A11		1								13515-1.RAW		472.9388501	439.7659801		psample10	CT	1
SEQ-CCB3	A12		1								13516-1.RAW		35.03243371	6.243560606		psample10	OK	1
SEQ-CCV6	C17		1								13517-1.RAW		572.2444806	428.5855587		psample10	CT	1
SEQ-CCV7	C18		1								13518-1.RAW	20:11:20	594.150249	385.0065341		psample10	CT	1

Failing Data Report - 6G19009

Sample ID	Analysis	Result	MRL	Dup Result	Source Result	True Value	Units	% Rec.	Rec. LCL	Rec. UCL	RPD	RPD Limit	Over Cal	Failure	Qualifier
F607177-MS1	MHg-CVAFS-W-Dist	1.676	0.050		1.285	1.0010	ng/L	39.0	65.00	130.00			PASS-OVER	FAIL-MS	QM-02
F607177-MSD1	MHg-CVAFS-W-Dist	1.890	0.050	1.676	1.285	1.0010	ng/L	60.4	65.00	130.00	12.0	35.00	PASS-OVER	FAIL-MSD (Rec.)	QM-02
6G19009-CCV6	MHg-CVAFS-W-Dist	0.715	0.045			0.50049	ng/L	143	67.00	133.00			PASS-OVER	FAIL-CCV	DNR
6G19009-CCV7	MHg-CVAFS-W-Dist	0.742	0.045			0.50049	ng/L	148	67.00	133.00			PASS-OVER	FAIL-CCV	DNR

7/27/16
Analyst Reviewed By Date

7/27/16
Peer Reviewed By Date

ANALYSIS SEQUENCE

6G19009

Instrument: AAS-1

Calibration ID: UNASSIGNED

Analyzed: 7/13/2016

Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
6G19009-IBL1	QC	1			
6G19009-CAL1	QC	2	1602252		
6G19009-CAL2	QC	3	1602253		
6G19009-CAL3	QC	4	1602254		
6G19009-CAL4	QC	5	1602255		
6G19009-CAL5	QC	6	1602256		
6G19009-ICV1	QC	7	1603001		
6G19009-ICB1	QC	8			
F607177-BLK1	QC	9			
F607177-BLK2	QC	10			
F607177-BLK3	QC	11			
F607177-BS1	QC	12			
F607177-BSD1	QC	13			
1606778-04RE1	MHg-CVAFS-W-Dist	14			Re-extract added 7/12/2016 by DM2
1606778-05RE1	MHg-CVAFS-W-Dist	15			Re-extract added 7/12/2016 by DM2
1606778-06RE1	MHg-CVAFS-W-Dist	16			Re-extract added 7/12/2016 by DM2
1606810-01RE1	MHg-CVAFS-W-Dist	17			Re-extract added 7/12/2016 by DM2
1606810-03RE1	MHg-CVAFS-W-Dist	18			Re-extract added 7/12/2016 by DM2
6G19009-CCV1	QC	19	1603001		
6G19009-CCB1	QC	20			
F607177-DUP1	QC	21			
F607177-MS1	QC	22			
F607177-MSD1	QC	23			
F607177-MS2	QC	24			
F607177-MSD2	QC	25			
1606810-05RE1	MHg-CVAFS-W-Dist	26			Re-extract added 7/12/2016 by DM2
1606810-07RE1	MHg-CVAFS-W-Dist	27			Re-extract added 7/12/2016 by DM2
1606810-09RE1	MHg-CVAFS-W-Dist	28			Re-extract added 7/12/2016 by DM2
1606810-11RE1	MHg-CVAFS-W-Dist	29			Re-extract added 7/12/2016 by DM2
1606810-13RE1	MHg-CVAFS-W-Dist	30			Re-extract added 7/12/2016 by DM2
6G19009-CCB2	QC	31			
6G19009-CCV2	QC	32	1603001		
6G19009-CCV3	QC	33	1603001		
6G19009-CCV4	QC	34	1603001		
1606810-15RE1	MHg-CVAFS-W-Dist	35			Re-extract added 7/12/2016 by DM2

Due Date: 7/25/2016

ANALYSIS SEQUENCE

6G19009

Instrument: AAS-1

Calibration ID: UNASSIGNED

Analyzed: 7/13/2016

Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
1607040-01	MHg-CVAFS-W-Dist	36			
1607040-03	MHg-CVAFS-W-Dist	37			
1607040-05	MHg-CVAFS-W-Dist	38			
1607040-07	MHg-CVAFS-W-Dist	39			
1607042-01	MHg-CVAFS-W-Dist	40			Scan all data - Level IV
1607042-02	MHg-CVAFS-W-Dist	41			Scan all data - Level IV
1607042-03	MHg-CVAFS-W-Dist	42			Scan all data - Level IV
1607042-04	MHg-CVAFS-W-Dist	43			Scan all data - Level IV
1607042-05	MHg-CVAFS-W-Dist	44			Scan all data - Level IV
6G19009-CCV5	QC	45	1603001		
6G19009-CCB3	QC	46			
6G19009-CCV6	QC	47	1603001		
6G19009-CCV7	QC	48	1603001		

7/27/16

Samples Loaded By Date

7/27/16

Data Processed By Date

Due Date: 7/25/2016

2200-1

7/13/16 DM

PREPARATION BENCH SHEET

F607177

Eurofins Frontier Global Sciences, Inc.

Matrix: Water **Prepared using: Hg Aquatic/Solids - EFGS-013 Methyl Hg Distillation for Water** **Prepared: 7/12/2016**

Lab Number	Sample ID and Source Sample	Initial (mL)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F607177-BLK1	Blank	45	40					1.25X
F607177-BLK2	Blank	45	40					1.25X
F607177-BLK3	Blank	45	40					1.25X
F607177-BS1	Blank Spike	45	40	1602184	45			1.25X
F607177-BSD1	Blank Spike Dup	45	40	1602184	45			1.25X
F607177-DUP1	Duplicate [1606810-15RE1]	45	40					1.25X
F607177-MS1	Matrix Spike [1607040-01]	45	40	1602184	45			1.25X
F607177-MS2	Matrix Spike [1607042-01]	45	40	1602184	45			1.25X
F607177-MSD1	Matrix Spike Dup [1607040-01]	45	40	1602184	45			1.25X
F607177-MSD2	Matrix Spike Dup [1607042-01]	45	40	1602184	45			1.25X

Standard ID(s):	Description:	Expiration:
1602184	MHg New Primary 1.0 ng/mL CAL	25-Jul-16 00:00

Reagent ID(s):	Description:	Expiration:
1603668	APDC	07-Jan-17 00:00
1603711	0.5% Distillation Dilute (Made Daily)	08-Jan-17 00:00

1602944

K02K04

Date: 7/25/2016

2700.1
7/18/16 DM

PREPARATION BENCH SHEET

F607177

Eurofins Frontier Global Sciences, Inc.

Matrix: Water **Prepared using: Hg Aquatic/Solids - EFGS-013 Methyl Hg Distillation for Water** **Prepared: 7/12/2016**

Lab Number	Sample ID	Initial (mL)	Final (mL)	QC Sample	Sample Specs.	Raw Data	Sample Comments	Analysis Comments
1606778-04RE1	OL-2423-03	45	40	-	-	-	Re-extract added 7/12/2016 by DM2	1.25x
1606778-05RE1	OL-2423-04	45	40	-	-	-	Re-extract added 7/12/2016 by DM2	1.25x
1606778-06RE1	OL-2423-05	45	40	-	-	-	Re-extract added 7/12/2016 by DM2	1.25x
1606810-01RE1	B159760 Dunn Blank	45	40	-	-	-	Re-extract added 7/12/2016 by DM2	1.25x
1606810-03RE1	B159766 Dunn Inf	45	40	-	-	-	Re-extract added 7/12/2016 by DM2	1.25x
1606810-05RE1	B159761 Dunn Inf Dup	45	40	-	-	-	Re-extract added 7/12/2016 by DM2	1.25x
1606810-07RE1	B159720 Dunn Eff	45	40	-	-	-	Re-extract added 7/12/2016 by DM2	1.25x
1606810-09RE1	B159775 South Cross Blank	45	40	-	-	-	Re-extract added 7/12/2016 by DM2	1.25x
1606810-11RE1	B159774 South Cross Inf	45	40	-	-	-	Re-extract added 7/12/2016 by DM2	1.25x
1606810-13RE1	B159755 South Cross Inf Dup	45	40	-	-	-	Re-extract added 7/12/2016 by DM2	1.25x
1606810-15RE1	B159761 South Cross EFF	45	40	-	-	-	Re-extract added 7/12/2016 by DM2	1.25x
1607040-01	B159770 Dale Mabry INF	45	40	-	-	-		1.25x
1607040-03	B159781 Dale Mabry EFF	45	40	-	-	-		1.25x
1607040-05	B159762 Northwest Inf	45	40	-	-	-		1.25x
1607040-07	B159757 Northwest Eff	45	40	-	-	-		
1607042-01	OV-02_062916_SW_10	45	40	-	-	-	Scan all data - Level IV	
1607042-02	OV-02_062916_SW_10 Dissolved	45	40	-	-	-	Scan all data - Level IV	
042-03	WQ1b-c_062916_SW_10	45	40	-	-	-	Scan all data - Level IV	
042-04	WQ1b-c_062916_SW_10 Dissolved	45	40	-	-	-	Scan all data - Level IV	

e Date: 7/25/2016

2700-1

7/13/16 DM

PREPARATION BENCH SHEET

F607177

Eurofins Frontier Global Sciences, Inc.

Matrix: Water **Prepared using: Hg Aquatic/Solids - EFGS-013 Methyl Hg Distillation for Water** **Prepared: 7/12/2016**

1607042-05	WQ2-c_063016_SW_10	45	40	-	-	-	Scan all data - Level IV	

[redacted]

Methyl Mercury Distillations (EPA 1630)

Name: Dwyer Date: 7/12/16 Batch #: F607177 Sample Matrix: Water

WO#: 1606778, 1606810, 1607040, 1607042

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)
Blk1	F607177 Blank1	1.0	45	5.0
Blk2	F607177 Blank2	1.0	45	3.0
Blk3	F607177 Blank3	1.0	45	3.0
BS1	F607177 BS1	1.0	45	3.0
BSD1	F607177 BSD1	1.0	45	3.0
Dup1	F607177 Dup1	1.0	45	4.0
MS1	F607177 MS1	1.0	45	4.0
MSD1	F607177 MSD1	1.0	45	4.0
MS2	F607177 MS2	1.0	45	5.0
MSD2	F607177 MSD2	1.0	45	5.0
1	1606778-04RE1	1.0	45	4.0
2	1606778-05RE1	1.0	45	3.0
3	1606778-06RE1	1.0	45	3.0
4	1606810-01RE1	1.0	45	4.0
5	1606810-03RE1	1.0	45	4.0
6	1606810-05RE1	1.0	45	4.0
7	1606810-07RE1	1.0	45	4.0
8	1606810-09RE1	1.0	45	4.0
9	1606810-11RE1	1.0	45	4.0
10	1606810-13RE1	1.0	45	4.0
11	1606810-15RE1	1.0	45	3.0
12	1607040-01A	1.0	45	4.0
13	1607040-03A	1.0	45	4.0
14	1607040-05A	1.0	45	4.0
15	1607040-07A	1.0	45	4.0
16	1607042-01B	1.0	45	4.0
17	1607042-02B	1.0	45	4.0
18	1607042-03B	1.0	45	5.0
19	1607042-04B	1.0	45	5.0
20	1607042-05B	1.0	45	5.0
			7-12-16	DH

Spike ID: 160284
Spike Amount: 45 µl
Spike Witness: M 7/12/16

Balance #: 2
Calibrated? ☑ Yes ☐ No

Pipette #: CJ17087
Cal. Date: 7/11/16

Pipette #: W27707
Cal. Date: 7/12/16

Pipette #: Lu24486
Cal. Date: 7/12/16

APDC ID: 1603668
HCl ID: 1603711

Temperature: No set range as the temp. may be changed to keep flow rate of ≥10 mL per hour. Temperature is recorded for informational purposes only.

Unit 1: 120.3
Unit 2: 122.
Unit 3: 120.6
Unit 4: 120.9
Unit 5: 122.
Unit 6: 122.

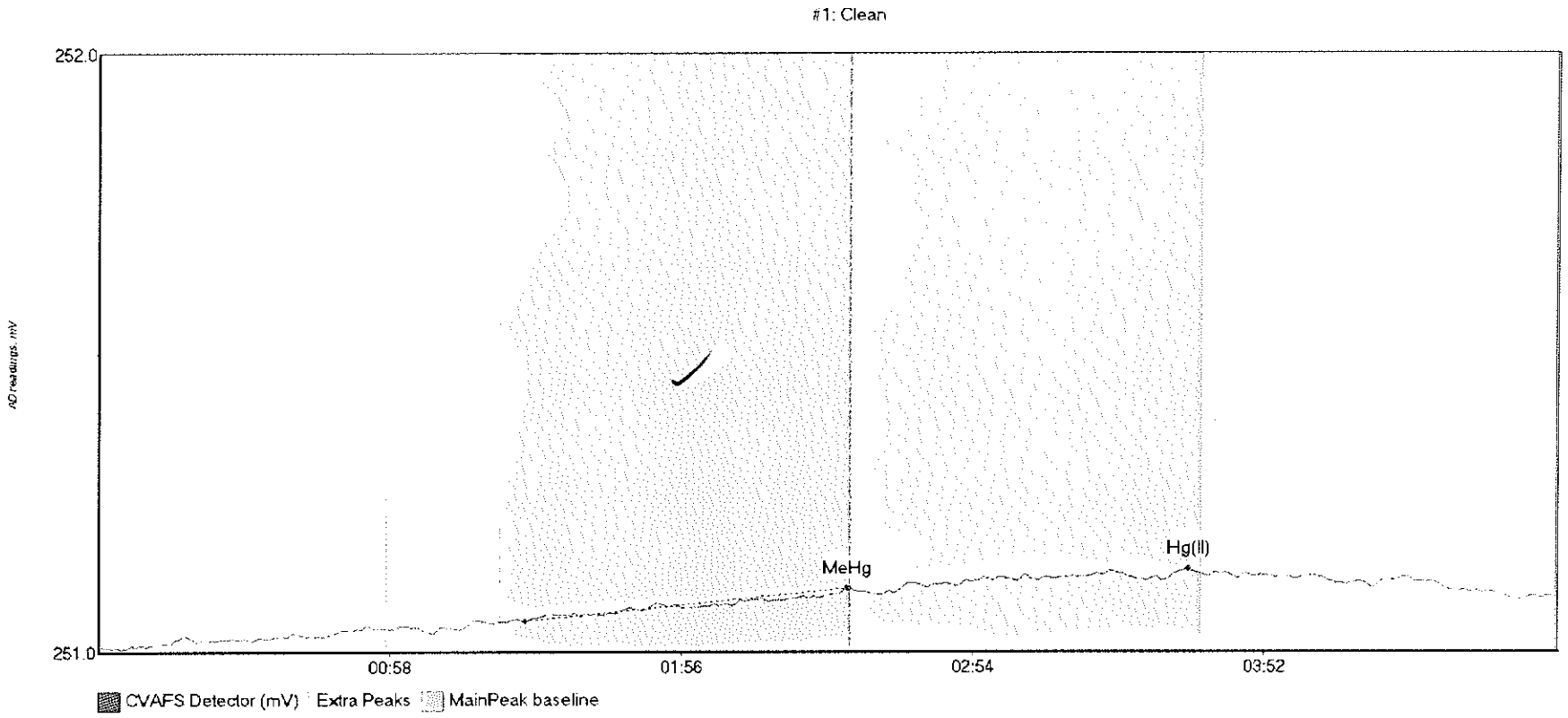
orange tape

Comments:
* 1# 1606778-04RE1
Dup1 source is 1606810-15RE1

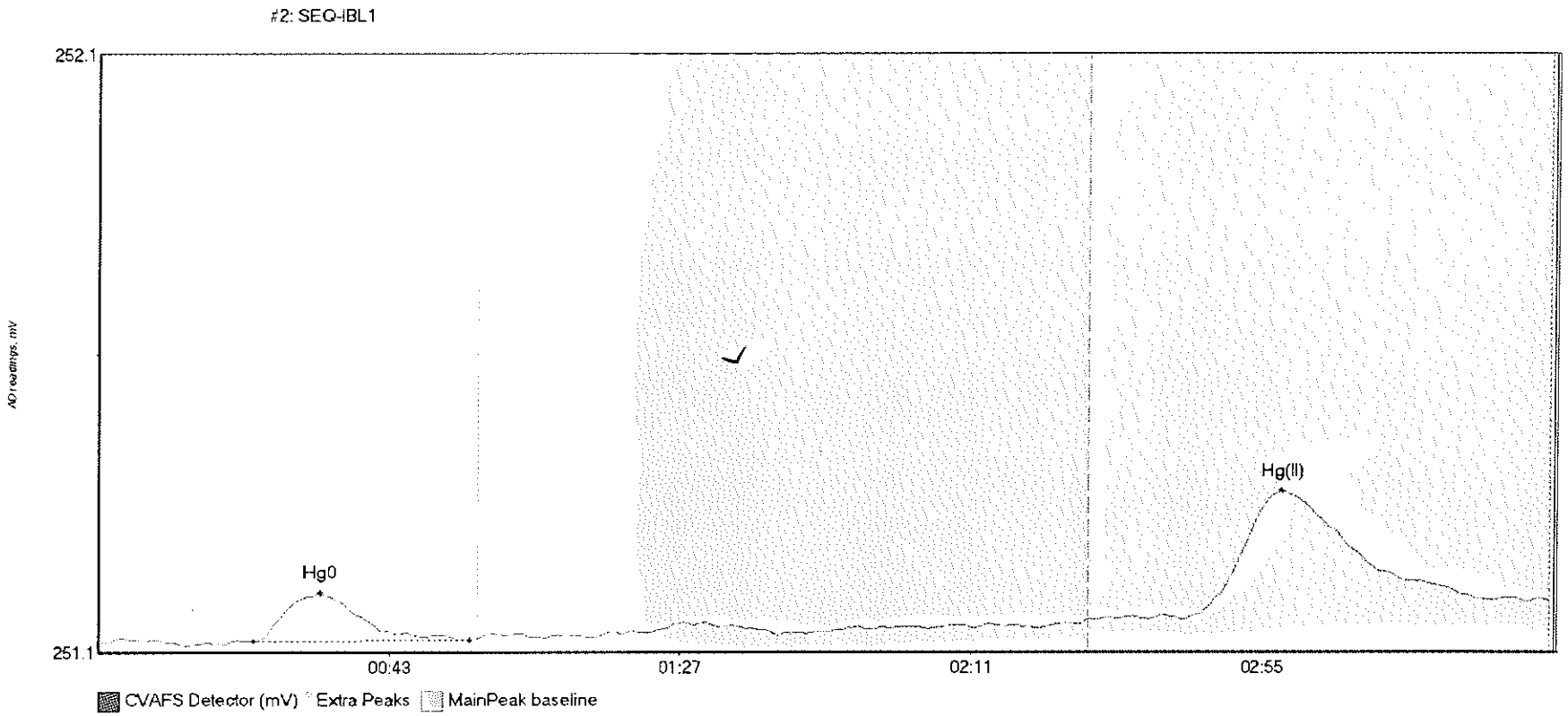
MS1, MSD1 1607040-01

MS2, MSD2 1607042-01
7-12-16 DH

Reviewed 7/12/16 DM



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
Clean MeHg	0.804	85.1	150.0	251.09	251.15	149.6	0.055	CT	251.0518	0.00	0.08	
Clean Hg(II)	2.595	165.4	219.8	251.15	251.17	217.7	0.030	CT	251.0518	0.00	0.08	



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-IBL1 Hg0	10.460	23.6	56.1	251.12	251.13	33.6	0.082	OK	251.1223	0.00	0.07	
SEQ-IBL1 Hg(II)	40.493	164.4	216.5	251.16	251.19	179.1	0.215	OK	251.1223	0.00	0.07	

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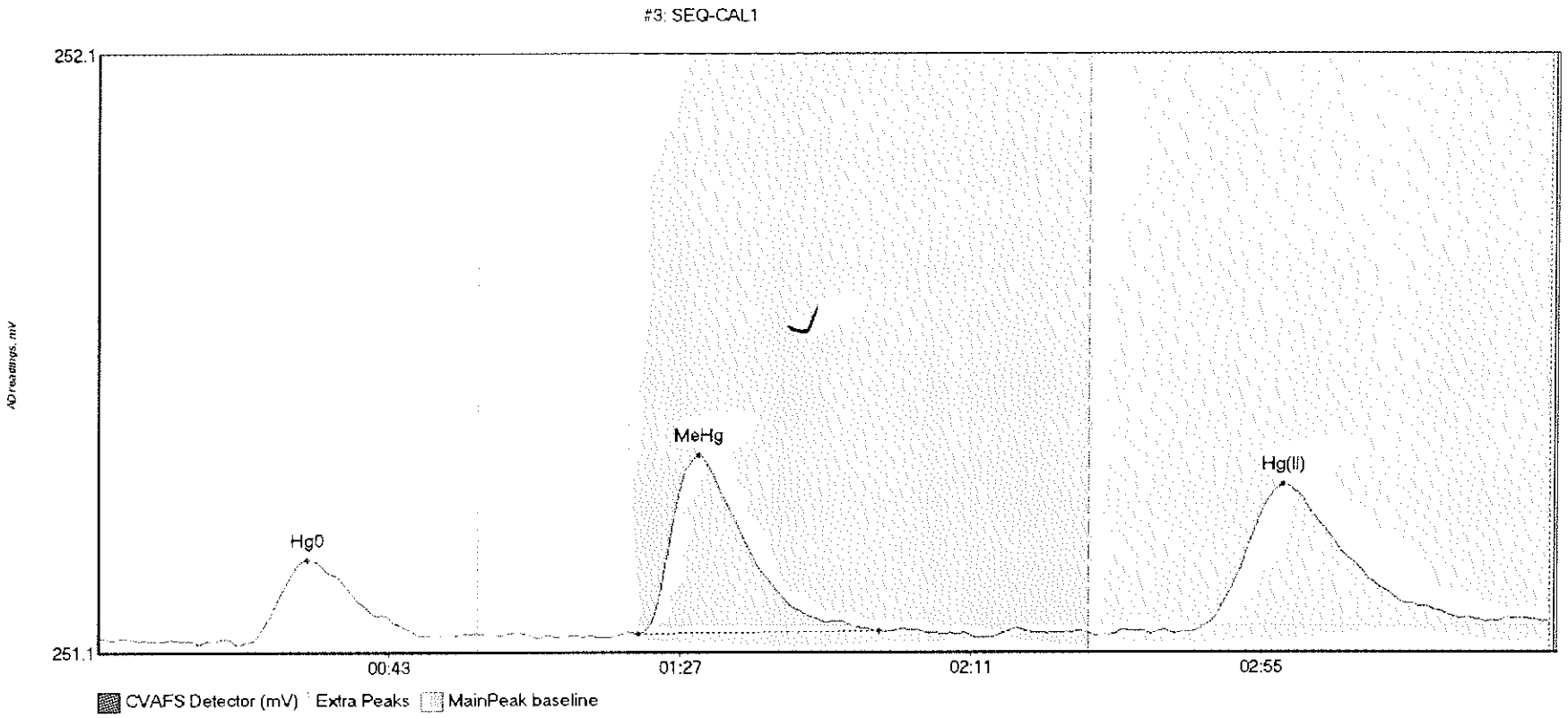
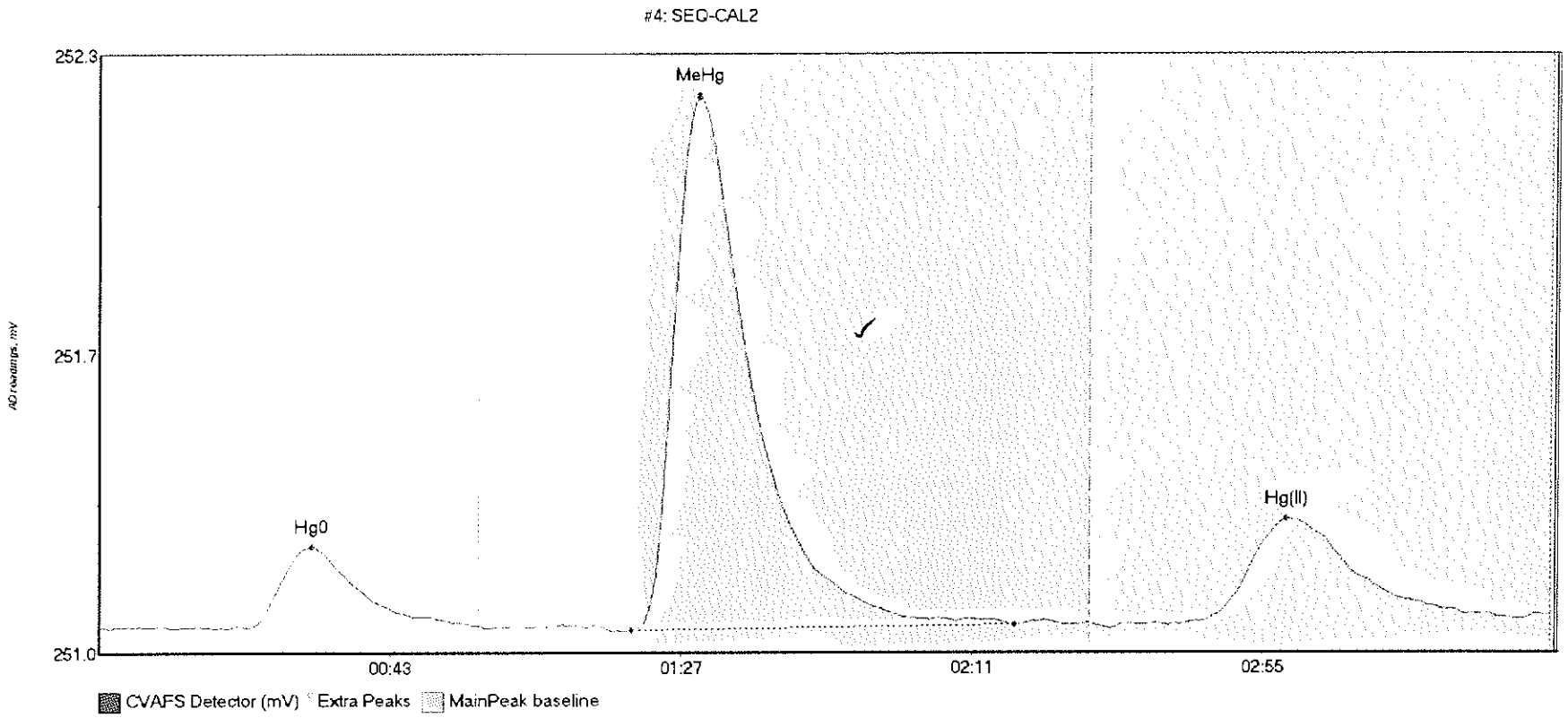
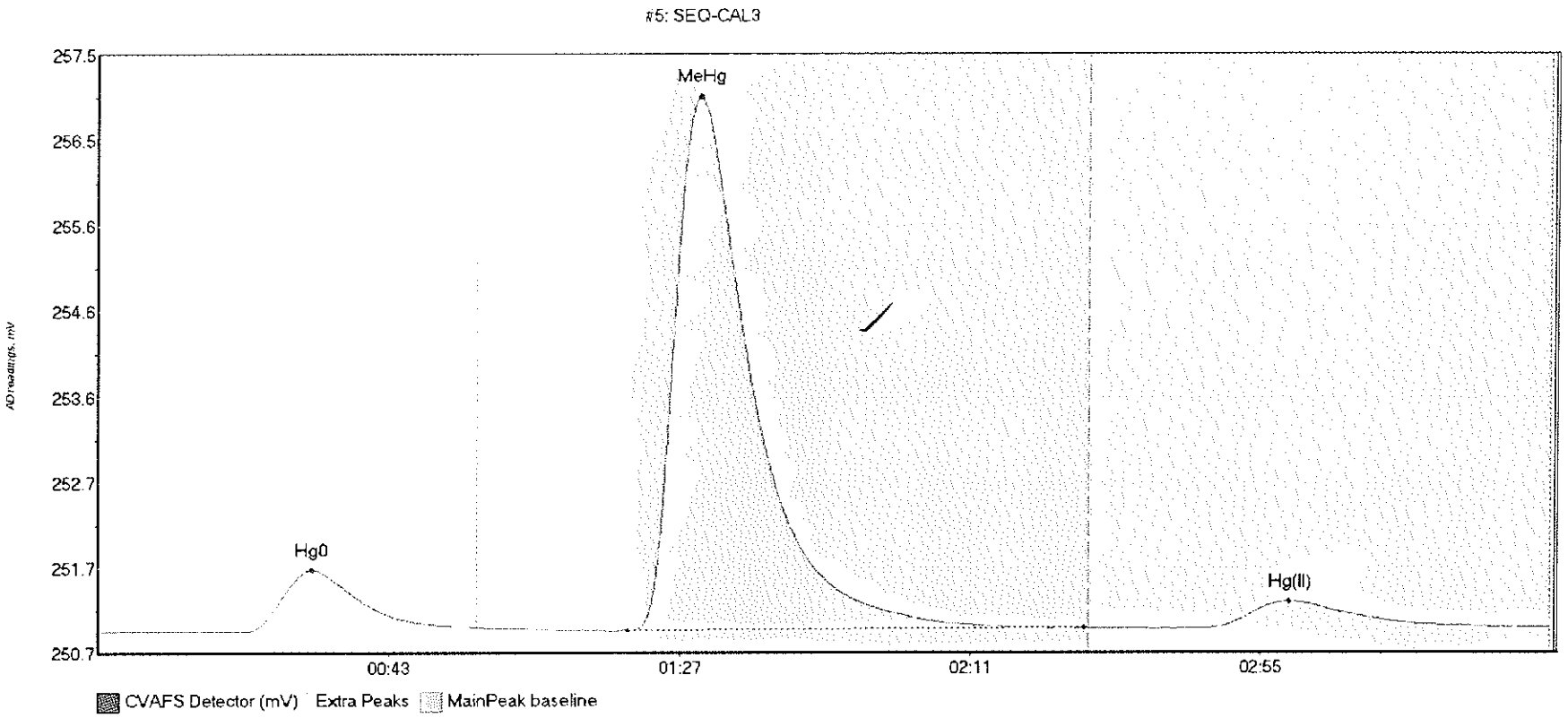


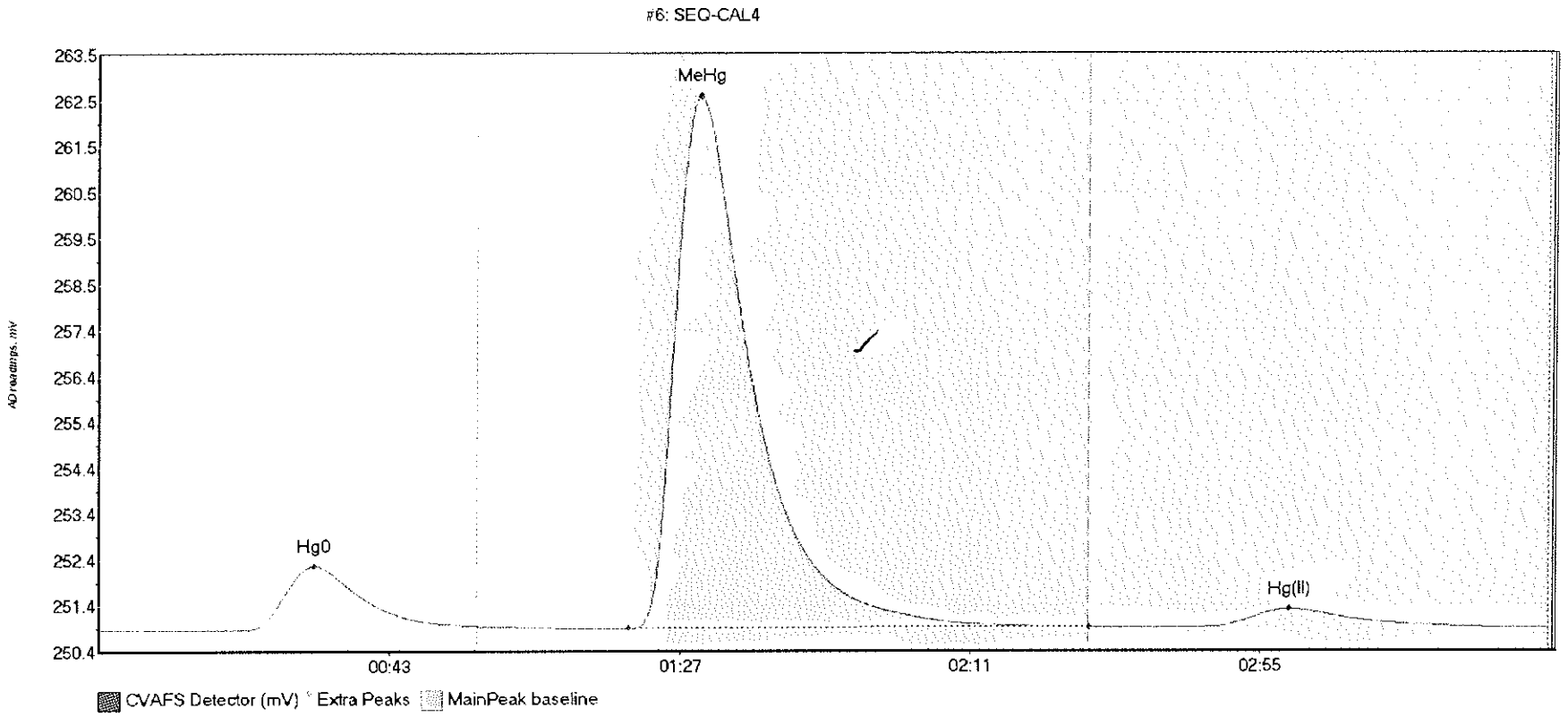
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CAL1 Hg0	16.974	22.7	50.1	251.14	251.15	31.7	0.137	OK	251.1439	0.00	0.03	
SEQ-CAL1 MeHg	38.427	81.8	118.1	251.15	251.16	90.9	0.299	OK	251.1439	0.00	0.03	
SEQ-CAL1 Hg(II)	41.244	164.9	210.1	251.15	251.17	179.3	0.247	OK	251.1439	0.00	0.03	



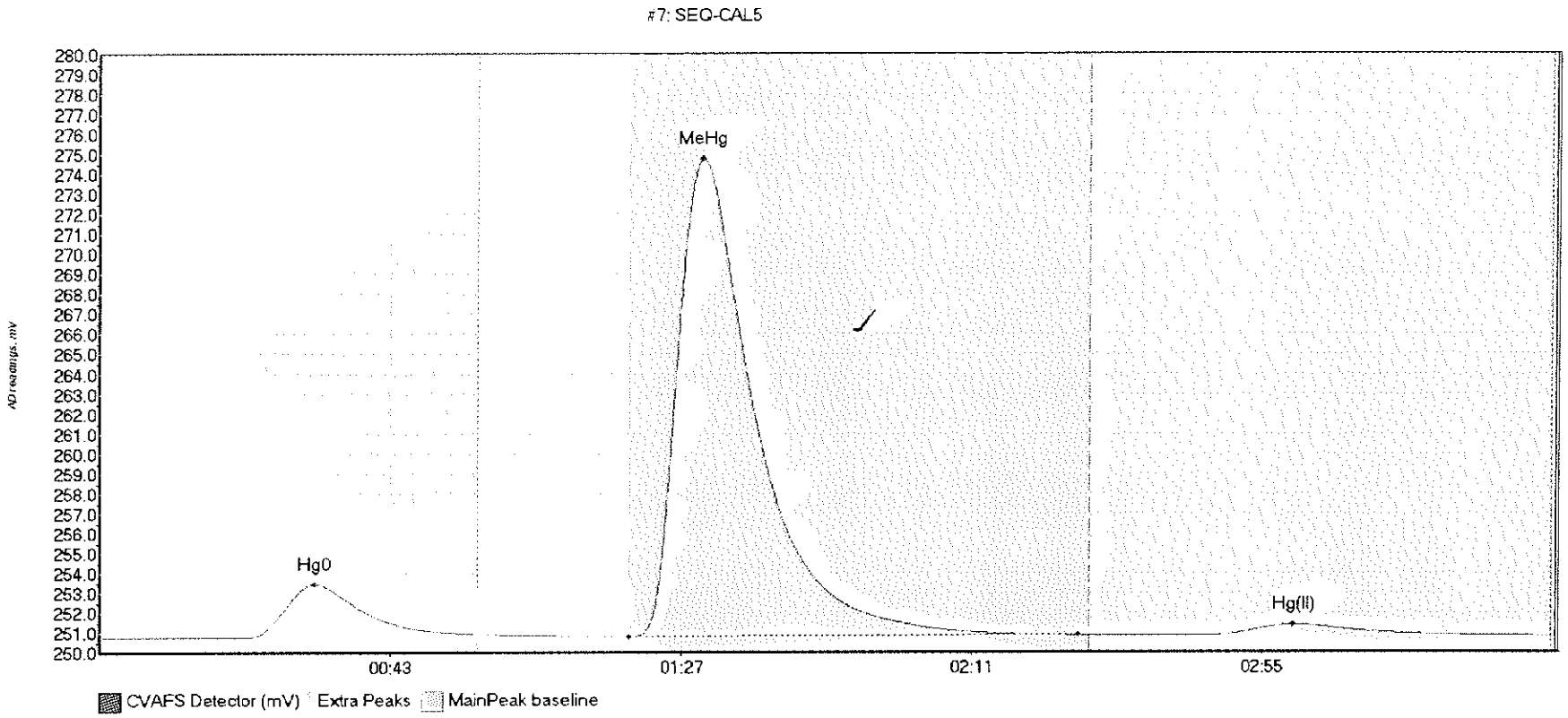
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CAL2 Hg0	23.090	22.5	57.0	251.05	251.05	32.2	0.177	OK	251.0510	0.00	0.03	
SEQ-CAL2 MeHg	159.951	80.5	138.5	251.04	251.06	90.8	1.173	OK	251.0510	0.00	0.03	
SEQ-CAL2 Hg(II)	42.104	163.6	215.0	251.06	251.07	179.6	0.231	OK	251.0510	0.00	0.03	



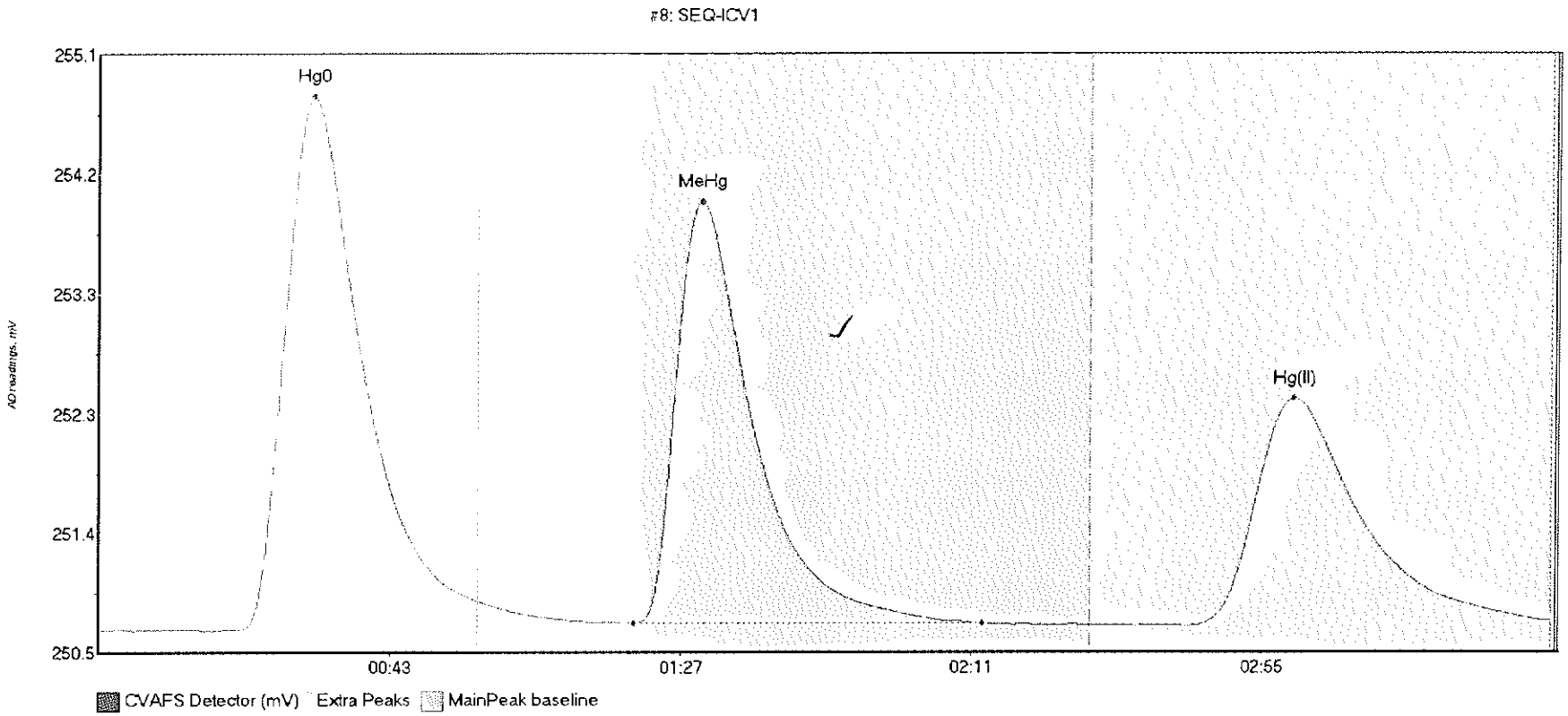
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CAL3 Hg0	88.921	21.9	57.5	250.96	251.00	32.5	0.701	CT	250.9664	0.00	0.04	
SEQ-CAL3 MeHg	822.500	80.2	149.2	250.97	251.00	91.1	6.043	OK	250.9664	0.00	0.04	
SEQ-CAL3 Hg(II)	53.175	166.7	218.1	250.99	251.00	160.4	0.302	OK	250.9664	0.00	0.04	



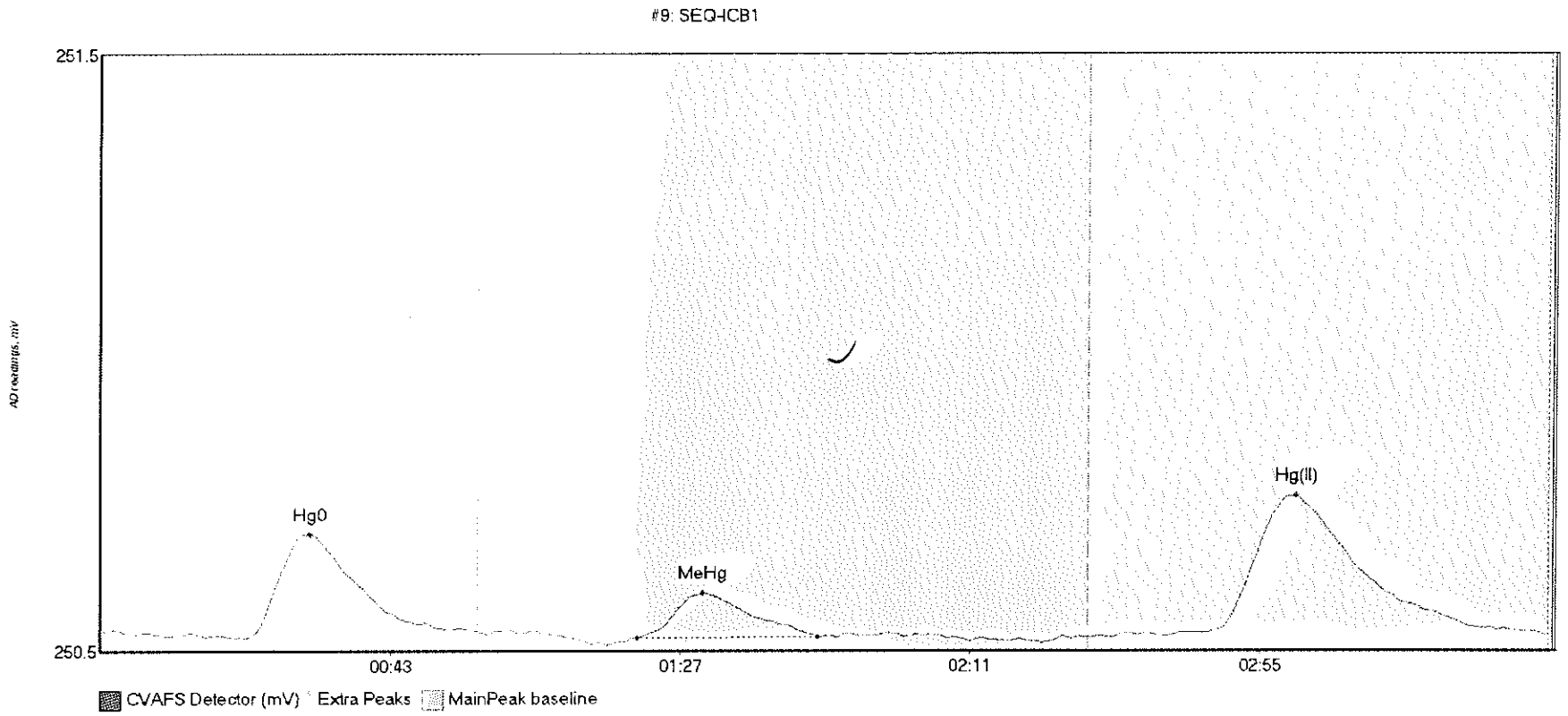
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CAL4 Hg0	179.395	21.6	57.5	250.86	250.94	32.6	1.406	CT	250.8676	0.00	0.04	
SEQ-CAL4 MeHg	1590.307	80.1	150.0	250.89	250.92	91.1	11.677	CT	250.8676	0.00	0.04	
SEQ-CAL4 Hg(II)	64.713	168.1	210.5	250.92	250.92	180.5	0.386	OK	250.8676	0.00	0.04	



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CAL5 Hg0	339.694	21.5	57.5	250.76	250.91	32.6	2.674	CT	250.7561	0.00	0.07	
SEQ-CAL5 MeHg	3267.792	80.2	148.2	250.81	250.87	91.2	23.948	OK	250.7561	0.00	0.07	
SEQ-CAL5 Hg(II)	87.987	165.7	207.6	250.84	250.87	180.9	0.543	OK	250.7561	0.00	0.07	



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-ICV1 Hg0	531.637	20.9	57.5	250.66	250.87	32.4	4.126	CT	250.6583	0.00	0.07	
SEQ-ICV1 MeHg	439.645	80.9	133.7	250.71	250.71	91.1	3.262	OK	250.6583	0.00	0.07	
SEQ-ICV1 Hg(II)	315.981	164.6	219.8	250.69	250.73	180.9	1.761	CT	250.6583	0.00	0.07	



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-ICB1 Hg0	21.432	21.9	51.5	250.54	250.55	31.9	0.175	OK	250.5478	0.00	-0.01	
SEQ-ICB1 MeHg	9.869	81.6	108.9	250.54	250.54	91.4	0.076	OK	250.5478	0.00	-0.01	
SEQ-ICB1 Hg(II)	43.270	161.9	219.4	250.54	250.54	181.4	0.235	OK	250.5478	0.00	-0.01	

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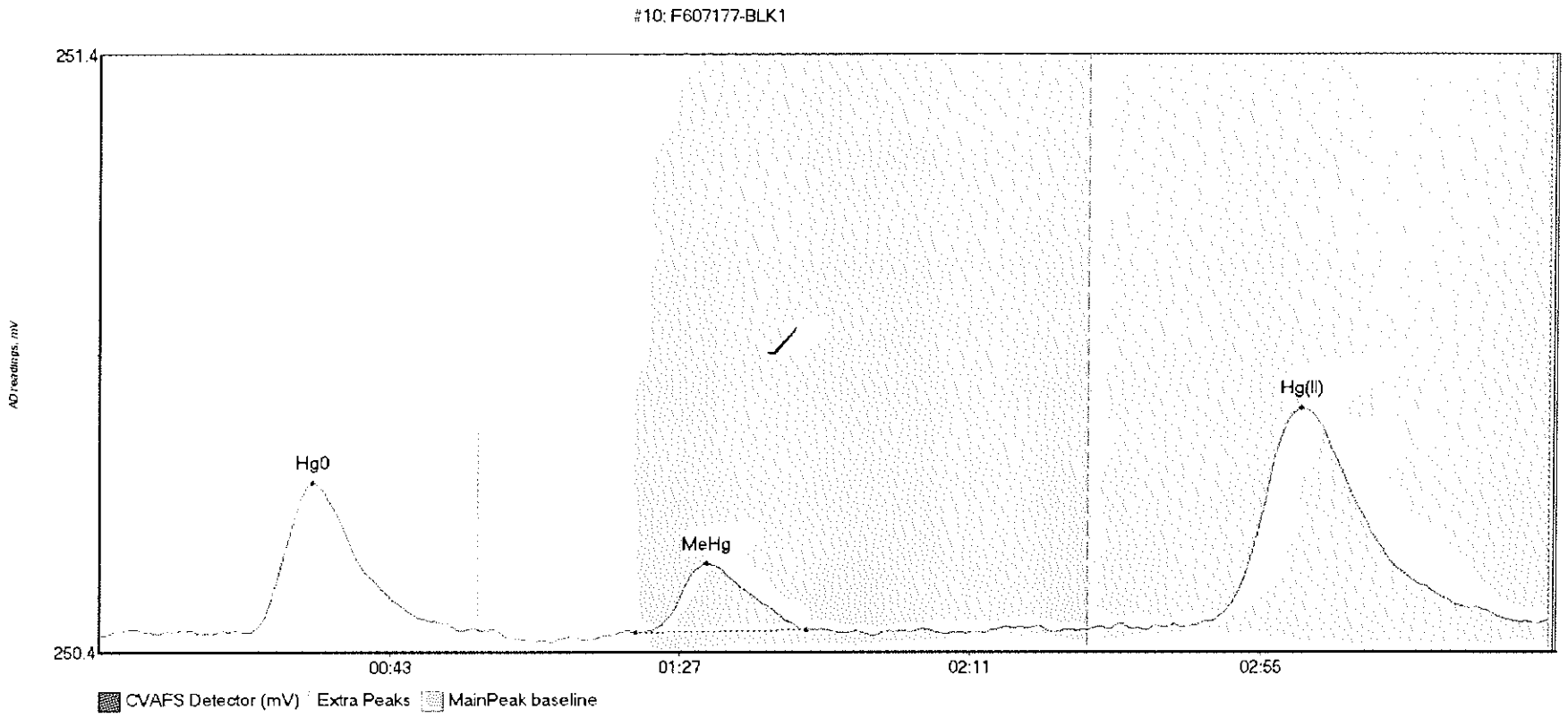
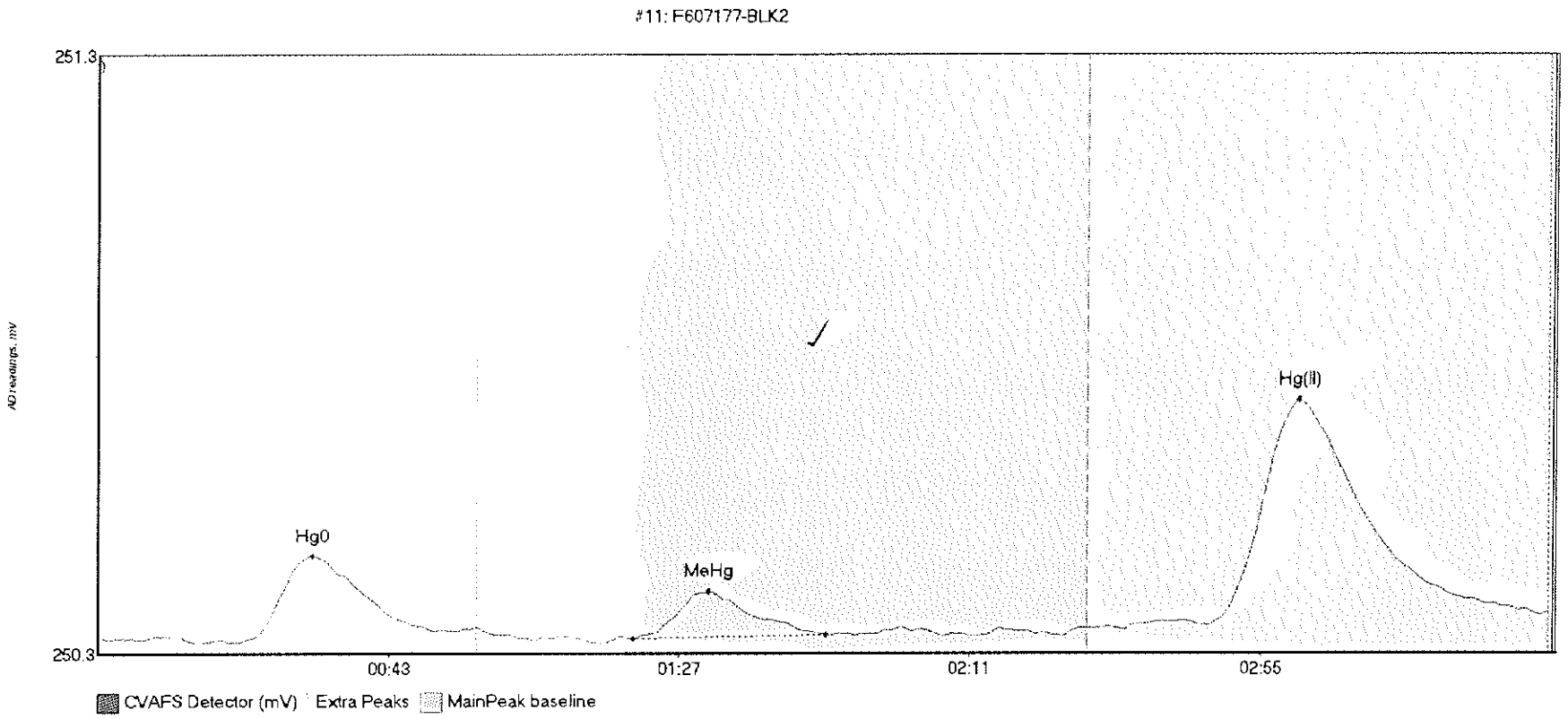


Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F607177-BLK1 Hg	31.113	22.7	54.7	250.43	250.43	32.3	0.251	OK	250.4208	0.00	0.02	
F607177-BLK1 Me	13.180	81.5	107.2	250.42	250.43	92.1	0.116	OK	250.4208	0.00	0.02	
F607177-BLK1 Hg	65.394	164.1	217.9	250.44	250.44	182.2	0.365	OK	250.4208	0.00	0.02	



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F607177-BLK2 Hg	18.318	22.0	54.0	250.34	250.36	32.6	0.144	OK	250.3459	0.00	0.04	
F607177-BLK2 Me	9.939	81.1	110.3	250.34	250.35	92.6	0.079	OK	250.3459	0.00	0.04	
F607177-BLK2 Hg	67.670	155.2	218.5	250.36	250.38	181.9	0.383	OK	250.3459	0.00	0.04	

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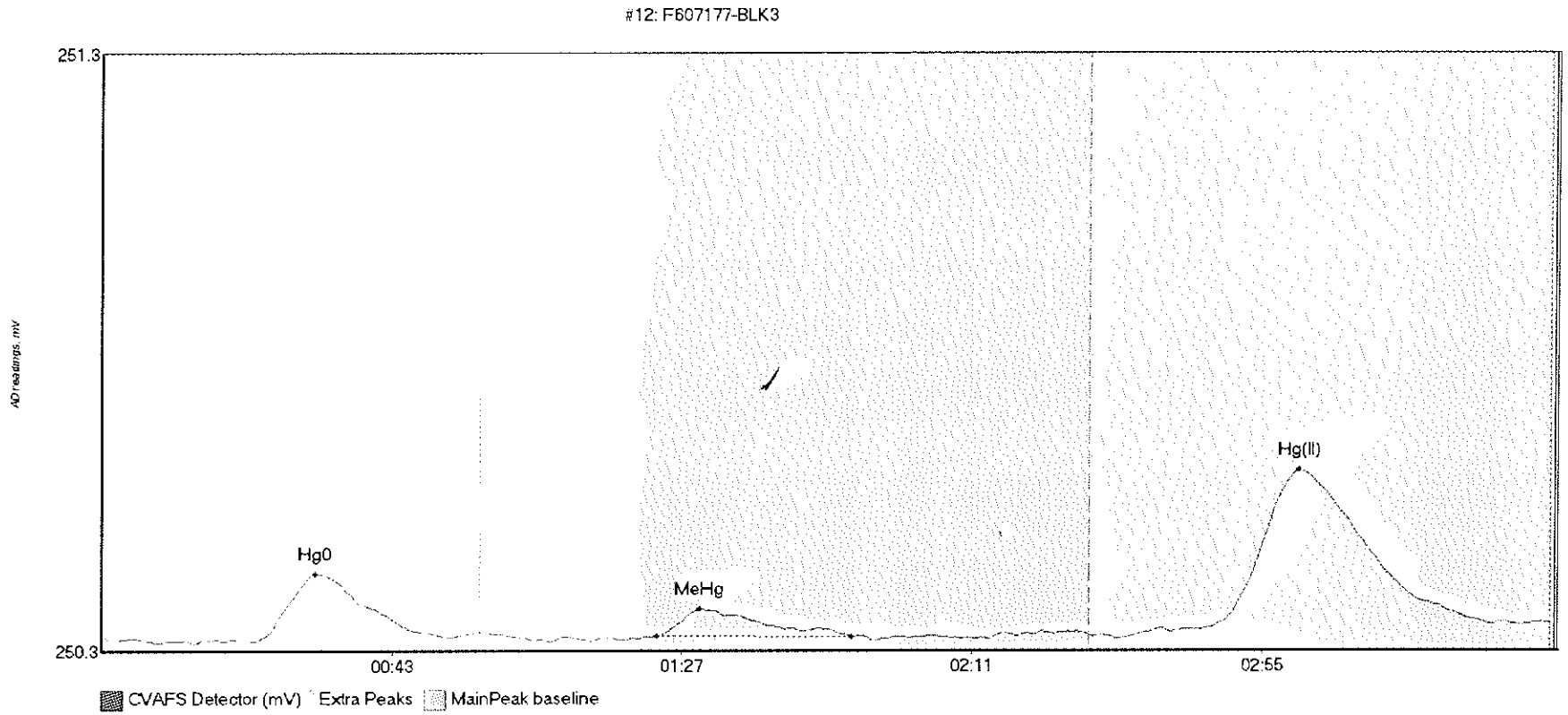
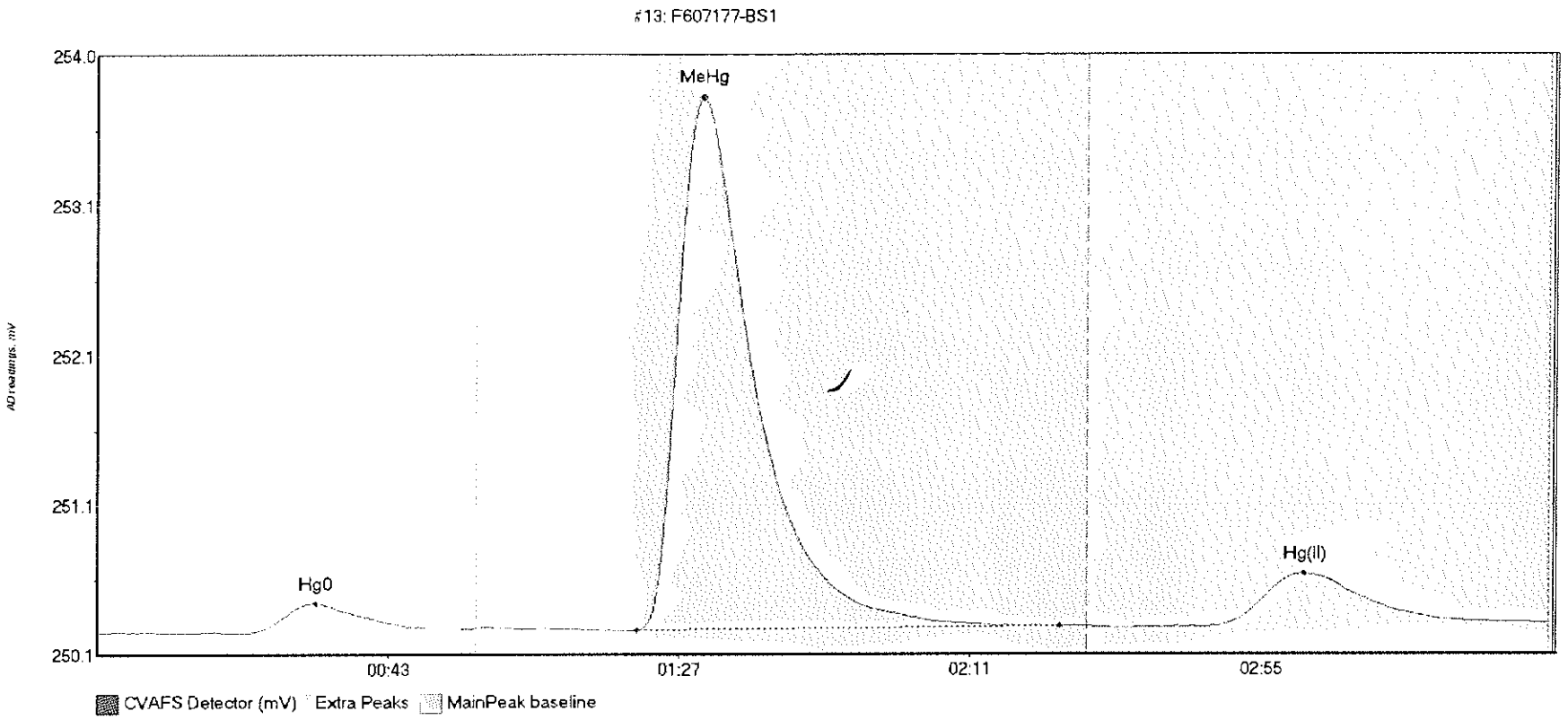
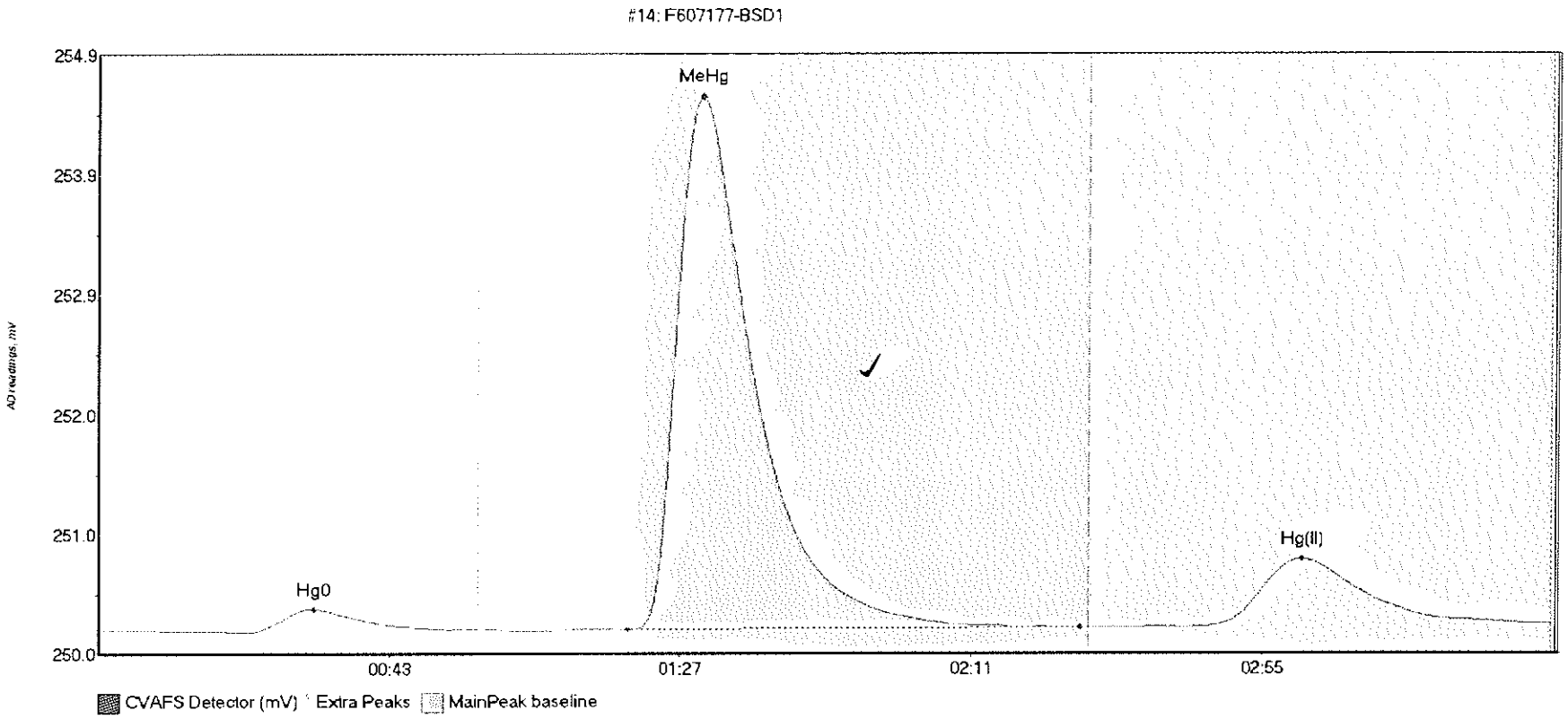


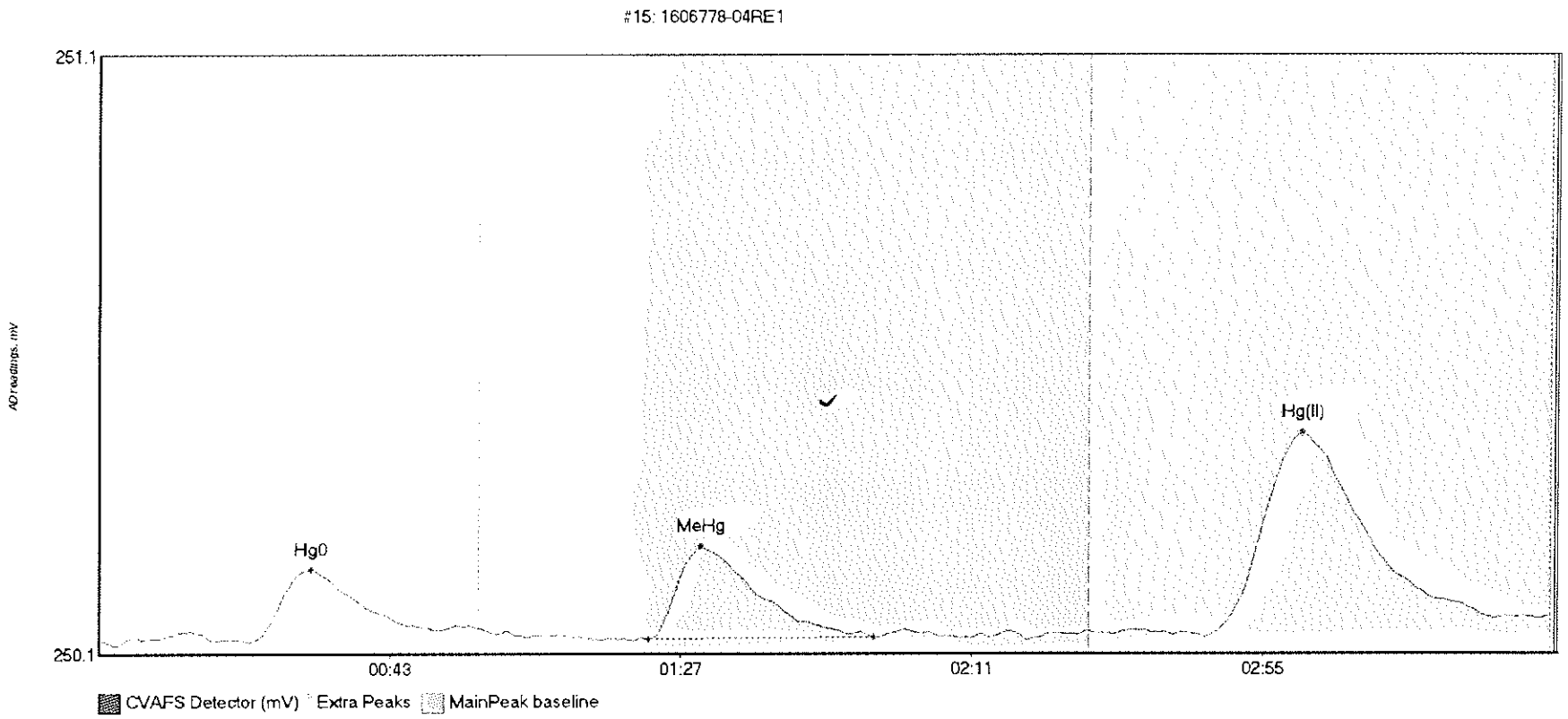
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F607177-BLK3 Hg	14.413	23.2	52.4	250.28	250.29	32.4	0.113	OK	250.2901	0.00	0.03	
F607177-BLK3 Me	6.410	84.3	113.8	250.29	250.29	90.7	0.046	OK	250.2901	0.00	0.03	
F607177-BLK3 Hg	50.386	155.5	215.5	250.29	250.31	181.6	0.281	OK	250.2901	0.00	0.03	



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F607177-BS1 Hg0	24.324	22.8	56.4	250.22	250.25	33.1	0.194	OK	250.2231	0.00	0.06	
F607177-BS1 MeH	472.339	81.7	145.8	250.23	250.26	91.7	3.529	OK	250.2231	0.00	0.06	
F607177-BS1 Hg(	61.359	167.6	218.2	250.26	250.28	182.6	0.350	OK	250.2231	0.00	0.06	



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F607177-BSD1 Hg	23.582	22.4	52.7	250.17	250.19	32.7	0.190	OK	250.1886	0.00	0.05	
F607177-BSD1 Me	584.115	80.1	148.6	250.19	250.21	91.4	4.350	OK	250.1886	0.00	0.05	
F607177-BSD1 Hg	95.252	167.2	219.5	250.22	250.24	182.1	0.550	OK	250.1886	0.00	0.05	



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1606778-04RE1 H	14.525	22.8	51.5	250.16	250.18	32.1	0.121	OK	250.1614	0.00	0.04	
1606778-04RE1 M	21.124	83.2	117.1	250.17	250.17	91.1	0.155	OK	250.1614	0.00	0.04	
1606778-04RE1 H	58.231	167.4	218.1	250.17	250.20	182.1	0.339	OK	250.1614	0.00	0.04	

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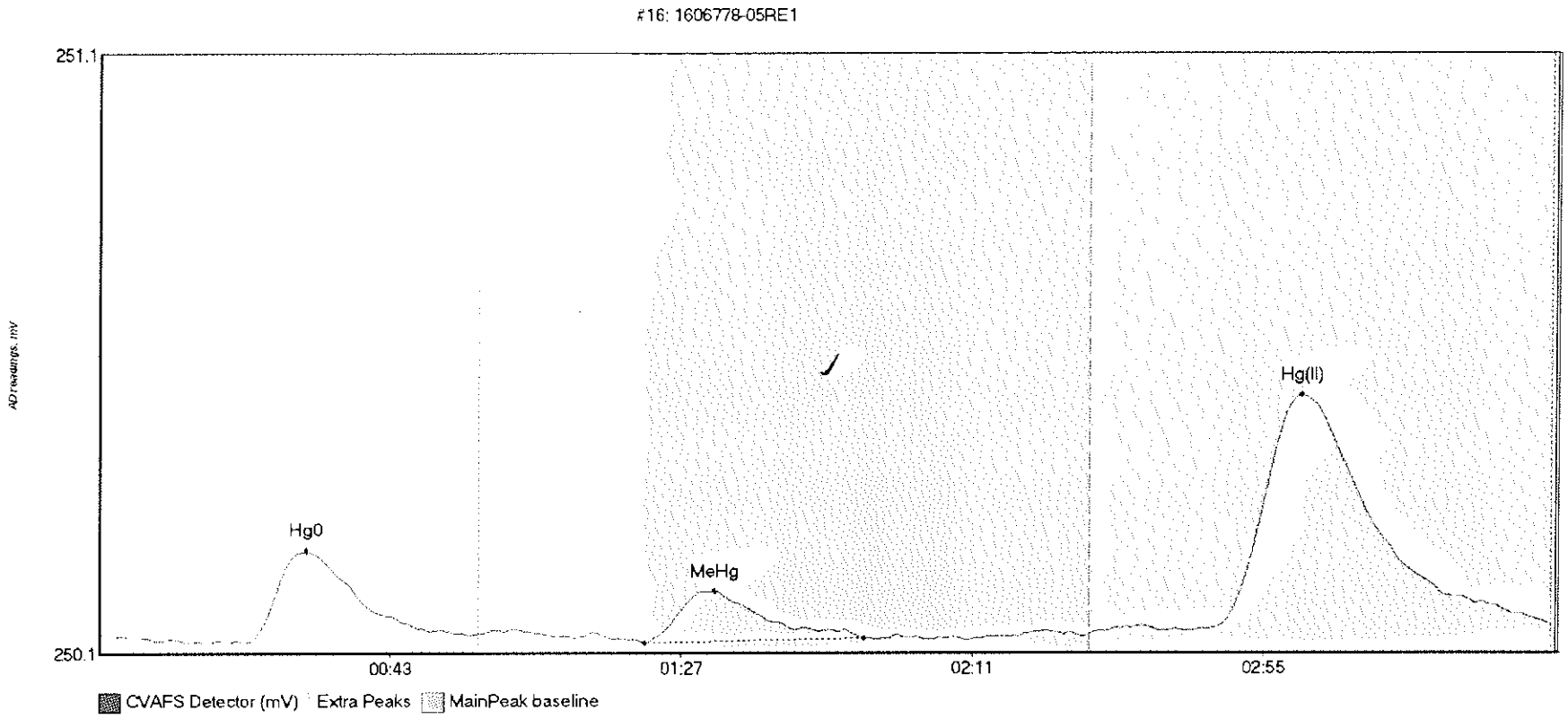
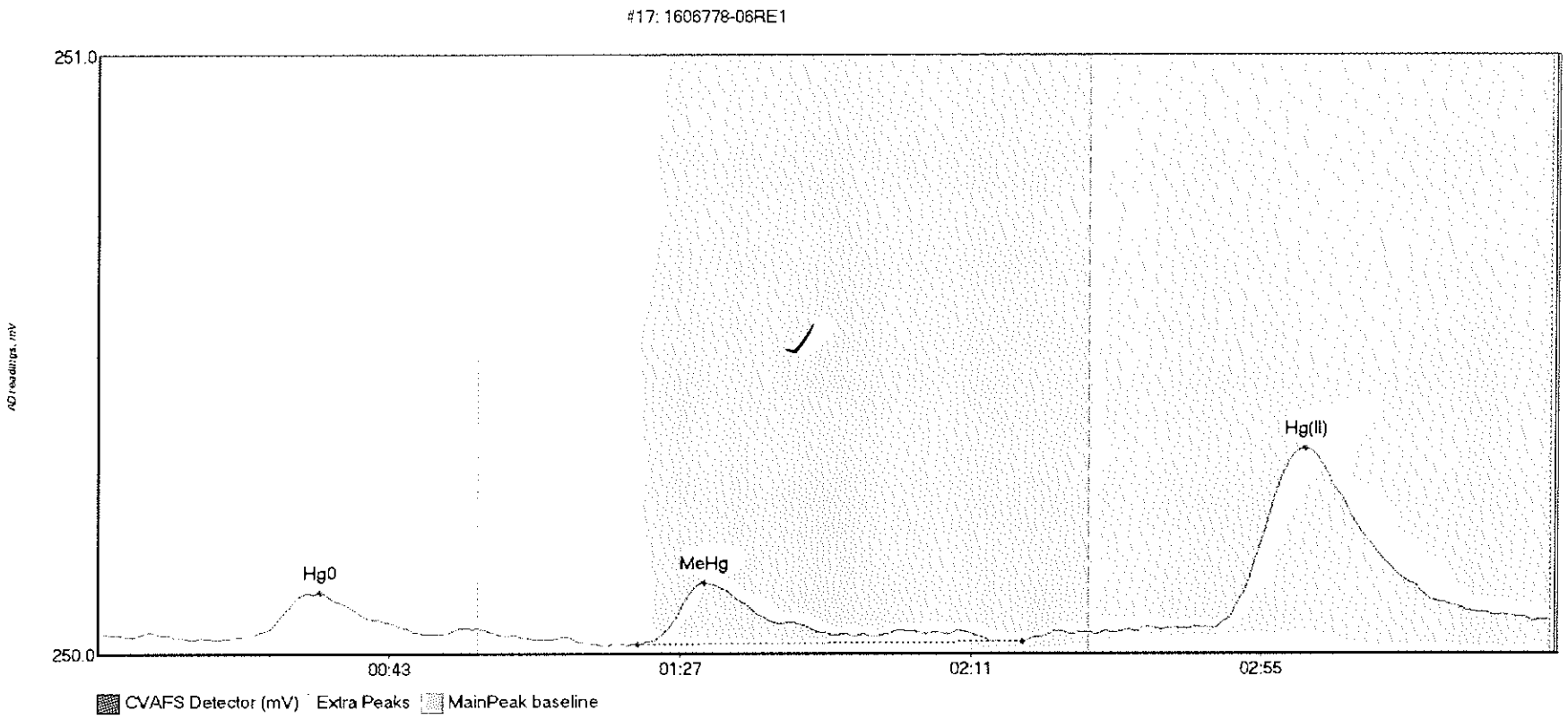
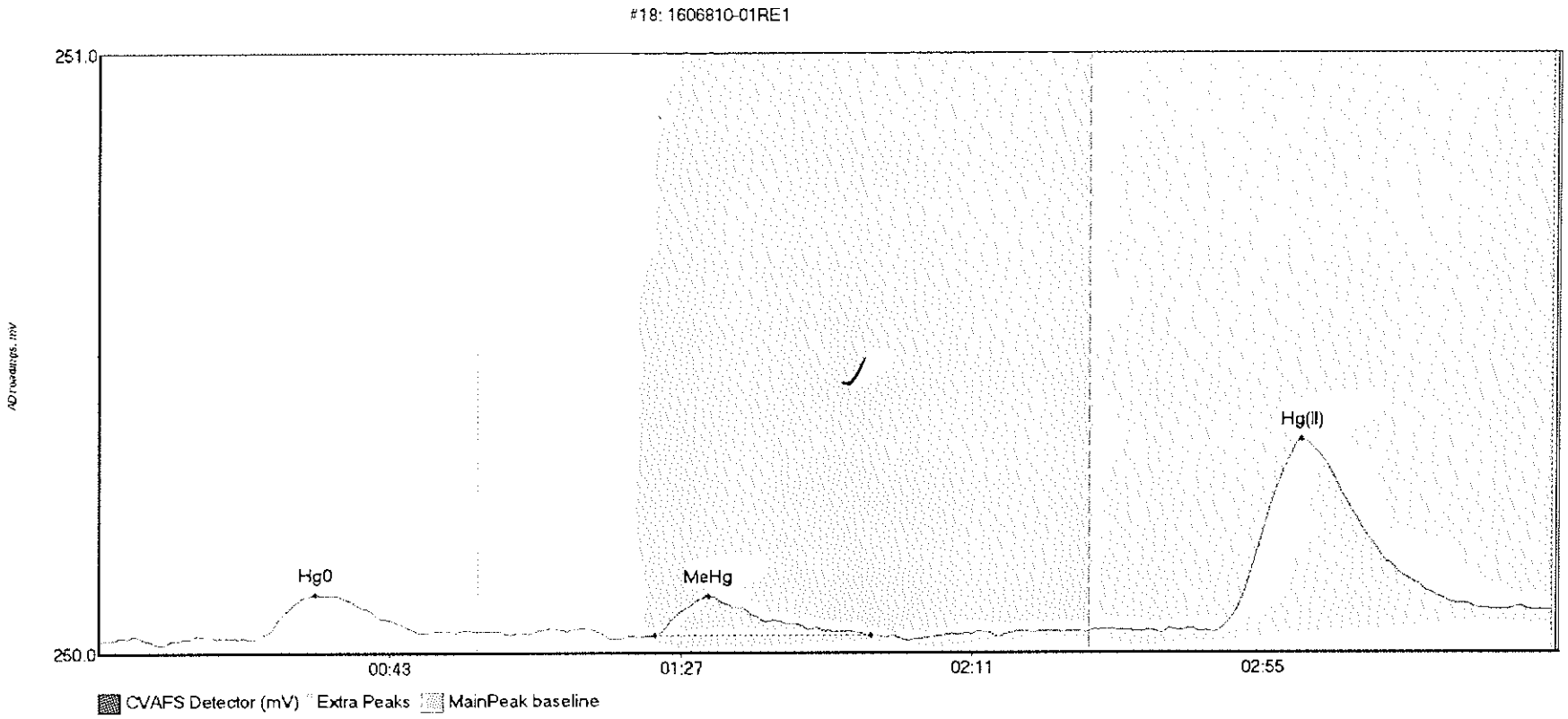


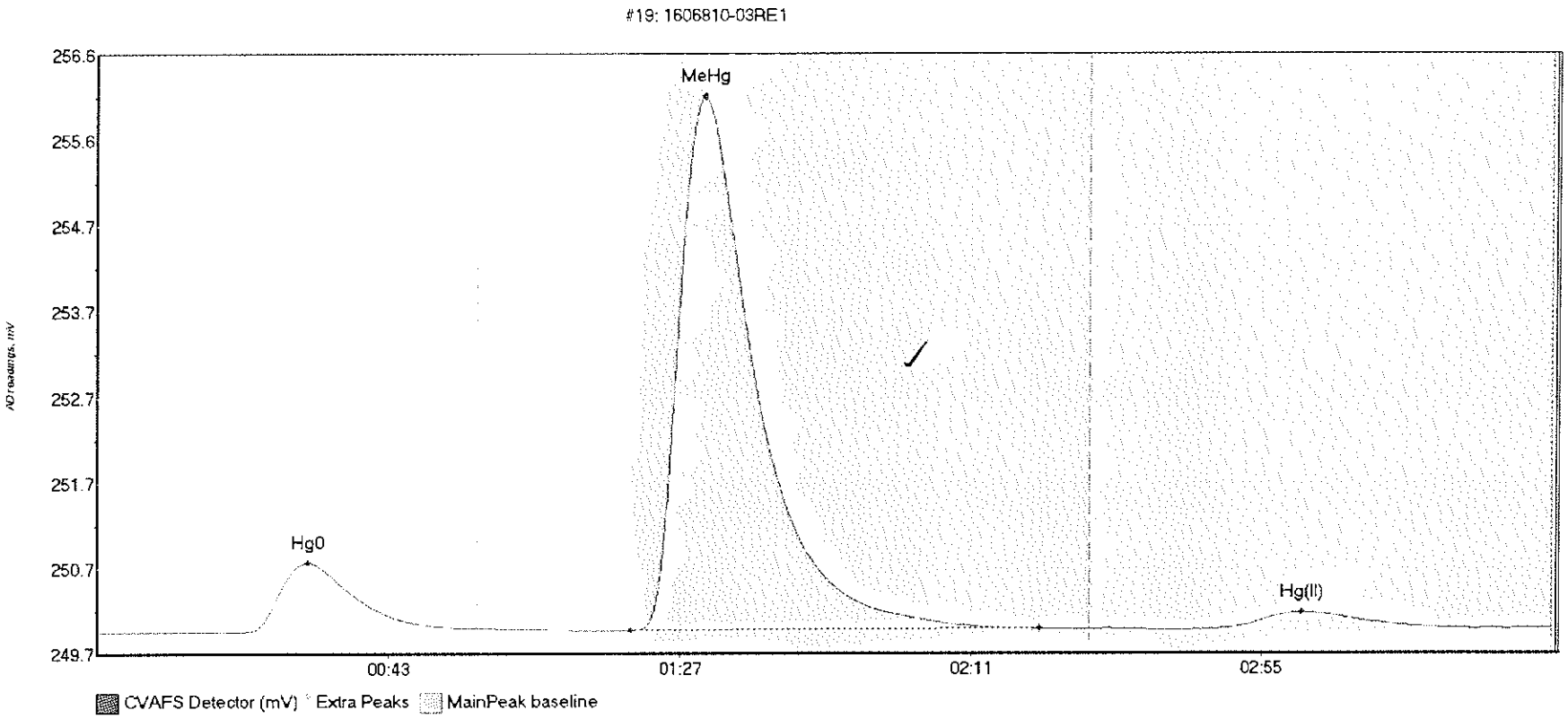
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1606778-05RE1 H	19.049	22.0	53.1	250.13	250.15	31.5	0.153	OK	250.1481	0.00	0.02	
1606778-05RE1 M	12.530	82.6	115.7	250.13	250.14	93.2	0.087	OK	250.1481	0.00	0.02	
1606778-05RE1 H	71.889	167.5	219.6	250.16	250.17	181.8	0.391	OK	250.1481	0.00	0.02	



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1606778-06RE1 H	8.642	23.1	48.2	250.07	250.08	33.6	0.073	OK	250.0769	0.00	0.02	
1606778-06RE1 M	17.901	81.6	139.9	250.06	250.06	91.7	0.103	OK	250.0769	0.00	0.02	
1606778-06RE1 H	52.968	157.3	217.3	250.08	250.10	182.7	0.306	OK	250.0769	0.00	0.02	



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1606810-01RE1 H	10.058	23.3	49.1	250.00	250.01	32.8	0.074	OK	250.0010	0.00	0.05	
1606810-01RE1 M	9.237	84.0	116.9	250.01	250.01	92.2	0.066	OK	250.0010	0.00	0.05	
1606810-01RE1 H	52.806	168.7	217.5	250.02	250.05	181.9	0.321	OK	250.0010	0.00	0.05	



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1606810-03RE1 H	100.302	21.6	57.5	249.96	250.00	31.8	0.802	CT	249.9573	0.00	0.04	
1606810-03RE1 M	832.822	80.6	142.3	249.97	249.99	91.7	6.172	OK	249.9573	0.00	0.04	
1606810-03RE1 H	30.557	169.4	208.4	249.99	249.99	182.2	0.184	OK	249.9573	0.00	0.04	

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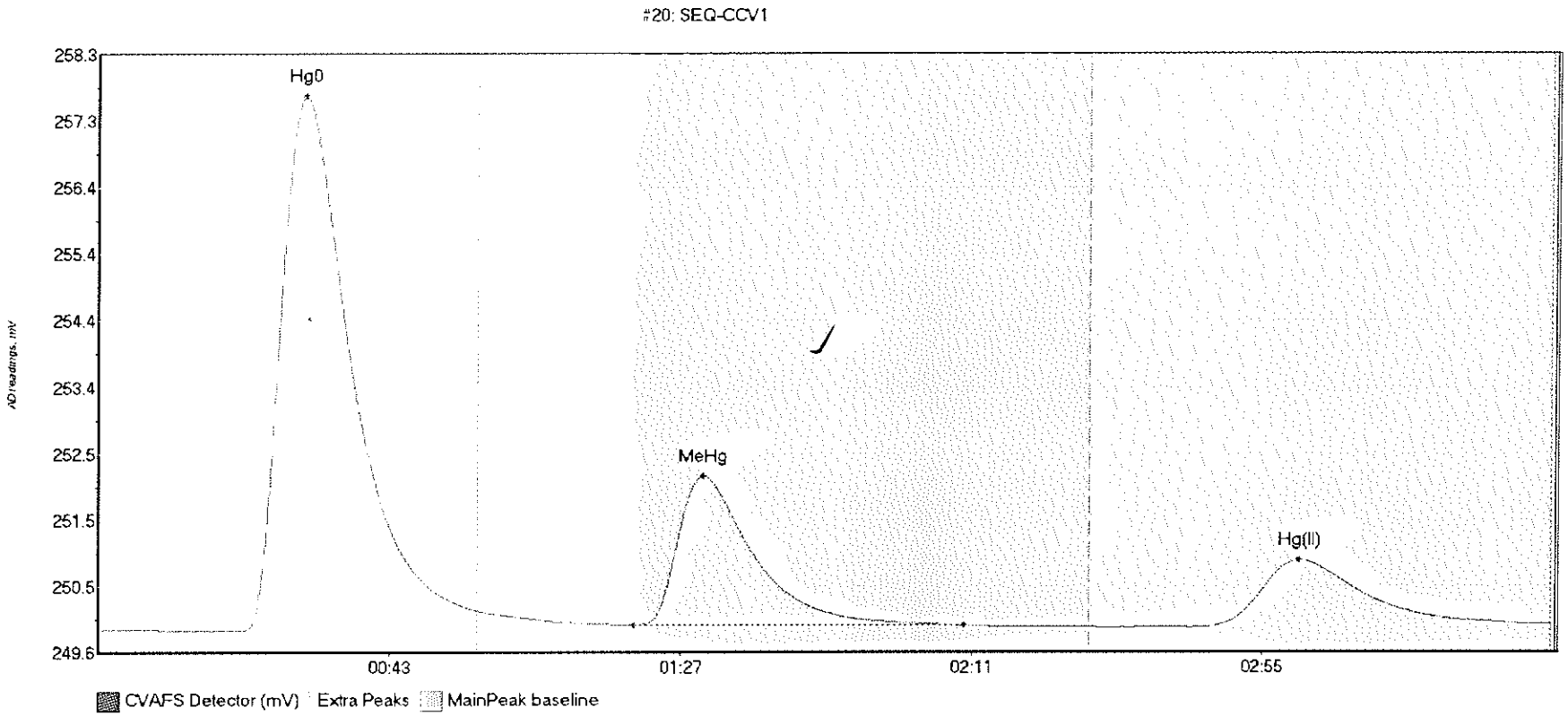
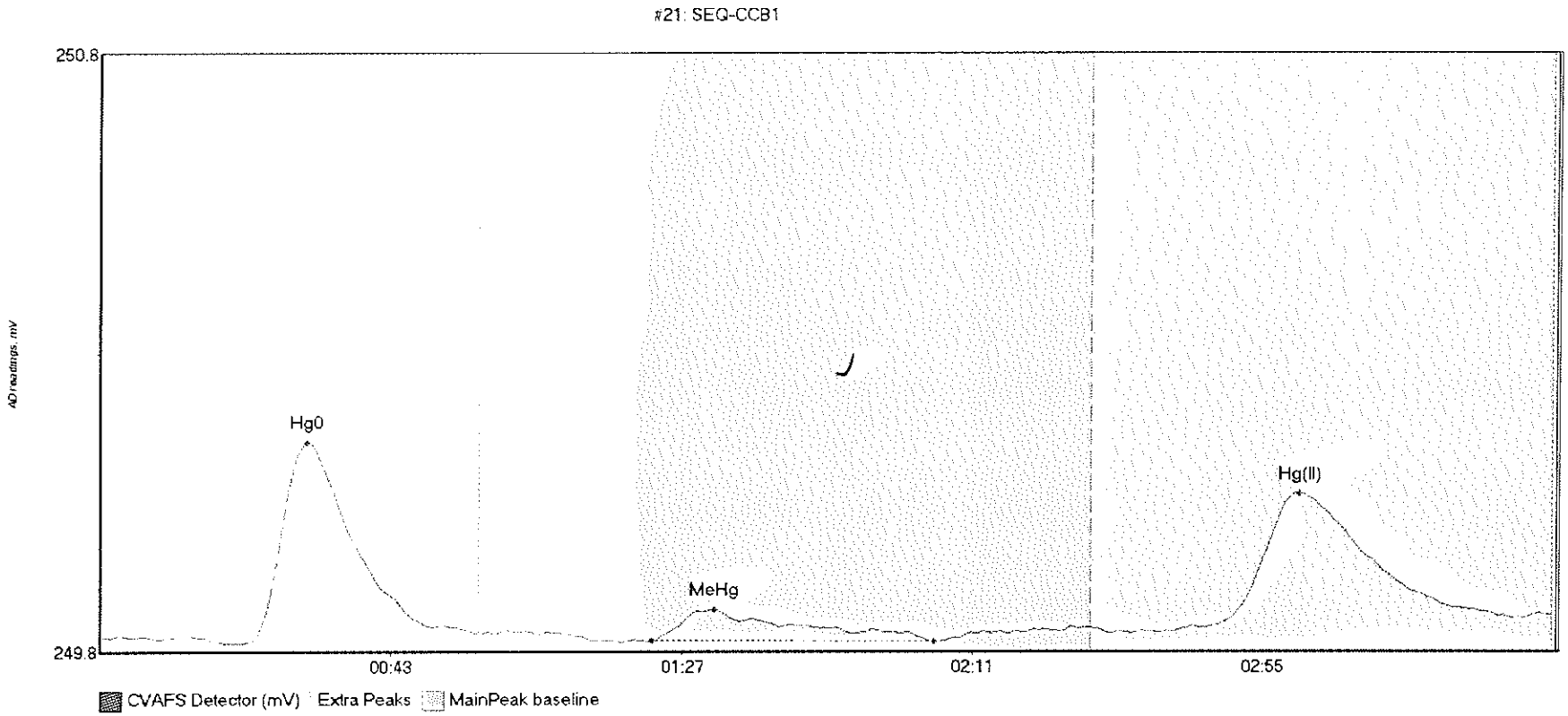
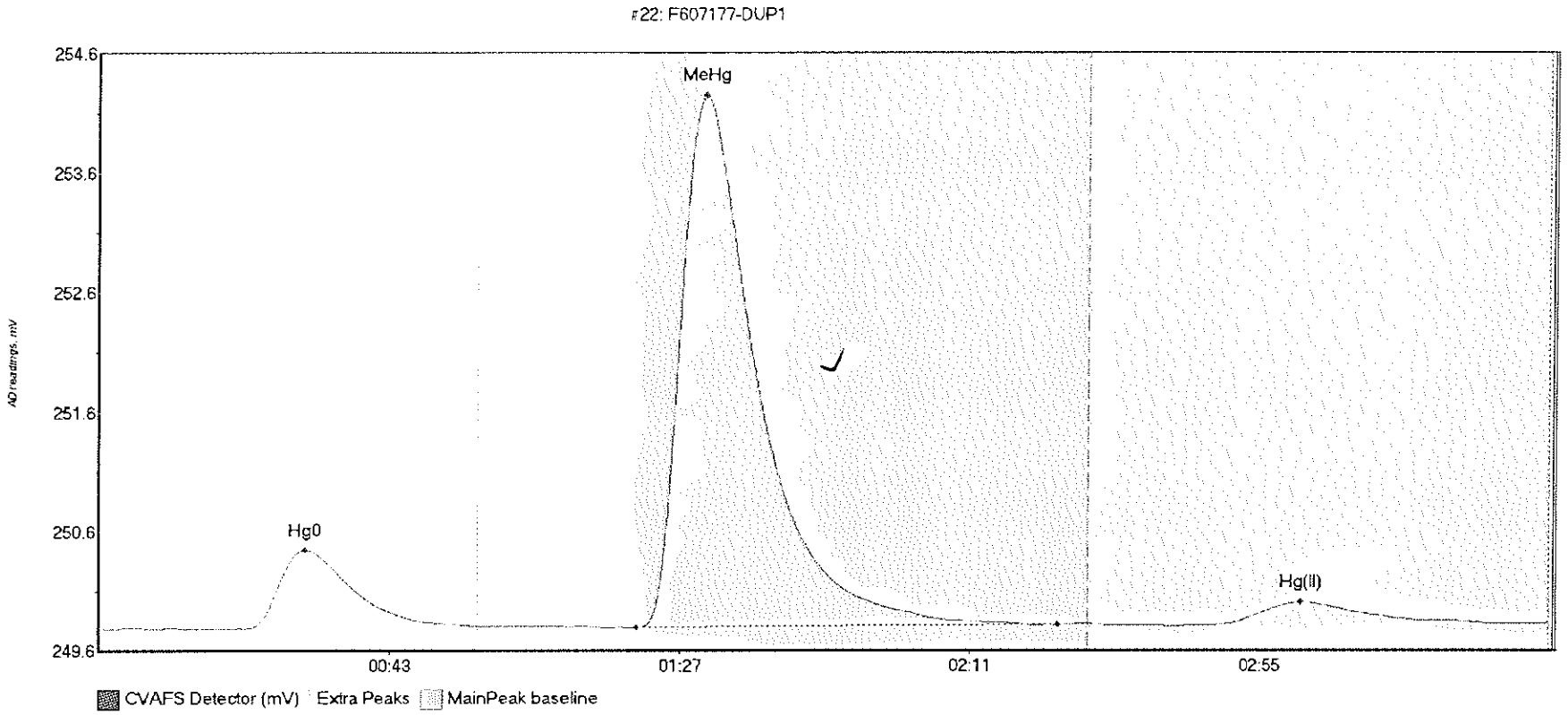


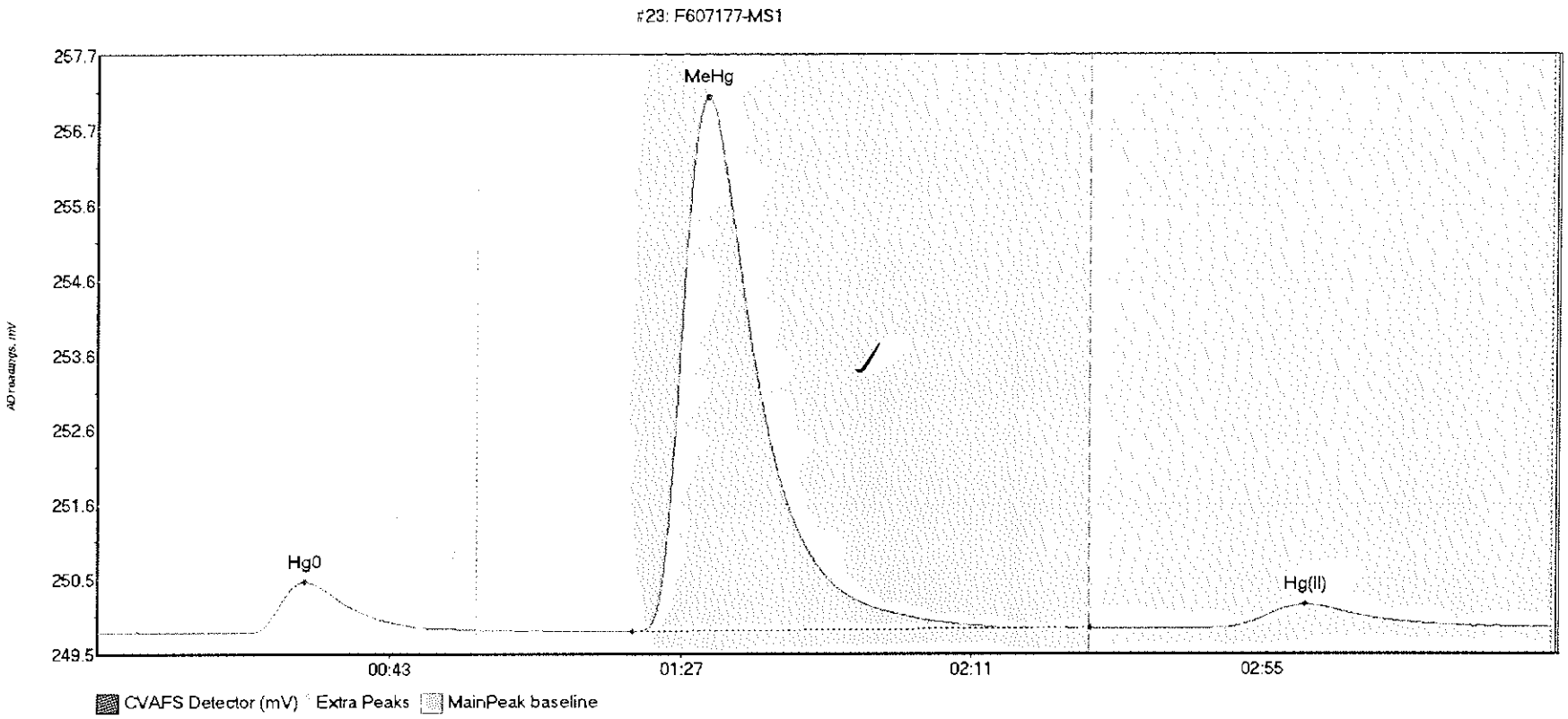
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CCV1 Hg0	938.843	20.6	57.5	249.90	250.18	31.2	7.766	CT	249.9080	0.00	0.08	
SEQ-CCV1 MeHg	288.683	80.9	130.9	249.98	249.97	91.5	2.170	OK	249.9080	0.00	0.08	
SEQ-CCV1 Hg(II)	171.594	166.7	219.8	249.95	249.99	181.7	0.979	CT	249.9080	0.00	0.08	



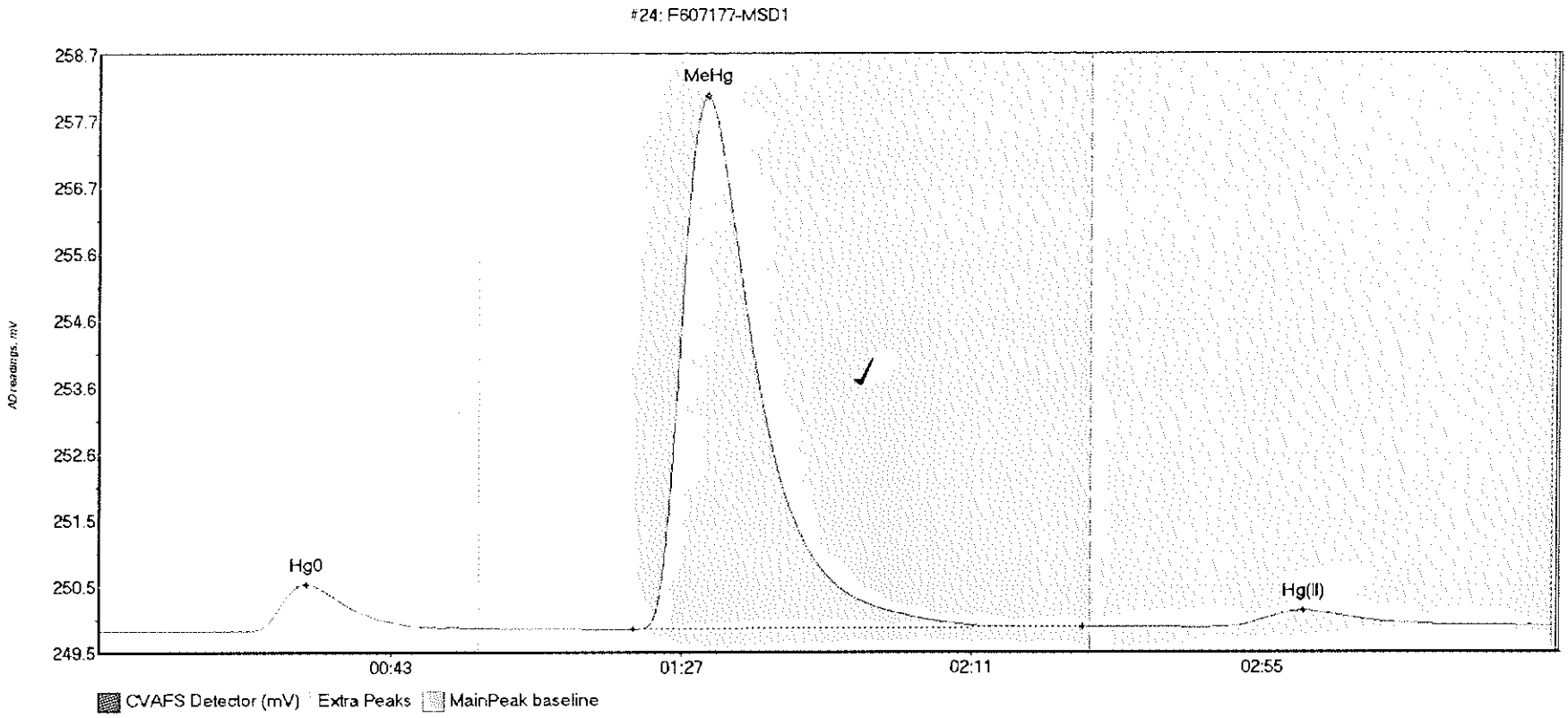
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CCB1 Hg0	40.809	22.5	57.4	249.86	249.87	31.3	0.334	OK	249.8640	0.00	0.04	
SEQ-CCB1 MeHg	11.064	83.5	126.3	249.86	249.86	92.9	0.053	OK	249.8640	0.00	0.04	
SEQ-CCB1 Hg(II)	39.103	167.4	215.7	249.88	249.90	181.6	0.226	OK	249.8640	0.00	0.04	



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F607177-DUP1 Hg	82.154	22.0	57.5	249.83	249.85	31.1	0.656	CT	249.8264	0.00	0.05	
F607177-DUP1 Me	597.243	81.5	145.3	249.84	249.86	91.9	4.421	OK	249.8264	0.00	0.05	
F607177-DUP1 Hg	33.046	167.4	211.4	249.86	249.87	182.3	0.191	OK	249.8264	0.00	0.05	



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F607177-MS1 Hg0	81.251	23.1	57.4	249.81	249.84	31.3	0.689	OK	249.8118	0.00	0.07	
F607177-MS1 MeH	981.338	80.7	150.0	249.82	249.87	92.0	7.282	CT	249.8118	0.00	0.07	
F607177-MS1 Hg(	54.702	169.7	219.8	249.87	249.88	182.6	0.315	CT	249.8118	0.00	0.07	



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F607177-MSD1 Hg	81.315	22.4	57.4	249.82	249.87	31.3	0.718	OK	249.8237	0.00	0.08	
F607177-MSD1 Me	1105.464	80.8	148.7	249.85	249.88	91.9	8.210	OK	249.8237	0.00	0.08	
F607177-MSD1 Hg	40.418	169.4	218.6	249.88	249.90	182.3	0.250	OK	249.8237	0.00	0.08	

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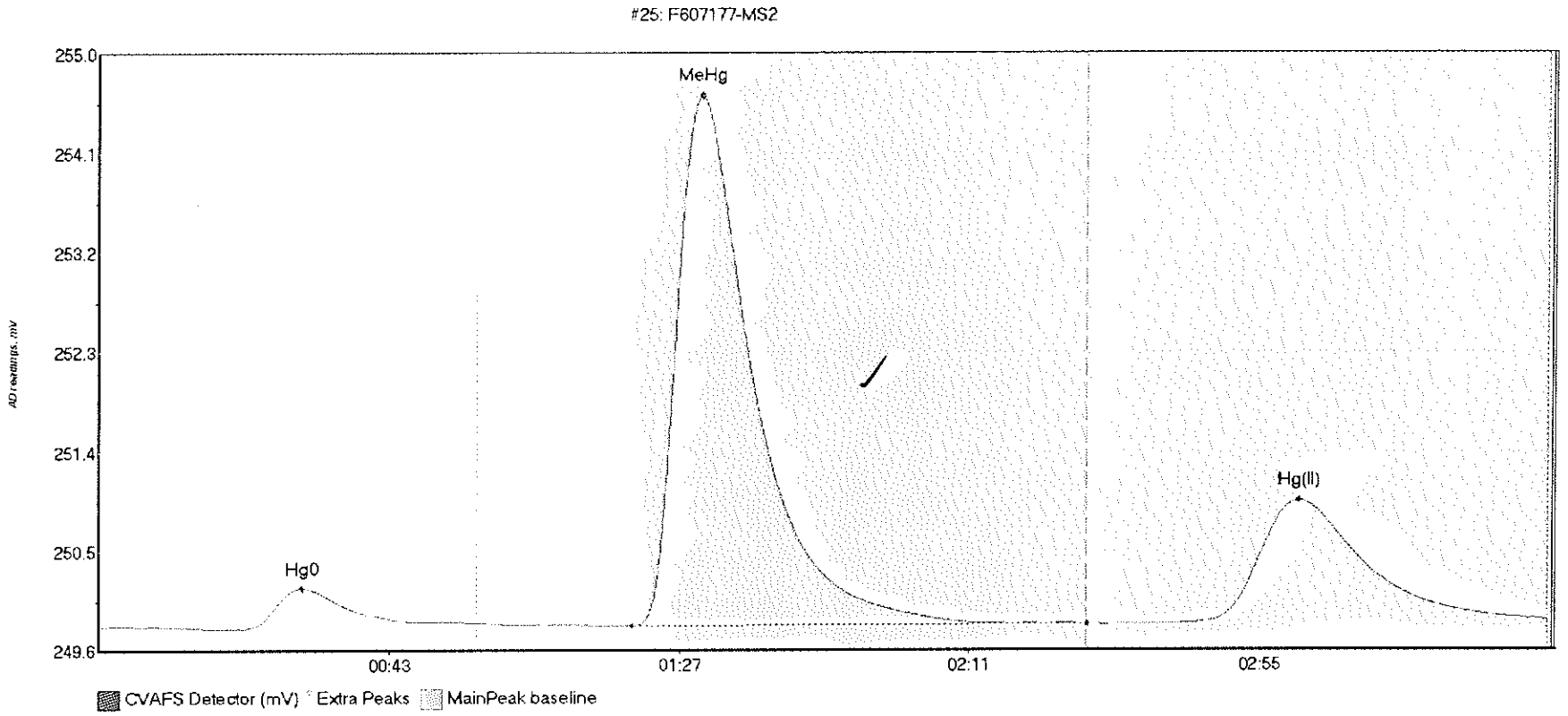
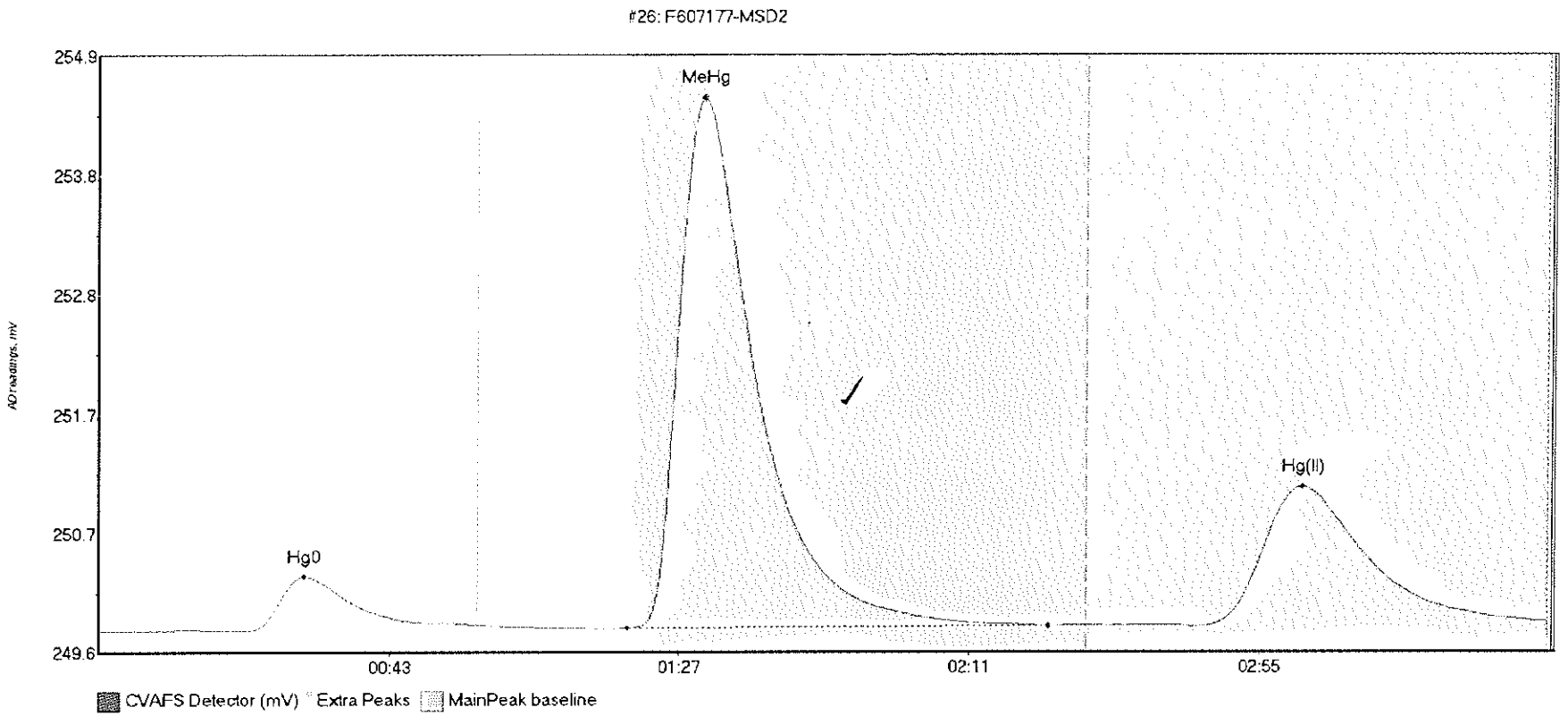
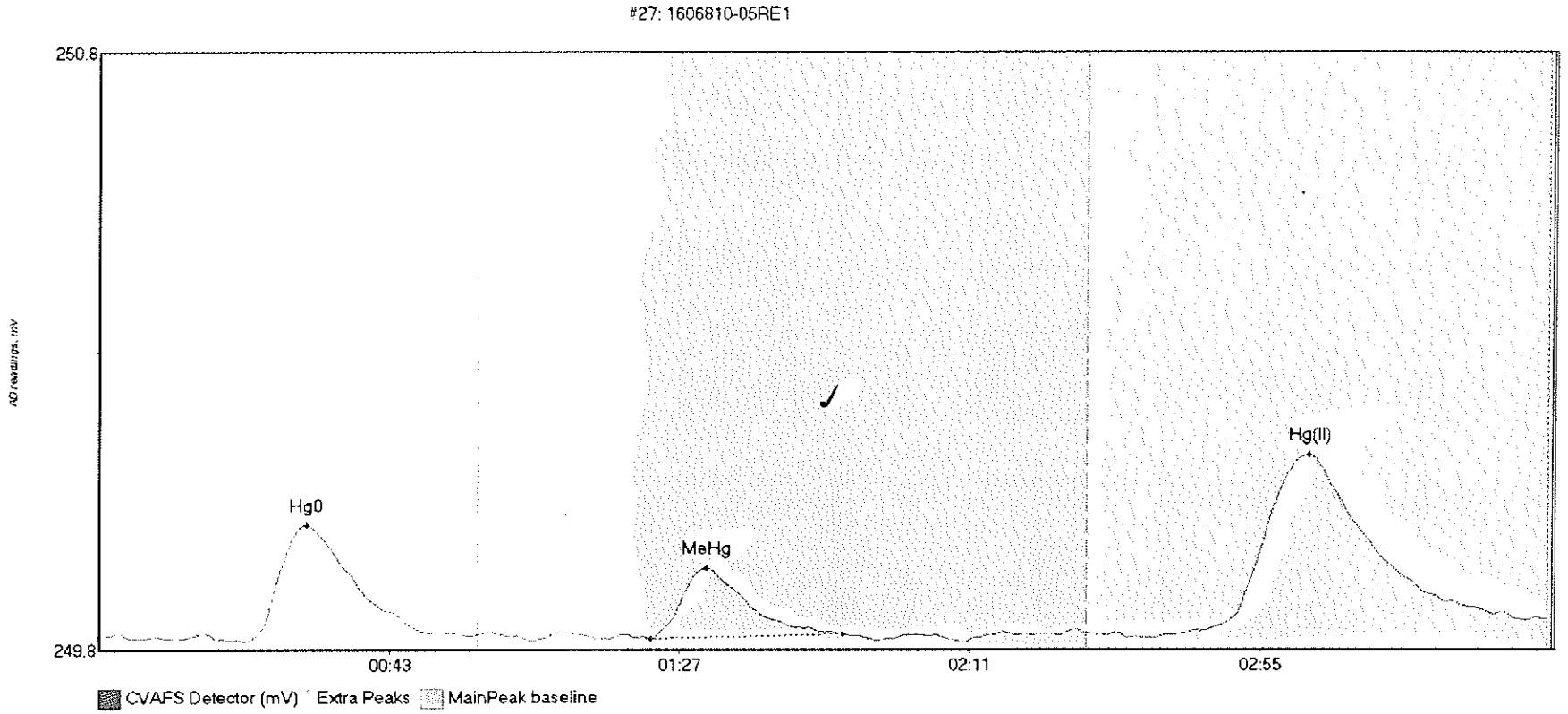


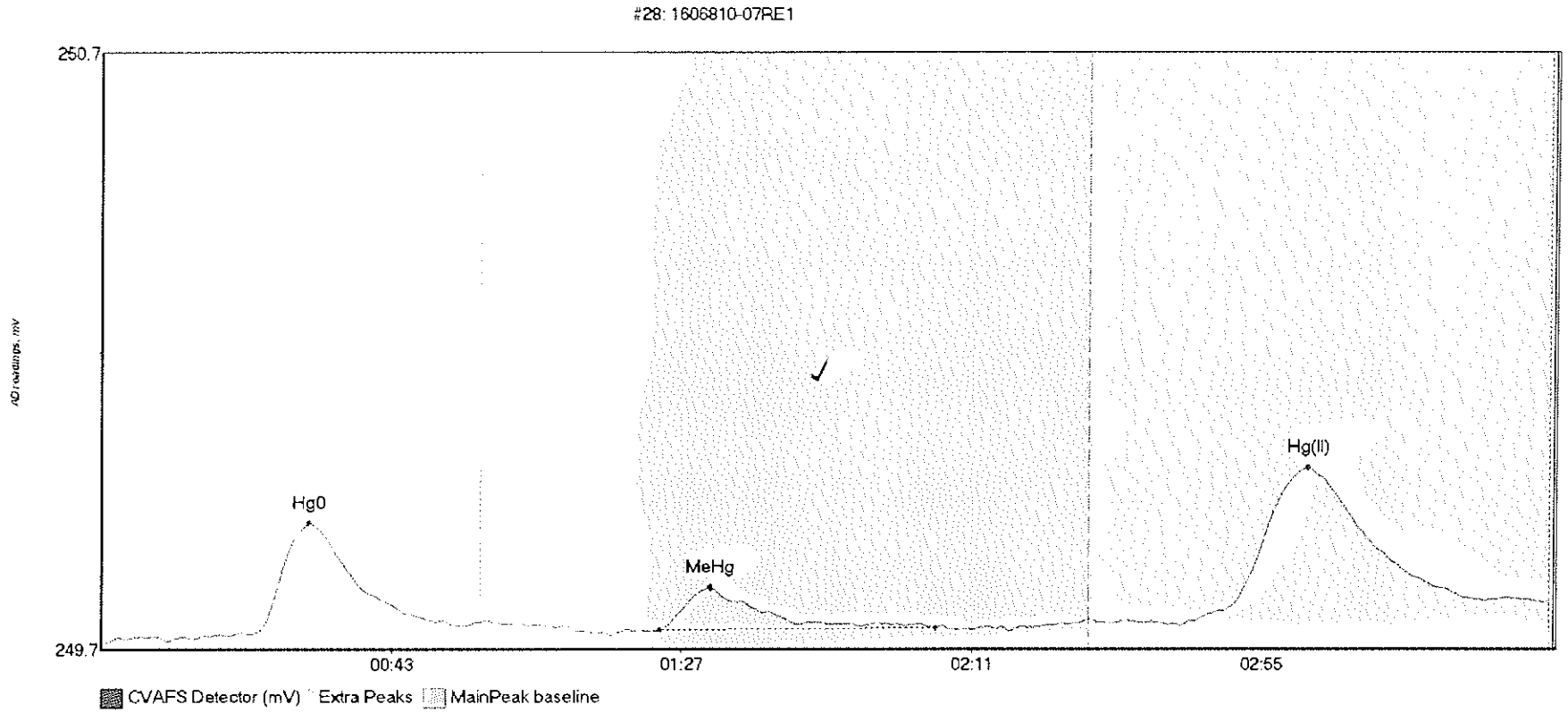
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F607177-MS2 Hg0	43.146	21.7	57.1	249.81	249.86	30.8	0.366	OK	249.8335	0.00	0.06	
F607177-MS2 MeH	643.748	80.9	150.0	249.83	249.85	91.4	4.783	CT	249.8335	0.00	0.06	
F607177-MS2 Hg(	199.663	162.9	219.8	249.86	249.89	182.0	1.109	CT	249.8335	0.00	0.06	



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F607177-MSD2 Hg	55.072	21.9	56.2	249.80	249.85	31.1	0.473	OK	249.8021	0.00	0.08	
F607177-MSD2 Me	630.631	80.1	144.1	249.82	249.84	91.9	4.665	OK	249.8021	0.00	0.08	
F607177-MSD2 Hg	220.460	167.1	219.8	249.84	249.88	182.6	1.231	CT	249.8021	0.00	0.08	

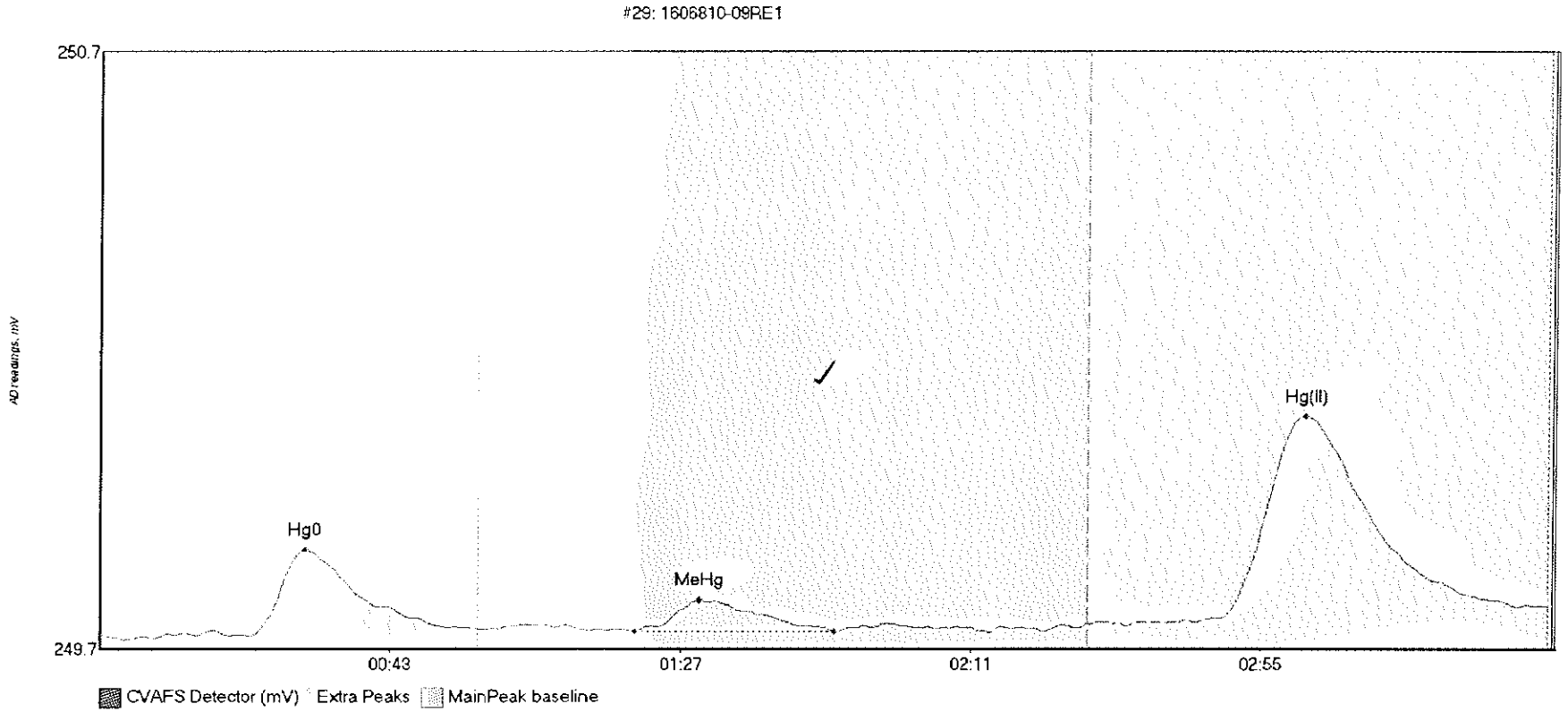


Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1606810-05RE1 H	24.359	22.1	56.0	249.79	249.80	31.4	0.196	OK	249.7968	0.00	0.03	
1606810-05RE1 M	13.118	83.7	112.8	249.79	249.80	92.2	0.118	OK	249.7968	0.00	0.03	
1606810-05RE1 H	51.986	167.0	217.0	249.81	249.83	183.5	0.294	OK	249.7968	0.00	0.03	



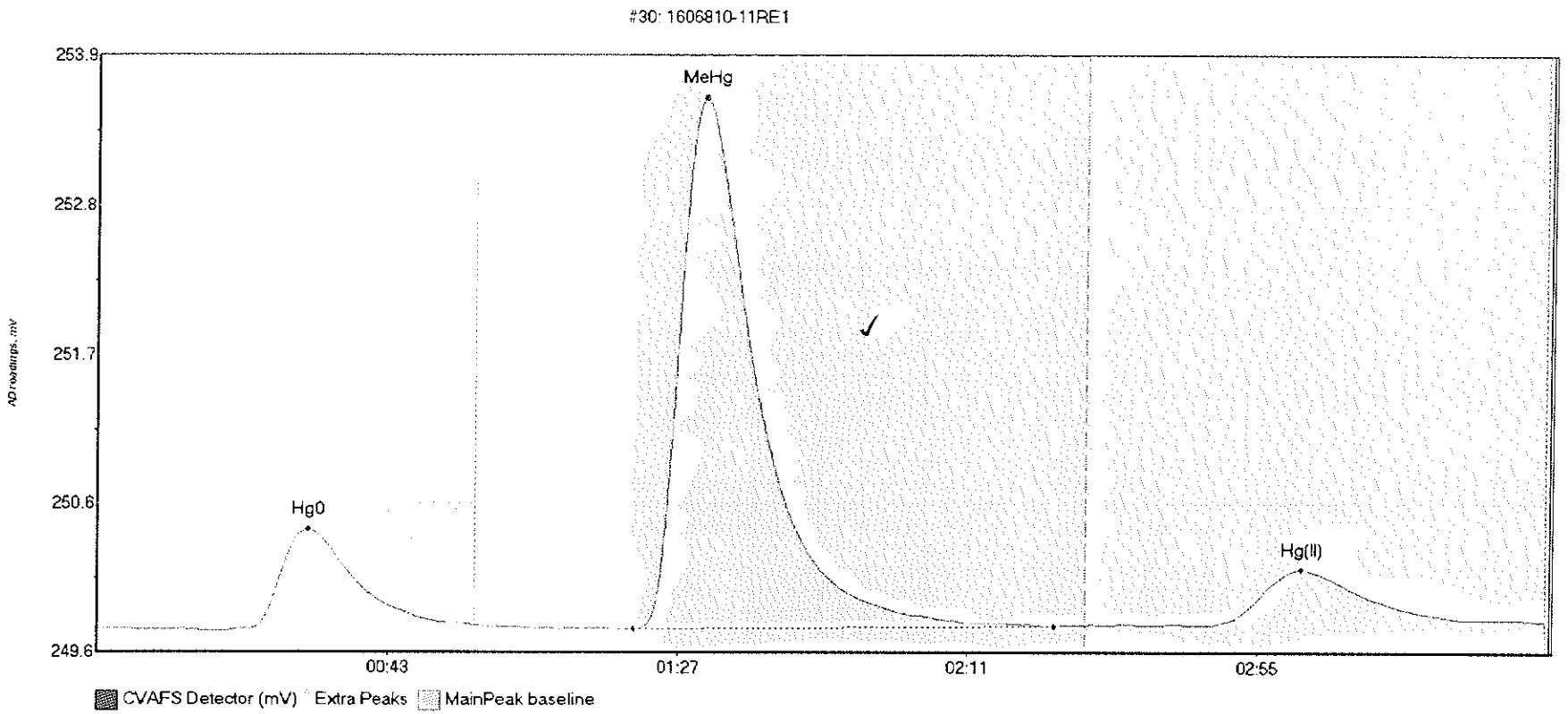
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1606810-07RE1 H	23.446	10.1	53.6	249.72	249.74	31.6	0.198	OK	249.7175	0.00	0.07	
1606810-07RE1 M	9.397	84.7	126.4	249.74	249.74	92.4	0.071	OK	249.7175	0.00	0.07	
1606810-07RE1 H	44.985	165.8	219.0	249.75	249.78	183.1	0.257	OK	249.7175	0.00	0.07	

016



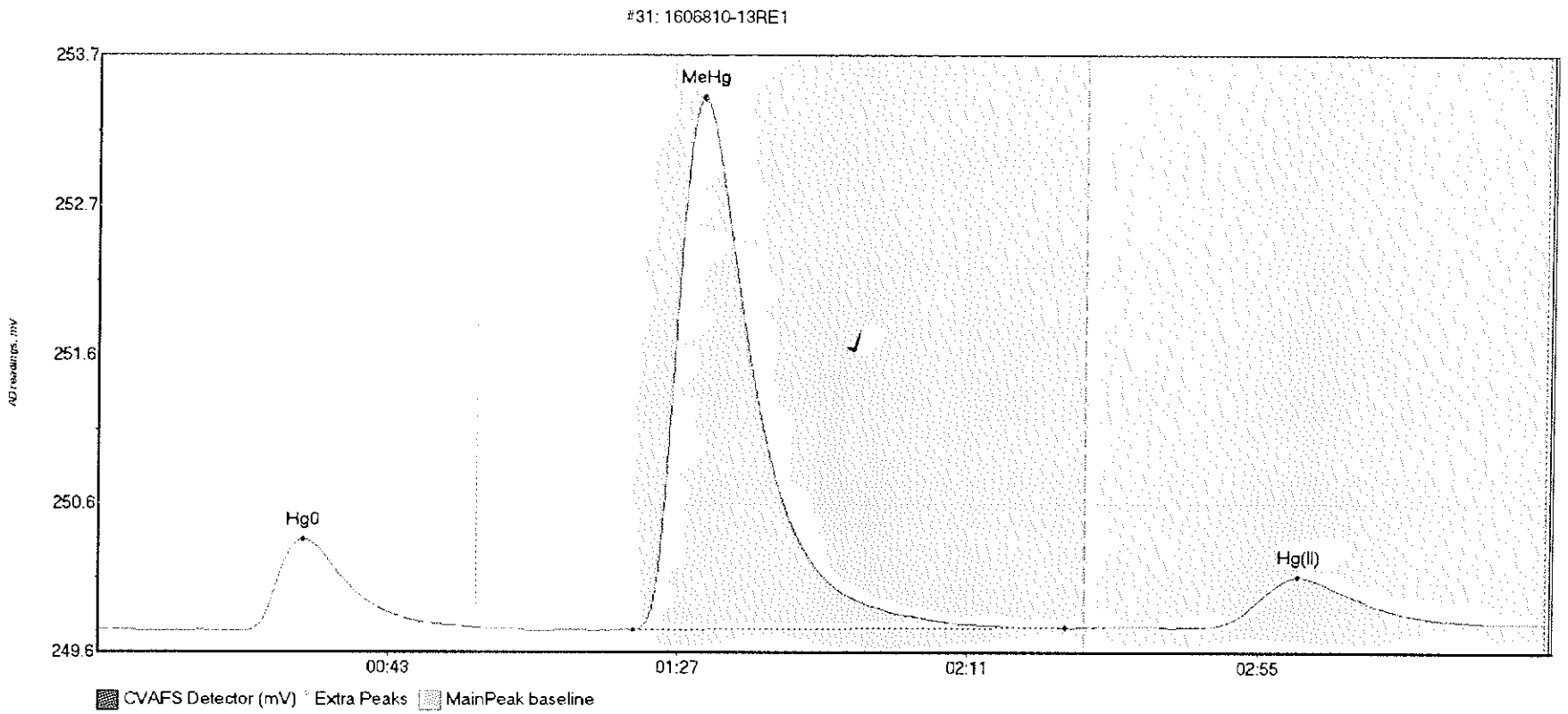
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1606810-09RE1 H	18.371	22.8	57.5	249.74	249.75	31.1	0.144	CT	249.7384	0.00	0.05	
1606810-09RE1 M	7.576	81.0	111.4	249.75	249.75	90.9	0.051	OK	249.7384	0.00	0.05	
1606810-09RE1 H	59.434	166.2	215.1	249.76	249.79	182.7	0.345	OK	249.7384	0.00	0.05	

016



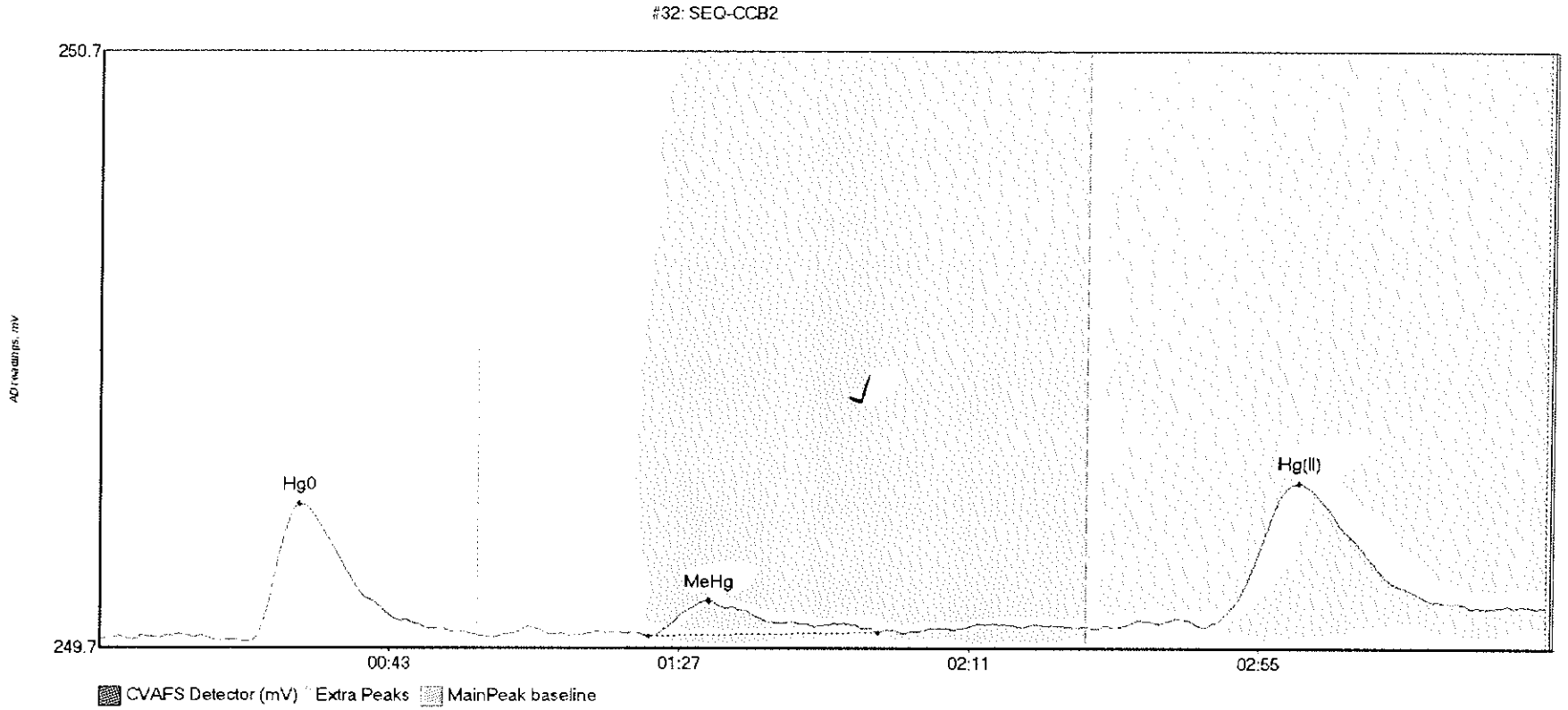
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1606810-11RE1 H	89.253	22.6	57.5	249.73	249.76	31.8	0.718	CT	249.7271	0.00	0.06	
1606810-11RE1 M	518.464	81.3	145.1	249.73	249.75	92.0	3.821	OK	249.7271	0.00	0.06	
1606810-11RE1 H	71.334	167.3	219.1	249.75	249.78	182.8	0.408	OK	249.7271	0.00	0.06	

016

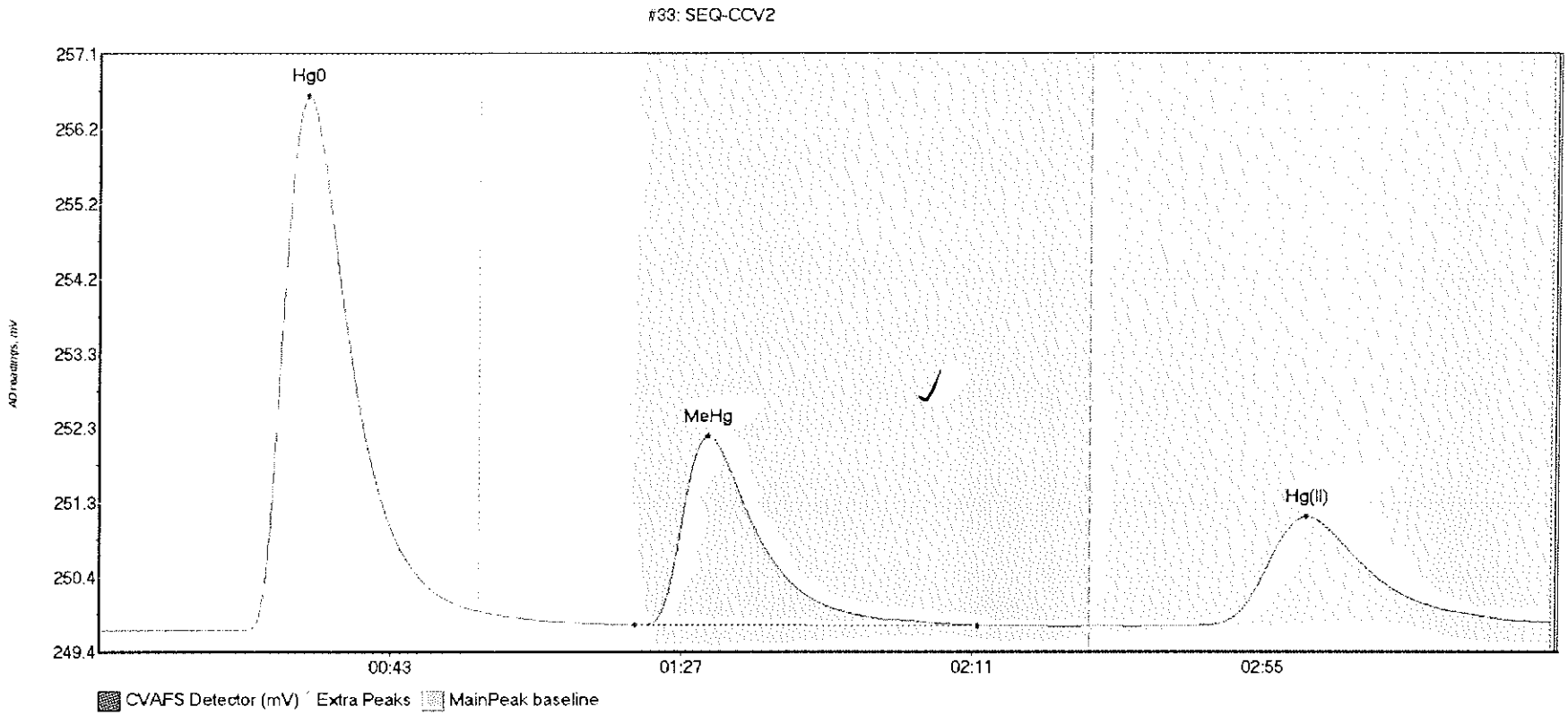


Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1606810-13RE1 H	78.080	22.0	57.5	249.71	249.73	31.2	0.638	CT	249.7140	0.00	0.05	
1606810-13RE1 M	504.574	81.4	147.0	249.71	249.73	91.7	3.727	OK	249.7140	0.00	0.05	
1606810-13RE1 H	59.204	167.8	215.1	249.74	249.76	182.2	0.348	OK	249.7140	0.00	0.05	

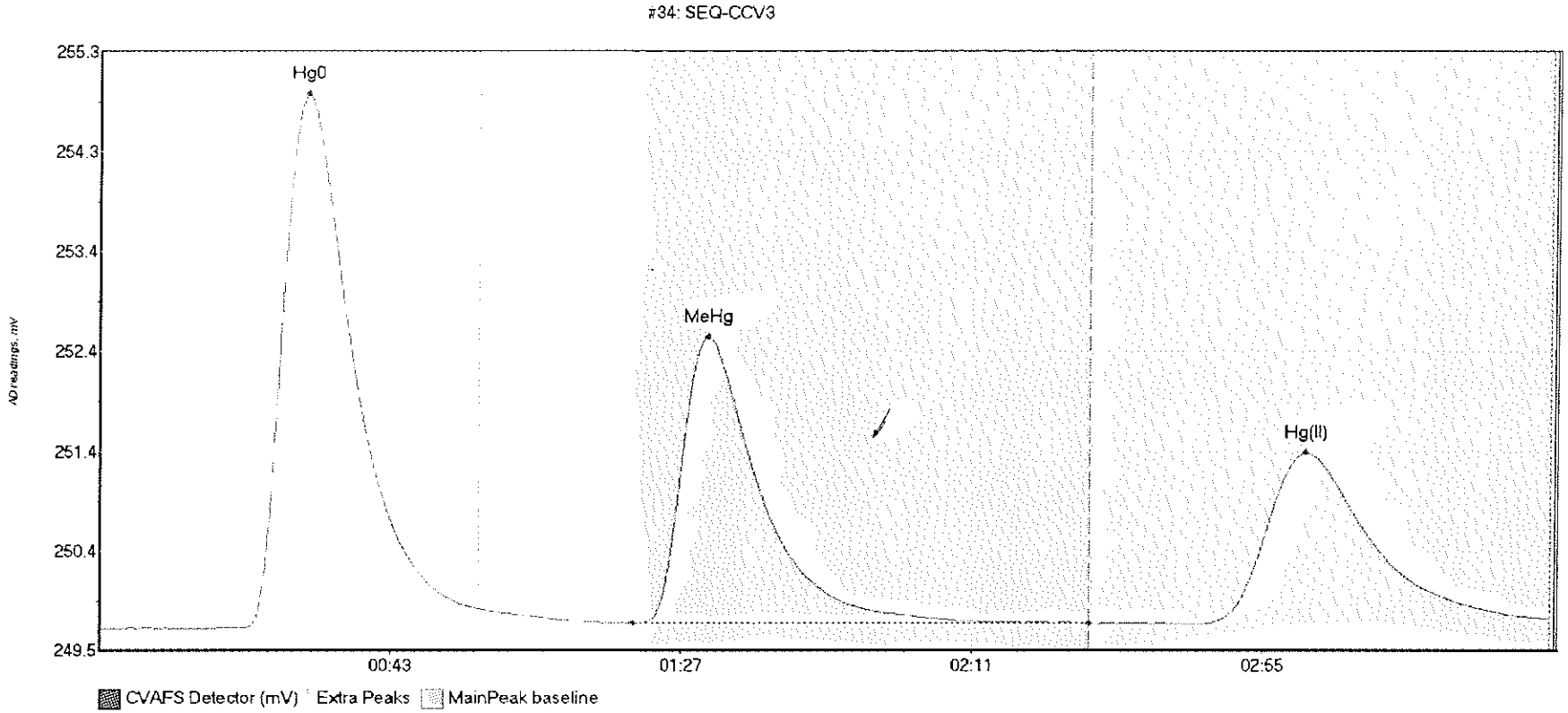
016



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CCB2 Hg0	28.342	22.1	57.5	249.69	249.70	30.5	0.232	CT	249.6960	0.00	0.05	
SEQ-CCB2 MeHg	8.932	83.4	118.3	249.70	249.71	92.6	0.060	OK	249.6960	0.00	0.05	
SEQ-CCB2 Hg(II)	38.560	167.9	210.6	249.72	249.75	182.0	0.241	OK	249.6960	0.00	0.05	

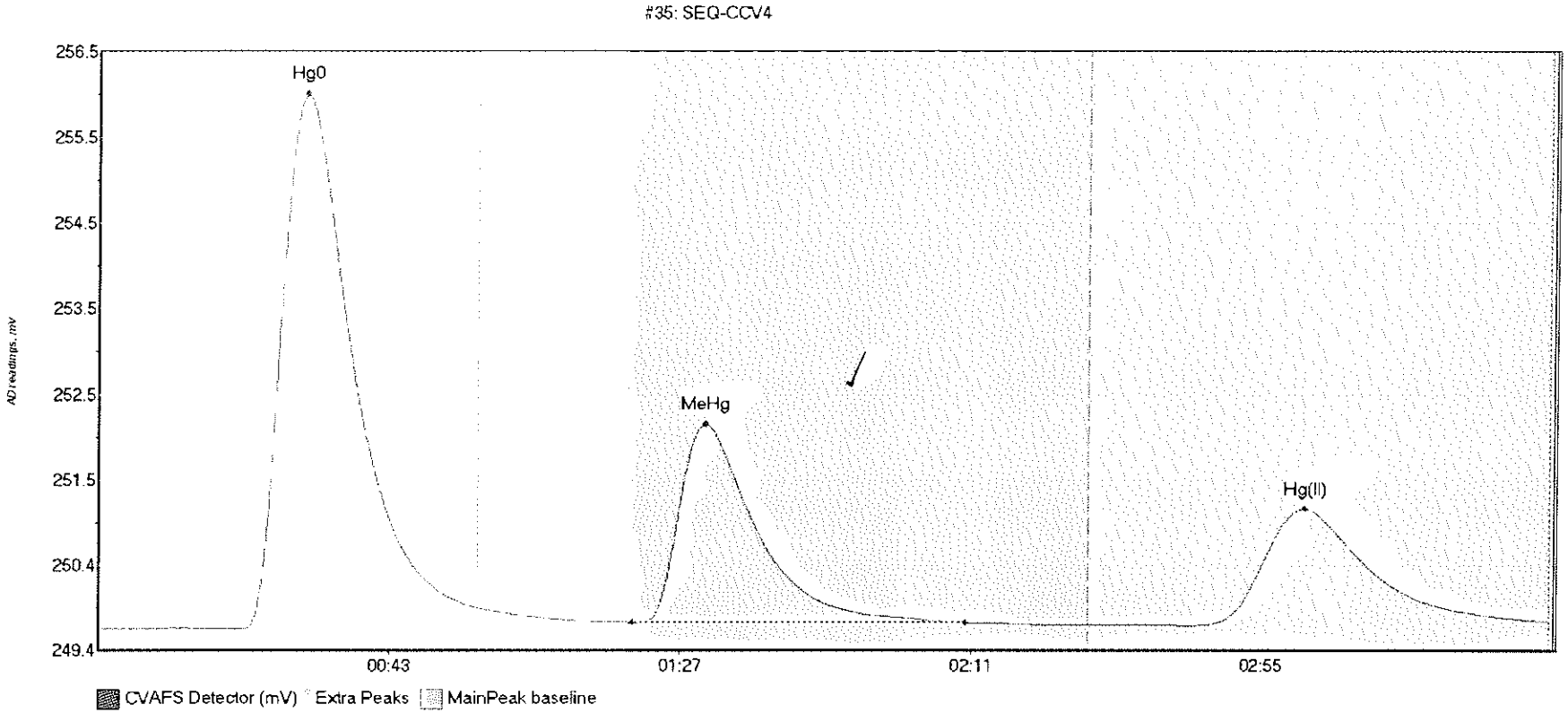


Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CCV2 Hg0	813.302	21.8	57.5	249.69	249.93	31.5	6.887	CT	249.6897	0.00	0.11	
SEQ-CCV2 MeHg	329.103	81.0	132.9	249.75	249.75	92.2	2.447	OK	249.6897	0.00	0.11	
SEQ-CCV2 Hg(II)	245.461	168.0	219.8	249.76	249.80	182.6	1.401	CT	249.6897	0.00	0.11	



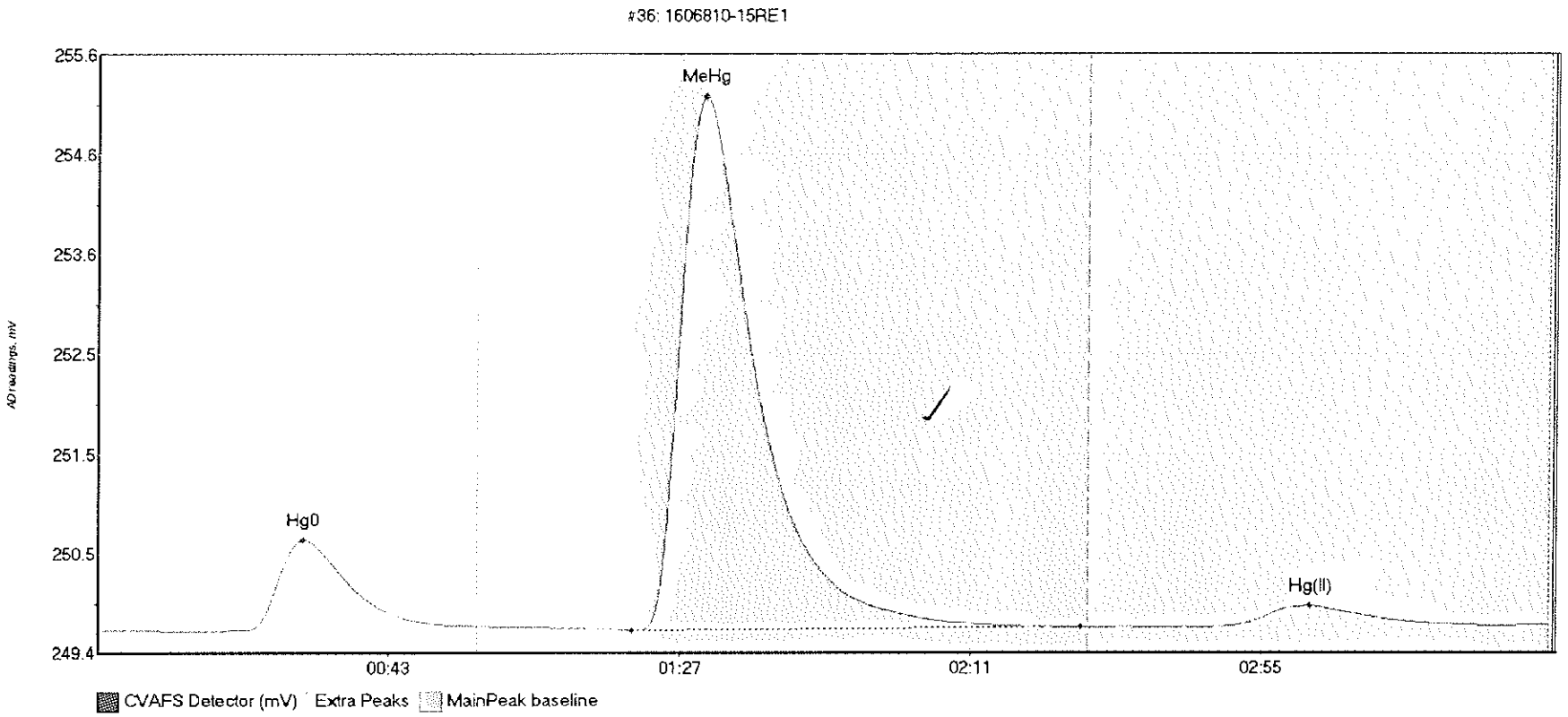
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CCV3 Hg0	621.033	16.6	57.5	249.69	249.88	31.6	5.204	CT	249.6850	0.00	0.10	
SEQ-CCV3 MeHg	384.990	80.7	149.9	249.74	249.73	92.1	2.793	OK	249.6850	0.00	0.10	
SEQ-CCV3 Hg(II)	295.627	165.8	219.7	249.73	249.79	182.5	1.675	OK	249.6850	0.00	0.10	

016



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CCV4 Hg0	770.960	21.8	57.5	249.68	249.93	31.6	6.344	CT	249.6880	0.00	0.09	
SEQ-CCV4 MeHg	316.789	80.9	131.1	249.75	249.76	91.9	2.359	OK	249.6880	0.00	0.09	
SEQ-CCV4 Hg(II)	245.201	165.4	219.8	249.72	249.78	182.6	1.395	CT	249.6880	0.00	0.09	

016



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1606810-15RE1 H	111.479	22.1	57.5	249.66	249.71	31.2	0.937	CT	249.6626	0.00	0.06	
1606810-15RE1 M	744.004	80.7	148.7	249.66	249.69	91.9	5.513	OK	249.6626	0.00	0.06	
1606810-15RE1 H	36.688	167.0	211.6	249.69	249.71	183.5	0.224	OK	249.6626	0.00	0.06	

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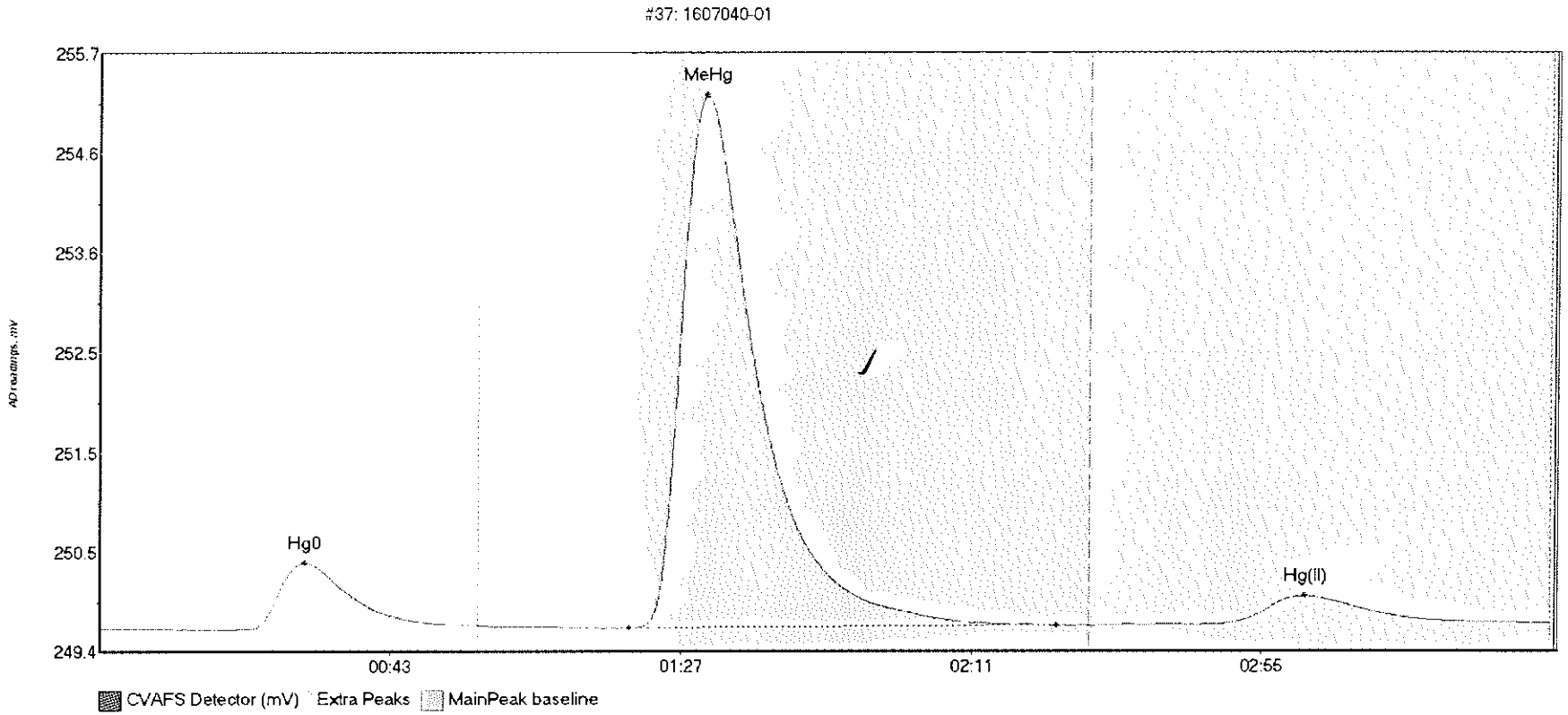
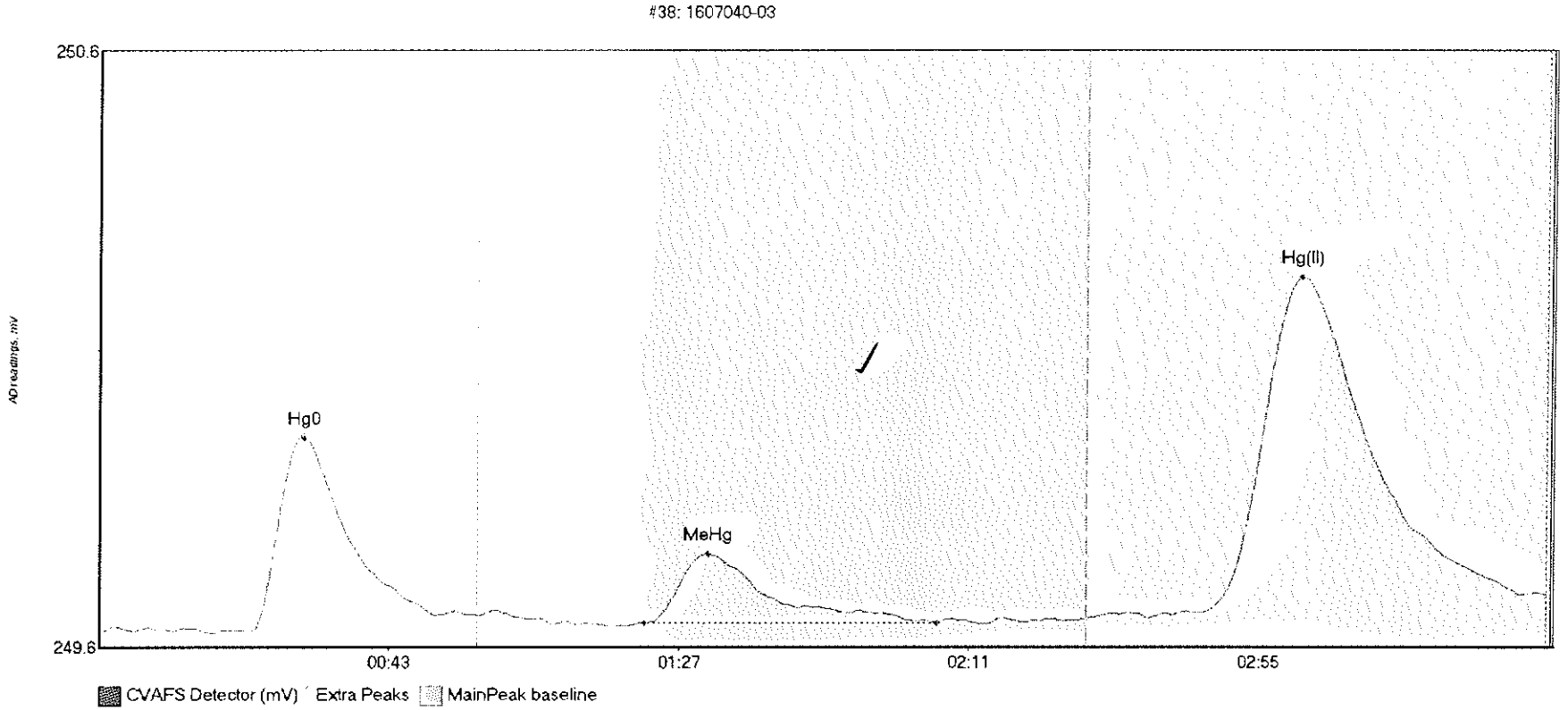


Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1607040-01 Hg0	83.295	22.3	57.5	249.64	249.68	31.1	0.697	CT	249.6425	0.00	0.06	
1607040-01 MeHg	754.737	80.1	144.9	249.65	249.68	91.9	5.585	OK	249.6425	0.00	0.06	
1607040-01 Hg(I	53.158	151.6	219.8	249.68	249.70	182.6	0.308	CT	249.6425	0.00	0.06	



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1607040-03 Hg0	37.106	22.7	51.2	249.64	249.67	31.1	0.328	OK	249.6411	0.00	0.06	
1607040-03 MeHg	18.143	82.8	127.1	249.65	249.65	92.5	0.116	OK	249.6411	0.00	0.06	
1607040-03 Hg(I	100.302	162.9	215.8	249.67	249.70	182.5	0.567	OK	249.6411	0.00	0.06	

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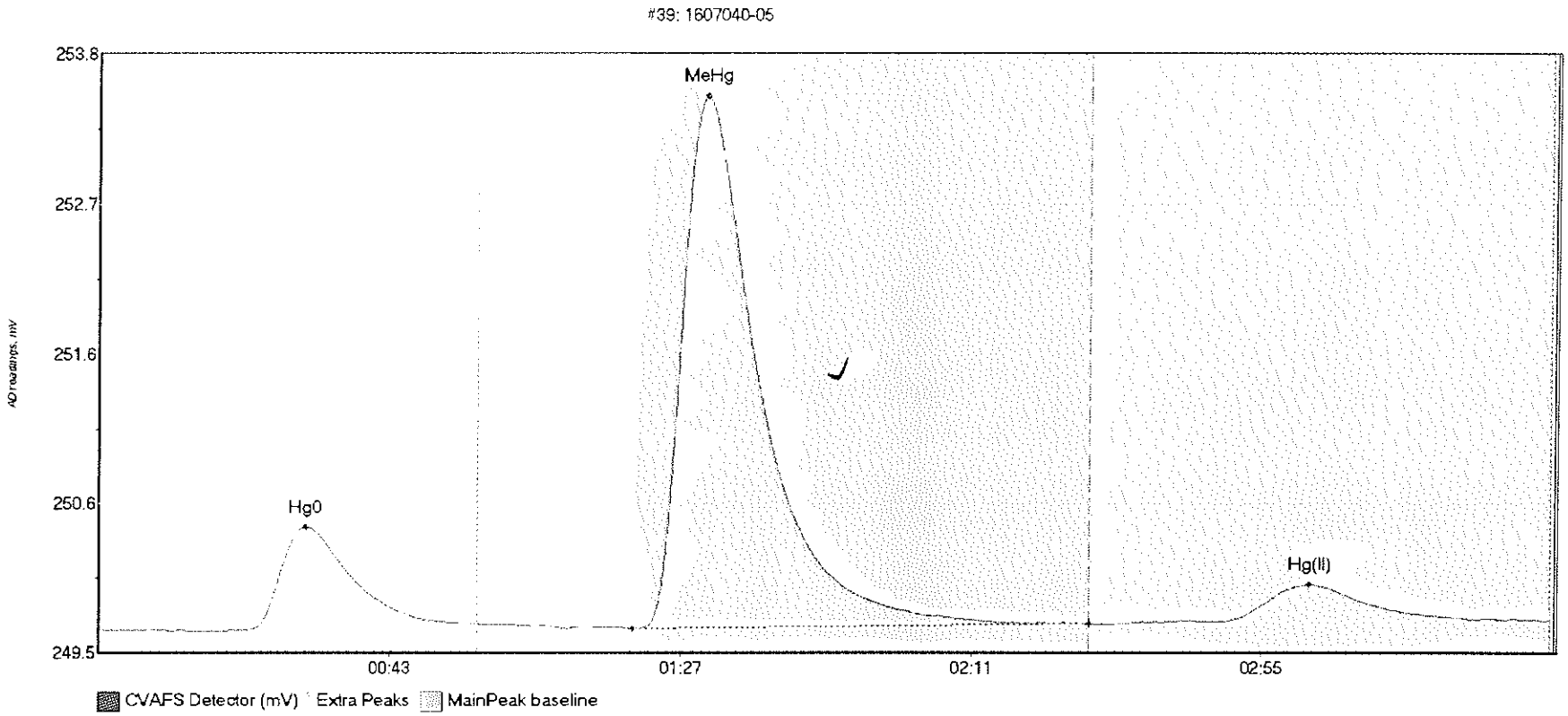

Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1607040-05 Hg0	88.303	21.4	57.5	249.65	249.69	31.3	0.738	CT	249.6541	0.00	0.06	
1607040-05 MeHg	517.726	80.8	149.9	249.66	249.69	92.0	3.793	OK	249.6541	0.00	0.06	
1607040-05 Hg(I	49.664	155.4	219.8	249.69	249.72	183.3	0.280	CT	249.6541	0.00	0.06	

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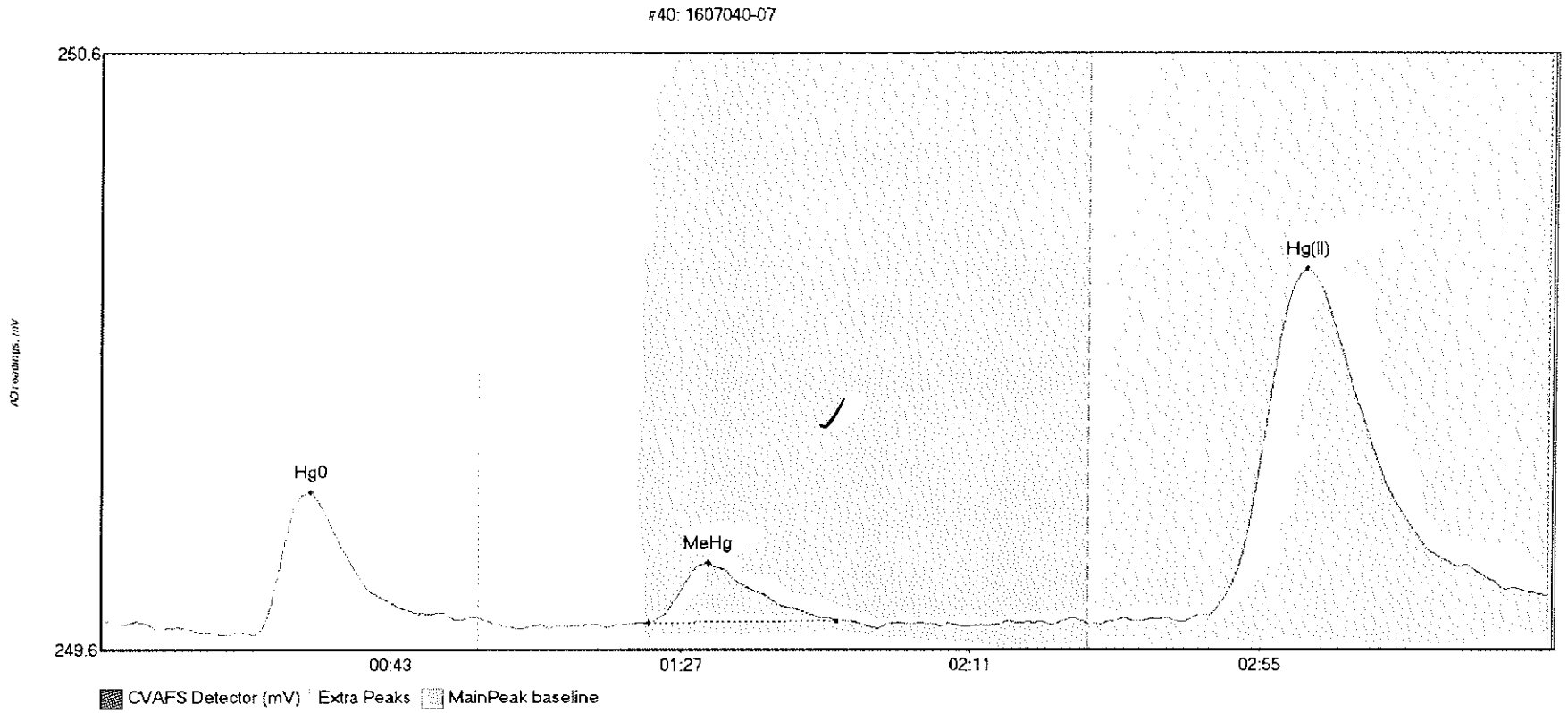
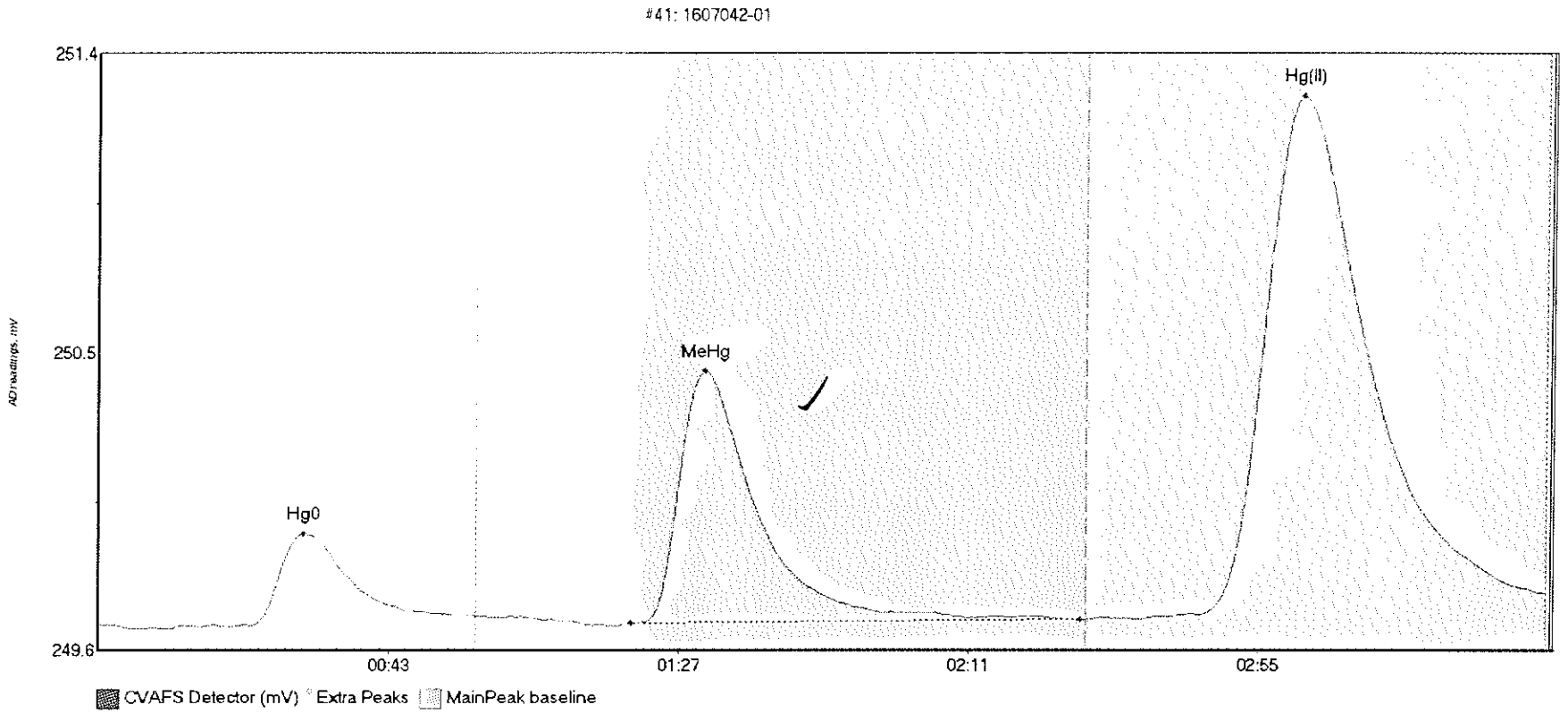
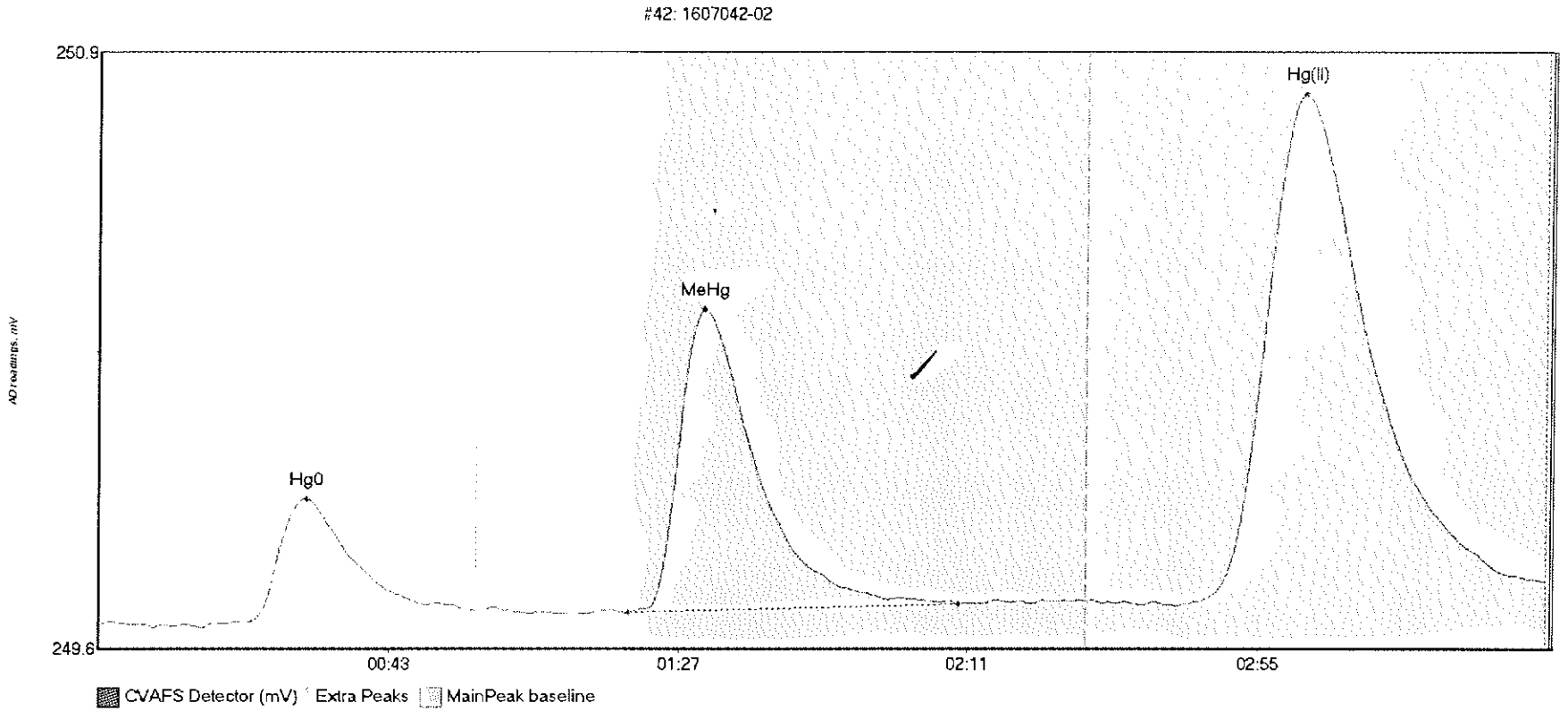


Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1607040-07 Hg0	26.859	23.0	53.9	249.67	249.70	31.8	0.239	OK	249.6917	0.00	0.04	
1607040-07 MeHg	12.617	83.2	111.8	249.69	249.69	92.1	0.099	OK	249.6917	0.00	0.04	
1607040-07 Hg(I	105.353	164.4	219.8	249.69	249.74	183.0	0.592	CT	249.6917	0.00	0.04	



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1607042-01 Hg0	33.273	23.0	57.5	249.67	249.70	31.0	0.284	CT	249.6742	0.00	0.10	
1607042-01 MeHg	108.142	80.8	149.1	249.68	249.69	92.0	0.785	OK	249.6742	0.00	0.10	
1607042-01 Hg(I	284.265	158.0	219.2	249.69	249.77	182.7	1.622	OK	249.6742	0.00	0.10	



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1607042-02 Hg0	31.045	22.2	57.1	249.68	249.71	31.6	0.255	OK	249.6789	0.00	0.09	
1607042-02 MeHg	83.354	80.4	130.7	249.70	249.72	91.9	0.623	OK	249.6789	0.00	0.09	
1607042-02 Hg(I	184.360	166.9	219.8	249.72	249.76	183.1	1.039	CT	249.6789	0.00	0.09	

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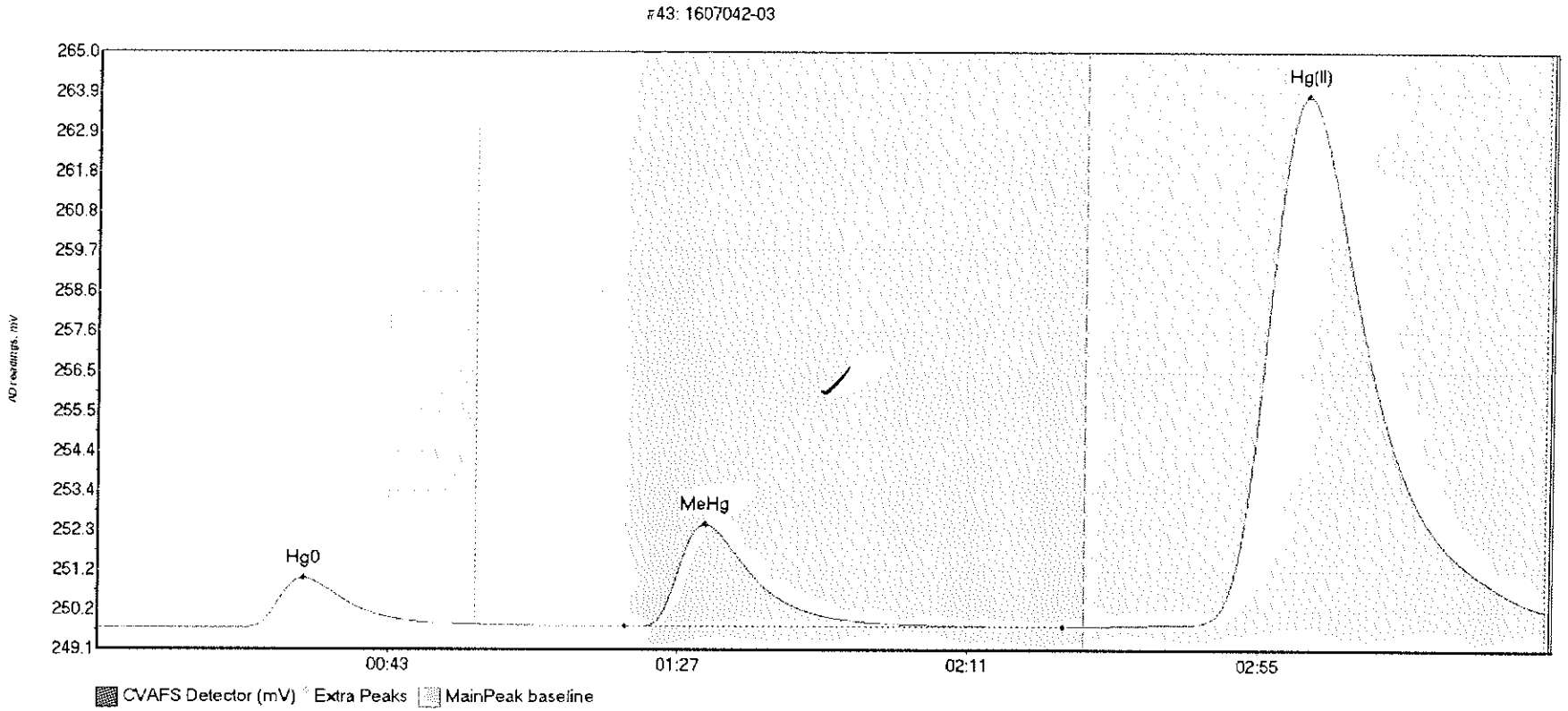
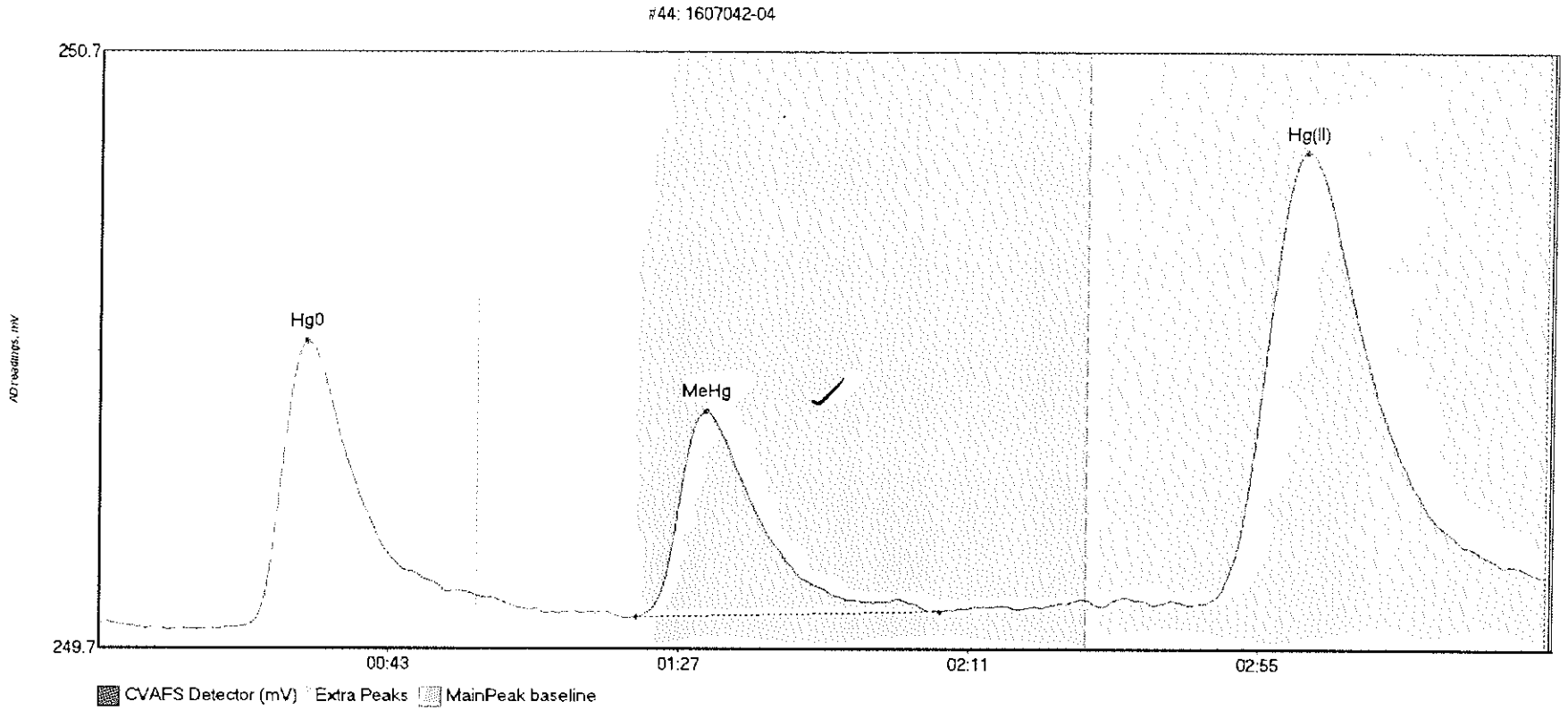
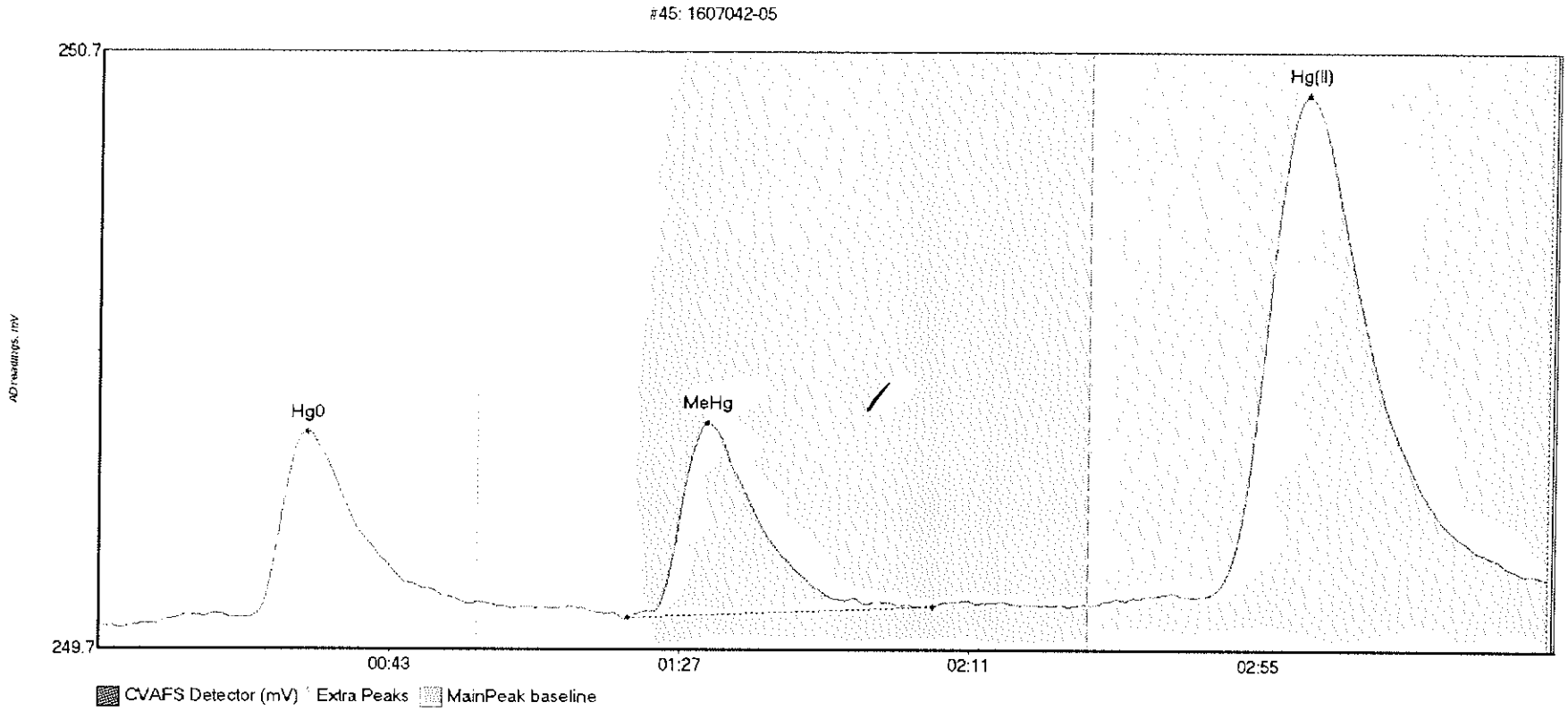


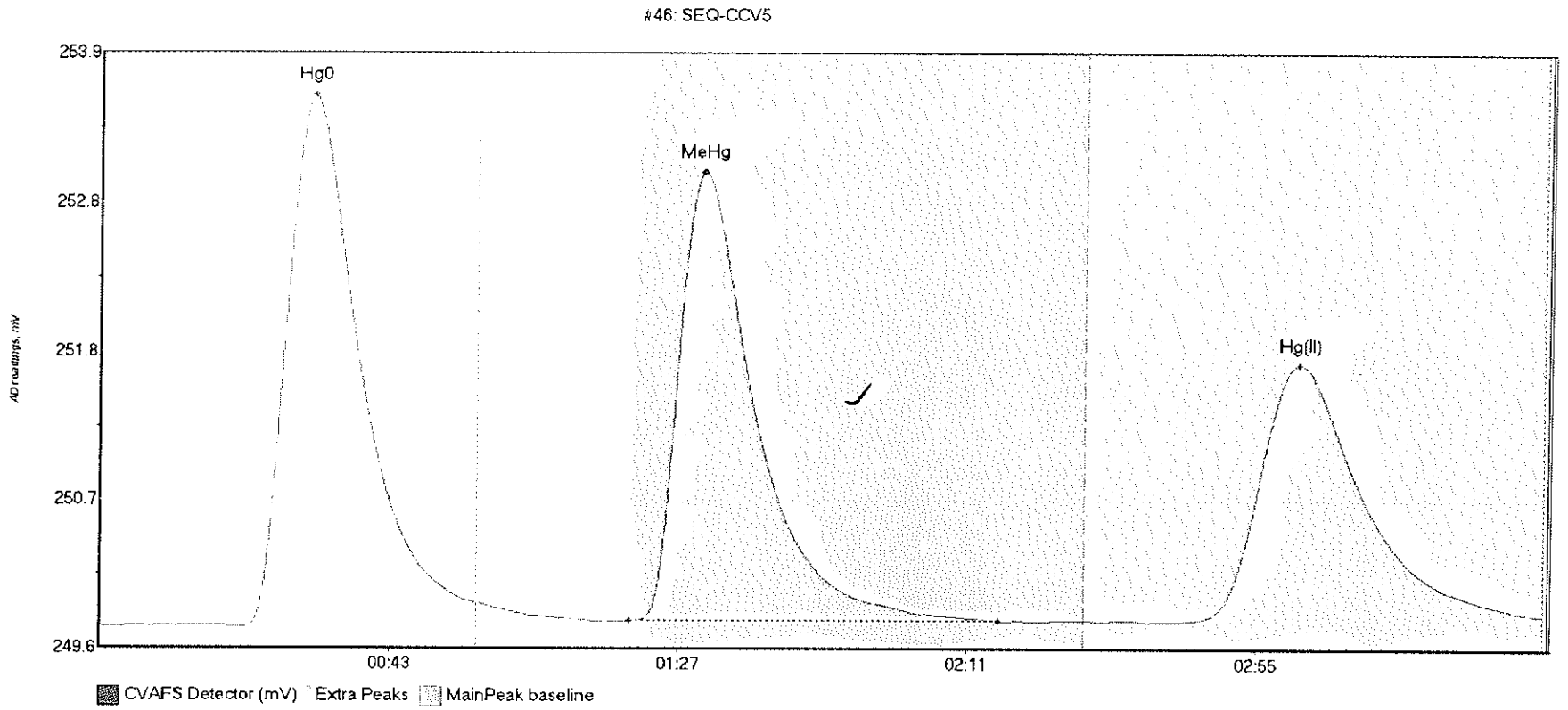
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1607042-03 Hg0	154.143	21.8	57.5	249.70	249.79	31.3	1.321	CT	249.7017	0.00	0.50	
1607042-03 MeHg	367.388	80.1	146.7	249.74	249.74	92.1	2.728	OK	249.7017	0.00	0.50	
1607042-03 Hg(I	2500.669	152.8	219.8	249.76	250.19	183.2	14.104	CT	249.7017	0.00	0.50	



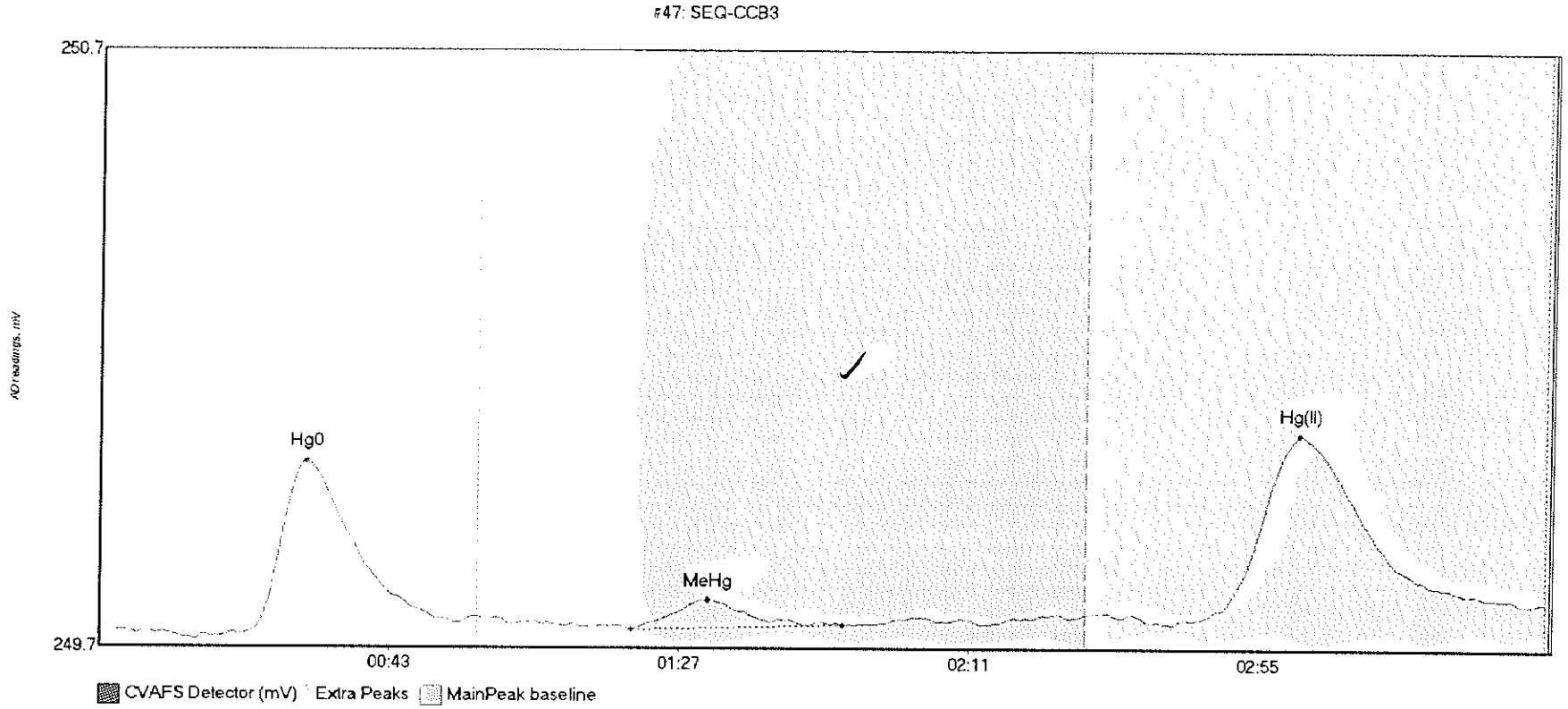
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1607042-04 Hg0	57.824	22.2	57.5	249.73	249.78	31.4	0.478	CT	249.7357	0.00	0.08	
1607042-04 MeHg	48.289	81.6	127.8	249.75	249.76	92.1	0.345	OK	249.7357	0.00	0.08	
1607042-04 Hg(I	134.635	167.6	219.6	249.77	249.81	183.0	0.758	OK	249.7357	0.00	0.08	



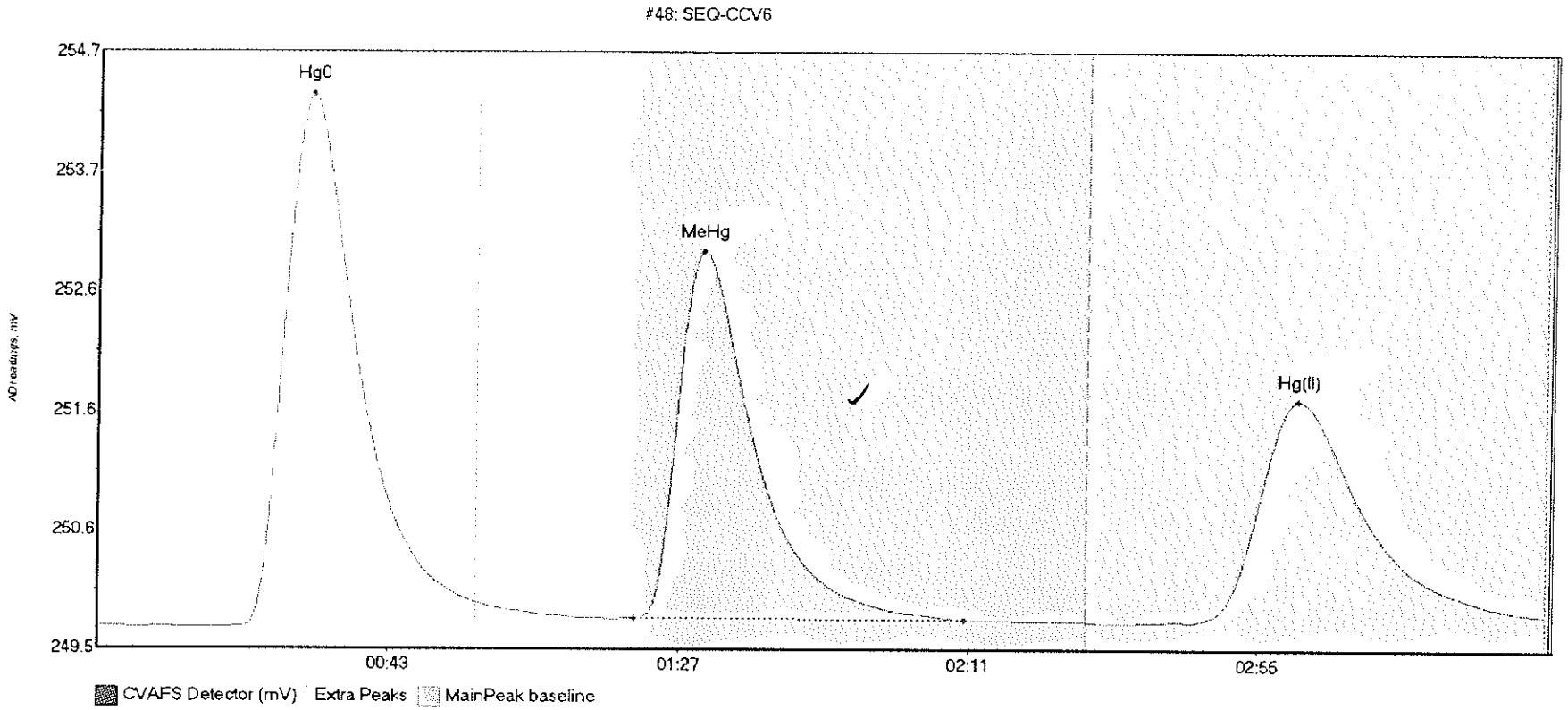
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1607042-05 Hg0	41.401	8.0	56.4	249.74	249.77	31.4	0.332	OK	249.7352	0.00	0.08	
1607042-05 MeHg	44.640	80.1	126.6	249.75	249.77	92.1	0.338	OK	249.7352	0.00	0.08	
1607042-05 Hg(I	154.078	151.0	219.8	249.77	249.82	183.2	0.879	CT	249.7352	0.00	0.08	



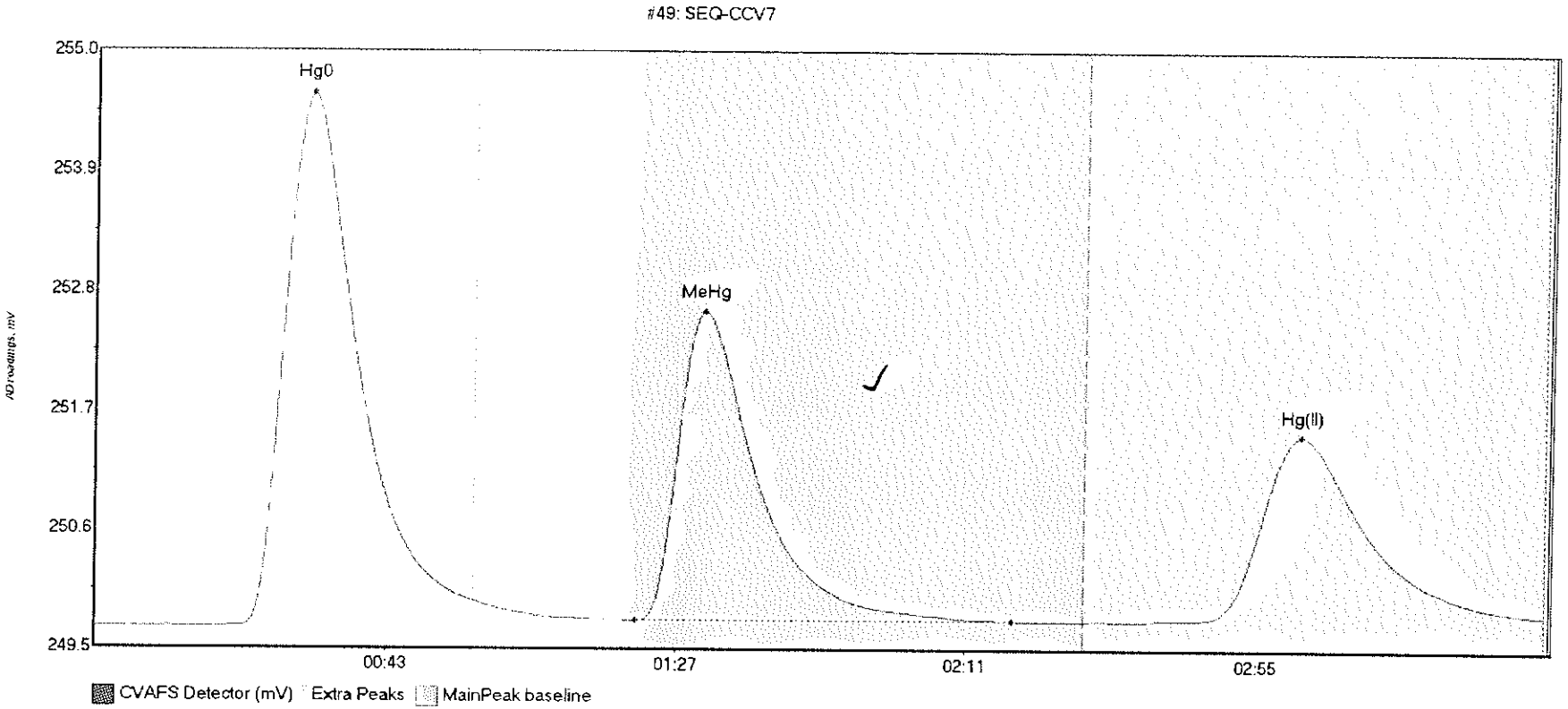
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CCV5 Hg0	472.939	21.4	57.5	249.74	249.92	32.4	3.866	CT	249.7508	0.00	0.09	
SEQ-CCV5 MeHg	439.766	80.7	136.9	249.79	249.79	91.8	3.267	OK	249.7508	0.00	0.09	
SEQ-CCV5 Hg(II)	330.743	166.5	219.8	249.80	249.84	182.5	1.866	CT	249.7508	0.00	0.09	



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CCB3 Hg0	35.032	21.8	54.5	249.72	249.74	31.4	0.290	OK	249.7265	0.00	0.05	
SEQ-CCB3 MeHg	6.244	80.8	112.9	249.73	249.73	92.5	0.051	OK	249.7265	0.00	0.05	
SEQ-CCB3 Hg(II)	53.261	167.0	217.6	249.75	249.77	182.2	0.310	OK	249.7265	0.00	0.05	



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CCV6 Hg0	572.244	20.3	57.5	249.73	249.94	32.2	4.587	CT	249.7368	0.00	0.10	
SEQ-CCV6 MeHg	428.586	81.3	131.4	249.80	249.79	91.6	3.170	OK	249.7368	0.00	0.10	
SEQ-CCV6 Hg(II)	341.940	165.9	219.8	249.78	249.84	182.1	1.914	CT	249.7368	0.00	0.10	



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CCV7 Hg0	594.150	19.1	57.5	249.74	249.98	32.6	4.860	CT	249.7439	0.00	0.13	
SEQ-CCV7 MeHg	385.007	82.0	139.2	249.81	249.81	92.2	2.822	OK	249.7439	0.00	0.13	
SEQ-CCV7 Hg(II)	299.297	158.0	219.8	249.81	249.87	182.8	1.702	CT	249.7439	0.00	0.13	

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

Analyst:	Blake Cassidy	**Sequence #:**	6G19009
Reviewer:	Ryan Nelson	**Dataset ID #:**	MHg27001-160713-1
Date:	7/27/16	**WO #:**	1606778, 1606810, 1607040, 1607042
Batch #(s):	F607177	**Client(s):**	NA

- **Select the correct preparation method.**

Analyte	Prep Method		Matrix
☐ MHg	FGS-013	MHg Distillation	Water
☐ MHg	FGS-010	KOH/MeOH Digest	Tissue
☐ MHg	FGS-045	MeCl Extraction	Sed/Soil
☐ DMHg	FGS-098 (None Accredited method)		ALL

Additional Comments:

	Analyst Initials: BC		Reviewer Initials: N
1. Compare Sample ID with Bench sheet/Sequence/Raw Data (Have all samples been imported?)	☑ YES	☐ NO	☑
2. Check for transcription errors from Excel spreadsheet (or Prep Bench sheet)/Raw data	☑ YES	☐ NO	☑
(a) Reviewer: 100% of peak heights checked	☑ YES	☐ NO	☑
(b) Are there peak height errors?	☐ YES	☑ NO	☑
(c) Error on a sample: Do peak heights, responses, & initial results match corrected data?	☐ YES	☐ NO	☑ N/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	☐ N/A ☑
(f) Check and compare masses (review prep bench sheet)	☑ YES	☐ NO	☐ N/A ☑
(g) Check and compare initial and final volumes	☑ YES	☐ NO	☐ N/A ☑
(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	☐ N/A ☑
(j) Is the sequence #, analyst, date, and instrument # on the QC page?	☑ YES	☐ NO	☑
(k) Is the analysis status correct? (analyzed/initial review/reviewed)	☑ YES	☐ NO	☑
(l) Original prep bench sheet added to data package?	☑ YES	☐ NO	☑
(m) Benchsheet prep date MUST match actual prep date (check if re-shot vs re-extract)	☑ YES	☐ NO	☑
3. High QA? WO#(s)/Client(s):	☐ YES	☑ NO	☑
4. Client specific QC? (if Yes, refer to Project Notes/LIMS)	☐ YES	☑ NO	☑
(a) Have the QC requirements been met for all WO#s?	☑ YES	☐ NO	☑
5. 20 or fewer samples in batch?	☑ YES	☐ NO	☑
(a) 3 PBs, 1 LCS/LCSD (or BS/BSD), 2 MS/MSD/MD per batch?	☑ YES	☐ NO	☑
(b) 1 CCV and 1 CCB every 10 analytical runs?	☑ YES	☐ NO	☑
QA/QC Data Checked			
6. The calibration curve included a minimum of 5 Standards	☑ PASS	☐ FAIL	☐ N/A ☑
Comments:			
7. 1st Calibration Standard % Recoveries (65-135%)	☑ PASS	☐ FAIL	☐ N/A ☑
Comments:			
8. RSD CF (≤ 15%)	☑ PASS	☐ FAIL	☑
Comments:			

Peer Review Check List for MHg for CV-GC-AFS (FGS-070) 2013 Rev 4 (08/22/2013)

Analyst:	Blake Cassidy	**Sequence #:**	6G19009
Reviewer:	Ryan Nelson	**Dataset ID #:**	MHg27001-160713-1
Date:	7/27/2016	**WO #:**	1606778, 1606810, 1607040, 1607042
Batch #(s):	F607177	**Client(s):**	NA

	Analyst Initials: BC			Reviewer Initials:
9. ICV % Recoveries 67-133%	☑ PASS	☐ FAIL		☑
Comments:				
10. CCV % Recoveries 67-133%	☑ PASS	☐ FAIL		☑
Comments:				
11. Are the absolute value of the ICB and CCBs < PQL?	☑ PASS	☐ FAIL		☑
Comments:				
12. LCS/LCSD/CRM/BS/BSD % Recoveries (70-130%)	☑ PASS	☐ FAIL		☑
Comments:				
13. LCS/LCSD or BS/BSD RPD (< 25%)	☑ PASS	☐ FAIL		☑
Comments:				
14. Water: Average of Preparation Blanks < 0.045 ng/L and standard devaition of 0.015 ng/L?	☑ PASS	☐ FAIL	☐ N/A	☑
Comments:				
15. Sediment/Tissue: Individually, are the Preparation Blanks < PQL for the matrix?	☐ PASS	☐ FAIL	☑ N/A	☑
Comments:	☐ PASS	☐ FAIL		☑
16. Have Total Solids been applied? (If NO, please ensure that they are done or nearly done)	☐ YES	☐ NO	☑ N/A	☑
17. Is the correct 'Source' designated for MD/MS/MSD?	☑ YES	☐ NO		☑
18. For digested preps: was there a spike witness signature & date on the prep bench sheet?	☑ YES	☐ NO	☐ N/A	☑
19. MD RPD/MT RSD(< 35%)	☑ PASS	☐ FAIL		☑
Comments:				
20. Is there one set of MS/MSD per every 10 samples?	☑ PASS	☐ FAIL		☑
Comments:				
21. MS/MSD RPD(< 35%)	☑ PASS	☐ FAIL		☑
Comments:				
22. MS (AS) % Recoveries (65-130%)	☑ PASS	☑ FAIL		☑
Comments: ***QM-02***				
23. MSD (ASD) % Recoveries (65-130%)	☑ PASS	☑ FAIL		☑
Comments: ***QM-02***				
24. Spiked 1-5X ambient or 1-5X PQL (whichever is higher) (from EPA 1630)	☑ YES	☐ NO		☑
25. Are all samples within instrument calibration range (or at maximum aliquot size)?	☐ YES	☐ NO		☑
Comments:				
26. For instrumental dilutions, is the dilution factor in excel correct?	☐ PASS	☐ NO	☑ N/A	☑
Is the sample volume, diluents, and final volume of the dilution noted on benchsheet?	☐ PASS	☐ NO	☑ N/A	☑
27. Dissolved < Total metals (if applicable)	☐ PASS	☐ NO	☑ N/A	☑
Comments:				
28. Effluent < Influent metals (visually confirm if needed)	☐ PASS	☐ NO	☑ N/A	☑
Comments:				

Peer Review Check List for MHg for CV-GC-AFS (FGS-070) 2013 Rev 4 (08/22/2013)

Analyst:	Blake Cassidy	**Sequence #:**	6G19009
Reviewer:	Ryan Nelson	**Dataset ID #:**	MHg27001-160713-1
Date:	7/27/2016	**WO #:**	1606778, 1606810, 1607040, 1607042
Batch #(s):	F607177	**Client(s):**	NA

	Analyst Initials: BC		Reviewer Initials: AV	
29. Are re-runs noted with reason?	☑ YES	☐ NO	☐ N/A	☑
Comments:				
30. For failing QC (CCV, CCB, PB, BS/BSD, CAL):	☑ YES	☐ NO	☐ N/A	☑
Was a bubbler and trap test run before the analytical run continued?				
Comments: ***NA***				
31. Do re-run results compare to initial analysis (< 35% RPD)?	☑ YES	☐ NO	☐ N/A	☑
Comments:				
32. Are qualifiers consistent with the data review flowcharts?	☑ YES	☐ NO	☐ N/A	☑
Comments: ***QM-02***				
33. Have non-reportable samples been imported into LIMS and clicked to non-reportable?	☐ YES	☐ NO	☑ N/A	☑
Comments:				
34. Have re-extracts been created for non-reportable samples?	☐ YES	☐ NO	☑ N/A	☑
35. Narrations in MMO box in LIMS?				
Comments:				
36. Are there any HIGH QA projects within the data?	☐ YES	☑ NO		
If so, place dataset to the QA office.				
37. Does the data set need scanning?	☑ YES		☐ N/A	☑
Files located at: \\Cuprum\gen_admin\Quality Assurance\Training Master\DOCs				
38. Date of analyst IDOC/CDOC: 1/12/2016 IDOC/CDOC within last 12 months?	☑ YES	☐ NO		☑
39. Date of analyst's SOP reading: 6/8/2016 Current SOP revision?	☑ YES	☐ NO		☑
40. Date of LOD: ***6/16/2016*** LOD within last 3 months (within 12 months for MDN)?	☑ YES	☐ NO	☐ N/A	☑
41. Date of LOQ: ***6/16/2016*** LOQ within last 3 months (within 12 months for MDN)?	☑ YES	☐ NO	☐ N/A	☑
42. If MDN samples, date of last MDL study:				
43. MDL study within last 12 months?	☐ YES	☐ NO	☑ N/A	☐
Data can not be reported without a current IDOC/CDOC, LOD or LOQ.				
Additional Comments:	☐ YES	☑ NO		☑

MMHg27001-160720-1 WATERS

eurofins

Frontier Global Sciences

Analysis Datasheet for Methyl Mercury in Waters

Date of Analysis: July 20, 2016
Instrument #: Hg2700-1
LIMS Sequence #: 6G21004

Analyst: RN
Units ng/L

Calibration Statistics:

LabNumber	n	True Val	Area	Uncorrected Response Factor	Corrected Peak Height	Corrected Response Factor	% Recovery
SEQ-CAL1	1	0.05 ng/L	33.02 units	660.34	31.75 units	634.99	97.2 %Rec
SEQ-CAL2	1	0.20 ng/L	148.89 units	744.46	147.62 units	738.12	113.0 %Rec
SEQ-CAL3	1	1.00 ng/L	641.77 units	641.77	640.51 units	640.51	98.1 %Rec
SEQ-CAL4	1	2.00 ng/L	1400.09 units	700.05	1398.83 units	699.41	107.1 %Rec
SEQ-CAL5	1	4.00 ng/L	2213.48 units	553.37	2212.21 units	553.05	84.7 %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
653.22	+/- 70.48	10.8% RSD	660.00	**0.8046**

MDN Only	
SEQ-CAL1	
SEQ-CAL2	
SEQ-CAL3	
SEQ-CAL4	
SEQ-CAL5	
SEQ-CAL6	NA
SEQ-CAL7	NA
SEQ-CAL8	NA
SEQ-CAL9	NA
SEQ-ICV/CCV	
Acetate Buffer	
Ethylating Agent	

Blanks:

LabNumber	n	Mean	Std Dev	Mean (ng/L)	Std Dev (ng/L)
SEQ-IBL	1	1.27 units		0.00 ng/L	#VALUE!

Preparation Blanks

Sample Type	Batch ID	n	Mean	Std Dev
BLK	1	3	0.021 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	

QUALITY ASSURANCE
PEER - REVIEWED
INITIALS: 7/22/16

Instrument	Analyst	Sample Type	LabNumber	Dilution	Analyzed	FileID	Run End	Uncorrected Response	Batch ID	No PB Correction?	RESP	InitialResult	FinalResult	InitialUnits	Comments
Hg2700-1	RN	CAL	SEQ-IBL1	1	7/20/16 4:13	13565-1.RAW	4:13	1.27			0.0	0.000	0.000	ng/L	
Hg2700-1	RN	CAL	SEQ-CAL1	1	7/20/16 4:24	13566-1.RAW	#######	33.02			31.7	0.049	0.049	ng/L	
Hg2700-1	RN	CAL	SEQ-CAL2	1	7/20/16 4:34	13567-1.RAW	#######	148.89			147.6	0.226	0.226	ng/L	
Hg2700-1	RN	CAL	SEQ-CAL3	1	7/20/16 4:45	13568-1.RAW	#######	641.77			640.5	0.981	0.981	ng/L	
Hg2700-1	RN	CAL	SEQ-CAL4	1	7/20/16 4:55	13569-1.RAW	#######	1400.09			1398.8	2.141	2.141	ng/L	
Hg2700-1	RN	CAL	SEQ-CAL5	1	7/20/16 5:06	13570-1.RAW	#######	2213.48			2212.2	3.387	3.387	ng/L	
Hg2700-1	RN	CAL	SEQ-ICV1	1	7/20/16 5:16	13571-1.RAW	#######	379.66			378.4	0.579	0.579	ng/L	
Hg2700-1	RN	CAL	SEQ-ICB1	1	7/20/16 5:27	13572-1.RAW	#######	8.69			7.4	0.011	0.011	ng/L	
Hg2700-1	RN	BLK	F607309-BLK1	1.25	7/20/16 5:37	13573-1.RAW	#######	9.72	1		8.5	0.016	0.020	ng/L	
Hg2700-1	RN	BLK	F607309-BLK2	1.25	7/20/16 5:48	13574-1.RAW	#######	10.91	1		9.6	0.018	0.023	ng/L	
Hg2700-1	RN	BLK	F607309-BLK3	1.25	7/20/16 5:58	13575-1.RAW	#######	9.84	1		8.6	0.016	0.020	ng/L	
Hg2700-1	RN	SAM	F607309-BS1	1.25	7/20/16 6:09	13576-1.RAW	#######	513.76	1		512.5	0.958	1.198	ng/L	
Hg2700-1	RN	SAM	F607309-BSD1	1.25	7/20/16 6:19	13577-1.RAW	#######	563.97	1		562.7	1.054	1.317	ng/L	
Hg2700-1	RN	SAM	F607309-DUP1	1.25	7/20/16 6:30	13578-1.RAW	#######	48.60	1		47.3	0.073	0.091	ng/L	
Hg2700-1	RN	SAM	F607309-MS1	1.25	7/20/16 6:40	13579-1.RAW	#######	572.08	1		570.8	1.069	1.336	ng/L	
Hg2700-1	RN	SAM	F607309-MSD1	1.25	7/20/16 6:51	13580-1.RAW	#######	573.06	1		571.8	1.071	1.339	ng/L	
Hg2700-1	RN	SAM	F607309-MS2	1.25	7/20/16 7:02	13581-1.RAW	#######	589.64	1		588.4	1.103	1.378	ng/L	
Hg2700-1	RN	SAM	F607309-MSD2	1.25	7/20/16 7:12	13582-1.RAW	#######	573.78	1		572.5	1.072	1.340	ng/L	
Hg2700-1	RN	CAL	SEQ-CCV1	1	7/20/16 7:23	13583-1.RAW	#######	338.51			337.2	0.516	0.516	ng/L	
Hg2700-1	RN	CAL	SEQ-CCB1	1	7/20/16 7:33	13584-1.RAW	#######	11.75			10.5	0.016	0.016	ng/L	
Hg2700-1	RN	SAM	1607042-06	1.25	7/20/16 7:44	13585-1.RAW	#######	29.78	1		28.5	0.037	0.047	ng/L	
Hg2700-1	RN	SAM	1607042-07	1.25	7/20/16 7:54	13586-1.RAW	#######	37.36	1		36.1	0.052	0.065	ng/L	
Hg2700-1	RN	SAM	1607042-08	1.25	7/20/16 8:05	13587-1.RAW	#######	11.89	1		10.6	0.003	0.004	ng/L	
Hg2700-1	RN	SAM	1607042-09	1.25	7/20/16 8:15	13588-1.RAW	#######	33.61	1		32.3	0.045	0.056	ng/L	
Hg2700-1	RN	SAM	1607042-10	1.25	7/20/16 8:26	13589-1.RAW	#######	11.82	1		10.6	0.003	0.004	ng/L	
Hg2700-1	RN	SAM	1607042-11	1.25	7/20/16 8:36	13590-1.RAW	#######	43.71	1		42.4	0.064	0.080	ng/L	
Hg2700-1	RN	SAM	1607042-12	1.25	7/20/16 8:47	13591-1.RAW	#######	27.03	1		25.8	0.032	0.040	ng/L	
Hg2700-1	RN	SAM	1607042-13	1.25	7/20/16 8:57	13592-1.RAW	#######	31.08	1		29.8	0.040	0.050	ng/L	
Hg2700-1	RN	SAM	1607042-14	1.25	7/20/16 9:08	13593-1.RAW	#######	9.88	1		8.6	-0.001	-0.001	ng/L	
Hg2700-1	RN	SAM	1607042-15	1.25	7/20/16 9:18	13594-1.RAW	#######	40.08	1		38.8	0.057	0.071	ng/L	
Hg2700-1	RN	CAL	SEQ-CCV2	1	7/20/16 9:29	13595-1.RAW	#######	372.12			370.9	0.568	0.568	ng/L	
Hg2700-1	RN	CAL	SEQ-CCB2	1	7/20/16 9:39	13596-1.RAW	#######	2.06			0.8	0.001	0.001	ng/L	
Hg2700-1	RN	SAM	1607042-16	1.25	7/20/16 9:50	13597-1.RAW	#######	23.25	1		22.0	0.025	0.031	ng/L	
Hg2700-1	RN	SAM	1607042-21	1.25	7/20/16 10:00	13598-1.RAW	#######	3.11	1		1.8	-0.013	-0.017	ng/L	
Hg2700-1	RN	SAM	1607158-01	1.25	7/20/16 10:11	13599-1.RAW	#######	46.84	1		45.6	0.070	0.087	ng/L	
Hg2700-1	RN	SAM	1607158-02	1.25	7/20/16 10:21	13600-1.RAW	#######	45.79	1		44.5	0.068	0.085	ng/L	
Hg2700-1	RN	SAM	1607158-03	1.25	7/20/16 10:32	13601-1.RAW	#######	40.80	1		39.5	0.058	0.073	ng/L	
Hg2700-1	RN	SAM	1607158-04	1.25	7/20/16 10:42	13602-1.RAW	#######	36.90	1		35.6	0.051	0.064	ng/L	
Hg2700-1	RN	SAM	1607158-05	1.25	7/20/16 10:53	13603-1.RAW	#######	38.55	1		37.3	0.054	0.068	ng/L	
Hg2700-1	RN	SAM	1607158-06	1.25	7/20/16 11:03	13604-1.RAW	#######	10.37	1		9.1	0.000	0.000	ng/L	
Hg2700-1	RN	SAM	1607348-01	1.25	7/20/16 11:14	13605-1.RAW	#######	3.26	1		2.0	-0.013	-0.016	ng/L	
Hg2700-1	RN	SAM	1607382-01	1.25	7/20/16 11:24	13606-1.RAW	#######	37.13	1		35.9	0.051	0.064	ng/L	
Hg2700-1	RN	CAL	SEQ-CCV3	1	7/20/16 11:35	13607-1.RAW	#######	288.32			287.1	0.439	0.439	ng/L	
Hg2700-1	RN	CAL	SEQ-CCB3	1	7/20/16 11:45	13608-1.RAW	#######	4.15			2.9	0.004	0.004	ng/L	

MethylMercury	**Operat** RN/DM	**BlankS** 1.2672	**Calib Eqn:** Conc = (Area-1.267) / 653.218		**Run Date:** ######	**Blank SD:**	0		
EPA1630	**Worksl** MMHg2.	**CalibFa** 653.22	**Status:**	OK,1 Warnings	**Run Time:** 3:47:15	**Blank RSD**	0		
	Methoc 2010-01	**R:** 0.9921	**R²:**	0.984358142	**CalibAnal:** MeHg	**CF SD:**	70.48023453		
	Descri MMHg27001-160720-1					**CF RSD%**	10.78969259		

Sample/ID	Location	Rinse	Dilute	Blank	ConcHg0(p	ConcMeHg(ppt)	ConcHg2(p	ConcPrHg(	Rec%	QA	RawData	RunEnd	PeakHg0 (Ra	PeakMeHg (R	PeakHg2(Raw	PeakPrHg(Ra	Control (etf)	Flags	RunCount
Clean				0.00		0.00	0.00				13563-1.RAW	3:52:46	0.00	0.71	0.81	0.00	cleandry	OK	1
WS	A1			1.2672	0.0122191	0.00776611	0.0456052				13564-1.RAW	4:03:17	9.24891098	6.34015152	31.0573627	0	psample10	OK	1
SEQ-IBL1	A2		1	0	0.0155672	0.001939915	0.0614709				13565-1.RAW	4:13:47	10.1687973	1.2671875	40.1539299	0	psample10	OK	1
SEQ-CAL1	A3		1	1.2672	0.0317366	0.04860507	0.0515116		97.21		13566-1.RAW	4:24:18	21.9981235	33.0169034	34.9155303	0	psample10	OK	1
SEQ-CAL2	A4		1	1.2672	0.0339581	0.225996281	0.0639988		113.00		13567-1.RAW	4:34:49	23.4492188	148.892069	43.0723485	0	psample10	OK	1
SEQ-CAL3	A5		1	1.2672	0.3541656	0.980538687	0.0746283		96.05		13568-1.RAW	4:45:19	232.614631	641.772893	50.0157197	0	psample10	CT	1
SEQ-CAL4	A6		1	1.2672	0.5728938	2.141439164	0.087408		107.07		13569-1.RAW	4:55:50	375.491809	1400.0942	58.3636837	0	psample10	CT	1
SEQ-CAL5	A7		1	1.2672	1.8567159	3.386635682	0.1347951		84.67		13570-1.RAW	5:06:21	1214.10778	2213.47921	89.317803	0	psample10	CT	1
SEQ-ICV1	A8		1	1.2672	2.9902793	0.579272104	0.3077015		116.00		13571-1.RAW	5:16:51	1954.57203	379.658262	202.2534	0	psample10	CT	1
SEQ-ICB1	A9		1	1.2672	0.0496208	0.011367017	0.0213483		0.00		13572-1.RAW	5:27:23	33.6803741	8.69232955	15.2122869	0	psample10	OK	1
F607309-BLK1	A10		1.25	1.2672	0.0429738	0.016170168	0.0815876				13573-1.RAW	5:37:54	23.7242072	9.71730587	43.9027709	0	psample10	CT	1
F607309-BLK2	A11		1.25	1.2672	0.0296826	0.018457385	0.0723175				13574-1.RAW	5:48:25	16.7785748	10.9125473	39.0584754	0	psample10	OK	1
F607309-BLK3	A12		1.25	1.2672	0.0288049	0.01640443	0.0735859				13575-1.RAW	5:58:55	16.3198864	9.83972538	39.7213305	0	psample10	OK	1
F607309-BS1	A13		1.25	1.2672	0.0893658	0.980709172	0.2557677				13576-1.RAW	6:09:26	47.9674716	513.760843	134.924882	0	psample10	CT	1
F607309-BSD1	A14		1.25	1.2672	0.0441878	1.076780492	0.1148296				13577-1.RAW	6:19:57	24.3586322	563.96527	61.2742256	0	psample10	CT	1
F607309-DUP1	A15		1.25	1.2672	0.0500684	0.090568399	0.1886564				13578-1.RAW	6:30:28	27.4316761	48.595928	99.854202	0	psample10	CT	1
F607309-MS1	A16		1.25	1.2672	0.1535574	1.092312702	0.1413377		109.23		13579-1.RAW	6:40:58	81.512358	572.082008	75.1266691	0	psample10	CT	1
F607309-MSD1	A17		1.25	1.2672	0.1247422	1.094186076	0.1540121				13580-1.RAW	6:51:29	66.4542614	573.060985	81.7500081	0	psample10	CT	1
F607309-MS2	A18		1.25	1.2672	0.084206	1.12591473	0.1227852		56.30		13581-1.RAW	7:02:00	45.2710748	589.641572	65.4316288	0	psample10	OK	1
F607309-MSD2	A19		1.25	1.2672	0.0973671	1.095552825	0.1101447				13582-1.RAW	7:12:30	52.1487689	573.775213	58.8259943	0	psample10	CT	1
SEQ-CCV1	A20		1	1.2672	1.4418397	0.516277359	0.3630967		103.38		13583-1.RAW	7:23:01	943.103075	338.508949	238.448578	0	psample10	CT	1
SEQ-CCB1	A21		1	1.2672	0.030041	0.016049544	0.0635456		0.00		13584-1.RAW	7:33:32	20.8905303	11.7510417	42.7763494	0	psample10	OK	1
1607042-06	B1		1.25	1.2672	0.0294194	0.05455448	0.1010587				13585-1.RAW	7:44:03	16.6410038	29.7759706	54.077893	0	psample10	CT	1
1607042-07	B2		1.25	1.2672	0.0282125	0.069061708	0.1687144				13586-1.RAW	7:54:33	16.010322	37.3570786	89.4330256	0	psample10	OK	1
1607042-08	B3		1.25	1.2672	0.0232177	0.020325141	0.077384				13587-1.RAW	8:05:04	13.4001894	11.888589	41.7061069	0	psample10	OK	1
1607042-09	B4		1.25	1.2672	0.0233833	0.061895846	0.1076125				13588-1.RAW	8:15:35	13.4866951	33.6123816	57.5027442	0	psample10	CT	1
1607042-10	B5		1.25	1.2672	0.0232785	0.020192358	0.1079167				13589-1.RAW	8:26:06	13.4319602	11.8191998	57.6616951	0	psample10	OK	1
1607042-11	B6		1.25	1.2672	0.0243856	0.081216663	0.1849684				13590-1.RAW	8:36:36	14.0104877	43.7089489	97.9269886	0	psample10	OK	1
1607042-12	B7		1.25	1.2672	0.0196979	0.049302085	0.1066396				13591-1.RAW	8:47:07	11.5607955	27.0312027	56.9943182	0	psample10	OK	1
1607042-13	B8		1.25	1.2672	0.0280628	0.057052266	0.1297092				13592-1.RAW	8:57:38	15.9321023	31.08125	69.0499053	0	psample10	OK	1
1607042-14	B9		1.25	1.2672	0.0162749	0.016484164	0.051123				13593-1.RAW	9:08:09	9.77201705	9.88139705	27.9827888	0	psample10	OK	1
1607042-15	B10		1.25	1.2672	0.0213049	0.07427478	0.0968365				13594-1.RAW	9:18:39	12.4005682	40.0812973	51.8714962	0	psample10	CT	1
SEQ-CCV2	B11		1	1.2672	1.1590888	0.567734929	0.4493264		113.69		13595-1.RAW	9:29:10	758.405076	372.12197	294.775374	0	psample10	CT	1
SEQ-CCB2	B12		1	1.2672	0.0252418	0.001216624	0.064574		0.00		13596-1.RAW	9:39:41	17.7556055	2.06190814	43.4480824	0	psample10	CT	1
1607042-16	B13		1.25	1.2672	0.0234928	0.042068858	0.1210005				13597-1.RAW	9:50:12	13.5439394	23.2513021	64.498961	0	psample10	CT	1
1607042-21	B14		1.25	1.2672	0.7358509	0.003524535	3.2309457				13598-1.RAW	10:00:42	385.804133	3.10901989	1689.6772	0	psample10	CT	1
1607158-01	B15		1.25	1.2672	0.0511976	0.087206185	0.3037928				13599-1.RAW	10:11:13	28.021733	46.8389205	160.02156	0	psample10	CT	1
1607158-02	B16		1.25	1.2672	0.0535165	0.085194546	0.2523821				13600-1.RAW	10:21:44	29.2335227	45.7876894	133.155633	0	psample10	CT	1
1607158-03	B17		1.25	1.2672	0.0427876	0.075654803	0.317172				13601-1.RAW	10:32:14	23.6268939	40.8024621	167.013227	0	psample10	CT	1
1607158-04	B18		1.25	1.2672	0.0471592	0.068182738	0.2404868				13602-1.RAW	10:42:45	25.9113636	36.8977509	126.939489	0	psample10	OK	1
1607158-05	B19		1.25	1.2672	0.0575671	0.071352459	0.2506994				13603-1.RAW	10:53:16	31.3502799	38.5541667	132.276326	0	psample10	OK	1
1607158-06	B20		1.25	1.2672	0.0221093	0.017411065	0.1015237				13604-1.RAW	11:03:47	12.820928	10.365767	54.3209044	0	psample10	CT	1
1607348-01	B21		1.25	1.2672	0.0165921	0.003809628	0.1640869				13605-1.RAW	11:14:17	9.93778409	3.25800189	87.0148201	0	psample10	OK	1
1607382-01	C1		1.25	1.2672	0.0177819	0.068621226	0.1578201				13606-1.RAW	11:24:48	10.5595644	37.1268939	83.7399621	0	psample10	OK	1
SEQ-CCV3	C2		1	1.2672	1.9288632	0.439448753	0.3774886		88.00		13607-1.RAW	11:35:19	1261.2357	288.323106	247.849599	0	psample10	CT	1
SEQ-CCB3	C3		1	1.2672	0.0252104	0.004409984	0.0686009		0.00		15608-1.RAW	11:45:50	17.7350852	4.14786932	46.0785511	0	psample10	OK	1

MethylMercury	Operat	RN/DM	BlankS	1.2672	Calib Eqn:	Conc = (Area-1.267) / 653.218	Run Date:	######	Blank SD:	0
EPA1630	Workst	MMHg2	CalibFa	653.22	Status:	OK.1 Warnings	Run Time:	3:47:15	Blank RSD	0
	Metho	2010-01	R:	0.9921	R²:	0.984358142	CalibAnal	Metq	CF SD:	70.48023453
	Descrip	MMHg27001-160720-1							CF RSD%	10.76969259

Sample/ID	Locator	Rinse	Dilute	Blank	ConcHg0(pr	ConcMeHg(opt)	ConcHg2(pr	ConcPrHg(p	Rec%	QA	RawData	RunEnd	PeakHg0 (Ra	PeakMeHg (R	PeakHg2(Raw	PeakPrHg(Ra	Control (etf)	Flags	RunCount
Clean				0.00			0.00	0.00			13563-1.RAW		0.00	0.71	0.81	0.00	cleandry	OK	1
WS	A1			1.2672	0.0122191	0.00776611	0.0456052				13564-1.RAW		9.24891098	6.34015152	31.0573627	0	psample10	OK	1
SEQ-IBL1	A2		1	0	0.0155672	0.001939915	0.0624072				13565-1.RAW		10.1687973	1.2671875	40.7655303	0	psample10	OK	1
SEQ-CAL1	A3		1	1.2672	0.0317366	0.04860507	0.055791		97.21		13566-1.RAW		21.9981235	33.0169034	37.7108902	0	psample10	OK	1
SEQ-CAL2	A4		1	1.2672	0.0339581	0.225996281	0.0639968		113.00		13567-1.RAW		23.4492188	148.892069	43.0723485	0	psample10	OK	1
SEQ-CAL3	A5		1	1.2672	0.3541158	0.980538687	0.0746283		98.05		13568-1.RAW		232.582086	641.772893	50.0157197	0	psample10	CT	1
SEQ-CAL4	A6		1	1.2672	0.5728938	2.1414439164	0.087408		107.07		13569-1.RAW		375.491809	1400.0942	58.3636837	0	psample10	CT	1
SEQ-CAL5	A7		1	1.2672	1.8572464	3.386635682	0.1347951		84.67		13570-1.RAW		1214.45431	2213.47921	89.317803	0	psample10	CT	1
SEQ-ICV1	A8		1	1.2672	2.9902793	0.579272104	0.3077015		116.00		13571-1.RAW		1954.57203	379.658262	202.2634	0	psample10	CT	1
SEQ-ICB1	A9		1	1.2672	0.0496208	0.011348895	0.0214932		0.00		13572-1.RAW		33.6803741	8.68049242	15.3069129	0	psample10	OK	1
F607309-BLK1	A10		1.25	1.2672	0.0429738	0.036170168	0.0815876				13573-1.RAW		23.7242072	9.71730587	43.9027709	0	psample10	CT	1
F607309-BLK2	A11		1.25	1.2672	0.0296826	0.018457385	0.068124				13574-1.RAW		16.7785748	10.9125473	36.8670455	0	psample10	OK	1
F607309-BLK3	A12		1.25	1.2672	0.0288049	0.016532548	0.0735859				13575-1.RAW		16.3198864	9.90667614	39.7213305	0	psample10	OK	1
F607309-BS1	A13		1.25	1.2672	0.0893658	0.980709172	0.2557677				13576-1.RAW		47.9674716	513.760843	134.924882	0	psample10	CT	1
F607309-BSD1	A14		1.25	1.2672	0.0442489	1.076780492	0.1148296				13577-1.RAW		24.3905303	563.96527	61.2742256	0	psample10	CT	1
F607309-DUP1	A15		1.25	1.2672	0.0500684	0.090568399	0.1886564				13578-1.RAW		27.4316761	48.595928	99.854202	0	psample10	CT	1
F607309-MS1	A16		1.25	1.2672	0.1535574	1.092312702	0.1413377		109.23		13579-1.RAW		81.512358	572.082008	75.1266691	0	psample10	CT	1
F607309-MSD1	A17		1.25	1.2672	0.1247422	1.094186076	0.1540121				13580-1.RAW		66.4542614	573.060985	81.7500081	0	psample10	CT	1
F607309-MS2	A18		1.25	1.2672	0.0842509	1.12591473	0.1227852		56.30		13581-1.RAW		45.2945549	589.641572	65.4316288	0	psample10	OK	1
F607309-MSD2	A19		1.25	1.2672	0.0973671	1.095323546	0.1101447				13582-1.RAW		52.1487689	573.655398	58.8259943	0	psample10	CT	1
SEQ-CCV1	A20		1	1.2672	1.4418397	0.516277359	0.3630967		103.38		13583-1.RAW		943.103075	338.508949	238.448578	0	psample10	CT	1
SEQ-CCB1	A21		1	1.2672	0.030041	0.016042114	0.0635456		0.00		13584-1.RAW		20.8905303	11.7461884	42.7763494	0	psample10	OK	1
1607042-06	B1		1.25	1.2672	0.0294194	0.05455448	0.1010587				13585-1.RAW		16.6410038	29.7759706	54.077893	0	psample10	CT	1
1607042-07	B2		1.25	1.2672	0.0281868	0.069061708	0.1687144				13586-1.RAW		15.996875	37.3570786	89.4330256	0	psample10	OK	1
1607042-08	B3		1.25	1.2672	0.0232153	0.021909571	0.0746883				13587-1.RAW		13.398911	12.716572	40.2973748	0	psample10	OK	1
1607042-09	B4		1.25	1.2672	0.0233833	0.061895846	0.1081684				13588-1.RAW		13.4866951	33.6123816	57.7932204	0	psample10	CT	1
1607042-10	B5		1.25	1.2672	0.0203398	0.020192358	0.1079167				13589-1.RAW		11.8962595	11.8191998	57.6616951	0	psample10	OK	1
1607042-11	B6		1.25	1.2672	0.0243856	0.081216663	0.1849684				13590-1.RAW		14.0104877	43.7089489	97.9269886	0	psample10	OK	1
1607042-12	B7		1.25	1.2672	0.0196975	0.049302085	0.1066396				13591-1.RAW		11.5607955	27.0312027	56.9943182	0	psample10	OK	1
1607042-13	B8		1.25	1.2672	0.0280628	0.057052266	0.1296601				13592-1.RAW		15.9321023	31.08125	69.0242484	0	psample10	OK	1
1607042-14	B9		1.25	1.2672	0.0162749	0.016484164	0.051123				13593-1.RAW		9.77701705	9.88139205	27.9827888	0	psample10	OK	1
1607042-15	B10		1.25	1.2672	0.0213049	0.07427478	0.0968365				13594-1.RAW		12.4005682	40.0812973	51.8714962	0	psample10	CT	1
SEQ-CCV2	B11		1	1.2672	1.1590888	0.567734929	0.4493583		113.69		13595-1.RAW		758.405076	372.12197	294.796207	0	psample10	CT	1
SEQ-CCB2	B12		1	1.2672	0.0252418	0.001216624	0.064574		0.00		13596-1.RAW		17.7556055	2.06190814	43.4480824	0	psample10	CT	1
1607042-16	B13		1.25	1.2672	0.0234928	0.042068858	0.1210186				13597-1.RAW		13.5479394	23.2513021	64.5084375	0	psample10	CT	1
1607042-21	B14		1.25	1.2672	0.7362089	0.003524535	3.2309457				13598-1.RAW		385.991241	3.10901989	1689.6772	0	psample10	CT	1
1607158-01	B15		1.25	1.2672	0.0511976	0.087206185	0.3037928				13599-1.RAW		28.021733	46.8389205	160.02156	0	psample10	CT	1
1607158-02	B16		1.25	1.2672	0.0535165	0.085194546	0.2523821				13600-1.RAW		29.2335227	45.7876894	133.155633	0	psample10	CT	1
1607158-03	B17		1.25	1.2672	0.0427876	0.075654803	0.317172				13601-1.RAW		23.6268939	40.8024621	167.013227	0	psample10	CT	1
1607158-04	B18		1.25	1.2672	0.0471592	0.068182738	0.2404868				13602-1.RAW		25.9113636	36.8977509	126.939489	0	psample10	OK	1
1607158-05	B19		1.25	1.2672	0.0575671	0.071352459	0.2506438				13603-1.RAW		31.3502799	38.5541667	132.247277	0	psample10	OK	1
1607158-06	B20		1.25	1.2672	0.0220925	0.017411065	0.1015237				13604-1.RAW		12.8121686	10.365767	54.3209044	0	psample10	CT	1
1607348-01	B21		1.25	1.2672	0.0165921	0.003809628	0.1640869				13605-1.RAW		9.93778409	3.25800189	87.0148201	0	psample10	OK	1
1607382-01	C1		1.25	1.2672	0.0177819	0.068621226	0.1578201				13606-1.RAW		10.5595644	37.1268939	83.7399621	0	psample10	OK	1
SEQ-CCV3	C2		1	1.2672	1.9288832	0.439448391	0.3774886		88.00		13607-1.RAW		1261.2357	288.322869	247.849599	0	psample10	CT	1
SEQ-CCB3	C3		1	1.2672	0.0252194	0.004409984	0.0686009		0.00		13608-1.RAW	11:45:50	17.7409801	4.14786932	46.0785511	0	psample10	OK	1

PREPARATION BENCH SHEET

F607309

Eurofins Frontier Global Sciences, Inc.

Matrix: Water **Prepared using: Hg Aquatic/Solids - EFGS-013 Methyl Hg Distillation for Water** **Prepared: 7/18/2016**

Lab Number	Sample ID and Source Sample	Initial (mL)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F607309-BLK1	Blank	45	40					
F607309-BLK2	Blank	45	40					
F607309-BLK3	Blank	45	40					
F607309-BS1	Blank Spike	45	40	1602184	45			
F607309-BSD1	Blank Spike	45	40	1602184	45			
F607309-DUP1	Duplicate [1607158-01]	45	40					
F607309-MS1	Matrix Spike [1607042-11]	45	40	1602184	45			
F607309-MS2	Matrix Spike [1607042-12]	45	40	1602184	45			
F607309-MSD1	Matrix Spike Dup [1607042-11]	45	40	1602184	45			
F607309-MSD2	Matrix Spike Dup [1607042-12]	45	40	1602184	45			

Standard ID(s):	Description:	Expiration:
1602184	MHg New Primary 1.0 ng/mL CAL	25-Jul-16 00:00

Reagent ID(s):	Description:	Expiration:
1602604	Acetate Buffer	15-Nov-16 00:00
1602944	Ethylating Agent (For Methyl Mercury Analysis)	30-Nov-16 00:00
1603869	0.5% Distillation Dilute (Made Daily)	14-Jan-17 00:00
1603870	APDC	
1603899	2.5% Ascorbic Acid	26-Jul-16 00:00

e Date: 7/14/2016

ANALYSIS SEQUENCE

6G21004

Instrument: Hg2700-1

Calibration ID: UNASSIGNED **Analyzed: 7/20/2016**

Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
1607158-02	MHg-CVAFS-W-Dist	36			Scan all data for level IV report
1607158-03	MHg-CVAFS-W-Dist	37			Scan all data for level IV report
1607158-04	MHg-CVAFS-W-Dist	38			Scan all data for level IV report
1607158-05	MHg-CVAFS-W-Dist	39			Scan all data for level IV report
1607158-06	MHg-CVAFS-W-Dist	40			Scan all data for level IV report
1607348-01	MHg-CVAFS-W-Dist	41			
1607382-01	MHg-CVAFS-W-Dist	42			
6G21004-CCV3	QC	43	1603001		
6G21004-CCB3	QC	44			

Samples Loaded By 7/20/16 Date

Data Processed By 7/21/16 Date

7/20/16 7/21/16

Due Date: 7/14/2016

ANALYSIS SEQUENCE

6G21004

Instrument: Hg2700-1

Calibration ID: UNASSIGNED

Analyzed: 7/20/2016

Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
6G21004-IBL1	QC	1			
6G21004-CAL1	QC	2	1602252		
6G21004-CAL2	QC	3	1602253		
6G21004-CAL3	QC	4	1602254		
6G21004-CAL4	QC	5	1602255		
6G21004-CAL5	QC	6	1602256		
6G21004-ICV1	QC	7	1603001		
6G21004-ICB1	QC	8			
F607309-BLK1	QC	9			
F607309-BLK2	QC	10			
F607309-BLK3	QC	11			
F607309-BS1	QC	12			
F607309-BSD1	QC	13			
F607309-DUP1	QC	14			
F607309-MS1	QC	15			
F607309-MSD1	QC	16			
F607309-MS2	QC	17			
F607309-MSD2	QC	18			
6G21004-CCV1	QC	19	1603001		
6G21004-CCB1	QC	20			
1607042-06	MHg-CVAFS-W-Dist	21			Scan all data - Level IV
1607042-07	MHg-CVAFS-W-Dist	22			Scan all data - Level IV
1607042-08	MHg-CVAFS-W-Dist	23			Scan all data - Level IV
1607042-09	MHg-CVAFS-W-Dist	24			Scan all data - Level IV
1607042-10	MHg-CVAFS-W-Dist	25			Scan all data - Level IV
1607042-11	MHg-CVAFS-W-Dist	26			Scan all data - Level IV
1607042-12	MHg-CVAFS-W-Dist	27			Scan all data - Level IV
1607042-13	MHg-CVAFS-W-Dist	28			Scan all data - Level IV
1607042-14	MHg-CVAFS-W-Dist	29			Scan all data - Level IV
1607042-15	MHg-CVAFS-W-Dist	30			Scan all data - Level IV
6G21004-CCV2	QC	31	1603001		
6G21004-CCB2	QC	32			
1607042-16	MHg-CVAFS-W-Dist	33			Scan all data - Level IV
1607042-21	MHg-CVAFS-W-Dist	34			Scan all data - Level IV
1607158-01	MHg-CVAFS-W-Dist	35			Scan all data for level IV report

Due Date: 7/14/2016

Failing Data Report - 6G21004

Sample ID	Analysis	Result	MRL	Dup Result	Source Result	True Value	Units	% Rec.	Rec. LCL	Rec. UCL	RPD	RPD Limit	Over Cal	Failure	Qualifier

Don Moreen 7/21/16
Analyst Reviewed By Date

[signature] 7/21/16
Peer Reviewed By Date

PREPARATION BENCH SHEET

F607309

Eurofins Frontier Global Sciences, Inc.

Matrix: Water **Prepared using: Hg Aquatic/Solids - EFGS-013 Methyl Hg Distillation for Water** **Prepared: 7/18/2016**

Lab Number	Sample ID	Initial (mL)	Final (mL)	QC Sample	Sample Specs.	Raw Data	Sample Comments	Analysis Comments
1607042-06	WQ2-c_063016_SW_10 Dissolved	45	40	-	-	-	Scan all data - Level IV	
1607042-07	WQ3-L_062916_SW_10	45	40	-	-	-	Scan all data - Level IV	
1607042-08	WQ3-L_062916_SW_10 Dissolved	45	40	-	-	-	Scan all data - Level IV	
1607042-09	ES-15_062916_SW_10	45	40	-	-	-	Scan all data - Level IV	
1607042-10	ES-15_062916_SW_10 Dissolved	45	40	-	-	-	Scan all data - Level IV	
1607042-11	WQ-ECH_062916_SW_10	45	40	QC	-	-	MS/MSD Scan all data - Level IV	
1607042-12	WQ-ECH_062916_SW_10 Dissolved	45	40	QC	-	-	MS/MSD Scan all data - Level IV	
1607042-13	WQ-FPT_062916_SW_10	45	40	-	-	-	Scan all data - Level IV	
1607042-14	WQ-FPT_062916_SW_10 Dissolved	45	40	-	-	-	Scan all data - Level IV	
1607042-15	WQ-ECH_062916_SW_10_DUP	45	40	-	-	-	Scan all data - Level IV	
1607042-16	WQ-ECH_062916_SW_10_DUP Dissolved	45	40	-	-	-	Scan all data - Level IV	
1607042-21	EB_062916_SW_QC Dissolved	45	40	-	-	-	Scan all data - Level IV	
1607158-01	OL-2427-01	45	40	-	-	-	Scan all data for level IV report	
1607158-02	OL-2427-02	45	40	-	-	-	Scan all data for level IV report	
1607158-03	OL-2427-03	45	40	-	-	-	Scan all data for level IV report	
1607158-04	OL-2427-04	45	40	-	-	-	Scan all data for level IV report	
1607158-05	OL-2427-05	45	40	-	-	-	Scan all data for level IV report	
7158-06	OL-2427-06	45	40	-	-	-	Scan all data for level IV report	
7348-01	Rinse Blank	45	40	-	-	-	Rinse blank for tubing sent to AMEC F	

e Date: 7/14/2016

PREPARATION BENCH SHEET

F607309

Eurofins Frontier Global Sciences, Inc.

Matrix: Water **Prepared using: Hg Aquatic/Solids - EFGS-013 Methyl Hg Distillation for Water** **Prepared: 7/18/2016**

1607382-01	1607400-001B E1607004g	45	40	-	-	-		

[redacted]

e Date: 7/14/2016

PREPARATION BENCH SHEET

F607309

Eurofins Frontier Global Sciences, Inc.

Matrix: Water **Prepared using: Hg Aquatic/Solids - EFGS-013 Methyl Hg Distillation for Water** **Prepared: 7/18/2016**

Lab Number	Sample ID and Source Sample	Initial (mL)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F607309-BLK1	Blank	45	40					
F607309-BLK2	Blank	45	40					
F607309-BLK3	Blank	45	40					
F607309-BS1	Blank Spike	45	40	1602184	45			
F607309-BSD1	Blank Spike	45	40	1602184	45			
F607309-DUP1	Duplicate [1607158-01]	45	40					
F607309-MS1	Matrix Spike [1607042-11]	45	40	1602184	45			
F607309-MS2	Matrix Spike [1607042-12]	45	40	1602184	45			
F607309-MSD1	Matrix Spike Dup [1607042-11]	45	40	1602184	45			
F607309-MSD2	Matrix Spike Dup [1607042-12]	45	40	1602184	45			

Standard ID(s):	Description:	Expiration:	Reagent ID(s):	Description:	Expiration:
1602184	MHg New Primary 1.0 ng/mL CAL	25-Jul-16 00:00	1603869	0.5% Distillation Dilute (Made Daily)	14-Jan-17 00:00
			1603870	APDC	

1603899
1602604
1602944

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e Date: 7/14/2016

PREPARATION BENCH SHEET

F607309

Eurofins Frontier Global Sciences, Inc.

Matrix: Water **Prepared using: Hg Aquatic/Solids - EFGS-013 Methyl Hg Distillation for Water** **Prepared: 7/18/2016**

Lab Number	Sample ID	Initial (mL)	Final (mL)	QC Sample	Sample Specs.	Raw Data	Sample Comments	Analysis Comments
1607042-06	WQ2-c_063016_SW_10 Dissolved	45	40	-	-	-	Scan all data - Level IV	
1607042-07	WQ3-L_062916_SW_10	45	40	-	-	-	Scan all data - Level IV	
1607042-08	WQ3-L_062916_SW_10 Dissolved	45	40	-	-	-	Scan all data - Level IV	
1607042-09	ES-15_062916_SW_10	45	40	-	-	-	Scan all data - Level IV	
1607042-10	ES-15_062916_SW_10 Dissolved	45	40	-	-	-	Scan all data - Level IV	
1607042-11	WQ-ECH_062916_SW_10	45	40	QC	-	-	MS/MSD Scan all data - Level IV	
1607042-12	WQ-ECH_062916_SW_10 Dissolved	45	40	QC	-	-	MS/MSD Scan all data - Level IV	
1607042-13	WQ-FPT_062916_SW_10	45	40	-	-	-	Scan all data - Level IV	
1607042-14	WQ-FPT_062916_SW_10 Dissolved	45	40	-	-	-	Scan all data - Level IV	
1607042-15	WQ-ECH_062916_SW_10_DUP	45	40	-	-	-	Scan all data - Level IV	
1607042-16	WQ-ECH_062916_SW_10_DUP Dissolved	45	40	-	-	-	Scan all data - Level IV	
1607042-21	EB_062916_SW_QC Dissolved	45	40	-	-	-	Scan all data - Level IV	
1607158-01	OL-2427-01	45	40	-	-	-	Scan all data for level IV report	
1607158-02	OL-2427-02	45	40	-	-	-	Scan all data for level IV report	
1607158-03	OL-2427-03	45	40	-	-	-	Scan all data for level IV report	
1607158-04	OL-2427-04	45	40	-	-	-	Scan all data for level IV report	
1607158-05	OL-2427-05	45	40	-	-	-	Scan all data for level IV report	
158-06	OL-2427-06	45	40	-	-	-	Scan all data for level IV report	
348-01	Rinse Blank	45	40	-	-	-	Rinse blank for tubing sent to AMEC F	

e Date: 7/14/2016

PREPARATION BENCH SHEET

F607309

Eurofins Frontier Global Sciences, Inc.

Matrix: Water **Prepared using: Hg Aquatic/Solids - EFGS-013 Methyl Hg Distillation for Water** **Prepared: 7/18/2016**

1607382-01	1607400-001B E1607004g	45	40	-	-	-		

[redacted]

Date: 7/14/2016

Methyl Mercury Distillations (EPA 1630)

Name: Duyen **Date:** 7/18/16 **Batch #:** F607309 **Sample Matrix:** Water

WO#: 1607042, 1607158, 1607348, 1607382

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)
BLK1	F607309 BLANK1	1.0	45	3.0
BLK2	F607309 BLANK2	1.0	45	3.0
BLK3	F607309 BLANK3	1.0	45	3.0
BS1	F607309 BS1	1.0	45	3.0
BSD1	F607309 BSD	1.0	45	3.0
~~DUP1~~ DS1 7-18-16 DH	F607309 DUP1	1.0	45	4.0
MS1 7-18-16 DH	F607309 MS1	1.0	45	4.0
MSD1	F607309 MSD1	1.0	45	4.0
MS2	F607309 MS2	1.0	45	4.0
MSD2	F607309 MSD2	1.0	45	4.0
1	1607042-06B	1.0	45	3.0
2	1607042-07B	1.0	45	4.0
3	1607042-08B	1.0	45	3.0
4	1607042-09B	1.0	45	3.0
5	1607042-10B	1.0	45	3.0
6	1607042-11B	1.0	45	3.0
7	1607042-12B	1.0	45	3.0
8	1607042-13B	1.0	45	3.0
9	1607042-14B	1.0	45	3.0
10	1607042-15B	1.0	45	3.0
11	1607042-16B	1.0	45	3.0
12	1607042-21B	1.0	45	4.0
13	1607158-01B	1.0	45	4.0
14	1607158-02B	1.0	45	4.0
15	1607158-03B	1.0	45	4.0
16	1607158-04B	1.0	45	4.0
17	1607158-05B	1.0	45	4.0
18	1607158-06B	1.0	45	4.0
19	1607348-01	1.0	45	4.0
20	1607382-01	1.0	45	4.0
			7-18-16	DH

Spike ID: 1602184
Spike Amount: 45 µL
Spike Witness: M 7/18/16

Balance #: 2
Calibrated? ☑ Yes ☐ No

Pipette #: CIT86706
Cal. Date: 7-15-16

Pipette #: Lu24486
Cal. Date: 7/12/16

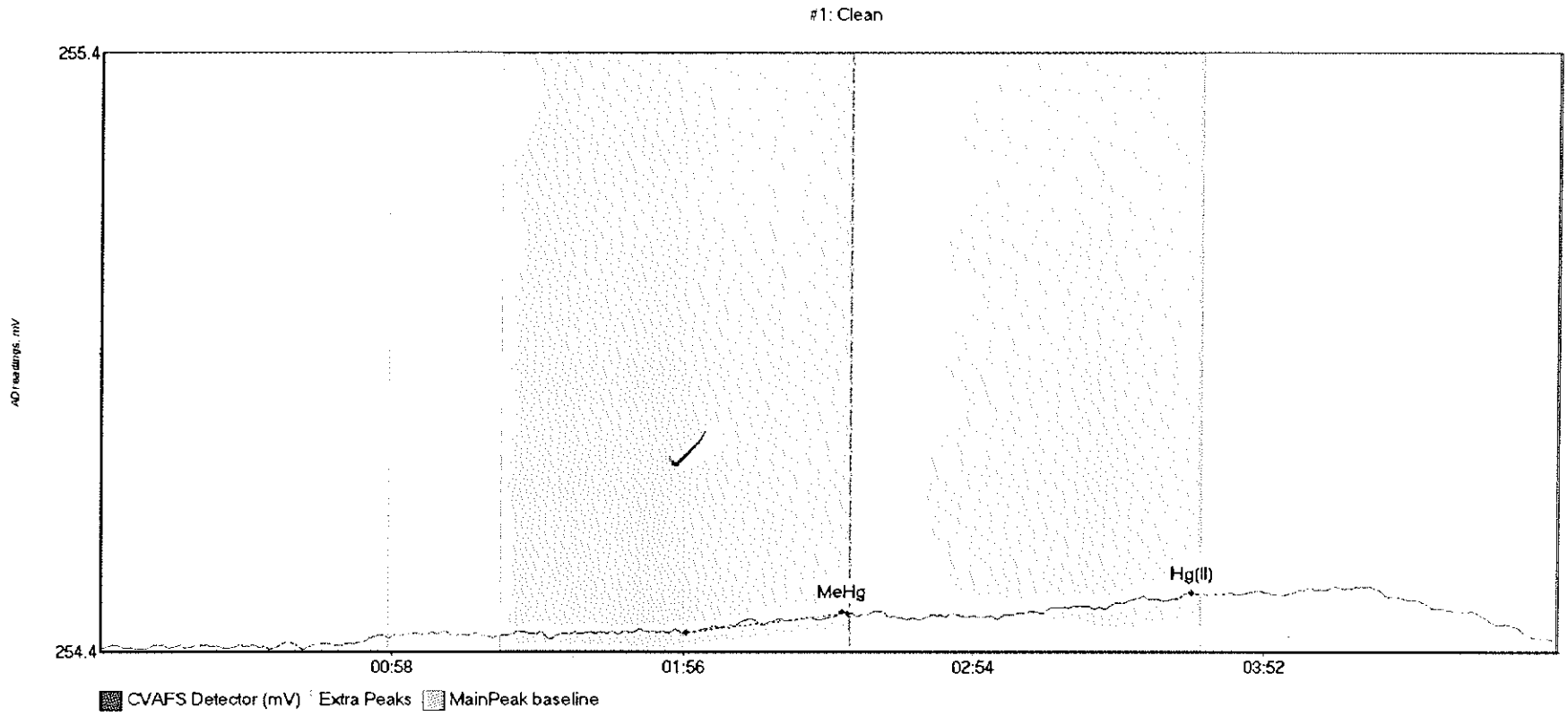
Pipette #: N27707
Cal. Date: 7/12/16

APDC ID: 1603870
HCl ID: 1603869

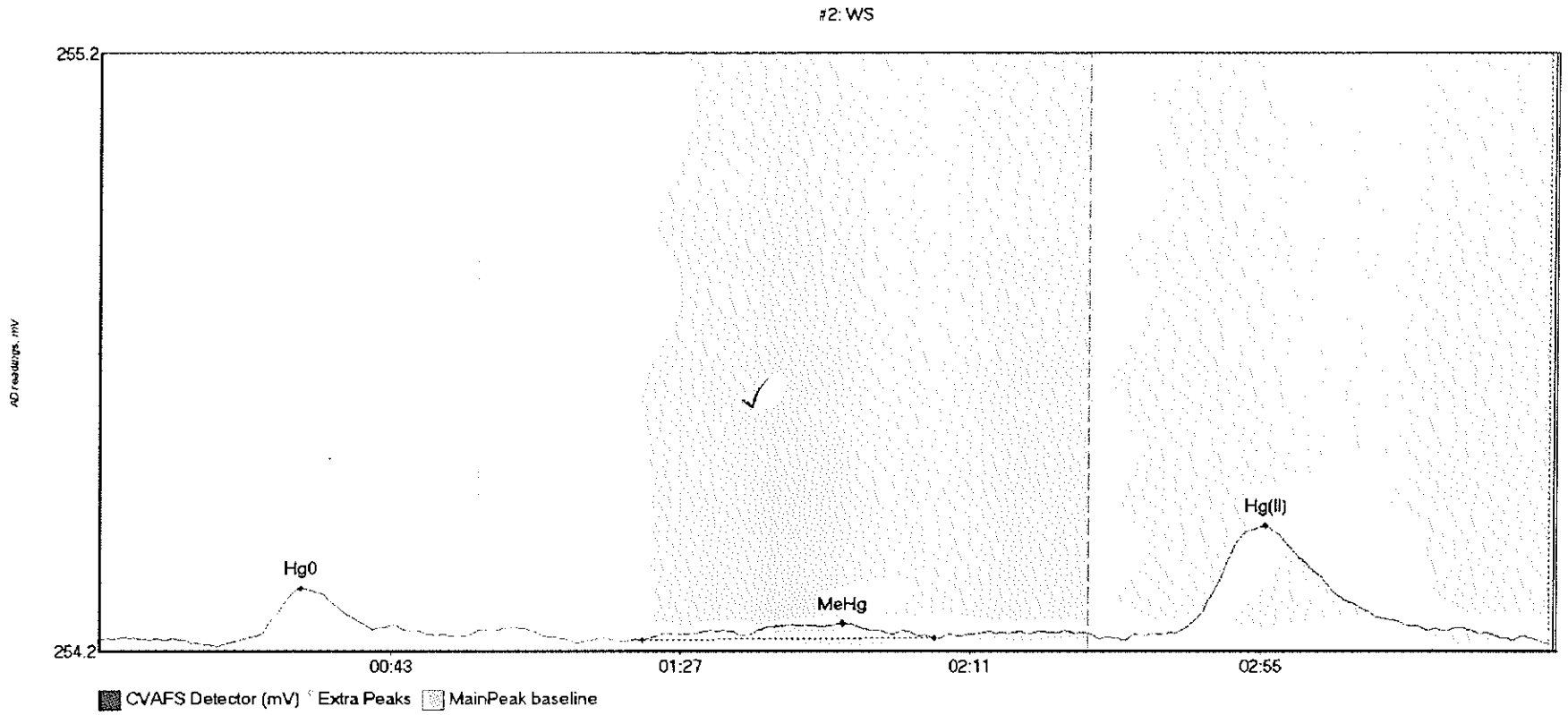
Temperature: No set range as the temp. may be changed to keep flow rate of ≥10 mL per hour. Temperature is recorded for informational purposes only.

Unit 1: 120.5
Unit 2: 122.
Unit 3: 120.6
Unit 4: 120.1
Unit 5: 122.
Unit 6: 122.

Comments:
MS1, MSD1 source is 1607042-11
MS2, MSD2 source is 1607042-12
Dup1 1607158-01
7/18/16 DH

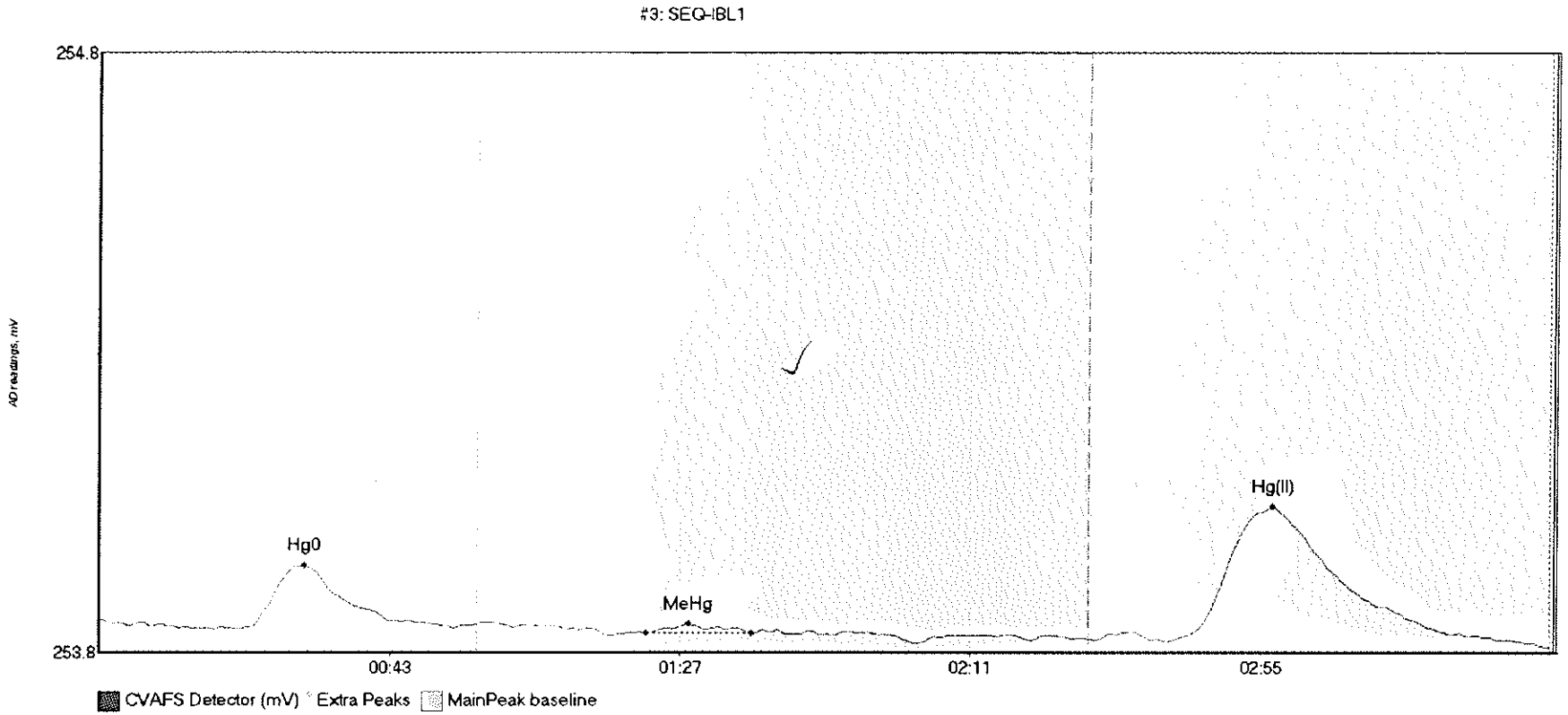


Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
Clean MeHg	0.712	117.0	149.5	254.47	254.50	148.4	0.034	OK	254.4412	0.00	0.01	
Clean Hg(II)	0.813	188.3	219.4	254.50	254.53	218.2	0.035	OK	254.4412	0.00	0.01	

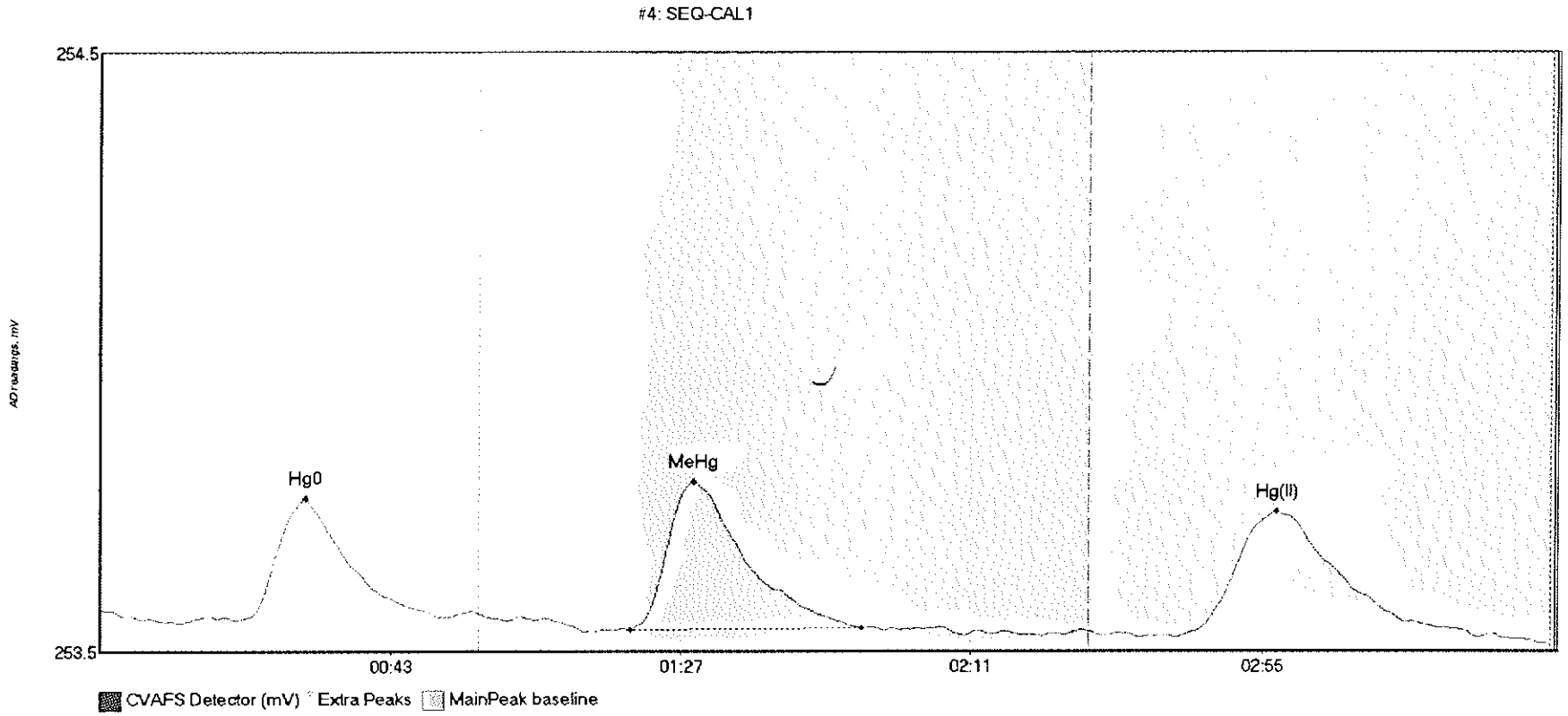


Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
WS Hg0	9.249	23.6	53.3	254.18	254.18	30.5	0.080	OK	254.1713	0.00	-0.01	
WS MeHg	6.340	82.3	126.6	254.17	254.17	112.6	0.028	OK	254.1713	0.00	-0.01	
WS Hg(II)	31.057	162.8	209.4	254.18	254.18	176.7	0.180	OK	254.1713	0.00	-0.01	

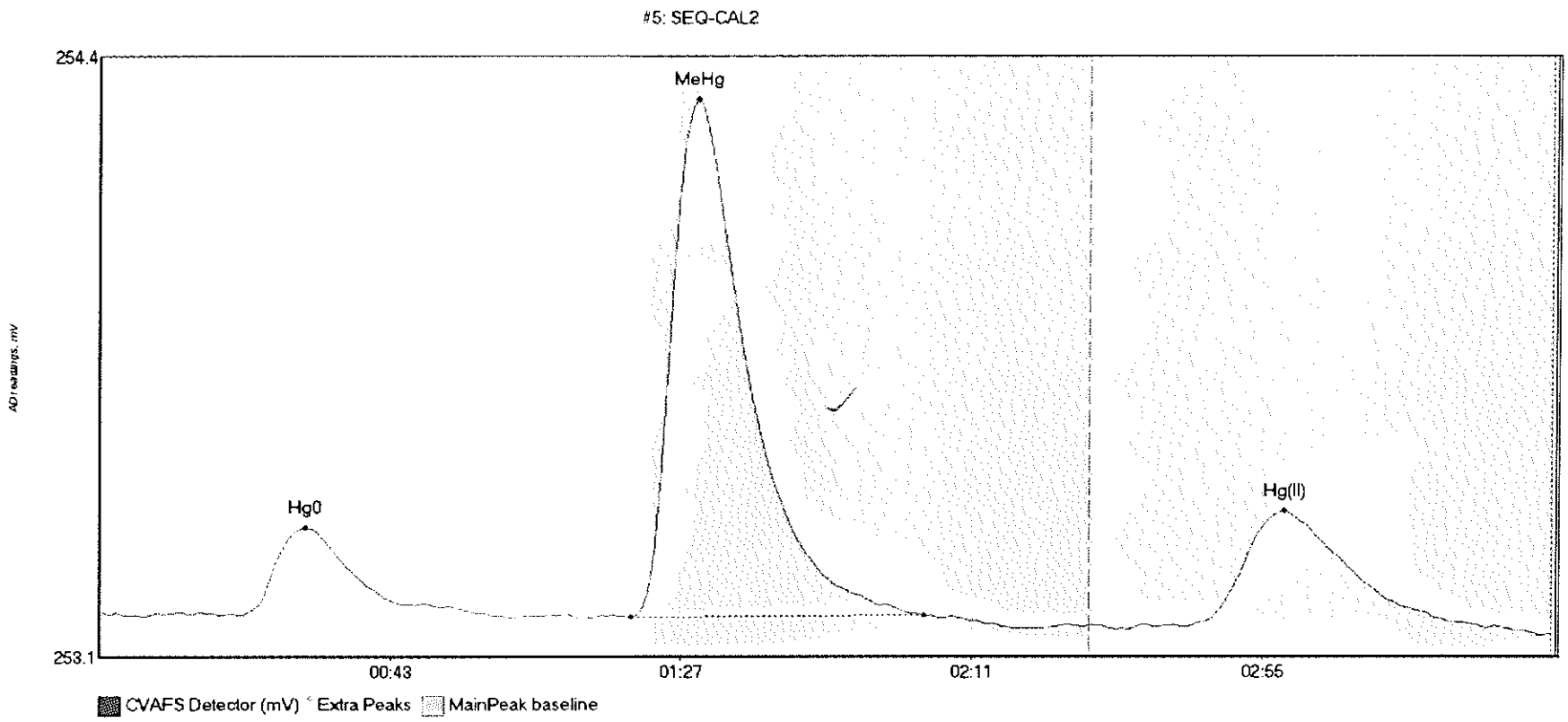
016



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-IBL1 Hg0	10.169	22.6	44.1	253.89	253.90	31.0	0.101	OK	253.8976	0.00	-0.05	
SEQ-IBL1 MeHg	1.267	82.9	98.8	253.88	253.87	89.3	0.015	OK	253.8976	0.00	-0.05	
SEQ-IBL1 Hg(II)	40.766	162.2	209.7	253.86	253.87	177.7	0.224	OK	253.8976	0.00	-0.05	

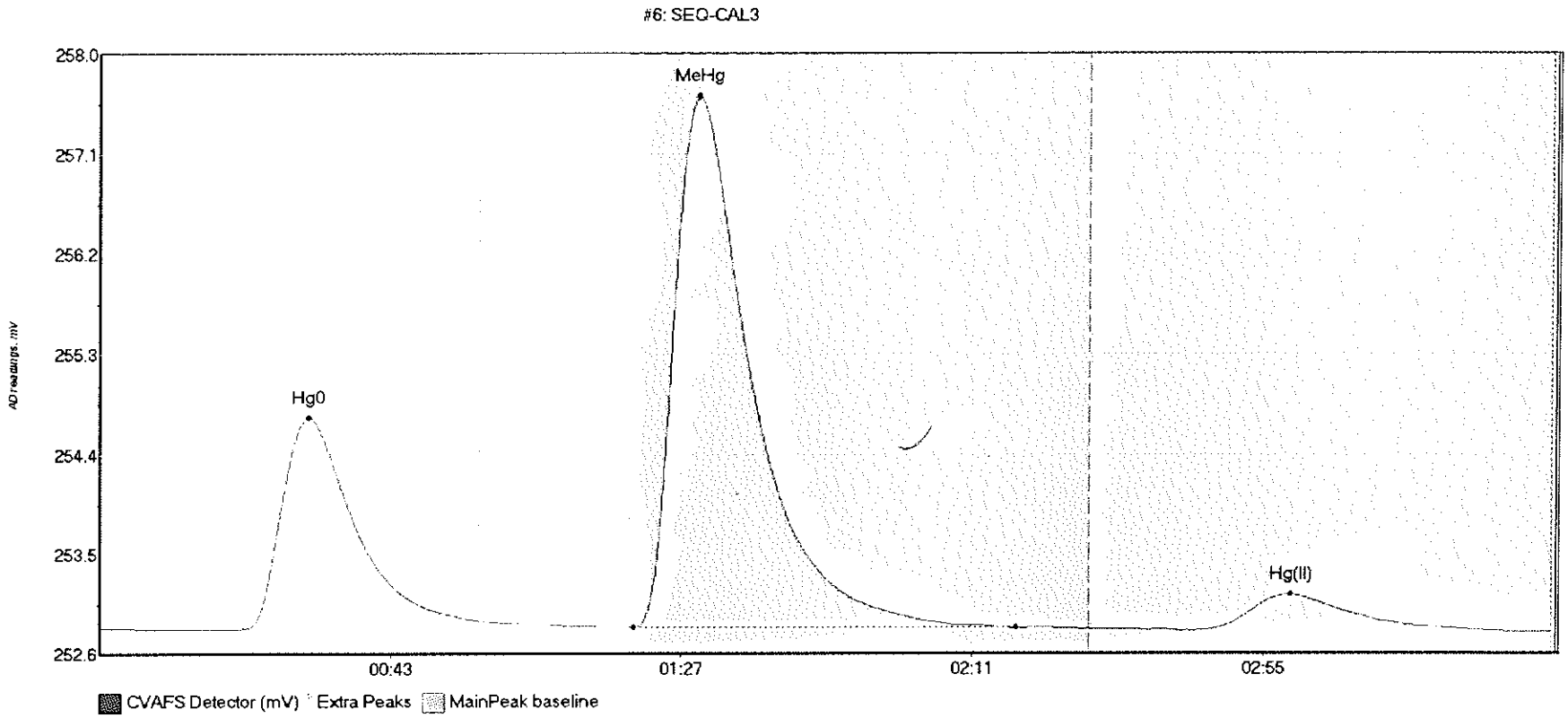


Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CAL1 Hg0	21.998	20.5	49.1	253.54	253.56	31.1	0.203	OK	253.5599	0.00	-0.06	
SEQ-CAL1 MeHg	33.017	80.4	115.5	253.53	253.53	89.9	0.247	OK	253.5599	0.00	-0.06	
SEQ-CAL1 Hg(II)	37.711	163.1	209.0	253.51	253.51	178.2	0.210	OK	253.5599	0.00	-0.06	



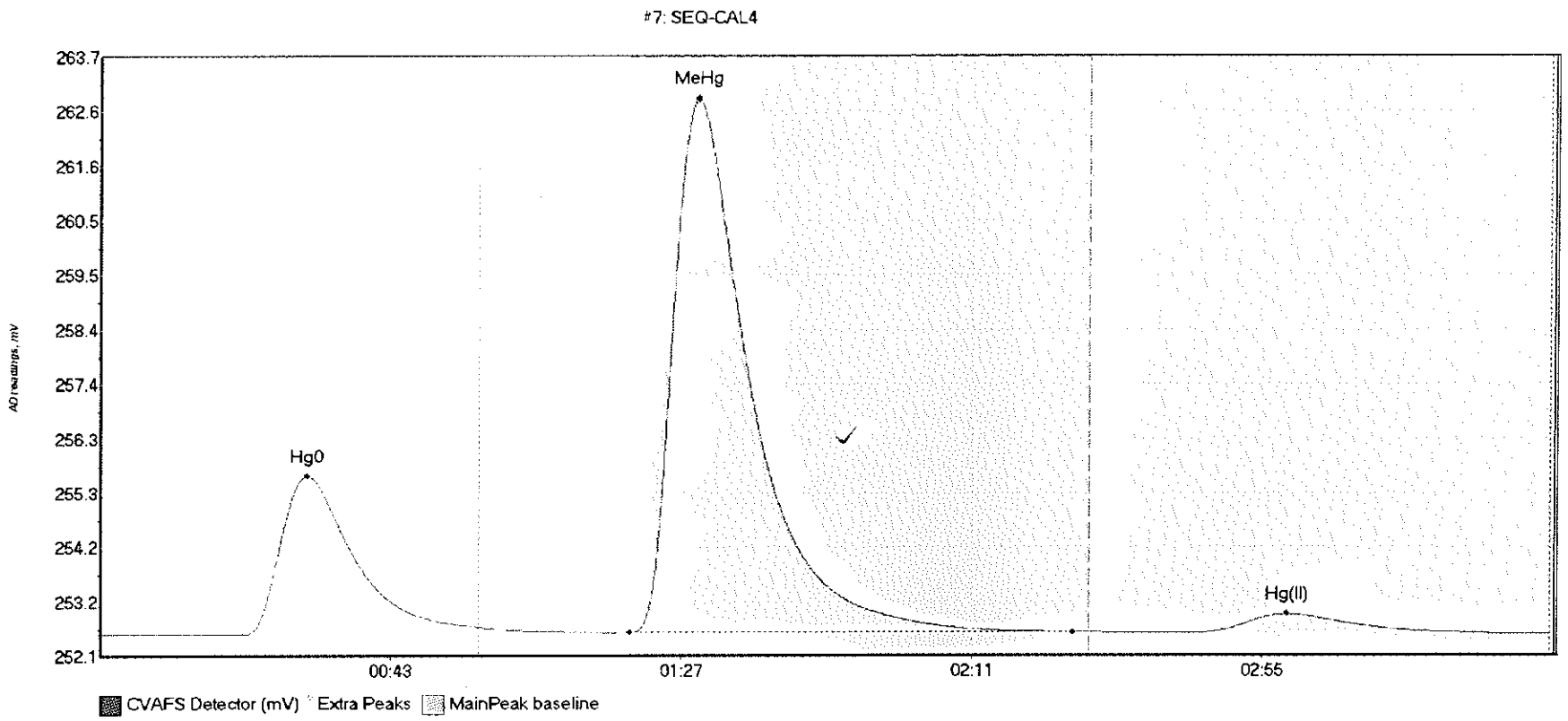
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CAL2 Hg0	23.449	21.2	54.8	253.20	253.21	31.1	0.192	OK	253.2054	0.00	-0.05	
SEQ-CAL2 MeHg	148.892	80.6	124.8	253.19	253.20	90.6	1.130	OK	253.2054	0.00	-0.05	
SEQ-CAL2 Hg(II)	43.072	164.5	206.2	253.17	253.18	179.3	0.252	OK	253.2054	0.00	-0.05	

016



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CAL3 Hg0	232.582	21.8	57.5	252.87	252.93	31.7	1.891	CT	252.8750	0.00	-0.04	
SEQ-CAL3 MeHg	641.773	80.9	138.7	252.88	252.87	90.8	4.746	OK	252.8750	0.00	-0.04	
SEQ-CAL3 Hg(II)	50.016	165.7	204.7	252.85	252.87	180.2	0.320	OK	252.8750	0.00	-0.04	

016



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CAL4 Hg0	375.492	21.5	57.5	252.53	252.66	31.5	3.052	CT	252.5374	0.00	0.01	
SEQ-CAL4 MeHg	1400.094	80.1	147.3	252.57	252.57	90.6	10.266	OK	252.5374	0.00	0.01	
SEQ-CAL4 Hg(II)	58.364	165.6	204.4	252.55	252.57	179.7	0.365	OK	252.5374	0.00	0.01	

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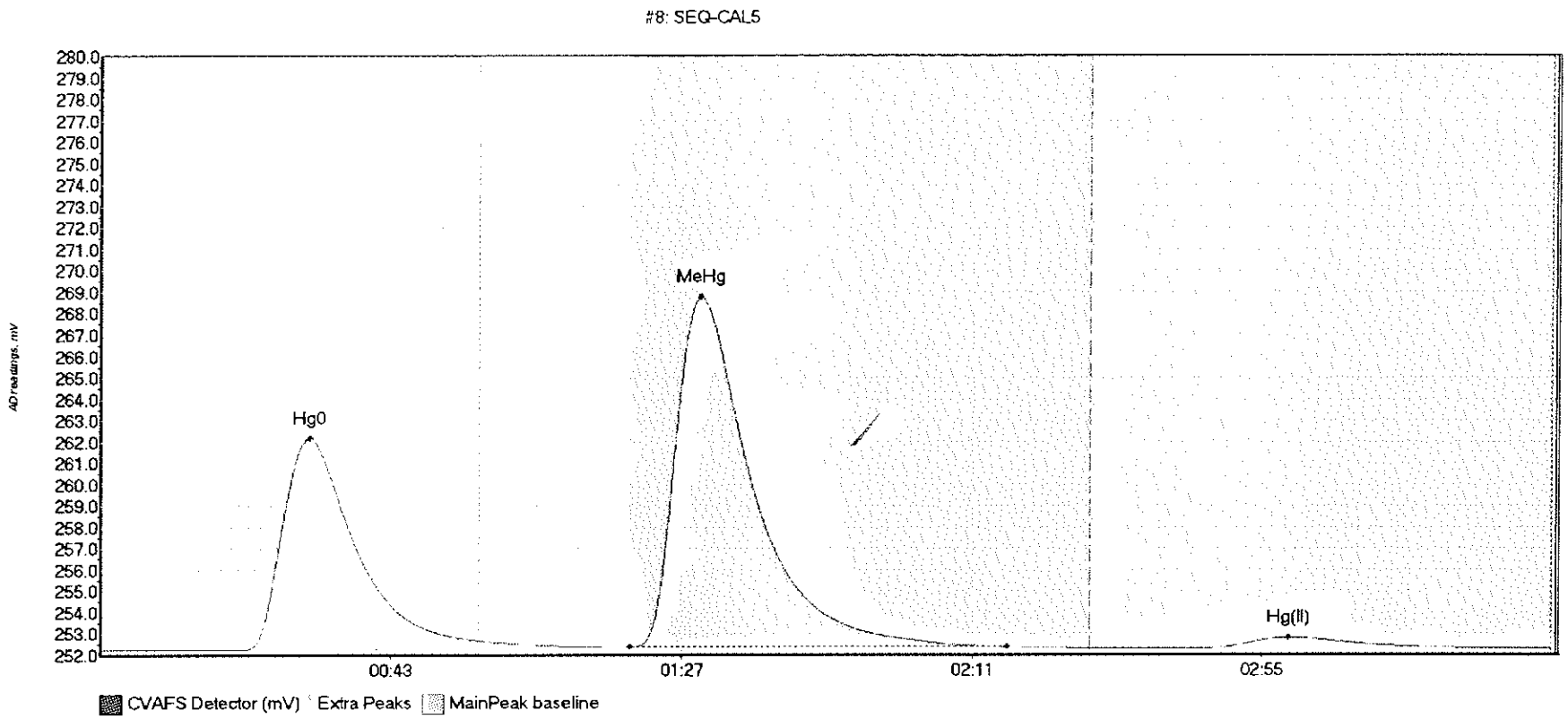
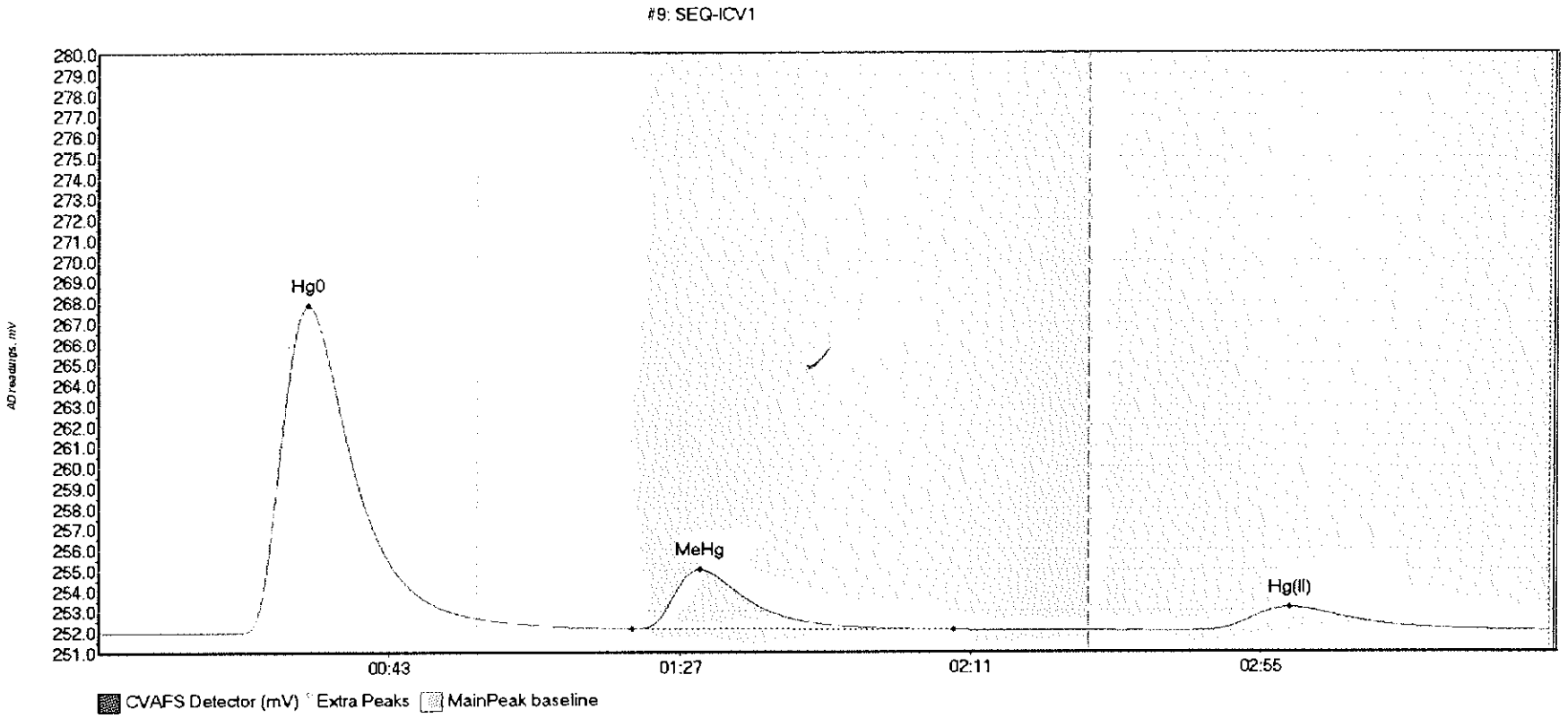


Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CAL5 Hg0	1214.454	19.9	57.5	252.26	252.67	31.7	9.914	CT	252.2565	0.00	0.03	
SEQ-CAL5 MeHg	2213.479	80.1	137.3	252.37	252.37	90.9	16.382	OK	252.2565	0.00	0.03	
SEQ-CAL5 Hg(II)	89.318	165.8	210.6	252.30	252.30	180.1	0.513	OK	252.2565	0.00	0.03	



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-ICV1 Hg0	1954.572	21.3	57.5	251.98	252.65	31.7	15.843	CT	251.9881	0.00	0.04	
SEQ-ICV1 MeHg	379.658	80.7	129.5	252.14	252.09	91.0	2.869	OK	251.9881	0.00	0.04	
SEQ-ICV1 Hg(II)	202.263	165.3	218.9	252.03	252.03	180.5	1.125	OK	251.9881	0.00	0.04	

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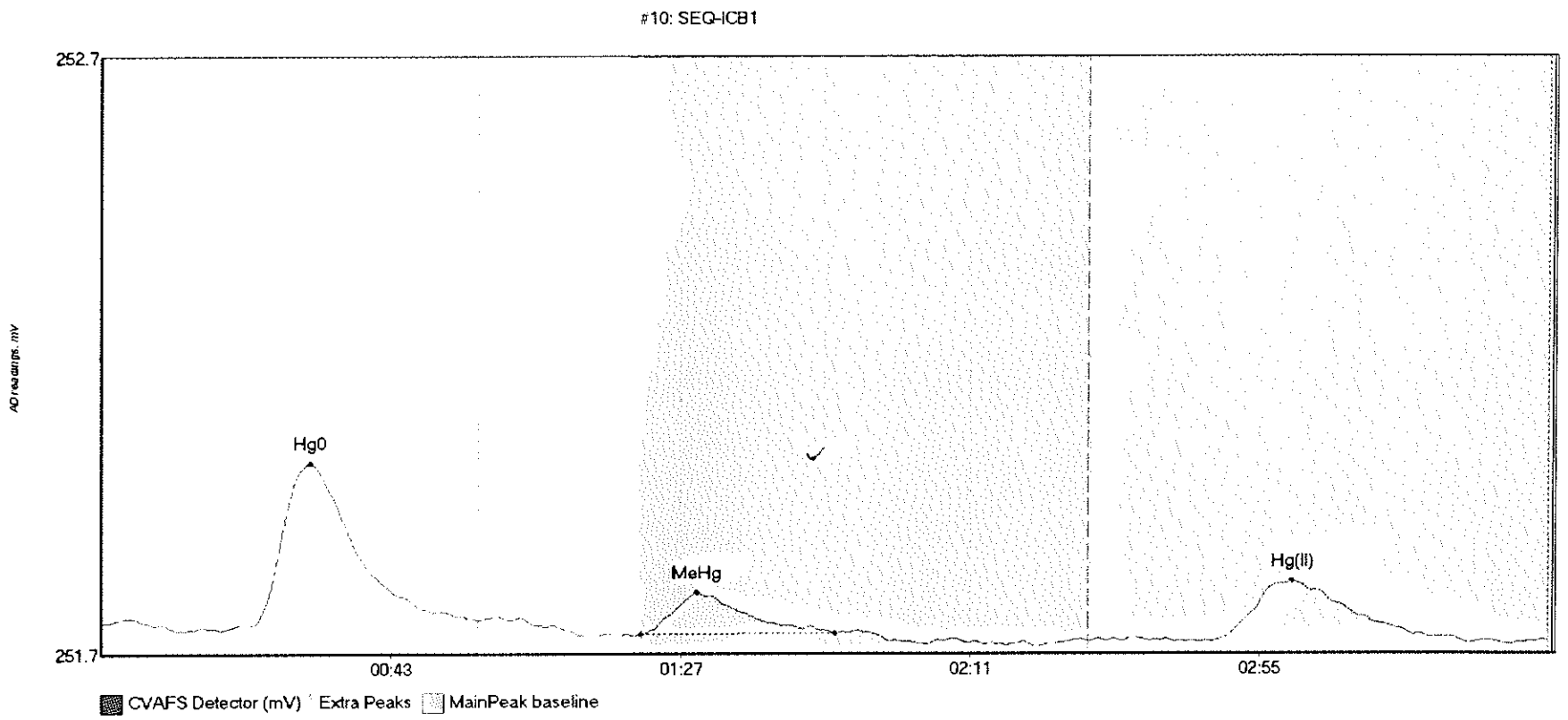
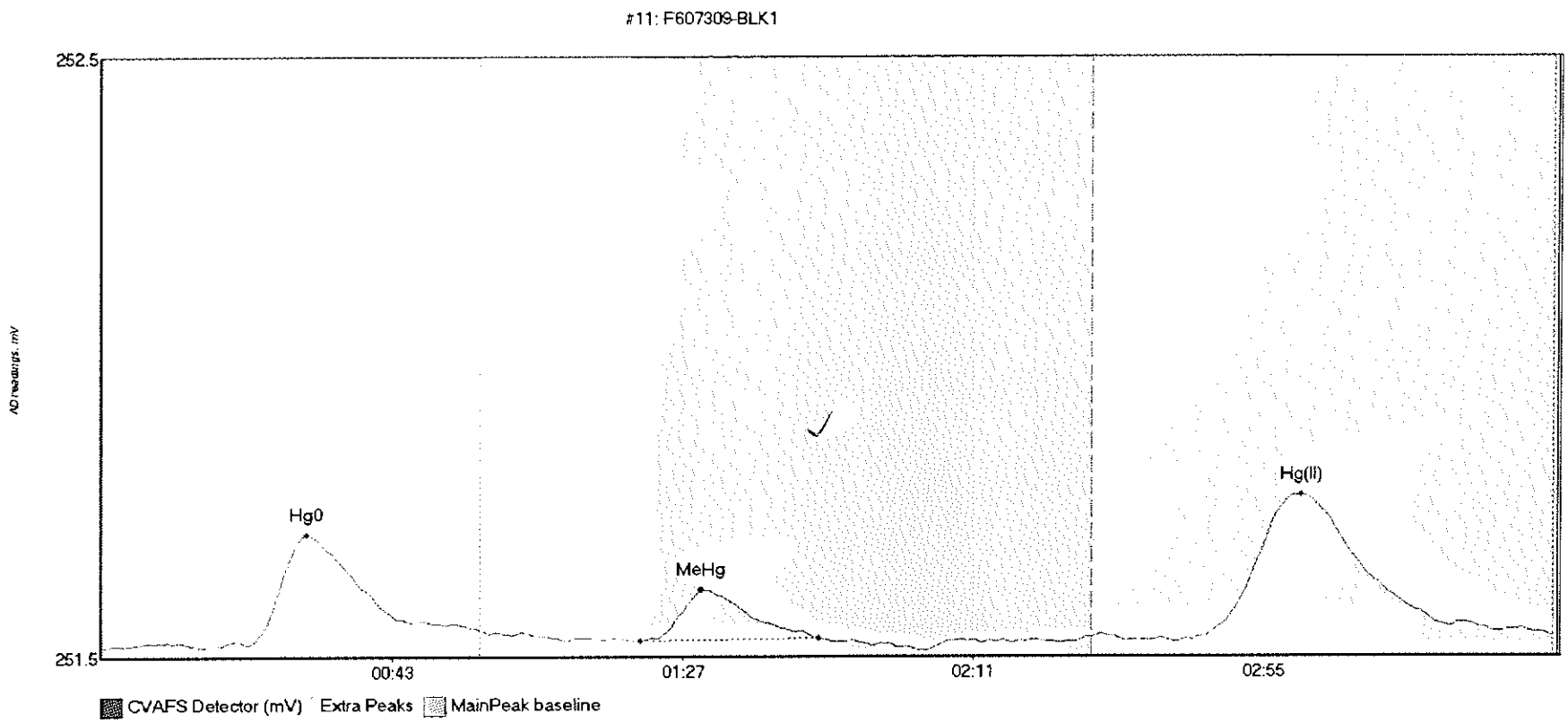
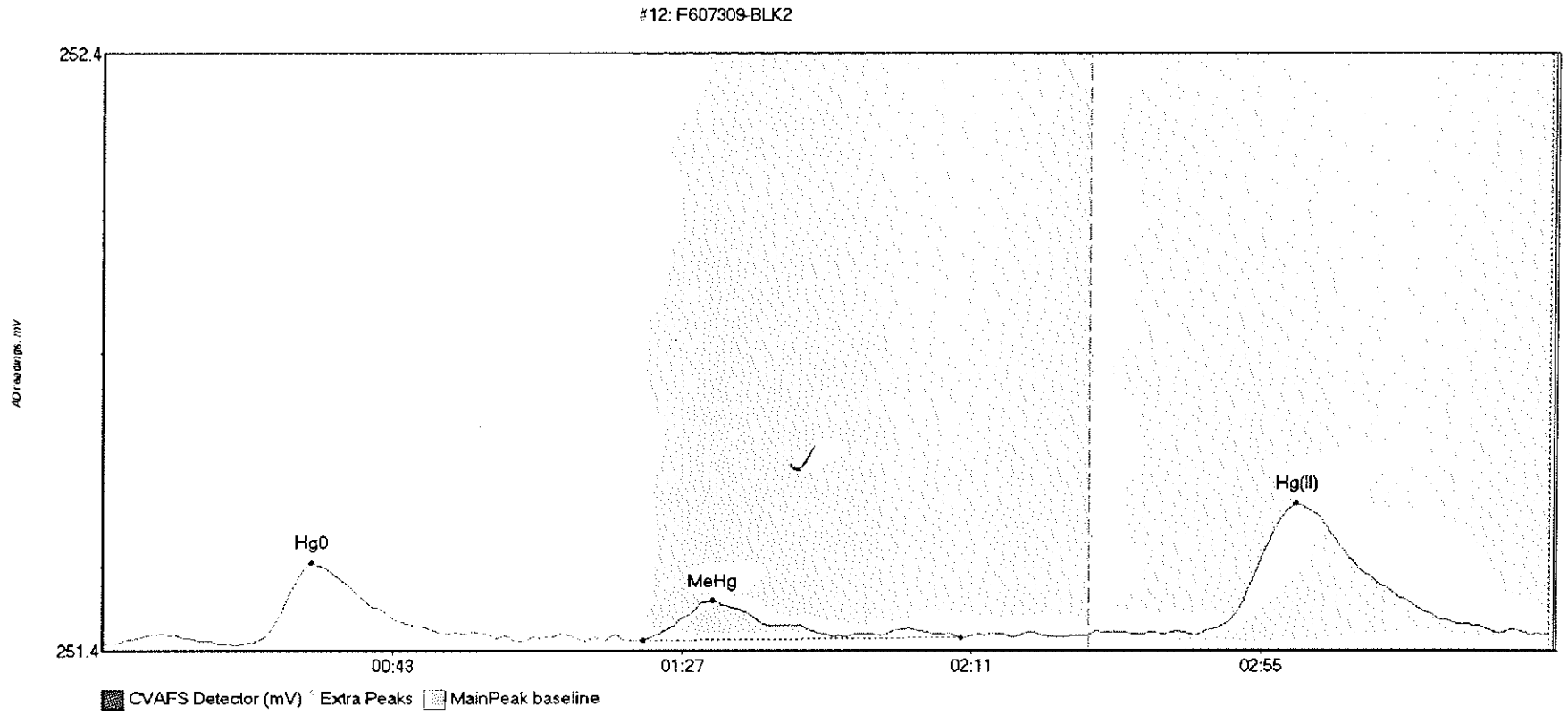


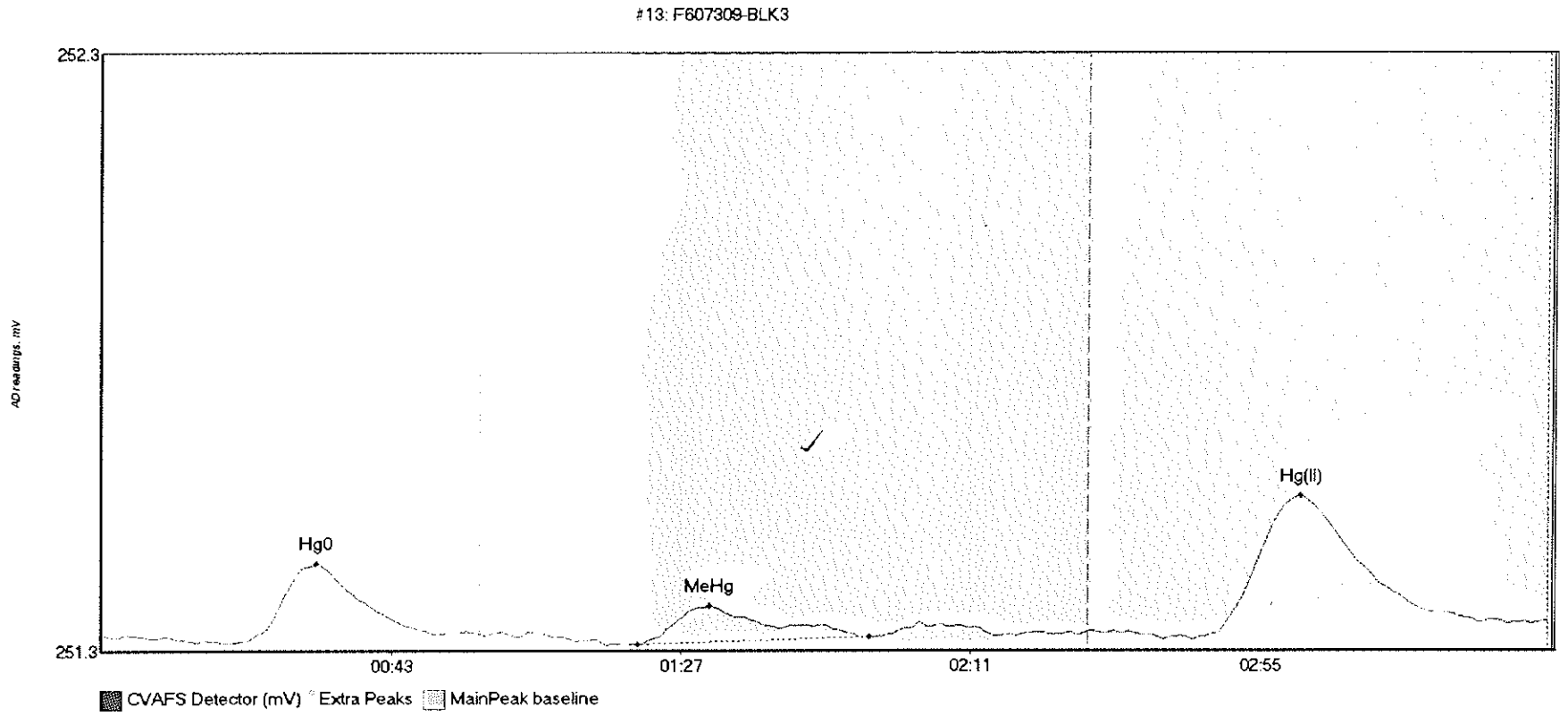
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-ICB1 Hg0	33.680	22.8	57.4	251.76	251.77	31.7	0.272	OK	251.7614	0.00	-0.03	
SEQ-ICB1 MeHg	8.680	82.0	111.5	251.74	251.74	90.5	0.071	OK	251.7614	0.00	-0.03	
SEQ-ICB1 Hg(II)	15.307	168.7	202.4	251.73	251.74	181.0	0.101	OK	251.7614	0.00	-0.03	



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F607309-BLK1 Hg	23.724	17.9	57.5	251.56	251.58	31.0	0.187	CT	251.5536	0.00	0.02	
F607309-BLK1 Me	9.717	81.6	108.6	251.56	251.57	90.8	0.085	OK	251.5536	0.00	0.02	
F607309-BLK1 Hg	43.903	166.6	219.8	251.57	251.57	181.8	0.235	CT	251.5536	0.00	0.02	



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F607309-BLK2 Hg	16.779	22.6	55.2	251.40	251.42	31.7	0.134	OK	251.4028	0.00	0.02	
F607309-BLK2 Me	10.913	82.1	130.5	251.41	251.41	92.6	0.067	OK	251.4028	0.00	0.02	
F607309-BLK2 Hg	36.867	168.5	211.9	251.43	251.42	181.5	0.211	OK	251.4028	0.00	0.02	



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F607309-BLK3 Hg	16.320	20.2	51.1	251.29	251.31	32.6	0.133	OK	251.3078	0.00	0.02	
F607309-BLK3 Me	9.907	81.4	116.6	251.29	251.30	92.3	0.065	OK	251.3078	0.00	0.02	
F607309-BLK3 Hg	39.721	168.2	214.0	251.31	251.33	182.2	0.233	OK	251.3078	0.00	0.02	

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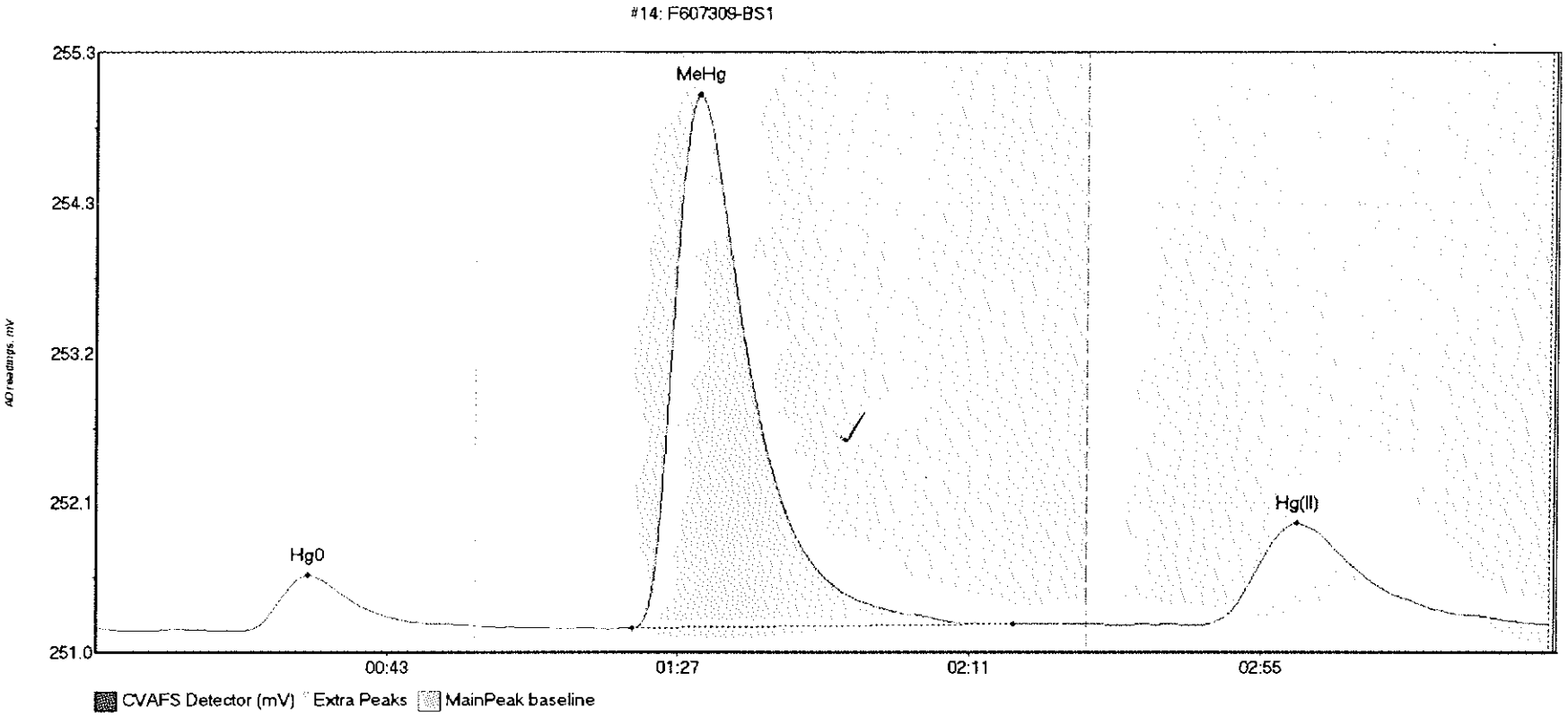

Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F607309-BS1 Hg0	47.967	22.6	57.5	251.20	251.24	32.2	0.392	CT	251.2231	0.00	0.03	
F607309-BS1 MeH	513.761	81.2	138.7	251.22	251.25	91.2	3.812	OK	251.2231	0.00	0.03	
F607309-BS1 Hg(	134.925	167.0	218.8	251.24	251.25	181.5	0.729	OK	251.2231	0.00	0.03	

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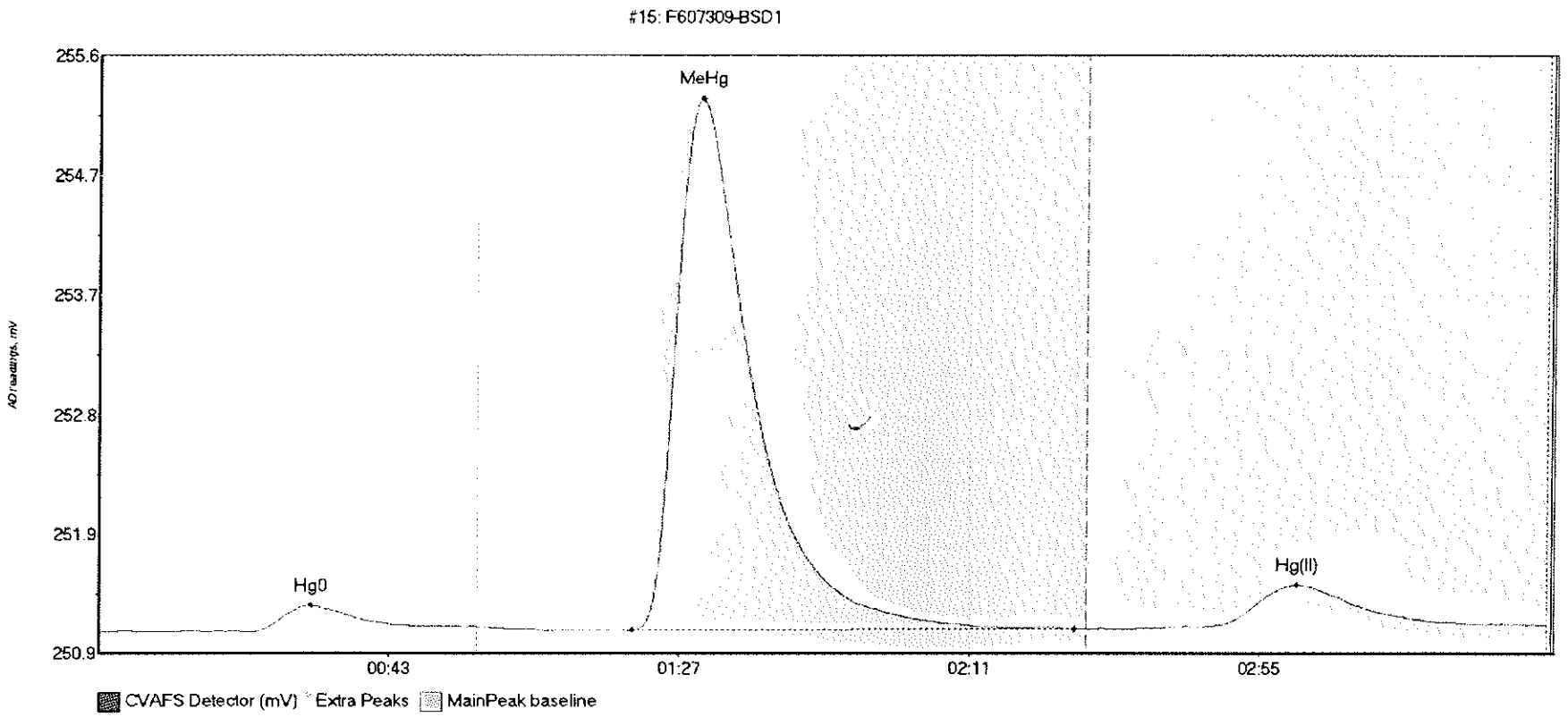
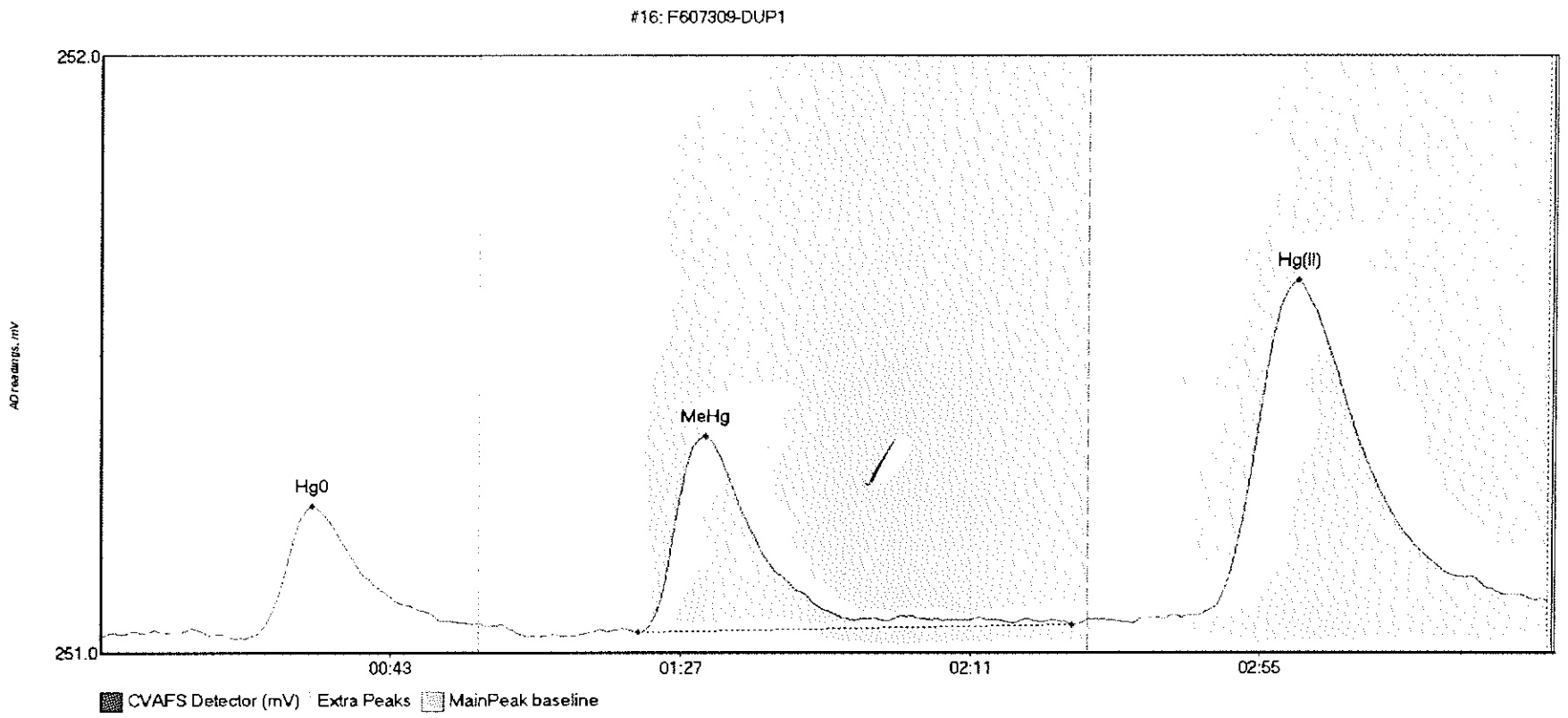


Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F607309-BSD1 Hg	24.391	22.6	57.5	251.11	251.15	32.3	0.207	CT	251.1155	0.00	0.05	
F607309-BSD1 Me	563.965	80.9	148.1	251.12	251.13	91.4	4.152	OK	251.1155	0.00	0.05	
F607309-BSD1 Hg	61.274	155.8	219.6	251.13	251.16	181.7	0.343	OK	251.1155	0.00	0.05	



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F607309-DUP1 Hg	27.432	22.3	56.4	251.06	251.09	32.2	0.222	OK	251.0676	0.00	0.06	
F607309-DUP1 Me	48.596	81.6	147.5	251.07	251.09	91.7	0.329	OK	251.0676	0.00	0.06	
F607309-DUP1 Hg	99.854	164.6	219.8	251.10	251.13	181.7	0.563	CT	251.0676	0.00	0.06	

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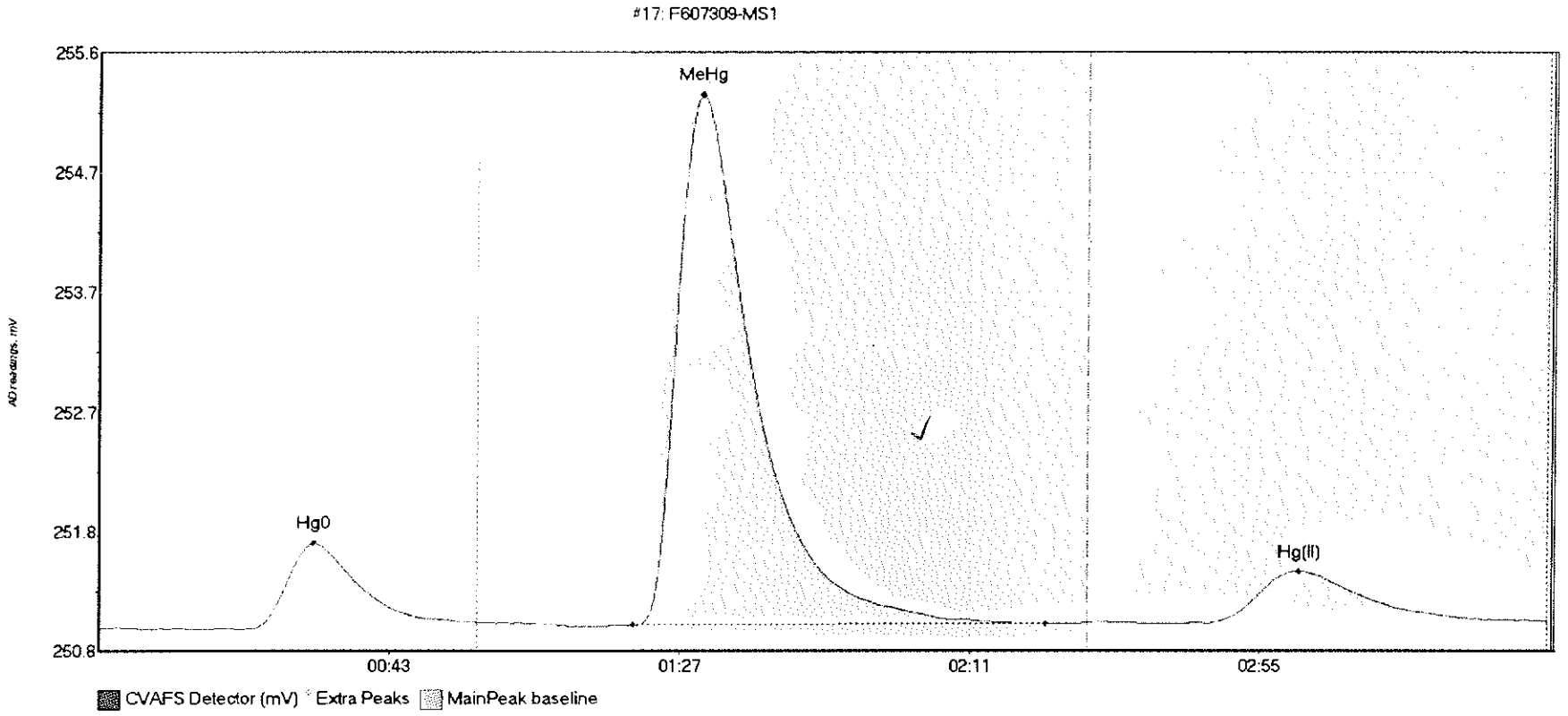

Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F607309-MS1 Hg0	81.512	21.4	57.5	251.01	251.07	32.6	0.687	CT	251.0176	0.00	0.06	
F607309-MS1 MeH	572.082	80.9	143.5	251.04	251.05	91.4	4.226	OK	251.0176	0.00	0.06	
F607309-MS1 Hg(	75.127	168.2	219.8	251.06	251.07	182.1	0.414	CT	251.0176	0.00	0.06	

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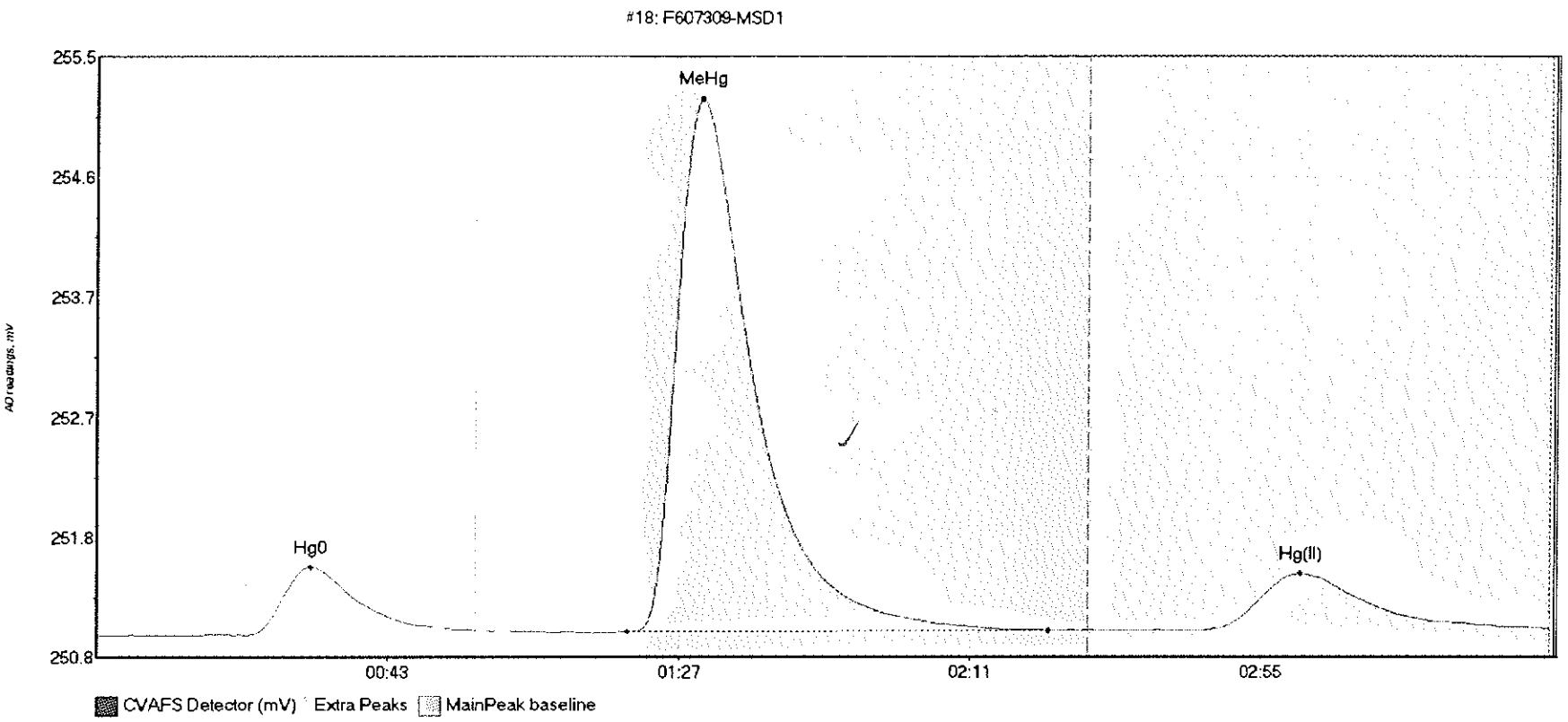
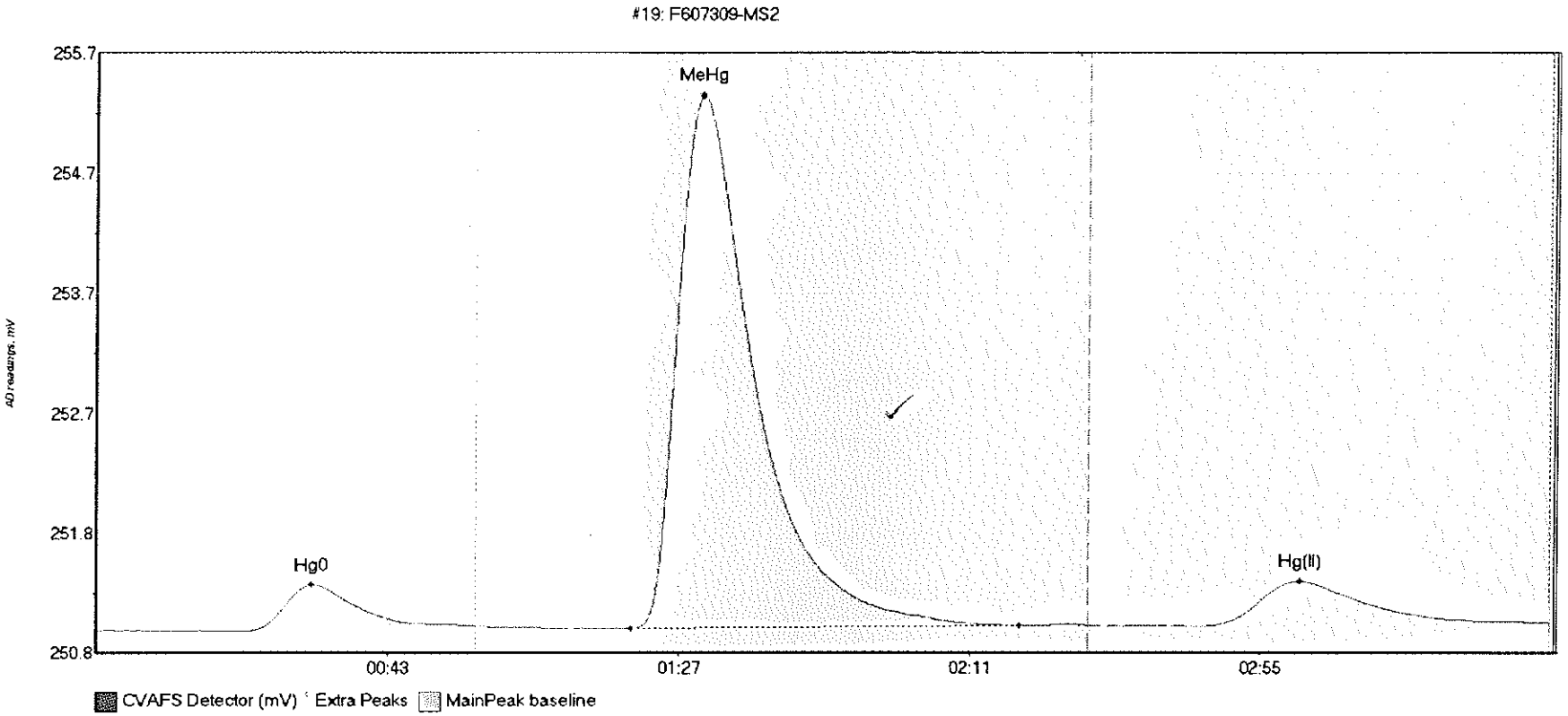


Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F607309-MSD1 Hg	66.454	23.0	57.5	250.99	251.02	32.4	0.537	CT	250.9822	0.00	0.06	
F607309-MSD1 Me	573.061	80.1	143.9	251.01	251.02	91.5	4.199	OK	250.9822	0.00	0.06	
F607309-MSD1 Hg	81.750	166.8	219.8	251.02	251.04	182.0	0.449	CT	250.9822	0.00	0.06	



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F607309-MS2 Hg0	45.295	21.7	57.4	250.96	251.00	32.4	0.382	OK	250.9637	0.00	0.07	
F607309-MS2 MeH	589.642	80.7	139.4	250.98	251.00	91.5	4.359	OK	250.9637	0.00	0.07	
F607309-MS2 Hg(	65.432	166.5	218.9	251.00	251.03	182.0	0.370	OK	250.9637	0.00	0.07	

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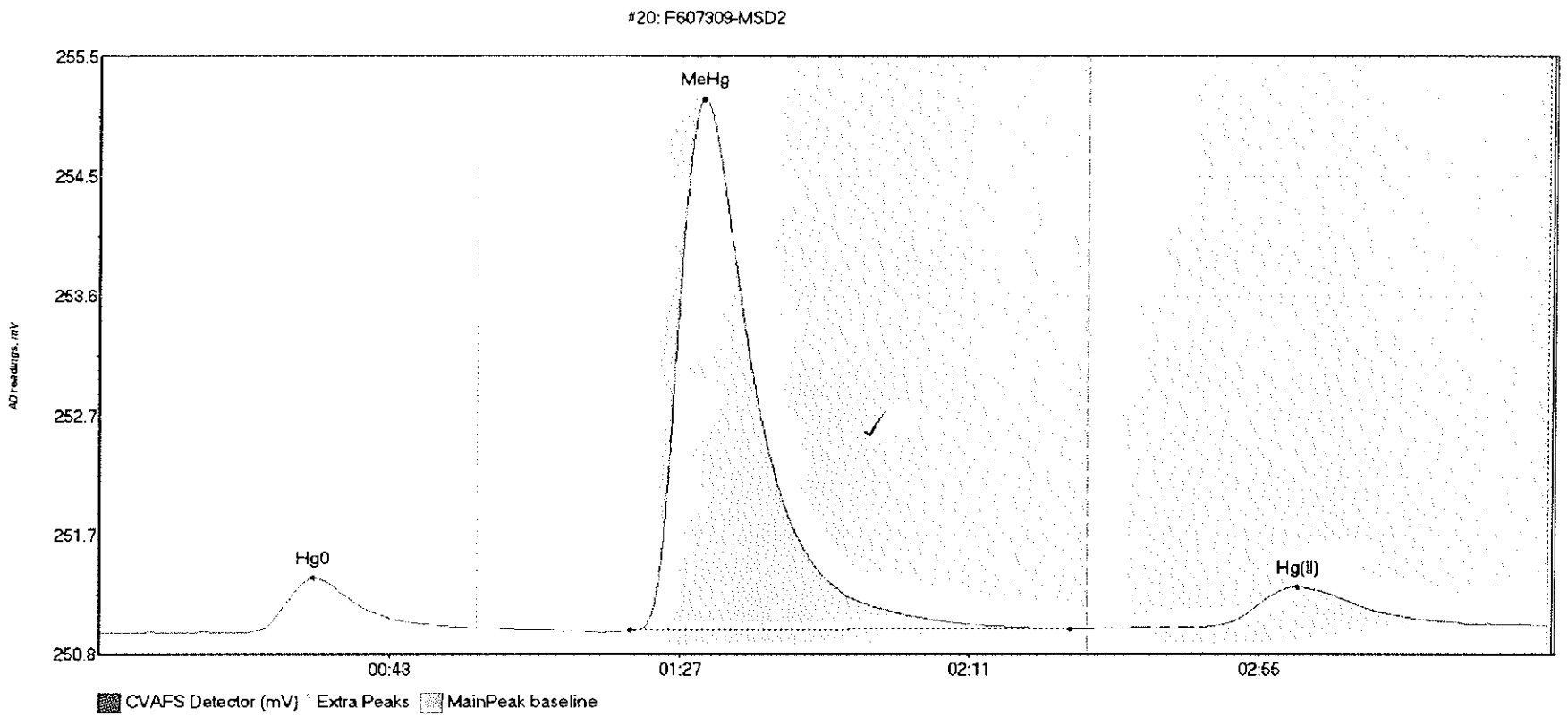

Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F607309-MSD2 Hg	52.149	21.9	57.5	250.94	250.98	32.4	0.433	CT	250.9368	0.00	0.06	
F607309-MSD2 Me	573.655	80.5	147.3	250.95	250.97	91.5	4.195	OK	250.9368	0.00	0.06	
F607309-MSD2 Hg	58.826	150.1	218.2	250.97	251.00	181.9	0.330	OK	250.9368	0.00	0.06	

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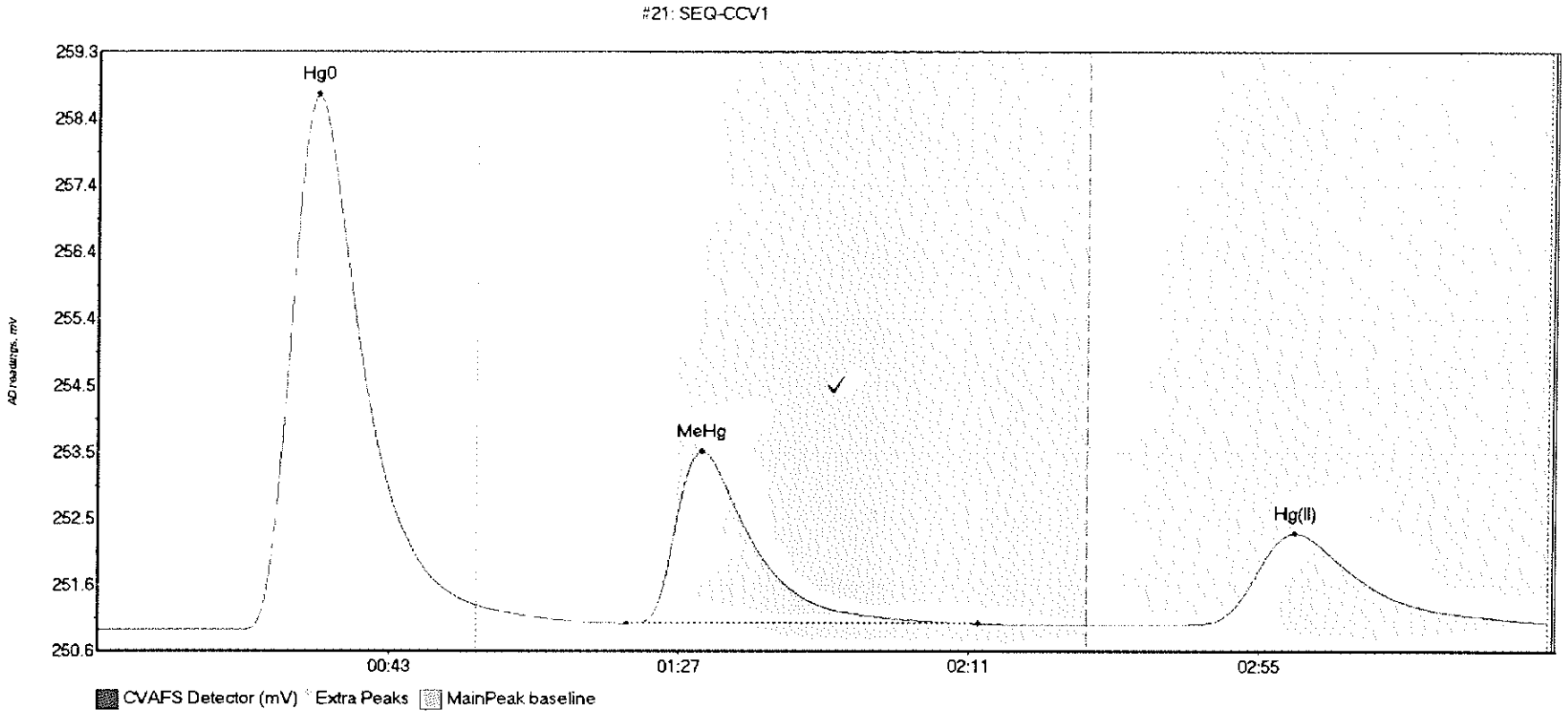

Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CCV1 Hg0	943.103	21.8	57.5	250.91	251.27	33.0	7.787	CT	250.9176	0.00	0.11	
SEQ-CCV1 MeHg	338.509	80.1	133.4	251.01	251.00	91.5	2.506	OK	250.9176	0.00	0.11	
SEQ-CCV1 Hg(II)	238.449	164.8	219.8	250.99	251.03	181.5	1.333	CT	250.9176	0.00	0.11	

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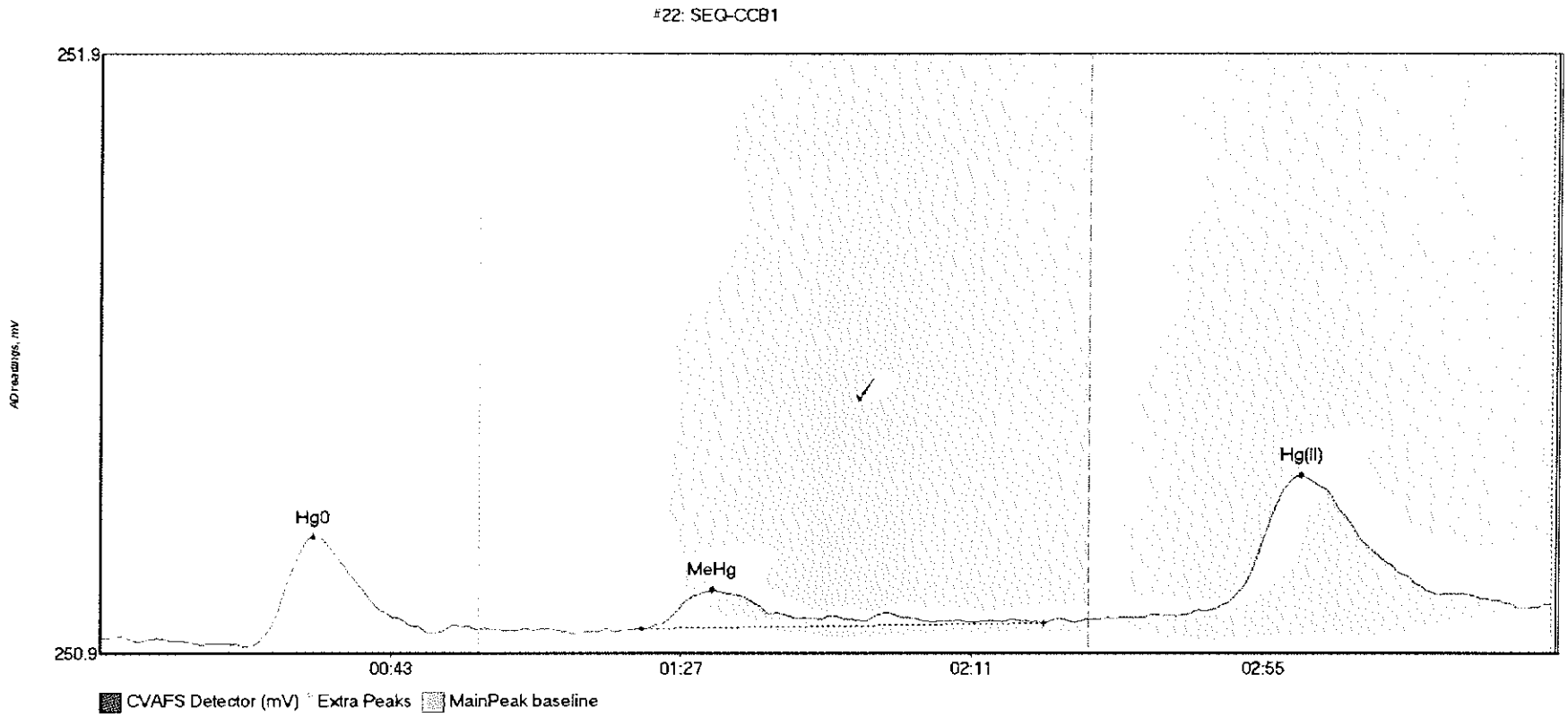
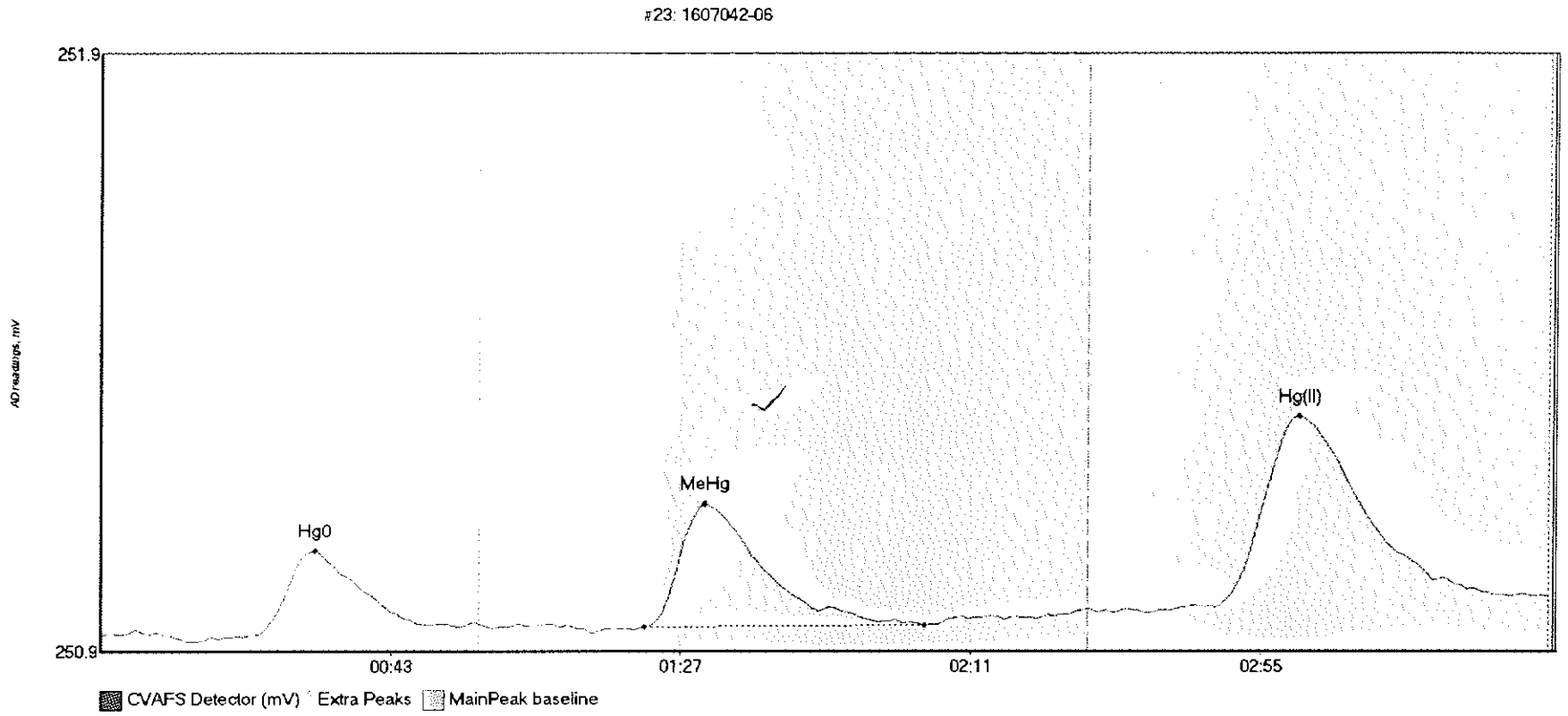
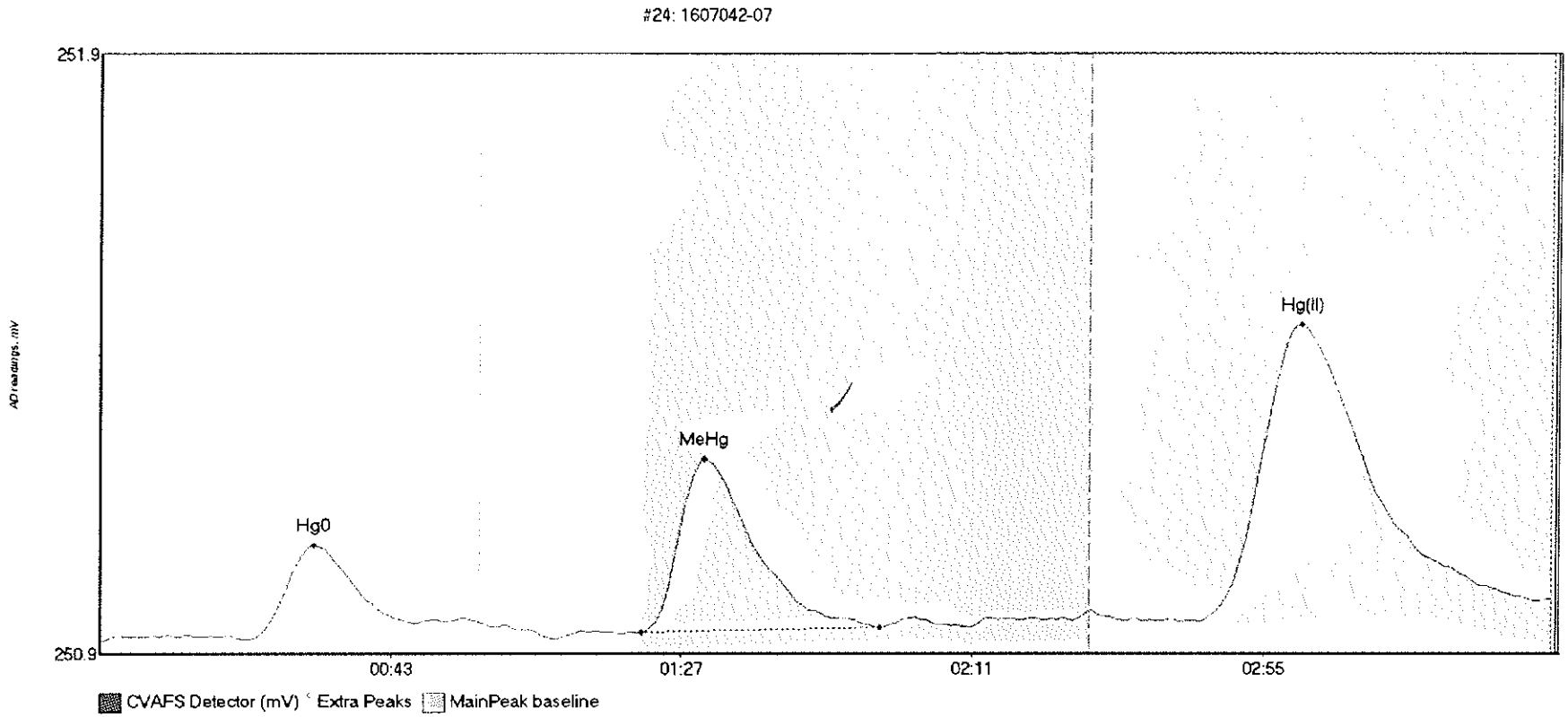


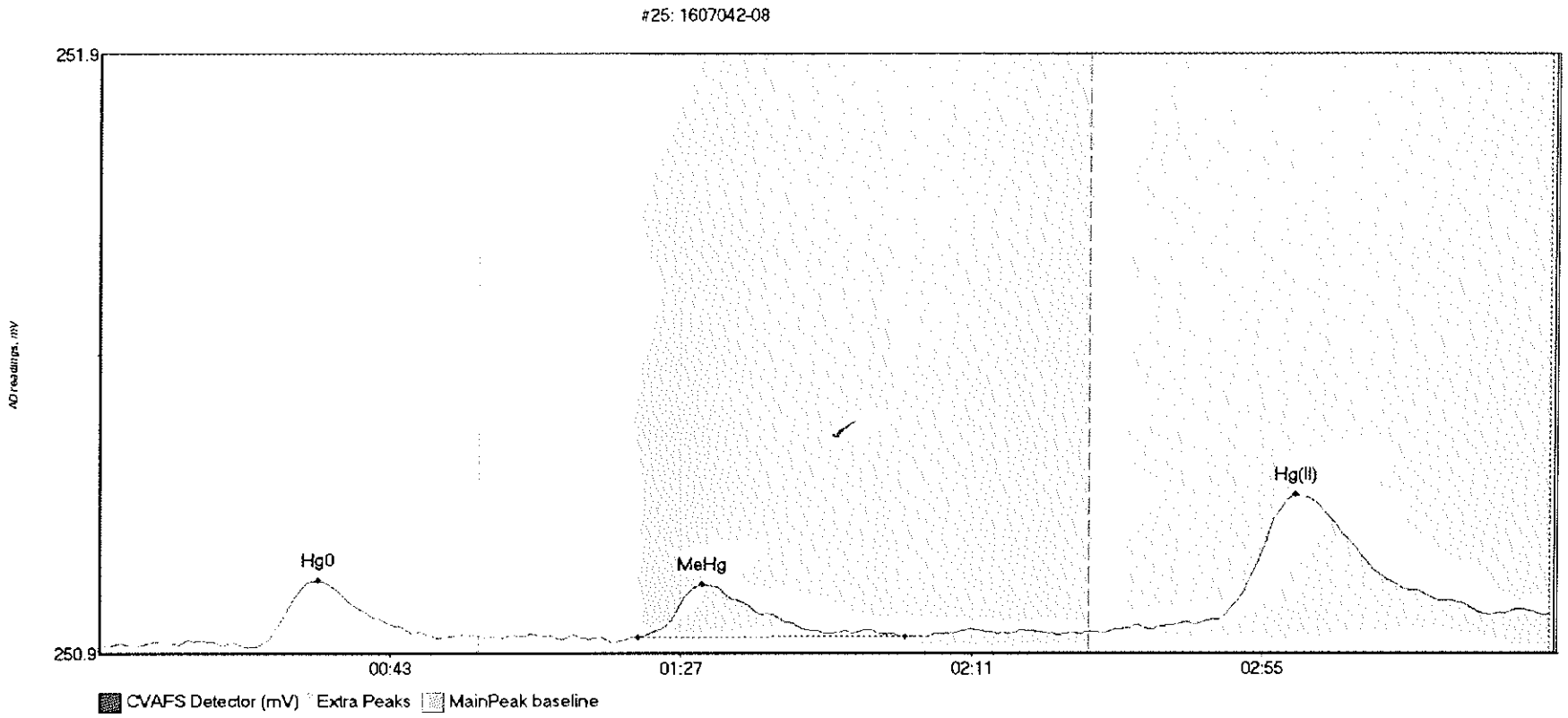
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CCB1 Hg0	20.891	23.1	50.6	250.91	250.93	32.3	0.183	OK	250.9206	0.00	0.06	
SEQ-CCB1 MeHg	11.746	82.2	143.0	250.94	250.95	92.7	0.064	OK	250.9206	0.00	0.06	
SEQ-CCB1 Hg(II)	42.776	158.3	215.1	250.96	250.97	181.7	0.237	OK	250.9206	0.00	0.06	



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1607042-06 Hg0	16.641	23.8	54.6	250.91	250.92	32.6	0.141	OK	250.9117	0.00	0.06	
1607042-06 MeHg	29.776	82.6	125.0	250.92	250.93	91.8	0.206	OK	250.9117	0.00	0.06	
1607042-06 Hg(I	54.078	164.4	219.8	250.96	250.98	181.7	0.320	CT	250.9117	0.00	0.06	



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1607042-07 Hg0	15.997	22.3	47.4	250.89	250.92	32.4	0.158	OK	250.8916	0.00	0.07	
1607042-07 MeHg	37.357	82.0	118.0	250.90	250.91	91.4	0.290	OK	250.8916	0.00	0.07	
1607042-07 Hg(I	89.433	166.5	217.7	250.92	250.96	181.7	0.495	OK	250.8916	0.00	0.07	



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1607042-08 Hg0	13.399	23.3	51.2	250.88	250.89	33.1	0.111	OK	250.8828	0.00	0.05	
1607042-08 MeHg	12.717	81.6	121.9	250.90	250.90	91.3	0.089	OK	250.8828	0.00	0.05	
1607042-08 Hg(I	40.297	159.2	219.7	250.91	250.93	181.0	0.224	OK	250.8828	0.00	0.05	

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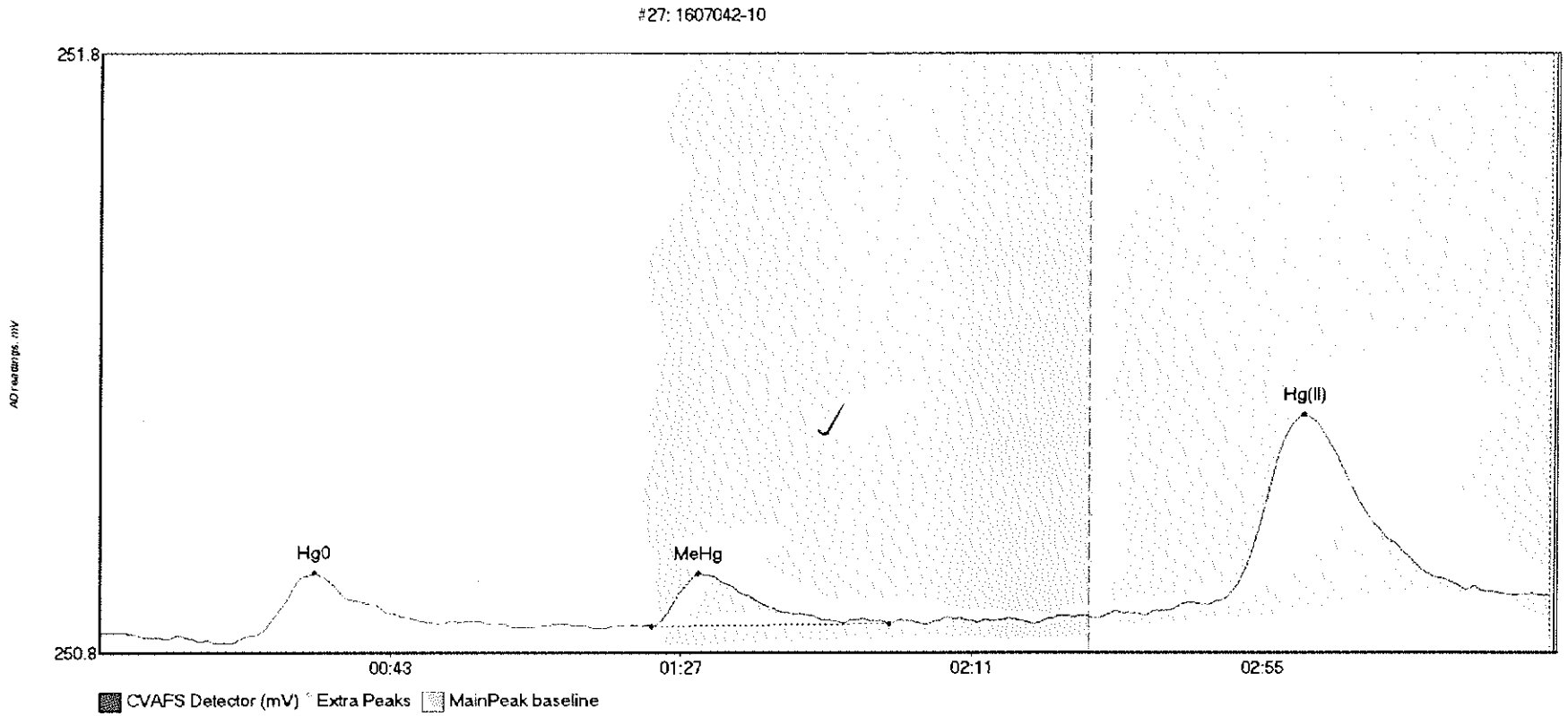

Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1607042-10 Hg0	11.896	23.4	51.2	250.85	250.87	32.6	0.104	OK	250.8577	0.00	0.06	
1607042-10 MeHg	11.819	83.6	119.6	250.87	250.87	90.8	0.088	OK	250.8577	0.00	0.06	
1607042-10 Hg(I	57.662	158.4	218.9	250.89	250.92	182.3	0.334	OK	250.8577	0.00	0.06	

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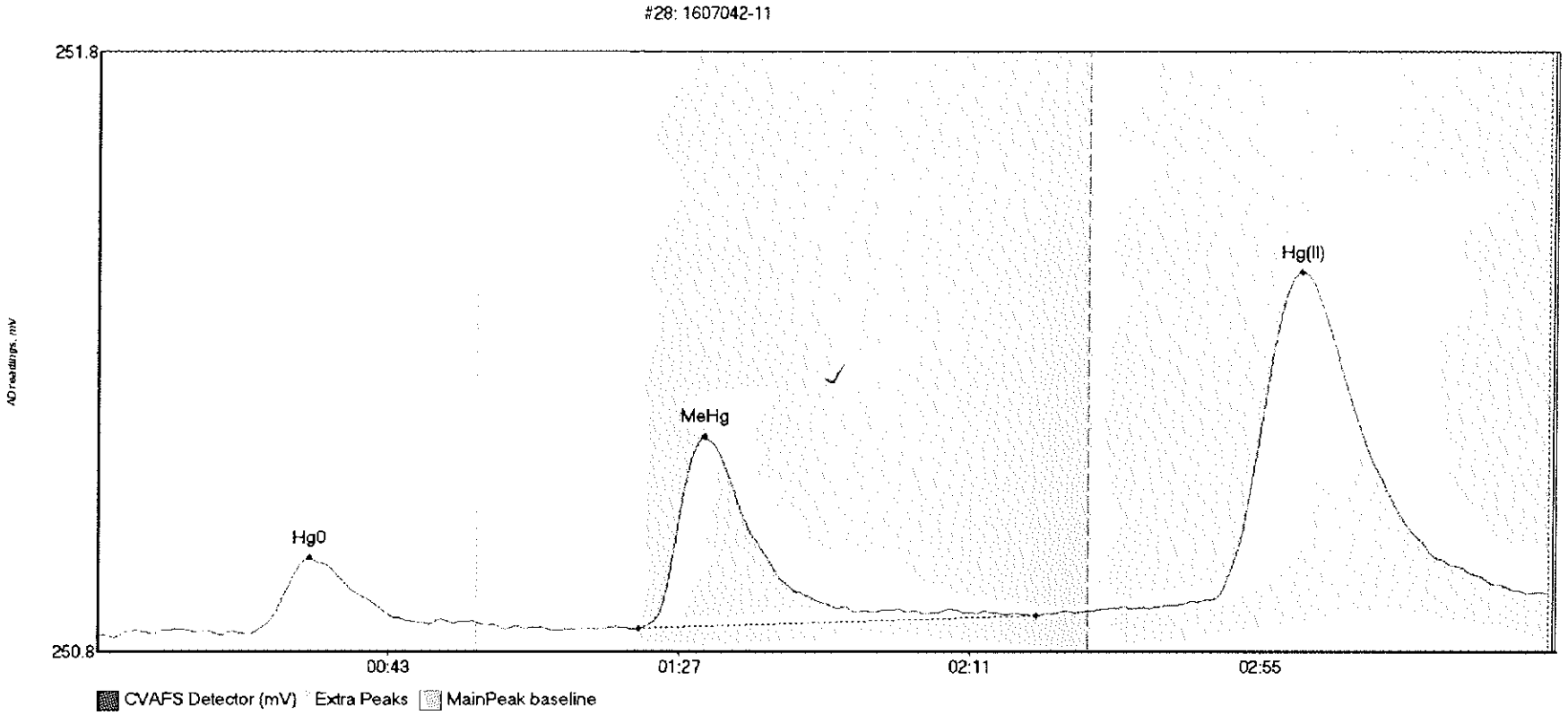

Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1607042-11 Hg0	14.010	23.2	50.2	250.85	250.86	32.1	0.126	OK	250.8451	0.00	0.07	
1607042-11 MeHg	43.709	81.9	142.0	250.86	250.88	91.9	0.319	OK	250.8451	0.00	0.07	
1607042-11 Hg(I	97.927	159.3	216.8	250.89	250.91	182.2	0.562	OK	250.8451	0.00	0.07	

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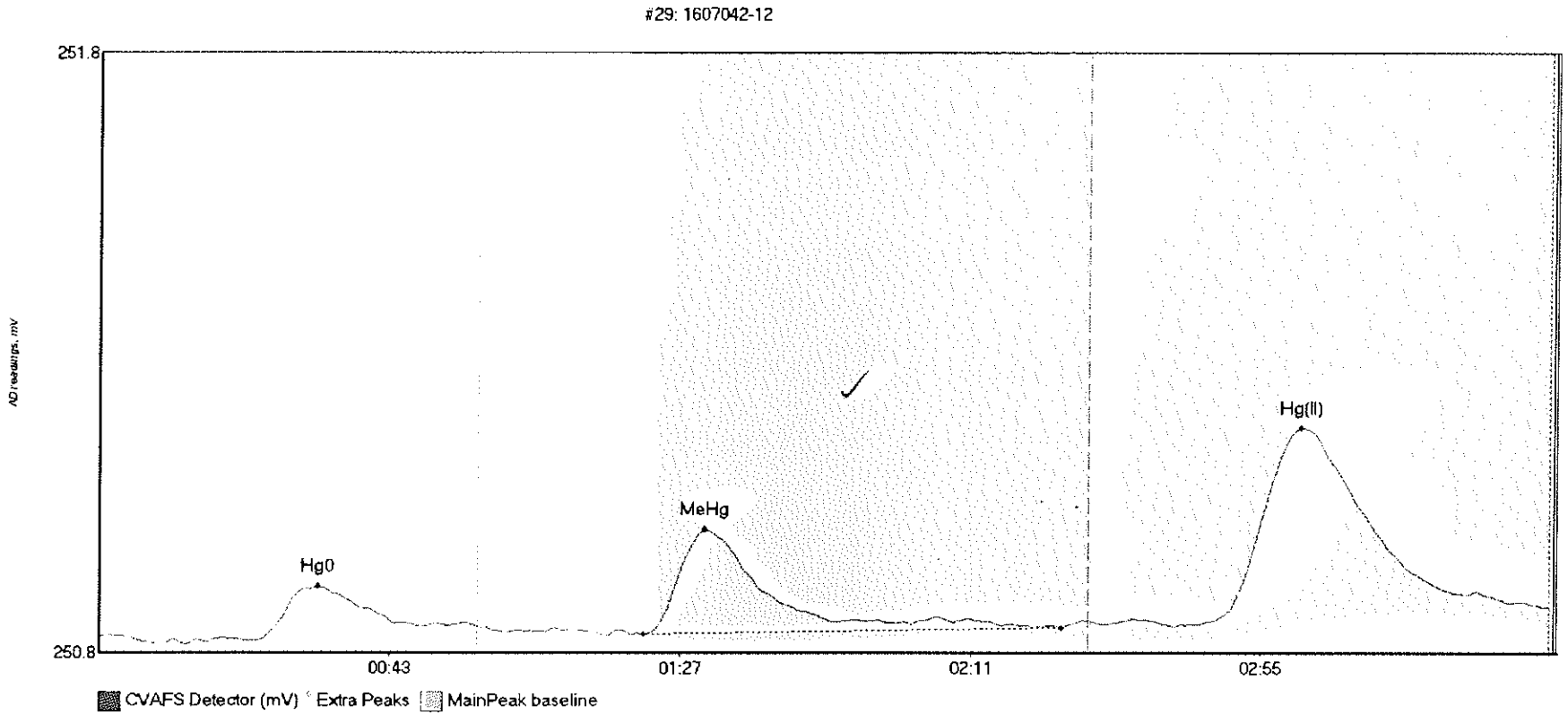

Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1607042-12 Hg0	11.561	23.5	57.4	250.84	250.86	33.1	0.091	OK	250.8479	0.00	0.05	
1607042-12 MeHg	27.031	82.5	145.8	250.85	250.86	91.7	0.175	OK	250.8479	0.00	0.05	
1607042-12 Hg(I	56.994	169.0	219.0	250.87	250.90	182.0	0.323	OK	250.8479	0.00	0.05	

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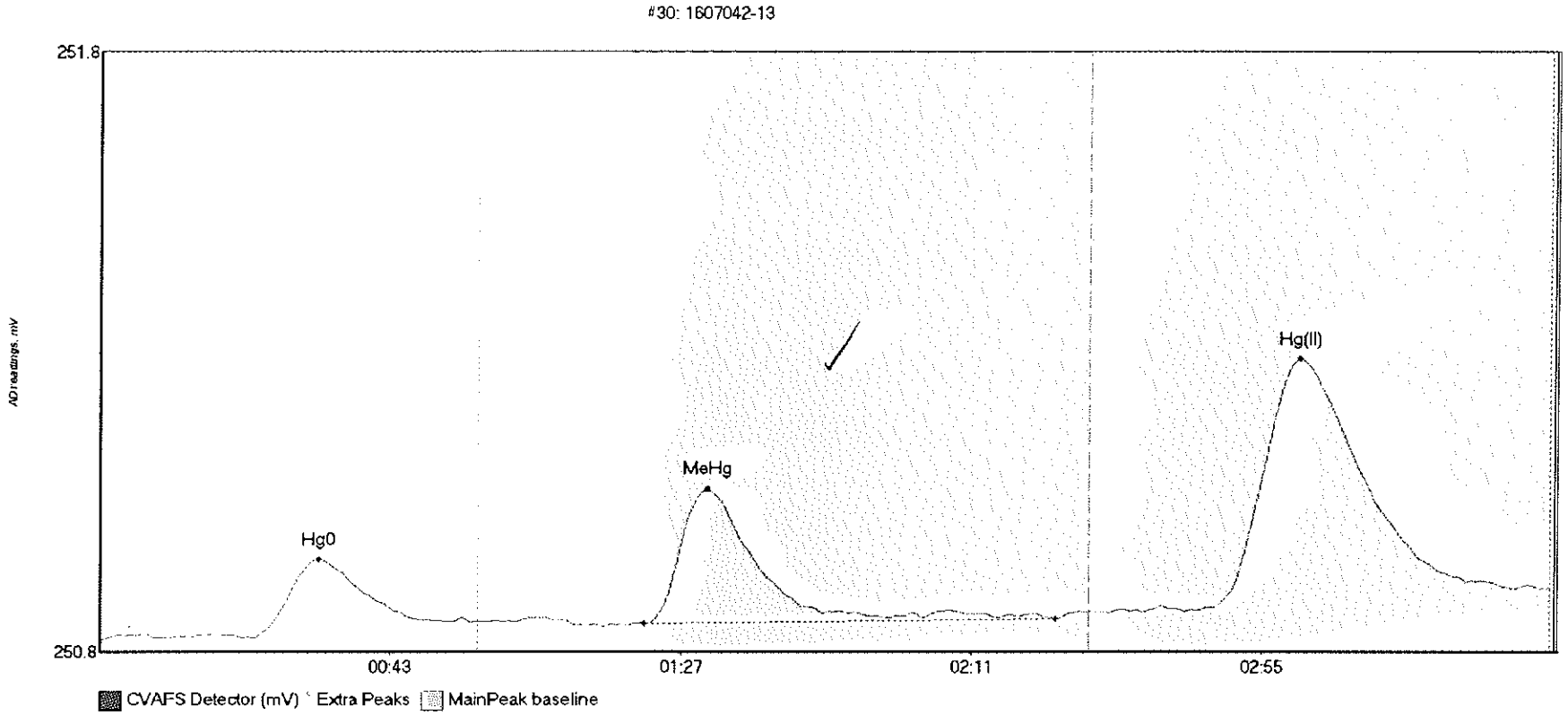

Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1607042-13 Hg0	15.932	23.4	56.4	250.83	250.86	33.3	0.131	OK	250.8270	0.00	0.09	
1607042-13 MeHg	31.081	82.5	144.8	250.85	250.86	92.0	0.224	OK	250.8270	0.00	0.09	
1607042-13 Hg(I	69.024	166.2	214.6	250.88	250.91	181.8	0.420	OK	250.8270	0.00	0.09	

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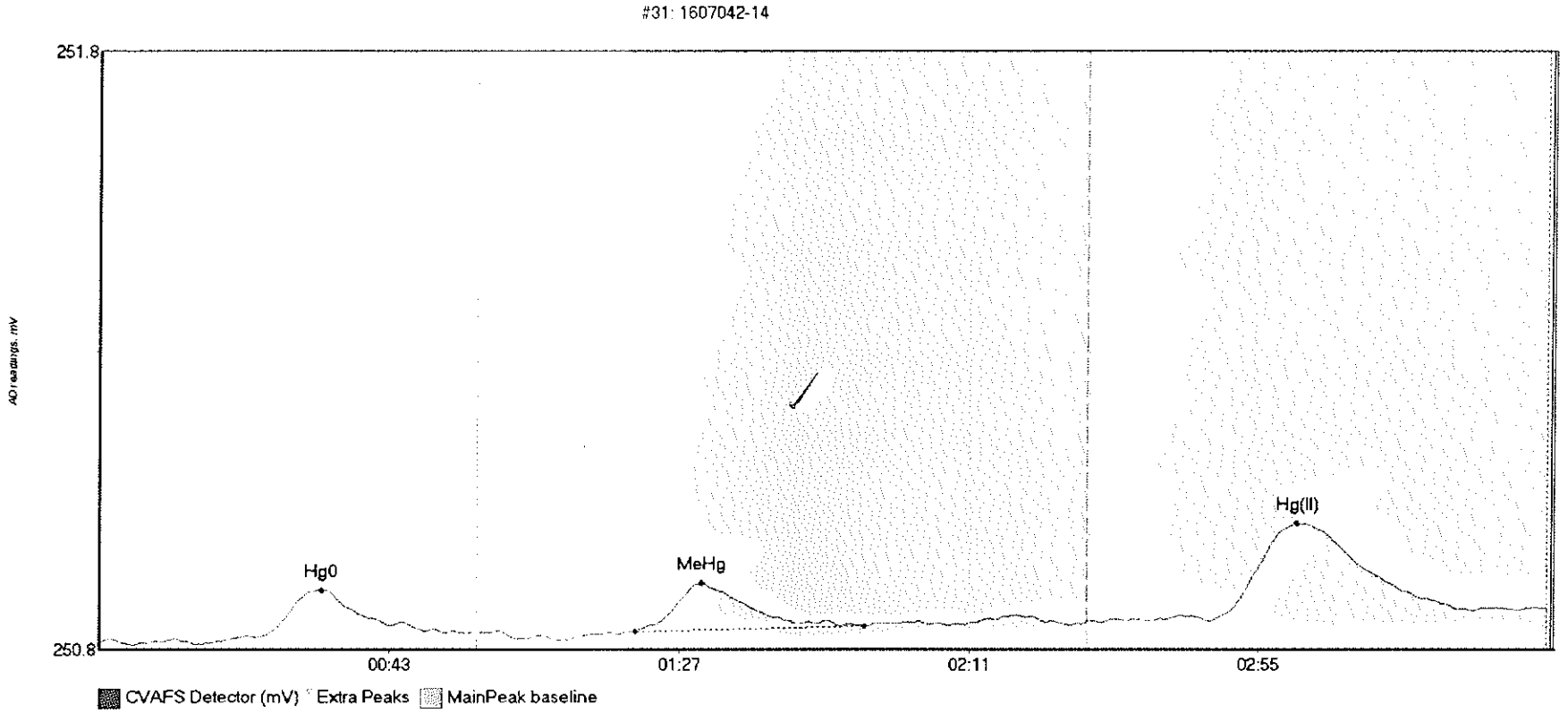

Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1607042-14 Hg0	9.772	20.6	55.9	250.83	250.84	33.7	0.081	OK	250.8240	0.00	0.05	
1607042-14 MeHg	9.881	81.3	116.2	250.84	250.85	91.5	0.082	OK	250.8240	0.00	0.05	
1607042-14 Hg(I	27.983	168.9	208.5	250.86	250.87	181.9	0.163	OK	250.8240	0.00	0.05	

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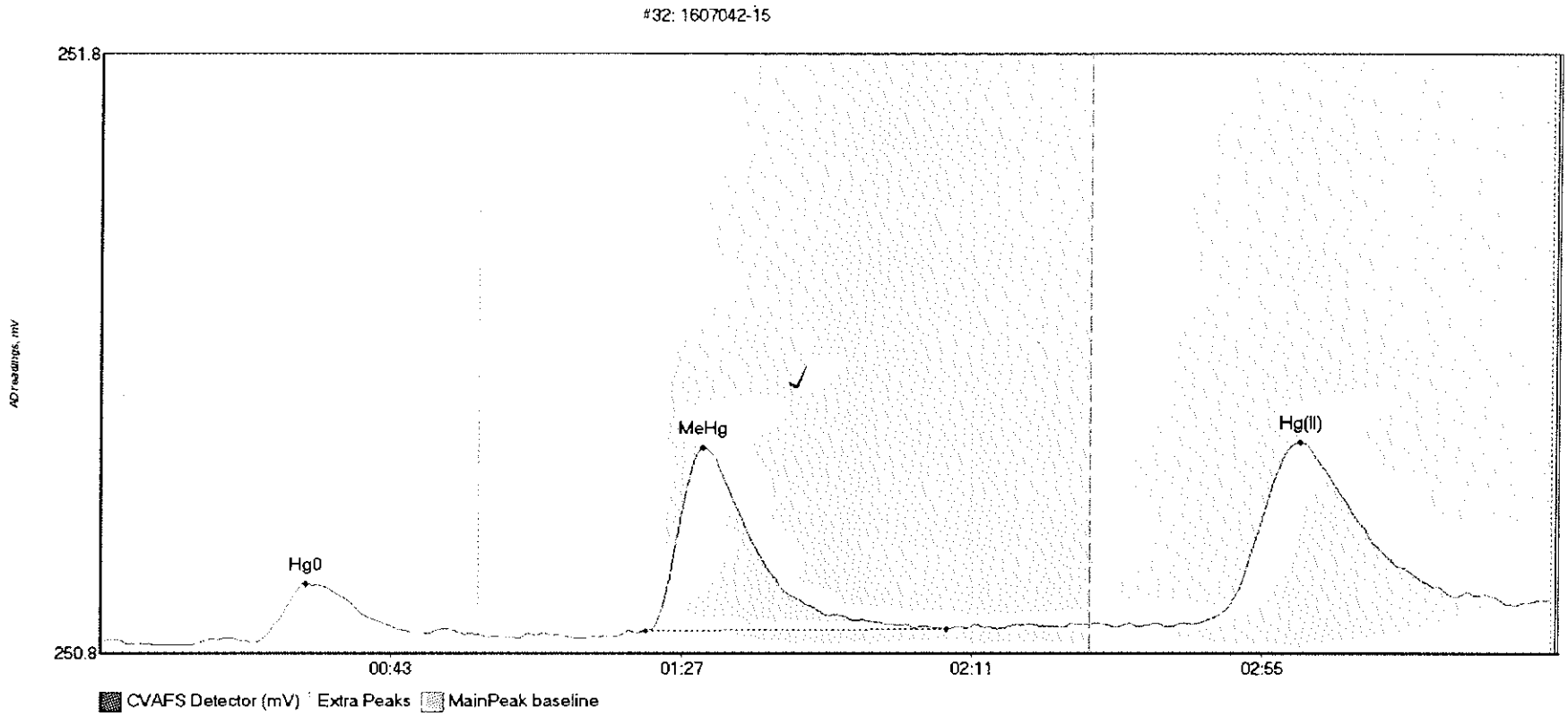

Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1607042-15 Hg0	12.401	23.2	57.5	250.81	250.83	31.1	0.099	CT	250.8180	0.00	0.07	
1607042-15 MeHg	40.081	82.6	128.3	250.84	250.84	91.2	0.306	OK	250.8180	0.00	0.07	
1607042-15 Hg(I	51.871	166.5	214.4	250.85	250.88	181.8	0.302	OK	250.8180	0.00	0.07	

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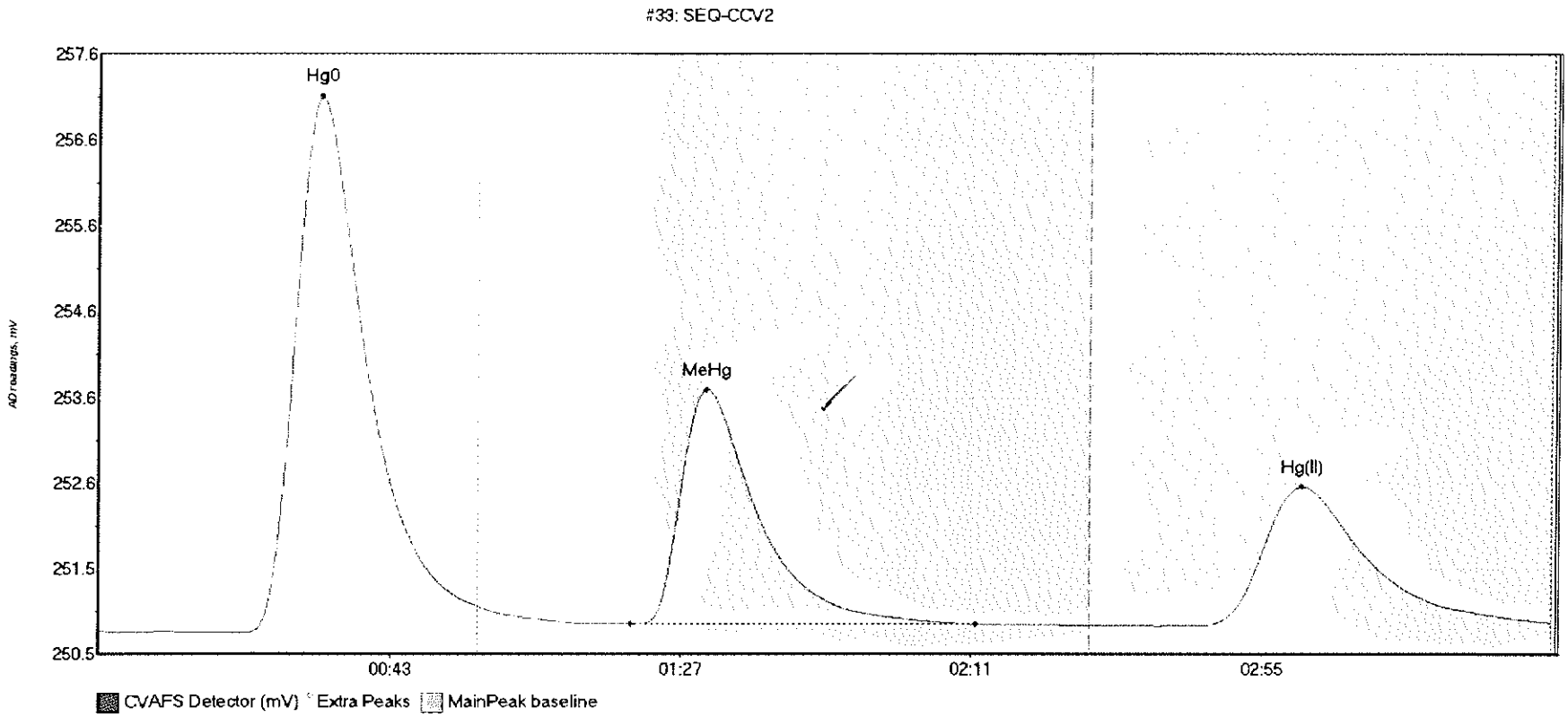

Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CCV2 Hg0	758.405	22.4	57.5	250.79	251.09	33.5	6.318	CT	250.7987	0.00	0.11	
SEQ-CCV2 MeHg	372.122	80.5	132.8	250.89	250.88	91.9	2.770	OK	250.7987	0.00	0.11	
SEQ-CCV2 Hg(II)	294.796	166.6	219.8	250.87	250.91	182.1	1.649	CT	250.7987	0.00	0.11	

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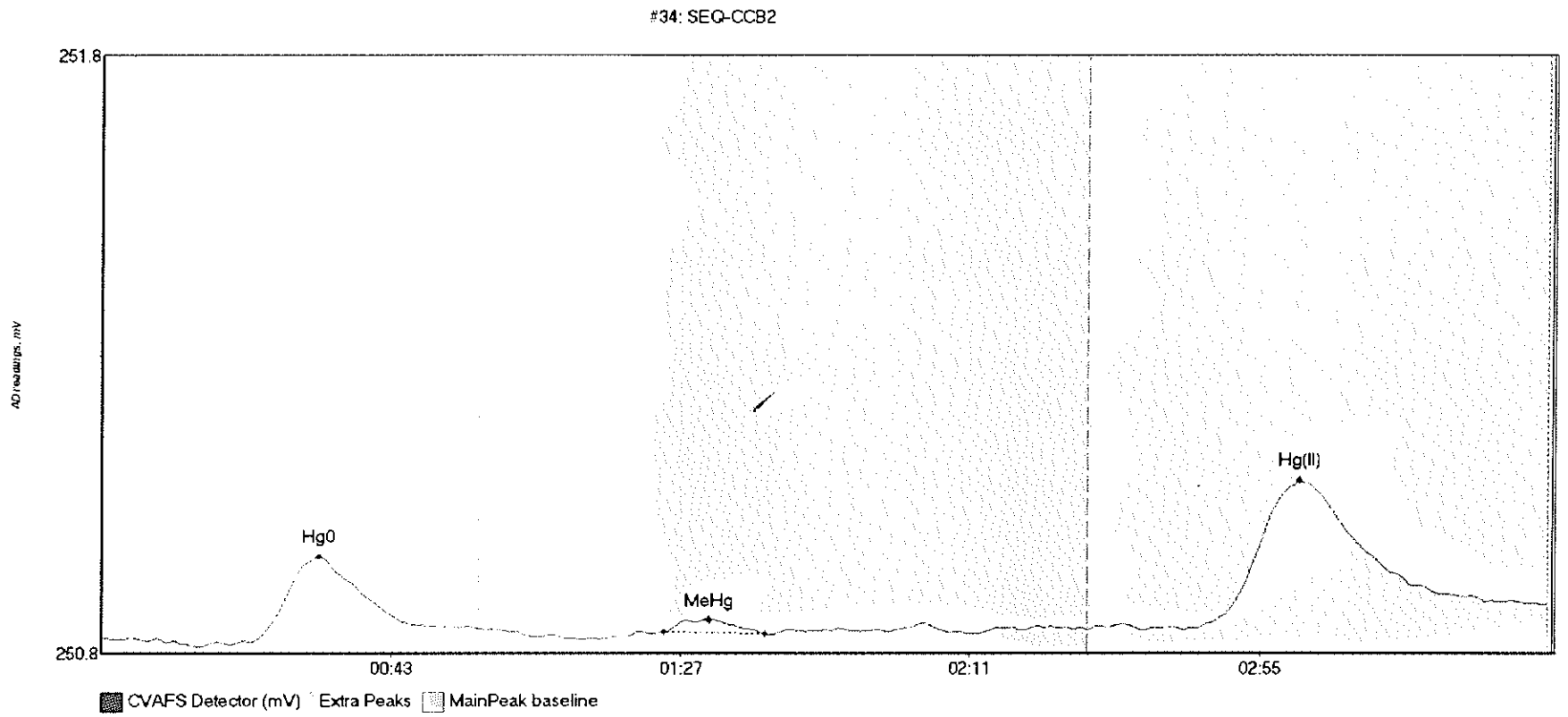

Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CCB2 Hg0	17.756	22.6	57.5	250.80	250.82	33.0	0.144	CT	250.8037	0.00	0.06	
SEQ-CCB2 MeHg	2.062	85.4	100.8	250.81	250.81	92.3	0.021	OK	250.8037	0.00	0.06	
SEQ-CCB2 Hg(II)	43.448	166.3	219.1	250.82	250.86	182.1	0.246	OK	250.8037	0.00	0.06	

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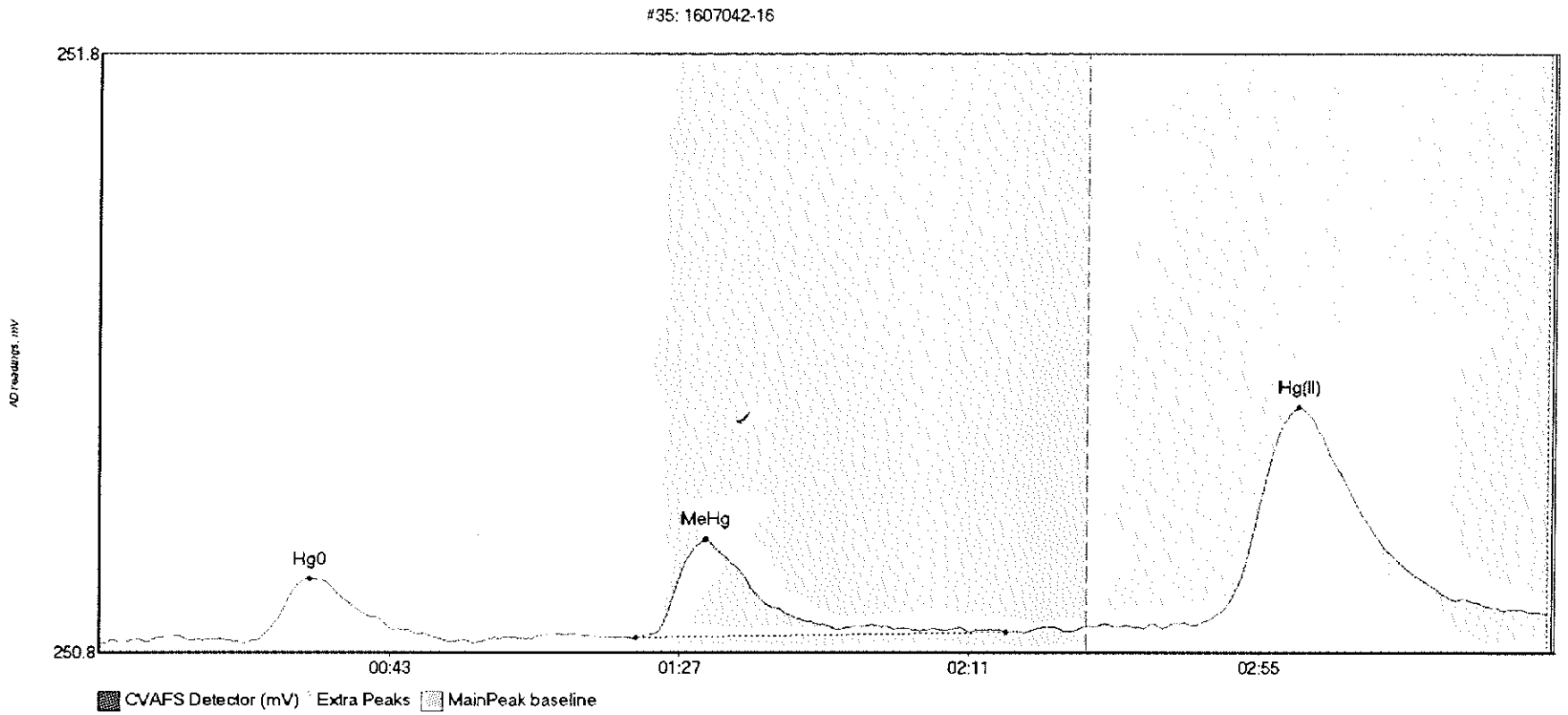
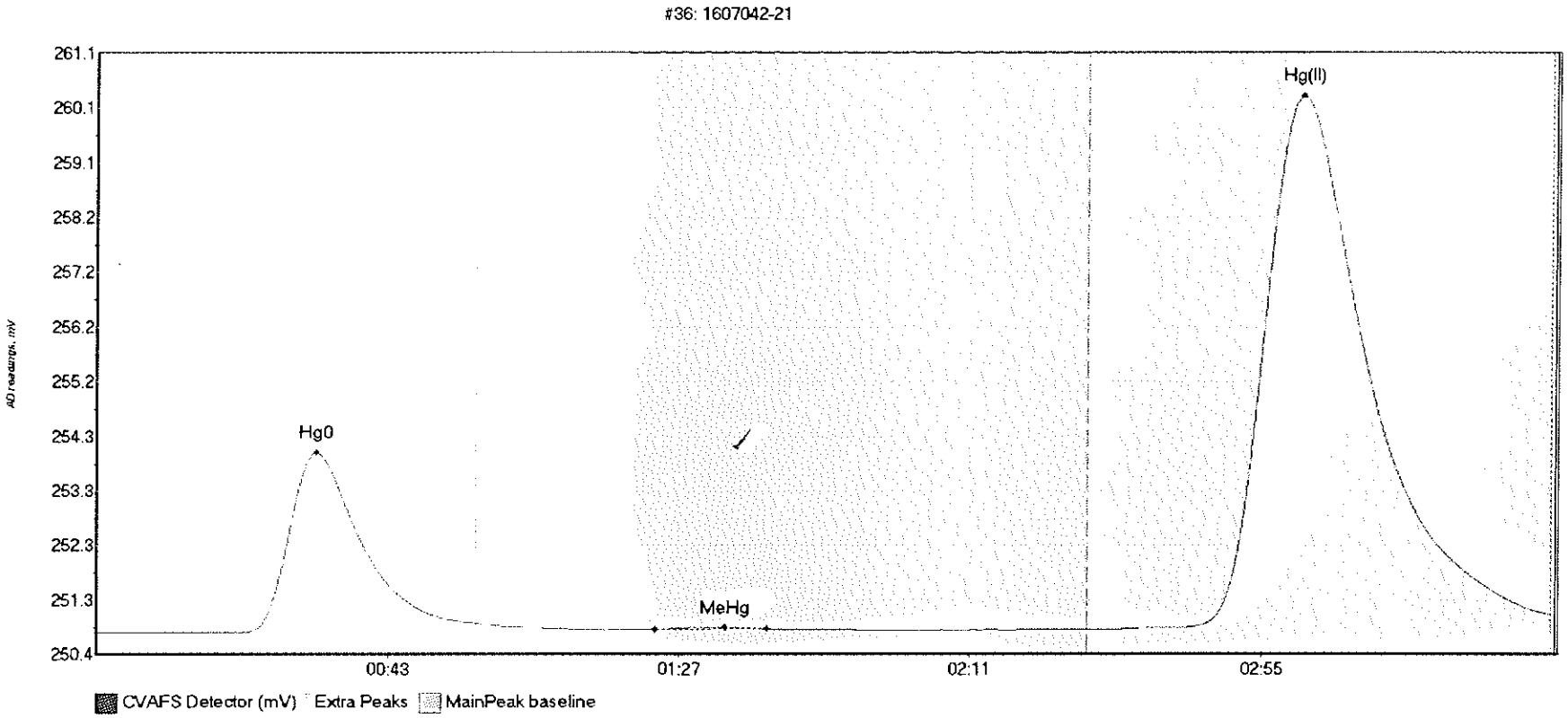


Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1607042-16 HgO	13.544	23.4	53.5	250.79	250.78	31.9	0.104	OK	250.7810	0.00	0.05	
1607042-16 MeHg	23.251	81.4	137.8	250.79	250.80	92.0	0.165	OK	250.7810	0.00	0.05	
1607042-16 Hg(I	64.508	166.2	219.8	250.81	250.83	182.1	0.365	CT	250.7810	0.00	0.05	



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1607042-21 Hg0	385.991	22.2	57.5	250.77	250.92	33.1	3.204	CT	250.7630	0.00	0.33	
1607042-21 MeHg	3.109	84.5	101.3	250.81	250.82	95.0	0.037	OK	250.7630	0.00	0.33	
1607042-21 Hg(I	1689.677	154.1	219.8	250.82	251.09	182.2	9.489	CT	250.7630	0.00	0.33	

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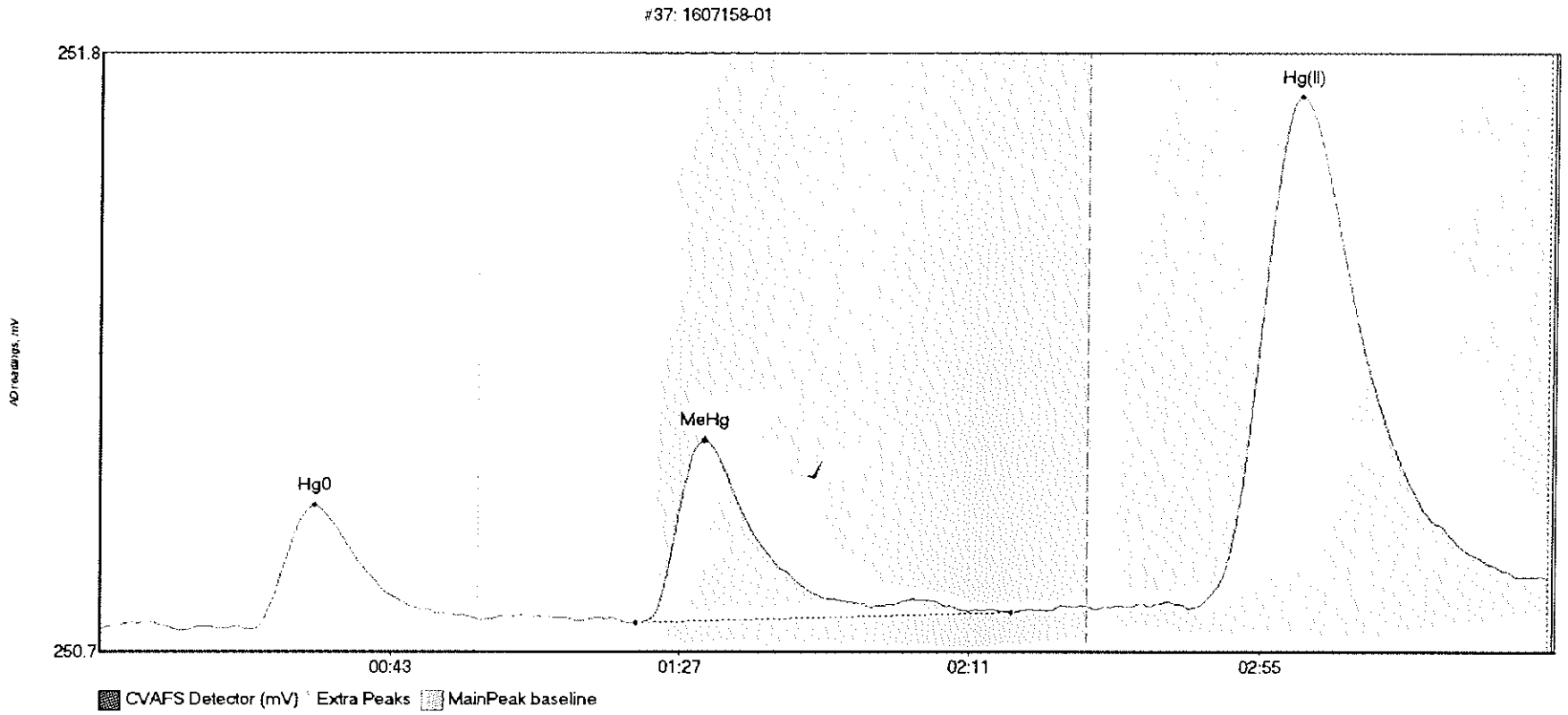
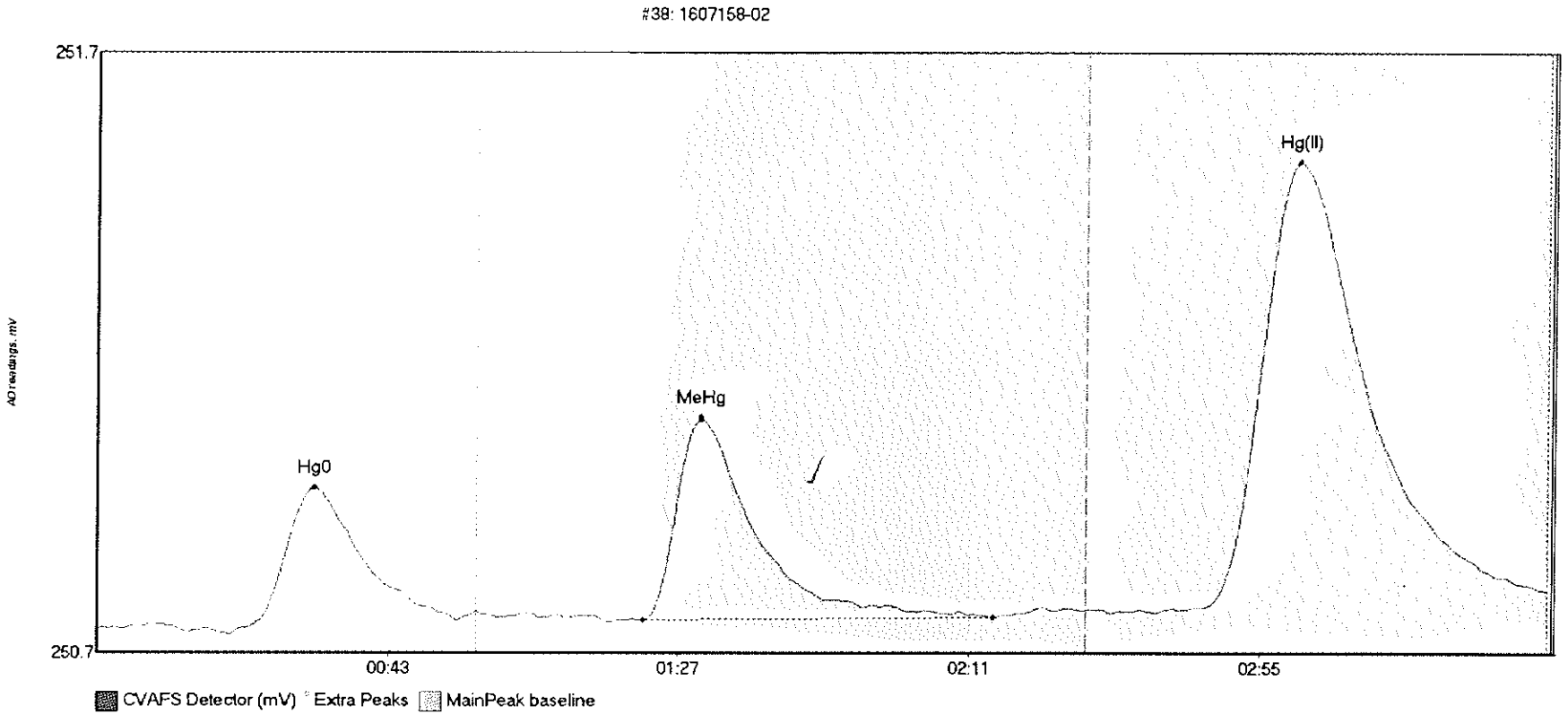


Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1607158-01 Hg0	28.022	23.2	57.5	250.77	250.78	32.6	0.220	CT	250.7677	0.00	0.09	
1607158-01 MeHg	46.839	81.5	138.5	250.78	250.80	91.7	0.326	OK	250.7677	0.00	0.09	
1607158-01 Hg(I	160.022	165.3	219.8	250.80	250.86	182.2	0.910	CT	250.7677	0.00	0.09	



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1607158-02 Hg0	29.234	22.4	54.3	250.76	250.78	32.8	0.234	OK	250.7643	0.00	0.06	
1607158-02 MeHg	45.788	82.7	135.7	250.78	250.78	91.5	0.334	OK	250.7643	0.00	0.06	
1607158-02 Hg(I	133.156	167.4	219.8	250.80	250.83	181.9	0.743	CT	250.7643	0.00	0.06	

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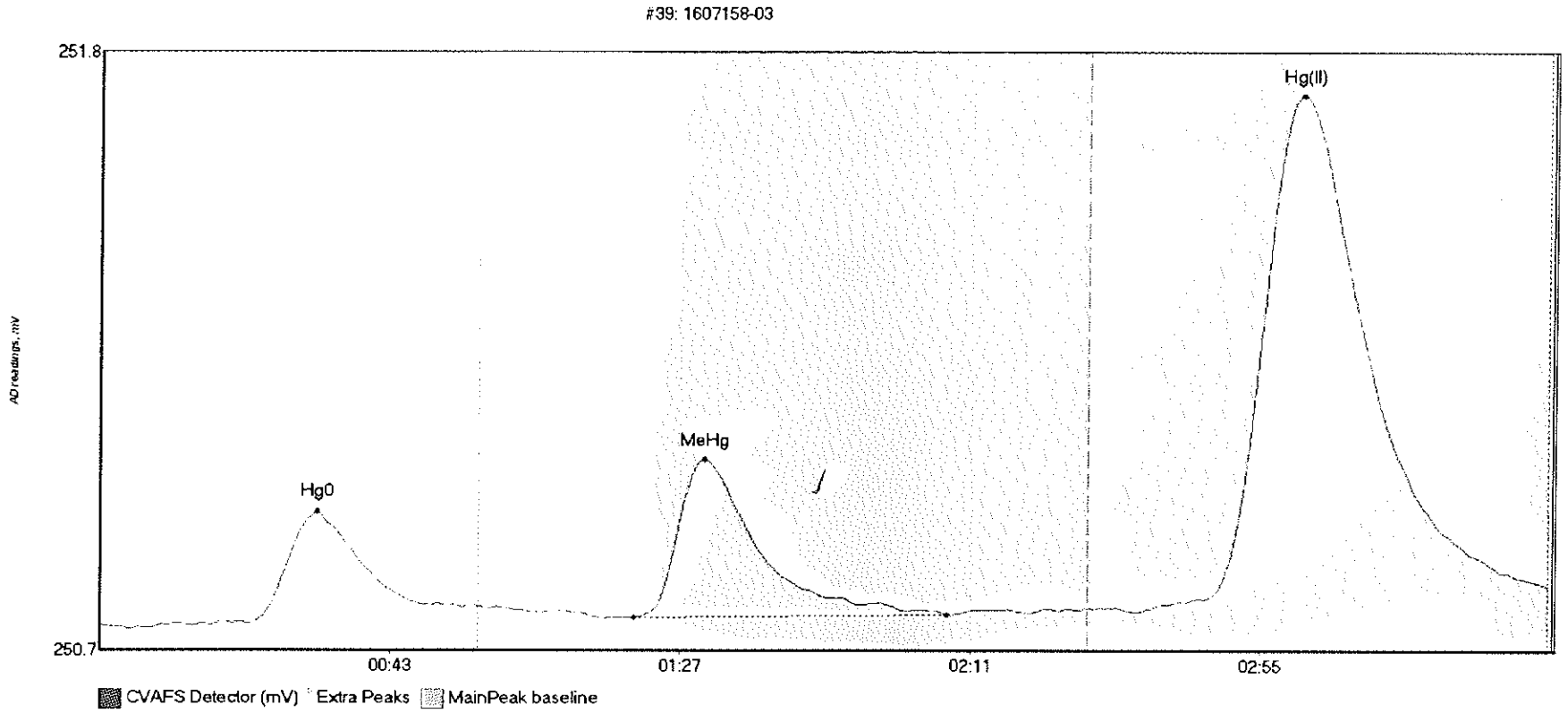

Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1607158-03 Hg0	23.627	22.7	54.8	250.76	250.79	33.0	0.203	OK	250.7533	0.00	0.07	
1607158-03 MeHg	40.802	81.0	128.5	250.77	250.77	91.7	0.292	OK	250.7533	0.00	0.07	
1607158-03 Hg(I	167.013	159.4	219.8	250.78	250.83	182.3	0.943	CT	250.7533	0.00	0.07	

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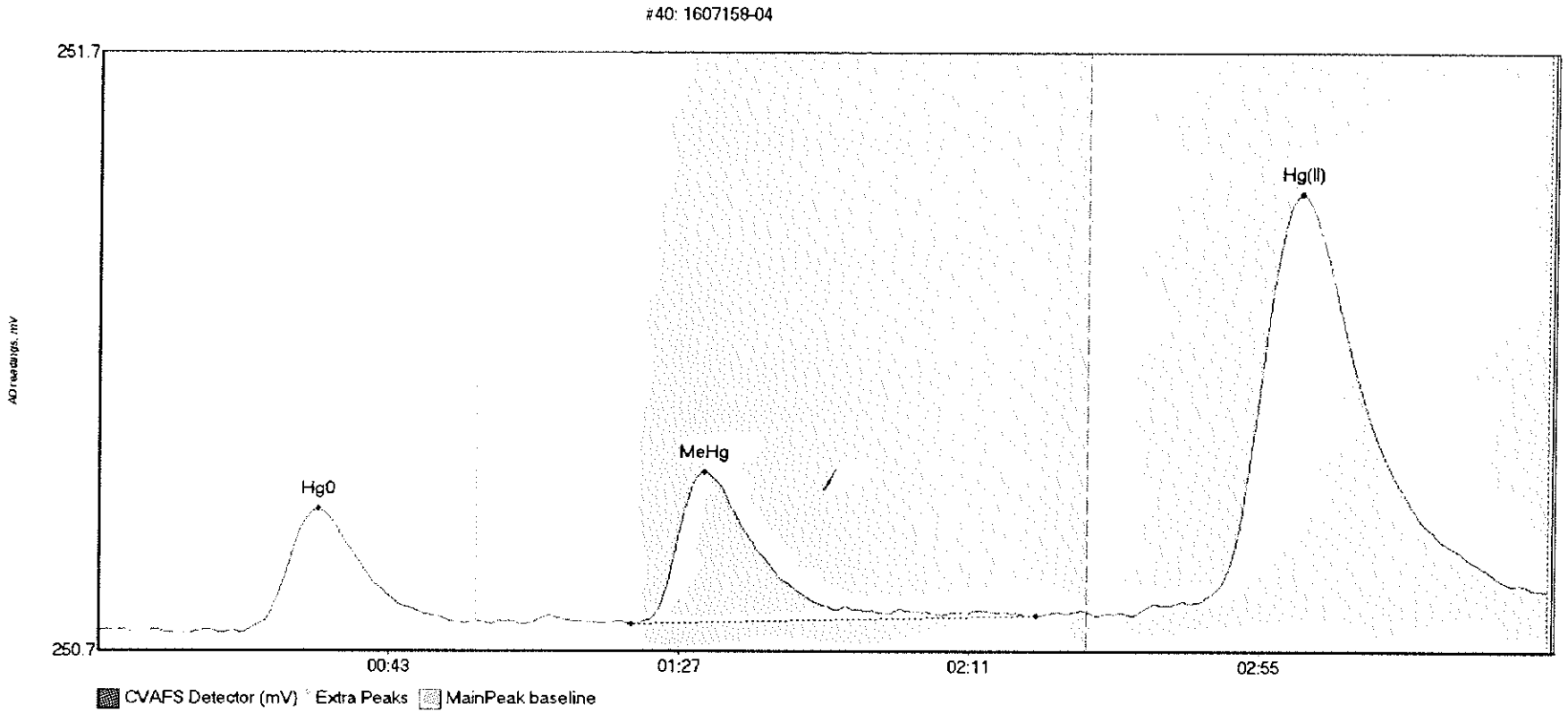

Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1607158-04 Hg0	25.911	21.6	55.6	250.75	250.76	33.3	0.207	OK	250.7511	0.00	0.07	
1607158-04 MeHg	36.898	80.8	142.2	250.76	250.77	91.7	0.256	OK	250.7511	0.00	0.07	
1607158-04 Hg(I	126.939	156.9	219.2	250.78	250.82	182.3	0.704	OK	250.7511	0.00	0.07	

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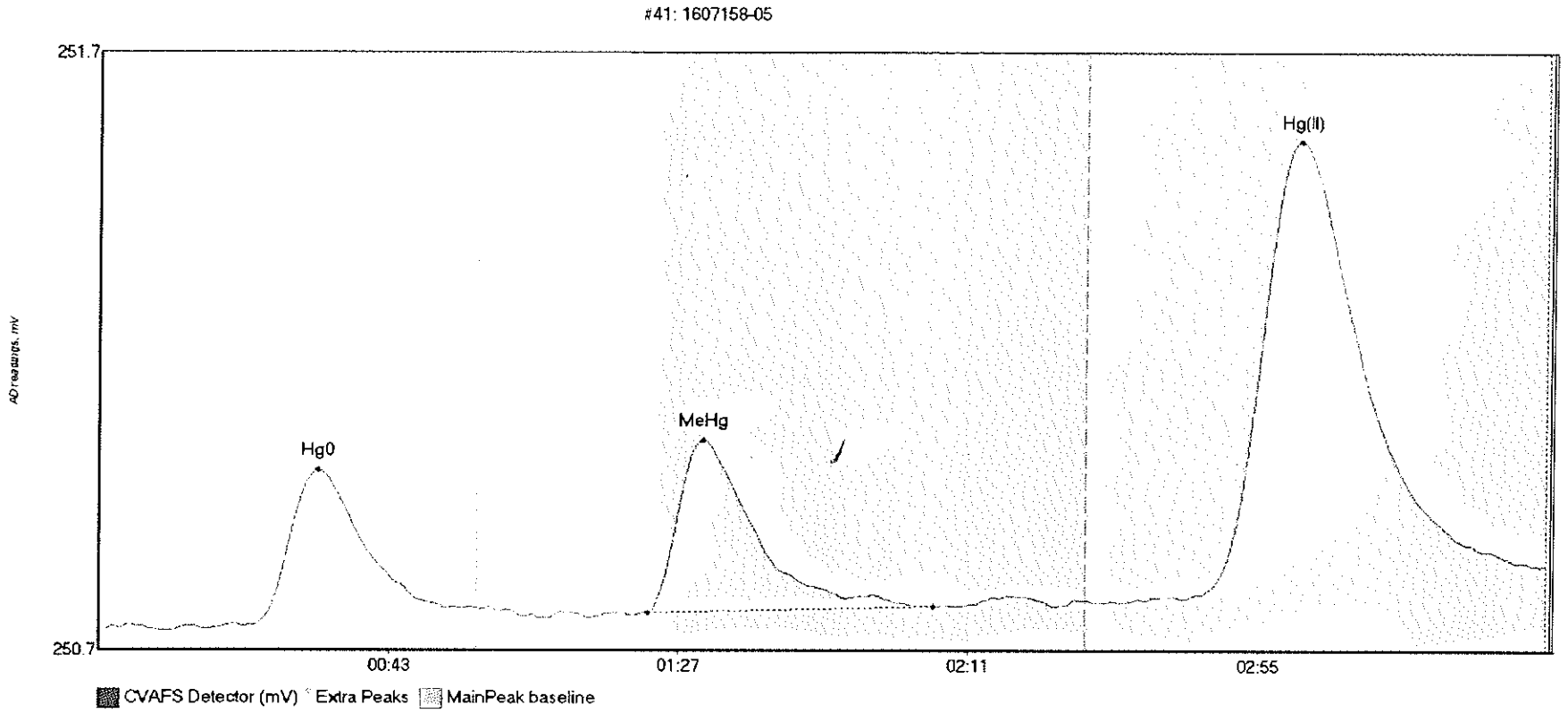
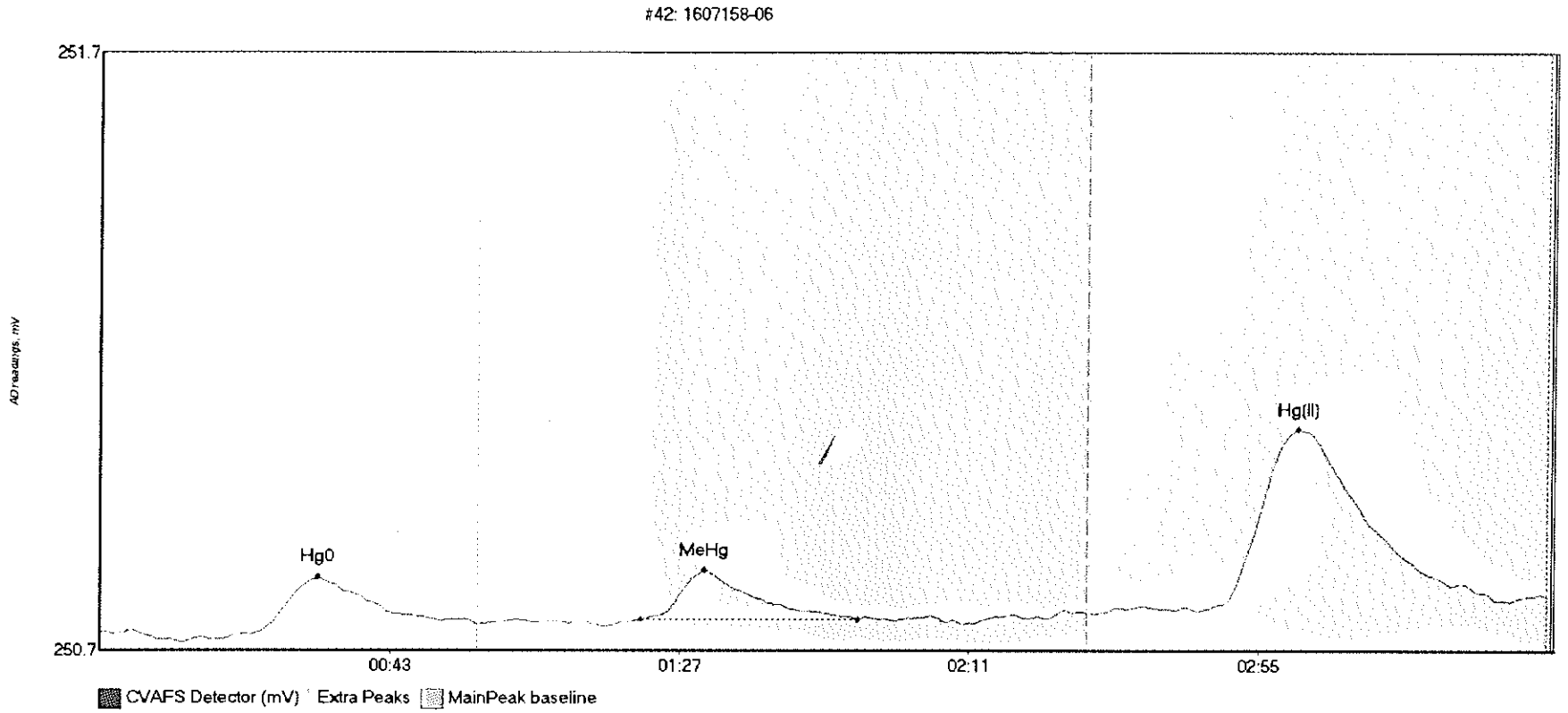
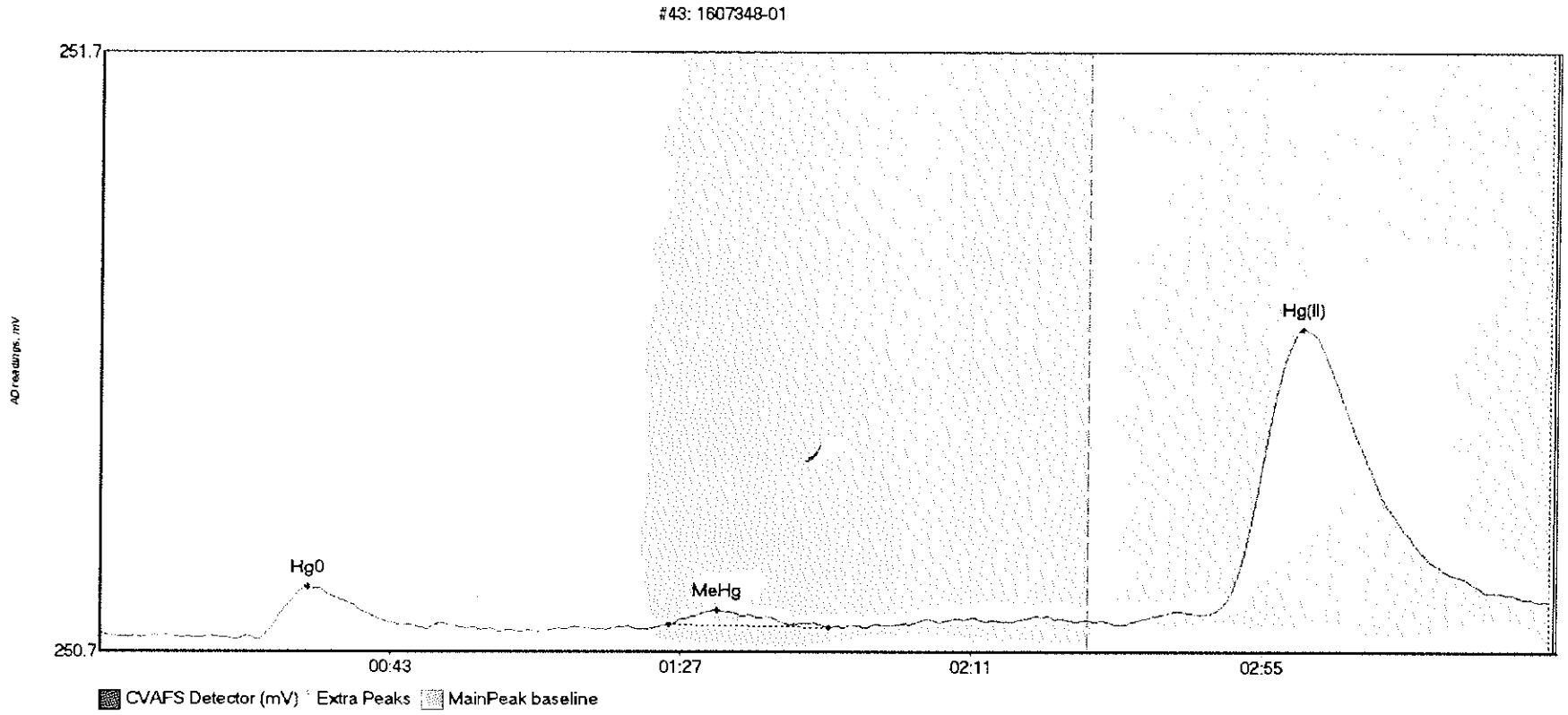


Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1607158-05 Hg0	31.350	18.2	57.4	250.73	250.77	33.2	0.264	OK	250.7301	0.00	0.11	
1607158-05 MeHg	38.554	83.4	126.8	250.76	250.77	91.7	0.289	OK	250.7301	0.00	0.11	
1607158-05 Hg(I	132.247	165.1	218.9	250.78	250.84	182.3	0.764	OK	250.7301	0.00	0.11	

016

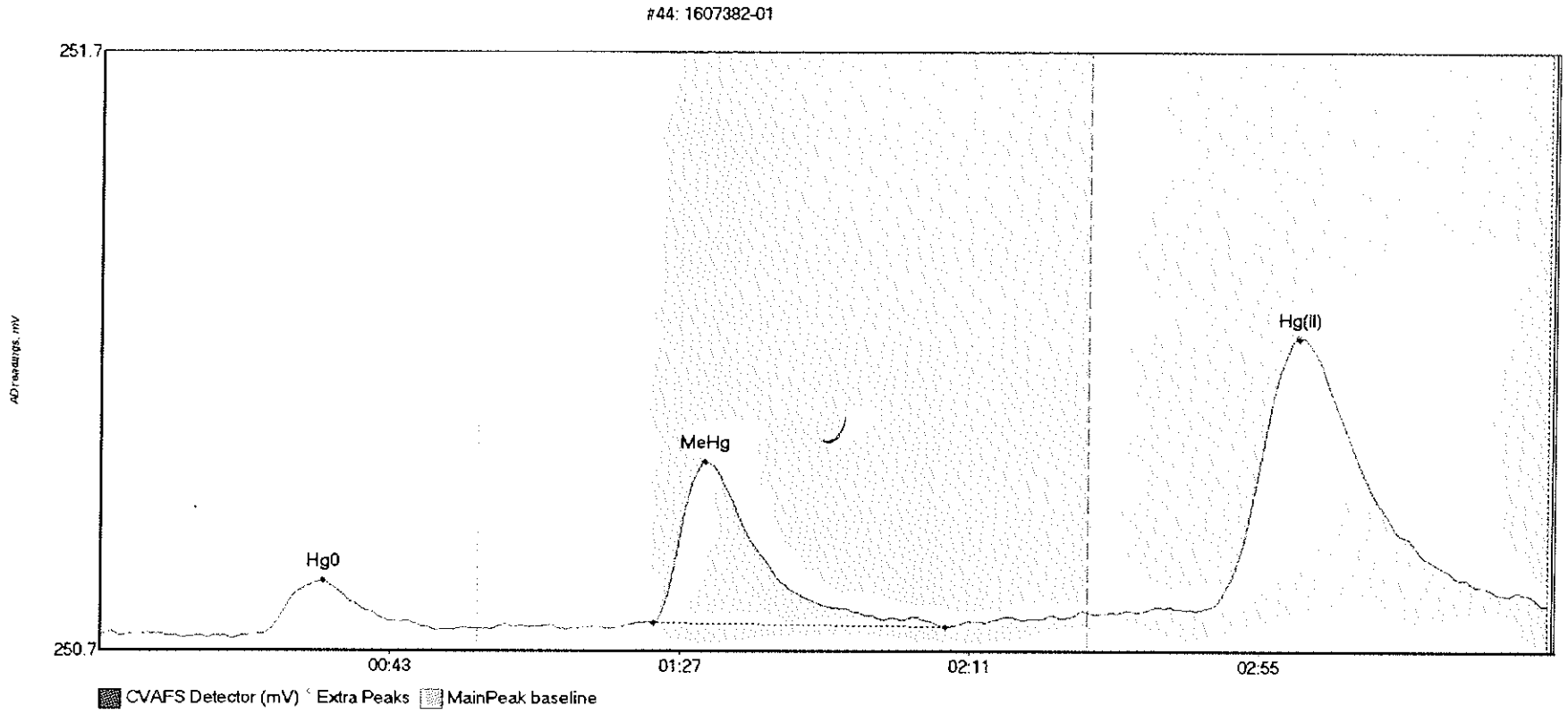


Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1607158-06 Hg0	12.812	22.7	57.5	250.74	250.76	33.0	0.094	CT	250.7501	0.00	0.06	
1607158-06 MeHg	10.366	82.1	115.1	250.77	250.77	91.7	0.083	OK	250.7501	0.00	0.06	
1607158-06 Hg(I	54.321	166.7	214.3	250.78	250.80	182.1	0.304	OK	250.7501	0.00	0.06	



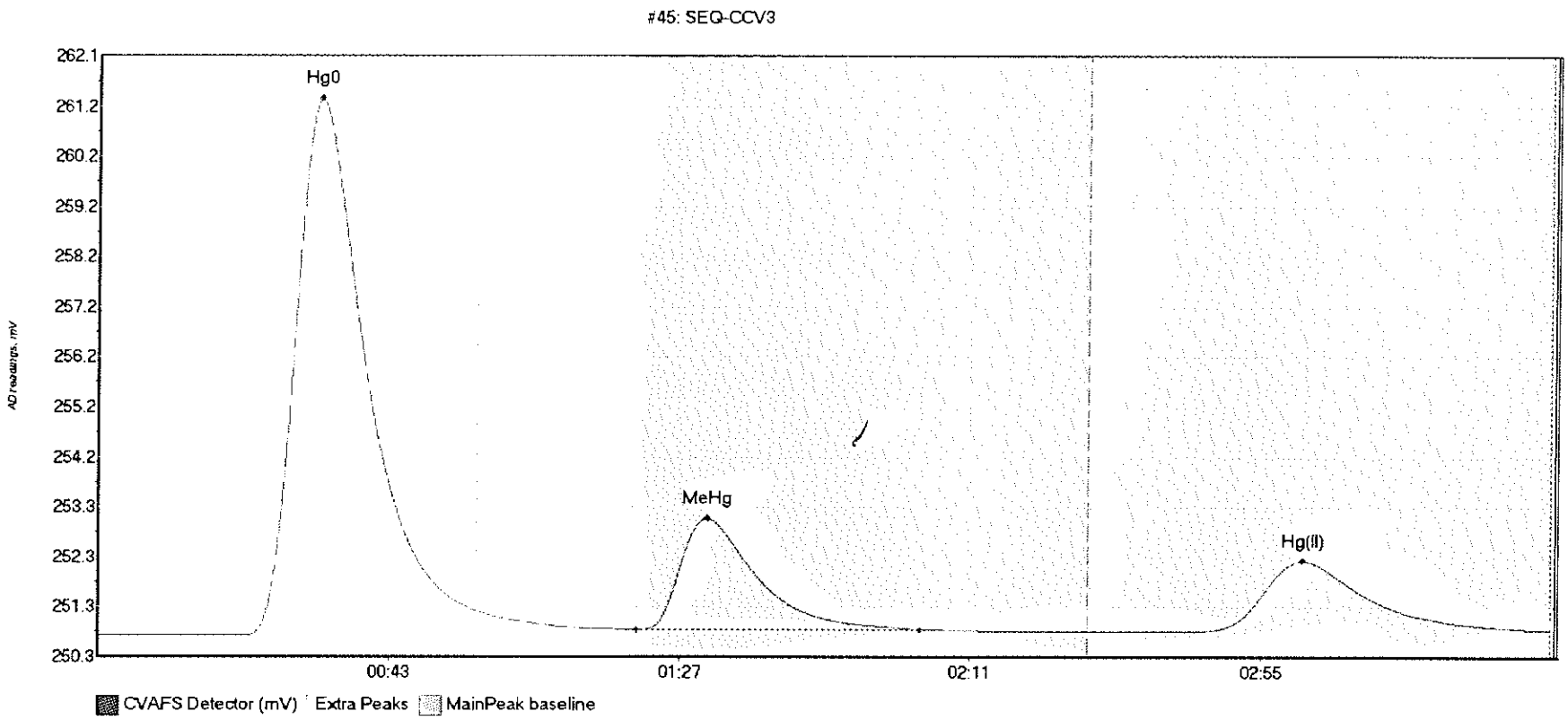
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1607348-01 Hg0	9.938	24.0	49.5	250.74	250.75	31.6	0.089	OK	250.7477	0.00	0.05	
1607348-01 MeHg	3.258	86.3	110.4	250.76	250.76	93.6	0.024	OK	250.7477	0.00	0.05	
1607348-01 Hg(I	87.015	158.4	218.4	250.77	250.80	182.1	0.485	OK	250.7477	0.00	0.05	

016

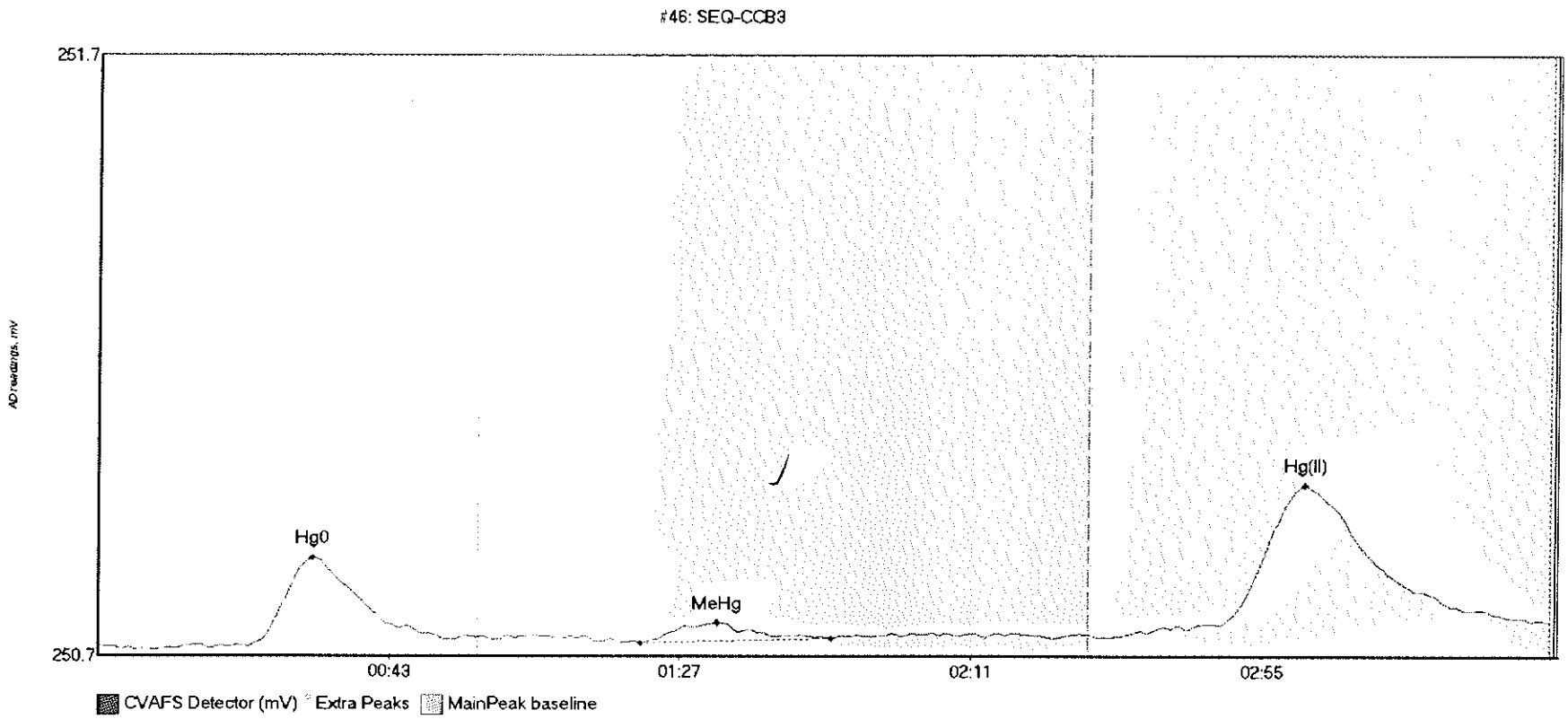


Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1607382-01 Hg0	10.560	24.4	51.1	250.74	250.75	33.8	0.089	OK	250.7418	0.00	0.05	
1607382-01 MeHg	37.127	84.0	128.5	250.76	250.75	91.8	0.269	OK	250.7418	0.00	0.05	
1607382-01 Hg(I	83.740	158.2	219.1	250.78	250.79	181.9	0.459	OK	250.7418	0.00	0.05	

016



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CCV3 Hg0	1261.236	22.4	57.5	250.72	251.20	33.6	10.584	CT	250.7183	0.00	0.11	
SEQ-CCV3 MeHg	288.323	81.6	124.5	250.84	250.84	92.1	2.195	OK	250.7183	0.00	0.11	
SEQ-CCV3 Hg(II)	247.850	164.8	219.8	250.79	250.83	182.3	1.396	CT	250.7183	0.00	0.11	



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CCB3 Hg0	17.741	22.8	52.6	250.70	250.71	32.5	0.147	OK	250.6970	0.00	0.04	
SEQ-CCB3 MeHg	4.148	82.1	110.9	250.70	250.71	93.7	0.035	OK	250.6970	0.00	0.04	
SEQ-CCB3 Hg(II)	46.079	154.9	217.2	250.71	250.74	182.5	0.252	OK	250.6970	0.00	0.04	

016

M 7/22/16

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

Uploaded by BC DM M 7/22/16

Analyst:	RYAN NELSON	**Sequence #:**	6G21004
Reviewer:	[illegible]	**Dataset ID #:**	MMHG27001-160720-1
Date:	7/21/16	**WO #:**	[redacted]
Batch #(s):	F607309	**Client(s):**	

- **Select the correct preparation method.**

Additional Comments:

Analyte	Prep Method		Matrix
☑ MHg	FGS-013	MHg Distillation	Water
☐ MHg	FGS-010	KOH/MeOH Digest	Tissue
☐ MHg	FGS-045	MeCl Extraction	Sed/Soil
☐ DMHg	FGS-098 (None Accredited method)		ALL

	Analyst Initials: DM		Reviewer Initials: M	
1. Compare Sample ID with Bench sheet/Sequence/Raw Data (Have all samples been imported?)	☑ YES	☐ NO		☑
2. Check for transcription errors from Excel spreadsheet (or Prep Bench sheet)/Raw data	☑ YES	☐ NO		☑
(a) Reviewer: 100% of peak heights checked	☑ YES	☐ NO		☑
(b) Are there peak height errors?	☐ YES	☑ NO		☑
(c) Error on a sample: Do peak heights, responses, & initial results match corrected data?	☐ YES	☐ NO	☑ N/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	☐ N/A	☑
(f) Check and compare masses (review prep bench sheet)	☐ YES	☐ NO	☐ N/A	☑
(g) Check and compare initial and final volumes	☐ YES	☐ NO	☐ N/A	☑
(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	☐ N/A	☑
(j) Is the sequence #, analyst, date, and instrument # on the QC page?	☐ YES	☐ NO		☑
(k) Is the analysis status correct? (analyzed/initial review/reviewed)	☐ YES	☐ NO		☑
(l) Original prep bench sheet added to data package?	☐ YES	☐ NO		☑
(m) Benchsheet prep date MUST match actual prep date (check if re-shot vs re-extract)	☐ YES	☐ NO		☑
3. High QA? WO#(s)/Client(s): _____	☐ YES	☑ NO		☑
4. Client specific QC? (if Yes, refer to Project Notes/LIMS)	☑ YES	☐ NO		☑
(a) Have the QC requirements been met for all WO#s?	☑ YES	☐ NO		☑
5. 20 or fewer samples in batch? _____	☑ YES	☐ NO		☑
(a) 3 PBs, 1 LCS/LCSD (or BS/BSD), 2 MS/MSD/MD per batch?	☑ YES	☐ NO		☑
(b) 1 CCV and 1 CCB every 10 analytical runs? _____	☑ YES	☐ NO		☑
QA/QC Data Checked				
6. The calibration curve included a minimum of 5 Standards	☑ PASS	☐ FAIL	☐ N/A	☑
Comments: _____				
7. 1st Calibration Standard % Recoveries (65-135%)	☑ PASS	☐ FAIL	☐ N/A	☑
Comments: _____				
8. RSD CF (≤ 15%)	☑ PASS	☐ FAIL		☑
Comments: _____				

Peer Review Check List for MHg for CV-GC-AFS (FGS-070) 2013 Rev 4 (08/22/2013)

Analyst:	RYAN NELSON	**Sequence #:**	6G21004
Reviewer:	0	**Dataset ID #:**	MMHG27001-160720-1
Date:	7/21/2016	**WO #:**	[redacted]
Batch #(s):	F607309	**Client(s):**	

	Analyst Initials:			Reviewer Initials:
9. ICV % Recoveries 67-133%	☑ PASS	☐ FAIL		☑
Comments:				
10. CCV % Recoveries 67-133%	☑ PASS	☐ FAIL		☑
Comments:				
11. Are the absolute value of the ICB and CCBs < PQL?	☑ PASS	☐ FAIL		☑
Comments:				
12. LCS/LCSD/CRM/BS/BSD % Recoveries (70-130%)	☑ PASS	☐ FAIL		☑
Comments:				
13. LCS/LCSD or BS/BSD RPD (< 25%)	☑ PASS	☐ FAIL		☑
Comments:				
14. Water: Average of Preparation Blanks < 0.045 ng/L and standard devaition of 0.015 ng/L?	☑ PASS	☐ FAIL	☐ N/A	☑
Comments:				
15. Sediment/Tissue: Individually, are the Preparation Blanks < PQL for the matrix?	☐ PASS	☐ FAIL	☑ N/A	☐
Comments:	☐ PASS	☐ FAIL		☐
16. Have Total Solids been applied? (If NO, please ensure that they are done or nearly done)	☐ YES	☐ NO	☑ N/A	☑
17. Is the correct 'Source' designated for MD/MS/MSD?	☑ YES	☐ NO		☑
18. For digested preps: was there a spike witness signature & date on the prep bench sheet?	☑ YES	☐ NO	☐ N/A	☑
19. MD RPD/MT RSD(< 35%)	☑ PASS	☐ FAIL		☑
Comments:				
20. Is there one set of MS/MSD per every 10 samples?	☑ PASS	☐ FAIL		☑
Comments:				
21. MS/MSD RPD(< 35%)	☑ PASS	☐ FAIL		☑
Comments:				
22. MS (AS) % Recoveries (65-130%)	☑ PASS	☐ FAIL		☑
Comments:				
23. MSD (ASD) % Recoveries (65-130%)	☑ PASS	☐ FAIL		☑
Comments:				
24. Spiked 1-5X ambient or 1-5X PQL (whichever is higher) (from EPA 1630)	☑ YES	☐ NO		☑
25. Are all samples within instrument calibration range (or at maximum aliquot size)?	☑ YES	☐ NO		☑
Comments:				
26. For instrumental dilutions, is the dilution factor in excel correct?	☑ PASS	☐ NO	☐ N/A	☑
Is the sample volume, diluents, and final volume of the dilution noted on benchsheet?	☑ PASS	☐ NO	☐ N/A	☑
27. Dissolved < Total metals (if applicable)	☑ PASS	☐ NO	☐ N/A	☑
Comments:				
28. Effluent < Influent metals (visually confirm if needed)	☐ PASS	☐ NO	☑ N/A	☑
Comments:				

Peer Review Check List for MHg for CV-GC-AFS (FGS-070) 2013 Rev 4 (08/22/2013)

Analyst:	RYAN NELSON	**Sequence #:**	6G21004
Reviewer:	0	**Dataset ID #:**	MMHG27001-160720-1
Date:	7/21/2016	**WO #:**	[redacted]
Batch #(s):	F607309	**Client(s):**	

	Analyst Initials:		Reviewer Initials:	
29. Are re-runs noted with reason?	☐ YES	☐ NO	☑ N/A	☑
Comments:				
30. For failing QC (CCV, CCB, PB, BS/BSD, CAL):	☐ YES	☐ NO	☑ N/A	☑
Was a bubbler and trap test run before the analytical run continued?				
Comments:				
31. Do re-run results compare to initial analysis (< 35% RPD)?	☐ YES	☐ NO	☑ N/A	☑
Comments:				
32. Are qualifiers consistent with the data review flowcharts?	☐ YES	☐ NO	☑ N/A	☑
Comments:				
33. Have non-reportable samples been imported into LIMS and clicked to non-reportable?	☐ YES	☐ NO	☑ N/A	☑
Comments:				
34. Have re-extracts been created for non-reportable samples?	☐ YES	☐ NO	☑ N/A	☑
35. Narrations in MMO box in LIMS?				
Comments:				
36. Are there any HIGH QA projects within the data?	☐ YES	☑ NO		
If so, place dataset to the QA office.				
37. Does the data set need scanning?	☑ YES		☐ N/A	☐
Files located at: \\Cuprum\gen_admin\Quality Assurance\Training Master\DOCs				
38. Date of analyst IDOC/CDOC: 1/10/16 IDOC/CDOC within last 12 months?	☐ YES	☐ NO		☑
39. Date of analyst's SOP reading: 6/8/16 Current SOP revision?	☐ YES	☐ NO		☑
40. Date of LOD: 6/16/16 LOD within last 3 months (within 12 months for MDN)?	☒ YES	☐ NO	☐ N/A	☑
41. Date of LOQ: 6/16/16 LOQ within last 3 months (within 12 months for MDN)?	☒ YES	☐ NO	☐ N/A	☑
42. If MDN samples, date of last MDL study:				
43. MDL study within last 12 months?	☐ YES	☐ NO	☑ N/A	☑
Data can not be reported without a current IDOC/CDOC, LOD or LOQ.				
Additional Comments:	☐ YES	☑ NO		☑

ALPHA ANALYTICAL

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Lab Number: L1620423

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 Job number: L1620423
Project Manager: Elizabeth Porta **Review Date:** 07/05/2016
Project Number: 3616166052
Project Name: PENOBSCOT RIVER ESTUARY **Received:** 07/01/2016 11:30
Client Account: AMEC Foster Wheeler E & I, Inc. **Received by:** WM/DM

Samples Delivered by: FEDEX **Call Tracker #**
Bill Of Laden Yes **Trackingnum** 809405619706
Coc Present Present

Container Status Intact **Sample IDs**

All Containers Accounted For? Yes

Were Extra Samples Received? No

Do Sample Labels and COC agree? Yes

Are Samples in Appropriate Containers? Yes

Are Samples Received within Holding time? Yes

pH of Samples upon Receipt 7 **Are samples Properly Preserved?** Yes
Initial pH **preserved in house with** **Final pH**
Other Issues
Chlorine Check N/A

Are VOA/VPH Vials Present? No
Aqueous: Do Vials Contain Head Space? N/A
Soils: Is MeOHCovering the Soil? N/A
Reagent H2O Preserved vials Frozen on N/A
Frozen by Client N/A

Cooler	Seal	Ice Present	Blue Ice Present	Temp. (Celsius)	Frozen upon Receipt	Delivered Direct from Site
A	Absent	Yes	No	4.1 - IR Gun	No	No

LIMS Chain of Custody

ALPHA ANALYTICAL LABORATORIES, INC.
LOGIN CHAIN OF CUSTODY REPORT
Jul 10 2016, 04:26 pm

Login Number: L1620423
Account: AMEC-ME AMEC Foster Wheeler E & I, Inc.Project: 3616166052
Received: 01JUL16 Due Date: 11JUL16

Sample #	Client ID	Mat	PR	Collected	Container
L1620423-01	OV-02_062916_SW_10	1	S0	29JUN16 15:00	1-Plastic-A1,2-Vial-D
| DPKG-FULL Package Due Date: 07/11/16					
DOC-9060,DPKG-FULL,TSS-2540					
L1620423-02	WQ161B-C_062916_SW_	1	S0	29JUN16 10:40	1-Plastic-A1,2-Vial-D
| Package Due Date: 07/11/16					
DOC-9060,TSS-2540					
L1620423-03	WQ2-C_063016_SW_10	1	S0	30JUN16 09:00	1-Plastic-A1,2-Vial-D
| Package Due Date: 07/11/16					
DOC-9060,TSS-2540					
L1620423-04	WQ3-L_062916_SW_10	1	S0	29JUN16 09:35	1-Plastic-A1,2-Vial-D
| Package Due Date: 07/11/16					
DOC-9060,TSS-2540					
L1620423-05	ES-15_062916_SW_10	1	S0	29JUN16 09:00	1-Plastic-A1,2-Vial-D
| Package Due Date: 07/11/16					
DOC-9060,TSS-2540					
L1620423-06	WQ-ECH_062916_SW_10	1	S0	29JUN16 07:45	3-Plastic-A1,6-Vial-D
L1620423-06 MS L1620423-06 MSD L1620423-06 DUP Package Due Date: 07/11/16					
DOC-9060,MS/MSD,TSS-2540					
L1620423-07	WQ-FPT_062916_SW_10	1	S0	29JUN16 08:25	1-Plastic-A1,2-Vial-D
| Package Due Date: 07/11/16					

ALPHA ANALYTICAL LABORATORIES, INC.
LOGIN CHAIN OF CUSTODY REPORT
Jul 10 2016, 04:26 pm

Login Number: L1620423
Account: AMEC-ME AMEC Foster Wheeler E & I, Inc.Project: 3616166052
Received: 01JUL16 Due Date: 11JUL16

Sample #	Client ID	Mat	PR	Collected	Container
DOC-9060,TSS-2540					
L1620423-08	WQ-ECH_062916_SW_10	S0	1	29JUN16 07:45	1-Plastic-A1,2-Vial-D
| Package Due Date: 07/11/16					
DOC-9060,TSS-2540					

Page 2
Logged By: William McClendon

Container Tracking

ALPHA ANALYTICAL LABORATORIES
Container Tracking Report

Container ID	Type	Status	Transaction Date	From Response	From Location	From Operator	To Response	To Location	To Operator
L1620423-01A	Vial-D	INTACT	07-JUL-16	CUSTODY	WETCHEM	Deb Whelan	WALK-IN CUSTODY	WALK-IN CUSTODY	Deb Whelan
L1620423-01A	Vial-D	INTACT	05-JUL-16	CUSTODY	WALK-IN CUSTODY	Deb Whelan	WETCHEM	WETCHEM	Deb Whelan
L1620423-01A	Vial-D	INTACT	02-JUL-16	W18-S3-A CUSTODY	CUSTODY	Isaac Mensah	WALK-IN CUSTODY	WALK-IN CUSTODY	Isaac Mensah
L1620423-01A	Vial-D	INTACT	01-JUL-16	LOGIN	LOGIN	Brett Read	CUSTODY	CUSTODY	Brett Read
L1620423-01B	Vial-D	INTACT	07-JUL-16	CUSTODY	WETCHEM	Deb Whelan	WALK-IN CUSTODY	WALK-IN CUSTODY	Deb Whelan
L1620423-01B	Vial-D	INTACT	05-JUL-16	CUSTODY	WALK-IN CUSTODY	Deb Whelan	WETCHEM	WETCHEM	Deb Whelan
L1620423-01B	Vial-D	INTACT	02-JUL-16	W18-S3-A CUSTODY	CUSTODY	Isaac Mensah	WALK-IN CUSTODY	WALK-IN CUSTODY	Isaac Mensah
L1620423-01B	Vial-D	INTACT	01-JUL-16	LOGIN	LOGIN	Brett Read	CUSTODY	CUSTODY	Brett Read
L1620423-01C	Plastic-A1	EMPTY	05-JUL-16	CUSTODY	WETCHEM	Samantha Garner	CUSTODY	CUSTODY	Samantha Garner
L1620423-01C	Plastic-A1	INTACT	05-JUL-16	CUSTODY	W19-S4-D CUSTODY	Samantha Garner	WETCHEM	WETCHEM	Samantha Garner
L1620423-01C	Plastic-A1	INTACT	02-JUL-16	W18-S3-A CUSTODY	CUSTODY	Isaac Mensah	W19-S4-D CUSTODY	W19-S4-D CUSTODY	Isaac Mensah
L1620423-01C	Plastic-A1	INTACT	01-JUL-16	LOGIN	LOGIN	Brett Read	CUSTODY	CUSTODY	Brett Read
L1620423-02A	Vial-D	INTACT	07-JUL-16	CUSTODY	WETCHEM	Deb Whelan	WALK-IN CUSTODY	WALK-IN CUSTODY	Deb Whelan
L1620423-02A	Vial-D	INTACT	05-JUL-16	CUSTODY	WALK-IN CUSTODY	Deb Whelan	WETCHEM	WETCHEM	Deb Whelan
L1620423-02A	Vial-D	INTACT	02-JUL-16	W18-S3-A CUSTODY	CUSTODY	Isaac Mensah	WALK-IN CUSTODY	WALK-IN CUSTODY	Isaac Mensah
L1620423-02A	Vial-D	INTACT	01-JUL-16	LOGIN	LOGIN	Brett Read	CUSTODY	CUSTODY	Brett Read
L1620423-02B	Vial-D	INTACT	07-JUL-16	CUSTODY	WETCHEM	Deb Whelan	WALK-IN CUSTODY	WALK-IN CUSTODY	Deb Whelan
L1620423-02B	Vial-D	INTACT	05-JUL-16	CUSTODY	WALK-IN CUSTODY	Deb Whelan	WETCHEM	WETCHEM	Deb Whelan
L1620423-02B	Vial-D	INTACT	02-JUL-16	W18-S3-A CUSTODY	CUSTODY	Isaac Mensah	WALK-IN CUSTODY	WALK-IN CUSTODY	Isaac Mensah
L1620423-02B	Vial-D	INTACT	01-JUL-16	LOGIN	LOGIN	Brett Read	CUSTODY	CUSTODY	Brett Read
L1620423-02C	Plastic-A1	EMPTY	05-JUL-16	CUSTODY	WETCHEM	Samantha Garner	CUSTODY	CUSTODY	Samantha Garner
L1620423-02C	Plastic-A1	INTACT	05-JUL-16	CUSTODY	W19-S4-D CUSTODY	Samantha Garner	WETCHEM	WETCHEM	Samantha Garner
L1620423-02C	Plastic-A1	INTACT	02-JUL-16	W18-S3-A CUSTODY	CUSTODY	Isaac Mensah	W19-S4-D CUSTODY	W19-S4-D CUSTODY	Isaac Mensah
L1620423-02C	Plastic-A1	INTACT	01-JUL-16	LOGIN	LOGIN	Brett Read	CUSTODY	CUSTODY	Brett Read
L1620423-03A	Vial-D	INTACT	07-JUL-16	CUSTODY	WETCHEM	Deb Whelan	WALK-IN CUSTODY	WALK-IN CUSTODY	Deb Whelan

Container ID	Type	Status	Transaction Date	From Response	Location	To Operator	Response	Location	Operator
L1620423-03A	Vial-D	INTACT	05-JUL-16	CUSTODY	WALK-IN CUSTODY	Deb Whelan	WETCHEM	WETCHEM	Deb Whelan
L1620423-03A	Vial-D	INTACT	02-JUL-16	W18-S3-A CUSTODY	CUSTODY	Isaac Mensah	WALK-IN CUSTODY	WALK-IN CUSTODY	Isaac Mensah
L1620423-03A	Vial-D	INTACT	01-JUL-16	LOGIN	LOGIN	Brett Read	CUSTODY	CUSTODY	Brett Read
L1620423-03B	Vial-D	INTACT	07-JUL-16	CUSTODY	WETCHEM	Deb Whelan	WALK-IN CUSTODY	WALK-IN CUSTODY	Deb Whelan
L1620423-03B	Vial-D	INTACT	05-JUL-16	CUSTODY	WALK-IN CUSTODY	Deb Whelan	WETCHEM	WETCHEM	Deb Whelan
L1620423-03B	Vial-D	INTACT	02-JUL-16	W18-S3-A CUSTODY	CUSTODY	Isaac Mensah	WALK-IN CUSTODY	WALK-IN CUSTODY	Isaac Mensah
L1620423-03B	Vial-D	INTACT	01-JUL-16	LOGIN	LOGIN	Brett Read	CUSTODY	CUSTODY	Brett Read
L1620423-03C	Plastic-A1	EMPTY	05-JUL-16	CUSTODY	WETCHEM	Samantha Garner	CUSTODY	CUSTODY	Samantha Garner
L1620423-03C	Plastic-A1	INTACT	05-JUL-16	CUSTODY	W19-S4-D CUSTODY	Samantha Garner	WETCHEM	WETCHEM	Samantha Garner
L1620423-03C	Plastic-A1	INTACT	02-JUL-16	W18-S3-A CUSTODY	CUSTODY	Isaac Mensah	W19-S4-D CUSTODY	W19-S4-D CUSTODY	Isaac Mensah
L1620423-03C	Plastic-A1	INTACT	01-JUL-16	LOGIN	LOGIN	Brett Read	CUSTODY	CUSTODY	Brett Read
L1620423-04A	Vial-D	INTACT	07-JUL-16	CUSTODY	WETCHEM	Deb Whelan	WALK-IN CUSTODY	WALK-IN CUSTODY	Deb Whelan
L1620423-04A	Vial-D	INTACT	05-JUL-16	CUSTODY	WALK-IN CUSTODY	Deb Whelan	WETCHEM	WETCHEM	Deb Whelan
L1620423-04A	Vial-D	INTACT	02-JUL-16	W18-S3-A CUSTODY	CUSTODY	Isaac Mensah	WALK-IN CUSTODY	WALK-IN CUSTODY	Isaac Mensah
L1620423-04A	Vial-D	INTACT	01-JUL-16	LOGIN	LOGIN	Brett Read	CUSTODY	CUSTODY	Brett Read
L1620423-04B	Vial-D	INTACT	07-JUL-16	CUSTODY	WETCHEM	Deb Whelan	WALK-IN CUSTODY	WALK-IN CUSTODY	Deb Whelan
L1620423-04B	Vial-D	INTACT	05-JUL-16	CUSTODY	WALK-IN CUSTODY	Deb Whelan	WETCHEM	WETCHEM	Deb Whelan
L1620423-04B	Vial-D	INTACT	02-JUL-16	W18-S3-A CUSTODY	CUSTODY	Isaac Mensah	WALK-IN CUSTODY	WALK-IN CUSTODY	Isaac Mensah
L1620423-04B	Vial-D	INTACT	01-JUL-16	LOGIN	LOGIN	Brett Read	CUSTODY	CUSTODY	Brett Read
L1620423-04C	Plastic-A1	EMPTY	05-JUL-16	CUSTODY	WETCHEM	Samantha Garner	CUSTODY	CUSTODY	Samantha Garner
L1620423-04C	Plastic-A1	INTACT	05-JUL-16	CUSTODY	W19-S4-D CUSTODY	Samantha Garner	WETCHEM	WETCHEM	Samantha Garner
L1620423-04C	Plastic-A1	INTACT	02-JUL-16	W18-S3-A CUSTODY	CUSTODY	Isaac Mensah	W19-S4-D CUSTODY	W19-S4-D CUSTODY	Isaac Mensah
L1620423-04C	Plastic-A1	INTACT	01-JUL-16	LOGIN	LOGIN	Brett Read	CUSTODY	CUSTODY	Brett Read
L1620423-05A	Vial-D	INTACT	07-JUL-16	CUSTODY	WETCHEM	Deb Whelan	WALK-IN CUSTODY	WALK-IN CUSTODY	Deb Whelan
L1620423-05A	Vial-D	INTACT	05-JUL-16	CUSTODY	WALK-IN CUSTODY	Deb Whelan	WETCHEM	WETCHEM	Deb Whelan

Container ID	Type	Status	Transaction Date	From Response	Location	To Operator	Response	Location	Operator
L1620423-05A	Vial-D	INTACT	02-JUL-16	W18-S3-A CUSTODY	CUSTODY	Isaac Mensah	WALK-IN CUSTODY	WALK-IN CUSTODY	Isaac Mensah
L1620423-05A	Vial-D	INTACT	01-JUL-16	LOGIN	LOGIN	Brett Read	CUSTODY	CUSTODY	Brett Read
L1620423-05B	Vial-D	INTACT	07-JUL-16	CUSTODY	WETCHEM	Deb Whelan	WALK-IN CUSTODY	WALK-IN CUSTODY	Deb Whelan
L1620423-05B	Vial-D	INTACT	05-JUL-16	CUSTODY	WALK-IN CUSTODY	Deb Whelan	WETCHEM	WETCHEM	Deb Whelan
L1620423-05B	Vial-D	INTACT	02-JUL-16	W18-S3-A CUSTODY	CUSTODY	Isaac Mensah	WALK-IN CUSTODY	WALK-IN CUSTODY	Isaac Mensah
L1620423-05B	Vial-D	INTACT	01-JUL-16	LOGIN	LOGIN	Brett Read	CUSTODY	CUSTODY	Brett Read
L1620423-05C	Plastic-A1	EMPTY	05-JUL-16	CUSTODY	WETCHEM	Samantha Garner	CUSTODY	CUSTODY	Samantha Garner
L1620423-05C	Plastic-A1	INTACT	05-JUL-16	CUSTODY	W19-S4-D CUSTODY	Samantha Garner	WETCHEM	WETCHEM	Samantha Garner
L1620423-05C	Plastic-A1	INTACT	02-JUL-16	W18-S3-A CUSTODY	CUSTODY	Isaac Mensah	W19-S4-D CUSTODY	W19-S4-D CUSTODY	Isaac Mensah
L1620423-05C	Plastic-A1	INTACT	01-JUL-16	LOGIN	LOGIN	Brett Read	CUSTODY	CUSTODY	Brett Read
L1620423-06A	Vial-D	INTACT	07-JUL-16	CUSTODY	WETCHEM	Deb Whelan	WALK-IN CUSTODY	WALK-IN CUSTODY	Deb Whelan
L1620423-06A	Vial-D	INTACT	05-JUL-16	CUSTODY	WALK-IN CUSTODY	Deb Whelan	WETCHEM	WETCHEM	Deb Whelan
L1620423-06A	Vial-D	INTACT	02-JUL-16	W18-S3-A CUSTODY	CUSTODY	Isaac Mensah	WALK-IN CUSTODY	WALK-IN CUSTODY	Isaac Mensah
L1620423-06A	Vial-D	INTACT	01-JUL-16	LOGIN	LOGIN	Brett Read	CUSTODY	CUSTODY	Brett Read
L1620423-06A1	Vial-D	INTACT	06-JUL-16	WETCHEM	WETCHEM	Marc Pollard	CUSTODY	WALK-IN CUSTODY	Marc Pollard
L1620423-06A1	Vial-D	INTACT	05-JUL-16	CUSTODY	WALK-IN CUSTODY	Deb Whelan	WETCHEM	WETCHEM	Deb Whelan
L1620423-06A1	Vial-D	INTACT	02-JUL-16	W18-S3-A CUSTODY	CUSTODY	Isaac Mensah	WALK-IN CUSTODY	WALK-IN CUSTODY	Isaac Mensah
L1620423-06A1	Vial-D	INTACT	01-JUL-16	LOGIN	LOGIN	William McClendon	CUSTODY	CUSTODY	William McClendon
L1620423-06A2	Vial-D	INTACT	07-JUL-16	CUSTODY	WETCHEM	Deb Whelan	WALK-IN CUSTODY	WALK-IN CUSTODY	Deb Whelan
L1620423-06A2	Vial-D	INTACT	05-JUL-16	CUSTODY	WALK-IN CUSTODY	Deb Whelan	WETCHEM	WETCHEM	Deb Whelan
L1620423-06A2	Vial-D	INTACT	02-JUL-16	W18-S3-A CUSTODY	CUSTODY	Isaac Mensah	WALK-IN CUSTODY	WALK-IN CUSTODY	Isaac Mensah
L1620423-06A2	Vial-D	INTACT	01-JUL-16	LOGIN	LOGIN	William McClendon	CUSTODY	CUSTODY	William McClendon
L1620423-06B	Vial-D	INTACT	07-JUL-16	CUSTODY	WETCHEM	Deb Whelan	WALK-IN CUSTODY	WALK-IN CUSTODY	Deb Whelan
L1620423-06B	Vial-D	INTACT	05-JUL-16	CUSTODY	WALK-IN CUSTODY	Deb Whelan	WETCHEM	WETCHEM	Deb Whelan
L1620423-06B	Vial-D	INTACT	02-JUL-16	W18-S3-A CUSTODY	CUSTODY	Isaac Mensah	WALK-IN CUSTODY	WALK-IN CUSTODY	Isaac Mensah

Container ID Type	Status	Transaction Date	From Response	Location	To Operator	Response	Location	Operator
L1620423-06B Vial-D	INTACT	01-JUL-16	LOGIN	LOGIN	Brett Read	CUSTODY	CUSTODY	Brett Read
L1620423-06B1 Vial-D	INTACT	07-JUL-16	CUSTODY	WETCHEM	Deb Whelan	WALK-IN CUSTODY	WALK-IN CUSTODY	Deb Whelan
L1620423-06B1 Vial-D	INTACT	05-JUL-16	CUSTODY	WALK-IN CUSTODY	Deb Whelan	WETCHEM	WETCHEM	Deb Whelan
L1620423-06B1 Vial-D	INTACT	02-JUL-16	W18-S3-A CUSTODY	CUSTODY	Isaac Mensah	WALK-IN CUSTODY	WALK-IN CUSTODY	Isaac Mensah
L1620423-06B1 Vial-D	INTACT	01-JUL-16	LOGIN	LOGIN	William McClendon	CUSTODY	CUSTODY	William McClendon
L1620423-06B2 Vial-D	INTACT	07-JUL-16	CUSTODY	WETCHEM	Deb Whelan	WALK-IN CUSTODY	WALK-IN CUSTODY	Deb Whelan
L1620423-06B2 Vial-D	INTACT	05-JUL-16	CUSTODY	WALK-IN CUSTODY	Deb Whelan	WETCHEM	WETCHEM	Deb Whelan
L1620423-06B2 Vial-D	INTACT	02-JUL-16	W18-S3-A CUSTODY	CUSTODY	Isaac Mensah	WALK-IN CUSTODY	WALK-IN CUSTODY	Isaac Mensah
L1620423-06B2 Vial-D	INTACT	01-JUL-16	LOGIN	LOGIN	William McClendon	CUSTODY	CUSTODY	William McClendon
L1620423-06C Plastic-A1	EMPTY	05-JUL-16	CUSTODY	WETCHEM	Samantha Garner	CUSTODY	CUSTODY	Samantha Garner
L1620423-06C Plastic-A1	INTACT	05-JUL-16	CUSTODY	W19-S4-D CUSTODY	Samantha Garner	WETCHEM	WETCHEM	Samantha Garner
L1620423-06C Plastic-A1	INTACT	02-JUL-16	W18-S3-A CUSTODY	CUSTODY	Isaac Mensah	W19-S4-D CUSTODY	W19-S4-D CUSTODY	Isaac Mensah
L1620423-06C Plastic-A1	INTACT	01-JUL-16	LOGIN	LOGIN	Brett Read	CUSTODY	CUSTODY	Brett Read
L1620423-06C1 Plastic-A1	INTACT	02-JUL-16	W18-S3-A CUSTODY	CUSTODY	Isaac Mensah	W19-S4-D CUSTODY	W19-S4-D CUSTODY	Isaac Mensah
L1620423-06C1 Plastic-A1	INTACT	01-JUL-16	LOGIN	LOGIN	William McClendon	CUSTODY	CUSTODY	William McClendon
L1620423-06C2 Plastic-A1	EMPTY	05-JUL-16	CUSTODY	WETCHEM	Samantha Garner	CUSTODY	CUSTODY	Samantha Garner
L1620423-06C2 Plastic-A1	INTACT	05-JUL-16	CUSTODY	W19-S4-D CUSTODY	Samantha Garner	WETCHEM	WETCHEM	Samantha Garner
L1620423-06C2 Plastic-A1	INTACT	02-JUL-16	W18-S3-A CUSTODY	CUSTODY	Isaac Mensah	W19-S4-D CUSTODY	W19-S4-D CUSTODY	Isaac Mensah
L1620423-06C2 Plastic-A1	INTACT	01-JUL-16	LOGIN	LOGIN	William McClendon	CUSTODY	CUSTODY	William McClendon
L1620423-07A Vial-D	INTACT	07-JUL-16	CUSTODY	WETCHEM	Deb Whelan	WALK-IN CUSTODY	WALK-IN CUSTODY	Deb Whelan
L1620423-07A Vial-D	INTACT	05-JUL-16	CUSTODY	WALK-IN CUSTODY	Deb Whelan	WETCHEM	WETCHEM	Deb Whelan
L1620423-07A Vial-D	INTACT	02-JUL-16	W18-S3-A CUSTODY	CUSTODY	Isaac Mensah	WALK-IN CUSTODY	WALK-IN CUSTODY	Isaac Mensah
L1620423-07A Vial-D	INTACT	01-JUL-16	LOGIN	LOGIN	Brett Read	CUSTODY	CUSTODY	Brett Read
L1620423-07B Vial-D	INTACT	07-JUL-16	CUSTODY	WETCHEM	Deb Whelan	WALK-IN CUSTODY	WALK-IN CUSTODY	Deb Whelan
L1620423-07B Vial-D	INTACT	05-JUL-16	CUSTODY	WALK-IN CUSTODY	Deb Whelan	WETCHEM	WETCHEM	Deb Whelan

Container ID	Type	Status	Transaction Date	From Response	Location	To Operator	Response	Location	Operator
L1620423-07B	Vial-D	INTACT	02-JUL-16	W18-S3-A CUSTODY	CUSTODY	Isaac Mensah	WALK-IN CUSTODY	WALK-IN CUSTODY	Isaac Mensah
L1620423-07B	Vial-D	INTACT	01-JUL-16	LOGIN	LOGIN	Brett Read	CUSTODY	CUSTODY	Brett Read
L1620423-07C	Plastic-A1	EMPTY	05-JUL-16	CUSTODY	WETCHEM	Samantha Garner	CUSTODY	CUSTODY	Samantha Garner
L1620423-07C	Plastic-A1	INTACT	05-JUL-16	CUSTODY	W19-S4-D CUSTODY	Samantha Garner	WETCHEM	WETCHEM	Samantha Garner
L1620423-07C	Plastic-A1	INTACT	02-JUL-16	W18-S3-A CUSTODY	CUSTODY	Isaac Mensah	W19-S4-D CUSTODY	W19-S4-D CUSTODY	Isaac Mensah
L1620423-07C	Plastic-A1	INTACT	01-JUL-16	LOGIN	LOGIN	Brett Read	CUSTODY	CUSTODY	Brett Read
L1620423-08A	Vial-D	INTACT	07-JUL-16	CUSTODY	WETCHEM	Deb Whelan	WALK-IN CUSTODY	WALK-IN CUSTODY	Deb Whelan
L1620423-08A	Vial-D	INTACT	05-JUL-16	CUSTODY	WALK-IN CUSTODY	Deb Whelan	WETCHEM	WETCHEM	Deb Whelan
L1620423-08A	Vial-D	INTACT	02-JUL-16	W18-S3-A CUSTODY	CUSTODY	Isaac Mensah	WALK-IN CUSTODY	WALK-IN CUSTODY	Isaac Mensah
L1620423-08A	Vial-D	INTACT	01-JUL-16	LOGIN	LOGIN	Brett Read	CUSTODY	CUSTODY	Brett Read
L1620423-08B	Vial-D	INTACT	07-JUL-16	CUSTODY	WETCHEM	Deb Whelan	WALK-IN CUSTODY	WALK-IN CUSTODY	Deb Whelan
L1620423-08B	Vial-D	INTACT	05-JUL-16	CUSTODY	WALK-IN CUSTODY	Deb Whelan	WETCHEM	WETCHEM	Deb Whelan
L1620423-08B	Vial-D	INTACT	02-JUL-16	W18-S3-A CUSTODY	CUSTODY	Isaac Mensah	WALK-IN CUSTODY	WALK-IN CUSTODY	Isaac Mensah
L1620423-08B	Vial-D	INTACT	01-JUL-16	LOGIN	LOGIN	Brett Read	CUSTODY	CUSTODY	Brett Read
L1620423-08C	Plastic-A1	EMPTY	05-JUL-16	CUSTODY	WETCHEM	Samantha Garner	CUSTODY	CUSTODY	Samantha Garner
L1620423-08C	Plastic-A1	INTACT	05-JUL-16	CUSTODY	W19-S4-D CUSTODY	Samantha Garner	WETCHEM	WETCHEM	Samantha Garner
L1620423-08C	Plastic-A1	INTACT	02-JUL-16	W18-S3-A CUSTODY	CUSTODY	Isaac Mensah	W19-S4-D CUSTODY	W19-S4-D CUSTODY	Isaac Mensah
L1620423-08C	Plastic-A1	INTACT	01-JUL-16	LOGIN	LOGIN	Brett Read	CUSTODY	CUSTODY	Brett Read