

**ATTACHMENT C**  
Laboratory Analytical Reports

# AMEC FOSTER WHEELER

## USDC Penobscot

### Level IV Data Package

Laboratory SDG:

1707771

PO#

C012505874

August 25, 2017

# AMEC Foster Wheeler

## USDC Penobscot

Laboratory SDG: 1707771

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AMEC Foster Wheeler  
271 Mill Road  
Chelmsford MA, 01824

Project: 2017 Penobscot Sediment Cores  
Project Number: WO-04A-030  
Project Manager: Denise King

Reported:  
25-Aug-17 16:26

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
OR-01-01_072417_SED_00-01_R1	1707771-01	Soil/Sediment	24-Jul-17 17:52	27-Jul-17 08:00
OR-01-01_072417_SED_00-01_R2	1707771-02	Soil/Sediment	24-Jul-17 17:52	27-Jul-17 08:00
OR-01-01_072417_SED_00-01_R3	1707771-03	Soil/Sediment	24-Jul-17 17:52	27-Jul-17 08:00
OR-01-01_072417_SED_01-03	1707771-04	Soil/Sediment	24-Jul-17 17:53	27-Jul-17 08:00
OR-01-02_072417_SED_00-01	1707771-05	Soil/Sediment	24-Jul-17 12:35	27-Jul-17 08:00
OR-01-02_072417_SED_01-03	1707771-06	Soil/Sediment	24-Jul-17 12:37	27-Jul-17 08:00
OR-01-03_072417_SED_00-01	1707771-07	Soil/Sediment	24-Jul-17 17:15	27-Jul-17 08:00
OR-01-03_072417_SED_01-03	1707771-08	Soil/Sediment	24-Jul-17 17:16	27-Jul-17 08:00
OR-01-05_072417_SED_00-01_R1	1707771-09	Soil/Sediment	24-Jul-17 17:27	27-Jul-17 08:00
OR-01-05_072417_SED_00-01_R2	1707771-10	Soil/Sediment	24-Jul-17 17:27	27-Jul-17 08:00
OR-01-05_072417_SED_00-01_R3	1707771-11	Soil/Sediment	24-Jul-17 17:27	27-Jul-17 08:00
OR-01-05_072417_SED_01-03	1707771-12	Soil/Sediment	24-Jul-17 17:29	27-Jul-17 08:00
OR-02-01_072417_SED_00-01	1707771-13	Soil/Sediment	24-Jul-17 12:10	27-Jul-17 08:00
OR-02-01_072417_SED_01-03_R1	1707771-14	Soil/Sediment	24-Jul-17 12:10	27-Jul-17 08:00
OR-02-01_072417_SED_01-03_R2	1707771-15	Soil/Sediment	24-Jul-17 12:10	27-Jul-17 08:00
OR-02-01_072417_SED_01-03_R3	1707771-16	Soil/Sediment	24-Jul-17 12:10	27-Jul-17 08:00
OR-02-02_072417_SED_00-01	1707771-17	Soil/Sediment	24-Jul-17 17:00	27-Jul-17 08:00
OR-02-02_072417_SED_01-03	1707771-18	Soil/Sediment	24-Jul-17 17:01	27-Jul-17 08:00
W-103-A_072417_SED_00-01	1707771-19	Soil/Sediment	24-Jul-17 15:18	27-Jul-17 08:00
W-103-A_072417_SED_01-03	1707771-20	Soil/Sediment	24-Jul-17 15:19	27-Jul-17 08:00
W-103-B_072417_SED_00-01_R1	1707771-21	Soil/Sediment	24-Jul-17 12:47	27-Jul-17 08:00
W-103-B_072417_SED_00-01_R2	1707771-22	Soil/Sediment	24-Jul-17 12:47	27-Jul-17 08:00
W-103-B_072417_SED_00-01_R3	1707771-23	Soil/Sediment	24-Jul-17 12:47	27-Jul-17 08:00
W-103-B_072417_SED_01-03	1707771-24	Soil/Sediment	24-Jul-17 12:50	27-Jul-17 08:00
W-105-A_072417_SED_00-01	1707771-25	Soil/Sediment	24-Jul-17 15:37	27-Jul-17 08:00
W-105-A_072417_SED_01-03	1707771-26	Soil/Sediment	24-Jul-17 15:38	27-Jul-17 08:00

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271 Mill Road  
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Project: 2017 Penobscot Sediment Cores  
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Project Manager: Denise King

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25-Aug-17 16:26

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
W-14-C_072417_SED_00-01	1707771-27	Soil/Sediment	24-Jul-17 13:32	27-Jul-17 08:00
W-14-C_072417_SED_01-03_R1	1707771-28	Soil/Sediment	24-Jul-17 13:35	27-Jul-17 08:00
W-14-C_072417_SED_01-03_R2	1707771-29	Soil/Sediment	24-Jul-17 13:35	27-Jul-17 08:00
W-14-C_072417_SED_01-03_R3	1707771-30	Soil/Sediment	24-Jul-17 13:35	27-Jul-17 08:00
W-27-INTA_072417_SED_00-01	1707771-31	Soil/Sediment	24-Jul-17 16:19	27-Jul-17 08:00
W-27-INTA_072417_SED_01-03	1707771-32	Soil/Sediment	24-Jul-17 16:20	27-Jul-17 08:00
W-MM-06_072417_SED_00-01	1707771-33	Soil/Sediment	24-Jul-17 15:55	27-Jul-17 08:00
W-MM-06_072417_SED_01-03	1707771-34	Soil/Sediment	24-Jul-17 15:56	27-Jul-17 08:00
W-MM-19_072417_SED_00-01	1707771-35	Soil/Sediment	24-Jul-17 18:17	27-Jul-17 08:00
W-MM-19_072417_SED_01-03	1707771-36	Soil/Sediment	24-Jul-17 18:18	27-Jul-17 08:00
W-MM-22_072417_SED_00-01	1707771-37	Soil/Sediment	24-Jul-17 17:39	27-Jul-17 08:00
W-MM-22_072417_SED_01-03	1707771-38	Soil/Sediment	24-Jul-17 17:41	27-Jul-17 08:00
W-MM-23_072417_SED_00-01_R1	1707771-39	Soil/Sediment	24-Jul-17 13:03	27-Jul-17 08:00
W-MM-23_072417_SED_00-01_R2	1707771-40	Soil/Sediment	24-Jul-17 13:03	27-Jul-17 08:00
W-MM-23_072417_SED_00-01_R3	1707771-41	Soil/Sediment	24-Jul-17 13:03	27-Jul-17 08:00
W-MM-23_072417_SED_01-03	1707771-42	Soil/Sediment	24-Jul-17 13:05	27-Jul-17 08:00
W-MM-24_072417_SED_00-01	1707771-43	Soil/Sediment	24-Jul-17 18:05	27-Jul-17 08:00
W-MM-24_072417_SED_01-03_R1	1707771-44	Soil/Sediment	24-Jul-17 18:06	27-Jul-17 08:00
W-MM-24_072417_SED_01-03_R2	1707771-45	Soil/Sediment	24-Jul-17 18:06	27-Jul-17 08:00
W-MM-24_072417_SED_01-03_R3	1707771-46	Soil/Sediment	24-Jul-17 18:06	27-Jul-17 08:00
W-27-A_072617_SED_03-05	1707771-47	Soil/Sediment	26-Jul-17 08:33	27-Jul-17 08:00
W-27-A_072617_SED_05-10	1707771-48	Soil/Sediment	26-Jul-17 08:35	27-Jul-17 08:00
W-14-INTA_072617_SED_03-05_R1	1707771-49	Soil/Sediment	26-Jul-17 08:38	27-Jul-17 08:00
W-14-INTA_072617_SED_03-05_R2	1707771-50	Soil/Sediment	26-Jul-17 08:38	27-Jul-17 08:00
W-14-INTA_072617_SED_03-05_R3	1707771-51	Soil/Sediment	26-Jul-17 08:38	27-Jul-17 08:00
W-14-INTA_072617_SED_05-10	1707771-52	Soil/Sediment	26-Jul-17 08:40	27-Jul-17 08:00

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25-Aug-17 16:26

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Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
W-MM-07_072617_SED_03-05	1707771-53	Soil/Sediment	26-Jul-17 08:47	27-Jul-17 08:00
W-MM-07_072617_SED_05-10	1707771-54	Soil/Sediment	26-Jul-17 08:49	27-Jul-17 08:00
W-MM-TP_072617_SED_03-05	1707771-55	Soil/Sediment	26-Jul-17 09:08	27-Jul-17 08:00
W-MM-TP_072617_SED_05-10	1707771-56	Soil/Sediment	26-Jul-17 09:10	27-Jul-17 08:00
W-103-INTA_072617_SED_03-05	1707771-57	Soil/Sediment	26-Jul-17 09:47	27-Jul-17 08:00
W-103-INTA_072617_SED_05-10	1707771-58	Soil/Sediment	26-Jul-17 09:49	27-Jul-17 08:00
W-63-INT_072617_SED_03-05	1707771-59	Soil/Sediment	26-Jul-17 09:52	27-Jul-17 08:00
W-63-INT_072617_SED_05-10_R1	1707771-60	Soil/Sediment	26-Jul-17 09:54	27-Jul-17 08:00
W-63-INT_072617_SED_05-10_R2	1707771-61	Soil/Sediment	26-Jul-17 09:54	27-Jul-17 08:00
W-63-INT_072617_SED_05-10_R3	1707771-62	Soil/Sediment	26-Jul-17 09:54	27-Jul-17 08:00
W-MM-01_072617_SED_03-05	1707771-63	Soil/Sediment	26-Jul-17 10:08	27-Jul-17 08:00
W-MM-01_072617_SED_05-10	1707771-64	Soil/Sediment	26-Jul-17 10:10	27-Jul-17 08:00
W-104-INTA_072617_SED_03-05_R1	1707771-65	Soil/Sediment	26-Jul-17 10:18	27-Jul-17 08:00
W-104-INTA_072617_SED_03-05_R2	1707771-66	Soil/Sediment	26-Jul-17 10:18	27-Jul-17 08:00
W-104-INTA_072617_SED_03-05_R3	1707771-67	Soil/Sediment	26-Jul-17 10:18	27-Jul-17 08:00
W-104-INTA_072617_SED_05-10	1707771-68	Soil/Sediment	26-Jul-17 10:20	27-Jul-17 08:00
W-MM-17_072617_SED_03-05_R1	1707771-69	Soil/Sediment	26-Jul-17 10:23	27-Jul-17 08:00
W-MM-17_072617_SED_03-05_R2	1707771-70	Soil/Sediment	26-Jul-17 10:23	27-Jul-17 08:00
W-MM-17_072617_SED_03-05_R3	1707771-71	Soil/Sediment	26-Jul-17 10:23	27-Jul-17 08:00
W-MM-17_072617_SED_05-10	1707771-72	Soil/Sediment	26-Jul-17 10:25	27-Jul-17 08:00
W-MM-02_072617_SED_03-05	1707771-73	Soil/Sediment	26-Jul-17 10:30	27-Jul-17 08:00
W-MM-02_072617_SED_05-10	1707771-74	Soil/Sediment	26-Jul-17 10:32	27-Jul-17 08:00
W-102-INTA_072617_SED_03-05	1707771-75	Soil/Sediment	26-Jul-17 10:42	27-Jul-17 08:00
W-102-INTA_072617_SED_05-10_R1	1707771-76	Soil/Sediment	26-Jul-17 10:44	27-Jul-17 08:00
W-102-INTA_072617_SED_05-10_R2	1707771-77	Soil/Sediment	26-Jul-17 10:44	27-Jul-17 08:00
W-102-INTA_072617_SED_05-10_R3	1707771-78	Soil/Sediment	26-Jul-17 10:44	27-Jul-17 08:00

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Project Manager: Denise King

Reported:  
25-Aug-17 16:26

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
OR-01-01_072517_SED_03-05	1707771-79	Soil/Sediment	25-Jul-17 15:04	27-Jul-17 08:00
OR-01-01_072517_SED_05-10	1707771-80	Soil/Sediment	25-Jul-17 15:06	27-Jul-17 08:00
OR-01-02_072517_SED_03-05	1707771-81	Soil/Sediment	25-Jul-17 15:42	27-Jul-17 08:00
OR-01-02_072517_SED_05-10	1707771-82	Soil/Sediment	25-Jul-17 15:44	27-Jul-17 08:00
OR-01-03_072517_SED_03-05	1707771-83	Soil/Sediment	25-Jul-17 16:24	27-Jul-17 08:00
OR-01-03_072517_SED_05-10_R1	1707771-84	Soil/Sediment	25-Jul-17 16:26	27-Jul-17 08:00
OR-01-03_072517_SED_05-10_R2	1707771-85	Soil/Sediment	25-Jul-17 16:26	27-Jul-17 08:00
OR-01-03_072517_SED_05-10_R3	1707771-86	Soil/Sediment	25-Jul-17 16:26	27-Jul-17 08:00
OR-01-04_072517_SED_00-01_R1	1707771-87	Soil/Sediment	25-Jul-17 09:00	27-Jul-17 08:00
OR-01-04_072517_SED_00-01_R2	1707771-88	Soil/Sediment	25-Jul-17 09:00	27-Jul-17 08:00
OR-01-04_072517_SED_00-01_R3	1707771-89	Soil/Sediment	25-Jul-17 09:00	27-Jul-17 08:00
OR-01-04_072517_SED_01-03	1707771-90	Soil/Sediment	25-Jul-17 09:01	27-Jul-17 08:00
OR-01-04_072517_SED_03-05	1707771-91	Soil/Sediment	25-Jul-17 17:16	27-Jul-17 08:00
OR-01-04_072517_SED_05-10	1707771-92	Soil/Sediment	25-Jul-17 17:18	27-Jul-17 08:00
OR-01-05_072517_SED_03-05	1707771-93	Soil/Sediment	25-Jul-17 15:08	27-Jul-17 08:00
OR-01-05_072517_SED_05-10	1707771-94	Soil/Sediment	25-Jul-17 15:10	27-Jul-17 08:00
OR-02-01_072517_SED_03-05	1707771-95	Soil/Sediment	25-Jul-17 15:16	27-Jul-17 08:00
OR-02-01_072517_SED_05-10	1707771-96	Soil/Sediment	25-Jul-17 15:18	27-Jul-17 08:00
OR-02-02_072517_SED_03-05_R1	1707771-97	Soil/Sediment	25-Jul-17 14:48	27-Jul-17 08:00
OR-02-02_072517_SED_03-05_R2	1707771-98	Soil/Sediment	25-Jul-17 14:48	27-Jul-17 08:00
OR-02-02_072517_SED_03-05_R3	1707771-99	Soil/Sediment	25-Jul-17 14:48	27-Jul-17 08:00
OR-02-02_072517_SED_05-10	1707771-AA	Soil/Sediment	25-Jul-17 14:50	27-Jul-17 08:00
W-102-INTA_072517_SED_00-01	1707771-AB	Soil/Sediment	25-Jul-17 09:29	27-Jul-17 08:00
W-102-INTA_072517_SED_01-03	1707771-AC	Soil/Sediment	25-Jul-17 09:30	27-Jul-17 08:00
W-103-A_072517_SED_03-05	1707771-AD	Soil/Sediment	25-Jul-17 14:40	27-Jul-17 08:00
W-103-A_072517_SED_05-10_R1	1707771-AE	Soil/Sediment	25-Jul-17 14:42	27-Jul-17 08:00

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Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
W-103-A_072517_SED_05-10_R2	1707771-AF	Soil/Sediment	25-Jul-17 14:42	27-Jul-17 08:00
W-103-A_072517_SED_05-10_R3	1707771-AG	Soil/Sediment	25-Jul-17 14:42	27-Jul-17 08:00
W-103-B_072517_SED_03-05	1707771-AH	Soil/Sediment	25-Jul-17 15:36	27-Jul-17 08:00
W-103-B_072517_SED_05-10	1707771-AI	Soil/Sediment	25-Jul-17 15:38	27-Jul-17 08:00
W-103-INTA_072517_SED_00-01	1707771-AJ	Soil/Sediment	25-Jul-17 11:48	27-Jul-17 08:00
W-103-INTA_072517_SED_01-03_R1	1707771-AK	Soil/Sediment	25-Jul-17 11:49	27-Jul-17 08:00
W-103-INTA_072517_SED_01-03_R2	1707771-AL	Soil/Sediment	25-Jul-17 11:49	27-Jul-17 08:00
W-103-INTA_072517_SED_01-03_R3	1707771-AM	Soil/Sediment	25-Jul-17 11:49	27-Jul-17 08:00
W-104-INTA_072517_SED_00-01	1707771-AN	Soil/Sediment	25-Jul-17 09:45	27-Jul-17 08:00
W-104-INTA_072517_SED_01-03	1707771-AO	Soil/Sediment	25-Jul-17 09:46	27-Jul-17 08:00
W-105-A_072517_SED_03-05	1707771-AP	Soil/Sediment	25-Jul-17 14:44	27-Jul-17 08:00
W-105-A_072517_SED_05-10	1707771-AQ	Soil/Sediment	25-Jul-17 14:46	27-Jul-17 08:00
W-14-A_072517_SED_00-01_R1	1707771-AR	Soil/Sediment	25-Jul-17 08:49	27-Jul-17 08:00
W-14-A_072517_SED_00-01_R2	1707771-AS	Soil/Sediment	25-Jul-17 08:49	27-Jul-17 08:00
W-14-A_072517_SED_00-01_R3	1707771-AT	Soil/Sediment	25-Jul-17 08:49	27-Jul-17 08:00
W-14-A_072517_SED_01-03	1707771-AU	Soil/Sediment	25-Jul-17 08:50	27-Jul-17 08:00
W-14-A_072517_SED_03-05	1707771-AV	Soil/Sediment	25-Jul-17 17:26	27-Jul-17 08:00
W-14-A_072517_SED_05-10	1707771-AW	Soil/Sediment	25-Jul-17 17:28	27-Jul-17 08:00
W-14-B_072517_SED_00-01	1707771-AX	Soil/Sediment	25-Jul-17 09:15	27-Jul-17 08:00
W-14-B_072517_SED_01-03	1707771-AY	Soil/Sediment	25-Jul-17 09:17	27-Jul-17 08:00
W-14-B_072517_SED_03-05	1707771-AZ	Soil/Sediment	25-Jul-17 17:36	27-Jul-17 08:00
W-14-B_072517_SED_05-10_R1	1707771-BA	Soil/Sediment	25-Jul-17 17:38	27-Jul-17 08:00
W-14-B_072517_SED_05-10_R2	1707771-BB	Soil/Sediment	25-Jul-17 17:38	27-Jul-17 08:00
W-14-B_072517_SED_05-10_R3	1707771-BC	Soil/Sediment	25-Jul-17 17:38	27-Jul-17 08:00
W-14-C_072517_SED_03-05	1707771-BD	Soil/Sediment	25-Jul-17 16:20	27-Jul-17 08:00
W-14-C_072517_SED_05-10	1707771-BE	Soil/Sediment	25-Jul-17 16:22	27-Jul-17 08:00

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Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
W-14-INTA_072517_SED_00-01	1707771-BF	Soil/Sediment	25-Jul-17 12:50	27-Jul-17 08:00
W-14-INTA_072517_SED_01-03	1707771-BG	Soil/Sediment	25-Jul-17 12:51	27-Jul-17 08:00
W-27-A_072517_SED_00-01_R1	1707771-BH	Soil/Sediment	25-Jul-17 12:39	27-Jul-17 08:00
W-27-A_072517_SED_00-01_R2	1707771-BI	Soil/Sediment	25-Jul-17 12:39	27-Jul-17 08:00
W-27-A_072517_SED_00-01_R3	1707771-BJ	Soil/Sediment	25-Jul-17 12:39	27-Jul-17 08:00
W-27-A_072517_SED_01-03	1707771-BK	Soil/Sediment	25-Jul-17 12:40	27-Jul-17 08:00
W-27-INTA_072517_SED_03-05	1707771-BL	Soil/Sediment	25-Jul-17 14:23	27-Jul-17 08:00
W-27-INTA_072517_SED_05-10	1707771-BM	Soil/Sediment	25-Jul-17 14:26	27-Jul-17 08:00
W-63-INT_072517_SED_00-01	1707771-BN	Soil/Sediment	25-Jul-17 10:58	27-Jul-17 08:00
W-63-INT_072517_SED_01-03	1707771-BO	Soil/Sediment	25-Jul-17 10:59	27-Jul-17 08:00
W-MM-01_072517_SED_00-01	1707771-BP	Soil/Sediment	25-Jul-17 10:47	27-Jul-17 08:00
W-MM-01_072517_SED_01-03_R1	1707771-BQ	Soil/Sediment	25-Jul-17 10:48	27-Jul-17 08:00
W-MM-01_072517_SED_01-03_R2	1707771-BR	Soil/Sediment	25-Jul-17 10:48	27-Jul-17 08:00
W-MM-01_072517_SED_01-03_R3	1707771-BS	Soil/Sediment	25-Jul-17 10:48	27-Jul-17 08:00
W-MM-02_072517_SED_00-01	1707771-BT	Soil/Sediment	25-Jul-17 10:09	27-Jul-17 08:00
W-MM-02_072517_SED_01-03	1707771-BU	Soil/Sediment	25-Jul-17 10:10	27-Jul-17 08:00
W-MM-06_072517_SED_03-05_R1	1707771-BV	Soil/Sediment	25-Jul-17 17:00	27-Jul-17 08:00
W-MM-06_072517_SED_03-05_R2	1707771-BW	Soil/Sediment	25-Jul-17 17:00	27-Jul-17 08:00
W-MM-06_072517_SED_03-05_R3	1707771-BX	Soil/Sediment	25-Jul-17 17:00	27-Jul-17 08:00
W-MM-06_072517_SED_05-10	1707771-BY	Soil/Sediment	25-Jul-17 17:02	27-Jul-17 08:00
W-MM-07_072517_SED_00-01	1707771-BZ	Soil/Sediment	25-Jul-17 08:39	27-Jul-17 08:00
W-MM-07_072517_SED_01-03_R1	1707771-CA	Soil/Sediment	25-Jul-17 08:40	27-Jul-17 08:00
W-MM-07_072517_SED_01-03_R2	1707771-CB	Soil/Sediment	25-Jul-17 08:40	27-Jul-17 08:00
W-MM-07_072517_SED_01-03_R3	1707771-CC	Soil/Sediment	25-Jul-17 08:40	27-Jul-17 08:00
W-MM-17_072517_SED_00-01	1707771-CD	Soil/Sediment	25-Jul-17 10:25	27-Jul-17 08:00
W-MM-17_072517_SED_01-03	1707771-CE	Soil/Sediment	25-Jul-17 10:26	27-Jul-17 08:00

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.



AMEC Foster Wheeler  
271 Mill Road  
Chelmsford MA, 01824

Project: 2017 Penobscot Sediment Cores  
Project Number: WO-04A-030  
Project Manager: Denise King

Reported:  
25-Aug-17 16:26

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
W-MM-18_072517_SED_00-01	1707771-CF	Soil/Sediment	25-Jul-17 08:29	27-Jul-17 08:00
W-MM-18_072517_SED_01-03	1707771-CG	Soil/Sediment	25-Jul-17 08:30	27-Jul-17 08:00
W-MM-18_072517_SED_03-05_R1	1707771-CH	Soil/Sediment	25-Jul-17 17:44	27-Jul-17 08:00
W-MM-18_072517_SED_03-05_R2	1707771-CI	Soil/Sediment	25-Jul-17 17:44	27-Jul-17 08:00
W-MM-18_072517_SED_03-05_R3	1707771-CJ	Soil/Sediment	25-Jul-17 17:44	27-Jul-17 08:00
W-MM-18_072517_SED_05-10	1707771-CK	Soil/Sediment	25-Jul-17 17:46	27-Jul-17 08:00
W-MM-19_072517_SED_03-05	1707771-CL	Soil/Sediment	25-Jul-17 16:50	27-Jul-17 08:00
W-MM-19_072517_SED_05-10_R1	1707771-CM	Soil/Sediment	25-Jul-17 16:52	27-Jul-17 08:00
W-MM-19_072517_SED_05-10_R2	1707771-CN	Soil/Sediment	25-Jul-17 16:52	27-Jul-17 08:00
W-MM-19_072517_SED_05-10_R3	1707771-CO	Soil/Sediment	25-Jul-17 16:52	27-Jul-17 08:00
W-MM-22_072517_SED_03-05	1707771-CP	Soil/Sediment	25-Jul-17 14:37	27-Jul-17 08:00
W-MM-22_072517_SED_05-10_R1	1707771-CQ	Soil/Sediment	25-Jul-17 14:39	27-Jul-17 08:00
W-MM-22_072517_SED_05-10_R2	1707771-CR	Soil/Sediment	25-Jul-17 14:39	27-Jul-17 08:00
W-MM-22_072517_SED_05-10_R3	1707771-CS	Soil/Sediment	25-Jul-17 14:39	27-Jul-17 08:00
W-MM-23_072517_SED_03-05	1707771-CT	Soil/Sediment	25-Jul-17 15:22	27-Jul-17 08:00
W-MM-23_072517_SED_05-10	1707771-CU	Soil/Sediment	25-Jul-17 15:24	27-Jul-17 08:00
W-MM-24_072517_SED_03-05	1707771-CV	Soil/Sediment	25-Jul-17 16:36	27-Jul-17 08:00
W-MM-24_072517_SED_05-10	1707771-CW	Soil/Sediment	25-Jul-17 16:38	27-Jul-17 08:00
W-MM-TP_072517_SED_00-01_R1	1707771-CX	Soil/Sediment	25-Jul-17 11:42	27-Jul-17 08:00
W-MM-TP_072517_SED_00-01_R2	1707771-CY	Soil/Sediment	25-Jul-17 11:42	27-Jul-17 08:00
W-MM-TP_072517_SED_00-01_R3	1707771-CZ	Soil/Sediment	25-Jul-17 11:42	27-Jul-17 08:00
W-MM-TP_072517_SED_01-03	1707771-DA	Soil/Sediment	25-Jul-17 11:43	27-Jul-17 08:00

Eurofins Frontier Global Sciences, Inc.

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AMEC Foster Wheeler  
271 Mill Road  
Chelmsford MA, 01824Project: 2017 Penobscot Sediment Cores  
Project Number: WO-04A-030  
Project Manager: Denise KingReported:  
25-Aug-17 16:26

## SAMPLE RECEIPT

Samples were received at Eurofins Frontier Global Sciences (EFGS) on 7/27/2017 8:00:00 AM . The samples were received intact, on-ice within seven sealed coolers at -6.6, -13.4, 0.0, -42.0, -3.3, -6.6, and -8.4 degrees Celsius.

## SAMPLE PREPARATION AND ANALYSIS

Total solids analysis was performed in accordance with method SM2540B.

Total mercury preparation followed EPA 7474 and the analysis was performed by flow injection atomic fluorescence spectrometry (FI-AFS) in accordance with EPA 1631B.

Samples were prepped using a Potassium Hydroxide/Methanol solution for analysis of methyl mercury (SOP 2986) and analyzed for methyl mercury by cold vapor gas chromatography atomic fluorescence spectrometry (CV-GC-AFS) in accordance with EPA 1630 (EFGS-070/SOP 2808).

Samples were prepped in eleven batches for total solids; F708368, F708369, F708370, F708371, F708372, F708384, F708404, F708405, F708406, F708407, and F708447. Per client request, the following samples were used as the source QC. Sample 1707771-17 in batch F708368, samples 1707771-04 and -31 in batch F708369, samples 1707771-52 and -68 in batch F708370, samples 1707771-79 and -90 in batch F708371, samples 1707771-AH and -AU in batch F708372, samples 1707771-BK and -BY in batch F708384, and sample 1707771-CD in batch F708404. Due to limited volume, total solids was only done once for these samples 1707771-01, -02, -03 and 1707771-09, -10, -11.

Samples were prepped in eleven batches for total Mercury; F707537, F708322, F708399, F708427, F708428, F708445, F708446, F708463, F708464, F708484, and F708485. These were analyzed in six sequences; 7H15016, 7H16016, 7H18017, 7H21012, 7H22013, and 7H23013. Per client request, the following samples were used as the source QC. Sample 1707771-04 in batch F707537, samples 1707771-17 and -21 in batch F708322, samples 1707771-31 and -52 in batch F708427, samples 1707771-59 and -68 in batch F708428, samples 1707771-79 and -90 in batch F708445, samples 1707771-AA and -AH in batch F708446, samples 1707771-AU and -BD in batch F708463, samples 1707771-BK and -BY in batch F708464, sample 1707771-CD in batch F708484, and sample 1707771-DA in batch F708485.

Samples were prepped in five batches for Methyl Mercury; F707566, F707567, F707568, F707569, and F707570. These were analyzed in three sequences; 7H07017, 7H09017, and 7H11011. Per client request, the following samples were used as the source QC. Samples 1707771-04 and -17 in batch F707566, samples 1707771-21 and -31 in batch F707567, samples 1707771-90 and -AB in batch F707568, samples 1707771-AU and -BK in batch F707569, and sample 1707771-CD in batch F707570.

Eurofins Frontier Global Sciences, Inc.

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Amy Goodall, Project Manager

AMEC Foster Wheeler  
271 Mill Road  
Chelmsford MA, 01824Project: 2017 Penobscot Sediment Cores  
Project Number: WO-04A-030  
Project Manager: Denise King**Reported:**  
25-Aug-17 16:26

## ANALYTICAL AND QUALITY CONTROL ISSUES

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

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

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

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

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Eurofins Frontier Global Sciences, Inc.



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Amy Goodall, Project Manager

# Sample Receipt Checklist

EFGS Work Order: 1707771

Client: AMEC

Date & Time Received: 7/27/17 8:00

Date Labeled: 7/27/17 Labeled By: CSF

Project: \_\_\_\_\_

Received By: BW

Label Verified By: LM

# of Coolers Received: 7 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:	<u>Y</u>	
Custody Seals are present and intact:	<u>N</u>	
Custody seals signed:	<u>N</u>	

TID:	CF:	Date/time:	By:
<u>5225</u>	<u>0.0 °C</u>	<u>7/27/17 8:00</u>	<u>BW</u>
Cooler 1: <u>-6.6 °C</u>	w/CF: <u>-6.6 °C</u>	Cooler 4: <u>42.0 °C</u>	w/CF: <u>-42.0 °C</u>
Cooler 2: <u>13.4 °C</u>	w/CF: <u>-13.4 °C</u>	Cooler 5: <u>-3.3 °C</u>	w/CF: <u>-3.3 °C</u>
Cooler 3: <u>0.0 °C</u>	w/CF: <u>0.0 °C</u>	Cooler 6: <u>-6.6 °C</u>	w/CF: <u>6.6 °C</u>

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

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

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

Cooler 1: 8103 4444 8175 cooler 2: 7873 1030 9624 cooler 3: 7873 1030 9635  
 Cooler 4: 7873 1030 9646 cooler 5: 7873 1030 9657 cooler 6: 7873 1030 9668  
 Cooler 7: 7873 1030 9679 Cooler 7 Temp: -8.4 °C w/CF: -8.9 °C

Sample W-27-INTA\_072417\_S&D-CO-01 not present in coolers

1707771

COC SED EuroFin W03081

### Environmental Analysis Request/Chain of Custody

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Page 1 of 9

Client: Amec Foster Wheeler / 511 Congress St. Suite 200 Portland, ME 04101				<b>Matrix</b>				<b>Analyses Requested</b>				<b>For Lab Use Only</b>		
Project Name/#: USDC Penobscot				PN #3616166052.04A.030				<input type="checkbox"/> Tissue				SF #:		
Project Manager: Rod Pendleton				P.O. #:				<input type="checkbox"/> Ground				SCR #:		
Sampler: BW/JP				PWSID #:				<input type="checkbox"/> Surface						
Phone #:				Quote #:				<input type="checkbox"/> NPDES						
State where samples were collected: ME				For Compliance: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>				<input type="checkbox"/> Sediment						
				<input type="checkbox"/> Potable				<input type="checkbox"/> Hg 1631e						
				<input type="checkbox"/> Water				<input type="checkbox"/> Hg 1631e 8 oz P/ Freeze						
				<input type="checkbox"/> Other: Tissue				<input type="checkbox"/> MeHg 1630 16 Oz P/ Freeze						
				<input type="checkbox"/> Composite				<input type="checkbox"/> Hg 1631e/MeHg 1630/ TOC						
				<input type="checkbox"/> Soil				<input type="checkbox"/> Elutriate/Amc. COC E287AC Lab						
				<input type="checkbox"/> Grab				<input type="checkbox"/> Hg/As/Se/Le/Al/Co/Cr/Cu/Fe/Mn/Ni/Pb/Zn						
				<input type="checkbox"/> Date				<input type="checkbox"/> Total # of Containers						
				<input type="checkbox"/> Time				<input type="checkbox"/> Hg 1631e 16 Oz P/ Freeze						
<b>Sample Identification</b>												<b>Remarks</b>		
1	OR-01-01_072417_SED_00-01	7/24/2017	1752	X	X	X	1							Use volume for 3X Replicate
2	OR-01-01_072417_SED_01-03	7/24/2017	1753	X	X	X	2							Use volume for MS/ MD
3	OR-01-02_072417_SED_00-01	7/24/2017	1235	X	X	X	1							
4	OR-01-02_072417_SED_01-03	7/24/2017	1237	X	X	X	2							
5	OR-01-03_072417_SED_00-01	7/24/2017	1715	X	X	X	1							
6	OR-01-03_072417_SED_01-03	7/24/2017	1716	X	X	X	2							
7	OR-01-05_072417_SED_00-01	7/24/2017	1727	X	X	X	1							Use volume for 3X replicate
8	OR-01-05_072417_SED_01-03	7/24/2017	1729	X	X	X	2							
9	OR-02-01_072417_SED_00-01	7/24/2017	1210	X	X	X	1							
10	OR-02-01_072417_SED_01-03	7/24/2017	1210	X	X	X	2							Use volume for 3X Replicate
11	OR-02-02_072417_SED_00-01	7/24/2017	1700	X	X	X	1							
12	OR-02-02_072417_SED_01-03	7/24/2017	1701	X	X	X	2							Use volume for MS/ MD
13	W-103-A_072417_SED_00-01	7/24/2017	1518	X	X	X	1							
14	W-103-A_072417_SED_01-03	7/24/2017	1519	X	X	X	2							
15	W-103-B_072417_SED_00-01	7/24/2017	1247	X	X	X	1							Use volume for 3X replicate
<b>Turnaround Time Requested (TAT)</b> (please check):				Standard <input type="checkbox"/> Rush <input type="checkbox"/>				Relinquished by: <i>[Signature]</i>				Date: 7/26/17 Time: 1730		
(Rush TAT is subject to laboratory approval and surcharges.)								Relinquished by:				Date: Time:		
<b>Notes:</b> Lab required to homogenize and aliquot to sub-labs								Relinquished by:				Date: Time:		
FedEx # _____								Relinquished by:				Date: Time:		
# of Coolers _____								Relinquished by:				Date: Time:		
Sample disposal - Hold Equipment Blanks 1-4 until 30 days after delivery of report								Relinquished by Commercial Carrier:				Date: Time:		
Report and EDD to: denise.king@amecfw.com / 978-692-6633								UPS _____ FedEx _____ Other _____				Temperature upon receipt _____ °C		
<b>Data Package Options</b> (please check if required)				High <input type="checkbox"/> Standard <input checked="" type="checkbox"/>										
EDD Required? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>				If yes, format: _____										

Eurofins Frontier Global Sciences • 11720 Northcreek Pkwy N, Suite 400, Bothel, WA 98011 • 425-686-1996

CS-MA

*[Signature]*

Binlan woldens

RFEs

FedEx

7/27/17

8:00

1707771

COC SED EuroFin WO30B2

### Environmental Analysis Request/Chain of Custody



Page 2 of 9

Client: Amec Foster Wheeler / 511 Congress St. Suite 200 Portland, ME 04101		Matrix		Analyses Requested										For Lab Use Only		
Project Name/#: USDC Penobscot		PN #: 3616166052.04A.030		Preservation Codes										SF #:		
Project Manager: Rod Pendleton		P.O. #:												SCR #:		
Sampler: BW/JP/LT		PWSID #:												Preservation Codes		
Phone #:		Quote #:												H = HCl      T = Thiosulfate		
State where samples were collected: ME		For Compliance: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>												N = HNO <sub>3</sub> B = NaOH		
														G = H <sub>2</sub> SO <sub>4</sub> P = H <sub>3</sub> PO <sub>4</sub>		
														O = Other		
Sample Identification		Date	Time	Grab	Composite	Soil	Water	Other:	Tissue	Total # of Containers	Hg 1631e 16 Oz P/Freeze	Hg 1631e 8 oz P/Freeze	MeHg 1630 16 Oz P/Freeze	Hg 1631e/MeHg 1630 TOC Liqui-Hg/MeHg/OC D2014-C LAD HOM/GEN/ZE -ALCO/LAT	Remarks	
1	W-103-B_072417_SED_01-03	7/24/2017	1250	X		X				2				X		
2	W-105-A_072417_SED_00-01	7/24/2017	1537	X		X				1				X		
3	W-105-A_072417_SED_01-03	7/24/2017	1538	X		X				2				X		
4	W-14-C_072417_SED_00-01	7/24/2017	1332	X		X				1				X		
5	W-14-C_072417_SED_01-03	7/24/2017	1335	X		X				2				X	Use volume for 3X Replicate	
6	W-27-INTA_072417_SED_00-01	7/24/2017	1619	X		X				1				X	Use volume for MS/ MD	
7	W-27-INTA_072417_SED_01-03	7/24/2017	1620	X		X				2				X		
8	W-MM-06_072417_SED_00-01	7/24/2017	1555	X		X				1				X		
9	W-MM-06_072417_SED_01-03	7/24/2017	1556	X		X				2				X		
10	W-MM-19_072417_SED_00-01	7/24/2017	1817	X		X				1				X		
11	W-MM-19_072417_SED_01-03	7/24/2017	1818	X		X				2				X		
12	W-MM-22_072417_SED_00-01	7/24/2017	1739	X		X				1				X		
13	W-MM-22_072417_SED_01-03	7/24/2017	1741	X		X				2				X		
14	W-MM-23_072417_SED_00-01	7/24/2017	1303	X		X				1				X	Use volume for 3X Replicate	
15	W-MM-23_072417_SED_01-03	7/24/2017	1305	X		X				2				X		
Turnaround Time Requested (TAT) (please check):				Standard <input type="checkbox"/> Rush <input type="checkbox"/>		Relinquished by:		Date	Time	Received by:		Date	Time			
(Rush TAT is subject to laboratory approval and surcharges.)						<i>Jawicki</i>		7/26/17	1730							
Notes: Lab required to homogenized and aliquot to sub-labs						Relinquished by:		Date	Time	Received by:		Date	Time			
FedEx # _____						Relinquished by:		Date	Time	Received by:		Date	Time			
# of Coolers _____						Relinquished by:		Date	Time	Received by:		Date	Time			
Sample disposal - Hold Equipment Blanks 1-4 until 30 days after delivery of report						Relinquished by:		Date	Time	Received by:		Date	Time			
Report and EDD to: denise.king@amefcw.com / 978-692-6633						Relinquished by:		Date	Time	Received by:		Date	Time			
Data Package Options (please check if required)				High <input type="checkbox"/> Standard <input checked="" type="checkbox"/>		Relinquished by Commercial Carrier:				Temperature upon receipt _____ °C						
EDD Required? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>				If yes, format: _____		UPS _____ FedEx _____ Other _____										



1707771

COC SED EuroFin W030B3

# Environmental Analysis Request/Chain of Custody



Page 3 of 9

Client: <b>Amecc Foster Wheeler / 511 Congress St. Suite 200 Portland, ME 04101</b>		Matrix		Analyses Requested				For Lab Use Only													
Project Name/#: USDC Penobscot		PN # 3616166052.04A.030		Preservation Codes				SF #: _____													
Project Manager: Rod Pendleton		P.O. #:						SCR #: _____													
Sampler: BW/JP/LT		PWSID #:																			
Phone #:		Quote #:																			
State where samples were collected: ME		For Compliance: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>																			
Sample Identification		Collection		Grab	Composite	Soil	Water	Other: Tissue	Total # of Containers	Hg 1631e 16 Oz P/ Freeze	Hg 1631e 8 oz P/4 Deg c	MeHg 1630 16 Oz P/ Freeze	Hg 1631e/MeHg 1630/ TOC Lloyd K. King, QC DC374-C Lish HONIGSENIZE - ALOQUAT						Remarks		
		Date	Time																		
1	W-MM-24_072417_SED_00-01	7/24/2017	1805	X		X			1												
2	W-MM-24_072417_SED_01-03	7/24/2017	1806	X		X			2				X							Use volume for 3X replicate	
3	W-27-A_072617_SED_03-05	7/26/17	0833		X	X			1	1											
4	W-27-A_072617_SED_05-10	7/26/17	0835		X	X			1	1											
5	W-14-INTA_072617_SED_03-05	7/26/17	0838		X	X			1	1										Use volume for 3X replicate	
6	W-14-INTA_072617_SED_05-10	7/26/17	0840		X	X			1	1										Use volume for MS/MD	
7	W-MM-07_072617_SED_03-05	7/26/17	0847		X	X			1	1											
8	W-MM-07_072617_SED_05-10	7/26/17	0849		X	X			1	1											
9	W-MM-TP_072617_SED_03-05	7/26/17	0908		X	X			1	1											
10	W-MM-TP_072617_SED_05-10	7/26/17	0910		X	X			1	1											
11	W-103-INTA_072617_SED_03-05	7/26/17	0947		X	X			1	1											
12	W-103-INTA_072617_SED_05-10	7/26/17	0949		X	X			1	1											
13	W-63-INT_072617_SED_03-05	7/26/17	0952		X	X			1	1											
14	W-63-INT_072617_SED_05-10	7/26/17	0954		X	X			1	1										Use volume for 3X replicate	
15	W-MM-01_072617_SED_03-05	7/26/17	1008		X	X			1	1											
Turnaround Time Requested (TAT) (please check):		Standard <input type="checkbox"/> Rush <input type="checkbox"/>		Relinquished by:		Date	Time	Received by:		Date	Time										
(Rush TAT is subject to laboratory approval and surcharges.)				<i>[Signature]</i>		7/26/17	17:30														
Notes: Lab required to homogenize and aliquot to sub-labs				Relinquished by:		Date	Time	Received by:		Date	Time										
				Relinquished by:		Date	Time	Received by:		Date	Time										
				Relinquished by:		Date	Time	Received by:		Date	Time										
Data Package Options (please check if required)		High <input type="checkbox"/> Standard <input checked="" type="checkbox"/>		Relinquished by Commercial Carrier:																	
EDD Required? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		If yes, format: _____		UPS _____ FedEx _____ Other _____																Temperature upon receipt _____ °C	

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COC SED EuroFin W03084

### Environmental Analysis Request/Chain of Custody



Client: <b>AmeC Foster Wheeler / 511 Congress St. Suite 200 Portland, ME 04101</b>				Matrix				Analyses Requested								For Lab Use Only			
Project Name/#: USDC Penobscot				PN # 3616166052.04A.030				Preservation Codes								SF #:			
Project Manager: Rod Pendleton				P.O. #:												SCR #:			
Sampler: BW/JP/LT				PWSID #:												Preservation Codes			
Phone #:				Quote #:												H = HCl      T = Thiosulfate N = HNO <sub>3</sub> B = NaOH S = H <sub>2</sub> SO <sub>4</sub> P = H <sub>2</sub> PO <sub>4</sub> O = Other			
State where samples were collected: ME		For Compliance: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>																	
Sample Identification			Collection		Grab	Composite	Soil	Water	Other:	Tissue	Total # of Containers	Hg 1631e 16 Oz P/ Freeze	Hg 1631e 8 oz P/4 Deg c	MeHg 1630 16 Oz P/ Freeze	H <sub>2</sub> 1631e <sup>16</sup> 16 Oz P/ Freeze TOC Lloyd Blank OC D2374-C Lab HOMOGENIZE ALLOQUAT	Remarks			
1	W-MM-01_072617_SED_05-10	7/26/17	1010	X	X	X					1	1							
2	W-104-INTA_072617_SED_03-05	7/26/17	1018	X	X	X					1	1					Use volume for 3X replicate		
3	W-104-INTA_072617_SED_05-10	7/26/17	1020	X	X	X					1	1					MS/MSD		
4	W-MM-17_072617_SED_03-05	7/26/17	1023	X	X	X					1	1					Use volume for 3X replicate		
5	W-MM-17_072617_SED_05-10	7/26/17	1025	X	X	X					1	1							
6	W-MM-02_072617_SED_03-05	7/26/17	1030	X	X	X					1	1							
7	W-MM-02_072617_SED_05-10	7/26/17	1032	X	X	X					1	1							
8	W-102-INTA_072617_SED_03-05	7/26/17	1042	X	X	X					1	1							
9	W-102-INTA_072617_SED_05-10	7/26/17	1044	X	X	X					1	1					Use volume for 3X replicate		
10	OR-01-01_072517_SED_03-05	7/25/17	1504	X	X	X					1	1					MS/MSD		
11	OR-01-01_072517_SED_05-10	7/25/17	1506	X	X	X					1	1							
12	OR-01-02_072517_SED_03-05	7/25/17	1542	X	X	X					1	1							
13	OR-01-02_072517_SED_05-10	7/25/17	1544	X	X	X					1	1							
14	OR-01-03_072517_SED_03-05	7/25/17	1624	X	X	X					1	1							
15	OR-01-03_072517_SED_05-10	7/25/17	1626	X	X	X					1	1					Use volume for 3X replicate		
Turnaround Time Requested (TAT) (please check):				Standard <input type="checkbox"/>	Rush <input type="checkbox"/>	Relinquished by: <i>[Signature]</i>		Date	Time	Received by:	Date	Time							
(Rush TAT is subject to laboratory approval and surcharges)								7/26/17	1730										
Notes:	Lab required to homogenize and aliquot to sub-labs					Relinquished by:		Date	Time	Received by:	Date	Time							
	FedEx # _____					Relinquished by:		Date	Time	Received by:	Date	Time							
	# of Coolers _____					Relinquished by:		Date	Time	Received by:	Date	Time							
	Sample disposal - Hold Equipment Blanks 1-4 until 30 days after delivery of report Report and EDD to: denise.king@amecfw.com / 978-692-6633					Relinquished by:		Date	Time	Received by:	Date	Time							
Data Package Options (please check if required)				High <input type="checkbox"/>	Standard <input checked="" type="checkbox"/>	Relinquished by Commercial Carrier:		Date	Time	Received by:	Date	Time							
EDD Required? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>				If yes, format: _____				UPS _____	FedEx _____	Other _____	Temperature upon receipt _____ °C								

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COC SED EuroFin W030B5

### Environmental Analysis Request/Chain of Custody



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Client: <b>AmeC Foster Wheeler / 511 Congress St. Suite 200 Portland, ME 04101</b>		Matrix		Analyses Requested				For Lab Use Only			
Project Name/#: USDC Penobscot		PN #: 3616166052.04A.030		Preservation Codes				SF #: _____			
Project Manager: Rod Pendleton		P.O. #:						SCR #: _____			
Sampler: BW/JP/LT		PWSID #:									
Phone #:		Quote #:									
State where samples were collected: ME		For Compliance: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>									
Sample Identification		Collection		Soil	Sediment	Tissue	Total # of Containers	Remarks			
Date	Time	Grab	Composite	Potable	Ground	Surface	Hg 1631e 16 Oz P/ Freeze	Hg 1631e 8 oz P/4 Deg c	MeHg 1630 16 Oz P/ Freeze	Hg 1631e MeHg 1630, TOC U/ovb /alnt: OC, D23/4C, L, W HOMOCENIZE - ALOQUAT	Preservation Codes
1	OR-01-04_072517_SED_00-01	7/25/2017	0900	X	X		1				H = HCl T = Thiosulfate
2	OR-01-04_072517_SED_01-03	7/25/2017	0901	X	X		2			X	N = HNO <sub>3</sub> B = NaOH
3	OR-01-04_072517_SED_03-05	7/25/2017	1716	X	X		1	X			S = H <sub>2</sub> SO <sub>4</sub> P = H <sub>2</sub> PO <sub>4</sub>
4	OR-01-04_072517_SED_05-10	7/25/2017	1718	X	X		1	X			O = Other
5	OR-01-05_072517_SED_03-05	7/25/2017	1508	X	X		1	X			
6	OR-01-05_072517_SED_05-10	7/25/2017	1510	X	X		1	X			
7	OR-02-01_072517_SED_03-05	7/25/2017	1516	X	X		1	X			
8	OR-02-01_072517_SED_05-10	7/25/2017	1518	X	X		1	X			
9	OR-02-02_072517_SED_03-05	7/25/2017	1448	X	X		1	X			
10	OR-02-02_072517_SED_05-10	7/25/2017	1450	X	X		1	X			Use volume for 3X replicate
11	W-102-INTA_072517_SED_00-01	7/25/2017	0929	X	X		1			X	
12	W-102-INTA_072517_SED_01-03	7/25/2017	0930	X	X		2			X	
13	W-103-A_072517_SED_03-05	7/25/2017	1440	X	X		1	X			
14	W-103-A_072517_SED_05-10	7/25/2017	1442	X	X		1	X			Use volume for 3X replicate
15	W-103-B_072517_SED_03-05	7/25/2017	1536	X	X		1	X			MS/MSD
Turnaround Time Requested (TAT) (please check):		Standard <input type="checkbox"/> Rush <input type="checkbox"/>		Relinquished by:		Date	Time	Received by:		Date	Time
(Rush TAT is subject to laboratory approval and surcharges.)				<i>James</i>		7/26/17	1730				
Notes: Lab required to homogenized and aloquot to sub-labs				Relinquished by:		Date	Time	Received by:		Date	Time
FedEx # _____				Relinquished by:		Date	Time	Received by:		Date	Time
# of Coolers _____				Relinquished by:		Date	Time	Received by:		Date	Time
Sample disposal - Hold Equipment Blanks 1-4 until 30 days after delivery of report				Relinquished by Commercial Carrier:				Temperature upon receipt _____ °C			
Report and EDD to: denise.king@amecfw.com / 978-692-6633				UPS _____ FedEx _____ Other _____							
Data Package Options (please check if required)		High <input type="checkbox"/> Standard <input checked="" type="checkbox"/>									
EDD Required? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		If yes, format: _____									

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COC SED EuroFin WO3086

# Environmental Analysis Request/Chain of Custody



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Client: Amec Foster Wheeler / 511 Congress St. Suite 200 Portland, ME 04101		Matrix		Analyses Requested				For Lab Use Only	
Project Name/#: USDC Penobscot		PN #: 3616166052.04A.030		Preservation Codes				SF #: _____	
Project Manager: Rod Pendleton		P.O. #:						SCR #: _____	
Sampler: BWJP/LT		PWSID #:							
Phone #:		Quote #:							
State where samples were collected: ME		For Compliance: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>							
<b>Sample Identification</b>		<b>Collection</b>		<b>Matrix</b>		<b>Total # of Containers</b>		<b>Remarks</b>	
		Date	Time	Soil <input type="checkbox"/>	Sediment <input type="checkbox"/>	Tissue <input type="checkbox"/>	Hg 1631e 16 Oz P/ Freeze	Hg 1631e 8 oz P/4 Deg c	Methg 1630 16 Oz P/ Freeze
				Water <input type="checkbox"/>	Potable <input type="checkbox"/>	Ground <input type="checkbox"/>			
				Other: <input type="checkbox"/>	NPDES <input type="checkbox"/>	Surface <input type="checkbox"/>			
				Composite <input type="checkbox"/>					
1	W-103-B_072517_SED_05-10	7/25/2017	1538	X	X		1	X	
2	W-103-INTA_072517_SED_00-01	7/25/2017	1148	X	X		1		X
3	W-103-INTA_072517_SED_01-03	7/25/2017	1149	X	X		2		X
4	W-104-INTA_072517_SED_00-01	7/25/2017	0945	X	X		1		X
5	W-104-INTA_072517_SED_01-03	7/25/2017	0946	X	X		2		X
6	W-105-A_072517_SED_03-05	7/25/2017	1444	X	X		1	X	
7	W-105-A_072517_SED_05-10	7/25/2017	1446	X	X		1	X	
8	W-14-A_072517_SED_00-01	7/25/2017	0849	X	X		1		X
9	W-14-A_072517_SED_01-03	7/25/2017	0850	X	X		2		X
10	W-14-A_072517_SED_03-05	7/25/2017	1726	X	X		1	X	
11	W-14-A_072517_SED_05-10	7/25/2017	1728	X	X		1	X	
12	W-14-B_072517_SED_00-01	7/25/2017	0915	X	X		1		X
13	W-14-B_072517_SED_01-03	7/25/2017	0917	X	X		2		X
14	W-14-B_072517_SED_03-05	7/25/2017	1736	X	X		1	X	
15	W-14-B_072517_SED_05-10	7/25/2017	1738	X	X		1	X	
<b>Turnaround Time Requested (TAT)</b> (please check):		Standard <input type="checkbox"/> Rush <input type="checkbox"/>		Relinquished by: <i>Janey</i>		Date: 7/26/17	Time: 1730	Received by:	
<b>Notes:</b> Lab required to homogenized and aliquot to sub-labs				Relinquished by:		Date:	Time:	Received by:	
FedEx # _____		# of Coolers _____		Relinquished by:		Date:	Time:	Received by:	
Sample disposal - Hold Equipment Blanks 1-4 until 30 days after delivery of report		Report and EDD to: denise.king@amecfw.com / 978-692-6633		Relinquished by:		Date:	Time:	Received by:	
<b>Data Package Options</b> (please check if required)		High <input type="checkbox"/> Standard <input checked="" type="checkbox"/>		Relinquished by Commercial Carrier:				Temperature upon receipt _____ °C	
EOD Required? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		If yes, format: _____		UPS _____ FedEx _____ Other _____					

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### Environmental Analysis Request/Chain of Custody



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Client: <b>AmeC Foster Wheeler / 511 Congress St. Suite 200 Portland, ME 04101</b>		Project Name/#: <b>USDC Penobscot</b>		PN # <b>3616166052.04A.030</b>		Matrix		Analyses Requested						For Lab Use Only													
Project Manager: <b>Rod Pendleton</b>		P.O. #:		PWSID #:		Quote #:		Preservation Codes						SF #:													
Sampler: <b>BW/JP/LT</b>		State where samples were collected: <b>ME</b>		For Compliance: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		Soil <input checked="" type="checkbox"/> Sediment <input type="checkbox"/> Tissue <input type="checkbox"/>		<table border="1"> <tr> <td>Hg 1631e 16 Oz P/ Freeze</td> <td>Hg 1631e 8 oz P/4 Deg c</td> <td>MeHg 1630 16 Oz P/ Freeze</td> <td>Hg 1631e 7eHg 1630 TOC Licor Kane OC E3974-C Lab HOMOGENIZE ASO2/AT</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>						Hg 1631e 16 Oz P/ Freeze	Hg 1631e 8 oz P/4 Deg c	MeHg 1630 16 Oz P/ Freeze	Hg 1631e 7eHg 1630 TOC Licor Kane OC E3974-C Lab HOMOGENIZE ASO2/AT									SCR #:	
Hg 1631e 16 Oz P/ Freeze	Hg 1631e 8 oz P/4 Deg c	MeHg 1630 16 Oz P/ Freeze	Hg 1631e 7eHg 1630 TOC Licor Kane OC E3974-C Lab HOMOGENIZE ASO2/AT																								
Phone #:		Date		Time		Water <input type="checkbox"/> NPDES <input type="checkbox"/> Surface <input type="checkbox"/>		Potable <input type="checkbox"/> Ground <input type="checkbox"/>		Other: <input type="checkbox"/> Tissue <input type="checkbox"/>		Total # of Containers		Preservation Codes H = HCl      T = Thiosulfate N = HNO <sub>3</sub> B = NaOH S = H <sub>2</sub> SO <sub>4</sub> P = H <sub>3</sub> PO <sub>4</sub> O = Other													
Sample Identification		Collection		Grab	Composite	Soil	Water	Other	Total # of Containers	Hg 1631e 16 Oz P/ Freeze	Hg 1631e 8 oz P/4 Deg c	MeHg 1630 16 Oz P/ Freeze	Hg 1631e 7eHg 1630 TOC Licor Kane OC E3974-C Lab HOMOGENIZE ASO2/AT	Remarks													
1	W-14-C_072517_SED_03-05	7/25/2017	1620			X	X		1	X																	
2	W-14-C_072517_SED_05-10	7/25/2017	1622			X	X		1	X																	
3	W-14-INTA_072517_SED_00-01	7/25/2017	1250	X		X			1				X														
4	W-14-INTA_072517_SED_01-03	7/25/2017	1251	X		X			2				X														
5	W-27-A_072517_SED_00-01	7/25/2017	1239	X		X			1				X		Use volume for 3X replicate												
6	W-27-A_072517_SED_01-03	7/25/2017	1240	X		X			2				X		MS/MSD												
7	W-27-INTA_072517_SED_03-05	7/25/2017	1423		X	X			1	X																	
8	W-27-INTA_072517_SED_05-10	7/25/2017	1426		X	X			1	X																	
9	W-63-INT_072517_SED_00-01	7/25/2017	1058	X		X			1				X														
10	W-63-INT_072517_SED_01-03	7/25/2017	1059	X		X			2				X														
11	W-MM-01_072517_SED_00-01	7/25/2017	1047	X		X			1				X														
12	W-MM-01_072517_SED_01-03	7/25/2017	1048	X		X			2				X		Use volume for 3X replicate												
13	W-MM-02_072517_SED_00-01	7/25/2017	1009	X		X			1				X														
14	W-MM-02_072517_SED_01-03	7/25/2017	1010	X		X			2				X														
15	W-MM-06_072517_SED_03-05	7/25/2017	1700		X	X			1	X					Use volume for 3X replicate												
Turnaround Time Requested (TAT) (please check):		Standard <input type="checkbox"/>		Rush <input type="checkbox"/>		Relinquished by:		Date		Time		Received by:		Date		Time											
(Rush TAT is subject to laboratory approval and surcharges.)						<i>[Signature]</i>		7/26/17		1730																	
Notes: Lab required to homogenized and aliquot to sub-labs						Relinquished by:		Date		Time		Received by:		Date		Time											
FedEx # _____		# of Coolers _____		Sample disposal - Hold Equipment Blanks 1-4 until 30 days after delivery of report		Relinquished by:		Date		Time		Received by:		Date		Time											
				Report and EDD to: denise.king@amecfw.com / 978-692-6633																							
Data Package Options (please check if required)		High <input type="checkbox"/>		Standard <input checked="" type="checkbox"/>		Relinquished by Commercial Carrier:		Date		Time		Received by:		Date		Time											
EDD Required? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		If yes, format _____		UPS _____ FedEx _____ Other _____												Temperature upon receipt _____ °C											

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COC SED EuroFin WO3088

## Environmental Analysis Request/Chain of Custody



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Client: <b>AmeC Foster Wheeler / 511 Congress St. Suite 200 Portland, ME 04101</b>				<b>Matrix</b>			<b>Analyses Requested</b>						<b>For Lab Use Only</b>				
Project Name/#: USDC Penobscot		PN #: 3616166052.04A.030		<input type="checkbox"/> Potable	<input type="checkbox"/> Ground	<input type="checkbox"/> Surface	<b>Preservation Codes</b>						SF #:	SCR #:			
Project Manager: Rod Pendleton		P.O. #:		<input type="checkbox"/> Sediment	<input type="checkbox"/> Tissue							<b>Preservation Codes</b>					
Sampler: BWJP/LT		PWSID #:		<input type="checkbox"/> Water	<input type="checkbox"/> NPDES	<input type="checkbox"/> Other: _____	Hg 1631e 16 Oz P/ Freeze	Hg 1631e 8 oz P/4 Deg c	Methg 1630 16 Oz P/ Freeze	Hg 1631e 16 Oz P/4 Deg c TCC Liquid Water OC D937A-C Lab HOMOCENTRE-ALOUQUAT							H = HCl      T = Thiosulfate
Phone #:		Quote #:											N = HNO <sub>3</sub> B = NaOH				
State where samples were collected: ME		For Compliance: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>											S = H <sub>2</sub> SO <sub>4</sub> P = H <sub>2</sub> PO <sub>4</sub>				
													O = Other				
<b>Sample Identification</b>													<b>Remarks</b>				
		<b>Date</b>	<b>Time</b>	<b>Grab</b>	<b>Composite</b>	<b>Soil</b>	<b>Water</b>	<b>Other</b>	<b>Total # of Containers</b>								
1	W-MM-06_072517_SED_05-10	7/25/2017	1702	X	X				1	X						MS/MSD	
2	W-MM-07_072517_SED_00-01	7/25/2017	0839	X	X				1			X					
3	W-MM-07_072517_SED_01-03	7/25/2017	0840	X	X				2			X				Use volume for 3X replicate	
4	W-MM-17_072517_SED_00-01	7/25/2017	1025	X	X				1			X				MS/MSD	
5	W-MM-17_072517_SED_01-03	7/25/2017	1026	X	X				2			X					
6	W-MM-18_072517_SED_00-01	7/25/2017	0829	X	X				1			X					
7	W-MM-18_072517_SED_01-03	7/25/2017	0830	X	X				2			X					
8	W-MM-18_072517_SED_03-05	7/25/2017	1744		X	X			1	X						Use volume for 3X replicate	
9	W-MM-18_072517_SED_05-10	7/25/2017	1746		X	X			1	X							
10	W-MM-19_072517_SED_03-05	7/25/2017	1650		X	X			1	X							
11	W-MM-19_072517_SED_05-10	7/25/2017	1652		X	X			1	X						Use volume for 3X replicate	
12	W-MM-22_072517_SED_03-05	7/25/2017	1437		X	X			1	X							
13	W-MM-22_072517_SED_05-10	7/25/2017	1439		X	X			1	X						Use volume for 3X replicate	
14	W-MM-23_072517_SED_03-05	7/25/2017	1522		X	X			1	X							
15	W-MM-23_072517_SED_05-10	7/25/2017	1524		X	X			1	X							
<b>Turnaround Time Requested (TAT)</b> (please check):				Standard <input type="checkbox"/> Rush <input type="checkbox"/>			Relinquished by: <i>[Signature]</i>		Date: 7/26/17	Time: 1730	Received by:		Date:	Time:			
(Rush TAT is subject to laboratory approval and surcharges.)							Relinquished by:		Date:	Time:	Received by:		Date:	Time:			
<b>Notes:</b> Lab required to homogenized and aliquot to sub-labs							Relinquished by:		Date:	Time:	Received by:		Date:	Time:			
FedEx # _____							Relinquished by:		Date:	Time:	Received by:		Date:	Time:			
# of Coolers _____							Relinquished by:		Date:	Time:	Received by:		Date:	Time:			
Sample disposal - Hold Equipment Blanks 1-4 until 30 days after delivery of report							Relinquished by:		Date:	Time:	Received by:		Date:	Time:			
Report and EDD to: denise.king@amecwf.com / 978-692-6633							Relinquished by:		Date:	Time:	Received by:		Date:	Time:			
<b>Data Package Options</b> (please check if required)							Relinquished by Commercial Carrier:										
High <input type="checkbox"/> Standard <input checked="" type="checkbox"/>							UPS _____ FedEx _____ Other _____		Temperature upon receipt _____ °C								
EDD Required? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> If yes, format: _____																	





AMEC Foster Wheeler  
271 Mill Road  
Chelmsford MA, 01824

Project: 2017 Penobscot Sediment Cores  
Project Number: WO-04A-030  
Project Manager: Denise King

Reported:  
25-Aug-17 16:26

**OR-01-01\_072417\_SED\_00-01\_R1**  
**1707771-01**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
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**Sample Preparation: EFGS-010 KOH/Methanol Hg Digestion**

Methyl Mercury (as Mercury)	7.1	1.4	5.6	ng/g dry	500	F707566	02-Aug-17	7H07017	04-Aug-17	EPA 1630 Mod/FGS-070	
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**Sample Preparation: EFGS-019 Solids Analysis**

% Solids	30.4	0.1	0.1	% by Weight	1	F708447	16-Aug-17		18-Aug-17	SM 2540B	O-04
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**Sample Preparation: EPA 7474**

Mercury	1130	27.3	121	ng/g dry	100	F707537	11-Aug-17	7H15016	15-Aug-17	EPA 1631B	
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AMEC Foster Wheeler  
271 Mill Road  
Chelmsford MA, 01824

Project: 2017 Penobscot Sediment Cores  
Project Number: WO-04A-030  
Project Manager: Denise King

Reported:  
25-Aug-17 16:26

**OR-01-01\_072417\_SED\_00-01\_R2**  
**1707771-02**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-010 KOH/Methanol Hg Digestion</b>											
Methyl Mercury (as Mercury)	6.5	1.3	5.3	ng/g dry	500	F707566	02-Aug-17	7H07017	04-Aug-17	EPA 1630 Mod/FGS-070	
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	30.4	0.1	0.1	% by Weight	1	F708447	16-Aug-17		18-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	813	13.7	60.7	ng/g dry	50	F707537	11-Aug-17	7H15016	15-Aug-17	EPA 1631B	

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Project: 2017 Penobscot Sediment Cores  
Project Number: WO-04A-030  
Project Manager: Denise King

Reported:  
25-Aug-17 16:26

**OR-01-01\_072417\_SED\_00-01\_R3**  
**1707771-03**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
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**Sample Preparation: EFGS-010 KOH/Methanol Hg Digestion**

Methyl Mercury (as Mercury)	8.1	1.5	5.9	ng/g dry	500	F707566	02-Aug-17	7H07017	04-Aug-17	EPA 1630 Mod/FGS-070	
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**Sample Preparation: EFGS-019 Solids Analysis**

% Solids	30.4	0.1	0.1	% by Weight	1	F708447	16-Aug-17		18-Aug-17	SM 2540B	O-04
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**Sample Preparation: EPA 7474**

Mercury	815	14.4	63.7	ng/g dry	50	F707537	11-Aug-17	7H15016	15-Aug-17	EPA 1631B	
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Chelmsford MA, 01824

Project: 2017 Penobscot Sediment Cores  
Project Number: WO-04A-030  
Project Manager: Denise King

**Reported:**  
25-Aug-17 16:26

**OR-01-01\_072417\_SED\_01-03  
1707771-04**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
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**Sample Preparation: EFGS-010 KOH/Methanol Hg Digestion**

Methyl Mercury (as Mercury)	9.0	1.1	4.2	ng/g dry	500	F707566	02-Aug-17	7H07017	04-Aug-17	EPA 1630 Mod/FGS-070	
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**Sample Preparation: EFGS-019 Solids Analysis**

% Solids	40.2	0.1	0.1	% by Weight	1	F708369	10-Aug-17		14-Aug-17	SM 2540B	O-04
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**Sample Preparation: EPA 7474**

Mercury	1100	10.3	45.4	ng/g dry	50	F707537	11-Aug-17	7H15016	15-Aug-17	EPA 1631B	
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Project Number: WO-04A-030  
Project Manager: Denise King

Reported:  
25-Aug-17 16:26

**OR-01-02\_072417\_SED\_00-01**  
**1707771-05**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-010 KOH/Methanol Hg Digestion</b>											
Methyl Mercury (as Mercury)	9.2	1.6	6.2	ng/g dry	500	F707566	02-Aug-17	7H07017	04-Aug-17	EPA 1630 Mod/FGS-070	
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	29.0	0.1	0.1	% by Weight	1	F708368	10-Aug-17		14-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	882	13.2	58.3	ng/g dry	50	F707537	11-Aug-17	7H15016	15-Aug-17	EPA 1631B	

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25-Aug-17 16:26

**OR-01-02\_072417\_SED\_01-03**  
**1707771-06**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-010 KOH/Methanol Hg Digestion</b>											
Methyl Mercury (as Mercury)	15.6	1.2	4.9	ng/g dry	500	F707566	02-Aug-17	7H07017	04-Aug-17	EPA 1630 Mod/FGS-070	
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	34.5	0.1	0.1	% by Weight	1	F708368	10-Aug-17		14-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	937	11.4	50.5	ng/g dry	50	F707537	11-Aug-17	7H15016	15-Aug-17	EPA 1631B	

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Project Number: WO-04A-030  
Project Manager: Denise King

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25-Aug-17 16:26

**OR-01-03\_072417\_SED\_00-01**  
**1707771-07**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
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**Sample Preparation: EFGS-010 KOH/Methanol Hg Digestion**

Methyl Mercury (as Mercury)	20.4	1.5	5.8	ng/g dry	500	F707566	02-Aug-17	7H07017	04-Aug-17	EPA 1630 Mod/FGS-070	
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**Sample Preparation: EFGS-019 Solids Analysis**

% Solids	32.1	0.1	0.1	% by Weight	1	F708368	10-Aug-17		14-Aug-17	SM 2540B	O-04
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**Sample Preparation: EPA 7474**

Mercury	858	12.5	55.3	ng/g dry	50	F707537	11-Aug-17	7H15016	15-Aug-17	EPA 1631B	
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Project: 2017 Penobscot Sediment Cores  
Project Number: WO-04A-030  
Project Manager: Denise King

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25-Aug-17 16:26

**OR-01-03\_072417\_SED\_01-03**  
**1707771-08**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
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**Sample Preparation: EFGS-010 KOH/Methanol Hg Digestion**

Methyl Mercury (as Mercury)	17.7	1.3	5.2	ng/g dry	500	F707566	02-Aug-17	7H07017	04-Aug-17	EPA 1630 Mod/FGS-070	
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**Sample Preparation: EFGS-019 Solids Analysis**

% Solids	35.3	0.1	0.1	% by Weight	1	F708368	10-Aug-17		14-Aug-17	SM 2540B	O-04
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**Sample Preparation: EPA 7474**

Mercury	689	11.4	50.4	ng/g dry	50	F707537	11-Aug-17	7H15016	15-Aug-17	EPA 1631B	
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Project: 2017 Penobscot Sediment Cores  
Project Number: WO-04A-030  
Project Manager: Denise King

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25-Aug-17 16:26

**OR-01-05\_072417\_SED\_00-01\_R1**  
**1707771-09**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
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**Sample Preparation: EFGS-010 KOH/Methanol Hg Digestion**

Methyl Mercury (as Mercury)	10.8	0.9	3.8	ng/g dry	500	F707566	02-Aug-17	7H07017	04-Aug-17	EPA 1630 Mod/FGS-070	
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**Sample Preparation: EFGS-019 Solids Analysis**

% Solids	41.8	0.1	0.1	% by Weight	1	F708447	16-Aug-17		18-Aug-17	SM 2540B	O-04
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**Sample Preparation: EPA 7474**

Mercury	687	10.0	44.4	ng/g dry	50	F707537	11-Aug-17	7H15016	15-Aug-17	EPA 1631B	
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Chelmsford MA, 01824

Project: 2017 Penobscot Sediment Cores  
Project Number: WO-04A-030  
Project Manager: Denise King

Reported:  
25-Aug-17 16:26

**OR-01-05\_072417\_SED\_00-01\_R2**  
**1707771-10**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
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**Sample Preparation: EFGS-010 KOH/Methanol Hg Digestion**

Methyl Mercury (as Mercury)	8.5	1.0	3.9	ng/g dry	500	F707566	02-Aug-17	7H07017	04-Aug-17	EPA 1630 Mod/FGS-070	
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**Sample Preparation: EFGS-019 Solids Analysis**

% Solids	41.8	0.1	0.1	% by Weight	1	F708447	16-Aug-17		18-Aug-17	SM 2540B	O-04
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**Sample Preparation: EPA 7474**

Mercury	817	10.1	44.5	ng/g dry	50	F707537	11-Aug-17	7H15016	15-Aug-17	EPA 1631B	
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Project: 2017 Penobscot Sediment Cores  
Project Number: WO-04A-030  
Project Manager: Denise King

Reported:  
25-Aug-17 16:26

**OR-01-05\_072417\_SED\_00-01\_R3**  
**1707771-11**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-010 KOH/Methanol Hg Digestion</b>											
Methyl Mercury (as Mercury)	11.6	1.0	4.0	ng/g dry	500	F707566	02-Aug-17	7H07017	04-Aug-17	EPA 1630 Mod/FGS-070	
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	41.8	0.1	0.1	% by Weight	1	F708447	16-Aug-17		18-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	700	9.75	43.1	ng/g dry	50	F708322	08-Aug-17	7H15016	15-Aug-17	EPA 1631B	

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Project Number: WO-04A-030  
Project Manager: Denise King

Reported:  
25-Aug-17 16:26

**OR-01-05\_072417\_SED\_01-03**  
**1707771-12**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-010 KOH/Methanol Hg Digestion</b>											
Methyl Mercury (as Mercury)	13.1	0.8	3.3	ng/g dry	500	F707566	02-Aug-17	7H07017	04-Aug-17	EPA 1630 Mod/FGS-070	
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	48.2	0.1	0.1	% by Weight	1	F708369	10-Aug-17		14-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	715	8.24	36.4	ng/g dry	50	F708322	08-Aug-17	7H15016	15-Aug-17	EPA 1631B	

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Project Number: WO-04A-030  
Project Manager: Denise King

Reported:  
25-Aug-17 16:26

**OR-02-01\_072417\_SED\_00-01**  
**1707771-13**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
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**Sample Preparation: EFGS-010 KOH/Methanol Hg Digestion**

Methyl Mercury (as Mercury)	9.3	1.9	7.5	ng/g dry	500	F707566	02-Aug-17	7H07017	04-Aug-17	EPA 1630 Mod/FGS-070	
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**Sample Preparation: EFGS-019 Solids Analysis**

% Solids	22.3	0.1	0.1	% by Weight	1	F708369	10-Aug-17		14-Aug-17	SM 2540B	O-04
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**Sample Preparation: EPA 7474**

Mercury	1080	19.5	86.2	ng/g dry	50	F708322	08-Aug-17	7H15016	15-Aug-17	EPA 1631B	
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Project Number: WO-04A-030  
Project Manager: Denise King

Reported:  
25-Aug-17 16:26

**OR-02-01\_072417\_SED\_01-03\_R1**  
**1707771-14**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-010 KOH/Methanol Hg Digestion</b>											
Methyl Mercury (as Mercury)	11.4	1.3	5.3	ng/g dry	500	F707566	02-Aug-17	7H07017	04-Aug-17	EPA 1630 Mod/FGS-070	
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	34.1	0.1	0.1	% by Weight	1	F708369	10-Aug-17		14-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	850	11.9	52.6	ng/g dry	50	F708322	08-Aug-17	7H15016	15-Aug-17	EPA 1631B	

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Project Number: WO-04A-030  
Project Manager: Denise King

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25-Aug-17 16:26

**OR-02-01\_072417\_SED\_01-03\_R2**  
**1707771-15**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-010 KOH/Methanol Hg Digestion</b>											
Methyl Mercury (as Mercury)	12.4	1.3	5.2	ng/g dry	500	F707566	02-Aug-17	7H07017	04-Aug-17	EPA 1630 Mod/FGS-070	
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	33.7	0.1	0.1	% by Weight	1	F708369	10-Aug-17		14-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	772	11.4	50.5	ng/g dry	50	F708322	08-Aug-17	7H15016	15-Aug-17	EPA 1631B	

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Project: 2017 Penobscot Sediment Cores  
Project Number: WO-04A-030  
Project Manager: Denise King

Reported:  
25-Aug-17 16:26

**OR-02-01\_072417\_SED\_01-03\_R3**  
**1707771-16**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-010 KOH/Methanol Hg Digestion</b>											
Methyl Mercury (as Mercury)	13.6	1.3	5.0	ng/g dry	500	F707566	02-Aug-17	7H07017	04-Aug-17	EPA 1630 Mod/FGS-070	
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	33.7	0.1	0.1	% by Weight	1	F708369	10-Aug-17		14-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	829	11.8	52.2	ng/g dry	50	F708322	08-Aug-17	7H15016	15-Aug-17	EPA 1631B	

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**OR-02-02\_072417\_SED\_00-01**  
**1707771-17**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
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**Sample Preparation: EFGS-010 KOH/Methanol Hg Digestion**

Methyl Mercury (as Mercury)	15.7	1.4	5.5	ng/g dry	500	F707566	02-Aug-17	7H07017	04-Aug-17	EPA 1630 Mod/FGS-070	
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**Sample Preparation: EFGS-019 Solids Analysis**

% Solids	33.0	0.1	0.1	% by Weight	1	F708368	10-Aug-17		14-Aug-17	SM 2540B	O-04
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**Sample Preparation: EPA 7474**

Mercury	901	11.8	52.0	ng/g dry	50	F708322	08-Aug-17	7H15016	15-Aug-17	EPA 1631B	
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Project: 2017 Penobscot Sediment Cores  
Project Number: WO-04A-030  
Project Manager: Denise King

Reported:  
25-Aug-17 16:26

**OR-02-02\_072417\_SED\_01-03**  
**1707771-18**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-010 KOH/Methanol Hg Digestion</b>											
Methyl Mercury (as Mercury)	11.6	1.1	4.4	ng/g dry	500	F707566	02-Aug-17	7H07017	04-Aug-17	EPA 1630 Mod/FGS-070	
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	41.5	0.1	0.1	% by Weight	1	F708369	10-Aug-17		14-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	903	9.97	44.0	ng/g dry	50	F708322	08-Aug-17	7H15016	15-Aug-17	EPA 1631B	

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Project: 2017 Penobscot Sediment Cores  
Project Number: WO-04A-030  
Project Manager: Denise King

Reported:  
25-Aug-17 16:26

**W-103-A\_072417\_SED\_00-01**  
**1707771-19**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-010 KOH/Methanol Hg Digestion</b>											
Methyl Mercury (as Mercury)	17.1	1.8	7.2	ng/g dry	500	F707566	02-Aug-17	7H07017	04-Aug-17	EPA 1630 Mod/FGS-070	
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	22.5	0.1	0.1	% by Weight	1	F708369	10-Aug-17		14-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	171	18.7	82.8	ng/g dry	50	F708322	08-Aug-17	7H15016	15-Aug-17	EPA 1631B	

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Project Number: WO-04A-030  
Project Manager: Denise King

Reported:  
25-Aug-17 16:26

**W-103-A\_072417\_SED\_01-03**  
**1707771-20**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-010 KOH/Methanol Hg Digestion</b>											
Methyl Mercury (as Mercury)	35.7	1.8	7.1	ng/g dry	500	F707566	02-Aug-17	7H07017	04-Aug-17	EPA 1630 Mod/FGS-070	
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	24.2	0.1	0.1	% by Weight	1	F708369	10-Aug-17		14-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	742	16.8	74.2	ng/g dry	50	F708322	08-Aug-17	7H15016	15-Aug-17	EPA 1631B	

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Project Number: WO-04A-030  
Project Manager: Denise King

Reported:  
25-Aug-17 16:26

**W-103-B\_072417\_SED\_00-01\_R1**  
**1707771-21**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-010 KOH/Methanol Hg Digestion</b>											
Methyl Mercury (as Mercury)	40.1	1.9	7.5	ng/g dry	500	F707567	02-Aug-17	7H09017	08-Aug-17	EPA 1630 Mod/FGS-070	
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	22.9	0.1	0.1	% by Weight	1	F708369	10-Aug-17		14-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	574	17.2	75.8	ng/g dry	50	F708322	08-Aug-17	7H15016	15-Aug-17	EPA 1631B	

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Project Number: WO-04A-030  
Project Manager: Denise King

Reported:  
25-Aug-17 16:26

**W-103-B\_072417\_SED\_00-01\_R2**  
**1707771-22**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
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**Sample Preparation: EFGS-010 KOH/Methanol Hg Digestion**

Methyl Mercury (as Mercury)	38.1	1.8	7.0	ng/g dry	500	F707567	02-Aug-17	7H09017	08-Aug-17	EPA 1630 Mod/FGS-070	
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**Sample Preparation: EFGS-019 Solids Analysis**

% Solids	23.7	0.1	0.1	% by Weight	1	F708369	10-Aug-17		14-Aug-17	SM 2540B	O-04
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**Sample Preparation: EPA 7474**

Mercury	484	18.4	81.4	ng/g dry	50	F708322	08-Aug-17	7H15016	15-Aug-17	EPA 1631B	
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Project Number: WO-04A-030  
Project Manager: Denise King

**Reported:**  
25-Aug-17 16:26

**W-103-B\_072417\_SED\_00-01\_R3**  
**1707771-23**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-010 KOH/Methanol Hg Digestion</b>											
Methyl Mercury (as Mercury)	34.4	1.8	7.2	ng/g dry	500	F707567	02-Aug-17	7H09017	08-Aug-17	EPA 1630 Mod/FGS-070	
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	24.2	0.1	0.1	% by Weight	1	F708369	10-Aug-17		14-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	415	15.8	69.9	ng/g dry	50	F708322	08-Aug-17	7H15016	15-Aug-17	EPA 1631B	

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Project Manager: Denise King

Reported:  
25-Aug-17 16:26

**W-103-B\_072417\_SED\_01-03**  
**1707771-24**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
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**Sample Preparation: EFGS-010 KOH/Methanol Hg Digestion**

Methyl Mercury (as Mercury)	28.9	1.7	6.6	ng/g dry	500	F707567	02-Aug-17	7H09017	08-Aug-17	EPA 1630 Mod/FGS-070	
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**Sample Preparation: EFGS-019 Solids Analysis**

% Solids	27.0	0.1	0.1	% by Weight	1	F708369	10-Aug-17		14-Aug-17	SM 2540B	O-04
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**Sample Preparation: EPA 7474**

Mercury	1150	14.0	62.0	ng/g dry	50	F708322	08-Aug-17	7H15016	15-Aug-17	EPA 1631B	
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Project Manager: Denise King

Reported:  
25-Aug-17 16:26

**W-105-A\_072417\_SED\_00-01**  
**1707771-25**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
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**Sample Preparation: EFGS-010 KOH/Methanol Hg Digestion**

Methyl Mercury (as Mercury)	10.6	1.9	7.5	ng/g dry	500	F707567	02-Aug-17	7H09017	08-Aug-17	EPA 1630 Mod/FGS-070	
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**Sample Preparation: EFGS-019 Solids Analysis**

% Solids	23.3	0.1	0.1	% by Weight	1	F708369	10-Aug-17		14-Aug-17	SM 2540B	O-04
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**Sample Preparation: EPA 7474**

Mercury	713	17.4	76.7	ng/g dry	50	F708322	08-Aug-17	7H15016	15-Aug-17	EPA 1631B	
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Project Manager: Denise King

Reported:  
25-Aug-17 16:26

**W-105-A\_072417\_SED\_01-03**  
**1707771-26**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-010 KOH/Methanol Hg Digestion</b>											
Methyl Mercury (as Mercury)	5.3	1.3	5.1	ng/g dry	500	F707567	02-Aug-17	7H09017	08-Aug-17	EPA 1630 Mod/FGS-070	
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	31.8	0.1	0.1	% by Weight	1	F708369	10-Aug-17		14-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	719	12.8	56.6	ng/g dry	50	F708322	08-Aug-17	7H15016	15-Aug-17	EPA 1631B	

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Project Number: WO-04A-030  
Project Manager: Denise King

**Reported:**  
25-Aug-17 16:26

**W-14-C\_072417\_SED\_00-01**  
**1707771-27**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
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**Sample Preparation: EFGS-010 KOH/Methanol Hg Digestion**

Methyl Mercury (as Mercury)	26.8	1.7	6.7	ng/g dry	500	F707567	02-Aug-17	7H09017	08-Aug-17	EPA 1630 Mod/FGS-070	
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**Sample Preparation: EFGS-019 Solids Analysis**

% Solids	26.3	0.1	0.1	% by Weight	1	F708369	10-Aug-17		14-Aug-17	SM 2540B	O-04
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**Sample Preparation: EPA 7474**

Mercury	515	14.8	65.4	ng/g dry	50	F708322	08-Aug-17	7H15016	15-Aug-17	EPA 1631B	
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Project Number: WO-04A-030  
Project Manager: Denise King

**Reported:**  
25-Aug-17 16:26

**W-14-C\_072417\_SED\_01-03\_R1  
1707771-28**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
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**Sample Preparation: EFGS-010 KOH/Methanol Hg Digestion**

Methyl Mercury (as Mercury)	16.1	1.7	6.7	ng/g dry	500	F707567	02-Aug-17	7H09017	08-Aug-17	EPA 1630 Mod/FGS-070	
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**Sample Preparation: EFGS-019 Solids Analysis**

% Solids	28.0	0.1	0.1	% by Weight	1	F708369	10-Aug-17		14-Aug-17	SM 2540B	O-04
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**Sample Preparation: EPA 7474**

Mercury	757	14.6	64.3	ng/g dry	50	F708322	08-Aug-17	7H15016	15-Aug-17	EPA 1631B	
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Project Manager: Denise King

**Reported:**  
25-Aug-17 16:26

**W-14-C\_072417\_SED\_01-03\_R2**  
**1707771-29**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-010 KOH/Methanol Hg Digestion</b>											
Methyl Mercury (as Mercury)	19.4	1.5	6.0	ng/g dry	500	F707567	02-Aug-17	7H09017	08-Aug-17	EPA 1630 Mod/FGS-070	
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	27.9	0.1	0.1	% by Weight	1	F708369	10-Aug-17		14-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	667	14.7	65.2	ng/g dry	50	F708322	08-Aug-17	7H15016	15-Aug-17	EPA 1631B	

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Project Manager: Denise King

Reported:  
25-Aug-17 16:26

**W-14-C\_072417\_SED\_01-03\_R3**  
**1707771-30**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-010 KOH/Methanol Hg Digestion</b>											
Methyl Mercury (as Mercury)	24.5	1.6	6.4	ng/g dry	500	F707567	02-Aug-17	7H09017	08-Aug-17	EPA 1630 Mod/FGS-070	
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	28.4	0.1	0.1	% by Weight	1	F708369	10-Aug-17		14-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	664	14.1	62.4	ng/g dry	50	F708322	08-Aug-17	7H15016	15-Aug-17	EPA 1631B	

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Project Number: WO-04A-030  
Project Manager: Denise King

**Reported:**  
25-Aug-17 16:26

**W-27-INTA\_072417\_SED\_00-01  
1707771-31**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
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**Sample Preparation: EFGS-010 KOH/Methanol Hg Digestion**

Methyl Mercury (as Mercury)	7.6	1.3	5.3	ng/g dry	500	F707567	02-Aug-17	7H09017	08-Aug-17	EPA 1630 Mod/FGS-070	
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**Sample Preparation: EFGS-019 Solids Analysis**

% Solids	34.1	0.1	0.1	% by Weight	1	F708369	10-Aug-17		14-Aug-17	SM 2540B	O-04
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**Sample Preparation: EPA 7474**

Mercury	905	12.0	53.2	ng/g dry	50	F708427	15-Aug-17	7H16016	16-Aug-17	EPA 1631B	
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Project Manager: Denise King

Reported:  
25-Aug-17 16:26

**W-27-INTA\_072417\_SED\_01-03**  
**1707771-32**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
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**Sample Preparation: EFGS-010 KOH/Methanol Hg Digestion**

Methyl Mercury (as Mercury)	8.9	1.3	5.0	ng/g dry	500	F707567	02-Aug-17	7H09017	08-Aug-17	EPA 1630 Mod/FGS-070	
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**Sample Preparation: EFGS-019 Solids Analysis**

% Solids	35.9	0.1	0.1	% by Weight	1	F708368	10-Aug-17		14-Aug-17	SM 2540B	O-04
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**Sample Preparation: EPA 7474**

Mercury	931	11.1	48.9	ng/g dry	50	F708427	15-Aug-17	7H16016	16-Aug-17	EPA 1631B	
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Project Number: WO-04A-030  
Project Manager: Denise King

Reported:  
25-Aug-17 16:26

**W-MM-06\_072417\_SED\_00-01**  
**1707771-33**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-010 KOH/Methanol Hg Digestion</b>											
Methyl Mercury (as Mercury)	15.1	1.7	6.9	ng/g dry	500	F707567	02-Aug-17	7H09017	08-Aug-17	EPA 1630 Mod/FGS-070	
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	23.7	0.1	0.1	% by Weight	1	F708368	10-Aug-17		14-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	420	18.2	80.4	ng/g dry	50	F708427	15-Aug-17	7H16016	16-Aug-17	EPA 1631B	

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Project Manager: Denise King

Reported:  
25-Aug-17 16:26

**W-MM-06\_072417\_SED\_01-03**  
**1707771-34**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-010 KOH/Methanol Hg Digestion</b>											
Methyl Mercury (as Mercury)	11.7	1.6	6.5	ng/g dry	500	F707567	02-Aug-17	7H09017	08-Aug-17	EPA 1630 Mod/FGS-070	
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	27.3	0.1	0.1	% by Weight	1	F708368	10-Aug-17		14-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	1050	14.6	64.4	ng/g dry	50	F708427	15-Aug-17	7H16016	16-Aug-17	EPA 1631B	

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Project Number: WO-04A-030  
Project Manager: Denise King

**Reported:**  
25-Aug-17 16:26

**W-MM-19\_072417\_SED\_00-01**  
**1707771-35**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-010 KOH/Methanol Hg Digestion</b>											
Methyl Mercury (as Mercury)	16.4	1.4	5.7	ng/g dry	500	F707567	02-Aug-17	7H09017	08-Aug-17	EPA 1630 Mod/FGS-070	
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	31.2	0.1	0.1	% by Weight	1	F708368	10-Aug-17		14-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	360	12.4	55.0	ng/g dry	50	F708427	15-Aug-17	7H16016	16-Aug-17	EPA 1631B	

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Project Number: WO-04A-030  
Project Manager: Denise King

**Reported:**  
25-Aug-17 16:26

**W-MM-19\_072417\_SED\_01-03  
1707771-36**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
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**Sample Preparation: EFGS-010 KOH/Methanol Hg Digestion**

Methyl Mercury (as Mercury)	16.0	1.2	4.7	ng/g dry	500	F707567	02-Aug-17	7H09017	08-Aug-17	EPA 1630 Mod/FGS-070	
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**Sample Preparation: EFGS-019 Solids Analysis**

% Solids	37.8	0.1	0.1	% by Weight	1	F708368	10-Aug-17		14-Aug-17	SM 2540B	O-04
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**Sample Preparation: EPA 7474**

Mercury	655	10.1	44.5	ng/g dry	50	F708427	15-Aug-17	7H16016	16-Aug-17	EPA 1631B	
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Project Number: WO-04A-030  
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**Reported:**  
25-Aug-17 16:26

**W-MM-22\_072417\_SED\_00-01**  
**1707771-37**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
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**Sample Preparation: EFGS-010 KOH/Methanol Hg Digestion**

Methyl Mercury (as Mercury)	28.9	2.1	8.3	ng/g dry	500	F707567	02-Aug-17	7H09017	08-Aug-17	EPA 1630 Mod/FGS-070	
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**Sample Preparation: EFGS-019 Solids Analysis**

% Solids	20.7	0.1	0.1	% by Weight	1	F708370	11-Aug-17		14-Aug-17	SM 2540B	O-04
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**Sample Preparation: EPA 7474**

Mercury	276	20.4	89.9	ng/g dry	50	F708427	15-Aug-17	7H16016	16-Aug-17	EPA 1631B	
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Project: 2017 Penobscot Sediment Cores  
Project Number: WO-04A-030  
Project Manager: Denise King

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25-Aug-17 16:26

**W-MM-22\_072417\_SED\_01-03**  
**1707771-38**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
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**Sample Preparation: EFGS-010 KOH/Methanol Hg Digestion**

Methyl Mercury (as Mercury)	15.6	1.7	6.8	ng/g dry	500	F707567	02-Aug-17	7H09017	08-Aug-17	EPA 1630 Mod/FGS-070	
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**Sample Preparation: EFGS-019 Solids Analysis**

% Solids	25.4	0.1	0.1	% by Weight	1	F708370	11-Aug-17		14-Aug-17	SM 2540B	O-04
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**Sample Preparation: EPA 7474**

Mercury	417	16.0	70.7	ng/g dry	50	F708427	15-Aug-17	7H16016	16-Aug-17	EPA 1631B	
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Project Manager: Denise King

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25-Aug-17 16:26

**W-MM-23\_072417\_SED\_00-01\_R1  
1707771-39**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-010 KOH/Methanol Hg Digestion</b>											
Methyl Mercury (as Mercury)	6.3	1.2	5.0	ng/g dry	500	F707567	02-Aug-17	7H09017	08-Aug-17	EPA 1630 Mod/FGS-070	
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	34.0	0.1	0.1	% by Weight	1	F708370	11-Aug-17		14-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	423	11.5	51.0	ng/g dry	50	F708399	14-Aug-17	7H16016	16-Aug-17	EPA 1631B	

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25-Aug-17 16:26

**W-MM-23\_072417\_SED\_00-01\_R2**  
**1707771-40**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-010 KOH/Methanol Hg Digestion</b>											
Methyl Mercury (as Mercury)	7.6	1.2	4.9	ng/g dry	500	F707567	02-Aug-17	7H09017	08-Aug-17	EPA 1630 Mod/FGS-070	
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	32.7	0.1	0.1	% by Weight	1	F708370	11-Aug-17		14-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	440	13.4	59.2	ng/g dry	50	F708399	14-Aug-17	7H16016	16-Aug-17	EPA 1631B	

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25-Aug-17 16:26

**W-MM-23\_072417\_SED\_00-01\_R3**  
**1707771-41**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-010 KOH/Methanol Hg Digestion</b>											
Methyl Mercury (as Mercury)	7.9	1.4	5.5	ng/g dry	500	F707568	03-Aug-17	7H11011	10-Aug-17	EPA 1630 Mod/FGS-070	
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	33.5	0.1	0.1	% by Weight	1	F708370	11-Aug-17		14-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	389	12.8	56.5	ng/g dry	50	F708399	14-Aug-17	7H16016	16-Aug-17	EPA 1631B	

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**W-MM-23\_072417\_SED\_01-03**  
**1707771-42**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-010 KOH/Methanol Hg Digestion</b>											
Methyl Mercury (as Mercury)	8.8	1.2	4.9	ng/g dry	500	F707568	03-Aug-17	7H11011	10-Aug-17	EPA 1630 Mod/FGS-070	
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	37.5	0.1	0.1	% by Weight	1	F708370	11-Aug-17		14-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	596	10.5	46.4	ng/g dry	50	F708427	15-Aug-17	7H16016	16-Aug-17	EPA 1631B	

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**W-MM-24\_072417\_SED\_00-01**  
**1707771-43**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-010 KOH/Methanol Hg Digestion</b>											
Methyl Mercury (as Mercury)	5.8	1.3	5.1	ng/g dry	500	F707568	03-Aug-17	7H11011	10-Aug-17	EPA 1630 Mod/FGS-070	
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	34.7	0.1	0.1	% by Weight	1	F708370	11-Aug-17		14-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	480	11.8	52.1	ng/g dry	50	F708427	15-Aug-17	7H16016	16-Aug-17	EPA 1631B	

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**W-MM-24\_072417\_SED\_01-03\_R1  
1707771-44**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-010 KOH/Methanol Hg Digestion</b>											
Methyl Mercury (as Mercury)	5.0	1.1	4.3	ng/g dry	500	F707568	03-Aug-17	7H11011	10-Aug-17	EPA 1630 Mod/FGS-070	
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	40.3	0.1	0.1	% by Weight	1	F708370	11-Aug-17		14-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	391	10.3	45.4	ng/g dry	50	F708427	15-Aug-17	7H16016	16-Aug-17	EPA 1631B	

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**W-MM-24\_072417\_SED\_01-03\_R2  
1707771-45**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
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**Sample Preparation: EFGS-010 KOH/Methanol Hg Digestion**

Methyl Mercury (as Mercury)	4.9	1.1	4.5	ng/g dry	500	F707568	03-Aug-17	7H11011	10-Aug-17	EPA 1630 Mod/FGS-070	
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**Sample Preparation: EFGS-019 Solids Analysis**

% Solids	39.4	0.1	0.1	% by Weight	1	F708370	11-Aug-17		14-Aug-17	SM 2540B	O-04
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**Sample Preparation: EPA 7474**

Mercury	418	10.5	46.6	ng/g dry	50	F708427	15-Aug-17	7H16016	16-Aug-17	EPA 1631B	
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Project Manager: Denise King

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25-Aug-17 16:26

**W-MM-24\_072417\_SED\_01-03\_R3**  
**1707771-46**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-010 KOH/Methanol Hg Digestion</b>											
Methyl Mercury (as Mercury)	3.6	1.3	5.0	ng/g dry	500	F707568	03-Aug-17	7H11011	10-Aug-17	EPA 1630 Mod/FGS-070	J
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	39.8	0.1	0.1	% by Weight	1	F708370	11-Aug-17		14-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	345	9.96	44.0	ng/g dry	50	F708427	15-Aug-17	7H16016	16-Aug-17	EPA 1631B	

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Project Manager: Denise King

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**W-27-A\_072617\_SED\_03-05**  
**1707771-47**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	28.8	0.1	0.1	% by Weight	1	F708370	11-Aug-17		14-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	1520	14.8	65.2	ng/g dry	50	F708427	15-Aug-17	7H16016	16-Aug-17	EPA 1631B	

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25-Aug-17 16:26

**W-27-A\_072617\_SED\_05-10  
1707771-48**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	29.9	0.1	0.1	% by Weight	1	F708370	11-Aug-17		14-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	2110	14.2	62.6	ng/g dry	50	F708427	15-Aug-17	7H16016	16-Aug-17	EPA 1631B	

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**W-14-INTA\_072617\_SED\_03-05\_R1**  
**1707771-49**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	64.1	0.1	0.1	% by Weight	1	F708370	11-Aug-17		14-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	43.6	6.79	30.0	ng/g dry	50	F708427	15-Aug-17	7H16016	16-Aug-17	EPA 1631B	

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25-Aug-17 16:26

**W-14-INTA\_072617\_SED\_03-05\_R2**  
**1707771-50**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	63.3	0.1	0.1	% by Weight	1	F708370	11-Aug-17		14-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	29.1	1.31	5.80	ng/g dry	10	F708427	15-Aug-17	7H16016	16-Aug-17	EPA 1631B	

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**W-14-INTA\_072617\_SED\_03-05\_R3**  
**1707771-51**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	64.1	0.1	0.1	% by Weight	1	F708370	11-Aug-17		14-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	26.9	1.22	5.40	ng/g dry	10	F708427	15-Aug-17	7H16016	16-Aug-17	EPA 1631B	

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**W-14-INTA\_072617\_SED\_05-10  
1707771-52**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	66.5	0.1	0.1	% by Weight	1	F708370	11-Aug-17		14-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	23.0	1.20	5.32	ng/g dry	10	F708427	15-Aug-17	7H16016	16-Aug-17	EPA 1631B	

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**W-MM-07\_072617\_SED\_03-05**  
**1707771-53**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	20.9	0.1	0.1	% by Weight	1	F708370	11-Aug-17		14-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	682	19.5	86.2	ng/g dry	50	F708427	15-Aug-17	7H16016	16-Aug-17	EPA 1631B	



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**W-MM-07\_072617\_SED\_05-10  
1707771-54**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	30.2	0.1	0.1	% by Weight	1	F708370	11-Aug-17		14-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	212	13.8	61.1	ng/g dry	50	F708428	15-Aug-17	7H18017	17-Aug-17	EPA 1631B	

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**W-MM-TP\_072617\_SED\_03-05**  
**1707771-55**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	49.2	0.1	0.1	% by Weight	1	F708371	11-Aug-17		16-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	100	7.92	35.0	ng/g dry	50	F708428	15-Aug-17	7H18017	17-Aug-17	EPA 1631B	

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**W-MM-TP\_072617\_SED\_05-10  
1707771-56**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	48.3	0.1	0.1	% by Weight	1	F708371	11-Aug-17		16-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	46.6	8.36	36.9	ng/g dry	50	F708428	15-Aug-17	7H18017	17-Aug-17	EPA 1631B	

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Project Number: WO-04A-030  
Project Manager: Denise King

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25-Aug-17 16:26

**W-103-INTA\_072617\_SED\_03-05**  
**1707771-57**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	42.7	0.1	0.1	% by Weight	1	F708371	11-Aug-17		16-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	1100	9.78	43.2	ng/g dry	50	F708428	15-Aug-17	7H18017	17-Aug-17	EPA 1631B	

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Amy Goodall, Project Manager





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**W-103-INTA\_072617\_SED\_05-10**  
**1707771-58**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	42.5	0.1	0.1	% by Weight	1	F708371	11-Aug-17		16-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	841	9.08	40.1	ng/g dry	50	F708428	15-Aug-17	7H18017	17-Aug-17	EPA 1631B	

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**W-63-INT\_072617\_SED\_03-05**  
**1707771-59**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	41.9	0.1	0.1	% by Weight	1	F708371	11-Aug-17		16-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	962	9.83	43.4	ng/g dry	50	F708428	15-Aug-17	7H18017	17-Aug-17	EPA 1631B	

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Project: 2017 Penobscot Sediment Cores  
Project Number: WO-04A-030  
Project Manager: Denise King

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25-Aug-17 16:26

**W-63-INT\_072617\_SED\_05-10\_R1**  
**1707771-60**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	36.6	0.1	0.1	% by Weight	1	F708371	11-Aug-17		16-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	2200	22.1	97.8	ng/g dry	100	F708428	15-Aug-17	7H18017	17-Aug-17	EPA 1631B	

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Project Number: WO-04A-030  
Project Manager: Denise King

**Reported:**  
25-Aug-17 16:26

**W-63-INT\_072617\_SED\_05-10\_R2**  
**1707771-61**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	36.4	0.1	0.1	% by Weight	1	F708371	11-Aug-17		16-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	2080	21.5	94.8	ng/g dry	100	F708428	15-Aug-17	7H18017	17-Aug-17	EPA 1631B	

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Project Number: WO-04A-030  
Project Manager: Denise King

Reported:  
25-Aug-17 16:26

**W-63-INT\_072617\_SED\_05-10\_R3**  
**1707771-62**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	36.2	0.1	0.1	% by Weight	1	F708371	11-Aug-17		16-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	2290	21.3	94.1	ng/g dry	100	F708428	15-Aug-17	7H18017	17-Aug-17	EPA 1631B	

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Project Number: WO-04A-030  
Project Manager: Denise King

Reported:  
25-Aug-17 16:26

**W-MM-01\_072617\_SED\_03-05**  
**1707771-63**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	22.1	0.1	0.1	% by Weight	1	F708371	11-Aug-17		16-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	3370	37.9	167	ng/g dry	100	F708428	15-Aug-17	7H18017	17-Aug-17	EPA 1631B	

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Project Manager: Denise King

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25-Aug-17 16:26

**W-MM-01\_072617\_SED\_05-10  
1707771-64**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	28.6	0.1	0.1	% by Weight	1	F708371	11-Aug-17		16-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	1200	14.6	64.7	ng/g dry	50	F708428	15-Aug-17	7H18017	17-Aug-17	EPA 1631B	

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**Reported:**  
25-Aug-17 16:26

**W-104-INTA\_072617\_SED\_03-05\_R1  
1707771-65**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	37.7	0.1	0.1	% by Weight	1	F708371	11-Aug-17		16-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	729	10.2	45.2	ng/g dry	50	F708428	15-Aug-17	7H18017	17-Aug-17	EPA 1631B	

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**Reported:**  
25-Aug-17 16:26

**W-104-INTA\_072617\_SED\_03-05\_R2**  
**1707771-66**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	38.2	0.1	0.1	% by Weight	1	F708371	11-Aug-17		16-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	727	11.1	48.8	ng/g dry	50	F708428	15-Aug-17	7H18017	17-Aug-17	EPA 1631B	

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**Reported:**  
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**W-104-INTA\_072617\_SED\_03-05\_R3**  
**1707771-67**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	37.9	0.1	0.1	% by Weight	1	F708371	11-Aug-17		16-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	688	10.2	45.2	ng/g dry	50	F708428	15-Aug-17	7H18017	17-Aug-17	EPA 1631B	

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**Reported:**  
25-Aug-17 16:26

**W-104-INTA\_072617\_SED\_05-10**  
**1707771-68**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	43.4	0.1	0.1	% by Weight	1	F708370	11-Aug-17		14-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	826	9.68	42.8	ng/g dry	50	F708428	15-Aug-17	7H18017	17-Aug-17	EPA 1631B	



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**W-MM-17\_072617\_SED\_03-05\_R1  
1707771-69**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	25.6	0.1	0.1	% by Weight	1	F708371	11-Aug-17		16-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	104	15.6	69.0	ng/g dry	50	F708428	15-Aug-17	7H18017	17-Aug-17	EPA 1631B	

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**W-MM-17\_072617\_SED\_03-05\_R2**  
**1707771-70**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	25.7	0.1	0.1	% by Weight	1	F708371	11-Aug-17		16-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	99.8	15.8	69.9	ng/g dry	50	F708428	15-Aug-17	7H18017	17-Aug-17	EPA 1631B	

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**W-MM-17\_072617\_SED\_03-05\_R3**  
**1707771-71**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	24.2	0.1	0.1	% by Weight	1	F708371	11-Aug-17		16-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	99.3	17.9	79.0	ng/g dry	50	F708428	15-Aug-17	7H18017	17-Aug-17	EPA 1631B	

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**W-MM-17\_072617\_SED\_05-10**  
**1707771-72**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	27.7	0.1	0.1	% by Weight	1	F708371	11-Aug-17		16-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	26.7	2.78	12.3	ng/g dry	10	F708428	15-Aug-17	7H18017	17-Aug-17	EPA 1631B	

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**W-MM-02\_072617\_SED\_03-05**  
**1707771-73**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	24.5	0.1	0.1	% by Weight	1	F708371	11-Aug-17		16-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	205	17.5	77.4	ng/g dry	50	F708428	15-Aug-17	7H18017	17-Aug-17	EPA 1631B	

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**W-MM-02\_072617\_SED\_05-10**  
**1707771-74**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	28.1	0.1	0.1	% by Weight	1	F708372	11-Aug-17		14-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	38.1	2.92	12.9	ng/g dry	10	F708445	17-Aug-17	7H21012	18-Aug-17	EPA 1631B	



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25-Aug-17 16:26

**W-102-INTA\_072617\_SED\_03-05**  
**1707771-75**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	30.4	0.1	0.1	% by Weight	1	F708372	11-Aug-17		14-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	1310	13.4	59.3	ng/g dry	50	F708445	17-Aug-17	7H21012	18-Aug-17	EPA 1631B	

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25-Aug-17 16:26

**W-102-INTA\_072617\_SED\_05-10\_R1**  
**1707771-76**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	30.0	0.1	0.1	% by Weight	1	F708372	11-Aug-17		14-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	1160	12.9	56.9	ng/g dry	50	F708445	17-Aug-17	7H21012	18-Aug-17	EPA 1631B	

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25-Aug-17 16:26

**W-102-INTA\_072617\_SED\_05-10\_R2**  
**1707771-77**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	29.2	0.1	0.1	% by Weight	1	F708372	11-Aug-17		14-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	1080	13.4	59.2	ng/g dry	50	F708445	17-Aug-17	7H21012	18-Aug-17	EPA 1631B	

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25-Aug-17 16:26

**W-102-INTA\_072617\_SED\_05-10\_R3**  
**1707771-78**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	29.7	0.1	0.1	% by Weight	1	F708372	11-Aug-17		14-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	1100	13.8	60.9	ng/g dry	50	F708445	17-Aug-17	7H21012	18-Aug-17	EPA 1631B	

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25-Aug-17 16:26

**OR-01-01\_072517\_SED\_03-05**  
**1707771-79**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	45.0	0.1	0.1	% by Weight	1	F708371	11-Aug-17		16-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	863	9.20	40.6	ng/g dry	50	F708445	17-Aug-17	7H21012	18-Aug-17	EPA 1631B	

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**OR-01-01\_072517\_SED\_05-10**  
**1707771-80**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	49.4	0.1	0.1	% by Weight	1	F708372	11-Aug-17		14-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	260	8.19	36.2	ng/g dry	50	F708445	17-Aug-17	7H21012	18-Aug-17	EPA 1631B	

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**OR-01-02\_072517\_SED\_03-05**  
**1707771-81**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	36.5	0.1	0.1	% by Weight	1	F708372	11-Aug-17		14-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	856	10.5	46.3	ng/g dry	50	F708445	17-Aug-17	7H21012	18-Aug-17	EPA 1631B	

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**OR-01-02\_072517\_SED\_05-10**  
**1707771-82**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	38.0	0.1	0.1	% by Weight	1	F708372	11-Aug-17		14-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	1180	10.3	45.4	ng/g dry	50	F708445	17-Aug-17	7H21012	18-Aug-17	EPA 1631B	

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**OR-01-03\_072517\_SED\_03-05**  
**1707771-83**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	41.2	0.1	0.1	% by Weight	1	F708372	11-Aug-17		14-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	898	9.18	40.6	ng/g dry	50	F708445	17-Aug-17	7H21012	18-Aug-17	EPA 1631B	

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**Reported:**  
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**OR-01-03\_072517\_SED\_05-10\_R1**  
**1707771-84**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	41.9	0.1	0.1	% by Weight	1	F708372	11-Aug-17		14-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	1320	10.3	45.7	ng/g dry	50	F708445	17-Aug-17	7H21012	18-Aug-17	EPA 1631B	

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AMEC Foster Wheeler  
271 Mill Road  
Chelmsford MA, 01824

Project: 2017 Penobscot Sediment Cores  
Project Number: WO-04A-030  
Project Manager: Denise King

Reported:  
25-Aug-17 16:26

**OR-01-03\_072517\_SED\_05-10\_R2**  
**1707771-85**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	41.7	0.1	0.1	% by Weight	1	F708372	11-Aug-17		14-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	1200	9.17	40.5	ng/g dry	50	F708445	17-Aug-17	7H21012	18-Aug-17	EPA 1631B	

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Project: 2017 Penobscot Sediment Cores  
Project Number: WO-04A-030  
Project Manager: Denise King

Reported:  
25-Aug-17 16:26

**OR-01-03\_072517\_SED\_05-10\_R3**  
**1707771-86**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	41.3	0.1	0.1	% by Weight	1	F708372	11-Aug-17		14-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	1140	10.4	46.1	ng/g dry	50	F708445	17-Aug-17	7H21012	18-Aug-17	EPA 1631B	

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Project: 2017 Penobscot Sediment Cores  
Project Number: WO-04A-030  
Project Manager: Denise King

Reported:  
25-Aug-17 16:26

**OR-01-04\_072517\_SED\_00-01\_R1**  
**1707771-87**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-010 KOH/Methanol Hg Digestion</b>											
Methyl Mercury (as Mercury)	9.0	1.3	5.0	ng/g dry	500	F707568	03-Aug-17	7H11011	10-Aug-17	EPA 1630 Mod/FGS-070	
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	37.1	0.1	0.1	% by Weight	1	F708372	11-Aug-17		14-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	696	10.2	45.3	ng/g dry	50	F708445	17-Aug-17	7H21012	18-Aug-17	EPA 1631B	

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Project: 2017 Penobscot Sediment Cores  
Project Number: WO-04A-030  
Project Manager: Denise King

**Reported:**  
25-Aug-17 16:26

**OR-01-04\_072517\_SED\_00-01\_R2**  
**1707771-88**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-010 KOH/Methanol Hg Digestion</b>											
Methyl Mercury (as Mercury)	10.2	1.4	5.6	ng/g dry	500	F707568	03-Aug-17	7H11011	10-Aug-17	EPA 1630 Mod/FGS-070	
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	34.8	0.1	0.1	% by Weight	1	F708372	11-Aug-17		14-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	1330	11.1	49.0	ng/g dry	50	F708445	17-Aug-17	7H21012	18-Aug-17	EPA 1631B	

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Project: 2017 Penobscot Sediment Cores  
Project Number: WO-04A-030  
Project Manager: Denise King

**Reported:**  
25-Aug-17 16:26

**OR-01-04\_072517\_SED\_00-01\_R3**  
**1707771-89**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-010 KOH/Methanol Hg Digestion</b>											
Methyl Mercury (as Mercury)	9.9	1.2	4.8	ng/g dry	500	F707568	03-Aug-17	7H11011	10-Aug-17	EPA 1630 Mod/FGS-070	
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	35.5	0.1	0.1	% by Weight	1	F708372	11-Aug-17		14-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	869	11.3	49.8	ng/g dry	50	F708445	17-Aug-17	7H21012	18-Aug-17	EPA 1631B	

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Project Number: WO-04A-030  
Project Manager: Denise King

**Reported:**  
25-Aug-17 16:26

**OR-01-04\_072517\_SED\_01-03**  
**1707771-90**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
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**Sample Preparation: EFGS-010 KOH/Methanol Hg Digestion**

Methyl Mercury (as Mercury)	10.3	1.0	3.8	ng/g dry	500	F707568	03-Aug-17	7H11011	10-Aug-17	EPA 1630 Mod/FGS-070	
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**Sample Preparation: EFGS-019 Solids Analysis**

% Solids	40.3	0.1	0.1	% by Weight	1	F708371	11-Aug-17		16-Aug-17	SM 2540B	O-04
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**Sample Preparation: EPA 7474**

Mercury	935	10.2	45.1	ng/g dry	50	F708445	17-Aug-17	7H21012	18-Aug-17	EPA 1631B	
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Project: 2017 Penobscot Sediment Cores  
Project Number: WO-04A-030  
Project Manager: Denise King

**Reported:**  
25-Aug-17 16:26

**OR-01-04\_072517\_SED\_03-05**  
**1707771-91**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	45.4	0.1	0.1	% by Weight	1	F708372	11-Aug-17		14-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	870	8.59	38.0	ng/g dry	50	F708445	17-Aug-17	7H21012	18-Aug-17	EPA 1631B	

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Project Number: WO-04A-030  
Project Manager: Denise King

**Reported:**  
25-Aug-17 16:26

**OR-01-04\_072517\_SED\_05-10  
1707771-92**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	42.8	0.1	0.1	% by Weight	1	F708372	11-Aug-17		14-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	2020	19.7	86.8	ng/g dry	100	F708445	17-Aug-17	7H21012	18-Aug-17	EPA 1631B	

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Project Number: WO-04A-030  
Project Manager: Denise King

**Reported:**  
25-Aug-17 16:26

**OR-01-05\_072517\_SED\_03-05**  
**1707771-93**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	42.8	0.1	0.1	% by Weight	1	F708372	11-Aug-17		14-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	961	9.61	42.5	ng/g dry	50	F708445	17-Aug-17	7H21012	18-Aug-17	EPA 1631B	

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Project Number: WO-04A-030  
Project Manager: Denise King

**Reported:**  
25-Aug-17 16:26

**OR-01-05\_072517\_SED\_05-10  
1707771-94**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	48.3	0.1	0.1	% by Weight	1	F708384	11-Aug-17		14-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	1120	8.69	38.4	ng/g dry	50	F708446	17-Aug-17	7H21012	18-Aug-17	EPA 1631B	

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Project: 2017 Penobscot Sediment Cores  
Project Number: WO-04A-030  
Project Manager: Denise King

**Reported:**  
25-Aug-17 16:26

**OR-02-01\_072517\_SED\_03-05**  
**1707771-95**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	37.1	0.1	0.1	% by Weight	1	F708384	11-Aug-17		14-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	1210	11.1	48.9	ng/g dry	50	F708446	17-Aug-17	7H21012	18-Aug-17	EPA 1631B	

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Project Number: WO-04A-030  
Project Manager: Denise King

**Reported:**  
25-Aug-17 16:26

**OR-02-01\_072517\_SED\_05-10  
1707771-96**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	34.5	0.1	0.1	% by Weight	1	F708384	11-Aug-17		14-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	3210	23.4	103	ng/g dry	100	F708446	17-Aug-17	7H21012	18-Aug-17	EPA 1631B	

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Project Number: WO-04A-030  
Project Manager: Denise King

Reported:  
25-Aug-17 16:26

**OR-02-02\_072517\_SED\_03-05\_R1**  
**1707771-97**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	39.5	0.1	0.1	% by Weight	1	F708384	11-Aug-17		14-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	990	10.3	45.3	ng/g dry	50	F708446	17-Aug-17	7H21012	18-Aug-17	EPA 1631B	





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Project Manager: Denise King

**Reported:**  
25-Aug-17 16:26

**OR-02-02\_072517\_SED\_03-05\_R2**  
**1707771-98**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	39.0	0.1	0.1	% by Weight	1	F708384	11-Aug-17		14-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	1020	10.2	45.2	ng/g dry	50	F708446	17-Aug-17	7H21012	18-Aug-17	EPA 1631B	

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Project: 2017 Penobscot Sediment Cores  
Project Number: WO-04A-030  
Project Manager: Denise King

Reported:  
25-Aug-17 16:26

**OR-02-02\_072517\_SED\_03-05\_R3**  
**1707771-99**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	39.2	0.1	0.1	% by Weight	1	F708384	11-Aug-17		14-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	1090	10.1	44.6	ng/g dry	50	F708446	17-Aug-17	7H21012	18-Aug-17	EPA 1631B	

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Project Number: WO-04A-030  
Project Manager: Denise King

**Reported:**  
25-Aug-17 16:26

**OR-02-02\_072517\_SED\_05-10  
1707771-AA**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	39.6	0.1	0.1	% by Weight	1	F708384	11-Aug-17		14-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	1500	10.1	44.8	ng/g dry	50	F708446	17-Aug-17	7H21012	18-Aug-17	EPA 1631B	

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Project: 2017 Penobscot Sediment Cores  
Project Number: WO-04A-030  
Project Manager: Denise King

Reported:  
25-Aug-17 16:26

**W-102-INTA\_072517\_SED\_00-01**  
**1707771-AB**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-010 KOH/Methanol Hg Digestion</b>											
Methyl Mercury (as Mercury)	15.1	1.2	5.0	ng/g dry	500	F707568	03-Aug-17	7H11011	10-Aug-17	EPA 1630 Mod/FGS-070	
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	34.4	0.1	0.1	% by Weight	1	F708384	11-Aug-17		14-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	1350	12.5	55.2	ng/g dry	50	F708446	17-Aug-17	7H21012	18-Aug-17	EPA 1631B	

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Project: 2017 Penobscot Sediment Cores  
Project Number: WO-04A-030  
Project Manager: Denise King

**Reported:**  
25-Aug-17 16:26

**W-102-INTA\_072517\_SED\_01-03**  
**1707771-AC**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-010 KOH/Methanol Hg Digestion</b>											
Methyl Mercury (as Mercury)	11.6	1.5	6.1	ng/g dry	500	F707568	03-Aug-17	7H11011	10-Aug-17	EPA 1630 Mod/FGS-070	
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	29.8	0.1	0.1	% by Weight	1	F708384	11-Aug-17		14-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	1140	14.0	61.8	ng/g dry	50	F708446	17-Aug-17	7H21012	18-Aug-17	EPA 1631B	

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Project Number: WO-04A-030  
Project Manager: Denise King

**Reported:**  
25-Aug-17 16:26

**W-103-A\_072517\_SED\_03-05**  
**1707771-AD**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	27.1	0.1	0.1	% by Weight	1	F708384	11-Aug-17		14-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	1100	14.1	62.3	ng/g dry	50	F708446	17-Aug-17	7H21012	18-Aug-17	EPA 1631B	

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Project Number: WO-04A-030  
Project Manager: Denise King

Reported:  
25-Aug-17 16:26

**W-103-A\_072517\_SED\_05-10\_R1**  
**1707771-AE**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	22.5	0.1	0.1	% by Weight	1	F708404	14-Aug-17		16-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	649	19.0	84.1	ng/g dry	50	F708446	17-Aug-17	7H21012	18-Aug-17	EPA 1631B	

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Project Number: WO-04A-030  
Project Manager: Denise King

**Reported:**  
25-Aug-17 16:26

**W-103-A\_072517\_SED\_05-10\_R2**  
**1707771-AF**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	23.8	0.1	0.1	% by Weight	1	F708404	14-Aug-17		16-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	457	17.3	76.6	ng/g dry	50	F708446	17-Aug-17	7H21012	18-Aug-17	EPA 1631B	

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Project: 2017 Penobscot Sediment Cores  
Project Number: WO-04A-030  
Project Manager: Denise King

Reported:  
25-Aug-17 16:26

**W-103-A\_072517\_SED\_05-10\_R3**  
**1707771-AG**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	23.8	0.1	0.1	% by Weight	1	F708404	14-Aug-17		16-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	909	17.6	77.8	ng/g dry	50	F708446	17-Aug-17	7H21012	18-Aug-17	EPA 1631B	

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Project: 2017 Penobscot Sediment Cores  
Project Number: WO-04A-030  
Project Manager: Denise King

**Reported:**  
25-Aug-17 16:26

**W-103-B\_072517\_SED\_03-05**  
**1707771-AH**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	28.5	0.1	0.1	% by Weight	1	F708372	11-Aug-17		14-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	936	13.5	59.7	ng/g dry	50	F708446	17-Aug-17	7H21012	18-Aug-17	EPA 1631B	

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Project Number: WO-04A-030  
Project Manager: Denise King

**Reported:**  
25-Aug-17 16:26

**W-103-B\_072517\_SED\_05-10  
1707771-AI**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	33.0	0.1	0.1	% by Weight	1	F708404	14-Aug-17		16-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	106	13.3	58.7	ng/g dry	50	F708446	17-Aug-17	7H21012	18-Aug-17	EPA 1631B	

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AMEC Foster Wheeler  
271 Mill Road  
Chelmsford MA, 01824

Project: 2017 Penobscot Sediment Cores  
Project Number: WO-04A-030  
Project Manager: Denise King

Reported:  
25-Aug-17 16:26

**W-103-INTA\_072517\_SED\_00-01**  
**1707771-AJ**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-010 KOH/Methanol Hg Digestion</b>											
Methyl Mercury (as Mercury)	9.9	1.1	4.5	ng/g dry	500	F707568	03-Aug-17	7H11011	10-Aug-17	EPA 1630 Mod/FGS-070	
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	39.4	0.1	0.1	% by Weight	1	F708384	11-Aug-17		14-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	643	9.76	43.1	ng/g dry	50	F708446	17-Aug-17	7H21012	18-Aug-17	EPA 1631B	

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Project: 2017 Penobscot Sediment Cores  
Project Number: WO-04A-030  
Project Manager: Denise King

Reported:  
25-Aug-17 16:26

**W-103-INTA\_072517\_SED\_01-03\_R1**  
**1707771-AK**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-010 KOH/Methanol Hg Digestion</b>											
Methyl Mercury (as Mercury)	10.2	0.9	3.6	ng/g dry	500	F707568	03-Aug-17	7H11011	10-Aug-17	EPA 1630 Mod/FGS-070	
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	47.9	0.1	0.1	% by Weight	1	F708384	11-Aug-17		14-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	817	8.23	36.4	ng/g dry	50	F708446	17-Aug-17	7H21012	18-Aug-17	EPA 1631B	

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Project: 2017 Penobscot Sediment Cores  
Project Number: WO-04A-030  
Project Manager: Denise King

Reported:  
25-Aug-17 16:26

**W-103-INTA\_072517\_SED\_01-03\_R2**  
**1707771-AL**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
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**Sample Preparation: EFGS-010 KOH/Methanol Hg Digestion**

Methyl Mercury (as Mercury)	10.3	0.9	3.6	ng/g dry	500	F707568	03-Aug-17	7H11011	10-Aug-17	EPA 1630 Mod/FGS-070	
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**Sample Preparation: EFGS-019 Solids Analysis**

% Solids	48.0	0.1	0.1	% by Weight	1	F708384	11-Aug-17		14-Aug-17	SM 2540B	O-04
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**Sample Preparation: EPA 7474**

Mercury	698	8.75	38.7	ng/g dry	50	F708446	17-Aug-17	7H21012	18-Aug-17	EPA 1631B	
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Project: 2017 Penobscot Sediment Cores  
Project Number: WO-04A-030  
Project Manager: Denise King

Reported:  
25-Aug-17 16:26

**W-103-INTA\_072517\_SED\_01-03\_R3**  
**1707771-AM**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-010 KOH/Methanol Hg Digestion</b>											
Methyl Mercury (as Mercury)	12.3	1.0	3.8	ng/g dry	500	F707568	03-Aug-17	7H11011	10-Aug-17	EPA 1630 Mod/FGS-070	
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	47.6	0.1	0.1	% by Weight	1	F708384	11-Aug-17		14-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	644	9.01	39.8	ng/g dry	50	F708446	17-Aug-17	7H21012	18-Aug-17	EPA 1631B	

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Project: 2017 Penobscot Sediment Cores  
Project Number: WO-04A-030  
Project Manager: Denise King

Reported:  
25-Aug-17 16:26

**W-104-INTA\_072517\_SED\_00-01**  
**1707771-AN**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-010 KOH/Methanol Hg Digestion</b>											
Methyl Mercury (as Mercury)	15.7	1.9	7.5	ng/g dry	500	F707568	03-Aug-17	7H11011	10-Aug-17	EPA 1630 Mod/FGS-070	
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	23.9	0.1	0.1	% by Weight	1	F708384	11-Aug-17		14-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	1090	16.9	74.7	ng/g dry	50	F708446	17-Aug-17	7H21012	18-Aug-17	EPA 1631B	

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Project: 2017 Penobscot Sediment Cores  
Project Number: WO-04A-030  
Project Manager: Denise King

Reported:  
25-Aug-17 16:26

**W-104-INTA\_072517\_SED\_01-03**  
**1707771-AO**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-010 KOH/Methanol Hg Digestion</b>											
Methyl Mercury (as Mercury)	7.4	1.5	5.8	ng/g dry	500	F707568	03-Aug-17	7H11011	10-Aug-17	EPA 1630 Mod/FGS-070	
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	33.9	0.1	0.1	% by Weight	1	F708404	14-Aug-17		16-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	733	12.2	53.9	ng/g dry	50	F708463	18-Aug-17	7H22013	22-Aug-17	EPA 1631B	

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Project Number: WO-04A-030  
Project Manager: Denise King

**Reported:**  
25-Aug-17 16:26

**W-105-A\_072517\_SED\_03-05**  
**1707771-AP**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	32.3	0.1	0.1	% by Weight	1	F708404	14-Aug-17		16-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	894	13.0	57.4	ng/g dry	50	F708463	18-Aug-17	7H22013	22-Aug-17	EPA 1631B	



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Project: 2017 Penobscot Sediment Cores  
Project Number: WO-04A-030  
Project Manager: Denise King

**Reported:**  
25-Aug-17 16:26

**W-105-A\_072517\_SED\_05-10**  
**1707771-AQ**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	34.4	0.1	0.1	% by Weight	1	F708404	14-Aug-17		16-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	1540	12.2	53.9	ng/g dry	50	F708463	18-Aug-17	7H22013	22-Aug-17	EPA 1631B	

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Project: 2017 Penobscot Sediment Cores  
Project Number: WO-04A-030  
Project Manager: Denise King

**Reported:**  
25-Aug-17 16:26

**W-14-A\_072517\_SED\_00-01\_R1  
1707771-AR**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-010 KOH/Methanol Hg Digestion</b>											
Methyl Mercury (as Mercury)	27.9	1.5	6.0	ng/g dry	500	F707568	03-Aug-17	7H11011	10-Aug-17	EPA 1630 Mod/FGS-070	
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	28.8	0.1	0.1	% by Weight	1	F708384	11-Aug-17		14-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	447	15.0	66.1	ng/g dry	50	F708463	18-Aug-17	7H22013	22-Aug-17	EPA 1631B	



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Project Number: WO-04A-030  
Project Manager: Denise King

Reported:  
25-Aug-17 16:26

**W-14-A\_072517\_SED\_00-01\_R2**  
**1707771-AS**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-010 KOH/Methanol Hg Digestion</b>											
Methyl Mercury (as Mercury)	30.1	1.7	6.7	ng/g dry	500	F707568	03-Aug-17	7H11011	10-Aug-17	EPA 1630 Mod/FGS-070	
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	29.0	0.1	0.1	% by Weight	1	F708384	11-Aug-17		14-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	462	13.3	58.6	ng/g dry	50	F708463	18-Aug-17	7H22013	22-Aug-17	EPA 1631B	

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Project Number: WO-04A-030  
Project Manager: Denise King

Reported:  
25-Aug-17 16:26

**W-14-A\_072517\_SED\_00-01\_R3**  
**1707771-AT**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-010 KOH/Methanol Hg Digestion</b>											
Methyl Mercury (as Mercury)	34.8	1.4	5.7	ng/g dry	500	F707569	04-Aug-17	7H11011	10-Aug-17	EPA 1630 Mod/FGS-070	
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	28.7	0.1	0.1	% by Weight	1	F708384	11-Aug-17		14-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	459	13.6	60.2	ng/g dry	50	F708463	18-Aug-17	7H22013	22-Aug-17	EPA 1631B	

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Project: 2017 Penobscot Sediment Cores  
Project Number: WO-04A-030  
Project Manager: Denise King

Reported:  
25-Aug-17 16:26

**W-14-A\_072517\_SED\_01-03**  
**1707771-AU**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-010 KOH/Methanol Hg Digestion</b>											
Methyl Mercury (as Mercury)	7.9	1.5	6.0	ng/g dry	500	F707569	04-Aug-17	7H11011	10-Aug-17	EPA 1630 Mod/FGS-070	
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	27.1	0.1	0.1	% by Weight	1	F708372	11-Aug-17		14-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	673	15.3	67.5	ng/g dry	50	F708463	18-Aug-17	7H22013	22-Aug-17	EPA 1631B	

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Project Number: WO-04A-030  
Project Manager: Denise King

**Reported:**  
25-Aug-17 16:26

**W-14-A\_072517\_SED\_03-05**  
**1707771-AV**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	30.4	0.1	0.1	% by Weight	1	F708404	14-Aug-17		16-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	1000	13.8	60.8	ng/g dry	50	F708463	18-Aug-17	7H22013	22-Aug-17	EPA 1631B	

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Project Number: WO-04A-030  
Project Manager: Denise King

**Reported:**  
25-Aug-17 16:26

**W-14-A\_072517\_SED\_05-10**  
**1707771-AW**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	28.2	0.1	0.1	% by Weight	1	F708404	14-Aug-17		16-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	2810	29.3	130	ng/g dry	100	F708463	18-Aug-17	7H22013	22-Aug-17	EPA 1631B	

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**W-14-B\_072517\_SED\_00-01  
1707771-AX**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
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**Sample Preparation: EFGS-010 KOH/Methanol Hg Digestion**

Methyl Mercury (as Mercury)	5.6	1.0	4.0	ng/g dry	500	F707569	04-Aug-17	7H11011	10-Aug-17	EPA 1630 Mod/FGS-070	
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**Sample Preparation: EFGS-019 Solids Analysis**

% Solids	41.8	0.1	0.1	% by Weight	1	F708404	14-Aug-17		16-Aug-17	SM 2540B	O-04
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**Sample Preparation: EPA 7474**

Mercury	787	10.0	44.2	ng/g dry	50	F708463	18-Aug-17	7H22013	22-Aug-17	EPA 1631B	
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Project Number: WO-04A-030  
Project Manager: Denise King

Reported:  
25-Aug-17 16:26

**W-14-B\_072517\_SED\_01-03**  
**1707771-AY**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-010 KOH/Methanol Hg Digestion</b>											
Methyl Mercury (as Mercury)	2.2	1.0	3.8	ng/g dry	500	F707569	04-Aug-17	7H11011	10-Aug-17	EPA 1630 Mod/FGS-070	J
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	43.9	0.1	0.1	% by Weight	1	F708404	14-Aug-17		16-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	823	9.51	42.0	ng/g dry	50	F708463	18-Aug-17	7H22013	22-Aug-17	EPA 1631B	



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Project Manager: Denise King

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25-Aug-17 16:26

**W-14-B\_072517\_SED\_03-05**  
**1707771-AZ**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	43.5	0.1	0.1	% by Weight	1	F708404	14-Aug-17		16-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	1070	9.42	41.6	ng/g dry	50	F708463	18-Aug-17	7H22013	22-Aug-17	EPA 1631B	

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Project: 2017 Penobscot Sediment Cores  
Project Number: WO-04A-030  
Project Manager: Denise King

**Reported:**  
25-Aug-17 16:26

**W-14-B\_072517\_SED\_05-10\_R1  
1707771-BA**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	55.1	0.1	0.1	% by Weight	1	F708404	14-Aug-17		16-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	758	7.31	32.3	ng/g dry	50	F708463	18-Aug-17	7H22013	22-Aug-17	EPA 1631B	

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Project: 2017 Penobscot Sediment Cores  
Project Number: WO-04A-030  
Project Manager: Denise King

**Reported:**  
25-Aug-17 16:26

**W-14-B\_072517\_SED\_05-10\_R2  
1707771-BB**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	61.7	0.1	0.1	% by Weight	1	F708404	14-Aug-17		16-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	934	6.75	29.8	ng/g dry	50	F708463	18-Aug-17	7H22013	22-Aug-17	EPA 1631B	

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Project: 2017 Penobscot Sediment Cores  
Project Number: WO-04A-030  
Project Manager: Denise King

**Reported:**  
25-Aug-17 16:26

**W-14-B\_072517\_SED\_05-10\_R3  
1707771-BC**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	59.6	0.1	0.1	% by Weight	1	F708404	14-Aug-17		16-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	1210	7.26	32.1	ng/g dry	50	F708463	18-Aug-17	7H22013	22-Aug-17	EPA 1631B	

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Frontier Global Sciences

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Project: 2017 Penobscot Sediment Cores  
Project Number: WO-04A-030  
Project Manager: Denise King

**Reported:**  
25-Aug-17 16:26

**W-14-C\_072517\_SED\_03-05**  
**1707771-BD**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	26.2	0.1	0.1	% by Weight	1	F708404	14-Aug-17		16-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	989	16.4	72.6	ng/g dry	50	F708463	18-Aug-17	7H22013	22-Aug-17	EPA 1631B	

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Amy Goodall, Project Manager





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Project: 2017 Penobscot Sediment Cores  
Project Number: WO-04A-030  
Project Manager: Denise King

**Reported:**  
25-Aug-17 16:26

**W-14-C\_072517\_SED\_05-10**  
**1707771-BE**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	25.3	0.1	0.1	% by Weight	1	F708404	14-Aug-17		16-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	2130	15.5	68.3	ng/g dry	50	F708463	18-Aug-17	7H22013	22-Aug-17	EPA 1631B	

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AMEC Foster Wheeler  
271 Mill Road  
Chelmsford MA, 01824

Project: 2017 Penobscot Sediment Cores  
Project Number: WO-04A-030  
Project Manager: Denise King

Reported:  
25-Aug-17 16:26

**W-14-INTA\_072517\_SED\_00-01**  
**1707771-BF**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-010 KOH/Methanol Hg Digestion</b>											
Methyl Mercury (as Mercury)	9.0	0.9	3.4	ng/g dry	500	F707569	04-Aug-17	7H11011	10-Aug-17	EPA 1630 Mod/FGS-070	
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	51.7	0.1	0.1	% by Weight	1	F708404	14-Aug-17		16-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	357	8.20	36.2	ng/g dry	50	F708463	18-Aug-17	7H22013	22-Aug-17	EPA 1631B	

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Project: 2017 Penobscot Sediment Cores  
Project Number: WO-04A-030  
Project Manager: Denise King

**Reported:**  
25-Aug-17 16:26

**W-14-INTA\_072517\_SED\_01-03  
1707771-BG**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-010 KOH/Methanol Hg Digestion</b>											
Methyl Mercury (as Mercury)	1.1	0.7	2.8	ng/g dry	500	F707569	04-Aug-17	7H11011	10-Aug-17	EPA 1630 Mod/FGS-070	J
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	61.0	0.1	0.1	% by Weight	1	F708405	14-Aug-17		16-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	64.0	6.44	28.4	ng/g dry	50	F708463	18-Aug-17	7H22013	22-Aug-17	EPA 1631B	



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Project: 2017 Penobscot Sediment Cores  
Project Number: WO-04A-030  
Project Manager: Denise King

**Reported:**  
25-Aug-17 16:26

**W-27-A\_072517\_SED\_00-01\_R1  
1707771-BH**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-010 KOH/Methanol Hg Digestion</b>											
Methyl Mercury (as Mercury)	14.1	1.5	6.0	ng/g dry	500	F707569	04-Aug-17	7H11011	10-Aug-17	EPA 1630 Mod/FGS-070	
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	29.1	0.1	0.1	% by Weight	1	F708405	14-Aug-17		16-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	433	14.6	64.7	ng/g dry	50	F708463	18-Aug-17	7H22013	22-Aug-17	EPA 1631B	



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Project Number: WO-04A-030  
Project Manager: Denise King

Reported:  
25-Aug-17 16:26

**W-27-A\_072517\_SED\_00-01\_R2**  
**1707771-BI**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
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**Sample Preparation: EFGS-010 KOH/Methanol Hg Digestion**

Methyl Mercury (as Mercury)	17.4	1.6	6.4	ng/g dry	500	F707569	04-Aug-17	7H11011	10-Aug-17	EPA 1630 Mod/FGS-070	
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**Sample Preparation: EFGS-019 Solids Analysis**

% Solids	28.3	0.1	0.1	% by Weight	1	F708405	14-Aug-17		16-Aug-17	SM 2540B	O-04
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**Sample Preparation: EPA 7474**

Mercury	448	14.8	65.5	ng/g dry	50	F708464	18-Aug-17	7H22013	22-Aug-17	EPA 1631B	
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Project: 2017 Penobscot Sediment Cores  
Project Number: WO-04A-030  
Project Manager: Denise King

Reported:  
25-Aug-17 16:26

**W-27-A\_072517\_SED\_00-01\_R3**  
**1707771-BJ**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
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**Sample Preparation: EFGS-010 KOH/Methanol Hg Digestion**

Methyl Mercury (as Mercury)	14.3	1.5	6.1	ng/g dry	500	F707569	04-Aug-17	7H11011	10-Aug-17	EPA 1630 Mod/FGS-070	
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**Sample Preparation: EFGS-019 Solids Analysis**

% Solids	26.9	0.1	0.1	% by Weight	1	F708405	14-Aug-17		16-Aug-17	SM 2540B	O-04
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**Sample Preparation: EPA 7474**

Mercury	488	15.2	67.1	ng/g dry	50	F708464	18-Aug-17	7H22013	22-Aug-17	EPA 1631B	
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Project Number: WO-04A-030  
Project Manager: Denise King

Reported:  
25-Aug-17 16:26

**W-27-A\_072517\_SED\_01-03**  
**1707771-BK**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
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**Sample Preparation: EFGS-010 KOH/Methanol Hg Digestion**

Methyl Mercury (as Mercury)	10.3	1.7	6.6	ng/g dry	500	F707569	04-Aug-17	7H11011	10-Aug-17	EPA 1630 Mod/FGS-070	
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**Sample Preparation: EFGS-019 Solids Analysis**

% Solids	25.2	0.1	0.1	% by Weight	1	F708384	11-Aug-17		14-Aug-17	SM 2540B	O-04
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**Sample Preparation: EPA 7474**

Mercury	651	15.2	66.9	ng/g dry	50	F708464	18-Aug-17	7H22013	22-Aug-17	EPA 1631B	
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Project Number: WO-04A-030  
Project Manager: Denise King

**Reported:**  
25-Aug-17 16:26

**W-27-INTA\_072517\_SED\_03-05  
1707771-BL**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	41.4	0.1	0.1	% by Weight	1	F708405	14-Aug-17		16-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	1340	9.27	41.0	ng/g dry	50	F708464	18-Aug-17	7H22013	22-Aug-17	EPA 1631B	

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Project Number: WO-04A-030  
Project Manager: Denise King

Reported:  
25-Aug-17 16:26

**W-27-INTA\_072517\_SED\_05-10**  
**1707771-BM**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	41.9	0.1	0.1	% by Weight	1	F708405	14-Aug-17		16-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	1470	9.37	41.4	ng/g dry	50	F708464	18-Aug-17	7H22013	22-Aug-17	EPA 1631B	

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Project Number: WO-04A-030  
Project Manager: Denise King

Reported:  
25-Aug-17 16:26

**W-63-INT\_072517\_SED\_00-01**  
**1707771-BN**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
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**Sample Preparation: EFGS-010 KOH/Methanol Hg Digestion**

Methyl Mercury (as Mercury)	22.4	2.0	8.0	ng/g dry	500	F707569	04-Aug-17	7H11011	10-Aug-17	EPA 1630 Mod/FGS-070	
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**Sample Preparation: EFGS-019 Solids Analysis**

% Solids	22.1	0.1	0.1	% by Weight	1	F708405	14-Aug-17		16-Aug-17	SM 2540B	O-04
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**Sample Preparation: EPA 7474**

Mercury	1280	17.8	78.8	ng/g dry	50	F708464	18-Aug-17	7H22013	22-Aug-17	EPA 1631B	
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Project Number: WO-04A-030  
Project Manager: Denise King

**Reported:**  
25-Aug-17 16:26

**W-63-INT\_072517\_SED\_01-03**  
**1707771-BO**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-010 KOH/Methanol Hg Digestion</b>											
Methyl Mercury (as Mercury)	15.1	1.3	5.0	ng/g dry	500	F707569	04-Aug-17	7H11011	10-Aug-17	EPA 1630 Mod/FGS-070	
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	32.4	0.1	0.1	% by Weight	1	F708405	14-Aug-17		16-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	1080	12.4	54.6	ng/g dry	50	F708464	18-Aug-17	7H22013	22-Aug-17	EPA 1631B	

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Project: 2017 Penobscot Sediment Cores  
Project Number: WO-04A-030  
Project Manager: Denise King

Reported:  
25-Aug-17 16:26

**W-MM-01\_072517\_SED\_00-01**  
**1707771-BP**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-010 KOH/Methanol Hg Digestion</b>											
Methyl Mercury (as Mercury)	51.8	1.7	6.6	ng/g dry	500	F707569	04-Aug-17	7H11011	10-Aug-17	EPA 1630 Mod/FGS-070	
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	26.5	0.1	0.1	% by Weight	1	F708405	14-Aug-17		16-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	456	14.6	64.5	ng/g dry	50	F708464	18-Aug-17	7H22013	22-Aug-17	EPA 1631B	

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Project: 2017 Penobscot Sediment Cores  
Project Number: WO-04A-030  
Project Manager: Denise King

Reported:  
25-Aug-17 16:26

**W-MM-01\_072517\_SED\_01-03\_R1  
1707771-BQ**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-010 KOH/Methanol Hg Digestion</b>											
Methyl Mercury (as Mercury)	20.7	1.5	6.0	ng/g dry	500	F707569	04-Aug-17	7H11011	10-Aug-17	EPA 1630 Mod/FGS-070	
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	26.3	0.1	0.1	% by Weight	1	F708405	14-Aug-17		16-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	735	15.5	68.4	ng/g dry	50	F708464	18-Aug-17	7H22013	22-Aug-17	EPA 1631B	

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Project: 2017 Penobscot Sediment Cores  
Project Number: WO-04A-030  
Project Manager: Denise King

Reported:  
25-Aug-17 16:26

**W-MM-01\_072517\_SED\_01-03\_R2  
1707771-BR**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-010 KOH/Methanol Hg Digestion</b>											
Methyl Mercury (as Mercury)	18.1	1.6	6.3	ng/g dry	500	F707569	04-Aug-17	7H11011	11-Aug-17	EPA 1630 Mod/FGS-070	
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	27.5	0.1	0.1	% by Weight	1	F708405	14-Aug-17		16-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	847	15.6	69.1	ng/g dry	50	F708464	18-Aug-17	7H22013	22-Aug-17	EPA 1631B	

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Project: 2017 Penobscot Sediment Cores  
Project Number: WO-04A-030  
Project Manager: Denise King

Reported:  
25-Aug-17 16:26

**W-MM-01\_072517\_SED\_01-03\_R3  
1707771-BS**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
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**Sample Preparation: EFGS-010 KOH/Methanol Hg Digestion**

Methyl Mercury (as Mercury)	19.0	1.6	6.4	ng/g dry	500	F707569	04-Aug-17	7H11011	11-Aug-17	EPA 1630 Mod/FGS-070	
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**Sample Preparation: EFGS-019 Solids Analysis**

% Solids	25.3	0.1	0.1	% by Weight	1	F708405	14-Aug-17		16-Aug-17	SM 2540B	O-04
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**Sample Preparation: EPA 7474**

Mercury	1020	15.8	69.8	ng/g dry	50	F708464	18-Aug-17	7H22013	22-Aug-17	EPA 1631B	
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Project: 2017 Penobscot Sediment Cores  
Project Number: WO-04A-030  
Project Manager: Denise King

Reported:  
25-Aug-17 16:26

**W-MM-02\_072517\_SED\_00-01**  
**1707771-BT**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-010 KOH/Methanol Hg Digestion</b>											
Methyl Mercury (as Mercury)	13.5	1.7	6.8	ng/g dry	500	F707569	04-Aug-17	7H11011	11-Aug-17	EPA 1630 Mod/FGS-070	
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	23.4	0.1	0.1	% by Weight	1	F708405	14-Aug-17		16-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	434	17.8	78.8	ng/g dry	50	F708464	18-Aug-17	7H22013	22-Aug-17	EPA 1631B	





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Project Number: WO-04A-030  
Project Manager: Denise King

**Reported:**  
25-Aug-17 16:26

**W-MM-02\_072517\_SED\_01-03**  
**1707771-BU**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-010 KOH/Methanol Hg Digestion</b>											
Methyl Mercury (as Mercury)	22.1	1.9	7.3	ng/g dry	500	F707569	04-Aug-17	7H11011	11-Aug-17	EPA 1630 Mod/FGS-070	
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	23.8	0.1	0.1	% by Weight	1	F708405	14-Aug-17		16-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	697	16.2	71.5	ng/g dry	50	F708464	18-Aug-17	7H22013	22-Aug-17	EPA 1631B	



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Project Number: WO-04A-030  
Project Manager: Denise King

**Reported:**  
25-Aug-17 16:26

**W-MM-06\_072517\_SED\_03-05\_R1  
1707771-BV**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	29.5	0.1	0.1	% by Weight	1	F708405	14-Aug-17		16-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	282	14.4	63.5	ng/g dry	50	F708464	18-Aug-17	7H22013	22-Aug-17	EPA 1631B	



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Project: 2017 Penobscot Sediment Cores  
Project Number: WO-04A-030  
Project Manager: Denise King

Reported:  
25-Aug-17 16:26

**W-MM-06\_072517\_SED\_03-05\_R2**  
**1707771-BW**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	27.0	0.1	0.1	% by Weight	1	F708405	14-Aug-17		16-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	292	15.8	70.0	ng/g dry	50	F708464	18-Aug-17	7H22013	22-Aug-17	EPA 1631B	

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Project: 2017 Penobscot Sediment Cores  
Project Number: WO-04A-030  
Project Manager: Denise King

**Reported:**  
25-Aug-17 16:26

**W-MM-06\_072517\_SED\_03-05\_R3  
1707771-BX**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	29.2	0.1	0.1	% by Weight	1	F708405	14-Aug-17		16-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	297	14.1	62.4	ng/g dry	50	F708464	18-Aug-17	7H22013	22-Aug-17	EPA 1631B	

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Project Number: WO-04A-030  
Project Manager: Denise King

Reported:  
25-Aug-17 16:26

**W-MM-06\_072517\_SED\_05-10**  
**1707771-BY**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	31.4	0.1	0.1	% by Weight	1	F708384	11-Aug-17		14-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	96.8	13.7	60.5	ng/g dry	50	F708464	18-Aug-17	7H22013	22-Aug-17	EPA 1631B	

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Project Number: WO-04A-030  
Project Manager: Denise King

**Reported:**  
25-Aug-17 16:26

**W-MM-07\_072517\_SED\_00-01  
1707771-BZ**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-010 KOH/Methanol Hg Digestion</b>											
Methyl Mercury (as Mercury)	10.6	2.1	8.2	ng/g dry	500	F707569	04-Aug-17	7H11011	11-Aug-17	EPA 1630 Mod/FGS-070	
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	21.8	0.1	0.1	% by Weight	1	F708405	14-Aug-17		16-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	321	19.0	84.1	ng/g dry	50	F708464	18-Aug-17	7H22013	22-Aug-17	EPA 1631B	



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Project: 2017 Penobscot Sediment Cores  
Project Number: WO-04A-030  
Project Manager: Denise King

Reported:  
25-Aug-17 16:26

**W-MM-07\_072517\_SED\_01-03\_R1  
1707771-CA**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
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**Sample Preparation: EFGS-010 KOH/Methanol Hg Digestion**

Methyl Mercury (as Mercury)	10.8	1.9	7.4	ng/g dry	500	F707569	04-Aug-17	7H11011	11-Aug-17	EPA 1630 Mod/FGS-070	
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**Sample Preparation: EFGS-019 Solids Analysis**

% Solids	23.5	0.1	0.1	% by Weight	1	F708406	14-Aug-17		17-Aug-17	SM 2540B	O-04
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**Sample Preparation: EPA 7474**

Mercury	495	16.5	73.0	ng/g dry	50	F708464	18-Aug-17	7H22013	22-Aug-17	EPA 1631B	
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Project Number: WO-04A-030  
Project Manager: Denise King

Reported:  
25-Aug-17 16:26

**W-MM-07\_072517\_SED\_01-03\_R2  
1707771-CB**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-010 KOH/Methanol Hg Digestion</b>											
Methyl Mercury (as Mercury)	13.0	1.9	7.4	ng/g dry	500	F707570	03-Aug-17	7H09017	08-Aug-17	EPA 1630 Mod/FGS-070	
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	23.2	0.1	0.1	% by Weight	1	F708406	14-Aug-17		17-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	562	17.2	76.0	ng/g dry	50	F708464	18-Aug-17	7H22013	22-Aug-17	EPA 1631B	

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Project Manager: Denise King

Reported:  
25-Aug-17 16:26

**W-MM-07\_072517\_SED\_01-03\_R3  
1707771-CC**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-010 KOH/Methanol Hg Digestion</b>											
Methyl Mercury (as Mercury)	13.2	1.8	7.2	ng/g dry	500	F707570	03-Aug-17	7H09017	08-Aug-17	EPA 1630 Mod/FGS-070	
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	22.5	0.1	0.1	% by Weight	1	F708406	14-Aug-17		17-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	616	16.9	74.8	ng/g dry	50	F708484	21-Aug-17	7H23013	22-Aug-17	EPA 1631B	

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Project Number: WO-04A-030  
Project Manager: Denise King

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25-Aug-17 16:26

**W-MM-17\_072517\_SED\_00-01**  
**1707771-CD**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-010 KOH/Methanol Hg Digestion</b>											
Methyl Mercury (as Mercury)	19.4	2.3	9.1	ng/g dry	500	F707570	03-Aug-17	7H09017	08-Aug-17	EPA 1630 Mod/FGS-070	
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	19.4	0.1	0.1	% by Weight	1	F708404	14-Aug-17		16-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	162	21.5	95.2	ng/g dry	50	F708484	21-Aug-17	7H23013	22-Aug-17	EPA 1631B	

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Project Number: WO-04A-030  
Project Manager: Denise King

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25-Aug-17 16:26

**W-MM-17\_072517\_SED\_01-03**  
**1707771-CE**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
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**Sample Preparation: EFGS-010 KOH/Methanol Hg Digestion**

Methyl Mercury (as Mercury)	3.0	1.8	7.0	ng/g dry	500	F707570	03-Aug-17	7H09017	08-Aug-17	EPA 1630 Mod/FGS-070	J
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**Sample Preparation: EFGS-019 Solids Analysis**

% Solids	26.0	0.1	0.1	% by Weight	1	F708406	14-Aug-17		17-Aug-17	SM 2540B	O-04
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**Sample Preparation: EPA 7474**

Mercury	294	14.6	64.7	ng/g dry	50	F708484	21-Aug-17	7H23013	22-Aug-17	EPA 1631B	
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Project Number: WO-04A-030  
Project Manager: Denise King

**Reported:**  
25-Aug-17 16:26

**W-MM-18\_072517\_SED\_00-01  
1707771-CF**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
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**Sample Preparation: EFGS-010 KOH/Methanol Hg Digestion**

Methyl Mercury (as Mercury)	25.6	2.0	7.8	ng/g dry	500	F707570	03-Aug-17	7H09017	08-Aug-17	EPA 1630 Mod/FGS-070	
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**Sample Preparation: EFGS-019 Solids Analysis**

% Solids	22.5	0.1	0.1	% by Weight	1	F708406	14-Aug-17		17-Aug-17	SM 2540B	O-04
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**Sample Preparation: EPA 7474**

Mercury	212	19.1	84.4	ng/g dry	50	F708484	21-Aug-17	7H23013	22-Aug-17	EPA 1631B	
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Project Number: WO-04A-030  
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25-Aug-17 16:26

**W-MM-18\_072517\_SED\_01-03**  
**1707771-CG**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-010 KOH/Methanol Hg Digestion</b>											
Methyl Mercury (as Mercury)	26.6	1.8	7.2	ng/g dry	500	F707570	03-Aug-17	7H09017	08-Aug-17	EPA 1630 Mod/FGS-070	
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	23.6	0.1	0.1	% by Weight	1	F708406	14-Aug-17		17-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	564	17.4	76.9	ng/g dry	50	F708484	21-Aug-17	7H23013	22-Aug-17	EPA 1631B	



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25-Aug-17 16:26

**W-MM-18\_072517\_SED\_03-05\_R1  
1707771-CH**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	25.1	0.1	0.1	% by Weight	1	F708406	14-Aug-17		17-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	858	16.0	70.7	ng/g dry	50	F708484	21-Aug-17	7H23013	22-Aug-17	EPA 1631B	

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Project Number: WO-04A-030  
Project Manager: Denise King

**Reported:**  
25-Aug-17 16:26

**W-MM-18\_072517\_SED\_03-05\_R2  
1707771-CI**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	22.4	0.1	0.1	% by Weight	1	F708406	14-Aug-17		17-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	1230	18.6	82.2	ng/g dry	50	F708484	21-Aug-17	7H23013	22-Aug-17	EPA 1631B	



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Project Manager: Denise King

Reported:  
25-Aug-17 16:26

**W-MM-18\_072517\_SED\_03-05\_R3**  
**1707771-CJ**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	32.7	0.1	0.1	% by Weight	1	F708406	14-Aug-17		17-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	576	13.2	58.3	ng/g dry	50	F708484	21-Aug-17	7H23013	22-Aug-17	EPA 1631B	

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Project Number: WO-04A-030  
Project Manager: Denise King

Reported:  
25-Aug-17 16:26

**W-MM-18\_072517\_SED\_05-10**  
**1707771-CK**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	27.1	0.1	0.1	% by Weight	1	F708406	14-Aug-17		17-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	53.3	2.88	12.7	ng/g dry	10	F708484	21-Aug-17	7H23013	22-Aug-17	EPA 1631B	

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Project Number: WO-04A-030  
Project Manager: Denise King

Reported:  
25-Aug-17 16:26

**W-MM-19\_072517\_SED\_03-05**  
**1707771-CL**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	45.2	0.1	0.1	% by Weight	1	F708406	14-Aug-17		17-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	190	8.98	39.7	ng/g dry	50	F708484	21-Aug-17	7H23013	22-Aug-17	EPA 1631B	



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Project Manager: Denise King

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25-Aug-17 16:26

**W-MM-19\_072517\_SED\_05-10\_R1  
1707771-CM**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	26.1	0.1	0.1	% by Weight	1	F708406	14-Aug-17		17-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	336	15.1	66.9	ng/g dry	50	F708484	21-Aug-17	7H23013	22-Aug-17	EPA 1631B	

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Project Number: WO-04A-030  
Project Manager: Denise King

**Reported:**  
25-Aug-17 16:26

**W-MM-19\_072517\_SED\_05-10\_R2  
1707771-CN**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	27.3	0.1	0.1	% by Weight	1	F708406	14-Aug-17		17-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	245	15.6	68.7	ng/g dry	50	F708484	21-Aug-17	7H23013	22-Aug-17	EPA 1631B	

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Project Manager: Denise King

Reported:  
25-Aug-17 16:26

**W-MM-19\_072517\_SED\_05-10\_R3**  
**1707771-CO**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	31.1	0.1	0.1	% by Weight	1	F708406	14-Aug-17		17-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	150	12.7	56.3	ng/g dry	50	F708484	21-Aug-17	7H23013	22-Aug-17	EPA 1631B	

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Project Number: WO-04A-030  
Project Manager: Denise King

Reported:  
25-Aug-17 16:26

**W-MM-22\_072517\_SED\_03-05**  
**1707771-CP**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	26.5	0.1	0.1	% by Weight	1	F708406	14-Aug-17		17-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	584	16.0	70.7	ng/g dry	50	F708484	21-Aug-17	7H23013	22-Aug-17	EPA 1631B	



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Project Number: WO-04A-030  
Project Manager: Denise King

Reported:  
25-Aug-17 16:26

**W-MM-22\_072517\_SED\_05-10\_R1  
1707771-CQ**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	31.8	0.1	0.1	% by Weight	1	F708406	14-Aug-17		17-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	21.0	2.61	11.5	ng/g dry	10	F708484	21-Aug-17	7H23013	22-Aug-17	EPA 1631B	

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Project Number: WO-04A-030  
Project Manager: Denise King

Reported:  
25-Aug-17 16:26

**W-MM-22\_072517\_SED\_05-10\_R2**  
**1707771-CR**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	31.2	0.1	0.1	% by Weight	1	F708406	14-Aug-17		17-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	20.8	2.42	10.7	ng/g dry	10	F708484	21-Aug-17	7H23013	22-Aug-17	EPA 1631B	

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Project Number: WO-04A-030  
Project Manager: Denise King

**Reported:**  
25-Aug-17 16:26

**W-MM-22\_072517\_SED\_05-10\_R3  
1707771-CS**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	32.1	0.1	0.1	% by Weight	1	F708406	14-Aug-17		17-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	103	12.1	53.3	ng/g dry	50	F708484	21-Aug-17	7H23013	22-Aug-17	EPA 1631B	

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Project Number: WO-04A-030  
Project Manager: Denise King

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25-Aug-17 16:26

**W-MM-23\_072517\_SED\_03-05**  
**1707771-CT**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	35.7	0.1	0.1	% by Weight	1	F708407	14-Aug-17		16-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	1080	10.8	47.6	ng/g dry	50	F708484	21-Aug-17	7H23013	22-Aug-17	EPA 1631B	

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Project Number: WO-04A-030  
Project Manager: Denise King

Reported:  
25-Aug-17 16:26

**W-MM-23\_072517\_SED\_05-10**  
**1707771-CU**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	38.9	0.1	0.1	% by Weight	1	F708407	14-Aug-17		16-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	288	10.9	48.4	ng/g dry	50	F708484	21-Aug-17	7H23013	22-Aug-17	EPA 1631B	

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Project Number: WO-04A-030  
Project Manager: Denise King

**Reported:**  
25-Aug-17 16:26

**W-MM-24\_072517\_SED\_03-05**  
**1707771-CV**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	42.9	0.1	0.1	% by Weight	1	F708407	14-Aug-17		16-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	302	10.0	44.2	ng/g dry	50	F708484	21-Aug-17	7H23013	22-Aug-17	EPA 1631B	

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Project Manager: Denise King

**Reported:**  
25-Aug-17 16:26

**W-MM-24\_072517\_SED\_05-10**  
**1707771-CW**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	48.0	0.1	0.1	% by Weight	1	F708407	14-Aug-17		16-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	140	8.82	39.0	ng/g dry	50	F708485	21-Aug-17	7H23013	22-Aug-17	EPA 1631B	



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Chelmsford MA, 01824

Project: 2017 Penobscot Sediment Cores  
Project Number: WO-04A-030  
Project Manager: Denise King

Reported:  
25-Aug-17 16:26

**W-MM-TP\_072517\_SED\_00-01\_R1**  
**1707771-CX**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
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**Sample Preparation: EFGS-010 KOH/Methanol Hg Digestion**

Methyl Mercury (as Mercury)	3.1	0.8	3.1	ng/g dry	500	F707570	03-Aug-17	7H09017	08-Aug-17	EPA 1630 Mod/FGS-070	
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**Sample Preparation: EFGS-019 Solids Analysis**

% Solids	56.9	0.1	0.1	% by Weight	1	F708407	14-Aug-17		16-Aug-17	SM 2540B	O-04
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**Sample Preparation: EPA 7474**

Mercury	247	7.03	31.0	ng/g dry	50	F708485	21-Aug-17	7H23013	22-Aug-17	EPA 1631B	
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271 Mill Road  
Chelmsford MA, 01824

Project: 2017 Penobscot Sediment Cores  
Project Number: WO-04A-030  
Project Manager: Denise King

Reported:  
25-Aug-17 16:26

**W-MM-TP\_072517\_SED\_00-01\_R2**  
**1707771-CY**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
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**Sample Preparation: EFGS-010 KOH/Methanol Hg Digestion**

Methyl Mercury (as Mercury)	2.7	0.8	3.2	ng/g dry	500	F707570	03-Aug-17	7H09017	08-Aug-17	EPA 1630 Mod/FGS-070	J
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**Sample Preparation: EFGS-019 Solids Analysis**

% Solids	56.0	0.1	0.1	% by Weight	1	F708407	14-Aug-17		16-Aug-17	SM 2540B	O-04
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**Sample Preparation: EPA 7474**

Mercury	221	7.26	32.1	ng/g dry	50	F708485	21-Aug-17	7H23013	22-Aug-17	EPA 1631B	
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Project: 2017 Penobscot Sediment Cores  
Project Number: WO-04A-030  
Project Manager: Denise King

Reported:  
25-Aug-17 16:26

**W-MM-TP\_072517\_SED\_00-01\_R3**  
**1707771-CZ**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-010 KOH/Methanol Hg Digestion</b>											
Methyl Mercury (as Mercury)	3.2	0.8	3.1	ng/g dry	500	F707570	03-Aug-17	7H09017	08-Aug-17	EPA 1630 Mod/FGS-070	
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	52.2	0.1	0.1	% by Weight	1	F708407	14-Aug-17		16-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	230	8.35	36.9	ng/g dry	50	F708485	21-Aug-17	7H23013	22-Aug-17	EPA 1631B	

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Project Manager: Denise King

Reported:  
25-Aug-17 16:26

**W-MM-TP\_072517\_SED\_01-03**  
**1707771-DA**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
<b>Sample Preparation: EFGS-010 KOH/Methanol Hg Digestion</b>											
Methyl Mercury (as Mercury)	1.4	0.8	3.1	ng/g dry	500	F707570	03-Aug-17	7H09017	08-Aug-17	EPA 1630 Mod/FGS-070	J
<b>Sample Preparation: EFGS-019 Solids Analysis</b>											
% Solids	50.7	0.1	0.1	% by Weight	1	F708407	14-Aug-17		16-Aug-17	SM 2540B	O-04
<b>Sample Preparation: EPA 7474</b>											
Mercury	163	8.00	35.4	ng/g dry	50	F708485	21-Aug-17	7H23013	22-Aug-17	EPA 1631B	

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Project Number: WO-04A-030  
Project Manager: Denise King

Reported:  
25-Aug-17 16:26

**Quality Control Data**

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch 7H07017 - F707566</b>											
<b>Cal Standard (7H07017-CAL1)</b>					Prepared & Analyzed: 04-Aug-17						
Methyl Mercury (as Mercury)	0.05	-		ng/L	0.050050		98.7				
<b>Cal Standard (7H07017-CAL2)</b>					Prepared & Analyzed: 04-Aug-17						
Methyl Mercury (as Mercury)	0.2	-		ng/L	0.20020		97.4				
<b>Cal Standard (7H07017-CAL3)</b>					Prepared & Analyzed: 04-Aug-17						
Methyl Mercury (as Mercury)	1.1	-		ng/L	1.0010		110				
<b>Cal Standard (7H07017-CAL4)</b>					Prepared & Analyzed: 04-Aug-17						
Methyl Mercury (as Mercury)	1.9	-		ng/L	2.0020		97.3				
<b>Cal Standard (7H07017-CAL5)</b>					Prepared & Analyzed: 04-Aug-17						
Methyl Mercury (as Mercury)	3.9	-		ng/L	4.0040		96.5				
<b>Calibration Blank (7H07017-CCB1)</b>					Prepared & Analyzed: 04-Aug-17						
Methyl Mercury (as Mercury)	0.0	-		ng/L							U
<b>Calibration Blank (7H07017-CCB2)</b>					Prepared & Analyzed: 04-Aug-17						
Methyl Mercury (as Mercury)	0.0	-		ng/L							U
<b>Calibration Blank (7H07017-CCB3)</b>					Prepared & Analyzed: 04-Aug-17						
Methyl Mercury (as Mercury)	0.0	-		ng/L							U
<b>Calibration Blank (7H07017-CCB4)</b>					Prepared & Analyzed: 04-Aug-17						
Methyl Mercury (as Mercury)	0.002	-		ng/L							
<b>Calibration Blank (7H07017-CCB5)</b>					Prepared & Analyzed: 04-Aug-17						
Methyl Mercury (as Mercury)	0.0	-		ng/L							U

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Project Number: WO-04A-030  
Project Manager: Denise King

Reported:  
25-Aug-17 16:26

**Quality Control Data**

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch 7H07017 - F707566</b>											
<b>Calibration Blank (7H07017-CCB6)</b>											
Prepared & Analyzed: 04-Aug-17											
Methyl Mercury (as Mercury)	0.0	-		ng/L							U
<b>Calibration Check (7H07017-CCV1)</b>											
Prepared & Analyzed: 04-Aug-17											
Methyl Mercury (as Mercury)	0.4	-		ng/L	0.50049		85.0	75-125			
<b>Calibration Check (7H07017-CCV2)</b>											
Prepared & Analyzed: 04-Aug-17											
Methyl Mercury (as Mercury)	0.4	-		ng/L	0.50049		84.5	75-125			
<b>Calibration Check (7H07017-CCV3)</b>											
Prepared & Analyzed: 04-Aug-17											
Methyl Mercury (as Mercury)	0.4	-		ng/L	0.50049		81.0	75-125			
<b>Calibration Check (7H07017-CCV4)</b>											
Prepared & Analyzed: 04-Aug-17											
Methyl Mercury (as Mercury)	0.4	-		ng/L	0.50049		88.0	75-125			
<b>Calibration Check (7H07017-CCV5)</b>											
Prepared & Analyzed: 04-Aug-17											
Methyl Mercury (as Mercury)	0.5	-		ng/L	0.50049		93.5	75-125			
<b>Calibration Check (7H07017-CCV6)</b>											
Prepared & Analyzed: 04-Aug-17											
Methyl Mercury (as Mercury)	0.4	-		ng/L	0.50049		86.1	75-125			
<b>Instrument Blank (7H07017-IBL1)</b>											
Prepared & Analyzed: 04-Aug-17											
Methyl Mercury (as Mercury)	ND	0.001	0.004	ng/L							U
<b>Initial Cal Blank (7H07017-ICB1)</b>											
Prepared & Analyzed: 04-Aug-17											
Methyl Mercury (as Mercury)	0.008	-		ng/L							
<b>Initial Cal Check (7H07017-ICV1)</b>											
Prepared & Analyzed: 04-Aug-17											
Methyl Mercury (as Mercury)	0.5	-		ng/L	0.50049		93.0	80-120			

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25-Aug-17 16:26

Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 7H09017 - F707570

<b>Cal Standard (7H09017-CAL1)</b>					Prepared & Analyzed: 08-Aug-17						
Methyl Mercury (as Mercury)	0.06	-		ng/L	0.050050		112				
<b>Cal Standard (7H09017-CAL2)</b>					Prepared & Analyzed: 08-Aug-17						
Methyl Mercury (as Mercury)	0.2	-		ng/L	0.20020		103				
<b>Cal Standard (7H09017-CAL3)</b>					Prepared & Analyzed: 08-Aug-17						
Methyl Mercury (as Mercury)	1.0	-		ng/L	1.0010		105				
<b>Cal Standard (7H09017-CAL4)</b>					Prepared & Analyzed: 08-Aug-17						
Methyl Mercury (as Mercury)	1.6	-		ng/L	2.0020		82.3				
<b>Cal Standard (7H09017-CAL5)</b>					Prepared & Analyzed: 08-Aug-17						
Methyl Mercury (as Mercury)	3.9	-		ng/L	4.0040		96.8				
<b>Calibration Blank (7H09017-CCB1)</b>					Prepared & Analyzed: 08-Aug-17						
Methyl Mercury (as Mercury)	0.0	-		ng/L							U
<b>Calibration Blank (7H09017-CCB2)</b>					Prepared & Analyzed: 08-Aug-17						
Methyl Mercury (as Mercury)	0.0	-		ng/L							U
<b>Calibration Blank (7H09017-CCB3)</b>					Prepared & Analyzed: 08-Aug-17						
Methyl Mercury (as Mercury)	0.0	-		ng/L							U
<b>Calibration Blank (7H09017-CCB4)</b>					Prepared & Analyzed: 08-Aug-17						
Methyl Mercury (as Mercury)	0.007	-		ng/L							
<b>Calibration Blank (7H09017-CCB5)</b>					Prepared & Analyzed: 08-Aug-17						
Methyl Mercury (as Mercury)	0.0	-		ng/L							U

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Reported:  
25-Aug-17 16:26

Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 7H09017 - F707570

<b>Calibration Blank (7H09017-CCB6)</b>												Prepared & Analyzed: 08-Aug-17
Methyl Mercury (as Mercury)	0.001	-		ng/L								
<b>Calibration Check (7H09017-CCV1)</b>												Prepared & Analyzed: 08-Aug-17
Methyl Mercury (as Mercury)	0.4	-		ng/L	0.50049		86.6	75-125				
<b>Calibration Check (7H09017-CCV2)</b>												Prepared & Analyzed: 08-Aug-17
Methyl Mercury (as Mercury)	0.4	-		ng/L	0.50049		87.4	75-125				
<b>Calibration Check (7H09017-CCV3)</b>												Prepared & Analyzed: 08-Aug-17
Methyl Mercury (as Mercury)	0.4	-		ng/L	0.50049		85.4	75-125				
<b>Calibration Check (7H09017-CCV4)</b>												Prepared & Analyzed: 08-Aug-17
Methyl Mercury (as Mercury)	0.5	-		ng/L	0.50049		92.7	75-125				
<b>Calibration Check (7H09017-CCV5)</b>												Prepared & Analyzed: 08-Aug-17
Methyl Mercury (as Mercury)	0.5	-		ng/L	0.50049		95.5	75-125				
<b>Calibration Check (7H09017-CCV6)</b>												Prepared & Analyzed: 08-Aug-17
Methyl Mercury (as Mercury)	0.4	-		ng/L	0.50049		84.1	75-125				
<b>Instrument Blank (7H09017-IBL1)</b>												Prepared & Analyzed: 08-Aug-17
Methyl Mercury (as Mercury)	ND	0.001	0.004	ng/L							U	
<b>Initial Cal Blank (7H09017-ICB1)</b>												Prepared & Analyzed: 08-Aug-17
Methyl Mercury (as Mercury)	0.002	-		ng/L								
<b>Initial Cal Check (7H09017-ICV1)</b>												Prepared & Analyzed: 08-Aug-17
Methyl Mercury (as Mercury)	0.5	-		ng/L	0.50049		98.3	80-120				

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Reported:  
25-Aug-17 16:26

Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 7H11011 - F708268

<b>Cal Standard (7H11011-CAL1)</b>						Prepared & Analyzed: 10-Aug-17					
Methyl Mercury (as Mercury)	0.05	-		ng/L	0.050050		106				
<b>Cal Standard (7H11011-CAL2)</b>						Prepared & Analyzed: 10-Aug-17					
Methyl Mercury (as Mercury)	0.2	-		ng/L	0.20020		91.1				
<b>Cal Standard (7H11011-CAL3)</b>						Prepared & Analyzed: 10-Aug-17					
Methyl Mercury (as Mercury)	1.0	-		ng/L	1.0010		100				
<b>Cal Standard (7H11011-CAL4)</b>						Prepared & Analyzed: 10-Aug-17					
Methyl Mercury (as Mercury)	1.9	-		ng/L	2.0020		96.7				
<b>Cal Standard (7H11011-CAL5)</b>						Prepared & Analyzed: 10-Aug-17					
Methyl Mercury (as Mercury)	4.2	-		ng/L	4.0040		106				
<b>Calibration Blank (7H11011-CCB1)</b>						Prepared & Analyzed: 10-Aug-17					
Methyl Mercury (as Mercury)	0.003	-		ng/L							
<b>Calibration Blank (7H11011-CCB2)</b>						Prepared & Analyzed: 10-Aug-17					
Methyl Mercury (as Mercury)	0.004	-		ng/L							
<b>Calibration Blank (7H11011-CCB3)</b>						Prepared & Analyzed: 10-Aug-17					
Methyl Mercury (as Mercury)	0.0	-		ng/L							U
<b>Calibration Blank (7H11011-CCB4)</b>						Prepared & Analyzed: 10-Aug-17					
Methyl Mercury (as Mercury)	0.0	-		ng/L							U
<b>Calibration Blank (7H11011-CCB5)</b>						Prepared & Analyzed: 10-Aug-17					
Methyl Mercury (as Mercury)	0.003	-		ng/L							

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25-Aug-17 16:26

Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 7H11011 - F708268

<b>Calibration Blank (7H11011-CCB6)</b>											
Prepared & Analyzed: 10-Aug-17											
Methyl Mercury (as Mercury)	0.0	-		ng/L							U
<b>Calibration Blank (7H11011-CCB7)</b>											
Prepared: 10-Aug-17 Analyzed: 11-Aug-17											
Methyl Mercury (as Mercury)	0.0	-		ng/L							U
<b>Calibration Blank (7H11011-CCB8)</b>											
Prepared: 10-Aug-17 Analyzed: 11-Aug-17											
Methyl Mercury (as Mercury)	0.002	-		ng/L							
<b>Calibration Check (7H11011-CCV1)</b>											
Prepared & Analyzed: 10-Aug-17											
Methyl Mercury (as Mercury)	0.5	-		ng/L	0.50049		93.3	67-133			
<b>Calibration Check (7H11011-CCV2)</b>											
Prepared & Analyzed: 10-Aug-17											
Methyl Mercury (as Mercury)	0.5	-		ng/L	0.50049		93.0	67-133			
<b>Calibration Check (7H11011-CCV3)</b>											
Prepared & Analyzed: 10-Aug-17											
Methyl Mercury (as Mercury)	0.4	-		ng/L	0.50049		86.3	67-133			
<b>Calibration Check (7H11011-CCV4)</b>											
Prepared & Analyzed: 10-Aug-17											
Methyl Mercury (as Mercury)	0.5	-		ng/L	0.50049		95.3	67-133			
<b>Calibration Check (7H11011-CCV5)</b>											
Prepared & Analyzed: 10-Aug-17											
Methyl Mercury (as Mercury)	0.5	-		ng/L	0.50049		98.4	67-133			
<b>Calibration Check (7H11011-CCV6)</b>											
Prepared & Analyzed: 10-Aug-17											
Methyl Mercury (as Mercury)	0.5	-		ng/L	0.50049		97.7	67-133			
<b>Calibration Check (7H11011-CCV7)</b>											
Prepared: 10-Aug-17 Analyzed: 11-Aug-17											
Methyl Mercury (as Mercury)	0.5	-		ng/L	0.50049		95.2	67-133			

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Project: 2017 Penobscot Sediment Cores  
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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
<b>Batch 7H11011 - F708268</b>											
<b>Calibration Check (7H11011-CCV8)</b>					Prepared: 10-Aug-17 Analyzed: 11-Aug-17						
Methyl Mercury (as Mercury)	0.4	-		ng/L	0.50049		82.7	67-133			
<b>Instrument Blank (7H11011-IBL1)</b>					Prepared & Analyzed: 10-Aug-17						
Methyl Mercury (as Mercury)	ND	0.001	0.004	ng/L							U
<b>Initial Cal Blank (7H11011-ICB1)</b>					Prepared & Analyzed: 10-Aug-17						
Methyl Mercury (as Mercury)	0.004	-		ng/L							
<b>Initial Cal Check (7H11011-ICV1)</b>					Prepared & Analyzed: 10-Aug-17						
Methyl Mercury (as Mercury)	0.5	-		ng/L	0.50049		99.8	69-131			
<b>Batch F707566 - EFGS-010 KOH/Methanol Hg Digestion</b>											
<b>Blank (F707566-BLK1)</b>					Prepared: 02-Jul-17 Analyzed: 04-Aug-17						
Methyl Mercury (as Mercury)	ND	0.5	2.0	ng/g wet							U
<b>Blank (F707566-BLK2)</b>					Prepared: 02-Jul-17 Analyzed: 04-Aug-17						
Methyl Mercury (as Mercury)	ND	0.5	2.0	ng/g wet							U
<b>Blank (F707566-BLK3)</b>					Prepared: 02-Jul-17 Analyzed: 04-Aug-17						
Methyl Mercury (as Mercury)	ND	0.5	2.0	ng/g wet							U
<b>LCS (F707566-BS1)</b>					Prepared: 02-Jul-17 Analyzed: 04-Aug-17						
Methyl Mercury (as Mercury)	244.6	2.0	8.0	ng/g wet	330.28		74.1	70-130			
<b>LCS Dup (F707566-BSD1)</b>					Prepared: 02-Jul-17 Analyzed: 04-Aug-17						
Methyl Mercury (as Mercury)	274.6	2.0	8.0	ng/g wet	330.28		83.1	70-130	11.5	25	

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Reported:  
25-Aug-17 16:26

**Quality Control Data**

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch F707566 - EFGS-010 KOH/Methanol Hg Digestion**

<b>Duplicate (F707566-DUP1)</b>		<b>Source: 1707771-04</b>		<b>Prepared: 02-Jul-17 Analyzed: 04-Aug-17</b>							
Methyl Mercury (as Mercury)	10.0	1.1	4.3	ng/g dry		9.0			9.71	35	
<b>Matrix Spike (F707566-MS1)</b>		<b>Source: 1707771-04</b>		<b>Prepared: 02-Jul-17 Analyzed: 04-Aug-17</b>							
Methyl Mercury (as Mercury)	97.6	1.1	4.4	ng/g dry	87.309	9.0	101	65-130			
<b>Matrix Spike (F707566-MS2)</b>		<b>Source: 1707771-17</b>		<b>Prepared: 02-Jul-17 Analyzed: 04-Aug-17</b>							
Methyl Mercury (as Mercury)	128.0	1.4	5.5	ng/g dry	109.82	15.7	102	65-130			
<b>Matrix Spike Dup (F707566-MSD1)</b>		<b>Source: 1707771-04</b>		<b>Prepared: 02-Jul-17 Analyzed: 04-Aug-17</b>							
Methyl Mercury (as Mercury)	96.1	1.1	4.2	ng/g dry	84.985	9.0	102	65-130	1.07	35	
<b>Matrix Spike Dup (F707566-MSD2)</b>		<b>Source: 1707771-17</b>		<b>Prepared: 02-Jul-17 Analyzed: 04-Aug-17</b>							
Methyl Mercury (as Mercury)	127.6	1.4	5.6	ng/g dry	111.93	15.7	99.9	65-130	2.22	35	

**Batch F707567 - EFGS-010 KOH/Methanol Hg Digestion**

<b>Blank (F707567-BLK4)</b>				<b>Prepared: 02-Aug-17 Analyzed: 08-Aug-17</b>							
Methyl Mercury (as Mercury)	ND	0.5	2.0	ng/g wet							U
<b>Blank (F707567-BLK5)</b>				<b>Prepared: 02-Aug-17 Analyzed: 08-Aug-17</b>							
Methyl Mercury (as Mercury)	ND	0.5	2.0	ng/g wet							U
<b>Blank (F707567-BLK6)</b>				<b>Prepared: 02-Aug-17 Analyzed: 08-Aug-17</b>							
Methyl Mercury (as Mercury)	ND	0.5	2.0	ng/g wet							U
<b>LCS (F707567-BS2)</b>				<b>Prepared: 02-Aug-17 Analyzed: 08-Aug-17</b>							
Methyl Mercury (as Mercury)	271.2	2.0	8.0	ng/g wet	330.28		82.1	70-130			

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AMEC Foster Wheeler  
271 Mill Road  
Chelmsford MA, 01824

Project: 2017 Penobscot Sediment Cores  
Project Number: WO-04A-030  
Project Manager: Denise King

Reported:  
25-Aug-17 16:26

**Quality Control Data**

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch F707567 - EFGS-010 KOH/Methanol Hg Digestion**

<b>LCS Dup (F707567-BSD2)</b>											
					Prepared: 02-Aug-17 Analyzed: 08-Aug-17						
Methyl Mercury (as Mercury)	303.3	2.0	7.9	ng/g wet	330.28		91.8	70-130	11.2	25	
<b>Duplicate (F707567-DUP2)</b>											
					Source: 1707771-21RE1 Prepared: 02-Aug-17 Analyzed: 08-Aug-17						
Methyl Mercury (as Mercury)	33.9	1.9	7.4	ng/g dry	40.1				16.8	35	
<b>Matrix Spike (F707567-MS3)</b>											
					Source: 1707771-21RE1 Prepared: 02-Aug-17 Analyzed: 08-Aug-17						
Methyl Mercury (as Mercury)	170.6	1.9	7.7	ng/g dry	153.43	40.1	85.0	65-130			
<b>Matrix Spike (F707567-MS4)</b>											
					Source: 1707771-31RE1 Prepared: 02-Aug-17 Analyzed: 08-Aug-17						
Methyl Mercury (as Mercury)	106.3	1.3	5.0	ng/g dry	100.26	7.6	98.5	65-130			
<b>Matrix Spike Dup (F707567-MSD3)</b>											
					Source: 1707771-21RE1 Prepared: 02-Aug-17 Analyzed: 08-Aug-17						
Methyl Mercury (as Mercury)	182.7	1.9	7.6	ng/g dry	152.57	40.1	93.4	65-130	9.39	35	
<b>Matrix Spike Dup (F707567-MSD4)</b>											
					Source: 1707771-31RE1 Prepared: 02-Aug-17 Analyzed: 08-Aug-17						
Methyl Mercury (as Mercury)	112.6	1.2	4.9	ng/g dry	98.904	7.6	106	65-130	7.47	35	

**Batch F707568 - EFGS-010 KOH/Methanol Hg Digestion**

<b>Blank (F707568-BLK1)</b>											
					Prepared: 03-Aug-17 Analyzed: 10-Aug-17						
Methyl Mercury (as Mercury)	ND	0.5	2.0	ng/g wet							U
<b>Blank (F707568-BLK2)</b>											
					Prepared: 03-Aug-17 Analyzed: 10-Aug-17						
Methyl Mercury (as Mercury)	ND	0.5	2.0	ng/g wet							U
<b>Blank (F707568-BLK3)</b>											
					Prepared: 03-Aug-17 Analyzed: 10-Aug-17						
Methyl Mercury (as Mercury)	ND	0.5	2.0	ng/g wet							U

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AMEC Foster Wheeler 271 Mill Road Chelmsford MA, 01824	Project: 2017 Penobscot Sediment Cores Project Number: WO-04A-030 Project Manager: Denise King	Reported: 25-Aug-17 16:26
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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
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**Batch F707568 - EFGS-010 KOH/Methanol Hg Digestion**

<b>LCS (F707568-BS1)</b>					Prepared: 03-Aug-17 Analyzed: 10-Aug-17						
Methyl Mercury (as Mercury)	288.1	1.9	7.6	ng/g wet	330.28		87.2	70-130			
<b>LCS Dup (F707568-BSD1)</b>					Prepared: 03-Aug-17 Analyzed: 10-Aug-17						
Methyl Mercury (as Mercury)	283.2	1.9	7.5	ng/g wet	330.28		85.7	70-130	1.72	25	
<b>Duplicate (F707568-DUP1)</b>					Source: 1707771-90 Prepared: 03-Aug-17 Analyzed: 10-Aug-17						
Methyl Mercury (as Mercury)	12.2	1.1	4.3	ng/g dry		10.3			17.0	35	
<b>Matrix Spike (F707568-MS1)</b>					Source: 1707771-90 Prepared: 03-Aug-17 Analyzed: 10-Aug-17						
Methyl Mercury (as Mercury)	83.4	1.0	3.8	ng/g dry	76.781	10.3	95.2	65-130			
<b>Matrix Spike (F707568-MS2)</b>					Source: 1707771-AB Prepared: 03-Aug-17 Analyzed: 10-Aug-17						
Methyl Mercury (as Mercury)	116.2	1.3	5.2	ng/g dry	103.22	15.1	97.9	65-130			
<b>Matrix Spike Dup (F707568-MSD1)</b>					Source: 1707771-90 Prepared: 03-Aug-17 Analyzed: 10-Aug-17						
Methyl Mercury (as Mercury)	88.9	1.1	4.2	ng/g dry	84.514	10.3	92.9	65-130	2.37	35	
<b>Matrix Spike Dup (F707568-MSD2)</b>					Source: 1707771-AB Prepared: 03-Aug-17 Analyzed: 10-Aug-17						
Methyl Mercury (as Mercury)	129.9	1.3	5.2	ng/g dry	104.18	15.1	110	65-130	11.8	35	

**Batch F707569 - EFGS-010 KOH/Methanol Hg Digestion**

<b>Blank (F707569-BLK1)</b>					Prepared: 04-Aug-17 Analyzed: 10-Aug-17						
Methyl Mercury (as Mercury)	ND	0.3	1.0	ng/g wet							U
<b>Blank (F707569-BLK2)</b>					Prepared: 04-Aug-17 Analyzed: 10-Aug-17						
Methyl Mercury (as Mercury)	ND	0.3	1.0	ng/g wet							U

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AMEC Foster Wheeler  
271 Mill Road  
Chelmsford MA, 01824

Project: 2017 Penobscot Sediment Cores  
Project Number: WO-04A-030  
Project Manager: Denise King

Reported:  
25-Aug-17 16:26

**Quality Control Data**

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch F707569 - EFGS-010 KOH/Methanol Hg Digestion**

<b>Blank (F707569-BLK3)</b>					Prepared: 04-Aug-17 Analyzed: 10-Aug-17						
Methyl Mercury (as Mercury)	ND	0.3	1.0	ng/g wet							U
<b>LCS (F707569-BS1)</b>					Prepared: 04-Aug-17 Analyzed: 10-Aug-17						
Methyl Mercury (as Mercury)	291.7	2.0	8.0	ng/g wet	330.28		88.3	70-130			
<b>LCS Dup (F707569-BSD1)</b>					Prepared: 04-Aug-17 Analyzed: 10-Aug-17						
Methyl Mercury (as Mercury)	271.0	2.0	8.0	ng/g wet	330.28		82.0	70-130	7.38	25	
<b>Duplicate (F707569-DUP1)</b>					Source: 1707771-AU Prepared: 04-Aug-17 Analyzed: 10-Aug-17						
Methyl Mercury (as Mercury)	7.9	1.7	6.7	ng/g dry		7.9			0.0312	35	
<b>Matrix Spike (F707569-MS1)</b>					Source: 1707771-AU Prepared: 04-Aug-17 Analyzed: 10-Aug-17						
Methyl Mercury (as Mercury)	141.4	1.5	6.1	ng/g dry	121.66	7.9	110	65-130			
<b>Matrix Spike (F707569-MS2)</b>					Source: 1707771-BK Prepared: 04-Aug-17 Analyzed: 10-Aug-17						
Methyl Mercury (as Mercury)	182.1	1.8	7.1	ng/g dry	141.36	10.3	122	65-130			
<b>Matrix Spike Dup (F707569-MSD1)</b>					Source: 1707771-AU Prepared: 04-Aug-17 Analyzed: 10-Aug-17						
Methyl Mercury (as Mercury)	148.4	1.6	6.3	ng/g dry	126.71	7.9	111	65-130	1.04	35	
<b>Matrix Spike Dup (F707569-MSD2)</b>					Source: 1707771-BK Prepared: 04-Aug-17 Analyzed: 10-Aug-17						
Methyl Mercury (as Mercury)	140.0	1.7	6.7	ng/g dry	133.93	10.3	96.8	65-130	22.6	35	

**Batch F707570 - EFGS-010 KOH/Methanol Hg Digestion**

<b>Blank (F707570-BLK1)</b>					Prepared: 03-Aug-17 Analyzed: 08-Aug-17						
Methyl Mercury (as Mercury)	ND	0.5	2.0	ng/g wet							U

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Chelmsford MA, 01824

Project: 2017 Penobscot Sediment Cores  
Project Number: WO-04A-030  
Project Manager: Denise King

Reported:  
25-Aug-17 16:26

Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch F707570 - EFGS-010 KOH/Methanol Hg Digestion

<b>Blank (F707570-BLK2)</b>					Prepared: 03-Aug-17 Analyzed: 08-Aug-17						
Methyl Mercury (as Mercury)	ND	0.5	2.0	ng/g wet							U
<b>Blank (F707570-BLK3)</b>					Prepared: 03-Aug-17 Analyzed: 08-Aug-17						
Methyl Mercury (as Mercury)	ND	0.5	2.0	ng/g wet							U
<b>LCS (F707570-BS1)</b>					Prepared: 03-Aug-17 Analyzed: 08-Aug-17						
Methyl Mercury (as Mercury)	275.2	2.0	8.0	ng/g wet	330.28		83.3	70-130			
<b>LCS Dup (F707570-BSD1)</b>					Prepared: 03-Aug-17 Analyzed: 08-Aug-17						
Methyl Mercury (as Mercury)	271.6	2.0	8.0	ng/g wet	330.28		82.2	70-130	1.33	25	
<b>Duplicate (F707570-DUP1)</b>					Source: 1707771-CD Prepared: 03-Aug-17 Analyzed: 08-Aug-17						
Methyl Mercury (as Mercury)	15.1	2.3	9.0	ng/g dry		19.4			25.2	35	
<b>Matrix Spike (F707570-MS1)</b>					Source: 1707771-CD Prepared: 03-Aug-17 Analyzed: 08-Aug-17						
Methyl Mercury (as Mercury)	237.8	2.4	9.5	ng/g dry	190.75	19.4	114	65-130			
<b>Matrix Spike (F707570-MS2)</b>					Source: 1707775-01 Prepared: 03-Aug-17 Analyzed: 08-Aug-17						
Methyl Mercury (as Mercury)	113.2	1.3	5.1	ng/g dry	101.47	9.9	102	65-130			
<b>Matrix Spike Dup (F707570-MSD1)</b>					Source: 1707771-CD Prepared: 03-Aug-17 Analyzed: 08-Aug-17						
Methyl Mercury (as Mercury)	204.9	2.3	9.1	ng/g dry	182.20	19.4	102	65-130	11.7	35	
<b>Matrix Spike Dup (F707570-MSD2)</b>					Source: 1707775-01 Prepared: 03-Aug-17 Analyzed: 08-Aug-17						
Methyl Mercury (as Mercury)	121.3	1.3	5.2	ng/g dry	103.23	9.9	108	65-130	5.86	35	

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25-Aug-17 16:26

Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 7H15016 - F708322

<b>Cal Standard (7H15016-CAL1)</b>					Prepared & Analyzed: 15-Aug-17						
Mercury	0.51	-		ng/L	0.50100		101				
<b>Cal Standard (7H15016-CAL2)</b>					Prepared & Analyzed: 15-Aug-17						
Mercury	1.02	-		ng/L	1.0020		102				
<b>Cal Standard (7H15016-CAL3)</b>					Prepared & Analyzed: 15-Aug-17						
Mercury	4.98	-		ng/L	5.0100		99.5				
<b>Cal Standard (7H15016-CAL4)</b>					Prepared & Analyzed: 15-Aug-17						
Mercury	19.64	-		ng/L	20.040		98.0				
<b>Cal Standard (7H15016-CAL5)</b>					Prepared & Analyzed: 15-Aug-17						
Mercury	39.30	-		ng/L	40.080		98.1				
<b>Calibration Blank (7H15016-CCB1)</b>					Prepared & Analyzed: 15-Aug-17						
Mercury	0.02	-		ng/L							
<b>Calibration Blank (7H15016-CCB2)</b>					Prepared & Analyzed: 15-Aug-17						
Mercury	0.01	-		ng/L							
<b>Calibration Blank (7H15016-CCB3)</b>					Prepared & Analyzed: 15-Aug-17						
Mercury	0.01	-		ng/L							
<b>Calibration Blank (7H15016-CCB4)</b>					Prepared & Analyzed: 15-Aug-17						
Mercury	0.02	-		ng/L							
<b>Calibration Blank (7H15016-CCB5)</b>					Prepared & Analyzed: 15-Aug-17						
Mercury	0.06	-		ng/L							

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25-Aug-17 16:26

Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch 7H15016 - F708322</b>											
<b>Calibration Blank (7H15016-CCB6)</b> Prepared & Analyzed: 15-Aug-17											
Mercury	0.07	-		ng/L							
<b>Calibration Blank (7H15016-CCB7)</b> Prepared & Analyzed: 15-Aug-17											
Mercury	0.05	-		ng/L							
<b>Calibration Check (7H15016-CCV1)</b> Prepared & Analyzed: 15-Aug-17											
Mercury	5.08	-		ng/L	5.0000		102	77-123			
<b>Calibration Check (7H15016-CCV2)</b> Prepared & Analyzed: 15-Aug-17											
Mercury	5.22	-		ng/L	5.0000		104	77-123			
<b>Calibration Check (7H15016-CCV3)</b> Prepared & Analyzed: 15-Aug-17											
Mercury	5.10	-		ng/L	5.0000		102	77-123			
<b>Calibration Check (7H15016-CCV4)</b> Prepared & Analyzed: 15-Aug-17											
Mercury	5.09	-		ng/L	5.0000		102	77-123			
<b>Calibration Check (7H15016-CCV5)</b> Prepared & Analyzed: 15-Aug-17											
Mercury	5.15	-		ng/L	5.0000		103	77-123			
<b>Calibration Check (7H15016-CCV6)</b> Prepared & Analyzed: 15-Aug-17											
Mercury	5.17	-		ng/L	5.0000		103	77-123			
<b>Calibration Check (7H15016-CCV7)</b> Prepared & Analyzed: 15-Aug-17											
Mercury	5.03	-		ng/L	5.0000		101	77-123			
<b>Instrument Blank (7H15016-IBL1)</b> Prepared & Analyzed: 15-Aug-17											
Mercury	ND	0.09	0.40	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
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**Batch 7H15016 - F708322**

Instrument Blank (7H15016-IBL2) Prepared & Analyzed: 15-Aug-17											
Mercury	ND	0.09	0.40	ng/L							U
Instrument Blank (7H15016-IBL3) Prepared & Analyzed: 15-Aug-17											
Mercury	ND	0.09	0.40	ng/L							U
Initial Cal Check (7H15016-ICV1) Prepared & Analyzed: 15-Aug-17											
Mercury	5.10	-		ng/L	5.0000		102	79-121			

**Batch 7H16016 - F708399**

Cal Standard (7H16016-CAL1) Prepared & Analyzed: 16-Aug-17											
Mercury	0.53	-		ng/L	0.50100		106				
Cal Standard (7H16016-CAL2) Prepared & Analyzed: 16-Aug-17											
Mercury	1.05	-		ng/L	1.0020		105				
Cal Standard (7H16016-CAL3) Prepared & Analyzed: 16-Aug-17											
Mercury	4.81	-		ng/L	5.0100		96.0				
Cal Standard (7H16016-CAL4) Prepared & Analyzed: 16-Aug-17											
Mercury	19.39	-		ng/L	20.040		96.8				
Cal Standard (7H16016-CAL5) Prepared & Analyzed: 16-Aug-17											
Mercury	38.05	-		ng/L	40.080		94.9				
Calibration Blank (7H16016-CCB1) Prepared & Analyzed: 16-Aug-17											
Mercury	0.15	-		ng/L							

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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
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Batch 7H16016 - F708399

<b>Calibration Blank (7H16016-CCB2)</b>												Prepared & Analyzed: 16-Aug-17
Mercury	0.25	-		ng/L								
<b>Calibration Blank (7H16016-CCB3)</b>												Prepared & Analyzed: 16-Aug-17
Mercury	0.18	-		ng/L								
<b>Calibration Blank (7H16016-CCB4)</b>												Prepared & Analyzed: 16-Aug-17
Mercury	0.22	-		ng/L								
<b>Calibration Blank (7H16016-CCB5)</b>												Prepared & Analyzed: 16-Aug-17
Mercury	0.14	-		ng/L								
<b>Calibration Blank (7H16016-CCB6)</b>												Prepared & Analyzed: 16-Aug-17
Mercury	0.15	-		ng/L								
<b>Calibration Blank (7H16016-CCB7)</b>												Prepared & Analyzed: 16-Aug-17
Mercury	0.09	-		ng/L								
<b>Calibration Check (7H16016-CCV1)</b>												Prepared & Analyzed: 16-Aug-17
Mercury	5.40	-		ng/L	5.0000		108	77-123				
<b>Calibration Check (7H16016-CCV2)</b>												Prepared & Analyzed: 16-Aug-17
Mercury	5.48	-		ng/L	5.0000		110	77-123				
<b>Calibration Check (7H16016-CCV3)</b>												Prepared & Analyzed: 16-Aug-17
Mercury	5.09	-		ng/L	5.0000		102	77-123				
<b>Calibration Check (7H16016-CCV4)</b>												Prepared & Analyzed: 16-Aug-17
Mercury	5.39	-		ng/L	5.0000		108	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
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Batch 7H16016 - F708399

Calibration Check (7H16016-CCV6) Prepared & Analyzed: 16-Aug-17

Mercury	5.11	-		ng/L	5.0000		102	77-123			
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Calibration Check (7H16016-CCV7) Prepared & Analyzed: 16-Aug-17

Mercury	5.22	-		ng/L	5.0000		104	77-123			
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Calibration Check (7H16016-CCV8) Prepared & Analyzed: 16-Aug-17

Mercury	5.30	-		ng/L	5.0000		106	77-123			
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Calibration Check (7H16016-CCV9) Prepared & Analyzed: 16-Aug-17

Mercury	5.28	-		ng/L	5.0000		106	77-123			
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Instrument Blank (7H16016-IBL1) Prepared & Analyzed: 16-Aug-17

Mercury	ND	0.09	0.40	ng/L							U
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Instrument Blank (7H16016-IBL2) Prepared & Analyzed: 16-Aug-17

Mercury	ND	0.09	0.40	ng/L							U
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Instrument Blank (7H16016-IBL3) Prepared & Analyzed: 16-Aug-17

Mercury	ND	0.09	0.40	ng/L							U
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Initial Cal Check (7H16016-ICV1) Prepared & Analyzed: 16-Aug-17

Mercury	5.20	-		ng/L	5.0000		104	79-121			
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Batch 7H18017 - F708428

Cal Standard (7H18017-CAL1) Prepared & Analyzed: 17-Aug-17

Mercury	0.51	-		ng/L	0.50100		102				
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AMEC Foster Wheeler  
271 Mill Road  
Chelmsford MA, 01824

Project: 2017 Penobscot Sediment Cores  
Project Number: WO-04A-030  
Project Manager: Denise King

Reported:  
25-Aug-17 16:26

Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 7H18017 - F708428

<b>Cal Standard (7H18017-CAL2)</b>					Prepared & Analyzed: 17-Aug-17						
Mercury	0.99	-		ng/L	1.0020		99.0				
<b>Cal Standard (7H18017-CAL3)</b>					Prepared & Analyzed: 17-Aug-17						
Mercury	5.05	-		ng/L	5.0100		101				
<b>Cal Standard (7H18017-CAL4)</b>					Prepared & Analyzed: 17-Aug-17						
Mercury	19.71	-		ng/L	20.040		98.3				
<b>Cal Standard (7H18017-CAL5)</b>					Prepared & Analyzed: 17-Aug-17						
Mercury	39.65	-		ng/L	40.080		98.9				
<b>Calibration Blank (7H18017-CCB1)</b>					Prepared & Analyzed: 17-Aug-17						
Mercury	0.10	-		ng/L							
<b>Calibration Blank (7H18017-CCB2)</b>					Prepared & Analyzed: 17-Aug-17						
Mercury	0.10	-		ng/L							
<b>Calibration Blank (7H18017-CCB3)</b>					Prepared & Analyzed: 17-Aug-17						
Mercury	0.13	-		ng/L							
<b>Calibration Blank (7H18017-CCB4)</b>					Prepared & Analyzed: 17-Aug-17						
Mercury	0.21	-		ng/L							
<b>Calibration Blank (7H18017-CCB5)</b>					Prepared & Analyzed: 17-Aug-17						
Mercury	0.18	-		ng/L							
<b>Calibration Blank (7H18017-CCB6)</b>					Prepared & Analyzed: 17-Aug-17						
Mercury	0.36	-		ng/L							

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Chelmsford MA, 01824

Project: 2017 Penobscot Sediment Cores  
Project Number: WO-04A-030  
Project Manager: Denise King

Reported:  
25-Aug-17 16:26

Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 7H18017 - F708428

<b>Calibration Blank (7H18017-CCB7)</b>												Prepared & Analyzed: 17-Aug-17
Mercury	0.25	-		ng/L								
<b>Calibration Blank (7H18017-CCB8)</b>												Prepared & Analyzed: 17-Aug-17
Mercury	0.28	-		ng/L								
<b>Calibration Blank (7H18017-CCB9)</b>												Prepared & Analyzed: 17-Aug-17
Mercury	0.21	-		ng/L								
<b>Calibration Check (7H18017-CCV1)</b>												Prepared & Analyzed: 17-Aug-17
Mercury	5.11	-		ng/L	5.0000		102	77-123				
<b>Calibration Check (7H18017-CCV2)</b>												Prepared & Analyzed: 17-Aug-17
Mercury	4.88	-		ng/L	5.0000		97.7	77-123				
<b>Calibration Check (7H18017-CCV3)</b>												Prepared & Analyzed: 17-Aug-17
Mercury	5.11	-		ng/L	5.0000		102	77-123				
<b>Calibration Check (7H18017-CCV4)</b>												Prepared & Analyzed: 17-Aug-17
Mercury	5.21	-		ng/L	5.0000		104	77-123				
<b>Calibration Check (7H18017-CCV5)</b>												Prepared & Analyzed: 17-Aug-17
Mercury	4.93	-		ng/L	5.0000		98.7	77-123				
<b>Calibration Check (7H18017-CCV6)</b>												Prepared & Analyzed: 17-Aug-17
Mercury	5.81	-		ng/L	5.0000		116	77-123				
<b>Calibration Check (7H18017-CCV7)</b>												Prepared & Analyzed: 17-Aug-17
Mercury	5.02	-		ng/L	5.0000		100	77-123				

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AMEC Foster Wheeler 271 Mill Road Chelmsford MA, 01824	Project: 2017 Penobscot Sediment Cores Project Number: WO-04A-030 Project Manager: Denise King	Reported: 25-Aug-17 16:26
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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
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**Batch 7H18017 - F708428**

<b>Calibration Check (7H18017-CCV8)</b>					Prepared & Analyzed: 17-Aug-17						
Mercury	5.36	-		ng/L	5.0000		107	77-123			
<b>Calibration Check (7H18017-CCV9)</b>					Prepared & Analyzed: 17-Aug-17						
Mercury	5.17	-		ng/L	5.0000		103	77-123			
<b>Instrument Blank (7H18017-IBL1)</b>					Prepared & Analyzed: 17-Aug-17						
Mercury	ND	0.09	0.40	ng/L							U
<b>Instrument Blank (7H18017-IBL2)</b>					Prepared & Analyzed: 17-Aug-17						
Mercury	ND	0.09	0.40	ng/L							U
<b>Instrument Blank (7H18017-IBL3)</b>					Prepared & Analyzed: 17-Aug-17						
Mercury	ND	0.09	0.40	ng/L							U
<b>Initial Cal Check (7H18017-ICV1)</b>					Prepared & Analyzed: 17-Aug-17						
Mercury	5.38	-		ng/L	5.0000		108	79-121			

**Batch 7H21012 - F708446**

<b>Cal Standard (7H21012-CAL1)</b>					Prepared & Analyzed: 18-Aug-17						
Mercury	0.51	-		ng/L	0.50100		103				
<b>Cal Standard (7H21012-CAL2)</b>					Prepared & Analyzed: 18-Aug-17						
Mercury	1.02	-		ng/L	1.0020		102				
<b>Cal Standard (7H21012-CAL3)</b>					Prepared & Analyzed: 18-Aug-17						
Mercury	5.05	-		ng/L	5.0100		101				

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AMEC Foster Wheeler  
271 Mill Road  
Chelmsford MA, 01824

Project: 2017 Penobscot Sediment Cores  
Project Number: WO-04A-030  
Project Manager: Denise King

Reported:  
25-Aug-17 16:26

Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 7H21012 - F708446

<b>Cal Standard (7H21012-CAL4)</b>					Prepared & Analyzed: 18-Aug-17						
Mercury	19.62	-		ng/L	20.040		97.9				
<b>Cal Standard (7H21012-CAL5)</b>					Prepared & Analyzed: 18-Aug-17						
Mercury	38.41	-		ng/L	40.080		95.8				
<b>Calibration Blank (7H21012-CCB1)</b>					Prepared & Analyzed: 18-Aug-17						
Mercury	0.08	-		ng/L							
<b>Calibration Blank (7H21012-CCB2)</b>					Prepared & Analyzed: 18-Aug-17						
Mercury	0.45	-		ng/L							
<b>Calibration Blank (7H21012-CCB3)</b>					Prepared & Analyzed: 18-Aug-17						
Mercury	0.37	-		ng/L							
<b>Calibration Blank (7H21012-CCB4)</b>					Prepared & Analyzed: 18-Aug-17						
Mercury	0.25	-		ng/L							
<b>Calibration Blank (7H21012-CCB5)</b>					Prepared & Analyzed: 18-Aug-17						
Mercury	0.43	-		ng/L							
<b>Calibration Blank (7H21012-CCB6)</b>					Prepared & Analyzed: 18-Aug-17						
Mercury	0.40	-		ng/L							
<b>Calibration Blank (7H21012-CCB7)</b>					Prepared & Analyzed: 18-Aug-17						
Mercury	0.26	-		ng/L							
<b>Calibration Blank (7H21012-CCB8)</b>					Prepared & Analyzed: 18-Aug-17						
Mercury	0.30	-		ng/L							

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Amy Goodall, Project Manager



AMEC Foster Wheeler  
271 Mill Road  
Chelmsford MA, 01824

Project: 2017 Penobscot Sediment Cores  
Project Number: WO-04A-030  
Project Manager: Denise King

Reported:  
25-Aug-17 16:26

Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch 7H21012 - F708446</b>											
<b>Calibration Check (7H21012-CCV1)</b>					Prepared & Analyzed: 18-Aug-17						
Mercury	4.96	-		ng/L	5.0000		99.3	77-123			
<b>Calibration Check (7H21012-CCV2)</b>					Prepared & Analyzed: 18-Aug-17						
Mercury	5.14	-		ng/L	5.0000		103	77-123			
<b>Calibration Check (7H21012-CCV3)</b>					Prepared & Analyzed: 18-Aug-17						
Mercury	5.37	-		ng/L	5.0000		107	77-123			
<b>Calibration Check (7H21012-CCV4)</b>					Prepared & Analyzed: 18-Aug-17						
Mercury	5.02	-		ng/L	5.0000		100	77-123			
<b>Calibration Check (7H21012-CCV5)</b>					Prepared & Analyzed: 18-Aug-17						
Mercury	5.60	-		ng/L	5.0000		112	77-123			
<b>Calibration Check (7H21012-CCV6)</b>					Prepared & Analyzed: 18-Aug-17						
Mercury	5.40	-		ng/L	5.0000		108	77-123			
<b>Calibration Check (7H21012-CCV7)</b>					Prepared & Analyzed: 18-Aug-17						
Mercury	5.33	-		ng/L	5.0000		107	77-123			
<b>Calibration Check (7H21012-CCV8)</b>					Prepared & Analyzed: 18-Aug-17						
Mercury	5.38	-		ng/L	5.0000		108	77-123			
<b>Instrument Blank (7H21012-IBL1)</b>					Prepared & Analyzed: 18-Aug-17						
Mercury	ND	0.09	0.40	ng/L							U
<b>Instrument Blank (7H21012-IBL2)</b>					Prepared & Analyzed: 18-Aug-17						
Mercury	ND	0.09	0.40	ng/L							U

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Project Number: WO-04A-030  
Project Manager: Denise King

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25-Aug-17 16:26

Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 7H21012 - F708446

Instrument Blank (7H21012-IBL3)

Prepared & Analyzed: 18-Aug-17

Mercury	ND	0.09	0.40	ng/L							U
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Initial Cal Check (7H21012-ICV1)

Prepared & Analyzed: 18-Aug-17

Mercury	5.12	-		ng/L	5.0000		102	79-121			
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Batch 7H22013 - F708464

Cal Standard (7H22013-CAL1)

Prepared: 21-Aug-17 Analyzed: 22-Aug-17

Mercury	0.52	-		ng/L	0.50100		103				
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Cal Standard (7H22013-CAL2)

Prepared: 21-Aug-17 Analyzed: 22-Aug-17

Mercury	0.99	-		ng/L	1.0020		98.9				
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Cal Standard (7H22013-CAL3)

Prepared: 21-Aug-17 Analyzed: 22-Aug-17

Mercury	5.08	-		ng/L	5.0100		101				
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Cal Standard (7H22013-CAL4)

Prepared: 21-Aug-17 Analyzed: 22-Aug-17

Mercury	20.02	-		ng/L	20.040		99.9				
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Cal Standard (7H22013-CAL5)

Prepared: 21-Aug-17 Analyzed: 22-Aug-17

Mercury	38.21	-		ng/L	40.080		95.3				
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Calibration Blank (7H22013-CCB1)

Prepared: 21-Aug-17 Analyzed: 22-Aug-17

Mercury	0.14	-		ng/L							
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Calibration Blank (7H22013-CCB2)

Prepared: 21-Aug-17 Analyzed: 22-Aug-17

Mercury	0.25	-		ng/L							
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Project: 2017 Penobscot Sediment Cores  
Project Number: WO-04A-030  
Project Manager: Denise King

Reported:  
25-Aug-17 16:26

Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 7H22013 - F708464

<b>Calibration Blank (7H22013-CCB3)</b>					Prepared: 21-Aug-17 Analyzed: 22-Aug-17						
Mercury	0.23	-		ng/L							
<b>Calibration Blank (7H22013-CCB4)</b>					Prepared: 21-Aug-17 Analyzed: 22-Aug-17						
Mercury	0.33	-		ng/L							
<b>Calibration Blank (7H22013-CCB5)</b>					Prepared: 21-Aug-17 Analyzed: 22-Aug-17						
Mercury	0.15	-		ng/L							
<b>Calibration Blank (7H22013-CCB6)</b>					Prepared: 21-Aug-17 Analyzed: 22-Aug-17						
Mercury	0.22	-		ng/L							
<b>Calibration Check (7H22013-CCV1)</b>					Prepared: 21-Aug-17 Analyzed: 22-Aug-17						
Mercury	5.23	-		ng/L	5.0000		105	77-123			
<b>Calibration Check (7H22013-CCV2)</b>					Prepared: 21-Aug-17 Analyzed: 22-Aug-17						
Mercury	5.18	-		ng/L	5.0000		104	77-123			
<b>Calibration Check (7H22013-CCV3)</b>					Prepared: 21-Aug-17 Analyzed: 22-Aug-17						
Mercury	5.11	-		ng/L	5.0000		102	77-123			
<b>Calibration Check (7H22013-CCV4)</b>					Prepared: 21-Aug-17 Analyzed: 22-Aug-17						
Mercury	5.34	-		ng/L	5.0000		107	77-123			
<b>Calibration Check (7H22013-CCV5)</b>					Prepared: 21-Aug-17 Analyzed: 22-Aug-17						
Mercury	5.13	-		ng/L	5.0000		103	77-123			
<b>Calibration Check (7H22013-CCV6)</b>					Prepared: 21-Aug-17 Analyzed: 22-Aug-17						
Mercury	5.07	-		ng/L	5.0000		101	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
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Batch 7H22013 - F708464

<b>Instrument Blank (7H22013-IBL1)</b>					Prepared: 21-Aug-17 Analyzed: 22-Aug-17						
Mercury	ND	0.09	0.40	ng/L							U
<b>Instrument Blank (7H22013-IBL2)</b>					Prepared: 21-Aug-17 Analyzed: 22-Aug-17						
Mercury	ND	0.09	0.40	ng/L							U
<b>Instrument Blank (7H22013-IBL3)</b>					Prepared: 21-Aug-17 Analyzed: 22-Aug-17						
Mercury	ND	0.09	0.40	ng/L							U
<b>Initial Cal Check (7H22013-ICV1)</b>					Prepared: 21-Aug-17 Analyzed: 22-Aug-17						
Mercury	5.22	-		ng/L	5.0000		104	79-121			

Batch 7H23013 - F708485

<b>Cal Standard (7H23013-CAL1)</b>					Prepared & Analyzed: 22-Aug-17						
Mercury	0.51	-		ng/L	0.50100		102				
<b>Cal Standard (7H23013-CAL2)</b>					Prepared & Analyzed: 22-Aug-17						
Mercury	1.01	-		ng/L	1.0020		100				
<b>Cal Standard (7H23013-CAL3)</b>					Prepared & Analyzed: 22-Aug-17						
Mercury	5.04	-		ng/L	5.0100		101				
<b>Cal Standard (7H23013-CAL4)</b>					Prepared & Analyzed: 22-Aug-17						
Mercury	19.59	-		ng/L	20.040		97.8				
<b>Cal Standard (7H23013-CAL5)</b>					Prepared & Analyzed: 22-Aug-17						
Mercury	39.25	-		ng/L	40.080		97.9				

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Project: 2017 Penobscot Sediment Cores  
Project Number: WO-04A-030  
Project Manager: Denise King

Reported:  
25-Aug-17 16:26

Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch 7H23013 - F708485</b>											
<b>Calibration Blank (7H23013-CCB1)</b> Prepared & Analyzed: 22-Aug-17											
Mercury	0.01	-		ng/L							
<b>Calibration Blank (7H23013-CCB2)</b> Prepared & Analyzed: 22-Aug-17											
Mercury	0.02	-		ng/L							
<b>Calibration Blank (7H23013-CCB3)</b> Prepared & Analyzed: 22-Aug-17											
Mercury	0.03	-		ng/L							
<b>Calibration Blank (7H23013-CCB4)</b> Prepared & Analyzed: 22-Aug-17											
Mercury	0.03	-		ng/L							
<b>Calibration Blank (7H23013-CCB5)</b> Prepared & Analyzed: 22-Aug-17											
Mercury	0.05	-		ng/L							
<b>Calibration Blank (7H23013-CCB6)</b> Prepared & Analyzed: 22-Aug-17											
Mercury	0.06	-		ng/L							
<b>Calibration Blank (7H23013-CCB7)</b> Prepared & Analyzed: 22-Aug-17											
Mercury	0.07	-		ng/L							
<b>Calibration Check (7H23013-CCV1)</b> Prepared & Analyzed: 22-Aug-17											
Mercury	5.08	-		ng/L	5.0000		102	77-123			
<b>Calibration Check (7H23013-CCV2)</b> Prepared & Analyzed: 22-Aug-17											
Mercury	5.09	-		ng/L	5.0000		102	77-123			
<b>Calibration Check (7H23013-CCV3)</b> Prepared & Analyzed: 22-Aug-17											
Mercury	5.11	-		ng/L	5.0000		102	77-123			

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Project: 2017 Penobscot Sediment Cores  
Project Number: WO-04A-030  
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Reported:  
25-Aug-17 16:26

**Quality Control Data**

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 7H23013 - F708485**

<b>Calibration Check (7H23013-CCV4)</b>					Prepared & Analyzed: 22-Aug-17						
Mercury	5.04	-		ng/L	5.0000		101	77-123			
<b>Calibration Check (7H23013-CCV5)</b>					Prepared & Analyzed: 22-Aug-17						
Mercury	4.96	-		ng/L	5.0000		99.2	77-123			
<b>Calibration Check (7H23013-CCV6)</b>					Prepared & Analyzed: 22-Aug-17						
Mercury	5.16	-		ng/L	5.0000		103	77-123			
<b>Calibration Check (7H23013-CCV7)</b>					Prepared & Analyzed: 22-Aug-17						
Mercury	5.19	-		ng/L	5.0000		104	77-123			
<b>Instrument Blank (7H23013-IBL1)</b>					Prepared & Analyzed: 22-Aug-17						
Mercury	ND	0.09	0.40	ng/L							U
<b>Instrument Blank (7H23013-IBL2)</b>					Prepared & Analyzed: 22-Aug-17						
Mercury	ND	0.09	0.40	ng/L							U
<b>Instrument Blank (7H23013-IBL3)</b>					Prepared & Analyzed: 22-Aug-17						
Mercury	ND	0.09	0.40	ng/L							U
<b>Initial Cal Check (7H23013-ICV1)</b>					Prepared & Analyzed: 22-Aug-17						
Mercury	5.25	-		ng/L	5.0000		105	79-121			

**Batch F707537 - EPA 7474**

<b>Blank (F707537-BLK1)</b>					Prepared: 11-Aug-17 Analyzed: 15-Aug-17						
Mercury	ND	0.91	4.00	ng/g wet							U

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AMEC Foster Wheeler 271 Mill Road Chelmsford MA, 01824	Project: 2017 Penobscot Sediment Cores Project Number: WO-04A-030 Project Manager: Denise King	Reported: 25-Aug-17 16:26
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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
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**Batch F707537 - EPA 7474**

<b>Blank (F707537-BLK2)</b>					Prepared: 11-Aug-17 Analyzed: 15-Aug-17						
Mercury	ND	0.91	4.00	ng/g wet							U

<b>LCS (F707537-BS1)</b>					Prepared: 11-Aug-17 Analyzed: 15-Aug-17						
Mercury	75.63	8.64	38.2	ng/g wet	76.321		99.1	75-125			

<b>LCS Dup (F707537-BSD1)</b>					Prepared: 11-Aug-17 Analyzed: 15-Aug-17						
Mercury	78.42	8.21	36.3	ng/g wet	72.516		108	75-125	8.73	24	

<b>Matrix Spike (F707537-MS1)</b>					Source: 1707620-34RE1 Prepared: 11-Aug-17 Analyzed: 15-Aug-17						
Mercury	3654	163	722	ng/g dry	4518.8	29.35	80.2	71-125			

<b>Matrix Spike (F707537-MS2)</b>					Source: 1707771-04 Prepared: 11-Aug-17 Analyzed: 15-Aug-17						
Mercury	2958	82.6	365	ng/g dry	2285.5	1103	81.2	71-125			

<b>Matrix Spike Dup (F707537-MSD1)</b>					Source: 1707620-34RE1 Prepared: 11-Aug-17 Analyzed: 15-Aug-17						
Mercury	3868	150	661	ng/g dry	4140.8	29.35	92.7	71-125	14.4	24	

<b>Matrix Spike Dup (F707537-MSD2)</b>					Source: 1707771-04 Prepared: 11-Aug-17 Analyzed: 15-Aug-17						
Mercury	3060	84.9	375	ng/g dry	2347.9	1103	83.3	71-125	2.63	24	

**Batch F708322 - EPA 7474**

<b>Blank (F708322-BLK1)</b>					Prepared: 08-Aug-17 Analyzed: 15-Aug-17						
Mercury	ND	0.91	4.00	ng/g wet							U

<b>Blank (F708322-BLK2)</b>					Prepared: 08-Aug-17 Analyzed: 15-Aug-17						
Mercury	ND	0.91	4.00	ng/g wet							U

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AMEC Foster Wheeler  
271 Mill Road  
Chelmsford MA, 01824

Project: 2017 Penobscot Sediment Cores  
Project Number: WO-04A-030  
Project Manager: Denise King

Reported:  
25-Aug-17 16:26

Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch F708322 - EPA 7474

<b>LCS (F708322-BS1)</b>					Prepared: 08-Aug-17 Analyzed: 15-Aug-17						
Mercury	81.05	8.82	39.0	ng/g wet	77.973		104	75-125			
<b>LCS Dup (F708322-BSD1)</b>					Prepared: 08-Aug-17 Analyzed: 15-Aug-17						
Mercury	79.06	8.21	36.3	ng/g wet	72.556		109	75-125	4.71	24	
<b>Matrix Spike (F708322-MS1)</b>					Source: 1707771-17		Prepared: 08-Aug-17 Analyzed: 15-Aug-17				
Mercury	3217	94.9	419	ng/g dry	2625.7	900.8	88.2	71-125			
<b>Matrix Spike (F708322-MS2)</b>					Source: 1707771-21		Prepared: 08-Aug-17 Analyzed: 15-Aug-17				
Mercury	4249	145	642	ng/g dry	4020.2	574.3	91.4	71-125			
<b>Matrix Spike Dup (F708322-MSD1)</b>					Source: 1707771-17		Prepared: 08-Aug-17 Analyzed: 15-Aug-17				
Mercury	3438	104	457	ng/g dry	2864.0	900.8	88.6	71-125	0.427	24	
<b>Matrix Spike Dup (F708322-MSD2)</b>					Source: 1707771-21		Prepared: 08-Aug-17 Analyzed: 15-Aug-17				
Mercury	4041	144	635	ng/g dry	3976.3	574.3	87.2	71-125	4.75	24	

Batch F708399 - EPA 7474

<b>Blank (F708399-BLK1)</b>					Prepared: 14-Aug-17 Analyzed: 16-Aug-17						
Mercury	1.50	0.91	4.00	ng/g wet							J
<b>Blank (F708399-BLK2)</b>					Prepared: 14-Aug-17 Analyzed: 16-Aug-17						
Mercury	ND	0.91	4.00	ng/g wet							U
<b>LCS (F708399-BS1)</b>					Prepared: 14-Aug-17 Analyzed: 16-Aug-17						
Mercury	86.47	0.91	4.00	ng/g wet	80.000		108	75-125			

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AMEC Foster Wheeler 271 Mill Road Chelmsford MA, 01824	Project: 2017 Penobscot Sediment Cores Project Number: WO-04A-030 Project Manager: Denise King	Reported: 25-Aug-17 16:26
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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
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Batch F708399 - EPA 7474

<b>LCS Dup (F708399-BSD1)</b>					Prepared: 14-Aug-17 Analyzed: 16-Aug-17						
Mercury	88.99	0.91	4.00	ng/g wet	80.000		111	75-125	2.86	24	
<b>Matrix Spike (F708399-MS1)</b>					Source: 1707775-01 Prepared: 14-Aug-17 Analyzed: 16-Aug-17						
Mercury	2948	92.3	408	ng/g dry	2554.1	622.1	91.0	71-125			
<b>Matrix Spike (F708399-MS2)</b>					Source: 1707776-05 Prepared: 14-Aug-17 Analyzed: 16-Aug-17						
Mercury	3229	99.4	439	ng/g dry	2750.8	1014	80.5	71-125			
<b>Matrix Spike Dup (F708399-MSD1)</b>					Source: 1707775-01 Prepared: 14-Aug-17 Analyzed: 16-Aug-17						
Mercury	2882	91.6	405	ng/g dry	2535.0	622.1	89.1	71-125	2.11	24	
<b>Matrix Spike Dup (F708399-MSD2)</b>					Source: 1707776-05 Prepared: 14-Aug-17 Analyzed: 16-Aug-17						
Mercury	3909	107	471	ng/g dry	2950.0	1014	98.1	71-125	19.8	24	

Batch F708427 - EPA 7474

<b>Blank (F708427-BLK1)</b>					Prepared: 15-Aug-17 Analyzed: 16-Aug-17						
Mercury	ND	0.91	4.00	ng/g wet							U
<b>Blank (F708427-BLK2)</b>					Prepared: 15-Aug-17 Analyzed: 16-Aug-17						
Mercury	ND	0.91	4.00	ng/g wet							U
<b>LCS (F708427-BS1)</b>					Prepared: 15-Aug-17 Analyzed: 16-Aug-17						
Mercury	80.22	0.91	4.00	ng/g wet	80.000		100	75-125			
<b>LCS Dup (F708427-BSD1)</b>					Prepared: 15-Aug-17 Analyzed: 16-Aug-17						
Mercury	88.82	0.91	4.00	ng/g wet	80.000		111	75-125	10.2	24	

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Project: 2017 Penobscot Sediment Cores  
Project Number: WO-04A-030  
Project Manager: Denise King

Reported:  
25-Aug-17 16:26

**Quality Control Data**

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch F708427 - EPA 7474**

<b>Matrix Spike (F708427-MS1)</b>		<b>Source: 1707771-31</b>		Prepared: 15-Aug-17 Analyzed: 16-Aug-17							
Mercury	3403	93.3	412	ng/g dry	2580.7	904.7	96.8	71-125			
<b>Matrix Spike (F708427-MS2)</b>		<b>Source: 1707771-52RE1</b>		Prepared: 15-Aug-17 Analyzed: 16-Aug-17							
Mercury	1286	46.7	207	ng/g dry	1293.6	22.97	97.6	71-125			
<b>Matrix Spike Dup (F708427-MSD1)</b>		<b>Source: 1707771-31</b>		Prepared: 15-Aug-17 Analyzed: 16-Aug-17							
Mercury	3517	95.3	421	ng/g dry	2637.7	904.7	99.0	71-125	2.28	24	
<b>Matrix Spike Dup (F708427-MSD2)</b>		<b>Source: 1707771-52RE1</b>		Prepared: 15-Aug-17 Analyzed: 16-Aug-17							
Mercury	1121	47.3	209	ng/g dry	1308.2	22.97	84.0	71-125	15.0	24	

**Batch F708428 - EPA 7474**

<b>Blank (F708428-BLK1)</b>				Prepared: 15-Aug-17 Analyzed: 17-Aug-17							
Mercury	1.41	0.91	4.00	ng/g wet							J
<b>Blank (F708428-BLK2)</b>				Prepared: 15-Aug-17 Analyzed: 17-Aug-17							
Mercury	ND	0.91	4.00	ng/g wet							U
<b>LCS (F708428-BS1)</b>				Prepared: 15-Aug-17 Analyzed: 17-Aug-17							
Mercury	85.03	0.91	4.00	ng/g wet	80.000		106	75-125			
<b>LCS Dup (F708428-BSD1)</b>				Prepared: 15-Aug-17 Analyzed: 17-Aug-17							
Mercury	85.52	0.91	4.00	ng/g wet	80.000		107	75-125	0.564	24	
<b>Matrix Spike (F708428-MS1)</b>		<b>Source: 1707771-59</b>		Prepared: 15-Aug-17 Analyzed: 17-Aug-17							
Mercury	2847	72.4	320	ng/g dry	2003.9	962.0	94.1	71-125			

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AMEC Foster Wheeler 271 Mill Road Chelmsford MA, 01824	Project: 2017 Penobscot Sediment Cores Project Number: WO-04A-030 Project Manager: Denise King	Reported: 25-Aug-17 16:26
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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
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Batch F708428 - EPA 7474

<b>Matrix Spike (F708428-MS2)</b>		<b>Source: 1707771-68</b>			Prepared: 15-Aug-17 Analyzed: 17-Aug-17						
Mercury	2726	75.6	334	ng/g dry	2091.3	826.0	90.9	71-125			
<b>Matrix Spike Dup (F708428-MSD1)</b>		<b>Source: 1707771-59</b>			Prepared: 15-Aug-17 Analyzed: 17-Aug-17						
Mercury	2741	72.6	321	ng/g dry	2008.9	962.0	88.6	71-125	6.04	24	
<b>Matrix Spike Dup (F708428-MSD2)</b>		<b>Source: 1707771-68</b>			Prepared: 15-Aug-17 Analyzed: 17-Aug-17						
Mercury	2744	75.6	334	ng/g dry	2093.2	826.0	91.6	71-125	0.813	24	

Batch F708445 - EPA 7474

<b>Blank (F708445-BLK1)</b>					Prepared: 16-Aug-17 Analyzed: 18-Aug-17						
Mercury	ND	0.91	4.00	ng/g wet							U
<b>Blank (F708445-BLK2)</b>					Prepared: 16-Aug-17 Analyzed: 18-Aug-17						
Mercury	ND	0.91	4.00	ng/g wet							U
<b>LCS (F708445-BS1)</b>					Prepared: 16-Aug-17 Analyzed: 18-Aug-17						
Mercury	81.26	0.91	4.00	ng/g wet	80.000		102	75-125			
<b>LCS Dup (F708445-BSD1)</b>					Prepared: 16-Aug-17 Analyzed: 18-Aug-17						
Mercury	80.97	0.91	4.00	ng/g wet	80.000		101	75-125	0.356	24	
<b>Matrix Spike (F708445-MS1)</b>		<b>Source: 1707771-79</b>			Prepared: 16-Aug-17 Analyzed: 18-Aug-17						
Mercury	2576	70.1	310	ng/g dry	1939.9	863.0	88.3	71-125			
<b>Matrix Spike (F708445-MS2)</b>		<b>Source: 1707771-90</b>			Prepared: 16-Aug-17 Analyzed: 18-Aug-17						
Mercury	2867	83.3	368	ng/g dry	2304.7	934.7	83.8	71-125			

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AMEC Foster Wheeler  
271 Mill Road  
Chelmsford MA, 01824

Project: 2017 Penobscot Sediment Cores  
Project Number: WO-04A-030  
Project Manager: Denise King

Reported:  
25-Aug-17 16:26

**Quality Control Data**

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch F708445 - EPA 7474</b>											
<b>Matrix Spike Dup (F708445-MSD1)</b> Source: 1707771-79 Prepared: 16-Aug-17 Analyzed: 18-Aug-17											
Mercury	2536	68.7	304	ng/g dry	1901.2	863.0	88.0	71-125	0.368	24	
<b>Matrix Spike Dup (F708445-MSD2)</b> Source: 1707771-90 Prepared: 16-Aug-17 Analyzed: 18-Aug-17											
Mercury	3108	83.4	368	ng/g dry	2306.4	934.7	94.2	71-125	11.7	24	
<b>Batch F708446 - EPA 7474</b>											
<b>Blank (F708446-BLK1)</b> Prepared: 16-Aug-17 Analyzed: 18-Aug-17											
Mercury	1.91	0.91	4.00	ng/g wet							J
<b>Blank (F708446-BLK2)</b> Prepared: 16-Aug-17 Analyzed: 18-Aug-17											
Mercury	ND	0.91	4.00	ng/g wet							U
<b>LCS (F708446-BS1)</b> Prepared: 16-Aug-17 Analyzed: 18-Aug-17											
Mercury	81.61	0.91	4.00	ng/g wet	80.000		102	75-125			
<b>LCS Dup (F708446-BSD1)</b> Prepared: 16-Aug-17 Analyzed: 18-Aug-17											
Mercury	84.92	0.91	4.00	ng/g wet	80.000		106	75-125	3.97	24	
<b>Matrix Spike (F708446-MS1)</b> Source: 1707771-AA Prepared: 16-Aug-17 Analyzed: 18-Aug-17											
Mercury	3676	82.2	363	ng/g dry	2274.2	1497	95.8	71-125			
<b>Matrix Spike (F708446-MS2)</b> Source: 1707771-AH Prepared: 16-Aug-17 Analyzed: 18-Aug-17											
Mercury	3612	112	493	ng/g dry	3085.6	935.6	86.7	71-125			
<b>Matrix Spike Dup (F708446-MSD1)</b> Source: 1707771-AA Prepared: 16-Aug-17 Analyzed: 18-Aug-17											
Mercury	3702	79.7	352	ng/g dry	2205.6	1497	100	71-125	4.23	24	

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Project: 2017 Penobscot Sediment Cores  
Project Number: WO-04A-030  
Project Manager: Denise King

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25-Aug-17 16:26

**Quality Control Data**

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch F708446 - EPA 7474**

**Matrix Spike Dup (F708446-MSD2)**

Source: 1707771-AH

Prepared: 16-Aug-17 Analyzed: 18-Aug-17

Mercury	3382	107	475	ng/g dry	2973.9	935.6	82.3	71-125	5.28	24	
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**Batch F708463 - EPA 7474**

**Blank (F708463-BLK1)**

Prepared: 17-Aug-17 Analyzed: 22-Aug-17

Mercury	ND	0.91	4.00	ng/g wet							U
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**Blank (F708463-BLK2)**

Prepared: 17-Aug-17 Analyzed: 22-Aug-17

Mercury	ND	0.91	4.00	ng/g wet							U
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**LCS (F708463-BS1)**

Prepared: 17-Aug-17 Analyzed: 22-Aug-17

Mercury	83.22	9.05	40.0	ng/g wet	80.000		104	75-125			
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**LCS Dup (F708463-BSD1)**

Prepared: 17-Aug-17 Analyzed: 22-Aug-17

Mercury	85.15	9.05	40.0	ng/g wet	80.000		106	75-125	2.29	24	
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**Matrix Spike (F708463-MS1)**

Source: 1707771-AU

Prepared: 17-Aug-17 Analyzed: 22-Aug-17

Mercury	3346	113	499	ng/g dry	3124.4	672.8	85.6	71-125			
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**Matrix Spike (F708463-MS2)**

Source: 1707771-BD

Prepared: 17-Aug-17 Analyzed: 22-Aug-17

Mercury	4303	133	586	ng/g dry	3671.0	989.2	90.3	71-125			
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**Matrix Spike Dup (F708463-MSD1)**

Source: 1707771-AU

Prepared: 17-Aug-17 Analyzed: 22-Aug-17

Mercury	3368	116	510	ng/g dry	3196.2	672.8	84.3	71-125	1.48	24	
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**Matrix Spike Dup (F708463-MSD2)**

Source: 1707771-BD

Prepared: 17-Aug-17 Analyzed: 22-Aug-17

Mercury	4044	129	569	ng/g dry	3560.9	989.2	85.8	71-125	5.11	24	
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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
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Batch F708464 - EPA 7474

<b>Blank (F708464-BLK1)</b>					Prepared: 18-Aug-17 Analyzed: 22-Aug-17						
Mercury	ND	0.91	4.00	ng/g wet							U

<b>Blank (F708464-BLK2)</b>					Prepared: 18-Aug-17 Analyzed: 22-Aug-17						
Mercury	ND	0.91	4.00	ng/g wet							U

<b>LCS (F708464-BS1)</b>					Prepared: 18-Aug-17 Analyzed: 22-Aug-17						
Mercury	80.45	0.91	4.00	ng/g wet	80.000		101	75-125			

<b>LCS Dup (F708464-BSD1)</b>					Prepared: 18-Aug-17 Analyzed: 22-Aug-17						
Mercury	82.02	0.91	4.00	ng/g wet	80.000		103	75-125	1.93	24	

<b>Matrix Spike (F708464-MS1)</b>					Source: 1707771-BK		Prepared: 18-Aug-17 Analyzed: 22-Aug-17				
Mercury	4030	136	601	ng/g dry	3766.0	650.6	89.7	71-125			

<b>Matrix Spike (F708464-MS2)</b>					Source: 1707771-BY		Prepared: 18-Aug-17 Analyzed: 22-Aug-17				
Mercury	2529	98.3	434	ng/g dry	2719.5	96.76	89.4	71-125			

<b>Matrix Spike Dup (F708464-MSD1)</b>					Source: 1707771-BK		Prepared: 18-Aug-17 Analyzed: 22-Aug-17				
Mercury	3843	136	601	ng/g dry	3762.5	650.6	84.9	71-125	5.58	24	

<b>Matrix Spike Dup (F708464-MSD2)</b>					Source: 1707771-BY		Prepared: 18-Aug-17 Analyzed: 22-Aug-17				
Mercury	2761	105	464	ng/g dry	2908.9	96.76	91.6	71-125	2.38	24	

Batch F708484 - EPA 7474

<b>Blank (F708484-BLK1)</b>					Prepared: 21-Aug-17 Analyzed: 22-Aug-17						
Mercury	ND	0.91	4.00	ng/g wet							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
<b>Batch F708484 - EPA 7474</b>											
<b>Blank (F708484-BLK2)</b>											
					Prepared: 21-Aug-17 Analyzed: 22-Aug-17						
Mercury	ND	0.91	4.00	ng/g wet							U
<b>LCS (F708484-BS1)</b>											
					Prepared: 21-Aug-17 Analyzed: 22-Aug-17						
Mercury	78.79	9.05	40.0	ng/g wet	80.000		98.5	75-125			
<b>LCS Dup (F708484-BSD1)</b>											
					Prepared: 21-Aug-17 Analyzed: 22-Aug-17						
Mercury	81.70	9.05	40.0	ng/g wet	80.000		102	75-125	3.63	24	
<b>Matrix Spike (F708484-MS1)</b>											
					Source: 1707771-CD		Prepared: 21-Aug-17 Analyzed: 22-Aug-17				
Mercury	3557	173	766	ng/g dry	4800.1	162.1	70.7	71-125			QM-07
<b>Matrix Spike (F708484-MS2)</b>											
					Source: 1707771-CP		Prepared: 21-Aug-17 Analyzed: 22-Aug-17				
Mercury	3177	125	553	ng/g dry	3460.7	583.6	75.0	71-125			
<b>Matrix Spike (F708484-MS3)</b>											
					Source: 1707771-CD		Prepared: 21-Aug-17 Analyzed: 22-Aug-17				
Mercury	612.1	21.5	95.2	ng/g dry	476.74	162.1	94.4	71-125			AS
<b>Matrix Spike (F708484-MS4)</b>											
					Source: 1707771-CP		Prepared: 21-Aug-17 Analyzed: 22-Aug-17				
Mercury	1970	16.0	70.7	ng/g dry	1417.2	583.6	97.8	71-125			AS
<b>Matrix Spike Dup (F708484-MSD1)</b>											
					Source: 1707771-CD		Prepared: 21-Aug-17 Analyzed: 22-Aug-17				
Mercury	3221	157	694	ng/g dry	4345.4	162.1	70.4	71-125	0.450	24	QM-07
<b>Matrix Spike Dup (F708484-MSD2)</b>											
					Source: 1707771-CP		Prepared: 21-Aug-17 Analyzed: 22-Aug-17				
Mercury	3119	130	574	ng/g dry	3595.6	583.6	70.5	71-125	6.11	24	QM-07
<b>Matrix Spike Dup (F708484-MSD3)</b>											
					Source: 1707771-CD		Prepared: 21-Aug-17 Analyzed: 22-Aug-17				
Mercury	633.8	21.5	95.2	ng/g dry	476.74	162.1	98.9	71-125	4.72	24	AS

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AMEC Foster Wheeler  
271 Mill Road  
Chelmsford MA, 01824

Project: 2017 Penobscot Sediment Cores  
Project Number: WO-04A-030  
Project Manager: Denise King

Reported:  
25-Aug-17 16:26

Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch F708484 - EPA 7474

<b>Matrix Spike Dup (F708484-MSD4)</b>		<b>Source: 1707771-CP</b>			Prepared: 21-Aug-17 Analyzed: 22-Aug-17						
Mercury	1989	16.0	70.7	ng/g dry	1417.2	583.6	99.2	71-125	1.36	24	AS

Batch F708485 - EPA 7474

<b>Blank (F708485-BLK1)</b>		Prepared: 21-Aug-17 Analyzed: 22-Aug-17									
Mercury	ND	0.91	4.00	ng/g wet							U

<b>Blank (F708485-BLK2)</b>		Prepared: 21-Aug-17 Analyzed: 22-Aug-17									
Mercury	ND	0.91	4.00	ng/g wet							U

<b>LCS (F708485-BS1)</b>		Prepared: 21-Aug-17 Analyzed: 22-Aug-17									
Mercury	80.39	0.91	4.00	ng/g wet	80.000		100	75-125			

<b>LCS Dup (F708485-BSD1)</b>		Prepared: 21-Aug-17 Analyzed: 22-Aug-17									
Mercury	83.04	0.91	4.00	ng/g wet	80.000		104	75-125	3.25	24	

<b>Matrix Spike (F708485-MS1)</b>		<b>Source: 1707771-DA</b>			Prepared: 21-Aug-17 Analyzed: 22-Aug-17						
Mercury	2002	65.0	287	ng/g dry	1799.3	162.5	102	71-125			

<b>Matrix Spike (F708485-MS2)</b>		<b>Source: 1707810-02</b>			Prepared: 21-Aug-17 Analyzed: 22-Aug-17						
Mercury	2148	73.0	322	ng/g dry	2018.9	36.52	105	71-125			

<b>Matrix Spike Dup (F708485-MSD1)</b>		<b>Source: 1707771-DA</b>			Prepared: 21-Aug-17 Analyzed: 22-Aug-17						
Mercury	1666	60.9	269	ng/g dry	1684.3	162.5	89.2	71-125	13.6	24	

<b>Matrix Spike Dup (F708485-MSD2)</b>		<b>Source: 1707810-02</b>			Prepared: 21-Aug-17 Analyzed: 22-Aug-17						
Mercury	2018	75.9	335	ng/g dry	2100.1	36.52	94.4	71-125	10.3	24	

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AMEC Foster Wheeler  
271 Mill Road  
Chelmsford MA, 01824

Project: 2017 Penobscot Sediment Cores  
Project Number: WO-04A-030  
Project Manager: Denise King

Reported:  
25-Aug-17 16:26

Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch F708368 - EFGS-019 Solids Analysis

<b>Duplicate (F708368-DUP1)</b>		<b>Source: 1707620-34</b>			Prepared: 10-Aug-17 Analyzed: 14-Aug-17						
% Solids	19.9	0.1	0.1	% by Weight		20.7			3.94	10	O-04

<b>Duplicate (F708368-DUP2)</b>		<b>Source: 1707771-17</b>			Prepared: 10-Aug-17 Analyzed: 14-Aug-17						
% Solids	32.3	0.1	0.1	% by Weight		33.0			2.14	10	O-04

Batch F708369 - EFGS-019 Solids Analysis

<b>Duplicate (F708369-DUP1)</b>		<b>Source: 1707771-31</b>			Prepared: 10-Aug-17 Analyzed: 14-Aug-17						
% Solids	30.9	0.1	0.1	% by Weight		34.1			9.85	10	O-04

<b>Duplicate (F708369-DUP2)</b>		<b>Source: 1707771-04</b>			Prepared: 10-Aug-17 Analyzed: 14-Aug-17						
% Solids	40.2	0.1	0.1	% by Weight		40.2			0.00	10	O-04

Batch F708370 - EFGS-019 Solids Analysis

<b>Duplicate (F708370-DUP1)</b>		<b>Source: 1707771-52</b>			Prepared: 11-Aug-17 Analyzed: 14-Aug-17						
% Solids	65.7	0.1	0.1	% by Weight		66.5			1.21	10	O-04

<b>Duplicate (F708370-DUP2)</b>		<b>Source: 1707771-68</b>			Prepared: 11-Aug-17 Analyzed: 14-Aug-17						
% Solids	43.5	0.1	0.1	% by Weight		43.4			0.230	10	O-04

Batch F708371 - EFGS-019 Solids Analysis

<b>Duplicate (F708371-DUP1)</b>		<b>Source: 1707771-79</b>			Prepared: 11-Aug-17 Analyzed: 16-Aug-17						
% Solids	45.4	0.1	0.1	% by Weight		45.0			0.885	10	O-04

Eurofins Frontier Global Sciences, Inc.

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AMEC Foster Wheeler  
271 Mill Road  
Chelmsford MA, 01824

Project: 2017 Penobscot Sediment Cores  
Project Number: WO-04A-030  
Project Manager: Denise King

Reported:  
25-Aug-17 16:26

**Quality Control Data**

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch F708371 - EFGS-019 Solids Analysis**

<b>Duplicate (F708371-DUP2)</b>		<b>Source: 1707771-90</b>			Prepared: 11-Aug-17 Analyzed: 16-Aug-17						
% Solids	40.9	0.1	0.1	% by Weight		40.3			1.48	10	O-04

**Batch F708372 - EFGS-019 Solids Analysis**

<b>Duplicate (F708372-DUP1)</b>		<b>Source: 1707771-AH</b>			Prepared: 11-Aug-17 Analyzed: 14-Aug-17						
% Solids	28.4	0.1	0.1	% by Weight		28.5			0.351	10	O-04

<b>Duplicate (F708372-DUP2)</b>		<b>Source: 1707771-AU</b>			Prepared: 11-Aug-17 Analyzed: 14-Aug-17						
% Solids	28.9	0.1	0.1	% by Weight		27.1			6.43	10	O-04

**Batch F708384 - EFGS-019 Solids Analysis**

<b>Duplicate (F708384-DUP1)</b>		<b>Source: 1707771-BK</b>			Prepared: 11-Aug-17 Analyzed: 14-Aug-17						
% Solids	25.3	0.1	0.1	% by Weight		25.2			0.396	10	O-04

<b>Duplicate (F708384-DUP2)</b>		<b>Source: 1707771-BY</b>			Prepared: 11-Aug-17 Analyzed: 14-Aug-17						
% Solids	31.6	0.1	0.1	% by Weight		31.4			0.635	10	O-04

**Batch F708404 - EFGS-019 Solids Analysis**

<b>Duplicate (F708404-DUP1)</b>		<b>Source: 1707771-CD</b>			Prepared: 14-Aug-17 Analyzed: 16-Aug-17						
% Solids	20.1	0.1	0.1	% by Weight		19.4			3.54	10	O-04

<b>Duplicate (F708404-DUP2)</b>		<b>Source: 1708086-01</b>			Prepared: 14-Aug-17 Analyzed: 16-Aug-17						
% Solids	15.2	0.1	0.1	% by Weight		14.9			1.99	10	O-04

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AMEC Foster Wheeler  
271 Mill Road  
Chelmsford MA, 01824

Project: 2017 Penobscot Sediment Cores  
Project Number: WO-04A-030  
Project Manager: Denise King

Reported:  
25-Aug-17 16:26

Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch F708405 - EFGS-019 Solids Analysis

<b>Duplicate (F708405-DUP1)</b>		<b>Source: 1708151-22</b>			Prepared: 14-Aug-17 Analyzed: 16-Aug-17						
% Solids	23.7	0.1	0.1	% by Weight		23.6			0.423	10	O-04
<b>Duplicate (F708405-DUP2)</b>		<b>Source: 1708151-42</b>			Prepared: 14-Aug-17 Analyzed: 16-Aug-17						
% Solids	41.3	0.1	0.1	% by Weight		41.2			0.242	10	O-04

Batch F708406 - EFGS-019 Solids Analysis

<b>Duplicate (F708406-DUP1)</b>		<b>Source: 1708151-61</b>			Prepared: 14-Aug-17 Analyzed: 17-Aug-17						
% Solids	37.9	0.1	0.1	% by Weight		37.1			2.13	10	O-04
<b>Duplicate (F708406-DUP2)</b>		<b>Source: 1708154-02</b>			Prepared: 14-Aug-17 Analyzed: 17-Aug-17						
% Solids	24.7	0.1	0.1	% by Weight		24.0			2.87	10	O-04

Batch F708407 - EFGS-019 Solids Analysis

<b>Duplicate (F708407-DUP1)</b>		<b>Source: 1707810-02</b>			Prepared: 14-Aug-17 Analyzed: 16-Aug-17						
% Solids	45.6	0.1	0.1	% by Weight		44.6			2.22	10	O-04
<b>Duplicate (F708407-DUP2)</b>		<b>Source: 1708155-05</b>			Prepared: 14-Aug-17 Analyzed: 16-Aug-17						
% Solids	38.7	0.1	0.1	% by Weight		38.7			0.00	10	O-04

Batch F708447 - EFGS-019 Solids Analysis

<b>Duplicate (F708447-DUP1)</b>		<b>Source: 1708151-26</b>			Prepared: 16-Aug-17 Analyzed: 18-Aug-17						
% Solids	22.8	0.1	0.1	% by Weight		26.1			13.5	10	O-04, Z-01

Eurofins Frontier Global Sciences, Inc.

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AMEC Foster Wheeler 271 Mill Road Chelmsford MA, 01824	Project: 2017 Penobscot Sediment Cores Project Number: WO-04A-030 Project Manager: Denise King	Reported: 25-Aug-17 16:26
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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
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Batch F708447 - EFGS-019 Solids Analysis

<b>Duplicate (F708447-DUP2)</b>		<b>Source: 1708151-35</b>			Prepared: 16-Aug-17 Analyzed: 18-Aug-17						
% Solids	41.4	0.1	0.1	% by Weight		41.0			0.971	10	O-04

Eurofins Frontier Global Sciences, Inc.

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AMEC Foster Wheeler  
 271 Mill Road  
 Chelmsford MA, 01824

Project: 2017 Penobscot Sediment Cores  
 Project Number: WO-04A-030  
 Project Manager: Denise King

**Reported:**  
 25-Aug-17 16:26

**Notes and Definitions**

- Z-01 RPD>10% due to %TS being <25% on the duplicate sample; QA approved. CLC 8/21/17
- 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-08 The RPD value for the MS/MSD was outside of acceptance limits. Batch QC acceptable based on matrix duplicate and/or LCS/LCSD RPD values within control limits.
- 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.
- O-04 This sample was analyzed outside of the recommended holding time.
- J The result is an estimated concentration.
- 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).
- AS This MS and/or MSD is an analytical spike and/or an analytical spike duplicate.
- 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





Frontier Global Sciences

**Total Solids Dataset Cover Page**

**Dataset ID:** TS170810-2  
**Batch ID:** F708368  
**Work Order(s):** 1707737, 1707771

**Analyst:** CLC  
**Prep. Date:** 8/10/2017

**Analytical Issues/Explanations:**

QUALITY ASSURANCE  
PEER-REVIEWED

INITIALS: PC 8/14/17

Preparation Date: Aug 10, 2017

Batch #: 2

Analyst: CLC

Batch ID: F708368

Work Order(s): 1707737, 1707771

Pan ID	Sample ID	Pan Wt (g)	Pan + Sample Wet (g)	Wet Sample (g)	Pan + Sample Dry (g)	Dry Sample (g)	% TS	Notes
1	1707737-06	1.0240	6.4540	5.4300	2.3280	1.3040	24.0%	
2	1707737-07	1.0220	6.0540	5.0320	1.9280	0.9060	18.0%	
3	1707737-08	1.0130	6.9490	5.9360	2.4460	1.4330	24.1%	
4	1707737-09	0.9890	6.8370	5.8480	2.8610	1.8720	32.0%	
5	1707737-10	1.0380	6.3070	5.2690	2.6230	1.5850	30.1%	
6	1707737-11	1.0570	6.5730	5.5160	2.0540	0.9970	18.1%	
7	1707737-12	1.0410	6.4270	5.3860	2.1130	1.0720	19.9%	
8	1707737-13	1.0320	6.2110	5.1790	1.7360	0.7040	13.6%	
9	1707737-14	1.0690	6.5740	5.5050	2.0230	0.9540	17.3%	
10	1707771-32	1.0310	6.2810	5.2500	2.9140	1.8830	35.9%	
11	1707771-33	1.0170	6.5640	5.5470	2.3290	1.3120	23.7%	
12	1707771-34	0.9810	6.1130	5.1320	2.3800	1.3990	27.3%	
13	1707620-34	1.0750	6.4870	5.4120	2.1940	1.1190	20.7%	
14	1707620-34MD	1.0840	6.4460	5.3620	2.1500	1.0660	19.9%	3.9%
15	1707771-05	1.0320	7.5670	6.5350	2.9290	1.8970	29.0%	
16	1707771-06	1.0390	6.1630	5.1240	2.8090	1.7700	34.5%	
17	1707771-07	1.0620	6.7340	5.6720	2.8840	1.8220	32.1%	
18	1707771-08	1.0260	6.4390	5.4130	2.9370	1.9110	35.3%	
19	1707771-35	1.0750	6.6740	5.5990	2.8200	1.7450	31.2%	
20	1707771-36	1.0930	6.3940	5.3010	3.0950	2.0020	37.8%	
21	1707771-17	1.1000	6.2620	5.1620	2.8010	1.7010	33.0%	
22	1707771-17MD	1.0530	6.2520	5.1990	2.7340	1.6810	32.3%	1.9%

Remote Lab Total Solids Logbook

Lab Technician(s): CC Batch: F708368 Date: 8/10/17 Page 1 of 1 <sup>2 3</sup>  
 Thermometer #: 1204041425<sup>2</sup> Oven #: 12 Actual temperature: 104.0 (Range 103-105°C) <sup>ccc 8/10/17</sup>  
 Balance #<sup>1</sup>: 6 Start time: 10:45 <sup>8/10/17</sup> End time<sup>2</sup>: 9:45 <sup>8/10/17</sup> Time re-weighed<sup>3</sup>: 10:00  
 Client(s)/WO#: 1707737, 1707771

Sample ID	Pan #	Pan (g)	Pan + Wet Sample (g)	Pan + Dry Sample (g)	Notes
1707737-06	F1	1.024	6.454	2.328	
1707737-07	F2	1.022	6.054	1.928	
1707737-08	F3	1.013	6.949	2.446	
1707737-09	F4	0.989	6.837	2.861	
1707737-10	F5	1.038	6.307	2.623	
1707737-11	F6	1.057	6.573	2.054	
1707737-12	F7	1.041	6.427	2.113	
1707737-13	F8	1.032	6.211	1.736	
1707737-14	F9	1.069	6.574	2.023	
<del>1707771-37</del> <del>1707771-01</del>	F10	1.031	6.281	2.914	
<del>1707771-33</del> <del>1707771-02</del>	F11	1.017	6.564	2.329	
<del>1707771-34</del> <del>1707771-03</del>	F12	0.981	6.113 <sup>cc 8/10/17</sup>	2.380	Container D
<del>1707771-34</del> <del>1707771-04</del>	F13	<del>1.075</del> 1.054	<del>6.487</del> 6.739	2.194	Container D <sup>ccc 8/10/17</sup>
F708368-DUP1	F14	<del>1.084</del> 1.009	<del>6.446</del> 6.820	2.150	SRC: <del>1707771-04</del> <sup>ccc 8/10/17</sup>
1707771-05	F15	1.032	7.567	2.929	
1707771-06	F16	1.039	6.163	2.809	Container D
1707771-07	F17	1.062	6.734	2.884	
1707771-08	F18	1.026	6.439	2.937	
<del>1707771-35</del> <del>1707771-09</del>	F19	1.075	6.674	2.820	
<del>1707771-36</del> <del>1707771-10</del>	F20	1.093	6.394	3.095	Cont. D
1707771-17	F21	1.100	6.262	2.801	
F708368-DUP2	F22	1.053	6.252	2.734	SRC: 1707771-17

Comments:

cc 8/10/17

<sup>1</sup>The same balance must be used to weight samples before and after ovening.

<sup>2</sup>Samples must be ovened over 12 hours.

<sup>3</sup>Samples must be re-weighed within 30 minutes of oven cool down.

PREPARATION BENCH SHEET

F708368

Eurofins Frontier Global Sciences, Inc.

Matrix: Soil/Sediment

Prepared using: AFS - EFGS-019 Solids Analysis

Prepared: 8/10/2017

Lab Number	Sample ID and Source Sample	Initial (g)	Final (g)	Spike1 ID	$\mu$ l Spike1	Spike2 ID	$\mu$ l Spike2	Extraction Comments
F708368-DUP1	Duplicate [1707620-34]	5	5					
F708368-DUP2	Duplicate [1707771-17]	5	5					

Standard ID(s):

Description:

Expiration:

**PREPARATION BENCH SHEET**

F708368

**Eurofins Frontier Global Sciences, Inc.**

**Matrix: Soil/Sediment**

**Prepared using: AFS - EFGS-019 Solids Analysis**

**Prepared: 8/10/2017**

Lab Number	Sample ID	Initial (g)	Final (g)	QC Sample	Sample Specs.	Raw Data	Sample Comments	Analysis Comments
1707620-34	W-MM-13_071917_SED_05-10	5	5	QC	-	-	MS/MSD	
1707737-06	MMSW-C_SW_072617_SED_05-10	5	5	-	-	-		
1707737-07	MMSE-1_N2_072517_SED_03-05	5	5	-	-	-		
1707737-08	MMSE-1_N2_072517_SED_05-10	5	5	-	-	-		
1707737-09	MMSW-C_S_072517_SED_03-05	5	5	-	-	-		
1707737-10	MMSW-C_S_072517_SED_05-10	5	5	-	-	-		
1707737-11	MMSW-C_SW_072517_SED_00-01	5	5	-	-	-		
1707737-12	MMSW-C_SW_072517_SED_01-03	5	5	-	-	-	Original jar broken, created container D	
1707737-13	W-21-UM-West-A_072517_SED_00-01	5	5	-	-	-		
1707737-14	W-21-UM-West-A_072517_SED_01-03	5	5	-	-	-		
1707771-05	OR-01-02_072417_SED_00-01	5	5	-	-	-		
1707771-06	OR-01-02_072417_SED_01-03	5	5	-	-	-		
1707771-07	OR-01-03_072417_SED_00-01	5	5	-	-	-		
1707771-08	OR-01-03_072417_SED_01-03	5	5	-	-	-		
1707771-17	OR-02-02_072417_SED_00-01	5	5	QC	-	-	MS/MSD	
1707771-32	W-27-INTA_072417_SED_01-03	5	5	-	-	-		
1707771-33	W-MM-06_072417_SED_00-01	5	5	-	-	-		
1707771-34	W-MM-06_072417_SED_01-03	5	5	-	-	-		
1707771-35	W-MM-19_072417_SED_00-01	5	5	-	-	-		



PREPARATION BENCH SHEET

F708368

Eurofins Frontier Global Sciences, Inc.

Matrix: Soil/Sediment

Prepared using: AFS - EFGS-019 Solids Analysis

Prepared: 8/10/2017

1707771-36	W-MM-19_072417_SED_01-03	5	5	-	-	-		
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# Failing Data Report -

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


  
 Analyst Reviewed By \_\_\_\_\_ Date 8/14/17


  
 Peer Reviewed By \_\_\_\_\_ Date 8/14/17

### Peer Review Checklist for Total Solids and Density (SOP5133)

Analyst: CLC

Date: 8/14/17

Reviewer: RLR

Date: 8/14/14

WO #: 1707737, 1707771

Batch #: F708368

Dataset ID: B170810-2

Reviewer Initials: RLR

**General Comments/Re-run requirements:**

Select	SOP	Method	Matrix
<input checked="" type="checkbox"/>	SOP5133	TS	S/T
<input type="checkbox"/>	SOP5133	Density	Liquids

Initials	SOP Date
<u>CLC</u>	<u>12/20/16</u>

Reviewer Initials: RLR

**1. Total Solids**

- A. Check for transcription errors from Bencsheet/Raw Data
  - (i) Do sample ID(s) match?
  - (ii) Do masses/volumes match?
  - (iii) Are the analyst name, dataset ID, and preparation date listed?
  - (iv) Does the LIMS bencsheet prep date match the actual prep date?
- B. Does the batch include 1 MD/MT per 10 client samples?
- C. MD RPD/MT RSD ≤ 10%
- D. Are qualifiers, O-04 and O-09, included for samples analyzed out of hold time?

Density Only - NA this section			
<input checked="" type="checkbox"/>	DONE		<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	YES	<input type="checkbox"/> NO	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	YES	<input type="checkbox"/> NO	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	YES	<input type="checkbox"/> NO	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	YES	<input type="checkbox"/> NO	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	YES	<input type="checkbox"/> NO	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	PASS	<input type="checkbox"/> FAIL	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	YES	<input type="checkbox"/> NO	<input type="checkbox"/> N/A <input checked="" type="checkbox"/>

**2. Density**

- A. Check for transcription errors from Bencsheet/Raw Data
  - (i) Do sample ID(s) match?
  - (ii) Do masses/volumes match?
  - (iii) Are the analyst name, dataset ID, and preparation date listed?
  - (iv) Does the LIMS bencsheet prep date match the actual prep date?
  - (v) Volume (if other than 1 mL): \_\_\_\_\_ Can the calculated result be reproduced?

Total Solids Only - NA this section			
<input type="checkbox"/>	DONE		<input checked="" type="checkbox"/>
<input type="checkbox"/>	YES	<input type="checkbox"/> NO	<input checked="" type="checkbox"/>
<input type="checkbox"/>	YES	<input type="checkbox"/> NO	<input checked="" type="checkbox"/>
<input type="checkbox"/>	YES	<input type="checkbox"/> NO	<input checked="" type="checkbox"/>
<input type="checkbox"/>	YES	<input type="checkbox"/> NO	<input checked="" type="checkbox"/>
<input type="checkbox"/>	YES	<input type="checkbox"/> NO	<input checked="" type="checkbox"/>
<input type="checkbox"/>	YES	<input type="checkbox"/> NO	<input type="checkbox"/> N/A <input checked="" type="checkbox"/>



**Total Solids Dataset Cover Page**

**Dataset ID:** TS170810-3  
**Batch ID:** F708369  
**Work Order(s):** 1707771

**Analyst:** CLC  
**Prep. Date:** 8/10/2017

**Analytical Issues/Explanations:**

QUALITY ASSURANCE  
PEER-REVIEWED

INITIALS: PC 8/14/17

Preparation Date: Aug 10, 2017

Batch #: 3

Analyst: CLC

Batch ID: F708369

Work Order(s): 1707771

Pan ID	Sample ID	Pan Wt (g)	Pan + Sample Wet (g)	Wet Sample (g)	Pan + Sample Dry (g)	Dry Sample (g)	% TS	Notes
1	1707771-30 ✓	1.0190 ✓	6.0690 ✓	5.0500	2.4540 ✓	1.4350	28.4%	
2	1707771-12 ✓	1.0340 ✓	6.3800 ✓	5.3460	3.6110 ✓	2.5770	48.2%	
3	1707771-13 ✓	1.0250 ✓	6.3050 ✓	5.2800	2.2010 ✓	1.1760	22.3%	
4	1707771-14 ✓	1.0500 ✓	6.4850 ✓	5.4350	2.9020 ✓	1.8520	34.1%	
5	1707771-15 ✓	1.0390 ✓	6.9540 ✓	5.9150	3.0320 ✓	1.9930	33.7%	
6	1707771-16 ✓	0.9980 ✓	6.2240 ✓	5.2260	2.7580 ✓	1.7600	33.7%	
7	1707771-18 ✓	1.0200 ✓	6.3110 ✓	5.2910	3.2170 ✓	2.1970	41.5%	
8	1707771-19 ✓	1.0150 ✓	6.9470 ✓	5.9320	2.3480 ✓	1.3330	22.5%	
9	1707771-20 ✓	1.0390 ✓	6.5410 ✓	5.5020	2.3690 ✓	1.3300	24.2%	
10	1707771-21 ✓	1.0340 ✓	6.5700 ✓	5.5360	2.3010 ✓	1.2670	22.9%	
11	1707771-22 ✓	1.0340 ✓	6.5990 ✓	5.5650	2.3540 ✓	1.3200	23.7%	
12	1707771-23 ✓	0.9690 ✓	6.2410 ✓	5.2720	2.2430 ✓	1.2740	24.2%	
13	1707771-24 ✓	1.0000 ✓	6.1150 ✓	5.1150	2.3790 ✓	1.3790	27.0%	
14	1707771-25 ✓	1.0240 ✓	6.1710 ✓	5.1470	2.2210 ✓	1.1970	23.3%	
15	1707771-26 ✓	1.0550 ✓	6.8360 ✓	5.7810	2.8920 ✓	1.8370	31.8%	
16	1707771-27 ✓	1.0150 ✓	6.9900 ✓	5.9750	2.5860 ✓	1.5710	26.3%	
17	1707771-28 ✓	0.9810 ✓	6.8990 ✓	5.9180	2.6360 ✓	1.6550	28.0%	
18	1707771-29 ✓	1.0650 ✓	6.4160 ✓	5.3510	2.5590 ✓	1.4940	27.9%	
19	1707771-31 ✓	1.0470 ✓	6.5180 ✓	5.4710	2.9120 ✓	1.8650	34.1%	
20	1707771-31MD ✓	1.0340 ✓	6.5050 ✓	5.4710	2.7240 ✓	1.6900	30.9%	9.8%
21	1707771-04 ✓	1.0540 ✓	6.7390 ✓	5.6850	3.3400 ✓	2.2860	40.2%	
22	1707771-04MD ✓	1.0090 ✓	6.8200 ✓	5.8110	3.3460 ✓	2.3370	40.2%	0.0%

### Remote Lab Total Solids Logbook

Lab Technician(s): CIC Batch: F708369 Date: 8/10/17 Page 3 of 3  
 Thermometer #: 120405142 TL Oven #: 12 Actual temperature: 104.0 (Range 103-105°C)  
 Balance #1: 6 Start time: 9:45 End time<sup>2</sup>: 9:45 Time re-weighed<sup>3</sup>: 10:13  
 Client(s)/WO#: 1707771

Sample ID	Pan #	Pan (g)	Pan + Wet Sample (g)	Pan + Dry Sample (g)	Notes
1707771-130	G1	1.019	6.069	2.454	Same sample as 1707771-28 and 29
1707771-12	G2	1.034	6.380	3.611	
1707771-13	G3	1.025	6.305	2.201	
1707771-14	G4	1.050	6.425	2.902	} same sample
1707771-15	G5	1.039	6.954	3.032	
1707771-16	G6	0.998	6.224	2.758	
1707771-18	G7	1.020	6.311	3.217	
1707771-19	G8	1.0135	6.947	2.348	
1707771-20	G9	1.039	6.541	2.369	
1707771-21	G10	1.034	6.570	2.301	} Same Sample
1707771-22	G11	1.034	6.599	2.354	
1707771-23	G12	0.969	6.241	2.243	
1707771-24	G13	1.000	6.115	2.379	
1707771-25	G14	1.024	6.171	2.221	
1707771-26	G15	1.055	6.836	2.892	
1707771-27	G16	1.015	6.990	2.586	
1707771-28	G17	0.981	6.899	2.636	} same sample + 1707771-30
1707771-29	G18	1.065	6.416	2.559	
1707771-31	G19	1.047	6.518	2.912	
F708369-DUP1	G20	1.034	6.505	2.724	Src: 1707771-31
1707771-52	G21	1.054	6.739	3.340	Container D
F708369-DUP2	G22	1.009	6.820	3.346	Src: 1707771-52
CIC 8/10/17					

Comments:

<sup>1</sup>The same balance must be used to weight samples before and after ovening.  
<sup>2</sup>Samples must be ovened over 12 hours.  
<sup>3</sup>Samples must be re-weighed within 30 minutes of oven cool down.

PREPARATION BENCH SHEET

F708369

Eurofins Frontier Global Sciences, Inc.

Matrix: Soil/Sediment

Prepared using: AFS - EFGS-019 Solids Analysis

Prepared: 8/10/2017

Lab Number	Sample ID and Source Sample	Initial (g)	Final (g)	Spike1 ID	$\mu$ l Spike1	Spike2 ID	$\mu$ l Spike2	Extraction Comments
F708369-DUP1	Duplicate [1707771-31]	5	5					
F708369-DUP2	Duplicate [1707771-04]	5	5					

Standard ID(s):

Description:

Expiration:

**PREPARATION BENCH SHEET**

F708369

**Eurofins Frontier Global Sciences, Inc.**

**Matrix: Soil/Sediment**

**Prepared using: AFS - EFGS-019 Solids Analysis**

**Prepared: 8/10/2017**

Lab Number	Sample ID	Initial (g)	Final (g)	QC Sample	Sample Specs.	Raw Data	Sample Comments	Analysis Comments
1707771-04	OR-01-01_072417_SED_01-03	5	5	QC	-	-	MS/MSD	
1707771-12	OR-01-05_072417_SED_01-03	5	5	-	-	-		
1707771-13	OR-02-01_072417_SED_00-01	5	5	-	-	-		
1707771-14	OR-02-01_072417_SED_01-03_R1	5	5	-	-	-		
1707771-15	OR-02-01_072417_SED_01-03_R2	5	5	-	-	-		
1707771-16	OR-02-01_072417_SED_01-03_R3	5	5	-	-	-		
1707771-18	OR-02-02_072417_SED_01-03	5	5	-	-	-		
1707771-19	W-103-A_072417_SED_00-01	5	5	-	-	-		
1707771-20	W-103-A_072417_SED_01-03	5	5	-	-	-		
1707771-21	W-103-B_072417_SED_00-01_R1	5	5	-	-	-		
1707771-22	W-103-B_072417_SED_00-01_R2	5	5	-	-	-		
1707771-23	W-103-B_072417_SED_00-01_R3	5	5	-	-	-		
1707771-24	W-103-B_072417_SED_01-03	5	5	-	-	-		
1707771-25	W-105-A_072417_SED_00-01	5	5	-	-	-		
1707771-26	W-105-A_072417_SED_01-03	5	5	-	-	-		
1707771-27	W-14-C_072417_SED_00-01	5	5	-	-	-		
1707771-28	W-14-C_072417_SED_01-03_R1	5	5	-	-	-		
1707771-29	W-14-C_072417_SED_01-03_R2	5	5	-	-	-		
1707771-30	W-14-C_072417_SED_01-03_R3	5	5	-	-	-		



PREPARATION BENCH SHEET

F708369

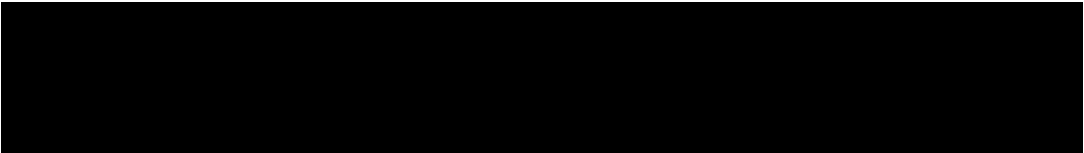
Eurofins Frontier Global Sciences, Inc.

Matrix: Soil/Sediment

Prepared using: AFS - EFGS-019 Solids Analysis

Prepared: 8/10/2017

1707771-31	W-27-INTA_072417_SED_00-01	5	5	QC	-	-	MS/MSD	
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**Failing Data Report -**

Sample ID	Analysis	Result	MRL	Dup Result	Source Result	True Value	Units	% Rec.	Rec. LCL	Rec. UCL	RPD	RPD Limit	Over Cal	Failure	Qualifier
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*Coveley*  
Analyst Reviewed By  
*8/14/17*  
Date

*[Signature]*  
Peer Reviewed By  
*8/14/17*  
Date

### Peer Review Checklist for Total Solids and Density (SOP5133)

Analyst: CLC

Date: 8/14/17

Reviewer: [Signature]

Date: 8/14/17

WO #: 1707771

Batch #: F708369

Dataset ID: TS170810-3

Reviewer Initials: [Signature]

#### General Comments/Re-run requirements:

Select	SOP	Method	Matrix
<input checked="" type="checkbox"/>	SOP5133	TS	S/T
<input type="checkbox"/>	SOP5133	Density	Liquids

Initials	SOP Date
<u>CLC</u>	<u>12/20/16</u>


Reviewer Initials: [Signature]

#### 1. Total Solids

- A. Check for transcription errors from Benchsheet/Raw Data
  - (i) Do sample ID(s) match?
  - (ii) Do masses/volumes match?
  - (iii) Are the analyst name, dataset ID, and preparation date listed?
  - (iv) Does the LIMS benchsheet prep date match the actual prep date?
- B. Does the batch include 1 MD/MT per 10 client samples?
- C. MD RPD/MT RSD ≤ 10%
- D. Are qualifiers, O-04 and O-09, included for samples analyzed out of hold time?

<input type="checkbox"/> Density Only - NA this section			
<input checked="" type="checkbox"/> DONE			<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO		<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO		<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO		<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO		<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO		<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> PASS	<input type="checkbox"/> FAIL		<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> N/A	<input checked="" type="checkbox"/>

#### 2. Density

- A. Check for transcription errors from Benchsheet/Raw Data
  - (i) Do sample ID(s) match?
  - (ii) Do masses/volumes match?
  - (iii) Are the analyst name, dataset ID, and preparation date listed?
  - (iv) Does the LIMS benchsheet prep date match the actual prep date?
  - (v) Volume (if other than 1 mL): \_\_\_\_\_ Can the calculated result be reproduced?

<input checked="" type="checkbox"/> Total Solids Only - NA this section			
<input type="checkbox"/> DONE			<input checked="" type="checkbox"/>
<input type="checkbox"/> YES	<input type="checkbox"/> NO		<input checked="" type="checkbox"/>
<input type="checkbox"/> YES	<input type="checkbox"/> NO		<input checked="" type="checkbox"/>
<input type="checkbox"/> YES	<input type="checkbox"/> NO		<input checked="" type="checkbox"/>
<input type="checkbox"/> YES	<input type="checkbox"/> NO		<input checked="" type="checkbox"/>
<input type="checkbox"/> YES	<input type="checkbox"/> NO		<input checked="" type="checkbox"/>
<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> N/A	<input checked="" type="checkbox"/>



Frontier Global Sciences

**Total Solids Dataset Cover Page**

**Dataset ID:** TS170811-1  
**Batch ID:** F708370  
**Work Order(s):** 1707771, 1708044

**Analyst:** CLC  
**Prep. Date:** 8/11/2017

**Analytical Issues/Explanations:**

QUALITY ASSURANCE  
PEER-REVIEWED

INITIALS: CLC 8/14/17

### Remote Lab Total Solids Logbook

Lab Technician(s): CLC Batch: F708370 Date: 8/14/17 Page 1 of 4

Thermometer #: 12405142 Oven #: 12 Actual temperature: 107.0 (Range 103-105°C)

Balance #<sup>1</sup>: 6 Start time: 9:45 End time<sup>2</sup>: 9:15 <sup>8/14/17</sup> Time re-weighed<sup>3</sup>: 10:24

Client(s)/WO#: 1707771, 1708044

Sample ID	Pan #	Pan (g)	Pan + Wet Sample (g)	Pan + Dry Sample (g)	Notes
1707771-37	H1	0.969	6.747	2.167	
1707771-38	H2	0.970	6.469	2.369	Container D
1707771-39	H3	0.972	6.326	2.791	} Same Sample
1707771-40	H4	1.020	6.175	2.706	
1707771-41	H5	0.969	6.047	2.669	
1707771-42	H6	1.038 <sup>6/8/17</sup>	6.700	3.161	
1707771-43	H7	1.024	6.309	2.857	
1707771-44	H8	1.041	6.495	3.237	Container D
1707771-45	H9	1.058	6.392	3.162	Container D
1707771-46	H10	1.052	6.380	3.172	Do Container D
1707771-47	H11	1.012	6.143	2.488	} Same Sample
1707771-48	H12	1.059	6.305	2.629	
1707771-49	H13	0.959	6.581	4.562	} Same Sample
1707771-50	H14	0.992	6.861	4.706	
1707771-51	H15	1.042	6.065	4.261	
1707771-52	H16	0.988	6.574	4.700	
F708370-DUP1	H17	1.015	6.951	4.917	SRC: 1707771-52
1707771-53	H18	1.004	6.759	2.207	
1707771-54	H19	1.015	6.892	2.790	
1707771-68	H20	0.999	6.031	3.181	
F708370-DUP2	H21	1.059	6.729	3.526	SRC: 1707771-68
1708044-01	H22	1.071	6.525	5.636	SRC: 170
					CLC 8/14/17

Comments:

The same balance must be used to weight samples before and after ovening.  
 Samples must be ovened over 12 hours.  
 Samples must be re-weighed within 30 minutes of oven cool down.

Preparation Date: Aug 11, 2017

Batch #: 1

Analyst: CLC

Batch ID: F708370

Work Order(s): 1707771, 1708044

Pan ID	Sample ID	Pan Wt (g)	Pan + Sample Wet (g)	Wet Sample (g)	Pan + Sample Dry (g)	Dry Sample (g)	% TS	Notes
1	1707771-37 ✓	0.9690 ✓	6.7470 ✓	5.7780	2.1670 ✓	1.1980	20.7%	
2	1707771-38 ✓	0.9700 ✓	6.4690 ✓	5.4990	2.3690 ✓	1.3990	25.4%	
3	1707771-39 ✓	0.9720 ✓	6.3260 ✓	5.3540	2.7910 ✓	1.8190	34.0%	
4	1707771-40 ✓	1.0200 ✓	6.1750 ✓	5.1550	2.7060 ✓	1.6860	32.7%	
5	1707771-41 ✓	0.9690 ✓	6.0470 ✓	5.0780	2.6690 ✓	1.7000	33.5%	
6	1707771-42 ✓	1.0360 ✓	6.7000 ✓	5.6640	3.1610 ✓	2.1250	37.5%	
7	1707771-43 ✓	1.0240 ✓	6.3090 ✓	5.2850	2.8570 ✓	1.8330	34.7%	
8	1707771-44 ✓	1.0410 ✓	6.4950 ✓	5.4540	3.2370 ✓	2.1960	40.3%	
9	1707771-45 ✓	1.0580 ✓	6.3920 ✓	5.3340	3.1620 ✓	2.1040	39.4%	
10	1707771-46 ✓	1.0520 ✓	6.3800 ✓	5.3280	3.1720 ✓	2.1200	39.8%	
11	1707771-47 ✓	1.0120 ✓	6.1430 ✓	5.1310	2.4880 ✓	1.4760	28.8%	
12	4707771-48 ✓	1.0590 ✓	6.3050 ✓	5.2460	2.6290 ✓	1.5700	29.9%	
13	1707771-49 ✓	0.9590 ✓	6.5810 ✓	5.6220	4.5620 ✓	3.6030	64.1%	
14	1707771-50 ✓	0.9920 ✓	6.8610 ✓	5.8690	4.7060 ✓	3.7140	63.3%	
15	1707771-51 ✓	1.0420 ✓	6.0650 ✓	5.0230	4.2610 ✓	3.2190	64.1%	
16	1707771-52 ✓	0.9880 ✓	6.5740 ✓	5.5860	4.7000 ✓	3.7120	66.5%	
17	1707771-52MD ✓	1.0150 ✓	6.9510 ✓	5.9360	4.9170 ✓	3.9020	65.7%	1.1%
18	1707771-53 ✓	1.0040 ✓	6.7590 ✓	5.7550	2.2070 ✓	1.2030	20.9%	
19	1707771-54 ✓	1.0150 ✓	6.8920 ✓	5.8770	2.7900 ✓	1.7750	30.2%	
20	1707771-68 ✓	0.9990 ✓	6.0310 ✓	5.0320	3.1810 ✓	2.1820	43.4%	
21	1707771-68MD ✓	1.0590 ✓	6.7290 ✓	5.6700	3.5260 ✓	2.4670	43.5%	0.3%
22	1708044-01 ✓	1.0710 ✓	6.5250 ✓	5.4540	5.6360 ✓	4.5650	83.7%	

PREPARATION BENCH SHEET

F708370

Eurofins Frontier Global Sciences, Inc.

Matrix: Soil/Sediment

Prepared using: AFS - EFGS-019 Solids Analysis

Prepared: 8/11/2017

Lab Number	Sample ID and Source Sample	Initial (g)	Final (g)	Spike1 ID	$\mu$ l Spike1	Spike2 ID	$\mu$ l Spike2	Extraction Comments
F708370-DUP1	Duplicate [1707771-52]	5	5					
F708370-DUP2	Duplicate [1707771-68]	5	5					

Standard ID(s): Description:

Expiration:

**PREPARATION BENCH SHEET**

F708370

**Eurofins Frontier Global Sciences, Inc.**

**Matrix: Soil/Sediment**

**Prepared using: AFS - EFGS-019 Solids Analysis**

**Prepared: 8/11/2017**

Lab Number	Sample ID	Initial (g)	Final (g)	QC Sample	Sample Specs.	Raw Data	Sample Comments	Analysis Comments
1707771-37	W-MM-22_072417_SED_00-01	5	5	-	-	-		
1707771-38	W-MM-22_072417_SED_01-03	5	5	-	-	-		
1707771-39	W-MM-23_072417_SED_00-01_R1	5	5	-	-	-		
1707771-40	W-MM-23_072417_SED_00-01_R2	5	5	-	-	-		
1707771-41	W-MM-23_072417_SED_00-01_R3	5	5	-	-	-		
1707771-42	W-MM-23_072417_SED_01-03	5	5	-	-	-		
1707771-43	W-MM-24_072417_SED_00-01	5	5	-	-	-		
1707771-44	W-MM-24_072417_SED_01-03_R1	5	5	-	-	-		
1707771-45	W-MM-24_072417_SED_01-03_R2	5	5	-	-	-		
1707771-46	W-MM-24_072417_SED_01-03_R3	5	5	-	-	-		
1707771-47	W-27-A_072617_SED_03-05	5	5	-	-	-		
1707771-48	W-27-A_072617_SED_05-10	5	5	-	-	-		
1707771-49	W-14-INTA_072617_SED_03-05_R1	5	5	-	-	-		
1707771-50	W-14-INTA_072617_SED_03-05_R2	5	5	-	-	-		
1707771-51	W-14-INTA_072617_SED_03-05_R3	5	5	-	-	-		
1707771-52	W-14-INTA_072617_SED_05-10	5	5	QC	-	-	MS/MSD	
1707771-53	W-MM-07_072617_SED_03-05	5	5	-	-	-		
1707771-54	W-MM-07_072617_SED_05-10	5	5	-	-	-		
1707771-68	W-104-INTA_072617_SED_05-10	5	5	QC	-	-	MS/MSD	



PREPARATION BENCH SHEET

F708370

Eurofins Frontier Global Sciences, Inc.

Matrix: Soil/Sediment

Prepared using: AFS - EFGS-019 Solids Analysis

Prepared: 8/11/2017

1708044-01	1707059-017A B-7-4.5-5	5	5	-	-	-		
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**Failing Data Report -**

Sample ID	Analysis	Result	MRL	Dup Result	Source Result	True Value	Units	% Rec.	Rec. LCL	Rec. UCL	RPD	RPD Limit	Over Cal	Failure	Qualifier
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Courtney Welch 8/14/17  
Analyst Reviewed By Date

J. L. H. 8/14/17  
Peer Reviewed By Date

Peer Review Checklist for Total Solids and Density (SOP5133)

Analyst: CLC Date: 8/14/17 Reviewer: PLC Date: 8/14/17

WO #: 1707771, 1708044 Batch #: F708370 Dataset ID: TS170811-1

Reviewer Initials: PLC

General Comments/Re-run requirements:

Select	SOP	Method	Matrix
<input checked="" type="checkbox"/>	SOP5133	TS	S/T
<input type="checkbox"/>	SOP5133	Density	Liquids

Initials	SOP Date
<u>CLC</u>	<u>12/20/16</u>
<input type="checkbox"/>	<input type="checkbox"/>

Reviewer Initials: PLC

1. Total Solids

- A. Check for transcription errors from Benchsheet/Raw Data
  - (i) Do sample ID(s) match?
  - (ii) Do masses/volumes match?
  - (iii) Are the analyst name, dataset ID, and preparation date listed?
  - (iv) Does the LIMS benchsheet prep date match the actual prep date?
- B. Does the batch include 1 MD/MT per 10 client samples?
- C. MD RPD/MT RSD ≤ 10%
- D. Are qualifiers, O-04 and O-09, included for samples analyzed out of hold time?

<input type="checkbox"/> Density Only - NA this section			
<input checked="" type="checkbox"/> DONE			<input checked="" type="checkbox"/>
<input type="checkbox"/> YES	<input type="checkbox"/> NO		<input checked="" type="checkbox"/>
<input type="checkbox"/> YES	<input type="checkbox"/> NO		<input checked="" type="checkbox"/>
<input type="checkbox"/> YES	<input type="checkbox"/> NO		<input checked="" type="checkbox"/>
<input type="checkbox"/> YES	<input type="checkbox"/> NO		<input checked="" type="checkbox"/>
<input type="checkbox"/> YES	<input type="checkbox"/> NO		<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> PASS	<input type="checkbox"/> FAIL		<input checked="" type="checkbox"/>
<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> N/A	<input checked="" type="checkbox"/>

2. Density

- A. Check for transcription errors from Benchsheet/Raw Data
  - (i) Do sample ID(s) match?
  - (ii) Do masses/volumes match?
  - (iii) Are the analyst name, dataset ID, and preparation date listed?
  - (iv) Does the LIMS benchsheet prep date match the actual prep date?
  - (v) Volume (if other than 1 mL): \_\_\_\_\_ Can the calculated result be reproduced?

<input checked="" type="checkbox"/> Total Solids Only - NA this section			
<input type="checkbox"/> DONE			<input checked="" type="checkbox"/>
<input type="checkbox"/> YES	<input type="checkbox"/> NO		<input checked="" type="checkbox"/>
<input type="checkbox"/> YES	<input type="checkbox"/> NO		<input checked="" type="checkbox"/>
<input type="checkbox"/> YES	<input type="checkbox"/> NO		<input checked="" type="checkbox"/>
<input type="checkbox"/> YES	<input type="checkbox"/> NO		<input checked="" type="checkbox"/>
<input type="checkbox"/> YES	<input type="checkbox"/> NO		<input checked="" type="checkbox"/>
<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> N/A	<input checked="" type="checkbox"/>



Frontier Global Sciences

**Total Solids Dataset Cover Page**

**Dataset ID:** TS170811-2  
**Batch ID:** F708371  
**Work Order(s):** 1707771

**Analyst:** CLC  
**Prep. Date:** 8/11/2017

**Analytical Issues/Explanations:**

QUALITY ASSURANCE  
PEER - REVIEWED  
INITIALS: DM 8/14/17

Preparation Date: Aug 11, 2017

Batch #: 2

Analyst: CLC

Batch ID: F708371

Work Order(s): 1707771

Pan ID	Sample ID	Pan Wt (g)	Pan + Sample Wet (g)	Wet Sample (g)	Pan + Sample Dry (g)	Dry Sample (g)	% TS	Notes
1	1707771-55	0.9630	6.2360	5.2730	3.5570	2.5940	49.2%	
2	1707771-56	1.0130	6.5440	5.5310	3.6870	2.6740	48.3%	
3	1707771-57	1.0370	6.3670	5.3300	3.3150	2.2780	42.7%	
4	1707771-58	1.0390	6.2940	5.2550	3.2710	2.2320	42.5%	
5	1707771-59	1.0010	6.7700	5.7690	3.4210	2.4200	41.9%	
6	1707771-60	1.0020	6.2390	5.2370	2.9200	1.9180	36.6%	
7	1707771-61	1.0000	6.3600	5.3600	2.9500	1.9500	36.4%	
8	1707771-62	1.0160	6.4320	5.4160	2.9780	1.9620	36.2%	
9	1707771-63	1.0170	6.7190	5.7020	2.2760	1.2590	22.1%	
10	1707771-64	1.0450	6.5330	5.4880	2.6120	1.5670	28.6%	
11	1707771-65	1.0550	6.1350	5.0800	2.9690	1.9140	37.7%	
12	1707771-66	1.0430	6.1580	5.1150	2.9970	1.9540	38.2%	
13	1707771-67	1.0710	6.9480	5.8770	3.2990	2.2280	37.9%	
14	1707771-69	1.0580	6.5040	5.4460	2.4530	1.3950	25.6%	
15	1707771-70	1.0680	6.8780	5.8100	2.5590	1.4910	25.7%	
16	1707771-71	1.0210	6.8990	5.8780	2.4410	1.4200	24.2%	
17	1707771-72	1.0370	6.3450	5.3080	2.5060	1.4690	27.7%	
18	1707771-73	1.0650	6.8840	5.8190	2.4890	1.4240	24.5%	
19	1707771-79	1.0740	6.3970	5.3230	3.4710	2.3970	45.0%	
20	1707771-79MD	1.0990	6.2330	5.1340	3.4310	2.3320	45.4%	
21	1707771-90	1.0280	6.7370	5.7090	3.3280	2.3000	40.3%	0.9%
22	1707771-90MD	1.0000	6.8100	5.8100	3.3760	2.3760	40.9%	1.5%

### Remote Lab Total Solids Logbook

Lab Technician(s): CC 1P Batch: F708371 Date: 8/14/17 Page 2 of 4  
 Thermometer #: 120405121<sup>1</sup> Oven #: 12 Actual temperature: 103.2 (Range 103-105°C)  
 Balance #<sup>1</sup>: 6 Start time: 1455 <sup>8/14/17</sup> End time<sup>2</sup>: 9:20 <sup>8/14/17</sup> Time re-weighed<sup>3</sup>: 9:35 <sup>8/14/17</sup>  
 Client(s)/WO#: 1707771 9:10 <sup>8/14/17</sup> 9:25 <sup>8/14/17</sup>

Sample ID	Pan #	Pan (g)	Pan + Wet Sample (g)	Pan + Dry Sample (g)	Notes
1707771-55	I1	0.963	6.236	3.557	
1707771-56	I2	1.013	6.544	3.687	
1707771-57	I3	1.037	6.367	3.315	
1707771-58	I4	1.039	6.294	3.271	
1707771-59	I5	1.001	6.770	3.421	
1707771-60	I6	1.002	6.239	2.920	} Same Sample
1707771-61	I7	1.000	6.360	2.950	
1707771-62	I8	1.016	6.432	2.978	
1707771-63	I9	1.017	6.719	2.276	
1707771-64	I10	1.045	6.533	2.612	
1707771-65	I11	1.055	6.135	2.969	} Same Sample
1707771-66	I12	1.043	6.158	2.997	
1707771-67	I13	1.071	6.948	3.299	
1707771-69	I14	1.058	6.504	2.453	} Same Sample
1707771-70	I15	1.068	6.878	2.559	
1707771-71	I16	1.021	6.899	2.441	
1707771-72	I17	1.037	6.345	2.506	
1707771-73	I18	1.065	6.884	2.489	
1707771-79	I19	1.074	6.397	3.471	
F708371-DUP1	I20	1.099	6.233	3.431	SRC: 1707771-79
1707771-90	I21	1.028	6.737	3.328	
F708371-DUP2	I22	1.000	6.810	3.376	SRC: 1707771-90
CC 8/14/17					

Comments:

<sup>1</sup>The same balance must be used to weight samples before and after ovening.

<sup>2</sup>Samples must be ovened over 12 hours.

<sup>3</sup>Samples must be re-weighed within 30 minutes of oven cool down.

PREPARATION BENCH SHEET

F708371

Eurofins Frontier Global Sciences, Inc.

Matrix: Soil/Sediment

Prepared using: AFS - EFGS-019 Solids Analysis

Prepared: 8/11/2017

Lab Number	Sample ID and Source Sample	Initial (g)	Final (g)	Spike1 ID	$\mu$ l Spike1	Spike2 ID	$\mu$ l Spike2	Extraction Comments
F708371-DUP1	Duplicate [1707771-79]	5	5					
F708371-DUP2	Duplicate [1707771-90]	5	5					

Standard ID(s):      Description:

Expiration:

Due Date: 8/24/2017

**PREPARATION BENCH SHEET**

F708371

**Eurofins Frontier Global Sciences, Inc.**

**Matrix: Soil/Sediment**

**Prepared using: AFS - EFGS-019 Solids Analysis**

**Prepared: 8/11/2017**

Lab Number	Sample ID	Initial (g)	Final (g)	QC Sample	Sample Specs.	Raw Data	Sample Comments	Analysis Comments
1707771-55	W-MM-TP_072617_SED_03-05	5	5	-	-	-		
1707771-56	W-MM-TP_072617_SED_05-10	5	5	-	-	-		
1707771-57	W-103-INTA_072617_SED_03-05	5	5	-	-	-		
1707771-58	W-103-INTA_072617_SED_05-10	5	5	-	-	-		
1707771-59	W-63-INT_072617_SED_03-05	5	5	-	-	-		
1707771-60	W-63-INT_072617_SED_05-10_R1	5	5	-	-	-		
1707771-61	W-63-INT_072617_SED_05-10_R2	5	5	-	-	-		
1707771-62	W-63-INT_072617_SED_05-10_R3	5	5	-	-	-		
1707771-63	W-MM-01_072617_SED_03-05	5	5	-	-	-		
1707771-64	W-MM-01_072617_SED_05-10	5	5	-	-	-		
1707771-65	W-104-INTA_072617_SED_03-05_R1	5	5	-	-	-		
1707771-66	W-104-INTA_072617_SED_03-05_R2	5	5	-	-	-		
1707771-67	W-104-INTA_072617_SED_03-05_R3	5	5	-	-	-		
1707771-69	W-MM-17_072617_SED_03-05_R1	5	5	-	-	-		
1707771-70	W-MM-17_072617_SED_03-05_R2	5	5	-	-	-		
1707771-71	W-MM-17_072617_SED_03-05_R3	5	5	-	-	-		
1707771-72	W-MM-17_072617_SED_05-10	5	5	-	-	-		
1707771-73	W-MM-02_072617_SED_03-05	5	5	-	-	-		
1707771-79	OR-01-01_072517_SED_03-05	5	5	QC	-	-	MS/MSD	

Due Date: 8/24/2017



PREPARATION BENCH SHEET

F708371

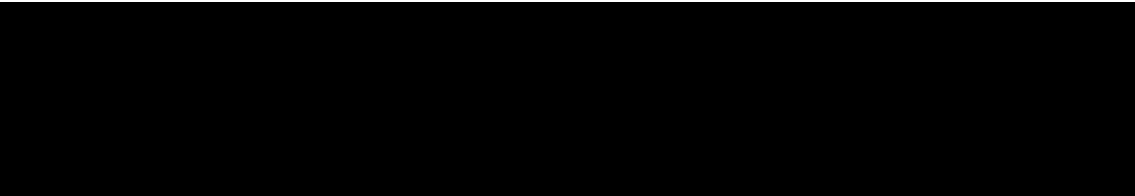
Eurofins Frontier Global Sciences, Inc.

Matrix: Soil/Sediment

Prepared using: AFS - EFGS-019 Solids Analysis

Prepared: 8/11/2017

1707771-90	OR-01-04_072517_SED_01-03	5	5	QC	-	-	MS/MSD	
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# Failing Data Report -

Sample ID	Analysis	Result	MRL	Dup Result	Source Result	True Value	Units	% Rec.	Rec. LCL	Rec. UCL	RPD	RPD Limit	Over Cal	Failure	Qualifier
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Courtney Carly 8/16/17  
Analyst Reviewed By Date

Dan Moseem 8/16/17  
Peer Reviewed By Date

# Peer Review Checklist for Total Solids and Density (SOP5133)

Analyst: CUC

Date: 8/16/17

Reviewer: DM

Date: 8-14-17

WO #: 1707771

Batch #: F708371

Dataset ID: TS170811-2

Reviewer Initials: DM

### General Comments/Re-run requirements:

Select	SOP	Method	Matrix
<input checked="" type="checkbox"/>	SOP5133	TS	S/T
<input type="checkbox"/>	SOP5133	Density	Liquids

Initials	SOP Date	
<u>CUC</u>	<u>12/20/16</u>	<input checked="" type="checkbox"/>
		<input type="checkbox"/>

Reviewer Initials: DM

## 1. Total Solids

- A. Check for transcription errors from Benchsheet/Raw Data
  - (i) Do sample ID(s) match?
  - (ii) Do masses/volumes match?
  - (iii) Are the analyst name, dataset ID, and preparation date listed?
  - (iv) Does the LIMS benchsheet prep date match the actual prep date?
- B. Does the batch include 1 MD/MT per 10 client samples?
- C. MD RPD/MT RSD ≤ 10%
- D. Are qualifiers, O-04 and O-09, included for samples analyzed out of hold time?

<input type="checkbox"/> Density Only - NA this section			
<input checked="" type="checkbox"/> DONE			<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO		<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO		<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO		<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO		<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO		<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> PASS	<input type="checkbox"/> FAIL		<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> N/A	<input checked="" type="checkbox"/>

## 2. Density

- A. Check for transcription errors from Benchsheet/Raw Data
  - (i) Do sample ID(s) match?
  - (ii) Do masses/volumes match?
  - (iii) Are the analyst name, dataset ID, and preparation date listed?
  - (iv) Does the LIMS benchsheet prep date match the actual prep date?
  - (v) Volume (if other than 1 mL): \_\_\_\_\_ Can the calculated result be reproduced?

<input checked="" type="checkbox"/> Total Solids Only - NA this section			
<input type="checkbox"/> DONE			<input type="checkbox"/>
<input type="checkbox"/> YES	<input type="checkbox"/> NO		<input type="checkbox"/>
<input type="checkbox"/> YES	<input type="checkbox"/> NO		<input type="checkbox"/>
<input type="checkbox"/> YES	<input type="checkbox"/> NO		<input type="checkbox"/>
<input type="checkbox"/> YES	<input type="checkbox"/> NO		<input type="checkbox"/>
<input type="checkbox"/> YES	<input type="checkbox"/> NO		<input type="checkbox"/>
<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> N/A	<input type="checkbox"/>



Frontier Global Sciences

**Total Solids Dataset Cover Page**

**Dataset ID:** TS170811-3  
**Batch ID:** F708372  
**Work Order(s):** 1707771

**Analyst:** CLC  
**Prep. Date:** 8/11/2017

**Analytical Issues/Explanations:**

QUALITY ASSURANCE  
PEER-REVIEWED

INITIALS: PC 8/14/17

Preparation Date: Aug 11, 2017

Batch #: 3

Analyst: CLC

Batch ID: F708372

Work Order(s): 1707771

Pan ID	Sample ID	Pan Wt (g)	Pan + Sample Wet (g)	Wet Sample (g)	Pan + Sample Dry (g)	Dry Sample (g)	% TS	Notes
1	1707771-74	1.0260	6.0980	5.0720	2.4510	1.4250	28.1%	
2	1707771-75	1.0120	6.9680	5.9560	2.8230	1.8110	30.4%	
3	1707771-76	1.0050	6.2680	5.2630	2.5840	1.5790	30.0%	
4	1707771-77	1.0000	6.4780	5.4780	2.6000	1.6000	29.2%	
5	1707771-78	1.0340	6.4230	5.3890	2.6370	1.6030	29.7%	
6	1707771-80	1.0170	6.5680	5.5510	3.7610	2.7440	49.4%	
7	1707771-81	1.0090	6.0460	5.0370	2.8460	1.8370	36.5%	
8	1707771-82	1.0200	6.7930	5.7730	3.2120	2.1920	38.0%	
9	1707771-83	1.0060	6.2500	5.2440	3.1670	2.1610	41.2%	
10	1707771-84	1.0220	6.3750	5.3530	3.2650	2.2430	41.9%	
11	1707771-85	1.0120	6.8770	5.8650	3.4560	2.4440	41.7%	
12	1707771-86	1.0450	6.9690	5.9240	3.4940	2.4490	41.3%	
13	1707771-87	1.0250	7.1700	6.1450	3.3020	2.2770	37.1%	
14	1707771-88	1.0640	6.7600	5.6960	3.0440	1.9800	34.8%	
15	1707771-89	1.0860	6.1510	5.0650	2.8840	1.7980	35.5%	
16	1707771-91	1.0490	6.6930	5.6440	3.6110	2.5620	45.4%	
17	1707771-92	1.0760	6.4860	5.4100	3.3930	2.3170	42.8%	
18	1707771-93	1.0010	6.0930	5.0920	3.1780	2.1770	42.8%	
19	1707771-AH	1.0410	6.8420	5.8010	2.6950	1.6540	28.5%	
20	1707771-AHMD	1.0170	6.2430	5.2260	2.5030	1.4860	28.4%	0.3%
21	1707771-AU	1.0140	6.4940	5.4800	2.4970	1.4830	27.1%	
22	1707771-AUMD	0.9540	6.7270	5.7730	2.6200	1.6660	28.9%	6.4%

Preparation Date: Aug 11, 2017

Batch #: 3

Analyst: CLC

Batch ID: F708372

Work Order(s): 1707771

Pan ID	Sample ID	Pan Wt (g)	Pan + Sample Wet (g)	Wet Sample (g)	Pan + Sample Dry (g)	Dry Sample (g)	% TS	Notes
1	1707771-74 ✓	1.0260 ✓	6.0980 ✓	5.0720	2.4510 ✓	1.4250	28.1%	
2	1707771-75 ✓	1.0120 ✓	6.9680 ✓	5.9560	2.8230 ✓	1.8110	30.4%	
3	1707771-76 ✓	1.0050 ✓	6.2680 ✓	5.2630	2.5480 ✓	1.5430	29.3%	
4	1707771-77 ✓	1.0000 ✓	6.4780 ✓	5.4780	2.6000 ✓	1.6000	29.2%	
5	1707771-78 ✓	1.0340 ✓	6.4230 ✓	5.3890	2.6370 ✓	1.6030	29.7%	
6	1707771-80 ✓	1.0170 ✓	6.5680 ✓	5.5510	3.7610 ✓	2.7440	49.4%	
7	1707771-81 ✓	1.0090 ✓	6.0460 ✓	5.0370	2.8460 ✓	1.8370	36.5%	
8	1707771-82 ✓	1.0200 ✓	6.7930 ✓	5.7730	3.2120 ✓	2.1920	38.0%	
9	1707771-83 ✓	1.0060 ✓	6.2500 ✓	5.2440	3.1670 ✓	2.1610	41.2%	
10	1707771-84 ✓	1.0220 ✓	6.3750 ✓	5.3530	3.2650 ✓	2.2430	41.9%	
11	1707771-85 ✓	1.0120 ✓	6.8770 ✓	5.8650	3.4560 ✓	2.4440	41.7%	
12	1707771-86 ✓	1.0450 ✓	6.9690 ✓	5.9240	3.4940 ✓	2.4490	41.3%	
13	1707771-87 ✓	1.0250 ✓	7.1700 ✓	6.1450	3.3020 ✓	2.2770	37.1%	
14	1707771-88 ✓	1.0640 ✓	6.7600 ✓	5.6960	3.0440 ✓	1.9800	34.8%	
15	1707771-89 ✓	1.0860 ✓	6.1510 ✓	5.0650	2.8840 ✓	1.7980	35.5%	
16	1707771-91 ✓	1.0490 ✓	6.6930 ✓	5.6440	3.6110 ✓	2.5620	45.4%	
17	1707771-92 ✓	1.0760 ✓	6.4860 ✓	5.4100	3.3930 ✓	2.3170	42.8%	
18	1707771-93 ✓	1.0010 ✓	6.0930 ✓	5.0920	3.1780 ✓	2.1770	42.8%	
19	1707771-AH ✓	1.0410 ✓	6.8420 ✓	5.8010	2.6950 ✓	1.6540	28.5%	
20	1707771-AHMD ✓	1.0170 ✓	6.2430 ✓	5.2260	2.5030 ✓	1.4860	28.4%	0.3%
21	1707771-AU ✓	1.0140 ✓	6.4940 ✓	5.4800	2.4970 ✓	1.4830	27.1%	
22	1707771-AUMD ✓	0.9540 ✓	6.7270 ✓	5.7730	2.6200 ✓	1.6660	28.9%	6.4%

*R 8/14/17  
Excel  
Changed.  
CLC 8/14/17*

### Remote Lab Total Solids Logbook

Lab Technician(s): CIC / R Batch: F708372 Date: 8/11/17 Page 3 of 4  
 Thermometer #: 12040512 Oven #: 12 Actual temperature: 104.0 (Range 103-105°C)  
 Balance #<sup>1</sup>: 6 Start time: 10:10<sup>8/12/17</sup> End time<sup>2</sup>: 9:15<sup>8/13/17</sup> Time re-weighed<sup>3</sup>: 9:30  
 Client(s)/WO#: 1707771

Sample ID	Pan #	Pan (g)	Pan + Wet Sample (g)	Pan + Dry Sample (g)	Notes
1707771-74	J1	1.026	6.098	2.451	
1707771-75	J2	1.012	6.968	2.823	
1707771-76	J3	1.005	6.268	2.584	} Same Sample
1707771-77	J4	1.000	6.478	2.600	
1707771-78	J5	1.034	6.423	2.637	
1707771-80	J6	1.017	6.568	3.761	
1707771-81	J7	1.009 <sup>cic</sup>	6.046	2.846	
1707771-82	J8	1.019 <sup>20</sup> <sup>8/11/17</sup>	6.793	3.212	
1707771-83	J9	1.006	6.250	3.167	
1707771-84	J10	1.022	6.375	3.265	} Same Sample
1707771-85	J11	1.012	6.877	3.456	
1707771-86	J12	1.045	6.969	3.494	
1707771-87	J13	1.025	7.170	3.302	} Same Sample
1707771-88	J14	1.064	6.760	3.044	
1707771-89	J15	1.086	6.151	2.884	
1707771-91	J16	1.049	6.693	3.611	
1707771-92	J17	1.076	6.486	3.393	
1707771-93	J18	1.001	6.093	3.178	
1707771-AH <sup>8/11/17</sup>	J19	1.041	6.842	2.695	
F708372-DUP1	J20	1.017	6.243	2.503	SRC: 1707771-AH
1707771-AU	J21	1.014	6.494	2.497	
F708372-DUP2	J22	0.954	6.727	2.620	SRC: 1707771-AU
			CIC 8/11/17		

Comments:

<sup>1</sup>The same balance must be used to weight samples before and after ovening.

<sup>2</sup>Samples must be ovened over 12 hours.

<sup>3</sup>Samples must be re-weighed within 30 minutes of oven cool down.

PREPARATION BENCH SHEET

F708372

Eurofins Frontier Global Sciences, Inc.

Matrix: Soil/Sediment

Prepared using: AFS - EFGS-019 Solids Analysis

Prepared: 8/11/2017

Lab Number	Sample ID and Source Sample	Initial (g)	Final (g)	Spike1 ID	$\mu$ l Spike1	Spike2 ID	$\mu$ l Spike2	Extraction Comments
F708372-DUP1	Duplicate [1707771-AH]	5	5					
F708372-DUP2	Duplicate [1707771-AU]	5	5					

Standard ID(s): Description:

Expiration:



**PREPARATION BENCH SHEET**

F708372

**Eurofins Frontier Global Sciences, Inc.**

**Matrix: Soil/Sediment**

**Prepared using: AFS - EFGS-019 Solids Analysis**

**Prepared: 8/11/2017**

Lab Number	Sample ID	Initial (g)	Final (g)	QC Sample	Sample Specs.	Raw Data	Sample Comments	Analysis Comments
1707771-74	W-MM-02_072617_SED_05-10	5	5	-	-	-		
1707771-75	W-102-INTA_072617_SED_03-05	5	5	-	-	-		
1707771-76	W-102-INTA_072617_SED_05-10_R1	5	5	-	-	-		
1707771-77	W-102-INTA_072617_SED_05-10_R2	5	5	-	-	-		
1707771-78	W-102-INTA_072617_SED_05-10_R3	5	5	-	-	-		
1707771-80	OR-01-01_072517_SED_05-10	5	5	-	-	-		
1707771-81	OR-01-02_072517_SED_03-05	5	5	-	-	-		
1707771-82	OR-01-02_072517_SED_05-10	5	5	-	-	-		
1707771-83	OR-01-03_072517_SED_03-05	5	5	-	-	-		
1707771-84	OR-01-03_072517_SED_05-10_R1	5	5	-	-	-		
1707771-85	OR-01-03_072517_SED_05-10_R2	5	5	-	-	-		
1707771-86	OR-01-03_072517_SED_05-10_R3	5	5	-	-	-		
1707771-87	OR-01-04_072517_SED_00-01_R1	5	5	-	-	-		
1707771-88	OR-01-04_072517_SED_00-01_R2	5	5	-	-	-		
1707771-89	OR-01-04_072517_SED_00-01_R3	5	5	-	-	-		
1707771-91	OR-01-04_072517_SED_03-05	5	5	-	-	-		
1707771-92	OR-01-04_072517_SED_05-10	5	5	-	-	-		
1707771-93	OR-01-05_072517_SED_03-05	5	5	-	-	-		
1707771-AH	W-103-B_072517_SED_03-05	5	5	QC	-	-	MS/MSD	

PREPARATION BENCH SHEET

F708372

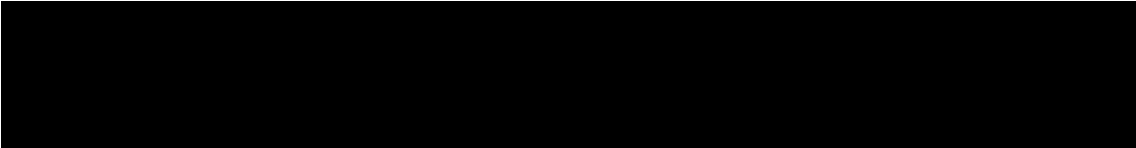
Eurofins Frontier Global Sciences, Inc.

Matrix: Soil/Sediment

Prepared using: AFS - EFGS-019 Solids Analysis

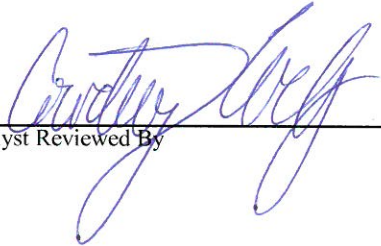
Prepared: 8/11/2017


1707771-AU	W-14-A_072517_SED_01-03	5	5	QC	-	-	MS/MSD	
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**Failing Data Report -**

Sample ID	Analysis	Result	MRL	Dup Result	Source Result	True Value	Units	% Rec.	Rec. LCL	Rec. UCL	RPD	RPD Limit	Over Cal	Failure	Qualifier
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Analyst Reviewed By  Date 8/14/27

Peer Reviewed By  Date 8/14/27

### Peer Review Checklist for Total Solids and Density (SOP5133)

Analyst: CU

Date: 8/14/17

Reviewer: [Signature]

Date: 8/14/17

WO #: 1707771

Batch #: F708372

Dataset ID: TS170811-3

Reviewer Initials: [Signature]

**General Comments/Re-run requirements:**

Select	SOP	Method	Matrix
<input checked="" type="checkbox"/>	SOP5133	TS	S/T
<input type="checkbox"/>	SOP5133	Density	Liquids

Initials	SOP Date
<u>CU</u>	<u>12/20/16</u>
<input type="checkbox"/>	<input type="checkbox"/>

Reviewer Initials: [Signature]

**1. Total Solids**

- A. Check for transcription errors from Benchsheet/Raw Data
  - (i) Do sample ID(s) match?
  - (ii) Do masses/volumes match?
  - (iii) Are the analyst name, dataset ID, and preparation date listed?
  - (iv) Does the LIMS benchsheet prep date match the actual prep date?
- B. Does the batch include 1 MD/MT per 10 client samples?
- C. MD RPD/MT RSD ≤ 10%
- D. Are qualifiers, O-04 and O-09, included for samples analyzed out of hold time?

<input type="checkbox"/> Density Only - NA this section			
<input checked="" type="checkbox"/> DONE			<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO		<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO		<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO		<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO		<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO		<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> PASS	<input type="checkbox"/> FAIL		<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> N/A	<input checked="" type="checkbox"/>

**2. Density**

- A. Check for transcription errors from Benchsheet/Raw Data
  - (i) Do sample ID(s) match?
  - (ii) Do masses/volumes match?
  - (iii) Are the analyst name, dataset ID, and preparation date listed?
  - (iv) Does the LIMS benchsheet prep date match the actual prep date?
  - (v) Volume (if other than 1 mL): \_\_\_\_\_ . Can the calculated result be reproduced?

<input checked="" type="checkbox"/> Total Solids Only - NA this section			
<input type="checkbox"/> DONE			<input checked="" type="checkbox"/>
<input type="checkbox"/> YES	<input type="checkbox"/> NO		<input checked="" type="checkbox"/>
<input type="checkbox"/> YES	<input type="checkbox"/> NO		<input checked="" type="checkbox"/>
<input type="checkbox"/> YES	<input type="checkbox"/> NO		<input checked="" type="checkbox"/>
<input type="checkbox"/> YES	<input type="checkbox"/> NO		<input checked="" type="checkbox"/>
<input type="checkbox"/> YES	<input type="checkbox"/> NO		<input checked="" type="checkbox"/>
<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> N/A	<input checked="" type="checkbox"/>



Frontier Global Sciences

**Total Solids Dataset Cover Page**

**Dataset ID:** TS170811-4  
**Batch ID:** F708384  
**Work Order(s):** 1707771

**Analyst:** CLC  
**Prep. Date:** 8/11/2017

**Analytical Issues/Explanations:**

QUALITY ASSURANCE  
PEER-REVIEWED

INITIALS: CLC 8/14/17

Preparation Date: Aug 11, 2017

Batch #: 4

Analyst: CLC

Batch ID: F708384

Work Order(s): 1707771

Pan ID	Sample ID	Pan Wt (g)	Pan + Sample Wet (g)	Wet Sample (g)	Pan + Sample Dry (g)	Dry Sample (g)	% TS	Notes
1	1707771-94	1.0380	6.0380	5.0000	3.4550	2.4170	48.3%	
2	1707771-95	0.9990	6.6210	5.6220	3.0850	2.0860	37.1%	
3	1707771-96	0.9930	6.5270	5.5340	2.9010	1.9080	34.5%	
4	1707771-97	1.0200	6.2240	5.2040	3.0770	2.0570	39.5%	
5	1707771-98	1.0060	6.3940	5.3880	3.1050	2.0990	39.0%	
6	1707771-99	1.0370	6.6800	5.6430	3.2510	2.2140	39.2%	
7	1707771-AA	1.0330	6.6440	5.6110	3.2570	2.2240	39.6%	
8	1707771-AB	1.0260	6.1010	5.0750	2.7730	1.7470	34.4%	
9	1707771-AC	1.0120	6.6120	5.6000	2.6830	1.6710	29.8%	
10	1707771-AD	1.0000	6.9440	5.9440	2.6120	1.6120	27.1%	
11	1707771-AR	1.0000	6.3040	5.3040	2.5300	1.5300	28.8%	
12	1707771-AS	0.9970	6.1640	5.1670	2.4980	1.5010	29.0%	
13	1707771-AT	1.0240	6.5930	5.5690	2.6200	1.5960	28.7%	
14	1707771-AN	1.0020	6.2340	5.2320	2.2530	1.2510	23.9%	
15	1707771-AJ	1.0470	7.2200	6.1730	3.4790	2.4320	39.4%	
16	1707771-AK	0.9570	6.1520	5.1950	3.4440	2.4870	47.9%	
17	1707771-AL	0.9620	6.2840	5.3220	3.5140	2.5520	48.0%	
18	1707771-AM	1.0110	6.0810	5.0700	3.4230	2.4120	47.6%	
19	1707771-BK	0.9930	6.2730	5.2800	2.3240	1.3310	25.2%	
20	1707771-BKMD	0.9930	6.0800	5.0870	2.2800	1.2870	25.3%	0.4%
21	1707771-BY	1.0170	6.7050	5.6880	2.8020	1.7850	31.4%	
22	1707771-BYMD	1.0310	6.5800	5.5490	2.7840	1.7530	31.6%	0.7%

Remote Lab Total Solids Logbook

Lab Technician(s): CUC / PL Batch: F708384 Date: 8/17 Page 4 of 4  
 Thermometer #: 120405142 TL Oven #: 12 Actual temperature: 102.0 (Range 103-105°C)  
 Balance #<sup>1</sup>: 6 Start time: 10:10<sup>8/17</sup> End time<sup>2</sup>: 9:05<sup>8/17</sup> Time re-weighed<sup>3</sup>: 9:20  
 Client(s)/WO#: 1707771

Sample ID	Pan #	Pan (g)	Pan + Wet Sample (g)	Pan + Dry Sample (g)	Notes
1707771-94	K1	1.038	6.038	3.455	
1707771-95	K2	<del>1.099</del> <sup>8/17</sup>	6.621	3.085	
1707771-96	K3	0.993	6.527	2.901	
1707771-97	K4	1.020	6.224	3.077	} Same Sample
1707771-98	K5	1.006	6.394	3.105	
1707771-99	K6	1.037	6.680	3.251	
1707771-AA	K7	1.033	6.644	3.257	
1707771-AB	K8	1.026	6.101	2.773	
1707771-AC	K9	1.012	6.612	2.683	
1707771-AD <sup>8/17</sup>	K10	1.000	6.944	2.612	
1707771-AE <sup>8/17</sup>	K11	1.000	6.304	2.530	} Same Sample
1707771-AF	K12	0.997	6.164	2.498	
1707771-AG <sup>8/17</sup>	K13	1.024	6.593	2.620	
1707771-AH <sup>8/17</sup>	K14	1.002	6.234	2.253	
1707771-AI <sup>8/17</sup>	K15	1.047	7.220	3.479	
1707771-AJ	K16	0.957	6.152	3.444	
1707771-AK	K17	0.962	6.284	3.514	Pan: 0.962
1707771-AL	K18	1.011	6.081	3.423	
1707771-AM	K19	0.993	6.273	2.324	
F708384-DUP1	K20	0.993	6.080	2.280	SRU: 1707771-BK
1707771-BY	K21	1.017	6.705	2.802	
F708384-DUP2	K22	1.031	6.580	2.784	SRU: 1707771-BX
CUC 8/17/17					

Comments:

<sup>1</sup>The same balance must be used to weight samples before and after ovening.

<sup>2</sup>Samples must be ovened over 12 hours.

<sup>3</sup>Samples must be re-weighed within 30 minutes of oven cool down.

PREPARATION BENCH SHEET

F708384

Eurofins Frontier Global Sciences, Inc.

Matrix: Soil/Sediment

Prepared using: AFS - EFGS-019 Solids Analysis

Prepared: 8/11/2017

Lab Number	Sample ID and Source Sample	Initial (g)	Final (g)	Spike1 ID	$\mu$ l Spike1	Spike2 ID	$\mu$ l Spike2	Extraction Comments
F708384-DUP1	Duplicate [1707771-BK]	5	5					
F708384-DUP2	Duplicate [1707771-BY]	5	5					

Standard ID(s): Description:

Expiration:



**PREPARATION BENCH SHEET**

F708384

**Eurofins Frontier Global Sciences, Inc.**

**Matrix: Soil/Sediment**

**Prepared using: AFS - EFGS-019 Solids Analysis**

**Prepared: 8/11/2017**

Lab Number	Sample ID	Initial (g)	Final (g)	QC Sample	Sample Specs.	Raw Data	Sample Comments	Analysis Comments
1707771-94	OR-01-05_072517_SED_05-10	5	5	-	-	-		
1707771-95	OR-02-01_072517_SED_03-05	5	5	-	-	-		
1707771-96	OR-02-01_072517_SED_05-10	5	5	-	-	-		
1707771-97	OR-02-02_072517_SED_03-05_R1	5	5	-	-	-		
1707771-98	OR-02-02_072517_SED_03-05_R2	5	5	-	-	-		
1707771-99	OR-02-02_072517_SED_03-05_R3	5	5	-	-	-		
1707771-AA	OR-02-02_072517_SED_05-10	5	5	-	-	-		
1707771-AB	W-102-INTA_072517_SED_00-01	5	5	-	-	-		
1707771-AC	W-102-INTA_072517_SED_01-03	5	5	-	-	-		
1707771-AD	W-103-A_072517_SED_03-05	5	5	-	-	-		
1707771-AJ	W-103-INTA_072517_SED_00-01	5	5	-	-	-		
1707771-AK	W-103-INTA_072517_SED_01-03_R1	5	5	-	-	-		
1707771-AL	W-103-INTA_072517_SED_01-03_R2	5	5	-	-	-		
1707771-AM	W-103-INTA_072517_SED_01-03_R3	5	5	-	-	-		
1707771-AN	W-104-INTA_072517_SED_00-01	5	5	-	-	-		
1707771-AR	W-14-A_072517_SED_00-01_R1	5	5	-	-	-		
1707771-AS	W-14-A_072517_SED_00-01_R2	5	5	-	-	-		
1707771-AT	W-14-A_072517_SED_00-01_R3	5	5	-	-	-		
1707771-BK	W-27-A_072517_SED_01-03	5	5	QC	-	-	MS/MSD	

PREPARATION BENCH SHEET

F708384

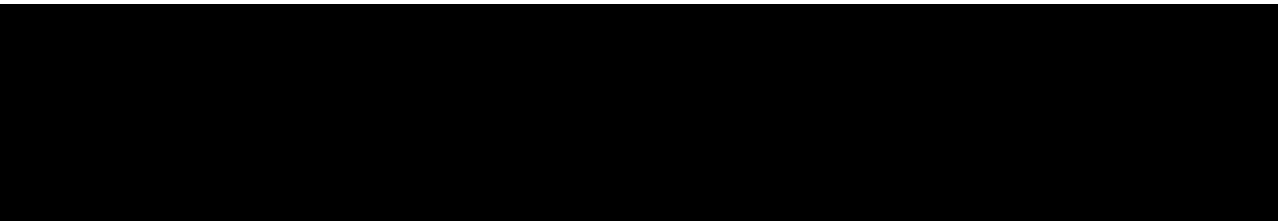
Eurofins Frontier Global Sciences, Inc.

Matrix: Soil/Sediment

Prepared using: AFS - EFGS-019 Solids Analysis

Prepared: 8/11/2017

1707771-BY	W-MM-06_072517_SED_05-10	5	5	QC	-	-	MS/MSD	
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# Failing Data Report -

Sample ID	Analysis	Result	MRL	Dup Result	Source Result	True Value	Units	% Rec.	Rec. LCL	Rec. UCL	RPD	RPD Limit	Over Cal	Failure	Qualifier
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Courtney Kelly 8/14/17  
 Analyst Reviewed By Date

[Signature] 8/14/17  
 Peer Reviewed By Date

### Peer Review Checklist for Total Solids and Density (SOP5133)

Analyst: CIC Date: 8/14/17 Reviewer: [Signature] Date: 8/14/17

WO #: 1707771 Batch #: F708384 Dataset ID: TS170811-4

Reviewer Initials: [Signature]

**General Comments/Re-run requirements:**

Select	SOP	Method	Matrix
<input checked="" type="checkbox"/>	SOP5133	TS	S/T
<input type="checkbox"/>	SOP5133	Density	Liquids

Initials	SOP Date	
<u>CIC</u>	<u>12/20/16</u>	<input checked="" type="checkbox"/>
		<input type="checkbox"/>

Reviewer Initials: [Signature]

**1. Total Solids**

- A. Check for transcription errors from Benchsheet/Raw Data
  - (i) Do sample ID(s) match?
  - (ii) Do masses/volumes match?
  - (iii) Are the analyst name, dataset ID, and preparation date listed?
  - (iv) Does the LIMS benchsheet prep date match the actual prep date?
- B. Does the batch include 1 MD/MT per 10 client samples?
- C. MD RPD/MT RSD ≤ 10%
- D. Are qualifiers, O-04 and O-09, included for samples analyzed out of hold time?

<input type="checkbox"/> Density Only - NA this section			
<input checked="" type="checkbox"/> DONE			<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO		<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO		<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO		<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO		<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO		<input checked="" type="checkbox"/>
<input type="checkbox"/> PASS	<input type="checkbox"/> FAIL		<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> N/A	<input checked="" type="checkbox"/>

**2. Density**

- A. Check for transcription errors from Benchsheet/Raw Data
  - (i) Do sample ID(s) match?
  - (ii) Do masses/volumes match?
  - (iii) Are the analyst name, dataset ID, and preparation date listed?
  - (iv) Does the LIMS benchsheet prep date match the actual prep date?
  - (v) Volume (if other than 1 mL): \_\_\_\_\_ Can the calculated result be reproduced?

<input checked="" type="checkbox"/> Total Solids Only - NA this section			
<input type="checkbox"/> DONE			<input checked="" type="checkbox"/>
<input type="checkbox"/> YES	<input type="checkbox"/> NO		<input checked="" type="checkbox"/>
<input type="checkbox"/> YES	<input type="checkbox"/> NO		<input checked="" type="checkbox"/>
<input type="checkbox"/> YES	<input type="checkbox"/> NO		<input checked="" type="checkbox"/>
<input type="checkbox"/> YES	<input type="checkbox"/> NO		<input checked="" type="checkbox"/>
<input type="checkbox"/> YES	<input type="checkbox"/> NO		<input checked="" type="checkbox"/>
<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> N/A	<input checked="" type="checkbox"/>



Frontier Global Sciences

**Total Solids Dataset Cover Page**

**Dataset ID:** TS170814-2  
**Batch ID:** F708404  
**Work Order(s):** 1707771, 1708086

**Analyst:** CLC  
**Prep. Date:** 8/14/2017

**Analytical Issues/Explanations:**

QUALITY ASSURANCE  
PEER - REVIEWED  
INITIALS: DM 8/16/17

Preparation Date: Aug 14, 2017

Batch #: 2

Analyst: CLC

Batch ID: F708404

Work Order(s): 1707771, 1708086

Pan ID	Sample ID	Pan Wt (g)	Pan + Sample Wet (g)	Wet Sample (g)	Pan + Sample Dry (g)	Dry Sample (g)	% TS	Notes
1	1707771-AE	1.0540	6.7260	5.6720	2.3290	1.2750	22.5%	
2	1707771-AF	1.0160	6.5240	5.5080	2.3250	1.3090	23.8%	
3	1707771-AG	1.0340	6.7630	5.7290	2.3950	1.3610	23.8%	
4	1707771-AI	1.0210	6.5190	5.4980	2.8370	1.8160	33.0%	
5	1707771-AO	1.0200	6.3720	5.3520	2.8320	1.8120	33.9%	
6	1707771-AP	0.9880	6.1980	5.2100	2.6720	1.6840	32.3%	
7	1707771-AQ	1.0360	6.6450	5.6090	2.9630	1.9270	34.4%	
8	1707771-AV	1.0140	6.7410	5.7270	2.7550	1.7410	30.4%	
9	1707771-AW	0.9940	6.3470	5.3530	2.5010	1.5070	28.2%	
10	1707771-AX	1.0690	6.3860	5.3170	3.2910	2.2220	41.8%	
11	1707771-AY	1.0210	6.3930	5.3720	3.3810	2.3600	43.9%	
12	1707771-AZ	1.0150	6.9820	5.9670	3.6120	2.5970	43.5%	
13	1707771-BA	0.9820	6.9020	5.9200	4.2440	3.2620	55.1%	
14	1707771-BB	0.9850	6.1780	5.1930	4.1870	3.2020	61.7%	
15	1707771-BC	1.0020	6.9130	5.9110	4.5260	3.5240	59.6%	
16	1707771-BD	1.0590	6.4080	5.3490	2.4610	1.4020	26.2%	
17	1707771-BE	1.0300	6.6840	5.6540	2.4580	1.4280	25.3%	
18	1707771-BF	0.9930	6.0430	5.0500	3.6030	2.6100	51.7%	
19	1707771-CD	1.0140	6.4180	5.4040	2.0650	1.0510	19.4%	
20	1707771-CDMD	1.0130	6.9990	5.9860	2.2180	1.2050	20.1%	3.4%
21	1708086-01	1.0460	6.4310	5.3850	1.8470	0.8010	14.9%	
22	1708086-01MD	1.0440	6.4100	5.3660	1.8610	0.8170	15.2%	2.3%

Remote Lab Total Solids Logbook

Lab Technician(s): cu Batch: F708404 Date: 8/14/17 Page 2 of 4

Thermometer #: 12040512TL Oven #: 12 Actual temperature: 104.7 (Range 103-105°C)

Balance #<sup>1</sup>: 6 Start time: 10:46 <sup>8/15/17</sup> End time<sup>2</sup>: 9:40 <sup>8/16/17</sup> Time re-weighed<sup>3</sup>: 10:10

Client(s)/WO#: 1707771, 1708086

Sample ID	Pan #	Pan (g)	Pan + Wet Sample (g)	Pan + Dry Sample (g)	Notes
1707771-AE	M1	1.054	6.726	2.329	} same sample
1707771-AF	M2	1.016	6.524	2.325	
1707771-AG	M3	1.034	6.763	2.395	
1707771-AI	M4	1.021	6.519	2.837	
1707771-AD	M5	1.020	6.372	2.832	
1707771-AP	M6	0.988	6.198	2.672	
1707771-AQ	M7	1.036	6.645	2.963	
1707771-AV	M8	1.014	6.741	2.755	
1707771-AW	M9	0.994	6.347	2.501	
1707771-AX	M10	1.059	6.386	3.291	
1707771-AY	M11	1.021	6.393	3.381	
1707771-AZ	M12	1.015	6.982	3.612	
1707771-BA	M13	0.982	6.902	4.244	} same sample
1707771-BB	M14	0.985	6.178	4.187	
1707771-BC	M15	1.002	6.913	4.526	
1707771-BD	M16	1.059	6.408	2.461	
1707771-BE	M17	1.030	6.684	2.458	
1707771-BF	M18	0.993	6.043	3.603	
1707771-CD	M19	1.014	6.418	2.065	
F708404-DUP1	M20	1.013	6.999	2.218	SRC: 1707771-CD
1708086-01	M21	1.046	6.431	1.847	containing 8/14/17 containing 8/14/17
F708404-DUP2	M22	1.044	6.410	1.861	SRC: 1708086-01
			cu 8/14/17		

Comments:

<sup>1</sup>The same balance must be used to weight samples before and after ovening.

<sup>2</sup>Samples must be ovened over 12 hours.

<sup>3</sup>Samples must be re-weighed within 30 minutes of oven cool down.

PREPARATION BENCH SHEET

F708404

Eurofins Frontier Global Sciences, Inc.

Matrix: Soil/Sediment

Prepared using: AFS - EFGS-019 Solids Analysis

Prepared: 8/14/2017

Lab Number	Sample ID and Source Sample	Initial (g)	Final (g)	Spike1 ID	$\mu$ l Spike1	Spike2 ID	$\mu$ l Spike2	Extraction Comments
F708404-DUP1	Duplicate [1707771-CD]	5	5					
F708404-DUP2	Duplicate [1708086-01]	5	5					

Standard ID(s):    Description:

Expiration:



**PREPARATION BENCH SHEET**

F708404

**Eurofins Frontier Global Sciences, Inc.**

**Matrix: Soil/Sediment**

**Prepared using: AFS - EFGS-019 Solids Analysis**

**Prepared: 8/14/2017**

Lab Number	Sample ID	Initial (g)	Final (g)	QC Sample	Sample Specs.	Raw Data	Sample Comments	Analysis Comments
1707771-AE	W-103-A_072517_SED_05-10_R1	5	5	-	-	-		
1707771-AF	W-103-A_072517_SED_05-10_R2	5	5	-	-	-		
1707771-AG	W-103-A_072517_SED_05-10_R3	5	5	-	-	-		
1707771-AI	W-103-B_072517_SED_05-10	5	5	-	-	-		
1707771-AO	W-104-INTA_072517_SED_01-03	5	5	-	-	-		
1707771-AP	W-105-A_072517_SED_03-05	5	5	-	-	-		
1707771-AQ	W-105-A_072517_SED_05-10	5	5	-	-	-		
1707771-AV	W-14-A_072517_SED_03-05	5	5	-	-	-		
1707771-AW	W-14-A_072517_SED_05-10	5	5	-	-	-		
1707771-AX	W-14-B_072517_SED_00-01	5	5	-	-	-		
1707771-AY	W-14-B_072517_SED_01-03	5	5	-	-	-		
1707771-AZ	W-14-B_072517_SED_03-05	5	5	-	-	-		
1707771-BA	W-14-B_072517_SED_05-10_R1	5	5	-	-	-		
1707771-BB	W-14-B_072517_SED_05-10_R2	5	5	-	-	-		
1707771-BC	W-14-B_072517_SED_05-10_R3	5	5	-	-	-		
1707771-BD	W-14-C_072517_SED_03-05	5	5	-	-	-		
1707771-BE	W-14-C_072517_SED_05-10	5	5	-	-	-		
1707771-BF	W-14-INTA_072517_SED_00-01	5	5	-	-	-		
1707771-CD	W-MM-17_072517_SED_00-01	5	5	QC	-	-	MS/MSD	

PREPARATION BENCH SHEET

F708404

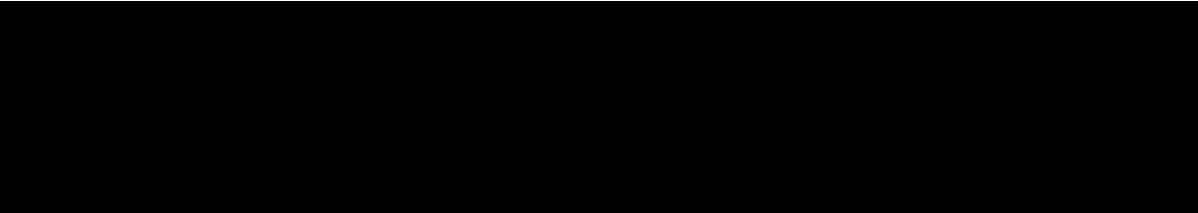
Eurofins Frontier Global Sciences, Inc.

Matrix: Soil/Sediment

Prepared using: AFS - EFGS-019 Solids Analysis

Prepared: 8/14/2017

1708086-01	AOI_21_080117_SS_N06_R1	5	5	QC	-	-	MS/MSD	
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**Failing Data Report -**

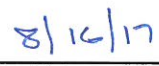
Sample ID	Analysis	Result	MRL	Dup Result	Source Result	True Value	Units	% Rec.	Rec. LCL	Rec. UCL	RPD	RPD Limit	Over Cal	Failure	Qualifier
-----------	----------	--------	-----	------------	---------------	------------	-------	--------	----------	----------	-----	-----------	----------	---------	-----------

  
Analyst Reviewed By

  
Date



  
Peer Reviewed By

  
Date

### Peer Review Checklist for Total Solids and Density (SOP5133)

Analyst: ccc Date: 8/16/17 Reviewer: DM Date: 8/16/17

WO #: 1707774, 1708086 Batch #: E708404 Dataset ID: 75170814-2

Reviewer Initials: DM

**General Comments/Re-run requirements:**

Select	SOP	Method	Matrix
<input checked="" type="checkbox"/>	SOP5133	TS	S/T
<input type="checkbox"/>	SOP5133	Density	Liquids

Initials	SOP Date
<u>ccc</u>	<u>12/20/16</u>

Reviewer Initials: DM

#### 1. Total Solids

- A. Check for transcription errors from Benchsheet/Raw Data
  - (i) Do sample ID(s) match?
  - (ii) Do masses/volumes match?
  - (iii) Are the analyst name, dataset ID, and preparation date listed?
  - (iv) Does the LIMS benchsheet prep date match the actual prep date?
- B. Does the batch include 1 MD/MT per 10 client samples?
- C. MD RPD/MT RSD ≤ 10%
- D. Are qualifiers, O-04 and O-09, included for samples analyzed out of hold time?

<input type="checkbox"/> Density Only - NA this section			
<input checked="" type="checkbox"/> DONE			<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO		<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO		<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO		<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO		<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO		<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> PASS	<input type="checkbox"/> FAIL		<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> N/A	<input checked="" type="checkbox"/>

#### 2. Density

- A. Check for transcription errors from Benchsheet/Raw Data
  - (i) Do sample ID(s) match?
  - (ii) Do masses/volumes match?
  - (iii) Are the analyst name, dataset ID, and preparation date listed?
  - (iv) Does the LIMS benchsheet prep date match the actual prep date?
  - (v) Volume (if other than 1 mL): \_\_\_\_\_. Can the calculated result be reproduced?

<input checked="" type="checkbox"/> Total Solids Only - NA this section			
<input type="checkbox"/> DONE			<input type="checkbox"/>
<input type="checkbox"/> YES	<input type="checkbox"/> NO		<input type="checkbox"/>
<input type="checkbox"/> YES	<input type="checkbox"/> NO		<input type="checkbox"/>
<input type="checkbox"/> YES	<input type="checkbox"/> NO		<input type="checkbox"/>
<input type="checkbox"/> YES	<input type="checkbox"/> NO		<input type="checkbox"/>
<input type="checkbox"/> YES	<input type="checkbox"/> NO		<input type="checkbox"/>
<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> N/A	<input type="checkbox"/>



Frontier Global Sciences

**Total Solids Dataset Cover Page**

**Dataset ID:** TS170814-3  
**Batch ID:** F708405  
**Work Order(s):** 1707771, 1708151

**Analyst:** CLC  
**Prep. Date:** 8/14/2017

**Analytical Issues/Explanations:**

QUALITY ASSURANCE  
PEER - REVIEWED  
INITIALS: DM 8/16/17

Preparation Date: Aug 14, 2017

Batch #: 3

Analyst: CLC

Batch ID: F708405

Work Order(s): 1707771, 1708151

Pan ID	Sample ID	Pan Wt (g)	Pan + Sample Wet (g)	Wet Sample (g)	Pan + Sample Dry (g)	Dry Sample (g)	% TS	Notes
1	1707771-BG	1.0190	6.9650	5.9460	4.6440	3.6250	61.0%	
2	1707771-BH	0.9950	6.3900	5.3950	2.5660	1.5710	29.1%	
3	1707771-BI	1.0340	6.9550	5.9210	2.7070	1.6730	28.3%	
4	1707771-BJ	0.9780	6.6010	5.6230	2.4920	1.5140	26.9%	
5	1707771-BL	0.9850	6.3600	5.3750	3.2090	2.2240	41.4%	
6	1707771-BM	1.0020	6.7950	5.7930	3.4280	2.4260	41.9%	
7	1707771-BN	0.9990	6.5440	5.5450	2.2260	1.2270	22.1%	
8	1707771-BO	1.0030	6.2370	5.2340	2.6970	1.6940	32.4%	
9	1707771-BP	0.9810	6.7260	5.7450	2.5040	1.5230	26.5%	
10	1707771-BQ	0.9800	6.9930	6.0130	2.5640	1.5840	26.3%	
11	1707771-BR	0.9930	6.8240	5.8310	2.5950	1.6020	27.5%	
12	1707771-BS	1.0200	6.8040	5.7840	2.4820	1.4620	25.3%	
13	1707771-BT	1.0370	6.8440	5.8070	2.3940	1.3570	23.4%	
14	1707771-BU	1.0330	6.1690	5.1360	2.2560	1.2230	23.8%	
15	1707771-BV	0.9990	6.1040	5.1050	2.5030	1.5040	29.5%	
16	1707771-BW	0.9980	6.9260	5.9280	2.5990	1.6010	27.0%	
17	1707771-BX	0.9760	6.3750	5.3990	2.5550	1.5790	29.2%	
18	1707771-BZ	1.0050	6.9800	5.9750	2.3090	1.3040	21.8%	
19	1708151-22	0.9920	6.9130	5.9210	2.3890	1.3970	23.6%	
20	1708151-22MD	0.9830	6.6380	5.6550	2.3240	1.3410	23.7%	0.5%
21	1708151-42	0.9990	6.7430	5.7440	3.3670	2.3680	41.2%	
22	1708151-42MD	1.0050	6.7030	5.6980	3.3560	2.3510	41.3%	0.1%

Preparation Date: Aug 14, 2017

Batch #: 3

Analyst: CLC

Batch ID: F708405

Work Order(s): 1707771, 1708151

Pan ID	Sample ID	Pan Wt (g)	Pan + Sample Wet (g)	Wet Sample (g)	Pan + Sample Dry (g)	Dry Sample (g)	% TS	Notes
1	1707771-BG	1.0190	6.9650	5.9460	4.6440	3.6250	61.0%	
2	1707771-BH	0.9950	6.3900	5.3950	2.5660	1.5710	29.1%	
3	1707771-BI	1.0340	6.9550	5.9210	2.7070	1.6730	28.3%	
4	1707771-BJ	0.9780	6.6010	5.6230	2.4920	1.5140	26.9%	
5	1707771-BL	0.9850	6.3600	5.3750	3.2090	2.2240	41.4%	
6	1707771-BM	1.0020	6.7950	5.7930	3.4280	2.4260	41.9%	
7	1707771-BN	0.9990	6.5440	5.5450	2.2260	1.2270	22.1%	
8	1707771-BO	1.0030	6.2370	5.2340	2.6970	1.6940	32.4%	
9	1707771-BP	0.9810	6.7260	5.7450	2.5040	1.5230	26.5%	
10	1707771-BQ	0.6980	6.9930	6.2950	2.5640	1.8660	29.6%	
11	1707771-BR	0.9930	6.8240	5.8310	2.5950	1.6020	27.5%	
12	1707771-BS	1.0200	6.8040	5.7840	2.4820	1.4620	25.3%	
13	1707771-BT	1.0370	6.8440	5.8070	2.3940	1.3570	23.4%	
14	1707771-BU	1.0330	6.1690	5.1360	2.2560	1.2230	23.8%	
15	1707771-BV	0.9990	6.1040	5.1050	2.5030	1.5040	29.5%	
16	1707771-BW	0.9980	6.9260	5.9280	2.5990	1.6010	27.0%	
17	1707771-BX	0.9760	6.3750	5.3990	2.5550	1.5790	29.2%	
18	1707771-BZ	1.0050	6.9800	5.9750	2.3090	1.3040	21.8%	
19	1708151-22	0.9920	6.9130	5.9210	2.3890	1.3970	23.6%	
20	1708151-22MD	0.9830	6.6380	5.6550	2.3240	1.3410	23.7%	0.5%
21	1708151-42	0.9990	6.7430	5.7440	3.3670	2.3680	41.2%	
22	1708151-42MD	1.0050	6.7030	5.6980	3.3560	2.3510	41.3%	0.1%

8/16/17  
DM

### Remote Lab Total Solids Logbook

Lab Technician(s): CC Batch: F708405 Date: 8/14/17 Page 3 of 4  
 Thermometer #: 120405142 Oven #: 12 Actual temperature: 104.0 (Range 103-105°C)  
 Balance #<sup>1</sup>: 6 Start time: 10:46 <sup>8/15/17</sup> End time<sup>2</sup>: 1:00 <sup>8/16/17</sup> Time re-weighed<sup>3</sup>: 10:20  
 Client(s)/WO#: 1707771, 1708151

Sample ID	Pan #	Pan (g)	Pan + Wet Sample (g)	Pan + Dry Sample (g)	Notes
1707771-BG	N1	1.019	6.965	4.644	
1707771-BH	N2	0.995	6.390	2.566	} same sample
1707771-BI	N3	1.034	6.955	2.707	
1707771-BJ	N4	0.978	6.601	2.492	
1707771-BL	N5	0.985	6.360	3.209	
1707771-BM	N6	1.002	6.795	3.428	
1707771-BN	N7	0.999	6.544	2.226	
1707771-BO	N8	1.003	6.237	2.697	
1707771-BP	N9	<del>0.981</del> <sup>0.981</sup>	6.726	2.504	
1707771-BQ	N10	0.980	6.993	2.564	} same sample
1707771-BR	N11	0.993	6.824	2.595	
1707771-BS	N12	1.020	6.804	2.482	
1707771-BT	N13	1.037	6.844	2.394	
1707771-BU	N14	1.033	6.169	2.256	
1707771-BV	N15	0.999	6.104	2.503	} same sample
1707771-BW	N16	<del>0.998</del> <sup>0.998</sup>	6.926	2.599	
1707771-BX	N17	0.976	6.375	2.558	
1707771-BZ	N18	1.005	6.980	2.309	
1708151-22	N19	0.992	6.913	2.389	
F708405-DUP1	N20	0.983	6.638	2.324	SRC: 1708151-22
1708151-42	N21	0.999	6.743	3.367	
F708405-DUP2	N22	1.005	6.703	3.356	SRC: 1708151-42
CC 8/14/17					

Comments:

<sup>1</sup>The same balance must be used to weight samples before and after ovening.

<sup>2</sup>Samples must be ovened over 12 hours.

<sup>3</sup>Samples must be re-weighed within 30 minutes of oven cool down.



**Failing Data Report -**

Sample ID	Analysis	Result	MRL	Dup Result	Source Result	True Value	Units	% Rec.	Rec. LCL	Rec. UCL	RPD	RPD Limit	Over Cal	Failure	Qualifier
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*Courtney Lovely* 8/16/17  
 Analyst Reviewed By Date

*Dan M...* 8/16/17  
 Peer Reviewed By Date

PREPARATION BENCH SHEET

F708405

Eurofins Frontier Global Sciences, Inc.

Matrix: Soil/Sediment

Prepared using: AFS - EFGS-019 Solids Analysis

Prepared: 8/14/2017

Lab Number	Sample ID and Source Sample	Initial (g)	Final (g)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F708405-DUP1	Duplicate [1708151-22]	5	5					
F708405-DUP2	Duplicate [1708151-42]	5	5					

Standard ID(s): Description:

Expiration:

**PREPARATION BENCH SHEET**

F708405

**Eurofins Frontier Global Sciences, Inc.**

**Matrix: Soil/Sediment**

**Prepared using: AFS - EFGS-019 Solids Analysis**

**Prepared: 8/14/2017**

Lab Number	Sample ID	Initial (g)	Final (g)	QC Sample	Sample Specs.	Raw Data	Sample Comments	Analysis Comments
1707771-BG	W-14-INTA_072517_SED_01-03	5	5	-	-	-		
1707771-BH	W-27-A_072517_SED_00-01_R1	5	5	-	-	-		
1707771-BI	W-27-A_072517_SED_00-01_R2	5	5	-	-	-		
1707771-BJ	W-27-A_072517_SED_00-01_R3	5	5	-	-	-		
1707771-BL	W-27-INTA_072517_SED_03-05	5	5	-	-	-		
1707771-BM	W-27-INTA_072517_SED_05-10	5	5	-	-	-		
1707771-BN	W-63-INT_072517_SED_00-01	5	5	-	-	-		
1707771-BO	W-63-INT_072517_SED_01-03	5	5	-	-	-		
1707771-BP	W-MM-01_072517_SED_00-01	5	5	-	-	-		
1707771-BQ	W-MM-01_072517_SED_01-03_R1	5	5	-	-	-		
1707771-BR	W-MM-01_072517_SED_01-03_R2	5	5	-	-	-		
1707771-BS	W-MM-01_072517_SED_01-03_R3	5	5	-	-	-		
1707771-BT	W-MM-02_072517_SED_00-01	5	5	-	-	-		
1707771-BU	W-MM-02_072517_SED_01-03	5	5	-	-	-		
1707771-BV	W-MM-06_072517_SED_03-05_R1	5	5	-	-	-		
1707771-BW	W-MM-06_072517_SED_03-05_R2	5	5	-	-	-		
1707771-BX	W-MM-06_072517_SED_03-05_R3	5	5	-	-	-		
1707771-BZ	W-MM-07_072517_SED_00-01	5	5	-	-	-		
1708151-22	W-MM-09_080117_SED_01-03	5	5	QC	-	-	MS/MSD	

PREPARATION BENCH SHEET

F708405

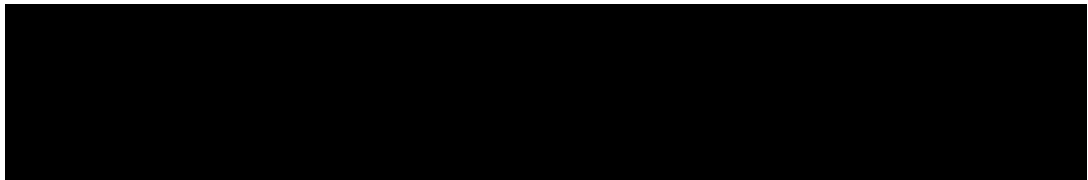
Eurofins Frontier Global Sciences, Inc.

Matrix: Soil/Sediment

Prepared using: AFS - EFGS-019 Solids Analysis

Prepared: 8/14/2017

1708151-42	W-104-INTB_080317_SED_05-10	5	5	QC	-	-	MS/MSD	
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### Peer Review Checklist for Total Solids and Density (SOP5133)

Analyst: CC

Date: 8/16/17

Reviewer: DM

Date: 8-16-17

WO #: 1707771, 1708151

Batch #: F708405

Dataset ID: TS170814-3

Reviewer Initials: DM

#### General Comments/Re-run requirements:

Select	SOP	Method	Matrix
<input checked="" type="checkbox"/>	SOP5133	TS	S/T
<input type="checkbox"/>	SOP5133	Density	Liquids

Initials	SOP Date	
<u>CC</u>	<u>12/20/16</u>	<input checked="" type="checkbox"/>
		<input type="checkbox"/>

Reviewer Initials: DM

#### 1. Total Solids

##### A. Check for transcription errors from Benchsheet/Raw Data

- (i) Do sample ID(s) match?
- (ii) Do masses/volumes match?
- (iii) Are the analyst name, dataset ID, and preparation date listed?
- (iv) Does the LIMS benchsheet prep date match the actual prep date?

##### B. Does the batch include 1 MD/MT per 10 client samples?

##### C. MD RPD/MT RSD ≤ 10%

##### D. Are qualifiers, O-04 and O-09, included for samples analyzed out of hold time?

<input type="checkbox"/> Density Only - NA this section			
<input checked="" type="checkbox"/> DONE			<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO		<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO		<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO		<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO		<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO		<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> PASS	<input type="checkbox"/> FAIL		<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> N/A	<input checked="" type="checkbox"/>

#### 2. Density

##### A. Check for transcription errors from Benchsheet/Raw Data

- (i) Do sample ID(s) match?
- (ii) Do masses/volumes match?
- (iii) Are the analyst name, dataset ID, and preparation date listed?
- (iv) Does the LIMS benchsheet prep date match the actual prep date?
- (v) Volume (if other than 1 mL): \_\_\_\_\_ Can the calculated result be reproduced?

<input checked="" type="checkbox"/> Total Solids Only - NA this section			
<input type="checkbox"/> DONE			<input type="checkbox"/>
<input type="checkbox"/> YES	<input type="checkbox"/> NO		<input type="checkbox"/>
<input type="checkbox"/> YES	<input type="checkbox"/> NO		<input type="checkbox"/>
<input type="checkbox"/> YES	<input type="checkbox"/> NO		<input type="checkbox"/>
<input type="checkbox"/> YES	<input type="checkbox"/> NO		<input type="checkbox"/>
<input type="checkbox"/> YES	<input type="checkbox"/> NO		<input type="checkbox"/>
<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> N/A	<input type="checkbox"/>



Frontier Global Sciences

**Total Solids Dataset Cover Page**

**Dataset ID:** TS170814-4  
**Batch ID:** F708406  
**Work Order(s):** 1707771, 1708151, 1708154

**Analyst:** CLC  
**Prep. Date:** 8/14/2017

**Analytical Issues/Explanations:**

QUALITY ASSURANCE  
PEER-REVIEWED

INITIALS: PL 8/17/17

Preparation Date: Aug 14, 2017

Batch #: 4  
Batch ID: F708406

Analyst: CLC

Work Order(s): 1707771, 1708151, 1708154

Pan ID	Sample ID	Pan Wt (g)	Pan + Sample Wet (g)	Wet Sample (g)	Pan + Sample Dry (g)	Dry Sample (g)	% TS	Notes
1	1707771-CA	0.9990	6.6720	5.6730	2.3310	1.3320	23.5%	
2	1707771-CB	0.9740	6.2240	5.2500	2.1930	1.2190	23.2%	
3	1707771-CC	0.9740	6.5540	5.5800	2.2300	1.2560	22.5%	
4	1707771-CE	0.9820	6.8640	5.8820	2.5140	1.5320	26.0%	
5	1707771-CF	1.0190	6.9880	5.9690	2.3610	1.3420	22.5%	
6	1707771-CG	1.0370	6.8580	5.8210	2.4120	1.3750	23.6%	
7	1707771-CH	1.0450	6.7280	5.6830	2.4700	1.4250	25.1%	
8	1707771-CI	0.9960	6.3270	5.3310	2.1910	1.1950	22.4%	
9	1707771-CJ	0.9970	6.1580	5.1610	2.6860	1.6890	32.7%	
10	1707771-CK	1.0250	6.8860	5.8610	2.6160	1.5910	27.1%	
11	1707771-CL	1.0750	6.6910	5.6160	3.6110	2.5360	45.2%	
12	1707771-CM	1.0180	6.3300	5.3120	2.4040	1.3860	26.1%	
13	1707771-CN	1.0390	6.8250	5.7860	2.6200	1.5810	27.3%	
14	1707771-CO	0.9860	6.2860	5.3000	2.6350	1.6490	31.1%	
15	1707771-CP	1.0710	6.0790	5.0080	2.3990	1.3280	26.5%	
16	1707771-CQ	1.0280	6.6430	5.6150	2.8120	1.7840	31.8%	
17	1707771-CR	1.0200	6.1110	5.0910	2.6100	1.5900	31.2%	
18	1707771-CS	0.9840	6.6650	5.6810	2.8100	1.8260	32.1%	
19	1708151-61	0.9780	6.2750	5.2970	2.9420	1.9640	37.1%	
20	1708151-61MD	1.0320	6.6010	5.5690	3.1440	2.1120	37.9%	2.3%
21	1708154-02	1.0680	6.3200	5.2520	2.3310	1.2630	24.0%	
22	1708154-02MD	1.0300	6.6720	5.6420	2.4230	1.3930	24.7%	2.6%

PREPARATION BENCH SHEET

F708406

Eurofins Frontier Global Sciences, Inc.

Matrix: Soil/Sediment

Prepared using: AFS - EFGS-019 Solids Analysis

Prepared: 8/14/2017

Lab Number	Sample ID and Source Sample	Initial (g)	Final (g)	Spike1 ID	$\mu$ l Spike1	Spike2 ID	$\mu$ l Spike2	Extraction Comments
F708406-DUP1	Duplicate [1708151-61]	5	5					
F708406-DUP2	Duplicate [1708154-02]	5	5					

Standard ID(s):

Description:

Expiration:



**PREPARATION BENCH SHEET**

F708406

**Eurofins Frontier Global Sciences, Inc.**

**Matrix: Soil/Sediment**

**Prepared using: AFS - EFGS-019 Solids Analysis**

**Prepared: 8/14/2017**

Lab Number	Sample ID	Initial (g)	Final (g)	Sample Comments	Analysis Comments
1707771-CA	W-MM-07_072517_SED_01-03_R1	5	5	No	
1707771-CB	W-MM-07_072517_SED_01-03_R2	5	5	No	
1707771-CC	W-MM-07_072517_SED_01-03_R3	5	5	No	
1707771-CE	W-MM-17_072517_SED_01-03	5	5	No	
1707771-CF	W-MM-18_072517_SED_00-01	5	5	No	
1707771-CG	W-MM-18_072517_SED_01-03	5	5	No	
1707771-CH	W-MM-18_072517_SED_03-05_R1	5	5	No	
1707771-CI	W-MM-18_072517_SED_03-05_R2	5	5	No	
1707771-CJ	W-MM-18_072517_SED_03-05_R3	5	5	No	
1707771-CK	W-MM-18_072517_SED_05-10	5	5	No	
1707771-CL	W-MM-19_072517_SED_03-05	5	5	No	
1707771-CM	W-MM-19_072517_SED_05-10_R1	5	5	No	
1707771-CN	W-MM-19_072517_SED_05-10_R2	5	5	No	
1707771-CO	W-MM-19_072517_SED_05-10_R3	5	5	No	
1707771-CP	W-MM-22_072517_SED_03-05	5	5	No	
1707771-CQ	W-MM-22_072517_SED_05-10_R1	5	5	No	
1707771-CR	W-MM-22_072517_SED_05-10_R2	5	5	No	
1707771-CS	W-MM-22_072517_SED_05-10_R3	5	5	No	
1708151-61	W-MM-20_080317_SED_03-05	5	5	No	
1708154-02	W-21-UM-South_080117_SED_01-03	5	5	No	

**PREPARATION BENCH SHEET**

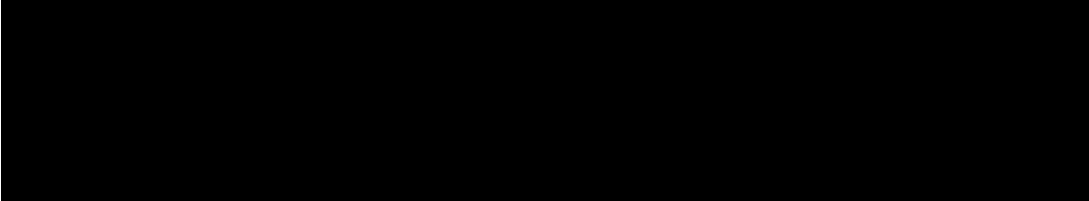
F708406

**Eurofins Frontier Global Sciences, Inc.**

**Matrix: Soil/Sediment**

**Prepared using: AFS - EFGS-019 Solids Analysis**

**Prepared: 8/14/2017**



# Failing Data Report -

Sample ID	Analysis	Result	MRL	Dup Result	Source Result	True Value	Units	% Rec.	Rec. LCL	Rec. UCL	RPD	RPD Limit	Over Cal	Failure	Qualifier
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*Coveles App*  
Analyst Reviewed By  
*8/17/17*  
Date

*[Signature]*  
Peer Reviewed By  
*8/17/17*  
Date

Remote Lab Total Solids Logbook

Lab Technician(s): CLC Batch: F708406 Date: 8/14/17 Page 4 of 4

Thermometer #: 12040514270 Oven #: 12 Actual temperature: 104.9 (Range 103-105°C)

Balance #<sup>1</sup>: 6 Start time: 1310<sup>8/16/17</sup> End time<sup>2</sup>: 950<sup>8/17/17</sup> Time re-weighed<sup>3</sup>: 1015

Client(s)/WO#: 1707771, 1708151, 1708154

Sample ID	Pan #	Pan (g) <i>CLC 8/14/17</i>	Pan + Wet Sample (g)	Pan + Dry Sample (g)	Notes
1707771-CA	01	1.0999	6.672	2.331	} same sample
1707771-CB	02	0.974	6.224	2.193	
1707771-CC	03	0.974	6.554	2.230	
1707771-CE	04	0.982	6.864	2.514	
1707771-CF	05	1.019	6.988	2.361	
1707771-CG	06	1.037	6.858	2.412	} same sample
<del>1707771-CH</del>	07	1.045	6.728	2.470	
1707771-CI	08	0.996	6.327	2.191	
1707771-CJ	09	0.997	6.158	2.686	
1707771-CK	010	1.025	6.886	2.616	
1707771-CL	011	1.075	6.691	3.611	} same sample
1707771-CM	012	1.018	6.330	2.404	
1707771-CN	013	1.039	6.825	2.620	
1707771-CO	014	0.986	6.286	2.635	
1707771-CP	015	1.071	6.079	2.399	
1707771-CQ	016	1.028	6.643	2.812	} same sample
1707771-CR	017	1.020	6.111	2.610	
1707771-CS	018	0.984	6.665	2.810	
1708151-61	019	0.978	6.275	2.942	
<del>F708406-DUP1</del>	020	1.032	6.601	3.144	SRC-1708151-61
1708154-02	021	1.068	6.320	2.331	SRC-1708154-02
F708406-DUP2	022	1.030	6.672	2.423	
			<i>CLC 8/14/17</i>		

Comments:

<sup>1</sup>The same balance must be used to weight samples before and after ovening.

<sup>2</sup>Samples must be ovened over 12 hours.

<sup>3</sup>Samples must be re-weighed within 30 minutes of oven cool down.

Peer Review Checklist for Total Solids and Density (SOP5133)

Analyst: CLC Date: 8/17/17 Reviewer: PL Date: 8/17/17

WO #: 1707771, 1708151, 1708154 Batch #: F708406 Dataset ID: TS170814-4

Reviewer Initials: PL

General Comments/Re-run requirements:

[Empty box for general comments]

Select	SOP	Method	Matrix
<input checked="" type="checkbox"/>	SOP5133	TS	S/T
<input type="checkbox"/>	SOP5133	Density	Liquids

Initials: CLC SOP Date: 12/20/16

Reviewer Initials: PL

1. Total Solids

- A. Check for transcription errors from Benchsheet/Raw Data
  - (i) Do sample ID(s) match?
  - (ii) Do masses/volumes match?
  - (iii) Are the analyst name, dataset ID, and preparation date listed?
  - (iv) Does the LIMS benchsheet prep date match the actual prep date?
- B. Does the batch include 1 MD/MT per 10 client samples?
- C. MD RPD/MT RSD ≤ 10%
- D. Are qualifiers, O-04 and O-09, included for samples analyzed out of hold time?

Density Only - NA this section

<input checked="" type="checkbox"/> DONE		<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> PASS	<input type="checkbox"/> FAIL	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> N/A <input checked="" type="checkbox"/>

2. Density

- A. Check for transcription errors from Benchsheet/Raw Data
  - (i) Do sample ID(s) match?
  - (ii) Do masses/volumes match?
  - (iii) Are the analyst name, dataset ID, and preparation date listed?
  - (iv) Does the LIMS benchsheet prep date match the actual prep date?
  - (v) Volume (if other than 1 mL): \_\_\_\_\_ Can the calculated result be reproduced?

Total Solids Only - NA this section

<input type="checkbox"/> DONE		<input checked="" type="checkbox"/>
<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input checked="" type="checkbox"/>
<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input checked="" type="checkbox"/>
<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input checked="" type="checkbox"/>
<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input checked="" type="checkbox"/>
<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input checked="" type="checkbox"/>
<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> N/A <input checked="" type="checkbox"/>



Frontier Global Sciences

**Total Solids Dataset Cover Page**

**Dataset ID:** TS170814-1  
**Batch ID:** F708407  
**Work Order(s):** 1707771, 1707810, 1708155

**Analyst:** CLC  
**Prep. Date:** 8/14/2017

**Analytical Issues/Explanations:**

QUALITY ASSURANCE  
PEER - REVIEWED  
INITIALS: DM 8/16/17

Preparation Date: Aug 14, 2017

Batch #: 1

Analyst: CLC

Batch ID: F708407

Work Order(s): 1707771, 1707810, 1708155

Pan ID	Sample ID	Pan Wt (g)	Pan + Sample Wet (g)	Wet Sample (g)	Pan + Sample Dry (g)	Dry Sample (g)	% TS	Notes
1	1707771-CT	1.0560	6.1270	5.0710	2.8670	1.8110	35.7%	
2	1707771-CU	1.0170	6.8210	5.8040	3.2720	2.2550	38.9%	
3	1707771-CV	0.9880	6.4970	5.5090	3.3500	2.3620	42.9%	
4	1707771-CW	0.9950	6.6010	5.6060	3.6880	2.6930	48.0%	
5	1707771-CX	1.0150	6.4970	5.4820	4.1320	3.1170	56.9%	
6	1707771-CY	1.0070	6.3320	5.3250	3.9880	2.9810	56.0%	
7	1707771-CZ	1.0260	6.2340	5.2080	3.7460	2.7200	52.2%	
8	1707771-DA	1.0220	6.5560	5.5340	3.8300	2.8080	50.7%	
9	1707810-01	1.0160	6.8990	5.8830	3.4260	2.4100	41.0%	
10	1707810-02	1.0170	6.9020	5.8850	3.6430	2.6260	44.6%	
11	1707810-02MD	1.0300	6.1850	5.1550	3.3800	2.3500	45.6%	2.1%
12	1707810-03	1.0020	6.2360	5.2340	2.5170	1.5150	28.9%	
13	1707810-04	1.0040	6.9390	5.9350	2.7090	1.7050	28.7%	
14	1707810-05	1.0270	6.1910	5.1640	2.4780	1.4510	28.1%	
15	1707810-06	1.0140	6.6690	5.6550	3.7990	2.7850	49.2%	
16	1707810-07	1.0100	6.9570	5.9470	4.4830	3.4730	58.4%	
17	1707810-08	0.9960	6.4650	5.4690	3.9240	2.9280	53.5%	
18	1707810-09	1.0000	6.3510	5.3510	2.5820	1.5820	29.6%	
19	1707810-10	1.0460	6.7380	5.6920	2.9590	1.9130	33.6%	
20	1707810-11	1.0600	6.2190	5.1590	2.2700	1.2100	23.5%	
21	1708155-05	1.0400	6.8500	5.8100	3.2900	2.2500	38.7%	
22	1708155-05MD	1.0030	6.3940	5.3910	3.0870	2.0840	38.7%	0.2%

Remote Lab Total Solids Logbook

Lab Technician(s): CVC / PL Batch: F708407 Date: 8/14/17 Page 1 of 4  
 Thermometer #: 120405142T<sup>2</sup> Oven #: 12 Actual temperature: 103.2 (Range 103-105°C)  
 Balance #: 6 Start time: 1455 <sup>8/14/17</sup> End time<sup>2</sup>: 8:55 <sup>8/14/17</sup> Time re-weighed<sup>3</sup>: 9:10  
 Client(s)/WO#: 1707771, 1707810, 1708155

Sample ID	Pan #	Pan (g) <i>CVC 8/14/17</i>	Pan + Wet Sample (g)	Pan + Dry Sample (g)	Notes
1707771-CT	L1	1.0546	6.127	2.867	
1707771-CU	L2	1.017	6.821	3.272	
1707771-CV	L3	0.988	6.497	3.350	
1707771-CW	L4	0.995	6.601	3.688	
1707771-CX	L5	1.015	6.497	4.132	} Same Sample
1707771-CY	L6	1.007	6.332	3.988	
1707771-CZ	L7	1.026	6.234	3.746	
1707771-DA	L8	1.022	6.556	3.830	
1707810-01	L9	1.016	6.899	3.426	
1707810-02	L10	1.017	6.902	3.643	
F708407-DUP1	L11	1.030	6.185	3.380	SPU 1707810-02
1707810-03	L12	1.002	6.236	2.517	
1707810-04	L13	1.004	6.939	2.709	
1707810-05	L14	1.027	6.191	2.478	
1707810-06	L15	1.014	6.669	3.799	Container D
1707810-07	L16	1.010	6.957	4.483	
1707810-08	L17	0.996	6.465	3.924	
1707810-09	L18	1.000	6.351	2.582	
1707810-10	L19	1.046	6.738	2.959	
1707810-11	L20	1.060	6.219	2.270	
1708155-05	L21	1.040	6.850	3.290	
F708407-DUP2	L22	1.003	6.394	3.087	SPU <del>17078</del> <sup>1708155-05</sup>

Comments:

*CVC 8/14/17*

<sup>1</sup>The same balance must be used to weight samples before and after ovening.

<sup>2</sup>Samples must be ovened over 12 hours.

<sup>3</sup>Samples must be re-weighed within 30 minutes of oven cool down.



PREPARATION BENCH SHEET

F708407

Eurofins Frontier Global Sciences, Inc.

Matrix: Soil/Sediment

Prepared using: AFS - EFGS-019 Solids Analysis

Prepared: 8/14/2017

Lab Number	Sample ID and Source Sample	Initial (g)	Final (g)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F708407-DUP1	Duplicate [1707810-02]	5	5					
F708407-DUP2	Duplicate [1708155-05]	5	5					

Standard ID(s):      Description:

Expiration:

**PREPARATION BENCH SHEET**

F708407

**Eurofins Frontier Global Sciences, Inc.**

**Matrix: Soil/Sediment**

**Prepared using: AFS - EFGS-019 Solids Analysis**

**Prepared: 8/14/2017**

Lab Number	Sample ID	Initial (g)	Final (g)	QC Sample	Sample Specs.	Raw Data	Sample Comments	Analysis Comments
1707771-CT	W-MM-23_072517_SED_03-05	5	5	-	-	-		
1707771-CU	W-MM-23_072517_SED_05-10	5	5	-	-	-		
1707771-CV	W-MM-24_072517_SED_03-05	5	5	-	-	-		
1707771-CW	W-MM-24_072517_SED_05-10	5	5	-	-	-		
1707771-CX	W-MM-TP_072517_SED_00-01_R1	5	5	-	-	-		
1707771-CY	W-MM-TP_072517_SED_00-01_R2	5	5	-	-	-		
1707771-CZ	W-MM-TP_072517_SED_00-01_R3	5	5	-	-	-		
1707771-DA	W-MM-TP_072517_SED_01-03	5	5	-	-	-		
1707810-01	ADD-02_072417_SED_00-01	5	5	-	-	-		
1707810-02	ADD-02_072417_SED_01-03	5	5	-	-	-		
1707810-03	W-17-High_072417_SED_00-01	5	5	-	-	-		
1707810-04	W-17-High_072417_SED_01-03	5	5	-	-	-		
1707810-05	W-61-High_072417_SED_00-01	5	5	-	-	-		
1707810-06	W-61-High_072417_SED_01-03	5	5	-	-	-		
1707810-07	W-61-Intertidal_072417_SED_00-01	5	5	-	-	-		
1707810-08	W-61-Intertidal_072417_SED_01-03	5	5	-	-	-		
1707810-09	W-61-Low_072417_SED_00-01	5	5	-	-	-		
1707810-10	W-61-Low_072417_SED_01-03	5	5	-	-	-		
1707810-11	W-61-Mid_072417_SED_00-01	5	5	-	-	-		

**PREPARATION BENCH SHEET**

F708407

**Eurofins Frontier Global Sciences, Inc.**

**Matrix: Soil/Sediment**

**Prepared using: AFS - EFGS-019 Solids Analysis**

**Prepared: 8/14/2017**

1708155-05	OR-02-03_080117_SED_00-01	5	5	QC	-	-	MS/MSD	
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# Failing Data Report -

Sample ID	Analysis	Result	MRL	Dup Result	Source Result	True Value	Units	% Rec.	Rec. LCL	Rec. UCL	RPD	RPD Limit	Over Cal	Failure	Qualifier
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*Courtney Wolf* 8/16/17  
\_\_\_\_\_  
Analyst Reviewed By Date

*Dan Maxam* 8/16/17  
\_\_\_\_\_  
Peer Reviewed By Date

### Peer Review Checklist for Total Solids and Density (SOP5133)

Analyst: CLC Date: 8/16/17 Reviewer: DM Date: 8/16/17

WO #: 1707774, 1707810, 1708155 Batch #: F708407 Dataset ID: TS 170814-1

Reviewer Initials: DM

**General Comments/Re-run requirements:**

Select	SOP	Method	Matrix
<input checked="" type="checkbox"/>	SOP5133	TS	S/T
<input type="checkbox"/>	SOP5133	Density	Liquids

Initials	SOP Date
<u>CLC</u>	<u>12/20/16</u>
<input type="checkbox"/>	<input type="checkbox"/>

Reviewer Initials: DM

**1. Total Solids**

- A. Check for transcription errors from Benchsheet/Raw Data
  - (i) Do sample ID(s) match?
  - (ii) Do masses/volumes match?
  - (iii) Are the analyst name, dataset ID, and preparation date listed?
  - (iv) Does the LIMS benchsheet prep date match the actual prep date?
- B. Does the batch include 1 MD/MT per 10 client samples?
- C. MD RPD/MT RSD ≤ 10%
- D. Are qualifiers, O-04 and O-09, included for samples analyzed out of hold time?

<input type="checkbox"/> Density Only - NA this section			
<input checked="" type="checkbox"/> DONE			<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO		<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO		<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO		<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO		<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO		<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> PASS	<input type="checkbox"/> FAIL		<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> N/A	<input checked="" type="checkbox"/>

**2. Density**

- A. Check for transcription errors from Benchsheet/Raw Data
  - (i) Do sample ID(s) match?
  - (ii) Do masses/volumes match?
  - (iii) Are the analyst name, dataset ID, and preparation date listed?
  - (iv) Does the LIMS benchsheet prep date match the actual prep date?
  - (v) Volume (if other than 1 mL): \_\_\_\_\_ Can the calculated result be reproduced?

<input checked="" type="checkbox"/> Total Solids Only - NA this section			
<input type="checkbox"/> DONE			<input type="checkbox"/>
<input type="checkbox"/> YES	<input type="checkbox"/> NO		<input type="checkbox"/>
<input type="checkbox"/> YES	<input type="checkbox"/> NO		<input type="checkbox"/>
<input type="checkbox"/> YES	<input type="checkbox"/> NO		<input type="checkbox"/>
<input type="checkbox"/> YES	<input type="checkbox"/> NO		<input type="checkbox"/>
<input type="checkbox"/> YES	<input type="checkbox"/> NO		<input type="checkbox"/>
<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> N/A	<input type="checkbox"/>



Frontier Global Sciences

**Total Solids Dataset Cover Page**

**Dataset ID:** TS170816-3  
**Batch ID:** F708447  
**Work Order(s):** 1707771, 1708151

**Analyst:** CLC  
**Prep. Date:** 8/16/2017

**Analytical Issues/Explanations:**

QUALITY ASSURANCE  
PEER - REVIEWED  
INITIALS: DM 8/22/17

PREPARATION BENCH SHEET

F708447

Eurofins Frontier Global Sciences, Inc.

Matrix: Soil/Sediment

Prepared using: AFS - EFGS-019 Solids Analysis

Prepared: 8/16/2017

Lab Number	Sample ID and Source Sample	Initial (g)	Final (g)	Spike1 ID	$\mu$ l Spike1	Spike2 ID	$\mu$ l Spike2	Extraction Comments
F708447-DUP1	Duplicate [1708151-26]	5	5					
F708447-DUP2	Duplicate [1708151-35]	5	5					

Standard ID(s): Description:

Expiration:

**PREPARATION BENCH SHEET**

F708447

**Eurofins Frontier Global Sciences, Inc.**

**Matrix: Soil/Sediment**

**Prepared using: AFS - EFGS-019 Solids Analysis**

**Prepared: 8/16/2017**

Lab Number	Sample ID	Initial (g)	Final (g)	QC Sample	Sample Specs.	Raw Data	Sample Comments	Analysis Comments
1707771-01	OR-01-01_072417_SED_00-01_R1	5	5	-	-	-		
1707771-02	OR-01-01_072417_SED_00-01_R2	5	5	-	-	-		
1707771-03	OR-01-01_072417_SED_00-01_R3	5	5	-	-	-		
1707771-09	OR-01-05_072417_SED_00-01_R1	5	5	-	-	-		
1707771-10	OR-01-05_072417_SED_00-01_R2	5	5	-	-	-		
1707771-11	OR-01-05_072417_SED_00-01_R3	5	5	-	-	-		
1708151-17	W-110-A_080117_SED_00-01_R1	5	5	-	-	-		
1708151-18	W-110-A_080117_SED_00-01_R2	5	5	-	-	-		
1708151-19	W-110-A_080117_SED_00-01_R3	5	5	-	-	-		
1708151-21	W-MM-09_080117_SED_00-01	5	5	-	-	-		
1708151-23	W-MM-10_080117_SED_00-01	5	5	-	-	-		
1708151-24	W-MM-10_080117_SED_01-03	5	5	-	-	-		
1708151-25	W-MM-15_080117_SED_00-01	5	5	-	-	-		
1708151-26	W-MM-15_080117_SED_01-03	5	5	-	-	-		
1708151-27	W-MM-16_080117_SED_00-01	5	5	-	-	-		
1708151-28	W-MM-16_080117_SED_01-03	5	5	-	-	-		
1708151-29	W-MM-20_080117_SED_00-01	5	5	-	-	-		
1708151-30	W-MM-20_080117_SED_01-03	5	5	-	-	-	Original jar broken, transferred sample	
1708151-31	W-MM-21_080117_SED_00-01	5	5	-	-	-		



PREPARATION BENCH SHEET

F708447

Eurofins Frontier Global Sciences, Inc.

Matrix: Soil/Sediment

Prepared using: AFS - EFGS-019 Solids Analysis

Prepared: 8/16/2017

1708151-35	W-101-INTA_080317_SED_03-05	5	5	-	-	-		
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# Failing Data Report -

Sample ID	Analysis	Result	MRL	Dup Result	Source Result	True Value	Units	% Rec.	Rec. LCL	Rec. UCL	RPD	RPD Limit	Over Cal	Failure	Qualifier
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Courtney Giff 8/18/17  
Analyst Reviewed By Date

Don Maxem 8/22/17  
Peer Reviewed By Date

Preparation Date: Aug 16, 2017

Batch #: 3

Analyst: CLC

Batch ID: F708447

Work Order(s): 1707771, 1708151

Pan ID	Sample ID	Pan Wt (g)	Pan + Sample Wet (g)	Wet Sample (g)	Pan + Sample Dry (g)	Dry Sample (g)	% TS	Notes
1	1707771-01	1.0050	6.2120	5.2070	2.5880	1.5830	30.4%	
2	1707771-02	1.0050	6.2120	5.2070	2.5880	1.5830	30.4%	
3	1707771-03	1.0050	6.2120	5.2070	2.5880	1.5830	30.4%	
4	1707771-09	0.9950	6.9850	5.9900	3.4970	2.5020	41.8%	
5	1707771-10	0.9950	6.9850	5.9900	3.4970	2.5020	41.8%	
6	1707771-11	0.9950	6.9850	5.9900	3.4970	2.5020	41.8%	
7	1708151-17	1.0570	6.2150	5.1580	2.2700	1.2130	23.5%	
8	1708151-18	0.9970	6.7350	5.7380	2.3710	1.3740	23.9%	
9	1708151-19	1.0380	6.2060	5.1680	2.1970	1.1590	22.4%	
10	1708151-21	1.0310	6.0330	5.0020	2.3180	1.2870	25.7%	
11	1708151-23	1.0070	6.4710	5.4640	1.7830	0.7760	14.2%	
12	1708151-24	1.0150	6.0320	5.0170	1.7940	0.7790	15.5%	
13	1708151-25	1.0180	6.2420	5.2240	2.3250	1.3070	25.0%	
14	1708151-26	1.0210	6.3640	5.3430	2.4170	1.3960	26.1%	
15	1708151-26MD	1.0180	6.7290	5.7110	2.3200	1.3020	22.8%	13.6%
16	1708151-27	0.9930	6.0840	5.0910	2.0130	1.0200	20.0%	
17	1708151-28	1.0030	6.6180	5.6150	2.4640	1.4610	26.0%	
18	1708151-29	1.0120	6.9990	5.9870	3.1470	2.1350	35.7%	
19	1708151-30	1.0050	6.4350	5.4300	2.9720	1.9670	36.2%	
20	1708151-31	1.0140	6.5350	5.5210	2.6730	1.6590	30.0%	
21	1708151-35	1.0160	6.1280	5.1120	3.1110	2.0950	41.0%	
22	1708151-35MD	1.0270	6.8210	5.7940	3.4240	2.3970	41.4%	0.9%

### Remote Lab Total Solids Logbook

Lab Technician(s): LVC Batch: F708447 Date: 8/16/17 Page 3 of 3  
 Thermometer #: 120405142<sup>TR</sup> Oven #: 12 Actual temperature: 106.2 (Range 103-105°C)  
 Balance #<sup>1</sup>: 6 Start time: 1203<sup>8/17/17</sup> End time<sup>2</sup>: 1412<sup>25</sup><sup>8/18/17</sup> Time re-weighed<sup>3</sup>: 1245  
 Client(s)/WO#: 1707771, 1708151

Sample ID	Pan #	Pan (g)	Pan + Wet Sample (g)	Pan + Dry Sample (g)	Notes
1707771-01	R1	1.005	6.212	2.588	} same sample (only weighed out once)
1707771-02	R2	1.005	6.212	2.588	
1707771-03	R3	1.005	6.212	2.588	
1707771-09	R4	0.995	6.985	3.497	} same sample (only weighed out once)
1707771-10	R5	0.995	6.985	3.497	
1707771-11	R6	0.995	6.985	3.497	
1708151-17	R7	1.057	6.215	2.270	} same sample
1708151-18	R8	0.997	6.735	2.371	
1708151-19	R9	1.038	6.206	2.197	
1708151-21	R10	1.031	6.033	2.318	
1708151-23	R11	1.007	6.471	1.783	
1708151-24	R12	1.015	6.082	1.794	
1708151-25	R13	1.018	6.242	2.325	
1708151-26	R14	1.021	6.364	2.417	
F708447-DUP1	R15	1.018	6.729	2.320	SPL: 1708151-26
1708151-27	R16	0.993	6.084	2.013	
1708151-28	R17	<del>0.998</del> <sup>1.005</sup>	6.618	2.464	
1708151-29	R18	1.012	6.999	3.147	
1708151-30	R19	1.005	6.435	2.972	
1708151-31	R20	1.014	6.529 <sup>35</sup>	2.673	
1708151-35	R21	1.016	6.128	3.111	
F708447-DUP2	R22	1.027	6.821	3.424	SPL: 1708151-35

Comments:

LVC 8/16/17

Reviewed  
8/18/17 DM

<sup>1</sup>The same balance must be used to weight samples before and after ovening.  
<sup>2</sup>Samples must be ovened over 12 hours.  
<sup>3</sup>Samples must be re-weighed within 30 minutes of oven cool down.

### Peer Review Checklist for Total Solids and Density (SOP5133)

Analyst: CLC Date: 8/18/17 Reviewer: DM Date: 8/22/17

WO #: 1707271, 1708151 Batch #: F708447 Dataset ID: TS170816-3

Reviewer Initials: DM

**General Comments/Re-run requirements:**

Select	SOP	Method	Matrix
<input checked="" type="checkbox"/>	SOP5133	TS	S/T
<input type="checkbox"/>	SOP5133	Density	Liquids

Initials	SOP Date
<u>CLC</u>	<u>12/20/16</u>

Reviewer Initials: DM

**1. Total Solids**

- A. Check for transcription errors from Benchsheet/Raw Data
  - (i) Do sample ID(s) match?
  - (ii) Do masses/volumes match?
  - (iii) Are the analyst name, dataset ID, and preparation date listed?
  - (iv) Does the LIMS benchsheet prep date match the actual prep date?
- B. Does the batch include 1 MD/MT per 10 client samples?
- C. MD RPD/MT RSD ≤ 10%
- D. Are qualifiers, O-04 and O-09, included for samples analyzed out of hold time?

Density Only - NA this section

<input checked="" type="checkbox"/> DONE		<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> PASS	<input checked="" type="checkbox"/> FAIL	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> N/A

**2. Density**

- A. Check for transcription errors from Benchsheet/Raw Data
  - (i) Do sample ID(s) match?
  - (ii) Do masses/volumes match?
  - (iii) Are the analyst name, dataset ID, and preparation date listed?
  - (iv) Does the LIMS benchsheet prep date match the actual prep date?
  - (v) Volume (if other than 1 mL): \_\_\_\_\_ . Can the calculated result be reproduced?

Total Solids Only - NA this section

<input type="checkbox"/> DONE		<input type="checkbox"/>
<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/>
<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/>
<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/>
<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/>
<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/>
<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> N/A

**Analysis Datasheet for Total Mercury**

 Date of Analysis: August 15, 2017  
 Instrument #: Hg2600-3  
 LIMS Sequence #: 7H15016

 Analyst: BC  
 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	40.27 units	80.54	37.99 units	75.97	101.5 %Rec
SEQ-CAL2	1	1.00 ng/L	78.94 units	78.94	76.66 units	76.66	102.4 %Rec
SEQ-CAL3	1	5.00 ng/L	375.28 units	75.06	373.00 units	74.60	99.7 %Rec
SEQ-CAL4	1	20.00 ng/L	1472.06 units	73.60	1469.78 units	73.49	98.2 %Rec
SEQ-CAL5	1	40.00 ng/L	2944.38 units	73.61	2942.10 units	73.55	98.3 %Rec
SEQ-CAL6	0						
SEQ-CAL7	0						
SEQ-CAL8	0						
SEQ-CAL9	0						
<b>Corr. Mean RF</b>		<b>Corr. St Dev RF</b>	<b>Corr. RSD CF</b>	<b>Uncorr. Mean RF</b>			
74.85		+/- 1.43	1.9% RSD	76.35			

**Blanks:**

LabNumber	n	Mean	Std Dev	Mean (ng/L)	Std Dev (ng/L)
SEQ-IBL	3	2.28 units	±2.04	0.03 ng/L	±0.03

**Preparation Blanks**

Sample Type	Batch ID	n	Mean	Std Dev
BLK	1	2	0.304 ng/L	±0.028
BLK	2	2	0.275 ng/L	±0.316
BLK	3	0	0.000 ng/L	
BLK	4	0	0.000 ng/L	
BLK	5	0	0.000 ng/L	
BLK	6	0	0.000 ng/L	

QUALITY ASSURANCE  
 PEER - REVIEWED  
 INITIALS: DM 8/16/17

Instrument	Analyst	Sample		Dilution	Analyzed	FileID	RunEnd	Uncorrected Response	Batch ID	No PB Correction?	RESP	InitialResult	FinalResult	InitialUnits	Comments
		Type	LabNumber												
Hg2600-3	BC	CAL	SEQ-IBL1	1	8/15/2017 8:28:57	73163-1.RAW	8:28:57 AM	0.00							
Hg2600-3	BC	CAL	SEQ-IBL2	1	8/15/2017 8:33:05	73164-1.RAW	8:33:05 AM	2.94			-2.3	-0.031	-0.031	ng/L	
Hg2600-3	BC	CAL	SEQ-IBL3	1	8/15/2017 8:37:14	73165-1.RAW	8:37:14 AM	3.91			0.7	0.009	0.009	ng/L	
Hg2600-3	BC	CAL	SEQ-CAL1	1	8/15/2017 8:41:22	73166-1.RAW	8:41:22 AM	40.27			1.6	0.022	0.022	ng/L	
Hg2600-3	BC	CAL	SEQ-CAL2	1	8/15/2017 8:45:30	73167-1.RAW	8:45:30 AM	78.94			38.0	0.507	0.507	ng/L	
Hg2600-3	BC	CAL	SEQ-CAL3	1	8/15/2017 8:49:39	73168-1.RAW	8:49:39 AM	375.28			76.7	1.024	1.024	ng/L	
Hg2600-3	BC	CAL	SEQ-CAL4	1	8/15/2017 8:53:47	73169-1.RAW	8:53:47 AM	1472.06			373.0	4.983	4.983	ng/L	
Hg2600-3	BC	CAL	SEQ-CAL5	1	8/15/2017 8:57:56	73170-1.RAW	8:57:56 AM	2944.38			1469.8	19.635	19.635	ng/L	
Hg2600-3	BC	CAL	SEQ-ICV1	1	8/15/2017 9:02:04	73171-1.RAW	9:02:04 AM	383.80			2942.1	39.304	39.304	ng/L	
Hg2600-3	BC	BLK	F707537-BLK1	10	8/15/2017 9:06:36	73172-1.RAW	9:06:36 AM	4.71	1		381.5	5.097	5.097	ng/L	
Hg2600-3	BC	BLK	F707537-BLK2	10	8/15/2017 9:10:45	73173-1.RAW	9:10:45 AM	4.41	1		2.4	0.032	0.324	ng/L	
Hg2600-3	BC	SAM	F707537-BS1	100	8/15/2017 9:14:53	73174-1.RAW	9:14:53 AM	150.87	1		2.1	0.028	0.284	ng/L	
Hg2600-3	BC	SAM	F707537-BSD1	100	8/15/2017 9:19:01	73175-1.RAW	9:19:01 AM	164.41	1		148.6	1.982	198.198	ng/L	
Hg2600-3	BC	SAM	1707620-34	100	8/15/2017 9:23:10	73176-1.RAW	9:23:10 AM	14.16	1		162.1	2.163	216.286	ng/L	
Hg2600-3	BC	SAM	1707737-06	100	8/15/2017 9:27:18	73177-1.RAW	9:27:18 AM	17.23	1		11.9	0.156	15.562	ng/L	
Hg2600-3	BC	SAM	1707737-07	100	8/15/2017 9:31:27	73178-1.RAW	9:31:27 AM	147.21	1		14.9	0.197	19.664	ng/L	
Hg2600-3	BC	SAM	1707737-08	100	8/15/2017 9:35:35	73179-1.RAW	9:35:35 AM	24.17	1		144.9	1.933	193.308	ng/L	
Hg2600-3	BC	SAM	1707737-09	100	8/15/2017 9:39:43	73180-1.RAW	9:39:43 AM	978.63	1		21.9	0.289	28.935	ng/L	
Hg2600-3	BC	SAM	1707737-10	100	8/15/2017 9:43:52	73181-1.RAW	9:43:52 AM	318.84	1		976.3	13.040	1304.028	ng/L	
Hg2600-3	BC	CAL	SEQ-CCV1	1	8/15/2017 9:48:00	73182-1.RAW	9:48:00 AM	382.61	1		316.6	4.226	422.594	ng/L	
Hg2600-3	BC	CAL	SEQ-CCB1	1	8/15/2017 9:52:09	73183-1.RAW	9:52:09 AM	4.02	1		380.3	5.081	5.081	ng/L	
Hg2600-3	BC	SAM	1707737-11	100	8/15/2017 9:56:17	73184-1.RAW	9:56:17 AM	50.95	1		1.7	0.023	0.023	ng/L	
Hg2600-3	BC	SAM	1707737-12	100	8/15/2017 10:00:26	73185-1.RAW	10:00:26 AM	73.68	1		48.7	0.647	64.711	ng/L	
Hg2600-3	BC	SAM	1707737-13	100	8/15/2017 10:04:34	73186-1.RAW	10:04:34 AM	27.84	1		71.4	0.951	95.077	ng/L	
Hg2600-3	BC	SAM	1707737-14	100	8/15/2017 10:08:42	73187-1.RAW	10:08:42 AM	83.20	1		25.6	0.338	33.838	ng/L	
Hg2600-3	BC	SAM	1707771-01	100	8/15/2017 10:12:51	73188-1.RAW	10:12:51 AM	706.83	1		80.9	1.078	107.795	ng/L	
Hg2600-3	BC	SAM	1707771-02	50	8/15/2017 10:16:59	73189-1.RAW	10:16:59 AM	1005.10	1		704.5	9.409	940.922	ng/L	
Hg2600-3	BC	SAM	1707771-03	50	8/15/2017 10:21:08	73190-1.RAW	10:21:08 AM	960.93	1		1002.8	13.391	669.543	ng/L	
Hg2600-3	BC	SAM	1707771-04	50	8/15/2017 10:25:16	73191-1.RAW	10:25:16 AM	1823.99	1		958.6	12.801	640.039	ng/L	
Hg2600-3	BC	SAM	1707771-05	50	8/15/2017 10:29:24	73192-1.RAW	10:29:24 AM	1135.42	1		1821.7	24.331	1216.534	ng/L	
Hg2600-3	BC	SAM	1707771-06	50	8/15/2017 10:33:33	73193-1.RAW	10:33:33 AM	1392.32	1		1133.1	15.132	756.593	ng/L	
Hg2600-3	BC	CAL	SEQ-CCV2	1	8/15/2017 10:37:41	73194-1.RAW	10:37:41 AM	392.86	1		1390.0	18.564	928.193	ng/L	
Hg2600-3	BC	CAL	SEQ-CCB2	1	8/15/2017 10:41:50	73195-1.RAW	10:41:50 AM	3.19	1		390.6	5.218	5.218	ng/L	
Hg2600-3	BC	SAM	1707771-07	50	8/15/2017 10:45:58	73196-1.RAW	10:45:58 AM	1163.75	1		0.9	0.012	0.012	ng/L	
Hg2600-3	BC	SAM	1707771-08	50	8/15/2017 10:50:07	73197-1.RAW	10:50:07 AM	1024.88	1		1161.5	15.510	775.516	ng/L	
Hg2600-3	BC	SAM	1707771-09	50	8/15/2017 10:54:15	73198-1.RAW	10:54:15 AM	1160.85	1		1022.6	13.655	682.756	ng/L	
Hg2600-3	BC	SAM	1707771-10	50	8/15/2017 10:58:23	73199-1.RAW	10:58:23 AM	1377.56	1		1158.6	15.472	773.579	ng/L	
Hg2600-3	BC	SAM	1707620-34RE1	10	8/15/2017 11:02:32	73200-1.RAW	11:02:32 AM	134.06	1		1375.3	18.367	918.334	ng/L	
Hg2600-3	BC	SAM	1707737-06RE1	10	8/15/2017 11:06:40	73201-1.RAW	11:06:40 AM	136.21	1		131.8	1.730	17.300	ng/L	
Hg2600-3	BC	SAM	1707737-08RE1	10	8/15/2017 11:10:49	73202-1.RAW	11:10:49 AM	204.84	1		133.9	1.759	17.588	ng/L	
Hg2600-3	BC	SAM	1707737-11RE1	10	8/15/2017 11:14:57	73203-1.RAW	11:14:57 AM	505.06	1		202.6	2.676	26.756	ng/L	
Hg2600-3	BC	SAM	1707737-12RE1	10	8/15/2017 11:19:06	73204-1.RAW	11:19:06 AM	673.01	1		502.8	6.686	66.863	ng/L	
Hg2600-3	BC	SAM	1707737-13RE1	10	8/15/2017 11:23:14	73205-1.RAW	11:23:14 AM	273.57	1		670.7	8.930	89.300	ng/L	
Hg2600-3	BC	CAL	SEQ-CCV3	1	8/15/2017 11:27:22	73206-1.RAW	11:27:22 AM	383.76	1		271.3	3.594	35.938	ng/L	
Hg2600-3	BC	CAL	SEQ-CCB3	1	8/15/2017 11:31:31	73207-1.RAW	11:31:31 AM	3.18	1		381.5	5.096	5.096	ng/L	
Hg2600-3	BC	SAM	1707737-14RE1	10	8/15/2017 11:35:39	73208-1.RAW	11:35:39 AM	789.53	1		0.9	0.012	0.012	ng/L	
Hg2600-3	BC	SAM	F707537-MS1	400	8/15/2017 11:39:48	73209-1.RAW	11:39:48 AM	381.43	1		787.2	10.487	104.867	ng/L	
Hg2600-3	BC	SAM	F707537-MSD1	400	8/15/2017 11:43:56	73210-1.RAW	11:43:56 AM	440.24	1		379.1	5.064	2025.752	ng/L	
Hg2600-3	BC	SAM	F707537-MS2	400	8/15/2017 11:48:04	73211-1.RAW	11:48:04 AM	609.08	1		438.0	5.850	2340.017	ng/L	
Hg2600-3	BC	SAM	F707537-MSD2	400	8/15/2017 11:52:13	73212-1.RAW	11:52:13 AM	613.21	1		606.8	8.106	3242.252	ng/L	
Hg2600-3	BC	BLK	F708322-BLK1	10	8/15/2017 11:56:21	73213-1.RAW	11:56:21 AM	6.01	2		610.9	8.161	3264.321	ng/L	
Hg2600-3	BC	BLK	F708322-BLK2	10	8/15/2017 12:00:30	73214-1.RAW	12:00:30 PM	2.67	2		3.7	0.050	0.498	ng/L	
Hg2600-3	BC	SAM	F708322-BS1	100	8/15/2017 12:04:38	73215-1.RAW	12:04:38 PM	158.11	2		0.4	0.005	0.052	ng/L	
Hg2600-3	BC	SAM	F708322-BSD1	100	8/15/2017 12:08:47	73216-1.RAW	12:08:47 PM	165.61	2		155.8	2.079	207.899	ng/L	
Hg2600-3	BC	SAM	1707771-11	50	8/15/2017 12:12:55	73217-1.RAW	12:12:55 PM	1219.84	2		163.3	2.179	217.919	ng/L	
Hg2600-3	BC	CAL	SEQ-CCV4	1	8/15/2017 12:17:03	73218-1.RAW	12:17:03 PM	383.02	2		1217.6	16.260	813.012	ng/L	
Hg2600-3	BC	CAL	SEQ-CCB4	1	8/15/2017 12:21:12	73219-1.RAW	12:21:12 PM	3.58	2		380.7	5.086	5.086	ng/L	
											1.3	0.017	0.017	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	BC	SAM	1707771-12	50	8/15/2017 12:25:20	73220-1.RAW	12:25:20 PM	1472.20							
Hg2600-3	BC	SAM	1707771-13	50	8/15/2017 12:29:29	73221-1.RAW	12:29:29 PM	937.77	2		1469.9	19.632	981.580	ng/L	
Hg2600-3	BC	SAM	1707771-14	50	8/15/2017 12:33:37	73222-1.RAW	12:33:37 PM	1212.55	2		935.5	12.492	624.598	ng/L	
Hg2600-3	BC	SAM	1707771-15	50	8/15/2017 12:37:45	73223-1.RAW	12:37:45 PM	1148.12	2		1210.3	16.163	808.142	ng/L	
Hg2600-3	BC	SAM	1707771-16	50	8/15/2017 12:41:54	73224-1.RAW	12:41:54 PM	1190.18	2		1145.8	15.302	765.105	ng/L	
Hg2600-3	BC	SAM	1707771-17	50	8/15/2017 12:46:02	73225-1.RAW	12:46:02 PM	1298.81	2		1187.9	15.864	793.200	ng/L	
Hg2600-3	BC	SAM	1707771-18	50	8/15/2017 12:50:11	73226-1.RAW	12:50:11 PM	1537.45	2		1296.5	17.315	865.761	ng/L	
Hg2600-3	BC	SAM	1707771-19	50	8/15/2017 12:54:19	73227-1.RAW	12:54:19 PM	157.25	2		1535.2	20.503	1025.164	ng/L	
Hg2600-3	BC	SAM	1707771-20	50	8/15/2017 12:58:28	73228-1.RAW	12:58:28 PM	751.28	2		155.0	2.065	103.238	ng/L	
Hg2600-3	BC	SAM	1707771-21	50	8/15/2017 13:02:36	73229-1.RAW	1:02:36 PM	569.78	2		749.0	10.001	500.030	ng/L	
Hg2600-3	BC	CAL	SEQ-CCV5	1	8/15/2017 13:06:44	73230-1.RAW	1:06:44 PM	387.97			567.5	7.576	378.794	ng/L	
Hg2600-3	BC	CAL	SEQ-CCB5	1	8/15/2017 13:10:53	73231-1.RAW	1:10:53 PM	6.85			385.7	5.153	5.153	ng/L	
Hg2600-3	BC	SAM	ws		8/15/2017 13:25:53	73232-1.RAW	1:25:53 PM	8.93	X		4.6	0.061	0.061	ng/L	
Hg2600-3	BC	SAM	1707771-22	50	8/15/2017 13:30:01	73233-1.RAW	1:30:01 PM	447.76	2		6.6	0.089	0.000	ng/L	
Hg2600-3	BC	SAM	1707771-23	50	8/15/2017 13:34:10	73234-1.RAW	1:34:10 PM	447.60	2		445.5	5.946	297.288	ng/L	
Hg2600-3	BC	SAM	1707771-24	50	8/15/2017 13:38:18	73235-1.RAW	1:38:18 PM	1390.41	2		445.3	5.944	297.182	ng/L	
Hg2600-3	BC	SAM	1707771-25	50	8/15/2017 13:42:27	73236-1.RAW	1:42:27 PM	698.37	2		1388.1	18.539	926.947	ng/L	
Hg2600-3	BC	SAM	1707771-26	50	8/15/2017 13:46:35	73237-1.RAW	1:46:35 PM	953.02	2		696.1	9.294	464.687	ng/L	
Hg2600-3	BC	SAM	1707771-27	50	8/15/2017 13:50:43	73238-1.RAW	1:50:43 PM	592.24	2		950.7	12.696	634.785	ng/L	
Hg2600-3	BC	SAM	1707771-28	50	8/15/2017 13:54:52	73239-1.RAW	1:54:52 PM	883.76	2		590.0	7.876	393.796	ng/L	
Hg2600-3	BC	SAM	1707771-29	50	8/15/2017 13:59:00	73240-1.RAW	1:59:00 PM	768.73	2		881.5	11.770	588.522	ng/L	
Hg2600-3	BC	SAM	1707771-30	50	8/15/2017 14:03:09	73241-1.RAW	2:03:09 PM	798.56	2		766.4	10.234	511.686	ng/L	
Hg2600-3	BC	SAM	F708322-MS1	400	8/15/2017 14:07:17	73242-1.RAW	2:07:17 PM	576.64	2		796.3	10.632	531.611	ng/L	
Hg2600-3	BC	CAL	SEQ-CCV6	1	8/15/2017 14:11:26	73243-1.RAW	2:11:26 PM	389.10			574.4	7.672	3068.931	ng/L	
Hg2600-3	BC	CAL	SEQ-CCB6	1	8/15/2017 14:15:34	73244-1.RAW	2:15:34 PM	7.29			386.8	5.168	5.168	ng/L	
Hg2600-3	BC	SAM	F708322-MSD1	400	8/15/2017 14:19:42	73245-1.RAW	2:19:42 PM	565.03	2		5.0	0.067	0.067	ng/L	
Hg2600-3	BC	SAM	F708322-MS2	400	8/15/2017 14:23:51	73246-1.RAW	2:23:51 PM	497.84	2		562.7	7.517	3006.890	ng/L	
Hg2600-3	BC	SAM	F708322-MSD2	400	8/15/2017 14:27:59	73247-1.RAW	2:27:59 PM	478.71	2		495.6	6.620	2647.845	ng/L	
Hg2600-3	BC	CAL	SEQ-CCV7	1	8/15/2017 14:36:45	73248-1.RAW	2:36:45 PM	379.12			476.4	6.364	2545.620	ng/L	
Hg2600-3	BC	CAL	SEQ-CCB7	1	8/15/2017 14:40:54	73249-1.RAW	2:40:54 PM	5.97			376.8	5.034	5.034	ng/L	
Hg2600-3	BC	SAM	SnCl2 1704955	1	8/15/2017 14:45:03	73250-1.RAW	2:45:03 PM	3.02	X		3.7	0.049	0.049	ng/L	
Hg2600-3	BC	SAM	CLEAN		8/15/2017 14:47:54	73251-1.RAW	2:47:54 PM	0.00	X		0.7	0.010	0.010	ng/L	
Hg2600-3	BC	SAM	WS		8/15/2017 14:52:03	73252-1.RAW	2:52:03 PM	0.00	X		-2.3	-0.031	0.000	ng/L	
Hg2600-3	BC	SAM	WS		8/15/2017 14:56:11	73253-1.RAW	2:56:11 PM	0.00	X		-2.3	-0.031	0.000	ng/L	
Hg2600-3	BC	SAM	WS		8/15/2017 15:00:20	73254-1.RAW	3:00:20 PM	0.00	X		-2.3	-0.031	0.000	ng/L	



TotalMercury EPA1631  
 Operatr BC  
 BlankSi 2.2842  
 Calib Eqn: Conc = (Area-2.284  
 Run Date: 8/15/2017  
 Blank SD: 2.036408503  
 Worksh THg260( CalibFa 74.852  
 Status: QC Warnings:3/QC E Run Time: 14:32:36  
 Blank RSD%: 89.1525771  
 Method ##### R: 1 R<sup>2</sup>: 1  
 CF SD: 1.423312471  
 Descrip THg26003-170815-1  
 CF RSD%: 1.901491368

Sample/ID	Location	Rinse	Dilute	Blank	Conc (ppt)	MB%	FinalConc	Rec%	QA	RawData	RunEnd	Peak (Raw)	Control (eff)	Flags	RunCount
Clean				0.00	1.49					73158-1.RAW	8:09:32	111.35	Clean	OK	1
clean										73159-1.RAW	8:12:23	0.00	Clean	NP	1
ws				2.28	0.00					73160-1.RAW	8:16:31	1.98	Sample	OK	1
ws										73161-1.RAW	8:20:40	0.00	Sample	NP	1
SEQ-IBL1	A1		1							73162-1.RAW	8:24:48	0.00	Sample	NP	1
SEQ-IBL2	A2		1	0.00	0.04					73163-1.RAW	8:28:57	0.00	Sample	NP	1
SEQ-IBL3	A3		1	0.00	0.05					73164-1.RAW	8:33:05	2.94	Sample	OK	1
SEQ-CAL1	A4		1	2.28	0.51			101.49		73165-1.RAW	8:37:14	3.91	Sample	OK	1
SEQ-CAL2	A5		1	2.28	1.02			102.40		73166-1.RAW	8:41:22	40.27	Sample	OK	1
SEQ-CAL3	A6		1	2.28	4.98			99.66		73167-1.RAW	8:45:30	78.94	Sample	OK	1
SEQ-CAL4	A7		1	2.28	19.64			98.18		73168-1.RAW	8:49:39	375.28	Sample	OK	1
SEQ-CAL5	A8		1	2.28	39.31			98.26		73169-1.RAW	8:53:47	1472.06	Sample	OK	1
SEQ-ICV1	A9		1	2.28	5.10			101.94		73170-1.RAW	8:57:56	2944.38	Sample	OK	1
F707537-BLK1	A10		10	2.28	0.32					73171-1.RAW	9:02:04	383.80	Sample	OK	1
F707537-BLK2	A11		10	2.28	0.28					73172-1.RAW	9:06:36	4.71	Sample	OK	1
F707537-BS1	A12		100	2.28	198.51					73173-1.RAW	9:10:45	4.41	Sample	OK	1
F707537-BSD1	B1		100	2.28	216.59					73174-1.RAW	9:14:53	150.87	Sample	OK	1
1707620-34	B2		100	2.28	15.87					73175-1.RAW	9:19:01	164.41	Sample	OK	1
1707737-06	B3		100	2.28	19.97					73176-1.RAW	9:23:10	14.16	Sample	OK	1
1707737-07	B4		100	2.28	193.61					73177-1.RAW	9:27:18	17.23	Sample	OK	1
1707737-08	B5		100	2.28	29.24					73178-1.RAW	9:31:27	147.21	Sample	OK	1
1707737-09	B6		100	2.28	1304.36					73179-1.RAW	9:35:35	24.17	Sample	OK	1
1707737-10	B7		100	2.28	422.90					73180-1.RAW	9:39:43	978.63	Sample	OK	1
SEQ-CCV1	B8		1	2.28	5.08			101.62		73181-1.RAW	9:43:52	318.84	Sample	OK	1
SEQ-CCB1	B9		1	2.28	0.02			0.00		73182-1.RAW	9:48:00	382.61	Sample	OK	1
1707737-11	B10		100	2.28	65.02					73183-1.RAW	9:52:09	4.02	Sample	OK	1
1707737-12	B11		100	2.28	95.38					73184-1.RAW	9:56:17	50.95	Sample	OK	1
1707737-13	B12		100	2.28	34.15					73185-1.RAW	10:00:26	73.68	Sample	OK	1
1707737-14	C1		100	2.28	108.11					73186-1.RAW	10:04:34	27.84	Sample	OK	1
1707771-01	C2		100	2.28	941.25					73187-1.RAW	10:08:42	83.20	Sample	OK	1
1707771-02	C3		50	2.28	669.86					73188-1.RAW	10:12:51	706.83	Sample	OK	1
1707771-03	C4		50	2.28	640.36					73189-1.RAW	10:16:59	1005.10	Sample	OK	1
1707771-04	C5		50	2.28	1216.87					73190-1.RAW	10:21:08	960.93	Sample	OK	1
1707771-05	C6		50	2.28	756.92					73191-1.RAW	10:25:16	1823.99	Sample	OK	1
1707771-06	C7		50	2.28	928.52					73192-1.RAW	10:29:24	1135.42	Sample	OK	1
SEQ-CCV2	C8		1	2.28	5.22			104.36		73193-1.RAW	10:33:33	1392.32	Sample	OK	1
SEQ-CCB2	C9		1	2.28	0.01			0.00		73194-1.RAW	10:37:41	392.86	Sample	OK	1
1707771-07	C10		50	2.28	775.84					73195-1.RAW	10:41:50	3.19	Sample	OK	1
1707771-08	C11		50	2.28	683.08					73196-1.RAW	10:45:58	1163.75	Sample	OK	1
1707771-09	C12		50	2.28	773.90					73197-1.RAW	10:50:07	1024.88	Sample	OK	1
1707771-10	D1		50	2.28	918.66					73198-1.RAW	10:54:15	1160.85	Sample	OK	1
1707620-34RE1	D2		10	2.28	17.60					73199-1.RAW	10:58:23	1377.56	Sample	OK	1
										73200-1.RAW	11:02:32	134.06	Sample	OK	1

1707737-06RE1	D3	10	2.28	17.89		73201-1.RAW	11:06:40	136.21	Sample	OK	1
1707737-08RE1	D4	10	2.28	27.06		73202-1.RAW	11:10:49	204.84	Sample	OK	1
1707737-11RE1	D5	10	2.28	67.17		73203-1.RAW	11:14:57	505.06	Sample	OK	1
1707737-12RE1	D6	10	2.28	89.61		73204-1.RAW	11:19:06	673.01	Sample	OK	1
1707737-13RE1	D7	10	2.28	36.24		73205-1.RAW	11:23:14	273.57	Sample	OK	1
SEQ-CCV3	D8	1	2.28	5.10	101.93	73206-1.RAW	11:27:22	383.76	Sample	OK	1
SEQ-CCB3	D9	1	2.28	0.01	0.00	73207-1.RAW	11:31:31	3.18	Sample	OK	1
1707737-14RE1	D10	10	2.28	105.17		73208-1.RAW	11:35:39	789.53	Sample	OK	1
F707537-MS1	D11	400	2.28	2026.09	1908.29	73209-1.RAW	11:39:48	381.43	Sample	OK	1
F707537-MSD1	D12	400	2.28	2340.38		73210-1.RAW	11:43:56	440.24	Sample	OK	1
F707537-MS2	A1	400	2.28	3242.62	138.43	73211-1.RAW	11:48:04	609.08	Sample	OK	1
F707537-MSD2	A2	400	2.28	3264.70		73212-1.RAW	11:52:13	613.21	Sample	OK	1
F708322-BLK1	A3	10	2.28	0.50		73213-1.RAW	11:56:21	6.01	Sample	OK	1
F708322-BLK2	A4	10	2.28	0.05		73214-1.RAW	12:00:30	2.67	Sample	OK	1
F708322-BS1	A5	100	2.28	208.18		73215-1.RAW	12:04:38	158.11	Sample	OK	1
F708322-BSD1	A6	100	2.28	218.19		73216-1.RAW	12:08:47	165.61	Sample	OK	1
1707771-11	A7	50	2.28	813.30		73217-1.RAW	12:12:55	1219.84	Sample	OK	1
SEQ-CCV4	A8	1	2.28	5.09	101.73	73218-1.RAW	12:17:03	383.02	Sample	OK	1
SEQ-CCB4	A9	1	2.28	0.02	0.00	73219-1.RAW	12:21:12	3.58	Sample	OK	1
1707771-12	A10	50	2.28	981.88		73220-1.RAW	12:25:20	1472.20	Sample	OK	1
1707771-13	A11	50	2.28	624.88		73221-1.RAW	12:29:29	937.77	Sample	OK	1
1707771-14	A12	50	2.28	808.44		73222-1.RAW	12:33:37	1212.55	Sample	OK	1
1707771-15	B1	50	2.28	765.40		73223-1.RAW	12:37:45	1148.12	Sample	OK	1
1707771-16	B2	50	2.28	793.50		73224-1.RAW	12:41:54	1190.18	Sample	OK	1
1707771-17	B3	50	2.28	866.05		73225-1.RAW	12:46:02	1298.81	Sample	OK	1
1707771-18	B4	50	2.28	1025.46		73226-1.RAW	12:50:11	1537.45	Sample	OK	1
1707771-19	B5	50	2.28	103.51		73227-1.RAW	12:54:19	157.25	Sample	OK	1
1707771-20	B6	50	2.28	500.32		73228-1.RAW	12:58:28	751.28	Sample	OK	1
1707771-21	B7	50	2.28	379.08		73229-1.RAW	13:02:36	569.78	Sample	OK	1
SEQ-CCV5	B8	1	2.28	5.15	103.05	73230-1.RAW	13:06:44	387.97	Sample	OK	1
SEQ-CCB5	B9	1	2.28	0.06	0.00	73231-1.RAW	13:10:53	6.85	Sample	OK	1
ws			2.28	0.09		73232-1.RAW	13:25:53	8.93	Sample	OK	1
1707771-22	B10	50	2.28	297.57		73233-1.RAW	13:30:01	447.76	Sample	OK	1
1707771-23	B11	50	2.28	297.46		73234-1.RAW	13:34:10	447.60	Sample	OK	1
1707771-24	B12	50	2.28	927.24		73235-1.RAW	13:38:18	1390.41	Sample	OK	1
1707771-25	C1	50	2.28	464.97		73236-1.RAW	13:42:27	698.37	Sample	OK	1
1707771-26	C2	50	2.28	635.07		73237-1.RAW	13:46:35	953.02	Sample	OK	1
1707771-27	C3	50	2.28	394.08		73238-1.RAW	13:50:43	592.24	Sample	OK	1
1707771-28	C4	50	2.28	588.81		73239-1.RAW	13:54:52	883.76	Sample	OK	1
1707771-29	C5	50	2.28	511.97		73240-1.RAW	13:59:00	768.73	Sample	OK	1
1707771-30	C6	50	2.28	531.90		73241-1.RAW	14:03:09	798.56	Sample	OK	1
F708322-MS1	C7	400	2.28	3069.25	575.95	73242-1.RAW	14:07:17	576.64	Sample	OK	1
SEQ-CCV6	C8	1	2.28	5.17	103.35	73243-1.RAW	14:11:26	389.10	Sample	OK	1
SEQ-CCB6	C9	1	2.28	0.07	0.00	73244-1.RAW	14:15:34	7.29	Sample	OK	1
F708322-MSD1	C10	400	2.28	3007.23		73245-1.RAW	14:19:42	565.03	Sample	OK	1
F708322-MS2	C11	400	2.28	2648.17	88.00	73246-1.RAW	14:23:51	497.84	Sample	OK	1
F708322-MSD2	C12	400	2.28	2545.93		73247-1.RAW	14:27:59	478.71	Sample	OK	1
SEQ-CCV7	D1	1	2.28	5.03	100.69	73248-1.RAW	14:36:45	379.12	Sample	OK	1

SEQ-CCB7	D2	1	2.28	0.05	0.00	73249-1.RAW	14:40:54	5.97	Sample	OK	1
SnCl2 1704955	D3	1	2.28	0.01		73250-1.RAW	14:45:03	3.02	Sample	OK	1
CLEAN						73251-1.RAW	14:47:54	0.00	Clean	NP	1
WS						73252-1.RAW	14:52:03	0.00	Sample	NP	1
WS						73253-1.RAW	14:56:11	0.00	Sample	NP	1
WS						73254-1.RAW	15:00:20	0.00	Sample	NP	1

## ANALYSIS SEQUENCE

7H15016



Instrument: Hg2600-3

Calibration ID: UNASSIGNED

Analyzed: 8/15/2017

Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
7H15016-IBL1	QC	1			
7H15016-IBL2	QC	2			
7H15016-IBL3	QC	3			
7H15016-CAL1	QC	4	1704505		
7H15016-CAL2	QC	5	1704506		
7H15016-CAL3	QC	6	1704507		
7H15016-CAL4	QC	7	1704508		
7H15016-CAL5	QC	8	1704509		
7H15016-ICV1	QC	9	1703679		
F707537-BLK1	QC	10			
F707537-BLK2	QC	11			
F707537-BS1	QC	12			
F707537-BSD1	QC	13			
1707620-34	Hg-CVAFS-S-7474	14			
1707737-06	Hg-CVAFS-S-7474	15			
1707737-07	Hg-CVAFS-S-7474	16			
1707737-08	Hg-CVAFS-S-7474	17			
1707737-09	Hg-CVAFS-S-7474	18			
1707737-10	Hg-CVAFS-S-7474	19			
7H15016-CCV1	QC	20	1703679		
7H15016-CCB1	QC	21			
1707737-11	Hg-CVAFS-S-7474	22			
1707737-12	Hg-CVAFS-S-7474	23			
1707737-13	Hg-CVAFS-S-7474	24			
1707737-14	Hg-CVAFS-S-7474	25			
1707771-01	Hg-CVAFS-S-7474	26			
1707771-02	Hg-CVAFS-S-7474	27			
1707771-03	Hg-CVAFS-S-7474	28			
1707771-04	Hg-CVAFS-S-7474	29			
1707771-05	Hg-CVAFS-S-7474	30			
1707771-06	Hg-CVAFS-S-7474	31			
7H15016-CCV2	QC	32	1703679		
7H15016-CCB2	QC	33			
1707771-07	Hg-CVAFS-S-7474	34			
1707771-08	Hg-CVAFS-S-7474	35			

Due Date: 8/21/2017

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## ANALYSIS SEQUENCE

7H15016



Instrument: Hg2600-3

Calibration ID: UNASSIGNED

Analyzed: 8/15/2017

Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
1707771-09	Hg-CVAFS-S-7474	36			
1707771-10	Hg-CVAFS-S-7474	37			
1707620-34RE1	Hg-CVAFS-S-7474	38			Added 8/15/2017 by BC
1707737-06RE1	Hg-CVAFS-S-7474	39			Added 8/15/2017 by BC
1707737-08RE1	Hg-CVAFS-S-7474	40			Added 8/15/2017 by BC
1707737-11RE1	Hg-CVAFS-S-7474	41			Added 8/15/2017 by BC
1707737-12RE1	Hg-CVAFS-S-7474	42			Added 8/15/2017 by BC
1707737-13RE1	Hg-CVAFS-S-7474	43			Added 8/15/2017 by BC
7H15016-CCV3	QC	44	1703679		
7H15016-CCB3	QC	45			
1707737-14RE1	Hg-CVAFS-S-7474	46			Added 8/15/2017 by BC
F707537-MS1	QC	47			
F707537-MSD1	QC	48			
F707537-MS2	QC	49			
F707537-MSD2	QC	50			
F708322-BLK1	QC	51			
F708322-BLK2	QC	52			
F708322-BS1	QC	53			
F708322-BSD1	QC	54			
1707771-11	Hg-CVAFS-S-7474	55			
7H15016-CCV4	QC	56	1703679		
7H15016-CCB4	QC	57			
1707771-12	Hg-CVAFS-S-7474	58			
1707771-13	Hg-CVAFS-S-7474	59			
1707771-14	Hg-CVAFS-S-7474	60			
1707771-15	Hg-CVAFS-S-7474	61			
1707771-16	Hg-CVAFS-S-7474	62			
1707771-17	Hg-CVAFS-S-7474	63			
1707771-18	Hg-CVAFS-S-7474	64			
1707771-19	Hg-CVAFS-S-7474	65			
1707771-20	Hg-CVAFS-S-7474	66			
1707771-21	Hg-CVAFS-S-7474	67			
7H15016-CCV5	QC	68	1703679		
7H15016-CCB5	QC	69			
1707771-22	Hg-CVAFS-S-7474	70			

Due Date: 8/21/2017

337 of 886

Page 2 of 3

**ANALYSIS SEQUENCE**

**7H15016**



**Instrument: Hg2600-3**

**Calibration ID: UNASSIGNED**

**Analyzed: 8/15/2017**

Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
1707771-23	Hg-CVAFS-S-7474	71			
1707771-24	Hg-CVAFS-S-7474	72			
1707771-25	Hg-CVAFS-S-7474	73			
1707771-26	Hg-CVAFS-S-7474	74			
1707771-27	Hg-CVAFS-S-7474	75			
1707771-28	Hg-CVAFS-S-7474	76			
1707771-29	Hg-CVAFS-S-7474	77			
1707771-30	Hg-CVAFS-S-7474	78			
F708322-MS1	QC	79			
7H15016-CCV6	QC	80	1703679		
7H15016-CCB6	QC	81			
F708322-MSD1	QC	82			
F708322-MS2	QC	83			
F708322-MSD2	QC	84			
7H15016-CCV7	QC	85	1703679		
7H15016-CCB7	QC	86			

*Beck* 8/15/17  
 Samples Loaded By                      Date

*Beck* 8/15/17  
 Data Processed By                      Date

**Failing Data Report - 7H15016**

Sample ID	Analysis	Result	MRL	Dup Result	Source Result	True Value	Units	% Rec.	Rec. LCL	Rec. UCL	RPD	RPD Limit	Over Cal	Failure	Qualifier
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Reavis 8/15/17  
Analyst Reviewed By /Date

Dan Moxem 8/16/17  
Peer Reviewed By /Date

**PREPARATION BENCH SHEET**

F708322

**Eurofins Frontier Global Sciences, Inc.**

**Matrix: Soil/Sediment**

**Prepared using: Trace Metals - EPA 7474**

**Prepared: 8/8/2017**

Lab Number	Sample ID and Source Sample	Initial (g)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F708322-BLK1	Blank	0.5	200					
F708322-BLK2	Blank	0.5	200					
F708322-BS1	Blank Spike	0.513	200	1701763	40			
F708322-BSD1	Blank Spike	0.5513	200	1701763	40			
F708322-MS1	Matrix Spike [1707771-17]	0.5782	200	1703591	50			
F708322-MS2	Matrix Spike [1707771-21]	0.5442	200	1703591	50			
F708322-MSD1	Matrix Spike Dup [1707771-17]	0.5301	200	1703591	50			
F708322-MSD2	Matrix Spike Dup [1707771-21]	0.5502	200	1703591	50			

<u>Standard ID(s):</u>	<u>Description:</u>
1701763	THg 1,000ng/mL Secondary Spiking Standard
1703591	THg 10,000ng/mL Primary Spiking Standard

<u>Expiration:</u>
22-Sep-17 00:00
14-Dec-17 00:00

<u>Reagent ID(s):</u>	<u>Description:</u>	<u>Expiration:</u>
1703182	25% Hydroxylamine-HCl working solution	24-Nov-17 00:00
1703701	THg Washstation (0.5% BrCl)	21-Dec-17 00:00
1703702	THg Dilute 1% BrCl	
1703831	Omnitrace Hydrochloric Acid	26-Jun-20 00:00
1704424	Boiling Chips for AFS prep	21-Jan-18 00:00
1704484	Fisher Nitric Acid, Tracemetal Grade	15-Mar-19 00:00
1704691	3% SnCl2 THg reductant	22-Jan-18 00:00
1704812	7474 Potassium Bromate/Bromide Reagent	15-Aug-17 00:00



**PREPARATION BENCH SHEET**

F708322

**Eurofins Frontier Global Sciences, Inc.**

**Matrix: Soil/Sediment**

**Prepared using: Trace Metals - EPA 7474**

**Prepared: 8/8/2017**

Lab Number	Sample ID	Initial (g)	Final (mL)	QC Sample	Sample Specs.	Raw Data	Sample Comments	Analysis Comments
1707771-11	OR-01-05_072417_SED_00-01_R3	0.5556	200	-	-	-		
1707771-12	OR-01-05_072417_SED_01-03	0.5697	200	-	-	-		
1707771-13	OR-02-01_072417_SED_00-01	0.5203	200	-	-	-		
1707771-14	OR-02-01_072417_SED_01-03_R1	0.5575	200	-	-	-		
1707771-15	OR-02-01_072417_SED_01-03_R2	0.5879	200	-	-	-		
1707771-16	OR-02-01_072417_SED_01-03_R3	0.568	200	-	-	-		
1707771-17	OR-02-02_072417_SED_00-01	0.5825	200	QC	-	-	MS/MSD	
1707771-18	OR-02-02_072417_SED_01-03	0.5472	200	-	-	-		
1707771-19	W-103-A_072417_SED_00-01	0.5365	200	-	-	-		
1707771-20	W-103-A_072417_SED_01-03	0.5569	200	-	-	-		
1707771-21	W-103-B_072417_SED_00-01_R1	0.576	200	-	-	-		
1707771-22	W-103-B_072417_SED_00-01_R2	0.5183	200	-	-	-		
1707771-23	W-103-B_072417_SED_00-01_R3	0.5914	200	-	-	-		
1707771-24	W-103-B_072417_SED_01-03	0.5978	200	-	-	-		
1707771-25	W-105-A_072417_SED_00-01	0.5598	200	-	-	-		
1707771-26	W-105-A_072417_SED_01-03	0.5553	200	-	-	-		
1707771-27	W-14-C_072417_SED_00-01	0.5815	200	-	-	-		
1707771-28	W-14-C_072417_SED_01-03_R1	0.5554	200	-	-	-		
1707771-29	W-14-C_072417_SED_01-03_R2	0.55	200	-	-	-		

Due Date: 8/24/2017

PREPARATION BENCH SHEET

F708322

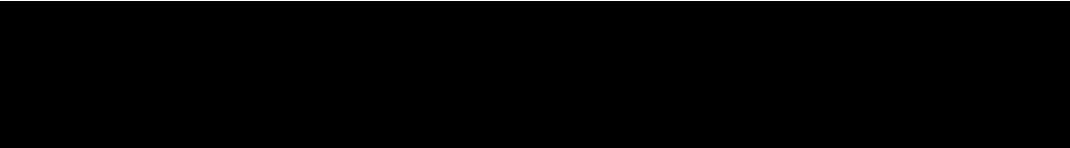
Eurofins Frontier Global Sciences, Inc.

Matrix: Soil/Sediment

Prepared using: Trace Metals - EPA 7474

Prepared: 8/8/2017

1707771-30	W-14-C_072417_SED_01-03_R3	0.5641	200	-	-	-		
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**PREPARATION BENCH SHEET**

F707537

**Eurofins Frontier Global Sciences, Inc.**

**Matrix: Soil/Sediment**

**Prepared using: AFS - EPA 7474**

**Prepared: 8/11/2017**

Lab Number	Sample ID and Source Sample	Initial (g)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F707537-BLK1	Blank	0.5	200					
F707537-BLK2	Blank	0.5	200					
F707537-BS1	Blank Spike	0.5241	200	1701763	40			
F707537-BSD1	Blank Spike Dup	0.5516	200	1701763	40			
F707537-MS1	Matrix Spike [1707620-34RE1]	0.5356	200	1703591	50			
F707537-MS2	Matrix Spike [1707771-04]	0.5453	200	1703591	50			
F707537-MSD1	Matrix Spike Dup [1707620-34RE1]	0.5845	200	1703591	50			
F707537-MSD2	Matrix Spike Dup [1707771-04]	0.5308	200	1703591	50			

<u>Standard ID(s):</u>	<u>Description:</u>	<u>Expiration:</u>	<u>Reagent ID(s):</u>	<u>Description:</u>	<u>Expiration:</u>
1701763	THg 1,000ng/mL Secondary Spiking Standard	22-Sep-17 00:00	1703182	25% Hydroxylamine-HCl working solution	24-Nov-17 00:00
1703591	THg 10,000ng/mL Primary Spiking Standard	14-Dec-17 00:00	1703701	THg Washstation (0.5% BrCl)	21-Dec-17 00:00
			1703702	THg Dilute 1% BrCl	
			1703831	Omnitrace Hydrochloric Acid	26-Jun-20 00:00
			1704424	Boiling Chips for AFS prep	21-Jan-18 00:00
			1704484	Fisher Nitric Acid, Tracemetal Grade	15-Mar-19 00:00
			1704691	3% SnCl2 THg reductant	22-Jan-18 00:00
			1704812	7474 Potassium Bromate/Bromide Reagent	15-Aug-17 00:00

**PREPARATION BENCH SHEET**

F707537

**Eurofins Frontier Global Sciences, Inc.**

**Matrix: Soil/Sediment**

**Prepared using: AFS - EPA 7474**

**Prepared: 8/11/2017**

Lab Number	Sample ID	Initial (g)	Final (mL)	QC Sample	Sample Specs.	Raw Data	Sample Comments	Analysis Comments
1707620-34	W-MM-13_071917_SED_05-10	0.5696	200	QC	-	-	MS/MSD	
1707620-34RE1	W-MM-13_071917_SED_05-10	0.5696	200	QC	-	-	MS/MSD Added 8/15/2017 by BC	Added 8/15/2017 by BC
1707737-06	MMSW-C_SW_072617_SED_05-10	0.5384	200	-	-	-		
1707737-06RE1	MMSW-C_SW_072617_SED_05-10	0.5384	200	-	-	-	Added 8/15/2017 by BC	Added 8/15/2017 by BC
1707737-07	MMSE-1_N2_072517_SED_03-05	0.5644	200	-	-	-		
1707737-08	MMSE-1_N2_072517_SED_05-10	0.5653	200	-	-	-		
1707737-08RE1	MMSE-1_N2_072517_SED_05-10	0.5653	200	-	-	-	Added 8/15/2017 by BC	Added 8/15/2017 by BC
1707737-09	MMSW-C_S_072517_SED_03-05	0.5665	200	-	-	-		
1707737-10	MMSW-C_S_072517_SED_05-10	0.5475	200	-	-	-		
1707737-11	MMSW-C_SW_072517_SED_00-01	0.5327	200	-	-	-		
1707737-11RE1	MMSW-C_SW_072517_SED_00-01	0.5327	200	-	-	-	Added 8/15/2017 by BC	Added 8/15/2017 by BC
1707737-12	MMSW-C_SW_072517_SED_01-03	0.5497	200	-	-	-	Original jar broken, created container D	
1707737-12RE1	MMSW-C_SW_072517_SED_01-03	0.5497	200	-	-	-	Original jar broken, created container D	Added 8/15/2017 by BC
1707737-13	W-21-UM-West-A_072517_SED_00-01	0.5848	200	-	-	-		
1707737-13RE1	W-21-UM-West-A_072517_SED_00-01	0.5848	200	-	-	-	Added 8/15/2017 by BC	Added 8/15/2017 by BC
1707737-14	W-21-UM-West-A_072517_SED_01-03	0.5974	200	-	-	-		
1707737-14RE1	W-21-UM-West-A_072517_SED_01-03	0.5974	200	-	-	-	Added 8/15/2017 by BC	Added 8/15/2017 by BC
1707771-01	OR-01-01_072417_SED_00-01_R1	0.5458	200	-	-	-		
1707771-02	OR-01-01_072417_SED_00-01_R2	0.5418	200	-	-	-		

Due Date: 8/21/2017

**PREPARATION BENCH SHEET**

F707537

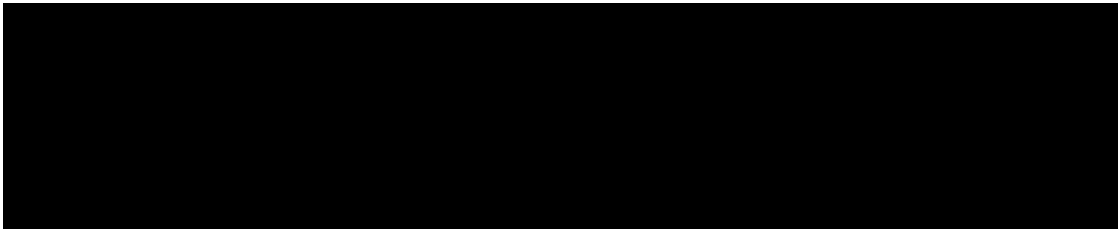
**Eurofins Frontier Global Sciences, Inc.**

**Matrix: Soil/Sediment**

**Prepared using: AFS - EPA 7474**

**Prepared: 8/11/2017**

1707771-03	OR-01-01_072417_SED_00-01_R3	0.5165	200	-	-	-		
1707771-04	OR-01-01_072417_SED_01-03	0.5485	200	QC	-	-	MS/MSD	
1707771-05	OR-01-02_072417_SED_00-01	0.5915	200	-	-	-		
1707771-06	OR-01-02_072417_SED_01-03	0.5741	200	-	-	-		
1707771-07	OR-01-03_072417_SED_00-01	0.5631	200	-	-	-		
1707771-08	OR-01-03_072417_SED_01-03	0.5617	200	-	-	-		
1707771-09	OR-01-05_072417_SED_00-01_R1	0.5388	200	-	-	-		
1707771-10	OR-01-05_072417_SED_00-01_R2	0.5376	200	-	-	-		



PREPARATION BENCH SHEET

BL 8/15/17  
2600-3

F708322

Eurofins Frontier Global Sciences, Inc.

Matrix: Soil/Sediment

Prepared using: Trace Metals - EPA 7474

Prepared: 8/8/2017

Lab Number	Sample ID and Source Sample	Initial (g)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F708322-BLK1	Blank	0.5	200					
F708322-BLK2	Blank	0.5	200					10x
F708322-BS1	Blank Spike	0.513	200	1701763	40			10x
F708322-BSD1	Blank Spike	0.5513	200	1701763	40			100x
F708322-MS1	Matrix Spike [1707771-17]	0.5578	200	1703591	50			50x/100x
F708322-MS2	Matrix Spike [1707771-21]	0.5714	200	1703591	50			400x
F708322-MSD1	Matrix Spike Dup [1707771-17]	0.5943	200	1703591	50			400x
F708322-MSD2	Matrix Spike Dup [1707771-21]	0.5414	200	1703591	50			400x

Standard ID(s):  
1701763  
1703591

Description:  
THg 1,000ng/mL Secondary Spiking Standard  
THg 10,000ng/mL Primary Spiking Standard

Expiration:  
22-Sep-17 00:00  
14-Dec-17 00:00

Reagent ID(s):  
1703831  
1704424  
1704484  
1704812

Description:  
Omnitrace Hydrochloric Acid  
Boiling Chips for AFS prep  
Fisher Nitric Acid, Tracemetal Grade  
7474 Potassium Bromate/Bromide Reagent

Expiration:  
26-Jun-20 00:00  
21-Jan-18 00:00  
15-Mar-19 00:00  
15-Aug-17 00:00

1703701  
1703702  
1703702  
1704691

Due Date: 8/24/2017

PREPARATION BENCH SHEET

BC 8/15/17

2600-3

F708322

Eurofins Frontier Global Sciences, Inc.

Matrix: Soil/Sediment

Prepared using: Trace Metals - EPA 7474

Prepared: 8/8/2017

Lab Number	Sample ID	Initial (g)	Final (mL)	QC Sample	Sample Specs.	Raw Data	Sample Comments	Analysis Comments
1707771-11	OR-01-05_072417_SED_00-01_R3	0.5556	200	-	-	-	50X	
1707771-12	OR-01-05_072417_SED_01-03	0.5697	200	-	-	-	50X	
1707771-13	OR-02-01_072417_SED_00-01	0.5203	200	-	-	-	50X	
1707771-14	OR-02-01_072417_SED_01-03_R1	0.5575	200	-	-	-	50X	
1707771-15	OR-02-01_072417_SED_01-03_R2	0.5879	200	-	-	-	50X	
1707771-16	OR-02-01_072417_SED_01-03_R3	0.568	200	-	-	-	50X	
1707771-17	OR-02-02_072417_SED_00-01	0.5825	200	QC	-	-	MS/MSD 50X	
1707771-18	OR-02-02_072417_SED_01-03	0.5472	200	-	-	-	50X	
1707771-19	W-103-A_072417_SED_00-01	0.5365	200	-	-	-	50X	
1707771-20	W-103-A_072417_SED_01-03	0.5569	200	-	-	-	50X	
1707771-21	W-103-B_072417_SED_00-01_R1	0.576	200	-	-	-	50X	
1707771-22	W-103-B_072417_SED_00-01_R2	0.5183	200	-	-	-	50X	
1707771-23	W-103-B_072417_SED_00-01_R3	0.5914	200	-	-	-	50X	
1707771-24	W-103-B_072417_SED_01-03	0.5978	200	-	-	-	50X	
1707771-25	W-105-A_072417_SED_00-01	0.5598	200	-	-	-	50X	
1707771-26	W-105-A_072417_SED_01-03	0.5553	200	-	-	-	50X	
1707771-27	W-14-C_072417_SED_00-01	0.5815	200	-	-	-	50X	
1707771-28	W-14-C_072417_SED_01-03_R1	0.5554	200	-	-	-	50X	
1707771-29	W-14-C_072417_SED_01-03_R2	0.55	200	-	-	-	50X	

Due Date: 8/24/2017

PREPARATION BENCH SHEET

BCLB/15/17  
2600-3

F708322

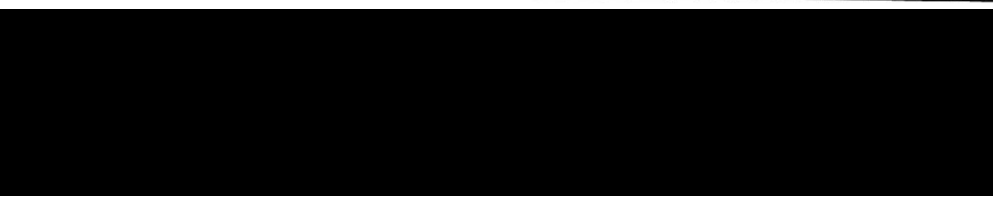
Eurofins Frontier Global Sciences, Inc.

Matrix: Soil/Sediment

Prepared using: Trace Metals - EPA 7474

Prepared: 8/8/2017

1707771-30	W-14-C_072417_SED_01-03_R3	0.5641	200	-	-	-	50x	
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Technician: Dwyer Batch#: F708322 Date: 8/11/17

- EFAFS-T-AFS-SOP2986 Tissues - Methyl Mercury - KOH/Methanol: Hot plate 75±5°C for 2-4 hours.
- EFAFS-T-AFS-SOP2795 Tissues - Total Mercury - 70:30: Hot plate 75±5°C for two hours.
- EFAFS-T-AFS-SOP5134 Sediments - Methyl Mercury - KBr/CH<sub>2</sub>Cl<sub>2</sub>: Heat Block 45°C (nitrogen purge for 30 minutes).
- EFAFS-T-AFS-SOP2807 Solids - Total Mercury - Cold AR: 18-25°C for over four hours.

Other: EPA 7474

Balance#: 19 Calibrated?  Yes  No Therm.#: N/A Vial Type:  Glass  Teflon  
 Calibrated?  Yes  No

\*Time in: N/A Actual Temp. (raw): N/A °C w/ CF: N/A °C

Time out: N/A Actual Temp. (raw): N/A °C w/ CF: N/A °C

\*Time in can't begin before target temperature is reached

Final vol.: 25 mL (LIMS ID: R0420) Spike vol.: 40 µL (LIMS ID: 1701763)  
 Spike Witness: BC 8/11/17 (initial and date)

HCl LIMS ID: 1703831 / 1704640

Pipette SN#: 0007852 Calibration Date: 8/11/17

HNO<sub>3</sub> LIMS ID: 1704484

Pipette SN#: N407692 Calibration Date: 8-9-17

70/30 LIMS ID: N/A

Dispenser #: 09NH5351 Calibrated?  Yes  No

Other Acid LIMS ID: 1704812

Dispenser #: 08Y2293 Style 8

Glass Vial # J264713-2025 Boiling Chip lot # 1704424

\*Hotblock Position: N/A

Vial #	Sample ID Number	Sample Size <input type="checkbox"/> mL <input checked="" type="checkbox"/> g	Vial #	Sample ID Number	Sample Size <input type="checkbox"/> mL <input checked="" type="checkbox"/> g	CRM LIMS ID <input type="checkbox"/> NA
1	F708322 Blk1	0.4998	23	8	1707771-25A	0.5598
2	F708322 Blk2	0.5676	24	9	1707771-26A	0.5553
3	F708322 B51	0.5130	25	10	1707771-27A	0.5815
4	F708322 B501	0.5513	26	11	1707771-28A	0.5554
5	1707771-11A	0.5556	27	12	1707771-29A	0.5500
6	1707771-12A	0.5697	28	13	1707771-30A	0.5641
7	1707771-13A	0.5207	29			
8	1707771-14A	0.5575	30			
9	1707771-15A	0.5879	31			
10	1707771-16A	0.5680	32			
11	1707771-17A	0.5825	33			
12	F708322-MS1	0.5782	34			
13	F708322-1MSD1	0.5301	35			
14	1707771-18A	0.5472	36			
15	1707771-19A	0.5365	37			
16	1707771-20A	0.5569	38			
17	1707771-21A	0.5760	39			
18	F708322-MS2	0.5442	40			
19	F708322-MS02	0.5502	41			
20	1707771-22A	0.5183	42			
21	1707771-23A	0.5914	43			
22	1707771-24A	0.5978	44			

**Comments**  
 F708322 source  
 MS1 MS01  
 1707771-17  
 F708322 MS2 MS02  
 1707771-21  
 F708322 All spike MS1 MS01 = 10,000 µL = 50 µL 1703591  
 8/11/17

PREPARATION BENCH SHEET

BL 8/15/17  
2600-3

F707537

Eurofins Frontier Global Sciences, Inc.

Matrix: Soil/Sediment

Prepared using: AFS - EPA 7474

Prepared: 8/11/2017

Lab Number	Sample ID and Source Sample	Initial (g)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F707537-BLK1	Blank	0.5	200					10X
F707537-BLK2	Blank	0.5	200					10X
F707537-BS1	Blank Spike	0.5241	200	1701763	40			100X
F707537-BSD1	Blank Spike Dup	0.5516	200	1701763	40			100X
F707537-MS1	Matrix Spike [1707620-34]	0.5356	200	1703591	50			400X
F707537-MS2	Matrix Spike [1707771-04]	0.5453	200	1703591	50			400X
F707537-MSD1	Matrix Spike Dup [1707620-34]	0.5845	200	1703591	50			400X
F707537-MSD2	Matrix Spike Dup [1707771-04]	0.5308	200	1703591	50			400X

Standard ID(s):  
1701763  
1703591

Description:  
THg 1,000ng/mL Secondary Spiking Standard  
THg 10,000ng/mL Primary Spiking Standard

Expiration:  
22-Sep-17 00:00  
14-Dec-17 00:00

Reagent ID(s):  
1703831  
1704424  
1704484  
1704812

Description:  
Omnitrace Hydrochloric Acid  
Boiling Chips for AFS prep  
Fisher Nitric Acid, Tracemetal Grade  
7474 Potassium Bromate/Bromide Reagent

Expiration:  
26-Jun-20 00:00  
21-Jan-18 00:00  
15-Mar-19 00:00  
15-Aug-17 00:00

#

1703701  
1703702  
1703182  
1704691

BL 8/15/17  
2600-3

PREPARATION BENCH SHEET

F707537

Eurofins Frontier Global Sciences, Inc.

Matrix: Soil/Sediment

Prepared using: AFS - EPA 7474

Prepared: 8/11/2017

Lab Number	Sample ID	Initial (g)	Final (mL)	QC Sample	Sample Specs.	Raw Data	Sample Comments	Analysis Comments
1707620-34	W-MM-13_071917_SED_05-10	0.5696	200	QC	-	-	MS/MSD 100X → 10X	
1707737-06	MMSW-C_SW_072617_SED_05-10	0.5384	200	-	-	-	100X → 10X	
1707737-07	MMSE-1_N2_072517_SED_03-05	0.5644	200	-	-	-	100X	
1707737-08	MMSE-1_N2_072517_SED_05-10	0.5653	200	-	-	-	100X → 10X	
1707737-09	MMSW-C_S_072517_SED_03-05	0.5665	200	-	-	-	100X	
1707737-10	MMSW-C_S_072517_SED_05-10	0.5475	200	-	-	-	100X	
1707737-11	MMSW-C_SW_072517_SED_00-01	0.5327	200	-	-	-	100X → 10X	
1707737-12	MMSW-C_SW_072517_SED_01-03	0.5497	200	-	-	-	Original jar broken, created container D 100X → 10X	
1707737-13	W-21-UM-West-A_072517_SED_00-01	0.5848	200	-	-	-	100X → 10X	
1707737-14	W-21-UM-West-A_072517_SED_01-03	0.5974	200	-	-	-	100X → 10X	
1707771-01	OR-01-01_072417_SED_00-01_R1	0.5458	200	-	-	-	100X	
1707771-02	OR-01-01_072417_SED_00-01_R2	0.5418	200	-	-	-	<del>50X</del> 50X	
1707771-03	OR-01-01_072417_SED_00-01_R3	0.5165	200	-	-	-	<del>50X</del> 50X	
1707771-04	OR-01-01_072417_SED_01-03	0.5485	200	QC	-	-	MS/MSD <del>50X</del> 50X	
1707771-05	OR-01-02_072417_SED_00-01	0.5915	200	-	-	-	<del>50X</del> 50X	
1707771-06	OR-01-02_072417_SED_01-03	0.5741	200	-	-	-	<del>50X</del> 50X	
1707771-07	OR-01-03_072417_SED_00-01	0.5631	200	-	-	-	50X	
1707771-08	OR-01-03_072417_SED_01-03	0.5617	200	-	-	-	50X	
1707771-09	OR-01-05_072417_SED_00-01_R1	0.5388	200	-	-	-	50X	

Due Date: 8/21/2017

PREPARATION BENCH SHEET

BL 8/15/17  
2600-3

F707537

Eurofins Frontier Global Sciences, Inc.

Matrix: Soil/Sediment

Prepared using: AFS - EPA 7474

Prepared: 8/11/2017

1707771-10	OR-01-05_072417_SED_00-01_R2	0.5376	200	-	-	-		
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Technician: Duyen Batch#: F707537 Date: 8-11-17

- EFAFS-T-AFS-SOP2986 Tissues - Methyl Mercury - KOH/Methanol: Hot plate 75±5°C for 2-4 hours.
- EFAFS-T-AFS-SOP2795 Tissues - Total Mercury - 70:30: Hot plate 75±5°C for two hours.
- EFAFS-T-AFS-SOP5134 Sediments - Methyl Mercury - KBr/CH<sub>2</sub>Cl<sub>2</sub>: Heat Block 45°C (nitrogen purge for 30 minutes).
- EFAFS-T-AFS-SOP2807 Solids - Total Mercury - Cold AR: 18-25°C for over four hours.

Other: EPA7474  
 Balance#: 19 Calibrated?  Yes  No Therm.#: N/A Vial Type:  Glass  Teflon  
 Calibrated?  Yes  No  
 \*Time in: N/A Actual Temp. (raw): N/A °C w/ CF: N/A °C  
 Time out: N/A Actual Temp. (raw): N/A °C w/ CF: N/A °C  
 \*Time in can't begin before target temperature is reached

Final vol.: 25 mL (LIMS ID: R0H20) Spike vol.: 40 µL (LIMS ID: 1701763)  
 Spike Witness: Cue 8/11/17 (initial and date)

HCl LIMS ID: 1703843 / 1703831 Pipette SN#: 0MU1167 Calibration Date: 8-9-17  
 HNO<sub>3</sub> LIMS ID: 1704484 Pipette SN#: NW07693 Calibration Date: 8-9-17  
 70/30 LIMS ID: N/A Dispenser #: 09N45351 Calibrated?  Yes  No  
 Other Acid LIMS ID: 1704812 Dispenser #: 08Y2297  yes  
 Glass Vial # J264713-3025 Boiling Chip lot # 1704424 \*Hotblock Position: N/A

Vial #	Sample ID Number	Sample Size <input type="checkbox"/> mL <input checked="" type="checkbox"/> g	Vial # 8-11-17	Sample ID Number	Sample Size <input type="checkbox"/> mL <input checked="" type="checkbox"/> g	CRM LIMS ID <input checked="" type="checkbox"/> N/A
1	F707537 Blk1	0.4998	237	F707537-14A	0.5308	
2	F707537 Blk2	0.5638	248	1707771-05A	0.5915	
3	F707537 BS1	0.5241	259	1707771-06A	0.5741	
4	F707537 BS01	0.5516	260	1707771-07A	0.5631	
5	1707620-34	0.5696	2711	1707771-08A	0.5617	
6	1707737-06	8/11/17	2812	1707771-09A	0.5388	F707537 source
7	F707620-537-MS1	0.5356	2913	1707771-10A	0.5376	1707620-34 MS1 MS01
8	F707537-MS01	0.5845	30			
9	1707737-06A	0.5384	31			
10	1707737-07A	0.5644	32			F707537 MS2 MS02
11	1707737-08A	0.5653	33			170777104
12	1707737-09A	0.5665	34			
13	1707737-10A	0.5475	35			# vials 6
14	1707737-11A	0.5327	36			F707537-MS1 = 0.5356(g)
15	1707737-12A	0.5497	37			F707537 ALL spike MS1 MS01
16	1707737-13A	0.5848	38			= 1000g/l
17	1707737-14A	0.5974	39			= 50ml
18	1707771-01A	0.5458	40			1703591
19	1707771-02A	0.5418	41			8/11/17ms
20	1707771-03A	0.5165	42			
21	1707771-04A	0.5485	43			
22	F707537-MS2	0.5453	44			

**Peer Review Check List for THg by 2600 CV-AFS (SOP2822) 2016 Rev 1 (04/1/2016)**

<b>Analyst:</b> BC	<b>Sequence(s) #:</b> 7H15016
<b>Reviewer:</b> DM	<b>Dataset ID(s):</b> THg26003-170815-1
<b>Date:</b> 8/15/2017	<b>WO (s) #:</b> Various
<b>Batch #(s):</b> F707537, F708322	

• Select the correct preparation method.

Analyte	Prep Method		Matrix
<input type="checkbox"/> THg	EFAFS-T-AFS-SOP2985	FSTM Trap 70:30 Digest	Air/Gas
<input type="checkbox"/> THg	EFAFS-T-AFS-SOP2807	Modified Cold Aqua Regia	Sed/Soil
<input type="checkbox"/> THg	EFAFS-T-AFS-SOP2821	Shared Bomb- HF/HNO3/HCl Digest	Sed/Soil
<input type="checkbox"/> THg	EFTM-T-TM-SOP2825	Nitric Acid Oven Bomb	Sed/Soil
<input type="checkbox"/> THg	EFAFS-T-AFS-SOP2795	70:30 Digest	Tissue
<input type="checkbox"/> THg	EFAFS-T-AFS-SOP2800	KCl Trap BrCl Oxidation	Air/Gas
<input type="checkbox"/> THg	EFTM-T-TM-SOP2837	Shared Nitric	Tissue
<input type="checkbox"/> THg	EFSR-P-SP-SOP2796	BrCl Oxidation	Water
<input type="checkbox"/> Hg <sup>0</sup>	NA	NA	Water
<input type="checkbox"/> Inorg Hg	NA	NA	Water

Analyst Initials: BC

Reviewer Initials: DM

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

**Peer Review Check List for THg by 2600 CV-AFS (SOP2822) 2016 Rev 1 (04/1/2016)**

<b>Analyst:</b> BC	<b>Sequence(s) #:</b> 7H15016
<b>Reviewer:</b> 0	<b>Dataset ID(s):</b> THg26003-170815-1
<b>Date:</b> 8/15/2017	<b>WO (s) #:</b> Various
<b>Batch #(s):</b> F707537, F708322	0

Analyst Initials BC                      Reviewer Initials JM

- 5b. Has the B/C section data been uploaded?                       YES     NO     N/A
- QA/QC Data Checked**
6. RSD CF ( $\leq 15\%$ )                       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 consistent with the data review flowcharts?                       YES     NO     N/A
- Comments: \_\_\_\_\_
12. Explain any items on the failed data report from Element
- Comments: NA
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 (SOP2822) 2016 Rev 1 (04/1/2016)**

<b>Analyst:</b> BC	<b>Sequence(s) #:</b> 7H15016
<b>Reviewer:</b> 0	<b>Dataset ID(s):</b> THg26003-170815-1
<b>Date:</b> 8/15/2017	<b>WO (s) #:</b> Various
<b>Batch #(s):</b> F707537, F708322	0

Analyst Initials BC                      Reviewer Initials DM

- |  |  |                               |   |
|--|--|-------------------------------|---|
| 20. MS/MSD Spiked at least 1-5 X ambient or 5x MRL (whichever is higher) ?   | <input checked="" type="checkbox"/> YES  | <input type="checkbox"/> NO   | <input checked="" type="checkbox"/>     |
| Comments: _____  |  |                               |   |
| 21. Are all samples within instrument calibration range? (or at minimum dilution size)   | <input checked="" type="checkbox"/> PASS | <input type="checkbox"/> FAIL | <input checked="" type="checkbox"/>     |
| Comments: _____  |  |                               |   |
| 22. Are the samples run at the correct dilution level for the method?  | <input checked="" type="checkbox"/> YES  | <input type="checkbox"/> NO   |   |
| Comments: _____  |  |                               |   |
| 23. Dissolved < Total (if applicable)  | <input type="checkbox"/> YES             | <input type="checkbox"/> NO   | <input checked="" type="checkbox"/> N/A |
| Comments: _____  |  |                               |   |
| 24. Effluent < Influent (visually confirm if needed)   | <input type="checkbox"/> YES             | <input type="checkbox"/> NO   | <input checked="" type="checkbox"/> N/A |
| Comments: _____  |  |                               |   |
| 25. Are re-runs noted with reason?   | <input checked="" type="checkbox"/> YES  | <input type="checkbox"/> NO   | <input type="checkbox"/> 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? | <input type="checkbox"/> YES             | <input type="checkbox"/> NO   | <input checked="" type="checkbox"/> N/A |
| Comments: _____  |  |                               |   |
| 27. Is the B trap <5% A Traps  | <input type="checkbox"/> YES             | <input type="checkbox"/> NO   | <input checked="" type="checkbox"/> N/A |
| Comments: _____  |  |                               |   |
| 28. Are spiked trap recoveries 75-125% of true value?  | <input type="checkbox"/> YES             | <input type="checkbox"/> NO   | <input checked="" type="checkbox"/> N/A |
| Comments: _____  |  |                               |   |
| 29. Have non-reportable samples been imported into LIMS and clicked to non-reportable?   | <input checked="" type="checkbox"/> YES  | <input type="checkbox"/> NO   | <input type="checkbox"/> N/A            |
| Comments: _____  |  |                               |   |
| 30. Have re-extracts been created for non-reportable samples?  | <input checked="" type="checkbox"/> YES  | <input type="checkbox"/> NO   | <input type="checkbox"/> N/A            |
| 31. Are there any HIGH QA projects within the data? If so, place data package in QA office before scanning.  | <input type="checkbox"/> YES             | <input type="checkbox"/> NO   | <input checked="" type="checkbox"/> N/A |
| 32. Does the data set need scanning?   | <input type="checkbox"/> YES             |                               | <input checked="" type="checkbox"/> N/A |
| 33. Does the dataset have an LOQ/LOQ or DOC?   | <input type="checkbox"/> YES             |                               | <input checked="" type="checkbox"/> N/A |
| 34. Water samples: has the preservation log been included in dataset for final volume verification?  | <input type="checkbox"/> YES             | <input type="checkbox"/> NO   | <input checked="" type="checkbox"/> N/A |
| 35. Water samples-is the final volume correct in the sequence?   | <input type="checkbox"/> YES             | <input type="checkbox"/> NO   | <input checked="" type="checkbox"/> N/A |

**Files located at: \\Cuprum\gen admin\Quality Assurance\Training Master\DOCs**

- |   |           |                                  |   |                             |                                     |
|---|-----------|----------------------------------|---|-----------------------------|-------------------------------------|
| 36. Date of analyst IDOC/CDOC: _____                | 1/11/2017 | IDOC/CDOC within last 12 months? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> |
| 37. Date of analyst's SOP reading for method: _____ | 5/20/2017 | Current SOP revision read?       | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> |
| 38. Date of LOD: _____                              |           | LOD within last 3 months?        | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> |
| 39. Date of LOQ: _____                              |           | LOQ within last 3 months?        | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> |

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



Peer Review Check List for THg by 2600 CV-AFS (SOP2822) 2016 Rev 1 (04/1/2016)

Analyst:	BC	Sequence(s) #:	7H15016
Reviewer:	0	Dataset ID(s):	THg26003-170815-1
Date:	8/15/2017	WO (s) #:	Various
Batch #(s):	F707537, F708322		0

*BC* *DM*

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


Additional Page (s)?  YES



## Analysis Datasheet for Total Mercury

Date of Analysis: August 16, 2017

Analyst: BC

Instrument #: Hg2600-2

Units ng/L

LIMS Sequence #: 7H16016

## Calibration Statistics:

LabNumber	n	True Val	Area	Uncorrected Response Factor	Corrected Peak Height	Corrected Response Factor	% Recovery
SEQ-CAL1	1	0.50 ng/L	85.34 units	170.68	77.82 units	155.63	106.5 %Rec
SEQ-CAL2	1	1.00 ng/L	161.30 units	161.30	153.77 units	153.77	105.2 %Rec
SEQ-CAL3	1	5.00 ng/L	709.97 units	141.99	702.44 units	140.49	96.2 %Rec
SEQ-CAL4	1	20.00 ng/L	2840.96 units	142.05	2833.43 units	141.67	97.0 %Rec
SEQ-CAL5	1	40.00 ng/L	5567.26 units	139.18	5559.74 units	138.99	95.1 %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  
 146.11            +/- 7.93            5.4% RSD            151.04

## Blanks:

LabNumber	n	Mean	Std Dev	Mean (ng/L)	Std Dev (ng/L)
SEQ-IBL	3	7.52 units	±6.08	0.05 ng/L	±0.04

## Preparation Blanks

Sample Type	Batch ID	n	Mean	Std Dev
BLK	1	2	2.642 ng/L	±1.553
BLK	2	2	1.374 ng/L	±0.161
BLK	3	0	0.000 ng/L	
BLK	4	0	0.000 ng/L	
BLK	5	0	0.000 ng/L	
BLK	6	0	0.000 ng/L	

QUALITY ASSURANCE

PEER - REVIEWED

INITIALS: DM 8/18/17

Instrument	Analyst	Sample Type	LabNumber	Dilution	Analyzed	FileID	RunEnd	Uncorrected Response	Batch ID	No PB Correction?	RESP	InitialResult	FinalResult	InitialUnits	Comments
Hg2600-2	BC	CAL	SEQ-IBL1	1	8/16/2017 8:35:55	83174-1.RAW	8:35:55 AM	10.25			2.7	0.019	0.019	ng/L	
Hg2600-2	BC	CAL	SEQ-IBL2	1	8/16/2017 8:40:04	83175-1.RAW	8:40:04 AM	11.76			4.2	0.029	0.029	ng/L	
Hg2600-2	BC	CAL	SEQ-IBL3	1	8/16/2017 8:44:12	83176-1.RAW	8:44:12 AM	0.55			-7.0	-0.048	-0.048	ng/L	
Hg2600-2	BC	CAL	SEQ-CAL1	1	8/16/2017 8:48:20	83177-1.RAW	8:48:20 AM	85.34			77.8	0.533	0.533	ng/L	
Hg2600-2	BC	CAL	SEQ-CAL2	1	8/16/2017 8:52:29	83178-1.RAW	8:52:29 AM	161.30			153.8	1.052	1.052	ng/L	
Hg2600-2	BC	CAL	SEQ-CAL3	1	8/16/2017 8:56:37	83179-1.RAW	8:56:37 AM	709.97			702.4	4.808	4.808	ng/L	
Hg2600-2	BC	CAL	SEQ-CAL4	1	8/16/2017 9:00:46	83180-1.RAW	9:00:46 AM	2840.96			2833.4	19.392	19.392	ng/L	
Hg2600-2	BC	CAL	SEQ-CAL5	1	8/16/2017 9:04:54	83181-1.RAW	9:04:54 AM	5567.26			5559.7	38.051	38.051	ng/L	
Hg2600-2	BC	CAL	SEQ-ICV1	1	8/16/2017 9:09:03	83182-1.RAW	9:09:03 AM	766.84			759.3	5.197	5.197	ng/L	
Hg2600-2	BC	BLK	F708399-BLK1	10	8/16/2017 9:13:11	83183-1.RAW	9:13:11 AM	62.16	1		54.6	0.374	3.740	ng/L	
Hg2600-2	BC	BLK	F708399-BLK2	10	8/16/2017 9:17:19	83184-1.RAW	9:17:19 AM	30.08	1		22.6	0.154	1.544	ng/L	
Hg2600-2	BC	SAM	F708399-BS1	10	8/16/2017 9:21:28	83185-1.RAW	9:21:28 AM	3204.86	1		3197.3	21.619	216.185	ng/L	
Hg2600-2	BC	SAM	F708399-BSD1	10	8/16/2017 9:25:36	83186-1.RAW	9:25:36 AM	3296.65	1		3289.1	22.247	222.468	ng/L	
Hg2600-2	BC	SAM	1707771-39	50	8/16/2017 9:29:45	83187-1.RAW	9:29:45 AM	1226.58	1		1219.1	8.290	414.523	ng/L	
Hg2600-2	BC	SAM	1707771-40	50	8/16/2017 9:33:53	83188-1.RAW	9:33:53 AM	1102.43	1		1094.9	7.441	372.037	ng/L	
Hg2600-2	BC	SAM	1707771-41	50	8/16/2017 9:38:01	83189-1.RAW	9:38:01 AM	1020.07	1		1012.5	6.877	343.855	ng/L	
Hg2600-2	BC	SAM	1707775-01	50	8/16/2017 9:42:10	83190-1.RAW	9:42:10 AM	1661.44	1		1653.9	11.267	563.333	ng/L	
Hg2600-2	BC	SAM	1707775-02	50	8/16/2017 9:46:18	83191-1.RAW	9:46:18 AM	1791.02	1		1783.5	12.153	607.674	ng/L	
Hg2600-2	BC	SAM	1707775-03	50	8/16/2017 9:50:27	83192-1.RAW	9:50:27 AM	1649.83	1		1642.3	11.187	559.360	ng/L	
Hg2600-2	BC	CAL	SEQ-CCV1	1	8/16/2017 9:54:35	83193-1.RAW	9:54:35 AM	796.12			788.6	5.397	5.397	ng/L	
Hg2600-2	BC	CAL	SEQ-CCB1	1	8/16/2017 9:58:44	83194-1.RAW	9:58:44 AM	29.44			21.9	0.150	0.150	ng/L	
Hg2600-2	BC	SAM	1707775-04	50	8/16/2017 10:02:52	83195-1.RAW	10:02:52 AM	1678.28	1		1670.8	11.382	569.096	ng/L	
Hg2600-2	BC	SAM	1707775-05	50	8/16/2017 10:07:00	83196-1.RAW	10:07:00 AM	1182.97	1		1175.4	7.992	399.598	ng/L	
Hg2600-2	BC	SAM	1707775-06	50	8/16/2017 10:11:09	83197-1.RAW	10:11:09 AM	1470.59	1		1463.1	9.960	498.022	ng/L	
Hg2600-2	BC	SAM	1707775-07	50	8/16/2017 10:15:17	83198-1.RAW	10:15:17 AM	1191.21	1		1183.7	8.048	402.420	ng/L	
Hg2600-2	BC	SAM	1707776-04	50	8/16/2017 10:19:26	83199-1.RAW	10:19:26 AM	1691.79	1		1684.3	11.474	573.717	ng/L	
Hg2600-2	BC	SAM	1707776-05	50	8/16/2017 10:23:34	83200-1.RAW	10:23:34 AM	2678.99	1		2671.5	18.231	911.541	ng/L	
Hg2600-2	BC	SAM	1707776-06	50	8/16/2017 10:27:42	83201-1.RAW	10:27:42 AM	2420.63	1		2413.1	16.463	823.128	ng/L	
Hg2600-2	BC	SAM	1707776-07	50	8/16/2017 10:31:51	83202-1.RAW	10:31:51 AM	2164.39	1		2156.9	14.709	735.445	ng/L	
Hg2600-2	BC	SAM	1707810-50	50	8/16/2017 10:35:59	83203-1.RAW	10:35:59 AM	2794.17	1		2786.6	19.019	950.954	ng/L	
Hg2600-2	BC	SAM	1707810-51	50	8/16/2017 10:40:08	83204-1.RAW	10:40:08 AM	1681.73	1		1674.2	11.405	570.275	ng/L	
Hg2600-2	BC	CAL	SEQ-CCV2	1	8/16/2017 10:44:16	83205-1.RAW	10:44:16 AM	808.65			801.1	5.483	5.483	ng/L	
Hg2600-2	BC	CAL	SEQ-CCB2	1	8/16/2017 10:48:25	83206-1.RAW	10:48:25 AM	44.76			37.2	0.255	0.255	ng/L	
Hg2600-2	BC	SAM	1707810-52	50	8/16/2017 10:52:33	83207-1.RAW	10:52:33 AM	2008.40	1		2000.9	13.641	682.062	ng/L	
Hg2600-2	BC	SAM	1707810-53	50	8/16/2017 10:56:41	83208-1.RAW	10:56:41 AM	5502.99	1		5495.5	37.558	1877.921	ng/L	
Hg2600-2	BC	SAM	1707810-54	50	8/16/2017 11:00:50	83209-1.RAW	11:00:50 AM	1746.19	1		1738.7	11.847	592.334	ng/L	
Hg2600-2	BC	SAM	1707810-55	50	8/16/2017 11:04:58	83210-1.RAW	11:04:58 AM	808.60	1		801.1	5.430	271.489	ng/L	
Hg2600-2	BC	SAM	F708399-MS1	400	8/16/2017 11:09:07	83211-1.RAW	11:09:07 AM	1064.50	1		1057.0	7.227	2890.953	ng/L	
Hg2600-2	BC	SAM	F708399-MSD1	400	8/16/2017 11:13:15	83212-1.RAW	11:13:15 AM	1048.78	1		1041.3	7.120	2847.934	ng/L	
Hg2600-2	BC	SAM	F708399-MS2	400	8/16/2017 11:17:24	83213-1.RAW	11:17:24 AM	1082.44	1		1074.9	7.350	2940.073	ng/L	
Hg2600-2	BC	SAM	F708399-MSD2	400	8/16/2017 11:21:32	83214-1.RAW	11:21:32 AM	1221.12	1		1213.6	8.299	3319.715	ng/L	
Hg2600-2	BC	CAL	SEQ-CCV3	1	8/16/2017 11:25:40	83215-1.RAW	11:25:40 AM	751.00			743.5	5.088	5.088	ng/L	
Hg2600-2	BC	CAL	SEQ-CCB3	1	8/16/2017 11:29:49	83216-1.RAW	11:29:49 AM	33.90			26.4	0.181	0.181	ng/L	
Hg2600-2	BC	BLK	F708427-BLK1	10	8/16/2017 11:33:57	83217-1.RAW	11:33:57 AM	29.26	2		21.7	0.149	1.488	ng/L	
Hg2600-2	BC	BLK	F708427-BLK2	10	8/16/2017 11:38:06	83218-1.RAW	11:38:06 AM	25.93	2		18.4	0.126	1.260	ng/L	
Hg2600-2	BC	SAM	F708427-BS1	10	8/16/2017 11:42:14	83219-1.RAW	11:42:14 AM	2957.75	2		2950.2	20.054	200.541	ng/L	
Hg2600-2	BC	SAM	F708427-BSD1	10	8/16/2017 11:46:22	83220-1.RAW	11:46:22 AM	3272.11	2		3264.6	22.206	222.056	ng/L	
Hg2600-2	BC	SAM	1707771-31	50	8/16/2017 11:50:31	83221-1.RAW	11:50:31 AM	2494.71	2		2487.2	16.995	849.748	ng/L	
Hg2600-2	BC	SAM	1707771-32	50	8/16/2017 11:54:39	83222-1.RAW	11:54:39 AM	2792.28	2		2784.8	19.032	951.575	ng/L	
Hg2600-2	BC	SAM	1707771-33	50	8/16/2017 11:58:48	83223-1.RAW	11:58:48 AM	775.83	2		768.3	5.231	261.541	ng/L	
Hg2600-2	BC	SAM	1707771-34	50	8/16/2017 12:02:56	83224-1.RAW	12:02:56 PM	2400.76	2		2393.2	16.352	817.598	ng/L	
Hg2600-2	BC	SAM	1707771-35	50	8/16/2017 12:07:04	83225-1.RAW	12:07:04 PM	968.97	2		961.4	6.553	327.636	ng/L	
Hg2600-2	BC	SAM	1707771-36	50	8/16/2017 12:11:13	83226-1.RAW	12:11:13 PM	2165.69	2		2158.2	14.743	737.154	ng/L	
Hg2600-2	BC	CAL	SEQ-CCV4	1	8/16/2017 12:15:21	83227-1.RAW	12:15:21 PM	794.90			787.4	5.389	5.389	ng/L	
Hg2600-2	BC	CAL	SEQ-CCB4	1	8/16/2017 12:19:30	83228-1.RAW	12:19:30 PM	39.69			32.2	0.220	0.220	ng/L	
Hg2600-2	BC	SAM	1707771-37	50	8/16/2017 12:23:38	83229-1.RAW	12:23:38 PM	459.38	2		451.9	3.065	153.253	ng/L	
Hg2600-2	BC	SAM	1707771-38	50	8/16/2017 12:27:47	83230-1.RAW	12:27:47 PM	874.37	2		866.8	5.905	295.262	ng/L	

Instrument	Analyst	Sample Type	LabNumber	Dilution	Analyzed	FileID	RunEnd	Uncorrected Response	Batch ID	No PB Correction?	RESP	InitialResult	FinalResult	InitialUnits	Comments
Hg2600-2	BC	SAM	1707771-42	50	8/16/2017 12:31:55	83231-1.RAW	12:31:55 PM	1891.13	2		1883.6	12.864	643.202	ng/L	
Hg2600-2	BC	SAM	1707771-43	50	8/16/2017 12:36:03	83232-1.RAW	12:36:03 PM	1356.87	2		1349.3	9.207	460.375	ng/L	
Hg2600-2	BC	SAM	ws		8/16/2017 12:49:55	83233-1.RAW	12:49:55 PM	129.69	2		122.2	#DIV/0!	#DIV/0!	ng/L	
Hg2600-2	BC	SAM	1707771-44	50	8/16/2017 12:54:04	83234-1.RAW	12:54:04 PM	1271.30	2		1263.8	8.622	431.092	ng/L	
Hg2600-2	BC	SAM	1707771-45	50	8/16/2017 12:58:12	83235-1.RAW	12:58:12 PM	1324.22	2		1316.7	8.984	449.204	ng/L	
Hg2600-2	BC	SAM	1707771-46	50	8/16/2017 13:02:21	83236-1.RAW	1:02:21 PM	1158.02	2		1150.5	7.847	392.329	ng/L	
Hg2600-2	BC	SAM	1707771-47	50	8/16/2017 13:06:29	83237-1.RAW	1:06:29 PM	3422.94	2		3415.4	23.348	1167.389	ng/L	
Hg2600-2	BC	SAM	1707771-48	50	8/16/2017 13:10:37	83238-1.RAW	1:10:37 PM	4938.58	2		4931.1	33.721	1686.046	ng/L	
Hg2600-2	BC	SAM	1707771-49	50	8/16/2017 13:14:46	83239-1.RAW	1:14:46 PM	223.99	2		216.5	1.454	72.702	ng/L	
Hg2600-2	BC	CAL	SEQ-CCV5	1	8/16/2017 13:18:54	83240-1.RAW	1:18:54 PM	190.83			183.3	1.255	1.255	ng/L	
Hg2600-2	BC	SAM	WS		8/16/2017 13:30:15	83242-1.RAW	1:30:15 PM	66.6389308	x		59.1	0.405	0.000	ng/L	
Hg2600-2	BC	CAL	SEQ-CCV6	1	8/16/2017 13:34:24	83241-2.RAW	1:34:24 PM	754.05			746.5	5.109	5.109	ng/L	
Hg2600-2	BC	CAL	SEQ-CCV7	1	8/16/2017 13:38:33	83243-1.RAW	1:38:33 PM	770.30			762.8	5.221	5.221	ng/L	
Hg2600-2	BC	CAL	SEQ-CCB5	1	8/16/2017 13:42:41	83244-1.RAW	1:42:41 PM	28.31			20.8	0.142	0.142	ng/L	
Hg2600-2	BC	SAM	1707771-50	50	8/16/2017 13:46:50	83245-1.RAW	1:46:50 PM	169.01	2		161.5	1.078	53.887	ng/L	
Hg2600-2	BC	SAM	1707771-51	50	8/16/2017 13:50:58	83246-1.RAW	1:50:58 PM	172.99	2		165.5	1.105	55.249	ng/L	
Hg2600-2	BC	SAM	1707771-52	50	8/16/2017 13:55:06	83247-1.RAW	1:55:06 PM	140.28	2		132.8	0.881	44.054	ng/L	
Hg2600-2	BC	SAM	1707771-53	50	8/16/2017 13:59:15	83248-1.RAW	1:59:15 PM	1167.76	2		1160.2	7.913	395.662	ng/L	
Hg2600-2	BC	SAM	F708427-MS1	400	8/16/2017 14:03:23	83249-1.RAW	2:03:23 PM	1214.54	2		1207.0	8.257	3302.971	ng/L	
Hg2600-2	BC	SAM	F708427-MSD1	400	8/16/2017 14:07:32	83250-1.RAW	2:07:32 PM	1228.06	2		1220.5	8.350	3339.982	ng/L	
Hg2600-2	BC	SAM	F708427-MS2	400	8/16/2017 14:11:41	83251-1.RAW	2:11:41 PM	917.37	2		909.8	6.224	2489.427	ng/L	
Hg2600-2	BC	SAM	F708427-MSD2	400	8/16/2017 14:15:50	83252-1.RAW	2:15:50 PM	792.42	2		784.9	5.368	2147.377	ng/L	
Hg2600-2	BC	SAM	1707771-50RE1	10	8/16/2017 14:19:58	83253-1.RAW	2:19:58 PM	760.87	2		753.3	5.019	50.186	ng/L	
Hg2600-2	BC	SAM	1707771-51RE1	10	8/16/2017 14:24:07	83254-1.RAW	2:24:07 PM	756.18	2		748.7	4.986	49.865	ng/L	
Hg2600-2	BC	CAL	SEQ-CCV8	1	8/16/2017 14:28:15	83255-1.RAW	2:28:15 PM	782.47			774.9	5.304	5.304	ng/L	
Hg2600-2	BC	CAL	SEQ-CCB6	1	8/16/2017 14:32:23	83256-1.RAW	2:32:23 PM	29.21			21.7	0.148	0.148	ng/L	
Hg2600-2	BC	SAM	1707771-52RE1	10	8/16/2017 14:36:32	83257-1.RAW	2:36:32 PM	659.06	2		651.5	4.322	43.217	ng/L	
Hg2600-2	BC	SAM	WS		8/16/2017 14:57:32	83258-1.RAW	2:57:32 PM	113.04	x		105.5	0.722	0.000	ng/L	
Hg2600-2	BC	CAL	SEQ-CCV9	1	8/16/2017 15:01:40	83259-1.RAW	3:01:40 PM	779.49			772.0	5.283	5.283	ng/L	
Hg2600-2	BC	CAL	SEQ-CCB7	1	8/16/2017 15:05:48	83260-1.RAW	3:05:48 PM	20.58			13.1	0.089	0.089	ng/L	

TotalMercury EPA1631  
 Operat: BC  
 BlankS: 7.5225  
 Calib Eqn: Conc = (Area-7.522  
 Run Date: 8/16/2017  
 Blank SD: 6.081918522  
 Worksh: THg260  
 CalibFa: 146.11  
 Status: QC Warnings:11/QC  
 Run Time: 14:53:22  
 Blank RSD%: 80.8500749  
 Method: #####  
 R: 1  
 R2: 0.9999  
 CF SD: 7.927507712  
 CF RSD%: 5.425622099  
 Descrip: THg26002-170816-1

Sample/ID	Location	Rinse	Dilute	Blank	Conc (ppt)	MB%	FinalConc	Rec%	QA	RawData	RunEnd	Peak (Raw)	Control (eff)	Flags	RunCount
Clean				0.00	7.65					83169-1.RAW	8:16:30	1117.77	Clean	OK	1
clean				0.00	0.00					83170-1.RAW	8:19:22	0.63	Clean	OK	1
ws				7.52	0.01					83171-1.RAW	8:23:30	8.59	Sample	OK	1
ws				7.52	0.00					83172-1.RAW	8:27:38	6.17	Sample	OK	1
ws				7.52	0.00					83173-1.RAW	8:31:47	1.50	Sample	OK	1
SEQ-IBL1	A1		1	0.00	0.07					83174-1.RAW	8:35:55	10.25	Sample	OK	1
SEQ-IBL2	A2		1	0.00	0.08					83175-1.RAW	8:40:04	11.76	Sample	OK	1
SEQ-IBL3	A3		1	0.00	0.00					83176-1.RAW	8:44:12	0.55	Sample	OK	1
SEQ-CAL1	A4		1	7.52	0.53			106.52		83177-1.RAW	8:48:20	85.34	Sample	OK	1
SEQ-CAL2	A5		1	7.52	1.05			105.24		83178-1.RAW	8:52:29	161.30	Sample	OK	1
SEQ-CAL3	A6		1	7.52	4.81			96.15		83179-1.RAW	8:56:37	709.97	Sample	OK	1
SEQ-CAL4	A7		1	7.52	19.39			96.96		83180-1.RAW	9:00:46	2840.96	Sample	OK	1
SEQ-CAL5	A8		1	7.52	38.05			95.13		83181-1.RAW	9:04:54	5567.26	Sample	OK	1
SEQ-ICV1	A9		1	7.52	5.20			103.94		83182-1.RAW	9:09:03	766.84	Sample	OK	1
F708399-BLK1	A10		10	7.52	3.74					83183-1.RAW	9:13:11	62.16	Sample	OK	1
F708399-BLK2	A11		10	7.52	1.54					83184-1.RAW	9:17:19	30.08	Sample	OK	1
F708399-BS1	A12		10	7.52	218.83					83185-1.RAW	9:21:28	3204.86	Sample	OK	1
F708399-BSD1	A13		10	7.52	225.11					83186-1.RAW	9:25:36	3296.65	Sample	OK	1
1707771-39	A14		50	7.52	417.16					83187-1.RAW	9:29:45	1226.58	Sample	OK	1
1707771-40	A15		50	7.52	374.68					83188-1.RAW	9:33:53	1102.43	Sample	OK	1
1707771-41	A16		50	7.52	346.50					83189-1.RAW	9:38:01	1020.07	Sample	OK	1
1707775-01	A17		50	7.52	565.97					83190-1.RAW	9:42:10	1661.44	Sample	OK	1
1707775-02	A18		50	7.52	610.32					83191-1.RAW	9:46:18	1791.02	Sample	OK	1
1707775-03	A19		50	7.52	562.00					83192-1.RAW	9:50:27	1649.83	Sample	OK	1
SEQ-CCV1	A20		1	7.52	5.40			107.94		83193-1.RAW	9:54:35	796.12	Sample	OK	1
SEQ-CCB1	A21		1	7.52	0.15			0.00		83194-1.RAW	9:58:44	29.44	Sample	OK	1
1707775-04	B1		50	7.52	571.74					83195-1.RAW	10:02:52	1678.28	Sample	OK	1
1707775-05	B2		50	7.52	402.24					83196-1.RAW	10:07:00	1182.97	Sample	OK	1
1707775-06	B3		50	7.52	500.66					83197-1.RAW	10:11:09	1470.59	Sample	OK	1
1707775-07	B4		50	7.52	405.06					83198-1.RAW	10:15:17	1191.21	Sample	OK	1
1707776-04	B5		50	7.52	576.36					83199-1.RAW	10:19:26	1691.79	Sample	OK	1
1707776-05	B6		50	7.52	914.18					83200-1.RAW	10:23:34	2678.99	Sample	OK	1
1707776-06	B7		50	7.52	825.77					83201-1.RAW	10:27:42	2420.63	Sample	OK	1
1707776-07	B8		50	7.52	738.09					83202-1.RAW	10:31:51	2164.39	Sample	OK	1
1707810-50	B9		50	7.52	953.60					83203-1.RAW	10:35:59	2794.17	Sample	OK	1
1707810-51	B10		50	7.52	572.92					83204-1.RAW	10:40:08	1681.73	Sample	OK	1
SEQ-CCV2	B11		1	7.52	5.48			109.66		83205-1.RAW	10:44:16	808.65	Sample	OK	1
SEQ-CCB2	B12		1	7.52	0.25			0.00		83206-1.RAW	10:48:25	44.76	Sample	OK	1
1707810-52	B13		50	7.52	684.70					83207-1.RAW	10:52:33	2008.40	Sample	OK	1
1707810-53	B14		50	7.52	1880.56					83208-1.RAW	10:56:41	5502.99	Sample	OK	1
1707810-54	B15		50	7.52	594.98					83209-1.RAW	11:00:50	1746.19	Sample	OK	1
1707810-55	B16		50	7.52	274.13					83210-1.RAW	11:04:58	808.60	Sample	OK	1
F708399-MS1	B17		400	7.52	2893.60			1051.72		83211-1.RAW	11:09:07	1064.50	Sample	OK	1

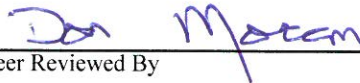
F708399-MSD1	B18	400	7.52	2850.58		83212-1.RAW	11:13:15	1048.78	Sample	OK	1
F708399-MS2	B19	400	7.52	2942.71	103.16	83213-1.RAW	11:17:24	1082.44	Sample	OK	1
F708399-MSD2	B20	400	7.52	3322.36		83214-1.RAW	11:21:32	1221.12	Sample	OK	1
SEQ-CCV3	B21	1	7.52	5.09	101.77	83215-1.RAW	11:25:40	751.00	Sample	OK	1
SEQ-CCB3	C1	1	7.52	0.18	0.00	83216-1.RAW	11:29:49	33.90	Sample	OK	1
F708427-BLK1	C2	10	7.52	1.49		83217-1.RAW	11:33:57	29.26	Sample	OK	1
F708427-BLK2	C3	10	7.52	1.26		83218-1.RAW	11:38:06	25.93	Sample	OK	1
F708427-BS1	C4	10	7.52	201.91		83219-1.RAW	11:42:14	2957.75	Sample	OK	1
F708427-BSD1	C5	10	7.52	223.43		83220-1.RAW	11:46:22	3272.11	Sample	OK	1
1707771-31	C6	50	7.52	851.12		83221-1.RAW	11:50:31	2494.71	Sample	OK	1
1707771-32	C7	50	7.52	952.95		83222-1.RAW	11:54:39	2792.28	Sample	OK	1
1707771-33	C8	50	7.52	262.92		83223-1.RAW	11:58:48	775.83	Sample	OK	1
1707771-34	C9	50	7.52	818.97		83224-1.RAW	12:02:56	2400.76	Sample	OK	1
1707771-35	C10	50	7.52	329.01		83225-1.RAW	12:07:04	968.97	Sample	OK	1
1707771-36	C11	50	7.52	738.53		83226-1.RAW	12:11:13	2165.69	Sample	OK	1
SEQ-CCV4	C12	1	7.52	5.39	107.78	83227-1.RAW	12:15:21	794.90	Sample	OK	1
SEQ-CCB4	C13	1	7.52	0.22	0.00	83228-1.RAW	12:19:30	39.69	Sample	OK	1
1707771-37	C14	50	7.52	154.63		83229-1.RAW	12:23:38	459.38	Sample	OK	1
1707771-38	C15	50	7.52	296.64		83230-1.RAW	12:27:47	874.37	Sample	OK	1
1707771-42	C16	50	7.52	644.58		83231-1.RAW	12:31:55	1891.13	Sample	OK	1
1707771-43	C17	50	7.52	461.75		83232-1.RAW	12:36:03	1356.87	Sample	OK	1
ws			7.52	0.84		83233-1.RAW	12:49:55	129.69	Sample	OK	1
1707771-44	C18	50	7.52	432.47		83234-1.RAW	12:54:04	1271.30	Sample	OK	1
1707771-45	C19	50	7.52	450.58		83235-1.RAW	12:58:12	1324.22	Sample	OK	1
1707771-46	C20	50	7.52	393.70		83236-1.RAW	13:02:21	1158.02	Sample	OK	1
1707771-47	C21	50	7.52	1168.76		83237-1.RAW	13:06:29	3422.94	Sample	OK	1
1707771-48	A1	50	7.52	1687.42		83238-1.RAW	13:10:37	4938.58	Sample	OK	1
1707771-49	A2	50	7.52	74.08		83239-1.RAW	13:14:46	223.99	Sample	OK	1
SEQ-CCV5	A3	1	7.52	1.25	25.09	83240-1.RAW	13:18:54	190.83	Sample	OK	1
WS			7.52	0.40		83242-1.RAW	13:30:15	66.64	Sample	OK	1
SEQ-CCV6	A4	1	7.52	5.11	102.19	83241-2.RAW	13:34:24	754.05	Sample	OK	1
SEQ-CCV7	A5	1	7.52	5.22	104.41	83243-1.RAW	13:38:33	770.30	Sample	OK	1
SEQ-CCB5	A6	1	7.52	0.14	0.00	83244-1.RAW	13:42:41	28.31	Sample	OK	1
1707771-50	A7	50	7.52	55.26		83245-1.RAW	13:46:50	169.01	Sample	OK	1
1707771-51	A8	50	7.52	56.62		83246-1.RAW	13:50:58	172.99	Sample	OK	1
1707771-52	A9	50	7.52	45.43		83247-1.RAW	13:55:06	140.28	Sample	OK	1
1707771-53	A10	50	7.52	397.04		83248-1.RAW	13:59:15	1167.76	Sample	OK	1
F708427-MS1	A11	400	7.52	3304.35	830.16	83249-1.RAW	14:03:23	1214.54	Sample	OK	1
F708427-MSD1	A12	400	7.52	3341.36		83250-1.RAW	14:07:32	1228.06	Sample	OK	1
F708427-MS2	A13	400	7.52	2490.80	74.50	83251-1.RAW	14:11:41	917.37	Sample	OK	1
F708427-MSD2	A14	400	7.52	2148.75		83252-1.RAW	14:15:50	792.42	Sample	OK	1
1707771-50RE1	A15	10	7.52	51.56		83253-1.RAW	14:19:58	760.87	Sample	OK	1
1707771-51RE1	A16	10	7.52	51.24		83254-1.RAW	14:24:07	756.18	Sample	OK	1
SEQ-CCV8	A17	1	7.52	5.30	106.08	83255-1.RAW	14:28:15	782.47	Sample	OK	1
SEQ-CCB6	A18	1	7.52	0.15	0.00	83256-1.RAW	14:32:23	29.21	Sample	OK	1
1707771-52RE1	A19	10	7.52	44.59		83257-1.RAW	14:36:32	659.06	Sample	OK	1
WS			7.52	0.72		83258-1.RAW	14:57:32	113.04	Sample	OK	1
SEQ-CCV9	A20	1	7.52	5.28	105.67	83259-1.RAW	15:01:40	779.49	Sample	OK	1

SEQ-CCB7	A21	1	7.52	0.09	0.00	83260-1.RAW	15:05:48	20.58 Sample	OK	1
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# Failing Data Report - 7H16016

Sample ID	Analysis	Result	MRL	Dup Result	Source Result	True Value	Units	% Rec.	Rec. LCL	Rec. UCL	RPD	RPD Limit	Over Cal	Failure	Qualifier
7H16016-CCV5	Hg-CVAFS-S-7474	1.25	2.000			5.0000	ng/L	25.1	77.00	123.00			PASS-OVER	FAIL-CCV	FE RUN

  
Analyst Reviewed By \_\_\_\_\_  
Date 8/16/17

  
Peer Reviewed By \_\_\_\_\_  
Date 8/18/17



## ANALYSIS SEQUENCE

7H16016

Instrument: Hg2600-2

Calibration ID: UNASSIGNED

Analyzed: 8/16/2017

Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
7H16016-IBL1	QC	1			
7H16016-IBL2	QC	2			
7H16016-IBL3	QC	3			
7H16016-CAL1	QC	4	1704505		
7H16016-CAL2	QC	5	1704506		
7H16016-CAL3	QC	6	1704507		
7H16016-CAL4	QC	7	1704508		
7H16016-CAL5	QC	8	1704509		
7H16016-ICV1	QC	9	1703679		
F708399-BLK1	QC	10			
F708399-BLK2	QC	11			
F708399-BS1	QC	12			
F708399-BSD1	QC	13			
1707771-39	Hg-CVAFS-S-7474	14			
1707771-40	Hg-CVAFS-S-7474	15			
1707771-41	Hg-CVAFS-S-7474	16			
1707775-01	Hg-CVAFS-S-7474	17			
1707775-02	Hg-CVAFS-S-7474	18			
1707775-03	Hg-CVAFS-S-7474	19			
7H16016-CCV1	QC	20	1703679		
7H16016-CCB1	QC	21			
1707775-04	Hg-CVAFS-S-7474	22			
1707775-05	Hg-CVAFS-S-7474	23			
1707775-06	Hg-CVAFS-S-7474	24			
1707775-07	Hg-CVAFS-S-7474	25			
1707776-04	Hg-CVAFS-S-7474	26			
1707776-05	Hg-CVAFS-S-7474	27			
1707776-06	Hg-CVAFS-S-7474	28			
1707776-07	Hg-CVAFS-S-7474	29			
1707810-50	Hg-CVAFS-S-7474	30			
1707810-51	Hg-CVAFS-S-7474	31			
7H16016-CCV2	QC	32	1703679		
7H16016-CCB2	QC	33			
1707810-52	Hg-CVAFS-S-7474	34			
1707810-53	Hg-CVAFS-S-7474	35			

Due Date: 8/24/2017

## ANALYSIS SEQUENCE

7H16016

Instrument: Hg2600-2

Calibration ID: UNASSIGNED

Analyzed: 8/16/2017

Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
1707810-54	Hg-CVAFS-S-7474	36			
1707810-55	Hg-CVAFS-S-7474	37			
F708399-MS1	QC	38			
F708399-MSD1	QC	39			
F708399-MS2	QC	40			
F708399-MSD2	QC	41			
7H16016-CCV3	QC	42	1703679		
7H16016-CCB3	QC	43			
F708427-BLK1	QC	44			
F708427-BLK2	QC	45			
F708427-BS1	QC	46			
F708427-BSD1	QC	47			
1707771-31	Hg-CVAFS-S-7474	48			
1707771-32	Hg-CVAFS-S-7474	49			
1707771-33	Hg-CVAFS-S-7474	50			
1707771-34	Hg-CVAFS-S-7474	51			
1707771-35	Hg-CVAFS-S-7474	52			
1707771-36	Hg-CVAFS-S-7474	53			
7H16016-CCV4	QC	54	1703679		
7H16016-CCB4	QC	55			
1707771-37	Hg-CVAFS-S-7474	56			
1707771-38	Hg-CVAFS-S-7474	57			
1707771-42	Hg-CVAFS-S-7474	58			
1707771-43	Hg-CVAFS-S-7474	59			
1707771-44	Hg-CVAFS-S-7474	60			
1707771-45	Hg-CVAFS-S-7474	61			
1707771-46	Hg-CVAFS-S-7474	62			
1707771-47	Hg-CVAFS-S-7474	63			
1707771-48	Hg-CVAFS-S-7474	64			
1707771-49	Hg-CVAFS-S-7474	65			
7H16016-CCV5	QC	66	1703679		
7H16016-CCV6	QC	67	1703679		
7H16016-CCV7	QC	68	1703679		
7H16016-CCB5	QC	69			
1707771-50	Hg-CVAFS-S-7474	70			

Due Date: 8/24/2017

**ANALYSIS SEQUENCE**

**7H16016**

**Instrument: Hg2600-2**

**Calibration ID: UNASSIGNED**

**Analyzed: 8/16/2017**

Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
1707771-51	Hg-CVAFS-S-7474	71			
1707771-52	Hg-CVAFS-S-7474	72			
1707771-53	Hg-CVAFS-S-7474	73			
F708427-MS1	QC	74			
F708427-MSD1	QC	75			
F708427-MS2	QC	76			
F708427-MSD2	QC	77			
1707771-50RE1	Hg-CVAFS-S-7474	78			Added 8/16/2017 by BC
1707771-51RE1	Hg-CVAFS-S-7474	79			Added 8/16/2017 by BC
7H16016-CCV8	QC	80	1703679		
7H16016-CCB6	QC	81			
1707771-52RE1	Hg-CVAFS-S-7474	82			Added 8/16/2017 by BC
7H16016-CCV9	QC	83	1703679		
7H16016-CCB7	QC	84			

*Be Ling*      8/16/17  
 Samples Loaded By                      Date

*Be Ling*      8/16/17  
 Data Processed By                      Date

**PREPARATION BENCH SHEET**

F708427

**Eurofins Frontier Global Sciences, Inc.**

**Matrix: Soil/Sediment**

**Prepared using: Trace Metals - EPA 7474**

**Prepared: 8/15/2017**

Lab Number	Sample ID and Source Sample	Initial (g)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F708427-BLK1	Blank	0.5	200					
F708427-BLK2	Blank	0.5	200					
F708427-BS1	Blank Spike	0.5	200	1701763	40			
F708427-BSD1	Blank Spike	0.5	200	1701763	40			
F708427-MS1	Matrix Spike [1707771-31]	0.5693	200	1703591	50			
F708427-MS2	Matrix Spike [1707771-52RE1]	0.5824	200	1703591	50			
F708427-MSD1	Matrix Spike Dup [1707771-31]	0.557	200	1703591	50			
F708427-MSD2	Matrix Spike Dup [1707771-52RE1]	0.5759	200	1703591	50			

<u>Standard ID(s):</u>	<u>Description:</u>	<u>Expiration:</u>	<u>Reagent ID(s):</u>	<u>Description:</u>	<u>Expiration:</u>
1701763	THg 1,000ng/mL Secondary Spiking Standard	22-Sep-17 00:00	1703182	25% Hydroxylamine-HCl working solution	24-Nov-17 00:00
1703591	THg 10,000ng/mL Primary Spiking Standard	14-Dec-17 00:00	1703701	THg Washstation (0.5% BrCl)	21-Dec-17 00:00
			1703702	THg Dilute 1% BrCl	
			1704424	Boiling Chips for AFS prep	21-Jan-18 00:00
			1704484	Fisher Nitric Acid, Tracemetal Grade	15-Mar-19 00:00
			1704640	Omnitrace Hydrochloric Acid	27-Jul-20 00:00
			1704691	3% SnCl <sub>2</sub> THg reductant	22-Jan-18 00:00
			1704959	7474 Potassium Bromate/Bromide Reagent	22-Aug-17 00:00

**PREPARATION BENCH SHEET**

F708427

**Eurofins Frontier Global Sciences, Inc.**

**Matrix: Soil/Sediment**

**Prepared using: Trace Metals - EPA 7474**

**Prepared: 8/15/2017**

Lab Number	Sample ID	Initial (g)	Final (mL)	QC Sample	Sample Specs.	Raw Data	Sample Comments	Analysis Comments
1707771-31	W-27-INTA_072417_SED_00-01	0.5509	200	QC	-	-	MS/MSD	
1707771-32	W-27-INTA_072417_SED_01-03	0.5696	200	-	-	-		
1707771-33	W-MM-06_072417_SED_00-01	0.5251	200	-	-	-		
1707771-34	W-MM-06_072417_SED_01-03	0.5691	200	-	-	-		
1707771-35	W-MM-19_072417_SED_00-01	0.5832	200	-	-	-		
1707771-36	W-MM-19_072417_SED_01-03	0.5951	200	-	-	-		
1707771-37	W-MM-22_072417_SED_00-01	0.5371	200	-	-	-		
1707771-38	W-MM-22_072417_SED_01-03	0.5572	200	-	-	-		
1707771-42	W-MM-23_072417_SED_01-03	0.5751	200	-	-	-		
1707771-43	W-MM-24_072417_SED_00-01	0.5527	200	-	-	-		
1707771-44	W-MM-24_072417_SED_01-03_R1	0.5465	200	-	-	-		
1707771-45	W-MM-24_072417_SED_01-03_R2	0.545	200	-	-	-		
1707771-46	W-MM-24_072417_SED_01-03_R3	0.571	200	-	-	-		
1707771-47	W-27-A_072617_SED_03-05	0.5326	200	-	-	-		
1707771-48	W-27-A_072617_SED_05-10	0.5345	200	-	-	-		
1707771-49	W-14-INTA_072617_SED_03-05_R1	0.5201	200	-	-	-		
1707771-50	W-14-INTA_072617_SED_03-05_R2	0.5452	200	-	-	-		
1707771-50RE1	W-14-INTA_072617_SED_03-05_R2	0.5452	200	-	-	-	Added 8/16/2017 by BC	Added 8/16/2017 by BC
1707771-51	W-14-INTA_072617_SED_03-05_R3	0.5783	200	-	-	-		

**PREPARATION BENCH SHEET**

F708427

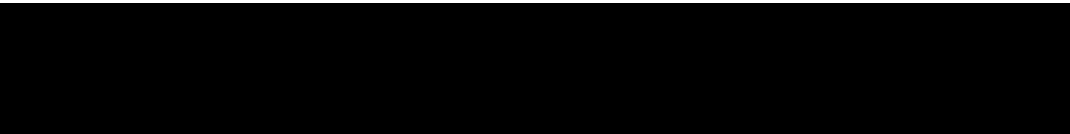
**Eurofins Frontier Global Sciences, Inc.**

**Matrix: Soil/Sediment**

**Prepared using: Trace Metals - EPA 7474**

**Prepared: 8/15/2017**

1707771-51RE1	W-14-INTA_072617_SED_03-05_R3	0.5783	200	-	-	-	Added 8/16/2017 by BC	Added 8/16/2017 by BC
1707771-52	W-14-INTA_072617_SED_05-10	0.5658	200	QC	-	-	MS/MSD	
1707771-52RE1	W-14-INTA_072617_SED_05-10	0.5658	200	QC	-	-	MS/MSD Added 8/16/2017 by BC	Added 8/16/2017 by BC
1707771-53	W-MM-07_072617_SED_03-05	0.5551	200	-	-	-		



**PREPARATION BENCH SHEET**

F708399

**Eurofins Frontier Global Sciences, Inc.**

**Matrix: Soil/Sediment**

**Prepared using: AFS - EPA 7474**

**Prepared: 8/14/2017**

Lab Number	Sample ID and Source Sample	Initial (g)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F708399-BLK1	Blank	0.5	200					
F708399-BLK2	Blank	0.5	200					
F708399-BS1	Blank Spike	0.5	200	1701763	40			
F708399-BSD1	Blank Spike Dup	0.5	200	1701763	40			
F708399-MS1	Matrix Spike [1707775-01]	0.5838	200	1703591	50			
F708399-MS2	Matrix Spike [1707776-05]	0.5952	200	1703591	50			
F708399-MSD1	Matrix Spike Dup [1707775-01]	0.5882	200	1703591	50			
F708399-MSD2	Matrix Spike Dup [1707776-05]	0.555	200	1703591	50			

<u>Standard ID(s):</u>	<u>Description:</u>	<u>Expiration:</u>	<u>Reagent ID(s):</u>	<u>Description:</u>	<u>Expiration:</u>
1701763	THg 1,000ng/mL Secondary Spiking Standard	22-Sep-17 00:00	1703182	25% Hydroxylamine-HCl working solution	24-Nov-17 00:00
1703591	THg 10,000ng/mL Primary Spiking Standard	14-Dec-17 00:00	1703701	THg Washstation (0.5% BrCl)	21-Dec-17 00:00
			1703702	THg Dilute 1% BrCl	
			1704424	Boiling Chips for AFS prep	21-Jan-18 00:00
			1704484	Fisher Nitric Acid, Tracemetal Grade	15-Mar-19 00:00
			1704640	Omnitrace Hydrochloric Acid	27-Jul-20 00:00
			1704691	3% SnCl2 THg reductant	22-Jan-18 00:00
			1704812	7474 Potassium Bromate/Bromide Reagent	15-Aug-17 00:00

**PREPARATION BENCH SHEET**

F708399

**Eurofins Frontier Global Sciences, Inc.**

**Matrix: Soil/Sediment**

**Prepared using: AFS - EPA 7474**

**Prepared: 8/14/2017**

Lab Number	Sample ID	Initial (g)	Final (mL)	QC Sample	Sample Specs.	Raw Data	Sample Comments	Analysis Comments
1707771-39	W-MM-23_072417_SED_00-01_R1	0.577	200	-	-	-		
1707771-40	W-MM-23_072417_SED_00-01_R2	0.5167	200	-	-	-		
1707771-41	W-MM-23_072417_SED_00-01_R3	0.5279	200	-	-	-		
1707775-01	E-01-01_072117_SED_00-03_R1	0.539	200	-	-	-		
1707775-02	E-01-01_072117_SED_00-03_R2	0.5965	200	-	-	-		
1707775-03	E-01-01_072117_SED_00-03_R3	0.5914	200	-	-	-		
1707775-04	E-01-03_072117_SED_00-03	0.5582	200	-	-	-		
1707775-05	E-01-04_072117_SED_00-03_R1	0.5537	200	-	-	-		
1707775-06	E-01-04_072117_SED_00-03_R2	0.5907	200	-	-	-		
1707775-07	E-01-04_072117_SED_00-03_R3	0.5398	200	-	-	-		
1707776-04	ESFP-E_072117_SED_00-03	0.5189	200	-	-	-		
1707776-05	SVE-EAC_072117_SED_00-03_R1	0.5874	200	-	-	-		
1707776-06	SVE-EAC_072117_SED_00-03_R2	0.5967	200	-	-	-		
1707776-07	SVE-EAC_072117_SED_00-03_R3	0.5456	200	-	-	-		
1707810-50	W-61-Low_072517_SED_03-05	0.5407	200	-	-	-		
1707810-51	W-61-Low_072517_SED_05-10	0.5712	200	-	-	-		
1707810-52	W-61-Mid_072517_SED_03-05	0.5583	200	-	-	-		
1707810-53	W-61-Mid_072517_SED_05-10	0.5771	200	-	-	-		
1707810-54	W-65-Intertidal_072517_SED_00-01	0.527	200	-	-	-		

Due Date: 8/24/2017



PREPARATION BENCH SHEET

F708399

Eurofins Frontier Global Sciences, Inc.

Matrix: Soil/Sediment

Prepared using: AFS - EPA 7474

Prepared: 8/14/2017

1707810-55	W-65-Intertidal_072517_SED_01-03	0.5374	200	-	-	-		
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PREPARATION BENCH SHEET

2600-2  
BC 8/16/17

F708399

Eurofins Frontier Global Sciences, Inc.

Matrix: Soil/Sediment

Prepared using: AFS - EPA 7474

Prepared: 8/14/2017

Lab Number	Sample ID and Source Sample	Initial (g)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F708399-BLK1	Blank	0.5	200					10X
F708399-BLK2	Blank	0.5	200					10X
F708399-BS1	Blank Spike	0.5	200	1701763	40			10X
F708399-BSD1	Blank Spike Dup	0.5	200	1701763	40			10X
F708399-MS1	Matrix Spike [1707775-01]	0.5838	200	1703591	50			400X
F708399-MS2	Matrix Spike [1707776-05]	0.5952	200	1703591	50			400X
F708399-MSD1	Matrix Spike Dup [1707775-01]	0.5882	200	1703591	50			400X
F708399-MSD2	Matrix Spike Dup [1707776-05]	0.555	200	1703591	50			400X

Standard ID(s):	Description:	Expiration:	Reagent ID(s):	Description:	Expiration:
1701763	THg 1,000ng/mL Secondary Spiking Standard	22-Sep-17 00:00	1704424	Boiling Chips for AFS prep	21-Jan-18 00:00
1703591	THg 10,000ng/mL Primary Spiking Standard	14-Dec-17 00:00	1704484	Fisher Nitric Acid, Tracemetal Grade	15-Mar-19 00:00
			1704640	Omnitrace Hydrochloric Acid	27-Jul-20 00:00
			1704812	7474 Potassium Bromate/Bromide Reagent	15-Aug-17 00:00

1703701  
1703702  
1703182  
1704641

PREPARATION BENCH SHEET

2600-2  
 BL 8/16/17

F708399

Eurofins Frontier Global Sciences, Inc.

Matrix: Soil/Sediment

Prepared using: AFS - EPA 7474

Prepared: 8/14/2017

Lab Number	Sample ID	Initial (g)	Final (mL)	QC Sample	Sample Specs.	Raw Data	Sample Comments	Analysis Comments
1707771-39	W-MM-23_072417_SED_00-01_R1	0.577	200	-	-	-	50X	
1707771-40	W-MM-23_072417_SED_00-01_R2	0.5467	200	-	-	-	50X	
1707771-41	W-MM-23_072417_SED_00-01_R3	0.5279	200	-	-	-	50X	
1707775-01	E-01-01_072117_SED_00-03_R1	0.539	200	-	-	-	50X	
1707775-02	E-01-01_072117_SED_00-03_R2	0.5965	200	-	-	-	50X	
1707775-03	E-01-01_072117_SED_00-03_R3	0.5914	200	-	-	-	50X	
1707775-04	E-01-03_072117_SED_00-03	0.5582	200	-	-	-	50X	
1707775-05	E-01-04_072117_SED_00-03_R1	0.5537	200	-	-	-	50X	
1707775-06	E-01-04_072117_SED_00-03_R2	0.5917	200	-	-	-	50X	
1707775-07	E-01-04_072117_SED_00-03_R3	0.5397	200	-	-	-	50X	
1707776-04	ESFP-E_072117_SED_00-03	0.5189	200	-	-	-	50X	
1707776-05	SVE-EAC_072117_SED_00-03_R1	0.5874	200	-	-	-	50X	
1707776-06	SVE-EAC_072117_SED_00-03_R2	0.5967	200	-	-	-	50X	
1707776-07	SVE-EAC_072117_SED_00-03_R3	0.5456	200	-	-	-	50X	
1707810-50	W-61-Low_072517_SED_03-05	0.5407	200	-	-	-	50X	
1707810-51	W-61-Low_072517_SED_05-10	0.5712	200	-	-	-	50X	
1707810-52	W-61-Mid_072517_SED_03-05	0.5583	200	-	-	-	50X	
1707810-53	W-61-Mid_072517_SED_05-10	0.5771	200	-	-	-	50X	
1707810-54	W-65-Intertidal_072517_SED_00-01	0.527	200	-	-	-	50X	

Due Date: 8/24/2017

PREPARATION BENCH SHEET

2600-2  
BC 8/16/17

F708399

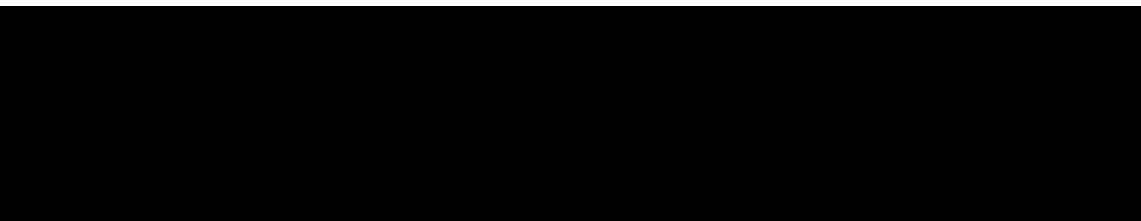
Eurofins Frontier Global Sciences, Inc.

Matrix: Soil/Sediment

Prepared using: AFS - EPA 7474

Prepared: 8/14/2017

1707810-55	W-65-Intertidal_072517_SED_01-03	0.5374	200	-	-	-	fox	
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Technician: Dwyer Batch#: F708399 Date: 8-14-17

- EFAFS-T-AFS-SOP2986 Tissues - Methyl Mercury - KOH/Methanol: Hot plate 75±5°C for 2-4 hours.
- EFAFS-T-AFS-SOP2795 Tissues - Total Mercury - 70:30: Hot plate 75±5°C for two hours.
- EFAFS-T-AFS-SOP5134 Sediments - Methyl Mercury - KBr/CH<sub>2</sub>Cl<sub>2</sub>: Heat Block 45°C (nitrogen purge for 30 minutes).
- EFAFS-T-AFS-SOP2807 Solids - Total Mercury - Cold AR: 18-25°C for over four hours.

Other: EPA 7474

Balance#: 19 Calibrated?  Yes  No Therm.#: N/A Vial Type:  Glass  Teflon  
 Calibrated?  Yes  No

\*Time in: N/A Actual Temp. (raw): N/A °C w/ CF: N/A °C

Time out: N/A Actual Temp. (raw): N/A °C w/ CF: N/A °C

\*Time in can't begin before target temperature is reached

Final vol.: 25 mL (LIMS ID: R0H20) Spike vol.: 40 µL (LIMS ID: 1701763)

Spike Witness: CV 8/14/17 (initial and date)

HCl LIMS ID: 1704640

Pipette SN#: 0067852 Calibration Date: 8-11-17

HNO<sub>3</sub> LIMS ID: 1704484

Pipette SN#: NW07623 Calibration Date: 8-9-17

70/30 LIMS ID: N/A

Dispenser #: 09N45351 Calibrated?  Yes  No

Other Acid LIMS ID: 1704812

Dispenser #: 08Y2293  Yes

147 Glass Vial # J26 4713-702 Boiling Chip lot # 1704424 \*Hotblock Position: N/A

Vial #	Sample ID Number	Sample Size <input type="checkbox"/> mL <input checked="" type="checkbox"/> µg	Vial #	Sample ID Number	Sample Size <input type="checkbox"/> mL <input checked="" type="checkbox"/> µg	CRM LIMS ID <input checked="" type="checkbox"/> NA
1	F708399 Blk1	0.5978	28 1	1707776-05	0.5874	
2	F708399 Blk2	0.5799	24 2	1707776-06	0.5967	
3	F708399 B51	0.5094	25 3	1707776-07	0.5456	
4	F708399 B501	0.4925	26 4	1707810-50	0.5407	Comments
5	1707771-39	0.5770	27 5	1707810-51	0.5712	F708399
6	1707771-40	0.5167	28 6	1707810-52	0.5583	Source
7	1707771-41	0.5279	29 7	1707810-53	0.5771	MS1 MS01
8	1707775-01	0.5390	30 8	1707810-54	0.5270	170777501
9	1707775-02	0.5965	31 9	1707810-55	0.5374	
10	1707775-03	0.5914	32 10	F708399 MS1	0.5838	F708399
11	1707775-04	0.5582	33 11	F708399-MS01	0.5882	MS2 MS02
12	1707775-05	0.5537	34 12	F708399-MS2	0.5952	1707776-05
13	1707775-06	0.5907	35 13	F708399 MS02	0.5550	ALL spike
14	1707775-07	0.5398	36			MS1 MS01
15	<del>1707776-06</del>		37			80,000 µg/L
16	<del>1707776-07</del>		38			= 50 µg/L
17	<del>1707810-51</del>		39			1703591
18	<del>-52</del>		40			8-14-17
19	<del>-53</del>		41			N/A
20	<del>-54</del>		42			
21	<del>-55</del>		43			
22	1707776-04	0.5189	44			

8/14/17

PREPARATION BENCH SHEET

2600-2  
BC 8/16/17

F708427

Eurofins Frontier Global Sciences, Inc.

Matrix: Soil/Sediment

Prepared using: Trace Metals - EPA 7474

Prepared: 8/15/2017

Lab Number	Sample ID and Source Sample	Initial (g)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F708427-BLK1	Blank	0.5	200					10X
F708427-BLK2	Blank	0.5	200					10X
F708427-BS1	LCS	0.5	200					10X
F708427-BSD1	LCS Dup	0.5	200					10X
F708427-MS1	Matrix Spike	0.5	200					400X
F708427-MS2	Matrix Spike	0.5	200					400X
F708427-MSD1	Matrix Spike Dup	0.5	200					400X
F708427-MSD2	Matrix Spike Dup	0.5	200					400X

Standard ID(s): Description:

Expiration:

1703701  
1703702  
1703182  
1704691

PREPARATION BENCH SHEET

F708427

Eurofins Frontier Global Sciences, Inc.

2600-2  
BC 8/16/17

Matrix: Soil/Sediment

Prepared using: Trace Metals - EPA 7474

Prepared: 8/15/2017

Lab Number	Sample ID	Initial (g)	Final (mL)	QC Sample	Sample Specs.	Raw Data	Sample Comments	Analysis Comments
1707771-31	W-27-INTA_072417_SED_00-01	0.5	200	QC	-	-	MS/MSD 50X	
1707771-32	W-27-INTA_072417_SED_01-03	0.5	200	-	-	-	50X	
1707771-33	W-MM-06_072417_SED_00-01	0.5	200	-	-	-	50X	
1707771-34	W-MM-06_072417_SED_01-03	0.5	200	-	-	-	50X	
1707771-35	W-MM-19_072417_SED_00-01	0.5	200	-	-	-	50X	
1707771-36	W-MM-19_072417_SED_01-03	0.5	200	-	-	-	50X	
1707771-37	W-MM-22_072417_SED_00-01	0.5	200	-	-	-	50X	
1707771-38	W-MM-22_072417_SED_01-03	0.5	200	-	-	-	50X	
1707771-42	W-MM-23_072417_SED_01-03	0.5	200	-	-	-	50X	
1707771-43	W-MM-24_072417_SED_00-01	0.5	200	-	-	-	50X	
1707771-44	W-MM-24_072417_SED_01-03_R1	0.5	200	-	-	-	50X	
1707771-45	W-MM-24_072417_SED_01-03_R2	0.5	200	-	-	-	50X	
1707771-46	W-MM-24_072417_SED_01-03_R3	0.5	200	-	-	-	50X	
1707771-47	W-27-A_072617_SED_03-05	0.5	200	-	-	-	50X	
1707771-48	W-27-A_072617_SED_05-10	0.5	200	-	-	-	50X	
1707771-49	W-14-INTA_072617_SED_03-05_R1	0.5	200	-	-	-	50X	
1707771-50	W-14-INTA_072617_SED_03-05_R2	0.5	200	-	-	-	50X → 10X	
1707771-51	W-14-INTA_072617_SED_03-05_R3	0.5	200	-	-	-	50X → 10X	
1707771-52	W-14-INTA_072617_SED_05-10	0.5	200	QC	-	-	MS/MSD 50X → 10X	

Due Date: 8/24/2017

PREPARATION BENCH SHEET

2600-2  
BCE/16/17

F708427

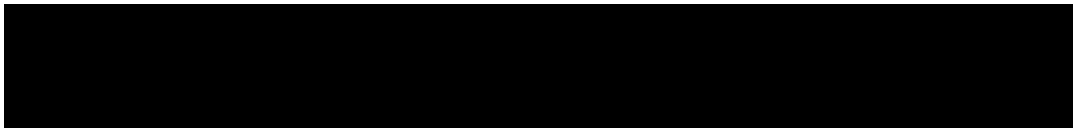
Eurofins Frontier Global Sciences, Inc.

Matrix: Soil/Sediment

Prepared using: Trace Metals - EPA 7474

Prepared: 8/15/2017

1707771-53	W-MM-07_072617_SED_03-05	0.5	200	-	-	-	50X	
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Technician: Duyen Batch#: F708427 Date: 8/15/17

- EFAFS-T-AFS-SOP2986 Tissues - Methyl Mercury - KOH/Methanol: Hot plate 75±5°C for 2-4 hours.
- EFAFS-T-AFS-SOP2795 Tissues - Total Mercury - 70:30: Hot plate 75±5°C for two hours.
- EFAFS-T-AFS-SOP5134 Sediments - Methyl Mercury - KBr/CH<sub>2</sub>Cl<sub>2</sub>: Heat Block 45°C (nitrogen purge for 30 minutes).
- EFAFS-T-AFS-SOP2807 Solids - Total Mercury - Cold AR: 18-25°C for over four hours.

Other: EPA 7474 Vial Type:  Glass  Teflon  
 Balance#: 19 Calibrated?  Yes  No Therm.#: N/A Calibrated?  Yes  No  
 \*Time in: N/A Actual Temp. (raw): N/A °C w/ CF: N/A °C  
 Time out: N/A Actual Temp. (raw): N/A °C w/ CF: N/A °C  
 \*Time in can't begin before target temperature is reached

Final vol.: 28 mL (LIMS ID: R0H20) Spike vol.: 40 µL (LIMS ID: 1701763)  
 Spike Witness: CME 8/15/17 (initial and date)

HCl LIMS ID: 1704640 Pipette SN#: 0007852 Calibration Date: 8-11-17  
 HNO<sub>3</sub> LIMS ID: 1704484 Pipette SN#: N407693 Calibration Date: \_\_\_\_\_  
 70/30 LIMS ID: N/A Dispenser #: 09N45351 Calibrated?  Yes  No  
 Other Acid LIMS ID: 1704959 Dispenser #: 08Y2293  Yes  
 Glass Vial # J264713-2025 Boiling Chip lot # 1704424 \*Hotblock Position: N/A

Vial #	Sample ID Number	Sample Size <input type="checkbox"/> mL <input checked="" type="checkbox"/> g	Vial # <u>8/15/17</u>	Sample ID Number	Sample Size <input type="checkbox"/> mL <input checked="" type="checkbox"/> g	CRM LIMS ID <input checked="" type="checkbox"/> NA
1	F708427 Bk1	0.5218	23	1707771-50A	0.5452	
2	F708427 Bk2	0.5519	24	1707771-51A	0.5783	
3	F708427 B51	0.5308	25	1707771-52A	0.5658	
4	F708427 B51	0.5410	26	F708427 M52	0.5824	Comments
5	1707771-31A	0.5509	27	F708427 M52	0.5759	F708427 source
6	F708427 M51	0.5693	28	1707771-53A	0.5551	M51 M501
7	F708427 M501	0.5570	29			1707771-31
8	1707771-32A	0.5696	30			
9	1707771-33A	0.5251	31			
10	1707771-34A	0.5691	32			F708427
11	1707771-35A	0.5832	33			M52 M502
12	1707771-36D	0.5951	34			1707771-52
13	1707771-37A	0.5371	35			
14	1707771-38A	0.5572	36			ALL spike
15	1707771-39A	0.5751	37			M51 M501
16	1707771-40A	0.5527	38			= 10,000 µL
17	1707771-41A	0.5465	39			= 50 µL 170359
18	1707771-42A	0.5450	40			8-15-17 Bk
19	1707771-43A	0.5710	41			
20	1707771-44A	0.5326	42			
21	1707771-45A	0.5345	43			
22	1707771-46A	0.5201	44			

Peer Review Check List for THg by 2600 CV-AFS (SOP2822) 2016 Rev 1 (04/1/2016)

Analyst:	BC	Sequence(s) #:	7H16016
Reviewer:	<i>DM</i>	Dataset ID(s):	THg26002-170816-1
Date:	8/16/2017	WO (s) #:	Various
Batch #(s):	F708399, F708427		

• Select the correct preparation method.

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

Analyst Initials: BC      Reviewer Initials: DM

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

**Peer Review Check List for THg by 2600 CV-AFS (SOP2822) 2016 Rev 1 (04/1/2016)**

<b>Analyst:</b>	BC	<b>Sequence(s) #:</b>	7H16016
<b>Reviewer:</b>	0	<b>Dataset ID(s):</b>	THg26002-170816-1
<b>Date:</b>	8/16/2017	<b>WO (s) #:</b>	Various
<b>Batch #(s):</b>	F708399, F708427		0

Analyst Initials BC      Reviewer Initials DM

- 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 consistent with the data review flowcharts?  YES     NO     N/A
- Comments: \_\_\_\_\_
12. Explain any items on the failed data report from Element
- Comments: CCV5 failed, rerun in duplicate
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 (SOP2822) 2016 Rev 1 (04/1/2016)**

<b>Analyst:</b> BC	<b>Sequence(s) #:</b> 7H16016
<b>Reviewer:</b> 0	<b>Dataset ID(s):</b> THg26002-170816-1
<b>Date:</b> 8/16/2017	<b>WO (s) #:</b> Various
<b>Batch #(s):</b> F708399, F708427	0

**Analyst Initials**                     PJC                          **Reviewer Initials** \_\_\_\_\_

- |  |  |                               |   |
|--|--|-------------------------------|---|
| 20. MS/MSD Spiked at least 1-5 X ambient or 5x MRL (whichever is higher) ?   | <input checked="" type="checkbox"/> YES  | <input type="checkbox"/> NO   | <input checked="" type="checkbox"/>   |
| Comments: _____  |  |                               |   |
| 21. Are all samples within instrument calibration range? (or at minimum dilution size)   | <input checked="" type="checkbox"/> PASS | <input type="checkbox"/> FAIL | <input checked="" type="checkbox"/>   |
| Comments: _____  |  |                               |   |
| 22. Are the samples run at the correct dilution level for the method?  | <input checked="" type="checkbox"/> YES  | <input type="checkbox"/> NO   | <input checked="" type="checkbox"/>   |
| Comments: _____  |  |                               |   |
| 23. Dissolved < Total (if applicable)  | <input type="checkbox"/> YES             | <input type="checkbox"/> NO   | <input checked="" type="checkbox"/> N/A <input checked="" type="checkbox"/> |
| Comments: _____  |  |                               |   |
| 24. Effluent < Influent (visually confirm if needed)   | <input type="checkbox"/> YES             | <input type="checkbox"/> NO   | <input checked="" type="checkbox"/> N/A <input checked="" type="checkbox"/> |
| Comments: _____  |  |                               |   |
| 25. Are re-runs noted with reason?   | <input type="checkbox"/> YES             | <input type="checkbox"/> NO   | <input checked="" type="checkbox"/> N/A <input checked="" type="checkbox"/> |
| 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? | <input type="checkbox"/> YES             | <input type="checkbox"/> NO   | <input checked="" type="checkbox"/> N/A <input checked="" type="checkbox"/> |
| Comments: _____  |  |                               |   |
| 27. Is the B trap <5% A Traps  | <input type="checkbox"/> YES             | <input type="checkbox"/> NO   | <input checked="" type="checkbox"/> N/A <input checked="" type="checkbox"/> |
| Comments: _____  |  |                               |   |
| 28. Are spiked trap recoveries 75-125% of true value?  | <input type="checkbox"/> YES             | <input type="checkbox"/> NO   | <input type="checkbox"/> N/A <input checked="" type="checkbox"/>            |
| Comments: _____  |  |                               |   |
| 29. Have non-reportable samples been imported into LIMS and clicked to non-reportable?   | <input checked="" type="checkbox"/> YES  | <input type="checkbox"/> NO   | <input type="checkbox"/> N/A <input checked="" type="checkbox"/>            |
| Comments: _____  |  |                               |   |
| 30. Have re-extracts been created for non-reportable samples?  | <input checked="" type="checkbox"/> YES  | <input type="checkbox"/> NO   | <input type="checkbox"/> N/A <input checked="" type="checkbox"/>            |
| 31. Are there any HIGH QA projects within the data? If so, place data package in QA office before scanning.  | <input type="checkbox"/> YES             | <input type="checkbox"/> NO   | <input checked="" type="checkbox"/> N/A <input checked="" type="checkbox"/> |
| 32. Does the data set need scanning?   | <input type="checkbox"/> YES             |                               | <input checked="" type="checkbox"/> N/A <input checked="" type="checkbox"/> |
| 33. Does the dataset have an LOQ/LOQ or DOC?   | <input type="checkbox"/> YES             |                               | <input checked="" type="checkbox"/> N/A <input checked="" type="checkbox"/> |
| 34. Water samples: has the preservation log been included in dataset for final volume verification?  | <input type="checkbox"/> YES             | <input type="checkbox"/> NO   | <input checked="" type="checkbox"/> N/A <input checked="" type="checkbox"/> |
| 35. Water samples-is the final volume correct in the sequence?   | <input type="checkbox"/> YES             | <input type="checkbox"/> NO   | <input checked="" type="checkbox"/> N/A <input checked="" type="checkbox"/> |
| <b>Files located at: \\Cuprum\gen_admin\Quality Assurance\Training Master\DOCs</b>   |  |                               |   |
| 36. Date of analyst IDOC/CDOC: _____ 1/11/2017 _____ IDOC/CDOC within last 12 months?  | <input checked="" type="checkbox"/> YES  | <input type="checkbox"/> NO   | <input checked="" type="checkbox"/>   |
| 37. Date of analyst's SOP reading for method: _____ 5/20/2017 _____ Current SOP revision read?   | <input checked="" type="checkbox"/> YES  | <input type="checkbox"/> NO   | <input checked="" type="checkbox"/>   |
| 38. Date of LOD: _____ LOD within last 3 months?   | <input checked="" type="checkbox"/> YES  | <input type="checkbox"/> NO   | <input checked="" type="checkbox"/>   |
| 39. Date of LOQ: _____ LOQ within last 3 months?   | <input checked="" type="checkbox"/> YES  | <input type="checkbox"/> NO   | <input checked="" type="checkbox"/>   |

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

### Peer Review Check List for THg by 2600 CV-AFS (SOP2822) 2016 Rev 1 (04/1/2016)

<b>Analyst:</b>	BC	<b>Sequence(s) #:</b>	7H16016
<b>Reviewer:</b>	0	<b>Dataset ID(s):</b>	THg26002-170816-1
<b>Date:</b>	8/16/2017	<b>WO (s) #:</b>	Various
<b>Batch #(s):</b>	F708399, F708427		0

BC

DM

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


Additional Page (s)?  YES

**Analysis Datasheet for Total Mercury**

Date of Analysis: August 17, 2017

Analyst: BC

Instrument #: Hg2600-2

Units ng/L

LIMS Sequence #: 7H18016, 7H18017

**Calibration Statistics:**

LabNumber	n	True Val	Area	Uncorrected Response Factor	Corrected Peak Height	Corrected Response Factor	% Recovery
SEQ-CAL1	1	0.50 ng/L	85.31 units	170.63	79.56 units	159.11	102.2 %Rec
SEQ-CAL2	1	1.00 ng/L	160.19 units	160.19	154.43 units	154.43	99.2 %Rec
SEQ-CAL3	1	5.00 ng/L	792.67 units	158.53	786.92 units	157.38	101.0 %Rec
SEQ-CAL4	1	20.00 ng/L	3075.09 units	153.75	3069.34 units	153.47	98.5 %Rec
SEQ-CAL5	1	40.00 ng/L	6181.02 units	154.53	6175.26 units	154.38	99.1 %Rec
SEQ-CAL6	0						
SEQ-CAL7	0						
SEQ-CAL8	0						
SEQ-CAL9	0						

<b>Corr. Mean RF</b>	<b>Corr. St Dev RF</b>	<b>Corr. RSD CF</b>	<b>Uncorr. Mean RF</b>
155.76	+/- 2.39	1.5% RSD	159.53

**Blanks:**

LabNumber	n	Mean	Std Dev	Mean (ng/L)	Std Dev (ng/L)
SEQ-IBL	3	5.76 units	±2.43	0.04 ng/L	±0.02

**Preparation Blanks**

Sample Type	Batch ID	n	Mean	Std Dev
BLK	1	3	6.654 ng/L	±2.261
BLK	2	2	1.717 ng/L	±0.691
BLK	3	2	2.503 ng/L	±1.442
BLK	4	0	0.000 ng/L	
BLK	5	0	0.000 ng/L	
BLK	6	0	0.000 ng/L	

QUALITY ASSURED  
PEER-REVIEWED

INITIALS:           a 8/23/18

Instrument	Analyst	Sample Type	LabNumber	Dilution	Analyzed	FileID	RunEnd	Uncorrected Response	Batch ID	No PB Correction?	RESP	InitialResult	FinalResult	InitialUnits	Comments
Hg2600-2	BC	CAL	SEQ-IBL1	1	8/17/2017 8:23:19	83266-1.RAW	8:23:19	3.16			-2.6	-0.017	-0.017	ng/L	
Hg2600-2	BC	CAL	SEQ-IBL2	1	8/17/2017 8:27:28	83267-1.RAW	8:27:28	6.15			0.4	0.003	0.003	ng/L	
Hg2600-2	BC	CAL	SEQ-IBL3	1	8/17/2017 8:31:36	83268-1.RAW	8:31:36	7.96			2.2	0.014	0.014	ng/L	
Hg2600-2	BC	CAL	SEQ-CAL1	1	8/17/2017 8:35:45	83269-1.RAW	8:35:45	85.31			79.6	0.511	0.511	ng/L	
Hg2600-2	BC	CAL	SEQ-CAL2	1	8/17/2017 8:39:53	83270-1.RAW	8:39:53	160.19			154.4	0.992	0.992	ng/L	
Hg2600-2	BC	CAL	SEQ-CAL3	1	8/17/2017 8:44:02	83271-1.RAW	8:44:02	792.67			786.9	5.052	5.052	ng/L	
Hg2600-2	BC	CAL	SEQ-CAL4	1	8/17/2017 8:48:10	83272-1.RAW	8:48:10	3075.09			3069.3	19.706	19.706	ng/L	
Hg2600-2	BC	CAL	SEQ-CAL5	1	8/17/2017 8:52:18	83273-1.RAW	8:52:18	6181.02			6175.3	39.647	39.647	ng/L	
Hg2600-2	BC	CAL	SEQ-ICV1	1	8/17/2017 8:56:27	83274-1.RAW	8:56:27	843.83			838.1	5.381	5.381	ng/L	
Hg2600-2	BC	SAM	ws		8/17/2017 9:08:07	83275-1.RAW	9:08:07	54.28		X	48.5	0.312	0.000	ng/L	
Hg2600-2	BC	SAM	NNQ6192 TV 65ng	400	8/17/2017 9:12:15	83276-1.RAW	9:12:15	637.83		X	632.1	4.058	1623.243	ng/L	
Hg2600-2	BC	SAM	NNQ5602 TV 65ng	400	8/17/2017 9:16:24	83277-1.RAW	9:16:24	595.28		X	589.5	3.785	1513.961	ng/L	
Hg2600-2	BC	SAM	NNQ6179 TV 70ng	400	8/17/2017 9:20:32	83278-1.RAW	9:20:32	649.45		X	643.7	4.133	1653.095	ng/L	
Hg2600-2	BC	SAM	NNQ6195 TV 70ng	400	8/17/2017 9:24:40	83279-1.RAW	9:24:40	649.47		X	643.7	4.133	1653.145	ng/L	
Hg2600-2	BC	SAM	NNQ6187 TV 100ng	400	8/17/2017 9:28:49	83280-1.RAW	9:28:49	898.99		X	893.2	5.735	2293.929	ng/L	
Hg2600-2	BC	SAM	NNQ6183 TV 100ng	400	8/17/2017 9:32:57	83281-1.RAW	9:32:57	912.00		X	906.2	5.818	2327.358	ng/L	
Hg2600-2	BC	BLK	F708444-BLK1	100	8/17/2017 9:37:06	83282-1.RAW	9:37:06	20.05		1	14.3	0.092	9.174	ng/L	
Hg2600-2	BC	BLK	F708444-BLK2	100	8/17/2017 9:41:14	83283-1.RAW	9:41:14	15.08		1	9.3	0.060	5.986	ng/L	
Hg2600-2	BC	BLK	F708444-BLK3	100	8/17/2017 9:45:23	83284-1.RAW	9:45:23	13.24		1	7.5	0.048	4.803	ng/L	
Hg2600-2	BC	SAM	F708444-BS1	400	8/17/2017 9:49:31	83285-1.RAW	9:49:31	3526.65		1	3520.9	22.589	9035.441	ng/L	
Hg2600-2	BC	CAL	SEQ-CCV1	1	8/17/2017 9:53:39	83286-1.RAW	9:53:39	801.98			796.2	5.112	5.112	ng/L	
Hg2600-2	BC	SAM	F708444-BSD1	400	8/17/2017 9:57:48	83287-1.RAW	9:57:48	21.26			15.5	0.100	0.100	ng/L	
Hg2600-2	BC	SAM	1708087-13	100	8/17/2017 10:01:56	83288-1.RAW	10:01:56	3448.97		1	3443.2	22.090	8835.968	ng/L	
Hg2600-2	BC	SAM	1708087-14	100	8/17/2017 10:06:05	83289-1.RAW	10:06:05	92.16		1	86.4	0.488	48.821	ng/L	
Hg2600-2	BC	SAM	1708087-15	100	8/17/2017 10:10:13	83290-1.RAW	10:10:13	41.12		1	35.4	0.160	16.048	ng/L	
Hg2600-2	BC	SAM	1708087-16	100	8/17/2017 10:14:22	83291-1.RAW	10:14:22	20.49		1	14.7	0.028	2.804	ng/L	
Hg2600-2	BC	SAM	1708087-13B	100	8/17/2017 10:18:30	83292-1.RAW	10:18:30	23.80		1	18.0	0.049	4.927	ng/L	
Hg2600-2	BC	SAM	1708087-14B	100	8/17/2017 10:22:38	83293-1.RAW	10:22:38	20.07		1	14.3	0.025	2.535	ng/L	
Hg2600-2	BC	SAM	1708087-15B	100	8/17/2017 10:26:47	83294-1.RAW	10:26:47	12.33		1	6.6	-0.024	-2.431	ng/L	
Hg2600-2	BC	SAM	1708087-13RE1	100	8/17/2017 10:30:55	83295-1.RAW	10:30:55	69.72		1	64.0	0.344	34.414	ng/L	
Hg2600-2	BC	SAM	F708444-DUP1	100	8/17/2017 10:35:04	83296-1.RAW	10:35:04	25.61		1	19.9	0.061	6.094	ng/L	
Hg2600-2	BC	SAM	F708444-MS1	100	8/17/2017 10:39:12	83297-1.RAW	10:39:12	407.90		1	402.1	2.515	251.536	ng/L	
Hg2600-2	BC	CAL	SEQ-CCV2	1	8/17/2017 10:43:20	83298-1.RAW	10:43:20	766.24			760.5	4.883	4.883	ng/L	
Hg2600-2	BC	CAL	SEQ-CCB2	1	8/17/2017 10:47:29	83299-1.RAW	10:47:29	21.73			16.0	0.103	0.103	ng/L	
Hg2600-2	BC	SAM	F708444-MSD1	100	8/17/2017 10:51:37	83300-1.RAW	10:51:37	419.31		1	413.5	2.589	258.857	ng/L	
Hg2600-2	BC	BLK	F708400-BLK1	10	8/17/2017 10:55:46	83301-1.RAW	10:55:46	40.11		2	34.3	0.221	2.205	ng/L	
Hg2600-2	BC	BLK	F708400-BLK2	10	8/17/2017 10:59:54	83302-1.RAW	10:59:54	24.88		2	19.1	0.123	1.228	ng/L	
Hg2600-2	BC	SAM	F708400-BS1	10	8/17/2017 11:04:03	83303-1.RAW	11:04:03	3343.31		2	3337.5	21.256	212.565	ng/L	
Hg2600-2	BC	SAM	F708400-BSD1	10	8/17/2017 11:08:11	83304-1.RAW	11:08:11	3106.38		2	3100.6	19.735	197.353	ng/L	
Hg2600-2	BC	SAM	1707810-30	50	8/17/2017 11:12:19	83305-1.RAW	11:12:19	663.14		2	657.4	4.186	209.315	ng/L	
Hg2600-2	BC	SAM	1707810-31	50	8/17/2017 11:16:28	83306-1.RAW	11:16:28	357.43		2	351.7	2.223	111.175	ng/L	
Hg2600-2	BC	SAM	1707810-32	50	8/17/2017 11:20:36	83307-1.RAW	11:20:36	3838.10		2	3832.3	24.571	1228.528	ng/L	
Hg2600-2	BC	SAM	1707810-33	50	8/17/2017 11:24:45	83308-1.RAW	11:24:45	1477.30		2	1471.5	9.413	470.672	ng/L	
Hg2600-2	BC	SAM	1707810-34	50	8/17/2017 11:28:53	83309-1.RAW	11:28:53	2627.24		2	2621.5	16.796	839.822	ng/L	
Hg2600-2	BC	CAL	SEQ-CCV3	1	8/17/2017 11:33:01	83310-1.RAW	11:33:01	801.62			795.9	5.110	5.110	ng/L	
Hg2600-2	BC	CAL	SEQ-CCB3	1	8/17/2017 11:37:10	83311-1.RAW	11:37:10	26.00			20.2	0.130	0.130	ng/L	
Hg2600-2	BC	SAM	1707810-35	50	8/17/2017 11:41:18	83312-1.RAW	11:41:18	2142.85		2	2137.1	13.686	684.324	ng/L	
Hg2600-2	BC	SAM	1707810-36	50	8/17/2017 11:45:27	83313-1.RAW	11:45:27	483.65		2	477.9	3.034	151.694	ng/L	
Hg2600-2	BC	SAM	1707810-37	50	8/17/2017 11:49:35	83314-1.RAW	11:49:35	981.66		2	975.9	6.231	311.563	ng/L	
Hg2600-2	BC	SAM	1707810-38	50	8/17/2017 11:53:44	83315-1.RAW	11:53:44	2596.98		2	2591.2	16.602	830.109	ng/L	
Hg2600-2	BC	SAM	1707810-39	50	8/17/2017 11:57:52	83316-1.RAW	11:57:52	2907.24		2	2901.5	18.594	929.705	ng/L	
Hg2600-2	BC	SAM	1707810-40	50	8/17/2017 12:02:00	83317-1.RAW	12:02:00	2669.66		2	2663.9	17.069	853.438	ng/L	
Hg2600-2	BC	SAM	1707810-41	50	8/17/2017 12:06:09	83318-1.RAW	12:06:09	2823.09		2	2817.3	18.054	902.693	ng/L	
Hg2600-2	BC	SAM	1707810-42	50	8/17/2017 12:10:17	83319-1.RAW	12:10:17	1440.25		2	1434.5	9.176	458.778	ng/L	
Hg2600-2	BC	SAM	1707810-43	50	8/17/2017 12:14:26	83320-1.RAW	12:14:26	1900.42		2	1894.7	12.130	606.500	ng/L	
Hg2600-2	BC	SAM	1707810-44	50	8/17/2017 12:18:34	83321-1.RAW	12:18:34	1419.41		2	1413.7	9.042	452.090	ng/L	
Hg2600-2	BC	CAL	SEQ-CCV4	1	8/17/2017 12:22:42	83322-1.RAW	12:22:42	817.74			812.0	5.213	5.213	ng/L	

Instrument	Analyst	Sample Type	LabNumber	Dilution	Analized	FileID	RunEnd	Uncorrected Response	Batch ID	No PB Correction?	RESP	InitialResult	FinalResult	InitialUnits	Comments
Hg2600-2	BC	CAL	SEQ-CCB4	1	8/17/2017 12:26:51	83323-1.RAW	12:26:51	37.80				0.206	0.206	ng/L	
Hg2600-2	BC	SAM	ws		8/17/2017 12:38:08	83324-1.RAW	12:38:08	89.46		X	32.0	83.7	0.537	0.000	ng/L
Hg2600-2	BC	SAM	1707810-45	50	8/17/2017 12:42:17	83325-1.RAW	12:42:17	2042.13		2	2036.4	13.040	651.992	ng/L	
Hg2600-2	BC	SAM	1707810-46	50	8/17/2017 12:46:25	83326-1.RAW	12:46:25	623.38		2	617.6	3.931	196.549	ng/L	
Hg2600-2	BC	SAM	1707810-47	50	8/17/2017 12:50:33	83327-1.RAW	12:50:33	122.96		2	117.2	0.718	35.907	ng/L	
Hg2600-2	BC	SAM	1707810-48	50	8/17/2017 12:54:42	83328-1.RAW	12:54:42	3101.11		2	3095.3	19.839	991.940	ng/L	
Hg2600-2	BC	SAM	1707810-49	50	8/17/2017 12:58:50	83329-1.RAW	12:58:50	2533.67		2	2527.9	16.196	809.785	ng/L	
Hg2600-2	BC	SAM	F708400-MS1	400	8/17/2017 13:02:59	83330-1.RAW	13:02:59	751.44		2	745.7	4.783	193.285	ng/L	
Hg2600-2	BC	SAM	F708400-MSD1	400	8/17/2017 13:07:07	83331-1.RAW	13:07:07	946.44		2	940.7	6.035	2414.071	ng/L	
Hg2600-2	BC	SAM	F708400-MS2	400	8/17/2017 13:11:16	83332-1.RAW	13:11:16	1186.91		2	1181.2	7.579	3031.640	ng/L	
Hg2600-2	BC	SAM	F708400-MSD2	400	8/17/2017 13:15:25	83333-1.RAW	13:15:25	1181.77		2	1176.0	7.546	3018.444	ng/L	
Hg2600-2	BC	BLK	F708428-BLK1	10	8/17/2017 13:19:33	83334-1.RAW	13:19:33	60.63		3	54.9	0.352	3.523	ng/L	
Hg2600-2	BC	BLK	F708428-BLK2	10	8/17/2017 13:23:42	83335-1.RAW	13:23:42	28.67		3	23.1	0.148	1.484	ng/L	
Hg2600-2	BC	CAL	SEQ-CCV5	1	8/17/2017 13:27:50	83336-1.RAW	13:27:50	774.10			768.3	4.933	4.933	ng/L	
Hg2600-2	BC	CAL	SEQ-CCB5	1	8/17/2017 13:31:58	83337-1.RAW	13:31:58	34.43			28.7	0.184	0.184	ng/L	
Hg2600-2	BC	SAM	F708428-BS1	10	8/17/2017 13:36:07	83338-1.RAW	13:36:07	3355.87		3	3350.1	21.258	212.585	ng/L	
Hg2600-2	BC	SAM	F708428-BSD1	10	8/17/2017 13:40:15	83339-1.RAW	13:40:15	3374.61		3	3368.8	21.379	213.788	ng/L	
Hg2600-2	BC	SAM	1707771-54	50	8/17/2017 13:44:24	83340-1.RAW	13:44:24	553.41		3	547.7	3.466	173.303	ng/L	
Hg2600-2	BC	SAM	1707771-55	50	8/17/2017 13:48:32	83341-1.RAW	13:48:32	459.07		3	453.3	2.860	143.016	ng/L	
Hg2600-2	BC	SAM	1707771-56	50	8/17/2017 13:52:41	83342-1.RAW	13:52:41	210.19		3	204.4	1.262	63.121	ng/L	
Hg2600-2	BC	SAM	1707771-57	50	8/17/2017 13:56:49	83343-1.RAW	13:56:49	3974.60		3	3968.8	25.431	1271.559	ng/L	
Hg2600-2	BC	SAM	1707771-58	50	8/17/2017 14:00:57	83344-1.RAW	14:00:57	3279.23		3	3273.5	20.967	1048.335	ng/L	
Hg2600-2	BC	SAM	1707771-59	50	8/17/2017 14:05:06	83345-1.RAW	14:05:06	3464.21		3	3458.4	22.154	1107.715	ng/L	
Hg2600-2	BC	SAM	1707771-60	50	8/17/2017 14:09:14	83346-1.RAW	14:09:14	6965.03		3	6959.3	44.631	2231.535	ng/L	
Hg2600-2	BC	SAM	1707771-61	50	8/17/2017 14:13:23	83347-1.RAW	14:13:23	6631.60		3	6625.8	42.490	2124.499	ng/L	
Hg2600-2	BC	CAL	SEQ-CCV6	1	8/17/2017 14:17:31	83348-1.RAW	14:17:31	910.17			904.4	5.807	5.807	ng/L	
Hg2600-2	BC	CAL	SEQ-CCB6	1	8/17/2017 14:21:40	83349-1.RAW	14:21:40	62.27			56.5	0.363	0.363	ng/L	
Hg2600-2	BC	SAM	ws		8/17/2017 14:28:39	83350-1.RAW	14:28:39	76.20		X	70.4	0.452	0.000	ng/L	
Hg2600-2	BC	SAM	1707771-62	50	8/17/2017 14:32:47	83351-1.RAW	14:32:47	8889.17		3	8863.4	44.015	2200.764	ng/L	
Hg2600-2	BC	SAM	1707771-63	50	8/17/2017 14:36:55	83352-1.RAW	14:36:55	6416.61		3	6410.9	41.110	2055.484	ng/L	
Hg2600-2	BC	SAM	1707771-64	50	8/17/2017 14:41:04	83353-1.RAW	14:41:04	2962.51		3	2956.8	18.933	946.662	ng/L	
Hg2600-2	BC	SAM	1707771-65	50	8/17/2017 14:45:12	83354-1.RAW	14:45:12	2526.27		3	2520.5	16.132	806.622	ng/L	
Hg2600-2	BC	SAM	1707771-66	50	8/17/2017 14:49:21	83355-1.RAW	14:49:21	2331.15		3	2325.4	14.880	743.984	ng/L	
Hg2600-2	BC	SAM	1707771-67	50	8/17/2017 14:53:29	83356-1.RAW	14:53:29	2385.45		3	2379.7	15.228	761.417	ng/L	
Hg2600-2	BC	SAM	1707771-68	50	8/17/2017 14:57:38	83357-1.RAW	14:57:38	3022.00		3	3016.2	19.315	965.759	ng/L	
Hg2600-2	BC	SAM	1707771-69	50	8/17/2017 15:01:46	83358-1.RAW	15:01:46	247.54		3	241.8	1.502	75.114	ng/L	
Hg2600-2	BC	SAM	1707771-70	50	8/17/2017 15:05:54	83359-1.RAW	15:05:54	235.73		3	230.0	1.426	71.322	ng/L	
Hg2600-2	BC	SAM	1707771-71	50	8/17/2017 15:10:03	83360-1.RAW	15:10:03	209.40		3	203.6	1.257	62.870	ng/L	
Hg2600-2	BC	CAL	SEQ-CCV7	1	8/17/2017 15:14:11	83361-1.RAW	15:14:11	788.28			782.5	5.024	5.024	ng/L	
Hg2600-2	BC	CAL	SEQ-CCB7	1	8/17/2017 15:18:20	83362-1.RAW	15:18:20	44.80			39.0	0.251	0.251	ng/L	
Hg2600-2	BC	SAM	1707771-72	50	8/17/2017 15:22:28	83363-1.RAW	15:22:28	97.43		3	91.7	0.539	26.925	ng/L	
Hg2600-2	BC	SAM	1707771-73	50	8/17/2017 15:26:36	83364-1.RAW	15:26:36	427.24		3	421.5	2.656	132.800	ng/L	
Hg2600-2	BC	SAM	1707771-60RE1	100	8/17/2017 15:30:45	83365-1.RAW	15:30:45	3507.24		3	3501.5	22.456	2245.559	ng/L	
Hg2600-2	BC	SAM	1707771-61RE1	100	8/17/2017 15:34:53	83366-1.RAW	15:34:53	3426.37		3	3420.6	21.936	2193.638	ng/L	
Hg2600-2	BC	SAM	1707771-62RE1	100	8/17/2017 15:39:02	83367-1.RAW	15:39:02	3799.88		3	3794.1	24.334	2433.444	ng/L	
Hg2600-2	BC	SAM	1707771-63RE1	100	8/17/2017 15:43:10	83368-1.RAW	15:43:10	3144.18		3	3138.4	20.125	2012.465	ng/L	
Hg2600-2	BC	SAM	1707771-64RE1	50	8/17/2017 15:47:19	83369-1.RAW	15:47:19	2898.70		3	2892.9	18.524	926.178	ng/L	
Hg2600-2	BC	SAM	F708428-MS1	400	8/17/2017 15:51:27	83370-1.RAW	15:51:27	1392.59		3	1386.8	8.898	3559.052	ng/L	
Hg2600-2	BC	SAM	F708428-MSD1	400	8/17/2017 15:55:35	83371-1.RAW	15:55:35	1337.63		3	1331.9	8.545	3417.924	ng/L	
Hg2600-2	BC	SAM	F708428-MS2	400	8/17/2017 15:59:44	83372-1.RAW	15:59:44	1278.37		3	1272.6	8.164	3265.723	ng/L	
Hg2600-2	BC	CAL	SEQ-CCV8	1	8/17/2017 16:03:52	83373-1.RAW	16:03:52	840.13			834.4	5.357	5.357	ng/L	
Hg2600-2	BC	CAL	SEQ-CCB8	1	8/17/2017 16:08:01	83374-1.RAW	16:08:01	49.38			43.6	0.280	0.280	ng/L	
Hg2600-2	BC	SAM	F708428-MSD2	400	8/17/2017 16:12:09	83375-1.RAW	16:12:09	1285.26		3	1279.5	8.209	3283.413	ng/L	
Hg2600-2	BC	SAM	1707771-72RE1	10	8/17/2017 16:16:17	83376-1.RAW	16:16:17	383.89		3	378.1	2.177	21.774	ng/L	
Hg2600-2	BC	CAL	SEQ-CCV9	1	8/17/2017 16:20:26	83377-1.RAW	16:20:26	810.47			804.7	5.167	5.167	ng/L	
Hg2600-2	BC	CAL	SEQ-CCB9	1	8/17/2017 16:24:34	83378-1.RAW	16:24:34	38.52			32.8	0.210	0.210	ng/L	

11 samples between CCBs QA old logs



TotalMercury  
EPA1631

Operat: BC BlankSi 5.7577 Calib Eqn: Conc = (Area-5.7577 Run Date: 8/17/2017 Blank SD: 2.426742181  
 Worksh THg2600 CalibFa 155.76 Status: QC Warnings:11/QC Run Time: 14:24:30 Blank RSD%: 42.14751706  
 Method ##### R: 1 R<sup>2</sup>: 1 CF SD: 2.386333907  
 Descrip THg26002-170817-1 CF RSD%: 1.53210371

Sample/ID	Location	Rinse	Dilute	Blank	Conc (ppt)	MB%	FinalConc	Rec%	QA	RawData	RunEnd	Peak (Raw)	Control (eff)	Flags	RunCount
Clean				0.00	6.19					83261-1.RAW	8:03:54	963.89	Clean	OK	1
clean				0.00	0.01					83262-1.RAW	8:06:46	1.32	Clean	OK	1
ws				5.76	0.05					83263-1.RAW	8:10:54	12.78	Sample	OK	1
ws				5.76	0.01					83264-1.RAW	8:15:03	7.61	Sample	OK	1
ws				5.76	0.00					83265-1.RAW	8:19:11	6.26	Sample	OK	1
SEQ-IBL1	A1		1	0.00	0.02					83266-1.RAW	8:23:19	3.16	Sample	OK	1
SEQ-IBL2	A2		1	0.00	0.04					83267-1.RAW	8:27:28	6.15	Sample	OK	1
SEQ-IBL3	A3		1	0.00	0.05					83268-1.RAW	8:31:36	7.96	Sample	OK	1
SEQ-CAL1	A4		1	5.76	0.51			102.15		83269-1.RAW	8:35:45	85.31	Sample	OK	1
SEQ-CAL2	A5		1	5.76	0.99			99.15		83270-1.RAW	8:39:53	160.19	Sample	OK	1
SEQ-CAL3	A6		1	5.76	5.05			101.05		83271-1.RAW	8:44:02	792.67	Sample	OK	1
SEQ-CAL4	A7		1	5.76	19.71			98.53		83272-1.RAW	8:48:10	3075.09	Sample	OK	1
SEQ-CAL5	A8		1	5.76	39.65			99.12		83273-1.RAW	8:52:18	6181.02	Sample	FB	1
SEQ-ICV1	A9		1	5.76	5.38			107.61		83274-1.RAW	8:56:27	843.83	Sample	OK	1
ws				5.76	0.31					83275-1.RAW	9:08:07	54.28	Sample	OK	1
NNQ6192 TV 65ng	A10		400	5.76	1623.24					83276-1.RAW	9:12:15	637.83	Sample	OK	1
NNQ5602 TV 65ng	A11		400	5.76	1513.96					83277-1.RAW	9:16:24	595.28	Sample	OK	1
NNQ6179 TV 70ng	A12		400	5.76	1653.09					83278-1.RAW	9:20:32	649.45	Sample	OK	1
NNQ6195 TV 70ng	A13		400	5.76	1653.15					83279-1.RAW	9:24:40	649.47	Sample	OK	1
NNQ6187 TV 100ng	A14		400	5.76	2293.93					83280-1.RAW	9:28:49	898.99	Sample	OK	1
NNQ6183 TV 100ng	A15		400	5.76	2327.36					83281-1.RAW	9:32:57	912.00	Sample	OK	1
F708444-BLK1	A16		100	5.76	9.17					83282-1.RAW	9:37:06	20.05	Sample	OK	1
F708444-BLK2	A17		100	5.76	5.99					83283-1.RAW	9:41:14	15.08	Sample	OK	1
F708444-BLK3	A18		100	5.76	4.80					83284-1.RAW	9:45:23	13.24	Sample	OK	1
F708444-BS1	A19		400	5.76	9042.10					83285-1.RAW	9:49:31	3526.65	Sample	OK	1
SEQ-CCV1	A20		1	5.76	5.11			102.24		83286-1.RAW	9:53:39	801.98	Sample	OK	1
SEQ-CCB1	A21		1	5.76	0.10			0.00		83287-1.RAW	9:57:48	21.26	Sample	OK	1
F708444-BSD1	B1		400	5.76	8842.62					83288-1.RAW	10:01:56	3448.97	Sample	OK	1
1708087-13	B2		100	5.76	55.47					83289-1.RAW	10:06:05	92.16	Sample	OK	1
1708087-14	B3		100	5.76	22.70					83290-1.RAW	10:10:13	41.12	Sample	OK	1
1708087-15	B4		100	5.76	9.46					83291-1.RAW	10:14:22	20.49	Sample	OK	1
1708087-13B	B5		100	5.76	11.58					83292-1.RAW	10:18:30	23.80	Sample	OK	1
1708087-14B	B6		100	5.76	9.19					83293-1.RAW	10:22:38	20.07	Sample	OK	1
1708087-15B	B7		100	5.76	4.22					83294-1.RAW	10:26:47	12.33	Sample	OK	1
1708087-13RE1	B8		100	5.76	41.07					83295-1.RAW	10:30:55	69.72	Sample	OK	1
F708444-DUP1	B9		100	5.76	12.75					83296-1.RAW	10:35:04	25.61	Sample	OK	1
F708444-MS1	B10		100	5.76	258.19			1878.05		83297-1.RAW	10:39:12	407.90	Sample	OK	1
SEQ-CCV2	B11		1	5.76	4.88			97.65		83298-1.RAW	10:43:20	766.24	Sample	OK	1
SEQ-CCB2	B12		1	5.76	0.10			0.00		83299-1.RAW	10:47:29	21.73	Sample	OK	1
F708444-MSD1	B13		100	5.76	265.51					83300-1.RAW	10:51:37	419.31	Sample	OK	1
F708400-BLK1	B14		10	5.76	2.21					83301-1.RAW	10:55:46	40.11	Sample	OK	1
F708400-BLK2	B15		10	5.76	1.23					83302-1.RAW	10:59:54	24.88	Sample	OK	1
F708400-BS1	B16		10	5.76	214.28					83303-1.RAW	11:04:03	3343.31	Sample	OK	1
F708400-BSD1	B17		10	5.76	199.07					83304-1.RAW	11:08:11	3106.38	Sample	OK	1

1707810-30	B18	50	5.76	211.03		83305-1.RAW	11:12:19	663.14	Sample	OK	1
1707810-31	B19	50	5.76	112.89		83306-1.RAW	11:16:28	357.43	Sample	OK	1
1707810-32	B20	50	5.76	1230.24		83307-1.RAW	11:20:36	3838.10	Sample	OK	1
1707810-33	B21	50	5.76	472.39		83308-1.RAW	11:24:45	1477.30	Sample	OK	1
1707810-34	C1	50	5.76	841.54		83309-1.RAW	11:28:53	2627.24	Sample	OK	1
SEQ-CCV3	C2	1	5.76	5.11	102.19	83310-1.RAW	11:33:01	801.62	Sample	OK	1
SEQ-CCB3	C3	1	5.76	0.13	0.00	83311-1.RAW	11:37:10	26.00	Sample	OK	1
1707810-35	C4	50	5.76	686.04		83312-1.RAW	11:41:18	2142.85	Sample	OK	1
1707810-36	C5	50	5.76	153.41		83313-1.RAW	11:45:27	483.65	Sample	OK	1
1707810-37	C6	50	5.76	313.28		83314-1.RAW	11:49:35	981.66	Sample	OK	1
1707810-38	C7	50	5.76	831.83		83315-1.RAW	11:53:44	2596.98	Sample	OK	1
1707810-39	C8	50	5.76	931.42		83316-1.RAW	11:57:52	2907.24	Sample	OK	1
1707810-40	C9	50	5.76	855.15		83317-1.RAW	12:02:00	2669.66	Sample	OK	1
1707810-41	C10	50	5.76	904.41		83318-1.RAW	12:06:09	2823.09	Sample	FB	1
1707810-42	C11	50	5.76	460.49		83319-1.RAW	12:10:17	1440.25	Sample	OK	1
1707810-43	C12	50	5.76	608.22		83320-1.RAW	12:14:26	1900.42	Sample	OK	1
1707810-44	C13	50	5.76	453.81		83321-1.RAW	12:18:34	1419.41	Sample	OK	1
SEQ-CCV4	C14	1	5.76	5.21	104.26	83322-1.RAW	12:22:42	817.74	Sample	OK	1
SEQ-CCB4	C15	1	5.76	0.21	0.00	83323-1.RAW	12:26:51	37.80	Sample	OK	1
ws			5.76	0.54		83324-1.RAW	12:38:08	89.46	Sample	OK	1
1707810-45	C16	50	5.76	653.71		83325-1.RAW	12:42:17	2042.13	Sample	OK	1
1707810-46	C17	50	5.76	198.27		83326-1.RAW	12:46:25	623.38	Sample	OK	1
1707810-47	C18	50	5.76	37.62		83327-1.RAW	12:50:33	122.96	Sample	OK	1
1707810-48	C19	50	5.76	993.66		83328-1.RAW	12:54:42	3101.11	Sample	OK	1
1707810-49	C20	50	5.76	811.50		83329-1.RAW	12:58:50	2533.67	Sample	OK	1
F708400-MS1	C21	400	5.76	1915.00	235.69	83330-1.RAW	13:02:59	751.44	Sample	OK	1
F708400-MSD1	A1	400	5.76	2415.79		83331-1.RAW	13:07:07	946.44	Sample	OK	1
F708400-MS2	A2	400	5.76	3033.36	125.46	83332-1.RAW	13:11:16	1186.91	Sample	OK	1
F708400-MSD2	A3	400	5.76	3020.16		83333-1.RAW	13:15:25	1181.77	Sample	OK	1
F708428-BLK1	A4	10	5.76	3.52		83334-1.RAW	13:19:33	60.63	Sample	OK	1
F708428-BLK2	A5	10	5.76	1.48		83335-1.RAW	13:23:42	28.87	Sample	OK	1
SEQ-CCV5	A6	1	5.76	4.93	98.66	83336-1.RAW	13:27:50	774.10	Sample	OK	1
SEQ-CCB5	A7	1	5.76	0.18	0.00	83337-1.RAW	13:31:58	34.43	Sample	OK	1
F708428-BS1	A8	10	5.76	215.09		83338-1.RAW	13:36:07	3355.87	Sample	OK	1
F708428-BSD1	A9	10	5.76	216.29		83339-1.RAW	13:40:15	3374.61	Sample	OK	1
1707771-54	A10	50	5.76	175.81		83340-1.RAW	13:44:24	553.41	Sample	OK	1
1707771-55	A11	50	5.76	145.52		83341-1.RAW	13:48:32	459.07	Sample	OK	1
1707771-56	A12	50	5.76	65.62		83342-1.RAW	13:52:41	210.19	Sample	OK	1
1707771-57	A13	50	5.76	1274.06		83343-1.RAW	13:56:49	3974.60	Sample	OK	1
1707771-58	A14	50	5.76	1050.84		83344-1.RAW	14:00:57	3279.23	Sample	OK	1
1707771-59	A15	50	5.76	1110.22		83345-1.RAW	14:05:06	3464.21	Sample	OK	1
1707771-60	A16	50	5.76	2234.04		83346-1.RAW	14:09:14	6965.03	Sample	OK	1
1707771-61	A17	50	5.76	2127.00		83347-1.RAW	14:13:23	6631.60	Sample	OK	1
SEQ-CCV6	A18	1	5.76	5.81	116.13	83348-1.RAW	14:17:31	910.17	Sample	OK	1
SEQ-CCB6	A19	1	5.76	0.36	0.00	83349-1.RAW	14:21:40	62.27	Sample	OK	1
ws			5.76	0.45		83350-1.RAW	14:28:39	76.20	Sample	OK	1
1707771-62	A20	50	5.76	2203.27		83351-1.RAW	14:32:47	6869.17	Sample	OK	1
1707771-63	A21	50	5.76	2057.99		83352-1.RAW	14:36:55	6416.61	Sample	OK	1
1707771-64	B1	50	5.76	949.17		83353-1.RAW	14:41:04	2962.51	Sample	OK	1

1707771-65	B2	50	5.76	809.13		83354-1.RAW	14:45:12	2526.27	Sample	OK	1
1707771-66	B3	50	5.76	746.49		83355-1.RAW	14:49:21	2331.15	Sample	OK	1
1707771-67	B4	50	5.76	763.92		83356-1.RAW	14:53:29	2385.45	Sample	OK	1
1707771-68	B5	50	5.76	968.26		83357-1.RAW	14:57:38	3022.00	Sample	OK	1
1707771-69	B6	50	5.76	77.62		83358-1.RAW	15:01:46	247.54	Sample	OK	1
1707771-70	B7	50	5.76	73.83		83359-1.RAW	15:05:54	235.73	Sample	OK	1
1707771-71	B8	50	5.76	65.37		83360-1.RAW	15:10:03	209.40	Sample	OK	1
SEQ-CCV7	B9	1	5.76	5.02	100.48	83361-1.RAW	15:14:11	788.28	Sample	OK	1
SEQ-CCB7	B10	1	5.76	0.25	0.00	83362-1.RAW	15:18:20	44.80	Sample	OK	1
1707771-72	B11	50	5.76	29.43		83363-1.RAW	15:22:28	97.43	Sample	OK	1
1707771-73	B12	50	5.76	135.30		83364-1.RAW	15:26:36	427.24	Sample	OK	1
1707771-60RE1	B13	100	5.76	2248.06		83365-1.RAW	15:30:45	3507.24	Sample	OK	1
1707771-61RE1	B14	100	5.76	2196.14		83366-1.RAW	15:34:53	3426.37	Sample	OK	1
1707771-62RE1	B15	100	5.76	2435.95		83367-1.RAW	15:39:02	3799.88	Sample	OK	1
1707771-63RE1	B16	100	5.76	2014.97		83368-1.RAW	15:43:10	3144.18	Sample	OK	1
1707771-64RE1	B17	50	5.76	928.68		83369-1.RAW	15:47:19	2898.70	Sample	OK	1
F708428-MS1	B18	400	5.76	3561.56	383.09	83370-1.RAW	15:51:27	1392.59	Sample	OK	1
F708428-MSD1	B19	400	5.76	3420.43		83371-1.RAW	15:55:35	1337.63	Sample	OK	1
F708428-MS2	B20	400	5.76	3268.23	95.49	83372-1.RAW	15:59:44	1278.37	Sample	OK	1
SEQ-CCV8	B21	1	5.76	5.36	107.14	83373-1.RAW	16:03:52	840.13	Sample	OK	1
SEQ-CCB8	C1	1	5.76	0.28	0.00	83374-1.RAW	16:08:01	49.38	Sample	OK	1
F708428-MSD2	C2	400	5.76	3285.92		83375-1.RAW	16:12:09	1285.26	Sample	OK	1
1707771-72RE1	C3	10	5.76	24.28		83376-1.RAW	16:16:17	383.89	Sample	OK	1
SEQ-CCV9	C4	1	5.76	5.17	103.33	83377-1.RAW	16:20:26	810.47	Sample	OK	1
SEQ-CCB9	C5	1	5.76	0.21	0.00	83378-1.RAW	16:24:34	38.52	Sample	OK	1

QUALITY ASSURANCE  
ANALYSIS SEQUENCE

7H18016

PEER-REVIEWED

Instrument: Hg2600-2

Calibration ID: UNASSIGNED

INITIALS: *DL 8/22/17*  
Analyzed: 8/17/2017

Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
7H18016-IBL1 ✓	QC	1			
7H18016-IBL2 ✓	QC	2			
7H18016-IBL3 ✓	QC	3			
7H18016-CAL1 ✓	QC	4	1704505 ✓		
7H18016-CAL2 ✓	QC	5	1704506 ✓		
7H18016-CAL3 ✓	QC	6	1704507 ✓		
7H18016-CAL4 ✓	QC	7	1704508 ✓		
7H18016-CAL5 ✓	QC	8	1704509 ✓		
7H18016-ICV1 ✓	QC	9	1703679 ✓		
F708444-BLK1 ✓	QC	10			
F708444-BLK2 ✓	QC	11			
F708444-BLK3 ✓	QC	12			
F708444-BS1 ✓	QC	13			
7H18016-CCV1 ✓	QC	14	1703679 ✓		
7H18016-CCB1 ✓	QC	15			
F708444-BSD1 ✓	QC	16			
1708087-13 ✓	Hg_FSTM_TRAP_A	17			
1708087-14 ✓	Hg_FSTM_TRAP_A	18			
1708087-15 ✓	Hg_FSTM_TRAP_A	19			
1708087-13RE1 ✓	Hg_FSTM_TRAP_A	20			Added 8/18/2017 by DM2
F708444-DUP1 ✓	QC	21			
F708444-MS1 ✓	QC	22			
7H18016-CCV2 ✓	QC	23	1703679 ✓		
7H18016-CCB2 ✓	QC	24			
F708444-MSD1 ✓	QC	25			
7H18016-CCV3 ✓	QC	26	1703679 ✓		
7H18016-CCB3 ✓	QC	27			

*B. C. C.* 8/18/17  
Samples Loaded By \_\_\_\_\_ Date

*Don M. ...* 8/18/17  
Data Processed By \_\_\_\_\_ Date

*10910 = d  
8/17/17*

**PREPARATION BENCH SHEET**

F708444

**Eurofins Frontier Global Sciences, Inc.**

**Matrix: Air**

**Prepared using: AFS - EFGS-009 FSTM Trap Nitric/Sulfuric Digestion**

**Prepared: 8/16/2017**

Lab Number	Sample ID and Source Sample	Initial (Trap)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F708444-BLK1	Blank	1	20					
F708444-BLK2	Blank	1	20					
F708444-BLK3	Blank	1	20					
F708444-BS1	LCS	1	20	1701763	200			
F708444-BSD1	LCS Dup	1	20	1701763	200			
F708444-DUP1	Duplicate [1708087-14] ✓	1	20					
F708444-MS1	Matrix Spike [1708087-14] ✓	0.025	0.5	1704483 ✓	125 ✓			[Spk] 1Trap->20mL; 20mL->20mL; Spiked 0.5mL
F708444-MSD1	Matrix Spike Dup [1708087-14] ✓	0.025	0.5	1704483	125			[Spk] 1Trap->20mL; 20mL->20mL; Spiked 0.5mL ✓

<u>Standard ID(s):</u>	<u>Description:</u>
1701763	THg 1,000ng/mL Secondary Spiking Standard
1704483	THg 1ng/mL Calibration Standard

<u>Expiration:</u>
22-Sep-17 00:00
24-Oct-17 00:00

<u>Reagent ID(s):</u>	<u>Description:</u>	<u>Expiration:</u>
1702564	FSTM Lot 170426A	26-Apr-18 00:00
1703182	25% Hydroxylamine-HCl working solution	24-Nov-17 00:00
1703701	THg Washstation (0.5% BrCl)	21-Dec-17 00:00
1703702	THg Dilute 1% BrCl	
1704691	3% SnCl2 THg reductant	22-Jan-18 00:00
1704887	70/30 Digestion Acid	06-Feb-18 00:00
1704958	5% BrCl	18-Dec-17 00:00

PREPARATION BENCH SHEET

F708444

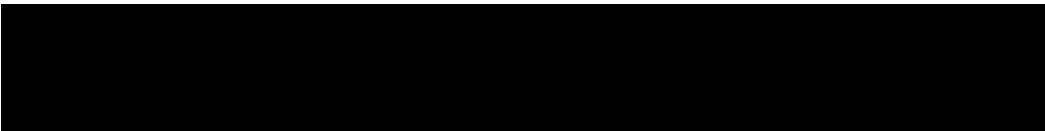
Eurofins Frontier Global Sciences, Inc.

Matrix: Air

Prepared using: AFS - EFGS-009 FSTM Trap Nitric/Sulfuric Digestion

Prepared: 8/16/2017

Lab Number	Sample ID	Initial (Trap)	Final (mL)	QC Sample	Sample Specs.	Raw Data	Sample Comments	Analysis Comments
1708087-13	Trip Blank - 0178	1	20	-	-	-	Blank trap added at PM request	
1708087-13RE1	Trip Blank - 0178	1	20	-	-	-	Blank trap added at PM request Added	Added 8/18/2017 by DM2
1708087-14	Trip Blank - 0179	1	20	-	-	-	Blank trap added at PM request	
1708087-15	Trip Blank - NNQ5137	1	20	-	-	-	Blank trap added at PM request	



PREPARATION BENCH SHEET

BL 8/17/17  
2600-2

F708444

Eurofins Frontier Global Sciences, Inc.

Matrix: Air

Prepared using: AFS - EFGS-009 FSTM Trap Nitric/Sulfuric Digestion

Prepared: 8/16/2017

Lab Number	Sample ID and Source Sample	Initial (Trap)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F708444-BLK1	Blank	1	20					100X ✓
F708444-BLK2	Blank	1	20					100X ✓
F708444-BLK3	Blank	1	20					100X ✓
F708444-BS1	LCS	1	20	1701763	200			400X ✓
F708444-BSD1	LCS Dup	1	20	1701763	200			400X ✓
F708444-DUP1	Duplicate 1708087-14	1	20					100X ✓
F708444-MS1	Matrix Spike 1708087-14	1	20	1704483	125			100X ✓
F708444-MSD1	Matrix Spike Dup 1708087-14	1	20	1704483	125			100X ✓

Standard ID(s):  
1701763

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

Expiration:  
22-Sep-17 00:00

Reagent ID(s):  
1702564  
1704887  
1704958

Description:  
FSTM Lot 170426A  
70/30 Digestion Acid  
5% BrCl

Expiration:  
26-Apr-18 00:00  
06-Feb-18 00:00  
18-Dec-17 00:00

1703701  
1703702  
1703182  
1604691

PREPARATION BENCH SHEET

BC 8/17/17  
2600-2

F708444

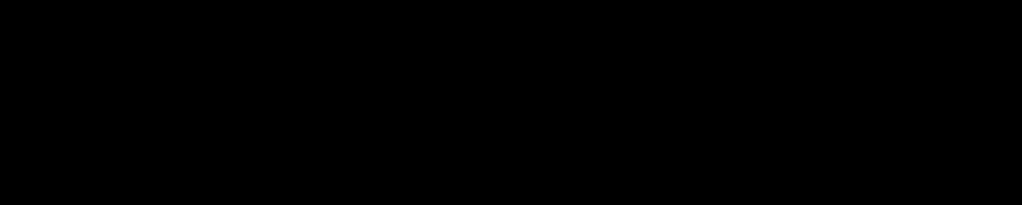
Eurofins Frontier Global Sciences, Inc.

Matrix: Air

Prepared using: AFS - EFGS-009 FSTM Trap Nitric/Sulfuric Digestion

Prepared: 8/16/2017

Lab Number	Sample ID	Initial (Trap)	Final (mL)	QC Sample	Sample Specs.	Raw Data	A Sample Comments	B Analysis Comments
1708087-13	Trip Blank - 0178	1	20	-	-	-	Blank trap added at PM request 100X → 100X	100X -
1708087-14	Trip Blank - 0179	1	20	-	-	-	Blank trap added at PM request 100X	100X -
1708087-15	Trip Blank - NNQ5137	1	20	-	-	-	Blank trap added at PM request 100X	100X -





**Trap Digestions**

Name: CWF Date: 8/16/17 Batch ID: F708444  
 Work Order(s): 1708087 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: 14:20, start temp (°C): 58.0 (raw) 57.8 (w/ CF) 8/16/17  
 end time: 16:20, end temp (°C): 64.0 (raw) 63.8 (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)
F708444	BLK1 20
F708444	BLK2 20
F708444	BLK3 20
F708444	B51 20
F708444	B5D1 20
1708087	13A 20
1708087	13B 20
1708087	14A 20
1708087	14B 20
1708087	15A 20
1708087	15B 20

Spike ID: 1701763  
 Spike Amount (µL): 200  
 Spike Witness: CLC 8/16/17  
 BrCl ID: 1709958  
 70/30: 1704887  
 Other: N/A  
 Thermometer: 14545  
 Dispensers: 02K27494   
 04N73497   
 Other 15406623  
 Pipette ID: MUN619  
 Cal. Date: 8/16/17  
 Vials and Jars lot# 00068124  
 Trap Material Lot#: 1702564  
 Loader Mass Verified:  Yes  No

Comments:  
All traps unspiked  
CWF 8/16/17

CWF  
8/16/17

# Failing Data Report - 7H18016

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

8/18/17  
 Date

  
 Peer Reviewed By

8/21/17  
 Date

ANALYSIS SEQUENCE

QUALITY ASSURANCE

PEER-REVIEWED

7H18017

Instrument: Hg2600-2

Calibration ID: UNASSIGNED

INITIALS: 8/23/17 Analyzed: 8/17/2017

Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
7H18017-IBL1	QC	1			
7H18017-IBL2	QC	2			
7H18017-IBL3	QC	3			
7H18017-CAL1	QC	4	1704505		
7H18017-CAL2	QC	5	1704506		
7H18017-CAL3	QC	6	1704507		
7H18017-CAL4	QC	7	1704508		
7H18017-CAL5	QC	8	1704509		
7H18017-ICV1	QC	9	1703679		
7H18017-CCV1	QC	10	1703679		
7H18017-CCB1	QC	11			
7H18017-CCV2	QC	12	1703679		
7H18017-CCB2	QC	13			
F708400-BLK1	QC	14			
F708400-BLK2	QC	15			
F708400-BS1	QC	16			
F708400-BSD1	QC	17			
1707810-30	Hg-CVAFS-S-7474	18			
1707810-31	Hg-CVAFS-S-7474	19			
1707810-32	Hg-CVAFS-S-7474	20			
1707810-33	Hg-CVAFS-S-7474	21			
1707810-34	Hg-CVAFS-S-7474	22			
7H18017-CCV3	QC	23	1703679		
7H18017-CCB3	QC	24			
1707810-35	Hg-CVAFS-S-7474	25			
1707810-36	Hg-CVAFS-S-7474	26			
1707810-37	Hg-CVAFS-S-7474	27			
1707810-38	Hg-CVAFS-S-7474	28			
1707810-39	Hg-CVAFS-S-7474	29			
1707810-40	Hg-CVAFS-S-7474	30			
1707810-41	Hg-CVAFS-S-7474	31			
1707810-42	Hg-CVAFS-S-7474	32			
1707810-43	Hg-CVAFS-S-7474	33			
1707810-44	Hg-CVAFS-S-7474	34			
7H18017-CCV4	QC	35	1703679		

**ANALYSIS SEQUENCE**

**7H18017**

**Instrument: Hg2600-2**

**Calibration ID: UNASSIGNED**

**Analyzed: 8/17/2017**

Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
7H18017-CCB4 ✓	QC	36			
1707810-45 ✓	Hg-CVAFS-S-7474	37			
1707810-46 ✓	Hg-CVAFS-S-7474	38			
1707810-47 ✓	Hg-CVAFS-S-7474	39			
1707810-48 ✓	Hg-CVAFS-S-7474	40			
1707810-49 ✓	Hg-CVAFS-S-7474	41			
F708400-MS1 ✓	QC	42			
F708400-MSD1 ✓	QC	43			
F708400-MS2 ✓	QC	44			
F708400-MSD2 ✓	QC	45			
F708428-BLK1 ✓	QC	46			
F708428-BLK2 ✓	QC	47			
7H18017-CCV5 ✓	QC	48	1703679		
7H18017-CCB5 ✓	QC	49			
F708428-BS1 ✓	QC	50			
F708428-BSD1 ✓	QC	51			
1707771-54 ✓	Hg-CVAFS-S-7474	52			
1707771-55 ✓	Hg-CVAFS-S-7474	53			
1707771-56 ✓	Hg-CVAFS-S-7474	54			
1707771-57 ✓	Hg-CVAFS-S-7474	55			
1707771-58 ✓	Hg-CVAFS-S-7474	56			
1707771-59 ✓	Hg-CVAFS-S-7474	57			
1707771-60 ✓	Hg-CVAFS-S-7474	58			
1707771-61 ✓	Hg-CVAFS-S-7474	59			
7H18017-CCV6 ✓	QC	60	1703679		
7H18017-CCB6 ✓	QC	61			
1707771-62 ✓	Hg-CVAFS-S-7474	62			
1707771-63 ✓	Hg-CVAFS-S-7474	63			
1707771-64 ✓	Hg-CVAFS-S-7474	64			
1707771-65 ✓	Hg-CVAFS-S-7474	65			
1707771-66 ✓	Hg-CVAFS-S-7474	66			
1707771-67 ✓	Hg-CVAFS-S-7474	67			
1707771-68 ✓	Hg-CVAFS-S-7474	68			
1707771-69 ✓	Hg-CVAFS-S-7474	69			
1707771-70 ✓	Hg-CVAFS-S-7474	70			

1707771-71  
 Due Date: 8/24/2017 *R 8/24/17*

**ANALYSIS SEQUENCE**

**7H18017**

**Instrument: Hg2600-2**

**Calibration ID: UNASSIGNED**

**Analyzed: 8/17/2017**

Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
7H18017-CCV7 ✓	QC	72	1703679	✓	
7H18017-CCB7 ✓	QC	73			
1707771-72 ✓	Hg-CVAFS-S-7474	74			
1707771-73 ✓	Hg-CVAFS-S-7474	75			
1707771-60RE1 ✓	Hg-CVAFS-S-7474	76			Added 8/18/2017 by DM2
1707771-61RE1 ✓	Hg-CVAFS-S-7474	77			Added 8/18/2017 by DM2
1707771-62RE1 ✓	Hg-CVAFS-S-7474	78			Added 8/18/2017 by DM2
1707771-63RE1 ✓	Hg-CVAFS-S-7474	79			Added 8/18/2017 by DM2
1707771-64RE1 ✓	Hg-CVAFS-S-7474	80			Added 8/18/2017 by DM2
F708428-MS1 ✓	QC	81			
F708428-MSD1 ✓	QC	82			
F708428-MS2 ✓	QC	83			
7H18017-CCV8 ✓	QC	84	1703679	✓	
7H18017-CCB8 ✓	QC	85			
F708428-MSD2 ✓	QC	86			
1707771-72RE1 ✓	Hg-CVAFS-S-7474	87			Added 8/18/2017 by DM2
7H18017-CCV9 ✓	QC	88	1703679	✓	
7H18017-CCB9 ✓	QC	89			

*P. Cis* 8/18/17  
 Samples Loaded By Date

*Don M. Green* 8/18/17  
 Data Processed By Date

104206  
 8/17/17

**PREPARATION BENCH SHEET**

F708400

**Eurofins Frontier Global Sciences, Inc.**

**Matrix: Soil/Sediment**

**Prepared using: AFS - EPA 7474**

**Prepared: 8/14/2017**

Lab Number	Sample ID and Source Sample	Initial (g)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F708400-BLK1	Blank	0.5	200					
F708400-BLK2	Blank	0.5	200					
F708400-BS1	Blank Spike	0.5	200	1701763	40			
F708400-BSD1	Blank Spike	0.5	200	1701763	40			
F708400-MS1	Matrix Spike [1707810-30]	0.5559	200	1703591	50			
F708400-MS2	Matrix Spike [1707810-45]	0.5436	200	1703591	50			
F708400-MSD1	Matrix Spike Dup [1707810-30]	0.558	200	1703591	50			
F708400-MSD2	Matrix Spike Dup [1707810-45]	0.5532	200	1703591	50			

<u>Standard ID(s):</u>	<u>Description:</u>
1701763	THg 1,000ng/mL Secondary Spiking Standard
1703591	THg 10,000ng/mL Primary Spiking Standard

<u>Expiration:</u>
22-Sep-17 00:00
14-Dec-17 00:00

<u>Reagent ID(s):</u>	<u>Description:</u>	<u>Expiration:</u>
1703182	25% Hydroxylamine-HCl working solution	24-Nov-17 00:00
1703701	THg Washstation (0.5% BrCl)	21-Dec-17 00:00
1703702	THg Dilute 1% BrCl	
1704691	3% SnCl2 THg reductant	22-Jan-18 00:00

**PREPARATION BENCH SHEET**

F708400

**Eurofins Frontier Global Sciences, Inc.**

**Matrix: Soil/Sediment**

**Prepared using: AFS - EPA 7474**

**Prepared: 8/14/2017**

Lab Number	Sample ID	Initial (g)	Final (mL)	QC Sample	Sample Specs.	Raw Data	Sample Comments	Analysis Comments
1707810-30	BO-05_072517_SED_00-01	0.5396	200	-	-	-		
1707810-31	BO-05_072517_SED_01-03	0.5362	200	-	-	-		
1707810-32	W-17-High_072517_SED_03-05	0.5143	200	-	-	-		
1707810-33	W-17-High_072517_SED_05-10	0.5419	200	-	-	-		
1707810-34	W-17-Intertidal_072517_SED_00-01	0.5743	200	-	-	-		
1707810-35	W-17-Intertidal_072517_SED_01-03	0.5081	200	-	-	-		
1707810-36	W-21-High_072517_SED_00-01	0.541	200	-	-	-		
1707810-37	W-21-High_072517_SED_01-03	0.5278	200	-	-	-		
1707810-38	W-21-Intertidal_072517_SED_00-01	0.5721	200	-	-	-		
1707810-39	W-21-Intertidal_072517_SED_01-03	0.5967	200	-	-	-		
1707810-40	W-21-Low_072517_SED_00-01	0.5498	200	-	-	-		
1707810-41	W-21-Low_072517_SED_01-03	0.5836	200	-	-	-		
1707810-42	W-21-Mid_072517_SED_00-01	0.5318	200	-	-	-		
1707810-43	W-21-Mid_072517_SED_01-03	0.549	200	-	-	-		
1707810-44	W-21-UM-Central-E_072517_SED_00-01	0.5413	200	-	-	-		
1707810-45	W-21-UM-Central-E_072517_SED_01-03	0.5094	200	-	-	-		
1707810-46	W-61-High_072517_SED_03-05	0.5593	200	-	-	-		
1707810-47	W-61-High_072517_SED_05-10	0.5938	200	-	-	-		
1707810-48	W-61-Intertidal_072517_SED_03-05	0.5783	200	-	-	-		

Due Date: 8/24/2017

PREPARATION BENCH SHEET

F708400

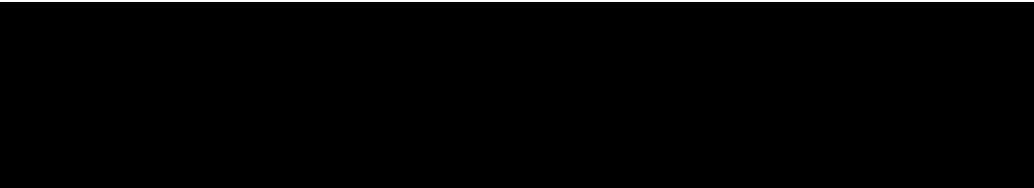
Eurofins Frontier Global Sciences, Inc.

Matrix: Soil/Sediment

Prepared using: AFS - EPA 7474

Prepared: 8/14/2017

1707810-49	W-61-Intertidal_072517_SED_05-10	0.5886	200	-	-	-		
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PREPARATION BENCH SHEET

BC8/17/17  
26002L

F708400

Eurofins Frontier Global Sciences, Inc.

Matrix: Soil/Sediment

Prepared using: AFS - EPA 7474

Prepared: 8/14/2017

Lab Number	Sample ID and Source Sample	Initial (g)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F708400-BLK1	Blank	0.5	200					10X
F708400-BLK2	Blank	0.5	200					10X
F708400-BS1	Blank Spike	0.5	200	1701763	40			10X
F708400-BSD1	Blank Spike	0.5	200	1701763	40			10X
F708400-MS1	Matrix Spike [1707810-30]	0.5559	200	1703591	50			400X
F708400-MS2	Matrix Spike [1707810-45]	0.5436	200	1703591	50			400X
F708400-MSD1	Matrix Spike Dup [1707810-30]	0.558	200	1703591	50			400X
F708400-MSD2	Matrix Spike Dup [1707810-45]	0.5532	200	1703591	50			400X

Standard ID(s):  
1701763  
1703591

Description:  
THg 1,000ng/mL Secondary Spiking Standard  
THg 10,000ng/mL Primary Spiking Standard

Expiration:  
22-Sep-17 00:00  
14-Dec-17 00:00

1703701  
1703762  
1703182  
+ 1704691

PREPARATION BENCH SHEET

BC 8/12/17  
2600-2

F708400

Eurofins Frontier Global Sciences, Inc.

Matrix: Soil/Sediment

Prepared using: AFS - EPA 7474

Prepared: 8/14/2017

Lab Number	Sample ID	Initial (g)	Final (mL)	QC Sample	Sample Specs.	Raw Data	Sample Comments	Analysis Comments
1707810-30	BO-05_072517_SED_00-01	0.5396	200	-	-	-	50X	
1707810-31	BO-05_072517_SED_01-03	0.5362	200	-	-	-	50X	
1707810-32	W-17-High_072517_SED_03-05	0.5143	200	-	-	-	50X	
1707810-33	W-17-High_072517_SED_05-10	0.5419	200	-	-	-	50X	
1707810-34	W-17-Intertidal_072517_SED_00-01	0.5743	200	-	-	-	50X	
1707810-35	W-17-Intertidal_072517_SED_01-03	0.5081	200	-	-	-	50X	
1707810-36	W-21-High_072517_SED_00-01	0.541	200	-	-	-	50X	
1707810-37	W-21-High_072517_SED_01-03	0.5278	200	-	-	-	50X	
1707810-38	W-21-Intertidal_072517_SED_00-01	0.5721	200	-	-	-	50X	
1707810-39	W-21-Intertidal_072517_SED_01-03	0.5967	200	-	-	-	50X	
1707810-40	W-21-Low_072517_SED_00-01	0.5498	200	-	-	-	50X	
1707810-41	W-21-Low_072517_SED_01-03	0.5836	200	-	-	-	50X	
1707810-42	W-21-Mid_072517_SED_00-01	0.5318	200	-	-	-	50X	
1707810-43	W-21-Mid_072517_SED_01-03	0.549	200	-	-	-	50X	
1707810-44	W-21-UM-Central-E_072517_SED_00-01	0.5413	200	-	-	-	50X	
1707810-45	W-21-UM-Central-E_072517_SED_01-03	0.5094	200	-	-	-	50X	
1707810-46	W-61-High_072517_SED_03-05	0.5593	200	-	-	-	50X	
1707810-47	W-61-High_072517_SED_05-10	0.5938	200	-	-	-	50X	
1707810-48	W-61-Intertidal_072517_SED_03-05	0.5783	200	-	-	-	50X	

Due Date: 8/24/2017

BL 8/17/17

PREPARATION BENCH SHEET

F708400

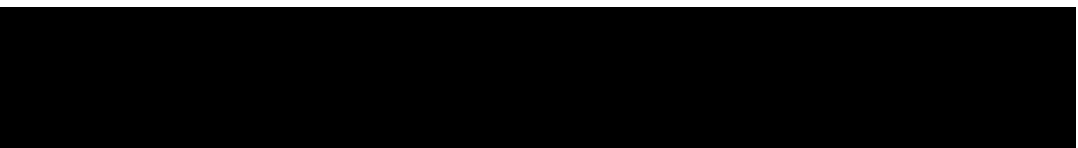
Eurofins Frontier Global Sciences, Inc.

Matrix: Soil/Sediment

Prepared using: AFS - EPA 7474

Prepared: 8/14/2017

1707810-49	W-61-Intertidal_072517_SED_05-10	0.5886	200	-	-	-	px	
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Technician: Dwyer Batch#: F78 8/14/17 Date: 8-14-17

- EFAFS-T-AFS-SOP2986 Tissues - Methyl Mercury - KOH/Methanol: Hot plate 75±5°C for 2-4 hours.
- EFAFS-T-AFS-SOP2795 Tissues - Total Mercury - 70:30: Hot plate 75±5°C for two hours.
- EFAFS-T-AFS-SOP5134 Sediments - Methyl Mercury - KBr/CH<sub>2</sub>Cl<sub>2</sub>: Heat Block 45°C (nitrogen purge for 30 minutes).
- EFAFS-T-AFS-SOP2807 Solids - Total Mercury - Cold AR: 18-25°C for over four hours.

Other: EPA 7474 Vial Type:  Glass  Teflon  
 Balance#: 19 Calibrated?  Yes  No Therm.#: N/A Calibrated?  Yes  No  
 \*Time in: N/A Actual Temp. (raw): N/A °C w/ CF: N/A °C  
 Time out: N/A Actual Temp. (raw): N/A °C w/ CF: N/A °C  
 \*Time in can't begin before target temperature is reached

Final vol.: 25 mL (LIMS ID: R0H20) Spike vol.: 40 µL (LIMS ID: 1701763)  
 Spike Witness: crc 8/14/17 (initial and date)

HCl LIMS ID: 1704640 Pipette SN#: 0U 07852 Calibration Date: 8-11-17  
 HNO<sub>3</sub> LIMS ID: 1704484 Pipette SN#: NW 07693 Calibration Date: 8-9-17  
 70/30 LIMS ID: N/A Dispenser #: 09W 45351 Calibrated?  Yes  No  
 Other Acid LIMS ID: 1704812 Dispenser #: 08Y 2293 Yes

2488 Glass Vial # J264713-3025 Boiling Chip lot # 1704224 \*Hotblock Position: N/A  
 cert tub

Vial #	Sample ID Number	Sample Size <input type="checkbox"/> mL <input type="checkbox"/> g	Vial #	Sample ID Number	Sample Size <input type="checkbox"/> mL <input checked="" type="checkbox"/> g	CRM LIMS ID <input checked="" type="checkbox"/> N/A
1	F708400 Bk1	0.4989	23	<del>1707810-21</del>	<del>0.5417</del>	
2	F708400 Bk2	0.5018	24	F708400-MS1	0.5436	
3	F708400 B51	0.5183	25	F708400-MS2	0.5532	
4	F708400 B501	0.5067	26	1707810-46A	0.5593	Comments
5	1707810-30	0.5296	27	1707810-47A	0.5938	F708400
6	F708400-MS1	0.5559	28	1707810-48A	0.5783	source
7	F708400 MS01	0.5580	29	1707810-49A	0.5886	1707810-30
8	1707810-31	0.5362	30			MS1 MS01
9	1707810-32	0.5143	31			
10	1707810-33	0.5419	32			F708400
11	1707810-34	0.5743	33			MS2 MS02
12	1707810-35	0.5081	34			1707810-45
13	1707810-36	0.5410	35			MS1 MS01
14	1707810-37	0.5278	36			10,000 µg/L
15	1707810-38	0.5721	37			= 50 µL
16	1707810-39	0.5967	38			1707810-45
17	1707810-40	0.5498	39			8/14/17
18	1707810-41	0.5836	40			
19	1707810-42	0.5318	41			
20	1707810-43	0.5490	42			
21	1707810-44	0.5413	43			
22	1707810-45	0.5094	44			

Technician: Duyen Batch#: F708400 Date: 8-14-17

- EFAFS-T-AFS-SOP2986 Tissues - Methyl Mercury - KOH/Methanol: Hot plate 75±5°C for 2-4 hours.
- EFAFS-T-AFS-SOP2795 Tissues - Total Mercury - 70:30: Hot plate 75±5°C for two hours.
- EFAFS-T-AFS-SOP5134 Sediments - Methyl Mercury - KBr/CH<sub>2</sub>Cl<sub>2</sub>: Heat Block 45°C (nitrogen purge for 30 minutes).
- EFAFS-T-AFS-SOP2807 Solids - Total Mercury - Cold AR: 18-25°C for over four hours.

Other: EPA 7494 Vial Type:  Glass  Teflon  
 Balance#: 19 Calibrated?  Yes  No Therm.#: N/A Calibrated?  Yes  No

\*Time in: N/A Actual Temp. (raw): N/A °C w/ CF: N/A °C  
 Time out: N/A Actual Temp. (raw): N/A °C w/ CF: N/A °C

\*Time in can't begin before target temperature is reached

Final vol.: 25 mL (LIMS ID: R0420) Spike vol.: 40 µL (LIMS ID: 1701763)  
 Spike Witness: BC 8/14/17 (initial and date)

HCl LIMS ID: 17048640 Pipette SN#: 0467852 Calibration Date: 8-11-17

HNO<sub>3</sub> LIMS ID: 1704484 Pipette SN#: N/A Calibration Date: \_\_\_\_\_

70/30 LIMS ID: N/A Dispenser #: \_\_\_\_\_ Calibrated?  Yes  No

Other Acid LIMS ID: \_\_\_\_\_ Dispenser #: \_\_\_\_\_

Glass Vial # J264913-305 Boiling Chip lot # 170442 \*Hotblock Position: N/A

Vial #	Sample ID Number	Sample Size <input type="checkbox"/> mL <input checked="" type="checkbox"/> µg	Vial #	Sample ID Number	Sample Size <input type="checkbox"/> mL <input checked="" type="checkbox"/> µg	CRM LIMS ID <input checked="" type="checkbox"/> NA
1	<del>F708400 Blk1</del>	<del>0.5204</del>	23	<del>F708400-MS2</del>	<del>0.5436</del>	
2	<del>881417 Blk2</del>	<del>0.5378</del>	24	<del>F708400-MS02</del>	<del>0.5532</del>	
3	<del>04 BS1</del>	<del>0.5086</del>	25	<del>170810-46</del>	<del>0.5593</del>	
4	<del>881417 BS01</del>	<del>0.5132</del>	26	<del>1707810-47</del>	<del>0.5938</del>	Comments
5	<del>1707810-30</del>	<del>0.5132</del>	27	<del>1707810-48</del>	<del>0.5783</del>	
6	<del>F708400-MS1</del>	<del>0.5928</del>	28	<del>1707810-49</del>	<del>0.5886</del>	F708400 source
7	<del>F708400 MS1</del>	<del>0.5864</del>	29	<del>8/14/17</del>		MS1 MS01
8	<del>170810-31A</del>	<del>0.5801</del>	30			1707810-30
9	<del>170810-32A</del>	<del>0.5539</del>	31			F708400
10	<del>170810-33A</del>	<del>0.5700</del>	32			MS2 MS02
11	<del>170810-34A</del>	<del>0.5960</del>	33			1707810-45
12	<del>170810-35A</del>	<del>0.5433</del>	34			ALL spike MS1 MS01 10,000 µg/mL = 50 µg 1703591 8-14-17
13	<del>170810-36A</del>	<del>0.5806</del>	35			
14	<del>170810-37A</del>	<del>0.5757</del>	36			
15	<del>170810-38A</del>	<del>0.5884</del>	37			
16	<del>1707810-39A</del>	<del>0.5967</del>	38			
17	<del>1707810-40A</del>	<del>0.5498</del>	39			
18	<del>1707810-41</del>	<del>0.5836</del>	40	*Note: Vials #1-15, incorrect		
19	<del>1707810-42</del>	<del>0.5318</del>	41	align not taken. Prep		
20	<del>1707810-43</del>	<del>0.5490</del>	42	technician, noticed this		
21	<del>1707810-44</del>	<del>0.5413</del>	43	and re-prepped. See		
22	<del>1707810-45</del>	<del>0.5094</del>	44	page 26 for redig. A 8/14/17		

**PREPARATION BENCH SHEET**

F708428

**Eurofins Frontier Global Sciences, Inc.**

**Matrix: Soil/Sediment**

**Prepared using: Trace Metals - EPA 7474**

**Prepared: 8/15/2017**

Lab Number	Sample ID and Source Sample	Initial (g)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F708428-BLK1	Blank	0.5	200					
F708428-BLK2	Blank	0.5	200					
F708428-BS1	Blank Spike	0.5	200	1701763	40			
F708428-BSD1	Blank Spike	0.5	200	1701763	40			
F708428-MS1	Matrix Spike [1707771-59]	0.5967	200	1703591	50			
F708428-MS2	Matrix Spike [1707771-68]	0.552	200	1703591	50			
F708428-MSD1	Matrix Spike Dup [1707771-59]	0.5952	200	1703591	50			
F708428-MSD2	Matrix Spike Dup [1707771-68]	0.5515	200	1703591	50			

<u>Standard ID(s):</u>	<u>Description:</u>	<u>Expiration:</u>	<u>Reagent ID(s):</u>	<u>Description:</u>	<u>Expiration:</u>
1701763	THg 1,000ng/mL Secondary Spiking Standard	22-Sep-17 00:00	1703182	25% Hydroxylamine-HCl working solution	24-Nov-17 00:00
1703591	THg 10,000ng/mL Primary Spiking Standard	14-Dec-17 00:00	1703701	THg Washstation (0.5% BrCl)	21-Dec-17 00:00
			1703702	THg Dilute 1% BrCl	
			1704424	Boiling Chips for AFS prep	21-Jan-18 00:00
			1704484	Fisher Nitric Acid, Tracemetal Grade	15-Mar-19 00:00
			1704640	Omnitrace Hydrochloric Acid	27-Jul-20 00:00
			1704691	3% SnCl <sub>2</sub> THg reductant	22-Jan-18 00:00
			1704959	7474 Potassium Bromate/Bromide Reagent	22-Aug-17 00:00

**PREPARATION BENCH SHEET**

F708428

**Eurofins Frontier Global Sciences, Inc.**

**Matrix: Soil/Sediment**

**Prepared using: Trace Metals - EPA 7474**

**Prepared: 8/15/2017**

Lab Number	Sample ID	Initial (g)	Final (mL)	QC Sample	Sample Specs.	Raw Data	Sample Comments	Analysis Comments
1707771-54	W-MM-07_072617_SED_05-10	0.5418	200	-	-	-		
1707771-55	W-MM-TP_072617_SED_03-05	0.5811	200	-	-	-		
1707771-56	W-MM-TP_072617_SED_05-10	0.5604	200	-	-	-		
1707771-57	W-103-INTA_072617_SED_03-05	0.5418	200	-	-	-		
1707771-58	W-103-INTA_072617_SED_05-10	0.5868	200	-	-	-		
1707771-59	W-63-INT_072617_SED_03-05	0.5496	200	-	-	-		
1707771-60	W-63-INT_072617_SED_05-10_R1	0.5589	200	-	-	-		
1707771-60RE1	W-63-INT_072617_SED_05-10_R1	0.5589	200	-	-	-	Added 8/18/2017 by DM2	Added 8/18/2017 by DM2
1707771-61	W-63-INT_072617_SED_05-10_R2	0.5797	200	-	-	-		
1707771-61RE1	W-63-INT_072617_SED_05-10_R2	0.5797	200	-	-	-	Added 8/18/2017 by DM2	Added 8/18/2017 by DM2
1707771-62	W-63-INT_072617_SED_05-10_R3	0.5871	200	-	-	-		
1707771-62RE1	W-63-INT_072617_SED_05-10_R3	0.5871	200	-	-	-	Added 8/18/2017 by DM2	Added 8/18/2017 by DM2
1707771-63	W-MM-01_072617_SED_03-05	0.5411	200	-	-	-		
1707771-63RE1	W-MM-01_072617_SED_03-05	0.5411	200	-	-	-	Added 8/18/2017 by DM2	Added 8/18/2017 by DM2
1707771-64	W-MM-01_072617_SED_05-10	0.5403	200	-	-	-		
1707771-64RE1	W-MM-01_072617_SED_05-10	0.5403	200	-	-	-	Added 8/18/2017 by DM2	Added 8/18/2017 by DM2
1707771-65	W-104-INTA_072617_SED_03-05_R1	0.587	200	-	-	-		
1707771-66	W-104-INTA_072617_SED_03-05_R2	0.5361	200	-	-	-		
1707771-67	W-104-INTA_072617_SED_03-05_R3	0.5841	200	-	-	-		

Due Date: 8/24/2017

**PREPARATION BENCH SHEET**

F708428

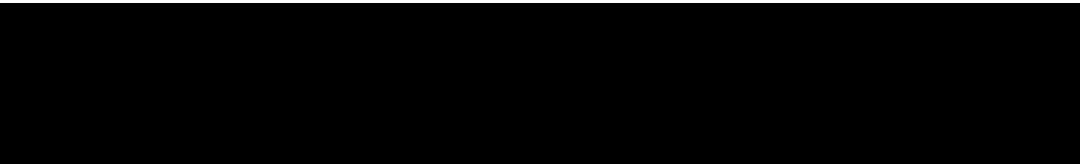
**Eurofins Frontier Global Sciences, Inc.**

**Matrix: Soil/Sediment**

**Prepared using: Trace Metals - EPA 7474**

**Prepared: 8/15/2017**

1707771-68	W-104-INTA_072617_SED_05-10	0.5388	200	QC	-	-	MS/MSD	
1707771-69	W-MM-17_072617_SED_03-05_R1	0.566	200	-	-	-		
1707771-70	W-MM-17_072617_SED_03-05_R2	0.5563	200	-	-	-		
1707771-71	W-MM-17_072617_SED_03-05_R3	0.523	200	-	-	-		
1707771-72	W-MM-17_072617_SED_05-10	0.5882	200	-	-	-		
1707771-72RE1	W-MM-17_072617_SED_05-10	0.5882	200	-	-	-	Added 8/18/2017 by DM2	Added 8/18/2017 by DM2
1707771-73	W-MM-02_072617_SED_03-05	0.5276	200	-	-	-		





PREPARATION BENCH SHEET

BL 8/17/17  
2600-32

F708428

Eurofins Frontier Global Sciences, Inc.

Matrix: Soil/Sediment

Prepared using: Trace Metals - EPA 7474

Prepared: 8/15/2017

Lab Number	Sample ID and Source Sample	Initial (g)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F708428-BLK1	Blank	0.5	200					10X
F708428-BLK2	Blank	0.5	200					10X
F708428-BS1	Blank Spike	0.5	200	1701763	40			10X
F708428-BSD1	Blank Spike	0.5	200	1701763	40			10X
F708428-MS1	Matrix Spike [1707771-59]	0.5967	200	1703591	50			400X
F708428-MS2	Matrix Spike [1707771-68]	0.552	200	1703591	50			400X
F708428-MSD1	Matrix Spike Dup [1707771-59]	0.5952	200	1703591	50			400X
F708428-MSD2	Matrix Spike Dup [1707771-68]	0.5515	200	1703591	50			400X

Standard ID(s):  
1701763  
1703591

Description:  
THg 1,000ng/mL Secondary Spiking Standard  
THg 10,000ng/mL Primary Spiking Standard

Expiration:  
22-Sep-17 00:00  
14-Dec-17 00:00

Reagent ID(s):  
1704424  
1704484  
1704640  
1704959

Description:  
Boiling Chips for AFS prep  
Fisher Nitric Acid, Tracemetal Grade  
Omnitrac Hydrochloric Acid  
7474 Potassium Bromate/Bromide Reagent

Expiration:  
21-Jan-18 00:00  
15-Mar-19 00:00  
27-Jul-20 00:00  
22-Aug-17 00:00

1703701  
1703702  
1703182  
~~1604691~~  
1704691

Due Date: 8/24/2017

BC 8/17/17  
2600-2

PREPARATION BENCH SHEET

F708428

Eurofins Frontier Global Sciences, Inc.

Matrix: Soil/Sediment

Prepared using: Trace Metals - EPA 7474

Prepared: 8/15/2017

Lab Number	Sample ID	Initial (g)	Final (mL)	QC Sample	Sample Specs.	Raw Data	Sample Comments	Analysis Comments
1707771-54	W-MM-07_072617_SED_05-10	0.5418	200	-	-	-	50x	
1707771-55	W-MM-TP_072617_SED_03-05	0.5811	200	-	-	-	50x	
1707771-56	W-MM-TP_072617_SED_05-10	0.5604	200	-	-	-	50x	
1707771-57	W-103-INTA_072617_SED_03-05	0.5418	200	-	-	-	50x	
1707771-58	W-103-INTA_072617_SED_05-10	0.5868	200	-	-	-	50x	
1707771-59	W-63-INT_072617_SED_03-05	0.5496	200	-	-	-	50x	
1707771-60	W-63-INT_072617_SED_05-10_R1	0.5589	200	-	-	-	50x → 100x	
1707771-61	W-63-INT_072617_SED_05-10_R2	0.5797	200	-	-	-	50x → 100x	
1707771-62	W-63-INT_072617_SED_05-10_R3	0.5871	200	-	-	-	50x → 100x	
1707771-63	W-MM-01_072617_SED_03-05	0.5411	200	-	-	-	50x → 100x	
1707771-64	W-MM-01_072617_SED_05-10	0.5403	200	-	-	-	50x → 50x	
1707771-65	W-104-INTA_072617_SED_03-05_R1	0.587	200	-	-	-	50x	
1707771-66	W-104-INTA_072617_SED_03-05_R2	0.5361	200	-	-	-	50x	
1707771-67	W-104-INTA_072617_SED_03-05_R3	0.5841	200	-	-	-	50x	
1707771-68	W-104-INTA_072617_SED_05-10	0.5388	200	QC	-	-	MS/MSD 50x	
1707771-69	W-MM-17_072617_SED_03-05_R1	0.566	200	-	-	-	50	
1707771-70	W-MM-17_072617_SED_03-05_R2	0.5563	200	-	-	-	50x	
1707771-71	W-MM-17_072617_SED_03-05_R3	0.523	200	-	-	-	50x	
1707771-72	W-MM-17_072617_SED_05-10	0.5882	200	-	-	-	50x → 10x	

Due Date: 8/24/2017

PREPARATION BENCH SHEET

BC 8/17/17  
2600-2

F708428

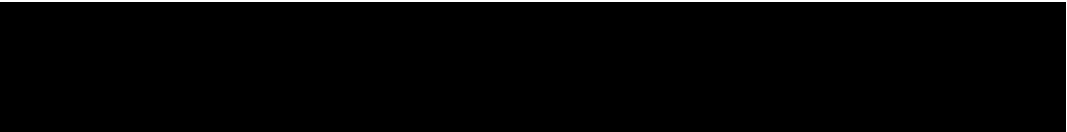
Eurofins Frontier Global Sciences, Inc.

Matrix: Soil/Sediment

Prepared using: Trace Metals - EPA 7474

Prepared: 8/15/2017

1707771-73	W-MM-02_072617_SED_03-05	0.5276	200	-	-	-	50x	
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Technician: Dmylen

Batch#: F708428

Date: 8/15/17

EFAFS-T-AFS-SOP2986 Tissues - Methyl Mercury - KOH/Methanol: Hot plate 75±5°C for 2-4 hours.

EFAFS-T-AFS-SOP2795 Tissues - Total Mercury - 70:30: Hot plate 75±5°C for two hours.

EFAFS-T-AFS-SOP5134 Sediments - Methyl Mercury - KBr/CH<sub>2</sub>Cl<sub>2</sub>: Heat Block 45°C (nitrogen purge for 30 minutes).

EFAFS-T-AFS-SOP2807 Solids - Total Mercury - Cold AR: 18-25°C for over four hours.

Other: EPA 7474

Balance#: 19 Calibrated?  Yes  No

Therm.#: N/A Calibrated?  Yes  No

Vial Type:  Glass  Teflon

\*Time in: N/A Actual Temp. (raw): N/A °C w/ CF: N/A °C

Time out: N/A Actual Temp. (raw): N/A °C w/ CF: N/A °C

\*Time in can't begin before target temperature is reached

Final vol.: 25 mL (LIMS ID: ROH20) Spike vol.: 40 µL (LIMS ID: 1707763)

Spike Witness: BC 8/15/17 (initial and date)

HCl LIMS ID: 1704640

Pipette SN#: MU11617 Calibration Date: 8-9-17

HNO<sub>3</sub> LIMS ID: 1704484

Pipette SN#: NU07693 Calibration Date: 8/9/17

70/30 LIMS ID: N/A

Dispenser #: 09W45351 Calibrated?  Yes  No

Other Acid LIMS ID: 1704959

Dispenser #: 0842293 yes

15pt Glass Vial # J264713-3025 Boiling Chip lot # 1704424 \*Hotblock Position: N/A


Vial #	Sample ID Number	Sample Size <input type="checkbox"/> mL <input checked="" type="checkbox"/> g	Vial #	Sample ID Number	Sample Size <input type="checkbox"/> mL <input checked="" type="checkbox"/> g	CRM LIMS ID <input checked="" type="checkbox"/> NA
1	F708428 Blk1	0.5187	23 8	F708428-MS12	0.5515	
2	F708428 Blk2	0.5647	24 9	1707771-69	0.5660	
3	F708428 BS1	0.5964	25 10	1707771-70	0.5563	
4	F708428 BS01	0.5779	26 11	1707771-71	0.5230	Comments
5	1707771-54A	0.5418	27 12	1707771-72	0.5882	F708428 source
6	1707771-55A	0.5811	28 13	1707771-73	0.5276	MS1 MS01 = 1707771-59
7	1707771-56	0.5604	29			
8	1707771-57	0.5418	30			
9	1707771-58	0.5868	31			
10	1707771-59	0.5496	32			F708428 MS2 MS02 = 1707771-68
11	F708428 MS1	0.5967	33			
12	F708428 MS01	0.5952	34			
13	1707771-60	0.5589	35			All spike MS1 MS01 = 10,000 µg/lz = 50 µl 1703591
14	1707771-61	0.5797	36			
15	1707771-62	0.5871	37			
16 1	1707771-63	0.5411	38			
17 2	1707771-64	0.5403	39			Vials # 9 1707771-69
18 3	1707771-65	0.5870	40			
19 4	1707771-66	0.5361	41			Vials # 10 1707771-70
20 5	1707771-67	0.5841	42			
21 6	1707771-68	0.5388	43			Vials # 10 1707771-71
22 7	F708428-MS2	0.5520	44			8/15/17

**Failing Data Report - 7H18017**

Sample ID	Analysis	Result	MRL	Dup Result	Source Result	True Value	Units	% Rec.	Rec. LCL	Rec. UCL	RPD	RPD Limit	Over Cal	Failure	Qualifier
1707771-60	Hg-CVAFS-S-7474	2180	48.9				ng/g						FAIL-OVER	PASS	E ✓
1707771-61	Hg-CVAFS-S-7474	2010	47.4				ng/g						FAIL-OVER	PASS	E ✓
1707771-62	Hg-CVAFS-S-7474	2070	47.1				ng/g						FAIL-OVER	PASS	E ✓
1707771-63	Hg-CVAFS-S-7474	3440	83.6				ng/g						FAIL-OVER	PASS	E ✓
F708400-MS1	Hg-CVAFS-S-7474	688.4	144		77.58	901.24	ng/g	67.8	71.00	125.00			PASS-OVER	FAIL-MS	QM-07 ✓
F708400-MSD1	Hg-CVAFS-S-7474	865.3	143	688.4	77.58	897.85	ng/g	87.7	71.00	125.00	25.7	24.00	PASS-OVER	FAIL-MSD (RPD)	QR-08 ✓

Don Moran  
 Analyst Reviewed By

8/18/17  
 Date

  
 Peer Reviewed By

8-23-17  
 Date



**Peer Review Check List for THg by 2600 CV-AFS (SOP2822) 2016 Rev 1 (04/1/2016)**

<b>Analyst:</b>	BLAKE CASSIDY	<b>Sequence(s) #:</b>	7H18017, 7H18016
<b>Reviewer:</b>	0 <i>R 8/18/17</i>	<b>Dataset ID(s):</b>	THG26002-170817-1
<b>Date:</b>	8/18/2017	<b>WO (s) #:</b>	1707810, 1708087, 1707771
<b>Batch #(s):</b>	F708400, F708444, F708428		0

Analyst Initials DM                      Reviewer Initials R 8/18/17

- 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 consistent with the data review flowcharts?  YES     NO     N/A      
 Comments: \_\_\_\_\_
12. Explain any items on the failed data report from Element   
 Comments: 1707771-60,61,62,63 HIGH SAMPLES. ABOVE CAL5. F708400-MS1 FAILED. LOW RECOVERY. F708400-MSD1 FAILED. HIGH RPD
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 (SOP2822) 2016 Rev 1 (04/1/2016)**

<b>Analyst:</b>	BLAKE CASSIDY	<b>Sequence(s) #:</b>	7H18017, 7H18016
<b>Reviewer:</b>	0 <i>R 8/18/17</i>	<b>Dataset ID(s):</b>	THG26002-170817-1
<b>Date:</b>	8/18/2017	<b>WO (s) #:</b>	1707810, 1708087, 1707771
<b>Batch #(s):</b>	F708400, F708444, F708428		0

Analyst Initials DM                      Reviewer Initials R 8/18/17

- |  |  |                               |   |
|--|--|-------------------------------|---|
| 20. MS/MSD Spiked at least 1-5 X ambient or 5x MRL (whichever is higher) ?   | <input checked="" type="checkbox"/> YES  | <input type="checkbox"/> NO   | <input checked="" type="checkbox"/>   |
| Comments: _____  |  |                               |   |
| 21. Are all samples within instrument calibration range? (or at minimum dilution size)   | <input checked="" type="checkbox"/> PASS | <input type="checkbox"/> FAIL | <input checked="" type="checkbox"/>   |
| Comments: _____  |  |                               |   |
| 22. Are the samples run at the correct dilution level for the method?  | <input checked="" type="checkbox"/> YES  | <input type="checkbox"/> NO   | <input checked="" type="checkbox"/>   |
| Comments: _____  |  |                               |   |
| 23. Dissolved < Total (if applicable)  | <input type="checkbox"/> YES             | <input type="checkbox"/> NO   | <input checked="" type="checkbox"/> N/A <input checked="" type="checkbox"/> |
| Comments: _____  |  |                               |   |
| 24. Effluent < Influent (visually confirm if needed)   | <input type="checkbox"/> YES             | <input type="checkbox"/> NO   | <input checked="" type="checkbox"/> N/A <input checked="" type="checkbox"/> |
| Comments: _____  |  |                               |   |
| 25. Are re-runs noted with reason?   | <input checked="" type="checkbox"/> YES  | <input type="checkbox"/> NO   | <input type="checkbox"/> N/A <input checked="" type="checkbox"/>            |
| 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? | <input checked="" type="checkbox"/> YES  | <input type="checkbox"/> NO   | <input type="checkbox"/> N/A <input checked="" type="checkbox"/>            |
| Comments: _____  |  |                               |   |
| 27. Is the B trap <5% A Traps  | <input checked="" type="checkbox"/> YES  | <input type="checkbox"/> NO   | <input type="checkbox"/> N/A <input checked="" type="checkbox"/>            |
| Comments: _____  |  |                               |   |
| 28. Are spiked trap recoveries 75-125% of true value?  | <input type="checkbox"/> YES             | <input type="checkbox"/> NO   | <input checked="" type="checkbox"/> N/A <input checked="" type="checkbox"/> |
| Comments: _____  |  |                               |   |
| 29. Have non-reportable samples been imported into LIMS and clicked to non-reportable?   | <input checked="" type="checkbox"/> YES  | <input type="checkbox"/> NO   | <input type="checkbox"/> N/A <input checked="" type="checkbox"/>            |
| Comments: _____  |  |                               |   |
| 30. Have re-extracts been created for non-reportable samples?  | <input type="checkbox"/> YES             | <input type="checkbox"/> NO   | <input checked="" type="checkbox"/> N/A <input type="checkbox"/>            |
| 31. Are there any HIGH QA projects within the data? If so, place data package in QA office before scanning.  | <input type="checkbox"/> YES             | <input type="checkbox"/> NO   | <input checked="" type="checkbox"/> N/A <input checked="" type="checkbox"/> |
| 32. Does the data set need scanning?   | <input type="checkbox"/> YES             |                               | <input checked="" type="checkbox"/> N/A <input checked="" type="checkbox"/> |
| 33. Does the dataset have an LOQ/LOQ or DOC?   | <input type="checkbox"/> YES             |                               | <input checked="" type="checkbox"/> N/A <input checked="" type="checkbox"/> |
| 34. Water samples: has the preservation log been included in dataset for final volume verification?  | <input type="checkbox"/> YES             | <input type="checkbox"/> NO   | <input checked="" type="checkbox"/> N/A <input checked="" type="checkbox"/> |
| 35. Water samples-is the final volume correct in the sequence?   | <input type="checkbox"/> YES             | <input type="checkbox"/> NO   | <input checked="" type="checkbox"/> N/A <input checked="" type="checkbox"/> |
- Files located at: \\Cuprum\gen\_admin\Quality Assurance\Training Master\DOCs
- |  |   |                             |                                     |
|--|---|-----------------------------|-------------------------------------|
| 36. Date of analyst IDOC/CDOC: _____ 1/11/2017 _____ IDOC/CDOC within last 12 months?          | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> |
| 37. Date of analyst's SOP reading for method: _____ 5/20/2017 _____ Current SOP revision read? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> |
| 38. Date of LOD: _____ 4/27/17, 4/25/17 _____ LOD within last 3 months?                        | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> |
| 39. Date of LOQ: _____ 4/27/17, 4/25/17 _____ LOQ within last 3 months?                        | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> |

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







Frontier Global Sciences

THg26002-170818-1

Analysis Datasheet for Total Mercury

Date of Analysis: August 18, 2017

Analyst: BC

Instrument #: Hg2600-2

Units ng/L

LIMS Sequence #: 7H21011, 7H21012

Calibration Statistics:

LabNumber	n	True Val	Area	Uncorrected Response Factor	Corrected Peak Height	Corrected Response Factor	% Recovery
SEQ-CAL1	1	0.50 ng/L	61.08 units	122.16	53.85 units	107.71	102.9 %Rec
SEQ-CAL2	1	1.00 ng/L	114.07 units	114.07	106.84 units	106.84	102.1 %Rec
SEQ-CAL3	1	5.00 ng/L	535.62 units	107.12	528.39 units	105.68	100.9 %Rec
SEQ-CAL4	1	20.00 ng/L	2060.97 units	103.05	2053.74 units	102.69	98.1 %Rec
SEQ-CAL5	1	40.00 ng/L	4028.93 units	100.72	4021.70 units	100.54	96.0 %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**  
 104.69            +/- 3.00            2.9% RSD            109.43

Blanks:

LabNumber	n	Mean	Std Dev	Mean (ng/L)	Std Dev (ng/L)
SEQ-IBL	3	7.23 units	±1.25	0.07 ng/L	±0.01

Preparation Blanks

Sample Type	Batch ID	n	Mean	Std Dev
BLK	1	2	1.110 ng/L	±0.068
BLK	2	2	0.950 ng/L	±0.595
BLK	3	2	3.342 ng/L	±2.042
BLK	4	2	2.416 ng/L	±0.877
BLK	5	0	0.000 ng/L	
BLK	6	0	0.000 ng/L	

QUALITY ASSURANCE  
 PEER - REVIEWED  
 INITIALS: DM 8/21/17

Instrument	Analyst	Sample		Dilution	Analyzed	FileID	RunEnd	Uncorrected Response	Batch ID	No PB		InitialResult	FinalResult	InitialUnits	Comments
		Type	LabNumber							Correction?	RESP				
Hg2600-2	BC	CAL	SEQ-IBL1	1	8/18/2017 8:49:41	83384-1.RAW	8:49:41 AM	6.05			-1.2	-0.011	-0.011	ng/L	
Hg2600-2	BC	CAL	SEQ-IBL2	1	8/18/2017 8:53:50	83385-1.RAW	8:53:50 AM	8.54			1.3	0.013	0.013	ng/L	
Hg2600-2	BC	CAL	SEQ-IBL3	1	8/18/2017 8:57:58	83386-1.RAW	8:57:58 AM	7.09			-0.1	-0.001	-0.001	ng/L	
Hg2600-2	BC	CAL	SEQ-CAL1	1	8/18/2017 9:02:06	83387-1.RAW	9:02:06 AM	61.08			53.9	0.514	0.514	ng/L	
Hg2600-2	BC	CAL	SEQ-CAL2	1	8/18/2017 9:06:15	83388-1.RAW	9:06:15 AM	114.07			106.8	1.021	1.021	ng/L	
Hg2600-2	BC	CAL	SEQ-CAL3	1	8/18/2017 9:10:23	83389-1.RAW	9:10:23 AM	535.62			528.4	5.047	5.047	ng/L	
Hg2600-2	BC	CAL	SEQ-CAL4	1	8/18/2017 9:14:32	83390-1.RAW	9:14:32 AM	2060.97			2053.7	19.617	19.617	ng/L	
Hg2600-2	BC	CAL	SEQ-CAL5	1	8/18/2017 9:18:40	83391-1.RAW	9:18:40 AM	4028.93			4021.7	38.415	38.415	ng/L	
Hg2600-2	BC	CAL	SEQ-ICV1	1	8/18/2017 9:22:49	83392-1.RAW	9:22:49 AM	543.03			535.8	5.118	5.118	ng/L	
Hg2600-2	BC	SAM	ws		8/18/2017 9:31:59	83393-1.RAW	9:31:59 AM	33.82		x	26.6	0.254	0.000	ng/L	
Hg2600-2	BC	BLK	F708437-BLK1	50	8/18/2017 9:36:07	83394-1.RAW	9:36:07 AM	9.65	1		2.4	0.023	1.157	ng/L	
Hg2600-2	BC	BLK	F708437-BLK2	50	8/18/2017 9:40:17	83395-1.RAW	9:40:17 AM	9.45	1		2.2	0.021	1.062	ng/L	
Hg2600-2	BC	SAM	F708437-BS1	400	8/18/2017 9:44:25	83396-1.RAW	9:44:25 AM	738.98	1		731.8	6.987	2794.732	ng/L	
Hg2600-2	BC	SAM	F708437-BSD1	400	8/18/2017 9:48:34	83397-1.RAW	9:48:34 AM	707.99	1		700.8	6.691	2676.327	ng/L	
Hg2600-2	BC	SAM	1708380-01	50	8/18/2017 9:52:42	83398-1.RAW	9:52:42 AM	14.22	1		7.0	0.045	2.230	ng/L	
Hg2600-2	BC	SAM	1708380-02	50	8/18/2017 9:56:51	83399-1.RAW	9:56:51 AM	13.87	1		6.6	0.041	2.063	ng/L	
Hg2600-2	BC	SAM	F708437-DUP1	50	8/18/2017 10:00:59	83400-1.RAW	10:00:59 AM	13.39	1		6.2	0.037	1.834	ng/L	
Hg2600-2	BC	SAM	F708437-MS1	400	8/18/2017 10:05:07	83401-1.RAW	10:05:07 AM	713.79	1		706.6	6.746	2698.487	ng/L	
Hg2600-2	BC	BLK	F708445-BLK1	10	8/18/2017 10:09:16	83402-1.RAW	10:09:16 AM	21.58	2		14.4	0.137	1.371	ng/L	
Hg2600-2	BC	BLK	F708445-BLK2	10	8/18/2017 10:13:24	83403-1.RAW	10:13:24 AM	12.77	2		5.5	0.053	0.529	ng/L	
Hg2600-2	BC	CAL	SEQ-CCV1	1	8/18/2017 10:17:33	83404-1.RAW	10:17:33 AM	526.91			519.7	4.964	4.964	ng/L	
Hg2600-2	BC	CAL	SEQ-CCB1	1	8/18/2017 10:21:41	83405-1.RAW	10:21:41 AM	15.65			8.4	0.080	0.080	ng/L	
Hg2600-2	BC	SAM	F708445-BS1	10	8/18/2017 10:25:49	83406-1.RAW	10:25:49 AM	2144.01	2		2136.8	20.315	203.152	ng/L	
Hg2600-2	BC	SAM	F708445-BSD1	10	8/18/2017 10:29:58	83407-1.RAW	10:29:58 AM	2136.46	2		2129.2	20.243	202.431	ng/L	
Hg2600-2	BC	SAM	1707771-74	50	8/18/2017 10:34:06	83408-1.RAW	10:34:06 AM	90.74	2		83.5	0.779	38.935	ng/L	
Hg2600-2	BC	SAM	1707771-75	50	8/18/2017 10:38:15	83409-1.RAW	10:38:15 AM	2323.66	2		2316.4	22.107	1105.362	ng/L	
Hg2600-2	BC	SAM	1707771-76	50	8/18/2017 10:42:23	83410-1.RAW	10:42:23 AM	2148.47	2		2141.2	20.434	1021.692	ng/L	
Hg2600-2	BC	SAM	1707771-77	50	8/18/2017 10:46:32	83411-1.RAW	10:46:32 AM	1919.56	2		1912.3	18.247	912.366	ng/L	
Hg2600-2	BC	SAM	1707771-78	50	8/18/2017 10:50:40	83412-1.RAW	10:50:40 AM	1903.99	2		1896.8	18.099	904.930	ng/L	
Hg2600-2	BC	SAM	1707771-79	50	8/18/2017 10:54:48	83413-1.RAW	10:54:48 AM	2231.98	2		2224.8	21.232	1061.576	ng/L	
Hg2600-2	BC	SAM	1707771-80	50	8/18/2017 10:58:57	83414-1.RAW	10:58:57 AM	-760.98	2		753.8	7.181	359.037	ng/L	
Hg2600-2	BC	SAM	1707771-81	50	8/18/2017 11:03:06	83415-1.RAW	11:03:06 AM	1945.60	2		1938.4	18.496	924.803	ng/L	
Hg2600-2	BC	CAL	SEQ-CCV2	1	8/18/2017 11:07:15	83416-1.RAW	11:07:15 AM	544.91			537.7	5.136	5.136	ng/L	
Hg2600-2	BC	CAL	SEQ-CCB2	1	8/18/2017 11:11:23	83417-1.RAW	11:11:23 AM	54.23			47.0	0.449	0.449	ng/L	
Hg2600-2	BC	SAM	1707771-82	50	8/18/2017 11:15:32	83418-1.RAW	11:15:32 AM	2734.84	2		2727.6	26.035	1301.738	ng/L	
Hg2600-2	BC	SAM	1707771-83	50	8/18/2017 11:19:40	83419-1.RAW	11:19:40 AM	2325.11	2		2317.9	22.121	1106.054	ng/L	
Hg2600-2	BC	SAM	1707771-84	50	8/18/2017 11:23:49	83420-1.RAW	11:23:49 AM	3030.63	2		3023.4	28.860	1443.006	ng/L	
Hg2600-2	BC	SAM	1707771-85	50	8/18/2017 11:27:57	83421-1.RAW	11:27:57 AM	3112.31	2		3105.1	29.640	1482.015	ng/L	
Hg2600-2	BC	SAM	1707771-86	50	8/18/2017 11:32:06	83422-1.RAW	11:32:06 AM	2603.37	2		2596.1	24.779	1238.949	ng/L	
Hg2600-2	BC	SAM	1707771-87	50	8/18/2017 11:36:14	83423-1.RAW	11:36:14 AM	1618.66	2		1611.4	15.373	768.659	ng/L	
Hg2600-2	BC	SAM	1707771-88	50	8/18/2017 11:40:22	83424-1.RAW	11:40:22 AM	2860.89	2		2853.7	27.239	1361.939	ng/L	
Hg2600-2	BC	SAM	1707771-89	50	8/18/2017 11:44:31	83425-1.RAW	11:44:31 AM	1837.12	2		1829.9	17.460	872.994	ng/L	
Hg2600-2	BC	SAM	1707771-90	50	8/18/2017 11:48:39	83426-1.RAW	11:48:39 AM	2181.26	2		2174.0	20.747	1037.353	ng/L	
Hg2600-2	BC	SAM	1707771-91	50	8/18/2017 11:52:48	83427-1.RAW	11:52:48 AM	2408.57	2		2401.3	22.918	1145.914	ng/L	
Hg2600-2	BC	CAL	SEQ-CCV3	1	8/18/2017 11:56:56	83428-1.RAW	11:56:56 AM	569.24			562.0	5.368	5.368	ng/L	
Hg2600-2	BC	CAL	SEQ-CCB3	1	8/18/2017 12:01:04	83429-1.RAW	12:01:04 PM	46.13			38.9	0.372	0.372	ng/L	
Hg2600-2	BC	SAM	1707771-92	50	8/18/2017 12:05:13	83430-1.RAW	12:05:13 PM	4888.39	2		4881.2	46.605	2330.258	ng/L	
Hg2600-2	BC	SAM	1707771-93	50	8/18/2017 12:09:21	83431-1.RAW	12:09:21 PM	2394.57	2		2387.3	22.785	1139.228	ng/L	
Hg2600-2	BC	SAM	F708445-MS1	400	8/18/2017 12:13:30	83432-1.RAW	12:13:30 PM	878.05	2		870.8	8.316	3326.242	ng/L	
Hg2600-2	BC	SAM	F708445-MSD1	400	8/18/2017 12:17:38	83433-1.RAW	12:17:38 PM	881.87	2		874.6	8.352	3340.837	ng/L	
Hg2600-2	BC	SAM	F708445-MS2	400	8/18/2017 12:21:47	83434-1.RAW	12:21:47 PM	822.97	2		815.7	7.789	3115.795	ng/L	
Hg2600-2	BC	SAM	F708445-MSD2	400	8/18/2017 12:25:55	83435-1.RAW	12:25:55 PM	891.07	2		883.8	8.440	3375.988	ng/L	
Hg2600-2	BC	SAM	1707771-74RE1	10	8/18/2017 12:30:03	83436-1.RAW	12:30:03 PM	325.90	2		318.7	2.949	29.489	ng/L	
Hg2600-2	BC	SAM	1707771-92RE1	100	8/18/2017 12:34:12	83437-1.RAW	12:34:12 PM	2439.29	2		2432.1	23.221	2322.122	ng/L	
Hg2600-2	BC	SAM	1707771-93RE1	50	8/18/2017 12:38:20	83438-1.RAW	12:38:20 PM	2377.53	2		2370.3	22.622	1131.090	ng/L	
Hg2600-2	BC	BLK	F708446-BLK1	10	8/18/2017 12:42:29	83439-1.RAW	12:42:29 PM	57.33	3		50.1	0.479	4.786	ng/L	
Hg2600-2	BC	CAL	SEQ-CCV4	1	8/18/2017 12:46:37	83440-1.RAW	12:46:37 PM	533.00			525.8	5.022	5.022	ng/L	

Instrument	Analyst	Sample Type	LabNumber	Dilution	Analyzed	FileID	RunEnd	Uncorrected Response	Batch ID	No PB Correction?	RESP	InitialResult	FinalResult	InitialUnits	Comments
Hg2600-2	BC	CAL	SEQ-CCB4	1	8/18/2017 12:50:45	83441-1.RAW	12:50:45 PM	33.14			25.9	0.248	0.248	ng/L	
Hg2600-2	BC	BLK	F708446-BLK2	10	8/18/2017 12:54:54	83442-1.RAW	12:54:54 PM	27.10	3		19.9	0.190	1.898	ng/L	
Hg2600-2	BC	SAM	F708446-BS1	10	8/18/2017 12:59:02	83443-1.RAW	12:59:02 PM	2178.30	3		2171.1	20.404	204.036	ng/L	
Hg2600-2	BC	SAM	F708446-BSD1	10	8/18/2017 13:03:11	83444-1.RAW	1:03:11 PM	2264.91	3		2257.7	21.231	212.309	ng/L	
Hg2600-2	BC	SAM	1707771-94	50	8/18/2017 13:07:19	83445-1.RAW	1:07:19 PM	3064.66	3		3057.4	29.137	1456.866	ng/L	
Hg2600-2	BC	SAM	1707771-95	50	8/18/2017 13:11:28	83446-1.RAW	1:11:28 PM	2601.92	3		2594.7	24.717	1235.865	ng/L	
Hg2600-2	BC	SAM	1707771-96	50	8/18/2017 13:15:36	83447-1.RAW	1:15:36 PM	6400.12	3		6392.9	60.997	3049.858	ng/L	
Hg2600-2	BC	SAM	1707771-97	50	8/18/2017 13:19:44	83448-1.RAW	1:19:44 PM	2361.80	3		2354.6	22.424	1121.185	ng/L	
Hg2600-2	BC	SAM	1707771-98	50	8/18/2017 13:23:53	83449-1.RAW	1:23:53 PM	2384.93	3		2377.7	22.645	1132.232	ng/L	
Hg2600-2	BC	SAM	1707771-99	50	8/18/2017 13:28:01	83450-1.RAW	1:28:01 PM	2561.60	3		2554.4	24.332	1216.608	ng/L	
Hg2600-2	BC	SAM	1707771-AA	50	8/18/2017 13:32:10	83451-1.RAW	1:32:10 PM	3514.24	3		3507.0	33.432	1671.582	ng/L	
Hg2600-2	BC	CAL	SEQ-CCV5	1	8/18/2017 13:36:18	83452-1.RAW	1:36:18 PM	593.10			585.9	5.596	5.596	ng/L	
Hg2600-2	BC	CAL	SEQ-CCB5	1	8/18/2017 13:40:27	83453-1.RAW	1:40:27 PM	52.75			45.5	0.435	0.435	ng/L	
Hg2600-2	BC	SAM	ws		8/18/2017 13:50:37	83454-1.RAW	1:50:37 PM	105.76	x		98.5	0.941	0.000	ng/L	
Hg2600-2	BC	SAM	1707771-AB	50	8/18/2017 13:54:45	83455-1.RAW	1:54:45 PM	2583.23	3		2576.0	24.539	1226.939	ng/L	
Hg2600-2	BC	SAM	1707771-AC	50	8/18/2017 13:58:53	83456-1.RAW	1:58:53 PM	1953.68	3		1946.5	18.525	926.270	ng/L	
Hg2600-2	BC	SAM	1707771-AD	50	8/18/2017 14:03:02	83457-1.RAW	2:03:02 PM	1854.88	3		1847.7	17.582	879.084	ng/L	
Hg2600-2	BC	SAM	1707771-AE	50	8/18/2017 14:07:10	83458-1.RAW	2:07:10 PM	822.23	3		815.0	7.718	385.898	ng/L	
Hg2600-2	BC	SAM	1707771-AF	50	8/18/2017 14:11:19	83459-1.RAW	2:11:19 PM	639.19	3		632.0	5.970	298.479	ng/L	
Hg2600-2	BC	SAM	1707771-AG	50	8/18/2017 14:15:27	83460-1.RAW	2:15:27 PM	1237.43	3		1230.2	11.684	584.194	ng/L	
Hg2600-2	BC	SAM	1707771-AH	50	8/18/2017 14:19:35	83461-1.RAW	2:19:35 PM	1654.27	3		1647.0	15.665	783.274	ng/L	
Hg2600-2	BC	SAM	1707771-AI	50	8/18/2017 14:23:44	83462-1.RAW	2:23:44 PM	202.34	3		195.1	1.797	89.843	ng/L	
Hg2600-2	BC	SAM	1707771-AJ	50	8/18/2017 14:27:52	83463-1.RAW	2:27:52 PM	1575.09	3		1567.9	14.909	745.458	ng/L	
Hg2600-2	BC	SAM	1707771-AK	50	8/18/2017 14:32:01	83464-1.RAW	2:32:01 PM	2366.26	3		2359.0	22.466	1123.315	ng/L	
Hg2600-2	BC	CAL	SEQ-CCV6	1	8/18/2017 14:36:09	83465-1.RAW	2:36:09 PM	572.09			564.9	5.395	5.395	ng/L	
Hg2600-2	BC	CAL	SEQ-CCB6	1	8/18/2017 14:40:18	83466-1.RAW	2:40:18 PM	49.05			41.8	0.399	0.399	ng/L	
Hg2600-2	BC	SAM	1707771-AL	50	8/18/2017 14:44:26	83467-1.RAW	2:44:26 PM	1903.22	3		1896.0	18.043	902.171	ng/L	
Hg2600-2	BC	SAM	1707771-AM	50	8/18/2017 14:48:34	83468-1.RAW	2:48:34 PM	1708.60	3		1701.4	16.184	809.222	ng/L	
Hg2600-2	BC	SAM	1707771-AN	50	8/18/2017 14:52:43	83469-1.RAW	2:52:43 PM	1542.33	3		1535.1	14.596	729.812	ng/L	
Hg2600-2	BC	SAM	F708446-MS1	400	8/18/2017 14:56:51	83470-1.RAW	2:56:51 PM	1067.87	3		1060.6	10.123	4049.103	ng/L	
Hg2600-2	BC	SAM	F708446-MSD1	400	8/18/2017 15:01:00	83471-1.RAW	3:01:00 PM	1108.42	3		1101.2	10.510	4204.035	ng/L	
Hg2600-2	BC	SAM	F708446-MS2	400	8/18/2017 15:05:08	83472-1.RAW	3:05:08 PM	775.52	3		768.3	7.330	2932.109	ng/L	
Hg2600-2	BC	SAM	F708446-MSD2	400	8/18/2017 15:09:16	83473-1.RAW	3:09:16 PM	753.75	3		746.5	7.122	2848.932	ng/L	
Hg2600-2	BC	SAM	1707771-96RE1	100	8/18/2017 15:13:25	83474-1.RAW	3:13:25 PM	3256.90	3		3249.7	31.007	3100.699	ng/L	
Hg2600-2	BC	SAM	1707771-97RE1	50	8/18/2017 15:17:33	83475-1.RAW	3:17:33 PM	2301.42	3		2294.2	21.847	1092.348	ng/L	
Hg2600-2	BC	SAM	*F708400-BLK3	10	8/18/2017 15:21:42	83476-1.RAW	3:21:42 PM	74.04	4		66.8	0.397	3.966	ng/L	
Hg2600-2	BC	CAL	SEQ-CCV7	1	8/18/2017 15:25:50	83477-1.RAW	3:25:50 PM	565.40			558.2	5.332	5.332	ng/L	
Hg2600-2	BC	CAL	SEQ-CCB7	1	8/18/2017 15:29:59	83478-1.RAW	3:29:59 PM	34.78			27.6	0.263	0.263	ng/L	
Hg2600-2	BC	BLK	F708400-BLK4	10	8/18/2017 15:34:07	83479-1.RAW	3:34:07 PM	26.02	4		18.8	0.180	1.795	ng/L	
Hg2600-2	BC	BLK	F708400-BLK5	10	8/18/2017 15:38:15	83480-1.RAW	3:38:15 PM	39.01	4		31.8	0.304	3.036	ng/L	
Hg2600-2	BC	SAM	F708400-MS3	50	8/18/2017 15:42:24	83481-1.RAW	3:42:24 PM	2544.87	4		2537.6	24.191	1209.545	ng/L	
Hg2600-2	BC	SAM	F708400-MSD3	50	8/18/2017 15:46:32	83482-1.RAW	3:46:32 PM	2627.69	4		2620.5	24.982	1249.099	ng/L	
Hg2600-2	BC	CAL	SEQ-CCV8	1	8/18/2017 15:50:41	83483-1.RAW	3:50:41 PM	570.18			563.0	5.377	5.377	ng/L	
Hg2600-2	BC	CAL	SEQ-CCB8	1	8/18/2017 15:54:49	83484-1.RAW	3:54:49 PM	38.18			31.0	0.296	0.296	ng/L	

TotalMercury EPA1631  
 Operati BC BlankSi 7.2255 Calib Eqn: Conc = (Area-7.225 Run Date: 8/18/2017 Blank SD: 1.253869733  
 Worksh THg260( CalibFa 104.69 Status: QC Warnings:12/QC Run Time: 13:46:27 Blank RSD%: 17.35349003  
 Method ##### R: 0.9999 R<sup>2</sup>: 0.9999 CF SD: 2.996002042  
 Descrip THg26002-170818-1 CF RSD%: 2.861756058

Sample/ID	Location	Rinse	Dilute	Blank	Conc (ppt)	MB%	FinalConc	Rec%	QA	RawData	RunEnd	Peak (Raw)	Control (etf)	Flags	RunCount
Clean				0.00	11.95					83379-1.RAW	8:30:16	1250.72	Clean	OK	1
clean				0.00	0.01					83380-1.RAW	8:33:08	0.79	Clean	OK	1
ws				7.23	0.04					83381-1.RAW	8:37:16	11.49	Sample	OK	1
ws				7.23	0.00					83382-1.RAW	8:41:24	6.85	Sample	OK	1
ws				7.23	0.00					83383-1.RAW	8:45:33	5.11	Sample	OK	1
SEQ-IBL1	A1		1	0.00	0.06					83384-1.RAW	8:49:41	6.05	Sample	OK	1
SEQ-IBL2	A2		1	0.00	0.08					83385-1.RAW	8:53:50	8.54	Sample	OK	1
SEQ-IBL3	A3		1	0.00	0.07					83386-1.RAW	8:57:58	7.09	Sample	OK	1
SEQ-CAL1	A4		1	7.23	0.51			102.88		83387-1.RAW	9:02:06	61.08	Sample	OK	1
SEQ-CAL2	A5		1	7.23	1.02			102.06		83388-1.RAW	9:06:15	114.07	Sample	OK	1
SEQ-CAL3	A6		1	7.23	5.05			100.94		83389-1.RAW	9:10:23	535.62	Sample	OK	1
SEQ-CAL4	A7		1	7.23	19.62			98.09		83390-1.RAW	9:14:32	2060.97	Sample	OK	1
SEQ-CAL5	A8		1	7.23	38.42			96.04		83391-1.RAW	9:18:40	4028.93	Sample	OK	1
SEQ-ICV1	A9		1	7.23	5.12			102.36		83392-1.RAW	9:22:49	543.03	Sample	OK	1
ws				7.23	0.25					83393-1.RAW	9:31:59	33.82	Sample	OK	1
F708437-BLK1	A10		50	7.23	1.16					83394-1.RAW	9:36:07	9.65	Sample	OK	1
F708437-BLK2	A11		50	7.23	1.06					83395-1.RAW	9:40:17	9.45	Sample	OK	1
F708437-BS1	A12		400	7.23	2795.87					83396-1.RAW	9:44:25	738.98	Sample	OK	1
F708437-BSD1	A13		400	7.23	2677.46					83397-1.RAW	9:48:34	707.99	Sample	OK	1
1708380-01	A14		50	7.23	3.34					83398-1.RAW	9:52:42	14.22	Sample	OK	1
1708380-02	A15		50	7.23	3.17					83399-1.RAW	9:56:51	13.87	Sample	OK	1
F708437-DUP1	A16		50	7.23	2.94					83400-1.RAW	10:00:59	13.39	Sample	OK	1
F708437-MS1	A17		400	7.23	2699.64		68448.44			83401-1.RAW	10:05:07	713.79	Sample	OK	1
F708445-BLK1	A18		10	7.23	1.37					83402-1.RAW	10:09:16	21.58	Sample	OK	1
F708445-BLK2	A19		10	7.23	0.53					83403-1.RAW	10:13:24	12.77	Sample	OK	1
SEQ-CCV1	A20		1	7.23	4.96			99.28		83404-1.RAW	10:17:33	526.91	Sample	OK	1
SEQ-CCB1	A21		1	7.23	0.08			0.00		83405-1.RAW	10:21:41	15.65	Sample	OK	1
F708445-BS1	B1		10	7.23	204.10					83406-1.RAW	10:25:49	2144.01	Sample	OK	1
F708445-BSD1	B2		10	7.23	203.38					83407-1.RAW	10:29:58	2136.46	Sample	OK	1
1707771-74	B3		50	7.23	39.88					83408-1.RAW	10:34:06	90.74	Sample	OK	1
1707771-75	B4		50	7.23	1106.32					83409-1.RAW	10:38:15	2323.66	Sample	OK	1
1707771-76	B5		50	7.23	1022.65					83410-1.RAW	10:42:23	2148.47	Sample	OK	1
1707771-77	B6		50	7.23	913.32					83411-1.RAW	10:46:32	1919.56	Sample	OK	1
1707771-78	B7		50	7.23	905.89					83412-1.RAW	10:50:40	1903.99	Sample	OK	1
1707771-79	B8		50	7.23	1062.53					83413-1.RAW	10:54:48	2231.98	Sample	OK	1
1707771-80	B9		50	7.23	359.99					83414-1.RAW	10:58:57	760.98	Sample	OK	1
1707771-81	B10		50	7.23	925.76					83415-1.RAW	11:03:06	1945.60	Sample	OK	1
SEQ-CCV2	B11		1	7.23	5.14			102.72		83416-1.RAW	11:07:15	544.91	Sample	OK	1
SEQ-CCB2	B12		1	7.23	0.45			0.00		83417-1.RAW	11:11:23	54.23	Sample	OK	1
1707771-82	B13		50	7.23	1302.70					83418-1.RAW	11:15:32	2734.84	Sample	OK	1
1707771-83	B14		50	7.23	1107.01					83419-1.RAW	11:19:40	2325.11	Sample	OK	1
1707771-84	B15		50	7.23	1443.97					83420-1.RAW	11:23:49	3030.63	Sample	FB	1
1707771-85	B16		50	7.23	1482.98					83421-1.RAW	11:27:57	3112.31	Sample	OK	1

1707771-86	B17	50	7.23	1239.91		83422-1.RAW	11:32:06	2603.37	Sample	OK	1
1707771-87	B18	50	7.23	769.61		83423-1.RAW	11:36:14	1618.66	Sample	OK	1
1707771-88	B19	50	7.23	1362.90		83424-1.RAW	11:40:22	2860.89	Sample	OK	1
1707771-89	B20	50	7.23	873.95		83425-1.RAW	11:44:31	1837.12	Sample	OK	1
1707771-90	B21	50	7.23	1038.31		83426-1.RAW	11:48:39	2181.26	Sample	OK	1
1707771-91	C1	50	7.23	1146.87		83427-1.RAW	11:52:48	2408.57	Sample	OK	1
SEQ-CCV3	C2	1	7.23	5.37	107.37	83428-1.RAW	11:56:56	569.24	Sample	OK	1
SEQ-CCB3	C3	1	7.23	0.37	0.00	83429-1.RAW	12:01:04	46.13	Sample	OK	1
1707771-92	C4	50	7.23	2331.22		83430-1.RAW	12:05:13	4888.39	Sample	OK	1
1707771-93	C5	50	7.23	1140.19		83431-1.RAW	12:09:21	2394.57	Sample	OK	1
F708445-MS1	C6	400	7.23	3327.20	291.56	83432-1.RAW	12:13:30	878.05	Sample	OK	1
F708445-MSD1	C7	400	7.23	3341.80		83433-1.RAW	12:17:38	881.87	Sample	OK	1
F708445-MS2	C8	400	7.23	3116.77	93.21	83434-1.RAW	12:21:47	822.97	Sample	OK	1
F708445-MSD2	C9	400	7.23	3376.96		83435-1.RAW	12:25:55	891.07	Sample	OK	1
1707771-74RE1	C10	10	7.23	30.44		83436-1.RAW	12:30:03	325.90	Sample	OK	1
1707771-92RE1	C11	100	7.23	2323.09		83437-1.RAW	12:34:12	2439.29	Sample	OK	1
1707771-93RE1	C12	50	7.23	1132.05		83438-1.RAW	12:38:20	2377.53	Sample	OK	1
F708446-BLK1	C13	10	7.23	4.79		83439-1.RAW	12:42:29	57.33	Sample	OK	1
SEQ-CCV4	C14	1	7.23	5.02	100.44	83440-1.RAW	12:46:37	533.00	Sample	OK	1
SEQ-CCB4	C15	1	7.23	0.25	0.00	83441-1.RAW	12:50:45	33.14	Sample	OK	1
F708446-BLK2	C16	10	7.23	1.90		83442-1.RAW	12:54:54	27.10	Sample	OK	1
F708446-BS1	C17	10	7.23	207.38		83443-1.RAW	12:59:02	2178.30	Sample	OK	1
F708446-BSD1	C18	10	7.23	215.65		83444-1.RAW	13:03:11	2264.91	Sample	OK	1
1707771-94	C19	50	7.23	1460.22		83445-1.RAW	13:07:19	3064.66	Sample	OK	1
1707771-95	C20	50	7.23	1239.22		83446-1.RAW	13:11:28	2601.92	Sample	OK	1
1707771-96	C21	50	7.23	3053.22		83447-1.RAW	13:15:36	6400.12	Sample	OK	1
1707771-97	A1	50	7.23	1124.53		83448-1.RAW	13:19:44	2361.80	Sample	OK	1
1707771-98	A2	50	7.23	1135.58		83449-1.RAW	13:23:53	2384.93	Sample	OK	1
1707771-99	A3	50	7.23	1219.96		83450-1.RAW	13:28:01	2561.60	Sample	OK	1
1707771-AA	A4	50	7.23	1674.94		83451-1.RAW	13:32:10	3514.24	Sample	OK	1
SEQ-CCV5	A5	1	7.23	5.60	111.92	83452-1.RAW	13:36:18	593.10	Sample	OK	1
SEQ-CCB5	A6	1	7.23	0.43	0.00	83453-1.RAW	13:40:27	52.75	Sample	OK	1
ws			7.23	0.94		83454-1.RAW	13:50:37	105.76	Sample	OK	1
1707771-AB	A7	50	7.23	1230.29		83455-1.RAW	13:54:45	2583.23	Sample	OK	1
1707771-AC	A8	50	7.23	929.62		83456-1.RAW	13:58:53	1953.68	Sample	OK	1
1707771-AD	A9	50	7.23	882.43		83457-1.RAW	14:03:02	1854.88	Sample	OK	1
1707771-AE	A10	50	7.23	389.24		83458-1.RAW	14:07:10	822.23	Sample	OK	1
1707771-AF	A11	50	7.23	301.82		83459-1.RAW	14:11:19	639.19	Sample	OK	1
1707771-AG	A12	50	7.23	587.54		83460-1.RAW	14:15:27	1237.43	Sample	OK	1
1707771-AH	A13	50	7.23	786.62		83461-1.RAW	14:19:35	1654.27	Sample	OK	1
1707771-AI	A14	50	7.23	93.19		83462-1.RAW	14:23:44	202.34	Sample	OK	1
1707771-AJ	A15	50	7.23	748.81		83463-1.RAW	14:27:52	1575.09	Sample	OK	1
1707771-AK	A16	50	7.23	1126.66		83464-1.RAW	14:32:01	2366.26	Sample	OK	1
SEQ-CCV6	A17	1	7.23	5.40	107.91	83465-1.RAW	14:36:09	572.09	Sample	OK	1
SEQ-CCB6	A18	1	7.23	0.40	0.00	83466-1.RAW	14:40:18	49.05	Sample	OK	1
1707771-AL	A19	50	7.23	905.52		83467-1.RAW	14:44:26	1903.22	Sample	OK	1
1707771-AM	A20	50	7.23	812.57		83468-1.RAW	14:48:34	1708.60	Sample	OK	1
1707771-AN	A21	50	7.23	733.16		83469-1.RAW	14:52:43	1542.33	Sample	OK	1

F708446-MS1	B1	400	7.23	4052.49	551.99	83470-1.RAW	14:56:51	1067.87	Sample	OK	1
F708446-MSD1	B2	400	7.23	4207.40		83471-1.RAW	15:01:00	1108.42	Sample	OK	1
F708446-MS2	B3	400	7.23	2935.48	69.74	83472-1.RAW	15:05:08	775.52	Sample	OK	1
F708446-MSD2	B4	400	7.23	2852.30		83473-1.RAW	15:09:16	753.75	Sample	OK	1
1707771-96RE1	B5	100	7.23	3104.06		83474-1.RAW	15:13:25	3256.90	Sample	OK	1
1707771-97RE1	B6	50	7.23	1095.70		83475-1.RAW	15:17:33	2301.42	Sample	OK	1
*F708400-BLK3	B7	10	7.23	6.38		83476-1.RAW	15:21:42	74.04	Sample	OK	1
SEQ-CCV7	B8	1	7.23	5.33	106.63	83477-1.RAW	15:25:50	565.40	Sample	OK	1
SEQ-CCB7	B9	1	7.23	0.26	0.00	83478-1.RAW	15:29:59	34.78	Sample	OK	1
F708400-BLK4	B10	10	7.23	1.80		83479-1.RAW	15:34:07	26.02	Sample	OK	1
F708400-BLK5	B13	10	7.23	3.04		83480-1.RAW	15:38:15	39.01	Sample	OK	1
F708400-MS3	B11	50	7.23	1211.97	20079.61	83481-1.RAW	15:42:24	2544.87	Sample	OK	1
F708400-MSD3	B12	50	7.23	1251.52		83482-1.RAW	15:46:32	2627.69	Sample	OK	1
SEQ-CCV8	B14	1	7.23	5.38	107.54	83483-1.RAW	15:50:41	570.18	Sample	OK	1
SEQ-CCB8	B15	1	7.23	0.30	0.00	83484-1.RAW	15:54:49	38.18	Sample	OK	1

**ANALYSIS SEQUENCE**

**7H21011**



**Instrument: Hg2600-2**

**Calibration ID: UNASSIGNED**

**Analyzed: 8/18/2017**

Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
7H21011-IBL1	QC	1			
7H21011-IBL2	QC	2			
7H21011-IBL3	QC	3			
7H21011-CAL1	QC	4	1704505		
7H21011-CAL2	QC	5	1704506		
7H21011-CAL3	QC	6	1704507		
7H21011-CAL4	QC	7	1704508		
7H21011-CAL5	QC	8	1704509		
7H21011-ICV1	QC	9	1703679		
F708437-BLK1	QC	10			
F708437-BLK2	QC	11			
F708437-BS1	QC	12			
F708437-BSD1	QC	13			
1708380-01	Hg-CVAFS-S-Bomb	14			QG00L-1 - Prep 2.0-2.15 grams
1708380-02	Hg-CVAFS-S-Bomb	15			QG00L-1 - Prep 2.0-2.15 grams
F708437-DUP1	QC	16			
F708437-MS1	QC	17			
7H21011-CCV1	QC	18	1703679		
7H21011-CCB1	QC	19			

*Becis* 8/21/17

*Becis* 8/21/17

Samples Loaded By

Date

Data Processed By

Date

*loaded  
8/18/17*



## ANALYSIS SEQUENCE

7H21012



Instrument: Hg2600-2

Calibration ID: UNASSIGNED

Analyzed: 8/18/2017

Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
7H21012-IBL1	QC	1			
7H21012-IBL2	QC	2			
7H21012-IBL3	QC	3			
7H21012-CAL1	QC	4	1704505		
7H21012-CAL2	QC	5	1704506		
7H21012-CAL3	QC	6	1704507		
7H21012-CAL4	QC	7	1704508		
7H21012-CAL5	QC	8	1704509		
7H21012-ICV1	QC	9	1703679		
F708445-BLK1	QC	10			
F708445-BLK2	QC	11			
7H21012-CCV1	QC	12	1703679		
7H21012-CCB1	QC	13			
F708445-BS1	QC	14			
F708445-BSD1	QC	15			
1707771-74	Hg-CVAFS-S-7474	16			
1707771-75	Hg-CVAFS-S-7474	17			
1707771-76	Hg-CVAFS-S-7474	18			
1707771-77	Hg-CVAFS-S-7474	19			
1707771-78	Hg-CVAFS-S-7474	20			
1707771-79	Hg-CVAFS-S-7474	21			
1707771-80	Hg-CVAFS-S-7474	22			
1707771-81	Hg-CVAFS-S-7474	23			
7H21012-CCV2	QC	24	1703679		
7H21012-CCB2	QC	25			
1707771-82	Hg-CVAFS-S-7474	26			
1707771-83	Hg-CVAFS-S-7474	27			
1707771-84	Hg-CVAFS-S-7474	28			
1707771-85	Hg-CVAFS-S-7474	29			
1707771-86	Hg-CVAFS-S-7474	30			
1707771-87	Hg-CVAFS-S-7474	31			
1707771-88	Hg-CVAFS-S-7474	32			
1707771-89	Hg-CVAFS-S-7474	33			
1707771-90	Hg-CVAFS-S-7474	34			
1707771-91	Hg-CVAFS-S-7474	35			

Due Date: 8/24/2017

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## ANALYSIS SEQUENCE

7H21012



Instrument: Hg2600-2

Calibration ID: UNASSIGNED

Analyzed: 8/18/2017

Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
7H21012-CCV3	QC	36	1703679		
7H21012-CCB3	QC	37			
1707771-92	Hg-CVAFS-S-7474	38			
1707771-93	Hg-CVAFS-S-7474	39			
F708445-MS1	QC	40			
F708445-MSD1	QC	41			
F708445-MS2	QC	42			
F708445-MSD2	QC	43			
1707771-74RE1	Hg-CVAFS-S-7474	44			Added 8/21/2017 by BC
1707771-92RE1	Hg-CVAFS-S-7474	45			Added 8/21/2017 by BC
1707771-93RE1	Hg-CVAFS-S-7474	46			Added 8/21/2017 by BC
F708446-BLK1	QC	47			
7H21012-CCV4	QC	48	1703679		
7H21012-CCB4	QC	49			
F708446-BLK2	QC	50			
F708446-BS1	QC	51			
F708446-BSD1	QC	52			
1707771-94	Hg-CVAFS-S-7474	53			
1707771-95	Hg-CVAFS-S-7474	54			
1707771-96	Hg-CVAFS-S-7474	55			
1707771-97	Hg-CVAFS-S-7474	56			
1707771-98	Hg-CVAFS-S-7474	57			
1707771-99	Hg-CVAFS-S-7474	58			
1707771-AA	Hg-CVAFS-S-7474	59			
7H21012-CCV5	QC	60	1703679		
7H21012-CCB5	QC	61			
1707771-AB	Hg-CVAFS-S-7474	62			
1707771-AC	Hg-CVAFS-S-7474	63			
1707771-AD	Hg-CVAFS-S-7474	64			
1707771-AE	Hg-CVAFS-S-7474	65			
1707771-AF	Hg-CVAFS-S-7474	66			
1707771-AG	Hg-CVAFS-S-7474	67			
1707771-AH	Hg-CVAFS-S-7474	68			
1707771-AI	Hg-CVAFS-S-7474	69			
1707771-AJ	Hg-CVAFS-S-7474	70			

Due Date: 8/24/2017

430 of 886

Page 2 of 3

**ANALYSIS SEQUENCE**

**7H21012**



**Instrument: Hg2600-2**

**Calibration ID: UNASSIGNED**

**Analyzed: 8/18/2017**

Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
1707771-AK	Hg-CVAFS-S-7474	71			
7H21012-CCV6	QC	72	1703679		
7H21012-CCB6	QC	73			
1707771-AL	Hg-CVAFS-S-7474	74			
1707771-AM	Hg-CVAFS-S-7474	75			
1707771-AN	Hg-CVAFS-S-7474	76			
F708446-MS1	QC	77			
F708446-MSD1	QC	78			
F708446-MS2	QC	79			
F708446-MSD2	QC	80			
1707771-96RE1	Hg-CVAFS-S-7474	81			Added 8/21/2017 by BC
1707771-97RE1	Hg-CVAFS-S-7474	82			Added 8/21/2017 by BC
F708400-BLK3	QC	83			
7H21012-CCV7	QC	84	1703679		
7H21012-CCB7	QC	85			
F708400-BLK4	QC	86			
F708400-BLK5	QC	87			
F708400-MS3	QC	88			
F708400-MSD3	QC	89			
7H21012-CCV8	QC	90	1703679		
7H21012-CCB8	QC	91			

Be Cj 8/21/17  
 Samples Loaded By \_\_\_\_\_ Date \_\_\_\_\_  
 loaded 8/18/17

Be Cj 8/21/17  
 Data Processed By \_\_\_\_\_ Date \_\_\_\_\_

**Failing Data Report - 7H21011**


Sample ID	Analysis	Result	MRL	Dup Result	Source Result	True Value	Units	% Rec.	Rec. LCL	Rec. UCL	RPD	RPD Limit	Over Cal	Failure	Qualifier
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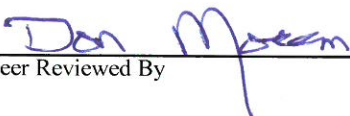
Becis      8/21/17  
Analyst Reviewed By      Date

Don Mason      8/21/17  
Peer Reviewed By      Date

**Failing Data Report - 7H21012**

Sample ID	Analysis	Result	MRL	Dup Result	Source Result	True Value	Units	% Rec.	Rec. LCL	Rec. UCL	RPD	RPD Limit	Over Cal	Failure	Qualifier
1707771-92	Hg-CVAFS-S-7474	2020	43.4				ng/g						FAIL-OVER	PASS	E
1707771-96	Hg-CVAFS-S-7474	3150	51.7				ng/g						FAIL-OVER	PASS	E

 8/21/17  
 Analyst Reviewed By Date

 8/21/17  
 Peer Reviewed By Date

**PREPARATION BENCH SHEET**

F708437

**Eurofins Frontier Global Sciences, Inc.**

**Matrix: Soil/Sediment**

**Prepared using: Trace Metals - EFGS-141 Nitric Acid Bomb Digestion**

**Prepared: 8/15/2017**

Lab Number	Sample ID and Source Sample	Initial (g)	Final (ml)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F708437-BLK1	Blank	0.5	50					
F708437-BLK2	Blank	0.5	50					
F708437-BS1	LCS	0.5	50	1704577	50			
F708437-BSD1	LCS Dup	0.5	50	1704577	50			
F708437-DUP1	Duplicate [1708380-01]	2.0315	50					
F708437-MS1	Matrix Spike [1708380-01]	2.0093	50	1704577	50			

Standard ID(s):  
1704577

Description:  
EFGS-PREP SPIKE1/2, plus Hg

Expiration:  
24-Sep-17 00:00

<u>Reagent ID(s):</u>	<u>Description:</u>	<u>Expiration:</u>
1703182	25% Hydroxylamine-HCl working solution	24-Nov-17 00:00
1703701	THg Washstation (0.5% BrCl)	21-Dec-17 00:00
1703702	THg Dilute 1% BrCl	
1704484	Fisher Nitric Acid, Tracemetal Grade	15-Mar-19 00:00
1704517	THg Dilute 1% BrCl	18-Dec-17 00:00
1704956	3% SnCl2 THg reductant	29-Jan-18 00:00

PREPARATION BENCH SHEET

F708437

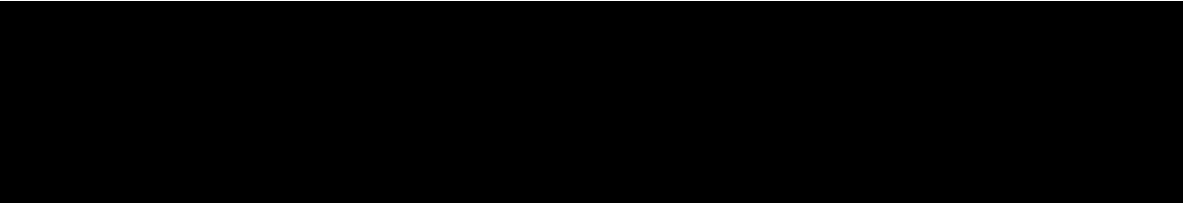
Eurofins Frontier Global Sciences, Inc.

Matrix: Soil/Sediment

Prepared using: Trace Metals - EFGS-141 Nitric Acid Bomb Digestion

Prepared: 8/15/2017

Lab Number	Sample ID	Initial (g)	Final (ml)	QC Sample	Sample Specs.	Raw Data	Sample Comments	Analysis Comments
1708380-01	740-2017-08140072 EUUSBO2-00093005	2.1261	50	-	See COC	-	MSM, Powder, Lot #1708217 QG00L-1	
1708380-02	740-2017-08140073 EUUSBO2-00093005	2.0794	50	-	See COC	-	MSM, Powder, Lot #1708317 QG00L-1	



**PREPARATION BENCH SHEET**

F708445

**Eurofins Frontier Global Sciences, Inc.**

**Matrix: Soil/Sediment**

**Prepared using: Trace Metals - EPA 7474**

**Prepared: 8/17/2017**

Lab Number	Sample ID and Source Sample	Initial (g)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F708445-BLK1	Blank	0.5	200					
F708445-BLK2	Blank	0.5	200					
F708445-BS1	Blank Spike	0.5	200	1701763	40			
F708445-BSD1	Blank Spike Dup	0.5	200	1701763	40			
F708445-MS1	Matrix Spike [1707771-79]	0.5739	200	1703591	50			
F708445-MS2	Matrix Spike [1707771-90]	0.5394	200	1703591	50			
F708445-MSD1	Matrix Spike Dup [1707771-79]	0.5856	200	1703591	50			
F708445-MSD2	Matrix Spike Dup [1707771-90]	0.539	200	1703591	50			

<u>Standard ID(s):</u>	<u>Description:</u>	<u>Expiration:</u>	<u>Reagent ID(s):</u>	<u>Description:</u>	<u>Expiration:</u>
1701763	THg 1,000ng/mL Secondary Spiking Standard	22-Sep-17 00:00	1703182	25% Hydroxylamine-HCl working solution	24-Nov-17 00:00
1703591	THg 10,000ng/mL Primary Spiking Standard	14-Dec-17 00:00	1703701	THg Washstation (0.5% BrCl)	21-Dec-17 00:00
			1703702	THg Dilute 1% BrCl	
			1704424	Boiling Chips for AFS prep	21-Jan-18 00:00
			1704484	Fisher Nitric Acid, Tracemetal Grade	15-Mar-19 00:00
			1704517	THg Dilute 1% BrCl	18-Dec-17 00:00
			1704640	Omnitrace Hydrochloric Acid	27-Jul-20 00:00
			1704956	3% SnCl2 THg reductant	29-Jan-18 00:00
			1704959	7474 Potassium Bromate/Bromide Reagent	22-Aug-17 00:00



**PREPARATION BENCH SHEET**

F708445

**Eurofins Frontier Global Sciences, Inc.**

**Matrix: Soil/Sediment**

**Prepared using: Trace Metals - EPA 7474**

**Prepared: 8/17/2017**

Lab Number	Sample ID	Initial (g)	Final (mL)	QC Sample	Sample Specs.	Raw Data	Sample Comments	Analysis Comments
1707771-74	W-MM-02_072617_SED_05-10	0.5514	200	-	-	-		
1707771-74RE1	W-MM-02_072617_SED_05-10	0.5514	200	-	-	-	Added 8/21/2017 by BC	Added 8/21/2017 by BC
1707771-75	W-102-INTA_072617_SED_03-05	0.5546	200	-	-	-		
1707771-76	W-102-INTA_072617_SED_05-10_R1	0.5855	200	-	-	-		
1707771-77	W-102-INTA_072617_SED_05-10_R2	0.5784	200	-	-	-		
1707771-78	W-102-INTA_072617_SED_05-10_R3	0.5528	200	-	-	-		
1707771-79	OR-01-01_072517_SED_03-05	0.5467	200	QC	-	-	MS/MSD	
1707771-80	OR-01-01_072517_SED_05-10	0.5597	200	-	-	-		
1707771-81	OR-01-02_072517_SED_03-05	0.5918	200	-	-	-		
1707771-82	OR-01-02_072517_SED_05-10	0.5799	200	-	-	-		
1707771-83	OR-01-03_072517_SED_03-05	0.5982	200	-	-	-		
1707771-84	OR-01-03_072517_SED_05-10_R1	0.5221	200	-	-	-		
1707771-85	OR-01-03_072517_SED_05-10_R2	0.592	200	-	-	-		
1707771-86	OR-01-03_072517_SED_05-10_R3	0.5247	200	-	-	-		
1707771-87	OR-01-04_072517_SED_00-01_R1	0.5954	200	-	-	-		
1707771-88	OR-01-04_072517_SED_00-01_R2	0.5866	200	-	-	-		
1707771-89	OR-01-04_072517_SED_00-01_R3	0.5658	200	-	-	-		
1707771-90	OR-01-04_072517_SED_01-03	0.5508	200	QC	-	-	MS/MSD	
1707771-91	OR-01-04_072517_SED_03-05	0.5804	200	-	-	-		

Due Date: 8/24/2017

PREPARATION BENCH SHEET

F708445

Eurofins Frontier Global Sciences, Inc.

Matrix: Soil/Sediment

Prepared using: Trace Metals - EPA 7474

Prepared: 8/17/2017

1707771-92	OR-01-04_072517_SED_05-10	0.5381	200	-	-	-		
1707771-92RE1	OR-01-04_072517_SED_05-10	0.5381	200	-	-	-	Added 8/21/2017 by BC	Added 8/21/2017 by BC
1707771-93	OR-01-05_072517_SED_03-05	0.5502	200	-	-	-		
1707771-93RE1	OR-01-05_072517_SED_03-05	0.5502	200	-	-	-	Added 8/21/2017 by BC	Added 8/21/2017 by BC



**PREPARATION BENCH SHEET**

F708400

**Eurofins Frontier Global Sciences, Inc.**

**Matrix: Soil/Sediment**

**Prepared using: AFS - EPA 7474**

**Prepared: 8/14/2017**

Lab Number	Sample ID and Source Sample	Initial (g)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F708400-BLK1	Blank	0.5	200					
F708400-BLK2	Blank	0.5	200					
F708400-BLK3	Blank	0.5	200					
F708400-BLK4	Blank	0.5	200					
F708400-BLK5	Blank	0.5	200					
F708400-BS1	Blank Spike	0.5	200	1701763	40			
F708400-BSD1	Blank Spike	0.5	200	1701763	40			
F708400-MS1	Matrix Spike [1707810-30]	0.5559	200	1703591	50			
F708400-MS2	Matrix Spike [1707810-45]	0.5436	200	1703591	50			
F708400-MS3	AS [1707810-30]	0.002698	1	1704422	100			[Spk] 0.5396g->200mL; 200mL->200mL; Spiked 1mL
F708400-MSD1	Matrix Spike Dup [1707810-30]	0.558	200	1703591	50			
F708400-MSD2	Matrix Spike Dup [1707810-45]	0.5532	200	1703591	50			
F708400-MSD3	ASD [1707810-30]	0.002698	1	1704422	100			[Spk] 0.5396g->200mL; 200mL->200mL; Spiked 1mL

<u>Standard ID(s):</u>	<u>Description:</u>
1701763	THg 1,000ng/mL Secondary Spiking Standard
1703591	THg 10,000ng/mL Primary Spiking Standard
1704422	THg 10ng/mL Calibration Standard

<u>Expiration:</u>
22-Sep-17 00:00
14-Dec-17 00:00
21-Oct-17 00:00

<u>Reagent ID(s):</u>	<u>Description:</u>	<u>Expiration:</u>
1703182	25% Hydroxylamine-HCl working solution	24-Nov-17 00:00
1703701	THg Washstation (0.5% BrCl)	21-Dec-17 00:00
1703702	THg Dilute 1% BrCl	
1704517		18-Dec-17 00:00
1704691	3% SnCl2 THg reductant	22-Jan-18 00:00

**PREPARATION BENCH SHEET**

F708400

**Eurofins Frontier Global Sciences, Inc.**

**Matrix: Soil/Sediment**

**Prepared using: AFS - EPA 7474**

**Prepared: 8/14/2017**

Lab Number	Sample ID	Initial (g)	Final (mL)	QC Sample	Sample Specs.	Raw Data	Sample Comments	Analysis Comments
1707810-30	BO-05_072517_SED_00-01	0.5396	200	-	-	-		
1707810-31	BO-05_072517_SED_01-03	0.5362	200	-	-	-		
1707810-32	W-17-High_072517_SED_03-05	0.5143	200	-	-	-		
1707810-33	W-17-High_072517_SED_05-10	0.5419	200	-	-	-		
1707810-34	W-17-Intertidal_072517_SED_00-01	0.5743	200	-	-	-		
1707810-35	W-17-Intertidal_072517_SED_01-03	0.5081	200	-	-	-		
1707810-36	W-21-High_072517_SED_00-01	0.541	200	-	-	-		
1707810-37	W-21-High_072517_SED_01-03	0.5278	200	-	-	-		
1707810-38	W-21-Intertidal_072517_SED_00-01	0.5721	200	-	-	-		
1707810-39	W-21-Intertidal_072517_SED_01-03	0.5967	200	-	-	-		
1707810-40	W-21-Low_072517_SED_00-01	0.5498	200	-	-	-		
1707810-41	W-21-Low_072517_SED_01-03	0.5836	200	-	-	-		
1707810-42	W-21-Mid_072517_SED_00-01	0.5318	200	-	-	-		
1707810-43	W-21-Mid_072517_SED_01-03	0.549	200	-	-	-		
1707810-44	W-21-UM-Central-E_072517_SED_00-01	0.5413	200	-	-	-		
1707810-45	W-21-UM-Central-E_072517_SED_01-03	0.5094	200	-	-	-		
1707810-46	W-61-High_072517_SED_03-05	0.5593	200	-	-	-		
1707810-47	W-61-High_072517_SED_05-10	0.5938	200	-	-	-		
1707810-48	W-61-Intertidal_072517_SED_03-05	0.5783	200	-	-	-		

Due Date: 8/24/2017

PREPARATION BENCH SHEET

F708400

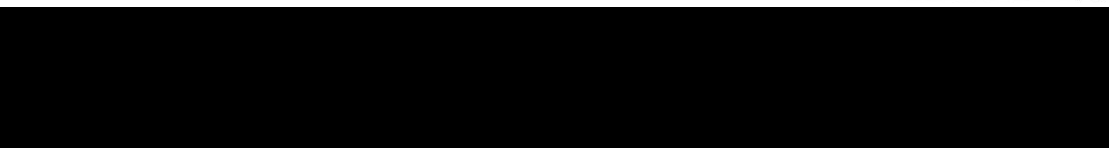
Eurofins Frontier Global Sciences, Inc.

Matrix: Soil/Sediment

Prepared using: AFS - EPA 7474

Prepared: 8/14/2017

1707810-49	W-61-Intertidal_072517_SED_05-10	0.5886	200	-	-	-		
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**PREPARATION BENCH SHEET**

F708446

**Eurofins Frontier Global Sciences, Inc.**

**Matrix: Soil/Sediment**

**Prepared using: Trace Metals - EPA 7474**

**Prepared: 8/17/2017**

Lab Number	Sample ID and Source Sample	Initial (g)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F708446-BLK1	Blank	0.5	200					
F708446-BLK2	Blank	0.5	200					
F708446-BS1	Blank Spike	0.5	200	1701763	40			
F708446-BSD1	Blank Spike	0.5	200	1701763	40			
F708446-MS1	Matrix Spike [1707771-AA]	0.5563	200	1703591	50			
F708446-MS2	Matrix Spike [1707771-AH]	0.5697	200	1703591	50			
F708446-MSD1	Matrix Spike Dup [1707771-AA]	0.5736	200	1703591	50			
F708446-MSD2	Matrix Spike Dup [1707771-AH]	0.5911	200	1703591	50			

<u>Standard ID(s):</u>	<u>Description:</u>	<u>Expiration:</u>	<u>Reagent ID(s):</u>	<u>Description:</u>	<u>Expiration:</u>
1701763	THg 1,000ng/mL Secondary Spiking Standard	22-Sep-17 00:00	1703182	25% Hydroxylamine-HCl working solution	24-Nov-17 00:00
1703591	THg 10,000ng/mL Primary Spiking Standard	14-Dec-17 00:00	1703701	THg Washstation (0.5% BrCl)	21-Dec-17 00:00
			1703702	THg Dilute 1% BrCl	
			1704424	Boiling Chips for AFS prep	21-Jan-18 00:00
			1704484	Fisher Nitric Acid, Tracemetal Grade	15-Mar-19 00:00
			1704517	THg Dilute 1% BrCl	18-Dec-17 00:00
			1704640	Omnitrace Hydrochloric Acid	27-Jul-20 00:00
			1704956	3% SnCl2 THg reductant	29-Jan-18 00:00
			1704959	7474 Potassium Bromate/Bromide Reagent	22-Aug-17 00:00

**PREPARATION BENCH SHEET**

F708446

**Eurofins Frontier Global Sciences, Inc.**

**Matrix: Soil/Sediment**

**Prepared using: Trace Metals - EPA 7474**

**Prepared: 8/17/2017**

Lab Number	Sample ID	Initial (g)	Final (mL)	QC Sample	Sample Specs.	Raw Data	Sample Comments	Analysis Comments
1707771-94	OR-01-05_072517_SED_05-10	0.5392	200	-	-	-		
1707771-95	OR-02-01_072517_SED_03-05	0.5517	200	-	-	-		
1707771-96	OR-02-01_072517_SED_05-10	0.5607	200	-	-	-		
1707771-96RE1	OR-02-01_072517_SED_05-10	0.5607	200	-	-	-	Added 8/21/2017 by BC	Added 8/21/2017 by BC
1707771-97	OR-02-02_072517_SED_03-05_R1	0.5587	200	-	-	-		
1707771-97RE1	OR-02-02_072517_SED_03-05_R1	0.5587	200	-	-	-	Added 8/21/2017 by BC	Added 8/21/2017 by BC
1707771-98	OR-02-02_072517_SED_03-05_R2	0.5676	200	-	-	-		
1707771-99	OR-02-02_072517_SED_03-05_R3	0.5714	200	-	-	-		
1707771-AA	OR-02-02_072517_SED_05-10	0.564	200	-	-	-		
1707771-AB	W-102-INTA_072517_SED_00-01	0.5269	200	-	-	-		
1707771-AC	W-102-INTA_072517_SED_01-03	0.5434	200	-	-	-		
1707771-AD	W-103-A_072517_SED_03-05	0.5922	200	-	-	-		
1707771-AE	W-103-A_072517_SED_05-10_R1	0.5286	200	-	-	-		
1707771-AF	W-103-A_072517_SED_05-10_R2	0.5485	200	-	-	-		
1707771-AG	W-103-A_072517_SED_05-10_R3	0.5399	200	-	-	-		
1707771-AH	W-103-B_072517_SED_03-05	0.5875	200	QC	-	-	MS/MSD	
1707771-AI	W-103-B_072517_SED_05-10	0.516	200	-	-	-		
1707771-AJ	W-103-INTA_072517_SED_00-01	0.5883	200	-	-	-		
1707771-AK	W-103-INTA_072517_SED_01-03_R1	0.5742	200	-	-	-		

PREPARATION BENCH SHEET

F708446

Eurofins Frontier Global Sciences, Inc.

Matrix: Soil/Sediment

Prepared using: Trace Metals - EPA 7474

Prepared: 8/17/2017

1707771-AL	W-103-INTA_072517_SED_01-03_R2	0.5386	200	-	-	-		
1707771-AM	W-103-INTA_072517_SED_01-03_R3	0.5276	200	-	-	-		
1707771-AN	W-104-INTA_072517_SED_00-01	0.5598	200	-	-	-		





PREPARATION BENCH SHEET

2600-2  
8/18/17 BC

F708437

Eurofins Frontier Global Sciences, Inc.

Matrix: Soil/Sediment

Prepared using: Trace Metals - EFGS-141 Nitric Acid Bomb Digestion

Prepared: 8/15/2017

Lab Number	Sample ID and Source Sample	Initial (g)	Final (ml)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F708437-BLK1	Blank	0.5	50					50X
F708437-BLK2	Blank	0.5	50					50X
F708437-BS1	LCS	0.5	50	1704577	50			40X
F708437-BSD1	LCS Dup	0.5	50	1704577	50			400X
F708437-DUP1	Duplicate [1708380-01]	2.0315	50					50X
F708437-MS1	Matrix Spike [1708380-01]	2.0093	50	1704577	50			400X

Standard ID(s):  
1704577

Description:  
EFGS-PREP SPIKE1/2, plus Hg

Expiration:  
24-Sep-17 00:00

1704956  
1703701  
1704517  
1703702  
1703182

PREPARATION BENCH SHEET

2600-2  
8/19/17 BC

F708437

Eurofins Frontier Global Sciences, Inc.

Matrix: Soil/Sediment

Prepared using: Trace Metals - EFGS-141 Nitric Acid Bomb Digestion

Prepared: 8/15/2017

Lab Number	Sample ID	Initial (g)	Final (ml)	QC Sample	Sample Specs.	Raw Data	Sample Comments	Analysis Comments
1708380-01	740-2017-08140072 EUUSBO2-00093005	2.1261	50	-	See COC	-	MSM, Powder QG00L-1 - Prep 2.0-2.1	50X
1708380-02	740-2017-08140073 EUUSBO2-00093005	2.0794	50	-	See COC	-	MSM, Powder QG00L-1 - Prep 2.0-2.1	50X



# Ceutical Digestions

435/436 / 437  
 Batch TM/Hg (circle one): F708435/437/438

Boiling Chip Lot # 0919120

Batch continued on next page?  Yes  No

1° Tech.: MMP 2° Tech.: BB Date/Time In: 8/15/2017 1550

Date/Time Out: 8-16-17 10950

Spiked By: MMP Spike Witness (SW): UCL

Final Vol. (mL)/Initials/Date:

Balance ID/Cal. (Y/N): 90 / 8/15/2017

50 / UCL / 8-16-17

Digestion:  Oven ID: OVN-07  Other ID: \_\_\_\_\_

Vial Type:  50 mL Centrifuge Tube  Teflon

Analysis:  ICP-MS  CV-AFS

LC-ICP-MS  Other: \_\_\_\_\_

Thermometer ID: 131206130 Initial: Temp. (°C): 160 / 162.4 / 162.7  
target raw corrected

Final: Temp. (°C): 160 / 158.1 / 158.4  
target raw corrected

#	Bomb ID		Sample/Batch ID	Bottle ID	Sample Amount ( <input type="checkbox"/> g <input type="checkbox"/> mL)	Matrix (specify)	ID Check	Notes/Comments
	Lid	Bottom						
1	NA	X083	F708435/437-BLK1	NA	0.7617	Benl Chig (Be)	/	
2	NA	TH056	F708435/437-BLK2	NA	0.6905	BC	/	
3	NA	X184	F708435/437-BSI	NA	0.6702	BC	/	
4	NA	TH034	F708435/437-BSDI	NA	0.7008	BC	/	
5	NA	N3916	1708380-01	A	2.1261	Powder (P)	/	
6	NA	X064	1708380-01 DUPL	A	2.0315	P	/	
7	NA	X069	1708380-01 MS1	A	2.0093	P	/	
8	NA	N3911	1708380-01 MSDI	A	2.0331	P	/	Dug UCL 8-16-17
9	TH-050	X022	1708347-01	E	0.5817	Food (F)	/	1708347-01

BB 8-15-17 Initials: UCL

	Spike Name	SW	Volume (µL)	LIMS ID	Pipette ID	Cal. Date
A	Prep Spike 1	<input checked="" type="checkbox"/>	50	1703595	S12664	8/9/2017
B	Prep Spike 2	<input checked="" type="checkbox"/>	50	1703596		
C	THy	<input checked="" type="checkbox"/>	50	1704576		
D		<input type="checkbox"/>				
E		<input type="checkbox"/>				

Preparation Method SOP: EFGS-147		
Reagent	Volume (mL)	LIMS ID
HNO <sub>3</sub>	7.5	1704484

1	Combined Spike ID: <u>A-C</u>	= <u>1704577</u>	; Batches: <u>F708435/437/438</u>
2	Combined Spike ID: _____	= _____	; Batches: _____

Batch continued on next page?  Yes  No

Ceutral Digestions

#	Bomb ID		Sample/Batch ID	Bottle	Sample Amount (g or mL)	Matrix (specify)	ID Check	Notes/Comments
	Lid	Bottom						
10	NA	N487	1708347-01 MFD	EE	0.6297	F F	/	
11	NA	X171	1708347-01 MSD	E	0.7223	F F	/	Double Acid (DA)
12	NA	N369	1708363-01	A	1.3624	1 cap	/	back-up, DA - FEL 876-17
13	NA	N441	1708363-01	A	1.3557	1 cap	/	
14	X143	X073	1708291-01	A	1.2115	P	/	
15	NA	TH-057	1708346-01	A	0.6320	Liquid (LL)	/	
16	NA	X105	1708346-02	A	0.7474	L	/	
17	TH-023	TH-031	1708346-03	A	0.7615	L	/	
18	NA	N470	1708346-04	A	0.5197	F	/	
19	NA	X058	1708349-03	A	0.5157	L	/	Dry FEL 876-17
20	X001	X002	1708351-01	A	0.5694	0.1 (0)	/	
21	NA	TH-036	1708358-01	B	1.2150	Plant Material (PM)	/	
22	X147	N428	1708359-01	A	0.5175	L	/	
23	N424	TH-045	1708365-01	A	1.0095	1 cap	/	1708364-01
24	TH-058	TH-002	1708364-02	A	1.0416	P	/	
25	NA	X090	1708380-02	A	2.0794	P	/	
26	NA	X070	1708388-01	A	1.3540	1 cap	/	DA
27	NA	TH-039	1708388-02	A	0.7729	1 cap	/	
28	NA	TH-042	1708388-03	A	0.5993	0	/	
29	NA	N390	1708233-01	A	2.5799	L - concentrate	/	
30	X126	N462	1708325-12	A	0.6889	1 gel	/	
31								
32								
33								
34								

M/A 10/15/2017

Initials: V.L.

**Density by EFGS-019**

Required?  Yes  No

Batch ID: \_\_\_\_\_

Density = ((D-C)/B)

A: Sample ID / Flask ID	B: Volume (mL)	C: Flask mass (g)	D: Flask + sample (g)	Density (g/mL)
/				
/				
/				
/				

M/A 10/15/2017

### Sample Preparation Review Checklist

Revision: 3  
Effective: Dec. 5, 2013

Technician/Date: MMP 8/15/2017  
Upload/Date: MMP 8/15/2017

Samples to lab: 1550  
Reviewer/Date: \_\_\_\_\_

Batch #: F708437

EFGS Preparation Method			
<input type="checkbox"/>	FGS-032	Co-APDC	
<input type="checkbox"/>	FGS-052	Oven Digestion (Total Recoverable Metals)	<input type="checkbox"/> ICPMS <input type="checkbox"/> AFS
<input type="checkbox"/>	FGS-058	Nitric Digestion	<input type="checkbox"/> ICPMS <input type="checkbox"/> CVAFS
<input type="checkbox"/>	FGS-084	Modified Aqua Regia (Ag, Sb only)	
<input type="checkbox"/>	FGS-108	Cr+6 Sediments/Tissues	
<input type="checkbox"/>	FGS-109	RP	
<input type="checkbox"/>	FGS-111	HF Bomb Digestion	<input type="checkbox"/> ICPMS <input type="checkbox"/> CVAFS
<input checked="" type="checkbox"/>	FGS-141	Nitric Bomb Digestion	<input type="checkbox"/> ICPMS <input checked="" type="checkbox"/> CVAFS
<input type="checkbox"/>	FGS-145	Oven Digestion (As, Se Speciation)	<input type="checkbox"/> As <input type="checkbox"/> Se
<input type="checkbox"/>	FGS-146	Microwave Digestion (Nutraceuticals)	<input type="checkbox"/>
<input type="checkbox"/>	FGS-146	Microwave Digestion (CPSC-Metal)	
<input type="checkbox"/>	FGS-146	Microwave Digestion (CPSC-Non-Metal/Paint)	
<input type="checkbox"/>	FGS-149	Oven Digestion (Aqueous Nutraceuticals)	
<input type="checkbox"/>	NA	Other:	

Initials	SOP Date	DOC Date
<u>MMP</u>	<u>2/14/2017</u>	<u>12/28/2016</u>

Comments: \_\_\_\_\_

Conditionally formatted training files located at:  
\\us34filal\General and Admin\Quality Assurance\Training\Training Master  
(Contact QA for any problems regarding these training files.)

Analytes: Hg

<p>1. Is any SOP/DOC expiring within one week of Submission Date? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO</p> <p style="text-align: center;"><b>Data cannot be reported without a current IDOC/CDOC.</b></p> <p>2. Check prep method</p> <p>(a) For Ceuticals: Is correct Hg code being used in LIMS? <input type="checkbox"/> ICPMS <input checked="" type="checkbox"/> CV-AFS <input type="checkbox"/> 70:30 <input type="checkbox"/> N/A</p> <p>3. Compare sample ID with benchsheet <input checked="" type="checkbox"/> YES <input type="checkbox"/> N/A</p> <p>4. Verify time of submission? (if not met please explain in the comments)</p> <p>(a) Oven bomb - digestion start time before 14:00? <input checked="" type="checkbox"/> YES <input type="checkbox"/> N/A</p> <p>(b) Microwave - submitted to the lab before 16:00? <input type="checkbox"/> YES <input checked="" type="checkbox"/> N/A</p> <p>5. Check for transcription errors from benchsheet</p> <p>(a) Check and compare initial and final volumes <input checked="" type="checkbox"/> YES <input type="checkbox"/> N/A</p> <p>(b) Check and compare mass <input checked="" type="checkbox"/> YES <input type="checkbox"/> N/A</p> <p>(c) Has the number of pills been documented (benchsheet and LIMS)? <input type="checkbox"/> YES <input checked="" type="checkbox"/> N/A</p> <p>(d) Benchsheet prep date MUST match actual prep date <input checked="" type="checkbox"/> YES <input type="checkbox"/> N/A</p> <p>6. Samples per Batch? <b>Check QC Requirements</b></p> <p>(a) PBs per batch? <input type="checkbox"/> ≤ 20 <input checked="" type="checkbox"/> ≤ 10</p> <p>(b) BS, BS/BSD or CRM in batch? <input type="checkbox"/> 3 PBs <input checked="" type="checkbox"/> 2 PB <input type="checkbox"/> 1 PB</p> <p>(c) MS/MSD in batch? <input type="checkbox"/> BS <input checked="" type="checkbox"/> BS/BSD <input type="checkbox"/> CRM</p> <p>(d) MD in batch? <input checked="" type="checkbox"/> YES <input type="checkbox"/> N/A</p> <p>(e) Client specific WO #'s: _____ <input checked="" type="checkbox"/> YES <input type="checkbox"/> N/A</p> <p>(f) Are there any client specific requests and/or alterations? <input type="checkbox"/> YES <input checked="" type="checkbox"/> N/A</p> <p>Document: _____</p> <p>(g) Correct LIMS spike ID included for BS, BS/BSD and/or MS/MSD? <input checked="" type="checkbox"/> YES <input type="checkbox"/> N/A</p> <p>(h) Correct 'source' designated for MD/MS/MSD? <input checked="" type="checkbox"/> YES <input type="checkbox"/> N/A</p> <p>(i) For EFGS-filtered samples, was a filtration blank included? <input type="checkbox"/> YES <input checked="" type="checkbox"/> N/A</p> <p>7. Are the samples appropriately spiked?</p> <p>(a) Is the spike and amount used appropriate and entered into LIMS? <input checked="" type="checkbox"/> YES <input type="checkbox"/> N/A</p> <p>(b) For IDOCs, was there a spike witness? (initials <u>must</u> be in logbook) <input checked="" type="checkbox"/> YES <input type="checkbox"/> N/A</p> <p>(c) Spikes added: <input checked="" type="checkbox"/> YES <input type="checkbox"/> N/A</p>	<p>Reviewer Initials <u>BC</u></p> <p>Tertiary Review <u>DM</u></p>
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NOTE: Due to LIMS software constraints, new LIMS IDs need to be created when multiple/ supplemental spikes are used. Enter new LIMS ID below and use table to list all spikes included in it.

Spike LIMS ID : 1704577

Spike Name	LIMS ID	µL	Spike Name	LIMS ID	µL
<u>Pre Spike 1</u>	<u>1703595</u>	<u>50</u>			
<u>Pre Spike 2</u>	<u>1703596</u>	<u>50</u>			
<u>THg</u>	<u>1704576</u>	<u>50</u>			

PREPARATION BENCH SHEET

F708446

Eurofins Frontier Global Sciences, Inc.

26002  
+1700  
8/18/17 BK

Matrix: Soil/Sediment

Prepared using: Trace Metals - EPA 7474

Prepared: 8/17/2017

Lab Number	Sample ID and Source Sample	Initial (g)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F708446-BLK1	Blank	0.5	200					10x
F708446-BLK2	Blank	0.5	200					10x
F708446-BS1	Blank Spike	0.5	200	1701763	40			10x
F708446-BSD1	Blank Spike	0.5	200	1701763	40			10x
F708446-MS1	Matrix Spike [1707771-AA]	0.5563	200	1703591	50			400x
F708446-MS2	Matrix Spike [1707771-AH]	0.5697	200	1703591	50			400x
F708446-MSD1	Matrix Spike Dup [1707771-AA]	0.5763	200	1703591	50			400x
F708446-MSD2	Matrix Spike Dup [1707771-AH]	0.5911	200	1703591	50			400x

Standard ID(s):  
1701763  
1703591

Description:  
THg 1,000ng/mL Secondary Spiking Standard  
THg 10,000ng/mL Primary Spiking Standard

Expiration:  
22-Sep-17 00:00  
14-Dec-17 00:00

Reagent ID(s):  
1704424  
1704484  
1704640  
1704959

Description:  
Boiling Chips for AFS prep  
Fisher Nitric Acid, Tracemetal Grade  
Omnitrace Hydrochloric Acid  
7474 Potassium Bromate/Bromide Reagent

Expiration:  
21-Jan-18 00:00  
15-Mar-19 00:00  
27-Jul-20 00:00  
22-Aug-17 00:00

1704956  
1703761  
1703702  
1703182  
1704517

Due Date: 8/24/2017

PREPARATION BENCH SHEET

2600-2  
8/18/17 BL

F708446

Eurofins Frontier Global Sciences, Inc.

Matrix: Soil/Sediment

Prepared using: Trace Metals - EPA 7474

Prepared: 8/17/2017

Lab Number	Sample ID	Initial (g)	Final (mL)	QC Sample	Sample Specs.	Raw Data	Sample Comments	Analysis Comments
1707771-94	OR-01-05_072517_SED_05-10	0.5392	200	-	-	-	50X	
1707771-95	OR-02-01_072517_SED_03-05	0.5517	200	-	-	-	50X	
1707771-96	OR-02-01_072517_SED_05-10	0.5607	200	-	-	-	50X → 100X	
1707771-97	OR-02-02_072517_SED_03-05_R1	0.5587	200	-	-	-	50X → 500X	
1707771-98	OR-02-02_072517_SED_03-05_R2	0.5676	200	-	-	-	50X	
1707771-99	OR-02-02_072517_SED_03-05_R3	0.5714	200	-	-	-	50X	
1707771-AA	OR-02-02_072517_SED_05-10	0.564	200	-	-	-	50X	
1707771-AB	W-102-INTA_072517_SED_00-01	0.5269	200	-	-	-	50X	
1707771-AC	W-102-INTA_072517_SED_01-03	0.5434	200	-	-	-	50X	
1707771-AD	W-103-A_072517_SED_03-05	0.5922	200	-	-	-	50X	
1707771-AE	W-103-A_072517_SED_05-10_R1	0.5286	200	-	-	-	50X	
1707771-AF	W-103-A_072517_SED_05-10_R2	0.5485	200	-	-	-	50X	
1707771-AG	W-103-A_072517_SED_05-10_R3	0.5399	200	-	-	-	50X	
1707771-AH	W-103-B_072517_SED_03-05	0.5875	200	QC	-	-	MS/MSD 50	
1707771-AI	W-103-B_072517_SED_05-10	0.516	200	-	-	-	50X	
1707771-AJ	W-103-INTA_072517_SED_00-01	0.5883	200	-	-	-	50X	
1707771-AK	W-103-INTA_072517_SED_01-03_R1	0.5742	200	-	-	-	50X	
1707771-AL	W-103-INTA_072517_SED_01-03_R2	0.5386	200	-	-	-	50X	
1707771-AM	W-103-INTA_072517_SED_01-03_R3	0.5276	200	-	-	-	50X	

Due Date: 8/24/2017

PREPARATION BENCH SHEET

F708446

Eurofins Frontier Global Sciences, Inc.

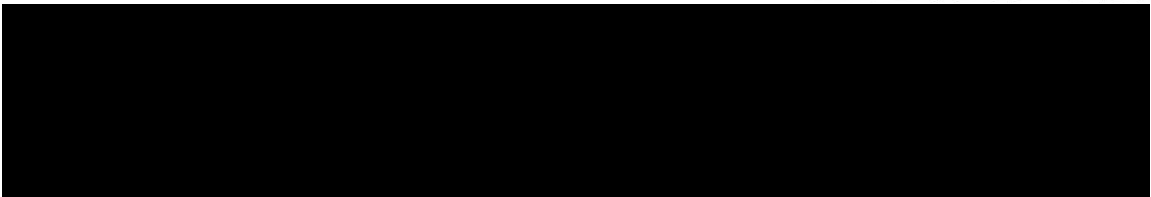
2600-2  
8/18/17 BL

Matrix: Soil/Sediment

Prepared using: Trace Metals - EPA 7474

Prepared: 8/17/2017

1707771-AN	W-104-INTA_072517_SED_00-01	0.5598	200	-	-	-	SOX	
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Technician: Dwyer Batch#: F708446 Date: 8/17/17

- EFAFS-T-AFS-SOP2986 Tissues - Methyl Mercury - KOH/Methanol: Hot plate 75±5°C for 2-4 hours.
- EFAFS-T-AFS-SOP2795 Tissues - Total Mercury - 70:30: Hot plate 75±5°C for two hours.
- EFAFS-T-AFS-SOP5134 Sediments - Methyl Mercury - KBr/CH<sub>2</sub>Cl<sub>2</sub>: Heat Block 45°C (nitrogen purge for 30 minutes).
- EFAFS-T-AFS-SOP2807 Solids - Total Mercury - Cold AR: 18-25°C for over four hours.

Other: EPA 7474  
 Balance#: 19 Calibrated?  Yes  No Therm.#: N/A Calibrated?  Yes  No  
 Vial Type:  Glass  Teflon  
 \*Time in: N/A Actual Temp. (raw): N/A °C w/ CF: N/A °C  
 Time out: N/A Actual Temp. (raw): N/A °C w/ CF: N/A °C  
 \*Time in can't begin before target temperature is reached

Final vol.: 25 mL (LIMS ID: ROH20) Spike vol.: 40 µL (LIMS ID: 1701763)  
 Spike Witness: BC 8/17/17 (initial and date)

HCl LIMS ID: 1704640 Pipette SN#: MU11619 Calibration Date: 8-16-17  
 HNO<sub>3</sub> LIMS ID: 1704484 Pipette SN#: DU078693 Calibration Date: 8-16-17  
 70/30 LIMS ID: N/A Dispenser #: 04N45351 Calibrated?  Yes  No  
 Other Acid LIMS ID: 1704959 Dispenser #: 0842293  Yes  No  
 Glass Vial # J26 4713-305 Boiling Chip lot # 1704424 \*Hotblock Position: N/A

Vial #	Sample ID Number	Sample Size <input type="checkbox"/> mL <input checked="" type="checkbox"/> µg	Vial #	Sample ID Number	Sample Size <input type="checkbox"/> mL <input checked="" type="checkbox"/> µg	CRM LIMS ID <input checked="" type="checkbox"/> NA
1	F708446 Blk1	0.5081	23	1707771-AI	0.5160	
2	F708446 Blk2	0.5173	24	1707771-AJ	0.5883	
3	F708446 BS1	0.5237	25	1707771-AK	0.5792	
4	F708446 BS01	0.5534	26	1707771-AL	0.5386	
5	1707771-94A	0.5392	27	1707771-AM	0.5276	F708446 source MS1, MS1 1707771-AA
6	1707771-95A	0.5517	28	1707771-AN	0.5598	
7	1707771-96A	0.5607	29			F708446 MS2, MS2 1707771-AH
8	1707771-97	0.5587	30			
9	1707771-98	0.5676	31			ALL Swill MS7 MS01 = 10,000 µg = 50 µg 1703591
10	1707771-99	0.5714	32			
11	1707771-AA	0.5640	33			8/17/17 N/A
12	F708446-MS1	0.5563	34			
13	F708446-MS01	0.5736	35			
14	1707771-AB	0.5269	36			
15	1707771-AC	0.5434	37			
16	1707771-AD	0.5922	38			
17	1707771-AE	0.5286	39			
18	1707771-AE	0.5485	40			
19	1707771-AG	0.5399	41			
20	1707771-AH	0.5875	42			
21	F708446-MS2	0.5697	43			
22	F708446-MS02	0.5911	44			

PREPARATION BENCH SHEET

2600-2  
BCE/18/17

F708445

Eurofins Frontier Global Sciences, Inc.

Matrix: Soil/Sediment

Prepared using: Trace Metals - EPA 7474

Prepared: 8/17/2017

Lab Number	Sample ID and Source Sample	Initial (g)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F708445-BLK1	Blank	0.5	200					10X
F708445-BLK2	Blank	0.5	200					10X
F708445-BS1	Blank Spike	0.5	200	1701763	40			10X
F708445-BSD1	Blank Spike Dup	0.5	200	1701763	40			10X
F708445-MS1	Matrix Spike [1707771-79]	0.5739	200	1703591				400X
F708445-MS2	Matrix Spike [1707771-90]	0.5394	200	1703591				400X
F708445-MSD1	Matrix Spike Dup [1707771-79]	0.5856	200	1703591	50			400X
F708445-MSD2	Matrix Spike Dup [1707771-90]	0.539	200	1703591				400X

Standard ID(s):  
1701763  
1703591

Description:  
THg 1,000ng/mL Secondary Spiking Standard  
THg 10,000ng/mL Primary Spiking Standard

Expiration:  
22-Sep-17 00:00  
14-Dec-17 00:00  
14-Dec-17 00:00

Reagent ID(s):  
1704424  
1704484  
1704640  
1704959

Description:  
Boiling Chips for AFS prep  
Fisher Nitric Acid, Tracemetal Grade  
Omnitrace Hydrochloric Acid  
7474 Potassium Bromate/Bromide Reagent

Expiration:  
21-Jan-18 00:00  
15-Mar-19 00:00  
27-Jul-20 00:00  
22-Aug-17 00:00

1764956  
1703701  
1703702  
1703182  
1704517

Due Date: 8/24/2017

PREPARATION BENCH SHEET

2600-2  
BC 8/18/17

F708445

Eurofins Frontier Global Sciences, Inc.

Matrix: Soil/Sediment

Prepared using: Trace Metals - EPA 7474

Prepared: 8/17/2017

Lab Number	Sample ID	Initial (g)	Final (mL)	QC Sample	Sample Specs.	Raw Data	Sample Comments	Analysis Comments
1707771-74	W-MM-02_072617_SED_05-10	0.5514	200	-	-	-	50X → 10X	
1707771-75	W-102-INTA_072617_SED_03-05	0.5546	200	-	-	-	50X	
1707771-76	W-102-INTA_072617_SED_05-10_R1	0.5855	200	-	-	-	50X	
1707771-77	W-102-INTA_072617_SED_05-10_R2	0.5784	200	-	-	-	50X	
1707771-78	W-102-INTA_072617_SED_05-10_R3	0.5528	200	-	-	-	50X	
1707771-79	OR-01-01_072517_SED_03-05	0.5467	200	QC	-	-	MS/MSD 50X	
1707771-80	OR-01-01_072517_SED_05-10	0.5597	200	-	-	-	50X	
1707771-81	OR-01-02_072517_SED_03-05	0.5918	200	-	-	-	50X	
1707771-82	OR-01-02_072517_SED_05-10	0.5799	200	-	-	-	50X	
1707771-83	OR-01-03_072517_SED_03-05	0.5982	200	-	-	-	50X	
1707771-84	OR-01-03_072517_SED_05-10_R1	0.5221	200	-	-	-	50X	
1707771-85	OR-01-03_072517_SED_05-10_R2	0.592	200	-	-	-	50X	
1707771-86	OR-01-03_072517_SED_05-10_R3	0.5247	200	-	-	-	50X	
1707771-87	OR-01-04_072517_SED_00-01_R1	0.5954	200	-	-	-	50X	
1707771-88	OR-01-04_072517_SED_00-01_R2	0.5866	200	-	-	-	50X	
1707771-89	OR-01-04_072517_SED_00-01_R3	0.5658	200	-	-	-	50X	
1707771-90	OR-01-04_072517_SED_01-03	0.5508	200	QC	-	-	MS/MSD 50X	
1707771-91	OR-01-04_072517_SED_03-05	0.5804	200	-	-	-	50X	
1707771-92	OR-01-04_072517_SED_05-10	0.5381	200	-	-	-	50X → 100X	

Due Date: 8/24/2017

2600-2  
BC 8/18/17

PREPARATION BENCH SHEET

F708445

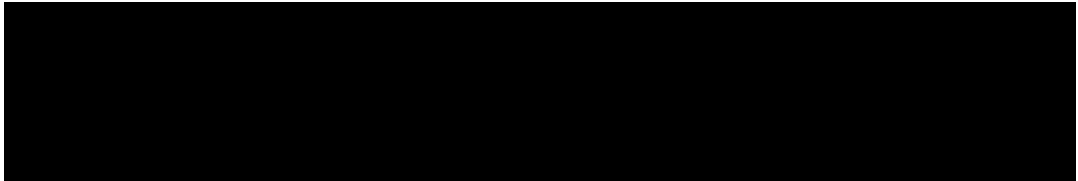
Eurofins Frontier Global Sciences, Inc.

Matrix: Soil/Sediment

Prepared using: Trace Metals - EPA 7474

Prepared: 8/17/2017

1707771-93	OR-01-05_072517_SED_03-05	0.5502	200	-	-	-	50x → 50x	
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Technician: Duyen Batch#: F708445 Date: 8-17-17

- EFAFS-T-AFS-SOP2986 Tissues - Methyl Mercury - KOH/Methanol: Hot plate 75±5°C for 2-4 hours.
- EFAFS-T-AFS-SOP2795 Tissues - Total Mercury - 70:30: Hot plate 75±5°C for two hours.
- EFAFS-T-AFS-SOP5134 Sediments - Methyl Mercury - KBr/CH<sub>2</sub>Cl<sub>2</sub>: Heat Block 45°C (nitrogen purge for 30 minutes).
- EFAFS-T-AFS-SOP2807 Solids - Total Mercury - Cold AR: 18-25°C for over four hours.

Other: EPA 7474 Vial Type:  Glass  Teflon  
 Balance#: 19 Calibrated?  Yes  No Therm.#: 1/18 Calibrated?  Yes  No

\*Time in: N/A Actual Temp. (raw): N/A °C w/ CF: N/A °C  
 Time out: N/A Actual Temp. (raw): N/A °C w/ CF: N/A °C

\*Time in can't begin before target temperature is reached  
 Final vol.: 25 mL (LIMS ID: R0420) Spike vol.: 40 µL (LIMS ID: 1701763)  
 Spike Witness: Cms 8/17/17 (initial and date)

HCl LIMS ID: 1704640 Pipette SN#: MU11619 Calibration Date: 8-16-17  
 HNO<sub>3</sub> LIMS ID: 1704484 Pipette SN#: N407693 Calibration Date: \_\_\_\_\_  
 70/30 LIMS ID: N/A Dispenser #: 09N45351 Calibrated?  Yes  No  
 Other Acid LIMS ID: 1704959 Dispenser #: 08Y2293 18 yea  
 Glass Vial # J26 4713023 Boiling Chip lot # 1704424 \*Hotblock Position: N/A

Vial #	Sample ID Number	Sample Size <input type="checkbox"/> mL <input checked="" type="checkbox"/> µg	Vial # <u>8/17/17</u>	Sample ID Number	Sample Size <input type="checkbox"/> mL <input checked="" type="checkbox"/> µg	CRM LIMS ID <input checked="" type="checkbox"/> NA
1	F708445 Blk1	0.5018	23 8	1707771-90A	0.5508	
2	F708445 Blk2	0.5128	24 9	F708445-MS2	0.5394	
3	F708445 BS1	0.5337	25 10	F708445-MS02	0.5390	
4	F708445 BS01	0.5670	26 11	1707771-91A	0.5804	Comments
5	1707771-74A	0.5514	27 12	1707771-92A	0.5381	F708445
6	1707771-75A	0.5546	28 13	1707771-93A	0.5502	source
7	1707771-76A	0.5855	29			MS1, MS01
8	1707771-77A	0.5784	30			1707771-79
9	1707771-78A	0.5528	31			F708445
10	1707771-79A	0.5467	32			MS2, MS02
11	F708445-MS1	0.5739	33			1707771-90
12	F708445-MS01	0.5856	34			ALL spike
13	1707771-80A	0.5597	35			MS1 MS01
14	1707771-81A	0.5918	36			= 10,000 µg/L
15	1707771-82A	0.5799	37			= 50 µg/L
16	1707771-83A	0.5982	38			170391
17	1707771-84A	0.5221	39			8/17/17 N/A
18	1707771-85A	0.5920	40			
19	1707771-86A	0.5247	41			
20	1707771-87A	0.5954	42			
21	1707771-88A	0.5866	43			
22	1707771-89A	0.5658	44			

PREPARATION BENCH SHEET

2600-2  
8/18/17 BC

F708400

Eurofins Frontier Global Sciences, Inc.

Matrix: Soil/Sediment

Prepared using: AFS - EPA 7474

Prepared: 8/14/2017

Lab Number	Sample ID and Source Sample	Initial (g)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F708400-BLK1	Blank	0.5	200					
F708400-BLK2	Blank	0.5	200					
F708400-BLK3	Blank	0.5	200					10X
F708400-BLK4	Blank	0.5	200					10X
<del>F708400-BLK5</del>	<del>Blank</del>	<del>0.5</del>	<del>200</del>					
F708400-BS1	Blank Spike	0.5	200	1701763	40			
F708400-BSD1	Blank Spike	0.5	200	1701763	40			
F708400-MS1	Matrix Spike [1707810-30]	0.5559	200	1703591	50			
F708400-MS2	Matrix Spike [1707810-45]	0.5436	200	1703591	50			
F708400-MS3	AS [1707810-30]	0.5396	200	1704422	100			50X
F708400-MSD1	Matrix Spike Dup [1707810-30]	0.558	200	1703591	50			
F708400-MSD2	Matrix Spike Dup [1707810-45]	0.5532	200	1703591	50			
F708400-MSD3	ASD [1707810-30]	0.5396	200	1704422	100			50X

<u>Standard ID(s):</u>	<u>Description:</u>	<u>Expiration:</u>	<u>Reagent ID(s):</u>	<u>Description:</u>	<u>Expiration:</u>
1701763	THg 1,000ng/mL Secondary Spiking Standard	22-Sep-17 00:00	1703182	25% Hydroxylamine-HCl working solution	24-Nov-17 00:00
1703591	THg 10,000ng/mL Primary Spiking Standard	14-Dec-17 00:00	1703701	THg Washstation (0.5% BrCl)	21-Dec-17 00:00
			1703702	THg Dilute 1% BrCl	
			1704691	3% SnCl2 THg reductant	22-Jan-18 00:00

Blk 5 rerun Blk 3 10X 1704517

2600-2  
8/18/17 BC

PREPARATION BENCH SHEET

F708400

Eurofins Frontier Global Sciences, Inc.

Matrix: Soil/Sediment

Prepared using: AFS - EPA 7474

Prepared: 8/14/2017

Lab Number	Sample ID	Initial (g)	Final (mL)	QC Sample	Sample Specs.	Raw Data	Sample Comments	Analysis Comments
1707810-30	BO-05_072517_SED_00-01	0.5396	200	-	-	-		
1707810-31	BO-05_072517_SED_01-03	0.5362	200	-	-	-		
1707810-32	W-17-High_072517_SED_03-05	0.5143	200	-	-	-		
1707810-33	W-17-High_072517_SED_05-10	0.5419	200	-	-	-		
1707810-34	W-17-Intertidal_072517_SED_00-01	0.5743	200	-	-	-		
1707810-35	W-17-Intertidal_072517_SED_01-03	0.5081	200	-	-	-		
1707810-36	W-21-High_072517_SED_00-01	0.541	200	-	-	-		
1707810-37	W-21-High_072517_SED_01-03	0.5278	200	-	-	-		
1707810-38	W-21-Intertidal_072517_SED_00-01	0.5721	200	-	-	-		
1707810-39	W-21-Intertidal_072517_SED_01-03	0.5967	200	-	-	-		
1707810-40	W-21-Low_072517_SED_00-01	0.5498	200	-	-	-		
1707810-41	W-21-Low_072517_SED_01-03	0.5836	200	-	-	-		
1707810-42	W-21-Mid_072517_SED_00-01	0.5318	200	-	-	-		
1707810-43	W-21-Mid_072517_SED_01-03	0.549	200	-	-	-		
1707810-44	W-21-UM-Central-E_072517_SED_00-01	0.5413	200	-	-	-		
1707810-45	W-21-UM-Central-E_072517_SED_01-03	0.5094	200	-	-	-		
1707810-46	W-61-High_072517_SED_03-05	0.5593	200	-	-	-		
1707810-47	W-61-High_072517_SED_05-10	0.5938	200	-	-	-		
1707810-48	W-61-Intertidal_072517_SED_03-05	0.5783	200	-	-	-		

PREPARATION BENCH SHEET

F708400

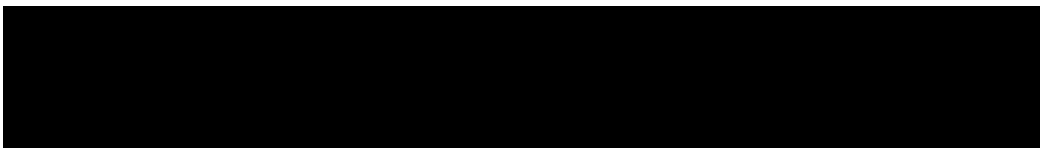
Eurofins Frontier Global Sciences, Inc.

Matrix: Soil/Sediment

Prepared using: AFS - EPA 7474

Prepared: 8/14/2017

1707810-49	W-61-Intertidal_072517_SED_05-10	0.5886	200	-	-	-		
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**Peer Review Check List for THg by 2600 CV-AFS (SOP2822) 2016 Rev 1 (04/1/2016)**

<b>Analyst:</b> BC	<b>Sequence(s) #:</b> 7H21011, 7H21012
<b>Reviewer:</b> <u>DM</u>	<b>Dataset ID(s):</b> THg26002-170808-1
<b>Date:</b> 8/21/2017	<b>WO (s) #:</b> _____
<b>Batch #(s):</b> F708437, F708445, F708446, F708400	

● Select the correct preparation method.

Analyte	Prep Method	Matrix
<input type="checkbox"/> THg	EFAFS-T-AFS-SOP2985	FSTM Trap 70:30 Digest
<input type="checkbox"/> THg	EFAFS-T-AFS-SOP2807	Modified Cold Aqua Regia
<input checked="" type="checkbox"/> THg	EFAFS-T-AFS-SOP2821	Shared Bomb- HF/HNO3/HCl Digest
<input type="checkbox"/> THg	EFTM-T-TM-SOP2825	Nitric Acid Oven Bomb
<input type="checkbox"/> THg	EFAFS-T-AFS-SOP2795	70:30 Digest
<input type="checkbox"/> THg	EFAFS-T-AFS-SOP2800	KCl Trap BrCl Oxidation
<input type="checkbox"/> THg	EFTM-T-TM-SOP2837	Shared Nitric
<input type="checkbox"/> THg	EFSR-P-SP-SOP2796	BrCl Oxidation
<input type="checkbox"/> Hg0	NA	NA
<input type="checkbox"/> Inorg Hg	NA	NA

**Analyst Initials:** BC      **Reviewer Initials:** DM

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

**Peer Review Check List for THg by 2600 CV-AFS (SOP2822) 2016 Rev 1 (04/1/2016)**

<b>Analyst:</b>	BC	<b>Sequence(s) #:</b>	7H21011, 7H21012
<b>Reviewer:</b>	0	<b>Dataset ID(s):</b>	THg26002-170808-1
<b>Date:</b>	8/21/2017	<b>WO (s) #:</b>	0
<b>Batch #(s):</b>	F708437, F708445, F708446, F708400		0

Analyst Initials BC      Reviewer Initials DA

- 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 consistent with the data review flowcharts?  YES    NO    N/A     
 Comments: \_\_\_\_\_
12. Explain any items on the failed data report from Element   
 Comments: \_\_\_\_\_
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 (SOP2822) 2016 Rev 1 (04/1/2016)**

<b>Analyst:</b>	BC	<b>Sequence(s) #:</b>	7H21011, 7H21012
<b>Reviewer:</b>	0	<b>Dataset ID(s):</b>	THg26002-170808-1
<b>Date:</b>	8/21/2017	<b>WO (s) #:</b>	0
<b>Batch #(s):</b>	F708437, F708445, F708446, F708400		0

**Analyst Initials** BC **Reviewer Initials** DM

- |  |  |                               |   |
|--|--|-------------------------------|---|
| 20. MS/MSD Spiked at least 1-5 X ambient or 5x MRL (whichever is higher) ?   | <input checked="" type="checkbox"/> YES  | <input type="checkbox"/> NO   | <input checked="" type="checkbox"/>   |
| Comments: _____  |  |                               |   |
| 21. Are all samples within instrument calibration range? (or at minimum dilution size)   | <input checked="" type="checkbox"/> PASS | <input type="checkbox"/> FAIL | <input checked="" type="checkbox"/>   |
| Comments: _____  |  |                               |   |
| 22. Are the samples run at the correct dilution level for the method?  | <input checked="" type="checkbox"/> YES  | <input type="checkbox"/> NO   | <input checked="" type="checkbox"/>   |
| Comments: _____  |  |                               |   |
| 23. Dissolved < Total (if applicable)  | <input type="checkbox"/> YES             | <input type="checkbox"/> NO   | <input checked="" type="checkbox"/> N/A <input checked="" type="checkbox"/> |
| Comments: _____  |  |                               |   |
| 24. Effluent < Influent (visually confirm if needed)   | <input type="checkbox"/> YES             | <input type="checkbox"/> NO   | <input checked="" type="checkbox"/> N/A <input checked="" type="checkbox"/> |
| Comments: _____  |  |                               |   |
| 25. Are re-runs noted with reason?   | <input type="checkbox"/> YES             | <input type="checkbox"/> NO   | <input checked="" type="checkbox"/> N/A <input checked="" type="checkbox"/> |
| 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? | <input type="checkbox"/> YES             | <input type="checkbox"/> NO   | <input checked="" type="checkbox"/> N/A <input checked="" type="checkbox"/> |
| Comments: _____  |  |                               |   |
| 27. Is the B trap <5% A Traps  | <input type="checkbox"/> YES             | <input type="checkbox"/> NO   | <input checked="" type="checkbox"/> N/A <input checked="" type="checkbox"/> |
| Comments: _____  |  |                               |   |
| 28. Are spiked trap recoveries 75-125% of true value?  | <input type="checkbox"/> YES             | <input type="checkbox"/> NO   | <input checked="" type="checkbox"/> N/A <input checked="" type="checkbox"/> |
| Comments: _____  |  |                               |   |
| 29. Have non-reportable samples been imported into LIMS and clicked to non-reportable?   | <input type="checkbox"/> YES             | <input type="checkbox"/> NO   | <input checked="" type="checkbox"/> N/A                                     |
| Comments: _____  |  |                               |   |
| 30. Have re-extracts been created for non-reportable samples?  | <input type="checkbox"/> YES             | <input type="checkbox"/> NO   | <input checked="" type="checkbox"/> N/A <input checked="" type="checkbox"/> |
| 31. Are there any HIGH QA projects within the data? If so, place data package in QA office before scanning.  | <input type="checkbox"/> YES             | <input type="checkbox"/> NO   | <input checked="" type="checkbox"/> N/A <input checked="" type="checkbox"/> |
| 32. Does the data set need scanning?   | <input type="checkbox"/> YES             |                               | <input checked="" type="checkbox"/> N/A <input checked="" type="checkbox"/> |
| 33. Does the dataset have an LOQ/LOQ or DOC?   | <input type="checkbox"/> YES             |                               | <input checked="" type="checkbox"/> N/A <input checked="" type="checkbox"/> |
| 34. Water samples: has the preservation log been included in dataset for final volume verification?  | <input type="checkbox"/> YES             | <input type="checkbox"/> NO   | <input checked="" type="checkbox"/> N/A <input checked="" type="checkbox"/> |
| 35. Water samples-is the final volume correct in the sequence?   | <input type="checkbox"/> YES             | <input type="checkbox"/> NO   | <input checked="" type="checkbox"/> N/A <input checked="" type="checkbox"/> |

**Files located at:** \\Cuprum\gen\_admin\Quality Assurance\Training Master\DOCs

- |  |   |                             |                                     |
|--|---|-----------------------------|-------------------------------------|
| 36. Date of analyst IDOC/CDOC: _____ 1/11/2017 _____ IDOC/CDOC within last 12 months?          | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> |
| 37. Date of analyst's SOP reading for method: _____ 5/20/2017 _____ Current SOP revision read? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> |
| 38. Date of LOD: _____ LOD within last 3 months?   | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> |
| 39. Date of LOQ: _____ LOQ within last 3 months?   | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> |

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





Frontier Global Sciences

THg26002-170821-1

Analysis Datasheet for Total Mercury

Date of Analysis: August 22, 2017

Analyst: BC

Instrument #: Hg2600-2

Units ng/L

LIMS Sequence #: 7H22013, 7H22014

Calibration Statistics:

LabNumber	n	True Val	Area	Uncorrected Response Factor	Corrected Peak Height	Corrected Response Factor	% Recovery
SEQ-CAL1	1	0.50 ng/L	63.24 units	126.48	61.72 units	123.43	103.6 %Rec
SEQ-CAL2	1	1.00 ng/L	119.53 units	119.53	118.01 units	118.01	99.1 %Rec
SEQ-CAL3	1	5.00 ng/L	606.87 units	121.37	605.35 units	121.07	101.6 %Rec
SEQ-CAL4	1	20.00 ng/L	2386.24 units	119.31	2384.72 units	119.24	100.1 %Rec
SEQ-CAL5	1	40.00 ng/L	4552.86 units	113.82	4551.34 units	113.78	95.5 %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**  
 119.11            +/- 3.61            3.0% RSD            120.10

Blanks:

LabNumber	n	Mean	Std Dev	Mean (ng/L)	Std Dev (ng/L)
SEQ-IBL	3	1.52 units	±0.76	0.01 ng/L	±0.01

Preparation Blanks

Sample Type	Batch ID	n	Mean	Std Dev
BLK	1	2	1.075 ng/L	±0.566
BLK	2	2	1.554 ng/L	±0.083
BLK	3	3	18.258 ng/L	±3.863
BLK	4	0	0.000 ng/L	
BLK	5	0	0.000 ng/L	
BLK	6	0	0.000 ng/L	

QUALITY ASSURANCE  
 PEER - REVIEWED  
 INITIALS: DM 8/22/17

Instrument	Analyst	Sample Type	LabNumber	Dilution	Analyzed	FileID	RunEnd	Uncorrected Response	Batch ID	No PB Correction?	RESP	InitialResult	FinalResult	InitialUnits	Comments
Hg2600-2	BC	CAL	SEQ-IBL1	1	8/22/2017 8:43:20	83490-1.RAW	8:43:20 AM	2.31			0.8	0.007	0.007	ng/L	
Hg2600-2	BC	CAL	SEQ-IBL2	1	8/22/2017 8:47:28	83491-1.RAW	8:47:28 AM	1.46			-0.1	-0.001	-0.001	ng/L	
Hg2600-2	BC	CAL	SEQ-IBL3	1	8/22/2017 8:51:37	83492-1.RAW	8:51:37 AM	0.80			-0.7	-0.006	-0.006	ng/L	
Hg2600-2	BC	CAL	SEQ-CAL1	1	8/22/2017 8:55:45	83493-1.RAW	8:55:45 AM	63.24			61.7	0.518	0.518	ng/L	
Hg2600-2	BC	CAL	SEQ-CAL2	1	8/22/2017 8:59:53	83494-1.RAW	8:59:53 AM	119.53			118.0	0.991	0.991	ng/L	
Hg2600-2	BC	CAL	SEQ-CAL3	1	8/22/2017 9:04:02	83495-1.RAW	9:04:02 AM	606.87			605.3	5.082	5.082	ng/L	
Hg2600-2	BC	CAL	SEQ-CAL4	1	8/22/2017 9:08:10	83496-1.RAW	9:08:10 AM	2386.24			2384.7	20.022	20.022	ng/L	
Hg2600-2	BC	CAL	SEQ-CAL5	1	8/22/2017 9:12:19	83497-1.RAW	9:12:19 AM	4552.86			4551.3	38.213	38.213	ng/L	
Hg2600-2	BC	CAL	SEQ-ICV1	1	8/22/2017 9:16:27	83498-1.RAW	9:16:27 AM	623.74			622.2	5.224	5.224	ng/L	
Hg2600-2	BC	BLK	F708463-BLK1	10	8/22/2017 9:22:40	83499-1.RAW	9:22:40 AM	19.10	1		17.6	0.148	1.476	ng/L	
Hg2600-2	BC	BLK	F708463-BLK2	10	8/22/2017 9:26:49	83500-1.RAW	9:26:49 AM	9.56	1		8.0	0.067	0.675	ng/L	
Hg2600-2	BC	SAM	F708463-BS1	100	8/22/2017 9:30:57	83501-1.RAW	9:30:57 AM	250.61	1		249.1	2.081	208.056	ng/L	
Hg2600-2	BC	SAM	F708463-BSD1	100	8/22/2017 9:35:05	83502-1.RAW	9:35:05 AM	256.36	1		254.8	2.129	212.883	ng/L	
Hg2600-2	BC	SAM	1707771-AO	50	8/22/2017 9:39:14	83503-1.RAW	9:39:14 AM	1624.00	1		1622.5	13.601	680.033	ng/L	
Hg2600-2	BC	SAM	1707771-AP	50	8/22/2017 9:43:22	83504-1.RAW	9:43:22 AM	1860.34	1		1858.8	15.585	779.247	ng/L	
Hg2600-2	BC	SAM	1707771-AQ	50	8/22/2017 9:47:31	83505-1.RAW	9:47:31 AM	3415.99	1		3414.5	28.646	1432.301	ng/L	
Hg2600-2	BC	SAM	1707771-AR	50	8/22/2017 9:51:39	83506-1.RAW	9:51:39 AM	810.53	1		809.0	6.771	338.542	ng/L	
Hg2600-2	BC	SAM	1707771-AS	50	8/22/2017 9:55:48	83507-1.RAW	9:55:48 AM	942.68	1		941.2	7.880	394.018	ng/L	
Hg2600-2	BC	SAM	1707771-AT	50	8/22/2017 9:59:56	83508-1.RAW	9:59:56 AM	912.16	1		910.6	7.624	381.206	ng/L	
Hg2600-2	BC	CAL	SEQ-CCV1	1	8/22/2017 10:04:05	83509-1.RAW	10:04:05 AM	624.09			622.6	5.227	5.227	ng/L	
Hg2600-2	BC	CAL	SEQ-CCB1	1	8/22/2017 10:08:13	83510-1.RAW	10:08:13 AM	17.65			16.1	0.135	0.135	ng/L	
Hg2600-2	BC	SAM	1707771-AU	50	8/22/2017 10:12:21	83511-1.RAW	10:12:21 AM	1191.99	1		1190.5	9.974	498.677	ng/L	
Hg2600-2	BC	SAM	1707771-AV	50	8/22/2017 10:16:30	83512-1.RAW	10:16:30 AM	1965.57	1		1964.0	16.468	823.422	ng/L	
Hg2600-2	BC	SAM	1707771-AW	50	8/22/2017 10:20:38	83513-1.RAW	10:20:38 AM	5061.93	1		5060.4	42.465	2123.259	ng/L	
Hg2600-2	BC	SAM	1707771-AX	50	8/22/2017 10:24:47	83514-1.RAW	10:24:47 AM	2147.91	1		2146.4	17.999	899.967	ng/L	
Hg2600-2	BC	SAM	1707771-AY	50	8/22/2017 10:28:55	83515-1.RAW	10:28:55 AM	2336.55	1		2335.0	19.583	979.158	ng/L	
Hg2600-2	BC	SAM	1707771-AZ	50	8/22/2017 10:33:04	83516-1.RAW	10:33:04 AM	3059.13	1		3057.6	25.650	1282.493	ng/L	
Hg2600-2	BC	SAM	1707771-BA	50	8/22/2017 10:37:12	83517-1.RAW	10:37:12 AM	2801.12	1		2799.6	23.484	1174.182	ng/L	
Hg2600-2	BC	SAM	1707771-BB	50	8/22/2017 10:41:20	83518-1.RAW	10:41:20 AM	3733.07	1		3731.5	31.308	1565.410	ng/L	
Hg2600-2	BC	SAM	1707771-BC	50	8/22/2017 10:45:29	83519-1.RAW	10:45:29 AM	4499.40	1		4497.9	37.742	1887.111	ng/L	
Hg2600-2	BC	SAM	1707771-BD	50	8/22/2017 10:49:37	83520-1.RAW	10:49:37 AM	1627.55	1		1626.0	13.630	681.523	ng/L	
Hg2600-2	BC	CAL	SEQ-CCV2	1	8/22/2017 10:53:46	83521-1.RAW	10:53:46 AM	618.93			617.4	5.184	5.184	ng/L	
Hg2600-2	BC	CAL	SEQ-CCB2	1	8/22/2017 10:57:54	83522-1.RAW	10:57:54 AM	31.65			30.1	0.253	0.253	ng/L	
Hg2600-2	BC	SAM	1707771-BE	50	8/22/2017 11:02:03	83523-1.RAW	11:02:03 AM	3722.87	1		3721.3	31.223	1561.128	ng/L	
Hg2600-2	BC	SAM	1707771-BF	50	8/22/2017 11:06:11	83524-1.RAW	11:06:11 AM	1177.40	1		1175.9	9.851	492.552	ng/L	
Hg2600-2	BC	SAM	1707771-BG	50	8/22/2017 11:10:20	83525-1.RAW	11:10:20 AM	272.24	1		270.7	2.251	112.570	ng/L	
Hg2600-2	BC	SAM	1707771-BH	50	8/22/2017 11:14:28	83526-1.RAW	11:14:28 AM	801.87	1		800.3	6.698	334.906	ng/L	
Hg2600-2	BC	SAM	F708463-MS1	400	8/22/2017 11:18:36	83527-1.RAW	11:18:36 AM	800.76	1		799.2	6.708	2683.050	ng/L	
Hg2600-2	BC	SAM	F708463-MSD1	400	8/22/2017 11:22:45	83528-1.RAW	11:22:45 AM	787.79	1		786.3	6.599	2639.492	ng/L	
Hg2600-2	BC	SAM	F708463-MS2	400	8/22/2017 11:26:53	83529-1.RAW	11:26:53 AM	876.25	1		874.7	7.341	2936.573	ng/L	
Hg2600-2	BC	SAM	F708463-MSD2	400	8/22/2017 11:31:02	83530-1.RAW	11:31:02 AM	848.92	1		847.4	7.112	2844.789	ng/L	
Hg2600-2	BC	SAM	1707771-AWRE1	100	8/22/2017 11:35:10	83531-1.RAW	11:35:10 AM	2586.92	1		2585.4	21.696	2169.599	ng/L	
Hg2600-2	BC	SAM	1707771-AXRE1	50	8/22/2017 11:39:19	83532-1.RAW	11:39:19 AM	2123.01	1		2121.5	17.790	889.515	ng/L	
Hg2600-2	BC	CAL	SEQ-CCV3	1	8/22/2017 11:43:27	83533-1.RAW	11:43:27 AM	609.70			608.2	5.106	5.106	ng/L	
Hg2600-2	BC	CAL	SEQ-CCB3	1	8/22/2017 11:47:35	83534-1.RAW	11:47:35 AM	28.76			27.2	0.229	0.229	ng/L	
Hg2600-2	BC	BLK	F708464-BLK1	10	8/22/2017 11:51:43	83535-1.RAW	11:51:43 AM	20.73	2		19.2	0.161	1.613	ng/L	
Hg2600-2	BC	BLK	F708464-BLK2	10	8/22/2017 11:55:51	83536-1.RAW	11:55:51 AM	19.34	2		17.8	0.150	1.496	ng/L	
Hg2600-2	BC	SAM	F708464-BS1	10	8/22/2017 11:59:59	83537-1.RAW	11:59:59 AM	2415.49	2		2414.0	20.112	201.120	ng/L	
Hg2600-2	BC	SAM	F708464-BSD1	10	8/22/2017 12:04:07	83538-1.RAW	12:04:07 PM	2462.21	2		2460.7	20.504	205.043	ng/L	
Hg2600-2	BC	SAM	1707771-BI	50	8/22/2017 12:08:16	83539-1.RAW	12:08:16 PM	818.67	2		817.1	6.830	341.480	ng/L	
Hg2600-2	BC	SAM	1707771-BJ	50	8/22/2017 12:12:24	83540-1.RAW	12:12:24 PM	872.28	2		870.8	7.280	363.985	ng/L	
Hg2600-2	BC	SAM	1707771-BK	50	8/22/2017 12:16:33	83541-1.RAW	12:16:33 PM	1162.83	2		1161.3	9.719	485.957	ng/L	
Hg2600-2	BC	SAM	1707771-BL	50	8/22/2017 12:20:41	83542-1.RAW	12:20:41 PM	3895.77	2		3894.2	32.665	1633.232	ng/L	
Hg2600-2	BC	SAM	1707771-BM	50	8/22/2017 12:24:50	83543-1.RAW	12:24:50 PM	4235.88	2		4234.4	35.520	1776.008	ng/L	
Hg2600-2	BC	SAM	1707771-BN	50	8/22/2017 12:28:58	83544-1.RAW	12:28:58 PM	1942.27	2		1940.7	16.263	813.162	ng/L	
Hg2600-2	BC	CAL	SEQ-CCV4	1	8/22/2017 12:33:06	83545-1.RAW	12:33:06 PM	637.28			635.8	5.338	5.338	ng/L	
Hg2600-2	BC	CAL	SEQ-CCB4	1	8/22/2017 12:37:15	83546-1.RAW	12:37:15 PM	41.07			39.5	0.332	0.332	ng/L	

Instrument	Analyst	Sample Type	LabNumber	Dilution	Analyzed	FileID	RunEnd	Uncorrected Response	Batch ID	No PB Correction?	RESP	InitialResult	FinalResult	InitialUnits	Comments
Hg2600-2	BC	SAM	1707771-BO	50	8/22/2017 12:41:23	83547-1.RAW	12:41:23 PM	2361.39	2		2359.9	19.782	989.106	ng/L	
Hg2600-2	BC	SAM	1707771-BP	50	8/22/2017 12:45:32	83548-1.RAW	12:45:32 PM	847.89	2		846.4	7.075	353.746	ng/L	
Hg2600-2	BC	SAM	1707771-BQ	50	8/22/2017 12:49:40	83549-1.RAW	12:49:40 PM	1284.59	2		1283.1	10.741	537.071	ng/L	
Hg2600-2	BC	SAM	1707771-BR	50	8/22/2017 12:53:48	83550-1.RAW	12:53:48 PM	1465.25	2		1463.7	12.258	612.911	ng/L	
Hg2600-2	BC	SAM	WS		8/22/2017 13:10:00	83551-1.RAW	1:10:00 PM	147.80	x		146.3	1.228	0.000	ng/L	
Hg2600-2	BC	SAM	1707771-BS	50	8/22/2017 13:14:09	83552-1.RAW	1:14:09 PM	1752.56	2		1751.0	14.670	733.522	ng/L	
Hg2600-2	BC	SAM	1707771-BT	50	8/22/2017 13:18:17	83553-1.RAW	1:18:17 PM	660.58	2		659.1	5.502	275.115	ng/L	
Hg2600-2	BC	SAM	1707771-BU	50	8/22/2017 13:22:26	83554-1.RAW	1:22:26 PM	1166.24	2		1164.7	9.748	487.388	ng/L	
Hg2600-2	BC	SAM	1707771-BV	50	8/22/2017 13:26:34	83555-1.RAW	1:26:34 PM	534.71	2		533.2	4.445	222.275	ng/L	
Hg2600-2	BC	SAM	1707771-BW	50	8/22/2017 13:30:42	83556-1.RAW	1:30:42 PM	502.67	2		501.1	4.176	208.825	ng/L	
Hg2600-2	BC	SAM	1707771-BX	50	8/22/2017 13:34:51	83557-1.RAW	1:34:51 PM	572.66	2		571.1	4.764	238.206	ng/L	
Hg2600-2	BC	CAL	SEQ-CCV5	1	8/22/2017 13:38:59	83558-1.RAW	1:38:59 PM	612.07			610.5	5.126	5.126	ng/L	
Hg2600-2	BC	CAL	SEQ-CCB5	1	8/22/2017 13:43:08	83559-1.RAW	1:43:08 PM	19.61			18.1	0.152	0.152	ng/L	
Hg2600-2	BC	SAM	1707771-BY	50	8/22/2017 13:47:16	83560-1.RAW	1:47:16 PM	195.75	2		194.2	1.600	79.981	ng/L	
Hg2600-2	BC	SAM	1707771-BZ	50	8/22/2017 13:51:25	83561-1.RAW	1:51:25 PM	460.45	2		458.9	3.822	191.101	ng/L	
Hg2600-2	BC	SAM	1707771-CA	50	8/22/2017 13:55:33	83562-1.RAW	1:55:33 PM	813.05	2		811.5	6.782	339.121	ng/L	
Hg2600-2	BC	SAM	1707771-CB	50	8/22/2017 13:59:41	83563-1.RAW	1:59:41 PM	885.88	2		884.4	7.394	369.694	ng/L	
Hg2600-2	BC	SAM	F708464-MS1	400	8/22/2017 14:03:50	83564-1.RAW	2:03:50 PM	800.16	2		798.6	6.701	2680.556	ng/L	
Hg2600-2	BC	SAM	F708464-MSD1	400	8/22/2017 14:07:58	83565-1.RAW	2:07:58 PM	763.92	2		762.4	6.397	2558.849	ng/L	
Hg2600-2	BC	SAM	F708464-MS2	400	8/22/2017 14:12:07	83566-1.RAW	2:12:07 PM	695.62	2		694.1	5.824	2329.473	ng/L	
Hg2600-2	BC	SAM	F708464-MSD2	400	8/22/2017 14:16:15	83567-1.RAW	2:16:15 PM	709.94	2		708.4	5.944	2377.565	ng/L	
Hg2600-2	BC	BLK	F708474-BLK1	100	8/22/2017 14:20:24	83568-1.RAW	2:20:24 PM	28.58	3		27.1	0.227	22.717	ng/L	
Hg2600-2	BC	BLK	F708474-BLK2	100	8/22/2017 14:24:32	83569-1.RAW	2:24:32 PM	20.48	3		19.0	0.159	15.916	ng/L	
Hg2600-2	BC	CAL	SEQ-CCV6	1	8/22/2017 14:28:40	83570-1.RAW	2:28:40 PM	605.05			603.5	5.067	5.067	ng/L	
Hg2600-2	BC	CAL	SEQ-CCB6	1	8/22/2017 14:32:49	83571-1.RAW	2:32:49 PM	27.45			25.9	0.218	0.218	ng/L	
Hg2600-2	BC	BLK	F708474-BLK3	100	8/22/2017 14:36:57	83572-1.RAW	2:36:57 PM	20.75	3		19.2	0.161	16.143	ng/L	
Hg2600-2	BC	SAM	F708474-BS1	400	8/22/2017 14:41:06	83573-1.RAW	2:41:06 PM	1382.41	3		1380.9	11.548	4619.258	ng/L	
Hg2600-2	BC	SAM	F708474-BS2	400	8/22/2017 14:45:14	83574-1.RAW	2:45:14 PM	1382.05	3		1380.5	11.545	4618.049	ng/L	
Hg2600-2	BC	SAM	F708474-BS3	400	8/22/2017 14:49:22	83575-1.RAW	2:49:22 PM	1403.48	3		1402.0	11.725	4690.018	ng/L	
Hg2600-2	BC	SAM	F708474-BS4	400	8/22/2017 14:53:31	83576-1.RAW	2:53:31 PM	1402.15	3		1400.6	11.714	4685.552	ng/L	
Hg2600-2	BC	SAM	1708504-01	100	8/22/2017 14:57:39	83577-1.RAW	2:57:39 PM	53.09	3		51.6	0.250	25.037	ng/L	
Hg2600-2	BC	SAM	ws		8/22/2017 15:16:37	83578-1.RAW	3:16:37 PM	106.42	x		104.9	0.881	0.000	ng/L	
Hg2600-2	BC	CAL	SEQ-CCV7	1	8/22/2017 15:20:45	83579-1.RAW	3:20:45 PM	578.73			577.2	4.846	4.846	ng/L	
Hg2600-2	BC	CAL	SEQ-CCB7	1	8/22/2017 15:24:54	83580-1.RAW	3:24:54 PM	20.80			19.3	0.162	0.162	ng/L	

TotalMercury EPA1631  
 Operat: BC  
 BlankSi 1.5249  
 Calib Eqn: Conc = (Area-1.524  
 Run Date: 8/21/2017  
 Blank SD: 0.755752873  
 Worksh THg260( CalibFa 119.1  
 Status: QC Warnings:8/QC E  
 Run Time: 15:12:28  
 Blank RSD%: 49.55967837  
 Method ##### R: 0.9997  
 R<sup>2</sup>: 0.9995  
 CF SD: 3.606847253  
 Descrip THg26002-170821-1  
 CF RSD%: 3.028315327

Sample/ID	Location	Rinse	Dilute	Blank	Conc (ppt)	MB%	FinalConc	Rec%	QA	RawData	RunEnd	Peak (Raw)	Control (etf)	Flags	RunCount
Clean				0.00	18.12					83485-1.RAW	8:23:55	2158.32	Clean	OK	1
clean				0.00	0.04					83486-1.RAW	8:26:46	4.24	Clean	OK	1
ws				1.52	0.06					83487-1.RAW	8:30:54	8.34	Sample	OK	1
ws				1.52	0.03					83488-1.RAW	8:35:03	5.43	Sample	OK	1
ws				1.52	0.04					83489-1.RAW	8:39:11	6.36	Sample	OK	1
SEQ-IBL1	A1		1	0.00	0.02					83490-1.RAW	8:43:20	2.31	Sample	OK	1
SEQ-IBL2	A2		1	0.00	0.01					83491-1.RAW	8:47:28	1.46	Sample	OK	1
SEQ-IBL3	A3		1	0.00	0.01					83492-1.RAW	8:51:37	0.80	Sample	OK	1
SEQ-CAL1	A4		1	1.52	0.52			103.63		83493-1.RAW	8:55:45	63.24	Sample	OK	1
SEQ-CAL2	A5		1	1.52	0.99			99.08		83494-1.RAW	8:59:53	119.53	Sample	OK	1
SEQ-CAL3	A6		1	1.52	5.08			101.65		83495-1.RAW	9:04:02	606.87	Sample	OK	1
SEQ-CAL4	A7		1	1.52	20.02			100.11		83496-1.RAW	9:08:10	2386.24	Sample	OK	1
SEQ-CAL5	A8		1	1.52	38.21			95.53		83497-1.RAW	9:12:19	4552.86	Sample	OK	1
SEQ-ICV1	A9		1	1.52	5.22			104.48		83498-1.RAW	9:16:27	623.74	Sample	OK	1
F708463-BLK1	A10		10	1.52	1.48					83499-1.RAW	9:22:40	19.10	Sample	OK	1
F708463-BLK2	A11		10	1.52	0.67					83500-1.RAW	9:26:49	9.56	Sample	OK	1
F708463-BS1	A12		100	1.52	209.13					83501-1.RAW	9:30:57	250.61	Sample	OK	1
F708463-BSD1	A13		100	1.52	213.96					83502-1.RAW	9:35:05	256.36	Sample	OK	1
1707771-AO	A14		50	1.52	681.12					83503-1.RAW	9:39:14	1624.00	Sample	OK	1
1707771-AP	A15		50	1.52	780.33					83504-1.RAW	9:43:22	1860.34	Sample	OK	1
1707771-AQ	A16		50	1.52	1433.39					83505-1.RAW	9:47:31	3415.99	Sample	OK	1
1707771-AR	A17		50	1.52	339.62					83506-1.RAW	9:51:39	810.53	Sample	OK	1
1707771-AS	A18		50	1.52	395.10					83507-1.RAW	9:55:48	942.68	Sample	OK	1
1707771-AT	A19		50	1.52	382.28					83508-1.RAW	9:59:56	912.16	Sample	OK	1
SEQ-CCV1	A20		1	1.52	5.23			104.54		83509-1.RAW	10:04:05	624.09	Sample	OK	1
SEQ-CCB1	A21		1	1.52	0.14			0.00		83510-1.RAW	10:08:13	17.65	Sample	OK	1
1707771-AU	B1		50	1.52	499.76					83511-1.RAW	10:12:21	1191.99	Sample	OK	1
1707771-AV	B2		50	1.52	824.51					83512-1.RAW	10:16:30	1965.57	Sample	OK	1
1707771-AW	B3		50	1.52	2124.36					83513-1.RAW	10:20:38	5061.93	Sample	OK	1
1707771-AX	B4		50	1.52	901.06					83514-1.RAW	10:24:47	2147.91	Sample	OK	1
1707771-AY	B5		50	1.52	980.25					83515-1.RAW	10:28:55	2336.55	Sample	OK	1
1707771-AZ	B6		50	1.52	1283.59					83516-1.RAW	10:33:04	3059.13	Sample	OK	1
1707771-BA	B7		50	1.52	1175.27					83517-1.RAW	10:37:12	2801.12	Sample	OK	1
1707771-BB	B8		50	1.52	1566.51					83518-1.RAW	10:41:20	3733.07	Sample	OK	1
1707771-BC	B9		50	1.52	1888.21					83519-1.RAW	10:45:29	4499.40	Sample	OK	1
1707771-BD	B10		50	1.52	682.61					83520-1.RAW	10:49:37	1627.55	Sample	OK	1
SEQ-CCV2	B11		1	1.52	5.18			103.67		83521-1.RAW	10:53:46	618.93	Sample	OK	1
SEQ-CCB2	B12		1	1.52	0.25			0.00		83522-1.RAW	10:57:54	31.65	Sample	OK	1
1707771-BE	B13		50	1.52	1562.22					83523-1.RAW	11:02:03	3722.87	Sample	OK	1
1707771-BF	B14		50	1.52	493.63					83524-1.RAW	11:06:11	1177.40	Sample	OK	1
1707771-BG	B15		50	1.52	113.65					83525-1.RAW	11:10:20	272.24	Sample	OK	1
1707771-BH	B16		50	1.52	335.98					83526-1.RAW	11:14:28	801.87	Sample	OK	1
F708463-MS1	B17		400	1.52	2684.16			796.52		83527-1.RAW	11:18:36	800.76	Sample	OK	1



F708463-MSD1	B18	400	1.52	2640.61		83528-1.RAW	11:22:45	787.79	Sample	OK	1
F708463-MS2	B19	400	1.52	2937.70	111.17	83529-1.RAW	11:26:53	876.25	Sample	OK	1
F708463-MSD2	B20	400	1.52	2845.88		83530-1.RAW	11:31:02	848.92	Sample	OK	1
1707771-AWRE1	B21	100	1.52	2170.70		83531-1.RAW	11:35:10	2586.92	Sample	OK	1
1707771-AXRE1	C1	50	1.52	890.60		83532-1.RAW	11:39:19	2123.01	Sample	OK	1
SEQ-CCV3	C2	1	1.52	5.11	102.13	83533-1.RAW	11:43:27	609.70	Sample	OK	1
SEQ-CCB3	C3	1	1.52	0.23	0.00	83534-1.RAW	11:47:35	28.76	Sample	OK	1
F708464-BLK1	C4	10	1.52	1.61		83535-1.RAW	11:51:43	20.73	Sample	OK	1
F708464-BLK2	C5	10	1.52	1.50		83536-1.RAW	11:55:51	19.34	Sample	OK	1
F708464-BS1	C6	10	1.52	202.68		83537-1.RAW	11:59:59	2415.49	Sample	OK	1
F708464-BSD1	C7	10	1.52	206.60		83538-1.RAW	12:04:07	2462.21	Sample	OK	1
1707771-BI	C8	50	1.52	343.04		83539-1.RAW	12:08:16	818.67	Sample	OK	1
1707771-BJ	C9	50	1.52	365.54		83540-1.RAW	12:12:24	872.28	Sample	OK	1
1707771-BK	C10	50	1.52	487.52		83541-1.RAW	12:16:33	1162.83	Sample	OK	1
1707771-BL	C11	50	1.52	1634.81		83542-1.RAW	12:20:41	3895.77	Sample	OK	1
1707771-BM	C12	50	1.52	1777.59		83543-1.RAW	12:24:50	4235.88	Sample	OK	1
1707771-BN	C13	50	1.52	814.73		83544-1.RAW	12:28:58	1942.27	Sample	OK	1
SEQ-CCV4	C14	1	1.52	5.34	106.76	83545-1.RAW	12:33:06	637.28	Sample	OK	1
SEQ-CCB4	C15	1	1.52	0.33	0.00	83546-1.RAW	12:37:15	41.07	Sample	OK	1
1707771-BO	C16	50	1.52	990.67		83547-1.RAW	12:41:23	2361.39	Sample	OK	1
1707771-BP	C17	50	1.52	355.31		83548-1.RAW	12:45:32	847.89	Sample	OK	1
1707771-BQ	C18	50	1.52	538.63		83549-1.RAW	12:49:40	1284.59	Sample	OK	1
1707771-BR	C19	50	1.52	614.47		83550-1.RAW	12:53:48	1465.25	Sample	OK	1
WS			1.52	1.23		83551-1.RAW	13:10:00	147.80	Sample	OK	1
1707771-BS	C20	50	1.52	735.09		83552-1.RAW	13:14:09	1752.56	Sample	OK	1
1707771-BT	C21	50	1.52	276.67		83553-1.RAW	13:18:17	660.58	Sample	OK	1
1707771-BU	A1	50	1.52	488.95		83554-1.RAW	13:22:26	1166.24	Sample	OK	1
1707771-BV	A2	50	1.52	223.83		83555-1.RAW	13:26:34	534.71	Sample	OK	1
1707771-BW	A3	50	1.52	210.38		83556-1.RAW	13:30:42	502.67	Sample	OK	1
1707771-BX	A4	50	1.52	239.76		83557-1.RAW	13:34:51	572.66	Sample	OK	1
SEQ-CCV5	A5	1	1.52	5.13	102.52	83558-1.RAW	13:38:59	612.07	Sample	OK	1
SEQ-CCB5	A6	1	1.52	0.15	0.00	83559-1.RAW	13:43:08	19.61	Sample	OK	1
1707771-BY	A7	50	1.52	81.53		83560-1.RAW	13:47:16	195.75	Sample	OK	1
1707771-BZ	A8	50	1.52	192.66		83561-1.RAW	13:51:25	460.45	Sample	OK	1
1707771-CA	A9	50	1.52	340.68		83562-1.RAW	13:55:33	813.05	Sample	OK	1
1707771-CB	A10	50	1.52	371.25		83563-1.RAW	13:59:41	885.88	Sample	OK	1
F708464-MS1	A11	400	1.52	2682.15	720.51	83564-1.RAW	14:03:50	800.16	Sample	OK	1
F708464-MSD1	A12	400	1.52	2560.42		83565-1.RAW	14:07:58	763.92	Sample	OK	1
F708464-MS2	A13	400	1.52	2331.07	90.97	83566-1.RAW	14:12:07	695.62	Sample	OK	1
F708464-MSD2	A14	400	1.52	2379.16		83567-1.RAW	14:16:15	709.94	Sample	OK	1
F708474-BLK1	A15	100	1.52	22.72		83568-1.RAW	14:20:24	28.58	Sample	OK	1
F708474-BLK2	A16	100	1.52	15.92		83569-1.RAW	14:24:32	20.48	Sample	OK	1
SEQ-CCV6	A17	1	1.52	5.07	101.34	83570-1.RAW	14:28:40	605.05	Sample	OK	1
SEQ-CCB6	A18	1	1.52	0.22	0.00	83571-1.RAW	14:32:49	27.45	Sample	OK	1
F708474-BLK3	A19	100	1.52	16.14		83572-1.RAW	14:36:57	20.75	Sample	OK	1
F708474-BS1	A20	400	1.52	4637.59		83573-1.RAW	14:41:06	1382.41	Sample	OK	1
F708474-BS2	A21	400	1.52	4636.36		83574-1.RAW	14:45:14	1382.05	Sample	OK	1
F708474-BS3	B1	400	1.52	4708.32		83575-1.RAW	14:49:22	1403.48	Sample	OK	1

F708474-BS4	B2	400	1.52	4703.87		83576-1.RAW	14:53:31	1402.15 Sample	OK	1
1708504-01	B3	100	1.52	43.29		83577-1.RAW	14:57:39	53.09 Sample	OK	1
ws			1.52	0.88		83578-1.RAW	15:16:37	106.42 Sample	OK	1
SEQ-CCV7	B4	1	1.52	4.85	96.93	83579-1.RAW	15:20:45	578.73 Sample	OK	1
SEQ-CCB7	B5	1	1.52	0.16	0.00	83580-1.RAW	15:24:54	20.80 Sample	OK	1

## ANALYSIS SEQUENCE

7H22013



Instrument: Hg2600-2

Calibration ID: UNASSIGNED

Analyzed: 8/21/2017

Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
7H22013-IBL1	QC	1			
7H22013-IBL2	QC	2			
7H22013-IBL3	QC	3			
7H22013-CAL1	QC	4	1704505		
7H22013-CAL2	QC	5	1704506		
7H22013-CAL3	QC	6	1704507		
7H22013-CAL4	QC	7	1704508		
7H22013-CAL5	QC	8	1704509		
7H22013-ICV1	QC	9	1703679		
F708463-BLK1	QC	10			
F708463-BLK2	QC	11			
F708463-BS1	QC	12			
F708463-BSD1	QC	13			
1707771-AO	Hg-CVAFS-S-7474	14			
1707771-AP	Hg-CVAFS-S-7474	15			
1707771-AQ	Hg-CVAFS-S-7474	16			
1707771-AR	Hg-CVAFS-S-7474	17			
1707771-AS	Hg-CVAFS-S-7474	18			
1707771-AT	Hg-CVAFS-S-7474	19			
7H22013-CCV1	QC	20	1703679		
7H22013-CCB1	QC	21			
1707771-AU	Hg-CVAFS-S-7474	22			
1707771-AV	Hg-CVAFS-S-7474	23			
1707771-AW	Hg-CVAFS-S-7474	24			
1707771-AX	Hg-CVAFS-S-7474	25			
1707771-AY	Hg-CVAFS-S-7474	26			
1707771-AZ	Hg-CVAFS-S-7474	27			
1707771-BA	Hg-CVAFS-S-7474	28			
1707771-BB	Hg-CVAFS-S-7474	29			
1707771-BC	Hg-CVAFS-S-7474	30			
1707771-BD	Hg-CVAFS-S-7474	31			
7H22013-CCV2	QC	32	1703679		
7H22013-CCB2	QC	33			
1707771-BE	Hg-CVAFS-S-7474	34			
1707771-BF	Hg-CVAFS-S-7474	35			

Due Date: 8/24/2017

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## ANALYSIS SEQUENCE

7H22013



Instrument: Hg2600-2

Calibration ID: UNASSIGNED

Analyzed: 8/21/2017

Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
1707771-BG	Hg-CVAFS-S-7474	36			
1707771-BH	Hg-CVAFS-S-7474	37			
F708463-MS1	QC	38			
F708463-MSD1	QC	39			
F708463-MS2	QC	40			
F708463-MSD2	QC	41			
1707771-AWRE1	Hg-CVAFS-S-7474	42			Added 8/22/2017 by BC
1707771-AXRE1	Hg-CVAFS-S-7474	43			Added 8/22/2017 by BC
7H22013-CCV3	QC	44	1703679		
7H22013-CCB3	QC	45			
F708464-BLK1	QC	46			
F708464-BLK2	QC	47			
F708464-BS1	QC	48			
F708464-BSD1	QC	49			
1707771-BI	Hg-CVAFS-S-7474	50			
1707771-BJ	Hg-CVAFS-S-7474	51			
1707771-BK	Hg-CVAFS-S-7474	52			
1707771-BL	Hg-CVAFS-S-7474	53			
1707771-BM	Hg-CVAFS-S-7474	54			
1707771-BN	Hg-CVAFS-S-7474	55			
7H22013-CCV4	QC	56	1703679		
7H22013-CCB4	QC	57			
1707771-BO	Hg-CVAFS-S-7474	58			
1707771-BP	Hg-CVAFS-S-7474	59			
1707771-BQ	Hg-CVAFS-S-7474	60			
1707771-BR	Hg-CVAFS-S-7474	61			
1707771-BS	Hg-CVAFS-S-7474	62			
1707771-BT	Hg-CVAFS-S-7474	63			
1707771-BU	Hg-CVAFS-S-7474	64			
1707771-BV	Hg-CVAFS-S-7474	65			
1707771-BW	Hg-CVAFS-S-7474	66			
1707771-BX	Hg-CVAFS-S-7474	67			
7H22013-CCV5	QC	68	1703679		
7H22013-CCB5	QC	69			
1707771-BY	Hg-CVAFS-S-7474	70			

Due Date: 8/24/2017

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ANALYSIS SEQUENCE

7H22013



Instrument: Hg2600-2

Calibration ID: UNASSIGNED

Analyzed: 8/21/2017

Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
1707771-BZ	Hg-CVAFS-S-7474	71			
1707771-CA	Hg-CVAFS-S-7474	72			
1707771-CB	Hg-CVAFS-S-7474	73			
F708464-MS1	QC	74			
F708464-MSD1	QC	75			
F708464-MS2	QC	76			
F708464-MSD2	QC	77			
7H22013-CCV6	QC	78	1703679		
7H22013-CCB6	QC	79			

Becky 8/22/17  
Samples Loaded By Date

Becky 8/22/17  
Data Processed By Date

10992  
8/21/17

**ANALYSIS SEQUENCE**

**7H22014**



**Instrument: Hg2600-2**

**Calibration ID: UNASSIGNED**

**Analyzed: 8/21/2017**

Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
7H22014-IBL1	QC	1			
7H22014-IBL2	QC	2			
7H22014-IBL3	QC	3			
7H22014-CAL1	QC	4	1704505		
7H22014-CAL2	QC	5	1704506		
7H22014-CAL3	QC	6	1704507		
7H22014-CAL4	QC	7	1704508		
7H22014-CAL5	QC	8	1704509		
7H22014-ICV1	QC	9	1703679		
7H22014-CCV1	QC	10	1703679		
7H22014-CCB1	QC	11			
7H22014-CCV2	QC	12	1703679		
7H22014-CCB2	QC	13			
7H22014-CCV3	QC	14	1703679		
7H22014-CCB3	QC	15			
7H22014-CCV4	QC	16	1703679		
7H22014-CCB4	QC	17			
7H22014-CCV5	QC	18	1703679		
7H22014-CCB5	QC	19			
F708474-BLK1	QC	20			
F708474-BLK2	QC	21			
7H22014-CCV6	QC	22	1703679		
7H22014-CCB6	QC	23			
F708474-BLK3	QC	24			
F708474-BS1	QC	25			
F708474-BS2	QC	26			
F708474-BS3	QC	27			
F708474-BS4	QC	28			
1708504-01	Hg_FSTM_TRAP_A	29			
7H22014-CCV7	QC	30	1703679		
7H22014-CCB7	QC	31			

Becis      8/22/17  
 Samples Loaded By      Date

Becis      8/22/17  
 Data Processed By      Date

10nd-d  
 8/21/17

Due Date: 8/25/2017

**Failing Data Report - 7H22013**

Sample ID	Analysis	Result	MRL	Dup Result	Source Result	True Value	Units	% Rec.	Rec. LCL	Rec. UCL	RPD	RPD Limit	Over Cal	Failure	Qualifier
1707771-AW	Hg-CVAFS-S-7474	2750	64.8				ng/g						FAIL-OVER	PASS	E



8/22/17  
 Analyst Reviewed By Date



8/22/17  
 Peer Reviewed By Date





**PREPARATION BENCH SHEET**

F708463

**Eurofins Frontier Global Sciences, Inc.**

**Matrix: Soil/Sediment**

**Prepared using: Trace Metals - EPA 7474**

**Prepared: 8/18/2017**

Lab Number	Sample ID and Source Sample	Initial (g)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F708463-BLK1	Blank	0.5	200					
F708463-BLK2	Blank	0.5	200					
F708463-BS1	Blank Spike	0.5	200	1701763	40			
F708463-BSD1	Blank Spike	0.5	200	1701763	40			
F708463-MS1	Matrix Spike [1707771-AU]	0.5917	200	1703591	50			
F708463-MS2	Matrix Spike [1707771-BD]	0.5209	200	1703591	50			
F708463-MSD1	Matrix Spike Dup [1707771-AU]	0.5784	200	1703591	50			
F708463-MSD2	Matrix Spike Dup [1707771-BD]	0.537	200	1703591	50			

<u>Standard ID(s):</u>	<u>Description:</u>	<u>Expiration:</u>	<u>Reagent ID(s):</u>	<u>Description:</u>	<u>Expiration:</u>
1701763	THg 1,000ng/mL Secondary Spiking Standard	22-Sep-17 00:00	1703182	25% Hydroxylamine-HCl working solution	24-Nov-17 00:00
1703591	THg 10,000ng/mL Primary Spiking Standard	14-Dec-17 00:00	1704424	Boiling Chips for AFS prep	21-Jan-18 00:00
			1704484	Fisher Nitric Acid, Tracemetal Grade	15-Mar-19 00:00
			1704516	THg Washstation (0.5% BrCl)	24-Nov-17 00:00
			1704517	THg Dilute 1% BrCl	18-Dec-17 00:00
			1704640	Omnitrace Hydrochloric Acid	27-Jul-20 00:00
			1704956	3% SnCl2 THg reductant	29-Jan-18 00:00
			1704959	7474 Potassium Bromate/Bromide Reagent	22-Aug-17 00:00

**PREPARATION BENCH SHEET**

F708463

**Eurofins Frontier Global Sciences, Inc.**

**Matrix: Soil/Sediment**

**Prepared using: Trace Metals - EPA 7474**

**Prepared: 8/18/2017**

Lab Number	Sample ID	Initial (g)	Final (mL)	QC Sample	Sample Specs.	Raw Data	Sample Comments	Analysis Comments
1707771-AO	W-104-INTA_072517_SED_01-03	0.5475	200	-	-	-		
1707771-AP	W-105-A_072517_SED_03-05	0.5397	200	-	-	-		
1707771-AQ	W-105-A_072517_SED_05-10	0.539	200	-	-	-		
1707771-AR	W-14-A_072517_SED_00-01_R1	0.5256	200	-	-	-		
1707771-AS	W-14-A_072517_SED_00-01_R2	0.5887	200	-	-	-		
1707771-AT	W-14-A_072517_SED_00-01_R3	0.5784	200	-	-	-		
1707771-AU	W-14-A_072517_SED_01-03	0.547	200	QC	-	-	MS/MSD	
1707771-AV	W-14-A_072517_SED_03-05	0.5413	200	-	-	-		
1707771-AW	W-14-A_072517_SED_05-10	0.547	200	-	-	-		
1707771-AWRE1	W-14-A_072517_SED_05-10	0.547	200	-	-	-	Added 8/22/2017 by BC	Added 8/22/2017 by BC
1707771-AX	W-14-B_072517_SED_00-01	0.5407	200	-	-	-		
1707771-AXRE1	W-14-B_072517_SED_00-01	0.5407	200	-	-	-	Added 8/22/2017 by BC	Added 8/22/2017 by BC
1707771-AY	W-14-B_072517_SED_01-03	0.542	200	-	-	-		
1707771-AZ	W-14-B_072517_SED_03-05	0.5526	200	-	-	-		
1707771-BA	W-14-B_072517_SED_05-10_R1	0.562	200	-	-	-		
1707771-BB	W-14-B_072517_SED_05-10_R2	0.5433	200	-	-	-		
1707771-BC	W-14-B_072517_SED_05-10_R3	0.5228	200	-	-	-		
1707771-BD	W-14-C_072517_SED_03-05	0.5259	200	-	-	-		
1707771-BE	W-14-C_072517_SED_05-10	0.5784	200	-	-	-		

Due Date: 8/24/2017

**PREPARATION BENCH SHEET**

F708463

**Eurofins Frontier Global Sciences, Inc.**

**Matrix: Soil/Sediment**

**Prepared using: Trace Metals - EPA 7474**

**Prepared: 8/18/2017**

1707771-BF	W-14-INTA_072517_SED_00-01	0.5337	200	-	-	-		
1707771-BG	W-14-INTA_072517_SED_01-03	0.5765	200	-	-	-		
1707771-BH	W-27-A_072517_SED_00-01_R1	0.5315	200	-	-	-		



**PREPARATION BENCH SHEET**

F708464

**Eurofins Frontier Global Sciences, Inc.**

**Matrix: Soil/Sediment**

**Prepared using: Trace Metals - EPA 7474**

**Prepared: 8/18/2017**

Lab Number	Sample ID and Source Sample	Initial (g)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F708464-BLK1	Blank	0.5	200					
F708464-BLK2	Blank	0.5	200					
F708464-BS1	Blank Spike	0.5	200	1701763	40			
F708464-BSD1	Blank Spike	0.5	200	1701763	40			
F708464-MS1	Matrix Spike [1707771-BK]	0.5279	200	1703591	50			
F708464-MS2	Matrix Spike [1707771-BY]	0.5867	200	1703591	50			
F708464-MSD1	Matrix Spike Dup [1707771-BK]	0.5284	200	1703591	50			
F708464-MSD2	Matrix Spike Dup [1707771-BY]	0.5485	200	1703591	50			

<u>Standard ID(s):</u>	<u>Description:</u>	<u>Expiration:</u>	<u>Reagent ID(s):</u>	<u>Description:</u>	<u>Expiration:</u>
1701763	THg 1,000ng/mL Secondary Spiking Standard	22-Sep-17 00:00	1703182	25% Hydroxylamine-HCl working solution	24-Nov-17 00:00
1703591	THg 10,000ng/mL Primary Spiking Standard	14-Dec-17 00:00	1704424	Boiling Chips for AFS prep	21-Jan-18 00:00
			1704484	Fisher Nitric Acid, Tracemetal Grade	15-Mar-19 00:00
			1704516	THg Washstation (0.5% BrCl)	24-Nov-17 00:00
			1704517	THg Dilute 1% BrCl	18-Dec-17 00:00
			1704640	Omnitrace Hydrochloric Acid	27-Jul-20 00:00
			1704956	3% SnCl2 THg reductant	29-Jan-18 00:00
			1704959	7474 Potassium Bromate/Bromide Reagent	22-Aug-17 00:00

**PREPARATION BENCH SHEET**

F708464

**Eurofins Frontier Global Sciences, Inc.**

**Matrix: Soil/Sediment**

**Prepared using: Trace Metals - EPA 7474**

**Prepared: 8/18/2017**

Lab Number	Sample ID	Initial (g)	Final (mL)	QC Sample	Sample Specs.	Raw Data	Sample Comments	Analysis Comments
1707771-BI	W-27-A_072517_SED_00-01_R2	0.5392	200	-	-	-		
1707771-BJ	W-27-A_072517_SED_00-01_R3	0.5543	200	-	-	-		
1707771-BK	W-27-A_072517_SED_01-03	0.5928	200	QC	-	-	MS/MSD	
1707771-BL	W-27-INTA_072517_SED_03-05	0.5898	200	-	-	-		
1707771-BM	W-27-INTA_072517_SED_05-10	0.5766	200	-	-	-		
1707771-BN	W-63-INT_072517_SED_00-01	0.5745	200	-	-	-		
1707771-BO	W-63-INT_072517_SED_01-03	0.5651	200	-	-	-		
1707771-BP	W-MM-01_072517_SED_00-01	0.5852	200	-	-	-		
1707771-BQ	W-MM-01_072517_SED_01-03_R1	0.5558	200	-	-	-		
1707771-BR	W-MM-01_072517_SED_01-03_R2	0.5264	200	-	-	-		
1707771-BS	W-MM-01_072517_SED_01-03_R3	0.5665	200	-	-	-		
1707771-BT	W-MM-02_072517_SED_00-01	0.5424	200	-	-	-		
1707771-BU	W-MM-02_072517_SED_01-03	0.5879	200	-	-	-		
1707771-BV	W-MM-06_072517_SED_03-05_R1	0.5339	200	-	-	-		
1707771-BW	W-MM-06_072517_SED_03-05_R2	0.5293	200	-	-	-		
1707771-BX	W-MM-06_072517_SED_03-05_R3	0.5487	200	-	-	-		
1707771-BY	W-MM-06_072517_SED_05-10	0.5265	200	QC	-	-	MS/MSD	
1707771-BZ	W-MM-07_072517_SED_00-01	0.5457	200	-	-	-		
1707771-CA	W-MM-07_072517_SED_01-03_R1	0.583	200	-	-	-		

Due Date: 8/24/2017

PREPARATION BENCH SHEET

F708464

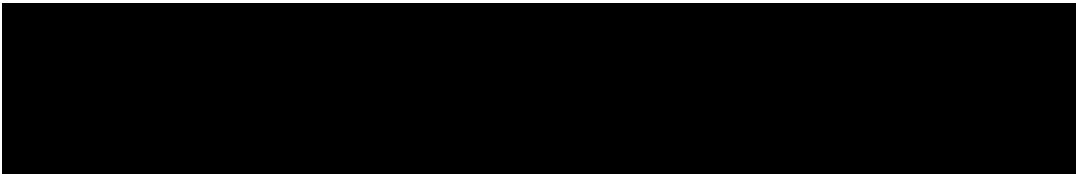
Eurofins Frontier Global Sciences, Inc.

Matrix: Soil/Sediment

Prepared using: Trace Metals - EPA 7474

Prepared: 8/18/2017

1707771-CB	W-MM-07_072517_SED_01-03_R2	0.5671	200	-	-	-		
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**PREPARATION BENCH SHEET**

F708474

**Eurofins Frontier Global Sciences, Inc.**

**Matrix: Air**

**Prepared using: AFS - EFGS-009 FSTM Trap Nitric/Sulfuric Digestion**

**Prepared: 8/18/2017**

Lab Number	Sample ID and Source Sample	Initial (Trap)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F708474-BLK1	Blank	1	40					
F708474-BLK2	Blank	1	40					
F708474-BLK3	Blank	1	40					
F708474-BS1	DOC	1	40	1701763	200			
F708474-BS2	DOC	1	40	1701763	200			
F708474-BS3	DOC	1	40	1701763	200			
F708474-BS4	DOC	1	40	1701763	200			

<u>Standard ID(s):</u> 1701763	<u>Description:</u> THg 1,000ng/mL Secondary Spiking Standard	<u>Expiration:</u> 22-Sep-17 00:00	<u>Reagent ID(s):</u> 1703182	<u>Description:</u> 25% Hydroxylamine-HCl working solution	<u>Expiration:</u> 24-Nov-17 00:00
			1704516	THg Washstation (0.5% BrCl)	
			1704517	THg Dilute 1% BrCl	18-Dec-17 00:00
			1704956	3% SnCl2 THg reductant	29-Jan-18 00:00
			1704958	5% BrCl	18-Dec-17 00:00
			1705022	70/30 Digestion Acid	13-Feb-18 00:00

**PREPARATION BENCH SHEET**

F708474

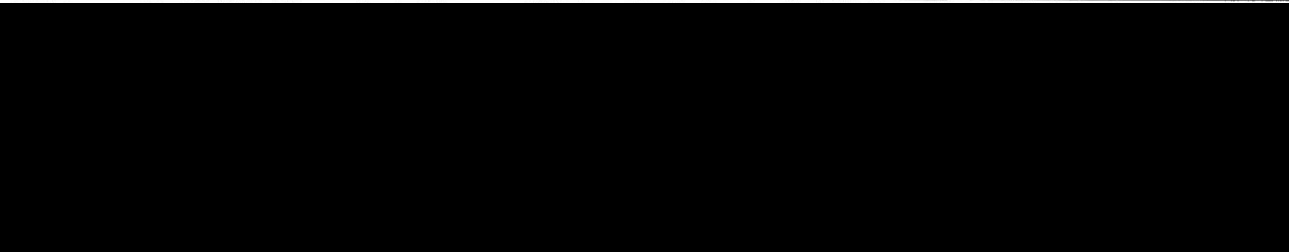
**Eurofins Frontier Global Sciences, Inc.**

**Matrix: Air**

**Prepared using: AFS - EFGS-009 FSTM Trap Nitric/Sulfuric Digestion**

**Prepared: 8/18/2017**

Lab Number	Sample ID	Initial (Trap)	Final (mL)	QC Sample	Sample Specs.	Raw Data	Sample Comments	Analysis Comments
1708504-01	DM DOC 2017	1	40	-	-	-	DM DOC 2017	





PREPARATION BENCH SHEET

2600.2  
8/22/17 BC  
zi

F708463

Eurofins Frontier Global Sciences, Inc.

Matrix: Soil/Sediment

Prepared using: Trace Metals - EPA 7474

Prepared: 8/18/2017

Lab Number	Sample ID and Source Sample	Initial (g)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F708463-BLK1	Blank	0.5	200					50X
F708463-BLK2	Blank	0.5	200					50X
F708463-BS1	Blank Spike	0.5	200	1701763	40			100X
F708463-BSD1	Blank Spike	0.5	200	1701763	40			100X
F708463-MS1	Matrix Spike [1707771-AU]	0.5917	200	1703591	50			400X
F708463-MS2	Matrix Spike [1707771-BD]	0.5209	200	1703591	50			400X
F708463-MSD1	Matrix Spike Dup [1707771-AU]	0.5784	200	1703591	50			400X
F708463-MSD2	Matrix Spike Dup [1707771-BD]	0.537	200	1703591	50			400X

Standard ID(s):  
1701763  
1703591

Description:  
THg 1,000ng/mL Secondary Spiking Standard  
THg 10,000ng/mL Primary Spiking Standard

Expiration:  
22-Sep-17 00:00  
14-Dec-17 00:00

Reagent ID(s):  
1704424  
1704484  
1704640  
1704959

Description:  
Boiling Chips for AFS prep  
Fisher Nitric Acid, Tracemetal Grade  
Omnitrace Hydrochloric Acid  
7474 Potassium Bromate/Bromide Reagent

Expiration:  
21-Jan-18 00:00  
15-Mar-19 00:00  
27-Jul-20 00:00  
22-Aug-17 00:00

1704956  
1704516  
1704517  
1703182

PREPARATION BENCH SHEET

F708463

Eurofins Frontier Global Sciences, Inc.

200.2  
8/22/17 BC  
zi

Matrix: Soil/Sediment

Prepared using: Trace Metals - EPA 7474

Prepared: 8/18/2017

Lab Number	Sample ID	Initial (g)	Final (mL)	QC Sample	Sample Specs.	Raw Data	Sample Comments	Analysis Comments
1707771-AO	W-104-INTA_072517_SED_01-03	0.5475	200	-	-	-		50X
1707771-AP	W-105-A_072517_SED_03-05	0.5397	200	-	-	-		50X
1707771-AQ	W-105-A_072517_SED_05-10	0.539	200	-	-	-		50X
1707771-AR	W-14-A_072517_SED_00-01_R1	0.5256	200	-	-	-		50X
1707771-AS	W-14-A_072517_SED_00-01_R2	0.5887	200	-	-	-		50X
1707771-AT	W-14-A_072517_SED_00-01_R3	0.5784	200	-	-	-		50X
1707771-AU	W-14-A_072517_SED_01-03	0.547	200	QC	-	-	MS/MSD	50X
1707771-AV	W-14-A_072517_SED_03-05	0.5413	200	-	-	-		50X
1707771-AW	W-14-A_072517_SED_05-10	0.547	200	-	-	-		50X → 100X
1707771-AX	W-14-B_072517_SED_00-01	0.5407	200	-	-	-		50X → 50X
1707771-AY	W-14-B_072517_SED_01-03	0.542	200	-	-	-		50X
1707771-AZ	W-14-B_072517_SED_03-05	0.5526	200	-	-	-		50X
1707771-BA	W-14-B_072517_SED_05-10_R1	0.562	200	-	-	-		50X
1707771-BB	W-14-B_072517_SED_05-10_R2	0.5433	200	-	-	-		50X
1707771-BC	W-14-B_072517_SED_05-10_R3	0.5228	200	-	-	-		50X
1707771-BD	W-14-C_072517_SED_03-05	0.5259	200	-	-	-		50X
1707771-BE	W-14-C_072517_SED_05-10	0.5784	200	-	-	-		50X
1707771-BF	W-14-INTA_072517_SED_00-01	0.5337	200	-	-	-		50X
1707771-BG	W-14-INTA_072517_SED_01-03	0.5765	200	-	-	-		50X

Due Date: 8/24/2017

PREPARATION BENCH SHEET

2600-2  
8/21/17 BC

F708463

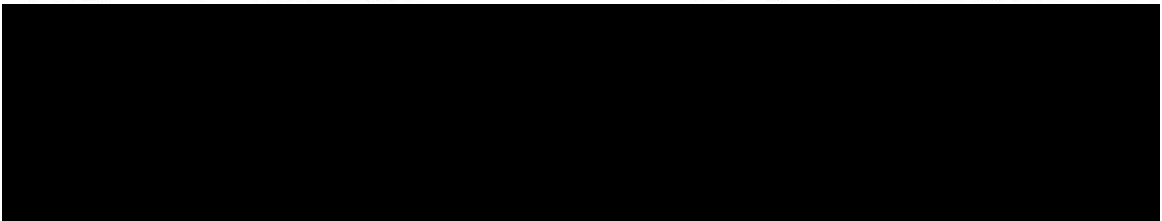
Eurofins Frontier Global Sciences, Inc.

Matrix: Soil/Sediment

Prepared using: Trace Metals - EPA 7474

Prepared: 8/18/2017

1707771-BH	W-27-A_072517_SED_00-01_R1	0.5315	200	-	-	-		30X
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Technician: Duyen Batch#: F708463 Date: 8/18/17

- EFAFS-T-AFS-SOP2986 Tissues - Methyl Mercury - KOH/Methanol: Hot plate 75±5°C for 2-4 hours.
- EFAFS-T-AFS-SOP2795 Tissues - Total Mercury - 70:30: Hot plate 75±5°C for two hours.
- EFAFS-T-AFS-SOP5134 Sediments - Methyl Mercury - KBr/CH<sub>2</sub>Cl<sub>2</sub>: Heat Block 45°C (nitrogen purge for 30 minutes).
- EFAFS-T-AFS-SOP2807 Solids - Total Mercury - Cold AR: 18-25°C for over four hours.

Other: EPA 7474 Vial Type:  Glass  Teflon  
 Balance#: 19 Calibrated?  Yes  No Therm.#: N/A Calibrated?  Yes  No  
 \*Time in: N/A Actual Temp. (raw): N/A °C w/ CF: N/A °C  
 Time out: N/A Actual Temp. (raw): N/A °C w/ CF: N/A °C  
 \*Time in can't begin before target temperature is reached

Final vol.: 25 mL (LIMS ID: ROH20) Spike vol.: 40 µL (LIMS ID: 1701763)  
 Spike Witness: Cue 8/18/17 (initial and date)

HCl LIMS ID: 1704640 Pipette SN#: 0U07852 Calibration Date: 8-18-17  
 HNO<sub>3</sub> LIMS ID: 1704484 Pipette SN#: 0U07693 Calibration Date: 8-16-17  
 70/30 LIMS ID: N/A Dispenser #: 09N45351 Calibrated?  Yes  No  
 Other Acid LIMS ID: 1704959 Dispenser #: 08Y2293  Yes  
 Glass Vial # J264713-3025 Boiling Chip lot # 1704424 \*Hotblock Position: N/A

Vial #	Sample ID Number	Sample Size <input type="checkbox"/> mL <input checked="" type="checkbox"/> g	Vial #	Sample ID Number	Sample Size <input type="checkbox"/> mL <input checked="" type="checkbox"/> g	CRM LIMS ID <input checked="" type="checkbox"/> NA
1	F708463 Blk1	0.5018	23	6 1707771-BC	0.5228	
2	F708463 Blk2	0.5863	24	7 1707771 BD	0.5259	
3	F708463 BS1	0.5036	25	8 1707771 BE	0.5784	
4	F708463 BS01	0.5337	26	9 1707771 BF	0.5337	
5	1707771-AO	0.5475	27	10 1707771 BG	0.5765	F708463 source
6	1707771-AP	0.5397	28	11 1707771 BH	0.5315	MS1 MS01
7	1707771 AQ	0.5390	29	12 F708463-MS2 <sup>BD</sup>	0.5209	1707771-AU
8	1707771 AR	0.5256	30	13 F708463 MS2 <sup>BD</sup>	0.5370	F708463 MS2 MS02 BD
9	1707771 AS	0.5887	31			1707771-BA 8/18/17
10	1707771 AT	0.5784	32			
11	1707771 AU	0.5470	33			
12	F708463-MS1	0.5917	34			ALL Spike MS1 MS01 = 10,000 µg/hul = 50 ul 1703591 8/18/17
13	1707771-MS01	0.5784	35			
14	1707771 AV	0.5413	36			
15	1707771 AW	0.5470	37			
16	1707771 AX	0.5407	38			
17	1707771 AY	0.5420	39			
18	1707771 AZ	0.5526	40			
19	1707771-BA	0.5620	41			
20	F708463-MS2	8/18/17	42			
21	F708463-MS02	8/18/17	43			
22	1707771-BB	0.5433	44			

PREPARATION BENCH SHEET

8/21/17 BC  
2600-2

F708464

Eurofins Frontier Global Sciences, Inc.

Matrix: Soil/Sediment

Prepared using: Trace Metals - EPA 7474

Prepared: 8/18/2017

Lab Number	Sample ID and Source Sample	Initial (g)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F708464-BLK1	Blank	0.5	200					10X
F708464-BLK2	Blank	0.5	200					10X
F708464-BS1	Blank Spike	0.5	200	1701763	40			10X
F708464-BSD1	Blank Spike	0.5	200	1701763	40			10X
F708464-MS1	Matrix Spike [1707771-BK]	0.5279	200	1703591	50			400X
F708464-MS2	Matrix Spike [1707771-BY]	0.5867	200	1703591	50			400X
F708464-MSD1	Matrix Spike Dup [1707771-BK]	0.5284	200	1703591	50			400X
F708464-MSD2	Matrix Spike Dup [1707771-BY]	0.5485	200	1703591	50			400X

Standard ID(s):  
1701763  
1703591

Description:  
THg 1,000ng/mL Secondary Spiking Standard  
THg 10,000ng/mL Primary Spiking Standard

Expiration:  
22-Sep-17 00:00  
14-Dec-17 00:00

Reagent ID(s):  
1704424  
1704484  
1704640  
1704959

Description:  
Boiling Chips for AFS prep  
Fisher Nitric Acid, Tracemetal Grade  
Omnitrace Hydrochloric Acid  
7474 Potassium Bromate/Bromide Reagent

Expiration:  
21-Jan-18 00:00  
15-Mar-19 00:00  
27-Jul-20 00:00  
22-Aug-17 00:00

1704956  
1704516  
1703182  
1704517

8/24/17 BC  
2600-2

PREPARATION BENCH SHEET

F708464

Eurofins Frontier Global Sciences, Inc.

Matrix: Soil/Sediment

Prepared using: Trace Metals - EPA 7474

Prepared: 8/18/2017

Lab Number	Sample ID	Initial (g)	Final (mL)	QC Sample	Sample Specs.	Raw Data	Sample Comments	Analysis Comments
1707771-BI	W-27-A_072517_SED_00-01_R2	0.5392	200	-	-	-	50X	
1707771-BJ	W-27-A_072517_SED_00-01_R3	0.5543	200	-	-	-	50X	
1707771-BK	W-27-A_072517_SED_01-03	0.5928	200	QC	-	-	MS/MSD 50X	
1707771-BL	W-27-INTA_072517_SED_03-05	0.5898	200	-	-	-	50X	
1707771-BM	W-27-INTA_072517_SED_05-10	0.5766	200	-	-	-	50X	
1707771-BN	W-63-INT_072517_SED_00-01	0.5745	200	-	-	-	50X	
1707771-BO	W-63-INT_072517_SED_01-03	0.5651	200	-	-	-	50X	
1707771-BP	W-MM-01_072517_SED_00-01	0.5852	200	-	-	-	50X	
1707771-BQ	W-MM-01_072517_SED_01-03_R1	0.5558	200	-	-	-	50X	
1707771-BR	W-MM-01_072517_SED_01-03_R2	0.5264	200	-	-	-	50X	
1707771-BS	W-MM-01_072517_SED_01-03_R3	0.5665	200	-	-	-	50X	
1707771-BT	W-MM-02_072517_SED_00-01	0.5424	200	-	-	-	50X	
1707771-BU	W-MM-02_072517_SED_01-03	0.5879	200	-	-	-	50X	
1707771-BV	W-MM-06_072517_SED_03-05_R1	0.5339	200	-	-	-	50X	
1707771-BW	W-MM-06_072517_SED_03-05_R2	0.5293	200	-	-	-	50X	
1707771-BX	W-MM-06_072517_SED_03-05_R3	0.5487	200	-	-	-	50X	
1707771-BY	W-MM-06_072517_SED_05-10	0.5265	200	QC	-	-	MS/MSD 50X	
1707771-BZ	W-MM-07_072517_SED_00-01	0.5457	200	-	-	-	50X	
1707771-CA	W-MM-07_072517_SED_01-03_R1	0.583	200	-	-	-	50X	

Due Date: 8/24/2017

8/21/17 BC  
2600-2

PREPARATION BENCH SHEET

F708464

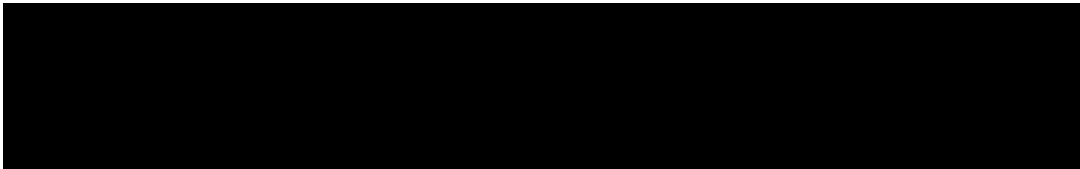
Eurofins Frontier Global Sciences, Inc.

Matrix: Soil/Sediment

Prepared using: Trace Metals - EPA 7474

Prepared: 8/18/2017

1707771-CB	W-MM-07_072517_SED_01-03_R2	0.5671	200	-	-	-	9X	
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Technician: Duyen Batch#: F708464 Date: 8/18/17

- EFAFS-T-AFS-SOP2986 Tissues - Methyl Mercury - KOH/Methanol: Hot plate 75±5°C for 2-4 hours.
- EFAFS-T-AFS-SOP2795 Tissues - Total Mercury - 70:30: Hot plate 75±5°C for two hours.
- EFAFS-T-AFS-SOP5134 Sediments - Methyl Mercury - KBr/CH<sub>2</sub>Cl<sub>2</sub>: Heat Block 45°C (nitrogen purge for 30 minutes).
- EFAFS-T-AFS-SOP2807 Solids - Total Mercury - Cold AR: 18-25°C for over four hours.

Other: EPA 7474 Vial Type:  Glass  Teflon  
 Balance#: 19 Calibrated?  Yes  No Therm.#: N/A Calibrated?  Yes  No

\*Time in: N/A Actual Temp. (raw): N/A °C w/ CF: N/A °C  
 Time out: N/A Actual Temp. (raw): N/A °C w/ CF: N/A °C  
 \*Time in can't begin before target temperature is reached

Final vol.: 25 mL (LIMS ID: R0420) Spike vol.: 40 µL (LIMS ID: 1701763)  
 Spike Witness: CNC 8/18/17 (initial and date)

HCl LIMS ID: 1704640 Pipette SN#: 0220788 Calibration Date: 8/18/17  
 HNO<sub>3</sub> LIMS ID: 1704484 Pipette SN#: 04078693 Calibration Date: 8/16/17  
 70/30 LIMS ID: N/A Dispenser #: 09N45351 Calibrated?  Yes  No  
 Other Acid LIMS ID: 1704959 Dispenser #: 0842293  Yes  No  
 Glass Vial # J26 473-3025 Boiling Chip lot # 1704424 \*Hotblock Position: N/A

Vial #	Sample ID Number	Sample Size <input type="checkbox"/> mL <input checked="" type="checkbox"/> µg	Vial # 8/18/17	Sample ID Number	Sample Size <input type="checkbox"/> mL <input checked="" type="checkbox"/> µg	CRM LIMS ID <input checked="" type="checkbox"/> NA
1	F708464 Blk1	0.5927	28	1707771-BY	0.5265	
2	F708464 Blk2	0.5592	24	F708464-MS2	0.5867	
3	F708464 B51	0.5492	25	F708464-MS02	0.5485	
4	F708464 B501	0.5439	26	1707771-BZ	0.5457	Comments
5	1707771-BI	0.5392	27	1707771-CA	0.5830	F708464 some MS1 MS01 1707771-BK
6	1707771-BJ	0.5543	28	1707771-CB	0.5671	
7	1707771-BK	0.5928	29			
8	F708464 MS1	0.5279	30			
9	F708464 MS01	0.5284	31			
10	1707771 BL	0.5898	32			F708464 MS2 MS02 1707771-BY
11	1707771 BM	0.5766	33			
12	1707771 BN	0.5745	34			
13	1707771 BO	0.5651	35			
14	1707771 BP	0.5852	36			
15	1707771 BQ	0.5558	37			
16	1707771 BR	0.5264	38			
17	1707771 BS	0.5665	39			
18	1707771 BT	0.5424	40			
19	1707771 BU	0.5879	41			
20	1707771 BV	0.5339	42			
21	1707771 BW	0.5293	43			
22	1707771 BX	0.5487	44			



PREPARATION BENCH SHEET

BC 8/21/17  
2600-2

F708474

Eurofins Frontier Global Sciences, Inc.

Matrix: Air

Prepared using: AFS - EFGS-009 FSTM Trap Nitric/Sulfuric Digestion

Prepared: 8/18/2017

Lab Number	Sample ID and Source Sample	Initial (Trap)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F708474-BLK1	Blank	1	40					100X
F708474-BLK2	Blank	1	40					100X
F708474-BLK3	Blank	1	40					100X
F708474-BS1	DOC	1	40	1701763	200			400X
F708474-BS2	DOC	1	40	1701763	200			400X
F708474-BS3	DOC	1	40	1701763	200			400X
F708474-BS4	DOC	1	40	1701763	200			400X

Standard ID(s):

Description:

Expiration:

1701763

THg 1,000ng/mL Secondary Spiking Standard

22-Sep-17 00:00

1704956  
1704516  
1704517  
1703182

PREPARATION BENCH SHEET

BL 8/21/17  
2600-2

F708474

Eurofins Frontier Global Sciences, Inc.

Matrix: Air

Prepared using: AFS - EFGS-009 FSTM Trap Nitric/Sulfuric Digestion

Prepared: 8/18/2017

Lab Number	Sample ID	Initial (Trap)	Final (mL)	QC Sample	Sample Specs.	Raw Data	Sample Comments	Analysis Comments
1708504-01	DM DOC 2017	1	40	-	-	-	DM DOC 2017	100x



Trap Digestions

Name: DM

Date: 8-18-17

Batch ID: F708474

Work Order(s): 1708504

Analysis:  Total Hg  Other

Sample Matrix:  ESTM  KCl  PHg Plug  Other

Prep:  70/30 Digestion, 2 hr. @ ~55°C (EFAFS-T-AFS-SOP2985)

start time: 1145, start temp (°C): 55°C (raw) 54.8 (w/ CF)

end time: 1345, end temp (°C): 62°C (raw) 61.8 (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)
F708474 - Bk1	40
F708474 - Bk2	40
F708474 - Bk3	40
F708474 - B51	40
F708474 - B52	40
F708474 - B53	40
F708474 - B54	40
1708504 - 01	40
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Spike ID: 1701763

Spike Amount (µL): 200

Spike Witness: CVC 8/18/17

BrCl ID: 1704958

70/30: 1705022

Other: N/A

Thermometer: 14545

Dispensers: 02K27494

04N73497

Other 150 15406623  
08/18/17

Pipette ID: MV11619

Cal. Date: 8/18/17

Vials and Jars lot# 00068469

Trap Material Lot#: 1702564

Loader Mass Verified:  Yes  No

Comments:

Don's Doc  
8/18/17 DM

**Peer Review Check List for THg by 2600 CV-AFS (SOP2822) 2016 Rev 1 (04/1/2016)**

<b>Analyst:</b> BC	<b>Sequence(s) #:</b> 7H22013, 7H22014
<b>Reviewer:</b> <u>DM</u>	<b>Dataset ID(s):</b> THg26002-170821-1
<b>Date:</b> 8/22/2017	<b>WO (s) #:</b> Various
<b>Batch #(s):</b> F708463, F708464, F708474	

• Select the correct preparation method.

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

**Analyst Initials:** BC      **Reviewer Initials:** DM

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

**Peer Review Check List for THg by 2600 CV-AFS (SOP2822) 2016 Rev 1 (04/1/2016)**

<b>Analyst:</b>	BC	<b>Sequence(s) #:</b>	7H22013, 7H22014
<b>Reviewer:</b>	0	<b>Dataset ID(s):</b>	THg26002-170821-1
<b>Date:</b>	8/22/2017	<b>WO (s) #:</b>	Various
<b>Batch #(s):</b>	F708463, F708464, F708474		0

Analyst Initials BC      Reviewer Initials DM

- 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 consistent with the data review flowcharts?  YES     NO     N/A
- Comments: \_\_\_\_\_
12. Explain any items on the failed data report from Element
- Comments: Sample off curve
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 (SOP2822) 2016 Rev 1 (04/1/2016)**

<b>Analyst:</b>	BC	<b>Sequence(s) #:</b>	7H22013, 7H22014
<b>Reviewer:</b>	0	<b>Dataset ID(s):</b>	THg26002-170821-1
<b>Date:</b>	8/22/2017	<b>WO (s) #:</b>	Various
<b>Batch #(s):</b>	F708463, F708464, F708474		0

Analyst Initials BC Reviewer Initials DM

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 recoveries 75-125% 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  NO  N/A
33. Does the dataset have an LOQ/LOQ or DOC?  YES  NO  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: \_\_\_\_\_ 1/11/2017 \_\_\_\_\_ IDOC/CDOC within last 12 months?  YES  NO
37. Date of analyst's SOP reading for method: \_\_\_\_\_ 5/20/2017 \_\_\_\_\_ Current SOP revision read?  YES  NO
38. Date of LOD: \_\_\_\_\_ 4/27/2017 \_\_\_\_\_ LOD within last 3 months?  YES  NO
39. Date of LOQ: \_\_\_\_\_ 4/27/2017 \_\_\_\_\_ LOQ within last 3 months?  YES  NO

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





Frontier Global Sciences

THg26003-170822-1

Analysis Datasheet for Total Mercury

Date of Analysis: August 22, 2017

Analyst: BC

Instrument #: Hg2600-3

Units ng/L

LIMS Sequence #: 7H23013, 7H23014

Calibration Statistics:

LabNumber	n	True Val	Area	Uncorrected Response Factor	Corrected Peak Height	Corrected Response Factor	% Recovery
SEQ-CAL1	1	0.50 ng/L	59.18 units	118.35	56.95 units	113.90	102.6 %Rec
SEQ-CAL2	1	1.00 ng/L	113.88 units	113.88	111.66 units	111.66	100.6 %Rec
SEQ-CAL3	1	5.00 ng/L	561.40 units	112.28	559.17 units	111.83	100.7 %Rec
SEQ-CAL4	1	20.00 ng/L	2176.75 units	108.84	2174.53 units	108.73	97.9 %Rec
SEQ-CAL5	1	40.00 ng/L	4359.05 units	108.98	4356.82 units	108.92	98.1 %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**  
 111.01            +/- 2.18            2.0% RSD            112.47

Blanks:

LabNumber	n	Mean	Std Dev	Mean (ng/L)	Std Dev (ng/L)
SEQ-IBL	3	2.23 units	±2.12	0.02 ng/L	±0.02

Preparation Blanks

Sample Type	Batch ID	n	Mean	Std Dev
BLK	1	2	0.495 ng/L	±0.073
BLK	2	2	0.684 ng/L	±0.300
BLK	3	3	5.566 ng/L	±1.548
BLK	4	0	0.000 ng/L	
BLK	5	0	0.000 ng/L	
BLK	6	0	0.000 ng/L	

QUALITY ASSURANCE  
PEER-REVIEWED

INITIALS: BC 8/24/17



Instrument	Analyst	Sample Type	LabNumber	Dilution	Analyzed	FileID	RunEnd	Uncorrected Response	Batch ID	No PB Correction?	RESP	InitialResult	FinalResult	InitialUnits	Comments
Hg2600-3	BC	CAL	SEQ-IBL1	1	8/22/2017 8:10:57	73681-1.RAW	8:10:57 AM	4.22			2.0	0.018	0.018	ng/L	
Hg2600-3	BC	CAL	SEQ-IBL2	1	8/22/2017 8:15:05	73682-1.RAW	8:15:05 AM	0.00			-2.2	-0.020	-0.020	ng/L	
Hg2600-3	BC	CAL	SEQ-IBL3	1	8/22/2017 8:19:13	73683-1.RAW	8:19:13 AM	2.47			0.2	0.002	0.002	ng/L	
Hg2600-3	BC	CAL	SEQ-CAL1	1	8/22/2017 8:23:22	73684-1.RAW	8:23:22 AM	59.18			56.9	0.513	0.513	ng/L	
Hg2600-3	BC	CAL	SEQ-CAL2	1	8/22/2017 8:27:30	73685-1.RAW	8:27:30 AM	113.88			111.7	1.006	1.006	ng/L	
Hg2600-3	BC	CAL	SEQ-CAL3	1	8/22/2017 8:31:39	73686-1.RAW	8:31:39 AM	561.40			559.2	5.037	5.037	ng/L	
Hg2600-3	BC	CAL	SEQ-CAL4	1	8/22/2017 8:35:47	73687-1.RAW	8:35:47 AM	2176.75			2174.5	19.589	19.589	ng/L	
Hg2600-3	BC	CAL	SEQ-CAL5	1	8/22/2017 8:39:55	73688-1.RAW	8:39:55 AM	4359.05			4356.8	39.248	39.248	ng/L	
Hg2600-3	BC	CAL	SEQ-ICV1	1	8/22/2017 8:44:04	73689-1.RAW	8:44:04 AM	585.33			583.1	5.253	5.253	ng/L	
Hg2600-3	BC	BLK	F708484-BLK1	10	8/22/2017 8:48:12	73690-1.RAW	8:48:12 AM	8.30	1		6.1	0.055	0.055	ng/L	
Hg2600-3	BC	BLK	F708484-BLK2	10	8/22/2017 8:52:21	73691-1.RAW	8:52:21 AM	7.14	1		4.9	0.044	0.443	ng/L	
Hg2600-3	BC	SAM	F708484-BS1	100	8/22/2017 8:56:29	73692-1.RAW	8:56:29 AM	221.43	1		219.2	1.970	196.972	ng/L	
Hg2600-3	BC	SAM	F708484-BSD1	100	8/22/2017 9:00:37	73693-1.RAW	9:00:37 AM	229.52	1		227.3	2.043	204.258	ng/L	
Hg2600-3	BC	SAM	1707771-CC	50	8/22/2017 9:04:46	73694-1.RAW	9:04:46 AM	917.40	1		915.2	8.234	411.718	ng/L	
Hg2600-3	BC	SAM	1707771-CD	50	8/22/2017 9:08:54	73695-1.RAW	9:08:54 AM	192.45	1		190.2	1.704	85.188	ng/L	
Hg2600-3	BC	SAM	1707771-CE	50	8/22/2017 9:13:03	73696-1.RAW	9:13:03 AM	508.29	1		506.1	4.549	227.449	ng/L	
Hg2600-3	BC	SAM	1707771-CF	50	8/22/2017 9:17:11	73697-1.RAW	9:17:11 AM	281.81	1		279.6	2.509	125.435	ng/L	
Hg2600-3	BC	SAM	1707771-CG	50	8/22/2017 9:21:20	73698-1.RAW	9:21:20 AM	817.18	1		815.0	7.332	366.578	ng/L	
Hg2600-3	BC	SAM	1707771-CH	50	8/22/2017 9:25:28	73699-1.RAW	9:25:28 AM	1351.63	1		1349.4	12.146	607.306	ng/L	
Hg2600-3	BC	CAL	SEQ-CCV1	1	8/22/2017 9:29:36	73700-1.RAW	9:29:36 AM	566.02			563.8	5.079	5.079	ng/L	
Hg2600-3	BC	CAL	SEQ-CCB1	1	8/22/2017 9:33:45	73701-1.RAW	9:33:45 AM	3.48			1.3	0.011	0.011	ng/L	
Hg2600-3	BC	SAM	1707771-CI	50	8/22/2017 9:37:53	73702-1.RAW	9:37:53 AM	1661.80	1		1659.6	14.940	747.016	ng/L	
Hg2600-3	BC	SAM	1707771-CJ	50	8/22/2017 9:42:02	73703-1.RAW	9:42:02 AM	1099.46	1		1097.2	9.875	493.725	ng/L	
Hg2600-3	BC	SAM	1707771-CK	50	8/22/2017 9:46:10	73704-1.RAW	9:46:10 AM	92.79	1		90.6	0.806	40.296	ng/L	
Hg2600-3	BC	SAM	1707771-CL	50	8/22/2017 9:50:19	73705-1.RAW	9:50:19 AM	536.05	1		533.8	4.799	239.949	ng/L	
Hg2600-3	BC	SAM	1707771-CM	50	8/22/2017 9:54:27	73706-1.RAW	9:54:27 AM	561.00	1		558.8	5.024	251.188	ng/L	
Hg2600-3	BC	SAM	1707771-CN	50	8/22/2017 9:58:35	73707-1.RAW	9:58:35 AM	398.32	1		396.1	3.558	177.915	ng/L	
Hg2600-3	BC	SAM	1707771-CO	50	8/22/2017 10:02:44	73708-1.RAW	10:02:44 AM	300.17	1		297.9	2.674	133.706	ng/L	
Hg2600-3	BC	SAM	1707771-CP	50	8/22/2017 10:06:52	73709-1.RAW	10:06:52 AM	919.32	1		917.1	8.252	412.585	ng/L	
Hg2600-3	BC	SAM	1707771-CQ	50	8/22/2017 10:11:01	73710-1.RAW	10:11:01 AM	48.99	1		46.8	0.411	20.566	ng/L	
Hg2600-3	BC	SAM	1707771-CR	50	8/22/2017 10:15:09	73711-1.RAW	10:15:09 AM	46.69	1		44.5	0.391	19.531	ng/L	
Hg2600-3	BC	CAL	SEQ-CCV2	1	8/22/2017 10:19:17	73712-1.RAW	10:19:17 AM	567.47			565.2	5.092	5.092	ng/L	
Hg2600-3	BC	CAL	SEQ-CCB2	1	8/22/2017 10:23:26	73713-1.RAW	10:23:26 AM	4.23			2.0	0.018	0.018	ng/L	
Hg2600-3	BC	SAM	F708451-DUP3	10	8/22/2017 10:27:34	73714-1.RAW	10:27:34 AM	10.46			8.2	0.074	0.741	ng/L	
Hg2600-3	BC	SAM	1707771-CS	50	8/22/2017 10:31:43	73715-1.RAW	10:31:43 AM	217.91	1		215.7	1.933	96.652	ng/L	
Hg2600-3	BC	SAM	1707771-CT	50	8/22/2017 10:35:52	73716-1.RAW	10:35:52 AM	2521.49	1		2519.3	22.685	1134.240	ng/L	
Hg2600-3	BC	SAM	1707771-CU	50	8/22/2017 10:40:00	73717-1.RAW	10:40:00 AM	663.81	1		661.6	5.950	297.498	ng/L	
Hg2600-3	BC	SAM	1707771-CV	50	8/22/2017 10:44:09	73718-1.RAW	10:44:09 AM	760.95	1		758.7	6.825	341.253	ng/L	
Hg2600-3	BC	SAM	1707771-CKRE1	10	8/22/2017 10:48:18	73719-1.RAW	10:48:18 AM	472.76	1		470.5	4.189	41.893	ng/L	
Hg2600-3	BC	SAM	1707771-CQRE1	10	8/22/2017 10:52:26	73720-1.RAW	10:52:26 AM	210.23	1		208.0	1.824	18.243	ng/L	
Hg2600-3	BC	SAM	1707771-CRRE1	10	8/22/2017 10:56:34	73721-1.RAW	10:56:34 AM	223.32	1		221.1	1.942	19.422	ng/L	
Hg2600-3	BC	SAM	F708484-MS1	400	8/22/2017 11:00:43	73722-1.RAW	11:00:43 AM	517.45	1		515.2	4.640	1856.048	ng/L	
Hg2600-3	BC	SAM	F708484-MSD1	400	8/22/2017 11:04:51	73723-1.RAW	11:04:51 AM	517.70	1		515.5	4.642	1856.941	ng/L	
Hg2600-3	BC	CAL	SEQ-CCV3	1	8/22/2017 11:09:00	73724-1.RAW	11:09:00 AM	569.31			567.1	5.109	5.109	ng/L	
Hg2600-3	BC	CAL	SEQ-CCB3	1	8/22/2017 11:13:08	73725-1.RAW	11:13:08 AM	5.51			3.3	0.030	0.030	ng/L	
Hg2600-3	BC	SAM	F708484-MS2	400	8/22/2017 11:17:17	73726-1.RAW	11:17:17 AM	640.66	1		638.4	5.750	2300.024	ng/L	
Hg2600-3	BC	SAM	F708484-MSD2	400	8/22/2017 11:21:25	73727-1.RAW	11:21:25 AM	605.34	1		603.1	5.432	2172.766	ng/L	
Hg2600-3	BC	SAM	F708484-MS3	50	8/22/2017 11:25:34	73728-1.RAW	11:25:34 AM	717.34	1		715.1	6.432	321.611	ng/L	
Hg2600-3	BC	SAM	F708484-MSD3	50	8/22/2017 11:29:42	73729-1.RAW	11:29:42 AM	742.69	1		740.5	6.661	333.029	ng/L	
Hg2600-3	BC	SAM	F708484-MS4	50	8/22/2017 11:33:50	73730-1.RAW	11:33:50 AM	3095.86	1		3093.6	27.859	1392.951	ng/L	
Hg2600-3	BC	SAM	F708484-MSD4	50	8/22/2017 11:37:59	73731-1.RAW	11:37:59 AM	3125.66	1		3123.4	28.127	1406.371	ng/L	
Hg2600-3	BC	BLK	F708485-BLK1	10	8/22/2017 11:42:07	73732-1.RAW	11:42:07 AM	12.17	2		9.9	0.090	0.472	ng/L	
Hg2600-3	BC	BLK	F708485-BLK2	10	8/22/2017 11:46:16	73733-1.RAW	11:46:16 AM	7.46	2		5.2	0.047	0.472	ng/L	
Hg2600-3	BC	SAM	F708485-BS1	10	8/22/2017 11:50:24	73734-1.RAW	11:50:24 AM	2240.81	2		2238.6	20.098	200.979	ng/L	
Hg2600-3	BC	SAM	F708485-BSD1	10	8/22/2017 11:54:33	73735-1.RAW	11:54:33 AM	2314.43	2		2312.2	20.761	207.610	ng/L	
Hg2600-3	BC	CAL	SEQ-CCV4	1	8/22/2017 11:58:41	73736-1.RAW	11:58:41 AM	561.77			559.5	5.041	5.041	ng/L	
Hg2600-3	BC	CAL	SEQ-CCB4	1	8/22/2017 12:02:49	73737-1.RAW	12:02:49 PM	5.03			2.8	0.025	0.025	ng/L	

Not uploaded  
- PK for confirmation  
only for dup

Instrument	Analyst	Sample		Dilution	Analyzed	FileID	RunEnd	Uncorrected Response	Batch ID	No PB		InitialResult	FinalResult	InitialUnits	Comments
		Type	LabNumber							Correction?	RESP				
Hg2600-3	BC	SAM	1707771-CW	50	8/22/2017 12:06:56	73738-1.RAW	12:06:58 PM	403.13	2		400.9	3.598	179.891	ng/L	
Hg2600-3	BC	SAM	1707771-CX	50	8/22/2017 12:11:06	73739-1.RAW	12:11:06 PM	886.93	2		884.7	7.956	397.806	ng/L	
Hg2600-3	BC	SAM	1707771-CY	50	8/22/2017 12:15:15	73740-1.RAW	12:15:15 PM	769.01	2		766.8	6.894	344.692	ng/L	
Hg2600-3	BC	SAM	1707771-CZ	50	8/22/2017 12:19:23	73741-1.RAW	12:19:23 PM	694.43	2		692.2	6.222	311.099	ng/L	
Hg2600-3	BC	SAM	1707771-DA	50	8/22/2017 12:23:32	73742-1.RAW	12:23:32 PM	514.10	2		511.9	4.598	229.876	ng/L	
Hg2600-3	BC	SAM	1707775-08	50	8/22/2017 12:27:40	73743-1.RAW	12:27:40 PM	80.37	2		78.1	0.690	34.513	ng/L	
Hg2600-3	BC	SAM	1707775-09	50	8/22/2017 12:31:49	73744-1.RAW	12:31:49 PM	63.23	2		61.0	0.536	26.792	ng/L	
Hg2600-3	BC	SAM	1707776-08	50	8/22/2017 12:35:57	73745-1.RAW	12:35:57 PM	1511.22	2		1509.0	13.580	679.001	ng/L	
Hg2600-3	BC	SAM	1707810-01	50	8/22/2017 12:40:05	73746-1.RAW	12:40:05 PM	95.95	2		93.7	0.831	41.533	ng/L	
Hg2600-3	BC	SAM	1707810-02	50	8/22/2017 12:44:14	73747-1.RAW	12:44:14 PM	100.76	2		98.5	0.874	43.697	ng/L	
Hg2600-3	BC	CAL	SEQ-CCV5	1	8/22/2017 12:48:22	73748-1.RAW	12:48:22 PM	552.8334333			550.6	4.960	4.960	ng/L	
Hg2600-3	BC	CAL	SEQ-CCB5	1	8/22/2017 12:52:31	73749-1.RAW	12:52:31 PM	7.72			5.5	0.049	0.049	ng/L	
Hg2600-3	BC	SAM	1707810-03	10	8/22/2017 12:56:39	73750-1.RAW	12:56:39 PM	4538.73	2		4536.5	40.799	407.986	ng/L	
Hg2600-3	BC	SAM	1707810-04	10	8/22/2017 13:00:48	73751-1.RAW	1:00:48 PM	5221.83	2		5219.6	46.952	469.522	ng/L	
Hg2600-3	BC	SAM	WS		8/22/2017 13:05:52	73752-1.RAW	1:05:52 PM	20.78			18.6	Error	#VALUE!	ng/L	
Hg2600-3	BC	SAM	1707810-05	50	8/22/2017 13:10:01	73753-1.RAW	1:10:01 PM	368.51	2	X	366.3	3.286	164.298	ng/L	
Hg2600-3	BC	SAM	1707810-06	50	8/22/2017 13:14:09	73754-1.RAW	1:14:09 PM	638.01	2		635.8	5.714	285.688	ng/L	
Hg2600-3	BC	SAM	1707810-07	50	8/22/2017 13:18:18	73755-1.RAW	1:18:18 PM	1265.98	2		1263.8	11.371	568.540	ng/L	
Hg2600-3	BC	SAM	1707810-08	50	8/22/2017 13:22:26	73756-1.RAW	1:22:26 PM	1607.89	2		1605.7	14.451	722.544	ng/L	
Hg2600-3	BC	SAM	1707810-09	50	8/22/2017 13:26:34	73757-1.RAW	1:26:34 PM	707.76	2		705.5	6.342	317.107	ng/L	
Hg2600-3	BC	SAM	1707810-10	50	8/22/2017 13:30:43	73758-1.RAW	1:30:43 PM	1567.19	2		1565.0	14.084	704.213	ng/L	
Hg2600-3	BC	SAM	1707810-11	50	8/22/2017 13:34:51	73759-1.RAW	1:34:51 PM	1136.37	2		1134.1	10.203	510.161	ng/L	
Hg2600-3	BC	SAM	1707810-12	50	8/22/2017 13:39:00	73760-1.RAW	1:39:00 PM	1526.11	2		1523.9	13.714	685.708	ng/L	
Hg2600-3	BC	CAL	SEQ-CCV6	1	8/22/2017 13:43:08	73761-1.RAW	1:43:08 PM	575.05			572.8	5.160	5.160	ng/L	
Hg2600-3	BC	CAL	SEQ-CCB6	1	8/22/2017 13:47:17	73762-1.RAW	1:47:17 PM	9.37			7.1	0.064	0.064	ng/L	
Hg2600-3	BC	SAM	1707775-08RE1	10	8/22/2017 13:51:25	73763-1.RAW	1:51:25 PM	417.60	2		415.4	3.674	36.735	ng/L	
Hg2600-3	BC	SAM	1707775-09RE1	10	8/22/2017 13:55:34	73764-1.RAW	1:55:34 PM	296.91	2		294.7	2.586	25.862	ng/L	
Hg2600-3	BC	SAM	1707810-01RE1	10	8/22/2017 13:59:42	73765-1.RAW	1:59:42 PM	446.79	2		444.6	3.936	39.364	ng/L	
Hg2600-3	BC	SAM	1707810-02RE1	10	8/22/2017 14:03:50	73766-1.RAW	2:03:50 PM	484.75	2		482.5	4.278	42.784	ng/L	
Hg2600-3	BC	SAM	1707810-03RE1	50	8/22/2017 14:07:59	73767-1.RAW	2:07:59 PM	912.37	2		910.1	8.185	409.266	ng/L	
Hg2600-3	BC	SAM	1707810-04RE1	50	8/22/2017 14:12:07	73768-1.RAW	2:12:07 PM	1069.61	2		1067.4	9.602	480.089	ng/L	
Hg2600-3	BC	SAM	F708485-MS1	400	8/22/2017 14:16:16	73769-1.RAW	2:16:16 PM	775.83	2		773.6	6.967	2786.919	ng/L	
Hg2600-3	BC	SAM	F708485-MSD1	400	8/22/2017 14:20:24	73770-1.RAW	2:20:24 PM	689.89	2		687.7	6.193	2477.240	ng/L	
Hg2600-3	BC	SAM	F708485-MS2	400	8/22/2017 14:24:33	73771-1.RAW	2:24:33 PM	742.00	2		739.8	6.662	2664.988	ng/L	
Hg2600-3	BC	SAM	F708485-MSD2	400	8/22/2017 14:28:41	73772-1.RAW	2:28:41 PM	670.53	2		668.3	6.019	2407.481	ng/L	
Hg2600-3	BC	CAL	SEQ-CCV7	1	8/22/2017 14:32:49	73773-1.RAW	2:32:49 PM	578.57			576.3	5.192	5.192	ng/L	
Hg2600-3	BC	CAL	SEQ-CCB7	1	8/22/2017 14:36:58	73774-1.RAW	2:36:58 PM	9.63			7.4	0.067	0.067	ng/L	
Hg2600-3	BC	BLK	F708493-BLK1	100	8/22/2017 14:41:47	73775-1.RAW	2:41:47 PM	8.96	3		6.7	0.061	6.061	ng/L	
Hg2600-3	BC	BLK	F708493-BLK2	100	8/22/2017 14:45:55	73776-1.RAW	2:45:55 PM	9.78	3		7.6	0.068	6.806	ng/L	
Hg2600-3	BC	BLK	F708493-BLK3	100	8/22/2017 14:50:04	73777-1.RAW	2:50:04 PM	6.48	3		4.3	0.038	3.830	ng/L	
Hg2600-3	BC	SAM	F708493-BS1	400	8/22/2017 14:54:12	73778-1.RAW	2:54:12 PM	1351.58	3		1349.4	12.142	4856.671	ng/L	
Hg2600-3	BC	SAM	F708493-BSD1	400	8/22/2017 14:58:20	73779-1.RAW	2:58:20 PM	1340.25	3		1338.0	12.040	4815.860	ng/L	
Hg2600-3	BC	SAM	1708486-31	100	8/22/2017 15:02:29	73780-1.RAW	3:02:29 PM	33.37	3		31.1	0.225	22.488	ng/L	
Hg2600-3	BC	SAM	1708486-32	100	8/22/2017 15:06:37	73781-1.RAW	3:06:37 PM	14.37	3		12.1	0.054	5.377	ng/L	
Hg2600-3	BC	SAM	1708486-33	100	8/22/2017 15:10:46	73782-1.RAW	3:10:46 PM	11.99	3		9.8	0.032	3.227	ng/L	
Hg2600-3	BC	SAM	1708486-34	100	8/22/2017 15:14:54	73783-1.RAW	3:14:54 PM	15.97	3		13.7	0.068	6.818	ng/L	
Hg2600-3	BC	SAM	1708486-35	100	8/22/2017 15:19:03	73784-1.RAW	3:19:03 PM	21.01	3		18.8	0.114	11.357	ng/L	
Hg2600-3	BC	CAL	SEQ-CCV8	1	8/22/2017 15:23:11	73785-1.RAW	3:23:11 PM	583.31			581.1	5.235	5.235	ng/L	
Hg2600-3	BC	CAL	SEQ-CCB8	1	8/22/2017 15:27:20	73786-1.RAW	3:27:20 PM	7.97			5.7	0.052	0.052	ng/L	
Hg2600-3	BC	SAM	1708486-36	100	8/22/2017 15:31:28	73787-1.RAW	3:31:28 PM	18.40	3		16.2	0.090	9.000	ng/L	
Hg2600-3	BC	SAM	1708485-01	100	8/22/2017 15:35:36	73788-1.RAW	3:35:36 PM	15.01	3		12.8	0.060	5.953	ng/L	
Hg2600-3	BC	SAM	1708486-31B	100	8/22/2017 15:39:45	73789-1.RAW	3:39:45 PM	10.15	3		7.9	0.016	1.573	ng/L	
Hg2600-3	BC	SAM	1708486-32B	100	8/22/2017 15:43:53	73790-1.RAW	3:43:53 PM	11.67	3		9.4	0.029	2.944	ng/L	
Hg2600-3	BC	SAM	1708486-33B	100	8/22/2017 15:48:02	73791-1.RAW	3:48:02 PM	11.59	3		9.4	0.029	2.866	ng/L	
Hg2600-3	BC	SAM	1708486-34B	100	8/22/2017 15:52:10	73792-1.RAW	3:52:10 PM	14.68	3		12.5	0.057	5.653	ng/L	
Hg2600-3	BC	SAM	1708486-35B	100	8/22/2017 15:56:19	73793-1.RAW	3:56:19 PM	10.89	3		8.7	0.022	2.237	ng/L	
Hg2600-3	BC	SAM	1708486-36B	100	8/22/2017 16:00:27	73794-1.RAW	4:00:27 PM	15.61	3		13.4	0.065	6.486	ng/L	
Hg2600-3	BC	SAM	1708485-01B	100	8/22/2017 16:04:35	73795-1.RAW	4:04:35 PM	16.56	3		14.3	0.073	7.344	ng/L	
Hg2600-3	BC	SAM	F708493-DUP1	100	8/22/2017 16:08:44	73796-1.RAW	4:08:44 PM	13.16	3		10.9	0.043	4.286	ng/L	
Hg2600-3	BC	CAL	SEQ-CCV9	1	8/22/2017 16:12:52	73797-1.RAW	4:12:52 PM	574.24			572.0	5.153	5.153	ng/L	
Hg2600-3	BC	CAL	SEQ-CCB9	1	8/22/2017 16:17:01	73798-1.RAW	4:17:01 PM	11.77			9.5	0.086	0.086	ng/L	
Hg2600-3	BC	SAM	F708493-MS1	100	8/22/2017 16:21:12	73799-1.RAW	4:21:12 PM	301.00	3		298.8	2.636	263.583	ng/L	
Hg2600-3	BC	SAM	F708493-MSD1	100	8/22/2017 16:25:21	73800-1.RAW	4:25:21 PM	285.45	3		283.2	2.496	249.575	ng/L	
Hg2600-3	BC	CAL	SEQ-CCVA	1	8/22/2017 16:29:29	73801-1.RAW	4:29:29 PM	575.49			573.3	5.164	5.164	ng/L	
Hg2600-3	BC	CAL	SEQ-CCBA	1	8/22/2017 16:33:38	73802-1.RAW	4:33:38 PM	17.38			15.2	0.137	0.137	ng/L	

TotalMercury EPA1631  
 Operati BC  
 Worksf THg260  
 Method #####  
 R: 1  
 R2: 1  
 BlankSi 2.2271  
 CalibFa 111.01  
 Conc = (Area-2.227  
 Status: QC Warnings:6/QC E  
 Run Date: 8/22/2017  
 Run Time: 14:37:38  
 Blank SD: 2.117819136  
 Blank RSD%: 95.09250649  
 CF SD: 2.179901855  
 CF RSD%: 1.963758549

Sample/ID	Locator	Rinse	Dilute	Blank	Conc (ppt)	MB%	FinalConc	Rec%	QA	RawData	RunEnd	Peak (Raw)	Control (eff)	Flags	RunCount	Comment
Clean				0.00	1.23					73676-1.RAW	7:51:32	136.71	Clean	OK	1	
clean										73677-1.RAW	7:54:23	0.00	Clean	NP	1	
ws				2.23	0.00					73678-1.RAW	7:58:31	1.80	Sample	OK	1	
ws										73679-1.RAW	8:02:40	0.00	Sample	NP	1	
ws				2.23	0.00					73680-1.RAW	8:06:48	0.46	Sample	OK	1	
SEQ-IBL1	A1		1	0.00	0.04					73681-1.RAW	8:10:57	4.22	Sample	OK	1	
SEQ-IBL2	A2		1							73682-1.RAW	8:15:05	0.00	Sample	NP	1	
SEQ-IBL3	A3		1	0.00	0.02					73683-1.RAW	8:19:13	2.47	Sample	OK	1	
SEQ-CAL1	A4		1	2.23	0.51			102.60		73684-1.RAW	8:23:22	59.18	Sample	OK	1	
SEQ-CAL2	A5		1	2.23	1.01			100.58		73685-1.RAW	8:27:30	113.88	Sample	OK	1	
SEQ-CAL3	A6		1	2.23	5.04			100.75		73686-1.RAW	8:31:39	561.40	Sample	OK	1	
SEQ-CAL4	A7		1	2.23	19.59			97.95		73687-1.RAW	8:35:47	2176.75	Sample	OK	1	
SEQ-CAL5	A8		1	2.23	39.25			98.12		73688-1.RAW	8:39:55	4359.05	Sample	OK	1	
SEQ-HCV1	A9		1	2.23	5.25			105.06		73689-1.RAW	8:44:04	585.33	Sample	OK	1	
F708484-BLK1	A10		10	2.23	0.55					73690-1.RAW	8:48:12	8.30	Sample	OK	1	
F708484-BLK2	A11		10	2.23	0.44					73691-1.RAW	8:52:21	7.14	Sample	OK	1	
F708484-BS1	A12		100	2.23	197.47					73692-1.RAW	8:56:29	221.43	Sample	OK	1	
F708484-BSD1	B1		100	2.23	204.75					73693-1.RAW	9:00:37	229.52	Sample	OK	1	
1707771-CC	B2		50	2.23	412.21					73694-1.RAW	9:04:46	917.40	Sample	OK	1	
1707771-CD	B3		50	2.23	85.68					73695-1.RAW	9:08:54	192.45	Sample	OK	1	
1707771-CE	B4		50	2.23	227.94					73696-1.RAW	9:13:03	508.29	Sample	OK	1	
1707771-CF	B5		50	2.23	125.93					73697-1.RAW	9:17:11	281.81	Sample	OK	1	
1707771-CG	B6		50	2.23	367.07					73698-1.RAW	9:21:20	817.18	Sample	OK	1	
1707771-CH	B7		50	2.23	607.80					73699-1.RAW	9:25:28	1351.63	Sample	OK	1	
SEQ-CCV1	B8		1	2.23	5.08			101.58		73700-1.RAW	9:29:36	566.02	Sample	OK	1	
SEQ-CCB1	B9		1	2.23	0.01			0.00		73701-1.RAW	9:33:45	3.48	Sample	OK	1	
1707771-CI	B10		50	2.23	747.51					73702-1.RAW	9:37:53	1661.80	Sample	OK	1	
1707771-CJ	B11		50	2.23	494.22					73703-1.RAW	9:42:02	1099.46	Sample	OK	1	
1707771-CK	B12		50	2.23	40.79					73704-1.RAW	9:46:10	92.79	Sample	OK	1	
1707771-CL	C1		50	2.23	240.44					73705-1.RAW	9:50:19	536.05	Sample	OK	1	
1707771-CM	C2		50	2.23	251.68					73706-1.RAW	9:54:27	561.00	Sample	OK	1	
1707771-CN	C3		50	2.23	178.41					73707-1.RAW	9:58:35	398.32	Sample	OK	1	
1707771-CO	C4		50	2.23	134.20					73708-1.RAW	10:02:44	300.17	Sample	OK	1	
1707771-CP	C5		50	2.23	413.08					73709-1.RAW	10:06:52	919.32	Sample	OK	1	
1707771-CQ	C6		50	2.23	21.06					73710-1.RAW	10:11:01	48.99	Sample	OK	1	
1707771-CR	C7		50	2.23	20.03					73711-1.RAW	10:15:09	46.69	Sample	OK	1	
SEQ-CCV2	C8		1	2.23	5.09			101.84		73712-1.RAW	10:19:17	567.47	Sample	OK	1	
SEQ-CCB2	C9		1	2.23	0.02			0.00		73713-1.RAW	10:23:26	4.23	Sample	OK	1	
F708451-DUP3	C10		10	2.23	0.74					73714-1.RAW	10:27:34	10.46	Sample	OK	1	RE RUN FOR CONFORMATION
1707771-CS	C11		50	2.23	97.15					73715-1.RAW	10:31:43	217.91	Sample	OK	1	NO UPLOAD NEEDED
1707771-CT	C12		50	2.23	1134.74					73716-1.RAW	10:35:52	2521.49	Sample	OK	1	
1707771-CU	D1		50	2.23	297.99					73717-1.RAW	10:40:00	663.81	Sample	OK	1	
1707771-CV	D2		50	2.23	341.75					73718-1.RAW	10:44:09	760.95	Sample	OK	1	
1707771-CKRE1	D3		10	2.23	42.39					73719-1.RAW	10:48:18	472.76	Sample	OK	1	
1707771-CQRE1	D4		10	2.23	18.74					73720-1.RAW	10:52:26	210.23	Sample	OK	1	
1707771-CRRE1	D5		10	2.23	19.92					73721-1.RAW	10:56:34	223.32	Sample	OK	1	
F708484-MS1	D6		400	2.23	1856.54			8875.80		73722-1.RAW	11:00:43	517.45	Sample	OK	1	
F708484-MSD1	D7		400	2.23	1857.44					73723-1.RAW	11:04:51	517.70	Sample	OK	1	
SEQ-CCV3	D8		1	2.23	5.11			102.17		73724-1.RAW	11:09:00	569.31	Sample	OK	1	
SEQ-CCB3	D9		1	2.23	0.03			0.00		73725-1.RAW	11:13:08	5.51	Sample	OK	1	
F708484-MS2	D10		400	2.23	2300.52			113350.40		73726-1.RAW	11:17:17	640.66	Sample	OK	1	
F708484-MSD2	D11		400	2.23	2173.26					73727-1.RAW	11:21:25	605.34	Sample	OK	1	

F708484-MS3	D12	50	2.23	322.11	14.80	73728-1.RAW	11:25:34	717.34	Sample	OK	1
F708484-MSD3	A1	50	2.23	333.52		73729-1.RAW	11:29:42	742.69	Sample	OK	1
F708484-MS4	A2	50	2.23	1393.45	412.84	73730-1.RAW	11:33:50	3095.86	Sample	OK	1
F708484-MSD4	A3	50	2.23	1406.87		73731-1.RAW	11:37:59	3125.66	Sample	OK	1
F708485-BLK1	A4	10	2.23	0.90		73732-1.RAW	11:42:07	12.17	Sample	OK	1
F708485-BLK2	A5	10	2.23	0.47		73733-1.RAW	11:46:16	7.46	Sample	OK	1
F708485-BS1	A6	10	2.23	201.66		73734-1.RAW	11:50:24	2240.81	Sample	OK	1
F708485-BSD1	A7	10	2.23	208.29		73735-1.RAW	11:54:33	2314.43	Sample	OK	1
SEQ-CCV4	A8	1	2.23	5.04	100.81	73736-1.RAW	11:58:41	561.77	Sample	OK	1
SEQ-CCB4	A9	1	2.23	0.03	0.00	73737-1.RAW	12:02:49	5.03	Sample	OK	1
1707771-CW	A10	50	2.23	180.57		73738-1.RAW	12:06:58	403.13	Sample	OK	1
1707771-CX	A11	50	2.23	398.49		73739-1.RAW	12:11:06	886.93	Sample	OK	1
1707771-CY	A12	50	2.23	345.38		73740-1.RAW	12:15:15	769.01	Sample	OK	1
1707771-CZ	B1	50	2.23	311.78		73741-1.RAW	12:19:23	694.43	Sample	OK	1
1707771-DA	B2	50	2.23	230.56		73742-1.RAW	12:23:32	514.10	Sample	OK	1
1707775-08	B3	50	2.23	35.20		73743-1.RAW	12:27:40	80.37	Sample	OK	1
1707775-09	B4	50	2.23	27.48		73744-1.RAW	12:31:49	63.23	Sample	OK	1
1707776-08	B5	50	2.23	679.68		73745-1.RAW	12:35:57	1511.22	Sample	OK	1
1707810-01	B6	50	2.23	42.22		73746-1.RAW	12:40:05	95.95	Sample	OK	1
1707810-02	B7	50	2.23	44.38		73747-1.RAW	12:44:14	100.76	Sample	OK	1
SEQ-CCV5	B8	1	2.23	4.96	99.20	73748-1.RAW	12:48:22	552.83	Sample	OK	1
SEQ-CCB5	B9	1	2.23	0.05	0.00	73749-1.RAW	12:52:31	7.72	Sample	OK	1
1707810-03	B10	10	2.23	408.67		73750-1.RAW	12:56:39	4538.73	Sample	FB	1
1707810-04	B11	10	2.23	470.21		73751-1.RAW	13:00:48	5221.83	Sample	FB	1
WS			2.23	0.17		73752-1.RAW	13:05:52	20.78	Sample	OK	1
1707810-05	B12	50	2.23	164.98		73753-1.RAW	13:10:01	368.51	Sample	OK	1
1707810-06	C1	50	2.23	286.37		73754-1.RAW	13:14:09	638.01	Sample	OK	1
1707810-07	C2	50	2.23	569.22		73755-1.RAW	13:18:18	1265.98	Sample	OK	1
1707810-08	C3	50	2.23	723.23		73756-1.RAW	13:22:26	1607.89	Sample	OK	1
1707810-09	C4	50	2.23	317.79		73757-1.RAW	13:26:34	707.76	Sample	OK	1
1707810-10	C5	50	2.23	704.90		73758-1.RAW	13:30:43	1567.19	Sample	OK	1
1707810-11	C6	50	2.23	510.84		73759-1.RAW	13:34:51	1136.37	Sample	OK	1
1707810-12	C7	50	2.23	686.39		73760-1.RAW	13:39:00	1526.11	Sample	OK	1
SEQ-CCV6	C8	1	2.23	5.16	103.20	73761-1.RAW	13:43:08	575.05	Sample	OK	1
SEQ-CCB6	C9	1	2.23	0.06	0.00	73762-1.RAW	13:47:17	9.37	Sample	OK	1
1707775-08RE1	C10	10	2.23	37.42		73763-1.RAW	13:51:25	417.60	Sample	OK	1
1707775-09RE1	C11	10	2.23	26.55		73764-1.RAW	13:55:34	296.91	Sample	OK	1
1707810-01RE1	C12	10	2.23	40.05		73765-1.RAW	13:59:42	446.79	Sample	OK	1
1707810-02RE1	D1	10	2.23	43.47		73766-1.RAW	14:03:50	484.75	Sample	OK	1
1707810-03RE1	D2	50	2.23	409.95		73767-1.RAW	14:07:59	912.37	Sample	OK	1
1707810-04RE1	D3	50	2.23	480.77		73768-1.RAW	14:12:07	1069.61	Sample	OK	1
F708485-MS1	D4	400	2.23	2787.60	578.61	73769-1.RAW	14:16:16	775.83	Sample	OK	1
F708485-MSD1	D5	400	2.23	2477.92		73770-1.RAW	14:20:24	689.89	Sample	OK	1
F708485-MS2	D6	400	2.23	2665.67	107.49	73771-1.RAW	14:24:33	742.00	Sample	OK	1
F708485-MSD2	D7	400	2.23	2408.16		73772-1.RAW	14:28:41	670.53	Sample	OK	1
SEQ-CCV7	D8	1	2.23	5.19	103.84	73773-1.RAW	14:32:49	578.57	Sample	OK	1
SEQ-CCB7	D9	1	2.23	0.07	0.00	73774-1.RAW	14:36:58	9.63	Sample	OK	1
F708493-BLK1	D10	100	2.23	6.06		73775-1.RAW	14:41:47	8.96	Sample	OK	1
F708493-BLK2	D11	100	2.23	6.81		73776-1.RAW	14:45:55	9.78	Sample	OK	1
F708493-BLK3	D12	100	2.23	3.83		73777-1.RAW	14:50:04	6.48	Sample	OK	1
F708493-BS1	A1	400	2.23	4862.24		73778-1.RAW	14:54:12	1351.58	Sample	OK	1
F708493-BSD1	A2	400	2.23	4821.43		73779-1.RAW	14:58:20	1340.25	Sample	OK	1
1708486-31	A3	100	2.23	28.05		73780-1.RAW	15:02:29	33.37	Sample	OK	1
1708486-32	A4	100	2.23	10.94		73781-1.RAW	15:06:37	14.37	Sample	OK	1
1708486-33	A5	100	2.23	8.79		73782-1.RAW	15:10:46	11.99	Sample	OK	1
1708486-34	A6	100	2.23	12.38		73783-1.RAW	15:14:54	15.97	Sample	OK	1
1708486-35	A7	100	2.23	16.92		73784-1.RAW	15:19:03	21.01	Sample	OK	1

SEQ-CCV8	A8	1	2.23	5.23	104.69	73785-1.RAW	15:23:11	583.31	Sample	OK	1
SEQ-CCB8	A9	1	2.23	0.05	0.00	73786-1.RAW	15:27:20	7.97	Sample	OK	1
1708486-36	A10	100	2.23	14.57		73787-1.RAW	15:31:28	18.40	Sample	OK	1
1708485-01	A11	100	2.23	11.52		73788-1.RAW	15:35:36	15.01	Sample	OK	1
1708486-31B	A12	100	2.23	7.14		73789-1.RAW	15:39:45	10.15	Sample	OK	1
1708486-32B	B1	100	2.23	8.51		73790-1.RAW	15:43:53	11.67	Sample	OK	1
1708486-33B	B2	100	2.23	8.43		73791-1.RAW	15:48:02	11.59	Sample	OK	1
1708486-34B	B3	100	2.23	11.22		73792-1.RAW	15:52:10	14.68	Sample	OK	1
1708486-35B	B4	100	2.23	7.80		73793-1.RAW	15:56:19	10.89	Sample	OK	1
1708486-36B	B5	100	2.23	12.05		73794-1.RAW	16:00:27	15.61	Sample	OK	1
1708485-01B	B6	100	2.23	12.91		73795-1.RAW	16:04:35	16.56	Sample	OK	1
F708493-DUP1	B7	100	2.23	9.85		73796-1.RAW	16:08:44	13.16	Sample	OK	1
SEQ-CCV9	B8	1	2.23	5.15	103.06	73797-1.RAW	16:12:52	574.24	Sample	OK	1
SEQ-CCB9	B9	1	2.23	0.09	0.00	73798-1.RAW	16:17:01	11.77	Sample	OK	1
F708493-MS1	B10	100	2.23	269.15	24783.71	73799-1.RAW	16:21:12	301.00	Sample	OK	1
F708493-MSD1	B11	100	2.23	255.14		73800-1.RAW	16:25:21	285.45	Sample	OK	1
SEQ-CCVA	B12	1	2.23	5.16		73801-1.RAW	16:29:29	575.49	Sample	OK	1
SEQ-CCBA	C1	1	2.23	0.14		73802-1.RAW	16:33:38	17.38	Sample	OK	1

ANALYSIS SEQUENCE

QUALITY ASSURANCE

7H23013

PEER-REVIEWED

Instrument: Hg2600-2



Calibration ID: UNASSIGNED

INITIALS: *R 8/24/17* Analyzed: 8/22/2017

Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
7H23013-IBL1 ✓	QC	1			
7H23013-IBL2 ✓	QC	2			
7H23013-IBL3 ✓	QC	3			
7H23013-CAL1 ✓	QC	4	1704505		
7H23013-CAL2 ✓	QC	5	1704506		
7H23013-CAL3 ✓	QC	6	1704507		
7H23013-CAL4 ✓	QC	7	1704508		
7H23013-CAL5 ✓	QC	8	1704509		
7H23013-ICV1 ✓	QC	9	1703679		
F708484-BLK1 ✓	QC	10			
F708484-BLK2 ✓	QC	11			
F708484-BS1 ✓	QC	12			
F708484-BSD1 ✓	QC	13			
1707771-CC ✓	Hg-CVAFS-S-7474	14			
1707771-CD ✓	Hg-CVAFS-S-7474	15			
1707771-CE ✓	Hg-CVAFS-S-7474	16			
1707771-CF ✓	Hg-CVAFS-S-7474	17			
1707771-CG ✓	Hg-CVAFS-S-7474	18			
1707771-CH ✓	Hg-CVAFS-S-7474	19			
7H23013-CCV1 ✓	QC	20	1703679		
7H23013-CCB1 ✓	QC	21			
1707771-CI ✓	Hg-CVAFS-S-7474	22			
1707771-CJ ✓	Hg-CVAFS-S-7474	23			
1707771-CK ✓	Hg-CVAFS-S-7474	24			
1707771-CL ✓	Hg-CVAFS-S-7474	25			
1707771-CM ✓	Hg-CVAFS-S-7474	26			
1707771-CN ✓	Hg-CVAFS-S-7474	27			
1707771-CO ✓	Hg-CVAFS-S-7474	28			
1707771-CP ✓	Hg-CVAFS-S-7474	29			
1707771-CQ ✓	Hg-CVAFS-S-7474	30			
1707771-CR ✓	Hg-CVAFS-S-7474	31			
7H23013-CCV2 ✓	QC	32	1703679		
7H23013-CCB2 ✓	QC	33			
1707771-CS ✓	Hg-CVAFS-S-7474	34			
1707771-CT ✓	Hg-CVAFS-S-7474	35			

## ANALYSIS SEQUENCE

7H23013



Instrument: Hg2600-2

Calibration ID: UNASSIGNED

Analyzed: 8/22/2017

Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
1707771-CU ✓	Hg-CVAFS-S-7474	36			
1707771-CV ✓	Hg-CVAFS-S-7474	37			
1707771-CKRE1 ✓	Hg-CVAFS-S-7474	38			Added 8/23/2017 by BC
1707771-CQRE1 ✓	Hg-CVAFS-S-7474	39			Added 8/23/2017 by BC
1707771-CRRE1 ✓	Hg-CVAFS-S-7474	40			Added 8/23/2017 by BC
F708484-MS1 ✓	QC	41			
F708484-MSD1 ✓	QC	42			
7H23013-CCV3 ✓	QC	43	1703679	✓	
7H23013-CCB3 ✓	QC	44			
F708484-MS2 ✓	QC	45			
F708484-MSD2 ✓	QC	46			
F708484-MS3 ✓	QC	47			
F708484-MSD3 ✓	QC	48			
F708484-MS4 ✓	QC	49			
F708484-MSD4 ✓	QC	50			
F708485-BLK1 ✓	QC	51			
F708485-BLK2 ✓	QC	52			
F708485-BS1 ✓	QC	53			
F708485-BSD1 ✓	QC	54			
7H23013-CCV4 ✓	QC	55	1703679	✓	
7H23013-CCB4 ✓	QC	56			
1707771-CW ✓	Hg-CVAFS-S-7474	57			
1707771-CX ✓	Hg-CVAFS-S-7474	58			
1707771-CY ✓	Hg-CVAFS-S-7474	59			
1707771-CZ ✓	Hg-CVAFS-S-7474	60			
1707771-DA ✓	Hg-CVAFS-S-7474	61			
1707775-08 ✓	Hg-CVAFS-S-7474	62			
1707775-09 ✓	Hg-CVAFS-S-7474	63			
1707776-08 ✓	Hg-CVAFS-S-7474	64			
1707810-01 ✓	Hg-CVAFS-S-7474	65			
1707810-02 ✓	Hg-CVAFS-S-7474	66			
7H23013-CCV5 ✓	QC	67	1703679	✓	
7H23013-CCB5 ✓	QC	68			
1707810-03 ✓	Hg-CVAFS-S-7474	69			
1707810-04 ✓	Hg-CVAFS-S-7474	70			

Due Date: 8/24/2017

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**ANALYSIS SEQUENCE**

**7H23013**



**Instrument: Hg2600-2**

**Calibration ID: UNASSIGNED**

**Analyzed: 8/22/2017**

Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
1707810-05	Hg-CVAFS-S-7474	71			
1707810-06	Hg-CVAFS-S-7474	72			
1707810-07	Hg-CVAFS-S-7474	73			
1707810-08	Hg-CVAFS-S-7474	74			
1707810-09	Hg-CVAFS-S-7474	75			
1707810-10	Hg-CVAFS-S-7474	76			
1707810-11	Hg-CVAFS-S-7474	77			
1707810-12	Hg-CVAFS-S-7474	78			
7H23013-CCV6	QC	79	1703679		
7H23013-CCB6	QC	80			
1707775-08RE1	Hg-CVAFS-S-7474	81			Added 8/23/2017 by BC
1707775-09RE1	Hg-CVAFS-S-7474	82			Added 8/23/2017 by BC
1707810-01RE1	Hg-CVAFS-S-7474	83			Added 8/23/2017 by BC
1707810-02RE1	Hg-CVAFS-S-7474	84			Added 8/23/2017 by BC
1707810-03RE1	Hg-CVAFS-S-7474	85			Added 8/23/2017 by BC
1707810-04RE1	Hg-CVAFS-S-7474	86			Added 8/23/2017 by BC
F708485-MS1	QC	87			
F708485-MSD1	QC	88			
F708485-MS2	QC	89			
F708485-MSD2	QC	90			
7H23013-CCV7	QC	91	1703679		
7H23013-CCB7	QC	92			

*BC* 8/23/17  
 Samples Loaded By                      Date

*BC* 8/23/17  
 Data Processed By                      Date

*10922*  
8/22/17



**PREPARATION BENCH SHEET**

F708484

**Eurofins Frontier Global Sciences, Inc.**

**Matrix: Soil/Sediment**

**Prepared using: AFS - EPA 7474**

**Prepared: 8/21/2017**

Lab Number	Sample ID and Source Sample	Initial (g)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F708484-BLK1	Blank	0.5	200					
F708484-BLK2	Blank	0.5	200					
F708484-BS1	Blank Spike	0.5	200	1701763	40			
F708484-BSD1	Blank Spike Dup	0.5	200	1701763	40			
F708484-MS1	Matrix Spike [1707771-CD]	0.538	200	1703591	50			
F708484-MS2	Matrix Spike [1707771-CP]	0.5463	200	1703591	50			
F708484-MS3	AS/ASD [1707771-CD] ✓	0.0027085	1	1704422	25 ✓			[Spk] 0.5417g->200mL; 200mL->200mL; Spiked 1mL
F708484-MS4	AS/ASD [1707771-CP] ✓	0.002668	1	1704422	100 ✓			[Spk] 0.5336g->200mL; 200mL->200mL; Spiked 1mL
F708484-MSD1	Matrix Spike Dup [1707771-CD]	0.5943	200	1703591	50			
F708484-MSD2	Matrix Spike Dup [1707771-CP]	0.5258	200	1703591	50			
F708484-MSD3	AS/ASD [1707771-CD] ✓	0.0027085	1	1704422	25 ✓			[Spk] 0.5417g->200mL; 200mL->200mL; Spiked 1mL
F708484-MSD4	AS/ASD [1707771-CP] ✓	0.002668	1	1704422	100 ✓			[Spk] 0.5336g->200mL; 200mL->200mL; Spiked 1mL

**Standard ID(s):**  
 1701763 THg 1,000ng/mL Secondary Spiking Standard  
 1703591 THg 10,000ng/mL Primary Spiking Standard  
 1704422 THg 10ng/mL Calibration Standard

**Expiration:**  
 22-Sep-17 00:00  
 14-Dec-17 00:00  
 21-Oct-17 00:00  
 21-Oct-17 00:00

**Reagent ID(s):**  
 1703182 25% Hydroxylamine-HCl working solution  
 1704424 Boiling Chips for AFS prep  
 1704484 Fisher Nitric Acid, Tracemetal Grade  
 1704516 THg Washstation (0.5% BrCl)  
 1704517 THg Dilute 1% BrCl  
 1704640 Omnitrace Hydrochloric Acid  
 1704956 3% SnCl<sub>2</sub> THg reductant  
 1704959 7474 Potassium Bromate/Bromide Reagent

**Description:**  
 25% Hydroxylamine-HCl working solution  
 Boiling Chips for AFS prep  
 Fisher Nitric Acid, Tracemetal Grade  
 THg Washstation (0.5% BrCl)  
 THg Dilute 1% BrCl  
 Omnitrace Hydrochloric Acid  
 3% SnCl<sub>2</sub> THg reductant  
 7474 Potassium Bromate/Bromide Reagent

**Expiration:**  
 24-Nov-17 00:00  
 21-Jan-18 00:00  
 15-Mar-19 00:00  
 24-Nov-17 00:00  
 18-Dec-17 00:00  
 27-Jul-20 00:00  
 29-Jan-18 00:00  
 22-Aug-17 00:00

**PREPARATION BENCH SHEET**

F708484

**Eurofins Frontier Global Sciences, Inc.**

**Matrix: Soil/Sediment**

**Prepared using: AFS - EPA 7474**

**Prepared: 8/21/2017**

Lab Number	Sample ID	Initial (g)	Final (mL)	QC Sample	Sample Specs.	Raw Data	Sample Comments	Analysis Comments
1707771-CC	W-MM-07_072517_SED_01-03_R3	0.5939	200	-	-	-		
1707771-CD	W-MM-17_072517_SED_00-01	0.5417	200	QC	-	-	MS/MSD	
1707771-CE	W-MM-17_072517_SED_01-03	0.5943 0.5948	200 RL 8/23/17	-	-	-		
1707771-CF	W-MM-18_072517_SED_00-01	0.5263	200	-	-	-		
1707771-CG	W-MM-18_072517_SED_01-03	0.551	200	-	-	-		
1707771-CH	W-MM-18_072517_SED_03-05_R1	0.5638	200	-	-	-		
1707771-CI	W-MM-18_072517_SED_03-05_R2	0.5432	200	-	-	-		
1707771-CJ	W-MM-18_072517_SED_03-05_R3	0.5247	200	-	-	-		
1707771-CK	W-MM-18_072517_SED_05-10	0.5798	200	-	-	-		
1707771-CKRE1	W-MM-18_072517_SED_05-10	0.5798	200	-	-	-	Added 8/23/2017 by BC	Added 8/23/2017 by BC
1707771-CL	W-MM-19_072517_SED_03-05	0.5576	200	-	-	-		
1707771-CM	W-MM-19_072517_SED_05-10_R1	0.5728	200	-	-	-		
1707771-CN	W-MM-19_072517_SED_05-10_R2	0.5329	200	-	-	-		
1707771-CO	W-MM-19_072517_SED_05-10_R3	0.5714	200	-	-	-		
1707771-CP	W-MM-22_072517_SED_03-05	0.5336	200	-	-	-		
1707771-CQ	W-MM-22_072517_SED_05-10_R1	0.5452	200	-	-	-		
1707771-CQRE1	W-MM-22_072517_SED_05-10_R1	0.5452	200	-	-	-	Added 8/23/2017 by BC	Added 8/23/2017 by BC
1707771-CR	W-MM-22_072517_SED_05-10_R2	0.5994	200	-	-	-		
1707771-CRRE1	W-MM-22_072517_SED_05-10_R2	0.5994	200	-	-	-	Added 8/23/2017 by BC	Added 8/23/2017 by BC

Due Date: 8/24/2017

PREPARATION BENCH SHEET

F708484

Eurofins Frontier Global Sciences, Inc.

Matrix: Soil/Sediment

Prepared using: AFS - EPA 7474

Prepared: 8/21/2017

1707771-CS	W-MM-22_072517_SED_05-10_R3	0.585	200	-	-	-		
1707771-CT	W-MM-23_072517_SED_03-05	0.5889	200	-	-	-		
1707771-CU	W-MM-23_072517_SED_05-10	0.5314	200	-	-	-		
1707771-CV	W-MM-24_072517_SED_03-05	0.5274	200	-	-	-		



PREPARATION BENCH SHEET

200-3  
8/22/17 BC

F708484

Eurofins Frontier Global Sciences, Inc.

Matrix: Soil/Sediment

Prepared using: AFS - EPA 7474

Prepared: 8/21/2017

Lab Number	Sample ID and Source Sample	Initial (g)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F708484-BLK1	Blank	0.5	200					10X
F708484-BLK2	Blank	0.5	200					10X
F708484-BS1	Blank Spike	0.5	200	1701763	40			100X
F708484-BSD1	Blank Spike Dup	0.5	200	1701763	40			100X
F708484-MS1	Matrix Spike [1707771-CD]	0.538	200	1703591	50			400X
F708484-MS2	Matrix Spike [1707771-CP]	0.5463	200	1703591	50			400X
F708484-MSD1	Matrix Spike Dup [1707771-CD]	0.5943	200	1703591	50			400X
F708484-MSD2	Matrix Spike Dup [1707771-CP]	5.258	200	1703591	50			400X

<u>Standard ID(s):</u>	<u>Description:</u>	<u>Expiration:</u>	<u>Reagent ID(s):</u>	<u>Description:</u>	<u>Expiration:</u>
1701763	THg 1.000ng/mL Secondary Spiking Standard	22-Sep-17 00:00	1704424	Boiling Chips for AFS prep	21-Jan-18 00:00
1703591	THg 10.000ng/mL Primary Spiking Standard	14-Dec-17 00:00	1704484	Fisher Nitric Acid, Tracemetal Grade	15-Mar-19 00:00
			1704640	Omnitrace Hydrochloric Acid	27-Jul-20 00:00
			1704959	7474 Potassium Bromate/Bromide Reagent	22-Aug-17 00:00

MS3/MSD3 (AS/ASD) 1707771-CD 25 uL 1704422 50X

MS4/MSD4 (AS/ASD) 1707771-CP 100 uL 1704422 50X

1704516

1704517

1704956

1703182

Due Date: 8/24/2017

PREPARATION BENCH SHEET

2600-3  
8/22/17 BX

F708484

Eurofins Frontier Global Sciences, Inc.

Matrix: Soil/Sediment

Prepared using: AFS - EPA 7474

Prepared: 8/21/2017

Lab Number	Sample ID	Initial (g)	Final (mL)	QC Sample	Sample Specs.	Raw Data	Sample Comments	Analysis Comments
1707771-CC	W-MM-07_072517_SED_01-03_R3	0.5939	200	-	-	-		50X
1707771-CD	W-MM-17_072517_SED_00-01	0.5417	200	QC	-	-	MS/MSD	50X
1707771-CE	W-MM-17_072517_SED_01-03	0.5943	200	-	-	-		50X
1707771-CF	W-MM-18_072517_SED_00-01	0.5263	200	-	-	-		50X
1707771-CG	W-MM-18_072517_SED_01-03	0.551	200	-	-	-		50X
1707771-CH	W-MM-18_072517_SED_03-05_R1	0.5638	200	-	-	-		50X
1707771-CI	W-MM-18_072517_SED_03-05_R2	0.5432	200	-	-	-		50X
1707771-CJ	W-MM-18_072517_SED_03-05_R3	0.5247	200	-	-	-		50X
1707771-CK	W-MM-18_072517_SED_05-10	0.5798	200	-	-	-		50X → 10X
1707771-CL	W-MM-19_072517_SED_03-05	0.5576	200	-	-	-		50X
1707771-CM	W-MM-19_072517_SED_05-10_R1	0.5728	200	-	-	-		50X
1707771-CN	W-MM-19_072517_SED_05-10_R2	0.5329	200	-	-	-		50X
1707771-CO	W-MM-19_072517_SED_05-10_R3	0.5714	200	-	-	-		50X
1707771-CP	W-MM-22_072517_SED_03-05	0.5336	200	-	-	-		50X
1707771-CQ	W-MM-22_072517_SED_05-10_R1	0.5452	200	-	-	-		50X → 10X
1707771-CR	W-MM-22_072517_SED_05-10_R2	0.5994	200	-	-	-		50X → 10X
1707771-CS	W-MM-22_072517_SED_05-10_R3	0.585	200	-	-	-		50X
1707771-CT	W-MM-23_072517_SED_03-05	0.5889	200	-	-	-		50X
1707771-CU	W-MM-23_072517_SED_05-10	0.5314	200	-	-	-		50X

Due Date: 8/24/2017

PREPARATION BENCH SHEET

2600-3  
8/22/17 BC

F708484

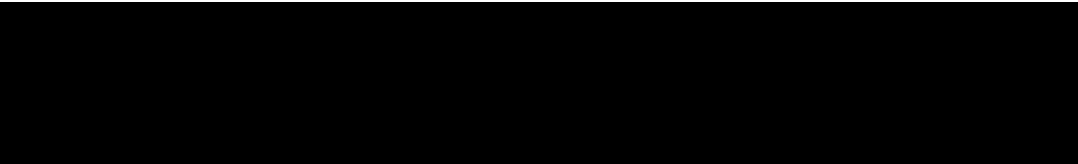
Eurofins Frontier Global Sciences, Inc.

Matrix: Soil/Sediment

Prepared using: AFS - EPA 7474

Prepared: 8/21/2017

1707771-CV	W-MM-24_072517_SED_03-05	0.5274	200	-	-	-		Sox
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Technician: Duyh Batch#: F708484 Date: 8/21/17

- EFAFS-T-AFS-SOP2986 Tissues - Methyl Mercury - KOH/Methanol: Hot plate 75±5°C for 2-4 hours.
- EFAFS-T-AFS-SOP2795 Tissues - Total Mercury - 70:30: Hot plate 75±5°C for two hours.
- EFAFS-T-AFS-SOP5134 Sediments - Methyl Mercury - KBr/CH<sub>2</sub>Cl<sub>2</sub>: Heat Block 45°C (nitrogen purge for 30 minutes).
- EFAFS-T-AFS-SOP2807 Solids - Total Mercury - Cold AR: 18-25°C for over four hours.

Other: EPA 7474 Vial Type:  Glass  Teflon  
 Balance#: 19 Calibrated?  Yes  No Therm.#: N/A Calibrated?  Yes  No  
 \*Time in: N/A Actual Temp. (raw): N/A °C w/ CF: N/A °C  
 Time out: N/A Actual Temp. (raw): N/A °C w/ CF: N/A °C  
 \*Time in can't begin before target temperature is reached

Final vol.: 25 mL (LIMS ID: R0420) Spike vol.: 40 µL (LIMS ID: 1701763)  
 Spike Witness: bc 8/21/17 (initial and date)

HCl LIMS ID: 1704640 Pipette SN#: MU11619 Calibration Date: 8/16/17  
 HNO<sub>3</sub> LIMS ID: 1704484 Pipette SN#: 0U07693 Calibration Date: 8/16/17  
 70/30 LIMS ID: N/A Dispenser #: 09N45351 Calibrated?  Yes  No  
 Other Acid LIMS ID: 1704959 Dispenser #: 08Y2293 17400  
 Glass Vial # 2264713-3025 Boiling Chip lot # 1704424 \*Hotblock Position: N/A

Vial #	Sample ID Number	Sample Size <input type="checkbox"/> mL <input checked="" type="checkbox"/> g	Vial # <u>8/21/17</u>	Sample ID Number	Sample Size <input type="checkbox"/> mL <input checked="" type="checkbox"/> g	CRM LIMS ID <input type="checkbox"/> NA
1	F708484 Blk1	0.5136	2378	1707771-CA	0.5452	
2	F708484 Blk2	0.5354	249	1707771 CR	0.5994	
3	F708484 BS1	0.5169	2510	1707771 CS	0.5850	
4	F708484 BS01	0.5710	2611	1707771 CT	0.5889	Comments
5	1707771-CC	0.5939	2712	1707771 CU	0.5314	F708484 source
6	1707771 CD	0.5418	2813	1707771 CV	0.5274	MS1 MS01
7	F708484 MS1	0.5380	29			1707771-CD
8	F708484 MS01	0.5993	30			F708484
9	1707771-CE	0.5948	31			MS2 MS02
10	1707771 CF	0.5263	32			1707771-EP
11	1707771 CG	0.5510	33			
12	1707771 CH	0.5638	34			ALL SMILE
13	1707771 CI	0.5432	35			MS1 MS01
14	1707771 CJ	0.5247	36			= 10,000 µg/L
15	1707771 CK	0.5798	37			= 50 µg/L
16	1707771 CL	0.5576	38			1703591
17	1707771 CM	0.5728	39			8/21/17
18	1707771 CN	0.5329	40			
19	1707771 CO	0.5714	41			
20	1707771 CP	0.5336	42			
21	F708484-MS2	0.5463	43			
22	F708484 MS02	0.5258	44			

**PREPARATION BENCH SHEET**

F708485

**Eurofins Frontier Global Sciences, Inc.**

**Matrix: Soil/Sediment**

**Prepared using: AFS - EPA 7474**

**Prepared: 8/21/2017**

Lab Number	Sample ID and Source Sample	Initial (g)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F708485-BLK1	Blank	0.5	200					
F708485-BLK2	Blank	0.5	200					
F708485-BS1	Blank Spike	0.5	200	1701763	40			
F708485-BSD1	Blank Spike	0.5	200	1701763	40			
F708485-MS1	Matrix Spike [1707771-DA]	0.5492	200	1703591	50			
F708485-MS2	Matrix Spike [1707810-02]	0.5564	200	1703591	50			
F708485-MSD1	Matrix Spike Dup [1707771-DA]	0.5867	200	1703591	50			
F708485-MSD2	Matrix Spike Dup [1707810-02]	0.5349	200	1703591	50			

<u>Standard ID(s):</u>	<u>Description:</u>	<u>Expiration:</u>	<u>Reagent ID(s):</u>	<u>Description:</u>	<u>Expiration:</u>
1701763	THg 1,000ng/mL Secondary Spiking Standard	22-Sep-17 00:00	1703182	25% Hydroxylamine-HCl working solution	24-Nov-17 00:00
1703591	THg 10,000ng/mL Primary Spiking Standard	14-Dec-17 00:00	1704424	Boiling Chips for AFS prep	21-Jan-18 00:00
			1704484	Fisher Nitric Acid, Tracemetal Grade	15-Mar-19 00:00
			1704516	THg Washstation (0.5% BrCl)	24-Nov-17 00:00
			1704517	THg Dilute 1% BrCl	18-Dec-17 00:00
			1704640	Omnitrace Hydrochloric Acid	27-Jul-20 00:00
			1704956	3% SnCl2 THg reductant	29-Jan-18 00:00
			1704959	7474 Potassium Bromate/Bromide Reagent	22-Aug-17 00:00



**PREPARATION BENCH SHEET**

F708485

**Eurofins Frontier Global Sciences, Inc.**

**Matrix: Soil/Sediment**

**Prepared using: AFS - EPA 7474**

**Prepared: 8/21/2017**

Lab Number	Sample ID	Initial (g)	Final (mL)	QC Sample	Sample Specs.	Raw Data	Sample Comments	Analysis Comments
1707771-CW	W-MM-24_072517_SED_05-10	0.5348	200	-	-	-		
1707771-CX	W-MM-TP_072517_SED_00-01_R1	0.5661	200	-	-	-		
1707771-CY	W-MM-TP_072517_SED_00-01_R2	0.5565	200	-	-	-		
1707771-CZ	W-MM-TP_072517_SED_00-01_R3	0.5192	200	-	-	-		
1707771-DA	W-MM-TP_072517_SED_01-03	0.5579	200	-	-	-		
1707775-08	OV-01_072617_SED_00-03	0.5501	200	-	-	-		
1707775-08RE1	OV-01_072617_SED_00-03	0.5501	200	-	-	-	Added 8/23/2017 by BC	Added 8/23/2017 by BC
1707775-09	OV-02_072617_SED_00-03	0.5319	200	-	-	-		
1707775-09RE1	OV-02_072617_SED_00-03	0.5319	200	-	-	-	Added 8/23/2017 by BC	Added 8/23/2017 by BC
1707776-08	SVE-TIP_072117_SED_00-03	0.599	200	-	-	-		
1707810-01	ADD-02_072417_SED_00-01	0.5477	200	-	-	-		
1707810-01RE1	ADD-02_072417_SED_00-01	0.5477	200	-	-	-	Added 8/23/2017 by BC	Added 8/23/2017 by BC
1707810-02	ADD-02_072417_SED_01-03	0.5365	200	-	-	-		
1707810-02RE1	ADD-02_072417_SED_01-03	0.5365	200	-	-	-	Added 8/23/2017 by BC	Added 8/23/2017 by BC
1707810-03	W-17-High_072417_SED_00-01	0.5525	200	-	-	-		
1707810-03RE1	W-17-High_072417_SED_00-01	0.5525	200	-	-	-	Added 8/23/2017 by BC	Added 8/23/2017 by BC
1707810-04	W-17-High_072417_SED_01-03	0.5621	200	-	-	-		
1707810-04RE1	W-17-High_072417_SED_01-03	0.5621	200	-	-	-	Added 8/23/2017 by BC	Added 8/23/2017 by BC
1707810-05	W-61-High_072417_SED_00-01	0.5593	200	-	-	-		

Due Date: 8/24/2017

PREPARATION BENCH SHEET

F708485

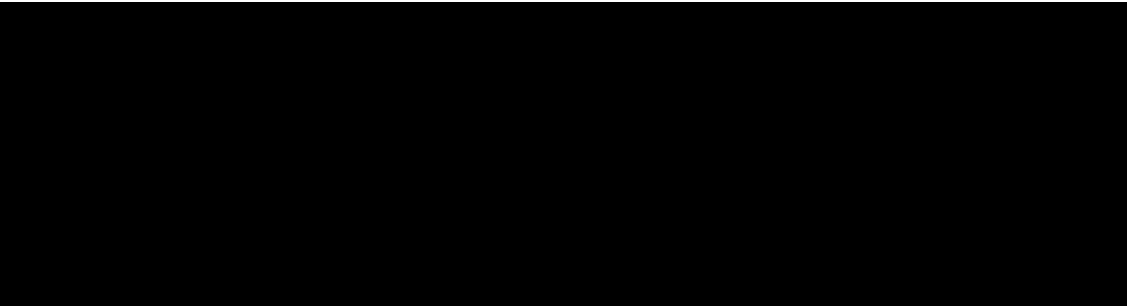
Eurofins Frontier Global Sciences, Inc.

Matrix: Soil/Sediment

Prepared using: AFS - EPA 7474

Prepared: 8/21/2017

1707810-06	W-61-High_072417_SED_01-03	0.5479	200	-	-	-		
1707810-07	W-61-Intertidal_072417_SED_00-01	0.5677	200	-	-	-		
1707810-08	W-61-Intertidal_072417_SED_01-03	0.5277	200	-	-	-		
1707810-09	W-61-Low_072417_SED_00-01	0.5141	200	-	-	-		
1707810-10	W-61-Low_072417_SED_01-03	0.5574	200	-	-	-		
1707810-11	W-61-Mid_072417_SED_00-01	0.5201	200	-	-	-		
1707810-12	W-61-Mid_072417_SED_01-03	0.5697	200	-	-	-		



PREPARATION BENCH SHEET

Bx 8/22/17  
2600-3

F708485

**Eurofins Frontier Global Sciences, Inc.**

**Matrix: Soil/Sediment**

**Prepared using: AFS - EPA 7474**

**Prepared: 8/21/2017**

Lab Number	Sample ID and Source Sample	Initial (g)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F708485-BLK1	Blank	0.5	200					10X -
F708485-BLK2	Blank	0.5	200					10X -
F708485-BS1	Blank Spike	0.5	200	1701763	40			10X -
F708485-BSD1	Blank Spike	0.5	200	1701763	40			10X -
F708485-MS1	Matrix Spike [1707771-DA]	0.5492	200	1703591	50			400X -
F708485-MS2	Matrix Spike [1707810-02]	0.5564	200	1703591	50			400X -
F708485-MSD1	Matrix Spike Dup [1707771-DA]	0.5867	200	1703591	50			400X -
F708485-MSD2	Matrix Spike Dup [1707810-02]	0.5349	200	1703591	50			400X -

Standard ID(s):	Description:	Expiration:	Reagent ID(s):	Description:	Expiration:
1701763	THg 1,000ng/mL Secondary Spiking Standard	22-Sep-17 00:00	1704424	Boiling Chips for AFS prep	21-Jan-18 00:00
1703591	THg 10,000ng/mL Primary Spiking Standard	14-Dec-17 00:00	1704484	Fisher Nitric Acid, Tracemetal Grade	15-Mar-19 00:00
			1704640	Omnitrace Hydrochloric Acid	27-Jul-20 00:00
			1704959	7474 Potassium Bromate/Bromide Reagent	22-Aug-17 00:00

1704516  
1704517  
1704956  
1703182

PREPARATION BENCH SHEET

BC ~~8/26/17~~  
 - 8/22/17  
 2600-3

F708485

Eurofins Frontier Global Sciences, Inc.

Matrix: Soil/Sediment

Prepared using: AFS - EPA 7474

Prepared: 8/21/2017

Lab Number	Sample ID	Initial (g)	Final (mL)	QC Sample	Sample Specs.	Raw Data	Sample Comments	Analysis Comments
1707771-CW	W-MM-24_072517_SED_05-10	0.5348	200	-	-	-	50X -	
1707771-CX	W-MM-TP_072517_SED_00-01_R1	0.5661	200	-	-	-	50X -	
1707771-CY	W-MM-TP_072517_SED_00-01_R2	0.5565	200	-	-	-	50X -	
1707771-CZ	W-MM-TP_072517_SED_00-01_R3	0.5192	200	-	-	-	50X -	
1707771-DA	W-MM-TP_072517_SED_01-03	0.5579	200	-	-	-	50X -	
1707775-08	OV-01_072617_SED_00-03	0.5501	200	-	-	-	50X → 10X -	
1707775-09	OV-02_072617_SED_00-03	0.5319	200	-	-	-	50X → 10X -	
1707776-08	SVE-TIP_072117_SED_00-03	0.599	200	-	-	-	50X	
1707810-01	ADD-02_072417_SED_00-01	0.5477	200	-	-	-	50X → 10X -	
1707810-02	ADD-02_072417_SED_01-03	0.5365	200	-	-	-	50X → 10X -	
1707810-03	W-17-High_072417_SED_00-01	0.5525	200	-	-	-	10X → 50X -	
1707810-04	W-17-High_072417_SED_01-03	0.5621	200	-	-	-	10X → 50X -	
1707810-05	W-61-High_072417_SED_00-01	0.5593	200	-	-	-	50X -	
1707810-06	W-61-High_072417_SED_01-03	0.5479	200	-	-	-	50X -	
1707810-07	W-61-Intertidal_072417_SED_00-01	0.5677	200	-	-	-	50X -	
1707810-08	W-61-Intertidal_072417_SED_01-03	0.5277	200	-	-	-	50X -	
1707810-09	W-61-Low_072417_SED_00-01	0.5141	200	-	-	-	50X -	
1707810-10	W-61-Low_072417_SED_01-03	0.5574	200	-	-	-	50X -	
1707810-11	W-61-Mid_072417_SED_00-01	0.5201	200	-	-	-	50X -	

Due Date: 8/24/2017

BC 8/22/17  
2600-3

PREPARATION BENCH SHEET

F708485

Eurofins Frontier Global Sciences, Inc.

Matrix: Soil/Sediment

Prepared using: AFS - EPA 7474

Prepared: 8/21/2017

1707810-12	W-61-Mid_072417_SED_01-03	0.5697	200	-	-	-	TOX	
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Technician: Dmyan Batch#: F708485 Date: 8/21/17

- EFAFS-T-AFS-SOP2986 Tissues - Methyl Mercury - KOH/Methanol: Hot plate 75±5°C for 2-4 hours.
- EFAFS-T-AFS-SOP2795 Tissues - Total Mercury - 70:30: Hot plate 75±5°C for two hours.
- EFAFS-T-AFS-SOP5134 Sediments - Methyl Mercury - KBr/CH<sub>2</sub>Cl<sub>2</sub>: Heat Block 45°C (nitrogen purge for 30 minutes).
- EFAFS-T-AFS-SOP2807 Solids - Total Mercury - Cold AR: 18-25°C for over four hours.

Other: EPA 7774 Vial Type:  Glass  Teflon  
 Balance#: 19 Calibrated?  Yes  No Therm.#: N/A Calibrated?  Yes  No  
 \*Time in: N/A Actual Temp. (raw): N/A °C w/ CF: N/A °C  
 Time out: N/A Actual Temp. (raw): N/A °C w/ CF: N/A °C  
 \*Time in can't begin before target temperature is reached

Final vol.: 25 mL (LIMS ID: R0H20) Spike vol.: 40 µL (LIMS ID: 1701963)  
 Spike Witness: CWP 8/21/17 (initial and date)

HCl LIMS ID: 1704640 Pipette SN#: MU11619 Calibration Date: 8-16-17  
 HNO<sub>3</sub> LIMS ID: 1704484 Pipette SN#: 0407693 Calibration Date: 8-16-17  
 70/30 LIMS ID: N/A Dispenser #: 09W45251 Calibrated?  Yes  No  
 Other Acid LIMS ID: 1704959 Dispenser #: 0842293 yes  
 Glass Vial # 5264713-3025 Boiling Chip lot # 1704424 \*Hotblock Position: N/A

Vial #	Sample ID Number	Sample Size <input type="checkbox"/> mL <input checked="" type="checkbox"/> µg	Vial # <u>8/21/17</u>	Sample ID Number	Sample Size <input type="checkbox"/> mL <input checked="" type="checkbox"/> µg	CRM LIMS ID <input checked="" type="checkbox"/> NA
1	F708485 B101	0.5498	27	1707810-06	0.5479	
2	F708485 B102	0.5101	28	1707810-07	0.5677	
3	F708485 B51	0.5491	25	1707810-08	0.5277	
4	F708485 B501	0.5671	26	1707810-09	0.5141	
5	1707771-CW	0.5348	27	1707810-10	0.5574	F708485
6	1707771 CX	0.5661	28	1707810-11	0.5201	source
7	1707771 CY	0.5665	29	1707810-12	0.5697	MS1 MS01
8	1707771 CZ	0.5192	30			1707771-DA
9	1707771 DA	0.5579	31			F708485
10	F708485-MS1	0.5492	32			MS2 MS02
11	F708485 MS01	0.5867	33			1707810-02
12	1707775-08	0.5501	34			ALL spike
13	1707775-09	0.5319	35			MS MS01
14	1707776-08	0.5990	36			= 10,000 µg
15	1707777	<u>0.521/17</u>	37			= 500 µg
16	1707810-01	0.5477	38			1703591
17	1707810-02	0.5365	39			8/21/17 CW
18	F708485-MS2	0.5564	40			
19	F708485 MS02	0.5349	41			
20	1707810-03	0.5525	42			
21	1707810-04	0.5621	43			
22	1707810-05	0.5593	44			

**Failing Data Report - 7H23013**

Sample ID	Analysis	Result	MRL	Dup Result	Source Result	True Value	Units	% Rec.	Rec. LCL	Rec. UCL	RPD	RPD Limit	Over Cal	Failure	Qualifier
1707810-03	✓ Hg-CVAFS-S-7474	511	12.5				ng/g						FAIL-OVER	PASS	E ✓
1707810-04	✓ Hg-CVAFS-S-7474	582	12.4				ng/g						FAIL-OVER	PASS	E ✓
F708484-MS1	✓ Hg-CVAFS-S-7474	3557	766		162.1	4800.1	ng/g	70.7	71.00	125.00			PASS-OVER	FAIL-MS	QM-07 ✓
F708484-MSD1	✓ Hg-CVAFS-S-7474	3221	694	3557	162.1	4345.4	ng/g	70.4	71.00	125.00	0.450	24.00	PASS-OVER	FAIL-MSD (Rec.)	QM-07 ✓
F708484-MSD2	✓ Hg-CVAFS-S-7474	3119	574	3177	583.6	3595.6	ng/g	70.5	71.00	125.00	6.11	24.00	PASS-OVER	FAIL-MSD (Rec.)	QM-07 ✓

Be Ling 8/23/17  
 Analyst Reviewed By Date

PLM 8/24/17  
 Peer Reviewed By Date

ANALYSIS SEQUENCE

QUALITY ASSURANCE

7H23014

PEER-REVIEWED

Instrument: Hg2600-2



Calibration ID: UNASSIGNED

INITIALS: *A 8/24/17* Analyzed: 8/22/2017

Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
7H23014-IBL1	QC	1			
7H23014-IBL2	QC	2			
7H23014-IBL3	QC	3			
7H23014-CAL1	QC	4	1704505		
7H23014-CAL2	QC	5	1704506		
7H23014-CAL3	QC	6	1704507		
7H23014-CAL4	QC	7	1704508		
7H23014-CAL5	QC	8	1704509		
7H23014-ICV1	QC	9	1703679		
7H23014-CCV1	QC	10	1703679		
7H23014-CCB1	QC	11			
7H23014-CCV2	QC	12	1703679		
7H23014-CCB2	QC	13			
7H23014-CCV3	QC	14	1703679		
7H23014-CCB3	QC	15			
7H23014-CCV4	QC	16	1703679		
7H23014-CCB4	QC	17			
7H23014-CCV5	QC	18	1703679		
7H23014-CCB5	QC	19			
7H23014-CCV6	QC	20	1703679		
7H23014-CCB6	QC	21			
7H23014-CCV7	QC	22	1703679		
7H23014-CCB7	QC	23			
F708493-BLK1	QC	24			
F708493-BLK2	QC	25			
F708493-BLK3	QC	26			
F708493-BS1	QC	27			
F708493-BSD1	QC	28			
1708486-31	Hg_FSTM_TRAP_A	29			
1708486-32	Hg_FSTM_TRAP_A	30			
1708486-33	Hg_FSTM_TRAP_A	31			
1708486-34	Hg_FSTM_TRAP_A	32			
1708486-35	Hg_FSTM_TRAP_A	33			
7H23014-CCV8	QC	34	1703679		
7H23014-CCB8	QC	35			



ANALYSIS SEQUENCE

7H23014



Instrument: Hg2600-2

Calibration ID: UNASSIGNED

Analyzed: 8/22/2017

Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
1708486-36 ✓	Hg_FSTM_TRAP_A	36			
1708485-01 ✓	Hg_FSTM_TRAP_A	37			
F708493-DUP1 ✓	QC	38			
7H23014-CCV9 ✓	QC	39	1703679 ✓		
7H23014-CCB9 ✓	QC	40			
F708493-MS1 ✓	QC	41			
F708493-MSD1 ✓	QC	42			
7H23014-CCVA ✓	QC	43	1703679 ✓		
7H23014-CCBA ✓	QC	44			

*Becky* 8/23/17  
Samples Loaded By Date

*Becky* 8/23/17  
Data Processed By Date

loaded  
8/22/17

**PREPARATION BENCH SHEET**

F708493

**Eurofins Frontier Global Sciences, Inc.**

**Matrix: Air**

**Prepared using: AFS - EFGS-009 FSTM Trap Nitric/Sulfuric Digestion**

**Prepared: 8/21/2017**

Lab Number	Sample ID and Source Sample	Initial (Trap)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F708493-BLK1	Blank	1	40					
F708493-BLK2	Blank	1	40					
F708493-BLK3	Blank	1	40					
F708493-BS1	LCS	1	40	1701763	200			
F708493-BSD1	LCS Dup	1	40	1701763	200			
F708493-DUP1	Duplicate [1708486-32] ✓	1	40					
F708493-MS1	Matrix Spike [1708486-32] ✓	0.0125	0.5	1704483 ✓	125 ✓			[Spk] 1Trap->40mL; 20mL->20mL; Spiked 0.5mL ✓
F708493-MSD1	Matrix Spike Dup [1708486-32] ✓	0.0125	0.5	1704483	125			[Spk] 1Trap->40mL; 20mL->20mL; Spiked 0.5mL

<u>Standard ID(s):</u>	<u>Description:</u>	<u>Expiration:</u>	<u>Reagent ID(s):</u>	<u>Description:</u>	<u>Expiration:</u>
1701763	THg 1.000ng/mL Secondary Spiking Standard	22-Sep-17 00:00	1703182	25% Hydroxylamine-HCl working solution	24-Nov-17 00:00
1704483	THg 1ng/mL Calibration Standard	24-Oct-17 00:00	1704516	THg Washstation (0.5% BrCl)	
			1704517	THg Dilute 1% BrCl	18-Dec-17 00:00
			1704956	3% SnCl2 THg reductant	29-Jan-18 00:00
			1704958	5% BrCl	18-Dec-17 00:00
			1705022	70/30 Digestion Acid	13-Feb-18 00:00

**PREPARATION BENCH SHEET**

F708493

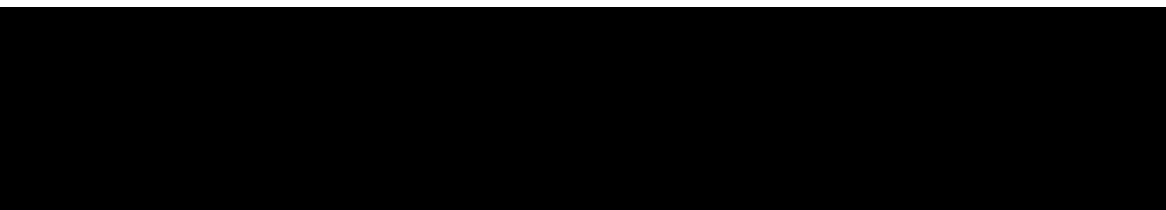
**Eurofins Frontier Global Sciences, Inc.**

**Matrix: Air**

**Prepared using: AFS - EFGS-009 FSTM Trap Nitric/Sulfuric Digestion**

**Prepared: 8/21/2017**

Lab Number	Sample ID	Initial (Trap)	Final (mL)	QC Sample	Sample Specs.	Raw Data	Sample Comments	Analysis Comments
1708485-01	HGS1714-BM-6-7	1	40	-	-	-		
1708486-31	HGS1714-7-13	1	40	-	-	-		
1708486-32	HGS1714-7-14	1	40	-	-	-		
1708486-33	HGS1714-7-15	1	40	-	-	-		
1708486-34	HGS1714-7-16	1	40	-	-	-		
1708486-35	HGS1714-7-17	1	40	-	-	-		
1708486-36	HGS1714-7-18	1	40	-	-	-		



BC 8/22/17  
2600-3

PREPARATION BENCH SHEET

F708493

Eurofins Frontier Global Sciences, Inc.

Matrix: Air

Prepared using: AFS - EFGS-009 FSTM Trap Nitric/Sulfuric Digestion

Prepared: 8/21/2017

Lab Number	Sample ID and Source Sample	Initial (Trap)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F708493-BLK1	Blank	1	40					100X
F708493-BLK2	Blank	1	40					100X
F708493-BLK3	Blank	1	40					100X
F708493-BS1	LCS	1	40	1701763	200			400X
F708493-BSD1	LCS Dup	1	40	1701763	200			400X
F708493-DUP1	Duplicate 1708496-32	1	40					100X
F708493-MS1	Matrix Spike 1708496-32	1	40	1704483	125			100X
F708493-MSD1	Matrix Spike Dup 1708496-32	1	40	1704483	125			100X

Standard ID(s): 1701763  
Description: THg 1.000ng/mL Secondary Spiking Standard

Expiration: 22-Sep-17 00:00

Reagent ID(s): 1704958, 1705022  
Description: 5% BrCl, 70/30 Digestion Acid

Expiration: 18-Dec-17 00:00, 13-Feb-18 00:00

1704516  
1704517  
1704956  
1703182

Due Date: 8/24/2017

PREPARATION BENCH SHEET

BC 8/22/17  
2600-3

F708493

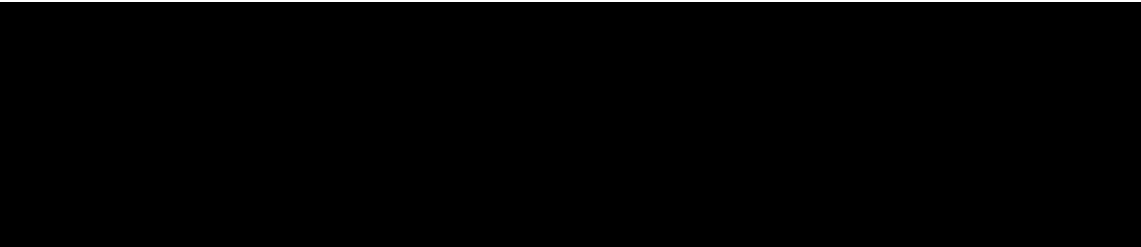
Eurofins Frontier Global Sciences, Inc.

Matrix: Air

Prepared using: AFS - EFGS-009 FSTM Trap Nitric/Sulfuric Digestion

Prepared: 8/21/2017

Lab Number	Sample ID	Initial (Trap)	Final (mL)	QC Sample	Sample Specs.	Raw Data	A Sample Comments	B Analysis Comments
1708485-01	HGS1714-BM-6-7	1	40	-	-	-	100X	100X
1708486-31	HGS1714-7-13	1	40	-	-	-	100X	100X
1708486-32	HGS1714-7-14	1	40	-	-	-	100X	100X
1708486-33	HGS1714-7-15	1	40	-	-	-	100X	100X
1708486-34	HGS1714-7-16	1	40	-	-	-	100X	100X
1708486-35	HGS1714-7-17	1	40	-	-	-	100X	100X
1708486-36	HGS1714-7-18	1	40	-	-	-	100X	100X



Name: CWF Trap Digestions Date: 8/22/17 Batch ID: F708493  
 Work Order(s): 1708486, 1708485 Analysis:  Total Hg  Other  
 Sample Matrix:  FSTM  KCl  PHg Plug  Other  
 Prep:  70/30 Digestion, 2 hr. @ ~55°C (EFAFS-I-AFS-SOP2985)  
 start time: 15:49, start temp (°C): 54.9 (raw) 54.9 (w/ CF)  
 end time: 17:49, end temp (°C): 59.1 (raw) 59.1 (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)
F708493	40
F708493	40
F708493	40
F708493	40
F708493	40
1708486	40
1708486	40
1708486	40
1708486	40
1708486	40
1708486	40
1708486	40
1708486	40
1708486	40
1708486	40
1708486	40
1708486	40
1708486	40
1708485	40
1708485	40

Spike ID: 1701763  
 Spike Amount (µL): 200  
 Spike Witness: DA 8/21/17  
 BrCl ID: 104958  
 70/30: 1709022  
 Other: N/A  
 Thermometer: 140418015  
 Dispensers: 02K27494   
 04N73497   
 Other 15406623  
 Pipette ID: MM061A  
 Cal. Date: 8/16/17  
 Vials and Jars lot# 00068469  
 Trap Material Lot#: 1702564  
 Loader Mass Verified:  Yes  No  
 Comments: All traps unspiked  
CWF 8/21/17

**Failing Data Report - 7H23014**

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

Becky      8/23/17  
Analyst Reviewed By      Date

[Signature]      8/24/17  
Peer Reviewed By      Date

**Peer Review Check List for THg by 2600 CV-AFS (SOP2822) 2016 Rev 1 (04/1/2016)**

<b>Analyst:</b> BC	<b>Sequence(s) #:</b> 7H23013, 7H23014
<b>Reviewer:</b> <i>PC 8/23/17</i>	<b>Dataset ID(s):</b> THg26003-170823-1
<b>Date:</b> 8/23/2017	<b>WO (s) #:</b> _____
<b>Batch #(s):</b> F708484, F708485, F708493	

• Select the correct preparation method.

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

**Analyst Initials:** BC      **Reviewer Initials:** PC 8/23/17

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



**Peer Review Check List for THg by 2600 CV-AFS (SOP2822) 2016 Rev 1 (04/1/2016)**

<b>Analyst:</b> BC	<b>Sequence(s) #:</b> 7H23013, 7H23014
<b>Reviewer:</b> 0 <i>R 8/24/17</i>	<b>Dataset ID(s):</b> THg26003-170823-1
<b>Date:</b> 8/23/2017	<b>WO (s) #:</b> 0
<b>Batch #(s):</b> F708484, F708485, F708493	0

Analyst Initials BC                      Reviewer Initials R 8/24/17

- 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 consistent with the data review flowcharts?  YES     NO     N/A      
 Comments: \_\_\_\_\_
12. Explain any items on the failed data report from Element   
 Comments: \_\_\_\_\_
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 BrCi 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 (SOP2822) 2016 Rev 1 (04/1/2016)**

<b>Analyst:</b> BC	<b>Sequence(s) #:</b> 7H23013, 7H23014
<b>Reviewer:</b> 0 <i>R 8/24/17</i>	<b>Dataset ID(s):</b> THg26003-170823-1
<b>Date:</b> 8/23/2017	<b>WO (s) #:</b> 0
<b>Batch #(s):</b> F708484, F708485, F708493	0

Analyst Initials BL                      Reviewer Initials R 8/24/17

- |  |  |                               |   |
|--|--|-------------------------------|---|
| 20. MS/MSD Spiked at least 1-5 X ambient or 5x MRL (whichever is higher) ?   | <input checked="" type="checkbox"/> YES  | <input type="checkbox"/> NO   | <input checked="" type="checkbox"/>   |
| Comments: _____  |  |                               |   |
| 21. Are all samples within instrument calibration range? (or at minimum dilution size)   | <input checked="" type="checkbox"/> PASS | <input type="checkbox"/> FAIL | <input checked="" type="checkbox"/>   |
| Comments: _____  |  |                               |   |
| 22. Are the samples run at the correct dilution level for the method?  | <input checked="" type="checkbox"/> YES  | <input type="checkbox"/> NO   | <input checked="" type="checkbox"/>   |
| Comments: _____  |  |                               |   |
| 23. Dissolved < Total (if applicable)  | <input type="checkbox"/> YES             | <input type="checkbox"/> NO   | <input checked="" type="checkbox"/> N/A <input checked="" type="checkbox"/> |
| Comments: _____  |  |                               |   |
| 24. Effluent < Influent (visually confirm if needed)   | <input type="checkbox"/> YES             | <input type="checkbox"/> NO   | <input checked="" type="checkbox"/> N/A <input checked="" type="checkbox"/> |
| Comments: _____  |  |                               |   |
| 25. Are re-runs noted with reason?   | <input checked="" type="checkbox"/> YES  | <input type="checkbox"/> NO   | <input type="checkbox"/> N/A <input checked="" type="checkbox"/>            |
| 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? | <input checked="" type="checkbox"/> YES  | <input type="checkbox"/> NO   | <input type="checkbox"/> N/A <input checked="" type="checkbox"/>            |
| Comments: _____  |  |                               |   |
| 27. Is the B trap <5% A Traps  | <input checked="" type="checkbox"/> YES  | <input type="checkbox"/> NO   | <input type="checkbox"/> N/A <input checked="" type="checkbox"/>            |
| Comments: _____  |  |                               |   |
| 28. Are spiked trap recoveries 75-125% of true value?  | <input type="checkbox"/> YES             | <input type="checkbox"/> NO   | <input checked="" type="checkbox"/> N/A <input checked="" type="checkbox"/> |
| Comments: _____  |  |                               |   |
| 29. Have non-reportable samples been imported into LIMS and clicked to non-reportable?   | <input checked="" type="checkbox"/> YES  | <input type="checkbox"/> NO   | <input type="checkbox"/> N/A <input checked="" type="checkbox"/>            |
| Comments: _____  |  |                               |   |
| 30. Have re-extracts been created for non-reportable samples?  | <input checked="" type="checkbox"/> YES  | <input type="checkbox"/> NO   | <input type="checkbox"/> N/A <input checked="" type="checkbox"/>            |
| 31. Are there any HIGH QA projects within the data? If so, place data package in QA office before scanning.  | <input type="checkbox"/> YES             | <input type="checkbox"/> NO   | <input checked="" type="checkbox"/> N/A <input checked="" type="checkbox"/> |
| 32. Does the data set need scanning?   | <input checked="" type="checkbox"/> YES  |                               | <input type="checkbox"/> N/A <input checked="" type="checkbox"/>            |
| 33. Does the dataset have an LOQ/LOQ or DOC?   | <input type="checkbox"/> YES             |                               | <input checked="" type="checkbox"/> N/A <input checked="" type="checkbox"/> |
| 34. Water samples: has the preservation log been included in dataset for final volume verification?  | <input type="checkbox"/> YES             | <input type="checkbox"/> NO   | <input checked="" type="checkbox"/> N/A <input checked="" type="checkbox"/> |
| 35. Water samples-is the final volume correct in the sequence?   | <input type="checkbox"/> YES             | <input type="checkbox"/> NO   | <input checked="" type="checkbox"/> N/A <input type="checkbox"/>            |

**Files located at: \\Cuprum\gen\_admin\Quality Assurance\Training Master\DOCs**

- |   |                                  |   |                             |                                     |
|---|----------------------------------|---|-----------------------------|-------------------------------------|
| 36. Date of analyst IDOC/CDOC: _____ 1/11/2017 _____          | IDOC/CDOC within last 12 months? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> |
| 37. Date of analyst's SOP reading for method: 5/20/2017 _____ | Current SOP revision read?       | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> |
| 38. Date of LOD: 4/26/2017 _____                              | LOD within last 3 months?        | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> |
| 39. Date of LOQ: 4/26/2017 _____                              | LOQ within last 3 months?        | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> |

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





Frontier Global Sciences

# MHg27001-170804-1

## Analysis Datasheet for Methyl Mercury in Soil/Tissue

Date of Analysis: August 04, 2017

Instrument #: Hg2700-1

LIMS Sequence #: 7H07017

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	23.06 units	461.19	23.06 units	461.19	98.8 %Rec
SEQ-CAL2	1	0.20 ng/L	91.00 units	455.00	91.00 units	455.00	97.5 %Rec
SEQ-CAL3	1	1.00 ng/L	512.32 units	512.32	512.32 units	512.32	109.7 %Rec
SEQ-CAL4	1	2.00 ng/L	908.97 units	454.48	908.97 units	454.48	97.4 %Rec
SEQ-CAL5	1	4.00 ng/L	1804.27 units	451.07	1804.27 units	451.07	96.6 %Rec
SEQ-CAL6	0						
SEQ-CAL7	0						
SEQ-CAL8	0						
SEQ-CAL9	0						

Corr. Mean RF  
466.81

Corr. St Dev RF  
+/- 25.70

Corr. RSD CF  
5.5% RSD

Uncorr. Mean RF  
466.81

### 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	0.000 ng/L	±0.000
BLK	2	3	0.000 ng/L	±0.000
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:    P   8/9/17

Instrument	Analyst	Sample		Dilution	Analyzed	FileID	Run End	Uncorrected Response	Batch ID	No PB Correction?	RESP	InitialResult	FinalResult	InitialUnits	Comments
		Type	LabNumber												
Hg2700-1	DM2	CAL	SEQ-IBL1	1	8/4/17 9:00	24659-1.RAW	9:00:18	0.00			0.0	0.000	0.000	ng/L	
Hg2700-1	DM2	CAL	SEQ-CAL1	1	8/4/17 9:10	24660-1.RAW	9:10:48	23.06			23.1	0.049	0.049	ng/L	
Hg2700-1	DM2	CAL	SEQ-CAL2	1	8/4/17 9:21	24661-1.RAW	9:21:19	91.00			91.0	0.195	0.195	ng/L	
Hg2700-1	DM2	CAL	SEQ-CAL3	1	8/4/17 9:31	24662-1.RAW	9:31:50	512.32			512.3	1.097	1.097	ng/L	
Hg2700-1	DM2	CAL	SEQ-CAL4	1	8/4/17 9:42	24663-1.RAW	9:42:21	908.97			909.0	1.947	1.947	ng/L	
Hg2700-1	DM2	CAL	SEQ-CAL5	1	8/4/17 9:52	24664-1.RAW	9:52:51	1804.27			1804.3	3.865	3.865	ng/L	
Hg2700-1	DM2	CAL	SEQ-ICV1	1	8/4/17 10:03	24665-1.RAW	10:03:22	217.35			217.3	0.466	0.466	ng/L	
Hg2700-1	DM2	CAL	SEQ-ICB1	1	8/4/17 10:13	24666-1.RAW	10:13:53	3.54			3.5	0.008	0.008	ng/L	
Hg2700-1	DM2	BLK	F707566-BLK1	500	8/4/17 10:24	24667-1.RAW	10:24:23	0.00	1		0.0	0.000	0.000	ng/L	
Hg2700-1	DM2	BLK	F707566-BLK2	500	8/4/17 10:34	24668-1.RAW	10:34:54	0.00	1		0.0	0.000	0.000	ng/L	
Hg2700-1	DM2	BLK	F707566-BLK3	500	8/4/17 10:45	24669-1.RAW	10:45:25	0.00	1		0.0	0.000	0.000	ng/L	
Hg2700-1	DM2	SAM	F707566-BS1	1000	8/4/17 10:55	24670-1.RAW	10:55:55	714.30	1		714.3	1.530	1530.158	ng/L	
Hg2700-1	DM2	SAM	F707566-BSD1	1000	8/4/17 11:06	24671-1.RAW	11:06:26	802.99	1		803.0	1.720	1720.144	ng/L	
Hg2700-1	DM2	SAM	F707566-DUP1	500	8/4/17 11:16	24672-1.RAW	11:16:57	53.94	1		53.9	0.116	57.770	ng/L	
Hg2700-1	DM2	SAM	F707566-MS1	500	8/4/17 11:27	24673-1.RAW	11:27:27	522.22	1		522.2	1.119	559.348	ng/L	
Hg2700-1	DM2	SAM	F707566-MSD1	500	8/4/17 11:37	24674-1.RAW	11:37:58	528.62	1		528.6	1.132	566.200	ng/L	
Hg2700-1	DM2	SAM	F707566-MS2	500	8/4/17 11:48	24675-1.RAW	11:48:29	544.47	1		544.5	1.166	583.181	ng/L	
Hg2700-1	DM2	SAM	F707566-MSD2	500	8/4/17 11:58	24676-1.RAW	11:58:59	532.74	1		532.7	1.141	570.611	ng/L	
Hg2700-1	DM2	CAL	SEQ-CCV1	1	8/4/17 12:09	24677-1.RAW	12:09:30	198.59			198.6	0.425	0.425	ng/L	
Hg2700-1	DM2	CAL	SEQ-CCB1	1	8/4/17 12:20	24678-1.RAW	12:20:01	0.00			0.0	0.000	0.000	ng/L	
Hg2700-1	DM2	SAM	1707771-01	500	8/4/17 12:30	24679-1.RAW	12:30:31	29.69	1		29.7	0.064	31.800	ng/L	
Hg2700-1	DM2	SAM	1707771-02	500	8/4/17 12:41	24680-1.RAW	12:41:02	28.79	1		28.8	0.062	30.840	ng/L	
Hg2700-1	DM2	SAM	1707771-03	500	8/4/17 12:51	24681-1.RAW	12:51:33	31.63	1		31.6	0.068	33.876	ng/L	
Hg2700-1	DM2	SAM	1707771-04	500	8/4/17 13:02	24682-1.RAW	13:02:04	50.13	1		50.1	0.107	53.692	ng/L	
Hg2700-1	DM2	SAM	1707771-05	500	8/4/17 13:12	24683-1.RAW	13:12:35	34.61	1		34.6	0.074	37.065	ng/L	
Hg2700-1	DM2	SAM	1707771-06	500	8/4/17 13:23	24684-1.RAW	13:23:05	74.64	1		74.6	0.160	79.944	ng/L	
Hg2700-1	DM2	SAM	1707771-07	500	8/4/17 13:33	24685-1.RAW	13:33:37	82.61	1		82.6	0.177	88.478	ng/L	
Hg2700-1	DM2	SAM	1707771-08	500	8/4/17 13:44	24686-1.RAW	13:44:08	79.98	1		80.0	0.171	85.671	ng/L	
Hg2700-1	DM2	SAM	1707771-09	500	8/4/17 13:54	24687-1.RAW	13:54:39	66.82	1		66.8	0.143	71.568	ng/L	
Hg2700-1	DM2	SAM	1707771-10	500	8/4/17 14:05	24688-1.RAW	14:05:09	51.13	1		51.1	0.110	54.762	ng/L	
Hg2700-1	DM2	CAL	SEQ-CCV2	1	8/4/17 14:15	24689-1.RAW	14:15:40	197.41			197.4	0.423	0.423	ng/L	
Hg2700-1	DM2	CAL	SEQ-CCB2	1	8/4/17 14:26	24690-1.RAW	14:26:11	0.00			0.0	0.000	0.000	ng/L	
Hg2700-1	DM2	SAM	1707771-11	500	8/4/17 14:36	24691-1.RAW	14:36:41	66.82	1		66.8	0.143	71.569	ng/L	
Hg2700-1	DM2	SAM	1707771-12	500	8/4/17 14:47	24692-1.RAW	14:47:12	91.64	1		91.6	0.196	98.155	ng/L	
Hg2700-1	DM2	SAM	1707771-13	500	8/4/17 14:57	24693-1.RAW	14:57:43	28.90	1		28.9	0.062	30.950	ng/L	
Hg2700-1	DM2	SAM	1707771-14	500	8/4/17 15:08	24694-1.RAW	15:08:13	50.08	1		50.1	0.107	53.635	ng/L	
Hg2700-1	DM2	SAM	1707771-15	500	8/4/17 15:18	24695-1.RAW	15:18:44	55.95	1		55.9	0.120	59.925	ng/L	
Hg2700-1	DM2	SAM	1707771-16	500	8/4/17 15:29	24696-1.RAW	15:29:15	63.76	1		63.8	0.137	68.296	ng/L	
Hg2700-1	DM2	SAM	1707771-17	500	8/4/17 15:39	24697-1.RAW	15:39:45	67.32	1		67.3	0.144	72.103	ng/L	
Hg2700-1	DM2	SAM	1707771-18	500	8/4/17 15:50	24698-1.RAW	15:50:16	61.70	1		61.7	0.132	66.081	ng/L	
Hg2700-1	DM2	SAM	1707771-19	500	8/4/17 16:00	24699-1.RAW	16:00:47	55.10	1		55.1	0.118	59.021	ng/L	
Hg2700-1	DM2	SAM	1707771-20	500	8/4/17 16:11	24700-1.RAW	16:11:17	117.79	1		117.8	0.252	126.163	ng/L	
Hg2700-1	DM2	CAL	SEQ-CCV3	1	8/4/17 16:21	24701-1.RAW	16:21:48	189.35			189.3	0.406	0.406	ng/L	
Hg2700-1	DM2	CAL	SEQ-CCB3	1	8/4/17 16:32	24702-1.RAW	16:32:19	0.00			0.0	0.000	0.000	ng/L	
Hg2700-1	DM2	BLK	F707567-BLK1	500	8/4/17 16:42	24703-1.RAW	16:42:49	0.00	2		0.0	0.000	0.000	ng/L	
Hg2700-1	DM2	BLK	F707567-BLK2	500	8/4/17 16:53	24704-1.RAW	16:53:20	0.00	2		0.0	0.000	0.000	ng/L	

Instrument	Analyst	Sample		Dilution	Analyzed	FileID	Run End	Uncorrected Response	Batch ID	No PB Correction?	RESP	InitialResult	FinalResult	InitialUnits	Comments
		Type	LabNumber												
Hg2700-1	DM2	BLK	F707567-BLK3	500	8/4/17 17:03	24705-1.RAW	17:03:51	0.00	2		0.0	0.000	0.000	ng/L	
Hg2700-1	DM2	SAM	F707567-BS1	1000	8/4/17 17:14	24706-1.RAW	17:14:21	429.83	2		429.8	0.921	920.782	ng/L	
Hg2700-1	DM2	SAM	F707567-BSD1	1000	8/4/17 17:24	24707-1.RAW	17:24:52	465.50	2		465.5	0.997	997.180	ng/L	
Hg2700-1	DM2	SAM	F707567-DUP1	500	8/4/17 17:35	24708-1.RAW	17:35:23	90.16	2		90.2	0.193	96.566	ng/L	
Hg2700-1	DM2	SAM	F707567-MS1	500	8/4/17 17:45	24709-1.RAW	17:45:53	359.43	2		359.4	0.770	384.986	ng/L	
Hg2700-1	DM2	SAM	F707567-MSD1	500	8/4/17 17:56	24710-1.RAW	17:56:24	304.05	2		304.1	0.651	325.665	ng/L	
Hg2700-1	DM2	SAM	F707567-MS2	500	8/4/17 18:06	24711-1.RAW	18:06:55	419.39	2		419.4	0.898	449.202	ng/L	
Hg2700-1	DM2	SAM	F707567-MSD2	500	8/4/17 18:17	24712-1.RAW	18:17:25	428.12	2		428.1	0.917	458.556	ng/L	
Hg2700-1	DM2	CAL	SEQ-CCV4	1	8/4/17 18:27	24713-1.RAW	18:27:56	205.64			205.6	0.441	0.441	ng/L	
Hg2700-1	DM2	CAL	SEQ-CCB4	1	8/4/17 18:38	24714-1.RAW	18:38:27	0.83			0.8	0.002	0.002	ng/L	
Hg2700-1	DM2	SAM	1707771-21	500	8/4/17 18:48	24715-1.RAW	18:48:57	94.27	2		94.3	0.202	100.974	ng/L	
Hg2700-1	DM2	SAM	1707771-22	500	8/4/17 18:59	24716-1.RAW	18:59:28	123.21	2		123.2	0.264	131.965	ng/L	
Hg2700-1	DM2	SAM	1707771-23	500	8/4/17 19:09	24717-1.RAW	19:09:59	106.60	2		106.6	0.228	114.178	ng/L	
Hg2700-1	DM2	SAM	1707771-24	500	8/4/17 19:20	24718-1.RAW	19:20:30	75.95	2		76.0	0.163	81.352	ng/L	
Hg2700-1	DM2	SAM	1707771-25	500	8/4/17 19:31	24719-1.RAW	19:31:00	19.47	2		19.5	0.042	20.854	ng/L	
Hg2700-1	DM2	SAM	1707771-26	500	8/4/17 19:41	24720-1.RAW	19:41:31	7.34	2		7.3	0.016	7.860	ng/L	
Hg2700-1	DM2	SAM	1707771-27	500	8/4/17 19:52	24721-1.RAW	19:52:01	68.53	2		68.5	0.147	73.398	ng/L	
Hg2700-1	DM2	SAM	1707771-28	500	8/4/17 20:02	24722-1.RAW	20:02:32	26.10	2		26.1	0.056	27.952	ng/L	
Hg2700-1	DM2	SAM	1707771-29	500	8/4/17 20:13	24723-1.RAW	20:13:03	19.63	2		19.6	0.042	21.021	ng/L	
Hg2700-1	DM2	SAM	1707771-30	500	8/4/17 20:23	24724-1.RAW	20:23:34	32.28	2		32.3	0.069	34.579	ng/L	
Hg2700-1	DM2	CAL	SEQ-CCV5	1	8/4/17 20:34	24725-1.RAW	20:34:04	218.34			218.3	0.468	0.468	ng/L	
Hg2700-1	DM2	CAL	SEQ-CCB5	1	8/4/17 20:44	24726-1.RAW	20:44:35	0.00			0.0	0.000	0.000	ng/L	
Hg2700-1	DM2	SAM	1707771-31	500	8/4/17 20:55	24727-1.RAW	20:55:06	33.49	2		33.5	0.072	35.868	ng/L	
Hg2700-1	DM2	SAM	1707771-32	500	8/4/17 21:05	24728-1.RAW	21:05:36	21.32	2		21.3	0.046	22.841	ng/L	
Hg2700-1	DM2	SAM	1707771-33	500	8/4/17 21:16	24729-1.RAW	21:16:07	54.72	2		54.7	0.117	58.615	ng/L	
Hg2700-1	DM2	SAM	1707771-34	500	8/4/17 21:26	24730-1.RAW	21:26:38	37.33	2		37.3	0.080	39.983	ng/L	
Hg2700-1	DM2	SAM	1707771-35	500	8/4/17 21:37	24731-1.RAW	21:37:08	58.01	2		58.0	0.124	62.134	ng/L	
Hg2700-1	DM2	SAM	1707771-36	500	8/4/17 21:47	24732-1.RAW	21:47:39	68.32	2		68.3	0.146	73.175	ng/L	
Hg2700-1	DM2	SAM	1707771-37	500	8/4/17 21:58	24733-1.RAW	21:58:10	39.95	2		39.9	0.086	42.788	ng/L	
Hg2700-1	DM2	SAM	1707771-38	500	8/4/17 22:08	24734-1.RAW	22:08:42	28.53	2		28.5	0.061	30.557	ng/L	
Hg2700-1	DM2	SAM	1707771-39	500	8/4/17 22:19	24735-1.RAW	22:19:12	23.40	2		23.4	0.050	25.061	ng/L	
Hg2700-1	DM2	SAM	1707771-40	500	8/4/17 22:29	24736-1.RAW	22:29:43	34.19	2		34.2	0.073	36.619	ng/L	
Hg2700-1	DM2	CAL	SEQ-CCV6	1	8/4/17 22:40	24737-1.RAW	22:40:14	201.20			201.2	0.431	0.431	ng/L	
Hg2700-1	DM2	CAL	SEQ-CCB6	1	8/4/17 22:50	24738-1.RAW	22:50:45	0.00			0.0	0.000	0.000	ng/L	

**ANALYSIS SEQUENCE**

**7H07017**

**Instrument: Hg2700-1**

**Calibration ID: UNASSIGNED**

**Analyzed: 8/4/2017**

Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
7H07017-IBL1 ✓	QC	1			
7H07017-CAL1 ✓	QC	2	1704180 ✓		
7H07017-CAL2 ✓	QC	3	1704181 ✓		
7H07017-CAL3 ✓	QC	4	1704182 ✓		
7H07017-CAL4 ✓	QC	5	1704183 ✓		
7H07017-CAL5 ✓	QC	6	1704184 ✓		
7H07017-ICV1 ✓	QC	7	1703246 ✓		
7H07017-ICB1 ✓	QC	8			
F707566-BLK1 ✓	QC	9			
F707566-BLK2 ✓	QC	10			
F707566-BLK3 ✓	QC	11			
F707566-BS1 ✓	QC	12			
F707566-BSD1 ✓	QC	13			
F707566-DUP1 ✓	QC	14			
F707566-MS1 ✓	QC	15			
F707566-MSD1 ✓	QC	16			
F707566-MS2 ✓	QC	17			
F707566-MSD2 ✓	QC	18			
7H07017-CCV1 ✓	QC	19	1703246 ✓		
7H07017-CCB1 ✓	QC	20			
1707771-01 ✓	MHg-CVAFS-S-KOH	21			
1707771-02 ✓	MHg-CVAFS-S-KOH	22			
1707771-03 ✓	MHg-CVAFS-S-KOH	23			
1707771-04 ✓	MHg-CVAFS-S-KOH	24			
1707771-05 ✓	MHg-CVAFS-S-KOH	25			
1707771-06 ✓	MHg-CVAFS-S-KOH	26			
1707771-07 ✓	MHg-CVAFS-S-KOH	27			
1707771-08 ✓	MHg-CVAFS-S-KOH	28			
1707771-09 ✓	MHg-CVAFS-S-KOH	29			
1707771-10 ✓	MHg-CVAFS-S-KOH	30			
7H07017-CCV2 ✓	QC	31	1703246 ✓		
7H07017-CCB2 ✓	QC	32			
1707771-11 ✓	MHg-CVAFS-S-KOH	33			
1707771-12 ✓	MHg-CVAFS-S-KOH	34			
1707771-13 ✓	MHg-CVAFS-S-KOH	35			

## ANALYSIS SEQUENCE

7H07017

Instrument: Hg2700-1

Calibration ID: UNASSIGNED

Analyzed: 8/4/2017

Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
1707771-14 ✓	MHg-CVAFS-S-KOH	36			
1707771-15 ✓	MHg-CVAFS-S-KOH	37			
1707771-16 ✓	MHg-CVAFS-S-KOH	38			
1707771-17 ✓	MHg-CVAFS-S-KOH	39			
1707771-18 ✓	MHg-CVAFS-S-KOH	40			
1707771-19 ✓	MHg-CVAFS-S-KOH	41			
1707771-20 ✓	MHg-CVAFS-S-KOH	42			
7H07017-CCV3 ✓	QC	43	1703246 ✓		
7H07017-CCB3 ✓	QC	44			
F707567-BLK1 ✓	QC	45			
F707567-BLK2 ✓	QC	46			
F707567-BLK3 ✓	QC	47			
F707567-BS1 ✓	QC	48			
F707567-BSD1 ✓	QC	49			
F707567-DUP1 ✓	QC	50			
F707567-MS1 ✓	QC	51			
F707567-MSD1 ✓	QC	52			
F707567-MS2 ✓	QC	53			
F707567-MSD2 ✓	QC	54			
7H07017-CCV4 ✓	QC	55	1703246 ✓		
7H07017-CCB4 ✓	QC	56			
1707771-21 ✓	MHg-CVAFS-S-KOH	57			
1707771-22 ✓	MHg-CVAFS-S-KOH	58			
1707771-23 ✓	MHg-CVAFS-S-KOH	59			
1707771-24 ✓	MHg-CVAFS-S-KOH	60			
1707771-25 ✓	MHg-CVAFS-S-KOH	61			
1707771-26 ✓	MHg-CVAFS-S-KOH	62			
1707771-27 ✓	MHg-CVAFS-S-KOH	63			
1707771-28 ✓	MHg-CVAFS-S-KOH	64			
1707771-29 ✓	MHg-CVAFS-S-KOH	65			
1707771-30 ✓	MHg-CVAFS-S-KOH	66			
7H07017-CCV5 ✓	QC	67	1703246 ✓		
7H07017-CCB5 ✓	QC	68			
1707771-31 ✓	MHg-CVAFS-S-KOH	69			
1707771-32 ✓	MHg-CVAFS-S-KOH	70			

Due Date: 8/24/2017

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**ANALYSIS SEQUENCE**

**7H07017**

**Instrument: Hg2700-1**

**Calibration ID: UNASSIGNED**

**Analyzed: 8/4/2017**

Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
1707771-33 ✓	MHg-CVAFS-S-KOH	71			
1707771-34 ✓	MHg-CVAFS-S-KOH	72			
1707771-35 ✓	MHg-CVAFS-S-KOH	73			
1707771-36 ✓	MHg-CVAFS-S-KOH	74			
1707771-37 ✓	MHg-CVAFS-S-KOH	75			
1707771-38 ✓	MHg-CVAFS-S-KOH	76			
1707771-39 ✓	MHg-CVAFS-S-KOH	77			
1707771-40 ✓	MHg-CVAFS-S-KOH	78			
7H07017-CCV6 ✓	QC	79	1703246		
7H07017-CCB6 ✓	QC	80			

Don M. Mason      8/4/17  
 Samples Loaded By                                  Date

Don M. Mason      8/7/17  
 Data Processed By                                  Date

**PREPARATION BENCH SHEET**

F707566

**Eurofins Frontier Global Sciences, Inc.**

**Matrix: Soil/Sediment**

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

**Prepared: 8/2/2017**

Lab Number	Sample ID and Source Sample	Initial (g)	Final (ml)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F707566-BLK1	Blank	0.25	20					
F707566-BLK2	Blank	0.25	20					
F707566-BLK3	Blank	0.25	20					
F707566-BS1	LCS	0.1251	20	1703305	125			
F707566-BSD1	LCS Dup	0.1253	20	1703305	125			
F707566-DUP1	Duplicate [1707771-04]	0.2886	20					
F707566-MS1	Matrix Spike [1707771-04]	0.2852	20	1605978	100			
F707566-MS2	Matrix Spike [1707771-17]	0.2762	20	1605978	100			
F707566-MSD1	Matrix Spike Dup [1707771-04]	0.293	20	1605978	100			
F707566-MSD2	Matrix Spike Dup [1707771-17]	0.271	20	1605978	100			

Standard ID(s):  
1605978  
1703305

Description:  
MHg New Primary 100 ng/mL spike  
DORM-4

Expiration:  
15-Oct-17 00:00  
29-May-20 00:00

Reagent ID(s):  
1606305  
1700863  
1703755  
1704399  
1704424

Description:  
Methanol, HPLC Grade  
25% KOH/Methanol  
Acetate Buffer  
Ethylating Agent (For Methyl Mercury Analysis)  
Boiling Chips for AFS prep

Expiration:  
28-Oct-19 00:00  
09-Aug-17 00:00  
20-Dec-17 00:00  
16-Jan-18 00:00  
21-Jan-18 00:00

**PREPARATION BENCH SHEET**

F707566

**Eurofins Frontier Global Sciences, Inc.**

**Matrix: Soil/Sediment**

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

**Prepared: 8/2/2017**

Lab Number	Sample ID	Initial (g)	Final (ml)	QC Sample	Sample Specs.	Raw Data	Sample Comments	Analysis Comments
1707771-01	OR-01-01_072417_SED_00-01_R1	0.2958	20	-	-	-		
1707771-02	OR-01-01_072417_SED_00-01_R2	0.3126	20	-	-	-		
1707771-03	OR-01-01_072417_SED_00-01_R3	0.2768	20	-	-	-		
1707771-04	OR-01-01_072417_SED_01-03	0.2956	20	QC	-	-	MS/MSD	
1707771-05	OR-01-02_072417_SED_00-01	0.2772	20	-	-	-		
1707771-06	OR-01-02_072417_SED_01-03	0.2965	20	-	-	-		
1707771-07	OR-01-03_072417_SED_00-01	0.2699	20	-	-	-		
1707771-08	OR-01-03_072417_SED_01-03	0.2736	20	-	-	-		
1707771-09	OR-01-05_072417_SED_00-01_R1	0.3182	20	-	-	-		
1707771-10	OR-01-05_072417_SED_00-01_R2	0.3085	20	-	-	-		
1707771-11	OR-01-05_072417_SED_00-01_R3	0.2963	20	-	-	-		
1707771-12	OR-01-05_072417_SED_01-03	0.3115	20	-	-	-		
1707771-13	OR-02-01_072417_SED_00-01	0.2987	20	-	-	-		
1707771-14	OR-02-01_072417_SED_01-03_R1	0.2759	20	-	-	-		
1707771-15	OR-02-01_072417_SED_01-03_R2	0.2874	20	-	-	-		
1707771-16	OR-02-01_072417_SED_01-03_R3	0.2979	20	-	-	-		
1707771-17	OR-02-02_072417_SED_00-01	0.2775	20	QC	-	-	MS/MSD	
1707771-18	OR-02-02_072417_SED_01-03	0.2747	20	-	-	-		
1707771-19	W-103-A_072417_SED_00-01	0.3071	20	-	-	-		

Due Date: 8/24/2017

PREPARATION BENCH SHEET

F707566

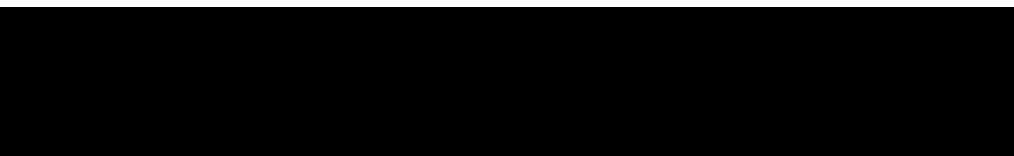
Eurofins Frontier Global Sciences, Inc.

Matrix: Soil/Sediment

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

Prepared: 8/2/2017

1707771-20	W-103-A_072417_SED_01-03	0.2922	20	-	-	-		
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PREPARATION BENCH SHEET

2700-1  
8/4/17 DM

F707566

Eurofins Frontier Global Sciences, Inc.

Matrix: Soil/Sediment

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

Prepared: 8/2/2017

Lab Number	Sample ID and Source Sample	Initial (g)	Final (ml)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F707566-BLK1	Blank	0.25	20					500X
F707566-BLK2	Blank	0.25	20					500X
F707566-BLK3	Blank	0.25	20					500X
F707566-BS1	LCS	0.1251	20	1703305	125			1000X
F707566-BSD1	LCS Dup	0.1253	20	1703305	125			1000X
F707566-DUP1	Duplicate [1707771-04]	0.2886	20					500X
F707566-MS1	Matrix Spike [1707771-04]	0.2852	20	1605978	100			500X
F707566-MS2	Matrix Spike [1707771-17]	0.2762	20	1605978	100			500X
F707566-MSD1	Matrix Spike Dup [1707771-04]	0.293	20	1605978	100			500X
F707566-MSD2	Matrix Spike Dup [1707771-17]	0.271	20	1605978	100			500X

Standard ID(s):  
1605978  
1703305

Description:  
MHg New Primary 100 ng/mL spike  
DORM-4

Expiration:  
15-Oct-17 00:00  
29-May-20 00:00

Reagent ID(s):  
1606305  
1700863  
1704424

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

Expiration:  
28-Oct-19 00:00  
09-Aug-17 00:00  
21-Jan-18 00:00

1703755

1704399

Due Date: 8/24/2017

PREPARATION BENCH SHEET

2700-1  
8/4/17 DM

F707566

Eurofins Frontier Global Sciences, Inc.

Matrix: Soil/Sediment

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

Prepared: 8/2/2017

Lab Number	Sample ID	Initial (g)	Final (ml)	QC Sample	Sample Specs.	Raw Data	Sample Comments	Analysis Comments
1707771-01	OR-01-01_072417_SED_00-01_R1	0.2958	20	-	-	-		500X
1707771-02	OR-01-01_072417_SED_00-01_R2	0.3126	20	-	-	-		500X
1707771-03	OR-01-01_072417_SED_00-01_R3	0.2768	20	-	-	-		500X
1707771-04	OR-01-01_072417_SED_01-03	0.2956	20	QC	-	-	MS/MSD	500X
1707771-05	OR-01-02_072417_SED_00-01	0.2772	20	-	-	-		500X
1707771-06	OR-01-02_072417_SED_01-03	0.2965	20	-	-	-		500X
1707771-07	OR-01-03_072417_SED_00-01	0.2699	20	-	-	-		500X
1707771-08	OR-01-03_072417_SED_01-03	0.2736	20	-	-	-		500X
1707771-09	OR-01-05_072417_SED_00-01_R1	0.3182	20	-	-	-		500X
1707771-10	OR-01-05_072417_SED_00-01_R2	0.3085	20	-	-	-		500X
1707771-11	OR-01-05_072417_SED_00-01_R3	0.2963	20	-	-	-		500X
1707771-12	OR-01-05_072417_SED_01-03	0.3115	20	-	-	-		500X
1707771-13	OR-02-01_072417_SED_00-01	0.2987	20	-	-	-		500X
1707771-14	OR-02-01_072417_SED_01-03_R1	0.2759	20	-	-	-		500X
1707771-15	OR-02-01_072417_SED_01-03_R2	0.2874	20	-	-	-		500X
1707771-16	OR-02-01_072417_SED_01-03_R3	0.2979	20	-	-	-		500X
1707771-17	OR-02-02_072417_SED_00-01	0.2775	20	QC	-	-	MS/MSD	500X
1707771-18	OR-02-02_072417_SED_01-03	0.2747	20	-	-	-		500X
1707771-19	W-103-A_072417_SED_00-01	0.3071	20	-	-	-		500X

Due Date: 8/24/2017

PREPARATION BENCH SHEET

2700-1

8/4/17 DM

F707566

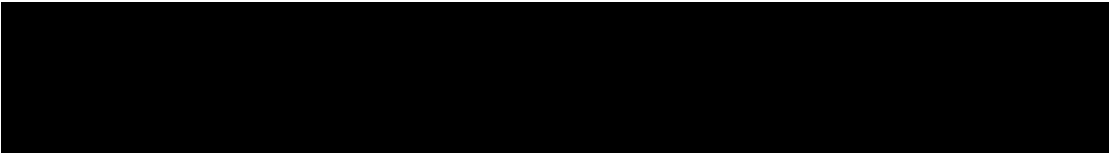
Eurofins Frontier Global Sciences, Inc.

Matrix: Soil/Sediment

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

Prepared: 8/2/2017

1707771-20	W-103-A_072417_SED_01-03	0.2922	20	-	-	-		500x -
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Technician: Dwyer Batch#: F707566 Date: 8/2/17

- EFAFS-T-AFS-SOP2986 Tissues - Methyl Mercury - KOH/Methanol: Hot plate 75±5°C for 2-4 hours.
- EFAFS-T-AFS-SOP2795 Tissues - Total Mercury - 70:30: Hot plate 75±5°C for two hours.
- EFAFS-T-AFS-SOP5134 Sediments - Methyl Mercury - KBr/CH<sub>2</sub>Cl<sub>2</sub>: Heat Block 45°C (nitrogen purge for 30 minutes).
- EFAFS-T-AFS-SOP2807 Solids - Total Mercury - Cold AR: 18-25°C for over four hours.

Other: \_\_\_\_\_ Vial Type:  Glass  Teflon  
 Balance#: 1.9 Calibrated?  Yes  No Therm.#: 13698 Calibrated?  Yes  No  
 \*Time in: 14:15 Actual Temp. (raw): 80.0 °C w/ CF: 80.0 °C  
 Time out: \_\_\_\_\_ Actual Temp. (raw): \_\_\_\_\_ °C w/ CF: \_\_\_\_\_ °C  
 \*Time in can't begin before target temperature is reached

Final vol.: 20 mL (LIMS ID: 1606305) Spike vol.: 100 µL (LIMS ID: 1605978)  
 Spike Witness: DM 8/2/17 (initial and date)

HCl LIMS ID: N/A Pipette SN#: NW 09653 Calibration Date: 7/27/17  
 HNO<sub>3</sub> LIMS ID: N/A Pipette SN#: NU 01152 Calibration Date: 7/31/17  
 70/30 LIMS ID: 8/2/17 N/A Dispenser #: 02N48426 Calibrated?  Yes  No  
 Other Acid LIMS ID: 1706863 25% koff Dispenser #: N/A  
 Glass Vial # 00068647 Boiling Chip lot # 1704424 \*Hotblock Position: M, 3

Vial #	Sample ID Number	Sample Size <input type="checkbox"/> mL <input checked="" type="checkbox"/> g	Vial #	Sample ID Number	Sample Size <input type="checkbox"/> mL <input checked="" type="checkbox"/> g	CRM LIMS ID <input type="checkbox"/> NA
1	F707566 Rlk1	0.2781	23	1707771-15A	0.2874	151/1501
2	F707566 Rlk2	0.1993	24	1707771-16A	0.2979	DORMY
3	F707566 Rlk3	0.2876	25	1707771-17A	0.2775	1703305
4	F707566 B51	0.1251	26	F707566-MS2	0.2762	Comments
5	F707566 B101	0.1253	27	F707566-MS02	0.2710	F707566
6	1707771-01A	0.2958	28	1707771-18A	0.2747	Some
7	1707771-02A	0.3126	29	1707771-19A	0.3071	Dupl MS/MS0
8	1707771-03A	0.2768	30	1707771-20A	0.2922	1707771-04
9	1707771-04A	0.2956	31			
10	F707566-Dupl	0.2886	32			MS2 MS02
11	F707566 MS1	0.2852	33			1707771-17
12	F707566 MS01	0.2930	34			8/2/17 DM
13	1707771-05A	0.2772	35			
14	1707771-06A	0.2965	36			
15	1707771-07A	0.2699	37			
16	1707771-08A	0.2736	38			
17	1707771-09A	0.3182	39			
18	1707771-10A	0.3085	40			
19	1707771-11A	0.2963	41			
20	1707771-12A	0.3115	42			
21	1707771-13A	0.2987	43			
22	1707771-14A	0.2759	44			



**PREPARATION BENCH SHEET**

F707567

**Eurofins Frontier Global Sciences, Inc.**

**Matrix: Soil/Sediment**

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

**Prepared: 8/2/2017**

Lab Number	Sample ID and Source Sample	Initial (g)	Final (ml)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F707567-BLK1	Blank	0.25	20					
F707567-BLK2	Blank	0.25	20					
F707567-BLK3	Blank	0.25	20					
F707567-BS1	DORM-4	0.1255	20	1703305	126			
F707567-BSD1	DORM-4	0.1258	20	1703305	126			
F707567-DUP1	Duplicate [1707771-21]	0.2945	20					
F707567-MS1	Matrix Spike [1707771-21]	0.2849	20	1605978	100			
F707567-MS2	Matrix Spike [1707771-31]	0.2928	20	1605978	100			
F707567-MSD1	Matrix Spike Dup [1707771-21]	0.2865	20	1605978	100			
F707567-MSD2	Matrix Spike Dup [1707771-31]	0.2968	20	1605978	100			

Standard ID(s):  
 1605978  
 1703305

Description:  
 MHg New Primary 100 ng/mL spike  
 DORM-4

Expiration:  
 15-Oct-17 00:00  
 29-May-20 00:00

Reagent ID(s):  
 1606305  
 1700863  
 1703755  
 1704399  
 1704424

Description:  
 Methanol, HPLC Grade  
 25% KOH/Methanol  
 Acetate Buffer  
 Ethylating Agent (For Methyl Mercury Analysis)  
 Boiling Chips for AFS prep

Expiration:  
 28-Oct-19 00:00  
 09-Aug-17 00:00  
 20-Dec-17 00:00  
 16-Jan-18 00:00  
 21-Jan-18 00:00

**PREPARATION BENCH SHEET**

F707567

**Eurofins Frontier Global Sciences, Inc.**

**Matrix: Soil/Sediment**

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

**Prepared: 8/2/2017**

Lab Number	Sample ID	Initial (g)	Final (ml)	QC Sample	Sample Specs.	Raw Data	Sample Comments	Analysis Comments
1707771-21	W-103-B_072417_SED_00-01_R1	0.291	20	-	-	-		
1707771-22	W-103-B_072417_SED_00-01_R2	0.2998	20	-	-	-		
1707771-23	W-103-B_072417_SED_00-01_R3	0.2856	20	-	-	-		
1707771-24	W-103-B_072417_SED_01-03	0.2818	20	-	-	-		
1707771-25	W-105-A_072417_SED_00-01	0.287	20	-	-	-		
1707771-26	W-105-A_072417_SED_01-03	0.3084	20	-	-	-		
1707771-27	W-14-C_072417_SED_00-01	0.2833	20	-	-	-		
1707771-28	W-14-C_072417_SED_01-03_R1	0.2676	20	-	-	-		
1707771-29	W-14-C_072417_SED_01-03_R2	0.2998	20	-	-	-		
1707771-30	W-14-C_072417_SED_01-03_R3	0.2743	20	-	-	-		
1707771-31	W-27-INTA_072417_SED_00-01	0.2748	20	QC	-	-	MS/MSD	
1707771-32	W-27-INTA_072417_SED_01-03	0.2802	20	-	-	-		
1707771-33	W-MM-06_072417_SED_00-01	0.3052	20	-	-	-		
1707771-34	W-MM-06_072417_SED_01-03	0.2804	20	-	-	-		
1707771-35	W-MM-19_072417_SED_00-01	0.279	20	-	-	-		
1707771-36	W-MM-19_072417_SED_01-03	0.2788	20	-	-	-		
1707771-37	W-MM-22_072417_SED_00-01	0.2916	20	-	-	-		
1707771-38	W-MM-22_072417_SED_01-03	0.2911	20	-	-	-		
1707771-39	W-MM-23_072417_SED_00-01_R1	0.297	20	-	-	-		

Due Date: 8/24/2017

PREPARATION BENCH SHEET

F707567

Eurofins Frontier Global Sciences, Inc.

Matrix: Soil/Sediment

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

Prepared: 8/2/2017

1707771-40	W-MM-23_072417_SED_00-01_R2	0.3097	20	-	-	-		
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PREPARATION BENCH SHEET

F707567

Eurofins Frontier Global Sciences, Inc.

2700-1  
8/4/17 DM

Matrix: Soil/Sediment

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

Prepared: 8/2/2017

Lab Number	Sample ID and Source Sample	Initial (g)	Final (ml)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F707567-BLK1	Blank	0.25	20					500X -
F707567-BLK2	Blank	0.25	20					500X -
F707567-BLK3	Blank	0.25	20					500X -
F707567-BS1	DORM-4	0.1255	20	1703305	126			1000X -
F707567-BSD1	DORM-4	0.1258	20	1703305	126			1000X -
F707567-DUP1	Duplicate [1707771-21]	0.2945	20					500X -
F707567-MS1	Matrix Spike [1707771-21]	0.2849	20	1605978	100			500X -
F707567-MS2	Matrix Spike [1707771-31]	0.2928	20	1605978	100			500X -
F707567-MSD1	Matrix Spike Dup [1707771-21]	0.2865	20	1605978	100			500X -
F707567-MSD2	Matrix Spike Dup [1707771-31]	0.2968	20	1605978	100			500X -

Standard ID(s):  
1605978  
1703305

Description:  
MHg New Primary 100 ng/mL spike  
DORM-4

Expiration:  
15-Oct-17 00:00  
29-May-20 00:00

Reagent ID(s):  
1606305  
1700863  
1704424

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

Expiration:  
28-Oct-19 00:00  
09-Aug-17 00:00  
21-Jan-18 00:00

1703755

1704300

PREPARATION BENCH SHEET

2700-1  
8/4/17 DM

F707567

Eurofins Frontier Global Sciences, Inc.

Matrix: Soil/Sediment

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

Prepared: 8/2/2017

Lab Number	Sample ID	Initial (g)	Final (ml)	QC Sample	Sample Specs.	Raw Data	Sample Comments	Analysis Comments
1707771-21	W-103-B_072417_SED_00-01_R1	0.291	20	-	-	-		500X
1707771-22	W-103-B_072417_SED_00-01_R2	0.2998	20	-	-	-		500X
1707771-23	W-103-B_072417_SED_00-01_R3	0.2856	20	-	-	-		500X
1707771-24	W-103-B_072417_SED_01-03	0.2818	20	-	-	-		500X
1707771-25	W-105-A_072417_SED_00-01	0.287	20	-	-	-		500X
1707771-26	W-105-A_072417_SED_01-03	0.3084	20	-	-	-		500X
1707771-27	W-14-C_072417_SED_00-01	0.2833	20	-	-	-		500X
1707771-28	W-14-C_072417_SED_01-03_R1	0.2676	20	-	-	-		500X
1707771-29	W-14-C_072417_SED_01-03_R2	0.2998	20	-	-	-		500X
1707771-30	W-14-C_072417_SED_01-03_R3	0.2743	20	-	-	-		500X
1707771-31	W-27-INTA_072417_SED_00-01	0.2748	20	QC	-	-	MS/MSD	500X
1707771-32	W-27-INTA_072417_SED_01-03	0.2802	20	-	-	-		500X
1707771-33	W-MM-06_072417_SED_00-01	0.3052	20	-	-	-		500X
1707771-34	W-MM-06_072417_SED_01-03	0.2804	20	-	-	-		500X
1707771-35	W-MM-19_072417_SED_00-01	0.279	20	-	-	-		500X
1707771-36	W-MM-19_072417_SED_01-03	0.2788	20	-	-	-		500X
1707771-37	W-MM-22_072417_SED_00-01	0.2916	20	-	-	-		500X
1707771-38	W-MM-22_072417_SED_01-03	0.2911	20	-	-	-		500X
1707771-39	W-MM-23_072417_SED_00-01_R1	0.297	20	-	-	-		500X

Due Date: 8/24/2017

PREPARATION BENCH SHEET

2700-1  
8/4/17 DM

F707567

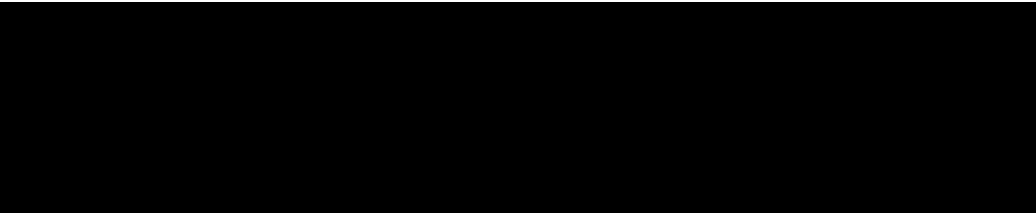
Eurofins Frontier Global Sciences, Inc.

Matrix: Soil/Sediment

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

Prepared: 8/2/2017

1707771-40	W-MM-23_072417_SED_00-01_R2	0.3097	20	-	-	-	500X
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Technician: Dwyer Batch#: F707567 Date: 8/2/17

- EFAFS-T-AFS-SOP2986 Tissues - Methyl Mercury - KOH/Methanol: Hot plate 75±5°C for 2-4 hours.
- EFAFS-T-AFS-SOP2795 Tissues - Total Mercury - 70:30: Hot plate 75±5°C for two hours.
- EFAFS-T-AFS-SOP5134 Sediments - Methyl Mercury - KBr/CH<sub>2</sub>Cl<sub>2</sub>: Heat Block 45°C (nitrogen purge for 30 minutes).
- EFAFS-T-AFS-SOP2807 Solids - Total Mercury - Cold AR: 18-25°C for over four hours.

Other: \_\_\_\_\_ Vial Type:  Glass  Teflon  
 Balance#: 19 Calibrated?  Yes  No Therm.#: 13698 Calibrated?  Yes  No

\*Time in: 14:15 Actual Temp. (raw): 80.0 °C w/ CF: 80.0 °C  
 Time out: 17:45 Actual Temp. (raw): 80.0 °C w/ CF: 80.0 °C

\*Time in can't begin before target temperature is reached

Final vol.: 20 mL (LIMS ID: 1606305) Spike vol.: 100 µL (LIMS ID: 1605998)  
 Spike Witness: DM 8/2/17 (initial and date)

HCl LIMS ID: N/A Pipette SN#: NW09653 Calibration Date: 7/27/17  
 HNO<sub>3</sub> LIMS ID: N/A Pipette SN#: NW01152 Calibration Date: 7/31/17  
 70/30 LIMS ID: 1706863 Dispenser #: 02N48426 Calibrated?  Yes  No  
 Other Acid LIMS ID: 1700863 Dispenser #: N/A  
 Glass Vial # 00068647 Boiling Chip lot # 1704424 \*Hotblock Position: M,3

Vial #	Sample ID Number	Sample Size <input type="checkbox"/> mL <input checked="" type="checkbox"/> g	Vial #	Sample ID Number	Sample Size <input type="checkbox"/> mL <input checked="" type="checkbox"/> g	CRM LIMS ID <input type="checkbox"/> NA
1	F707567 Bk1	0.2956	23	1707771-33A	0.3052	DORM-4 BS1 and BS01 = 1703305
2	F707567 Bk2	0.2832	24	1707771-34A	0.2804	
3	F707567 Bk3	0.3018	25	1707771-35A	0.2790	
4	F707567 BS1	0.1255	26	1707771-36A	0.2788	
5	F707567 BS01	0.1258	27	1707771-37A	0.2916	
6	1707771-21A	0.2910	28	1707771-38A	0.2911	F707567 Source Dup1 MS4 MS10 1707771-31 MS2 MS102 1707771-31 8/2/17 N/A 8/2/17 1708
7	F707567 Dup1	0.2945	29	1707771-39A	0.2970	
8	F707567 MS1	0.2849	30	1707771-40A	0.3098	
9	F707567 MS01	0.2865	31			
10	1707771-22A	0.2998	32			
11	1707771-23A	0.2856	33			
12	1707771-24A	0.2818	34			
13	1707771-25A	0.2870	35			
14	1707771-26A	0.3084	36			
15	1707771-27A	0.2833	37			
16	1707771-28A	0.2676	38			
17	1707771-29A	0.2998	39			
18	1707771-30A	0.2743	40			
19	1707771-31A	0.2748	41			
20	F707567-MS2	0.2928	42			
21	F707567-MS02	0.2968	43			
22	1707771-32A	0.2802	44			

**Peer Review Check List for MHg for CV-GC-AFS (SOP2808) 2017 Rev 6 (02/22/17)**

<b>Analyst:</b> DON MORAN	<b>Sequence #:</b> 7H07017
<b>Reviewer:</b> <u>R 8/8/17</u>	<b>Dataset ID #:</b> MMHG27001-170804-1
<b>Date:</b> <u>8/7/17</u>	<b>WO #:</b> <span style="background-color: black; color: black;">XXXXXXXXXX</span>
<b>Batch #(s):</b> F707566, F707567	<b>Client(s):</b> <span style="background-color: black; color: black;">XXXXXXXXXX</span>

• Select the correct preparation method.

Additional Comments:

Analyte	Prep Method	Matrix
<input type="checkbox"/> MHg	SOP2797 MHg Distillation	Water
<input checked="" type="checkbox"/> MHg	SOP2986 KOH/MeOH Digest	Tissue
<input type="checkbox"/> MHg	SOP5134 MeCl Extraction	Sed/Soil
<input type="checkbox"/> DMHg	SOP2816 (None Accredited method)	ALL

*Refin F707567 due to QC PR.*

Analyst Initials:

DM

Reviewer Initials:

R 8/8/17

- |   |  |   |                             |                                     |   |                             |                                     |   |                             |                                     |   |                             |                                     |                              |                             |   |                              |                             |   |   |                             |                              |   |                             |                              |   |                             |                              |                              |  |                                     |   |                             |                                     |   |                             |                                     |   |                             |                                     |                              |                             |                                     |   |                             |                                     |  |                               |                              |  |                               |                              |  |                               |                                     |
|---|--|---|-----------------------------|-------------------------------------|---|-----------------------------|-------------------------------------|---|-----------------------------|-------------------------------------|---|-----------------------------|-------------------------------------|------------------------------|-----------------------------|---|------------------------------|-----------------------------|---|---|-----------------------------|------------------------------|---|-----------------------------|------------------------------|---|-----------------------------|------------------------------|------------------------------|--|-------------------------------------|---|-----------------------------|-------------------------------------|---|-----------------------------|-------------------------------------|---|-----------------------------|-------------------------------------|------------------------------|-----------------------------|-------------------------------------|---|-----------------------------|-------------------------------------|--|-------------------------------|------------------------------|--|-------------------------------|------------------------------|--|-------------------------------|-------------------------------------|
| <p>1. Compare Sample ID with Bench sheet/Sequence/Raw Data (Have all samples been imported?)</p> <p>2. Check for transcription errors from Excel spreadsheet (or Prep Bench sheet)/Raw data</p> <p style="margin-left: 20px;">(a) Reviewer: 100% of peak heights checked</p> <p style="margin-left: 20px;">(b) Are there peak height errors?</p> <p style="margin-left: 20px;">(c) Error on a sample: Do peak heights, responses, &amp; initial results match corrected data?</p> <p style="margin-left: 20px;">(d) Error on a Cal Pt, ICB/CCB, or PB: Has the data been reimported?</p> <p style="margin-left: 20px;">(e) Check standards &amp; reagents in sequence &amp; bench sheet for correct usage (i.e. expiries).</p> <p style="margin-left: 20px;">(f) Check and compare masses (review prep bench sheet)</p> <p style="margin-left: 20px;">(g) Check and compare initial and final volumes</p> <p style="margin-left: 20px;">(h) Do aliquots and dilutions written on benchsheet match those in Excel?</p> <p style="margin-left: 20px;">(i) Is the pH&gt;3.0 for all distilled samples? _____</p> <p style="margin-left: 20px;">(j) Is the sequence #, analyst, date, and instrument # on the QC page?</p> <p style="margin-left: 20px;">(k) Is the analysis status correct? (analyzed/initial review/reviewed)</p> <p style="margin-left: 20px;">(l) Original prep bench sheet added to data package?</p> <p style="margin-left: 20px;">(m) Benchsheet prep date MUST match actual prep date (check if re-shot vs re-extract)</p> <p>3. High QA? WO#(s)/Client(s): _____</p> <p>4. Client specific QC? (if Yes, refer to Project Notes/LIMS)</p> <p style="margin-left: 20px;">(a) Have the QC requirements been met for all WO#s?</p> <p>5. 20 or fewer samples in batch? _____</p> <p style="margin-left: 20px;">(a) 3 PBs, 1 LCS/LCSD (or BS/BSD), 2 MS/MSD/MD per batch?</p> <p style="margin-left: 20px;">(b) 1 CCV and 1 CCB every 10 analytical runs? _____</p> <p><b>QA/QC Data Checked</b></p> <p>6. The calibration curve included a minimum of 5 Standards</p> <p style="margin-left: 20px;">Comments: _____</p> <p>7. 1st Calibration Standard % Recoveries (65-135%)</p> <p style="margin-left: 20px;">Comments: _____</p> <p>8. RSD CF (≤ 15%)</p> <p style="margin-left: 20px;">Comments: _____</p> | <table style="width:100%; border-collapse: collapse;"> <tr> <td><input checked="" type="checkbox"/> YES</td> <td><input type="checkbox"/> NO</td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td><input checked="" type="checkbox"/> YES</td> <td><input type="checkbox"/> NO</td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td><input checked="" type="checkbox"/> YES</td> <td><input type="checkbox"/> NO</td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td><input checked="" type="checkbox"/> YES</td> <td><input type="checkbox"/> NO</td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td><input type="checkbox"/> YES</td> <td><input type="checkbox"/> NO</td> <td><input checked="" type="checkbox"/> N/A</td> </tr> <tr> <td><input type="checkbox"/> YES</td> <td><input type="checkbox"/> NO</td> <td><input checked="" type="checkbox"/> N/A</td> </tr> <tr> <td><input checked="" type="checkbox"/> YES</td> <td><input type="checkbox"/> NO</td> <td><input type="checkbox"/> N/A</td> </tr> <tr> <td><input checked="" type="checkbox"/> YES</td> <td><input type="checkbox"/> NO</td> <td><input type="checkbox"/> N/A</td> </tr> <tr> <td><input checked="" type="checkbox"/> YES</td> <td><input type="checkbox"/> NO</td> <td><input type="checkbox"/> N/A</td> </tr> <tr> <td><input type="checkbox"/> YES</td> <td><input checked="" type="checkbox"/> NO</td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td><input checked="" type="checkbox"/> YES</td> <td><input type="checkbox"/> NO</td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td><input checked="" type="checkbox"/> YES</td> <td><input type="checkbox"/> NO</td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td><input checked="" type="checkbox"/> YES</td> <td><input type="checkbox"/> NO</td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td><input type="checkbox"/> YES</td> <td><input type="checkbox"/> NO</td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td><input checked="" type="checkbox"/> YES</td> <td><input type="checkbox"/> NO</td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td><input checked="" type="checkbox"/> PASS</td> <td><input type="checkbox"/> FAIL</td> <td><input type="checkbox"/> N/A</td> </tr> <tr> <td><input checked="" type="checkbox"/> PASS</td> <td><input type="checkbox"/> FAIL</td> <td><input type="checkbox"/> N/A</td> </tr> <tr> <td><input checked="" type="checkbox"/> PASS</td> <td><input type="checkbox"/> FAIL</td> <td><input checked="" type="checkbox"/></td> </tr> </table> | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> | <input type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> N/A | <input type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> N/A | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> N/A | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> N/A | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> N/A | <input type="checkbox"/> YES | <input checked="" type="checkbox"/> NO | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> | <input type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> PASS | <input type="checkbox"/> FAIL | <input type="checkbox"/> N/A | <input checked="" type="checkbox"/> PASS | <input type="checkbox"/> FAIL | <input type="checkbox"/> N/A | <input checked="" type="checkbox"/> PASS | <input type="checkbox"/> FAIL | <input checked="" type="checkbox"/> |
| <input checked="" type="checkbox"/> YES   | <input type="checkbox"/> NO  | <input checked="" type="checkbox"/>     |                             |                                     |   |                             |                                     |   |                             |                                     |   |                             |                                     |                              |                             |   |                              |                             |   |   |                             |                              |   |                             |                              |   |                             |                              |                              |  |                                     |   |                             |                                     |   |                             |                                     |   |                             |                                     |                              |                             |                                     |   |                             |                                     |  |                               |                              |  |                               |                              |  |                               |                                     |
| <input checked="" type="checkbox"/> YES   | <input type="checkbox"/> NO  | <input checked="" type="checkbox"/>     |                             |                                     |   |                             |                                     |   |                             |                                     |   |                             |                                     |                              |                             |   |                              |                             |   |   |                             |                              |   |                             |                              |   |                             |                              |                              |  |                                     |   |                             |                                     |   |                             |                                     |   |                             |                                     |                              |                             |                                     |   |                             |                                     |  |                               |                              |  |                               |                              |  |                               |                                     |
| <input checked="" type="checkbox"/> YES   | <input type="checkbox"/> NO  | <input checked="" type="checkbox"/>     |                             |                                     |   |                             |                                     |   |                             |                                     |   |                             |                                     |                              |                             |   |                              |                             |   |   |                             |                              |   |                             |                              |   |                             |                              |                              |  |                                     |   |                             |                                     |   |                             |                                     |   |                             |                                     |                              |                             |                                     |   |                             |                                     |  |                               |                              |  |                               |                              |  |                               |                                     |
| <input checked="" type="checkbox"/> YES   | <input type="checkbox"/> NO  | <input checked="" type="checkbox"/>     |                             |                                     |   |                             |                                     |   |                             |                                     |   |                             |                                     |                              |                             |   |                              |                             |   |   |                             |                              |   |                             |                              |   |                             |                              |                              |  |                                     |   |                             |                                     |   |                             |                                     |   |                             |                                     |                              |                             |                                     |   |                             |                                     |  |                               |                              |  |                               |                              |  |                               |                                     |
| <input type="checkbox"/> YES  | <input type="checkbox"/> NO  | <input checked="" type="checkbox"/> N/A |                             |                                     |   |                             |                                     |   |                             |                                     |   |                             |                                     |                              |                             |   |                              |                             |   |   |                             |                              |   |                             |                              |   |                             |                              |                              |  |                                     |   |                             |                                     |   |                             |                                     |   |                             |                                     |                              |                             |                                     |   |                             |                                     |  |                               |                              |  |                               |                              |  |                               |                                     |
| <input type="checkbox"/> YES  | <input type="checkbox"/> NO  | <input checked="" type="checkbox"/> N/A |                             |                                     |   |                             |                                     |   |                             |                                     |   |                             |                                     |                              |                             |   |                              |                             |   |   |                             |                              |   |                             |                              |   |                             |                              |                              |  |                                     |   |                             |                                     |   |                             |                                     |   |                             |                                     |                              |                             |                                     |   |                             |                                     |  |                               |                              |  |                               |                              |  |                               |                                     |
| <input checked="" type="checkbox"/> YES   | <input type="checkbox"/> NO  | <input type="checkbox"/> N/A            |                             |                                     |   |                             |                                     |   |                             |                                     |   |                             |                                     |                              |                             |   |                              |                             |   |   |                             |                              |   |                             |                              |   |                             |                              |                              |  |                                     |   |                             |                                     |   |                             |                                     |   |                             |                                     |                              |                             |                                     |   |                             |                                     |  |                               |                              |  |                               |                              |  |                               |                                     |
| <input checked="" type="checkbox"/> YES   | <input type="checkbox"/> NO  | <input type="checkbox"/> N/A            |                             |                                     |   |                             |                                     |   |                             |                                     |   |                             |                                     |                              |                             |   |                              |                             |   |   |                             |                              |   |                             |                              |   |                             |                              |                              |  |                                     |   |                             |                                     |   |                             |                                     |   |                             |                                     |                              |                             |                                     |   |                             |                                     |  |                               |                              |  |                               |                              |  |                               |                                     |
| <input checked="" type="checkbox"/> YES   | <input type="checkbox"/> NO  | <input type="checkbox"/> N/A            |                             |                                     |   |                             |                                     |   |                             |                                     |   |                             |                                     |                              |                             |   |                              |                             |   |   |                             |                              |   |                             |                              |   |                             |                              |                              |  |                                     |   |                             |                                     |   |                             |                                     |   |                             |                                     |                              |                             |                                     |   |                             |                                     |  |                               |                              |  |                               |                              |  |                               |                                     |
| <input type="checkbox"/> YES  | <input checked="" type="checkbox"/> NO   | <input checked="" type="checkbox"/>     |                             |                                     |   |                             |                                     |   |                             |                                     |   |                             |                                     |                              |                             |   |                              |                             |   |   |                             |                              |   |                             |                              |   |                             |                              |                              |  |                                     |   |                             |                                     |   |                             |                                     |   |                             |                                     |                              |                             |                                     |   |                             |                                     |  |                               |                              |  |                               |                              |  |                               |                                     |
| <input checked="" type="checkbox"/> YES   | <input type="checkbox"/> NO  | <input checked="" type="checkbox"/>     |                             |                                     |   |                             |                                     |   |                             |                                     |   |                             |                                     |                              |                             |   |                              |                             |   |   |                             |                              |   |                             |                              |   |                             |                              |                              |  |                                     |   |                             |                                     |   |                             |                                     |   |                             |                                     |                              |                             |                                     |   |                             |                                     |  |                               |                              |  |                               |                              |  |                               |                                     |
| <input checked="" type="checkbox"/> YES   | <input type="checkbox"/> NO  | <input checked="" type="checkbox"/>     |                             |                                     |   |                             |                                     |   |                             |                                     |   |                             |                                     |                              |                             |   |                              |                             |   |   |                             |                              |   |                             |                              |   |                             |                              |                              |  |                                     |   |                             |                                     |   |                             |                                     |   |                             |                                     |                              |                             |                                     |   |                             |                                     |  |                               |                              |  |                               |                              |  |                               |                                     |
| <input checked="" type="checkbox"/> YES   | <input type="checkbox"/> NO  | <input checked="" type="checkbox"/>     |                             |                                     |   |                             |                                     |   |                             |                                     |   |                             |                                     |                              |                             |   |                              |                             |   |   |                             |                              |   |                             |                              |   |                             |                              |                              |  |                                     |   |                             |                                     |   |                             |                                     |   |                             |                                     |                              |                             |                                     |   |                             |                                     |  |                               |                              |  |                               |                              |  |                               |                                     |
| <input type="checkbox"/> YES  | <input type="checkbox"/> NO  | <input checked="" type="checkbox"/>     |                             |                                     |   |                             |                                     |   |                             |                                     |   |                             |                                     |                              |                             |   |                              |                             |   |   |                             |                              |   |                             |                              |   |                             |                              |                              |  |                                     |   |                             |                                     |   |                             |                                     |   |                             |                                     |                              |                             |                                     |   |                             |                                     |  |                               |                              |  |                               |                              |  |                               |                                     |
| <input checked="" type="checkbox"/> YES   | <input type="checkbox"/> NO  | <input checked="" type="checkbox"/>     |                             |                                     |   |                             |                                     |   |                             |                                     |   |                             |                                     |                              |                             |   |                              |                             |   |   |                             |                              |   |                             |                              |   |                             |                              |                              |  |                                     |   |                             |                                     |   |                             |                                     |   |                             |                                     |                              |                             |                                     |   |                             |                                     |  |                               |                              |  |                               |                              |  |                               |                                     |
| <input checked="" type="checkbox"/> PASS  | <input type="checkbox"/> FAIL  | <input type="checkbox"/> N/A            |                             |                                     |   |                             |                                     |   |                             |                                     |   |                             |                                     |                              |                             |   |                              |                             |   |   |                             |                              |   |                             |                              |   |                             |                              |                              |  |                                     |   |                             |                                     |   |                             |                                     |   |                             |                                     |                              |                             |                                     |   |                             |                                     |  |                               |                              |  |                               |                              |  |                               |                                     |
| <input checked="" type="checkbox"/> PASS  | <input type="checkbox"/> FAIL  | <input type="checkbox"/> N/A            |                             |                                     |   |                             |                                     |   |                             |                                     |   |                             |                                     |                              |                             |   |                              |                             |   |   |                             |                              |   |                             |                              |   |                             |                              |                              |  |                                     |   |                             |                                     |   |                             |                                     |   |                             |                                     |                              |                             |                                     |   |                             |                                     |  |                               |                              |  |                               |                              |  |                               |                                     |
| <input checked="" type="checkbox"/> PASS  | <input type="checkbox"/> FAIL  | <input checked="" type="checkbox"/>     |                             |                                     |   |                             |                                     |   |                             |                                     |   |                             |                                     |                              |                             |   |                              |                             |   |   |                             |                              |   |                             |                              |   |                             |                              |                              |  |                                     |   |                             |                                     |   |                             |                                     |   |                             |                                     |                              |                             |                                     |   |                             |                                     |  |                               |                              |  |                               |                              |  |                               |                                     |



**Peer Review Check List for MHg for CV-GC-AFS (SOP2808) 2017 Rev 6 (02/22/17)**

<b>Analyst:</b>	DON MORAN	<b>Sequence #:</b>	7H07017
<b>Reviewer:</b>	0 <i>PL 8/8/17</i>	<b>Dataset ID #:</b>	MMHG27001-170804-1
<b>Date:</b>	8/7/2017	<b>WO #:</b>	[REDACTED]
<b>Batch #(s):</b>	F707566, F707567	<b>Client(s):</b>	[REDACTED]

**Initials:** *DM*      **Reviewer Initials:** *PL 8/8/17*

- |  |  |  |   |                                     |
|--|--|--|---|-------------------------------------|
| 9. ICV % Recoveries 67-133%  | <input checked="" type="checkbox"/> PASS | <input type="checkbox"/> FAIL            |   | <input checked="" type="checkbox"/> |
| Comments: _____  |  |  |   |                                     |
| 10. CCV % Recoveries 67-133%   | <input checked="" type="checkbox"/> PASS | <input type="checkbox"/> FAIL            |   | <input checked="" type="checkbox"/> |
| Comments: _____  |  |  |   |                                     |
| 11. Are the absolute value of the ICB and CCBs < PQL?  | <input checked="" type="checkbox"/> PASS | <input type="checkbox"/> FAIL            |   | <input checked="" type="checkbox"/> |
| Comments: _____  |  |  |   |                                     |
| 12. LCS/LCSD/CRM/BS/BSD % Recoveries (70-130%)   | <input checked="" type="checkbox"/> PASS | <input checked="" type="checkbox"/> FAIL |   | <input checked="" type="checkbox"/> |
| Comments: <b><i>F707567-BS1, BSD1 FAILED. LOW RECOVERY</i></b>                               |  |  |   |                                     |
| 13. LCS/LCSD or BS/BSD RPD (< 25%)   | <input checked="" type="checkbox"/> PASS | <input type="checkbox"/> FAIL            |   | <input checked="" type="checkbox"/> |
| Comments: _____  |  |  |   |                                     |
| 14. Water: Average of Preparation Blanks < 0.045 ng/L and standard deviation of 0.015 ng/L?  | <input type="checkbox"/> PASS            | <input type="checkbox"/> FAIL            | <input checked="" type="checkbox"/> N/A | <input checked="" type="checkbox"/> |
| Comments: _____  |  |  |   |                                     |
| 15. Sediment/Tissue: Individually, are the Preparation Blanks < PQL for the matrix?          | <input checked="" type="checkbox"/> PASS | <input type="checkbox"/> FAIL            | <input type="checkbox"/> N/A            | <input checked="" type="checkbox"/> |
| Comments: _____  | <input checked="" type="checkbox"/> PASS | <input type="checkbox"/> FAIL            |   | <input checked="" type="checkbox"/> |
| 16. Have Total Solids been applied? (If NO, please ensure that they are done or nearly done) | <input type="checkbox"/> YES             | <input type="checkbox"/> NO              | <input checked="" type="checkbox"/> N/A | <input checked="" type="checkbox"/> |
| 17. Is the correct 'Source' designated for MD/MS/MSD?  | <input checked="" type="checkbox"/> YES  | <input type="checkbox"/> NO              |   | <input checked="" type="checkbox"/> |
| 18. For digested preps: was there a spike witness signature & date on the prep bench sheet?  | <input checked="" type="checkbox"/> YES  | <input type="checkbox"/> NO              | <input type="checkbox"/> N/A            | <input checked="" type="checkbox"/> |
| 19. MD RPD/MT RSD(< 35%)   | <input checked="" type="checkbox"/> PASS | <input type="checkbox"/> FAIL            |   | <input checked="" type="checkbox"/> |
| Comments: _____  |  |  |   |                                     |
| 20. Is there one set of MS/MSD per every 10 samples?   | <input checked="" type="checkbox"/> PASS | <input type="checkbox"/> FAIL            |   | <input checked="" type="checkbox"/> |
| Comments: _____  |  |  |   |                                     |
| 21. MS/MSD RPD(< 35%)  | <input checked="" type="checkbox"/> PASS | <input type="checkbox"/> FAIL            |   | <input checked="" type="checkbox"/> |
| Comments: _____  |  |  |   |                                     |
| 22. MS (AS) % Recoveries (65-130%)   | <input checked="" type="checkbox"/> PASS | <input type="checkbox"/> FAIL            |   | <input checked="" type="checkbox"/> |
| Comments: _____  |  |  |   |                                     |
| 23. MSD (ASD) % Recoveries (65-130%)   | <input checked="" type="checkbox"/> PASS | <input type="checkbox"/> FAIL            |   | <input checked="" type="checkbox"/> |
| Comments: _____  |  |  |   |                                     |
| 24. Spiked 1-5X ambient or 1-5X PQL (whichever is higher) (from EPA 1630)                    | <input checked="" type="checkbox"/> YES  | <input type="checkbox"/> NO              |   | <input checked="" type="checkbox"/> |
| 25. Are all samples within instrument calibration range (or at maximum aliquot size)?        | <input checked="" type="checkbox"/> YES  | <input type="checkbox"/> NO              |   | <input checked="" type="checkbox"/> |
| Comments: _____  |  |  |   |                                     |
| 26. For instrumental dilutions, is the dilution factor in excel correct?                     | <input checked="" type="checkbox"/> PASS | <input type="checkbox"/> NO              | <input type="checkbox"/> N/A            | <input checked="" type="checkbox"/> |
| Is the sample volume, diluents, and final volume of the dilution noted on benchsheet?        | <input checked="" type="checkbox"/> PASS | <input type="checkbox"/> NO              | <input type="checkbox"/> N/A            | <input checked="" type="checkbox"/> |
| 27. Dissolved < Total metals (if applicable)   | <input type="checkbox"/> PASS            | <input type="checkbox"/> NO              | <input checked="" type="checkbox"/> N/A | <input checked="" type="checkbox"/> |
| Comments: _____  |  |  |   |                                     |
| 28. Effluent < Influent metals (visually confirm if needed)                                  | <input type="checkbox"/> PASS            | <input type="checkbox"/> NO              | <input checked="" type="checkbox"/> N/A | <input checked="" type="checkbox"/> |
| Comments: _____  |  |  |   |                                     |

**Peer Review Check List for MHg for CV-GC-AFS (SOP2808) 2017 Rev 6 (02/22/17)**

<b>Analyst:</b> DON MORAN	<b>Sequence #:</b> 7H07017
<b>Reviewer:</b> 0 <u>R 8/6/17</u>	<b>Dataset ID #:</b> MMHG27001-170804-1
<b>Date:</b> 8/7/2017	<b>WO #:</b> [REDACTED]
<b>Batch #(s):</b> F707566, F707567	<b>Client(s):</b> [REDACTED]

**Analyst Initials:**  
DM

**Reviewer Initials:**  
R 8/6/17

- |  |   |  |   |                                     |
|--|---|--|---|-------------------------------------|
| 29. Are re-runs noted with reason?<br>Comments: _____  | <input type="checkbox"/> YES            | <input type="checkbox"/> NO            | <input checked="" type="checkbox"/> N/A | <input checked="" type="checkbox"/> |
| 30. For failing QC (CCV, CCB, PB, BS/BSD, CAL):<br>Was a bubbler and trap test run before the analytical run continued?<br>Comments: _____ | <input type="checkbox"/> YES            | <input type="checkbox"/> NO            | <input checked="" type="checkbox"/> N/A | <input checked="" type="checkbox"/> |
| 31. Do re-run results compare to initial analysis (< 35% RPD)?<br>Comments: _____  | <input type="checkbox"/> YES            | <input type="checkbox"/> NO            | <input checked="" type="checkbox"/> N/A | <input checked="" type="checkbox"/> |
| 32. Are qualifiers consistent with the data review flowcharts?<br>Comments: _____  | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO            | <input type="checkbox"/> N/A            | <input checked="" type="checkbox"/> |
| 33. Have non-reportable samples been imported into LIMS and clicked to non-reportable?<br>Comments: _____                                  | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO            | <input type="checkbox"/> N/A            | <input checked="" type="checkbox"/> |
| 34. Have re-extracts been created for non-reportable samples?  | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO            | <input type="checkbox"/> N/A            | <input checked="" type="checkbox"/> |
| 35. Narrations in MMO box in LIMS?<br>Comments: _____  |   |  |   |                                     |
| 36. Are there any HIGH QA projects within the data?<br>If so, place dataset to the QA office.  | <input type="checkbox"/> YES            | <input checked="" type="checkbox"/> NO |   |                                     |
| 37. Does the data set need scanning?<br>Files located at: \\Cuprum\gen_admin\Quality Assurance\Training Master\IDOCs                       | <input type="checkbox"/> YES            |  | <input checked="" type="checkbox"/> N/A | <input checked="" type="checkbox"/> |
| 38. Date of analyst IDOC/CDOC: <u>6/13/2017</u> IDOC/CDOC within last 12 months?   | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO            |   | <input checked="" type="checkbox"/> |
| 39. Date of analyst's SOP reading: <u>5/23/2016</u> Current SOP revision?  | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO            |   | <input checked="" type="checkbox"/> |
| 40. Date of LOD: <u>4/24/2017</u> LOD within last 3 months (within 12 months for MDN)?   | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO            | <input type="checkbox"/> N/A            | <input checked="" type="checkbox"/> |
| 41. Date of LOQ: <u>4/24/2017</u> LOQ within last 3 months (within 12 months for MDN)?   | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO            | <input type="checkbox"/> N/A            | <input checked="" type="checkbox"/> |
| 42. If MDN samples, date of last MDL study: _____  |   |  |   |                                     |
| 43. MDL study within last 12 months?   | <input type="checkbox"/> YES            | <input type="checkbox"/> NO            | <input checked="" type="checkbox"/> N/A | <input checked="" type="checkbox"/> |
| <b>Data can not be reported without a current IDOC/CDOC, LOD or LOQ.</b>   |   |  |   |                                     |
| Additional Comments: _____   | <input type="checkbox"/> YES            | <input type="checkbox"/> NO            |   | <input checked="" type="checkbox"/> |

**Failing Data Report - 7H07017**

Sample ID	Analysis	Result	MRL	Dup Result	Source Result	True Value	Units	% Rec.	Rec. LCL	Rec. UCL	RPD	RPD Limit	Over Cal	Failure	Qualifier
F707567-BS1	MHg-CVAFS-S-KOH	146.7	8.0			331.60	ng/g	44.3	70.00	130.00			PASS-OVER	FAIL-BS	RL batch
F707567-BSD1	MHg-CVAFS-S-KOH	158.5	7.9	146.7		330.81	ng/g	47.9	70.00	130.00	7.97	25.00	PASS-OVER	FAIL-BSD (Rec.)	
F707567-MS1	MHg-CVAFS-S-KOH	27.0	1.8		6.9	35.135	ng/g	57.2	65.00	130.00			PASS-OVER	FAIL-MS	RL PM .07
F707567-MSD1	MHg-CVAFS-S-KOH	22.7	1.7	27.0	6.9	34.939	ng/g	45.2	65.00	130.00	23.4	35.00	PASS-OVER	FAIL-MSD (Rec.)	PM .07

Dan Moran 8/7/17  
 Analyst Reviewed By Date

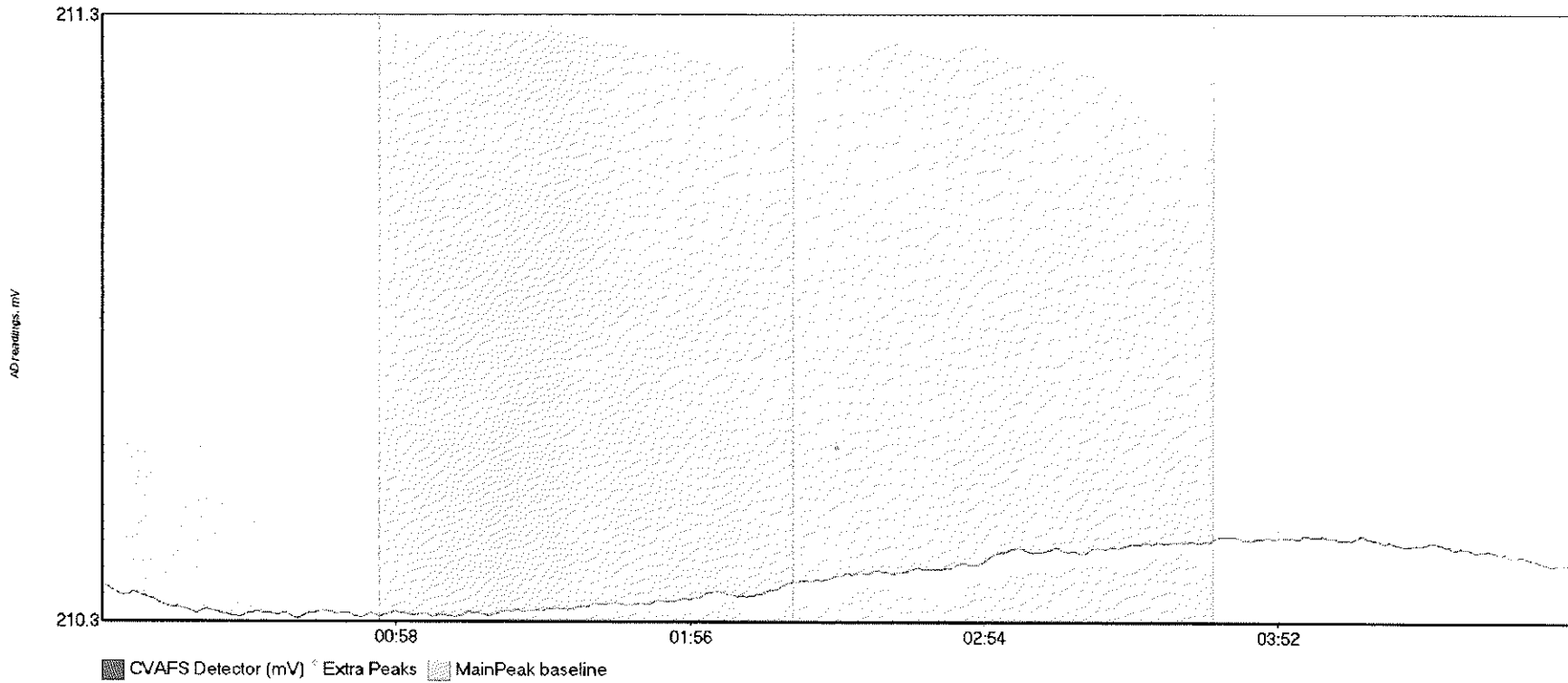
PLM 8/9/17  
 Peer Reviewed By Date

Methylmercury Operat DM BlankSub: Calib Ean: Run Date: 8/4/2017 Blank SD: EPA1630 Workst MMHQ: CalibFactor: Status: Calib error: Zero Pa: Run Time: 0:00:00 Blank RSD%: Methoc 2010-01 R: R: CalibAnalyte: CF SD: Descr: MMHQ27001-170804-1

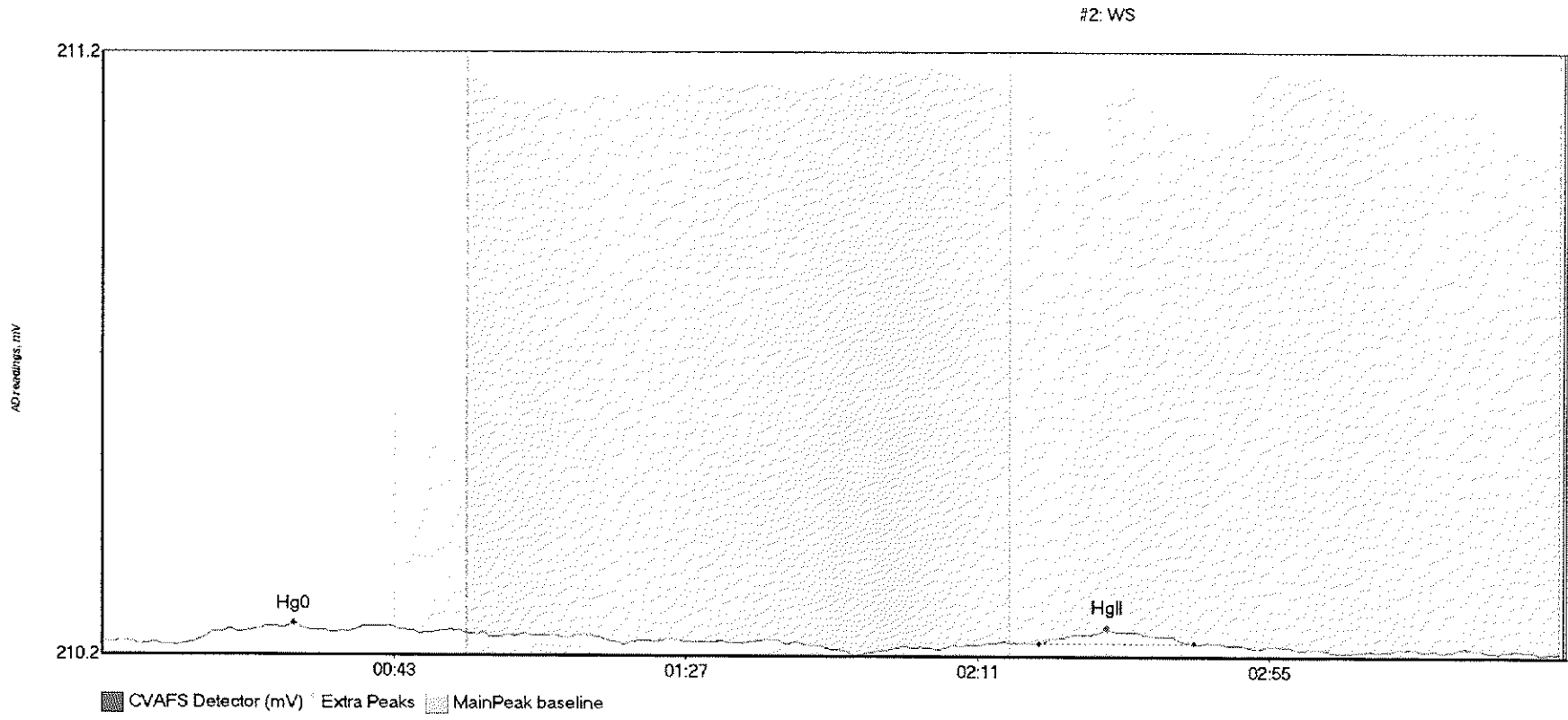
Sample/ID	Locator	Rinse	Dilute	Blank	ConcHQ(p)	ConcMeHQ	ConcHQ2(p)	ConcPthQ	Rec%	QA	RawData	RunEnd	PeakHQ (R)	PeakMeHQ (R)	PeakHQ2(Raw)	PeakPthQ(Raw)	Control (ref)	Flags	RunCount
Clear																	clean	NP	1
WS A1											8:39:16		24657-1.RAW	0.00					1
SEQ-1BL1 A2		1									8:49:47		24658-1.RAW	5.11	0.00	3.02	0.00 psample10	OK	1
SEQ-CAL1 A3		1									9:00:18		24659-1.RAW	3.68	0.00	3.47	0.00 psample10	CT	1
SEQ-CAL2 A4		1									9:10:48		24660-1.RAW	1.53	23.06	5.17	0.00 psample10	OK	1
SEQ-CAL3 A5		1									9:21:19		24661-1.RAW	3.17	91.00	4.68	0.00 psample10	OK	1
SEQ-CAL4 A6		1									9:31:50		24662-1.RAW	5.41	512.32	28.52	0.00 psample10	OK	1
SEQ-CAL5 A7		1									9:42:21		24663-1.RAW	4.88	908.97	51.81	0.00 psample10	OK	1
SEQ-ICV1 A8		1									9:52:51		24664-1.RAW	6.57	1804.27	94.81	0.00 psample10	CT	1
SEQ-ICB1 A9		1									10:03:22		24665-1.RAW	2.67	217.35	0.93	0.00 psample10	OK	1
F707566-BLK1 A10		500									10:13:53		24666-1.RAW	5.76	3.54	2.92	0.00 psample10	OK	1
F707566-BLK2 A11		500									10:24:23		24667-1.RAW	4.52	0.00	4.49	0.00 psample10	CT	1
F707566-BLK3 A12		500									10:34:54		24668-1.RAW	3.63	0.00	5.20	0.00 psample10	OK	1
F707566-BS1 A13		1000									10:45:25		24669-1.RAW	3.20	0.00	5.83	0.00 psample10	CT	1
F707566-BSD1 A14		1000									10:55:55		24670-1.RAW	5.05	714.30	105.32	0.00 psample10	CT	1
F707566-DUP1 A15		500									11:06:26		24671-1.RAW	3.98	802.99	117.45	0.00 psample10	CT	1
F707566-MS1 A16		500									11:16:57		24672-1.RAW	3.38	53.94	4777.89	0.00 psample10	CT	1
F707566-MSD1 A17		500									11:27:27		24673-1.RAW	11.46	522.22	3776.01	0.00 psample10	CT	1
F707566-MS2 A18		500									11:37:58		24674-1.RAW	12.64	528.62	3534.18	0.00 psample10	OK	1
F707566-MSD2 A19		500									11:48:29		24675-1.RAW	9.61	544.47	1643.28	0.00 psample10	CT	1
SEQ-CCV1 A20		1									11:58:59		24676-1.RAW	8.40	532.74	1404.97	0.00 psample10	CT	1
SEQ-CCB1 A21		1									12:09:30		24677-1.RAW	6.18	198.59	19.70	0.00 psample10	OK	1
1707771-01 B1		500									12:20:01		24678-1.RAW	4.96	0.00	9.21	0.00 psample10	OK	1
1707771-02 B2		500									12:30:31		24679-1.RAW	3.60	29.69	1571.79	0.00 psample10	CT	1
1707771-03 B3		500									12:41:02		24680-1.RAW	6.19	28.79	1141.96	0.00 psample10	CT	1
1707771-04 B4		500									12:51:33		24681-1.RAW	6.37	31.63	1641.68	0.00 psample10	OK	1
1707771-05 B5		500									13:02:04		24682-1.RAW	8.52	50.13	4135.42	0.00 psample10	CT	1
1707771-06 B6		500									13:12:35		24683-1.RAW	9.01	34.61	1638.27	0.00 psample10	OK	1
1707771-07 B7		500									13:23:05		24684-1.RAW	3.36	74.64	2163.93	0.00 psample10	CT	1
1707771-08 B8		500									13:33:37		24685-1.RAW	10.54	82.61	1352.33	0.00 psample10	CT	1
1707771-09 B9		500									13:44:08		24686-1.RAW	8.45	79.98	2478.33	0.00 psample10	CT	1
1707771-10 B10		500									13:54:39		24687-1.RAW	11.25	66.82	3058.53	0.00 psample10	OK	1
SEQ-CCV2 B11		1									14:05:09		24688-1.RAW	12.08	51.13	1359.21	0.00 psample10	OK	1
SEQ-CCB2 B12		1									14:15:40		24689-1.RAW	5.63	197.41	58.13	0.00 psample10	OK	1
1707771-11 B13		500									14:26:11		24690-1.RAW	2.16	0.00	11.45	0.00 psample10	OK	1
1707771-12 B14		500									14:36:41		24691-1.RAW	6.81	66.82	1505.69	0.00 psample10	CT	1
1707771-13 B15		500									14:47:12		24692-1.RAW	10.19	91.64	3573.75	0.00 psample10	CT	1
1707771-14 B16		500									14:57:43		24693-1.RAW	8.33	28.90	1287.89	0.00 psample10	CT	1
1707771-15 B17		500									15:08:13		24694-1.RAW	9.23	50.08	1928.49	0.00 psample10	OK	1
1707771-16 B18		500									15:18:44		24695-1.RAW	4.94	55.95	2572.35	0.00 psample10	CT	1
1707771-17 B19		500									15:29:15		24696-1.RAW	6.15	63.76	2743.24	0.00 psample10	CT	1
1707771-18 B20		500									15:39:45		24697-1.RAW	11.19	67.32	1905.62	0.00 psample10	CT	1
1707771-19 B21		500									15:50:16		24698-1.RAW	8.79	61.70	2561.83	0.00 psample10	CT	1
1707771-20 C1		500									16:00:47		24699-1.RAW	6.98	55.10	233.20	0.00 psample10	OK	1
SEQ-CCV3 C2		1									16:11:17		24700-1.RAW	9.24	117.79	1857.40	0.00 psample10	CT	1
SEQ-CCB3 C3		1									16:21:48		24701-1.RAW	6.63	189.35	13.02	0.00 psample10	OK	1
F707567-BLK1 C4		500									16:32:19		24702-1.RAW	6.91	0.00	8.40	0.00 psample10	CT	1
F707567-BLK2 C5		500									16:42:49		24703-1.RAW	5.39	0.00	10.10	0.00 psample10	OK	1
F707567-BLK3 C6		500									16:53:20		24704-1.RAW	5.27	0.00	6.47	0.00 psample10	CT	1
F707567-BS1 C7		1000									17:03:51		24705-1.RAW	4.59	0.00	8.84	0.00 psample10	CT	1
F707567-BSD1 C8		1000									17:14:21		24706-1.RAW	6.25	429.83	80.30	0.00 psample10	CT	1
F707567-DUP1 C9		500									17:24:52		24707-1.RAW	6.13	465.50	78.38	0.00 psample10	CT	1
F707567-MS1 C10		500									17:35:23		24708-1.RAW	6.53	90.16	593.56	0.00 psample10	CT	1
F707567-MSD1 C11		500									17:45:53		24709-1.RAW	6.27	359.43	395.11	0.00 psample10	OK	1
F707567-MS2 C12		500									17:56:24		24710-1.RAW	4.68	304.05	369.45	0.00 psample10	OK	1
F707567-MSD2 C13		500									18:06:55		24711-1.RAW	4.37	419.39	1015.79	0.00 psample10	OK	1
SEQ-CCV4 C14		1									18:17:25		24712-1.RAW	8.91	428.12	1173.40	0.00 psample10	OK	1
SEQ-CCB4 C15		1									18:27:56		24713-1.RAW	3.44	205.64	9.31	0.00 psample10	OK	1
1707771-21 C16		500									18:38:27		24714-1.RAW	5.74	0.83	5.63	0.00 psample10	OK	1
1707771-22 C17		500									18:48:57		24715-1.RAW	5.69	94.27	501.08	0.00 psample10	OK	1
1707771-23 C18		500									18:59:28		24716-1.RAW	7.99	123.21	684.39	0.00 psample10	CT	1
1707771-24 C19		500									19:09:59		24717-1.RAW	6.35	106.60	541.08	0.00 psample10	OK	1
1707771-25 C20		500									19:20:30		24718-1.RAW	7.06	75.95	1089.08	0.00 psample10	OK	1
1707771-26 C21		500									19:31:00		24719-1.RAW	8.31	19.47	664.55	0.00 psample10	CT	1
1707771-27 A1		500									19:41:31		24720-1.RAW	4.10	7.34	1396.26	0.00 psample10	OK	1
1707771-28 A2		500									19:52:01		24721-1.RAW	3.32	68.53	514.00	0.00 psample10	OK	1
1707771-29 A3		500									20:02:32		24722-1.RAW	2.93	26.10	745.61	0.00 psample10	OK	1
1707771-30 A4		500									20:13:03		24723-1.RAW	2.79	19.63	444.85	0.00 psample10	OK	1
SEQ-CCV5 A5		1									20:23:34		24724-1.RAW	7.85	32.28	836.82	0.00 psample10	CT	1
SEQ-CCB5 A6		1									20:34:04		24725-1.RAW	4.67	218.34	9.93	0.00 psample10	CT	1
1707771-31 A7		500									20:44:35		24726-1.RAW	5.36	0.00	4.20	0.00 psample10	OK	1
1707771-32 A8		500									20:55:06		24727-1.RAW	4.79	33.49	1212.52	0.00 psample10	OK	1
1707771-33 A9		500									21:05:36		24728-1.RAW	2.14	21.32	812.80	0.00 psample10	OK	1
1707771-34 A10		500									21:16:07		24729-1.RAW	5.44	54.72	313.07	0.00 psample10	CT	1
											21:26:38		24730-1.RAW	6.36	37.33	402.95	0.00 psample10	OK	1

1707771-35	A11	500	24731-1.RAW	21:37:08	5.51	58.01	411.22	0.00	psample10	OK	1
1707771-36	A12	500	24732-1.RAW	21:47:39	7.60	68.32	745.55	0.00	psample10	CT	1
1707771-37	A13	500	24733-1.RAW	21:58:10	4.02	39.95	327.92	0.00	psample10	OK	1
1707771-38	A14	500	24734-1.RAW	22:08:42	5.23	28.53	680.98	0.00	psample10	CT	1
1707771-39	A15	500	24735-1.RAW	22:19:12	4.39	23.40	496.46	0.00	psample10	OK	1
1707771-40	A16	500	24736-1.RAW	22:29:43	6.20	34.19	803.06	0.00	psample10	OK	1
SEQ-CCV6	A17	1	24737-1.RAW	22:40:14	4.84	201.20	8.06	0.00	psample10	OK	1
SEQ-CCB6	A18	1	24738-1.RAW	22:50:45	3.98	0.00	5.00	0.00	psample10	OK	1

Clean: No peak(s) detected.

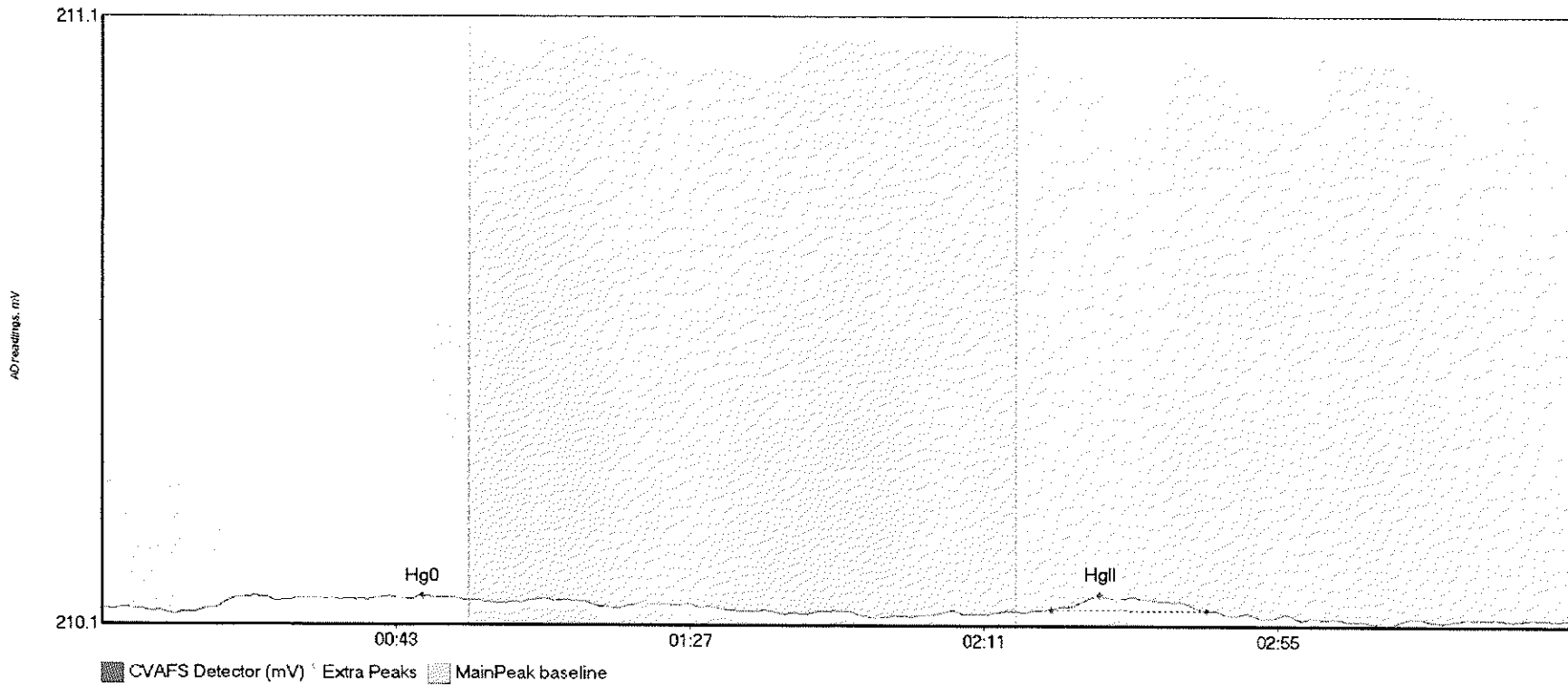


Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
Clean	0.000	-	-	-	-	-	-	NP	210.3296	0.00	0.04	017



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
WS Hg0	5.113	11.5	48.0	210.20	210.22	28.8	0.035	OK	210.2058	0.00	-0.02	
WS HgII	3.019	141.3	164.7	210.20	210.21	151.6	0.024	OK	210.2058	0.00	-0.02	017

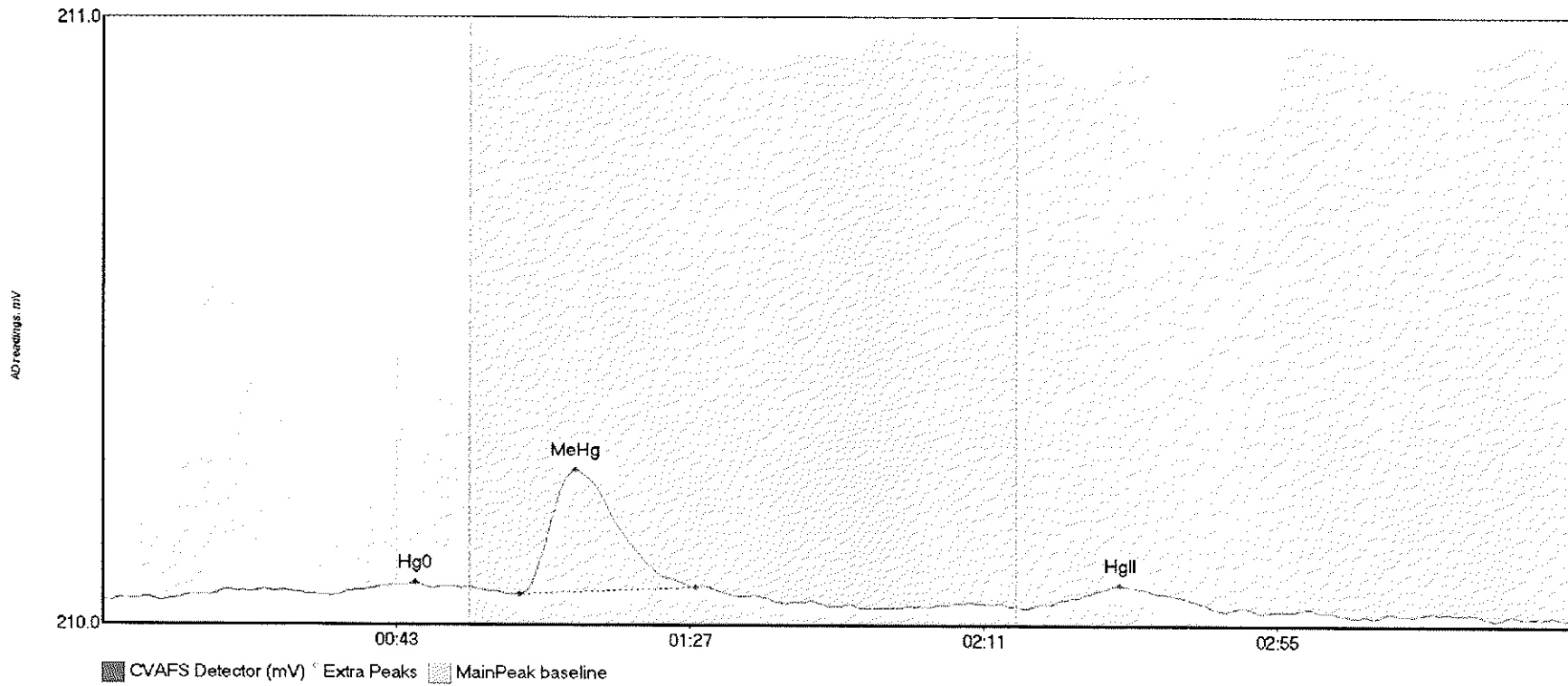
#3: SEQ-IBL1



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-IBL1 Hg0	3.683	16.8	55.0	210.15	210.16	48.0	0.021	CT	210.1471	0.00	-0.02	
SEQ-IBL1 HgII	3.468	142.1	165.5	210.15	210.14	149.5	0.023	OK	210.1471	0.00	-0.02	017

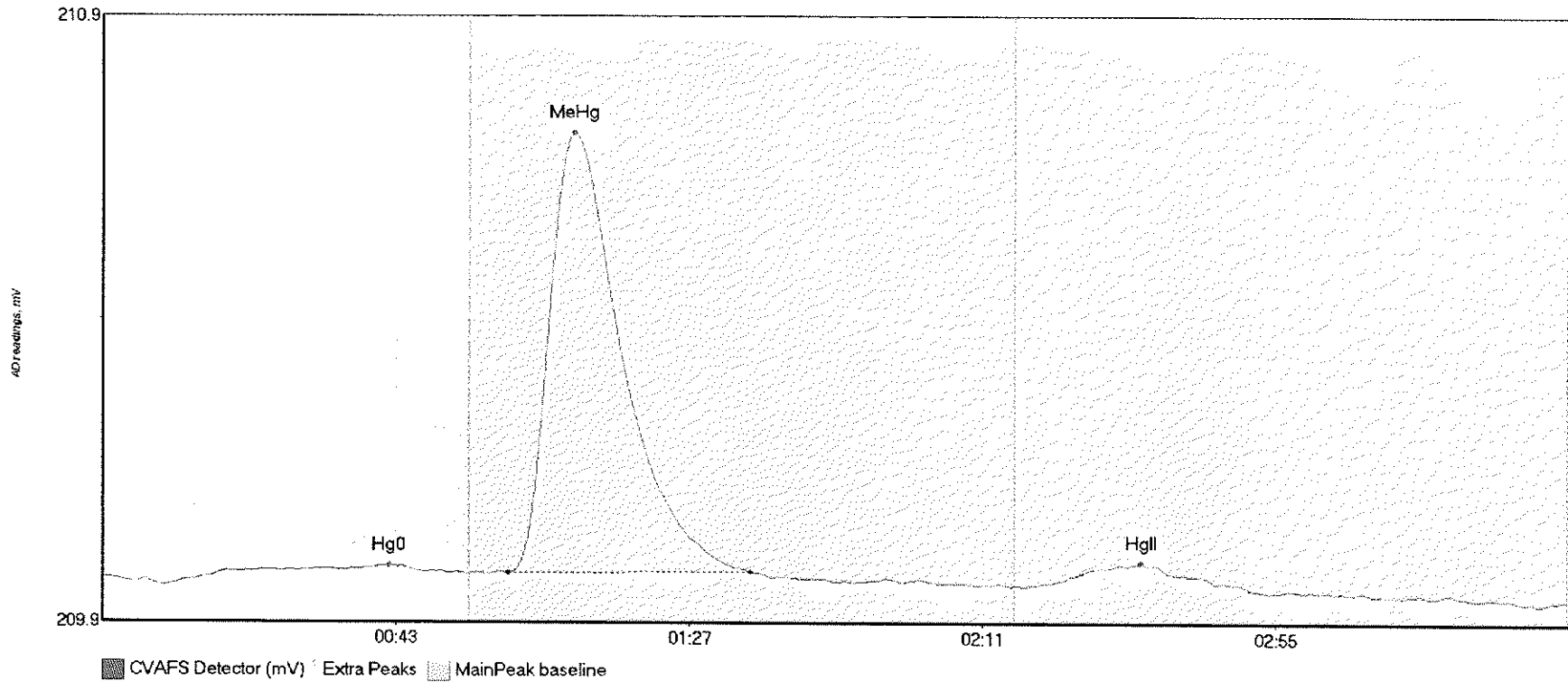


#4: SEQ-CAL1



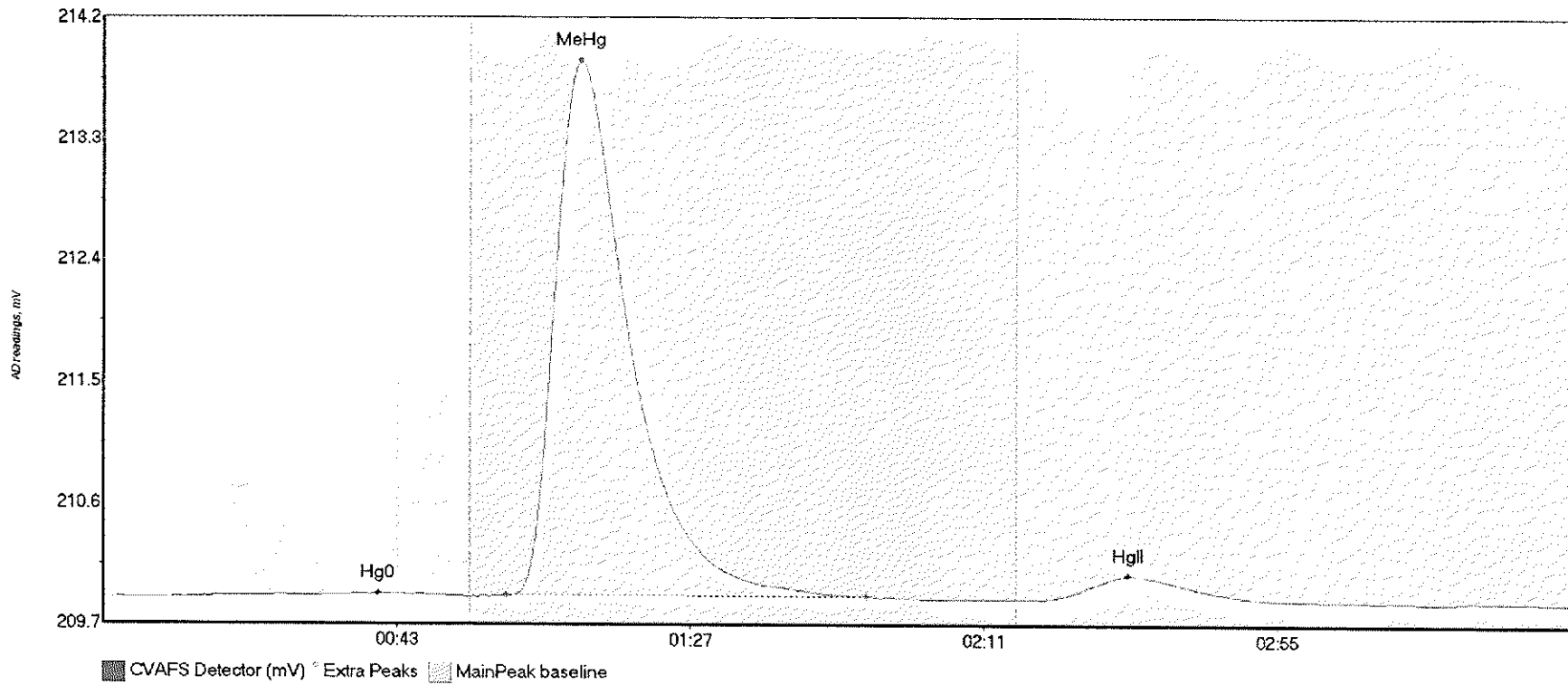
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CAL1 Hg0	1.533	11.8	49.6	210.07	210.09	46.9	0.025	OK	210.0668	0.00	-0.03	
SEQ-CAL1 MeHg	23.060	62.4	88.9	210.08	210.09	70.9	0.204	OK	210.0668	0.00	-0.03	
SEQ-CAL1 HgII	5.170	141.6	168.2	210.06	210.05	152.4	0.031	OK	210.0668	0.00	-0.03	

#5: SEQ-CAL2



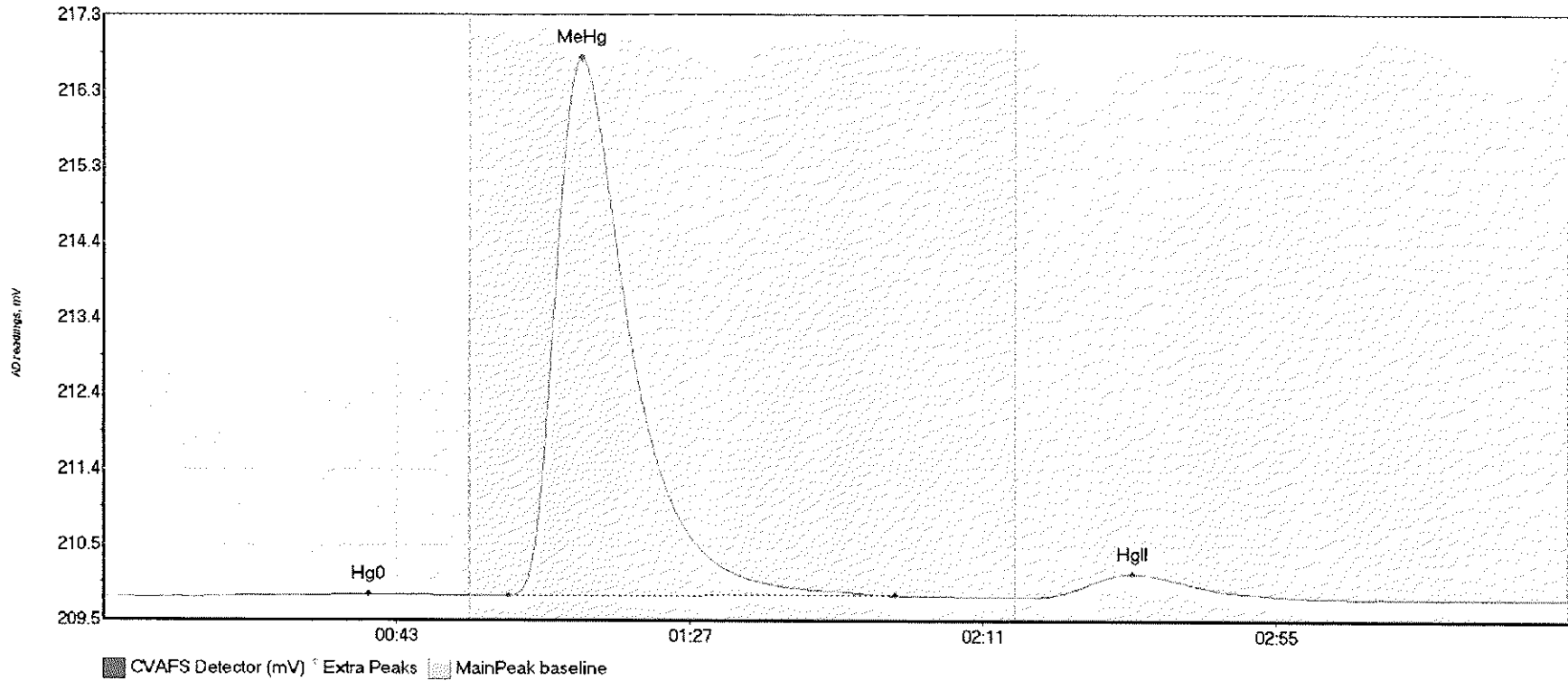
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CAL2 Hg0	3.168	15.8	54.4	209.98	209.99	43.0	0.018	OK	209.9787	0.00	-0.04	
SEQ-CAL2 MeHg	91.000	60.9	97.1	209.99	209.99	70.7	0.726	OK	209.9787	0.00	-0.04	
SEQ-CAL2 HgII	4.681	142.0	167.1	209.97	209.97	155.9	0.034	OK	209.9787	0.00	-0.04	

#6: SEQ-CAL3



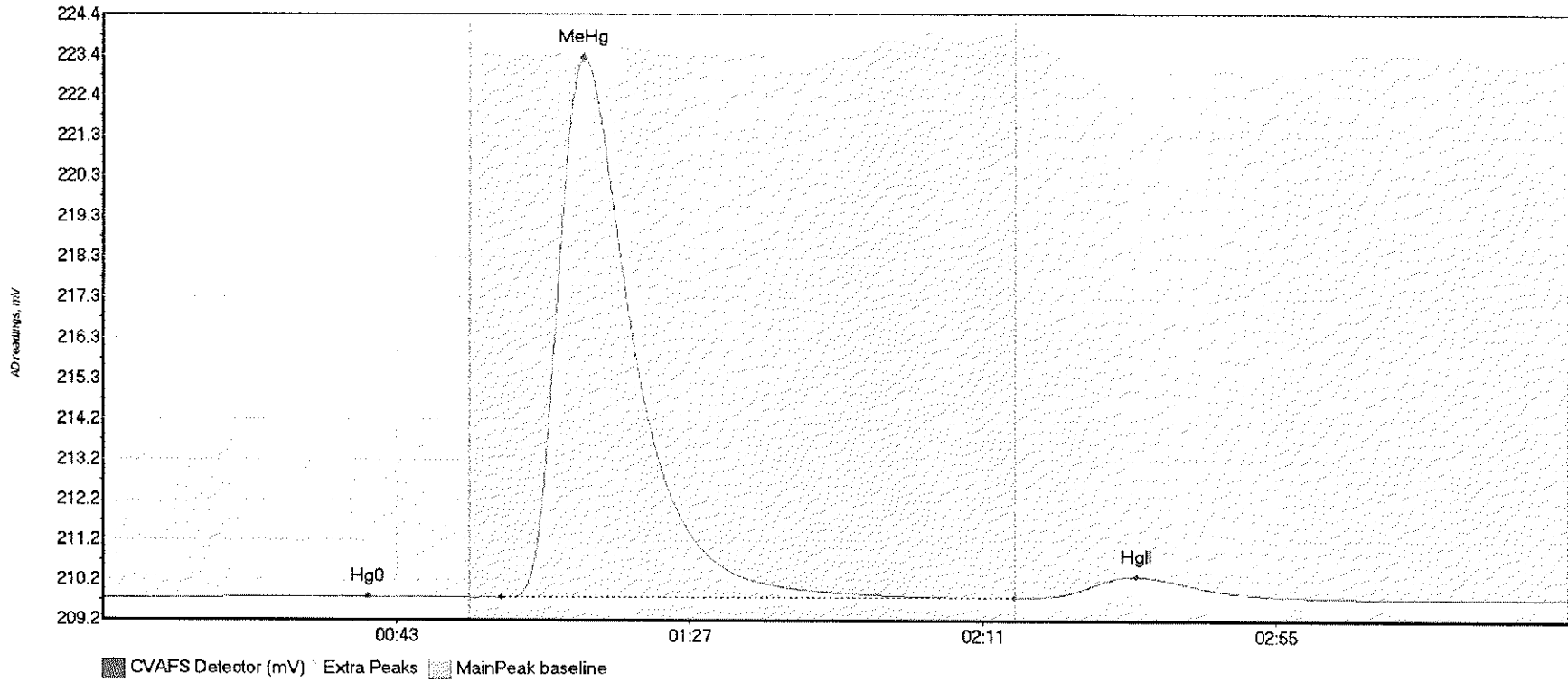
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CAL3 Hg0	5.410	12.3	54.5	209.89	209.89	41.2	0.028	OK	209.8887	0.00	-0.04	
SEQ-CAL3 MeHg	512.323	60.5	114.4	209.90	209.90	71.6	3.954	OK	209.8887	0.00	-0.04	
SEQ-CAL3 HgII	28.522	140.6	175.0	209.88	209.87	153.6	0.177	OK	209.8887	0.00	-0.04	

#7: SEQ-CAL4



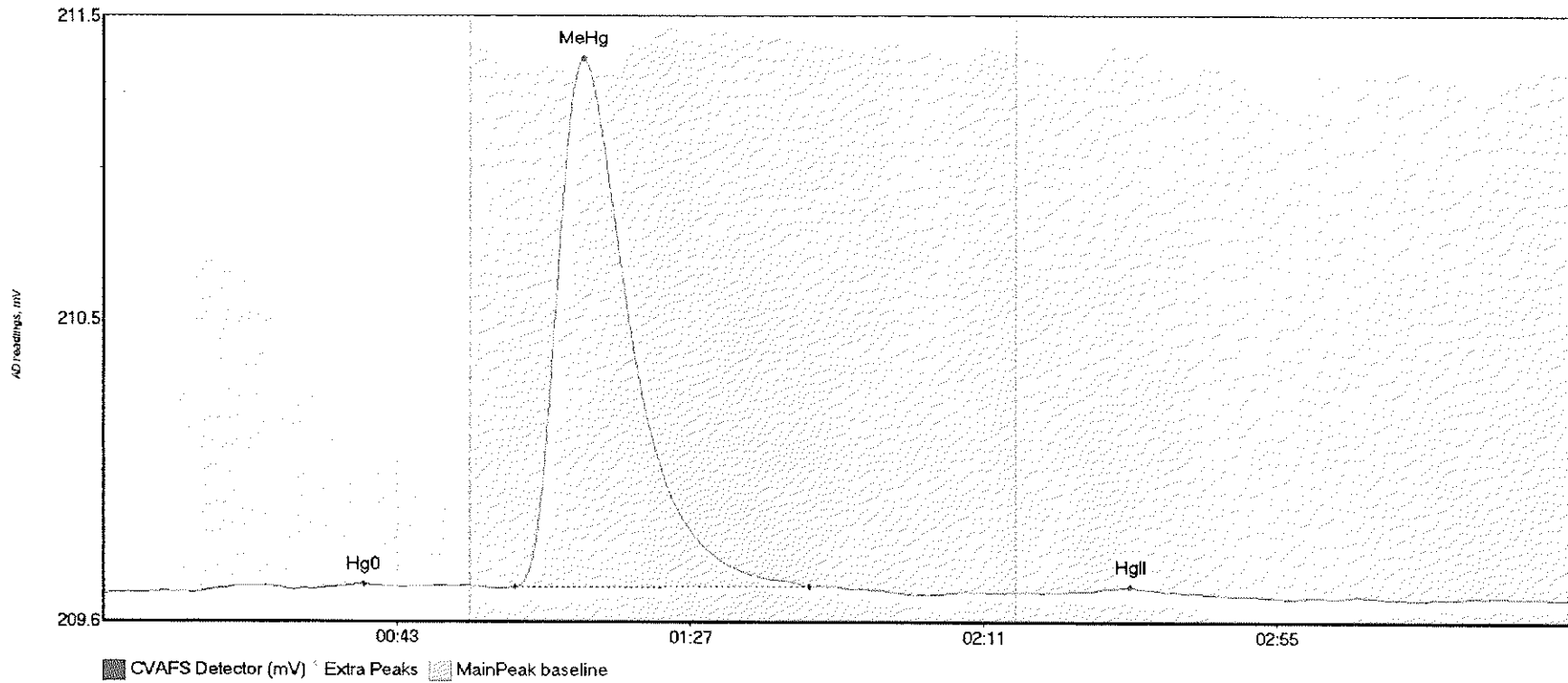
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CAL4 Hg0	4.880	16.4	53.1	209.79	209.81	39.9	0.035	OK	209.7956	0.00	-0.02	
SEQ-CAL4 MeHg	908.967	60.9	118.9	209.81	209.82	71.8	6.936	OK	209.7956	0.00	-0.02	
SEQ-CAL4 HgII	51.808	139.6	178.7	209.80	209.80	154.4	0.302	OK	209.7956	0.00	-0.02	

#8: SEQ-CAL5



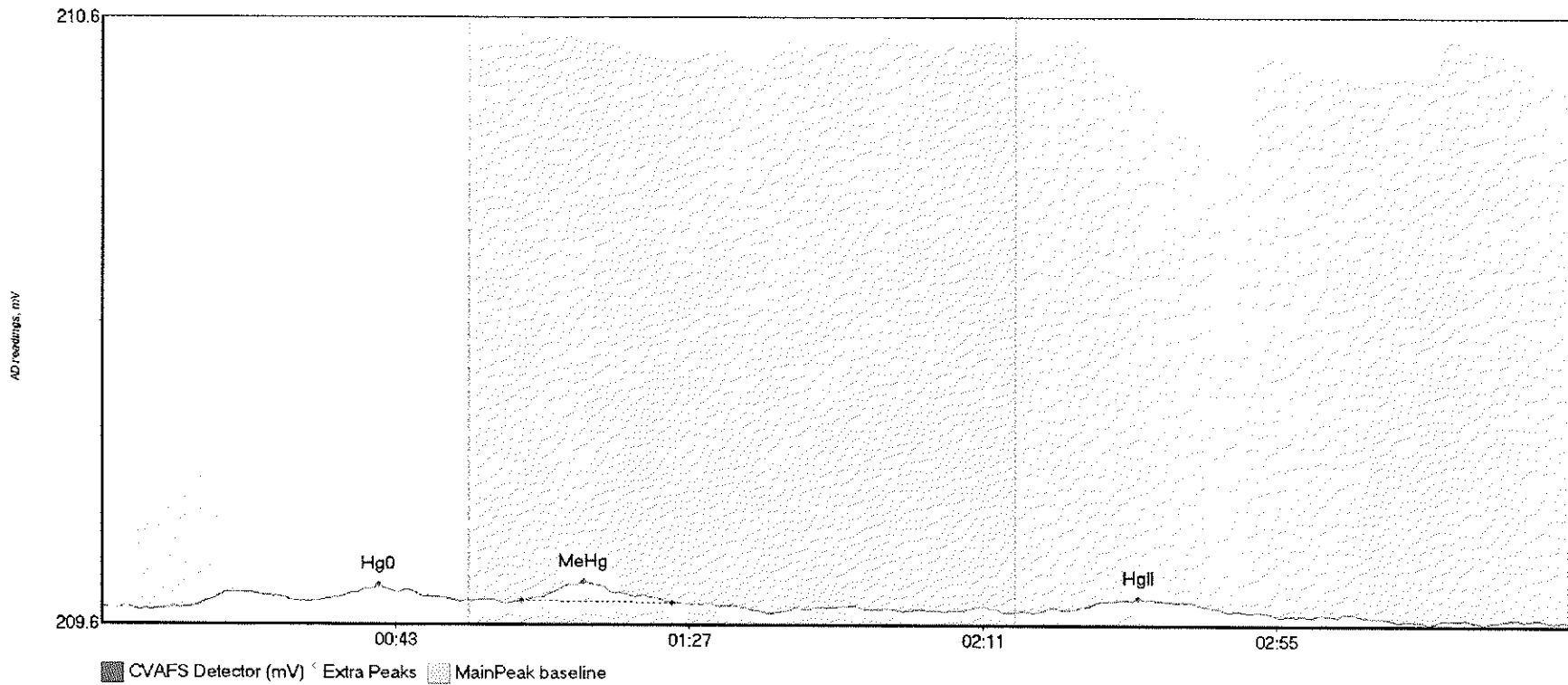
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CAL5 Hg0	6.568	12.5	55.0	209.70	209.72	39.7	0.038	CT	209.7071	0.00	0.00	
SEQ-CAL5 MeHg	1804.267	59.7	136.8	209.72	209.73	72.2	13.585	CT	209.7071	0.00	0.00	
SEQ-CAL5 HgII	94.809	138.6	183.2	209.74	209.74	155.0	0.543	OK	209.7071	0.00	0.00	

#9: SEQ-ICV1



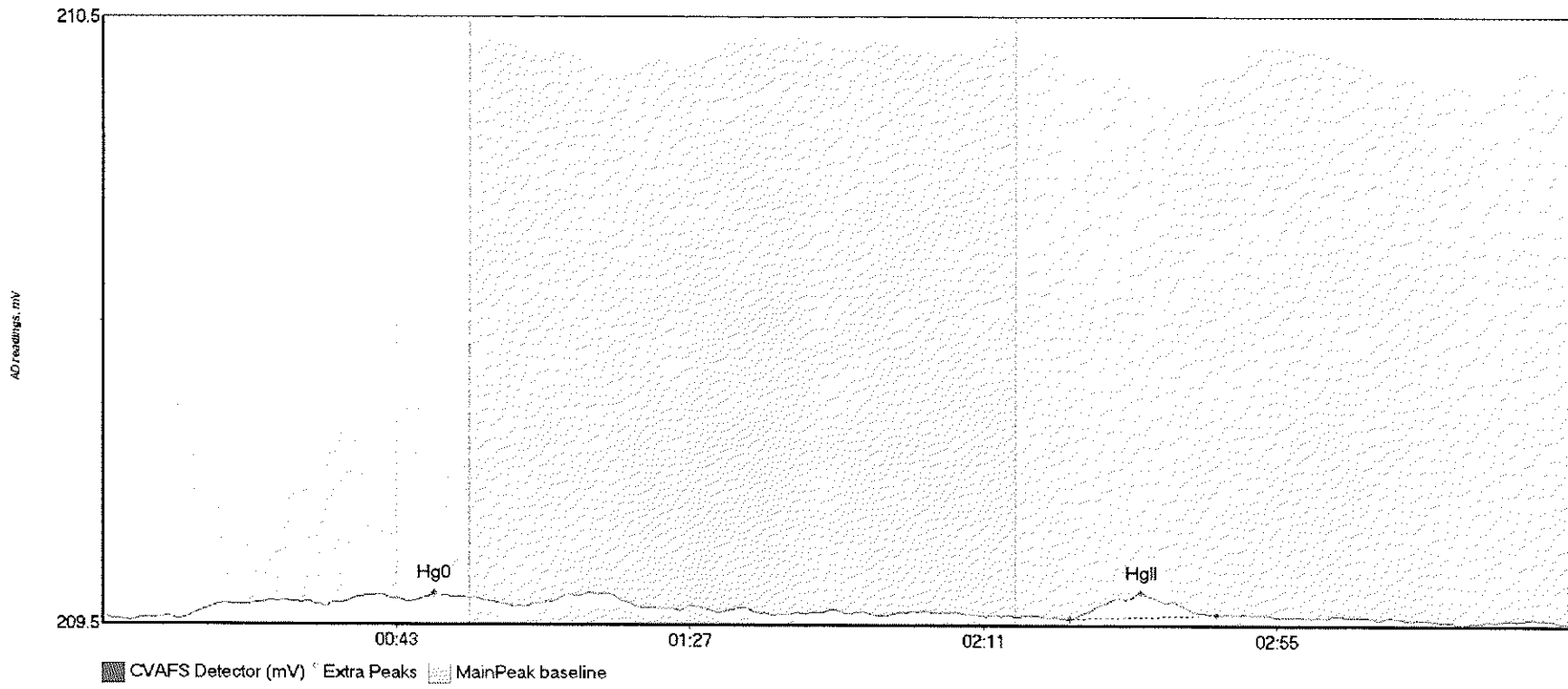
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-ICV1 Hg0	2.667	13.5	45.1	209.65	209.66	39.0	0.027	OK	209.6417	0.00	-0.01	
SEQ-ICV1 MeHg	217.345	61.7	105.9	209.66	209.67	72.0	1.695	OK	209.6417	0.00	-0.01	
SEQ-ICV1 HgII	0.930	148.0	159.6	209.65	209.65	154.0	0.012	OK	209.6417	0.00	-0.01	

#10: SEQ-ICB1



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-ICB1 Hg0	5.755	12.9	53.7	209.59	209.60	41.5	0.035	OK	209.5894	0.00	-0.02	
SEQ-ICB1 MeHg	3.537	62.8	85.4	209.60	209.60	72.1	0.032	OK	209.5894	0.00	-0.02	
SEQ-ICB1 HgII	2.917	144.6	168.5	209.59	209.58	155.3	0.018	OK	209.5894	0.00	-0.02	

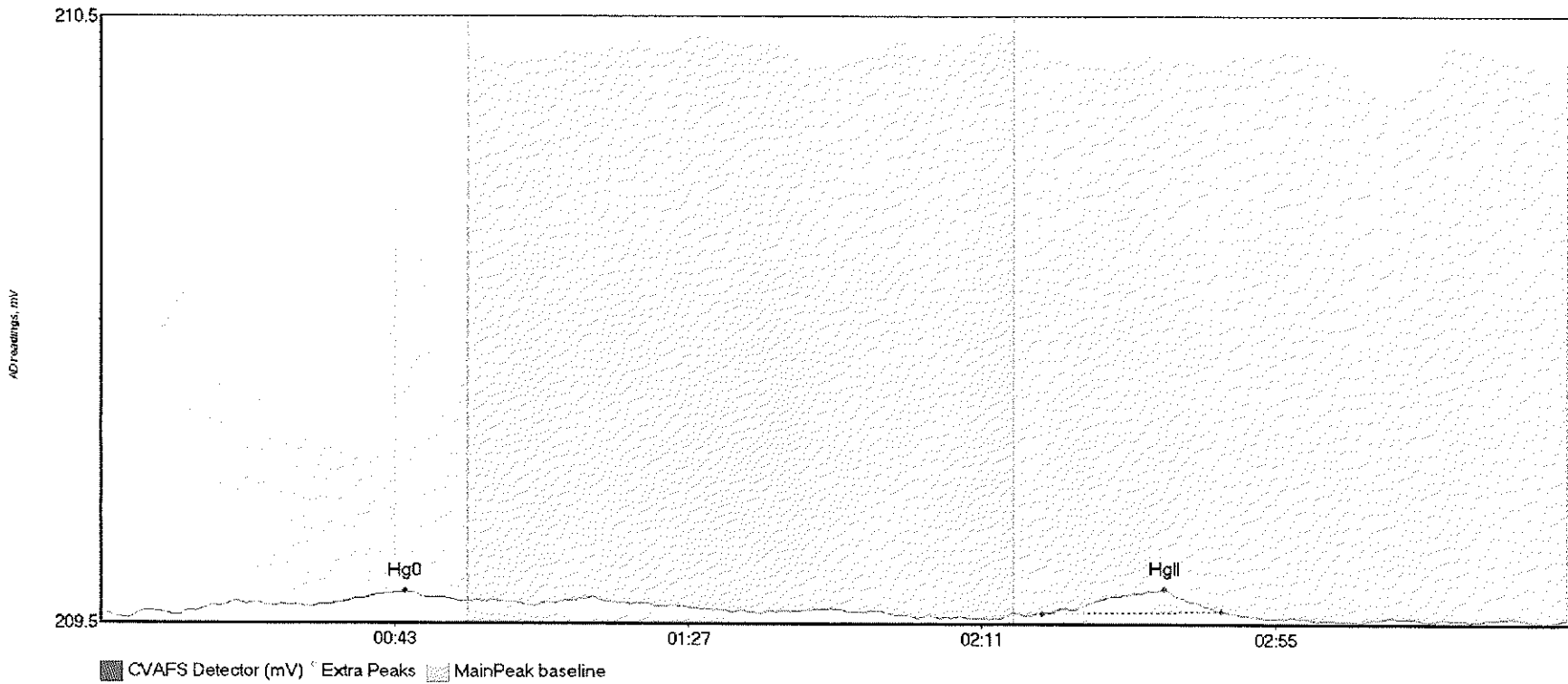
#11: F707566-BLK1



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F707566-BLK1 Hg	4.524	11.6	55.0	209.54	209.57	49.7	0.039	CT	209.5402	0.00	-0.01	
F707566-BLK1 Hg	4.492	145.0	167.1	209.54	209.54	155.7	0.044	OK	209.5402	0.00	-0.01	017

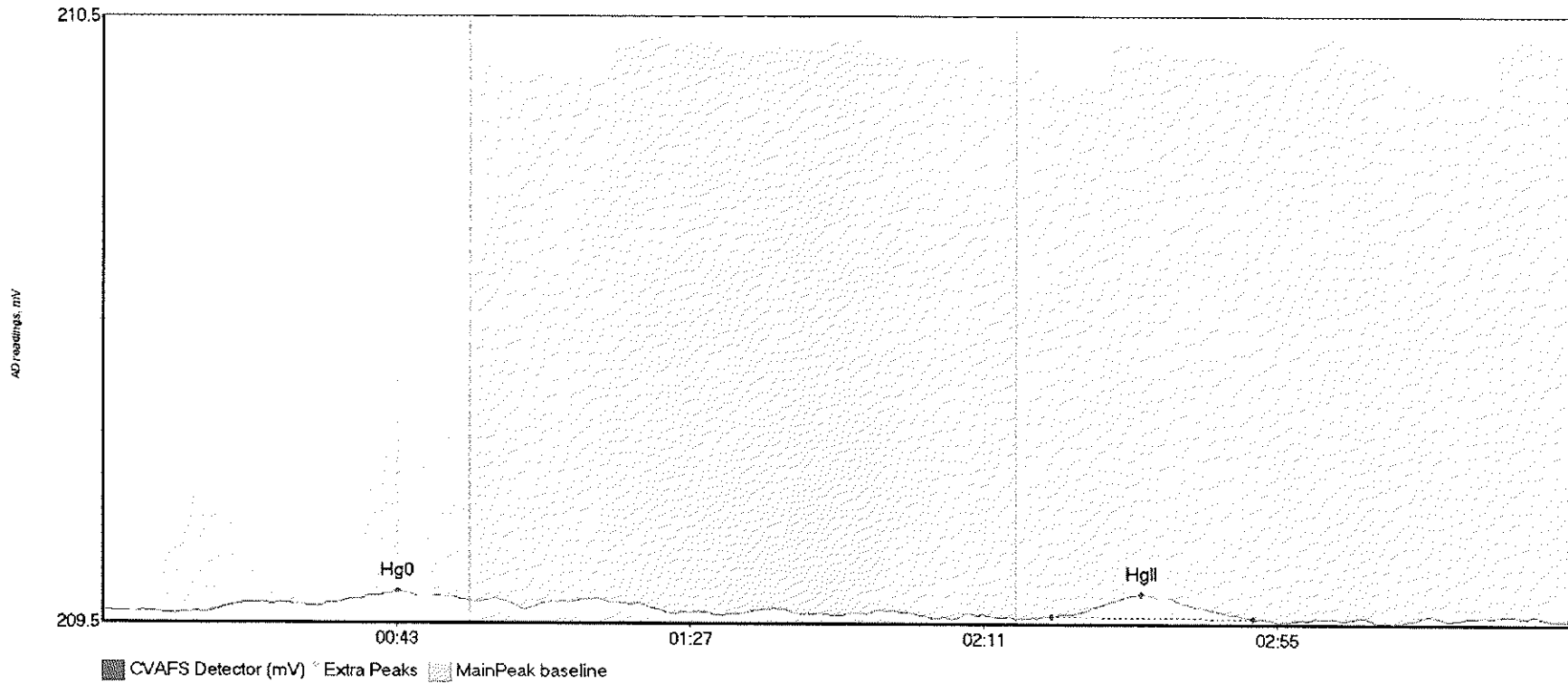


#12: F707566-BLK2



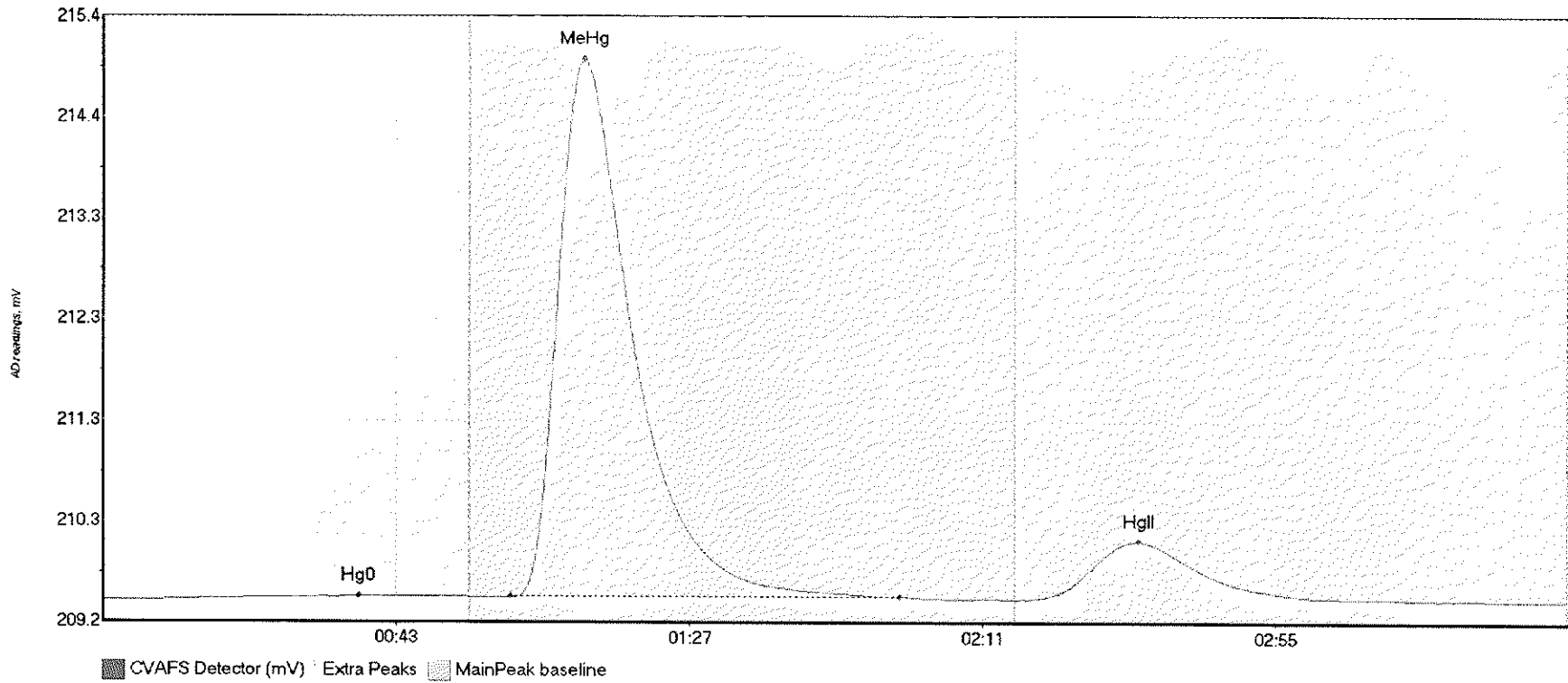
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F707566-BLK2 Hg	3.627	14.2	54.5	209.52	209.54	45.6	0.032	OK	209.5178	0.00	-0.01	
F707566-BLK2 Hg	5.197	141.1	168.1	209.52	209.52	159.5	0.039	OK	209.5178	0.00	-0.01	017

#13: F707566-BLK3



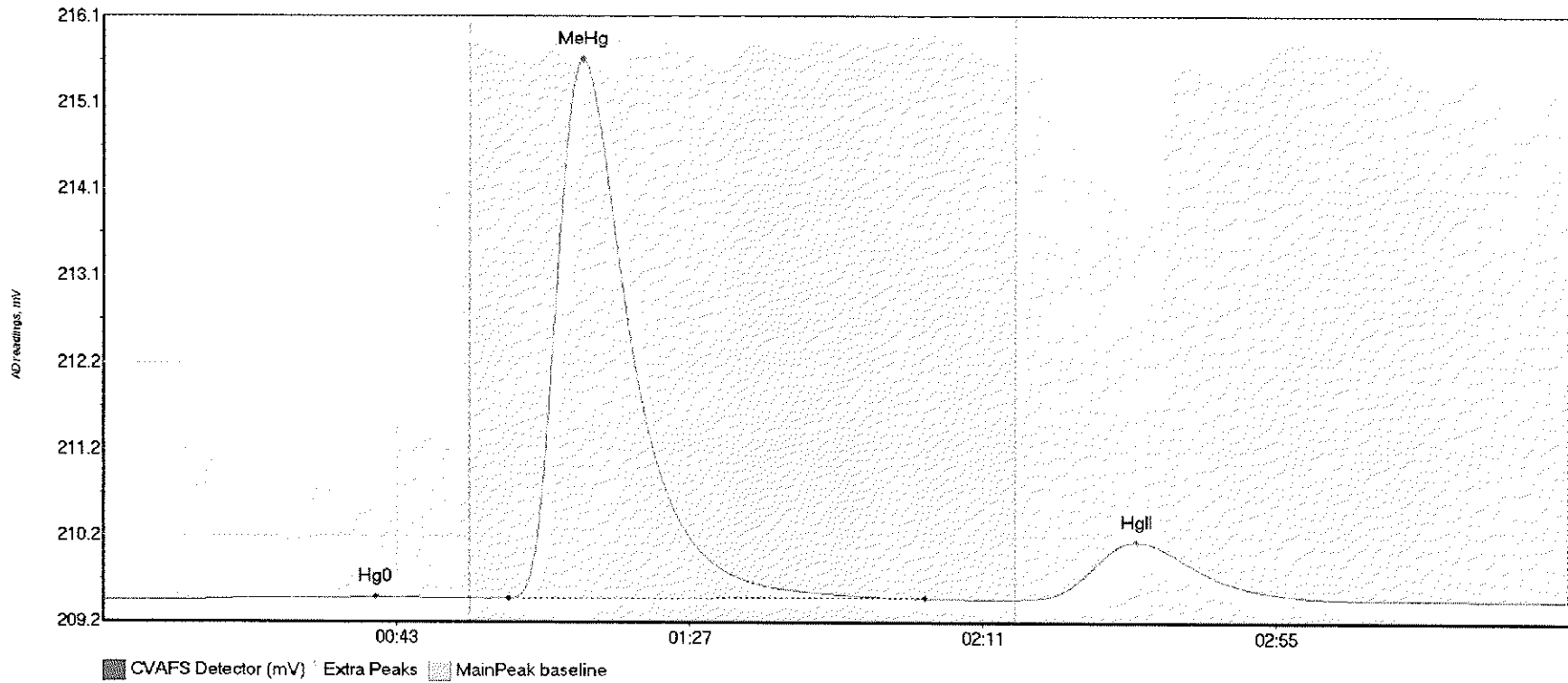
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F707566-BLK3 Hg	3.196	17.2	55.0	209.50	209.51	44.2	0.030	CT	209.4975	0.00	-0.02	
F707566-BLK3 Hg	5.828	142.2	172.5	209.49	209.49	155.8	0.038	OK	209.4975	0.00	-0.02	J17

#14: F707566-BS1



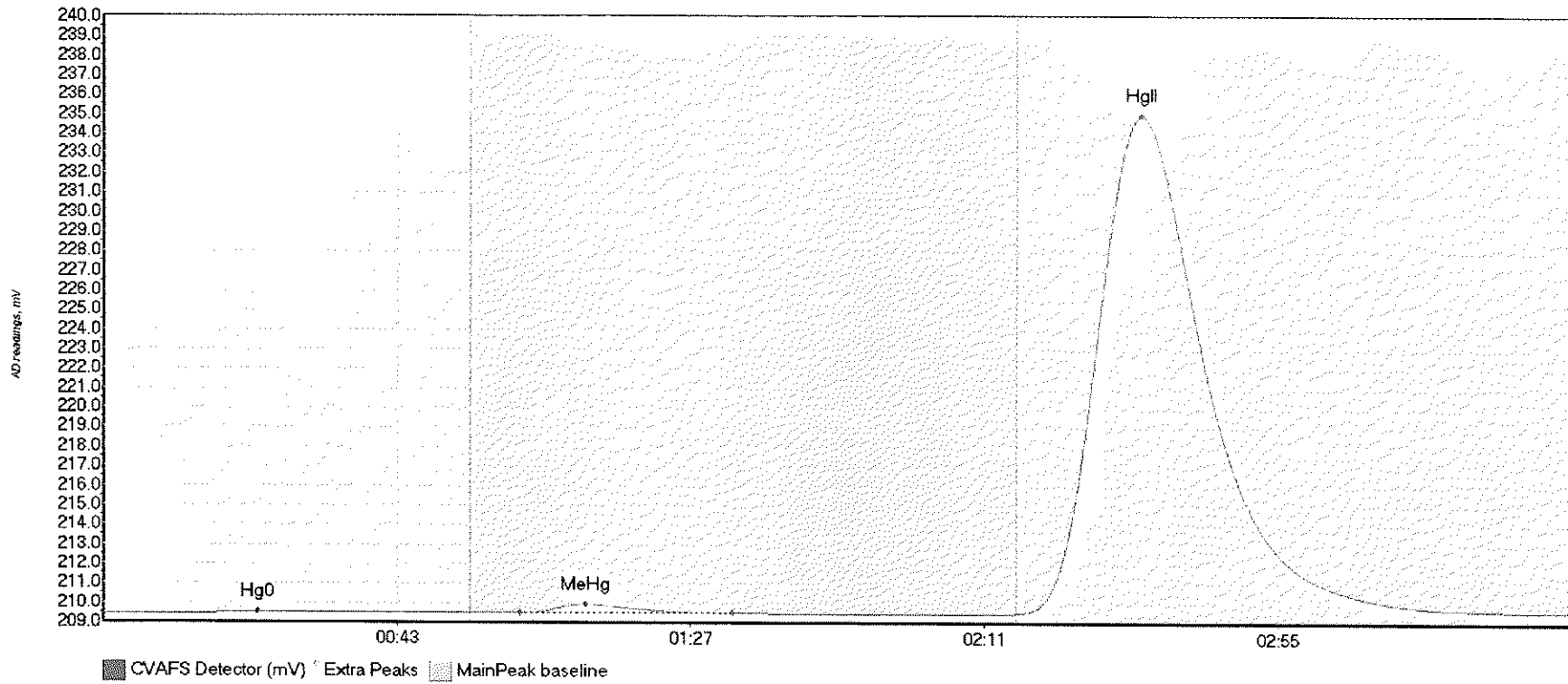
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F707566-BS1 Hg0	5.055	12.6	55.0	209.47	209.50	38.4	0.034	CT	209.4671	0.00	-0.01	
F707566-BS1 MeH	714.299	61.1	119.6	209.49	209.50	72.3	5.461	OK	209.4671	0.00	-0.01	
F707566-BS1 HgI	105.323	139.3	190.2	209.48	209.48	155.4	0.590	OK	209.4671	0.00	-0.01	

#15: F707566-BSD1



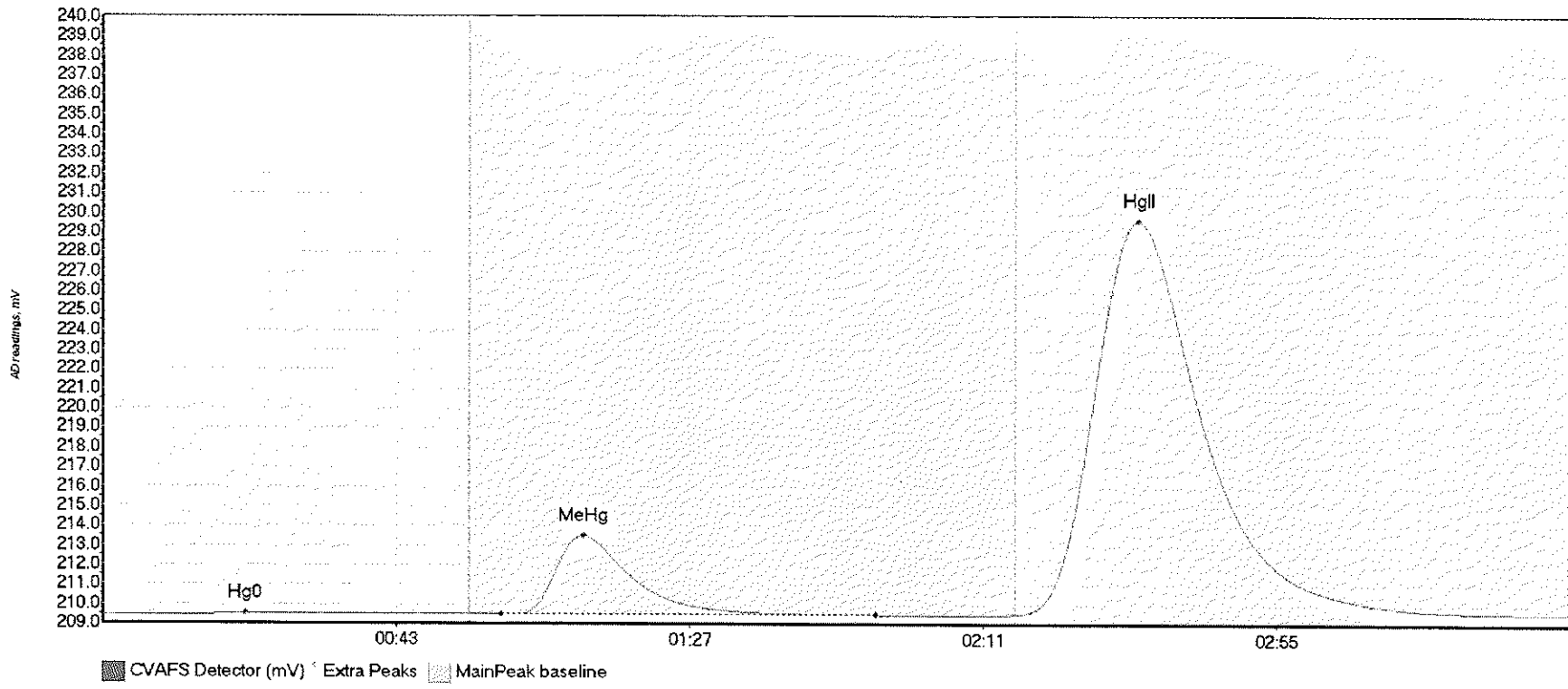
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F707566-BSD1 Hg	3.978	14.6	55.0	209.46	209.47	40.8	0.032	CT	209.4518	0.00	0.00	
F707566-BSD1 Me	802.987	60.9	123.3	209.47	209.47	72.0	6.131	OK	209.4518	0.00	0.00	
F707566-BSD1 Hg	117.451	138.4	187.4	209.47	209.47	155.0	0.657	OK	209.4518	0.00	0.00	

#16: F707566-DUP1



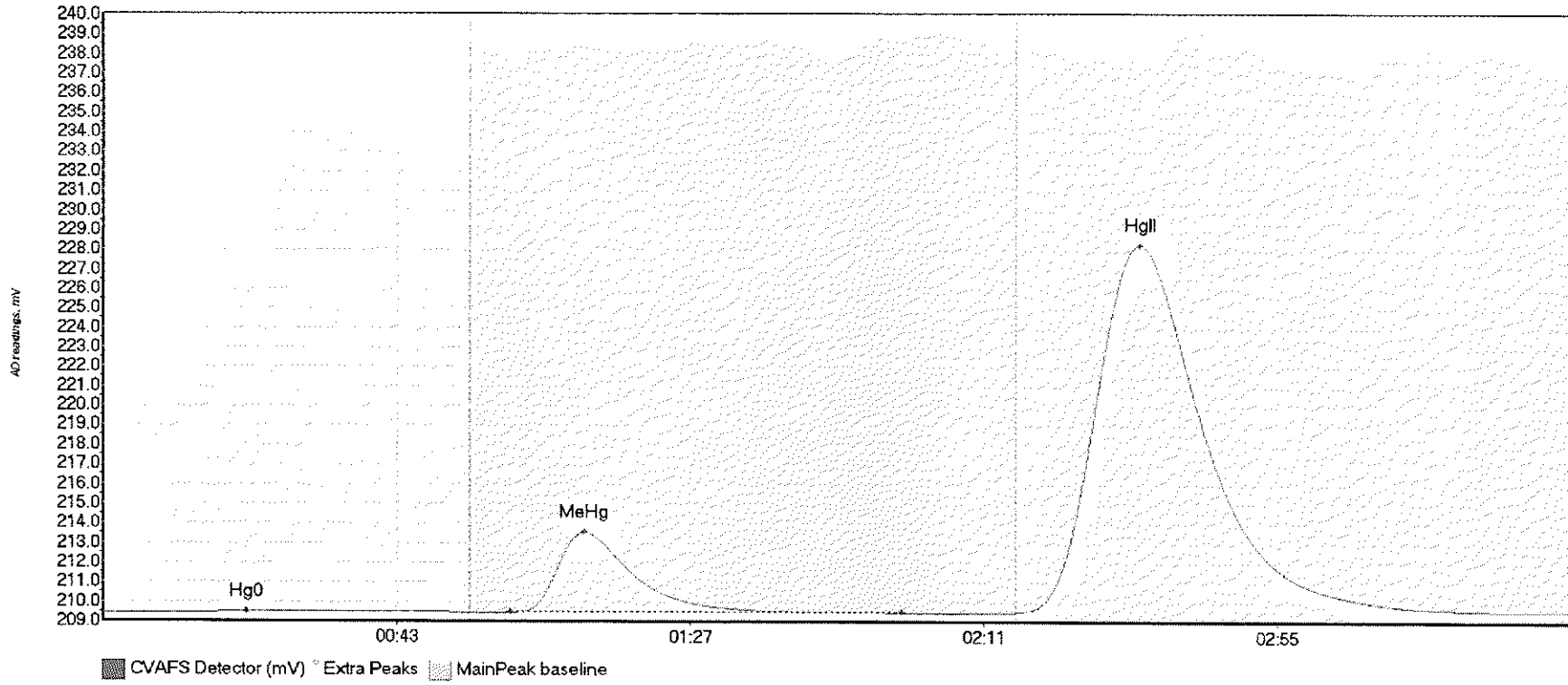
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F707566-DUP1 Hg	3.382	14.0	30.6	209.44	209.47	23.2	0.050	OK	209.4508	0.00	0.12	
F707566-DUP1 Me	53.936	62.4	94.3	209.48	209.48	72.3	0.445	OK	209.4508	0.00	0.12	
F707566-DUP1 Hg	4777.887	136.8	219.8	209.47	209.57	155.5	25.443	CT	209.4508	0.00	0.12	

#17: F707566-MS1



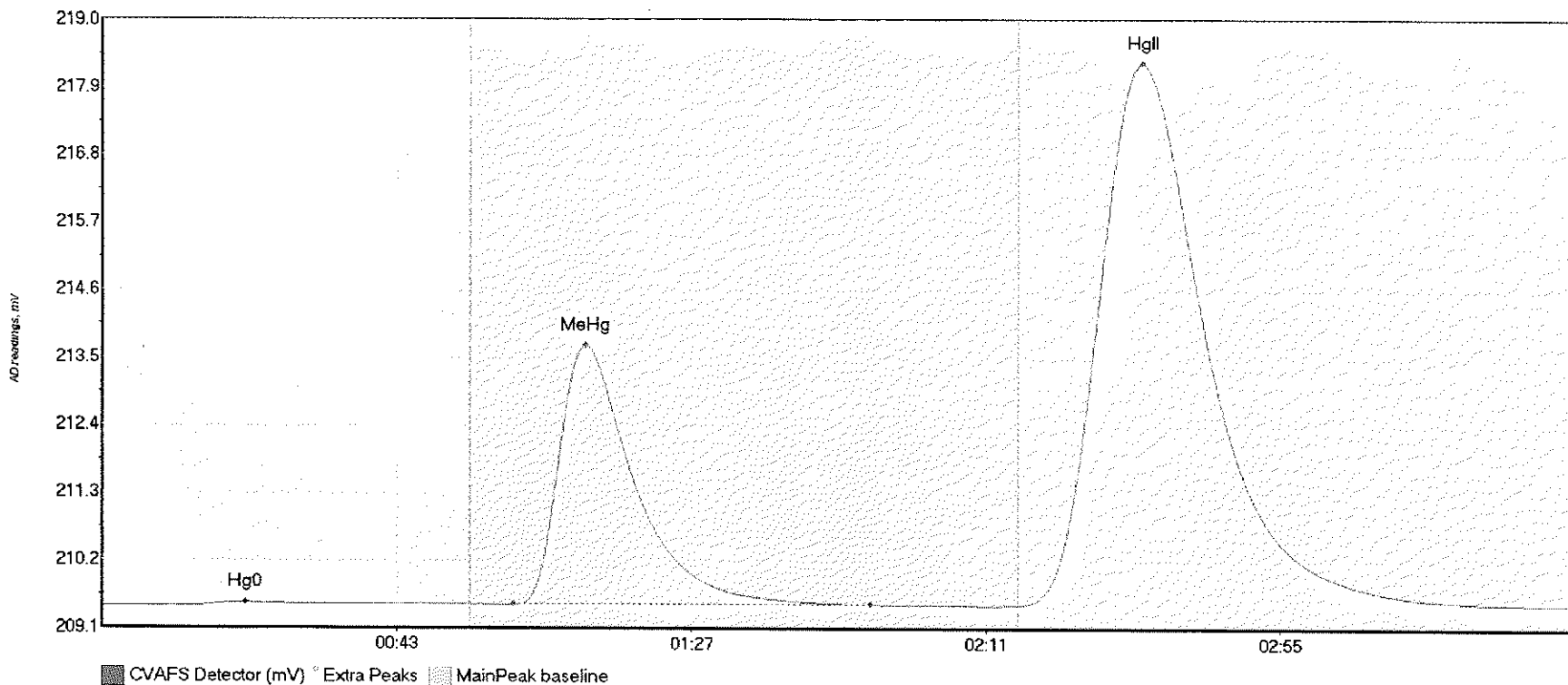
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F707566-MS1 Hg0	11.464	11.3	54.9	209.43	209.47	21.4	0.066	OK	209.4381	0.00	0.09	
F707566-MS1 MeH	522.222	59.7	115.9	209.47	209.47	72.1	4.020	OK	209.4381	0.00	0.09	
F707566-MS1 HgI	3776.015	136.8	219.8	209.48	209.53	155.3	20.144	CT	209.4381	0.00	0.09	

#18: F707566-MSD1



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F707566-MSD1 Hg	12.638	12.9	54.9	209.43	209.46	21.6	0.062	OK	209.4322	0.00	0.09	
F707566-MSD1 Me	528.620	61.0	119.7	209.46	209.46	72.2	4.065	OK	209.4322	0.00	0.09	
F707566-MSD1 Hg	3534.179	136.8	218.3	209.46	209.52	155.4	18.819	OK	209.4322	0.00	0.09	

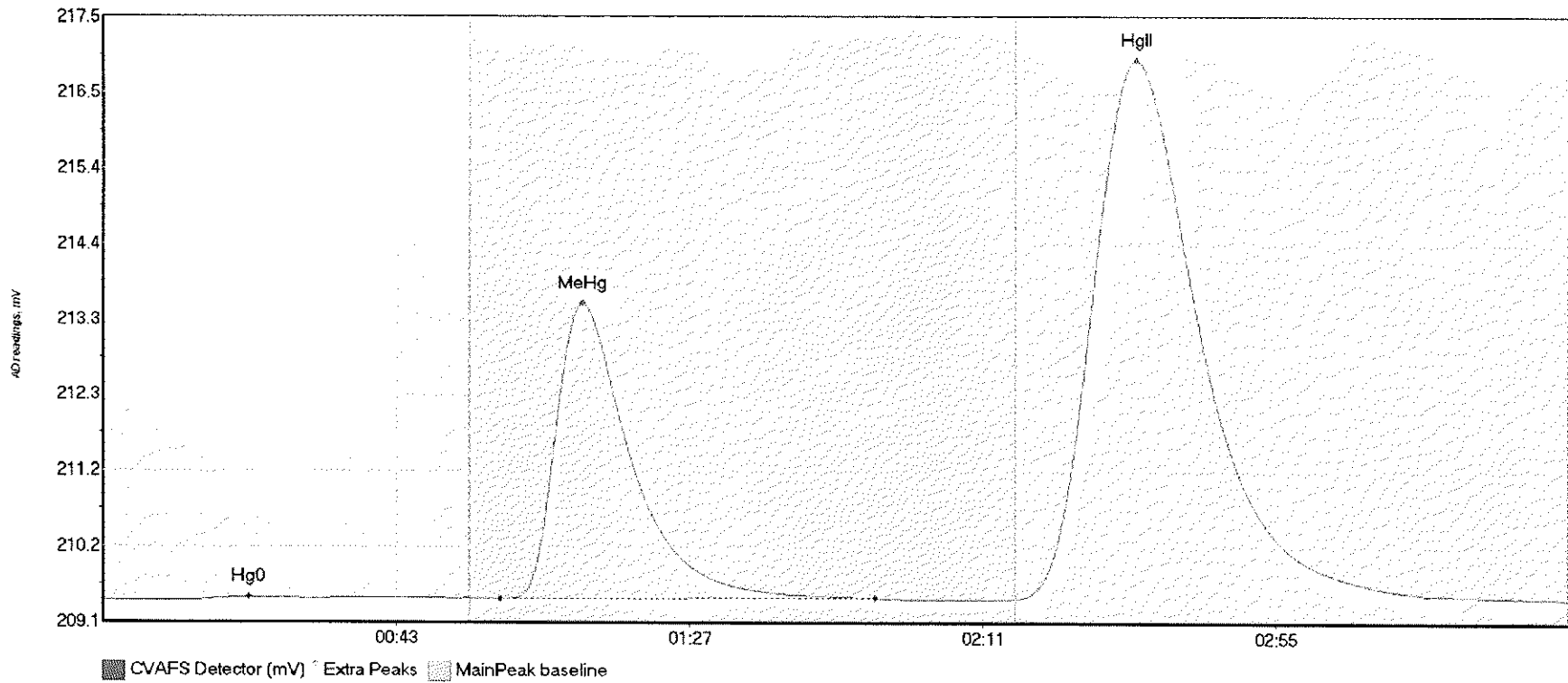
#19: F707566-MS2



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	StDev	StShift	Comment
F707566-MS2 Hg0	9.612	13.2	55.0	209.43	209.46	21.4	0.056	CT	209.4296	0.00	0.04	
F707566-MS2 MeH	544.474	61.5	114.7	209.46	209.46	72.2	4.213	OK	209.4296	0.00	0.04	
F707566-MS2 HgI	1643.280	136.8	219.8	209.45	209.46	155.4	8.814	CT	209.4296	0.00	0.04	

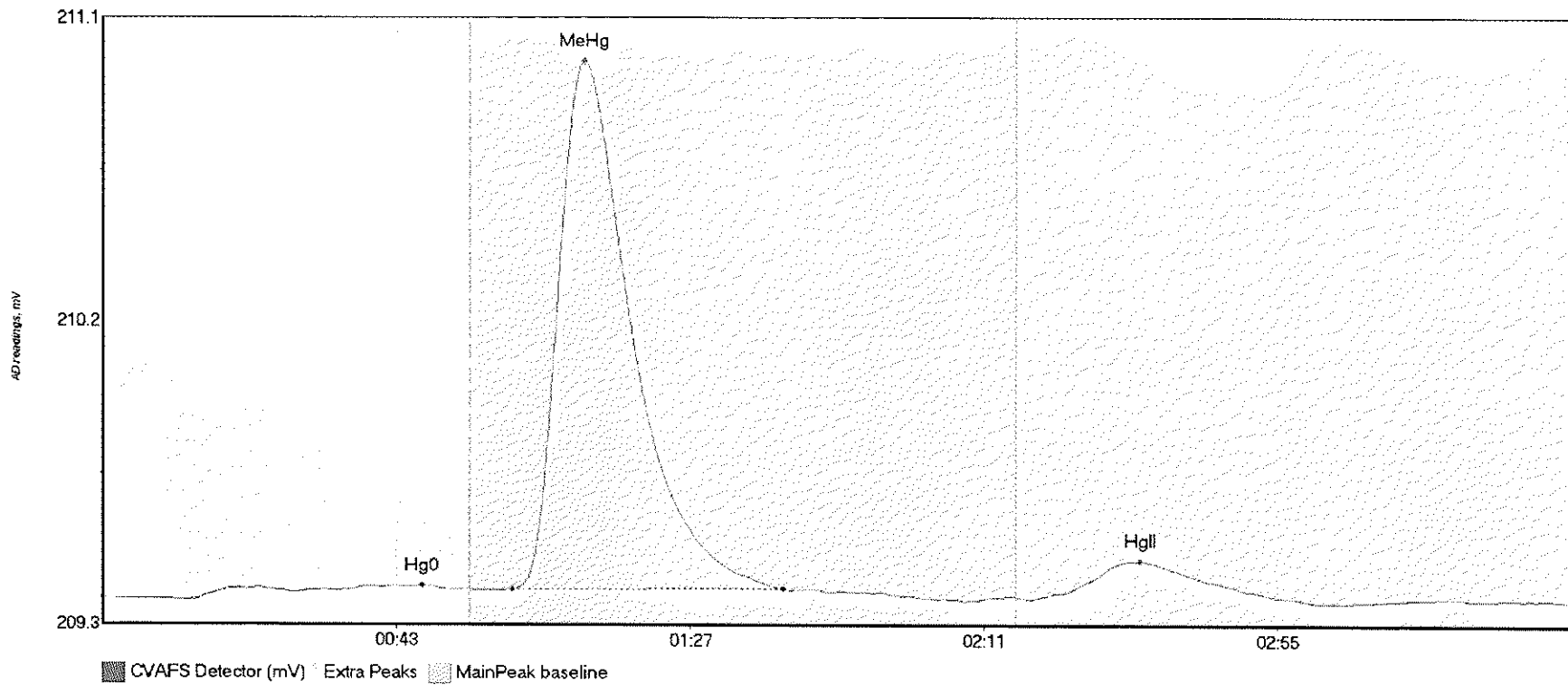


#20: F707566-MSD2



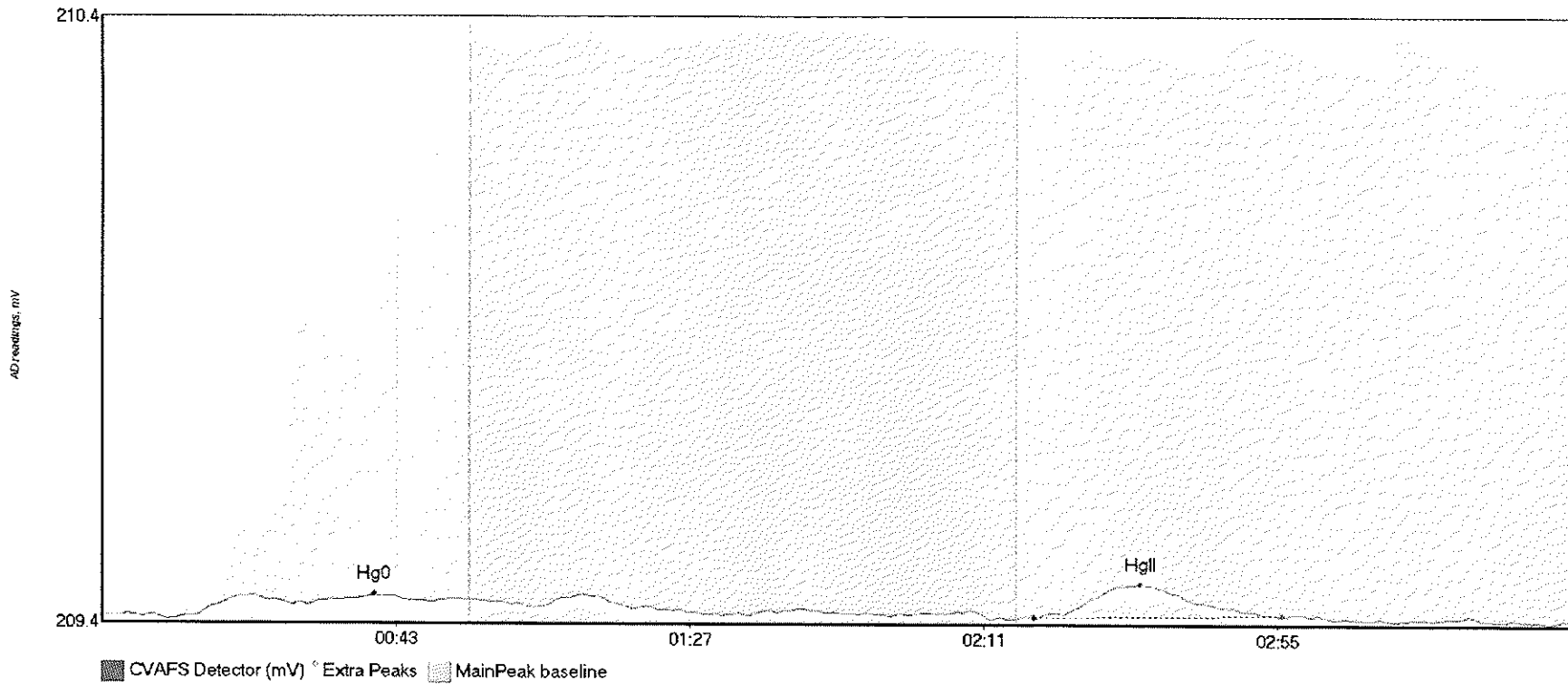
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F707566-MSD2 Hg	8.398	12.4	52.5	209.42	209.45	21.8	0.048	OK	209.4203	0.00	0.03	
F707566-MSD2 Me	532.739	59.6	115.9	209.45	209.46	71.9	4.088	OK	209.4203	0.00	0.03	
F707566-MSD2 Hg	1404.975	136.8	219.8	209.45	209.45	155.0	7.477	CT	209.4203	0.00	0.03	

#21: SEQ-CCV1



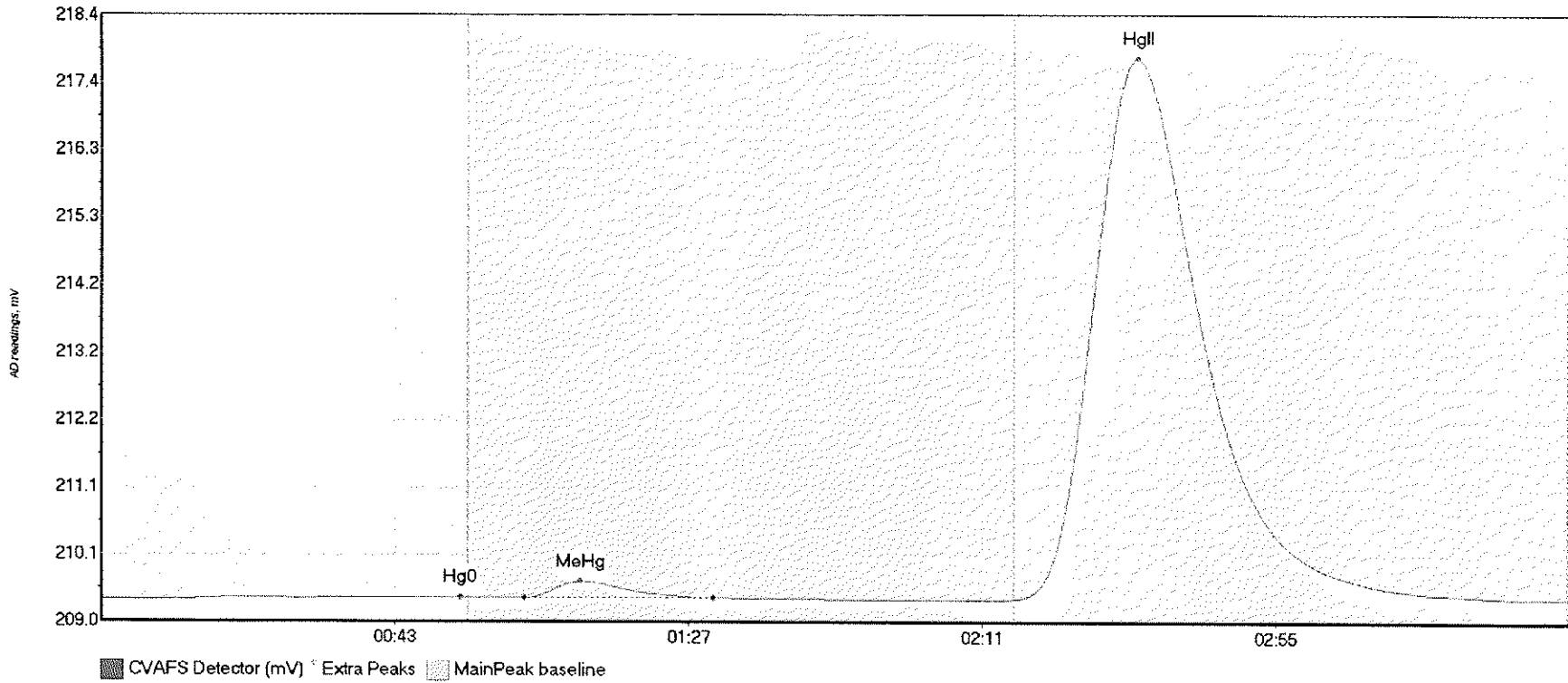
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CCV1 Hg0	6.184	13.7	52.7	209.41	209.44	47.8	0.042	OK	209.4145	0.00	-0.01	
SEQ-CCV1 MeHg	198.590	61.4	101.9	209.44	209.44	72.2	1.567	OK	209.4145	0.00	-0.01	
SEQ-CCV1 HgII	19.703	139.1	176.3	209.41	209.42	155.4	0.115	OK	209.4145	0.00	-0.01	

#22: SEQ-CCB1



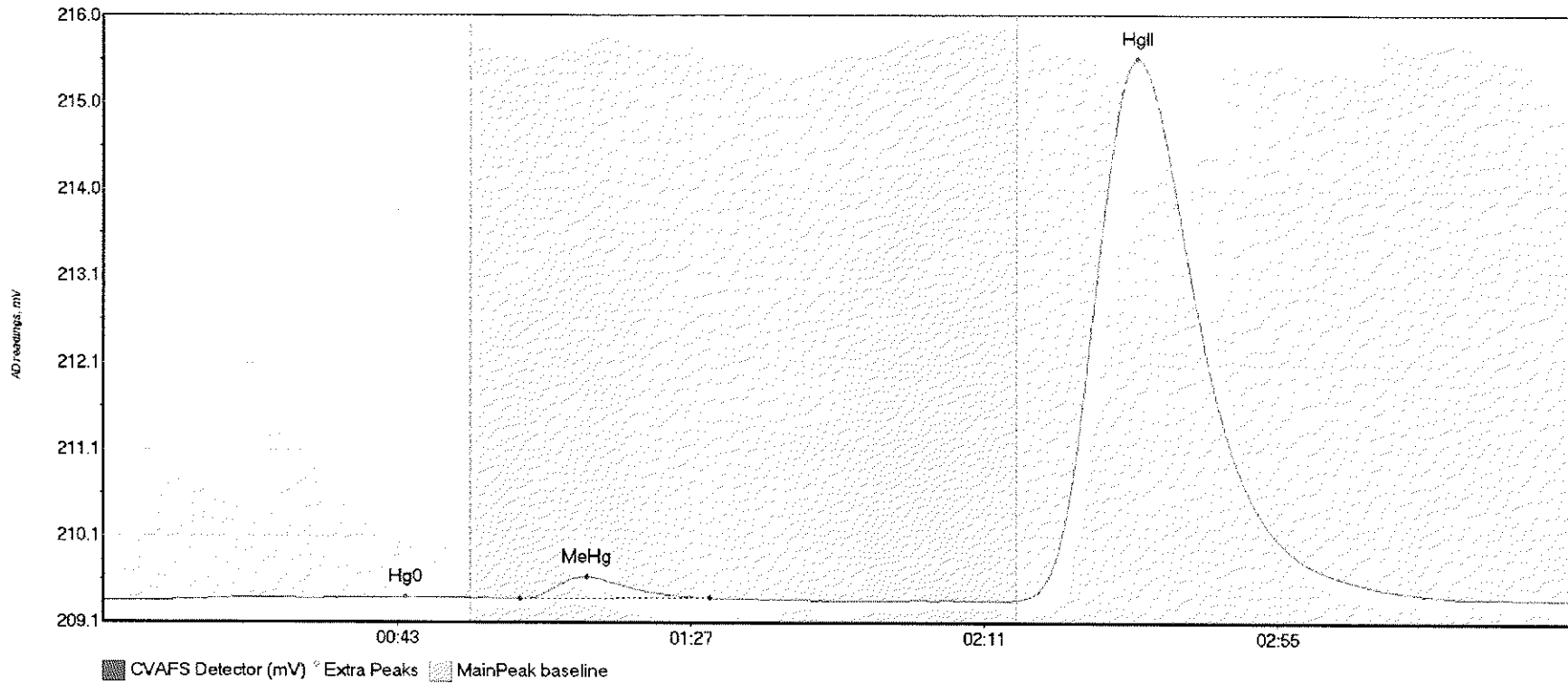
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CCB1 Hg0	4.964	14.0	49.1	209.40	209.43	40.7	0.035	OK	209.4031	0.00	0.00	
SEQ-CCB1 HgII	9.205	139.5	176.7	209.40	209.40	155.5	0.055	OK	209.4031	0.00	0.00	317

#23: 1707771-01



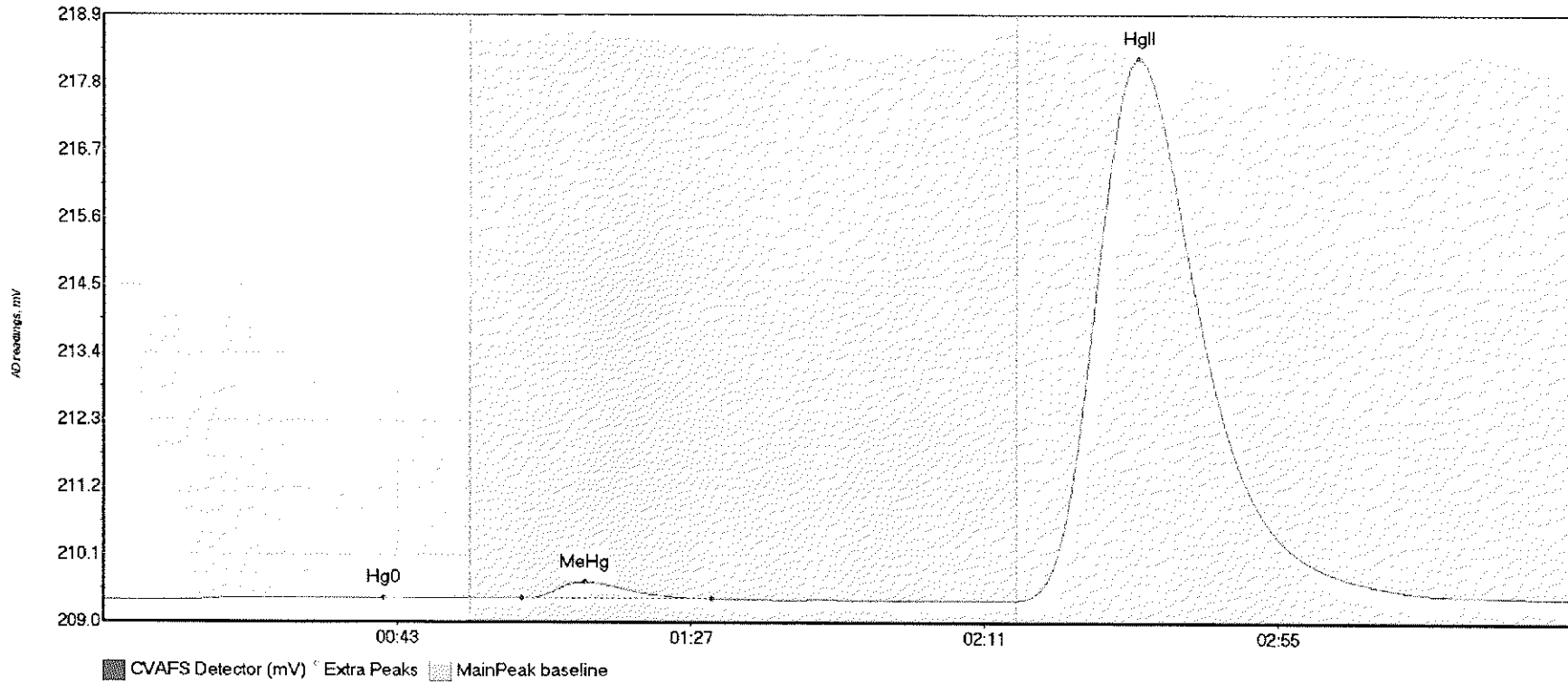
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1707771-01 Hg0	3.600	12.7	55.0	209.39	209.42	53.9	0.031	CT	209.3885	0.00	0.04	
1707771-01 MeHg	29.689	63.4	91.8	209.41	209.41	71.9	0.249	OK	209.3885	0.00	0.04	
1707771-01 HgII	1571.786	136.8	215.9	209.40	209.42	155.4	8.331	OK	209.3885	0.00	0.04	

#24: 1707771-02



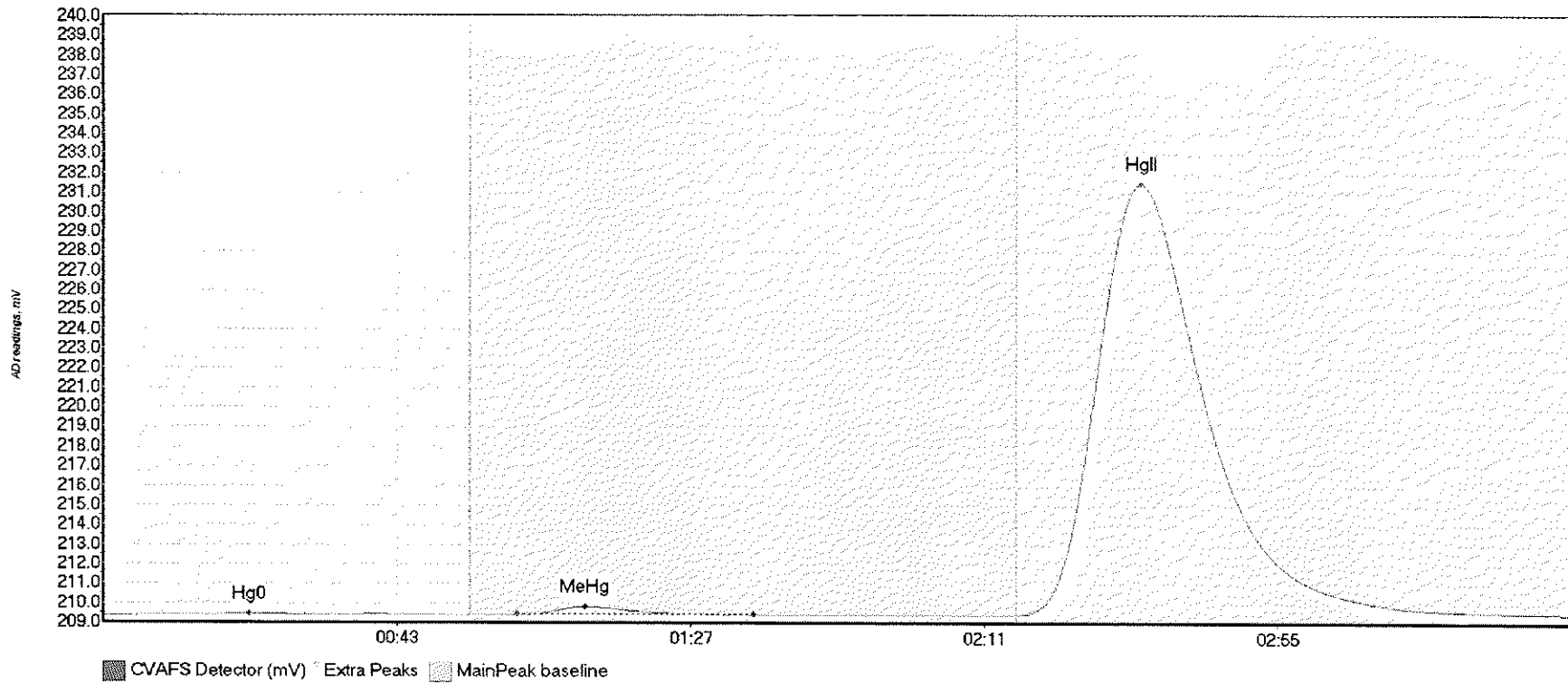
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1707771-02 Hg0	6.195	9.1	55.0	209.38	209.41	45.3	0.037	CT	209.3852	0.00	0.02	
1707771-02 MeHg	28.793	62.5	90.9	209.41	209.41	72.4	0.244	OK	209.3852	0.00	0.02	
1707771-02 HgII	1141.959	136.8	219.4	209.39	209.40	155.1	6.128	OK	209.3852	0.00	0.02	

#25: 1707771-03



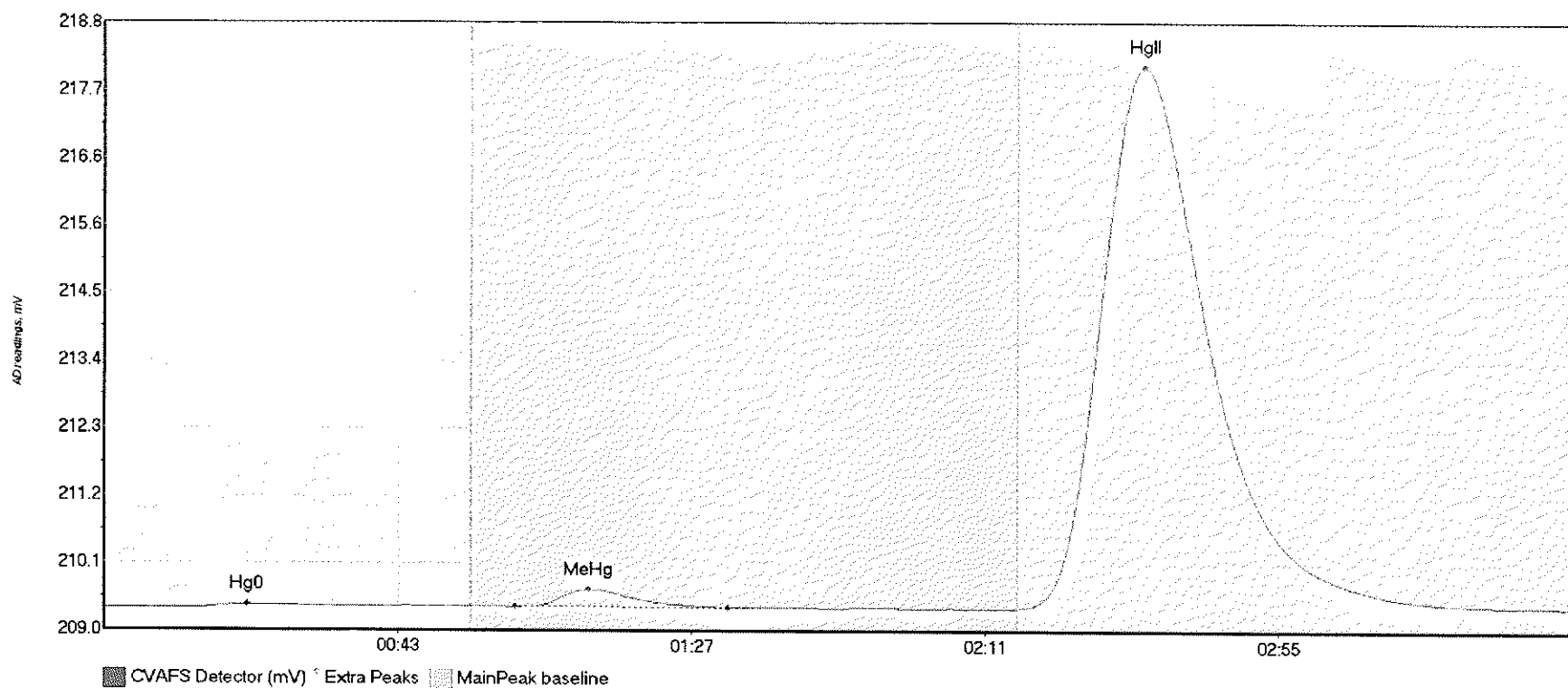
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1707771-03 Hg0	6.370	13.3	54.7	209.37	209.40	42.0	0.036	OK	209.3688	0.00	0.04	
1707771-03 MeHg	31.628	62.7	91.2	209.39	209.39	72.1	0.264	OK	209.3688	0.00	0.04	
1707771-03 HgII	1641.679	136.8	219.3	209.38	209.41	155.2	8.773	OK	209.3688	0.00	0.04	

#26: 1707771-04



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1707771-04 Hg0	8.519	4.9	49.0	209.37	209.41	21.9	0.063	OK	209.3646	0.00	0.10	
1707771-04 MeHg	50.129	62.0	97.4	209.40	209.39	72.2	0.404	OK	209.3646	0.00	0.10	
1707771-04 HgII	4135.422	136.8	219.8	209.40	209.46	155.5	22.070	CT	209.3646	0.00	0.10	

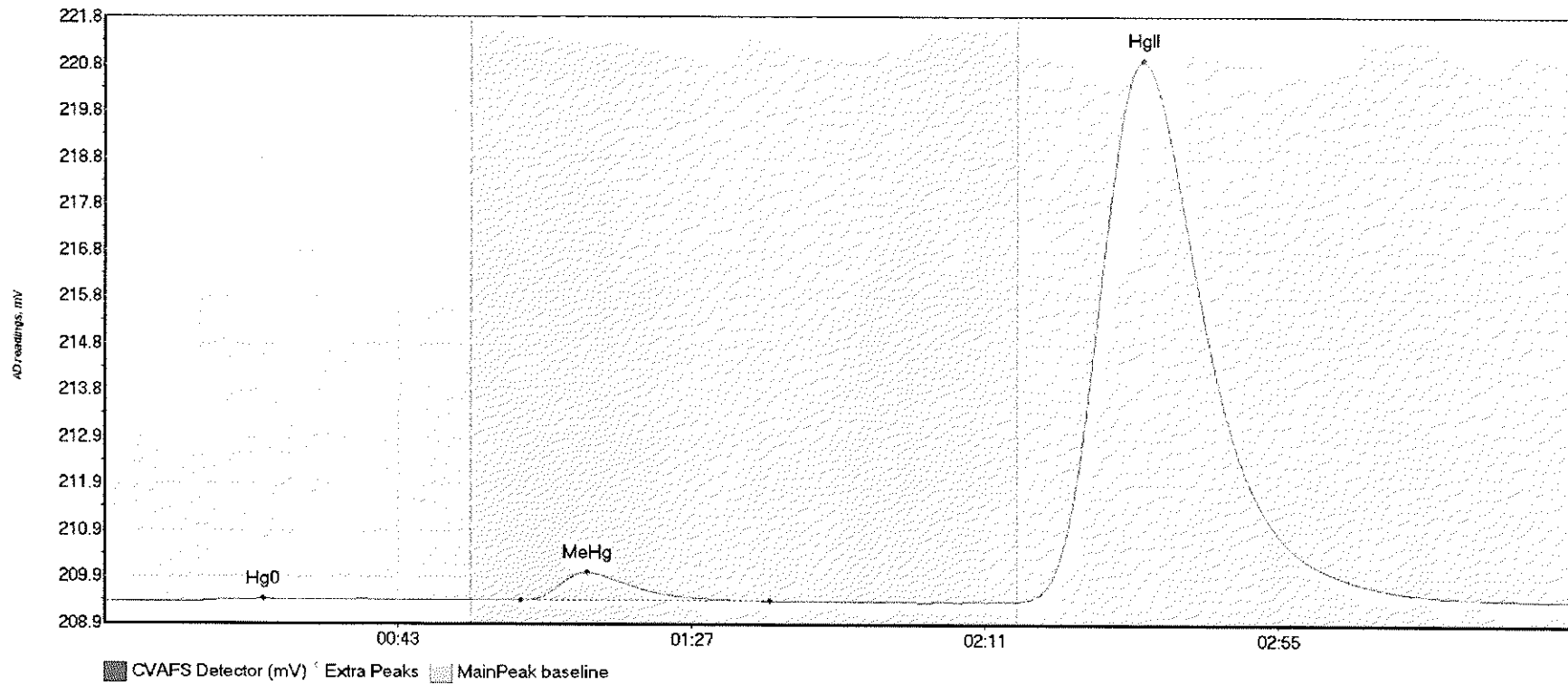
#27: 1707771-05



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1707771-05 Hg0	9.010	13.1	51.4	209.36	209.39	21.5	0.054	OK	209.3632	0.00	0.04	
1707771-05 MeHg	34.605	61.6	93.4	209.38	209.38	72.6	0.286	OK	209.3632	0.00	0.04	
1707771-05 HgII	1638.275	136.8	219.7	209.37	209.40	155.9	8.753	OK	209.3632	0.00	0.04	

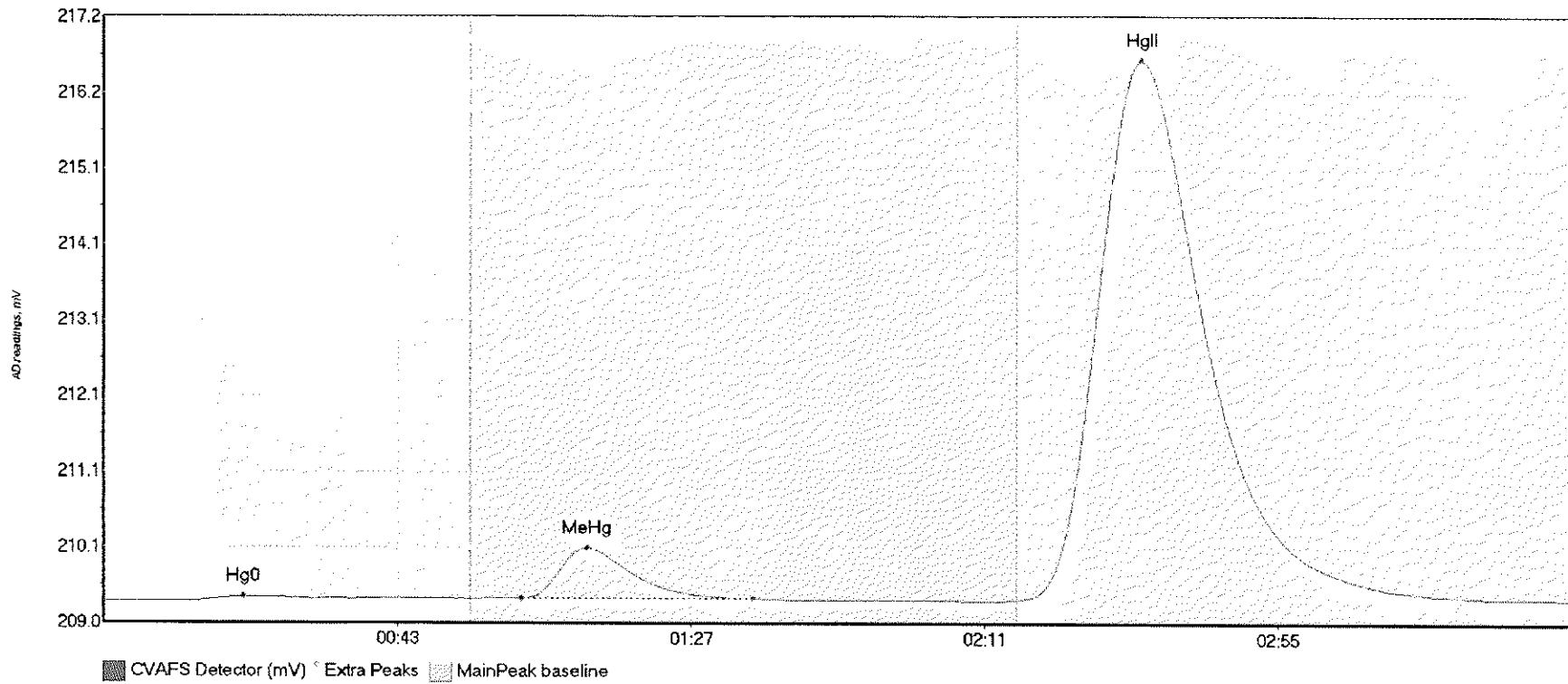


#28: 1707771-06



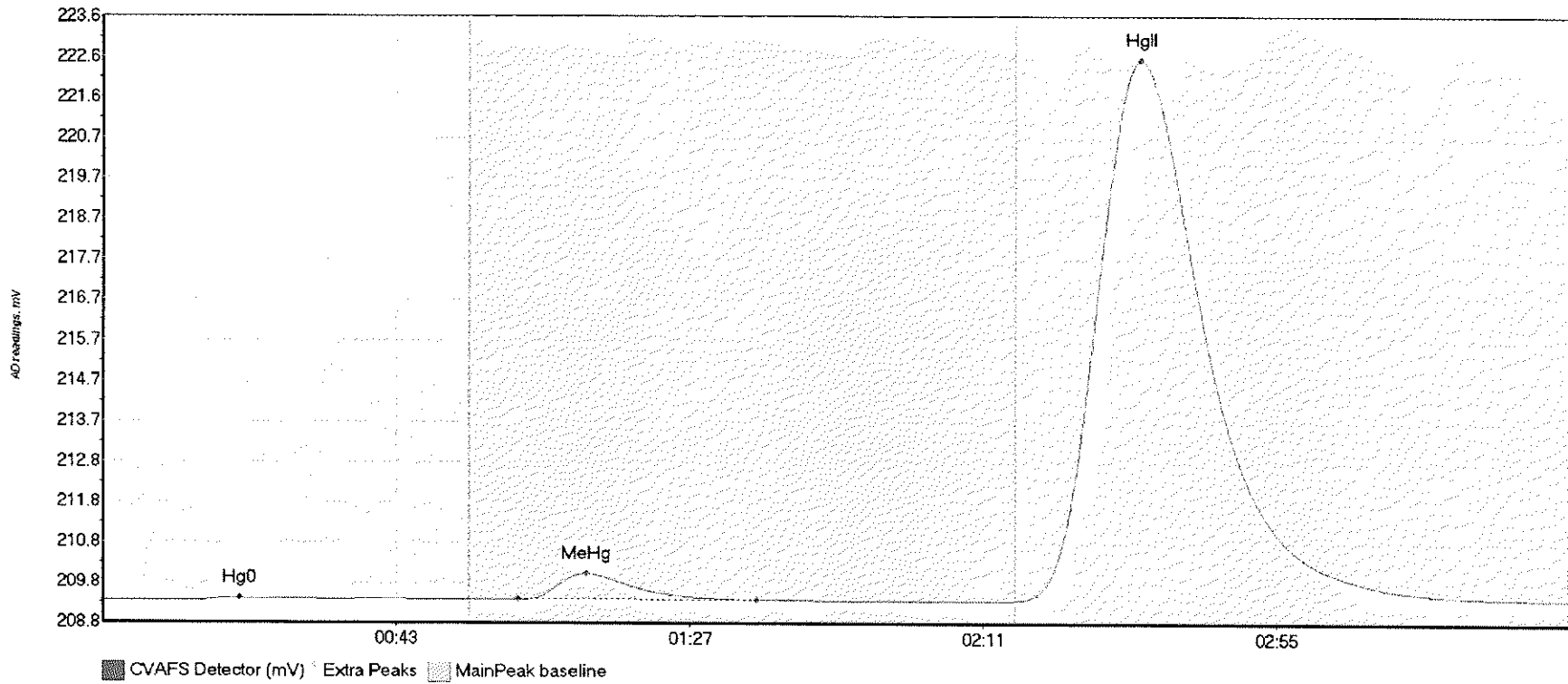
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1707771-06 Hg0	3.360	11.1	30.9	209.35	209.39	23.8	0.053	OK	209.3482	0.00	0.06	
1707771-06 MeHg	74.638	62.4	99.7	209.39	209.38	72.4	0.588	OK	209.3482	0.00	0.06	
1707771-06 HgII	2163.932	136.8	219.8	209.38	209.40	155.7	11.493	CT	209.3482	0.00	0.06	

#29: 1707771-07



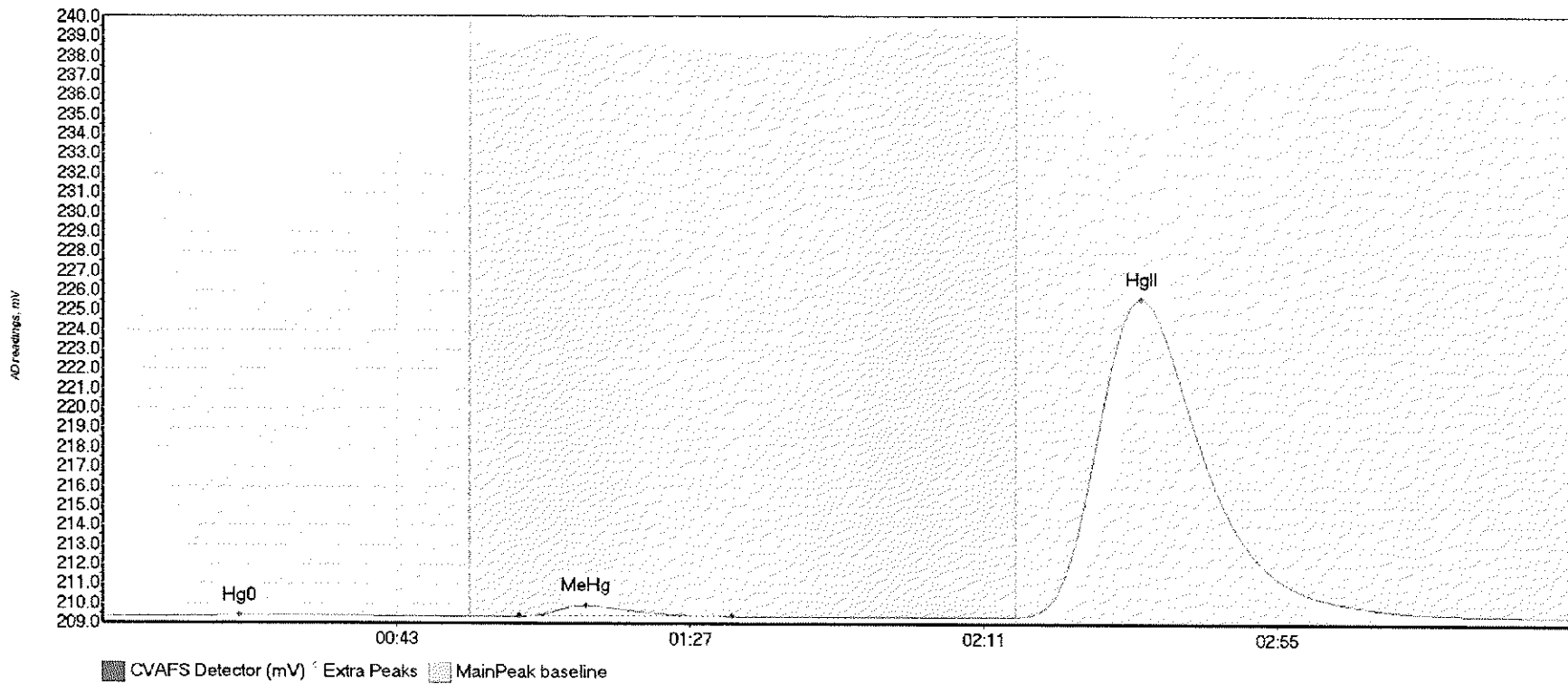
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1707771-07 Hg0	10.545	11.8	55.0	209.34	209.37	21.0	0.061	CT	209.3428	0.00	0.03	
1707771-07 MeHg	82.605	62.6	97.3	209.38	209.38	72.4	0.679	OK	209.3428	0.00	0.03	
1707771-07 HgII	1352.325	136.8	219.8	209.36	209.37	155.6	7.235	CT	209.3428	0.00	0.03	

#30: 1707771-08



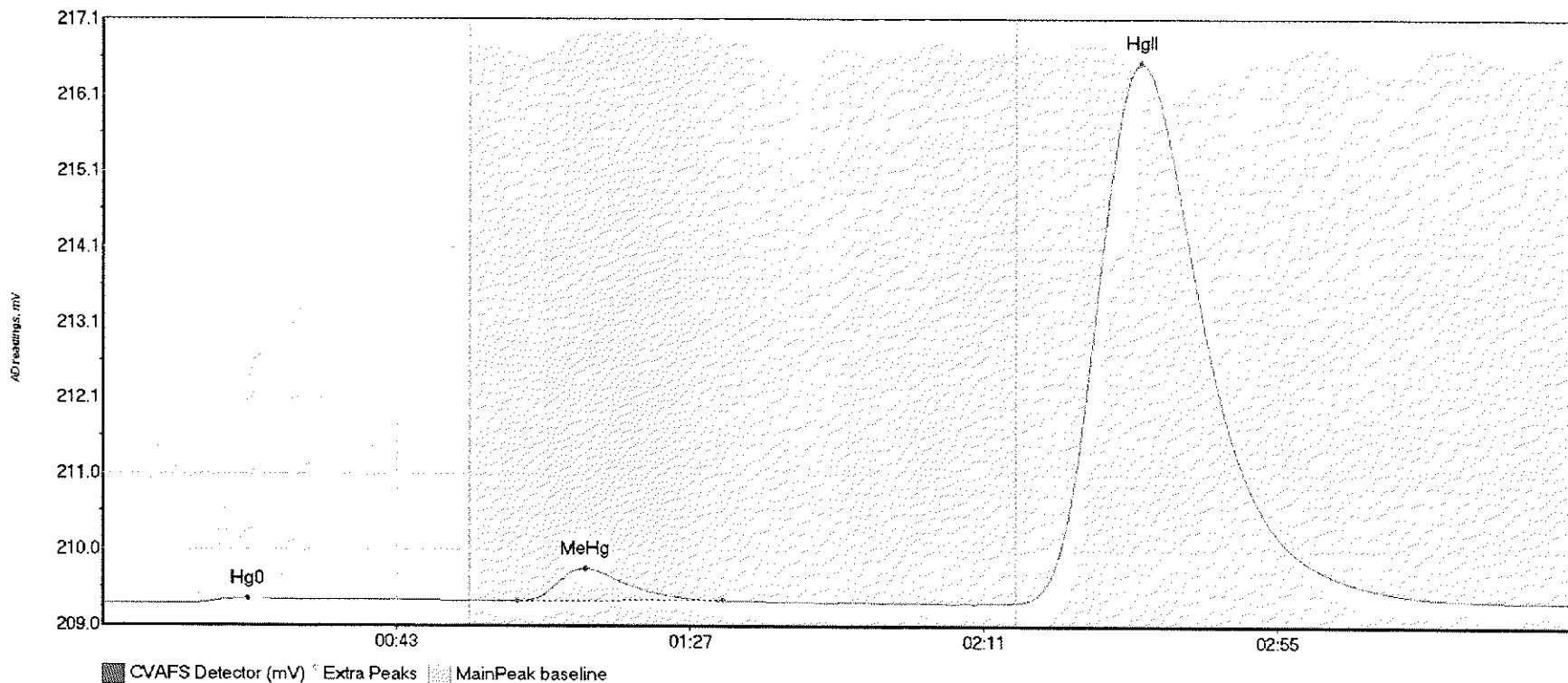
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1707771-08 Hg0	8.447	14.0	47.6	209.34	209.37	20.6	0.059	OK	209.3401	0.00	0.06	
1707771-08 MeHg	79.984	62.3	98.0	209.37	209.37	72.6	0.638	OK	209.3401	0.00	0.06	
1707771-08 HgII	2478.329	136.8	219.8	209.36	209.39	155.7	13.204	CT	209.3401	0.00	0.06	

#31: 1707771-09



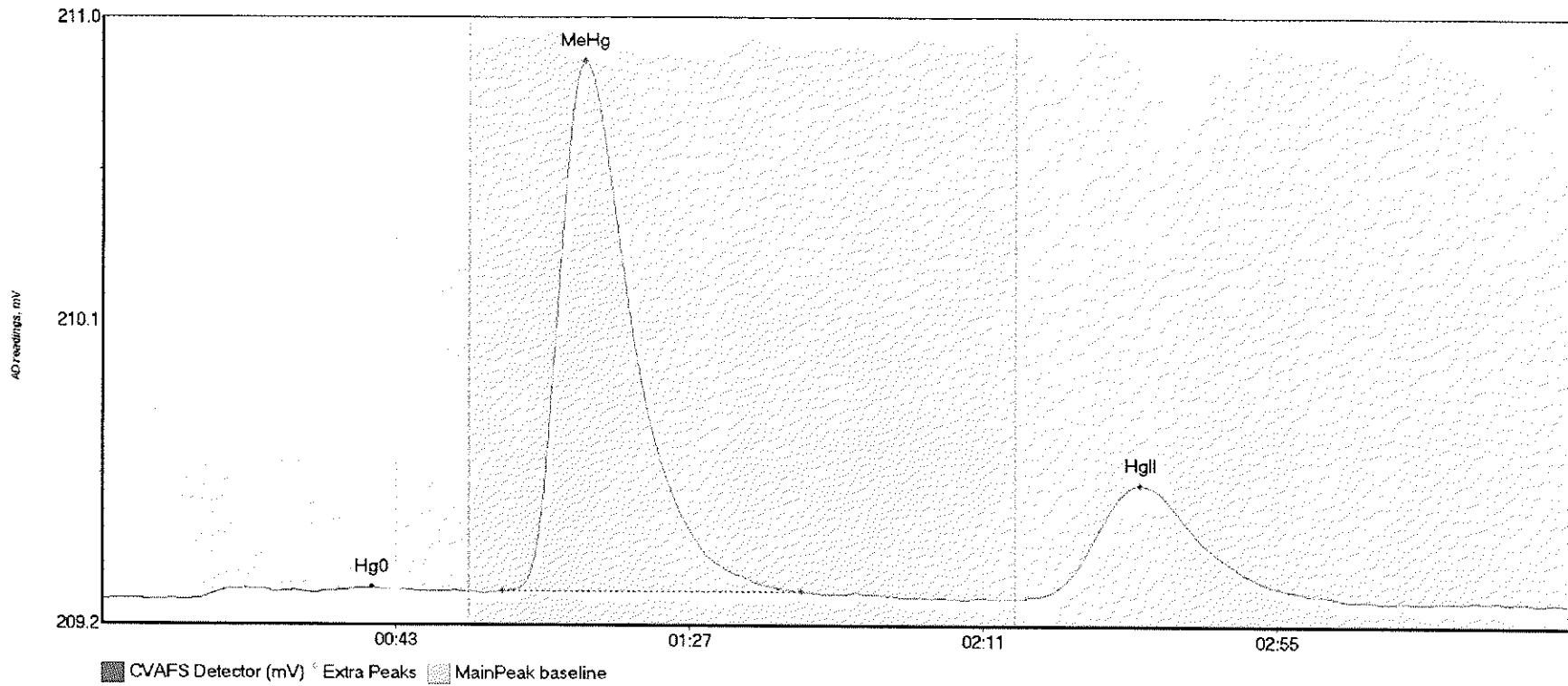
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1707771-09 Hg0	11.255	12.8	53.3	209.32	209.36	20.6	0.069	OK	209.3263	0.00	0.08	
1707771-09 MeHg	66.818	62.4	94.3	209.36	209.36	72.4	0.543	OK	209.3263	0.00	0.08	
1707771-09 HgII	3058.535	136.8	219.5	209.35	209.40	155.6	16.272	OK	209.3263	0.00	0.08	

#32: 1707771-10



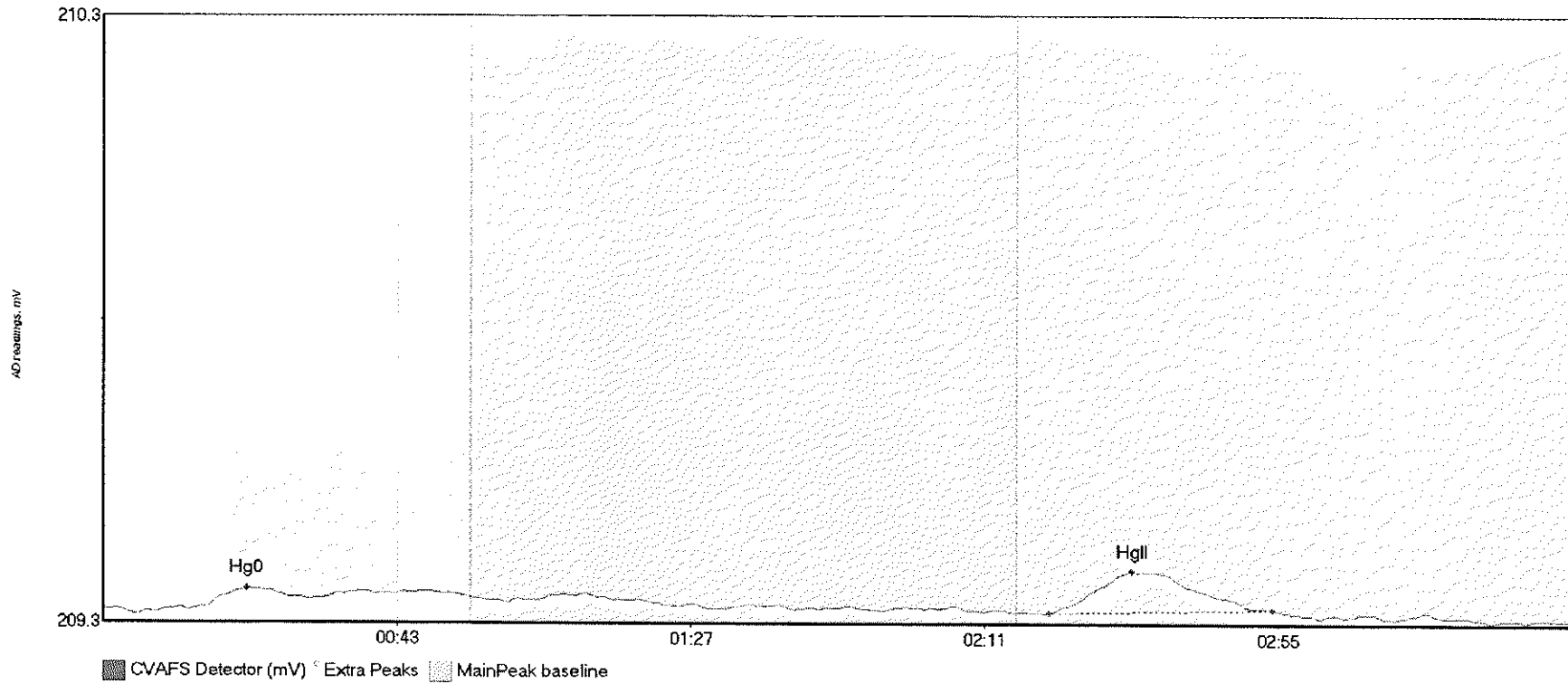
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1707771-10 Hg0	12.077	12.3	52.5	209.31	209.35	21.7	0.068	OK	209.3174	0.00	0.03	
1707771-10 MeHg	51.128	62.1	92.9	209.35	209.36	72.3	0.426	OK	209.3174	0.00	0.03	
1707771-10 HgII	1359.206	136.8	219.6	209.34	209.35	155.6	7.192	OK	209.3174	0.00	0.03	

#33: SEQ-CCV2



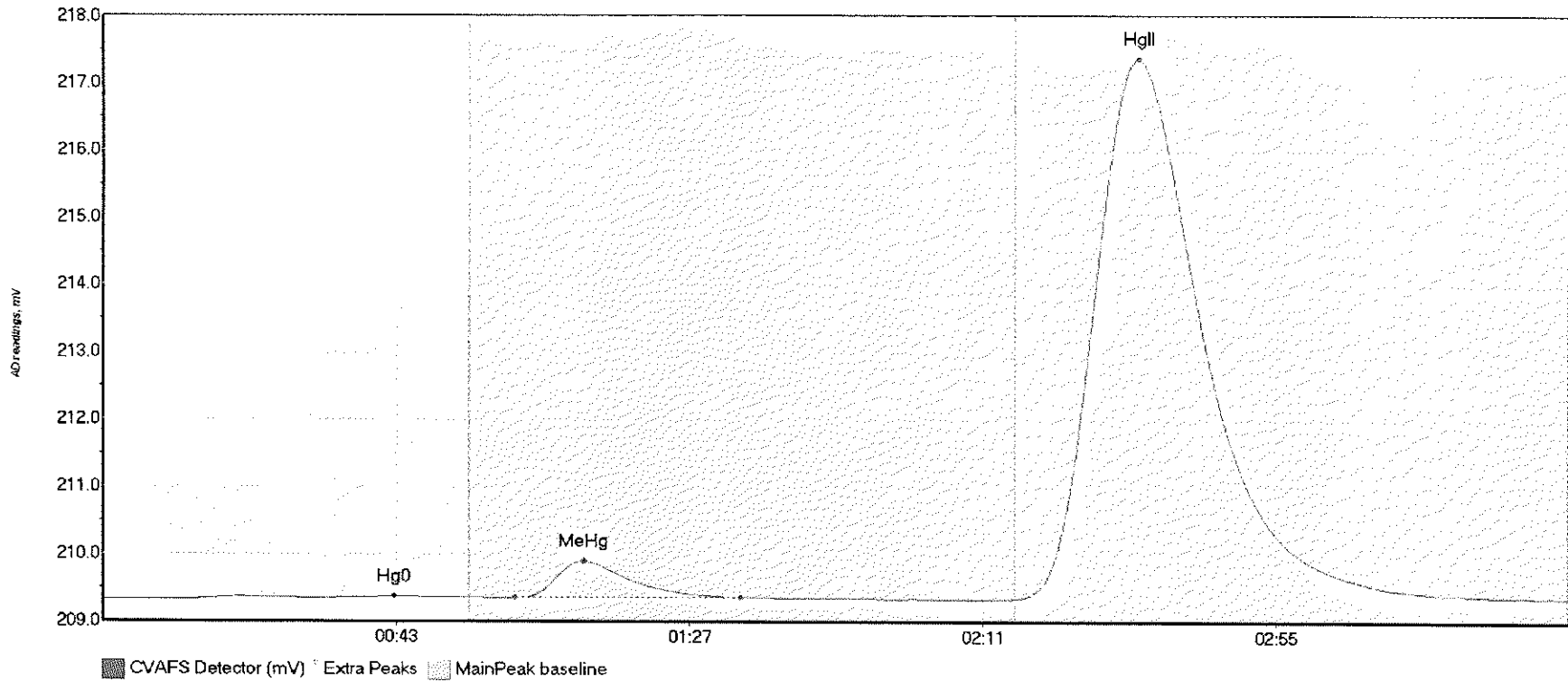
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CCV2 Hg0	5.630	14.3	54.7	209.32	209.34	40.5	0.034	OK	209.3146	0.00	-0.01	
SEQ-CCV2 MeHg	197.408	60.0	104.8	209.34	209.34	72.3	1.537	OK	209.3146	0.00	-0.01	
SEQ-CCV2 HgII	58.127	137.9	184.2	209.32	209.33	155.6	0.329	OK	209.3146	0.00	-0.01	

#34: SEQ-CCB2



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	ElDev	BlShift	Comment
SEQ-CCB2 Hg0	2.165	15.4	31.2	209.31	209.32	21.5	0.030	OK	209.3038	0.00	-0.02	
SEQ-CCB2 HgII	11.446	141.7	175.2	209.30	209.30	154.2	0.070	OK	209.3038	0.00	-0.02	317

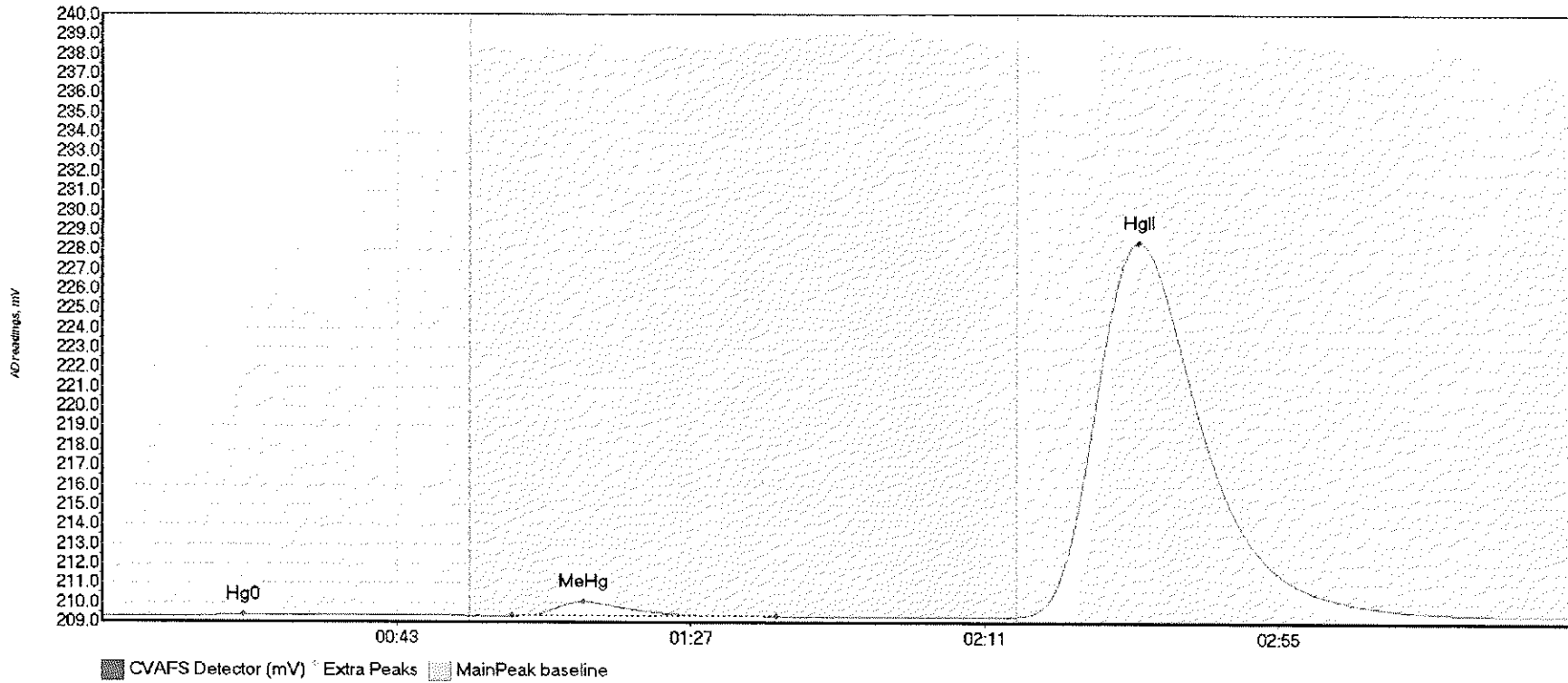
#35: 1707771-11



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1707771-11 Hg0	6.805	12.4	55.0	209.30	209.32	43.7	0.040	CT	209.2912	0.00	0.04	
1707771-11 MeHg	66.819	61.9	95.7	209.32	209.32	72.1	0.539	OK	209.2912	0.00	0.04	
1707771-11 HgII	1505.893	136.8	219.0	209.31	209.33	155.4	8.023	OK	209.2912	0.00	0.04	

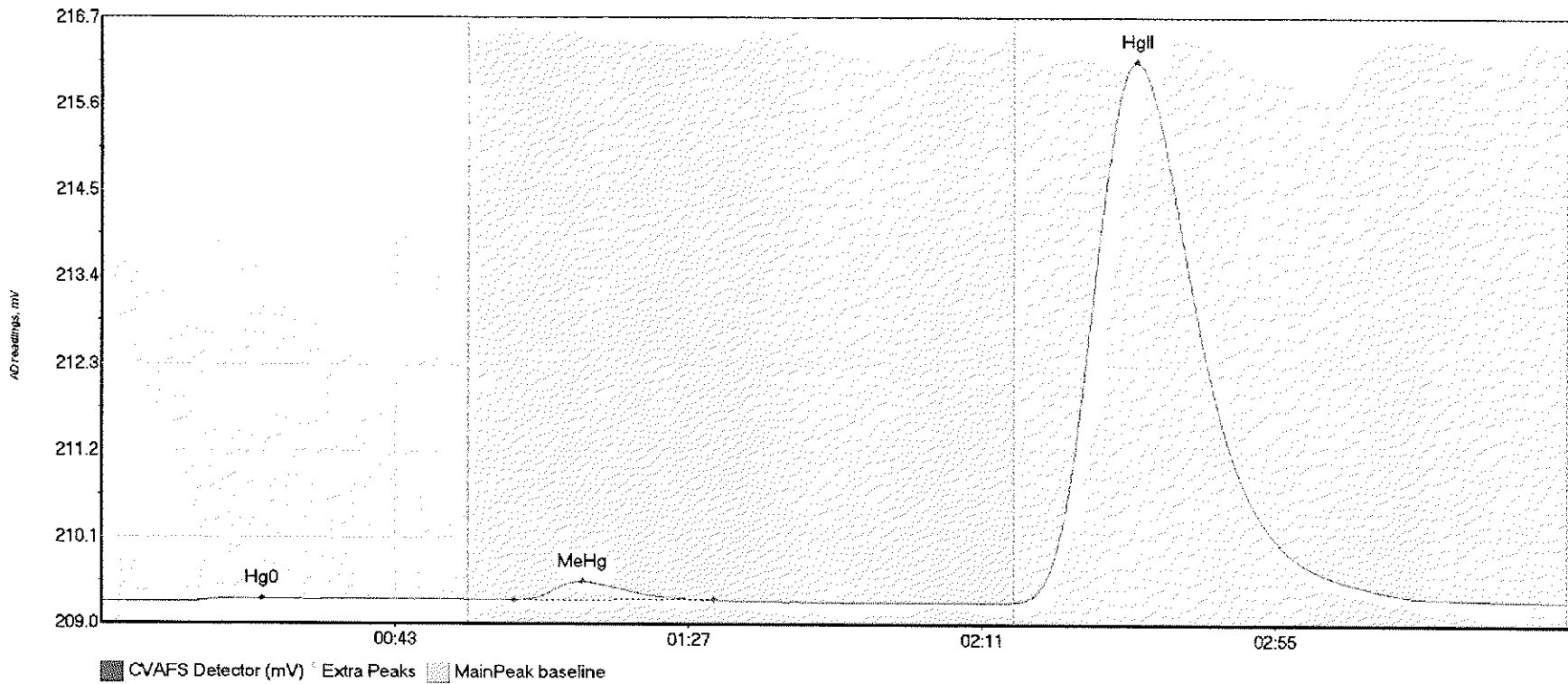


#36: 1707771-12



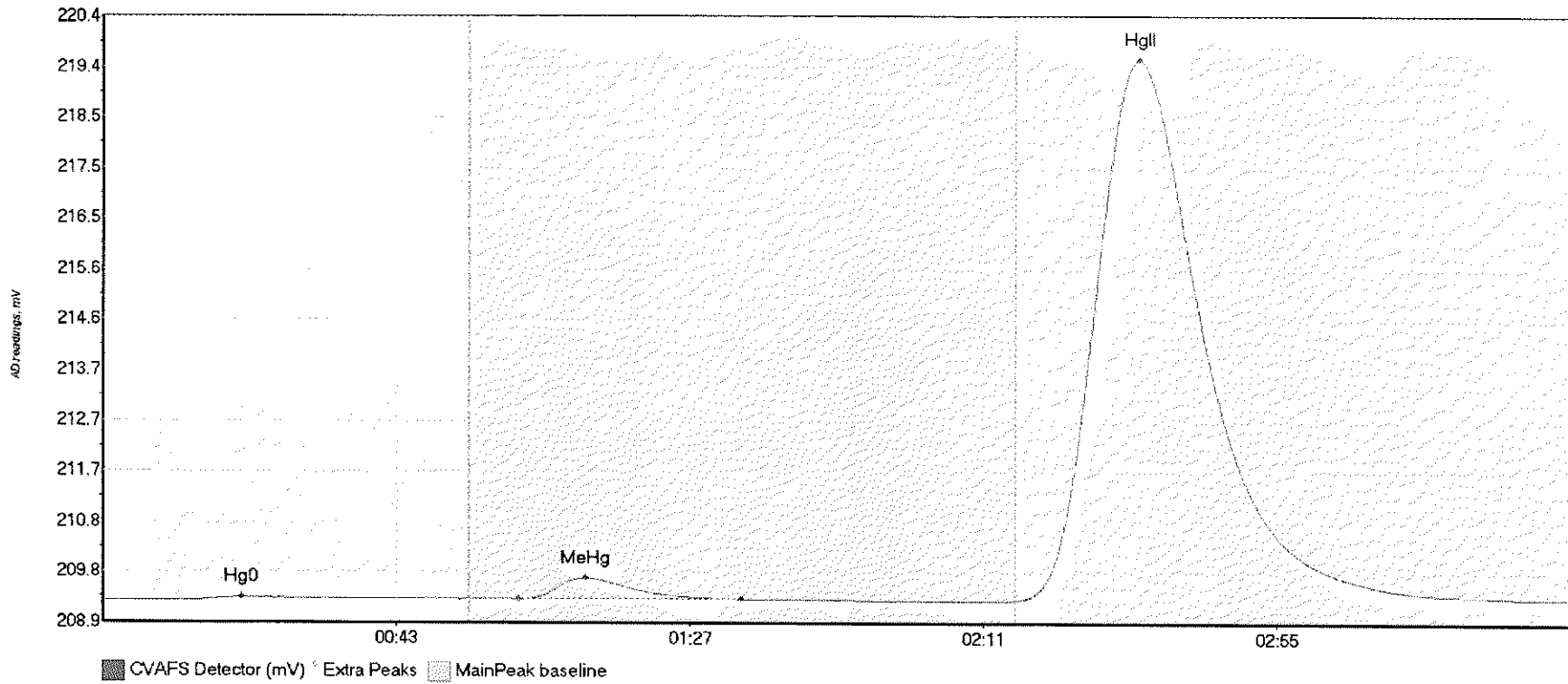
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1707771-12 Hg0	10.186	11.8	54.9	209.28	209.32	21.1	0.063	OK	209.2865	0.00	0.09	
1707771-12 MeHg	91.640	61.3	100.9	209.31	209.31	72.0	0.731	OK	209.2865	0.00	0.09	
1707771-12 HgII	3573.749	136.8	219.8	209.32	209.37	155.2	19.111	CT	209.2865	0.00	0.09	

#37: 1707771-13



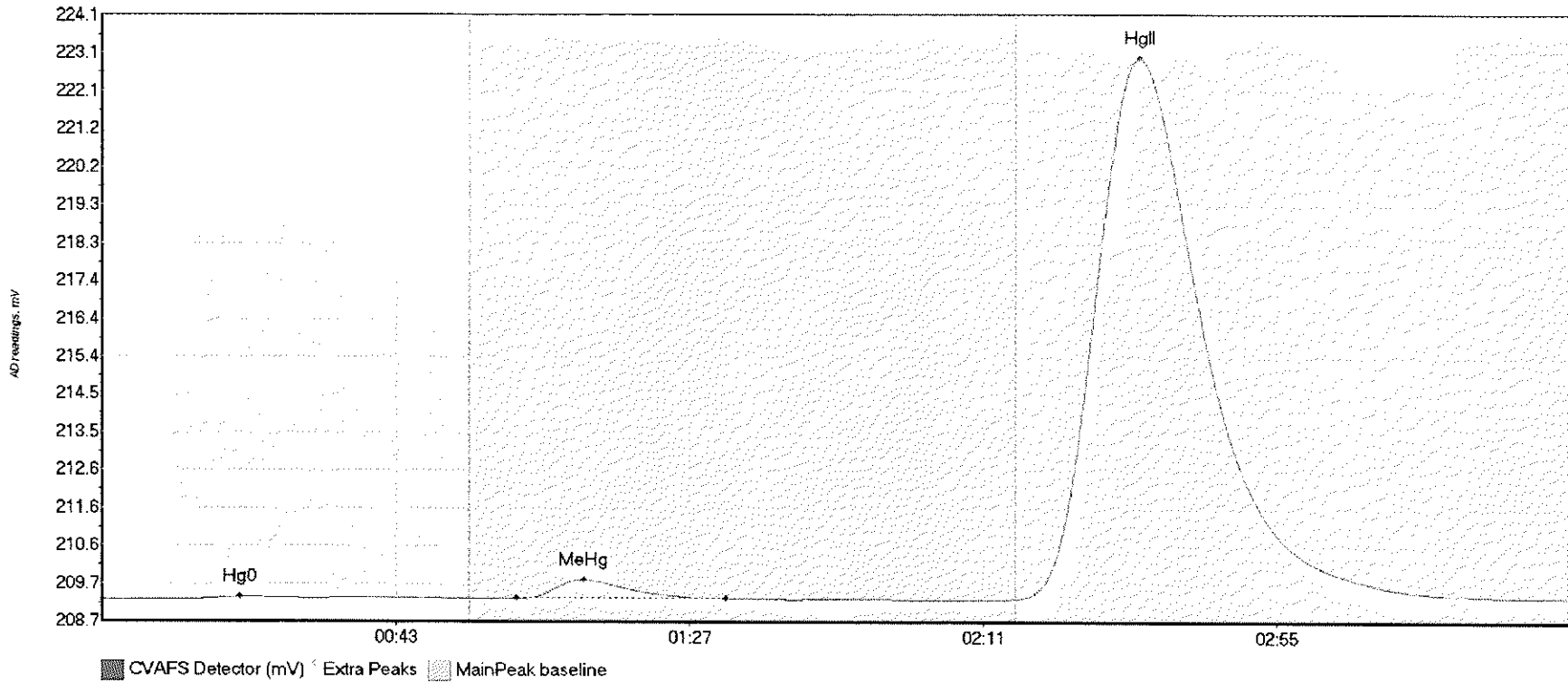
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1707771-13 Hg0	8.328	10.9	55.0	209.29	209.32	24.0	0.046	CT	209.2904	0.00	0.03	
1707771-13 MeHg	28.896	61.8	91.9	209.31	209.32	72.2	0.237	OK	209.2904	0.00	0.03	
1707771-13 HgII	1287.886	136.8	219.8	209.30	209.32	155.3	6.862	CT	209.2904	0.00	0.03	

#38: 1707771-14



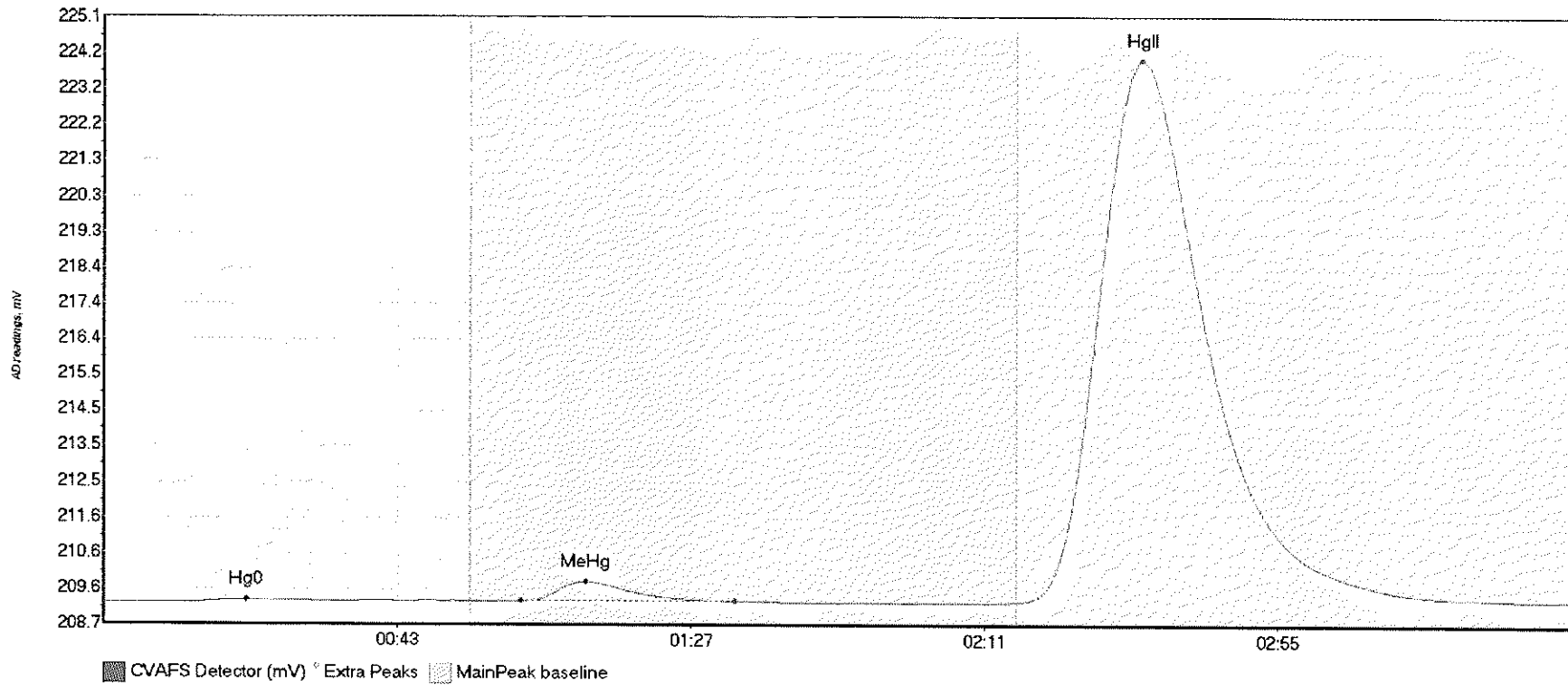
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1707771-14 Hg0	9.232	13.1	53.6	209.28	209.31	20.8	0.053	OK	209.2805	0.00	0.05	
1707771-14 MeHg	50.075	62.4	95.8	209.31	209.31	72.4	0.405	OK	209.2805	0.00	0.05	
1707771-14 HgII	1928.490	136.8	219.0	209.29	209.33	155.4	10.261	OK	209.2805	0.00	0.05	

#39: 1707771-15



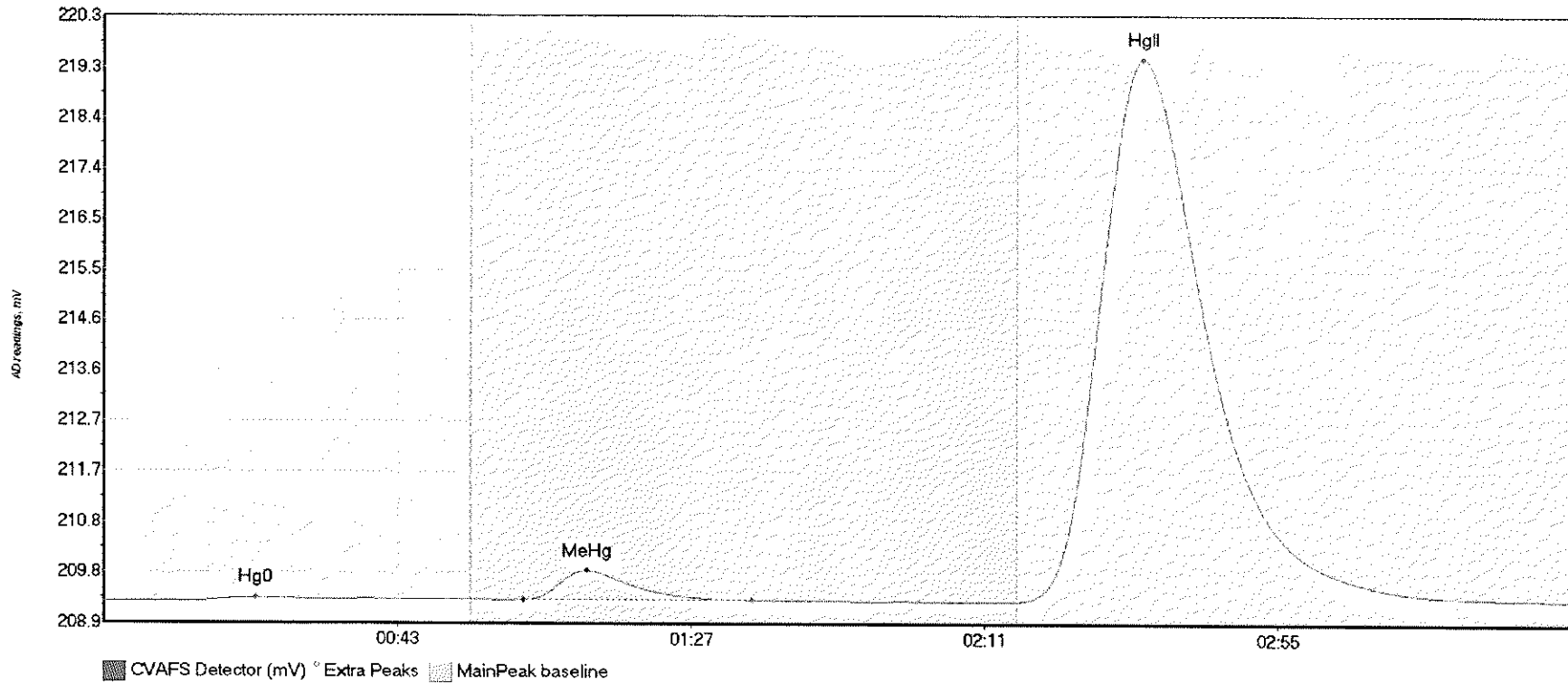
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1707771-15 Hg0	4.938	9.1	31.6	209.27	209.31	20.7	0.073	OK	209.2712	0.00	0.07	
1707771-15 MeHg	55.948	62.0	93.4	209.31	209.32	72.2	0.468	OK	209.2712	0.00	0.07	
1707771-15 HgII	2572.354	136.8	219.8	209.30	209.34	155.4	13.666	CT	209.2712	0.00	0.07	

#40: 1707771-16



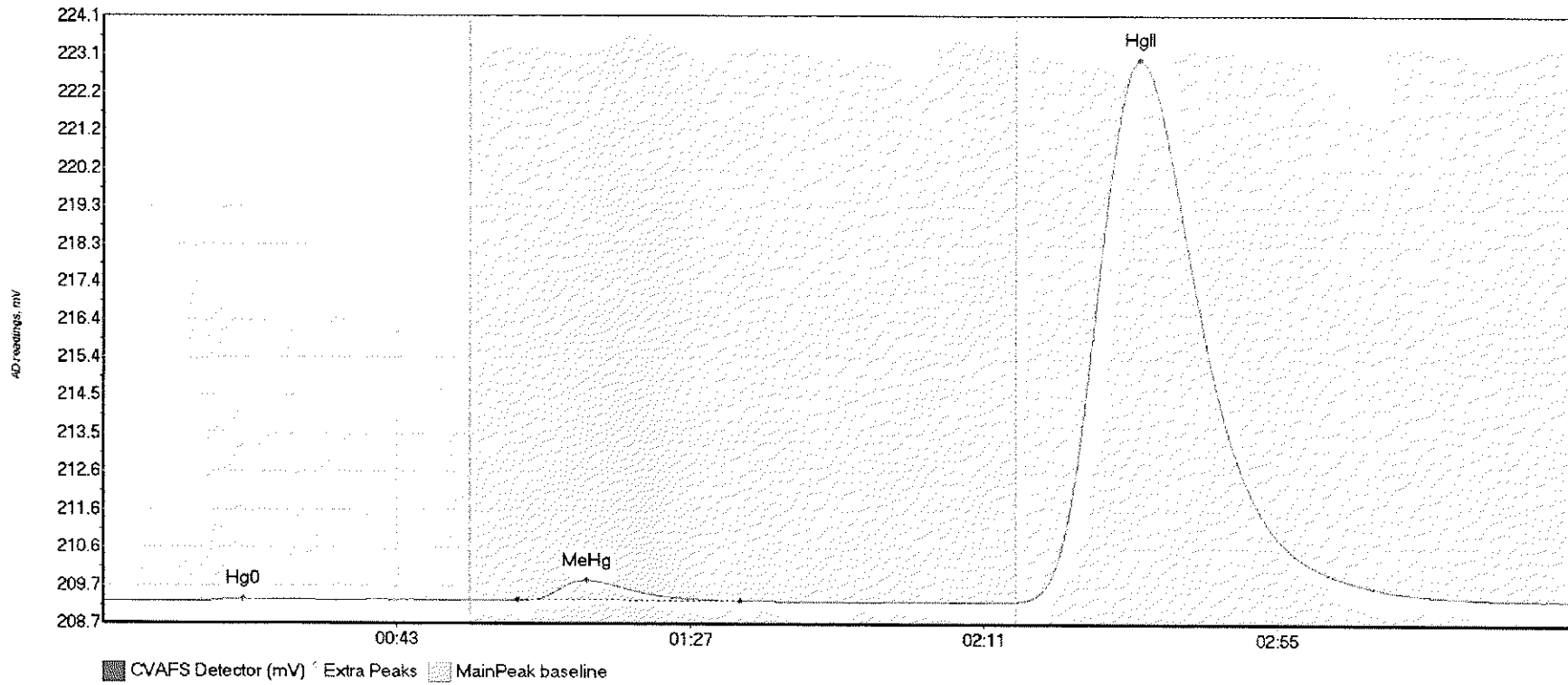
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1707771-16 Hg0	6.147	11.1	36.0	209.27	209.31	21.5	0.071	OK	209.2687	0.00	0.08	
1707771-16 MeHg	63.763	62.6	94.6	209.31	209.30	72.3	0.518	OK	209.2687	0.00	0.08	
1707771-16 HgII	2743.235	136.8	219.8	209.29	209.35	155.8	14.671	CT	209.2687	0.00	0.08	

#41: 1707771-17



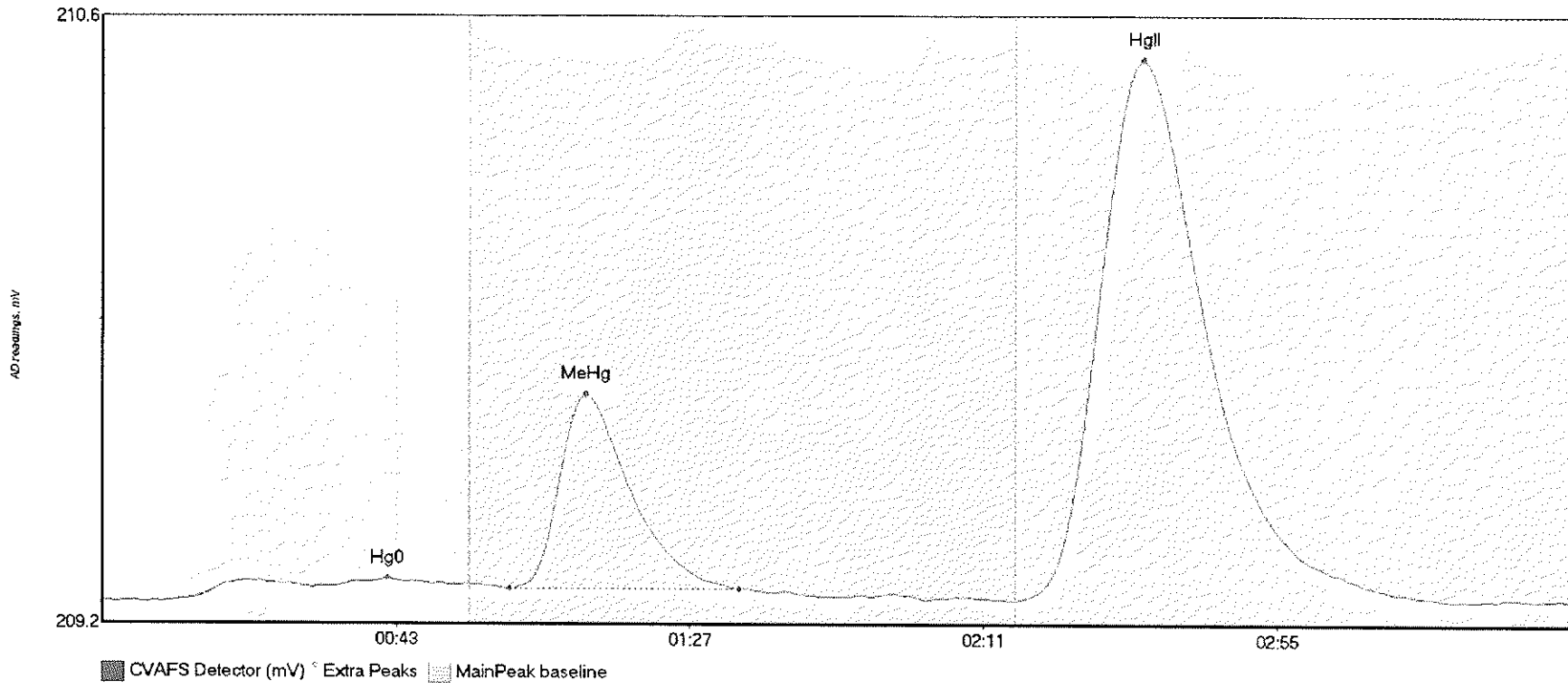
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1707771-17 Hg0	11.190	13.0	55.0	209.27	209.30	22.9	0.065	CT	209.2678	0.00	0.04	
1707771-17 MeHg	67.317	62.8	97.1	209.30	209.30	72.4	0.546	OK	209.2678	0.00	0.04	
1707771-17 HgII	1905.617	136.8	219.8	209.28	209.31	155.8	10.208	CT	209.2678	0.00	0.04	

#42: 1707771-18



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1707771-18 Hg0	8.793	13.7	51.3	209.26	209.29	21.0	0.055	OK	209.2583	0.00	0.07	
1707771-18 MeHg	61.695	62.2	95.4	209.29	209.29	72.6	0.503	OK	209.2583	0.00	0.07	
1707771-18 HgII	2561.832	136.8	219.8	209.27	209.32	155.5	13.718	CT	209.2583	0.00	0.07	

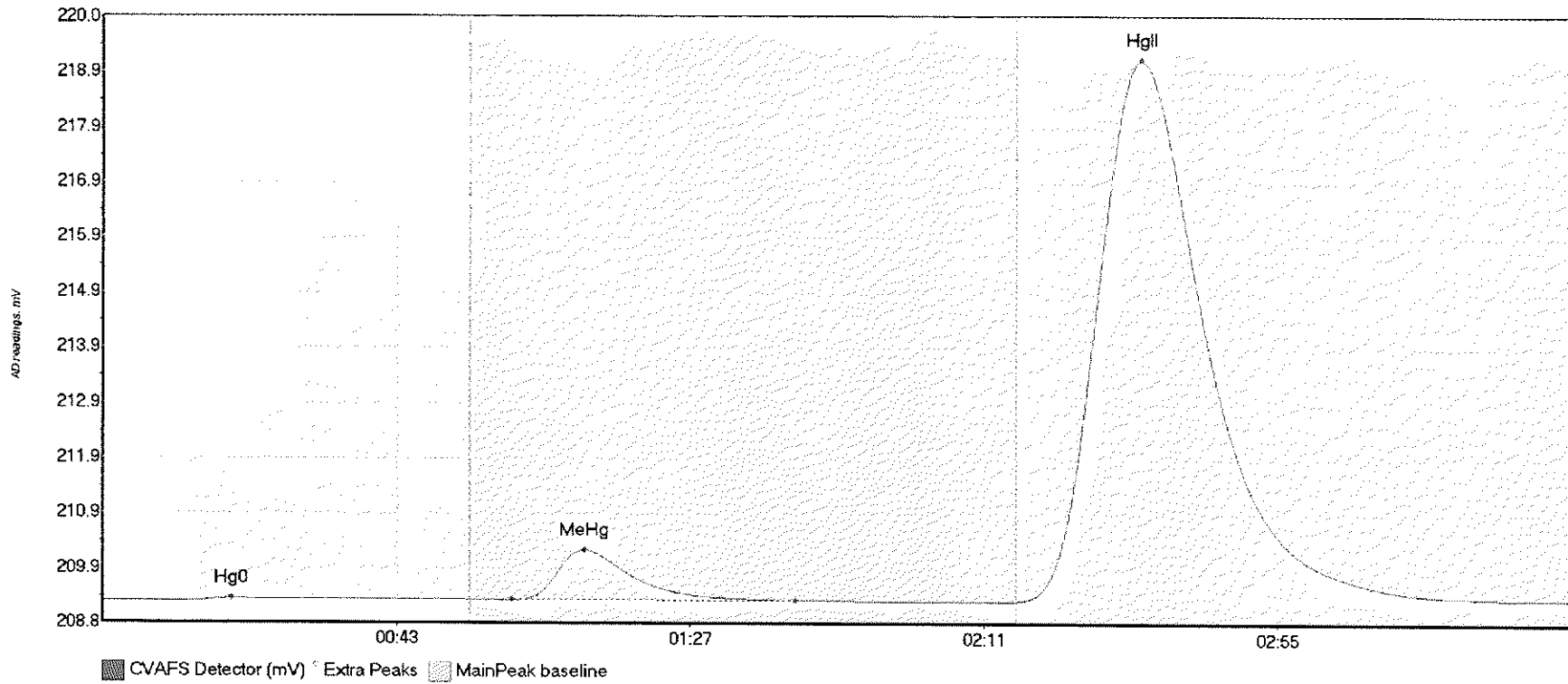
#43: 1707771-19



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1707771-19 Hg0	6.983	12.0	52.1	209.26	209.29	42.7	0.048	OK	209.2538	0.00	0.00	
1707771-19 MeHg	55.103	61.0	95.4	209.28	209.28	72.5	0.450	OK	209.2538	0.00	0.00	
1707771-19 HgII	233.205	136.8	200.9	209.26	209.26	156.0	1.247	OK	209.2538	0.00	0.00	

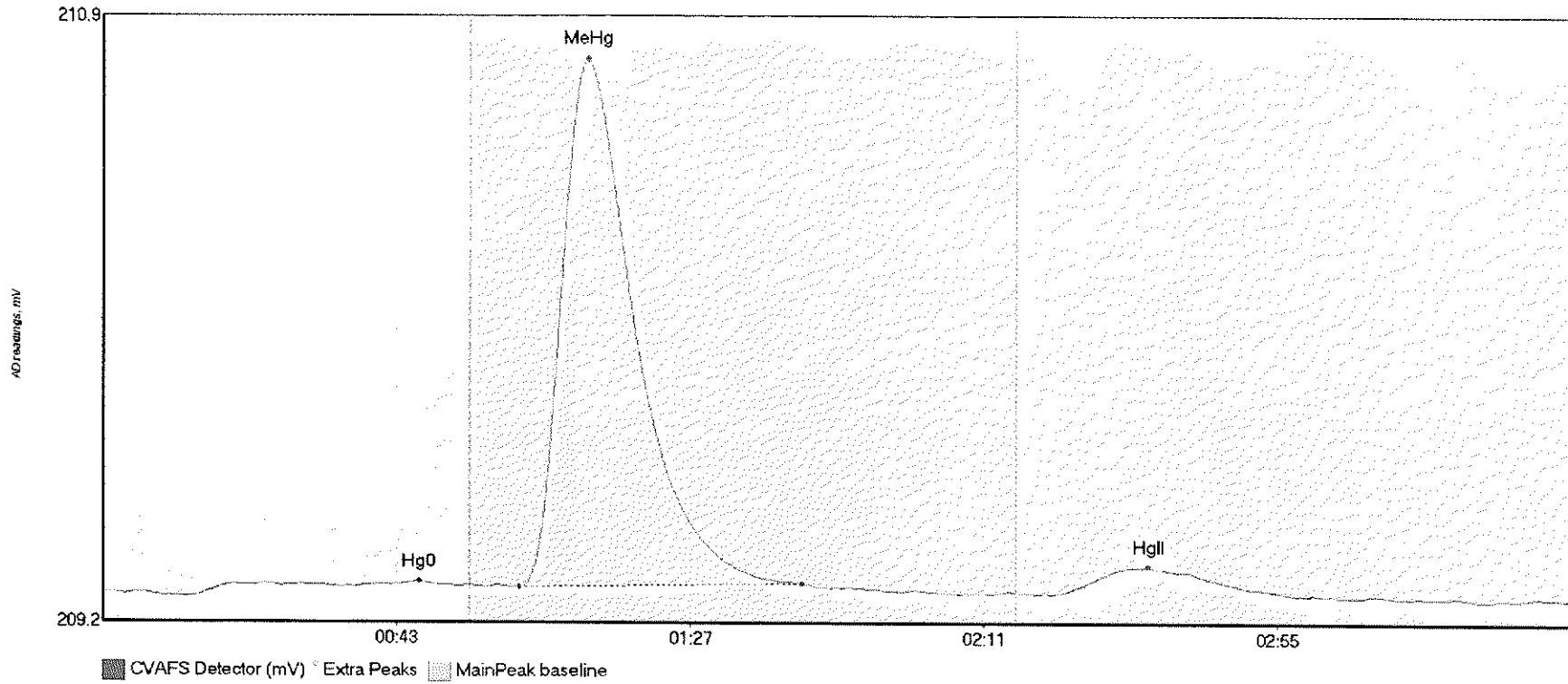


#44: 1707771-20



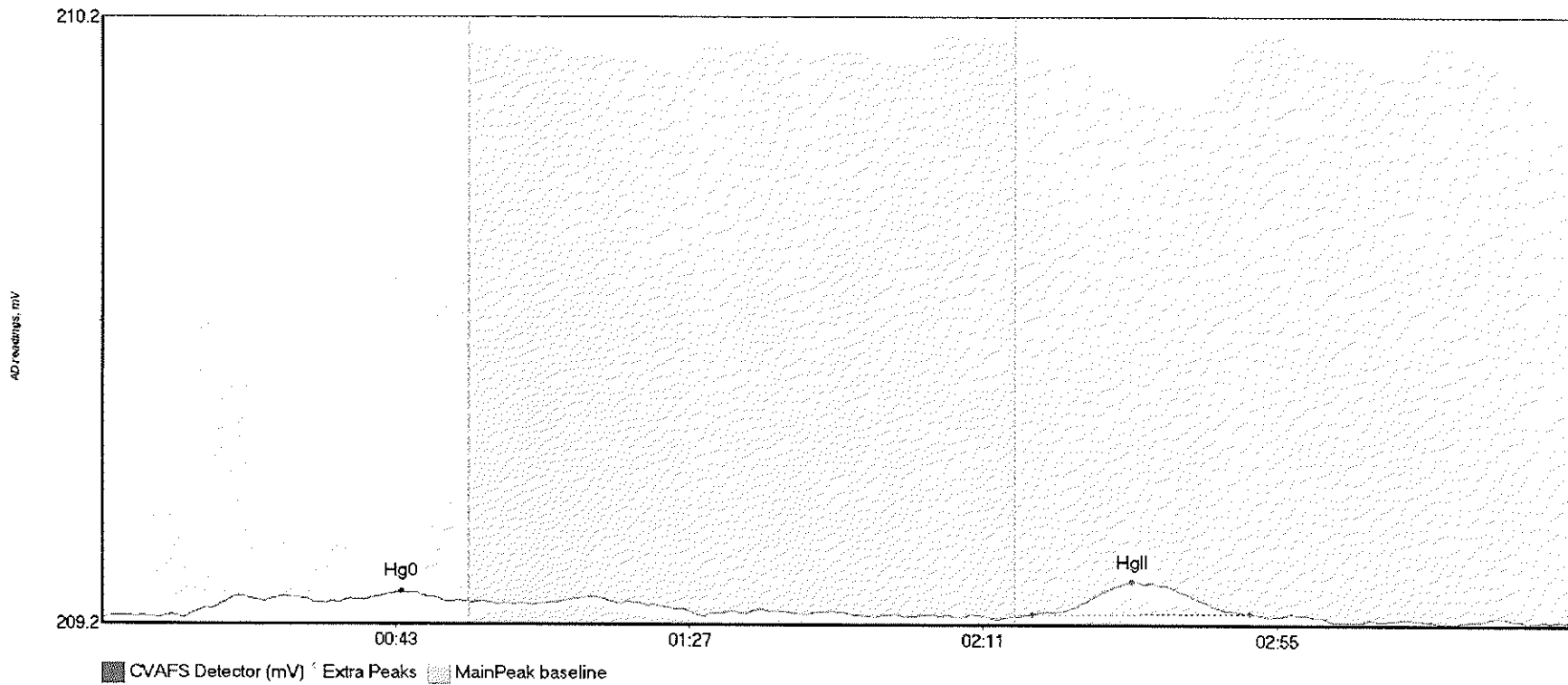
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1707771-20 Hg0	9.240	14.1	55.0	209.25	209.28	19.3	0.050	CT	209.2463	0.00	0.05	
1707771-20 MeHg	117.789	61.3	103.9	209.27	209.27	72.1	0.918	OK	209.2463	0.00	0.05	
1707771-20 HgII	1857.399	136.8	217.5	209.26	209.30	155.6	9.906	OK	209.2463	0.00	0.05	

#45: SEQ-CCV3



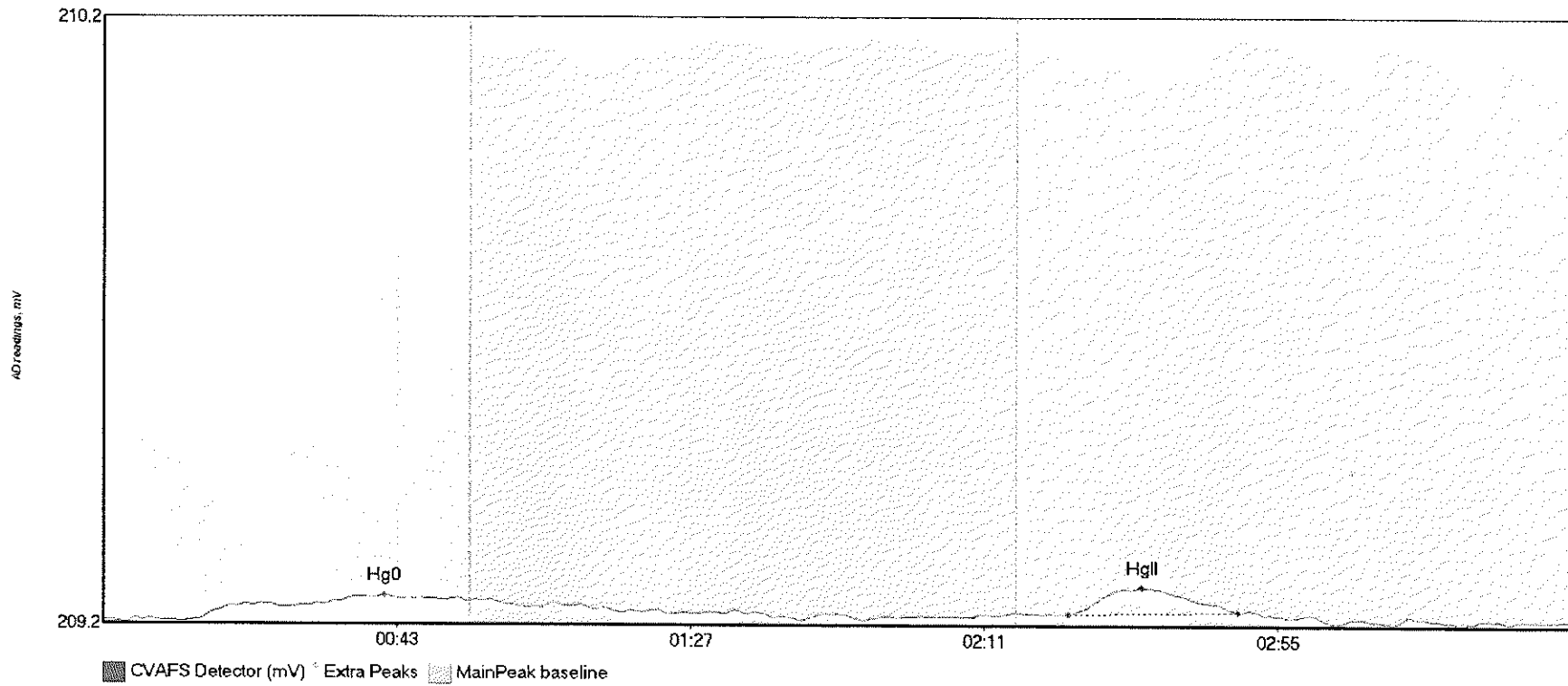
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CCV3 Hg0	6.631	13.2	53.6	209.24	209.27	47.4	0.043	OK	209.2541	0.00	-0.02	
SEQ-CCV3 MeHg	189.346	62.4	104.7	209.27	209.28	72.7	1.493	OK	209.2541	0.00	-0.02	
SEQ-CCV3 HgII	13.020	143.7	176.3	209.25	209.25	156.7	0.075	OK	209.2541	0.00	-0.02	

#46: SEQ-CCB3



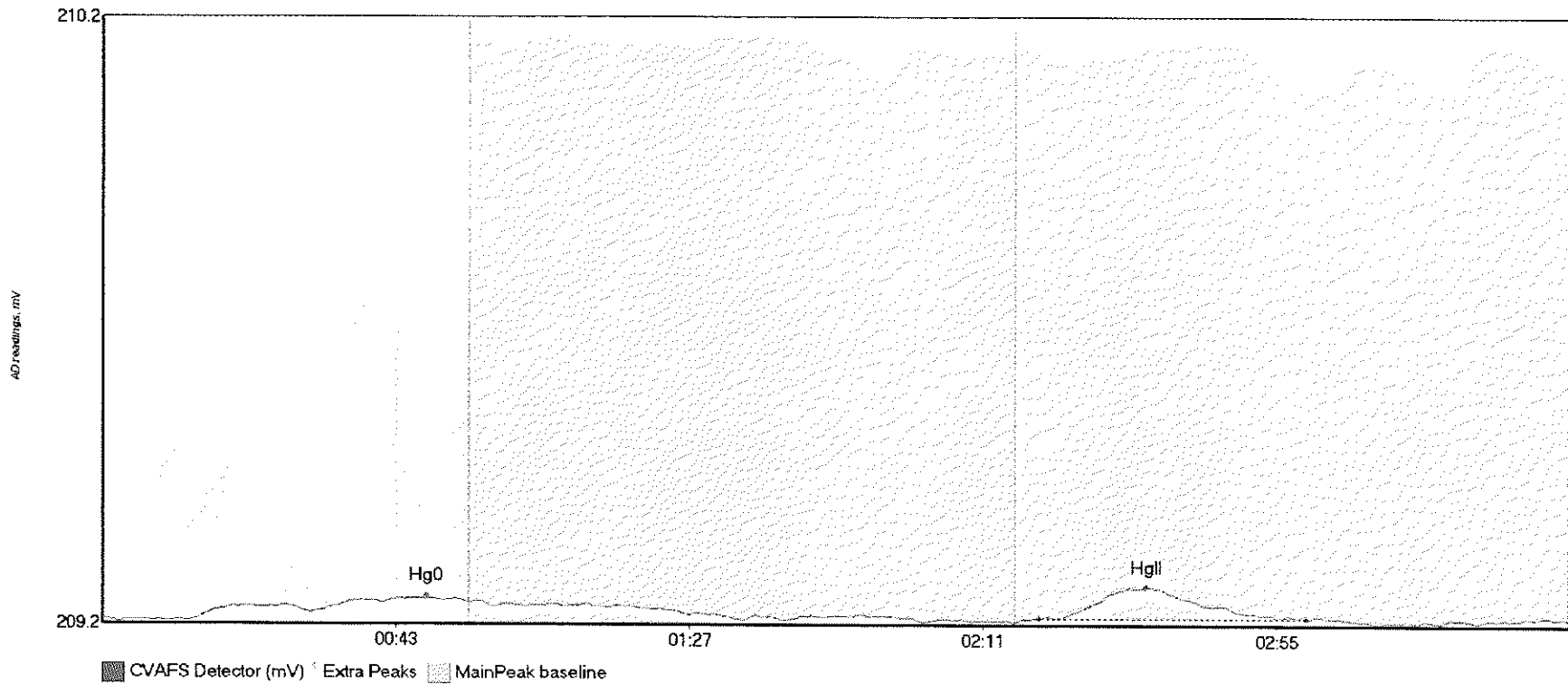
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CCB3 Hg0	6.909	12.1	55.0	209.23	209.25	44.8	0.043	CT	209.2287	0.00	-0.01	
SEQ-CCB3 HgII	8.403	139.4	172.0	209.23	209.24	154.3	0.055	OK	209.2287	0.00	-0.01	017

#48: F707567-BLK2



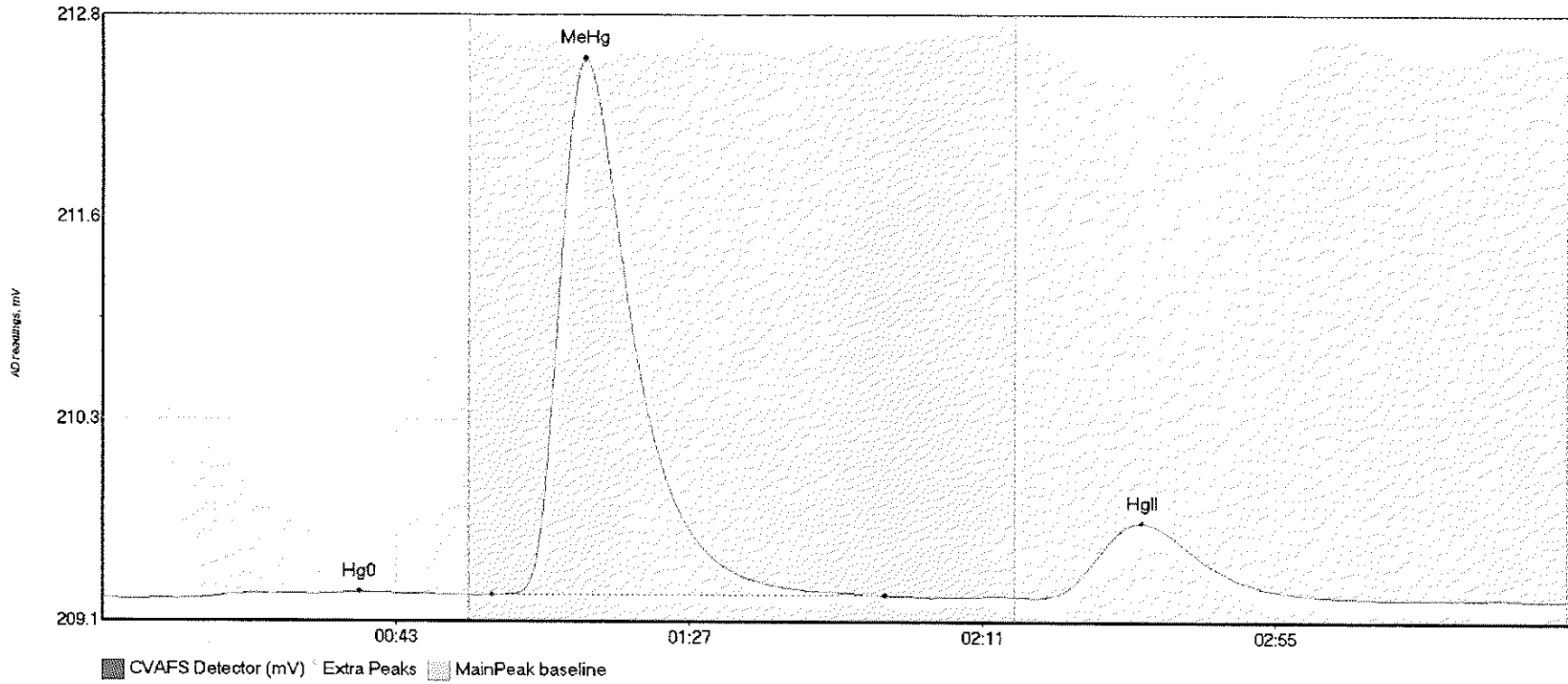
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F707567-BLK2 Hg	5.269	14.3	55.0	209.22	209.25	42.2	0.040	CT	209.2177	0.00	0.00	
F707567-BLK2 Hg	6.468	144.8	170.1	209.23	209.23	155.7	0.045	OK	209.2177	0.00	0.00	017

#49: F707567-BLK3



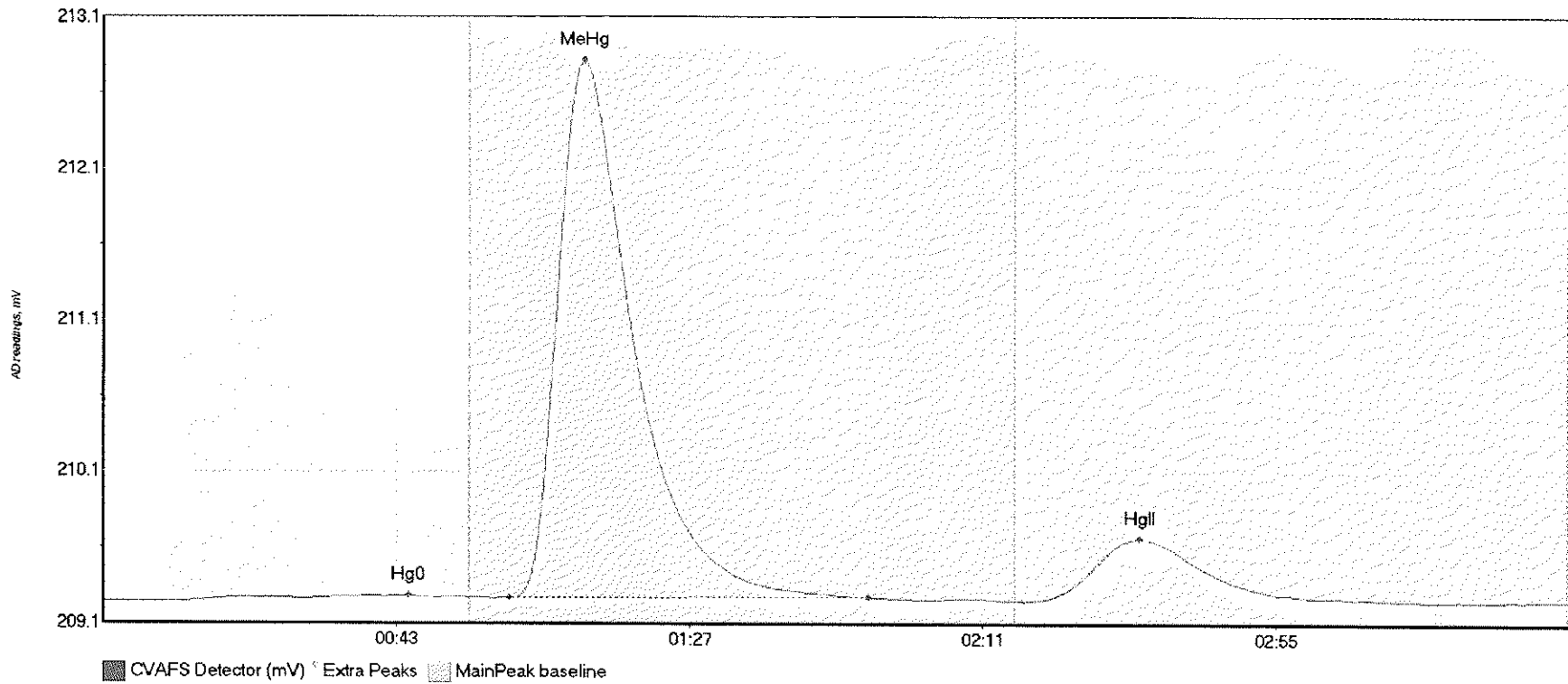
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F707567-BLK3 Hg	4.586	12.7	55.0	209.22	209.25	48.6	0.038	CT	209.2187	0.00	0.00	
F707567-BLK3 Hg	8.842	140.5	180.4	209.22	209.22	156.5	0.051	OK	209.2187	0.00	0.00	017

#50: F707567-BS1



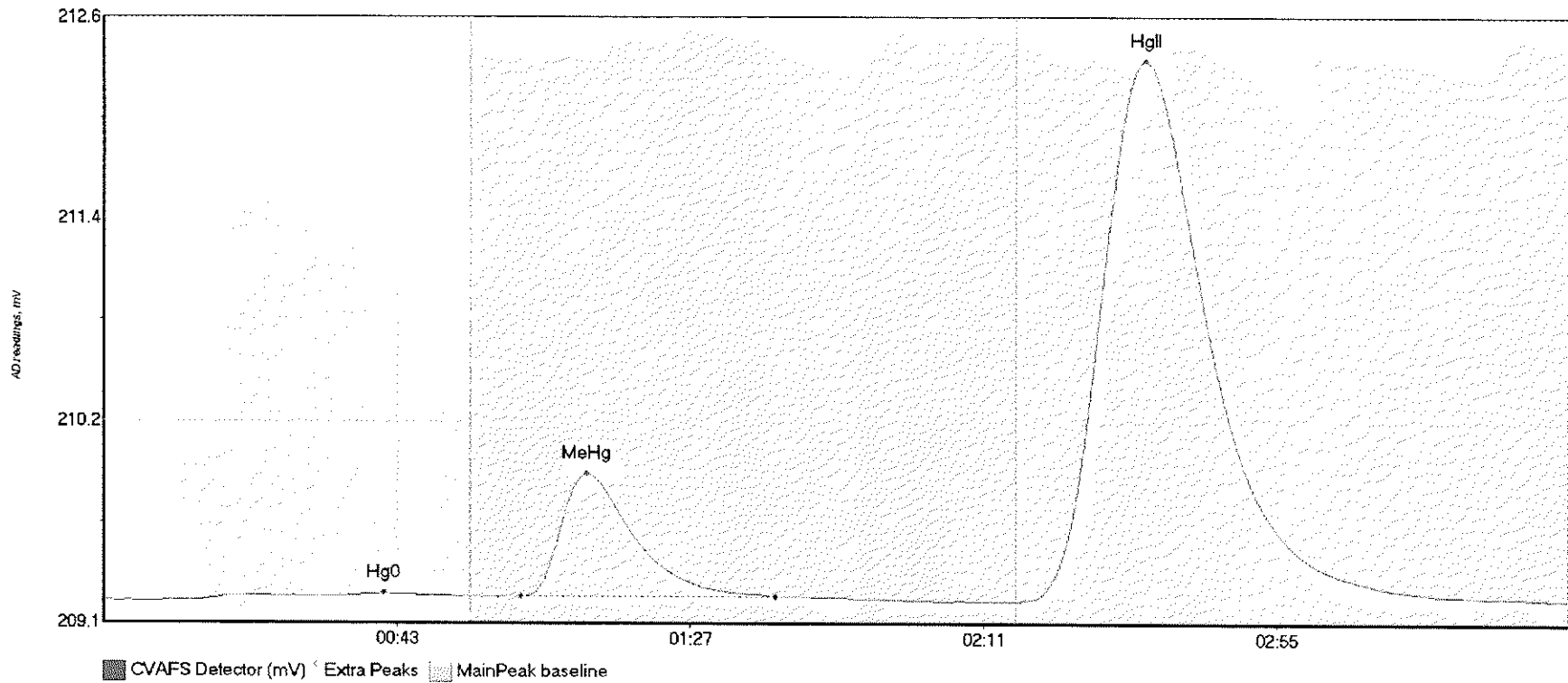
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F707567-BS1 Hg0	6.247	14.6	55.0	209.22	209.24	38.6	0.038	CT	209.2182	0.00	-0.01	
F707567-BS1 MeH	429.834	58.5	117.4	209.24	209.24	72.5	3.309	OK	209.2182	0.00	-0.01	
F707567-BS1 HgI	80.300	140.1	186.1	209.23	209.23	156.0	0.462	OK	209.2182	0.00	-0.01	

#51: F707567-BSD1



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F707567-BSD1 Hg	6.127	12.2	55.0	209.21	209.24	45.8	0.044	CT	209.2111	0.00	0.00	
F707567-BSD1 Me	465.497	61.0	114.9	209.23	209.24	72.3	3.567	OK	209.2111	0.00	0.00	
F707567-BSD1 Hg	78.378	138.3	194.1	209.21	209.22	155.6	0.417	OK	209.2111	0.00	0.00	

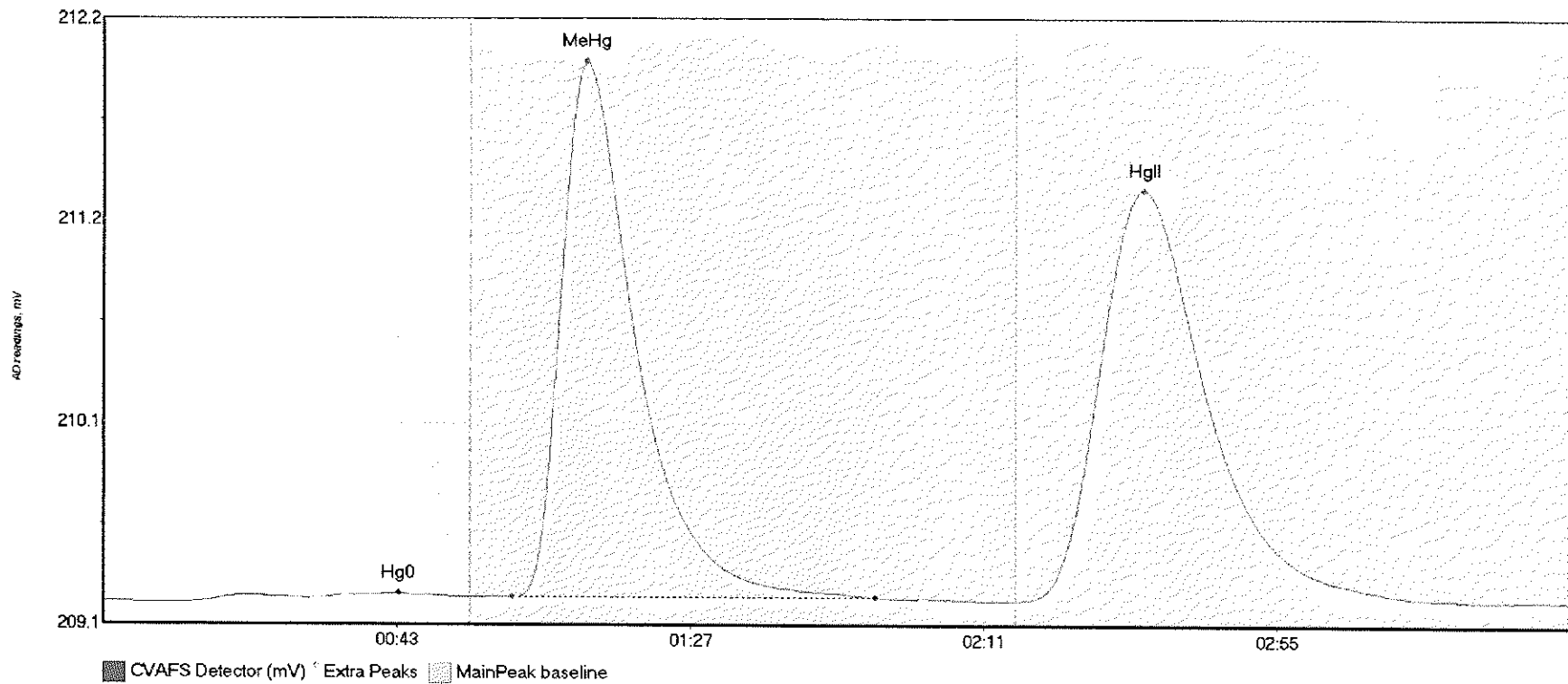
#52: F707567-DUP1



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F707567-DUP1 Hg	6.531	13.8	55.0	209.20	209.23	42.0	0.040	CT	209.2039	0.00	0.01	
F707567-DUP1 Me	90.156	62.6	100.8	209.23	209.23	72.5	0.715	OK	209.2039	0.00	0.01	
F707567-DUP1 Hg	593.561	136.8	219.8	209.20	209.21	156.3	3.153	CT	209.2039	0.00	0.01	

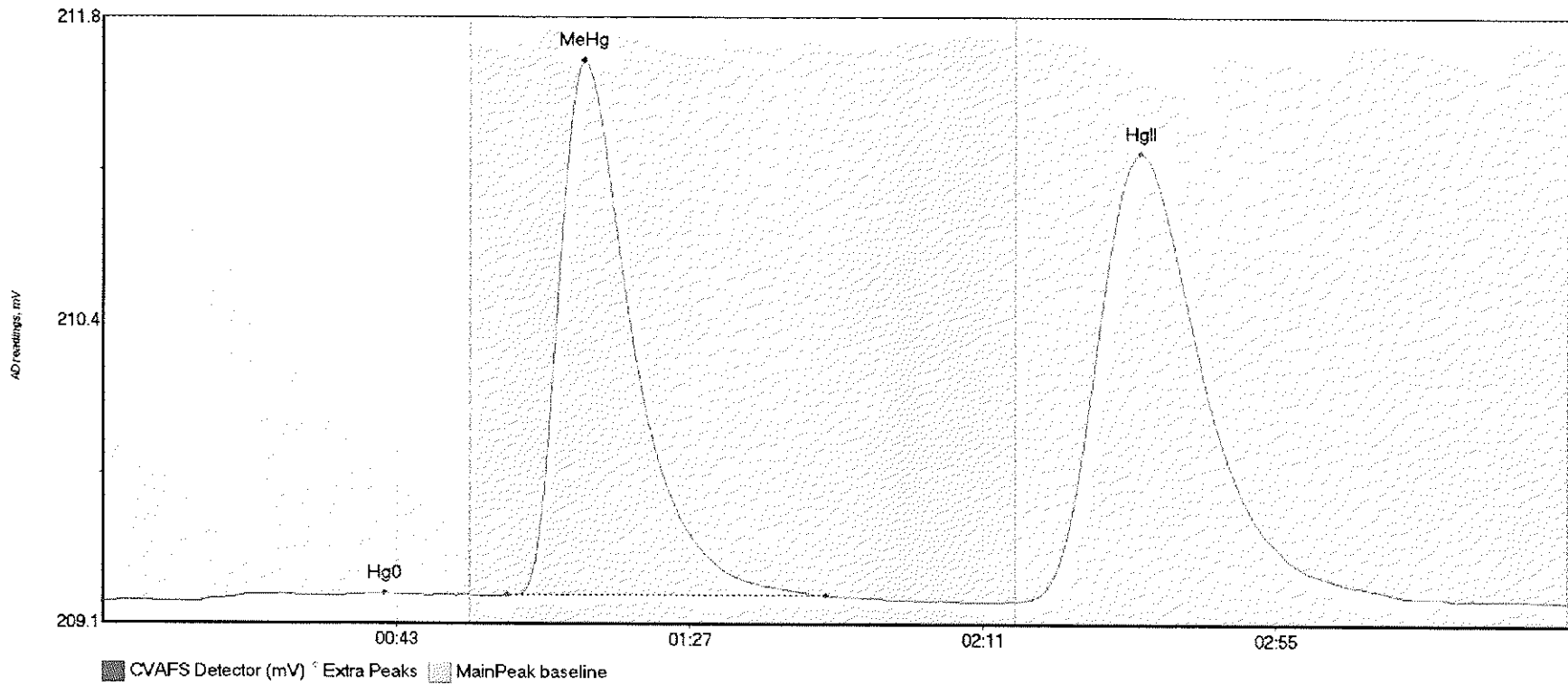


#53: F707567-MS1



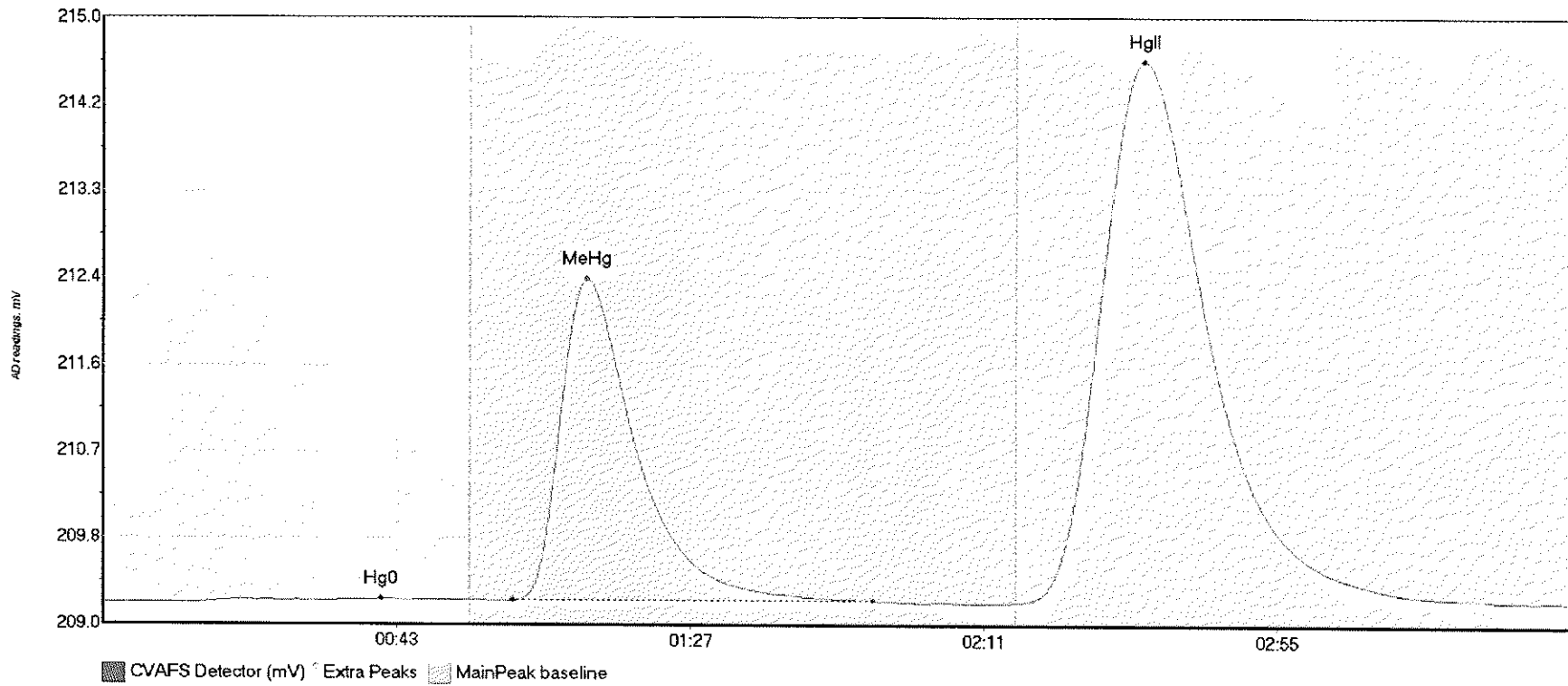
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F707567-MS1 Hg0	6.265	13.7	53.3	209.20	209.23	44.3	0.043	OK	209.2041	0.00	0.01	
F707567-MS1 MeH	359.433	61.3	115.7	209.23	209.23	72.5	2.764	OK	209.2041	0.00	0.01	
F707567-MS1 HgI	395.107	138.3	205.5	209.21	209.21	156.0	2.122	OK	209.2041	0.00	0.01	

#54: F707567-MSD1



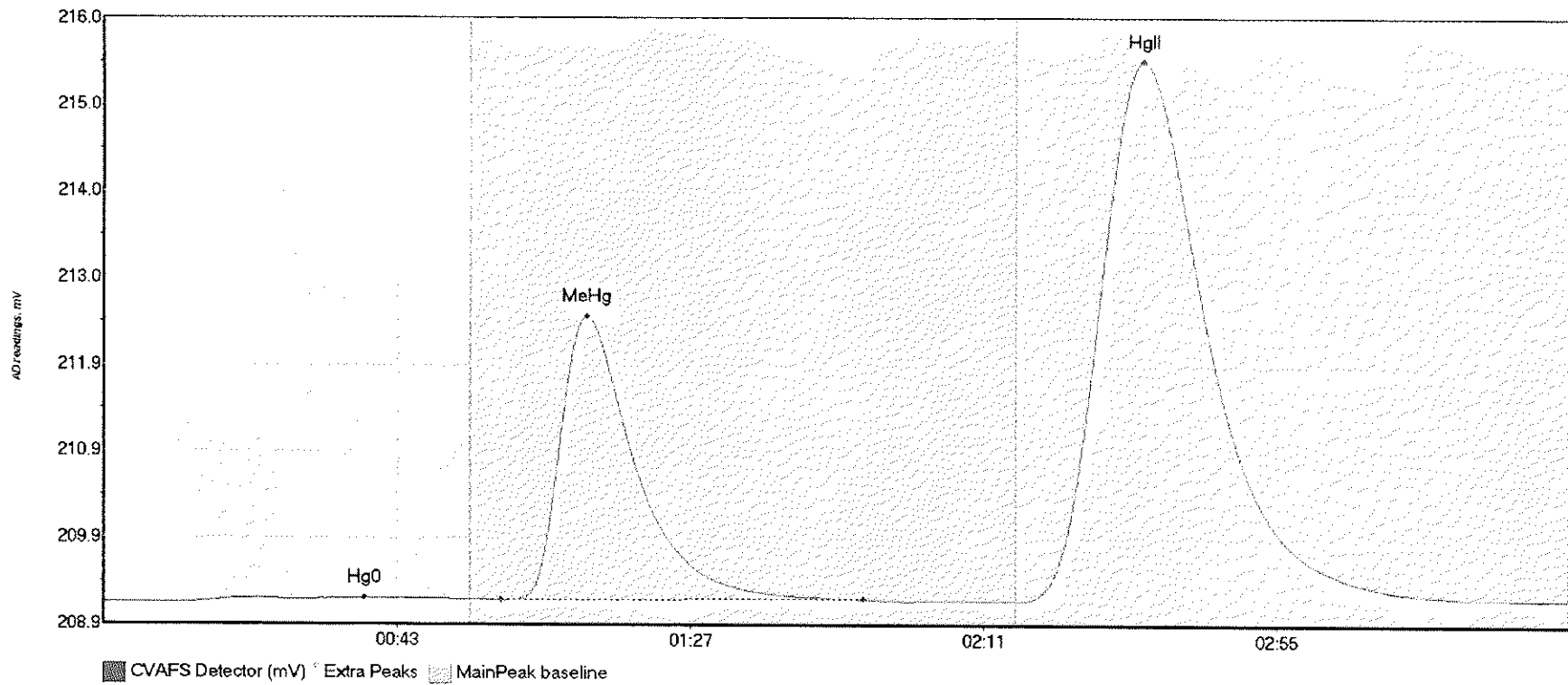
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F707567-MSD1 Hg	4.682	14.3	48.9	209.20	209.23	42.3	0.036	OK	209.2021	0.00	0.01	
F707567-MSD1 Me	304.050	60.6	108.4	209.23	209.23	72.2	2.360	OK	209.2021	0.00	0.01	
F707567-MSD1 Hg	369.452	137.2	214.9	209.21	209.21	155.6	1.976	OK	209.2021	0.00	0.01	

#55: F707567-MS2



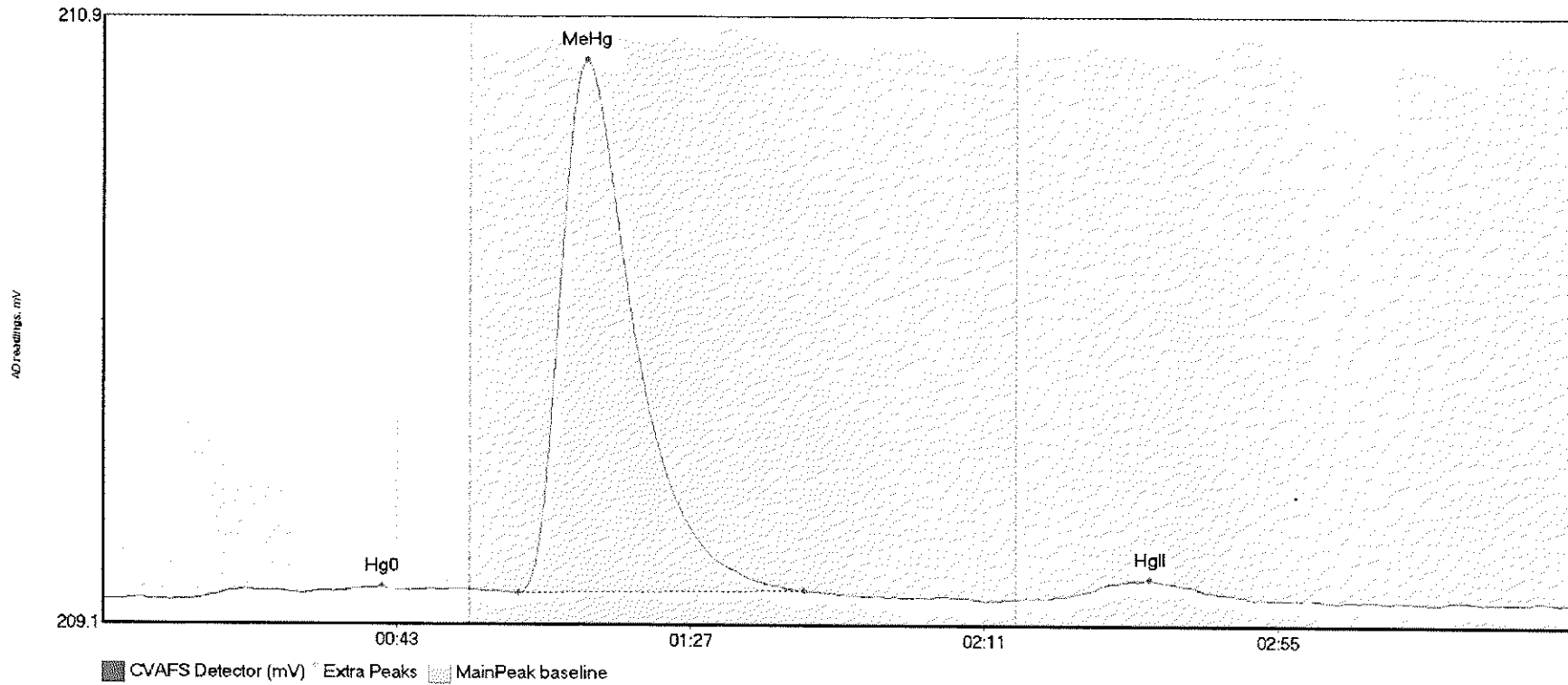
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F707567-MS2 Hg0	4.371	14.2	49.8	209.20	209.22	41.7	0.036	OK	209.1970	0.00	0.02	
F707567-MS2 MeH	419.387	61.5	115.5	209.22	209.22	72.5	3.206	OK	209.1970	0.00	0.02	
F707567-MS2 HgI	1015.789	136.8	214.6	209.21	209.22	156.1	5.394	OK	209.1970	0.00	0.02	

#56: F707567-MSD2



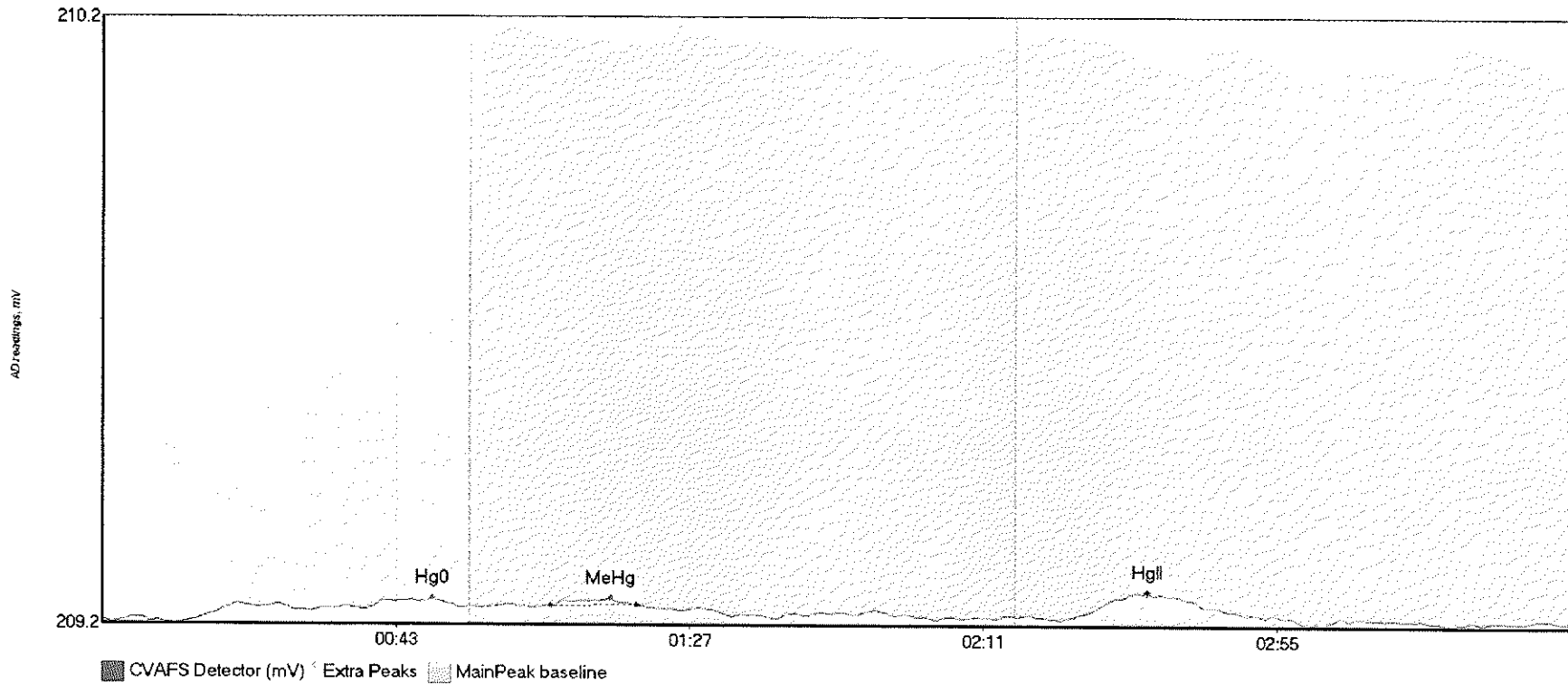
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F707567-MSD2 Hg	8.913	13.0	54.4	209.19	209.22	39.1	0.047	OK	209.1878	0.00	0.04	
F707567-MSD2 Me	428.120	59.6	114.0	209.21	209.23	72.4	3.302	OK	209.1878	0.00	0.04	
F707567-MSD2 Hg	1173.402	137.9	219.7	209.21	209.23	156.0	6.262	OK	209.1878	0.00	0.04	

#57: SEQ-CCV4



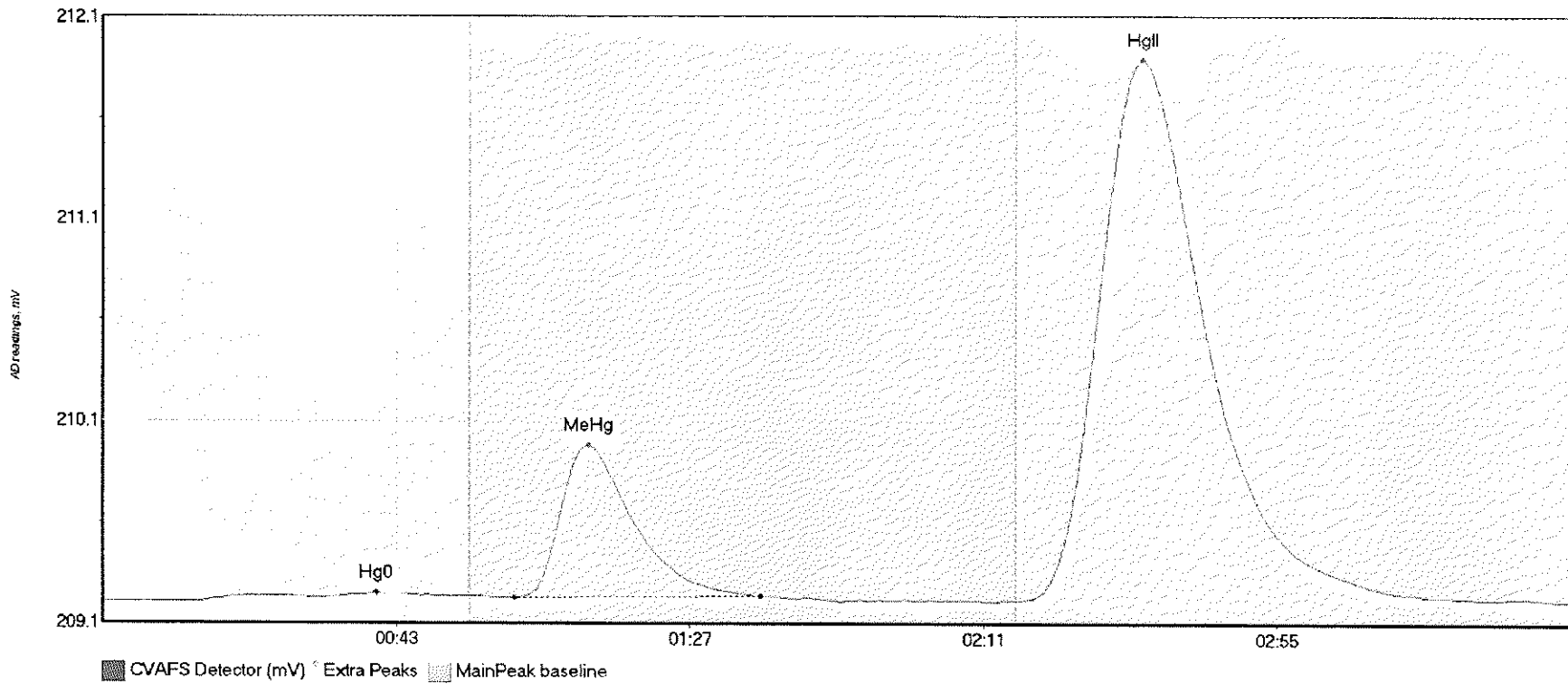
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CCV4 Hg0	3.444	13.7	45.9	209.19	209.22	41.8	0.036	OK	209.1912	0.00	0.00	
SEQ-CCV4 MeHg	205.635	62.3	105.0	209.21	209.22	72.4	1.600	OK	209.1912	0.00	0.00	
SEQ-CCV4 HgII	9.314	141.0	172.6	209.20	209.20	156.9	0.058	OK	209.1912	0.00	0.00	

#58: SEQ-CCB4



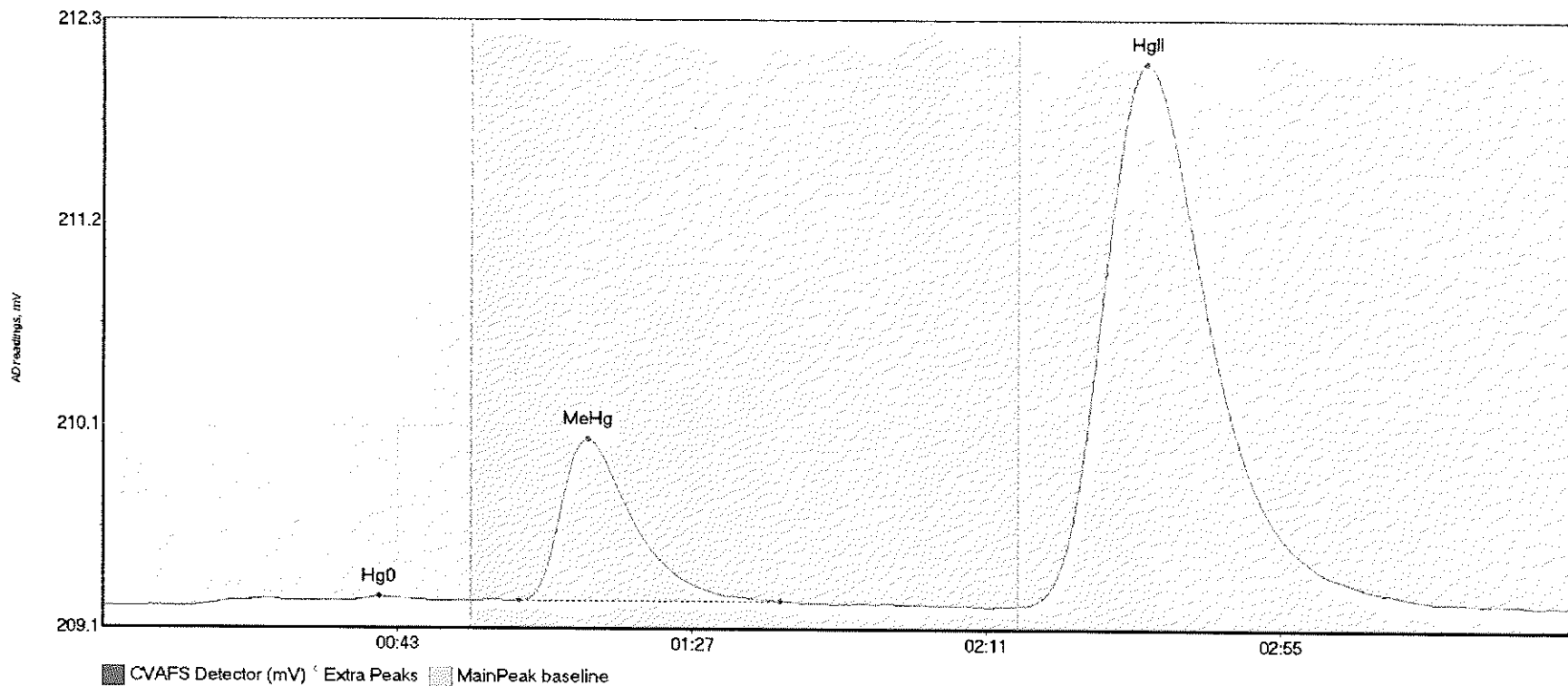
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CCB4 Hg0	5.737	10.8	54.2	209.17	209.20	49.4	0.040	OK	209.1763	0.00	0.00	
SEQ-CCB4 MeHg	0.833	67.2	80.0	209.20	209.20	76.1	0.012	OK	209.1763	0.00	0.00	
SEQ-CCB4 HgII	5.630	145.3	171.1	209.18	209.19	156.6	0.040	OK	209.1763	0.00	0.00	

#59: 1707771-21



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1707771-21 Hg0	5.694	13.9	52.1	209.18	209.21	41.0	0.044	OK	209.1830	0.00	0.00	
1707771-21 MeHg	94.272	61.7	98.6	209.20	209.21	72.8	0.754	OK	209.1830	0.00	0.00	
1707771-21 HgII	501.078	137.3	219.2	209.19	209.19	155.9	2.674	OK	209.1830	0.00	0.00	

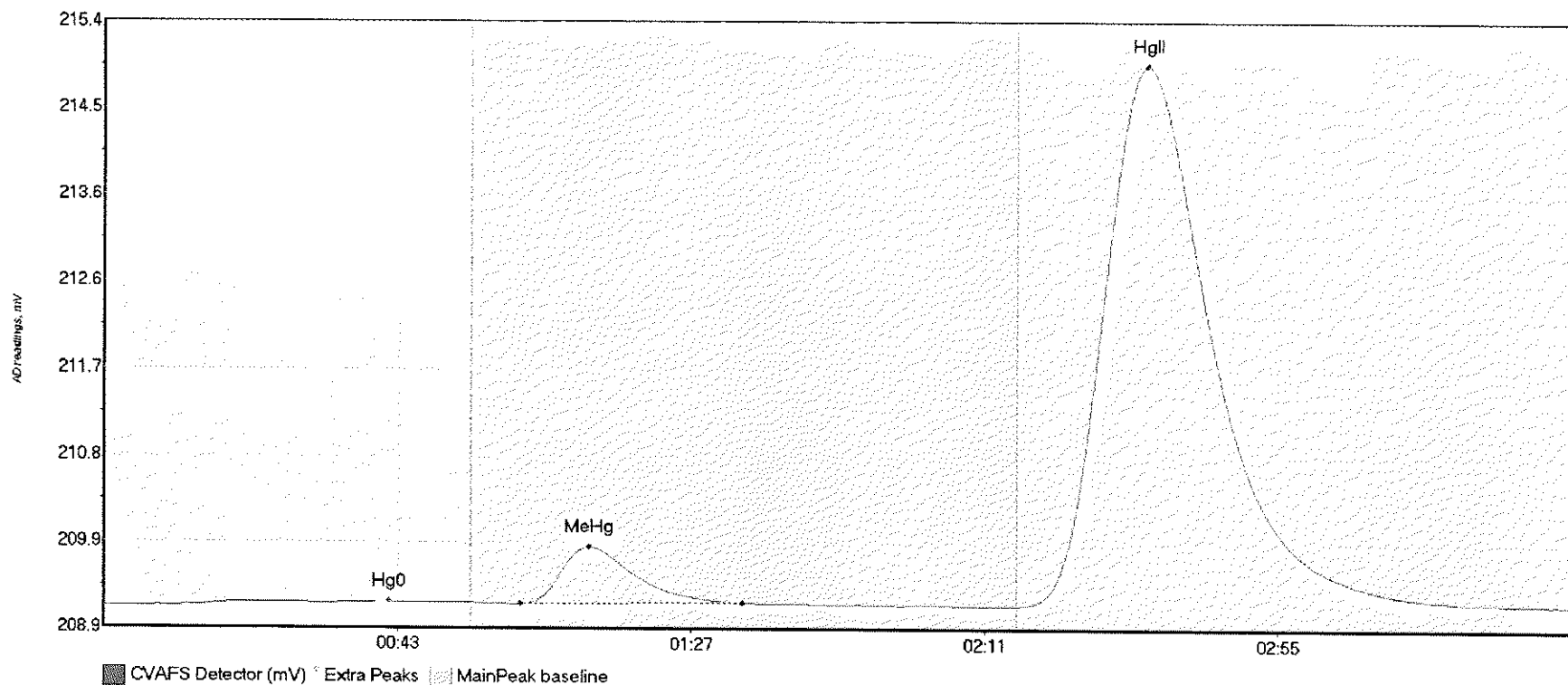
#61: 1707771-23



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1707771-23 Hg0	6.346	12.7	49.3	209.18	209.21	41.3	0.050	OK	209.1811	0.00	0.01	
1707771-23 MeHg	106.600	62.2	101.3	209.21	209.21	72.4	0.851	OK	209.1811	0.00	0.01	
1707771-23 HgII	541.076	136.8	214.6	209.19	209.19	156.1	2.845	OK	209.1811	0.00	0.01	

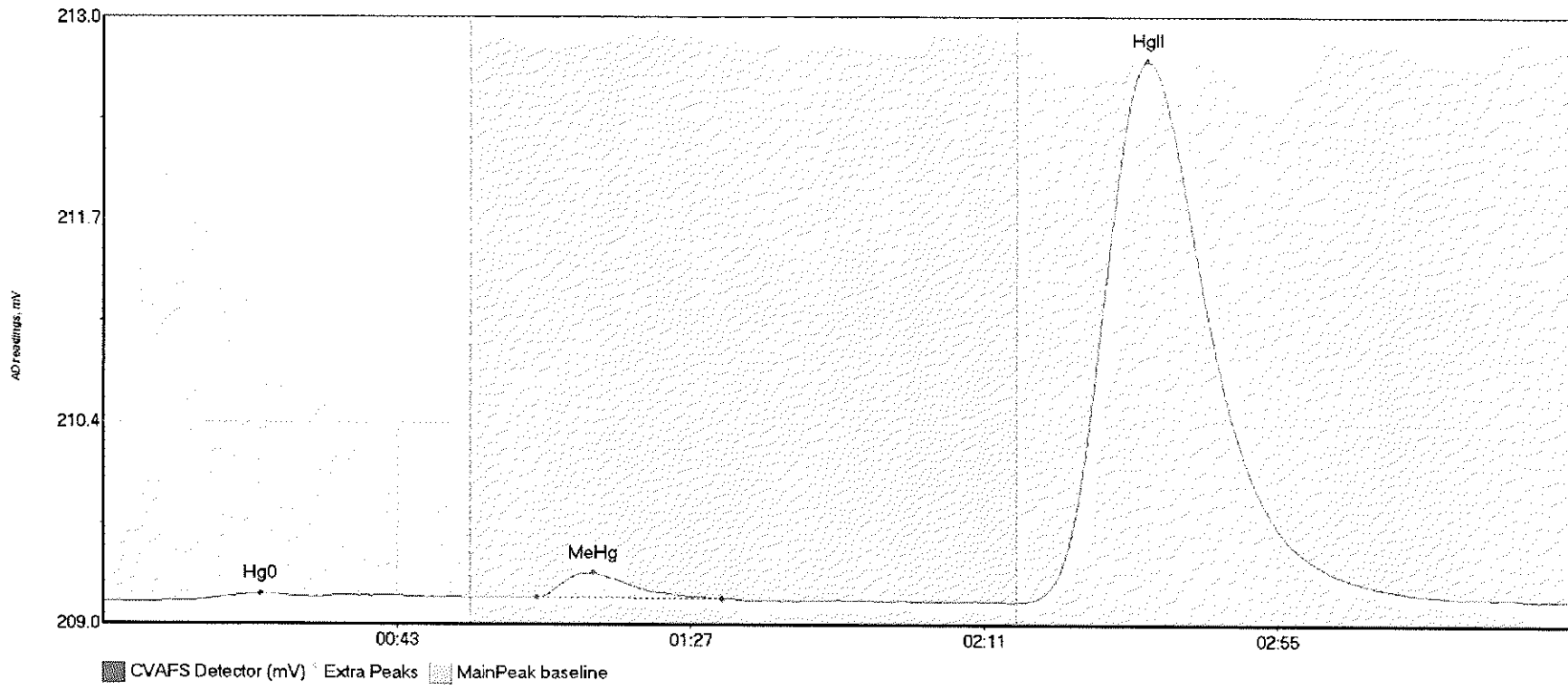


#62: 1707771-24



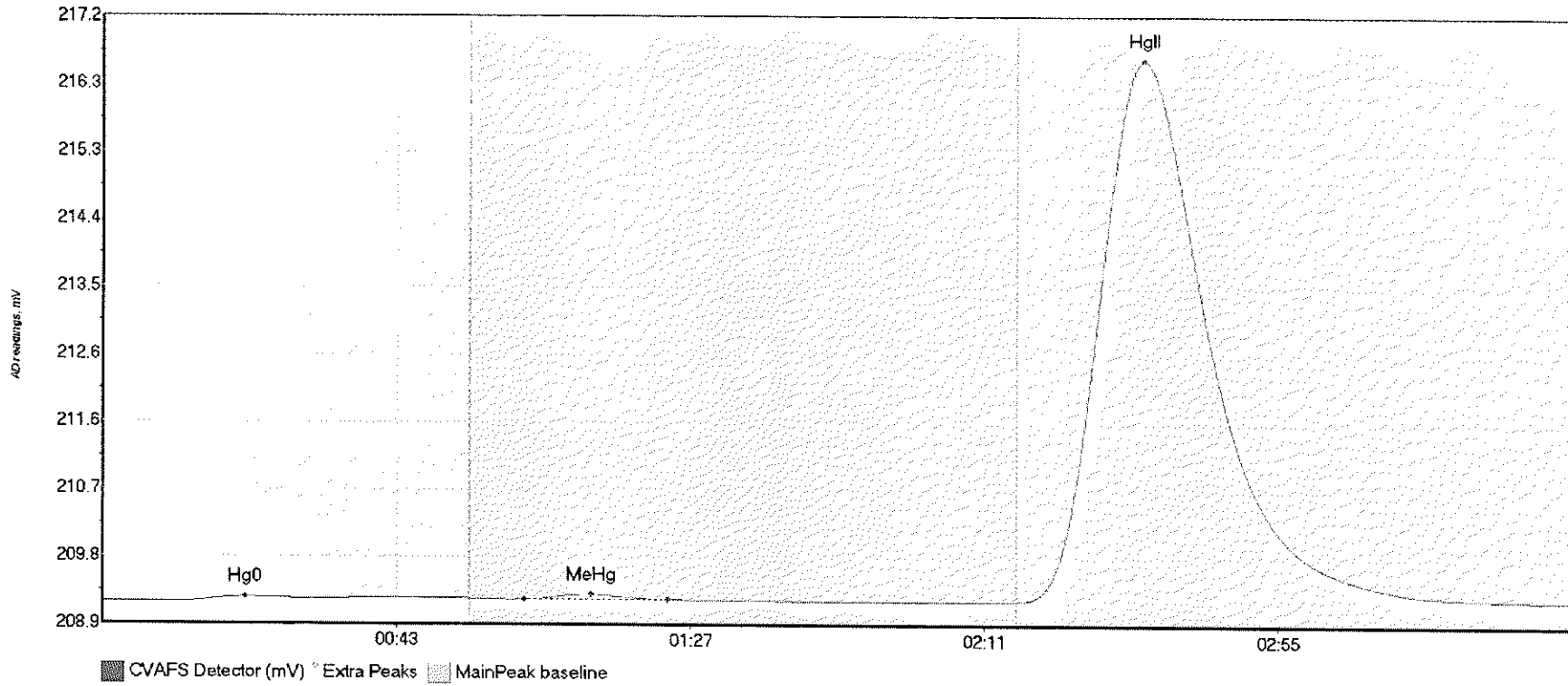
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1707771-24 Hg0	7.059	11.1	54.8	209.18	209.21	42.7	0.043	OK	209.1777	0.00	0.03	
1707771-24 MeHg	75.952	62.5	95.7	209.20	209.22	72.7	0.616	OK	209.1777	0.00	0.03	
1707771-24 HgII	1089.083	136.8	219.2	209.19	209.21	156.4	5.756	OK	209.1777	0.00	0.03	

#63: 1707771-25



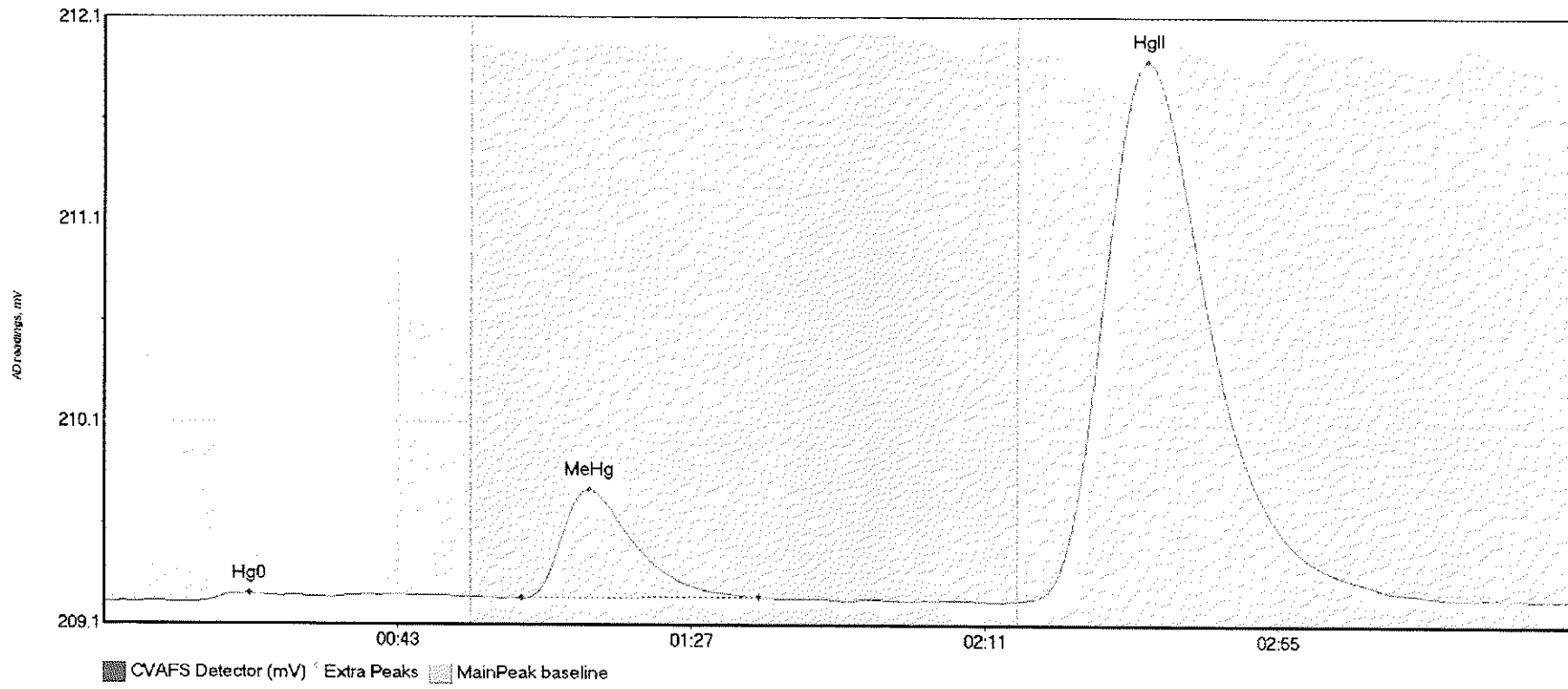
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1707771-25 Hg0	8.310	12.5	55.0	209.18	209.21	23.6	0.048	CT	209.1798	0.00	0.02	
1707771-25 MeHg	19.470	65.0	92.7	209.21	209.20	73.4	0.160	OK	209.1798	0.00	0.02	
1707771-25 HgII	664.546	137.2	215.4	209.18	209.19	156.5	3.530	OK	209.1798	0.00	0.02	

#64: 1707771-26



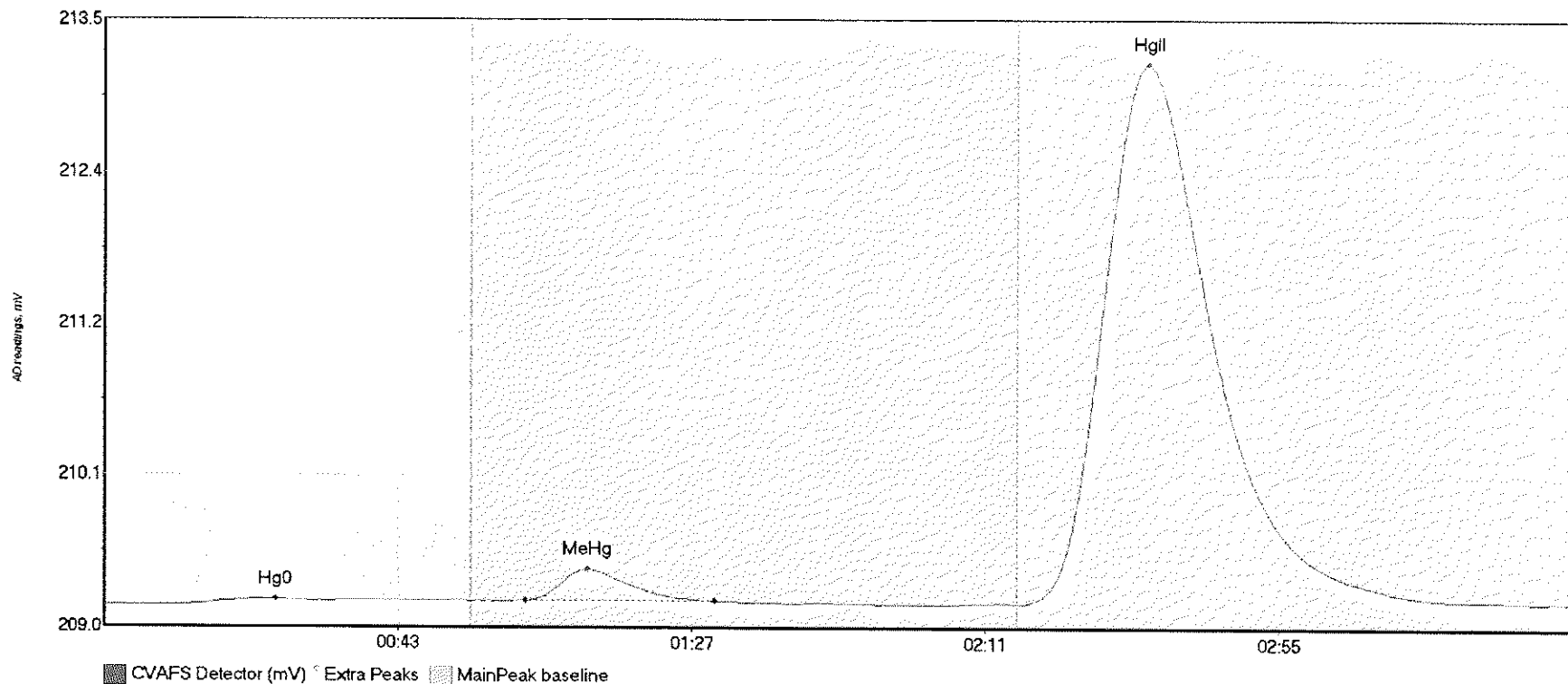
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1707771-26 Hg0	4.099	12.5	31.1	209.18	209.22	21.5	0.061	OK	209.1825	0.00	0.04	
1707771-26 MeHg	7.339	63.1	84.6	209.21	209.21	73.1	0.069	OK	209.1825	0.00	0.04	
1707771-26 HgII	1396.260	136.8	217.5	209.19	209.22	155.9	7.397	OK	209.1825	0.00	0.04	

#65: 1707771-27



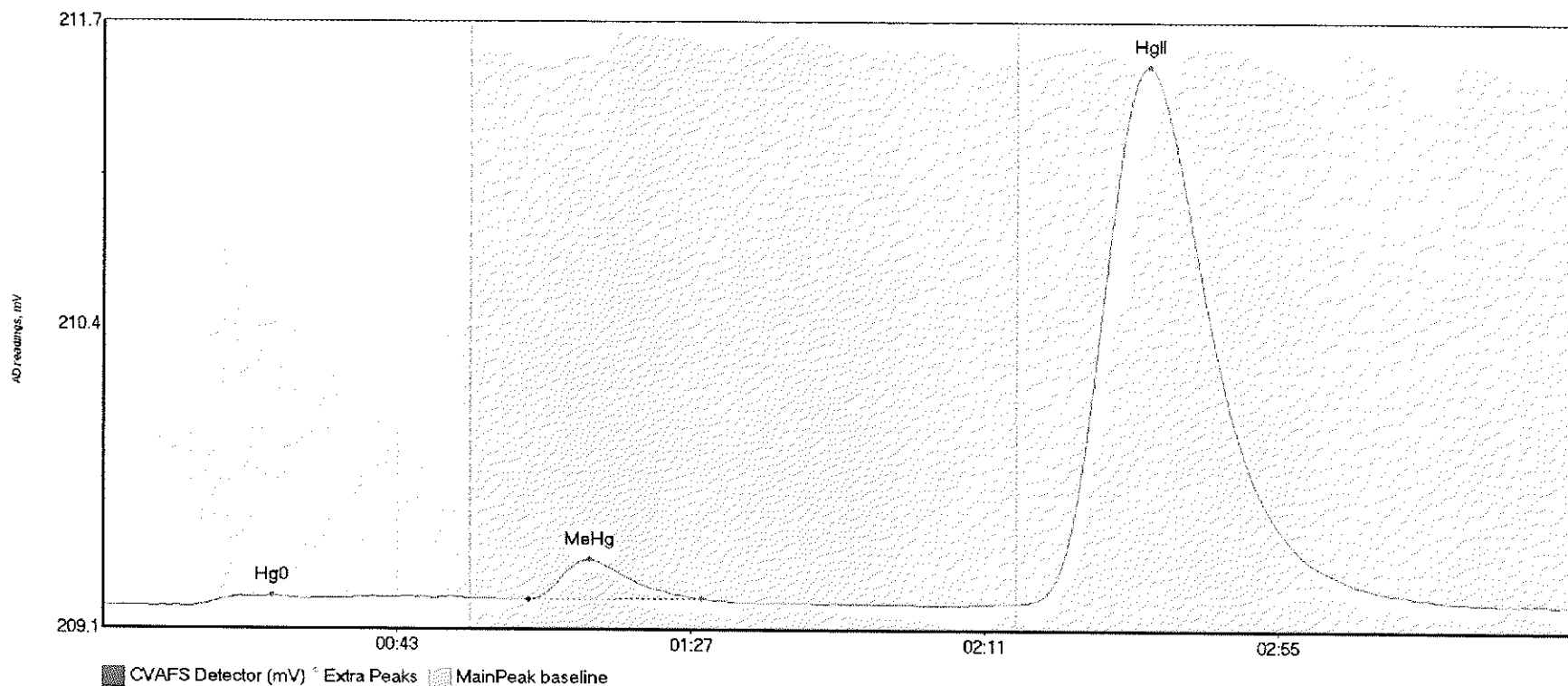
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1707771-27 Hg0	3.324	13.8	34.0	209.18	209.21	21.8	0.043	OK	209.1843	0.00	0.02	
1707771-27 MeHg	68.527	62.6	98.1	209.20	209.21	72.7	0.552	OK	209.1843	0.00	0.02	
1707771-27 HgII	513.996	136.8	214.7	209.19	209.20	156.4	2.734	OK	209.1843	0.00	0.02	

#66: 1707771-28



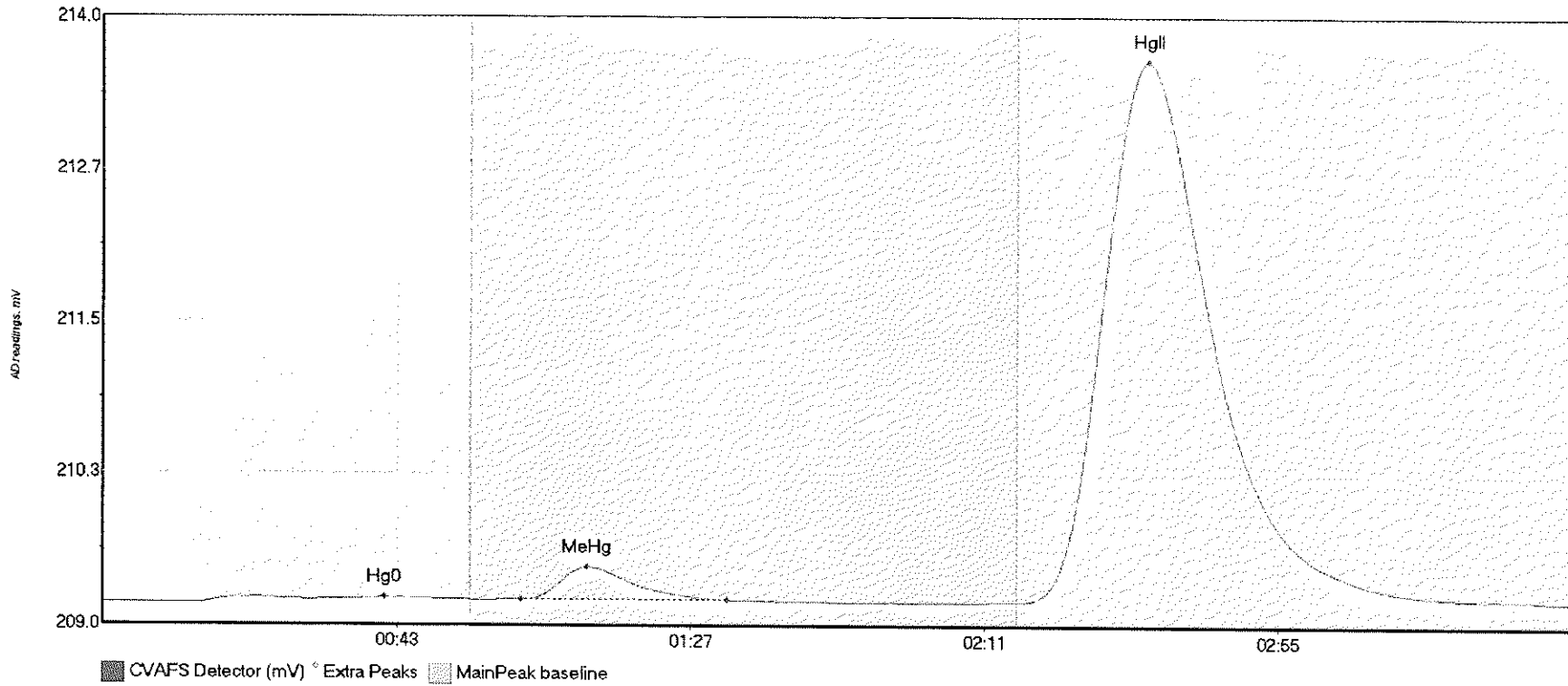
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1707771-28 Hg0	2.927	13.8	34.3	209.19	209.22	25.7	0.038	OK	209.1884	0.00	0.03	
1707771-28 MeHg	26.097	63.2	91.5	209.22	209.22	72.4	0.229	OK	209.1884	0.00	0.03	
1707771-28 HgII	745.608	137.4	214.6	209.20	209.22	156.4	3.940	OK	209.1884	0.00	0.03	

#67: 1707771-29



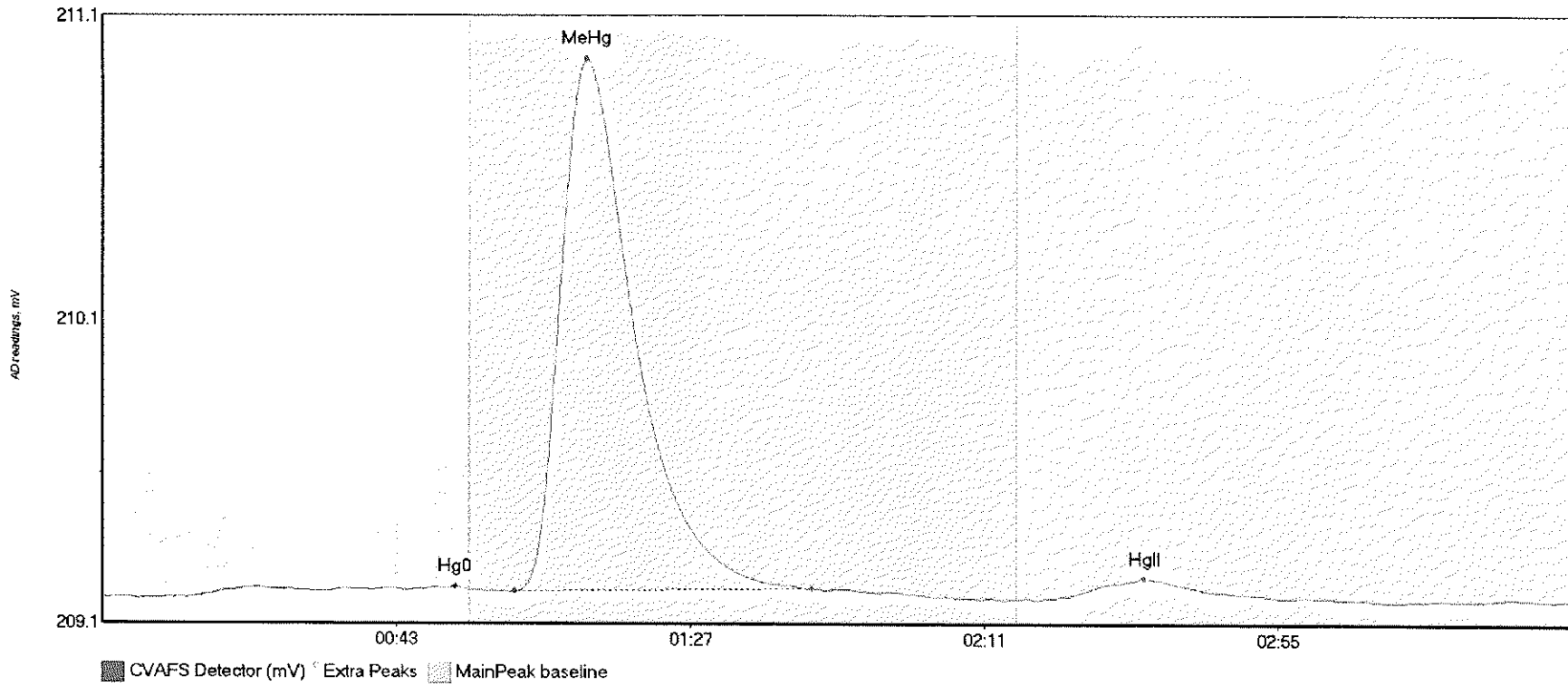
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1707771-29 Hg0	2.789	12.7	29.7	209.19	209.22	25.3	0.049	OK	209.1943	0.00	0.01	
1707771-29 MeHg	19.625	63.7	89.6	209.22	209.23	72.8	0.175	OK	209.1943	0.00	0.01	
1707771-29 HgII	444.851	136.8	205.1	209.21	209.22	156.7	2.343	OK	209.1943	0.00	0.01	

#68: 1707771-30



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1707771-30 Hg0	7.849	14.6	55.0	209.20	209.23	42.2	0.043	CT	209.2025	0.00	0.03	
1707771-30 MeHg	32.284	62.6	93.4	209.23	209.23	72.4	0.262	OK	209.2025	0.00	0.03	
1707771-30 HgII	836.825	137.8	217.8	209.22	209.23	156.4	4.410	OK	209.2025	0.00	0.03	

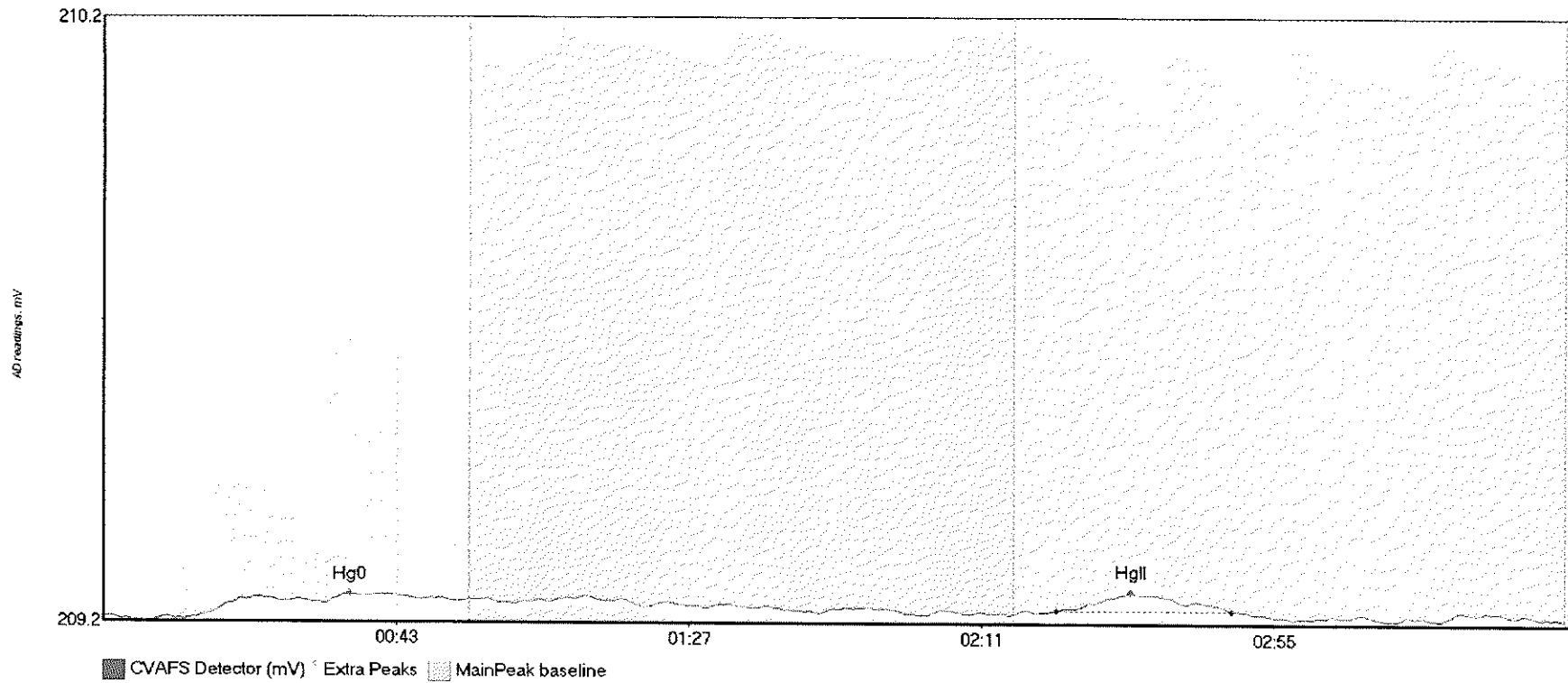
#69: SEQ-CCV5



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CCV5 Hg0	4.669	13.9	55.0	209.22	209.24	52.9	0.029	CT	209.2181	0.00	-0.01	
SEQ-CCV5 MeHg	218.338	61.7	106.1	209.24	209.24	72.5	1.710	OK	209.2181	0.00	-0.01	
SEQ-CCV5 HgII	9.934	142.3	176.5	209.22	209.22	156.1	0.065	OK	209.2181	0.00	-0.01	

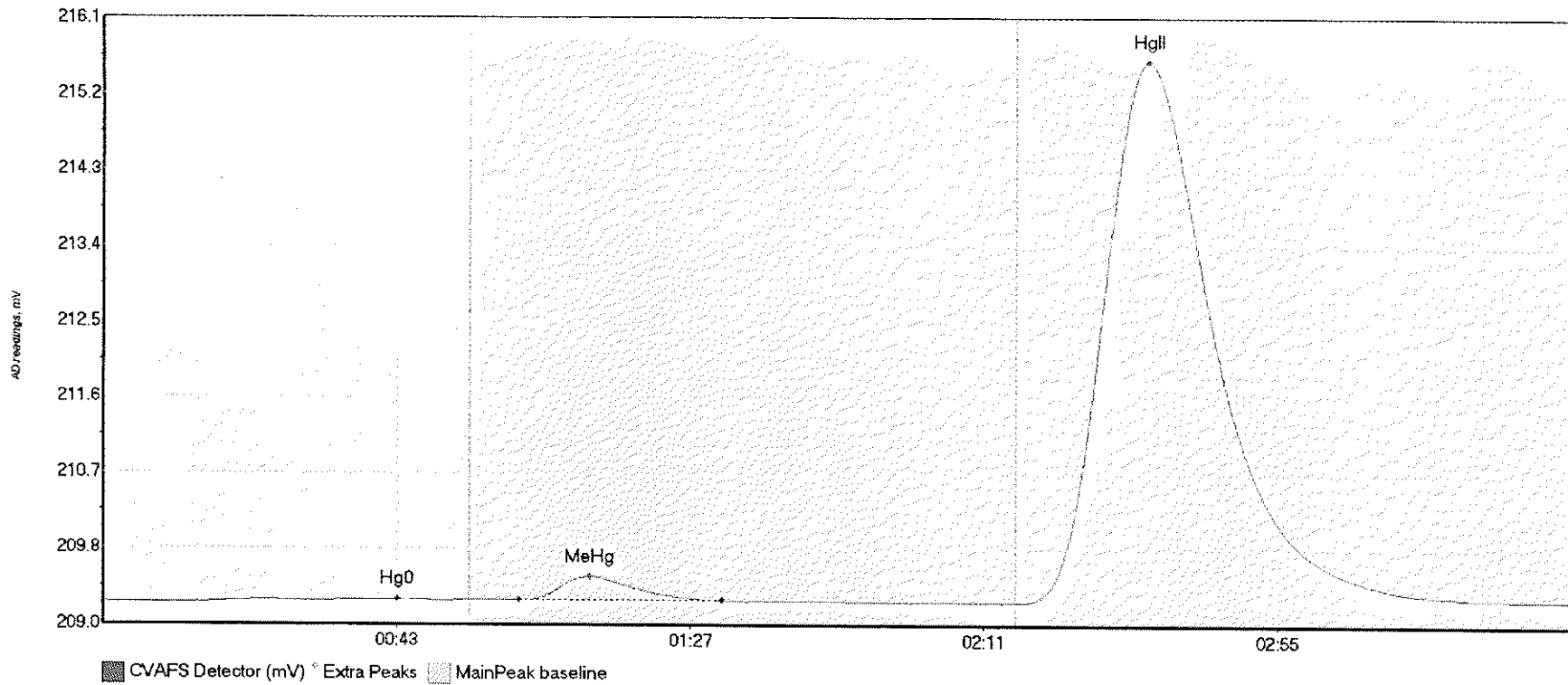


#70: SEQ-CCB5



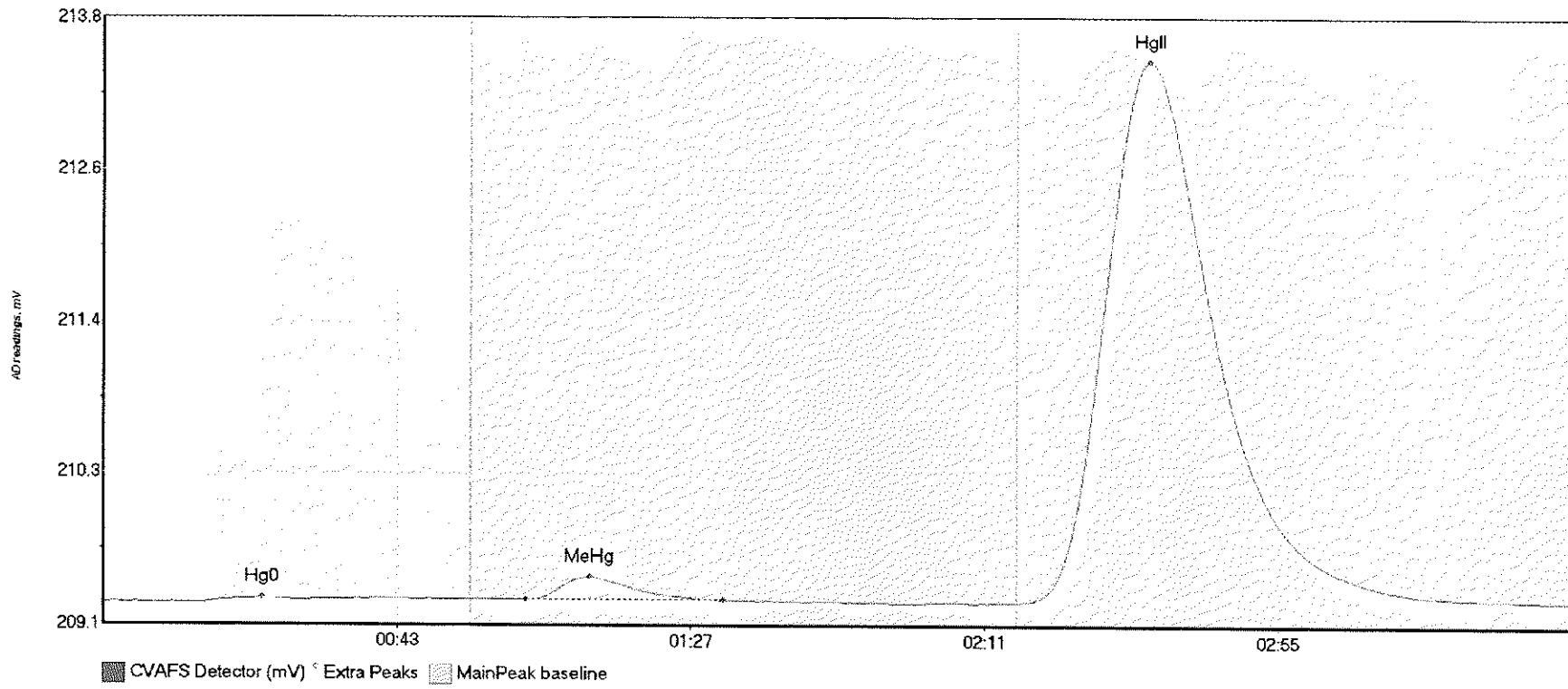
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CCB5 Hg0	5.360	15.6	53.3	209.21	209.23	37.0	0.035	OK	209.2079	0.00	0.00	
SEQ-CCB5 HgII	4.198	143.3	169.6	209.22	209.22	154.5	0.030	OK	209.2079	0.00	0.00	

#71: 1707771-31



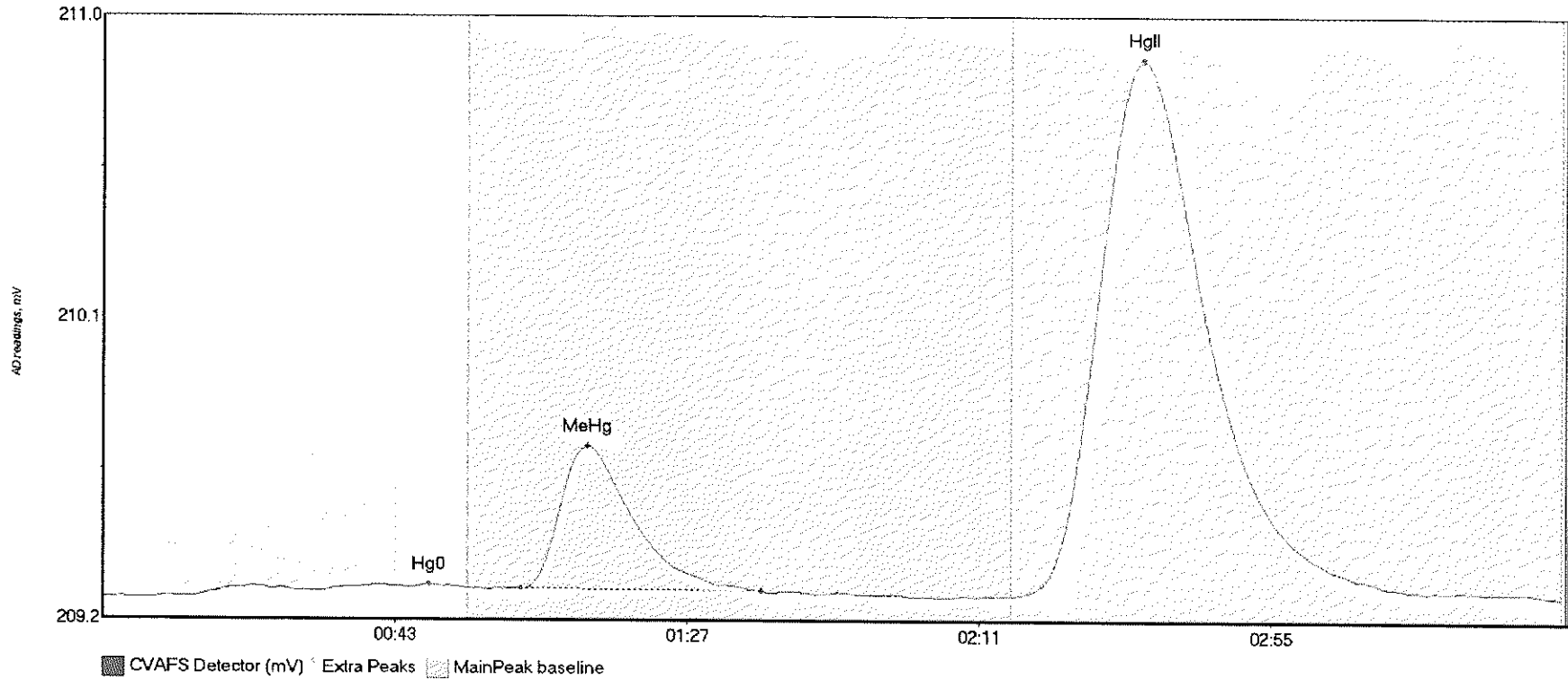
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1707771-31 Hg0	4.789	15.2	50.5	209.22	209.24	44.2	0.035	OK	209.2238	0.00	0.04	
1707771-31 MeHg	33.487	62.5	92.7	209.25	209.24	73.0	0.273	OK	209.2238	0.00	0.04	
1707771-31 HgII	1212.520	137.0	215.8	209.23	209.26	156.8	6.356	OK	209.2238	0.00	0.04	

#72: 1707771-32



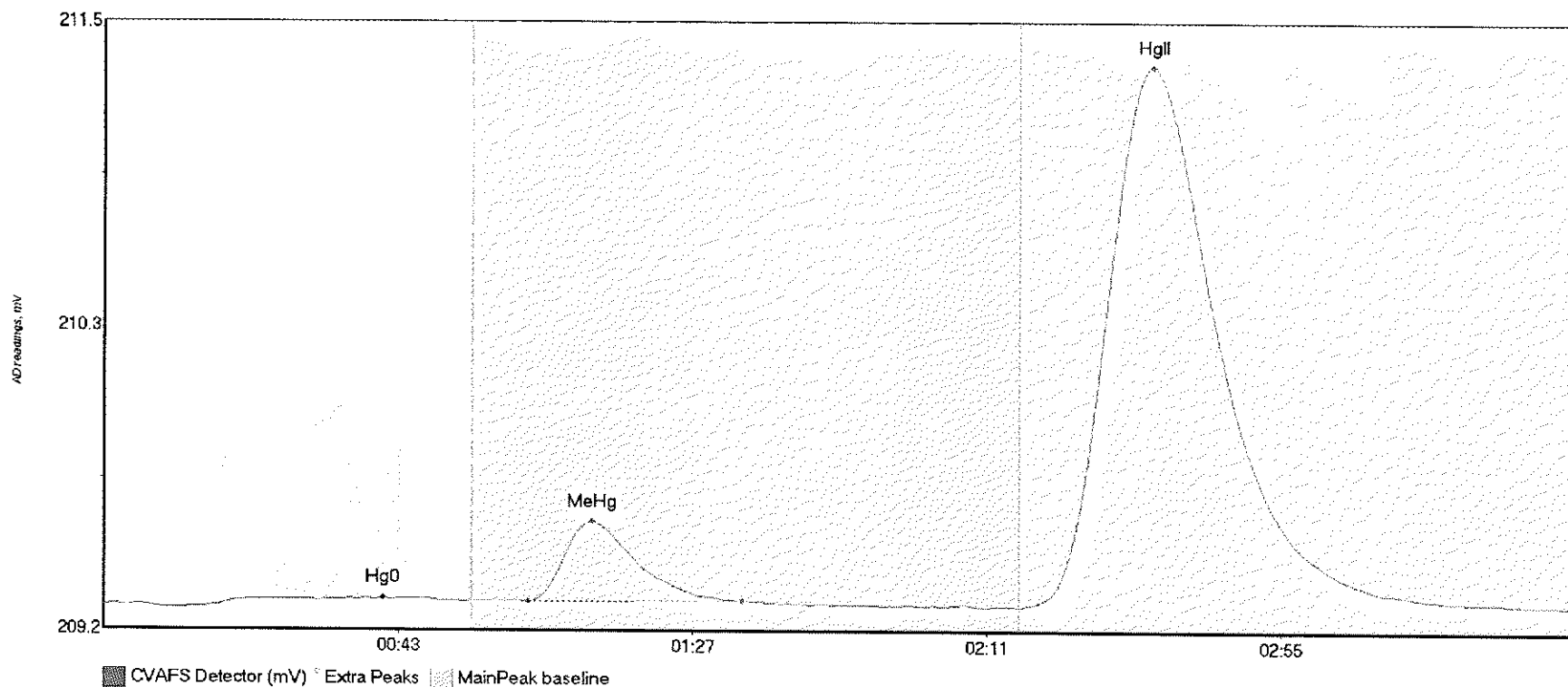
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1707771-32 Hg0	2.142	14.4	30.0	209.23	209.26	23.9	0.039	OK	209.2357	0.00	0.02	
1707771-32 MeHg	21.325	63.3	92.9	209.26	209.26	72.8	0.181	OK	209.2357	0.00	0.02	
1707771-32 HgII	812.798	137.0	219.6	209.24	209.26	156.7	4.256	OK	209.2357	0.00	0.02	

#73: 1707771-33



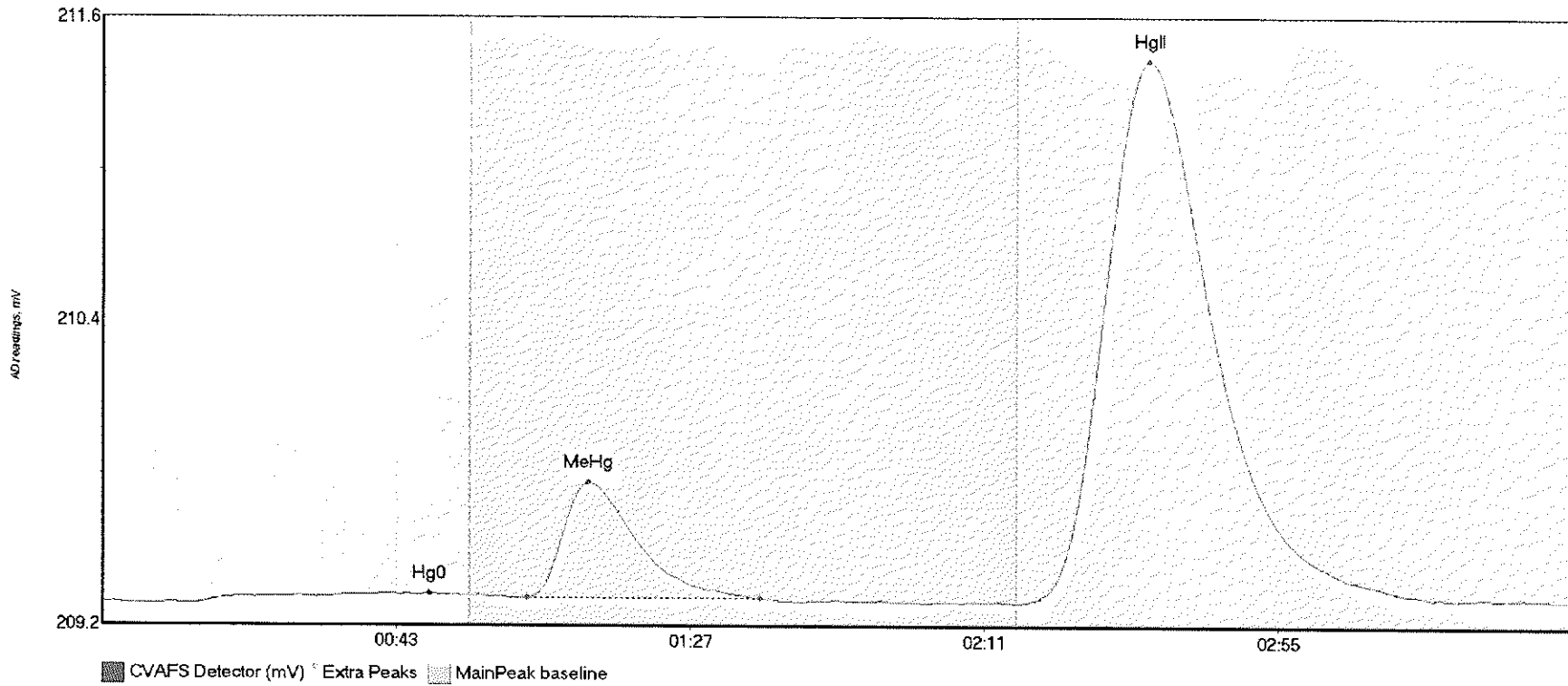
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1707771-33 Hg0	5.439	13.2	55.0	209.24	209.27	49.1	0.037	CT	209.2378	0.00	0.01	
1707771-33 MeHg	54.724	63.0	99.2	209.27	209.26	73.0	0.432	OK	209.2378	0.00	0.01	
1707771-33 HgII	313.065	136.8	219.2	209.25	209.25	156.8	1.628	OK	209.2378	0.00	0.01	

#74: 1707771-34



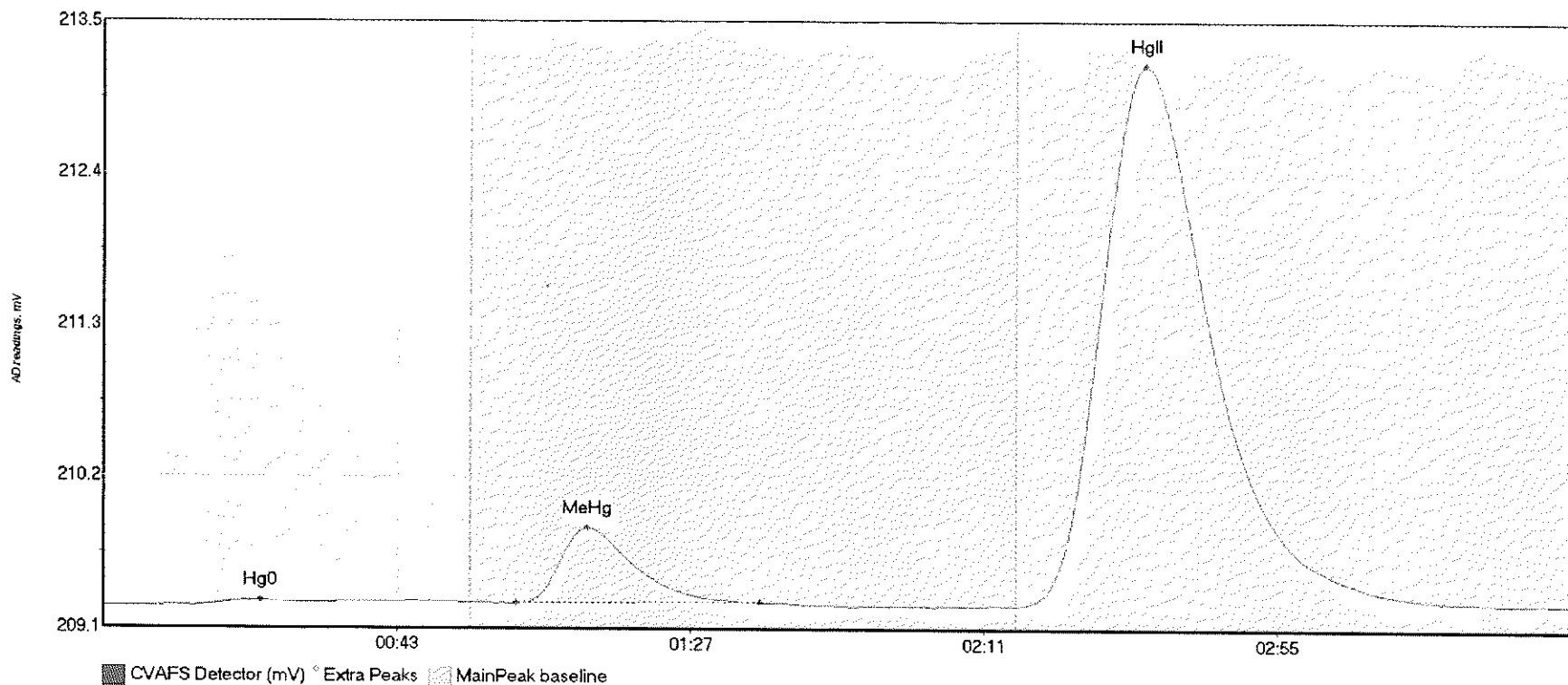
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1707771-34 Hg0	6.359	15.0	53.9	209.25	209.27	41.7	0.034	OK	209.2585	0.00	0.00	
1707771-34 MeHg	37.329	63.4	95.4	209.27	209.27	73.0	0.307	OK	209.2585	0.00	0.00	
1707771-34 HgII	402.951	136.9	219.1	209.25	209.26	156.9	2.083	OK	209.2585	0.00	0.00	

#75: 1707771-35



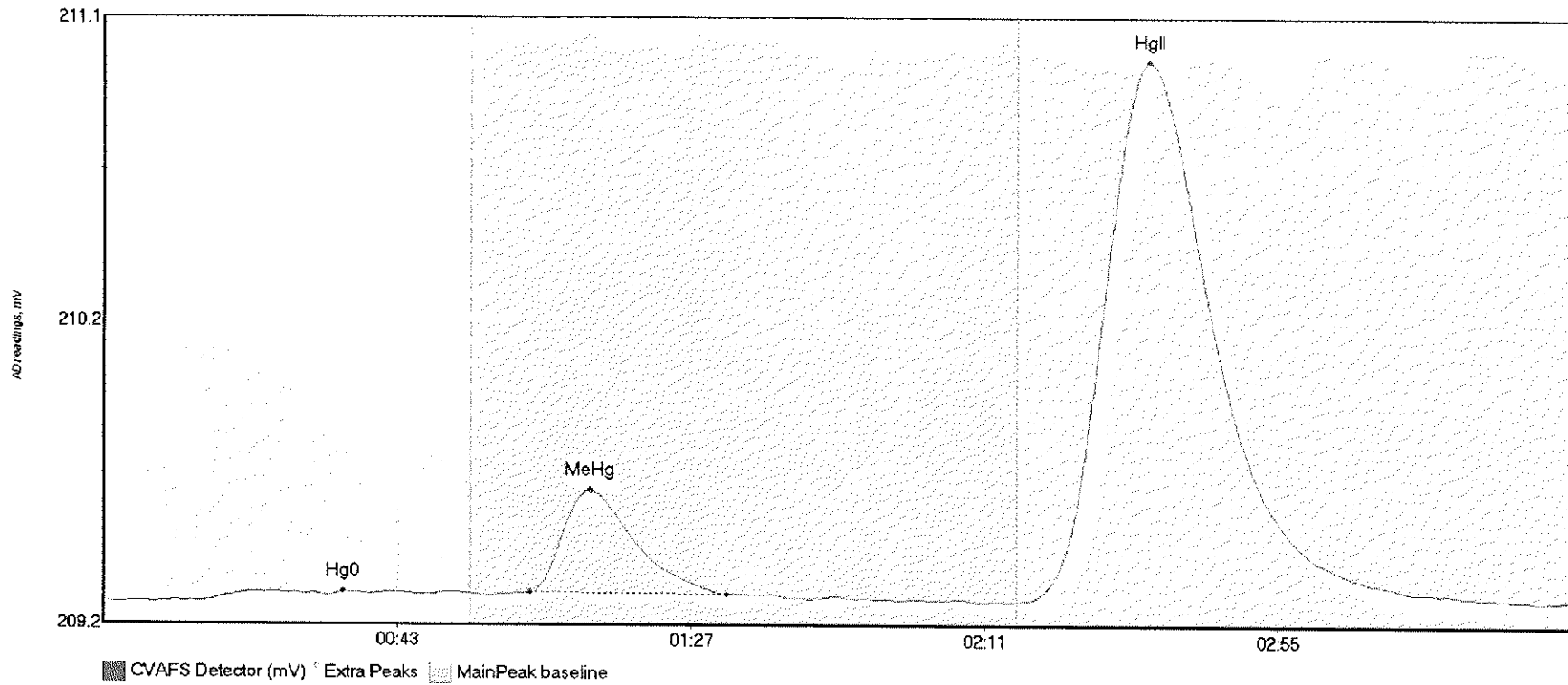
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1707771-35 Hg0	5.512	13.7	54.7	209.25	209.28	49.0	0.038	OK	209.2560	0.00	0.01	
1707771-35 MeHg	58.010	63.6	98.4	209.27	209.27	72.7	0.462	OK	209.2560	0.00	0.01	
1707771-35 HgII	411.221	136.9	219.6	209.26	209.27	156.6	2.176	OK	209.2560	0.00	0.01	

#76: 1707771-36



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1707771-36 Hg0	7.597	13.5	55.0	209.26	209.29	23.6	0.039	CT	209.2587	0.00	0.03	
1707771-36 MeHg	68.318	61.8	98.5	209.28	209.29	72.6	0.545	OK	209.2587	0.00	0.03	
1707771-36 HgII	745.554	136.9	219.6	209.27	209.29	156.2	3.893	OK	209.2587	0.00	0.03	

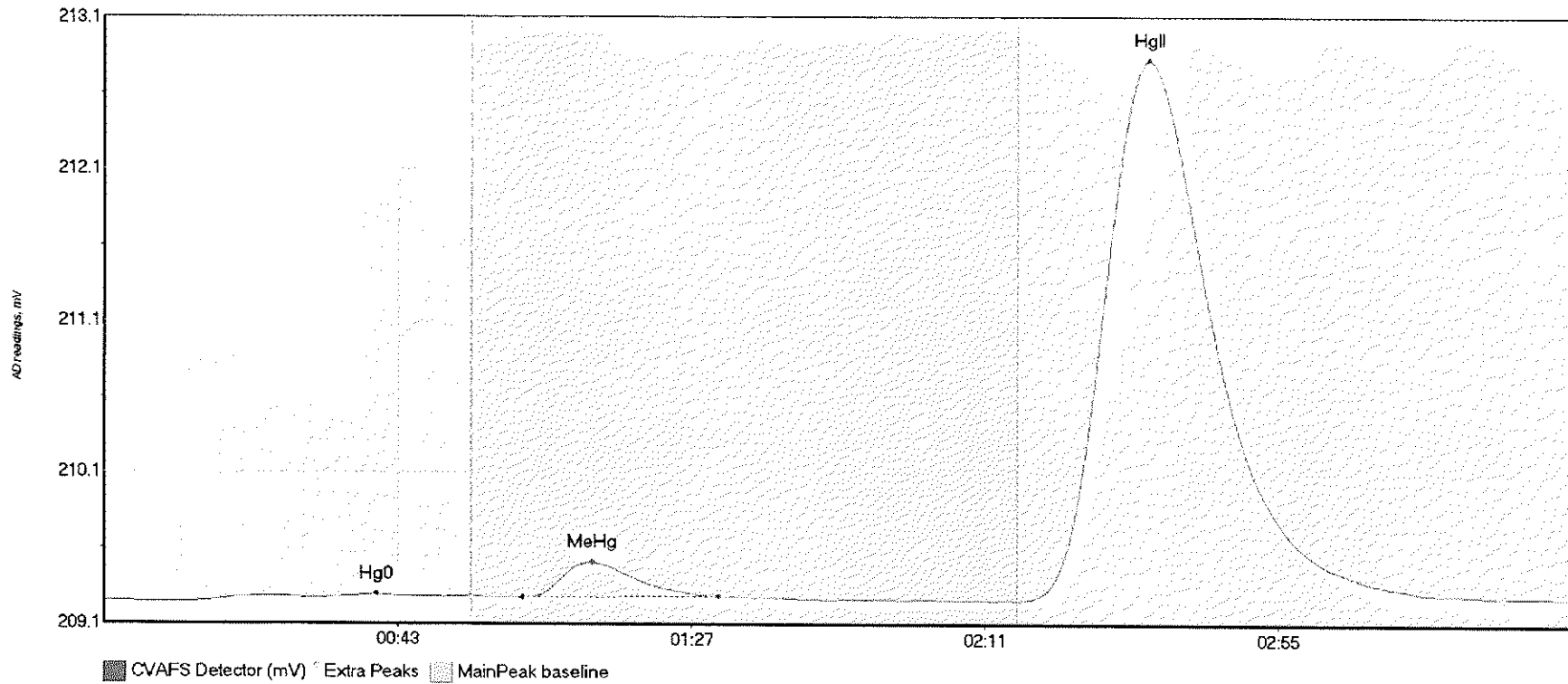
#77: 1707771-37



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1707771-37 Hg0	4.019	15.7	48.9	209.27	209.30	35.9	0.028	OK	209.2708	0.00	0.01	
1707771-37 MeHg	39.948	63.9	93.3	209.30	209.30	72.8	0.321	OK	209.2708	0.00	0.01	
1707771-37 HgII	327.919	137.3	214.9	209.28	209.28	156.6	1.696	OK	209.2708	0.00	0.01	

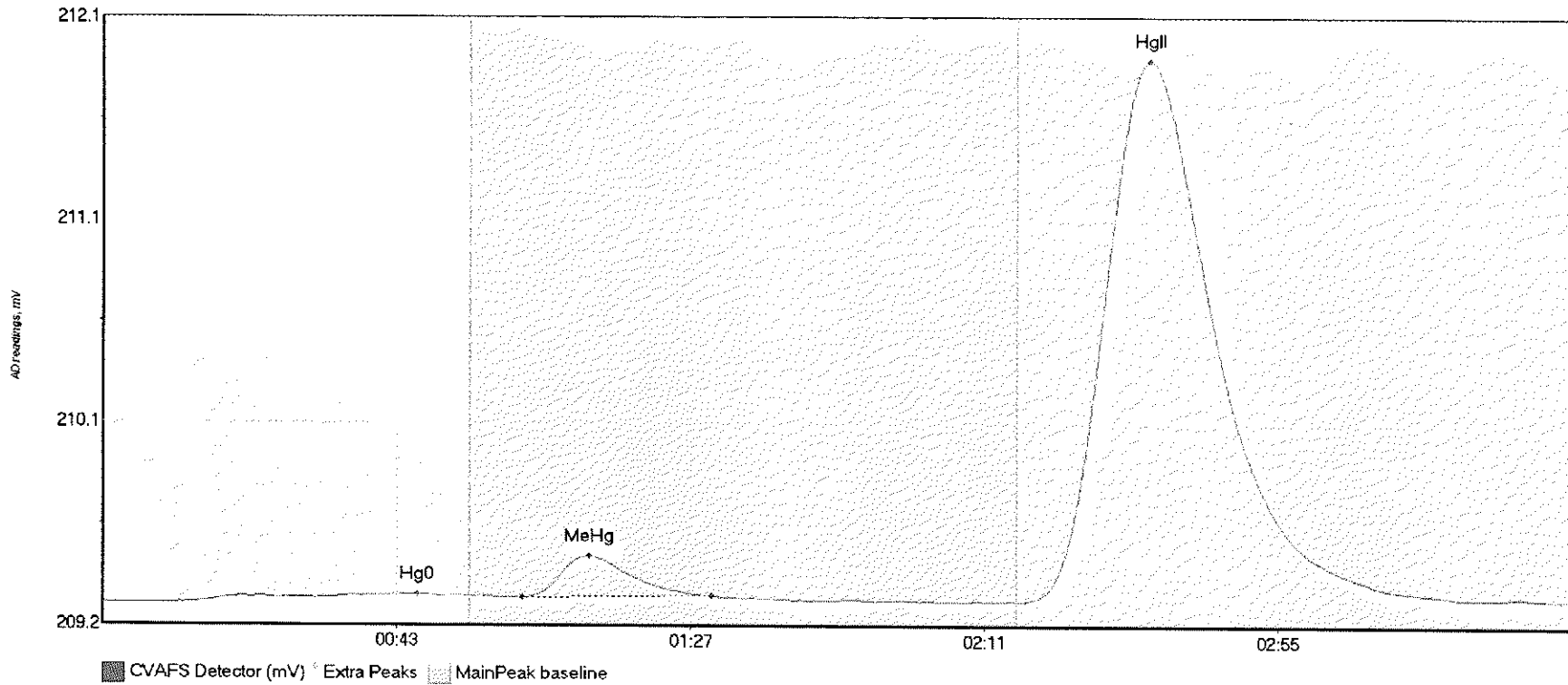


#78: 1707771-38



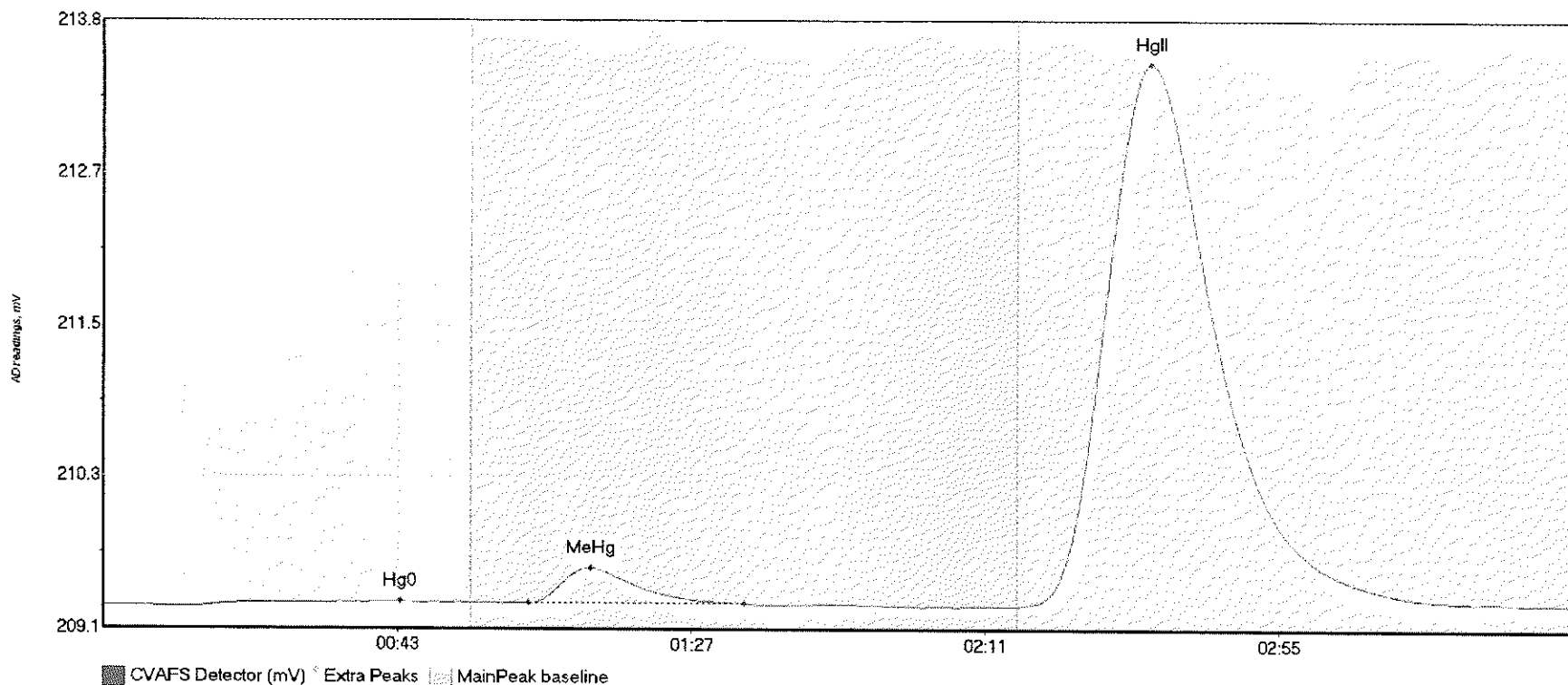
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1707771-38 Hg0	5.235	14.7	50.7	209.27	209.30	40.8	0.045	OK	209.2744	0.00	0.03	
1707771-38 MeHg	28.529	62.7	92.0	209.30	209.30	73.2	0.231	OK	209.2744	0.00	0.03	
1707771-38 HgII	680.977	136.8	219.8	209.28	209.30	156.6	3.557	CT	209.2744	0.00	0.03	

#79: 1707771-39



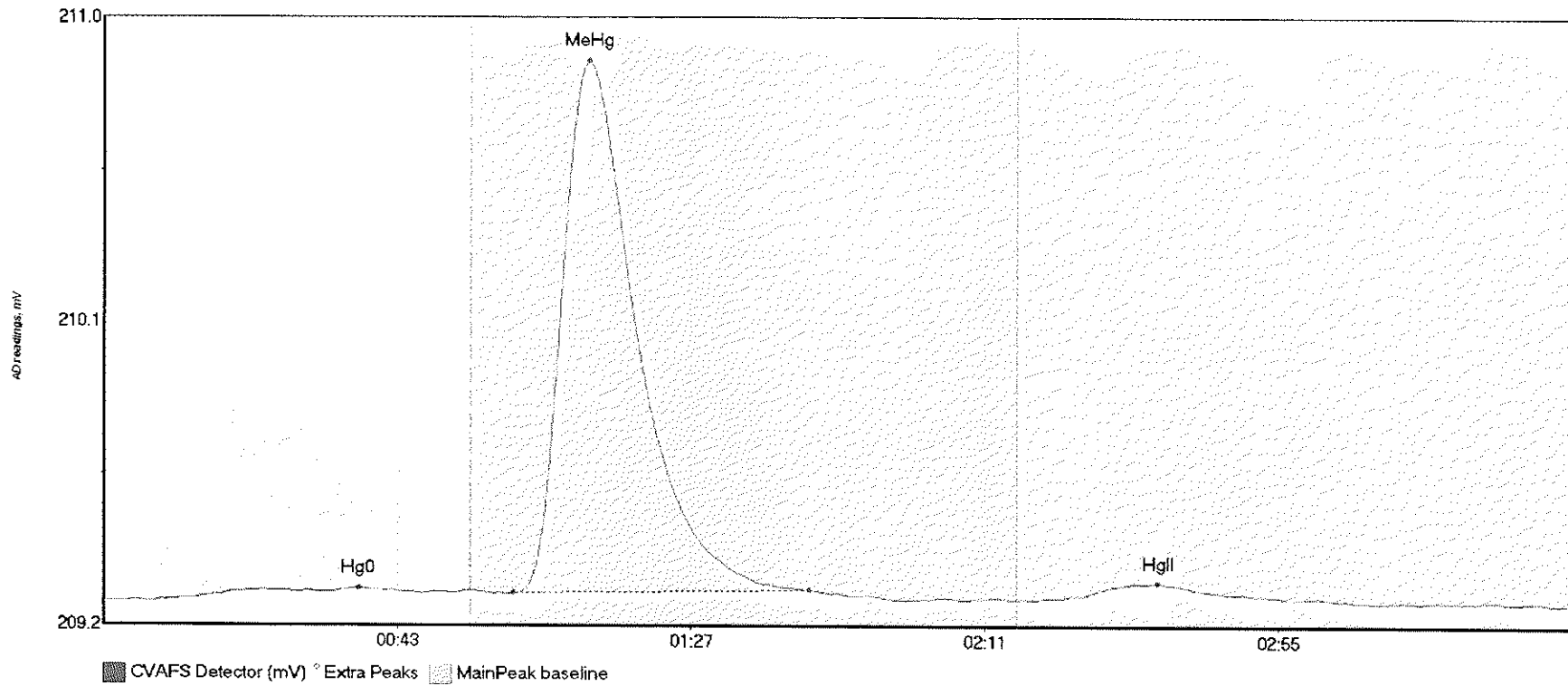
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1707771-39 Hg0	4.394	12.0	50.6	209.28	209.31	47.1	0.039	OK	209.2779	0.00	0.02	
1707771-39 MeHg	23.397	62.9	91.1	209.30	209.31	72.8	0.200	OK	209.2779	0.00	0.02	
1707771-39 HgII	496.456	137.3	218.4	209.29	209.30	156.8	2.580	OK	209.2779	0.00	0.02	

#80: 1707771-40

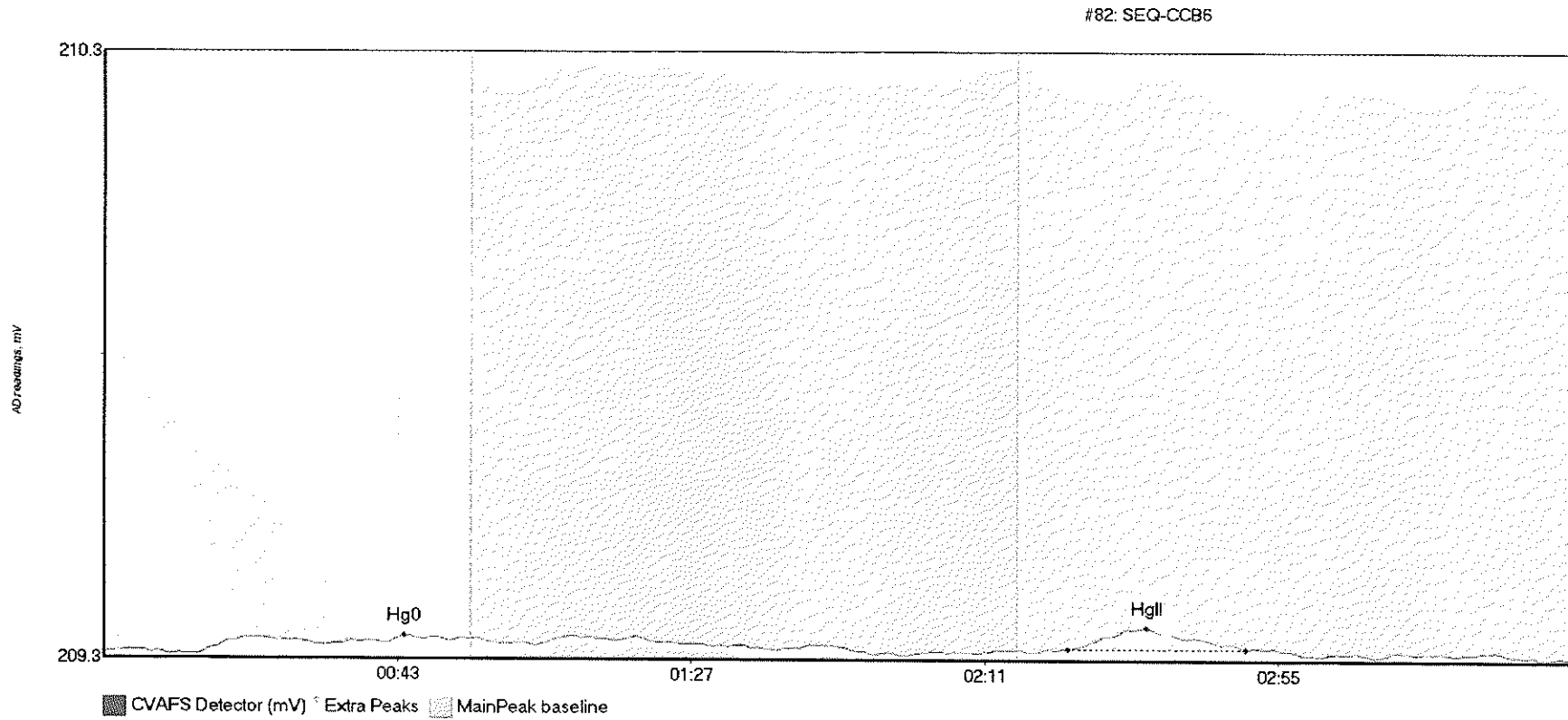


Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1707771-40 Hg0	6.195	13.8	54.9	209.28	209.32	44.5	0.041	OK	209.2904	0.00	0.03	
1707771-40 MeHg	34.189	63.6	95.9	209.32	209.31	73.0	0.273	OK	209.2904	0.00	0.03	
1707771-40 HgII	803.062	136.8	215.8	209.29	209.32	156.8	4.210	OK	209.2904	0.00	0.03	

#81: SEQ-CCV6



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CCV6 Hg0	4.843	9.2	47.7	209.30	209.32	38.2	0.034	OK	209.2940	0.00	0.00	
SEQ-CCV6 MeHg	201.201	61.5	105.7	209.32	209.33	72.7	1.566	OK	209.2940	0.00	0.00	
SEQ-CCV6 HgII	8.065	143.0	177.9	209.31	209.30	158.1	0.047	OK	209.2940	0.00	0.00	



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	ElDev	ElShift	Comment
SEQ-CCB6 Hg0	3.978	13.9	51.9	209.29	209.32	45.0	0.031	OK	209.2977	0.00	-0.01	
SEQ-CCB6 HgII	4.996	144.5	171.2	209.31	209.30	156.3	0.035	OK	209.2977	0.00	-0.01	317



Frontier Global Sciences

### MHg27001-170808-1

#### Analysis Datasheet for Methyl Mercury in Soil/Tissue

Date of Analysis: August 08, 2017

Instrument #: Hg2700-1

LIMS Sequence #: 7H09017

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	26.80 units	535.91	26.80 units	535.91	112.6 %Rec
SEQ-CAL2	1	0.20 ng/L	98.35 units	491.76	98.35 units	491.76	103.3 %Rec
SEQ-CAL3	1	1.00 ng/L	498.62 units	498.62	498.62 units	498.62	104.8 %Rec
SEQ-CAL4	1	2.00 ng/L	784.11 units	392.05	784.11 units	392.05	82.4 %Rec
SEQ-CAL5	1	4.00 ng/L	1845.39 units	461.35	1845.39 units	461.35	96.9 %Rec
SEQ-CAL6	0						
SEQ-CAL7	0						
SEQ-CAL8	0						
SEQ-CAL9	0						

Corr. Mean RF  
475.94

Corr. St Dev RF  
+/- 53.88

Corr. RSD CF  
11.3% RSD

Uncorr. Mean RF  
475.94

#### 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	0.000 ng/L	±0.000
BLK	2	3	0.993 ng/L	±1.033
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:   P 8/12/17

Instrument	Analyst	Sample		Dilution	Analyzed	FileID	Run End	Uncorrected Response	Batch ID	No PB					Comments	
		Type	LabNumber							Correction?	RESP	InitialResult	FinalResult	InitialUnits		
Hg2700-1	DM2	CAL	SEQ-1BL1 ✓	1	8/8/17 8:53	24741-1.RAW	8:53:47	0.00				0.0	0.000	0.000	ng/L	
Hg2700-1	DM2	CAL	SEQ-CAL1 ✓	1	8/8/17 9:04	24742-1.RAW	9:04:17	26.80				26.8	0.056	0.056	ng/L	
Hg2700-1	DM2	CAL	SEQ-CAL2 ✓	1	8/8/17 9:14	24743-1.RAW	9:14:48	98.35				98.4	0.207	0.207	ng/L	
Hg2700-1	DM2	CAL	SEQ-CAL3 ✓	1	8/8/17 9:25	24744-1.RAW	9:25:19	498.62				498.6	1.048	1.048	ng/L	
Hg2700-1	DM2	CAL	SEQ-CAL4 ✓	1	8/8/17 9:35	24745-1.RAW	9:35:50	784.11				784.1	1.648	1.648	ng/L	
Hg2700-1	DM2	CAL	SEQ-CAL5 ✓	1	8/8/17 9:46	24746-1.RAW	9:46:20	1845.39				1845.4	3.877	3.877	ng/L	
Hg2700-1	DM2	CAL	SEQ-ICV1 ✓	1	8/8/17 9:56	24747-1.RAW	9:56:51	234.04				234.0	0.492	0.492	ng/L	
Hg2700-1	DM2	CAL	SEQ-ICB1 ✓	1	8/8/17 10:07	24748-1.RAW	10:07:22	1.15				1.2	0.002	0.002	ng/L	
Hg2700-1	DM2	BLK	F707567-BLK4 ✓	500	8/8/17 10:17	24749-1.RAW	10:17:53	0.00	1			0.0	0.000	0.000	ng/L	
Hg2700-1	DM2	BLK	F707567-BLK5 ✓	500	8/8/17 10:28	24750-1.RAW	10:28:23	0.00	1			0.0	0.000	0.000	ng/L	
Hg2700-1	DM2	BLK	F707567-BLK6 ✓	500	8/8/17 10:38	24751-1.RAW	10:38:54	0.00	1			0.0	0.000	0.000	ng/L	
Hg2700-1	DM2	SAM	F707567-BSD1 ✓	1000	8/8/17 10:49	24752-1.RAW	10:49:25	809.96	1			810.0	1.702	1701.829	ng/L	
Hg2700-1	DM2	SAM	F707567-BSD2 ✓	1000	8/8/17 10:59	24753-1.RAW	10:59:56	907.91	1			907.9	1.908	1907.616	ng/L	
Hg2700-1	DM2	BLK	F707570-BLK1 ✓	500	8/8/17 11:10	24754-1.RAW	11:10:26	1.96	2			2.0	0.004	2.062	ng/L	
Hg2700-1	DM2	BLK	F707570-BLK2 ✓	500	8/8/17 11:20	24755-1.RAW	11:20:57	0.87	2			0.9	0.002	0.917	ng/L	
Hg2700-1	DM2	BLK	F707570-BLK3 ✓	500	8/8/17 11:31	24756-1.RAW	11:31:28	0.00	2			0.0	0.000	0.000	ng/L	
Hg2700-1	DM2	SAM	F707570-BSD1 ✓	1000	8/8/17 11:41	24757-1.RAW	11:41:59	823.77	2			823.8	1.730	1729.853	ng/L	
Hg2700-1	DM2	SAM	F707570-BSD1 ✓	1000	8/8/17 11:52	24758-1.RAW	11:52:29	810.32	2			810.3	1.702	1701.582	ng/L	
Hg2700-1	DM2	CAL	SEQ-CCV1 ✓	1	8/8/17 12:03	24759-1.RAW	12:03:00	206.32				206.3	0.433	0.433	ng/L	
Hg2700-1	DM2	CAL	SEQ-CCB1 ✓	1	8/8/17 12:13	24760-1.RAW	12:13:31	0.00				0.0	0.000	0.000	ng/L	
Hg2700-1	DM2	SAM	F707570-DUP1 ✓	500	8/8/17 12:24	24761-1.RAW	12:24:02	40.95	2			41.0	0.084	42.028	ng/L	
Hg2700-1	DM2	SAM	F707570-MS1 ✓	500	8/8/17 12:34	24762-1.RAW	12:34:32	594.80	2			594.8	1.248	623.880	ng/L	
Hg2700-1	DM2	SAM	F707570-MSD1 ✓	500	8/8/17 12:45	24763-1.RAW	12:45:03	536.76	2			536.8	1.126	562.909	ng/L	
Hg2700-1	DM2	SAM	F707570-MS2 ✓	500	8/8/17 12:55	24764-1.RAW	12:55:34	532.35	2			532.4	1.117	558.275	ng/L	
Hg2700-1	DM2	SAM	F707570-MSD2 ✓	500	8/8/17 13:06	24765-1.RAW	13:06:05	560.80	2			560.8	1.176	588.158	ng/L	
Hg2700-1	DM2	SAM	1707771-CB ✓	500	8/8/17 13:16	24766-1.RAW	13:16:35	42.51	2			42.5	0.087	43.663	ng/L	
Hg2700-1	DM2	SAM	1707771-CC ✓	500	8/8/17 13:27	24767-1.RAW	13:27:06	44.63	2			44.6	0.092	45.892	ng/L	
Hg2700-1	DM2	SAM	1707771-CO ✓	500	8/8/17 13:37	24768-1.RAW	13:37:37	51.64	2			51.6	0.107	53.253	ng/L	
Hg2700-1	DM2	SAM	1707771-CE ✓	500	8/8/17 13:48	24769-1.RAW	13:48:07	11.08	2			11.1	0.021	10.650	ng/L	
Hg2700-1	DM2	SAM	1707771-CF ✓	500	8/8/17 13:58	24770-1.RAW	13:58:38	79.28	2			79.3	0.165	82.292	ng/L	
Hg2700-1	DM2	CAL	SEQ-CCV2 ✓	1	8/8/17 14:09	24771-1.RAW	14:09:09	208.09				208.1	0.437	0.437	ng/L	
Hg2700-1	DM2	CAL	SEQ-CCB2 ✓	1	8/8/17 14:19	24772-1.RAW	14:19:40	0.00				0.0	0.000	0.000	ng/L	
Hg2700-1	DM2	SAM	1707771-CG ✓	500	8/8/17 14:30	24773-1.RAW	14:30:10	89.56	2			89.6	0.186	93.097	ng/L	
Hg2700-1	DM2	SAM	1707771-CX ✓	500	8/8/17 14:40	24774-1.RAW	14:40:41	24.81	2			24.8	0.050	25.067	ng/L	
Hg2700-1	DM2	SAM	1707771-CY ✓	500	8/8/17 14:51	24775-1.RAW	14:51:12	21.15	2			21.2	0.042	21.228	ng/L	
Hg2700-1	DM2	SAM	1707771-CZ ✓	500	8/8/17 15:01	24776-1.RAW	15:01:43	25.19	2			25.2	0.051	25.470	ng/L	
Hg2700-1	DM2	SAM	1707771-DA ✓	500	8/8/17 15:12	24777-1.RAW	15:12:13	11.73	2			11.7	0.023	11.333	ng/L	
Hg2700-1	DM2	SAM	1707775-01 ✓	500	8/8/17 15:22	24778-1.RAW	15:22:44	51.27	2			51.3	0.106	52.871	ng/L	
Hg2700-1	DM2	SAM	1707775-02 ✓	500	8/8/17 15:33	24779-1.RAW	15:33:15	42.18	2			42.2	0.087	43.316	ng/L	
Hg2700-1	DM2	SAM	1707775-03 ✓	500	8/8/17 15:43	24780-1.RAW	15:43:46	36.80	2			36.8	0.075	37.669	ng/L	
Hg2700-1	DM2	SAM	1707775-04 ✓	500	8/8/17 15:54	24781-1.RAW	15:54:16	26.02	2			26.0	0.053	26.340	ng/L	
Hg2700-1	DM2	SAM	1707775-05 ✓	500	8/8/17 16:04	24782-1.RAW	16:04:47	17.61	2			17.6	0.035	17.503	ng/L	
Hg2700-1	DM2	CAL	SEQ-CCV3 ✓	1	8/8/17 16:15	24783-1.RAW	16:15:18	203.39				203.4	0.427	0.427	ng/L	
Hg2700-1	DM2	CAL	SEQ-CCB3 ✓	1	8/8/17 16:25	24784-1.RAW	16:25:49	0.00				0.0	0.000	0.000	ng/L	
Hg2700-1	DM2	SAM	1707775-06 ✓	500	8/8/17 16:36	24785-1.RAW	16:36:19	17.33	2			17.3	0.034	17.212	ng/L	
Hg2700-1	DM2	SAM	1707775-07 ✓	500	8/8/17 16:46	24786-1.RAW	16:46:50	17.55	2			17.6	0.035	17.449	ng/L	

Instrument	Analyst	Sample		Dilution	Analyzed	FileID	Run End	Uncorrected Response	Batch ID	No PB		InitialResult	FinalResult	InitialUnits	Comments
		Type	LabNumber							Correction?	RESP				
Hg2700-1	DM2	SAM	1707775-08	500	8/8/17 16:57	24787-1.RAW	16:57:20	0.00	2		0.0	-0.002	-0.993	ng/L	
Hg2700-1	DM2	SAM	1707775-09	500	8/8/17 17:07	24788-1.RAW	17:07:50	0.00	2		0.0	-0.002	-0.993	ng/L	
Hg2700-1	DM2	SAM	1707776-01	500	8/8/17 17:18	24789-1.RAW	17:18:20	94.42	2		94.4	0.196	98.200	ng/L	
Hg2700-1	DM2	SAM	F707567-DUP2	500	8/8/17 17:28	24790-1.RAW	17:28:51	108.85	1		108.9	0.229	114.354	ng/L	
Hg2700-1	DM2	SAM	F707567-MS3	500	8/8/17 17:39	24791-1.RAW	17:39:22	529.76	1		529.8	1.113	556.539	ng/L	
Hg2700-1	DM2	SAM	F707567-MSD3	500	8/8/17 17:49	24792-1.RAW	17:49:52	570.38	1		570.4	1.198	599.216	ng/L	
Hg2700-1	DM2	SAM	F707567-MS4	500	8/8/17 18:00	24793-1.RAW	18:00:23	505.35	1		505.3	1.062	530.898	ng/L	
Hg2700-1	DM2	SAM	F707567-MSD4	500	8/8/17 18:10	24794-1.RAW	18:10:54	542.27	1		542.3	1.139	569.683	ng/L	
Hg2700-1	DM2	CAL	SEQ-CCV4	1	8/8/17 18:21	24795-1.RAW	18:21:24	220.90			220.9	0.464	0.464	ng/L	
Hg2700-1	DM2	CAL	SEQ-CCB4	1	8/8/17 18:31	24796-1.RAW	18:31:55	3.42			3.4	0.007	0.007	ng/L	
Hg2700-1	DM2	SAM	1707771-21RE1	500	8/8/17 18:42	24797-1.RAW	18:42:26	127.30	1		127.3	0.267	133.741	ng/L	
Hg2700-1	DM2	SAM	1707771-22RE1	500	8/8/17 18:52	24798-1.RAW	18:52:56	128.91	1		128.9	0.271	135.423	ng/L	
Hg2700-1	DM2	SAM	1707771-23RE1	500	8/8/17 19:03	24799-1.RAW	19:03:27	113.22	1		113.2	0.238	118.941	ng/L	
Hg2700-1	DM2	SAM	1707771-24RE1	500	8/8/17 19:13	24800-1.RAW	19:13:58	104.76	1		104.8	0.220	110.058	ng/L	
Hg2700-1	DM2	SAM	1707771-25RE1	500	8/8/17 19:24	24801-1.RAW	19:24:28	33.58	1		33.6	0.071	35.276	ng/L	
Hg2700-1	DM2	SAM	1707771-26RE1	500	8/8/17 19:34	24802-1.RAW	19:34:59	24.76	1		24.8	0.052	26.007	ng/L	
Hg2700-1	DM2	SAM	1707771-27RE1	500	8/8/17 19:45	24803-1.RAW	19:45:30	95.03	1		95.0	0.200	99.831	ng/L	
Hg2700-1	DM2	SAM	1707771-28RE1	500	8/8/17 19:56	24804-1.RAW	19:56:00	57.28	1		57.3	0.120	60.178	ng/L	
Hg2700-1	DM2	SAM	1707771-29RE1	500	8/8/17 20:06	24805-1.RAW	20:06:31	77.10	1		77.1	0.162	81.001	ng/L	
Hg2700-1	DM2	SAM	1707771-30RE1	500	8/8/17 20:17	24806-1.RAW	20:17:02	90.78	1		90.8	0.191	95.369	ng/L	
Hg2700-1	DM2	CAL	SEQ-CCV5	1	8/8/17 20:27	24807-1.RAW	20:27:33	227.58			227.6	0.478	0.478	ng/L	
Hg2700-1	DM2	CAL	SEQ-CCB5	1	8/8/17 20:38	24808-1.RAW	20:38:03	0.00			0.0	0.000	0.000	ng/L	
Hg2700-1	DM2	SAM	1707771-31RE1	500	8/8/17 20:48	24809-1.RAW	20:48:34	33.79	1		33.8	0.071	35.503	ng/L	
Hg2700-1	DM2	SAM	1707771-32RE1	500	8/8/17 20:59	24810-1.RAW	20:59:05	42.53	1		42.5	0.089	44.680	ng/L	
Hg2700-1	DM2	SAM	1707771-33RE1	500	8/8/17 21:09	24811-1.RAW	21:09:35	52.06	1		52.1	0.109	54.689	ng/L	
Hg2700-1	DM2	SAM	1707771-34RE1	500	8/8/17 21:20	24812-1.RAW	21:20:06	42.77	1		42.8	0.090	44.936	ng/L	
Hg2700-1	DM2	SAM	1707771-35RE1	500	8/8/17 21:30	24813-1.RAW	21:30:37	68.10	1		68.1	0.143	71.540	ng/L	
Hg2700-1	DM2	SAM	1707771-36RE1	500	8/8/17 21:41	24814-1.RAW	21:41:07	80.10	1		80.1	0.168	84.152	ng/L	
Hg2700-1	DM2	SAM	1707771-37RE1	500	8/8/17 21:51	24815-1.RAW	21:51:38	83.08	1		83.1	0.175	87.278	ng/L	
Hg2700-1	DM2	SAM	1707771-38RE1	500	8/8/17 22:02	24816-1.RAW	22:02:09	54.82	1		54.8	0.115	57.590	ng/L	
Hg2700-1	DM2	SAM	1707771-39RE1	500	8/8/17 22:12	24817-1.RAW	22:12:39	30.40	1		30.4	0.064	31.939	ng/L	
Hg2700-1	DM2	SAM	1707771-40RE1	500	8/8/17 22:23	24818-1.RAW	22:23:10	36.83	1		36.8	0.077	38.696	ng/L	
Hg2700-1	DM2	CAL	SEQ-CCV6	1	8/8/17 22:33	24819-1.RAW	22:33:41	200.33			200.3	0.421	0.421	ng/L	
Hg2700-1	DM2	CAL	SEQ-CCB6	1	8/8/17 22:44	24820-1.RAW	22:44:11	0.65			0.7	0.001	0.001	ng/L	



## ANALYSIS SEQUENCE

7H09017

Instrument: Hg2700-1

Calibration ID: UNASSIGNED

Analyzed: 8/8/2017

Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
7H09017-IBL1 ✓	QC	1			
7H09017-CAL1 ✓	QC	2	1704180	✓	
7H09017-CAL2 ✓	QC	3	1704181	✓	
7H09017-CAL3 ✓	QC	4	1704182	✓	
7H09017-CAL4 ✓	QC	5	1704183	✓	
7H09017-CAL5 ✓	QC	6	1704184	✓	
7H09017-ICV1 ✓	QC	7	1703246	✓	
7H09017-ICB1 ✓	QC	8			
F707567-BLK4 ✓	QC	9			
F707567-BLK5 ✓	QC	10			
F707567-BLK6 ✓	QC	11			
F707567-BS2 ✓	QC	12			
F707567-BSD2 ✓	QC	13			
F707570-BLK1 ✓	QC	14			
F707570-BLK2 ✓	QC	15			
F707570-BLK3 ✓	QC	16			
F707570-BS1 ✓	QC	17			
F707570-BSD1 ✓	QC	18			
7H09017-CCV1 ✓	QC	19	1703246	✓	
7H09017-CCB1 ✓	QC	20			
F707570-DUP1 ✓	QC	21			
F707570-MS1 ✓	QC	22			
F707570-MSD1 ✓	QC	23			
F707570-MS2 ✓	QC	24			
F707570-MSD2 ✓	QC	25			
1707771-CB ✓	MHg-CVAFS-S-KOH	26			
1707771-CC ✓	MHg-CVAFS-S-KOH	27			
1707771-CD ✓	MHg-CVAFS-S-KOH	28			
1707771-CE ✓	MHg-CVAFS-S-KOH	29			
1707771-CF ✓	MHg-CVAFS-S-KOH	30			
7H09017-CCV2 ✓	QC	31	1703246	✓	
7H09017-CCB2 ✓	QC	32			
1707771-CG ✓	MHg-CVAFS-S-KOH	33			
1707771-CX ✓	MHg-CVAFS-S-KOH	34			
1707771-CY ✓	MHg-CVAFS-S-KOH	35			

Due Date: 8/24/2017

## ANALYSIS SEQUENCE

7H09017

Instrument: Hg2700-1

Calibration ID: UNASSIGNED

Analyzed: 8/8/2017

Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
1707771-CZ ✓	MHg-CVAFS-S-KOH	36			
1707771-DA ✓	MHg-CVAFS-S-KOH	37			
1707775-01 ✓	MHg-CVAFS-S-KOH	38			
1707775-02 ✓	MHg-CVAFS-S-KOH	39			
1707775-03 ✓	MHg-CVAFS-S-KOH	40			
1707775-04 ✓	MHg-CVAFS-S-KOH	41			
1707775-05 ✓	MHg-CVAFS-S-KOH	42			
7H09017-CCV3 ✓	QC	43	1703246 ✓		
7H09017-CCB3 ✓	QC	44			
1707775-06 ✓	MHg-CVAFS-S-KOH	45			
1707775-07 ✓	MHg-CVAFS-S-KOH	46			
1707775-08 ✓	MHg-CVAFS-S-KOH	47			
1707775-09 ✓	MHg-CVAFS-S-KOH	48			
1707776-01 ✓	MHg-CVAFS-S-KOH	49			
F707567-DUP2 ✓	QC	50			
F707567-MS3 ✓	QC	51			
F707567-MSD3 ✓	QC	52			
F707567-MS4 ✓	QC	53			
F707567-MSD4 ✓	QC	54			
7H09017-CCV4 ✓	QC	55	1703246 ✓		
7H09017-CCB4 ✓	QC	56			
1707771-21RE1 ✓	MHg-CVAFS-S-KOH	57			Added 8/8/2017 by DM2
1707771-22RE1 ✓	MHg-CVAFS-S-KOH	58			Added 8/8/2017 by DM2
1707771-23RE1 ✓	MHg-CVAFS-S-KOH	59			Added 8/8/2017 by DM2
1707771-24RE1 ✓	MHg-CVAFS-S-KOH	60			Added 8/8/2017 by DM2
1707771-25RE1 ✓	MHg-CVAFS-S-KOH	61			Added 8/8/2017 by DM2
1707771-26RE1 ✓	MHg-CVAFS-S-KOH	62			Added 8/8/2017 by DM2
1707771-27RE1 ✓	MHg-CVAFS-S-KOH	63			Added 8/8/2017 by DM2
1707771-28RE1 ✓	MHg-CVAFS-S-KOH	64			Added 8/8/2017 by DM2
1707771-29RE1 ✓	MHg-CVAFS-S-KOH	65			Added 8/8/2017 by DM2
1707771-30RE1 ✓	MHg-CVAFS-S-KOH	66			Added 8/8/2017 by DM2
7H09017-CCV5 ✓	QC	67	1703246 ✓		
7H09017-CCB5 ✓	QC	68			
1707771-31RE1 ✓	MHg-CVAFS-S-KOH	69			Added 8/8/2017 by DM2
1707771-32RE1 ✓	MHg-CVAFS-S-KOH	70			Added 8/8/2017 by DM2

Due Date: 8/24/2017

**ANALYSIS SEQUENCE**

**7H09017**

**Instrument: Hg2700-1**

**Calibration ID: UNASSIGNED**

**Analyzed: 8/8/2017**

Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
1707771-33RE1 ✓	MHg-CVAFS-S-KOH	71			Added 8/8/2017 by DM2
1707771-34RE1 ✓	MHg-CVAFS-S-KOH	72			Added 8/8/2017 by DM2
1707771-35RE1 ✓	MHg-CVAFS-S-KOH	73			Added 8/8/2017 by DM2
1707771-36RE1 ✓	MHg-CVAFS-S-KOH	74			Added 8/8/2017 by DM2
1707771-37RE1 ✓	MHg-CVAFS-S-KOH	75			Added 8/8/2017 by DM2
1707771-38RE1 ✓	MHg-CVAFS-S-KOH	76			Added 8/8/2017 by DM2
1707771-39RE1 ✓	MHg-CVAFS-S-KOH	77			Added 8/8/2017 by DM2
1707771-40RE1 ✓	MHg-CVAFS-S-KOH	78			Added 8/8/2017 by DM2
7H09017-CCV6 ✓	QC	79	1703246	/	
7H09017-CCB6 ✓	QC	80			

Don Moore      8/8/17  
 Samples Loaded By      Date

Don Moore      8/9/17  
 Data Processed By      Date

**PREPARATION BENCH SHEET**

F707567

**Eurofins Frontier Global Sciences, Inc.**

**Matrix: Soil/Sediment**

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

**Prepared: 8/2/2017**

Lab Number	Sample ID and Source Sample	Initial (g)	Final (ml)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F707567-BLK1	Blank	0.25	20					
F707567-BLK2	Blank	0.25	20					
F707567-BLK3	Blank	0.25	20					
F707567-BLK4	Blank	0.25	20					
F707567-BLK5	Blank	0.25	20					
F707567-BLK6	Blank	0.25	20					
F707567-BS1	DORM-4	0.1255	20	1703305	126			
F707567-BS2	DORM-4	0.1255	20	1703305	126			
F707567-BSD1	DORM-4	0.1258	20	1703305	126			
F707567-BSD2	DORM-4	0.1258	20	1703305	126			
F707567-DUP1	Duplicate [1707771-21]	0.2945	20					
F707567-DUP2	Duplicate [1707771-21RE1]	0.2945	20					
F707567-MS1	Matrix Spike [1707771-21]	0.2849	20	1605978	100			
F707567-MS2	Matrix Spike [1707771-31]	0.2928	20	1605978	100			
F707567-MS3	Matrix Spike [1707771-21RE1]	0.2849	20	1605978	100			
F707567-MS4	Matrix Spike [1707771-31RE1]	0.2928	20	1605978	100			
F707567-MSD1	Matrix Spike Dup [1707771-21]	0.2865	20	1605978	100			
F707567-MSD2	Matrix Spike Dup [1707771-31]	0.2968	20	1605978	100			
F707567-MSD3	Matrix Spike Dup [1707771-21RE1]	0.2865	20	1605978	100			
F707567-MSD4	Matrix Spike Dup [1707771-31RE1]	0.2968	20	1605978	100			

**PREPARATION BENCH SHEET**

**F707567**

**Eurofins Frontier Global Sciences, Inc.**

**Matrix: Soil/Sediment**

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

**Prepared: 8/2/2017**

<u>Standard ID(s):</u>	<u>Description:</u>	<u>Expiration:</u>	<u>Reagent ID(s):</u>	<u>Description:</u>	<u>Expiration:</u>
1605978	MHg New Primary 100 ng/mL spike	15-Oct-17 00:00	1606305	Methanol, HPLC Grade	28-Oct-19 00:00
1703305	DORM-4	29-May-20 00:00	1700863	25% KOH/Methanol	09-Aug-17 00:00
			1703755	Acetate Buffer	20-Dec-17 00:00
			1704399	Ethylating Agent (For Methyl Mercury Analysis)	16-Jan-18 00:00
			1704424	Boiling Chips for AFS prep	21-Jan-18 00:00
			1704707	Acetate Buffer	29-Jan-18 00:00

**PREPARATION BENCH SHEET**

F707567

**Eurofins Frontier Global Sciences, Inc.**

**Matrix: Soil/Sediment**

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

**Prepared: 8/2/2017**

Lab Number	Sample ID	Initial (g)	Final (ml)	QC Sample	Sample Specs.	Raw Data	Sample Comments	Analysis Comments
1707771-21	W-103-B_072417_SED_00-01_R1	0.291	20	-	-	-		
1707771-21RE1	W-103-B_072417_SED_00-01_R1	0.291	20	-	-	-	Added 8/8/2017 by DM2	Added 8/8/2017 by DM2
1707771-22	W-103-B_072417_SED_00-01_R2	0.2998	20	-	-	-		
1707771-22RE1	W-103-B_072417_SED_00-01_R2	0.2998	20	-	-	-	Added 8/8/2017 by DM2	Added 8/8/2017 by DM2
1707771-23	W-103-B_072417_SED_00-01_R3	0.2856	20	-	-	-		
1707771-23RE1	W-103-B_072417_SED_00-01_R3	0.2856	20	-	-	-	Added 8/8/2017 by DM2	Added 8/8/2017 by DM2
1707771-24	W-103-B_072417_SED_01-03	0.2818	20	-	-	-		
1707771-24RE1	W-103-B_072417_SED_01-03	0.2818	20	-	-	-	Added 8/8/2017 by DM2	Added 8/8/2017 by DM2
1707771-25	W-105-A_072417_SED_00-01	0.287	20	-	-	-		
1707771-25RE1	W-105-A_072417_SED_00-01	0.287	20	-	-	-	Added 8/8/2017 by DM2	Added 8/8/2017 by DM2
1707771-26	W-105-A_072417_SED_01-03	0.3084	20	-	-	-		
1707771-26RE1	W-105-A_072417_SED_01-03	0.3084	20	-	-	-	Added 8/8/2017 by DM2	Added 8/8/2017 by DM2
1707771-27	W-14-C_072417_SED_00-01	0.2833	20	-	-	-		
1707771-27RE1	W-14-C_072417_SED_00-01	0.2833	20	-	-	-	Added 8/8/2017 by DM2	Added 8/8/2017 by DM2
1707771-28	W-14-C_072417_SED_01-03_R1	0.2676	20	-	-	-		
1707771-28RE1	W-14-C_072417_SED_01-03_R1	0.2676	20	-	-	-	Added 8/8/2017 by DM2	Added 8/8/2017 by DM2
1707771-29	W-14-C_072417_SED_01-03_R2	0.2998	20	-	-	-		
1707771-29RE1	W-14-C_072417_SED_01-03_R2	0.2998	20	-	-	-	Added 8/8/2017 by DM2	Added 8/8/2017 by DM2
1707771-30	W-14-C_072417_SED_01-03_R3	0.2743	20	-	-	-		

Due Date: 8/24/2017

**PREPARATION BENCH SHEET**

F707567

**Eurofins Frontier Global Sciences, Inc.**

**Matrix: Soil/Sediment**

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

**Prepared: 8/2/2017**

1707771-30RE1	W-14-C_072417_SED_01-03_R3	0.2743	20	-	-	-	Added 8/8/2017 by DM2	Added 8/8/2017 by DM2
1707771-31	W-27-INTA_072417_SED_00-01	0.2748	20	QC	-	-	MS/MSD	
1707771-31RE1	W-27-INTA_072417_SED_00-01	0.2748	20	QC	-	-	MS/MSD Added 8/8/2017 by DM2	Added 8/8/2017 by DM2
1707771-32	W-27-INTA_072417_SED_01-03	0.2802	20	-	-	-		
1707771-32RE1	W-27-INTA_072417_SED_01-03	0.2802	20	-	-	-	Added 8/8/2017 by DM2	Added 8/8/2017 by DM2
1707771-33	W-MM-06_072417_SED_00-01	0.3052	20	-	-	-		
1707771-33RE1	W-MM-06_072417_SED_00-01	0.3052	20	-	-	-	Added 8/8/2017 by DM2	Added 8/8/2017 by DM2
1707771-34	W-MM-06_072417_SED_01-03	0.2804	20	-	-	-		
1707771-34RE1	W-MM-06_072417_SED_01-03	0.2804	20	-	-	-	Added 8/8/2017 by DM2	Added 8/8/2017 by DM2
1707771-35	W-MM-19_072417_SED_00-01	0.279	20	-	-	-		
1707771-35RE1	W-MM-19_072417_SED_00-01	0.279	20	-	-	-	Added 8/8/2017 by DM2	Added 8/8/2017 by DM2
1707771-36	W-MM-19_072417_SED_01-03	0.2788	20	-	-	-		
1707771-36RE1	W-MM-19_072417_SED_01-03	0.2788	20	-	-	-	Added 8/8/2017 by DM2	Added 8/8/2017 by DM2
1707771-37	W-MM-22_072417_SED_00-01	0.2916	20	-	-	-		
1707771-37RE1	W-MM-22_072417_SED_00-01	0.2916	20	-	-	-	Added 8/8/2017 by DM2	Added 8/8/2017 by DM2
1707771-38	W-MM-22_072417_SED_01-03	0.2911	20	-	-	-		
1707771-38RE1	W-MM-22_072417_SED_01-03	0.2911	20	-	-	-	Added 8/8/2017 by DM2	Added 8/8/2017 by DM2
1707771-39	W-MM-23_072417_SED_00-01_R1	0.297	20	-	-	-		
1707771-39RE1	W-MM-23_072417_SED_00-01_R1	0.297	20	-	-	-	Added 8/8/2017 by DM2	Added 8/8/2017 by DM2
1707771-40	W-MM-23_072417_SED_00-01_R2	0.3097	20	-	-	-		
1707771-40RE1	W-MM-23_072417_SED_00-01_R2	0.3097	20	-	-	-	Added 8/8/2017 by DM2	Added 8/8/2017 by DM2

Due Date: 8/24/2017

**PREPARATION BENCH SHEET**

F707567

**Eurofins Frontier Global Sciences, Inc.**

**Matrix: Soil/Sediment**

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

**Prepared: 8/2/2017**

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Due Date: 8/24/2017



PREPARATION BENCH SHEET

2700-1  
8/8/17 DM

F707567

Eurofins Frontier Global Sciences, Inc.

Matrix: Soil/Sediment

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

Prepared: 8/2/2017

Lab Number	Sample ID and Source Sample	Initial (g)	Final (ml)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F707567-BLK1	Blank	0.25	20					
F707567-BLK2	Blank	0.25	20					
F707567-BLK3	Blank	0.25	20					
F707567-BLK4	Blank	0.25	20					500x
F707567-BLK5	Blank	0.25	20					500x
F707567-BLK6	Blank	0.25	20					500x
F707567-BS1	DORM-4	0.1255	20	1703305	126			
F707567-BS2	DORM-4	0.1255	20	1703305	126			1000x
F707567-BSD1	DORM-4	0.1258	20	1703305	126			
F707567-BSD2	DORM-4	0.1258	20	1703305	126			1000x
F707567-DUP1	Duplicate [1707771-21]	0.2945	20					
F707567-DUP2	Duplicate [1707771-21RE1] 0.2945	0.5	20					500x
F707567-MS1	Matrix Spike [1707771-21]	0.2849	20	1605978	100			
F707567-MS2	Matrix Spike [1707771-31]	0.2928	20	1605978	100			
F707567-MS3	Matrix Spike [1707771-21RE1]	0.2849	20	1605978	100			500x
F707567-MS4	Matrix Spike [1707771-31RE1]	0.2928	20	1605978	100			500x
F707567-MSD1	Matrix Spike Dup [1707771-21]	0.2865	20	1605978	100			
F707567-MSD2	Matrix Spike Dup [1707771-31]	0.2968	20	1605978	100			
F707567-MSD3	Matrix Spike Dup [1707771-21RE1]	0.2865	20	1605978	100			500x
F707567-MSD4	Matrix Spike Dup [1707771-31RE1]	0.2968	20	1605978	100			500x

PREPARATION BENCH SHEET

F707567

Eurofins Frontier Global Sciences, Inc.

Matrix: Soil/Sediment

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

Prepared: 8/2/2017

<u>Standard ID(s):</u>	<u>Description:</u>	<u>Expiration:</u>	<u>Reagent ID(s):</u>	<u>Description:</u>	<u>Expiration:</u>
1605978	MHg New Primary 100 ng/mL spike	15-Oct-17 00:00	1606305	Methanol, HPLC Grade	28-Oct-19 00:00
1703305	DORM-4	29-May-20 00:00	1700863	25% KOH/Methanol	09-Aug-17 00:00
			1703755	Acetate Buffer	20-Dec-17 00:00
			1704399	Ethylating Agent (For Methyl Mercury Analysis)	16-Jan-18 00:00
			1704424	Boiling Chips for AFS prep	21-Jan-18 00:00

1704707

PREPARATION BENCH SHEET

F707567

Eurofins Frontier Global Sciences, Inc.

2700-1  
8/8/17 DM

Matrix: Soil/Sediment

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

Prepared: 8/2/2017

Lab Number	Sample ID	Initial (g)	Final (ml)	QC Sample	Sample Specs.	Raw Data	Sample Comments	Analysis Comments
1707771-21	W-103-B_072417_SED_00-01_R1	0.291	20	-	-	-		
1707771-21RE1	W-103-B_072417_SED_00-01_R1	0.291	20	-	-	-	Added 8/8/2017 by DM2	Added 8/8/2017 by DM2 SOX
1707771-22	W-103-B_072417_SED_00-01_R2	0.2998	20	-	-	-		
1707771-22RE1	W-103-B_072417_SED_00-01_R2	0.2998	20	-	-	-	Added 8/8/2017 by DM2	Added 8/8/2017 by DM2 SOX
1707771-23	W-103-B_072417_SED_00-01_R3	0.2856	20	-	-	-		
1707771-23RE1	W-103-B_072417_SED_00-01_R3	0.2856	20	-	-	-	Added 8/8/2017 by DM2	Added 8/8/2017 by DM2 SOX
1707771-24	W-103-B_072417_SED_01-03	0.2818	20	-	-	-		
1707771-24RE1	W-103-B_072417_SED_01-03	0.2818	20	-	-	-	Added 8/8/2017 by DM2	Added 8/8/2017 by DM2 SOX
1707771-25	W-105-A_072417_SED_00-01	0.287	20	-	-	-		
1707771-25RE1	W-105-A_072417_SED_00-01	0.287	20	-	-	-	Added 8/8/2017 by DM2	Added 8/8/2017 by DM2 SOX
1707771-26	W-105-A_072417_SED_01-03	0.3084	20	-	-	-		
1707771-26RE1	W-105-A_072417_SED_01-03	0.3084	20	-	-	-	Added 8/8/2017 by DM2	Added 8/8/2017 by DM2 SOX
1707771-27	W-14-C_072417_SED_00-01	0.2833	20	-	-	-		
1707771-27RE1	W-14-C_072417_SED_00-01	0.2833	20	-	-	-	Added 8/8/2017 by DM2	Added 8/8/2017 by DM2 SOX
1707771-28	W-14-C_072417_SED_01-03_R1	0.2676	20	-	-	-		
1707771-28RE1	W-14-C_072417_SED_01-03_R1	0.2676	20	-	-	-	Added 8/8/2017 by DM2	Added 8/8/2017 by DM2 SOX
1707771-29	W-14-C_072417_SED_01-03_R2	0.2998	20	-	-	-		
1707771-29RE1	W-14-C_072417_SED_01-03_R2	0.2998	20	-	-	-	Added 8/8/2017 by DM2	Added 8/8/2017 by DM2 SOX
1707771-30	W-14-C_072417_SED_01-03_R3	0.2743	20	-	-	-		

Due Date: 8/24/2017

PREPARATION BENCH SHEET

2700-1  
8/8/17 DM

F707567

Eurofins Frontier Global Sciences, Inc.

Matrix: Soil/Sediment

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

Prepared: 8/2/2017

1707771-30RE1	W-14-C_072417_SED_01-03_R3	0.2743	20	-	-	-	Added 8/8/2017 by DM2	Added 8/8/2017 by DM2	500X
1707771-31	W-27-INTA_072417_SED_00-01	0.2748	20	QC	-	-	MS/MSD		
1707771-31RE1	W-27-INTA_072417_SED_00-01	0.2748	20	QC	-	-	MS/MSD Added 8/8/2017 by DM2	Added 8/8/2017 by DM2	500X
1707771-32	W-27-INTA_072417_SED_01-03	0.2802	20	-	-	-			
1707771-32RE1	W-27-INTA_072417_SED_01-03	0.2802	20	-	-	-	Added 8/8/2017 by DM2	Added 8/8/2017 by DM2	500X
1707771-33	W-MM-06_072417_SED_00-01	0.3052	20	-	-	-			
1707771-33RE1	W-MM-06_072417_SED_00-01	0.3052	20	-	-	-	Added 8/8/2017 by DM2	Added 8/8/2017 by DM2	500X
1707771-34	W-MM-06_072417_SED_01-03	0.2804	20	-	-	-			
1707771-34RE1	W-MM-06_072417_SED_01-03	0.2804	20	-	-	-	Added 8/8/2017 by DM2	Added 8/8/2017 by DM2	500X
1707771-35	W-MM-19_072417_SED_00-01	0.279	20	-	-	-			
1707771-35RE1	W-MM-19_072417_SED_00-01	0.279	20	-	-	-	Added 8/8/2017 by DM2	Added 8/8/2017 by DM2	500X
1707771-36	W-MM-19_072417_SED_01-03	0.2788	20	-	-	-			
1707771-36RE1	W-MM-19_072417_SED_01-03	0.2788	20	-	-	-	Added 8/8/2017 by DM2	Added 8/8/2017 by DM2	500X
1707771-37	W-MM-22_072417_SED_00-01	0.2916	20	-	-	-			
1707771-37RE1	W-MM-22_072417_SED_00-01	0.2916	20	-	-	-	Added 8/8/2017 by DM2	Added 8/8/2017 by DM2	500X
1707771-38	W-MM-22_072417_SED_01-03	0.2911	20	-	-	-			
1707771-38RE1	W-MM-22_072417_SED_01-03	0.2911	20	-	-	-	Added 8/8/2017 by DM2	Added 8/8/2017 by DM2	500X
1707771-39	W-MM-23_072417_SED_00-01_R1	0.297	20	-	-	-			
1707771-39RE1	W-MM-23_072417_SED_00-01_R1	0.297	20	-	-	-	Added 8/8/2017 by DM2	Added 8/8/2017 by DM2	500X
1707771-40	W-MM-23_072417_SED_00-01_R2	0.3097	20	-	-	-			
1707771-40RE1	W-MM-23_072417_SED_00-01_R2	0.3097	20	-	-	-	Added 8/8/2017 by DM2	Added 8/8/2017 by DM2	500X

Due Date: 8/24/2017

PREPARATION BENCH SHEET

F707567

Eurofins Frontier Global Sciences, Inc.

Matrix: Soil/Sediment

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

Prepared: 8/2/2017

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Due Date: 8/24/2017

**PREPARATION BENCH SHEET**

F707570

**Eurofins Frontier Global Sciences, Inc.**

**Matrix: Soil/Sediment**

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

**Prepared: 8/3/2017**

Lab Number	Sample ID and Source Sample	Initial (g)	Final (ml)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F707570-BLK1	Blank	0.25	20					
F707570-BLK2	Blank	0.25	20					
F707570-BLK3	Blank	0.25	20					
F707570-BS1	DORM-4	0.1257	20	1703305	126			
F707570-BSD1	DORM-4	0.1253	20	1703305	125			
F707570-DUP1	Duplicate [1707771-CD]	0.2875	20					
F707570-MS1	Matrix Spike [1707771-CD]	0.2705	20	1605978	100			
F707570-MS2	Matrix Spike [1707775-01]	0.2936	20	1605978	100			
F707570-MSD1	Matrix Spike Dup [1707771-CD]	0.2832	20	1605978	100			
F707570-MSD2	Matrix Spike Dup [1707775-01]	0.2886	20	1605978	100			

<u>Standard ID(s):</u>	<u>Description:</u>
1605978	MHg New Primary 100 ng/mL spike
1703305	DORM-4

<u>Expiration:</u>
15-Oct-17 00:00
29-May-20 00:00
29-May-20 00:00

<u>Reagent ID(s):</u>	<u>Description:</u>
1606305	Methanol, HPLC Grade
1700863	25% KOH/Methanol
1704399	Ethylating Agent (For Methyl Mercury Analysis)
1704424	Boiling Chips for AFS prep
1704707	Acetate Buffer

<u>Expiration:</u>
28-Oct-19 00:00
09-Aug-17 00:00
16-Jan-18 00:00
21-Jan-18 00:00
29-Jan-18 00:00

**PREPARATION BENCH SHEET**

F707570

**Eurofins Frontier Global Sciences, Inc.**

**Matrix: Soil/Sediment**

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

**Prepared: 8/3/2017**

Lab Number	Sample ID	Initial (g)	Final (ml)	QC Sample	Sample Specs.	Raw Data	Sample Comments	Analysis Comments
1707771-CB	W-MM-07_072517_SED_01-03_R2	0.2894	20	-	-	-		
1707771-CC	W-MM-07_072517_SED_01-03_R3	0.3087	20	-	-	-		
1707771-CD	W-MM-17_072517_SED_00-01	0.2827	20	QC	-	-	MS/MSD	
1707771-CE	W-MM-17_072517_SED_01-03	0.2745	20	-	-	-		
1707771-CF	W-MM-18_072517_SED_00-01	0.2853	20	-	-	-		
1707771-CG	W-MM-18_072517_SED_01-03	0.2961	20	-	-	-		
1707771-CX	W-MM-TP_072517_SED_00-01_R1	0.2875	20	-	-	-		
1707771-CY	W-MM-TP_072517_SED_00-01_R2	0.2818	20	-	-	-		
1707771-CZ	W-MM-TP_072517_SED_00-01_R3	0.3075	20	-	-	-		
1707771-DA	W-MM-TP_072517_SED_01-03	0.3187	20	-	-	-		
1707775-01	E-01-01_072117_SED_00-03_R1	0.3164	20	-	-	-		
1707775-02	E-01-01_072117_SED_00-03_R2	0.2993	20	-	-	-		
1707775-03	E-01-01_072117_SED_00-03_R3	0.271	20	-	-	-		
1707775-04	E-01-03_072117_SED_00-03	0.3022	20	-	-	-		
1707775-05	E-01-04_072117_SED_00-03_R1	0.2885	20	-	-	-		
1707775-06	E-01-04_072117_SED_00-03_R2	0.2871	20	-	-	-		
1707775-07	E-01-04_072117_SED_00-03_R3	0.2969	20	-	-	-		
1707775-08	OV-01_072617_SED_00-03	0.2847	20	-	-	-		
1707775-09	OV-02_072617_SED_00-03	0.2964	20	-	-	-		

Due Date: 8/24/2017

PREPARATION BENCH SHEET

F707570

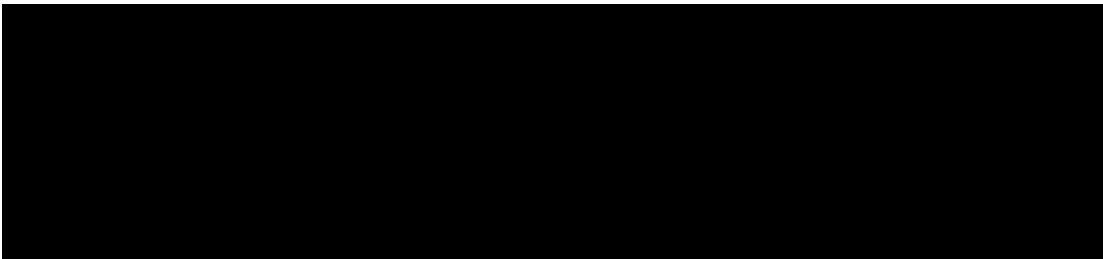
Eurofins Frontier Global Sciences, Inc.

Matrix: Soil/Sediment

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

Prepared: 8/3/2017

1707776-01	BFK_072617_SED_00-03_R1	0.2814	20	-	-	-		
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PREPARATION BENCH SHEET

2700-1

8/8/17 DM

F707570

Eurofins Frontier Global Sciences, Inc.

Matrix: Soil/Sediment

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

Prepared: 8/3/2017

Lab Number	Sample ID and Source Sample	Initial (g)	Final (ml)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F707570-BLK1	Blank	0.25	20					500x
F707570-BLK2	Blank	0.25	20					500x
F707570-BLK3	Blank	0.25	20					500x
F707570-BS1	DORM-4	0.1257	20	1703305	126			1000x
F707570-BSD1	DORM-4	0.1253	20	1703305	125			1000x
F707570-DUP1	Duplicate [1707771-CD]	0.2875	20					500x
F707570-MS1	Matrix Spike [1707771-CD]	0.2705	20	1605978	100			500x
F707570-MS2	Matrix Spike [1707775-01]	0.2936	20	1605978	100			500x
F707570-MSD1	Matrix Spike Dup [1707771-CD]	0.2832	20	1605978	100			500x
F707570-MSD2	Matrix Spike Dup [1707775-01]	0.2886	20	1605978	100			500x

Standard ID(s):  
1605978  
1703305

Description:  
MHg New Primary 100 ng/mL spike  
DORM-4

Expiration:  
15-Oct-17 00:00  
29-May-20 00:00  
29-May-20 00:00

Reagent ID(s):  
1606305  
1700863  
1704424

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

Expiration:  
28-Oct-19 00:00  
09-Aug-17 00:00  
21-Jan-18 00:00

1704707

1704309

PREPARATION BENCH SHEET

2700-1

F707570

8/8/17 DM

Eurofins Frontier Global Sciences, Inc.

Matrix: Soil/Sediment

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

Prepared: 8/3/2017

Lab Number	Sample ID	Initial (g)	Final (ml)	QC Sample	Sample Specs.	Raw Data	Sample Comments	Analysis Comments
1707771-CB	W-MM-07_072517_SED_01-03_R2	0.2894	20	-	-	-		500x
1707771-CC	W-MM-07_072517_SED_01-03_R3	0.3087	20	-	-	-		500x
1707771-CD	W-MM-17_072517_SED_00-01	0.2827	20	QC	-	-	MS/MSD	500x
1707771-CE	W-MM-17_072517_SED_01-03	0.2745	20	-	-	-		500x
1707771-CF	W-MM-18_072517_SED_00-01	0.2853	20	-	-	-		500x
1707771-CG	W-MM-18_072517_SED_01-03	0.2961	20	-	-	-		500x
1707771-CX	W-MM-TP_072517_SED_00-01_R1	0.2875	20	-	-	-		500x
1707771-CY	W-MM-TP_072517_SED_00-01_R2	0.2818	20	-	-	-		500x
1707771-CZ	W-MM-TP_072517_SED_00-01_R3	0.3075	20	-	-	-		500x
1707771-DA	W-MM-TP_072517_SED_01-03	0.3187	20	-	-	-		500x
1707775-01	E-01-01_072117_SED_00-03_R1	0.3164	20	-	-	-		500x
1707775-02	E-01-01_072117_SED_00-03_R2	0.2993	20	-	-	-		500x
1707775-03	E-01-01_072117_SED_00-03_R3	0.271	20	-	-	-		500x
1707775-04	E-01-03_072117_SED_00-03	0.3022	20	-	-	-		500x
1707775-05	E-01-04_072117_SED_00-03_R1	0.2885	20	-	-	-		500x
1707775-06	E-01-04_072117_SED_00-03_R2	0.2871	20	-	-	-		500x
1707775-07	E-01-04_072117_SED_00-03_R3	0.2969	20	-	-	-		500x
1707775-08	OV-01_072617_SED_00-03	0.2847	20	-	-	-		500x
1707775-09	OV-02_072617_SED_00-03	0.2964	20	-	-	-		500x

Due Date: 8/24/2017

PREPARATION BENCH SHEET

F707570

Eurofins Frontier Global Sciences, Inc.

2700-1

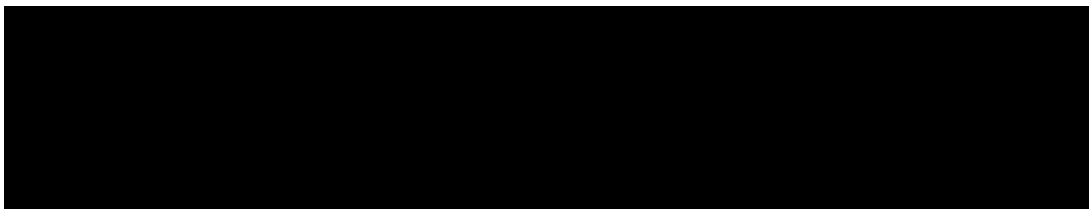
8/8/17 DM

Matrix: Soil/Sediment

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

Prepared: 8/3/2017

1707776-01	BFK_072617_SED_00-03_R1	0.2814	20	-	-	-		500x
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Technician: Duyen Batch#: F707570 Date: 8/3/17

- EFAFS-T-AFS-SOP2986 Tissues - Methyl Mercury - KOH/Methanol: Hot plate 75±5°C for 2-4 hours.
- EFAFS-T-AFS-SOP2795 Tissues - Total Mercury - 70:30: Hot plate 75±5°C for two hours.
- EFAFS-T-AFS-SOP5134 Sediments - Methyl Mercury - KBr/CH<sub>2</sub>Cl<sub>2</sub>: Heat Block 45°C (nitrogen purge for 30 minutes).
- EFAFS-T-AFS-SOP2807 Solids - Total Mercury - Cold AR: 18-25°C for over four hours.

Other: \_\_\_\_\_ Vial Type:  Glass  Teflon  
 Balance#: 19 Calibrated?  Yes  No Therm.#: 13698 Calibrated?  Yes  No

\*Time in: 14:50 Actual Temp. (raw): 78.0 °C w/ CF: 78.0 °C  
 Time out: 17:50 Actual Temp. (raw): 78.0 °C w/ CF: 78.0 °C  
 \*Time in can't begin before target temperature is reached

Final vol.: 20 mL (LIMS ID: 1606305) Spike vol.: 100 µL (LIMS ID: 1605978)  
 Spike Witness: BC 8/3/17 (initial and date)

HCl LIMS ID: N/A Pipette SN#: NU09653 Calibration Date: 8-3-17  
 HNO<sub>3</sub> LIMS ID: N/A Pipette SN#: NU01152 Calibration Date: 8/3/17 & 7/31/17  
 70/30 LIMS ID: N/A Dispenser #: 02N48426 Calibrated?  Yes  No  
 Other Acid LIMS ID: 1700863 25% KOH Dispenser #: N/A  
 Glass Vial # 00068124 Boiling Chip lot # 1704424 \*Hotblock Position: J.6

Vial #	Sample ID Number	Sample Size <input type="checkbox"/> mL <input checked="" type="checkbox"/> g	Vial #	Sample ID Number	Sample Size <input type="checkbox"/> mL <input type="checkbox"/> g	CRM LIMS ID <input type="checkbox"/> NA
1	F707570 Blk1	0.2777	23	1707775-03A	0.2710	BS1/BSM1
2	F707570 Blk2	0.3012	24	1707775-04A	0.3022	DOR4-4
3	F707570 Blk3	0.2762	25	1707775-05A	0.2885	1707305
4	F707570 BS1	0.1257	26	1707775-06A	0.2871	Comments
5	F707570 BSM1	0.1253	27	1707775-07A	0.2969	F707570
6	1707771-CBA	0.2894	28	1707775-08A	0.2847	Some
7	1707771 CCA	0.3087	29	1707775-09A	0.2964	Dup1 MS1/MS2
8	1707771 CD	0.2827	30	177776-01A	0.2814	1707771-CD
9	F707570 Dup1	0.2875	31			MS2 MS2
10	F707570 MS1	0.2705	32			F707570
11	F707570 MS1	0.2832	33			170777501
12	1707771-CEA	0.2745	34			
13	1707771 CFA	0.2853	35			F707570
14	1707771 CGA	0.2961	36			Dup1
15	1707771 CXA	0.2875	37			= 0.2875(g)
16	1707771 CYA	0.2818	38			
17	1707771 CZ	0.2307	39			1707775-09,08
18	1707771 DAA	0.3187	40			Samples were
19	1707775-01A	0.3164	41			Rock Sand, in
20	F707570 MS2	0.2936	42			8/3/17 & 8/3/17
21	F707570 MS2	0.2886	43			1707775, 08, 09
22	1707775-02A	0.2993	44			Samples has
						a Rock Sand.
						in the Sample -
						8/3/17 & 8/3/17

# Failing Data Report - 7H09017

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

8/9/17  
Date

[Signature]  
Peer Reviewed By

8/12/17  
Date

**Peer Review Check List for MHg for CV-GC-AFS (SOP2808) 2017 Rev 6 (02/22/17)**

<b>Analyst:</b> DON MORAN	<b>Sequence #:</b> 7H09017
<b>Reviewer:</b> <i>PL 8/12/17</i>	<b>Dataset ID #:</b> MMHG27001-170808-1
<b>Date:</b> 8.9.17	<b>WO #:</b> [REDACTED]
<b>Batch #(s):</b> F707570, F707567	<b>Client(s):</b> [REDACTED]

• Select the correct preparation method.

Additional Comments:

Analyte	Prep Method	Matrix
<input type="checkbox"/> MHg	SOP2797 MHg Distillation	Water
<input checked="" type="checkbox"/> MHg	SOP2986 KOH/MeOH Digest	Tissue
<input type="checkbox"/> MHg	SOP5134 MeCl Extraction	Sed/Soil
<input type="checkbox"/> DMHg	SOP2816 (None Accredited method)	ALL

**Analyst Initials:**

*DM*

**Reviewer Initials:**

*PL 8/12/17*

- |  |  |   |                             |                                     |   |                             |                                     |                              |                             |   |   |                             |   |   |                             |   |   |                             |   |                              |                             |   |   |                             |                                     |   |                             |                                     |   |                             |                                     |                              |  |                                     |   |                             |                                     |   |                             |                                     |   |                             |                                     |  |                               |                              |  |                               |                              |  |                               |                                     |
|--|--|---|-----------------------------|-------------------------------------|---|-----------------------------|-------------------------------------|------------------------------|-----------------------------|---|---|-----------------------------|---|---|-----------------------------|---|---|-----------------------------|---|------------------------------|-----------------------------|---|---|-----------------------------|-------------------------------------|---|-----------------------------|-------------------------------------|---|-----------------------------|-------------------------------------|------------------------------|--|-------------------------------------|---|-----------------------------|-------------------------------------|---|-----------------------------|-------------------------------------|---|-----------------------------|-------------------------------------|--|-------------------------------|------------------------------|--|-------------------------------|------------------------------|--|-------------------------------|-------------------------------------|
| <p>1. Compare Sample ID with Bench sheet/Sequence/Raw Data (Have all samples been imported?)</p> <p>2. Check for transcription errors from Excel spreadsheet (or Prep Bench sheet)/Raw data</p> <p style="margin-left: 20px;">(a) Reviewer: 100% of peak heights checked</p> <p style="margin-left: 20px;">(b) Are there peak height errors?</p> <p style="margin-left: 20px;">(c) Error on a sample: Do peak heights, responses, &amp; initial results match corrected data?</p> <p style="margin-left: 20px;">(d) Error on a Cal Pt, ICB/CCB, or PB: Has the data been reimported?</p> <p style="margin-left: 20px;">(e) Check standards &amp; reagents in sequence &amp; bench sheet for correct usage (i.e. expiries).</p> <p style="margin-left: 20px;">(f) Check and compare masses (review prep bench sheet)</p> <p style="margin-left: 20px;">(g) Check and compare initial and final volumes</p> <p style="margin-left: 20px;">(h) Do aliquots and dilutions written on benchsheet match those in Excel?</p> <p style="margin-left: 20px;">(i) Is the pH&gt;3.0 for all distilled samples? _____</p> <p style="margin-left: 20px;">(j) Is the sequence #, analyst, date, and instrument # on the QC page?</p> <p style="margin-left: 20px;">(k) Is the analysis status correct? (analyzed/initial review/reviewed)</p> <p style="margin-left: 20px;">(l) Original prep bench sheet added to data package?</p> <p style="margin-left: 20px;">(m) Benchsheet prep date MUST match actual prep date (check if re-shot vs re-extract)</p> <p>3. High QA? WO#(s)/Client(s): _____</p> <p>4. Client specific QC? (if Yes, refer to Project Notes/LIMS)</p> <p style="margin-left: 20px;">(a) Have the QC requirements been met for all WO#s?</p> <p>5. 20 or fewer samples in batch? _____</p> <p style="margin-left: 20px;">(a) 3 PBs, 1 LCS/LCSD (or BS/BSD), 2 MS/MSD/MD per batch?</p> <p style="margin-left: 20px;">(b) 1 CCV and 1 CCB every 10 analytical runs? _____</p> <p><b>QA/QC Data Checked</b></p> <p>6. The calibration curve included a minimum of 5 Standards</p> <p>Comments: _____</p> <p>7. 1st Calibration Standard % Recoveries (65-135%)</p> <p>Comments: _____</p> <p>8. RSD CF (≤ 15%)</p> <p>Comments: _____</p> | <table style="width:100%; border-collapse: collapse;"> <tr> <td><input checked="" type="checkbox"/> YES</td> <td><input type="checkbox"/> NO</td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td><input checked="" type="checkbox"/> YES</td> <td><input type="checkbox"/> NO</td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td><input type="checkbox"/> YES</td> <td><input type="checkbox"/> NO</td> <td><input checked="" type="checkbox"/> N/A</td> </tr> <tr> <td><input checked="" type="checkbox"/> YES</td> <td><input type="checkbox"/> NO</td> <td><input checked="" type="checkbox"/> N/A</td> </tr> <tr> <td><input checked="" type="checkbox"/> YES</td> <td><input type="checkbox"/> NO</td> <td><input checked="" type="checkbox"/> N/A</td> </tr> <tr> <td><input checked="" type="checkbox"/> YES</td> <td><input type="checkbox"/> NO</td> <td><input checked="" type="checkbox"/> N/A</td> </tr> <tr> <td><input type="checkbox"/> YES</td> <td><input type="checkbox"/> NO</td> <td><input checked="" type="checkbox"/> N/A</td> </tr> <tr> <td><input checked="" type="checkbox"/> YES</td> <td><input type="checkbox"/> NO</td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td><input checked="" type="checkbox"/> YES</td> <td><input type="checkbox"/> NO</td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td><input checked="" type="checkbox"/> YES</td> <td><input type="checkbox"/> NO</td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td><input type="checkbox"/> YES</td> <td><input checked="" type="checkbox"/> NO</td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td><input checked="" type="checkbox"/> YES</td> <td><input type="checkbox"/> NO</td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td><input checked="" type="checkbox"/> YES</td> <td><input type="checkbox"/> NO</td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td><input checked="" type="checkbox"/> YES</td> <td><input type="checkbox"/> NO</td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td><input checked="" type="checkbox"/> PASS</td> <td><input type="checkbox"/> FAIL</td> <td><input type="checkbox"/> N/A</td> </tr> <tr> <td><input checked="" type="checkbox"/> PASS</td> <td><input type="checkbox"/> FAIL</td> <td><input type="checkbox"/> N/A</td> </tr> <tr> <td><input checked="" type="checkbox"/> PASS</td> <td><input type="checkbox"/> FAIL</td> <td><input checked="" type="checkbox"/></td> </tr> </table> | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> | <input type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> N/A | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> N/A | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> N/A | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> N/A | <input type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> N/A | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> | <input type="checkbox"/> YES | <input checked="" type="checkbox"/> NO | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> PASS | <input type="checkbox"/> FAIL | <input type="checkbox"/> N/A | <input checked="" type="checkbox"/> PASS | <input type="checkbox"/> FAIL | <input type="checkbox"/> N/A | <input checked="" type="checkbox"/> PASS | <input type="checkbox"/> FAIL | <input checked="" type="checkbox"/> |
| <input checked="" type="checkbox"/> YES  | <input type="checkbox"/> NO  | <input checked="" type="checkbox"/>     |                             |                                     |   |                             |                                     |                              |                             |   |   |                             |   |   |                             |   |   |                             |   |                              |                             |   |   |                             |                                     |   |                             |                                     |   |                             |                                     |                              |  |                                     |   |                             |                                     |   |                             |                                     |   |                             |                                     |  |                               |                              |  |                               |                              |  |                               |                                     |
| <input checked="" type="checkbox"/> YES  | <input type="checkbox"/> NO  | <input checked="" type="checkbox"/>     |                             |                                     |   |                             |                                     |                              |                             |   |   |                             |   |   |                             |   |   |                             |   |                              |                             |   |   |                             |                                     |   |                             |                                     |   |                             |                                     |                              |  |                                     |   |                             |                                     |   |                             |                                     |   |                             |                                     |  |                               |                              |  |                               |                              |  |                               |                                     |
| <input type="checkbox"/> YES   | <input type="checkbox"/> NO  | <input checked="" type="checkbox"/> N/A |                             |                                     |   |                             |                                     |                              |                             |   |   |                             |   |   |                             |   |   |                             |   |                              |                             |   |   |                             |                                     |   |                             |                                     |   |                             |                                     |                              |  |                                     |   |                             |                                     |   |                             |                                     |   |                             |                                     |  |                               |                              |  |                               |                              |  |                               |                                     |
| <input checked="" type="checkbox"/> YES  | <input type="checkbox"/> NO  | <input checked="" type="checkbox"/> N/A |                             |                                     |   |                             |                                     |                              |                             |   |   |                             |   |   |                             |   |   |                             |   |                              |                             |   |   |                             |                                     |   |                             |                                     |   |                             |                                     |                              |  |                                     |   |                             |                                     |   |                             |                                     |   |                             |                                     |  |                               |                              |  |                               |                              |  |                               |                                     |
| <input checked="" type="checkbox"/> YES  | <input type="checkbox"/> NO  | <input checked="" type="checkbox"/> N/A |                             |                                     |   |                             |                                     |                              |                             |   |   |                             |   |   |                             |   |   |                             |   |                              |                             |   |   |                             |                                     |   |                             |                                     |   |                             |                                     |                              |  |                                     |   |                             |                                     |   |                             |                                     |   |                             |                                     |  |                               |                              |  |                               |                              |  |                               |                                     |
| <input checked="" type="checkbox"/> YES  | <input type="checkbox"/> NO  | <input checked="" type="checkbox"/> N/A |                             |                                     |   |                             |                                     |                              |                             |   |   |                             |   |   |                             |   |   |                             |   |                              |                             |   |   |                             |                                     |   |                             |                                     |   |                             |                                     |                              |  |                                     |   |                             |                                     |   |                             |                                     |   |                             |                                     |  |                               |                              |  |                               |                              |  |                               |                                     |
| <input type="checkbox"/> YES   | <input type="checkbox"/> NO  | <input checked="" type="checkbox"/> N/A |                             |                                     |   |                             |                                     |                              |                             |   |   |                             |   |   |                             |   |   |                             |   |                              |                             |   |   |                             |                                     |   |                             |                                     |   |                             |                                     |                              |  |                                     |   |                             |                                     |   |                             |                                     |   |                             |                                     |  |                               |                              |  |                               |                              |  |                               |                                     |
| <input checked="" type="checkbox"/> YES  | <input type="checkbox"/> NO  | <input checked="" type="checkbox"/>     |                             |                                     |   |                             |                                     |                              |                             |   |   |                             |   |   |                             |   |   |                             |   |                              |                             |   |   |                             |                                     |   |                             |                                     |   |                             |                                     |                              |  |                                     |   |                             |                                     |   |                             |                                     |   |                             |                                     |  |                               |                              |  |                               |                              |  |                               |                                     |
| <input checked="" type="checkbox"/> YES  | <input type="checkbox"/> NO  | <input checked="" type="checkbox"/>     |                             |                                     |   |                             |                                     |                              |                             |   |   |                             |   |   |                             |   |   |                             |   |                              |                             |   |   |                             |                                     |   |                             |                                     |   |                             |                                     |                              |  |                                     |   |                             |                                     |   |                             |                                     |   |                             |                                     |  |                               |                              |  |                               |                              |  |                               |                                     |
| <input checked="" type="checkbox"/> YES  | <input type="checkbox"/> NO  | <input checked="" type="checkbox"/>     |                             |                                     |   |                             |                                     |                              |                             |   |   |                             |   |   |                             |   |   |                             |   |                              |                             |   |   |                             |                                     |   |                             |                                     |   |                             |                                     |                              |  |                                     |   |                             |                                     |   |                             |                                     |   |                             |                                     |  |                               |                              |  |                               |                              |  |                               |                                     |
| <input type="checkbox"/> YES   | <input checked="" type="checkbox"/> NO   | <input checked="" type="checkbox"/>     |                             |                                     |   |                             |                                     |                              |                             |   |   |                             |   |   |                             |   |   |                             |   |                              |                             |   |   |                             |                                     |   |                             |                                     |   |                             |                                     |                              |  |                                     |   |                             |                                     |   |                             |                                     |   |                             |                                     |  |                               |                              |  |                               |                              |  |                               |                                     |
| <input checked="" type="checkbox"/> YES  | <input type="checkbox"/> NO  | <input checked="" type="checkbox"/>     |                             |                                     |   |                             |                                     |                              |                             |   |   |                             |   |   |                             |   |   |                             |   |                              |                             |   |   |                             |                                     |   |                             |                                     |   |                             |                                     |                              |  |                                     |   |                             |                                     |   |                             |                                     |   |                             |                                     |  |                               |                              |  |                               |                              |  |                               |                                     |
| <input checked="" type="checkbox"/> YES  | <input type="checkbox"/> NO  | <input checked="" type="checkbox"/>     |                             |                                     |   |                             |                                     |                              |                             |   |   |                             |   |   |                             |   |   |                             |   |                              |                             |   |   |                             |                                     |   |                             |                                     |   |                             |                                     |                              |  |                                     |   |                             |                                     |   |                             |                                     |   |                             |                                     |  |                               |                              |  |                               |                              |  |                               |                                     |
| <input checked="" type="checkbox"/> YES  | <input type="checkbox"/> NO  | <input checked="" type="checkbox"/>     |                             |                                     |   |                             |                                     |                              |                             |   |   |                             |   |   |                             |   |   |                             |   |                              |                             |   |   |                             |                                     |   |                             |                                     |   |                             |                                     |                              |  |                                     |   |                             |                                     |   |                             |                                     |   |                             |                                     |  |                               |                              |  |                               |                              |  |                               |                                     |
| <input checked="" type="checkbox"/> PASS   | <input type="checkbox"/> FAIL  | <input type="checkbox"/> N/A            |                             |                                     |   |                             |                                     |                              |                             |   |   |                             |   |   |                             |   |   |                             |   |                              |                             |   |   |                             |                                     |   |                             |                                     |   |                             |                                     |                              |  |                                     |   |                             |                                     |   |                             |                                     |   |                             |                                     |  |                               |                              |  |                               |                              |  |                               |                                     |
| <input checked="" type="checkbox"/> PASS   | <input type="checkbox"/> FAIL  | <input type="checkbox"/> N/A            |                             |                                     |   |                             |                                     |                              |                             |   |   |                             |   |   |                             |   |   |                             |   |                              |                             |   |   |                             |                                     |   |                             |                                     |   |                             |                                     |                              |  |                                     |   |                             |                                     |   |                             |                                     |   |                             |                                     |  |                               |                              |  |                               |                              |  |                               |                                     |
| <input checked="" type="checkbox"/> PASS   | <input type="checkbox"/> FAIL  | <input checked="" type="checkbox"/>     |                             |                                     |   |                             |                                     |                              |                             |   |   |                             |   |   |                             |   |   |                             |   |                              |                             |   |   |                             |                                     |   |                             |                                     |   |                             |                                     |                              |  |                                     |   |                             |                                     |   |                             |                                     |   |                             |                                     |  |                               |                              |  |                               |                              |  |                               |                                     |

**Peer Review Check List for MHg for CV-GC-AFS (SOP2808) 2017 Rev 6 (02/22/17)**

<b>Analyst:</b> DON MORAN	<b>Sequence #:</b> 7H09017
<b>Reviewer:</b> 0 <i>DM e/n/vr</i>	<b>Dataset ID #:</b> MMHG27001-170808-1
<b>Date:</b> 8/9/2017	<b>WO #:</b> [REDACTED]
<b>Batch #(s):</b> F707570, F707567	<b>Client(s):</b> [REDACTED]

**Initials:** *DM*      **Reviewer Initials:** *DM e/n/vr*

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

**Peer Review Check List for MHg for CV-GC-AFS (SOP2808) 2017 Rev 6 (02/22/17)**

<b>Analyst:</b> DON MORAN	<b>Sequence #:</b> 7H09017
<b>Reviewer:</b> 0 <i>R 8/12/17</i>	<b>Dataset ID #:</b> MMHG27001-170808-1
<b>Date:</b> 8/9/2017	<b>WO #:</b> [REDACTED]
<b>Batch #(s):</b> F707567, F707570	<b>Client(s):</b> [REDACTED]

**Analyst Initials:** *DM*      **Reviewer Initials:** *R 8/12/17*

- |  |   |   |
|--|---|---|
| 29. Are re-runs noted with reason?<br>Comments: _____  | <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO | <input type="checkbox"/> N/A <input checked="" type="checkbox"/>            |
| 30. For failing QC (CCV, CCB, PB, BS/BSD, CAL):<br>Was a bubbler and trap test run before the analytical run continued?<br>Comments: _____ | <input type="checkbox"/> YES <input type="checkbox"/> NO            | <input checked="" type="checkbox"/> N/A <input checked="" type="checkbox"/> |
| 31. Do re-run results compare to initial analysis (< 35% RPD)?<br>Comments: <i>Initial analysis run had failing QC F707567</i>             | <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO | <input type="checkbox"/> N/A <input checked="" type="checkbox"/>            |
| 32. Are qualifiers consistent with the data review flowcharts?<br>Comments: _____  | <input type="checkbox"/> YES <input type="checkbox"/> NO            | <input checked="" type="checkbox"/> N/A <input checked="" type="checkbox"/> |
| 33. Have non-reportable samples been imported into LIMS and clicked to non-reportable?<br>Comments: _____                                  | <input type="checkbox"/> YES <input type="checkbox"/> NO            | <input checked="" type="checkbox"/> N/A <input checked="" type="checkbox"/> |
| 34. Have re-extracts been created for non-reportable samples?  | <input type="checkbox"/> YES <input type="checkbox"/> NO            | <input checked="" type="checkbox"/> N/A <input checked="" type="checkbox"/> |
| 35. Narrations in MMO box in LIMS?<br>Comments: _____  |   |   |
| 36. Are there any HIGH QA projects within the data?<br>If so, place dataset to the QA office.  | <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO |   |
| 37. Does the data set need scanning?<br><i>Files located at: \\Cuprum\gen_admin\Quality Assurance\Training Master\DOCs</i>                 | <input type="checkbox"/> YES  | <input checked="" type="checkbox"/> N/A <input checked="" type="checkbox"/> |
| 38. Date of analyst IDOC/CDOC: <u>6/13/2017</u> IDOC/CDOC within last 12 months?   | <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO | <input checked="" type="checkbox"/>   |
| 39. Date of analyst's SOP reading: <u>5/23/2016</u> Current SOP revision?  | <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO | <input checked="" type="checkbox"/>   |
| 40. Date of LOD: <u>4/24/2017</u> LOD within last 3 months (within 12 months for MDN)?   | <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO | <input type="checkbox"/> N/A <input checked="" type="checkbox"/>            |
| 41. Date of LOQ: <u>4/24/2017</u> LOQ within last 3 months (within 12 months for MDN)?   | <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO | <input type="checkbox"/> N/A <input checked="" type="checkbox"/>            |
| 42. If MDN samples, date of last MDL study: _____  |   |   |
| 43. MDL study within last 12 months?   | <input type="checkbox"/> YES <input type="checkbox"/> NO            | <input type="checkbox"/> N/A <input checked="" type="checkbox"/>            |
| <b>Data can not be reported without a current IDOC/CDOC, LOD or LOQ.</b>   |   |   |
| Additional Comments:   | <input type="checkbox"/> YES <input type="checkbox"/> NO            | <input checked="" type="checkbox"/>   |

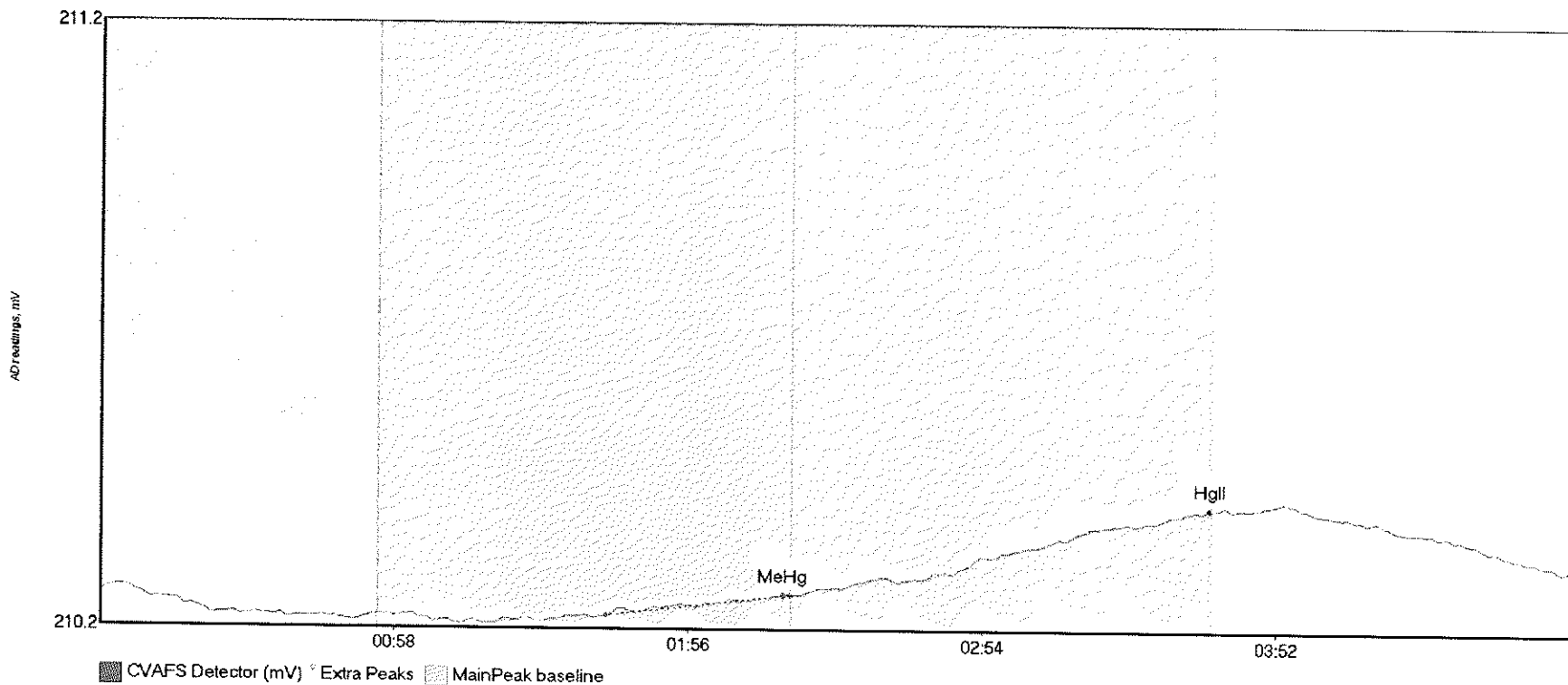


MethylMercury EPA1630 Operat DM BlankSub: Calib Eqn: Run Date: 8/8/2017 Blank SD: Works1 MMHg2: CalibFactor: Status: Calblank error: Zero Pe: Run Time: 0:00:00 Blank RSD%: Methoc 2010-01 R: R2: CalibAnalyte: CF SD: Descrip MMHg27001-170808-1 CF RSD%:

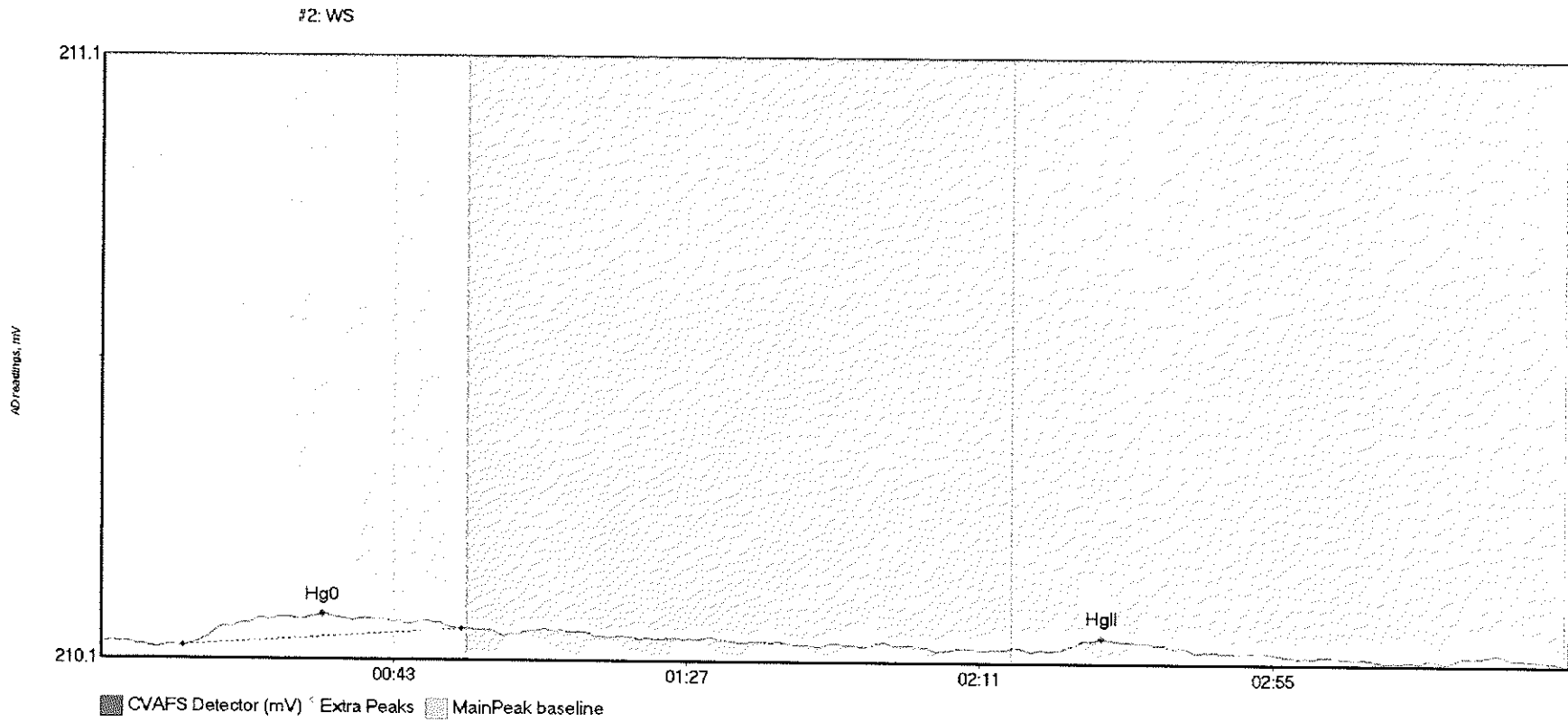
Sample/ID	Locabor	Rinse	Dilute	Blank	ConcHo0(Di	ConcMeHg	ConcHo2(Di	ConcPrHo0	Rec%	QA	RawData	RunEnd	PeakHo0 (Raw	PeakMeHg (R	PeakHo2(Raw	PeakPrHo(Raw	Control (etf)	Flags	RunCount
Clean																			
WS	A1										24739-1.RAW	8:32:45	0.00	1.03	1.58	0.00	cleandry	CT	1
SEQ-HBL1	A2		1								24740-1.RAW	8:43:16	10.21	0.00	1.28	0.00	psample10	OK	1
SEQ-CAL1	A3		1								24741-1.RAW	8:53:47	6.76	0.00	2.34	0.00	psample10	OK	1
SEQ-CAL2	A4		1								24742-1.RAW	9:04:17	6.37	26.80	5.20	0.00	psample10	OK	1
SEQ-CAL3	A5		1								24743-1.RAW	9:14:48	5.30	98.35	5.43	0.00	psample10	CT	1
SEQ-CAL4	A6		1								24744-1.RAW	9:25:19	7.90	498.62	33.93	0.00	psample10	OK	1
SEQ-CAL5	A7		1								24745-1.RAW	9:35:50	4.67	784.11	41.25	0.00	psample10	OK	1
SEQ-ICV1	A8		1								24746-1.RAW	9:46:20	8.56	1845.39	105.69	0.00	psample10	CT	1
SEQ-ICB1	A9		1								24747-1.RAW	9:56:51	4.37	234.04	3.76	0.00	psample10	OK	1
F707567-BLK4	A10		500								24748-1.RAW	10:07:22	1.42	1.15	8.15	0.00	psample10	OK	1
F707567-BLK5	A11		500								24749-1.RAW	10:17:53	3.02	0.00	8.00	0.00	psample10	OK	1
F707567-BLK6	A12		500								24750-1.RAW	10:28:23	4.52	0.00	7.16	0.00	psample10	OK	1
F707567-BS2	A13		1000								24751-1.RAW	10:38:54	4.10	0.00	6.17	0.00	psample10	OK	1
F707567-BSD2	A14		1000								24752-1.RAW	10:49:25	5.20	809.96	112.04	0.00	psample10	OK	1
F707570-BLK1	A15		500								24753-1.RAW	10:59:56	4.69	907.91	125.26	0.00	psample10	OK	1
F707570-BLK2	A16		500								24754-1.RAW	11:10:26	4.49	1.96	5.43	0.00	psample10	OK	1
F707570-BLK3	A17		500								24755-1.RAW	11:20:57	3.07	0.87	10.44	0.00	psample10	OK	1
F707570-BS1	A18		1000								24756-1.RAW	11:31:28	4.06	0.00	6.11	0.00	psample10	OK	1
F707570-BSD1	A19		1000								24757-1.RAW	11:41:59	6.84	823.77	116.41	0.00	psample10	CT	1
SEQ-CCV1	A20		1								24758-1.RAW	11:52:29	5.09	810.32	115.33	0.00	psample10	OK	1
SEQ-CCB1	A21		1								24759-1.RAW	12:03:00	2.15	206.32	3.41	0.00	psample10	OK	1
F707570-DUP1	B1		500								24760-1.RAW	12:13:31	3.55	0.00	4.45	0.00	psample10	OK	1
F707570-MS1	B2		500								24761-1.RAW	12:24:02	4.67	40.95	355.53	0.00	psample10	OK	1
F707570-MSD1	B3		500								24762-1.RAW	12:34:32	5.55	594.80	448.40	0.00	psample10	OK	1
F707570-MS2	B4		500								24763-1.RAW	12:45:03	5.66	536.76	373.55	0.00	psample10	CT	1
F707570-MSD2	B5		500								24764-1.RAW	12:55:34	6.07	532.35	970.51	0.00	psample10	OK	1
1707771-CB	B6		500								24765-1.RAW	13:06:05	7.45	560.80	1259.58	0.00	psample10	CT	1
1707771-CC	B7		500								24767-1.RAW	13:16:35	7.30	42.51	631.30	0.00	psample10	OK	1
1707771-CD	B8		500								24768-1.RAW	13:27:06	2.72	44.63	873.99	0.00	psample10	OK	1
1707771-CE	B9		500								24769-1.RAW	13:37:37	4.56	51.64	375.21	0.00	psample10	CT	1
1707771-CF	B10		500								24770-1.RAW	13:48:07	4.10	11.08	475.66	0.00	psample10	CT	1
SEQ-CCV2	B11		1								24771-1.RAW	13:58:38	8.49	79.28	348.27	0.00	psample10	CT	1
SEQ-CCB2	B12		1								24772-1.RAW	14:09:09	6.39	208.09	6.99	0.00	psample10	CT	1
1707771-CG	B13		500								24773-1.RAW	14:19:40	3.66	0.00	5.62	0.00	psample10	OK	1
1707771-CX	B14		500								24774-1.RAW	14:30:10	5.80	69.56	1158.78	0.00	psample10	OK	1
1707771-CY	B15		500								24775-1.RAW	14:40:41	6.54	24.81	622.70	0.00	psample10	CT	1
1707771-CZ	B16		500								24776-1.RAW	14:51:12	6.01	21.15	552.99	0.00	psample10	CT	1
1707771-DA	B17		500								24777-1.RAW	15:01:43	3.44	25.19	595.58	0.00	psample10	OK	1
1707775-01	B18		500								24778-1.RAW	15:12:13	5.48	11.73	452.47	0.00	psample10	OK	1
1707775-02	B19		500								24779-1.RAW	15:22:44	3.44	51.27	1375.12	0.00	psample10	CT	1
1707775-03	B20		500								24780-1.RAW	15:33:15	6.20	42.18	999.32	0.00	psample10	OK	1
1707775-04	B21		500								24781-1.RAW	15:43:46	5.67	36.80	898.37	0.00	psample10	CT	1
1707775-05	C1		500								24782-1.RAW	15:54:16	5.85	26.02	1059.73	0.00	psample10	CT	1
SEQ-CCV3	C2		1								24783-1.RAW	16:04:47	5.15	17.61	603.62	0.00	psample10	CT	1
SEQ-CCB3	C3		1								24784-1.RAW	16:15:18	5.65	203.39	8.02	0.00	psample10	OK	1
1707775-06	C4		500								24785-1.RAW	16:25:49	5.07	0.00	4.16	0.00	psample10	OK	1
1707775-07	C5		500								24786-1.RAW	16:36:19	5.68	17.33	845.07	0.00	psample10	OK	1
1707775-08	C6		500								24787-1.RAW	16:46:50	4.93	17.55	719.56	0.00	psample10	OK	1
1707775-09	C7		500								24788-1.RAW	16:57:20	4.27	0.00	25.77	0.00	psample10	OK	1
1707776-01	C8		500								24789-1.RAW	17:07:50	5.26	0.00	82.52	0.00	psample10	OK	1
F707567-DUP2	C9		500								24790-1.RAW	17:18:20	4.68	94.42	1384.72	0.00	psample10	OK	1
F707567-MS3	C10		500								24791-1.RAW	17:28:51	4.33	108.85	465.62	0.00	psample10	CT	1
F707567-MSD3	C11		500								24792-1.RAW	17:39:22	3.53	529.76	419.66	0.00	psample10	OK	1
F707567-MS4	C12		500								24793-1.RAW	17:49:52	4.45	570.38	443.74	0.00	psample10	CT	1
F707567-MSD4	C13		500								24794-1.RAW	18:00:23	4.32	505.35	1228.33	0.00	psample10	OK	1
SEQ-CCV4	C14		1								24795-1.RAW	18:10:54	5.17	542.27	1448.76	0.00	psample10	OK	1
SEQ-CCB4	C15		1								24796-1.RAW	18:21:24	2.81	220.90	9.81	0.00	psample10	OK	1
1707771-21RE1	C16		500								24797-1.RAW	18:31:55	8.48	3.42	3.92	0.00	psample10	CT	1
1707771-22RE1	C17		500								24798-1.RAW	18:42:26	4.58	127.30	465.86	0.00	psample10	OK	1
1707771-23RE1	C18		500								24799-1.RAW	18:52:56	4.88	128.91	404.70	0.00	psample10	CT	1
1707771-24RE1	C19		500								24800-1.RAW	19:03:27	6.25	113.22	577.21	0.00	psample10	OK	1
1707771-25RE1	C20		500								24801-1.RAW	19:13:58	6.48	104.76	635.68	0.00	psample10	OK	1
1707771-26RE1	C21		500								24802-1.RAW	19:24:28	5.77	33.58	751.04	0.00	psample10	OK	1
1707771-27RE1	A1		500								24803-1.RAW	19:34:59	4.44	24.76	1792.62	0.00	psample10	OK	1
1707771-28RE1	A2		500								24804-1.RAW	19:45:30	1.64	95.03	429.26	0.00	psample10	OK	1
1707771-29RE1	A3		500								24805-1.RAW	19:56:00	6.30	57.28	1142.69	0.00	psample10	OK	1
1707771-30RE1	A4		500								24806-1.RAW	20:06:31	6.97	77.10	1096.52	0.00	psample10	OK	1
SEQ-CCV5	A5		1								24807-1.RAW	20:17:02	2.72	90.78	1392.43	0.00	psample10	CT	1
SEQ-CCB5	A6		1								24808-1.RAW	20:27:33	4.02	227.58	13.19	0.00	psample10	OK	1
1707771-31RE1	A7		500								24809-1.RAW	20:38:03	4.16	0.00	6.43	0.00	psample10	OK	1
1707771-32RE1	A8		500								24810-1.RAW	20:48:34	7.02	33.79	1037.70	0.00	psample10	CT	1
1707771-33RE1	A9		500								24811-1.RAW	20:59:05	6.90	42.53	1131.07	0.00	psample10	CT	1
1707771-34RE1	A10		500								24812-1.RAW	21:09:35	5.52	52.06	323.44	0.00	psample10	OK	1
												21:20:06	3.80	42.77	254.99	0.00	psample10	CT	1

1707771-35RE1	A11	500										
1707771-36RE1	A12	500	24813-1.RAW	21:30:37	3.27	68.10	505.60	0.00	psample10	OK		1
1707771-37RE1	A13	500	24814-1.RAW	21:41:07	4.81	80.10	711.62	0.00	psample10	OK		1
1707771-38RE1	A14	500	24815-1.RAW	21:51:38	2.64	83.08	323.49	0.00	psample10	OK		1
1707771-39RE1	A15	500	24816-1.RAW	22:02:09	5.46	54.82	954.66	0.00	psample10	OK		1
1707771-40RE1	A16	500	24817-1.RAW	22:12:39	4.17	30.40	711.20	0.00	psample10	CT		1
SEQ-CCV6	A17	1	24818-1.RAW	22:23:10	4.10	36.83	717.27	0.00	psample10	CT		1
SEQ-CCB6	A18	1	24819-1.RAW	22:33:41	4.81	200.33	6.69	0.00	psample10	OK		1
			24820-1.RAW	22:44:11	5.56	0.65	4.08	0.00	psample10	OK		1

#1: Clean

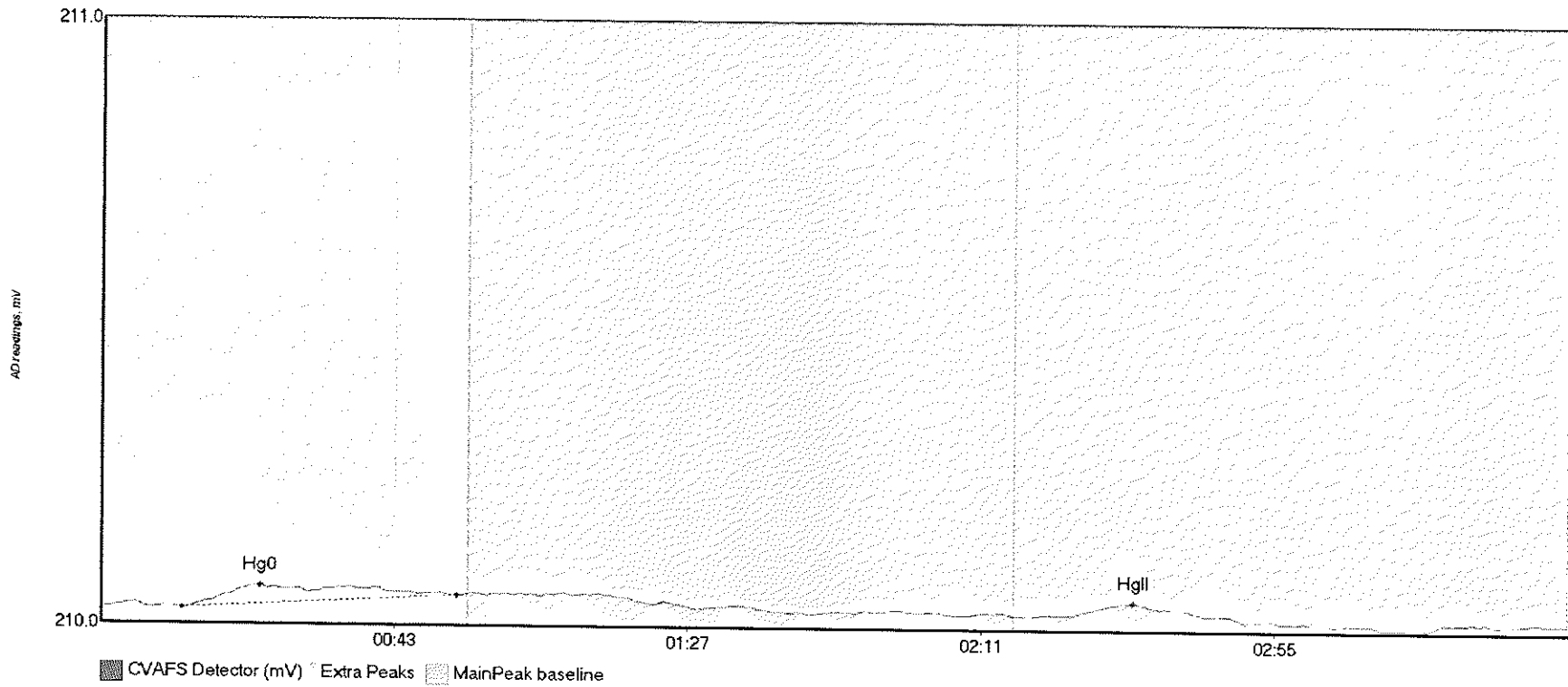


Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
Clean MeHg	1.030	100.2	136.5	210.24	210.27	135.1	0.036	OK	210.2785	0.00	0.04	
Clean HgII	1.580	138.7	219.8	210.27	210.42	219.5	0.144	CT	210.2785	0.00	0.04	017



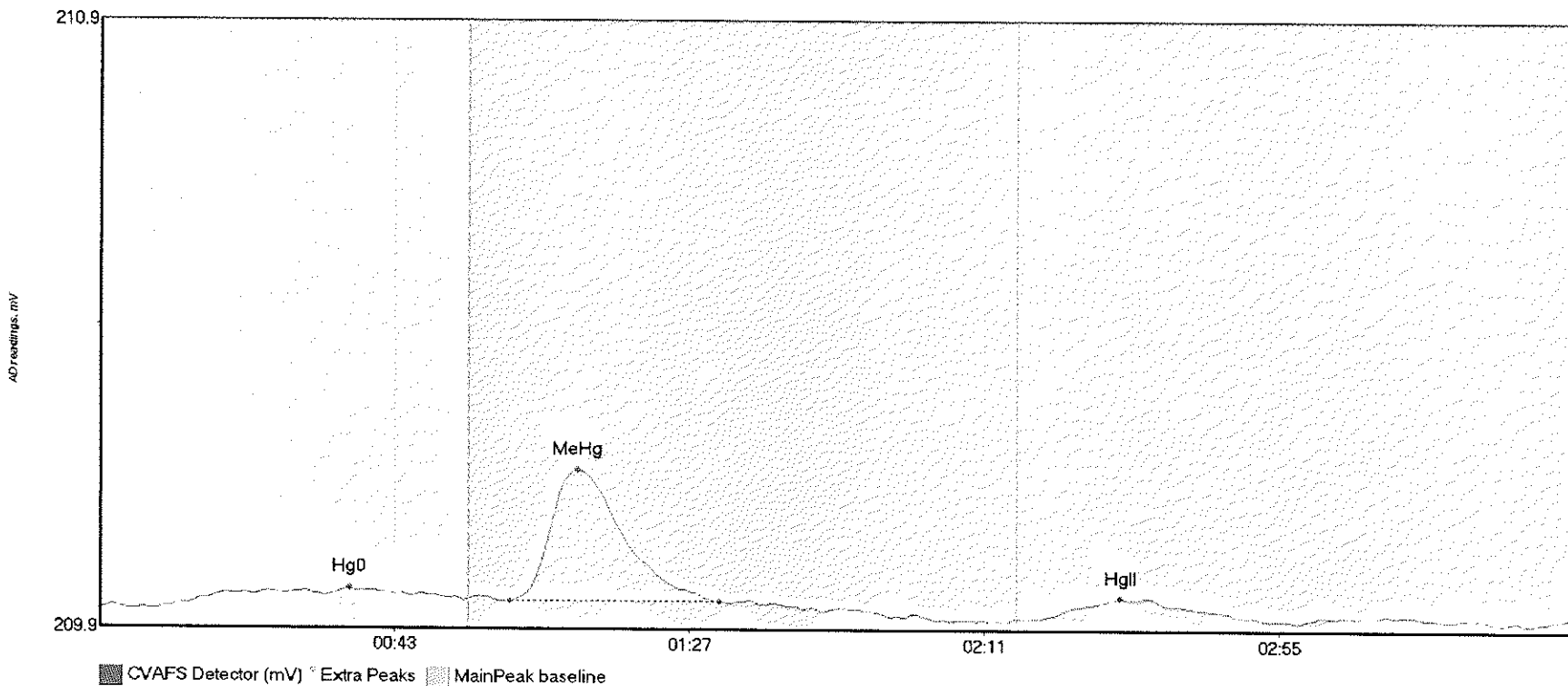
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
WS Hg0	10.207	12.3	54.1	210.13	210.16	33.3	0.054	OK	210.1333	0.00	-0.02	
WS HgII	1.283	145.6	160.9	210.13	210.13	150.3	0.014	OK	210.1333	0.00	-0.02	017

#3: SEQ-IBL1



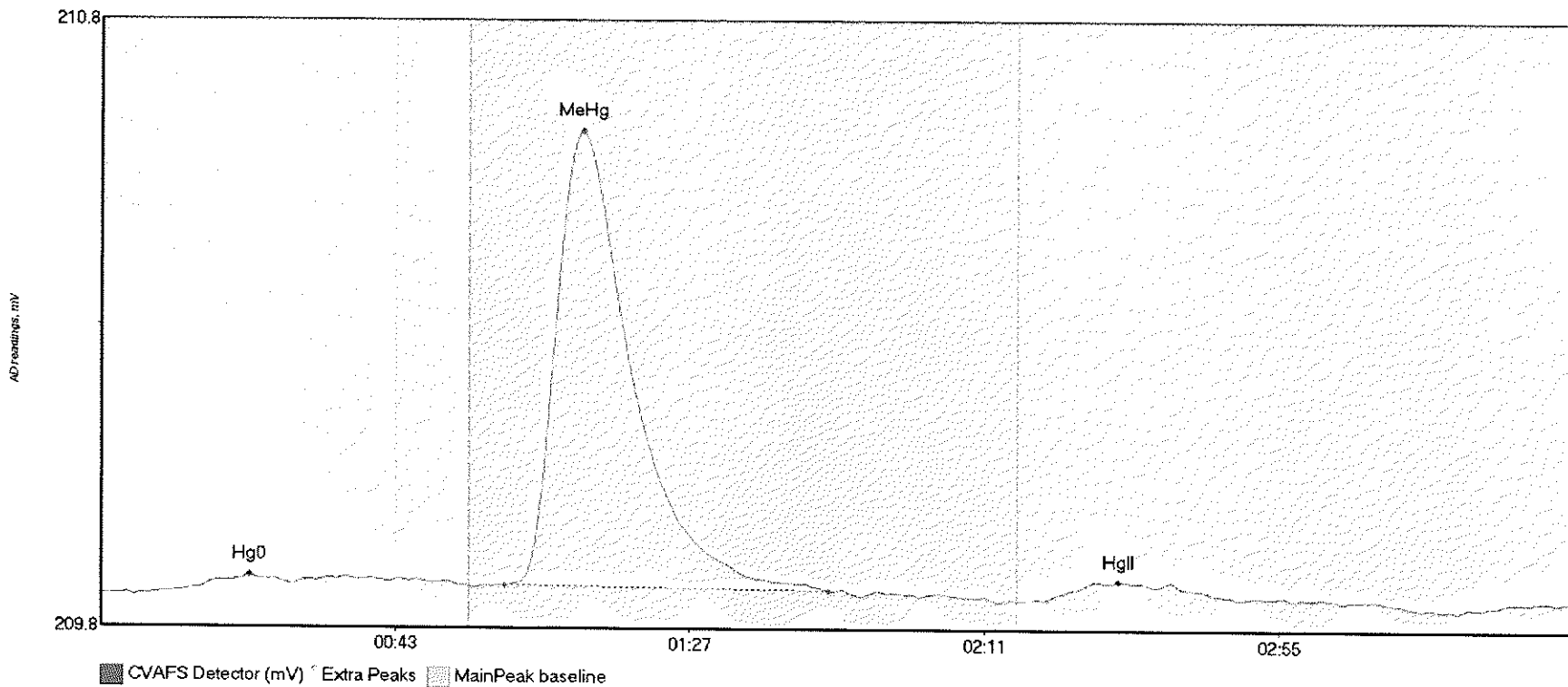
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-IBL1 Hg0	6.757	12.2	53.3	210.05	210.08	23.8	0.038	OK	210.0558	0.00	-0.01	
SEQ-IBL1 HgII	2.342	145.3	165.4	210.05	210.05	154.8	0.022	OK	210.0558	0.00	-0.01	017

#4: SEQ-CAL1



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CAL1 Hg0	6.375	10.3	54.3	209.98	209.99	37.3	0.030	OK	209.9794	0.00	-0.01	
SEQ-CAL1 MeHg	26.795	61.2	92.5	209.99	209.99	71.3	0.216	OK	209.9794	0.00	-0.01	
SEQ-CAL1 HgII	5.203	140.8	169.5	209.97	209.97	152.3	0.033	OK	209.9794	0.00	-0.01	

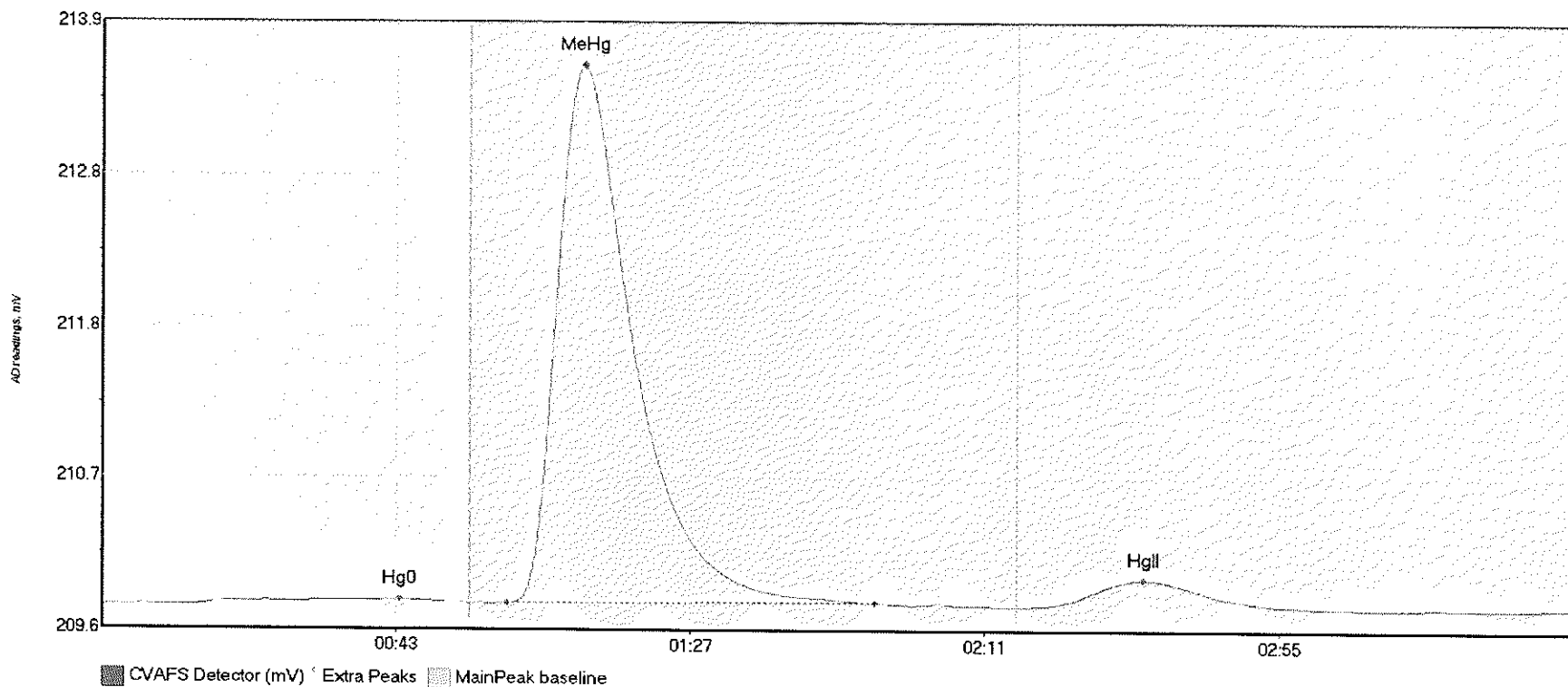
#5: SEQ-CAL2



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CAL2 Hg0	5.304	12.0	55.0	209.91	209.91	22.1	0.025	CT	209.9004	0.00	-0.01	
SEQ-CAL2 MeHg	98.352	60.3	108.8	209.92	209.91	72.0	0.748	OK	209.9004	0.00	-0.01	
SEQ-CAL2 HgII	5.429	140.7	169.9	209.89	209.90	152.1	0.031	OK	209.9004	0.00	-0.01	

017

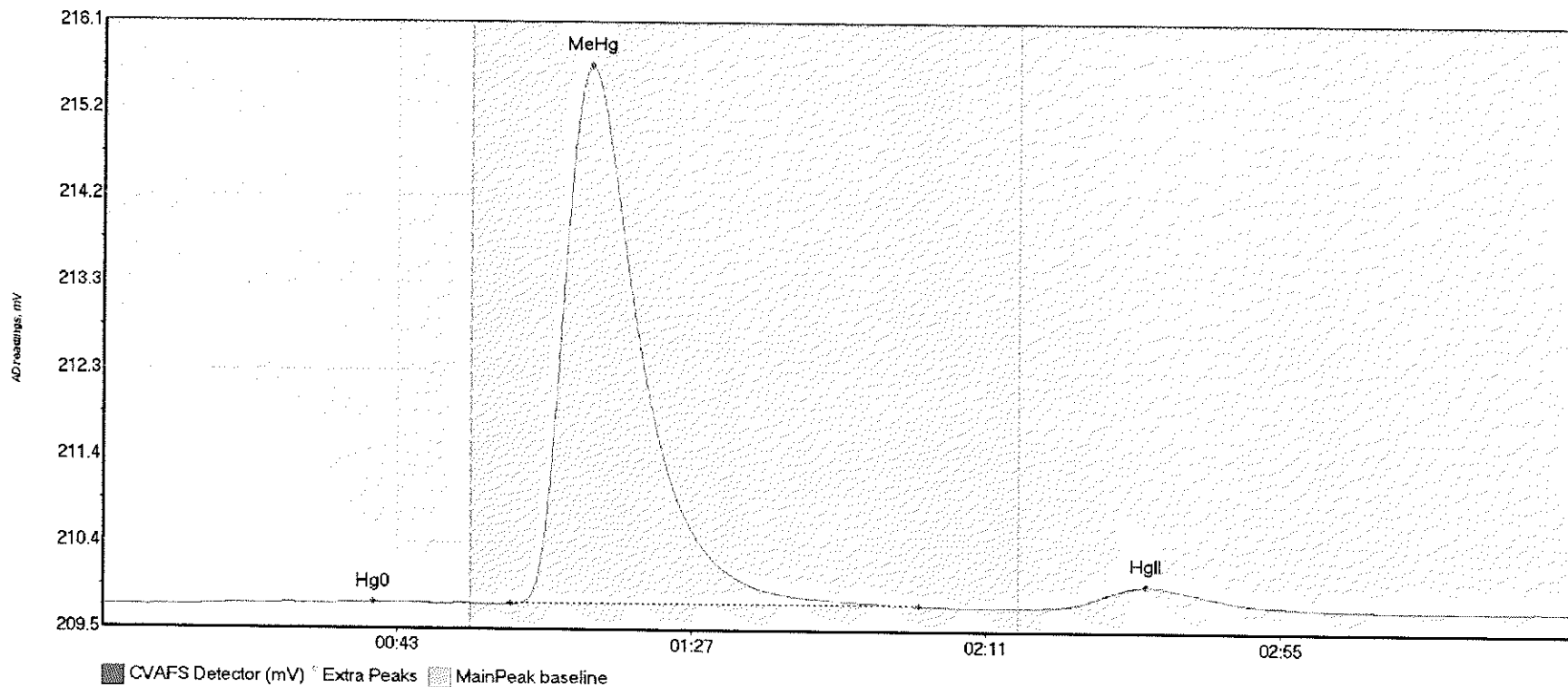
#6: SEQ-CAL3



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CAL3 Hg0	7.900	14.1	54.9	209.82	209.83	44.6	0.041	OK	209.8170	0.00	-0.01	
SEQ-CAL3 MeHg	498.622	60.6	115.6	209.83	209.83	72.1	3.779	OK	209.8170	0.00	-0.01	
SEQ-CAL3 HgII	33.929	139.4	181.0	209.82	209.81	155.7	0.187	OK	209.8170	0.00	-0.01	

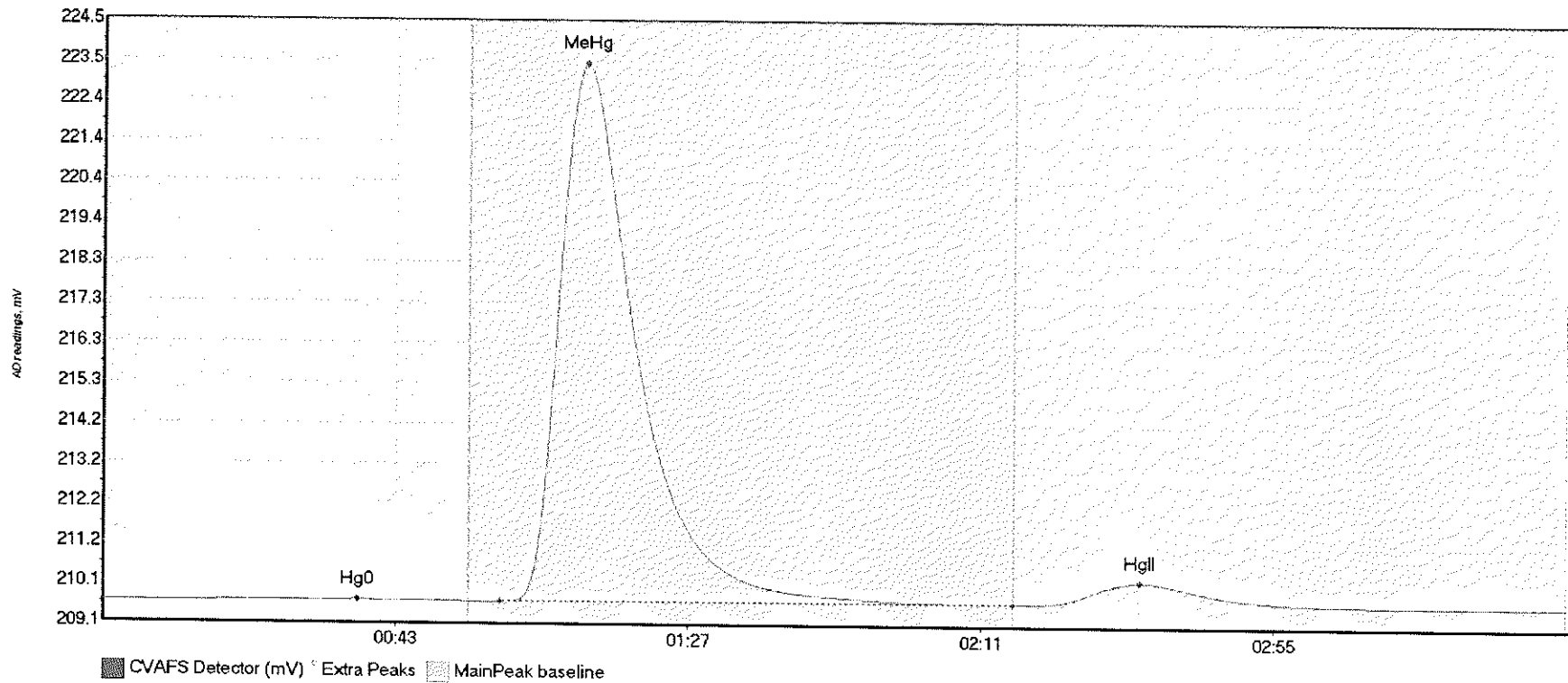


#7: SEQ-CAL4



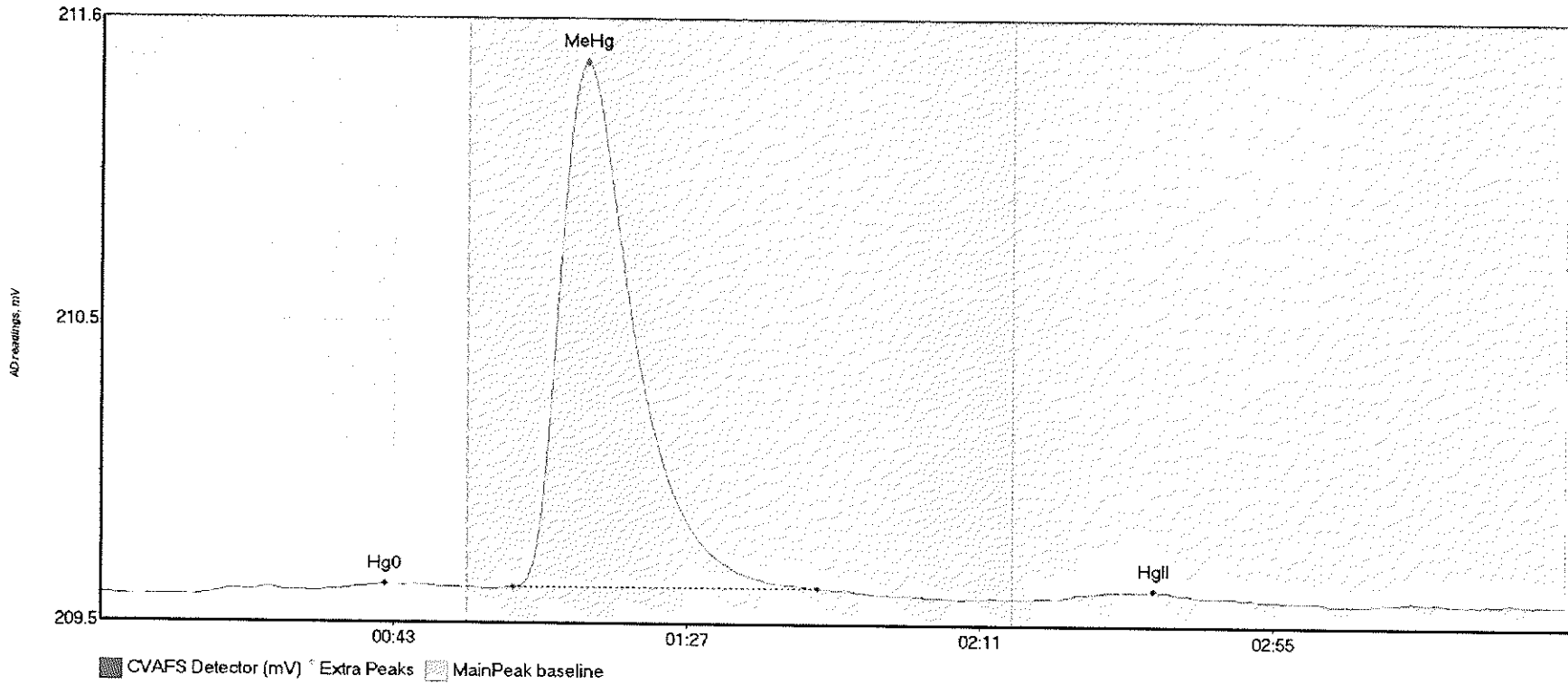
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CAL4 Hg0	4.674	13.4	51.2	209.73	209.76	40.4	0.036	OK	209.7353	0.00	-0.01	
SEQ-CAL4 MeHg	784.107	61.0	122.0	209.75	209.76	72.9	5.892	OK	209.7353	0.00	-0.01	
SEQ-CAL4 HgII	41.250	139.8	181.3	209.75	209.74	155.9	0.240	OK	209.7353	0.00	-0.01	

#8: SEQ-CAL5



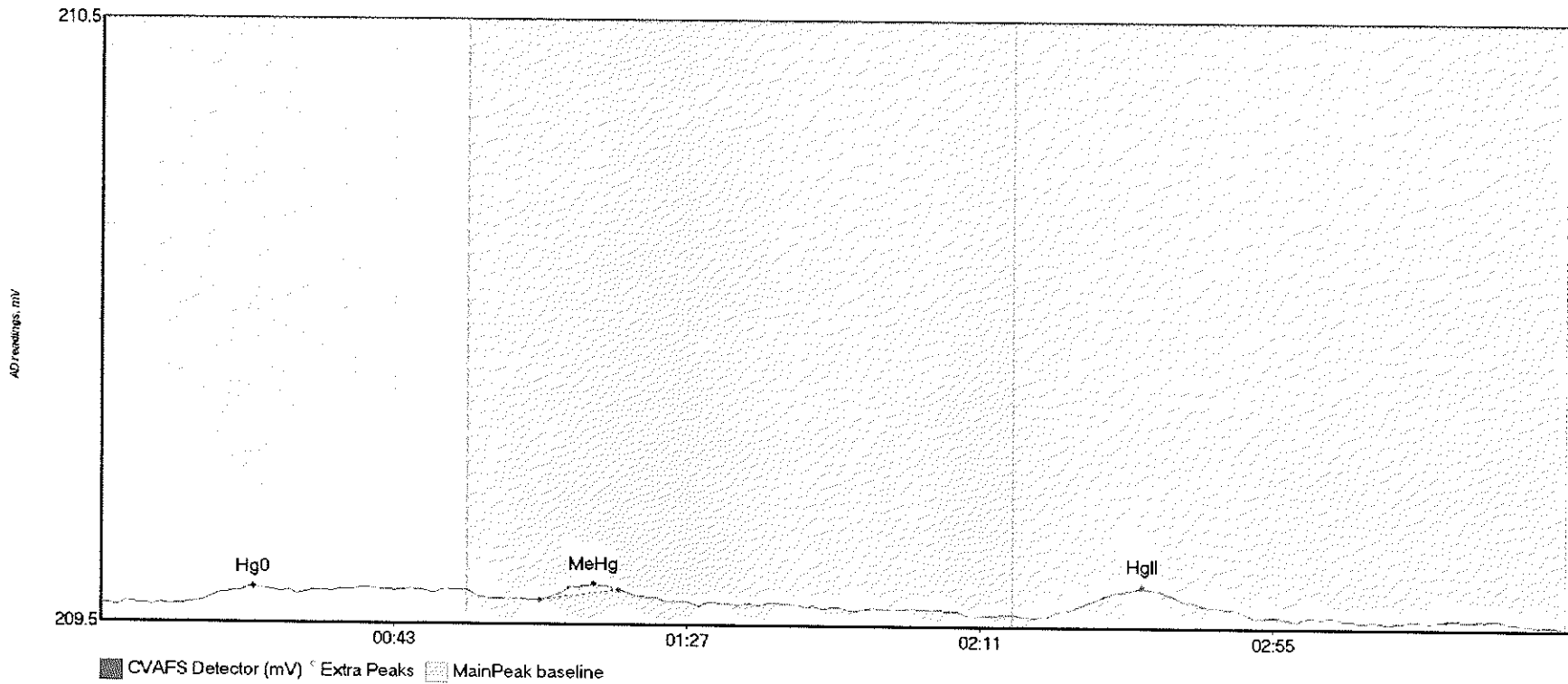
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CAL5 Hg0	8.561	13.1	55.0	209.67	209.68	38.3	0.040	CT	209.6658	0.00	-0.01	
SEQ-CAL5 MeHg	1845.392	59.7	136.8	209.68	209.69	72.6	13.716	CT	209.6658	0.00	-0.01	
SEQ-CAL5 HgII	105.692	139.7	186.7	209.69	209.68	155.9	0.574	OK	209.6658	0.00	-0.01	

#9: SEQ-ICV1



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-ICV1 Hg0	4.374	14.0	54.2	209.58	209.61	42.7	0.041	OK	209.5892	0.00	-0.02	
SEQ-ICV1 MeHg	234.044	61.8	107.6	209.62	209.62	72.9	1.808	OK	209.5892	0.00	-0.02	
SEQ-ICV1 HgII	3.763	143.2	166.4	209.58	209.59	158.0	0.029	OK	209.5892	0.00	-0.02	

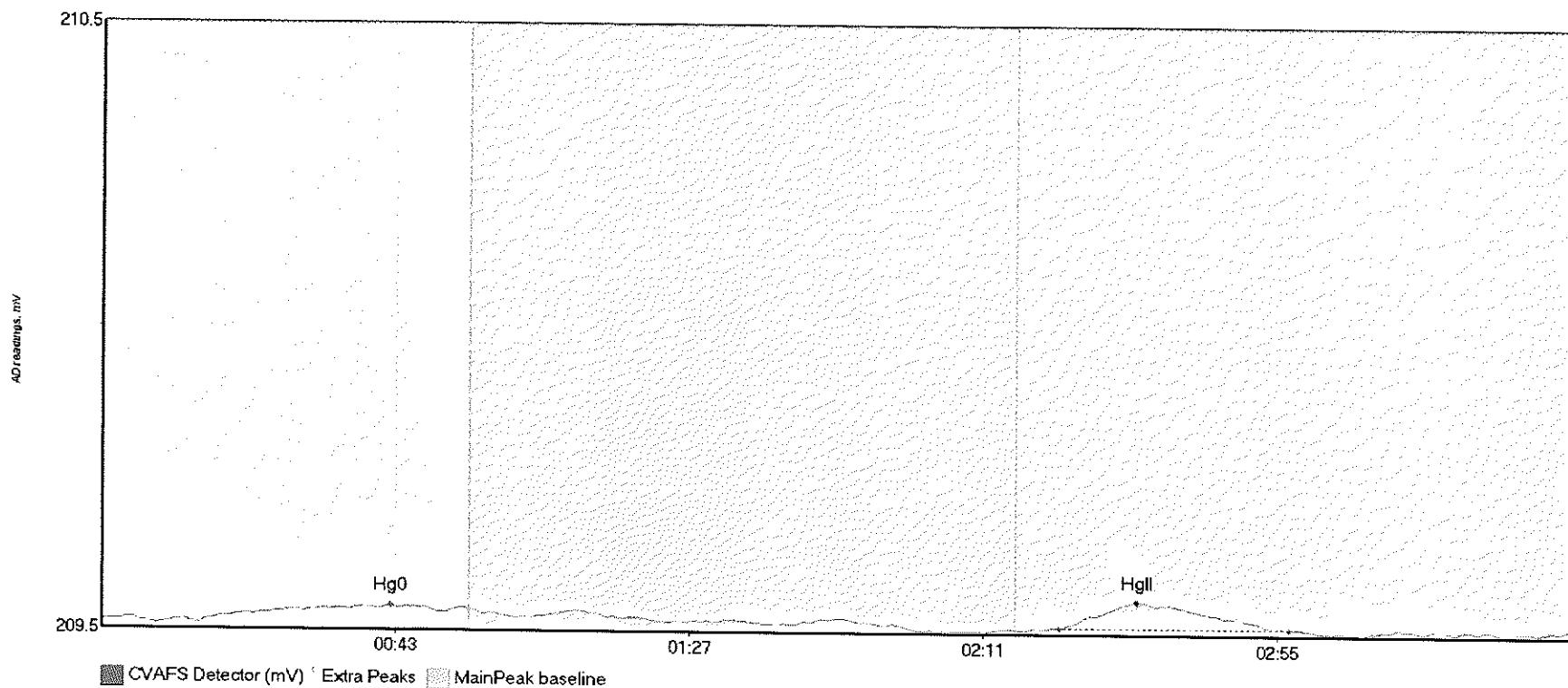
#10: SEQ-ICB1



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-ICB1 Hg0	1.423	14.5	29.4	209.54	209.56	22.8	0.025	OK	209.5384	0.00	-0.03	
SEQ-ICB1 MeHg	1.151	65.9	77.7	209.55	209.56	74.0	0.027	OK	209.5384	0.00	-0.03	
SEQ-ICB1 HgII	8.153	141.7	173.1	209.52	209.52	156.3	0.050	OK	209.5384	0.00	-0.03	

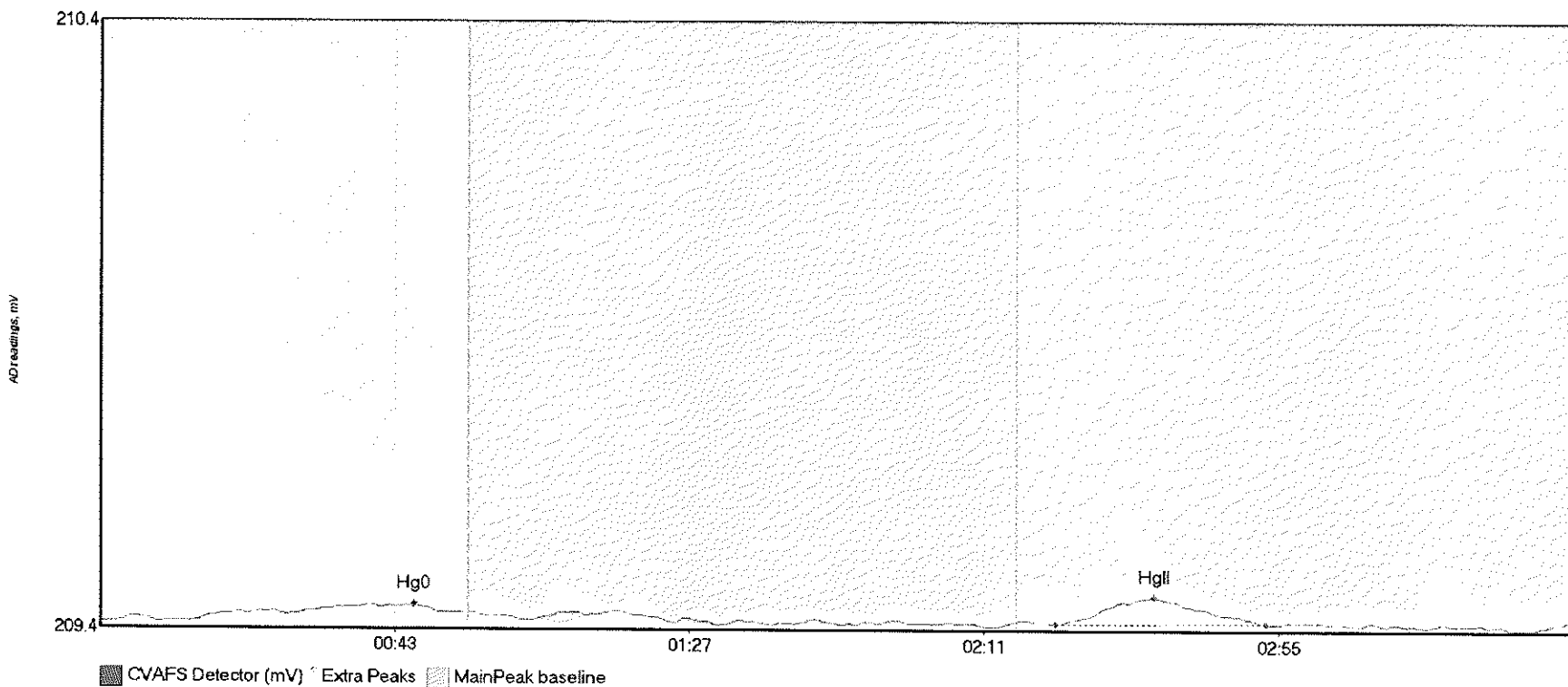
017

#11: F707567-BLK4



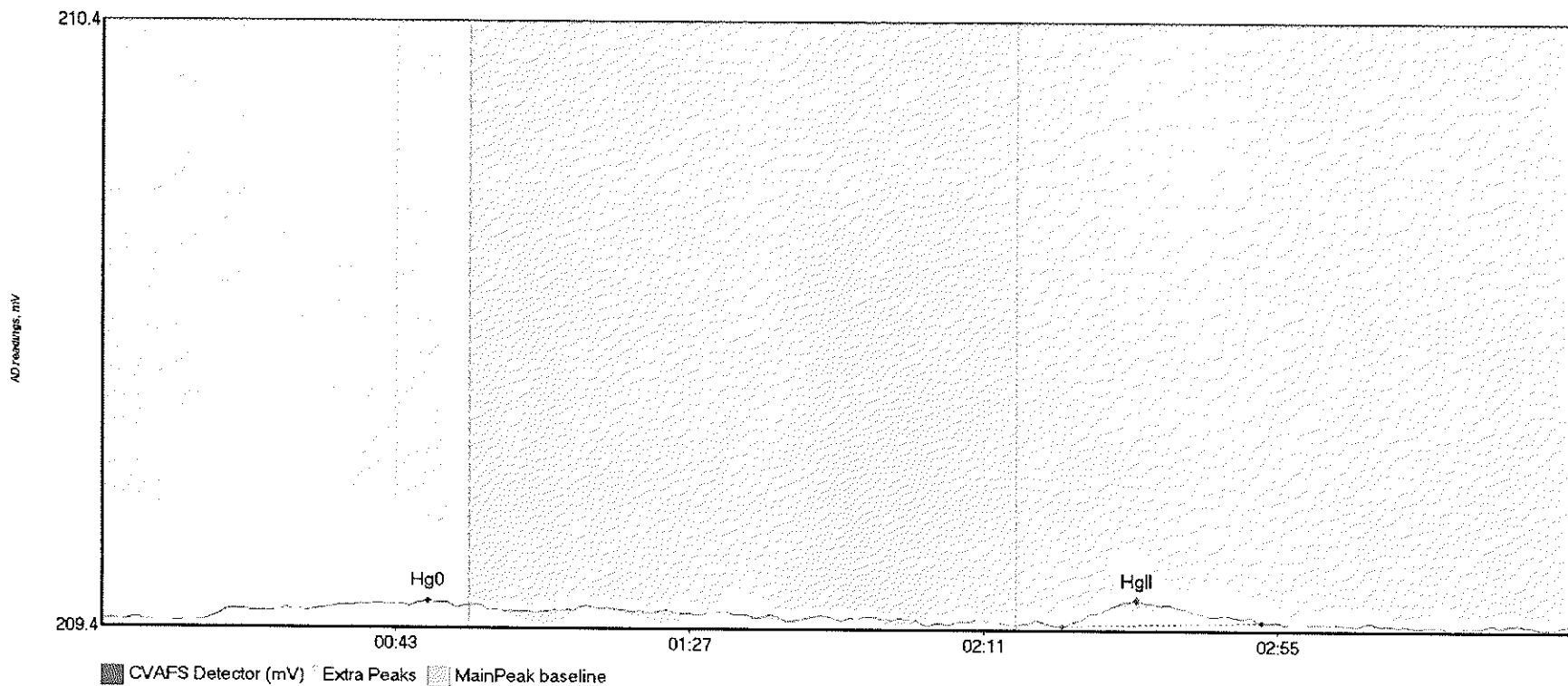
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F707567-BLK4 Hg	3.019	16.3	51.5	209.49	209.51	43.3	0.023	OK	209.4914	0.00	0.00	
F707567-BLK4 Hg	8.001	143.5	177.7	209.49	209.49	155.1	0.044	OK	209.4914	0.00	0.00	017

#12: F707567-BLK5



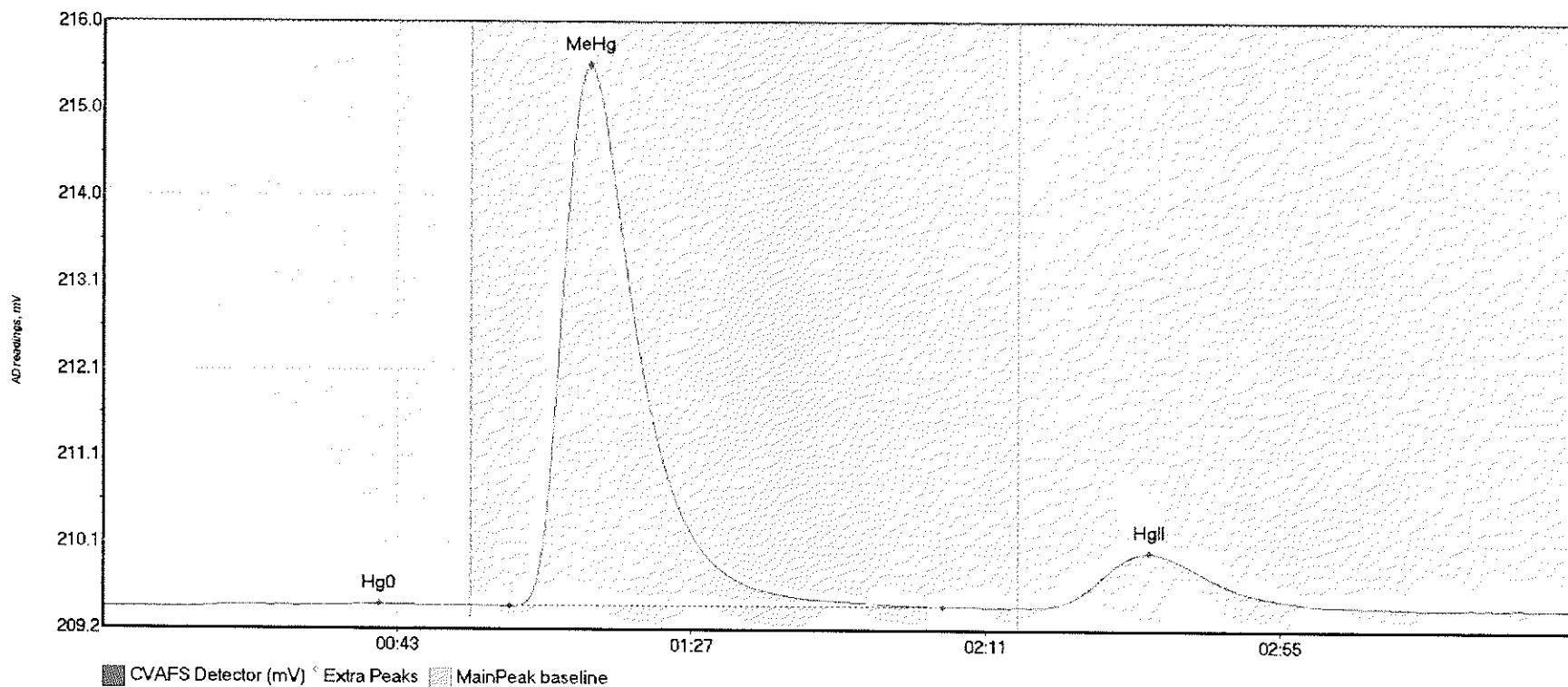
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F707567-BLK5 Hg	4.524	13.3	54.9	209.46	209.47	46.8	0.028	OK	209.4542	0.00	0.01	
F707567-BLK5 Hg	7.161	142.7	174.1	209.45	209.45	157.4	0.046	OK	209.4542	0.00	0.01	017

#13: F707567-BLK6



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F707567-BLK6 Hg	4.099	14.6	53.1	209.43	209.46	48.8	0.033	OK	209.4344	0.00	0.00	
F707567-BLK6 Hg	6.170	143.7	173.6	209.43	209.43	154.9	0.043	OK	209.4344	0.00	0.00	017

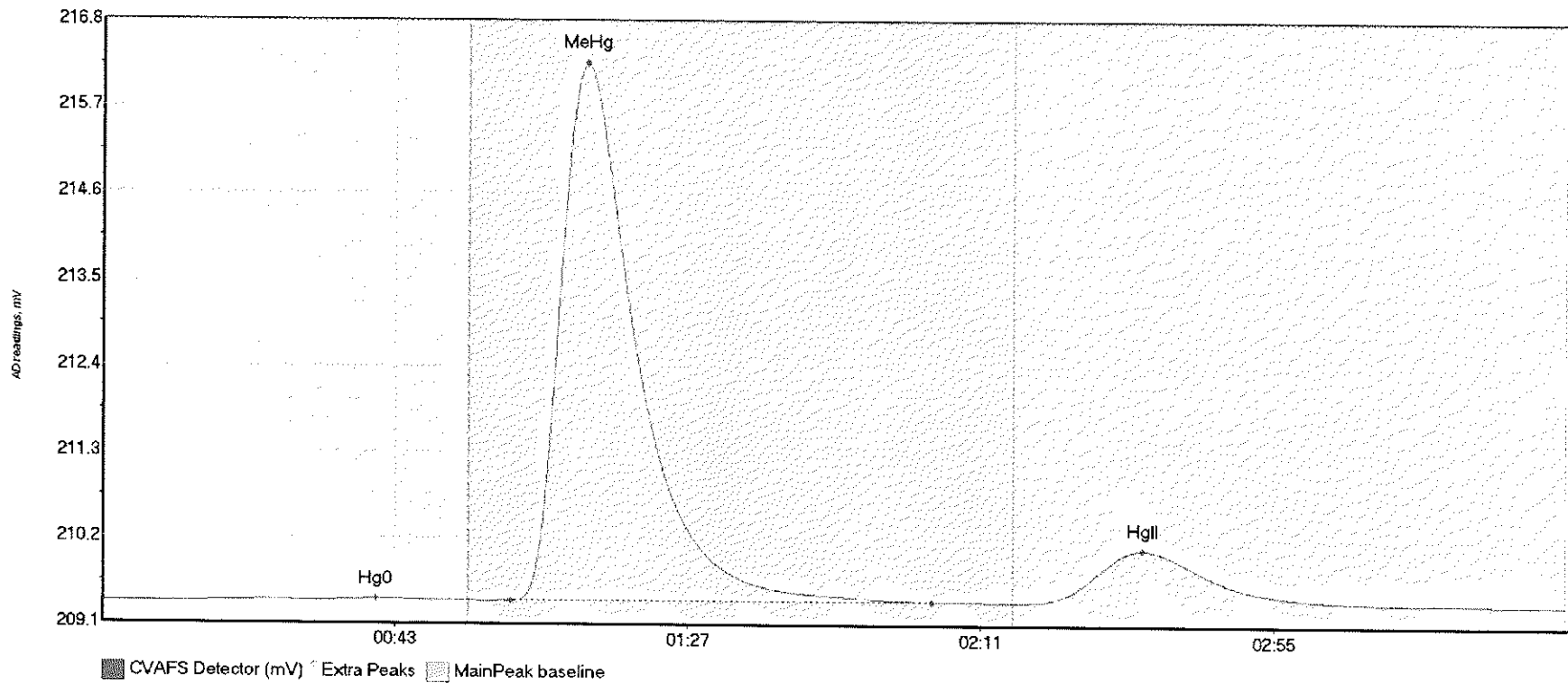
#14: F707567-BS2



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F707567-BS2 Hg0	5.203	14.2	54.9	209.41	209.42	41.3	0.036	OK	209.4042	0.00	0.00	
F707567-BS2 MeH	809.964	60.8	125.6	209.42	209.43	72.8	6.094	OK	209.4042	0.00	0.00	
F707567-BS2 HgI	112.043	140.6	190.5	209.43	209.42	156.5	0.608	OK	209.4042	0.00	0.00	

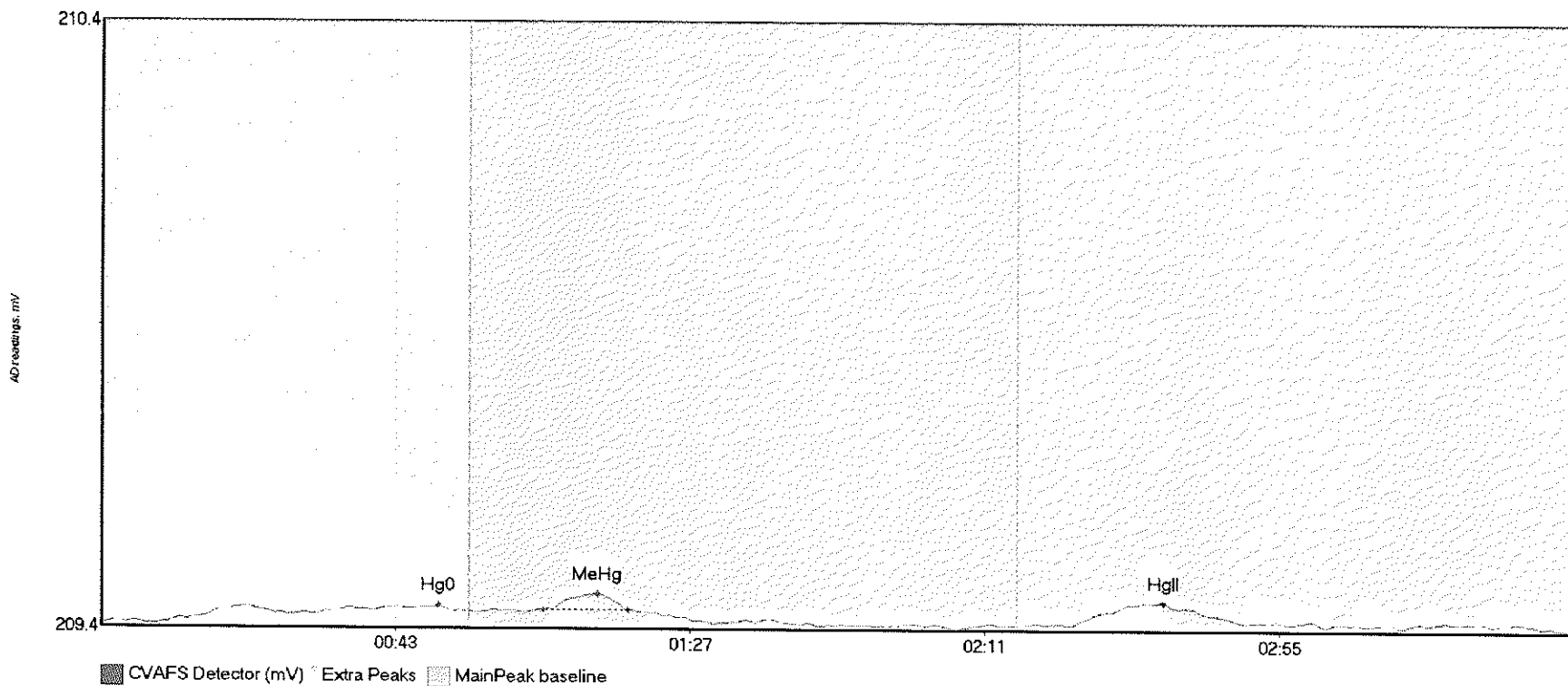


#15: F707567-BSD2



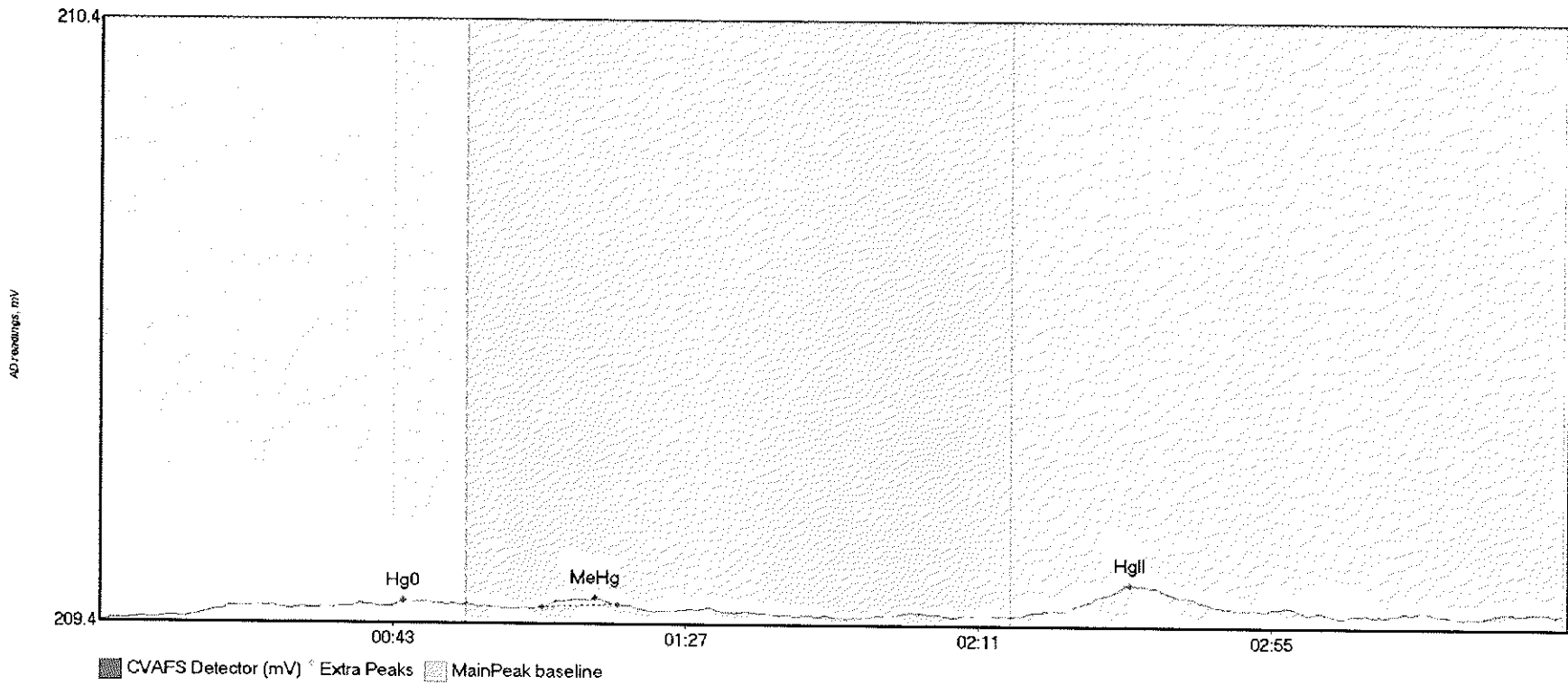
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F707567-BSD2 Hg	4.686	13.9	54.5	209.39	209.41	41.1	0.037	OK	209.3893	0.00	0.00	
F707567-BSD2 Me	907.906	61.3	124.7	209.41	209.41	72.7	6.852	OK	209.3893	0.00	0.00	
F707567-BSD2 Hg	125.263	139.7	192.6	209.41	209.40	156.3	0.666	OK	209.3893	0.00	0.00	

#16: F707570-BLK1



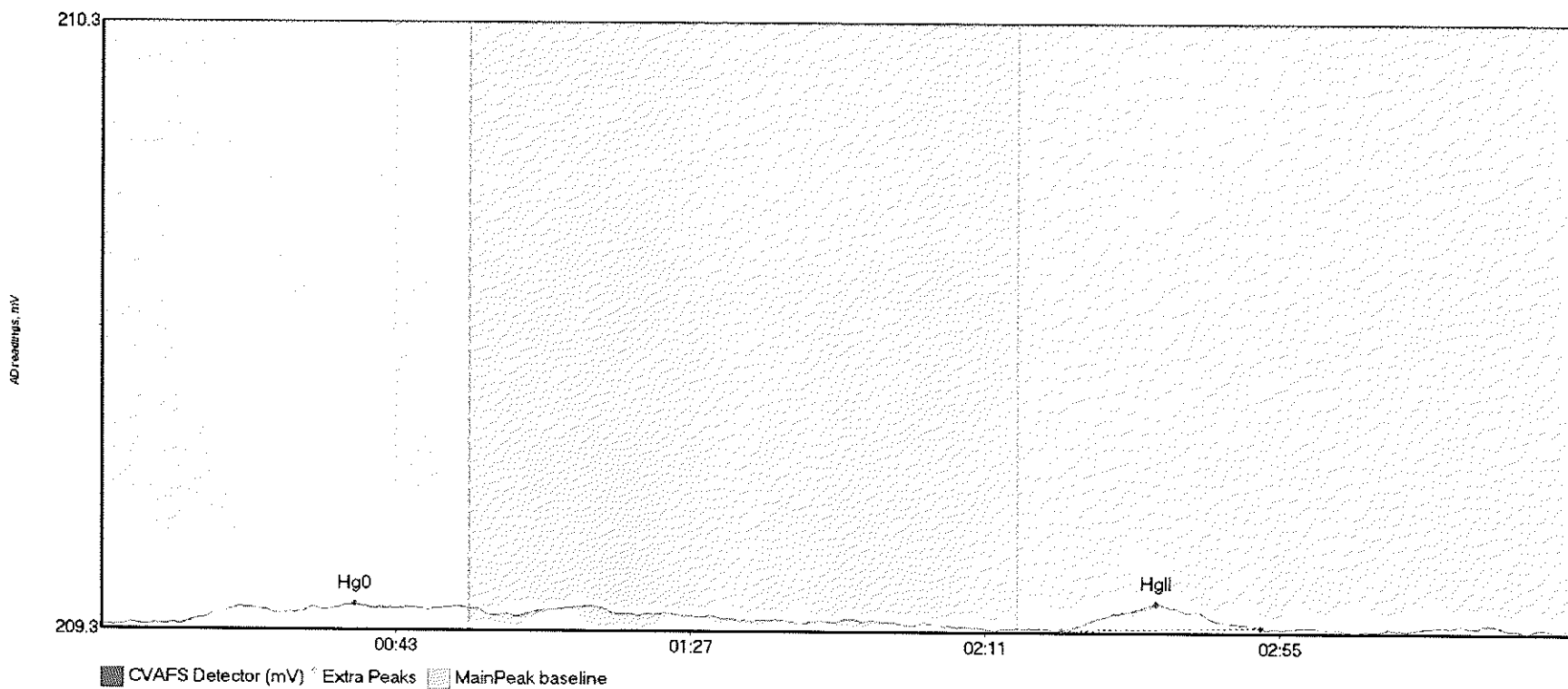
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F707570-BLK1 Hg	4.495	9.3	54.6	209.37	209.39	50.5	0.027	OK	209.3717	0.00	-0.01	
F707570-BLK1 Me	1.963	66.0	78.8	209.39	209.39	74.2	0.026	OK	209.3717	0.00	-0.01	
F707570-BLK1 Hg	5.432	145.1	174.2	209.37	209.38	158.8	0.037	OK	209.3717	0.00	-0.01	

#17: F707570-BLK2



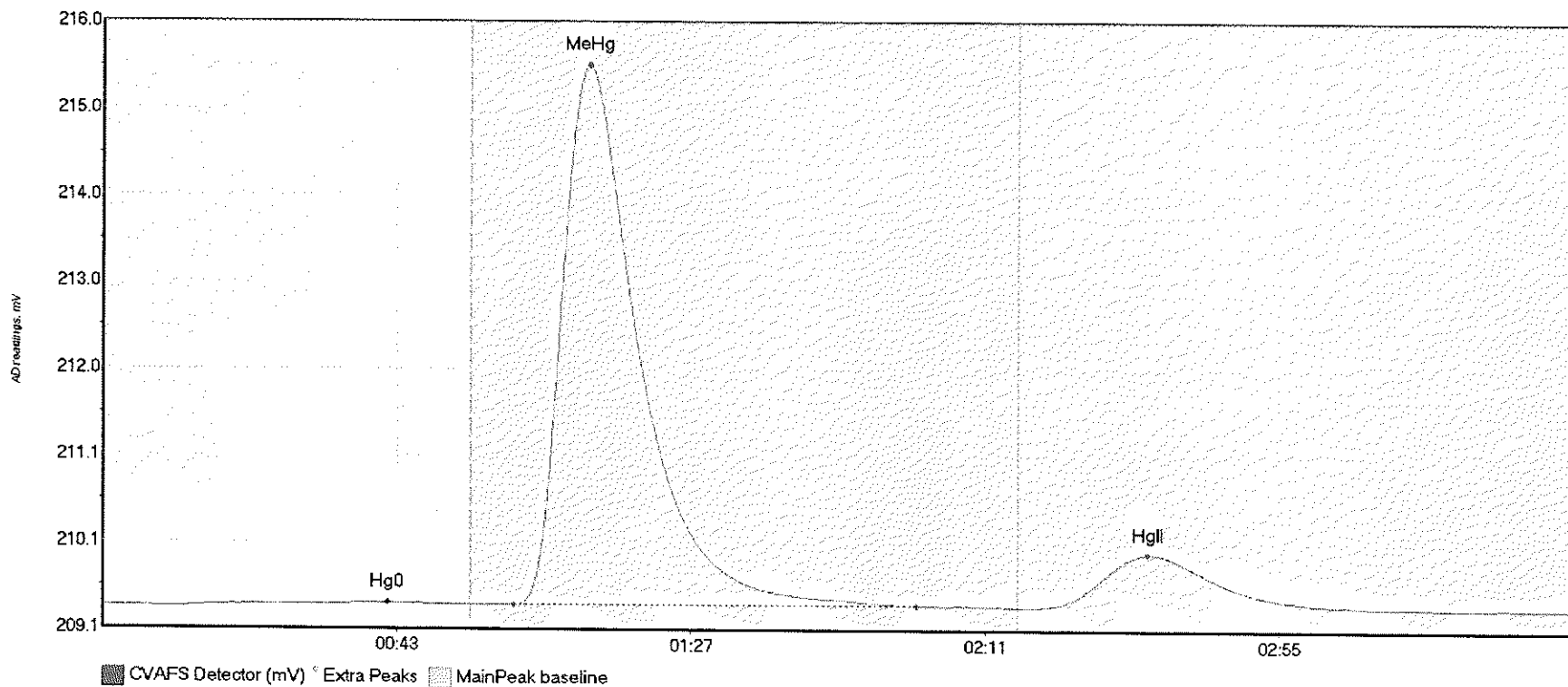
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F707570-BLK2 Hg	3.070	8.6	54.1	209.36	209.38	45.6	0.028	OK	209.3542	0.00	0.02	
F707570-BLK2 Me	0.872	66.5	77.8	209.38	209.38	74.5	0.015	OK	209.3542	0.00	0.02	
F707570-BLK2 Hg	10.437	138.4	186.8	209.37	209.37	154.8	0.054	OK	209.3542	0.00	0.02	

#18: F707570-BLK3



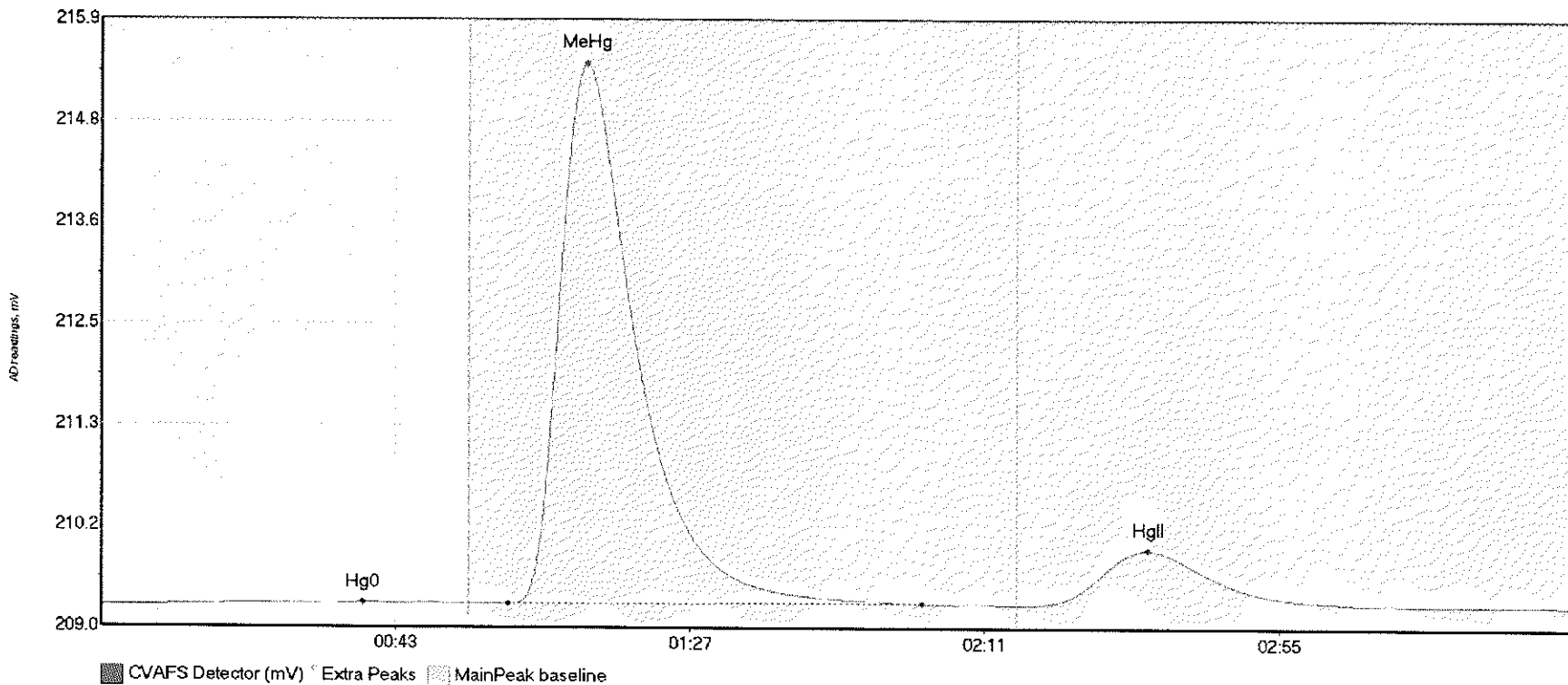
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F707570-BLK3 Hg	4.057	11.8	49.0	209.34	209.37	37.9	0.033	OK	209.3426	0.00	0.00	
F707570-BLK3 Hg	6.107	143.5	173.2	209.34	209.34	157.6	0.043	OK	209.3426	0.00	0.00	017

#19: F707570-BS1



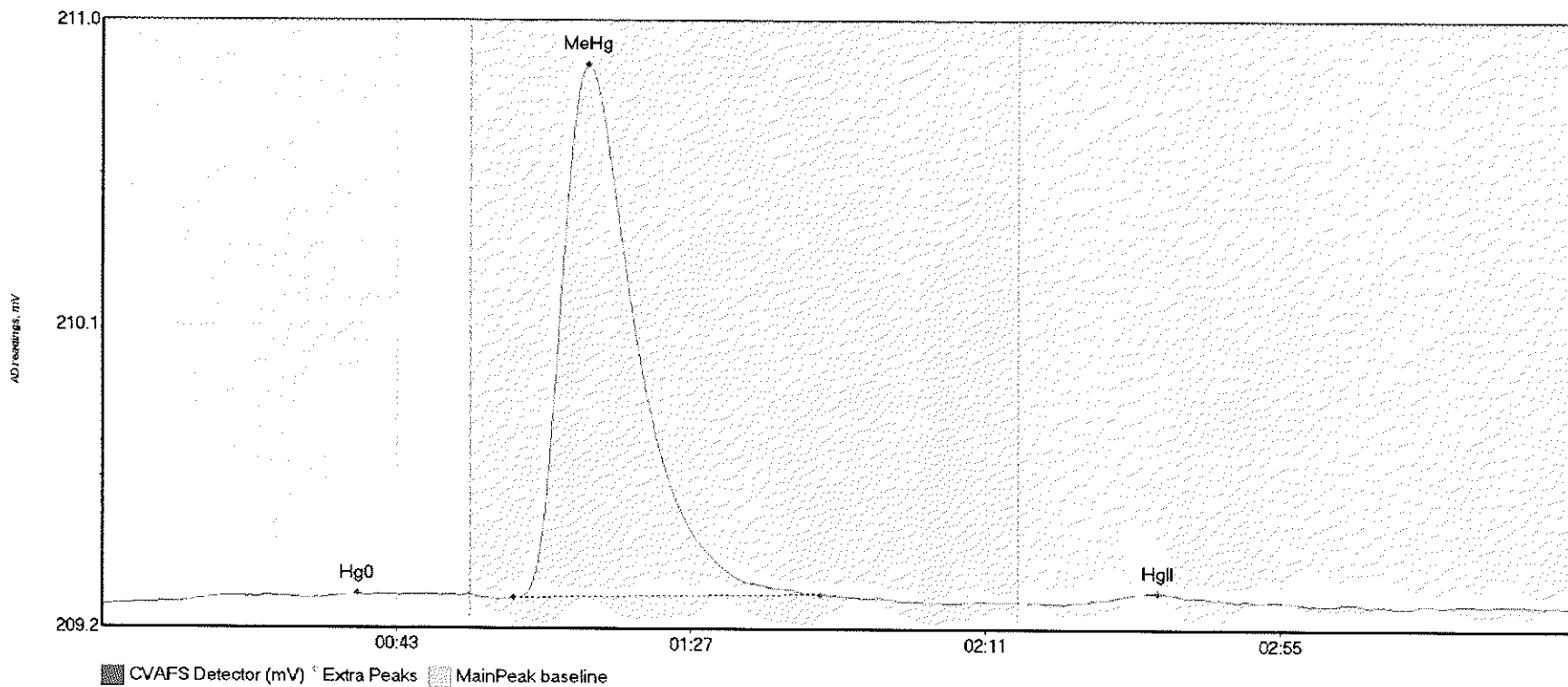
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F707570-BS1 Hg0	6.845	12.0	55.0	209.32	209.34	42.6	0.045	CT	209.3221	0.00	-0.01	
F707570-BS1 MeH	823.775	61.4	121.7	209.34	209.35	72.7	6.194	OK	209.3221	0.00	-0.01	
F707570-BS1 HgI	116.406	138.4	190.5	209.32	209.33	156.3	0.618	OK	209.3221	0.00	-0.01	

#20: F707570-BSD1



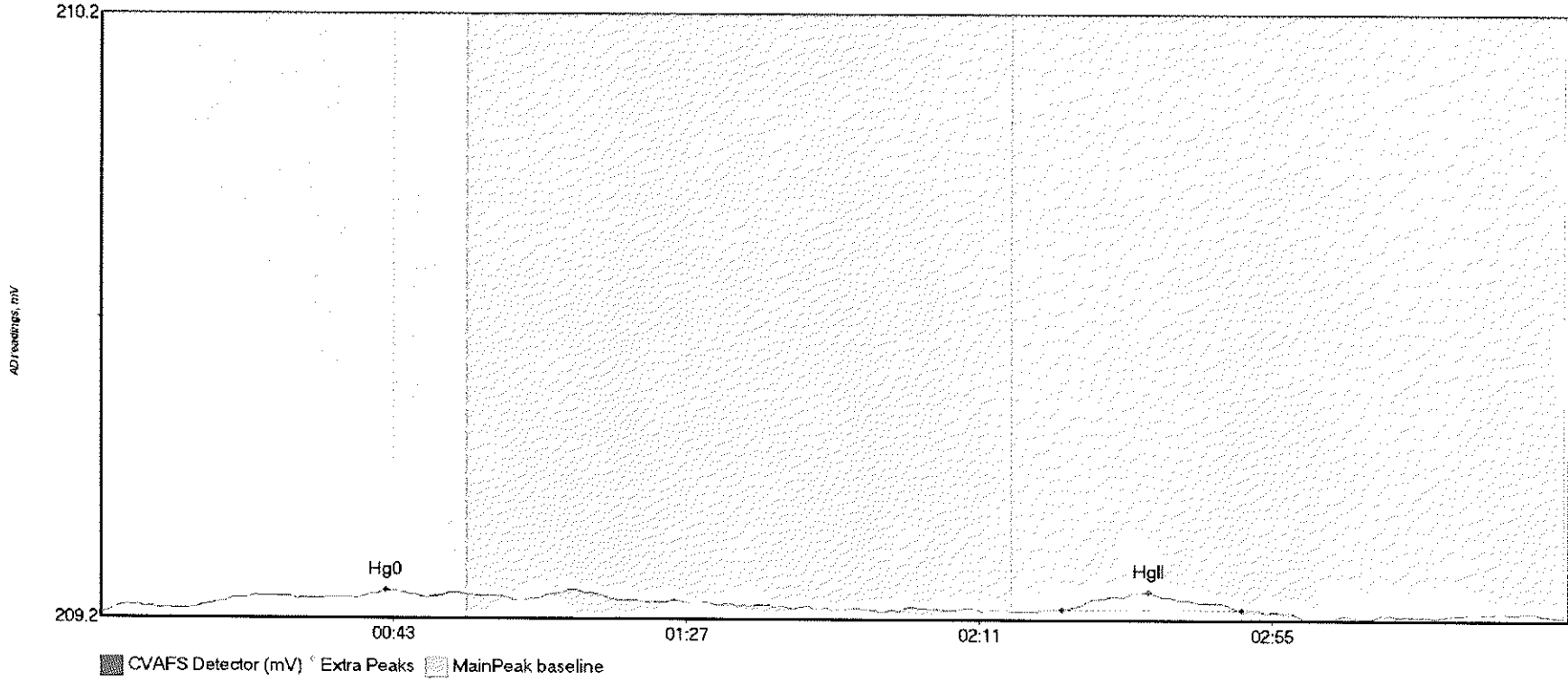
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F707570-BSD1 Hg	5.090	8.5	54.8	209.29	209.31	39.1	0.031	OK	209.2893	0.00	0.01	
F707570-BSD1 Me	810.319	60.9	122.8	209.31	209.32	72.6	6.699	OK	209.2893	0.00	0.01	
F707570-BSD1 Hg	115.334	139.4	194.1	209.31	209.31	156.5	0.616	OK	209.2893	0.00	0.01	

#21: SEQ-CCV1



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CCV1 Hg0	2.154	7.6	44.6	209.28	209.30	38.1	0.028	OK	209.2719	0.00	0.00	
SEQ-CCV1 MeHg	206.316	61.5	107.3	209.29	209.30	72.6	1.595	OK	209.2719	0.00	0.00	
SEQ-CCV1 HgII	3.410	146.5	169.3	209.28	209.29	157.7	0.032	OK	209.2719	0.00	0.00	

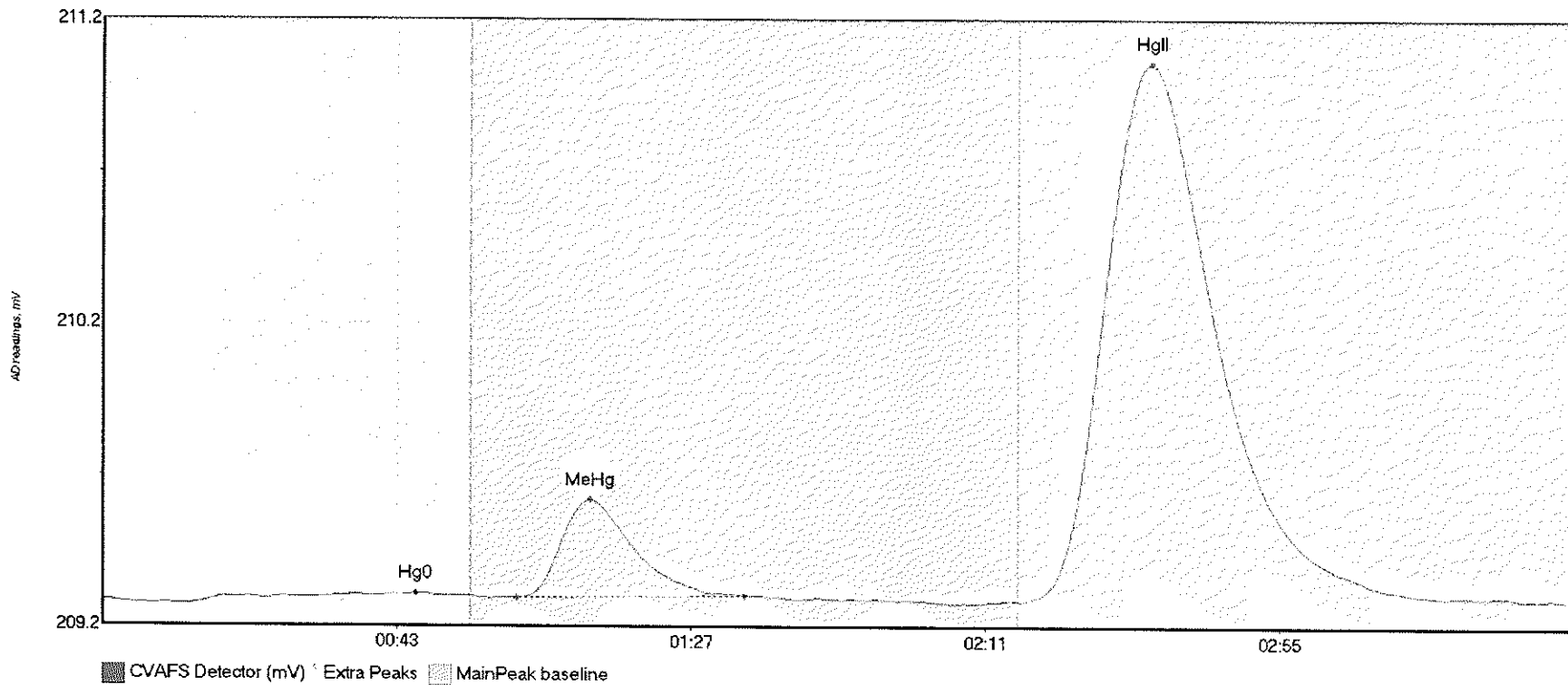
#22: SEQ-CCB1



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CCB1 Hg0	3.548	0.8	48.8	209.26	209.28	42.9	0.036	OK	209.2575	0.00	0.00	
SEQ-CCB1 HgII	4.450	144.5	171.4	209.26	209.26	157.4	0.030	OK	209.2575	0.00	0.00	017

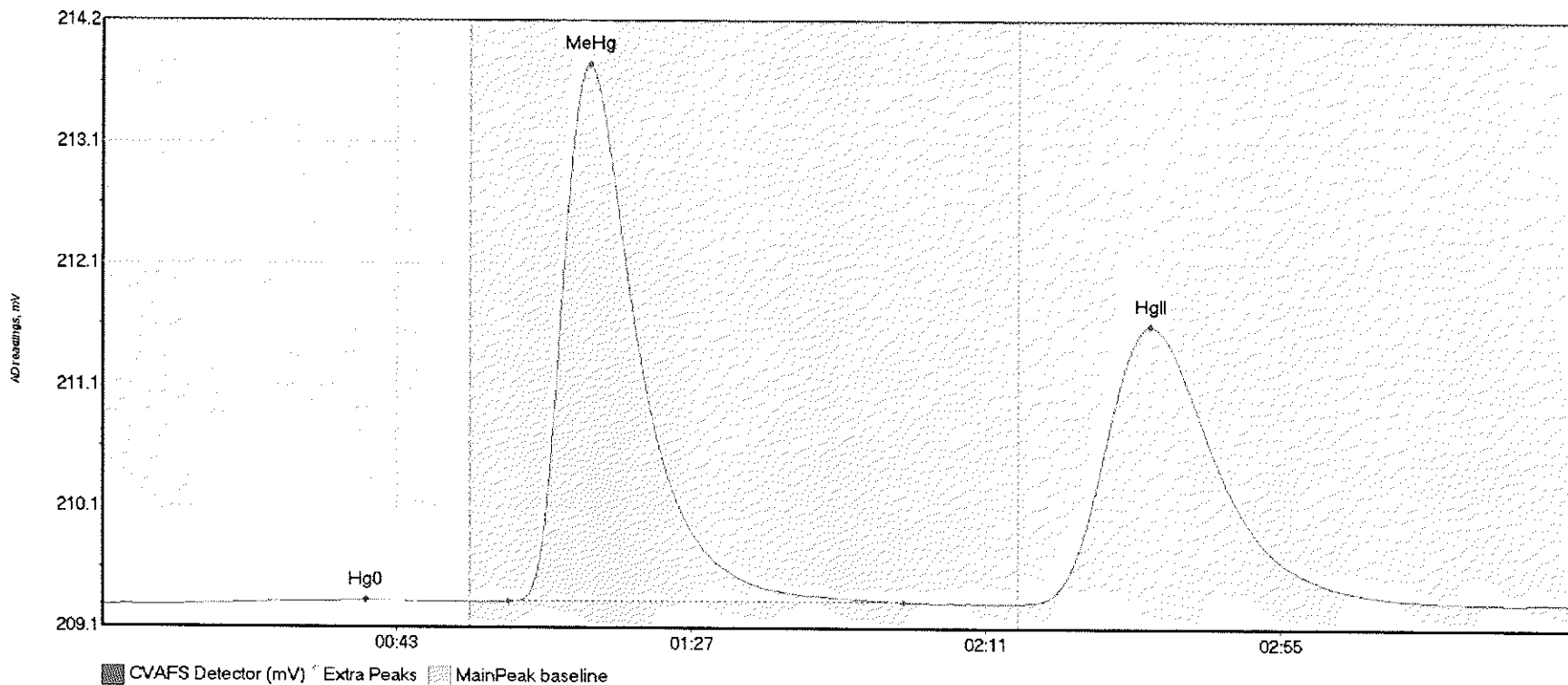


#23: F707570-DUP1



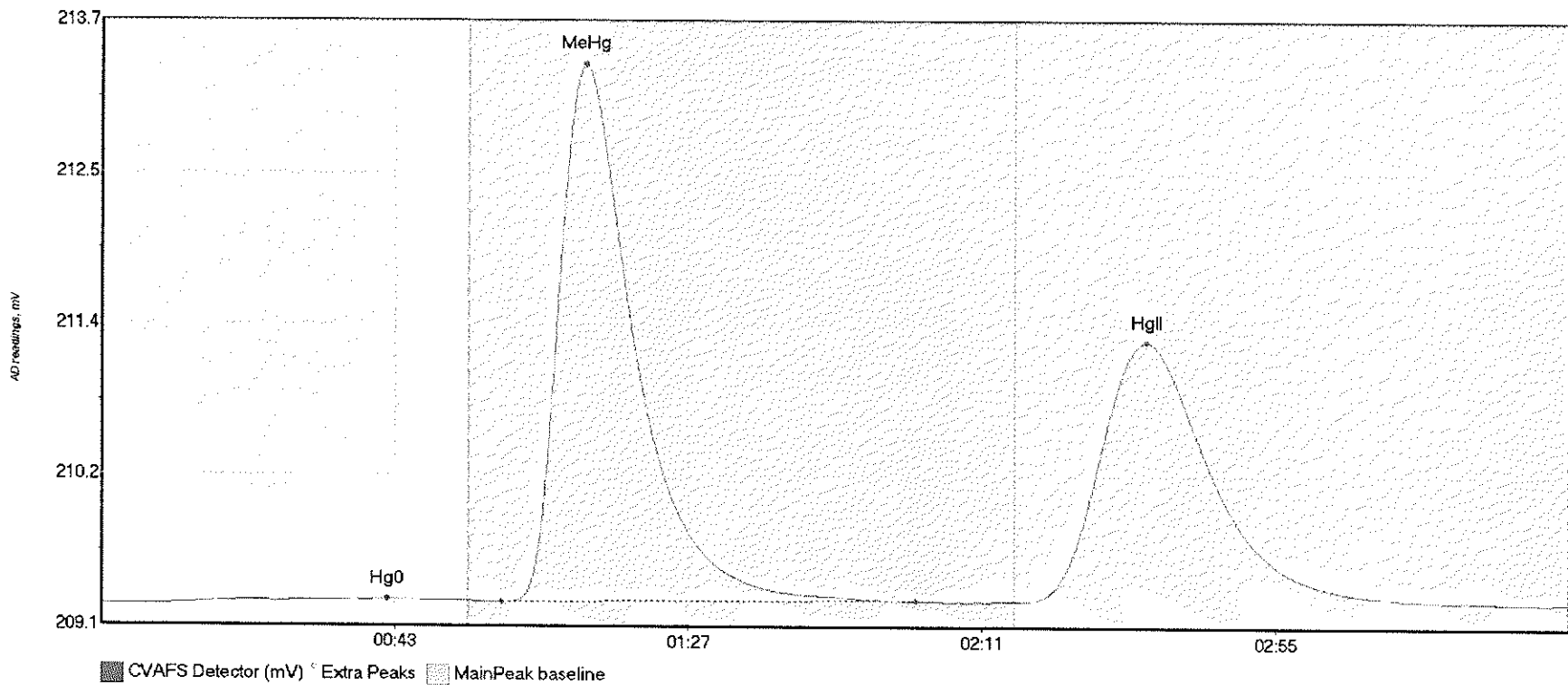
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F707570-DUP1 Hg	4.669	12.5	52.2	209.24	209.27	46.8	0.038	OK	209.2586	0.00	0.00	
F707570-DUP1 Me	40.951	61.8	96.0	209.27	209.27	72.8	0.334	OK	209.2586	0.00	0.00	
F707570-DUP1 Hg	355.528	137.2	219.4	209.26	209.26	156.7	1.829	OK	209.2586	0.00	0.00	

#24: F707570-MS1



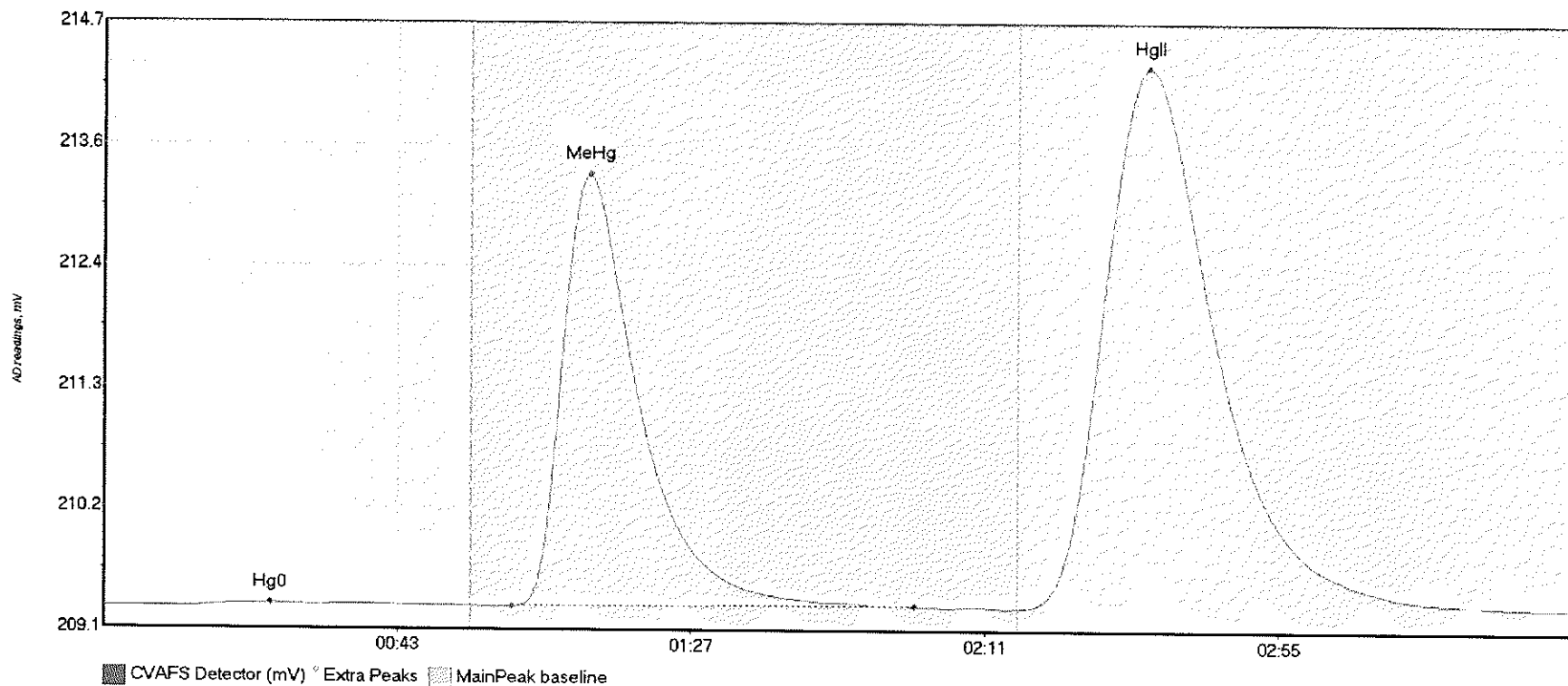
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F707570-MS1 Hg0	5.548	12.6	54.9	209.25	209.28	39.4	0.039	OK	209.2471	0.00	0.03	
F707570-MS1 MeH	594.801	60.7	119.8	209.28	209.28	72.8	4.510	OK	209.2471	0.00	0.03	
F707570-MS1 HgI	448.398	137.5	206.6	209.27	209.27	156.6	2.323	OK	209.2471	0.00	0.03	

#25: F707570-MSD1



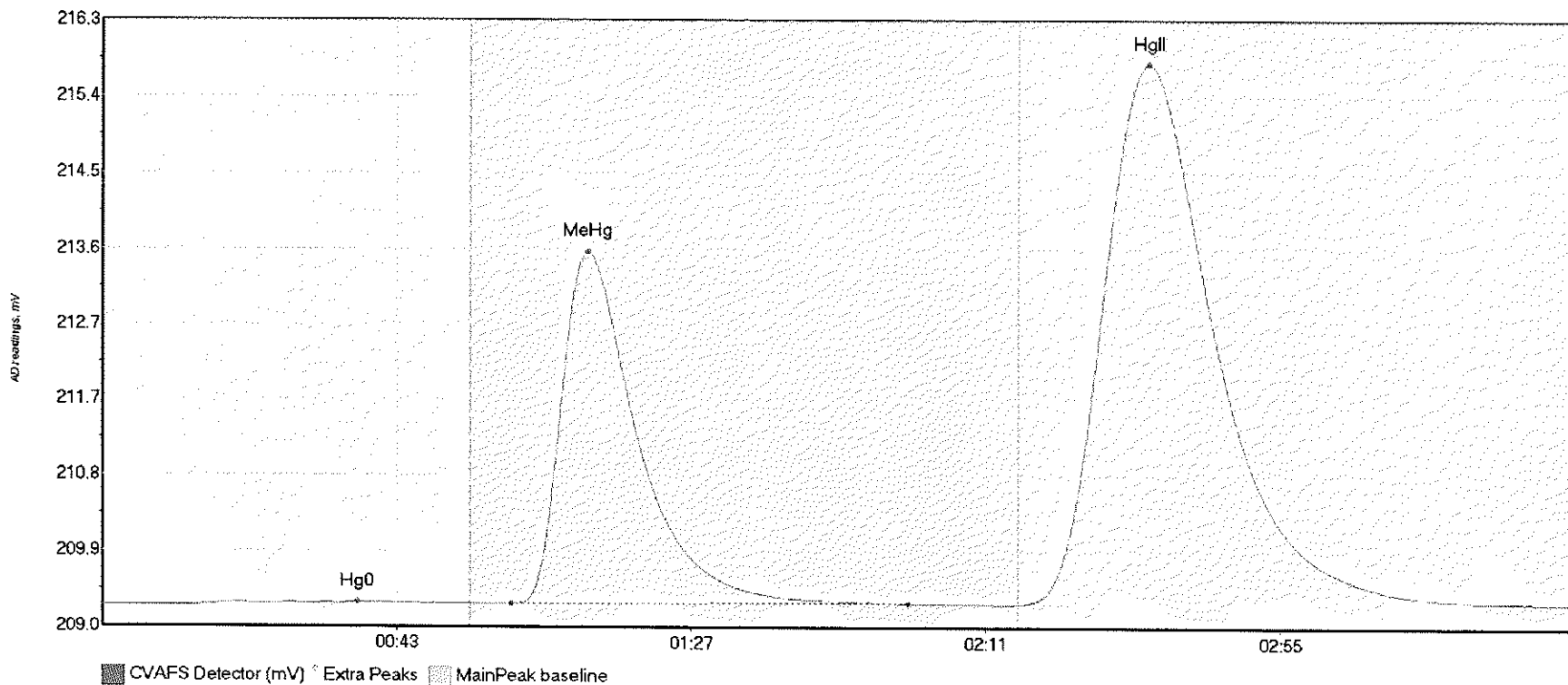
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F707570-MSD1 Hg	5.655	9.6	55.0	209.24	209.27	42.9	0.040	CT	209.2446	0.00	0.02	
F707570-MSD1 Me	536.764	60.0	122.2	209.26	209.28	72.6	4.066	OK	209.2446	0.00	0.02	
F707570-MSD1 Hg	373.550	137.9	202.0	209.27	209.28	156.6	1.964	OK	209.2446	0.00	0.02	

#26: F707570-MS2



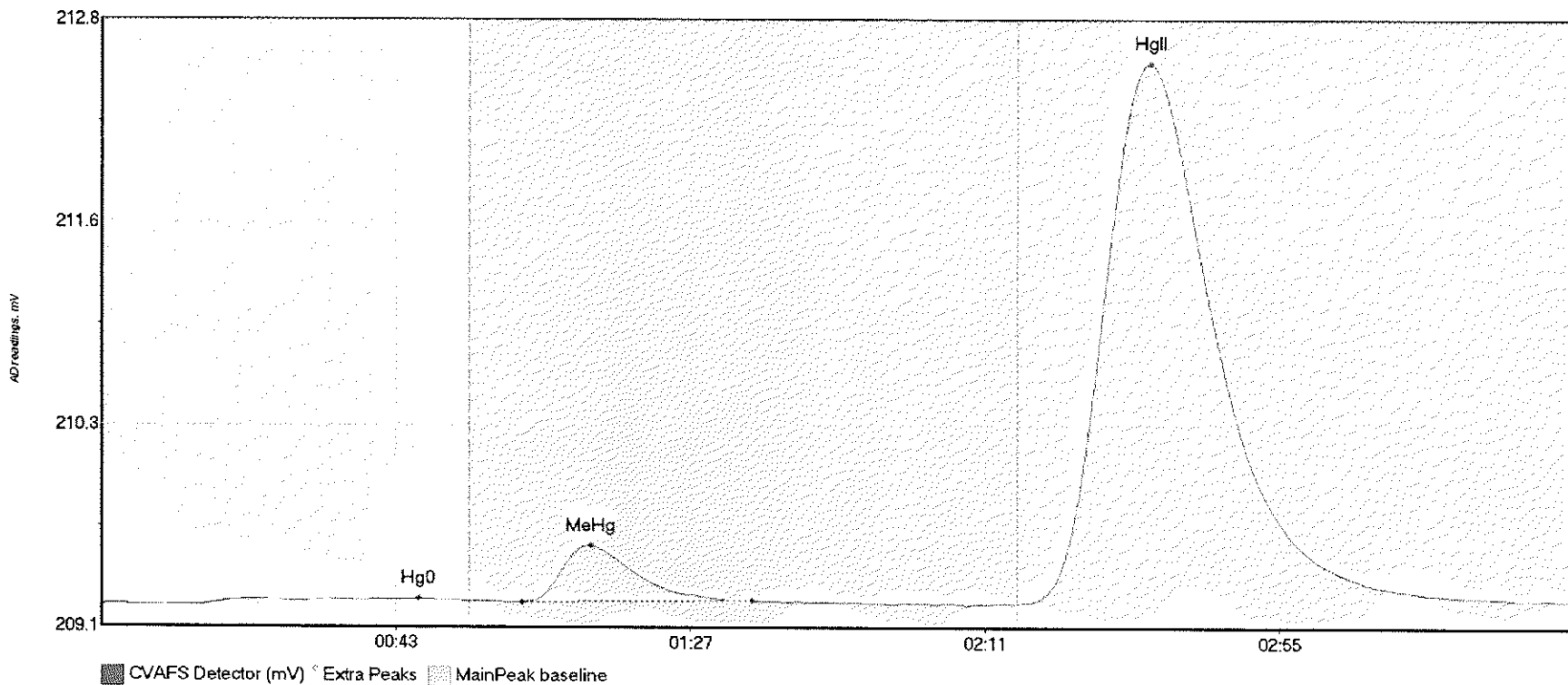
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F707570-MS2 Hg0	6.068	13.3	52.8	209.26	209.27	25.0	0.032	OK	209.2565	0.00	0.02	
F707570-MS2 MeH	532.354	61.1	121.4	209.27	209.28	72.8	4.012	OK	209.2565	0.00	0.02	
F707570-MS2 HgI	970.506	136.8	216.5	209.26	209.28	156.5	5.009	OK	209.2565	0.00	0.02	

#27: F707570-MSD2



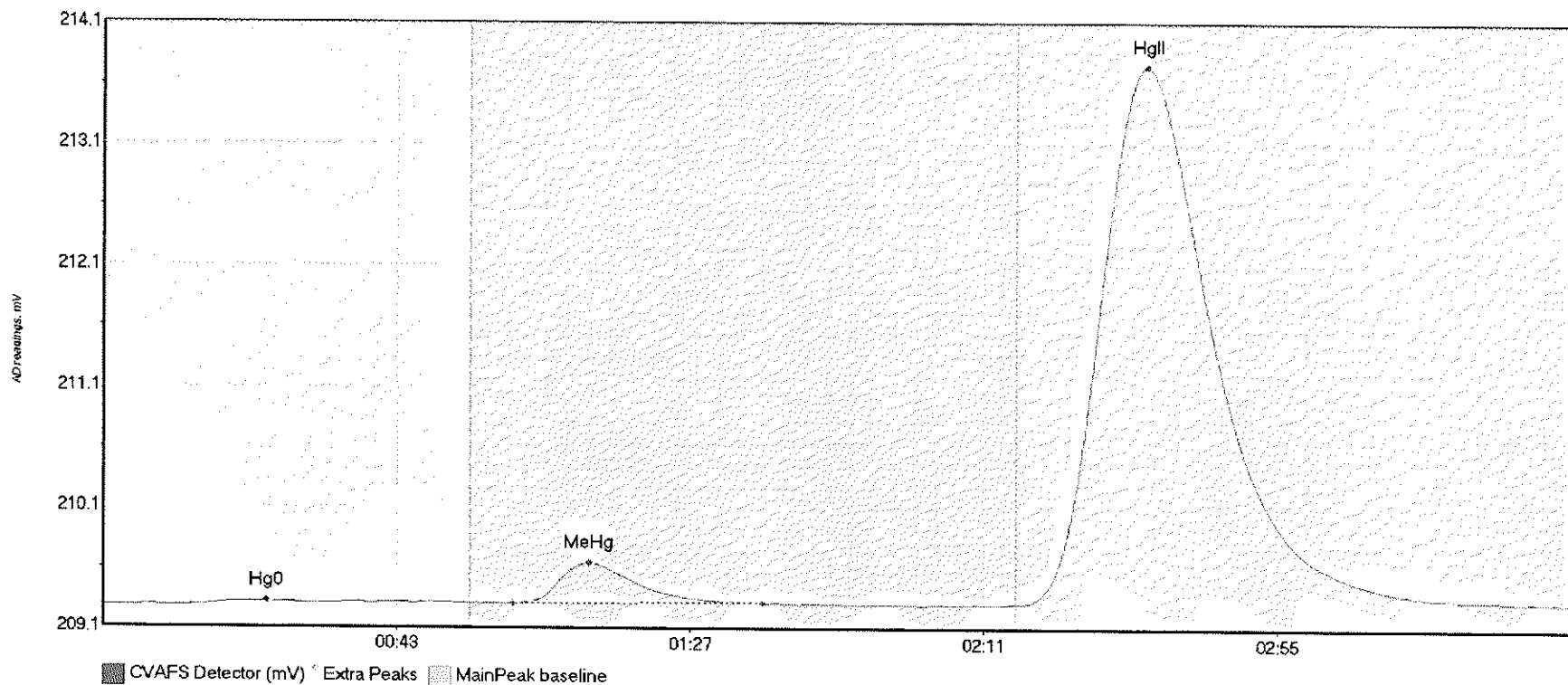
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BiDev	BlShift	Comment
F707570-MSD2 Hg	7.450	11.8	55.0	209.24	209.27	38.1	0.041	CT	209.2431	0.00	0.04	
F707570-MSD2 Me	560.798	61.1	120.4	209.27	209.27	72.6	4.270	OK	209.2431	0.00	0.04	
F707570-MSD2 Hg	1259.580	136.8	219.8	209.27	209.28	156.3	6.539	CT	209.2431	0.00	0.04	

#28: 1707771-CB



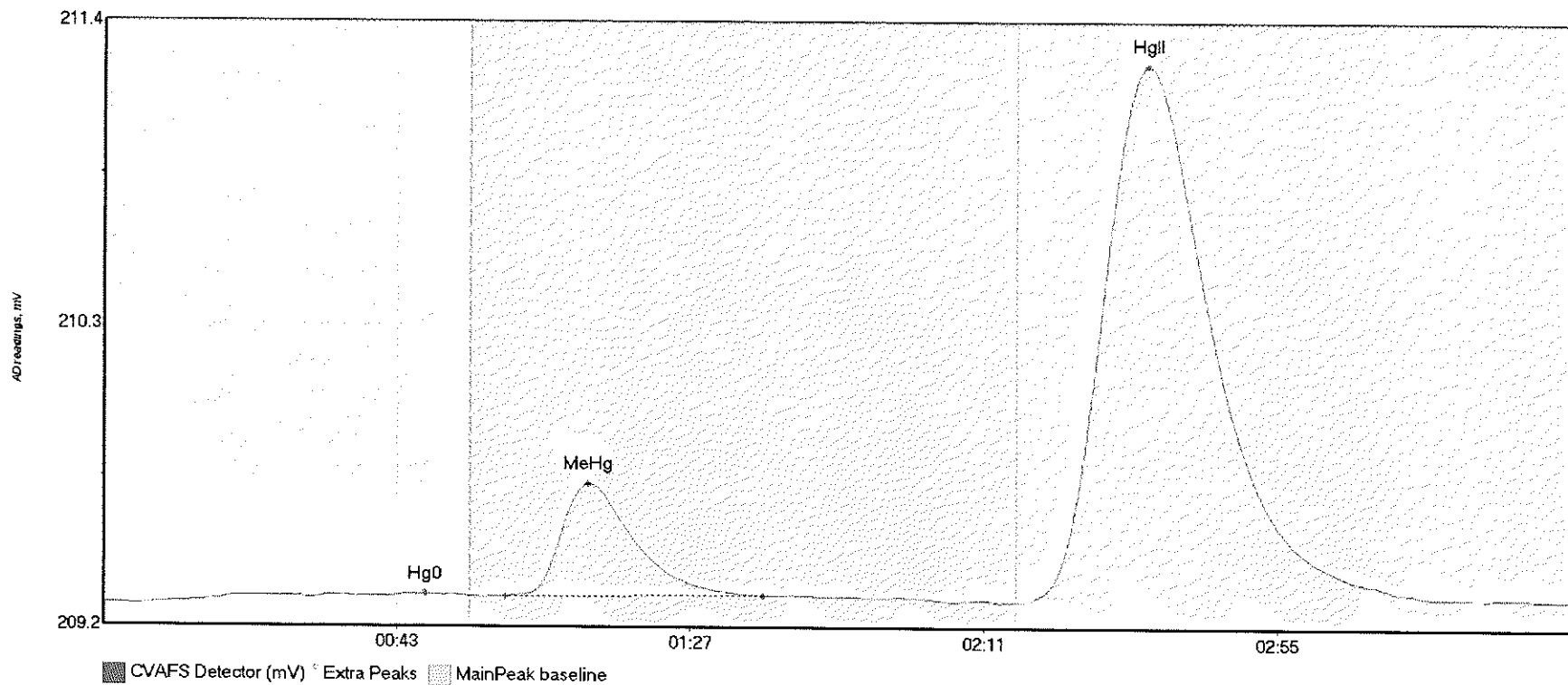
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1707771-CB Hg0	7.304	14.0	54.9	209.25	209.27	47.5	0.040	OK	209.2519	0.00	0.02	
1707771-CB MeHg	42.507	62.9	97.2	209.27	209.28	73.1	0.345	OK	209.2519	0.00	0.02	
1707771-CB HgII	631.296	137.3	219.5	209.26	209.28	156.7	3.268	OK	209.2519	0.00	0.02	

#29: 1707771-CC



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1707771-CC Hg0	2.716	12.2	32.7	209.25	209.27	24.6	0.035	OK	209.2499	0.00	0.04	
1707771-CC MeHg	44.629	61.5	98.9	209.27	209.27	72.8	0.342	OK	209.2499	0.00	0.04	
1707771-CC HgII	873.987	136.8	212.8	209.27	209.29	156.4	4.503	OK	209.2499	0.00	0.04	

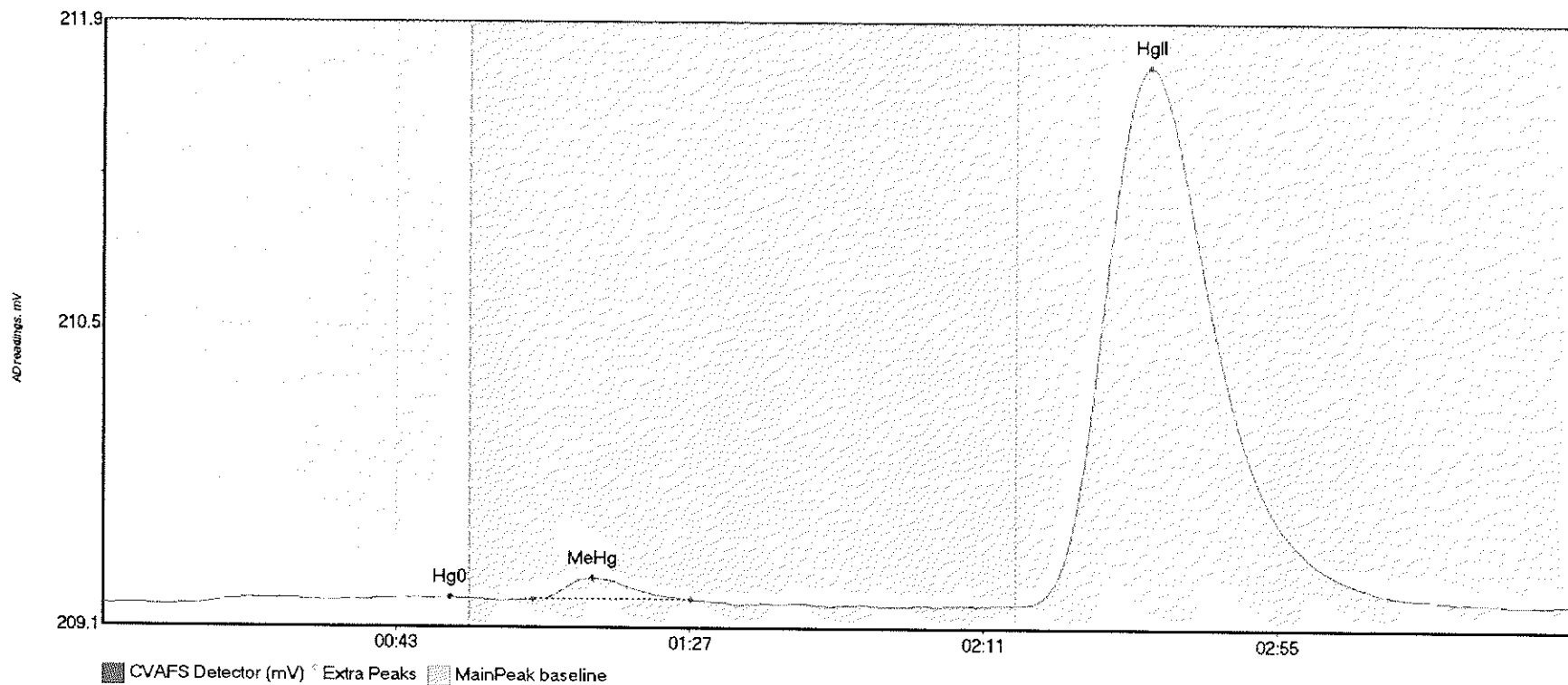
#30: 1707771-CD



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1707771-CD Hg0	4.558	10.2	55.0	209.24	209.26	48.3	0.032	CT	209.2384	0.00	0.02	
1707771-CD MeHg	51.636	60.3	98.9	209.27	209.27	72.7	0.415	OK	209.2384	0.00	0.02	
1707771-CD HgII	375.210	138.0	219.8	209.25	209.26	156.5	1.967	CT	209.2384	0.00	0.02	

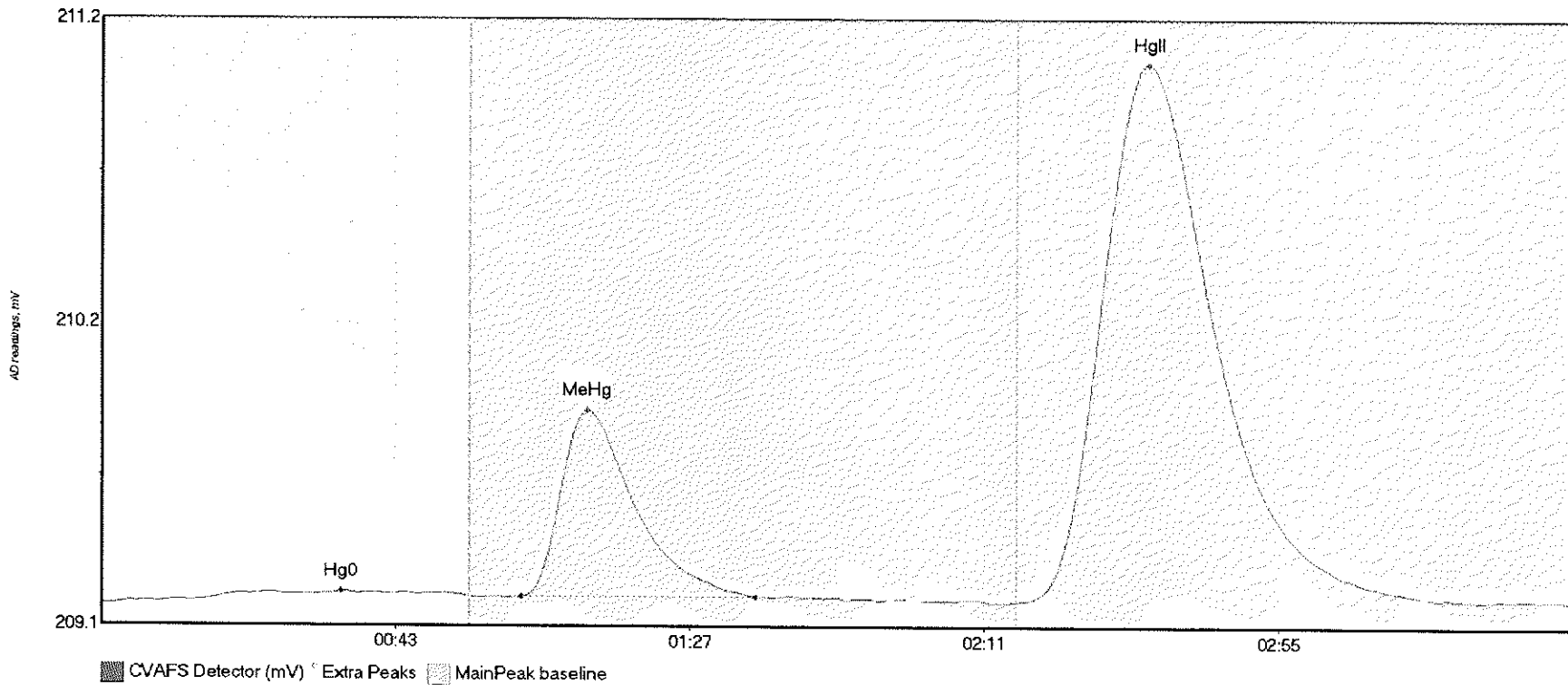


#31: 1707771-CE



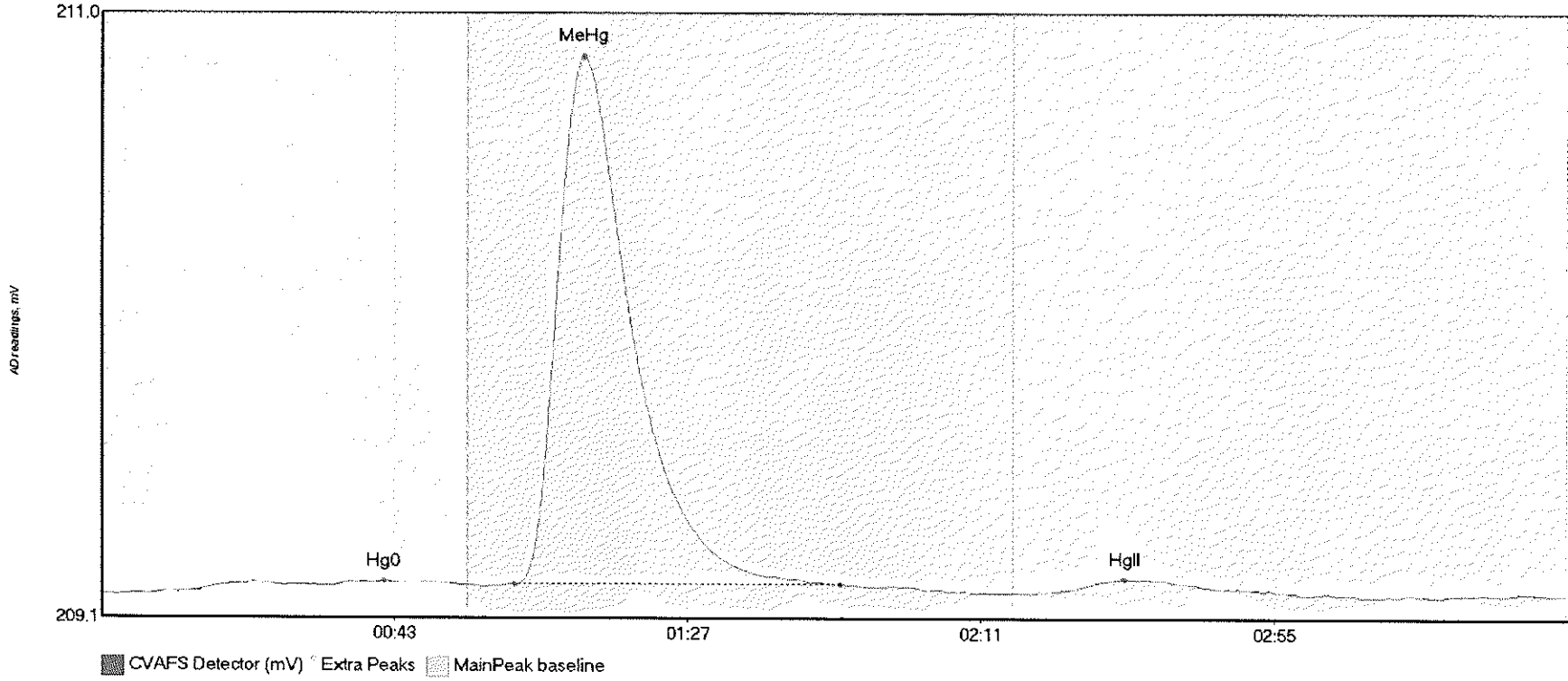
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1707771-CE Hg0	4.104	14.5	55.0	209.23	209.25	52.1	0.031	CT	209.2284	0.00	0.02	
1707771-CE MeHg	11.083	64.5	88.2	209.25	209.25	73.4	0.100	OK	209.2284	0.00	0.02	
1707771-CE HgII	475.656	138.8	211.6	209.24	209.24	156.9	2.461	OK	209.2284	0.00	0.02	

#32: 1707771-CF



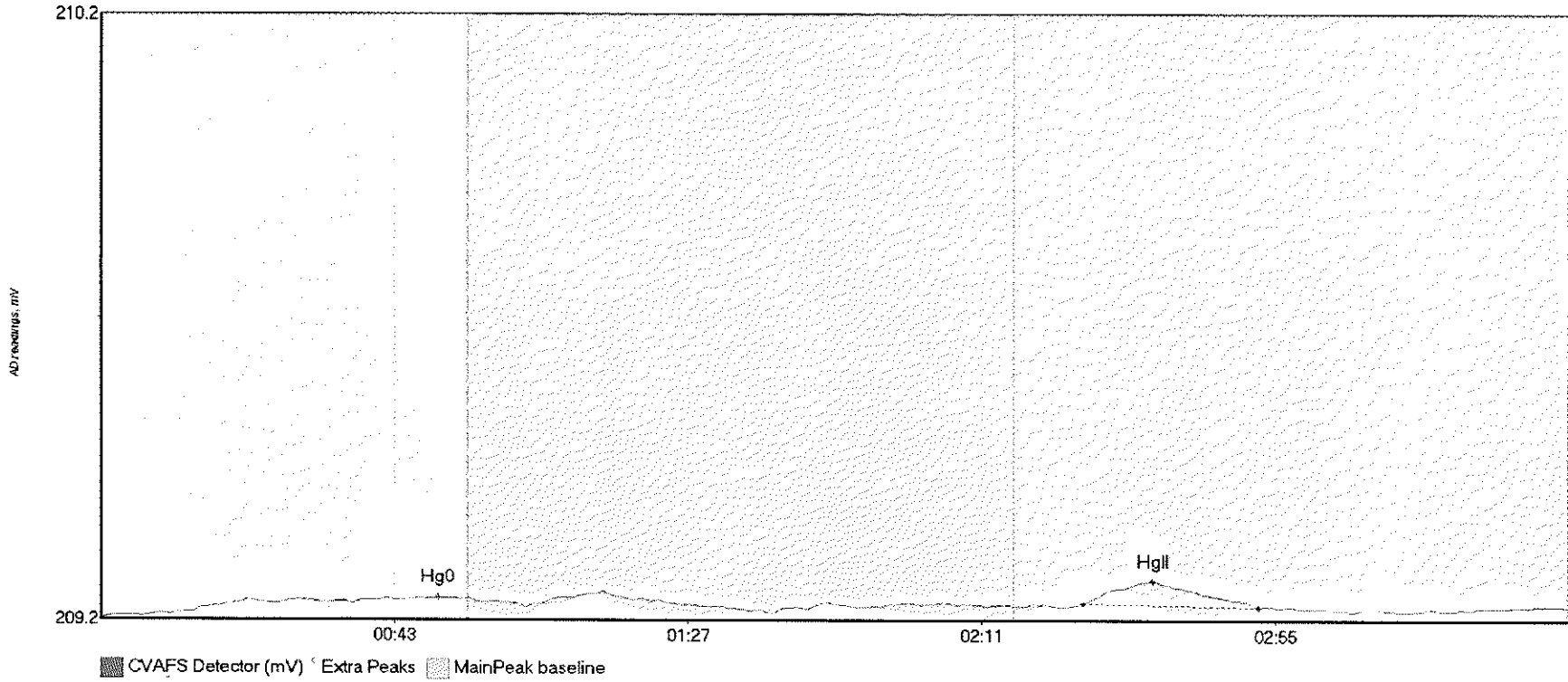
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1707771-CF Hg0	8.486	1.3	55.0	209.21	209.24	35.9	0.043	CT	209.2150	0.00	0.01	
1707771-CF MeHg	79.277	62.7	97.7	209.24	209.24	72.6	0.623	OK	209.2150	0.00	0.01	
1707771-CF HgII	348.275	137.4	206.3	209.23	209.23	156.4	1.794	OK	209.2150	0.00	0.01	

#33: SEQ-CCV2



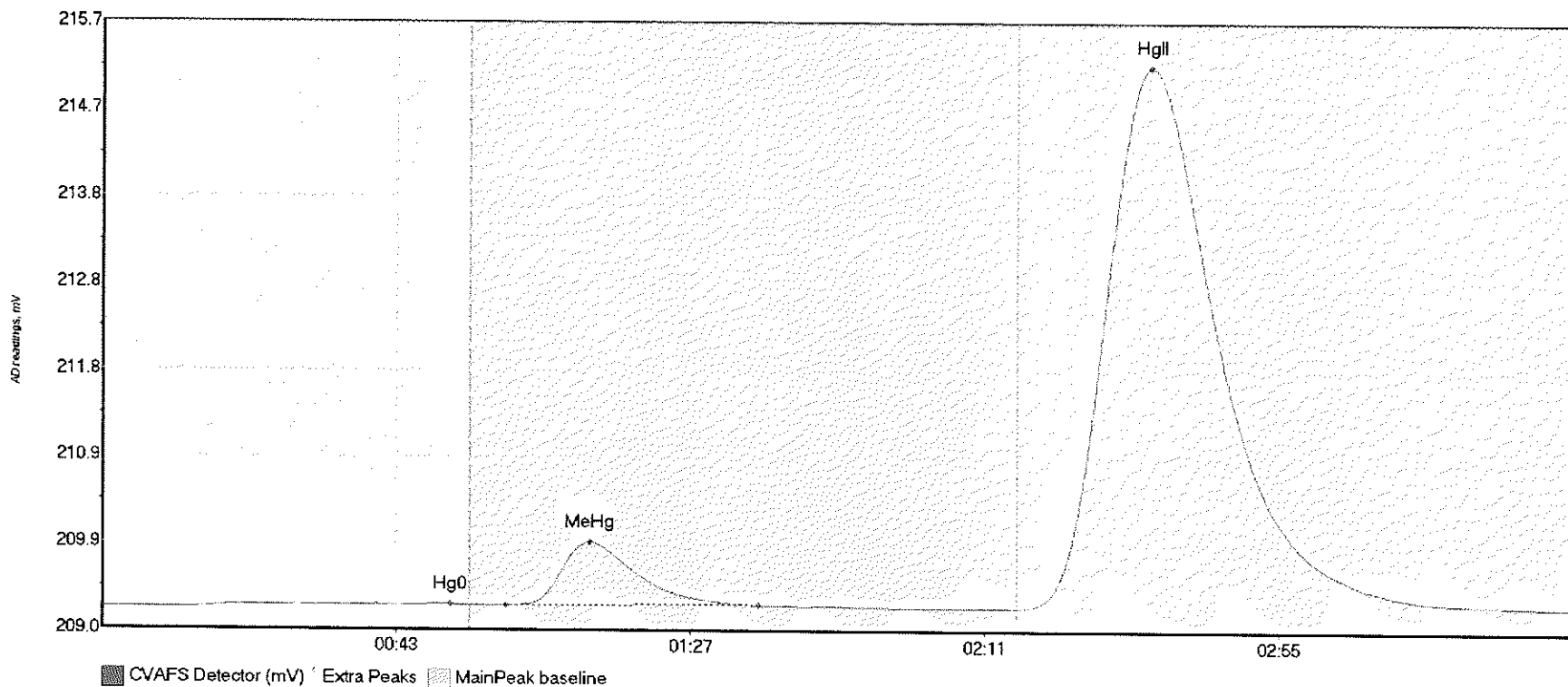
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CCV2 Hg0	6.388	7.1	55.0	209.21	209.23	42.5	0.040	CF	209.2046	0.00	0.00	
SEQ-CCV2 MeHg	208.094	62.0	110.9	209.23	209.24	72.5	1.617	OK	209.2046	0.00	0.00	
SEQ-CCV2 HgII	6.989	141.9	176.5	209.21	209.21	153.6	0.041	OK	209.2046	0.00	0.00	

#34: SEQ-CCB2



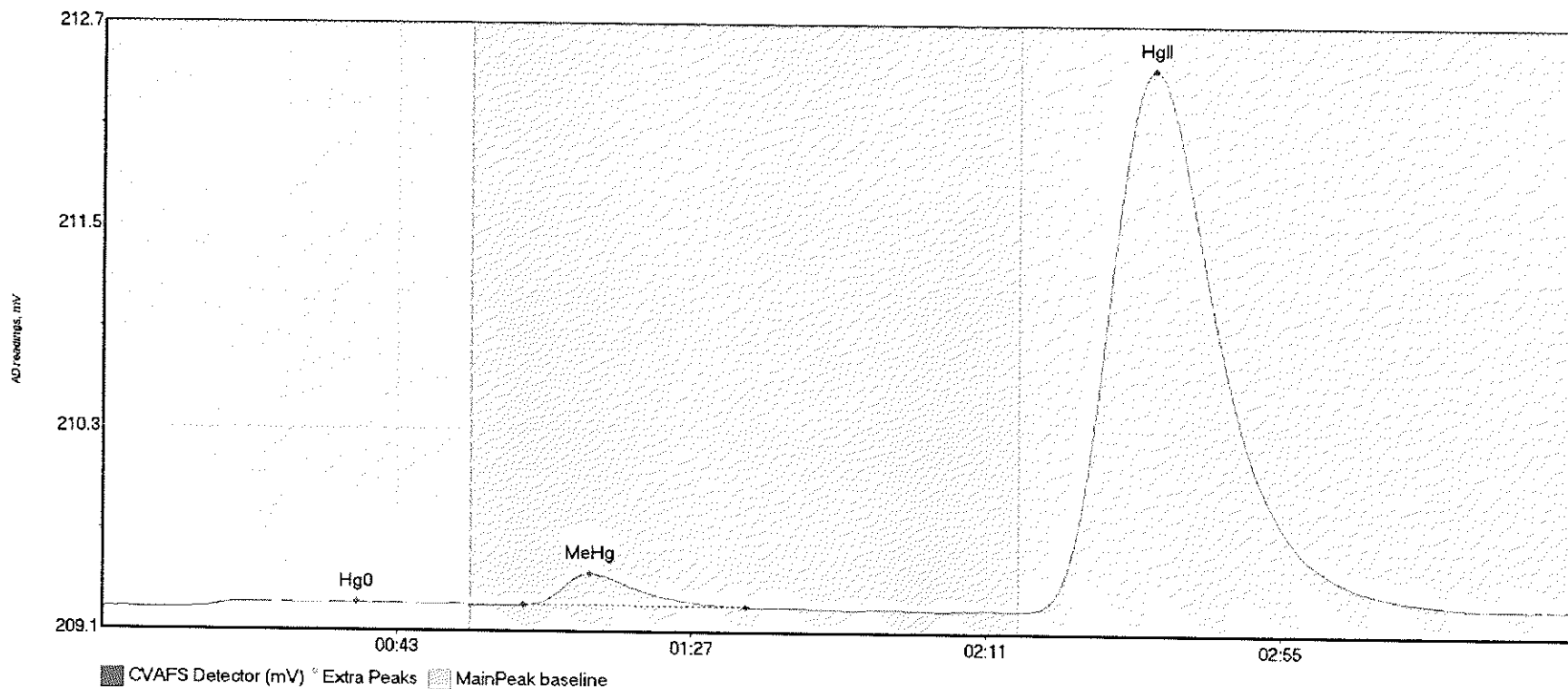
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CCB2 Hg0	3.660	6.4	54.2	209.20	209.22	50.6	0.031	OK	209.1930	0.00	0.02	
SEQ-CCB2 HgII	5.619	147.3	173.5	209.22	209.21	157.7	0.036	OK	209.1930	0.00	0.02	017

#35: 1707771-CG



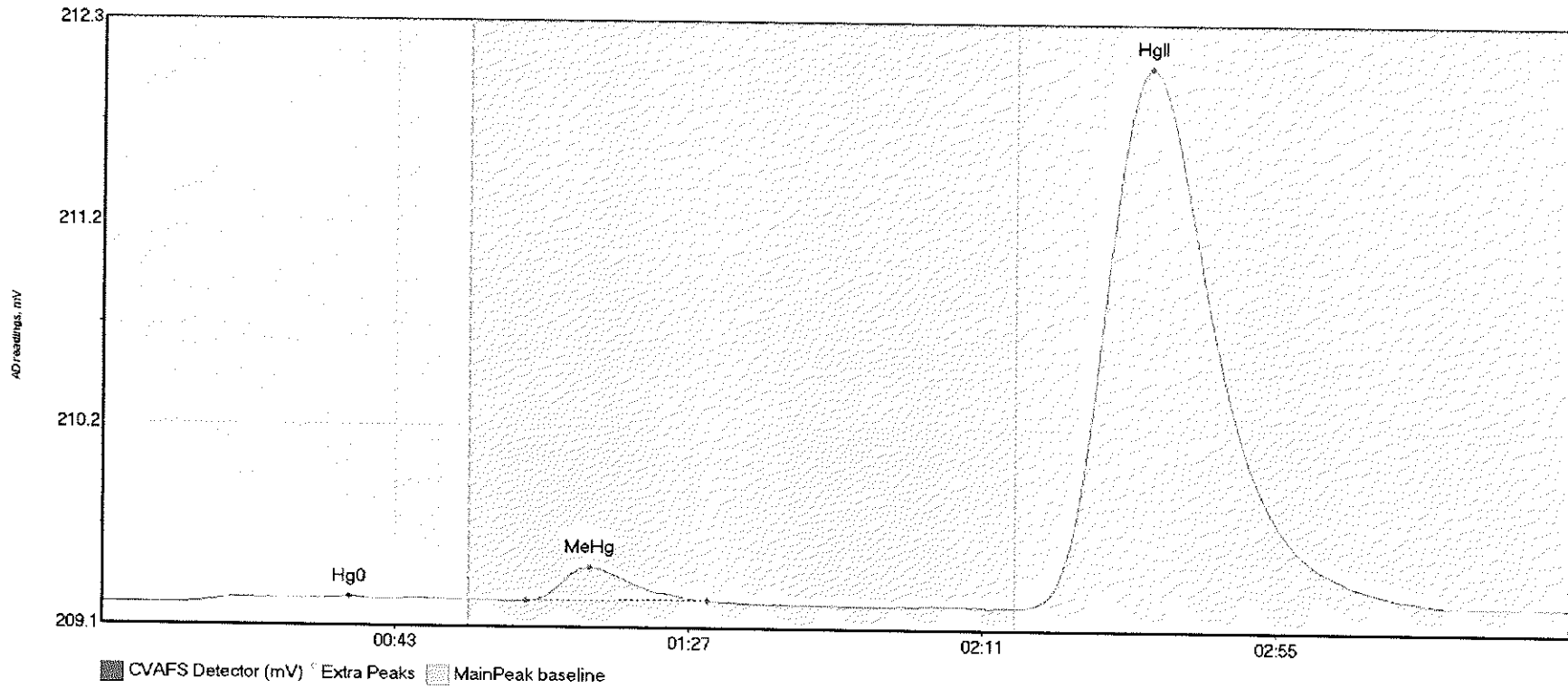
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1707771-CG Hg0	5.803	11.6	53.9	209.20	209.24	52.1	0.042	OK	209.1969	0.00	0.04	
1707771-CG MeHg	89.562	60.4	98.2	209.23	209.23	73.0	0.698	OK	209.1969	0.00	0.04	
1707771-CG HgII	1158.783	137.3	218.6	209.21	209.23	156.9	5.978	OK	209.1969	0.00	0.04	

#36: 1707771-CX



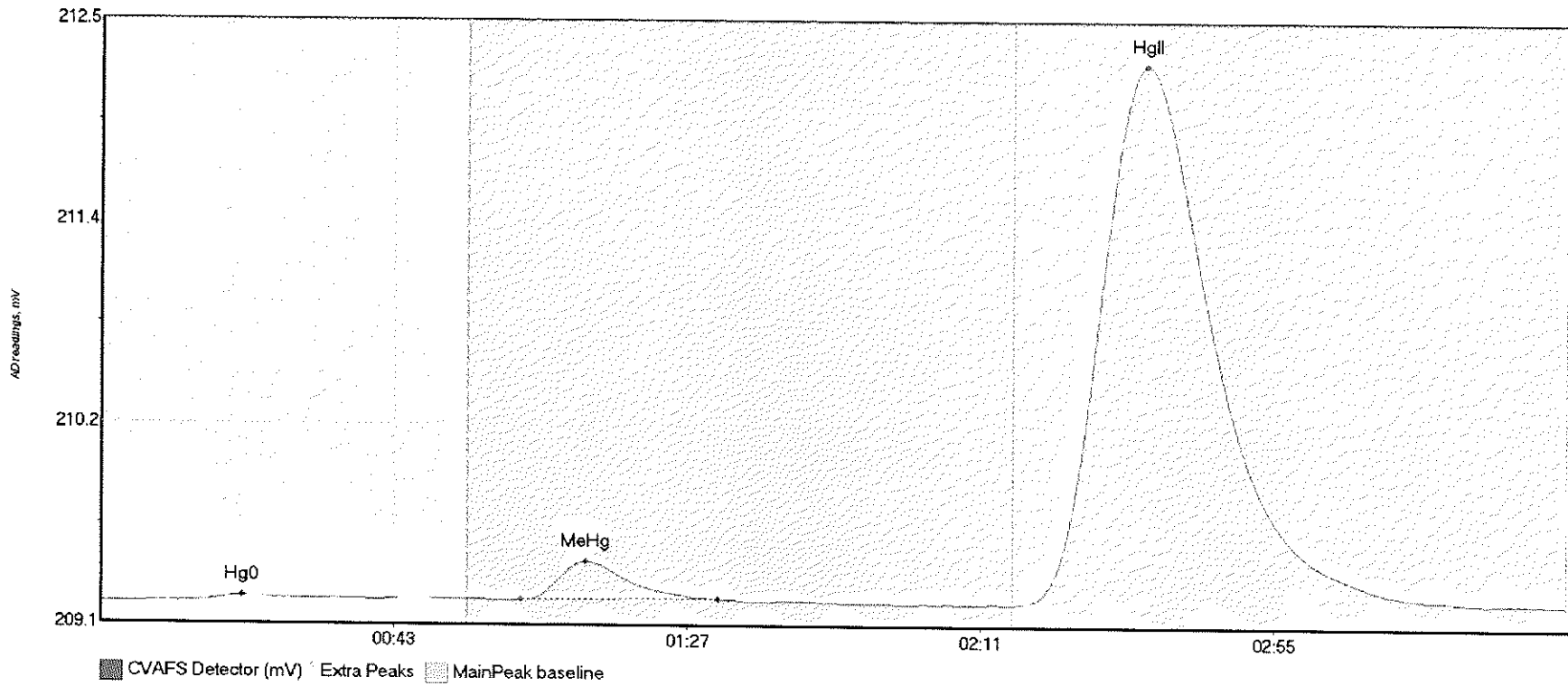
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1707771-CX Hg0	6.538	15.0	55.0	209.21	209.22	38.0	0.032	CT	209.2029	0.00	0.03	
1707771-CX MeHg	24.806	62.9	96.2	209.22	209.22	72.8	0.191	OK	209.2029	0.00	0.03	
1707771-CX HgII	622.700	138.3	206.6	209.21	209.23	157.0	3.242	OK	209.2029	0.00	0.03	

#37: 1707771-CY



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1707771-CY Hg0	6.008	11.1	54.1	209.19	209.22	37.1	0.037	OK	209.1904	0.00	0.02	
1707771-CY MeHg	21.152	63.6	90.8	209.21	209.22	73.2	0.181	OK	209.1904	0.00	0.02	
1707771-CY HgII	552.986	137.5	219.8	209.20	209.21	157.1	2.875	CT	209.1904	0.00	0.02	

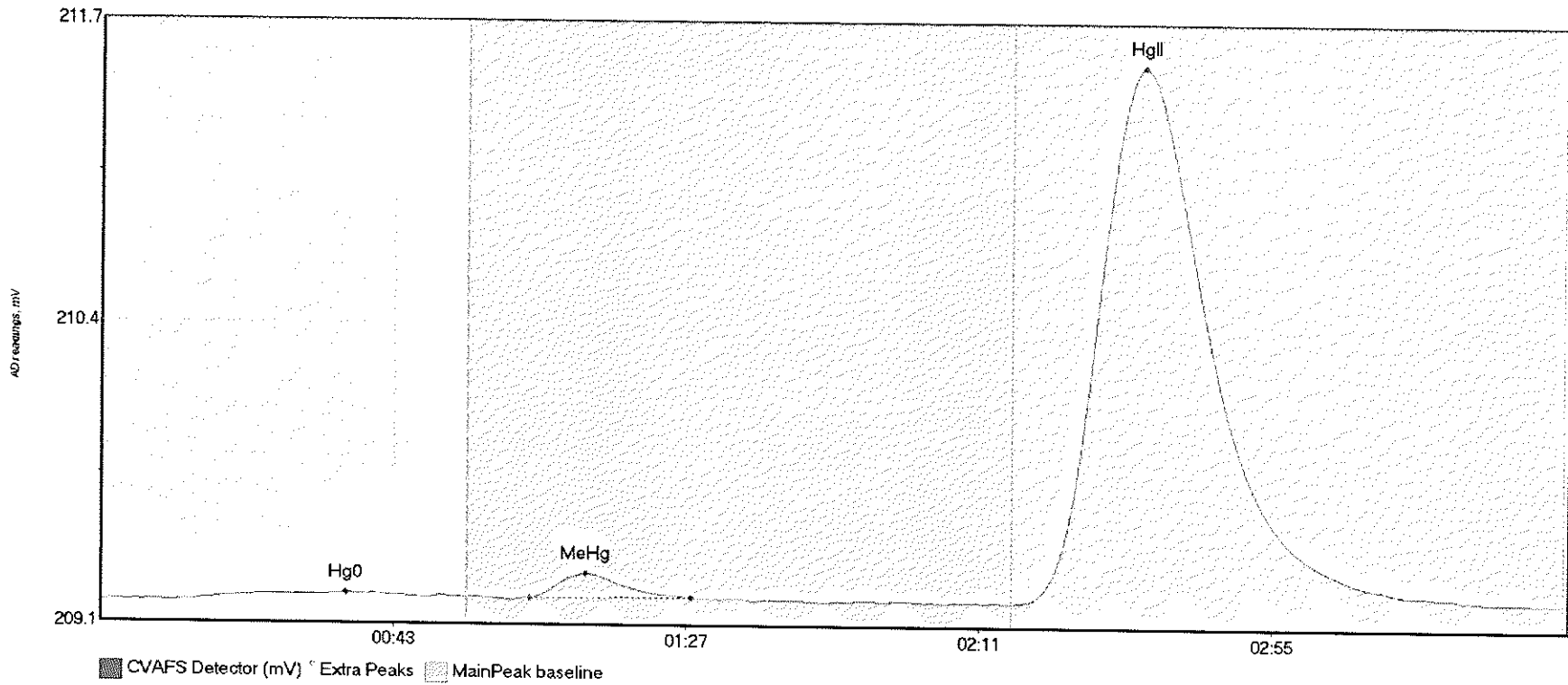
#38: 1707771-CZ



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1707771-CZ Hg0	3.437	13.8	40.7	209.20	209.21	21.2	0.029	OK	209.1912	0.00	0.01	
1707771-CZ MeHg	25.189	63.0	92.6	209.21	209.22	72.7	0.217	OK	209.1912	0.00	0.01	
1707771-CZ HgII	595.576	137.3	219.5	209.19	209.20	156.8	3.059	OK	209.1912	0.00	0.01	

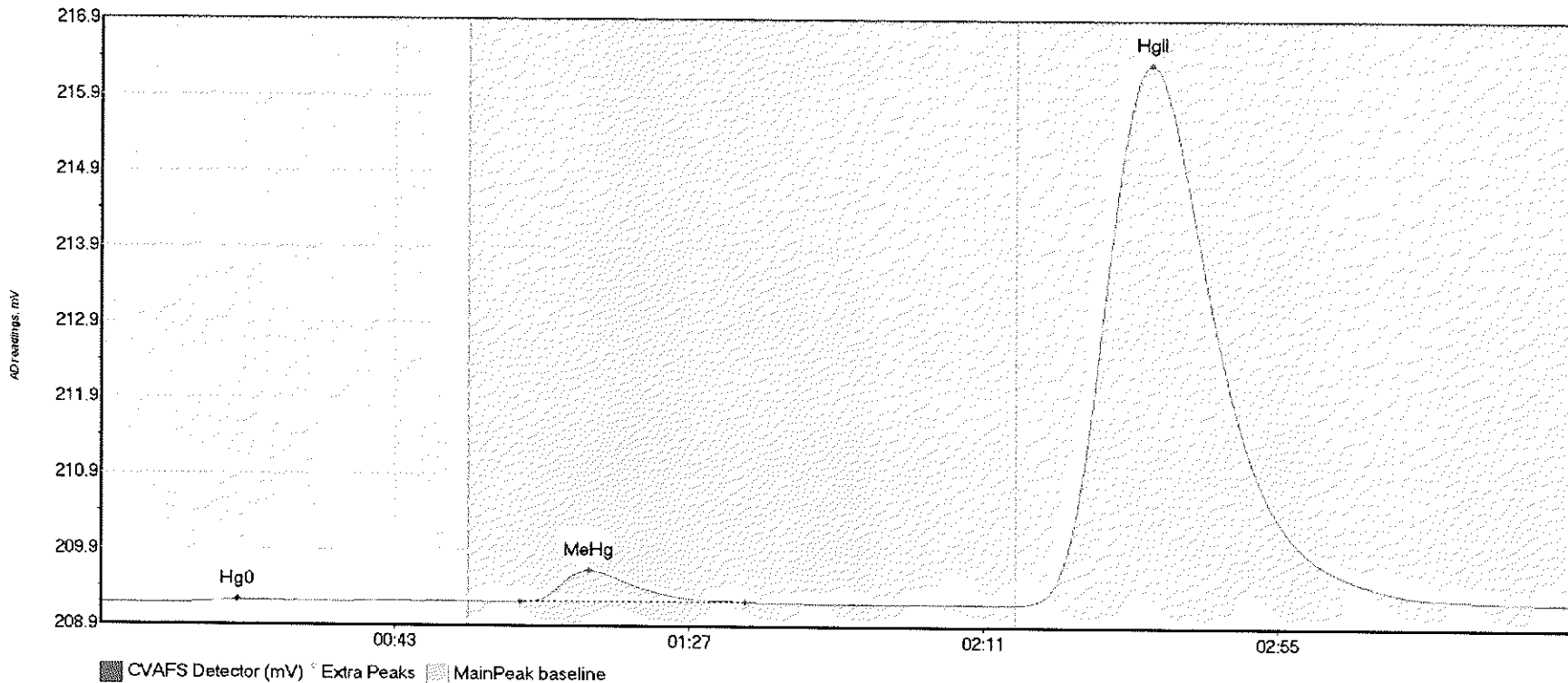


#39: 1707771-DA



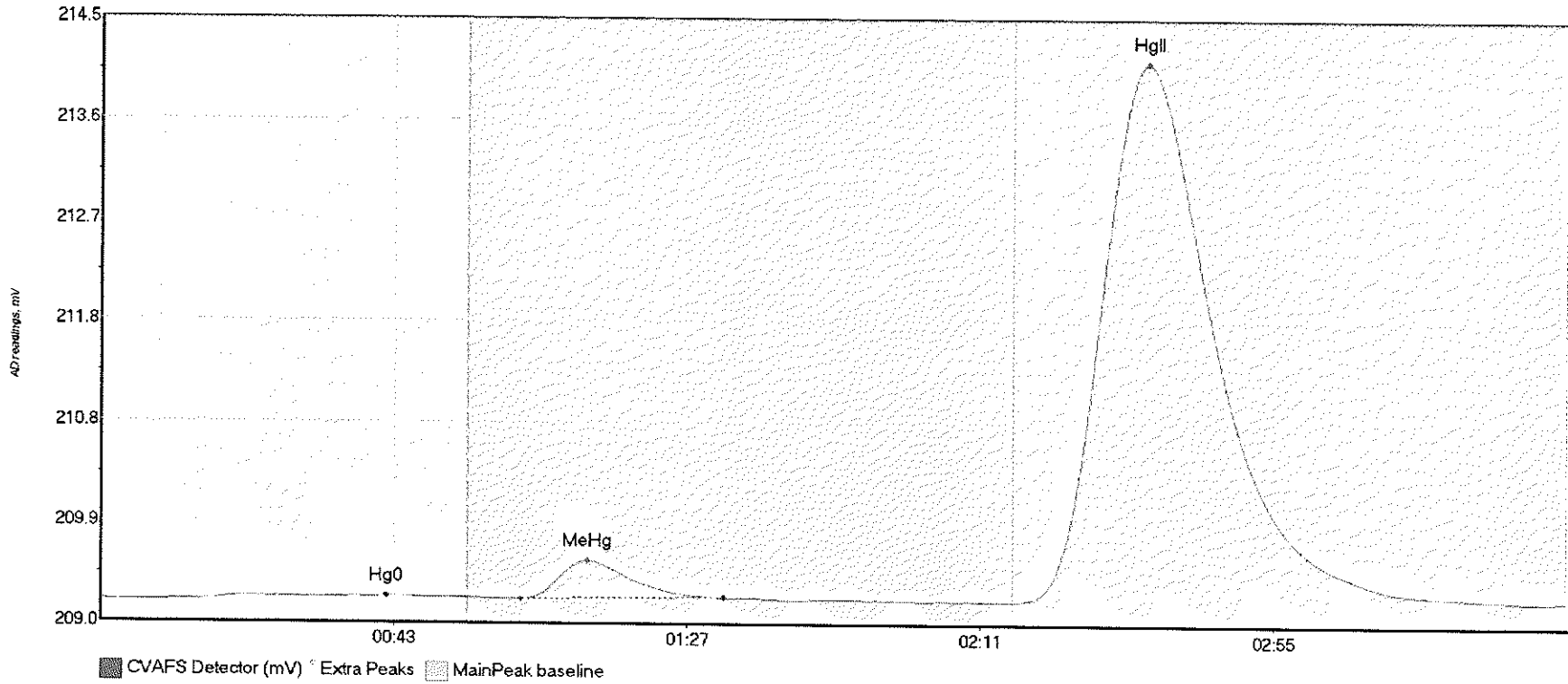
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1707771-DA Hg0	5.484	12.3	48.6	209.19	209.21	36.9	0.033	OK	209.1866	0.00	0.02	
1707771-DA MeHg	11.733	64.5	88.7	209.21	209.21	72.9	0.106	OK	209.1866	0.00	0.02	
1707771-DA HgII	452.474	136.8	218.4	209.20	209.21	156.6	2.347	OK	209.1866	0.00	0.02	

#40: 1707775-01



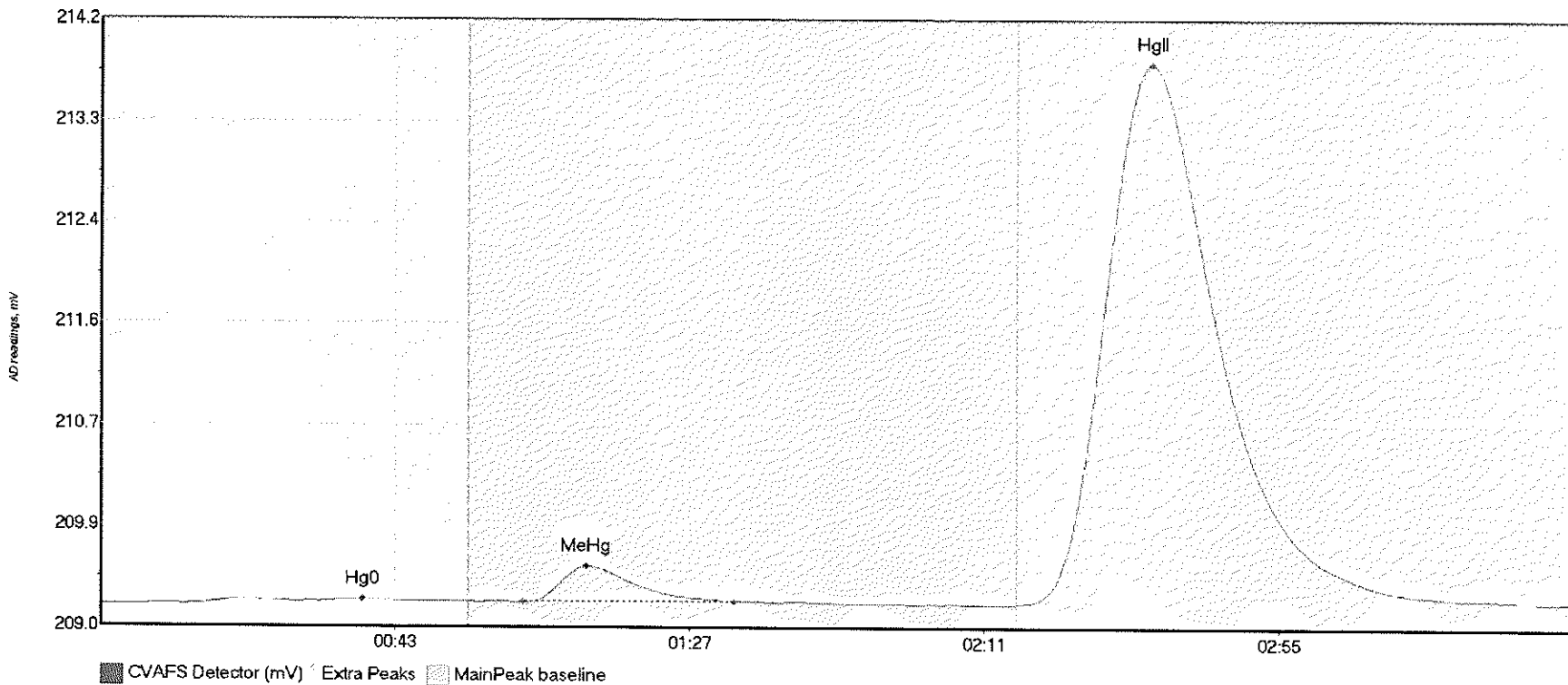
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1707775-01 Hg0	3.440	10.7	32.5	209.19	209.22	20.5	0.047	OK	209.1948	0.00	0.05	
1707775-01 MeHg	51.272	62.7	96.3	209.23	209.23	73.0	0.414	OK	209.1948	0.00	0.05	
1707775-01 HgII	1375.118	137.3	219.8	209.21	209.24	157.0	7.094	CT	209.1948	0.00	0.05	

#41: 1707775-02



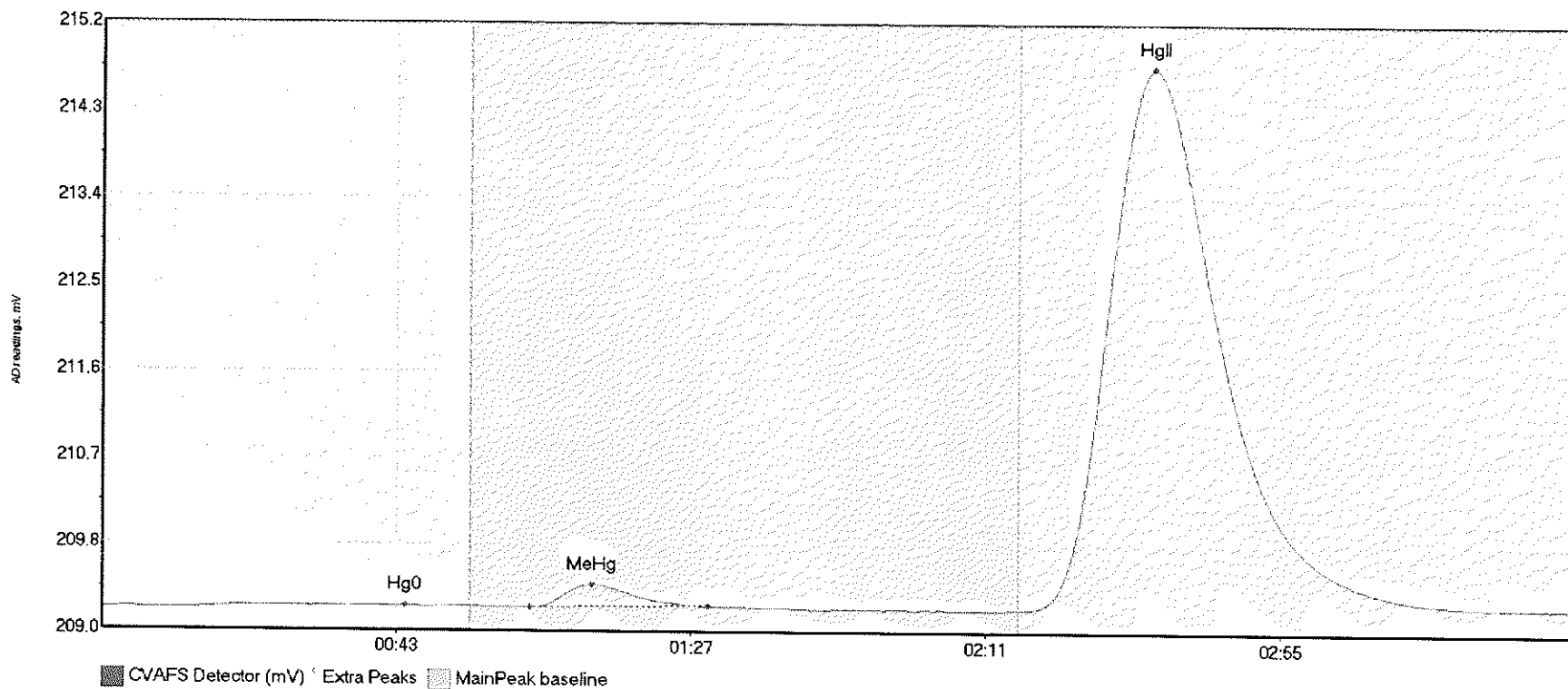
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1707775-02 Hg0	6.201	15.0	50.6	209.19	209.22	42.9	0.040	OK	209.1946	0.00	0.03	
1707775-02 MeHg	42.177	63.0	93.5	209.21	209.23	73.0	0.353	OK	209.1946	0.00	0.03	
1707775-02 HgII	959.316	137.2	217.5	209.20	209.22	157.0	4.941	OK	209.1946	0.00	0.03	

#42: 1707775-03



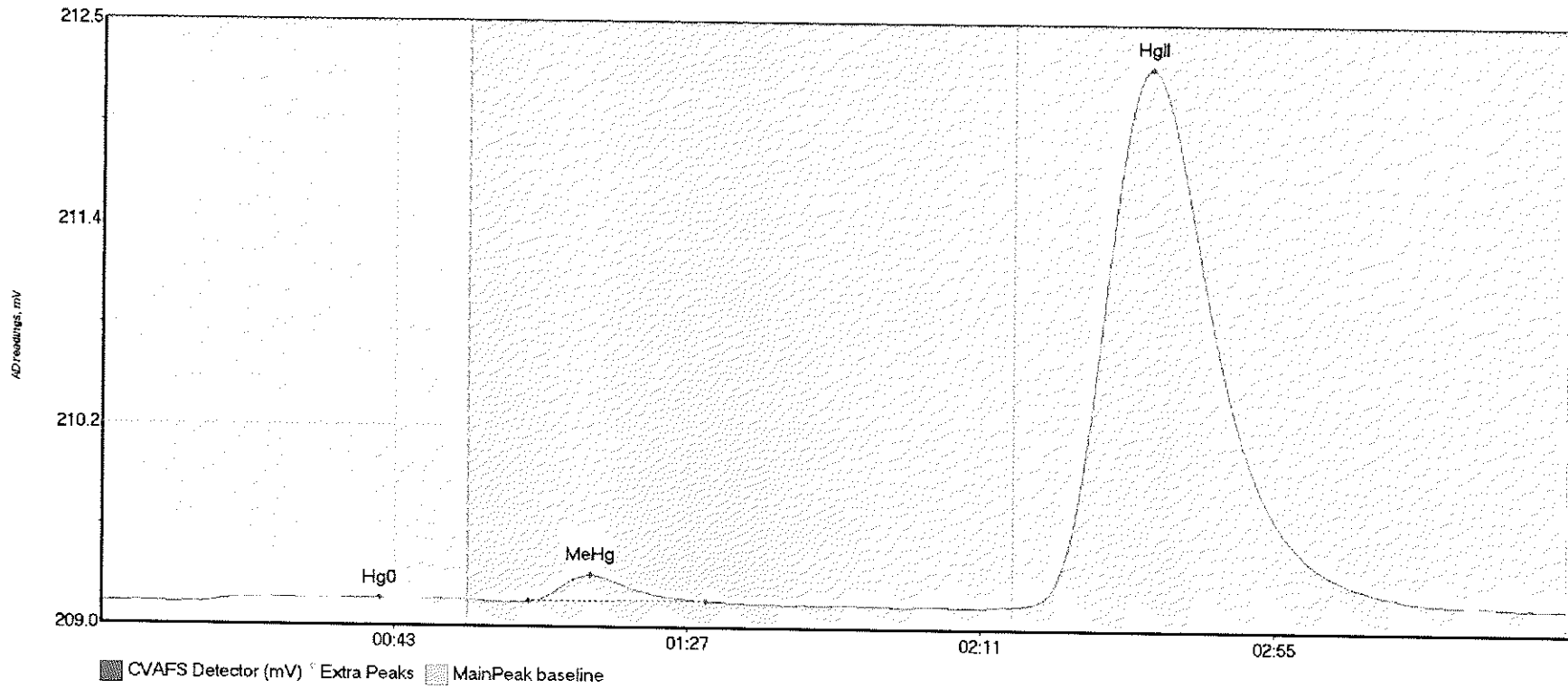
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1707775-03 Hg0	5.665	14.4	53.1	209.19	209.21	39.2	0.037	OK	209.1846	0.00	0.03	
1707775-03 MeHg	36.801	63.2	94.6	209.21	209.21	72.6	0.301	OK	209.1846	0.00	0.03	
1707775-03 HgII	898.374	136.8	219.8	209.19	209.21	157.0	4.610	CT	209.1846	0.00	0.03	

#43: 170775-04



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1707775-04 Hg0	5.850	13.4	48.8	209.17	209.20	45.3	0.035	OK	209.1793	0.00	0.03	
1707775-04 MeHg	26.017	63.9	90.5	209.20	209.21	73.1	0.232	OK	209.1793	0.00	0.03	
1707775-04 HgII	1059.734	137.8	216.3	209.19	209.21	157.1	5.530	OK	209.1793	0.00	0.03	

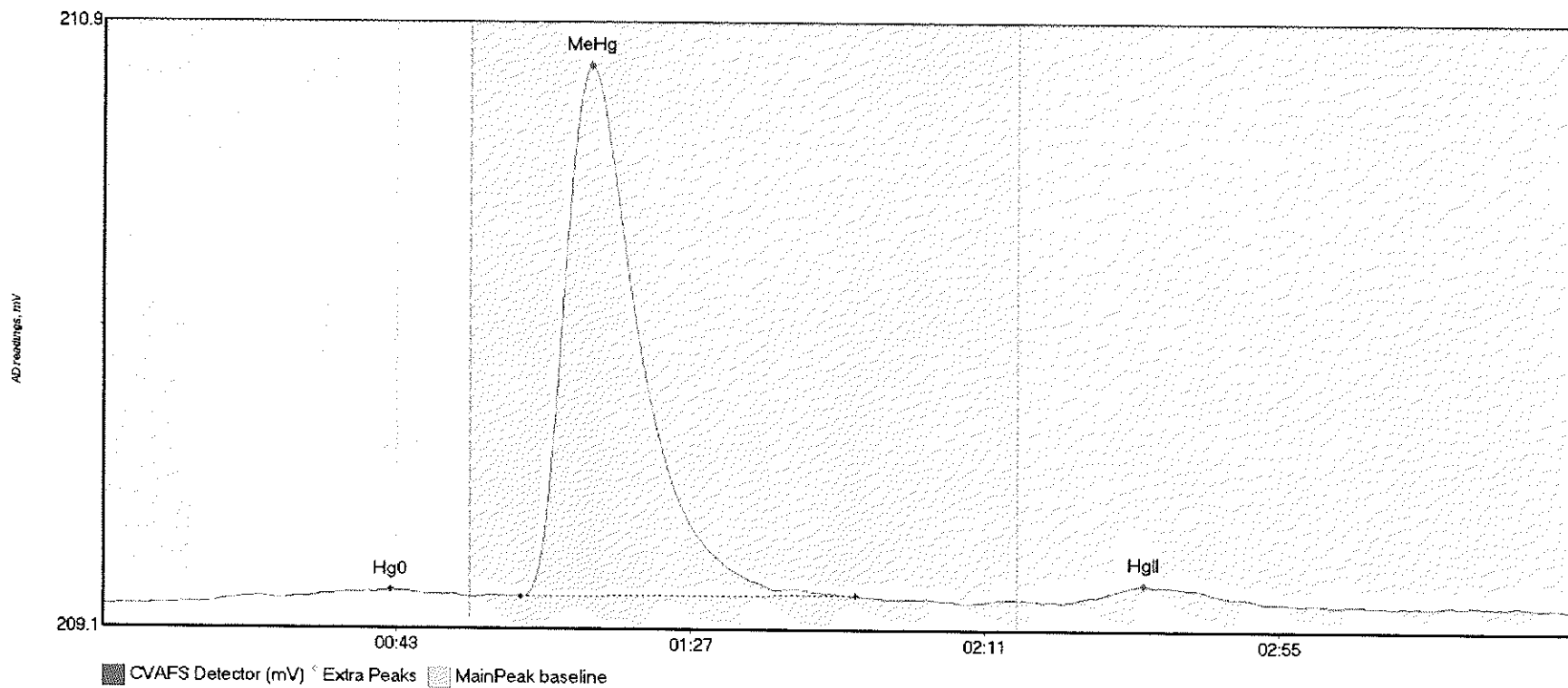
#44: 1707775-05



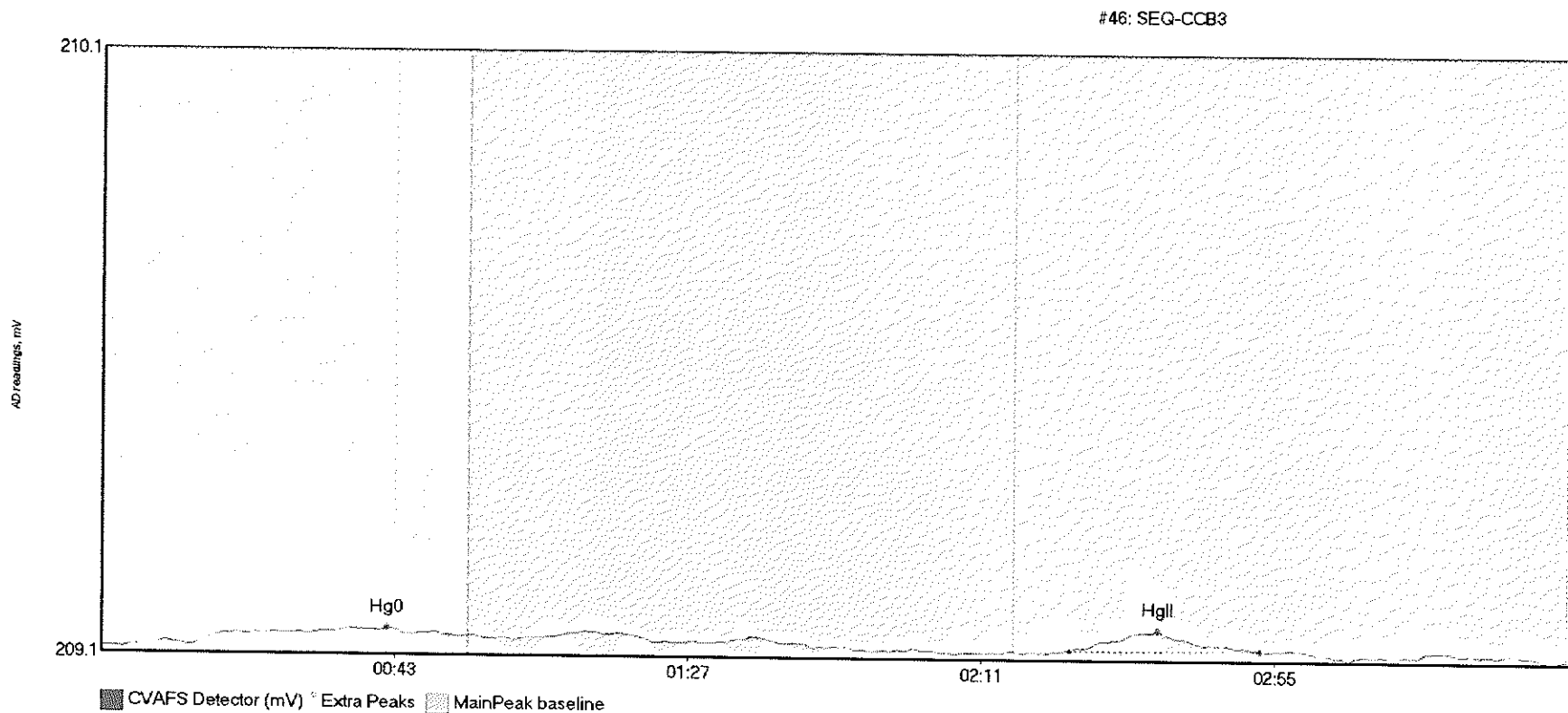
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1707775-05 Hg0	5.150	15.0	53.9	209.18	209.20	41.9	0.030	OK	209.1776	0.00	0.01	
1707775-05 MeHg	17.606	64.2	90.7	209.19	209.20	73.4	0.156	OK	209.1776	0.00	0.01	
1707775-05 HgII	603.618	136.8	219.8	209.18	209.19	157.3	3.117	CT	209.1776	0.00	0.01	

017

#45: SEQ-CCV3



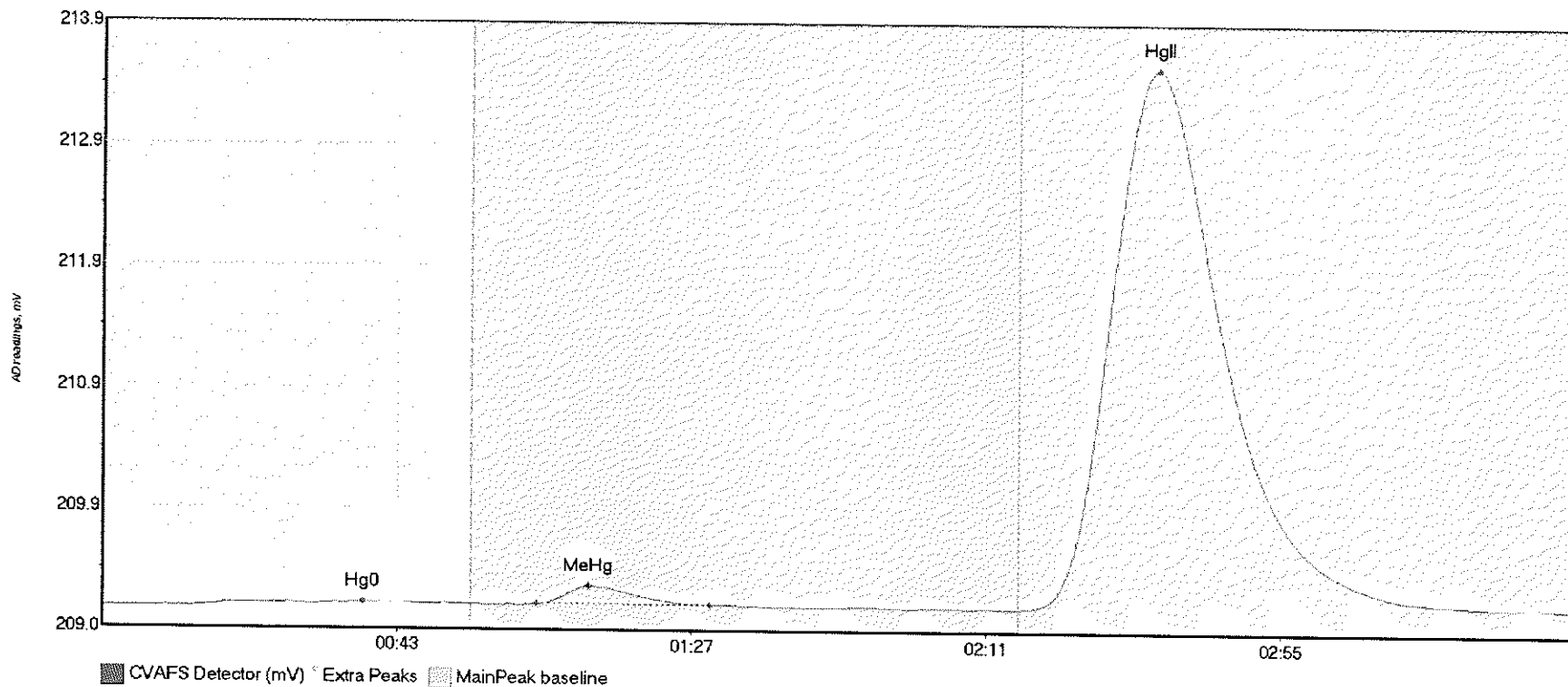
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CCV3 Hg0	5.647	9.9	54.9	209.17	209.19	43.2	0.041	OK	209.1677	0.00	0.00	
SEQ-CCV3 MeHg	203.388	62.6	112.8	209.20	209.20	73.0	1.563	OK	209.1677	0.00	0.00	
SEQ-CCV3 HgII	8.022	144.9	174.1	209.19	209.18	155.7	0.049	OK	209.1677	0.00	0.00	



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CCB3 Hg0	5.067	13.6	53.6	209.16	209.18	42.9	0.029	OK	209.1547	0.00	-0.01	
SEQ-CCB3 HgII	4.163	145.3	173.7	209.16	209.16	158.4	0.033	OK	209.1547	0.00	-0.01	017



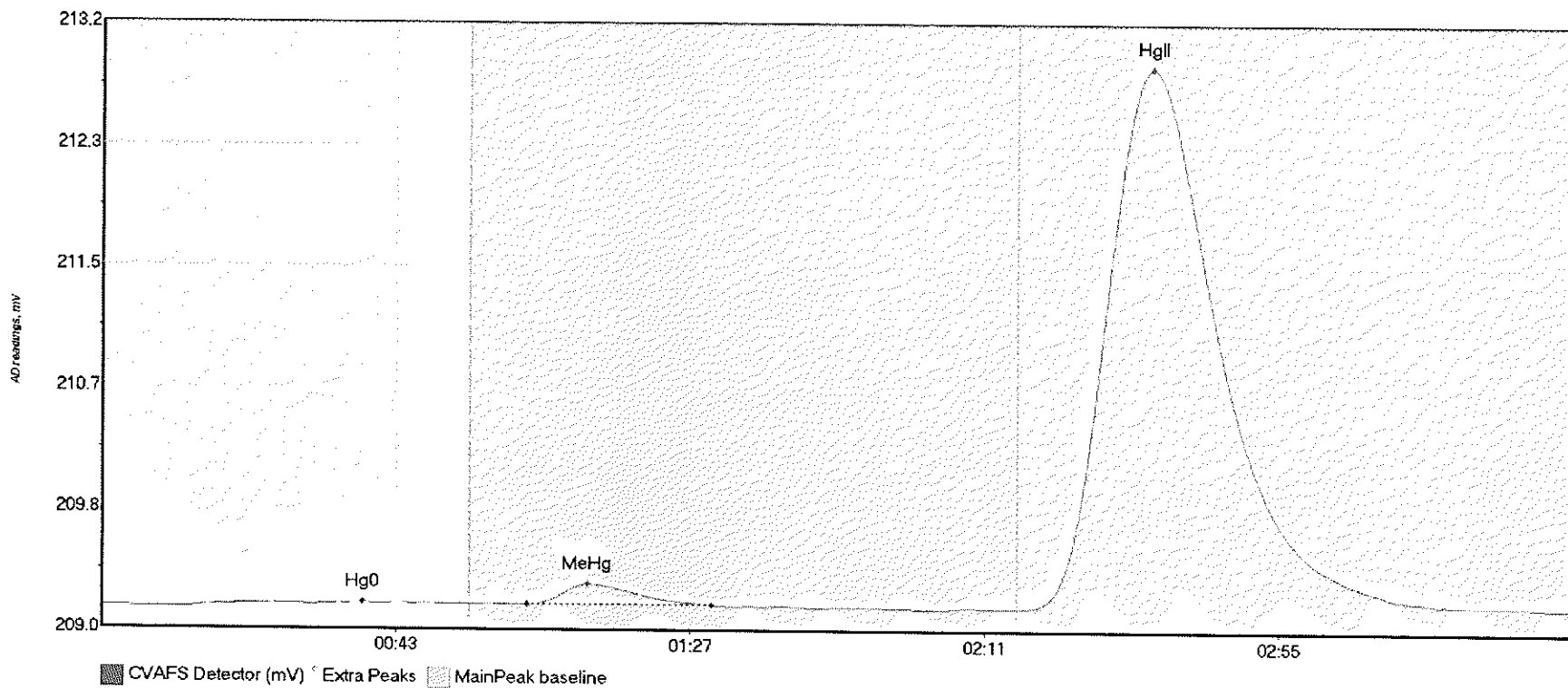
#47: 1707775-06



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1707775-06 Hg0	5.675	12.6	49.0	209.15	209.17	38.8	0.042	OK	209.1416	0.00	0.03	
1707775-06 MeHg	17.329	64.7	90.8	209.18	209.17	72.6	0.148	OK	209.1416	0.00	0.03	
1707775-06 HgII	845.071	136.8	218.5	209.16	209.18	157.4	4.372	OK	209.1416	0.00	0.03	

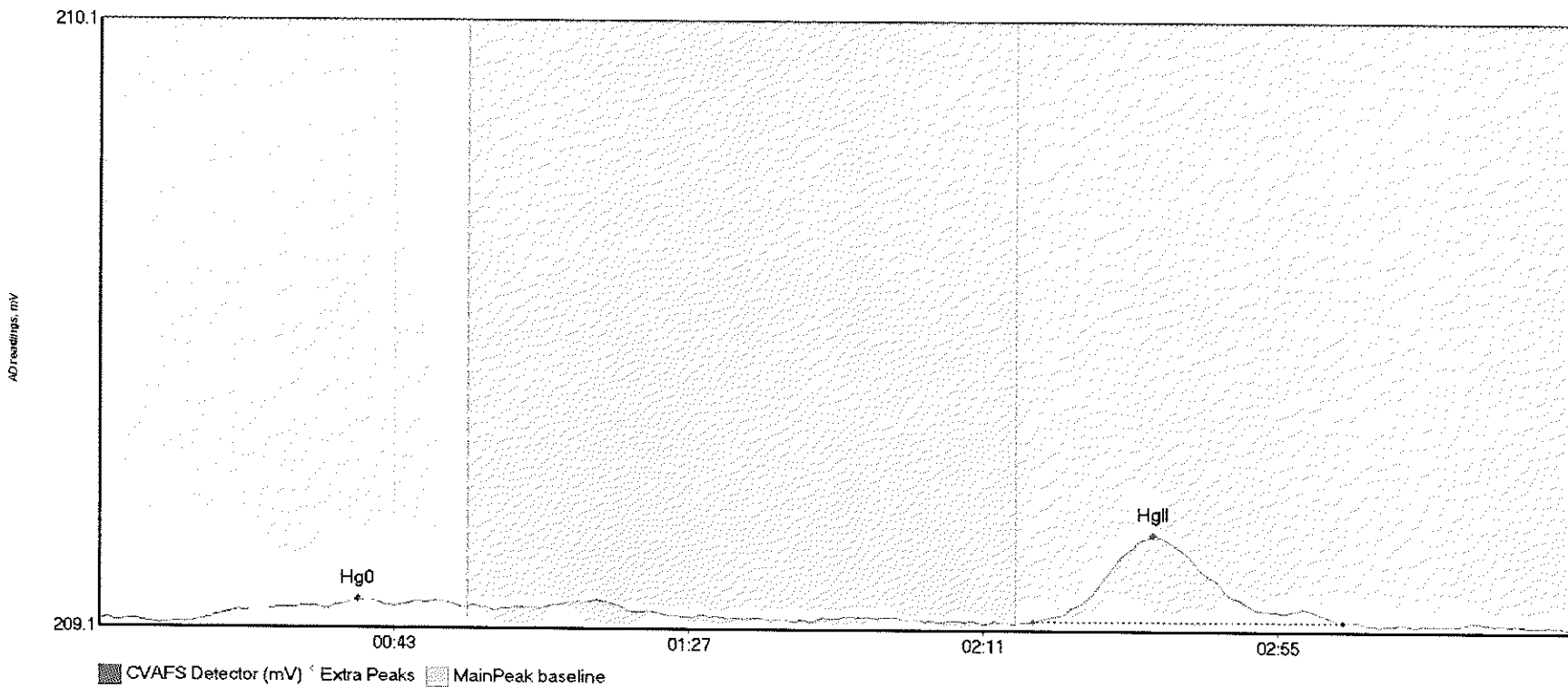
017

#48: 1707775-07



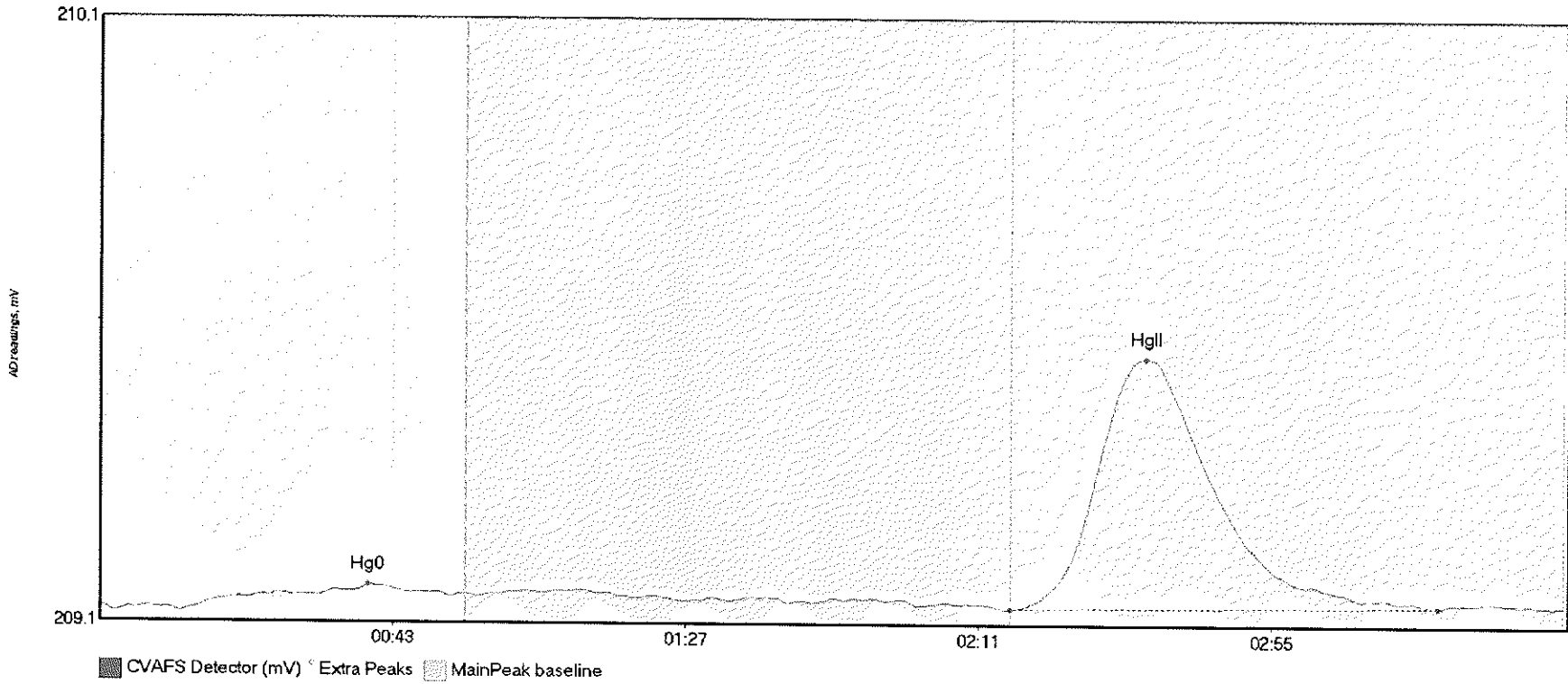
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1707775-07 Hg0	4.927	12.8	51.1	209.15	209.18	39.0	0.033	OK	209.1557	0.00	0.02	
1707775-07 MeHg	17.554	63.6	91.2	209.18	209.18	72.6	0.142	OK	209.1557	0.00	0.02	
1707775-07 HgII	719.562	137.2	218.4	209.16	209.17	157.0	3.732	OK	209.1557	0.00	0.02	017

#49: 170775-08



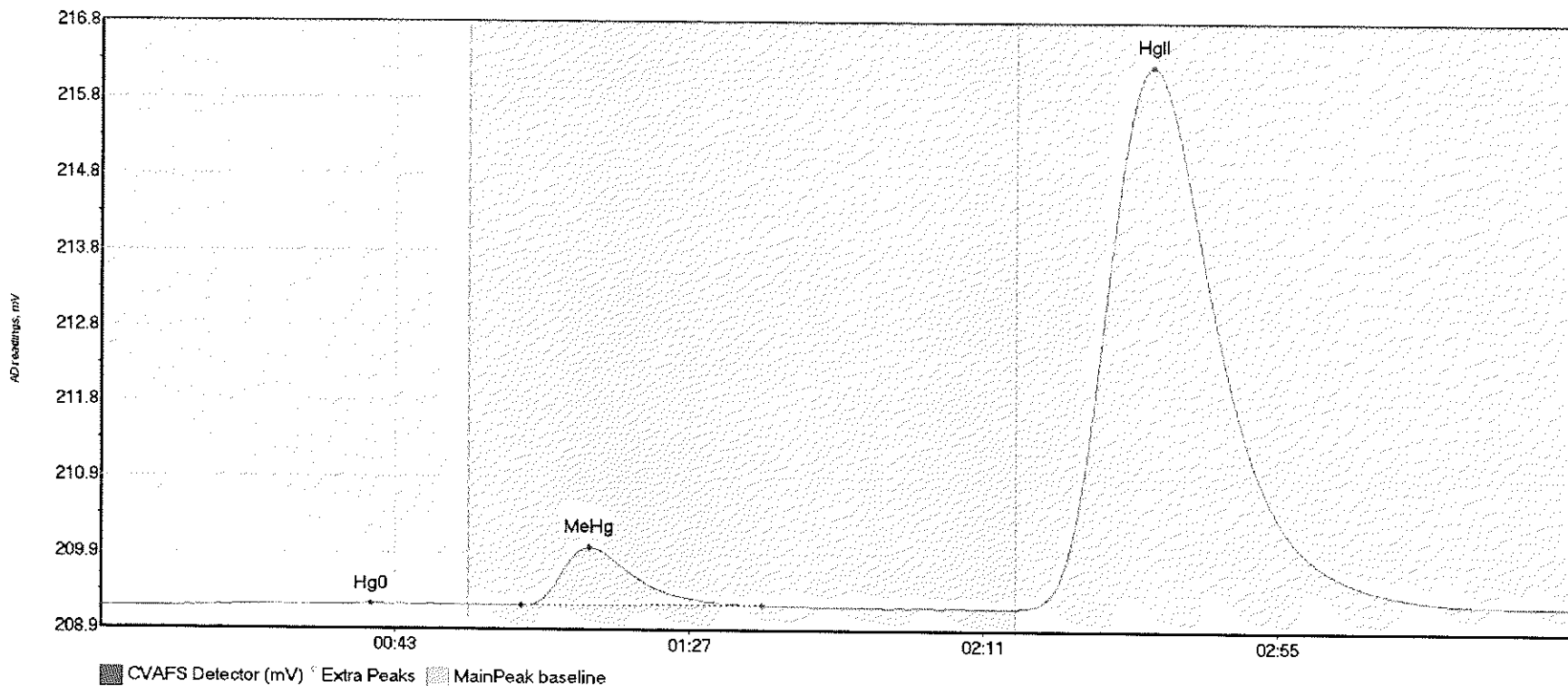
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1707775-08 Hg0	4.274	16.1	54.4	209.16	209.18	38.6	0.031	OK	209.1551	0.00	-0.01	
1707775-08 HgII	25.766	139.5	185.7	209.16	209.16	157.3	0.143	OK	209.1551	0.00	-0.01	017

#50: 1707775-09



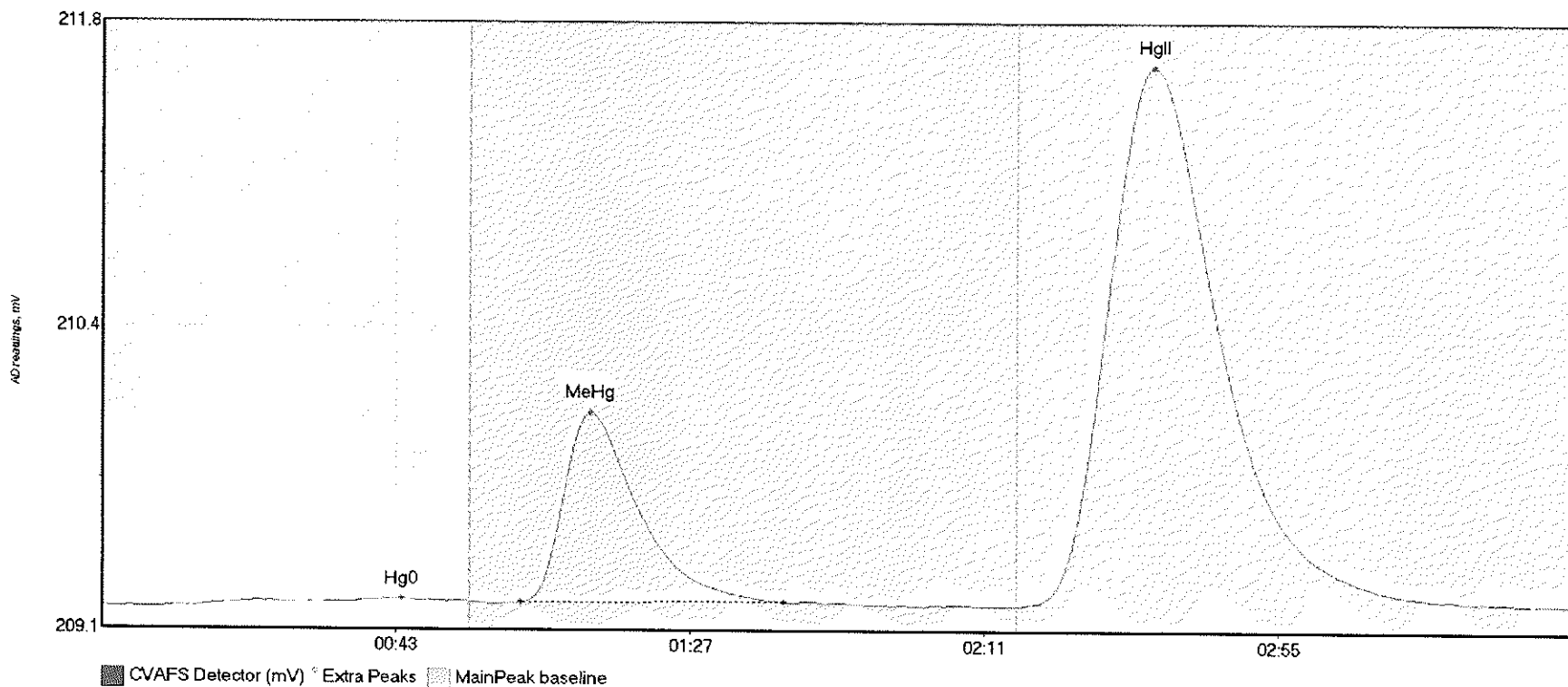
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	B1Dev	B1Shift	Comment
1707775-09 Hg0	5.261	13.9	52.6	209.15	209.17	40.3	0.039	OK	209.1513	0.00	0.01	
1707775-09 HgII	82.521	136.8	201.1	209.15	209.16	157.2	0.416	OK	209.1513	0.00	0.01	017

#51: 1707776-01



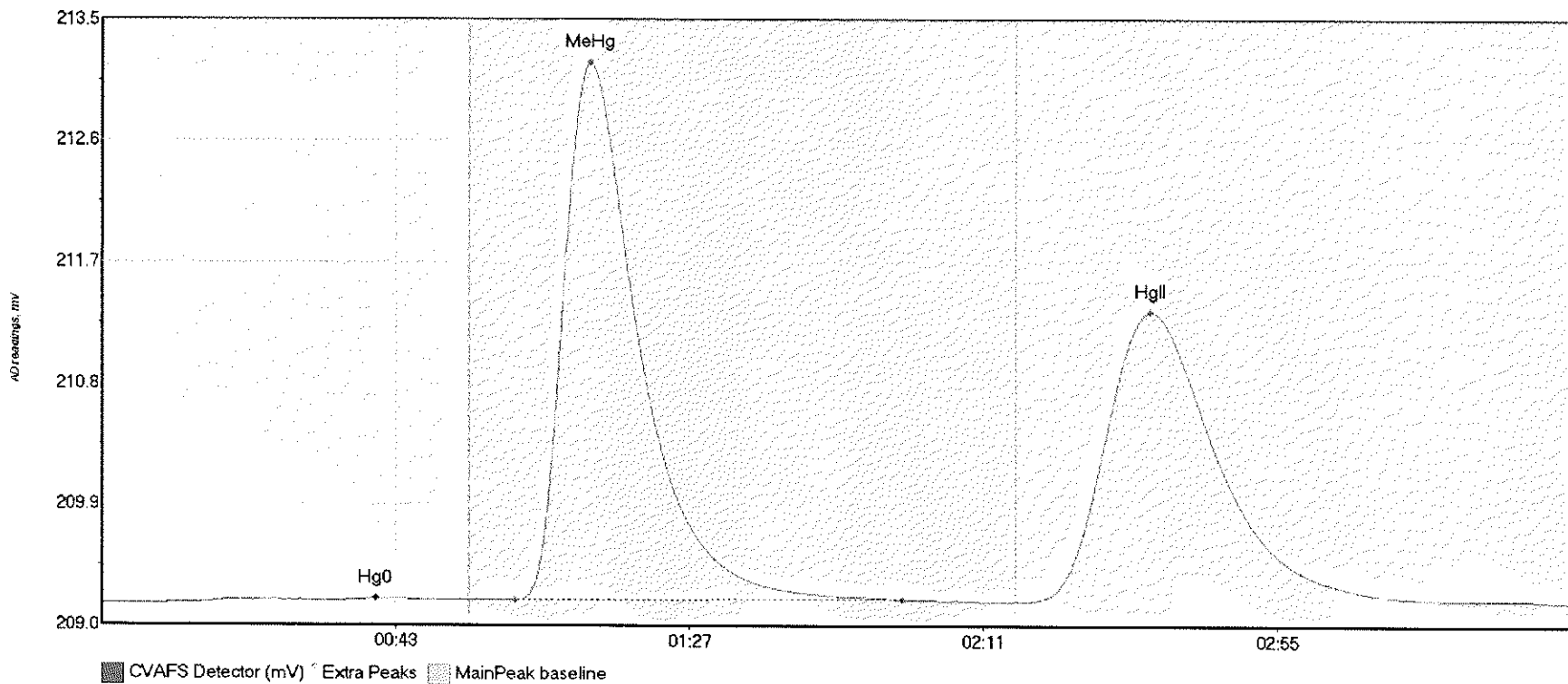
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1707776-01 Hg0	4.684	10.6	51.4	209.15	209.18	40.5	0.036	OK	209.1562	0.00	0.05	
1707776-01 MeHg	94.420	62.8	98.9	209.18	209.19	73.0	0.758	OK	209.1562	0.00	0.05	
1707776-01 HgII	1384.723	136.8	219.0	209.16	209.20	157.2	7.093	OK	209.1562	0.00	0.05	

#52: F707567-DUP2



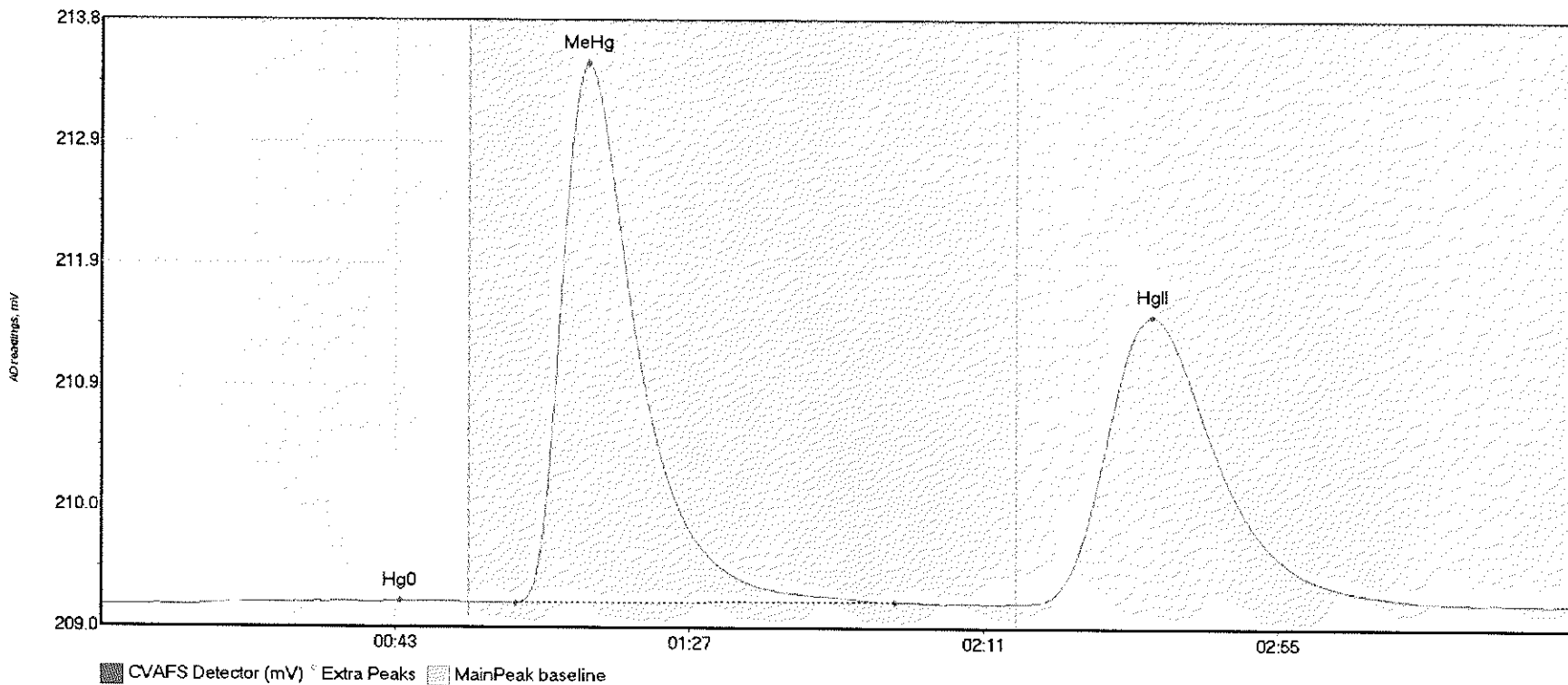
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F707567-DUP2 Hg	4.325	13.8	55.0	209.16	209.18	44.9	0.034	CT	209.1592	0.00	0.02	
F707567-DUP2 Me	108.850	62.6	101.9	209.18	209.18	73.0	0.849	OK	209.1592	0.00	0.02	
F707567-DUP2 Hg	465.622	136.9	214.0	209.17	209.18	157.2	2.464	OK	209.1592	0.00	0.02	

#53: F707567-MS3



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	B1Dev	B1Shift	Comment
F707567-MS3 Hg0	3.526	7.5	48.5	209.17	209.19	41.0	0.037	OK	209.1620	0.00	0.01	
F707567-MS3 MeH	529.756	61.9	119.9	209.19	209.19	73.2	4.017	OK	209.1620	0.00	0.01	
F707567-MS3 HgI	419.660	138.0	217.6	209.18	209.18	157.1	2.170	OK	209.1620	0.00	0.01	

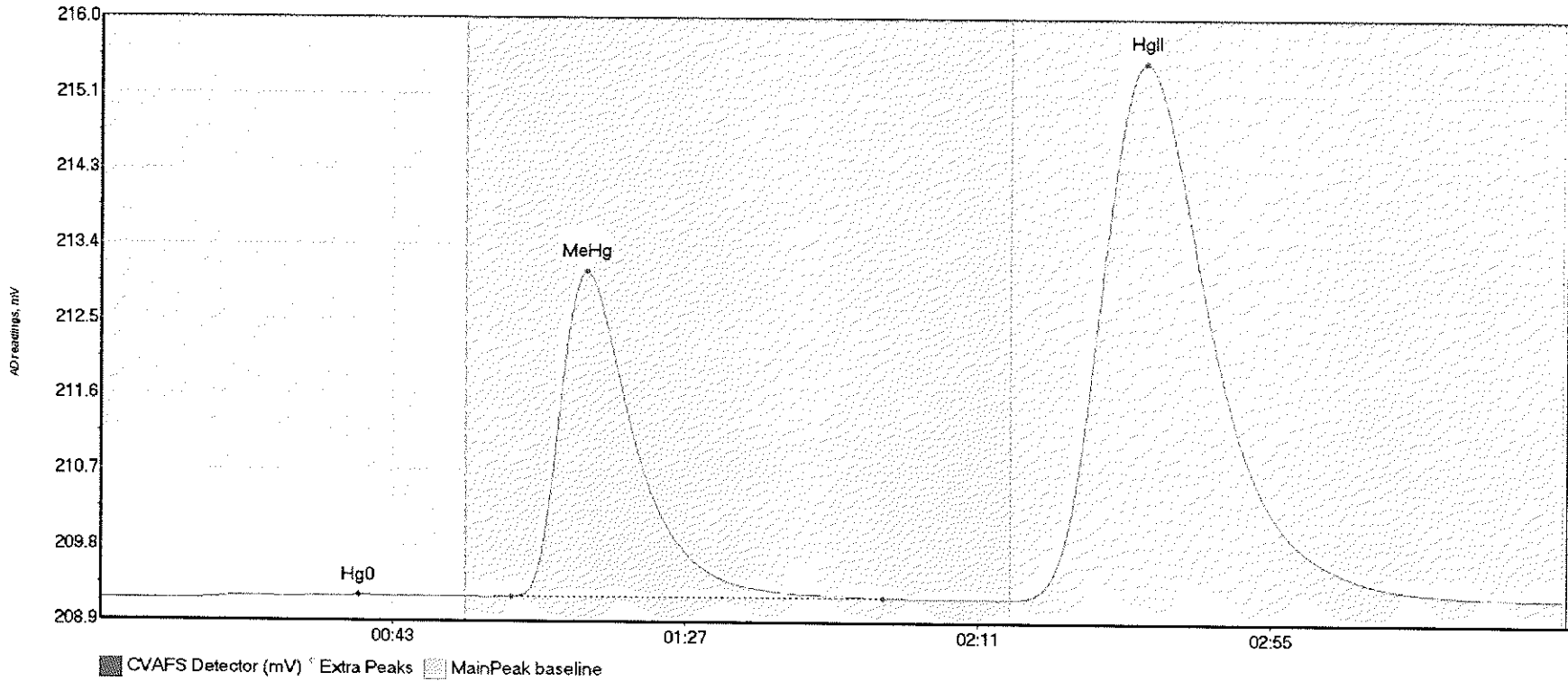
#54: F707567-MSD3



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F707567-MSD3 Hg	4.453	14.1	55.0	209.17	209.19	44.7	0.030	CP	209.1634	0.00	0.02	
F707567-MSD3 Me	570.379	62.0	118.8	209.19	209.19	72.9	4.311	OK	209.1634	0.00	0.02	
F707567-MSD3 Hg	443.744	137.8	206.8	209.19	209.19	157.2	2.297	OK	209.1634	0.00	0.02	

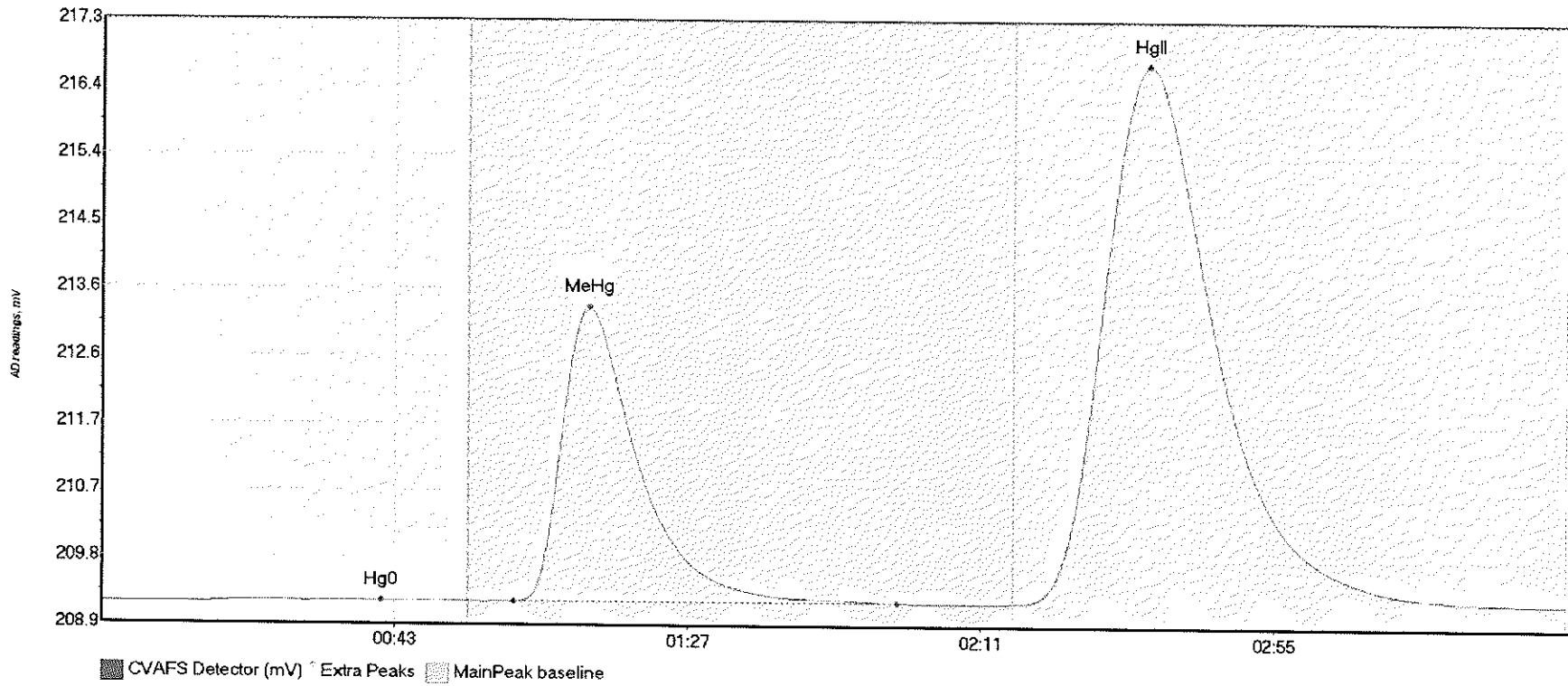


#55: F707567-MS4



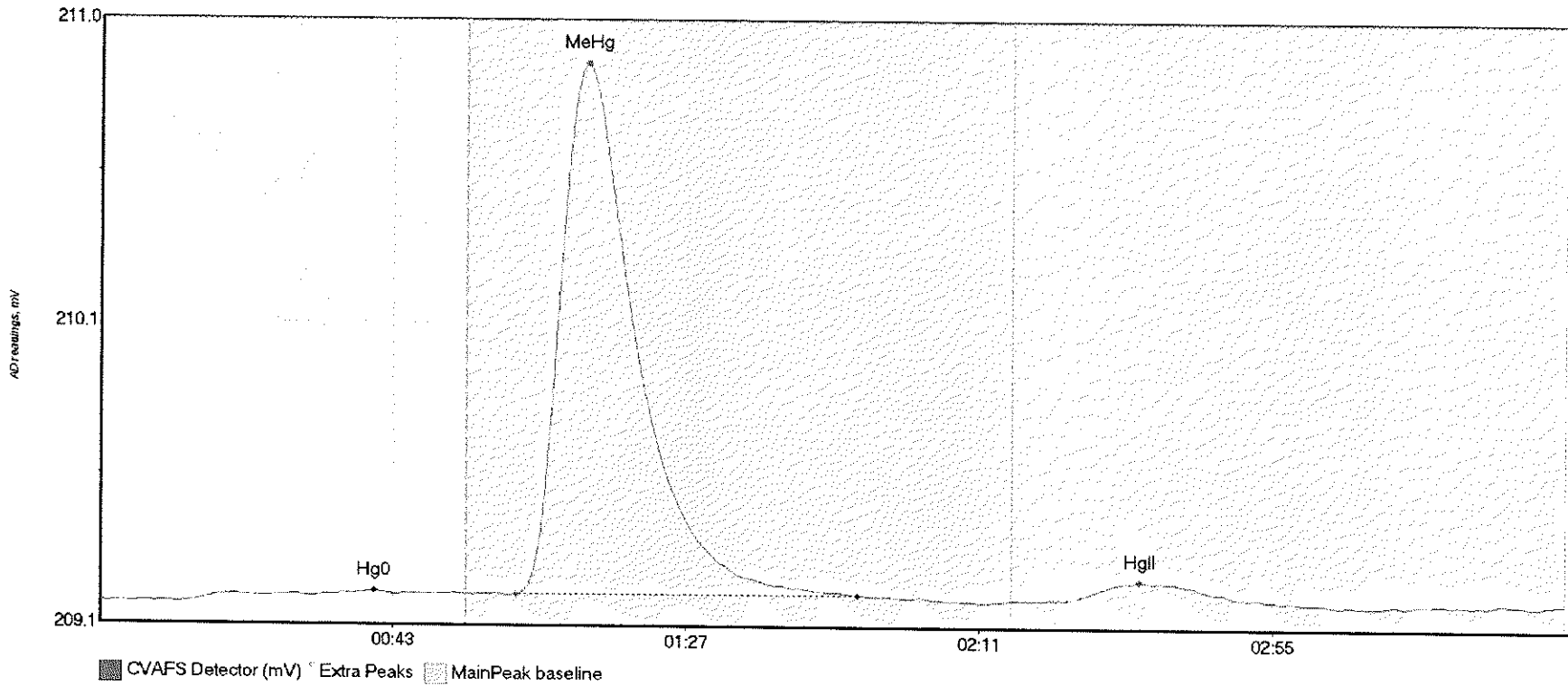
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F707567-MS4 Hg0	4.325	15.2	46.5	209.17	209.19	38.8	0.038	OK	209.1640	0.00	0.04	
F707567-MS4 MeH	505.348	61.8	117.8	209.19	209.19	73.1	3.843	OK	209.1640	0.00	0.04	
F707567-MS4 HgI	1228.327	137.3	218.6	209.18	209.20	157.2	6.343	OK	209.1640	0.00	0.04	

#56: F707567-MSD4



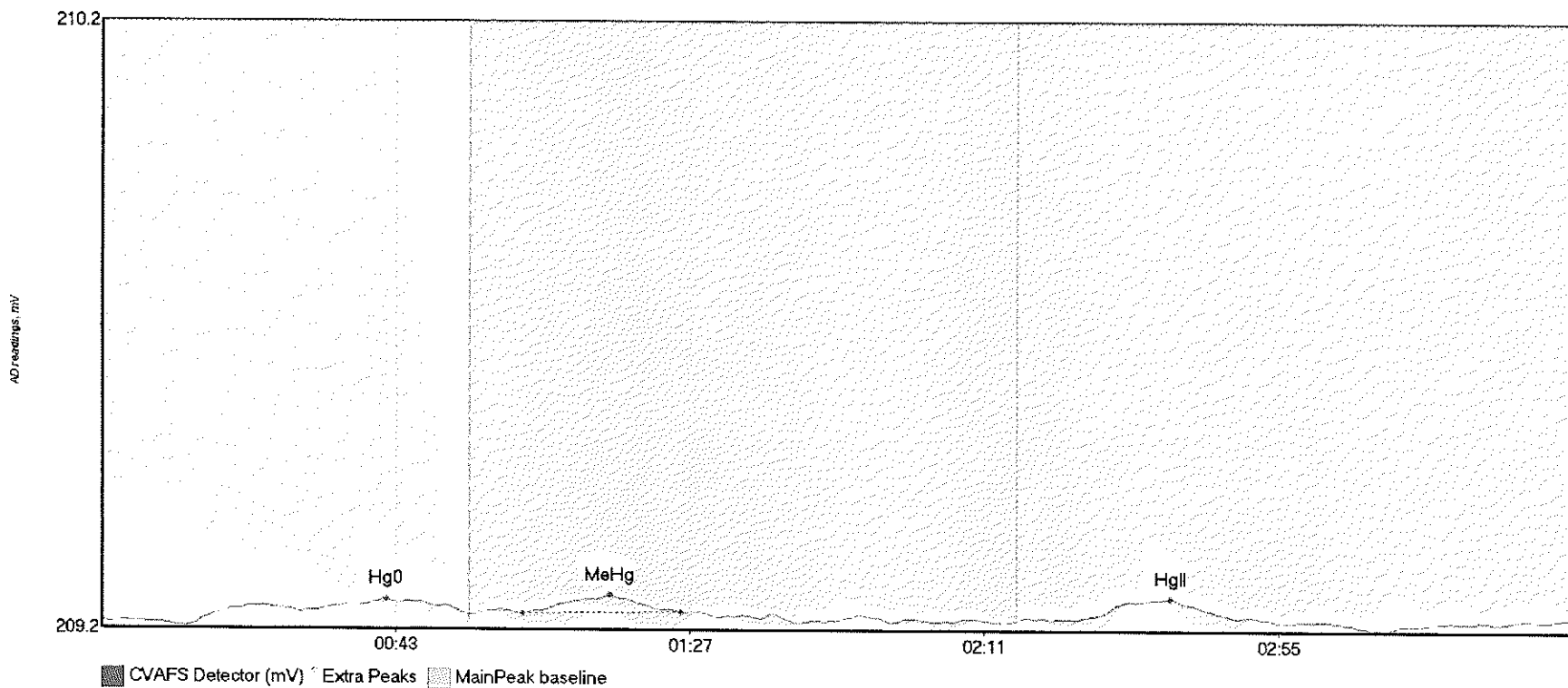
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F707567-MSD4 Hg	5.166	13.5	48.3	209.17	209.19	42.0	0.037	OK	209.1747	0.00	0.04	
F707567-MSD4 Me	542.267	61.8	119.4	209.19	209.19	73.1	4.113	OK	209.1747	0.00	0.04	
F707567-MSD4 Hg	1448.761	137.4	216.6	209.19	209.21	157.1	7.515	OK	209.1747	0.00	0.04	

#57: SEQ-CCV4



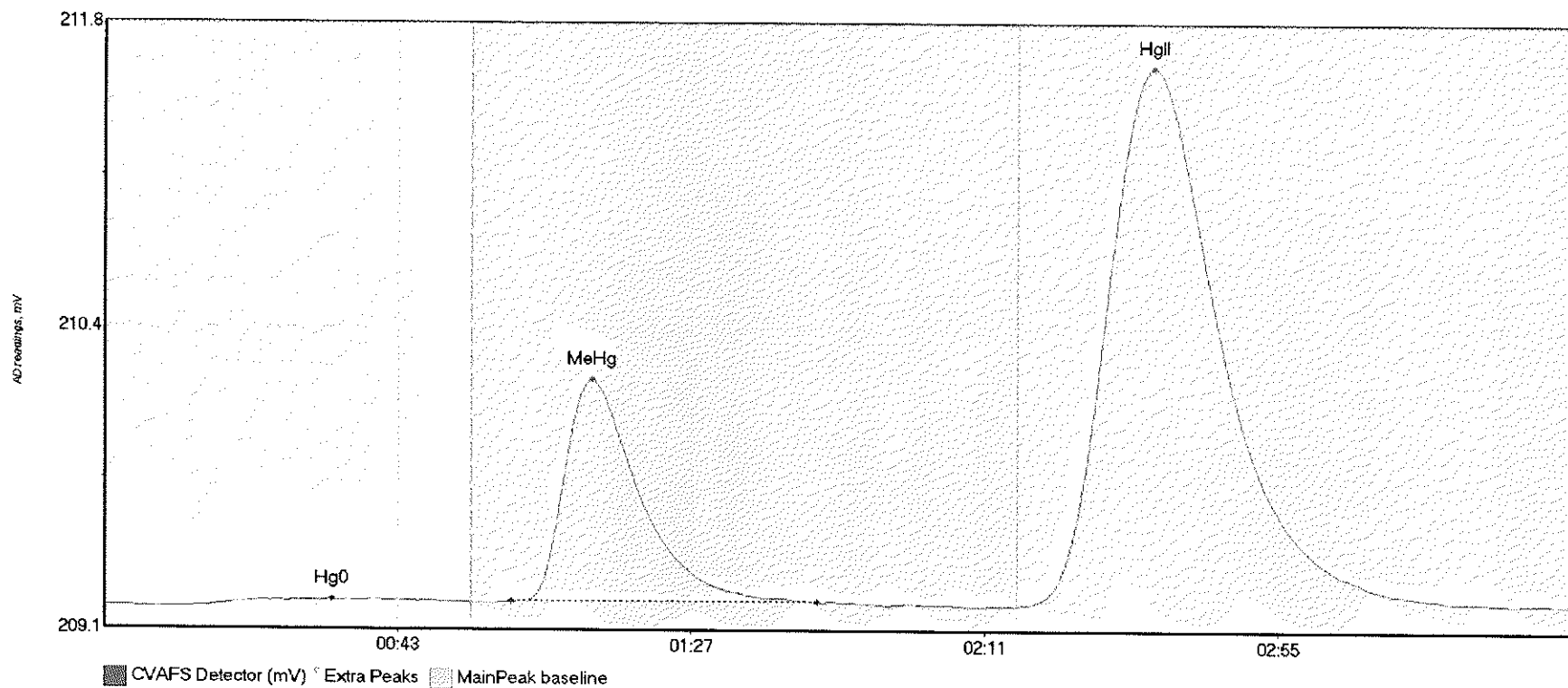
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CCV4 Hg0	2.805	13.6	44.6	209.17	209.20	41.2	0.032	OK	209.1710	0.00	0.01	
SEQ-CCV4 MeHg	220.902	62.5	113.7	209.20	209.20	73.1	1.676	OK	209.1710	0.00	0.01	
SEQ-CCV4 HgII	9.813	144.8	175.4	209.19	209.19	156.1	0.061	OK	209.1710	0.00	0.01	

#58: SEQ-CCB4



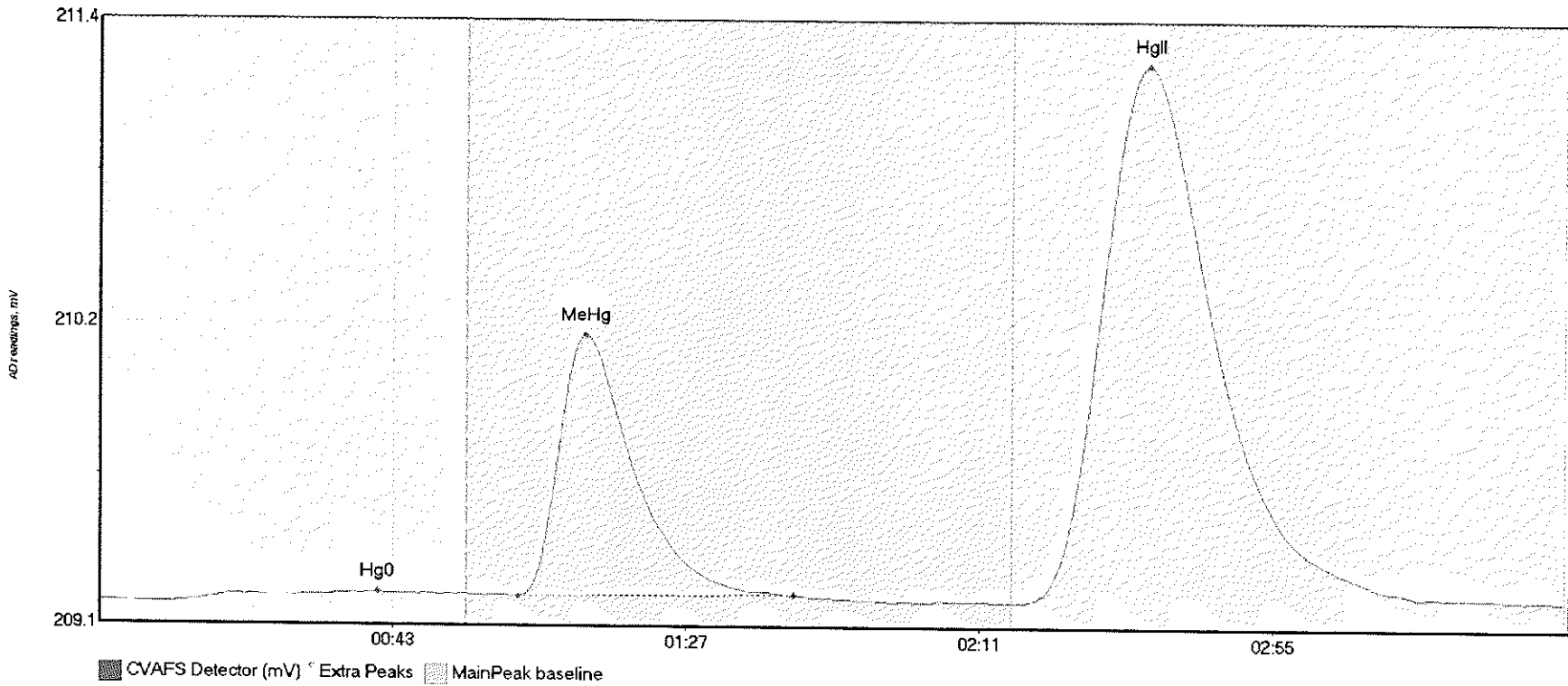
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CCB4 Hg0	8.475	12.5	55.0	209.16	209.19	42.6	0.044	CT	209.1733	0.00	0.01	
SEQ-CCB4 MeHg	3.416	63.0	86.6	209.19	209.19	76.0	0.031	OK	209.1733	0.00	0.01	
SEQ-CCB4 HgII	3.917	147.6	169.7	209.18	209.18	159.9	0.030	OK	209.1733	0.00	0.01	

#59: 1707771-21RE1



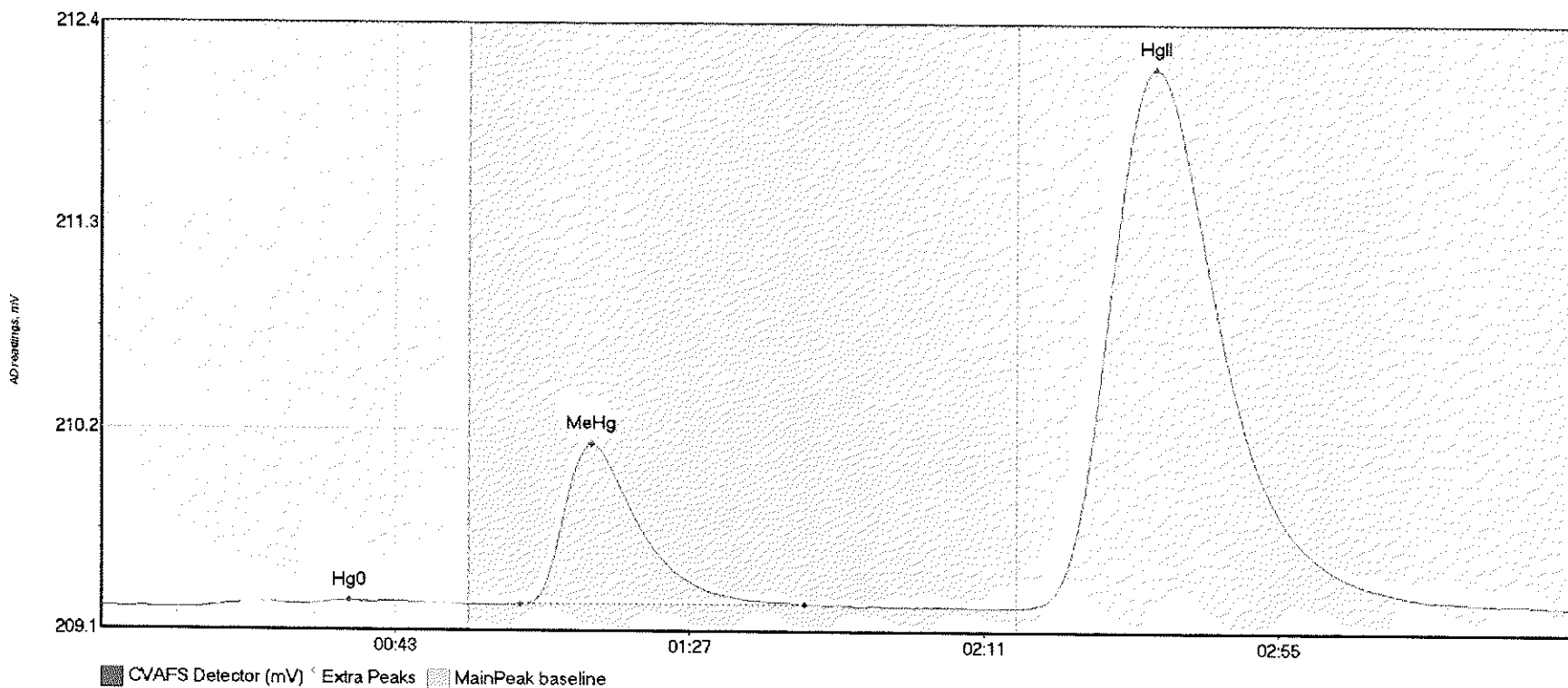
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1707771-21RE1 H	4.585	15.4	51.4	209.18	209.20	34.1	0.028	OK	209.1776	0.00	0.02	
1707771-21RE1 M	127.304	61.0	106.9	209.20	209.20	73.1	0.982	OK	209.1776	0.00	0.02	
1707771-21RE1 H	465.859	137.8	211.3	209.19	209.19	157.2	2.371	OK	209.1776	0.00	0.02	

#60: 1707771-22RE1



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1707771-22RE1 H	4.879	12.6	51.0	209.17	209.21	41.7	0.040	OK	209.1750	0.00	0.02	
1707771-22RE1 M	128.906	62.7	104.1	209.20	209.21	72.9	1.004	OK	209.1750	0.00	0.02	
1707771-22RE1 H	404.704	138.1	219.8	209.18	209.19	157.3	2.062	CT	209.1750	0.00	0.02	

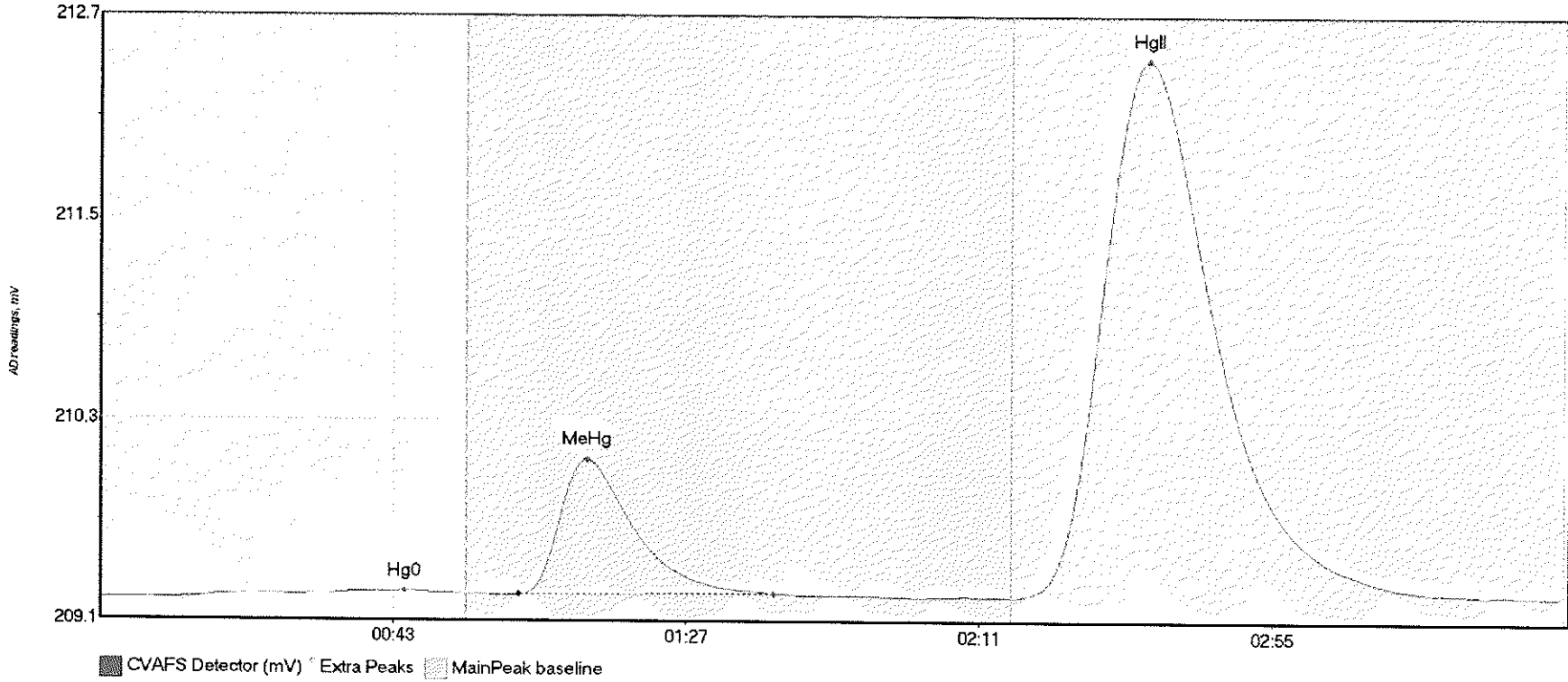
#61: 1707771-23RE1



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	B1Dev	B1Shift	Comment
1707771-23RE1 H	6.248	14.8	54.6	209.19	209.20	37.2	0.036	OK	209.1874	0.00	0.02	
1707771-23RE1 M	113.217	62.6	105.2	209.21	209.21	73.3	0.876	OK	209.1874	0.00	0.02	
1707771-23RE1 H	577.211	137.3	219.2	209.19	209.21	157.5	2.942	OK	209.1874	0.00	0.02	

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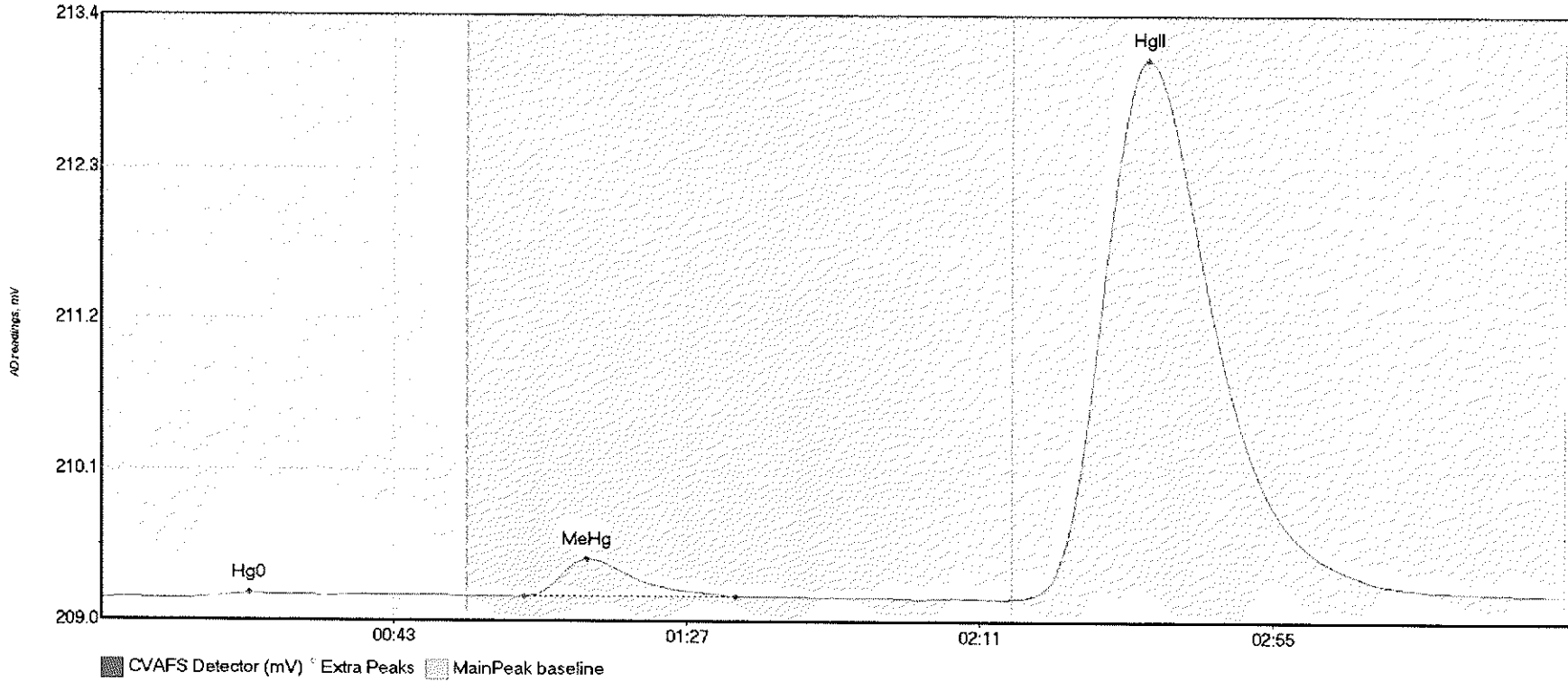
#62: 1707771-24RE1



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1707771-24RE1 H	6.478	13.3	54.3	209.20	209.22	45.7	0.043	OK	209.1916	0.00	0.03	
1707771-24RE1 M	104.761	62.8	101.1	209.22	209.23	73.1	0.822	OK	209.1916	0.00	0.03	
1707771-24RE1 H	635.680	137.4	218.0	209.21	209.22	157.5	3.253	OK	209.1916	0.00	0.03	

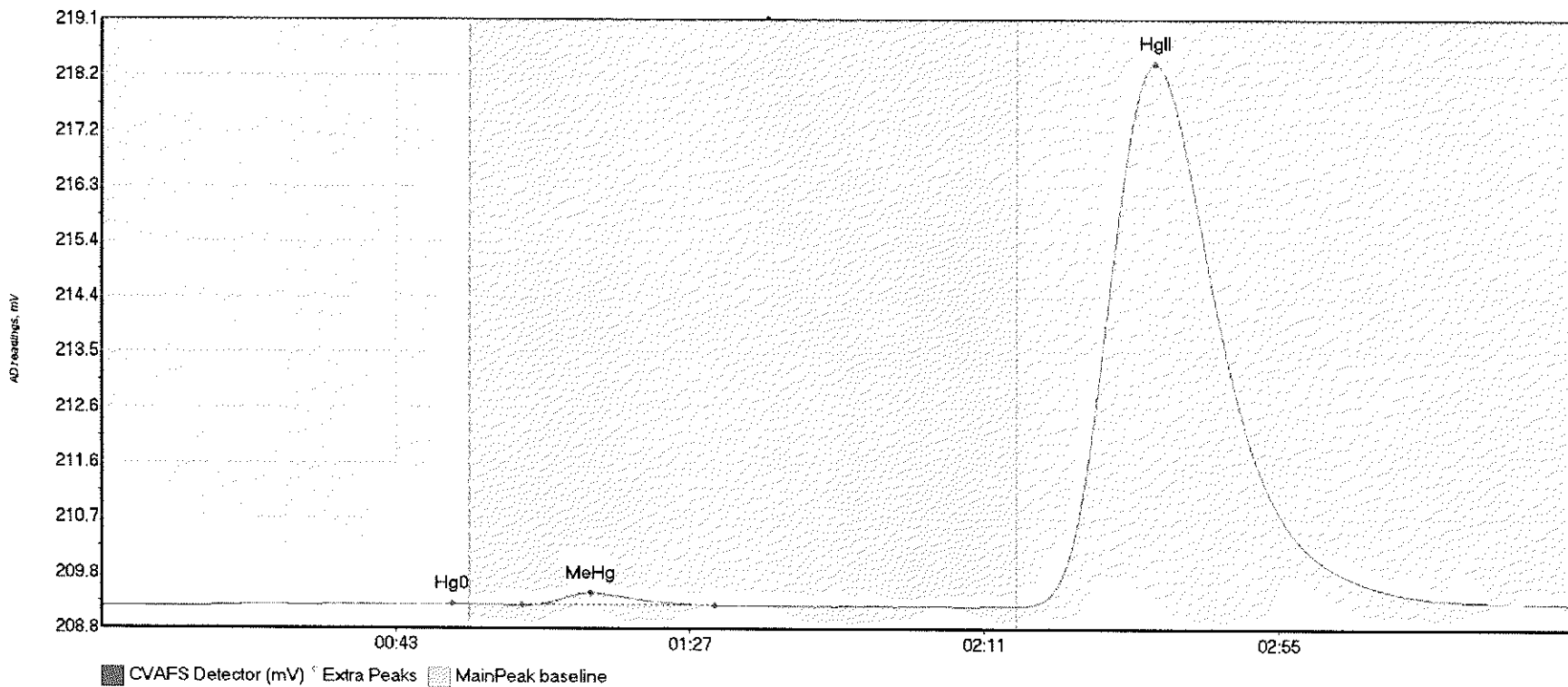


#63: 1707771-25RE1



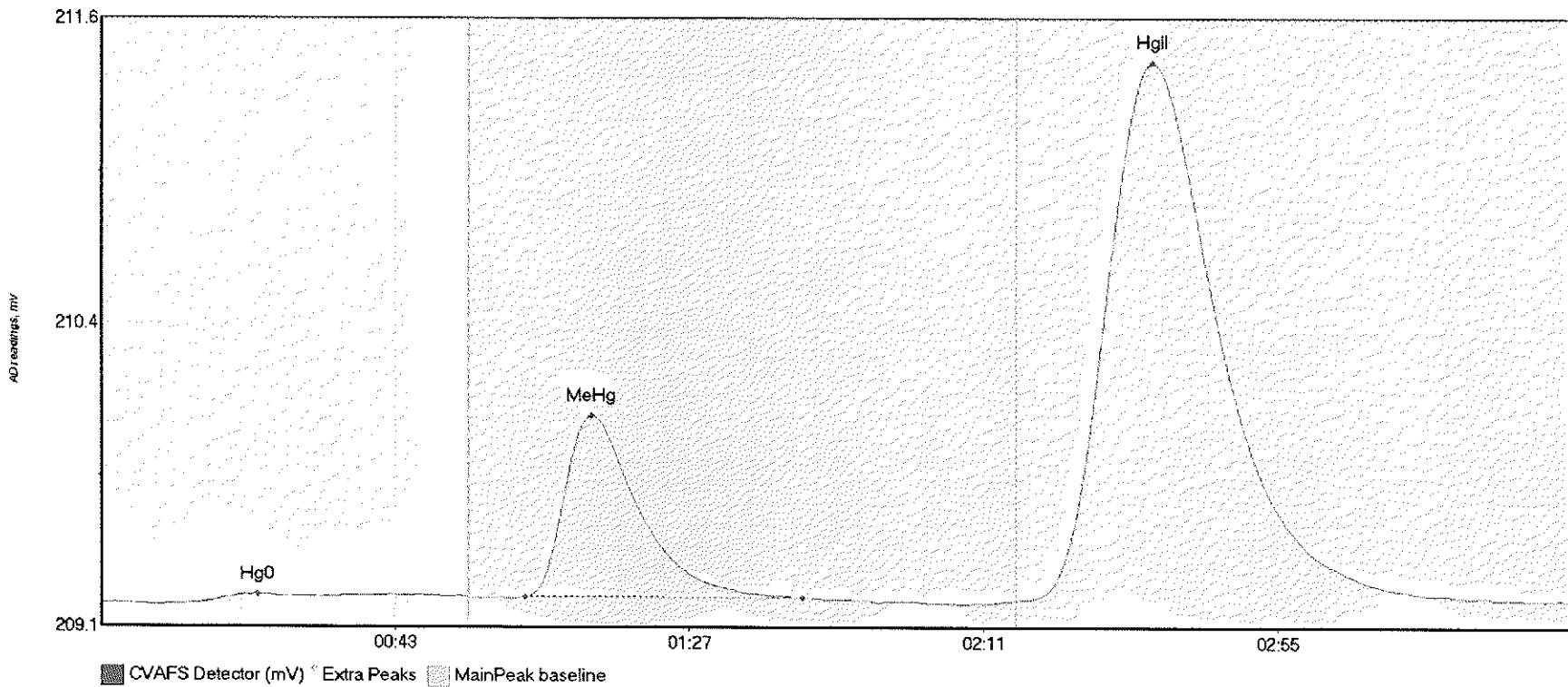
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1707771-25RE1 H	5.767	14.0	54.6	209.21	209.22	22.3	0.030	OK	209.2024	0.00	0.03	
1707771-25RE1 M	33.578	63.6	95.3	209.22	209.22	73.0	0.267	OK	209.2024	0.00	0.03	
1707771-25RE1 H	751.040	136.8	219.7	209.21	209.24	157.3	3.844	OK	209.2024	0.00	0.03	

#64: 1707771-26RE1



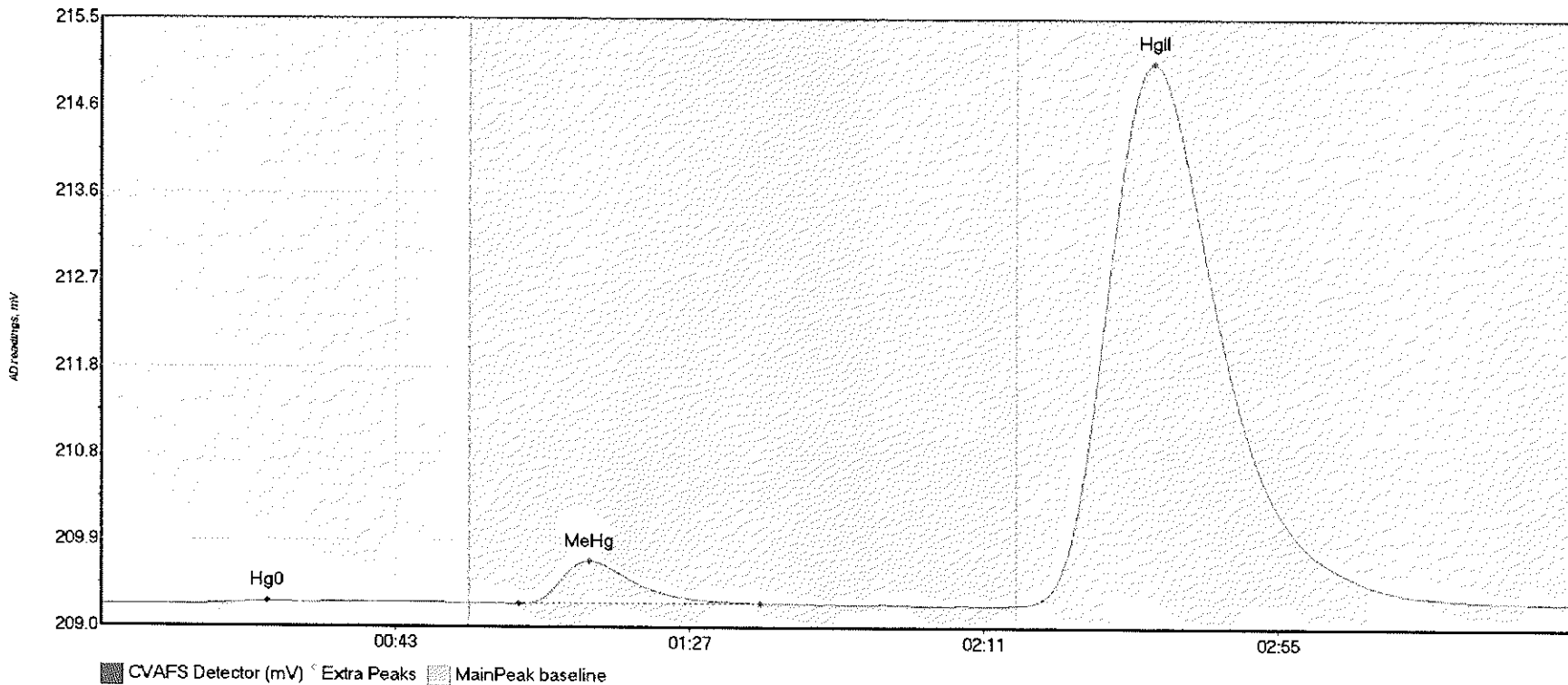
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1707771-26RE1 H	4.439	13.1	54.1	209.21	209.25	52.5	0.035	OK	209.2098	0.00	0.06	
1707771-26RE1 M	24.755	62.9	91.8	209.23	209.24	73.2	0.207	OK	209.2098	0.00	0.06	
1707771-26RE1 H	1792.623	136.8	219.7	209.23	209.27	157.4	9.143	OK	209.2098	0.00	0.06	

#65: 1707771-27RE1



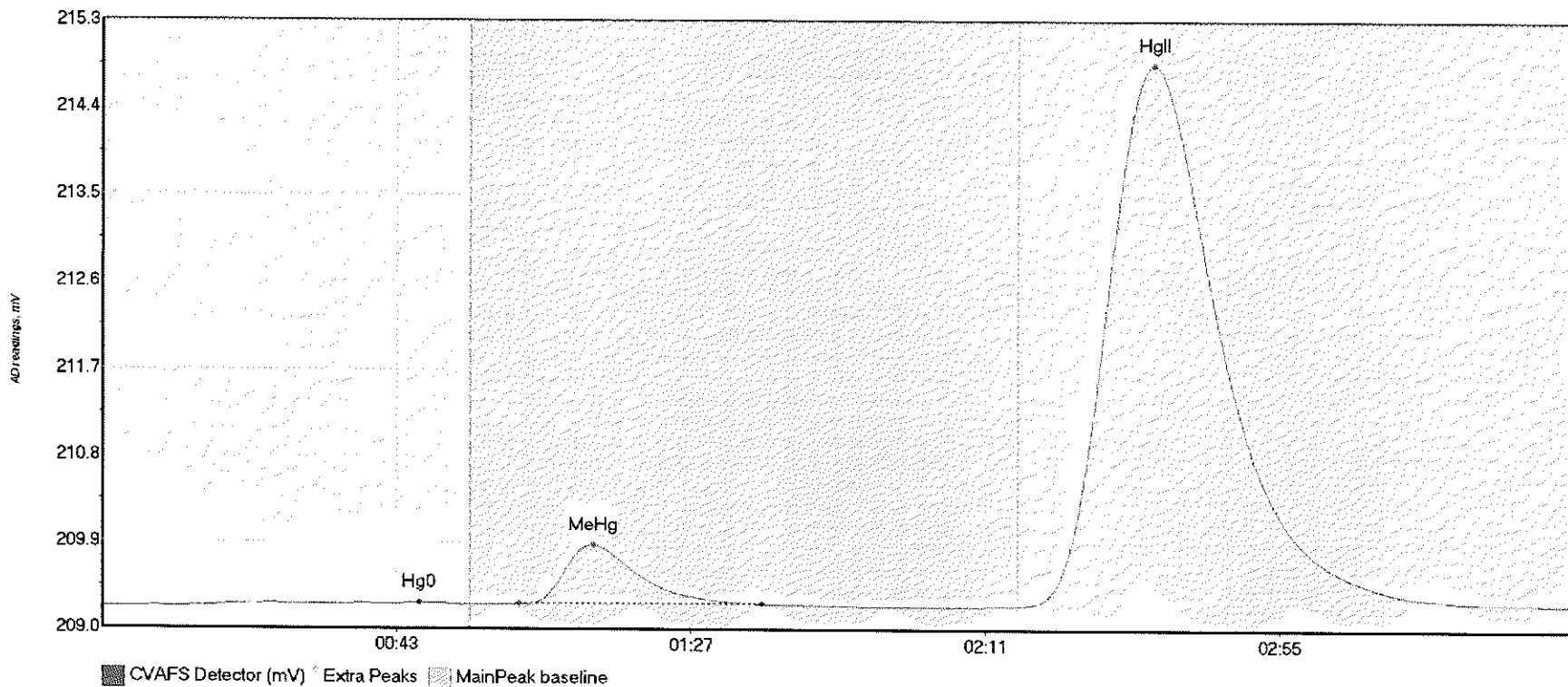
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1707771-27RE1 H	1.641	14.0	28.2	209.22	209.25	23.4	0.035	OK	209.2231	0.00	0.01	
1707771-27RE1 M	95.027	63.4	104.9	209.25	209.24	73.5	0.743	OK	209.2231	0.00	0.01	
1707771-27RE1 H	429.260	138.4	208.9	209.24	209.24	157.2	2.207	OK	209.2231	0.00	0.01	

#66: 1707771-28RE1



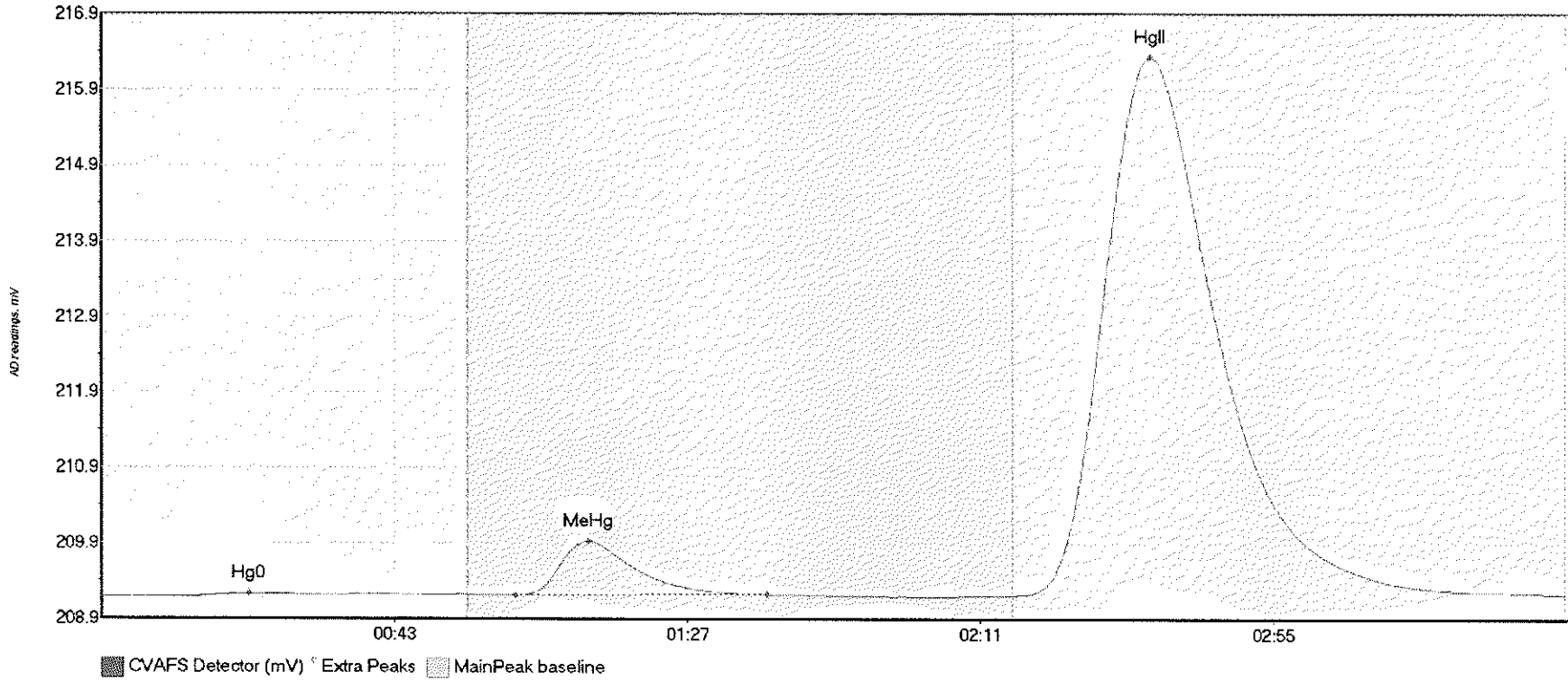
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1707771-28RE1 H	6.298	14.0	54.2	209.22	209.25	24.8	0.035	OK	209.2234	0.00	0.04	
1707771-28RE1 M	57.281	62.5	98.6	209.24	209.24	73.0	0.453	OK	209.2234	0.00	0.04	
1707771-28RE1 H	1142.692	136.8	218.8	209.23	209.26	157.3	5.784	OK	209.2234	0.00	0.04	

#67: 1707771-29RE1



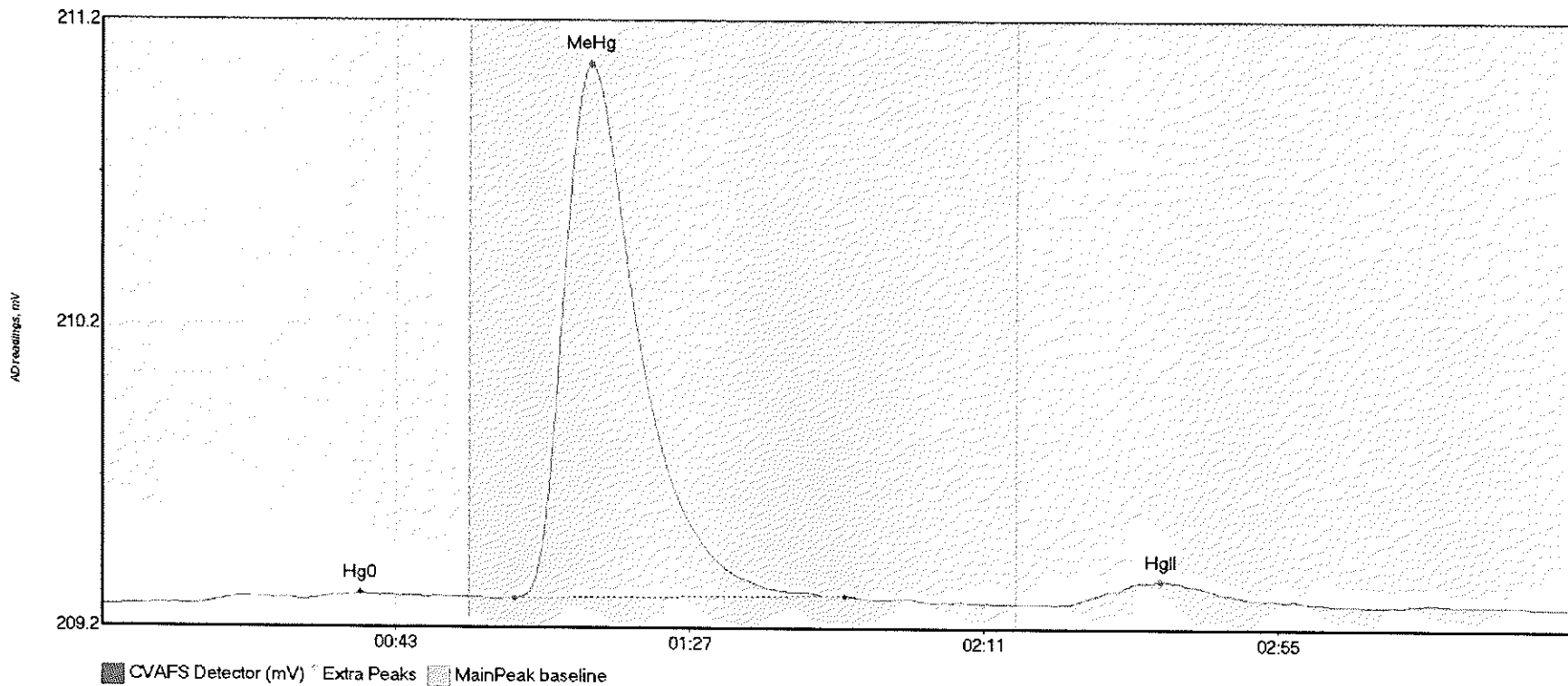
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1707771-29RE1 H	6.973	11.1	53.9	209.23	209.25	47.4	0.041	OK	209.2213	0.00	0.04	
1707771-29RE1 M	77.103	62.3	98.6	209.25	209.26	73.4	0.616	OK	209.2213	0.00	0.04	
1707771-29RE1 H	1096.518	136.8	216.7	209.24	209.26	157.2	5.598	OK	209.2213	0.00	0.04	

#68: 1707771-30RE1



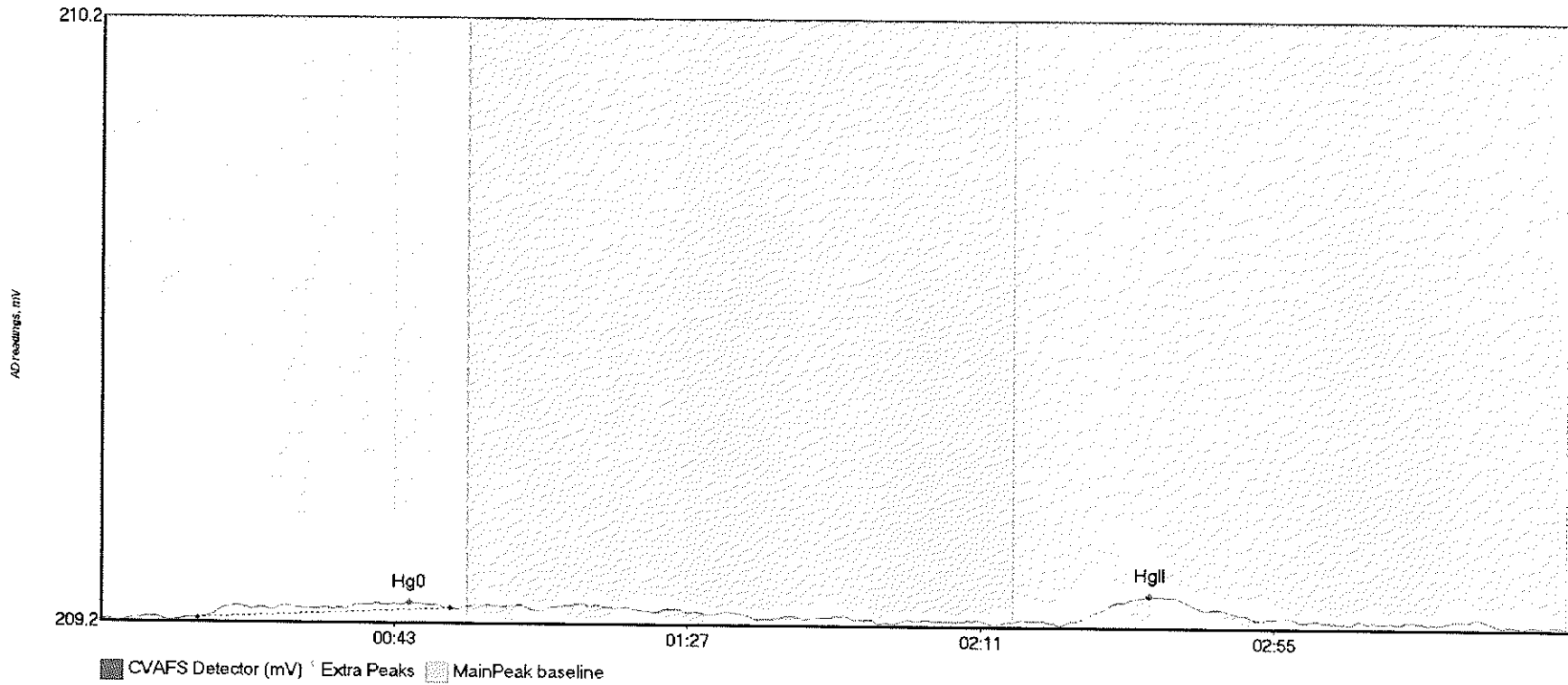
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1707771-30RE1 H	2.715	12.2	31.6	209.24	209.26	22.2	0.040	OK	209.2349	0.00	0.04	
1707771-30RE1 M	90.780	62.1	100.0	209.26	209.27	73.1	0.716	OK	209.2349	0.00	0.04	
1707771-30RE1 H	1392.428	136.8	219.8	209.25	209.27	157.5	7.097	CT	209.2349	0.00	0.04	

#69: SEQ-CCV5



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CCV5 Hg0	4.023	13.8	48.8	209.24	209.27	38.7	0.036	OK	209.2408	0.00	0.00	
SEQ-CCV5 MeHg	227.581	61.7	111.1	209.27	209.28	73.0	1.744	OK	209.2408	0.00	0.00	
SEQ-CCV5 HgII	13.193	144.7	181.0	209.25	209.25	158.5	0.077	OK	209.2408	0.00	0.00	

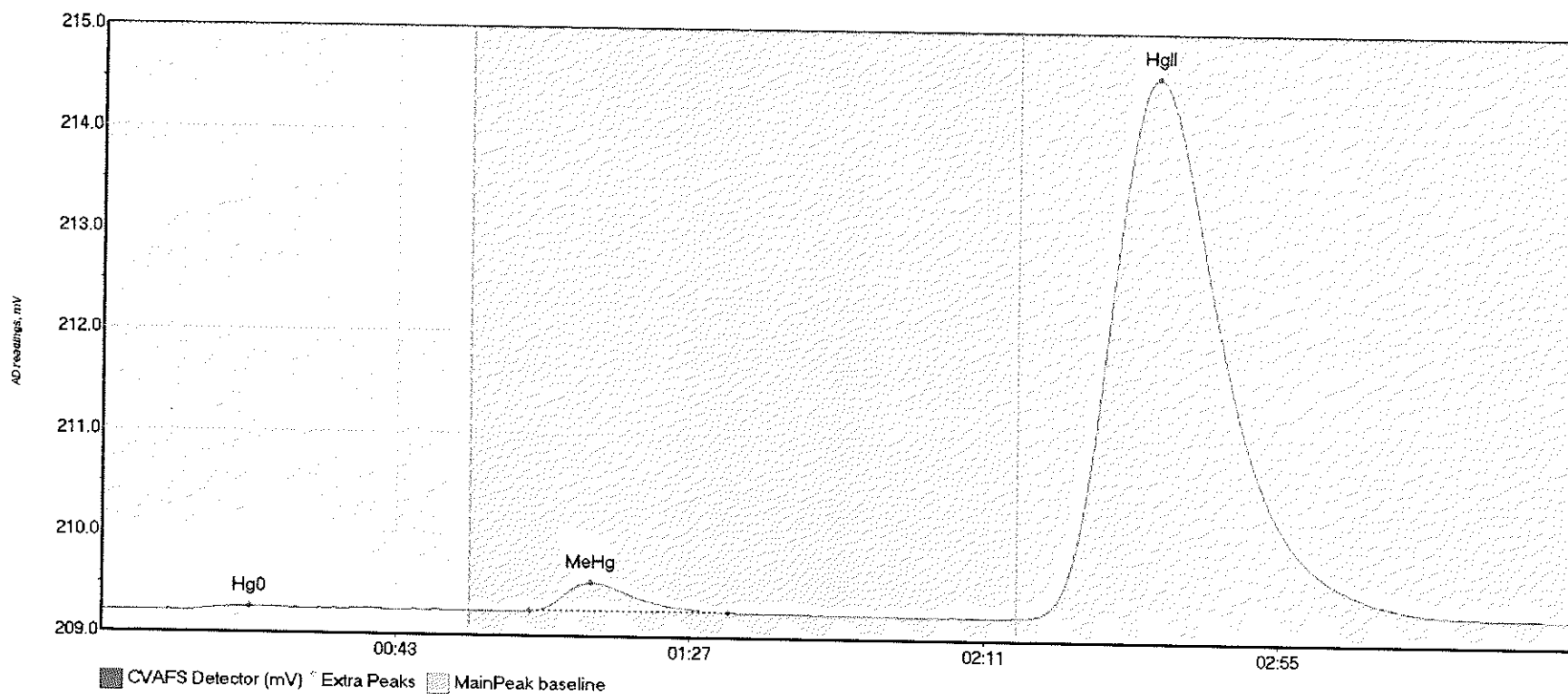
#70: SEQ-CCB5



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CCB5 Hg0	4.158	14.4	52.5	209.25	209.27	46.3	0.027	OK	209.2504	0.00	0.00	
SEQ-CCB5 HgII	6.425	146.2	173.9	209.26	209.26	157.3	0.042	OK	209.2504	0.00	0.00	017

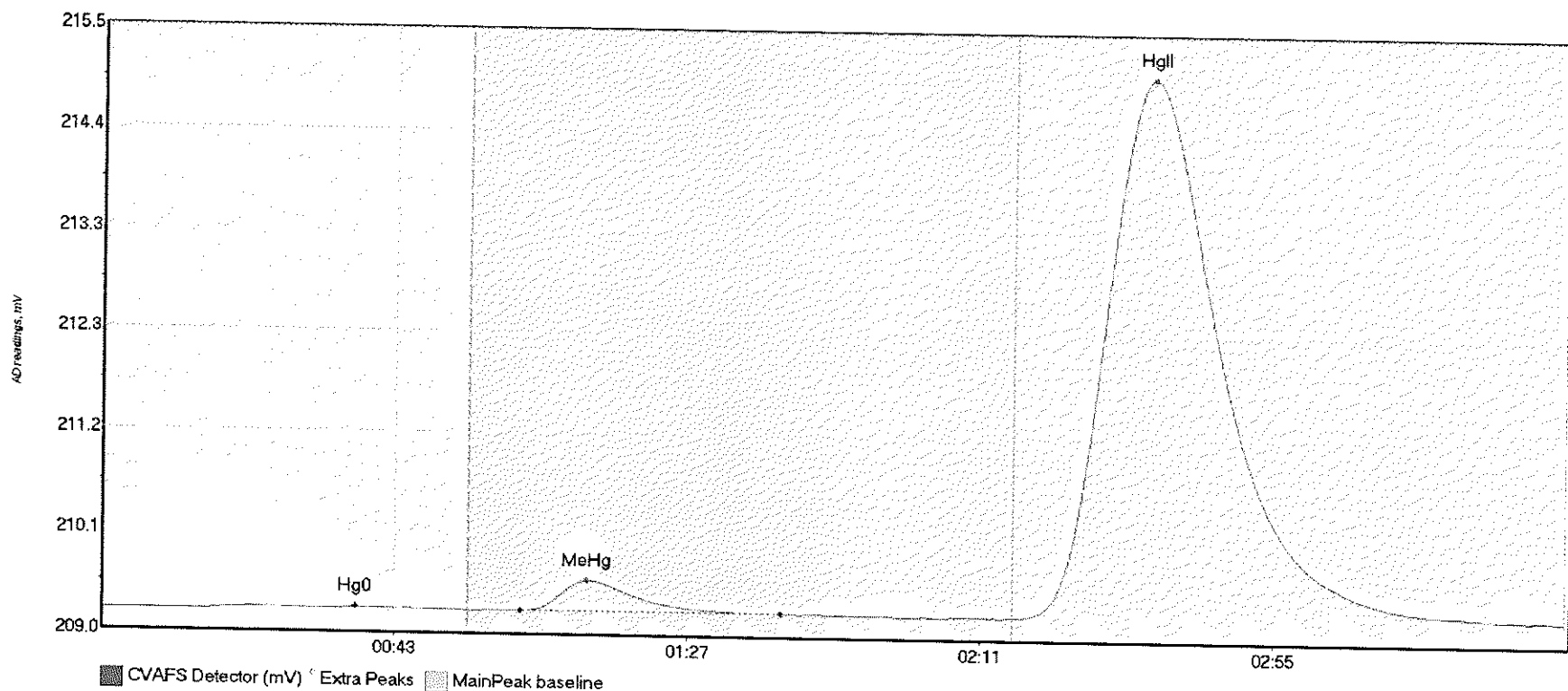


#71: 1707771-31RE1



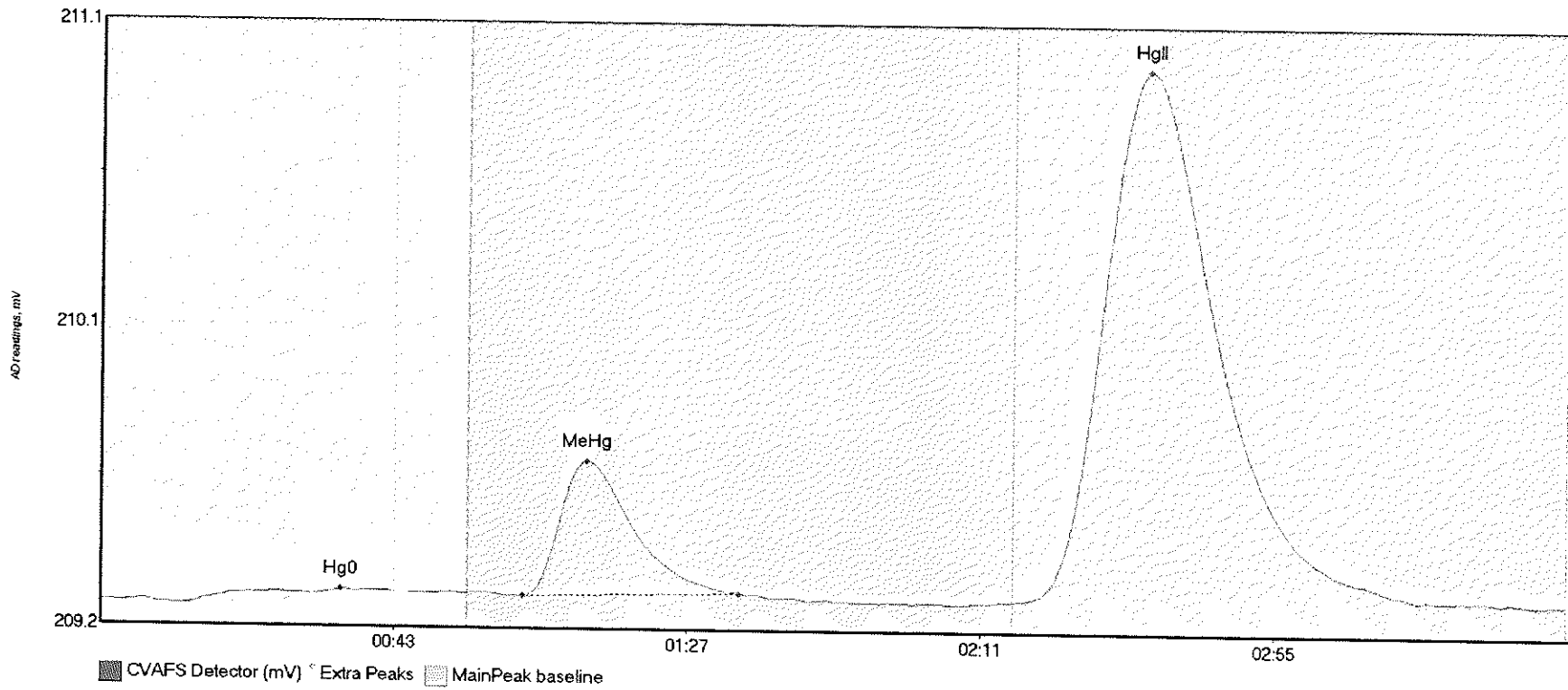
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1707771-31RE1 H	7.016	13.1	52.9	209.25	209.27	22.2	0.039	OK	209.2433	0.00	0.05	
1707771-31RE1 M	33.794	64.0	93.7	209.28	209.28	73.1	0.278	OK	209.2433	0.00	0.05	
1707771-31RE1 H	1037.703	137.6	219.8	209.26	209.29	157.6	5.318	CT	209.2433	0.00	0.05	

#72: 1707771-32RE1



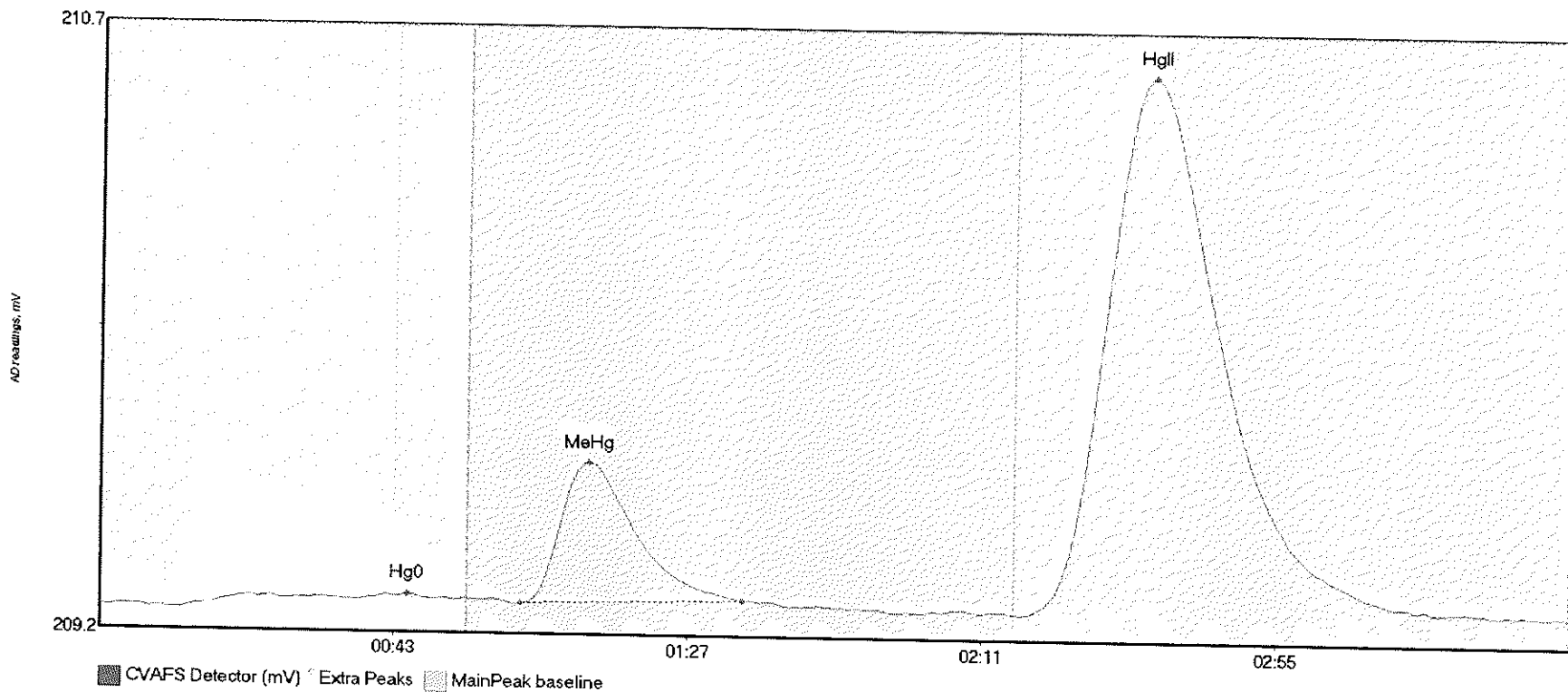
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1707771-32RE1 H	6.901	14.5	55.0	209.26	209.27	38.2	0.036	CT	209.2564	0.00	0.04	
1707771-32RE1 M	42.530	62.9	102.0	209.28	209.28	72.9	0.328	OK	209.2564	0.00	0.04	
1707771-32RE1 H	1131.065	136.8	219.8	209.27	209.29	157.6	5.750	CT	209.2564	0.00	0.04	

#73: 1707771-33RE1



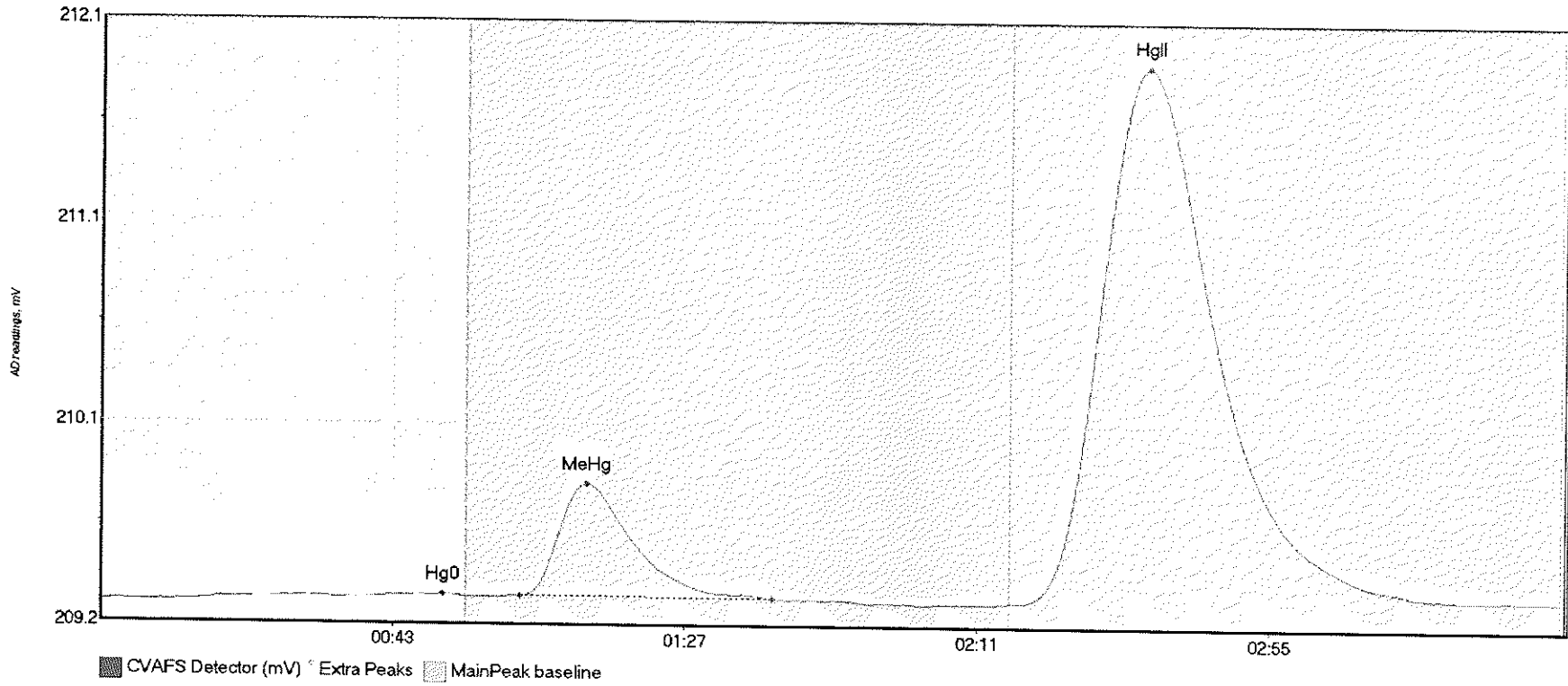
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1707771-33RE1 H	5.519	12.3	47.2	209.27	209.31	36.0	0.048	OK	209.2768	0.00	0.02	
1707771-33RE1 M	52.057	63.3	95.7	209.30	209.31	72.8	0.419	OK	209.2768	0.00	0.02	
1707771-33RE1 H	323.436	138.2	215.4	209.30	209.30	157.1	1.648	OK	209.2768	0.00	0.02	

#74: 1707771-34RE1



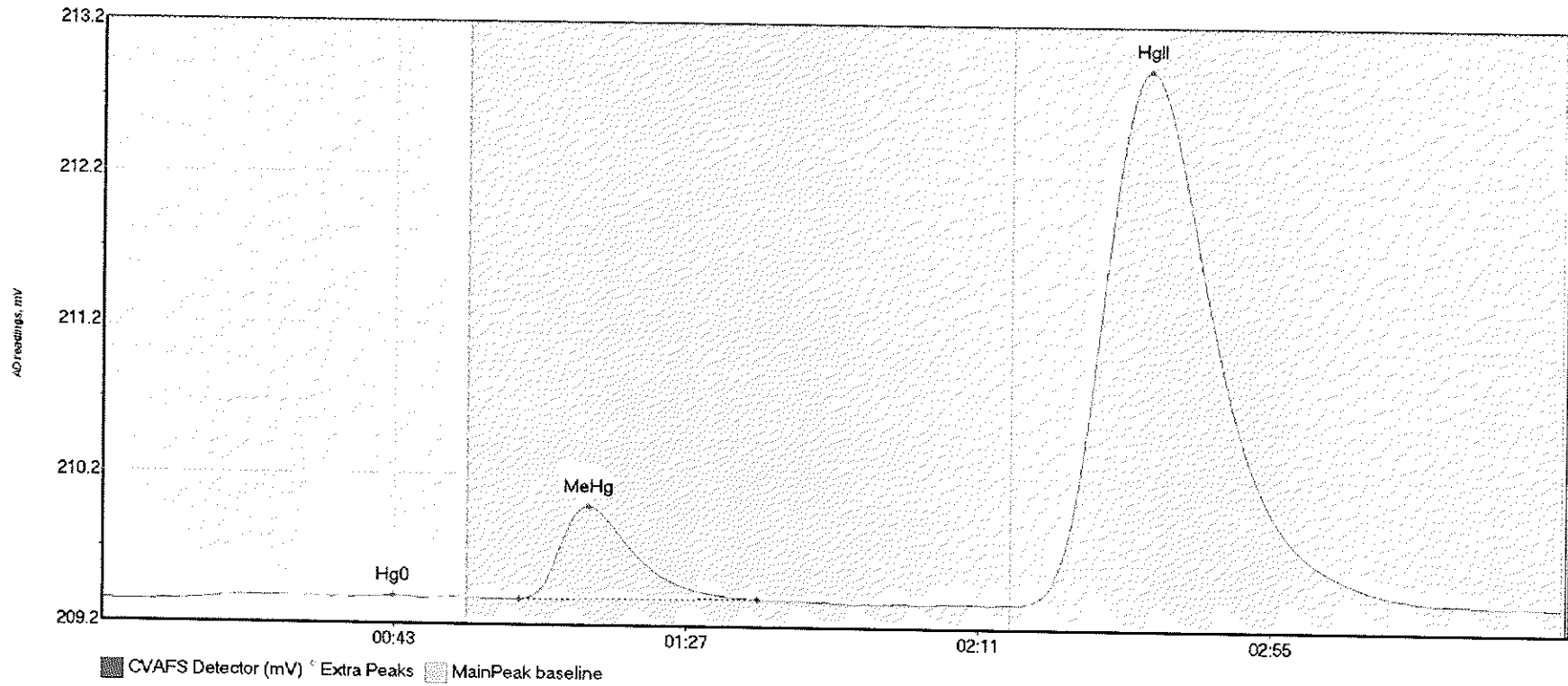
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1707771-34RE1 H	3.805	14.9	53.0	209.29	209.31	46.0	0.029	OK	209.2881	0.00	0.01	
1707771-34RE1 M	42.774	63.0	96.1	209.30	209.31	73.2	0.340	OK	209.2881	0.00	0.01	
1707771-34RE1 H	254.991	138.4	219.8	209.29	209.30	157.4	1.291	CT	209.2881	0.00	0.01	

#75: 1707771-35RE1



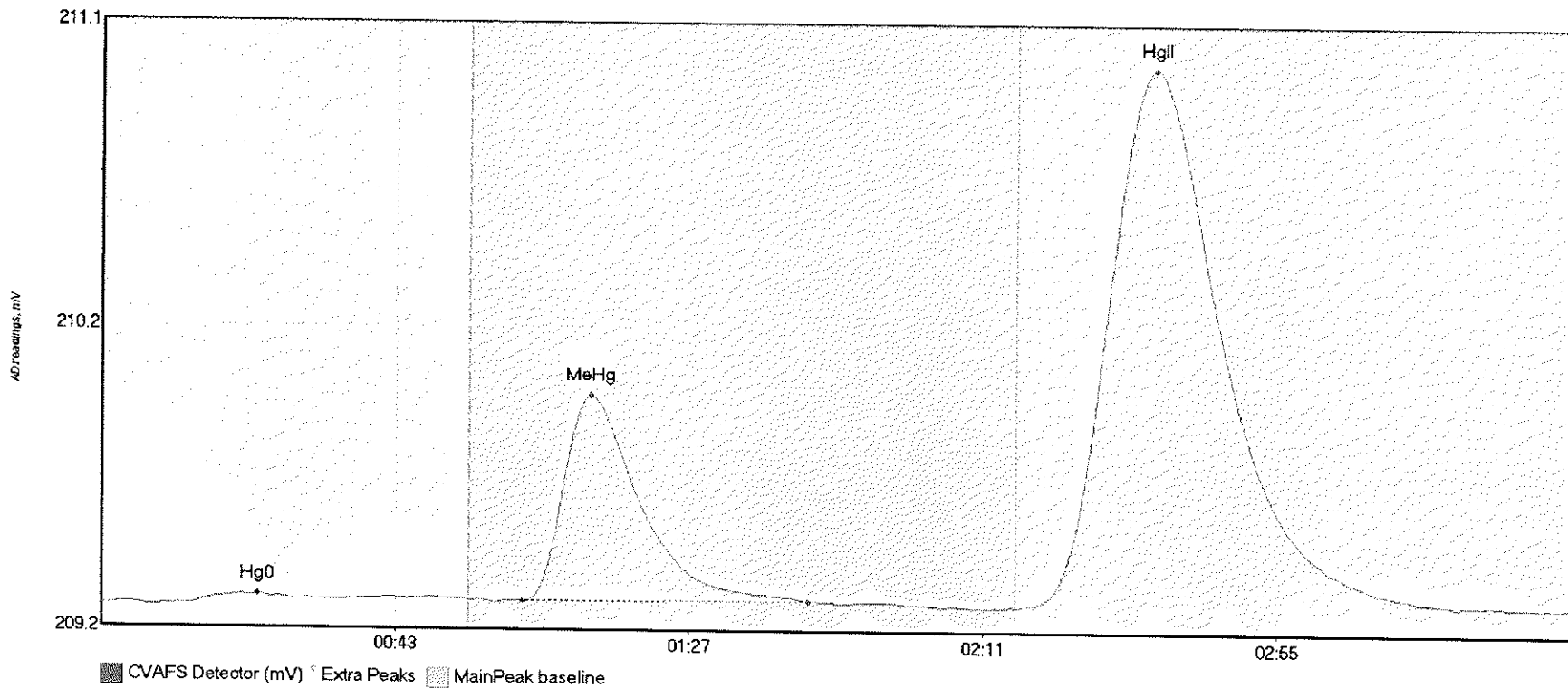
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1707771-35RE1 H	3.272	14.4	54.8	209.30	209.32	51.6	0.030	OK	209.2937	0.00	0.03	
1707771-35RE1 M	68.097	63.1	101.1	209.32	209.32	73.1	0.534	OK	209.2937	0.00	0.03	
1707771-35RE1 H	505.596	138.2	218.6	209.30	209.33	157.6	2.553	OK	209.2937	0.00	0.03	

#76: 1707771-36RE1



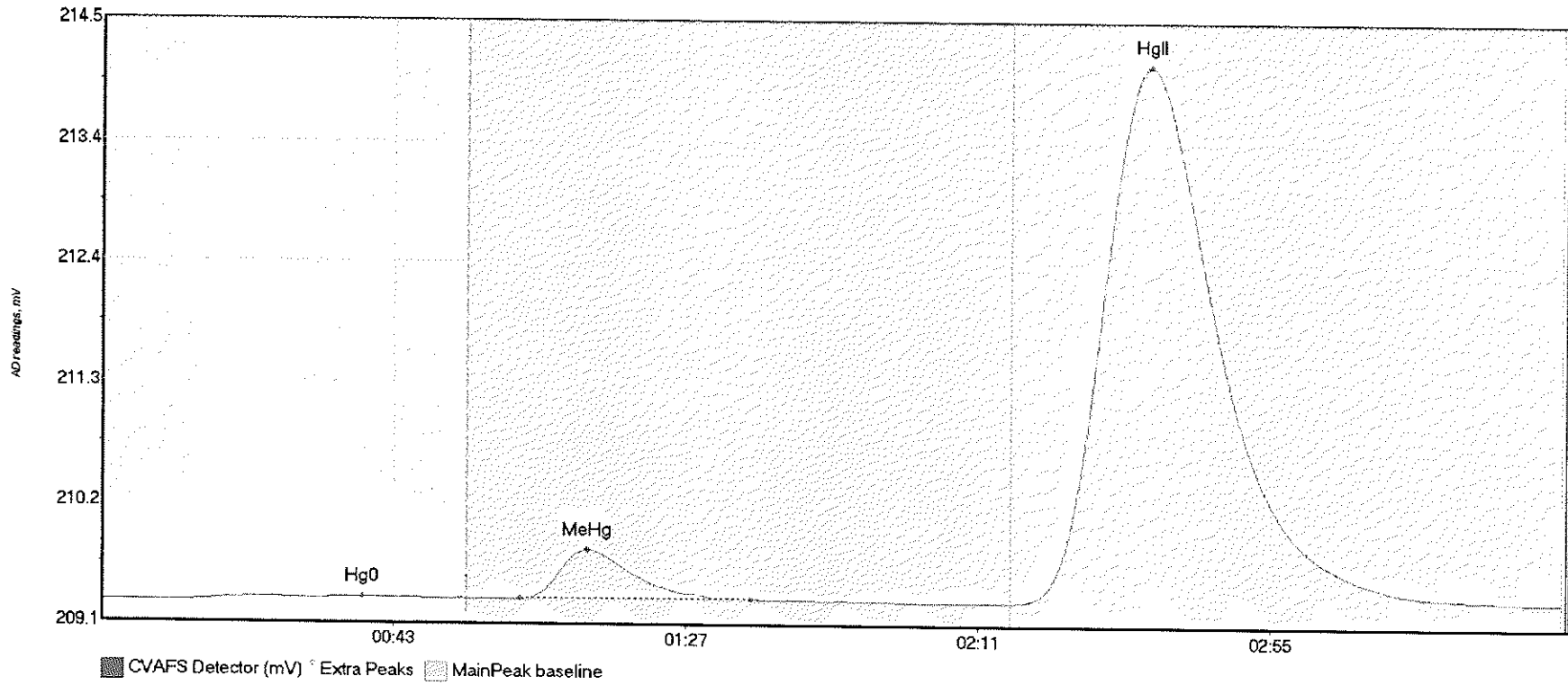
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1707771-36RE1 H	4.809	11.9	48.1	209.31	209.34	43.8	0.033	OK	209.3113	0.00	0.02	
1707771-36RE1 M	80.102	62.8	98.8	209.33	209.34	73.3	0.629	OK	209.3113	0.00	0.02	
1707771-36RE1 H	711.618	137.7	219.0	209.33	209.33	157.6	3.606	OK	209.3113	0.00	0.02	

#77:1707771-37RE1



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1707771-37RE1 H	2.635	13.4	33.6	209.32	209.33	23.5	0.029	OK	209.3155	0.00	0.01	
1707771-37RE1 M	83.078	63.0	105.9	209.33	209.34	73.1	0.632	OK	209.3155	0.00	0.01	
1707771-37RE1 H	323.487	137.0	217.5	209.32	209.33	157.6	1.644	OK	209.3155	0.00	0.01	

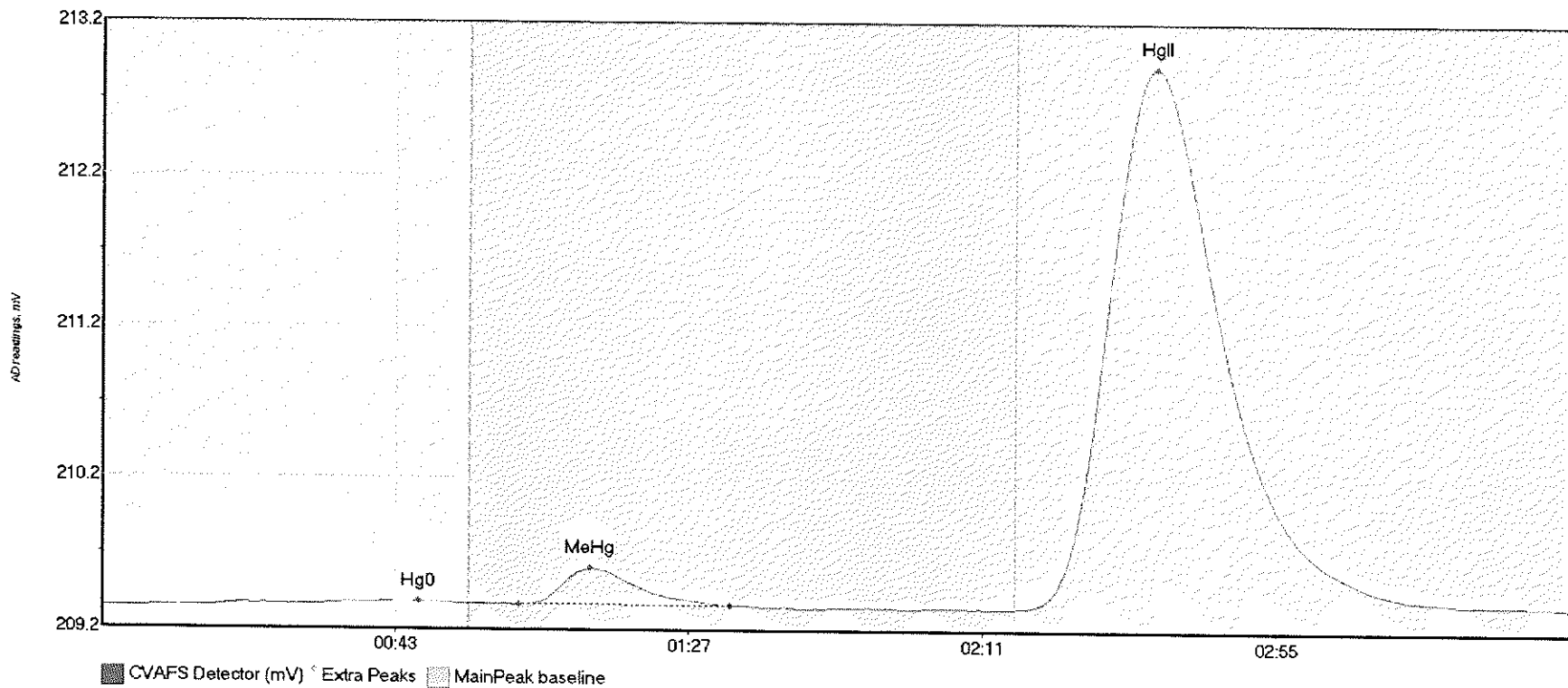
#78: 1707771-38RE1



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1707771-38RE1 H	5.458	12.9	49.4	209.31	209.34	39.3	0.038	OK	209.3153	0.00	0.04	
1707771-38RE1 M	54.819	63.0	97.7	209.34	209.35	73.2	0.440	OK	209.3153	0.00	0.04	
1707771-38RE1 H	954.660	138.1	218.2	209.33	209.35	157.8	4.800	OK	209.3153	0.00	0.04	

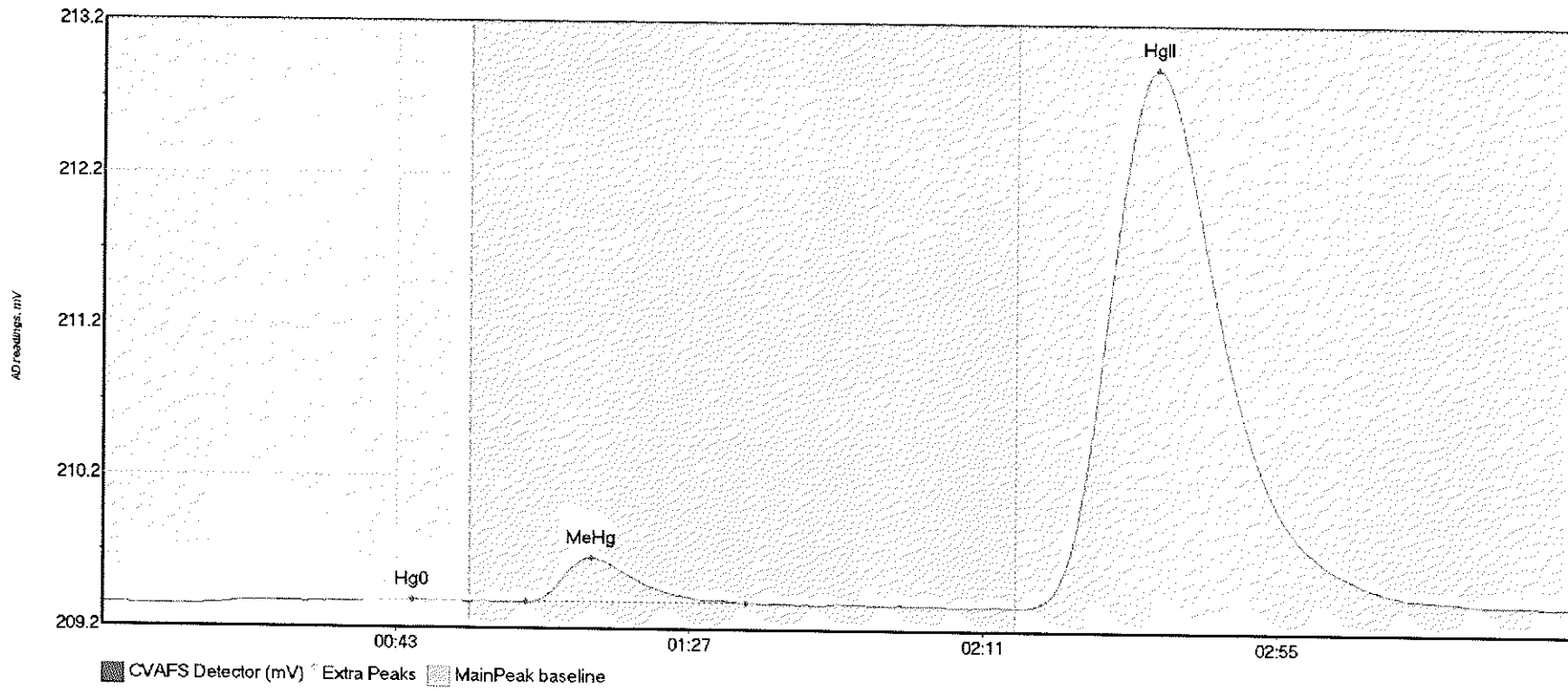


#79: 1707771-39RE1



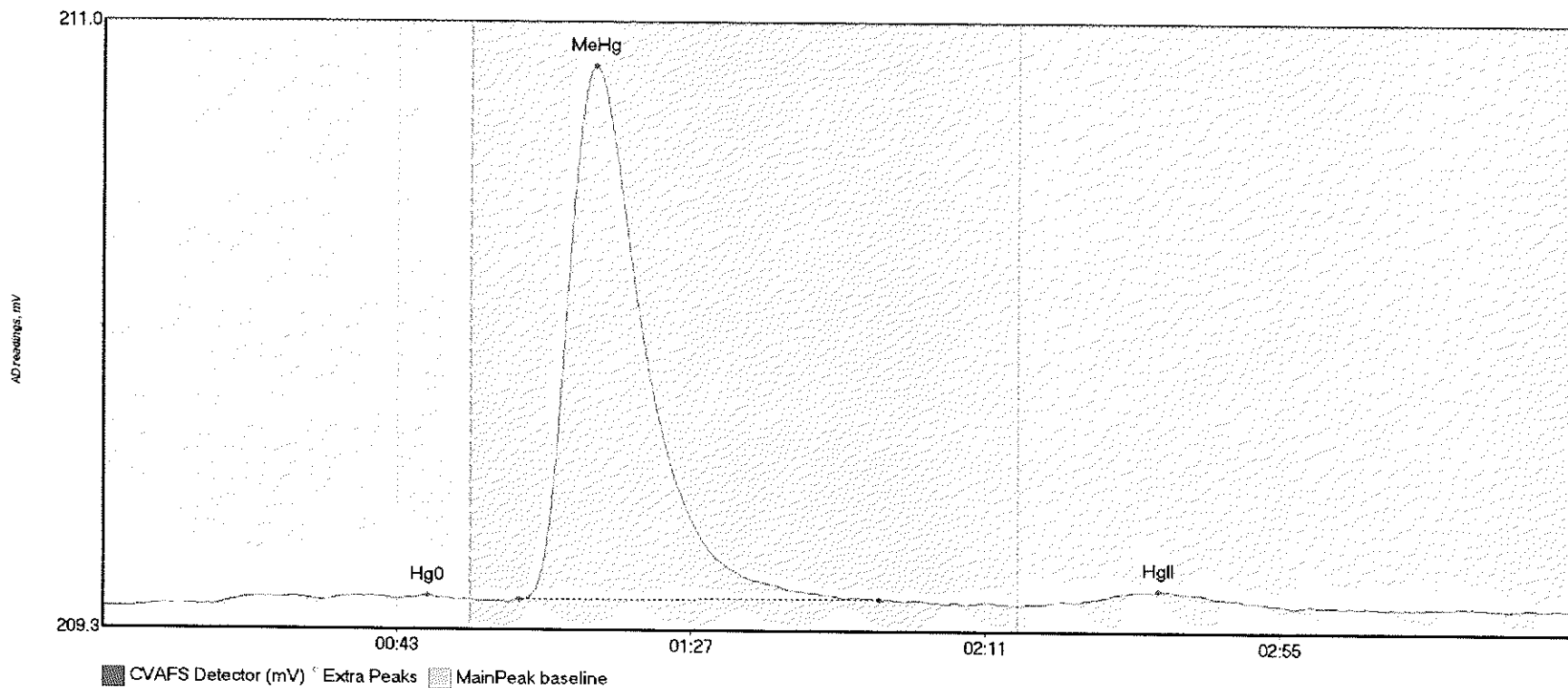
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BiDev	BiShift	Comment
1707771-39RE1 H	4.172	13.8	53.7	209.34	209.36	47.4	0.033	OK	209.3337	0.00	0.02	
1707771-39RE1 M	30.402	62.5	94.1	209.36	209.35	73.2	0.241	OK	209.3337	0.00	0.02	
1707771-39RE1 H	711.201	136.8	219.8	209.34	209.36	157.7	3.590	CF	209.3337	0.00	0.02	

#80: 1707771-40RE1



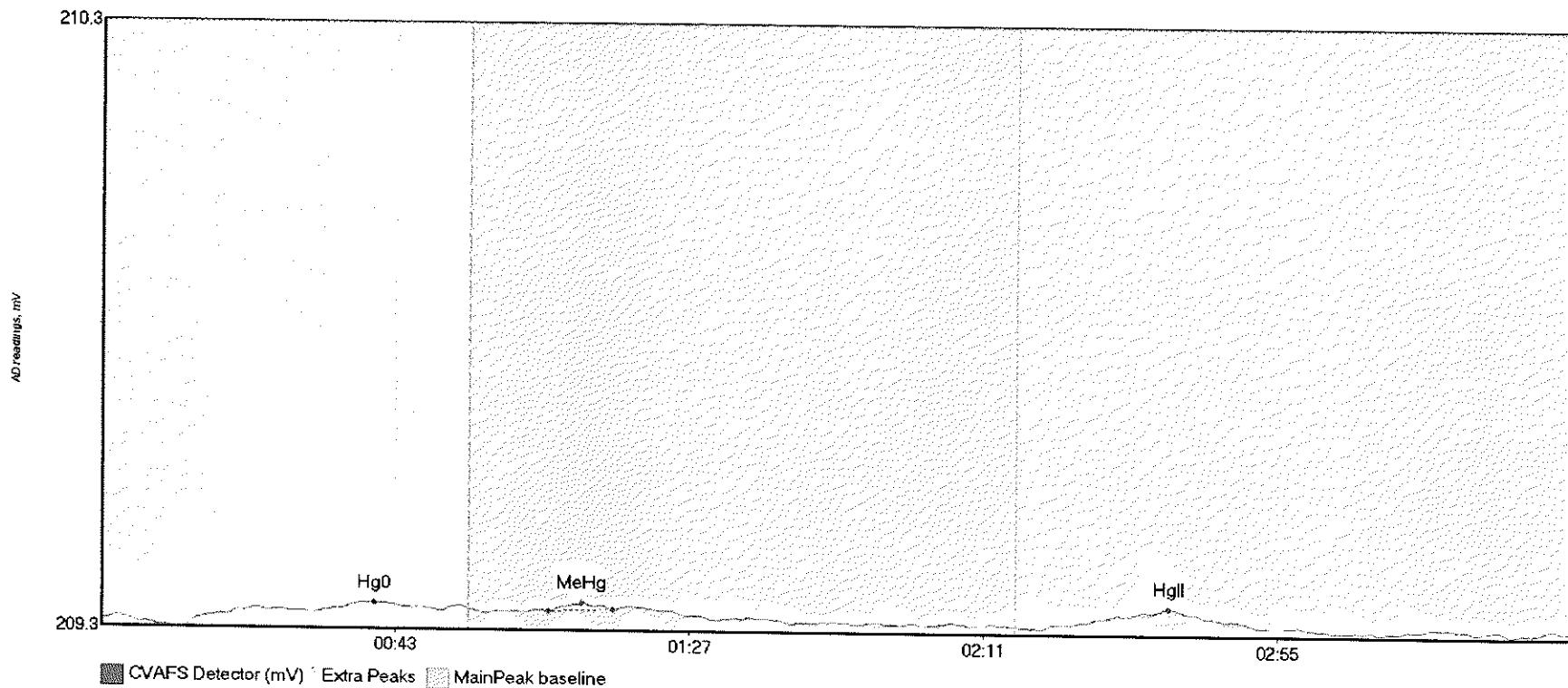
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1707771-40RE1 H	4.101	17.0	54.8	209.34	209.36	46.5	0.030	OK	209.3435	0.00	0.03	
1707771-40RE1 M	36.834	63.5	96.4	209.36	209.37	73.3	0.296	OK	209.3435	0.00	0.03	
1707771-40RE1 H	717.271	137.5	219.8	209.35	209.37	157.8	3.599	CT	209.3435	0.00	0.03	

#81: SEQ-CCV6



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BiDev	BiShift	Comment
SEQ-CCV6 Hg0	4.815	5.5	53.1	209.34	209.36	48.6	0.032	OK	209.3409	0.00	0.01	
SEQ-CCV6 MeHg	200.329	62.3	116.2	209.36	209.37	73.6	1.507	OK	209.3409	0.00	0.01	
SEQ-CCV6 HgII	6.685	140.3	174.8	209.36	209.36	157.9	0.039	OK	209.3409	0.00	0.01	

#82: SEQ-CCB6



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CCB6 Hg0	5.565	12.0	51.0	209.34	209.37	40.8	0.041	OK	209.3521	0.00	0.00	
SEQ-CCB6 MeHg	0.653	66.9	76.5	209.37	209.37	71.9	0.014	OK	209.3521	0.00	0.00	
SEQ-CCB6 HgII	4.076	144.7	173.0	209.35	209.35	159.7	0.029	OK	209.3521	0.00	0.00	



Frontier Global Sciences

# MHg27001-170810-1

## Analysis Datasheet for Methyl Mercury in Soil/Tissue

Date of Analysis: August 10, 2017

Instrument #: Hg2700-1

LIMS Sequence #: 7H11011

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	23.51 units	470.29	23.51 units	470.29	105.8 %Rec
SEQ-CAL2	1	0.20 ng/L	81.07 units	405.35	81.07 units	405.35	91.2 %Rec
SEQ-CAL3	1	1.00 ng/L	444.82 units	444.82	444.82 units	444.82	100.1 %Rec
SEQ-CAL4	1	2.00 ng/L	860.29 units	430.14	860.29 units	430.14	96.8 %Rec
SEQ-CAL5	1	4.00 ng/L	1883.64 units	470.91	1883.64 units	470.91	106.0 %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**  
 444.30            +/- 27.85            6.3% RSD            444.30

### 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	0.626 ng/L	±0.708
BLK	2	3	0.669 ng/L	±1.158
BLK	3	3	2.269 ng/L	±1.159
BLK	4	3	0.000 ng/L	±0.000
BLK	5	0	0.000 ng/L	

QUALITY ASSURANCE  
PEER-REVIEWED

INITIALS:   a   8/12/17

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	8/10/17 9:01	24899-1.RAW	9:01:34	0.00			0.0	0.000	0.000	ng/L	
Hg2700-1	DM2	CAL	SEQ-CAL1	1	8/10/17 9:12	24900-1.RAW	9:12:04	23.51			23.5	0.053	0.053	ng/L	
Hg2700-1	DM2	CAL	SEQ-CAL2	1	8/10/17 9:22	24901-1.RAW	9:22:35	81.07			81.1	0.182	0.182	ng/L	
Hg2700-1	DM2	CAL	SEQ-CAL3	1	8/10/17 9:33	24902-1.RAW	9:33:06	444.82			444.8	1.001	1.001	ng/L	
Hg2700-1	DM2	CAL	SEQ-CAL4	1	8/10/17 9:43	24903-1.RAW	9:43:36	860.29			860.3	1.936	1.936	ng/L	
Hg2700-1	DM2	CAL	SEQ-CAL5	1	8/10/17 9:54	24904-1.RAW	9:54:07	1883.64			1883.6	4.240	4.240	ng/L	
Hg2700-1	DM2	CAL	SEQ-ICV1	1	8/10/17 10:04	24905-1.RAW	10:04:38	222.00			222.0	0.500	0.500	ng/L	
Hg2700-1	DM2	CAL	SEQ-ICB1	1	8/10/17 10:15	24906-1.RAW	10:15:08	1.74			1.7	0.004	0.004	ng/L	
Hg2700-1	DM2	BLK	F708268-BLK4	500	8/10/17 10:25	24907-1.RAW	10:25:39	1.24		1	1.2	0.003	1.394	ng/L	
Hg2700-1	DM2	BLK	F708268-BLK5	500	8/10/17 10:36	24908-1.RAW	10:36:10	0.00		1	0.0	0.000	0.000	ng/L	
Hg2700-1	DM2	BLK	F708268-BLK6	500	8/10/17 10:46	24909-1.RAW	10:46:41	0.43		1	0.4	0.001	0.485	ng/L	
Hg2700-1	DM2	SAM	1707706-01RE1	2500	8/10/17 10:57	24910-1.RAW	10:57:11	1317.15		1	1317.2	2.964	7410.707	ng/L	
Hg2700-1	DM2	SAM	1707706-02RE1	2500	8/10/17 11:07	24911-1.RAW	11:07:42	1305.53		1	1305.5	2.938	7345.277	ng/L	
Hg2700-1	DM2	SAM	1707706-03RE1	2500	8/10/17 11:18	24912-1.RAW	11:18:12	404.00		1	404.0	0.909	2272.609	ng/L	
Hg2700-1	DM2	SAM	1707737-01RE1	500	8/10/17 11:28	24913-1.RAW	11:28:43	64.79		1	64.8	0.145	72.282	ng/L	
Hg2700-1	DM2	BLK	F708293-BLK7	500	8/10/17 11:39	24914-1.RAW	11:39:14	1.78		2	1.8	0.004	2.006	ng/L	
Hg2700-1	DM2	BLK	F708293-BLK8	500	8/10/17 11:49	24915-1.RAW	11:49:44	0.00		2	0.0	0.000	0.000	ng/L	
Hg2700-1	DM2	BLK	F708293-BLK9	500	8/10/17 12:00	24916-1.RAW	12:00:15	0.00		2	0.0	0.000	0.000	ng/L	
Hg2700-1	DM2	CAL	SEQ-CCV1	1	8/10/17 12:10	24917-1.RAW	12:10:46	207.43			207.4	0.467	0.467	ng/L	
Hg2700-1	DM2	CAL	SEQ-CCB1	1	8/10/17 12:21	24918-1.RAW	12:21:17	1.36			1.4	0.003	0.003	ng/L	
Hg2700-1	DM2	SAM	F708293-MS3	500	8/10/17 12:31	24919-1.RAW	12:31:47	1171.83		2	1171.8	2.636	1318.056	ng/L	
Hg2700-1	DM2	SAM	F708293-MSD3	500	8/10/17 12:42	24920-1.RAW	12:42:18	1125.28		2	1125.3	2.531	1265.676	ng/L	
Hg2700-1	DM2	BLK	F707568-BLK1	500	8/10/17 12:52	24921-1.RAW	12:52:49	3.20		3	3.2	0.007	3.605	ng/L	
Hg2700-1	DM2	BLK	F707568-BLK2	500	8/10/17 13:03	24922-1.RAW	13:03:19	1.36		3	1.4	0.003	1.529	ng/L	
Hg2700-1	DM2	BLK	F707568-BLK3	500	8/10/17 13:13	24923-1.RAW	13:13:50	1.49		3	1.5	0.003	1.673	ng/L	
Hg2700-1	DM2	SAM	F707568-BS1	1000	8/10/17 13:24	24924-1.RAW	13:24:21	842.72		3	842.7	1.894	1894.443	ng/L	
Hg2700-1	DM2	SAM	F707568-BSD1	1000	8/10/17 13:34	24925-1.RAW	13:34:51	839.03		3	839.0	1.886	1886.156	ng/L	
Hg2700-1	DM2	SAM	F707568-DUP1	500	8/10/17 13:45	24926-1.RAW	13:45:22	64.97		3	65.0	0.142	70.842	ng/L	
Hg2700-1	DM2	SAM	F707568-MS1	500	8/10/17 13:55	24927-1.RAW	13:55:53	485.03		3	485.0	1.087	543.559	ng/L	
Hg2700-1	DM2	SAM	F707568-MSD1	500	8/10/17 14:06	24928-1.RAW	14:06:23	469.64		3	469.6	1.052	526.247	ng/L	
Hg2700-1	DM2	CAL	SEQ-CCV2	1	8/10/17 14:16	24929-1.RAW	14:16:54	206.82			206.8	0.466	0.466	ng/L	
Hg2700-1	DM2	CAL	SEQ-CCB2	1	8/10/17 14:27	24930-1.RAW	14:27:25	1.62			1.6	0.004	0.004	ng/L	
Hg2700-1	DM2	SAM	F707568-MS2	500	8/10/17 14:37	24931-1.RAW	14:37:56	502.70		3	502.7	1.127	563.443	ng/L	
Hg2700-1	DM2	SAM	F707568-MSD2	500	8/10/17 14:48	24932-1.RAW	14:48:27	556.74		3	556.7	1.249	624.263	ng/L	
Hg2700-1	DM2	SAM	1707771-41	500	8/10/17 14:58	24933-1.RAW	14:58:58	34.09		3	34.1	0.072	36.093	ng/L	
Hg2700-1	DM2	SAM	1707771-42	500	8/10/17 15:09	24934-1.RAW	15:09:29	41.98		3	42.0	0.090	44.976	ng/L	
Hg2700-1	DM2	SAM	1707771-43	500	8/10/17 15:19	24935-1.RAW	15:19:59	26.84		3	26.8	0.056	27.934	ng/L	
Hg2700-1	DM2	SAM	1707771-44	500	8/10/17 15:30	24936-1.RAW	15:30:30	27.63		3	27.6	0.058	28.820	ng/L	
Hg2700-1	DM2	SAM	1707771-45	500	8/10/17 15:41	24937-1.RAW	15:41:01	26.23		3	26.2	0.055	27.254	ng/L	
Hg2700-1	DM2	SAM	1707771-46	500	8/10/17 15:51	24938-1.RAW	15:51:32	18.10		3	18.1	0.036	18.103	ng/L	
Hg2700-1	DM2	SAM	1707771-87	500	8/10/17 16:02	24939-1.RAW	16:02:02	42.11		3	42.1	0.090	45.117	ng/L	
Hg2700-1	DM2	SAM	1707771-88	500	8/10/17 16:12	24940-1.RAW	16:12:33	42.95		3	42.9	0.092	46.064	ng/L	
Hg2700-1	DM2	CAL	SEQ-CCV3	1	8/10/17 16:23	24941-1.RAW	16:23:04	192.00			192.0	0.432	0.432	ng/L	
Hg2700-1	DM2	CAL	SEQ-CCB3	1	8/10/17 16:33	24942-1.RAW	16:33:35	0.00			0.0	0.000	0.000	ng/L	
Hg2700-1	DM2	SAM	1707771-89	500	8/10/17 16:44	24943-1.RAW	16:44:05	48.10		3	48.1	0.104	51.865	ng/L	
Hg2700-1	DM2	SAM	1707771-90	500	8/10/17 16:54	24944-1.RAW	16:54:36	62.05		3	62.0	0.135	67.555	ng/L	

Instrument		Analyst		Sample		Dilution	Analyzed	FileID	Run End	Uncorrected Response	Batch ID	No PB Correction?	RESP	InitialResult	FinalResult	InitialUnits	Comments
Hg2700-1	DM2	SAM	1707771-AB	500	8/10/17 17:05	24945-1.RAW	17:05:07	69.84	3	69.8	0.153	76.322	ng/L				
Hg2700-1	DM2	SAM	1707771-AC	500	8/10/17 17:15	24946-1.RAW	17:15:38	44.08	3	44.1	0.095	47.341	ng/L				
Hg2700-1	DM2	SAM	1707771-AJ	500	8/10/17 17:26	24947-1.RAW	17:26:08	50.83	3	50.8	0.110	54.930	ng/L				
Hg2700-1	DM2	SAM	1707771-AK	500	8/10/17 17:36	24948-1.RAW	17:36:39	65.34	3	65.3	0.143	71.267	ng/L				
Hg2700-1	DM2	SAM	1707771-AL	500	8/10/17 17:47	24949-1.RAW	17:47:10	64.74	3	64.7	0.141	70.592	ng/L				
Hg2700-1	DM2	SAM	1707771-AM	500	8/10/17 17:57	24950-1.RAW	17:57:40	73.55	3	73.6	0.161	80.502	ng/L				
Hg2700-1	DM2	SAM	1707771-AN	500	8/10/17 18:08	24951-1.RAW	18:08:11	48.89	3	48.9	0.105	52.745	ng/L				
Hg2700-1	DM2	SAM	1707771-AO	500	8/10/17 18:18	24952-1.RAW	18:18:42	30.72	3	30.7	0.065	32.300	ng/L				
Hg2700-1	DM2	CAL	SEQ-CCV4	1	8/10/17 18:29	24953-1.RAW	18:29:13	211.85		211.8	0.477	0.477	ng/L				
Hg2700-1	DM2	CAL	SEQ-CCB4	1	8/10/17 18:39	24954-1.RAW	18:39:44	0.00		0.0	0.000	0.000	ng/L				
Hg2700-1	DM2	SAM	1707771-AR	500	8/10/17 18:50	24955-1.RAW	18:50:14	105.75	3	105.7	0.233	116.736	ng/L				
Hg2700-1	DM2	SAM	1707771-AS	500	8/10/17 19:00	24956-1.RAW	19:00:45	101.22	3	101.2	0.223	111.636	ng/L				
Hg2700-1	DM2	BLK	F707569-BLK1	500	8/10/17 19:11	24957-1.RAW	19:11:16	0.00	4	0.0	0.000	0.000	ng/L				
Hg2700-1	DM2	BLK	F707569-BLK2	500	8/10/17 19:21	24958-1.RAW	19:21:46	0.00	4	0.0	0.000	0.000	ng/L				
Hg2700-1	DM2	BLK	F707569-BLK3	500	8/10/17 19:32	24959-1.RAW	19:32:17	0.00	4	0.0	0.000	0.000	ng/L				
Hg2700-1	DM2	SAM	F707569-BS1	1000	8/10/17 19:42	24960-1.RAW	19:42:48	814.69	4	814.7	1.834	1833.639	ng/L				
Hg2700-1	DM2	SAM	F707569-BSD1	1000	8/10/17 19:53	24961-1.RAW	19:53:19	755.48	4	755.5	1.700	1700.364	ng/L				
Hg2700-1	DM2	SAM	F707569-DUP1	500	8/10/17 20:03	24962-1.RAW	20:03:49	26.43	4	26.4	0.059	29.746	ng/L				
Hg2700-1	DM2	SAM	F707569-MS1	500	8/10/17 20:14	24963-1.RAW	20:14:20	516.93	4	516.9	1.163	581.727	ng/L				
Hg2700-1	DM2	SAM	F707569-MSD1	500	8/10/17 20:24	24964-1.RAW	20:24:51	520.87	4	520.9	1.172	586.170	ng/L				
Hg2700-1	DM2	CAL	SEQ-CCV5	1	8/10/17 20:35	24965-1.RAW	20:35:22	218.74		218.7	0.492	0.492	ng/L				
Hg2700-1	DM2	CAL	SEQ-CCB5	1	8/10/17 20:45	24966-1.RAW	20:45:52	1.23		1.2	0.003	0.003	ng/L				
Hg2700-1	DM2	SAM	F707569-MS2	500	8/10/17 20:56	24967-1.RAW	20:56:23	572.86	4	572.9	1.289	644.677	ng/L				
Hg2700-1	DM2	SAM	F707569-MSD2	500	8/10/17 21:06	24968-1.RAW	21:06:54	464.91	4	464.9	1.046	523.187	ng/L				
Hg2700-1	DM2	SAM	1707771-AT	500	8/10/17 21:17	24969-1.RAW	21:17:25	134.60	4	134.6	0.303	151.473	ng/L				
Hg2700-1	DM2	SAM	1707771-AU	500	8/10/17 21:27	24970-1.RAW	21:27:55	29.28	4	29.3	0.066	32.948	ng/L				
Hg2700-1	DM2	SAM	1707771-AX	500	8/10/17 21:38	24971-1.RAW	21:38:26	30.91	4	30.9	0.070	34.787	ng/L				
Hg2700-1	DM2	SAM	1707771-AY	500	8/10/17 21:48	24972-1.RAW	21:48:57	12.57	4	12.6	0.028	14.142	ng/L				
Hg2700-1	DM2	SAM	1707771-BF	500	8/10/17 21:59	24973-1.RAW	21:59:28	57.96	4	58.0	0.130	65.225	ng/L				
Hg2700-1	DM2	SAM	1707771-BG	500	8/10/17 22:09	24974-1.RAW	22:09:58	8.94	4	8.9	0.020	10.063	ng/L				
Hg2700-1	DM2	SAM	1707771-BH	500	8/10/17 22:20	24975-1.RAW	22:20:29	52.23	4	52.2	0.118	58.775	ng/L				
Hg2700-1	DM2	SAM	1707771-BI	500	8/10/17 22:31	24976-1.RAW	22:31:00	60.45	4	60.4	0.136	68.026	ng/L				
Hg2700-1	DM2	CAL	SEQ-CCV6	1	8/10/17 22:41	24977-1.RAW	22:41:30	217.18		217.2	0.489	0.489	ng/L				
Hg2700-1	DM2	CAL	SEQ-CCB6	1	8/10/17 22:52	24978-1.RAW	22:52:01	0.00		0.0	0.000	0.000	ng/L				
Hg2700-1	DM2	SAM	1707771-BJ	500	8/10/17 23:02	24979-1.RAW	23:02:32	52.03	4	52.0	0.117	58.553	ng/L				
Hg2700-1	DM2	SAM	1707771-BK	500	8/10/17 23:13	24980-1.RAW	23:13:03	34.91	4	34.9	0.079	39.286	ng/L				
Hg2700-1	DM2	SAM	1707771-BN	500	8/10/17 23:23	24981-1.RAW	23:23:33	62.16	4	62.2	0.140	69.949	ng/L				
Hg2700-1	DM2	SAM	1707771-BO	500	8/10/17 23:34	24982-1.RAW	23:34:04	66.71	4	66.7	0.150	75.070	ng/L				
Hg2700-1	DM2	SAM	1707771-BP	500	8/10/17 23:44	24983-1.RAW	23:44:33	173.80	4	173.8	0.391	195.587	ng/L				
Hg2700-1	DM2	SAM	1707771-BQ	500	8/10/17 23:55	24984-1.RAW	23:55:04	76.59	4	76.6	0.172	86.195	ng/L				
Hg2700-1	DM2	SAM	1707771-BR	500	8/10/17 0:05	24985-1.RAW	0:05:34	63.49	4	63.5	0.143	71.446	ng/L				
Hg2700-1	DM2	SAM	1707771-BS	500	8/10/17 0:16	24986-1.RAW	0:16:05	65.76	4	65.8	0.148	74.005	ng/L				
Hg2700-1	DM2	SAM	1707771-BT	500	8/10/17 0:26	24987-1.RAW	0:26:36	44.04	4	44.0	0.099	49.556	ng/L				
Hg2700-1	DM2	SAM	1707771-BU	500	8/10/17 0:37	24988-1.RAW	0:37:06	66.90	4	66.9	0.151	75.292	ng/L				
Hg2700-1	DM2	CAL	SEQ-CCV7	1	8/10/17 0:47	24989-1.RAW	0:47:37	211.68		211.7	0.476	0.476	ng/L				
Hg2700-1	DM2	CAL	SEQ-CCB7	1	8/10/17 0:58	24990-1.RAW	0:58:08	0.00		0.0	0.000	0.000	ng/L				
Hg2700-1	DM2	SAM	1707771-BZ	500	8/10/17 1:08	24991-1.RAW	1:08:39	28.67	4	28.7	0.065	32.259	ng/L				
Hg2700-1	DM2	SAM	1707771-CA	500	8/10/17 1:19	24992-1.RAW	1:19:09	32.34	4	32.3	0.073	36.392	ng/L				
Hg2700-1	DM2	CAL	SEQ-CCV8	1	8/10/17 1:29	24993-1.RAW	1:29:40	183.91		183.9	0.414	0.414	ng/L				
Hg2700-1	DM2	CAL	SEQ-CCB8	1	8/10/17 1:40	24994-1.RAW	1:40:11	0.74		0.7	0.002	0.002	ng/L				

\* Analyzed on 8/11/17  
DM

## ANALYSIS SEQUENCE

7H11011

Instrument: Hg2700-1

Calibration ID: UNASSIGNED

Analyzed: 8/10/2017

Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
7H11011-IBL1	QC	1			
7H11011-CAL1	QC	2	1704180		
7H11011-CAL2	QC	3	1704181		
7H11011-CAL3	QC	4	1704182		
7H11011-CAL4	QC	5	1704183		
7H11011-CAL5	QC	6	1704184		
7H11011-ICV1	QC	7	1703246		
7H11011-ICB1	QC	8			
F708268-BLK4	QC	9			
F708268-BLK5	QC	10			
F708268-BLK6	QC	11			
1707706-01RE1	MHg-CVAFS-T-KOH	12			Added 8/10/2017 by DM2
1707706-02RE1	MHg-CVAFS-T-KOH	13			Added 8/10/2017 by DM2
1707706-03RE1	MHg-CVAFS-T-KOH	14			Added 8/10/2017 by DM2
1707737-01RE1	MHg-CVAFS-S-KOH	15			Added 8/10/2017 by DM2
1707737-01RE1	MHg-CVAFS-T-KOH	16			Added 8/11/2017 by DM2
F708293-BLK7	QC	17			
F708293-BLK8	QC	18			
F708293-BLK9	QC	19			
7H11011-CCV1	QC	20	1703246		
7H11011-CCB1	QC	21			
F708293-MS3	QC	22			
F708293-MSD3	QC	23			
F707568-BLK1	QC	24			
F707568-BLK2	QC	25			
F707568-BLK3	QC	26			
F707568-BS1	QC	27			
F707568-BSD1	QC	28			
F707568-DUPI	QC	29			
F707568-MS1	QC	30			
F707568-MSD1	QC	31			
7H11011-CCV2	QC	32	1703246		
7H11011-CCB2	QC	33			
F707568-MS2	QC	34			
F707568-MSD2	QC	35			

Due Date: 8/21/2017

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## ANALYSIS SEQUENCE

7H11011

Instrument: Hg2700-1

Calibration ID: UNASSIGNED

Analyzed: 8/10/2017

Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
1707771-41 ✓	MHg-CVAFS-S-KOH	36			
1707771-42 ✓	MHg-CVAFS-S-KOH	37			
1707771-43 ✓	MHg-CVAFS-S-KOH	38			
1707771-44 ✓	MHg-CVAFS-S-KOH	39			
1707771-45 ✓	MHg-CVAFS-S-KOH	40			
1707771-46 ✓	MHg-CVAFS-S-KOH	41			
1707771-87 ✓	MHg-CVAFS-S-KOH	42			
1707771-88 ✓	MHg-CVAFS-S-KOH	43			
7H11011-CCV3 ✓	QC	44	1703246 ✓		
7H11011-CCB3 ✓	QC	45			
1707771-89 ✓	MHg-CVAFS-S-KOH	46			
1707771-90 ✓	MHg-CVAFS-S-KOH	47			
1707771-AB ✓	MHg-CVAFS-S-KOH	48			
1707771-AC ✓	MHg-CVAFS-S-KOH	49			
1707771-AJ ✓	MHg-CVAFS-S-KOH	50			
1707771-AK ✓	MHg-CVAFS-S-KOH	51			
1707771-AL ✓	MHg-CVAFS-S-KOH	52			
1707771-AM ✓	MHg-CVAFS-S-KOH	53			
1707771-AN ✓	MHg-CVAFS-S-KOH	54			
1707771-AO ✓	MHg-CVAFS-S-KOH	55			
7H11011-CCV4 ✓	QC	56	1703246 ✓		
7H11011-CCB4 ✓	QC	57			
1707771-AR ✓	MHg-CVAFS-S-KOH	58			
1707771-AS ✓	MHg-CVAFS-S-KOH	59			
F707569-BLK1 ✓	QC	60			
F707569-BLK2 ✓	QC	61			
F707569-BLK3 ✓	QC	62			
F707569-BS1 ✓	QC	63			
F707569-BSD1 ✓	QC	64			
F707569-DUP1 ✓	QC	65			
F707569-MS1 ✓	QC	66			
F707569-MSD1 ✓	QC	67			
7H11011-CCV5 ✓	QC	68	1703246 ✓		
7H11011-CCB5 ✓	QC	69			
F707569-MS2 ✓	QC	70			

Due Date: 8/21/2017

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**ANALYSIS SEQUENCE**

**7H11011**

**Instrument: Hg2700-1**

**Calibration ID: UNASSIGNED**

**Analyzed: 8/10/2017**

Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
F707569-MSD2 .	QC	71			
1707771-AF .	MHg-CVAFS-S-KOH	72			
1707771-AU .	MHg-CVAFS-S-KOH	73			
1707771-AX .	MHg-CVAFS-S-KOH	74			
1707771-AY .	MHg-CVAFS-S-KOH	75			
1707771-BF .	MHg-CVAFS-S-KOH	76			
1707771-BG .	MHg-CVAFS-S-KOH	77			
1707771-BH .	MHg-CVAFS-S-KOH	78			
1707771-BI .	MHg-CVAFS-S-KOH	79			
7H11011-CCV6 .	QC	80	1703246		
7H11011-CCB6 .	QC	81			
1707771-BJ .	MHg-CVAFS-S-KOH	82			
1707771-BK .	MHg-CVAFS-S-KOH	83			
1707771-BN .	MHg-CVAFS-S-KOH	84			
1707771-BO .	MHg-CVAFS-S-KOH	85			
1707771-BP .	MHg-CVAFS-S-KOH	86			
1707771-BQ .	MHg-CVAFS-S-KOH	87			
1707771-BR .	MHg-CVAFS-S-KOH	88			
1707771-BS .	MHg-CVAFS-S-KOH	89			
1707771-BT .	MHg-CVAFS-S-KOH	90			
1707771-BU .	MHg-CVAFS-S-KOH	91			
7H11011-CCV7 .	QC	92	1703246		
7H11011-CCB7 .	QC	93			
1707771-BZ .	MHg-CVAFS-S-KOH	94			
1707771-CA .	MHg-CVAFS-S-KOH	95			
7H11011-CCV8 .	QC	96	1703246		
7H11011-CCB8 .	QC	97			

Dan Moxem      8/10/17  
 Samples Loaded By      Date

Dan Moxem      8/11/17  
 Data Processed By      Date

**PREPARATION BENCH SHEET**

F708268

**Eurofins Frontier Global Sciences, Inc.**

**Matrix: Tissue**

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

**Prepared: 8/4/2017**

Lab Number	Sample ID and Source Sample	Initial (g)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F708268-BLK1	Blank	0.25	20					
F708268-BLK2	Blank	0.25	20					
F708268-BLK3	Blank	0.25	20					
F708268-BLK4	Blank	0.25	20					
F708268-BLK5	Blank	0.25	20					
F708268-BLK6	Blank	0.25	20					
F708268-BS1	DORM-4	0.1258	20	1703305	126			
F708268-BSD1	DORM-4 Dup	0.1253	20	1703305	125			
F708268-DUP1	Duplicate [1707737-01]	0.3026	20					
F708268-MS1	Matrix Spike [1707737-01]	0.2814	20	1605978	100			
F708268-MS2	Matrix Spike [1707810-35]	0.2876	20	1605978	100			
F708268-MSD1	Matrix Spike Dup [1707737-01]	0.3001	20	1605978	100			
F708268-MSD2	Matrix Spike Dup [1707810-35]	0.2919	20	1605978	100			

Standard ID(s):  
 1605978  
 1703305

Description:  
 MHg New Primary 100 ng/mL spike  
 DORM-4

Expiration:  
 15-Oct-17 00:00  
 29-May-20 00:00  
 29-May-20 00:00

Reagent ID(s):  
 1606119  
 1704399  
 1704424  
 1704707  
 1704725

Description:  
 Methanol, HPLC Grade  
 Ethylating Agent (For Methyl Mercury Analysis)  
 Boiling Chips for AFS prep  
 Acetate Buffer  
 25% KOH/Methanol

Expiration:  
 17-Oct-19 00:00  
 16-Jan-18 00:00  
 21-Jan-18 00:00  
 29-Jan-18 00:00  
 30-Jan-18 00:00

**PREPARATION BENCH SHEET**

F708268

**Eurofins Frontier Global Sciences, Inc.**

**Matrix: Tissue**

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

**Prepared: 8/4/2017**

Lab Number	Sample ID	Initial (g)	Final (mL)	QC Sample	Sample Specs.	Raw Data	Sample Comments	Analysis Comments
1707706-01	MMSE-1_17HC005_071917_SPI_03_WB	0.2727	20	-	-	-	Hold prep/analysis until Hg is complete	
1707706-01RE1	MMSE-1_17HC005_071917_SPI_03_WB	0.2727	20	-	-	-	Added 8/10/2017 by DM2	Added 8/10/2017 by DM2
1707706-02	MMSE-1_17HC005_071917_SPI_04_WB	0.1963	20	-	-	-	Hold prep/analysis until Hg is complete	
1707706-02RE1	MMSE-1_17HC005_071917_SPI_04_WB	0.1963	20	-	-	-	Added 8/10/2017 by DM2	Added 8/10/2017 by DM2
1707706-03	MMSE-1_17HC005_071917_SPI_05_WB	0.0806	20	-	-	-	Hold prep/analysis until Hg is complete	
1707706-03RE1	MMSE-1_17HC005_071917_SPI_05_WB	0.0806	20	-	-	-	Added 8/10/2017 by DM2	Added 8/10/2017 by DM2
1707737-01	MMSE-1_N2_072417_SED_00-01	0.292	20	-	-	-		
1707737-01RE1	MMSE-1_N2_072417_SED_00-01	0.292	20	-	-	-	Added 8/10/2017 by DM2	Added 8/10/2017 by DM2
1707737-02	MMSE-1_N2_072417_SED_01-03	0.3008	20	-	-	-		
1707737-03	MMSW-C_S_072417_SED_00-01	0.299	20	-	-	-		
1707737-04	MMSW-C_S_072417_SED_01-03	0.2902	20	-	-	-		
1707737-11	MMSW-C_SW_072517_SED_00-01	0.3059	20	-	-	-		
1707737-12	MMSW-C_SW_072517_SED_01-03	0.2895	20	-	-	-	Original jar broken, created container E	
1707737-13	W-21-UM-West-A_072517_SED_00-01	0.3085	20	-	-	-		
1707810-34	W-17-Intertidal_072517_SED_00-01	0.304	20	-	-	-		
1707810-35	W-17-Intertidal_072517_SED_01-03	0.2998	20	-	-	-	BatchQC	Added for BatchQC in: F708268
1707810-36	W-21-High_072517_SED_00-01	0.2801	20	-	-	-		
1707810-37	W-21-High_072517_SED_01-03	0.2802	20	-	-	-		
1707810-38	W-21-Intertidal_072517_SED_00-01	0.3148	20	-	-	-		

Due Date: 8/21/2017

**PREPARATION BENCH SHEET**

F708268

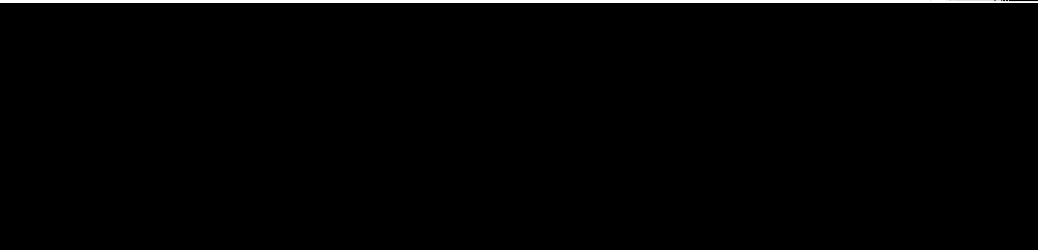
**Eurofins Frontier Global Sciences, Inc.**

**Matrix: Tissue**

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

**Prepared: 8/4/2017**

1707810-39	W-21-Intertidal_072517_SED_01-03	0.318	20	-	-	-		
1707810-40	W-21-Low_072517_SED_00-01	0.2868	20	-	-	-		
1707810-41	W-21-Low_072517_SED_01-03	0.3031	20	-	-	-		
1707810-42	W-21-Mid_072517_SED_00-01	0.2939	20	-	-	-		
1707810-43	W-21-Mid_072517_SED_01-03	0.3015	20	-	-	-		



PREPARATION BENCH SHEET

2700-1  
8/10/17 DM

F708268

Eurofins Frontier Global Sciences, Inc.

Matrix: Tissue

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

Prepared: 8/4/2017

Lab Number	Sample ID and Source Sample	Initial (g)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F708268-BLK1	Blank	0.25	20					
F708268-BLK2	Blank	0.25	20					
F708268-BLK3	Blank	0.25	20					
F708268-BLK4	Blank	0.5	20					500x
F708268-BLK5	Blank	0.5	20					500x
F708268-BLK6	Blank	0.5	20					500x
F708268-BS1	DORM-4	0.1258	20	1703305	126			
F708268-BSD1	DORM-4 Dup	0.1253	20	1703305	125			
F708268-DUP1	Duplicate [1707737-01]	0.3026	20					
F708268-MS1	Matrix Spike [1707737-01]	0.2814	20	1605978	100			
F708268-MS2	Matrix Spike [1707810-35]	0.2876	20	1605978	100			
F708268-MSD1	Matrix Spike Dup [1707737-01]	0.3001	20	1605978	100			
F708268-MSD2	Matrix Spike Dup [1707810-35]	0.2919	20	1605978	100			

Standard ID(s):  
1605978  
1703305

Description:  
MHg New Primary 100 ng/mL spike  
DORM-4

Expiration:  
15-Oct-17 00:00  
29-May-20 00:00  
29-May-20 00:00

Reagent ID(s):  
1606119  
1704399  
1704424  
1704707  
1704725

Description:  
Methanol, HPLC Grade  
Ethylating Agent (For Methyl Mercury Analysis)  
Boiling Chips for AFS prep  
Acetate Buffer  
25% KOH/Methanol

Expiration:  
17-Oct-19 00:00  
16-Jan-18 00:00  
21-Jan-18 00:00  
29-Jan-18 00:00  
30-Jan-18 00:00

PREPARATION BENCH SHEET

2700-1  
8/10/17 DM

F708268

Eurofins Frontier Global Sciences, Inc.

Matrix: Tissue

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

Prepared: 8/4/2017

Lab Number	Sample ID	Initial (g)	Final (mL)	QC Sample	Sample Specs.	Raw Data	Sample Comments	Analysis Comments
1707706-01	MMSE-1_17HC005_071917_SPI_03_WB	0.2727	20	-	-	-	Hold prep/analysis until Hg is complete	
1707706-01RE1	MMSE-1_17HC005_071917_SPI_03_WB	0.2727	20	-	-	-	Added 8/10/2017 by DM2	Added 8/10/2017 by DM2 2500X
1707706-02	MMSE-1_17HC005_071917_SPI_04_WB	0.1963	20	-	-	-	Hold prep/analysis until Hg is complete	
1707706-02RE1	MMSE-1_17HC005_071917_SPI_04_WB	0.1963	20	-	-	-	Added 8/10/2017 by DM2	Added 8/10/2017 by DM2 2500X
1707706-03	MMSE-1_17HC005_071917_SPI_05_WB	0.0806	20	-	-	-	Hold prep/analysis until Hg is complete	
1707706-03RE1	MMSE-1_17HC005_071917_SPI_05_WB	0.0806	20	-	-	-	Added 8/10/2017 by DM2	Added 8/10/2017 by DM2 2500X
1707737-01	MMSE-1_N2_072417_SED_00-01	0.292	20	-	-	-		
1707737-01RE1	MMSE-1_N2_072417_SED_00-01	0.292	20	-	-	-	Added 8/10/2017 by DM2	Added 8/10/2017 by DM2 500X
1707737-02	MMSE-1_N2_072417_SED_01-03	0.3008	20	-	-	-		
1707737-03	MMSW-C_S_072417_SED_00-01	0.299	20	-	-	-		
1707737-04	MMSW-C_S_072417_SED_01-03	0.2902	20	-	-	-		
1707737-11	MMSW-C_SW_072517_SED_00-01	0.3059	20	-	-	-		
1707737-12	MMSW-C_SW_072517_SED_01-03	0.2895	20	-	-	-	Original jar broken, created container D	
1707737-13	W-21-UM-West-A_072517_SED_00-01	0.3085	20	-	-	-		
1707810-34	W-17-Intertidal_072517_SED_00-01	0.304	20	-	-	-		
1707810-35	W-17-Intertidal_072517_SED_01-03	0.2998	20	-	-	-	BatchQC	Added for BatchQC in: F708268
1707810-36	W-21-High_072517_SED_00-01	0.2801	20	-	-	-		
1707810-37	W-21-High_072517_SED_01-03	0.2802	20	-	-	-		
1707810-38	W-21-Intertidal_072517_SED_00-01	0.3148	20	-	-	-		

Due Date: 8/21/2017

**PREPARATION BENCH SHEET**

F708268

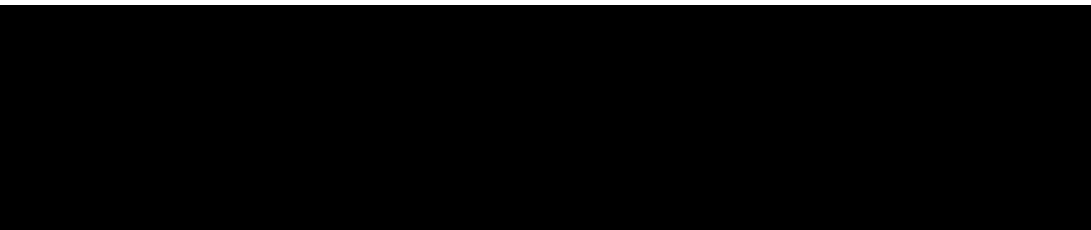
**Eurofins Frontier Global Sciences, Inc.**

**Matrix: Tissue**

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

**Prepared: 8/4/2017**

1707810-39	W-21-Intertidal_072517_SED_01-03	0.318	20	-	-	-		
1707810-40	W-21-Low_072517_SED_00-01	0.2868	20	-	-	-		
1707810-41	W-21-Low_072517_SED_01-03	0.3031	20	-	-	-		
1707810-42	W-21-Mid_072517_SED_00-01	0.2939	20	-	-	-		
1707810-43	W-21-Mid_072517_SED_01-03	0.3015	20	-	-	-		





**PREPARATION BENCH SHEET**

F707568

**Eurofins Frontier Global Sciences, Inc.**

**Matrix: Soil/Sediment**

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

**Prepared: 8/3/2017**

Lab Number	Sample ID and Source Sample	Initial (g)	Final (ml)	Spike1 ID	$\mu$ l Spike1	Spike2 ID	$\mu$ l Spike2	Extraction Comments
F707568-BLK1	Blank	0.25	20					
F707568-BLK2	Blank	0.25	20					
F707568-BLK3	Blank	0.25	20					
F707568-BS1	DORM-4	0.1315	20	1703305	131			
F707568-BSD1	DORM-4 Dup	0.1332	20	1703305	133			
F707568-DUP1	Duplicate [1707771-90]	0.2872	20					
F707568-MS1	Matrix Spike [1707771-90]	0.3235	20	1605978	100			
F707568-MS2	Matrix Spike [1707771-AB]	0.2819	20	1605978	100			
F707568-MSD1	Matrix Spike Dup [1707771-90]	0.2939	20	1605978	100			
F707568-MSD2	Matrix Spike Dup [1707771-AB]	0.2793	20	1605978	100			

Standard ID(s):  
1605978  
1703305

Description:  
MHg New Primary 100 ng/mL spike  
DORM-4

Expiration:  
15-Oct-17 00:00  
29-May-20 00:00  
29-May-20 00:00

Reagent ID(s):  
1606305  
1704399  
1704424  
1704707  
1704725

Description:  
Methanol, HPLC Grade  
Ethylating Agent (For Methyl Mercury Analysis)  
Boiling Chips for AFS prep  
Acetate Buffer  
25% KOH/Methanol

Expiration:  
28-Oct-19 00:00  
16-Jan-18 00:00  
21-Jan-18 00:00  
29-Jan-18 00:00  
30-Jan-18 00:00

**PREPARATION BENCH SHEET**

F707568

**Eurofins Frontier Global Sciences, Inc.**

**Matrix: Soil/Sediment**

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

**Prepared: 8/3/2017**

Lab Number	Sample ID	Initial (g)	Final (ml)	QC Sample	Sample Specs.	Raw Data	Sample Comments	Analysis Comments
1707771-41	W-MM-23_072417_SED_00-01_R3	0.2715	20	-	-	-		
1707771-42	W-MM-23_072417_SED_01-03	0.2728	20	-	-	-		
1707771-43	W-MM-24_072417_SED_00-01	0.2798	20	-	-	-		
1707771-44	W-MM-24_072417_SED_01-03_R1	0.2867	20	-	-	-		
1707771-45	W-MM-24_072417_SED_01-03_R2	0.2841	20	-	-	-		
1707771-46	W-MM-24_072417_SED_01-03_R3	0.2509	20	-	-	-		
1707771-87	OR-01-04_072517_SED_00-01_R1	0.2702	20	-	-	-		
1707771-88	OR-01-04_072517_SED_00-01_R2	0.2585	20	-	-	-		
1707771-89	OR-01-04_072517_SED_00-01_R3	0.2944	20	-	-	-		
1707771-90	OR-01-04_072517_SED_01-03	0.3246	20	QC	-	-	MS/MSD	
1707771-AB	W-102-INTA_072517_SED_00-01	0.2933	20	-	-	-		
1707771-AC	W-102-INTA_072517_SED_01-03	0.2747	20	-	-	-		
1707771-AJ	W-103-INTA_072517_SED_00-01	0.283	20	-	-	-		
1707771-AK	W-103-INTA_072517_SED_01-03_R1	0.292	20	-	-	-		
1707771-AL	W-103-INTA_072517_SED_01-03_R2	0.2869	20	-	-	-		
1707771-AM	W-103-INTA_072517_SED_01-03_R3	0.2747	20	-	-	-		
1707771-AN	W-104-INTA_072517_SED_00-01	0.2808	20	-	-	-		
1707771-AO	W-104-INTA_072517_SED_01-03	0.2559	20	-	-	-		
1707771-AR	W-14-A_072517_SED_00-01_R1	0.2907	20	-	-	-		

**Due Date: 8/24/2017**

PREPARATION BENCH SHEET

F707568

Eurofins Frontier Global Sciences, Inc.

Matrix: Soil/Sediment

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

Prepared: 8/3/2017

1707771-AS	W-14-A_072517_SED_00-01_R2	0.2561	20	-	-	-		
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PREPARATION BENCH SHEET

2700-1  
8/10/17 DM

F707568

Eurofins Frontier Global Sciences, Inc.

Matrix: Soil/Sediment

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

Prepared: 8/3/2017

Lab Number	Sample ID and Source Sample	Initial (g)	Final (ml)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F707568-BLK1	Blank	0.25	20					500X
F707568-BLK2	Blank	0.25	20					500X
F707568-BLK3	Blank	0.25	20					500X
F707568-BS1	DORM-4	0.1315	20	1703305	131			1000X
F707568-BSD1	DORM-4 Dup	0.1332	20	1703305	133			1000X
F707568-DUP1	Duplicate [1707771-90]	0.2872	20					500X
F707568-MS1	Matrix Spike [1707771-90]	0.3235	20	1605978	100			500X
F707568-MS2	Matrix Spike [1707771-AB]	0.2819	20	1605978	100			500X
F707568-MSD1	Matrix Spike Dup [1707771-90]	0.2939	20	1605978	100			500X
F707568-MSD2	Matrix Spike Dup [1707771-AB]	0.2793	20	1605978	100			500X

Standard ID(s):  
1605978  
1703305

Description:  
MHg New Primary 100 ng/mL spike  
DORM-4

Expiration:  
15-Oct-17 00:00  
29-May-20 00:00  
29-May-20 00:00

Reagent ID(s):  
1606305  
1704424  
1704725

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

Expiration:  
28-Oct-19 00:00  
21-Jan-18 00:00  
30-Jan-18 00:00

1704707  
1704309

Due Date: 8/24/2017

PREPARATION BENCH SHEET

2700-1  
8/17/17 DM

F707568

Eurofins Frontier Global Sciences, Inc.

Matrix: Soil/Sediment

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

Prepared: 8/3/2017

Lab Number	Sample ID	Initial (g)	Final (ml)	QC Sample	Sample Specs.	Raw Data	Sample Comments	Analysis Comments
1707771-41	W-MM-23_072417_SED_00-01_R3	0.2715	20	-	-	-		500X
1707771-42	W-MM-23_072417_SED_01-03	0.2728	20	-	-	-		500X
1707771-43	W-MM-24_072417_SED_00-01	0.2798	20	-	-	-		500X
1707771-44	W-MM-24_072417_SED_01-03_R1	0.2867	20	-	-	-		500X
1707771-45	W-MM-24_072417_SED_01-03_R2	0.2841	20	-	-	-		500X
1707771-46	W-MM-24_072417_SED_01-03_R3	0.2509	20	-	-	-		500X
1707771-87	OR-01-04_072517_SED_00-01_R1	0.2702	20	-	-	-		500X
1707771-88	OR-01-04_072517_SED_00-01_R2	0.2585	20	-	-	-		500X
1707771-89	OR-01-04_072517_SED_00-01_R3	0.2944	20	-	-	-		500X
1707771-90	OR-01-04_072517_SED_01-03	0.3246	20	QC	-	-	MS/MSD	500X
1707771-AB	W-102-INTA_072517_SED_00-01	0.2933	20	-	-	-		500X
1707771-AC	W-102-INTA_072517_SED_01-03	0.2747	20	-	-	-		500X
1707771-AJ	W-103-INTA_072517_SED_00-01	0.283	20	-	-	-		500X
1707771-AK	W-103-INTA_072517_SED_01-03_R1	0.292	20	-	-	-		500X
1707771-AL	W-103-INTA_072517_SED_01-03_R2	0.2869	20	-	-	-		500X
1707771-AM	W-103-INTA_072517_SED_01-03_R3	0.2747	20	-	-	-		500X
1707771-AN	W-104-INTA_072517_SED_00-01	0.2808	20	-	-	-		500X
1707771-AO	W-104-INTA_072517_SED_01-03	0.2559	20	-	-	-		500X
1707771-AR	W-14-A_072517_SED_00-01_R1	0.2907	20	-	-	-		500X

Due Date: 8/24/2017

PREPARATION BENCH SHEET

2700-1  
8/10/17 DM

F707568

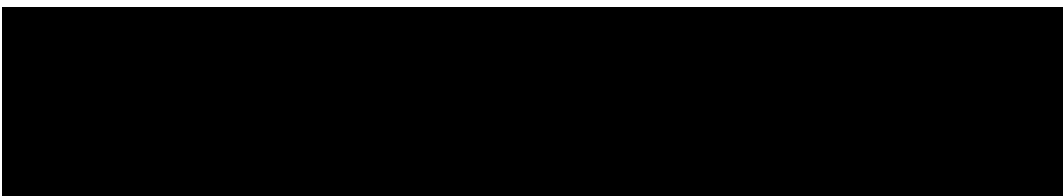
Eurofins Frontier Global Sciences, Inc.

Matrix: Soil/Sediment

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

Prepared: 8/3/2017

1707771-AS	W-14-A_072517_SED_00-01_R2	0.2561	20	-	-	-		500X
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Technician: CWF, Dwyer Batch#: F707568 Date: 8/3/17

- EFAFS-T-AFS-SOP2986** Tissues - Methyl Mercury - KOH/Methanol: **Hot plate 75±5°C for 2-4 hours.**
- EFAFS-T-AFS-SOP2795** Tissues - Total Mercury - 70:30: **Hot plate 75±5°C for two hours.**
- EFAFS-T-AFS-SOP5134** Sediments - Methyl Mercury - KBr/CH<sub>2</sub>Cl<sub>2</sub>: **Heat Block 45°C (nitrogen purge for 30 minutes).**
- EFAFS-T-AFS-SOP2807** Solids - Total Mercury - Cold AR: **18-25°C for over four hours.**

Other: \_\_\_\_\_ Vial Type:  Glass  Teflon  
 Balance#: 19 Calibrated?  Yes  No Therm.#: 12698 Calibrated?  Yes  No

\*Time in: 10:05 Actual Temp. (raw): 79.0 °C w/ CF: 79.0 °C  
 Time out: 13:05 Actual Temp. (raw): 81.0 °C w/ CF: 81.0 °C

\*Time in can't begin before target temperature is reached  
 Final vol.: 20 mL (LIMS ID: 1704725) Spike vol.: 100 µL (LIMS ID: 1704725)  
 Spike Witness: CWF 8/3/17 (initial and date)

HCl LIMS ID: N/A Pipette SN#: NU09653 Calibration Date: 8/3/17  
 HNO<sub>3</sub> LIMS ID: N/A Pipette SN#: NU01152 Calibration Date: 7/31/17  
 70/30 LIMS ID: N/A Dispenser #: 02N48426 Calibrated?  Yes  No  
 Other Acid LIMS ID: 1704725 25% KOH Dispenser #: N/A  
 Glass Vial # 00066804 Boiling Chip lot # 1704424 \*Hotblock Position: B2

Vial #	Sample ID Number	Sample Size <input type="checkbox"/> mL <input checked="" type="checkbox"/> g	Vial #	Sample ID Number	Sample Size <input type="checkbox"/> mL <input checked="" type="checkbox"/> g	CRM LIMS ID <input type="checkbox"/> NA
1	F707568 - BLK1	0.2865	23	1707771 -AJ	0.2830	[BS1 + BSD]
2	F707568 - BLK2	0.2717	24	1707771 -AK	0.2920	DORM-4
3	F707568 - BLK3	0.2901	25	1707771 -AL	0.2869	1703305
4	F707568 - BS1	0.1315	26	1707771 -AM	0.2747	<b>Comments</b>
5	F707568 - BSD1	0.1332	27	1707771 -AN	0.2808	DUP1 Source = 1707771
6	1707771 -41	0.2715	28	1707771 -AO	0.2559	-90
7	1707771 -42	0.2728	29	1707771 -AR	0.2907	MS1 Source = 1707771
8	1707771 -43	0.2798	30	1707771 -AS	0.2561	-90
9	1707771 -44	0.2867	31			MSD1 Source = 1707771
10	1707771 -45	0.2841	32			-90
11	1707771 -46	0.2509	33			MS2 Source = 1707771
12	1707771 -87	0.2702	34			-AB
13	1707771 -88	0.2565	35			MSD2 source = 1707771
14	1707771 -89	0.2944	36			-AB
15	1707771 -90	0.3246	37			F707568
16	F707568 -DUP1	0.2872	38			Final Volume
17	F707568 -MS1	0.3235	39			1606305
18	F707568 -MSD1	0.2939	40			LIMS ID.
19	1707771 -AB	0.2933	41			8/7/17 vlt
20	F707568 -MS2	0.2819	42			8/7/17 vlt
21	F707568 -MSD2	0.2793	43			Weight out
22	1707771 -AC	0.2747	44			sampled on 8/3/17

**PREPARATION BENCH SHEET**

F707569

**Eurofins Frontier Global Sciences, Inc.**

**Matrix: Soil/Sediment**

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

**Prepared: 8/4/2017**

Lab Number	Sample ID and Source Sample	Initial (g)	Final (ml)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F707569-BLK1	Blank	0.5	20					
F707569-BLK2	Blank	0.5	20					
F707569-BLK3	Blank	0.5	20					
F707569-BS1	DORM-4	0.1257	20	1703305	126			
F707569-BSD1	DORM-4 Dup	0.1255	20	1703305	126			
F707569-DUP1	Duplicate [1707771-AU]	0.2769	20					
F707569-MS1	Matrix Spike [1707771-AU]	0.3036	20	1605978	100			
F707569-MS2	Matrix Spike [1707771-BK]	0.281	20	1605978	100			
F707569-MSD1	Matrix Spike Dup [1707771-AU]	0.2915	20	1605978	100			
F707569-MSD2	Matrix Spike Dup [1707771-BK]	0.2966	20	1605978	100			

Standard ID(s):  
1605978  
1703305

Description:  
MHg New Primary 100 ng/mL spike  
DORM-4

Expiration:  
15-Oct-17 00:00  
29-May-20 00:00

Reagent ID(s):  
1606305  
1704399  
1704424  
1704707  
1704725

Description:  
Methanol, HPLC Grade  
Ethylating Agent (For Methyl Mercury Analysis)  
Boiling Chips for AFS prep  
Acetate Buffer  
25% KOH/Methanol

Expiration:  
28-Oct-19 00:00  
16-Jan-18 00:00  
21-Jan-18 00:00  
29-Jan-18 00:00  
30-Jan-18 00:00



**PREPARATION BENCH SHEET**

F707569

**Eurofins Frontier Global Sciences, Inc.**

**Matrix: Soil/Sediment**

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

**Prepared: 8/4/2017**

Lab Number	Sample ID	Initial (g)	Final (ml)	QC Sample	Sample Specs.	Raw Data	Sample Comments	Analysis Comments
1707771-AT	W-14-A_072517_SED_00-01_R3	0.3034	20	-	-	-		
1707771-AU	W-14-A_072517_SED_01-03	0.3068	20	QC	-	-	MS/MSD	
1707771-AX	W-14-B_072517_SED_00-01	0.2996	20	-	-	-		
1707771-AY	W-14-B_072517_SED_01-03	0.2992	20	-	-	-		
1707771-BF	W-14-INTA_072517_SED_00-01	0.2816	20	-	-	-		
1707771-BG	W-14-INTA_072517_SED_01-03	0.2901	20	-	-	-		
1707771-BH	W-27-A_072517_SED_00-01_R1	0.2865	20	-	-	-		
1707771-BI	W-27-A_072517_SED_00-01_R2	0.2759	20	-	-	-		
1707771-BJ	W-27-A_072517_SED_00-01_R3	0.3034	20	-	-	-		
1707771-BK	W-27-A_072517_SED_01-03	0.3019	20	QC	-	-	MS/MSD	
1707771-BN	W-63-INT_072517_SED_00-01	0.282	20	-	-	-		
1707771-BO	W-63-INT_072517_SED_01-03	0.3067	20	-	-	-		
1707771-BP	W-MM-01_072517_SED_00-01	0.285	20	-	-	-		
1707771-BQ	W-MM-01_072517_SED_01-03_R1	0.317	20	-	-	-		
1707771-BR	W-MM-01_072517_SED_01-03_R2	0.2875	20	-	-	-		
1707771-BS	W-MM-01_072517_SED_01-03_R3	0.3081	20	-	-	-		
1707771-BT	W-MM-02_072517_SED_00-01	0.3147	20	-	-	-		
1707771-BU	W-MM-02_072517_SED_01-03	0.2859	20	-	-	-		
1707771-BZ	W-MM-07_072517_SED_00-01	0.2803	20	-	-	-		

Due Date: 8/24/2017

PREPARATION BENCH SHEET

F707569

Eurofins Frontier Global Sciences, Inc.

Matrix: Soil/Sediment

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

Prepared: 8/4/2017

1707771-CA	W-MM-07_072517_SED_01-03_R1	0.2859	20	-	-	-		
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PREPARATION BENCH SHEET

2700-1  
8/10/17 DM

F707569

Eurofins Frontier Global Sciences, Inc.

Matrix: Soil/Sediment

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

Prepared: 8/4/2017

Lab Number	Sample ID and Source Sample	Initial (g)	Final (ml)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F707569-BLK1	Blank	0.5	20					500X
F707569-BLK2	Blank	0.5	20					500X
F707569-BLK3	Blank	0.5	20					500X
F707569-BS1	DORM-4	0.1257	20	1703305	126			1000X
F707569-BSD1	DORM-4 Dup	0.1255	20	1703305	126			1000X
F707569-DUP1	Duplicate [1707771-AU]	0.2769	20					500X
F707569-MS1	Matrix Spike [1707771-AU]	3036	20	1605978	100			500X
F707569-MS2	Matrix Spike [1707771-BK]	0.281	20	1605978	100			500X
F707569-MSD1	Matrix Spike Dup [1707771-AU]	0.2915	20	1605978	100			500X
F707569-MSD2	Matrix Spike Dup [1707771-BK]	0.2966	20	1605978	100			500X

Standard ID(s):  
1605978  
1703305

Description:  
MHg New Primary 100 ng/mL spike  
DORM-4

Expiration:  
15-Oct-17 00:00  
29-May-20 00:00

Reagent ID(s):  
1606305  
1704424  
1704725

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

Expiration:  
28-Oct-19 00:00  
21-Jan-18 00:00  
30-Jan-18 00:00

1704707

1704399

Due Date: 8/24/2017

PREPARATION BENCH SHEET

2700-1  
8/10/17 DM

F707569

Eurofins Frontier Global Sciences, Inc.

Matrix: Soil/Sediment

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

Prepared: 8/4/2017

Lab Number	Sample ID	Initial (g)	Final (ml)	QC Sample	Sample Specs.	Raw Data	Sample Comments	Analysis Comments
1707771-AT	W-14-A_072517_SED_00-01_R3	0.3034	20	-	-	-		500X
1707771-AU	W-14-A_072517_SED_01-03	0.3068	20	QC	-	-	MS/MSD	500X
1707771-AX	W-14-B_072517_SED_00-01	0.2996	20	-	-	-		500X
1707771-AY	W-14-B_072517_SED_01-03	0.2992	20	-	-	-		500X
1707771-BF	W-14-INTA_072517_SED_00-01	0.2816	20	-	-	-		500X
1707771-BG	W-14-INTA_072517_SED_01-03	0.2901	20	-	-	-		500X
1707771-BH	W-27-A_072517_SED_00-01_R1	0.2865	20	-	-	-		500X
1707771-BI	W-27-A_072517_SED_00-01_R2	0.2759	20	-	-	-		500X
1707771-BJ	W-27-A_072517_SED_00-01_R3	0.3034	20	-	-	-		500X
1707771-BK	W-27-A_072517_SED_01-03	0.3019	20	QC	-	-	MS/MSD	500X
1707771-BN	W-63-INT_072517_SED_00-01	0.282	20	-	-	-		500X
1707771-BO	W-63-INT_072517_SED_01-03	0.3067	20	-	-	-		500X
1707771-BP	W-MM-01_072517_SED_00-01	0.285	20	-	-	-		500X
1707771-BQ	W-MM-01_072517_SED_01-03_R1	0.317	20	-	-	-		500X
1707771-BR	W-MM-01_072517_SED_01-03_R2	0.2875	20	-	-	-		500X
1707771-BS	W-MM-01_072517_SED_01-03_R3	0.3081	20	-	-	-		500X
1707771-BT	W-MM-02_072517_SED_00-01	0.3147	20	-	-	-		500X
1707771-BU	W-MM-02_072517_SED_01-03	0.2859	20	-	-	-		500X
1707771-BZ	W-MM-07_072517_SED_00-01	0.2803	20	-	-	-		500X

Due Date: 8/24/2017

PREPARATION BENCH SHEET

2700-1  
8/10/17 om

F707569

Eurofins Frontier Global Sciences, Inc.

Matrix: Soil/Sediment

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

Prepared: 8/4/2017

1707771-CA	W-MM-07_072517_SED_01-03_R1	0.2859	20	-	-	-	500X
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Technician: Duyen Batch#: F707569 Date: 8/4/17

- EFAFS-T-AFS-SOP2986 Tissues - Methyl Mercury - KOH/Methanol: Hot plate 75±5°C for 2-4 hours.
- EFAFS-T-AFS-SOP2795 Tissues - Total Mercury - 70:30: Hot plate 75±5°C for two hours.
- EFAFS-T-AFS-SOP5134 Sediments - Methyl Mercury - KBr/CH<sub>2</sub>Cl<sub>2</sub>: Heat Block 45°C (nitrogen purge for 30 minutes).
- EFAFS-T-AFS-SOP2807 Solids - Total Mercury - Cold AR: 18-25°C for over four hours.

Other: \_\_\_\_\_ Vial Type:  Glass  Teflon  
 Balance#: 19 Calibrated?  Yes  No Therm.#: 13698 Calibrated?  Yes  No  
 \*Time in: 14:20 Actual Temp. (raw): 78.0 °C w/ CF: 78.0 °C  
 Time out: 17:20 Actual Temp. (raw): 78.0 °C w/ CF: 78.0 °C  
 \*Time in can't begin before target temperature is reached

Final vol.: 20 mL (LIMS ID: 1606305) Spike vol.: 100 µL (LIMS ID: 1605978)  
 Spike Witness: DM 8/4/17 (initial and date)

HCl LIMS ID: N/A Pipette SN#: NW09653 Calibration Date: 8-3-17  
 HNO<sub>3</sub> LIMS ID: N/A Pipette SN#: NW01152 Calibration Date: 7/13/17  
 70/30 LIMS ID: N/A Dispenser #: 02V48426 Calibrated?  Yes  No  
 Other Acid LIMS ID: 1704725 25% KOH Dispenser #: N/A  
 Glass Vial # 00066804 Boiling Chip lot # 1704424 \*Hotblock Position: N15

Vial #	Sample ID Number	Sample Size <input type="checkbox"/> mL <input checked="" type="checkbox"/> g	Vial #	Sample ID Number	Sample Size <input type="checkbox"/> mL <input checked="" type="checkbox"/> g	CRM LIMS ID <input type="checkbox"/> NA
1	F707569 RLK1	0.2620	23	1707771-BP	0.2850	BS1 BS01
2	F707569 RLK2	0.3100	24	1707771 BQ	0.3170	DOM-4
3	F707569 RLK3	0.2900	25	1707771 BR	0.2875	1703305
4	F707569 BS1	0.1257	26	1707771 BS	0.3081	Comments
5	F707569 BS01	0.1255	27	1707771 BT	0.3147	F707569
6	1707771-A7A	30.34	28	1707771 BWA	0.2859	Source Dup MS1 MS01
7	1707771 AUW	30.68	29	1707771 BZ	0.2803	1707771-AU
8	F707569-Dup1	0.2769	30	1707771 CA	0.2859	
9	F707569 MS1	0.3036	31	<div style="border: 1px solid black; width: 100%; height: 100%; transform: rotate(45deg);"></div>	F707569	
10	F707569 MS01	0.2915	32		MS2 MS02	
11	1707771 AXA	0.2996	33		1707771-BK	
12	1707771 AVA	0.2992	34		0.2875(g)	
13	1707771-BF	0.2816	35			
14	1707771 BG	0.2901	36			
15	1707771 BH	0.2865	37			
16	1707771 BI	0.2759	38			
17	1707771 BJ	0.3034	39			
18	1707771 BK	0.3019	40			
19	F707569 MS2	0.2810	41			
20	F707569 MS02	0.2966	42			
21	1707771 BN	0.2820	43			
22	1707771 BO	0.3067	44			

**PREPARATION BENCH SHEET**

F708293

**Eurofins Frontier Global Sciences, Inc.**

**Matrix: Tissue**

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

**Prepared: 8/4/2017**

Lab Number	Sample ID and Source Sample	Initial (g)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F708293-BLK1	Blank	0.25	20					
F708293-BLK2	Blank	0.25	20					
F708293-BLK3	Blank	0.25	20					
F708293-BLK4	Pre Blank	0.3441	20					
F708293-BLK5	Post Blank	0.3609	20					
F708293-BLK6	Filter Blank	0.3933	20					1708084-01
F708293-BLK7	Blank	0.25	20					
F708293-BLK8	Blank	0.25	20					
F708293-BLK9	Blank	0.25	20					
F708293-BS1	DORM-4	0.1253	20	1703305	125			
F708293-BSD1	DORM-4	0.1252	20	1703305	125			
F708293-DUP1	Duplicate [1708077-01]	0.2838	20					
F708293-MS1	Matrix Spike [1708077-01]	0.2858	20	1605978	100			
F708293-MS2	Matrix Spike [1708078-01]	0.2813	20	1605978	100			
F708293-MS3	AS [1708078-01]	0.001509	0.1	1704143	100			[Spk] 0.3018g->20mL; 40mL->40mL; Spiked 0.1mL
F708293-MSD1	Matrix Spike Dup [1708077-01]	0.305	20	1605978	100			
F708293-MSD2	Matrix Spike Dup [1708078-01]	0.3019	20	1605978	100			
F708293-MSD3	ASD [1708078-01]	0.001509	0.1	1704143	100			[Spk] 0.3018g->20mL; 40mL->40mL; Spiked 0.1mL

Standard ID(s):  
 1605978  
 1703305  
 1704143

Description:  
 MHg New Primary 100 ng/mL spike  
 DORM-4  
 MHg New Primary 1.0 ng/mL CAL

Expiration:  
 15-Oct-17 00:00  
 29-May-20 00:00  
 10-Oct-17 00:00

Reagent ID(s):  
 1606305  
 1700863  
 1704399  
 1704424  
 1704707

Description:  
 Methanol, HPLC Grade  
 25% KOH/Methanol  
 Ethylating Agent (For Methyl Mercury Analysis)  
 Boiling Chips for AFS prep  
 Acetate Buffer

Expiration:  
 28-Oct-19 00:00  
 09-Aug-17 00:00  
 16-Jan-18 00:00  
 21-Jan-18 00:00  
 29-Jan-18 00:00

**Due Date: 8/16/2017**

**PREPARATION BENCH SHEET**

F708293

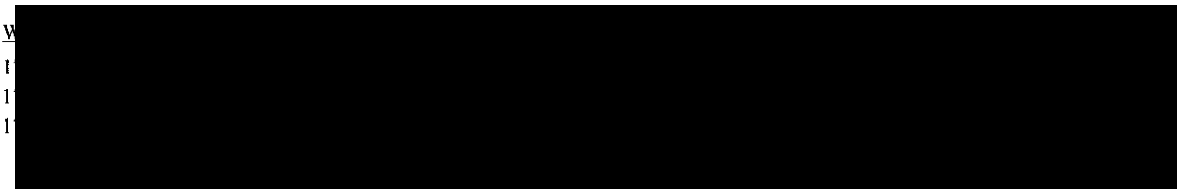
**Eurofins Frontier Global Sciences, Inc.**

**Matrix: Tissue**

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

**Prepared: 8/4/2017**

Lab Number	Sample ID	Initial (g)	Final (mL)	QC Sample	Sample Specs.	Raw Data	Sample Comments	Analysis Comments
1708077-01	S-170703-01626 417382 Halibut Trident	0.2699	20	-	-	-		
1708077-02	S-170703-01627 417382 Halibut S.M Products	0.2877	20	-	-	-		
1708077-03	S-170703-01628 417382 Halibut S.M Products	0.3066	20	-	-	-		
1708077-04	S-170703-01629 417382 Halibut S.M Products	0.2877	20	-	-	-		
1708077-05	S-170703-01630 417382 Halibut S.M Products	0.2827	20	-	-	-		
1708077-06	S-170703-01632 417382 Halibut S.M Products	0.2859	20	-	-	-		
1708077-07	S-170717-00593 699794 Atlantic Cod Hofseth	0.2854	20	-	-	-		
1708077-08	S-170717-00594 699794 Atlantic Cod Hofseth	0.298	20	-	-	-		
1708078-01	S-170714-00934 43178 Cold Water Shrimp Pacific Seafood	0.3018	20	-	-	-		
1708078-02	S-170717-00925 40604 Seafood Medley OreCal	0.3062	20	-	-	-		
1708084-01	OL-2638-01	0.293	20	-	-	-	Preservation Blank Created Scan all dat	





PREPARATION BENCH SHEET

2700-1  
8/10/17 DM

F708293

Eurofins Frontier Global Sciences, Inc.

Matrix: Tissue

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

Prepared: 8/4/2017

Lab Number	Sample ID and Source Sample	Initial (g)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F708293-BLK1	Blank	0.25	20					
F708293-BLK2	Blank	0.25	20					
F708293-BLK3	Blank	0.25	20					
F708293-BLK4	Pre Blank	0.3441	20					
F708293-BLK5	Post Blank	0.3609	20					
F708293-BLK6	Filter Blank	0.3933	20					1708084-01
F708293-BLK7	Blank	0.25	20					500X
F708293-BLK8	Blank	0.25	20					500X
F708293-BLK9	Blank	0.25	20					500X
F708293-BS1	DORM-4	0.1253	20	1703305	125			
F708293-BSD1	DORM-4	0.1252	20	1703305	125			
F708293-DUP1	Duplicate [1708077-01]	0.2838	20					
F708293-MS1	Matrix Spike [1708077-01]	0.2858	20	1605978	100			
F708293-MS2	Matrix Spike [1708078-01]	0.2813	20	1605978	100			
F708293-MS3	AS [1708078-01]	0.3018	20	1704143	100			500X
F708293-MSD1	Matrix Spike Dup [1708077-01]	0.305	20	1605978	100			
F708293-MSD2	Matrix Spike Dup [1708078-01]	0.3019	20	1605978	100			
F708293-MSD3	ASD [1708078-01]	0.3018	20	1704143	100			500X

Standard ID(s):  
1605978  
1703305  
1704143

Description:  
MHg New Primary 100 ng/mL spike  
DORM-4  
MHg New Primary 1.0 ng/mL CAL

Expiration:  
15-Oct-17 00:00  
29-May-20 00:00  
10-Oct-17 00:00

Reagent ID(s):  
1606305  
1700863  
1704399  
1704424  
1704707

Description:  
Methanol, HPLC Grade  
25% KOH/Methanol  
Ethylating Agent (For Methyl Mercury Analysis)  
Boiling Chips for AFS prep  
Acetate Buffer

Expiration:  
28-Oct-19 00:00  
09-Aug-17 00:00  
16-Jan-18 00:00  
21-Jan-18 00:00  
29-Jan-18 00:00

Due Date: 8/16/2017

**PREPARATION BENCH SHEET**

F708293

**Eurofins Frontier Global Sciences, Inc.**

**Matrix: Tissue**

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

**Prepared: 8/4/2017**

Lab Number	Sample ID	Initial (g)	Final (mL)	QC Sample	Sample Specs.	Raw Data	Sample Comments	Analysis Comments
1708077-01	S-170703-01626 417382 Halibut Trident	0.2699	20	-	-	-		
1708077-02	S-170703-01627 417382 Halibut S.M Products	0.2877	20	-	-	-		
1708077-03	S-170703-01628 417382 Halibut S.M Products	0.3066	20	-	-	-		
1708077-04	S-170703-01629 417382 Halibut S.M Products	0.2877	20	-	-	-		
1708077-05	S-170703-01630 417382 Halibut S.M Products	0.2827	20	-	-	-		
1708077-06	S-170703-01632 417382 Halibut S.M Products	0.2859	20	-	-	-		
1708077-07	S-170717-00593 699794 Atlantic Cod Hofseth	0.2854	20	-	-	-		
1708077-08	S-170717-00594 699794 Atlantic Cod Hofseth	0.298	20	-	-	-		
1708078-01	S-170714-00934 43178 Cold Water Shrimp Pacific Seafood	0.3018	20	-	-	-		
1708078-02	S-170717-00925 40604 Seafood Medley OreCal	0.3062	20	-	-	-		
1708084-01	OL-2638-01	0.293	20	-	-	-	Preservation Blank Created Scan all dat	

# Failing Data Report - 7H11011

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

8/11/17  
Date

[Signature]  
Peer Reviewed By

8/12/17  
Date

**Peer Review Check List for MHg for CV-GC-AFS (SOP2808) 2017 Rev 6 (02/22/17)**

<b>Analyst:</b> DON MORAN	<b>Sequence #:</b> 7H11011
<b>Reviewer:</b> <u>R 8/12/17</u>	<b>Dataset ID #:</b> MMHG27001-170810-1
<b>Date:</b> 8-11-17	<b>WO #:</b> VARIOUS
<b>Batch #(s):</b> F708293, F707569, F708268, F707568	<b>Client(s):</b> VARIOUS

• Select the correct preparation method.

Additional Comments:

Analyte	Prep Method	Matrix
<input type="checkbox"/> MHg	SOP2797 MHg Distillation	Water
<input checked="" type="checkbox"/> MHg	SOP2986 KOH/MeOH Digest	Tissue
<input type="checkbox"/> MHg	SOP5134 MeCl Extraction	Sed/Soil
<input type="checkbox"/> DMHg	SOP2816 (None Accredited method)	ALL

	Analyst Initials:	Reviewer Initials:		
	<u>DM</u>	<u>R 8/12/17</u>		
1. Compare Sample ID with Bench sheet/Sequence/Raw Data (Have all samples been imported?)	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO		<input checked="" type="checkbox"/>
2. Check for transcription errors from Excel spreadsheet (or Prep Bench sheet)/Raw data	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO		<input checked="" type="checkbox"/>
(a) Reviewer: 100% of peak heights checked	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO		<input checked="" type="checkbox"/>
(b) Are there peak height errors?	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO		<input checked="" type="checkbox"/>
(c) Error on a sample: Do peak heights, responses, & initial results match corrected data?	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input checked="" type="checkbox"/> N/A	<input checked="" type="checkbox"/>
(d) Error on a Cal Pt, ICB/CCB, or PB: Has the data been reimported?	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input checked="" type="checkbox"/> N/A	<input checked="" type="checkbox"/>
(e) Check standards & reagents in sequence & bench sheet for correct usage (i.e. expiries).	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> N/A	<input checked="" type="checkbox"/>
(f) Check and compare masses (review prep bench sheet)	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> N/A	<input checked="" type="checkbox"/>
(g) Check and compare initial and final volumes	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> N/A	<input checked="" type="checkbox"/>
(h) Do aliquots and dilutions written on benchsheet match those in Excel?	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> N/A	<input checked="" type="checkbox"/>
(i) Is the pH>3.0 for all distilled samples? _____	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input checked="" type="checkbox"/> N/A	<input checked="" type="checkbox"/>
(j) Is the sequence #, analyst, date, and instrument # on the QC page?	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO		<input checked="" type="checkbox"/>
(k) Is the analysis status correct? (analyzed/initial review/reviewed)	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO		<input checked="" type="checkbox"/>
(l) Original prep bench sheet added to data package?	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO		<input checked="" type="checkbox"/>
(m) Benchsheet prep date MUST match actual prep date (check if re-shot vs re-extract)	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO		<input checked="" type="checkbox"/>
3. High QA?                      WO#(s)/Client(s): _____	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO		<input checked="" type="checkbox"/>
4. Client specific QC? (if Yes, refer to Project Notes/LIMS)	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO		<input checked="" type="checkbox"/>
(a) Have the QC requirements been met for all WO#s?	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO		<input checked="" type="checkbox"/>
5. 20 or fewer samples in batch? _____	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO		<input checked="" type="checkbox"/>
(a) 3 PBs, 1 LCS/LCSD (or BS/BSD), 2 MS/MSD/MD per batch?	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO		<input checked="" type="checkbox"/>
(b) 1 CCV and 1 CCB every 10 analytical runs? _____	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO		<input checked="" type="checkbox"/>
<b>QA/QC Data Checked</b>				
6. The calibration curve included a minimum of 5 Standards	<input checked="" type="checkbox"/> PASS	<input type="checkbox"/> FAIL	<input type="checkbox"/> N/A	<input checked="" type="checkbox"/>
Comments: _____				
7. 1st Calibration Standard % Recoveries (65-135%)	<input checked="" type="checkbox"/> PASS	<input type="checkbox"/> FAIL	<input type="checkbox"/> N/A	<input checked="" type="checkbox"/>
Comments: _____				
8. RSD CF (≤ 15%)	<input checked="" type="checkbox"/> PASS	<input type="checkbox"/> FAIL		<input checked="" type="checkbox"/>
Comments: _____				

**Peer Review Check List for MHg for CV-GC-AFS (SOP2808) 2017 Rev 6 (02/22/17)**

<b>Analyst:</b>	DON MORAN	<b>Sequence #:</b>	7H11011
<b>Reviewer:</b>	0 <i>R. G. Jones</i>	<b>Dataset ID #:</b>	MMHG27001-170810-1
<b>Date:</b>	8/11/2017	<b>WO #:</b>	VARIOUS
<b>Batch #(s):</b>	F708293, F707569, F708268, F707568	<b>Client(s):</b>	VARIOUS

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

**Peer Review Check List for MHg for CV-GC-AFS (SOP2808) 2017 Rev 6 (02/22/17)**

<b>Analyst:</b>	DON MORAN	<b>Sequence #:</b>	7H11011
<b>Reviewer:</b>	0 <i>m 8/12/17</i>	<b>Dataset ID #:</b>	MMHG27001-170810-1
<b>Date:</b>	8/11/2017	<b>WO #:</b>	VARIOUS
<b>Batch #(s):</b>	F708293, F707569, F708268, F707568	<b>Client(s):</b>	VARIOUS

**Analyst Initials:**

*DM*

**Reviewer Initials:**

*m 8/12/17*

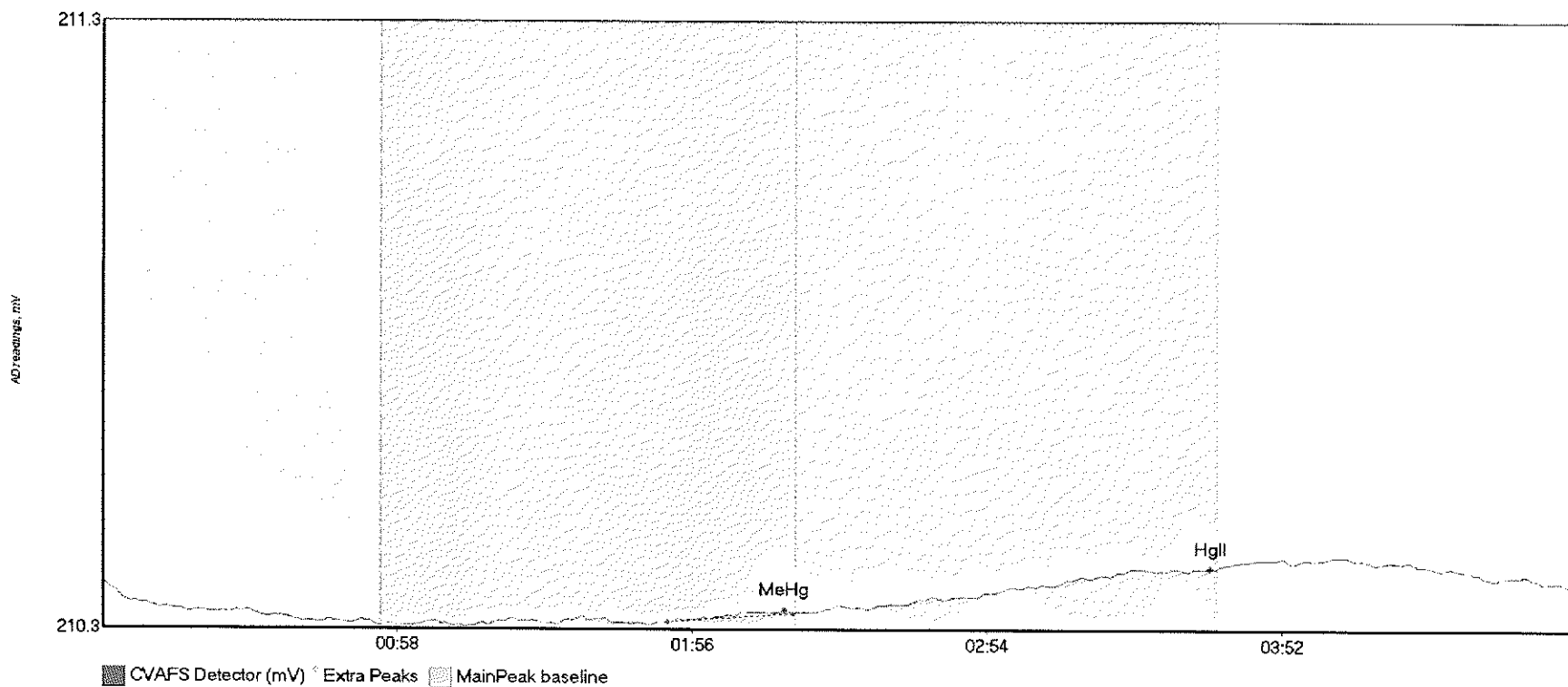
29. Are re-runs noted with reason?  YES  NO  N/A
- Comments: \_\_\_\_\_
30. For failing QC (CCV, CCB, PB, BS/BSD, CAL):  YES  NO  N/A
- Was a bubbler and trap test run before the analytical run continued?
- Comments: \_\_\_\_\_
31. Do re-run results compare to initial analysis (< 35% RPD)?  YES  NO  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: 6/13/2017 IDOC/CDOC within last 12 months?  YES  NO
39. Date of analyst's SOP reading: 5/23/2016 Current SOP revision?  YES  NO
40. Date of LOD: 4/24/2017 LOD within last 3 months (within 12 months for MDN)?  YES  NO  N/A
41. Date of LOQ: 4/24/2017 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

Sample/ID	Locobor	Rinse	Dilute	Blank	ConcHQ	ConcMeHg	ConcHQ2	ConcPr	ConcPr	Rec%	QA	RawData	RunEng	PeakHQ	PeakMeHg	PeakHQ2	PeakPr	Control (est)	Flags	RunCount	
Clear																					
WIS	A1													8:40:32	0.00	1.00	2.51	0.00	clean	OK	1
SEQ-IBL1	A2													8:51:03	8.76	0.00	14.41	0.00	psample10	OK	1
SEQ-CAL1	A3													9:01:34	6.10	0.00	3.09	0.00	psample10	CT	1
SEQ-CAL2	A4													9:12:04	6.37	23.51	0.47	0.00	psample10	OK	1
SEQ-CAL3	A5													9:22:35	3.97	81.07	1.66	0.00	psample10	OK	1
SEQ-CAL4	A6													9:33:06	6.14	444.82	13.76	0.00	psample10	OK	1
SEQ-CAL5	A7													9:43:36	5.03	860.29	40.35	0.00	psample10	OK	1
SEQ-ICV1	A8													9:54:07	6.37	1883.64	102.18	0.00	psample10	CT	1
SEQ-ICB1	A9													10:04:38	1.38	222.00	18.17	0.00	psample10	OK	1
F708268-BLK4	A10													10:15:08	5.12	1.74	3.82	0.00	psample10	OK	1
F708268-BLK5	A11													10:25:39	3.18	1.24	6.54	0.00	psample10	OK	1
F708268-BLK6	A12													10:36:10	3.77	0.00	5.36	0.00	psample10	OK	1
1707706-Q1RE1	A13													10:46:41	4.13	0.43	5.69	0.00	psample10	OK	1
1707706-Q2RE1	A14													10:57:11	5.42	1317.15	170.76	0.00	psample10	CT	1
1707706-Q3RE1	A15													11:07:42	5.38	1305.53	60.30	0.00	psample10	OK	1
1707737-Q1RE1	A16													11:18:12	5.40	404.00	24.83	0.00	psample10	OK	1
F708293-BLK7	A17													11:28:43	3.13	64.79	195.78	0.00	psample10	CT	1
F708293-BLK8	A18													11:39:14	4.36	1.78	11.73	0.00	psample10	CT	1
F708293-BLK9	A19													11:49:44	3.31	0.00	10.16	0.00	psample10	OK	1
SEQ-CCV1	A20													12:00:15	3.48	0.00	4.65	0.00	psample10	OK	1
SEQ-CCB1	A21													12:10:46	5.40	207.43	2.19	0.00	psample10	OK	1
F708293-MS3	B1													12:21:17	3.11	1.36	1.20	0.00	psample10	CT	1
F708293-MSD3	B2													12:31:47	4.60	1171.83	50.86	0.00	psample10	OK	1
F707568-BLK1	B3													12:42:18	5.07	1125.28	48.26	0.00	psample10	OK	1
F707568-BLK2	B4													12:52:49	3.24	3.20	7.05	0.00	psample10	CT	1
F707568-BLK3	B5													13:03:19	3.27	1.36	3.38	0.00	psample10	OK	1
F707568-B51	B6													13:13:50	4.78	1.49	8.25	0.00	psample10	OK	1
F707568-BSD1	B7													13:24:21	5.47	842.72	118.57	0.00	psample10	CT	1
F707568-DUP1	B8													13:34:51	6.50	839.03	138.27	0.00	psample10	OK	1
F707568-MS1	B9													13:45:22	1.91	64.97	1603.73	0.00	psample10	OK	1
F707568-MSD1	B10													13:55:53	6.62	485.03	1386.76	0.00	psample10	CT	1
SEQ-CCV2	B11													14:06:23	7.51	469.64	1056.16	0.00	psample10	CT	1
SEQ-CCB2	B12													14:16:54	2.89	206.82	10.38	0.00	psample10	OK	1
F707568-MS2	B13													14:27:25	6.23	1.62	4.32	0.00	psample10	OK	1
F707568-MSD2	B14													14:37:56	6.12	502.70	1545.96	0.00	psample10	OK	1
1707771-41	B15													14:48:27	9.24	556.74	1982.80	0.00	psample10	CT	1
1707771-42	B16													14:58:58	5.67	34.09	729.78	0.00	psample10	CT	1
1707771-43	B17													15:09:29	4.11	41.98	1039.98	0.00	psample10	OK	1
1707771-44	B18													15:19:59	7.22	26.84	878.26	0.00	psample10	OK	1
1707771-45	B19													15:30:30	4.76	27.63	831.98	0.00	psample10	OK	1
1707771-46	B20													15:41:01	2.73	26.23	874.04	0.00	psample10	CT	1
1707771-87	B21													15:51:32	6.23	18.10	570.99	0.00	psample10	CT	1
SEQ-CCV3	C2													16:02:02	8.49	42.11	780.53	0.00	psample10	CT	1
SEQ-CCB3	C3													16:12:33	6.25	42.95	935.24	0.00	psample10	OK	1
1707771-89	C4													16:23:04	2.80	192.00	7.95	0.00	psample10	OK	1
1707771-90	C5													16:44:05	4.52	0.00	7.34	0.00	psample10	OK	1
1707771-AB	C6													16:54:36	3.67	48.10	978.57	0.00	psample10	CT	1
1707771-AC	C7													17:05:07	8.34	62.05	1505.26	0.00	psample10	CT	1
1707771-AJ	C8													17:15:38	7.29	44.08	1195.01	0.00	psample10	CT	1
1707771-AK	C9													17:26:08	8.00	50.83	702.93	0.00	psample10	OK	1
1707771-AL	C10													17:36:39	8.49	65.34	1200.16	0.00	psample10	OK	1
1707771-AM	C11													17:47:10	4.59	64.74	1015.04	0.00	psample10	OK	1
1707771-AN	C12													17:57:40	8.58	73.55	1610.68	0.00	psample10	OK	1
1707771-AO	C13													18:08:11	6.57	48.89	528.38	0.00	psample10	CT	1
SEQ-CCV4	C14													18:18:42	6.84	30.72	634.31	0.00	psample10	CT	1
SEQ-CCB4	C15													18:29:13	4.57	211.85	7.37	0.00	psample10	OK	1
1707771-AR	C16													18:39:44	3.38	0.00	4.04	0.00	psample10	OK	1
1707771-AS	C17													18:50:14	5.31	105.75	728.55	0.00	psample10	CT	1
F707569-BLK1	C18													19:00:45	5.28	101.22	508.16	0.00	psample10	CT	1
F707569-BLK2	C19													19:11:16	3.91	0.00	12.60	0.00	psample10	OK	1
F707569-BLK3	C20													19:21:46	5.86	0.00	6.09	0.00	psample10	CT	1
F707569-B51	C21													19:32:17	6.93	0.00	6.59	0.00	psample10	OK	1
F707569-BSD1	A1													19:42:48	4.44	814.69	105.17	0.00	psample10	OK	1
F707569-DUP1	A2													19:53:19	5.02	755.48	103.70	0.00	psample10	OK	1
F707569-MS1	A3													20:03:49	3.30	26.43	809.32	0.00	psample10	OK	1
F707569-MSD1	A4													20:14:20	4.90	516.93	1132.85	0.00	psample10	CT	1
SEQ-CCV5	A5													20:24:51	2.62	520.87	1171.47	0.00	psample10	OK	1
SEQ-CCB5	A6													20:35:22	5.29	218.74	13.12	0.00	psample10	CT	1
F707569-MS2	A7													20:45:52	5.77	1.23	8.46	0.00	psample10	CT	1
F707569-MSD2	A8													20:56:23	7.79	572.86	767.07	0.00	psample10	CT	1
1707771-AT	A9													21:06:54	7.31	464.91	888.36	0.00	psample10	CT	1
1707771-AU	A10													21:17:25	7.43	134.60	621.09	0.00	psample10	CT	1
														21:27:55	6.02	29.28	966.61	0.00	psample10	CT	1

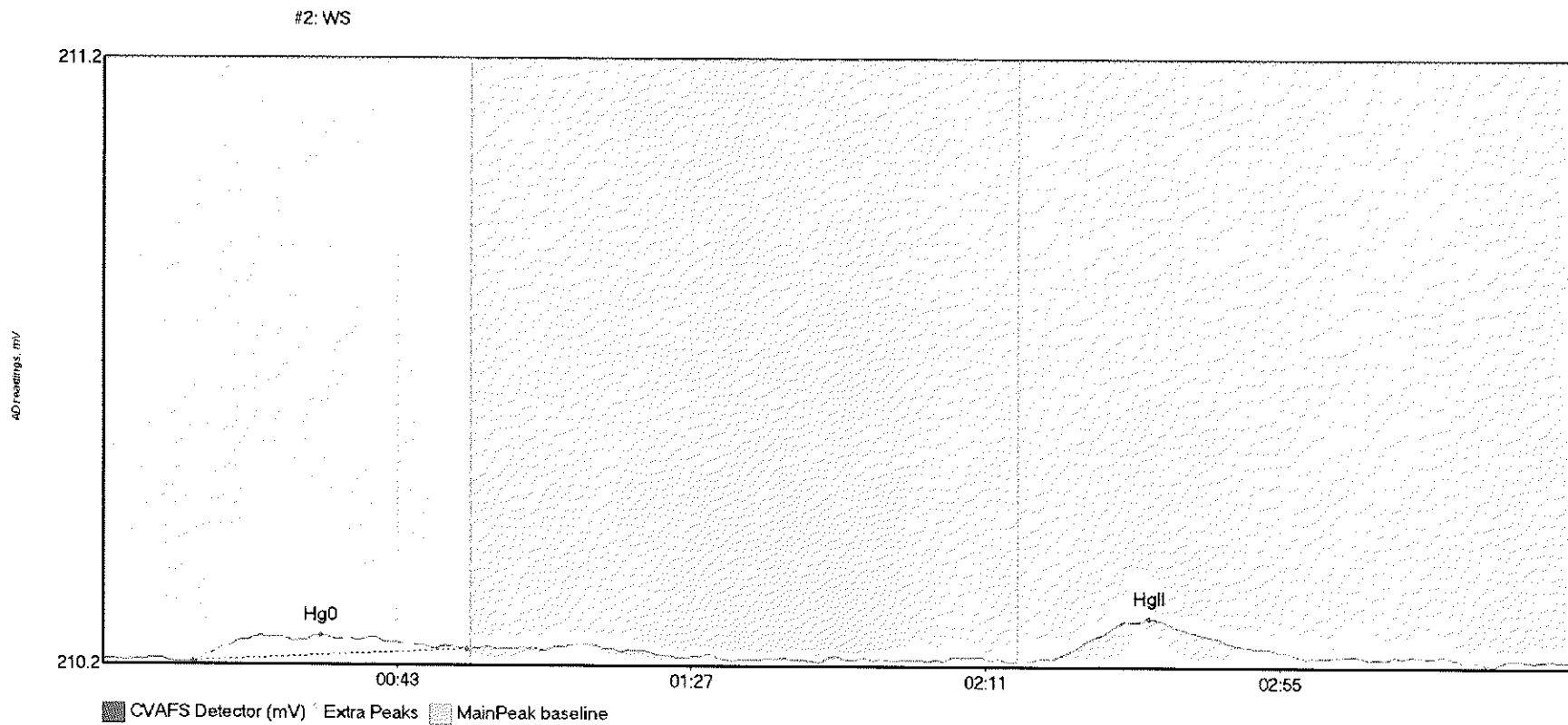
1707771-AX	A11	500	24971-1.RAW	21:38:26	5.47	30.91 ✓	514.60	0.00	psample10	OK	1
1707771-AY	A12	500	24972-1.RAW	21:48:57	7.27	12.57 ✓	722.66	0.00	psample10	CT	1
1707771-BF	A13	500	24973-1.RAW	21:59:28	7.65	57.96 ✓	528.83	0.00	psample10	CT	1
1707771-BG	A14	500	24974-1.RAW	22:09:58	8.29	8.94 ✓	130.04	0.00	psample10	OK	1
1707771-BH	A15	500	24975-1.RAW	22:20:29	7.45	52.23 ✓	543.62	0.00	psample10	CT	1
1707771-BI	A16	500	24976-1.RAW	22:31:00	2.33	60.45 ✓	563.59	0.00	psample10	OK	1
SEQ-CCV6	A17	1	24977-1.RAW	22:41:30	4.77	217.18 ✓	6.74	0.00	psample10	OK	1
SEQ-CCB6	A18	1	24978-1.RAW	22:52:01	4.40	0.00 ✓	3.24	0.00	psample10	OK	1
1707771-BJ	A19	500	24979-1.RAW	23:02:32	4.46	52.03 ✓	479.27	0.00	psample10	CT	1
1707771-BK	A20	500	24980-1.RAW	23:13:03	3.92	34.91 ✓	739.76	0.00	psample10	CT	1
1707771-BN	A21	500	24981-1.RAW	23:23:33	7.02	62.16 ✓	1086.47	0.00	psample10	CT	1
1707771-BO	B1	500	24982-1.RAW	23:34:04	6.35	66.71 ✓	1171.67	0.00	psample10	CT	1
1707771-BP	B2	500	24983-1.RAW	23:44:33	7.45	173.80 ✓	531.36	0.00	psample10	CT	1
1707771-BQ	B3	500	24984-1.RAW	23:55:04	7.95	76.59 ✓	1290.35	0.00	psample10	OK	1
1707771-BR	B4	500	24985-1.RAW	0:05:34	6.41	63.49 ✓	1600.87	0.00	psample10	CT	1
1707771-BS	B5	500	24986-1.RAW	0:16:05	7.12	65.76 ✓	1805.72	0.00	psample10	CT	1
1707771-BT	B6	500	24987-1.RAW	0:26:36	6.60	44.04 ✓	374.09	0.00	psample10	OK	1
1707771-BU	B7	500	24988-1.RAW	0:37:06	5.31	66.90 ✓	327.31	0.00	psample10	OK	1
SEQ-CCV7	B8	1	24989-1.RAW	0:47:37	3.95	211.68 ✓	7.82	0.00	psample10	OK	1
SEQ-CCB7	B9	1	24990-1.RAW	0:58:08	2.39	0.00 ✓	9.38	0.00	psample10	OK	1
1707771-BZ	B10	500	24991-1.RAW	1:08:39	2.91	28.67 ✓	352.78	0.00	psample10	CT	1
1707771-CA	B11	500	24992-1.RAW	1:19:09	3.47	32.34 ✓	587.70	0.00	psample10	OK	1
SEQ-CCV8	B12	1	24993-1.RAW	1:29:40	1.37	183.91 ✓	6.98	0.00	psample10	OK	1
SEQ-CCB8	B13	1	24994-1.RAW	1:40:11	4.68	0.74 ✓	5.35	0.00	psample10	OK	1



#1: Clean

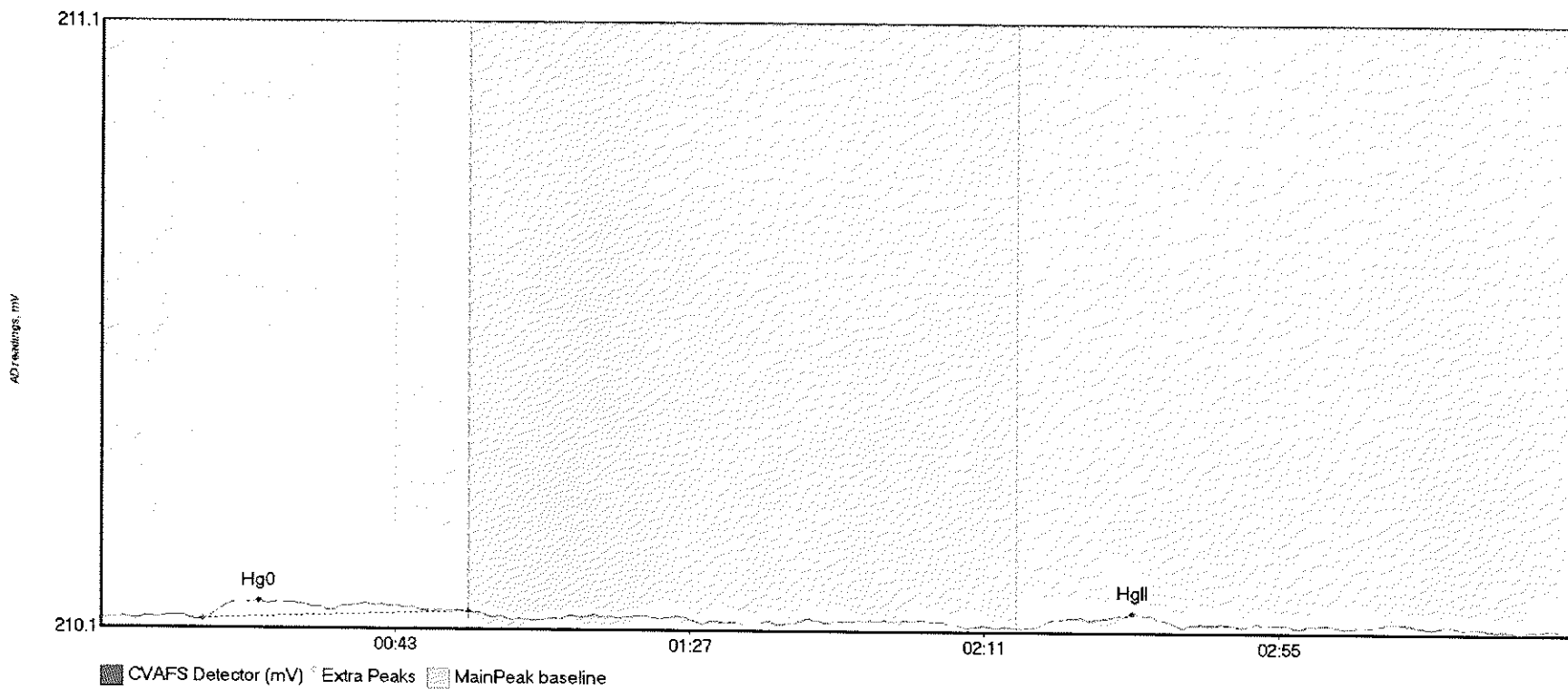


Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
Clean MeHg	1.004	111.5	136.4	210.27	210.29	134.7	0.020	OK	210.3376	0.00	0.00	
Clean HgII	2.507	142.9	219.4	210.30	210.36	218.6	0.068	OK	210.3376	0.00	0.00	317



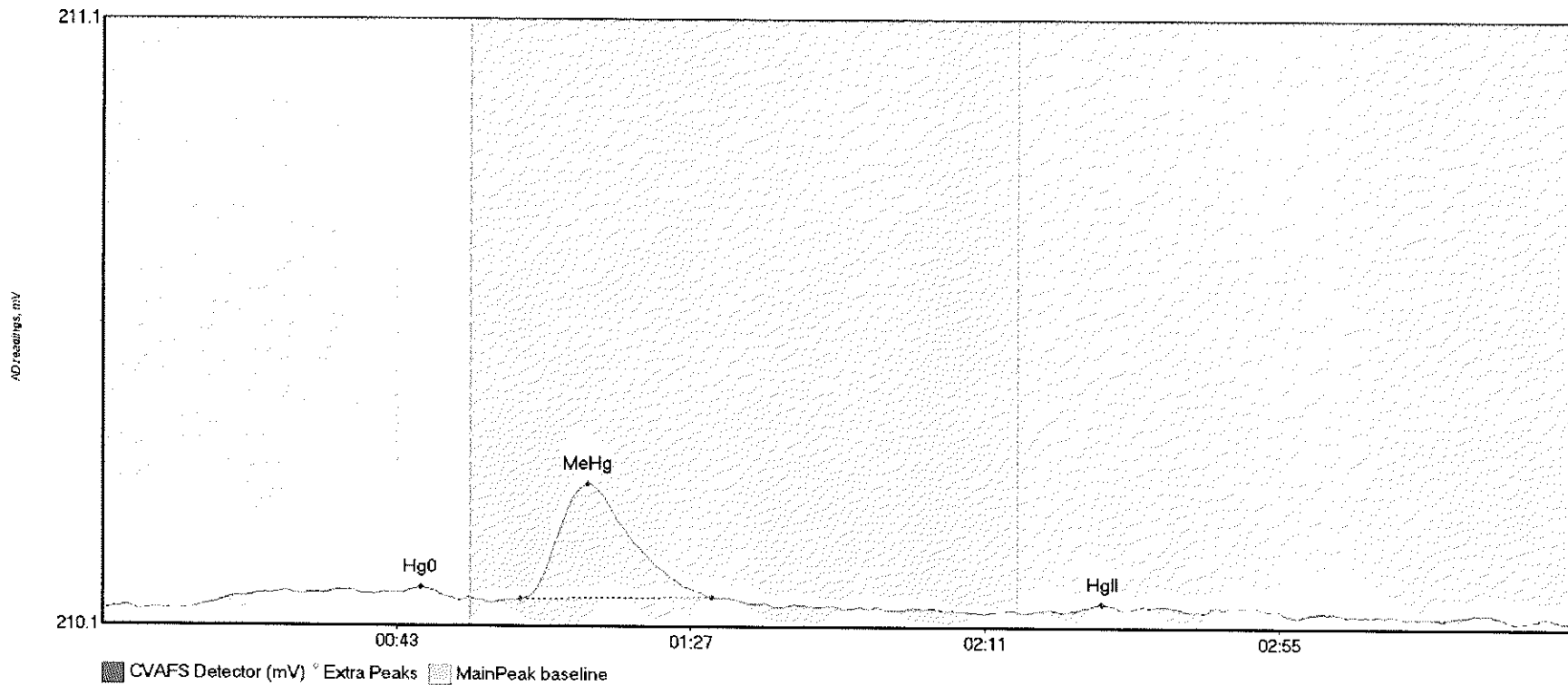
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
WS Hg0	8.764	13.5	54.4	210.20	210.23	32.6	0.044	OK	210.2088	0.00	0.00	
WS HgII	14.413	138.4	189.3	210.21	210.21	156.5	0.072	OK	210.2088	0.00	0.00	017

#3: SEQ-IBL1



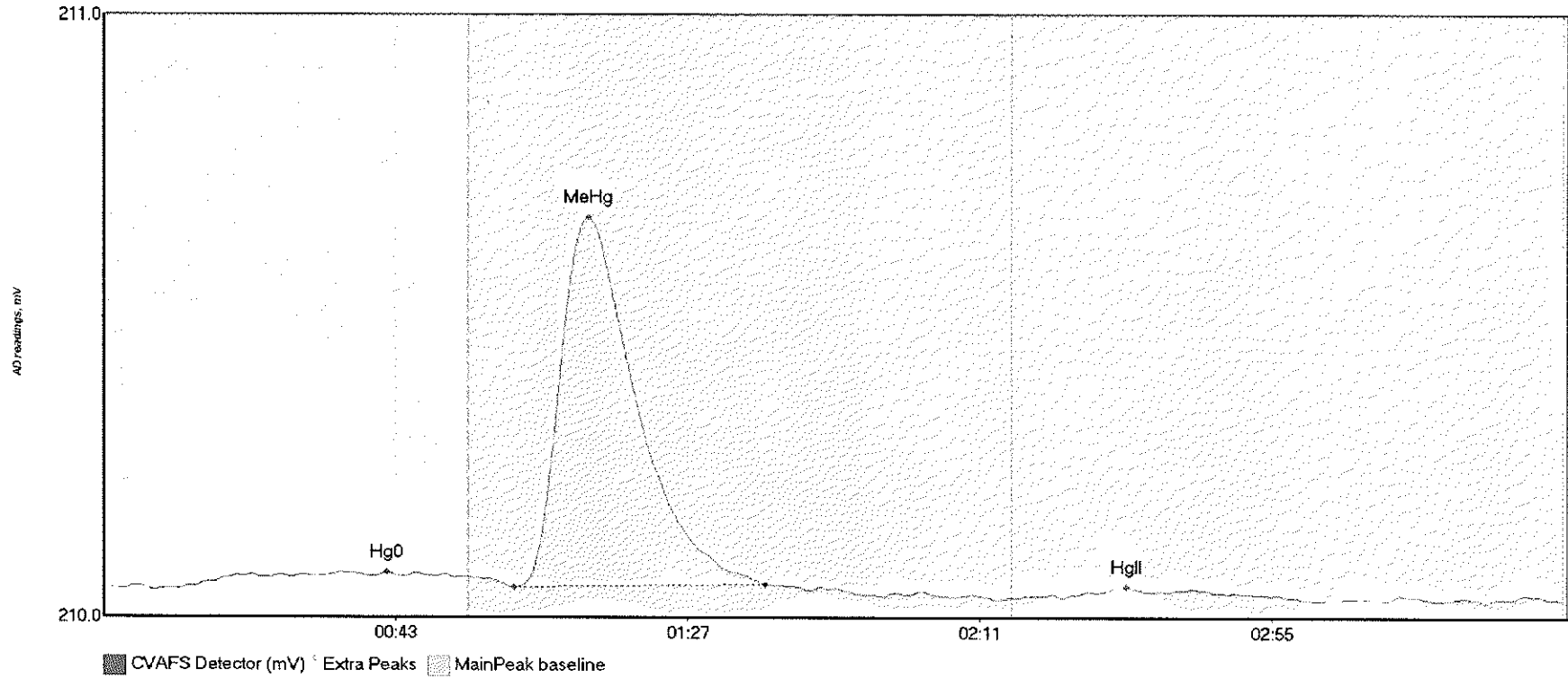
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-IBL1 Hg0	6.102	15.1	55.0	210.16	210.18	23.6	0.030	CT	210.1627	0.00	-0.01	
SEQ-IBL1 HgII	3.093	138.8	161.5	210.15	210.16	154.2	0.024	OK	210.1627	0.00	-0.01	017

#4: SEQ-CAL1



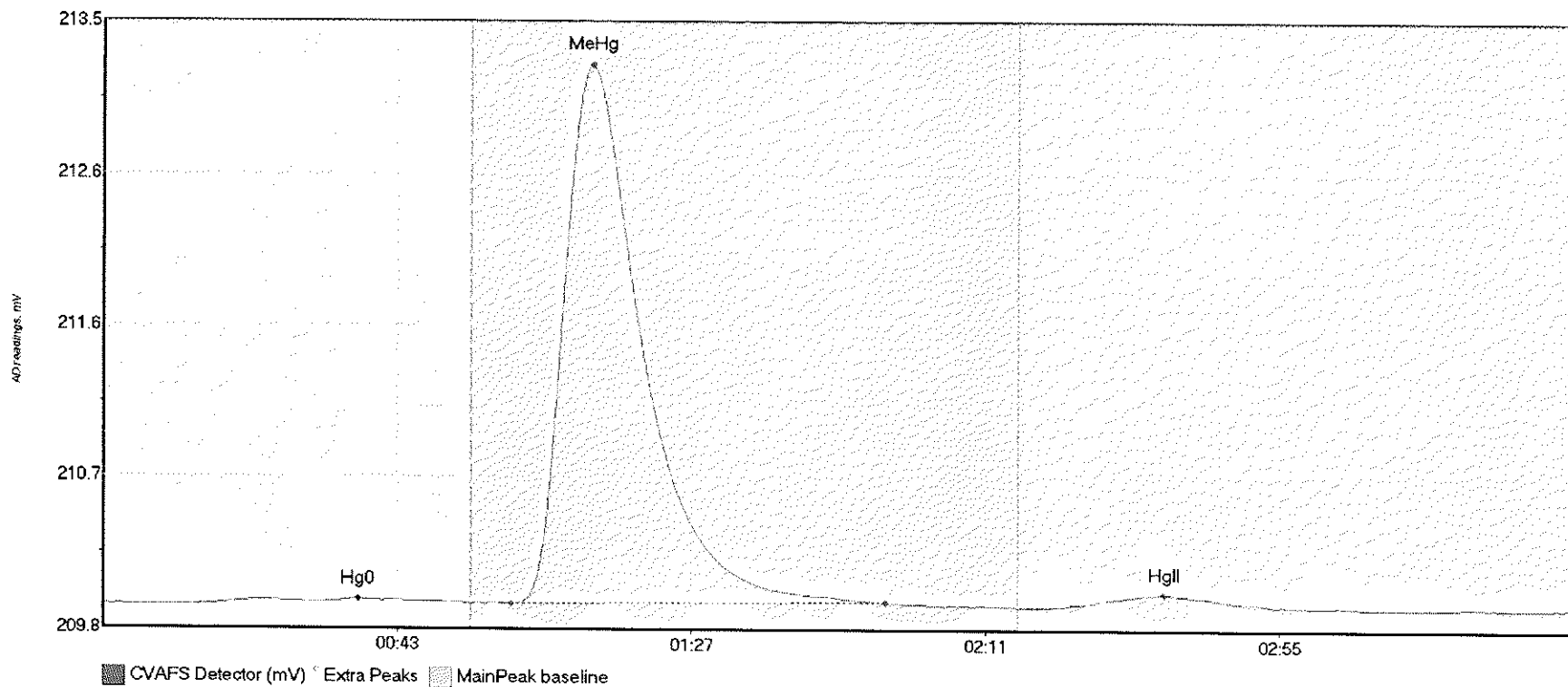
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CAL1 Hg0	6.367	13.3	53.4	210.09	210.11	47.6	0.033	OK	210.0927	0.00	-0.02	
SEQ-CAL1 MeHg	23.515	62.4	91.1	210.11	210.11	72.6	0.191	OK	210.0927	0.00	-0.02	
SEQ-CAL1 HgII	0.471	145.4	152.9	210.09	210.09	149.6	0.011	OK	210.0927	0.00	-0.02	

#5: SEQ-CAL2



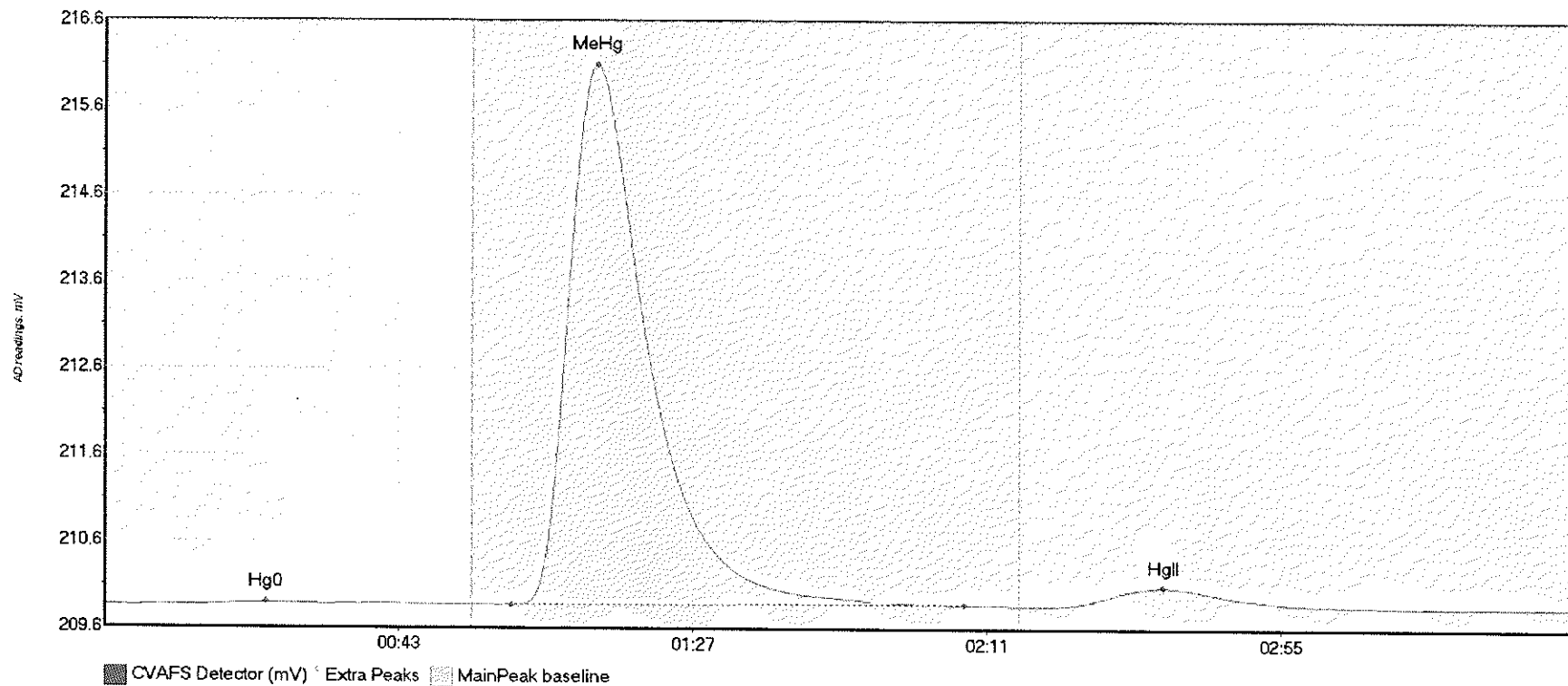
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CAL2 Hg0	3.966	13.7	53.0	210.02	210.04	42.7	0.024	OK	210.0211	0.00	-0.02	
SEQ-CAL2 MeHg	81.069	61.9	99.8	210.02	210.03	73.1	0.614	OK	210.0211	0.00	-0.02	
SEQ-CAL2 HgII	1.661	146.8	174.1	210.01	210.01	154.2	0.013	OK	210.0211	0.00	-0.02	

#6: SEQ-CAL3



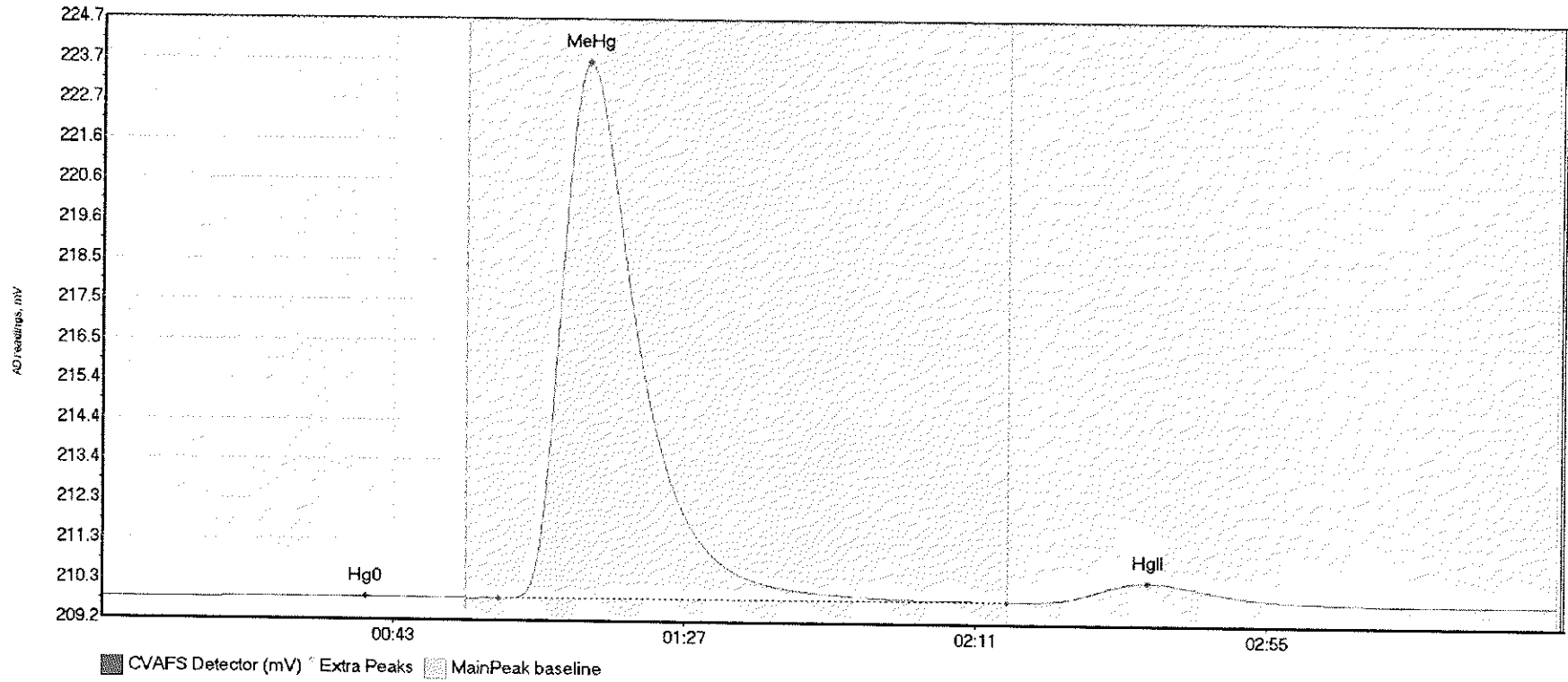
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CAL3 Hg0	6.142	13.7	54.5	209.93	209.95	38.1	0.032	OK	209.9357	0.00	-0.01	
SEQ-CAL3 MeHg	444.823	61.0	117.0	209.94	209.95	73.1	3.277	OK	209.9357	0.00	-0.01	
SEQ-CAL3 HgII	13.760	143.3	181.5	209.93	209.93	158.8	0.077	OK	209.9357	0.00	-0.01	

#7: SEQ-CAL4



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CAL4 Hg0	5.028	14.1	51.6	209.85	209.87	24.1	0.030	OK	209.8504	0.00	-0.01	
SEQ-CAL4 MeHg	860.290	60.8	128.6	209.86	209.87	73.6	6.264	OK	209.8504	0.00	-0.01	
SEQ-CAL4 HgII	40.348	141.3	185.1	209.86	209.86	158.5	0.218	OK	209.8504	0.00	-0.01	

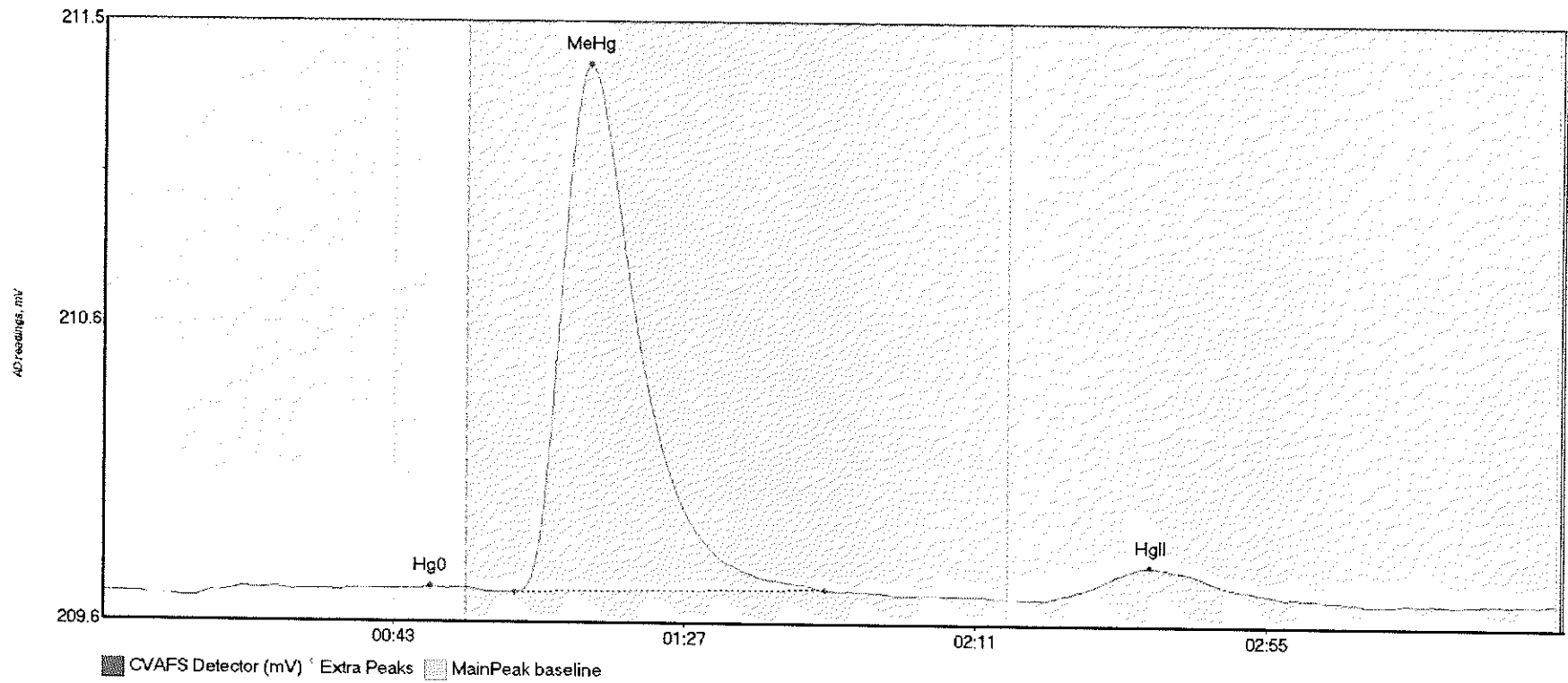
#8: SEQ-CAL5



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CAL5 Hg0	6.367	14.3	55.0	209.79	209.81	39.9	0.033	CT	209.7883	0.00	0.00	
SEQ-CAL5 MeHg	1883.640	59.9	136.8	209.81	209.82	73.5	13.815	CT	209.7883	0.00	0.00	
SEQ-CAL5 HgII	102.180	139.1	187.1	209.82	209.82	158.1	0.527	OK	209.7883	0.00	0.00	

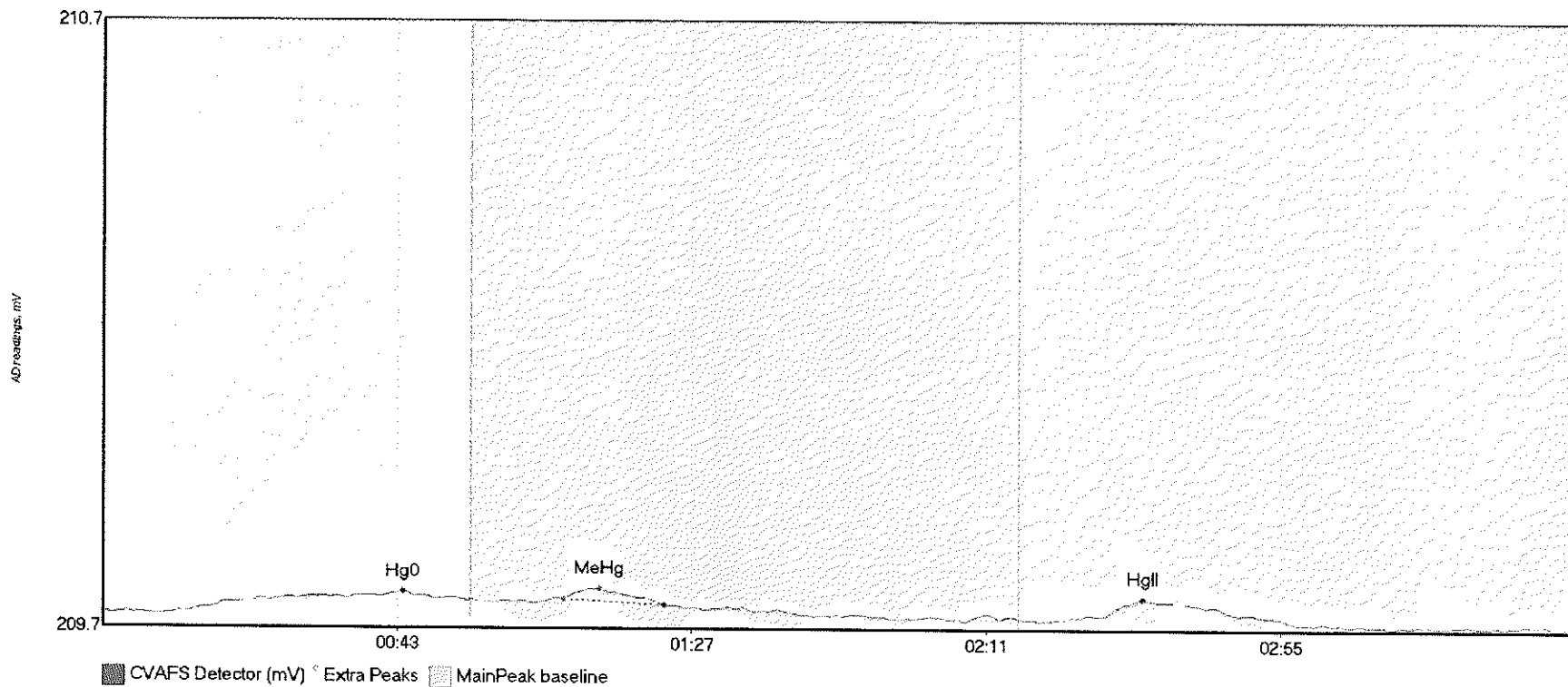


#9: SEQ-ICV1



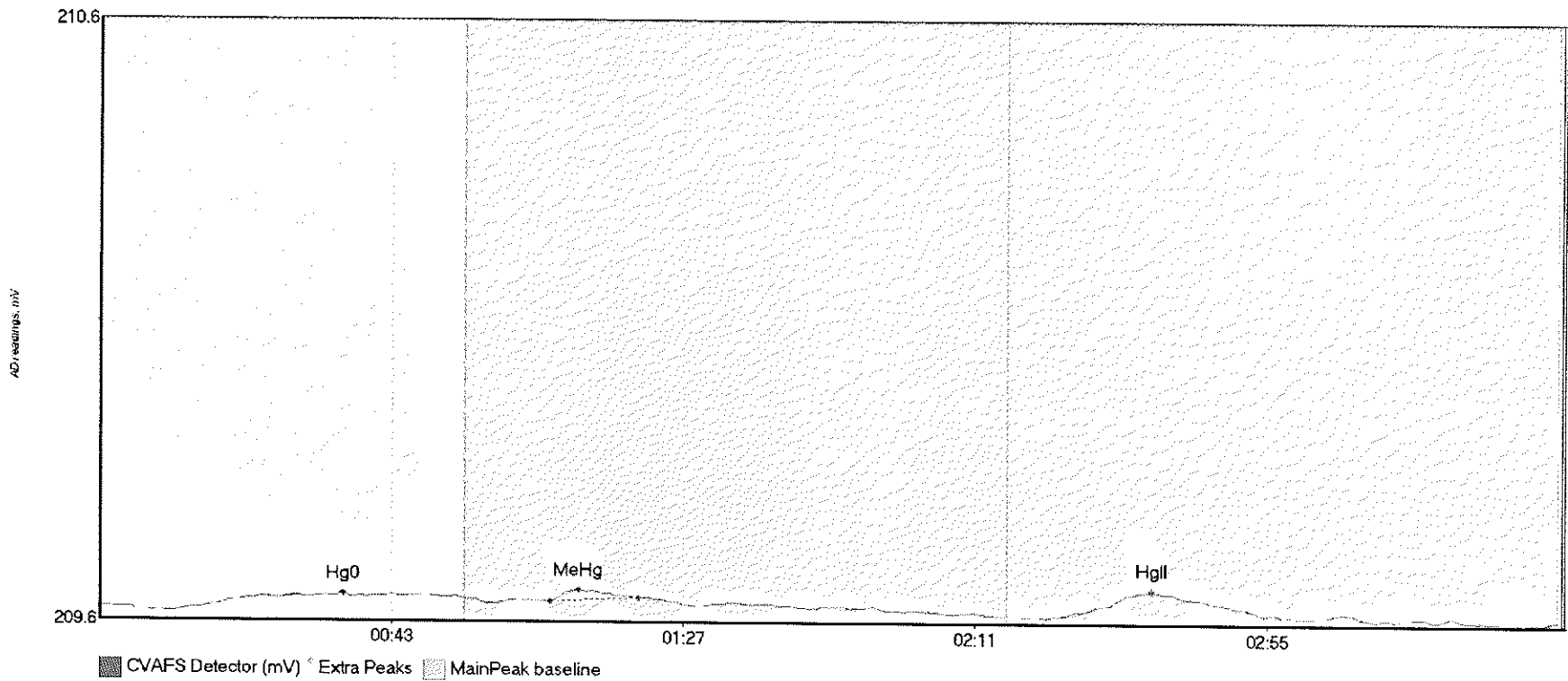
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-ICV1 Hg0	1.379	17.6	52.2	209.74	209.75	49.6	0.015	OK	209.7349	0.00	-0.01	
SEQ-ICV1 MeHg	222.002	62.3	109.2	209.74	209.75	73.5	1.658	OK	209.7349	0.00	-0.01	
SEQ-ICV1 HgII	18.170	142.1	178.6	209.72	209.73	158.5	0.105	OK	209.7349	0.00	-0.61	

#10: SEQ-ICB1



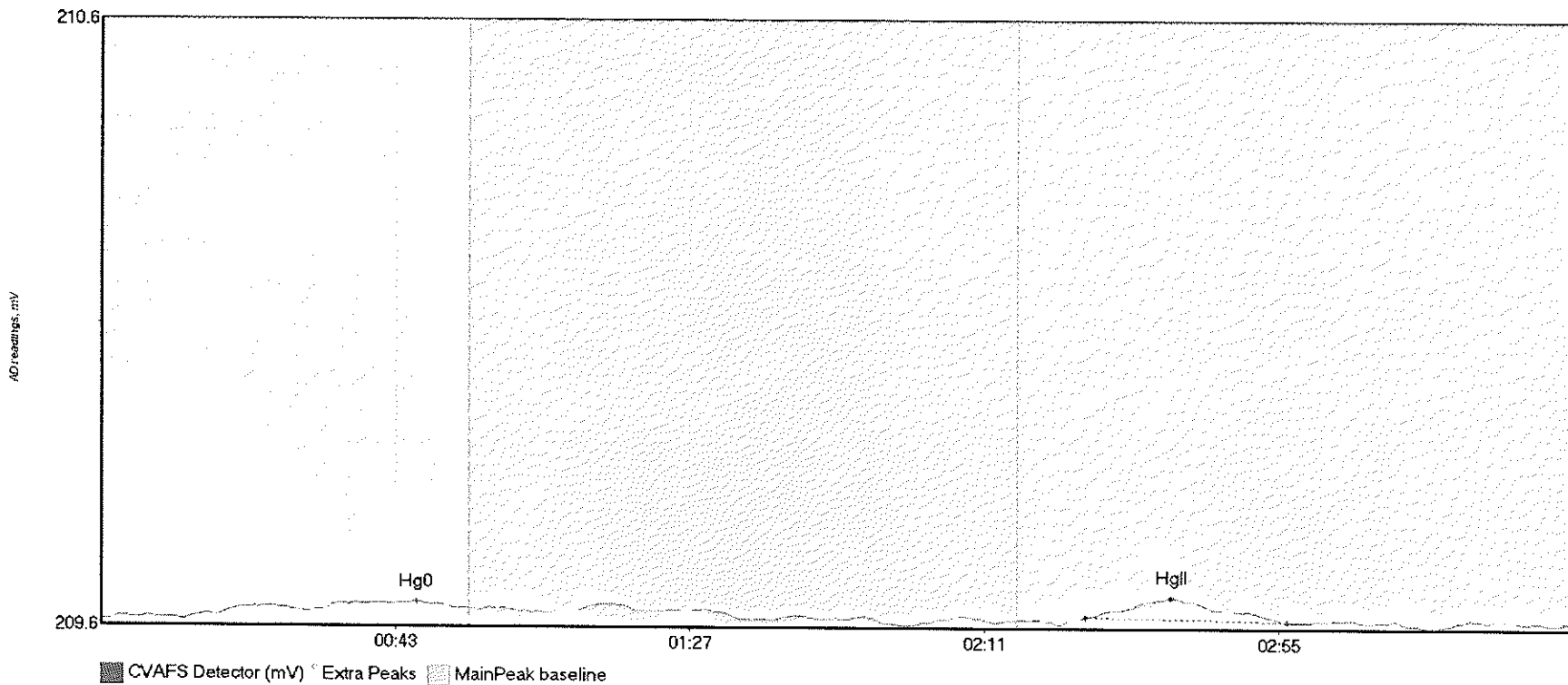
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-ICB1 Hg0	5.123	12.3	54.5	209.68	209.70	44.8	0.034	OK	209.6769	0.00	-0.02	
SEQ-ICB1 MeHg	1.740	68.9	83.9	209.70	209.69	74.3	0.017	OK	209.6769	0.00	-0.02	
SEQ-ICB1 HgII	3.816	149.0	173.3	209.67	209.67	155.5	0.029	OK	209.6769	0.00	-0.02	

#11: F708268-BLK4



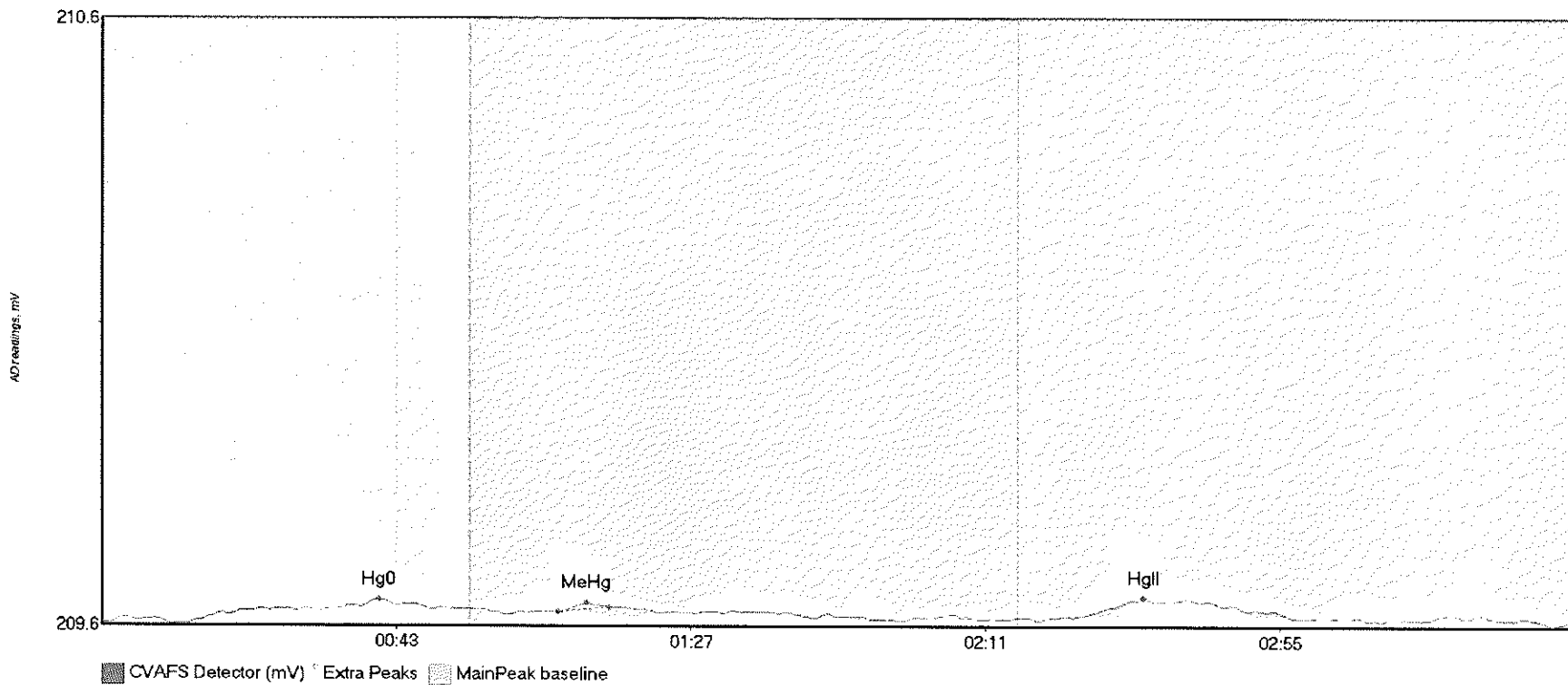
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F708268-BLK4 Hg	3.183	17.2	54.8	209.63	209.64	36.7	0.020	OK	209.6281	0.00	-0.02	
F708268-BLK4 Me	1.238	67.9	81.2	209.64	209.64	72.2	0.019	OK	209.6281	0.00	-0.02	
F708268-BLK4 Hg	6.544	144.8	175.4	209.62	209.62	158.6	0.041	OK	209.6281	0.00	-0.02	

#12: F708268-BLK5



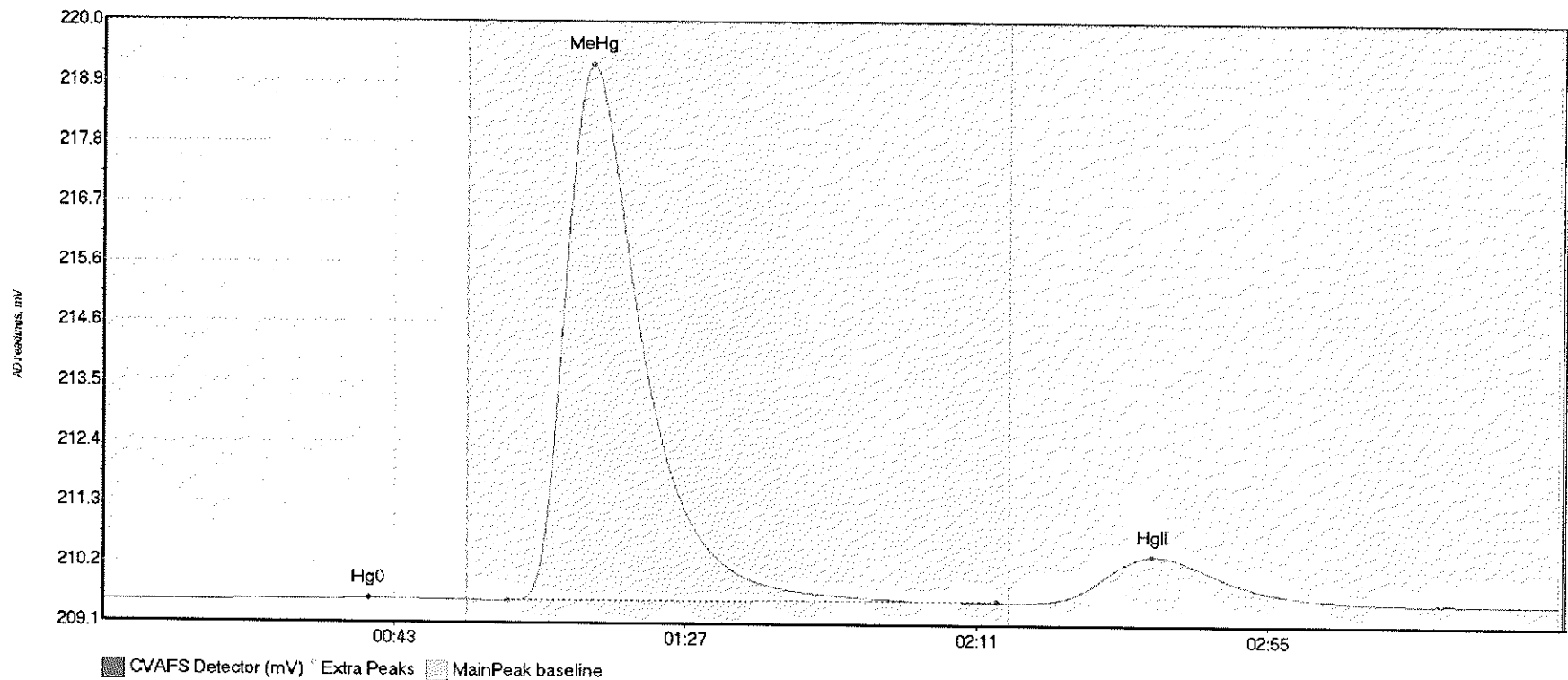
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F708268-BLK5 Hg	3.769	13.7	53.3	209.59	209.61	47.1	0.026	OK	209.5878	0.00	0.00	
F708268-BLK5 Hg	5.356	147.2	177.2	209.60	209.59	160.0	0.033	OK	209.5878	0.00	0.00	317

#13: F708268-BLK6



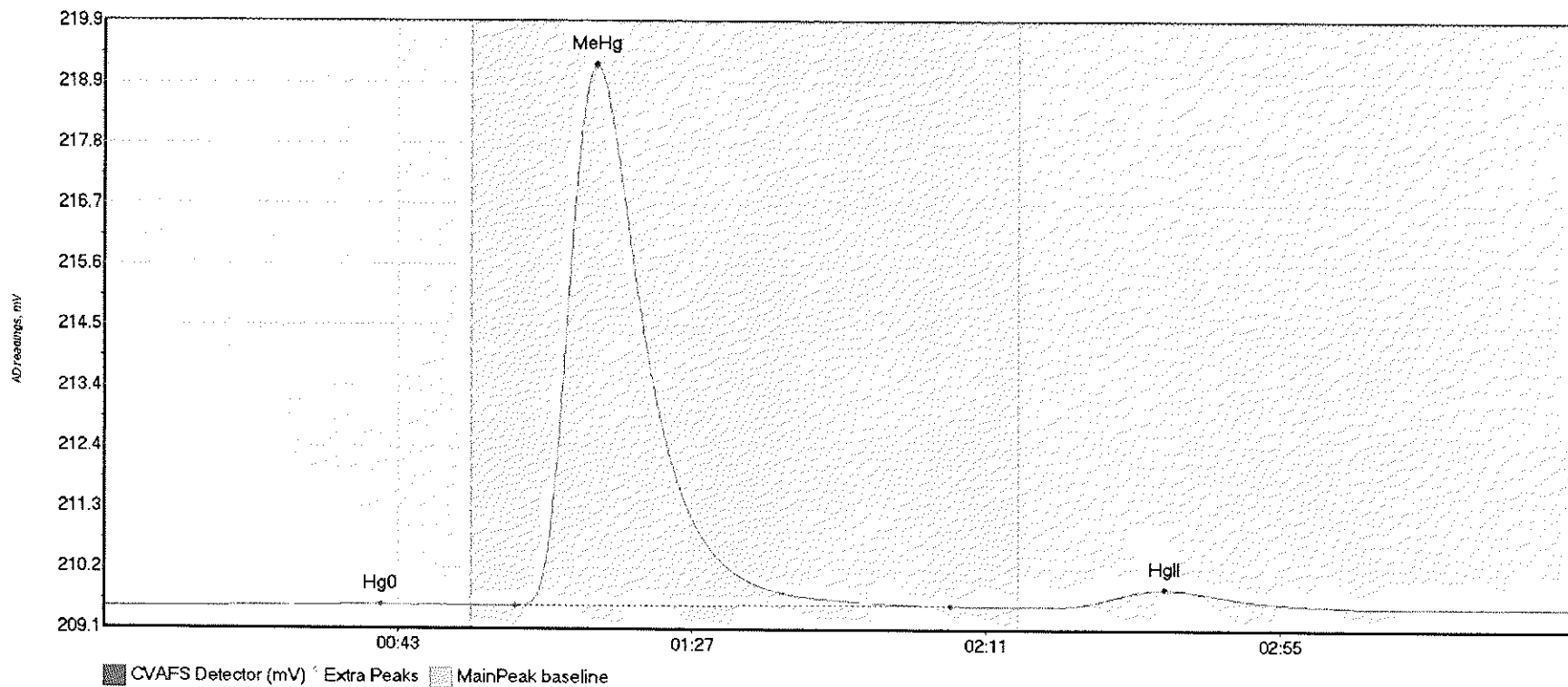
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F708268-BLK6 Hg	4.126	14.9	54.4	209.57	209.59	41.5	0.034	OK	209.5628	0.00	0.00	
F708268-BLK6 Me	0.431	68.1	75.8	209.58	209.59	72.4	0.016	OK	209.5628	0.00	0.00	
F708268-BLK6 Hg	5.686	146.5	178.6	209.58	209.57	155.6	0.028	OK	209.5628	0.00	0.00	

#14: 1707706-01RE1



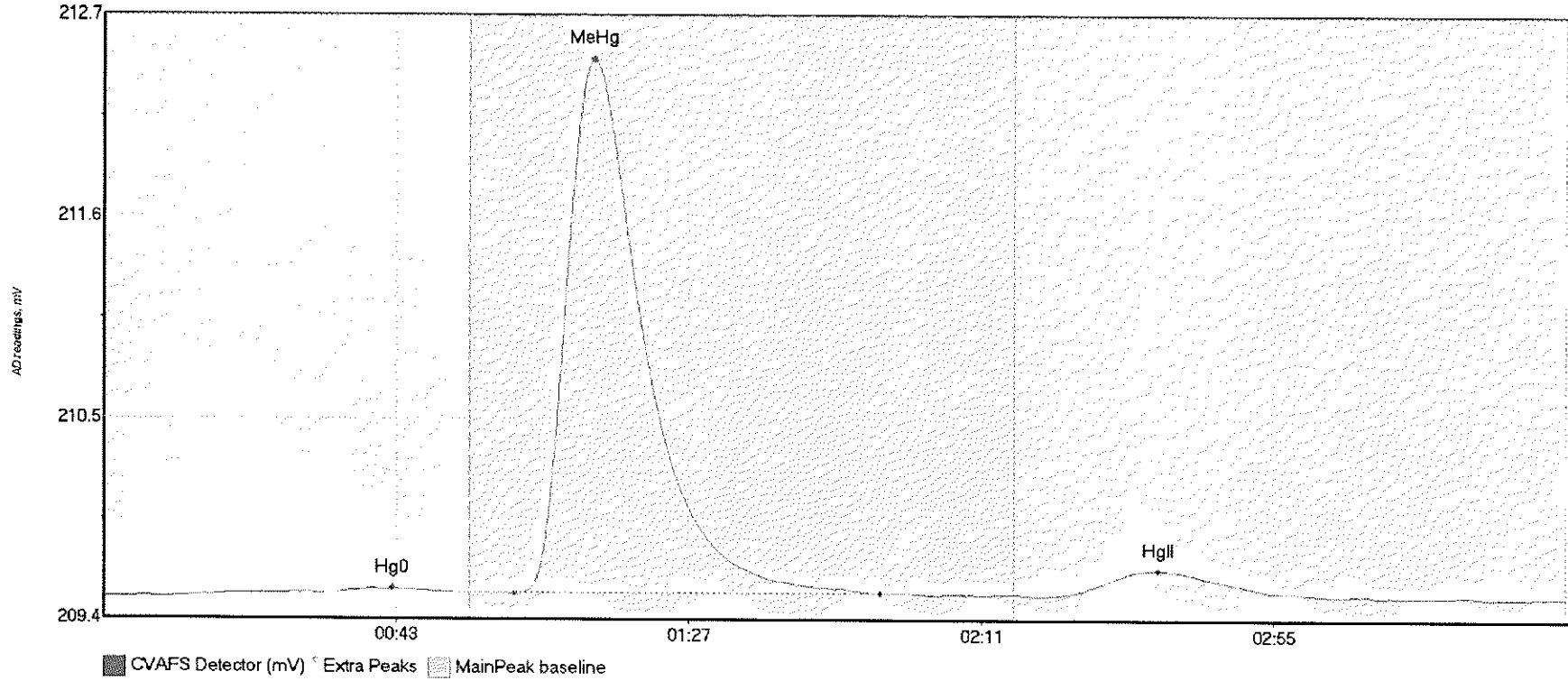
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1707706-01RE1 H	5.421	13.1	55.0	209.54	209.55	40.1	0.040	CT	209.5314	0.00	0.01	
1707706-01RE1 M	1317.153	61.2	135.0	209.55	209.56	73.9	9.642	OK	209.5314	0.00	0.01	
1707706-01RE1 H	170.778	140.1	197.2	209.56	209.55	158.5	0.831	OK	209.5314	0.00	0.01	

#15: 1707706-02RE1



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1707706-02RE1 H	5.379	15.5	53.0	209.51	209.54	41.4	0.043	OK	209.5099	0.00	0.01	
1707706-02RE1 M	1305.525	61.6	126.7	209.53	209.54	73.7	9.630	OK	209.5099	0.00	0.01	
1707706-02RE1 H	60.302	142.1	187.1	209.53	209.52	158.8	0.308	OK	209.5099	0.00	0.01	

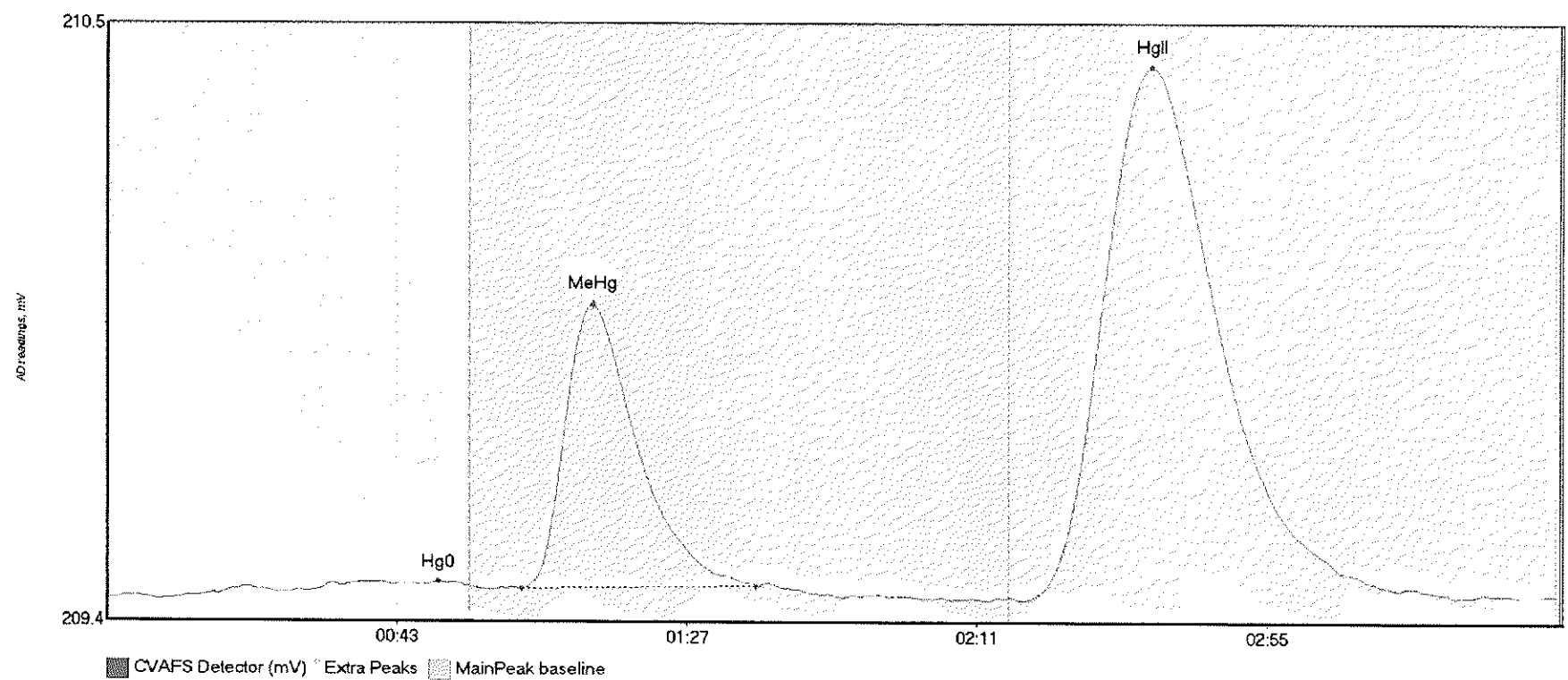
#16: 1707706-03RE1



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1707706-03RE1 H	5.401	12.1	53.9	209.49	209.51	43.4	0.042	OK	209.4824	0.00	0.00	
1707706-03RE1 M	404.003	61.7	116.8	209.50	209.51	73.8	2.993	OK	209.4824	0.00	0.00	
1707706-03RE1 H	24.830	143.4	181.0	209.50	209.50	158.6	0.140	OK	209.4824	0.00	0.00	

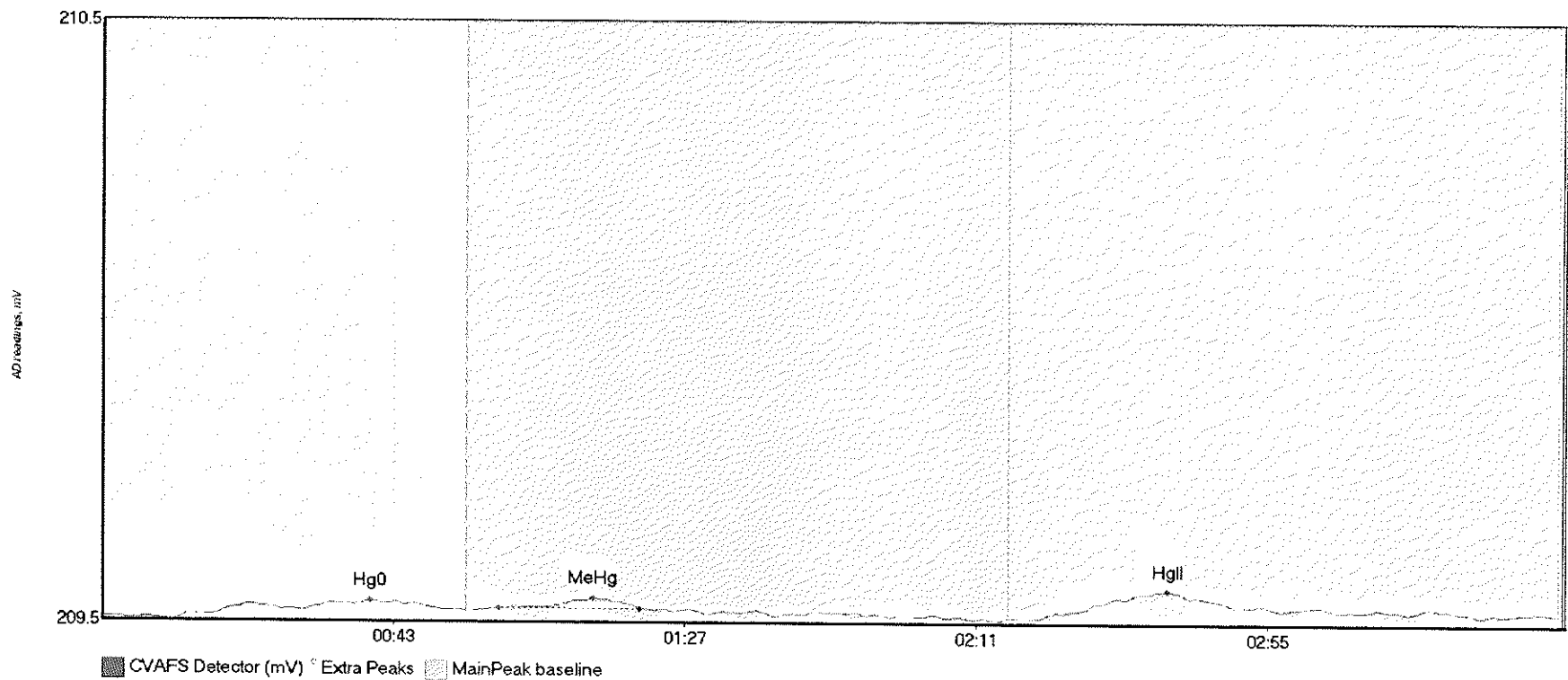


#17: 1707737-01RE1



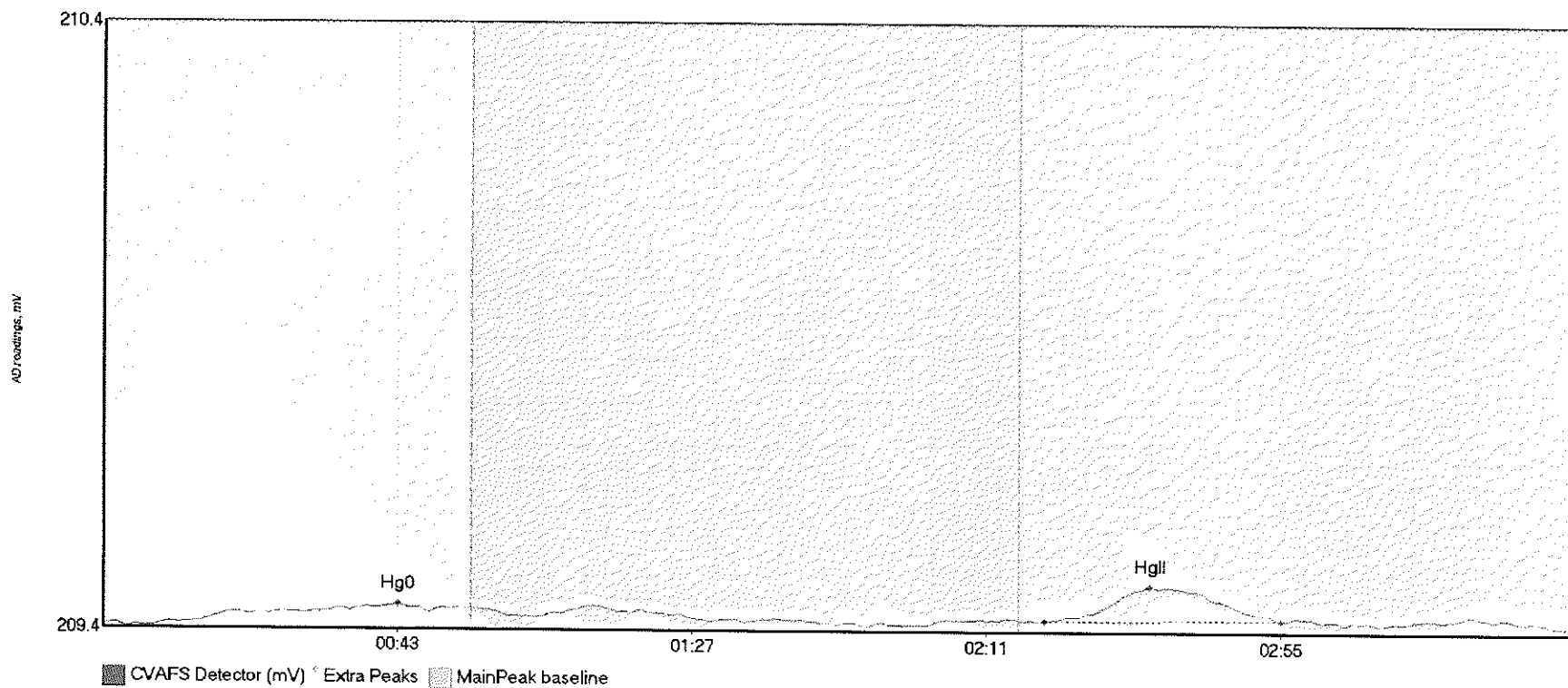
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	B1Dev	B1Shift	Comment
1707737-01RE1 H	3.126	13.8	55.0	209.47	209.49	50.3	0.026	CT	209.4697	0.00	0.01	
1707737-01RE1 M	64.787	62.9	98.5	209.49	209.49	73.7	0.513	OK	209.4697	0.00	0.01	
1707737-01RE1 H	195.780	139.5	204.5	209.47	209.47	158.4	0.963	OK	209.4697	0.00	0.01	

#18: F708293-BLK7



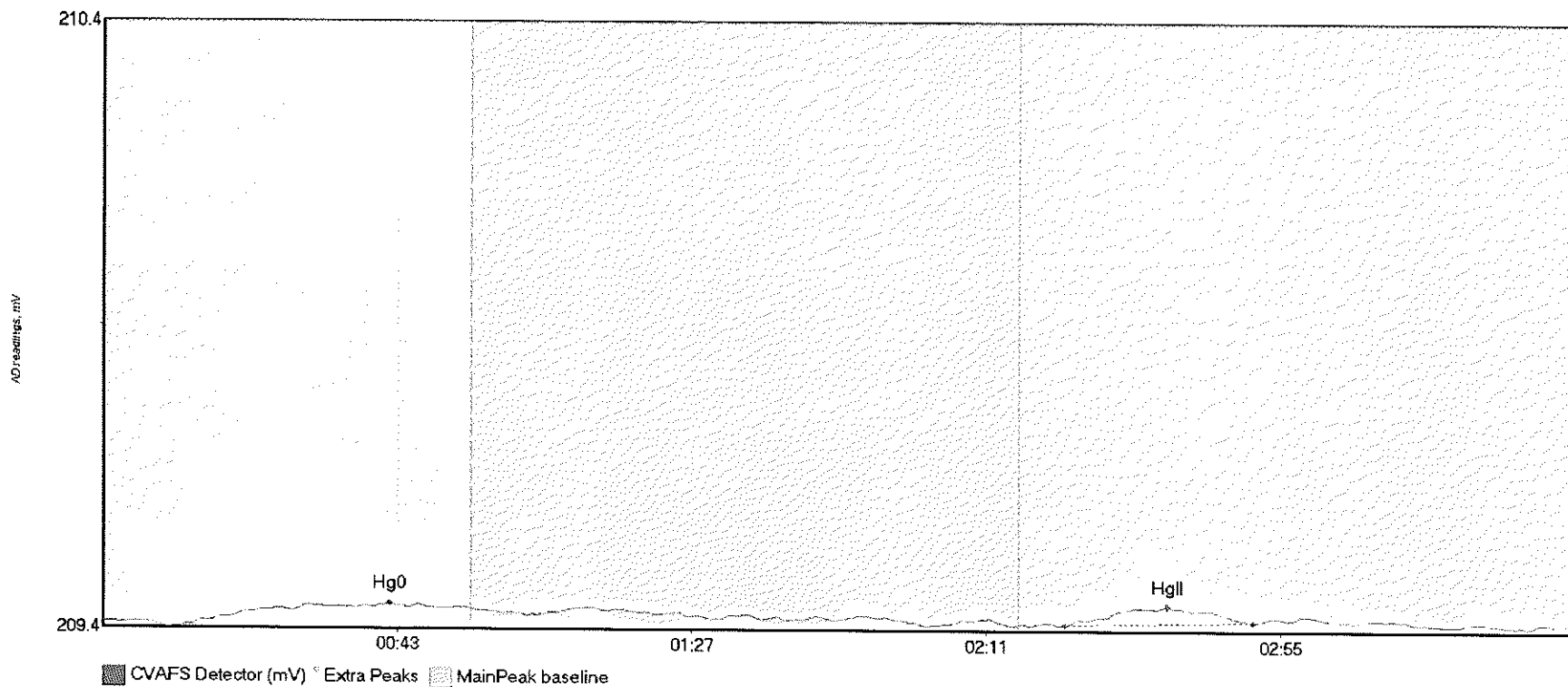
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F708293-BLK7 Hg	4.363	16.2	55.0	209.47	209.47	40.5	0.023	CT	209.4633	0.00	0.01	
F708293-BLK7 Me	1.783	59.9	81.2	209.48	209.48	74.2	0.018	OK	209.4633	0.00	0.01	
F708293-BLK7 Hg	11.735	141.3	207.7	209.47	209.47	160.9	0.046	OK	209.4633	0.00	0.01	

#19: F708293-BLK8



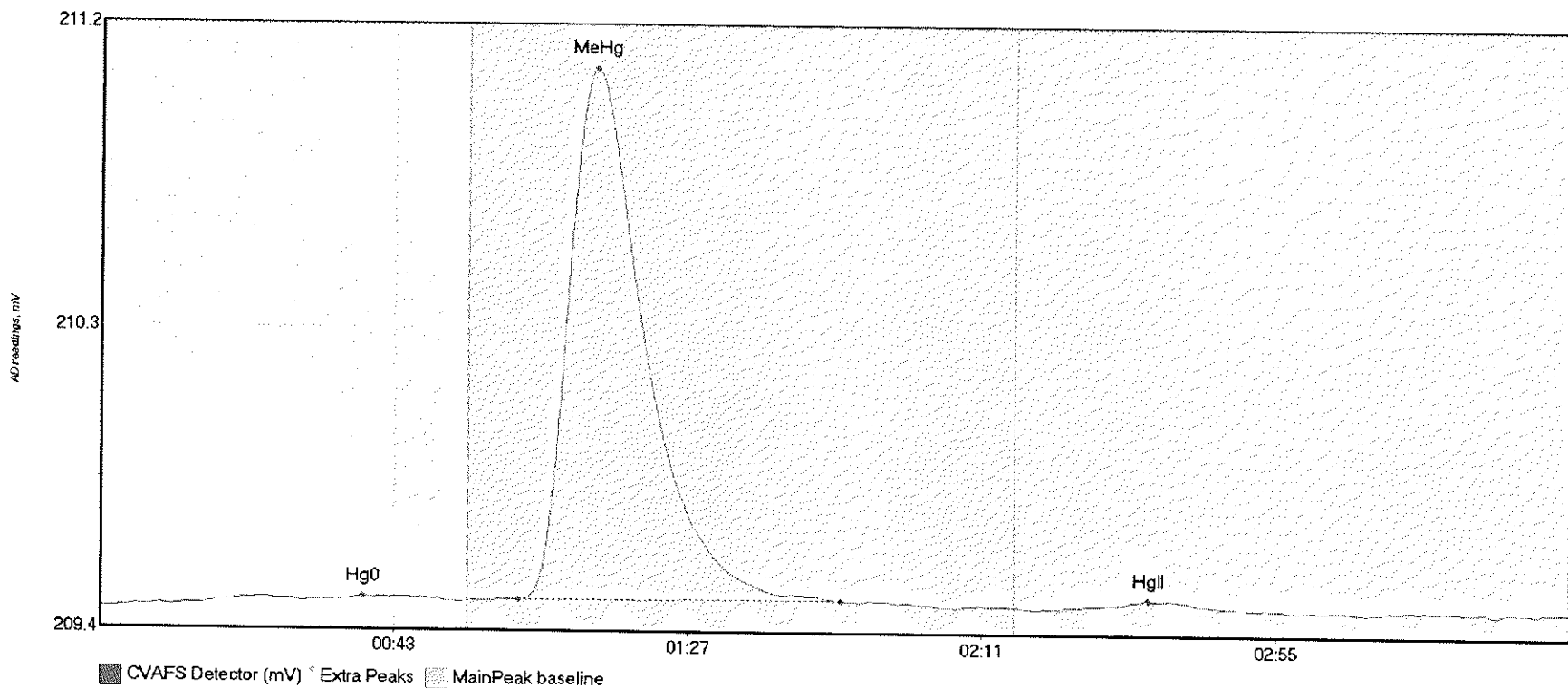
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F708293-BLK8 Hg	3.315	14.3	48.7	209.45	209.47	44.1	0.029	OK	209.4477	0.00	0.00	
F708293-BLK8 Hg	10.164	140.8	176.1	209.46	209.46	156.4	0.058	OK	209.4477	0.00	0.00	017

#20: F708293-BLK9



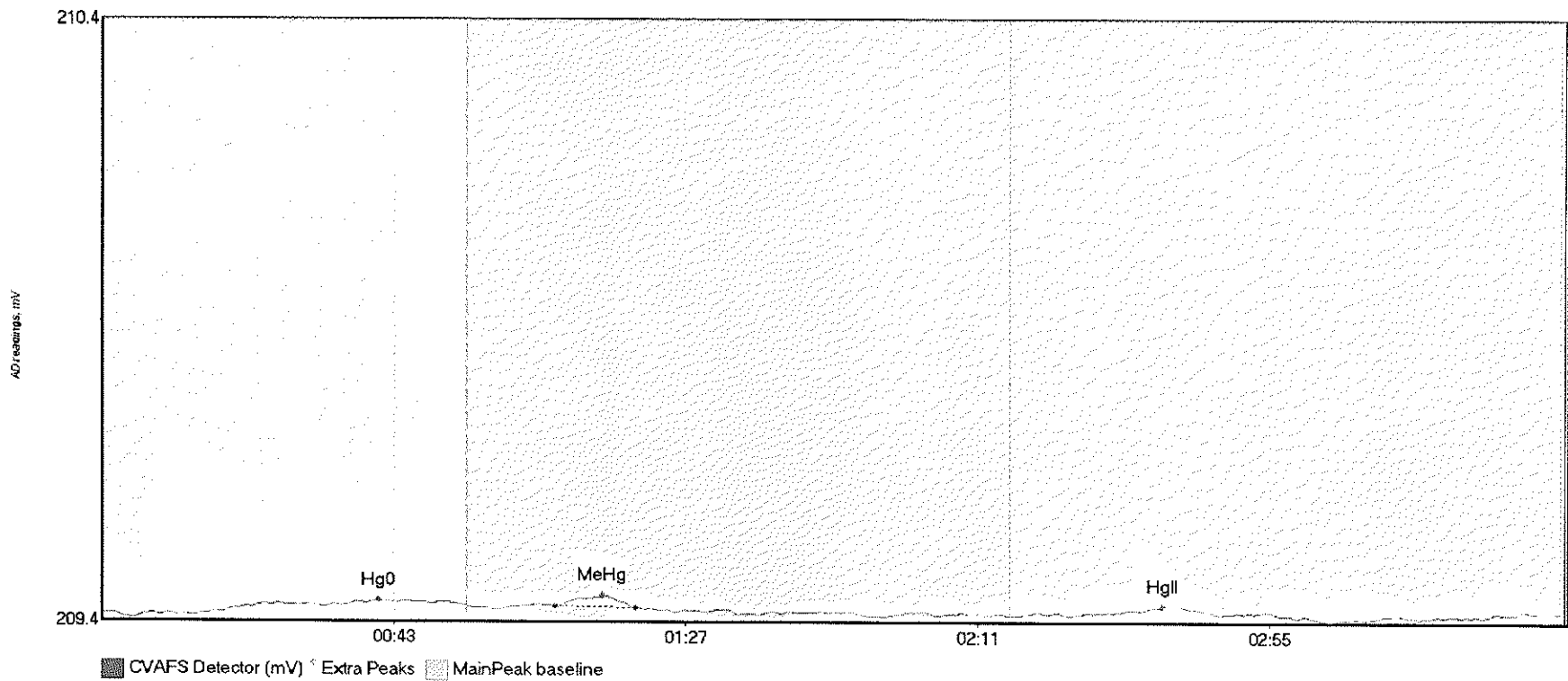
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F708293-BLK9 Hg	3.485	15.7	51.4	209.45	209.47	42.8	0.029	OK	209.4507	0.00	0.00	
F708293-BLK9 Hg	4.652	143.8	171.9	209.45	209.45	159.0	0.033	OK	209.4507	0.00	0.00	317

#21: SEQ-CCV1



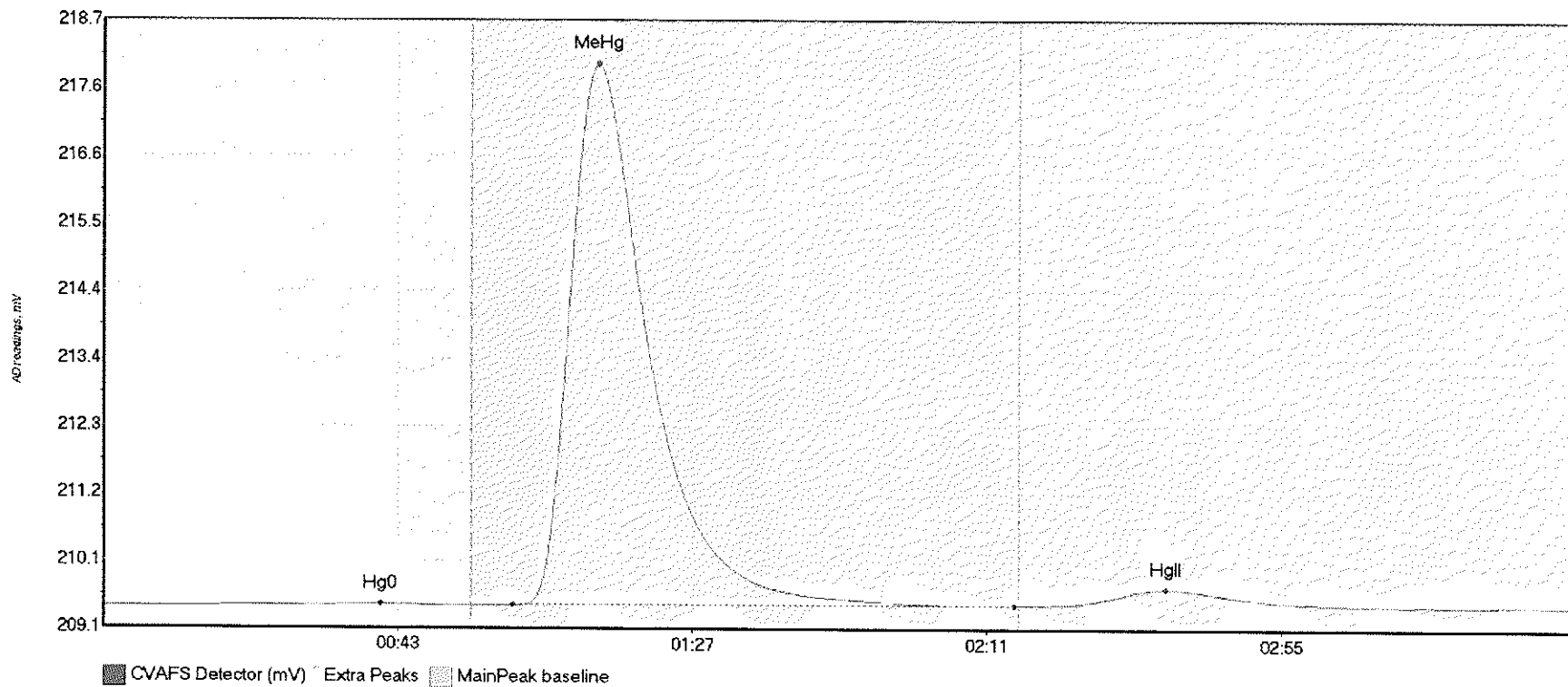
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CCV1 Hg0	5.398	6.6	53.6	209.44	209.45	39.4	0.031	OK	209.4322	0.00	0.01	
SEQ-CCV1 MeHg	207.431	62.6	110.9	209.46	209.46	74.0	1.570	OK	209.4322	0.00	0.01	
SEQ-CCV1 HgII	2.193	149.6	168.4	209.45	209.45	157.0	0.019	OK	209.4322	0.00	0.01	117

#22: SEQ-CCB1



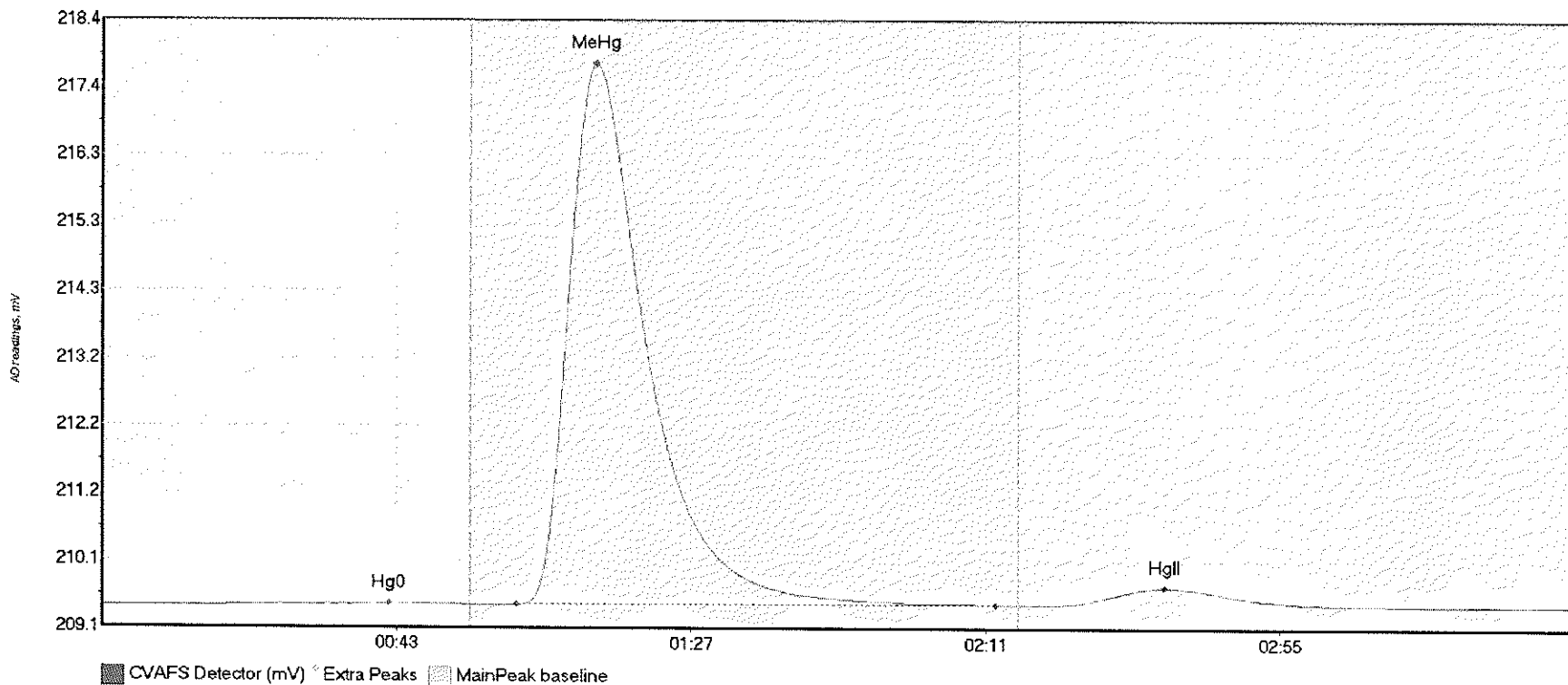
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CCB1 Hg0	3.111	18.2	55.0	209.43	209.44	41.7	0.020	CT	209.4325	0.00	0.00	
SEQ-CCB1 MeHg	1.359	68.3	80.5	209.44	209.44	75.5	0.017	OK	209.4325	0.00	0.00	
SEQ-CCB1 HgII	1.201	150.3	168.5	209.43	209.43	159.9	0.012	OK	209.4325	0.00	0.00	

#23: F708293-MS3



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment	
F708293-MS3	Hg0	4.601	15.4	53.5	209.43	209.44	41.4	0.032	OK	209.4235	0.00	0.02	
F708293-MS3	MeH	1171.829	61.2	136.2	209.44	209.46	73.9	8.576	OK	209.4235	0.00	0.02	
F708293-MS3	HgI	50.861	138.7	187.4	209.46	209.46	158.7	0.266	OK	209.4235	0.00	0.02	

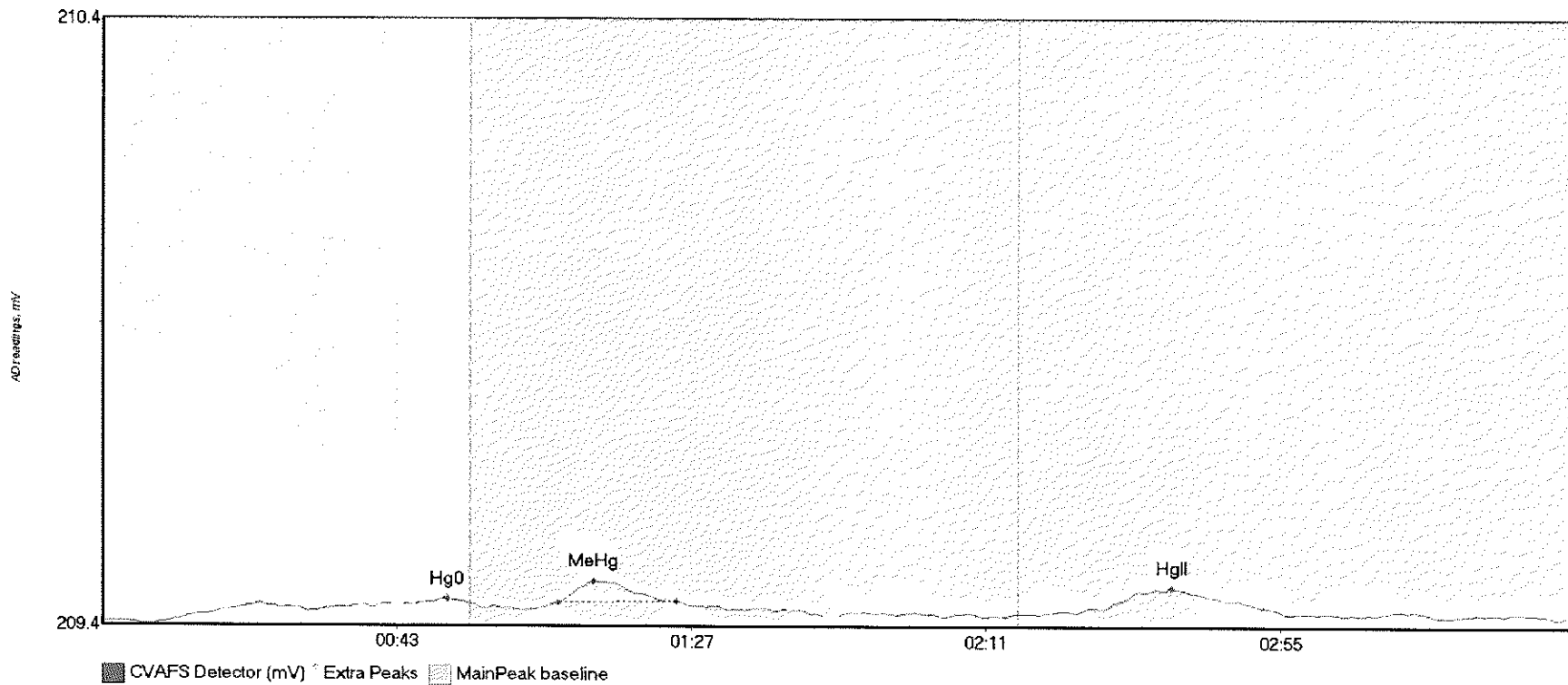
#24: F708293-MSD3



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F708293-MSD3 Hg	5.075	14.6	54.9	209.43	209.45	42.9	0.034	OK	209.4314	0.00	0.02	
F708293-MSD3 Me	1125.284	61.8	133.5	209.45	209.46	73.8	8.268	OK	209.4314	0.00	0.02	
F708293-MSD3 Hg	48.262	142.0	183.6	209.47	209.47	158.8	0.266	OK	209.4314	0.00	0.02	

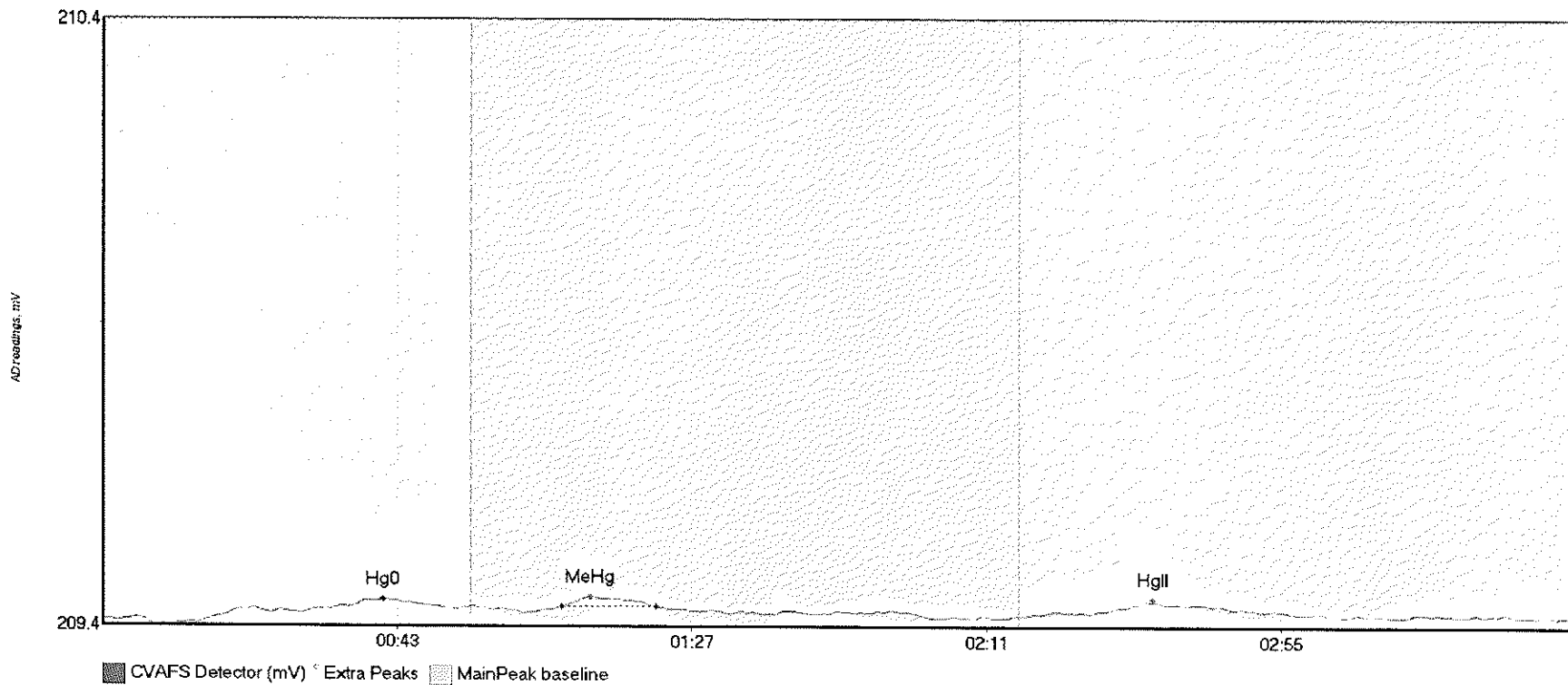


#25: F707568-BLK1



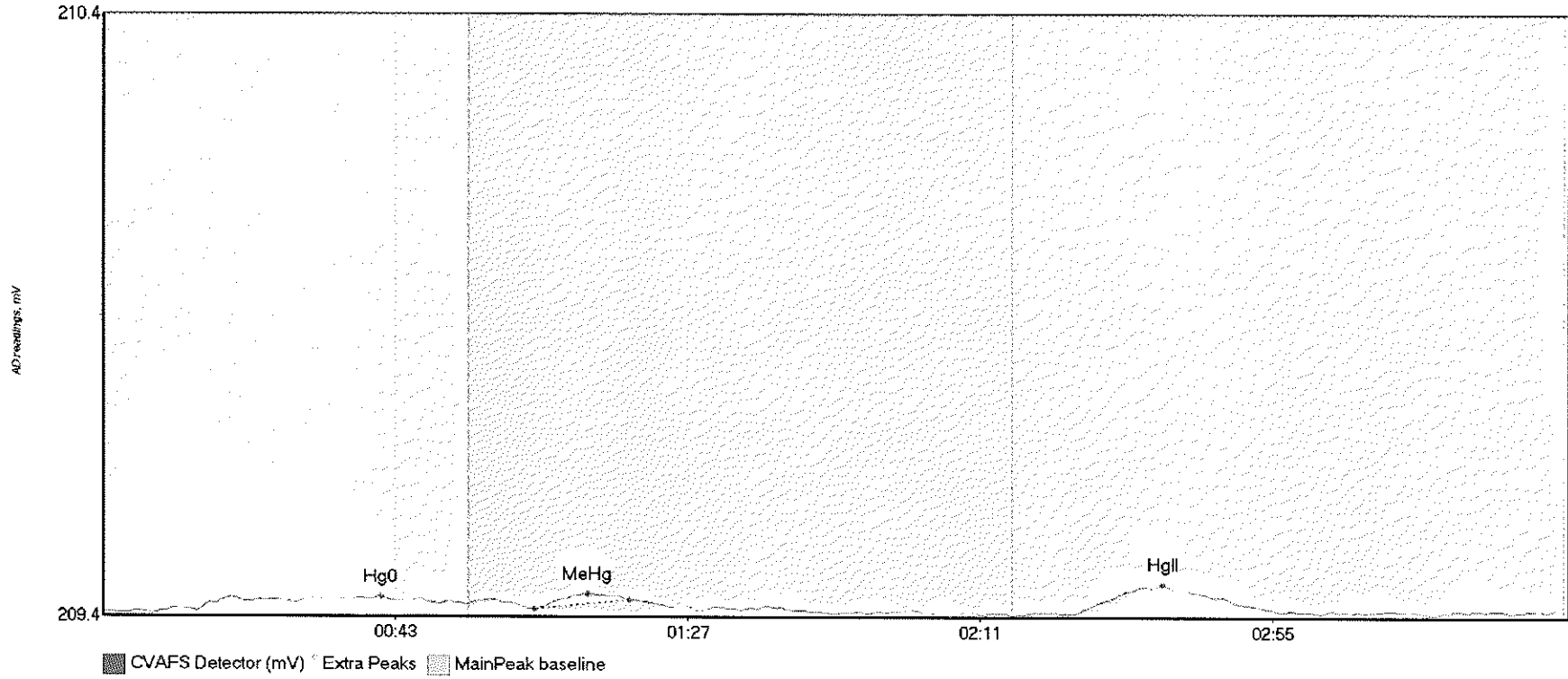
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F707568-BLK1 Hg	3.245	11.4	55.0	209.43	209.45	51.6	0.034	CT	209.4212	0.00	0.01	
F707568-BLK1 Me	3.203	68.1	85.7	209.45	209.45	73.5	0.035	OK	209.4212	0.00	0.01	
F707568-BLK1 Hg	7.053	145.4	176.9	209.44	209.43	159.8	0.041	OK	209.4212	0.00	0.01	

#26: F707568-BLK2



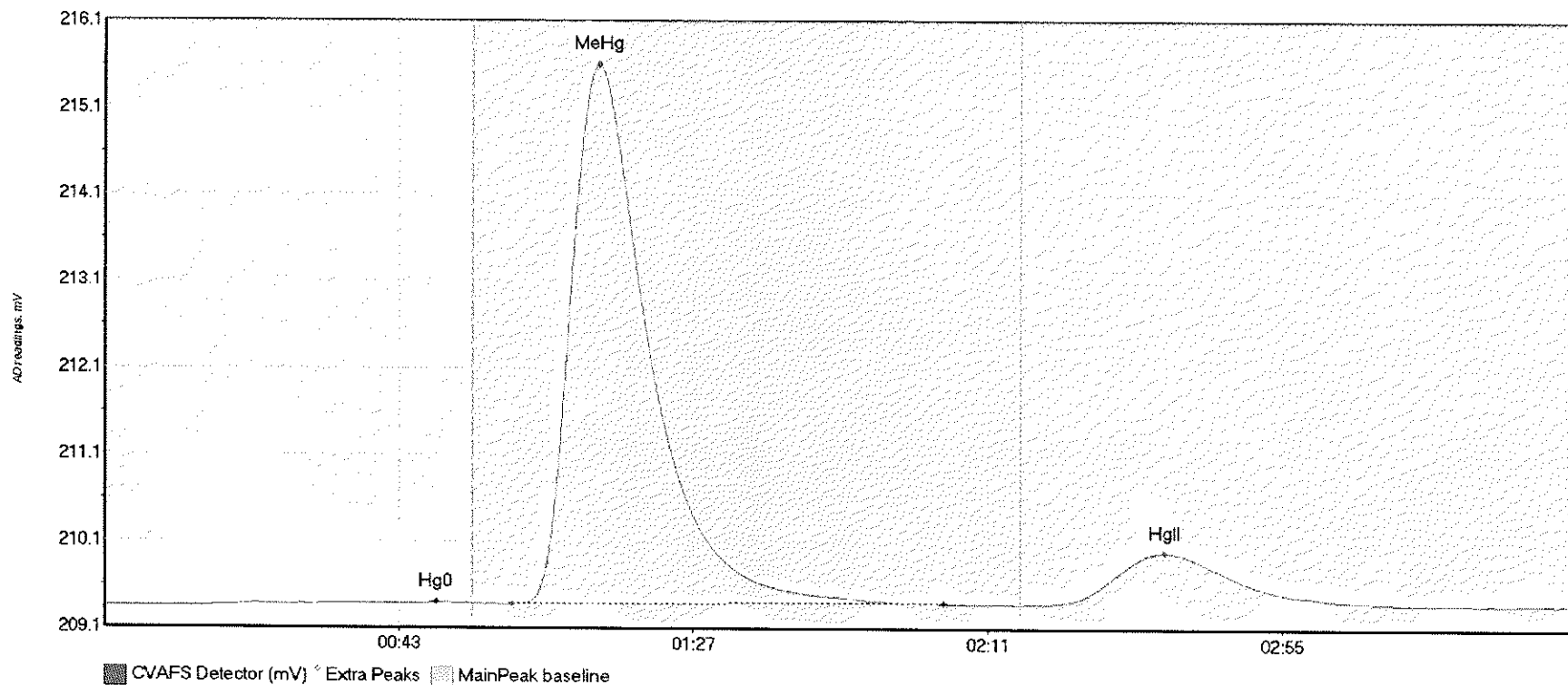
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F707568-BLK2 Hg	3.270	17.0	52.9	209.43	209.44	41.9	0.029	OK	209.4239	0.00	0.01	
F707568-BLK2 Me	1.359	68.6	82.8	209.45	209.45	72.8	0.016	OK	209.4239	0.00	0.01	
F707568-BLK2 Hg	3.376	147.3	178.8	209.43	209.43	156.9	0.021	OK	209.4239	0.00	0.01	

#27: F707568-BLK3



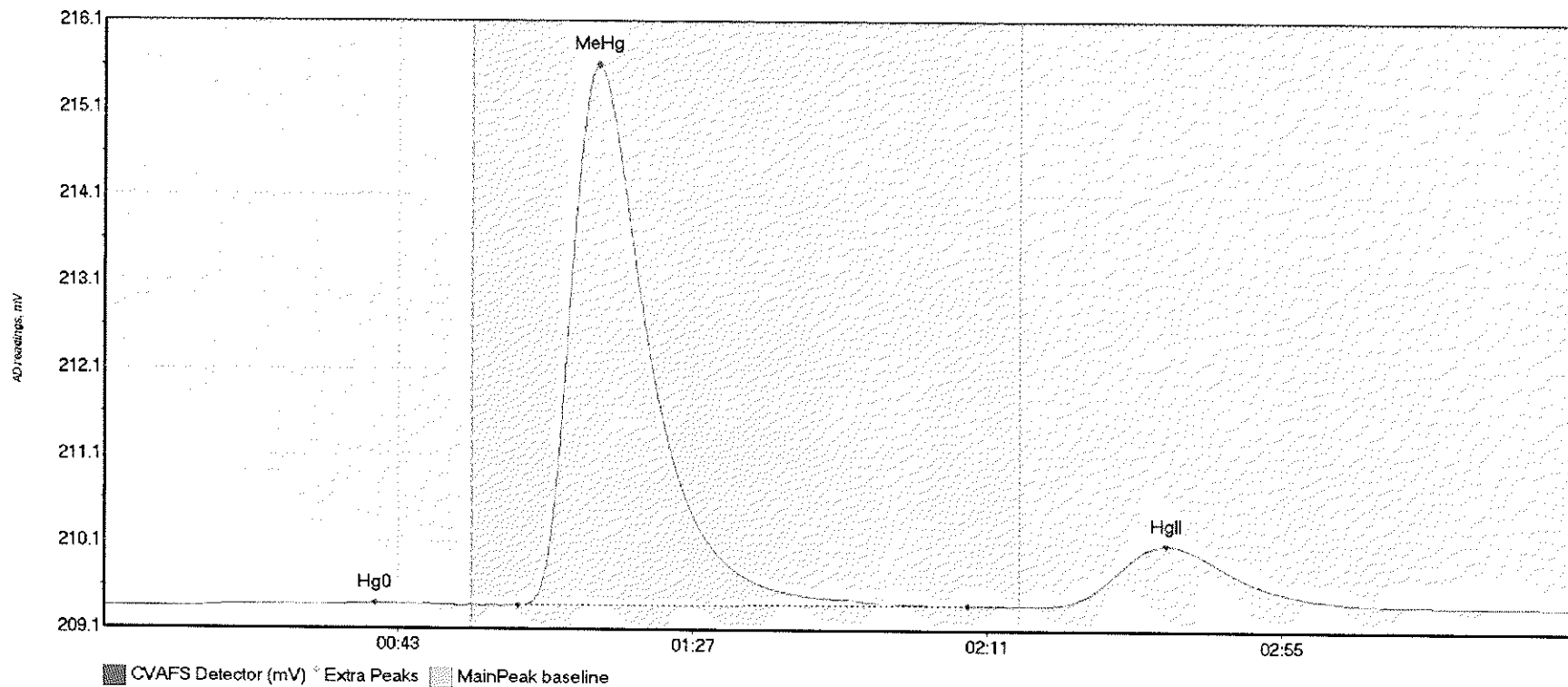
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F707568-BLK3 Hg	4.785	14.1	54.7	209.42	209.43	41.8	0.024	OK	209.4145	0.00	0.00	
F707568-BLK3 Me	1.487	64.9	79.1	209.42	209.44	72.9	0.026	OK	209.4145	0.00	0.00	
F707568-BLK3 Hg	8.251	145.6	183.1	209.41	209.41	159.4	0.048	OK	209.4145	0.00	0.00	

#28: F707568-BS1



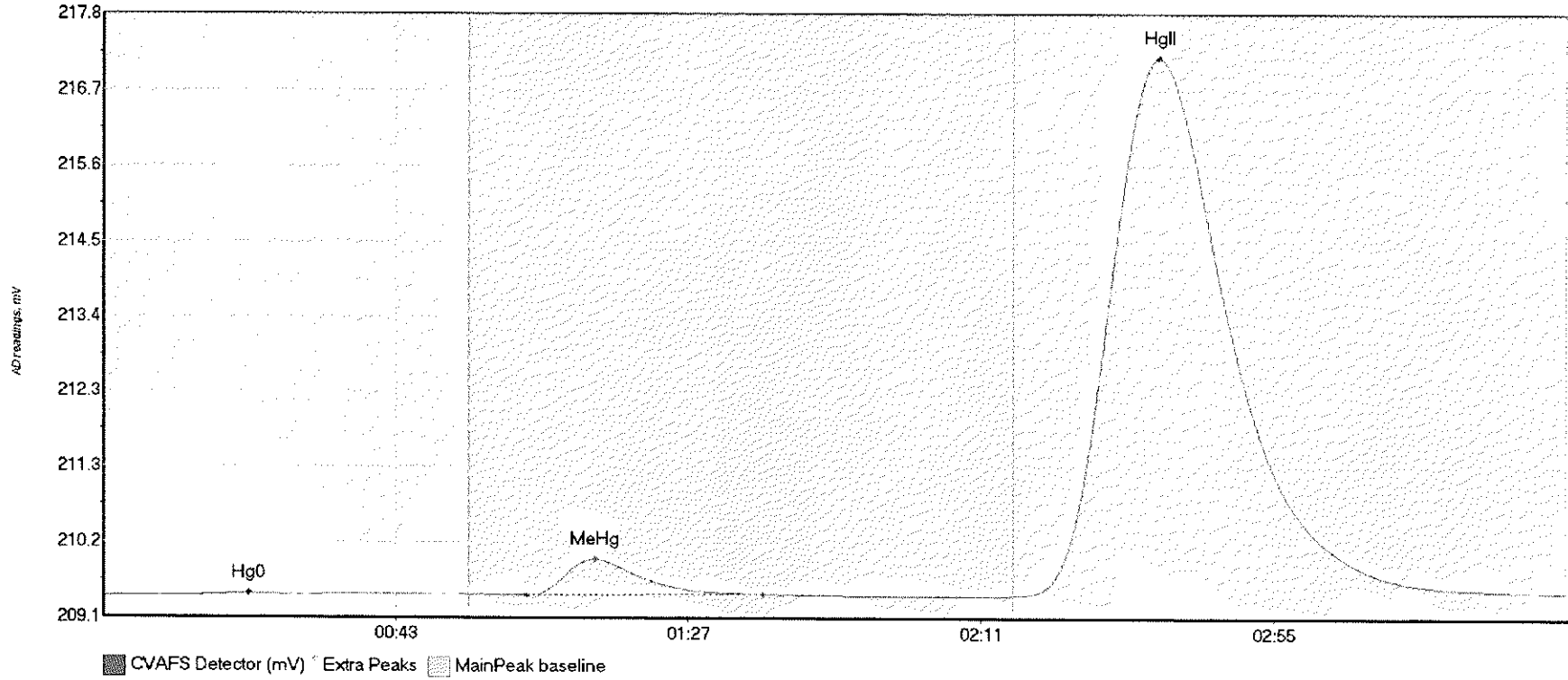
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F707568-BS1 Hg0	5.468	13.8	55.0	209.40	209.44	49.6	0.049	CT	209.4042	0.00	0.03	
F707568-BS1 MeH	842.717	60.8	125.4	209.43	209.44	73.9	6.207	OK	209.4042	0.00	0.03	
F707568-BS1 HgI	118.573	139.4	199.5	209.43	209.43	158.4	0.595	OK	209.4042	0.00	0.03	

#29: F707568-BSD1



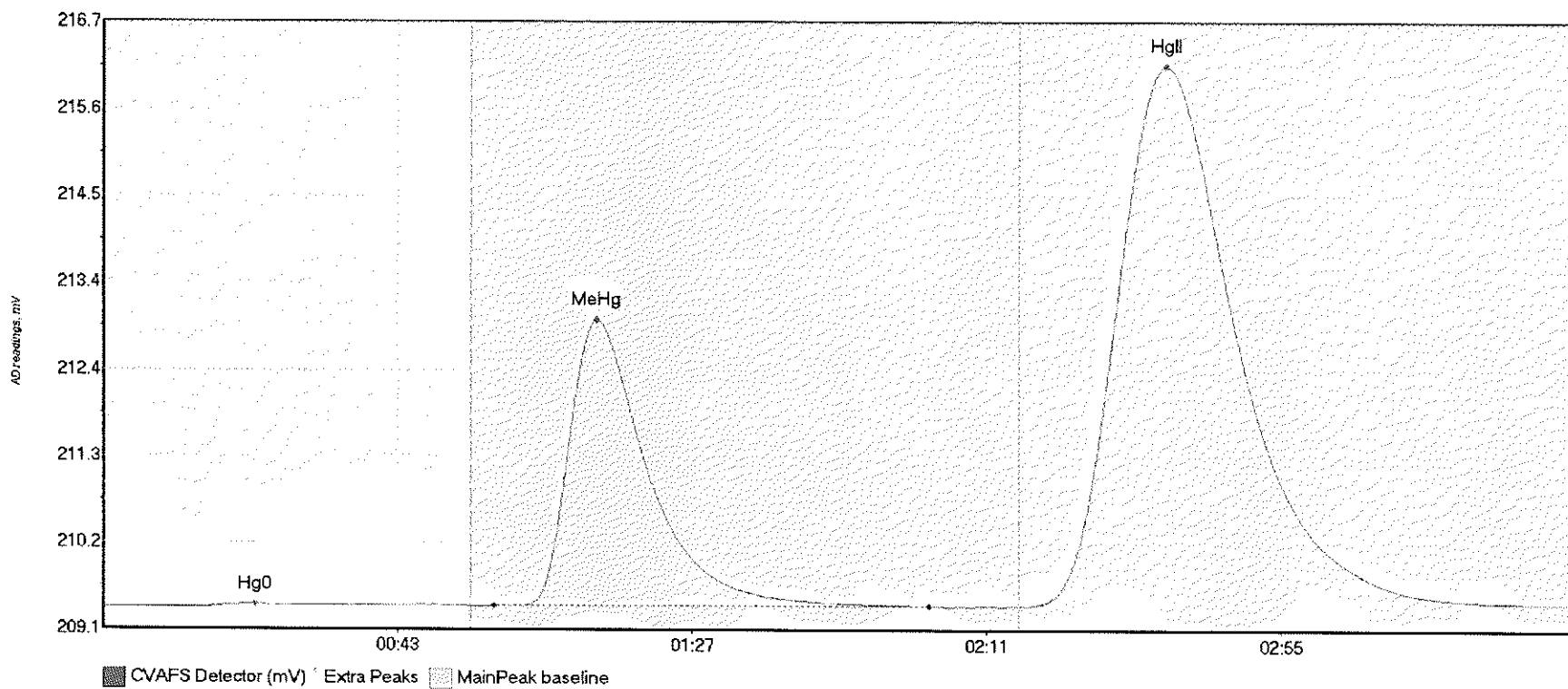
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F707568-BSD1 Hg	6.496	13.6	53.3	209.40	209.42	40.6	0.038	OK	209.3982	0.00	0.03	
F707568-BSD1 Me	839.034	61.8	129.1	209.42	209.43	73.9	6.153	OK	209.3982	0.00	0.03	
F707568-BSD1 Hg	138.268	140.5	199.7	209.43	209.43	158.7	0.692	OK	209.3982	0.00	0.03	

#30: F707568-DUP1



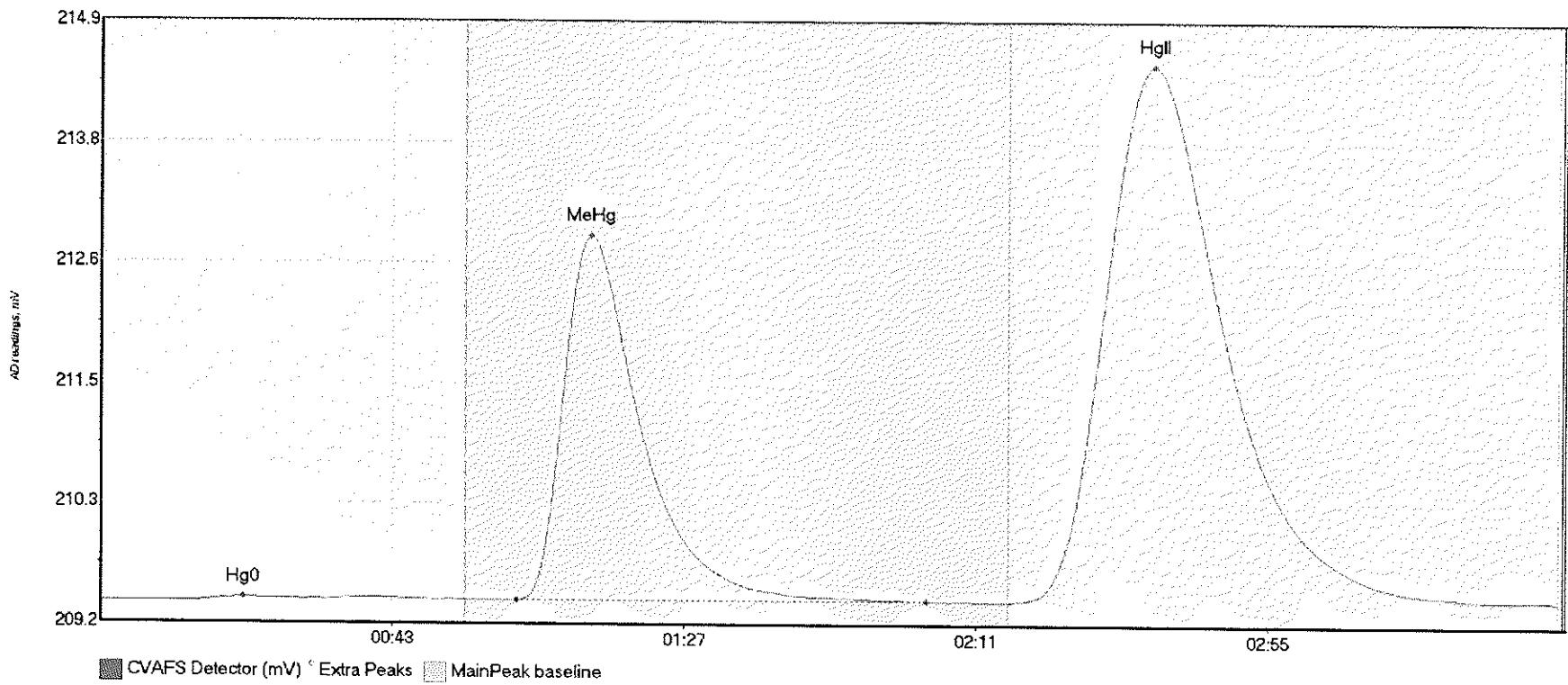
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F707568-DUP1 Hg	1.912	13.7	30.7	209.40	209.42	21.9	0.029	OK	209.4000	0.00	0.05	
F707568-DUP1 Me	64.967	63.7	99.2	209.41	209.43	74.0	0.511	OK	209.4000	0.00	0.05	
F707568-DUP1 Hg	1603.731	136.8	219.1	209.41	209.45	158.7	7.756	OK	209.4000	0.00	0.05	

#31: F707568-MS1



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment	
F707568-MS1	Hg0	6.618	11.8	55.0	209.40	209.41	22.7	0.036	CT	209.3918	0.00	0.06	
F707568-MS1	MeH	485.027	58.4	123.4	209.41	209.42	73.8	3.565	OK	209.3918	0.00	0.06	
F707568-MS1	HgI	1386.762	136.8	219.8	209.42	209.45	158.7	6.738	CT	209.3918	0.00	0.06	

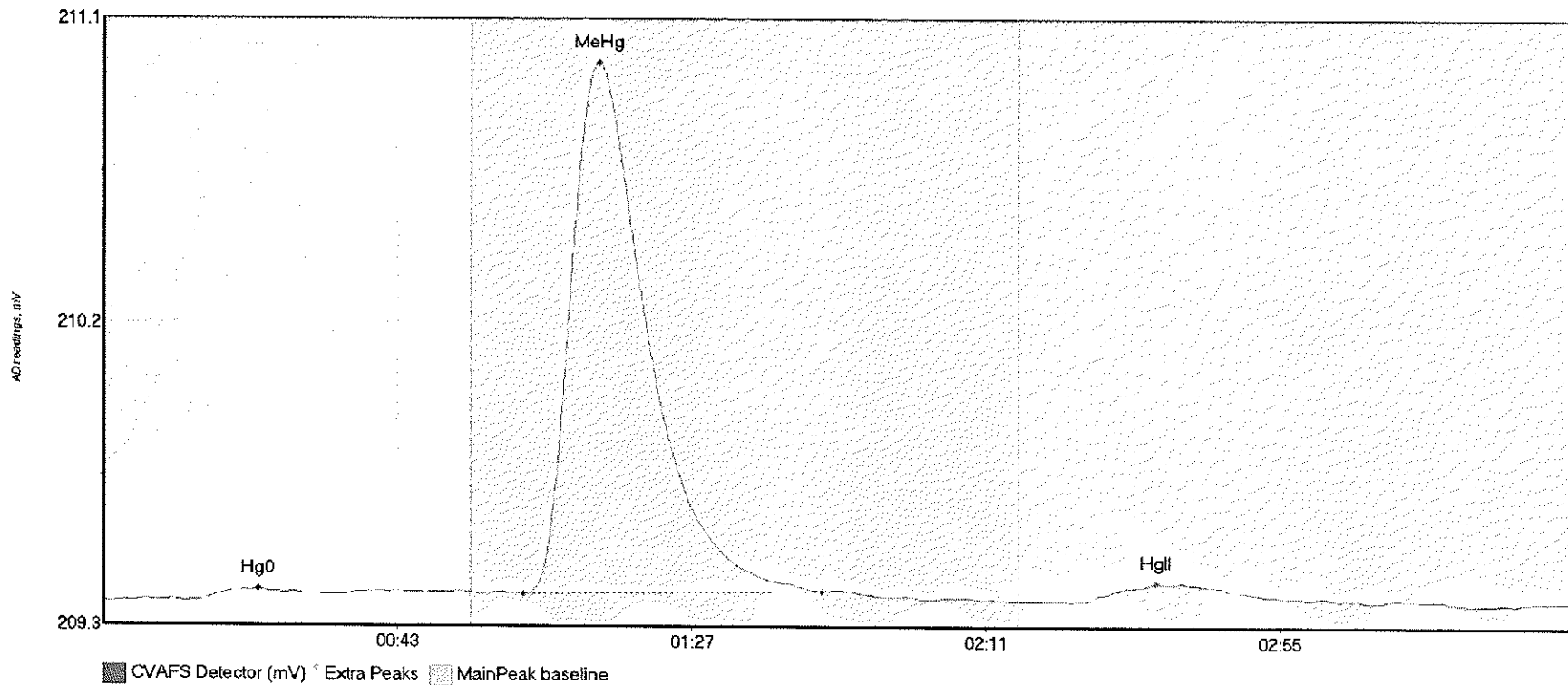
#32: F707568-MSD1



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F707568-MSD1 Hg	7.507	12.6	55.0	209.39	209.41	21.6	0.040	CT	209.3870	0.00	0.04	
F707568-MSD1 Me	469.644	62.7	124.6	209.41	209.41	73.9	3.483	OK	209.3870	0.00	0.04	
F707568-MSD1 Hg	1056.163	136.8	219.5	209.40	209.42	158.8	5.120	OK	209.3870	0.00	0.04	

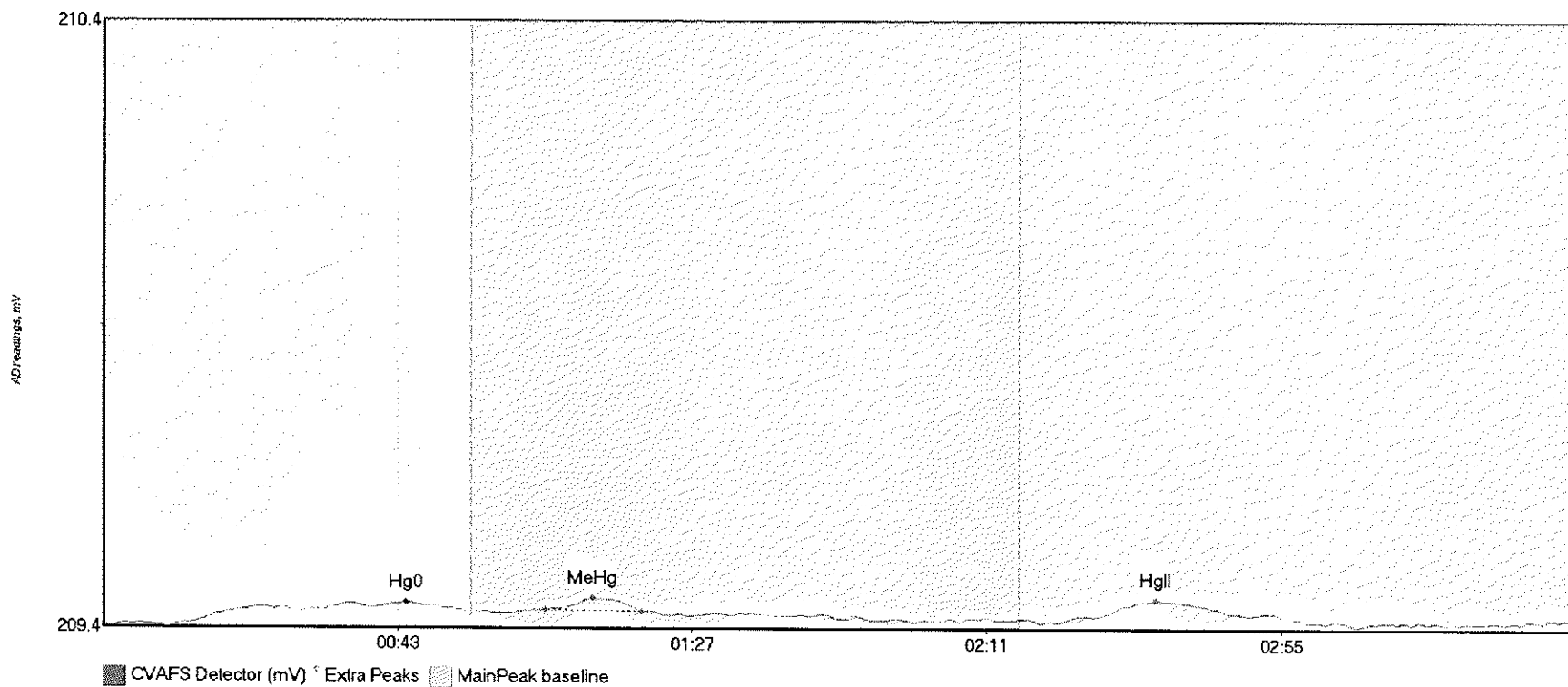


#33: SEQ-CCV2



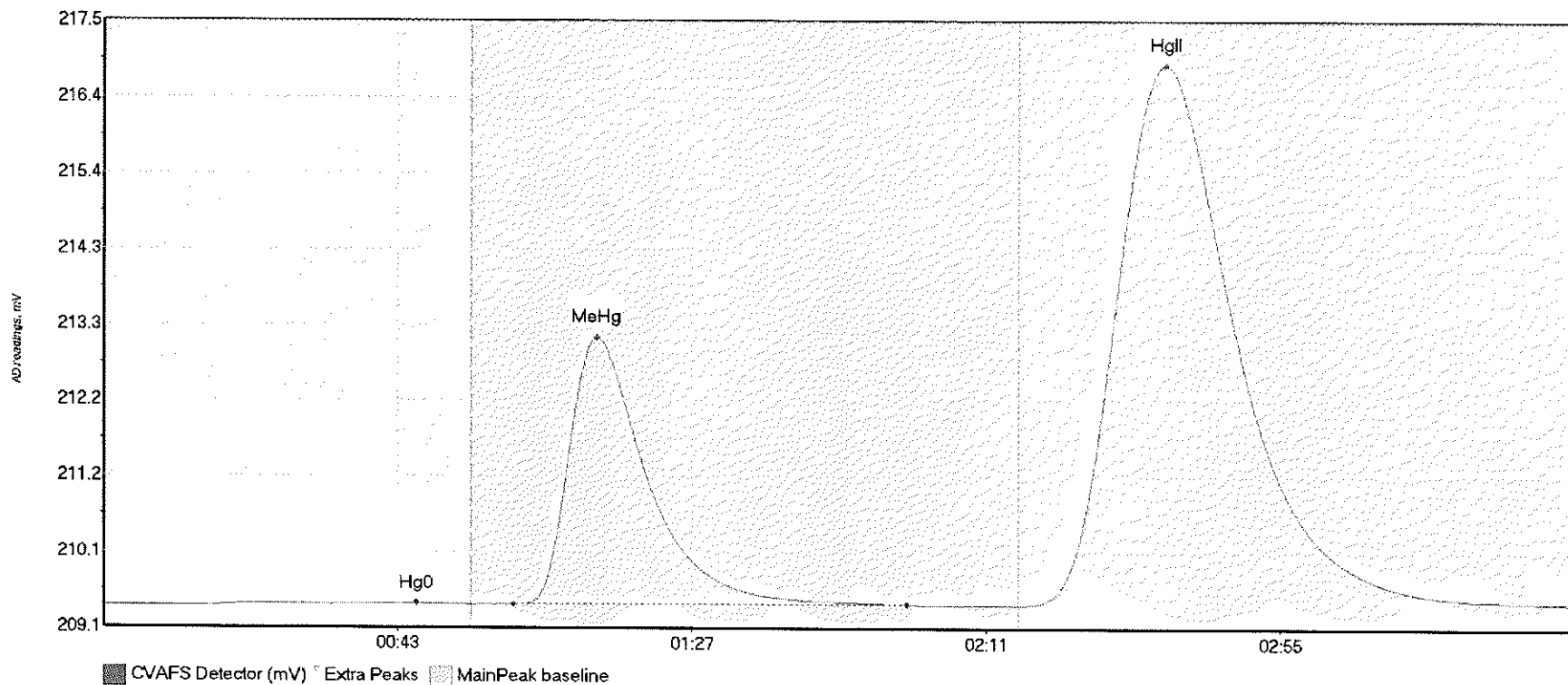
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CCV2 Hg0	2.890	14.1	34.9	209.38	209.40	23.2	0.033	OK	209.3783	0.00	0.00	
SEQ-CCV2 MeHg	206.825	62.9	107.5	209.40	209.41	74.1	1.564	OK	209.3783	0.00	0.00	
SEQ-CCV2 HgII	10.381	146.6	185.1	209.38	209.38	157.4	0.055	OK	209.3783	0.00	0.00	

#34: SEQ-CCB2



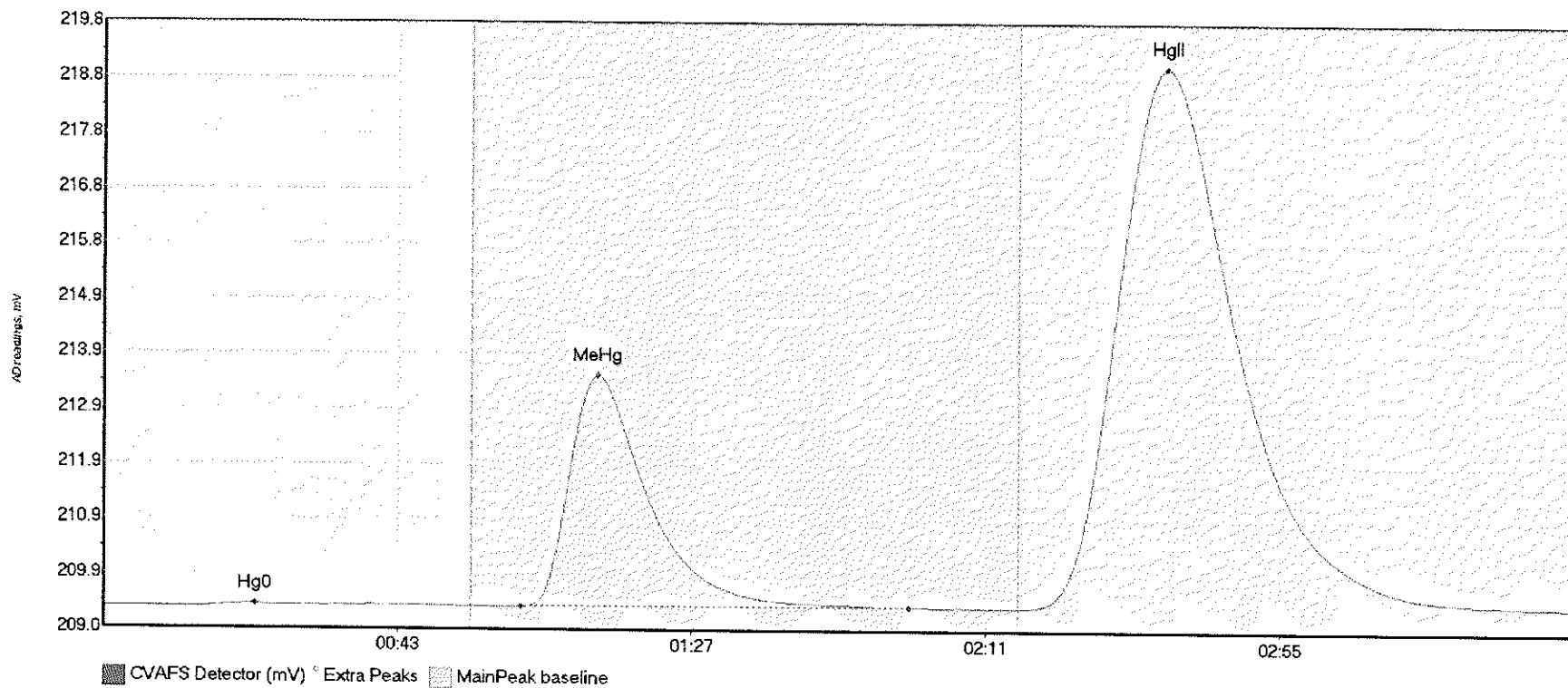
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CCB2 Hg0	6.226	13.3	54.8	209.36	209.38	45.3	0.035	OK	209.3570	0.00	0.01	
SEQ-CCB2 MeHg	1.621	66.0	80.5	209.38	209.38	73.1	0.019	OK	209.3570	0.00	0.01	
SEQ-CCB2 HgII	4.321	148.0	176.7	209.37	209.37	157.2	0.028	OK	209.3570	0.00	0.01	

#35: F707568-MS2



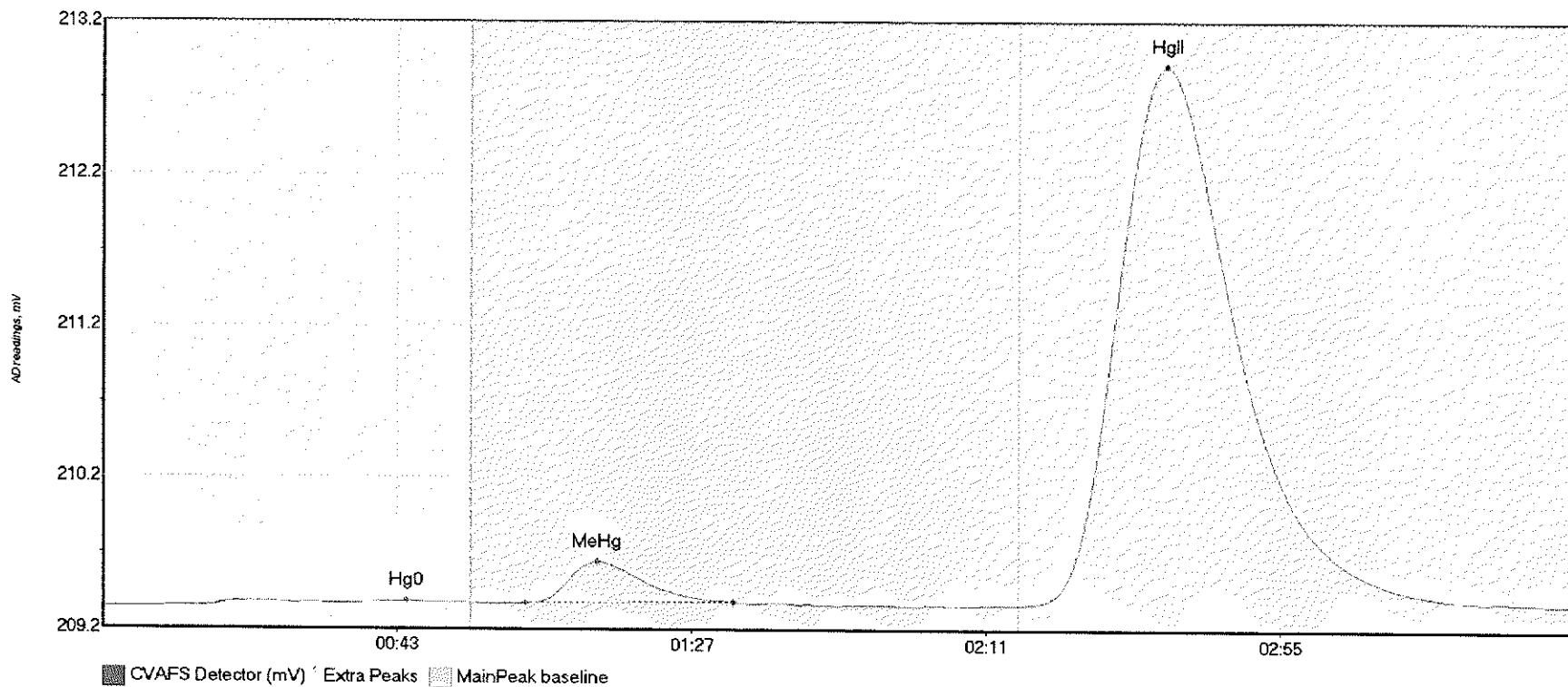
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F707568-MS2 Hg0	6.119	15.0	54.9	209.36	209.38	46.9	0.035	OK	209.3603	0.00	0.05	
F707568-MS2 MeH	502.696	61.3	120.1	209.38	209.39	73.8	3.711	OK	209.3603	0.00	0.05	
F707568-MS2 HgI	1545.963	137.1	219.0	209.38	209.41	158.7	7.521	OK	209.3603	0.00	0.05	

#36: F707568-MSD2



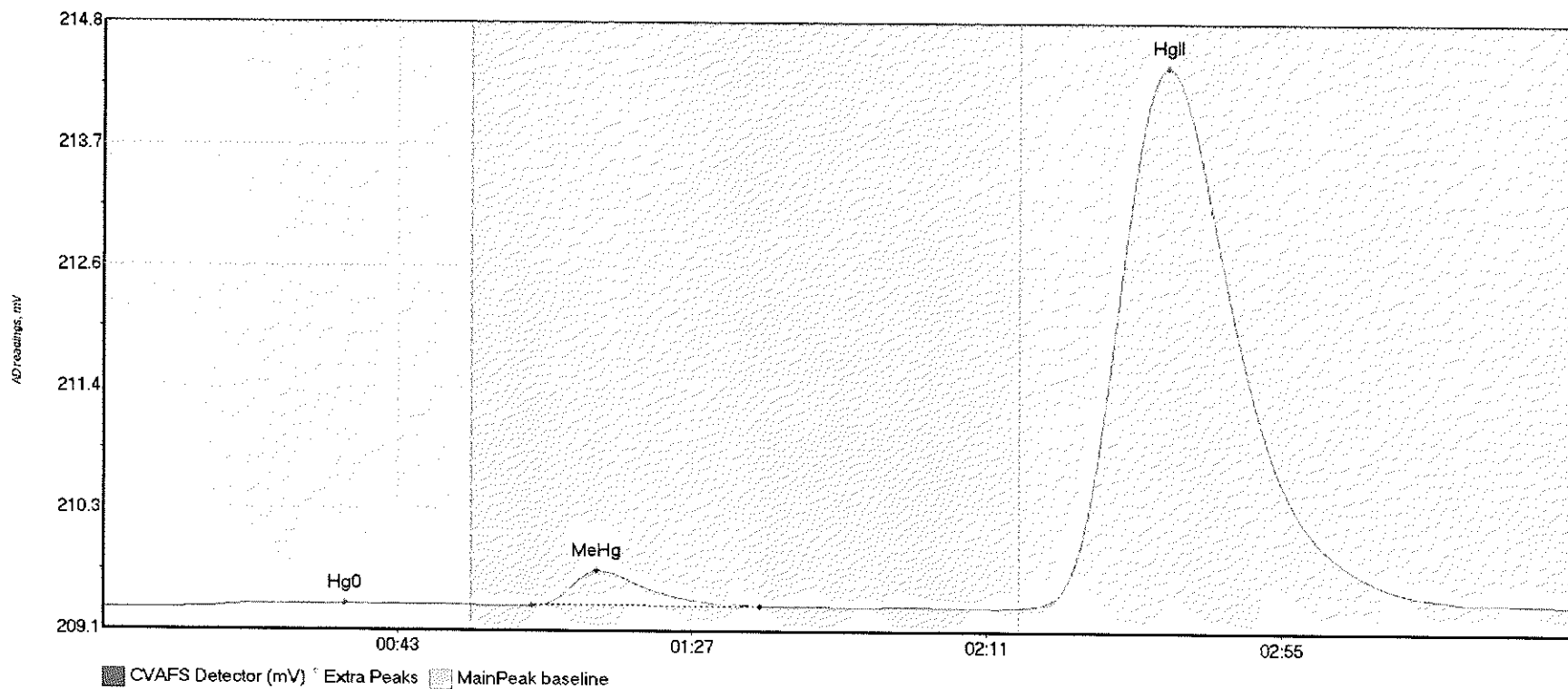
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BiDev	BiShift	Comment
F707568-MSD2 Hg	9.239	13.3	53.9	209.35	209.38	22.7	0.052	OK	209.3528	0.00	0.06	
F707568-MSD2 Me	556.741	62.5	120.6	209.38	209.38	73.9	4.117	OK	209.3528	0.00	0.06	
F707568-MSD2 Hg	1982.803	137.2	219.8	209.37	209.41	158.9	9.638	CT	209.3528	0.00	0.06	

#37: 1707771-41



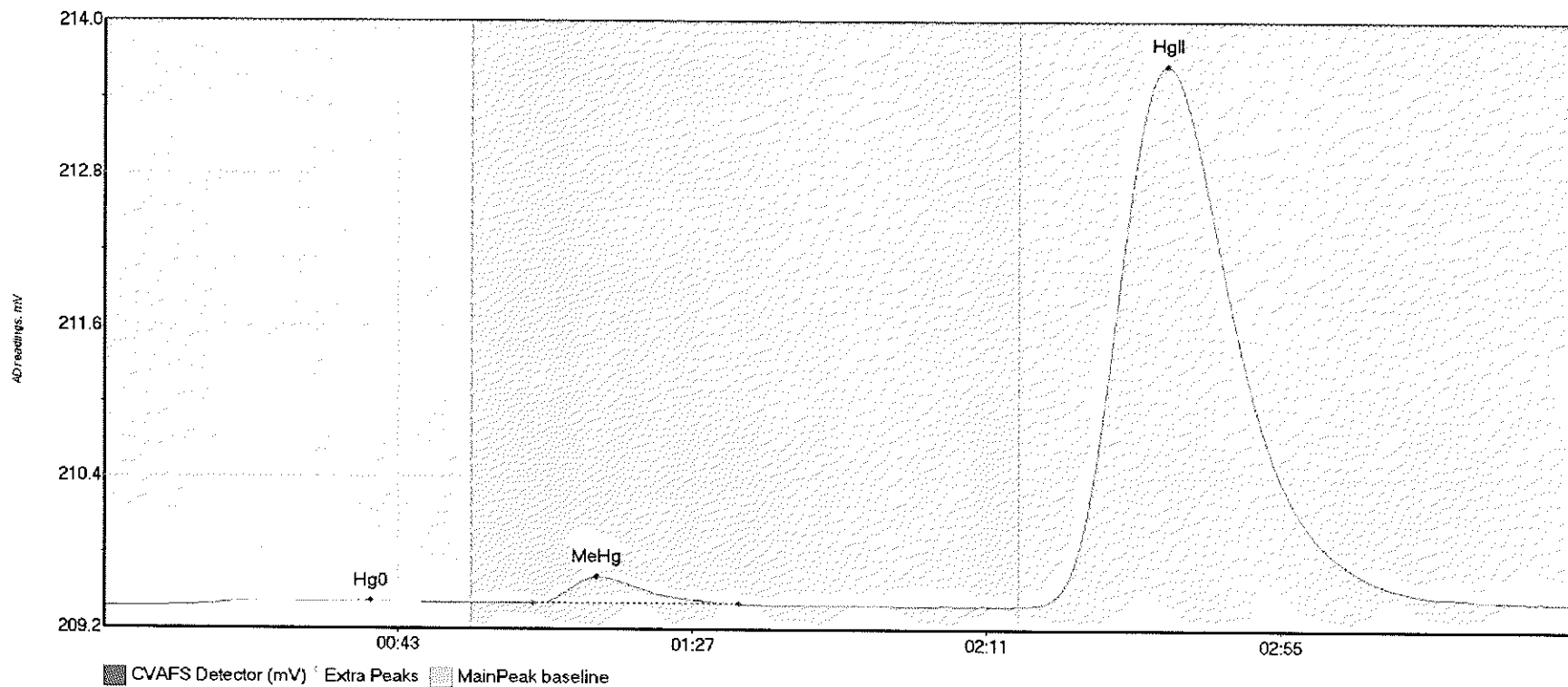
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	ElDev	BlShift	Comment
1707771-41 Hg0	5.670	14.4	55.0	209.36	209.38	45.4	0.038	CP	209.3555	0.00	0.02	
1707771-41 MeHg	34.089	63.2	94.2	209.38	209.39	73.9	0.273	OK	209.3555	0.00	0.02	
1707771-41 HgII	729.782	136.8	218.5	209.37	209.38	158.9	3.553	OK	209.3555	0.00	0.02	

#38: 1707771-42



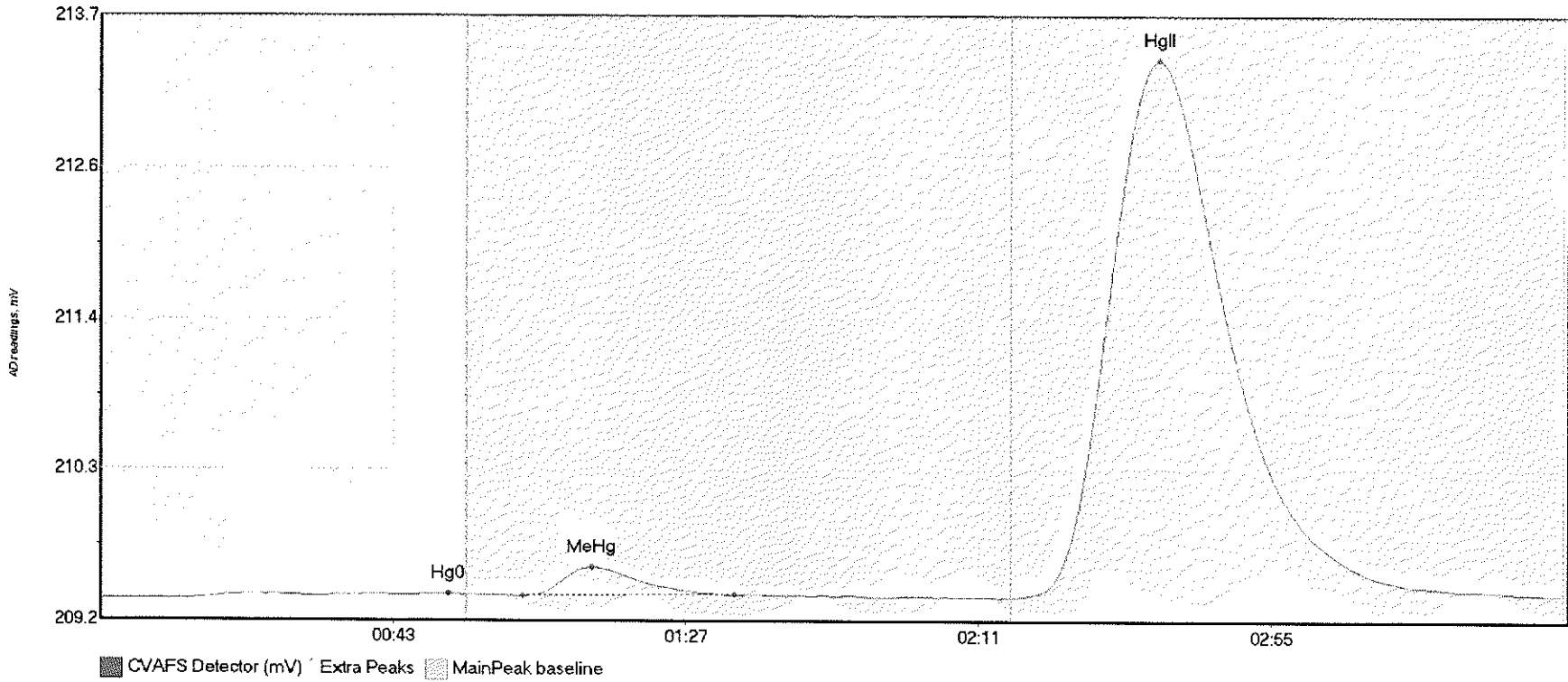
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1707771-42 Hg0	4.114	9.0	41.9	209.34	209.38	36.2	0.045	OK	209.3420	0.00	0.05	
1707771-42 MeHg	41.982	64.0	98.2	209.37	209.37	73.8	0.325	OK	209.3420	0.00	0.05	
1707771-42 HgII	1039.977	137.3	218.4	209.36	209.40	158.9	5.058	OK	209.3420	0.00	0.05	

#39: 1707771-43



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1707771-43 Hg0	7.222	8.6	50.1	209.34	209.37	40.0	0.043	OK	209.3404	0.00	0.04	
1707771-43 MeHg	26.839	64.2	94.9	209.37	209.37	73.8	0.210	OK	209.3404	0.00	0.04	
1707771-43 HgII	878.260	136.8	219.1	209.35	209.38	159.0	4.272	OK	209.3404	0.00	0.04	

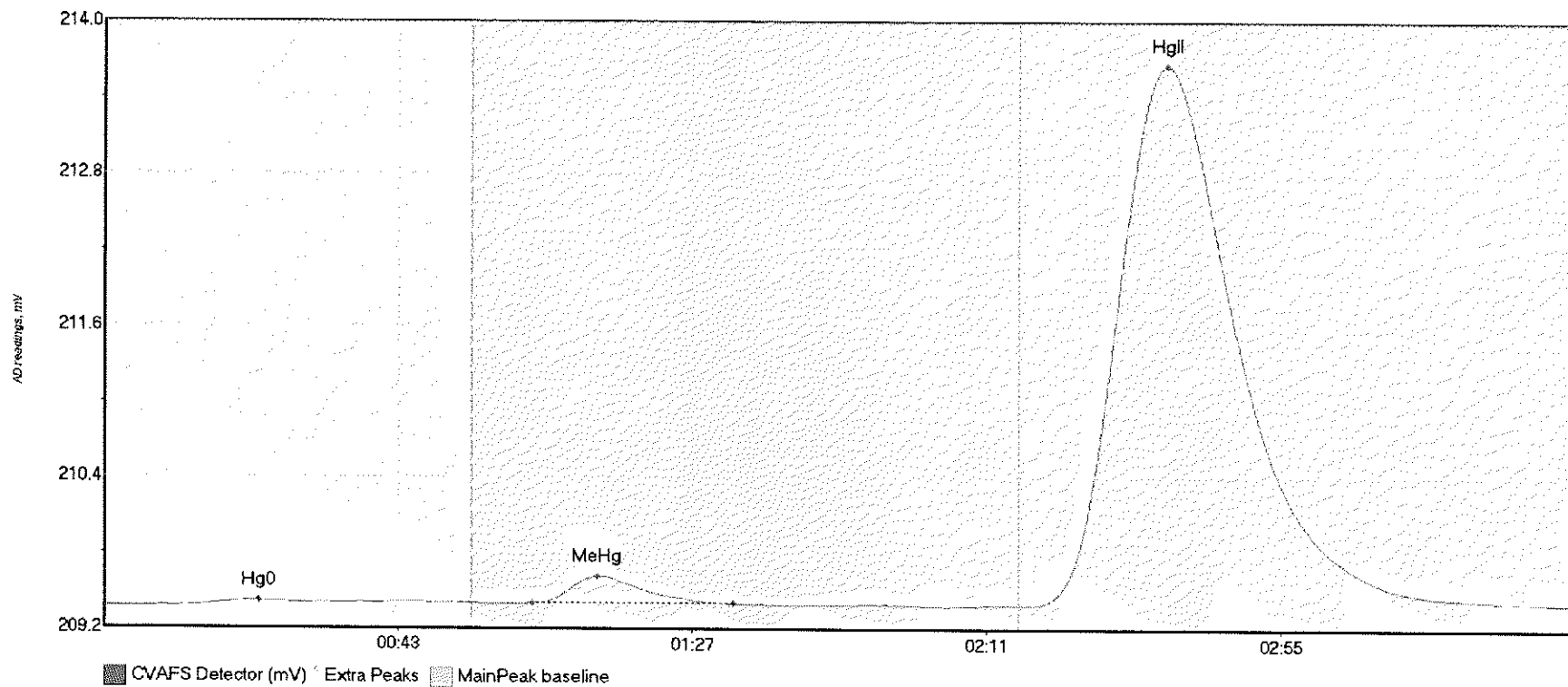
#40: 1707771-44



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1707771-44 Hg0	4.762	13.6	54.4	209.34	209.37	52.3	0.037	OK	209.3317	0.00	0.04	
1707771-44 MeHg	27.626	63.5	95.3	209.36	209.36	73.9	0.215	OK	209.3317	0.00	0.04	
1707771-44 HgII	831.979	136.9	219.1	209.35	209.37	159.0	4.045	OK	209.3317	0.00	0.04	

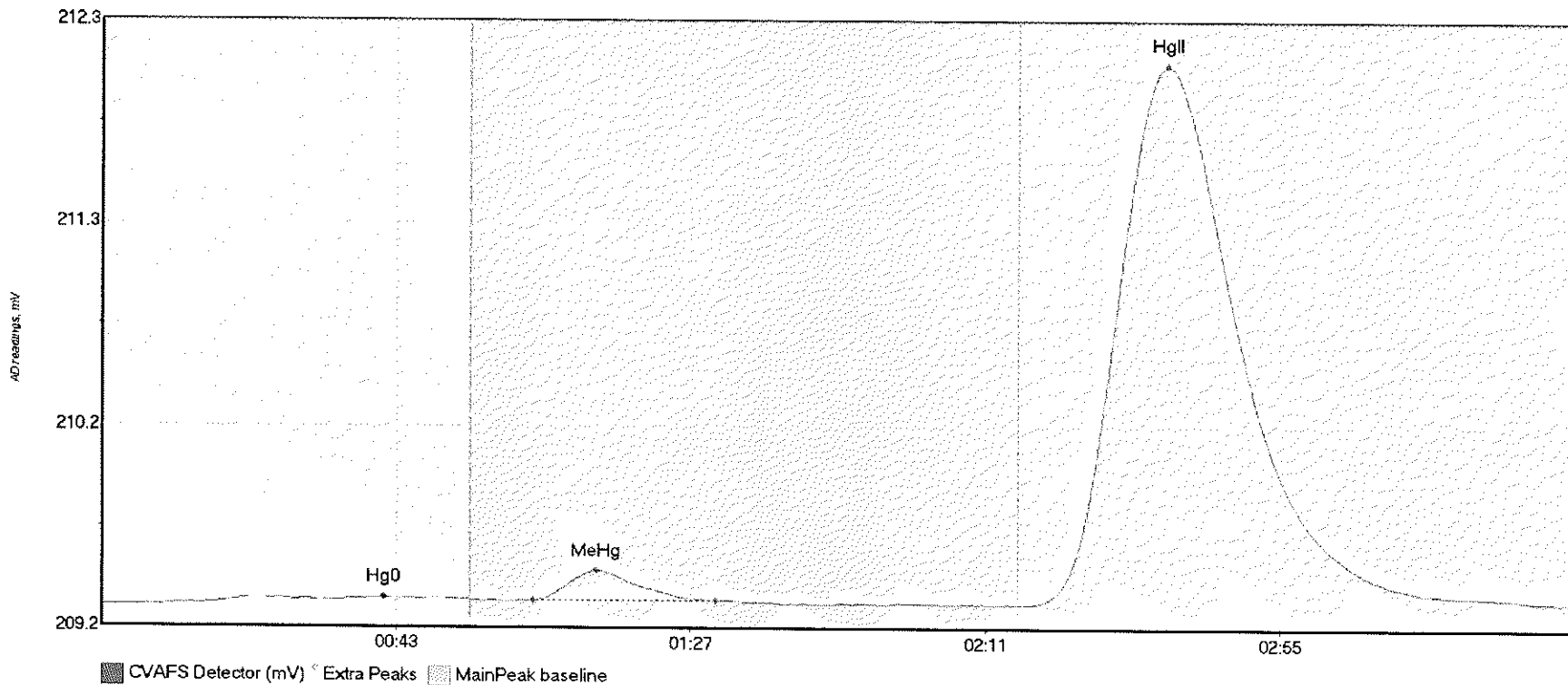


#41: 1707771-45



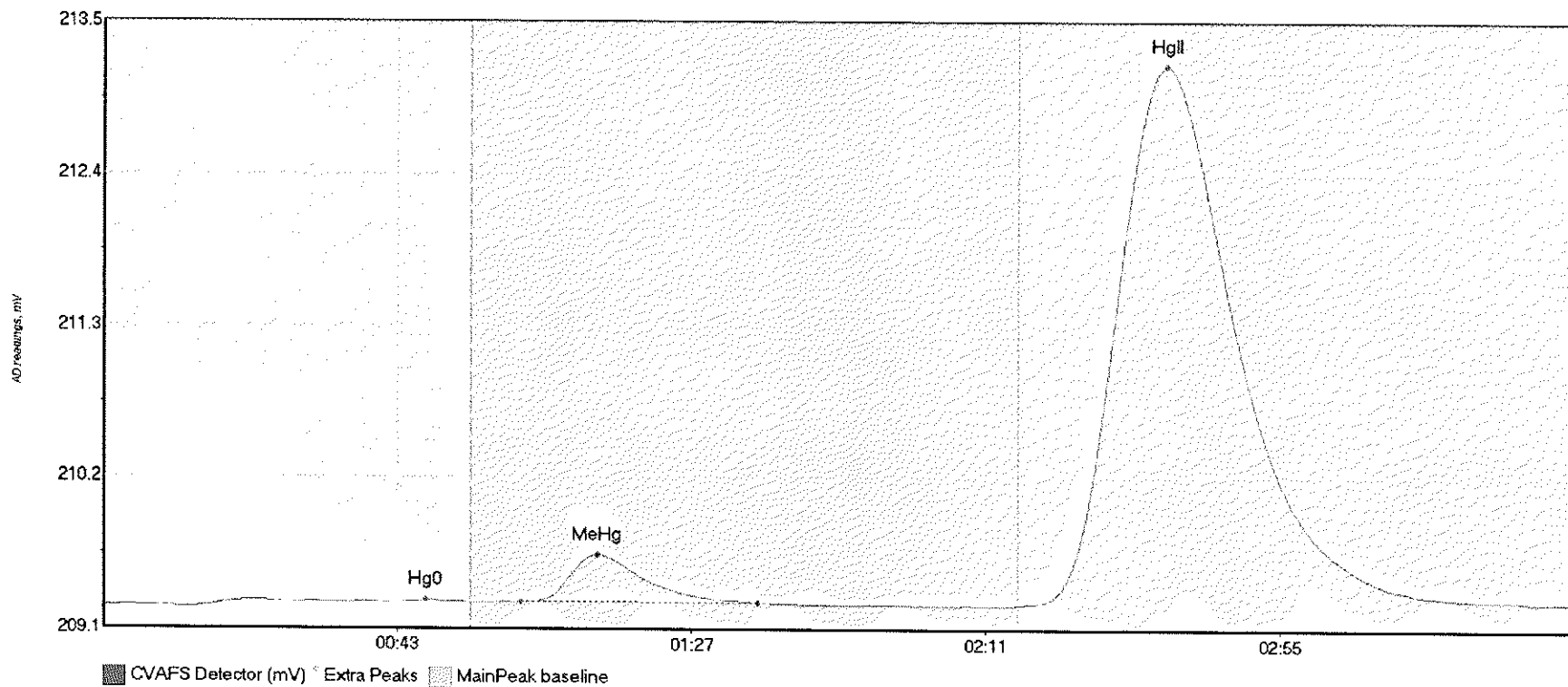
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1707771-45 Hg0	2.733	10.5	30.3	209.33	209.36	23.1	0.042	OK	209.3312	0.00	0.03	
1707771-45 MeHg	26.234	64.0	94.1	209.36	209.36	73.8	0.211	OK	209.3312	0.00	0.03	
1707771-45 HgII	874.039	138.6	219.8	209.35	209.36	158.9	4.295	CT	209.3312	0.00	0.03	

#42: 1707771-46



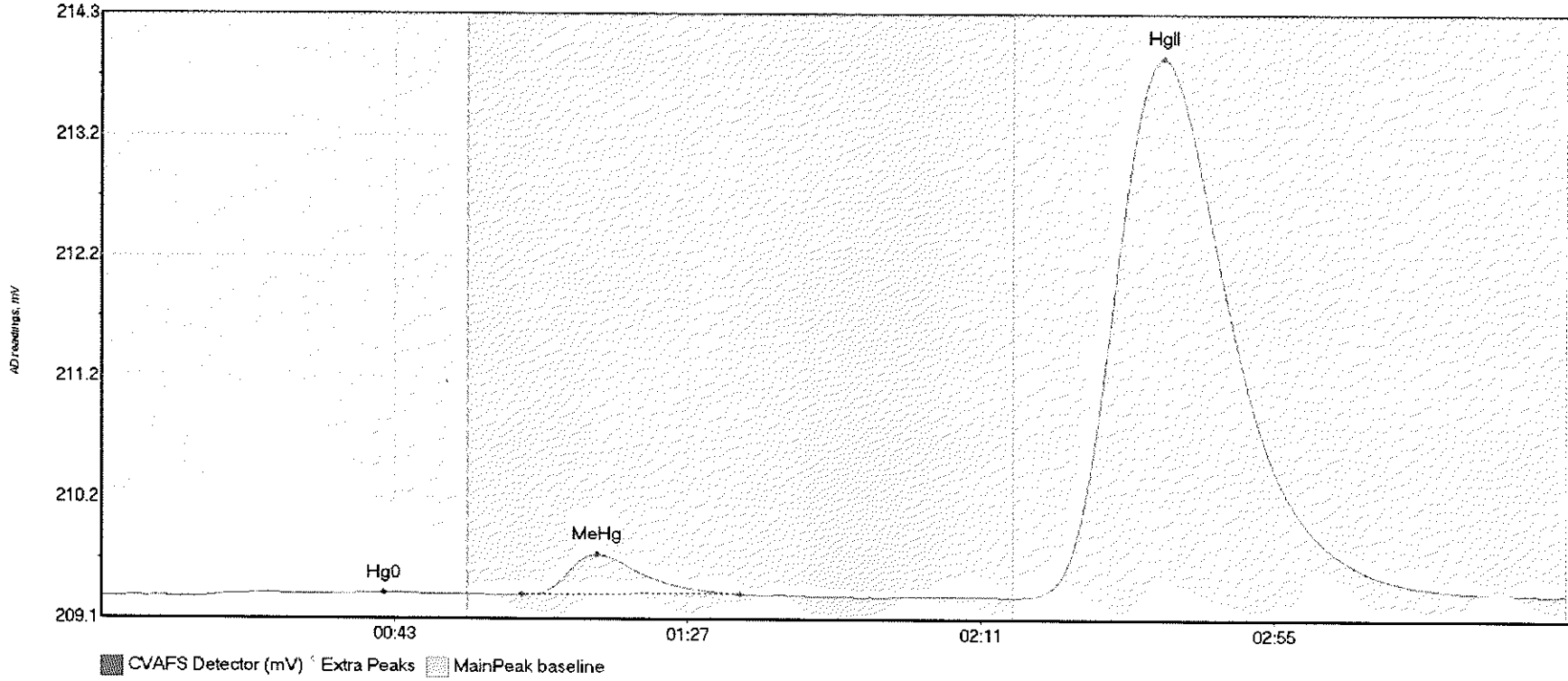
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1707771-46 Hg0	6.229	8.4	55.0	209.32	209.35	42.1	0.042	CT	209.3156	0.00	0.02	
1707771-46 MeHg	18.103	64.4	91.8	209.34	209.34	73.9	0.154	OK	209.3156	0.00	0.02	
1707771-46 HgII	570.988	138.5	219.1	209.33	209.34	159.1	2.748	OK	209.3156	0.00	0.02	

#43: 1707771-87



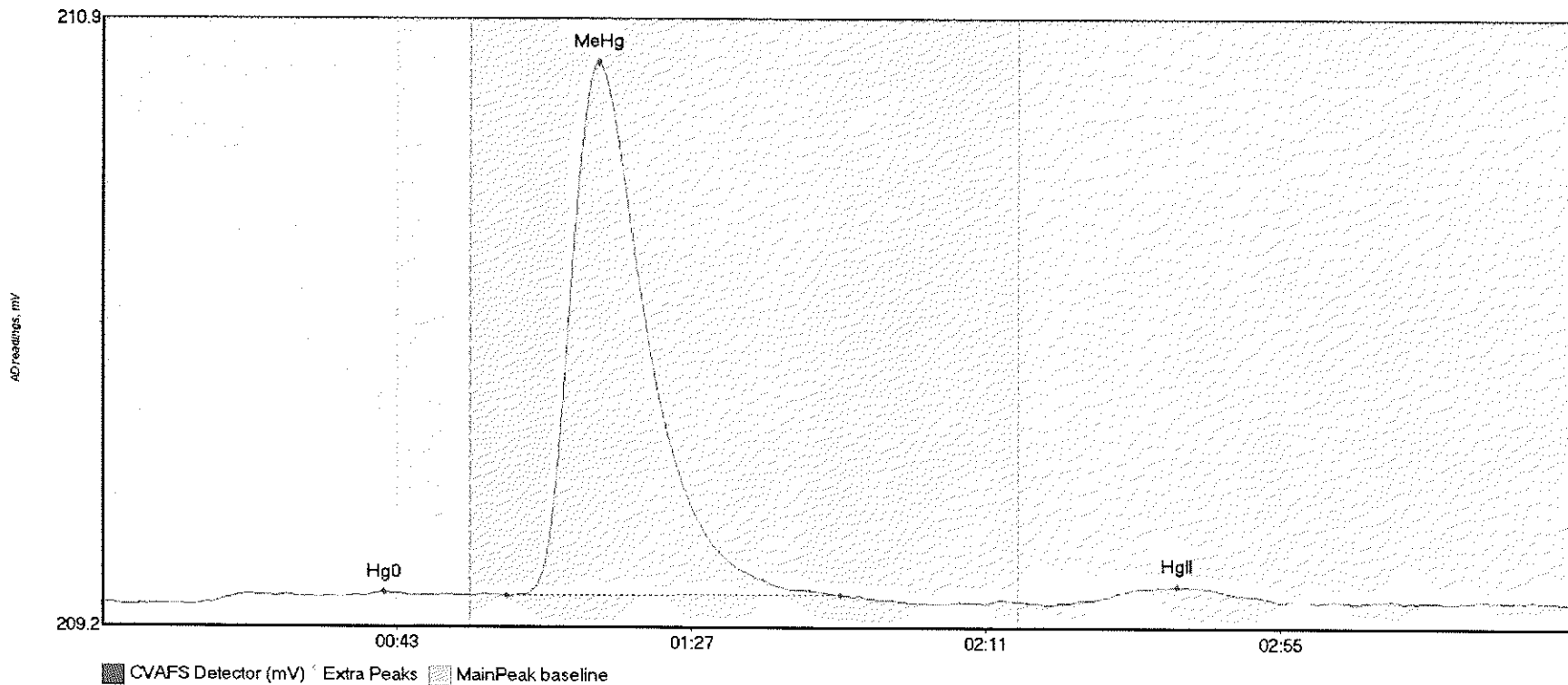
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1707771-87 Hg0	8.493	12.5	54.7	209.30	209.34	48.3	0.050	OK	209.3167	0.00	0.03	
1707771-87 MeHg	42.107	62.4	97.9	209.34	209.34	73.9	0.334	OK	209.3167	0.00	0.03	
1707771-87 HgII	780.527	136.8	219.8	209.33	209.34	159.0	3.820	CT	209.3167	0.00	0.03	

#44: 1707771-88



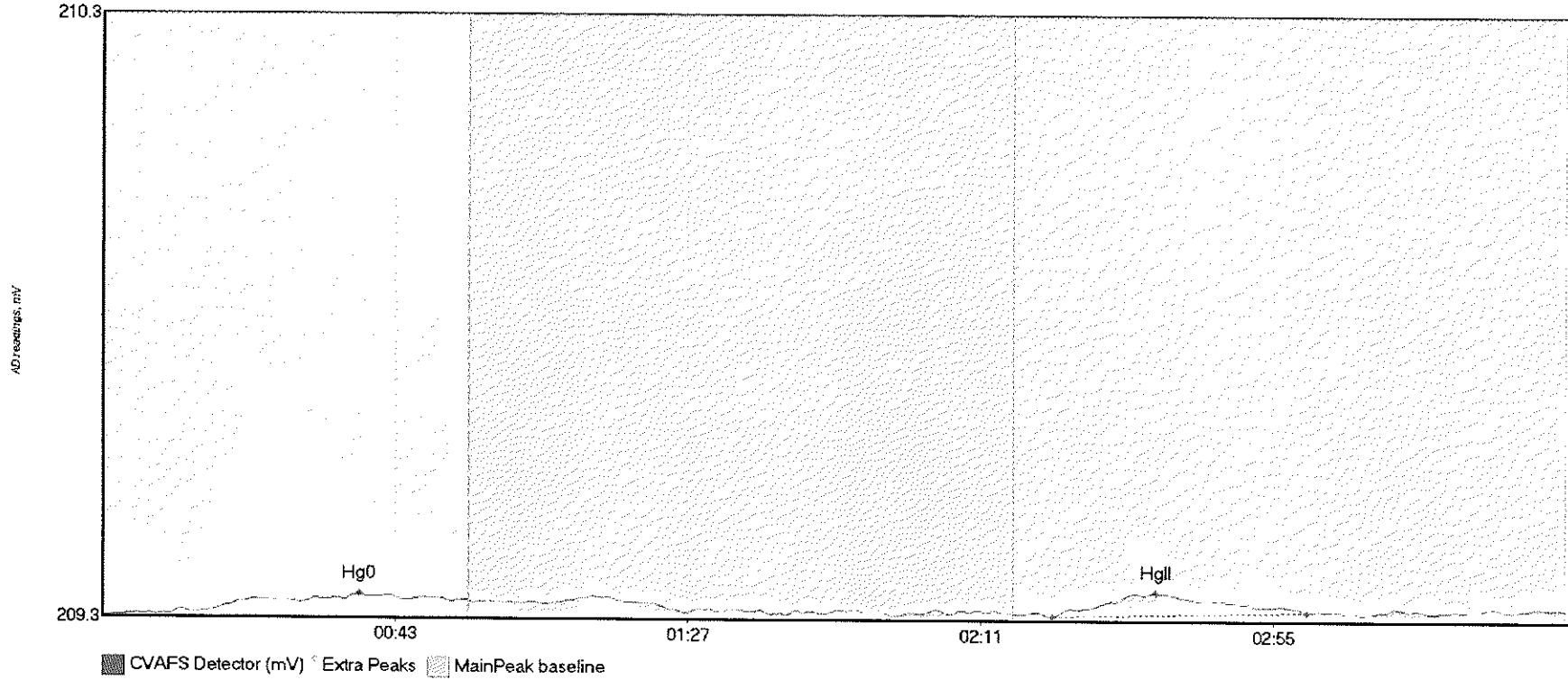
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1707771-88 Hg0	6.249	14.2	53.7	209.31	209.33	42.5	0.037	OK	209.3111	0.00	0.03	
1707771-88 MeHg	42.949	63.1	95.9	209.33	209.34	74.5	0.341	OK	209.3111	0.00	0.03	
1707771-88 HgII	935.241	138.7	217.2	209.32	209.33	159.4	4.582	OK	209.3111	0.00	0.03	

#45: SEQ-CCV3



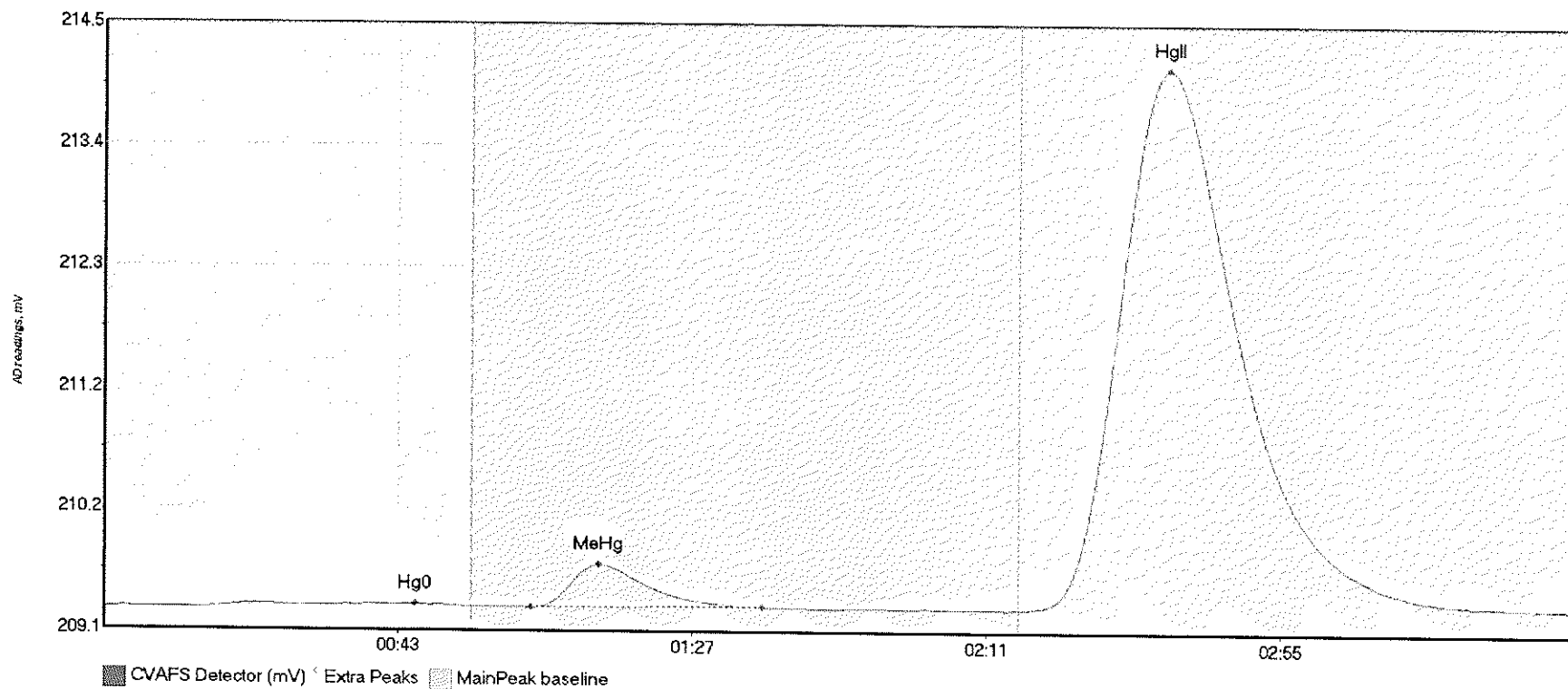
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CCV3 Hg0	2.796	16.4	47.2	209.31	209.32	42.1	0.029	OK	209.3048	0.00	0.00	
SEQ-CCV3 MeHg	191.995	60.5	110.3	209.32	209.33	74.1	1.439	OK	209.3048	0.00	0.00	
SEQ-CCV3 HgII	7.947	144.3	176.0	209.31	209.31	160.6	0.045	OK	209.3048	0.00	0.00	

#46: SEQ-CCB3



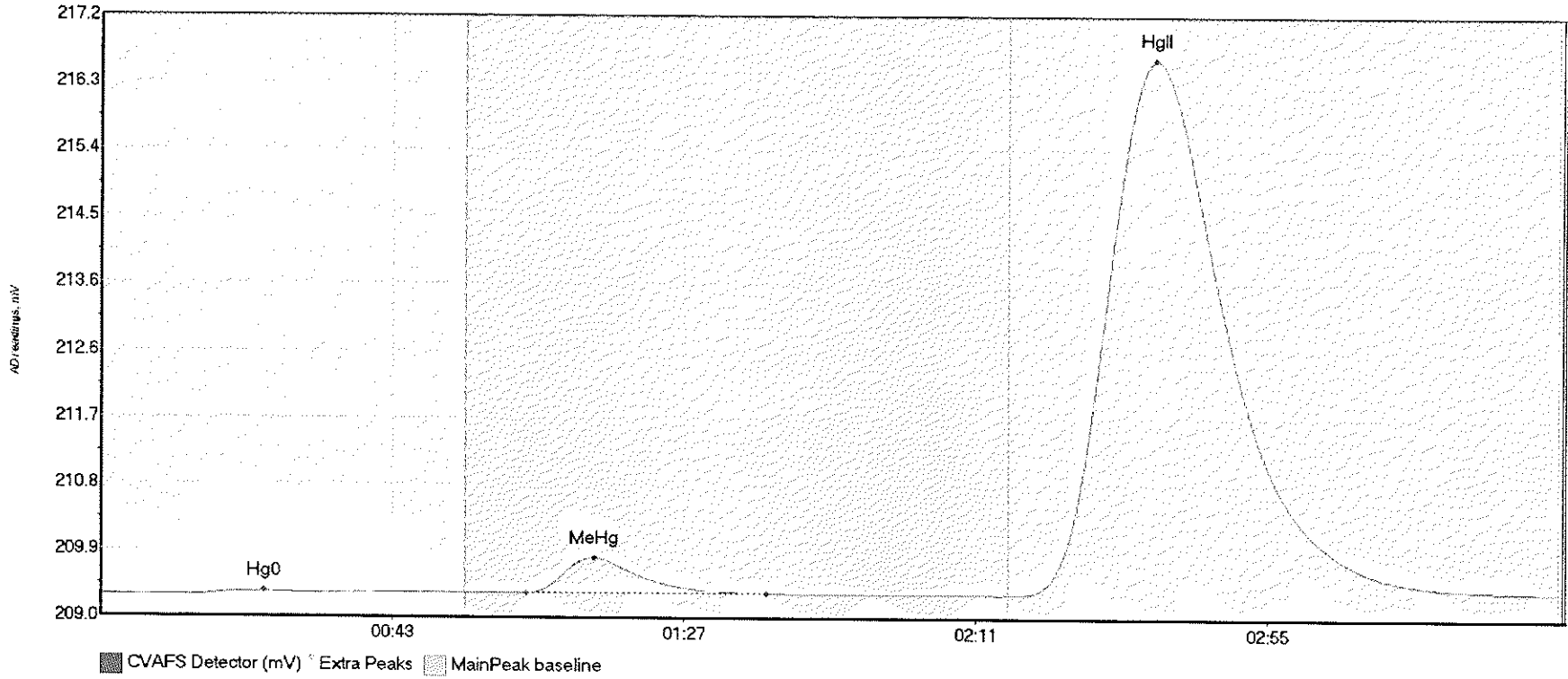
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CCB3 Hg0	4.524	9.8	52.6	209.29	209.31	38.6	0.033	OK	209.2887	0.00	0.02	
SEQ-CCB3 HgII	7.336	142.7	181.0	209.29	209.30	158.3	0.040	OK	209.2887	0.00	0.02	017

#47: 1707771-89



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1707771-89 Hg0	7.613	14.7	55.0	209.30	209.31	46.6	0.036	CT	209.2972	0.00	0.02	
1707771-89 MeHg	48.104	63.9	98.5	209.31	209.32	74.0	0.377	OK	209.2972	0.00	0.02	
1707771-89 HgII	978.574	137.2	219.8	209.30	209.32	159.2	4.771	CT	209.2972	0.00	0.02	

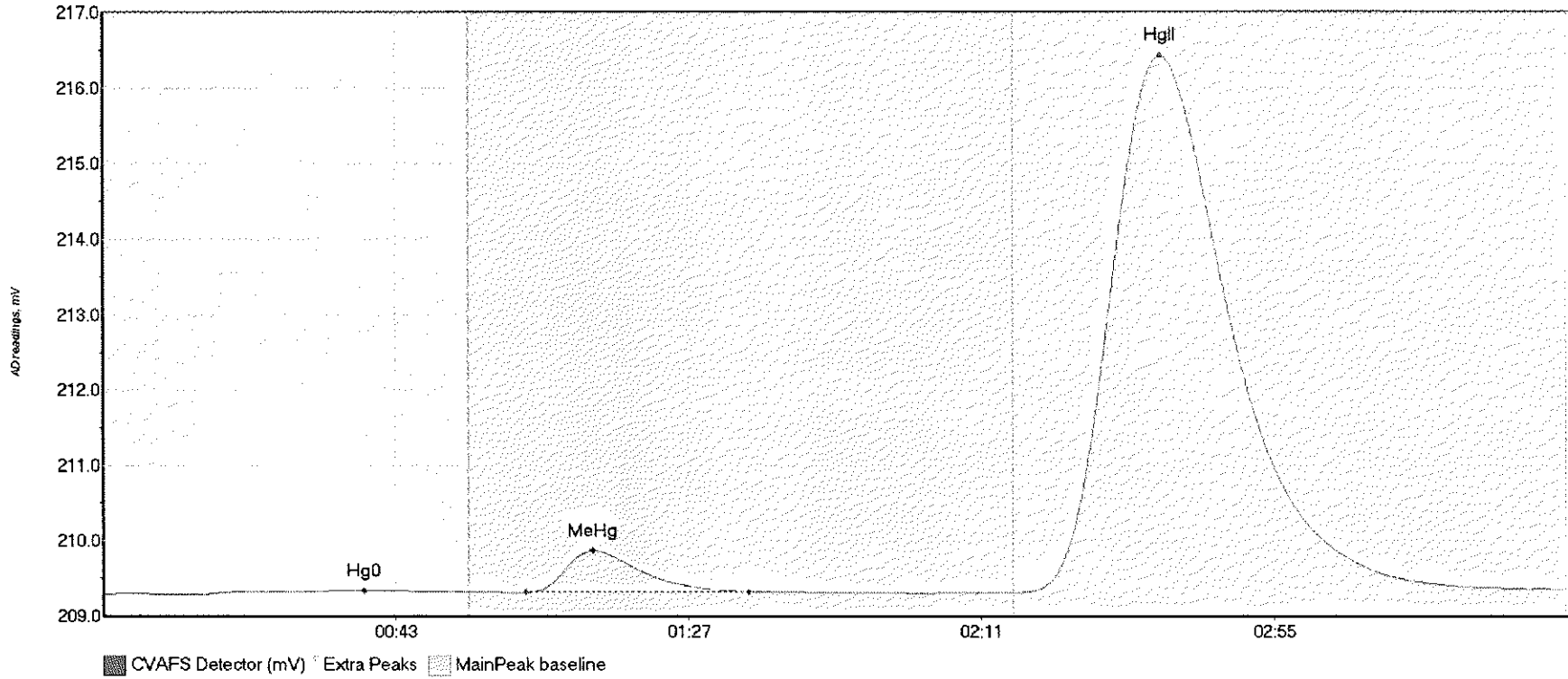
#48: 1707771-90



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1707771-90 Hg0	3.666	14.9	32.2	209.30	209.32	24.7	0.045	OK	209.2944	0.00	0.06	
1707771-90 MeHg	62.046	64.2	100.4	209.33	209.33	74.4	0.479	OK	209.2944	0.00	0.06	
1707771-90 HgII	1505.263	137.8	219.8	209.32	209.36	159.1	7.292	CT	209.2944	0.00	0.06	

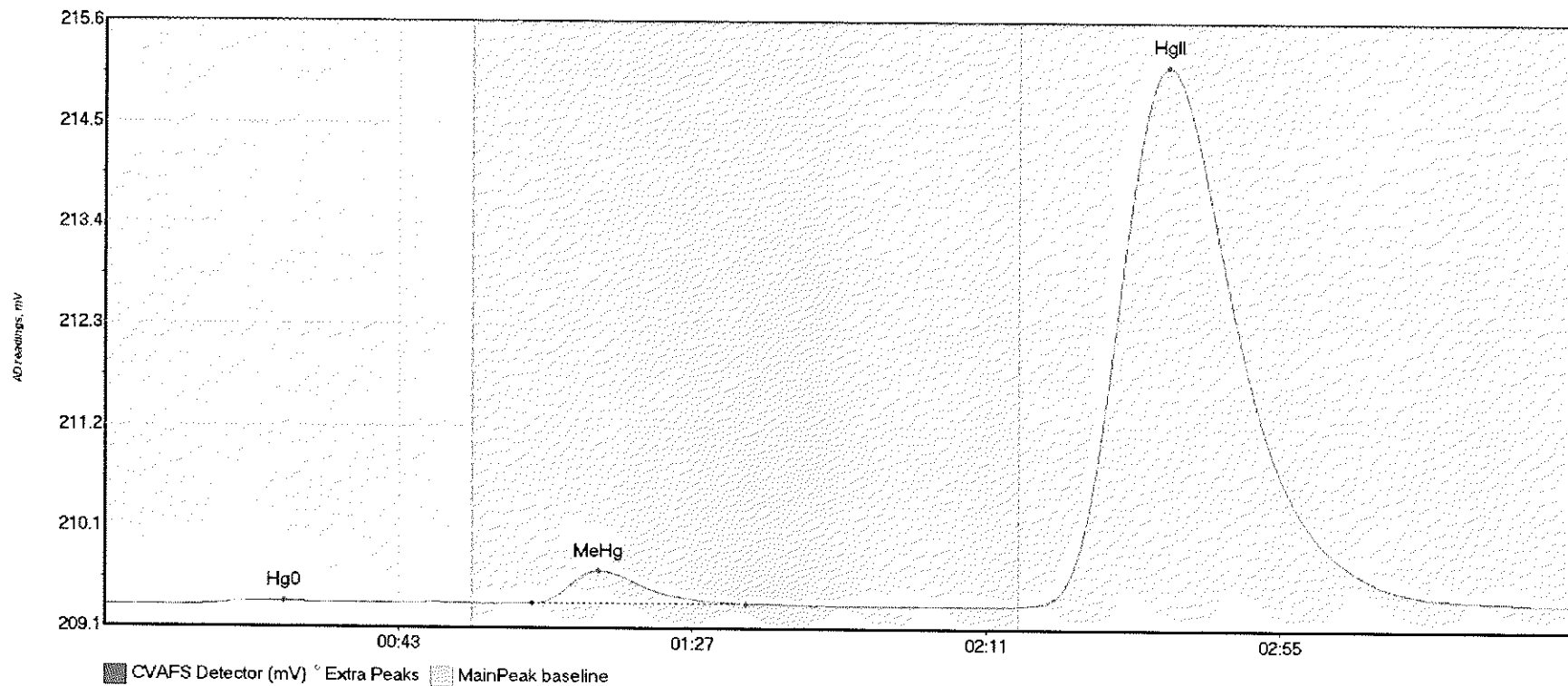


#49: 1707771-AB



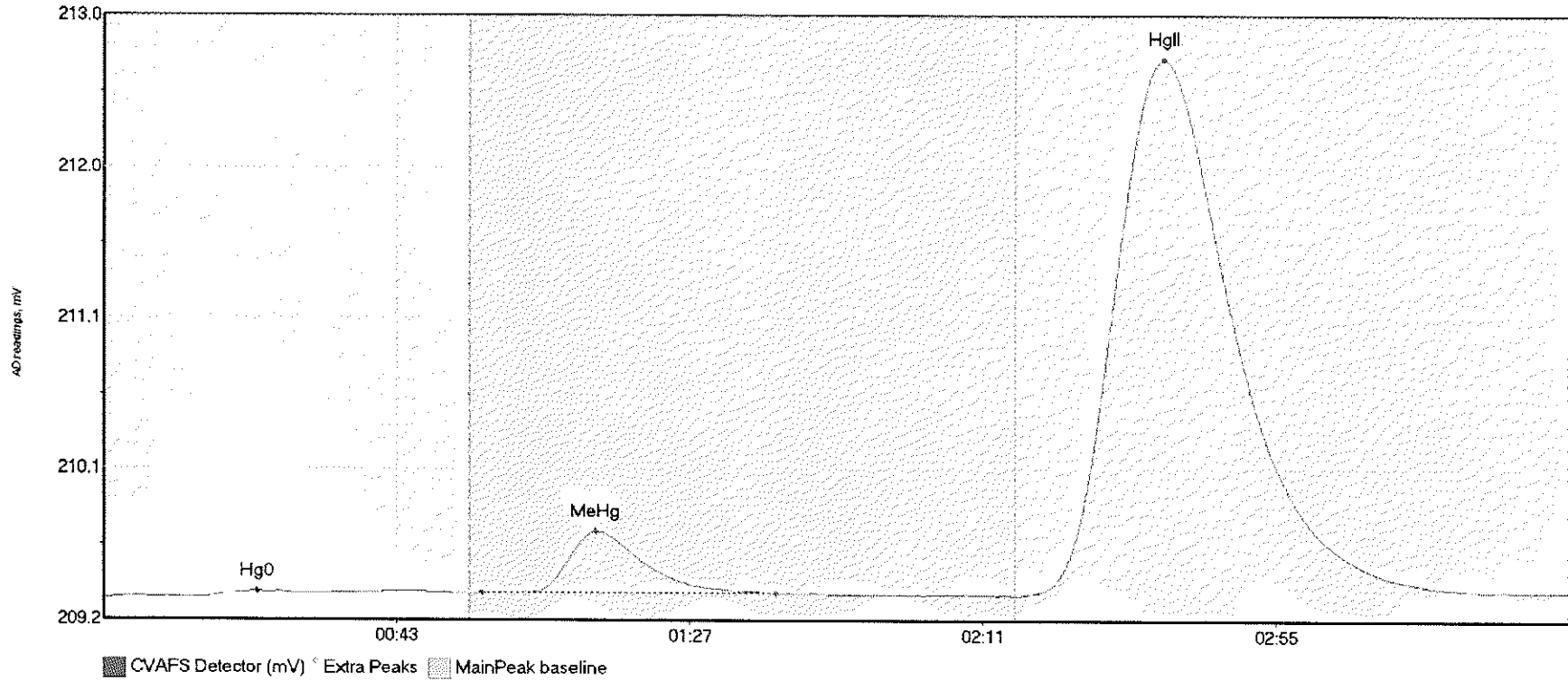
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1707771-AB Hg0	8.339	12.4	50.1	209.29	209.33	39.3	0.057	OK	209.3000	0.00	0.06	
1707771-AB MeHg	69.837	63.6	97.0	209.33	209.33	73.8	0.553	OK	209.3000	0.00	0.06	
1707771-AB HgII	1478.075	137.3	219.8	209.32	209.36	158.9	7.123	CT	209.3000	0.00	0.06	

#50: 1707771-AC



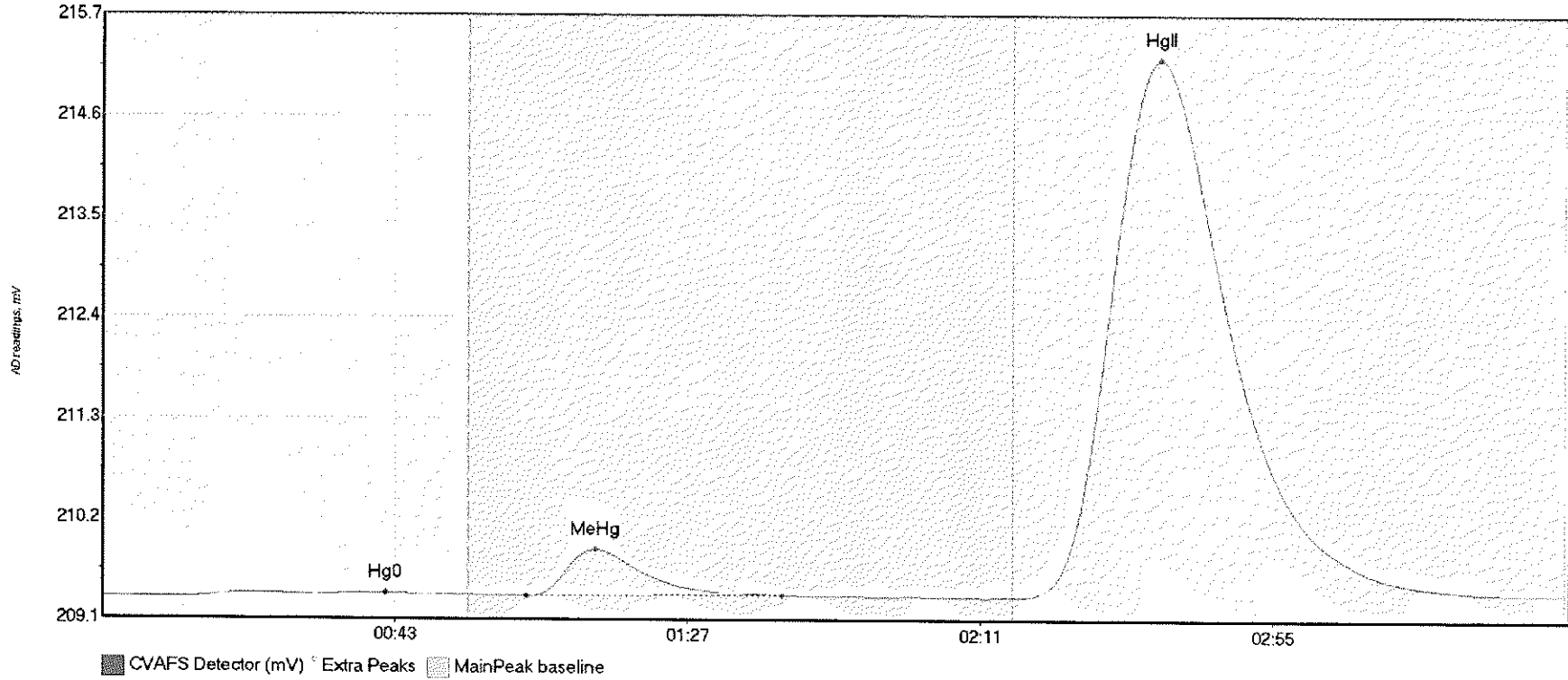
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1707771-AC Hg0	7.289	14.5	55.0	209.30	209.33	26.9	0.037	CT	209.3023	0.00	0.05	
1707771-AC MeHg	44.084	64.0	96.0	209.33	209.33	74.0	0.350	OK	209.3023	0.00	0.05	
1707771-AC HgII	1195.006	136.8	219.8	209.32	209.35	159.2	5.781	CT	209.3023	0.00	0.05	

#51: 1707771-AJ



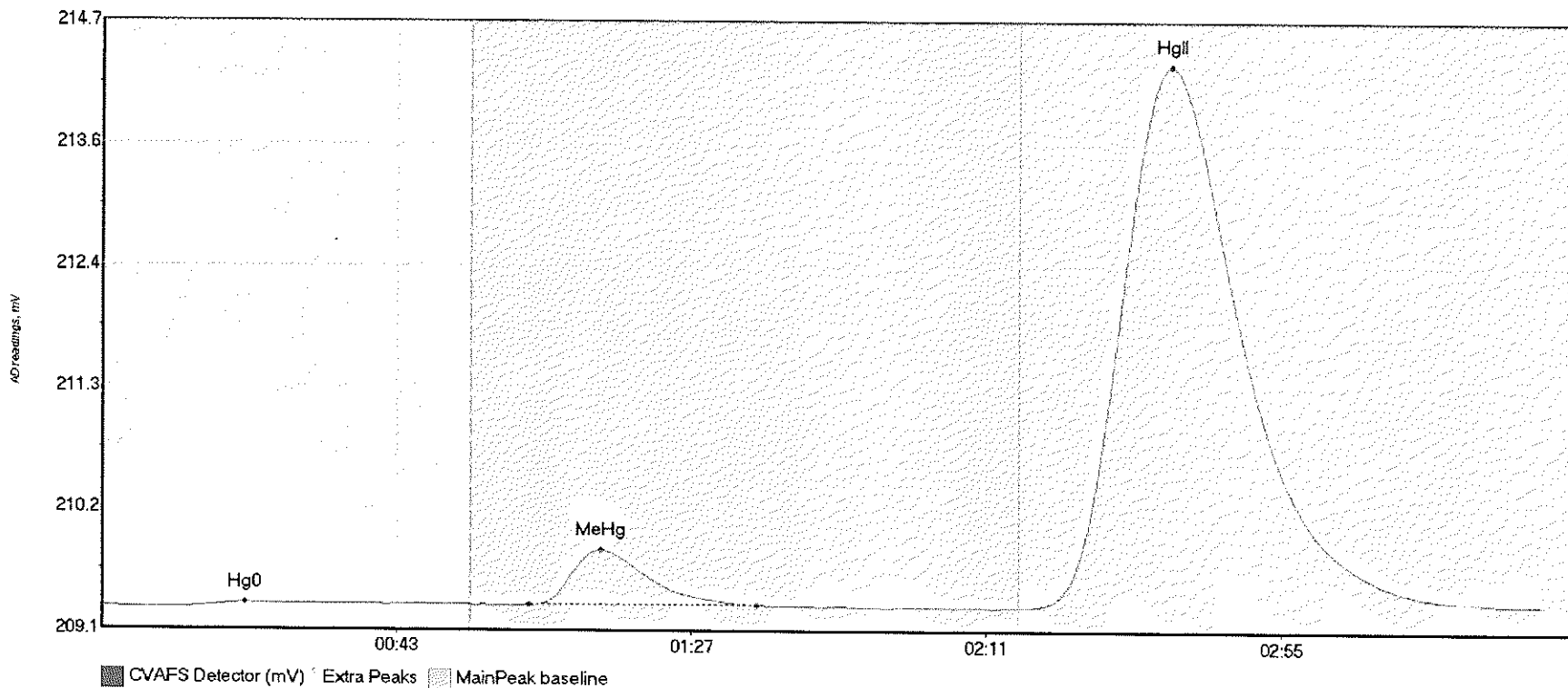
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1707771-AJ Hg0	7.999	0.0	54.8	209.30	209.33	23.2	0.045	NP	209.2972	0.00	0.04	
1707771-AJ MeHg	50.827	56.9	100.9	209.33	209.33	73.9	0.392	OK	209.2972	0.00	0.04	
1707771-AJ HgII	702.932	137.2	218.2	209.32	209.34	159.2	3.414	OK	209.2972	0.00	0.04	

#52: 1707771-AK



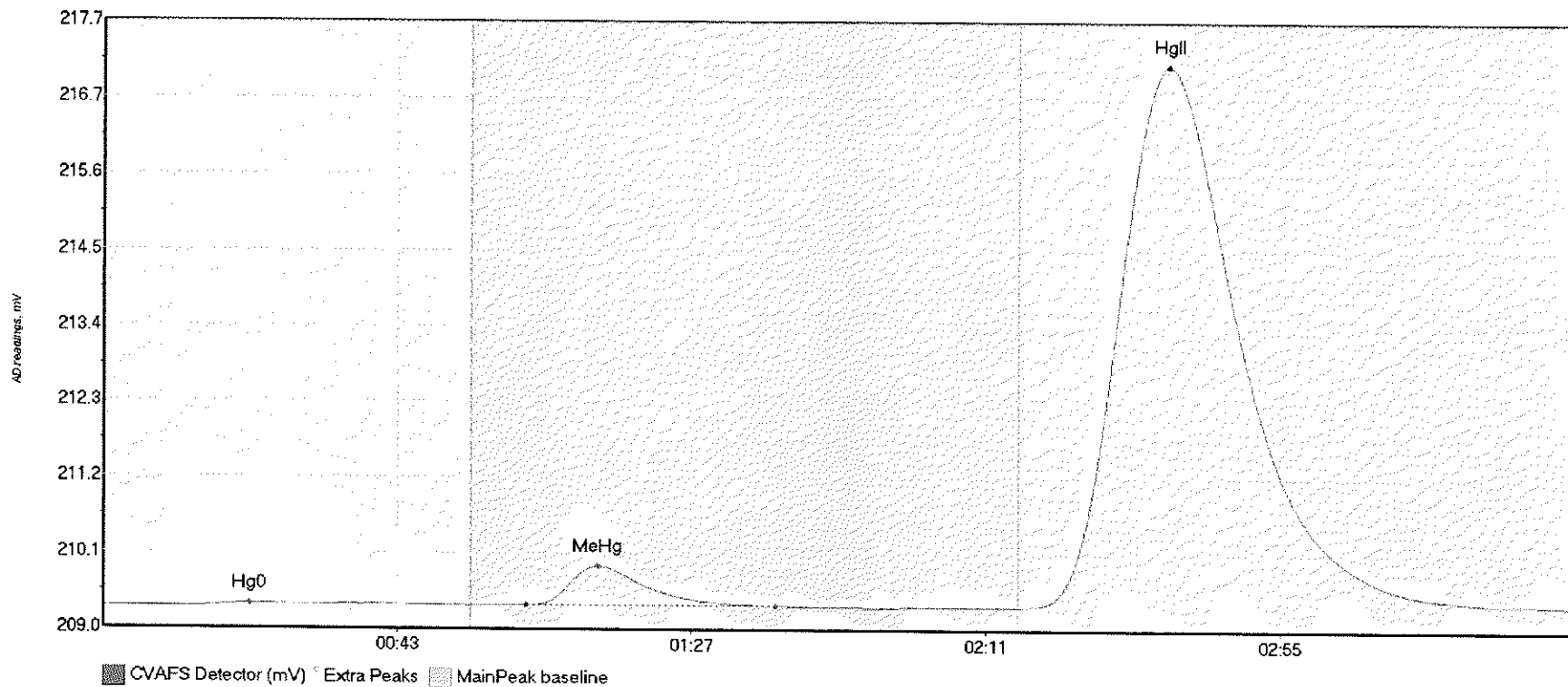
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1707771-AK Hg0	8.492	12.4	53.3	209.31	209.34	42.6	0.047	OK	209.3117	0.00	0.05	
1707771-AK MeHg	65.345	63.7	102.2	209.33	209.34	74.2	0.505	OK	209.3117	0.00	0.05	
1707771-AK HgII	1200.164	137.9	217.4	209.32	209.36	159.0	5.875	OK	209.3117	0.00	0.05	

#53: 1707771-AL



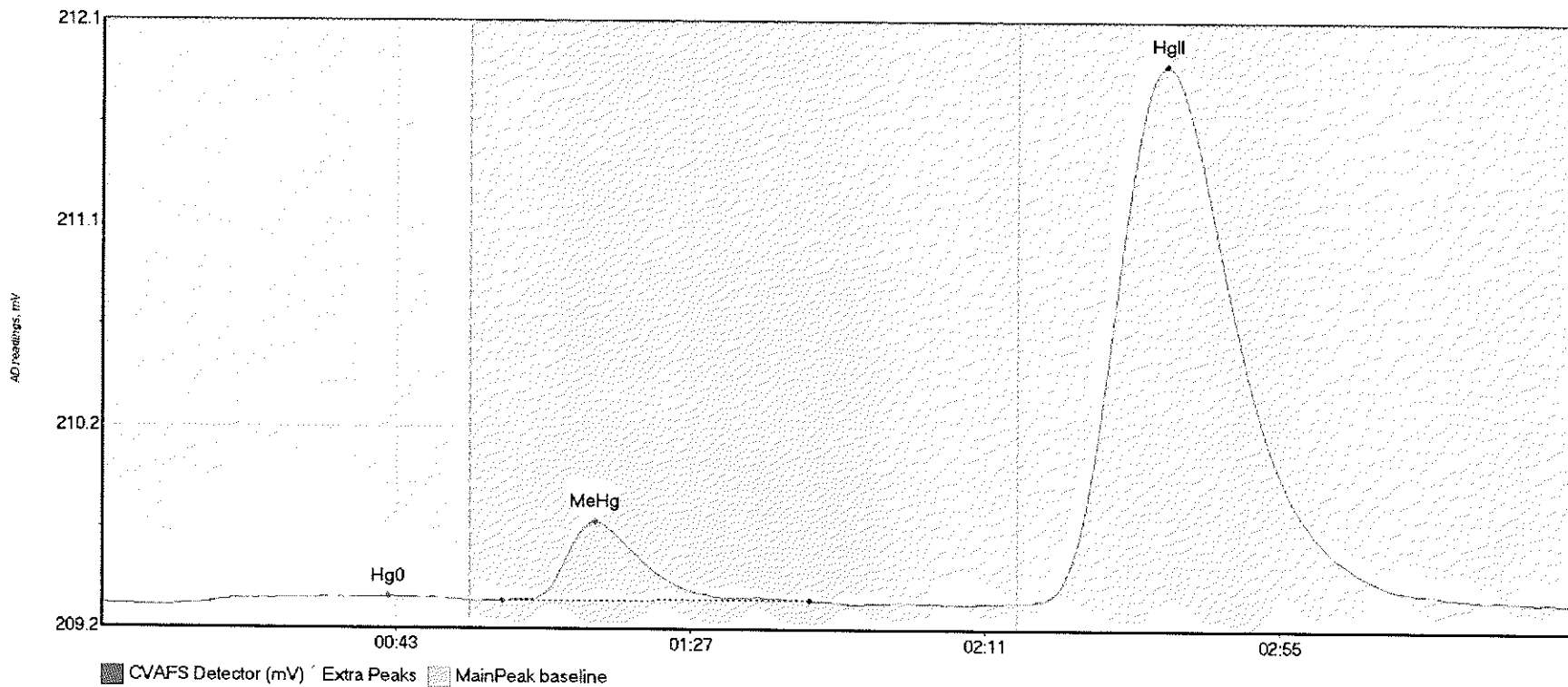
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1707771-AL Hg0	4.592	13.1	42.4	209.32	209.34	21.5	0.038	OK	209.3209	0.00	0.03	
1707771-AL MeHg	64.745	63.7	97.8	209.34	209.35	74.4	0.501	OK	209.3209	0.00	0.03	
1707771-AL HgII	1015.042	138.3	219.6	209.33	209.35	159.4	4.930	OK	209.3209	0.00	0.03	

#54: 1707771-AM



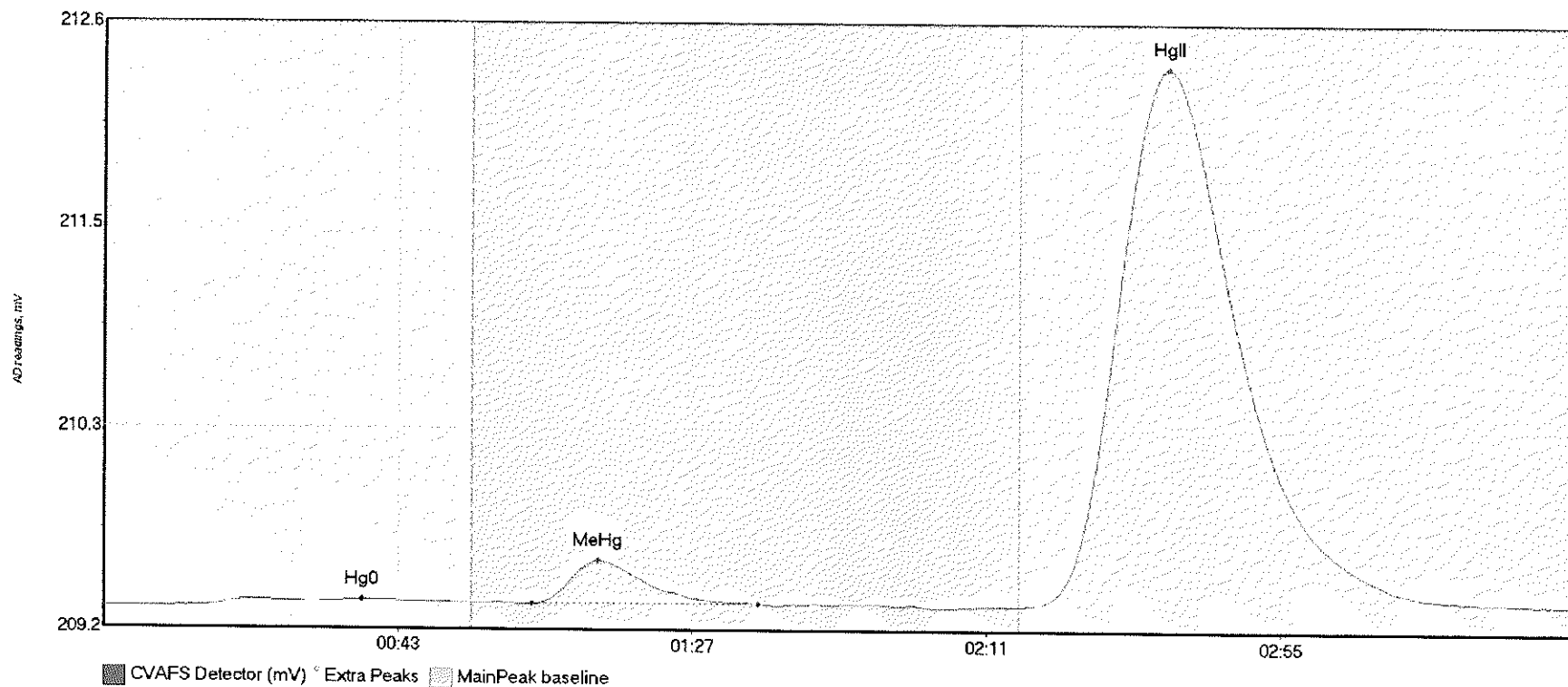
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1707771-AM Hg0	8.580	12.9	54.8	209.32	209.35	21.9	0.043	OK	209.3210	0.00	0.05	
1707771-AM MeHg	73.551	63.3	100.6	209.35	209.35	74.0	0.570	OK	209.3210	0.00	0.05	
1707771-AM HgII	1610.685	138.2	219.6	209.35	209.37	159.3	7.779	OK	209.3210	0.00	0.05	

#55: 1707771-AN



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1707771-AN Hg0	6.569	15.0	55.0	209.33	209.35	42.9	0.033	CT	209.3286	0.00	0.02	
1707771-AN MeHg	48.885	59.9	105.7	209.34	209.35	73.7	0.376	OK	209.3286	0.00	0.02	
1707771-AN HgII	528.385	138.0	218.6	209.34	209.34	159.0	2.535	OK	209.3286	0.00	0.02	

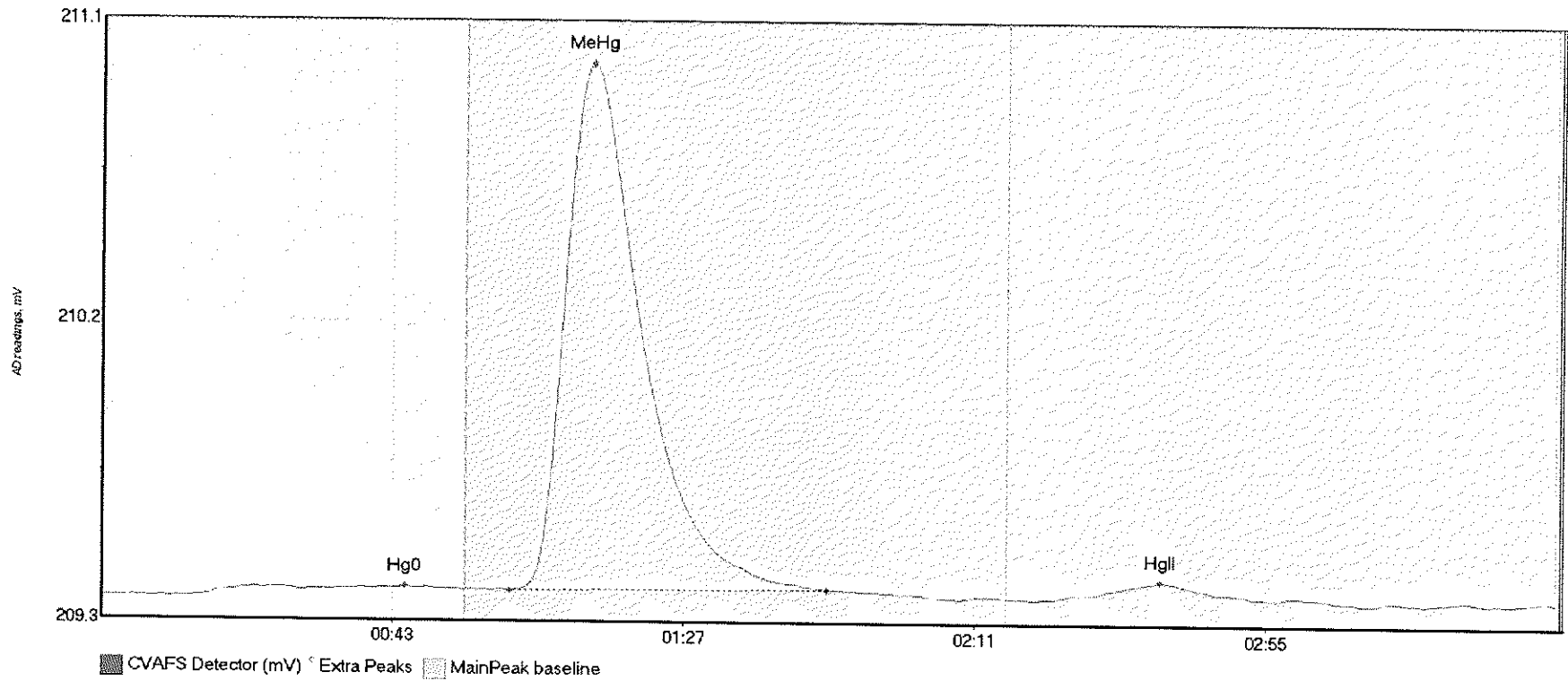
#56: 1707771-AO



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1707771-AO Hg0	6.837	12.4	55.0	209.32	209.34	38.6	0.038	CT	209.3128	0.00	0.03	
1707771-AO MeHg	30.718	64.0	97.9	209.34	209.34	73.9	0.246	OK	209.3128	0.00	0.03	
1707771-AO HgII	634.313	137.1	219.8	209.33	209.34	159.0	3.058	CT	209.3128	0.00	0.03	117

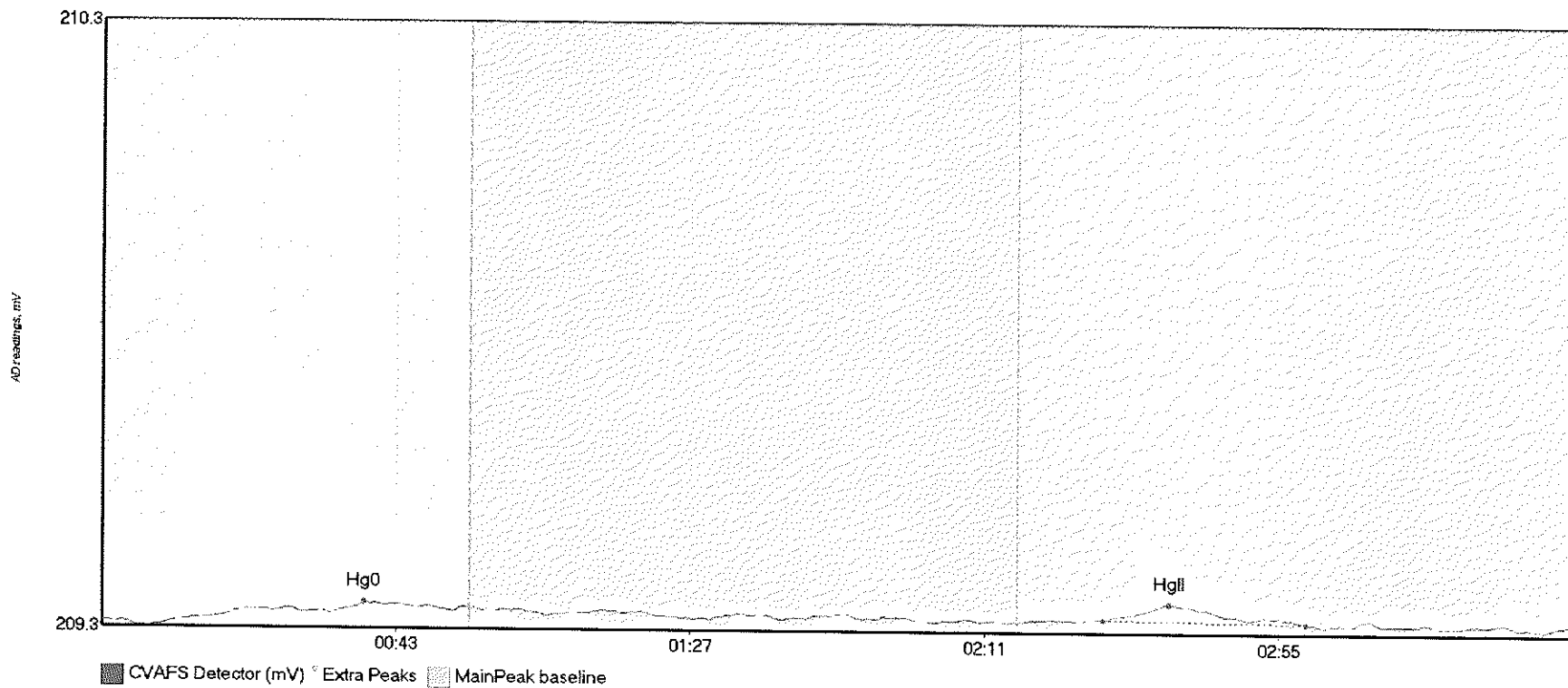


#57: SEQ-CCV4



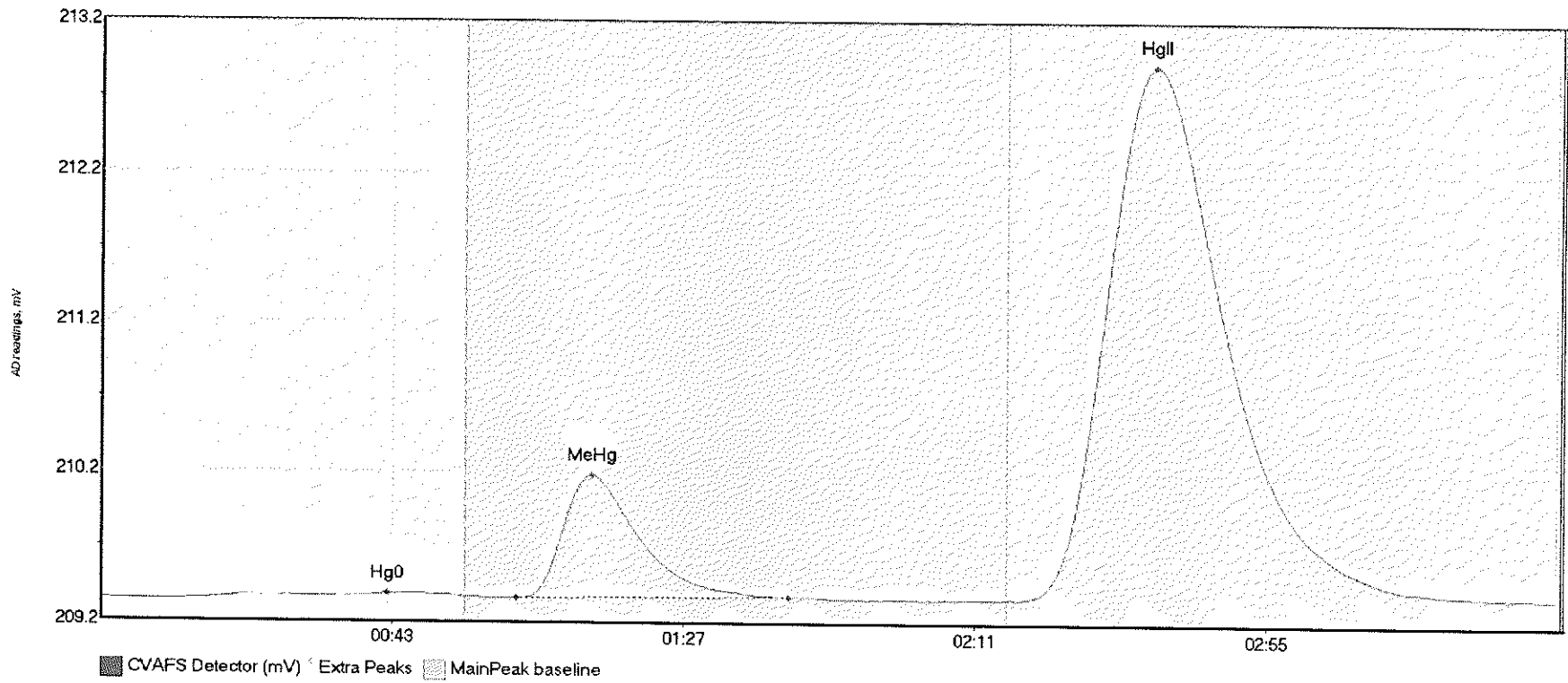
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CCV4 Hg0	4.566	14.6	54.7	209.33	209.35	45.9	0.030	OK	209.3233	0.00	0.00	
SEQ-CCV4 MeHg	211.846	61.7	109.7	209.34	209.35	74.2	1.588	OK	209.3233	0.00	0.00	
SEQ-CCV4 HgII	7.374	143.4	174.8	209.33	209.33	160.0	0.055	OK	209.3233	0.00	0.00	

#58: SEQ-CCB4



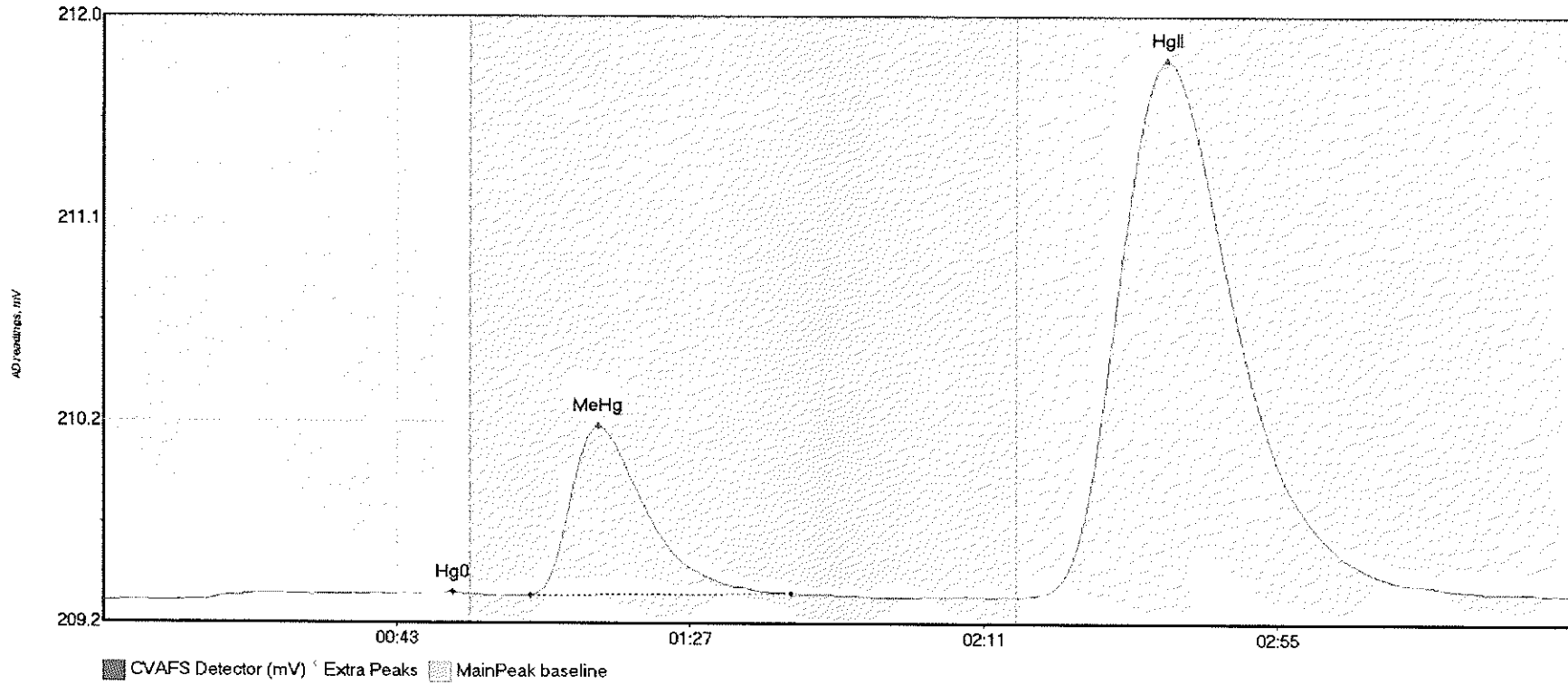
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CCB4 Hg0	3.382	14.0	52.5	209.33	209.35	39.1	0.027	OK	209.3267	0.00	0.01	
SEQ-CCB4 HgII	4.038	149.7	180.1	209.34	209.33	159.6	0.026	OK	209.3267	0.00	0.01	317

#59: 1707771-AR



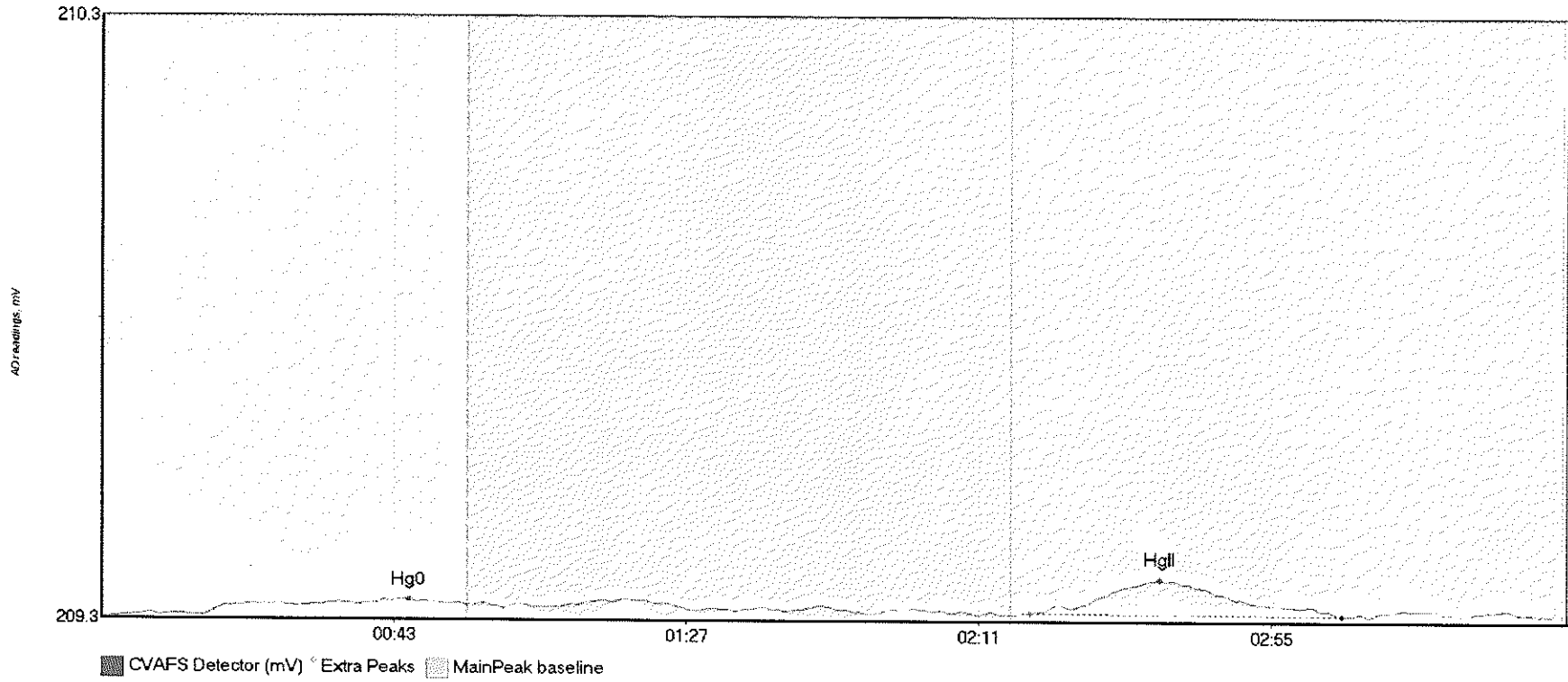
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1707771-AR Hg0	5.308	15.3	55.0	209.33	209.36	43.3	0.039	CF	209.3331	0.00	0.03	
1707771-AR MeHg	105.749	62.7	103.9	209.35	209.36	74.1	0.813	OK	209.3331	0.00	0.03	
1707771-AR HgII	728.549	138.8	219.8	209.35	209.36	159.1	3.533	CT	209.3331	0.00	0.03	

#60: 1707771-AS



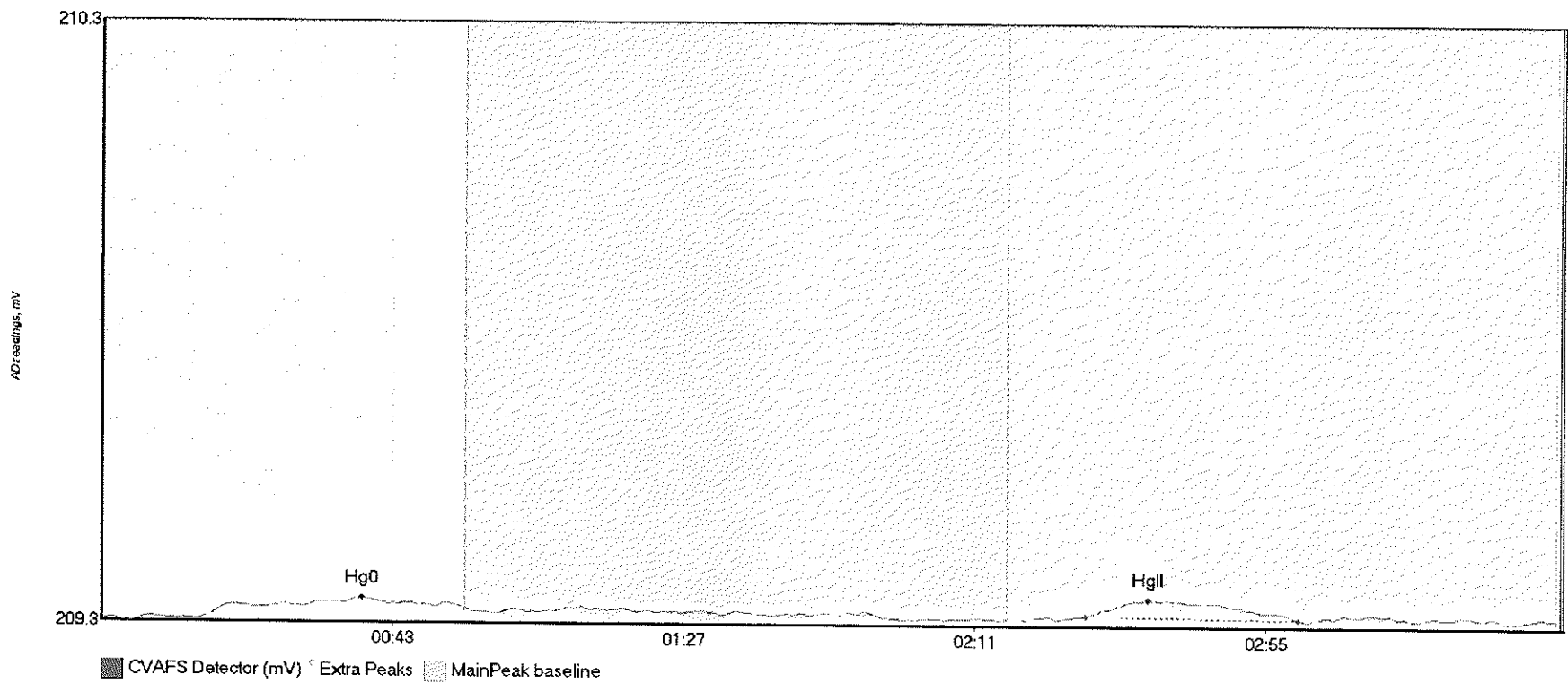
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1707771-AS Hg0	5.278	15.0	55.0	209.34	209.37	52.4	0.034	CT	209.3367	0.00	0.03	
1707771-AS MeHg	101.217	64.0	103.1	209.36	209.37	74.2	0.778	OK	209.3367	0.00	0.03	
1707771-AS HgII	508.162	138.8	219.6	209.36	209.37	159.4	2.464	OK	209.3367	0.00	0.03	

#61: F707569-BLK1



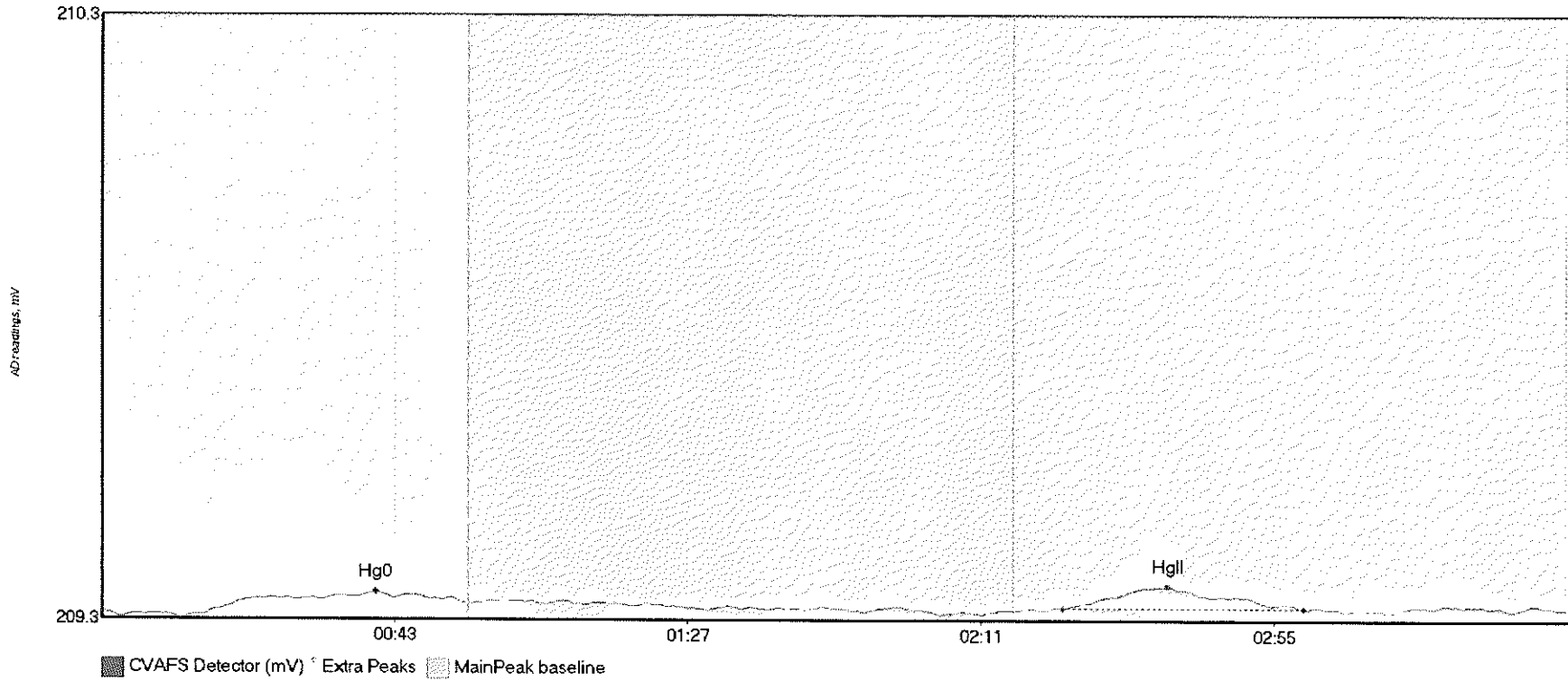
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F707569-BLK1 Hg	3.913	15.1	54.7	209.34	209.36	46.1	0.027	OK	209.3383	0.00	0.01	
F707569-BLK1 Hg	12.602	139.7	186.6	209.35	209.35	159.2	0.056	OK	209.3383	0.00	0.01	017

#62: F707569-BLK2



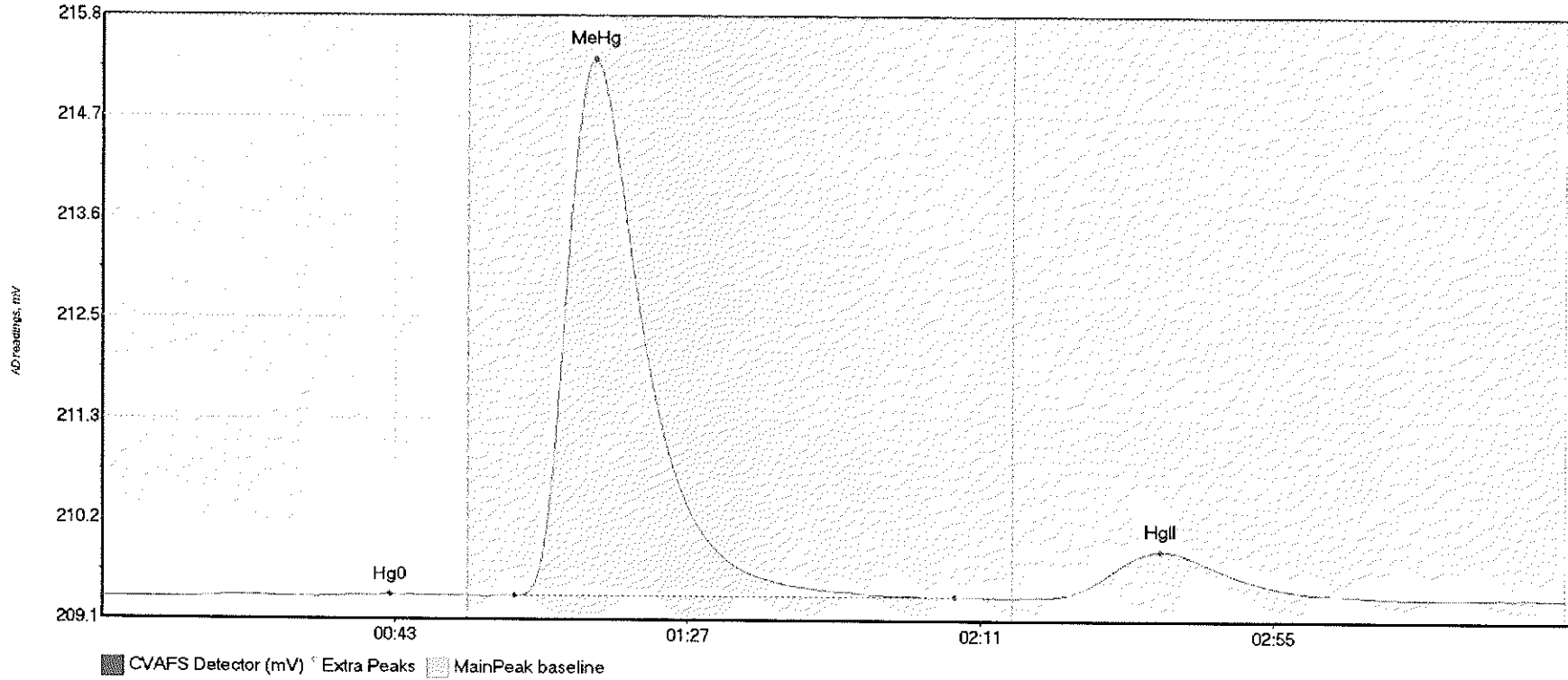
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F707569-BLK2 Hg	5.863	14.2	55.0	209.35	209.37	39.5	0.036	CT	209.3458	0.00	0.01	
F707569-BLK2 Hg	6.092	148.7	180.9	209.36	209.35	158.2	0.028	OK	209.3458	0.00	0.01	117

#63: F707569-BLK3



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F707569-BLK3 Hg	6.934	15.0	54.7	209.35	209.37	41.1	0.038	OK	209.3587	0.00	0.01	
F707569-BLK3 Hg	6.589	144.3	180.4	209.37	209.37	160.1	0.037	OK	209.3587	0.00	0.01	117

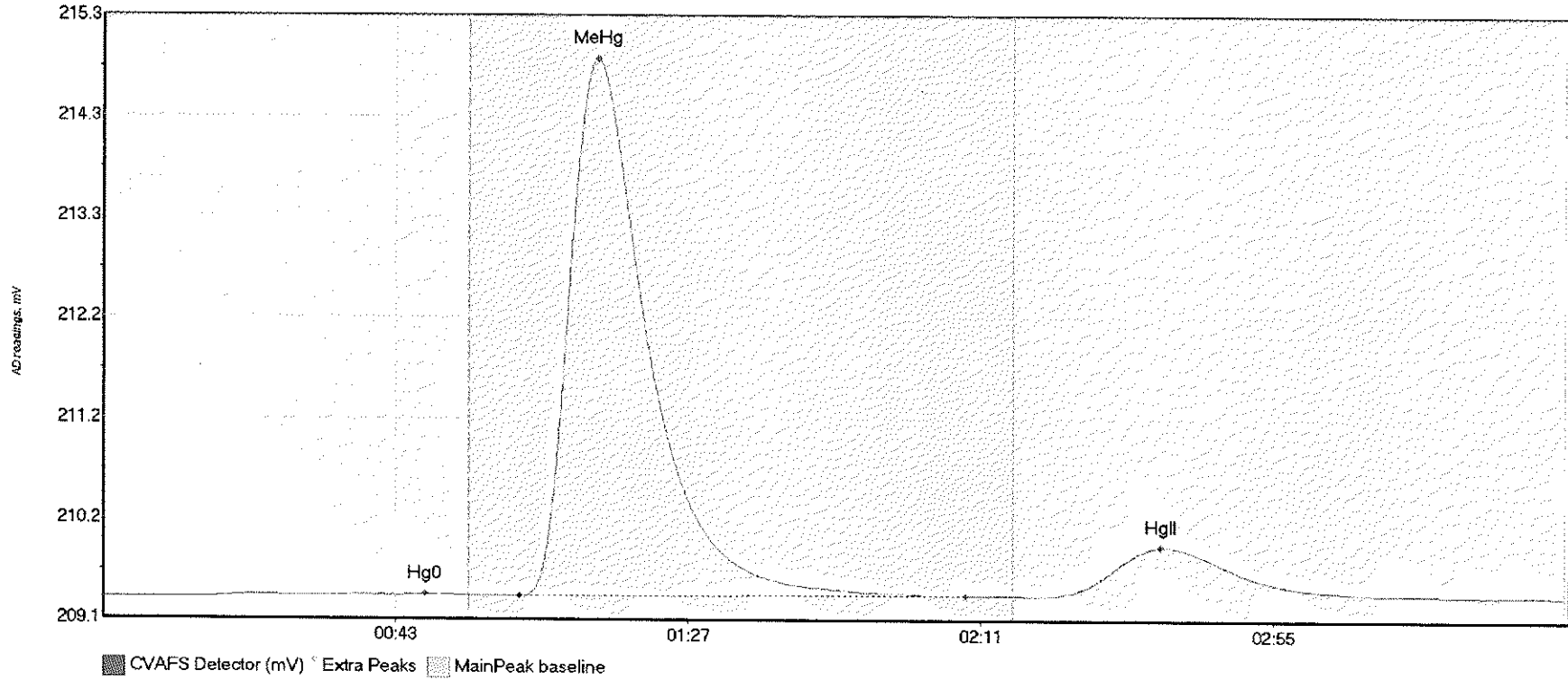
#64: F707569-BS1



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F707569-BS1 Hg0	4.437	12.8	54.2	209.36	209.38	43.3	0.034	OK	209.3628	0.00	0.01	
F707569-BS1 MeH	814.693	62.0	128.2	209.38	209.38	74.0	5.944	OK	209.3628	0.00	0.01	
F707569-BS1 HgI	105.174	136.8	195.0	209.38	209.38	159.1	0.520	OK	209.3628	0.00	0.01	

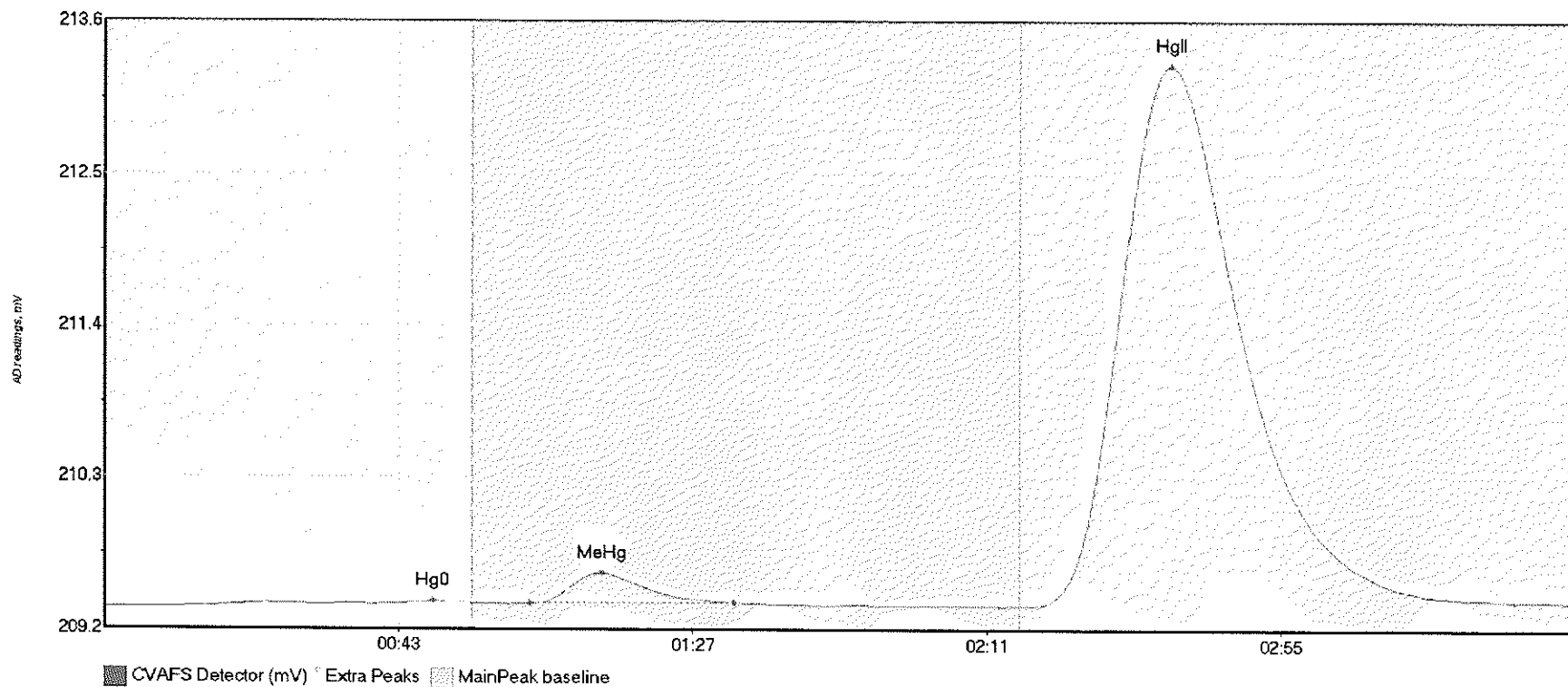


#65: F707569-BSD1



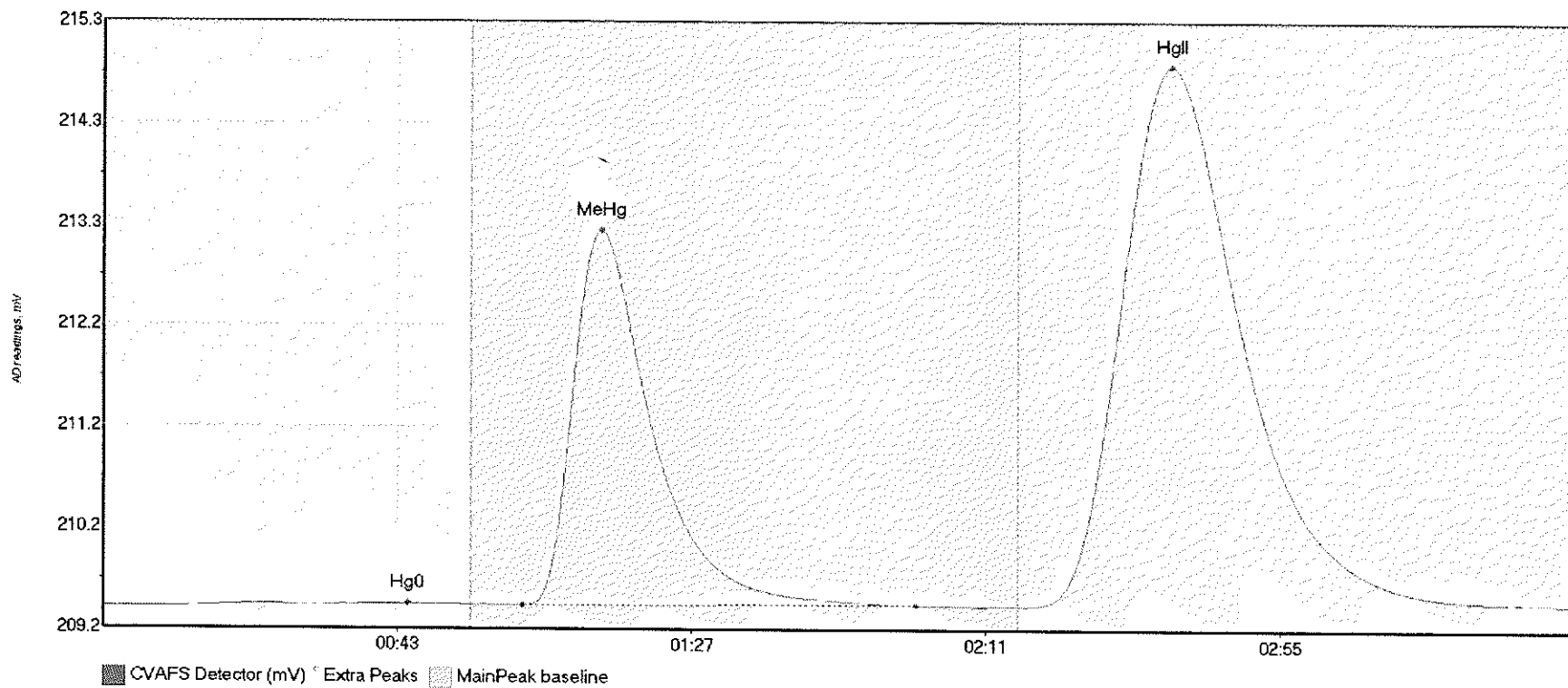
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F707569-BSD1 Hg	5.016	15.4	54.5	209.37	209.39	48.4	0.031	OK	209.3632	0.00	0.03	
F707569-BSD1 Me	755.478	62.6	129.8	209.38	209.39	74.3	5.516	OK	209.3632	0.00	0.03	
F707569-BSD1 Hg	103.698	140.4	201.9	209.39	209.40	159.0	0.514	OK	209.3632	0.00	0.03	

#66: F707569-DUP1



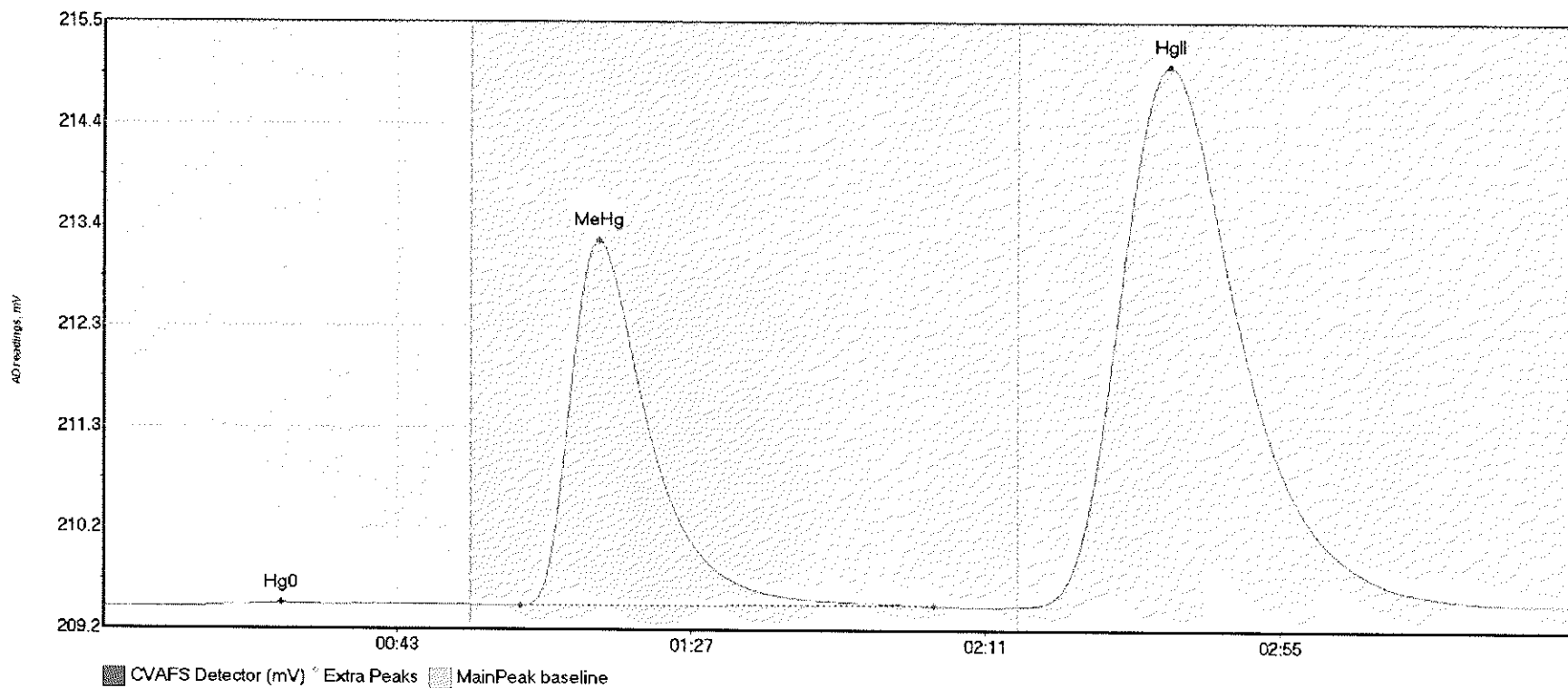
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F707569-DUP1 Hg	3.304	13.6	54.9	209.37	209.40	49.2	0.036	OK	209.3689	0.00	0.04	
F707569-DUP1 Me	26.433	63.6	94.2	209.40	209.40	74.5	0.218	OK	209.3689	0.00	0.04	
F707569-DUP1 Hg	809.323	139.3	219.0	209.38	209.41	159.5	3.903	OK	209.3689	0.00	0.04	

#67: F707569-MS1



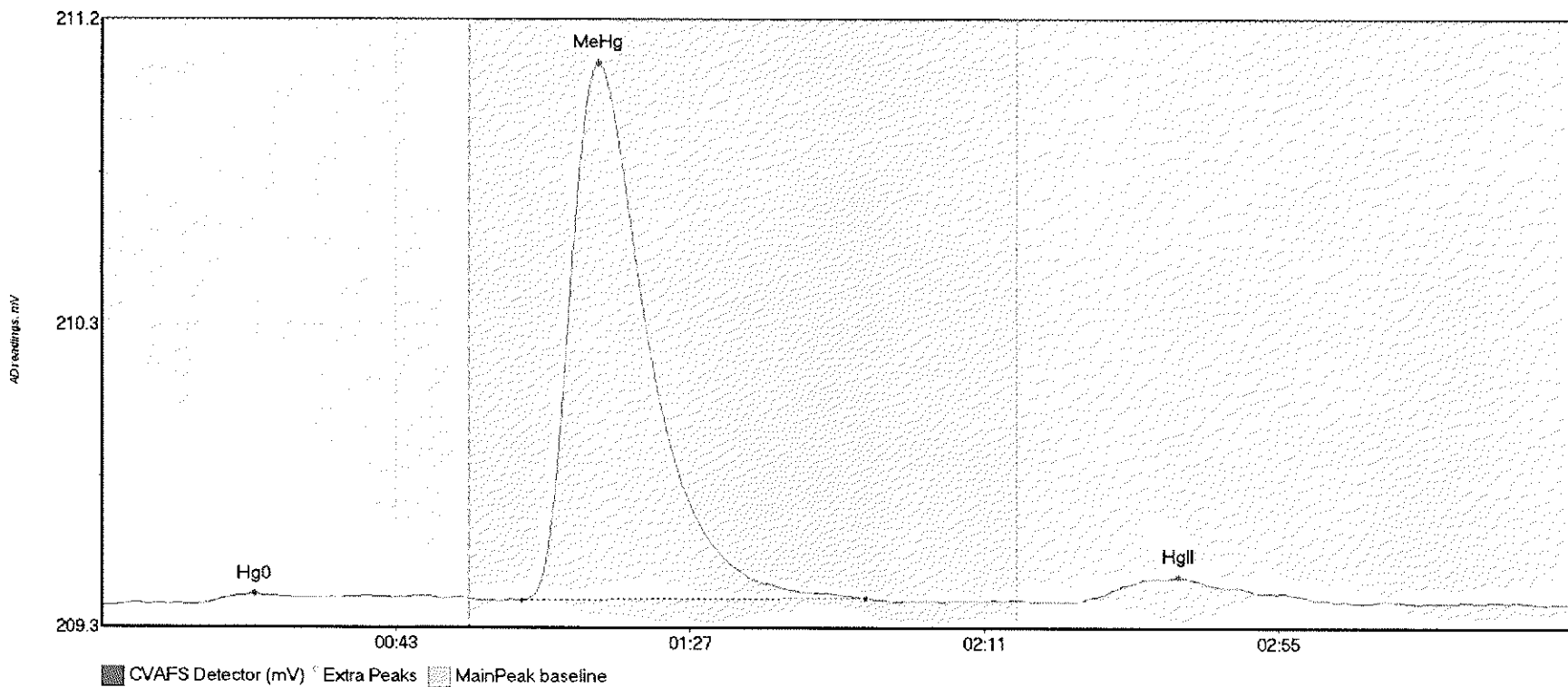
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment	
F707569-MS1	Hg0	4.898	12.0	55.0	209.38	209.40	45.6	0.032	CT	209.3764	0.00	0.04	
F707569-MS1	MeH	516.927	62.7	121.6	209.40	209.40	74.4	3.799	OK	209.3764	0.00	0.04	
F707569-MS1	HgI	1132.846	138.3	218.5	209.39	209.41	159.6	5.467	OK	209.3764	0.00	0.04	

#68: F707569-MSD1



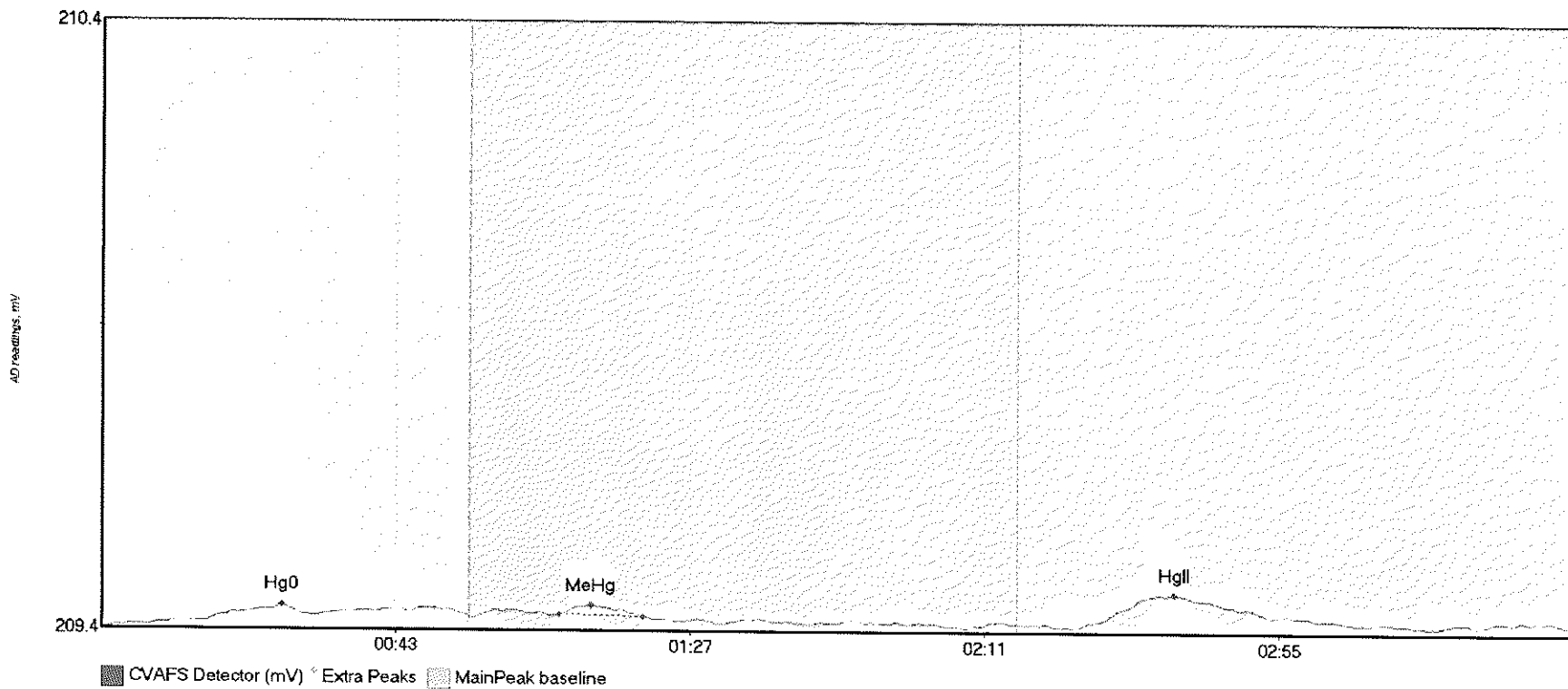
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F707569-MSD1 Hg	2.618	14.2	34.1	209.40	209.41	26.7	0.035	OK	209.3919	0.00	0.05	
F707569-MSD1 Me	520.875	62.4	124.3	209.41	209.41	74.2	3.795	OK	209.3919	0.00	0.05	
F707569-MSD1 Hg	1171.472	137.4	219.2	209.41	209.44	159.4	5.601	OK	209.3919	0.00	0.05	

#69: SEQ-CCV5



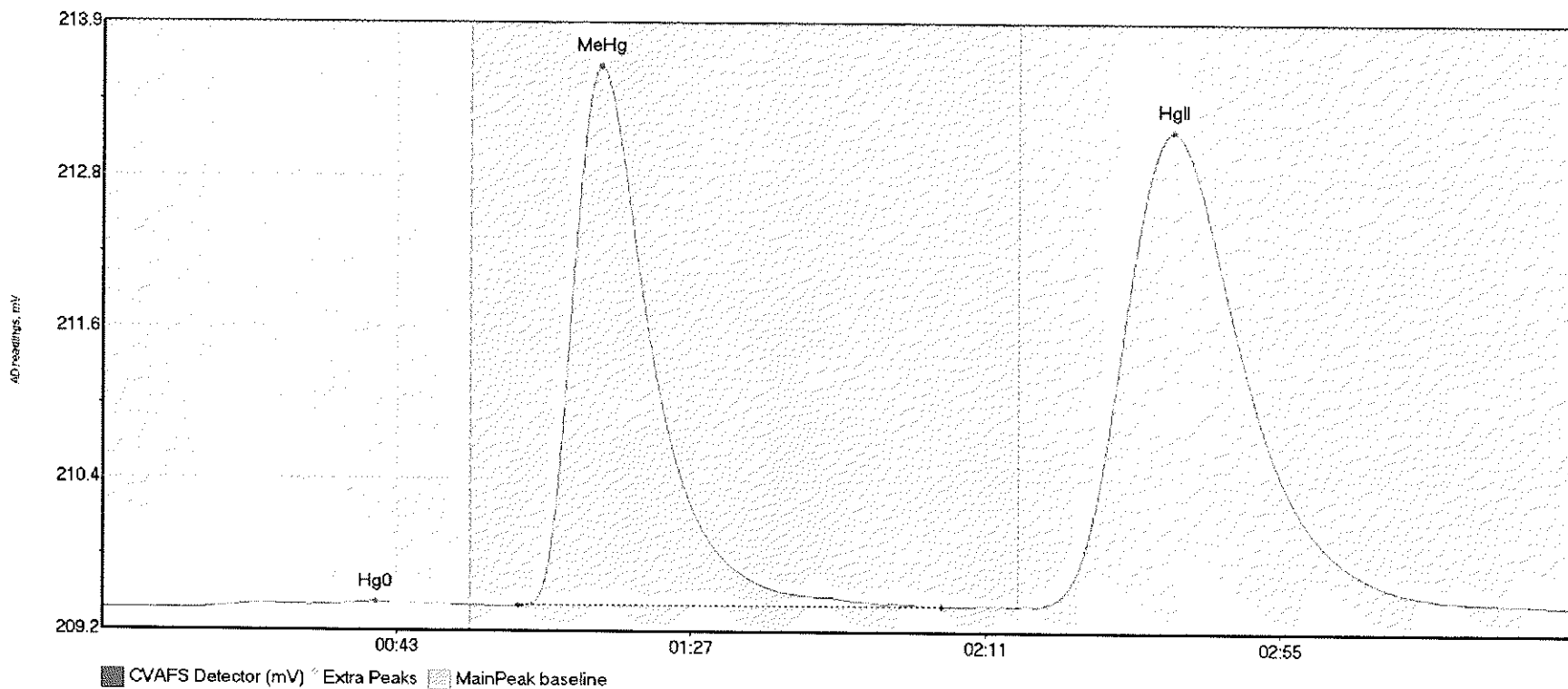
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CCV5 Hg0	5.288	13.1	55.0	209.41	209.42	22.8	0.032	CT	209.4026	0.00	0.01	
SEQ-CCV5 MeHg	218.745	62.9	114.3	209.42	209.43	74.3	1.615	OK	209.4026	0.00	0.01	
SEQ-CCV5 HgII	13.124	146.4	181.6	209.42	209.42	161.1	0.072	OK	209.4026	0.00	0.01	

#70: SEQ-CCB5



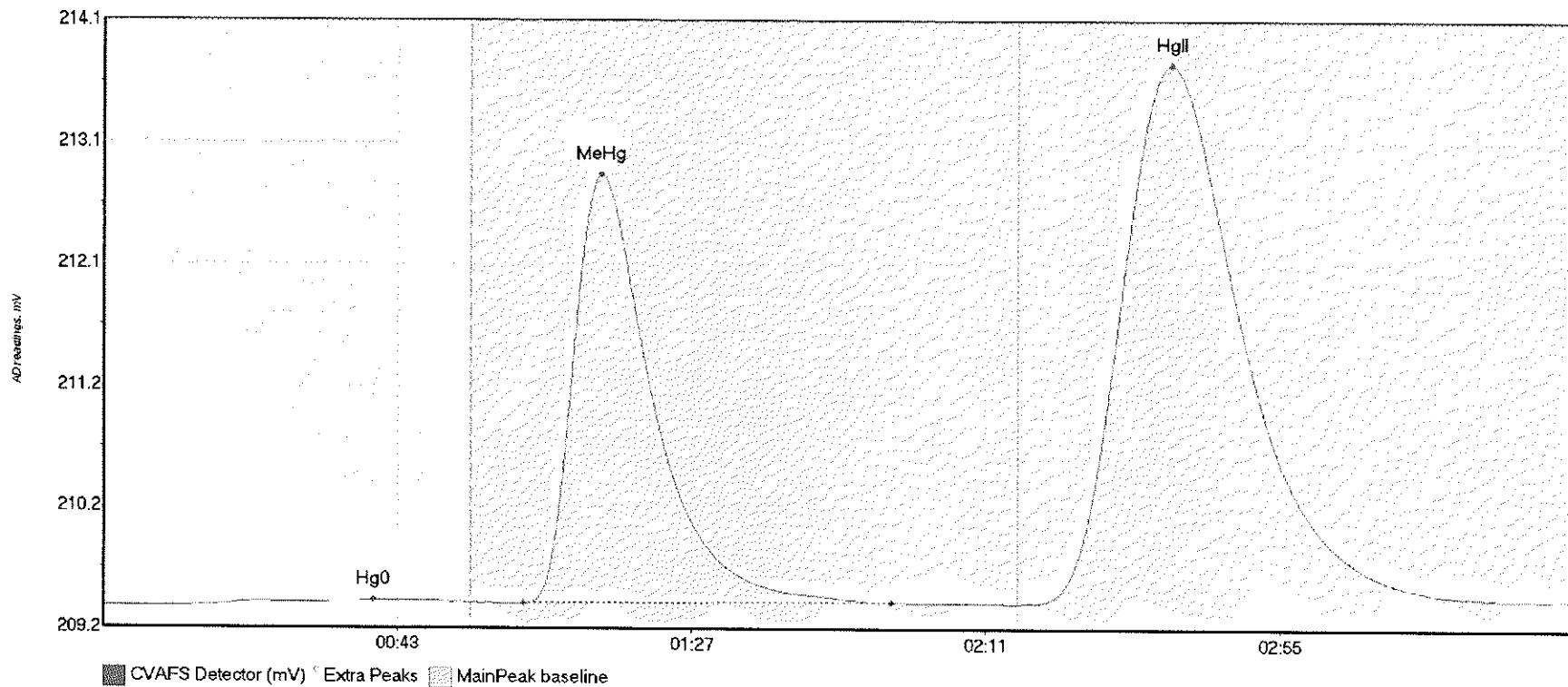
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CCB5 Hg0	5.772	6.9	55.0	209.40	209.42	27.0	0.032	CT	209.3968	0.00	0.01	
SEQ-CCB5 MeHg	1.226	68.5	80.9	209.42	209.42	73.2	0.016	OK	209.3968	0.00	0.01	017
SEQ-CCB5 HgII	8.458	147.8	185.9	209.41	209.41	160.3	0.047	OK	209.3968	0.00	0.01	

#71: F707569-MS2



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment	
F707569-MS2	Hg0	7.793	12.7	54.6	209.41	209.44	40.9	0.054	OK	209.4120	0.00	0.04	
F707569-MS2	MeH	572.865	62.2	125.4	209.44	209.44	74.5	4.157	OK	209.4120	0.00	0.04	
F707569-MS2	HgI	767.073	139.4	219.8	209.44	209.45	159.9	3.655	CT	209.4120	0.00	0.04	

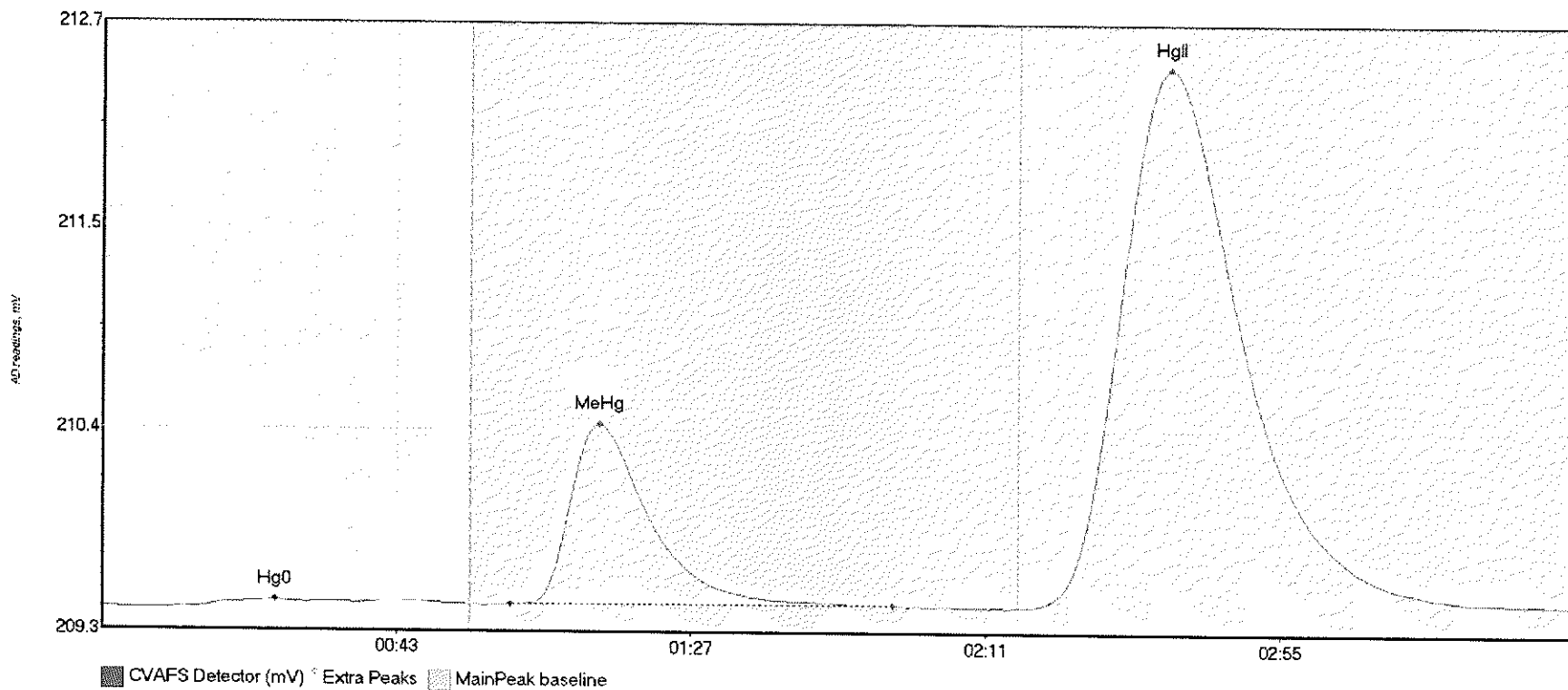
#72: F707569-MSD2



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F707569-MSD2 Hg	7.311	12.4	55.0	209.42	209.45	40.5	0.049	CT	209.4193	0.00	0.06	
F707569-MSD2 Me	464.908	62.9	117.9	209.44	209.45	74.5	3.403	OK	209.4193	0.00	0.06	
F707569-MSD2 Hg	888.357	138.7	215.9	209.45	209.48	159.7	4.273	OK	209.4193	0.00	0.06	



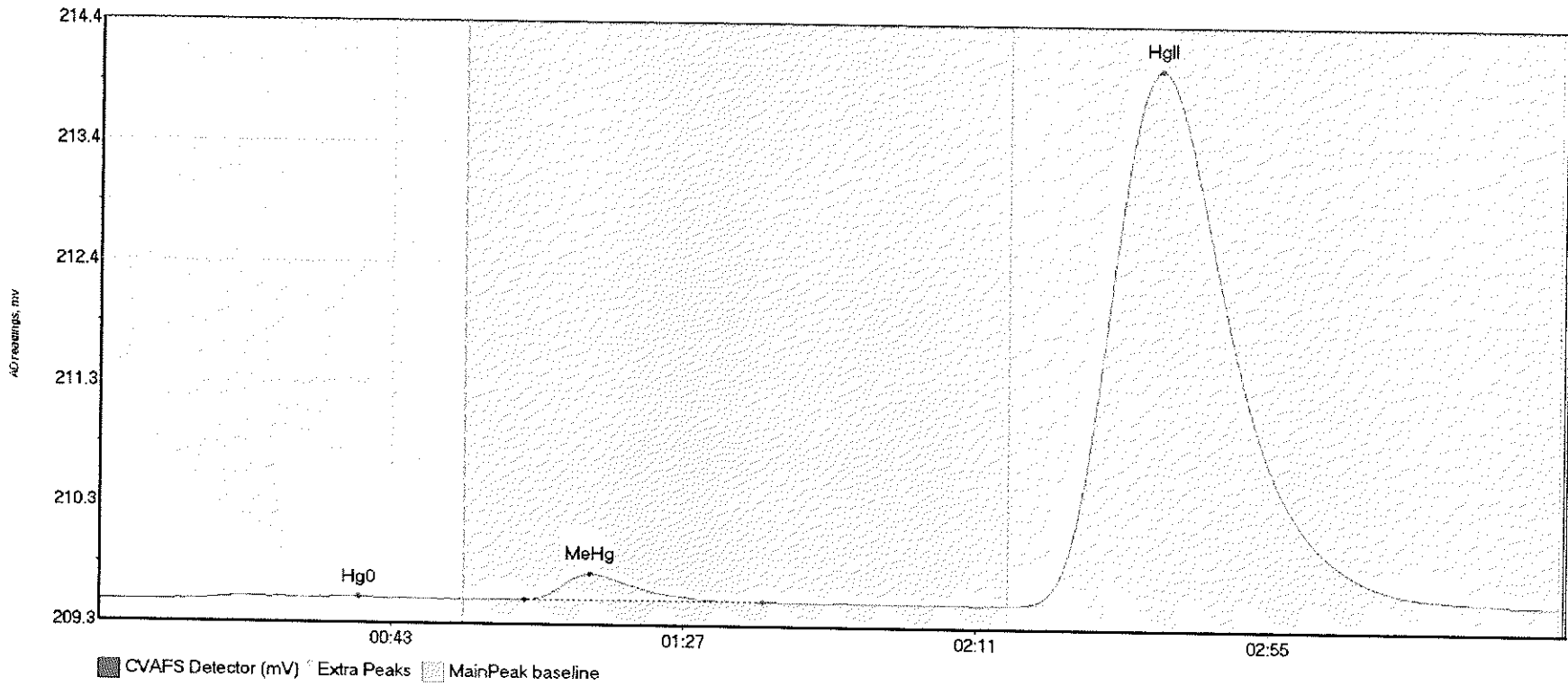
#73: 1707771-AT



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1707771-AT Hg0	7.427	14.8	55.0	209.43	209.45	25.8	0.037	CT	209.4327	0.00	0.03	
1707771-AT MeHg	134.600	61.0	118.1	209.45	209.46	74.3	0.993	OK	209.4327	0.00	0.03	
1707771-AT HgII	621.087	138.0	219.8	209.44	209.46	159.4	2.969	CT	209.4327	0.00	0.03	

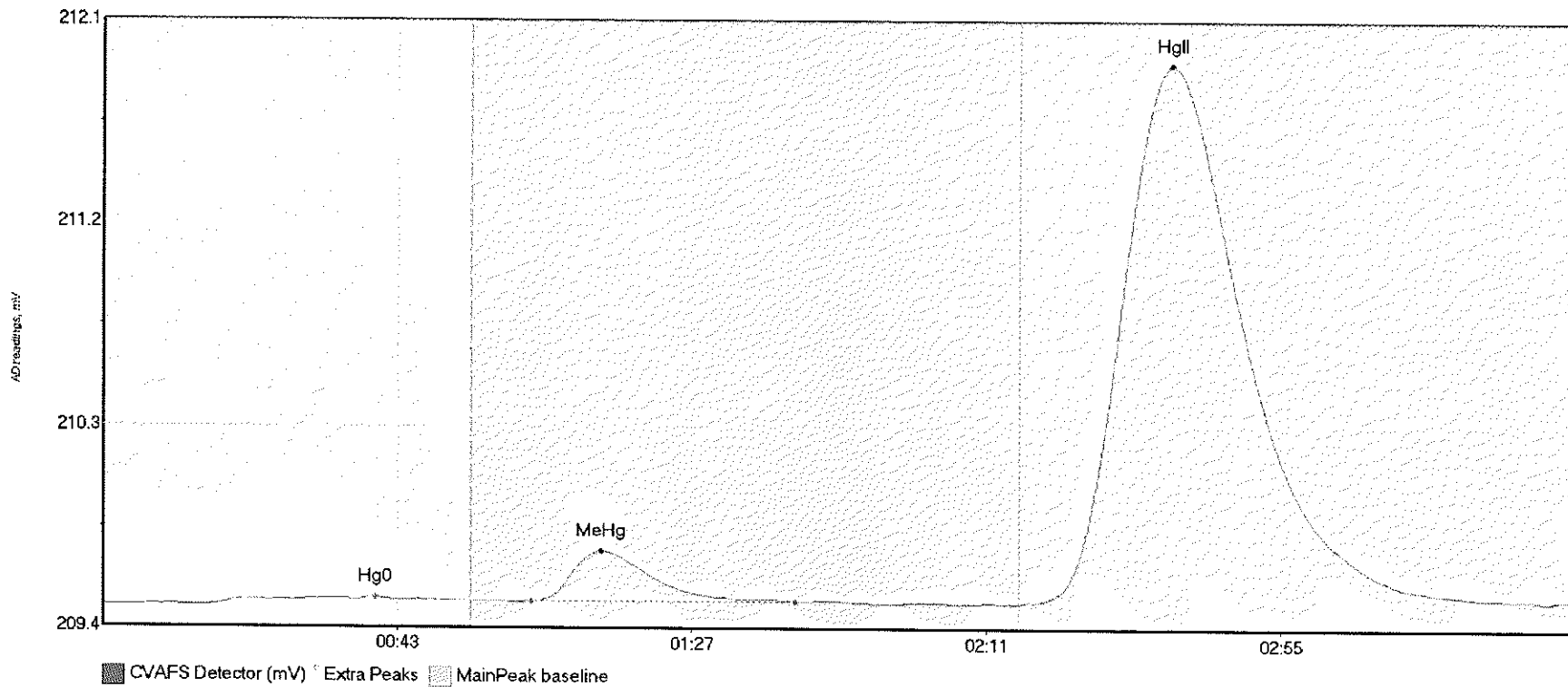
317

#74: 1707771-AU



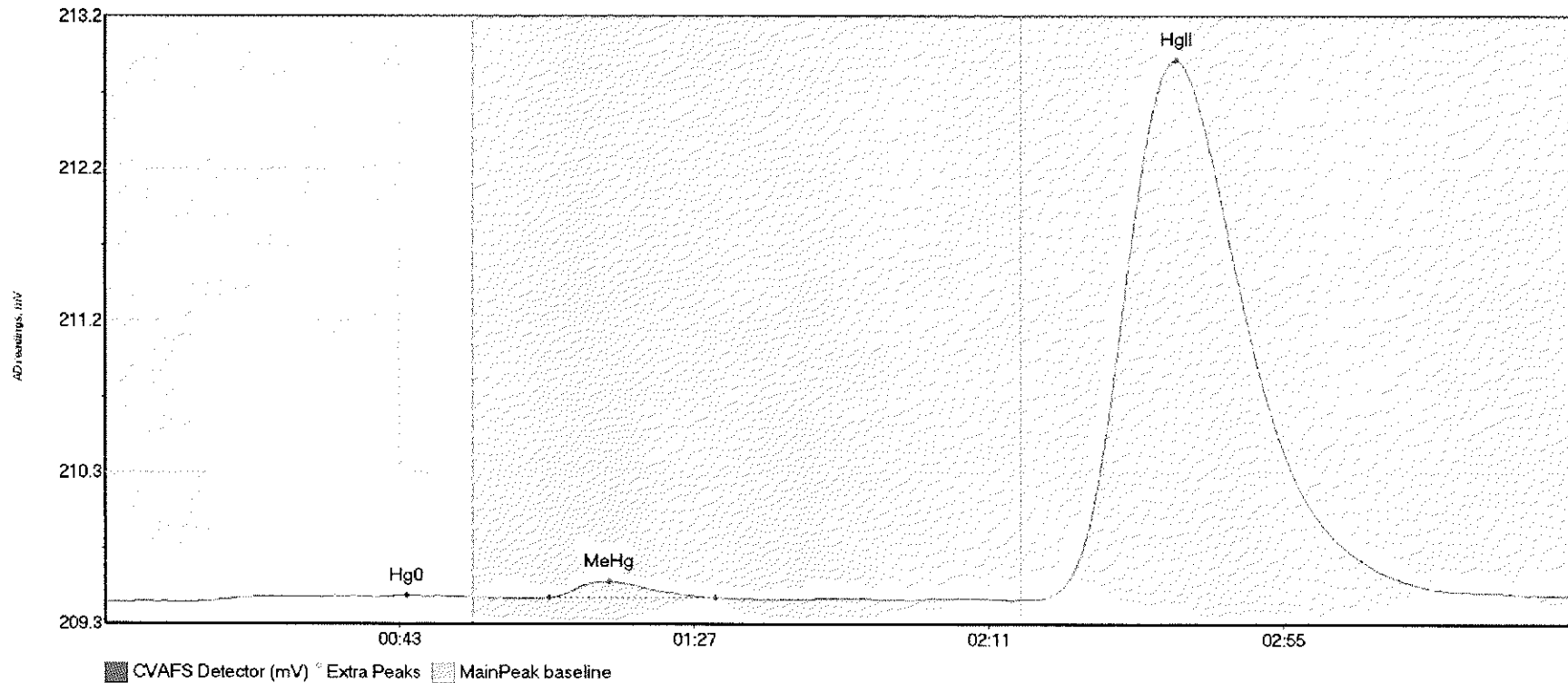
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1707771-AU Hg0	6.018	9.5	55.0	209.45	209.47	39.2	0.032	CT	209.4452	0.00	0.04	
1707771-AU MeHg	29.278	64.2	100.0	209.47	209.47	74.0	0.226	OK	209.4452	0.00	0.04	
1707771-AU HgII	966.606	137.7	219.8	209.47	209.49	159.6	4.578	CT	209.4452	0.00	0.04	

#75: 1707771-AX



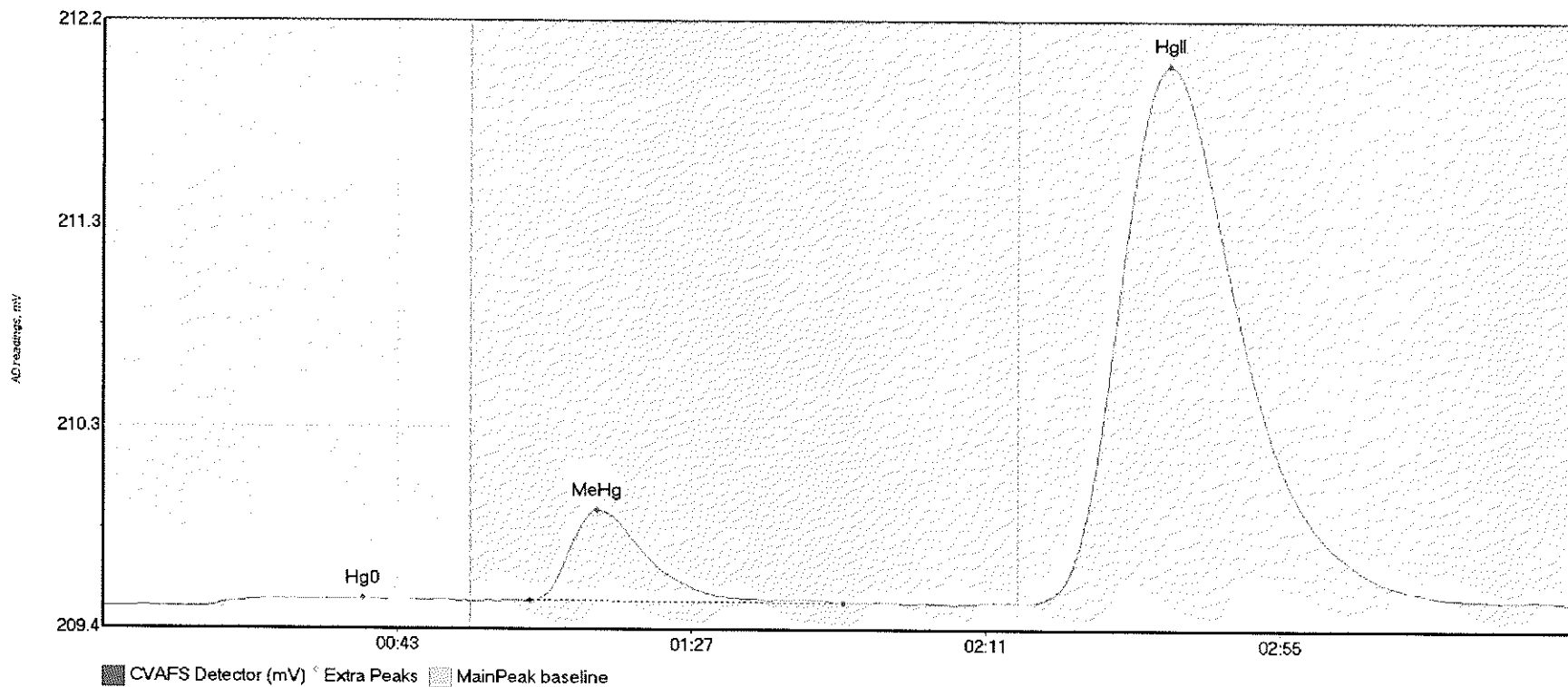
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1707771-AX Hg0	5.472	15.8	54.1	209.46	209.48	40.7	0.033	OK	209.4591	0.00	0.03	
1707771-AX MeHg	30.912	64.0	103.5	209.48	209.48	74.5	0.230	OK	209.4591	0.00	0.03	
1707771-AX HgII	514.599	138.9	215.6	209.48	209.48	159.6	2.453	OK	209.4591	0.00	0.03	

#76: 1707771-AY



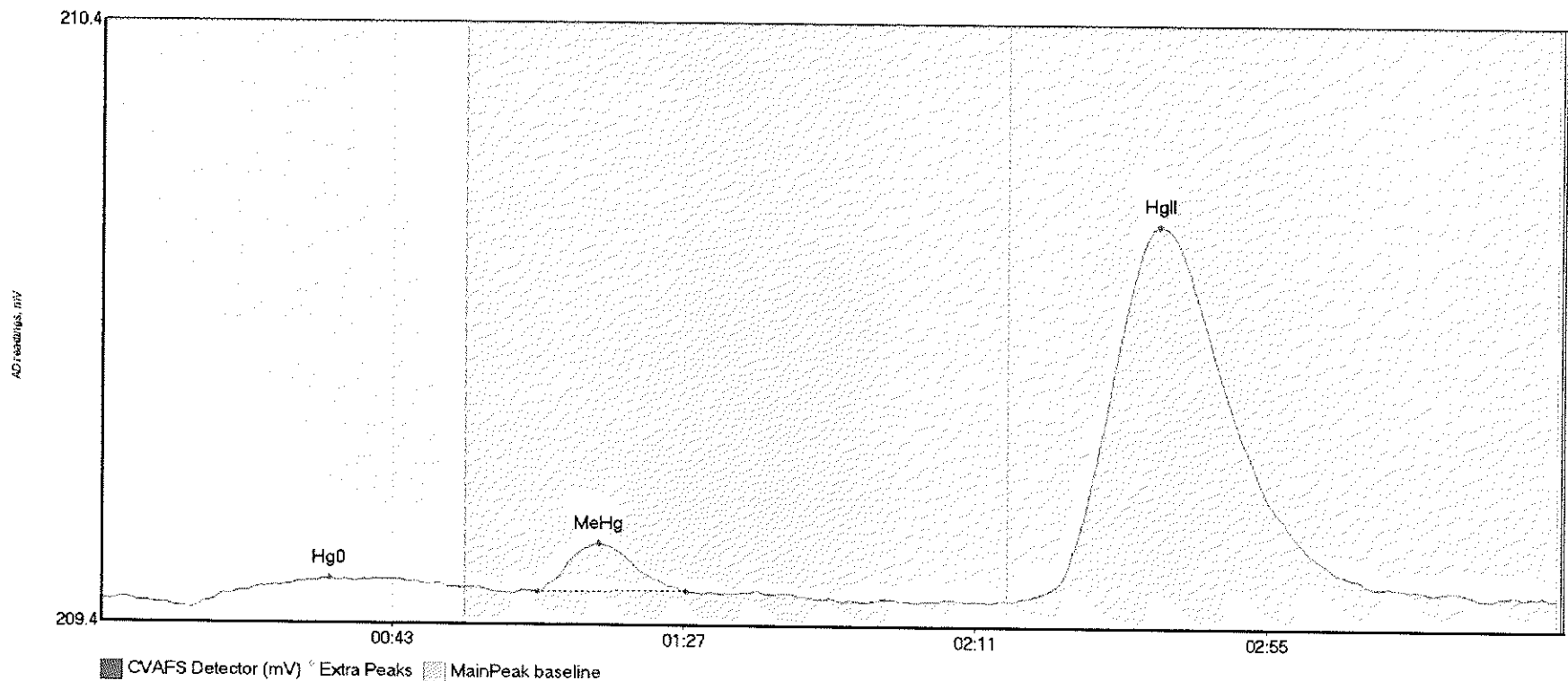
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1707771-AY Hg0	7.271	13.1	55.0	209.46	209.49	45.2	0.042	CT	209.4608	0.00	0.05	
1707771-AY MeHg	12.567	66.3	91.2	209.49	209.49	75.3	0.103	OK	209.4608	0.00	0.05	
1707771-AY HgII	722.663	138.9	216.3	209.48	209.50	160.0	3.413	OK	209.4608	0.00	0.05	

#77: 1707771-BF



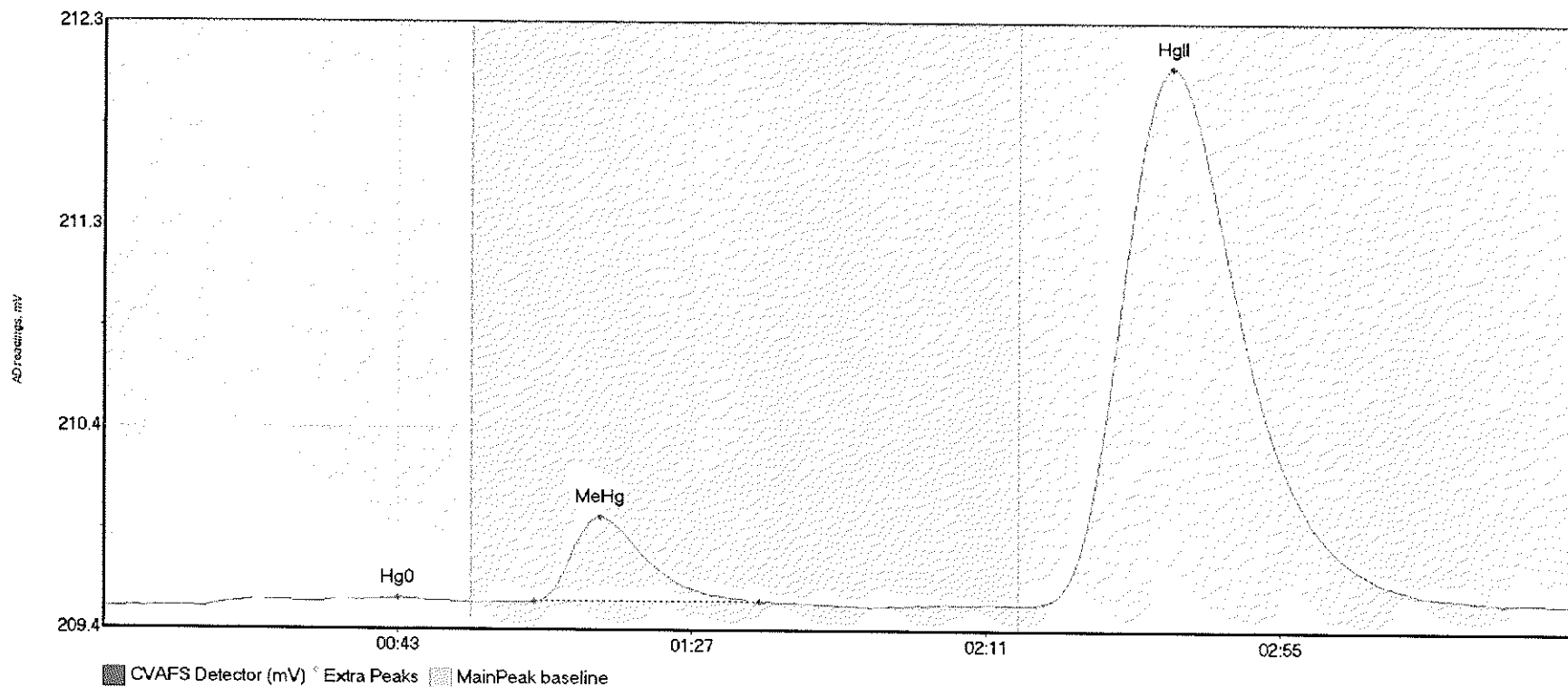
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1707771-BF Hg0	7.650	14.2	55.0	209.47	209.50	38.8	0.040	CT	209.4749	0.00	0.03	
1707771-BF MeHg	57.959	63.8	110.7	209.50	209.49	73.9	0.423	OK	209.4749	0.00	0.03	
1707771-BF HgII	528.828	138.8	219.8	209.50	209.50	159.5	2.504	CT	209.4749	0.00	0.03	

#78: 1707771-BG



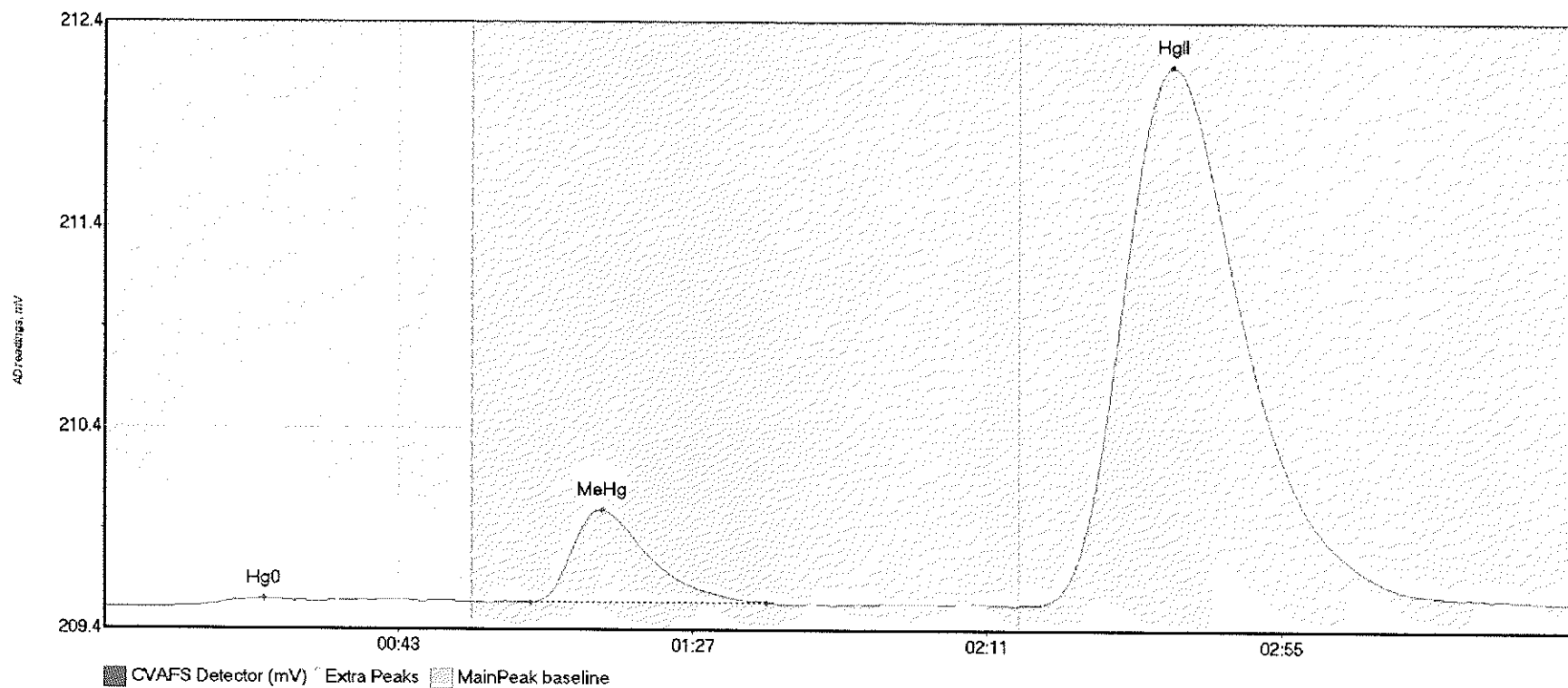
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1707771-BG Hg0	8.291	13.6	54.4	209.47	209.51	34.5	0.049	OK	209.4851	0.00	0.01	
1707771-BG MeHg	8.942	65.9	88.3	209.50	209.50	75.2	0.080	OK	209.4851	0.00	0.01	
1707771-BG HgII	130.043	139.4	208.6	209.50	209.50	159.7	0.619	OK	209.4851	0.00	0.01	

#79: 1707771-BH



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1707771-BH Hg0	7.448	14.5	55.0	209.49	209.52	44.0	0.045	CT	209.4874	0.00	0.03	
1707771-BH MeHg	52.228	64.4	98.2	209.52	209.52	74.3	0.407	OK	209.4874	0.00	0.03	
1707771-BH HgII	543.622	138.9	219.8	209.51	209.51	159.8	2.578	CT	209.4874	0.00	0.03	

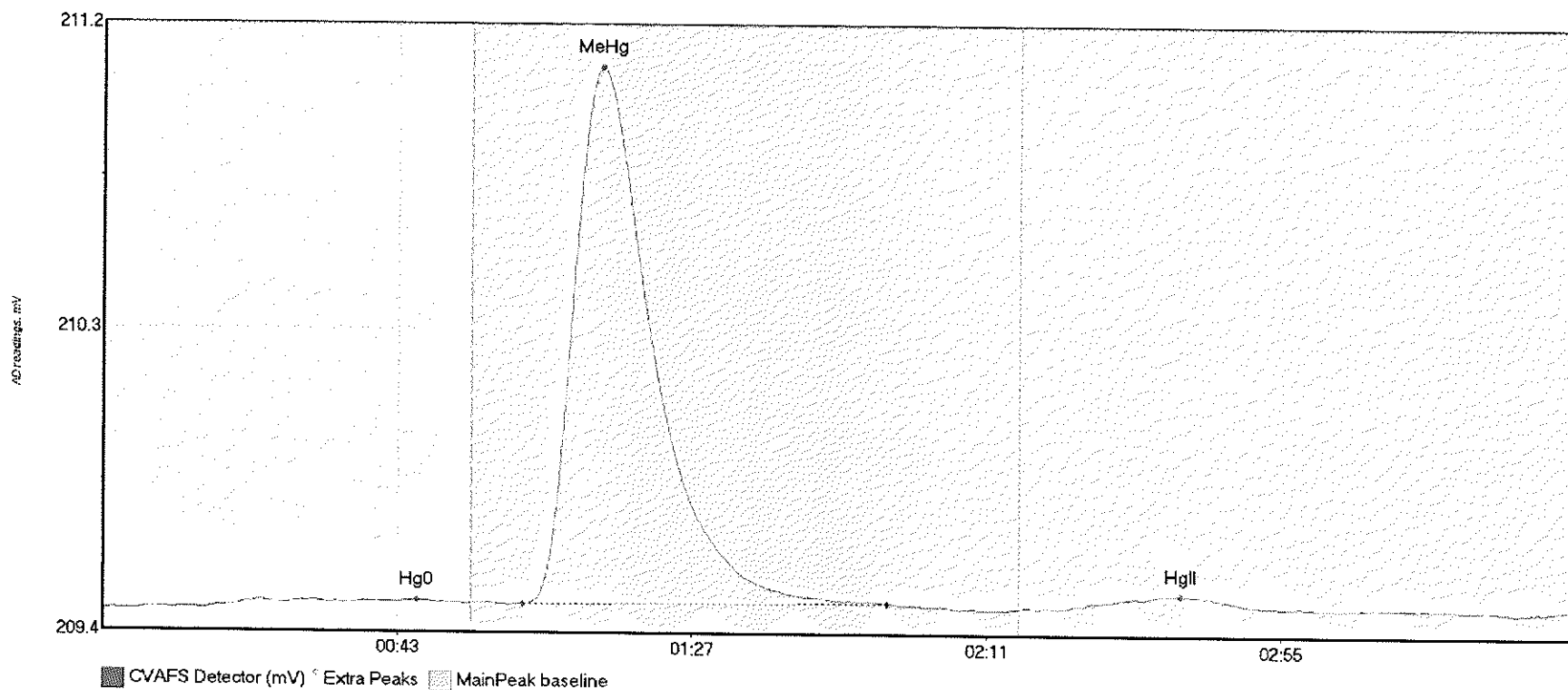
#80: 1707771-BI



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1707771-BI Hg0	2.328	9.7	31.0	209.50	209.53	23.9	0.042	OK	209.4985	0.00	0.03	
1707771-BI MeHg	60.449	63.7	99.0	209.53	209.53	74.4	0.459	OK	209.4985	0.00	0.03	
1707771-BI HgII	563.590	139.1	219.6	209.52	209.53	159.8	2.680	OK	209.4985	0.00	0.03	

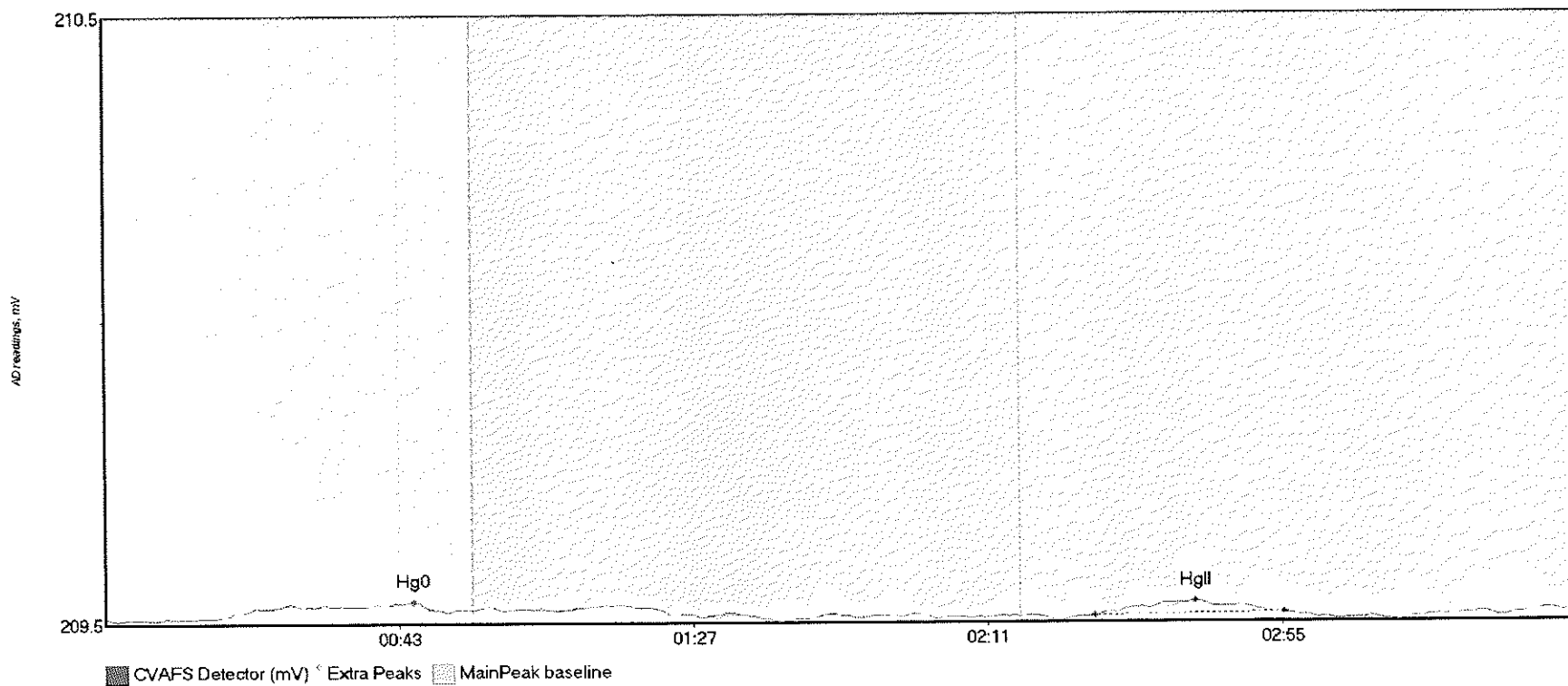


#81: SEQ-CCV6



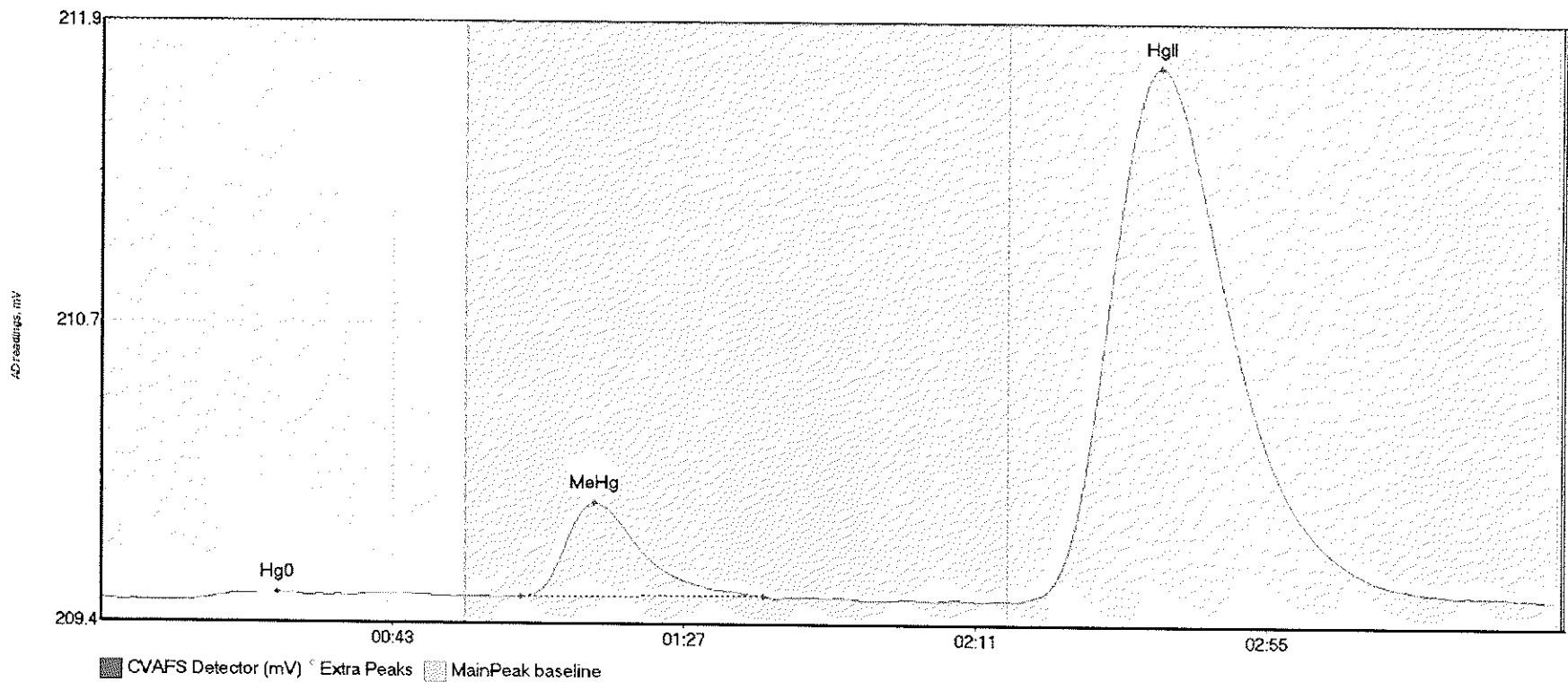
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CCV6 Hg0	4.772	14.8	54.2	209.51	209.53	46.8	0.028	OK	209.5071	0.00	0.01	
SEQ-CCV6 MeHg	217.178	62.7	117.1	209.53	209.53	74.4	1.594	OK	209.5071	0.00	0.01	
SEQ-CCV6 HgII	6.736	143.2	173.6	209.52	209.53	161.0	0.042	OK	209.5071	0.00	0.01	

#82: SEQ-CCB6



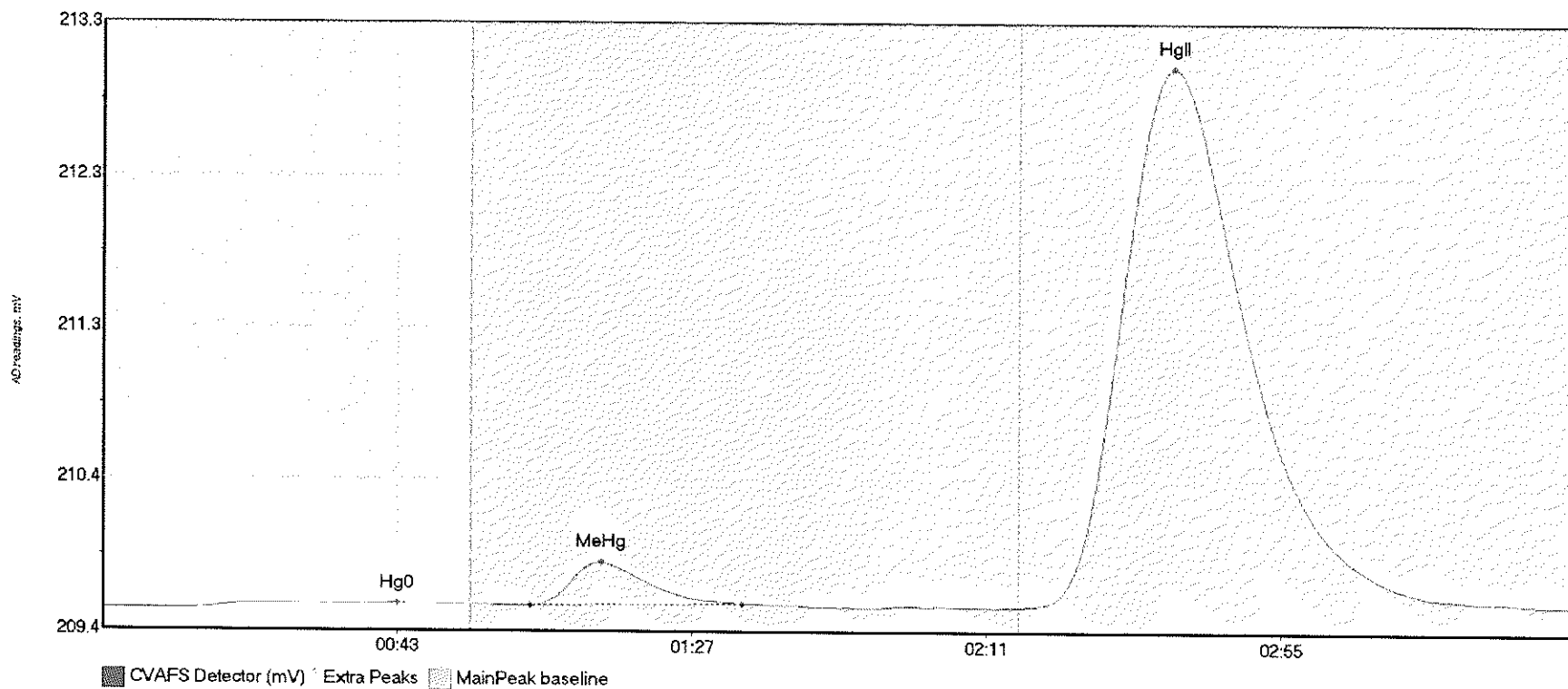
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CCB6 Hg0	4.401	17.2	51.3	209.52	209.53	46.1	0.025	OK	209.5221	0.00	0.01	
SEQ-CCB6 HgII	3.239	148.1	176.2	209.52	209.53	163.1	0.023	OK	209.5221	0.00	0.01	017

#83: 1707771-BJ



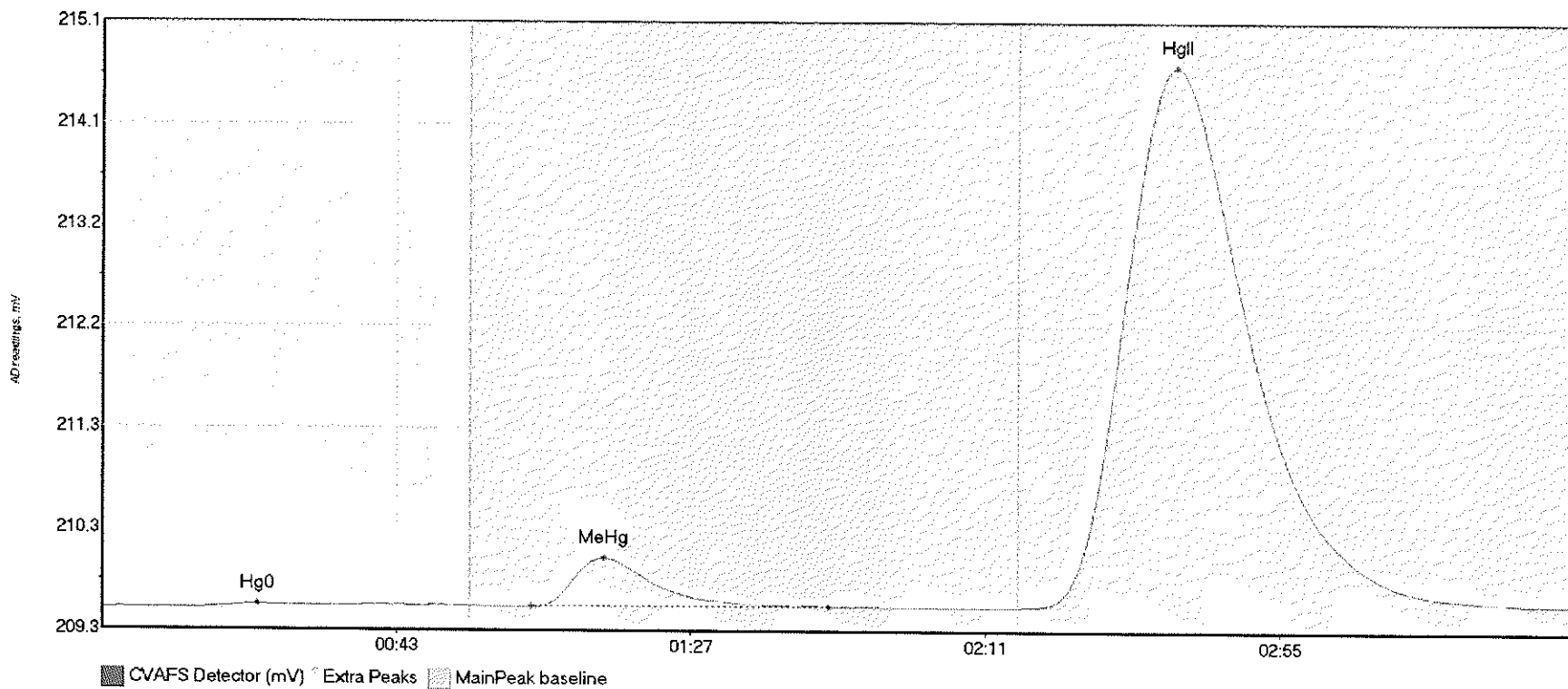
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1707771-BJ Hg0	4.463	16.0	53.2	209.53	209.54	26.6	0.024	OK	209.5262	0.00	0.01	
1707771-BJ MeHg	52.031	63.3	100.0	209.54	209.54	74.5	0.394	OK	209.5262	0.00	0.01	
1707771-BJ HgII	479.274	138.1	219.8	209.53	209.54	159.9	2.237	CT	209.5262	0.00	0.01	

#84: 1707771-BK



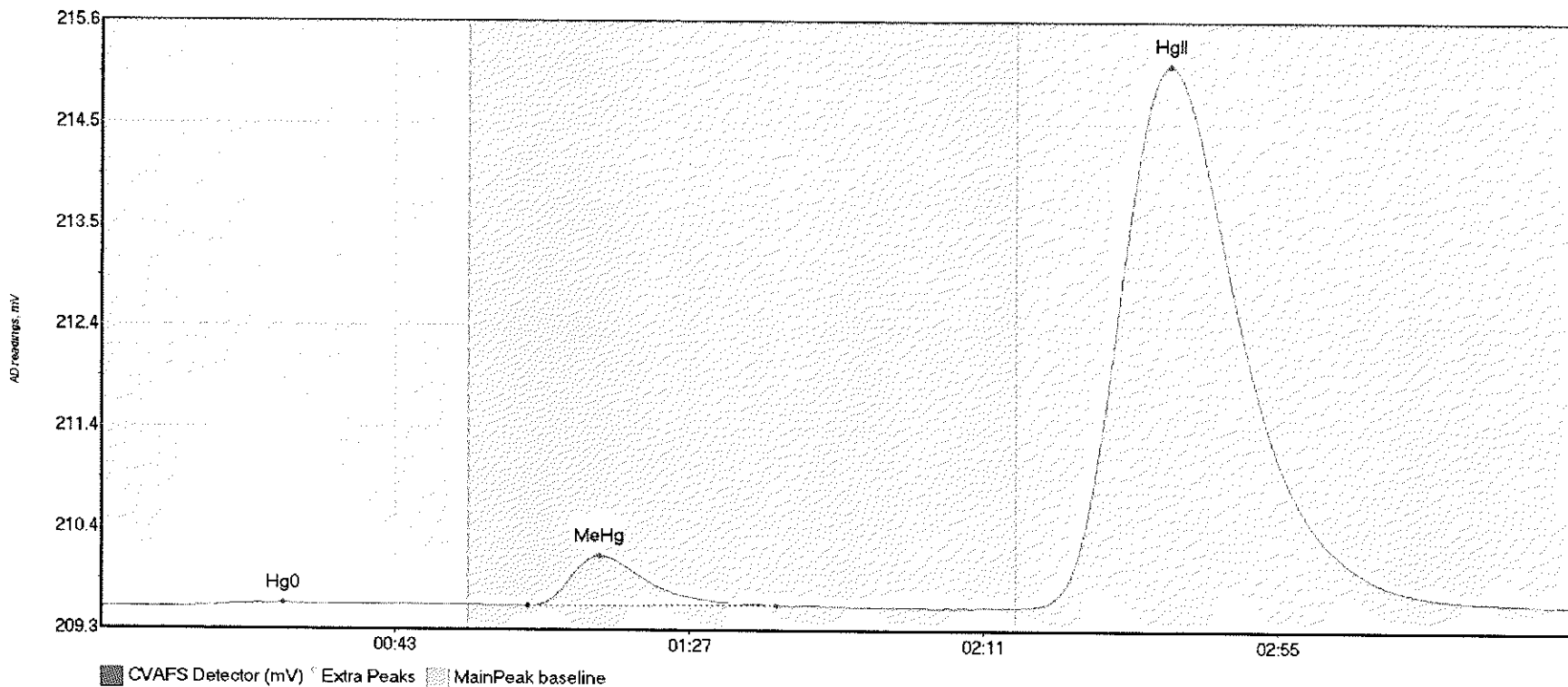
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1707771-BK Hg0	3.924	15.6	49.7	209.54	209.56	44.0	0.031	OK	209.5350	0.00	0.03	
1707771-BK MeHg	34.910	63.9	95.4	209.56	209.57	74.5	0.277	OK	209.5350	0.00	0.03	
1707771-BK HgII	739.756	137.8	219.8	209.55	209.57	159.9	3.457	CT	209.5350	0.00	0.03	

#85: 1707771-BN



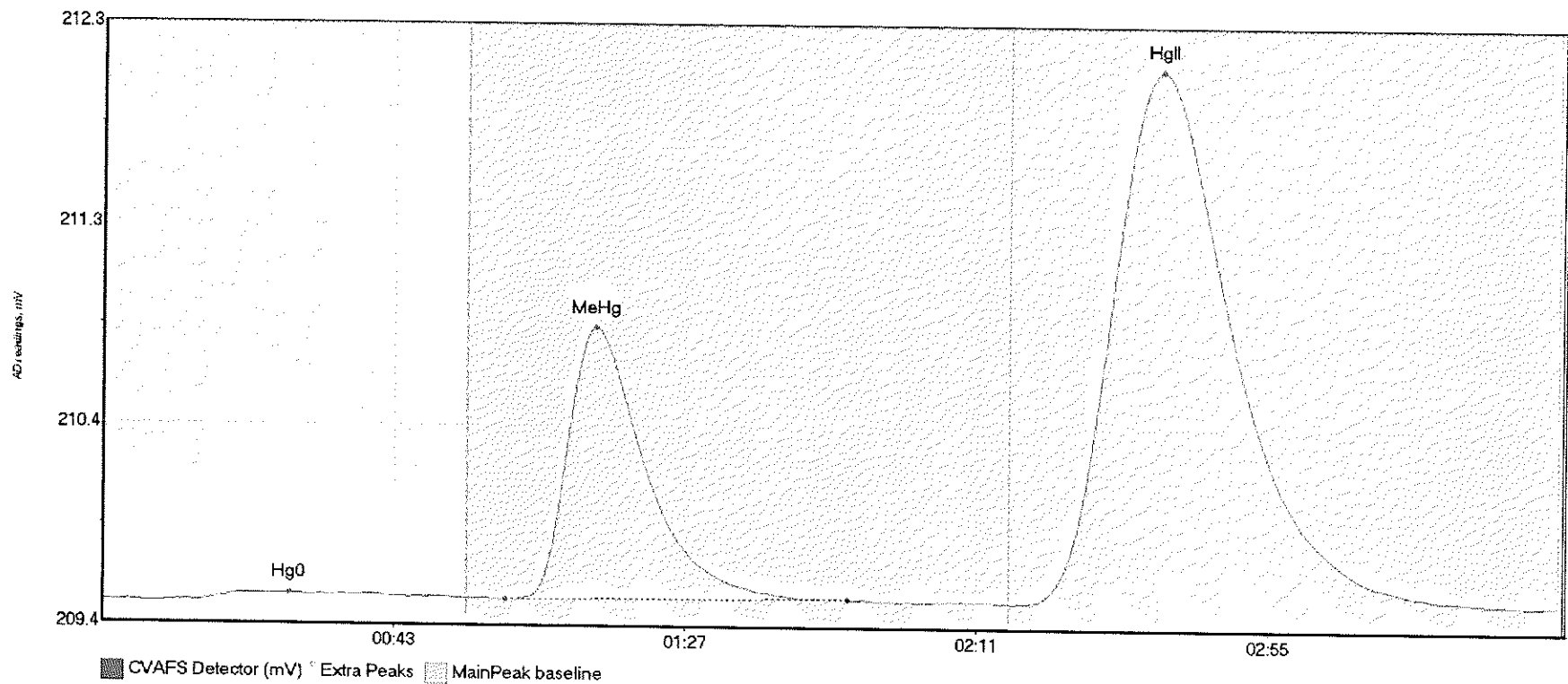
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1707771-BN Hg0	7.025	12.5	54.8	209.54	209.57	23.3	0.040	OK	209.5423	0.00	0.05	
1707771-BN MeHg	62.158	64.2	108.6	209.56	209.57	75.0	0.457	OK	209.5423	0.00	0.05	
1707771-BN HgII	1086.473	138.6	219.8	209.57	209.60	160.4	5.103	CT	209.5423	0.00	0.05	

#86: 1707771-BO



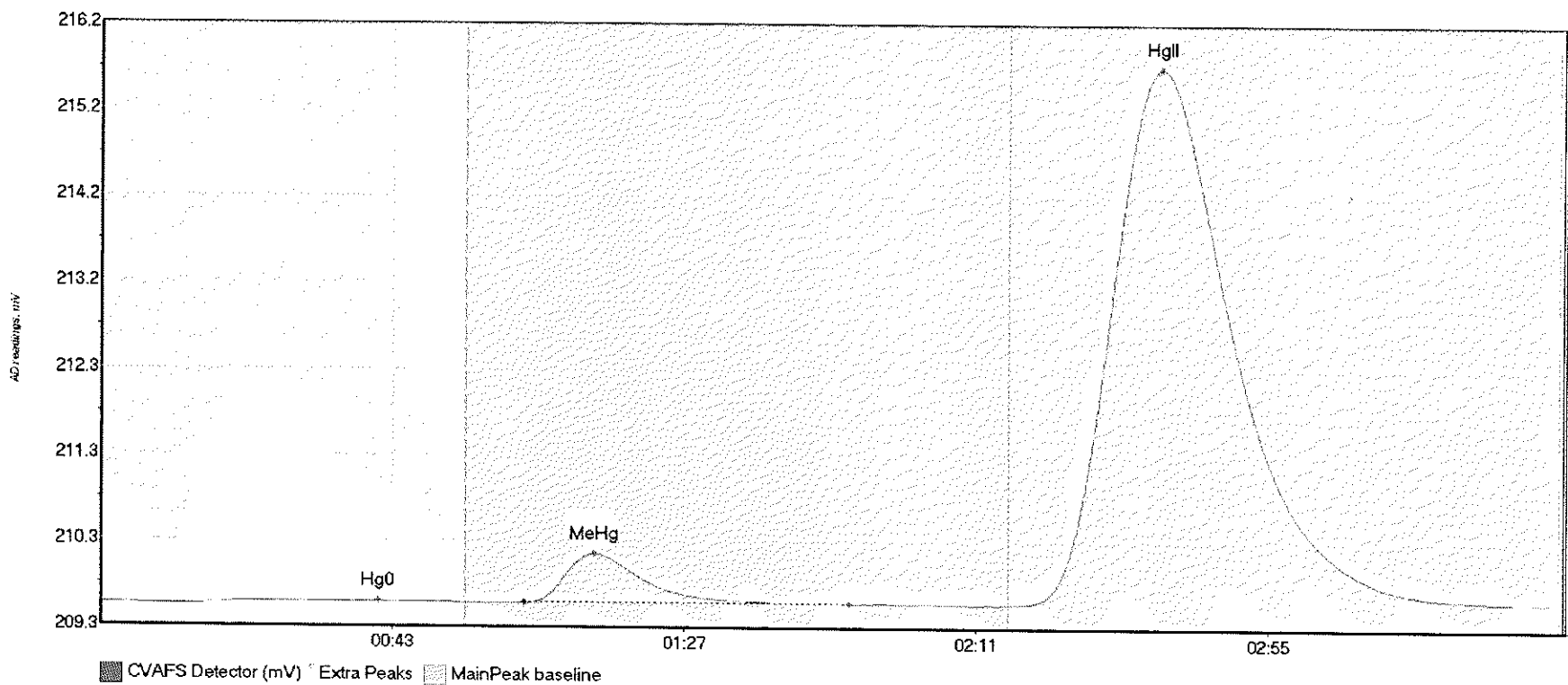
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1707771-BO Hg0	6.354	12.2	52.6	209.54	209.57	27.3	0.040	OK	209.5423	0.00	0.04	
1707771-BO MeHg	66.708	63.9	101.0	209.56	209.57	74.6	0.512	OK	209.5423	0.00	0.04	
1707771-BO HgII	1171.672	138.5	219.8	209.56	209.58	159.9	5.557	CT	209.5423	0.00	0.04	

#87: 1707771-BP



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1707771-BP Hg0	7.454	14.3	55.0	209.54	209.56	28.1	0.039	CT	209.5351	0.00	0.02	
1707771-BP MeHg	173.800	60.9	112.6	209.55	209.56	74.5	1.291	OK	209.5351	0.00	0.02	
1707771-BP HgII	531.362	139.2	215.0	209.55	209.55	159.9	2.524	OK	209.5351	0.00	0.02	

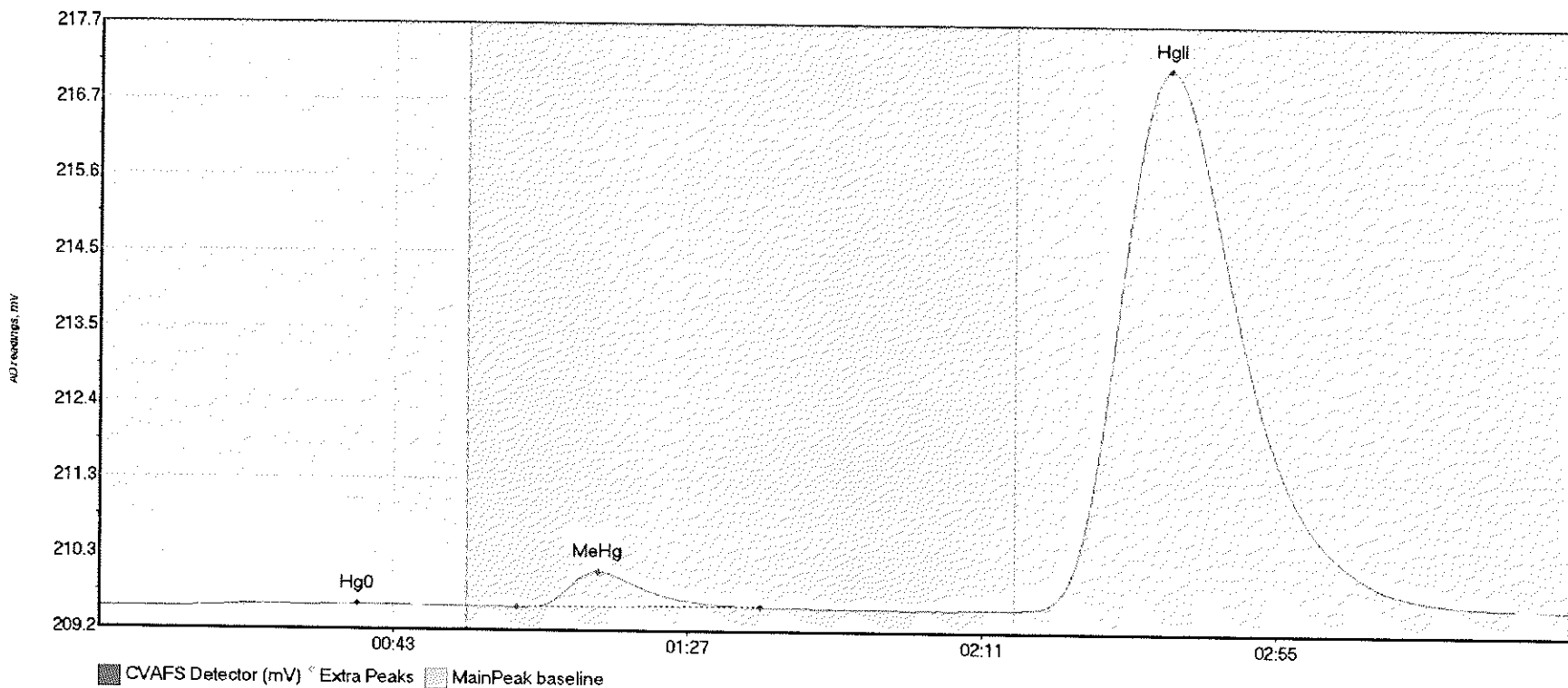
#88: 1707771-BQ



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1707771-BQ Hg0	7.947	14.5	54.1	209.53	209.55	41.9	0.039	OK	209.5417	0.00	0.04	
1707771-BQ MeHg	76.593	63.9	112.9	209.55	209.56	74.4	0.567	OK	209.5417	0.00	0.04	
1707771-BQ HgII	1290.349	137.9	215.0	209.55	209.58	159.8	6.169	OK	209.5417	0.00	0.04	017

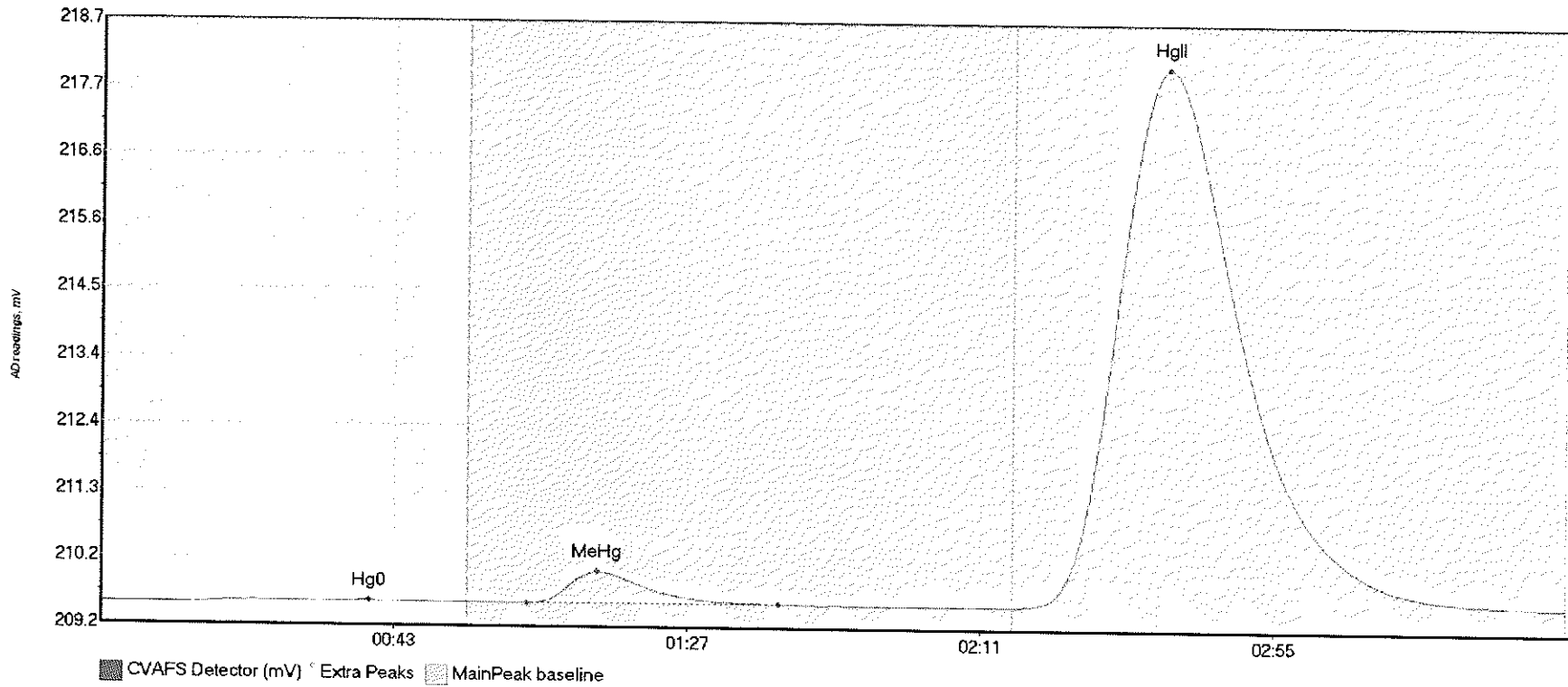


#89: 1707771-BR



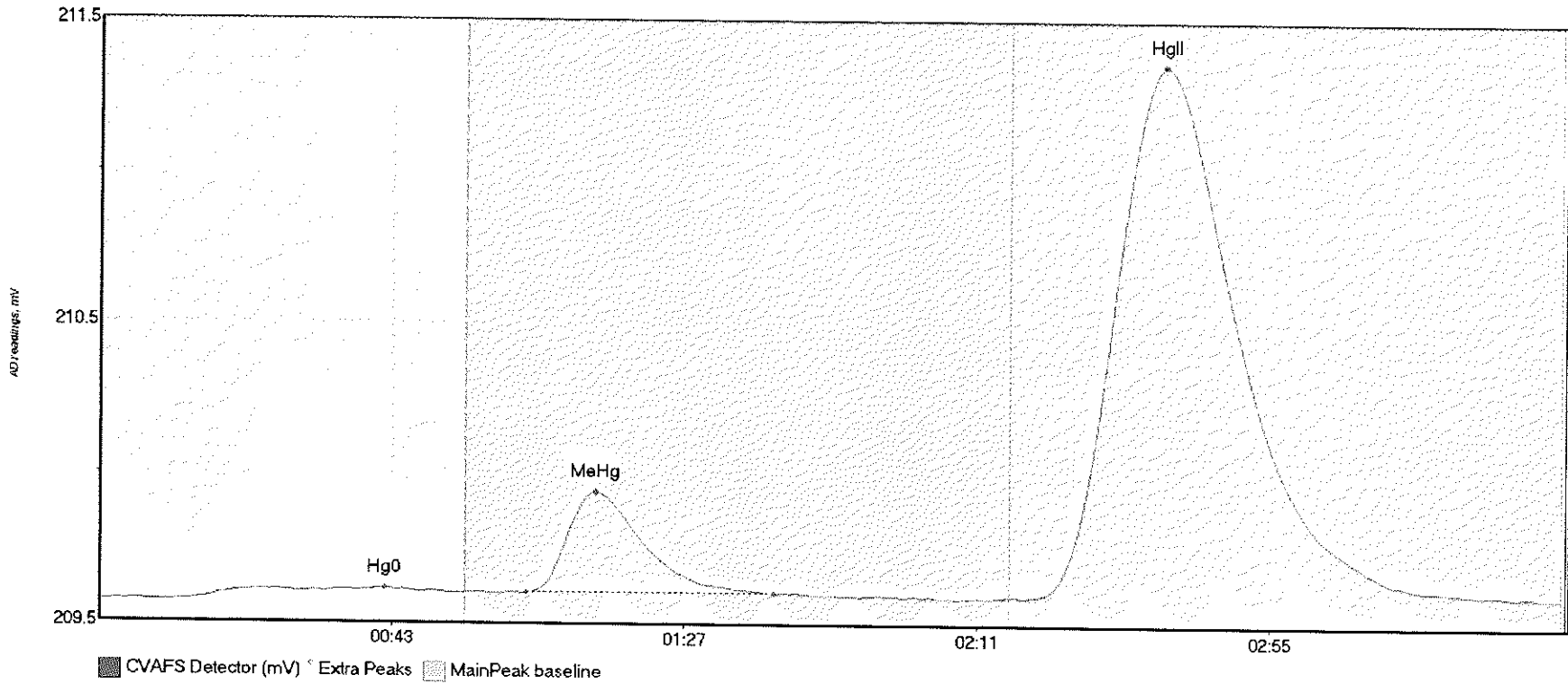
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1707771-BR Hg0	6.406	5.9	54.5	209.53	209.56	38.6	0.043	OK	209.5219	0.00	0.06	
1707771-BR MeHg	63.488	62.4	98.9	209.54	209.56	74.6	0.498	OK	209.5219	0.00	0.06	
1707771-BR HgII	1600.868	136.8	219.8	209.54	209.59	160.1	7.585	CT	209.5219	0.00	0.06	

#90: 1707771-BS



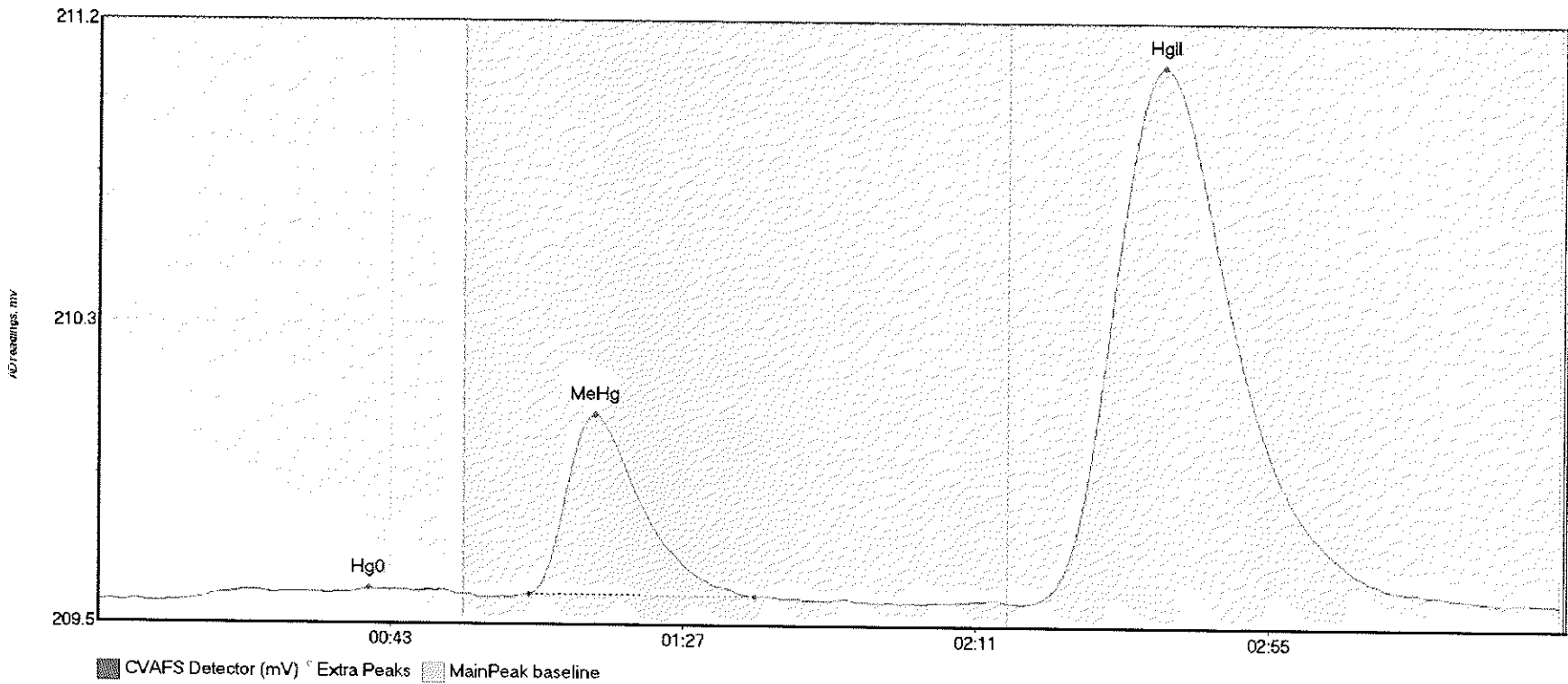
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1707771-BS Hg0	7.118	6.3	52.9	209.52	209.55	40.3	0.047	OK	209.5232	0.00	0.06	
1707771-BS MeHg	65.761	64.0	101.8	209.55	209.56	74.5	0.502	OK	209.5232	0.00	0.06	
1707771-BS HgII	1805.720	136.9	219.8	209.54	209.59	160.1	8.519	CT	209.5232	0.00	0.06	

#91: 1707771-BT



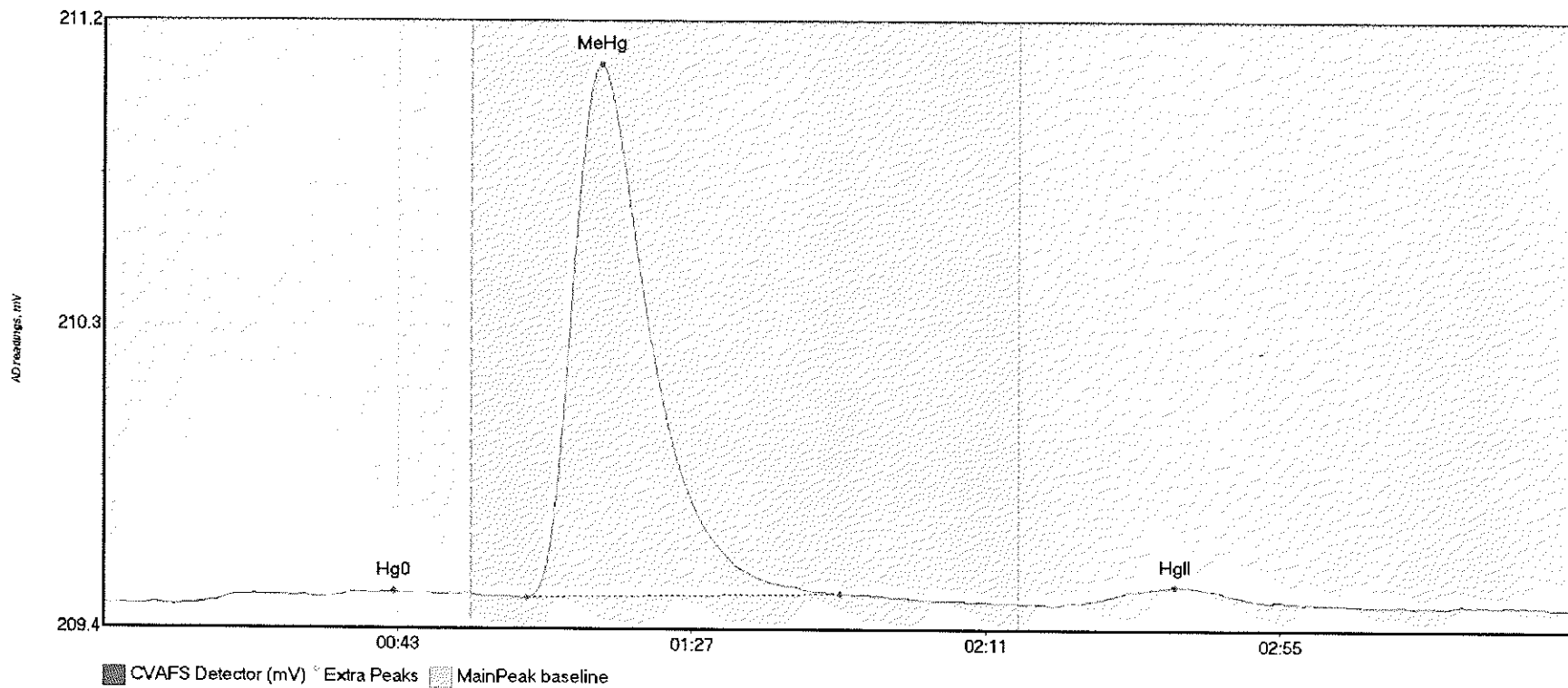
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	B1Dev	B1Shift	Comment
1707771-BT Hg0	6.597	13.4	53.5	209.53	209.55	42.8	0.038	OK	209.5261	0.00	0.03	
1707771-BT MeHg	44.036	64.1	101.4	209.56	209.56	74.6	0.335	OK	209.5261	0.00	0.03	
1707771-BT HgII	374.085	140.8	218.0	209.55	209.55	160.1	1.765	OK	209.5261	0.00	0.03	

#92: 1707771-BU



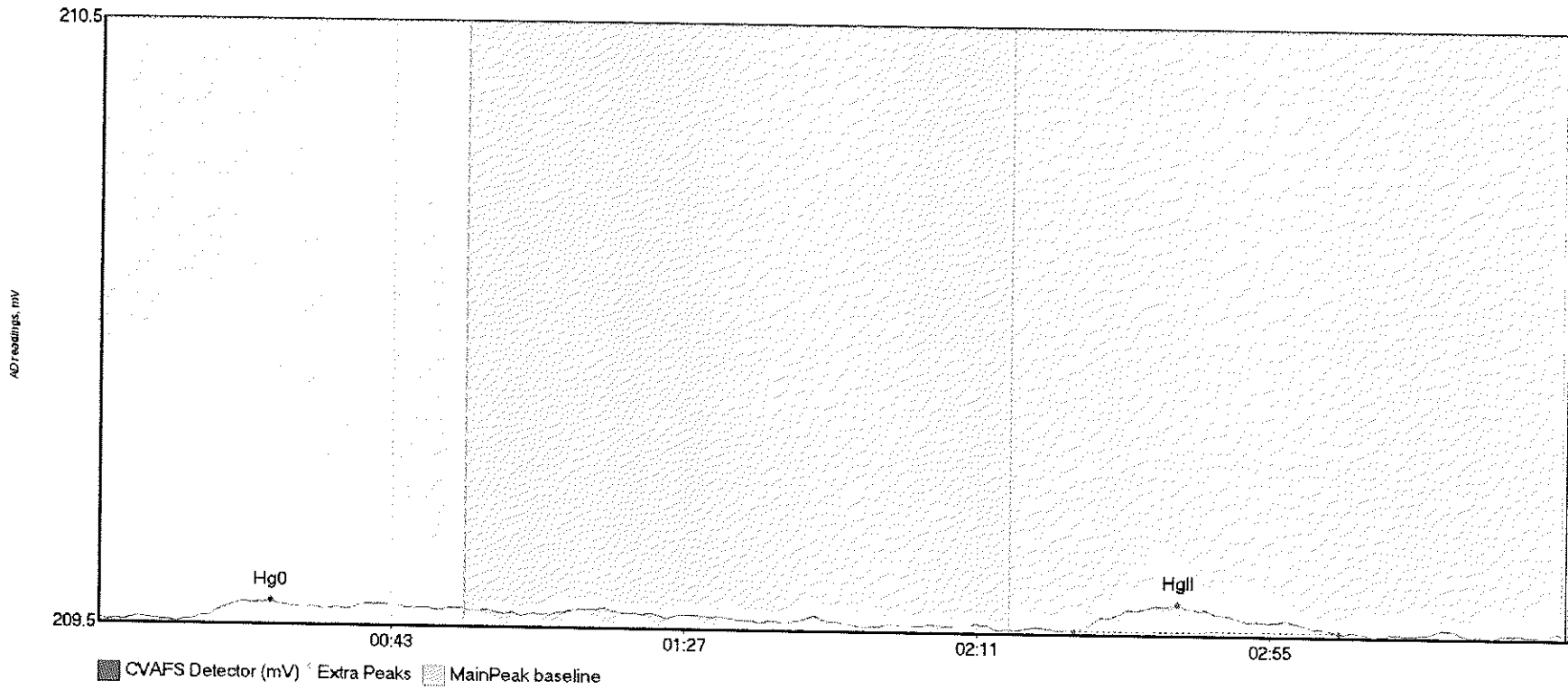
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1707771-BU Hg0	5.315	14.0	54.5	209.53	209.55	40.7	0.031	OK	209.5285	0.00	0.01	
1707771-BU MeHg	66.905	64.8	98.7	209.55	209.55	74.8	0.518	OK	209.5285	0.00	0.01	
1707771-BU HgII	327.308	139.7	216.4	209.53	209.54	160.2	1.549	OK	209.5285	0.00	0.01	017

#93: SEQ-CCV7



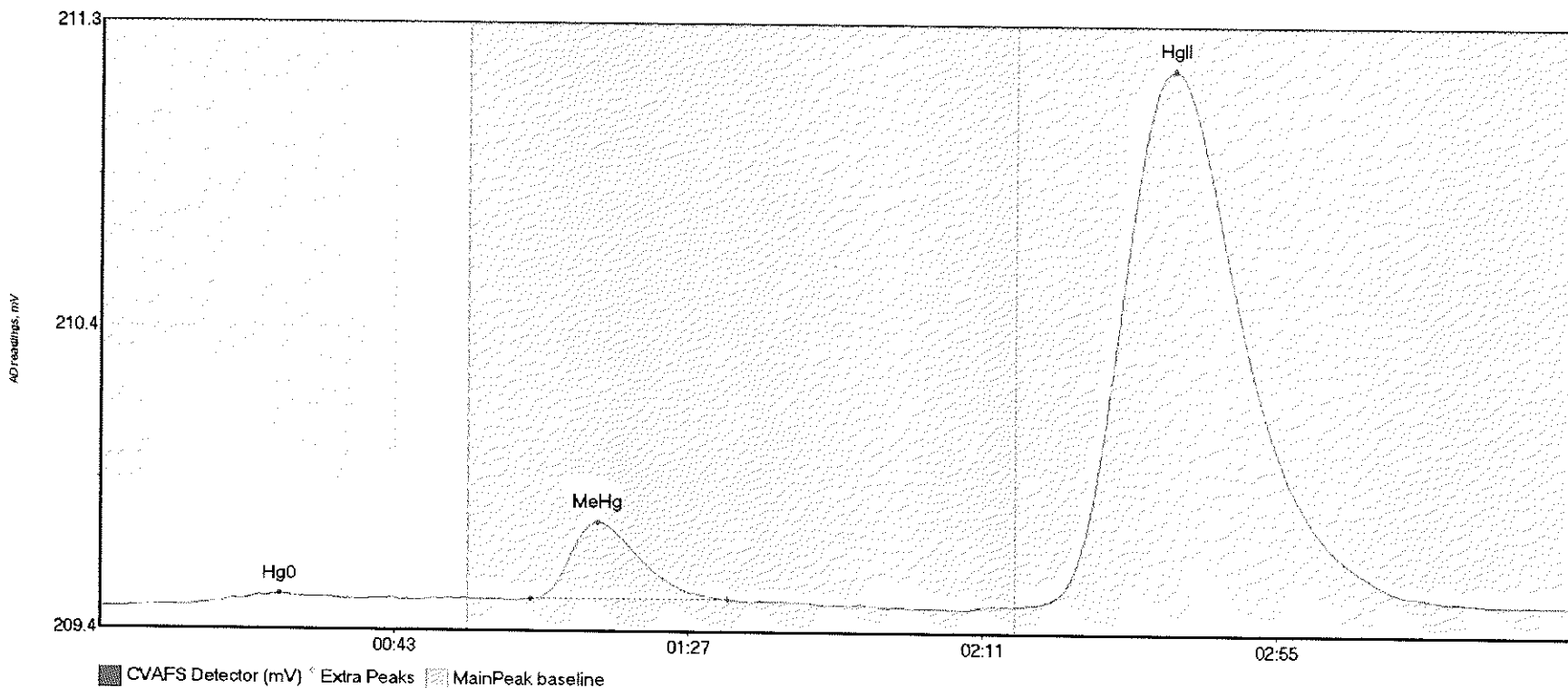
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CCV7 Hg0	3.955	13.1	50.8	209.51	209.54	43.4	0.036	OK	209.5101	0.00	-0.01	
SEQ-CCV7 MeHg	211.682	63.3	110.1	209.53	209.54	74.4	1.575	OK	209.5101	0.00	-0.01	
SEQ-CCV7 HgII	7.819	145.9	178.0	209.52	209.52	160.3	0.050	OK	209.5101	0.00	-0.01	

#94: SEQ-CCB7



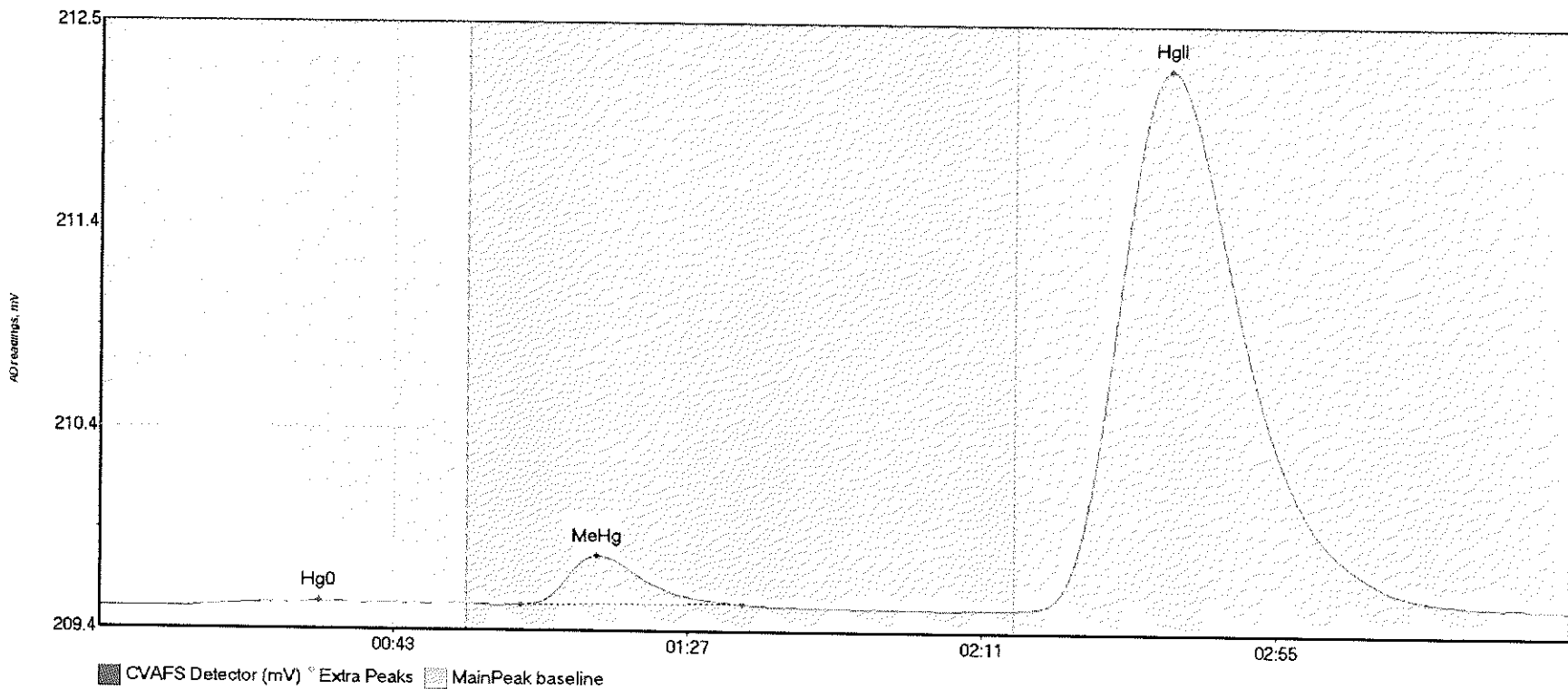
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CCB7 Hg0	2.392	13.6	34.3	209.50	209.52	25.8	0.032	OK	209.5030	0.00	0.00	
SEQ-CCB7 HgII	9.380	146.6	186.3	209.50	209.50	162.2	0.045	OK	209.5030	0.00	0.00	017

#95: 1707771-BZ



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BiDev	BlShift	Comment
1707771-BZ Hg0	2.912	5.8	38.8	209.49	209.52	26.8	0.038	OK	209.4901	0.00	0.03	
1707771-BZ MeHg	28.665	64.5	93.9	209.52	209.52	74.5	0.241	OK	209.4901	0.00	0.03	
1707771-BZ HgII	352.784	139.5	219.8	209.51	209.52	160.4	1.672	CT	209.4901	0.00	0.03	

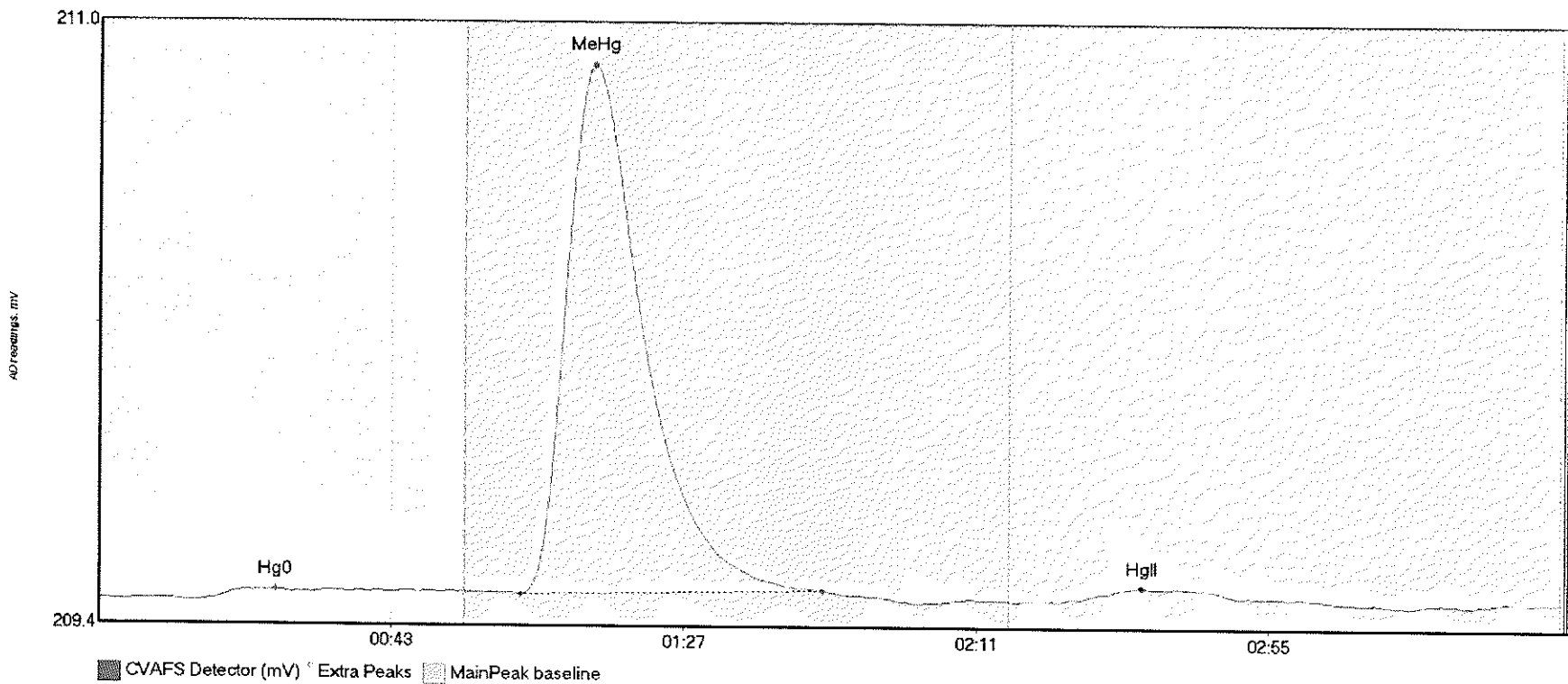
#96: 1707771-CA



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
1707771-CA Hg0	3.474	14.1	49.2	209.50	209.52	32.8	0.027	OK	209.4998	0.00	0.02	
1707771-CA MeHg	32.339	63.0	96.1	209.51	209.52	74.4	0.251	OK	209.4998	0.00	0.02	
1707771-CA HgII	587.702	138.5	219.7	209.51	209.52	160.1	2.727	OK	209.4998	0.00	0.02	

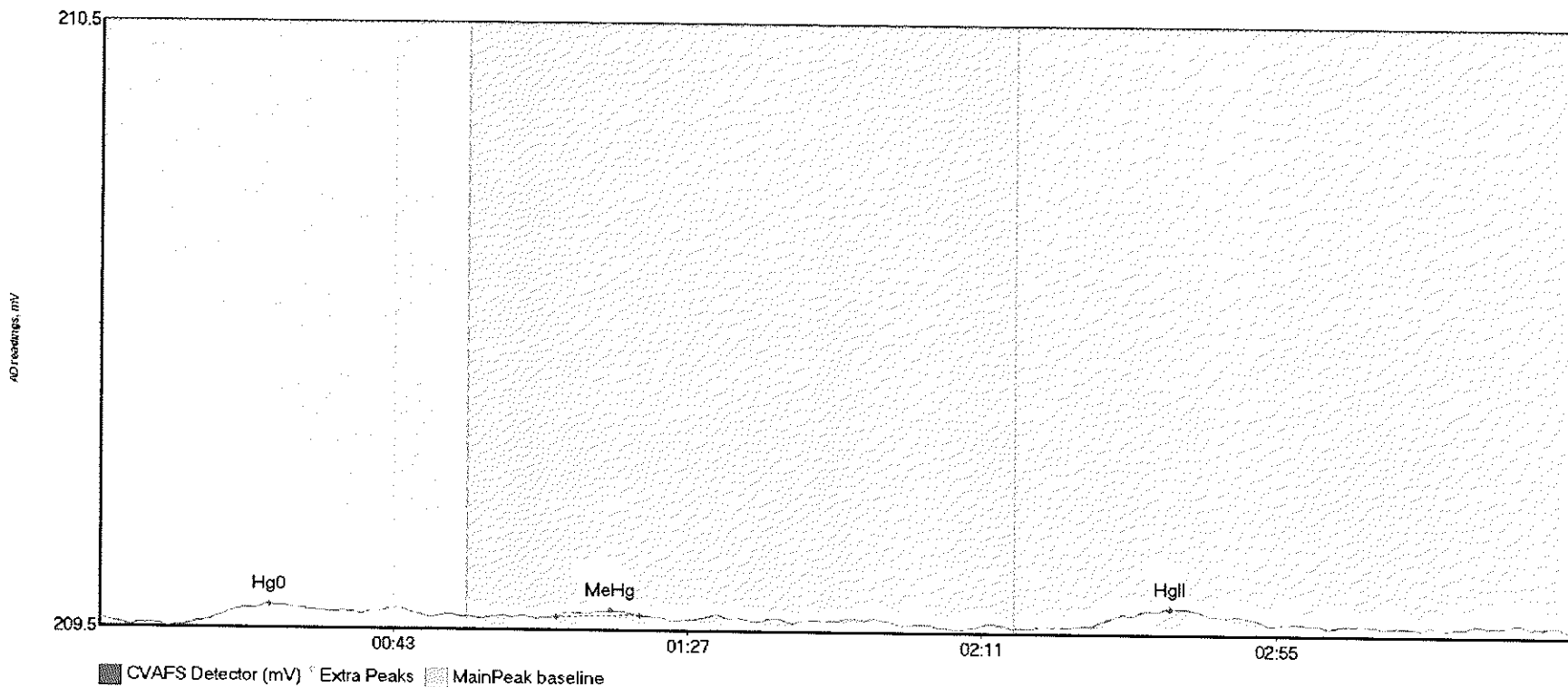


#97: SEQ-CCV8



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	B1Dev	B1Shift	Comment
SEQ-CCV8 Hg0	1.372	17.4	32.0	209.49	209.51	26.6	0.023	OK	209.4926	0.00	0.00	
SEQ-CCV8 MeHg	183.905	63.5	108.9	209.51	209.52	74.4	1.369	OK	209.4926	0.00	0.00	
SEQ-CCV8 HgII	6.980	144.4	183.5	209.49	209.50	156.9	0.037	OK	209.4926	0.00	0.00	

#98: SEQ-CCB8



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	B1Dev	B1Shift	Comment
SEQ-CCB8 Hg0	4.684	15.4	49.4	209.48	209.49	25.4	0.028	OK	209.4850	0.00	0.00	
SEQ-CCB8 MeHg	0.742	68.3	80.7	209.49	209.50	76.4	0.011	OK	209.4850	0.00	0.00	
SEQ-CCB8 HgII	5.350	148.2	183.3	209.48	209.48	160.1	0.030	OK	209.4850	0.00	0.00	