Metals

Inorganic Data
(ICPMS Analysis)

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Lab ID	: L2467934-05	**Date Collected**	: 11/19/24 08:10
Client ID	: MW-5S	**Date Received**	: 11/19/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 11/26/24 18:00
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,6020B	**Analyst**	: NTB
Lab File ID	: WG2002362.pdf	**Instrument ID**	: ICPMSQ2
Sample Amount	: 50ml	**%Solids**	: N/A
Digestion Method	: EPA 3005A	**Date Digested**	: 11/26/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7429-90-5	Aluminum, Total	0.0306	0.0100	0.00327	
7440-36-0	Antimony, Total	0.00125	0.00400	0.00042	J
7440-38-2	Arsenic, Total	ND	0.00050	0.00016	U
7440-39-3	Barium, Total	0.00344	0.00050	0.00017	
7440-41-7	Beryllium, Total	0.00015	0.00050	0.00010	J
7440-43-9	Cadmium, Total	0.00007	0.00020	0.00005	J
7440-47-3	Chromium, Total	0.00043	0.00100	0.00017	J
7440-48-4	Cobalt, Total	ND	0.00050	0.00016	U
7440-50-8	Copper, Total	ND	0.00100	0.00038	U
7439-89-6	Iron, Total	0.0361	0.0500	0.0191	J
7439-92-1	Lead, Total	ND	0.00100	0.00034	U
7439-95-4	Magnesium, Total	0.813	0.0700	0.0242	
7439-96-5	Manganese, Total	0.01271	0.00100	0.00044	
7440-02-0	Nickel, Total	0.00072	0.00200	0.00055	J
7782-49-2	Selenium, Total	ND	0.00500	0.00173	U
7440-22-4	Silver, Total	ND	0.00040	0.00016	U
7440-23-5	Sodium, Total	4.76	0.500	0.0293	
7440-28-0	Thallium, Total	ND	0.00100	0.00014	U
7440-62-2	Vanadium, Total	ND	0.00500	0.00157	U
7440-66-6	Zinc, Total	ND	0.01000	0.00341	U

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Lab ID	: WG2002206-1	**Date Collected**	: NA
Client ID	: WG2002206-1BLANK	**Date Received**	: NA
Sample Location	:	**Date Analyzed**	: 11/26/24 17:51
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,6020B	**Analyst**	: NTB
Lab File ID	: WG2002362.pdf	**Instrument ID**	: ICPMSQ2
Sample Amount	: 50ml	**%Solids**	: N/A
Digestion Method	: EPA 3005A	**Date Digested**	: 11/26/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7429-90-5	Aluminum, Total	ND	0.0100	0.00327	U
7440-36-0	Antimony, Total	ND	0.00400	0.00042	U
7440-38-2	Arsenic, Total	ND	0.00050	0.00016	U
7440-39-3	Barium, Total	ND	0.00050	0.00017	U
7440-41-7	Beryllium, Total	ND	0.00050	0.00010	U
7440-43-9	Cadmium, Total	ND	0.00020	0.00005	U
7440-47-3	Chromium, Total	ND	0.00100	0.00017	U
7440-48-4	Cobalt, Total	ND	0.00050	0.00016	U
7440-50-8	Copper, Total	ND	0.00100	0.00038	U
7439-89-6	Iron, Total	ND	0.0500	0.0191	U
7439-92-1	Lead, Total	ND	0.00100	0.00034	U
7439-95-4	Magnesium, Total	ND	0.0700	0.0242	U
7439-96-5	Manganese, Total	ND	0.00100	0.00044	U
7440-02-0	Nickel, Total	ND	0.00200	0.00055	U
7782-49-2	Selenium, Total	ND	0.00500	0.00173	U
7440-22-4	Silver, Total	ND	0.00040	0.00016	U
7440-23-5	Sodium, Total	ND	0.500	0.0293	U
7440-28-0	Thallium, Total	ND	0.00100	0.00014	U
7440-62-2	Vanadium, Total	ND	0.00500	0.00157	U
7440-66-6	Zinc, Total	ND	0.01000	0.00341	U

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Lab ID	: L2467934-01	**Date Collected**	: 11/18/24 15:46
Client ID	: MW-1S	**Date Received**	: 11/19/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 12/02/24 19:09
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,6020B	**Analyst**	: WKP
Lab File ID	: WG2003903.pdf	**Instrument ID**	: ICPMSQ
Sample Amount	: 50ml	**%Solids**	: N/A
Digestion Method	: EPA 3005A	**Date Digested**	: 11/26/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7429-90-5	Aluminum, Total	0.384	0.0100	0.00327	
7440-36-0	Antimony, Total	ND	0.00400	0.00042	U
7440-38-2	Arsenic, Total	0.00456	0.00050	0.00016	
7440-39-3	Barium, Total	0.01612	0.00050	0.00017	
7440-41-7	Beryllium, Total	ND	0.00050	0.00010	U
7440-43-9	Cadmium, Total	ND	0.00020	0.00005	U
7440-70-2	Calcium, Total	43.5	0.100	0.0394	
7440-47-3	Chromium, Total	0.00047	0.00100	0.00017	J
7440-48-4	Cobalt, Total	0.00050	0.00050	0.00016	
7440-50-8	Copper, Total	0.00079	0.00100	0.00038	J
7439-89-6	Iron, Total	1.18	0.0500	0.0191	
7439-92-1	Lead, Total	ND	0.00100	0.00034	U
7439-95-4	Magnesium, Total	0.286	0.0700	0.0242	
7439-96-5	Manganese, Total	0.9329	0.00100	0.00044	
7440-02-0	Nickel, Total	0.00336	0.00200	0.00055	
7440-09-7	Potassium, Total	25.5	0.100	0.0309	
7782-49-2	Selenium, Total	ND	0.00500	0.00173	U
7440-22-4	Silver, Total	ND	0.00040	0.00016	U
7440-23-5	Sodium, Total	50.0	0.500	0.0293	
7440-28-0	Thallium, Total	ND	0.00100	0.00014	U
7440-62-2	Vanadium, Total	0.00290	0.00500	0.00157	J
7440-66-6	Zinc, Total	0.00475	0.01000	0.00341	J

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Lab ID	: L2467934-02	**Date Collected**	: 11/18/24 14:33
Client ID	: MW-2S	**Date Received**	: 11/19/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 12/02/24 19:48
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,6020B	**Analyst**	: WKP
Lab File ID	: WG2003903.pdf	**Instrument ID**	: ICPMSQ
Sample Amount	: 50ml	**%Solids**	: N/A
Digestion Method	: EPA 3005A	**Date Digested**	: 11/26/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7429-90-5	Aluminum, Total	0.00417	0.0100	0.00327	J
7440-36-0	Antimony, Total	ND	0.00400	0.00042	U
7440-38-2	Arsenic, Total	0.00017	0.00050	0.00016	J
7440-39-3	Barium, Total	0.01748	0.00050	0.00017	
7440-41-7	Beryllium, Total	ND	0.00050	0.00010	U
7440-43-9	Cadmium, Total	ND	0.00020	0.00005	U
7440-70-2	Calcium, Total	52.9	0.100	0.0394	
7440-47-3	Chromium, Total	0.00147	0.00100	0.00017	
7440-48-4	Cobalt, Total	0.00026	0.00050	0.00016	J
7440-50-8	Copper, Total	0.00129	0.00100	0.00038	
7439-89-6	Iron, Total	ND	0.0500	0.0191	U
7439-92-1	Lead, Total	ND	0.00100	0.00034	U
7439-95-4	Magnesium, Total	4.61	0.0700	0.0242	
7439-96-5	Manganese, Total	ND	0.00100	0.00044	U
7440-02-0	Nickel, Total	ND	0.00200	0.00055	U
7440-09-7	Potassium, Total	8.81	0.100	0.0309	
7782-49-2	Selenium, Total	ND	0.00500	0.00173	U
7440-22-4	Silver, Total	ND	0.00040	0.00016	U
7440-23-5	Sodium, Total	5.10	0.500	0.0293	
7440-28-0	Thallium, Total	ND	0.00100	0.00014	U
7440-62-2	Vanadium, Total	ND	0.00500	0.00157	U
7440-66-6	Zinc, Total	ND	0.01000	0.00341	U

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Lab ID	: L2467934-03	**Date Collected**	: 11/18/24 13:31
Client ID	: MW-3S	**Date Received**	: 11/19/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 12/02/24 19:52
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,6020B	**Analyst**	: WKP
Lab File ID	: WG2003903.pdf	**Instrument ID**	: ICPMSQ
Sample Amount	: 50ml	**%Solids**	: N/A
Digestion Method	: EPA 3005A	**Date Digested**	: 11/26/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7429-90-5	Aluminum, Total	0.00797	0.0100	0.00327	J
7440-36-0	Antimony, Total	0.00066	0.00400	0.00042	J
7440-38-2	Arsenic, Total	0.00066	0.00050	0.00016	
7440-39-3	Barium, Total	0.1184	0.00050	0.00017	
7440-41-7	Beryllium, Total	ND	0.00050	0.00010	U
7440-43-9	Cadmium, Total	ND	0.00020	0.00005	U
7440-70-2	Calcium, Total	103.	0.100	0.0394	
7440-47-3	Chromium, Total	0.00042	0.00100	0.00017	J
7440-48-4	Cobalt, Total	0.00115	0.00050	0.00016	
7440-50-8	Copper, Total	0.00283	0.00100	0.00038	
7439-89-6	Iron, Total	0.0626	0.0500	0.0191	
7439-92-1	Lead, Total	ND	0.00100	0.00034	U
7439-95-4	Magnesium, Total	9.28	0.0700	0.0242	
7439-96-5	Manganese, Total	0.02365	0.00100	0.00044	
7440-02-0	Nickel, Total	0.00084	0.00200	0.00055	J
7440-09-7	Potassium, Total	31.4	0.100	0.0309	
7782-49-2	Selenium, Total	ND	0.00500	0.00173	U
7440-22-4	Silver, Total	ND	0.00040	0.00016	U
7440-23-5	Sodium, Total	30.7	0.500	0.0293	
7440-28-0	Thallium, Total	0.00033	0.00100	0.00014	J
7440-62-2	Vanadium, Total	0.00297	0.00500	0.00157	J
7440-66-6	Zinc, Total	ND	0.01000	0.00341	U

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Lab ID	: L2467934-04	**Date Collected**	: 11/19/24 09:35
Client ID	: MW-4D	**Date Received**	: 11/19/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 12/02/24 19:57
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,6020B	**Analyst**	: WKP
Lab File ID	: WG2003903.pdf	**Instrument ID**	: ICPMSQ
Sample Amount	: 50ml	**%Solids**	: N/A
Digestion Method	: EPA 3005A	**Date Digested**	: 11/26/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7429-90-5	Aluminum, Total	0.0187	0.0100	0.00327	
7440-36-0	Antimony, Total	ND	0.00400	0.00042	U
7440-38-2	Arsenic, Total	ND	0.00050	0.00016	U
7440-39-3	Barium, Total	0.07158	0.00050	0.00017	
7440-41-7	Beryllium, Total	ND	0.00050	0.00010	U
7440-43-9	Cadmium, Total	ND	0.00020	0.00005	U
7440-70-2	Calcium, Total	19.6	0.100	0.0394	
7440-47-3	Chromium, Total	0.00453	0.00100	0.00017	
7440-48-4	Cobalt, Total	ND	0.00050	0.00016	U
7440-50-8	Copper, Total	ND	0.00100	0.00038	U
7439-89-6	Iron, Total	0.0513	0.0500	0.0191	
7439-92-1	Lead, Total	ND	0.00100	0.00034	U
7439-95-4	Magnesium, Total	11.7	0.0700	0.0242	
7439-96-5	Manganese, Total	0.00428	0.00100	0.00044	
7440-02-0	Nickel, Total	0.00211	0.00200	0.00055	
7440-09-7	Potassium, Total	1.43	0.100	0.0309	
7782-49-2	Selenium, Total	ND	0.00500	0.00173	U
7440-22-4	Silver, Total	ND	0.00040	0.00016	U
7440-23-5	Sodium, Total	79.9	0.500	0.0293	
7440-28-0	Thallium, Total	ND	0.00100	0.00014	U
7440-62-2	Vanadium, Total	ND	0.00500	0.00157	U
7440-66-6	Zinc, Total	ND	0.01000	0.00341	U

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Lab ID	: L2467934-05	**Date Collected**	: 11/19/24 08:10
Client ID	: MW-5S	**Date Received**	: 11/19/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 12/02/24 18:31
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,6020B	**Analyst**	: WKP
Lab File ID	: WG2003903.pdf	**Instrument ID**	: ICPMSQ
Sample Amount	: 50ml	**%Solids**	: N/A
Digestion Method	: EPA 3005A	**Date Digested**	: 11/26/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-70-2	Calcium, Total	3.48	0.100	0.0394	
7440-09-7	Potassium, Total	0.733	0.100	0.0309	

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Lab ID	: L2467934-06	**Date Collected**	: 11/18/24 15:40
Client ID	: MW-6D	**Date Received**	: 11/19/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 12/02/24 20:02
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,6020B	**Analyst**	: WKP
Lab File ID	: WG2003903.pdf	**Instrument ID**	: ICPMSQ
Sample Amount	: 50ml	**%Solids**	: N/A
Digestion Method	: EPA 3005A	**Date Digested**	: 11/26/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7429-90-5	Aluminum, Total	0.261	0.0100	0.00327	
7440-36-0	Antimony, Total	ND	0.00400	0.00042	U
7440-38-2	Arsenic, Total	0.00059	0.00050	0.00016	
7440-39-3	Barium, Total	0.05890	0.00050	0.00017	
7440-41-7	Beryllium, Total	ND	0.00050	0.00010	U
7440-43-9	Cadmium, Total	ND	0.00020	0.00005	U
7440-70-2	Calcium, Total	86.9	0.100	0.0394	
7440-47-3	Chromium, Total	0.02308	0.00100	0.00017	
7440-48-4	Cobalt, Total	0.00091	0.00050	0.00016	
7440-50-8	Copper, Total	0.00451	0.00100	0.00038	
7439-89-6	Iron, Total	0.869	0.0500	0.0191	
7439-92-1	Lead, Total	0.00060	0.00100	0.00034	J
7439-95-4	Magnesium, Total	21.2	0.0700	0.0242	
7439-96-5	Manganese, Total	2.230	0.00100	0.00044	
7440-02-0	Nickel, Total	0.01319	0.00200	0.00055	
7440-09-7	Potassium, Total	23.1	0.100	0.0309	
7782-49-2	Selenium, Total	ND	0.00500	0.00173	U
7440-22-4	Silver, Total	ND	0.00040	0.00016	U
7440-23-5	Sodium, Total	35.3	0.500	0.0293	
7440-28-0	Thallium, Total	ND	0.00100	0.00014	U
7440-62-2	Vanadium, Total	0.00200	0.00500	0.00157	J
7440-66-6	Zinc, Total	ND	0.01000	0.00341	U

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Lab ID	: L2467934-07	**Date Collected**	: 11/18/24 14:15
Client ID	: MW-7S	**Date Received**	: 11/19/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 12/02/24 20:06
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,6020B	**Analyst**	: WKP
Lab File ID	: WG2003903.pdf	**Instrument ID**	: ICPMSQ
Sample Amount	: 50ml	**%Solids**	: N/A
Digestion Method	: EPA 3005A	**Date Digested**	: 11/26/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7429-90-5	Aluminum, Total	0.00407	0.0100	0.00327	J
7440-36-0	Antimony, Total	ND	0.00400	0.00042	U
7440-38-2	Arsenic, Total	0.00022	0.00050	0.00016	J
7440-39-3	Barium, Total	0.09536	0.00050	0.00017	
7440-41-7	Beryllium, Total	ND	0.00050	0.00010	U
7440-43-9	Cadmium, Total	ND	0.00020	0.00005	U
7440-70-2	Calcium, Total	97.1	0.100	0.0394	
7440-47-3	Chromium, Total	0.00055	0.00100	0.00017	J
7440-48-4	Cobalt, Total	0.00032	0.00050	0.00016	J
7440-50-8	Copper, Total	0.00161	0.00100	0.00038	
7439-89-6	Iron, Total	ND	0.0500	0.0191	U
7439-92-1	Lead, Total	ND	0.00100	0.00034	U
7439-95-4	Magnesium, Total	11.1	0.0700	0.0242	
7439-96-5	Manganese, Total	0.6885	0.00100	0.00044	
7440-02-0	Nickel, Total	ND	0.00200	0.00055	U
7440-09-7	Potassium, Total	17.6	0.100	0.0309	
7782-49-2	Selenium, Total	ND	0.00500	0.00173	U
7440-22-4	Silver, Total	ND	0.00040	0.00016	U
7440-23-5	Sodium, Total	18.9	0.500	0.0293	
7440-28-0	Thallium, Total	0.00077	0.00100	0.00014	J
7440-62-2	Vanadium, Total	ND	0.00500	0.00157	U
7440-66-6	Zinc, Total	ND	0.01000	0.00341	U

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Lab ID	: L2467934-08	**Date Collected**	: 11/18/24 16:45
Client ID	: MW-8S	**Date Received**	: 11/19/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 12/02/24 20:11
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,6020B	**Analyst**	: WKP
Lab File ID	: WG2003903.pdf	**Instrument ID**	: ICPMSQ
Sample Amount	: 50ml	**%Solids**	: N/A
Digestion Method	: EPA 3005A	**Date Digested**	: 11/26/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7429-90-5	Aluminum, Total	0.00564	0.0100	0.00327	J
7440-36-0	Antimony, Total	ND	0.00400	0.00042	U
7440-38-2	Arsenic, Total	0.00023	0.00050	0.00016	J
7440-39-3	Barium, Total	0.09825	0.00050	0.00017	
7440-41-7	Beryllium, Total	ND	0.00050	0.00010	U
7440-43-9	Cadmium, Total	ND	0.00020	0.00005	U
7440-70-2	Calcium, Total	40.2	0.100	0.0394	
7440-47-3	Chromium, Total	0.00189	0.00100	0.00017	
7440-48-4	Cobalt, Total	0.00023	0.00050	0.00016	J
7440-50-8	Copper, Total	0.00216	0.00100	0.00038	
7439-89-6	Iron, Total	0.0245	0.0500	0.0191	J
7439-92-1	Lead, Total	ND	0.00100	0.00034	U
7439-95-4	Magnesium, Total	4.35	0.0700	0.0242	
7439-96-5	Manganese, Total	0.00203	0.00100	0.00044	
7440-02-0	Nickel, Total	0.00209	0.00200	0.00055	
7440-09-7	Potassium, Total	23.1	0.100	0.0309	
7782-49-2	Selenium, Total	ND	0.00500	0.00173	U
7440-22-4	Silver, Total	ND	0.00040	0.00016	U
7440-23-5	Sodium, Total	31.4	0.500	0.0293	
7440-28-0	Thallium, Total	0.00026	0.00100	0.00014	J
7440-62-2	Vanadium, Total	ND	0.00500	0.00157	U
7440-66-6	Zinc, Total	ND	0.01000	0.00341	U

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Lab ID	: L2467934-09	**Date Collected**	: 11/18/24 00:00
Client ID	: DUP	**Date Received**	: 11/19/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 12/02/24 20:16
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,6020B	**Analyst**	: WKP
Lab File ID	: WG2003903.pdf	**Instrument ID**	: ICPMSQ
Sample Amount	: 50ml	**%Solids**	: N/A
Digestion Method	: EPA 3005A	**Date Digested**	: 11/26/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7429-90-5	Aluminum, Total	ND	0.0100	0.00327	U
7440-36-0	Antimony, Total	ND	0.00400	0.00042	U
7440-38-2	Arsenic, Total	0.00021	0.00050	0.00016	J
7440-39-3	Barium, Total	0.09266	0.00050	0.00017	
7440-41-7	Beryllium, Total	ND	0.00050	0.00010	U
7440-43-9	Cadmium, Total	ND	0.00020	0.00005	U
7440-70-2	Calcium, Total	94.0	0.100	0.0394	
7440-47-3	Chromium, Total	0.00055	0.00100	0.00017	J
7440-48-4	Cobalt, Total	0.00031	0.00050	0.00016	J
7440-50-8	Copper, Total	0.00164	0.00100	0.00038	
7439-89-6	Iron, Total	0.0300	0.0500	0.0191	J
7439-92-1	Lead, Total	ND	0.00100	0.00034	U
7439-95-4	Magnesium, Total	10.9	0.0700	0.0242	
7439-96-5	Manganese, Total	0.6709	0.00100	0.00044	
7440-02-0	Nickel, Total	ND	0.00200	0.00055	U
7440-09-7	Potassium, Total	17.2	0.100	0.0309	
7782-49-2	Selenium, Total	ND	0.00500	0.00173	U
7440-22-4	Silver, Total	ND	0.00040	0.00016	U
7440-23-5	Sodium, Total	18.4	0.500	0.0293	
7440-28-0	Thallium, Total	0.00073	0.00100	0.00014	J
7440-62-2	Vanadium, Total	ND	0.00500	0.00157	U
7440-66-6	Zinc, Total	ND	0.01000	0.00341	U

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Lab ID	: L2467934-10	**Date Collected**	: 11/18/24 16:30
Client ID	: FIELD BLANK	**Date Received**	: 11/19/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 12/02/24 19:43
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,6020B	**Analyst**	: WKP
Lab File ID	: WG2003903.pdf	**Instrument ID**	: ICPMSQ
Sample Amount	: 50ml	**%Solids**	: N/A
Digestion Method	: EPA 3005A	**Date Digested**	: 11/26/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7429-90-5	Aluminum, Total	ND	0.0100	0.00327	U
7440-36-0	Antimony, Total	ND	0.00400	0.00042	U
7440-38-2	Arsenic, Total	ND	0.00050	0.00016	U
7440-39-3	Barium, Total	ND	0.00050	0.00017	U
7440-41-7	Beryllium, Total	ND	0.00050	0.00010	U
7440-43-9	Cadmium, Total	ND	0.00020	0.00005	U
7440-70-2	Calcium, Total	ND	0.100	0.0394	U
7440-47-3	Chromium, Total	0.00036	0.00100	0.00017	J
7440-48-4	Cobalt, Total	ND	0.00050	0.00016	U
7440-50-8	Copper, Total	ND	0.00100	0.00038	U
7439-89-6	Iron, Total	ND	0.0500	0.0191	U
7439-92-1	Lead, Total	ND	0.00100	0.00034	U
7439-95-4	Magnesium, Total	ND	0.0700	0.0242	U
7439-96-5	Manganese, Total	ND	0.00100	0.00044	U
7440-02-0	Nickel, Total	ND	0.00200	0.00055	U
7440-09-7	Potassium, Total	ND	0.100	0.0309	U
7782-49-2	Selenium, Total	ND	0.00500	0.00173	U
7440-22-4	Silver, Total	ND	0.00040	0.00016	U
7440-23-5	Sodium, Total	ND	0.500	0.0293	U
7440-28-0	Thallium, Total	ND	0.00100	0.00014	U
7440-62-2	Vanadium, Total	ND	0.00500	0.00157	U
7440-66-6	Zinc, Total	ND	0.01000	0.00341	U

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Lab ID	: WG2002206-1	**Date Collected**	: NA
Client ID	: WG2002206-1BLANK	**Date Received**	: NA
Sample Location	:	**Date Analyzed**	: 12/02/24 19:34
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,6020B	**Analyst**	: WKP
Lab File ID	: WG2003903.pdf	**Instrument ID**	: ICPMSQ
Sample Amount	: 50ml	**%Solids**	: N/A
Digestion Method	: EPA 3005A	**Date Digested**	: 11/26/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-70-2	Calcium, Total	ND	0.100	0.0394	U
7440-09-7	Potassium, Total	ND	0.100	0.0309	U

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Lab ID	: WG2002206-6	**Date Collected**	:
Client ID	: Serial Dilution	**Date Received**	:
Sample Location	:	**Date Analyzed**	: 12/02/24 18:50
Sample Matrix	: WATER	**Dilution Factor**	: 5
Analytical Method	: 1,6020B	**Analyst**	: WKP
Lab File ID	: WG2003903.pdf	**Instrument ID**	: ICPMSQ
Sample Amount	: 50ml	**%Solids**	: N/A
Digestion Method	: EPA 3005A	**Date Digested**	: 11/26/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-70-2	Calcium, Total	3.54	0.500	0.197	

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Lab ID	: L2467934-01	**Date Collected**	: 11/18/24 15:46
Client ID	: MW-1S	**Date Received**	: 11/19/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 12/03/24 20:17
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,6020B	**Analyst**	: MRC
Lab File ID	: WG2004359.pdf	**Instrument ID**	: ICPMSQ2
Sample Amount	: 50ml	**%Solids**	: N/A
Digestion Method	: EPA 3005A	**Date Digested**	: 11/25/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7429-90-5	Aluminum, Dissolved	0.334	0.0100	0.00327	
7440-36-0	Antimony, Dissolved	ND	0.00400	0.00042	U
7440-38-2	Arsenic, Dissolved	0.00447	0.00050	0.00016	
7440-39-3	Barium, Dissolved	0.01598	0.00050	0.00017	
7440-41-7	Beryllium, Dissolved	ND	0.00050	0.00010	U
7440-43-9	Cadmium, Dissolved	ND	0.00020	0.00005	U
7440-70-2	Calcium, Dissolved	39.5	0.100	0.0394	
7440-47-3	Chromium, Dissolved	0.00040	0.00100	0.00017	J
7440-48-4	Cobalt, Dissolved	0.00049	0.00050	0.00016	J
7440-50-8	Copper, Dissolved	0.00052	0.00100	0.00038	J
7439-89-6	Iron, Dissolved	1.15	0.0500	0.0191	
7439-92-1	Lead, Dissolved	ND	0.00100	0.00034	U
7439-95-4	Magnesium, Dissolved	0.296	0.0700	0.0242	
7439-96-5	Manganese, Dissolved	1.124	0.00100	0.00044	
7440-02-0	Nickel, Dissolved	0.00158	0.00200	0.00055	J
7440-09-7	Potassium, Dissolved	26.5	0.100	0.0309	
7782-49-2	Selenium, Dissolved	ND	0.00500	0.00173	U
7440-22-4	Silver, Dissolved	ND	0.00040	0.00016	U
7440-23-5	Sodium, Dissolved	51.3	0.500	0.0293	
7440-28-0	Thallium, Dissolved	ND	0.00100	0.00014	U
7440-62-2	Vanadium, Dissolved	0.00258	0.00500	0.00157	J
7440-66-6	Zinc, Dissolved	ND	0.01000	0.00341	U

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Lab ID	: L2467934-02	**Date Collected**	: 11/18/24 14:33
Client ID	: MW-2S	**Date Received**	: 11/19/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 12/03/24 20:21
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,6020B	**Analyst**	: MRC
Lab File ID	: WG2004359.pdf	**Instrument ID**	: ICPMSQ2
Sample Amount	: 50ml	**%Solids**	: N/A
Digestion Method	: EPA 3005A	**Date Digested**	: 11/25/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7429-90-5	Aluminum, Dissolved	ND	0.0100	0.00327	U
7440-36-0	Antimony, Dissolved	0.00045	0.00400	0.00042	J
7440-38-2	Arsenic, Dissolved	0.00025	0.00050	0.00016	J
7440-39-3	Barium, Dissolved	0.01682	0.00050	0.00017	
7440-41-7	Beryllium, Dissolved	ND	0.00050	0.00010	U
7440-43-9	Cadmium, Dissolved	ND	0.00020	0.00005	U
7440-70-2	Calcium, Dissolved	56.0	0.100	0.0394	
7440-47-3	Chromium, Dissolved	0.00181	0.00100	0.00017	
7440-48-4	Cobalt, Dissolved	0.00028	0.00050	0.00016	J
7440-50-8	Copper, Dissolved	0.00147	0.00100	0.00038	
7439-89-6	Iron, Dissolved	ND	0.0500	0.0191	U
7439-92-1	Lead, Dissolved	ND	0.00100	0.00034	U
7439-95-4	Magnesium, Dissolved	4.76	0.0700	0.0242	
7439-96-5	Manganese, Dissolved	0.00073	0.00100	0.00044	J
7440-02-0	Nickel, Dissolved	ND	0.00200	0.00055	U
7440-09-7	Potassium, Dissolved	9.31	0.100	0.0309	
7782-49-2	Selenium, Dissolved	ND	0.00500	0.00173	U
7440-22-4	Silver, Dissolved	ND	0.00040	0.00016	U
7440-23-5	Sodium, Dissolved	5.03	0.500	0.0293	
7440-28-0	Thallium, Dissolved	ND	0.00100	0.00014	U
7440-62-2	Vanadium, Dissolved	ND	0.00500	0.00157	U
7440-66-6	Zinc, Dissolved	ND	0.01000	0.00341	U

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Lab ID	: L2467934-03	**Date Collected**	: 11/18/24 13:31
Client ID	: MW-3S	**Date Received**	: 11/19/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 12/03/24 20:26
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,6020B	**Analyst**	: MRC
Lab File ID	: WG2004359.pdf	**Instrument ID**	: ICPMSQ2
Sample Amount	: 50ml	**%Solids**	: N/A
Digestion Method	: EPA 3005A	**Date Digested**	: 11/25/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7429-90-5	Aluminum, Dissolved	ND	0.0100	0.00327	U
7440-36-0	Antimony, Dissolved	0.00058	0.00400	0.00042	J
7440-38-2	Arsenic, Dissolved	0.00043	0.00050	0.00016	J
7440-39-3	Barium, Dissolved	0.1052	0.00050	0.00017	
7440-41-7	Beryllium, Dissolved	ND	0.00050	0.00010	U
7440-43-9	Cadmium, Dissolved	ND	0.00020	0.00005	U
7440-70-2	Calcium, Dissolved	97.0	0.100	0.0394	
7440-47-3	Chromium, Dissolved	0.00030	0.00100	0.00017	J
7440-48-4	Cobalt, Dissolved	0.00062	0.00050	0.00016	
7440-50-8	Copper, Dissolved	0.00251	0.00100	0.00038	
7439-89-6	Iron, Dissolved	ND	0.0500	0.0191	U
7439-92-1	Lead, Dissolved	ND	0.00100	0.00034	U
7439-95-4	Magnesium, Dissolved	8.77	0.0700	0.0242	
7439-96-5	Manganese, Dissolved	0.01018	0.00100	0.00044	
7440-02-0	Nickel, Dissolved	ND	0.00200	0.00055	U
7440-09-7	Potassium, Dissolved	31.6	0.100	0.0309	
7782-49-2	Selenium, Dissolved	ND	0.00500	0.00173	U
7440-22-4	Silver, Dissolved	ND	0.00040	0.00016	U
7440-23-5	Sodium, Dissolved	29.0	0.500	0.0293	
7440-28-0	Thallium, Dissolved	0.00025	0.00100	0.00014	J
7440-62-2	Vanadium, Dissolved	0.00273	0.00500	0.00157	J
7440-66-6	Zinc, Dissolved	ND	0.01000	0.00341	U

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Lab ID	: L2467934-04	**Date Collected**	: 11/19/24 09:35
Client ID	: MW-4D	**Date Received**	: 11/19/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 12/03/24 20:30
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,6020B	**Analyst**	: MRC
Lab File ID	: WG2004359.pdf	**Instrument ID**	: ICPMSQ2
Sample Amount	: 50ml	**%Solids**	: N/A
Digestion Method	: EPA 3005A	**Date Digested**	: 11/25/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7429-90-5	Aluminum, Dissolved	ND	0.0100	0.00327	U
7440-36-0	Antimony, Dissolved	ND	0.00400	0.00042	U
7440-38-2	Arsenic, Dissolved	ND	0.00050	0.00016	U
7440-39-3	Barium, Dissolved	0.06577	0.00050	0.00017	
7440-41-7	Beryllium, Dissolved	ND	0.00050	0.00010	U
7440-43-9	Cadmium, Dissolved	ND	0.00020	0.00005	U
7440-70-2	Calcium, Dissolved	19.3	0.100	0.0394	
7440-47-3	Chromium, Dissolved	0.00165	0.00100	0.00017	
7440-48-4	Cobalt, Dissolved	ND	0.00050	0.00016	U
7440-50-8	Copper, Dissolved	ND	0.00100	0.00038	U
7439-89-6	Iron, Dissolved	ND	0.0500	0.0191	U
7439-92-1	Lead, Dissolved	ND	0.00100	0.00034	U
7439-95-4	Magnesium, Dissolved	12.2	0.0700	0.0242	
7439-96-5	Manganese, Dissolved	0.00091	0.00100	0.00044	J
7440-02-0	Nickel, Dissolved	ND	0.00200	0.00055	U
7440-09-7	Potassium, Dissolved	1.52	0.100	0.0309	
7782-49-2	Selenium, Dissolved	ND	0.00500	0.00173	U
7440-22-4	Silver, Dissolved	ND	0.00040	0.00016	U
7440-23-5	Sodium, Dissolved	80.5	0.500	0.0293	
7440-28-0	Thallium, Dissolved	ND	0.00100	0.00014	U
7440-62-2	Vanadium, Dissolved	ND	0.00500	0.00157	U
7440-66-6	Zinc, Dissolved	ND	0.01000	0.00341	U

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Lab ID	: L2467934-05	**Date Collected**	: 11/19/24 08:10
Client ID	: MW-5S	**Date Received**	: 11/19/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 12/03/24 19:10
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,6020B	**Analyst**	: MRC
Lab File ID	: WG2004359.pdf	**Instrument ID**	: ICPMSQ2
Sample Amount	: 50ml	**%Solids**	: N/A
Digestion Method	: EPA 3005A	**Date Digested**	: 11/25/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7429-90-5	Aluminum, Dissolved	0.0285	0.0100	0.00327	
7440-36-0	Antimony, Dissolved	0.00066	0.00400	0.00042	J
7440-38-2	Arsenic, Dissolved	0.00016	0.00050	0.00016	J
7440-39-3	Barium, Dissolved	0.00338	0.00050	0.00017	
7440-41-7	Beryllium, Dissolved	0.00012	0.00050	0.00010	J
7440-43-9	Cadmium, Dissolved	0.00009	0.00020	0.00005	J
7440-70-2	Calcium, Dissolved	3.48	0.100	0.0394	
7440-47-3	Chromium, Dissolved	0.00041	0.00100	0.00017	J
7440-48-4	Cobalt, Dissolved	ND	0.00050	0.00016	U
7440-50-8	Copper, Dissolved	0.00060	0.00100	0.00038	J
7439-89-6	Iron, Dissolved	0.0407	0.0500	0.0191	J
7439-92-1	Lead, Dissolved	ND	0.00100	0.00034	U
7439-95-4	Magnesium, Dissolved	0.884	0.0700	0.0242	
7439-96-5	Manganese, Dissolved	0.01409	0.00100	0.00044	
7440-02-0	Nickel, Dissolved	ND	0.00200	0.00055	U
7440-09-7	Potassium, Dissolved	0.728	0.100	0.0309	
7782-49-2	Selenium, Dissolved	ND	0.00500	0.00173	U
7440-22-4	Silver, Dissolved	ND	0.00040	0.00016	U
7440-23-5	Sodium, Dissolved	5.06	0.500	0.0293	
7440-28-0	Thallium, Dissolved	ND	0.00100	0.00014	U
7440-62-2	Vanadium, Dissolved	ND	0.00500	0.00157	U
7440-66-6	Zinc, Dissolved	ND	0.01000	0.00341	U

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Lab ID	: L2467934-06	**Date Collected**	: 11/18/24 15:40
Client ID	: MW-6D	**Date Received**	: 11/19/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 12/03/24 20:35
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,6020B	**Analyst**	: MRC
Lab File ID	: WG2004359.pdf	**Instrument ID**	: ICPMSQ2
Sample Amount	: 50ml	**%Solids**	: N/A
Digestion Method	: EPA 3005A	**Date Digested**	: 11/25/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7429-90-5	Aluminum, Dissolved	ND	0.0100	0.00327	U
7440-36-0	Antimony, Dissolved	ND	0.00400	0.00042	U
7440-38-2	Arsenic, Dissolved	0.00028	0.00050	0.00016	J
7440-39-3	Barium, Dissolved	0.05292	0.00050	0.00017	
7440-41-7	Beryllium, Dissolved	ND	0.00050	0.00010	U
7440-43-9	Cadmium, Dissolved	ND	0.00020	0.00005	U
7440-70-2	Calcium, Dissolved	84.5	0.100	0.0394	
7440-47-3	Chromium, Dissolved	0.00083	0.00100	0.00017	J
7440-48-4	Cobalt, Dissolved	0.00051	0.00050	0.00016	
7440-50-8	Copper, Dissolved	0.00126	0.00100	0.00038	
7439-89-6	Iron, Dissolved	ND	0.0500	0.0191	U
7439-92-1	Lead, Dissolved	ND	0.00100	0.00034	U
7439-95-4	Magnesium, Dissolved	22.2	0.0700	0.0242	
7439-96-5	Manganese, Dissolved	2.374	0.00100	0.00044	
7440-02-0	Nickel, Dissolved	ND	0.00200	0.00055	U
7440-09-7	Potassium, Dissolved	24.4	0.100	0.0309	
7782-49-2	Selenium, Dissolved	ND	0.00500	0.00173	U
7440-22-4	Silver, Dissolved	ND	0.00040	0.00016	U
7440-23-5	Sodium, Dissolved	35.5	0.500	0.0293	
7440-28-0	Thallium, Dissolved	ND	0.00100	0.00014	U
7440-62-2	Vanadium, Dissolved	ND	0.00500	0.00157	U
7440-66-6	Zinc, Dissolved	ND	0.01000	0.00341	U

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Lab ID	: L2467934-07	**Date Collected**	: 11/18/24 14:15
Client ID	: MW-7S	**Date Received**	: 11/19/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 12/03/24 20:53
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,6020B	**Analyst**	: MRC
Lab File ID	: WG2004359.pdf	**Instrument ID**	: ICPMSQ2
Sample Amount	: 50ml	**%Solids**	: N/A
Digestion Method	: EPA 3005A	**Date Digested**	: 11/25/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7429-90-5	Aluminum, Dissolved	ND	0.0100	0.00327	U
7440-36-0	Antimony, Dissolved	ND	0.00400	0.00042	U
7440-38-2	Arsenic, Dissolved	0.00029	0.00050	0.00016	J
7440-39-3	Barium, Dissolved	0.08404	0.00050	0.00017	
7440-41-7	Beryllium, Dissolved	ND	0.00050	0.00010	U
7440-43-9	Cadmium, Dissolved	ND	0.00020	0.00005	U
7440-70-2	Calcium, Dissolved	86.1	0.100	0.0394	
7440-47-3	Chromium, Dissolved	0.00077	0.00100	0.00017	J
7440-48-4	Cobalt, Dissolved	0.00027	0.00050	0.00016	J
7440-50-8	Copper, Dissolved	0.00169	0.00100	0.00038	
7439-89-6	Iron, Dissolved	ND	0.0500	0.0191	U
7439-92-1	Lead, Dissolved	ND	0.00100	0.00034	U
7439-95-4	Magnesium, Dissolved	10.7	0.0700	0.0242	
7439-96-5	Manganese, Dissolved	0.6321	0.00100	0.00044	
7440-02-0	Nickel, Dissolved	ND	0.00200	0.00055	U
7440-09-7	Potassium, Dissolved	16.8	0.100	0.0309	
7782-49-2	Selenium, Dissolved	ND	0.00500	0.00173	U
7440-22-4	Silver, Dissolved	ND	0.00040	0.00016	U
7440-23-5	Sodium, Dissolved	17.0	0.500	0.0293	
7440-28-0	Thallium, Dissolved	0.00066	0.00100	0.00014	J
7440-62-2	Vanadium, Dissolved	ND	0.00500	0.00157	U
7440-66-6	Zinc, Dissolved	ND	0.01000	0.00341	U

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Lab ID	: L2467934-08	**Date Collected**	: 11/18/24 16:45
Client ID	: MW-8S	**Date Received**	: 11/19/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 12/03/24 20:57
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,6020B	**Analyst**	: MRC
Lab File ID	: WG2004359.pdf	**Instrument ID**	: ICPMSQ2
Sample Amount	: 50ml	**%Solids**	: N/A
Digestion Method	: EPA 3005A	**Date Digested**	: 11/25/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7429-90-5	Aluminum, Dissolved	0.00487	0.0100	0.00327	J
7440-36-0	Antimony, Dissolved	ND	0.00400	0.00042	U
7440-38-2	Arsenic, Dissolved	0.00025	0.00050	0.00016	J
7440-39-3	Barium, Dissolved	0.08092	0.00050	0.00017	
7440-41-7	Beryllium, Dissolved	ND	0.00050	0.00010	U
7440-43-9	Cadmium, Dissolved	ND	0.00020	0.00005	U
7440-70-2	Calcium, Dissolved	35.9	0.100	0.0394	
7440-47-3	Chromium, Dissolved	0.00035	0.00100	0.00017	J
7440-48-4	Cobalt, Dissolved	0.00017	0.00050	0.00016	J
7440-50-8	Copper, Dissolved	0.00185	0.00100	0.00038	
7439-89-6	Iron, Dissolved	ND	0.0500	0.0191	U
7439-92-1	Lead, Dissolved	ND	0.00100	0.00034	U
7439-95-4	Magnesium, Dissolved	3.98	0.0700	0.0242	
7439-96-5	Manganese, Dissolved	0.00166	0.00100	0.00044	
7440-02-0	Nickel, Dissolved	ND	0.00200	0.00055	U
7440-09-7	Potassium, Dissolved	23.1	0.100	0.0309	
7782-49-2	Selenium, Dissolved	ND	0.00500	0.00173	U
7440-22-4	Silver, Dissolved	ND	0.00040	0.00016	U
7440-23-5	Sodium, Dissolved	29.1	0.500	0.0293	
7440-28-0	Thallium, Dissolved	0.00020	0.00100	0.00014	J
7440-62-2	Vanadium, Dissolved	ND	0.00500	0.00157	U
7440-66-6	Zinc, Dissolved	ND	0.01000	0.00341	U

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Lab ID	: L2467934-09	**Date Collected**	: 11/18/24 00:00
Client ID	: DUP	**Date Received**	: 11/19/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 12/03/24 21:02
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,6020B	**Analyst**	: MRC
Lab File ID	: WG2004359.pdf	**Instrument ID**	: ICPMSQ2
Sample Amount	: 50ml	**%Solids**	: N/A
Digestion Method	: EPA 3005A	**Date Digested**	: 11/25/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7429-90-5	Aluminum, Dissolved	ND	0.0100	0.00327	U
7440-36-0	Antimony, Dissolved	ND	0.00400	0.00042	U
7440-38-2	Arsenic, Dissolved	0.00036	0.00050	0.00016	J
7440-39-3	Barium, Dissolved	0.08758	0.00050	0.00017	
7440-41-7	Beryllium, Dissolved	ND	0.00050	0.00010	U
7440-43-9	Cadmium, Dissolved	ND	0.00020	0.00005	U
7440-70-2	Calcium, Dissolved	89.2	0.100	0.0394	
7440-47-3	Chromium, Dissolved	0.00037	0.00100	0.00017	J
7440-48-4	Cobalt, Dissolved	0.00033	0.00050	0.00016	J
7440-50-8	Copper, Dissolved	0.00147	0.00100	0.00038	
7439-89-6	Iron, Dissolved	ND	0.0500	0.0191	U
7439-92-1	Lead, Dissolved	ND	0.00100	0.00034	U
7439-95-4	Magnesium, Dissolved	11.2	0.0700	0.0242	
7439-96-5	Manganese, Dissolved	0.6602	0.00100	0.00044	
7440-02-0	Nickel, Dissolved	ND	0.00200	0.00055	U
7440-09-7	Potassium, Dissolved	17.4	0.100	0.0309	
7782-49-2	Selenium, Dissolved	ND	0.00500	0.00173	U
7440-22-4	Silver, Dissolved	ND	0.00040	0.00016	U
7440-23-5	Sodium, Dissolved	17.5	0.500	0.0293	
7440-28-0	Thallium, Dissolved	0.00066	0.00100	0.00014	J
7440-62-2	Vanadium, Dissolved	ND	0.00500	0.00157	U
7440-66-6	Zinc, Dissolved	ND	0.01000	0.00341	U

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Lab ID	: L2467934-10	**Date Collected**	: 11/18/24 16:30
Client ID	: FIELD BLANK	**Date Received**	: 11/19/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 12/03/24 20:48
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,6020B	**Analyst**	: MRC
Lab File ID	: WG2004359.pdf	**Instrument ID**	: ICPMSQ2
Sample Amount	: 50ml	**%Solids**	: N/A
Digestion Method	: EPA 3005A	**Date Digested**	: 11/25/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7429-90-5	Aluminum, Dissolved	ND	0.0100	0.00327	U
7440-36-0	Antimony, Dissolved	0.00043	0.00400	0.00042	J
7440-38-2	Arsenic, Dissolved	ND	0.00050	0.00016	U
7440-39-3	Barium, Dissolved	0.00023	0.00050	0.00017	J
7440-41-7	Beryllium, Dissolved	ND	0.00050	0.00010	U
7440-43-9	Cadmium, Dissolved	ND	0.00020	0.00005	U
7440-70-2	Calcium, Dissolved	0.148	0.100	0.0394	
7440-47-3	Chromium, Dissolved	ND	0.00100	0.00017	U
7440-48-4	Cobalt, Dissolved	ND	0.00050	0.00016	U
7440-50-8	Copper, Dissolved	ND	0.00100	0.00038	U
7439-89-6	Iron, Dissolved	ND	0.0500	0.0191	U
7439-92-1	Lead, Dissolved	ND	0.00100	0.00034	U
7439-95-4	Magnesium, Dissolved	ND	0.0700	0.0242	U
7439-96-5	Manganese, Dissolved	ND	0.00100	0.00044	U
7440-02-0	Nickel, Dissolved	ND	0.00200	0.00055	U
7440-09-7	Potassium, Dissolved	ND	0.100	0.0309	U
7782-49-2	Selenium, Dissolved	ND	0.00500	0.00173	U
7440-22-4	Silver, Dissolved	ND	0.00040	0.00016	U
7440-23-5	Sodium, Dissolved	0.743	0.500	0.0293	
7440-28-0	Thallium, Dissolved	ND	0.00100	0.00014	U
7440-62-2	Vanadium, Dissolved	ND	0.00500	0.00157	U
7440-66-6	Zinc, Dissolved	ND	0.01000	0.00341	U

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Lab ID	: WG2002010-1	**Date Collected**	: NA
Client ID	: WG2002010-1BLANK	**Date Received**	: NA
Sample Location	:	**Date Analyzed**	: 12/03/24 19:01
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,6020B	**Analyst**	: MRC
Lab File ID	: WG2004359.pdf	**Instrument ID**	: ICPMSQ2
Sample Amount	: 50ml	**%Solids**	: N/A
Digestion Method	: EPA 3005A	**Date Digested**	: 11/25/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7429-90-5	Aluminum, Dissolved	ND	0.0100	0.00327	U
7440-36-0	Antimony, Dissolved	ND	0.00400	0.00042	U
7440-38-2	Arsenic, Dissolved	ND	0.00050	0.00016	U
7440-39-3	Barium, Dissolved	ND	0.00050	0.00017	U
7440-41-7	Beryllium, Dissolved	ND	0.00050	0.00010	U
7440-43-9	Cadmium, Dissolved	ND	0.00020	0.00005	U
7440-70-2	Calcium, Dissolved	ND	0.100	0.0394	U
7440-47-3	Chromium, Dissolved	ND	0.00100	0.00017	U
7440-48-4	Cobalt, Dissolved	ND	0.00050	0.00016	U
7440-50-8	Copper, Dissolved	ND	0.00100	0.00038	U
7439-89-6	Iron, Dissolved	ND	0.0500	0.0191	U
7439-92-1	Lead, Dissolved	ND	0.00100	0.00034	U
7439-95-4	Magnesium, Dissolved	ND	0.0700	0.0242	U
7439-96-5	Manganese, Dissolved	ND	0.00100	0.00044	U
7440-02-0	Nickel, Dissolved	ND	0.00200	0.00055	U
7440-09-7	Potassium, Dissolved	ND	0.100	0.0309	U
7782-49-2	Selenium, Dissolved	ND	0.00500	0.00173	U
7440-22-4	Silver, Dissolved	ND	0.00040	0.00016	U
7440-23-5	Sodium, Dissolved	ND	0.500	0.0293	U
7440-28-0	Thallium, Dissolved	ND	0.00100	0.00014	U
7440-62-2	Vanadium, Dissolved	ND	0.00500	0.00157	U
7440-66-6	Zinc, Dissolved	ND	0.01000	0.00341	U

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Lab ID	: WG2002010-6	**Date Collected**	:
Client ID	: Serial Dilution	**Date Received**	:
Sample Location	:	**Date Analyzed**	: 12/03/24 19:28
Sample Matrix	: WATER	**Dilution Factor**	: 5
Analytical Method	: 1,6020B	**Analyst**	: MRC
Lab File ID	: WG2004359.pdf	**Instrument ID**	: ICPMSQ2
Sample Amount	: 50ml	**%Solids**	: N/A
Digestion Method	: EPA 3005A	**Date Digested**	: 11/25/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-70-2	Calcium, Dissolved	3.11	0.500	0.197	

Form 2A
Initial and Continuing Calibration Verification

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Instrument ID	: ICPMSQ2	**Units**	: ug/l

	Initial Calibration			Continuing Calibration(s)						
Lab ID :	R1904880-1			R1904880-5			R1904880-7		R1904880-10	
Date Analyzed :	11/26/24 07:44			11/26/24 08:12			11/26/24 08:23		11/26/24 09:24	
Parameter	**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Aluminum	50.0	54.1000	108	60.0000	72.8	121	63.2	105	65.8	110
Antimony	50.0	53.8000	108	60.0000	60.2	100	60.6	101	60.5	101
Arsenic	50.0	53.2000	106	60.0000	60.8	101	61.4	102	61.4	102
Barium	50.0	54.1000	108	60.0000	63.6	106	61.7	103	60.7	101
Beryllium	50.0	52.9000	106	60.0000	62.4	104	57.4	96	60.3	100
Cadmium	50.0	54.0000	108	60.0000	60.3	100	60.9	102	60.6	101
Chromium	50.0	53.1000	106	60.0000	60.9	102	61.8	103	62.0	103
Cobalt	50.0	54.0000	108	60.0000	61.4	102	62.7	104	63.0	105
Copper	50.0	54.1000	108	60.0000	63.9	106	63.0	105	63.7	106
Iron	5000	5340.0000	107	6000.0000	6170	103	6270	104	6320	105
Lead	50.0	52.7000	105	60.0000	61.5	102	61.5	102	60.7	101
Magnesium	5000	5400.0000	108	6000.0000	6210	104	6290	105	6350	106
Manganese	50.0	53.2000	106	60.0000	62.4	104	62.6	104	63.2	105
Nickel	50.0	53.8000	108	60.0000	62.7	104	62.4	104	62.9	105
Selenium	50.0	54.1000	108	60.0000	59.6	99	63.2	105	60.6	101
Silver	50.0	53.3000	107	60.0000	57.7	96	59.0	98	58.6	98
Sodium	5000	5370.0000	107	6000.0000	6190	103	6320	105	6400	107
Thallium	50.0	51.5000	103	60.0000	58.3	97	60.0	100	58.6	98
Vanadium	50.0	53.1000	106	60.0000	59.2	99	60.0	100	59.2	99
Zinc	50.0	53.3000	107	60.0000	62.9	105	62.7	104	62.7	104

Acceptance Criteria:

ICV:	95-105%	(Methods 200.7, 245.1)
	90-110%	(Methods 200.8, 6010, 6020, 7470, 7471, 7474)
	85-115%	(Method 1631)
CCV:	90-110%	(Methods 200.7, 245.1, 6010, 6020, 7474)
	85-115%	(Methods 200.8, 1631)
	80-120%	(Methods 7470, 7471)

Form 2A
Initial and Continuing Calibration Verification

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Instrument ID	: ICPMSQ2	**Units**	: ug/l

	Initial Calibration			Continuing Calibration(s)						
Lab ID :				R1904880-12			R1904880-14		R1904880-16	
Date Analyzed :				11/26/24 10:34			11/26/24 11:26		11/26/24 12:25	
Parameter	**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Aluminum				60.0000	63.6	106	63.8	106	56.9	95
Antimony				60.0000	60.3	100	60.6	101	60.7	101
Arsenic				60.0000	63.1	105	57.8	96	61.9	103
Barium				60.0000	61.3	102	61.4	102	62.2	104
Beryllium				60.0000	61.5	102	58.4	97	59.2	99
Cadmium				60.0000	60.2	100	61.2	102	61.6	103
Chromium				60.0000	62.6	104	59.5	99	60.7	101
Cobalt				60.0000	64.2	107	60.2	100	61.9	103
Copper				60.0000	63.6	106	59.3	99	62.7	104
Iron				6000.0000	6250	104	5970	100	6190	103
Lead				60.0000	61.0	102	60.4	101	61.6	103
Magnesium				6000.0000	6410	107	6220	104	5750	96
Manganese				60.0000	63.2	105	59.8	100	60.4	101
Nickel				60.0000	64.1	107	58.7	98	63.1	105
Selenium				60.0000	65.1	108	61.3	102	63.4	106
Silver				60.0000	58.1	97	58.8	98	59.3	99
Sodium				6000.0000	6440	107	6230	104	5830	97
Thallium				60.0000	59.3	99	58.7	98	59.2	99
Vanadium				60.0000	59.5	99	59.2	99	60.1	100
Zinc				60.0000	63.6	106	59.1	98	62.3	104

Acceptance Criteria:

ICV:	**95-105%**	**(Methods 200.7, 245.1)**
	90-110%	**(Methods 200.8, 6010, 6020, 7470, 7471, 7474)**
	85-115%	**(Method 1631)**
CCV:	**90-110%**	**(Methods 200.7, 245.1, 6010, 6020, 7474)**
	85-115%	**(Methods 200.8, 1631)**
	80-120%	**(Methods 7470, 7471)**

Form 2A
Initial and Continuing Calibration Verification

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Instrument ID	: ICPMSQ2	**Units**	: ug/l

	Initial Calibration			Continuing Calibration(s)						
Lab ID :				R1904880-18			R1904880-20		R1904880-22	
Date Analyzed :				11/26/24 13:24			11/26/24 14:15		11/26/24 15:20	
Parameter	**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Aluminum				60.0000	62.0	103	65.9	110	102.	170
Antimony				60.0000	60.1	100	63.7	106	65.7	110
Arsenic				60.0000	60.8	101	60.8	101	62.8	105
Barium				60.0000	60.9	102	64.1	107	65.8	110
Beryllium				60.0000	60.2	100	60.7	101	62.5	104
Cadmium				60.0000	60.9	102	64.0	107	64.8	108
Chromium				60.0000	61.4	102	63.2	105	64.3	107
Cobalt				60.0000	62.3	104	63.2	105	64.8	108
Copper				60.0000	62.9	105	63.2	105	64.5	108
Iron				6000.0000	6150	102	6270	104	6510	108
Lead				60.0000	62.0	103	66.1	110	66.6	111
Magnesium				6000.0000	6120	102	6410	107	6480	108
Manganese				60.0000	61.9	103	62.2	104	67.1	112
Nickel				60.0000	62.2	104	62.6	104	64.6	108
Selenium				60.0000	61.4	102	60.4	101	62.2	104
Silver				60.0000	59.6	99	64.1	107	65.4	109
Sodium				6000.0000	6110	102	6350	106	6320	105
Thallium				60.0000	59.4	99	64.3	107	64.3	107
Vanadium				60.0000	60.6	101	62.0	103	62.5	104
Zinc				60.0000	61.2	102	65.1	108	68.2	114

Acceptance Criteria:

ICV:	95-105%	(Methods 200.7, 245.1)
	90-110%	(Methods 200.8, 6010, 6020, 7470, 7471, 7474)
	85-115%	(Method 1631)
CCV:	90-110%	(Methods 200.7, 245.1, 6010, 6020, 7474)
	85-115%	(Methods 200.8, 1631)
	80-120%	(Methods 7470, 7471)

Form 2A
Initial and Continuing Calibration Verification

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Instrument ID	: ICPMSQ2	**Units**	: ug/l

	Initial Calibration			Continuing Calibration(s)							
Lab ID :				R1904880-24			R1904880-26		R1904880-28		
Date Analyzed :				11/26/24 15:31			11/26/24 16:28		11/26/24 17:02		
Parameter	**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**	
Aluminum				60.0000	57.4	96	39.8	66	63.4	106	
Antimony				60.0000	58.4	97	49.8	83	60.9	102	
Arsenic				60.0000	54.1	90	68.6	114	57.0	95	
Barium				60.0000	58.6	98	50.7	84	61.4	102	
Beryllium				60.0000	56.1	94	35.3	59	56.4	94	
Cadmium				60.0000	57.7	96	67.0	112	58.9	98	
Chromium				60.0000	56.2	94	44.3	74	61.1	102	
Cobalt				60.0000	56.7	94	51.4	86	62.0	103	
Copper				60.0000	56.9	95	59.3	99	62.0	103	
Iron				6000.0000	5580	93	4910	82	6140	102	
Lead				60.0000	57.6	96	59.7	100	59.8	100	
Magnesium				6000.0000	5780	96	4140	69	6260	104	
Manganese				60.0000	55.0	92	46.2	77	62.0	103	
Nickel				60.0000	56.3	94	52.6	88	62.1	104	
Selenium				60.0000	54.8	91	114.	190	56.6	94	
Silver				60.0000	56.6	94	65.8	110	58.8	98	
Sodium				6000.0000	5770	96	4160	69	6260	104	
Thallium				60.0000	54.4	91	59.6	99	58.4	97	
Vanadium				60.0000	56.0	93	46.8	78	58.0	97	
Zinc				60.0000	61.8	103	75.3	126	65.9	110	

Acceptance Criteria:

ICV:	95-105%	(Methods 200.7, 245.1)
	90-110%	(Methods 200.8, 6010, 6020, 7470, 7471, 7474)
	85-115%	(Method 1631)
CCV:	90-110%	(Methods 200.7, 245.1, 6010, 6020, 7474)
	85-115%	(Methods 200.8, 1631)
	80-120%	(Methods 7470, 7471)

Form 2A
Initial and Continuing Calibration Verification

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Instrument ID	: ICPMSQ2	**Units**	: ug/l

	Initial Calibration			Continuing Calibration(s)						
Lab ID :				R1904880-30						
Date Analyzed :				11/26/24 18:22						
Parameter	**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Aluminum				60.0000	61.8	103				
Antimony				60.0000	60.7	101				
Arsenic				60.0000	59.7	100				
Barium				60.0000	62.1	104				
Beryllium				60.0000	56.7	94				
Cadmium				60.0000	57.0	95				
Chromium				60.0000	62.5	104				
Cobalt				60.0000	62.8	105				
Copper				60.0000	63.5	106				
Iron				6000.0000	6200	103				
Lead				60.0000	59.6	99				
Magnesium				6000.0000	5880	98				
Manganese				60.0000	61.4	102				
Nickel				60.0000	63.6	106				
Selenium				60.0000	59.1	98				
Silver				60.0000	56.4	94				
Sodium				6000.0000	5780	96				
Thallium				60.0000	58.3	97				
Vanadium				60.0000	61.0	102				
Zinc				60.0000	83.2	139				

Acceptance Criteria:

ICV:	95-105%	(Methods 200.7, 245.1)
	90-110%	(Methods 200.8, 6010, 6020, 7470, 7471, 7474)
	85-115%	(Method 1631)
CCV:	90-110%	(Methods 200.7, 245.1, 6010, 6020, 7474)
	85-115%	(Methods 200.8, 1631)
	80-120%	(Methods 7470, 7471)

Form 2A
Initial and Continuing Calibration Verification

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Instrument ID	: ICPMSQ	**Units**	: ug/l

	Initial Calibration			Continuing Calibration(s)						
Lab ID :	R1906420-1			R1906420-4			R1906420-6		R1906420-8	
Date Analyzed :	12/02/24 08:28			12/02/24 08:57			12/02/24 10:13		12/02/24 10:32	
Parameter	**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Aluminum	50.0	49.9000	100	60.0000	58.4	97	61.2	102	62.1	104
Antimony	50.0	50.5000	101	60.0000	59.4	99	60.3	100	62.6	104
Arsenic	50.0	52.3000	105	60.0000	62.1	104	63.1	105	64.4	107
Barium	50.0	50.0000	100	60.0000	58.0	97	57.5	96	59.4	99
Beryllium	50.0	51.2000	102	60.0000	59.7	100	62.3	104	63.4	106
Cadmium	50.0	51.6000	103	60.0000	61.6	103	62.5	104	65.2	109
Calcium	5000	5190.0000	104	6000.0000	6070	101	6100	102	6240	104
Chromium	50.0	51.3000	103	60.0000	61.4	102	61.1	102	63.3	106
Cobalt	50.0	51.9000	104	60.0000	62.7	104	63.1	105	65.1	108
Copper	50.0	52.7000	105	60.0000	63.4	106	64.3	107	65.2	109
Iron	5000	5150.0000	103	6000.0000	6240	104	6170	103	6420	107
Lead	50.0	51.2000	102	60.0000	64.0	107	60.9	102	62.8	105
Magnesium	5000	5100.0000	102	6000.0000	6040	101	6140	102	6220	104
Manganese	50.0	51.4000	103	60.0000	60.9	102	60.8	101	63.0	105
Nickel	50.0	52.1000	104	60.0000	62.5	104	63.6	106	65.1	108
Potassium	5000	5160.0000	103	6000.0000	6130	102	6320	105	6420	107
Selenium	50.0	52.8000	106	60.0000	61.7	103	63.6	106	64.2	107
Silver	50.0	53.1000	106	60.0000	61.0	102	62.3	104	64.6	108
Sodium	5000	5220.0000	104	6000.0000	6060	101	6150	102	6240	104
Thallium	50.0	52.2000	104	60.0000	63.2	105	60.0	100	62.1	104
Vanadium	50.0	52.3000	105	60.0000	61.2	102	60.7	101	63.1	105
Zinc	50.0	52.5000	105	60.0000	63.5	106	64.7	108	66.0	110

Acceptance Criteria:

ICV:	95-105%	(Methods 200.7, 245.1)
	90-110%	(Methods 200.8, 6010, 6020, 7470, 7471, 7474)
	85-115%	(Method 1631)
CCV:	90-110%	(Methods 200.7, 245.1, 6010, 6020, 7474)
	85-115%	(Methods 200.8, 1631)
	80-120%	(Methods 7470, 7471)

Form 2A
Initial and Continuing Calibration Verification

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Instrument ID	: ICPMSQ	**Units**	: ug/l

	Initial Calibration			Continuing Calibration(s)						
Lab ID :				R1906420-11			R1906420-13		R1906420-15	
Date Analyzed:				12/02/24 11:31			12/02/24 12:45		12/02/24 13:54	
Parameter	**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Aluminum				60.0000	61.0	102	63.3	106	65.2	109
Antimony				60.0000	62.1	104	62.7	104	64.0	107
Arsenic				60.0000	63.8	106	64.7	108	66.9	112
Barium				60.0000	59.1	98	60.9	102	60.9	102
Beryllium				60.0000	63.8	106	64.9	108	65.6	109
Cadmium				60.0000	64.2	107	65.8	110	66.2	110
Calcium				6000.0000	6250	104	6280	105	6490	108
Chromium				60.0000	62.0	103	63.3	106	64.6	108
Cobalt				60.0000	64.0	107	66.0	110	69.0	115
Copper				60.0000	64.3	107	64.2	107	69.8	116
Iron				6000.0000	6250	104	6470	108	6760	113
Lead				60.0000	63.0	105	61.6	103	65.6	109
Magnesium				6000.0000	6190	103	6290	105	6480	108
Manganese				60.0000	61.4	102	62.8	105	64.1	107
Nickel				60.0000	63.6	106	65.8	110	68.5	114
Potassium				6000.0000	6380	106	6410	107	6760	113
Selenium				60.0000	64.0	107	64.8	108	66.3	110
Silver				60.0000	63.7	106	65.8	110	66.1	110
Sodium				6000.0000	6220	104	6320	105	6500	108
Thallium				60.0000	60.6	101	60.5	101	63.8	106
Vanadium				60.0000	62.0	103	63.6	106	65.0	108
Zinc				60.0000	65.0	108	65.5	109	68.7	114

Acceptance Criteria:

ICV:	95-105%	(Methods 200.7, 245.1)
	90-110%	(Methods 200.8, 6010, 6020, 7470, 7471, 7474)
	85-115%	(Method 1631)
CCV:	90-110%	(Methods 200.7, 245.1, 6010, 6020, 7474)
	85-115%	(Methods 200.8, 1631)
	80-120%	(Methods 7470, 7471)

Form 2A
Initial and Continuing Calibration Verification

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Instrument ID	: ICPMSQ	**Units**	: ug/l

	Initial Calibration			Continuing Calibration(s)						
Lab ID :				R1906420-17						
Date Analyzed :				12/02/24 14:44						
Parameter	**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Aluminum				60.0000	63.8	106				
Antimony				60.0000	64.8	108				
Arsenic				60.0000	66.7	111				
Barium				60.0000	60.6	101				
Beryllium				60.0000	64.8	108				
Cadmium				60.0000	66.1	110				
Calcium				6000.0000	6260	104				
Chromium				60.0000	63.5	106				
Cobalt				60.0000	66.6	111				
Copper				60.0000	67.2	112				
Iron				6000.0000	6500	108				
Lead				60.0000	65.2	109				
Magnesium				6000.0000	6340	106				
Manganese				60.0000	62.9	105				
Nickel				60.0000	66.4	111				
Potassium				6000.0000	6500	108				
Selenium				60.0000	66.2	110				
Silver				60.0000	65.9	110				
Sodium				6000.0000	6400	107				
Thallium				60.0000	63.8	106				
Vanadium				60.0000	64.2	107				
Zinc				60.0000	66.3	110				

Acceptance Criteria:

ICV:	**95-105%**	**(Methods 200.7, 245.1)**
	90-110%	**(Methods 200.8, 6010, 6020, 7470, 7471, 7474)**
	85-115%	**(Method 1631)**
CCV:	**90-110%**	**(Methods 200.7, 245.1, 6010, 6020, 7474)**
	85-115%	**(Methods 200.8, 1631)**
	80-120%	**(Methods 7470, 7471)**

Form 2A
Initial and Continuing Calibration Verification

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Instrument ID	: ICPMSQ	**Units**	: ug/l

	Initial Calibration			Continuing Calibration(s)						
Lab ID :	R1906420-19			R1906420-22			R1906420-24		R1906420-26	
Date Analyzed :	12/02/24 15:49			12/02/24 16:18			12/02/24 17:21		12/02/24 17:56	
Parameter	**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Aluminum	50.0	50.9000	102	60.0000	58.1	97	61.0	102	61.4	102
Antimony	50.0	51.2000	102	60.0000	60.1	100	61.0	102	60.9	102
Arsenic	50.0	52.0000	104	60.0000	59.4	99	59.7	100	60.5	101
Barium	50.0	51.8000	104	60.0000	60.0	100	60.9	102	61.0	102
Beryllium	50.0	50.7000	101	60.0000	59.1	98	59.4	99	60.4	101
Cadmium	50.0	52.0000	104	60.0000	59.8	100	60.1	100	59.6	99
Calcium	5000	5100.0000	102	6000.0000	5740	96	5900	98	5810	97
Chromium	50.0	50.8000	102	60.0000	58.9	98	59.0	98	59.4	99
Cobalt	50.0	51.6000	103	60.0000	59.3	99	60.7	101	60.9	102
Copper	50.0	51.5000	103	60.0000	59.5	99	61.4	102	61.3	102
Iron	5000	5070.0000	101	6000.0000	5910	98	5960	99	6000	100
Lead	50.0	53.0000	106	60.0000	59.4	99	59.0	98	58.6	98
Magnesium	5000	5110.0000	102	6000.0000	5750	96	5900	98	5880	98
Manganese	50.0	51.6000	103	60.0000	58.6	98	58.6	98	59.5	99
Nickel	50.0	52.0000	104	60.0000	60.1	100	61.4	102	61.9	103
Potassium	5000	5050.0000	101	6000.0000	5720	95	5860	98	5990	100
Selenium	50.0	52.1000	104	60.0000	59.8	100	60.2	100	60.6	101
Silver	50.0	53.4000	107	60.0000	58.9	98	59.6	99	59.7	100
Sodium	5000	5150.0000	103	6000.0000	5780	96	5960	99	5950	99
Thallium	50.0	52.0000	104	60.0000	58.6	98	58.4	97	58.3	97
Vanadium	50.0	51.2000	102	60.0000	58.5	98	58.8	98	59.6	99
Zinc	50.0	52.1000	104	60.0000	60.8	101	61.6	103	61.6	103

Acceptance Criteria:

ICV:	95-105%	(Methods 200.7, 245.1)
	90-110%	(Methods 200.8, 6010, 6020, 7470, 7471, 7474)
	85-115%	(Method 1631)
CCV:	90-110%	(Methods 200.7, 245.1, 6010, 6020, 7474)
	85-115%	(Methods 200.8, 1631)
	80-120%	(Methods 7470, 7471)

Form 2A
Initial and Continuing Calibration Verification

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Instrument ID	: ICPMSQ	**Units**	: ug/l

	Initial Calibration			Continuing Calibration(s)						
Lab ID :				R1906420-28			R1906420-30			
Date Analyzed :				12/02/24 19:13			12/02/24 20:20			
Parameter	**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Aluminum				60.0000	62.3	104	62.7	104		
Antimony				60.0000	62.2	104	63.8	106		
Arsenic				60.0000	61.7	103	62.4	104		
Barium				60.0000	62.5	104	64.4	107		
Beryllium				60.0000	60.8	101	60.7	101		
Cadmium				60.0000	61.5	102	63.2	105		
Calcium				6000.0000	6070	101	6050	101		
Chromium				60.0000	60.6	101	61.5	102		
Cobalt				60.0000	62.3	104	62.7	104		
Copper				60.0000	62.4	104	62.9	105		
Iron				6000.0000	6100	102	6190	103		
Lead				60.0000	60.2	100	60.0	100		
Magnesium				6000.0000	6020	100	6010	100		
Manganese				60.0000	60.5	101	62.1	104		
Nickel				60.0000	63.0	105	63.9	106		
Potassium				6000.0000	6020	100	6100	102		
Selenium				60.0000	62.2	104	62.3	104		
Silver				60.0000	60.9	102	62.7	104		
Sodium				6000.0000	6150	102	6140	102		
Thallium				60.0000	60.4	101	59.7	100		
Vanadium				60.0000	60.9	102	60.9	102		
Zinc				60.0000	63.1	105	63.9	106		

Acceptance Criteria:

ICV:	95-105%	(Methods 200.7, 245.1)
	90-110%	(Methods 200.8, 6010, 6020, 7470, 7471, 7474)
	85-115%	(Method 1631)
CCV:	90-110%	(Methods 200.7, 245.1, 6010, 6020, 7474)
	85-115%	(Methods 200.8, 1631)
	80-120%	(Methods 7470, 7471)

Form 2A
Initial and Continuing Calibration Verification

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Instrument ID	: ICPMSQ2	**Units**	: ug/l

	Initial Calibration			Continuing Calibration(s)						
Lab ID :	R1906801-1			R1906801-4			R1906801-6		R1906801-9	
Date Analyzed :	12/03/24 07:17			12/03/24 07:42			12/03/24 08:33		12/03/24 09:44	
Parameter	**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Aluminum	50.0	51.6000	103	60.0000	56.1	94	54.6	91	56.7	94
Antimony	50.0	50.2000	100	60.0000	61.5	102	61.2	102	56.9	95
Arsenic	50.0	50.4000	101	60.0000	60.7	101	61.2	102	59.5	99
Barium	50.0	50.4000	101	60.0000	60.8	101	59.5	99	56.0	93
Beryllium	50.0	50.7000	101	60.0000	63.0	105	61.1	102	56.9	95
Cadmium	50.0	50.4000	101	60.0000	62.3	104	61.4	102	57.8	96
Calcium	5000	5110.0000	102	6000.0000	5770	96	5630	94	5830	97
Chromium	50.0	50.6000	101	60.0000	60.6	101	59.0	98	57.2	95
Cobalt	50.0	51.0000	102	60.0000	62.4	104	60.0	100	58.6	98
Copper	50.0	51.6000	103	60.0000	63.0	105	63.1	105	58.6	98
Iron	5000	5070.0000	101	6000.0000	6060	101	5950	99	5780	96
Lead	50.0	50.5000	101	60.0000	62.8	105	59.9	100	56.9	95
Magnesium	5000	4990.0000	100	6000.0000	5880	98	5900	98	5530	92
Manganese	50.0	52.4000	105	60.0000	60.9	102	60.4	101	58.3	97
Nickel	50.0	50.4000	101	60.0000	62.6	104	61.3	102	59.3	99
Potassium	5000	4910.0000	98	6000.0000	5800	97	5840	97	5700	95
Selenium	50.0	50.2000	100	60.0000	56.7	94	58.9	98	58.8	98
Silver	50.0	52.4000	105	60.0000	62.2	104	59.9	100	57.5	96
Sodium	5000	5000.0000	100	6000.0000	5960	99	5960	99	5610	94
Thallium	50.0	50.3000	101	60.0000	62.3	104	59.8	100	56.8	95
Vanadium	50.0	50.7000	101	60.0000	58.5	98	58.4	97	57.0	95
Zinc	50.0	54.2000	108	60.0000	62.6	104	61.9	103	59.5	99

Acceptance Criteria:

ICV:	95-105%	(Methods 200.7, 245.1)
	90-110%	(Methods 200.8, 6010, 6020, 7470, 7471, 7474)
	85-115%	(Method 1631)
CCV:	90-110%	(Methods 200.7, 245.1, 6010, 6020, 7474)
	85-115%	(Methods 200.8, 1631)
	80-120%	(Methods 7470, 7471)

Form 2A
Initial and Continuing Calibration Verification

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Instrument ID	: ICPMSQ2	**Units**	: ug/l

	Initial Calibration			Continuing Calibration(s)						
Lab ID :				R1906801-11			R1906801-13		R1906801-15	
Date Analyzed :				12/03/24 10:39			12/03/24 11:00		12/03/24 11:55	
Parameter	**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Aluminum				60.0000	57.9	96	59.0	98	58.6	98
Antimony				60.0000	57.8	96	57.3	96	56.0	93
Arsenic				60.0000	60.6	101	58.6	98	55.8	93
Barium				60.0000	58.1	97	56.6	94	57.6	96
Beryllium				60.0000	51.5	86	57.9	96	58.1	97
Cadmium				60.0000	57.9	96	57.3	96	56.9	95
Calcium				6000.0000	5920	99	6040	101	6520	109
Chromium				60.0000	59.2	99	58.0	97	56.5	94
Cobalt				60.0000	60.2	100	58.0	97	55.5	92
Copper				60.0000	60.9	102	58.1	97	56.9	95
Iron				6000.0000	5930	99	5860	98	5660	94
Lead				60.0000	56.4	94	56.5	94	57.3	96
Magnesium				6000.0000	5850	98	5960	99	6040	101
Manganese				60.0000	59.0	98	59.0	98	58.8	98
Nickel				60.0000	61.4	102	59.8	100	57.0	95
Potassium				6000.0000	6060	101	5950	99	6670	111
Selenium				60.0000	57.2	95	55.6	93	58.5	98
Silver				60.0000	56.5	94	57.7	96	55.8	93
Sodium				6000.0000	6090	102	6000	100	8840	147
Thallium				60.0000	55.2	92	55.9	93	55.5	92
Vanadium				60.0000	58.5	98	56.5	94	57.4	96
Zinc				60.0000	61.0	102	59.7	100	59.0	98

Acceptance Criteria:

ICV:	**95-105%**	**(Methods 200.7, 245.1)**
	90-110%	**(Methods 200.8, 6010, 6020, 7470, 7471, 7474)**
	85-115%	**(Method 1631)**
CCV:	**90-110%**	**(Methods 200.7, 245.1, 6010, 6020, 7474)**
	85-115%	**(Methods 200.8, 1631)**
	80-120%	**(Methods 7470, 7471)**

Form 2A
Initial and Continuing Calibration Verification

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Instrument ID	: ICPMSQ2	**Units**	: ug/l

	Initial Calibration			Continuing Calibration(s)						
Lab ID :				R1906801-17			R1906801-19		R1906801-22	
Date Analyzed :				12/03/24 12:35			12/03/24 13:30		12/03/24 14:37	
Parameter	**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Aluminum				60.0000	56.2	94	54.8	91	54.8	91
Antimony				60.0000	55.5	92	55.3	92	54.8	91
Arsenic				60.0000	55.2	92	59.2	99	60.1	100
Barium				60.0000	56.8	95	56.6	94	55.5	92
Beryllium				60.0000	57.4	96	59.2	99	56.9	95
Cadmium				60.0000	56.7	94	56.0	93	57.0	95
Calcium				6000.0000	5180	86	5550	92	5590	93
Chromium				60.0000	53.8	90	55.6	93	56.6	94
Cobalt				60.0000	56.1	94	58.5	98	59.1	98
Copper				60.0000	56.7	94	60.0	100	60.6	101
Iron				6000.0000	5740	96	5930	99	5890	98
Lead				60.0000	55.8	93	57.0	95	57.0	95
Magnesium				6000.0000	5530	92	5750	96	5600	93
Manganese				60.0000	55.7	93	59.4	99	58.0	97
Nickel				60.0000	56.7	94	60.1	100	60.6	101
Potassium				6000.0000	5390	90	5760	96	5580	93
Selenium				60.0000	55.2	92	59.5	99	59.8	100
Silver				60.0000	57.0	95	56.0	93	56.9	95
Sodium				6000.0000	5980	100	6470	108	6400	107
Thallium				60.0000	55.9	93	56.0	93	56.4	94
Vanadium				60.0000	53.8	90	55.5	92	55.3	92
Zinc				60.0000	56.7	94	60.7	101	59.8	100

Acceptance Criteria:

ICV:	95-105%	(Methods 200.7, 245.1)
	90-110%	(Methods 200.8, 6010, 6020, 7470, 7471, 7474)
	85-115%	(Method 1631)
CCV:	90-110%	(Methods 200.7, 245.1, 6010, 6020, 7474)
	85-115%	(Methods 200.8, 1631)
	80-120%	(Methods 7470, 7471)

Form 2A
Initial and Continuing Calibration Verification

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Instrument ID	: ICPMSQ2	**Units**	: ug/l

	Initial Calibration			Continuing Calibration(s)						
Lab ID :	R1906801-24			R1906801-27			R1906801-29		R1906801-31	
Date Analyzed :	12/03/24 17:16			12/03/24 17:45			12/03/24 18:40		12/03/24 19:46	
Parameter	**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Aluminum	50.0	53.4000	107	60.0000	63.1	105	61.0	102	58.8	98
Antimony	50.0	50.2000	100	60.0000	58.6	98	58.7	98	58.0	97
Arsenic	50.0	49.3000	99	60.0000	61.5	102	59.2	99	58.0	97
Barium	50.0	51.1000	102	60.0000	61.2	102	60.0	100	59.1	98
Beryllium	50.0	51.6000	103	60.0000	58.4	97	57.4	96	55.9	93
Cadmium	50.0	49.3000	99	60.0000	58.7	98	57.8	96	59.0	98
Calcium	5000	5160.0000	103	6000.0000	6220	104	6370	106	6170	103
Chromium	50.0	51.5000	103	60.0000	61.2	102	63.6	106	62.7	104
Cobalt	50.0	51.6000	103	60.0000	58.3	97	64.8	108	62.4	104
Copper	50.0	51.3000	103	60.0000	57.2	95	63.3	106	60.5	101
Iron	5000	5340.0000	107	6000.0000	6130	102	6540	109	6360	106
Lead	50.0	50.1000	100	60.0000	61.1	102	59.2	99	58.1	97
Magnesium	5000	5160.0000	103	6000.0000	6370	106	6410	107	6290	105
Manganese	50.0	53.1000	106	60.0000	60.6	101	65.0	108	63.6	106
Nickel	50.0	50.6000	101	60.0000	56.4	94	61.5	102	60.8	101
Potassium	5000	5210.0000	104	6000.0000	6440	107	6370	106	6290	105
Selenium	50.0	48.8000	98	60.0000	58.5	98	57.9	96	53.7	90
Silver	50.0	51.6000	103	60.0000	59.2	99	58.5	98	59.2	99
Sodium	5000	5140.0000	103	6000.0000	6400	107	6260	104	6200	103
Thallium	50.0	49.9000	100	60.0000	60.3	100	59.0	98	58.7	98
Vanadium	50.0	52.1000	104	60.0000	60.1	100	62.0	103	61.6	103
Zinc	50.0	54.0000	108	60.0000	54.6	91	60.2	100	59.5	99

Acceptance Criteria:

ICV:	95-105%	(Methods 200.7, 245.1)
	90-110%	(Methods 200.8, 6010, 6020, 7470, 7471, 7474)
	85-115%	(Method 1631)
CCV:	90-110%	(Methods 200.7, 245.1, 6010, 6020, 7474)
	85-115%	(Methods 200.8, 1631)
	80-120%	(Methods 7470, 7471)

Form 2A
Initial and Continuing Calibration Verification

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Instrument ID	: ICPMSQ2	**Units**	: ug/l

	Initial Calibration			Continuing Calibration(s)						
Lab ID :				R1906801-33			R1906801-35			
Date Analyzed :				12/03/24 20:39			12/03/24 21:06			
Parameter	**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Aluminum				60.0000	64.6	108	61.8	103		
Antimony				60.0000	60.0	100	58.6	98		
Arsenic				60.0000	62.4	104	62.7	104		
Barium				60.0000	61.6	103	60.0	100		
Beryllium				60.0000	56.8	95	56.4	94		
Cadmium				60.0000	59.5	99	57.6	96		
Calcium				6000.0000	6220	104	6190	103		
Chromium				60.0000	64.3	107	65.9	110		
Cobalt				60.0000	65.9	110	65.3	109		
Copper				60.0000	63.6	106	63.9	106		
Iron				6000.0000	6560	109	6690	112		
Lead				60.0000	59.5	99	58.7	98		
Magnesium				6000.0000	6480	108	6500	108		
Manganese				60.0000	60.2	100	65.0	108		
Nickel				60.0000	65.5	109	63.8	106		
Potassium				6000.0000	6370	106	6650	111		
Selenium				60.0000	61.8	103	63.2	105		
Silver				60.0000	59.4	99	58.1	97		
Sodium				6000.0000	6350	106	6330	106		
Thallium				60.0000	59.7	100	58.6	98		
Vanadium				60.0000	61.6	103	65.0	108		
Zinc				60.0000	63.6	106	62.8	105		

Acceptance Criteria:

ICV:	**95-105%**	**(Methods 200.7, 245.1)**
	90-110%	**(Methods 200.8, 6010, 6020, 7470, 7471, 7474)**
	85-115%	**(Method 1631)**
CCV:	**90-110%**	**(Methods 200.7, 245.1, 6010, 6020, 7474)**
	85-115%	**(Methods 200.8, 1631)**
	80-120%	**(Methods 7470, 7471)**

Form 3
Blanks

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Instrument ID	: ICPMSQ2		

	Initial Calibration Blank		Continuing Calibration Blank(s)						Preparation Blank	
Lab ID :	R1904880-2		R1904880-6		R1904880-8		R1904880-11		WG2002206-1	
Date Analyzed :	11/26/24 07:49		11/26/24 08:16		11/26/24 08:29		11/26/24 09:28		11/26/24 17:51	
Parameter	ug/l	Q	ug/l	Q	ug/l	Q	ug/l	Q	mg/l	Q
Aluminum	3.27	U	3.89	J	3.27	U	3.27	U	0.00327	U
Antimony	0.429	U	0.429	U	0.429	U	0.429	U	0.00042	U
Arsenic	0.165	U	0.274	J	0.184	J	0.165	U	0.00016	U
Barium	0.173	U	0.645		0.223	J	0.173	U	0.00017	U
Beryllium	0.115	J	0.107	U	0.107	U	0.107	U	0.00010	U
Cadmium	0.0599	U	0.0599	U	0.0599	U	0.0599	U	0.00005	U
Chromium	0.178	U	0.178	U	0.178	U	0.178	U	0.00017	U
Cobalt	0.163	U	0.163	U	0.163	U	0.163	U	0.00016	U
Copper	0.384	U	1.29		0.602	J	0.384	U	0.00038	U
Iron	19.1	U	22.5	J	19.1	U	19.1	U	0.0191	U
Lead	0.343	U	0.819	J	0.343	U	0.343	U	0.00034	U
Magnesium	24.2	U	24.2	U	24.2	U	24.2	U	0.0242	U
Manganese	0.440	U	0.665	J	0.440	U	0.440	U	0.00044	U
Nickel	0.556	U	0.656	J	0.556	U	0.556	U	0.00055	U
Selenium	1.73	U	1.73	U	1.73	U	1.73	U	0.00173	U
Silver	0.163	U	0.163	U	0.163	U	0.163	U	0.00016	U
Sodium	29.3	U	29.3	U	29.3	U	116.	J	0.0293	U
Thallium	0.603	J	0.598	J	0.452	J	0.551	J	0.00014	U
Vanadium	1.57	U	1.57	U	1.57	U	1.57	U	0.00157	U
Zinc	3.41	U	3.41	U	3.41	U	3.41	U	0.00341	U

Form 3
Blanks

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Instrument ID	: ICPMSQ2		

	Initial Calibration Blank		Continuing Calibration Blank(s)						Preparation Blank	
Lab ID :	R1904880-3		R1904880-13		R1904880-15		R1904880-17			
Date Analyzed :	11/26/24 07:54		11/26/24 10:39		11/26/24 11:30		11/26/24 12:29			
Parameter	ug/l	Q	ug/l	Q	ug/l	Q	ug/l	Q		Q
Aluminum	3.27	U	3.27	U	3.27	U	3.27	U		
Antimony	0.429	U	0.429	U	0.429	U	0.429	U		
Arsenic	0.165	U	0.165	U	0.166	J	0.165	U		
Barium	0.173	U	0.173	U	0.173	U	0.173	U		
Beryllium	0.107	U	0.107	U	0.107	U	0.107	U		
Cadmium	0.0599	U	0.0599	U	0.0599	U	0.0599	U		
Chromium	0.178	U	0.178	U	0.178	U	0.178	U		
Cobalt	0.163	U	0.163	U	0.163	U	0.163	U		
Copper	0.384	U	0.384	U	0.384	U	0.384	U		
Iron	19.1	U	19.1	U	19.1	U	19.1	U		
Lead	0.343	U	0.343	U	0.343	U	0.343	U		
Magnesium	24.2	U	24.2	U	24.2	U	24.2	U		
Manganese	0.440	U	0.440	U	0.440	U	0.440	U		
Nickel	0.556	U	0.556	U	0.556	U	0.556	U		
Selenium	1.73	U	1.73	U	1.73	U	1.73	U		
Silver	0.163	U	0.163	U	0.163	U	0.163	U		
Sodium	29.3	U	85.9	J	69.3	J	29.3	U		
Thallium	0.143	U	0.551	J	0.573	J	0.573	J		
Vanadium	1.57	U	1.57	U	1.57	U	1.57	U		
Zinc	3.41	U	3.41	U	3.41	U	3.41	U		

Form 3
Blanks

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Instrument ID	: ICPMSQ2		

	Initial Calibration Blank		Continuing Calibration Blank(s)						Preparation Blank	
Lab ID :			R1904880-19		R1904880-21		R1904880-23			
Date Analyzed :			11/26/24 13:28		11/26/24 14:19		11/26/24 15:24			
Parameter	ug/l	Q	ug/l	Q	ug/l	Q	ug/l	Q		Q
Aluminum			3.27	U	3.27	U	3.27	U		
Antimony			0.429	U	0.429	U	0.429	U		
Arsenic			0.165	U	0.165	U	0.165	U		
Barium			0.173	U	0.173	U	0.173	U		
Beryllium			0.107	U	0.107	U	0.107	U		
Cadmium			0.0599	U	0.0599	U	0.0599	U		
Chromium			0.178	U	0.178	U	0.178	U		
Cobalt			0.163	U	0.163	U	0.163	U		
Copper			0.384	U	0.384	U	0.384	U		
Iron			19.1	U	19.1	U	21.5	J		
Lead			0.343	U	0.343	U	0.343	U		
Magnesium			24.2	U	24.2	U	24.2	U		
Manganese			0.440	U	0.440	U	0.529	J		
Nickel			0.556	U	0.556	U	0.556	U		
Selenium			1.73	U	1.73	U	1.73	U		
Silver			0.163	U	0.163	U	0.163	U		
Sodium			29.3	U	29.3	U	29.3	U		
Thallium			0.560	J	0.551	J	0.589	J		
Vanadium			1.57	U	1.57	U	1.57	U		
Zinc			3.41	U	3.41	U	3.41	U		

Form 3
Blanks

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Instrument ID	: ICPMSQ2		

	Initial Calibration Blank		Continuing Calibration Blank(s)						Preparation Blank	
Lab ID :			R1904880-25		R1904880-27		R1904880-29			
Date Analyzed :			11/26/24 15:35		11/26/24 16:32		11/26/24 17:07			
Parameter	ug/l	Q	ug/l	Q	ug/l	Q	ug/l	Q		Q
Aluminum			3.27	U	3.27	U	3.27	U		
Antimony			0.429	U	0.429	U	0.429	U		
Arsenic			0.165	U	0.165	U	0.165	U		
Barium			0.173	U	0.173	U	0.173	U		
Beryllium			0.107	U	0.120	J	0.107	U		
Cadmium			0.0599	U	0.0599	U	0.0599	U		
Chromium			0.178	U	0.178	U	0.178	U		
Cobalt			0.163	U	0.163	U	0.163	U		
Copper			0.384	U	0.384	U	0.384	U		
Iron			19.1	U	19.1	U	19.1	U		
Lead			0.343	U	0.343	U	0.343	U		
Magnesium			24.2	U	24.2	U	24.2	U		
Manganese			0.440	U	0.440	U	0.440	U		
Nickel			0.556	U	0.556	U	0.556	U		
Selenium			1.73	U	1.73	U	1.73	U		
Silver			0.163	U	0.163	U	0.163	U		
Sodium			29.3	U	29.3	U	29.3	U		
Thallium			0.541	J	0.565	J	0.375	J		
Vanadium			1.57	U	1.57	U	1.57	U		
Zinc			3.41	U	3.41	U	3.41	U		

Form 3
Blanks

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Instrument ID	: ICPMSQ2		

	Initial Calibration Blank		Continuing Calibration Blank(s)						Preparation Blank	
Lab ID :			R1904880-31							
Date Analyzed :			11/26/24 18:27							
Parameter	ug/l	Q	ug/l	Q	ug/l	Q	ug/l	Q		Q
Aluminum			3.27	U						
Antimony			0.429	U						
Arsenic			0.165	U						
Barium			0.173	U						
Beryllium			0.107	U						
Cadmium			0.0599	U						
Chromium			0.178	U						
Cobalt			0.163	U						
Copper			0.384	U						
Iron			19.1	U						
Lead			0.343	U						
Magnesium			24.2	U						
Manganese			0.440	U						
Nickel			0.556	U						
Selenium			1.73	U						
Silver			0.163	U						
Sodium			29.3	U						
Thallium			0.562	J						
Vanadium			1.57	U						
Zinc			3.41	U						

Form 3
Blanks

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Instrument ID	: ICPMSQ		

	Initial Calibration Blank		Continuing Calibration Blank(s)						Preparation Blank	
Lab ID :	R1906420-2		R1906420-5		R1906420-7		R1906420-9		WG2002206-1	
Date Analyzed :	12/02/24 08:33		12/02/24 09:02		12/02/24 10:18		12/02/24 10:36		12/02/24 19:34	
Parameter	ug/l	Q	ug/l	Q	ug/l	Q	ug/l	Q	mg/l	Q
Aluminum	3.27	U	3.27	U	3.27	U	3.27	U		
Antimony	0.429	U	0.429	U	0.429	U	0.429	U		
Arsenic	0.165	U	0.165	U	0.165	U	0.165	U		
Barium	0.173	U	0.173	U	0.173	U	0.173	U		
Beryllium	0.107	U	0.107	U	0.107	U	0.107	U		
Cadmium	0.0599	U	0.0599	U	0.0599	U	0.0599	U		
Calcium	39.4	U	39.4	U	39.4	U	39.4	U	0.0394	U
Chromium	0.178	U	0.178	U	0.178	U	0.178	U		
Cobalt	0.163	U	0.163	U	0.163	U	0.163	U		
Copper	0.384	U	0.384	U	0.384	U	0.384	U		
Iron	19.1	U	19.1	U	19.1	U	19.1	U		
Lead	0.343	U	0.343	U	0.343	U	0.343	U		
Magnesium	24.2	U	24.2	U	24.2	U	24.2	U		
Manganese	0.440	U	0.440	U	0.440	U	0.440	U		
Nickel	0.556	U	0.556	U	0.556	U	0.556	U		
Potassium	30.9	U	30.9	U	30.9	U	30.9	U	0.0309	U
Selenium	1.73	U	1.73	U	1.73	U	1.73	U		
Silver	0.163	U	0.163	U	0.163	U	0.163	U		
Sodium	29.3	U	29.3	U	29.3	U	29.3	U		
Thallium	0.333	J	0.351	J	0.380	J	0.367	J		
Vanadium	1.57	U	1.57	U	1.57	U	1.57	U		
Zinc	3.41	U	3.41	U	3.41	U	3.41	U		

Form 3
Blanks

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Instrument ID	: ICPMSQ		

	Initial Calibration Blank		Continuing Calibration Blank(s)						Preparation Blank	
Lab ID :	R1906420-20		R1906420-12		R1906420-14		R1906420-16			
Date Analyzed :	12/02/24 15:54		12/02/24 11:35		12/02/24 12:49		12/02/24 13:58			
Parameter	ug/l	Q	ug/l	Q	ug/l	Q	ug/l	Q		Q
Aluminum	3.27	U	3.27	U	3.27	U	3.27	U		
Antimony	0.429	U	0.429	U	0.429	U	0.429	U		
Arsenic	0.165	U	0.165	U	0.165	U	0.165	U		
Barium	0.173	U	0.173	U	0.173	U	0.173	U		
Beryllium	0.107	U	0.107	U	0.107	U	0.107	U		
Cadmium	0.0599	U	0.0599	U	0.0599	U	0.0599	U		
Calcium	39.4	U	39.4	U	39.4	U	39.4	U		
Chromium	0.178	U	0.178	U	0.178	U	0.178	U		
Cobalt	0.163	U	0.163	U	0.163	U	0.163	U		
Copper	0.384	U	0.384	U	0.384	U	0.384	U		
Iron	19.1	U	19.1	U	19.1	U	19.1	U		
Lead	0.343	U	0.343	U	0.343	U	0.343	U		
Magnesium	24.2	U	24.2	U	24.2	U	24.2	U		
Manganese	0.440	U	0.440	U	0.440	U	0.440	U		
Nickel	0.556	U	0.556	U	0.556	U	0.556	U		
Potassium	30.9	U	30.9	U	30.9	U	30.9	U		
Selenium	1.73	U	1.73	U	1.73	U	1.73	U		
Silver	0.163	U	0.163	U	0.163	U	0.163	U		
Sodium	29.3	U	32.4	J	31.0	J	29.3	U		
Thallium	0.429	J	0.392	J	0.379	J	0.411	J		
Vanadium	1.57	U	1.57	U	1.57	U	1.57	U		
Zinc	3.41	U	3.41	U	3.41	U	3.41	U		

Form 3
Blanks

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Instrument ID	: ICPMSQ		

	Initial Calibration Blank		Continuing Calibration Blank(s)						Preparation Blank	
Lab ID :			R1906420-18		R1906420-23		R1906420-25			
Date Analyzed :			12/02/24 14:48		12/02/24 16:23		12/02/24 17:26			
Parameter	ug/l	Q	ug/l	Q	ug/l	Q	ug/l	Q		Q
Aluminum			3.27	U	3.27	U	3.27	U		
Antimony			0.429	U	0.429	U	0.429	U		
Arsenic			0.165	U	0.165	U	0.165	U		
Barium			0.173	U	0.173	U	0.173	U		
Beryllium			0.107	U	0.107	U	0.107	U		
Cadmium			0.0599	U	0.0599	U	0.0599	U		
Calcium			39.4	U	39.4	U	39.4	U		
Chromium			0.178	U	0.178	U	0.178	U		
Cobalt			0.163	U	0.163	U	0.163	U		
Copper			0.384	U	0.384	U	0.384	U		
Iron			19.1	U	19.1	U	19.1	U		
Lead			0.343	U	0.343	U	0.343	U		
Magnesium			24.2	U	24.2	U	24.2	U		
Manganese			0.440	U	0.440	U	0.440	U		
Nickel			0.556	U	0.556	U	0.556	U		
Potassium			30.9	U	30.9	U	30.9	U		
Selenium			1.73	U	1.73	U	1.73	U		
Silver			0.163	U	0.163	U	0.163	U		
Sodium			29.3	U	29.3	U	32.8	J		
Thallium			0.450	J	0.389	J	0.355	J		
Vanadium			1.57	U	1.57	U	1.57	U		
Zinc			3.41	U	3.41	U	3.41	U		

Form 3
Blanks

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Instrument ID	: ICPMSQ		

	Initial Calibration Blank		Continuing Calibration Blank(s)						Preparation Blank	
Lab ID :			R1906420-27		R1906420-29		R1906420-31			
Date Analyzed :			12/02/24 18:01		12/02/24 19:18		12/02/24 20:25			
Parameter	ug/l	Q	ug/l	Q	ug/l	Q	ug/l	Q		Q
Aluminum			3.27	U	3.27	U	3.27	U		
Antimony			0.429	U	0.429	U	0.429	U		
Arsenic			0.165	U	0.165	U	0.165	U		
Barium			0.173	U	0.173	U	0.173	U		
Beryllium			0.107	U	0.107	U	0.107	U		
Cadmium			0.0599	U	0.0599	U	0.0599	U		
Calcium			39.4	U	39.4	U	39.4	U		
Chromium			0.178	U	0.178	U	0.178	U		
Cobalt			0.163	U	0.163	U	0.163	U		
Copper			0.384	U	0.384	U	0.384	U		
Iron			19.1	U	19.1	U	19.1	U		
Lead			0.343	U	0.343	U	0.343	U		
Magnesium			24.2	U	24.2	U	24.2	U		
Manganese			0.440	U	0.440	U	0.440	U		
Nickel			0.556	U	0.556	U	0.556	U		
Potassium			30.9	U	30.9	U	30.9	U		
Selenium			1.73	U	1.73	U	1.73	U		
Silver			0.163	U	0.163	U	0.163	U		
Sodium			34.4	J	29.3	U	29.3	U		
Thallium			0.388	J	0.389	J	0.393	J		
Vanadium			1.57	U	1.57	U	1.57	U		
Zinc			3.41	U	3.41	U	3.41	U		

Form 3
Blanks

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Instrument ID	: ICPMSQ2		

	Initial Calibration Blank		Continuing Calibration Blank(s)						Preparation Blank	
Lab ID :	R1906801-2		R1906801-5		R1906801-7		R1906801-10		WG2002010-1	
Date Analyzed :	12/03/24 07:22		12/03/24 07:46		12/03/24 08:38		12/03/24 09:49		12/03/24 19:01	
Parameter	ug/l	Q	ug/l	Q	ug/l	Q	ug/l	Q	mg/l	Q
Aluminum	3.27	U	3.27	U	3.27	U	3.27	U	0.00327	U
Antimony	0.429	U	0.429	U	0.429	U	0.429	U	0.00042	U
Arsenic	0.165	U	0.165	U	0.165	U	0.165	U	0.00016	U
Barium	0.173	U	0.173	U	0.173	U	0.173	U	0.00017	U
Beryllium	0.107	U	0.107	U	0.107	U	0.107	U	0.00010	U
Cadmium	0.0599	U	0.0599	U	0.0599	U	0.0599	U	0.00005	U
Calcium	39.4	U	39.4	U	39.4	U	39.4	U	0.0394	U
Chromium	0.178	U	0.178	U	0.178	U	0.178	U	0.00017	U
Cobalt	0.163	U	0.163	U	0.163	U	0.163	U	0.00016	U
Copper	0.384	U	0.542	J	0.384	U	0.384	U	0.00038	U
Iron	19.1	U	19.1	U	19.1	U	19.1	U	0.0191	U
Lead	0.343	U	0.343	U	0.343	U	0.343	U	0.00034	U
Magnesium	24.2	U	24.2	U	24.2	U	24.2	U	0.0242	U
Manganese	0.440	U	0.440	U	0.440	U	0.440	U	0.00044	U
Nickel	0.556	U	0.556	U	0.556	U	0.556	U	0.00055	U
Potassium	30.9	U	30.9	U	30.9	U	30.9	U	0.0309	U
Selenium	1.73	U	1.73	U	1.73	U	1.73	U	0.00173	U
Silver	0.163	U	0.163	U	0.163	U	0.163	U	0.00016	U
Sodium	29.3	U	29.3	U	29.3	U	29.3	U	0.0293	U
Thallium	0.189	J	0.217	J	0.241	J	0.238	J	0.00014	U
Vanadium	1.57	U	1.57	U	1.57	U	1.57	U	0.00157	U
Zinc	3.41	U	3.41	U	3.41	U	3.41	U	0.00341	U

Form 3
Blanks

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Instrument ID	: ICPMSQ2		

	Initial Calibration Blank		Continuing Calibration Blank(s)						Preparation Blank	
Lab ID :	R1906801-25		R1906801-12		R1906801-14		R1906801-16			
Date Analyzed :	12/03/24 17:21		12/03/24 10:44		12/03/24 11:05		12/03/24 12:00			
Parameter	ug/l	Q	ug/l	Q	ug/l	Q	ug/l	Q		Q
Aluminum	3.27	U	3.27	U	3.27	U	3.27	U		
Antimony	0.429	U	0.429	U	0.429	U	0.429	U		
Arsenic	0.165	U	0.165	U	0.199	J	0.165	U		
Barium	0.173	U	0.173	U	0.173	U	0.173	U		
Beryllium	0.228	J	0.299	J	0.120	J	0.456	J		
Cadmium	0.0599	U	0.0599	U	0.150	J	0.0599	U		
Calcium	39.4	U	39.4	U	39.4	U	39.4	U		
Chromium	0.178	U	0.178	U	0.178	U	0.178	U		
Cobalt	0.163	U	0.163	U	0.166	J	0.163	U		
Copper	0.384	U	0.384	U	0.384	U	0.384	U		
Iron	19.1	U	19.1	U	19.5	J	19.1	U		
Lead	0.343	U	0.343	U	0.343	U	0.343	U		
Magnesium	24.2	U	24.2	U	24.2	U	39.1	J		
Manganese	0.440	U	0.440	U	0.440	U	0.440	U		
Nickel	0.556	U	0.556	U	0.556	U	0.556	U		
Potassium	30.9	U	30.9	U	30.9	U	171.			
Selenium	1.73	U	1.73	U	1.73	U	1.73	U		
Silver	0.163	U	0.163	U	0.163	U	0.163	U		
Sodium	29.3	U	37.9	J	29.3	U	1270			
Thallium	0.236	J	0.243	J	0.372	J	0.220	J		
Vanadium	1.57	U	1.57	U	1.57	U	1.57	U		
Zinc	3.41	U	3.41	U	3.41	U	3.41	U		

Form 3
Blanks

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Instrument ID	: ICPMSQ2		

	Initial Calibration Blank		Continuing Calibration Blank(s)						Preparation Blank	
Lab ID :			R1906801-18		R1906801-20		R1906801-21			
Date Analyzed :			12/03/24 12:42		12/03/24 13:35		12/03/24 13:45			
Parameter	ug/l	Q	ug/l	Q	ug/l	Q	ug/l	Q		Q
Aluminum			3.27	U	3.27	U	3.27	U		
Antimony			0.429	U	0.429	U	0.429	U		
Arsenic			0.165	U	0.165	U	0.165	U		
Barium			0.173	U	0.173	U	0.173	U		
Beryllium			0.386	J	0.218	J	0.107	U		
Cadmium			0.0599	U	0.0599	U	0.0599	U		
Calcium			39.4	U	39.4	U	39.4	U		
Chromium			0.178	U	0.178	U	0.178	U		
Cobalt			0.163	U	0.163	U	0.163	U		
Copper			0.384	U	0.384	U	0.384	U		
Iron			19.1	U	19.1	U	19.1	U		
Lead			0.343	U	0.343	U	0.343	U		
Magnesium			24.2	U	24.2	U	24.2	U		
Manganese			0.440	U	0.440	U	0.440	U		
Nickel			0.556	U	0.556	U	0.556	U		
Potassium			39.3	J	71.3	J	30.9	U		
Selenium			1.73	U	1.73	U	1.73	U		
Silver			0.163	U	0.163	U	0.163	U		
Sodium			252.	J	546.		281.	J		
Thallium			0.192	J	0.233	J	0.143	U		
Vanadium			1.57	U	1.57	U	1.57	U		
Zinc			3.41	U	3.41	U	3.41	U		

Form 3
Blanks

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Instrument ID	: ICPMSQ2		

	Initial Calibration Blank		Continuing Calibration Blank(s)						Preparation Blank	
Lab ID :			R1906801-23		R1906801-28		R1906801-30			
Date Analyzed :			12/03/24 14:42		12/03/24 17:49		12/03/24 18:44			
Parameter	ug/l	Q	ug/l	Q	ug/l	Q	ug/l	Q		Q
Aluminum			3.27	U	3.27	U	3.27	U		
Antimony			0.429	U	0.429	U	0.429	U		
Arsenic			0.165	U	0.165	U	0.165	U		
Barium			0.173	U	0.205	J	0.173	U		
Beryllium			0.107	U	0.208	J	0.107	U		
Cadmium			0.0599	U	0.0599	U	0.0599	U		
Calcium			39.4	U	39.4	U	39.4	U		
Chromium			0.178	U	0.178	U	0.178	U		
Cobalt			0.163	U	0.163	U	0.163	U		
Copper			0.384	U	0.609	J	0.384	U		
Iron			19.1	U	19.1	U	19.1	U		
Lead			0.343	U	0.420	J	0.343	U		
Magnesium			24.2	U	24.2	U	24.2	U		
Manganese			0.440	U	0.440	U	0.440	U		
Nickel			0.556	U	0.556	U	0.556	U		
Potassium			49.8	J	30.9	U	30.9	U		
Selenium			1.73	U	1.73	U	1.73	U		
Silver			0.163	U	0.163	U	0.163	U		
Sodium			654.		29.3	U	29.3	U		
Thallium			0.207	J	0.238	J	0.245	J		
Vanadium			1.57	U	1.57	U	1.57	U		
Zinc			3.41	U	3.41	U	3.41	U		

Form 3
Blanks

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Instrument ID	: ICPMSQ2		

	Initial Calibration Blank		Continuing Calibration Blank(s)						Preparation Blank	
Lab ID :			R1906801-32		R1906801-34		R1906801-36			
Date Analyzed :			12/03/24 19:50		12/03/24 20:44		12/03/24 21:11			
Parameter	ug/l	Q	ug/l	Q	ug/l	Q	ug/l	Q		Q
Aluminum			3.27	U	3.27	U	3.27	U		
Antimony			0.429	U	0.429	U	0.429	U		
Arsenic			0.165	U	0.165	U	0.165	U		
Barium			0.173	U	0.173	U	0.173	U		
Beryllium			0.382	J	0.295	J	0.107	U		
Cadmium			0.0599	U	0.0599	U	0.0599	U		
Calcium			39.4	U	39.4	U	39.4	U		
Chromium			0.178	U	0.178	U	0.178	U		
Cobalt			0.163	U	0.163	U	0.163	U		
Copper			0.384	U	0.384	U	0.384	U		
Iron			19.1	U	19.1	U	19.1	U		
Lead			0.343	U	0.343	U	0.343	U		
Magnesium			24.2	U	24.2	U	24.2	U		
Manganese			0.440	U	0.440	U	0.440	U		
Nickel			0.556	U	0.556	U	0.556	U		
Potassium			30.9	U	30.9	U	30.9	U		
Selenium			1.73	U	1.73	U	1.73	U		
Silver			0.163	U	0.163	U	0.163	U		
Sodium			29.3	U	29.3	U	29.3	U		
Thallium			0.238	J	0.256	J	0.261	J		
Vanadium			1.57	U	1.57	U	1.57	U		
Zinc			3.41	U	3.41	U	3.41	U		

Form 4a
Interference Check Sample

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Instrument ID	: ICPMSQ2	**Concentration Units**	: ug/l

	True		Initial Found				Final Found			
Lab ID :			R1904880-4							
Analysis Date :			11/26/24 07:58							
Analyte	Sol. A	Sol. AB	Sol. A	%R	Sol. AB	%R	Sol. A	%R	Sol. AB	%R
Aluminum	100000		90600	91						
Antimony			0.208							
Arsenic			0.405							
Barium			1.18							
Beryllium			0.0248							
Cadmium			0.515							
Chromium			1.54							
Cobalt			2.06							
Copper			1.17							
Iron	250000		245000	98						
Lead			1.62							
Magnesium	100000		95800	96						
Manganese			4.42							
Nickel			2.87							
Selenium			3.71							
Silver			0.0358							
Sodium	250000		257000	103						
Thallium			0.0872							
Vanadium			0.0685							
Zinc			3.27							

Acceptance Criteria: Methods 200.7, 200.8, 6010, 6020

ICSA: 80-120%

ICSAB: 80-120%

Form 4a
Interference Check Sample

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Instrument ID	: ICPMSQ	**Concentration Units**	: ug/l

	True		Initial Found				Final Found			
Lab ID :			R1906420-3				R1906420-21			
Analysis Date :			12/02/24 08:43				12/02/24 16:04			
Analyte	**Sol. A**	**Sol. AB**	**Sol. A**	**%R**	**Sol. AB**	**%R**	**Sol. A**	**%R**	**Sol. AB**	**%R**
Aluminum	100000		108000	108			102000	102		
Antimony			0.218				0.205			
Arsenic			0.460				0.458			
Barium			1.46				1.44			
Beryllium			0.0273				0.0246			
Cadmium			0.800				0.736			
Calcium	300000		329000	110			307000	102		
Chromium			1.72				1.52			
Cobalt			2.41				2.19			
Copper			1.34				1.01			
Iron	250000		266000	106			239000	96		
Lead			1.80				1.70			
Magnesium	100000		107000	107			98800	99		
Manganese			5.10				4.55			
Nickel			2.89				2.80			
Potassium	100000		118000	118			106000	106		
Selenium			3.27				2.96			
Silver			0.0256				0.0258			
Sodium	250000		288000	115			268000	107		
Thallium			0.0692				0.0826			
Vanadium			0.0338				-0.169			
Zinc			3.05				2.69			

Acceptance Criteria: Methods 200.7, 200.8, 6010, 6020

ICSA: 80-120%

ICSAB: 80-120%

Form 4a
Interference Check Sample

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Instrument ID	: ICPMSQ2	**Concentration Units**	: ug/l

	True		Initial Found				Final Found			
Lab ID :			R1906801-3				R1906801-26			
Analysis Date :			12/03/24 07:28				12/03/24 17:32			
Analyte	**Sol. A**	**Sol. AB**	**Sol. A**	**%R**	**Sol. AB**	**%R**	**Sol. A**	**%R**	**Sol. AB**	**%R**
Aluminum	100000		95900	96			102000	102		
Antimony			0.184				0.242			
Arsenic			0.526				0.422			
Barium			1.31				1.50			
Beryllium			0.0262				0.0336			
Cadmium			0.524				0.501			
Calcium	300000		280000	93			308000	103		
Chromium			1.51				1.56			
Cobalt			2.04				2.05			
Copper			0.950				0.850			
Iron	250000		235000	94			238000	95		
Lead			1.54				1.58			
Magnesium	100000		95000	95			100000	100		
Manganese			4.35				4.43			
Nickel			2.74				1.22			
Potassium	100000		92600	93			103000	103		
Selenium			3.36				2.77			
Silver			0.0185				0.0256			
Sodium	250000		260000	104			269000	108		
Thallium			0.0524				0.0417			
Vanadium			-0.397				0.0487			
Zinc			3.44				2.63			

Acceptance Criteria: Methods 200.7, 200.8, 6010, 6020

ICSA: 80-120%

ICSAB: 80-120%

Form 5a
Matrix Spike

Client	: Alpha Geoscience	Lab Number	: L2467934
Project Name	: HUNTINGTON READY MIXED	Project Number	: 20116
Client Sample ID	: MW-5S	Matrix	: WATER
Lab Sample ID	: L2467934-05		
Matrix Spike	: WG2002206-3	MS Analysis Date	: 11/26/24 18:04
Matrix Spike Dup	: WG2002206-4	MSD Analysis Date	: 11/26/24 18:09

		Matrix Spike Sample				Matrix Spike Duplicate						
Parameter	Sample Conc. (mg/l)	Spike Added (mg/l)	Spike Conc. (mg/l)	%R		Spike Added (mg/l)	Spike Conc. (mg/l)	%R		RPD	Recovery Limits	RPD Limit
Aluminum, Total	0.0306	2	1.99	98		2	2.01	99		1	75-125	20
Antimony, Total	0.00125J	0.5	0.3523	70	Q	0.5	0.3582	72	Q	2	75-125	20
Arsenic, Total	ND	0.12	0.1177	98		0.12	0.1129	94		4	75-125	20
Barium, Total	0.00344	2	2.016	101		2	2.020	101		0	75-125	20
Beryllium, Total	0.00015J	0.05	0.04860	97		0.05	0.04660	93		4	75-125	20
Cadmium, Total	0.00007J	0.053	0.05057	95		0.053	0.04811	91		5	75-125	20
Chromium, Total	0.00043J	0.2	0.2017	101		0.2	0.1974	99		2	75-125	20
Cobalt, Total	ND	0.5	0.5208	104		0.5	0.4999	100		4	75-125	20
Copper, Total	ND	0.25	0.2659	106		0.25	0.2561	102		4	75-125	20
Iron, Total	0.0361J	1	1.11	111		1	1.07	107		4	75-125	20
Lead, Total	ND	0.53	0.5164	97		0.53	0.4978	94		4	75-125	20
Magnesium, Total	0.813	10	10.6	98		10	9.81	90		8	75-125	20
Manganese, Total	0.01271	0.5	0.5252	102		0.5	0.5023	98		4	75-125	20
Nickel, Total	0.00072J	0.5	0.5166	103		0.5	0.5060	101		2	75-125	20
Selenium, Total	ND	0.12	0.116	97		0.12	0.112	93		4	75-125	20
Silver, Total	ND	0.05	0.04379	88		0.05	0.04276	86		2	75-125	20
Sodium, Total	4.76	10	14.7	99		10	13.8	90		6	75-125	20
Thallium, Total	ND	0.12	0.1219	102		0.12	0.1181	98		3	75-125	20
Vanadium, Total	ND	0.5	0.4880	98		0.5	0.4673	93		4	75-125	20
Zinc, Total	ND	0.5	0.5086	102		0.5	0.4952	99		3	75-125	20

Form 5a
Matrix Spike

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Client Sample ID	: MW-5S	**Matrix**	: WATER
Lab Sample ID	: L2467934-05		
Matrix Spike	: WG2002206-3	**MS Analysis Date**	: 12/02/24 18:36
Matrix Spike Dup	: WG2002206-4	**MSD Analysis Date**	: 12/02/24 18:41

		Matrix Spike Sample			Matrix Spike Duplicate					
Parameter	Sample Conc. (mg/l)	Spike Added (mg/l)	Spike Conc. (mg/l)	%R	Spike Added (mg/l)	Spike Conc. (mg/l)	%R	RPD	Recovery Limits	RPD Limit
Calcium, Total	3.48	10	14.9	114	10	14.4	109	3	75-125	20
Potassium, Total	0.733	10	11.8	111	10	11.6	109	2	75-125	20

Form 5a
Matrix Spike

Client	: Alpha Geoscience	Lab Number	: L2467934
Project Name	: HUNTINGTON READY MIXED	Project Number	: 20116
Client Sample ID	: MW-5S	Matrix	: WATER
Lab Sample ID	: L2467934-05		
Matrix Spike	: WG2002010-3	MS Analysis Date	: 12/03/24 19:14
Matrix Spike Dup	: WG2002010-4	MSD Analysis Date	: 12/03/24 19:19

		Matrix Spike Sample			Matrix Spike Duplicate					
Parameter	Sample Conc. (mg/l)	Spike Added (mg/l)	Spike Conc. (mg/l)	%R	Spike Added (mg/l)	Spike Conc. (mg/l)	%R	RPD	Recovery Limits	RPD Limit
Aluminum, Dissolved	0.0285	2	2.13	105	2	2.08	102	2	75-125	20
Antimony, Dissolved	0.00066J	0.5	0.4374	87	0.5	0.4476	90	2	75-125	20
Arsenic, Dissolved	0.00016J	0.12	0.1311	109	0.12	0.1249	104	5	75-125	20
Barium, Dissolved	0.00338	2	2.114	106	2	2.061	103	3	75-125	20
Beryllium, Dissolved	0.00012J	0.05	0.05218	104	0.05	0.04980	100	5	75-125	20
Cadmium, Dissolved	0.00009J	0.053	0.05322	100	0.053	0.05116	96	4	75-125	20
Calcium, Dissolved	3.48	10	14.3	108	10	13.1	96	9	75-125	20
Chromium, Dissolved	0.00041J	0.2	0.2220	111	0.2	0.2161	108	3	75-125	20
Cobalt, Dissolved	ND	0.5	0.5666	113	0.5	0.5638	113	0	75-125	20
Copper, Dissolved	0.00060J	0.25	0.2829	113	0.25	0.2746	110	3	75-125	20
Iron, Dissolved	0.0407J	1	1.27	127 Q	1	1.20	120	6	75-125	20
Lead, Dissolved	ND	0.53	0.5265	99	0.53	0.5259	99	0	75-125	20
Magnesium, Dissolved	0.884	10	11.6	107	10	11.5	106	1	75-125	20
Manganese, Dissolved	0.01409	0.5	0.6005	117	0.5	0.5745	112	4	75-125	20
Nickel, Dissolved	ND	0.5	0.5519	110	0.5	0.5365	107	3	75-125	20
Potassium, Dissolved	0.728	10	12.3	116	10	11.6	109	6	75-125	20
Selenium, Dissolved	ND	0.12	0.127	106	0.12	0.132	110	4	75-125	20
Silver, Dissolved	ND	0.05	0.05019	100	0.05	0.04909	98	2	75-125	20
Sodium, Dissolved	5.06	10	15.8	107	10	15.6	105	1	75-125	20
Thallium, Dissolved	ND	0.12	0.1203	100	0.12	0.1197	100	1	75-125	20
Vanadium, Dissolved	ND	0.5	0.5505	110	0.5	0.5291	106	4	75-125	20
Zinc, Dissolved	ND	0.5	0.5425	108	0.5	0.5332	107	2	75-125	20

Form 5b
Post Digest Spike Recovery

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Client Sample ID	: MW-5S	**Matrix**	: WATER
Lab Sample ID	: L2467934-05		
Post Spike	: WG2002206-5	**PS Analysis Date**	: 11/26/24 18:13

		Post Spike Sample			
	Sample Conc.	Spike Added	Spike Conc.	%R	Recovery
Parameter	(mg/l)	(mg/l)	(mg/l)		Limits
Antimony, Total	0.00125J	0.5	0.5098	102	75-125

Form 5b
Post Digest Spike Recovery

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Client Sample ID	: MW-5S	**Matrix**	: WATER
Lab Sample ID	: L2467934-05		
Post Spike	: WG2002010-5	**PS Analysis Date**	: 12/03/24 19:23

		Post Spike Sample			
	Sample Conc.	Spike Added	Spike Conc.		
Parameter	(mg/l)	(mg/l)	(mg/l)	%R	Recovery Limits
Iron, Dissolved	0.0407J	50	54.2	108	75-125

Form 7
Laboratory Control Sample

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Client Sample ID	: NA	**Matrix**	: WATER
Lab Sample ID	: WG2002206-2	**LCS Analysis Date**	: 11/26/24 17:55
Dup Sample ID	:	**LCSD Analysis Date**	:

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	True (mg/l)	Found (mg/l)	%R	True (mg/l)	Found (mg/l)	%R	RPD	Recovery Limits	RPD Limit
Aluminum, Total	2.00	1.99	100.					80-120	20
Arsenic, Total	0.120	0.124	103.					80-120	20
Barium, Total	2.00	2.02	101.					80-120	20
Beryllium, Total	0.0500	0.0483	97.					80-120	20
Cadmium, Total	0.0530	0.0532	100.					80-120	20
Chromium, Total	0.200	0.207	104.					80-120	20
Cobalt, Total	0.500	0.540	108.					80-120	20
Copper, Total	0.250	0.269	108.					80-120	20
Iron, Total	1.00	1.11	111.					80-120	20
Lead, Total	0.530	0.527	99.					80-120	20
Magnesium, Total	10.0	10.3	103.					80-120	20
Manganese, Total	0.500	0.530	106.					80-120	20
Nickel, Total	0.500	0.533	107.					80-120	20
Selenium, Total	0.120	0.124	103.					80-120	20
Silver, Total	0.0500	0.0458	92.					80-120	20
Sodium, Total	10.0	10.6	106.					80-120	20
Thallium, Total	0.120	0.125	104.					80-120	20
Vanadium, Total	0.500	0.496	99.					80-120	20
Zinc, Total	0.500	0.516	103.					80-120	20

Form 7
Laboratory Control Sample

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Client Sample ID	: NA	**Matrix**	: WATER
Lab Sample ID	: WG2002206-2	**LCS Analysis Date**	: 12/02/24 18:27
Dup Sample ID	:	**LCSD Analysis Date**	:

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	**True (mg/l)**	**Found (mg/l)**	**%R**	**True (mg/l)**	**Found (mg/l)**	**%R**	**RPD**	**Recovery Limits**	**RPD Limit**
Antimony, Total	0.500	0.601	120.					80-120	20
Calcium, Total	10.0	11.2	112.					80-120	20
Potassium, Total	10.0	10.8	108.					80-120	20

Form 7
Laboratory Control Sample

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Client Sample ID	: NA	**Matrix**	: WATER
Lab Sample ID	: WG2002010-2	**LCS Analysis Date**	: 12/03/24 19:05
Dup Sample ID	:	**LCSD Analysis Date**	:

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	True (mg/l)	Found (mg/l)	%R	True (mg/l)	Found (mg/l)	%R	RPD	Recovery Limits	RPD Limit
Aluminum, Dissolved	2.00	2.18	109.					80-120	20
Antimony, Dissolved	0.500	0.452	90.					80-120	20
Arsenic, Dissolved	0.120	0.132	110.					80-120	20
Barium, Dissolved	2.00	2.11	105.					80-120	20
Beryllium, Dissolved	0.0500	0.0501	100.					80-120	20
Cadmium, Dissolved	0.0530	0.0520	98.					80-120	20
Calcium, Dissolved	10.0	10.7	107.					80-120	20
Chromium, Dissolved	0.200	0.222	111.					80-120	20
Cobalt, Dissolved	0.500	0.568	114.					80-120	20
Copper, Dissolved	0.250	0.272	109.					80-120	20
Iron, Dissolved	1.00	1.14	114.					80-120	20
Lead, Dissolved	0.530	0.541	102.					80-120	20
Magnesium, Dissolved	10.0	11.0	110.					80-120	20
Manganese, Dissolved	0.500	0.575	115.					80-120	20
Nickel, Dissolved	0.500	0.544	109.					80-120	20
Potassium, Dissolved	10.0	11.4	114.					80-120	20
Selenium, Dissolved	0.120	0.128	107.					80-120	20
Silver, Dissolved	0.0500	0.0484	97.					80-120	20
Sodium, Dissolved	10.0	10.9	109.					80-120	20
Thallium, Dissolved	0.120	0.124	103.					80-120	20
Vanadium, Dissolved	0.500	0.548	110.					80-120	20
Zinc, Dissolved	0.500	0.536	107.					80-120	20

Form 8
Serial Dilutions

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Client Sample ID	: MW-5S	**Matrix**	: WATER
Lab Sample ID	: L2467934-05	**Analysis Date**	: 12/02/24 18:31
Serial Dilution ID	: WG2002206-6	**Analysis Date**	: 12/02/24 18:50

Parameter	Initial Sample Result (mg/l)	Serial Dilution Result (mg/l)	% Difference	%D Limit
Calcium, Total	3.48	3.54	2	20

Form 8
Serial Dilutions

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Client Sample ID	: MW-5S	**Matrix**	: WATER
Lab Sample ID	: L2467934-05	**Analysis Date**	: 12/03/24 19:10
Serial Dilution ID	: WG2002010-6	**Analysis Date**	: 12/03/24 19:28

Parameter	Initial Sample Result (mg/l)	Serial Dilution Result (mg/l)	% Difference	%D Limit
Calcium, Dissolved	3.48	3.11	11	20

Form 12
Preparation Log

Client	:	**Alpha Geoscience**	**Lab Number**	:	**L2467934**
Project Name	:	**HUNTINGTON READY MIXED**	**Project Number**	:	**20116**
Matrix	:	**WATER**	**Prep Method**	:	**EPA 3005A**

Sample Number	Preparation Date	Weight (gram)	Volume (mL)
L2467934-05	11/26/24 11:00	-	50
WG2002206-1	11/26/24 11:00	-	50
WG2002206-2	11/26/24 11:00	-	50
WG2002206-3	11/26/24 11:00	-	50
WG2002206-4	11/26/24 11:00	-	50
WG2002206-5	11/26/24 11:00	-	50

Form 12
Preparation Log

Client	:	**Alpha Geoscience**	**Lab Number**	:	**L2467934**
Project Name	:	**HUNTINGTON READY MIXED**	**Project Number**	:	**20116**
Matrix	:	**WATER**	**Prep Method**	:	**EPA 3005A**

Sample Number	Preparation Date	Weight (gram)	Volume (mL)
L2467934-01	11/26/24 11:00	-	50
L2467934-02	11/26/24 11:00	-	50
L2467934-03	11/26/24 11:00	-	50
L2467934-04	11/26/24 11:00	-	50
L2467934-05	11/26/24 11:00	-	50
L2467934-06	11/26/24 11:00	-	50
L2467934-07	11/26/24 11:00	-	50
L2467934-08	11/26/24 11:00	-	50
L2467934-09	11/26/24 11:00	-	50
L2467934-10	11/26/24 11:00	-	50
WG2002206-1	11/26/24 11:00	-	50
WG2002206-2	11/26/24 11:00	-	50
WG2002206-3	11/26/24 11:00	-	50
WG2002206-4	11/26/24 11:00	-	50
WG2002206-6	11/26/24 11:00	-	50

Form 12
Preparation Log

Client	:	**Alpha Geoscience**	**Lab Number**	:	**L2467934**
Project Name	:	**HUNTINGTON READY MIXED**	**Project Number**	:	**20116**
Matrix	:	**WATER**	**Prep Method**	:	**EPA 3005A**

Sample Number	Preparation Date	Weight (gram)	Volume (mL)
L2467934-01	11/25/24 20:03	-	50
L2467934-02	11/25/24 20:03	-	50
L2467934-03	11/25/24 20:03	-	50
L2467934-04	11/25/24 20:03	-	50
L2467934-05	11/25/24 20:03	-	50
L2467934-06	11/25/24 20:03	-	50
L2467934-07	11/25/24 20:03	-	50
L2467934-08	11/25/24 20:03	-	50
L2467934-09	11/25/24 20:03	-	50
L2467934-10	11/25/24 20:03	-	50
WG2002010-1	11/25/24 20:03	-	50
WG2002010-2	11/25/24 20:03	-	50
WG2002010-3	11/25/24 20:03	-	50
WG2002010-4	11/25/24 20:03	-	50
WG2002010-5	11/25/24 20:03	-	50
WG2002010-6	11/25/24 20:03	-	50

Form 13
Analysis Run Log

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Instrument ID	: ICPMSQ2	**Analysis Method**	: 1,6020B
Start Date	: 11/26/24 06:04	**End Date**	: 11/26/24 18:27

Sample Number	Dilution Factor	Analysis Time	Aluminum, Total	Antimony, Total	Arsenic, Total	Barium, Total	Beryllium, Total	Cadmium, Total	Chromium, Total	Cobalt, Total	Copper, Total	Iron, Total	Lead, Total	Magnesium, Total	Manganese, Total	Nickel, Total	Selenium, Total	Silver, Total	Sodium, Total	Thallium, Total	Vanadium, Total	Zinc, Total
R1904880-9 TUNE		06:04:00																				
R1904880-1 ICV	1	07:44:40	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1904880-2 ICB	1	07:49:10	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1904880-3 ICB	1	07:54:15	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1904880-4 ICSA	1	07:58:49	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1904880-5 CCV	1	08:12:17	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1904880-6 CCB	1	08:16:48	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1904880-7 CCV	1	08:23:46	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1904880-8 CCB	1	08:29:06	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1904880-10 CCV	1	09:24:26	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1904880-11 CCB	1	09:28:57	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1904880-12 CCV	1	10:34:58	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1904880-13 CCB	1	10:39:30	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1904880-14 CCV	1	11:26:14	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1904880-15 CCB	1	11:30:45	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1904880-16 CCV	1	12:25:12	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1904880-17 CCB	1	12:29:43	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1904880-18 CCV	1	13:24:09	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1904880-19 CCB	1	13:28:40	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1904880-20 CCV	1	14:15:23	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1904880-21 CCB	1	14:19:55	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1904880-22 CCV	1	15:20:01	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1904880-23 CCB	1	15:24:33	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1904880-24 CCV	1	15:31:12	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1904880-25 CCB	1	15:35:43	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1904880-26 CCV	1	16:28:11	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1904880-27 CCB	1	16:32:43	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Form 13
Analysis Run Log

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Instrument ID	: ICPMSQ2	**Analysis Method**	: 1,6020B
Start Date	: 11/26/24 06:04	**End Date**	: 11/26/24 18:27

Sample Number	Dilution Factor	Analysis Time	Aluminum, Total	Antimony, Total	Arsenic, Total	Barium, Total	Beryllium, Total	Cadmium, Total	Chromium, Total	Cobalt, Total	Copper, Total	Iron, Total	Lead, Total	Magnesium, Total	Manganese, Total	Nickel, Total	Selenium, Total	Silver, Total	Sodium, Total	Thallium, Total	Vanadium, Total	Zinc, Total
R1904880-28 CCV	1	17:02:09	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1904880-29 CCB	1	17:07:53	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
WG2002206-1 BLANK	1	17:51:21	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
WG2002206-2 LCS	10	17:55:51	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
L2467934-05	1	18:00:20	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
WG2002206-3 MS	10	18:04:48	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
WG2002206-4 MSD	10	18:09:17	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
WG2002206-5 PS	10	18:13:45		X																		
R1904880-30 CCV	1	18:22:42	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1904880-31 CCB	1	18:27:14	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Form 13
Analysis Run Log

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Instrument ID	: ICPMSQ	**Analysis Method**	: 1,6020B
Start Date	: 12/02/24 07:12	**End Date**	: 12/02/24 20:25

Sample Number	Dilution Factor	Analysis Time	Aluminum, Total	Antimony, Total	Arsenic, Total	Barium, Total	Beryllium, Total	Cadmium, Total	Calcium, Total	Chromium, Total	Cobalt, Total	Copper, Total	Iron, Total	Lead, Total	Magnesium, Total	Manganese, Total	Nickel, Total	Potassium, Total	Selenium, Total	Silver, Total	Sodium, Total	Thallium, Total	Vanadium, Total	Zinc, Total
R1906420-10 TUNE		07:12:00																						
R1906420-1 ICV	1	08:28:37	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1906420-2 ICB	1	08:33:17	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1906420-3 ICSA	1	08:43:49	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1906420-4 CCV	1	08:57:48	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1906420-5 CCB	1	09:02:30	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1906420-6 CCV	1	10:13:25	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1906420-7 CCB	1	10:18:07	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1906420-8 CCV	1	10:32:08	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1906420-9 CCB	1	10:36:50	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1906420-11 CCV	1	11:31:08	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1906420-12 CCB	1	11:35:50	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1906420-13 CCV	1	12:45:17	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1906420-14 CCB	1	12:49:59	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1906420-15 CCV	1	13:54:09	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1906420-16 CCB	1	13:58:52	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1906420-17 CCV	1	14:44:17	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1906420-18 CCB	1	14:48:59	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1906420-19 ICV	1	15:49:44	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1906420-20 ICB	1	15:54:25	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1906420-21 ICSA	1	16:04:31	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1906420-22 CCV	1	16:18:32	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1906420-23 CCB	1	16:23:14	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1906420-24 CCV	1	17:21:47	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1906420-25 CCB	1	17:26:29	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1906420-26 CCV	1	17:56:59	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1906420-27 CCB	1	18:01:41	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Form 13
Analysis Run Log

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Instrument ID	: ICPMSQ	**Analysis Method**	: 1,6020B
Start Date	: 12/02/24 07:12	**End Date**	: 12/02/24 20:25

Sample Number	Dilution Factor	Analysis Time	Aluminum, Total	Antimony, Total	Arsenic, Total	Barium, Total	Beryllium, Total	Cadmium, Total	Calcium, Total	Chromium, Total	Cobalt, Total	Copper, Total	Iron, Total	Lead, Total	Magnesium, Total	Manganese, Total	Nickel, Total	Potassium, Total	Selenium, Total	Silver, Total	Sodium, Total	Thallium, Total	Vanadium, Total	Zinc, Total
WG2002206-2 LCS	10	18:27:21		X					X									X						
L2467934-05	1	18:31:59							X									X						
WG2002206-3 MS	10	18:36:37							X									X						
WG2002206-4 MSD	10	18:41:16							X									X						
WG2002206-6 SERDIL	5	18:50:35							X															
L2467934-01	1	19:09:10	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1906420-28 CCV	1	19:13:48	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1906420-29 CCB	1	19:18:31	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
WG2002206-1 BLANK	1	19:34:14							X									X						
L2467934-10	1	19:43:31	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
L2467934-02	1	19:48:11	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
L2467934-03	1	19:52:49	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
L2467934-04	1	19:57:28	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
L2467934-06	1	20:02:07	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
L2467934-07	1	20:06:45	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
L2467934-08	1	20:11:24	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
L2467934-09	1	20:16:04	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1906420-30 CCV	1	20:20:43	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1906420-31 CCB	1	20:25:26	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Form 13
Analysis Run Log

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Instrument ID	: ICPMSQ2	**Analysis Method**	: 1,6020B
Start Date	: 12/03/24 06:07	**End Date**	: 12/03/24 21:11

Sample Number	Dilution Factor	Analysis Time	Aluminum, Dissolved	Antimony, Dissolved	Arsenic, Dissolved	Barium, Dissolved	Beryllium, Dissolved	Cadmium, Dissolved	Calcium, Dissolved	Chromium, Dissolved	Cobalt, Dissolved	Copper, Dissolved	Iron, Dissolved	Lead, Dissolved	Magnesium, Dissolved	Manganese, Dissolved	Nickel, Dissolved	Potassium, Dissolved	Selenium, Dissolved	Silver, Dissolved	Sodium, Dissolved	Thallium, Dissolved	Vanadium, Dissolved	Zinc, Dissolved
R1906801-8 TUNE		06:07:00																						
R1906801-1 ICV	1	07:17:37	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1906801-2 ICB	1	07:22:07	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1906801-3 ICSA	1	07:28:46	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1906801-4 CCV	1	07:42:14	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1906801-5 CCB	1	07:46:45	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1906801-6 CCV	1	08:33:58	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1906801-7 CCB	1	08:38:29	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1906801-9 CCV	1	09:44:34	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1906801-10 CCB	1	09:49:04	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1906801-11 CCV	1	10:39:37	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1906801-12 CCB	1	10:44:08	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1906801-13 CCV	1	11:00:44	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1906801-14 CCB	1	11:05:15	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1906801-15 CCV	1	11:55:54	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1906801-16 CCB	1	12:00:26	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1906801-17 CCV	1	12:35:53	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1906801-18 CCB	1	12:42:03	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1906801-19 CCV	1	13:30:45	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1906801-20 CCB	1	13:35:17	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1906801-21 CCB	1	13:45:22	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1906801-22 CCV	1	14:37:57	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1906801-23 CCB	1	14:42:28	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1906801-24 ICV	1	17:16:50	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1906801-25 ICB	1	17:21:20	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1906801-26 ICSA	1	17:32:00	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1906801-27 CCV	1	17:45:27	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Form 13
Analysis Run Log

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Instrument ID	: ICPMSQ2	**Analysis Method**	: 1,6020B
Start Date	: 12/03/24 06:07	**End Date**	: 12/03/24 21:11

Sample Number	Dilution Factor	Analysis Time	Aluminum, Dissolved	Antimony, Dissolved	Arsenic, Dissolved	Barium, Dissolved	Beryllium, Dissolved	Cadmium, Dissolved	Calcium, Dissolved	Chromium, Dissolved	Cobalt, Dissolved	Copper, Dissolved	Iron, Dissolved	Lead, Dissolved	Magnesium, Dissolved	Manganese, Dissolved	Nickel, Dissolved	Potassium, Dissolved	Selenium, Dissolved	Silver, Dissolved	Sodium, Dissolved	Thallium, Dissolved	Vanadium, Dissolved	Zinc, Dissolved
R1906801-28 CCB	1	17:49:58	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1906801-29 CCV	1	18:40:08	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1906801-30 CCB	1	18:44:40	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
WG2002010-1 BLANK	1	19:01:20	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
WG2002010-2 LCS	10	19:05:47	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
L2467934-05	1	19:10:15	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
WG2002010-3 MS	10	19:14:43	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
WG2002010-4 MSD	10	19:19:11	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
WG2002010-5 PS	10	19:23:39											X											
WG2002010-6 SERDIL	5	19:28:07							X															
R1906801-31 CCV	1	19:46:02	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1906801-32 CCB	1	19:50:33	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
L2467934-01	1	20:17:29	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
L2467934-02	1	20:21:58	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
L2467934-03	1	20:26:27	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
L2467934-04	1	20:30:55	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
L2467934-06	1	20:35:24	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1906801-33 CCV	1	20:39:52	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1906801-34 CCB	1	20:44:24	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
L2467934-10	1	20:48:56	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
L2467934-07	1	20:53:26	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
L2467934-08	1	20:57:55	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
L2467934-09	1	21:02:24	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1906801-35 CCV	1	21:06:54	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1906801-36 CCB	1	21:11:25	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Form 14
ICP-MS Tune

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Lab Sample ID	: R1904880-9	**Analysis Date**	: 11/26/24 06:04
ICP-MS Instrument	: iCAP Q		

Mass Element	Avg Measured Mass (amu)	Avg. Peak Width at 10% Peak Height (amu)	%RSD
59 Co	58.9271	0.726	0.9
115 In	114.8952	0.741	1.8
7 Li	7.0092	0.695	0.9
238 U	238.0684	0.775	2.2

Form 14
ICP-MS Tune

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Lab Sample ID	: R1906420-10	**Analysis Date**	: 12/02/24 07:12
ICP-MS Instrument	: iCAP Q		

Mass Element	Avg Measured Mass (amu)	Avg. Peak Width at 10% Peak Height (amu)	%RSD
59 Co	58.9069	0.755	0.7
115 In	114.8336	0.8	0.7
7 Li	6.9983	0.76	0.6
238 U	238.0122	0.748	0.4

Form 14
ICP-MS Tune

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Lab Sample ID	: R1906801-8	**Analysis Date**	: 12/03/24 06:07
ICP-MS Instrument	: iCAP Q		

Mass Element	Avg Measured Mass (amu)	Avg. Peak Width at 10% Peak Height (amu)	%RSD
59 Co	58.9286	0.724	1.1
115 In	114.8993	0.74	4.5
7 Li	7.0146	0.694	0.6
238 U	238.0638	0.763	0.9

Form 15
ICP-MS Internal Standards Relative Intensity Summary

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Instrument ID	: ICPMSQ2	**Analysis Method**	: 1,6020B
Start Date	: 11/26/24	**End Date**	: 11/26/24

Sample #	Time	Internal Standards %RI For:				
		Lithium	Scandium	Ge	In	Bismuth
R1904880-1 ICV	07:44:40	96	100	99	96	97
R1904880-2 ICB	07:49:10	99	100	97	96	95
R1904880-3 ICB	07:54:15	99	100	97	96	95
R1904880-4 ICSA	07:58:49	72	76	102	94	85
R1904880-5 CCV	08:12:17	92	97	95	92	90
R1904880-6 CCB	08:16:48	93	97	92	90	87
R1904880-7 CCV	08:23:46	94	99	93	92	89
R1904880-8 CCB	08:29:06	92	94	91	88	86
R1904880-10 CCV	09:24:26	100	107	96	94	90
R1904880-11 CCB	09:28:57	100	101	93	92	86
R1904880-12 CCV	10:34:58	94	97	86	87	81
R1904880-13 CCB	10:39:30	93	94	83	84	80
R1904880-14 CCV	11:26:14	88	90	90	84	83
R1904880-15 CCB	11:30:45	82	81	72	71	70
R1904880-16 CCV	12:25:12	116	119	149	114	112
R1904880-17 CCB	12:29:43	112	110	112	112	112
R1904880-18 CCV	13:24:09	118	121	120	119	115
R1904880-19 CCB	13:28:40	117	118	116	114	114
R1904880-20 CCV	14:15:23	118	124	125	119	113
R1904880-21 CCB	14:19:55	121	123	123	118	116
R1904880-22 CCV	15:20:01	112	117	120	113	113
R1904880-23 CCB	15:24:33	115	118	118	115	112
R1904880-24 CCV	15:31:12	114	121	126	119	120
R1904880-25 CCB	15:35:43	116	119	118	117	116
R1904880-26 CCV	16:28:11	62	9	108	121	152
R1904880-27 CCB	16:32:43	71	11	112	124	160
R1904880-28 CCV	17:02:09	116	121	122	114	112

Form 15
ICP-MS Internal Standards Relative Intensity Summary

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Instrument ID	: ICPMSQ2	**Analysis Method**	: 1,6020B
Start Date	: 11/26/24	**End Date**	: 11/26/24

Sample #	Time	Internal Standards %RI For:				
		Lithium	Scandium	Ge	In	Bismuth
R1904880-29 CCB	17:07:53	115	116	113	111	110
WG2002206-1 BLANK	17:51:21	110	112	113	116	115
WG2002206-2 LCS	17:55:51	110	110	110	111	113
L2467934-05	18:00:20	113	115	112	115	114
WG2002206-3 MS	18:04:48	110	111	107	101	105
WG2002206-4 MSD	18:09:17	115	115	108	87	97
WG2002206-5 PS	18:13:45	111	109	104	87	97
R1904880-30 CCV	18:22:42	111	114	104	85	94
R1904880-31 CCB	18:27:14	112	112	107	86	97

Form 15
ICP-MS Internal Standards Relative Intensity Summary

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Instrument ID	: ICPMSQ	**Analysis Method**	: 1,6020B
Start Date	: 12/02/24	**End Date**	: 12/02/24

Sample #	Time	Internal Standards %RI For:				
		Lithium	Scandium	Ge	In	Bismuth
R1906420-1 ICV	08:28:37	104	105	105	108	95
R1906420-2 ICB	08:33:17	103	103	104	108	105
R1906420-3 ICSA	08:43:49	132	131	128	125	92
R1906420-4 CCV	08:57:48	111	114	109	113	103
R1906420-5 CCB	09:02:30	111	112	109	114	106
R1906420-6 CCV	10:13:25	114	118	112	117	110
R1906420-7 CCB	10:18:07	113	109	108	115	102
R1906420-8 CCV	10:32:08	114	113	110	114	109
R1906420-9 CCB	10:36:50	112	112	109	115	108
R1906420-11 CCV	11:31:08	118	121	116	120	111
R1906420-12 CCB	11:35:50	116	113	110	114	106
R1906420-13 CCV	12:45:17	125	124	117	119	116
R1906420-14 CCB	12:49:59	120	115	116	119	111
R1906420-15 CCV	13:54:09	134	134	127	132	116
R1906420-16 CCB	13:58:52	122	118	124	129	116
R1906420-17 CCV	14:44:17	124	122	118	122	111
R1906420-18 CCB	14:48:59	122	116	116	122	111
R1906420-19 ICV	15:49:44	94	98	94	92	94
R1906420-20 ICB	15:54:25	93	93	93	93	98
R1906420-21 ICSA	16:04:31	108	109	109	104	82
R1906420-22 CCV	16:18:32	93	98	94	93	97
R1906420-23 CCB	16:23:14	91	94	89	88	95
R1906420-24 CCV	17:21:47	102	106	101	99	100
R1906420-25 CCB	17:26:29	100	102	99	98	101
R1906420-26 CCV	17:56:59	104	112	105	102	102
R1906420-27 CCB	18:01:41	104	104	100	98	101
WG2002206-2 LCS	18:27:21	107	112	105	100	101

Form 15
ICP-MS Internal Standards Relative Intensity Summary

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Instrument ID	: ICPMSQ	**Analysis Method**	: 1,6020B
Start Date	: 12/02/24	**End Date**	: 12/02/24

Sample #	Time	Internal Standards %RI For:				
		Lithium	Scandium	Ge	In	Bismuth
L2467934-05	18:31:59	105	110	103	102	99
WG2002206-3 MS	18:36:37	106	110	107	104	105
WG2002206-4 MSD	18:41:16	104	109	105	100	103
WG2002206-6 SERDIL	18:50:35	100	102	95	94	97
L2467934-01	19:09:10	107	111	103	100	95
R1906420-28 CCV	19:13:48	103	109	100	97	100
R1906420-29 CCB	19:18:31	103	103	97	94	99
WG2002206-1 BLANK	19:34:14	104	105	98	95	97
L2467934-10	19:43:31	105	108	100	99	100
L2467934-02	19:48:11	108	112	107	103	97
L2467934-03	19:52:49	106	107	100	97	91
L2467934-04	19:57:28	104	109	100	95	92
L2467934-06	20:02:07	105	109	100	96	89
L2467934-07	20:06:45	106	109	100	100	93
L2467934-08	20:11:24	106	113	97	94	84
L2467934-09	20:16:04	104	107	99	97	92
R1906420-30 CCV	20:20:43	100	101	96	91	98
R1906420-31 CCB	20:25:26	99	100	93	91	97

Form 15
ICP-MS Internal Standards Relative Intensity Summary

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Instrument ID	: ICPMSQ2	**Analysis Method**	: 1,6020B
Start Date	: 12/03/24	**End Date**	: 12/03/24

Sample #	Time	Internal Standards %RI For:				
		Lithium	Scandium	Ge	In	Bismuth
R1906801-1 ICV	07:17:37	109	103	110	111	114
R1906801-2 ICB	07:22:07	110	101	110	108	112
R1906801-3 ICSA	07:28:46	77	75	108	104	99
R1906801-4 CCV	07:42:14	98	96	102	100	102
R1906801-5 CCB	07:46:45	98	96	96	96	100
R1906801-6 CCV	08:33:58	105	101	102	102	110
R1906801-7 CCB	08:38:29	104	100	97	99	107
R1906801-9 CCV	09:44:34	104	100	102	106	110
R1906801-10 CCB	09:49:04	105	97	103	104	110
R1906801-11 CCV	10:39:37	112	111	100	104	109
R1906801-12 CCB	10:44:08	108	98	101	102	107
R1906801-13 CCV	11:00:44	106	101	104	107	112
R1906801-14 CCB	11:05:15	103	95	102	105	108
R1906801-15 CCV	11:55:54	106	103	123	129	121
R1906801-16 CCB	12:00:26	108	106	118	128	121
R1906801-17 CCV	12:35:53	116	111	119	119	119
R1906801-18 CCB	12:42:03	117	108	114	117	118
R1906801-19 CCV	13:30:45	115	107	107	115	111
R1906801-20 CCB	13:35:17	118	107	105	110	109
R1906801-21 CCB	13:45:22	119	108	130	109	107
R1906801-22 CCV	14:37:57	119	113	105	112	108
R1906801-23 CCB	14:42:28	119	105	103	108	107
R1906801-24 ICV	17:16:50	96	95	95	100	100
R1906801-25 ICB	17:21:20	94	90	99	99	101
R1906801-26 ICSA	17:32:00	71	70	103	93	89
R1906801-27 CCV	17:45:27	92	94	111	98	94
R1906801-28 CCB	17:49:58	92	94	102	98	96

Form 15
ICP-MS Internal Standards Relative Intensity Summary

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Instrument ID	: ICPMSQ2	**Analysis Method**	: 1,6020B
Start Date	: 12/03/24	**End Date**	: 12/03/24

Sample #	Time	Internal Standards %RI For:				
		Lithium	Scandium	Ge	In	Bismuth
R1906801-29 CCV	18:40:08	95	98	95	99	97
R1906801-30 CCB	18:44:40	94	95	90	98	97
WG2002010-1 BLANK	19:01:20	97	103	100	103	103
WG2002010-2 LCS	19:05:47	99	99	93	100	100
L2467934-05	19:10:15	96	99	90	101	101
WG2002010-3 MS	19:14:43	95	97	90	100	99
WG2002010-4 MSD	19:19:11	96	101	91	100	100
WG2002010-5 PS	19:23:39	95	96	90	101	99
WG2002010-6 SERDIL	19:28:07	97	97	89	100	100
R1906801-31 CCV	19:46:02	100	102	99	103	103
R1906801-32 CCB	19:50:33	100	99	88	98	99
L2467934-01	20:17:29	93	96	90	101	99
L2467934-02	20:21:58	95	100	91	99	99
L2467934-03	20:26:27	94	99	92	101	98
L2467934-04	20:30:55	95	102	88	98	97
L2467934-06	20:35:24	88	92	90	100	96
R1906801-33 CCV	20:39:52	94	97	89	97	96
R1906801-34 CCB	20:44:24	92	94	90	99	96
L2467934-10	20:48:56	96	100	88	100	99
L2467934-07	20:53:26	94	100	91	101	98
L2467934-08	20:57:55	94	98	90	101	98
L2467934-09	21:02:24	96	100	89	100	94
R1906801-35 CCV	21:06:54	94	101	90	98	96
R1906801-36 CCB	21:11:25	93	93	89	96	97

Date Created: 01/22/21
Created By: Jason Hebert
File: PM9836-1
Page: 1

METALS by 6020B (WATER)

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Surrogate Criteria	Holding Time	Container/Sample Preservation
Aluminum, Total	7429-90-5	0.01	0.00327	mg/l	80-120		75-125	20	20		180 days	1 - Plastic 500ml HNO3 preserved
Antimony, Total	7440-36-0	0.004	0.000429	mg/l	80-120		75-125	20	20		180 days	1 - Plastic 500ml HNO3 preserved
Arsenic, Total	7440-38-2	0.0005	0.000165	mg/l	80-120		75-125	20	20		180 days	1 - Plastic 500ml HNO3 preserved
Barium, Total	7440-39-3	0.0005	0.000173	mg/l	80-120		75-125	20	20		180 days	1 - Plastic 500ml HNO3 preserved
Beryllium, Total	7440-41-7	0.0005	0.000107	mg/l	80-120		75-125	20	20		180 days	1 - Plastic 500ml HNO3 preserved
Cadmium, Total	7440-43-9	0.0002	0.0000599	mg/l	80-120		75-125	20	20		180 days	1 - Plastic 500ml HNO3 preserved
Calcium, Total	7440-70-2	0.1	0.0394	mg/l	80-120		75-125	20	20		180 days	1 - Plastic 500ml HNO3 preserved
Chromium, Total	7440-47-3	0.001	0.000178	mg/l	80-120		75-125	20	20		180 days	1 - Plastic 500ml HNO3 preserved
Cobalt, Total	7440-48-4	0.0005	0.000163	mg/l	80-120		75-125	20	20		180 days	1 - Plastic 500ml HNO3 preserved
Copper, Total	7440-50-8	0.001	0.000384	mg/l	80-120		75-125	20	20		180 days	1 - Plastic 500ml HNO3 preserved
Lithium, Total	7439-93-2	0.001	0.000083	mg/l	80-120		75-125	20	20		180 days	1 - Plastic 500ml HNO3 preserved
Iron, Total	7439-89-6	0.05	0.0191	mg/l	80-120		75-125	20	20		180 days	1 - Plastic 500ml HNO3 preserved
Lead, Total	7439-92-1	0.001	0.000343	mg/l	80-120		75-125	20	20		180 days	1 - Plastic 500ml HNO3 preserved
Magnesium, Total	7439-95-4	0.07	0.0242	mg/l	80-120		75-125	20	20		180 days	1 - Plastic 500ml HNO3 preserved
Manganese, Total	7439-96-5	0.001	0.00044	mg/l	80-120		75-125	20	20		180 days	1 - Plastic 500ml HNO3 preserved
Nickel, Total	7440-02-0	0.002	0.000556	mg/l	80-120		75-125	20	20		180 days	1 - Plastic 500ml HNO3 preserved
Potassium, Total	7440-09-7	0.1	0.0309	mg/l	80-120		75-125	20	20		180 days	1 - Plastic 500ml HNO3 preserved
Selenium, Total	7782-49-2	0.005	0.00173	mg/l	80-120		75-125	20	20		180 days	1 - Plastic 500ml HNO3 preserved
Silver, Total	7440-22-4	0.0004	0.000163	mg/l	80-120		75-125	20	20		180 days	1 - Plastic 500ml HNO3 preserved
Sodium, Total	7440-23-5	0.1	0.0293	mg/l	80-120		75-125	20	20		180 days	1 - Plastic 500ml HNO3 preserved
Thallium, Total	7440-28-0	0.0005	0.000143	mg/l	80-120		75-125	20	20		180 days	1 - Plastic 500ml HNO3 preserved
Vanadium, Total	7440-62-2	0.005	0.00157	mg/l	80-120		75-125	20	20		180 days	1 - Plastic 500ml HNO3 preserved
Zinc, Total	7440-66-6	0.01	0.00341	mg/l	80-120		75-125	20	20		180 days	1 - Plastic 500ml HNO3 preserved

Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)
Please Note that the information provided in this table is subject to change at anytime at the discretion of Alpha Analytical, Inc.

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Page: 1

METALS by 6020B (SOIL)

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Surrogate Criteria	Holding Time	Container/Sample Preservation
Aluminum, Total	7429-90-5	10	1.48	mg/kg	48-151	20	75-125	20	20		180 days	Metals Only-Glass 60mL/2oz unpreserv
Antimony, Total	7440-36-0	0.16	0.01352	mg/kg	1-208	20	75-125	20	20		180 days	Metals Only-Glass 60mL/2oz unpreserv
Arsenic, Total	7440-38-2	0.05	0.0066	mg/kg	79-121	20	75-125	20	20		180 days	Metals Only-Glass 60mL/2oz unpreserv
Barium, Total	7440-39-3	0.3	0.02112	mg/kg	83-117	20	75-125	20	20		180 days	Metals Only-Glass 60mL/2oz unpreserv
Beryllium, Total	7440-41-7	0.03	0.00872	mg/kg	83-117	20	75-125	20	20		180 days	Metals Only-Glass 60mL/2oz unpreserv
Cadmium, Total	7440-43-9	0.02	0.00264	mg/kg	83-117	20	75-125	20	20		180 days	Metals Only-Glass 60mL/2oz unpreserv
Calcium, Total	7440-70-2	50	6.08	mg/kg	81-119	20	75-125	20	20		180 days	Metals Only-Glass 60mL/2oz unpreserv
Chromium, Total	7440-47-3	0.2	0.0468	mg/kg	80-120	20	75-125	20	20		180 days	Metals Only-Glass 60mL/2oz unpreserv
Cobalt, Total	7440-48-4	0.05	0.00532	mg/kg	84-115	20	75-125	20	20		180 days	Metals Only-Glass 60mL/2oz unpreserv
Copper, Total	7440-50-8	0.2	0.0194	mg/kg	81-118	20	75-125	20	20		180 days	Metals Only-Glass 60mL/2oz unpreserv
Iron, Total	7439-89-6	20	2.06	mg/kg	45-155	20	75-125	20	20		180 days	Metals Only-Glass 60mL/2oz unpreserv
Lead, Total	7439-92-1	0.06	0.0146	mg/kg	81-117	20	75-125	20	20		180 days	Metals Only-Glass 60mL/2oz unpreserv
Magnesium, Total	7439-95-4	10	1.232	mg/kg	76-124	20	75-125	20	20		180 days	Metals Only-Glass 60mL/2oz unpreserv
Manganese, Total	7439-96-5	0.2	0.0444	mg/kg	81-117	20	75-125	20	20		180 days	Metals Only-Glass 60mL/2oz unpreserv
Nickel, Total	7440-02-0	0.1	0.02672	mg/kg	83-117	20	75-125	20	20		180 days	Metals Only-Glass 60mL/2oz unpreserv
Potassium, Total	7440-09-7	10	1.588	mg/kg	71-129	20	75-125	20	20		180 days	Metals Only-Glass 60mL/2oz unpreserv
Selenium, Total	7782-49-2	0.2	0.0756	mg/kg	78-122	20	75-125	20	20		180 days	Metals Only-Glass 60mL/2oz unpreserv
Silver, Total	7440-22-4	0.05	0.00488	mg/kg	75-124	20	75-125	20	20		180 days	Metals Only-Glass 60mL/2oz unpreserv
Sodium, Total	7440-23-5	15	1.172	mg/kg	72-127	20	75-125	20	20		180 days	Metals Only-Glass 60mL/2oz unpreserv
Thallium, Total	7440-28-0	0.02	0.00516	mg/kg	80-120	20	75-125	20	20		180 days	Metals Only-Glass 60mL/2oz unpreserv
Vanadium, Total	7440-62-2	0.1	0.03792	mg/kg	78-122	20	75-125	20	20		180 days	Metals Only-Glass 60mL/2oz unpreserv
Zinc, Total	7440-66-6	1	0.26	mg/kg	82-118	20	75-125	20	20		180 days	Metals Only-Glass 60mL/2oz unpreserv

Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)
Please Note that the information provided in this table is subject to change at anytime at the discretion of Alpha Analytical, Inc.

Performance Report

System

Start time:	11/26/2024 6:04:49 AM
Instrument:	iCAP Q
Operator:	ALPHALAB\a2-icpmsq2
Template:	STD AGD
Instrument Serial Number:	Q01717
Last Autotune:	Autotune-SourceTune High Matrix AGD-20241117-104951087.imatdat
Solution:	1 ppb Tune B in 2% HNO3 and 0.5% HCl.

Sensitivity & Stability Test

Result	Runs	Sweeps
Passed	5	10

Sensitivity

Analyte	Result	Value	Condition	Limit
Bkg4.5	Passed	0.4 CPS	Less than	5.0 CPS
Bkg220.7	Passed	0.2 CPS	Less than	5.0 CPS
7Li	Passed	80,221.0 CPS	Greater than	10,000.0 CPS
59Co	Passed	110,586.0 CPS	Greater than	1,000.0 CPS
238U	Passed	173,846.0 CPS	Greater than	20,000.0 CPS
140Ce.16O/140Ce	Passed	0.012	Less than	0.025
137Ba++/137Ba	Passed	0.0265	Less than	0.034
115In	Passed	142,199.0 CPS	Greater than	5,000.0 CPS

Stability

Analyte	Value	Limit
7Li	0.9%	5
59Co	0.9%	5
238U	2.2%	5
140Ce.16O	4.0%	2
140Ce	0.8%	2
115In	1.8%	5

Mass Calibration Test

Result	Channels	Dwell	MeasureWidth	PointSpacing	Sweeps
Passed	75	0.04	1.5	0.02	10

Analyte	Result	Centroid Mass [u]	Offset	Peak width [u]	Peak width min [u]	Peak width max [u]
7Li	Passed	7.0092	0.0068	0.695	0.650	0.850
59Co	Passed	58.9271	0.0061	0.726	0.650	0.850
115In	Passed	114.8952	0.0087	0.741	0.650	0.850
238U	Passed	238.0684	0.0176	0.775	0.650	0.850

Tune Settings

Parameter	Value
Additional Gas Flow 1	47.55
Additional Gas Flow 2	0.00
Additional Gas Flow 3	0.00
Angular Deflection	-356.48
Auxilliary Flow	0.80
CCT Bias	-2.01
CCT Entry Lens	-98.67
CCT Exit Lens	-160.01
CCT Focus Lens	-8.76
CCT1 Flow	0.00
CCT1 Shut-Off Valve	0.00
CCT2 Flow	0.00
CCT2 Shut-Off Valve	0.00
Cool Flow	14.00
D1 Lens	-181.98
D2 Lens	-80.00
Deflection Entry Lens	-35.00
Dry Pump Speed	0.00
Extraction Lens 1 Negative	0.00
Extraction Lens 1 Polarity	0.00
Extraction Lens 1 Positive	0.00
Extraction Lens 2	-94.99
Focus Lens	19.00
Nebulizer Flow	0.48
Peristaltic Pump Speed	17.00
Plasma Power	1550.00
Pole Bias	0.36
Quad Entry Lens	-22.39
Sampling Depth	5.00
Spray Chamber Temperature	2.70
Torch Horizontal Position	0.36
Torch Vertical Position	-0.92
Virtual CCT Mass Maximum Dac Limit Set	4095.00
Virtual CCT Mass parameter b	0.65
Virtual CCT Mass to Dac Factor	130.00
Virtual CCT Mass to Dac Offset	37.51

Vacuum Check

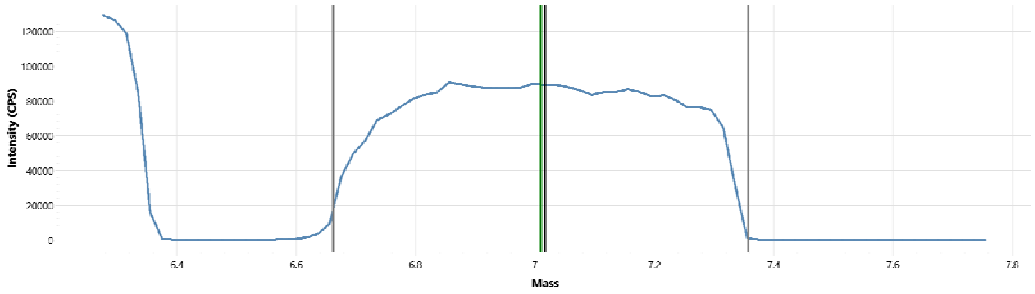
Parameter	Result	Value
Analyzer Pressure	Vacuum ok	3.943e-7
Interface Pressure		1.893e+0

Detector Voltages

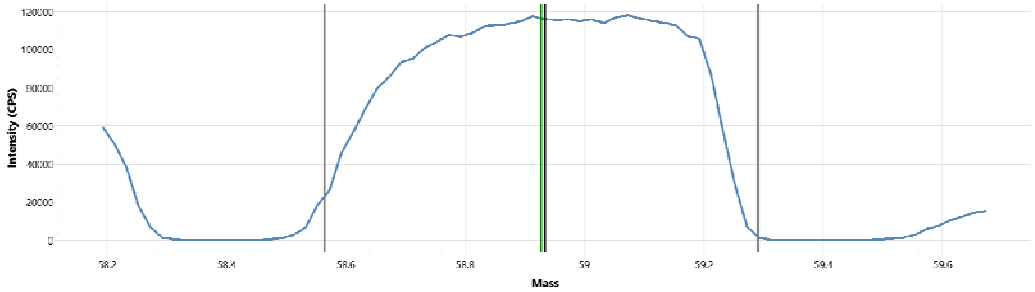
Analog	Counting
-2287.50	1862.50

Mass Calibration Peaks

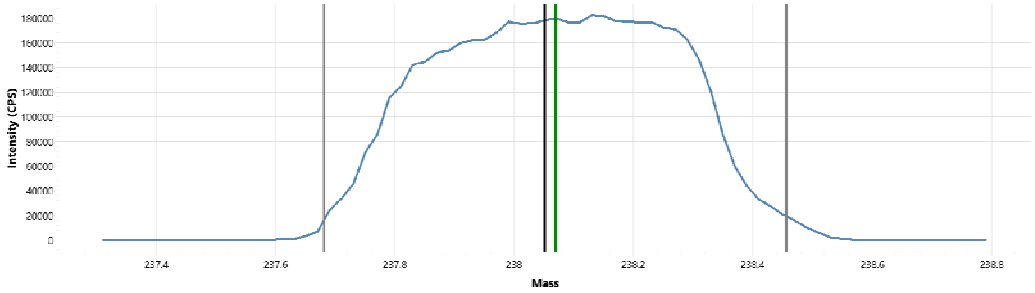
Analyte: 7Li



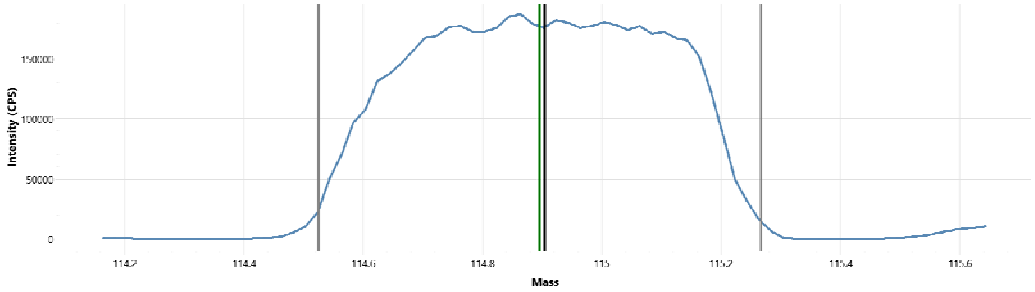
Analyte: 59Co



Analyte: 238U



Analyte: 115In



Performance Report

System

Start time:	12/2/2024 7:12:53 AM
Instrument:	iCAP Q
Operator:	ALPHALAB\Metals-Instrument
Template:	STD AGD
Instrument Serial Number:	03031R
Last Autotune:	Autotune-SourceTune High Matrix Alpha Custom-20241111-095049123.imatdat
Solution:	1 ppb Tune B in 2% HNO3 and 0.5% HCl.

Sensitivity & Stability Test

Result	Runs	Sweeps
Passed	5	10

Sensitivity

Analyte	Result	Value	Condition	Limit
Bkg4.5	Passed	0.2 CPS	Less than	5.0 CPS
Bkg220.7	Passed	0.4 CPS	Less than	5.0 CPS
7Li	Passed	35,943.0 CPS	Greater than	10,000.0 CPS
59Co	Passed	47,128.0 CPS	Greater than	1,000.0 CPS
238U	Passed	132,491.0 CPS	Greater than	20,000.0 CPS
140Ce.16O/140Ce	Passed	0.0152	Less than	0.025
137Ba++/137Ba	Passed	0.0287	Less than	0.034
115In	Passed	50,983.0 CPS	Greater than	5,000.0 CPS

Stability

Analyte	Value	Limit
7Li	0.6%	5
59Co	0.7%	5
238U	0.4%	5
140Ce.16O	3.9%	2
140Ce	0.9%	2
115In	0.7%	5

Mass Calibration Test

Result	Channels	Dwell	MeasureWidth	PointSpacing	Sweeps
Passed	75	0.04	1.5	0.02	10

Analyte	Result	Centroid Mass [u]	Offset	Peak width [u]	Peak width min [u]	Peak width max [u]
7Li	Passed	6.9983	0.0177	0.760	0.600	0.900
59Co	Passed	58.9069	0.0263	0.755	0.600	0.900
115In	Passed	114.8336	0.0703	0.800	0.600	0.900
238U	Passed	238.0122	0.0386	0.748	0.600	0.900

Tune Settings

Parameter	Value
Additional Gas Flow 1	47.51
Additional Gas Flow 2	0.00
Additional Gas Flow 3	0.00
Angular Deflection	-374.02
Auxilliary Flow	0.80
CCT Bias	-0.01
CCT Entry Lens	-87.97
CCT Exit Lens	-160.01
CCT Focus Lens	0.90
CCT1 Flow	0.00
CCT1 Shut-Off Valve	0.00
CCT2 Flow	0.00
CCT2 Shut-Off Valve	0.00
Cool Flow	14.00
D1 Lens	-198.00
D2 Lens	-80.00
Deflection Entry Lens	-35.01
Dry Pump Speed	0.00
Extraction Lens 1 Negative	0.00
Extraction Lens 1 Polarity	0.00
Extraction Lens 1 Positive	0.00
Extraction Lens 2	-266.67
Focus Lens	9.00
Nebulizer Flow	0.38
Peristaltic Pump Speed	20.00
Plasma Power	1550.00
Pole Bias	0.01
Quad Entry Lens	-23.81
Sampling Depth	5.00
Spray Chamber Temperature	2.70
Torch Horizontal Position	-0.58
Torch Vertical Position	0.70
Virtual CCT Mass Maximum Dac Limit Set	4095.00
Virtual CCT Mass parameter b	0.65
Virtual CCT Mass to Dac Factor	130.00
Virtual CCT Mass to Dac Offset	-140.01

Vacuum Check

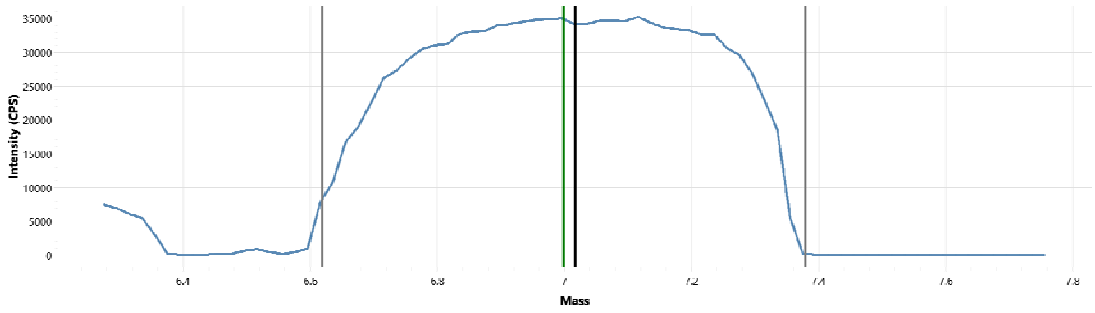
Parameter	Result	Value
Analyzer Pressure	Vacuum ok	2.007e-7
Interface Pressure		1.691e+0

Detector Voltages

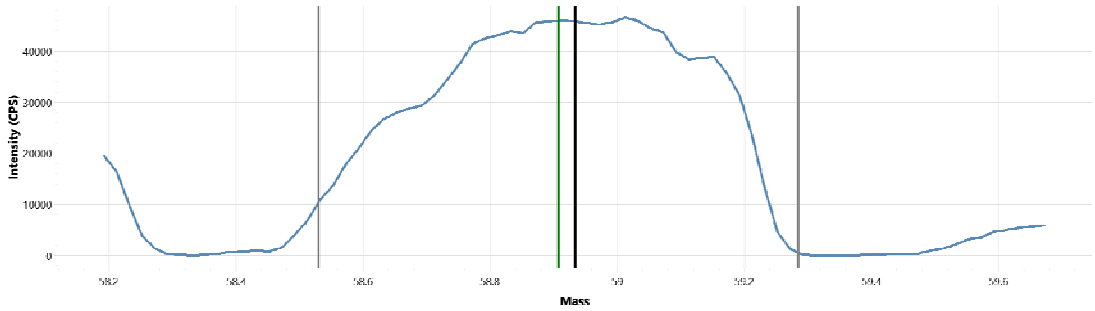
Analog	Counting
-2000.00	1750.00

Mass Calibration Peaks

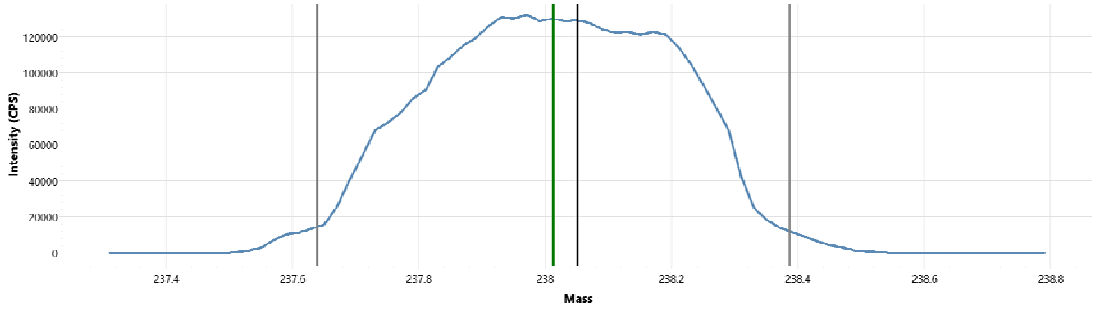
Analyte: 7Li



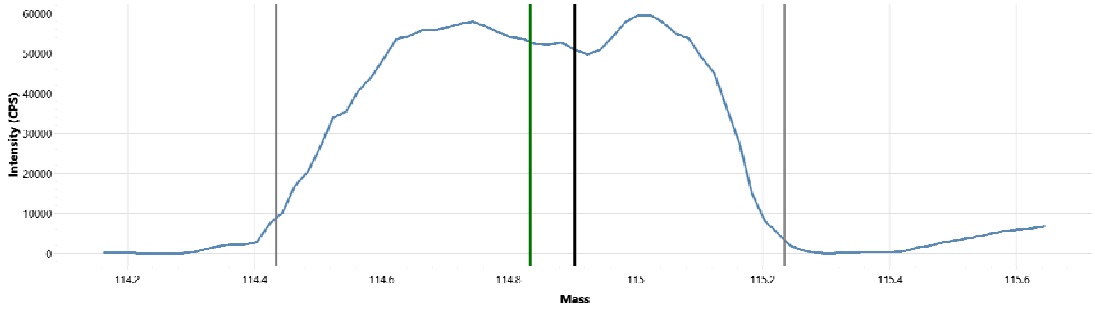
Analyte: 59Co



Analyte: 238U



Analyte: 115In



Performance Report

System

Start time:	12/3/2024 6:07:11 AM
Instrument:	iCAP Q
Operator:	ALPHALAB\a2-icpmsq2
Template:	STD AGD
Instrument Serial Number:	Q01717
Last Autotune:	Autotune-SourceTune High Matrix AGD-20241117-104951087.imatdat
Solution:	1 ppb Tune B in 2% HNO3 and 0.5% HCl.

Sensitivity & Stability Test

Result	Runs	Sweeps
Passed	5	10

Sensitivity

Analyte	Result	Value	Condition	Limit
Bkg4.5	Passed	0.6 CPS	Less than	5.0 CPS
Bkg220.7	Passed	0.2 CPS	Less than	5.0 CPS
7Li	Passed	56,774.0 CPS	Greater than	10,000.0 CPS
59Co	Passed	97,156.0 CPS	Greater than	1,000.0 CPS
238U	Passed	155,233.0 CPS	Greater than	20,000.0 CPS
140Ce.16O/140Ce	Passed	0.0119	Less than	0.025
137Ba++/137Ba	Passed	0.0312	Less than	0.034
115In	Passed	111,531.0 CPS	Greater than	5,000.0 CPS

Stability

Analyte	Value	Limit
7Li	0.6%	5
59Co	1.1%	5
238U	0.9%	5
140Ce.16O	1.2%	2
140Ce	0.6%	2
115In	4.5%	5

Mass Calibration Test

Result	Channels	Dwell	MeasureWidth	PointSpacing	Sweeps
Passed	75	0.04	1.5	0.02	10

Analyte	Result	Centroid Mass [u]	Offset	Peak width [u]	Peak width min [u]	Peak width max [u]
7Li	Passed	7.0146	0.0014	0.694	0.650	0.850
59Co	Passed	58.9286	0.0046	0.724	0.650	0.850
115In	Passed	114.8993	0.0046	0.740	0.650	0.850
238U	Passed	238.0638	0.0130	0.763	0.650	0.850

Tune Settings

Parameter	Value
Additional Gas Flow 1	47.55
Additional Gas Flow 2	0.00
Additional Gas Flow 3	0.00
Angular Deflection	-356.48
Auxilliary Flow	0.80
CCT Bias	-2.01
CCT Entry Lens	-98.67
CCT Exit Lens	-160.01
CCT Focus Lens	-8.76
CCT1 Flow	0.00
CCT1 Shut-Off Valve	0.00
CCT2 Flow	0.00
CCT2 Shut-Off Valve	0.00
Cool Flow	14.00
D1 Lens	-181.98
D2 Lens	-80.00
Deflection Entry Lens	-35.00
Dry Pump Speed	0.00
Extraction Lens 1 Negative	0.00
Extraction Lens 1 Polarity	0.00
Extraction Lens 1 Positive	0.00
Extraction Lens 2	-94.99
Focus Lens	19.00
Nebulizer Flow	0.48
Peristaltic Pump Speed	17.00
Plasma Power	1550.00
Pole Bias	0.36
Quad Entry Lens	-22.39
Sampling Depth	5.00
Spray Chamber Temperature	2.70
Torch Horizontal Position	0.36
Torch Vertical Position	-0.92
Virtual CCT Mass Maximum Dac Limit Set	4095.00
Virtual CCT Mass parameter b	0.65
Virtual CCT Mass to Dac Factor	130.00
Virtual CCT Mass to Dac Offset	37.51

Vacuum Check

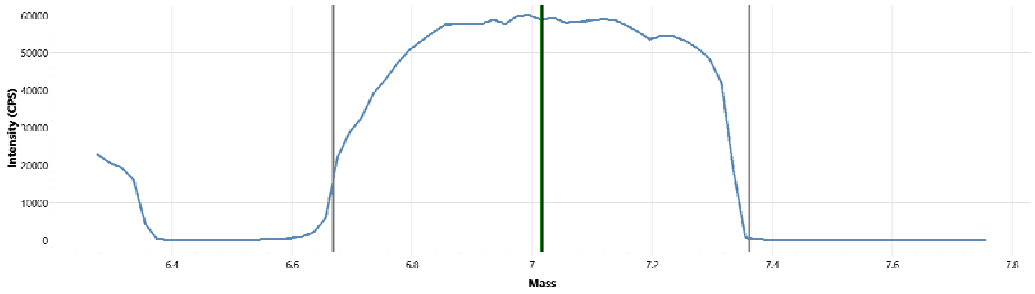
Parameter	Result	Value
Analyzer Pressure	Vacuum ok	4.828e-7
Interface Pressure		1.893e+0

Detector Voltages

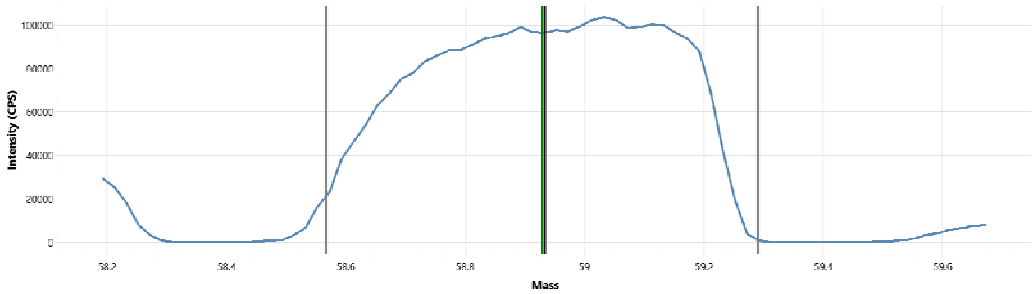
Analog	Counting
-2287.50	1862.50

Mass Calibration Peaks

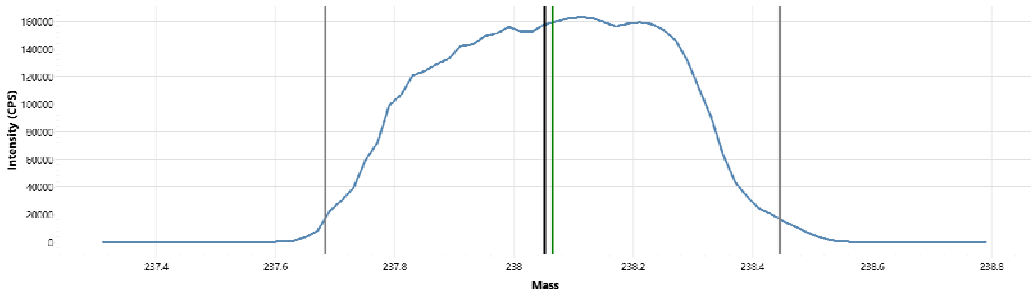
Analyte: 7Li



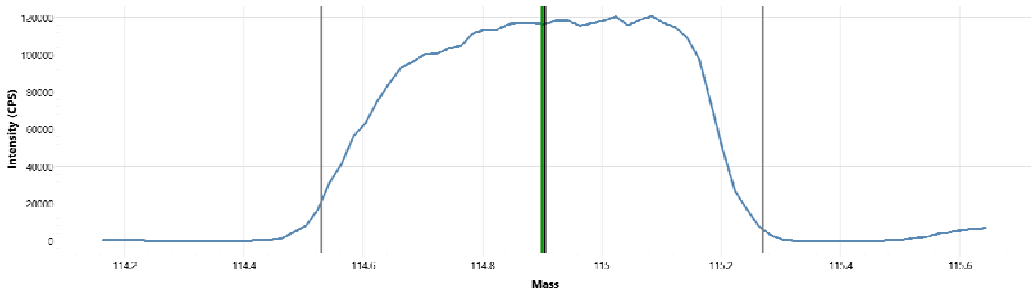
Analyte: 59Co



Analyte: 238U

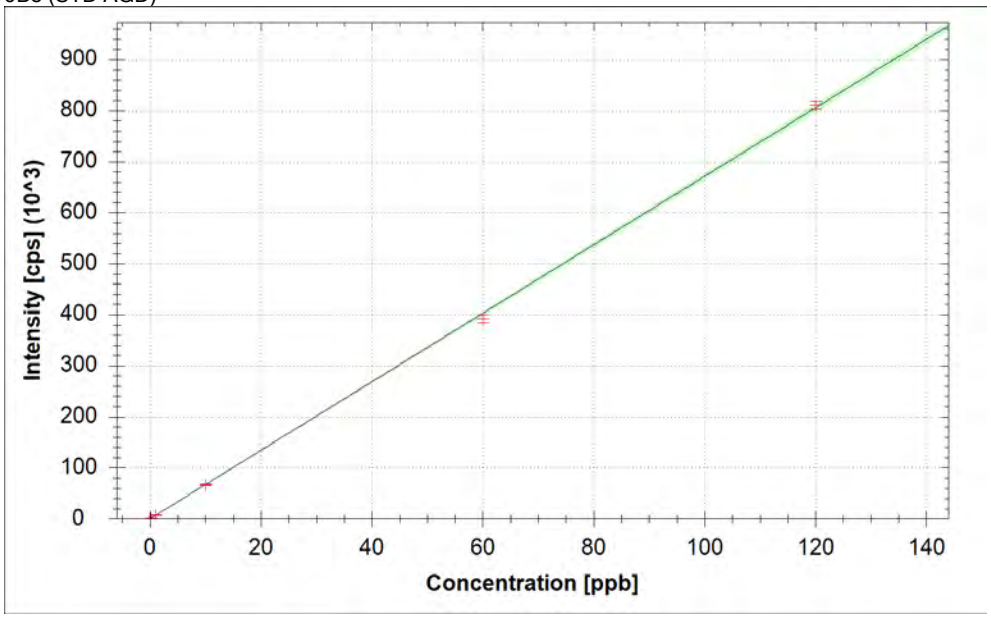


Analyte: 115In



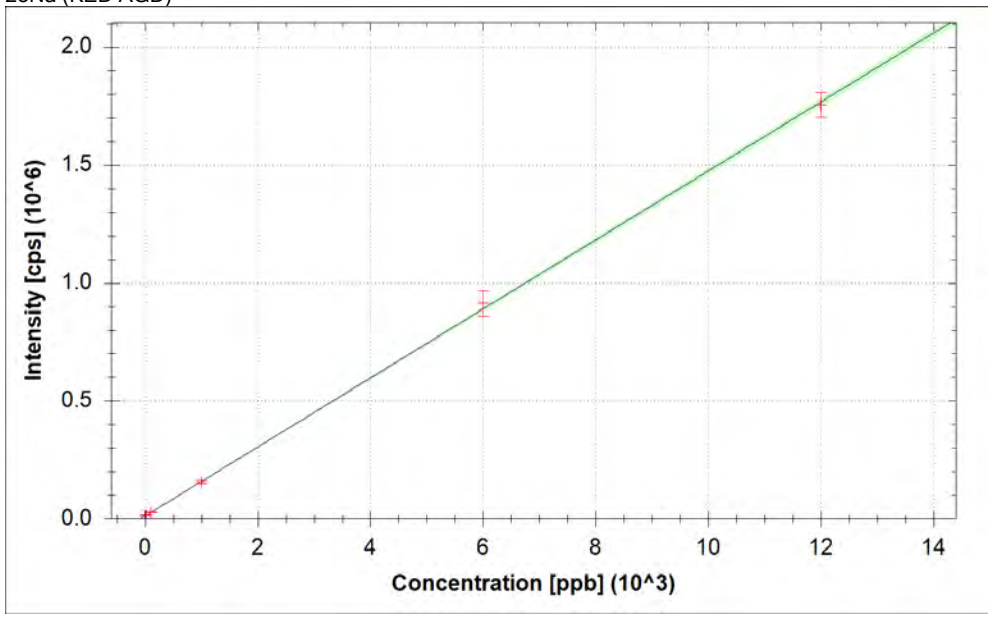
Calibration Curves:

9Be (STD AGD)



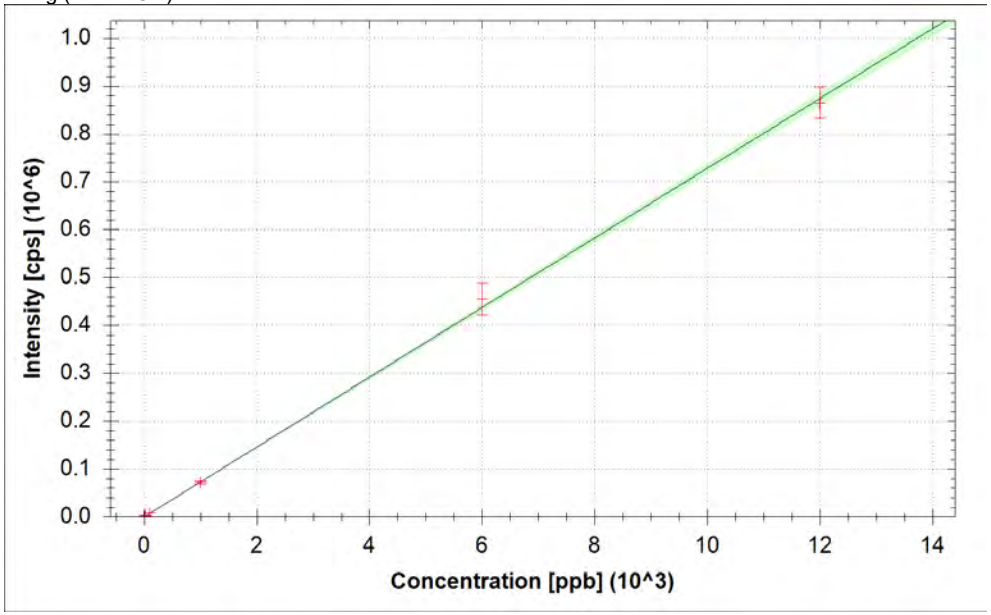
f(x) = 6709.6179*x + 52.4555
R² = 0.9997
BEC = 0.008 ppb
LoD = 0.0050 ppb

23Na (KED AGD)



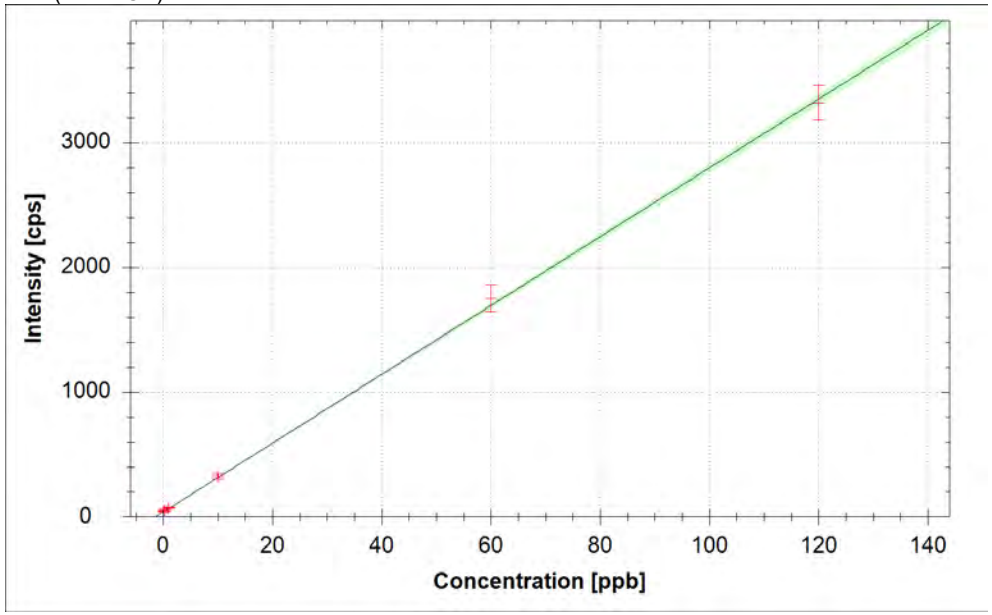
f(x) = 146.2061*x + 12079.1735
R² = 0.9997
BEC = 82.617 ppb
LoD = 5.2980 ppb

24Mg (KED AGD)



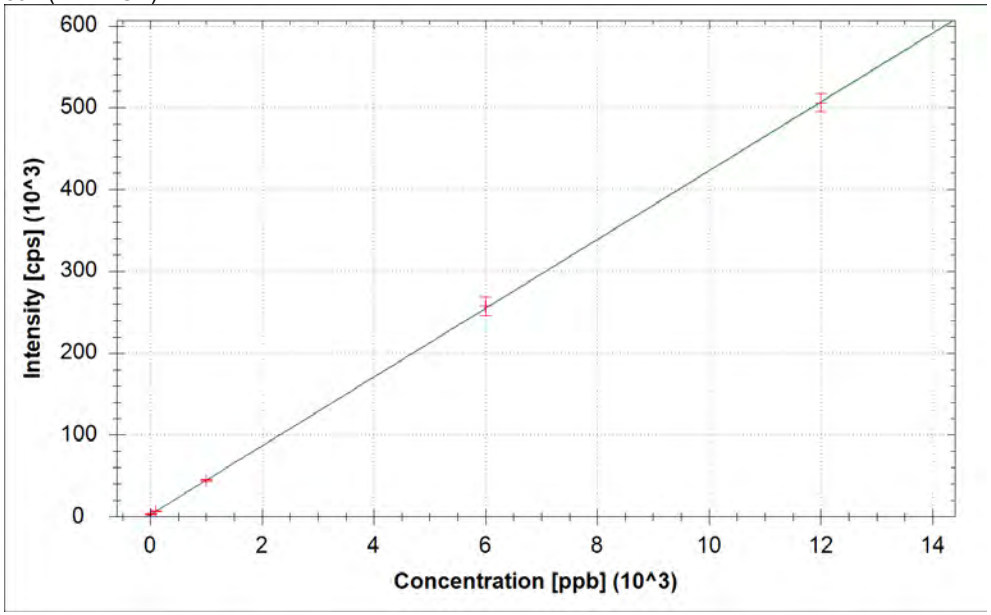
f(x) = 72.7959*x + 124.1952
R² = 0.9994
BEC = 1.706 ppb
LoD = 0.6570 ppb

27Al (KED AGD)



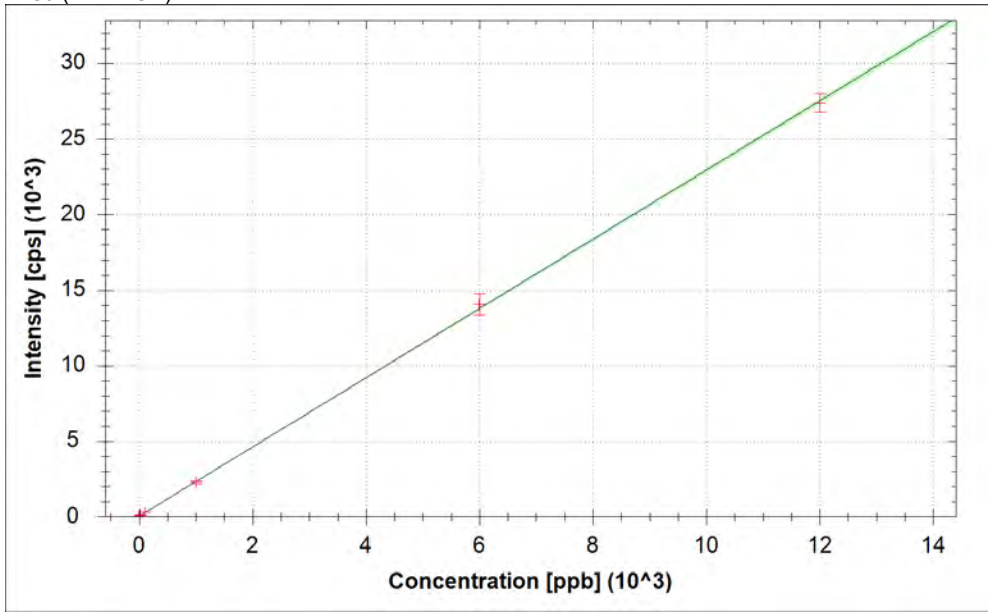
f(x) = 27.5793*x + 38.0839
R² = 0.9995
BEC = 1.381 ppb
LoD = 0.6402 ppb

39K (KED AGD)



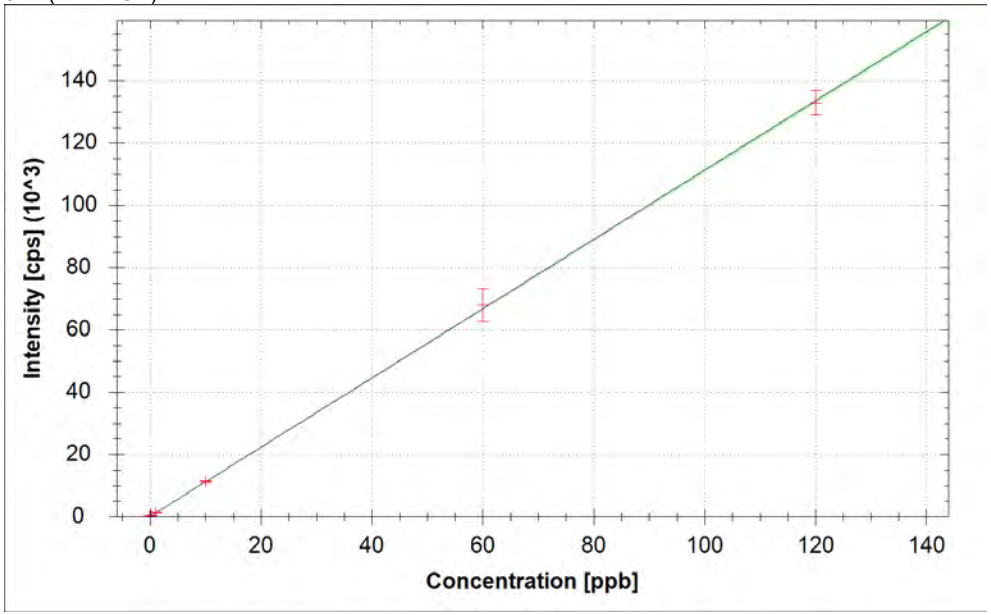
f(x) = 42.0253*x + 2569.2201
R² = 1.0000
BEC = 61.135 ppb
LoD = 11.3798 ppb

44Ca (KED AGD)



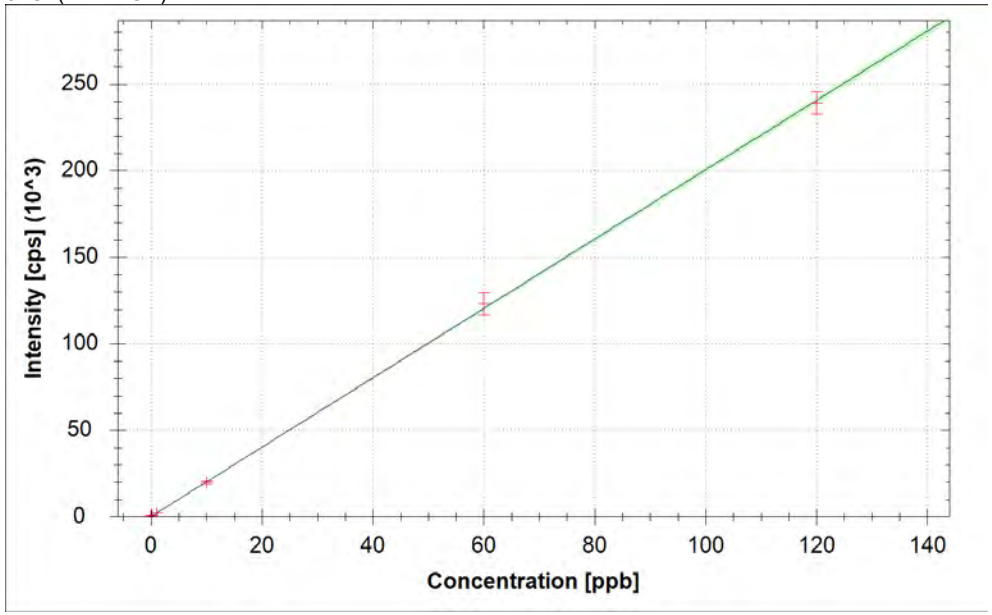
f(x) = 2.2901*x + 35.5859
R² = 0.9998
BEC = 15.539 ppb
LoD = 9.0686 ppb

51V (KED AGD)



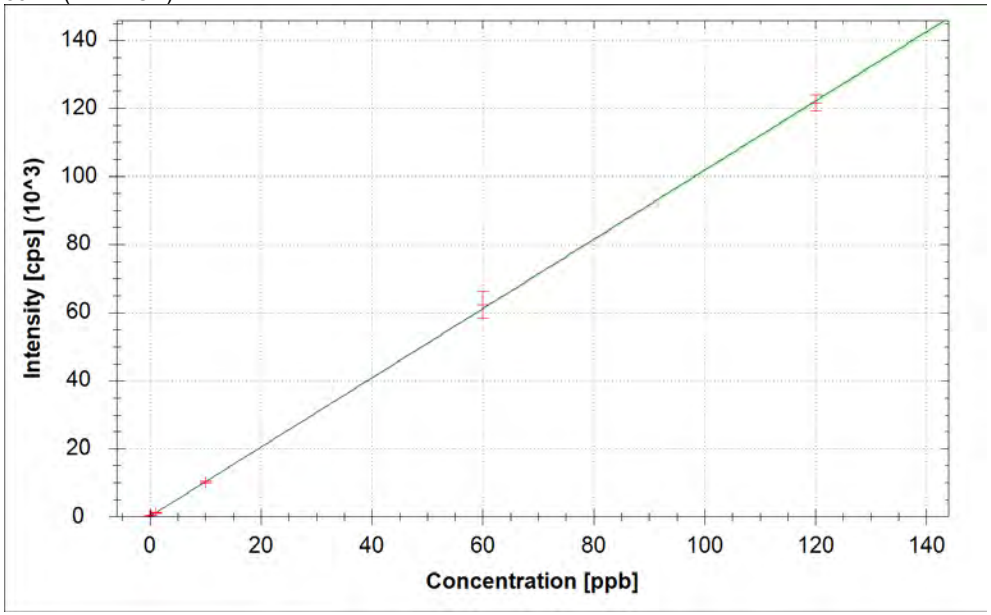
f(x) = 1111.0503*x + 108.6768
R² = 0.9999
BEC = 0.098 ppb
LoD = 0.0699 ppb

52Cr (KED AGD)



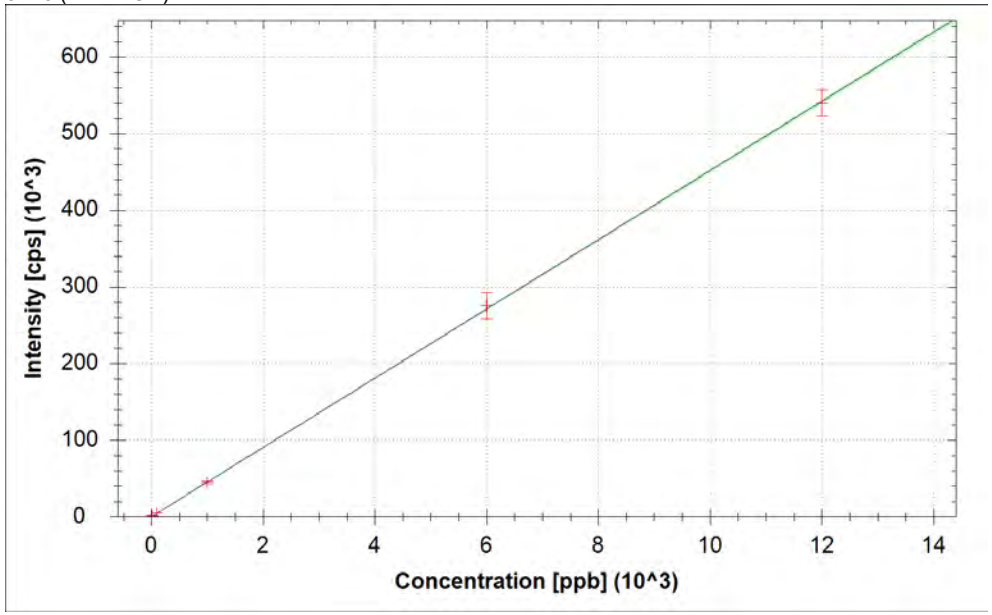
f(x) = 2003.0722*x + 141.6904
R² = 0.9998
BEC = 0.071 ppb
LoD = 0.0372 ppb

55Mn (KED AGD)



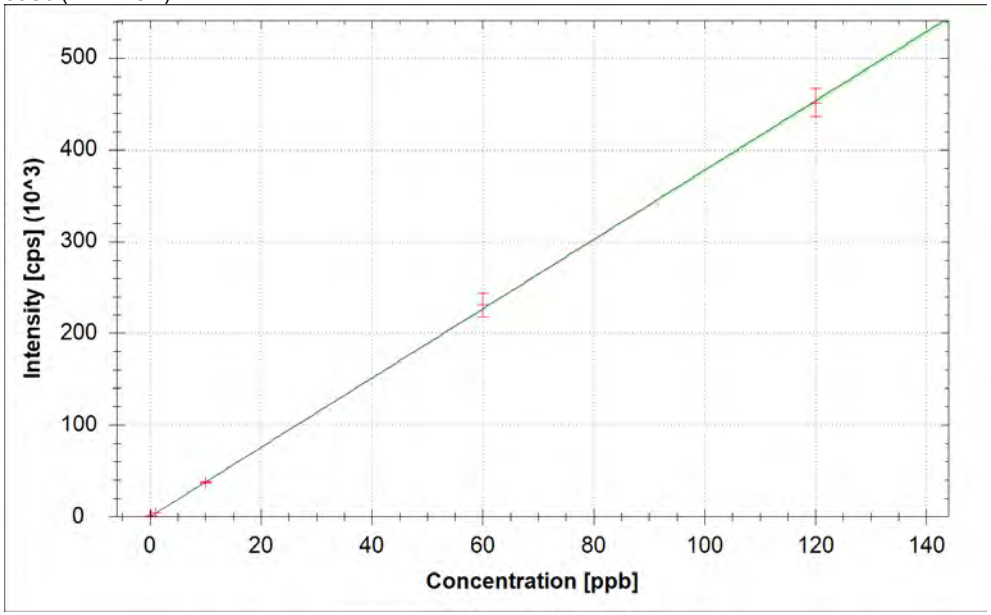
f(x) = 1016.4949*x + 125.5325
R² = 0.9999
BEC = 0.123 ppb
LoD = 0.1575 ppb

57Fe (KED AGD)



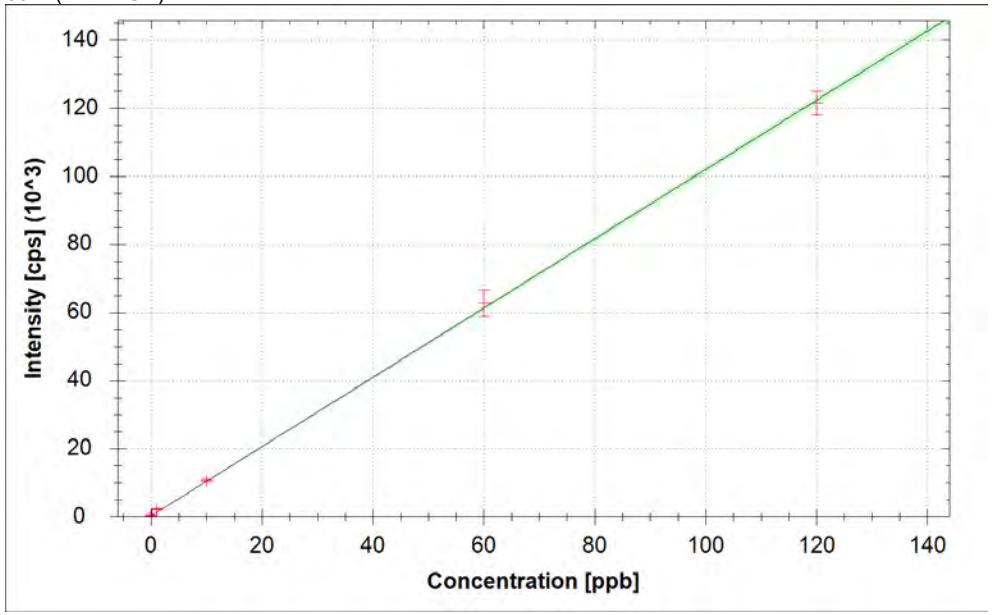
f(x) = 45.1554*x + 101.9691
R² = 0.9999
BEC = 2.258 ppb
LoD = 1.6606 ppb

59Co (KED AGD)



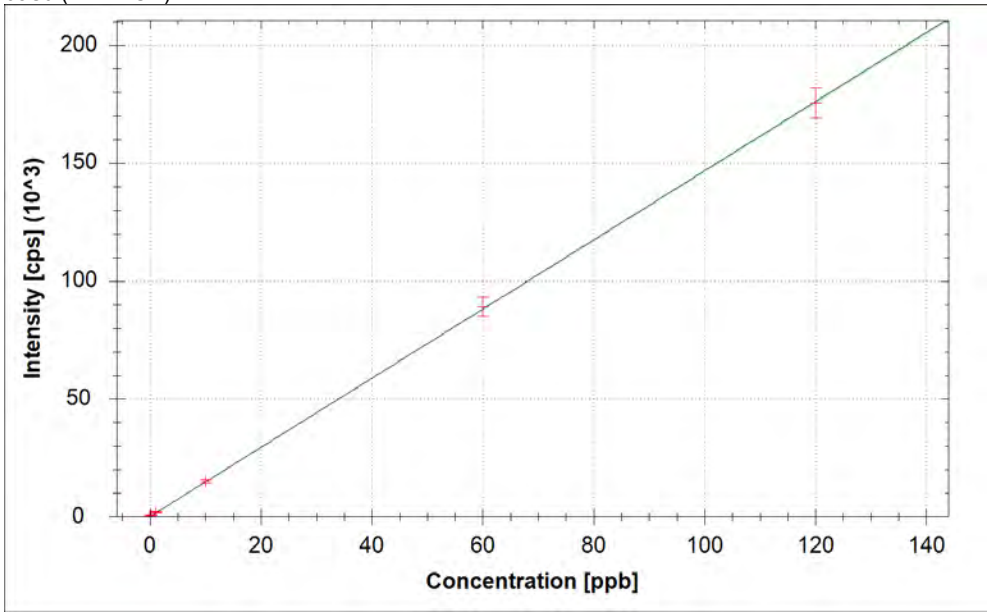
f(x) = 3775.6766*x + 46.4006
R² = 0.9999
BEC = 0.012 ppb
LoD = 0.0093 ppb

60Ni (KED AGD)



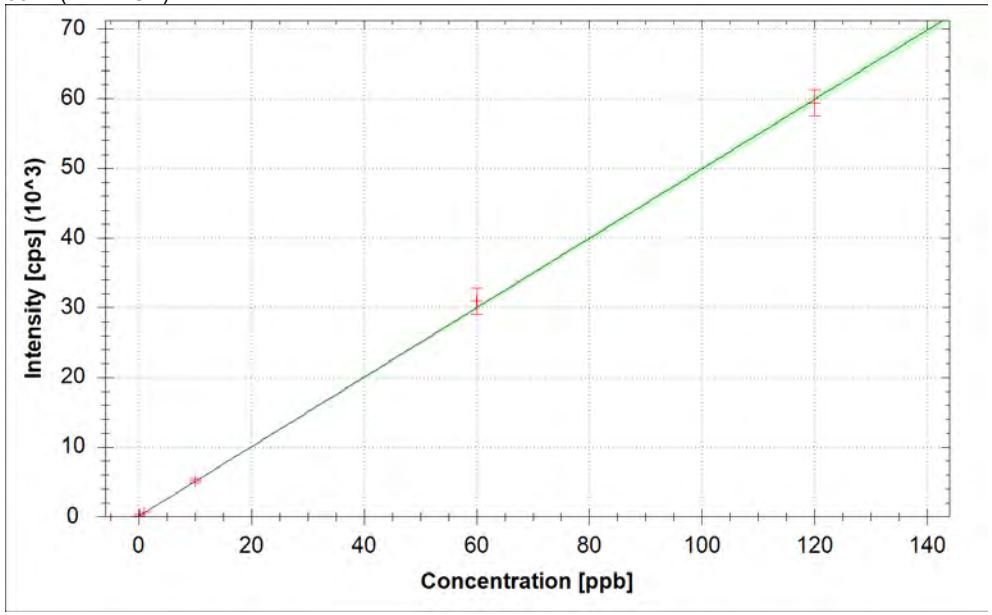
f(x) = 1017.1185*x + 247.2456
R² = 0.9997
BEC = 0.243 ppb
LoD = 0.1046 ppb

65Cu (KED AGD)



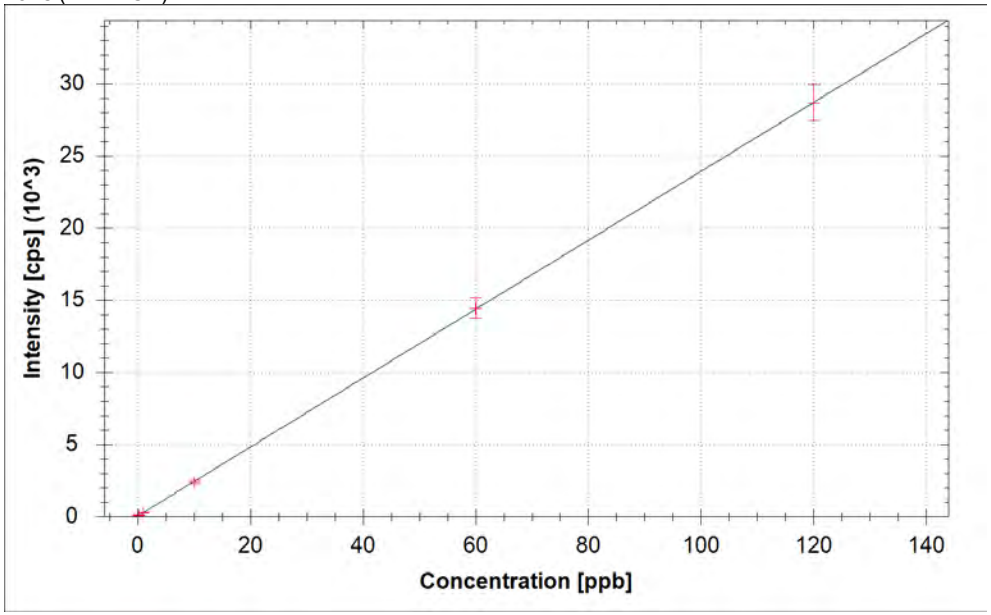
f(x) = 1465.7087*x + 120.0349
R² = 0.9999
BEC = 0.082 ppb
LoD = 0.0633 ppb

66Zn (KED AGD)



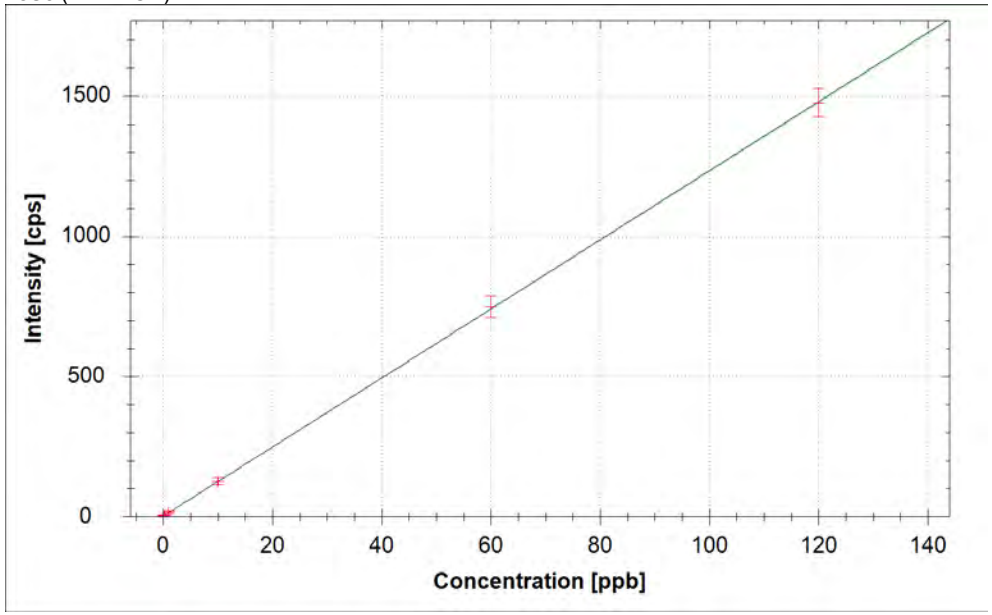
f(x) = 497.9824*x + 83.3415
R² = 0.9996
BEC = 0.167 ppb
LoD = 0.0928 ppb

75As (KED AGD)



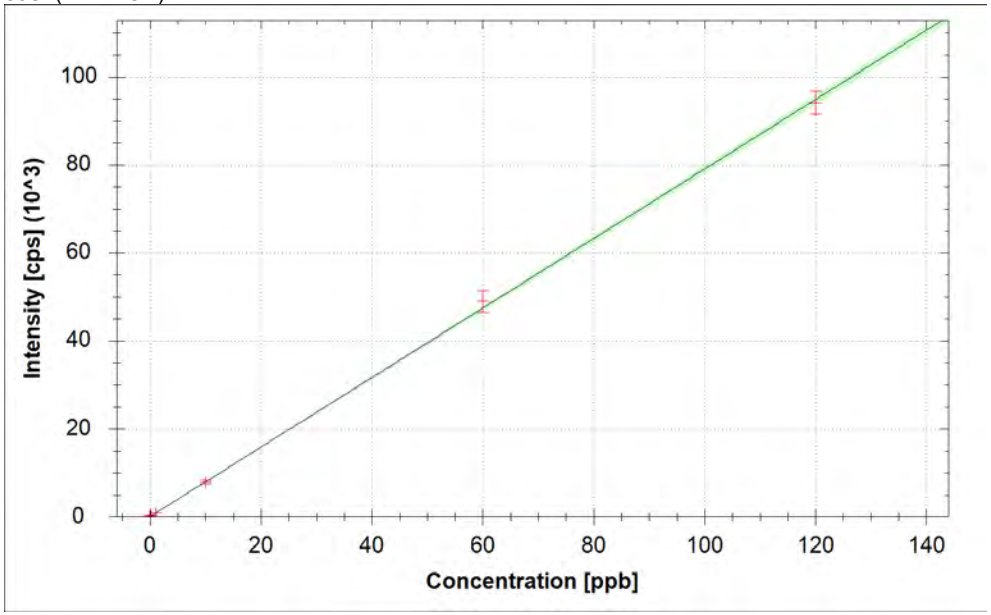
f(x) = 238.6565*x + 62.9769
R² = 1.0000
BEC = 0.264 ppb
LoD = 0.1027 ppb

78Se (KED AGD)



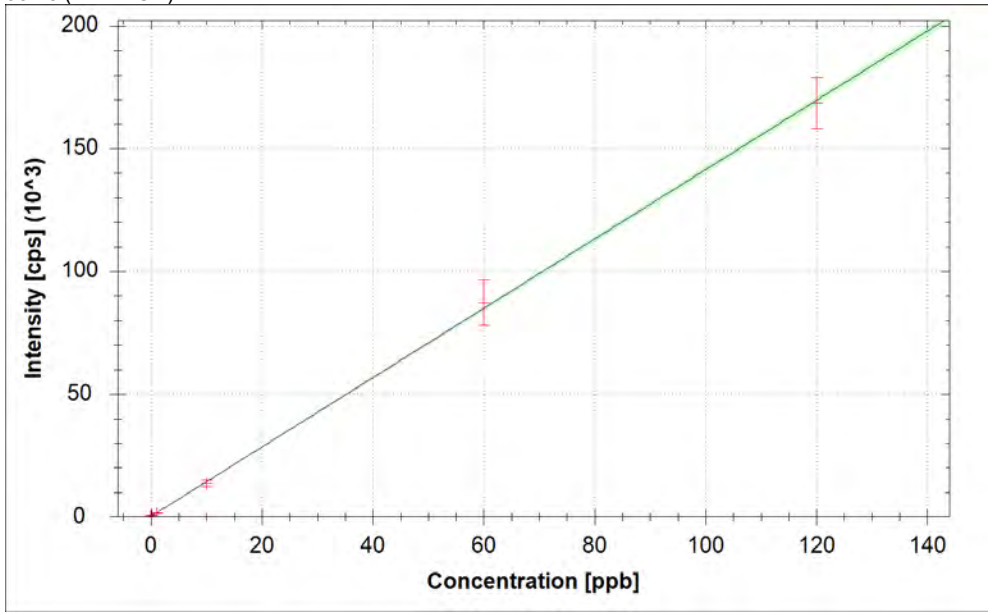
f(x) = 12.3082*x + 2.3211
R² = 1.0000
BEC = 0.189 ppb
LoD = 0.4555 ppb

88Sr (KED AGD)



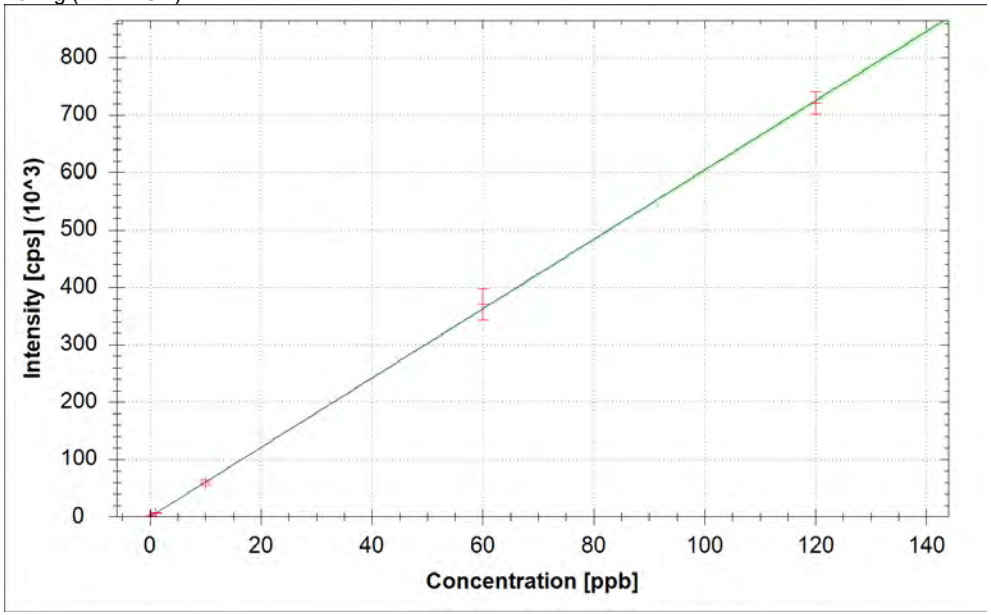
f(x) = 789.8957*x + 39.0068
R² = 0.9996
BEC = 0.049 ppb
LoD = 0.0124 ppb

95Mo (KED AGD)



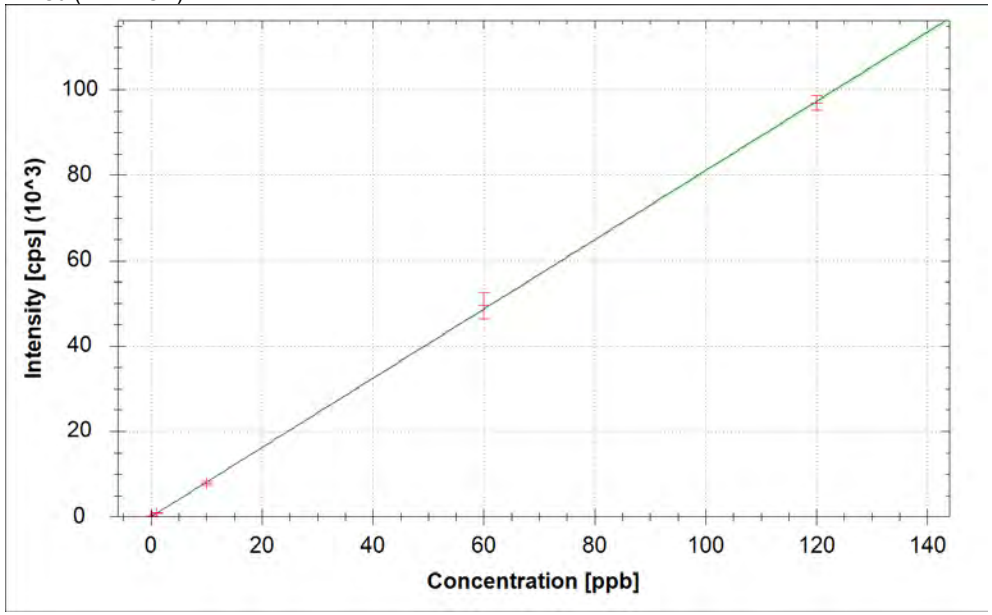
f(x) = 1412.0926*x + 180.4436
R² = 0.9997
BEC = 0.128 ppb
LoD = 0.0993 ppb

107Ag (KED AGD)



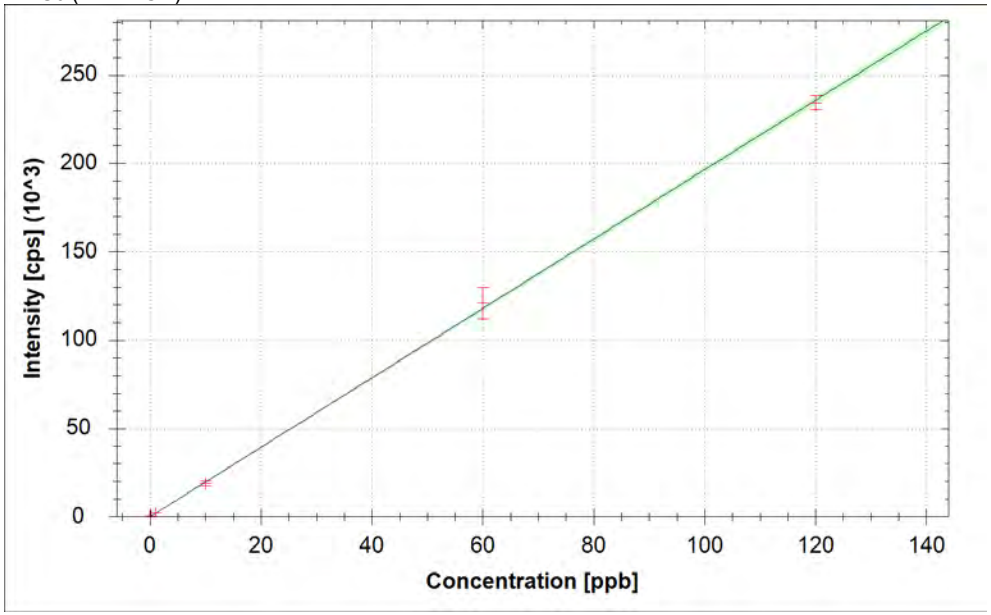
f(x) = 6040.4531*x + 24.3675
R² = 0.9998
BEC = 0.004 ppb
LoD = 0.0047 ppb

111Cd (KED AGD)



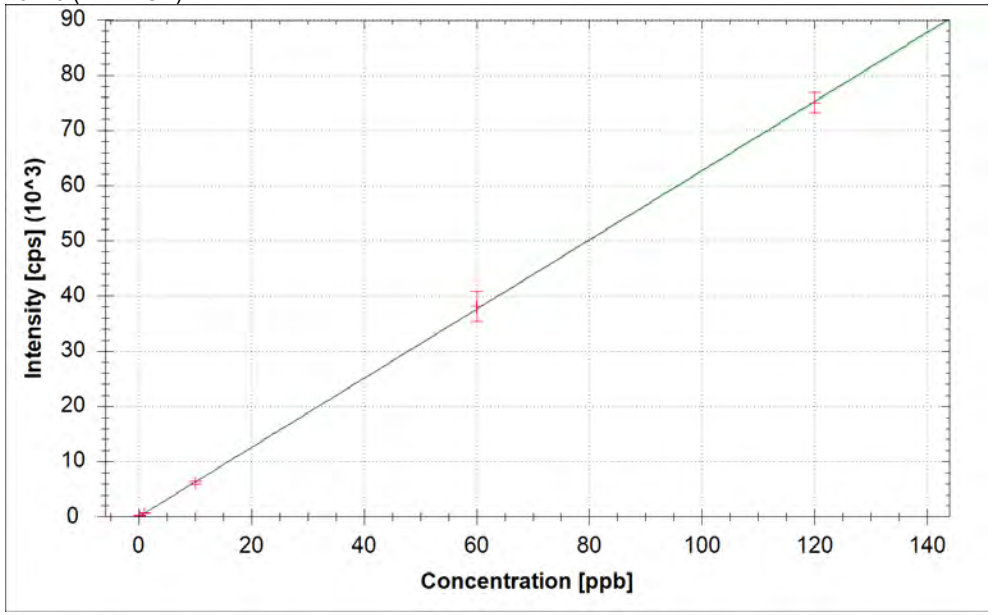
f(x) = 810.7054*x + 3.0995
R² = 0.9999
BEC = 0.004 ppb
LoD = 0.0056 ppb

121Sb (KED AGD)



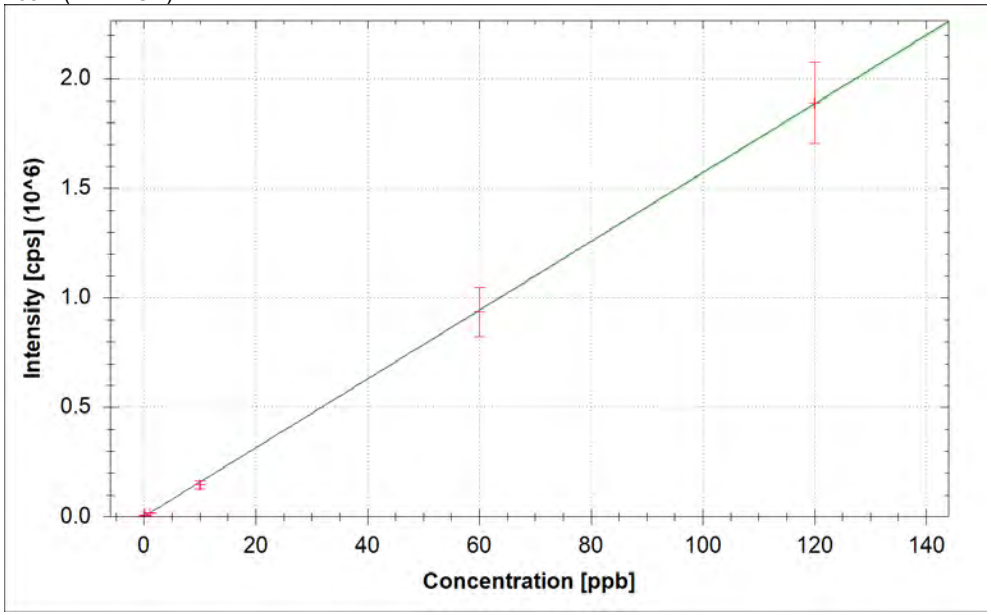
f(x) = 1963.2245*x + 46.4104
R² = 0.9997
BEC = 0.024 ppb
LoD = 0.0210 ppb

137Ba (KED AGD)



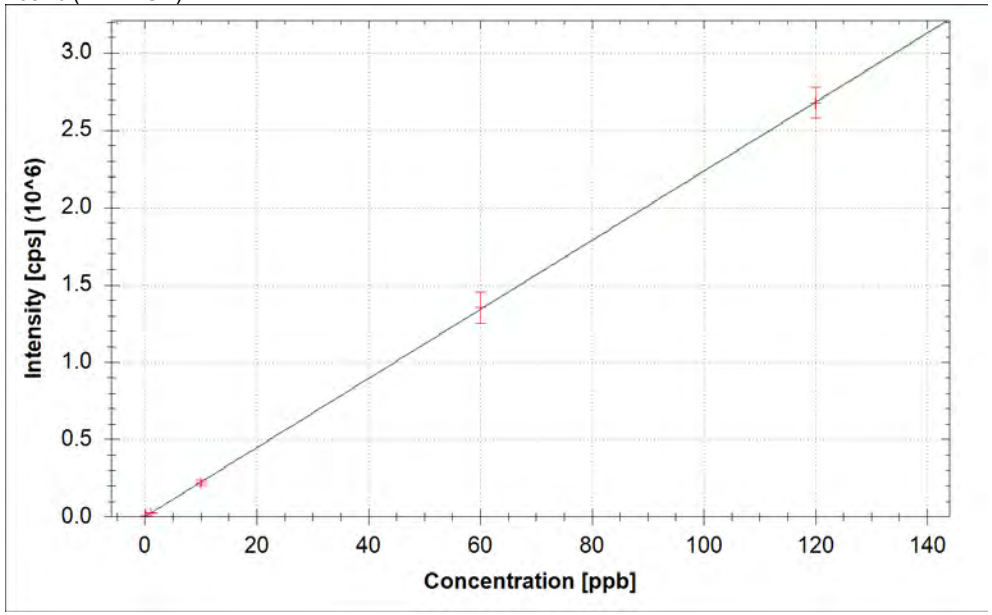
f(x) = 626.1712*x + 27.9802
R² = 0.9999
BEC = 0.045 ppb
LoD = 0.0492 ppb

205Tl (KED AGD)



f(x) = 15700.9168*x + 874.1681
R² = 0.9999
BEC = 0.056 ppb
LoD = 0.0624 ppb

208Pb (KED AGD)



f(x) = 22345.0338*x + 191.5655
R² = 1.0000
BEC = 0.009 ppb
LoD = 0.0023 ppb

Standards:

Analysis Index: 4
Analysis Name: 0.2/20 Cal
Analysis Type: STD
Analysis Started at: 11/26/2024 7:17:25 AM
Total Dilution Factor 50000
Rack 0
Vial 2

Category	Concentration average	Concentration RSD	Standard Concentration	Standard Relative Difference
6Li (STD AGD)	102.245 %	3.0 %		0.000 %
6Li (KED AGD)	101.153 %	2.9 %		0.000 %
9Be (STD AGD)	0.189 ppb	2.4 %	0.200 ppb	5.442 %
23Na (KED AGD)	20.026 ppb	11.6 %	20.000 ppb	0.131 %
24Mg (KED AGD)	20.441 ppb	8.2 %	20.000 ppb	2.205 %
27Al (KED AGD)	0.421 ppb	83.9 %	0.200 ppb	110.736 %
39K (KED AGD)	18.626 ppb	16.6 %	20.000 ppb	6.869 %
44Ca (KED AGD)	22.676 ppb	18.2 %	20.000 ppb	13.379 %
45Sc (STD AGD)	101.448 %	2.4 %		0.000 %
51V (KED AGD)	0.185 ppb	37.7 %	0.200 ppb	7.669 %
52Cr (KED AGD)	0.220 ppb	15.5 %	0.200 ppb	10.147 %
55Mn (KED AGD)	0.164 ppb	22.9 %	0.200 ppb	18.208 %
57Fe (KED AGD)	21.123 ppb	2.8 %	20.000 ppb	5.617 %
59Co (KED AGD)	0.192 ppb	12.7 %	0.200 ppb	4.226 %
60Ni (KED AGD)	0.658 ppb	5.3 %	0.200 ppb	229.035 %
65Cu (KED AGD)	0.336 ppb	15.1 %	0.200 ppb	67.876 %
66Zn (KED AGD)	0.487 ppb	9.5 %	0.200 ppb	143.646 %
74Ge (KED AGD)	100.187 %	1.8 %		0.000 %
75As (KED AGD)	0.172 ppb	19.3 %	0.200 ppb	13.927 %
78Se (KED AGD)	0.217 ppb	42.7 %	0.200 ppb	8.722 %
88Sr (KED AGD)	0.203 ppb	5.6 %	0.200 ppb	1.527 %
95Mo (KED AGD)	0.195 ppb	25.1 %	0.200 ppb	2.586 %
103Rh (KED AGD)	99.549 %	5.1 %		0.000 %
107Ag (KED AGD)	0.166 ppb	5.9 %	0.200 ppb	17.166 %
111Cd (KED AGD)	0.187 ppb	3.5 %	0.200 ppb	6.348 %
115In (KED AGD)	98.261 %	5.4 %		0.000 %
121Sb (KED AGD)	0.186 ppb	6.7 %	0.200 ppb	6.947 %
137Ba (KED AGD)	0.165 ppb	20.2 %	0.200 ppb	17.710 %
159Tb (KED AGD)	99.334 %	5.0 %		0.000 %
175Lu (KED AGD)	97.716 %	5.2 %		0.000 %
205Tl (KED AGD)	0.189 ppb	15.3 %	0.200 ppb	5.708 %
208Pb (KED AGD)	0.191 ppb	5.4 %	0.200 ppb	4.328 %
209Bi (KED AGD)	98.567 %	0.6 %		0.000 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Standards:

Analysis Index: 5
Analysis Name: 1/100 Cal
Analysis Type: STD
Analysis Started at: 11/26/2024 7:21:52 AM
Total Dilution Factor 10000
Rack 0
Vial 3

Category	Concentration average	Concentration RSD	Standard Concentration	Standard Relative Difference
6Li (STD AGD)	99.187 %	3.2 %		0.000 %
6Li (KED AGD)	96.846 %	3.2 %		0.000 %
9Be (STD AGD)	0.991 ppb	3.3 %	1.000 ppb	0.916 %
23Na (KED AGD)	107.276 ppb	6.1 %	100.000 ppb	7.276 %
24Mg (KED AGD)	105.359 ppb	5.3 %	100.000 ppb	5.359 %
27Al (KED AGD)	1.243 ppb	10.5 %	1.000 ppb	24.310 %
39K (KED AGD)	97.421 ppb	2.9 %	100.000 ppb	2.579 %
44Ca (KED AGD)	110.289 ppb	2.0 %	100.000 ppb	10.289 %
45Sc (STD AGD)	99.592 %	1.7 %		0.000 %
51V (KED AGD)	1.060 ppb	11.2 %	1.000 ppb	5.979 %
52Cr (KED AGD)	1.032 ppb	6.0 %	1.000 ppb	3.161 %
55Mn (KED AGD)	0.962 ppb	14.1 %	1.000 ppb	3.754 %
57Fe (KED AGD)	103.123 ppb	5.4 %	100.000 ppb	3.123 %
59Co (KED AGD)	1.035 ppb	2.6 %	1.000 ppb	3.489 %
60Ni (KED AGD)	1.950 ppb	6.7 %	1.000 ppb	95.016 %
65Cu (KED AGD)	1.144 ppb	12.6 %	1.000 ppb	14.403 %
66Zn (KED AGD)	1.049 ppb	1.3 %	1.000 ppb	4.894 %
74Ge (KED AGD)	98.554 %	3.6 %		0.000 %
75As (KED AGD)	0.983 ppb	9.8 %	1.000 ppb	1.701 %
78Se (KED AGD)	1.083 ppb	29.6 %	1.000 ppb	8.320 %
88Sr (KED AGD)	0.987 ppb	3.8 %	1.000 ppb	1.295 %
95Mo (KED AGD)	0.914 ppb	11.8 %	1.000 ppb	8.639 %
103Rh (KED AGD)	99.666 %	4.0 %		0.000 %
107Ag (KED AGD)	0.979 ppb	5.5 %	1.000 ppb	2.089 %
111Cd (KED AGD)	0.972 ppb	7.6 %	1.000 ppb	2.754 %
115In (KED AGD)	100.050 %	3.9 %		0.000 %
121Sb (KED AGD)	1.011 ppb	3.7 %	1.000 ppb	1.070 %
137Ba (KED AGD)	0.982 ppb	4.4 %	1.000 ppb	1.812 %
159Tb (KED AGD)	99.279 %	4.9 %		0.000 %
175Lu (KED AGD)	98.652 %	2.9 %		0.000 %
205Tl (KED AGD)	0.896 ppb	11.5 %	1.000 ppb	10.374 %
208Pb (KED AGD)	0.995 ppb	5.0 %	1.000 ppb	0.489 %
209Bi (KED AGD)	101.105 %	4.1 %		0.000 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Standards:

Analysis Index: 6
Analysis Name: 10/1000 Cal
Analysis Type: STD
Analysis Started at: 11/26/2024 7:26:20 AM
Total Dilution Factor 1000
Rack 0
Vial 4

Category	Concentration average	Concentration RSD	Standard Concentration	Standard Relative Difference
6Li (STD AGD)	100.062 %	0.7 %		0.000 %
6Li (KED AGD)	99.913 %	3.0 %		0.000 %
9Be (STD AGD)	9.819 ppb	2.0 %	10.000 ppb	1.807 %
23Na (KED AGD)	978.862 ppb	5.6 %	1,000.000 ppb	2.114 %
24Mg (KED AGD)	986.687 ppb	5.1 %	1,000.000 ppb	1.331 %
27Al (KED AGD)	10.384 ppb	7.4 %	10.000 ppb	3.845 %
39K (KED AGD)	992.016 ppb	3.6 %	1,000.000 ppb	0.798 %
44Ca (KED AGD)	975.255 ppb	5.5 %	1,000.000 ppb	2.474 %
45Sc (STD AGD)	102.197 %	2.0 %		0.000 %
51V (KED AGD)	10.005 ppb	2.9 %	10.000 ppb	0.054 %
52Cr (KED AGD)	9.866 ppb	4.4 %	10.000 ppb	1.339 %
55Mn (KED AGD)	9.933 ppb	3.8 %	10.000 ppb	0.666 %
57Fe (KED AGD)	988.671 ppb	5.4 %	1,000.000 ppb	1.133 %
59Co (KED AGD)	9.888 ppb	2.3 %	10.000 ppb	1.116 %
60Ni (KED AGD)	10.321 ppb	4.0 %	10.000 ppb	3.214 %
65Cu (KED AGD)	10.152 ppb	5.2 %	10.000 ppb	1.518 %
66Zn (KED AGD)	10.184 ppb	5.0 %	10.000 ppb	1.841 %
74Ge (KED AGD)	99.487 %	3.8 %		0.000 %
75As (KED AGD)	9.818 ppb	6.1 %	10.000 ppb	1.822 %
78Se (KED AGD)	10.045 ppb	10.3 %	10.000 ppb	0.448 %
88Sr (KED AGD)	9.943 ppb	5.5 %	10.000 ppb	0.568 %
95Mo (KED AGD)	9.506 ppb	9.7 %	10.000 ppb	4.943 %
103Rh (KED AGD)	98.884 %	5.5 %		0.000 %
107Ag (KED AGD)	9.754 ppb	7.1 %	10.000 ppb	2.461 %
111Cd (KED AGD)	9.587 ppb	6.7 %	10.000 ppb	4.126 %
115In (KED AGD)	100.733 %	6.2 %		0.000 %
121Sb (KED AGD)	9.585 ppb	7.4 %	10.000 ppb	4.155 %
137Ba (KED AGD)	9.763 ppb	5.2 %	10.000 ppb	2.374 %
159Tb (KED AGD)	100.493 %	5.1 %		0.000 %
175Lu (KED AGD)	98.603 %	4.7 %		0.000 %
205Tl (KED AGD)	9.157 ppb	14.0 %	10.000 ppb	8.430 %
208Pb (KED AGD)	9.755 ppb	8.0 %	10.000 ppb	2.453 %
209Bi (KED AGD)	99.602 %	5.7 %		0.000 %

Standards:

Analysis Index: 7
Analysis Name: 60/6000 Cal
Analysis Type: STD
Analysis Started at: 11/26/2024 7:30:48 AM
Total Dilution Factor 166.6666666
Rack 0
Vial 5

Category	Concentration average	Concentration RSD	Standard Concentration	Standard Relative Difference
6Li (STD AGD)	100.355 %	0.4 %		0.000 %
6Li (KED AGD)	97.586 %	4.9 %		0.000 %
9Be (STD AGD)	58.319 ppb	2.0 %	60.000 ppb	2.802 %
23Na (KED AGD)	6,168.609 ppb	6.0 %	6,000.000 ppb	2.810 %
24Mg (KED AGD)	6,248.436 ppb	7.4 %	6,000.000 ppb	4.141 %
27Al (KED AGD)	62.122 ppb	6.3 %	60.000 ppb	3.537 %
39K (KED AGD)	6,058.185 ppb	4.5 %	6,000.000 ppb	0.970 %
44Ca (KED AGD)	6,122.657 ppb	5.0 %	6,000.000 ppb	2.044 %
45Sc (STD AGD)	102.383 %	1.7 %		0.000 %
51V (KED AGD)	61.063 ppb	7.6 %	60.000 ppb	1.771 %
52Cr (KED AGD)	61.438 ppb	5.3 %	60.000 ppb	2.397 %
55Mn (KED AGD)	61.084 ppb	6.4 %	60.000 ppb	1.807 %
57Fe (KED AGD)	6,093.946 ppb	6.1 %	6,000.000 ppb	1.566 %
59Co (KED AGD)	61.114 ppb	5.5 %	60.000 ppb	1.856 %
60Ni (KED AGD)	61.442 ppb	6.3 %	60.000 ppb	2.404 %
65Cu (KED AGD)	60.677 ppb	4.6 %	60.000 ppb	1.129 %
66Zn (KED AGD)	61.914 ppb	6.1 %	60.000 ppb	3.190 %
74Ge (KED AGD)	98.052 %	3.2 %		0.000 %
75As (KED AGD)	60.287 ppb	4.8 %	60.000 ppb	0.478 %
78Se (KED AGD)	60.641 ppb	5.2 %	60.000 ppb	1.069 %
88Sr (KED AGD)	61.922 ppb	5.1 %	60.000 ppb	3.203 %
95Mo (KED AGD)	61.566 ppb	10.6 %	60.000 ppb	2.610 %
103Rh (KED AGD)	97.236 %	5.3 %		0.000 %
107Ag (KED AGD)	61.256 ppb	7.3 %	60.000 ppb	2.094 %
111Cd (KED AGD)	60.961 ppb	6.2 %	60.000 ppb	1.602 %
115In (KED AGD)	98.899 %	6.2 %		0.000 %
121Sb (KED AGD)	61.556 ppb	7.5 %	60.000 ppb	2.593 %
137Ba (KED AGD)	60.787 ppb	7.3 %	60.000 ppb	1.311 %
159Tb (KED AGD)	98.699 %	6.9 %		0.000 %
175Lu (KED AGD)	97.319 %	6.7 %		0.000 %
205Tl (KED AGD)	59.548 ppb	12.0 %	60.000 ppb	0.753 %
208Pb (KED AGD)	60.508 ppb	7.5 %	60.000 ppb	0.846 %
209Bi (KED AGD)	98.043 %	5.6 %		0.000 %

Standards:

Analysis Index: 8
Analysis Name: 120/12000 Cal
Analysis Type: STD
Analysis Started at: 11/26/2024 7:35:16 AM
Total Dilution Factor 83.33333333
Rack 0
Vial 6

Category	Concentration average	Concentration RSD	Standard Concentration	Standard Relative Difference
6Li (STD AGD)	95.602 %	1.7 %		0.000 %
6Li (KED AGD)	99.761 %	1.6 %		0.000 %
9Be (STD AGD)	120.856 ppb	0.9 %	120.000 ppb	0.713 %
23Na (KED AGD)	11,917.396 ppb	3.1 %	12,000.000 ppb	0.688 %
24Mg (KED AGD)	11,876.846 ppb	3.7 %	12,000.000 ppb	1.026 %
27Al (KED AGD)	118.904 ppb	4.2 %	120.000 ppb	0.913 %
39K (KED AGD)	11,971.596 ppb	2.2 %	12,000.000 ppb	0.237 %
44Ca (KED AGD)	11,940.644 ppb	2.2 %	12,000.000 ppb	0.495 %
45Sc (STD AGD)	100.975 %	2.0 %		0.000 %
51V (KED AGD)	119.468 ppb	2.9 %	120.000 ppb	0.444 %
52Cr (KED AGD)	119.292 ppb	2.7 %	120.000 ppb	0.590 %
55Mn (KED AGD)	119.464 ppb	1.9 %	120.000 ppb	0.447 %
57Fe (KED AGD)	11,953.943 ppb	3.2 %	12,000.000 ppb	0.384 %
59Co (KED AGD)	119.452 ppb	3.4 %	120.000 ppb	0.456 %
60Ni (KED AGD)	119.243 ppb	2.9 %	120.000 ppb	0.631 %
65Cu (KED AGD)	119.647 ppb	3.7 %	120.000 ppb	0.294 %
66Zn (KED AGD)	119.027 ppb	3.2 %	120.000 ppb	0.811 %
74Ge (KED AGD)	99.909 %	4.4 %		0.000 %
75As (KED AGD)	119.872 ppb	4.4 %	120.000 ppb	0.107 %
78Se (KED AGD)	119.675 ppb	3.4 %	120.000 ppb	0.271 %
88Sr (KED AGD)	119.044 ppb	2.8 %	120.000 ppb	0.797 %
95Mo (KED AGD)	119.259 ppb	6.2 %	120.000 ppb	0.618 %
103Rh (KED AGD)	98.237 %	1.5 %		0.000 %
107Ag (KED AGD)	119.393 ppb	2.7 %	120.000 ppb	0.506 %
111Cd (KED AGD)	119.554 ppb	1.8 %	120.000 ppb	0.372 %
115In (KED AGD)	98.290 %	0.1 %		0.000 %
121Sb (KED AGD)	119.257 ppb	1.7 %	120.000 ppb	0.619 %
137Ba (KED AGD)	119.627 ppb	2.5 %	120.000 ppb	0.311 %
159Tb (KED AGD)	100.002 %	1.4 %		0.000 %
175Lu (KED AGD)	98.708 %	0.8 %		0.000 %
205Tl (KED AGD)	120.297 ppb	9.8 %	120.000 ppb	0.247 %
208Pb (KED AGD)	119.767 ppb	3.7 %	120.000 ppb	0.194 %
209Bi (KED AGD)	97.606 %	3.0 %		0.000 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index: 1
Analysis label: Rinse
Analysis started at: 11/26/2024 7:04:01 AM
User name ALPHALAB\a2-icpmsq2
Rack 0
Vial 1
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	101.083 %	103.654 %	0.573 ppb	49.031 ppb	20.779 ppb	38.970 ppb	23.438 ppb	66.860 ppb	103.990 %
Concentration per Run 1	99.718 %	98.717 %	0.551 ppb	54.510 ppb	22.084 ppb	40.171 ppb	26.117 ppb	66.671 ppb	103.427 %
Concentration per Run 2	102.974 %	106.220 %	0.838 ppb	46.184 ppb	21.061 ppb	38.837 ppb	21.318 ppb	74.148 ppb	107.030 %
Concentration per Run 3	100.558 %	106.025 %	0.328 ppb	46.399 ppb	19.192 ppb	37.901 ppb	22.879 ppb	59.761 ppb	101.513 %
Concentration RSD	1.7 %	4.1 %	44.7 %	9.7 %	7.1 %	2.9 %	10.4 %	10.8 %	2.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.014 ppb	0.414 ppb	1.188 ppb	179.821 ppb	0.056 ppb	11.645 ppb	1.951 ppb	7.249 ppb	106.687 %
Concentration per Run 1	0.028 ppb	0.414 ppb	1.079 ppb	181.695 ppb	0.053 ppb	11.889 ppb	2.118 ppb	7.629 ppb	101.011 %
Concentration per Run 2	0.011 ppb	0.396 ppb	1.262 ppb	182.381 ppb	0.065 ppb	11.935 ppb	1.923 ppb	7.387 ppb	104.627 %
Concentration per Run 3	0.004 ppb	0.433 ppb	1.223 ppb	175.386 ppb	0.050 ppb	11.110 ppb	1.813 ppb	6.731 ppb	114.422 %
Concentration RSD	85.4 %	4.4 %	8.1 %	2.1 %	14.0 %	4.0 %	7.9 %	6.4 %	6.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.009 ppb	0.117 ppb	0.048 ppb	0.481 ppb	98.281 %	0.132 ppb	0.018 ppb	100.019 %	0.048 ppb
Concentration per Run 1	-0.067 ppb	0.142 ppb	0.053 ppb	0.489 ppb	97.992 %	0.133 ppb	0.018 ppb	100.199 %	0.052 ppb
Concentration per Run 2	0.044 ppb	0.114 ppb	0.045 ppb	0.398 ppb	97.831 %	0.132 ppb	0.019 ppb	100.443 %	0.038 ppb
Concentration per Run 3	0.049 ppb	0.094 ppb	0.047 ppb	0.558 ppb	99.021 %	0.131 ppb	0.016 ppb	99.416 %	0.053 ppb
Concentration RSD	751.8 %	20.7 %	9.2 %	16.7 %	0.7 %	1.1 %	9.2 %	0.5 %	17.3 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.180 ppb	98.736 %	97.129 %	0.052 ppb	0.320 ppb	98.682 %
Concentration per Run 1	0.191 ppb	98.263 %	95.668 %	0.018 ppb	0.323 ppb	99.446 %
Concentration per Run 2	0.159 ppb	98.273 %	97.954 %	0.065 ppb	0.307 ppb	99.445 %
Concentration per Run 3	0.191 ppb	99.671 %	97.764 %	0.073 ppb	0.331 ppb	97.155 %
Concentration RSD	10.3 %	0.8 %	1.3 %	56.6 %	3.7 %	1.3 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index: 2
Analysis label: CAL LOT #M23-1225
Analysis started at: 11/26/2024 7:08:27 AM
User name ALPHALAB\a2-icpmsq2
Rack 0
Vial 1
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	100.390 %	100.022 %	0.059 ppb	51.862 ppb	22.399 ppb	39.301 ppb	27.978 ppb	56.311 ppb	100.826 %
Concentration per Run 1	97.720 %	102.436 %	0.056 ppb	52.587 ppb	23.593 ppb	36.858 ppb	26.296 ppb	52.173 ppb	99.227 %
Concentration per Run 2	100.666 %	101.392 %	0.060 ppb	50.719 ppb	22.352 ppb	40.220 ppb	31.109 ppb	64.772 ppb	101.124 %
Concentration per Run 3	102.785 %	96.237 %	0.062 ppb	52.280 ppb	21.252 ppb	40.826 ppb	26.528 ppb	51.989 ppb	102.127 %
Concentration RSD	2.5 %	3.3 %	5.7 %	1.9 %	5.2 %	5.4 %	9.7 %	13.0 %	1.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.008 ppb	0.451 ppb	1.434 ppb	197.226 ppb	0.057 ppb	12.265 ppb	2.068 ppb	7.626 ppb	100.861 %
Concentration per Run 1	-0.009 ppb	0.419 ppb	1.414 ppb	187.852 ppb	0.064 ppb	11.585 ppb	2.177 ppb	7.619 ppb	101.133 %
Concentration per Run 2	0.029 ppb	0.477 ppb	1.361 ppb	200.004 ppb	0.072 ppb	12.298 ppb	2.209 ppb	7.794 ppb	98.028 %
Concentration per Run 3	-0.044 ppb	0.458 ppb	1.526 ppb	203.824 ppb	0.036 ppb	12.913 ppb	1.818 ppb	7.466 ppb	103.423 %
Concentration RSD	454.6 %	6.5 %	5.9 %	4.2 %	32.6 %	5.4 %	10.5 %	2.1 %	2.7 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.026 ppb	0.085 ppb	0.043 ppb	0.435 ppb	98.387 %	0.134 ppb	0.015 ppb	98.462 %	0.041 ppb
Concentration per Run 1	0.033 ppb	0.130 ppb	0.039 ppb	0.409 ppb	105.902 %	0.142 ppb	0.021 ppb	104.539 %	0.047 ppb
Concentration per Run 2	0.036 ppb	0.013 ppb	0.047 ppb	0.400 ppb	94.956 %	0.116 ppb	0.012 ppb	95.415 %	0.040 ppb
Concentration per Run 3	0.010 ppb	0.113 ppb	0.044 ppb	0.496 ppb	94.303 %	0.144 ppb	0.012 ppb	95.433 %	0.037 ppb
Concentration RSD	52.5 %	73.9 %	10.1 %	12.3 %	6.6 %	11.6 %	36.8 %	5.3 %	12.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.156 ppb	98.415 %	96.982 %	0.028 ppb	0.318 ppb	99.919 %
Concentration per Run 1	0.182 ppb	106.652 %	103.463 %	0.008 ppb	0.302 ppb	106.711 %
Concentration per Run 2	0.128 ppb	95.289 %	94.527 %	0.037 ppb	0.322 ppb	98.151 %
Concentration per Run 3	0.158 ppb	93.304 %	92.957 %	0.037 ppb	0.330 ppb	94.894 %
Concentration RSD	17.2 %	7.3 %	5.8 %	61.4 %	4.5 %	6.1 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index:	3	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	Blank NTB ICPMSQ2	Rack	4		
Analysis started at:	11/26/2024 7:12:53 AM	Vial	49		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	100.000 %	100.000 %	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	100.000 %
Concentration per Run	100.000 %	100.000 %	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	100.000 %
Concentration RSD	0.0 %	0.0 %	0.2 %	0.0 %	0.1 %	0.2 %	0.1 %	0.2 %	0.0 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	100.000 %
Concentration per Run	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	100.000 %
Concentration RSD	0.2 %	0.2 %	0.4 %	0.2 %	0.3 %	0.1 %	0.3 %	0.2 %	0.0 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	100.000 %	0.000 ppb	0.000 ppb	100.000 %	0.000 ppb
Concentration per Run	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	100.000 %	0.000 ppb	0.000 ppb	100.000 %	0.000 ppb
Concentration RSD	0.1 %	0.8 %	0.1 %	0.3 %	0.0 %	0.4 %	0.5 %	0.0 %	0.3 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.000 ppb	100.000 %	100.000 %	0.000 ppb	0.000 ppb	100.000 %
Concentration per Run	0.000 ppb	100.000 %	100.000 %	0.000 ppb	0.000 ppb	100.000 %
Concentration RSD	0.4 %	0.0 %	0.0 %	0.4 %	0.1 %	0.0 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index:	4	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	0.2/20 Cal	Rack	0		
Analysis started at:	11/26/2024 7:17:25 AM	Vial	2		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	102.245 %	101.153 %	0.189 ppb	20.026 ppb	20.441 ppb	0.421 ppb	18.626 ppb	22.676 ppb	101.448 %
Concentration per Run 1	98.749 %	102.893 %	0.188 ppb	17.819 ppb	18.649 ppb	0.263 ppb	20.962 ppb	27.451 ppb	98.698 %
Concentration per Run 2	103.746 %	97.803 %	0.194 ppb	22.455 ppb	20.714 ppb	0.827 ppb	19.807 ppb	20.262 ppb	102.949 %
Concentration per Run 3	104.241 %	102.762 %	0.185 ppb	19.804 ppb	21.960 ppb	0.175 ppb	15.109 ppb	20.315 ppb	102.696 %
Concentration RSD	3.0 %	2.9 %	2.4 %	11.6 %	8.2 %	83.9 %	16.6 %	18.2 %	2.4 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.185 ppb	0.220 ppb	0.164 ppb	21.123 ppb	0.192 ppb	0.658 ppb	0.336 ppb	0.487 ppb	100.187 %
Concentration per Run 1	0.106 ppb	0.194 ppb	0.186 ppb	21.488 ppb	0.164 ppb	0.694 ppb	0.392 ppb	0.436 ppb	98.344 %
Concentration per Run 2	0.240 ppb	0.259 ppb	0.120 ppb	21.452 ppb	0.202 ppb	0.624 ppb	0.323 ppb	0.526 ppb	100.243 %
Concentration per Run 3	0.207 ppb	0.208 ppb	0.185 ppb	20.430 ppb	0.209 ppb	0.655 ppb	0.292 ppb	0.499 ppb	101.974 %
Concentration RSD	37.7 %	15.5 %	22.9 %	2.8 %	12.7 %	5.3 %	15.1 %	9.5 %	1.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.172 ppb	0.217 ppb	0.203 ppb	0.195 ppb	99.549 %	0.166 ppb	0.187 ppb	98.261 %	0.186 ppb
Concentration per Run 1	0.186 ppb	0.163 ppb	0.190 ppb	0.169 ppb	105.138 %	0.156 ppb	0.187 ppb	104.252 %	0.172 ppb
Concentration per Run 2	0.196 ppb	0.164 ppb	0.211 ppb	0.164 ppb	98.186 %	0.175 ppb	0.194 ppb	94.116 %	0.190 ppb
Concentration per Run 3	0.134 ppb	0.325 ppb	0.208 ppb	0.251 ppb	95.323 %	0.166 ppb	0.181 ppb	96.413 %	0.197 ppb
Concentration RSD	19.3 %	42.7 %	5.6 %	25.1 %	5.1 %	5.9 %	3.5 %	5.4 %	6.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.165 ppb	99.334 %	97.716 %	0.189 ppb	0.191 ppb	98.567 %
Concentration per Run 1	0.133 ppb	104.904 %	103.502 %	0.155 ppb	0.179 ppb	98.845 %
Concentration per Run 2	0.161 ppb	97.862 %	95.739 %	0.206 ppb	0.197 ppb	98.921 %
Concentration per Run 3	0.200 ppb	95.235 %	93.908 %	0.204 ppb	0.197 ppb	97.936 %
Concentration RSD	20.2 %	5.0 %	5.2 %	15.3 %	5.4 %	0.6 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index:	5	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	1/100 Cal	Rack	0		
Analysis started at:	11/26/2024 7:21:52 AM	Vial	3		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	99.187 %	96.846 %	0.991 ppb	107.276 ppb	105.359 ppb	1.243 ppb	97.421 ppb	110.289 ppb	99.592 %
Concentration per Run 1	95.555 %	100.413 %	1.028 ppb	99.952 ppb	100.192 ppb	1.273 ppb	95.329 ppb	107.840 ppb	97.682 %
Concentration per Run 2	100.482 %	94.476 %	0.968 ppb	109.238 ppb	111.226 ppb	1.356 ppb	100.686 ppb	111.897 ppb	101.079 %
Concentration per Run 3	101.525 %	95.650 %	0.977 ppb	112.639 ppb	104.658 ppb	1.101 ppb	96.247 ppb	111.129 ppb	100.015 %
Concentration RSD	3.2 %	3.2 %	3.3 %	6.1 %	5.3 %	10.5 %	2.9 %	2.0 %	1.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	1.060 ppb	1.032 ppb	0.962 ppb	103.123 ppb	1.035 ppb	1.950 ppb	1.144 ppb	1.049 ppb	98.554 %
Concentration per Run 1	0.934 ppb	0.966 ppb	0.835 ppb	103.997 ppb	1.050 ppb	2.021 ppb	1.039 ppb	1.045 ppb	99.759 %
Concentration per Run 2	1.172 ppb	1.038 ppb	1.104 ppb	108.155 ppb	1.050 ppb	2.031 ppb	1.308 ppb	1.064 ppb	94.580 %
Concentration per Run 3	1.073 ppb	1.090 ppb	0.948 ppb	97.216 ppb	1.004 ppb	1.799 ppb	1.085 ppb	1.038 ppb	101.323 %
Concentration RSD	11.2 %	6.0 %	14.1 %	5.4 %	2.6 %	6.7 %	12.6 %	1.3 %	3.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.983 ppb	1.083 ppb	0.987 ppb	0.914 ppb	99.666 %	0.979 ppb	0.972 ppb	100.050 %	1.011 ppb
Concentration per Run 1	1.043 ppb	1.207 ppb	0.953 ppb	0.789 ppb	104.214 %	0.919 ppb	0.897 ppb	104.021 %	0.968 ppb
Concentration per Run 2	1.034 ppb	1.323 ppb	1.027 ppb	0.985 ppb	97.580 %	0.994 ppb	0.977 ppb	99.874 %	1.029 ppb
Concentration per Run 3	0.872 ppb	0.719 ppb	0.981 ppb	0.967 ppb	97.204 %	1.024 ppb	1.044 ppb	96.256 %	1.035 ppb
Concentration RSD	9.8 %	29.6 %	3.8 %	11.8 %	4.0 %	5.5 %	7.6 %	3.9 %	3.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.982 ppb	99.279 %	98.652 %	0.896 ppb	0.995 ppb	101.105 %
Concentration per Run 1	0.934 ppb	104.779 %	101.928 %	0.784 ppb	0.940 ppb	105.656 %
Concentration per Run 2	1.019 ppb	97.293 %	96.439 %	0.918 ppb	1.037 ppb	100.091 %
Concentration per Run 3	0.992 ppb	95.766 %	97.588 %	0.986 ppb	1.008 ppb	97.567 %
Concentration RSD	4.4 %	4.9 %	2.9 %	11.5 %	5.0 %	4.1 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index:	6	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	10/1000 Cal	Rack	0		
Analysis started at:	11/26/2024 7:26:20 AM	Vial	4		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	100.062 %	99.913 %	9.819 ppb	978.862 ppb	986.687 ppb	10.384 ppb	992.016 ppb	975.255 ppb	102.197 %
Concentration per Run 1	99.835 %	103.349 %	9.590 ppb	916.485 ppb	929.148 ppb	10.239 ppb	963.839 ppb	921.965 ppb	100.938 %
Concentration per Run 2	99.511 %	98.130 %	9.952 ppb	1,016.427 ppb	1,023.873 ppb	11.214 ppb	1,031.818 ppb	1,029.229 ppb	101.154 %
Concentration per Run 3	100.840 %	98.260 %	9.916 ppb	1,003.674 ppb	1,007.042 ppb	9.701 ppb	980.392 ppb	974.571 ppb	104.498 %
Concentration RSD	0.7 %	3.0 %	2.0 %	5.6 %	5.1 %	7.4 %	3.6 %	5.5 %	2.0 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	10.005 ppb	9.866 ppb	9.933 ppb	988.671 ppb	9.888 ppb	10.321 ppb	10.152 ppb	10.184 ppb	99.487 %
Concentration per Run 1	9.667 ppb	9.495 ppb	9.581 ppb	958.169 ppb	9.734 ppb	10.245 ppb	9.937 ppb	9.809 ppb	98.782 %
Concentration per Run 2	10.148 ppb	10.350 ppb	10.336 ppb	1,050.504 ppb	10.146 ppb	10.770 ppb	10.752 ppb	10.766 ppb	96.099 %
Concentration per Run 3	10.200 ppb	9.753 ppb	9.883 ppb	957.340 ppb	9.786 ppb	9.950 ppb	9.766 ppb	9.977 ppb	103.579 %
Concentration RSD	2.9 %	4.4 %	3.8 %	5.4 %	2.3 %	4.0 %	5.2 %	5.0 %	3.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	9.818 ppb	10.045 ppb	9.943 ppb	9.506 ppb	98.884 %	9.754 ppb	9.587 ppb	100.733 %	9.585 ppb
Concentration per Run 1	9.447 ppb	9.720 ppb	9.375 ppb	8.444 ppb	105.125 %	9.011 ppb	8.951 ppb	106.825 %	8.840 ppb
Concentration per Run 2	10.507 ppb	11.201 ppb	10.461 ppb	10.111 ppb	95.149 %	10.388 ppb	10.230 ppb	94.335 %	10.260 ppb
Concentration per Run 3	9.500 ppb	9.214 ppb	9.993 ppb	9.962 ppb	96.377 %	9.862 ppb	9.581 ppb	101.041 %	9.654 ppb
Concentration RSD	6.1 %	10.3 %	5.5 %	9.7 %	5.5 %	7.1 %	6.7 %	6.2 %	7.4 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	9.763 ppb	100.493 %	98.603 %	9.157 ppb	9.755 ppb	99.602 %
Concentration per Run 1	9.280 ppb	106.393 %	103.669 %	7.682 ppb	8.926 ppb	105.812 %
Concentration per Run 2	10.298 ppb	96.775 %	94.694 %	9.941 ppb	10.464 ppb	94.568 %
Concentration per Run 3	9.710 ppb	98.310 %	97.446 %	9.848 ppb	9.874 ppb	98.425 %
Concentration RSD	5.2 %	5.1 %	4.7 %	14.0 %	8.0 %	5.7 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index: 7
Analysis label: 60/6000 Cal
Analysis started at: 11/26/2024 7:30:48 AM
User name ALPHALAB\a2-icpmsq2
Rack 0
Vial 5
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	100.355 %	97.586 %	58.319 ppb	6,168.609 ppb	6,248.436 ppb	62.122 ppb	6,058.185 ppb	6,122.657 ppb	102.383 %
Concentration per Run 1	99.839 %	101.718 %	57.193 ppb	5,766.663 ppb	5,798.511 ppb	58.559 ppb	5,827.091 ppb	5,846.181 ppb	102.779 %
Concentration per Run 2	100.642 %	92.388 %	58.263 ppb	6,495.982 ppb	6,722.238 ppb	66.294 ppb	6,357.155 ppb	6,455.089 ppb	100.486 %
Concentration per Run 3	100.584 %	98.652 %	59.500 ppb	6,243.182 ppb	6,224.560 ppb	61.514 ppb	5,990.310 ppb	6,066.700 ppb	103.885 %
Concentration RSD	0.4 %	4.9 %	2.0 %	6.0 %	7.4 %	6.3 %	4.5 %	5.0 %	1.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	61.063 ppb	61.438 ppb	61.084 ppb	6,093.946 ppb	61.114 ppb	61.442 ppb	60.677 ppb	61.914 ppb	98.052 %
Concentration per Run 1	56.347 ppb	58.261 ppb	58.555 ppb	5,741.795 ppb	58.612 ppb	59.087 ppb	58.792 ppb	59.665 ppb	98.312 %
Concentration per Run 2	65.635 ppb	64.714 ppb	65.599 ppb	6,481.401 ppb	64.897 ppb	65.910 ppb	63.877 ppb	66.242 ppb	94.780 %
Concentration per Run 3	61.206 ppb	61.339 ppb	59.099 ppb	6,058.641 ppb	59.832 ppb	59.330 ppb	59.363 ppb	59.834 ppb	101.063 %
Concentration RSD	7.6 %	5.3 %	6.4 %	6.1 %	5.5 %	6.3 %	4.6 %	6.1 %	3.2 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	60.287 ppb	60.641 ppb	61.922 ppb	61.566 ppb	97.236 %	61.256 ppb	60.961 ppb	98.899 %	61.556 ppb
Concentration per Run 1	58.620 ppb	58.949 ppb	59.071 ppb	54.169 ppb	102.318 %	56.256 ppb	56.810 ppb	105.029 %	56.450 ppb
Concentration per Run 2	63.658 ppb	64.289 ppb	65.361 ppb	66.620 ppb	91.986 %	64.971 ppb	64.185 ppb	92.786 %	65.445 ppb
Concentration per Run 3	58.582 ppb	58.685 ppb	61.333 ppb	63.909 ppb	97.403 %	62.541 ppb	61.888 ppb	98.881 %	62.773 ppb
Concentration RSD	4.8 %	5.2 %	5.1 %	10.6 %	5.3 %	7.3 %	6.2 %	6.2 %	7.5 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	60.787 ppb	98.699 %	97.319 %	59.548 ppb	60.508 ppb	98.043 %
Concentration per Run 1	55.678 ppb	106.530 %	104.394 %	51.312 ppb	55.286 ppb	104.314 %
Concentration per Run 2	63.739 ppb	94.496 %	91.629 %	63.369 ppb	63.494 ppb	94.498 %
Concentration per Run 3	62.944 ppb	95.071 %	95.933 %	63.964 ppb	62.743 ppb	95.316 %
Concentration RSD	7.3 %	6.9 %	6.7 %	12.0 %	7.5 %	5.6 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index:	8	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	120/12000 Cal	Rack	0		
Analysis started at:	11/26/2024 7:35:16 AM	Vial	6		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	95.602 %	99.761 %	120.856 ppb	11,917.396 ppb	11,876.846 ppb	118.904 ppb	11,971.596 ppb	11,940.644 ppb	100.975 %
Concentration per Run 1	93.867 %	100.348 %	120.572 ppb	11,665.166 ppb	11,474.467 ppb	113.125 ppb	11,908.294 ppb	11,939.662 ppb	98.847 %
Concentration per Run 2	95.746 %	97.934 %	122.070 ppb	12,336.297 ppb	12,351.019 ppb	122.476 ppb	12,256.019 ppb	12,207.648 ppb	101.335 %
Concentration per Run 3	97.194 %	101.000 %	119.925 ppb	11,750.726 ppb	11,805.052 ppb	121.113 ppb	11,750.476 ppb	11,674.621 ppb	102.742 %
Concentration RSD	1.7 %	1.6 %	0.9 %	3.1 %	3.7 %	4.2 %	2.2 %	2.2 %	2.0 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	119.468 ppb	119.292 ppb	119.464 ppb	11,953.943 ppb	119.452 ppb	119.243 ppb	119.647 ppb	119.027 ppb	99.909 %
Concentration per Run 1	117.198 ppb	117.961 ppb	118.752 ppb	11,714.975 ppb	118.992 ppb	119.449 ppb	119.631 ppb	120.506 ppb	97.759 %
Concentration per Run 2	123.478 ppb	123.020 ppb	121.981 ppb	12,389.759 ppb	123.763 ppb	122.564 ppb	124.058 ppb	121.842 ppb	97.031 %
Concentration per Run 3	117.728 ppb	116.894 ppb	117.659 ppb	11,757.097 ppb	115.602 ppb	115.718 ppb	115.253 ppb	114.733 ppb	104.937 %
Concentration RSD	2.9 %	2.7 %	1.9 %	3.2 %	3.4 %	2.9 %	3.7 %	3.2 %	4.4 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	119.872 ppb	119.675 ppb	119.044 ppb	119.259 ppb	98.237 %	119.393 ppb	119.554 ppb	98.290 %	119.257 ppb
Concentration per Run 1	120.479 ppb	120.889 ppb	118.624 ppb	110.947 ppb	99.596 %	115.664 ppb	117.654 ppb	98.394 %	116.971 ppb
Concentration per Run 2	124.765 ppb	123.035 ppb	122.553 ppb	125.229 ppb	96.674 %	121.746 ppb	121.848 ppb	98.321 %	120.115 ppb
Concentration per Run 3	114.372 ppb	115.101 ppb	115.955 ppb	121.600 ppb	98.441 %	120.768 ppb	119.161 ppb	98.156 %	120.684 ppb
Concentration RSD	4.4 %	3.4 %	2.8 %	6.2 %	1.5 %	2.7 %	1.8 %	0.1 %	1.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	119.627 ppb	100.002 %	98.708 %	120.297 ppb	119.767 ppb	97.606 %
Concentration per Run 1	116.561 ppb	101.424 %	99.631 %	107.072 ppb	115.121 ppb	100.586 %
Concentration per Run 2	119.864 ppb	98.687 %	98.235 %	129.895 ppb	124.078 ppb	94.656 %
Concentration per Run 3	122.454 ppb	99.897 %	98.256 %	123.924 ppb	120.101 ppb	97.577 %
Concentration RSD	2.5 %	1.4 %	0.8 %	9.8 %	3.7 %	3.0 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index:	9	User name	ALPHALAB\a2-icpmsq2	Comment	Sr Inteference Check
Analysis label:	Sr 200ppb	Rack	4		
Analysis started at:	11/26/2024 7:40:08 AM	Vial	55		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	99.151 %	101.000 %	0.177 ppb	16.277 ppb	7.560 ppb	2.000 ppb	17.237 ppb	0.069 ppb	99.045 %
Concentration per Run 1	97.209 %	101.327 %	0.267 ppb	18.672 ppb	8.965 ppb	1.688 ppb	20.877 ppb	19.510 ppb	97.549 %
Concentration per Run 2	99.445 %	103.545 %	0.136 ppb	12.716 ppb	7.246 ppb	2.312 ppb	14.060 ppb	-18.410 ppb	98.582 %
Concentration per Run 3	100.798 %	98.130 %	0.127 ppb	17.443 ppb	6.469 ppb	2.000 ppb	16.776 ppb	-0.893 ppb	101.005 %
Concentration RSD	1.8 %	2.7 %	44.1 %	19.3 %	16.9 %	15.6 %	19.9 %	27,532.3 %	1.8 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.050 ppb	0.083 ppb	0.187 ppb	16.617 ppb	0.071 ppb	0.345 ppb	0.209 ppb	0.964 ppb	97.789 %
Concentration per Run 1	0.100 ppb	0.094 ppb	0.196 ppb	17.057 ppb	0.096 ppb	0.330 ppb	0.256 ppb	1.112 ppb	94.641 %
Concentration per Run 2	0.010 ppb	0.065 ppb	0.217 ppb	15.895 ppb	0.071 ppb	0.381 ppb	0.138 ppb	0.859 ppb	98.869 %
Concentration per Run 3	0.041 ppb	0.090 ppb	0.147 ppb	16.898 ppb	0.046 ppb	0.323 ppb	0.233 ppb	0.921 ppb	99.858 %
Concentration RSD	91.3 %	18.9 %	19.2 %	3.8 %	35.1 %	9.1 %	30.1 %	13.7 %	2.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.113 ppb	0.491 ppb	195.588 ppb	0.928 ppb	98.853 %	0.072 ppb	0.068 ppb	99.641 %	0.109 ppb
Concentration per Run 1	0.086 ppb	0.599 ppb	193.407 ppb	0.861 ppb	102.400 %	0.094 ppb	0.088 ppb	102.271 %	0.129 ppb
Concentration per Run 2	0.143 ppb	0.415 ppb	197.246 ppb	0.898 ppb	97.083 %	0.059 ppb	0.063 ppb	98.737 %	0.082 ppb
Concentration per Run 3	0.111 ppb	0.461 ppb	196.111 ppb	1.026 ppb	97.076 %	0.065 ppb	0.053 ppb	97.913 %	0.116 ppb
Concentration RSD	25.2 %	19.6 %	1.0 %	9.3 %	3.1 %	25.6 %	26.0 %	2.3 %	22.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.269 ppb	99.497 %	96.717 %	0.842 ppb	0.094 ppb	98.946 %
Concentration per Run 1	0.244 ppb	103.992 %	101.513 %	1.000 ppb	0.119 ppb	102.179 %
Concentration per Run 2	0.376 ppb	98.570 %	94.506 %	0.846 ppb	0.082 ppb	97.609 %
Concentration per Run 3	0.186 ppb	95.930 %	94.134 %	0.678 ppb	0.082 ppb	97.049 %
Concentration RSD	36.2 %	4.1 %	4.3 %	19.1 %	22.3 %	2.8 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index: 10
Analysis label: ICV
Analysis started at: 11/26/2024 7:44:40 AM
User name ALPHALAB\a2-icpmsq2
Rack 0
Vial 7
Comment ICV

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	96.381 %	97.651 %	52.867 ppb	5,368.113 ppb	5,396.700 ppb	54.062 ppb	5,249.341 ppb	5,293.481 ppb	99.801 %
Concentration per Run 1	93.201 %	101.783 %	53.603 ppb	4,982.714 ppb	4,946.973 ppb	48.331 ppb	4,933.366 ppb	4,982.358 ppb	97.131 %
Concentration per Run 2	96.664 %	92.322 %	53.105 ppb	5,862.715 ppb	5,895.238 ppb	61.519 ppb	5,713.746 ppb	5,790.282 ppb	100.877 %
Concentration per Run 3	99.279 %	98.847 %	51.894 ppb	5,258.910 ppb	5,347.888 ppb	52.335 ppb	5,100.911 ppb	5,107.804 ppb	101.394 %
Recovery Percentage 1			105.734 %	107.362 %	107.934 %	108.123 %	104.987 %	105.870 %	
Concentration RSD	3.2 %	5.0 %	1.7 %	8.4 %	8.8 %	12.5 %	7.8 %	8.2 %	2.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	53.079 ppb	53.116 ppb	53.197 ppb	5,338.278 ppb	53.960 ppb	53.830 ppb	54.124 ppb	53.320 ppb	98.716 %
Concentration per Run 1	49.462 ppb	49.269 ppb	51.015 ppb	5,071.456 ppb	52.216 ppb	53.107 ppb	52.862 ppb	51.906 ppb	100.039 %
Concentration per Run 2	58.145 ppb	57.654 ppb	57.457 ppb	5,843.825 ppb	58.852 ppb	57.309 ppb	58.323 ppb	57.659 ppb	91.056 %
Concentration per Run 3	51.630 ppb	52.424 ppb	51.120 ppb	5,099.552 ppb	50.813 ppb	51.074 ppb	51.186 ppb	50.396 ppb	105.051 %
Recovery Percentage 1	106.158 %	106.231 %	106.395 %	106.766 %	107.921 %	107.660 %	108.247 %	106.641 %	
Concentration RSD	8.5 %	8.0 %	6.9 %	8.2 %	8.0 %	5.9 %	6.9 %	7.2 %	7.2 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	53.166 ppb	54.110 ppb	53.507 ppb	53.993 ppb	95.486 %	53.284 ppb	54.013 ppb	96.075 %	53.797 ppb
Concentration per Run 1	50.753 ppb	51.832 ppb	50.359 ppb	47.226 ppb	102.778 %	47.695 ppb	49.310 ppb	103.767 %	48.717 ppb
Concentration per Run 2	58.420 ppb	59.751 ppb	58.252 ppb	59.152 ppb	89.615 %	57.585 ppb	58.652 ppb	90.942 %	57.679 ppb
Concentration per Run 3	50.324 ppb	50.746 ppb	51.909 ppb	55.602 ppb	94.064 %	54.572 ppb	54.078 ppb	93.515 %	54.994 ppb
Recovery Percentage 1	106.332 %	108.219 %	107.014 %	107.987 %		106.568 %	108.027 %		107.594 %
Concentration RSD	8.6 %	9.1 %	7.8 %	11.3 %	7.0 %	9.5 %	8.6 %	7.1 %	8.5 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	54.140 ppb	96.233 %	95.369 %	51.475 ppb	52.720 ppb	96.613 %
Concentration per Run 1	48.974 ppb	104.358 %	102.606 %	42.168 ppb	47.190 ppb	106.256 %
Concentration per Run 2	57.965 ppb	89.030 %	89.414 %	57.371 ppb	56.769 ppb	90.835 %
Concentration per Run 3	55.482 ppb	95.313 %	94.086 %	54.887 ppb	54.201 ppb	92.749 %
Recovery Percentage 1	108.281 %			102.951 %	105.440 %	
Concentration RSD	8.6 %	8.0 %	7.0 %	15.8 %	9.4 %	8.7 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index: 11
Analysis label: ICB
Analysis started at: 11/26/2024 7:49:10 AM
User name ALPHALAB\a2-icpmsq2
Rack 0
Vial 10
Comment ICB

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	98.880 %	98.695 %	0.115 ppb	6.229 ppb	3.983 ppb	-0.606 ppb	8.791 ppb	9.311 ppb	99.881 %
Concentration per Run 1	95.397 %	99.565 %	0.098 ppb	4.732 ppb	5.536 ppb	-0.571 ppb	16.195 ppb	4.674 ppb	97.605 %
Concentration per Run 2	100.010 %	95.324 %	0.160 ppb	10.046 ppb	3.679 ppb	-0.442 ppb	6.558 ppb	15.124 ppb	101.507 %
Concentration per Run 3	101.234 %	101.196 %	0.088 ppb	3.907 ppb	2.734 ppb	-0.807 ppb	3.619 ppb	8.134 ppb	100.530 %
Recovery Percentage 1			23.063 %	1.246 %	5.690 %	-6.064 %	8.791 %	9.311 %	
Concentration RSD	3.1 %	3.1 %	34.1 %	53.5 %	35.8 %	30.5 %	74.8 %	57.2 %	2.0 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.038 ppb	0.038 ppb	-0.003 ppb	9.133 ppb	0.056 ppb	0.037 ppb	0.068 ppb	0.020 ppb	97.237 %
Concentration per Run 1	-0.011 ppb	0.073 ppb	-0.015 ppb	9.774 ppb	0.079 ppb	0.102 ppb	0.102 ppb	0.041 ppb	96.062 %
Concentration per Run 2	0.091 ppb	0.017 ppb	0.008 ppb	8.458 ppb	0.056 ppb	-0.016 ppb	0.047 ppb	0.041 ppb	94.975 %
Concentration per Run 3	0.033 ppb	0.025 ppb	0.000 ppb	9.166 ppb	0.033 ppb	0.024 ppb	0.054 ppb	-0.021 ppb	100.674 %
Recovery Percentage 1	0.754 %	3.828 %	-0.256 %	18.265 %	11.239 %	1.839 %	6.759 %	0.405 %	
Concentration RSD	136.9 %	79.5 %	456.9 %	7.2 %	40.6 %	163.1 %	44.2 %	177.1 %	3.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.081 ppb	0.182 ppb	0.081 ppb	0.616 ppb	98.049 %	0.050 ppb	0.048 ppb	95.565 %	0.117 ppb
Concentration per Run 1	0.081 ppb	0.008 ppb	0.094 ppb	0.533 ppb	102.447 %	0.066 ppb	0.062 ppb	99.001 %	0.112 ppb
Concentration per Run 2	0.144 ppb	0.110 ppb	0.072 ppb	0.624 ppb	94.691 %	0.051 ppb	0.038 ppb	94.112 %	0.113 ppb
Concentration per Run 3	0.017 ppb	0.429 ppb	0.076 ppb	0.691 ppb	97.010 %	0.033 ppb	0.045 ppb	93.580 %	0.128 ppb
Recovery Percentage 1	16.154 %	3.642 %	0.807 %	30.816 %		12.544 %	24.115 %		2.935 %
Concentration RSD	78.5 %	120.7 %	14.6 %	12.8 %	4.1 %	32.3 %	25.5 %	3.1 %	7.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.031 ppb	96.909 %	94.384 %	0.603 ppb	0.055 ppb	94.652 %
Concentration per Run 1	0.040 ppb	101.727 %	96.002 %	0.585 ppb	0.064 ppb	100.134 %
Concentration per Run 2	-0.005 ppb	94.055 %	93.940 %	0.689 ppb	0.052 ppb	93.025 %
Concentration per Run 3	0.057 ppb	94.947 %	93.210 %	0.534 ppb	0.049 ppb	90.796 %
Recovery Percentage 1	6.138 %			60.282 %	5.504 %	
Concentration RSD	104.6 %	4.3 %	1.5 %	13.1 %	14.9 %	5.2 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index:	12	User name	ALPHALAB\a2-icpmsq2	Comment	ICB
Analysis label:	ICB	Rack	0		
Analysis started at:	11/26/2024 7:54:15 AM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	99.391 %	95.715 %	0.045 ppb	5.500 ppb	1.569 ppb	-0.443 ppb	2.731 ppb	2.725 ppb	99.920 %
Concentration per Run 1	97.630 %	95.259 %	0.058 ppb	3.699 ppb	1.475 ppb	-0.693 ppb	4.155 ppb	2.497 ppb	97.714 %
Concentration per Run 2	99.911 %	95.650 %	0.053 ppb	5.761 ppb	2.316 ppb	-0.142 ppb	4.396 ppb	1.704 ppb	100.735 %
Concentration per Run 3	100.632 %	96.237 %	0.022 ppb	7.039 ppb	0.915 ppb	-0.494 ppb	-0.357 ppb	3.974 ppb	101.310 %
Recovery Percentage 1			8.915 %	1.100 %	2.241 %	-4.433 %	2.731 %	2.725 %	
Concentration RSD	1.6 %	0.5 %	43.9 %	30.6 %	45.0 %	62.9 %	98.0 %	42.3 %	1.9 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.007 ppb	0.016 ppb	-0.022 ppb	3.600 ppb	0.014 ppb	0.043 ppb	0.033 ppb	0.010 ppb	97.395 %
Concentration per Run 1	-0.022 ppb	0.015 ppb	-0.026 ppb	3.835 ppb	0.025 ppb	0.034 ppb	0.067 ppb	0.017 ppb	94.249 %
Concentration per Run 2	0.015 ppb	0.018 ppb	-0.021 ppb	4.536 ppb	0.014 ppb	0.038 ppb	0.018 ppb	0.020 ppb	95.610 %
Concentration per Run 3	-0.014 ppb	0.015 ppb	-0.019 ppb	2.429 ppb	0.003 ppb	0.055 ppb	0.012 ppb	-0.007 ppb	102.327 %
Recovery Percentage 1	-0.137 %	1.633 %	-2.206 %	7.199 %	2.807 %	2.128 %	3.256 %	0.205 %	
Concentration RSD	283.1 %	9.0 %	17.2 %	29.8 %	77.2 %	26.1 %	93.3 %	143.5 %	4.4 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.074 ppb	0.256 ppb	0.036 ppb	0.131 ppb	96.289 %	0.024 ppb	0.019 ppb	95.600 %	0.033 ppb
Concentration per Run 1	0.073 ppb	0.284 ppb	0.039 ppb	0.165 ppb	97.560 %	0.024 ppb	0.028 ppb	98.971 %	0.027 ppb
Concentration per Run 2	0.123 ppb	0.325 ppb	0.041 ppb	0.137 ppb	96.705 %	0.026 ppb	0.015 ppb	93.711 %	0.031 ppb
Concentration per Run 3	0.027 ppb	0.158 ppb	0.029 ppb	0.092 ppb	94.602 %	0.023 ppb	0.014 ppb	94.119 %	0.040 ppb
Recovery Percentage 1	14.858 %	5.115 %	0.365 %	6.564 %		6.124 %	9.467 %		0.814 %
Concentration RSD	64.7 %	34.0 %	17.4 %	28.2 %	1.6 %	5.3 %	41.2 %	3.1 %	20.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.019 ppb	95.631 %	94.833 %	0.133 ppb	0.023 ppb	94.649 %
Concentration per Run 1	0.009 ppb	98.443 %	98.673 %	0.068 ppb	0.022 ppb	95.215 %
Concentration per Run 2	0.029 ppb	94.283 %	92.961 %	0.167 ppb	0.026 ppb	93.198 %
Concentration per Run 3	0.018 ppb	94.169 %	92.866 %	0.163 ppb	0.020 ppb	95.535 %
Recovery Percentage 1	3.713 %			13.261 %	2.297 %	
Concentration RSD	53.3 %	2.5 %	3.5 %	41.9 %	13.3 %	1.3 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index:	13	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	ICSA	Rack	4		
Analysis started at:	11/26/2024 7:58:49 AM	Vial	53		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	72.391 %	92.562 %	0.025 ppb	256,664.595 ppb	95,784.536 ppb	90,593.360 ppb	93,345.628 ppb	290,051.088 ppb	75.788 %
Concentration per Run 1	73.115 %	91.800 %	0.021 ppb	250,265.700 ppb	92,753.153 ppb	87,623.746 ppb	94,631.382 ppb	288,926.581 ppb	77.694 %
Concentration per Run 2	73.239 %	90.365 %	0.022 ppb	262,471.443 ppb	99,231.503 ppb	94,593.577 ppb	95,946.699 ppb	300,709.688 ppb	75.108 %
Concentration per Run 3	70.821 %	95.520 %	0.031 ppb	257,256.641 ppb	95,368.952 ppb	89,562.756 ppb	89,458.803 ppb	280,516.996 ppb	74.562 %
Recovery Percentage 1			2.480 %	102.666 %	95.785 %	90.593 %	93.346 %	96.684 %	
Concentration RSD	1.9 %	2.9 %	22.7 %	2.4 %	3.4 %	4.0 %	3.7 %	3.5 %	2.2 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.068 ppb	1.544 ppb	4.421 ppb	245,286.058 ppb	2.061 ppb	2.867 ppb	1.171 ppb	3.267 ppb	102.229 %
Concentration per Run 1	0.103 ppb	1.571 ppb	4.690 ppb	226,666.615 ppb	2.037 ppb	2.791 ppb	1.229 ppb	3.354 ppb	97.552 %
Concentration per Run 2	0.049 ppb	1.609 ppb	4.337 ppb	254,866.879 ppb	2.185 ppb	2.966 ppb	1.239 ppb	3.496 ppb	102.101 %
Concentration per Run 3	0.053 ppb	1.453 ppb	4.236 ppb	254,324.680 ppb	1.960 ppb	2.845 ppb	1.043 ppb	2.952 ppb	107.036 %
Recovery Percentage 1	1.369 %	46.800 %	77.564 %	98.114 %	71.802 %	47.003 %	142.755 %	28.660 %	
Concentration RSD	43.8 %	5.3 %	5.4 %	6.6 %	5.5 %	3.1 %	9.4 %	8.6 %	4.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.405 ppb	3.708 ppb	2.387 ppb	2,147.070 ppb	87.110 %	0.036 ppb	0.515 ppb	94.097 %	0.208 ppb
Concentration per Run 1	0.378 ppb	4.205 ppb	2.361 ppb	2,023.095 ppb	90.647 %	0.040 ppb	0.501 ppb	98.399 %	0.190 ppb
Concentration per Run 2	0.438 ppb	3.524 ppb	2.418 ppb	2,223.983 ppb	85.499 %	0.036 ppb	0.532 ppb	91.284 %	0.205 ppb
Concentration per Run 3	0.400 ppb	3.394 ppb	2.383 ppb	2,194.131 ppb	85.184 %	0.031 ppb	0.513 ppb	92.609 %	0.228 ppb
Recovery Percentage 1	24.865 %	28.743 %	477.487 %	107.353 %		4.471 %	128.767 %		2.595 %
Concentration RSD	7.4 %	11.7 %	1.2 %	5.0 %	3.5 %	13.7 %	3.0 %	4.0 %	9.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	1.179 ppb	92.160 %	88.914 %	0.087 ppb	1.620 ppb	85.063 %
Concentration per Run 1	1.154 ppb	95.271 %	92.238 %	0.041 ppb	1.565 ppb	87.168 %
Concentration per Run 2	1.141 ppb	91.838 %	88.303 %	0.106 ppb	1.667 ppb	84.112 %
Concentration per Run 3	1.242 ppb	89.371 %	86.200 %	0.114 ppb	1.629 ppb	83.909 %
Recovery Percentage 1	62.724 %			4.360 %	52.259 %	
Concentration RSD	4.7 %	3.2 %	3.4 %	46.3 %	3.2 %	2.1 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index: 14
Analysis label: LDR
Analysis started at: 11/26/2024 8:03:21 AM
User name ALPHALAB\a2-icpmsq2
Rack 4
Vial 1
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	92.926 %	99.739 %	0.003 ppb	20.554 ppb	6.291 ppb	6.360 ppb	10.001 ppb	19.471 ppb	94.321 %
Concentration per Run 1	91.417 %	96.303 %	0.005 ppb	28.354 ppb	6.377 ppb	6.686 ppb	14.456 ppb	23.544 ppb	92.843 %
Concentration per Run 2	93.621 %	103.349 %	0.001 ppb	15.720 ppb	6.636 ppb	5.903 ppb	9.832 ppb	20.913 ppb	94.365 %
Concentration per Run 3	93.740 %	99.565 %	0.004 ppb	17.589 ppb	5.861 ppb	6.491 ppb	5.715 ppb	13.955 ppb	95.757 %
Recovery Percentage 1									
Concentration RSD	1.4 %	3.5 %	58.1 %	33.2 %	6.3 %	6.4 %	43.7 %	25.4 %	1.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	951.077 ppb	977.413 ppb	9,164.124 ppb	47.051 ppb	0.021 ppb	9,643.827 ppb	9,711.049 ppb	9,633.730 ppb	96.328 %
Concentration per Run 1	962.958 ppb	989.898 ppb	9,298.060 ppb	50.388 ppb	0.028 ppb	9,877.273 ppb	9,880.029 ppb	9,772.180 ppb	92.049 %
Concentration per Run 2	917.357 ppb	945.554 ppb	8,964.584 ppb	42.276 ppb	0.020 ppb	9,301.674 ppb	9,367.114 ppb	9,326.166 ppb	98.608 %
Concentration per Run 3	972.914 ppb	996.788 ppb	9,229.730 ppb	48.487 ppb	0.015 ppb	9,752.536 ppb	9,886.002 ppb	9,802.845 ppb	98.328 %
Recovery Percentage 1	95.108 %	97.741 %	91.641 %			96.438 %	97.110 %	96.337 %	
Concentration RSD	3.1 %	2.8 %	1.9 %	9.0 %	31.9 %	3.1 %	3.1 %	2.8 %	3.9 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	789.341 ppb	1.588 ppb	0.209 ppb	6.832 ppb	95.651 %	0.095 ppb	0.023 ppb	95.444 %	0.016 ppb
Concentration per Run 1	869.464 ppb	1.557 ppb	0.214 ppb	6.507 ppb	97.156 %	0.092 ppb	0.028 ppb	99.029 %	0.013 ppb
Concentration per Run 2	758.887 ppb	1.317 ppb	0.204 ppb	6.596 ppb	98.140 %	0.092 ppb	0.013 ppb	96.187 %	0.020 ppb
Concentration per Run 3	739.671 ppb	1.889 ppb	0.208 ppb	7.394 ppb	91.658 %	0.101 ppb	0.029 ppb	91.117 %	0.014 ppb
Recovery Percentage 1	78.934 %								
Concentration RSD	8.9 %	18.1 %	2.4 %	7.1 %	3.7 %	5.2 %	37.6 %	4.2 %	25.5 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	9,648.600 ppb	95.085 %	93.164 %	0.059 ppb	10,041.380 ppb	92.558 %
Concentration per Run 1	9,296.898 ppb	94.282 %	91.609 %	0.025 ppb	9,885.375 ppb	93.397 %
Concentration per Run 2	9,519.720 ppb	97.543 %	97.263 %	0.066 ppb	9,815.105 ppb	93.683 %
Concentration per Run 3	10,129.183 ppb	93.429 %	90.620 %	0.086 ppb	10,423.661 ppb	90.594 %
Recovery Percentage 1	96.486 %				100.414 %	
Concentration RSD	4.5 %	2.3 %	3.8 %	52.9 %	3.3 %	1.8 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index: 15
Analysis label: Rinse
Analysis started at: 11/26/2024 8:07:51 AM
User name ALPHALAB\a2-icpmsq2
Rack 0
Vial 1
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	93.506 %	95.563 %	0.052 ppb	153.154 ppb	63.946 ppb	79.678 ppb	71.587 ppb	188.310 ppb	97.852 %
Concentration per Run 1	90.426 %	99.304 %	0.053 ppb	163.275 ppb	71.620 ppb	82.521 ppb	77.037 ppb	225.312 ppb	99.733 %
Concentration per Run 2	95.354 %	93.366 %	0.051 ppb	179.927 ppb	79.160 ppb	93.058 ppb	87.577 ppb	201.407 ppb	100.550 %
Concentration per Run 3	94.736 %	94.019 %	0.053 ppb	116.259 ppb	41.058 ppb	63.456 ppb	50.145 ppb	138.212 ppb	93.272 %
Concentration RSD	2.9 %	3.4 %	2.5 %	21.6 %	31.6 %	18.8 %	27.0 %	23.9 %	4.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.583 ppb	0.998 ppb	7.385 ppb	302.903 ppb	0.038 ppb	18.287 ppb	10.549 ppb	13.975 ppb	93.811 %
Concentration per Run 1	0.543 ppb	1.063 ppb	8.329 ppb	304.734 ppb	0.029 ppb	19.685 ppb	12.129 ppb	15.444 ppb	92.263 %
Concentration per Run 2	0.855 ppb	1.209 ppb	9.099 ppb	348.851 ppb	0.042 ppb	19.887 ppb	12.065 ppb	15.363 ppb	90.278 %
Concentration per Run 3	0.353 ppb	0.723 ppb	4.726 ppb	255.124 ppb	0.042 ppb	15.288 ppb	7.454 ppb	11.118 ppb	98.894 %
Concentration RSD	43.5 %	25.0 %	31.6 %	15.5 %	19.7 %	14.2 %	25.4 %	17.7 %	4.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	1.519 ppb	0.132 ppb	0.021 ppb	2.544 ppb	90.733 %	0.137 ppb	0.009 ppb	89.710 %	0.027 ppb
Concentration per Run 1	1.647 ppb	0.084 ppb	0.017 ppb	2.247 ppb	92.515 %	0.127 ppb	0.010 ppb	91.862 %	0.027 ppb
Concentration per Run 2	1.612 ppb	0.114 ppb	0.026 ppb	2.850 ppb	90.191 %	0.135 ppb	0.013 ppb	89.430 %	0.024 ppb
Concentration per Run 3	1.298 ppb	0.199 ppb	0.022 ppb	2.533 ppb	89.492 %	0.149 ppb	0.004 ppb	87.838 %	0.031 ppb
Concentration RSD	12.6 %	45.0 %	20.7 %	11.9 %	1.7 %	8.2 %	52.9 %	2.3 %	13.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	6.678 ppb	89.847 %	87.457 %	0.020 ppb	7.983 ppb	89.182 %
Concentration per Run 1	7.852 ppb	92.218 %	86.340 %	-0.011 ppb	9.492 ppb	91.603 %
Concentration per Run 2	8.097 ppb	87.543 %	88.110 %	0.034 ppb	9.678 ppb	86.914 %
Concentration per Run 3	4.086 ppb	89.780 %	87.919 %	0.037 ppb	4.779 ppb	89.028 %
Concentration RSD	33.7 %	2.6 %	1.1 %	134.8 %	34.8 %	2.6 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index:	16	User name	ALPHALAB\a2-icpmsq2	Comment	CCV/MCCV
Analysis label:	CCV	Rack	0		
Analysis started at:	11/26/2024 8:12:17 AM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	92.473 %	94.867 %	62.406 ppb	6,188.977 ppb	6,212.166 ppb	72.789 ppb	6,029.094 ppb	5,863.638 ppb	97.328 %
Concentration per Run 1	91.674 %	97.869 %	61.703 ppb	5,891.411 ppb	5,913.372 ppb	70.526 ppb	5,732.049 ppb	5,661.867 ppb	96.422 %
Concentration per Run 2	92.012 %	93.562 %	62.829 ppb	6,260.124 ppb	6,291.217 ppb	73.491 ppb	6,136.651 ppb	5,914.034 ppb	96.777 %
Concentration per Run 3	93.733 %	93.171 %	62.685 ppb	6,415.397 ppb	6,431.909 ppb	74.348 ppb	6,218.581 ppb	6,015.013 ppb	98.784 %
Recovery Percentage 1			104.010 %	103.150 %	103.536 %	121.314 %	100.485 %	97.727 %	
Concentration RSD	1.2 %	2.7 %	1.0 %	4.3 %	4.3 %	2.8 %	4.3 %	3.1 %	1.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	59.159 ppb	60.939 ppb	62.455 ppb	6,167.368 ppb	61.407 ppb	62.743 ppb	63.883 ppb	62.869 ppb	94.777 %
Concentration per Run 1	56.908 ppb	59.736 ppb	62.123 ppb	6,152.040 ppb	61.857 ppb	62.935 ppb	63.490 ppb	63.001 ppb	93.394 %
Concentration per Run 2	59.302 ppb	61.589 ppb	63.096 ppb	6,169.905 ppb	61.184 ppb	62.589 ppb	64.458 ppb	63.952 ppb	94.112 %
Concentration per Run 3	61.266 ppb	61.491 ppb	62.146 ppb	6,180.159 ppb	61.179 ppb	62.706 ppb	63.700 ppb	61.655 ppb	96.826 %
Recovery Percentage 1	98.598 %	101.564 %	104.092 %	102.789 %	102.344 %	104.572 %	106.471 %	104.782 %	
Concentration RSD	3.7 %	1.7 %	0.9 %	0.2 %	0.6 %	0.3 %	0.8 %	1.8 %	1.9 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	60.802 ppb	59.595 ppb	58.940 ppb	59.842 ppb	94.207 %	57.672 ppb	60.291 ppb	92.489 %	60.202 ppb
Concentration per Run 1	61.413 ppb	57.276 ppb	57.756 ppb	55.198 ppb	96.616 %	56.185 ppb	58.607 ppb	94.800 %	58.184 ppb
Concentration per Run 2	61.051 ppb	61.847 ppb	59.356 ppb	60.283 ppb	94.955 %	57.618 ppb	59.615 ppb	92.951 %	60.055 ppb
Concentration per Run 3	59.941 ppb	59.664 ppb	59.709 ppb	64.045 ppb	91.050 %	59.213 ppb	62.650 ppb	89.716 %	62.368 ppb
Recovery Percentage 1	101.336 %	99.326 %	98.234 %	99.736 %		96.120 %	100.485 %		100.337 %
Concentration RSD	1.3 %	3.8 %	1.8 %	7.4 %	3.0 %	2.6 %	3.5 %	2.8 %	3.5 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	63.639 ppb	91.569 %	90.393 %	58.304 ppb	61.546 ppb	90.585 %
Concentration per Run 1	60.728 ppb	93.731 %	92.644 %	52.210 ppb	60.798 ppb	92.276 %
Concentration per Run 2	63.979 ppb	92.311 %	91.662 %	59.178 ppb	60.533 ppb	90.227 %
Concentration per Run 3	66.209 ppb	88.666 %	86.874 %	63.525 ppb	63.307 ppb	89.252 %
Recovery Percentage 1	106.064 %			97.174 %	102.577 %	
Concentration RSD	4.3 %	2.9 %	3.4 %	9.8 %	2.5 %	1.7 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index:	17	User name	ALPHALAB\a2-icpmsq2	Comment	CCB
Analysis label:	CCB	Rack	0		
Analysis started at:	11/26/2024 8:16:48 AM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	92.931 %	94.215 %	0.013 ppb	19.826 ppb	5.885 ppb	3.888 ppb	17.441 ppb	13.142 ppb	97.028 %
Concentration per Run 1	89.838 %	97.542 %	0.009 ppb	26.789 ppb	13.385 ppb	6.650 ppb	25.644 ppb	23.188 ppb	92.451 %
Concentration per Run 2	93.857 %	92.649 %	0.018 ppb	23.229 ppb	5.189 ppb	5.330 ppb	15.203 ppb	17.584 ppb	98.617 %
Concentration per Run 3	95.098 %	92.453 %	0.013 ppb	9.461 ppb	-0.918 ppb	-0.315 ppb	11.477 ppb	-1.346 ppb	100.016 %
Recovery Percentage 1			2.659 %	3.965 %	8.408 %	38.885 %	17.441 %	13.142 %	
Concentration RSD	3.0 %	3.1 %	32.4 %	46.2 %	121.9 %	95.1 %	42.1 %	97.8 %	4.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.077 ppb	0.096 ppb	0.665 ppb	22.534 ppb	0.027 ppb	0.656 ppb	1.294 ppb	0.679 ppb	92.219 %
Concentration per Run 1	0.079 ppb	0.161 ppb	1.033 ppb	33.494 ppb	0.062 ppb	1.173 ppb	1.658 ppb	1.151 ppb	93.580 %
Concentration per Run 2	0.102 ppb	0.105 ppb	0.897 ppb	25.027 ppb	0.017 ppb	0.766 ppb	1.613 ppb	0.804 ppb	88.884 %
Concentration per Run 3	0.050 ppb	0.022 ppb	0.065 ppb	9.080 ppb	0.001 ppb	0.029 ppb	0.610 ppb	0.083 ppb	94.193 %
Recovery Percentage 1	1.538 %	9.575 %	66.541 %	45.067 %	5.374 %	32.811 %	129.382 %	13.586 %	
Concentration RSD	34.1 %	73.1 %	78.7 %	55.0 %	118.8 %	88.4 %	45.8 %	80.2 %	3.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.275 ppb	0.309 ppb	0.011 ppb	0.913 ppb	91.613 %	0.032 ppb	0.035 ppb	89.939 %	0.063 ppb
Concentration per Run 1	0.295 ppb	0.263 ppb	0.029 ppb	0.804 ppb	98.058 %	0.049 ppb	0.061 ppb	95.500 %	0.072 ppb
Concentration per Run 2	0.310 ppb	0.361 ppb	0.021 ppb	1.008 ppb	88.460 %	0.040 ppb	0.049 ppb	87.293 %	0.059 ppb
Concentration per Run 3	0.219 ppb	0.302 ppb	-0.018 ppb	0.927 ppb	88.322 %	0.007 ppb	-0.004 ppb	87.025 %	0.058 ppb
Recovery Percentage 1	54.916 %	6.174 %	0.108 %	45.642 %		8.035 %	17.652 %		1.574 %
Concentration RSD	17.7 %	15.9 %	232.2 %	11.3 %	6.1 %	68.6 %	97.6 %	5.4 %	13.0 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.645 ppb	89.634 %	86.596 %	0.598 ppb	0.819 ppb	86.848 %
Concentration per Run 1	1.032 ppb	95.433 %	90.864 %	0.619 ppb	1.230 ppb	92.294 %
Concentration per Run 2	0.838 ppb	86.367 %	83.923 %	0.671 ppb	1.014 ppb	84.126 %
Concentration per Run 3	0.065 ppb	87.101 %	85.002 %	0.504 ppb	0.213 ppb	84.123 %
Recovery Percentage 1	129.006 %			59.792 %	81.885 %	
Concentration RSD	79.3 %	5.6 %	4.3 %	14.3 %	65.4 %	5.4 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index:	18	User name	ALPHALAB\a2-icpmsq2	Comment	CCV/MCCV
Analysis label:	CCV	Rack	0		
Analysis started at:	11/26/2024 8:23:46 AM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	94.220 %	92.540 %	57.401 ppb	6,315.038 ppb	6,291.020 ppb	63.196 ppb	6,144.180 ppb	6,003.022 ppb	99.246 %
Concentration per Run 1	93.472 %	93.627 %	54.403 ppb	6,049.311 ppb	5,990.785 ppb	62.949 ppb	5,959.155 ppb	5,656.328 ppb	98.671 %
Concentration per Run 2	94.147 %	90.365 %	58.336 ppb	6,539.333 ppb	6,556.308 ppb	64.914 ppb	6,260.351 ppb	6,364.228 ppb	100.322 %
Concentration per Run 3	95.042 %	93.627 %	59.465 ppb	6,356.469 ppb	6,325.965 ppb	61.724 ppb	6,213.034 ppb	5,988.510 ppb	98.747 %
Recovery Percentage 1			95.669 %	105.251 %	104.850 %	105.327 %	102.403 %	100.050 %	
Concentration RSD	0.8 %	2.0 %	4.6 %	3.9 %	4.5 %	2.5 %	2.6 %	5.9 %	0.9 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	60.051 ppb	61.816 ppb	62.580 ppb	6,266.260 ppb	62.687 ppb	62.441 ppb	63.040 ppb	62.678 ppb	93.317 %
Concentration per Run 1	57.116 ppb	58.756 ppb	59.817 ppb	6,067.759 ppb	61.896 ppb	62.248 ppb	62.039 ppb	62.531 ppb	94.660 %
Concentration per Run 2	62.473 ppb	64.190 ppb	65.515 ppb	6,599.638 ppb	65.189 ppb	64.039 ppb	64.639 ppb	64.834 ppb	91.174 %
Concentration per Run 3	60.564 ppb	62.501 ppb	62.409 ppb	6,131.384 ppb	60.974 ppb	61.037 ppb	62.444 ppb	60.669 ppb	94.116 %
Recovery Percentage 1	100.085 %	103.026 %	104.301 %	104.438 %	104.478 %	104.069 %	105.067 %	104.463 %	
Concentration RSD	4.5 %	4.5 %	4.6 %	4.6 %	3.5 %	2.4 %	2.2 %	3.3 %	2.0 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	61.387 ppb	63.222 ppb	60.765 ppb	60.996 ppb	91.636 %	59.019 ppb	60.935 ppb	92.487 %	60.605 ppb
Concentration per Run 1	60.909 ppb	60.910 ppb	57.623 ppb	55.715 ppb	95.410 %	55.165 ppb	56.902 ppb	95.421 %	57.419 ppb
Concentration per Run 2	61.792 ppb	65.736 ppb	63.282 ppb	63.760 ppb	88.924 %	61.545 ppb	63.283 ppb	91.039 %	63.192 ppb
Concentration per Run 3	61.460 ppb	63.020 ppb	61.390 ppb	63.513 ppb	90.573 %	60.348 ppb	62.619 ppb	91.000 %	61.206 ppb
Recovery Percentage 1	102.312 %	105.370 %	101.275 %	101.660 %		98.366 %	101.558 %		101.009 %
Concentration RSD	0.7 %	3.8 %	4.7 %	7.5 %	3.7 %	5.7 %	5.8 %	2.7 %	4.8 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	61.746 ppb	90.345 %	88.761 %	60.009 ppb	61.460 ppb	88.902 %
Concentration per Run 1	57.994 ppb	95.073 %	92.162 %	51.383 ppb	57.029 ppb	93.564 %
Concentration per Run 2	64.862 ppb	86.916 %	86.342 %	63.647 ppb	64.267 ppb	87.282 %
Concentration per Run 3	62.381 ppb	89.048 %	87.778 %	64.997 ppb	63.084 ppb	85.861 %
Recovery Percentage 1	102.909 %			100.015 %	102.433 %	
Concentration RSD	5.6 %	4.7 %	3.4 %	12.5 %	6.3 %	4.6 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index:	19	User name	ALPHALAB\a2-icpmsq2	Comment	CCB
Analysis label:	CCB	Rack	0		
Analysis started at:	11/26/2024 8:29:06 AM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	91.750 %	91.126 %	0.049 ppb	13.214 ppb	2.614 ppb	0.678 ppb	15.119 ppb	6.506 ppb	93.719 %
Concentration per Run 1	89.415 %	95.063 %	0.078 ppb	9.521 ppb	4.510 ppb	0.699 ppb	14.426 ppb	8.504 ppb	90.162 %
Concentration per Run 2	93.221 %	89.778 %	0.041 ppb	14.446 ppb	1.257 ppb	0.966 ppb	16.498 ppb	-0.163 ppb	95.897 %
Concentration per Run 3	92.613 %	88.538 %	0.027 ppb	15.674 ppb	2.076 ppb	0.369 ppb	14.433 ppb	11.178 ppb	95.099 %
Recovery Percentage 1			9.741 %	2.643 %	3.735 %	6.779 %	15.119 %	6.506 %	
Concentration RSD	2.2 %	3.8 %	54.1 %	24.6 %	64.7 %	44.1 %	7.9 %	91.1 %	3.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.029 ppb	0.050 ppb	0.190 ppb	9.077 ppb	0.021 ppb	0.290 ppb	0.602 ppb	0.285 ppb	91.309 %
Concentration per Run 1	0.083 ppb	0.056 ppb	0.208 ppb	8.552 ppb	0.020 ppb	0.421 ppb	0.641 ppb	0.420 ppb	92.143 %
Concentration per Run 2	-0.031 ppb	0.030 ppb	0.177 ppb	10.133 ppb	0.027 ppb	0.219 ppb	0.606 ppb	0.225 ppb	89.229 %
Concentration per Run 3	0.034 ppb	0.064 ppb	0.185 ppb	8.547 ppb	0.017 ppb	0.229 ppb	0.561 ppb	0.211 ppb	92.555 %
Recovery Percentage 1	0.571 %	5.006 %	19.014 %	18.154 %	4.260 %	14.482 %	60.238 %	5.710 %	
Concentration RSD	199.0 %	36.0 %	8.4 %	10.1 %	25.5 %	39.4 %	6.7 %	41.0 %	2.0 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.184 ppb	0.103 ppb	0.004 ppb	0.507 ppb	88.135 %	0.028 ppb	0.027 ppb	88.224 %	0.047 ppb
Concentration per Run 1	0.195 ppb	0.050 ppb	0.009 ppb	0.352 ppb	91.217 %	0.033 ppb	0.034 ppb	91.334 %	0.052 ppb
Concentration per Run 2	0.179 ppb	0.125 ppb	0.005 ppb	0.533 ppb	86.351 %	0.030 ppb	0.021 ppb	85.918 %	0.035 ppb
Concentration per Run 3	0.178 ppb	0.133 ppb	-0.001 ppb	0.636 ppb	86.836 %	0.019 ppb	0.026 ppb	87.419 %	0.053 ppb
Recovery Percentage 1	36.806 %	2.053 %	0.042 %	25.354 %		6.898 %	13.562 %		1.170 %
Concentration RSD	5.1 %	44.4 %	116.2 %	28.3 %	3.0 %	26.4 %	24.1 %	3.2 %	22.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.223 ppb	88.203 %	86.026 %	0.452 ppb	0.275 ppb	86.267 %
Concentration per Run 1	0.316 ppb	91.457 %	87.817 %	0.538 ppb	0.343 ppb	91.329 %
Concentration per Run 2	0.197 ppb	86.079 %	84.530 %	0.464 ppb	0.252 ppb	83.324 %
Concentration per Run 3	0.157 ppb	87.074 %	85.730 %	0.355 ppb	0.229 ppb	84.149 %
Recovery Percentage 1	44.656 %			45.249 %	27.454 %	
Concentration RSD	37.2 %	3.2 %	1.9 %	20.4 %	21.9 %	5.1 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index:	20	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG2000752-2d10 2008SL	Rack	1		
Analysis started at:	11/26/2024 8:42:30 AM	Vial	1		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	91.649 %	89.278 %	5.073 ppb	1,069.231 ppb	1,022.150 ppb	204.833 ppb	1,009.203 ppb	965.153 ppb	94.329 %
Concentration per Run 1	89.114 %	92.322 %	5.109 ppb	1,021.392 ppb	979.158 ppb	195.780 ppb	964.345 ppb	898.713 ppb	93.675 %
Concentration per Run 2	92.686 %	87.233 %	5.050 ppb	1,096.189 ppb	1,035.927 ppb	209.049 ppb	1,058.384 ppb	981.038 ppb	94.007 %
Concentration per Run 3	93.146 %	88.277 %	5.058 ppb	1,090.111 ppb	1,051.366 ppb	209.670 ppb	1,004.879 ppb	1,015.709 ppb	95.306 %
Concentration RSD	2.4 %	3.0 %	0.6 %	3.9 %	3.7 %	3.8 %	4.7 %	6.2 %	0.9 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	49.750 ppb	20.591 ppb	52.961 ppb	113.779 ppb	51.667 ppb	52.155 ppb	26.435 ppb	52.010 ppb	88.435 %
Concentration per Run 1	49.859 ppb	19.959 ppb	51.564 ppb	114.365 ppb	50.811 ppb	51.691 ppb	26.622 ppb	51.950 ppb	87.572 %
Concentration per Run 2	50.597 ppb	21.164 ppb	54.717 ppb	119.520 ppb	52.861 ppb	53.877 ppb	26.580 ppb	53.153 ppb	87.816 %
Concentration per Run 3	48.793 ppb	20.649 ppb	52.603 ppb	107.452 ppb	51.327 ppb	50.897 ppb	26.104 ppb	50.927 ppb	89.916 %
Concentration RSD	1.8 %	2.9 %	3.0 %	5.3 %	2.1 %	3.0 %	1.1 %	2.1 %	1.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	12.476 ppb	12.467 ppb	100.519 ppb	106.189 ppb	88.676 %	4.708 ppb	5.301 ppb	88.855 %	42.312 ppb
Concentration per Run 1	12.177 ppb	12.152 ppb	99.113 ppb	107.221 ppb	90.269 %	4.510 ppb	5.228 ppb	89.890 %	40.534 ppb
Concentration per Run 2	12.743 ppb	12.825 ppb	102.000 ppb	106.158 ppb	87.999 %	4.768 ppb	5.268 ppb	87.943 %	43.128 ppb
Concentration per Run 3	12.509 ppb	12.426 ppb	100.443 ppb	105.187 ppb	87.761 %	4.845 ppb	5.409 ppb	88.733 %	43.275 ppb
Concentration RSD	2.3 %	2.7 %	1.4 %	1.0 %	1.6 %	3.7 %	1.8 %	1.1 %	3.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	201.374 ppb	88.438 %	87.479 %	12.431 ppb	52.024 ppb	89.425 %
Concentration per Run 1	196.941 ppb	91.284 %	90.296 %	12.063 ppb	50.876 ppb	91.020 %
Concentration per Run 2	205.593 ppb	86.534 %	86.006 %	12.500 ppb	52.885 ppb	89.326 %
Concentration per Run 3	201.586 ppb	87.495 %	86.137 %	12.729 ppb	52.312 ppb	87.931 %
Concentration RSD	2.2 %	2.8 %	2.8 %	2.7 %	2.0 %	1.7 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index: 21
Analysis label: L2467852-02 2008SL
Analysis started at: 11/26/2024 8:46:56 AM
User name ALPHALAB\a2-icpmsq2
Rack 1
Vial 2
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	90.604 %	95.433 %	0.011 ppb	364,774.570 ppb	7,252.525 ppb	3.613 ppb	8,918.726 ppb	63,136.688 ppb	93.622 %
Concentration per Run 1	89.277 %	95.781 %	0.011 ppb	352,842.410 ppb	7,055.132 ppb	3.144 ppb	8,614.010 ppb	60,241.283 ppb	93.066 %
Concentration per Run 2	91.864 %	95.193 %	0.009 ppb	368,732.431 ppb	7,344.611 ppb	3.878 ppb	8,930.807 ppb	63,461.118 ppb	94.344 %
Concentration per Run 3	90.671 %	95.324 %	0.012 ppb	372,748.868 ppb	7,357.832 ppb	3.816 ppb	9,211.363 ppb	65,707.663 ppb	93.454 %
Concentration RSD	1.4 %	0.3 %	15.3 %	2.9 %	2.4 %	11.3 %	3.4 %	4.4 %	0.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.024 ppb	0.066 ppb	220.607 ppb	1,735.587 ppb	2.646 ppb	3.452 ppb	2.408 ppb	13.842 ppb	84.387 %
Concentration per Run 1	0.069 ppb	0.037 ppb	209.221 ppb	1,635.862 ppb	2.538 ppb	3.379 ppb	2.451 ppb	13.550 ppb	86.619 %
Concentration per Run 2	-0.002 ppb	0.088 ppb	226.233 ppb	1,766.578 ppb	2.781 ppb	3.653 ppb	2.451 ppb	14.255 ppb	83.167 %
Concentration per Run 3	0.005 ppb	0.072 ppb	226.367 ppb	1,804.321 ppb	2.618 ppb	3.323 ppb	2.322 ppb	13.722 ppb	83.376 %
Concentration RSD	160.9 %	39.7 %	4.5 %	5.1 %	4.7 %	5.1 %	3.1 %	2.7 %	2.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.582 ppb	0.371 ppb	238.823 ppb	1.230 ppb	81.667 %	0.009 ppb	0.007 ppb	84.659 %	1.950 ppb
Concentration per Run 1	0.540 ppb	0.336 ppb	232.082 ppb	1.140 ppb	82.218 %	0.006 ppb	0.004 ppb	83.263 %	2.013 ppb
Concentration per Run 2	0.606 ppb	0.343 ppb	242.296 ppb	1.058 ppb	81.068 %	0.013 ppb	0.014 ppb	85.057 %	1.965 ppb
Concentration per Run 3	0.599 ppb	0.435 ppb	242.091 ppb	1.493 ppb	81.714 %	0.009 ppb	0.002 ppb	85.657 %	1.872 ppb
Concentration RSD	6.3 %	14.9 %	2.4 %	18.8 %	0.7 %	40.2 %	94.7 %	1.5 %	3.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.421 ppb	85.142 %	84.248 %	0.043 ppb	0.249 ppb	80.163 %
Concentration per Run 1	0.477 ppb	86.059 %	84.409 %	0.013 ppb	0.259 ppb	80.690 %
Concentration per Run 2	0.319 ppb	84.645 %	83.022 %	0.058 ppb	0.244 ppb	80.451 %
Concentration per Run 3	0.468 ppb	84.722 %	85.313 %	0.056 ppb	0.244 ppb	79.349 %
Concentration RSD	21.0 %	0.9 %	1.4 %	59.9 %	3.5 %	0.9 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index: 22
Analysis label: L2467949-02d10 2008SL
Analysis started at: 11/26/2024 8:57:04 AM
User name ALPHALAB\a2-icpmsq2
Rack 1
Vial 3
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	79.073 %	90.387 %	0.004 ppb	629,275.144 ppb	70,658.307 ppb	1.098 ppb	20,883.694 ppb	24,617.698 ppb	89.111 %
Concentration per Run 1	76.915 %	93.954 %	0.003 ppb	593,631.238 ppb	66,426.599 ppb	1.024 ppb	19,895.514 ppb	23,535.034 ppb	89.176 %
Concentration per Run 2	80.537 %	89.647 %	0.007 ppb	635,087.944 ppb	71,124.007 ppb	0.838 ppb	21,151.001 ppb	24,951.461 ppb	90.341 %
Concentration per Run 3	79.769 %	87.559 %	0.002 ppb	659,106.249 ppb	74,424.315 ppb	1.431 ppb	21,604.569 ppb	25,366.598 ppb	87.815 %
Concentration RSD	2.4 %	3.6 %	56.4 %	5.3 %	5.7 %	27.6 %	4.2 %	3.9 %	1.4 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.008 ppb	0.037 ppb	18.865 ppb	256.686 ppb	0.012 ppb	0.027 ppb	1.274 ppb	0.314 ppb	88.422 %
Concentration per Run 1	-0.017 ppb	0.065 ppb	18.375 ppb	256.091 ppb	0.012 ppb	0.019 ppb	1.273 ppb	0.366 ppb	85.919 %
Concentration per Run 2	-0.003 ppb	0.015 ppb	18.784 ppb	249.873 ppb	0.018 ppb	0.030 ppb	1.230 ppb	0.315 ppb	88.605 %
Concentration per Run 3	0.043 ppb	0.031 ppb	19.438 ppb	264.094 ppb	0.007 ppb	0.033 ppb	1.318 ppb	0.259 ppb	90.742 %
Concentration RSD	410.4 %	67.8 %	2.8 %	2.8 %	41.8 %	27.7 %	3.5 %	17.0 %	2.7 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.154 ppb	0.230 ppb	447.487 ppb	0.720 ppb	82.990 %	0.003 ppb	0.000 ppb	86.259 %	0.288 ppb
Concentration per Run 1	0.151 ppb	0.148 ppb	433.801 ppb	0.622 ppb	84.630 %	0.003 ppb	0.000 ppb	88.618 %	0.279 ppb
Concentration per Run 2	0.151 ppb	0.275 ppb	454.306 ppb	0.742 ppb	82.458 %	0.005 ppb	0.002 ppb	83.999 %	0.297 ppb
Concentration per Run 3	0.161 ppb	0.268 ppb	454.354 ppb	0.796 ppb	81.882 %	0.001 ppb	-0.002 ppb	86.159 %	0.288 ppb
Concentration RSD	3.7 %	30.9 %	2.6 %	12.4 %	1.7 %	63.0 %	3,982.4 %	2.7 %	3.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	3.763 ppb	85.844 %	84.683 %	-0.001 ppb	0.047 ppb	78.661 %
Concentration per Run 1	3.610 ppb	88.813 %	86.412 %	-0.013 ppb	0.051 ppb	79.341 %
Concentration per Run 2	3.913 ppb	84.696 %	83.564 %	0.000 ppb	0.047 ppb	78.247 %
Concentration per Run 3	3.766 ppb	84.025 %	84.074 %	0.009 ppb	0.044 ppb	78.394 %
Concentration RSD	4.0 %	3.0 %	1.8 %	713.3 %	7.4 %	0.8 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index:	23	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2467949-03d10 2008SL	Rack	1		
Analysis started at:	11/26/2024 9:01:31 AM	Vial	4		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	95.755 %	92.344 %	0.004 ppb	7,105.578 ppb	1,051.346 ppb	0.663 ppb	1,566.956 ppb	12,571.446 ppb	101.187 %
Concentration per Run 1	94.680 %	94.215 %	0.004 ppb	6,884.901 ppb	1,030.592 ppb	0.384 ppb	1,532.291 ppb	12,240.306 ppb	100.147 %
Concentration per Run 2	95.714 %	93.366 %	0.005 ppb	7,035.636 ppb	1,039.298 ppb	0.489 ppb	1,547.506 ppb	12,795.165 ppb	102.198 %
Concentration per Run 3	96.871 %	89.452 %	0.004 ppb	7,396.197 ppb	1,084.147 ppb	1.116 ppb	1,621.072 ppb	12,678.867 ppb	101.216 %
Concentration RSD	1.1 %	2.8 %	15.4 %	3.7 %	2.7 %	59.7 %	3.0 %	2.3 %	1.0 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.003 ppb	0.048 ppb	16.689 ppb	82.824 ppb	0.010 ppb	0.083 ppb	0.553 ppb	1.354 ppb	92.523 %
Concentration per Run 1	-0.019 ppb	0.058 ppb	16.538 ppb	78.348 ppb	0.021 ppb	0.044 ppb	0.631 ppb	1.416 ppb	90.717 %
Concentration per Run 2	-0.020 ppb	0.039 ppb	17.159 ppb	84.588 ppb	0.001 ppb	0.090 ppb	0.547 ppb	1.219 ppb	92.430 %
Concentration per Run 3	0.032 ppb	0.048 ppb	16.369 ppb	85.535 ppb	0.009 ppb	0.115 ppb	0.481 ppb	1.428 ppb	94.422 %
Concentration RSD	1,105.5 %	20.0 %	2.5 %	4.7 %	97.9 %	43.6 %	13.6 %	8.7 %	2.0 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.270 ppb	-0.014 ppb	116.410 ppb	1.675 ppb	90.730 %	0.000 ppb	-0.001 ppb	90.825 %	0.126 ppb
Concentration per Run 1	0.286 ppb	0.002 ppb	112.227 ppb	1.492 ppb	94.243 %	-0.001 ppb	-0.002 ppb	94.404 %	0.135 ppb
Concentration per Run 2	0.311 ppb	-0.108 ppb	118.516 ppb	1.675 ppb	88.496 %	0.002 ppb	-0.002 ppb	89.023 %	0.125 ppb
Concentration per Run 3	0.214 ppb	0.065 ppb	118.488 ppb	1.858 ppb	89.452 %	-0.001 ppb	0.000 ppb	89.047 %	0.117 ppb
Concentration RSD	18.6 %	639.3 %	3.1 %	10.9 %	3.4 %	926.0 %	78.3 %	3.4 %	7.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	3.444 ppb	88.944 %	85.825 %	-0.012 ppb	0.035 ppb	85.781 %
Concentration per Run 1	3.223 ppb	91.950 %	88.113 %	-0.030 ppb	0.038 ppb	91.437 %
Concentration per Run 2	3.548 ppb	85.856 %	83.634 %	-0.002 ppb	0.034 ppb	82.413 %
Concentration per Run 3	3.561 ppb	89.026 %	85.728 %	-0.003 ppb	0.032 ppb	83.491 %
Concentration RSD	5.5 %	3.4 %	2.6 %	134.2 %	9.3 %	5.7 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index:	24	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2467852-01 2008TL	Rack	1		
Analysis started at:	11/26/2024 9:05:59 AM	Vial	5		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	97.359 %	102.218 %	0.093 ppb	431,240.833 ppb	1,103.734 ppb	9,124.344 ppb	104,871.190 ppb	12,933.242 ppb	96.135 %
Concentration per Run 1	93.237 %	99.891 %	0.100 ppb	425,833.177 ppb	1,082.471 ppb	8,907.753 ppb	102,952.966 ppb	12,644.638 ppb	93.775 %
Concentration per Run 2	98.591 %	101.653 %	0.085 ppb	440,260.367 ppb	1,124.547 ppb	9,236.309 ppb	106,668.058 ppb	13,023.841 ppb	96.800 %
Concentration per Run 3	100.247 %	105.111 %	0.094 ppb	427,628.954 ppb	1,104.184 ppb	9,228.969 ppb	104,992.545 ppb	13,131.248 ppb	97.831 %
Concentration RSD	3.8 %	2.6 %	7.8 %	1.8 %	1.9 %	2.1 %	1.8 %	2.0 %	2.2 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	28.078 ppb	6.390 ppb	43.336 ppb	2,455.954 ppb	1.124 ppb	12.997 ppb	5.780 ppb	10.045 ppb	89.807 %
Concentration per Run 1	27.776 ppb	6.308 ppb	42.653 ppb	2,423.933 ppb	1.099 ppb	13.498 ppb	5.488 ppb	10.164 ppb	89.732 %
Concentration per Run 2	27.777 ppb	6.561 ppb	44.388 ppb	2,493.918 ppb	1.152 ppb	13.131 ppb	6.199 ppb	10.073 ppb	88.431 %
Concentration per Run 3	28.681 ppb	6.299 ppb	42.969 ppb	2,450.010 ppb	1.121 ppb	12.362 ppb	5.651 ppb	9.897 ppb	91.257 %
Concentration RSD	1.9 %	2.3 %	2.1 %	1.4 %	2.3 %	4.5 %	6.4 %	1.4 %	1.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	17.497 ppb	1.531 ppb	509.175 ppb	102.433 ppb	86.459 %	0.010 ppb	0.033 ppb	88.719 %	0.879 ppb
Concentration per Run 1	17.281 ppb	1.099 ppb	495.287 ppb	96.251 ppb	88.596 %	0.009 ppb	0.024 ppb	90.955 %	0.842 ppb
Concentration per Run 2	17.980 ppb	1.598 ppb	524.552 ppb	103.880 ppb	84.775 %	0.010 ppb	0.034 ppb	87.153 %	0.933 ppb
Concentration per Run 3	17.229 ppb	1.895 ppb	507.686 ppb	107.168 ppb	86.007 %	0.011 ppb	0.041 ppb	88.050 %	0.861 ppb
Concentration RSD	2.4 %	26.3 %	2.9 %	5.5 %	2.3 %	8.8 %	27.1 %	2.2 %	5.4 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	32.356 ppb	89.918 %	87.922 %	0.173 ppb	1.677 ppb	82.182 %
Concentration per Run 1	31.331 ppb	91.837 %	88.576 %	0.141 ppb	1.638 ppb	83.277 %
Concentration per Run 2	33.547 ppb	87.679 %	87.206 %	0.197 ppb	1.701 ppb	82.815 %
Concentration per Run 3	32.190 ppb	90.238 %	87.985 %	0.182 ppb	1.693 ppb	80.453 %
Concentration RSD	3.5 %	2.3 %	0.8 %	16.8 %	2.0 %	1.8 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index: 25
Analysis label: L2467852-02 2008TL
Analysis started at: 11/26/2024 9:10:27 AM
User name ALPHALAB\a2-icpmsq2
Rack 1
Vial 6
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	94.092 %	99.870 %	0.003 ppb	365,727.884 ppb	7,333.132 ppb	9.482 ppb	8,993.345 ppb	62,542.299 ppb	93.821 %
Concentration per Run 1	92.825 %	104.263 %	0.003 ppb	332,537.881 ppb	6,627.095 ppb	9.557 ppb	8,341.062 ppb	57,181.692 ppb	93.165 %
Concentration per Run 2	94.652 %	98.978 %	0.006 ppb	369,091.431 ppb	7,495.085 ppb	9.332 ppb	8,920.318 ppb	62,160.117 ppb	94.041 %
Concentration per Run 3	94.799 %	96.368 %	-0.001 ppb	395,554.341 ppb	7,877.216 ppb	9.557 ppb	9,718.656 ppb	68,285.087 ppb	94.255 %
Concentration RSD	1.2 %	4.0 %	132.8 %	8.7 %	8.7 %	1.4 %	7.7 %	8.9 %	0.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.021 ppb	0.072 ppb	219.532 ppb	1,769.065 ppb	2.765 ppb	3.847 ppb	11.162 ppb	146.713 ppb	88.717 %
Concentration per Run 1	-0.018 ppb	0.071 ppb	197.387 ppb	1,624.171 ppb	2.499 ppb	3.299 ppb	10.290 ppb	135.964 ppb	93.685 %
Concentration per Run 2	-0.013 ppb	0.066 ppb	223.864 ppb	1,781.291 ppb	2.863 ppb	3.918 ppb	10.982 ppb	147.921 ppb	89.017 %
Concentration per Run 3	0.093 ppb	0.077 ppb	237.344 ppb	1,901.732 ppb	2.933 ppb	4.325 ppb	12.216 ppb	156.254 ppb	83.447 %
Concentration RSD	302.2 %	7.7 %	9.3 %	7.9 %	8.4 %	13.4 %	8.7 %	7.0 %	5.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.553 ppb	0.232 ppb	234.175 ppb	1.088 ppb	86.118 %	0.000 ppb	0.021 ppb	87.634 %	0.088 ppb
Concentration per Run 1	0.516 ppb	0.291 ppb	212.376 ppb	0.985 ppb	92.087 %	0.001 ppb	0.009 ppb	92.740 %	0.065 ppb
Concentration per Run 2	0.620 ppb	0.244 ppb	233.625 ppb	0.916 ppb	86.028 %	0.000 ppb	0.021 ppb	87.096 %	0.089 ppb
Concentration per Run 3	0.524 ppb	0.161 ppb	256.524 ppb	1.362 ppb	80.240 %	-0.001 ppb	0.032 ppb	83.067 %	0.111 ppb
Concentration RSD	10.5 %	28.3 %	9.4 %	22.1 %	6.9 %	395.3 %	57.4 %	5.5 %	26.4 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.177 ppb	89.476 %	87.257 %	-0.015 ppb	4.553 ppb	82.317 %
Concentration per Run 1	0.124 ppb	96.072 %	93.675 %	-0.040 ppb	4.056 ppb	88.547 %
Concentration per Run 2	0.245 ppb	89.067 %	86.329 %	-0.015 ppb	4.586 ppb	81.842 %
Concentration per Run 3	0.160 ppb	83.289 %	81.767 %	0.010 ppb	5.016 ppb	76.563 %
Concentration RSD	35.2 %	7.2 %	6.9 %	161.6 %	10.6 %	7.3 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index:	26	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2467949-02d10 2008TL	Rack	1		
Analysis started at:	11/26/2024 9:14:56 AM	Vial	7		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	84.153 %	94.454 %	0.002 ppb	648,134.750 ppb	72,137.690 ppb	5.389 ppb	21,375.404 ppb	25,551.305 ppb	94.773 %
Concentration per Run 1	82.363 %	97.020 %	0.002 ppb	618,545.662 ppb	67,867.311 ppb	4.946 ppb	20,688.573 ppb	24,486.233 ppb	94.577 %
Concentration per Run 2	85.237 %	94.671 %	0.003 ppb	655,935.463 ppb	73,146.309 ppb	5.017 ppb	21,606.590 ppb	26,041.429 ppb	94.851 %
Concentration per Run 3	84.858 %	91.670 %	0.000 ppb	669,923.126 ppb	75,399.449 ppb	6.205 ppb	21,831.048 ppb	26,126.254 ppb	94.892 %
Concentration RSD	1.9 %	2.8 %	84.1 %	4.1 %	5.4 %	13.1 %	2.8 %	3.6 %	0.2 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.008 ppb	0.093 ppb	20.768 ppb	331.968 ppb	0.006 ppb	0.055 ppb	0.435 ppb	0.566 ppb	91.771 %
Concentration per Run 1	0.005 ppb	0.071 ppb	19.471 ppb	324.225 ppb	0.007 ppb	0.070 ppb	0.389 ppb	0.566 ppb	90.909 %
Concentration per Run 2	-0.013 ppb	0.087 ppb	21.102 ppb	347.154 ppb	0.011 ppb	0.023 ppb	0.469 ppb	0.558 ppb	90.316 %
Concentration per Run 3	0.031 ppb	0.120 ppb	21.730 ppb	324.525 ppb	0.001 ppb	0.072 ppb	0.447 ppb	0.575 ppb	94.088 %
Concentration RSD	280.5 %	27.1 %	5.6 %	4.0 %	80.7 %	50.7 %	9.4 %	1.5 %	2.2 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.174 ppb	0.103 ppb	446.496 ppb	0.847 ppb	85.643 %	0.001 ppb	-0.001 ppb	88.039 %	0.046 ppb
Concentration per Run 1	0.170 ppb	0.224 ppb	424.409 ppb	0.741 ppb	89.881 %	0.002 ppb	-0.002 ppb	90.740 %	0.032 ppb
Concentration per Run 2	0.190 ppb	0.064 ppb	460.344 ppb	0.895 ppb	83.536 %	0.001 ppb	0.000 ppb	86.521 %	0.046 ppb
Concentration per Run 3	0.161 ppb	0.020 ppb	454.736 ppb	0.905 ppb	83.513 %	-0.001 ppb	-0.002 ppb	86.856 %	0.060 ppb
Concentration RSD	8.5 %	104.5 %	4.3 %	10.8 %	4.3 %	175.4 %	88.2 %	2.7 %	29.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	4.198 ppb	87.593 %	84.681 %	-0.026 ppb	0.025 ppb	76.593 %
Concentration per Run 1	3.669 ppb	91.883 %	87.756 %	-0.041 ppb	0.023 ppb	80.671 %
Concentration per Run 2	4.652 ppb	84.406 %	82.859 %	-0.024 ppb	0.028 ppb	74.919 %
Concentration per Run 3	4.274 ppb	86.488 %	83.426 %	-0.014 ppb	0.025 ppb	74.188 %
Concentration RSD	11.8 %	4.4 %	3.2 %	53.4 %	10.8 %	4.6 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index: 27 | User name ALPHALAB\a2-icpmsq2 | Comment <Comment>
Analysis label: L2467949-03d10 2008TL | Rack 1
Analysis started at: 11/26/2024 9:19:24 AM | Vial 8

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	102.856 %	105.089 %	0.003 ppb	6,640.070 ppb	936.400 ppb	2.910 ppb	1,451.451 ppb	11,701.009 ppb	106.431 %
Concentration per Run 1	101.027 %	107.395 %	0.004 ppb	6,384.765 ppb	886.945 ppb	2.776 ppb	1,386.676 ppb	10,842.689 ppb	103.877 %
Concentration per Run 2	103.221 %	101.914 %	0.003 ppb	6,860.801 ppb	980.646 ppb	3.326 ppb	1,528.576 ppb	12,444.104 ppb	107.087 %
Concentration per Run 3	104.320 %	105.959 %	0.003 ppb	6,674.645 ppb	941.609 ppb	2.628 ppb	1,439.100 ppb	11,816.236 ppb	108.330 %
Concentration RSD	1.6 %	2.7 %	14.9 %	3.6 %	5.0 %	12.6 %	4.9 %	6.9 %	2.2 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.059 ppb	0.049 ppb	15.539 ppb	83.836 ppb	0.003 ppb	0.095 ppb	0.312 ppb	0.338 ppb	97.233 %
Concentration per Run 1	0.014 ppb	0.065 ppb	14.740 ppb	75.852 ppb	0.004 ppb	0.083 ppb	0.356 ppb	0.349 ppb	98.545 %
Concentration per Run 2	0.106 ppb	0.039 ppb	16.409 ppb	90.910 ppb	0.002 ppb	0.064 ppb	0.242 ppb	0.349 ppb	94.510 %
Concentration per Run 3	0.056 ppb	0.041 ppb	15.467 ppb	84.746 ppb	0.004 ppb	0.137 ppb	0.338 ppb	0.317 ppb	98.644 %
Concentration RSD	77.8 %	30.0 %	5.4 %	9.0 %	20.8 %	39.6 %	19.7 %	5.5 %	2.4 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.254 ppb	0.160 ppb	110.262 ppb	1.515 ppb	95.913 %	-0.003 ppb	-0.001 ppb	94.550 %	0.048 ppb
Concentration per Run 1	0.239 ppb	0.188 ppb	104.422 ppb	1.222 ppb	100.090 %	-0.003 ppb	-0.002 ppb	98.594 %	0.043 ppb
Concentration per Run 2	0.302 ppb	0.135 ppb	114.674 ppb	1.662 ppb	93.713 %	-0.003 ppb	0.001 ppb	92.377 %	0.044 ppb
Concentration per Run 3	0.222 ppb	0.158 ppb	111.691 ppb	1.662 ppb	93.937 %	-0.003 ppb	-0.002 ppb	92.679 %	0.057 ppb
Concentration RSD	16.5 %	16.6 %	4.8 %	16.7 %	3.8 %	10.8 %	228.8 %	3.7 %	16.5 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	3.137 ppb	92.194 %	90.199 %	-0.028 ppb	0.018 ppb	89.190 %
Concentration per Run 1	2.929 ppb	95.842 %	94.203 %	-0.043 ppb	0.017 ppb	94.004 %
Concentration per Run 2	3.215 ppb	89.572 %	87.895 %	-0.022 ppb	0.019 ppb	85.806 %
Concentration per Run 3	3.268 ppb	91.169 %	88.499 %	-0.018 ppb	0.018 ppb	87.759 %
Concentration RSD	5.8 %	3.5 %	3.9 %	47.2 %	6.3 %	4.8 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index: 28
Analysis label: CCV
Analysis started at: 11/26/2024 9:24:26 AM
User name ALPHALAB\a2-icpmsq2
Rack 0
Vial 9
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	100.072 %	97.412 %	60.317 ppb	6,402.163 ppb	6,352.407 ppb	65.837 ppb	6,285.324 ppb	6,092.913 ppb	106.880 %
Concentration per Run 1	98.619 %	91.539 %	59.512 ppb	6,659.005 ppb	6,629.722 ppb	69.942 ppb	6,559.753 ppb	6,236.031 ppb	107.425 %
Concentration per Run 2	101.502 %	96.629 %	59.947 ppb	6,386.789 ppb	6,453.939 ppb	66.698 ppb	6,379.636 ppb	6,160.041 ppb	108.410 %
Concentration per Run 3	100.095 %	104.067 %	61.492 ppb	6,160.695 ppb	5,973.561 ppb	60.870 ppb	5,916.582 ppb	5,882.667 ppb	104.805 %
Recovery Percentage 1			100.528 %	106.703 %	105.873 %	109.728 %	104.755 %	101.549 %	
Concentration RSD	1.4 %	6.5 %	1.7 %	3.9 %	5.3 %	7.0 %	5.3 %	3.1 %	1.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	59.190 ppb	62.051 ppb	63.159 ppb	6,317.022 ppb	62.971 ppb	62.921 ppb	63.671 ppb	62.689 ppb	95.944 %
Concentration per Run 1	59.332 ppb	63.053 ppb	65.812 ppb	6,400.431 ppb	64.458 ppb	63.759 ppb	63.788 ppb	63.414 ppb	93.326 %
Concentration per Run 2	61.586 ppb	64.097 ppb	64.025 ppb	6,538.788 ppb	64.150 ppb	65.051 ppb	66.372 ppb	65.892 ppb	94.188 %
Concentration per Run 3	56.650 ppb	59.003 ppb	59.640 ppb	6,011.847 ppb	60.305 ppb	59.953 ppb	60.852 ppb	58.761 ppb	100.319 %
Recovery Percentage 1	98.650 %	103.418 %	105.265 %	105.284 %	104.951 %	104.869 %	106.118 %	104.482 %	
Concentration RSD	4.2 %	4.3 %	5.0 %	4.3 %	3.7 %	4.2 %	4.3 %	5.8 %	4.0 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	61.437 ppb	60.556 ppb	60.306 ppb	59.794 ppb	95.206 %	58.563 ppb	60.623 ppb	94.197 %	60.483 ppb
Concentration per Run 1	62.612 ppb	60.871 ppb	60.457 ppb	57.887 ppb	94.991 %	58.493 ppb	61.082 ppb	93.121 %	60.343 ppb
Concentration per Run 2	63.137 ppb	62.064 ppb	63.090 ppb	63.559 ppb	92.102 %	61.125 ppb	63.288 ppb	91.251 %	63.214 ppb
Concentration per Run 3	58.563 ppb	58.735 ppb	57.373 ppb	57.935 ppb	98.524 %	56.072 ppb	57.498 ppb	98.219 %	57.892 ppb
Recovery Percentage 1	102.395 %	100.927 %	100.511 %	99.656 %		97.605 %	101.038 %		100.805 %
Concentration RSD	4.1 %	2.8 %	4.7 %	5.5 %	3.4 %	4.3 %	4.8 %	3.8 %	4.4 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	60.687 ppb	92.579 %	90.948 %	58.636 ppb	60.682 ppb	90.181 %
Concentration per Run 1	60.571 ppb	92.602 %	90.644 %	54.367 ppb	59.965 ppb	89.624 %
Concentration per Run 2	63.856 ppb	89.186 %	87.870 %	62.447 ppb	63.227 ppb	88.950 %
Concentration per Run 3	57.634 ppb	95.948 %	94.329 %	59.095 ppb	58.855 ppb	91.968 %
Recovery Percentage 1	101.145 %			97.727 %	101.137 %	
Concentration RSD	5.1 %	3.7 %	3.6 %	6.9 %	3.7 %	1.8 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index:	29	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	CCB	Rack	0		
Analysis started at:	11/26/2024 9:28:57 AM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	99.987 %	94.780 %	0.004 ppb	116.042 ppb	6.027 ppb	-0.300 ppb	25.173 ppb	9.404 ppb	101.452 %
Concentration per Run 1	97.929 %	97.934 %	0.003 ppb	133.695 ppb	7.759 ppb	-0.029 ppb	32.945 ppb	9.841 ppb	98.563 %
Concentration per Run 2	100.947 %	95.781 %	0.004 ppb	151.909 ppb	10.830 ppb	-0.121 ppb	26.925 ppb	15.323 ppb	101.009 %
Concentration per Run 3	101.084 %	90.626 %	0.005 ppb	62.521 ppb	-0.509 ppb	-0.750 ppb	15.649 ppb	3.049 ppb	104.783 %
Recovery Percentage 1			0.737 %	23.208 %	8.610 %	-3.000 %	25.173 %	9.404 %	
Concentration RSD	1.8 %	4.0 %	28.2 %	40.7 %	97.3 %	130.8 %	34.9 %	65.4 %	3.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.041 ppb	0.019 ppb	-0.004 ppb	6.666 ppb	0.015 ppb	-0.011 ppb	0.128 ppb	0.024 ppb	92.850 %
Concentration per Run 1	0.022 ppb	0.008 ppb	-0.027 ppb	6.948 ppb	0.027 ppb	0.021 ppb	0.121 ppb	0.080 ppb	93.513 %
Concentration per Run 2	0.046 ppb	0.033 ppb	-0.016 ppb	8.238 ppb	0.013 ppb	-0.027 ppb	0.144 ppb	-0.002 ppb	89.983 %
Concentration per Run 3	0.056 ppb	0.016 ppb	0.030 ppb	4.814 ppb	0.005 ppb	-0.027 ppb	0.120 ppb	-0.006 ppb	95.055 %
Recovery Percentage 1	0.827 %	1.901 %	-0.413 %	13.333 %	2.961 %	-0.566 %	12.837 %	0.483 %	
Concentration RSD	42.1 %	65.3 %	733.3 %	25.9 %	76.3 %	244.9 %	10.3 %	201.7 %	2.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.127 ppb	0.168 ppb	0.069 ppb	0.548 ppb	93.889 %	0.018 ppb	0.011 ppb	91.521 %	0.068 ppb
Concentration per Run 1	0.068 ppb	0.077 ppb	0.136 ppb	0.578 ppb	97.448 %	0.028 ppb	0.024 ppb	94.706 %	0.067 ppb
Concentration per Run 2	0.186 ppb	0.191 ppb	0.083 ppb	0.481 ppb	93.133 %	0.018 ppb	0.014 ppb	89.965 %	0.073 ppb
Concentration per Run 3	0.126 ppb	0.237 ppb	-0.011 ppb	0.584 ppb	91.088 %	0.007 ppb	-0.004 ppb	89.891 %	0.062 ppb
Recovery Percentage 1	25.316 %	3.365 %	0.693 %	27.384 %		4.420 %	5.687 %		1.690 %
Concentration RSD	46.5 %	48.8 %	107.9 %	10.5 %	3.5 %	59.6 %	122.9 %	3.0 %	7.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.042 ppb	91.904 %	89.703 %	0.551 ppb	0.035 ppb	86.474 %
Concentration per Run 1	0.079 ppb	94.461 %	92.944 %	0.618 ppb	0.051 ppb	89.249 %
Concentration per Run 2	0.050 ppb	90.099 %	88.798 %	0.613 ppb	0.037 ppb	83.275 %
Concentration per Run 3	-0.004 ppb	91.153 %	87.368 %	0.421 ppb	0.017 ppb	86.898 %
Recovery Percentage 1	8.369 %			55.075 %	3.489 %	
Concentration RSD	100.2 %	2.5 %	3.2 %	20.4 %	49.4 %	3.5 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index: 30
Analysis label: xWG2001958-1 6020TL
Analysis started at: 11/26/2024 9:46:24 AM
User name ALPHALAB\a2-icpmsq2
Rack 1
Vial 9
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	98.879 %	99.217 %	0.008 ppb	2,154.405 ppb	259.889 ppb	1.239 ppb	88.994 ppb	125.908 ppb	100.410 %
Concentration per Run 1	96.641 %	102.697 %	0.009 ppb	1,968.884 ppb	234.185 ppb	1.720 ppb	77.372 ppb	128.725 ppb	98.049 %
Concentration per Run 2	100.613 %	100.022 %	0.010 ppb	2,223.471 ppb	272.073 ppb	1.048 ppb	97.699 ppb	127.030 ppb	102.332 %
Concentration per Run 3	99.383 %	94.932 %	0.005 ppb	2,270.861 ppb	273.408 ppb	0.950 ppb	91.910 ppb	121.971 ppb	100.849 %
Concentration RSD	2.1 %	4.0 %	28.7 %	7.5 %	8.6 %	33.8 %	11.8 %	2.8 %	2.2 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.002 ppb	0.013 ppb	0.117 ppb	4.885 ppb	-0.002 ppb	-0.015 ppb	0.206 ppb	0.444 ppb	94.690 %
Concentration per Run 1	-0.031 ppb	0.011 ppb	0.071 ppb	4.860 ppb	-0.001 ppb	0.027 ppb	0.210 ppb	0.462 ppb	95.742 %
Concentration per Run 2	-0.005 ppb	0.008 ppb	0.087 ppb	4.478 ppb	-0.005 ppb	-0.018 ppb	0.207 ppb	0.456 ppb	95.243 %
Concentration per Run 3	0.030 ppb	0.020 ppb	0.192 ppb	5.317 ppb	-0.001 ppb	-0.054 ppb	0.201 ppb	0.415 ppb	93.085 %
Concentration RSD	1,769.9 %	46.7 %	56.2 %	8.6 %	89.9 %	266.9 %	2.3 %	5.7 %	1.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.082 ppb	0.152 ppb	1.696 ppb	0.084 ppb	96.034 %	0.002 ppb	0.002 ppb	97.388 %	0.018 ppb
Concentration per Run 1	0.053 ppb	0.090 ppb	1.540 ppb	0.082 ppb	100.090 %	0.001 ppb	0.003 ppb	100.917 %	0.016 ppb
Concentration per Run 2	0.099 ppb	0.238 ppb	1.770 ppb	0.094 ppb	96.138 %	0.001 ppb	0.005 ppb	96.277 %	0.010 ppb
Concentration per Run 3	0.093 ppb	0.127 ppb	1.779 ppb	0.077 ppb	91.875 %	0.005 ppb	0.000 ppb	94.971 %	0.028 ppb
Concentration RSD	30.6 %	50.9 %	8.0 %	10.2 %	4.3 %	99.1 %	107.1 %	3.2 %	51.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.055 ppb	95.065 %	93.724 %	0.032 ppb	0.014 ppb	95.509 %
Concentration per Run 1	0.035 ppb	98.665 %	98.171 %	0.033 ppb	0.012 ppb	99.488 %
Concentration per Run 2	0.073 ppb	93.893 %	93.670 %	0.043 ppb	0.015 ppb	94.576 %
Concentration per Run 3	0.057 ppb	92.637 %	89.333 %	0.019 ppb	0.015 ppb	92.462 %
Concentration RSD	34.2 %	3.3 %	4.7 %	38.9 %	11.6 %	3.8 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index:	31	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG2001958-2d10 6020TL	Rack	1		
Analysis started at:	11/26/2024 9:54:15 AM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	87.877 %	98.434 %	5.658 ppb	1,054.664 ppb	982.002 ppb	197.527 ppb	975.114 ppb	951.281 ppb	84.856 %
Concentration per Run 1	83.232 %	99.826 %	5.876 ppb	1,000.812 ppb	931.574 ppb	188.299 ppb	970.174 ppb	900.374 ppb	82.102 %
Concentration per Run 2	91.973 %	100.022 %	5.434 ppb	1,056.418 ppb	992.776 ppb	198.297 ppb	967.264 ppb	999.719 ppb	90.779 %
Concentration per Run 3	88.427 %	95.454 %	5.663 ppb	1,106.762 ppb	1,021.657 ppb	205.985 ppb	987.904 ppb	953.749 ppb	81.687 %
Concentration RSD	5.0 %	2.6 %	3.9 %	5.0 %	4.7 %	4.5 %	1.1 %	5.2 %	6.0 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	47.650 ppb	19.717 ppb	50.871 ppb	103.828 ppb	50.565 ppb	50.423 ppb	25.744 ppb	50.704 ppb	90.654 %
Concentration per Run 1	46.200 ppb	18.951 ppb	49.506 ppb	105.221 ppb	49.119 ppb	49.435 ppb	25.317 ppb	49.867 ppb	92.206 %
Concentration per Run 2	48.253 ppb	19.757 ppb	50.984 ppb	103.301 ppb	50.801 ppb	51.157 ppb	26.413 ppb	51.470 ppb	88.826 %
Concentration per Run 3	48.497 ppb	20.442 ppb	52.123 ppb	102.963 ppb	51.774 ppb	50.678 ppb	25.501 ppb	50.776 ppb	90.930 %
Concentration RSD	2.6 %	3.8 %	2.6 %	1.2 %	2.7 %	1.8 %	2.3 %	1.6 %	1.9 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	12.540 ppb	12.550 ppb	99.869 ppb	103.656 ppb	92.094 %	4.737 ppb	5.135 ppb	93.256 %	42.230 ppb
Concentration per Run 1	12.376 ppb	11.901 ppb	96.285 ppb	98.137 ppb	95.835 %	4.477 ppb	4.824 ppb	98.342 %	39.103 ppb
Concentration per Run 2	12.793 ppb	13.400 ppb	101.701 ppb	106.001 ppb	91.018 %	4.890 ppb	5.268 ppb	89.989 %	43.770 ppb
Concentration per Run 3	12.451 ppb	12.348 ppb	101.620 ppb	106.832 ppb	89.429 %	4.845 ppb	5.313 ppb	91.436 %	43.816 ppb
Concentration RSD	1.8 %	6.1 %	3.1 %	4.6 %	3.6 %	4.8 %	5.3 %	4.8 %	6.4 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	196.973 ppb	92.889 %	91.285 %	12.163 ppb	51.215 ppb	92.055 %
Concentration per Run 1	180.143 ppb	98.783 %	96.801 %	11.813 ppb	49.070 ppb	94.329 %
Concentration per Run 2	204.887 ppb	90.722 %	88.537 %	12.155 ppb	52.358 ppb	90.485 %
Concentration per Run 3	205.889 ppb	89.163 %	88.517 %	12.522 ppb	52.217 ppb	91.351 %
Concentration RSD	7.4 %	5.6 %	5.2 %	2.9 %	3.6 %	2.2 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index:	32	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2467845-01 6020TL	Rack	1		
Analysis started at:	11/26/2024 9:58:42 AM	Vial	11		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	92.996 %	90.996 %	0.014 ppb	134,378.751 ppb	9,102.631 ppb	66.879 ppb	35,486.114 ppb	11,575.661 ppb	95.338 %
Concentration per Run 1	91.027 %	93.758 %	0.011 ppb	124,477.093 ppb	8,399.389 ppb	60.649 ppb	31,767.432 ppb	11,055.617 ppb	93.463 %
Concentration per Run 2	93.432 %	88.212 %	0.017 ppb	139,893.320 ppb	9,678.764 ppb	70.202 ppb	37,783.022 ppb	12,064.036 ppb	95.799 %
Concentration per Run 3	94.528 %	91.017 %	0.015 ppb	138,765.839 ppb	9,229.742 ppb	69.786 ppb	36,907.888 ppb	11,607.330 ppb	96.752 %
Concentration RSD	1.9 %	3.0 %	21.8 %	6.4 %	7.1 %	8.1 %	9.2 %	4.4 %	1.8 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	16.409 ppb	93.765 ppb	23.587 ppb	73.742 ppb	0.385 ppb	1.276 ppb	1.933 ppb	1.870 ppb	87.537 %
Concentration per Run 1	15.122 ppb	88.052 ppb	22.490 ppb	74.291 ppb	0.349 ppb	1.195 ppb	1.865 ppb	1.811 ppb	89.368 %
Concentration per Run 2	17.092 ppb	96.836 ppb	24.321 ppb	75.107 ppb	0.410 ppb	1.400 ppb	1.966 ppb	1.956 ppb	86.128 %
Concentration per Run 3	17.012 ppb	96.405 ppb	23.951 ppb	71.828 ppb	0.395 ppb	1.233 ppb	1.969 ppb	1.844 ppb	87.116 %
Concentration RSD	6.8 %	5.3 %	4.1 %	2.3 %	8.2 %	8.6 %	3.1 %	4.1 %	1.9 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	1.675 ppb	1.210 ppb	645.287 ppb	51.812 ppb	87.864 %	0.002 ppb	0.011 ppb	89.677 %	2.193 ppb
Concentration per Run 1	1.574 ppb	1.104 ppb	614.474 ppb	46.612 ppb	92.137 %	0.000 ppb	0.012 ppb	92.513 %	2.197 ppb
Concentration per Run 2	1.889 ppb	1.243 ppb	663.096 ppb	53.849 ppb	86.421 %	0.005 ppb	0.015 ppb	87.847 %	2.164 ppb
Concentration per Run 3	1.561 ppb	1.282 ppb	658.292 ppb	54.975 ppb	85.035 %	0.000 ppb	0.006 ppb	88.671 %	2.217 ppb
Concentration RSD	11.1 %	7.7 %	4.2 %	8.8 %	4.3 %	145.0 %	44.3 %	2.8 %	1.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	18.647 ppb	89.275 %	88.202 %	0.092 ppb	0.296 ppb	86.867 %
Concentration per Run 1	18.237 ppb	92.471 %	92.230 %	0.067 ppb	0.271 ppb	90.559 %
Concentration per Run 2	18.647 ppb	87.551 %	85.532 %	0.089 ppb	0.289 ppb	85.801 %
Concentration per Run 3	19.058 ppb	87.803 %	86.844 %	0.120 ppb	0.327 ppb	84.240 %
Concentration RSD	2.2 %	3.1 %	4.0 %	28.7 %	9.7 %	3.8 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index: 33
Analysis label: WG2001958-3d10 6020TL
Analysis started at: 11/26/2024 10:03:12 AM
User name ALPHALAB\a2-icpmsq2
Rack 1
Vial 12
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	93.169 %	93.758 %	5.079 ppb	13,851.119 ppb	1,867.188 ppb	204.554 ppb	4,557.452 ppb	2,133.368 ppb	93.248 %
Concentration per Run 1	92.124 %	98.325 %	5.012 ppb	13,038.330 ppb	1,756.291 ppb	190.893 ppb	4,371.582 ppb	2,008.660 ppb	92.425 %
Concentration per Run 2	93.723 %	92.910 %	5.081 ppb	13,985.727 ppb	1,879.078 ppb	209.071 ppb	4,595.988 ppb	2,246.188 ppb	93.868 %
Concentration per Run 3	93.658 %	90.039 %	5.145 ppb	14,529.300 ppb	1,966.194 ppb	213.699 ppb	4,704.786 ppb	2,145.258 ppb	93.452 %
Concentration RSD	1.0 %	4.5 %	1.3 %	5.4 %	5.6 %	5.9 %	3.7 %	5.6 %	0.8 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	49.391 ppb	28.933 ppb	52.538 ppb	107.356 ppb	50.485 ppb	50.492 ppb	25.542 ppb	50.422 ppb	87.774 %
Concentration per Run 1	46.914 ppb	27.880 ppb	50.298 ppb	107.078 ppb	48.624 ppb	48.924 ppb	24.882 ppb	48.346 ppb	88.413 %
Concentration per Run 2	49.911 ppb	29.495 ppb	54.612 ppb	107.166 ppb	51.401 ppb	52.105 ppb	25.820 ppb	52.160 ppb	85.983 %
Concentration per Run 3	51.349 ppb	29.425 ppb	52.704 ppb	107.824 ppb	51.430 ppb	50.446 ppb	25.925 ppb	50.761 ppb	88.925 %
Concentration RSD	4.6 %	3.2 %	4.1 %	0.4 %	3.2 %	3.2 %	2.2 %	3.8 %	1.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	12.617 ppb	12.746 ppb	162.696 ppb	101.118 ppb	88.951 %	4.696 ppb	5.029 ppb	90.745 %	41.677 ppb
Concentration per Run 1	12.045 ppb	11.999 ppb	156.556 ppb	90.142 ppb	91.502 %	4.437 ppb	4.805 ppb	95.347 %	38.210 ppb
Concentration per Run 2	13.208 ppb	12.819 ppb	166.563 ppb	105.119 ppb	87.557 %	4.809 ppb	5.229 ppb	87.406 %	43.268 ppb
Concentration per Run 3	12.599 ppb	13.421 ppb	164.969 ppb	108.094 ppb	87.793 %	4.842 ppb	5.052 ppb	89.480 %	43.553 ppb
Concentration RSD	4.6 %	5.6 %	3.3 %	9.5 %	2.5 %	4.8 %	4.2 %	4.5 %	7.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	195.884 ppb	89.096 %	87.070 %	12.048 ppb	50.232 ppb	88.724 %
Concentration per Run 1	178.294 ppb	92.049 %	90.242 %	11.663 ppb	48.091 ppb	92.367 %
Concentration per Run 2	204.699 ppb	87.267 %	86.440 %	12.296 ppb	50.935 ppb	87.245 %
Concentration per Run 3	204.660 ppb	87.970 %	84.528 %	12.184 ppb	51.671 ppb	86.559 %
Concentration RSD	7.8 %	2.9 %	3.3 %	2.8 %	3.8 %	3.6 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index: 34
Analysis label: WG2001958-4 6020TL
Analysis started at: 11/26/2024 10:07:43 AM
User name ALPHALAB\a2-icpmsq2
Rack 1
Vial 13
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	92.752 %	90.757 %	0.011 ppb	132,672.789 ppb	8,945.111 ppb	69.588 ppb	36,071.892 ppb	11,541.182 ppb	98.552 %
Concentration per Run 1	87.164 %	92.192 %	0.007 ppb	124,630.594 ppb	8,363.985 ppb	68.829 ppb	33,882.281 ppb	10,737.628 ppb	92.579 %
Concentration per Run 2	93.714 %	84.754 %	0.016 ppb	142,996.980 ppb	9,734.368 ppb	73.129 ppb	38,874.313 ppb	12,426.223 ppb	101.231 %
Concentration per Run 3	97.377 %	95.324 %	0.009 ppb	130,390.792 ppb	8,736.980 ppb	66.805 ppb	35,459.082 ppb	11,459.696 ppb	101.847 %
Concentration RSD	5.6 %	6.0 %	41.9 %	7.1 %	7.9 %	4.6 %	7.1 %	7.3 %	5.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	16.558 ppb	94.873 ppb	23.542 ppb	71.583 ppb	0.454 ppb	1.449 ppb	3.558 ppb	3.464 ppb	85.316 %
Concentration per Run 1	15.506 ppb	89.555 ppb	22.147 ppb	69.604 ppb	0.439 ppb	1.381 ppb	3.549 ppb	3.455 ppb	87.895 %
Concentration per Run 2	17.510 ppb	101.287 ppb	25.271 ppb	77.565 ppb	0.482 ppb	1.599 ppb	3.680 ppb	3.502 ppb	81.996 %
Concentration per Run 3	16.658 ppb	93.778 ppb	23.208 ppb	67.580 ppb	0.443 ppb	1.366 ppb	3.447 ppb	3.434 ppb	86.057 %
Concentration RSD	6.1 %	6.3 %	6.7 %	7.4 %	5.2 %	9.0 %	3.3 %	1.0 %	3.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	1.718 ppb	1.115 ppb	649.912 ppb	52.804 ppb	85.747 %	-0.001 ppb	0.018 ppb	87.539 %	1.789 ppb
Concentration per Run 1	1.543 ppb	1.039 ppb	611.520 ppb	47.055 ppb	89.525 %	-0.002 ppb	0.018 ppb	91.959 %	1.715 ppb
Concentration per Run 2	1.909 ppb	1.363 ppb	690.959 ppb	57.308 ppb	81.155 %	-0.001 ppb	0.018 ppb	84.763 %	1.866 ppb
Concentration per Run 3	1.704 ppb	0.944 ppb	647.256 ppb	54.049 ppb	86.561 %	0.000 ppb	0.019 ppb	85.894 %	1.785 ppb
Concentration RSD	10.7 %	19.7 %	6.1 %	9.9 %	4.9 %	80.3 %	4.0 %	4.4 %	4.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	18.807 ppb	87.137 %	85.697 %	0.077 ppb	0.448 ppb	83.946 %
Concentration per Run 1	17.705 ppb	91.299 %	89.582 %	0.055 ppb	0.389 ppb	88.558 %
Concentration per Run 2	19.791 ppb	82.502 %	80.683 %	0.091 ppb	0.516 ppb	80.239 %
Concentration per Run 3	18.924 ppb	87.611 %	86.826 %	0.084 ppb	0.438 ppb	83.041 %
Concentration RSD	5.6 %	5.1 %	5.3 %	25.2 %	14.2 %	5.0 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index:	35	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG2001958-5d10 6020TL	Rack	1		
Analysis started at:	11/26/2024 10:12:09 AM	Vial	14		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	90.062 %	90.517 %	46.940 ppb	18,221.624 ppb	5,853.569 ppb	57.651 ppb	8,554.289 ppb	6,082.514 ppb	92.857 %
Concentration per Run 1	88.939 %	90.496 %	44.913 ppb	17,989.617 ppb	5,760.294 ppb	54.987 ppb	8,359.198 ppb	6,015.406 ppb	91.863 %
Concentration per Run 2	90.626 %	90.952 %	47.377 ppb	18,506.285 ppb	5,929.027 ppb	59.434 ppb	8,579.058 ppb	6,163.394 ppb	93.041 %
Concentration per Run 3	90.621 %	90.104 %	48.531 ppb	18,168.971 ppb	5,871.386 ppb	58.531 ppb	8,724.612 ppb	6,068.742 ppb	93.667 %
Concentration RSD	1.1 %	0.5 %	3.9 %	1.4 %	1.5 %	4.1 %	2.2 %	1.2 %	1.0 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	50.323 ppb	58.416 ppb	51.547 ppb	4,991.672 ppb	50.474 ppb	50.235 ppb	50.506 ppb	50.540 ppb	85.258 %
Concentration per Run 1	49.730 ppb	57.707 ppb	50.543 ppb	4,996.744 ppb	50.265 ppb	50.223 ppb	50.002 ppb	50.919 ppb	83.392 %
Concentration per Run 2	50.700 ppb	59.685 ppb	52.535 ppb	5,125.706 ppb	51.474 ppb	51.127 ppb	51.715 ppb	51.379 ppb	84.248 %
Concentration per Run 3	50.540 ppb	57.855 ppb	51.563 ppb	4,852.565 ppb	49.683 ppb	49.356 ppb	49.800 ppb	49.322 ppb	88.134 %
Concentration RSD	1.0 %	1.9 %	1.9 %	2.7 %	1.8 %	1.8 %	2.1 %	2.1 %	3.0 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	51.164 ppb	51.293 ppb	116.191 ppb	55.111 ppb	85.566 %	2.389 ppb	47.820 ppb	87.133 %	49.198 ppb
Concentration per Run 1	50.929 ppb	49.837 ppb	115.708 ppb	51.763 ppb	86.168 %	2.347 ppb	46.942 ppb	87.523 %	48.619 ppb
Concentration per Run 2	51.784 ppb	53.072 ppb	118.585 ppb	55.961 ppb	83.942 %	2.457 ppb	48.198 ppb	86.964 %	49.474 ppb
Concentration per Run 3	50.779 ppb	50.970 ppb	114.280 ppb	57.609 ppb	86.587 %	2.363 ppb	48.319 ppb	86.911 %	49.502 ppb
Concentration RSD	1.1 %	3.2 %	1.9 %	5.5 %	1.7 %	2.5 %	1.6 %	0.4 %	1.0 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	50.457 ppb	85.674 %	84.409 %	46.714 ppb	48.553 ppb	84.539 %
Concentration per Run 1	49.481 ppb	85.244 %	83.061 %	42.803 ppb	47.505 ppb	85.995 %
Concentration per Run 2	51.471 ppb	85.157 %	84.706 %	48.487 ppb	49.555 ppb	83.323 %
Concentration per Run 3	50.419 ppb	86.622 %	85.461 %	48.852 ppb	48.598 ppb	84.298 %
Concentration RSD	2.0 %	1.0 %	1.5 %	7.3 %	2.1 %	1.6 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index: 36
Analysis label: WG2001958-6d5 6020TL
Analysis started at: 11/26/2024 10:16:35 AM
User name ALPHALAB\a2-icpmsq2
Rack 1
Vial 15
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	91.028 %	89.778 %	0.032 ppb	26,626.847 ppb	1,823.166 ppb	16.786 ppb	7,328.232 ppb	2,400.611 ppb	93.950 %
Concentration per Run 1	89.001 %	93.171 %	0.036 ppb	24,964.665 ppb	1,749.578 ppb	11.719 ppb	7,022.844 ppb	2,307.947 ppb	91.889 %
Concentration per Run 2	92.509 %	91.539 %	0.032 ppb	26,605.987 ppb	1,799.504 ppb	13.645 ppb	7,330.707 ppb	2,397.956 ppb	95.637 %
Concentration per Run 3	91.573 %	84.623 %	0.027 ppb	28,309.890 ppb	1,920.417 ppb	24.994 ppb	7,631.145 ppb	2,495.931 ppb	94.325 %
Concentration RSD	2.0 %	5.1 %	13.6 %	6.3 %	4.8 %	42.7 %	4.2 %	3.9 %	2.0 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	3.384 ppb	19.669 ppb	4.895 ppb	21.143 ppb	0.127 ppb	0.310 ppb	0.450 ppb	0.475 ppb	85.187 %
Concentration per Run 1	2.996 ppb	18.228 ppb	4.858 ppb	19.991 ppb	0.106 ppb	0.295 ppb	0.453 ppb	0.500 ppb	84.848 %
Concentration per Run 2	3.624 ppb	20.003 ppb	4.738 ppb	17.632 ppb	0.151 ppb	0.385 ppb	0.515 ppb	0.446 ppb	85.282 %
Concentration per Run 3	3.532 ppb	20.774 ppb	5.089 ppb	25.806 ppb	0.124 ppb	0.249 ppb	0.382 ppb	0.479 ppb	85.429 %
Concentration RSD	10.0 %	6.6 %	3.6 %	19.9 %	17.7 %	22.4 %	14.8 %	5.8 %	0.4 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.469 ppb	0.500 ppb	128.714 ppb	10.812 ppb	86.224 %	0.001 ppb	0.023 ppb	86.618 %	0.416 ppb
Concentration per Run 1	0.381 ppb	0.282 ppb	125.330 ppb	9.998 ppb	88.534 %	0.000 ppb	0.030 ppb	88.475 %	0.362 ppb
Concentration per Run 2	0.482 ppb	0.454 ppb	131.650 ppb	11.039 ppb	84.280 %	0.002 ppb	0.029 ppb	86.173 %	0.444 ppb
Concentration per Run 3	0.545 ppb	0.765 ppb	129.160 ppb	11.398 ppb	85.857 %	0.001 ppb	0.012 ppb	85.206 %	0.443 ppb
Concentration RSD	17.6 %	48.8 %	2.5 %	6.7 %	2.5 %	122.0 %	43.7 %	1.9 %	11.4 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	3.890 ppb	85.427 %	84.260 %	0.473 ppb	0.097 ppb	85.348 %
Concentration per Run 1	3.874 ppb	88.675 %	87.496 %	0.450 ppb	0.089 ppb	89.075 %
Concentration per Run 2	3.930 ppb	83.409 %	82.875 %	0.543 ppb	0.104 ppb	83.984 %
Concentration per Run 3	3.865 ppb	84.195 %	82.409 %	0.426 ppb	0.099 ppb	82.985 %
Concentration RSD	0.9 %	3.3 %	3.3 %	13.0 %	7.7 %	3.8 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index:	37	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG2001958-1 6020TL	Rack	1		
Analysis started at:	11/26/2024 10:23:43 AM	Vial	16		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	95.056 %	89.169 %	0.012 ppb	72.660 ppb	3.304 ppb	1.432 ppb	32.020 ppb	21.928 ppb	98.219 %
Concentration per Run 1	91.313 %	92.192 %	0.017 ppb	80.129 ppb	3.566 ppb	1.546 ppb	30.909 ppb	20.288 ppb	95.174 %
Concentration per Run 2	95.784 %	84.558 %	0.011 ppb	71.836 ppb	2.471 ppb	1.557 ppb	34.916 ppb	27.155 ppb	99.359 %
Concentration per Run 3	98.072 %	90.757 %	0.007 ppb	66.015 ppb	3.875 ppb	1.194 ppb	30.235 ppb	18.341 ppb	100.125 %
Concentration RSD	3.6 %	4.5 %	44.6 %	9.8 %	22.3 %	14.4 %	7.9 %	21.1 %	2.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.022 ppb	0.054 ppb	0.090 ppb	7.389 ppb	0.015 ppb	0.015 ppb	0.153 ppb	0.354 ppb	82.536 %
Concentration per Run 1	-0.036 ppb	0.074 ppb	0.050 ppb	7.765 ppb	0.012 ppb	0.014 ppb	0.129 ppb	0.359 ppb	85.142 %
Concentration per Run 2	-0.017 ppb	0.050 ppb	0.127 ppb	7.766 ppb	0.016 ppb	0.017 ppb	0.178 ppb	0.359 ppb	79.821 %
Concentration per Run 3	-0.013 ppb	0.039 ppb	0.093 ppb	6.634 ppb	0.017 ppb	0.013 ppb	0.152 ppb	0.345 ppb	82.645 %
Concentration RSD	55.3 %	33.4 %	43.2 %	8.8 %	17.1 %	10.7 %	15.9 %	2.3 %	3.2 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.133 ppb	0.210 ppb	0.125 ppb	0.133 ppb	85.650 %	-0.002 ppb	0.001 ppb	86.622 %	0.095 ppb
Concentration per Run 1	0.093 ppb	0.274 ppb	0.201 ppb	0.057 ppb	87.623 %	-0.003 ppb	0.000 ppb	89.866 %	0.087 ppb
Concentration per Run 2	0.164 ppb	0.206 ppb	0.096 ppb	0.128 ppb	84.329 %	-0.002 ppb	0.000 ppb	84.950 %	0.101 ppb
Concentration per Run 3	0.141 ppb	0.149 ppb	0.077 ppb	0.214 ppb	84.998 %	-0.002 ppb	0.004 ppb	85.050 %	0.097 ppb
Concentration RSD	27.5 %	29.9 %	53.8 %	59.1 %	2.0 %	17.6 %	178.4 %	3.2 %	7.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.070 ppb	85.208 %	83.528 %	0.038 ppb	0.026 ppb	84.646 %
Concentration per Run 1	0.121 ppb	89.545 %	86.515 %	0.015 ppb	0.032 ppb	88.723 %
Concentration per Run 2	0.058 ppb	81.678 %	80.935 %	0.056 ppb	0.028 ppb	82.118 %
Concentration per Run 3	0.031 ppb	84.401 %	83.135 %	0.044 ppb	0.020 ppb	83.097 %
Concentration RSD	66.7 %	4.7 %	3.4 %	54.5 %	23.3 %	4.2 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index: 38
Analysis label: L2469087-01d10 6020TL
Analysis started at: 11/26/2024 10:28:10 AM
User name ALPHALAB\a2-icpmsq2
Rack 1
Vial 17
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	73.422 %	82.209 %	0.014 ppb	913,934.595 ppb	101,081.876 ppb	55.926 ppb	30,290.853 ppb	36,969.970 ppb	83.969 %
Concentration per Run 1	72.225 %	84.688 %	0.019 ppb	855,184.080 ppb	94,890.611 ppb	51.178 ppb	28,434.137 ppb	34,841.389 ppb	82.217 %
Concentration per Run 2	74.458 %	79.599 %	0.014 ppb	969,180.450 ppb	107,458.355 ppb	60.697 ppb	31,972.301 ppb	38,893.154 ppb	85.863 %
Concentration per Run 3	73.582 %	82.340 %	0.010 ppb	917,439.256 ppb	100,896.661 ppb	55.904 ppb	30,466.122 ppb	37,175.368 ppb	83.827 %
Concentration RSD	1.5 %	3.1 %	32.3 %	6.2 %	6.2 %	8.5 %	5.9 %	5.5 %	2.2 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.188 ppb	0.331 ppb	18.835 ppb	63.405 ppb	0.922 ppb	5.735 ppb	0.650 ppb	2.043 ppb	79.862 %
Concentration per Run 1	0.176 ppb	0.297 ppb	18.412 ppb	62.931 ppb	0.918 ppb	5.294 ppb	0.669 ppb	1.943 ppb	79.281 %
Concentration per Run 2	0.198 ppb	0.398 ppb	20.265 ppb	68.342 ppb	0.962 ppb	6.399 ppb	0.651 ppb	2.280 ppb	75.805 %
Concentration per Run 3	0.189 ppb	0.299 ppb	17.829 ppb	58.941 ppb	0.885 ppb	5.513 ppb	0.631 ppb	1.905 ppb	84.501 %
Concentration RSD	5.9 %	17.5 %	6.8 %	7.4 %	4.2 %	10.2 %	2.9 %	10.1 %	5.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.480 ppb	0.155 ppb	644.844 ppb	0.966 ppb	75.337 %	0.001 ppb	0.053 ppb	77.970 %	0.717 ppb
Concentration per Run 1	0.503 ppb	0.279 ppb	617.328 ppb	0.845 ppb	77.707 %	0.002 ppb	0.046 ppb	80.226 %	0.664 ppb
Concentration per Run 2	0.534 ppb	0.145 ppb	679.680 ppb	0.984 ppb	72.595 %	-0.001 ppb	0.069 ppb	75.735 %	0.773 ppb
Concentration per Run 3	0.404 ppb	0.040 ppb	637.523 ppb	1.069 ppb	75.708 %	0.002 ppb	0.043 ppb	77.951 %	0.714 ppb
Concentration RSD	14.2 %	77.7 %	4.9 %	11.7 %	3.4 %	181.4 %	26.9 %	2.9 %	7.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	13.959 ppb	78.892 %	77.017 %	0.020 ppb	0.897 ppb	70.173 %
Concentration per Run 1	12.910 ppb	82.297 %	80.521 %	-0.005 ppb	0.822 ppb	74.680 %
Concentration per Run 2	14.925 ppb	76.511 %	73.408 %	0.032 ppb	0.966 ppb	68.429 %
Concentration per Run 3	14.042 ppb	77.868 %	77.121 %	0.034 ppb	0.905 ppb	67.410 %
Concentration RSD	7.2 %	3.8 %	4.6 %	109.1 %	8.0 %	5.6 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index:	39	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	CCV	Rack	0		
Analysis started at:	11/26/2024 10:34:58 AM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	93.622 %	91.365 %	61.490 ppb	6,445.445 ppb	6,411.156 ppb	63.574 ppb	6,315.580 ppb	6,177.637 ppb	97.006 %
Concentration per Run 1	90.802 %	95.650 %	61.735 ppb	6,086.729 ppb	6,042.367 ppb	60.340 ppb	5,950.741 ppb	5,803.201 ppb	95.900 %
Concentration per Run 2	95.645 %	90.104 %	60.289 ppb	6,614.117 ppb	6,645.017 ppb	64.293 ppb	6,446.435 ppb	6,258.320 ppb	100.223 %
Concentration per Run 3	94.420 %	88.342 %	62.446 ppb	6,635.489 ppb	6,546.085 ppb	66.089 ppb	6,549.563 ppb	6,471.389 ppb	94.894 %
Recovery Percentage 1			102.484 %	107.424 %	106.853 %	105.956 %	105.260 %	102.961 %	
Concentration RSD	2.7 %	4.2 %	1.8 %	4.8 %	5.0 %	4.6 %	5.1 %	5.5 %	2.9 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	59.511 ppb	62.582 ppb	63.226 ppb	6,250.990 ppb	64.210 ppb	64.098 ppb	63.611 ppb	63.582 ppb	85.610 %
Concentration per Run 1	53.224 ppb	58.055 ppb	59.441 ppb	5,948.144 ppb	61.115 ppb	61.761 ppb	61.104 ppb	60.528 ppb	87.901 %
Concentration per Run 2	62.740 ppb	65.005 ppb	65.186 ppb	6,464.397 ppb	66.737 ppb	66.031 ppb	65.458 ppb	65.536 ppb	83.328 %
Concentration per Run 3	62.568 ppb	64.685 ppb	65.051 ppb	6,340.428 ppb	64.778 ppb	64.502 ppb	64.272 ppb	64.682 ppb	85.602 %
Recovery Percentage 1	99.185 %	104.303 %	105.377 %	104.183 %	107.017 %	106.830 %	106.019 %	105.970 %	
Concentration RSD	9.1 %	6.3 %	5.2 %	4.3 %	4.4 %	3.4 %	3.5 %	4.2 %	2.7 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	63.066 ppb	65.077 ppb	61.300 ppb	59.489 ppb	86.512 %	58.141 ppb	60.157 ppb	86.766 %	60.294 ppb
Concentration per Run 1	59.728 ppb	62.570 ppb	57.999 ppb	53.236 ppb	88.824 %	55.126 ppb	56.100 ppb	89.866 %	56.773 ppb
Concentration per Run 2	65.187 ppb	67.605 ppb	63.285 ppb	61.179 ppb	85.317 %	59.254 ppb	61.586 ppb	86.452 %	61.357 ppb
Concentration per Run 3	64.282 ppb	65.057 ppb	62.615 ppb	64.052 ppb	85.393 %	60.044 ppb	62.784 ppb	83.980 %	62.752 ppb
Recovery Percentage 1	105.110 %	108.462 %	102.166 %	99.149 %		96.902 %	100.261 %		100.490 %
Concentration RSD	4.6 %	3.9 %	4.7 %	9.4 %	2.3 %	4.5 %	5.9 %	3.4 %	5.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	61.295 ppb	84.543 %	82.689 %	59.331 ppb	61.003 ppb	80.895 %
Concentration per Run 1	57.568 ppb	86.546 %	82.671 %	50.309 ppb	56.794 ppb	84.407 %
Concentration per Run 2	62.051 ppb	83.363 %	81.451 %	63.504 ppb	63.830 ppb	79.115 %
Concentration per Run 3	64.266 ppb	83.721 %	83.946 %	64.179 ppb	62.386 ppb	79.161 %
Recovery Percentage 1	102.158 %			98.884 %	101.672 %	
Concentration RSD	5.6 %	2.1 %	1.5 %	13.2 %	6.1 %	3.8 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index:	40	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	CCB	Rack	0		
Analysis started at:	11/26/2024 10:39:30 AM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	93.070 %	84.014 %	0.004 ppb	85.937 ppb	-0.285 ppb	-0.350 ppb	24.625 ppb	5.951 ppb	93.830 %
Concentration per Run 1	92.420 %	81.883 %	0.007 ppb	91.947 ppb	-0.359 ppb	-0.343 ppb	28.190 ppb	7.200 ppb	91.537 %
Concentration per Run 2	93.046 %	86.189 %	0.004 ppb	80.303 ppb	-0.312 ppb	-0.332 ppb	27.211 ppb	2.197 ppb	94.356 %
Concentration per Run 3	93.743 %	83.971 %	0.002 ppb	85.560 ppb	-0.182 ppb	-0.376 ppb	18.473 ppb	8.457 ppb	95.597 %
Recovery Percentage 1			0.871 %	17.187 %	-0.407 %	-3.504 %	24.625 %	5.951 %	
Concentration RSD	0.7 %	2.6 %	52.1 %	6.8 %	32.2 %	6.5 %	21.7 %	55.6 %	2.2 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.008 ppb	0.024 ppb	0.002 ppb	5.545 ppb	0.003 ppb	0.067 ppb	0.048 ppb	0.028 ppb	82.894 %
Concentration per Run 1	-0.009 ppb	0.009 ppb	-0.018 ppb	5.028 ppb	0.005 ppb	0.032 ppb	0.047 ppb	0.081 ppb	80.779 %
Concentration per Run 2	0.002 ppb	0.036 ppb	-0.006 ppb	5.652 ppb	-0.006 ppb	0.116 ppb	0.087 ppb	-0.026 ppb	83.251 %
Concentration per Run 3	0.030 ppb	0.028 ppb	0.032 ppb	5.956 ppb	0.011 ppb	0.052 ppb	0.010 ppb	0.029 ppb	84.652 %
Recovery Percentage 1	0.153 %	2.435 %	0.233 %	11.090 %	0.658 %	3.335 %	4.787 %	0.556 %	
Concentration RSD	264.6 %	56.3 %	1,126.9 %	8.5 %	258.2 %	66.3 %	80.6 %	193.1 %	2.4 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.156 ppb	0.304 ppb	-0.012 ppb	0.464 ppb	84.296 %	0.005 ppb	-0.001 ppb	83.508 %	0.074 ppb
Concentration per Run 1	0.176 ppb	0.395 ppb	-0.009 ppb	0.265 ppb	85.375 %	0.008 ppb	0.000 ppb	85.288 %	0.065 ppb
Concentration per Run 2	0.134 ppb	0.165 ppb	-0.012 ppb	0.492 ppb	86.020 %	0.006 ppb	-0.002 ppb	84.663 %	0.068 ppb
Concentration per Run 3	0.157 ppb	0.353 ppb	-0.013 ppb	0.635 ppb	81.494 %	0.002 ppb	0.000 ppb	80.572 %	0.090 ppb
Recovery Percentage 1	31.179 %	6.083 %	-0.117 %	23.203 %		1.277 %	-0.269 %		1.854 %
Concentration RSD	13.5 %	40.3 %	17.8 %	40.2 %	2.9 %	54.8 %	218.5 %	3.1 %	18.5 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.003 ppb	81.925 %	79.870 %	0.551 ppb	0.019 ppb	80.204 %
Concentration per Run 1	-0.013 ppb	81.353 %	79.064 %	0.610 ppb	0.022 ppb	81.316 %
Concentration per Run 2	0.013 ppb	82.414 %	80.859 %	0.586 ppb	0.021 ppb	78.826 %
Concentration per Run 3	0.008 ppb	82.009 %	79.687 %	0.458 ppb	0.015 ppb	80.470 %
Recovery Percentage 1	0.509 %			55.136 %	1.909 %	
Concentration RSD	529.4 %	0.7 %	1.1 %	14.8 %	20.4 %	1.6 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index: 41
Analysis label: L2467837-01 2008TL
Analysis started at: 11/26/2024 10:53:38 AM
User name ALPHALAB\a2-icpmsq2
Rack 1
Vial 18
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	91.545 %	86.059 %	0.088 ppb	15,796.868 ppb	4,341.953 ppb	115.419 ppb	2,871.552 ppb	21,158.008 ppb	93.441 %
Concentration per Run 1	89.127 %	89.843 %	0.159 ppb	15,981.686 ppb	4,372.478 ppb	112.914 ppb	3,037.410 ppb	22,368.651 ppb	90.488 %
Concentration per Run 2	91.836 %	85.341 %	0.065 ppb	15,021.625 ppb	4,147.526 ppb	112.299 ppb	2,684.845 ppb	19,740.449 ppb	92.962 %
Concentration per Run 3	93.672 %	82.992 %	0.041 ppb	16,387.292 ppb	4,505.856 ppb	121.043 ppb	2,892.400 ppb	21,364.923 ppb	96.874 %
Concentration RSD	2.5 %	4.0 %	71.0 %	4.4 %	4.2 %	4.2 %	6.2 %	6.3 %	3.4 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.697 ppb	0.275 ppb	31.987 ppb	385.729 ppb	0.237 ppb	0.504 ppb	0.989 ppb	3.081 ppb	105.528 %
Concentration per Run 1	0.842 ppb	0.313 ppb	35.379 ppb	422.731 ppb	0.251 ppb	0.459 ppb	1.154 ppb	3.545 ppb	87.272 %
Concentration per Run 2	0.509 ppb	0.227 ppb	29.078 ppb	343.579 ppb	0.256 ppb	0.492 ppb	0.849 ppb	2.657 ppb	119.371 %
Concentration per Run 3	0.741 ppb	0.284 ppb	31.505 ppb	390.878 ppb	0.203 ppb	0.561 ppb	0.966 ppb	3.040 ppb	109.940 %
Concentration RSD	24.5 %	15.8 %	9.9 %	10.3 %	12.3 %	10.3 %	15.6 %	14.4 %	15.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.310 ppb	0.180 ppb	79.981 ppb	0.759 ppb	83.217 %	0.006 ppb	0.014 ppb	85.025 %	0.119 ppb
Concentration per Run 1	0.424 ppb	0.257 ppb	84.714 ppb	0.656 ppb	86.584 %	0.003 ppb	0.005 ppb	89.877 %	0.112 ppb
Concentration per Run 2	0.227 ppb	0.007 ppb	74.718 ppb	0.756 ppb	82.858 %	0.010 ppb	0.008 ppb	83.975 %	0.127 ppb
Concentration per Run 3	0.278 ppb	0.274 ppb	80.511 ppb	0.865 ppb	80.209 %	0.006 ppb	0.029 ppb	81.222 %	0.119 ppb
Concentration RSD	33.1 %	83.2 %	6.3 %	13.8 %	3.8 %	57.8 %	90.9 %	5.2 %	6.5 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	34.555 ppb	83.505 %	82.423 %	0.026 ppb	0.291 ppb	81.817 %
Concentration per Run 1	32.284 ppb	86.639 %	86.134 %	0.014 ppb	0.288 ppb	86.773 %
Concentration per Run 2	34.955 ppb	83.393 %	82.827 %	0.029 ppb	0.282 ppb	80.983 %
Concentration per Run 3	36.425 ppb	80.484 %	78.308 %	0.036 ppb	0.304 ppb	77.696 %
Concentration RSD	6.1 %	3.7 %	4.8 %	42.8 %	3.9 %	5.6 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index:	42	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2467837-02 2008TL	Rack	1		
Analysis started at:	11/26/2024 10:58:06 AM	Vial	19		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	89.649 %	85.406 %	0.023 ppb	16,381.134 ppb	4,440.090 ppb	91.901 ppb	3,094.244 ppb	22,993.390 ppb	90.779 %
Concentration per Run 1	85.849 %	84.949 %	0.023 ppb	15,672.563 ppb	4,261.745 ppb	83.797 ppb	2,915.465 ppb	21,845.425 ppb	87.855 %
Concentration per Run 2	91.064 %	88.669 %	0.023 ppb	16,127.317 ppb	4,377.802 ppb	90.869 ppb	3,136.145 ppb	22,914.904 ppb	93.765 %
Concentration per Run 3	92.034 %	82.601 %	0.023 ppb	17,343.521 ppb	4,680.723 ppb	101.037 ppb	3,231.122 ppb	24,219.841 ppb	90.717 %
Concentration RSD	3.7 %	3.6 %	0.9 %	5.3 %	4.9 %	9.4 %	5.2 %	5.2 %	3.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.834 ppb	0.319 ppb	37.769 ppb	425.881 ppb	0.243 ppb	0.675 ppb	1.330 ppb	3.805 ppb	87.241 %
Concentration per Run 1	0.783 ppb	0.315 ppb	34.732 ppb	385.512 ppb	0.213 ppb	0.528 ppb	1.173 ppb	3.579 ppb	91.465 %
Concentration per Run 2	0.796 ppb	0.315 ppb	38.460 ppb	443.656 ppb	0.256 ppb	0.831 ppb	1.388 ppb	4.030 ppb	84.551 %
Concentration per Run 3	0.923 ppb	0.328 ppb	40.116 ppb	448.475 ppb	0.260 ppb	0.666 ppb	1.427 ppb	3.805 ppb	85.707 %
Concentration RSD	9.3 %	2.4 %	7.3 %	8.2 %	10.7 %	22.5 %	10.3 %	5.9 %	4.2 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.333 ppb	0.286 ppb	85.353 ppb	0.855 ppb	82.299 %	0.000 ppb	0.015 ppb	82.897 %	0.092 ppb
Concentration per Run 1	0.379 ppb	0.125 ppb	79.666 ppb	0.698 ppb	85.127 %	-0.001 ppb	0.021 ppb	85.544 %	0.077 ppb
Concentration per Run 2	0.344 ppb	0.282 ppb	88.311 ppb	0.847 ppb	80.802 %	0.001 ppb	0.008 ppb	81.532 %	0.112 ppb
Concentration per Run 3	0.275 ppb	0.451 ppb	88.083 ppb	1.020 ppb	80.967 %	-0.001 ppb	0.016 ppb	81.615 %	0.087 ppb
Concentration RSD	15.9 %	57.1 %	5.8 %	18.8 %	3.0 %	244.9 %	42.6 %	2.8 %	19.3 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	34.742 ppb	81.592 %	79.905 %	0.002 ppb	0.307 ppb	80.999 %
Concentration per Run 1	32.874 ppb	84.665 %	82.176 %	-0.028 ppb	0.298 ppb	83.066 %
Concentration per Run 2	36.063 ppb	79.254 %	77.761 %	0.011 ppb	0.313 ppb	81.080 %
Concentration per Run 3	35.288 ppb	80.858 %	79.779 %	0.022 ppb	0.311 ppb	78.849 %
Concentration RSD	4.8 %	3.4 %	2.8 %	1,452.0 %	2.7 %	2.6 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index: 43
Analysis label: L2467837-03 2008TL
Analysis started at: 11/26/2024 11:02:34 AM
User name ALPHALAB\a2-icpmsq2
Rack 1
Vial 20
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	88.116 %	85.841 %	0.019 ppb	16,610.335 ppb	4,436.164 ppb	108.511 ppb	3,126.410 ppb	23,298.266 ppb	86.823 %
Concentration per Run 1	87.508 %	85.732 %	0.016 ppb	15,935.385 ppb	4,198.977 ppb	110.422 ppb	3,025.018 ppb	22,139.076 ppb	86.524 %
Concentration per Run 2	88.077 %	86.450 %	0.021 ppb	16,357.986 ppb	4,402.590 ppb	101.971 ppb	3,066.097 ppb	22,957.900 ppb	88.152 %
Concentration per Run 3	88.763 %	85.341 %	0.020 ppb	17,537.636 ppb	4,706.923 ppb	113.140 ppb	3,288.114 ppb	24,797.821 ppb	85.793 %
Concentration RSD	0.7 %	0.7 %	13.2 %	5.0 %	5.8 %	5.4 %	4.5 %	5.8 %	1.4 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.717 ppb	0.325 ppb	34.745 ppb	415.452 ppb	0.208 ppb	0.588 ppb	1.140 ppb	3.464 ppb	84.272 %
Concentration per Run 1	0.603 ppb	0.272 ppb	33.444 ppb	372.711 ppb	0.224 ppb	0.626 ppb	1.045 ppb	3.149 ppb	86.934 %
Concentration per Run 2	0.791 ppb	0.317 ppb	34.074 ppb	425.164 ppb	0.196 ppb	0.599 ppb	1.175 ppb	3.438 ppb	84.416 %
Concentration per Run 3	0.758 ppb	0.386 ppb	36.716 ppb	448.482 ppb	0.204 ppb	0.538 ppb	1.200 ppb	3.804 ppb	81.465 %
Concentration RSD	14.0 %	17.8 %	5.0 %	9.3 %	7.0 %	7.7 %	7.3 %	9.5 %	3.2 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.366 ppb	0.226 ppb	87.142 ppb	0.852 ppb	80.826 %	0.000 ppb	0.005 ppb	80.962 %	0.090 ppb
Concentration per Run 1	0.311 ppb	0.364 ppb	80.615 ppb	0.714 ppb	86.098 %	0.002 ppb	0.010 ppb	84.547 %	0.076 ppb
Concentration per Run 2	0.420 ppb	0.137 ppb	87.536 ppb	0.918 ppb	80.010 %	0.001 ppb	-0.002 ppb	80.689 %	0.092 ppb
Concentration per Run 3	0.368 ppb	0.177 ppb	93.275 ppb	0.922 ppb	76.369 %	-0.002 ppb	0.007 ppb	77.649 %	0.103 ppb
Concentration RSD	14.9 %	53.6 %	7.3 %	14.0 %	6.1 %	843.1 %	121.5 %	4.3 %	14.8 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	34.544 ppb	80.169 %	79.058 %	-0.009 ppb	0.288 ppb	80.196 %
Concentration per Run 1	31.350 ppb	84.483 %	81.565 %	-0.029 ppb	0.271 ppb	82.021 %
Concentration per Run 2	35.032 ppb	79.261 %	78.703 %	0.003 ppb	0.294 ppb	80.067 %
Concentration per Run 3	37.250 ppb	76.764 %	76.907 %	0.000 ppb	0.299 ppb	78.499 %
Concentration RSD	8.6 %	4.9 %	3.0 %	197.3 %	5.1 %	2.2 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index: 44
Analysis label: L2467837-04 2008TL
Analysis started at: 11/26/2024 11:07:02 AM
User name ALPHALAB\a2-icpmsq2
Rack 1
Vial 21
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	88.681 %	83.558 %	0.027 ppb	16,517.763 ppb	4,358.634 ppb	157.394 ppb	3,155.001 ppb	23,023.073 ppb	89.142 %
Concentration per Run 1	86.433 %	88.081 %	0.029 ppb	15,347.364 ppb	4,023.793 ppb	142.649 ppb	2,938.638 ppb	21,337.682 ppb	86.774 %
Concentration per Run 2	89.552 %	83.123 %	0.025 ppb	16,782.123 ppb	4,432.662 ppb	163.428 ppb	3,238.128 ppb	23,461.505 ppb	90.221 %
Concentration per Run 3	90.058 %	79.469 %	0.027 ppb	17,423.801 ppb	4,619.446 ppb	166.106 ppb	3,288.236 ppb	24,270.034 ppb	90.429 %
Concentration RSD	2.2 %	5.2 %	6.6 %	6.4 %	7.0 %	8.2 %	6.0 %	6.6 %	2.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.977 ppb	0.449 ppb	40.142 ppb	550.955 ppb	0.336 ppb	0.901 ppb	1.284 ppb	3.918 ppb	84.812 %
Concentration per Run 1	0.796 ppb	0.399 ppb	38.062 ppb	515.515 ppb	0.332 ppb	0.992 ppb	1.105 ppb	3.534 ppb	86.806 %
Concentration per Run 2	1.022 ppb	0.459 ppb	41.191 ppb	582.114 ppb	0.337 ppb	0.814 ppb	1.345 ppb	4.098 ppb	84.672 %
Concentration per Run 3	1.113 ppb	0.491 ppb	41.173 ppb	555.236 ppb	0.338 ppb	0.897 ppb	1.401 ppb	4.121 ppb	82.958 %
Concentration RSD	16.7 %	10.4 %	4.5 %	6.1 %	0.9 %	9.9 %	12.2 %	8.5 %	2.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.323 ppb	0.124 ppb	85.122 ppb	1.053 ppb	80.109 %	0.000 ppb	0.009 ppb	81.314 %	0.104 ppb
Concentration per Run 1	0.348 ppb	0.118 ppb	80.729 ppb	0.955 ppb	83.142 %	0.003 ppb	0.002 ppb	85.207 %	0.095 ppb
Concentration per Run 2	0.335 ppb	0.074 ppb	86.003 ppb	1.066 ppb	79.148 %	0.000 ppb	0.011 ppb	79.264 %	0.107 ppb
Concentration per Run 3	0.284 ppb	0.180 ppb	88.634 ppb	1.139 ppb	78.037 %	-0.001 ppb	0.013 ppb	79.470 %	0.109 ppb
Concentration RSD	10.5 %	42.8 %	4.7 %	8.8 %	3.4 %	388.7 %	67.3 %	4.1 %	7.0 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	34.272 ppb	81.145 %	78.908 %	-0.010 ppb	0.342 ppb	78.541 %
Concentration per Run 1	31.487 ppb	84.374 %	82.354 %	-0.029 ppb	0.328 ppb	80.475 %
Concentration per Run 2	35.443 ppb	79.614 %	76.895 %	-0.004 ppb	0.347 ppb	76.995 %
Concentration per Run 3	35.884 ppb	79.446 %	77.476 %	0.004 ppb	0.350 ppb	78.153 %
Concentration RSD	7.1 %	3.4 %	3.8 %	181.1 %	3.5 %	2.3 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index: 45
Analysis label: L2467837-06 2008TL
Analysis started at: 11/26/2024 11:11:30 AM
User name ALPHALAB\a2-icpmsq2
Rack 1
Vial 22
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	89.290 %	84.101 %	0.029 ppb	16,091.472 ppb	4,505.874 ppb	180.160 ppb	3,064.591 ppb	23,210.247 ppb	89.194 %
Concentration per Run 1	88.186 %	83.644 %	0.028 ppb	15,323.407 ppb	4,202.454 ppb	173.984 ppb	2,803.973 ppb	20,779.318 ppb	88.059 %
Concentration per Run 2	89.343 %	81.296 %	0.032 ppb	16,760.447 ppb	4,703.059 ppb	184.265 ppb	3,155.806 ppb	24,074.968 ppb	87.702 %
Concentration per Run 3	90.341 %	87.364 %	0.026 ppb	16,190.563 ppb	4,612.110 ppb	182.231 ppb	3,233.994 ppb	24,776.456 ppb	91.822 %
Concentration RSD	1.2 %	3.6 %	9.5 %	4.5 %	5.9 %	3.0 %	7.5 %	9.2 %	2.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	1.023 ppb	0.415 ppb	43.869 ppb	536.383 ppb	0.378 ppb	0.897 ppb	1.215 ppb	4.061 ppb	92.028 %
Concentration per Run 1	0.843 ppb	0.352 ppb	38.243 ppb	490.849 ppb	0.345 ppb	0.718 ppb	1.057 ppb	3.552 ppb	103.737 %
Concentration per Run 2	1.092 ppb	0.426 ppb	45.127 ppb	553.227 ppb	0.380 ppb	1.009 ppb	1.312 ppb	4.153 ppb	90.306 %
Concentration per Run 3	1.133 ppb	0.466 ppb	48.237 ppb	565.074 ppb	0.408 ppb	0.963 ppb	1.276 ppb	4.477 ppb	82.041 %
Concentration RSD	15.3 %	13.9 %	11.7 %	7.4 %	8.3 %	17.5 %	11.4 %	11.6 %	11.9 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.335 ppb	0.285 ppb	85.546 ppb	0.722 ppb	79.349 %	0.000 ppb	0.009 ppb	80.001 %	0.082 ppb
Concentration per Run 1	0.228 ppb	0.061 ppb	77.156 ppb	0.603 ppb	81.775 %	0.001 ppb	0.008 ppb	82.023 %	0.067 ppb
Concentration per Run 2	0.288 ppb	0.247 ppb	86.831 ppb	0.721 ppb	78.507 %	-0.001 ppb	0.007 ppb	78.023 %	0.079 ppb
Concentration per Run 3	0.491 ppb	0.546 ppb	92.652 ppb	0.841 ppb	77.766 %	-0.002 ppb	0.013 ppb	79.959 %	0.101 ppb
Concentration RSD	41.1 %	85.8 %	9.1 %	16.5 %	2.7 %	458.4 %	34.3 %	2.5 %	21.4 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	36.183 ppb	79.997 %	77.492 %	-0.016 ppb	0.377 ppb	76.750 %
Concentration per Run 1	34.393 ppb	82.009 %	79.299 %	-0.033 ppb	0.363 ppb	77.602 %
Concentration per Run 2	38.034 ppb	78.896 %	77.491 %	-0.009 ppb	0.394 ppb	75.292 %
Concentration per Run 3	36.123 ppb	79.086 %	75.685 %	-0.007 ppb	0.373 ppb	77.357 %
Concentration RSD	5.0 %	2.2 %	2.3 %	90.6 %	4.2 %	1.7 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index:	46	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2467837-07 2008TL	Rack	1		
Analysis started at:	11/26/2024 11:15:59 AM	Vial	23		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	87.020 %	81.992 %	0.665 ppb	21,010.294 ppb	7,852.403 ppb	868.748 ppb	3,376.724 ppb	29,083.310 ppb	88.183 %
Concentration per Run 1	84.621 %	82.535 %	0.670 ppb	20,696.245 ppb	7,796.172 ppb	849.103 ppb	3,359.229 ppb	28,188.576 ppb	87.535 %
Concentration per Run 2	87.850 %	81.361 %	0.663 ppb	21,263.593 ppb	7,931.107 ppb	886.231 ppb	3,459.463 ppb	29,871.845 ppb	89.445 %
Concentration per Run 3	88.587 %	82.079 %	0.663 ppb	21,071.046 ppb	7,829.929 ppb	870.911 ppb	3,311.480 ppb	29,189.508 ppb	87.570 %
Concentration RSD	2.4 %	0.7 %	0.6 %	1.4 %	0.9 %	2.1 %	2.2 %	2.9 %	1.2 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.124 ppb	0.084 ppb	378.821 ppb	796.103 ppb	10.464 ppb	16.142 ppb	6.215 ppb	39.248 ppb	79.288 %
Concentration per Run 1	0.058 ppb	0.100 ppb	373.735 ppb	799.436 ppb	10.437 ppb	16.348 ppb	6.003 ppb	39.280 ppb	79.794 %
Concentration per Run 2	0.145 ppb	0.053 ppb	386.640 ppb	806.771 ppb	10.538 ppb	15.721 ppb	6.239 ppb	39.471 ppb	78.018 %
Concentration per Run 3	0.170 ppb	0.098 ppb	376.088 ppb	782.101 ppb	10.417 ppb	16.358 ppb	6.404 ppb	38.993 ppb	80.054 %
Concentration RSD	47.1 %	31.6 %	1.8 %	1.6 %	0.6 %	2.3 %	3.2 %	0.6 %	1.4 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.294 ppb	0.749 ppb	168.915 ppb	0.167 ppb	77.420 %	0.002 ppb	0.256 ppb	77.954 %	0.045 ppb
Concentration per Run 1	0.310 ppb	0.683 ppb	165.911 ppb	0.100 ppb	78.246 %	0.002 ppb	0.274 ppb	79.977 %	0.041 ppb
Concentration per Run 2	0.282 ppb	0.879 ppb	170.519 ppb	0.231 ppb	77.519 %	0.002 ppb	0.241 ppb	77.236 %	0.044 ppb
Concentration per Run 3	0.291 ppb	0.685 ppb	170.313 ppb	0.171 ppb	76.495 %	0.001 ppb	0.254 ppb	76.647 %	0.049 ppb
Concentration RSD	4.8 %	15.0 %	1.5 %	39.1 %	1.1 %	38.0 %	6.5 %	2.3 %	8.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	56.660 ppb	79.159 %	77.384 %	0.020 ppb	0.410 ppb	76.795 %
Concentration per Run 1	55.253 ppb	79.755 %	76.297 %	-0.001 ppb	0.390 ppb	78.153 %
Concentration per Run 2	57.419 ppb	78.053 %	77.066 %	0.028 ppb	0.419 ppb	76.766 %
Concentration per Run 3	57.308 ppb	79.669 %	78.788 %	0.033 ppb	0.421 ppb	75.467 %
Concentration RSD	2.2 %	1.2 %	1.6 %	92.9 %	4.2 %	1.7 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index:	47	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	CCV	Rack	0		
Analysis started at:	11/26/2024 11:26:14 AM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	87.935 %	85.080 %	58.444 ppb	6,232.955 ppb	6,219.656 ppb	63.801 ppb	6,072.685 ppb	6,009.469 ppb	90.178 %
Concentration per Run 1	85.853 %	88.342 %	61.877 ppb	5,924.847 ppb	5,933.804 ppb	61.569 ppb	5,642.088 ppb	5,625.302 ppb	87.007 %
Concentration per Run 2	89.858 %	82.209 %	56.851 ppb	6,509.414 ppb	6,470.665 ppb	66.357 ppb	6,358.871 ppb	6,207.928 ppb	91.738 %
Concentration per Run 3	88.094 %	84.688 %	56.605 ppb	6,264.603 ppb	6,254.500 ppb	63.476 ppb	6,217.094 ppb	6,195.178 ppb	91.790 %
Recovery Percentage 1			97.407 %	103.883 %	103.661 %	106.335 %	101.211 %	100.158 %	
Concentration RSD	2.3 %	3.6 %	5.1 %	4.7 %	4.3 %	3.8 %	6.3 %	5.5 %	3.0 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	59.177 ppb	59.472 ppb	59.789 ppb	5,967.986 ppb	60.153 ppb	58.731 ppb	59.265 ppb	59.073 ppb	89.814 %
Concentration per Run 1	55.386 ppb	55.577 ppb	56.396 ppb	5,658.290 ppb	56.977 ppb	54.484 ppb	54.905 ppb	55.374 ppb	95.255 %
Concentration per Run 2	60.858 ppb	61.648 ppb	62.256 ppb	6,144.666 ppb	62.083 ppb	61.545 ppb	62.112 ppb	61.315 ppb	87.461 %
Concentration per Run 3	61.287 ppb	61.191 ppb	60.714 ppb	6,101.002 ppb	61.398 ppb	60.163 ppb	60.777 ppb	60.531 ppb	86.727 %
Recovery Percentage 1	98.628 %	99.120 %	99.648 %	99.466 %	100.254 %	97.885 %	98.774 %	98.455 %	
Concentration RSD	5.6 %	5.7 %	5.1 %	4.5 %	4.6 %	6.4 %	6.5 %	5.5 %	5.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	57.840 ppb	61.262 ppb	59.181 ppb	57.860 ppb	83.978 %	58.759 ppb	61.203 ppb	84.277 %	60.648 ppb
Concentration per Run 1	54.002 ppb	55.973 ppb	55.750 ppb	50.960 ppb	87.940 %	55.688 ppb	58.878 ppb	88.673 %	56.959 ppb
Concentration per Run 2	60.609 ppb	64.330 ppb	60.904 ppb	61.078 ppb	83.388 %	60.645 ppb	63.109 ppb	83.327 %	63.012 ppb
Concentration per Run 3	58.908 ppb	63.483 ppb	60.889 ppb	61.543 ppb	80.606 %	59.944 ppb	61.624 ppb	80.832 %	61.972 ppb
Recovery Percentage 1	96.400 %	102.103 %	98.635 %	96.434 %		97.931 %	102.006 %		101.080 %
Concentration RSD	5.9 %	7.5 %	5.0 %	10.3 %	4.4 %	4.6 %	3.5 %	4.8 %	5.3 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	61.446 ppb	84.044 %	81.612 %	58.711 ppb	60.381 ppb	82.642 %
Concentration per Run 1	57.368 ppb	87.240 %	83.415 %	51.375 ppb	57.152 ppb	88.066 %
Concentration per Run 2	62.750 ppb	83.085 %	80.699 %	62.347 ppb	62.517 ppb	80.391 %
Concentration per Run 3	64.220 ppb	81.806 %	80.721 %	62.412 ppb	61.475 ppb	79.469 %
Recovery Percentage 1	102.410 %			97.852 %	100.636 %	
Concentration RSD	5.9 %	3.4 %	1.9 %	10.8 %	4.7 %	5.7 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index: 48
Analysis label: CCB
Analysis started at: 11/26/2024 11:30:45 AM
User name ALPHALAB\a2-icpmsq2
Rack 0
Vial 10
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	82.121 %	74.292 %	0.063 ppb	69.289 ppb	2.559 ppb	-0.102 ppb	42.943 ppb	15.741 ppb	80.604 %
Concentration per Run 1	80.547 %	78.164 %	0.057 ppb	62.156 ppb	4.442 ppb	0.057 ppb	38.770 ppb	9.872 ppb	80.280 %
Concentration per Run 2	82.441 %	72.161 %	0.050 ppb	73.621 ppb	1.353 ppb	-0.203 ppb	44.991 ppb	13.401 ppb	80.462 %
Concentration per Run 3	83.377 %	72.552 %	0.082 ppb	72.092 ppb	1.883 ppb	-0.160 ppb	45.067 ppb	23.948 ppb	81.071 %
Recovery Percentage 1			12.630 %	13.858 %	3.656 %	-1.018 %	42.943 %	15.741 %	
Concentration RSD	1.8 %	4.5 %	26.9 %	9.0 %	64.6 %	136.7 %	8.4 %	46.5 %	0.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.029 ppb	0.058 ppb	0.084 ppb	9.062 ppb	0.031 ppb	0.127 ppb	0.085 ppb	0.002 ppb	**71.617 %**
Concentration per Run 1	0.051 ppb	0.062 ppb	0.023 ppb	8.211 ppb	0.025 ppb	0.119 ppb	0.140 ppb	0.027 ppb	75.482 %
Concentration per Run 2	0.003 ppb	0.067 ppb	0.051 ppb	9.958 ppb	0.042 ppb	0.125 ppb	0.059 ppb	-0.028 ppb	71.024 %
Concentration per Run 3	0.031 ppb	0.044 ppb	0.178 ppb	9.017 ppb	0.026 ppb	0.136 ppb	0.057 ppb	0.008 ppb	**68.347 %**
Recovery Percentage 1	0.571 %	5.762 %	8.411 %	18.124 %	6.200 %	6.326 %	8.515 %	0.043 %	
Concentration RSD	85.2 %	21.1 %	98.5 %	9.6 %	31.4 %	6.7 %	55.8 %	1,299.9 %	**5.0 %**

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.166 ppb	0.412 ppb	0.032 ppb	0.527 ppb	**71.630 %**	0.020 ppb	0.020 ppb	**71.312 %**	0.064 ppb
Concentration per Run 1	0.176 ppb	0.483 ppb	0.042 ppb	0.462 ppb	75.215 %	0.029 ppb	0.018 ppb	75.398 %	0.051 ppb
Concentration per Run 2	0.105 ppb	0.265 ppb	0.031 ppb	0.407 ppb	71.709 %	0.018 ppb	0.015 ppb	70.567 %	0.061 ppb
Concentration per Run 3	0.216 ppb	0.487 ppb	0.023 ppb	0.711 ppb	**67.967 %**	0.014 ppb	0.028 ppb	**67.972 %**	0.079 ppb
Recovery Percentage 1	33.121 %	8.232 %	0.319 %	26.334 %		5.099 %	10.060 %		1.592 %
Concentration RSD	34.1 %	30.9 %	29.7 %	30.8 %	**5.1 %**	38.0 %	33.3 %	**5.3 %**	22.0 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.037 ppb	**70.301 %**	**68.599 %**	0.573 ppb	0.038 ppb	**70.163 %**
Concentration per Run 1	0.061 ppb	75.443 %	72.534 %	0.623 ppb	0.048 ppb	72.262 %
Concentration per Run 2	0.023 ppb	70.036 %	**68.876 %**	0.609 ppb	0.037 ppb	70.496 %
Concentration per Run 3	0.027 ppb	**65.424 %**	**64.388 %**	0.486 ppb	0.030 ppb	**67.730 %**
Recovery Percentage 1	7.453 %			57.271 %	3.822 %	
Concentration RSD	55.8 %	**7.1 %**	**5.9 %**	13.1 %	23.8 %	**3.3 %**

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index: 49
Analysis label: WG2002380-1 6020TL
Analysis started at: 11/26/2024 11:37:38 AM
User name ALPHALAB\a2-icpmsq2
Rack 1
Vial 24
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	83.100 %	78.947 %	0.016 ppb	62.750 ppb	2.626 ppb	1.474 ppb	38.540 ppb	21.522 ppb	83.522 %
Concentration per Run 1	80.645 %	82.862 %	0.018 ppb	55.510 ppb	2.581 ppb	1.129 ppb	37.104 ppb	19.409 ppb	82.028 %
Concentration per Run 2	84.165 %	78.164 %	0.015 ppb	66.353 ppb	2.493 ppb	1.385 ppb	43.202 ppb	20.239 ppb	84.381 %
Concentration per Run 3	84.489 %	75.815 %	0.014 ppb	66.386 ppb	2.806 ppb	1.907 ppb	35.314 ppb	24.918 ppb	84.155 %
Concentration RSD	2.6 %	4.5 %	12.4 %	10.0 %	6.1 %	26.9 %	10.7 %	13.8 %	1.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.007 ppb	0.057 ppb	0.088 ppb	4.302 ppb	0.010 ppb	0.037 ppb	0.149 ppb	0.546 ppb	73.638 %
Concentration per Run 1	-0.029 ppb	0.037 ppb	0.128 ppb	4.547 ppb	0.013 ppb	0.085 ppb	0.106 ppb	0.623 ppb	76.513 %
Concentration per Run 2	-0.024 ppb	0.099 ppb	0.083 ppb	4.417 ppb	0.007 ppb	0.036 ppb	0.145 ppb	0.542 ppb	71.260 %
Concentration per Run 3	0.032 ppb	0.035 ppb	0.054 ppb	3.943 ppb	0.012 ppb	-0.012 ppb	0.197 ppb	0.474 ppb	73.139 %
Concentration RSD	468.1 %	63.7 %	42.2 %	7.4 %	28.1 %	132.5 %	30.4 %	13.6 %	3.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.176 ppb	0.078 ppb	0.012 ppb	0.029 ppb	75.777 %	0.006 ppb	0.004 ppb	76.487 %	0.019 ppb
Concentration per Run 1	0.142 ppb	-0.002 ppb	0.015 ppb	-0.026 ppb	79.887 %	0.008 ppb	0.002 ppb	80.124 %	0.015 ppb
Concentration per Run 2	0.172 ppb	0.231 ppb	0.010 ppb	0.086 ppb	73.355 %	0.005 ppb	0.005 ppb	75.558 %	0.008 ppb
Concentration per Run 3	0.213 ppb	0.004 ppb	0.013 ppb	0.026 ppb	74.089 %	0.005 ppb	0.005 ppb	73.778 %	0.034 ppb
Concentration RSD	20.5 %	171.4 %	17.7 %	196.6 %	4.7 %	33.1 %	37.5 %	4.3 %	69.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.013 ppb	74.975 %	73.133 %	0.044 ppb	0.023 ppb	75.097 %
Concentration per Run 1	0.042 ppb	79.529 %	77.834 %	0.014 ppb	0.025 ppb	78.633 %
Concentration per Run 2	0.013 ppb	72.474 %	70.118 %	0.055 ppb	0.021 ppb	73.833 %
Concentration per Run 3	-0.016 ppb	72.922 %	71.446 %	0.063 ppb	0.023 ppb	72.825 %
Concentration RSD	220.6 %	5.3 %	5.6 %	59.0 %	9.7 %	4.1 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index:	50	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG2002380-2d10 6020TL	Rack	1		
Analysis started at:	11/26/2024 11:45:06 AM	Vial	25		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	91.998 %	87.190 %	4.985 ppb	1,073.154 ppb	996.443 ppb	200.494 ppb	1,040.899 ppb	1,063.283 ppb	92.601 %
Concentration per Run 1	91.634 %	88.603 %	4.914 ppb	1,050.505 ppb	976.982 ppb	193.508 ppb	1,032.469 ppb	1,041.246 ppb	91.521 %
Concentration per Run 2	92.195 %	88.408 %	5.028 ppb	1,054.438 ppb	988.057 ppb	199.922 ppb	1,033.447 ppb	1,094.658 ppb	92.114 %
Concentration per Run 3	92.165 %	84.558 %	5.013 ppb	1,114.517 ppb	1,024.290 ppb	208.051 ppb	1,056.780 ppb	1,053.944 ppb	94.168 %
Concentration RSD	0.3 %	2.6 %	1.2 %	3.3 %	2.5 %	3.6 %	1.3 %	2.6 %	1.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	48.633 ppb	20.136 ppb	50.856 ppb	107.288 ppb	50.008 ppb	50.321 ppb	25.206 ppb	50.485 ppb	82.902 %
Concentration per Run 1	47.595 ppb	19.853 ppb	51.030 ppb	115.237 ppb	49.732 ppb	49.399 ppb	25.511 ppb	50.786 ppb	82.569 %
Concentration per Run 2	49.019 ppb	20.158 ppb	50.445 ppb	102.365 ppb	49.784 ppb	50.666 ppb	24.678 ppb	50.719 ppb	82.499 %
Concentration per Run 3	49.284 ppb	20.396 ppb	51.093 ppb	104.262 ppb	50.508 ppb	50.898 ppb	25.430 ppb	49.949 ppb	83.637 %
Concentration RSD	1.9 %	1.4 %	0.7 %	6.5 %	0.9 %	1.6 %	1.8 %	0.9 %	0.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	12.445 ppb	12.340 ppb	98.290 ppb	103.097 ppb	86.451 %	4.312 ppb	5.010 ppb	86.187 %	45.358 ppb
Concentration per Run 1	12.270 ppb	11.761 ppb	97.183 ppb	101.641 ppb	87.849 %	4.205 ppb	4.836 ppb	87.462 %	44.494 ppb
Concentration per Run 2	12.838 ppb	11.950 ppb	98.823 ppb	105.237 ppb	86.130 %	4.404 ppb	5.109 ppb	85.827 %	45.511 ppb
Concentration per Run 3	12.228 ppb	13.307 ppb	98.865 ppb	102.415 ppb	85.375 %	4.328 ppb	5.087 ppb	85.271 %	46.070 ppb
Concentration RSD	2.7 %	6.8 %	1.0 %	1.8 %	1.5 %	2.3 %	3.0 %	1.3 %	1.8 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	192.343 ppb	85.127 %	84.281 %	12.151 ppb	51.156 ppb	84.770 %
Concentration per Run 1	189.946 ppb	86.557 %	86.500 %	12.160 ppb	50.198 ppb	87.940 %
Concentration per Run 2	191.235 ppb	84.968 %	83.492 %	12.144 ppb	51.368 ppb	83.354 %
Concentration per Run 3	195.847 ppb	83.855 %	82.850 %	12.149 ppb	51.902 ppb	83.016 %
Concentration RSD	1.6 %	1.6 %	2.3 %	0.1 %	1.7 %	3.2 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index:	51	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2469536-01d5 6020TL	Rack	1		
Analysis started at:	11/26/2024 11:49:32 AM	Vial	26		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	88.239 %	83.384 %	0.012 ppb	4,939.545 ppb	27.117 ppb	285.599 ppb	2,428.128 ppb	3,757.967 ppb	87.660 %
Concentration per Run 1	86.893 %	88.212 %	0.013 ppb	4,572.212 ppb	26.383 ppb	260.284 ppb	2,241.667 ppb	3,494.167 ppb	85.724 %
Concentration per Run 2	89.599 %	77.511 %	0.013 ppb	5,230.971 ppb	27.177 ppb	304.794 ppb	2,550.349 ppb	4,026.229 ppb	89.828 %
Concentration per Run 3	88.224 %	84.427 %	0.012 ppb	5,015.451 ppb	27.792 ppb	291.721 ppb	2,492.368 ppb	3,753.507 ppb	87.426 %
Concentration RSD	1.5 %	6.5 %	5.3 %	6.8 %	2.6 %	8.0 %	6.8 %	7.1 %	2.4 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	11.624 ppb	0.599 ppb	1.229 ppb	51.643 ppb	0.139 ppb	0.271 ppb	2.506 ppb	1.137 ppb	82.223 %
Concentration per Run 1	10.738 ppb	0.559 ppb	1.036 ppb	44.855 ppb	0.134 ppb	0.284 ppb	2.456 ppb	1.114 ppb	85.090 %
Concentration per Run 2	12.015 ppb	0.636 ppb	1.357 ppb	57.497 ppb	0.160 ppb	0.249 ppb	2.358 ppb	1.141 ppb	80.580 %
Concentration per Run 3	12.119 ppb	0.600 ppb	1.293 ppb	52.577 ppb	0.122 ppb	0.278 ppb	2.705 ppb	1.155 ppb	80.999 %
Concentration RSD	6.6 %	6.4 %	13.8 %	12.3 %	14.2 %	7.0 %	7.1 %	1.8 %	3.0 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	1.622 ppb	0.965 ppb	34.388 ppb	2.152 ppb	83.817 %	0.002 ppb	0.004 ppb	85.141 %	0.976 ppb
Concentration per Run 1	1.521 ppb	0.747 ppb	31.719 ppb	1.848 ppb	90.687 %	0.003 ppb	0.005 ppb	92.660 %	0.982 ppb
Concentration per Run 2	1.659 ppb	1.060 ppb	35.437 ppb	2.215 ppb	81.472 %	0.002 ppb	0.000 ppb	81.033 %	0.993 ppb
Concentration per Run 3	1.686 ppb	1.089 ppb	36.010 ppb	2.394 ppb	79.292 %	0.001 ppb	0.006 ppb	81.729 %	0.952 ppb
Concentration RSD	5.5 %	19.6 %	6.8 %	12.9 %	7.2 %	51.3 %	83.0 %	7.7 %	2.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	1.674 ppb	83.190 %	82.015 %	0.012 ppb	0.291 ppb	84.522 %
Concentration per Run 1	1.444 ppb	91.132 %	89.544 %	-0.006 ppb	0.274 ppb	90.282 %
Concentration per Run 2	1.924 ppb	79.586 %	78.759 %	0.020 ppb	0.307 ppb	82.090 %
Concentration per Run 3	1.653 ppb	78.852 %	77.742 %	0.021 ppb	0.291 ppb	81.195 %
Concentration RSD	14.4 %	8.3 %	8.0 %	130.9 %	5.5 %	5.9 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index:	52	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG2002380-3d10 6020TL	Rack	1		
Analysis started at:	11/26/2024 11:53:58 AM	Vial	27		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	94.433 %	92.496 %	5.048 ppb	3,510.898 ppb	992.253 ppb	342.148 ppb	2,258.861 ppb	2,855.066 ppb	92.566 %
Concentration per Run 1	93.589 %	98.195 %	4.988 ppb	3,305.314 ppb	939.917 ppb	321.792 ppb	2,167.049 ppb	2,769.060 ppb	90.859 %
Concentration per Run 2	94.658 %	90.887 %	5.079 ppb	3,522.595 ppb	986.204 ppb	348.527 ppb	2,291.456 ppb	2,911.197 ppb	93.692 %
Concentration per Run 3	95.051 %	88.408 %	5.079 ppb	3,704.783 ppb	1,050.637 ppb	356.125 ppb	2,318.078 ppb	2,884.940 ppb	93.146 %
Concentration RSD	0.8 %	5.5 %	1.0 %	5.7 %	5.6 %	5.3 %	3.6 %	2.6 %	1.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	55.003 ppb	19.782 ppb	50.651 ppb	128.598 ppb	50.618 ppb	50.254 ppb	26.400 ppb	51.341 ppb	88.141 %
Concentration per Run 1	53.110 ppb	19.212 ppb	48.788 ppb	122.956 ppb	49.905 ppb	50.043 ppb	25.443 ppb	50.264 ppb	89.289 %
Concentration per Run 2	55.930 ppb	20.116 ppb	51.594 ppb	129.661 ppb	51.093 ppb	50.758 ppb	27.735 ppb	52.592 ppb	85.971 %
Concentration per Run 3	55.970 ppb	20.019 ppb	51.571 ppb	133.176 ppb	50.857 ppb	49.962 ppb	26.020 ppb	51.167 ppb	89.162 %
Concentration RSD	3.0 %	2.5 %	3.2 %	4.0 %	1.2 %	0.9 %	4.5 %	2.3 %	2.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	13.101 ppb	13.064 ppb	117.296 ppb	98.302 ppb	88.143 %	4.382 ppb	5.061 ppb	89.407 %	42.486 ppb
Concentration per Run 1	12.976 ppb	12.185 ppb	115.060 ppb	89.865 ppb	90.729 %	4.279 ppb	5.016 ppb	94.225 %	40.135 ppb
Concentration per Run 2	13.357 ppb	13.219 ppb	119.679 ppb	103.225 ppb	86.582 %	4.530 ppb	5.183 ppb	85.956 %	43.918 ppb
Concentration per Run 3	12.969 ppb	13.789 ppb	117.150 ppb	101.818 ppb	87.119 %	4.336 ppb	4.983 ppb	88.039 %	43.405 ppb
Concentration RSD	1.7 %	6.2 %	2.0 %	7.5 %	2.6 %	3.0 %	2.1 %	4.8 %	4.8 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	199.730 ppb	87.432 %	87.057 %	12.308 ppb	51.804 ppb	88.145 %
Concentration per Run 1	190.287 ppb	90.216 %	89.131 %	12.172 ppb	50.671 ppb	91.513 %
Concentration per Run 2	206.106 ppb	84.925 %	85.791 %	12.382 ppb	51.995 ppb	86.125 %
Concentration per Run 3	202.797 ppb	87.155 %	86.250 %	12.369 ppb	52.746 ppb	86.797 %
Concentration RSD	4.2 %	3.0 %	2.1 %	1.0 %	2.0 %	3.3 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index:	53	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG2002380-4d5 6020TL	Rack	1		
Analysis started at:	11/26/2024 11:58:25 AM	Vial	28		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	101.665 %	98.739 %	0.009 ppb	4,562.866 ppb	26.237 ppb	267.891 ppb	2,242.937 ppb	3,433.908 ppb	103.724 %
Concentration per Run 1	97.025 %	96.433 %	0.010 ppb	4,426.750 ppb	23.143 ppb	263.620 ppb	2,197.297 ppb	3,313.717 ppb	99.458 %
Concentration per Run 2	102.858 %	102.305 %	0.009 ppb	4,511.896 ppb	27.462 ppb	259.286 ppb	2,194.825 ppb	3,356.809 ppb	103.957 %
Concentration per Run 3	105.112 %	97.477 %	0.009 ppb	4,749.951 ppb	28.106 ppb	280.768 ppb	2,336.691 ppb	3,631.198 ppb	107.757 %
Concentration RSD	4.1 %	3.2 %	3.2 %	3.7 %	10.3 %	4.2 %	3.6 %	5.0 %	4.0 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	11.305 ppb	0.551 ppb	1.342 ppb	44.926 ppb	0.138 ppb	0.283 ppb	2.330 ppb	1.165 ppb	95.483 %
Concentration per Run 1	10.337 ppb	0.548 ppb	1.264 ppb	48.354 ppb	0.148 ppb	0.220 ppb	2.241 ppb	1.164 ppb	99.721 %
Concentration per Run 2	11.177 ppb	0.526 ppb	1.474 ppb	42.690 ppb	0.131 ppb	0.283 ppb	2.229 ppb	1.115 ppb	94.226 %
Concentration per Run 3	12.402 ppb	0.580 ppb	1.288 ppb	43.732 ppb	0.135 ppb	0.346 ppb	2.521 ppb	1.216 ppb	92.500 %
Concentration RSD	9.2 %	5.0 %	8.6 %	6.7 %	6.5 %	22.2 %	7.1 %	4.3 %	3.9 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	1.562 ppb	0.914 ppb	32.801 ppb	1.921 ppb	96.654 %	0.005 ppb	0.001 ppb	97.323 %	1.102 ppb
Concentration per Run 1	1.535 ppb	0.731 ppb	31.369 ppb	1.764 ppb	100.929 %	0.006 ppb	-0.001 ppb	100.392 %	1.155 ppb
Concentration per Run 2	1.597 ppb	0.905 ppb	33.320 ppb	2.017 ppb	93.890 %	0.003 ppb	0.001 ppb	95.416 %	1.068 ppb
Concentration per Run 3	1.554 ppb	1.108 ppb	33.715 ppb	1.983 ppb	95.145 %	0.005 ppb	0.003 ppb	96.161 %	1.082 ppb
Concentration RSD	2.0 %	20.6 %	3.8 %	7.2 %	3.9 %	36.4 %	139.6 %	2.8 %	4.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	1.679 ppb	95.001 %	94.961 %	-0.001 ppb	0.289 ppb	97.631 %
Concentration per Run 1	1.745 ppb	100.042 %	98.487 %	-0.017 ppb	0.289 ppb	100.272 %
Concentration per Run 2	1.508 ppb	92.494 %	93.764 %	0.002 ppb	0.285 ppb	98.294 %
Concentration per Run 3	1.784 ppb	92.467 %	92.634 %	0.011 ppb	0.294 ppb	94.328 %
Concentration RSD	8.9 %	4.6 %	3.3 %	1,081.5 %	1.5 %	3.1 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index:	54	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG2002380-5d10 6020TL	Rack	1		
Analysis started at:	11/26/2024 12:02:52 PM	Vial	29		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	101.851 %	97.434 %	48.419 ppb	7,319.145 ppb	5,123.073 ppb	204.176 ppb	6,307.583 ppb	7,011.219 ppb	101.333 %
Concentration per Run 1	99.725 %	97.412 %	48.375 ppb	7,338.515 ppb	5,152.063 ppb	203.244 ppb	6,495.394 ppb	7,109.960 ppb	99.280 %
Concentration per Run 2	101.961 %	97.020 %	49.086 ppb	7,199.747 ppb	5,089.756 ppb	194.716 ppb	6,106.776 ppb	6,713.944 ppb	100.629 %
Concentration per Run 3	103.868 %	97.869 %	47.794 ppb	7,419.174 ppb	5,127.399 ppb	214.568 ppb	6,320.579 ppb	7,209.754 ppb	104.088 %
Concentration RSD	2.0 %	0.4 %	1.3 %	1.5 %	0.6 %	4.9 %	3.1 %	3.7 %	2.4 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	56.822 ppb	50.875 ppb	51.623 ppb	5,143.526 ppb	51.297 ppb	50.996 ppb	52.156 ppb	52.436 ppb	96.916 %
Concentration per Run 1	56.543 ppb	51.349 ppb	52.526 ppb	5,202.942 ppb	53.116 ppb	53.553 ppb	53.931 ppb	55.358 ppb	93.653 %
Concentration per Run 2	55.571 ppb	48.722 ppb	49.357 ppb	4,957.212 ppb	48.896 ppb	47.451 ppb	49.419 ppb	49.148 ppb	104.052 %
Concentration per Run 3	58.353 ppb	52.556 ppb	52.986 ppb	5,270.425 ppb	51.878 ppb	51.984 ppb	53.116 ppb	52.802 ppb	93.044 %
Concentration RSD	2.5 %	3.9 %	3.8 %	3.2 %	4.2 %	6.2 %	4.6 %	6.0 %	6.4 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	52.243 ppb	51.587 ppb	69.327 ppb	51.518 ppb	94.530 %	2.792 ppb	50.805 ppb	95.028 %	51.364 ppb
Concentration per Run 1	55.143 ppb	52.891 ppb	70.991 ppb	50.344 ppb	95.795 %	2.787 ppb	51.897 ppb	94.260 %	52.673 ppb
Concentration per Run 2	48.126 ppb	48.815 ppb	67.009 ppb	51.366 ppb	93.803 %	2.795 ppb	50.341 ppb	94.900 %	51.646 ppb
Concentration per Run 3	53.461 ppb	53.054 ppb	69.981 ppb	52.844 ppb	93.992 %	2.794 ppb	50.177 ppb	95.924 %	49.773 ppb
Concentration RSD	7.0 %	4.7 %	3.0 %	2.4 %	1.2 %	0.2 %	1.9 %	0.9 %	2.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	50.675 ppb	95.996 %	93.203 %	49.066 ppb	51.609 ppb	93.040 %
Concentration per Run 1	52.275 ppb	96.716 %	95.192 %	44.958 ppb	51.810 ppb	95.128 %
Concentration per Run 2	49.856 ppb	96.179 %	92.772 %	49.762 ppb	51.629 ppb	92.467 %
Concentration per Run 3	49.894 ppb	95.093 %	91.647 %	52.478 ppb	51.389 ppb	91.524 %
Concentration RSD	2.7 %	0.9 %	1.9 %	7.8 %	0.4 %	2.0 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index:	55	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG2002380-6d25 6020TL	Rack	1		
Analysis started at:	11/26/2024 12:07:19 PM	Vial	30		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	101.248 %	100.631 %	0.040 ppb	966.825 ppb	7.524 ppb	54.566 ppb	480.003 ppb	741.406 ppb	99.579 %
Concentration per Run 1	100.690 %	101.979 %	0.044 ppb	924.238 ppb	9.087 ppb	52.073 ppb	458.467 ppb	697.364 ppb	100.703 %
Concentration per Run 2	102.145 %	102.893 %	0.034 ppb	963.176 ppb	7.238 ppb	54.554 ppb	485.239 ppb	751.305 ppb	101.373 %
Concentration per Run 3	100.910 %	97.020 %	0.041 ppb	1,013.061 ppb	6.246 ppb	57.073 ppb	496.302 ppb	775.549 ppb	96.660 %
Concentration RSD	0.8 %	3.1 %	13.4 %	4.6 %	19.2 %	4.6 %	4.1 %	5.4 %	2.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	2.333 ppb	0.148 ppb	0.394 ppb	16.939 ppb	0.076 ppb	0.134 ppb	0.577 ppb	0.880 ppb	95.801 %
Concentration per Run 1	2.092 ppb	0.135 ppb	0.366 ppb	15.317 ppb	0.089 ppb	0.075 ppb	0.540 ppb	0.989 ppb	98.178 %
Concentration per Run 2	2.296 ppb	0.169 ppb	0.389 ppb	19.500 ppb	0.071 ppb	0.135 ppb	0.611 ppb	0.868 ppb	93.271 %
Concentration per Run 3	2.613 ppb	0.138 ppb	0.428 ppb	16.001 ppb	0.067 ppb	0.193 ppb	0.581 ppb	0.783 ppb	95.954 %
Concentration RSD	11.2 %	12.8 %	8.1 %	13.2 %	15.9 %	44.0 %	6.1 %	11.8 %	2.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.449 ppb	0.448 ppb	6.969 ppb	0.829 ppb	98.704 %	0.002 ppb	0.028 ppb	98.704 %	0.284 ppb
Concentration per Run 1	0.361 ppb	0.324 ppb	6.680 ppb	0.758 ppb	100.983 %	0.006 ppb	0.030 ppb	102.094 %	0.261 ppb
Concentration per Run 2	0.450 ppb	0.428 ppb	7.204 ppb	0.789 ppb	96.058 %	0.001 ppb	0.026 ppb	98.674 %	0.288 ppb
Concentration per Run 3	0.536 ppb	0.592 ppb	7.024 ppb	0.939 ppb	99.070 %	-0.001 ppb	0.029 ppb	95.344 %	0.302 ppb
Concentration RSD	19.4 %	30.1 %	3.8 %	11.7 %	2.5 %	160.4 %	6.5 %	3.4 %	7.3 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.412 ppb	97.555 %	95.383 %	0.492 ppb	0.116 ppb	98.189 %
Concentration per Run 1	0.345 ppb	102.853 %	98.807 %	0.486 ppb	0.121 ppb	103.939 %
Concentration per Run 2	0.483 ppb	95.125 %	94.791 %	0.559 ppb	0.120 ppb	96.940 %
Concentration per Run 3	0.409 ppb	94.687 %	92.551 %	0.431 ppb	0.108 ppb	93.688 %
Concentration RSD	16.7 %	4.7 %	3.3 %	13.1 %	6.4 %	5.3 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index: 56
Analysis label: L2469536-02d5 6020TL
Analysis started at: 11/26/2024 12:11:47 PM
User name ALPHALAB\a2-icpmsq2
Rack 1
Vial 31
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	100.939 %	98.499 %	0.002 ppb	30,867.868 ppb	6,190.605 ppb	8.644 ppb	2,821.248 ppb	20,389.500 ppb	103.356 %
Concentration per Run 1	97.627 %	99.826 %	0.004 ppb	29,864.831 ppb	5,952.522 ppb	8.745 ppb	2,774.081 ppb	19,723.754 ppb	100.461 %
Concentration per Run 2	102.525 %	100.217 %	0.001 ppb	30,642.603 ppb	6,121.205 ppb	9.374 ppb	2,821.073 ppb	20,542.787 ppb	105.290 %
Concentration per Run 3	102.664 %	95.454 %	0.002 ppb	32,096.170 ppb	6,498.090 ppb	7.815 ppb	2,868.590 ppb	20,901.958 ppb	104.316 %
Concentration RSD	2.8 %	2.7 %	70.7 %	3.7 %	4.5 %	9.1 %	1.7 %	3.0 %	2.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.112 ppb	0.037 ppb	202.386 ppb	12.248 ppb	0.100 ppb	1.783 ppb	0.320 ppb	1.005 ppb	98.352 %
Concentration per Run 1	0.127 ppb	0.039 ppb	194.973 ppb	10.172 ppb	0.104 ppb	1.860 ppb	0.320 ppb	0.927 ppb	98.166 %
Concentration per Run 2	0.054 ppb	0.040 ppb	205.320 ppb	14.054 ppb	0.095 ppb	1.646 ppb	0.302 ppb	0.973 ppb	98.133 %
Concentration per Run 3	0.154 ppb	0.033 ppb	206.864 ppb	12.516 ppb	0.101 ppb	1.842 ppb	0.339 ppb	1.115 ppb	98.758 %
Concentration RSD	46.4 %	10.2 %	3.2 %	16.0 %	4.6 %	6.7 %	5.8 %	9.7 %	0.4 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.174 ppb	0.113 ppb	77.574 ppb	0.695 ppb	97.461 %	0.000 ppb	0.020 ppb	98.126 %	0.125 ppb
Concentration per Run 1	0.191 ppb	0.061 ppb	74.472 ppb	0.594 ppb	102.573 %	-0.001 ppb	0.025 ppb	105.014 %	0.104 ppb
Concentration per Run 2	0.124 ppb	0.234 ppb	78.262 ppb	0.655 ppb	96.801 %	0.001 ppb	0.013 ppb	96.941 %	0.119 ppb
Concentration per Run 3	0.207 ppb	0.043 ppb	79.989 ppb	0.836 ppb	93.009 %	0.000 ppb	0.023 ppb	92.424 %	0.151 ppb
Concentration RSD	25.3 %	93.5 %	3.6 %	18.1 %	4.9 %	739.6 %	30.5 %	6.5 %	19.5 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	14.840 ppb	98.276 %	96.620 %	0.088 ppb	0.110 ppb	95.342 %
Concentration per Run 1	13.359 ppb	103.562 %	101.284 %	0.036 ppb	0.112 ppb	100.445 %
Concentration per Run 2	15.455 ppb	96.906 %	94.865 %	0.107 ppb	0.107 ppb	93.343 %
Concentration per Run 3	15.705 ppb	94.360 %	93.710 %	0.122 ppb	0.111 ppb	92.238 %
Concentration RSD	8.7 %	4.8 %	4.2 %	52.0 %	2.5 %	4.7 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index:	57	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2469536-03d5 6020TL	Rack	1		
Analysis started at:	11/26/2024 12:16:15 PM	Vial	32		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	102.617 %	103.784 %	0.011 ppb	58,520.644 ppb	9,629.257 ppb	6.164 ppb	8,540.081 ppb	27,190.885 ppb	105.164 %
Concentration per Run 1	98.229 %	104.002 %	0.014 ppb	56,733.146 ppb	9,185.349 ppb	6.213 ppb	8,326.507 ppb	26,459.861 ppb	101.187 %
Concentration per Run 2	104.474 %	101.588 %	0.011 ppb	61,347.454 ppb	10,196.352 ppb	6.109 ppb	8,805.317 ppb	27,881.811 ppb	107.080 %
Concentration per Run 3	105.147 %	105.764 %	0.009 ppb	57,481.334 ppb	9,506.069 ppb	6.168 ppb	8,488.420 ppb	27,230.982 ppb	107.225 %
Concentration RSD	3.7 %	2.0 %	23.6 %	4.2 %	5.4 %	0.8 %	2.9 %	2.6 %	3.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.362 ppb	0.170 ppb	190.241 ppb	373.561 ppb	0.063 ppb	0.154 ppb	0.138 ppb	0.927 ppb	97.614 %
Concentration per Run 1	0.295 ppb	0.171 ppb	179.436 ppb	355.519 ppb	0.058 ppb	0.189 ppb	0.137 ppb	0.923 ppb	99.120 %
Concentration per Run 2	0.420 ppb	0.198 ppb	200.976 ppb	389.651 ppb	0.062 ppb	0.101 ppb	0.135 ppb	0.981 ppb	93.452 %
Concentration per Run 3	0.372 ppb	0.143 ppb	190.311 ppb	375.512 ppb	0.068 ppb	0.171 ppb	0.143 ppb	0.878 ppb	100.270 %
Concentration RSD	17.4 %	16.1 %	5.7 %	4.6 %	7.7 %	30.0 %	3.2 %	5.6 %	3.7 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.083 ppb	-0.018 ppb	171.157 ppb	0.099 ppb	97.798 %	-0.002 ppb	0.003 ppb	99.429 %	0.088 ppb
Concentration per Run 1	0.077 ppb	0.070 ppb	161.187 ppb	0.006 ppb	103.688 %	-0.002 ppb	-0.001 ppb	103.709 %	0.071 ppb
Concentration per Run 2	0.117 ppb	-0.094 ppb	181.001 ppb	0.110 ppb	93.444 %	-0.002 ppb	0.001 ppb	94.707 %	0.100 ppb
Concentration per Run 3	0.053 ppb	-0.032 ppb	171.284 ppb	0.183 ppb	96.263 %	-0.001 ppb	0.008 ppb	99.871 %	0.094 ppb
Concentration RSD	39.0 %	452.7 %	5.8 %	89.3 %	5.4 %	22.5 %	154.5 %	4.5 %	17.5 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	24.833 ppb	99.773 %	98.008 %	0.024 ppb	0.069 ppb	98.415 %
Concentration per Run 1	22.764 ppb	104.931 %	103.267 %	-0.013 ppb	0.059 ppb	105.052 %
Concentration per Run 2	26.229 ppb	95.626 %	92.929 %	0.043 ppb	0.077 ppb	95.688 %
Concentration per Run 3	25.507 ppb	98.763 %	97.827 %	0.043 ppb	0.071 ppb	94.506 %
Concentration RSD	7.4 %	4.7 %	5.3 %	134.0 %	13.5 %	5.9 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index:	58	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2469536-04d5 6020TL	Rack	1		
Analysis started at:	11/26/2024 12:20:43 PM	Vial	33		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	103.417 %	104.111 %	0.100 ppb	28,576.141 ppb	6,541.145 ppb	8.364 ppb	4,316.551 ppb	15,298.623 ppb	104.138 %
Concentration per Run 1	102.175 %	108.178 %	0.128 ppb	27,317.867 ppb	6,226.215 ppb	7.111 ppb	4,121.439 ppb	14,493.464 ppb	102.876 %
Concentration per Run 2	105.410 %	99.174 %	0.145 ppb	29,549.015 ppb	6,823.220 ppb	9.145 ppb	4,464.910 ppb	15,961.578 ppb	105.501 %
Concentration per Run 3	102.666 %	104.981 %	0.026 ppb	28,861.541 ppb	6,574.000 ppb	8.837 ppb	4,363.305 ppb	15,440.828 ppb	104.038 %
Concentration RSD	1.7 %	4.4 %	64.4 %	4.0 %	4.6 %	13.1 %	4.1 %	4.9 %	1.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.060 ppb	0.038 ppb	445.775 ppb	2,323.924 ppb	0.184 ppb	0.798 ppb	0.068 ppb	1.051 ppb	100.784 %
Concentration per Run 1	0.018 ppb	0.030 ppb	427.883 ppb	2,222.698 ppb	0.155 ppb	0.667 ppb	0.020 ppb	1.103 ppb	101.702 %
Concentration per Run 2	0.108 ppb	0.060 ppb	457.619 ppb	2,377.415 ppb	0.203 ppb	0.853 ppb	0.078 ppb	1.057 ppb	99.304 %
Concentration per Run 3	0.054 ppb	0.023 ppb	451.822 ppb	2,371.660 ppb	0.193 ppb	0.874 ppb	0.106 ppb	0.993 ppb	101.346 %
Concentration RSD	75.6 %	51.4 %	3.5 %	3.8 %	13.6 %	14.3 %	64.2 %	5.2 %	1.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	4.691 ppb	0.066 ppb	93.896 ppb	0.183 ppb	100.978 %	-0.002 ppb	0.000 ppb	100.171 %	0.063 ppb
Concentration per Run 1	4.569 ppb	-0.060 ppb	90.051 ppb	0.181 ppb	104.644 %	-0.002 ppb	-0.001 ppb	105.163 %	0.061 ppb
Concentration per Run 2	4.749 ppb	0.219 ppb	95.570 ppb	0.136 ppb	100.399 %	-0.002 ppb	-0.004 ppb	96.937 %	0.064 ppb
Concentration per Run 3	4.755 ppb	0.038 ppb	96.067 ppb	0.230 ppb	97.891 %	-0.001 ppb	0.005 ppb	98.414 %	0.066 ppb
Concentration RSD	2.3 %	215.3 %	3.6 %	25.8 %	3.4 %	53.8 %	37,352.9 %	4.4 %	4.0 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	65.604 ppb	101.487 %	99.464 %	0.008 ppb	0.105 ppb	98.684 %
Concentration per Run 1	61.595 ppb	105.907 %	104.501 %	-0.018 ppb	0.107 ppb	101.852 %
Concentration per Run 2	68.430 ppb	98.776 %	97.048 %	0.020 ppb	0.105 ppb	96.534 %
Concentration per Run 3	66.787 ppb	99.777 %	96.844 %	0.022 ppb	0.104 ppb	97.666 %
Concentration RSD	5.4 %	3.8 %	4.4 %	285.1 %	1.6 %	2.8 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index: 59
Analysis label: CCV
Analysis started at: 11/26/2024 12:25:12 PM
User name ALPHALAB\a2-icpmsq2
Rack 0
Vial 9
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	115.581 %	116.965 %	59.156 ppb	5,827.155 ppb	5,747.254 ppb	56.867 ppb	5,407.257 ppb	6,115.157 ppb	119.289 %
Concentration per Run 1	113.498 %	120.836 %	58.802 ppb	5,623.081 ppb	5,613.713 ppb	55.283 ppb	5,556.897 ppb	5,812.487 ppb	117.434 %
Concentration per Run 2	117.933 %	110.723 %	58.544 ppb	6,153.415 ppb	6,048.170 ppb	59.993 ppb	5,568.371 ppb	6,487.396 ppb	120.456 %
Concentration per Run 3	115.313 %	119.335 %	60.122 ppb	5,704.970 ppb	5,579.878 ppb	55.325 ppb	5,096.503 ppb	6,045.587 ppb	119.979 %
Recovery Percentage 1			98.593 %	97.119 %	95.788 %	94.778 %	90.121 %	101.919 %	
Concentration RSD	1.9 %	4.7 %	1.4 %	4.9 %	4.5 %	4.8 %	5.0 %	5.6 %	1.4 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	60.148 ppb	60.681 ppb	60.379 ppb	6,189.293 ppb	61.946 ppb	63.134 ppb	62.721 ppb	62.329 ppb	148.679 %
Concentration per Run 1	56.541 ppb	57.593 ppb	57.778 ppb	5,913.481 ppb	59.318 ppb	61.006 ppb	60.817 ppb	58.776 ppb	138.477 %
Concentration per Run 2	63.042 ppb	63.449 ppb	63.905 ppb	6,180.803 ppb	62.563 ppb	63.121 ppb	62.729 ppb	63.979 ppb	148.490 %
Concentration per Run 3	60.860 ppb	61.001 ppb	59.455 ppb	6,473.596 ppb	63.957 ppb	65.275 ppb	64.617 ppb	64.230 ppb	159.071 %
Recovery Percentage 1	100.246 %	101.135 %	100.632 %	103.155 %	103.244 %	105.223 %	104.535 %	103.881 %	
Concentration RSD	5.5 %	4.8 %	5.2 %	4.5 %	3.8 %	3.4 %	3.0 %	4.9 %	6.9 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	61.932 ppb	63.397 ppb	61.641 ppb	56.275 ppb	112.716 %	59.320 ppb	61.659 ppb	114.501 %	60.709 ppb
Concentration per Run 1	60.599 ppb	60.293 ppb	59.544 ppb	54.309 ppb	115.538 %	58.577 ppb	60.459 ppb	115.803 %	58.883 ppb
Concentration per Run 2	61.918 ppb	64.526 ppb	61.976 ppb	57.513 ppb	111.805 %	59.077 ppb	62.450 ppb	112.832 %	62.251 ppb
Concentration per Run 3	63.279 ppb	65.373 ppb	63.404 ppb	57.002 ppb	110.806 %	60.304 ppb	62.068 ppb	114.868 %	60.993 ppb
Recovery Percentage 1	103.220 %	105.662 %	102.735 %	93.791 %		98.866 %	102.765 %		101.181 %
Concentration RSD	2.2 %	4.3 %	3.2 %	3.1 %	2.2 %	1.5 %	1.7 %	1.3 %	2.8 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	62.174 ppb	111.882 %	110.650 %	59.193 ppb	61.616 ppb	111.889 %
Concentration per Run 1	60.027 ppb	115.236 %	112.100 %	53.550 ppb	59.349 ppb	115.108 %
Concentration per Run 2	64.207 ppb	110.177 %	109.259 %	61.324 ppb	62.503 ppb	109.276 %
Concentration per Run 3	62.290 ppb	110.233 %	110.592 %	62.705 ppb	62.996 ppb	111.283 %
Recovery Percentage 1	103.624 %			98.655 %	102.693 %	
Concentration RSD	3.4 %	2.6 %	1.3 %	8.3 %	3.2 %	2.6 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index: 60
Analysis label: CCB
Analysis started at: 11/26/2024 12:29:43 PM
User name ALPHALAB\a2-icpmsq2
Rack 0
Vial 10
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	112.529 %	116.051 %	0.067 ppb	15.574 ppb	5.152 ppb	-0.601 ppb	7.375 ppb	9.234 ppb	110.455 %
Concentration per Run 1	110.024 %	114.442 %	0.091 ppb	17.916 ppb	6.637 ppb	-0.343 ppb	7.941 ppb	11.540 ppb	108.478 %
Concentration per Run 2	114.666 %	116.334 %	0.060 ppb	14.957 ppb	5.922 ppb	-0.751 ppb	5.737 ppb	8.493 ppb	111.938 %
Concentration per Run 3	112.897 %	117.378 %	0.051 ppb	13.849 ppb	2.896 ppb	-0.709 ppb	8.449 ppb	7.668 ppb	110.951 %
Recovery Percentage 1			13.468 %	3.115 %	7.360 %	-6.008 %	7.375 %	9.234 %	
Concentration RSD	2.1 %	1.3 %	31.1 %	13.5 %	38.5 %	37.3 %	19.5 %	22.1 %	1.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.051 ppb	0.027 ppb	0.172 ppb	9.514 ppb	0.027 ppb	0.003 ppb	0.045 ppb	0.010 ppb	111.862 %
Concentration per Run 1	0.034 ppb	0.030 ppb	0.223 ppb	9.435 ppb	0.039 ppb	-0.007 ppb	0.014 ppb	0.064 ppb	113.374 %
Concentration per Run 2	0.061 ppb	0.025 ppb	0.125 ppb	8.820 ppb	0.035 ppb	0.006 ppb	0.027 ppb	-0.032 ppb	112.258 %
Concentration per Run 3	0.057 ppb	0.027 ppb	0.169 ppb	10.286 ppb	0.008 ppb	0.010 ppb	0.094 ppb	-0.003 ppb	109.955 %
Recovery Percentage 1	1.011 %	2.725 %	17.237 %	19.028 %	5.453 %	0.156 %	4.522 %	0.192 %	
Concentration RSD	28.4 %	10.5 %	28.3 %	7.7 %	60.9 %	273.7 %	95.2 %	512.6 %	1.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.066 ppb	0.295 ppb	0.057 ppb	0.527 ppb	114.541 %	0.032 ppb	0.033 ppb	112.118 %	0.106 ppb
Concentration per Run 1	0.028 ppb	0.299 ppb	0.067 ppb	0.412 ppb	118.598 %	0.036 ppb	0.033 ppb	116.407 %	0.100 ppb
Concentration per Run 2	0.075 ppb	0.197 ppb	0.054 ppb	0.562 ppb	115.019 %	0.030 ppb	0.046 ppb	112.419 %	0.092 ppb
Concentration per Run 3	0.095 ppb	0.388 ppb	0.051 ppb	0.606 ppb	110.007 %	0.028 ppb	0.020 ppb	107.527 %	0.125 ppb
Recovery Percentage 1	13.206 %	5.892 %	0.574 %	26.346 %		7.903 %	16.447 %		2.641 %
Concentration RSD	51.8 %	32.5 %	14.1 %	19.3 %	3.8 %	13.0 %	38.1 %	4.0 %	16.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.045 ppb	112.691 %	111.723 %	0.573 ppb	0.047 ppb	111.904 %
Concentration per Run 1	0.052 ppb	115.210 %	116.682 %	0.616 ppb	0.053 ppb	114.755 %
Concentration per Run 2	0.064 ppb	112.704 %	112.569 %	0.615 ppb	0.045 ppb	112.004 %
Concentration per Run 3	0.019 ppb	110.158 %	105.917 %	0.488 ppb	0.041 ppb	108.952 %
Recovery Percentage 1	8.989 %			57.302 %	4.652 %	
Concentration RSD	52.0 %	2.2 %	4.9 %	12.9 %	12.9 %	2.6 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index:	61	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2469536-05d5 6020TL	Rack	1		
Analysis started at:	11/26/2024 12:52:54 PM	Vial	34		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	114.039 %	120.727 %	0.877 ppb	3,503.983 ppb	17,561.461 ppb	10,723.723 ppb	2,027.024 ppb	225,108.974 ppb	114.425 %
Concentration per Run 1	111.164 %	126.904 %	0.888 ppb	3,214.625 ppb	16,617.433 ppb	9,816.919 ppb	1,869.547 ppb	208,478.712 ppb	112.791 %
Concentration per Run 2	115.555 %	119.335 %	0.878 ppb	3,595.389 ppb	18,256.506 ppb	10,926.198 ppb	2,042.268 ppb	228,176.163 ppb	116.609 %
Concentration per Run 3	115.398 %	115.942 %	0.865 ppb	3,701.936 ppb	17,810.444 ppb	11,428.053 ppb	2,169.255 ppb	238,672.048 ppb	113.874 %
Concentration RSD	2.2 %	4.6 %	1.3 %	7.3 %	4.8 %	7.7 %	7.4 %	6.8 %	1.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	19.788 ppb	18.756 ppb	597.299 ppb	13,138.259 ppb	5.232 ppb	15.434 ppb	46.369 ppb	279.670 ppb	117.510 %
Concentration per Run 1	18.139 ppb	17.694 ppb	554.829 ppb	12,164.557 ppb	4.934 ppb	14.762 ppb	44.849 ppb	257.592 ppb	121.678 %
Concentration per Run 2	20.513 ppb	18.997 ppb	618.866 ppb	13,648.587 ppb	5.264 ppb	15.733 ppb	47.618 ppb	292.351 ppb	114.238 %
Concentration per Run 3	20.712 ppb	19.578 ppb	618.201 ppb	13,601.633 ppb	5.496 ppb	15.807 ppb	46.640 ppb	289.067 ppb	116.615 %
Concentration RSD	7.2 %	5.1 %	6.2 %	6.4 %	5.4 %	3.8 %	3.0 %	6.9 %	3.2 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	6.660 ppb	2.236 ppb	642.260 ppb	0.501 ppb	114.396 %	0.213 ppb	1.109 ppb	119.137 %	0.391 ppb
Concentration per Run 1	6.189 ppb	2.398 ppb	598.743 ppb	0.507 ppb	121.167 %	0.193 ppb	1.045 ppb	124.845 %	0.373 ppb
Concentration per Run 2	6.786 ppb	2.299 ppb	665.556 ppb	0.464 ppb	110.752 %	0.220 ppb	1.128 ppb	115.952 %	0.404 ppb
Concentration per Run 3	7.006 ppb	2.009 ppb	662.480 ppb	0.534 ppb	111.268 %	0.225 ppb	1.153 ppb	116.615 %	0.397 ppb
Concentration RSD	6.4 %	9.0 %	5.9 %	7.0 %	5.1 %	8.0 %	5.1 %	4.2 %	4.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	270.851 ppb	123.999 %	120.417 %	0.143 ppb	125.564 ppb	124.845 %
Concentration per Run 1	258.703 ppb	129.675 %	127.898 %	0.148 ppb	111.666 ppb	136.182 %
Concentration per Run 2	274.935 ppb	118.552 %	113.788 %	0.152 ppb	134.133 ppb	118.186 %
Concentration per Run 3	278.916 ppb	123.769 %	119.565 %	0.131 ppb	130.894 ppb	120.165 %
Concentration RSD	4.0 %	4.5 %	5.9 %	7.8 %	9.7 %	7.9 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index: 62
Analysis label: L2469536-06d5 6020TL
Analysis started at: 11/26/2024 12:57:22 PM
User name ALPHALAB\a2-icpmsq2
Rack 1
Vial 35
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	111.256 %	118.291 %	0.004 ppb	130,393.941 ppb	7,099.154 ppb	13.207 ppb	8,378.791 ppb	41,131.799 ppb	119.078 %
Concentration per Run 1	109.406 %	115.942 %	0.006 ppb	127,948.258 ppb	6,907.510 ppb	14.639 ppb	8,358.936 ppb	39,861.465 ppb	118.771 %
Concentration per Run 2	112.174 %	122.859 %	0.003 ppb	130,395.106 ppb	7,142.562 ppb	13.171 ppb	8,317.022 ppb	41,225.837 ppb	120.103 %
Concentration per Run 3	112.187 %	116.073 %	0.004 ppb	132,838.459 ppb	7,247.392 ppb	11.810 ppb	8,460.414 ppb	42,308.095 ppb	118.359 %
Concentration RSD	1.4 %	3.3 %	33.3 %	1.9 %	2.5 %	10.7 %	0.9 %	3.0 %	0.8 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.212 ppb	0.097 ppb	1,562.627 ppb	5,116.149 ppb	0.091 ppb	0.154 ppb	0.119 ppb	0.469 ppb	121.803 %
Concentration per Run 1	0.141 ppb	0.131 ppb	1,572.699 ppb	5,028.745 ppb	0.093 ppb	0.308 ppb	0.112 ppb	0.532 ppb	122.608 %
Concentration per Run 2	0.195 ppb	0.084 ppb	1,486.197 ppb	5,233.210 ppb	0.087 ppb	0.089 ppb	0.103 ppb	0.425 ppb	119.839 %
Concentration per Run 3	0.300 ppb	0.077 ppb	1,628.987 ppb	5,086.491 ppb	0.094 ppb	0.064 ppb	0.142 ppb	0.451 ppb	122.962 %
Concentration RSD	38.0 %	30.4 %	4.6 %	2.1 %	3.8 %	87.4 %	16.8 %	11.8 %	1.4 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.229 ppb	0.117 ppb	238.230 ppb	-0.014 ppb	113.802 %	-0.001 ppb	0.001 ppb	116.877 %	0.021 ppb
Concentration per Run 1	0.221 ppb	0.139 ppb	228.515 ppb	-0.021 ppb	118.760 %	0.000 ppb	0.002 ppb	119.782 %	0.021 ppb
Concentration per Run 2	0.245 ppb	0.015 ppb	247.472 ppb	-0.018 ppb	109.321 %	-0.002 ppb	0.002 ppb	114.629 %	0.018 ppb
Concentration per Run 3	0.220 ppb	0.196 ppb	238.705 ppb	-0.002 ppb	113.325 %	-0.002 ppb	0.000 ppb	116.221 %	0.024 ppb
Concentration RSD	6.1 %	79.2 %	4.0 %	77.3 %	4.2 %	67.3 %	59.1 %	2.3 %	15.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	34.293 ppb	116.958 %	114.164 %	-0.017 ppb	0.117 ppb	110.769 %
Concentration per Run 1	32.395 ppb	120.041 %	117.822 %	-0.034 ppb	0.135 ppb	114.850 %
Concentration per Run 2	35.610 ppb	116.257 %	112.537 %	-0.013 ppb	0.112 ppb	110.216 %
Concentration per Run 3	34.874 ppb	114.577 %	112.132 %	-0.005 ppb	0.104 ppb	107.242 %
Concentration RSD	4.9 %	2.4 %	2.8 %	87.5 %	13.9 %	3.5 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index:	63	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2469536-07d5 6020TL	Rack	1		
Analysis started at:	11/26/2024 1:01:51 PM	Vial	36		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	115.915 %	118.444 %	0.002 ppb	18,612.372 ppb	7,059.519 ppb	6.086 ppb	3,648.462 ppb	14,018.430 ppb	118.624 %
Concentration per Run 1	113.418 %	125.534 %	0.001 ppb	17,475.492 ppb	6,518.356 ppb	5.873 ppb	3,347.948 ppb	12,780.332 ppb	118.010 %
Concentration per Run 2	117.201 %	115.290 %	0.001 ppb	19,145.415 ppb	7,330.256 ppb	6.123 ppb	3,861.883 ppb	14,722.249 ppb	118.466 %
Concentration per Run 3	117.126 %	114.507 %	0.004 ppb	19,216.208 ppb	7,329.945 ppb	6.263 ppb	3,735.554 ppb	14,552.708 ppb	119.396 %
Concentration RSD	1.9 %	5.2 %	66.2 %	5.3 %	6.6 %	3.2 %	7.3 %	7.7 %	0.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.103 ppb	0.127 ppb	560.049 ppb	19.139 ppb	0.059 ppb	0.528 ppb	0.319 ppb	0.455 ppb	121.956 %
Concentration per Run 1	0.101 ppb	0.127 ppb	538.595 ppb	22.642 ppb	0.054 ppb	0.566 ppb	0.310 ppb	0.482 ppb	122.599 %
Concentration per Run 2	0.114 ppb	0.132 ppb	584.522 ppb	19.770 ppb	0.050 ppb	0.552 ppb	0.286 ppb	0.462 ppb	120.648 %
Concentration per Run 3	0.092 ppb	0.121 ppb	557.030 ppb	15.005 ppb	0.072 ppb	0.467 ppb	0.360 ppb	0.420 ppb	122.620 %
Concentration RSD	10.7 %	4.6 %	4.1 %	20.2 %	20.7 %	10.1 %	11.8 %	6.9 %	0.9 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.052 ppb	0.439 ppb	53.363 ppb	0.058 ppb	117.756 %	0.002 ppb	0.012 ppb	119.737 %	0.043 ppb
Concentration per Run 1	0.032 ppb	0.317 ppb	51.049 ppb	0.029 ppb	123.401 %	0.003 ppb	0.009 ppb	126.729 %	0.037 ppb
Concentration per Run 2	0.064 ppb	0.544 ppb	55.148 ppb	0.080 ppb	113.939 %	0.000 ppb	0.015 ppb	116.562 %	0.039 ppb
Concentration per Run 3	0.061 ppb	0.457 ppb	53.891 ppb	0.065 ppb	115.929 %	0.002 ppb	0.013 ppb	115.919 %	0.052 ppb
Concentration RSD	33.4 %	26.1 %	3.9 %	44.8 %	4.2 %	76.5 %	22.5 %	5.1 %	18.3 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	21.621 ppb	119.893 %	117.220 %	-0.014 ppb	0.062 ppb	116.517 %
Concentration per Run 1	20.368 ppb	126.084 %	120.549 %	-0.032 ppb	0.069 ppb	122.058 %
Concentration per Run 2	22.161 ppb	116.705 %	115.878 %	-0.010 ppb	0.060 ppb	114.883 %
Concentration per Run 3	22.333 ppb	116.891 %	115.234 %	0.000 ppb	0.059 ppb	112.610 %
Concentration RSD	5.0 %	4.5 %	2.5 %	116.1 %	8.8 %	4.2 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index:	64	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2469536-08d5 6020TL	Rack	1		
Analysis started at:	11/26/2024 1:06:20 PM	Vial	37		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	115.605 %	117.356 %	0.003 ppb	34,378.635 ppb	5,832.586 ppb	5.463 ppb	3,672.921 ppb	18,506.466 ppb	117.406 %
Concentration per Run 1	114.248 %	119.792 %	0.003 ppb	32,587.001 ppb	5,626.761 ppb	6.260 ppb	3,537.392 ppb	17,767.932 ppb	116.872 %
Concentration per Run 2	114.365 %	113.528 %	0.001 ppb	35,801.138 ppb	6,066.330 ppb	4.956 ppb	3,745.587 ppb	19,095.048 ppb	117.314 %
Concentration per Run 3	118.203 %	118.748 %	0.004 ppb	34,747.767 ppb	5,804.666 ppb	5.172 ppb	3,735.785 ppb	18,656.416 ppb	118.033 %
Concentration RSD	1.9 %	2.9 %	62.9 %	4.8 %	3.8 %	12.8 %	3.2 %	3.7 %	0.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.109 ppb	0.079 ppb	306.577 ppb	384.722 ppb	0.049 ppb	0.784 ppb	0.044 ppb	0.262 ppb	115.850 %
Concentration per Run 1	0.121 ppb	0.072 ppb	295.257 ppb	368.156 ppb	0.037 ppb	0.832 ppb	0.023 ppb	0.330 ppb	117.073 %
Concentration per Run 2	0.166 ppb	0.089 ppb	317.040 ppb	399.235 ppb	0.050 ppb	0.798 ppb	0.038 ppb	0.237 ppb	114.032 %
Concentration per Run 3	0.040 ppb	0.076 ppb	307.435 ppb	386.776 ppb	0.060 ppb	0.721 ppb	0.070 ppb	0.218 ppb	116.445 %
Concentration RSD	58.3 %	11.2 %	3.6 %	4.1 %	23.4 %	7.3 %	55.6 %	22.9 %	1.4 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	1.658 ppb	0.048 ppb	68.663 ppb	1.724 ppb	114.400 %	-0.001 ppb	-0.001 ppb	114.929 %	0.025 ppb
Concentration per Run 1	1.614 ppb	0.011 ppb	65.659 ppb	1.417 ppb	119.556 %	-0.001 ppb	-0.002 ppb	117.227 %	0.024 ppb
Concentration per Run 2	1.612 ppb	0.098 ppb	71.077 ppb	1.872 ppb	110.493 %	-0.002 ppb	-0.002 ppb	112.076 %	0.017 ppb
Concentration per Run 3	1.747 ppb	0.034 ppb	69.254 ppb	1.884 ppb	113.151 %	-0.002 ppb	0.000 ppb	115.485 %	0.035 ppb
Concentration RSD	4.7 %	94.3 %	4.0 %	15.4 %	4.1 %	35.2 %	115.5 %	2.3 %	34.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	5.499 ppb	116.679 %	114.193 %	-0.027 ppb	0.037 ppb	115.121 %
Concentration per Run 1	5.090 ppb	121.252 %	119.257 %	-0.041 ppb	0.037 ppb	118.599 %
Concentration per Run 2	5.770 ppb	114.817 %	111.171 %	-0.024 ppb	0.038 ppb	111.973 %
Concentration per Run 3	5.636 ppb	113.968 %	112.150 %	-0.016 ppb	0.036 ppb	114.792 %
Concentration RSD	6.5 %	3.4 %	3.9 %	47.3 %	2.2 %	2.9 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index:	65	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2469536-09d5 6020TL	Rack	1		
Analysis started at:	11/26/2024 1:10:47 PM	Vial	38		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	116.713 %	117.965 %	0.040 ppb	31,967.856 ppb	5,918.839 ppb	500.714 ppb	2,670.493 ppb	18,208.628 ppb	120.253 %
Concentration per Run 1	112.032 %	117.182 %	0.042 ppb	31,590.289 ppb	5,865.009 ppb	504.251 ppb	2,705.940 ppb	18,123.115 ppb	117.585 %
Concentration per Run 2	118.520 %	122.989 %	0.042 ppb	31,310.419 ppb	5,814.228 ppb	484.183 ppb	2,601.715 ppb	18,076.025 ppb	122.372 %
Concentration per Run 3	119.588 %	113.724 %	0.036 ppb	33,002.860 ppb	6,077.279 ppb	513.707 ppb	2,703.825 ppb	18,426.745 ppb	120.802 %
Concentration RSD	3.5 %	4.0 %	8.6 %	2.8 %	2.4 %	3.0 %	2.2 %	1.0 %	2.0 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	1.537 ppb	1.161 ppb	34.756 ppb	1,016.283 ppb	0.942 ppb	4.996 ppb	2.956 ppb	2.784 ppb	116.220 %
Concentration per Run 1	1.475 ppb	1.125 ppb	35.301 ppb	1,022.668 ppb	0.963 ppb	5.126 ppb	2.999 ppb	2.912 ppb	113.687 %
Concentration per Run 2	1.634 ppb	1.141 ppb	34.439 ppb	1,026.367 ppb	0.935 ppb	4.907 ppb	3.046 ppb	2.819 ppb	114.160 %
Concentration per Run 3	1.504 ppb	1.216 ppb	34.530 ppb	999.815 ppb	0.928 ppb	4.953 ppb	2.821 ppb	2.622 ppb	120.812 %
Concentration RSD	5.5 %	4.2 %	1.4 %	1.4 %	1.9 %	2.3 %	4.0 %	5.3 %	3.4 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.876 ppb	0.157 ppb	68.677 ppb	0.062 ppb	111.804 %	0.000 ppb	0.001 ppb	114.265 %	0.028 ppb
Concentration per Run 1	0.904 ppb	0.191 ppb	68.701 ppb	0.031 ppb	112.732 %	0.000 ppb	0.003 ppb	114.617 %	0.024 ppb
Concentration per Run 2	0.958 ppb	0.112 ppb	70.092 ppb	0.109 ppb	110.547 %	0.000 ppb	-0.002 ppb	113.666 %	0.024 ppb
Concentration per Run 3	0.768 ppb	0.167 ppb	67.240 ppb	0.045 ppb	112.134 %	0.001 ppb	0.001 ppb	114.511 %	0.037 ppb
Concentration RSD	11.2 %	25.7 %	2.1 %	67.3 %	1.0 %	124.5 %	559.2 %	0.5 %	27.3 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	10.583 ppb	114.260 %	111.560 %	-0.017 ppb	0.961 ppb	114.597 %
Concentration per Run 1	10.477 ppb	116.774 %	112.557 %	-0.030 ppb	0.921 ppb	117.076 %
Concentration per Run 2	10.479 ppb	112.320 %	109.503 %	-0.012 ppb	0.975 ppb	115.628 %
Concentration per Run 3	10.792 ppb	113.685 %	112.619 %	-0.009 ppb	0.987 ppb	111.086 %
Concentration RSD	1.7 %	2.0 %	1.6 %	64.7 %	3.7 %	2.7 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index: 66
Analysis label: L2469536-10d5 6020TL
Analysis started at: 11/26/2024 1:15:14 PM
User name ALPHALAB\a2-icpmsq2
Rack 1
Vial 39
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	116.981 %	117.726 %	0.002 ppb	35,545.307 ppb	2,036.933 ppb	6.863 ppb	2,624.538 ppb	15,437.777 ppb	120.189 %
Concentration per Run 1	112.784 %	119.858 %	0.002 ppb	34,554.242 ppb	1,941.189 ppb	5.223 ppb	2,573.333 ppb	15,060.049 ppb	115.424 %
Concentration per Run 2	115.903 %	111.049 %	0.001 ppb	37,879.896 ppb	2,179.175 ppb	7.183 ppb	2,775.581 ppb	16,451.218 ppb	118.667 %
Concentration per Run 3	122.258 %	122.272 %	0.002 ppb	34,201.783 ppb	1,990.436 ppb	8.183 ppb	2,524.702 ppb	14,802.063 ppb	126.474 %
Concentration RSD	4.1 %	5.0 %	24.5 %	5.7 %	6.2 %	21.9 %	5.1 %	5.7 %	4.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.105 ppb	0.051 ppb	161.845 ppb	2,115.719 ppb	0.030 ppb	0.121 ppb	0.042 ppb	0.401 ppb	115.936 %
Concentration per Run 1	0.124 ppb	0.068 ppb	159.092 ppb	2,057.352 ppb	0.027 ppb	0.233 ppb	0.021 ppb	0.460 ppb	114.574 %
Concentration per Run 2	0.112 ppb	0.056 ppb	168.669 ppb	2,237.273 ppb	0.032 ppb	0.027 ppb	0.049 ppb	0.421 ppb	111.564 %
Concentration per Run 3	0.079 ppb	0.029 ppb	157.775 ppb	2,052.532 ppb	0.030 ppb	0.101 ppb	0.056 ppb	0.321 ppb	121.671 %
Concentration RSD	21.9 %	39.3 %	3.7 %	5.0 %	7.9 %	86.3 %	44.8 %	17.9 %	4.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.465 ppb	0.005 ppb	89.083 ppb	0.082 ppb	114.073 %	-0.001 ppb	-0.001 ppb	114.761 %	0.011 ppb
Concentration per Run 1	0.451 ppb	0.038 ppb	85.024 ppb	0.073 ppb	121.770 %	-0.002 ppb	0.002 ppb	120.405 %	0.011 ppb
Concentration per Run 2	0.463 ppb	-0.016 ppb	94.918 ppb	0.049 ppb	108.362 %	-0.003 ppb	-0.004 ppb	109.782 %	0.019 ppb
Concentration per Run 3	0.481 ppb	-0.007 ppb	87.307 ppb	0.123 ppb	112.088 %	0.000 ppb	0.001 ppb	114.096 %	0.003 ppb
Concentration RSD	3.3 %	560.6 %	5.8 %	46.0 %	6.1 %	109.2 %	515.2 %	4.7 %	71.5 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	18.997 ppb	114.778 %	112.106 %	-0.030 ppb	0.063 ppb	114.503 %
Concentration per Run 1	18.220 ppb	119.360 %	116.502 %	-0.040 ppb	0.057 ppb	121.375 %
Concentration per Run 2	19.758 ppb	109.264 %	108.740 %	-0.027 ppb	0.070 ppb	108.513 %
Concentration per Run 3	19.012 ppb	115.711 %	111.075 %	-0.023 ppb	0.062 ppb	113.620 %
Concentration RSD	4.0 %	4.5 %	3.6 %	30.0 %	10.7 %	5.7 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index:	67	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2469536-11d5 6020TL	Rack	1		
Analysis started at:	11/26/2024 1:19:41 PM	Vial	40		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	116.682 %	116.138 %	0.010 ppb	50,472.033 ppb	6,626.091 ppb	120.865 ppb	5,548.874 ppb	26,578.170 ppb	119.464 %
Concentration per Run 1	113.693 %	116.399 %	0.011 ppb	48,854.863 ppb	6,337.336 ppb	111.349 ppb	5,499.726 ppb	25,984.466 ppb	116.825 %
Concentration per Run 2	117.321 %	116.203 %	0.008 ppb	51,279.210 ppb	6,701.086 ppb	123.021 ppb	5,542.622 ppb	26,872.516 ppb	120.387 %
Concentration per Run 3	119.031 %	115.812 %	0.011 ppb	51,282.024 ppb	6,839.850 ppb	128.225 ppb	5,604.275 ppb	26,877.527 ppb	121.180 %
Concentration RSD	2.3 %	0.3 %	16.3 %	2.8 %	3.9 %	7.2 %	0.9 %	1.9 %	1.9 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.396 ppb	0.332 ppb	320.055 ppb	2,833.682 ppb	0.086 ppb	0.440 ppb	0.206 ppb	0.970 ppb	118.126 %
Concentration per Run 1	0.412 ppb	0.329 ppb	306.717 ppb	2,684.351 ppb	0.081 ppb	0.479 ppb	0.195 ppb	0.948 ppb	118.381 %
Concentration per Run 2	0.385 ppb	0.327 ppb	327.884 ppb	2,913.765 ppb	0.078 ppb	0.486 ppb	0.225 ppb	1.003 ppb	117.004 %
Concentration per Run 3	0.391 ppb	0.341 ppb	325.564 ppb	2,902.929 ppb	0.100 ppb	0.355 ppb	0.198 ppb	0.959 ppb	118.994 %
Concentration RSD	3.6 %	2.3 %	3.6 %	4.6 %	13.6 %	16.8 %	8.1 %	3.0 %	0.9 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.222 ppb	-0.002 ppb	178.962 ppb	-0.057 ppb	114.441 %	-0.001 ppb	0.000 ppb	114.790 %	0.016 ppb
Concentration per Run 1	0.196 ppb	0.053 ppb	170.077 ppb	-0.053 ppb	121.326 %	-0.001 ppb	-0.002 ppb	118.192 %	0.004 ppb
Concentration per Run 2	0.235 ppb	-0.032 ppb	183.991 ppb	-0.057 ppb	111.118 %	-0.002 ppb	0.002 ppb	113.757 %	0.020 ppb
Concentration per Run 3	0.236 ppb	-0.029 ppb	182.817 ppb	-0.061 ppb	110.879 %	-0.001 ppb	0.001 ppb	112.419 %	0.022 ppb
Concentration RSD	10.4 %	1,958.8 %	4.3 %	6.7 %	5.2 %	33.2 %	4,642.3 %	2.6 %	62.4 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	38.550 ppb	116.141 %	114.852 %	-0.030 ppb	0.204 ppb	113.602 %
Concentration per Run 1	36.752 ppb	121.330 %	120.312 %	-0.042 ppb	0.192 ppb	118.199 %
Concentration per Run 2	39.740 ppb	113.731 %	111.231 %	-0.025 ppb	0.209 ppb	112.456 %
Concentration per Run 3	39.157 ppb	113.360 %	113.012 %	-0.022 ppb	0.210 ppb	110.151 %
Concentration RSD	4.1 %	3.9 %	4.2 %	37.0 %	5.1 %	3.6 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index: 68
Analysis label: CCV
Analysis started at: 11/26/2024 1:24:09 PM
User name ALPHALAB\a2-icpmsq2
Rack 0
Vial 9
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	118.589 %	122.598 %	60.163 ppb	6,111.332 ppb	6,117.426 ppb	62.006 ppb	6,046.674 ppb	6,009.956 ppb	121.146 %
Concentration per Run 1	117.164 %	123.577 %	60.013 ppb	6,118.458 ppb	5,877.390 ppb	59.251 ppb	5,926.395 ppb	5,901.629 ppb	119.553 %
Concentration per Run 2	118.604 %	117.769 %	60.201 ppb	6,252.464 ppb	6,424.153 ppb	64.332 ppb	6,254.132 ppb	6,259.856 ppb	120.803 %
Concentration per Run 3	119.999 %	126.448 %	60.277 ppb	5,963.072 ppb	6,050.734 ppb	62.435 ppb	5,959.495 ppb	5,868.383 ppb	123.082 %
Recovery Percentage 1			100.272 %	101.856 %	101.957 %	103.343 %	100.778 %	100.166 %	
Concentration RSD	1.2 %	3.6 %	0.2 %	2.4 %	4.6 %	4.1 %	3.0 %	3.6 %	1.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	60.614 ppb	61.396 ppb	61.899 ppb	6,153.619 ppb	62.332 ppb	62.229 ppb	62.892 ppb	61.196 ppb	120.062 %
Concentration per Run 1	58.447 ppb	60.468 ppb	61.439 ppb	6,042.217 ppb	63.037 ppb	61.965 ppb	64.520 ppb	60.999 ppb	117.973 %
Concentration per Run 2	62.767 ppb	63.106 ppb	62.633 ppb	6,234.871 ppb	62.447 ppb	62.594 ppb	62.757 ppb	62.319 ppb	118.454 %
Concentration per Run 3	60.627 ppb	60.615 ppb	61.626 ppb	6,183.770 ppb	61.510 ppb	62.130 ppb	61.399 ppb	60.268 ppb	123.759 %
Recovery Percentage 1	101.023 %	102.327 %	103.166 %	102.560 %	103.886 %	103.716 %	104.820 %	101.993 %	
Concentration RSD	3.6 %	2.4 %	1.0 %	1.6 %	1.2 %	0.5 %	2.5 %	1.7 %	2.7 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	60.779 ppb	61.434 ppb	60.752 ppb	60.259 ppb	117.981 %	59.552 ppb	60.879 ppb	119.181 %	60.096 ppb
Concentration per Run 1	60.546 ppb	58.632 ppb	59.240 ppb	55.818 ppb	121.789 %	56.264 ppb	58.652 ppb	121.545 %	57.869 ppb
Concentration per Run 2	62.486 ppb	63.019 ppb	62.412 ppb	63.066 ppb	116.653 %	61.461 ppb	62.454 ppb	118.841 %	61.060 ppb
Concentration per Run 3	59.304 ppb	62.651 ppb	60.603 ppb	61.892 ppb	115.502 %	60.929 ppb	61.532 ppb	117.157 %	61.358 ppb
Recovery Percentage 1	101.298 %	102.390 %	101.253 %	100.431 %		99.253 %	101.465 %		100.160 %
Concentration RSD	2.6 %	4.0 %	2.6 %	6.5 %	2.8 %	4.8 %	3.3 %	1.9 %	3.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	60.913 ppb	118.724 %	116.857 %	59.373 ppb	61.971 ppb	115.457 %
Concentration per Run 1	59.235 ppb	119.954 %	119.222 %	52.782 ppb	59.496 ppb	120.393 %
Concentration per Run 2	61.926 ppb	118.740 %	116.569 %	63.201 ppb	63.794 ppb	112.314 %
Concentration per Run 3	61.579 ppb	117.479 %	114.780 %	62.135 ppb	62.622 ppb	113.664 %
Recovery Percentage 1	101.522 %			98.955 %	103.285 %	
Concentration RSD	2.4 %	1.0 %	1.9 %	9.7 %	3.6 %	3.7 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index: 69
Analysis label: CCB
Analysis started at: 11/26/2024 1:28:40 PM
User name ALPHALAB\a2-icpmsq2
Rack 0
Vial 10
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	116.689 %	114.550 %	0.019 ppb	-1.351 ppb	-0.101 ppb	-0.332 ppb	-4.759 ppb	-1.113 ppb	118.330 %
Concentration per Run 1	113.911 %	119.009 %	0.017 ppb	-4.305 ppb	0.828 ppb	-0.469 ppb	-7.235 ppb	-1.153 ppb	116.836 %
Concentration per Run 2	117.980 %	111.506 %	0.020 ppb	0.805 ppb	-0.381 ppb	-0.112 ppb	0.231 ppb	-0.897 ppb	117.457 %
Concentration per Run 3	118.176 %	113.137 %	0.020 ppb	-0.552 ppb	-0.750 ppb	-0.415 ppb	-7.272 ppb	-1.289 ppb	120.698 %
Recovery Percentage 1			3.807 %	-0.270 %	-0.144 %	-3.322 %	-4.759 %	-1.113 %	
Concentration RSD	2.1 %	3.4 %	9.8 %	196.0 %	816.1 %	58.0 %	90.8 %	17.9 %	1.8 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.000 ppb	-0.009 ppb	0.049 ppb	6.399 ppb	0.003 ppb	-0.050 ppb	0.011 ppb	-0.023 ppb	115.977 %
Concentration per Run 1	-0.033 ppb	-0.007 ppb	0.030 ppb	5.261 ppb	0.007 ppb	-0.095 ppb	0.040 ppb	0.009 ppb	120.031 %
Concentration per Run 2	0.012 ppb	-0.001 ppb	0.051 ppb	8.443 ppb	0.006 ppb	0.034 ppb	0.019 ppb	-0.024 ppb	108.152 %
Concentration per Run 3	0.020 ppb	-0.020 ppb	0.066 ppb	5.493 ppb	-0.003 ppb	-0.088 ppb	-0.025 ppb	-0.053 ppb	119.749 %
Recovery Percentage 1	-0.007 %	-0.908 %	4.879 %	12.798 %	0.606 %	-2.492 %	1.121 %	-0.452 %	
Concentration RSD	8,343.2 %	107.6 %	36.9 %	27.7 %	183.2 %	145.7 %	291.2 %	136.4 %	5.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.020 ppb	0.151 ppb	-0.002 ppb	0.456 ppb	116.337 %	0.008 ppb	0.004 ppb	114.175 %	0.046 ppb
Concentration per Run 1	0.038 ppb	0.041 ppb	-0.002 ppb	0.349 ppb	123.958 %	0.013 ppb	0.004 ppb	122.465 %	0.037 ppb
Concentration per Run 2	0.026 ppb	0.213 ppb	0.001 ppb	0.495 ppb	111.547 %	0.004 ppb	0.002 ppb	111.509 %	0.052 ppb
Concentration per Run 3	-0.004 ppb	0.198 ppb	-0.005 ppb	0.524 ppb	113.505 %	0.007 ppb	0.005 ppb	108.551 %	0.050 ppb
Recovery Percentage 1	4.054 %	3.011 %	-0.021 %	22.796 %		1.975 %	1.901 %		1.156 %
Concentration RSD	107.4 %	63.0 %	133.0 %	20.6 %	5.7 %	52.8 %	41.2 %	6.4 %	16.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	-0.008 ppb	114.460 %	112.337 %	0.560 ppb	0.016 ppb	113.837 %
Concentration per Run 1	-0.001 ppb	123.404 %	118.825 %	0.570 ppb	0.017 ppb	121.891 %
Concentration per Run 2	0.004 ppb	107.217 %	107.056 %	0.658 ppb	0.019 ppb	108.896 %
Concentration per Run 3	-0.025 ppb	112.760 %	111.129 %	0.452 ppb	0.012 ppb	110.723 %
Recovery Percentage 1	-1.522 %			55.980 %	1.601 %	
Concentration RSD	205.9 %	7.2 %	5.3 %	18.5 %	23.2 %	6.2 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index: 70
Analysis label: WG2001909-1d10 A2-6020T
Analysis started at: 11/26/2024 1:35:07 PM
User name ALPHALAB\a2-icpmsq2
Rack 1
Vial 41
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	117.517 %	117.922 %	0.002 ppb	5.216 ppb	2.614 ppb	1.063 ppb	-3.271 ppb	5.650 ppb	118.336 %
Concentration per Run 1	116.876 %	126.448 %	0.003 ppb	3.635 ppb	2.731 ppb	0.500 ppb	-1.270 ppb	4.752 ppb	117.093 %
Concentration per Run 2	117.731 %	108.765 %	0.003 ppb	9.684 ppb	2.711 ppb	1.408 ppb	4.851 ppb	8.107 ppb	117.946 %
Concentration per Run 3	117.944 %	118.552 %	0.001 ppb	2.330 ppb	2.401 ppb	1.282 ppb	-13.396 ppb	4.090 ppb	119.970 %
Concentration RSD	0.5 %	7.5 %	47.2 %	75.2 %	7.1 %	46.3 %	283.9 %	38.1 %	1.2 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.009 ppb	0.029 ppb	0.110 ppb	4.981 ppb	0.015 ppb	0.004 ppb	0.104 ppb	0.181 ppb	118.391 %
Concentration per Run 1	-0.008 ppb	0.039 ppb	0.140 ppb	4.440 ppb	0.013 ppb	-0.039 ppb	0.080 ppb	0.183 ppb	116.549 %
Concentration per Run 2	0.020 ppb	0.032 ppb	0.111 ppb	3.939 ppb	0.010 ppb	0.008 ppb	0.096 ppb	0.190 ppb	113.042 %
Concentration per Run 3	0.014 ppb	0.017 ppb	0.078 ppb	6.565 ppb	0.023 ppb	0.042 ppb	0.137 ppb	0.170 ppb	125.583 %
Concentration RSD	164.9 %	38.4 %	28.3 %	28.0 %	46.1 %	1,040.8 %	28.1 %	5.6 %	5.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.003 ppb	0.072 ppb	0.038 ppb	0.034 ppb	117.820 %	0.014 ppb	0.009 ppb	115.222 %	0.026 ppb
Concentration per Run 1	0.041 ppb	0.188 ppb	0.042 ppb	-0.032 ppb	125.249 %	0.018 ppb	0.016 ppb	123.475 %	0.027 ppb
Concentration per Run 2	-0.020 ppb	-0.068 ppb	0.048 ppb	0.028 ppb	112.276 %	0.010 ppb	0.004 ppb	108.601 %	0.013 ppb
Concentration per Run 3	-0.013 ppb	0.095 ppb	0.025 ppb	0.107 ppb	115.936 %	0.014 ppb	0.008 ppb	113.589 %	0.037 ppb
Concentration RSD	1,224.5 %	180.7 %	30.3 %	203.1 %	5.7 %	26.2 %	69.2 %	6.6 %	46.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.075 ppb	116.499 %	114.996 %	0.063 ppb	0.022 ppb	116.789 %
Concentration per Run 1	0.055 ppb	122.297 %	123.455 %	0.026 ppb	0.023 ppb	125.625 %
Concentration per Run 2	0.091 ppb	111.118 %	107.310 %	0.082 ppb	0.021 ppb	109.357 %
Concentration per Run 3	0.080 ppb	116.082 %	114.225 %	0.082 ppb	0.022 ppb	115.385 %
Concentration RSD	24.6 %	4.8 %	7.0 %	51.4 %	4.0 %	7.0 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index: 71
Analysis label: WG2001909-2d10 A2-6020T
Analysis started at: 11/26/2024 1:39:34 PM
User name ALPHALAB\a2-icpmsq2
Rack 1
Vial 42
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	118.025 %	119.401 %	10.002 ppb	1,953.302 ppb	1,886.328 ppb	391.325 ppb	1,879.793 ppb	1,873.261 ppb	117.261 %
Concentration per Run 1	115.919 %	125.077 %	9.861 ppb	1,845.526 ppb	1,789.634 ppb	367.206 ppb	1,792.953 ppb	1,820.419 ppb	116.588 %
Concentration per Run 2	119.267 %	116.073 %	9.893 ppb	2,014.914 ppb	1,942.530 ppb	402.957 ppb	1,937.536 ppb	1,899.850 ppb	118.443 %
Concentration per Run 3	118.890 %	117.052 %	10.253 ppb	1,999.466 ppb	1,926.818 ppb	403.811 ppb	1,908.890 ppb	1,899.516 ppb	116.752 %
Concentration RSD	1.6 %	4.1 %	2.2 %	4.8 %	4.5 %	5.3 %	4.1 %	2.4 %	0.9 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	93.562 ppb	38.883 ppb	98.251 ppb	208.739 ppb	97.463 ppb	97.746 ppb	48.724 ppb	95.049 ppb	126.890 %
Concentration per Run 1	90.740 ppb	37.796 ppb	96.009 ppb	196.771 ppb	94.129 ppb	96.607 ppb	47.821 ppb	92.551 ppb	125.436 %
Concentration per Run 2	94.826 ppb	39.573 ppb	99.964 ppb	214.752 ppb	101.125 ppb	100.584 ppb	50.430 ppb	98.440 ppb	123.488 %
Concentration per Run 3	95.119 ppb	39.281 ppb	98.780 ppb	214.692 ppb	97.134 ppb	96.048 ppb	47.920 ppb	94.156 ppb	131.745 %
Concentration RSD	2.6 %	2.4 %	2.1 %	5.0 %	3.6 %	2.5 %	3.0 %	3.2 %	3.4 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	22.155 ppb	22.326 ppb	187.924 ppb	191.182 ppb	118.722 %	10.126 ppb	10.683 ppb	119.030 %	100.939 ppb
Concentration per Run 1	21.971 ppb	21.719 ppb	180.071 ppb	175.174 ppb	127.113 %	9.572 ppb	9.922 ppb	126.216 %	93.620 ppb
Concentration per Run 2	22.887 ppb	22.944 ppb	192.386 ppb	199.135 ppb	117.228 %	10.315 ppb	11.018 ppb	115.614 %	103.891 ppb
Concentration per Run 3	21.605 ppb	22.314 ppb	191.314 ppb	199.237 ppb	111.825 %	10.491 ppb	11.108 ppb	115.260 %	105.307 ppb
Concentration RSD	3.0 %	2.7 %	3.6 %	7.3 %	6.5 %	4.8 %	6.2 %	5.2 %	6.3 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	407.167 ppb	117.953 %	116.139 %	22.125 ppb	102.830 ppb	116.235 %
Concentration per Run 1	379.319 ppb	122.944 %	121.682 %	19.386 ppb	95.905 ppb	121.681 %
Concentration per Run 2	415.587 ppb	116.594 %	113.474 %	22.670 ppb	105.267 ppb	113.464 %
Concentration per Run 3	426.593 ppb	114.320 %	113.260 %	24.319 ppb	107.319 ppb	113.560 %
Concentration RSD	6.1 %	3.8 %	4.1 %	11.4 %	5.9 %	4.1 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index:	72	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2462715-01d10 A2-6020T	Rack	1		
Analysis started at:	11/26/2024 1:44:02 PM	Vial	43		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	118.375 %	125.839 %	0.682 ppb	106.499 ppb	5,630.953 ppb	11,682.711 ppb	724.971 ppb	8,194.009 ppb	118.887 %
Concentration per Run 1	117.326 %	132.059 %	0.665 ppb	97.449 ppb	5,330.166 ppb	10,959.611 ppb	720.741 ppb	7,957.477 ppb	118.451 %
Concentration per Run 2	119.737 %	121.554 %	0.692 ppb	119.213 ppb	5,876.920 ppb	12,242.149 ppb	745.722 ppb	8,616.512 ppb	119.834 %
Concentration per Run 3	118.062 %	123.903 %	0.689 ppb	102.835 ppb	5,685.773 ppb	11,846.374 ppb	708.452 ppb	8,008.038 ppb	118.376 %
Concentration RSD	1.0 %	4.4 %	2.2 %	10.6 %	4.9 %	5.6 %	2.6 %	4.5 %	0.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	25.363 ppb	24.615 ppb	1,005.068 ppb	29,552.405 ppb	15.503 ppb	28.212 ppb	24.511 ppb	105.207 ppb	126.861 %
Concentration per Run 1	24.326 ppb	23.964 ppb	967.386 ppb	28,668.175 ppb	15.361 ppb	28.063 ppb	24.312 ppb	104.038 ppb	124.441 %
Concentration per Run 2	26.887 ppb	25.698 ppb	1,049.474 ppb	30,516.308 ppb	15.731 ppb	28.854 ppb	25.209 ppb	107.879 ppb	124.874 %
Concentration per Run 3	24.876 ppb	24.183 ppb	998.344 ppb	29,472.733 ppb	15.418 ppb	27.719 ppb	24.012 ppb	103.703 ppb	131.267 %
Concentration RSD	5.3 %	3.8 %	4.1 %	3.1 %	1.3 %	2.1 %	2.5 %	2.2 %	3.0 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	8.180 ppb	3.220 ppb	30.268 ppb	1.853 ppb	120.505 %	0.146 ppb	0.512 ppb	121.454 %	0.593 ppb
Concentration per Run 1	8.323 ppb	3.194 ppb	29.355 ppb	1.794 ppb	127.038 %	0.139 ppb	0.498 ppb	128.809 %	0.571 ppb
Concentration per Run 2	8.418 ppb	3.198 ppb	30.980 ppb	1.849 ppb	118.341 %	0.140 ppb	0.500 ppb	115.808 %	0.603 ppb
Concentration per Run 3	7.800 ppb	3.269 ppb	30.469 ppb	1.917 ppb	116.135 %	0.160 ppb	0.537 ppb	119.744 %	0.604 ppb
Concentration RSD	4.1 %	1.3 %	2.7 %	3.3 %	4.8 %	7.9 %	4.4 %	5.5 %	3.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	84.251 ppb	125.719 %	121.592 %	0.388 ppb	28.538 ppb	122.601 %
Concentration per Run 1	78.098 ppb	131.903 %	127.961 %	0.362 ppb	26.731 ppb	127.197 %
Concentration per Run 2	85.900 ppb	124.411 %	120.049 %	0.430 ppb	29.738 ppb	118.602 %
Concentration per Run 3	88.754 ppb	120.842 %	116.765 %	0.372 ppb	29.145 ppb	122.003 %
Concentration RSD	6.5 %	4.5 %	4.7 %	9.5 %	5.6 %	3.5 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index:	73	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG2001909-3d10 A2-6020T	Rack	1		
Analysis started at:	11/26/2024 1:48:30 PM	Vial	44		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	120.834 %	121.989 %	9.466 ppb	1,981.824 ppb	7,915.536 ppb	12,903.959 ppb	2,409.784 ppb	9,455.578 ppb	121.386 %
Concentration per Run 1	117.244 %	130.167 %	9.454 ppb	1,849.841 ppb	7,402.235 ppb	12,003.413 ppb	2,326.068 ppb	9,103.412 ppb	118.974 %
Concentration per Run 2	122.684 %	114.442 %	9.493 ppb	2,110.424 ppb	8,404.508 ppb	13,888.522 ppb	2,547.660 ppb	9,878.896 ppb	124.249 %
Concentration per Run 3	122.573 %	121.358 %	9.449 ppb	1,985.208 ppb	7,939.864 ppb	12,819.942 ppb	2,355.625 ppb	9,384.427 ppb	120.934 %
Concentration RSD	2.6 %	6.5 %	0.3 %	6.6 %	6.3 %	7.3 %	5.0 %	4.2 %	2.2 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	113.597 ppb	60.740 ppb	1,139.289 ppb	30,678.874 ppb	105.719 ppb	118.334 ppb	70.313 ppb	198.025 ppb	126.623 %
Concentration per Run 1	108.447 ppb	58.180 ppb	1,104.605 ppb	29,770.909 ppb	103.796 ppb	118.594 ppb	70.433 ppb	202.461 ppb	122.442 %
Concentration per Run 2	117.969 ppb	62.863 ppb	1,190.589 ppb	31,709.247 ppb	109.532 ppb	122.587 ppb	72.843 ppb	205.739 ppb	123.430 %
Concentration per Run 3	114.375 ppb	61.178 ppb	1,122.674 ppb	30,556.467 ppb	103.830 ppb	113.821 ppb	67.661 ppb	185.874 ppb	133.997 %
Concentration RSD	4.2 %	3.9 %	4.0 %	3.2 %	3.1 %	3.7 %	3.7 %	5.4 %	5.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	29.367 ppb	23.522 ppb	215.561 ppb	186.728 ppb	115.466 %	9.898 ppb	10.582 ppb	115.161 %	94.406 ppb
Concentration per Run 1	29.415 ppb	24.218 ppb	210.704 ppb	170.879 ppb	120.899 %	9.263 ppb	9.874 ppb	119.723 %	88.096 ppb
Concentration per Run 2	30.985 ppb	24.047 ppb	222.469 ppb	197.132 ppb	112.064 %	10.369 ppb	11.090 ppb	111.801 %	99.211 ppb
Concentration per Run 3	27.701 ppb	22.302 ppb	213.510 ppb	192.173 ppb	113.436 %	10.062 ppb	10.783 ppb	113.957 %	95.910 ppb
Concentration RSD	5.6 %	4.5 %	2.9 %	7.5 %	4.1 %	5.8 %	6.0 %	3.6 %	6.0 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	476.443 ppb	120.783 %	117.178 %	22.178 ppb	130.941 ppb	117.681 %
Concentration per Run 1	445.252 ppb	125.849 %	124.797 %	19.347 ppb	121.470 ppb	124.588 %
Concentration per Run 2	499.871 ppb	117.267 %	111.614 %	23.138 ppb	136.217 ppb	113.485 %
Concentration per Run 3	484.206 ppb	119.232 %	115.122 %	24.048 ppb	135.135 ppb	114.971 %
Concentration RSD	5.9 %	3.7 %	5.8 %	11.2 %	6.3 %	5.1 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index:	74	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG2001909-4d10 A2-6020T	Rack	1		
Analysis started at:	11/26/2024 1:52:59 PM	Vial	45		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	118.328 %	127.970 %	0.675 ppb	87.045 ppb	5,204.984 ppb	10,617.930 ppb	626.779 ppb	6,994.682 ppb	118.851 %
Concentration per Run 1	118.790 %	131.537 %	0.651 ppb	79.807 ppb	4,941.967 ppb	10,077.779 ppb	613.984 ppb	6,775.219 ppb	123.691 %
Concentration per Run 2	121.038 %	128.731 %	0.649 ppb	88.463 ppb	5,331.227 ppb	10,871.689 ppb	645.178 ppb	7,106.608 ppb	121.427 %
Concentration per Run 3	115.156 %	123.642 %	0.724 ppb	92.864 ppb	5,341.759 ppb	10,904.322 ppb	621.175 ppb	7,102.221 ppb	111.435 %
Concentration RSD	2.5 %	3.1 %	6.4 %	7.6 %	4.4 %	4.4 %	2.6 %	2.7 %	5.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	22.381 ppb	23.135 ppb	927.755 ppb	26,943.577 ppb	14.037 ppb	25.464 ppb	23.114 ppb	103.465 ppb	126.290 %
Concentration per Run 1	21.122 ppb	22.239 ppb	897.714 ppb	25,938.712 ppb	13.689 ppb	25.151 ppb	22.743 ppb	102.278 ppb	125.632 %
Concentration per Run 2	22.981 ppb	23.798 ppb	967.894 ppb	28,126.521 ppb	14.811 ppb	27.140 ppb	24.194 ppb	107.435 ppb	121.494 %
Concentration per Run 3	23.041 ppb	23.369 ppb	917.656 ppb	26,765.497 ppb	13.610 ppb	24.102 ppb	22.405 ppb	100.682 ppb	131.743 %
Concentration RSD	4.9 %	3.5 %	3.9 %	4.1 %	4.8 %	6.1 %	4.1 %	3.4 %	4.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	7.289 ppb	2.546 ppb	27.552 ppb	2.065 ppb	121.528 %	0.112 ppb	0.498 ppb	120.693 %	0.552 ppb
Concentration per Run 1	7.408 ppb	2.204 ppb	26.465 ppb	1.866 ppb	128.097 %	0.101 ppb	0.454 ppb	126.232 %	0.491 ppb
Concentration per Run 2	7.514 ppb	2.938 ppb	28.738 ppb	1.962 ppb	119.067 %	0.110 ppb	0.502 ppb	117.449 %	0.587 ppb
Concentration per Run 3	6.944 ppb	2.496 ppb	27.453 ppb	2.366 ppb	117.418 %	0.124 ppb	0.537 ppb	118.397 %	0.580 ppb
Concentration RSD	4.2 %	14.5 %	4.1 %	12.9 %	4.7 %	10.3 %	8.4 %	4.0 %	9.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	78.841 ppb	124.702 %	120.785 %	0.351 ppb	31.333 ppb	120.284 %
Concentration per Run 1	72.756 ppb	134.066 %	130.071 %	0.300 ppb	28.756 ppb	128.210 %
Concentration per Run 2	83.158 ppb	121.389 %	117.606 %	0.399 ppb	32.418 ppb	117.822 %
Concentration per Run 3	80.608 ppb	118.651 %	114.677 %	0.354 ppb	32.826 ppb	114.819 %
Concentration RSD	6.9 %	6.6 %	6.8 %	14.1 %	7.2 %	5.8 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index:	75	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG2001909-5d10 A2-6020T	Rack	1		
Analysis started at:	11/26/2024 1:57:28 PM	Vial	46		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	117.115 %	122.032 %	47.607 ppb	4,996.150 ppb	10,766.647 ppb	11,966.790 ppb	5,442.049 ppb	12,749.822 ppb	123.719 %
Concentration per Run 1	111.095 %	121.554 %	49.825 ppb	5,001.505 ppb	10,646.394 ppb	11,887.537 ppb	5,454.107 ppb	12,482.637 ppb	118.677 %
Concentration per Run 2	118.027 %	125.077 %	47.680 ppb	4,984.540 ppb	10,757.143 ppb	11,852.808 ppb	5,457.655 ppb	12,867.754 ppb	124.447 %
Concentration per Run 3	122.222 %	119.466 %	45.316 ppb	5,002.405 ppb	10,896.404 ppb	12,160.027 ppb	5,414.386 ppb	12,899.075 ppb	128.032 %
Concentration RSD	4.8 %	2.3 %	4.7 %	0.2 %	1.2 %	1.4 %	0.4 %	1.8 %	3.8 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	70.662 ppb	71.301 ppb	1,064.152 ppb	34,402.088 ppb	62.666 ppb	74.261 ppb	70.910 ppb	149.341 ppb	129.485 %
Concentration per Run 1	69.361 ppb	71.492 ppb	1,066.275 ppb	34,815.099 ppb	63.932 ppb	75.680 ppb	72.375 ppb	154.496 ppb	123.724 %
Concentration per Run 2	72.502 ppb	72.004 ppb	1,095.014 ppb	35,585.026 ppb	64.351 ppb	76.335 ppb	73.447 ppb	150.544 ppb	127.555 %
Concentration per Run 3	70.122 ppb	70.407 ppb	1,031.168 ppb	32,806.137 ppb	59.716 ppb	70.768 ppb	66.907 ppb	142.982 ppb	137.176 %
Concentration RSD	2.3 %	1.1 %	3.0 %	4.2 %	4.1 %	4.1 %	4.9 %	3.9 %	5.4 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	53.966 ppb	48.824 ppb	79.192 ppb	49.454 ppb	118.302 %	1.674 ppb	49.373 ppb	120.230 %	48.693 ppb
Concentration per Run 1	55.550 ppb	49.976 ppb	78.390 ppb	44.631 ppb	121.809 %	1.551 ppb	47.209 ppb	124.333 %	46.450 ppb
Concentration per Run 2	55.335 ppb	49.179 ppb	81.211 ppb	51.428 ppb	115.760 %	1.748 ppb	50.571 ppb	119.158 %	49.466 ppb
Concentration per Run 3	51.012 ppb	47.315 ppb	77.976 ppb	52.303 ppb	117.338 %	1.723 ppb	50.339 ppb	117.198 %	50.163 ppb
Concentration RSD	4.7 %	2.8 %	2.2 %	8.5 %	2.7 %	6.4 %	3.8 %	3.1 %	4.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	133.542 ppb	121.759 %	118.270 %	49.121 ppb	79.430 ppb	115.284 %
Concentration per Run 1	129.591 ppb	126.934 %	122.617 %	43.642 ppb	74.855 ppb	119.695 %
Concentration per Run 2	135.261 ppb	119.039 %	116.033 %	50.844 ppb	81.773 ppb	115.042 %
Concentration per Run 3	135.774 ppb	119.303 %	116.161 %	52.878 ppb	81.662 ppb	111.115 %
Concentration RSD	2.6 %	3.7 %	3.2 %	9.9 %	5.0 %	3.7 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index:	76	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG2001909-6d50 A2-6020T	Rack	1		
Analysis started at:	11/26/2024 2:01:57 PM	Vial	47		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	118.124 %	117.574 %	0.348 ppb	17.034 ppb	1,214.229 ppb	2,478.702 ppb	144.385 ppb	1,711.737 ppb	120.250 %
Concentration per Run 1	117.640 %	121.293 %	0.558 ppb	13.638 ppb	1,147.692 ppb	2,325.583 ppb	136.976 ppb	1,668.149 ppb	120.155 %
Concentration per Run 2	118.905 %	106.416 %	0.263 ppb	26.946 ppb	1,380.182 ppb	2,786.784 ppb	160.650 ppb	1,880.165 ppb	121.705 %
Concentration per Run 3	117.829 %	125.012 %	0.223 ppb	10.519 ppb	1,114.813 ppb	2,323.739 ppb	135.529 ppb	1,586.896 ppb	118.889 %
Concentration RSD	0.6 %	8.4 %	52.7 %	51.2 %	11.9 %	10.8 %	9.8 %	8.8 %	1.2 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	5.210 ppb	5.183 ppb	208.750 ppb	6,032.939 ppb	3.287 ppb	5.881 ppb	5.155 ppb	21.689 ppb	128.060 %
Concentration per Run 1	5.224 ppb	4.945 ppb	202.349 ppb	5,872.258 ppb	3.224 ppb	5.641 ppb	5.099 ppb	21.512 ppb	128.370 %
Concentration per Run 2	5.771 ppb	5.872 ppb	233.201 ppb	6,771.348 ppb	3.622 ppb	6.420 ppb	5.661 ppb	23.470 ppb	117.010 %
Concentration per Run 3	4.636 ppb	4.732 ppb	190.701 ppb	5,455.212 ppb	3.015 ppb	5.583 ppb	4.705 ppb	20.085 ppb	138.799 %
Concentration RSD	10.9 %	11.7 %	10.5 %	11.1 %	9.4 %	8.0 %	9.3 %	7.8 %	8.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	1.681 ppb	0.820 ppb	6.037 ppb	0.656 ppb	120.462 %	0.027 ppb	0.106 ppb	118.822 %	0.174 ppb
Concentration per Run 1	1.514 ppb	0.690 ppb	5.669 ppb	0.584 ppb	129.790 %	0.020 ppb	0.110 ppb	125.971 %	0.150 ppb
Concentration per Run 2	2.057 ppb	1.072 ppb	6.726 ppb	0.740 ppb	109.374 %	0.032 ppb	0.116 ppb	107.686 %	0.178 ppb
Concentration per Run 3	1.472 ppb	0.699 ppb	5.716 ppb	0.643 ppb	122.222 %	0.028 ppb	0.093 ppb	122.808 %	0.194 ppb
Concentration RSD	19.4 %	26.6 %	9.9 %	12.1 %	8.6 %	24.5 %	11.4 %	8.2 %	12.8 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	17.439 ppb	121.960 %	119.154 %	0.463 ppb	5.807 ppb	118.781 %
Concentration per Run 1	15.874 ppb	128.313 %	127.392 %	0.437 ppb	5.330 ppb	127.073 %
Concentration per Run 2	19.704 ppb	111.902 %	109.525 %	0.559 ppb	6.518 ppb	108.024 %
Concentration per Run 3	16.739 ppb	125.665 %	120.545 %	0.394 ppb	5.572 ppb	121.245 %
Concentration RSD	11.5 %	7.2 %	7.6 %	18.5 %	10.8 %	8.2 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index:	77	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2462715-02d10 A2-6020T	Rack	1		
Analysis started at:	11/26/2024 2:06:26 PM	Vial	48		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	121.768 %	123.925 %	0.679 ppb	103.370 ppb	6,043.189 ppb	12,099.090 ppb	729.198 ppb	8,978.974 ppb	123.675 %
Concentration per Run 1	120.959 %	123.381 %	0.691 ppb	104.330 ppb	5,998.747 ppb	12,005.644 ppb	717.674 ppb	9,030.442 ppb	122.872 %
Concentration per Run 2	121.625 %	124.164 %	0.681 ppb	105.398 ppb	6,057.817 ppb	12,023.112 ppb	742.677 ppb	8,994.164 ppb	124.208 %
Concentration per Run 3	122.721 %	124.229 %	0.664 ppb	100.381 ppb	6,073.002 ppb	12,268.515 ppb	727.243 ppb	8,912.316 ppb	123.946 %
Concentration RSD	0.7 %	0.4 %	2.0 %	2.6 %	0.6 %	1.2 %	1.7 %	0.7 %	0.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	20.993 ppb	27.644 ppb	1,054.059 ppb	30,898.962 ppb	13.599 ppb	26.339 ppb	22.150 ppb	118.425 ppb	130.794 %
Concentration per Run 1	20.223 ppb	27.497 ppb	1,051.515 ppb	30,964.995 ppb	13.819 ppb	27.047 ppb	21.915 ppb	122.147 ppb	125.720 %
Concentration per Run 2	21.537 ppb	28.065 ppb	1,074.993 ppb	31,420.161 ppb	13.593 ppb	26.286 ppb	22.511 ppb	119.590 ppb	129.231 %
Concentration per Run 3	21.220 ppb	27.371 ppb	1,035.668 ppb	30,311.729 ppb	13.384 ppb	25.683 ppb	22.025 ppb	113.537 ppb	137.432 %
Concentration RSD	3.3 %	1.3 %	1.9 %	1.8 %	1.6 %	2.6 %	1.4 %	3.7 %	4.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	7.989 ppb	2.743 ppb	29.905 ppb	0.577 ppb	118.597 %	0.129 ppb	0.444 ppb	119.507 %	0.354 ppb
Concentration per Run 1	8.841 ppb	2.768 ppb	29.021 ppb	0.483 ppb	128.160 %	0.127 ppb	0.450 ppb	124.202 %	0.308 ppb
Concentration per Run 2	7.829 ppb	2.808 ppb	30.410 ppb	0.570 ppb	116.997 %	0.130 ppb	0.399 ppb	120.379 %	0.353 ppb
Concentration per Run 3	7.298 ppb	2.654 ppb	30.285 ppb	0.676 ppb	110.633 %	0.130 ppb	0.483 ppb	113.939 %	0.401 ppb
Concentration RSD	9.8 %	2.9 %	2.6 %	16.8 %	7.5 %	1.5 %	9.5 %	4.3 %	13.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	91.944 ppb	121.858 %	116.914 %	0.200 ppb	33.336 ppb	116.728 %
Concentration per Run 1	86.582 ppb	126.261 %	121.591 %	0.135 ppb	31.068 ppb	122.075 %
Concentration per Run 2	93.011 ppb	122.893 %	116.215 %	0.228 ppb	33.807 ppb	115.430 %
Concentration per Run 3	96.238 ppb	116.421 %	112.936 %	0.236 ppb	35.132 ppb	112.678 %
Concentration RSD	5.3 %	4.1 %	3.7 %	28.0 %	6.2 %	4.1 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index:	78	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2462715-03d10 A2-6020T	Rack	1		
Analysis started at:	11/26/2024 2:10:56 PM	Vial	49		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	121.908 %	123.272 %	0.679 ppb	109.981 ppb	6,654.261 ppb	13,165.775 ppb	822.288 ppb	8,976.694 ppb	123.542 %
Concentration per Run 1	118.006 %	121.684 %	0.687 ppb	110.777 ppb	6,658.349 ppb	13,199.263 ppb	847.862 ppb	9,262.375 ppb	120.528 %
Concentration per Run 2	124.193 %	120.967 %	0.673 ppb	114.781 ppb	6,779.184 ppb	13,334.704 ppb	846.404 ppb	9,155.477 ppb	124.874 %
Concentration per Run 3	123.524 %	127.165 %	0.678 ppb	104.386 ppb	6,525.250 ppb	12,963.358 ppb	772.598 ppb	8,512.231 ppb	125.224 %
Concentration RSD	2.8 %	2.8 %	1.0 %	4.8 %	1.9 %	1.4 %	5.2 %	4.5 %	2.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	21.558 ppb	27.879 ppb	1,197.102 ppb	31,866.513 ppb	13.794 ppb	28.331 ppb	26.239 ppb	123.621 ppb	127.298 %
Concentration per Run 1	21.900 ppb	28.905 ppb	1,238.560 ppb	32,875.397 ppb	14.379 ppb	29.991 ppb	27.378 ppb	130.082 ppb	119.423 %
Concentration per Run 2	21.588 ppb	28.276 ppb	1,201.355 ppb	32,077.271 ppb	13.863 ppb	28.411 ppb	26.639 ppb	125.595 ppb	125.796 %
Concentration per Run 3	21.187 ppb	26.457 ppb	1,151.391 ppb	30,646.871 ppb	13.138 ppb	26.591 ppb	24.699 ppb	115.186 ppb	136.673 %
Concentration RSD	1.7 %	4.6 %	3.7 %	3.5 %	4.5 %	6.0 %	5.3 %	6.2 %	6.9 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	7.528 ppb	2.877 ppb	31.075 ppb	0.434 ppb	117.308 %	0.141 ppb	0.513 ppb	118.455 %	0.331 ppb
Concentration per Run 1	7.771 ppb	2.621 ppb	31.732 ppb	0.358 ppb	118.239 %	0.129 ppb	0.501 ppb	119.857 %	0.337 ppb
Concentration per Run 2	7.897 ppb	3.175 ppb	31.216 ppb	0.510 ppb	118.604 %	0.142 ppb	0.519 ppb	118.932 %	0.315 ppb
Concentration per Run 3	6.917 ppb	2.837 ppb	30.277 ppb	0.434 ppb	115.083 %	0.151 ppb	0.518 ppb	116.576 %	0.342 ppb
Concentration RSD	7.1 %	9.7 %	2.4 %	17.6 %	1.7 %	7.8 %	2.0 %	1.4 %	4.4 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	93.317 ppb	120.293 %	115.418 %	0.153 ppb	32.736 ppb	114.593 %
Concentration per Run 1	89.729 ppb	121.271 %	114.835 %	0.104 ppb	32.059 ppb	115.683 %
Concentration per Run 2	94.458 ppb	120.161 %	118.270 %	0.167 ppb	32.639 ppb	113.526 %
Concentration per Run 3	95.765 ppb	119.447 %	113.150 %	0.190 ppb	33.511 ppb	114.570 %
Concentration RSD	3.4 %	0.8 %	2.3 %	29.0 %	2.2 %	0.9 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index: 79
Analysis label: CCV
Analysis started at: 11/26/2024 2:15:23 PM
User name ALPHALAB\a2-icpmsq2
Rack 0
Vial 9
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	118.417 %	120.532 %	60.733 ppb	6,350.879 ppb	6,413.629 ppb	65.929 ppb	6,179.612 ppb	6,172.057 ppb	123.516 %
Concentration per Run 1	116.155 %	120.053 %	59.857 ppb	6,158.629 ppb	6,241.508 ppb	64.042 ppb	6,128.481 ppb	6,145.010 ppb	122.411 %
Concentration per Run 2	118.846 %	120.510 %	61.390 ppb	6,387.449 ppb	6,498.642 ppb	68.343 ppb	6,291.163 ppb	6,231.686 ppb	123.949 %
Concentration per Run 3	120.249 %	121.032 %	60.952 ppb	6,506.558 ppb	6,500.738 ppb	65.402 ppb	6,119.191 ppb	6,139.476 ppb	124.187 %
Recovery Percentage 1			101.222 %	105.848 %	106.894 %	109.882 %	102.994 %	102.868 %	
Concentration RSD	1.8 %	0.4 %	1.3 %	2.8 %	2.3 %	3.3 %	1.6 %	0.8 %	0.8 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	62.012 ppb	63.175 ppb	62.189 ppb	6,270.173 ppb	63.159 ppb	62.639 ppb	63.174 ppb	65.125 ppb	125.271 %
Concentration per Run 1	59.956 ppb	61.389 ppb	62.034 ppb	6,209.288 ppb	63.765 ppb	62.655 ppb	63.666 ppb	65.874 ppb	122.336 %
Concentration per Run 2	63.710 ppb	64.203 ppb	62.715 ppb	6,351.060 ppb	63.836 ppb	64.799 ppb	63.852 ppb	65.679 ppb	123.241 %
Concentration per Run 3	62.369 ppb	63.931 ppb	61.817 ppb	6,250.170 ppb	61.875 ppb	60.465 ppb	62.005 ppb	63.824 ppb	130.235 %
Recovery Percentage 1	103.353 %	105.291 %	103.648 %	104.503 %	105.264 %	104.399 %	105.290 %	108.542 %	
Concentration RSD	3.1 %	2.5 %	0.8 %	1.2 %	1.8 %	3.5 %	1.6 %	1.7 %	3.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	60.837 ppb	60.446 ppb	64.663 ppb	65.042 ppb	118.292 %	64.076 ppb	64.052 ppb	118.869 %	63.665 ppb
Concentration per Run 1	61.405 ppb	61.633 ppb	62.920 ppb	59.385 ppb	124.046 %	61.425 ppb	61.396 ppb	123.376 %	59.400 ppb
Concentration per Run 2	61.409 ppb	60.239 ppb	65.744 ppb	66.915 ppb	116.918 %	64.255 ppb	64.302 ppb	117.832 %	64.321 ppb
Concentration per Run 3	59.695 ppb	59.467 ppb	65.326 ppb	68.825 ppb	113.914 %	66.550 ppb	66.457 ppb	115.399 %	67.276 ppb
Recovery Percentage 1	101.394 %	100.744 %	107.772 %	108.403 %		106.794 %	106.753 %		106.109 %
Concentration RSD	1.6 %	1.8 %	2.4 %	7.7 %	4.4 %	4.0 %	4.0 %	3.4 %	6.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	64.093 ppb	117.835 %	115.302 %	64.347 ppb	66.123 ppb	113.067 %
Concentration per Run 1	60.330 ppb	122.731 %	121.931 %	58.451 ppb	62.454 ppb	116.765 %
Concentration per Run 2	64.263 ppb	117.196 %	111.572 %	65.774 ppb	67.641 ppb	111.449 %
Concentration per Run 3	67.684 ppb	113.579 %	112.401 %	68.816 ppb	68.273 ppb	110.987 %
Recovery Percentage 1	106.821 %			107.245 %	110.205 %	
Concentration RSD	5.7 %	3.9 %	5.0 %	8.3 %	4.8 %	2.8 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index: 80
Analysis label: CCB
Analysis started at: 11/26/2024 2:19:55 PM
User name ALPHALAB\a2-icpmsq2
Rack 0
Vial 10
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	120.627 %	119.553 %	0.022 ppb	-15.136 ppb	1.509 ppb	1.998 ppb	-4.061 ppb	-0.920 ppb	123.105 %
Concentration per Run 1	117.159 %	122.859 %	0.022 ppb	-16.123 ppb	2.114 ppb	3.288 ppb	1.651 ppb	4.254 ppb	120.575 %
Concentration per Run 2	120.858 %	118.683 %	0.023 ppb	-15.533 ppb	1.048 ppb	1.543 ppb	-6.003 ppb	-2.268 ppb	123.085 %
Concentration per Run 3	123.863 %	117.117 %	0.021 ppb	-13.752 ppb	1.364 ppb	1.164 ppb	-7.830 ppb	-4.746 ppb	125.655 %
Recovery Percentage 1			4.414 %	-3.027 %	2.155 %	19.984 %	-4.061 %	-0.920 %	
Concentration RSD	2.8 %	2.5 %	5.0 %	8.2 %	36.3 %	56.7 %	123.9 %	505.1 %	2.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.022 ppb	0.009 ppb	0.228 ppb	13.096 ppb	0.025 ppb	-0.012 ppb	0.037 ppb	0.040 ppb	122.885 %
Concentration per Run 1	0.036 ppb	0.013 ppb	0.385 ppb	11.992 ppb	0.034 ppb	-0.032 ppb	0.035 ppb	0.120 ppb	120.671 %
Concentration per Run 2	0.006 ppb	0.009 ppb	0.152 ppb	12.675 ppb	0.017 ppb	0.010 ppb	0.071 ppb	0.017 ppb	122.583 %
Concentration per Run 3	0.025 ppb	0.007 ppb	0.148 ppb	14.622 ppb	0.023 ppb	-0.015 ppb	0.006 ppb	-0.017 ppb	125.401 %
Recovery Percentage 1	0.442 %	0.942 %	22.830 %	26.193 %	4.967 %	-0.623 %	3.716 %	0.804 %	
Concentration RSD	67.5 %	34.1 %	59.4 %	10.4 %	35.8 %	169.3 %	87.6 %	178.0 %	1.9 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	-0.012 ppb	0.163 ppb	0.004 ppb	0.471 ppb	119.218 %	0.017 ppb	0.013 ppb	118.325 %	0.067 ppb
Concentration per Run 1	0.025 ppb	0.075 ppb	0.018 ppb	0.358 ppb	127.060 %	0.024 ppb	0.016 ppb	123.945 %	0.056 ppb
Concentration per Run 2	-0.030 ppb	0.186 ppb	-0.001 ppb	0.438 ppb	117.078 %	0.019 ppb	0.018 ppb	114.547 %	0.055 ppb
Concentration per Run 3	-0.032 ppb	0.229 ppb	-0.003 ppb	0.616 ppb	113.516 %	0.008 ppb	0.005 ppb	116.483 %	0.089 ppb
Recovery Percentage 1	-2.466 %	3.268 %	0.044 %	23.531 %		4.270 %	6.365 %		1.666 %
Concentration RSD	262.0 %	48.5 %	262.6 %	28.1 %	5.9 %	46.1 %	54.9 %	4.2 %	28.8 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.026 ppb	120.131 %	115.672 %	0.551 ppb	0.039 ppb	115.907 %
Concentration per Run 1	0.057 ppb	126.177 %	119.640 %	0.598 ppb	0.049 ppb	118.319 %
Concentration per Run 2	0.006 ppb	116.763 %	114.746 %	0.579 ppb	0.036 ppb	114.049 %
Concentration per Run 3	0.014 ppb	117.452 %	112.630 %	0.476 ppb	0.033 ppb	115.353 %
Recovery Percentage 1	5.193 %			55.082 %	3.929 %	
Concentration RSD	106.4 %	4.4 %	3.1 %	11.9 %	22.6 %	1.9 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index: 81
Analysis label: WG2002471-1d10 6020TS
Analysis started at: 11/26/2024 2:35:19 PM
User name ALPHALAB\a2-icpmsq2
Rack 1
Vial 50
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	118.955 %	122.402 %	0.003 ppb	-15.675 ppb	1.362 ppb	2.312 ppb	-18.740 ppb	-1.135 ppb	121.948 %
Concentration per Run 1	115.415 %	126.970 %	0.001 ppb	-18.552 ppb	1.924 ppb	2.882 ppb	-19.480 ppb	-4.210 ppb	119.293 %
Concentration per Run 2	119.769 %	119.531 %	0.002 ppb	-14.391 ppb	1.235 ppb	2.478 ppb	-19.374 ppb	0.014 ppb	123.942 %
Concentration per Run 3	121.681 %	120.706 %	0.005 ppb	-14.081 ppb	0.929 ppb	1.577 ppb	-17.368 ppb	0.790 ppb	122.608 %
Concentration RSD	2.7 %	3.3 %	74.0 %	15.9 %	37.4 %	28.9 %	6.3 %	237.0 %	2.0 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.002 ppb	0.081 ppb	0.070 ppb	7.930 ppb	-0.002 ppb	-0.013 ppb	0.097 ppb	0.246 ppb	154.314 %
Concentration per Run 1	0.006 ppb	0.081 ppb	0.083 ppb	13.736 ppb	0.001 ppb	-0.031 ppb	0.112 ppb	0.263 ppb	162.001 %
Concentration per Run 2	-0.025 ppb	0.087 ppb	0.034 ppb	4.780 ppb	-0.002 ppb	0.003 ppb	0.080 ppb	0.209 ppb	150.348 %
Concentration per Run 3	0.013 ppb	0.077 ppb	0.093 ppb	5.273 ppb	-0.004 ppb	-0.012 ppb	0.098 ppb	0.266 ppb	150.594 %
Concentration RSD	1,090.1 %	6.2 %	45.4 %	63.5 %	171.1 %	127.4 %	16.6 %	13.2 %	4.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	-0.046 ppb	0.005 ppb	-0.005 ppb	0.353 ppb	118.673 %	-0.001 ppb	-0.001 ppb	116.776 %	0.085 ppb
Concentration per Run 1	-0.044 ppb	-0.010 ppb	-0.006 ppb	0.611 ppb	124.489 %	-0.003 ppb	-0.001 ppb	121.714 %	0.140 ppb
Concentration per Run 2	-0.042 ppb	-0.026 ppb	-0.005 ppb	0.209 ppb	116.842 %	0.002 ppb	0.000 ppb	112.969 %	0.064 ppb
Concentration per Run 3	-0.053 ppb	0.051 ppb	-0.005 ppb	0.240 ppb	114.688 %	-0.002 ppb	-0.001 ppb	115.645 %	0.052 ppb
Concentration RSD	13.4 %	820.7 %	16.9 %	63.3 %	4.3 %	261.1 %	166.9 %	3.8 %	55.5 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.065 ppb	116.861 %	114.359 %	0.219 ppb	0.014 ppb	123.264 %
Concentration per Run 1	0.064 ppb	123.484 %	117.965 %	0.334 ppb	0.018 ppb	130.299 %
Concentration per Run 2	0.063 ppb	114.763 %	113.849 %	0.199 ppb	0.012 ppb	120.912 %
Concentration per Run 3	0.067 ppb	112.335 %	111.263 %	0.125 ppb	0.013 ppb	118.580 %
Concentration RSD	3.7 %	5.0 %	3.0 %	48.4 %	23.2 %	5.0 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index: 82
Analysis label: WG2002471-2d10 6020TS
Analysis started at: 11/26/2024 2:39:46 PM
User name ALPHALAB\a2-icpmsq2
Rack 1
Vial 51
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	119.408 %	119.335 %	8.458 ppb	1,755.428 ppb	1,713.860 ppb	338.275 ppb	1,639.989 ppb	1,638.752 ppb	123.227 %
Concentration per Run 1	117.876 %	121.032 %	8.394 ppb	1,714.747 ppb	1,678.620 ppb	332.156 ppb	1,669.685 ppb	1,697.934 ppb	123.544 %
Concentration per Run 2	120.368 %	115.486 %	8.506 ppb	1,811.087 ppb	1,779.440 ppb	350.174 ppb	1,680.047 ppb	1,702.415 ppb	123.093 %
Concentration per Run 3	119.980 %	121.489 %	8.474 ppb	1,740.448 ppb	1,683.521 ppb	332.496 ppb	1,570.234 ppb	1,515.907 ppb	123.044 %
Concentration RSD	1.1 %	2.8 %	0.7 %	2.8 %	3.3 %	3.0 %	3.7 %	6.5 %	0.2 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	79.875 ppb	32.896 ppb	82.662 ppb	176.771 ppb	82.138 ppb	81.943 ppb	41.260 ppb	79.423 ppb	133.579 %
Concentration per Run 1	81.112 ppb	33.254 ppb	84.330 ppb	179.080 ppb	83.184 ppb	83.954 ppb	42.717 ppb	82.411 ppb	124.402 %
Concentration per Run 2	81.180 ppb	33.665 ppb	83.431 ppb	175.969 ppb	85.480 ppb	84.312 ppb	42.392 ppb	80.879 ppb	132.002 %
Concentration per Run 3	77.333 ppb	31.770 ppb	80.226 ppb	175.262 ppb	77.752 ppb	77.562 ppb	38.672 ppb	74.979 ppb	144.334 %
Concentration RSD	2.8 %	3.0 %	2.6 %	1.1 %	4.8 %	4.6 %	5.4 %	4.9 %	7.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	21.202 ppb	20.166 ppb	167.456 ppb	170.680 ppb	117.749 %	8.992 ppb	9.359 ppb	116.309 %	89.539 ppb
Concentration per Run 1	20.442 ppb	18.325 ppb	167.800 ppb	159.533 ppb	122.847 %	8.743 ppb	8.938 ppb	117.861 %	85.515 ppb
Concentration per Run 2	21.555 ppb	20.880 ppb	172.274 ppb	178.777 ppb	115.503 %	9.192 ppb	9.729 ppb	114.319 %	92.158 ppb
Concentration per Run 3	21.610 ppb	21.294 ppb	162.295 ppb	173.731 ppb	114.897 %	9.041 ppb	9.410 ppb	116.747 %	90.942 ppb
Concentration RSD	3.1 %	8.0 %	3.0 %	5.8 %	3.8 %	2.5 %	4.3 %	1.6 %	4.0 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	358.803 ppb	118.861 %	115.654 %	20.302 ppb	93.221 ppb	117.553 %
Concentration per Run 1	344.732 ppb	120.482 %	118.830 %	18.288 ppb	89.806 ppb	119.016 %
Concentration per Run 2	366.471 ppb	117.948 %	113.566 %	20.897 ppb	95.064 ppb	115.665 %
Concentration per Run 3	365.208 ppb	118.152 %	114.564 %	21.721 ppb	94.792 ppb	117.979 %
Concentration RSD	3.4 %	1.2 %	2.4 %	8.8 %	3.2 %	1.5 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index: 83
Analysis label: I2467794-08d10 6020TS
Analysis started at: 11/26/2024 2:44:13 PM
User name ALPHALAB\a2-icpmsq2
Rack 1
Vial 52
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	118.295 %	121.858 %	0.599 ppb	26.765 ppb	1,541.283 ppb	6,517.404 ppb	664.943 ppb	4,746.428 ppb	124.915 %
Concentration per Run 1	115.097 %	122.794 %	0.617 ppb	26.585 ppb	1,509.294 ppb	6,488.656 ppb	697.235 ppb	4,731.419 ppb	121.220 %
Concentration per Run 2	119.189 %	120.706 %	0.593 ppb	30.219 ppb	1,570.066 ppb	6,579.051 ppb	664.242 ppb	4,809.040 ppb	126.429 %
Concentration per Run 3	120.598 %	122.076 %	0.589 ppb	23.489 ppb	1,544.489 ppb	6,484.505 ppb	633.351 ppb	4,698.824 ppb	127.097 %
Concentration RSD	2.4 %	0.9 %	2.6 %	12.6 %	2.0 %	0.8 %	4.8 %	1.2 %	2.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	36.649 ppb	19.717 ppb	243.433 ppb	19,203.904 ppb	6.318 ppb	13.079 ppb	80.709 ppb	145.502 ppb	127.390 %
Concentration per Run 1	35.924 ppb	19.636 ppb	246.541 ppb	19,655.260 ppb	6.572 ppb	13.795 ppb	83.215 ppb	151.933 ppb	121.374 %
Concentration per Run 2	38.207 ppb	20.718 ppb	253.430 ppb	19,830.669 ppb	6.591 ppb	13.133 ppb	82.675 ppb	149.020 ppb	124.492 %
Concentration per Run 3	35.814 ppb	18.798 ppb	230.328 ppb	18,125.782 ppb	5.790 ppb	12.307 ppb	76.235 ppb	135.552 ppb	136.302 %
Concentration RSD	3.7 %	4.9 %	4.9 %	4.9 %	7.2 %	5.7 %	4.8 %	6.0 %	6.2 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	153.206 ppb	1.539 ppb	18.340 ppb	2.398 ppb	118.952 %	0.215 ppb	0.782 ppb	118.668 %	5.167 ppb
Concentration per Run 1	159.122 ppb	1.491 ppb	18.398 ppb	2.299 ppb	121.719 %	0.206 ppb	0.768 ppb	121.734 %	4.900 ppb
Concentration per Run 2	158.476 ppb	1.595 ppb	18.775 ppb	2.433 ppb	118.358 %	0.220 ppb	0.771 ppb	118.490 %	5.248 ppb
Concentration per Run 3	142.020 ppb	1.530 ppb	17.848 ppb	2.462 ppb	116.779 %	0.220 ppb	0.808 ppb	115.779 %	5.353 ppb
Concentration RSD	6.3 %	3.4 %	2.5 %	3.6 %	2.1 %	3.8 %	2.8 %	2.5 %	4.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	75.708 ppb	118.198 %	116.473 %	0.368 ppb	156.143 ppb	120.424 %
Concentration per Run 1	73.451 ppb	121.282 %	119.130 %	0.342 ppb	149.216 ppb	124.174 %
Concentration per Run 2	76.306 ppb	115.508 %	114.358 %	0.414 ppb	160.908 ppb	118.045 %
Concentration per Run 3	77.367 ppb	117.804 %	115.931 %	0.347 ppb	158.303 ppb	119.053 %
Concentration RSD	2.7 %	2.5 %	2.1 %	11.0 %	3.9 %	2.7 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index:	84	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG2002471-3d10 6020TS	Rack	1		
Analysis started at:	11/26/2024 2:48:41 PM	Vial	53		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	114.629 %	121.010 %	10.411 ppb	2,098.340 ppb	5,643.035 ppb	11,275.153 ppb	2,643.787 ppb	15,691.078 ppb	119.441 %
Concentration per Run 1	112.205 %	122.337 %	10.365 ppb	2,084.156 ppb	5,579.481 ppb	11,045.934 ppb	2,709.347 ppb	15,795.519 ppb	117.216 %
Concentration per Run 2	115.698 %	122.402 %	10.456 ppb	2,098.950 ppb	5,661.055 ppb	11,443.913 ppb	2,626.469 ppb	15,714.152 ppb	120.337 %
Concentration per Run 3	115.982 %	118.291 %	10.413 ppb	2,111.914 ppb	5,688.567 ppb	11,335.610 ppb	2,595.544 ppb	15,563.564 ppb	120.771 %
Concentration RSD	1.8 %	1.9 %	0.4 %	0.7 %	1.0 %	1.8 %	2.2 %	0.8 %	1.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	132.757 ppb	59.712 ppb	488.604 ppb	25,285.278 ppb	97.739 ppb	104.729 ppb	202.402 ppb	279.710 ppb	134.685 %
Concentration per Run 1	133.295 ppb	60.097 ppb	493.883 ppb	25,586.010 ppb	100.291 ppb	107.730 ppb	210.265 ppb	290.445 ppb	125.815 %
Concentration per Run 2	134.351 ppb	61.052 ppb	503.462 ppb	26,135.352 ppb	101.372 ppb	108.820 ppb	211.661 ppb	290.145 ppb	131.793 %
Concentration per Run 3	130.626 ppb	57.988 ppb	468.468 ppb	24,134.474 ppb	91.555 ppb	97.637 ppb	185.280 ppb	258.541 ppb	146.447 %
Concentration RSD	1.4 %	2.6 %	3.7 %	4.1 %	5.5 %	5.9 %	7.3 %	6.6 %	7.9 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	235.991 ppb	21.641 ppb	223.053 ppb	186.723 ppb	118.371 %	10.122 ppb	11.155 ppb	117.644 %	102.198 ppb
Concentration per Run 1	248.702 ppb	23.369 ppb	219.634 ppb	173.309 ppb	125.656 %	9.469 ppb	10.419 ppb	121.648 %	97.135 ppb
Concentration per Run 2	239.555 ppb	22.147 ppb	230.924 ppb	195.630 ppb	114.162 %	10.267 ppb	11.562 ppb	113.673 %	106.627 ppb
Concentration per Run 3	219.717 ppb	19.406 ppb	218.601 ppb	191.231 ppb	115.294 %	10.632 ppb	11.482 ppb	117.611 %	102.831 ppb
Concentration RSD	6.3 %	9.4 %	3.1 %	6.3 %	5.4 %	5.9 %	5.7 %	3.4 %	4.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	506.949 ppb	121.135 %	119.803 %	22.436 ppb	309.534 ppb	118.044 %
Concentration per Run 1	475.805 ppb	127.563 %	125.624 %	19.367 ppb	285.702 ppb	123.274 %
Concentration per Run 2	533.203 ppb	117.636 %	115.702 %	23.161 ppb	316.582 ppb	116.647 %
Concentration per Run 3	511.839 ppb	118.207 %	118.083 %	24.778 ppb	326.320 ppb	114.210 %
Concentration RSD	5.7 %	4.6 %	4.3 %	12.4 %	6.9 %	4.0 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index: 85
Analysis label: WG2002471-4d10 6020TS
Analysis started at: 11/26/2024 2:53:09 PM
User name ALPHALAB\a2-icpmsq2
Rack 1
Vial 54
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	120.787 %	120.010 %	8.454 ppb	1,692.570 ppb	2,946.550 ppb	6,509.461 ppb	2,195.582 ppb	6,198.898 ppb	125.791 %
Concentration per Run 1	116.868 %	117.313 %	8.464 ppb	1,709.430 ppb	2,942.417 ppb	7,494.908 ppb	2,294.757 ppb	6,474.376 ppb	122.465 %
Concentration per Run 2	123.066 %	119.401 %	8.394 ppb	1,719.293 ppb	2,972.430 ppb	7,459.037 ppb	2,207.432 ppb	6,145.083 ppb	129.471 %
Concentration per Run 3	122.426 %	123.316 %	8.505 ppb	1,648.986 ppb	2,924.803 ppb	4,574.438 ppb	2,084.558 ppb	5,977.236 ppb	125.436 %
Concentration RSD	2.8 %	2.5 %	0.7 %	2.2 %	0.8 %	25.7 %	4.8 %	4.1 %	2.8 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	109.256 ppb	48.171 ppb	324.589 ppb	17,466.073 ppb	83.954 ppb	89.737 ppb	121.225 ppb	211.701 ppb	132.555 %
Concentration per Run 1	110.744 ppb	50.080 ppb	337.469 ppb	18,113.167 ppb	86.369 ppb	93.464 ppb	128.460 ppb	227.428 ppb	122.045 %
Concentration per Run 2	108.951 ppb	48.218 ppb	322.953 ppb	17,556.419 ppb	84.655 ppb	90.390 ppb	122.189 ppb	210.570 ppb	133.641 %
Concentration per Run 3	108.075 ppb	46.215 ppb	313.345 ppb	16,728.633 ppb	80.836 ppb	85.358 ppb	113.025 ppb	197.104 ppb	141.978 %
Concentration RSD	1.2 %	4.0 %	3.7 %	4.0 %	3.4 %	4.6 %	6.4 %	7.2 %	7.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	173.011 ppb	18.703 ppb	179.100 ppb	162.316 ppb	118.321 %	8.545 ppb	9.553 ppb	118.446 %	86.681 ppb
Concentration per Run 1	185.324 ppb	20.234 ppb	180.134 ppb	154.082 ppb	124.092 %	8.193 ppb	9.244 ppb	121.343 %	83.069 ppb
Concentration per Run 2	174.296 ppb	19.260 ppb	181.008 ppb	167.103 ppb	115.943 %	8.795 ppb	9.779 ppb	115.414 %	89.113 ppb
Concentration per Run 3	159.413 ppb	16.615 ppb	176.159 ppb	165.763 ppb	114.929 %	8.646 ppb	9.637 ppb	118.580 %	87.861 ppb
Concentration RSD	7.5 %	10.0 %	1.4 %	4.4 %	4.2 %	3.7 %	2.9 %	2.5 %	3.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	422.046 ppb	120.032 %	117.128 %	19.101 ppb	231.730 ppb	118.274 %
Concentration per Run 1	404.659 ppb	122.966 %	120.892 %	17.530 ppb	223.266 ppb	118.759 %
Concentration per Run 2	431.570 ppb	119.752 %	115.811 %	19.650 ppb	237.049 ppb	116.460 %
Concentration per Run 3	429.910 ppb	117.376 %	114.682 %	20.123 ppb	234.874 ppb	119.602 %
Concentration RSD	3.6 %	2.3 %	2.8 %	7.2 %	3.2 %	1.4 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index: 86
Analysis label: WG2002471-5d10 6020TS
Analysis started at: 11/26/2024 2:57:37 PM
User name ALPHALAB\a2-icpmsq2
Rack 1
Vial 55
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	116.442 %	119.879 %	46.463 ppb	4,667.265 ppb	6,175.872 ppb	5,968.053 ppb	5,178.600 ppb	8,855.388 ppb	121.846 %
Concentration per Run 1	113.701 %	121.554 %	46.659 ppb	4,678.264 ppb	6,135.063 ppb	5,873.156 ppb	5,245.920 ppb	8,811.427 ppb	120.461 %
Concentration per Run 2	117.041 %	120.967 %	47.007 ppb	4,579.801 ppb	6,269.994 ppb	6,006.746 ppb	5,182.619 ppb	9,025.603 ppb	121.951 %
Concentration per Run 3	118.583 %	117.117 %	45.722 ppb	4,743.730 ppb	6,122.558 ppb	6,024.258 ppb	5,107.260 ppb	8,729.135 ppb	123.126 %
Concentration RSD	2.1 %	2.0 %	1.4 %	1.8 %	1.3 %	1.4 %	1.3 %	1.7 %	1.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	79.524 ppb	63.754 ppb	267.984 ppb	22,205.712 ppb	52.538 ppb	58.439 ppb	117.849 ppb	175.652 ppb	130.062 %
Concentration per Run 1	79.872 ppb	63.904 ppb	271.513 ppb	22,568.294 ppb	53.988 ppb	59.978 ppb	119.677 ppb	182.569 ppb	123.543 %
Concentration per Run 2	79.653 ppb	65.417 ppb	272.450 ppb	22,629.503 ppb	53.970 ppb	60.187 ppb	121.570 ppb	179.143 ppb	126.143 %
Concentration per Run 3	79.048 ppb	61.941 ppb	259.989 ppb	21,419.339 ppb	49.655 ppb	55.152 ppb	112.300 ppb	165.244 ppb	140.501 %
Concentration RSD	0.5 %	2.7 %	2.6 %	3.1 %	4.8 %	4.9 %	4.2 %	5.2 %	7.0 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	183.003 ppb	45.035 ppb	64.092 ppb	50.724 ppb	117.930 %	2.236 ppb	47.984 ppb	119.122 %	52.843 ppb
Concentration per Run 1	188.212 ppb	45.561 ppb	63.757 ppb	48.188 ppb	121.801 %	2.124 ppb	46.418 ppb	122.741 %	51.023 ppb
Concentration per Run 2	188.716 ppb	46.031 ppb	66.210 ppb	52.839 ppb	115.936 %	2.277 ppb	48.460 ppb	118.847 %	53.549 ppb
Concentration per Run 3	172.082 ppb	43.512 ppb	62.308 ppb	51.147 ppb	116.055 %	2.306 ppb	49.075 ppb	115.776 %	53.957 ppb
Concentration RSD	5.2 %	3.0 %	3.1 %	4.6 %	2.8 %	4.4 %	2.9 %	2.9 %	3.0 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	116.639 ppb	119.833 %	116.162 %	48.517 ppb	191.717 ppb	116.111 %
Concentration per Run 1	112.323 ppb	124.260 %	121.077 %	43.034 ppb	183.704 ppb	122.287 %
Concentration per Run 2	116.209 ppb	116.940 %	113.874 %	51.505 ppb	195.071 ppb	112.364 %
Concentration per Run 3	121.385 ppb	118.299 %	113.535 %	51.011 ppb	196.376 ppb	113.681 %
Concentration RSD	3.9 %	3.2 %	3.7 %	9.8 %	3.6 %	4.6 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index: 87
Analysis label: WG2002471-6d50 6020TS
Analysis started at: 11/26/2024 3:02:05 PM
User name ALPHALAB\a2-icpmsq2
Rack 1
Vial 56
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	121.950 %	118.226 %	0.469 ppb	-7.144 ppb	308.655 ppb	1,302.767 ppb	124.787 ppb	962.453 ppb	123.942 %
Concentration per Run 1	117.381 %	122.206 %	0.375 ppb	-9.963 ppb	276.047 ppb	1,217.853 ppb	123.605 ppb	942.402 ppb	119.154 %
Concentration per Run 2	123.520 %	117.182 %	0.593 ppb	-8.178 ppb	323.923 ppb	1,347.305 ppb	139.872 ppb	1,010.842 ppb	126.717 %
Concentration per Run 3	124.950 %	115.290 %	0.439 ppb	-3.291 ppb	325.995 ppb	1,343.143 ppb	110.883 ppb	934.116 ppb	125.955 %
Concentration RSD	3.3 %	3.0 %	23.9 %	48.4 %	9.2 %	5.6 %	11.6 %	4.4 %	3.4 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	7.540 ppb	3.931 ppb	48.140 ppb	3,809.133 ppb	1.345 ppb	2.504 ppb	16.309 ppb	29.058 ppb	125.249 %
Concentration per Run 1	7.166 ppb	3.791 ppb	46.105 ppb	3,600.769 ppb	1.363 ppb	2.570 ppb	15.957 ppb	28.706 ppb	123.866 %
Concentration per Run 2	7.925 ppb	4.034 ppb	50.494 ppb	3,981.239 ppb	1.375 ppb	2.562 ppb	17.182 ppb	30.780 ppb	119.424 %
Concentration per Run 3	7.529 ppb	3.967 ppb	47.822 ppb	3,845.391 ppb	1.296 ppb	2.381 ppb	15.789 ppb	27.688 ppb	132.457 %
Concentration RSD	5.0 %	3.2 %	4.6 %	5.1 %	3.2 %	4.3 %	4.7 %	5.4 %	5.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	30.840 ppb	0.357 ppb	3.620 ppb	0.953 ppb	118.323 %	0.036 ppb	0.157 ppb	117.730 %	1.141 ppb
Concentration per Run 1	30.386 ppb	0.428 ppb	3.448 ppb	0.739 ppb	126.577 %	0.034 ppb	0.149 ppb	128.288 %	0.980 ppb
Concentration per Run 2	32.812 ppb	0.347 ppb	3.817 ppb	1.069 ppb	114.142 %	0.039 ppb	0.167 ppb	110.473 %	1.213 ppb
Concentration per Run 3	29.323 ppb	0.296 ppb	3.596 ppb	1.052 ppb	114.249 %	0.035 ppb	0.156 ppb	114.428 %	1.231 ppb
Concentration RSD	5.8 %	18.7 %	5.1 %	19.5 %	6.0 %	7.4 %	5.6 %	7.9 %	12.3 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	15.210 ppb	118.415 %	114.156 %	0.495 ppb	30.911 ppb	117.034 %
Concentration per Run 1	13.555 ppb	127.975 %	122.198 %	0.431 ppb	28.579 ppb	123.450 %
Concentration per Run 2	16.254 ppb	112.441 %	110.266 %	0.561 ppb	31.816 ppb	115.104 %
Concentration per Run 3	15.822 ppb	114.829 %	110.003 %	0.494 ppb	32.336 ppb	112.547 %
Concentration RSD	9.5 %	7.1 %	6.1 %	13.1 %	6.6 %	4.9 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index:	88	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	I2467794-03d10 6020TS	Rack	1		
Analysis started at:	11/26/2024 3:06:34 PM	Vial	57		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	112.647 %	115.377 %	2.883 ppb	740.554 ppb	27,622.361 ppb	26,295.997 ppb	2,551.000 ppb	115,315.137 ppb	115.202 %
Concentration per Run 1	110.981 %	119.466 %	2.916 ppb	701.193 ppb	26,014.157 ppb	24,493.313 ppb	2,489.932 ppb	111,083.337 ppb	111.141 %
Concentration per Run 2	113.721 %	107.264 %	2.822 ppb	810.416 ppb	30,139.262 ppb	28,730.311 ppb	2,720.972 ppb	124,520.595 ppb	117.847 %
Concentration per Run 3	113.240 %	119.401 %	2.912 ppb	710.052 ppb	26,713.666 ppb	25,664.365 ppb	2,442.096 ppb	110,341.480 ppb	116.618 %
Concentration RSD	1.3 %	6.1 %	1.8 %	8.2 %	8.0 %	8.3 %	5.8 %	6.9 %	3.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	46.488 ppb	43.327 ppb	3,529.186 ppb	44,234.862 ppb	10.393 ppb	30.993 ppb	106.096 ppb	179.536 ppb	125.699 %
Concentration per Run 1	44.685 ppb	41.706 ppb	3,460.118 ppb	43,080.063 ppb	10.188 ppb	30.871 ppb	104.240 ppb	178.639 ppb	123.293 %
Concentration per Run 2	50.487 ppb	47.675 ppb	3,813.729 ppb	47,948.939 ppb	11.227 ppb	33.369 ppb	114.646 ppb	193.601 ppb	117.700 %
Concentration per Run 3	44.293 ppb	40.601 ppb	3,313.712 ppb	41,675.582 ppb	9.764 ppb	28.740 ppb	99.403 ppb	166.366 ppb	136.106 %
Concentration RSD	7.5 %	8.8 %	7.3 %	7.4 %	7.2 %	7.5 %	7.3 %	7.6 %	7.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	113.921 ppb	3.458 ppb	256.053 ppb	4.471 ppb	113.653 %	0.264 ppb	0.946 ppb	116.621 %	6.628 ppb
Concentration per Run 1	111.394 ppb	3.458 ppb	243.461 ppb	3.696 ppb	123.222 %	0.240 ppb	0.854 ppb	125.236 %	6.021 ppb
Concentration per Run 2	124.396 ppb	3.594 ppb	277.890 ppb	5.381 ppb	105.522 %	0.284 ppb	1.084 ppb	110.754 %	6.967 ppb
Concentration per Run 3	105.974 ppb	3.321 ppb	246.806 ppb	4.336 ppb	112.217 %	0.267 ppb	0.899 ppb	113.874 %	6.895 ppb
Concentration RSD	8.3 %	3.9 %	7.4 %	19.0 %	7.9 %	8.5 %	12.9 %	6.5 %	7.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	386.792 ppb	120.174 %	116.378 %	0.214 ppb	177.516 ppb	116.094 %
Concentration per Run 1	349.271 ppb	129.779 %	124.865 %	0.116 ppb	162.525 ppb	127.378 %
Concentration per Run 2	410.426 ppb	111.287 %	109.124 %	0.275 ppb	187.505 ppb	107.841 %
Concentration per Run 3	400.679 ppb	119.455 %	115.144 %	0.252 ppb	182.519 ppb	113.063 %
Concentration RSD	8.5 %	7.7 %	6.8 %	40.2 %	7.4 %	8.7 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index:	89	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	I2467794-04d10 6020TS	Rack	1		
Analysis started at:	11/26/2024 3:11:03 PM	Vial	58		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	115.363 %	117.769 %	1.532 ppb	311.798 ppb	9,280.212 ppb	13,558.402 ppb	1,231.602 ppb	37,006.242 ppb	119.316 %
Concentration per Run 1	112.285 %	123.250 %	1.584 ppb	300.903 ppb	8,985.991 ppb	13,078.023 ppb	1,208.947 ppb	36,687.078 ppb	114.964 %
Concentration per Run 2	117.706 %	115.029 %	1.522 ppb	317.460 ppb	9,331.206 ppb	13,827.871 ppb	1,247.149 ppb	37,394.302 ppb	120.986 %
Concentration per Run 3	116.097 %	115.029 %	1.490 ppb	317.031 ppb	9,523.440 ppb	13,769.312 ppb	1,238.712 ppb	36,937.345 ppb	122.000 %
Concentration RSD	2.4 %	4.0 %	3.1 %	3.0 %	2.9 %	3.1 %	1.6 %	1.0 %	3.2 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	57.399 ppb	42.835 ppb	1,708.156 ppb	54,120.555 ppb	9.830 ppb	33.293 ppb	142.051 ppb	570.136 ppb	**127.518 %**
Concentration per Run 1	57.067 ppb	42.907 ppb	1,739.962 ppb	55,114.762 ppb	10.390 ppb	34.308 ppb	147.911 ppb	594.203 ppb	119.736 %
Concentration per Run 2	58.366 ppb	43.262 ppb	1,726.907 ppb	53,803.681 ppb	9.705 ppb	33.495 ppb	143.285 ppb	573.802 ppb	**127.906 %**
Concentration per Run 3	56.764 ppb	42.338 ppb	1,657.600 ppb	53,443.220 ppb	9.396 ppb	32.075 ppb	134.956 ppb	542.402 ppb	**134.912 %**
Concentration RSD	1.5 %	1.1 %	2.6 %	1.6 %	5.2 %	3.4 %	4.6 %	4.6 %	**6.0 %**

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	124.894 ppb	3.015 ppb	104.054 ppb	3.961 ppb	118.114 %	0.507 ppb	2.892 ppb	118.081 %	6.995 ppb
Concentration per Run 1	131.681 ppb	3.509 ppb	105.450 ppb	3.556 ppb	120.770 %	0.477 ppb	2.772 ppb	122.791 %	6.652 ppb
Concentration per Run 2	127.223 ppb	2.725 ppb	103.916 ppb	4.179 ppb	118.307 %	0.551 ppb	2.949 ppb	116.738 %	7.102 ppb
Concentration per Run 3	115.777 ppb	2.811 ppb	102.796 ppb	4.149 ppb	115.265 %	0.493 ppb	2.955 ppb	114.715 %	7.231 ppb
Concentration RSD	6.6 %	14.3 %	1.3 %	8.9 %	2.3 %	7.7 %	3.6 %	3.6 %	4.3 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	290.789 ppb	**121.689 %**	119.456 %	0.226 ppb	499.440 ppb	118.911 %
Concentration per Run 1	277.449 ppb	**125.961 %**	122.170 %	0.173 ppb	480.748 ppb	122.233 %
Concentration per Run 2	292.948 ppb	121.307 %	119.633 %	0.244 ppb	506.393 ppb	118.564 %
Concentration per Run 3	301.969 ppb	117.799 %	116.567 %	0.262 ppb	511.178 ppb	115.936 %
Concentration RSD	4.3 %	**3.4 %**	2.3 %	20.9 %	3.3 %	2.7 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index:	90	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	I2467794-05d10 6020TS	Rack	1		
Analysis started at:	11/26/2024 3:15:32 PM	Vial	59		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	110.951 %	112.811 %	2.391 ppb	463.904 ppb	26,137.615 ppb	25,475.442 ppb	2,845.412 ppb	98,188.605 ppb	112.850 %
Concentration per Run 1	107.721 %	116.725 %	2.404 ppb	437.785 ppb	24,939.157 ppb	23,910.424 ppb	2,736.443 ppb	93,240.392 ppb	110.937 %
Concentration per Run 2	112.042 %	107.003 %	2.404 ppb	500.557 ppb	27,918.459 ppb	27,159.010 ppb	2,982.316 ppb	104,881.587 ppb	112.672 %
Concentration per Run 3	113.091 %	114.703 %	2.366 ppb	453.370 ppb	25,555.230 ppb	25,356.893 ppb	2,817.477 ppb	96,443.836 ppb	114.942 %
Concentration RSD	2.6 %	4.5 %	0.9 %	7.0 %	6.0 %	6.4 %	4.4 %	6.1 %	1.8 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	58.486 ppb	57.194 ppb	2,983.368 ppb	65,678.227 ppb	14.343 ppb	42.280 ppb	158.889 ppb	246.129 ppb	121.889 %
Concentration per Run 1	54.154 ppb	54.445 ppb	2,839.434 ppb	64,081.098 ppb	13.827 ppb	40.574 ppb	154.587 ppb	241.555 ppb	122.292 %
Concentration per Run 2	62.474 ppb	61.147 ppb	3,151.146 ppb	69,848.509 ppb	15.358 ppb	45.879 ppb	172.265 ppb	266.021 ppb	115.445 %
Concentration per Run 3	58.831 ppb	55.991 ppb	2,959.526 ppb	63,105.074 ppb	13.843 ppb	40.387 ppb	149.816 ppb	230.813 ppb	127.929 %
Concentration RSD	7.1 %	6.1 %	5.3 %	5.5 %	6.1 %	7.4 %	7.4 %	7.3 %	5.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	132.056 ppb	3.539 ppb	244.601 ppb	5.361 ppb	110.761 %	0.298 ppb	1.205 ppb	112.173 %	8.521 ppb
Concentration per Run 1	129.524 ppb	3.457 ppb	226.772 ppb	4.703 ppb	122.173 %	0.263 ppb	1.069 ppb	120.278 %	7.790 ppb
Concentration per Run 2	141.394 ppb	3.464 ppb	265.636 ppb	5.855 ppb	101.563 %	0.328 ppb	1.268 ppb	104.827 %	9.164 ppb
Concentration per Run 3	125.251 ppb	3.696 ppb	241.394 ppb	5.524 ppb	108.547 %	0.302 ppb	1.277 ppb	111.415 %	8.608 ppb
Concentration RSD	6.3 %	3.8 %	8.0 %	11.1 %	9.5 %	10.9 %	9.7 %	6.9 %	8.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	413.698 ppb	114.806 %	112.066 %	0.106 ppb	238.960 ppb	111.838 %
Concentration per Run 1	373.429 ppb	124.571 %	122.459 %	0.051 ppb	215.972 ppb	121.677 %
Concentration per Run 2	445.705 ppb	105.932 %	102.711 %	0.128 ppb	261.853 ppb	103.671 %
Concentration per Run 3	421.960 ppb	113.916 %	111.028 %	0.139 ppb	239.053 ppb	110.166 %
Concentration RSD	8.9 %	8.1 %	8.8 %	45.5 %	9.6 %	8.2 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index:	91	User name	ALPHALAB\a2-icpmsq2	Comment	CCV/MCCV
Analysis label:	CCV	Rack	0		
Analysis started at:	11/26/2024 3:20:01 PM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	112.590 %	115.268 %	62.532 ppb	6,325.216 ppb	6,484.505 ppb	101.835 ppb	6,287.719 ppb	6,434.762 ppb	117.014 %
Concentration per Run 1	110.886 %	114.311 %	62.836 ppb	6,550.409 ppb	6,669.053 ppb	129.093 ppb	6,435.422 ppb	6,655.245 ppb	114.999 %
Concentration per Run 2	112.927 %	112.223 %	62.313 ppb	6,427.302 ppb	6,584.328 ppb	99.181 ppb	6,327.565 ppb	6,452.083 ppb	117.474 %
Concentration per Run 3	113.958 %	119.270 %	62.447 ppb	5,997.938 ppb	6,200.134 ppb	77.232 ppb	6,100.169 ppb	6,196.958 ppb	118.569 %
Recovery Percentage 1			104.220 %	105.420 %	108.075 %	169.726 %	104.795 %	107.246 %	
Concentration RSD	1.4 %	3.1 %	0.4 %	4.6 %	3.9 %	25.6 %	2.7 %	3.6 %	1.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	62.492 ppb	64.283 ppb	67.073 ppb	6,509.281 ppb	64.848 ppb	64.566 ppb	64.474 ppb	68.252 ppb	120.210 %
Concentration per Run 1	63.049 ppb	65.735 ppb	73.021 ppb	6,773.168 ppb	68.400 ppb	67.651 ppb	68.391 ppb	70.166 ppb	112.644 %
Concentration per Run 2	64.261 ppb	66.121 ppb	66.750 ppb	6,776.056 ppb	65.908 ppb	66.802 ppb	66.235 ppb	68.209 ppb	119.102 %
Concentration per Run 3	60.165 ppb	60.994 ppb	61.449 ppb	5,978.620 ppb	60.236 ppb	59.244 ppb	58.795 ppb	66.379 ppb	128.885 %
Recovery Percentage 1	104.153 %	107.139 %	111.789 %	108.488 %	108.080 %	107.609 %	107.456 %	113.753 %	
Concentration RSD	3.4 %	4.4 %	8.6 %	7.1 %	6.5 %	7.2 %	7.8 %	2.8 %	6.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	62.783 ppb	62.166 ppb	66.011 ppb	66.503 ppb	114.579 %	65.391 ppb	64.789 ppb	113.409 %	65.722 ppb
Concentration per Run 1	66.731 ppb	65.296 ppb	68.742 ppb	64.002 ppb	113.115 %	64.937 ppb	64.425 ppb	115.144 %	65.576 ppb
Concentration per Run 2	63.573 ppb	63.312 ppb	66.401 ppb	67.921 ppb	115.246 %	65.648 ppb	65.260 ppb	112.637 %	65.724 ppb
Concentration per Run 3	58.044 ppb	57.889 ppb	62.890 ppb	67.588 ppb	115.376 %	65.588 ppb	64.680 ppb	112.445 %	65.867 ppb
Recovery Percentage 1	104.638 %	103.609 %	110.018 %	110.839 %		108.985 %	107.981 %		109.537 %
Concentration RSD	7.0 %	6.2 %	4.5 %	3.3 %	1.1 %	0.6 %	0.7 %	1.3 %	0.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	65.790 ppb	115.107 %	113.066 %	64.322 ppb	66.624 ppb	113.170 %
Concentration per Run 1	66.698 ppb	113.952 %	111.630 %	60.822 ppb	66.485 ppb	113.152 %
Concentration per Run 2	63.966 ppb	115.753 %	113.003 %	65.425 ppb	67.804 ppb	112.762 %
Concentration per Run 3	66.706 ppb	115.616 %	114.565 %	66.718 ppb	65.584 ppb	113.596 %
Recovery Percentage 1	109.650 %			107.203 %	111.040 %	
Concentration RSD	2.4 %	0.9 %	1.3 %	4.8 %	1.7 %	0.4 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index: 92
Analysis label: CCB
Analysis started at: 11/26/2024 3:24:33 PM
User name ALPHALAB\a2-icpmsq2
Rack 0
Vial 10
Comment CCB

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	114.762 %	117.030 %	0.057 ppb	-14.923 ppb	5.920 ppb	3.199 ppb	-4.245 ppb	13.868 ppb	117.886 %
Concentration per Run 1	113.276 %	115.942 %	0.045 ppb	-11.107 ppb	10.782 ppb	5.975 ppb	1.508 ppb	28.133 ppb	117.260 %
Concentration per Run 2	115.315 %	118.096 %	0.063 ppb	-16.556 ppb	4.673 ppb	2.563 ppb	-4.797 ppb	12.857 ppb	118.350 %
Concentration per Run 3	115.695 %	117.052 %	0.063 ppb	-17.107 ppb	2.307 ppb	1.058 ppb	-9.445 ppb	0.614 ppb	118.048 %
Recovery Percentage 1			11.393 %	-2.985 %	8.458 %	31.989 %	-4.245 %	13.868 %	
Concentration RSD	1.1 %	0.9 %	17.9 %	22.2 %	73.9 %	78.8 %	129.5 %	99.4 %	0.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.003 ppb	0.053 ppb	0.529 ppb	21.520 ppb	0.033 ppb	-0.010 ppb	0.083 ppb	0.120 ppb	117.598 %
Concentration per Run 1	0.044 ppb	0.087 ppb	0.799 ppb	27.615 ppb	0.047 ppb	0.005 ppb	0.159 ppb	0.227 ppb	112.922 %
Concentration per Run 2	-0.011 ppb	0.043 ppb	0.588 ppb	18.930 ppb	0.027 ppb	0.009 ppb	0.058 ppb	0.091 ppb	116.724 %
Concentration per Run 3	-0.023 ppb	0.030 ppb	0.201 ppb	18.015 ppb	0.024 ppb	-0.044 ppb	0.033 ppb	0.040 ppb	123.149 %
Recovery Percentage 1	0.067 %	5.315 %	52.908 %	43.040 %	6.511 %	-0.500 %	8.349 %	2.395 %	
Concentration RSD	1,069.4 %	56.7 %	57.4 %	24.6 %	38.1 %	296.4 %	79.7 %	80.7 %	4.4 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.105 ppb	0.150 ppb	0.048 ppb	0.447 ppb	115.270 %	0.036 ppb	0.041 ppb	115.446 %	0.094 ppb
Concentration per Run 1	0.137 ppb	0.188 ppb	0.094 ppb	0.390 ppb	119.360 %	0.051 ppb	0.054 ppb	116.233 %	0.099 ppb
Concentration per Run 2	0.063 ppb	-0.066 ppb	0.037 ppb	0.450 ppb	111.275 %	0.038 ppb	0.042 ppb	113.015 %	0.093 ppb
Concentration per Run 3	0.114 ppb	0.326 ppb	0.013 ppb	0.500 ppb	115.175 %	0.019 ppb	0.027 ppb	117.091 %	0.090 ppb
Recovery Percentage 1	20.941 %	2.995 %	0.480 %	22.331 %		9.017 %	20.408 %		2.351 %
Concentration RSD	36.5 %	132.7 %	86.3 %	12.3 %	3.5 %	45.4 %	32.4 %	1.9 %	5.0 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.102 ppb	112.369 %	110.712 %	0.589 ppb	0.115 ppb	111.672 %
Concentration per Run 1	0.145 ppb	114.502 %	115.389 %	0.647 ppb	0.162 ppb	114.308 %
Concentration per Run 2	0.098 ppb	110.434 %	106.830 %	0.630 ppb	0.105 ppb	109.913 %
Concentration per Run 3	0.062 ppb	112.171 %	109.917 %	0.490 ppb	0.078 ppb	110.796 %
Recovery Percentage 1	20.326 %			58.899 %	11.490 %	
Concentration RSD	40.6 %	1.8 %	3.9 %	14.6 %	37.5 %	2.1 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index: 93
Analysis label: CCV
Analysis started at: 11/26/2024 3:31:12 PM
User name ALPHALAB\a2-icpmsq2
Rack 0
Vial 9
Comment CCV/MCCV

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	113.904 %	118.922 %	56.102 ppb	5,767.020 ppb	5,777.712 ppb	57.438 ppb	5,548.007 ppb	5,582.221 ppb	120.855 %
Concentration per Run 1	111.952 %	130.624 %	56.905 ppb	5,194.274 ppb	5,206.099 ppb	51.896 ppb	5,070.432 ppb	5,146.516 ppb	119.155 %
Concentration per Run 2	115.774 %	110.984 %	55.229 ppb	6,161.035 ppb	6,151.735 ppb	61.957 ppb	5,879.652 ppb	5,912.726 ppb	121.939 %
Concentration per Run 3	113.985 %	115.159 %	56.171 ppb	5,945.752 ppb	5,975.301 ppb	58.461 ppb	5,693.935 ppb	5,687.420 ppb	121.472 %
Recovery Percentage 1			93.503 %	96.117 %	96.295 %	95.730 %	92.467 %	93.037 %	
Concentration RSD	1.7 %	8.7 %	1.5 %	8.8 %	8.7 %	8.9 %	7.6 %	7.1 %	1.2 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	56.010 ppb	56.161 ppb	55.057 ppb	5,576.315 ppb	56.689 ppb	56.332 ppb	56.943 ppb	61.752 ppb	126.119 %
Concentration per Run 1	52.390 ppb	52.812 ppb	52.095 ppb	5,311.841 ppb	53.930 ppb	54.492 ppb	54.908 ppb	58.323 ppb	128.603 %
Concentration per Run 2	59.757 ppb	59.203 ppb	57.233 ppb	5,837.274 ppb	58.983 ppb	58.962 ppb	59.703 ppb	64.630 ppb	122.384 %
Concentration per Run 3	55.882 ppb	56.467 ppb	55.844 ppb	5,579.831 ppb	57.155 ppb	55.542 ppb	56.219 ppb	62.303 ppb	127.370 %
Recovery Percentage 1	93.350 %	93.601 %	91.762 %	92.939 %	94.482 %	93.887 %	94.906 %	102.920 %	
Concentration RSD	6.6 %	5.7 %	4.8 %	4.7 %	4.5 %	4.1 %	4.4 %	5.2 %	2.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	54.073 ppb	54.857 ppb	57.684 ppb	56.943 ppb	118.838 %	56.572 ppb	57.749 ppb	118.605 %	58.365 ppb
Concentration per Run 1	50.778 ppb	47.058 ppb	54.136 ppb	49.660 ppb	129.793 %	51.087 ppb	51.613 ppb	130.164 %	52.751 ppb
Concentration per Run 2	57.263 ppb	62.129 ppb	61.414 ppb	60.597 ppb	111.093 %	61.564 ppb	62.886 ppb	110.961 %	63.426 ppb
Concentration per Run 3	54.179 ppb	55.385 ppb	57.503 ppb	60.573 ppb	115.627 %	57.066 ppb	58.746 ppb	114.690 %	58.919 ppb
Recovery Percentage 1	90.122 %	91.428 %	96.141 %	94.905 %		94.287 %	96.248 %		97.276 %
Concentration RSD	6.0 %	13.8 %	6.3 %	11.1 %	8.2 %	9.3 %	9.9 %	8.6 %	9.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	58.567 ppb	117.225 %	117.208 %	54.404 ppb	57.563 ppb	119.928 %
Concentration per Run 1	54.124 ppb	126.370 %	127.776 %	42.418 ppb	50.728 ppb	136.804 %
Concentration per Run 2	62.814 ppb	109.188 %	110.273 %	61.943 ppb	63.200 ppb	108.196 %
Concentration per Run 3	58.763 ppb	116.118 %	113.576 %	58.849 ppb	58.762 ppb	114.783 %
Recovery Percentage 1	97.612 %			90.673 %	95.939 %	
Concentration RSD	7.4 %	7.4 %	7.9 %	19.3 %	11.0 %	12.5 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index: 94
Analysis label: CCB
Analysis started at: 11/26/2024 3:35:43 PM
User name ALPHALAB\a2-icpmsq2
Rack 0
Vial 10
Comment CCB

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	116.444 %	119.118 %	0.040 ppb	-17.044 ppb	1.879 ppb	-0.361 ppb	-4.431 ppb	2.604 ppb	118.993 %
Concentration per Run 1	113.635 %	116.008 %	0.039 ppb	-18.025 ppb	2.958 ppb	-0.212 ppb	-1.762 ppb	6.285 ppb	117.541 %
Concentration per Run 2	117.518 %	122.402 %	0.040 ppb	-16.575 ppb	1.643 ppb	-0.333 ppb	-3.075 ppb	1.506 ppb	117.854 %
Concentration per Run 3	118.179 %	118.944 %	0.041 ppb	-16.531 ppb	1.035 ppb	-0.538 ppb	-8.455 ppb	0.021 ppb	121.583 %
Recovery Percentage 1			7.952 %	-3.409 %	2.684 %	-3.612 %	-4.431 %	2.604 %	
Concentration RSD	2.1 %	2.7 %	2.4 %	5.0 %	52.3 %	45.7 %	80.0 %	125.7 %	1.9 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.014 ppb	0.019 ppb	0.055 ppb	9.910 ppb	0.025 ppb	-0.030 ppb	0.036 ppb	-0.003 ppb	117.959 %
Concentration per Run 1	0.011 ppb	0.037 ppb	0.087 ppb	10.776 ppb	0.044 ppb	0.058 ppb	0.044 ppb	0.023 ppb	115.382 %
Concentration per Run 2	0.051 ppb	0.019 ppb	0.068 ppb	9.780 ppb	0.023 ppb	-0.074 ppb	0.032 ppb	0.000 ppb	114.554 %
Concentration per Run 3	-0.019 ppb	0.001 ppb	0.010 ppb	9.174 ppb	0.008 ppb	-0.072 ppb	0.032 ppb	-0.033 ppb	123.941 %
Recovery Percentage 1	0.284 %	1.914 %	5.477 %	19.820 %	4.982 %	-1.477 %	3.629 %	-0.069 %	
Concentration RSD	247.1 %	93.8 %	72.4 %	8.2 %	73.5 %	255.7 %	18.8 %	805.7 %	4.4 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.019 ppb	0.376 ppb	0.007 ppb	0.469 ppb	119.970 %	0.026 ppb	0.024 ppb	117.395 %	0.083 ppb
Concentration per Run 1	0.011 ppb	0.440 ppb	0.020 ppb	0.424 ppb	123.939 %	0.038 ppb	0.028 ppb	117.092 %	0.082 ppb
Concentration per Run 2	0.004 ppb	0.329 ppb	0.000 ppb	0.439 ppb	117.281 %	0.025 ppb	0.026 ppb	118.029 %	0.079 ppb
Concentration per Run 3	0.041 ppb	0.359 ppb	0.000 ppb	0.544 ppb	118.689 %	0.017 ppb	0.017 ppb	117.065 %	0.087 ppb
Recovery Percentage 1	3.718 %	7.518 %	0.066 %	23.456 %		6.607 %	11.753 %		2.068 %
Concentration RSD	105.1 %	15.3 %	173.4 %	14.0 %	2.9 %	39.6 %	23.9 %	0.5 %	4.8 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.029 ppb	118.279 %	115.694 %	0.541 ppb	0.049 ppb	116.099 %
Concentration per Run 1	0.049 ppb	122.792 %	119.872 %	0.569 ppb	0.067 ppb	118.340 %
Concentration per Run 2	0.014 ppb	116.802 %	114.133 %	0.571 ppb	0.043 ppb	116.026 %
Concentration per Run 3	0.024 ppb	115.244 %	113.076 %	0.482 ppb	0.038 ppb	113.931 %
Recovery Percentage 1	5.789 %			54.084 %	4.920 %	
Concentration RSD	61.0 %	3.4 %	3.2 %	9.4 %	30.9 %	1.9 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index:	95	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	I2467794-06d10 6020TS	Rack	1		
Analysis started at:	11/26/2024 3:41:54 PM	Vial	60		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	111.674 %	117.922 %	2.127 ppb	429.181 ppb	22,536.501 ppb	22,481.069 ppb	2,118.175 ppb	80,141.483 ppb	116.730 %
Concentration per Run 1	113.793 %	122.794 %	2.052 ppb	413.916 ppb	21,565.978 ppb	21,477.481 ppb	2,094.120 ppb	78,400.213 ppb	118.816 %
Concentration per Run 2	111.478 %	114.050 %	2.130 ppb	439.362 ppb	23,259.336 ppb	23,146.098 ppb	2,186.835 ppb	81,958.882 ppb	115.423 %
Concentration per Run 3	109.749 %	116.921 %	2.200 ppb	434.264 ppb	22,784.189 ppb	22,819.627 ppb	2,073.571 ppb	80,065.354 ppb	115.950 %
Concentration RSD	1.8 %	3.8 %	3.5 %	3.1 %	3.9 %	3.9 %	2.8 %	2.2 %	1.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	83.803 ppb	59.157 ppb	2,164.264 ppb	64,747.519 ppb	18.091 ppb	68.911 ppb	154.063 ppb	530.543 ppb	123.948 %
Concentration per Run 1	80.859 ppb	57.546 ppb	2,128.995 ppb	64,344.080 ppb	18.226 ppb	69.009 ppb	156.138 ppb	528.533 ppb	122.376 %
Concentration per Run 2	87.587 ppb	62.024 ppb	2,245.893 ppb	66,624.123 ppb	18.677 ppb	70.446 ppb	155.372 ppb	544.067 ppb	120.567 %
Concentration per Run 3	82.962 ppb	57.901 ppb	2,117.905 ppb	63,274.353 ppb	17.370 ppb	67.278 ppb	150.680 ppb	519.029 ppb	128.901 %
Concentration RSD	4.1 %	4.2 %	3.3 %	2.6 %	3.7 %	2.3 %	1.9 %	2.4 %	3.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	142.426 ppb	4.276 ppb	160.117 ppb	4.736 ppb	116.348 %	0.842 ppb	2.688 ppb	119.538 %	5.730 ppb
Concentration per Run 1	139.473 ppb	4.220 ppb	156.662 ppb	4.320 ppb	121.698 %	0.803 ppb	2.593 ppb	124.870 %	5.512 ppb
Concentration per Run 2	147.324 ppb	4.398 ppb	164.055 ppb	4.919 ppb	113.161 %	0.881 ppb	2.717 ppb	115.530 %	5.958 ppb
Concentration per Run 3	140.482 ppb	4.210 ppb	159.633 ppb	4.969 ppb	114.184 %	0.841 ppb	2.753 ppb	118.214 %	5.721 ppb
Concentration RSD	3.0 %	2.5 %	2.3 %	7.6 %	4.0 %	4.7 %	3.1 %	4.0 %	3.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	287.050 ppb	121.654 %	119.248 %	0.296 ppb	326.599 ppb	121.708 %
Concentration per Run 1	271.012 ppb	127.145 %	123.044 %	0.255 ppb	303.450 ppb	130.617 %
Concentration per Run 2	290.138 ppb	118.594 %	118.083 %	0.322 ppb	340.786 ppb	116.363 %
Concentration per Run 3	300.000 ppb	119.223 %	116.616 %	0.309 ppb	335.560 ppb	118.144 %
Concentration RSD	5.1 %	3.9 %	2.8 %	12.0 %	6.2 %	6.4 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index:	96	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	I2467794-07d10 6020TS	Rack	2		
Analysis started at:	11/26/2024 3:46:23 PM	Vial	1		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	113.080 %	110.179 %	1.210 ppb	172.375 ppb	5,988.329 ppb	12,889.149 ppb	1,675.393 ppb	23,807.242 ppb	117.438 %
Concentration per Run 1	110.523 %	111.962 %	1.199 ppb	172.833 ppb	5,918.492 ppb	12,951.315 ppb	1,684.664 ppb	24,658.362 ppb	116.109 %
Concentration per Run 2	114.422 %	108.830 %	1.187 ppb	173.702 ppb	6,024.276 ppb	12,872.786 ppb	1,703.233 ppb	23,885.183 ppb	118.432 %
Concentration per Run 3	114.293 %	109.744 %	1.245 ppb	170.591 ppb	6,022.219 ppb	12,843.346 ppb	1,638.281 ppb	22,878.181 ppb	117.773 %
Concentration RSD	2.0 %	1.5 %	2.5 %	0.9 %	1.0 %	0.4 %	2.0 %	3.7 %	1.0 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	73.161 ppb	39.199 ppb	772.142 ppb	40,432.437 ppb	11.385 ppb	25.717 ppb	120.354 ppb	416.057 ppb	**120.526 %**
Concentration per Run 1	74.074 ppb	40.434 ppb	821.111 ppb	42,050.508 ppb	12.072 ppb	28.237 ppb	129.260 ppb	450.610 ppb	111.424 %
Concentration per Run 2	73.657 ppb	39.213 ppb	772.931 ppb	38,762.191 ppb	11.362 ppb	24.949 ppb	117.360 ppb	410.098 ppb	120.419 %
Concentration per Run 3	71.752 ppb	37.948 ppb	722.382 ppb	40,484.611 ppb	10.722 ppb	23.967 ppb	114.442 ppb	387.464 ppb	**129.734 %**
Concentration RSD	1.7 %	3.2 %	6.4 %	4.1 %	5.9 %	8.7 %	6.5 %	7.7 %	**7.6 %**

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	123.603 ppb	2.807 ppb	**60.715 ppb**	2.733 ppb	113.682 %	0.351 ppb	1.126 ppb	116.069 %	3.891 ppb
Concentration per Run 1	133.149 ppb	2.629 ppb	-5.529 ppb	2.680 ppb	110.123 %	0.346 ppb	1.132 ppb	114.518 %	3.976 ppb
Concentration per Run 2	123.338 ppb	2.729 ppb	95.769 ppb	2.843 ppb	115.703 %	0.366 ppb	1.144 ppb	118.356 %	3.814 ppb
Concentration per Run 3	114.322 ppb	3.062 ppb	91.903 ppb	2.676 ppb	115.222 %	0.342 ppb	1.100 ppb	115.333 %	3.884 ppb
Concentration RSD	7.6 %	8.1 %	**94.5 %**	3.5 %	2.7 %	3.7 %	2.0 %	1.7 %	2.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	156.926 ppb	117.381 %	115.137 %	0.250 ppb	237.894 ppb	114.599 %
Concentration per Run 1	161.170 ppb	114.301 %	112.004 %	0.205 ppb	243.083 ppb	112.567 %
Concentration per Run 2	152.355 ppb	117.367 %	115.366 %	0.268 ppb	238.474 ppb	114.488 %
Concentration per Run 3	157.255 ppb	120.476 %	118.041 %	0.277 ppb	232.127 ppb	116.742 %
Concentration RSD	2.8 %	2.6 %	2.6 %	15.7 %	2.3 %	1.8 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index: 97
Analysis label: LDR As 500
Analysis started at: 11/26/2024 3:50:51 PM
User name ALPHALAB\a2-icpmsq2
Rack 2
Vial 2
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	113.940 %	117.400 %	0.024 ppb	-16.278 ppb	18.713 ppb	26.322 ppb	-5.444 ppb	62.145 ppb	115.956 %
Concentration per Run 1	110.682 %	121.750 %	0.031 ppb	-19.562 ppb	31.556 ppb	44.949 ppb	-0.930 ppb	115.981 ppb	114.719 %
Concentration per Run 2	115.600 %	115.747 %	0.025 ppb	-14.118 ppb	13.876 ppb	19.364 ppb	-6.844 ppb	39.687 ppb	115.865 %
Concentration per Run 3	115.538 %	114.703 %	0.015 ppb	-15.153 ppb	10.707 ppb	14.652 ppb	-8.558 ppb	30.769 ppb	117.283 %
Concentration RSD	2.5 %	3.2 %	33.1 %	17.8 %	60.0 %	61.9 %	73.5 %	75.4 %	1.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.102 ppb	0.079 ppb	1.943 ppb	91.941 ppb	0.033 ppb	-0.012 ppb	0.211 ppb	0.873 ppb	118.181 %
Concentration per Run 1	0.183 ppb	0.138 ppb	3.085 ppb	148.032 ppb	0.054 ppb	0.087 ppb	0.362 ppb	1.432 ppb	118.488 %
Concentration per Run 2	0.078 ppb	0.047 ppb	1.501 ppb	67.409 ppb	0.025 ppb	-0.051 ppb	0.145 ppb	0.617 ppb	111.479 %
Concentration per Run 3	0.046 ppb	0.051 ppb	1.244 ppb	60.382 ppb	0.018 ppb	-0.072 ppb	0.125 ppb	0.570 ppb	124.577 %
Concentration RSD	70.4 %	65.1 %	51.3 %	53.0 %	59.0 %	727.8 %	62.3 %	55.5 %	5.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	495.996 ppb	0.072 ppb	0.165 ppb	0.013 ppb	116.713 %	0.007 ppb	0.009 ppb	114.918 %	0.034 ppb
Concentration per Run 1	483.720 ppb	0.018 ppb	0.276 ppb	0.015 ppb	124.363 %	0.014 ppb	0.021 ppb	123.141 %	0.028 ppb
Concentration per Run 2	531.240 ppb	0.052 ppb	0.119 ppb	0.011 ppb	112.509 %	0.001 ppb	0.008 ppb	109.456 %	0.045 ppb
Concentration per Run 3	473.028 ppb	0.148 ppb	0.099 ppb	0.014 ppb	113.265 %	0.006 ppb	-0.002 ppb	112.159 %	0.029 ppb
Concentration RSD	6.2 %	93.1 %	59.1 %	14.5 %	5.7 %	87.3 %	131.8 %	6.3 %	27.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.317 ppb	112.609 %	110.408 %	0.024 ppb	0.455 ppb	113.969 %
Concentration per Run 1	0.520 ppb	121.824 %	118.118 %	0.001 ppb	0.682 ppb	121.539 %
Concentration per Run 2	0.230 ppb	107.667 %	105.250 %	0.032 ppb	0.375 ppb	107.587 %
Concentration per Run 3	0.202 ppb	108.336 %	107.855 %	0.038 ppb	0.309 ppb	112.782 %
Concentration RSD	55.6 %	7.1 %	6.2 %	85.0 %	43.7 %	6.2 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index:	98	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG2002073-1d10 SPLP-6020T	Rack	2		
Analysis started at:	11/26/2024 3:56:52 PM	Vial	3		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	113.574 %	116.986 %	0.009 ppb	374.123 ppb	12.650 ppb	8.169 ppb	9.970 ppb	49.698 ppb	116.324 %
Concentration per Run 1	114.161 %	119.270 %	0.007 ppb	361.566 ppb	11.960 ppb	7.308 ppb	10.485 ppb	50.518 ppb	118.760 %
Concentration per Run 2	112.699 %	111.245 %	0.009 ppb	396.593 ppb	14.218 ppb	10.397 ppb	12.674 ppb	56.597 ppb	113.034 %
Concentration per Run 3	113.862 %	120.445 %	0.010 ppb	364.209 ppb	11.772 ppb	6.800 ppb	6.751 ppb	41.979 ppb	117.178 %
Concentration RSD	0.7 %	4.3 %	13.8 %	5.2 %	10.8 %	23.8 %	30.0 %	14.8 %	2.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.010 ppb	0.067 ppb	0.466 ppb	20.063 ppb	0.009 ppb	-0.046 ppb	0.226 ppb	4.290 ppb	121.836 %
Concentration per Run 1	-0.011 ppb	0.067 ppb	0.440 ppb	19.495 ppb	0.012 ppb	-0.070 ppb	0.194 ppb	4.388 ppb	116.805 %
Concentration per Run 2	-0.006 ppb	0.067 ppb	0.563 ppb	22.990 ppb	0.004 ppb	-0.007 ppb	0.267 ppb	4.357 ppb	121.204 %
Concentration per Run 3	-0.011 ppb	0.066 ppb	0.394 ppb	17.705 ppb	0.010 ppb	-0.061 ppb	0.216 ppb	4.124 ppb	127.497 %
Concentration RSD	31.0 %	1.0 %	18.8 %	13.4 %	47.2 %	74.9 %	16.6 %	3.4 %	4.4 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.440 ppb	0.000 ppb	0.189 ppb	-0.014 ppb	115.618 %	-0.001 ppb	0.001 ppb	115.867 %	0.016 ppb
Concentration per Run 1	0.384 ppb	0.010 ppb	0.193 ppb	-0.037 ppb	120.240 %	0.000 ppb	-0.001 ppb	121.695 %	0.004 ppb
Concentration per Run 2	0.527 ppb	0.013 ppb	0.198 ppb	-0.026 ppb	113.872 %	-0.002 ppb	0.006 ppb	113.020 %	0.017 ppb
Concentration per Run 3	0.410 ppb	-0.023 ppb	0.176 ppb	0.022 ppb	112.743 %	0.000 ppb	-0.002 ppb	112.884 %	0.028 ppb
Concentration RSD	17.3 %	26,983.7 %	6.1 %	228.1 %	3.5 %	113.3 %	493.0 %	4.4 %	74.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	2.394 ppb	114.963 %	113.322 %	0.000 ppb	0.110 ppb	115.386 %
Concentration per Run 1	2.276 ppb	121.468 %	119.614 %	-0.020 ppb	0.096 ppb	118.898 %
Concentration per Run 2	2.355 ppb	111.955 %	111.562 %	0.012 ppb	0.150 ppb	113.952 %
Concentration per Run 3	2.551 ppb	111.467 %	108.789 %	0.009 ppb	0.085 ppb	113.307 %
Concentration RSD	5.9 %	4.9 %	5.0 %	3,772.8 %	31.5 %	2.7 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index:	99	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG2002073-2d10 SPLP-6020T	Rack	2		
Analysis started at:	11/26/2024 4:01:20 PM	Vial	4		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	115.207 %	115.747 %	4.658 ppb	1,389.914 ppb	932.927 ppb	192.298 ppb	956.160 ppb	964.367 ppb	118.330 %
Concentration per Run 1	112.709 %	115.877 %	4.637 ppb	1,384.932 ppb	921.900 ppb	190.186 ppb	987.688 ppb	1,011.358 ppb	118.080 %
Concentration per Run 2	116.335 %	114.833 %	4.704 ppb	1,407.643 ppb	941.833 ppb	199.242 ppb	961.731 ppb	994.047 ppb	118.661 %
Concentration per Run 3	116.576 %	116.530 %	4.632 ppb	1,377.166 ppb	935.049 ppb	187.467 ppb	919.060 ppb	887.695 ppb	118.250 %
Concentration RSD	1.9 %	0.7 %	0.9 %	1.1 %	1.1 %	3.2 %	3.6 %	6.9 %	0.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	45.808 ppb	18.853 ppb	46.909 ppb	101.704 ppb	47.765 ppb	47.023 ppb	23.835 ppb	49.950 ppb	**124.077 %**
Concentration per Run 1	47.589 ppb	19.734 ppb	48.966 ppb	107.558 ppb	49.898 ppb	49.505 ppb	25.238 ppb	52.966 ppb	115.390 %
Concentration per Run 2	46.285 ppb	18.755 ppb	47.558 ppb	98.013 ppb	48.046 ppb	47.332 ppb	23.967 ppb	49.655 ppb	124.117 %
Concentration per Run 3	43.550 ppb	18.070 ppb	44.202 ppb	99.540 ppb	45.351 ppb	44.233 ppb	22.299 ppb	47.228 ppb	**132.724 %**
Concentration RSD	4.5 %	4.4 %	5.2 %	5.0 %	4.8 %	5.6 %	6.2 %	5.8 %	**7.0 %**

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	10.861 ppb	10.686 ppb	92.425 ppb	95.989 ppb	113.334 %	4.880 ppb	5.095 ppb	114.050 %	48.854 ppb
Concentration per Run 1	11.689 ppb	11.047 ppb	95.485 ppb	93.888 ppb	114.103 %	4.865 ppb	5.109 ppb	111.996 %	48.549 ppb
Concentration per Run 2	10.907 ppb	10.905 ppb	90.793 ppb	97.278 ppb	114.936 %	4.735 ppb	5.025 ppb	116.131 %	47.661 ppb
Concentration per Run 3	9.987 ppb	10.107 ppb	90.999 ppb	96.802 ppb	110.962 %	5.041 ppb	5.151 ppb	114.022 %	50.351 ppb
Concentration RSD	7.8 %	4.7 %	2.9 %	1.9 %	1.8 %	3.2 %	1.3 %	1.8 %	2.8 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	202.396 ppb	114.499 %	113.902 %	10.973 ppb	51.055 ppb	113.916 %
Concentration per Run 1	200.300 ppb	113.662 %	113.481 %	10.424 ppb	50.664 ppb	112.567 %
Concentration per Run 2	196.247 ppb	116.206 %	115.067 %	10.871 ppb	50.964 ppb	114.557 %
Concentration per Run 3	210.640 ppb	113.631 %	113.160 %	11.624 ppb	51.536 ppb	114.624 %
Concentration RSD	3.7 %	1.3 %	0.9 %	5.5 %	0.9 %	1.0 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index: 100
Analysis label: L2468082-04d10 SPLP-6020T
Analysis started at: 11/26/2024 4:05:48 PM
User name ALPHALAB\a2-icpmsq2
Rack 2
Vial 5
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	115.429 %	118.596 %	0.021 ppb	2,906.104 ppb	336.279 ppb	45.835 ppb	596.555 ppb	2,015.955 ppb	121.259 %
Concentration per Run 1	114.344 %	117.508 %	0.038 ppb	2,915.271 ppb	345.493 ppb	47.014 ppb	606.719 ppb	2,069.364 ppb	121.820 %
Concentration per Run 2	117.500 %	116.791 %	0.017 ppb	3,038.939 ppb	348.831 ppb	47.312 ppb	620.267 ppb	2,077.120 ppb	125.436 %
Concentration per Run 3	114.443 %	121.489 %	0.008 ppb	2,764.103 ppb	314.514 ppb	43.178 ppb	562.679 ppb	1,901.381 ppb	116.521 %
Concentration RSD	1.6 %	2.1 %	73.1 %	4.7 %	5.6 %	5.0 %	5.0 %	4.9 %	3.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.188 ppb	0.578 ppb	6.637 ppb	80.738 ppb	0.686 ppb	6.066 ppb	19.617 ppb	23.622 ppb	125.505 %
Concentration per Run 1	0.155 ppb	0.589 ppb	6.775 ppb	83.836 ppb	0.784 ppb	6.318 ppb	20.809 ppb	25.386 ppb	119.542 %
Concentration per Run 2	0.210 ppb	0.625 ppb	7.037 ppb	83.083 ppb	0.668 ppb	6.684 ppb	20.008 ppb	23.840 ppb	120.259 %
Concentration per Run 3	0.199 ppb	0.519 ppb	6.098 ppb	75.294 ppb	0.606 ppb	5.195 ppb	18.033 ppb	21.641 ppb	136.714 %
Concentration RSD	15.5 %	9.3 %	7.3 %	5.9 %	13.2 %	12.8 %	7.3 %	8.0 %	7.7 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.122 ppb	0.106 ppb	5.519 ppb	1.309 ppb	117.412 %	0.058 ppb	0.086 ppb	116.470 %	0.339 ppb
Concentration per Run 1	0.154 ppb	0.066 ppb	5.552 ppb	1.162 ppb	119.282 %	0.053 ppb	0.101 ppb	119.090 %	0.320 ppb
Concentration per Run 2	0.129 ppb	0.110 ppb	5.726 ppb	1.294 ppb	116.492 %	0.060 ppb	0.083 ppb	115.374 %	0.334 ppb
Concentration per Run 3	0.083 ppb	0.142 ppb	5.280 ppb	1.470 ppb	116.464 %	0.061 ppb	0.073 ppb	114.947 %	0.364 ppb
Concentration RSD	29.6 %	36.0 %	4.1 %	11.8 %	1.4 %	7.6 %	16.6 %	2.0 %	6.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	15.168 ppb	115.115 %	114.312 %	0.137 ppb	5.218 ppb	118.832 %
Concentration per Run 1	14.236 ppb	118.767 %	116.808 %	0.117 ppb	5.040 ppb	122.480 %
Concentration per Run 2	15.526 ppb	111.457 %	112.874 %	0.169 ppb	5.423 ppb	115.388 %
Concentration per Run 3	15.743 ppb	115.122 %	113.252 %	0.126 ppb	5.189 ppb	118.627 %
Concentration RSD	5.4 %	3.2 %	1.9 %	20.4 %	3.7 %	3.0 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index: 101
Analysis label: WG2002073-3d10 SPLP-6020T
Analysis started at: 11/26/2024 4:10:16 PM
User name ALPHALAB\a2-icpmsq2
Rack 2
Vial 6
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	114.372 %	115.703 %	4.384 ppb	3,653.166 ppb	1,171.851 ppb	220.730 ppb	1,410.254 ppb	2,793.063 ppb	118.464 %
Concentration per Run 1	111.993 %	117.835 %	4.375 ppb	3,519.919 ppb	1,115.742 ppb	217.393 ppb	1,411.862 ppb	2,792.164 ppb	116.216 %
Concentration per Run 2	114.177 %	111.701 %	4.369 ppb	3,855.145 ppb	1,246.844 ppb	230.083 ppb	1,471.180 ppb	2,864.342 ppb	121.278 %
Concentration per Run 3	116.948 %	117.574 %	4.407 ppb	3,584.434 ppb	1,152.967 ppb	214.715 ppb	1,347.720 ppb	2,722.684 ppb	117.897 %
Concentration RSD	2.2 %	3.0 %	0.5 %	4.9 %	5.8 %	3.7 %	4.4 %	2.5 %	2.2 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	42.272 ppb	17.661 ppb	49.505 ppb	162.575 ppb	44.334 ppb	48.968 ppb	40.333 ppb	65.713 ppb	123.536 %
Concentration per Run 1	40.633 ppb	17.201 ppb	49.635 ppb	159.394 ppb	44.568 ppb	49.689 ppb	40.851 ppb	66.814 ppb	118.963 %
Concentration per Run 2	45.042 ppb	18.740 ppb	51.553 ppb	176.066 ppb	46.311 ppb	50.980 ppb	41.877 ppb	67.588 ppb	120.576 %
Concentration per Run 3	41.141 ppb	17.043 ppb	47.326 ppb	152.265 ppb	42.123 ppb	46.236 ppb	38.270 ppb	62.736 ppb	131.069 %
Concentration RSD	5.7 %	5.3 %	4.3 %	7.5 %	4.7 %	5.0 %	4.6 %	4.0 %	5.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	10.101 ppb	9.914 ppb	89.131 ppb	89.118 ppb	115.888 %	4.634 ppb	4.779 ppb	115.281 %	45.250 ppb
Concentration per Run 1	10.278 ppb	10.440 ppb	87.180 ppb	81.379 ppb	119.817 %	4.347 ppb	4.501 ppb	121.297 %	42.436 ppb
Concentration per Run 2	10.470 ppb	9.869 ppb	92.677 ppb	94.519 ppb	112.997 %	4.914 ppb	5.029 ppb	112.842 %	46.970 ppb
Concentration per Run 3	9.556 ppb	9.432 ppb	87.537 ppb	91.458 ppb	114.849 %	4.642 ppb	4.808 ppb	111.705 %	46.344 ppb
Concentration RSD	4.8 %	5.1 %	3.5 %	7.7 %	3.0 %	6.1 %	5.6 %	4.5 %	5.4 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	196.266 ppb	115.790 %	112.645 %	10.294 ppb	51.164 ppb	117.004 %
Concentration per Run 1	182.984 ppb	121.799 %	115.842 %	8.846 ppb	46.516 ppb	126.668 %
Concentration per Run 2	204.494 ppb	111.727 %	109.029 %	10.914 ppb	53.852 ppb	111.610 %
Concentration per Run 3	201.320 ppb	113.842 %	113.066 %	11.120 ppb	53.123 ppb	112.733 %
Concentration RSD	5.9 %	4.6 %	3.0 %	12.2 %	7.9 %	7.2 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index:	102	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG2002073-4d10 SPLP-6020T	Rack	2		
Analysis started at:	11/26/2024 4:14:45 PM	Vial	7		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	114.766 %	110.005 %	0.028 ppb	2,983.437 ppb	354.278 ppb	56.155 ppb	608.995 ppb	2,035.155 ppb	116.271 %
Concentration per Run 1	115.216 %	116.921 %	0.040 ppb	2,836.296 ppb	326.801 ppb	51.942 ppb	594.536 ppb	2,022.369 ppb	117.221 %
Concentration per Run 2	116.050 %	101.392 %	0.028 ppb	3,231.194 ppb	392.618 ppb	61.381 ppb	653.848 ppb	2,213.545 ppb	117.727 %
Concentration per Run 3	113.033 %	111.701 %	0.015 ppb	2,882.820 ppb	343.415 ppb	55.141 ppb	578.602 ppb	1,869.550 ppb	113.864 %
Concentration RSD	1.4 %	7.2 %	44.6 %	7.2 %	9.7 %	8.5 %	6.5 %	8.5 %	1.8 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.191 ppb	0.655 ppb	6.033 ppb	98.462 ppb	0.710 ppb	6.169 ppb	19.733 ppb	24.171 ppb	**123.116 %**
Concentration per Run 1	0.159 ppb	0.622 ppb	6.121 ppb	98.956 ppb	0.746 ppb	6.166 ppb	19.438 ppb	24.034 ppb	120.154 %
Concentration per Run 2	0.229 ppb	0.702 ppb	6.384 ppb	99.880 ppb	0.717 ppb	6.838 ppb	21.420 ppb	26.419 ppb	114.447 %
Concentration per Run 3	0.186 ppb	0.641 ppb	5.593 ppb	96.550 ppb	0.667 ppb	5.501 ppb	18.340 ppb	22.059 ppb	**134.746 %**
Concentration RSD	18.5 %	6.4 %	6.7 %	1.7 %	5.6 %	10.8 %	7.9 %	9.0 %	**8.5 %**

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.133 ppb	0.126 ppb	5.571 ppb	1.391 ppb	111.140 %	0.178 ppb	0.078 ppb	110.110 %	0.392 ppb
Concentration per Run 1	0.152 ppb	0.186 ppb	5.428 ppb	1.250 ppb	118.479 %	0.157 ppb	0.073 ppb	117.841 %	0.316 ppb
Concentration per Run 2	0.134 ppb	0.186 ppb	6.053 ppb	1.481 ppb	101.881 %	0.193 ppb	0.085 ppb	101.407 %	0.421 ppb
Concentration per Run 3	0.111 ppb	0.006 ppb	5.231 ppb	1.443 ppb	113.060 %	0.184 ppb	0.076 ppb	111.082 %	0.438 ppb
Concentration RSD	15.3 %	82.3 %	7.7 %	8.9 %	7.6 %	10.4 %	8.4 %	7.5 %	16.8 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	16.122 ppb	109.878 %	106.189 %	0.121 ppb	5.458 ppb	111.094 %
Concentration per Run 1	15.074 ppb	116.489 %	112.334 %	0.091 ppb	5.156 ppb	117.920 %
Concentration per Run 2	18.060 ppb	101.742 %	99.360 %	0.156 ppb	5.866 ppb	102.778 %
Concentration per Run 3	15.232 ppb	111.402 %	106.872 %	0.115 ppb	5.353 ppb	112.583 %
Concentration RSD	10.4 %	6.8 %	6.1 %	27.2 %	6.7 %	6.9 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index:	103	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG2002073-6d50 SPLP-6020T	Rack	2		
Analysis started at:	11/26/2024 4:19:13 PM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	69.824 %	114.529 %	0.057 ppb	575.790 ppb	71.684 ppb	9.731 ppb	116.407 ppb	420.703 ppb	11.985 %
Concentration per Run 1	70.387 %	115.877 %	0.052 ppb	553.577 ppb	67.562 ppb	10.925 ppb	122.029 ppb	426.450 ppb	12.249 %
Concentration per Run 2	69.511 %	110.396 %	0.057 ppb	603.027 ppb	74.329 ppb	9.619 ppb	116.505 ppb	447.911 ppb	11.827 %
Concentration per Run 3	69.575 %	117.313 %	0.062 ppb	570.765 ppb	73.162 ppb	8.650 ppb	110.687 ppb	387.748 ppb	11.879 %
Concentration RSD	0.7 %	3.2 %	8.9 %	4.4 %	5.0 %	11.7 %	4.9 %	7.2 %	1.9 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.015 ppb	0.100 ppb	1.446 ppb	18.011 ppb	0.146 ppb	1.246 ppb	4.119 ppb	4.967 ppb	118.669 %
Concentration per Run 1	0.029 ppb	0.100 ppb	1.516 ppb	19.329 ppb	0.136 ppb	1.214 ppb	4.212 ppb	5.308 ppb	112.757 %
Concentration per Run 2	0.011 ppb	0.121 ppb	1.473 ppb	17.201 ppb	0.168 ppb	1.300 ppb	4.021 ppb	5.086 ppb	117.982 %
Concentration per Run 3	0.005 ppb	0.080 ppb	1.348 ppb	17.503 ppb	0.134 ppb	1.226 ppb	4.123 ppb	4.508 ppb	125.270 %
Concentration RSD	81.8 %	20.4 %	6.0 %	6.4 %	13.4 %	3.7 %	2.3 %	8.3 %	5.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.016 ppb	-0.015 ppb	1.103 ppb	0.163 ppb	116.089 %	0.011 ppb	0.013 ppb	113.945 %	0.083 ppb
Concentration per Run 1	0.033 ppb	-0.110 ppb	1.112 ppb	0.080 ppb	120.585 %	0.010 ppb	0.006 ppb	115.786 %	0.067 ppb
Concentration per Run 2	0.003 ppb	0.072 ppb	1.115 ppb	0.231 ppb	113.100 %	0.013 ppb	0.021 ppb	113.178 %	0.101 ppb
Concentration per Run 3	0.013 ppb	-0.006 ppb	1.083 ppb	0.178 ppb	114.582 %	0.009 ppb	0.014 ppb	112.870 %	0.082 ppb
Concentration RSD	94.0 %	617.0 %	1.6 %	47.2 %	3.4 %	18.9 %	55.3 %	1.4 %	20.0 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	2.923 ppb	114.110 %	111.148 %	0.009 ppb	1.078 ppb	114.231 %
Concentration per Run 1	2.685 ppb	119.797 %	116.088 %	-0.018 ppb	0.989 ppb	118.376 %
Concentration per Run 2	2.958 ppb	111.969 %	107.308 %	0.019 ppb	1.121 ppb	111.595 %
Concentration per Run 3	3.124 ppb	110.563 %	110.050 %	0.027 ppb	1.123 ppb	112.721 %
Concentration RSD	7.6 %	4.4 %	4.0 %	260.6 %	7.1 %	3.2 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index:	104	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	xL2468082-08d10 SPLP-6020T	Rack	2		
Analysis started at:	11/26/2024 4:23:42 PM	Vial	10		

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index: 105 User name ALPHALAB\a2-icpmsq2 Comment <Comment>
Analysis label: CCV Rack 0
Analysis started at: 11/26/2024 4:28:11 PM Vial 9

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	62.483 %	234.202 %	35.345 ppb	4,160.117 ppb	4,137.515 ppb	39.838 ppb	4,231.620 ppb	4,726.315 ppb	8.851 %
Concentration per Run 1	65.173 %	241.228 %	34.277 ppb	3,979.537 ppb	3,898.213 ppb	37.796 ppb	4,178.899 ppb	4,612.217 ppb	9.400 %
Concentration per Run 2	61.222 %	230.917 %	35.682 ppb	4,260.773 ppb	4,326.303 ppb	41.911 ppb	4,325.615 ppb	4,865.954 ppb	8.589 %
Concentration per Run 3	61.055 %	230.460 %	36.075 ppb	4,240.042 ppb	4,188.030 ppb	39.805 ppb	4,190.347 ppb	4,700.774 ppb	8.565 %
Recovery Percentage 1			58.908 %	69.335 %	68.959 %	66.396 %	70.527 %	78.772 %	
Concentration RSD	3.7 %	2.6 %	2.7 %	3.8 %	5.3 %	5.2 %	1.9 %	2.7 %	5.4 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	46.794 ppb	44.262 ppb	46.187 ppb	4,907.796 ppb	51.352 ppb	52.569 ppb	59.300 ppb	75.276 ppb	108.360 %
Concentration per Run 1	45.904 ppb	43.416 ppb	46.733 ppb	4,923.929 ppb	50.992 ppb	52.352 ppb	59.820 ppb	76.600 ppb	103.276 %
Concentration per Run 2	47.821 ppb	44.968 ppb	46.242 ppb	4,937.680 ppb	52.148 ppb	53.503 ppb	60.890 ppb	77.191 ppb	106.987 %
Concentration per Run 3	46.657 ppb	44.400 ppb	45.585 ppb	4,861.780 ppb	50.915 ppb	51.852 ppb	57.189 ppb	72.037 ppb	114.818 %
Recovery Percentage 1	77.990 %	73.769 %	76.978 %	81.797 %	85.587 %	87.615 %	98.833 %	125.460 %	
Concentration RSD	2.1 %	1.8 %	1.2 %	0.8 %	1.3 %	1.6 %	3.2 %	3.7 %	5.4 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	68.569 ppb	114.464 ppb	60.210 ppb	56.834 ppb	122.481 %	65.752 ppb	66.982 ppb	120.790 %	49.842 ppb
Concentration per Run 1	70.575 ppb	117.950 ppb	59.751 ppb	53.376 ppb	126.806 %	63.490 ppb	64.555 ppb	125.858 %	47.003 ppb
Concentration per Run 2	69.677 ppb	115.231 ppb	61.690 ppb	59.412 ppb	118.377 %	66.367 ppb	68.345 ppb	118.273 %	50.755 ppb
Concentration per Run 3	65.456 ppb	110.211 ppb	59.188 ppb	57.714 ppb	122.261 %	67.401 ppb	68.046 ppb	118.238 %	51.769 ppb
Recovery Percentage 1	114.282 %	190.773 %	100.350 %	94.723 %		109.587 %	111.637 %		83.071 %
Concentration RSD	4.0 %	3.4 %	2.2 %	5.5 %	3.4 %	3.1 %	3.1 %	3.6 %	5.0 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	50.694 ppb	136.920 %	136.020 %	59.593 ppb	59.704 ppb	151.890 %
Concentration per Run 1	47.664 ppb	142.035 %	140.603 %	53.843 ppb	57.481 ppb	158.451 %
Concentration per Run 2	51.337 ppb	134.921 %	133.348 %	61.236 ppb	60.322 ppb	149.898 %
Concentration per Run 3	53.081 ppb	133.803 %	134.110 %	63.701 ppb	61.309 ppb	147.321 %
Recovery Percentage 1	84.490 %			99.322 %	99.507 %	
Concentration RSD	5.5 %	3.3 %	2.9 %	8.6 %	3.3 %	3.8 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index:	106	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	CCB	Rack	0		
Analysis started at:	11/26/2024 4:32:43 PM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	70.777 %	241.532 %	0.121 ppb	-45.661 ppb	0.283 ppb	-0.935 ppb	-28.584 ppb	-10.025 ppb	10.666 %
Concentration per Run 1	69.897 %	248.601 %	0.150 ppb	-46.310 ppb	0.283 ppb	-1.052 ppb	-28.712 ppb	-10.215 ppb	10.336 %
Concentration per Run 2	70.709 %	235.681 %	0.106 ppb	-44.684 ppb	0.374 ppb	-0.730 ppb	-30.740 ppb	-8.269 ppb	10.683 %
Concentration per Run 3	71.724 %	240.314 %	0.105 ppb	-45.988 ppb	0.191 ppb	-1.022 ppb	-26.300 ppb	-11.591 ppb	10.979 %
Recovery Percentage 1			24.110 %	-9.132 %	0.404 %	-9.348 %	-28.584 %	-10.025 %	
Concentration RSD	1.3 %	2.7 %	21.4 %	1.9 %	32.4 %	19.0 %	7.8 %	16.7 %	3.0 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.026 ppb	-0.036 ppb	-0.019 ppb	5.092 ppb	0.006 ppb	0.271 ppb	0.056 ppb	0.074 ppb	112.148 %
Concentration per Run 1	-0.021 ppb	-0.035 ppb	-0.017 ppb	4.499 ppb	0.007 ppb	0.279 ppb	0.057 ppb	0.148 ppb	109.375 %
Concentration per Run 2	-0.019 ppb	-0.035 ppb	-0.002 ppb	5.036 ppb	0.007 ppb	0.320 ppb	0.044 ppb	0.040 ppb	110.326 %
Concentration per Run 3	-0.037 ppb	-0.038 ppb	-0.037 ppb	5.741 ppb	0.004 ppb	0.213 ppb	0.068 ppb	0.035 ppb	116.742 %
Recovery Percentage 1	-0.518 %	-3.615 %	-1.861 %	10.185 %	1.145 %	13.543 %	5.629 %	1.484 %	
Concentration RSD	38.3 %	4.0 %	94.5 %	12.2 %	31.5 %	19.9 %	22.2 %	86.0 %	3.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	-0.097 ppb	0.315 ppb	-0.011 ppb	0.505 ppb	129.560 %	0.016 ppb	0.012 ppb	124.462 %	0.057 ppb
Concentration per Run 1	-0.125 ppb	0.410 ppb	-0.009 ppb	0.491 ppb	135.286 %	0.021 ppb	0.010 ppb	127.223 %	0.051 ppb
Concentration per Run 2	-0.091 ppb	0.295 ppb	-0.015 ppb	0.405 ppb	125.660 %	0.018 ppb	0.016 ppb	123.110 %	0.047 ppb
Concentration per Run 3	-0.076 ppb	0.240 ppb	-0.009 ppb	0.618 ppb	127.733 %	0.010 ppb	0.009 ppb	123.052 %	0.071 ppb
Recovery Percentage 1	-19.417 %	6.303 %	-0.111 %	25.237 %		4.044 %	5.926 %		1.413 %
Concentration RSD	25.6 %	27.5 %	30.3 %	21.2 %	3.9 %	34.8 %	31.0 %	1.9 %	23.3 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.000 ppb	144.288 %	145.742 %	0.565 ppb	0.032 ppb	159.784 %
Concentration per Run 1	0.005 ppb	149.920 %	151.929 %	0.581 ppb	0.033 ppb	168.425 %
Concentration per Run 2	0.000 ppb	140.723 %	141.856 %	0.621 ppb	0.033 ppb	157.102 %
Concentration per Run 3	-0.005 ppb	142.220 %	143.442 %	0.494 ppb	0.029 ppb	153.825 %
Recovery Percentage 1	0.028 %			56.536 %	3.178 %	
Concentration RSD	3,544.2 %	3.4 %	3.7 %	11.6 %	7.5 %	4.8 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index: 107 User name ALPHALAB\a2-icpmsq2 Comment <Comment>
Analysis label: CCV Rack 0
Analysis started at: 11/26/2024 5:02:09 PM Vial 9

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	115.808 %	117.335 %	56.418 ppb	6,255.300 ppb	6,260.245 ppb	63.449 ppb	5,852.468 ppb	5,668.135 ppb	120.862 %
Concentration per Run 1	113.826 %	130.885 %	56.445 ppb	5,295.921 ppb	5,448.153 ppb	53.327 ppb	5,121.318 ppb	5,052.717 ppb	119.729 %
Concentration per Run 2	115.233 %	108.830 %	57.267 ppb	6,996.120 ppb	7,016.514 ppb	72.133 ppb	6,501.787 ppb	6,335.408 ppb	121.035 %
Concentration per Run 3	118.365 %	112.289 %	55.541 ppb	6,473.858 ppb	6,316.066 ppb	64.886 ppb	5,934.297 ppb	5,616.279 ppb	121.820 %
Recovery Percentage 1			94.030 %	104.255 %	104.337 %	105.748 %	97.541 %	94.469 %	
Concentration RSD	2.0 %	10.1 %	1.5 %	13.9 %	12.6 %	14.9 %	11.9 %	11.3 %	0.9 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	57.975 ppb	61.131 ppb	62.012 ppb	6,140.758 ppb	61.984 ppb	62.065 ppb	61.973 ppb	65.916 ppb	121.526 %
Concentration per Run 1	47.928 ppb	53.051 ppb	53.367 ppb	5,283.140 ppb	54.338 ppb	54.576 ppb	54.664 ppb	56.750 ppb	134.182 %
Concentration per Run 2	65.118 ppb	69.019 ppb	70.539 ppb	6,954.374 ppb	69.877 ppb	70.355 ppb	71.487 ppb	76.767 ppb	109.953 %
Concentration per Run 3	60.880 ppb	61.323 ppb	62.129 ppb	6,184.759 ppb	61.737 ppb	61.264 ppb	59.767 ppb	64.230 ppb	120.442 %
Recovery Percentage 1	96.626 %	101.885 %	103.353 %	102.346 %	103.306 %	103.442 %	103.288 %	109.860 %	
Concentration RSD	15.4 %	13.1 %	13.8 %	13.6 %	12.5 %	12.8 %	13.9 %	15.3 %	10.0 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	57.012 ppb	56.588 ppb	60.644 ppb	59.775 ppb	113.815 %	58.805 ppb	58.873 ppb	113.750 %	60.907 ppb
Concentration per Run 1	49.759 ppb	47.729 ppb	52.962 ppb	49.560 ppb	127.407 %	50.480 ppb	50.226 ppb	129.186 %	51.784 ppb
Concentration per Run 2	63.425 ppb	66.689 ppb	69.089 ppb	68.847 ppb	99.996 %	66.327 ppb	67.782 ppb	102.571 %	69.104 ppb
Concentration per Run 3	57.852 ppb	55.345 ppb	59.881 ppb	60.918 ppb	114.042 %	59.607 ppb	58.609 ppb	109.491 %	61.833 ppb
Recovery Percentage 1	95.020 %	94.313 %	101.073 %	99.625 %		98.008 %	98.121 %		101.511 %
Concentration RSD	12.1 %	16.9 %	13.3 %	16.2 %	12.0 %	13.5 %	14.9 %	12.1 %	14.3 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	61.365 ppb	113.296 %	110.824 %	58.433 ppb	59.794 ppb	112.093 %
Concentration per Run 1	53.021 ppb	128.091 %	125.409 %	43.047 ppb	50.289 ppb	130.742 %
Concentration per Run 2	69.976 ppb	98.813 %	97.089 %	68.616 ppb	69.343 ppb	97.815 %
Concentration per Run 3	61.096 ppb	112.985 %	109.973 %	63.637 ppb	59.748 ppb	107.721 %
Recovery Percentage 1	102.274 %			97.389 %	99.656 %	
Concentration RSD	13.8 %	12.9 %	12.8 %	23.2 %	15.9 %	15.1 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index: 108
Analysis label: CCB
Analysis started at: 11/26/2024 5:07:53 PM
User name ALPHALAB\a2-icpmsq2
Rack 0
Vial 10
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	114.632 %	115.290 %	0.004 ppb	20.433 ppb	-0.961 ppb	-0.278 ppb	-8.009 ppb	-1.538 ppb	116.262 %
Concentration per Run 1	113.024 %	123.055 %	0.004 ppb	14.888 ppb	-1.094 ppb	-0.305 ppb	-5.482 ppb	-1.625 ppb	115.205 %
Concentration per Run 2	116.719 %	110.853 %	0.003 ppb	24.362 ppb	-1.294 ppb	-0.359 ppb	-4.278 ppb	1.043 ppb	119.114 %
Concentration per Run 3	114.153 %	111.962 %	0.003 ppb	22.049 ppb	-0.496 ppb	-0.169 ppb	-14.267 ppb	-4.034 ppb	114.466 %
Recovery Percentage 1			0.735 %	4.087 %	-1.373 %	-2.779 %	-8.009 %	-1.538 %	
Concentration RSD	1.7 %	5.9 %	19.6 %	24.2 %	43.2 %	35.1 %	68.1 %	165.1 %	2.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.007 ppb	0.007 ppb	-0.039 ppb	2.533 ppb	-0.003 ppb	-0.012 ppb	0.040 ppb	0.006 ppb	113.298 %
Concentration per Run 1	0.012 ppb	-0.002 ppb	-0.054 ppb	1.644 ppb	0.002 ppb	0.012 ppb	0.036 ppb	0.086 ppb	110.330 %
Concentration per Run 2	-0.039 ppb	0.017 ppb	-0.018 ppb	2.372 ppb	-0.003 ppb	0.027 ppb	0.077 ppb	-0.028 ppb	111.848 %
Concentration per Run 3	0.006 ppb	0.007 ppb	-0.044 ppb	3.583 ppb	-0.008 ppb	-0.074 ppb	0.008 ppb	-0.039 ppb	117.714 %
Recovery Percentage 1	-0.138 %	0.724 %	-3.883 %	5.066 %	-0.586 %	-0.585 %	4.010 %	0.125 %	
Concentration RSD	401.4 %	136.0 %	48.9 %	38.7 %	162.2 %	467.7 %	86.9 %	1,110.0 %	3.4 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.035 ppb	0.131 ppb	-0.020 ppb	0.178 ppb	116.410 %	0.002 ppb	-0.001 ppb	110.863 %	0.022 ppb
Concentration per Run 1	0.048 ppb	0.181 ppb	-0.017 ppb	0.130 ppb	122.557 %	0.001 ppb	-0.001 ppb	115.558 %	0.020 ppb
Concentration per Run 2	0.045 ppb	0.082 ppb	-0.019 ppb	0.181 ppb	113.413 %	0.001 ppb	-0.001 ppb	107.774 %	0.026 ppb
Concentration per Run 3	0.012 ppb	0.130 ppb	-0.023 ppb	0.223 ppb	113.261 %	0.003 ppb	-0.001 ppb	109.258 %	0.020 ppb
Recovery Percentage 1	7.042 %	2.625 %	-0.197 %	8.898 %		0.479 %	-0.451 %		0.548 %
Concentration RSD	56.4 %	37.7 %	14.2 %	26.2 %	4.6 %	43.0 %	12.7 %	3.7 %	16.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	-0.024 ppb	111.671 %	107.559 %	0.375 ppb	0.017 ppb	109.636 %
Concentration per Run 1	-0.026 ppb	115.726 %	109.872 %	0.488 ppb	0.020 ppb	112.166 %
Concentration per Run 2	-0.035 ppb	110.111 %	106.354 %	0.365 ppb	0.016 ppb	107.423 %
Concentration per Run 3	-0.011 ppb	109.176 %	106.451 %	0.271 ppb	0.015 ppb	109.319 %
Recovery Percentage 1	-4.783 %			37.471 %	1.713 %	
Concentration RSD	51.6 %	3.2 %	1.9 %	29.1 %	13.5 %	2.2 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index:	109	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG2002073-5d10 SPLP-6020T	Rack	2		
Analysis started at:	11/26/2024 5:28:11 PM	Vial	8		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	113.160 %	123.946 %	48.590 ppb	7,793.161 ppb	5,303.632 ppb	91.160 ppb	4,725.122 ppb	5,750.076 ppb	122.903 %
Concentration per Run 1	112.109 %	130.363 %	47.853 ppb	7,195.062 ppb	4,899.274 ppb	86.165 ppb	4,415.693 ppb	5,486.031 ppb	122.389 %
Concentration per Run 2	113.620 %	121.554 %	48.553 ppb	7,878.777 ppb	5,332.441 ppb	92.561 ppb	4,814.118 ppb	5,983.020 ppb	123.127 %
Concentration per Run 3	113.750 %	119.923 %	49.363 ppb	8,305.643 ppb	5,679.182 ppb	94.755 ppb	4,945.554 ppb	5,781.177 ppb	123.193 %
Concentration RSD	0.8 %	4.5 %	1.6 %	7.2 %	7.4 %	4.9 %	5.8 %	4.3 %	0.4 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	41.146 ppb	43.182 ppb	48.037 ppb	4,362.268 ppb	43.802 ppb	47.900 ppb	59.138 ppb	57.869 ppb	153.462 %
Concentration per Run 1	39.170 ppb	41.256 ppb	45.927 ppb	4,244.225 ppb	42.990 ppb	47.421 ppb	56.765 ppb	53.832 ppb	157.848 %
Concentration per Run 2	42.849 ppb	44.570 ppb	50.307 ppb	4,474.769 ppb	44.592 ppb	47.982 ppb	61.517 ppb	61.136 ppb	148.871 %
Concentration per Run 3	41.418 ppb	43.720 ppb	47.876 ppb	4,367.809 ppb	43.824 ppb	48.296 ppb	59.131 ppb	58.640 ppb	153.667 %
Concentration RSD	4.5 %	4.0 %	4.6 %	2.6 %	1.8 %	0.9 %	4.0 %	6.4 %	2.9 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	39.127 ppb	37.284 ppb	50.003 ppb	50.316 ppb	114.807 %	1.731 ppb	49.793 ppb	113.159 %	51.726 ppb
Concentration per Run 1	36.999 ppb	32.950 ppb	47.766 ppb	45.962 ppb	119.640 %	1.695 ppb	47.641 ppb	120.344 %	47.436 ppb
Concentration per Run 2	41.416 ppb	38.679 ppb	52.131 ppb	53.308 ppb	110.122 %	1.768 ppb	51.862 ppb	107.629 %	54.343 ppb
Concentration per Run 3	38.968 ppb	40.224 ppb	50.112 ppb	51.678 ppb	114.658 %	1.729 ppb	49.877 ppb	111.503 %	53.399 ppb
Concentration RSD	5.7 %	10.3 %	4.4 %	7.7 %	4.1 %	2.1 %	4.2 %	5.8 %	7.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	67.546 ppb	112.465 %	109.983 %	48.862 ppb	55.138 ppb	116.010 %
Concentration per Run 1	61.673 ppb	116.686 %	116.475 %	41.600 ppb	51.638 ppb	125.191 %
Concentration per Run 2	71.027 ppb	107.516 %	104.989 %	52.307 ppb	57.746 ppb	109.900 %
Concentration per Run 3	69.939 ppb	113.193 %	108.485 %	52.678 ppb	56.029 ppb	112.938 %
Concentration RSD	7.6 %	4.1 %	5.4 %	12.9 %	5.7 %	7.0 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index: 110
Analysis label: L2467892-02d10 6020TL
Analysis started at: 11/26/2024 5:32:39 PM
User name ALPHALAB\a2-icpmsq2
Rack 2
Vial 11
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	113.306 %	116.356 %	0.095 ppb	4,755.277 ppb	2,276.031 ppb	9.879 ppb	272.006 ppb	12,732.893 ppb	117.416 %
Concentration per Run 1	111.322 %	118.879 %	0.065 ppb	4,696.081 ppb	2,209.675 ppb	15.664 ppb	275.426 ppb	12,456.852 ppb	114.829 %
Concentration per Run 2	113.170 %	117.769 %	0.074 ppb	4,621.856 ppb	2,277.806 ppb	7.136 ppb	275.072 ppb	13,087.205 ppb	117.310 %
Concentration per Run 3	115.426 %	112.419 %	0.148 ppb	4,947.895 ppb	2,340.612 ppb	6.839 ppb	265.518 ppb	12,654.624 ppb	120.110 %
Concentration RSD	1.8 %	3.0 %	47.9 %	3.6 %	2.9 %	50.7 %	2.1 %	2.5 %	2.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.049 ppb	0.145 ppb	1,658.104 ppb	444.065 ppb	0.778 ppb	0.460 ppb	0.165 ppb	0.897 ppb	119.494 %
Concentration per Run 1	0.062 ppb	0.190 ppb	1,655.338 ppb	434.029 ppb	0.819 ppb	0.537 ppb	0.233 ppb	0.940 ppb	115.141 %
Concentration per Run 2	0.050 ppb	0.123 ppb	1,671.034 ppb	463.479 ppb	0.755 ppb	0.441 ppb	0.165 ppb	0.905 ppb	117.837 %
Concentration per Run 3	0.036 ppb	0.121 ppb	1,647.940 ppb	434.688 ppb	0.760 ppb	0.403 ppb	0.098 ppb	0.846 ppb	125.504 %
Concentration RSD	26.4 %	27.0 %	0.7 %	3.8 %	4.6 %	15.1 %	40.7 %	5.3 %	4.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.124 ppb	0.199 ppb	83.254 ppb	0.387 ppb	116.748 %	0.003 ppb	0.126 ppb	115.519 %	0.106 ppb
Concentration per Run 1	0.133 ppb	0.299 ppb	81.533 ppb	0.350 ppb	122.600 %	0.005 ppb	0.150 ppb	121.170 %	0.126 ppb
Concentration per Run 2	0.125 ppb	0.132 ppb	84.779 ppb	0.418 ppb	115.131 %	0.003 ppb	0.112 ppb	112.653 %	0.090 ppb
Concentration per Run 3	0.116 ppb	0.168 ppb	83.451 ppb	0.393 ppb	112.513 %	0.001 ppb	0.116 ppb	112.733 %	0.101 ppb
Concentration RSD	6.7 %	44.0 %	2.0 %	8.9 %	4.5 %	65.6 %	16.7 %	4.2 %	17.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	10.578 ppb	114.765 %	111.925 %	0.470 ppb	0.071 ppb	111.998 %
Concentration per Run 1	9.513 ppb	116.376 %	115.246 %	0.528 ppb	0.114 ppb	114.909 %
Concentration per Run 2	11.133 ppb	115.640 %	111.302 %	0.485 ppb	0.056 ppb	110.936 %
Concentration per Run 3	11.088 ppb	112.279 %	109.226 %	0.396 ppb	0.043 ppb	110.150 %
Concentration RSD	8.7 %	1.9 %	2.7 %	14.4 %	53.7 %	2.3 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index: 111
Analysis label: L2468082-08d10 SPLP-6020T
Analysis started at: 11/26/2024 5:37:09 PM
User name ALPHALAB\a2-icpmsq2
Rack 2
Vial 10
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	112.344 %	120.053 %	0.040 ppb	6,977.208 ppb	457.014 ppb	87.787 ppb	1,041.305 ppb	2,730.401 ppb	115.729 %
Concentration per Run 1	109.061 %	124.555 %	0.024 ppb	6,683.244 ppb	441.539 ppb	81.053 ppb	1,003.208 ppb	2,671.526 ppb	111.492 %
Concentration per Run 2	114.172 %	118.161 %	0.051 ppb	6,999.394 ppb	468.416 ppb	90.779 ppb	1,079.230 ppb	2,790.732 ppb	116.786 %
Concentration per Run 3	113.799 %	117.443 %	0.044 ppb	7,248.987 ppb	461.088 ppb	91.527 ppb	1,041.476 ppb	2,728.945 ppb	118.910 %
Concentration RSD	2.5 %	3.3 %	35.1 %	4.1 %	3.0 %	6.7 %	3.7 %	2.2 %	3.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.133 ppb	1.176 ppb	12.234 ppb	243.911 ppb	1.118 ppb	7.581 ppb	27.395 ppb	55.325 ppb	120.650 %
Concentration per Run 1	0.119 ppb	1.166 ppb	12.161 ppb	234.635 ppb	1.081 ppb	7.877 ppb	28.360 ppb	55.824 ppb	116.279 %
Concentration per Run 2	0.192 ppb	1.210 ppb	12.610 ppb	250.359 ppb	1.200 ppb	7.834 ppb	27.854 ppb	56.025 ppb	120.759 %
Concentration per Run 3	0.088 ppb	1.152 ppb	11.930 ppb	246.738 ppb	1.072 ppb	7.033 ppb	25.972 ppb	54.126 ppb	124.912 %
Concentration RSD	40.1 %	2.6 %	2.8 %	3.4 %	6.4 %	6.3 %	4.6 %	1.9 %	3.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.183 ppb	0.080 ppb	7.514 ppb	1.252 ppb	114.543 %	0.205 ppb	0.321 ppb	113.789 %	0.571 ppb
Concentration per Run 1	0.165 ppb	0.034 ppb	7.301 ppb	1.064 ppb	118.679 %	0.186 ppb	0.283 ppb	120.312 %	0.486 ppb
Concentration per Run 2	0.171 ppb	0.088 ppb	7.660 ppb	1.323 ppb	112.678 %	0.212 ppb	0.343 ppb	111.361 %	0.581 ppb
Concentration per Run 3	0.213 ppb	0.118 ppb	7.582 ppb	1.369 ppb	112.274 %	0.217 ppb	0.337 ppb	109.696 %	0.645 ppb
Concentration RSD	14.3 %	53.1 %	2.5 %	13.1 %	3.1 %	8.3 %	10.3 %	5.0 %	14.0 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	12.179 ppb	114.479 %	110.378 %	0.082 ppb	11.978 ppb	115.941 %
Concentration per Run 1	11.370 ppb	120.782 %	115.132 %	0.026 ppb	10.954 ppb	124.114 %
Concentration per Run 2	12.051 ppb	111.238 %	106.948 %	0.111 ppb	12.552 ppb	109.546 %
Concentration per Run 3	13.115 ppb	111.418 %	109.055 %	0.108 ppb	12.429 ppb	114.162 %
Concentration RSD	7.2 %	4.8 %	3.9 %	58.9 %	7.4 %	6.4 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index:	112	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG2002206-1 6020TL	Rack	2		
Analysis started at:	11/26/2024 5:51:21 PM	Vial	12		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	110.124 %	119.357 %	0.002 ppb	7.171 ppb	-0.124 ppb	0.630 ppb	-6.865 ppb	6.984 ppb	112.191 %
Concentration per Run 1	102.266 %	123.838 %	0.004 ppb	1.416 ppb	0.032 ppb	0.240 ppb	-5.418 ppb	6.919 ppb	104.429 %
Concentration per Run 2	114.022 %	119.270 %	0.001 ppb	7.133 ppb	-0.304 ppb	0.887 ppb	-6.201 ppb	2.413 ppb	115.557 %
Concentration per Run 3	114.083 %	114.964 %	0.002 ppb	12.966 ppb	-0.099 ppb	0.764 ppb	-8.976 ppb	11.620 ppb	116.588 %
Concentration RSD	6.2 %	3.7 %	79.0 %	80.5 %	136.7 %	54.5 %	27.2 %	65.9 %	6.0 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.028 ppb	0.057 ppb	0.095 ppb	2.945 ppb	-0.004 ppb	-0.040 ppb	0.145 ppb	0.434 ppb	112.626 %
Concentration per Run 1	-0.052 ppb	0.060 ppb	0.023 ppb	3.830 ppb	-0.009 ppb	-0.023 ppb	0.108 ppb	0.419 ppb	113.920 %
Concentration per Run 2	-0.025 ppb	0.052 ppb	0.134 ppb	2.131 ppb	-0.009 ppb	-0.065 ppb	0.170 ppb	0.477 ppb	112.733 %
Concentration per Run 3	-0.007 ppb	0.058 ppb	0.128 ppb	2.875 ppb	0.005 ppb	-0.032 ppb	0.158 ppb	0.406 ppb	111.226 %
Concentration RSD	80.6 %	6.9 %	66.0 %	28.9 %	184.4 %	55.4 %	22.9 %	8.7 %	1.2 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	-0.036 ppb	0.041 ppb	-0.010 ppb	-0.066 ppb	118.530 %	-0.002 ppb	-0.002 ppb	116.308 %	0.011 ppb
Concentration per Run 1	-0.056 ppb	-0.023 ppb	-0.010 ppb	-0.081 ppb	123.333 %	-0.002 ppb	-0.002 ppb	119.168 %	0.004 ppb
Concentration per Run 2	-0.041 ppb	0.085 ppb	-0.010 ppb	-0.079 ppb	116.085 %	-0.002 ppb	-0.004 ppb	115.265 %	0.011 ppb
Concentration per Run 3	-0.010 ppb	0.061 ppb	-0.010 ppb	-0.037 ppb	116.174 %	-0.004 ppb	-0.001 ppb	114.492 %	0.018 ppb
Concentration RSD	65.8 %	137.5 %	4.3 %	37.4 %	3.5 %	38.0 %	59.2 %	2.2 %	62.0 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.024 ppb	116.885 %	114.963 %	0.016 ppb	0.017 ppb	114.724 %
Concentration per Run 1	0.008 ppb	122.589 %	123.742 %	0.013 ppb	0.016 ppb	120.731 %
Concentration per Run 2	0.039 ppb	114.440 %	111.587 %	0.026 ppb	0.018 ppb	111.154 %
Concentration per Run 3	0.025 ppb	113.627 %	109.560 %	0.008 ppb	0.016 ppb	112.287 %
Concentration RSD	63.7 %	4.2 %	6.7 %	60.0 %	6.7 %	4.6 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index:	113	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG2002206-2d10 6020TL	Rack	2		
Analysis started at:	11/26/2024 5:55:51 PM	Vial	13		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	110.549 %	117.139 %	4.830 ppb	1,057.641 ppb	1,026.021 ppb	199.283 ppb	967.914 ppb	1,016.381 ppb	109.782 %
Concentration per Run 1	108.447 %	116.726 %	4.832 ppb	1,063.955 ppb	1,036.018 ppb	198.859 ppb	994.060 ppb	1,028.913 ppb	107.597 %
Concentration per Run 2	111.319 %	121.162 %	4.846 ppb	1,023.373 ppb	984.488 ppb	195.219 ppb	942.459 ppb	975.738 ppb	111.421 %
Concentration per Run 3	111.880 %	113.528 %	4.810 ppb	1,085.594 ppb	1,057.557 ppb	203.773 ppb	967.222 ppb	1,044.492 ppb	110.327 %
Concentration RSD	1.7 %	3.3 %	0.4 %	3.0 %	3.7 %	2.2 %	2.7 %	3.5 %	1.8 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	49.580 ppb	20.744 ppb	52.977 ppb	110.779 ppb	54.025 ppb	53.299 ppb	26.924 ppb	51.617 ppb	110.469 %
Concentration per Run 1	50.133 ppb	20.968 ppb	53.683 ppb	111.725 ppb	55.941 ppb	55.042 ppb	27.566 ppb	52.553 ppb	106.019 %
Concentration per Run 2	49.847 ppb	20.773 ppb	52.715 ppb	106.632 ppb	53.926 ppb	52.768 ppb	27.409 ppb	52.273 ppb	110.777 %
Concentration per Run 3	48.759 ppb	20.492 ppb	52.533 ppb	113.980 ppb	52.209 ppb	52.086 ppb	25.799 ppb	50.024 ppb	114.611 %
Concentration RSD	1.5 %	1.2 %	1.2 %	3.4 %	3.5 %	2.9 %	3.6 %	2.7 %	3.9 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	12.362 ppb	12.454 ppb	100.716 ppb	100.528 ppb	113.168 %	4.578 ppb	5.319 ppb	111.281 %	34.650 ppb
Concentration per Run 1	12.799 ppb	12.365 ppb	102.453 ppb	96.063 ppb	112.468 %	4.500 ppb	5.305 ppb	112.529 %	32.792 ppb
Concentration per Run 2	12.424 ppb	12.952 ppb	100.913 ppb	101.786 ppb	113.321 %	4.676 ppb	5.393 ppb	112.917 %	34.253 ppb
Concentration per Run 3	11.864 ppb	12.045 ppb	98.782 ppb	103.736 ppb	113.714 %	4.560 ppb	5.259 ppb	108.399 %	36.905 ppb
Concentration RSD	3.8 %	3.7 %	1.8 %	4.0 %	0.6 %	2.0 %	1.3 %	2.3 %	6.0 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	201.578 ppb	112.840 %	109.706 %	12.532 ppb	52.716 ppb	112.707 %
Concentration per Run 1	200.293 ppb	112.078 %	109.847 %	12.295 ppb	51.955 ppb	114.008 %
Concentration per Run 2	198.144 ppb	113.778 %	109.509 %	12.789 ppb	53.208 ppb	112.174 %
Concentration per Run 3	206.296 ppb	112.665 %	109.761 %	12.512 ppb	52.983 ppb	111.940 %
Concentration RSD	2.1 %	0.8 %	0.2 %	2.0 %	1.3 %	1.0 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index: 114
Analysis label: L2467934-05 6020TL
Analysis started at: 11/26/2024 6:00:20 PM
User name ALPHALAB\a2-icpmsq2
Rack 2
Vial 14
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	113.263 %	122.533 %	0.155 ppb	4,759.671 ppb	812.631 ppb	30.564 ppb	607.059 ppb	2,991.212 ppb	115.358 %
Concentration per Run 1	111.170 %	119.401 %	0.171 ppb	4,808.288 ppb	813.458 ppb	31.367 ppb	608.706 ppb	2,946.774 ppb	112.282 %
Concentration per Run 2	112.092 %	119.074 %	0.156 ppb	4,898.913 ppb	848.331 ppb	30.329 ppb	626.504 ppb	3,023.520 ppb	116.226 %
Concentration per Run 3	116.526 %	129.123 %	0.137 ppb	4,571.814 ppb	776.104 ppb	29.997 ppb	585.967 ppb	3,003.342 ppb	117.565 %
Concentration RSD	2.5 %	4.7 %	11.2 %	3.5 %	4.4 %	2.3 %	3.3 %	1.3 %	2.4 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.031 ppb	0.439 ppb	12.714 ppb	36.094 ppb	0.057 ppb	0.722 ppb	0.370 ppb	1.640 ppb	112.396 %
Concentration per Run 1	-0.014 ppb	0.418 ppb	12.961 ppb	33.768 ppb	0.051 ppb	0.749 ppb	0.324 ppb	1.760 ppb	112.112 %
Concentration per Run 2	0.039 ppb	0.507 ppb	13.141 ppb	36.755 ppb	0.066 ppb	0.774 ppb	0.376 ppb	1.586 ppb	111.188 %
Concentration per Run 3	0.069 ppb	0.393 ppb	12.041 ppb	37.760 ppb	0.052 ppb	0.642 ppb	0.409 ppb	1.576 ppb	113.888 %
Concentration RSD	134.0 %	13.7 %	4.6 %	5.8 %	14.3 %	9.7 %	11.5 %	6.3 %	1.2 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.076 ppb	0.631 ppb	15.806 ppb	0.775 ppb	116.691 %	-0.001 ppb	0.076 ppb	114.931 %	1.252 ppb
Concentration per Run 1	0.078 ppb	0.585 ppb	15.651 ppb	0.693 ppb	117.680 %	-0.002 ppb	0.062 ppb	116.108 %	1.300 ppb
Concentration per Run 2	0.066 ppb	0.620 ppb	16.176 ppb	0.747 ppb	113.476 %	-0.001 ppb	0.077 ppb	111.608 %	1.270 ppb
Concentration per Run 3	0.085 ppb	0.687 ppb	15.590 ppb	0.885 ppb	118.917 %	-0.001 ppb	0.088 ppb	117.077 %	1.186 ppb
Concentration RSD	12.9 %	8.2 %	2.0 %	12.7 %	2.4 %	38.2 %	17.1 %	2.5 %	4.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	3.441 ppb	114.531 %	112.169 %	0.000 ppb	0.041 ppb	113.806 %
Concentration per Run 1	3.418 ppb	114.516 %	112.401 %	-0.013 ppb	0.042 ppb	113.446 %
Concentration per Run 2	3.480 ppb	112.827 %	109.239 %	0.005 ppb	0.040 ppb	114.921 %
Concentration per Run 3	3.424 ppb	116.249 %	114.866 %	0.009 ppb	0.041 ppb	113.051 %
Concentration RSD	1.0 %	1.5 %	2.5 %	9,201.3 %	2.4 %	0.9 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index:	115	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG2002206-3d10 6020TL	Rack	2		
Analysis started at:	11/26/2024 6:04:48 PM	Vial	15		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	110.483 %	117.574 %	4.860 ppb	1,473.795 ppb	1,058.488 ppb	199.283 ppb	925.605 ppb	1,151.208 ppb	110.839 %
Concentration per Run 1	107.617 %	121.489 %	4.875 ppb	1,426.714 ppb	1,023.133 ppb	185.629 ppb	962.346 ppb	1,263.302 ppb	107.494 %
Concentration per Run 2	111.851 %	114.442 %	4.844 ppb	1,548.388 ppb	1,133.099 ppb	209.208 ppb	1,029.049 ppb	1,241.870 ppb	112.806 %
Concentration per Run 3	111.981 %	116.791 %	4.860 ppb	1,446.285 ppb	1,019.231 ppb	203.012 ppb	785.420 ppb	948.453 ppb	112.217 %
Concentration RSD	2.2 %	3.1 %	0.3 %	4.4 %	6.1 %	6.1 %	13.6 %	15.3 %	2.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	48.798 ppb	20.169 ppb	52.517 ppb	111.155 ppb	52.084 ppb	51.659 ppb	26.588 ppb	50.865 ppb	107.467 %
Concentration per Run 1	46.116 ppb	19.201 ppb	50.838 ppb	114.561 ppb	50.761 ppb	50.801 ppb	25.369 ppb	49.767 ppb	112.547 %
Concentration per Run 2	50.471 ppb	21.185 ppb	53.644 ppb	112.906 ppb	53.415 ppb	52.417 ppb	27.396 ppb	52.021 ppb	105.466 %
Concentration per Run 3	49.806 ppb	20.120 ppb	53.069 ppb	105.998 ppb	52.077 ppb	51.757 ppb	26.998 ppb	50.808 ppb	104.387 %
Concentration RSD	4.8 %	4.9 %	2.8 %	4.1 %	2.5 %	1.6 %	4.0 %	2.2 %	4.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	11.774 ppb	11.641 ppb	100.047 ppb	97.924 ppb	102.729 %	4.379 ppb	5.057 ppb	100.740 %	35.232 ppb
Concentration per Run 1	11.319 ppb	10.036 ppb	95.301 ppb	89.363 ppb	115.225 %	4.319 ppb	4.845 ppb	116.405 %	32.402 ppb
Concentration per Run 2	12.243 ppb	13.029 ppb	101.706 ppb	101.625 ppb	108.600 %	4.466 ppb	5.188 ppb	105.140 %	36.088 ppb
Concentration per Run 3	11.759 ppb	11.859 ppb	103.134 ppb	102.784 ppb	84.363 %	4.353 ppb	5.137 ppb	80.675 %	37.208 ppb
Concentration RSD	3.9 %	13.0 %	4.2 %	7.6 %	15.8 %	1.8 %	3.7 %	18.1 %	7.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	201.556 ppb	106.874 %	103.613 %	12.190 ppb	51.643 ppb	105.242 %
Concentration per Run 1	191.955 ppb	114.086 %	109.815 %	11.817 ppb	49.790 ppb	115.457 %
Concentration per Run 2	201.493 ppb	104.902 %	105.467 %	12.586 ppb	53.363 ppb	105.177 %
Concentration per Run 3	211.221 ppb	101.633 %	95.558 %	12.168 ppb	51.776 ppb	95.092 %
Concentration RSD	4.8 %	6.0 %	7.1 %	3.2 %	3.5 %	9.7 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index:	116	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG2002206-4d10 6020TL	Rack	2		
Analysis started at:	11/26/2024 6:09:17 PM	Vial	16		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	114.640 %	117.356 %	4.660 ppb	1,379.910 ppb	981.440 ppb	201.179 ppb	780.039 ppb	934.307 ppb	115.451 %
Concentration per Run 1	110.896 %	123.120 %	4.770 ppb	1,246.834 ppb	894.691 ppb	177.180 ppb	734.624 ppb	837.697 ppb	110.404 %
Concentration per Run 2	115.147 %	114.442 %	4.670 ppb	1,449.977 ppb	1,031.426 ppb	212.171 ppb	810.120 ppb	994.686 ppb	114.567 %
Concentration per Run 3	117.877 %	114.507 %	4.542 ppb	1,442.919 ppb	1,018.201 ppb	214.187 ppb	795.373 ppb	970.540 ppb	121.384 %
Concentration RSD	3.1 %	4.3 %	2.5 %	8.4 %	7.7 %	10.3 %	5.1 %	9.0 %	4.8 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	46.732 ppb	19.746 ppb	50.234 ppb	106.988 ppb	49.989 ppb	50.605 ppb	25.615 ppb	49.523 ppb	107.544 %
Concentration per Run 1	43.225 ppb	18.519 ppb	47.169 ppb	97.446 ppb	47.265 ppb	47.404 ppb	23.858 ppb	47.162 ppb	109.236 %
Concentration per Run 2	49.664 ppb	20.274 ppb	52.866 ppb	113.706 ppb	52.453 ppb	52.564 ppb	27.065 ppb	52.118 ppb	103.456 %
Concentration per Run 3	47.307 ppb	20.444 ppb	50.667 ppb	109.811 ppb	50.249 ppb	51.846 ppb	25.921 ppb	49.288 ppb	109.939 %
Concentration RSD	7.0 %	5.4 %	5.7 %	7.9 %	5.2 %	5.5 %	6.3 %	5.0 %	3.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	11.294 ppb	11.221 ppb	97.964 ppb	94.501 ppb	89.097 %	4.277 ppb	4.811 ppb	86.855 %	35.822 ppb
Concentration per Run 1	11.126 ppb	10.621 ppb	91.260 ppb	83.032 ppb	95.207 %	3.920 ppb	4.403 ppb	94.218 %	30.133 ppb
Concentration per Run 2	11.573 ppb	11.607 ppb	102.190 ppb	100.930 ppb	86.602 %	4.495 ppb	5.037 ppb	82.578 %	38.149 ppb
Concentration per Run 3	11.183 ppb	11.435 ppb	100.442 ppb	99.541 ppb	85.483 %	4.415 ppb	4.993 ppb	83.768 %	39.184 ppb
Concentration RSD	2.2 %	4.7 %	6.0 %	10.5 %	6.0 %	7.3 %	7.4 %	7.4 %	13.8 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	202.054 ppb	103.424 %	98.753 %	11.807 ppb	49.785 ppb	96.746 %
Concentration per Run 1	181.028 ppb	109.586 %	104.648 %	10.881 ppb	46.022 ppb	102.778 %
Concentration per Run 2	211.676 ppb	100.630 %	96.676 %	12.019 ppb	51.367 ppb	93.508 %
Concentration per Run 3	213.456 ppb	100.056 %	94.936 %	12.521 ppb	51.966 ppb	93.951 %
Concentration RSD	9.0 %	5.2 %	5.2 %	7.1 %	6.6 %	5.4 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index: 117
Analysis label: WG2002206-5d10 6020TL
Analysis started at: 11/26/2024 6:13:45 PM
User name ALPHALAB\a2-icpmsq2
Rack 2
Vial 17
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	110.627 %	121.641 %	47.922 ppb	5,110.098 ppb	4,714.507 ppb	51.815 ppb	3,856.160 ppb	4,006.626 ppb	109.213 %
Concentration per Run 1	109.382 %	121.945 %	47.387 ppb	4,997.657 ppb	4,595.268 ppb	48.684 ppb	3,800.739 ppb	4,003.530 ppb	110.255 %
Concentration per Run 2	113.041 %	120.575 %	47.502 ppb	5,140.078 ppb	4,732.942 ppb	53.199 ppb	3,912.507 ppb	3,955.617 ppb	111.551 %
Concentration per Run 3	109.458 %	122.402 %	48.877 ppb	5,192.560 ppb	4,815.313 ppb	53.563 ppb	3,855.235 ppb	4,060.730 ppb	105.832 %
Concentration RSD	1.9 %	0.8 %	1.7 %	2.0 %	2.4 %	5.2 %	1.4 %	1.3 %	2.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	49.089 ppb	50.027 ppb	50.955 ppb	5,094.926 ppb	52.280 ppb	53.130 ppb	52.397 ppb	50.780 ppb	103.810 %
Concentration per Run 1	47.802 ppb	49.645 ppb	49.666 ppb	5,024.635 ppb	52.133 ppb	53.155 ppb	51.909 ppb	51.217 ppb	99.507 %
Concentration per Run 2	49.766 ppb	49.315 ppb	50.838 ppb	4,989.784 ppb	51.775 ppb	52.975 ppb	51.506 ppb	49.885 ppb	106.477 %
Concentration per Run 3	49.698 ppb	51.121 ppb	52.362 ppb	5,270.359 ppb	52.933 ppb	53.258 ppb	53.775 ppb	51.239 ppb	105.447 %
Concentration RSD	2.3 %	1.9 %	2.7 %	3.0 %	1.1 %	0.3 %	2.3 %	1.5 %	3.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	49.632 ppb	50.342 ppb	52.958 ppb	50.234 ppb	89.895 %	1.652 ppb	45.818 ppb	87.467 %	50.978 ppb
Concentration per Run 1	51.010 ppb	53.327 ppb	53.061 ppb	47.733 ppb	91.259 %	1.628 ppb	44.931 ppb	90.674 %	48.943 ppb
Concentration per Run 2	49.061 ppb	50.551 ppb	52.359 ppb	50.759 ppb	90.360 %	1.693 ppb	45.750 ppb	86.032 %	51.573 ppb
Concentration per Run 3	48.823 ppb	47.146 ppb	53.454 ppb	52.209 ppb	88.066 %	1.634 ppb	46.773 ppb	85.694 %	52.418 ppb
Concentration RSD	2.4 %	6.1 %	1.0 %	4.5 %	1.8 %	2.2 %	2.0 %	3.2 %	3.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	50.275 ppb	104.935 %	100.332 %	46.704 ppb	48.176 ppb	96.828 %
Concentration per Run 1	48.438 ppb	107.544 %	102.594 %	42.964 ppb	46.843 ppb	97.678 %
Concentration per Run 2	50.552 ppb	106.203 %	100.819 %	47.932 ppb	48.530 ppb	96.296 %
Concentration per Run 3	51.837 ppb	101.058 %	97.582 %	49.218 ppb	49.155 ppb	96.509 %
Concentration RSD	3.4 %	3.3 %	2.5 %	7.1 %	2.5 %	0.8 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index:	118	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG2002206-6d5 6020TL	Rack	2		
Analysis started at:	11/26/2024 6:18:14 PM	Vial	18		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	111.524 %	118.096 %	0.084 ppb	931.335 ppb	162.635 ppb	7.283 ppb	86.166 ppb	493.582 ppb	111.686 %
Concentration per Run 1	109.208 %	119.857 %	0.092 ppb	903.235 ppb	162.990 ppb	6.790 ppb	81.877 ppb	456.563 ppb	108.080 %
Concentration per Run 2	111.642 %	116.399 %	0.099 ppb	951.267 ppb	162.193 ppb	8.049 ppb	91.275 ppb	518.809 ppb	112.068 %
Concentration per Run 3	113.721 %	118.030 %	0.060 ppb	939.504 ppb	162.724 ppb	7.010 ppb	85.347 ppb	505.373 ppb	114.910 %
Concentration RSD	2.0 %	1.5 %	24.6 %	2.7 %	0.2 %	9.2 %	5.5 %	6.6 %	3.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.012 ppb	0.083 ppb	2.667 ppb	12.676 ppb	0.010 ppb	0.143 ppb	0.093 ppb	0.424 ppb	104.239 %
Concentration per Run 1	-0.031 ppb	0.086 ppb	2.632 ppb	13.884 ppb	0.011 ppb	0.180 ppb	0.124 ppb	0.507 ppb	101.508 %
Concentration per Run 2	0.003 ppb	0.060 ppb	2.779 ppb	13.793 ppb	0.016 ppb	0.143 ppb	0.062 ppb	0.382 ppb	102.238 %
Concentration per Run 3	-0.007 ppb	0.102 ppb	2.588 ppb	10.351 ppb	0.004 ppb	0.106 ppb	0.092 ppb	0.385 ppb	108.971 %
Concentration RSD	151.8 %	25.4 %	3.8 %	15.9 %	61.3 %	26.0 %	33.3 %	16.8 %	3.9 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.028 ppb	0.351 ppb	3.310 ppb	0.717 ppb	87.987 %	-0.002 ppb	0.015 ppb	85.392 %	0.653 ppb
Concentration per Run 1	0.033 ppb	0.498 ppb	3.306 ppb	0.482 ppb	90.776 %	-0.002 ppb	0.014 ppb	89.312 %	0.610 ppb
Concentration per Run 2	0.025 ppb	0.264 ppb	3.388 ppb	0.718 ppb	85.932 %	-0.001 ppb	0.020 ppb	83.609 %	0.671 ppb
Concentration per Run 3	0.027 ppb	0.291 ppb	3.236 ppb	0.951 ppb	87.253 %	-0.003 ppb	0.012 ppb	83.257 %	0.678 ppb
Concentration RSD	15.8 %	36.4 %	2.3 %	32.7 %	2.8 %	37.2 %	26.0 %	4.0 %	5.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.836 ppb	102.440 %	96.270 %	0.449 ppb	0.036 ppb	95.276 %
Concentration per Run 1	0.686 ppb	106.053 %	99.748 %	0.458 ppb	0.040 ppb	99.318 %
Concentration per Run 2	0.777 ppb	99.027 %	93.501 %	0.500 ppb	0.039 ppb	93.142 %
Concentration per Run 3	1.046 ppb	102.241 %	95.562 %	0.389 ppb	0.029 ppb	93.367 %
Concentration RSD	22.4 %	3.4 %	3.3 %	12.5 %	17.3 %	3.7 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index: 119
Analysis label: CCV
Analysis started at: 11/26/2024 6:22:42 PM
User name ALPHALAB\a2-icpmsq2
Rack 0
Vial 9
Comment CCV/MCCV

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	110.870 %	113.680 %	56.710 ppb	5,784.522 ppb	5,878.385 ppb	61.762 ppb	4,896.896 ppb	4,821.898 ppb	113.658 %
Concentration per Run 1	108.525 %	117.052 %	56.005 ppb	5,597.745 ppb	5,558.351 ppb	58.320 ppb	4,804.624 ppb	4,664.053 ppb	111.999 %
Concentration per Run 2	113.070 %	108.178 %	55.979 ppb	6,160.522 ppb	6,191.277 ppb	67.237 ppb	5,147.383 ppb	5,034.686 ppb	114.655 %
Concentration per Run 3	111.015 %	115.812 %	58.145 ppb	5,595.299 ppb	5,885.528 ppb	59.728 ppb	4,738.682 ppb	4,766.955 ppb	114.320 %
Recovery Percentage 1			94.516 %	96.409 %	97.973 %	102.936 %	81.615 %	80.365 %	
Concentration RSD	2.1 %	4.2 %	2.2 %	5.6 %	5.4 %	7.8 %	4.5 %	4.0 %	1.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	60.961 ppb	62.461 ppb	61.393 ppb	6,196.743 ppb	62.848 ppb	63.592 ppb	63.494 ppb	83.203 ppb	104.095 %
Concentration per Run 1	57.370 ppb	58.746 ppb	58.490 ppb	5,976.568 ppb	60.548 ppb	62.844 ppb	62.860 ppb	78.098 ppb	104.767 %
Concentration per Run 2	64.647 ppb	65.743 ppb	65.204 ppb	6,569.563 ppb	66.430 ppb	67.249 ppb	66.360 ppb	87.540 ppb	100.355 %
Concentration per Run 3	60.868 ppb	62.894 ppb	60.485 ppb	6,044.097 ppb	61.565 ppb	60.682 ppb	61.262 ppb	83.970 ppb	107.162 %
Recovery Percentage 1	101.602 %	104.102 %	102.322 %	103.279 %	104.746 %	105.987 %	105.823 %	138.671 %	
Concentration RSD	6.0 %	5.6 %	5.6 %	5.2 %	5.0 %	5.3 %	4.1 %	5.7 %	3.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	59.725 ppb	59.063 ppb	62.033 ppb	61.468 ppb	86.762 %	56.390 ppb	57.002 ppb	85.325 %	60.703 ppb
Concentration per Run 1	58.385 ppb	58.007 ppb	59.243 ppb	56.969 ppb	92.027 %	53.770 ppb	54.663 ppb	89.508 %	56.705 ppb
Concentration per Run 2	62.154 ppb	64.009 ppb	64.999 ppb	64.648 ppb	83.254 %	57.643 ppb	58.790 ppb	82.716 %	63.105 ppb
Concentration per Run 3	58.635 ppb	55.175 ppb	61.856 ppb	62.787 ppb	85.004 %	57.758 ppb	57.555 ppb	83.751 %	62.299 ppb
Recovery Percentage 1	99.541 %	98.439 %	103.388 %	102.447 %		93.984 %	95.004 %		101.172 %
Concentration RSD	3.5 %	7.6 %	4.6 %	6.5 %	5.4 %	4.0 %	3.7 %	4.3 %	5.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	62.116 ppb	102.094 %	96.666 %	58.266 ppb	59.597 ppb	93.734 %
Concentration per Run 1	59.201 ppb	108.848 %	98.759 %	50.968 ppb	56.308 ppb	97.209 %
Concentration per Run 2	65.019 ppb	98.147 %	94.446 %	59.957 ppb	60.929 ppb	92.285 %
Concentration per Run 3	62.129 ppb	99.288 %	96.793 %	63.872 ppb	61.555 ppb	91.708 %
Recovery Percentage 1	103.527 %			97.110 %	99.329 %	
Concentration RSD	4.7 %	5.8 %	2.2 %	11.4 %	4.8 %	3.2 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index: 120
Analysis label: CCB
Analysis started at: 11/26/2024 6:27:14 PM
User name ALPHALAB\a2-icpmsq2
Rack 0
Vial 10
Comment CCB

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	112.462 %	118.509 %	0.012 ppb	-6.371 ppb	-0.569 ppb	-0.379 ppb	-20.012 ppb	-4.255 ppb	111.502 %
Concentration per Run 1	107.972 %	124.099 %	0.014 ppb	-8.586 ppb	-0.629 ppb	-0.318 ppb	-19.846 ppb	-3.857 ppb	108.336 %
Concentration per Run 2	114.073 %	114.507 %	0.010 ppb	-3.363 ppb	-0.646 ppb	-0.409 ppb	-17.303 ppb	-6.666 ppb	113.538 %
Concentration per Run 3	115.341 %	116.921 %	0.012 ppb	-7.162 ppb	-0.431 ppb	-0.410 ppb	-22.886 ppb	-2.241 ppb	112.632 %
Recovery Percentage 1			2.345 %	-1.274 %	-0.812 %	-3.790 %	-20.012 %	-4.255 %	
Concentration RSD	3.5 %	4.2 %	17.5 %	42.4 %	21.0 %	14.0 %	14.0 %	52.6 %	2.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.013 ppb	-0.002 ppb	-0.012 ppb	4.191 ppb	0.005 ppb	-0.051 ppb	0.011 ppb	-0.025 ppb	106.822 %
Concentration per Run 1	-0.022 ppb	0.009 ppb	-0.028 ppb	4.327 ppb	0.002 ppb	-0.027 ppb	0.045 ppb	0.015 ppb	105.116 %
Concentration per Run 2	-0.015 ppb	0.001 ppb	0.022 ppb	3.202 ppb	0.007 ppb	-0.030 ppb	0.007 ppb	-0.045 ppb	106.028 %
Concentration per Run 3	-0.001 ppb	-0.017 ppb	-0.029 ppb	5.043 ppb	0.007 ppb	-0.095 ppb	-0.020 ppb	-0.043 ppb	109.321 %
Recovery Percentage 1	-0.260 %	-0.248 %	-1.203 %	8.381 %	1.093 %	-2.537 %	1.069 %	-0.490 %	
Concentration RSD	83.0 %	533.4 %	243.0 %	22.1 %	51.2 %	76.2 %	304.9 %	138.6 %	2.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	-0.037 ppb	0.245 ppb	-0.016 ppb	0.535 ppb	89.717 %	0.007 ppb	-0.001 ppb	85.972 %	0.235 ppb
Concentration per Run 1	-0.024 ppb	0.070 ppb	-0.020 ppb	0.425 ppb	95.490 %	0.009 ppb	-0.004 ppb	90.604 %	0.195 ppb
Concentration per Run 2	-0.022 ppb	0.387 ppb	-0.014 ppb	0.461 ppb	88.107 %	0.004 ppb	0.002 ppb	84.869 %	0.218 ppb
Concentration per Run 3	-0.064 ppb	0.276 ppb	-0.015 ppb	0.718 ppb	85.552 %	0.007 ppb	-0.002 ppb	82.443 %	0.291 ppb
Recovery Percentage 1	-7.358 %	4.892 %	-0.163 %	26.736 %		1.628 %	-0.626 %		5.871 %
Concentration RSD	64.9 %	65.9 %	21.6 %	29.9 %	5.8 %	41.5 %	232.8 %	4.9 %	21.3 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	-0.003 ppb	103.184 %	98.968 %	0.562 ppb	0.017 ppb	96.919 %
Concentration per Run 1	-0.007 ppb	108.805 %	105.571 %	0.598 ppb	0.020 ppb	101.514 %
Concentration per Run 2	0.013 ppb	100.788 %	95.880 %	0.626 ppb	0.016 ppb	94.495 %
Concentration per Run 3	-0.015 ppb	99.958 %	95.452 %	0.460 ppb	0.014 ppb	94.748 %
Recovery Percentage 1	-0.676 %			56.172 %	1.672 %	
Concentration RSD	428.4 %	4.7 %	5.8 %	15.8 %	20.3 %	4.1 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index: 121
Analysis label: CCV
Analysis started at: 11/26/2024 6:35:57 PM
User name ALPHALAB\a2-icpmsq2
Rack 0
Vial 9
Comment CCV/MCCV

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	109.119 %	119.488 %	58.439 ppb	5,474.071 ppb	5,557.695 ppb	59.264 ppb	4,381.767 ppb	4,298.192 ppb	111.973 %
Concentration per Run 1	109.905 %	127.818 %	56.181 ppb	5,073.627 ppb	5,153.550 ppb	53.683 ppb	3,994.370 ppb	3,996.816 ppb	115.000 %
Concentration per Run 2	110.302 %	113.789 %	58.515 ppb	5,745.838 ppb	5,744.306 ppb	62.339 ppb	4,630.005 ppb	4,491.830 ppb	111.927 %
Concentration per Run 3	107.149 %	116.856 %	60.622 ppb	5,602.746 ppb	5,775.228 ppb	61.769 ppb	4,520.926 ppb	4,405.929 ppb	108.992 %
Recovery Percentage 1			97.399 %	91.235 %	92.628 %	98.773 %	73.029 %	71.637 %	
Concentration RSD	1.6 %	6.2 %	3.8 %	6.5 %	6.3 %	8.2 %	7.8 %	6.2 %	2.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	55.497 ppb	57.252 ppb	56.071 ppb	5,681.559 ppb	57.609 ppb	58.429 ppb	56.923 ppb	61.160 ppb	119.219 %
Concentration per Run 1	50.940 ppb	53.205 ppb	52.386 ppb	5,332.037 ppb	53.868 ppb	54.560 ppb	54.651 ppb	56.067 ppb	125.633 %
Concentration per Run 2	56.749 ppb	58.576 ppb	57.044 ppb	5,853.431 ppb	59.786 ppb	60.777 ppb	57.534 ppb	64.028 ppb	114.860 %
Concentration per Run 3	58.801 ppb	59.975 ppb	58.784 ppb	5,859.208 ppb	59.171 ppb	59.951 ppb	58.583 ppb	63.384 ppb	117.163 %
Recovery Percentage 1	92.495 %	95.420 %	93.452 %	94.693 %	96.014 %	97.382 %	94.871 %	101.933 %	
Concentration RSD	7.3 %	6.2 %	5.9 %	5.3 %	5.6 %	5.8 %	3.6 %	7.2 %	4.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	66.573 ppb	63.481 ppb	57.805 ppb	56.191 ppb	91.149 %	55.597 ppb	54.481 ppb	89.494 %	59.155 ppb
Concentration per Run 1	61.408 ppb	56.389 ppb	54.568 ppb	50.262 ppb	97.093 %	52.701 ppb	50.801 ppb	94.413 %	54.178 ppb
Concentration per Run 2	67.988 ppb	64.807 ppb	59.176 ppb	59.097 ppb	89.408 %	56.304 ppb	55.321 ppb	86.865 %	61.941 ppb
Concentration per Run 3	70.322 ppb	69.246 ppb	59.672 ppb	59.213 ppb	86.945 %	57.785 ppb	57.320 ppb	87.205 %	61.346 ppb
Recovery Percentage 1	110.954 %	105.801 %	96.342 %	93.651 %		92.661 %	90.801 %		98.591 %
Concentration RSD	6.9 %	10.3 %	4.9 %	9.1 %	5.8 %	4.7 %	6.1 %	4.8 %	7.3 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	61.151 ppb	108.899 %	102.970 %	53.812 ppb	56.244 ppb	103.866 %
Concentration per Run 1	56.201 ppb	114.846 %	110.053 %	45.049 ppb	51.792 ppb	113.301 %
Concentration per Run 2	62.824 ppb	106.633 %	101.238 %	57.039 ppb	58.531 ppb	99.097 %
Concentration per Run 3	64.429 ppb	105.219 %	97.617 %	59.348 ppb	58.407 ppb	99.200 %
Recovery Percentage 1	101.919 %			89.686 %	93.739 %	
Concentration RSD	7.1 %	4.8 %	6.2 %	14.3 %	6.9 %	7.9 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index: 122
Analysis label: CCB
Analysis started at: 11/26/2024 6:40:28 PM
User name ALPHALAB\a2-icpmsq2
Rack 0
Vial 10
Comment CCB

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	112.465 %	117.530 %	0.014 ppb	-8.115 ppb	-0.670 ppb	-0.693 ppb	-22.251 ppb	-1.222 ppb	111.192 %
Concentration per Run 1	110.647 %	122.076 %	0.014 ppb	-12.061 ppb	-0.151 ppb	-0.699 ppb	-21.400 ppb	-2.251 ppb	110.200 %
Concentration per Run 2	112.640 %	114.442 %	0.014 ppb	-6.001 ppb	-0.719 ppb	-0.879 ppb	-21.313 ppb	-0.586 ppb	112.271 %
Concentration per Run 3	114.108 %	116.073 %	0.016 ppb	-6.283 ppb	-1.140 ppb	-0.501 ppb	-24.039 ppb	-0.827 ppb	111.105 %
Recovery Percentage 1			2.868 %	-1.623 %	-0.957 %	-6.934 %	-22.251 %	-1.222 %	
Concentration RSD	1.5 %	3.4 %	7.5 %	42.1 %	74.1 %	27.3 %	7.0 %	73.6 %	0.9 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.012 ppb	0.013 ppb	-0.022 ppb	6.246 ppb	0.001 ppb	-0.050 ppb	0.012 ppb	0.014 ppb	104.562 %
Concentration per Run 1	-0.001 ppb	0.006 ppb	-0.046 ppb	5.669 ppb	0.001 ppb	-0.045 ppb	0.011 ppb	0.059 ppb	105.823 %
Concentration per Run 2	-0.025 ppb	0.018 ppb	0.000 ppb	7.663 ppb	0.013 ppb	-0.081 ppb	0.001 ppb	-0.008 ppb	102.732 %
Concentration per Run 3	-0.010 ppb	0.015 ppb	-0.020 ppb	5.407 ppb	-0.009 ppb	-0.023 ppb	0.025 ppb	-0.009 ppb	105.131 %
Recovery Percentage 1	-0.234 %	1.300 %	-2.215 %	12.492 %	0.298 %	-2.489 %	1.218 %	0.280 %	
Concentration RSD	103.4 %	50.5 %	105.2 %	19.8 %	734.7 %	58.5 %	98.3 %	276.8 %	1.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	-0.019 ppb	0.143 ppb	-0.018 ppb	0.459 ppb	89.153 %	0.010 ppb	-0.001 ppb	86.882 %	0.135 ppb
Concentration per Run 1	0.001 ppb	0.135 ppb	-0.023 ppb	0.373 ppb	95.126 %	0.013 ppb	-0.004 ppb	91.019 %	0.117 ppb
Concentration per Run 2	-0.045 ppb	0.166 ppb	-0.010 ppb	0.421 ppb	85.600 %	0.012 ppb	0.002 ppb	84.192 %	0.127 ppb
Concentration per Run 3	-0.013 ppb	0.129 ppb	-0.021 ppb	0.582 ppb	86.734 %	0.006 ppb	0.000 ppb	85.436 %	0.160 ppb
Recovery Percentage 1	-3.823 %	2.869 %	-0.179 %	22.929 %		2.617 %	-0.302 %		3.368 %
Concentration RSD	123.5 %	13.9 %	37.2 %	23.9 %	5.8 %	35.6 %	490.6 %	4.2 %	16.8 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	-0.005 ppb	101.181 %	96.849 %	0.542 ppb	0.017 ppb	95.947 %
Concentration per Run 1	-0.001 ppb	105.847 %	102.865 %	0.577 ppb	0.019 ppb	99.299 %
Concentration per Run 2	-0.004 ppb	99.715 %	93.399 %	0.582 ppb	0.017 ppb	95.373 %
Concentration per Run 3	-0.010 ppb	97.980 %	94.282 %	0.467 ppb	0.016 ppb	93.168 %
Recovery Percentage 1	-1.029 %			54.190 %	1.719 %	
Concentration RSD	83.7 %	4.1 %	5.4 %	12.0 %	9.2 %	3.2 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index: 123
Analysis label: WG2001705-1 6020SL
Analysis started at: 11/26/2024 6:58:38 PM
User name ALPHALAB\a2-icpmsq2
Rack 2
Vial 19
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	115.292 %	125.991 %	0.012 ppb	-5.873 ppb	0.313 ppb	2.290 ppb	-27.160 ppb	18.098 ppb	119.536 %
Concentration per Run 1	114.500 %	138.062 %	0.010 ppb	-15.824 ppb	0.064 ppb	2.663 ppb	-29.773 ppb	16.396 ppb	117.723 %
Concentration per Run 2	114.216 %	117.508 %	0.012 ppb	-0.698 ppb	0.589 ppb	2.075 ppb	-28.080 ppb	19.082 ppb	119.068 %
Concentration per Run 3	117.162 %	122.402 %	0.013 ppb	-1.098 ppb	0.286 ppb	2.131 ppb	-23.627 ppb	18.816 ppb	121.818 %
Concentration RSD	1.4 %	8.5 %	12.0 %	146.8 %	84.1 %	14.2 %	11.7 %	8.2 %	1.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.005 ppb	0.388 ppb	0.179 ppb	6.252 ppb	0.000 ppb	0.031 ppb	0.075 ppb	0.749 ppb	115.643 %
Concentration per Run 1	0.023 ppb	0.333 ppb	0.173 ppb	7.780 ppb	-0.003 ppb	0.009 ppb	0.037 ppb	0.682 ppb	124.584 %
Concentration per Run 2	-0.023 ppb	0.398 ppb	0.139 ppb	5.226 ppb	0.002 ppb	0.055 ppb	0.138 ppb	0.793 ppb	110.746 %
Concentration per Run 3	-0.015 ppb	0.432 ppb	0.226 ppb	5.750 ppb	0.000 ppb	0.028 ppb	0.051 ppb	0.772 ppb	111.599 %
Concentration RSD	492.4 %	13.0 %	24.5 %	21.6 %	1,076.3 %	75.6 %	72.8 %	7.9 %	6.7 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	-0.023 ppb	0.025 ppb	-0.004 ppb	0.384 ppb	91.268 %	-0.002 ppb	-0.003 ppb	87.717 %	0.187 ppb
Concentration per Run 1	0.016 ppb	0.124 ppb	-0.003 ppb	0.749 ppb	97.530 %	-0.003 ppb	-0.002 ppb	92.848 %	0.241 ppb
Concentration per Run 2	-0.038 ppb	-0.057 ppb	-0.002 ppb	0.210 ppb	87.021 %	-0.002 ppb	-0.004 ppb	84.071 %	0.162 ppb
Concentration per Run 3	-0.046 ppb	0.007 ppb	-0.007 ppb	0.194 ppb	89.251 %	-0.002 ppb	-0.002 ppb	86.232 %	0.159 ppb
Concentration RSD	146.6 %	373.5 %	67.6 %	82.2 %	6.1 %	18.2 %	40.1 %	5.2 %	24.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.018 ppb	104.007 %	100.832 %	0.269 ppb	0.011 ppb	98.953 %
Concentration per Run 1	0.028 ppb	111.087 %	107.605 %	0.408 ppb	0.012 ppb	107.964 %
Concentration per Run 2	0.002 ppb	97.613 %	95.547 %	0.257 ppb	0.010 ppb	92.311 %
Concentration per Run 3	0.023 ppb	103.321 %	99.344 %	0.142 ppb	0.010 ppb	96.584 %
Concentration RSD	77.6 %	6.5 %	6.1 %	49.7 %	11.5 %	8.2 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index:	124	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG2001705-2d10 6020SL	Rack	2		
Analysis started at:	11/26/2024 7:09:43 PM	Vial	20		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	113.586 %	126.926 %	4.999 ppb	924.584 ppb	912.712 ppb	195.726 ppb	699.195 ppb	664.878 ppb	116.596 %
Concentration per Run 1	111.178 %	131.407 %	4.913 ppb	875.375 ppb	861.340 ppb	182.206 ppb	637.647 ppb	610.066 ppb	116.392 %
Concentration per Run 2	114.476 %	121.945 %	5.046 ppb	977.019 ppb	961.087 ppb	206.780 ppb	760.036 ppb	709.512 ppb	116.606 %
Concentration per Run 3	115.105 %	127.426 %	5.040 ppb	921.357 ppb	915.708 ppb	198.191 ppb	699.903 ppb	675.057 ppb	116.791 %
Concentration RSD	1.9 %	3.7 %	1.5 %	5.5 %	5.5 %	6.4 %	8.8 %	7.6 %	0.2 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	46.219 ppb	19.889 ppb	50.434 ppb	107.477 ppb	50.823 ppb	50.070 ppb	25.266 ppb	47.503 ppb	118.512 %
Concentration per Run 1	42.639 ppb	18.222 ppb	45.953 ppb	98.604 ppb	47.105 ppb	46.343 ppb	23.182 ppb	43.079 ppb	129.939 %
Concentration per Run 2	47.614 ppb	20.865 ppb	53.508 ppb	112.725 ppb	52.404 ppb	52.252 ppb	26.134 ppb	50.291 ppb	111.926 %
Concentration per Run 3	48.404 ppb	20.579 ppb	51.842 ppb	111.103 ppb	52.960 ppb	51.615 ppb	26.483 ppb	49.139 ppb	113.671 %
Concentration RSD	6.8 %	7.3 %	7.9 %	7.2 %	6.4 %	6.5 %	7.2 %	8.2 %	8.4 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	10.312 ppb	10.087 ppb	97.141 ppb	95.288 ppb	92.650 %	4.658 ppb	4.938 ppb	89.203 %	33.410 ppb
Concentration per Run 1	9.312 ppb	8.541 ppb	88.424 ppb	83.857 ppb	101.202 %	4.391 ppb	4.578 ppb	93.717 %	29.151 ppb
Concentration per Run 2	10.918 ppb	10.503 ppb	102.183 ppb	99.822 ppb	88.477 %	4.733 ppb	5.165 ppb	86.306 %	35.175 ppb
Concentration per Run 3	10.705 ppb	11.218 ppb	100.816 ppb	102.186 ppb	88.271 %	4.850 ppb	5.071 ppb	87.585 %	35.905 ppb
Concentration RSD	8.5 %	13.7 %	7.8 %	10.5 %	8.0 %	5.1 %	6.4 %	4.4 %	11.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	214.280 ppb	107.678 %	101.541 %	12.209 ppb	50.411 ppb	102.196 %
Concentration per Run 1	199.938 ppb	115.158 %	110.313 %	11.516 ppb	46.606 ppb	110.376 %
Concentration per Run 2	223.075 ppb	106.696 %	98.115 %	12.671 ppb	52.377 ppb	98.195 %
Concentration per Run 3	219.826 ppb	101.181 %	96.194 %	12.441 ppb	52.251 ppb	98.016 %
Concentration RSD	5.8 %	6.5 %	7.5 %	5.0 %	6.5 %	6.9 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index:	125	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2467981-01 6020SL	Rack	2		
Analysis started at:	11/26/2024 7:14:11 PM	Vial	21		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	95.459 %	112.854 %	0.002 ppb	469,600.798 ppb	54,611.010 ppb	2.690 ppb	3,155.040 ppb	112,489.916 ppb	105.156 %
Concentration per Run 1	93.965 %	114.181 %	0.001 ppb	454,505.816 ppb	52,697.303 ppb	2.806 ppb	3,023.898 ppb	107,518.289 ppb	102.665 %
Concentration per Run 2	95.718 %	111.701 %	0.002 ppb	476,914.373 ppb	55,596.917 ppb	2.232 ppb	3,218.854 ppb	115,361.968 ppb	106.815 %
Concentration per Run 3	96.694 %	112.680 %	0.005 ppb	477,382.205 ppb	55,538.809 ppb	3.031 ppb	3,222.368 ppb	114,589.492 ppb	105.986 %
Concentration RSD	1.4 %	1.1 %	76.0 %	2.8 %	3.0 %	15.3 %	3.6 %	3.8 %	2.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.429 ppb	2.337 ppb	2.348 ppb	7.798 ppb	0.707 ppb	9.420 ppb	1.225 ppb	3.278 ppb	100.285 %
Concentration per Run 1	0.486 ppb	2.238 ppb	2.437 ppb	7.192 ppb	0.670 ppb	9.267 ppb	1.254 ppb	3.348 ppb	101.499 %
Concentration per Run 2	0.451 ppb	2.455 ppb	2.354 ppb	8.913 ppb	0.736 ppb	9.476 ppb	1.167 ppb	3.224 ppb	96.685 %
Concentration per Run 3	0.349 ppb	2.318 ppb	2.252 ppb	7.288 ppb	0.713 ppb	9.518 ppb	1.252 ppb	3.262 ppb	102.670 %
Concentration RSD	16.6 %	4.7 %	3.9 %	12.4 %	4.8 %	1.4 %	4.0 %	1.9 %	3.2 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.444 ppb	0.173 ppb	890.797 ppb	3.064 ppb	81.248 %	-0.001 ppb	0.000 ppb	83.602 %	1.933 ppb
Concentration per Run 1	0.390 ppb	0.192 ppb	854.208 ppb	2.497 ppb	83.795 %	-0.001 ppb	-0.002 ppb	86.028 %	1.966 ppb
Concentration per Run 2	0.488 ppb	0.187 ppb	922.390 ppb	3.231 ppb	79.249 %	-0.001 ppb	-0.004 ppb	82.196 %	1.904 ppb
Concentration per Run 3	0.452 ppb	0.140 ppb	895.794 ppb	3.464 ppb	80.699 %	-0.002 ppb	0.006 ppb	82.583 %	1.928 ppb
Concentration RSD	11.2 %	16.6 %	3.9 %	16.5 %	2.9 %	45.7 %	3,241.5 %	2.5 %	1.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	232.050 ppb	100.713 %	97.802 %	0.014 ppb	0.037 ppb	88.525 %
Concentration per Run 1	221.951 ppb	101.350 %	100.644 %	-0.008 ppb	0.035 ppb	93.968 %
Concentration per Run 2	237.326 ppb	99.002 %	95.082 %	0.028 ppb	0.041 ppb	84.604 %
Concentration per Run 3	236.873 ppb	101.788 %	97.679 %	0.023 ppb	0.035 ppb	87.003 %
Concentration RSD	3.8 %	1.5 %	2.8 %	138.2 %	9.6 %	5.5 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index:	126	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG2001705-3d10 6020SL	Rack	2		
Analysis started at:	11/26/2024 7:18:41 PM	Vial	22		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	114.315 %	117.269 %	5.115 ppb	52,163.679 ppb	7,271.576 ppb	222.121 ppb	1,158.574 ppb	13,064.536 ppb	112.471 %
Concentration per Run 1	111.468 %	126.839 %	5.138 ppb	47,228.604 ppb	6,510.909 ppb	196.282 ppb	1,062.140 ppb	12,089.100 ppb	110.905 %
Concentration per Run 2	115.647 %	107.330 %	5.114 ppb	56,492.196 ppb	7,999.056 ppb	245.255 ppb	1,262.635 ppb	14,182.287 ppb	112.361 %
Concentration per Run 3	115.829 %	117.639 %	5.091 ppb	52,770.236 ppb	7,304.762 ppb	224.825 ppb	1,150.947 ppb	12,922.221 ppb	114.147 %
Concentration RSD	2.2 %	8.3 %	0.5 %	8.9 %	10.2 %	11.1 %	8.7 %	8.1 %	1.4 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	54.168 ppb	22.904 ppb	57.095 ppb	128.004 ppb	58.400 ppb	58.523 ppb	29.882 ppb	56.259 ppb	102.981 %
Concentration per Run 1	49.527 ppb	21.053 ppb	53.282 ppb	119.164 ppb	54.570 ppb	55.712 ppb	28.741 ppb	53.413 ppb	103.661 %
Concentration per Run 2	59.839 ppb	25.056 ppb	63.405 ppb	138.328 ppb	64.107 ppb	62.440 ppb	32.331 ppb	61.325 ppb	97.556 %
Concentration per Run 3	53.137 ppb	22.602 ppb	54.600 ppb	126.518 ppb	56.523 ppb	57.416 ppb	28.575 ppb	54.038 ppb	107.725 %
Concentration RSD	9.7 %	8.8 %	9.6 %	7.6 %	8.6 %	6.0 %	7.1 %	7.8 %	5.0 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	13.534 ppb	13.126 ppb	207.095 ppb	111.064 ppb	84.006 %	5.120 ppb	5.513 ppb	82.091 %	56.146 ppb
Concentration per Run 1	13.217 ppb	12.983 ppb	195.479 ppb	98.466 ppb	88.265 %	4.873 ppb	4.985 ppb	86.538 %	52.094 ppb
Concentration per Run 2	14.447 ppb	14.527 ppb	223.789 ppb	123.149 ppb	79.282 %	5.680 ppb	6.000 ppb	76.252 %	61.397 ppb
Concentration per Run 3	12.938 ppb	11.869 ppb	202.016 ppb	111.578 ppb	84.470 %	4.806 ppb	5.554 ppb	83.482 %	54.946 ppb
Concentration RSD	5.9 %	10.2 %	7.2 %	11.1 %	5.4 %	9.5 %	9.2 %	6.4 %	8.5 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	257.717 ppb	99.193 %	94.485 %	13.577 ppb	57.743 ppb	90.212 %
Concentration per Run 1	235.619 ppb	104.265 %	98.175 %	12.532 ppb	53.681 ppb	96.394 %
Concentration per Run 2	282.944 ppb	94.606 %	90.556 %	14.678 ppb	62.493 ppb	83.203 %
Concentration per Run 3	254.588 ppb	98.708 %	94.723 %	13.520 ppb	57.055 ppb	91.041 %
Concentration RSD	9.2 %	4.9 %	4.0 %	7.9 %	7.7 %	7.4 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index:	127	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG2001705-4 6020SL	Rack	2		
Analysis started at:	11/26/2024 7:23:10 PM	Vial	23		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	97.729 %	117.073 %	0.004 ppb	477,654.361 ppb	55,364.256 ppb	2.691 ppb	3,234.668 ppb	114,087.913 ppb	105.868 %
Concentration per Run 1	95.935 %	122.598 %	0.006 ppb	438,967.982 ppb	50,391.767 ppb	2.607 ppb	3,039.446 ppb	107,207.024 ppb	105.451 %
Concentration per Run 2	98.843 %	113.006 %	0.003 ppb	512,012.535 ppb	59,518.519 ppb	2.754 ppb	3,463.221 ppb	121,311.496 ppb	106.017 %
Concentration per Run 3	98.409 %	115.616 %	0.004 ppb	481,982.564 ppb	56,182.481 ppb	2.712 ppb	3,201.338 ppb	113,745.219 ppb	106.134 %
Concentration RSD	1.6 %	4.2 %	30.6 %	7.7 %	8.3 %	2.8 %	6.6 %	6.2 %	0.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.490 ppb	2.667 ppb	2.417 ppb	9.948 ppb	0.762 ppb	9.629 ppb	1.170 ppb	3.371 ppb	99.542 %
Concentration per Run 1	0.408 ppb	2.492 ppb	2.305 ppb	9.157 ppb	0.730 ppb	9.260 ppb	1.026 ppb	3.273 ppb	100.543 %
Concentration per Run 2	0.500 ppb	2.759 ppb	2.498 ppb	11.792 ppb	0.806 ppb	9.965 ppb	1.249 ppb	3.551 ppb	95.431 %
Concentration per Run 3	0.564 ppb	2.749 ppb	2.450 ppb	8.896 ppb	0.751 ppb	9.662 ppb	1.234 ppb	3.290 ppb	102.651 %
Concentration RSD	16.0 %	5.7 %	4.2 %	16.1 %	5.1 %	3.7 %	10.7 %	4.6 %	3.7 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.406 ppb	0.292 ppb	912.617 ppb	3.166 ppb	79.957 %	-0.002 ppb	0.004 ppb	80.663 %	0.545 ppb
Concentration per Run 1	0.350 ppb	0.212 ppb	851.095 ppb	2.711 ppb	86.402 %	-0.003 ppb	0.004 ppb	85.066 %	0.471 ppb
Concentration per Run 2	0.473 ppb	0.275 ppb	981.394 ppb	3.326 ppb	74.646 %	-0.002 ppb	0.005 ppb	75.082 %	0.551 ppb
Concentration per Run 3	0.395 ppb	0.389 ppb	905.362 ppb	3.461 ppb	78.823 %	-0.001 ppb	0.002 ppb	81.841 %	0.613 ppb
Concentration RSD	15.4 %	30.7 %	7.2 %	12.6 %	7.5 %	51.0 %	36.3 %	6.3 %	13.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	238.695 ppb	98.620 %	94.003 %	0.014 ppb	0.032 ppb	83.782 %
Concentration per Run 1	220.846 ppb	103.985 %	98.441 %	-0.007 ppb	0.031 ppb	86.704 %
Concentration per Run 2	253.930 ppb	93.772 %	89.352 %	0.036 ppb	0.036 ppb	80.608 %
Concentration per Run 3	241.308 ppb	98.103 %	94.216 %	0.015 ppb	0.028 ppb	84.034 %
Concentration RSD	7.0 %	5.2 %	4.8 %	150.5 %	13.4 %	3.6 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index: 128
Analysis label: WG2001705-5d10 6020SL
Analysis started at: 11/26/2024 7:27:40 PM
User name ALPHALAB\a2-icpmsq2
Rack 2
Vial 24
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	110.797 %	122.815 %	43.452 ppb	51,538.109 ppb	10,154.715 ppb	47.153 ppb	3,844.553 ppb	14,658.412 ppb	111.970 %
Concentration per Run 1	109.189 %	119.074 %	43.311 ppb	52,005.587 ppb	10,338.800 ppb	46.101 ppb	3,866.165 ppb	14,496.933 ppb	111.164 %
Concentration per Run 2	111.141 %	126.121 %	43.664 ppb	51,636.765 ppb	10,108.979 ppb	48.618 ppb	3,890.272 ppb	14,774.707 ppb	112.334 %
Concentration per Run 3	112.061 %	123.250 %	43.381 ppb	50,971.975 ppb	10,016.364 ppb	46.740 ppb	3,777.222 ppb	14,703.595 ppb	112.412 %
Concentration RSD	1.3 %	2.9 %	0.4 %	1.0 %	1.6 %	2.8 %	1.5 %	1.0 %	0.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	44.901 ppb	46.077 ppb	46.224 ppb	4,634.280 ppb	48.307 ppb	49.275 ppb	48.007 ppb	46.869 ppb	102.873 %
Concentration per Run 1	43.623 ppb	46.183 ppb	47.041 ppb	4,664.406 ppb	48.568 ppb	49.106 ppb	48.731 ppb	48.294 ppb	102.781 %
Concentration per Run 2	45.798 ppb	46.401 ppb	46.508 ppb	4,739.566 ppb	48.744 ppb	50.535 ppb	49.149 ppb	47.396 ppb	99.575 %
Concentration per Run 3	45.282 ppb	45.648 ppb	45.123 ppb	4,498.869 ppb	47.611 ppb	48.183 ppb	46.141 ppb	44.917 ppb	106.264 %
Concentration RSD	2.5 %	0.8 %	2.1 %	2.7 %	1.3 %	2.4 %	3.4 %	3.7 %	3.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	46.572 ppb	44.435 ppb	135.997 ppb	47.369 ppb	85.655 %	1.580 ppb	43.938 ppb	84.273 %	45.711 ppb
Concentration per Run 1	46.591 ppb	43.915 ppb	134.309 ppb	44.018 ppb	86.648 %	1.528 ppb	42.732 ppb	85.371 %	44.841 ppb
Concentration per Run 2	48.082 ppb	46.008 ppb	139.337 ppb	49.184 ppb	85.850 %	1.592 ppb	44.375 ppb	86.115 %	45.498 ppb
Concentration per Run 3	45.042 ppb	43.382 ppb	134.344 ppb	48.907 ppb	84.467 %	1.621 ppb	44.706 ppb	81.331 %	46.794 ppb
Concentration RSD	3.3 %	3.1 %	2.1 %	6.1 %	1.3 %	3.0 %	2.4 %	3.1 %	2.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	71.049 ppb	100.514 %	95.622 %	44.886 ppb	45.631 ppb	90.860 %
Concentration per Run 1	69.981 ppb	101.223 %	95.432 %	40.327 ppb	43.983 ppb	92.939 %
Concentration per Run 2	71.367 ppb	100.732 %	95.079 %	46.774 ppb	46.761 ppb	89.150 %
Concentration per Run 3	71.800 ppb	99.588 %	96.354 %	47.557 ppb	46.148 ppb	90.491 %
Concentration RSD	1.3 %	0.8 %	0.7 %	8.8 %	3.2 %	2.1 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index:	129	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG2001705-6d5 6020SL	Rack	2		
Analysis started at:	11/26/2024 7:32:11 PM	Vial	25		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	113.933 %	122.185 %	0.079 ppb	94,715.220 ppb	11,425.589 ppb	1.346 ppb	614.051 ppb	22,767.293 ppb	114.133 %
Concentration per Run 1	110.532 %	128.144 %	0.073 ppb	89,211.470 ppb	10,772.338 ppb	0.983 ppb	583.934 ppb	21,678.838 ppb	112.343 %
Concentration per Run 2	115.570 %	117.313 %	0.047 ppb	97,643.069 ppb	11,615.330 ppb	1.433 ppb	638.208 ppb	23,308.587 ppb	114.112 %
Concentration per Run 3	115.698 %	121.097 %	0.116 ppb	97,291.120 ppb	11,889.100 ppb	1.621 ppb	620.012 ppb	23,314.453 ppb	115.945 %
Concentration RSD	2.6 %	4.5 %	44.3 %	5.0 %	5.1 %	24.4 %	4.5 %	4.1 %	1.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.176 ppb	0.510 ppb	0.589 ppb	7.216 ppb	0.159 ppb	1.876 ppb	0.256 ppb	0.876 ppb	103.243 %
Concentration per Run 1	0.175 ppb	0.452 ppb	0.536 ppb	5.704 ppb	0.163 ppb	1.834 ppb	0.236 ppb	0.876 ppb	100.676 %
Concentration per Run 2	0.117 ppb	0.513 ppb	0.598 ppb	7.058 ppb	0.136 ppb	1.903 ppb	0.231 ppb	0.893 ppb	104.582 %
Concentration per Run 3	0.235 ppb	0.567 ppb	0.634 ppb	8.887 ppb	0.179 ppb	1.889 ppb	0.302 ppb	0.859 ppb	104.472 %
Concentration RSD	33.5 %	11.3 %	8.4 %	22.1 %	13.7 %	1.9 %	15.4 %	1.9 %	2.2 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.105 ppb	0.170 ppb	175.972 ppb	0.890 ppb	84.425 %	-0.001 ppb	0.009 ppb	84.308 %	0.212 ppb
Concentration per Run 1	0.130 ppb	0.137 ppb	171.407 ppb	0.736 ppb	88.501 %	-0.001 ppb	-0.002 ppb	88.349 %	0.174 ppb
Concentration per Run 2	0.099 ppb	0.160 ppb	176.373 ppb	0.787 ppb	83.515 %	-0.001 ppb	0.002 ppb	81.772 %	0.191 ppb
Concentration per Run 3	0.086 ppb	0.213 ppb	180.136 ppb	1.149 ppb	81.258 %	-0.001 ppb	0.026 ppb	82.804 %	0.273 ppb
Concentration RSD	21.1 %	23.0 %	2.5 %	25.3 %	4.4 %	36.8 %	172.8 %	4.2 %	25.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	46.942 ppb	100.675 %	95.888 %	0.390 ppb	0.040 ppb	89.953 %
Concentration per Run 1	44.554 ppb	104.781 %	99.636 %	0.392 ppb	0.034 ppb	91.684 %
Concentration per Run 2	47.718 ppb	100.708 %	96.240 %	0.419 ppb	0.031 ppb	89.484 %
Concentration per Run 3	48.555 ppb	96.534 %	91.788 %	0.358 ppb	0.055 ppb	88.690 %
Concentration RSD	4.5 %	4.1 %	4.1 %	7.9 %	32.7 %	1.7 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index: 130
Analysis label: L2467981-02 6020SL
Analysis started at: 11/26/2024 7:36:40 PM
User name ALPHALAB\a2-icpmsq2
Rack 2
Vial 26
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	106.374 %	115.116 %	0.038 ppb	258,298.271 ppb	101,121.064 ppb	2.448 ppb	2,563.090 ppb	140,148.305 ppb	115.218 %
Concentration per Run 1	104.426 %	119.531 %	0.040 ppb	247,261.513 ppb	96,975.245 ppb	2.097 ppb	2,448.136 ppb	132,603.444 ppb	112.507 %
Concentration per Run 2	108.106 %	111.375 %	0.034 ppb	266,192.771 ppb	104,321.968 ppb	2.607 ppb	2,619.651 ppb	144,384.302 ppb	117.777 %
Concentration per Run 3	106.588 %	114.442 %	0.040 ppb	261,440.529 ppb	102,065.977 ppb	2.639 ppb	2,621.484 ppb	143,457.170 ppb	115.371 %
Concentration RSD	1.7 %	3.6 %	9.4 %	3.8 %	3.7 %	12.4 %	3.9 %	4.7 %	2.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	1.702 ppb	0.959 ppb	8.724 ppb	21.714 ppb	0.332 ppb	19.441 ppb	2.131 ppb	7.482 ppb	100.598 %
Concentration per Run 1	1.614 ppb	0.878 ppb	8.150 ppb	18.069 ppb	0.326 ppb	19.764 ppb	2.058 ppb	7.546 ppb	101.547 %
Concentration per Run 2	1.727 ppb	0.995 ppb	9.245 ppb	23.650 ppb	0.349 ppb	19.295 ppb	2.154 ppb	7.709 ppb	98.127 %
Concentration per Run 3	1.765 ppb	1.004 ppb	8.777 ppb	23.425 ppb	0.321 ppb	19.263 ppb	2.181 ppb	7.191 ppb	102.122 %
Concentration RSD	4.6 %	7.3 %	6.3 %	14.5 %	4.6 %	1.4 %	3.0 %	3.5 %	2.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.448 ppb	0.703 ppb	1,044.977 ppb	0.701 ppb	79.526 %	0.000 ppb	0.016 ppb	81.552 %	0.505 ppb
Concentration per Run 1	0.349 ppb	0.505 ppb	1,011.594 ppb	0.625 ppb	81.728 %	0.001 ppb	0.022 ppb	82.662 %	0.492 ppb
Concentration per Run 2	0.475 ppb	1.035 ppb	1,083.422 ppb	0.749 ppb	76.344 %	0.002 ppb	0.013 ppb	79.384 %	0.506 ppb
Concentration per Run 3	0.521 ppb	0.570 ppb	1,039.914 ppb	0.729 ppb	80.506 %	-0.002 ppb	0.012 ppb	82.609 %	0.516 ppb
Concentration RSD	19.9 %	41.1 %	3.5 %	9.5 %	3.5 %	1,616.7 %	35.0 %	2.3 %	2.4 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	507.825 ppb	98.707 %	93.456 %	0.079 ppb	0.022 ppb	82.542 %
Concentration per Run 1	497.216 ppb	100.873 %	94.449 %	0.023 ppb	0.023 ppb	85.322 %
Concentration per Run 2	522.395 ppb	96.066 %	91.247 %	0.112 ppb	0.021 ppb	81.070 %
Concentration per Run 3	503.865 ppb	99.182 %	94.672 %	0.104 ppb	0.022 ppb	81.235 %
Concentration RSD	2.6 %	2.5 %	2.1 %	61.5 %	3.4 %	2.9 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index: 131
Analysis label: L2467981-03 6020SL
Analysis started at: 11/26/2024 7:41:09 PM
User name ALPHALAB\a2-icpmsq2
Rack 2
Vial 27
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	107.788 %	120.097 %	0.002 ppb	188,133.628 ppb	83,687.481 ppb	2.848 ppb	2,348.722 ppb	103,467.262 ppb	115.043 %
Concentration per Run 1	106.159 %	126.970 %	0.002 ppb	175,669.650 ppb	78,018.893 ppb	2.694 ppb	2,179.283 ppb	94,290.355 ppb	113.721 %
Concentration per Run 2	108.406 %	115.290 %	0.004 ppb	192,707.969 ppb	85,554.908 ppb	2.795 ppb	2,469.223 ppb	108,524.355 ppb	116.749 %
Concentration per Run 3	108.798 %	118.031 %	0.001 ppb	196,023.266 ppb	87,488.642 ppb	3.056 ppb	2,397.660 ppb	107,587.075 ppb	114.660 %
Concentration RSD	1.3 %	5.1 %	60.6 %	5.8 %	6.0 %	6.6 %	6.4 %	7.7 %	1.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	1.926 ppb	2.506 ppb	1.225 ppb	6.473 ppb	1.001 ppb	21.250 ppb	3.676 ppb	21.600 ppb	100.431 %
Concentration per Run 1	1.664 ppb	2.273 ppb	1.101 ppb	6.897 ppb	0.918 ppb	19.683 ppb	3.538 ppb	20.957 ppb	103.890 %
Concentration per Run 2	2.171 ppb	2.554 ppb	1.368 ppb	7.111 ppb	1.041 ppb	22.549 ppb	3.792 ppb	21.710 ppb	98.135 %
Concentration per Run 3	1.942 ppb	2.691 ppb	1.207 ppb	5.411 ppb	1.045 ppb	21.519 ppb	3.696 ppb	22.133 ppb	99.267 %
Concentration RSD	13.2 %	8.5 %	11.0 %	14.3 %	7.2 %	6.8 %	3.5 %	2.8 %	3.0 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.284 ppb	0.283 ppb	730.609 ppb	3.563 ppb	82.214 %	-0.002 ppb	0.018 ppb	83.497 %	0.189 ppb
Concentration per Run 1	0.311 ppb	0.150 ppb	686.293 ppb	3.166 ppb	84.761 %	-0.003 ppb	0.019 ppb	88.682 %	0.159 ppb
Concentration per Run 2	0.291 ppb	0.331 ppb	747.686 ppb	3.832 ppb	81.689 %	-0.001 ppb	0.021 ppb	80.782 %	0.198 ppb
Concentration per Run 3	0.250 ppb	0.368 ppb	757.848 ppb	3.690 ppb	80.193 %	-0.003 ppb	0.015 ppb	81.027 %	0.210 ppb
Concentration RSD	11.1 %	41.2 %	5.3 %	9.9 %	2.8 %	63.2 %	17.2 %	5.4 %	14.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	650.557 ppb	100.832 %	93.587 %	0.020 ppb	0.140 ppb	82.787 %
Concentration per Run 1	599.711 ppb	104.700 %	96.565 %	-0.013 ppb	0.124 ppb	85.984 %
Concentration per Run 2	676.951 ppb	98.741 %	92.009 %	0.036 ppb	0.151 ppb	81.686 %
Concentration per Run 3	675.010 ppb	99.054 %	92.188 %	0.037 ppb	0.146 ppb	80.690 %
Concentration RSD	6.8 %	3.3 %	2.8 %	140.8 %	10.2 %	3.4 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index:	132	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2467981-04 6020SL	Rack	2		
Analysis started at:	11/26/2024 7:45:38 PM	Vial	28		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	103.579 %	112.441 %	0.006 ppb	277,617.089 ppb	51,272.817 ppb	2.872 ppb	2,586.832 ppb	89,354.810 ppb	107.968 %
Concentration per Run 1	102.854 %	113.920 %	0.007 ppb	272,905.301 ppb	49,834.944 ppb	3.001 ppb	2,534.628 ppb	86,564.854 ppb	107.352 %
Concentration per Run 2	104.642 %	107.460 %	0.005 ppb	286,858.409 ppb	53,346.672 ppb	2.634 ppb	2,689.352 ppb	94,425.044 ppb	108.552 %
Concentration per Run 3	103.242 %	115.942 %	0.006 ppb	273,087.557 ppb	50,636.836 ppb	2.981 ppb	2,536.515 ppb	87,074.531 ppb	108.000 %
Concentration RSD	0.9 %	3.9 %	20.3 %	2.9 %	3.6 %	7.2 %	3.4 %	4.9 %	0.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	1.242 ppb	0.605 ppb	740.776 ppb	22.804 ppb	2.548 ppb	35.313 ppb	2.149 ppb	16.478 ppb	96.418 %
Concentration per Run 1	1.179 ppb	0.625 ppb	735.840 ppb	22.285 ppb	2.795 ppb	36.132 ppb	2.182 ppb	16.506 ppb	95.173 %
Concentration per Run 2	1.362 ppb	0.617 ppb	772.464 ppb	22.065 ppb	2.405 ppb	36.674 ppb	2.116 ppb	16.826 ppb	92.864 %
Concentration per Run 3	1.185 ppb	0.573 ppb	714.024 ppb	24.062 ppb	2.445 ppb	33.133 ppb	2.149 ppb	16.103 ppb	101.216 %
Concentration RSD	8.4 %	4.6 %	4.0 %	4.8 %	8.4 %	5.4 %	1.5 %	2.2 %	4.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.624 ppb	0.409 ppb	571.072 ppb	2.674 ppb	78.636 %	-0.001 ppb	0.025 ppb	80.864 %	0.697 ppb
Concentration per Run 1	0.633 ppb	0.498 ppb	559.111 ppb	2.639 ppb	79.698 %	-0.001 ppb	0.024 ppb	83.041 %	0.639 ppb
Concentration per Run 2	0.651 ppb	0.425 ppb	596.605 ppb	2.700 ppb	77.601 %	0.000 ppb	0.015 ppb	78.835 %	0.740 ppb
Concentration per Run 3	0.588 ppb	0.304 ppb	557.501 ppb	2.683 ppb	78.608 %	-0.001 ppb	0.035 ppb	80.717 %	0.712 ppb
Concentration RSD	5.2 %	24.0 %	3.9 %	1.2 %	1.3 %	57.2 %	40.6 %	2.6 %	7.4 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	353.920 ppb	96.499 %	91.858 %	0.006 ppb	0.035 ppb	82.998 %
Concentration per Run 1	347.814 ppb	96.287 %	91.638 %	-0.021 ppb	0.032 ppb	84.353 %
Concentration per Run 2	355.981 ppb	93.977 %	90.267 %	0.023 ppb	0.041 ppb	80.321 %
Concentration per Run 3	357.966 ppb	99.234 %	93.670 %	0.016 ppb	0.032 ppb	84.319 %
Concentration RSD	1.5 %	2.7 %	1.9 %	381.7 %	14.8 %	2.8 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index: 133
Analysis label: CCV
Analysis started at: 11/26/2024 7:50:07 PM
User name ALPHALAB\a2-icpmsq2
Rack 0
Vial 9
Comment CCV/MCCV

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	116.788 %	122.815 %	56.393 ppb	5,739.976 ppb	5,604.579 ppb	59.049 ppb	4,561.818 ppb	4,413.077 ppb	113.033 %
Concentration per Run 1	114.912 %	127.557 %	56.090 ppb	5,496.750 ppb	5,253.016 ppb	53.806 ppb	4,354.378 ppb	4,285.912 ppb	111.362 %
Concentration per Run 2	117.000 %	122.467 %	56.389 ppb	5,697.576 ppb	5,663.445 ppb	61.415 ppb	4,654.458 ppb	4,476.368 ppb	113.616 %
Concentration per Run 3	118.451 %	118.422 %	56.701 ppb	6,025.601 ppb	5,897.275 ppb	61.927 ppb	4,676.617 ppb	4,476.950 ppb	114.120 %
Recovery Percentage 1			93.988 %	95.666 %	93.410 %	98.415 %	76.030 %	73.551 %	
Concentration RSD	1.5 %	3.7 %	0.5 %	4.7 %	5.8 %	7.7 %	3.9 %	2.5 %	1.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	57.617 ppb	59.979 ppb	60.539 ppb	6,121.667 ppb	62.768 ppb	62.878 ppb	62.669 ppb	69.228 ppb	103.059 %
Concentration per Run 1	54.308 ppb	56.100 ppb	57.571 ppb	5,775.188 ppb	59.045 ppb	59.212 ppb	59.720 ppb	66.442 ppb	105.861 %
Concentration per Run 2	57.721 ppb	61.970 ppb	61.565 ppb	6,323.248 ppb	64.782 ppb	65.194 ppb	63.978 ppb	71.428 ppb	100.745 %
Concentration per Run 3	60.823 ppb	61.866 ppb	62.482 ppb	6,266.566 ppb	64.478 ppb	64.228 ppb	64.309 ppb	69.815 ppb	102.570 %
Recovery Percentage 1	96.029 %	99.965 %	100.899 %	102.028 %	104.614 %	104.796 %	104.448 %	115.381 %	
Concentration RSD	5.7 %	5.6 %	4.3 %	4.9 %	5.1 %	5.1 %	4.1 %	3.7 %	2.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	59.969 ppb	58.456 ppb	60.918 ppb	60.315 ppb	87.217 %	56.536 ppb	56.713 ppb	86.056 %	58.866 ppb
Concentration per Run 1	57.374 ppb	56.841 ppb	57.046 ppb	53.537 ppb	93.401 %	53.123 ppb	53.468 ppb	90.442 %	54.169 ppb
Concentration per Run 2	62.357 ppb	60.409 ppb	62.993 ppb	62.872 ppb	84.478 %	58.004 ppb	59.212 ppb	82.977 %	62.048 ppb
Concentration per Run 3	60.175 ppb	58.118 ppb	62.715 ppb	64.534 ppb	83.772 %	58.481 ppb	57.459 ppb	84.751 %	60.381 ppb
Recovery Percentage 1	99.948 %	97.426 %	101.530 %	100.524 %		94.226 %	94.521 %		98.110 %
Concentration RSD	4.2 %	3.1 %	5.5 %	9.8 %	6.2 %	5.2 %	5.2 %	4.5 %	7.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	60.626 ppb	101.433 %	95.049 %	56.396 ppb	57.814 ppb	94.102 %
Concentration per Run 1	56.291 ppb	108.361 %	100.227 %	49.380 ppb	54.156 ppb	96.072 %
Concentration per Run 2	63.638 ppb	100.586 %	94.936 %	57.529 ppb	58.859 ppb	93.493 %
Concentration per Run 3	61.950 ppb	95.351 %	89.984 %	62.278 ppb	60.427 ppb	92.742 %
Recovery Percentage 1	101.043 %			93.993 %	96.357 %	
Concentration RSD	6.3 %	6.5 %	5.4 %	11.6 %	5.6 %	1.9 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index: 134
Analysis label: CCB
Analysis started at: 11/26/2024 7:54:39 PM
User name ALPHALAB\a2-icpmsq2
Rack 0
Vial 10
Comment CCB

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	117.584 %	118.922 %	0.155 ppb	174.193 ppb	35.554 ppb	-0.570 ppb	-16.039 ppb	49.924 ppb	112.948 %
Concentration per Run 1	114.915 %	125.469 %	0.348 ppb	176.739 ppb	35.711 ppb	-0.711 ppb	-18.922 ppb	56.670 ppb	110.775 %
Concentration per Run 2	118.408 %	114.181 %	0.047 ppb	155.539 ppb	29.783 ppb	-0.369 ppb	-13.173 ppb	44.272 ppb	114.289 %
Concentration per Run 3	119.429 %	117.117 %	0.070 ppb	190.300 ppb	41.168 ppb	-0.630 ppb	-16.023 ppb	48.829 ppb	113.779 %
Recovery Percentage 1			30.973 %	34.839 %	50.791 %	-5.700 %	-16.039 %	49.924 %	
Concentration RSD	2.0 %	4.9 %	108.1 %	10.1 %	16.0 %	31.3 %	17.9 %	12.6 %	1.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.087 ppb	0.018 ppb	0.168 ppb	6.827 ppb	0.017 ppb	-0.008 ppb	0.038 ppb	0.025 ppb	102.566 %
Concentration per Run 1	0.079 ppb	0.016 ppb	0.132 ppb	6.610 ppb	0.012 ppb	-0.027 ppb	0.096 ppb	0.033 ppb	104.676 %
Concentration per Run 2	0.102 ppb	0.013 ppb	0.090 ppb	5.844 ppb	0.020 ppb	0.004 ppb	0.029 ppb	0.056 ppb	100.420 %
Concentration per Run 3	0.081 ppb	0.024 ppb	0.282 ppb	8.026 ppb	0.019 ppb	-0.001 ppb	-0.012 ppb	-0.013 ppb	102.602 %
Recovery Percentage 1	1.748 %	1.771 %	16.816 %	13.654 %	3.434 %	-0.384 %	3.766 %	0.500 %	
Concentration RSD	14.5 %	31.0 %	60.1 %	16.2 %	26.4 %	215.5 %	144.9 %	140.7 %	2.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.024 ppb	0.186 ppb	0.305 ppb	0.431 ppb	86.497 %	0.012 ppb	0.010 ppb	83.818 %	0.082 ppb
Concentration per Run 1	0.048 ppb	0.245 ppb	0.313 ppb	0.330 ppb	92.432 %	0.012 ppb	0.011 ppb	89.183 %	0.070 ppb
Concentration per Run 2	0.054 ppb	0.152 ppb	0.312 ppb	0.511 ppb	83.191 %	0.011 ppb	0.004 ppb	79.691 %	0.078 ppb
Concentration per Run 3	-0.031 ppb	0.161 ppb	0.291 ppb	0.450 ppb	83.869 %	0.013 ppb	0.016 ppb	82.581 %	0.098 ppb
Recovery Percentage 1	4.736 %	3.717 %	3.049 %	21.529 %		2.967 %	5.176 %		2.052 %
Concentration RSD	200.5 %	27.5 %	4.1 %	21.3 %	6.0 %	10.2 %	56.5 %	5.8 %	17.3 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.233 ppb	100.712 %	94.937 %	0.532 ppb	0.027 ppb	94.426 %
Concentration per Run 1	0.256 ppb	108.888 %	102.495 %	0.549 ppb	0.027 ppb	99.132 %
Concentration per Run 2	0.214 ppb	97.368 %	91.314 %	0.605 ppb	0.026 ppb	92.157 %
Concentration per Run 3	0.230 ppb	95.881 %	91.002 %	0.441 ppb	0.027 ppb	91.988 %
Recovery Percentage 1	46.666 %			53.159 %	2.690 %	
Concentration RSD	9.2 %	7.1 %	6.9 %	15.6 %	3.2 %	4.3 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index:	135	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2467981-05 6020SL	Rack	2		
Analysis started at:	11/26/2024 7:59:12 PM	Vial	29		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	106.946 %	120.793 %	0.003 ppb	100,811.629 ppb	63,120.124 ppb	2.557 ppb	1,531.636 ppb	81,709.428 ppb	110.734 %
Concentration per Run 1	104.386 %	123.316 %	0.003 ppb	94,111.420 ppb	58,906.409 ppb	2.153 ppb	1,445.049 ppb	76,600.587 ppb	105.373 %
Concentration per Run 2	102.430 %	121.293 %	0.004 ppb	103,112.286 ppb	64,830.319 ppb	2.544 ppb	1,559.253 ppb	83,722.492 ppb	103.083 %
Concentration per Run 3	114.021 %	117.769 %	0.002 ppb	105,211.182 ppb	65,623.645 ppb	2.973 ppb	1,590.607 ppb	84,805.204 ppb	123.746 %
Concentration RSD	5.8 %	2.3 %	33.4 %	5.8 %	5.8 %	16.0 %	5.0 %	5.5 %	10.2 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	1.583 ppb	1.328 ppb	2.088 ppb	14.465 ppb	0.690 ppb	24.423 ppb	1.221 ppb	18.579 ppb	103.943 %
Concentration per Run 1	1.432 ppb	1.221 ppb	1.927 ppb	12.747 ppb	0.621 ppb	22.789 ppb	1.150 ppb	17.639 ppb	107.141 %
Concentration per Run 2	1.688 ppb	1.382 ppb	2.077 ppb	15.219 ppb	0.697 ppb	25.491 ppb	1.225 ppb	19.465 ppb	101.485 %
Concentration per Run 3	1.628 ppb	1.380 ppb	2.261 ppb	15.429 ppb	0.751 ppb	24.989 ppb	1.290 ppb	18.633 ppb	103.204 %
Concentration RSD	8.5 %	7.0 %	8.0 %	10.3 %	9.5 %	5.9 %	5.7 %	4.9 %	2.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.432 ppb	0.180 ppb	612.504 ppb	0.894 ppb	83.352 %	-0.002 ppb	0.008 ppb	85.513 %	0.501 ppb
Concentration per Run 1	0.438 ppb	0.086 ppb	568.062 ppb	0.755 ppb	89.124 %	-0.002 ppb	0.003 ppb	91.498 %	0.443 ppb
Concentration per Run 2	0.481 ppb	0.336 ppb	637.888 ppb	0.986 ppb	80.703 %	-0.001 ppb	0.014 ppb	82.050 %	0.549 ppb
Concentration per Run 3	0.377 ppb	0.118 ppb	631.563 ppb	0.941 ppb	80.227 %	-0.003 ppb	0.006 ppb	82.992 %	0.513 ppb
Concentration RSD	12.1 %	75.6 %	6.3 %	13.7 %	6.0 %	53.3 %	70.9 %	6.1 %	10.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	496.066 ppb	100.559 %	94.945 %	0.084 ppb	0.016 ppb	86.964 %
Concentration per Run 1	452.304 ppb	106.914 %	100.340 %	0.028 ppb	0.015 ppb	92.784 %
Concentration per Run 2	519.197 ppb	98.168 %	91.463 %	0.105 ppb	0.017 ppb	84.770 %
Concentration per Run 3	516.696 ppb	96.597 %	93.031 %	0.118 ppb	0.017 ppb	83.338 %
Concentration RSD	7.6 %	5.5 %	5.0 %	57.7 %	7.4 %	5.9 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index:	136	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2467981-06 6020SL	Rack	2		
Analysis started at:	11/26/2024 8:03:41 PM	Vial	30		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	109.033 %	121.271 %	0.049 ppb	92,583.455 ppb	46,711.734 ppb	2.942 ppb	1,306.703 ppb	75,020.278 ppb	109.394 %
Concentration per Run 1	109.470 %	126.121 %	0.028 ppb	87,503.975 ppb	43,232.048 ppb	3.248 ppb	1,238.933 ppb	70,022.734 ppb	109.868 %
Concentration per Run 2	109.895 %	119.466 %	0.072 ppb	93,295.898 ppb	47,276.172 ppb	2.832 ppb	1,327.289 ppb	77,801.281 ppb	110.775 %
Concentration per Run 3	107.733 %	118.226 %	0.048 ppb	96,950.492 ppb	49,626.982 ppb	2.746 ppb	1,353.886 ppb	77,236.820 ppb	107.538 %
Concentration RSD	1.1 %	3.5 %	44.2 %	5.1 %	6.9 %	9.1 %	4.6 %	5.8 %	1.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	1.307 ppb	2.104 ppb	7.118 ppb	16.301 ppb	0.171 ppb	15.132 ppb	1.234 ppb	27.434 ppb	99.916 %
Concentration per Run 1	1.257 ppb	1.946 ppb	6.774 ppb	16.385 ppb	0.189 ppb	14.896 ppb	1.229 ppb	26.786 ppb	101.560 %
Concentration per Run 2	1.220 ppb	2.169 ppb	7.571 ppb	14.805 ppb	0.154 ppb	14.957 ppb	1.179 ppb	28.096 ppb	98.616 %
Concentration per Run 3	1.444 ppb	2.197 ppb	7.008 ppb	17.713 ppb	0.170 ppb	15.543 ppb	1.296 ppb	27.420 ppb	99.573 %
Concentration RSD	9.2 %	6.5 %	5.8 %	8.9 %	10.4 %	2.4 %	4.7 %	2.4 %	1.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.415 ppb	0.312 ppb	451.196 ppb	2.190 ppb	81.777 %	-0.002 ppb	0.007 ppb	83.530 %	0.555 ppb
Concentration per Run 1	0.435 ppb	0.340 ppb	429.768 ppb	2.091 ppb	84.755 %	-0.004 ppb	0.011 ppb	87.199 %	0.505 ppb
Concentration per Run 2	0.374 ppb	0.190 ppb	458.715 ppb	2.209 ppb	80.725 %	-0.001 ppb	0.004 ppb	79.662 %	0.573 ppb
Concentration per Run 3	0.435 ppb	0.406 ppb	465.105 ppb	2.269 ppb	79.852 %	-0.003 ppb	0.004 ppb	83.729 %	0.589 ppb
Concentration RSD	8.5 %	35.4 %	4.2 %	4.2 %	3.2 %	71.0 %	61.9 %	4.5 %	8.0 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	202.234 ppb	100.451 %	94.353 %	0.039 ppb	0.024 ppb	87.533 %
Concentration per Run 1	190.374 ppb	102.672 %	96.599 %	0.005 ppb	0.023 ppb	89.018 %
Concentration per Run 2	210.621 ppb	99.378 %	94.062 %	0.053 ppb	0.024 ppb	86.514 %
Concentration per Run 3	205.706 ppb	99.303 %	92.399 %	0.061 ppb	0.024 ppb	87.067 %
Concentration RSD	5.2 %	1.9 %	2.2 %	76.2 %	1.8 %	1.5 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index: 137
Analysis label: L2467981-07 6020SL
Analysis started at: 11/26/2024 8:08:10 PM
User name ALPHALAB\a2-icpmsq2
Rack 2
Vial 31
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	94.424 %	113.333 %	0.020 ppb	567,494.374 ppb	107,712.267 ppb	2.154 ppb	1,865.619 ppb	175,024.109 ppb	102.443 %
Concentration per Run 1	93.454 %	113.137 %	0.021 ppb	551,712.710 ppb	103,459.601 ppb	2.147 ppb	1,800.222 ppb	164,936.346 ppb	101.241 %
Concentration per Run 2	95.380 %	110.788 %	0.021 ppb	588,544.383 ppb	112,744.828 ppb	1.966 ppb	1,964.465 ppb	182,945.849 ppb	103.123 %
Concentration per Run 3	94.438 %	116.073 %	0.016 ppb	562,226.030 ppb	106,932.373 ppb	2.348 ppb	1,832.171 ppb	177,190.132 ppb	102.965 %
Concentration RSD	1.0 %	2.3 %	15.5 %	3.3 %	4.4 %	8.9 %	4.7 %	5.3 %	1.0 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.289 ppb	11.419 ppb	172.699 ppb	45.923 ppb	0.336 ppb	21.937 ppb	1.621 ppb	9.703 ppb	93.738 %
Concentration per Run 1	0.311 ppb	10.706 ppb	164.304 ppb	45.181 ppb	0.323 ppb	20.944 ppb	1.631 ppb	9.613 ppb	95.082 %
Concentration per Run 2	0.326 ppb	12.124 ppb	182.518 ppb	51.705 ppb	0.323 ppb	23.318 ppb	1.704 ppb	9.867 ppb	91.120 %
Concentration per Run 3	0.231 ppb	11.429 ppb	171.275 ppb	40.883 ppb	0.362 ppb	21.547 ppb	1.527 ppb	9.631 ppb	95.012 %
Concentration RSD	17.6 %	6.2 %	5.3 %	11.9 %	6.7 %	5.6 %	5.5 %	1.5 %	2.4 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.111 ppb	0.274 ppb	749.500 ppb	3.802 ppb	75.486 %	-0.002 ppb	0.088 ppb	78.266 %	0.386 ppb
Concentration per Run 1	0.109 ppb	0.277 ppb	723.042 ppb	3.250 ppb	77.094 %	-0.001 ppb	0.060 ppb	78.306 %	0.352 ppb
Concentration per Run 2	0.083 ppb	0.250 ppb	772.809 ppb	3.973 ppb	74.046 %	-0.002 ppb	0.096 ppb	79.016 %	0.426 ppb
Concentration per Run 3	0.140 ppb	0.294 ppb	752.649 ppb	4.182 ppb	75.318 %	-0.003 ppb	0.110 ppb	77.478 %	0.380 ppb
Concentration RSD	25.5 %	8.0 %	3.3 %	12.9 %	2.0 %	51.4 %	29.4 %	1.0 %	9.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	267.726 ppb	95.630 %	90.458 %	0.012 ppb	0.012 ppb	79.614 %
Concentration per Run 1	262.532 ppb	97.522 %	93.986 %	-0.016 ppb	0.013 ppb	81.878 %
Concentration per Run 2	268.823 ppb	93.661 %	87.932 %	0.027 ppb	0.011 ppb	78.541 %
Concentration per Run 3	271.822 ppb	95.705 %	89.456 %	0.025 ppb	0.012 ppb	78.423 %
Concentration RSD	1.8 %	2.0 %	3.5 %	198.8 %	8.7 %	2.5 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index:	138	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2467981-08 6020SL	Rack	2		
Analysis started at:	11/26/2024 8:12:39 PM	Vial	32		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	116.076 %	120.466 %	0.000 ppb	53,793.614 ppb	58,026.186 ppb	3.141 ppb	1,167.750 ppb	62,278.796 ppb	117.352 %
Concentration per Run 1	110.410 %	123.772 %	0.001 ppb	51,169.547 ppb	55,355.340 ppb	3.063 ppb	1,103.737 ppb	58,822.289 ppb	115.654 %
Concentration per Run 2	118.322 %	118.879 %	0.000 ppb	53,747.646 ppb	57,162.076 ppb	3.078 ppb	1,143.080 ppb	61,187.957 ppb	117.257 %
Concentration per Run 3	119.497 %	118.748 %	0.001 ppb	56,463.649 ppb	61,561.143 ppb	3.283 ppb	1,256.433 ppb	66,826.143 ppb	119.146 %
Concentration RSD	4.3 %	2.4 %	138.6 %	4.9 %	5.5 %	3.9 %	6.8 %	6.6 %	1.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.359 ppb	0.349 ppb	1,062.933 ppb	6.929 ppb	1.119 ppb	55.155 ppb	1.355 ppb	64.456 ppb	99.817 %
Concentration per Run 1	0.234 ppb	0.335 ppb	1,054.489 ppb	6.038 ppb	1.038 ppb	53.227 ppb	1.251 ppb	61.816 ppb	103.478 %
Concentration per Run 2	0.352 ppb	0.298 ppb	943.174 ppb	8.125 ppb	1.082 ppb	53.677 ppb	1.308 ppb	63.218 ppb	102.558 %
Concentration per Run 3	0.491 ppb	0.416 ppb	1,191.137 ppb	6.622 ppb	1.238 ppb	58.562 ppb	1.507 ppb	68.334 ppb	93.414 %
Concentration RSD	35.8 %	17.2 %	11.7 %	15.5 %	9.4 %	5.4 %	9.9 %	5.3 %	5.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.091 ppb	0.009 ppb	521.377 ppb	1.341 ppb	83.295 %	-0.002 ppb	0.011 ppb	84.064 %	0.639 ppb
Concentration per Run 1	0.075 ppb	0.050 ppb	487.937 ppb	1.258 ppb	87.592 %	-0.003 ppb	0.006 ppb	87.082 %	0.577 ppb
Concentration per Run 2	0.058 ppb	-0.016 ppb	502.114 ppb	1.253 ppb	84.198 %	-0.001 ppb	0.020 ppb	84.669 %	0.636 ppb
Concentration per Run 3	0.138 ppb	-0.006 ppb	574.078 ppb	1.513 ppb	78.094 %	-0.001 ppb	0.007 ppb	80.439 %	0.704 ppb
Concentration RSD	46.6 %	380.3 %	8.9 %	11.1 %	5.8 %	101.7 %	73.9 %	4.0 %	9.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	521.011 ppb	100.057 %	93.907 %	0.003 ppb	0.015 ppb	86.244 %
Concentration per Run 1	492.389 ppb	105.664 %	97.538 %	-0.021 ppb	0.013 ppb	91.572 %
Concentration per Run 2	521.057 ppb	100.534 %	94.455 %	0.003 ppb	0.012 ppb	87.802 %
Concentration per Run 3	549.587 ppb	93.973 %	89.729 %	0.027 ppb	0.020 ppb	79.358 %
Concentration RSD	5.5 %	5.9 %	4.2 %	764.8 %	31.2 %	7.3 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index: 139
Analysis label: L2467981-09 6020SL
Analysis started at: 11/26/2024 8:17:08 PM
User name ALPHALAB\a2-icpmsq2
Rack 2
Vial 33
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	121.552 %	123.968 %	0.001 ppb	6,030.277 ppb	3,455.792 ppb	3.914 ppb	445.217 ppb	19,838.013 ppb	119.218 %
Concentration per Run 1	117.318 %	124.033 %	0.001 ppb	5,895.920 ppb	3,346.413 ppb	3.777 ppb	434.247 ppb	19,365.667 ppb	114.435 %
Concentration per Run 2	123.679 %	120.445 %	0.001 ppb	6,219.462 ppb	3,561.459 ppb	3.652 ppb	462.918 ppb	20,453.213 ppb	122.380 %
Concentration per Run 3	123.658 %	127.426 %	0.002 ppb	5,975.450 ppb	3,459.504 ppb	4.312 ppb	438.485 ppb	19,695.159 ppb	120.840 %
Concentration RSD	3.0 %	2.8 %	15.1 %	2.8 %	3.1 %	9.0 %	3.5 %	2.8 %	3.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.783 ppb	0.669 ppb	2,529.711 ppb	18.907 ppb	0.364 ppb	3.911 ppb	2.036 ppb	55.364 ppb	103.118 %
Concentration per Run 1	0.713 ppb	0.593 ppb	2,460.311 ppb	18.970 ppb	0.340 ppb	4.089 ppb	2.063 ppb	54.070 ppb	103.316 %
Concentration per Run 2	0.866 ppb	0.725 ppb	2,580.542 ppb	18.355 ppb	0.374 ppb	3.780 ppb	2.228 ppb	56.101 ppb	102.148 %
Concentration per Run 3	0.771 ppb	0.687 ppb	2,548.280 ppb	19.396 ppb	0.378 ppb	3.863 ppb	1.818 ppb	55.922 ppb	103.889 %
Concentration RSD	9.9 %	10.2 %	2.5 %	2.8 %	5.8 %	4.1 %	10.1 %	2.0 %	0.9 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.041 ppb	0.056 ppb	80.689 ppb	1.281 ppb	86.937 %	-0.002 ppb	0.000 ppb	88.164 %	0.289 ppb
Concentration per Run 1	0.038 ppb	0.076 ppb	77.872 ppb	1.104 ppb	89.215 %	-0.004 ppb	-0.002 ppb	90.196 %	0.264 ppb
Concentration per Run 2	0.042 ppb	0.003 ppb	80.980 ppb	1.356 ppb	86.748 %	-0.001 ppb	0.000 ppb	87.520 %	0.294 ppb
Concentration per Run 3	0.044 ppb	0.089 ppb	83.215 ppb	1.381 ppb	84.847 %	0.000 ppb	0.002 ppb	86.777 %	0.308 ppb
Concentration RSD	6.8 %	82.4 %	3.3 %	12.0 %	2.5 %	122.4 %	4,122.1 %	2.0 %	7.8 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	436.365 ppb	102.136 %	95.985 %	-0.005 ppb	0.061 ppb	92.337 %
Concentration per Run 1	411.082 ppb	104.189 %	97.731 %	-0.024 ppb	0.065 ppb	92.481 %
Concentration per Run 2	443.672 ppb	103.102 %	96.900 %	0.002 ppb	0.059 ppb	91.737 %
Concentration per Run 3	454.340 ppb	99.118 %	93.324 %	0.006 ppb	0.058 ppb	92.793 %
Concentration RSD	5.2 %	2.6 %	2.4 %	323.1 %	5.9 %	0.6 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index: 140
Analysis label: L2467981-12 6020SL
Analysis started at: 11/26/2024 8:21:37 PM
User name ALPHALAB\a2-icpmsq2
Rack 2
Vial 34
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	117.520 %	125.186 %	0.003 ppb	184,403.392 ppb	22,067.586 ppb	4.439 ppb	21,041.667 ppb	25,676.169 ppb	117.155 %
Concentration per Run 1	114.805 %	122.663 %	0.003 ppb	179,010.504 ppb	21,146.006 ppb	4.164 ppb	20,842.182 ppb	24,855.300 ppb	115.653 %
Concentration per Run 2	118.569 %	123.642 %	0.004 ppb	189,703.944 ppb	23,473.693 ppb	4.741 ppb	21,067.207 ppb	25,786.444 ppb	115.818 %
Concentration per Run 3	119.188 %	129.253 %	0.002 ppb	184,495.728 ppb	21,583.058 ppb	4.414 ppb	21,215.613 ppb	26,386.763 ppb	119.996 %
Concentration RSD	2.0 %	2.8 %	31.7 %	2.9 %	5.6 %	6.5 %	0.9 %	3.0 %	2.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.164 ppb	0.270 ppb	17.236 ppb	5.097 ppb	0.039 ppb	1.034 ppb	0.811 ppb	1.010 ppb	99.122 %
Concentration per Run 1	0.124 ppb	0.259 ppb	16.339 ppb	6.622 ppb	0.033 ppb	0.969 ppb	0.838 ppb	1.033 ppb	100.986 %
Concentration per Run 2	0.237 ppb	0.294 ppb	17.636 ppb	4.311 ppb	0.048 ppb	1.155 ppb	0.812 ppb	1.032 ppb	96.633 %
Concentration per Run 3	0.132 ppb	0.258 ppb	17.733 ppb	4.357 ppb	0.036 ppb	0.977 ppb	0.783 ppb	0.966 ppb	99.747 %
Concentration RSD	38.4 %	7.6 %	4.5 %	25.9 %	20.6 %	10.2 %	3.4 %	3.8 %	2.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.278 ppb	0.152 ppb	651.603 ppb	3.261 ppb	81.545 %	-0.002 ppb	0.024 ppb	82.244 %	0.436 ppb
Concentration per Run 1	0.320 ppb	0.303 ppb	626.070 ppb	3.060 ppb	83.834 %	-0.004 ppb	0.020 ppb	82.945 %	0.384 ppb
Concentration per Run 2	0.238 ppb	0.049 ppb	671.565 ppb	3.289 ppb	78.649 %	-0.001 ppb	0.027 ppb	80.947 %	0.473 ppb
Concentration per Run 3	0.275 ppb	0.104 ppb	657.174 ppb	3.432 ppb	82.152 %	-0.002 ppb	0.026 ppb	82.839 %	0.451 ppb
Concentration RSD	14.9 %	87.8 %	3.6 %	5.8 %	3.2 %	58.9 %	15.8 %	1.4 %	10.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	55.530 ppb	97.520 %	92.043 %	-0.007 ppb	0.019 ppb	85.376 %
Concentration per Run 1	53.602 ppb	99.932 %	94.844 %	-0.029 ppb	0.013 ppb	89.179 %
Concentration per Run 2	55.797 ppb	94.566 %	90.803 %	0.005 ppb	0.024 ppb	84.402 %
Concentration per Run 3	57.191 ppb	98.062 %	90.483 %	0.003 ppb	0.021 ppb	82.546 %
Concentration RSD	3.3 %	2.8 %	2.6 %	275.5 %	30.5 %	4.0 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index: 141
Analysis label: L2467981-13 6020SL
Analysis started at: 11/26/2024 8:26:07 PM
User name ALPHALAB\a2-icpmsq2
Rack 2
Vial 35
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	115.022 %	121.032 %	0.000 ppb	69,269.416 ppb	33,003.759 ppb	5.246 ppb	5,214.530 ppb	59,205.861 ppb	115.244 %
Concentration per Run 1	113.066 %	120.053 %	0.001 ppb	67,921.636 ppb	32,247.311 ppb	5.129 ppb	5,178.647 ppb	57,997.040 ppb	116.256 %
Concentration per Run 2	118.489 %	119.596 %	0.000 ppb	71,089.239 ppb	33,485.009 ppb	5.735 ppb	5,221.156 ppb	59,842.634 ppb	118.400 %
Concentration per Run 3	113.510 %	123.446 %	0.000 ppb	68,797.374 ppb	33,278.957 ppb	4.874 ppb	5,243.787 ppb	59,777.909 ppb	111.076 %
Concentration RSD	2.6 %	1.7 %	233.5 %	2.4 %	2.0 %	8.4 %	0.6 %	1.8 %	3.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.925 ppb	1.714 ppb	22.017 ppb	43.085 ppb	0.061 ppb	0.649 ppb	0.455 ppb	5.458 ppb	100.971 %
Concentration per Run 1	0.885 ppb	1.716 ppb	20.752 ppb	40.879 ppb	0.069 ppb	0.681 ppb	0.420 ppb	5.318 ppb	102.824 %
Concentration per Run 2	0.872 ppb	1.750 ppb	23.109 ppb	46.264 ppb	0.052 ppb	0.635 ppb	0.505 ppb	5.614 ppb	99.701 %
Concentration per Run 3	1.017 ppb	1.675 ppb	22.189 ppb	42.111 ppb	0.063 ppb	0.630 ppb	0.441 ppb	5.443 ppb	100.388 %
Concentration RSD	8.7 %	2.2 %	5.4 %	6.5 %	13.8 %	4.4 %	9.7 %	2.7 %	1.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.461 ppb	0.109 ppb	523.848 ppb	1.107 ppb	83.695 %	-0.003 ppb	0.147 ppb	84.391 %	0.263 ppb
Concentration per Run 1	0.545 ppb	0.149 ppb	497.809 ppb	0.967 ppb	87.076 %	-0.003 ppb	0.148 ppb	86.648 %	0.265 ppb
Concentration per Run 2	0.458 ppb	0.033 ppb	536.365 ppb	1.269 ppb	82.415 %	-0.002 ppb	0.125 ppb	83.040 %	0.264 ppb
Concentration per Run 3	0.380 ppb	0.144 ppb	537.369 ppb	1.085 ppb	81.595 %	-0.004 ppb	0.167 ppb	83.486 %	0.259 ppb
Concentration RSD	17.9 %	60.3 %	4.3 %	13.8 %	3.5 %	32.5 %	14.2 %	2.3 %	1.3 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	118.846 ppb	101.061 %	93.901 %	-0.023 ppb	0.026 ppb	87.217 %
Concentration per Run 1	114.392 ppb	105.874 %	96.302 %	-0.039 ppb	0.022 ppb	87.177 %
Concentration per Run 2	123.109 ppb	98.515 %	92.183 %	-0.017 ppb	0.025 ppb	88.449 %
Concentration per Run 3	119.037 ppb	98.795 %	93.219 %	-0.012 ppb	0.031 ppb	86.025 %
Concentration RSD	3.7 %	4.1 %	2.3 %	62.5 %	16.4 %	1.4 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index: 142
Analysis label: L2467981-14 6020SL
Analysis started at: 11/26/2024 8:30:37 PM
User name ALPHALAB\a2-icpmsq2
Rack 2
Vial 36
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	122.891 %	126.600 %	0.018 ppb	4,226.861 ppb	1,122.639 ppb	13.093 ppb	831.525 ppb	11,479.362 ppb	119.355 %
Concentration per Run 1	121.553 %	127.622 %	0.015 ppb	4,103.105 ppb	1,071.429 ppb	12.527 ppb	819.004 ppb	11,240.071 ppb	119.030 %
Concentration per Run 2	124.035 %	121.750 %	0.021 ppb	4,366.601 ppb	1,156.969 ppb	13.825 ppb	846.086 ppb	11,624.788 ppb	119.799 %
Concentration per Run 3	123.084 %	130.428 %	0.017 ppb	4,210.878 ppb	1,139.519 ppb	12.928 ppb	829.486 ppb	11,573.229 ppb	119.235 %
Concentration RSD	1.0 %	3.5 %	15.7 %	3.1 %	4.0 %	5.1 %	1.6 %	1.8 %	0.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	1.663 ppb	18.109 ppb	36.866 ppb	300.007 ppb	0.459 ppb	10.931 ppb	1.171 ppb	20.554 ppb	102.487 %
Concentration per Run 1	1.598 ppb	17.588 ppb	35.431 ppb	288.475 ppb	0.417 ppb	10.471 ppb	1.167 ppb	19.988 ppb	102.706 %
Concentration per Run 2	1.699 ppb	18.263 ppb	38.089 ppb	303.846 ppb	0.518 ppb	10.993 ppb	1.159 ppb	20.635 ppb	102.264 %
Concentration per Run 3	1.693 ppb	18.475 ppb	37.078 ppb	307.700 ppb	0.441 ppb	11.328 ppb	1.186 ppb	21.038 ppb	102.489 %
Concentration RSD	3.4 %	2.6 %	3.6 %	3.4 %	11.5 %	4.0 %	1.2 %	2.6 %	0.2 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.730 ppb	0.109 ppb	1,115.131 ppb	0.991 ppb	87.646 %	0.014 ppb	0.090 ppb	86.846 %	0.593 ppb
Concentration per Run 1	0.730 ppb	0.168 ppb	1,082.065 ppb	0.822 ppb	89.189 %	0.017 ppb	0.089 ppb	87.612 %	0.581 ppb
Concentration per Run 2	0.649 ppb	0.120 ppb	1,115.702 ppb	1.018 ppb	88.558 %	0.010 ppb	0.075 ppb	86.860 %	0.588 ppb
Concentration per Run 3	0.812 ppb	0.040 ppb	1,147.627 ppb	1.132 ppb	85.192 %	0.015 ppb	0.105 ppb	86.066 %	0.611 ppb
Concentration RSD	11.2 %	59.0 %	2.9 %	15.8 %	2.5 %	22.7 %	16.8 %	0.9 %	2.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	27.840 ppb	101.105 %	94.728 %	0.035 ppb	0.317 ppb	91.978 %
Concentration per Run 1	26.749 ppb	101.024 %	95.413 %	0.022 ppb	0.321 ppb	91.103 %
Concentration per Run 2	27.764 ppb	103.054 %	95.816 %	0.044 ppb	0.312 ppb	92.200 %
Concentration per Run 3	29.008 ppb	99.238 %	92.956 %	0.041 ppb	0.318 ppb	92.631 %
Concentration RSD	4.1 %	1.9 %	1.6 %	33.1 %	1.5 %	0.9 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index:	143	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2467981-16 6020SL	Rack	2		
Analysis started at:	11/26/2024 8:35:07 PM	Vial	37		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	106.427 %	118.030 %	0.003 ppb	155,850.425 ppb	48,977.332 ppb	3.203 ppb	1,332.019 ppb	92,326.463 ppb	107.820 %
Concentration per Run 1	106.015 %	118.683 %	0.001 ppb	148,421.916 ppb	46,437.764 ppb	2.841 ppb	1,299.165 ppb	89,703.594 ppb	107.712 %
Concentration per Run 2	106.764 %	117.639 %	0.004 ppb	159,349.869 ppb	49,572.873 ppb	2.571 ppb	1,360.469 ppb	93,431.875 ppb	107.641 %
Concentration per Run 3	106.503 %	117.769 %	0.003 ppb	159,779.490 ppb	50,921.359 ppb	4.197 ppb	1,336.423 ppb	93,843.920 ppb	108.105 %
Concentration RSD	0.4 %	0.5 %	51.4 %	4.1 %	4.7 %	27.2 %	2.3 %	2.5 %	0.2 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.361 ppb	0.080 ppb	3,347.373 ppb	13.963 ppb	1.681 ppb	4.734 ppb	0.479 ppb	5.886 ppb	98.290 %
Concentration per Run 1	0.354 ppb	0.082 ppb	3,259.194 ppb	15.512 ppb	1.657 ppb	4.373 ppb	0.511 ppb	5.826 ppb	97.800 %
Concentration per Run 2	0.363 ppb	0.082 ppb	3,413.588 ppb	14.768 ppb	1.773 ppb	5.032 ppb	0.510 ppb	6.061 ppb	97.214 %
Concentration per Run 3	0.367 ppb	0.076 ppb	3,369.337 ppb	11.609 ppb	1.612 ppb	4.797 ppb	0.416 ppb	5.770 ppb	99.857 %
Concentration RSD	1.8 %	4.4 %	2.4 %	14.8 %	4.9 %	7.0 %	11.3 %	2.6 %	1.4 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.449 ppb	0.053 ppb	847.065 ppb	1.043 ppb	80.416 %	-0.003 ppb	0.147 ppb	82.922 %	0.292 ppb
Concentration per Run 1	0.486 ppb	-0.032 ppb	817.930 ppb	0.898 ppb	82.871 %	-0.004 ppb	0.147 ppb	86.000 %	0.283 ppb
Concentration per Run 2	0.462 ppb	0.185 ppb	852.826 ppb	1.097 ppb	80.620 %	-0.003 ppb	0.169 ppb	81.307 %	0.294 ppb
Concentration per Run 3	0.399 ppb	0.006 ppb	870.438 ppb	1.133 ppb	77.755 %	-0.002 ppb	0.125 ppb	81.459 %	0.298 ppb
Concentration RSD	10.1 %	218.0 %	3.2 %	12.2 %	3.2 %	36.9 %	14.7 %	3.2 %	2.8 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	90.666 ppb	99.225 %	94.744 %	-0.022 ppb	0.017 ppb	86.604 %
Concentration per Run 1	85.686 ppb	100.767 %	95.998 %	-0.038 ppb	0.017 ppb	87.609 %
Concentration per Run 2	91.819 ppb	98.912 %	93.603 %	-0.017 ppb	0.016 ppb	86.090 %
Concentration per Run 3	94.494 ppb	97.994 %	94.630 %	-0.010 ppb	0.018 ppb	86.113 %
Concentration RSD	5.0 %	1.4 %	1.3 %	67.6 %	3.6 %	1.0 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index:	144	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2467981-17 6020SL	Rack	2		
Analysis started at:	11/26/2024 8:39:36 PM	Vial	38		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	112.419 %	117.726 %	0.000 ppb	91,703.924 ppb	31,788.982 ppb	1.715 ppb	1,159.360 ppb	65,017.177 ppb	114.107 %
Concentration per Run 1	110.868 %	122.076 %	0.000 ppb	85,317.504 ppb	29,337.011 ppb	1.480 ppb	1,061.588 ppb	60,757.839 ppb	113.858 %
Concentration per Run 2	112.966 %	115.094 %	0.001 ppb	94,600.375 ppb	32,811.679 ppb	1.513 ppb	1,224.946 ppb	67,978.192 ppb	113.056 %
Concentration per Run 3	113.424 %	116.008 %	0.000 ppb	95,193.893 ppb	33,218.257 ppb	2.152 ppb	1,191.547 ppb	66,315.499 ppb	115.405 %
Concentration RSD	1.2 %	3.2 %	155.1 %	6.0 %	6.7 %	22.1 %	7.4 %	5.8 %	1.0 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.221 ppb	2.313 ppb	197.000 ppb	34.913 ppb	0.075 ppb	0.305 ppb	0.334 ppb	3.380 ppb	99.215 %
Concentration per Run 1	0.223 ppb	2.187 ppb	182.275 ppb	33.849 ppb	0.043 ppb	0.364 ppb	0.249 ppb	3.189 ppb	101.608 %
Concentration per Run 2	0.246 ppb	2.413 ppb	206.774 ppb	35.321 ppb	0.112 ppb	0.272 ppb	0.418 ppb	3.613 ppb	96.791 %
Concentration per Run 3	0.194 ppb	2.340 ppb	201.951 ppb	35.569 ppb	0.070 ppb	0.280 ppb	0.335 ppb	3.338 ppb	99.244 %
Concentration RSD	11.8 %	5.0 %	6.6 %	2.7 %	46.7 %	16.7 %	25.2 %	6.4 %	2.4 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.041 ppb	0.011 ppb	387.785 ppb	1.763 ppb	82.193 %	-0.002 ppb	0.005 ppb	83.879 %	0.213 ppb
Concentration per Run 1	0.085 ppb	-0.026 ppb	367.410 ppb	1.561 ppb	84.862 %	-0.001 ppb	0.008 ppb	86.090 %	0.204 ppb
Concentration per Run 2	0.015 ppb	0.046 ppb	394.939 ppb	1.754 ppb	82.292 %	-0.003 ppb	0.004 ppb	83.172 %	0.202 ppb
Concentration per Run 3	0.023 ppb	0.014 ppb	401.008 ppb	1.975 ppb	79.426 %	-0.003 ppb	0.004 ppb	82.374 %	0.232 ppb
Concentration RSD	92.9 %	319.7 %	4.6 %	11.7 %	3.3 %	38.7 %	37.8 %	2.3 %	8.0 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	185.227 ppb	99.739 %	93.725 %	-0.022 ppb	0.015 ppb	87.695 %
Concentration per Run 1	172.162 ppb	105.217 %	98.330 %	-0.038 ppb	0.011 ppb	89.315 %
Concentration per Run 2	189.056 ppb	96.194 %	91.487 %	-0.017 ppb	0.014 ppb	87.145 %
Concentration per Run 3	194.463 ppb	97.805 %	91.359 %	-0.012 ppb	0.020 ppb	86.625 %
Concentration RSD	6.3 %	4.8 %	4.3 %	61.6 %	29.1 %	1.6 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index:	145	User name	ALPHALAB\a2-icpmsq2	Comment	CCV/MCCV
Analysis label:	CCV	Rack	0		
Analysis started at:	11/26/2024 8:44:05 PM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	117.538 %	122.946 %	54.967 ppb	5,968.180 ppb	5,821.585 ppb	62.128 ppb	4,640.977 ppb	4,561.114 ppb	114.650 %
Concentration per Run 1	113.216 %	124.294 %	55.572 ppb	5,672.502 ppb	5,559.940 ppb	59.814 ppb	4,500.997 ppb	4,272.192 ppb	113.783 %
Concentration per Run 2	119.064 %	121.293 %	54.359 ppb	6,166.058 ppb	6,003.172 ppb	62.949 ppb	4,661.160 ppb	4,684.277 ppb	115.146 %
Concentration per Run 3	120.333 %	123.250 %	54.969 ppb	6,065.981 ppb	5,901.644 ppb	63.622 ppb	4,760.775 ppb	4,726.872 ppb	115.020 %
Recovery Percentage 1			91.611 %	99.470 %	97.026 %	103.547 %	77.350 %	76.019 %	
Concentration RSD	3.2 %	1.2 %	1.1 %	4.4 %	4.0 %	3.3 %	2.8 %	5.5 %	0.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	58.269 ppb	61.572 ppb	61.309 ppb	6,255.747 ppb	63.408 ppb	63.430 ppb	63.928 ppb	70.352 ppb	100.336 %
Concentration per Run 1	53.444 ppb	57.362 ppb	58.267 ppb	5,915.232 ppb	60.342 ppb	61.219 ppb	61.050 ppb	66.748 ppb	103.395 %
Concentration per Run 2	60.233 ppb	64.078 ppb	63.116 ppb	6,440.090 ppb	65.777 ppb	65.123 ppb	67.277 ppb	72.465 ppb	99.184 %
Concentration per Run 3	61.130 ppb	63.277 ppb	62.544 ppb	6,411.920 ppb	64.104 ppb	63.949 ppb	63.457 ppb	71.844 ppb	98.430 %
Recovery Percentage 1	97.115 %	102.620 %	102.182 %	104.262 %	105.679 %	105.717 %	106.547 %	117.254 %	
Concentration RSD	7.2 %	6.0 %	4.3 %	4.7 %	4.4 %	3.2 %	4.9 %	4.5 %	2.7 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	61.352 ppb	61.459 ppb	63.441 ppb	60.633 ppb	85.130 %	57.311 ppb	57.888 ppb	83.735 %	61.855 ppb
Concentration per Run 1	58.271 ppb	56.866 ppb	58.907 ppb	53.818 ppb	91.516 %	52.474 ppb	52.729 ppb	88.547 %	56.899 ppb
Concentration per Run 2	61.984 ppb	62.413 ppb	64.994 ppb	61.200 ppb	83.704 %	58.297 ppb	58.902 ppb	82.318 %	64.098 ppb
Concentration per Run 3	63.801 ppb	65.097 ppb	66.424 ppb	66.883 ppb	80.169 %	61.163 ppb	62.033 ppb	80.338 %	64.568 ppb
Recovery Percentage 1	102.253 %	102.431 %	105.736 %	101.056 %		95.519 %	96.480 %		103.092 %
Concentration RSD	4.6 %	6.8 %	6.3 %	10.8 %	6.8 %	7.7 %	8.2 %	5.1 %	6.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	62.865 ppb	100.188 %	93.128 %	58.912 ppb	60.983 ppb	90.049 %
Concentration per Run 1	57.635 ppb	106.327 %	97.122 %	49.685 ppb	54.782 ppb	95.942 %
Concentration per Run 2	64.841 ppb	99.075 %	93.171 %	60.854 ppb	62.847 ppb	89.578 %
Concentration per Run 3	66.119 ppb	95.163 %	89.092 %	66.198 ppb	65.318 ppb	84.627 %
Recovery Percentage 1	104.775 %			98.187 %	101.638 %	
Concentration RSD	7.3 %	5.7 %	4.3 %	14.3 %	9.0 %	6.3 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index:	146	User name	ALPHALAB\a2-icpmsq2	Comment	CCB
Analysis label:	CCB	Rack	0		
Analysis started at:	11/26/2024 8:48:38 PM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	118.854 %	117.965 %	0.188 ppb	75.936 ppb	4.889 ppb	0.105 ppb	-17.648 ppb	4.952 ppb	114.151 %
Concentration per Run 1	116.523 %	117.835 %	0.173 ppb	77.627 ppb	5.621 ppb	-0.312 ppb	-14.255 ppb	10.072 ppb	113.550 %
Concentration per Run 2	119.756 %	117.313 %	0.261 ppb	75.280 ppb	5.143 ppb	1.156 ppb	-17.283 ppb	5.848 ppb	114.020 %
Concentration per Run 3	120.285 %	118.748 %	0.128 ppb	74.900 ppb	3.902 ppb	-0.530 ppb	-21.406 ppb	-1.063 ppb	114.882 %
Recovery Percentage 1			37.521 %	15.187 %	6.984 %	1.048 %	-17.648 %	4.952 %	
Concentration RSD	1.7 %	0.6 %	36.1 %	1.9 %	18.2 %	874.6 %	20.3 %	113.5 %	0.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.039 ppb	0.019 ppb	0.175 ppb	5.138 ppb	0.009 ppb	-0.012 ppb	0.003 ppb	0.019 ppb	100.937 %
Concentration per Run 1	0.047 ppb	0.027 ppb	0.196 ppb	3.718 ppb	0.014 ppb	0.055 ppb	0.018 ppb	0.046 ppb	102.354 %
Concentration per Run 2	0.034 ppb	0.015 ppb	0.193 ppb	5.611 ppb	0.010 ppb	-0.077 ppb	-0.019 ppb	0.000 ppb	98.474 %
Concentration per Run 3	0.036 ppb	0.014 ppb	0.135 ppb	6.085 ppb	0.001 ppb	-0.013 ppb	0.010 ppb	0.010 ppb	101.982 %
Recovery Percentage 1	0.780 %	1.886 %	17.451 %	10.276 %	1.705 %	-0.577 %	0.308 %	0.377 %	
Concentration RSD	18.4 %	37.0 %	19.8 %	24.4 %	79.8 %	569.8 %	630.9 %	127.7 %	2.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	-0.006 ppb	0.190 ppb	0.066 ppb	0.408 ppb	86.075 %	0.010 ppb	0.003 ppb	83.277 %	0.057 ppb
Concentration per Run 1	-0.035 ppb	0.180 ppb	0.078 ppb	0.320 ppb	92.148 %	0.011 ppb	0.005 ppb	87.362 %	0.048 ppb
Concentration per Run 2	-0.025 ppb	0.350 ppb	0.060 ppb	0.306 ppb	82.614 %	0.011 ppb	0.000 ppb	81.144 %	0.057 ppb
Concentration per Run 3	0.043 ppb	0.042 ppb	0.061 ppb	0.597 ppb	83.462 %	0.007 ppb	0.004 ppb	81.326 %	0.065 ppb
Recovery Percentage 1	-1.115 %	3.808 %	0.662 %	20.387 %		2.438 %	1.637 %		1.422 %
Concentration RSD	755.6 %	81.1 %	15.4 %	40.3 %	6.1 %	21.9 %	83.3 %	4.2 %	15.4 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	-0.008 ppb	96.904 %	92.087 %	0.541 ppb	0.021 ppb	90.565 %
Concentration per Run 1	0.017 ppb	101.432 %	96.140 %	0.540 ppb	0.027 ppb	94.015 %
Concentration per Run 2	-0.008 ppb	94.639 %	89.413 %	0.630 ppb	0.019 ppb	87.336 %
Concentration per Run 3	-0.033 ppb	94.640 %	90.709 %	0.453 ppb	0.018 ppb	90.345 %
Recovery Percentage 1	-1.572 %			54.080 %	2.118 %	
Concentration RSD	317.7 %	4.0 %	3.9 %	16.4 %	23.3 %	3.7 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index:	147	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2467981-18 6020SL	Rack	2		
Analysis started at:	11/26/2024 8:53:10 PM	Vial	39		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	105.747 %	119.466 %	0.070 ppb	211,894.542 ppb	67,380.988 ppb	3.203 ppb	1,288.510 ppb	116,661.060 ppb	110.456 %
Concentration per Run 1	105.006 %	120.901 %	0.125 ppb	204,473.131 ppb	65,056.186 ppb	2.831 ppb	1,233.075 ppb	110,261.273 ppb	110.755 %
Concentration per Run 2	108.022 %	116.595 %	0.060 ppb	216,540.136 ppb	70,060.089 ppb	3.411 ppb	1,296.072 ppb	118,792.767 ppb	112.269 %
Concentration per Run 3	104.214 %	120.901 %	0.025 ppb	214,670.361 ppb	67,026.690 ppb	3.368 ppb	1,336.383 ppb	120,929.140 ppb	108.344 %
Concentration RSD	1.9 %	2.1 %	73.1 %	3.1 %	3.7 %	10.1 %	4.0 %	4.8 %	1.8 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.714 ppb	3.416 ppb	3,787.692 ppb	37.889 ppb	0.138 ppb	3.189 ppb	0.282 ppb	8.686 ppb	99.927 %
Concentration per Run 1	0.648 ppb	3.213 ppb	3,616.042 ppb	37.001 ppb	0.125 ppb	3.048 ppb	0.247 ppb	8.358 ppb	101.105 %
Concentration per Run 2	0.740 ppb	3.488 ppb	3,955.871 ppb	37.607 ppb	0.138 ppb	3.126 ppb	0.243 ppb	8.895 ppb	98.418 %
Concentration per Run 3	0.753 ppb	3.547 ppb	3,791.162 ppb	39.059 ppb	0.151 ppb	3.395 ppb	0.355 ppb	8.804 ppb	100.258 %
Concentration RSD	8.0 %	5.2 %	4.5 %	2.8 %	9.5 %	5.7 %	22.6 %	3.3 %	1.4 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.205 ppb	0.076 ppb	608.166 ppb	0.195 ppb	80.241 %	0.001 ppb	0.152 ppb	82.582 %	0.252 ppb
Concentration per Run 1	0.271 ppb	-0.012 ppb	579.528 ppb	0.206 ppb	82.662 %	0.001 ppb	0.162 ppb	83.918 %	0.225 ppb
Concentration per Run 2	0.122 ppb	0.246 ppb	628.217 ppb	0.132 ppb	78.152 %	0.000 ppb	0.129 ppb	81.517 %	0.262 ppb
Concentration per Run 3	0.220 ppb	-0.005 ppb	616.753 ppb	0.248 ppb	79.908 %	0.001 ppb	0.166 ppb	82.310 %	0.270 ppb
Concentration RSD	37.1 %	193.1 %	4.2 %	30.1 %	2.8 %	74.1 %	13.2 %	1.5 %	9.5 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	248.780 ppb	99.041 %	93.791 %	0.095 ppb	0.045 ppb	83.607 %
Concentration per Run 1	237.782 ppb	103.191 %	98.233 %	0.027 ppb	0.042 ppb	85.722 %
Concentration per Run 2	258.023 ppb	97.699 %	90.322 %	0.137 ppb	0.048 ppb	82.676 %
Concentration per Run 3	250.536 ppb	96.234 %	92.816 %	0.120 ppb	0.044 ppb	82.422 %
Concentration RSD	4.1 %	3.7 %	4.3 %	62.6 %	6.9 %	2.2 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index: 148
Analysis label: L2467981-19 6020SL
Analysis started at: 11/26/2024 8:57:40 PM
User name ALPHALAB\a2-icpmsq2
Rack 2
Vial 40
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	121.686 %	125.621 %	0.072 ppb	43,073.320 ppb	62,134.431 ppb	2.325 ppb	8,872.864 ppb	34,721.299 ppb	123.921 %
Concentration per Run 1	118.074 %	123.968 %	0.056 ppb	43,847.893 ppb	61,438.219 ppb	2.348 ppb	8,753.643 ppb	34,343.788 ppb	122.085 %
Concentration per Run 2	122.598 %	125.534 %	0.066 ppb	42,969.699 ppb	62,543.109 ppb	2.170 ppb	8,992.160 ppb	35,511.304 ppb	125.032 %
Concentration per Run 3	124.387 %	127.361 %	0.096 ppb	42,402.368 ppb	62,421.965 ppb	2.456 ppb	8,872.789 ppb	34,308.806 ppb	124.647 %
Concentration RSD	2.7 %	1.4 %	28.6 %	1.7 %	1.0 %	6.2 %	1.3 %	2.0 %	1.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.152 ppb	0.492 ppb	13.237 ppb	12.424 ppb	0.031 ppb	0.342 ppb	0.388 ppb	1.600 ppb	101.807 %
Concentration per Run 1	0.149 ppb	0.512 ppb	13.763 ppb	13.821 ppb	0.035 ppb	0.333 ppb	0.352 ppb	1.631 ppb	98.240 %
Concentration per Run 2	0.141 ppb	0.471 ppb	12.669 ppb	12.188 ppb	0.034 ppb	0.300 ppb	0.491 ppb	1.623 ppb	102.597 %
Concentration per Run 3	0.164 ppb	0.493 ppb	13.279 ppb	11.264 ppb	0.025 ppb	0.393 ppb	0.320 ppb	1.548 ppb	104.583 %
Concentration RSD	7.6 %	4.2 %	4.1 %	10.4 %	18.1 %	13.7 %	23.4 %	2.9 %	3.2 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.478 ppb	-0.021 ppb	2,446.304 ppb	0.975 ppb	82.729 %	0.002 ppb	0.933 ppb	83.549 %	0.234 ppb
Concentration per Run 1	0.505 ppb	0.013 ppb	2,468.090 ppb	0.900 ppb	82.493 %	0.004 ppb	0.922 ppb	83.757 %	0.218 ppb
Concentration per Run 2	0.500 ppb	-0.100 ppb	2,444.229 ppb	0.937 ppb	82.782 %	0.003 ppb	0.968 ppb	83.195 %	0.239 ppb
Concentration per Run 3	0.429 ppb	0.025 ppb	2,426.593 ppb	1.089 ppb	82.912 %	0.000 ppb	0.909 ppb	83.695 %	0.246 ppb
Concentration RSD	8.9 %	336.0 %	0.9 %	10.3 %	0.3 %	93.9 %	3.4 %	0.4 %	6.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	137.747 ppb	98.853 %	92.391 %	0.028 ppb	0.031 ppb	85.222 %
Concentration per Run 1	132.106 ppb	98.968 %	90.646 %	-0.003 ppb	0.028 ppb	84.445 %
Concentration per Run 2	142.128 ppb	98.603 %	92.623 %	0.047 ppb	0.029 ppb	83.459 %
Concentration per Run 3	139.006 ppb	98.989 %	93.905 %	0.040 ppb	0.035 ppb	87.763 %
Concentration RSD	3.7 %	0.2 %	1.8 %	97.1 %	11.4 %	2.6 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index: 149
Analysis label: L2468039-01 6020SL
Analysis started at: 11/26/2024 9:02:09 PM
User name ALPHALAB\a2-icpmsq2
Rack 2
Vial 41
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	115.499 %	120.553 %	0.039 ppb	69,996.998 ppb	4,317.702 ppb	8.817 ppb	2,039.036 ppb	4,109.830 ppb	114.040 %
Concentration per Run 1	114.363 %	126.513 %	0.040 ppb	66,703.793 ppb	4,024.583 ppb	7.693 ppb	1,913.602 ppb	3,872.463 ppb	112.307 %
Concentration per Run 2	116.402 %	117.900 %	0.041 ppb	71,847.355 ppb	4,529.464 ppb	9.421 ppb	2,128.039 ppb	4,291.272 ppb	114.677 %
Concentration per Run 3	115.731 %	117.247 %	0.036 ppb	71,439.845 ppb	4,399.060 ppb	9.337 ppb	2,075.468 ppb	4,165.755 ppb	115.135 %
Concentration RSD	0.9 %	4.3 %	7.6 %	4.1 %	6.1 %	11.0 %	5.5 %	5.2 %	1.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	1.276 ppb	5.602 ppb	78.022 ppb	4,034.193 ppb	0.691 ppb	8.461 ppb	0.363 ppb	7.350 ppb	100.482 %
Concentration per Run 1	1.107 ppb	5.355 ppb	75.860 ppb	3,880.445 ppb	0.619 ppb	7.974 ppb	0.340 ppb	6.996 ppb	102.439 %
Concentration per Run 2	1.412 ppb	5.730 ppb	79.347 ppb	4,155.099 ppb	0.752 ppb	8.987 ppb	0.439 ppb	7.632 ppb	97.714 %
Concentration per Run 3	1.308 ppb	5.722 ppb	78.860 ppb	4,067.034 ppb	0.702 ppb	8.422 ppb	0.310 ppb	7.422 ppb	101.294 %
Concentration RSD	12.2 %	3.8 %	2.4 %	3.5 %	9.7 %	6.0 %	18.7 %	4.4 %	2.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	12.212 ppb	0.036 ppb	69.366 ppb	2.598 ppb	86.414 %	-0.001 ppb	-0.001 ppb	84.710 %	0.029 ppb
Concentration per Run 1	11.997 ppb	0.069 ppb	65.684 ppb	1.845 ppb	92.194 %	-0.002 ppb	-0.002 ppb	89.474 %	0.019 ppb
Concentration per Run 2	12.299 ppb	0.036 ppb	71.231 ppb	2.648 ppb	84.670 %	0.002 ppb	0.000 ppb	81.846 %	0.039 ppb
Concentration per Run 3	12.339 ppb	0.004 ppb	71.182 ppb	3.301 ppb	82.378 %	-0.003 ppb	0.000 ppb	82.811 %	0.029 ppb
Concentration RSD	1.5 %	88.5 %	4.6 %	28.1 %	5.9 %	298.4 %	220.0 %	4.9 %	34.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	111.221 ppb	100.078 %	93.658 %	0.005 ppb	0.047 ppb	90.090 %
Concentration per Run 1	104.718 ppb	104.774 %	96.672 %	-0.022 ppb	0.041 ppb	92.299 %
Concentration per Run 2	114.279 ppb	97.581 %	92.873 %	0.015 ppb	0.047 ppb	89.471 %
Concentration per Run 3	114.664 ppb	97.878 %	91.430 %	0.021 ppb	0.053 ppb	88.499 %
Concentration RSD	5.1 %	4.1 %	2.9 %	467.8 %	12.2 %	2.2 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index:	150	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2468039-02 6020SL	Rack	2		
Analysis started at:	11/26/2024 9:06:39 PM	Vial	42		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	112.982 %	124.642 %	0.023 ppb	73,097.805 ppb	10,267.157 ppb	6.186 ppb	823.081 ppb	5,324.724 ppb	115.831 %
Concentration per Run 1	111.767 %	131.668 %	0.031 ppb	68,137.494 ppb	9,377.353 ppb	5.484 ppb	739.488 ppb	4,898.007 ppb	115.537 %
Concentration per Run 2	111.676 %	120.053 %	0.026 ppb	76,593.420 ppb	10,758.425 ppb	6.595 ppb	855.354 ppb	5,507.382 ppb	115.081 %
Concentration per Run 3	115.503 %	122.206 %	0.011 ppb	74,562.502 ppb	10,665.692 ppb	6.478 ppb	874.400 ppb	5,568.784 ppb	116.875 %
Concentration RSD	1.9 %	5.0 %	47.3 %	6.0 %	7.5 %	9.9 %	8.9 %	7.0 %	0.8 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.242 ppb	6.085 ppb	316.198 ppb	32,191.795 ppb	1.126 ppb	2.194 ppb	3.980 ppb	14.103 ppb	100.895 %
Concentration per Run 1	0.224 ppb	5.738 ppb	298.064 ppb	30,297.433 ppb	1.012 ppb	2.111 ppb	3.811 ppb	13.610 ppb	104.364 %
Concentration per Run 2	0.254 ppb	6.396 ppb	333.722 ppb	33,895.630 ppb	1.217 ppb	2.313 ppb	4.188 ppb	14.677 ppb	98.357 %
Concentration per Run 3	0.248 ppb	6.121 ppb	316.809 ppb	32,382.322 ppb	1.148 ppb	2.158 ppb	3.941 ppb	14.023 ppb	99.963 %
Concentration RSD	6.5 %	5.4 %	5.6 %	5.6 %	9.3 %	4.8 %	4.8 %	3.8 %	3.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	15.566 ppb	0.071 ppb	48.094 ppb	0.785 ppb	86.611 %	-0.001 ppb	-0.003 ppb	84.933 %	0.018 ppb
Concentration per Run 1	14.529 ppb	0.126 ppb	44.990 ppb	0.696 ppb	91.616 %	-0.001 ppb	-0.002 ppb	89.050 %	0.022 ppb
Concentration per Run 2	16.138 ppb	0.153 ppb	49.809 ppb	0.770 ppb	84.527 %	-0.001 ppb	-0.002 ppb	83.201 %	0.016 ppb
Concentration per Run 3	16.031 ppb	-0.065 ppb	49.484 ppb	0.889 ppb	83.692 %	-0.002 ppb	-0.004 ppb	82.548 %	0.015 ppb
Concentration RSD	5.8 %	167.2 %	5.6 %	12.4 %	5.0 %	54.4 %	42.9 %	4.2 %	23.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	40.973 ppb	102.851 %	97.566 %	-0.012 ppb	0.042 ppb	93.690 %
Concentration per Run 1	38.867 ppb	106.066 %	102.118 %	-0.032 ppb	0.040 ppb	99.189 %
Concentration per Run 2	41.482 ppb	100.014 %	95.238 %	-0.010 ppb	0.045 ppb	90.473 %
Concentration per Run 3	42.570 ppb	102.474 %	95.342 %	0.005 ppb	0.042 ppb	91.408 %
Concentration RSD	4.6 %	3.0 %	4.0 %	150.7 %	5.7 %	5.1 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index: 151
Analysis label: L2468039-03 6020SL
Analysis started at: 11/26/2024 9:11:08 PM
User name ALPHALAB\a2-icpmsq2
Rack 2
Vial 43
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	112.022 %	118.444 %	0.013 ppb	38,727.244 ppb	8,706.377 ppb	16.720 ppb	2,879.800 ppb	8,823.431 ppb	112.147 %
Concentration per Run 1	109.323 %	129.384 %	0.009 ppb	34,673.471 ppb	7,835.384 ppb	15.469 ppb	2,547.427 ppb	7,818.376 ppb	110.756 %
Concentration per Run 2	112.781 %	113.072 %	0.019 ppb	41,007.940 ppb	9,177.650 ppb	16.263 ppb	3,084.448 ppb	9,221.500 ppb	112.614 %
Concentration per Run 3	113.963 %	112.876 %	0.010 ppb	40,500.323 ppb	9,106.095 ppb	18.429 ppb	3,007.524 ppb	9,430.416 ppb	113.069 %
Concentration RSD	2.2 %	8.0 %	42.5 %	9.1 %	8.7 %	9.2 %	10.1 %	9.9 %	1.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.184 ppb	5.707 ppb	55.558 ppb	11,437.006 ppb	1.093 ppb	2.272 ppb	9.259 ppb	23.601 ppb	99.544 %
Concentration per Run 1	0.164 ppb	5.079 ppb	50.799 ppb	10,438.984 ppb	1.025 ppb	2.222 ppb	8.465 ppb	21.955 ppb	103.428 %
Concentration per Run 2	0.213 ppb	6.115 ppb	58.675 ppb	12,192.604 ppb	1.103 ppb	2.248 ppb	9.949 ppb	24.587 ppb	96.957 %
Concentration per Run 3	0.175 ppb	5.926 ppb	57.200 ppb	11,679.431 ppb	1.152 ppb	2.346 ppb	9.362 ppb	24.260 ppb	98.247 %
Concentration RSD	13.8 %	9.7 %	7.5 %	7.9 %	5.9 %	2.9 %	8.1 %	6.1 %	3.4 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	4.485 ppb	0.462 ppb	86.743 ppb	12.254 ppb	86.757 %	-0.002 ppb	0.021 ppb	86.552 %	0.076 ppb
Concentration per Run 1	4.190 ppb	0.241 ppb	80.813 ppb	7.049 ppb	91.917 %	0.000 ppb	0.016 ppb	92.495 %	0.059 ppb
Concentration per Run 2	4.618 ppb	0.471 ppb	89.692 ppb	12.064 ppb	85.275 %	-0.001 ppb	0.023 ppb	85.202 %	0.084 ppb
Concentration per Run 3	4.646 ppb	0.676 ppb	89.724 ppb	17.649 ppb	83.079 %	-0.003 ppb	0.024 ppb	81.958 %	0.086 ppb
Concentration RSD	5.7 %	47.1 %	5.9 %	43.3 %	5.3 %	85.0 %	21.8 %	6.2 %	19.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	52.131 ppb	103.030 %	97.507 %	-0.015 ppb	0.550 ppb	94.070 %
Concentration per Run 1	48.694 ppb	108.381 %	101.120 %	-0.037 ppb	0.514 ppb	97.416 %
Concentration per Run 2	53.371 ppb	100.801 %	95.686 %	-0.007 ppb	0.568 ppb	92.427 %
Concentration per Run 3	54.328 ppb	99.909 %	95.713 %	-0.002 ppb	0.567 ppb	92.366 %
Concentration RSD	5.8 %	4.5 %	3.2 %	124.9 %	5.7 %	3.1 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index: 152
Analysis label: CCV
Analysis started at: 11/26/2024 9:15:37 PM
User name ALPHALAB\a2-icpmsq2
Rack 0
Vial 9
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	116.210 %	120.466 %	55.203 ppb	5,796.181 ppb	5,785.271 ppb	60.815 ppb	4,641.616 ppb	4,537.659 ppb	116.848 %
Concentration per Run 1	112.400 %	122.663 %	55.947 ppb	5,452.531 ppb	5,432.701 ppb	56.793 ppb	4,511.961 ppb	4,501.526 ppb	114.686 %
Concentration per Run 2	118.195 %	115.159 %	54.759 ppb	6,190.694 ppb	6,207.212 ppb	64.767 ppb	4,730.208 ppb	4,580.506 ppb	119.198 %
Concentration per Run 3	118.034 %	123.577 %	54.903 ppb	5,745.319 ppb	5,715.899 ppb	60.886 ppb	4,682.680 ppb	4,530.944 ppb	116.662 %
Recovery Percentage 1			92.005 %	96.603 %	96.421 %	101.359 %	77.360 %	75.628 %	
Concentration RSD	2.8 %	3.8 %	1.2 %	6.4 %	6.8 %	6.6 %	2.5 %	0.9 %	1.9 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	58.757 ppb	61.317 ppb	60.594 ppb	6,264.118 ppb	62.274 ppb	62.425 ppb	63.572 ppb	69.902 ppb	100.869 %
Concentration per Run 1	54.902 ppb	58.315 ppb	56.536 ppb	5,913.393 ppb	59.127 ppb	58.426 ppb	60.116 ppb	66.726 ppb	102.638 %
Concentration per Run 2	60.984 ppb	64.046 ppb	63.201 ppb	6,521.669 ppb	65.346 ppb	64.838 ppb	66.772 ppb	73.891 ppb	97.637 %
Concentration per Run 3	60.385 ppb	61.589 ppb	62.046 ppb	6,357.291 ppb	62.349 ppb	64.009 ppb	63.827 ppb	69.090 ppb	102.331 %
Recovery Percentage 1	97.929 %	102.195 %	100.991 %	104.402 %	103.789 %	104.041 %	105.953 %	116.504 %	
Concentration RSD	5.7 %	4.7 %	5.9 %	5.0 %	5.0 %	5.6 %	5.2 %	5.2 %	2.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	60.275 ppb	61.447 ppb	62.038 ppb	61.145 ppb	86.549 %	56.745 ppb	57.128 ppb	84.060 %	60.653 ppb
Concentration per Run 1	57.706 ppb	59.198 ppb	58.770 ppb	55.248 ppb	90.732 %	54.030 ppb	53.360 ppb	86.609 %	56.712 ppb
Concentration per Run 2	63.687 ppb	64.671 ppb	64.960 ppb	63.391 ppb	83.675 %	57.957 ppb	58.977 ppb	82.693 %	63.855 ppb
Concentration per Run 3	59.433 ppb	60.473 ppb	62.383 ppb	64.795 ppb	85.238 %	58.248 ppb	59.048 ppb	82.877 %	61.393 ppb
Recovery Percentage 1	100.459 %	102.412 %	103.396 %	101.908 %		94.575 %	95.214 %		101.089 %
Concentration RSD	5.1 %	4.7 %	5.0 %	8.4 %	4.3 %	4.2 %	5.7 %	2.6 %	6.0 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	61.814 ppb	101.858 %	97.812 %	57.495 ppb	59.105 ppb	94.684 %
Concentration per Run 1	59.308 ppb	108.617 %	104.407 %	48.434 ppb	54.784 ppb	99.693 %
Concentration per Run 2	65.070 ppb	98.784 %	94.469 %	60.293 ppb	60.798 ppb	94.437 %
Concentration per Run 3	61.065 ppb	98.174 %	94.559 %	63.758 ppb	61.733 ppb	89.922 %
Recovery Percentage 1	103.024 %			95.825 %	98.509 %	
Concentration RSD	4.8 %	5.8 %	5.8 %	14.0 %	6.4 %	5.2 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index: 153
Analysis label: CCB
Analysis started at: 11/26/2024 9:20:10 PM
User name ALPHALAB\a2-icpmsq2
Rack 0
Vial 10
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	118.767 %	118.030 %	0.017 ppb	54.334 ppb	0.075 ppb	-0.499 ppb	-16.419 ppb	-4.273 ppb	116.205 %
Concentration per Run 1	117.056 %	124.229 %	0.013 ppb	53.349 ppb	-0.307 ppb	-0.718 ppb	-16.137 ppb	-5.227 ppb	114.905 %
Concentration per Run 2	120.228 %	115.551 %	0.025 ppb	53.349 ppb	0.345 ppb	-0.357 ppb	-15.891 ppb	-5.929 ppb	116.800 %
Concentration per Run 3	119.017 %	114.311 %	0.012 ppb	56.302 ppb	0.187 ppb	-0.421 ppb	-17.227 ppb	-1.663 ppb	116.911 %
Recovery Percentage 1			3.332 %	10.867 %	0.107 %	-4.987 %	-16.419 %	-4.273 %	
Concentration RSD	1.3 %	4.6 %	42.5 %	3.1 %	453.6 %	38.7 %	4.3 %	53.5 %	1.0 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.011 ppb	0.004 ppb	0.004 ppb	7.877 ppb	0.000 ppb	-0.022 ppb	-0.001 ppb	-0.009 ppb	101.191 %
Concentration per Run 1	0.008 ppb	0.002 ppb	0.036 ppb	7.487 ppb	-0.004 ppb	-0.031 ppb	0.011 ppb	0.041 ppb	99.994 %
Concentration per Run 2	0.033 ppb	0.014 ppb	-0.011 ppb	8.629 ppb	0.001 ppb	-0.016 ppb	0.002 ppb	-0.026 ppb	100.712 %
Concentration per Run 3	-0.008 ppb	-0.005 ppb	-0.012 ppb	7.517 ppb	0.003 ppb	-0.019 ppb	-0.017 ppb	-0.041 ppb	102.866 %
Recovery Percentage 1	0.216 %	0.369 %	0.437 %	15.755 %	0.012 %	-1.089 %	-0.120 %	-0.179 %	
Concentration RSD	189.7 %	269.1 %	631.3 %	8.3 %	6,030.3 %	36.6 %	1,159.3 %	490.7 %	1.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	-0.003 ppb	0.124 ppb	-0.005 ppb	1.033 ppb	86.583 %	0.005 ppb	0.003 ppb	84.512 %	0.049 ppb
Concentration per Run 1	0.016 ppb	0.109 ppb	0.004 ppb	0.999 ppb	89.834 %	0.007 ppb	0.004 ppb	87.664 %	0.038 ppb
Concentration per Run 2	-0.044 ppb	0.232 ppb	-0.009 ppb	0.965 ppb	86.275 %	0.004 ppb	0.006 ppb	82.492 %	0.056 ppb
Concentration per Run 3	0.020 ppb	0.030 ppb	-0.011 ppb	1.136 ppb	83.639 %	0.003 ppb	-0.002 ppb	83.381 %	0.054 ppb
Recovery Percentage 1	-0.548 %	2.475 %	-0.054 %	51.660 %		1.229 %	1.294 %		1.230 %
Concentration RSD	1,318.1 %	82.3 %	146.5 %	8.7 %	3.6 %	40.5 %	155.5 %	3.3 %	20.4 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	-0.014 ppb	100.262 %	95.448 %	0.503 ppb	0.016 ppb	92.542 %
Concentration per Run 1	0.006 ppb	103.177 %	98.134 %	0.555 ppb	0.020 ppb	93.936 %
Concentration per Run 2	-0.016 ppb	100.150 %	95.444 %	0.538 ppb	0.015 ppb	91.240 %
Concentration per Run 3	-0.033 ppb	97.460 %	92.766 %	0.416 ppb	0.013 ppb	92.451 %
Recovery Percentage 1	-2.861 %			50.301 %	1.610 %	
Concentration RSD	134.5 %	2.9 %	2.8 %	15.1 %	21.7 %	1.5 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index: 154
Analysis label: CCV
Analysis started at: 11/26/2024 9:24:43 PM
User name ALPHALAB\a2-icpmsq2
Rack 0
Vial 9
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	120.398 %	118.400 %	53.961 ppb	5,975.955 ppb	5,854.635 ppb	63.098 ppb	4,695.708 ppb	4,551.513 ppb	120.154 %
Concentration per Run 1	115.689 %	122.206 %	54.876 ppb	5,604.470 ppb	5,515.049 ppb	59.046 ppb	4,461.960 ppb	4,202.240 ppb	116.652 %
Concentration per Run 2	121.538 %	119.466 %	53.682 ppb	6,009.170 ppb	5,867.245 ppb	61.998 ppb	4,634.949 ppb	4,575.226 ppb	121.290 %
Concentration per Run 3	123.966 %	113.528 %	53.324 ppb	6,314.226 ppb	6,181.611 ppb	68.251 ppb	4,990.216 ppb	4,877.072 ppb	122.522 %
Recovery Percentage 1			89.934 %	99.599 %	97.577 %	105.164 %	78.262 %	75.859 %	
Concentration RSD	3.5 %	3.7 %	1.5 %	6.0 %	5.7 %	7.4 %	5.7 %	7.4 %	2.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	58.420 ppb	62.121 ppb	62.075 ppb	6,249.333 ppb	63.485 ppb	63.935 ppb	63.754 ppb	70.168 ppb	103.275 %
Concentration per Run 1	52.496 ppb	56.472 ppb	57.290 ppb	5,773.586 ppb	59.622 ppb	60.344 ppb	60.239 ppb	66.286 ppb	106.831 %
Concentration per Run 2	57.758 ppb	63.034 ppb	62.393 ppb	6,322.671 ppb	64.194 ppb	65.574 ppb	65.070 ppb	71.718 ppb	102.286 %
Concentration per Run 3	65.007 ppb	66.855 ppb	66.543 ppb	6,651.742 ppb	66.639 ppb	65.887 ppb	65.953 ppb	72.500 ppb	100.708 %
Recovery Percentage 1	97.367 %	103.534 %	103.459 %	104.156 %	105.809 %	106.558 %	106.257 %	116.947 %	
Concentration RSD	10.8 %	8.5 %	7.5 %	7.1 %	5.6 %	4.9 %	4.8 %	4.8 %	3.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	59.918 ppb	62.472 ppb	62.905 ppb	61.062 ppb	85.489 %	58.086 ppb	58.406 ppb	84.181 %	61.533 ppb
Concentration per Run 1	55.972 ppb	58.784 ppb	59.078 ppb	53.444 ppb	91.265 %	53.040 ppb	53.466 ppb	89.748 %	55.816 ppb
Concentration per Run 2	60.241 ppb	65.235 ppb	62.756 ppb	61.067 ppb	85.812 %	58.054 ppb	58.579 ppb	84.134 %	61.728 ppb
Concentration per Run 3	63.542 ppb	63.396 ppb	66.880 ppb	68.676 ppb	79.389 %	63.163 ppb	63.173 ppb	78.660 %	67.054 ppb
Recovery Percentage 1	99.864 %	104.120 %	104.841 %	101.771 %		96.809 %	97.343 %		102.554 %
Concentration RSD	6.3 %	5.3 %	6.2 %	12.5 %	7.0 %	8.7 %	8.3 %	6.6 %	9.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	63.853 ppb	100.117 %	95.083 %	58.698 ppb	60.178 ppb	91.029 %
Concentration per Run 1	58.861 ppb	106.107 %	101.979 %	49.284 ppb	54.693 ppb	96.598 %
Concentration per Run 2	64.691 ppb	99.280 %	94.182 %	58.826 ppb	60.351 ppb	90.821 %
Concentration per Run 3	68.008 ppb	94.966 %	89.087 %	67.985 ppb	65.488 ppb	85.667 %
Recovery Percentage 1	106.422 %			97.831 %	100.296 %	
Concentration RSD	7.3 %	5.6 %	6.8 %	15.9 %	9.0 %	6.0 %

Alpha ICPMSQ2 Data with SRD

11/27/2024 6:10:10 AM

Analysis index: 155
Analysis label: CCB
Analysis started at: 11/26/2024 9:29:15 PM
User name ALPHALAB\a2-icpmsq2
Rack 0
Vial 10
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	128.154 %	122.489 %	0.159 ppb	40.745 ppb	0.128 ppb	-0.535 ppb	-17.006 ppb	0.213 ppb	128.336 %
Concentration per Run 1	127.281 %	133.299 %	0.074 ppb	32.869 ppb	-0.092 ppb	-0.793 ppb	-17.243 ppb	-3.578 ppb	130.247 %
Concentration per Run 2	130.356 %	116.138 %	0.276 ppb	46.570 ppb	0.987 ppb	-0.363 ppb	-14.683 ppb	1.043 ppb	129.717 %
Concentration per Run 3	126.824 %	118.030 %	0.127 ppb	42.795 ppb	-0.509 ppb	-0.450 ppb	-19.092 ppb	3.174 ppb	125.043 %
Recovery Percentage 1			31.725 %	8.149 %	0.183 %	-5.353 %	-17.006 %	0.213 %	
Concentration RSD	1.5 %	7.7 %	66.0 %	17.4 %	601.2 %	42.6 %	13.0 %	1,620.3 %	2.2 %

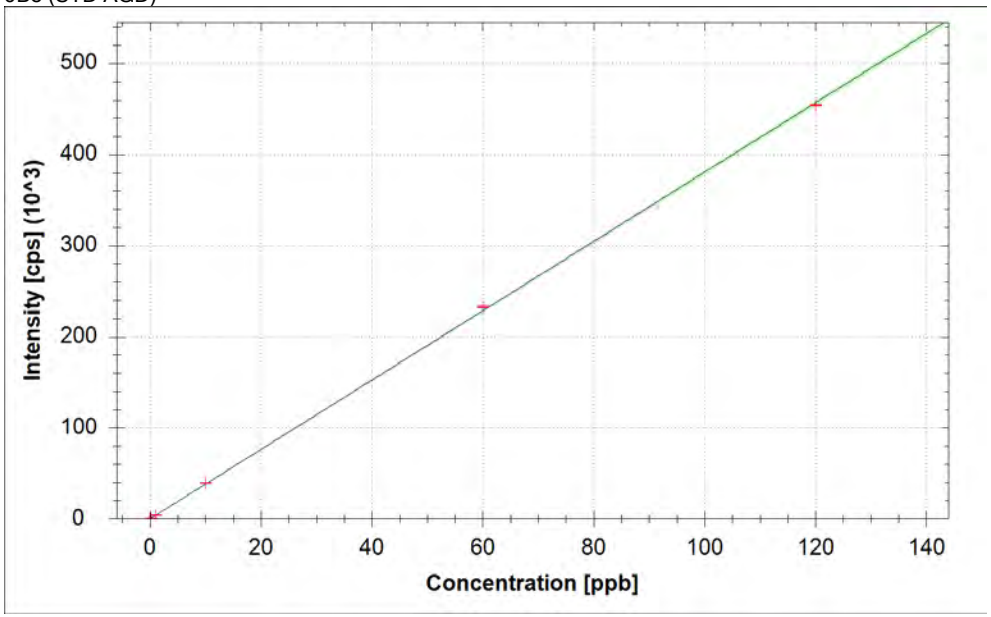
Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.003 ppb	0.000 ppb	-0.042 ppb	7.243 ppb	0.004 ppb	-0.017 ppb	-0.007 ppb	0.001 ppb	102.831 %
Concentration per Run 1	0.004 ppb	0.010 ppb	-0.088 ppb	5.569 ppb	0.012 ppb	0.036 ppb	0.009 ppb	0.054 ppb	101.424 %
Concentration per Run 2	0.009 ppb	0.001 ppb	0.001 ppb	7.020 ppb	0.003 ppb	-0.048 ppb	-0.025 ppb	-0.037 ppb	101.323 %
Concentration per Run 3	-0.021 ppb	-0.010 ppb	-0.039 ppb	9.139 ppb	-0.004 ppb	-0.037 ppb	-0.006 ppb	-0.015 ppb	105.748 %
Recovery Percentage 1	-0.055 %	0.034 %	-4.212 %	14.485 %	0.726 %	-0.826 %	-0.726 %	0.011 %	
Concentration RSD	600.3 %	2,939.0 %	105.5 %	24.8 %	225.0 %	278.0 %	229.3 %	8,643.4 %	2.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	-0.024 ppb	0.358 ppb	-0.013 ppb	0.807 ppb	87.645 %	0.005 ppb	0.002 ppb	84.257 %	0.050 ppb
Concentration per Run 1	-0.046 ppb	0.369 ppb	-0.013 ppb	0.827 ppb	93.188 %	0.005 ppb	0.003 ppb	88.200 %	0.029 ppb
Concentration per Run 2	-0.032 ppb	0.442 ppb	-0.011 ppb	0.792 ppb	83.970 %	0.005 ppb	0.004 ppb	82.664 %	0.056 ppb
Concentration per Run 3	0.005 ppb	0.262 ppb	-0.014 ppb	0.803 ppb	85.779 %	0.006 ppb	-0.002 ppb	81.906 %	0.065 ppb
Recovery Percentage 1	-4.844 %	7.156 %	-0.126 %	40.373 %		1.332 %	0.957 %		1.260 %
Concentration RSD	110.0 %	25.2 %	11.8 %	2.2 %	5.6 %	18.2 %	170.8 %	4.1 %	37.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.011 ppb	101.079 %	95.771 %	0.558 ppb	0.020 ppb	93.459 %
Concentration per Run 1	0.004 ppb	107.219 %	103.102 %	0.568 ppb	0.024 ppb	95.918 %
Concentration per Run 2	0.031 ppb	99.649 %	91.708 %	0.612 ppb	0.017 ppb	92.613 %
Concentration per Run 3	-0.003 ppb	96.369 %	92.503 %	0.493 ppb	0.019 ppb	91.847 %
Recovery Percentage 1	2.181 %			55.786 %	1.981 %	
Concentration RSD	164.9 %	5.5 %	6.6 %	10.8 %	18.8 %	2.3 %

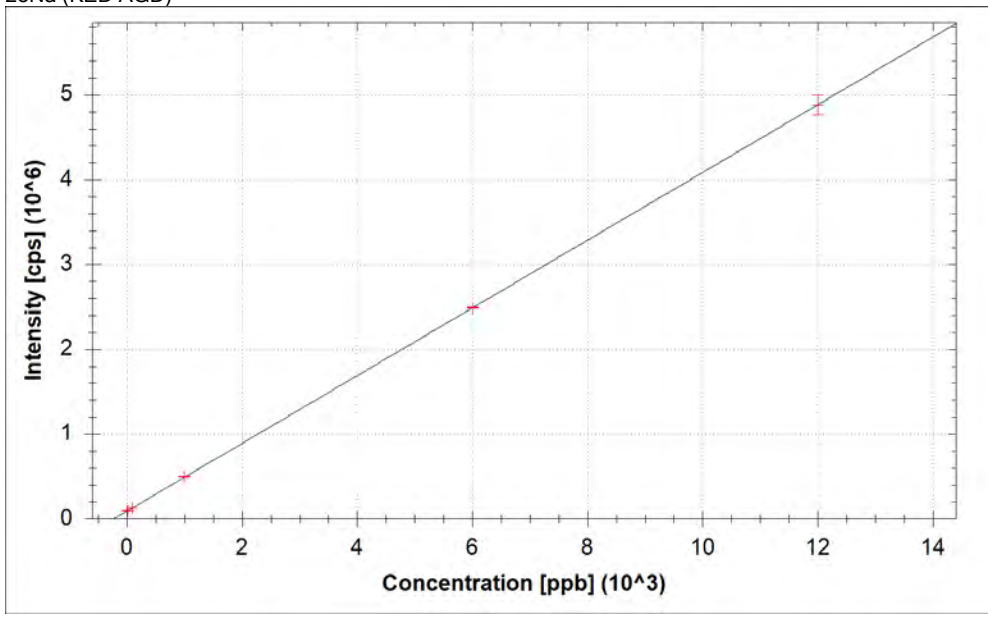
Calibration Curves:

9Be (STD AGD)



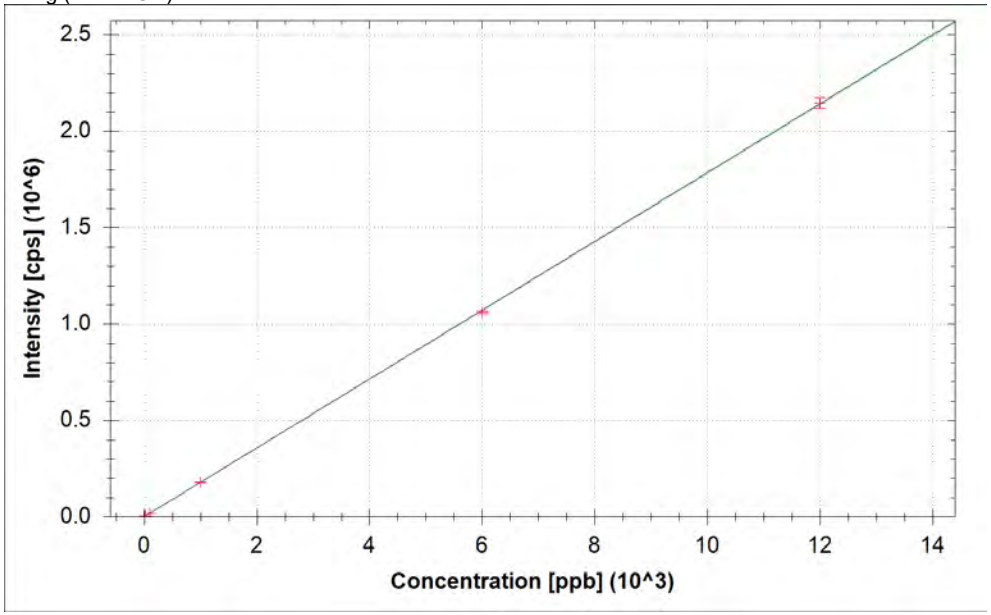
f(x) = 3805.3848*x + 21.2983
R² = 0.9999
BEC = 0.006 ppb
LoD = 0.0036 ppb

23Na (KED AGD)



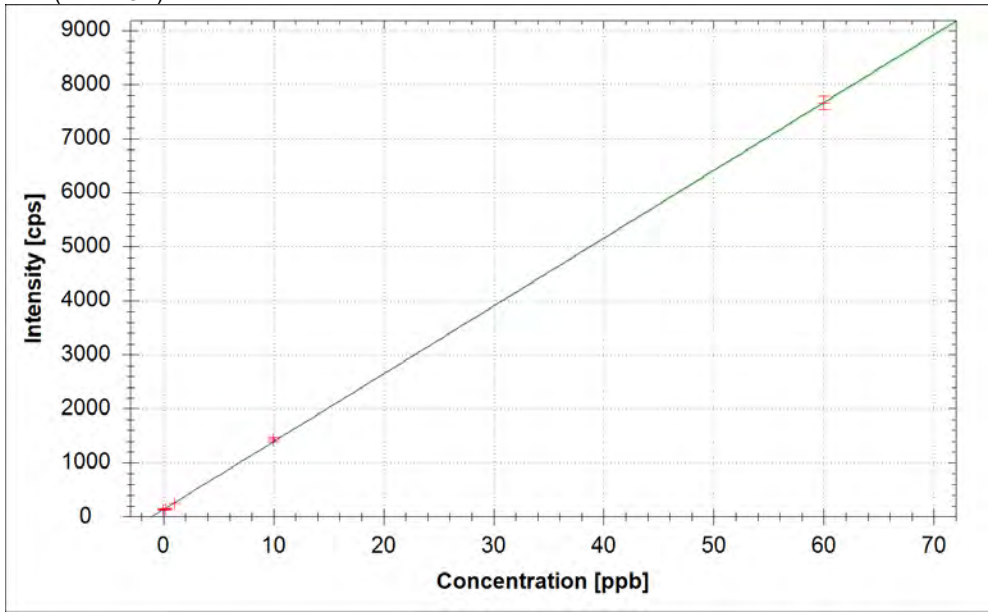
f(x) = 399.3843*x + 90005.7856
R² = 1.0000
BEC = 225.361 ppb
LoD = 17.5723 ppb

24Mg (KED AGD)



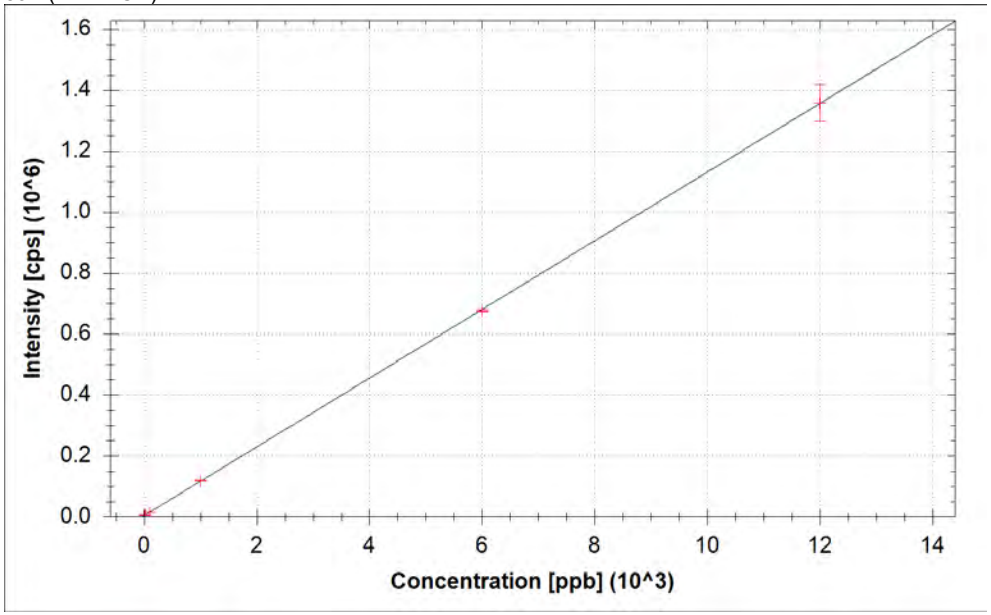
f(x) = 178.4080*x + 335.0087
R² = 1.0000
BEC = 1.878 ppb
LoD = 0.8835 ppb

27Al (KED AGD)



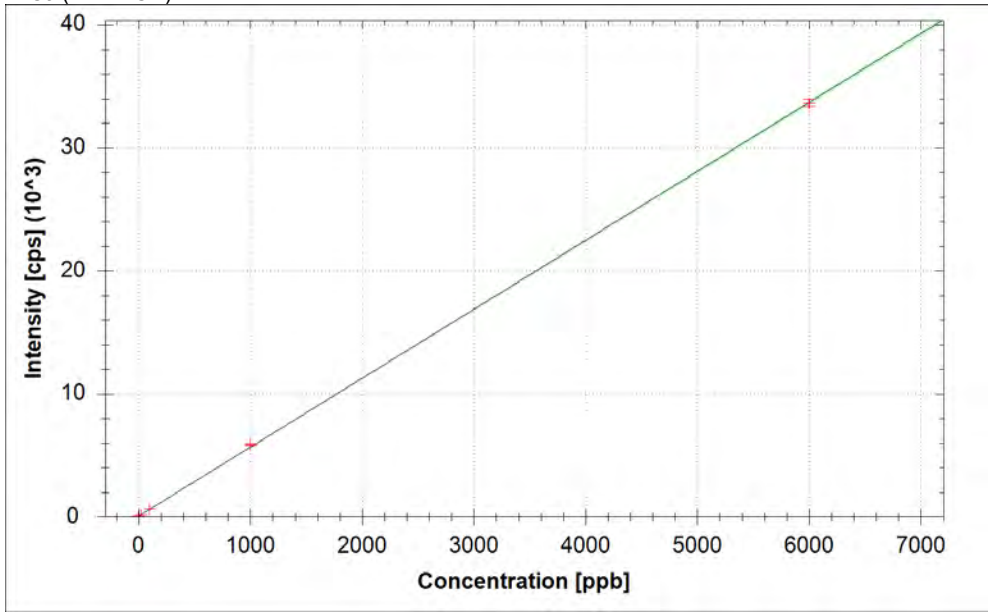
f(x) = 125.5382*x + 133.9292
R² = 1.0000
BEC = 1.067 ppb
LoD = 0.3397 ppb

39K (KED AGD)



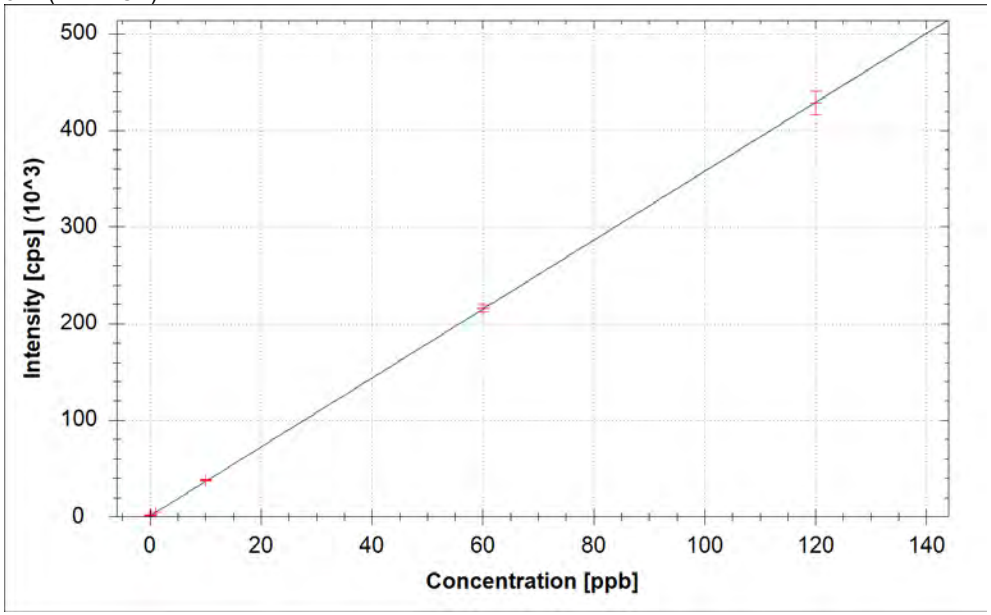
f(x) = 112.6621*x + 4121.8405
R² = 1.0000
BEC = 36.586 ppb
LoD = 4.2047 ppb

44Ca (KED AGD)



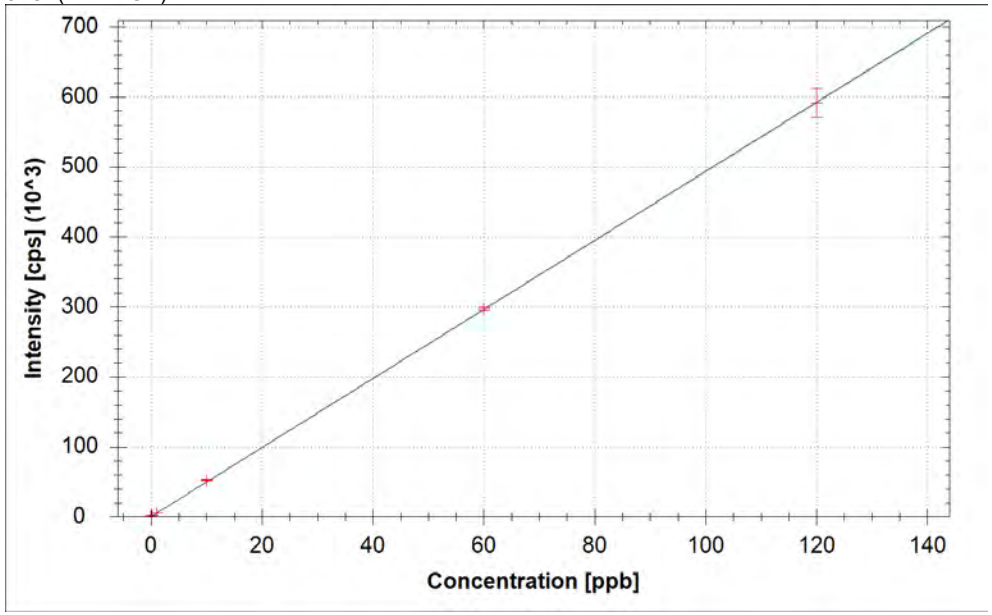
f(x) = 5.6043*x + 49.9520
R² = 0.9999
BEC = 8.913 ppb
LoD = 5.2961 ppb

51V (KED AGD)



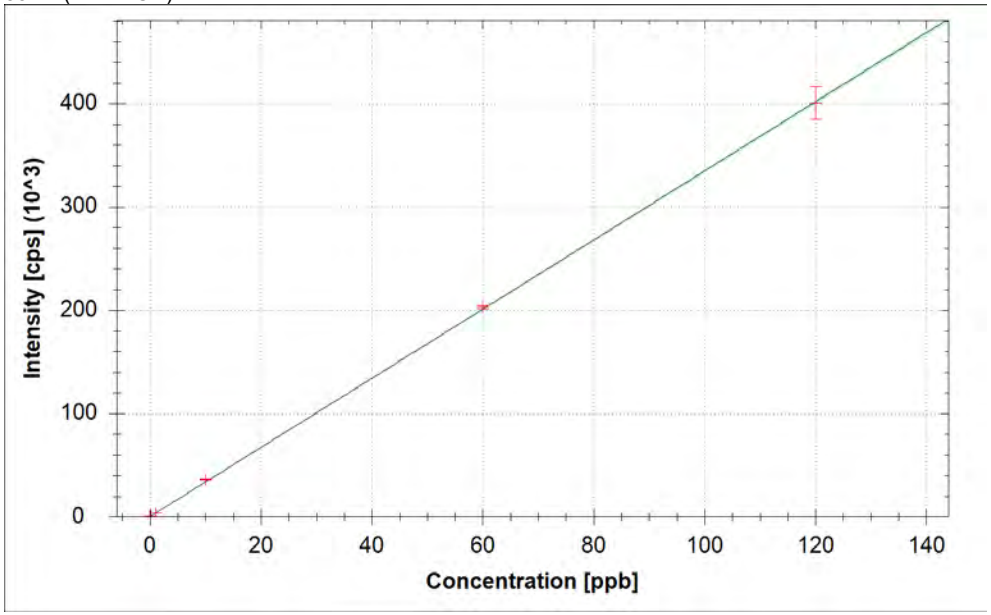
f(x) = 3566.7292*x + 820.5519
R² = 1.0000
BEC = 0.230 ppb
LoD = 0.1273 ppb

52Cr (KED AGD)



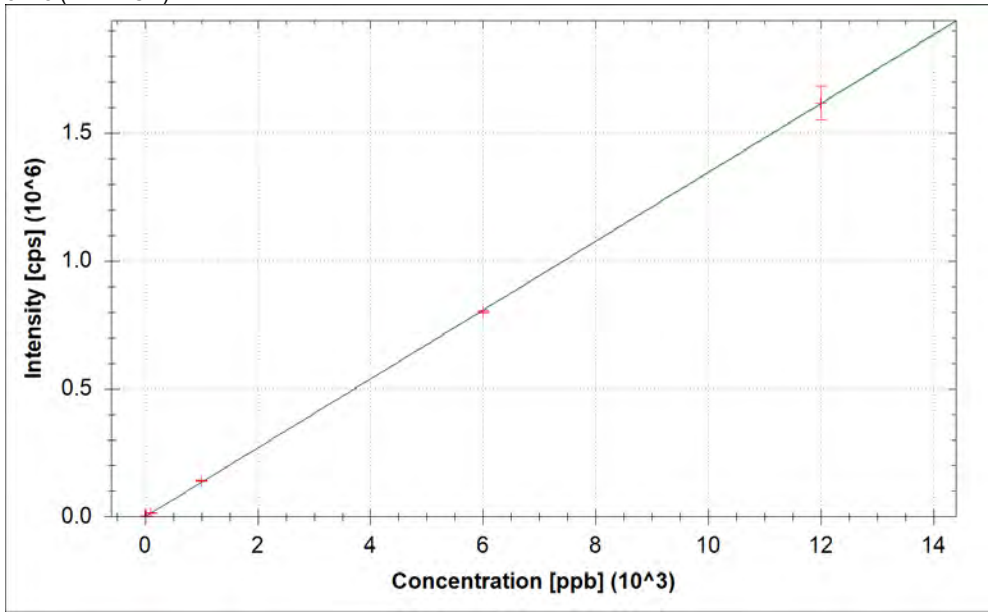
f(x) = 4932.4535*x + 231.0793
R² = 1.0000
BEC = 0.047 ppb
LoD = 0.0050 ppb

55Mn (KED AGD)



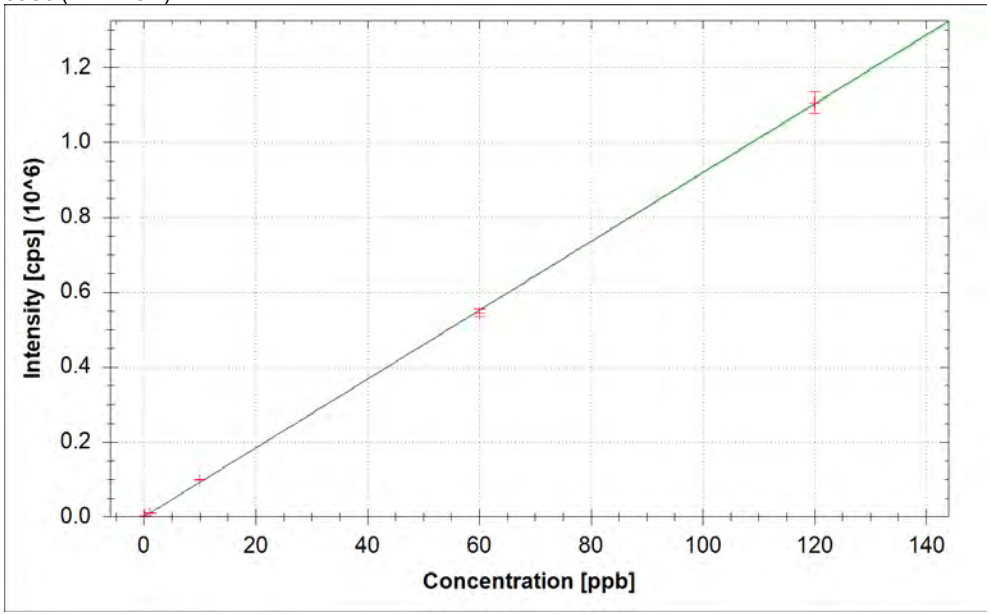
f(x) = 3346.2403*x + 224.3473
R² = 0.9999
BEC = 0.067 ppb
LoD = 0.0376 ppb

57Fe (KED AGD)



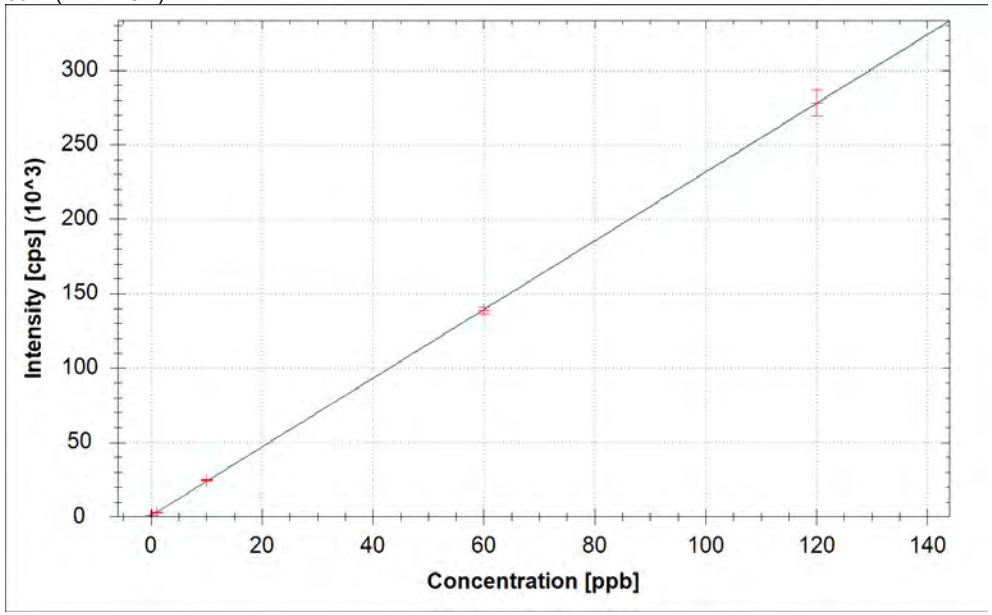
f(x) = 134.5680*x + 113.2634
R² = 1.0000
BEC = 0.842 ppb
LoD = 0.6740 ppb

59Co (KED AGD)



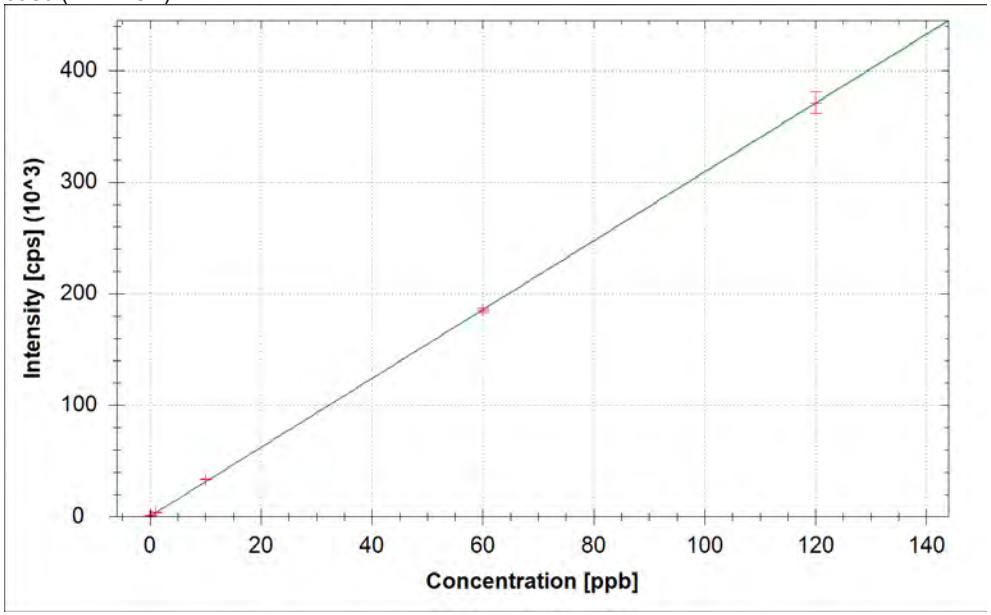
f(x) = 9189.4591*x + 37.8531
R² = 0.9999
BEC = 0.004 ppb
LoD = 0.0091 ppb

60Ni (KED AGD)



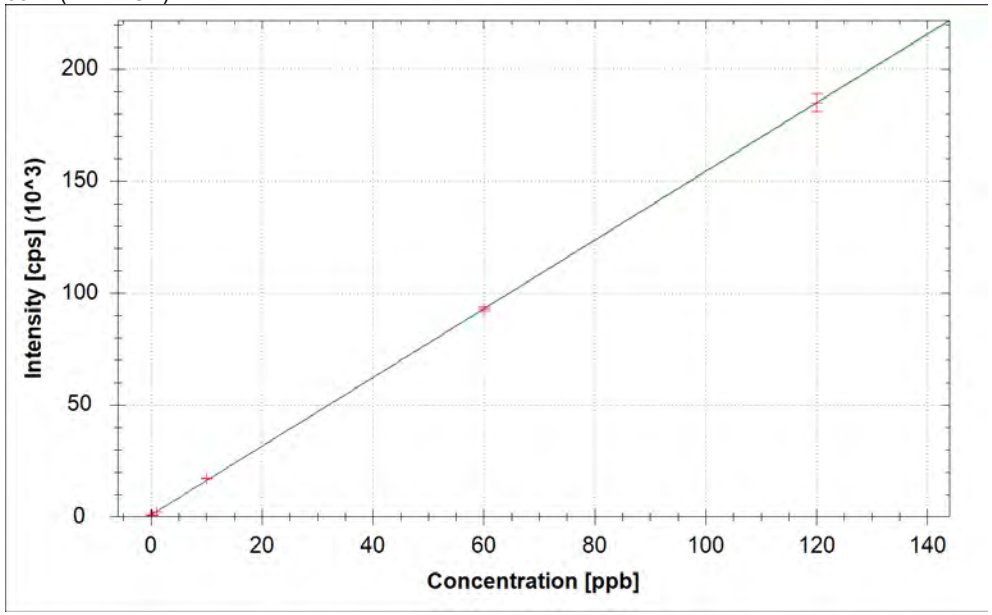
f(x) = 2309.0587*x + 680.2402
R² = 1.0000
BEC = 0.295 ppb
LoD = 0.1179 ppb

65Cu (KED AGD)



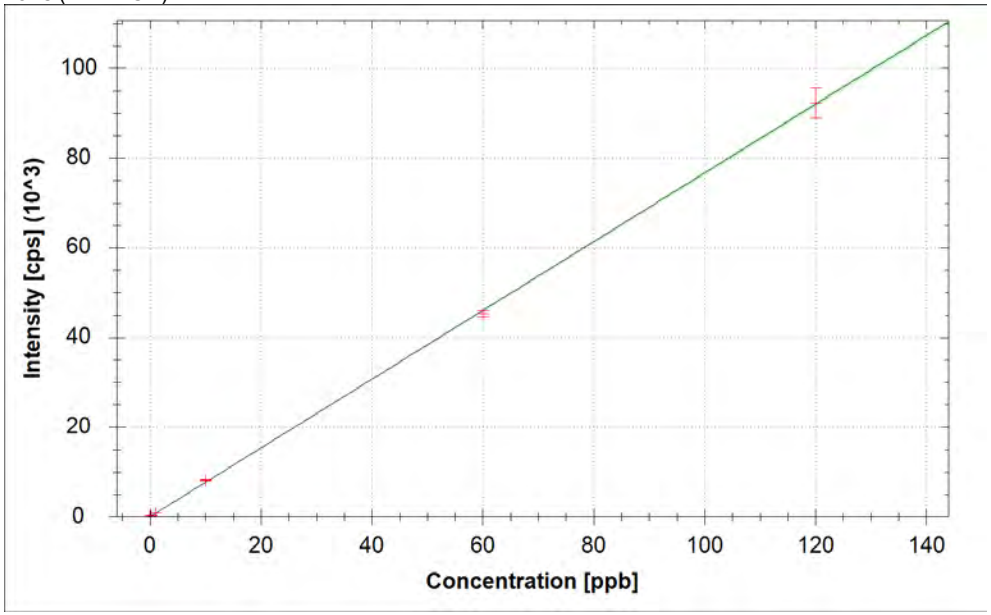
f(x) = 3088.2825*x + 440.0108
R² = 0.9999
BEC = 0.142 ppb
LoD = 0.0584 ppb

66Zn (KED AGD)



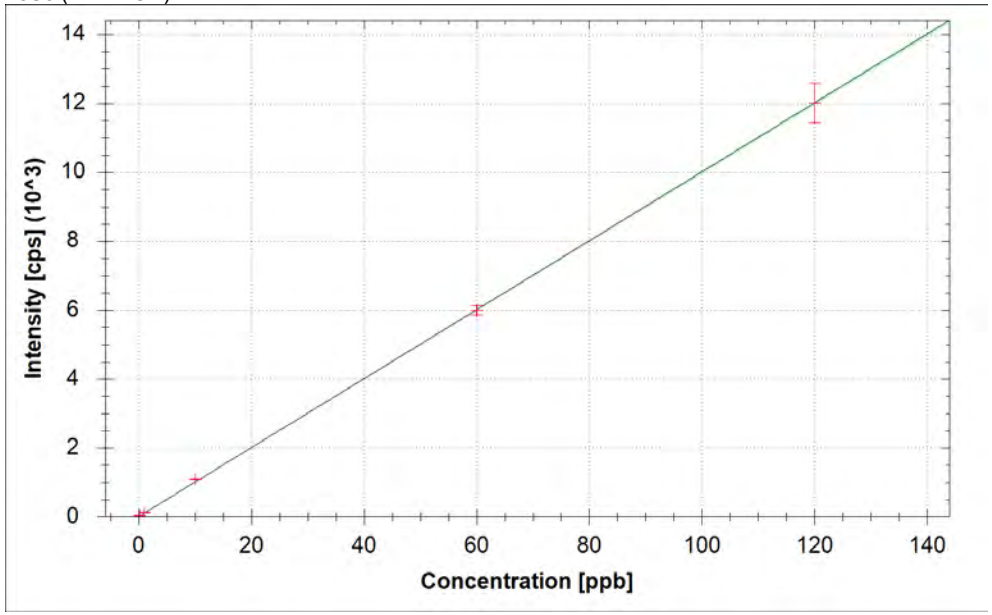
f(x) = 1534.7660*x + 828.8758
R² = 1.0000
BEC = 0.540 ppb
LoD = 0.0530 ppb

75As (KED AGD)



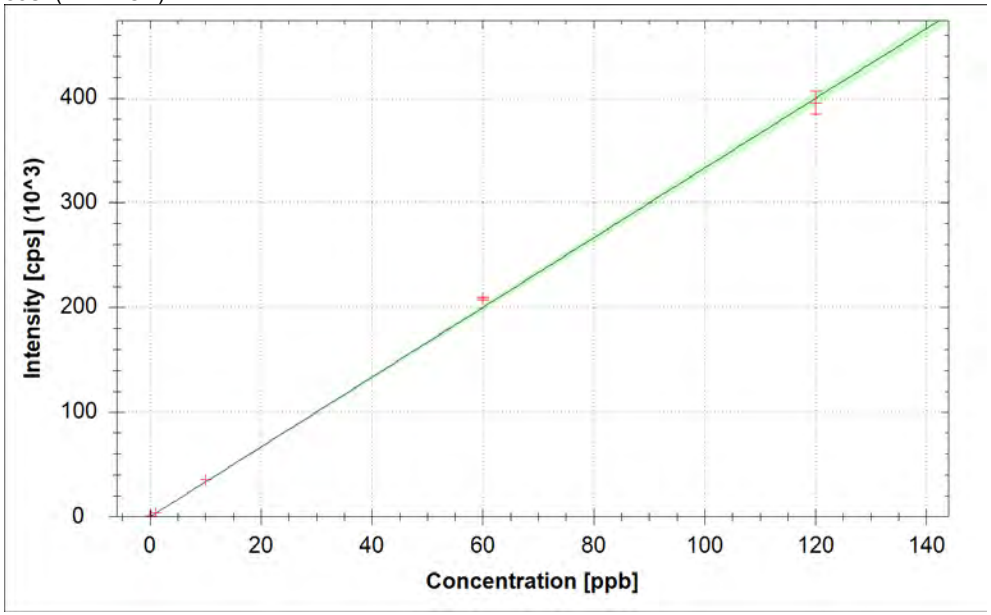
f(x) = 766.2253*x + 19.7175
R² = 0.9999
BEC = 0.026 ppb
LoD = 0.0122 ppb

78Se (KED AGD)



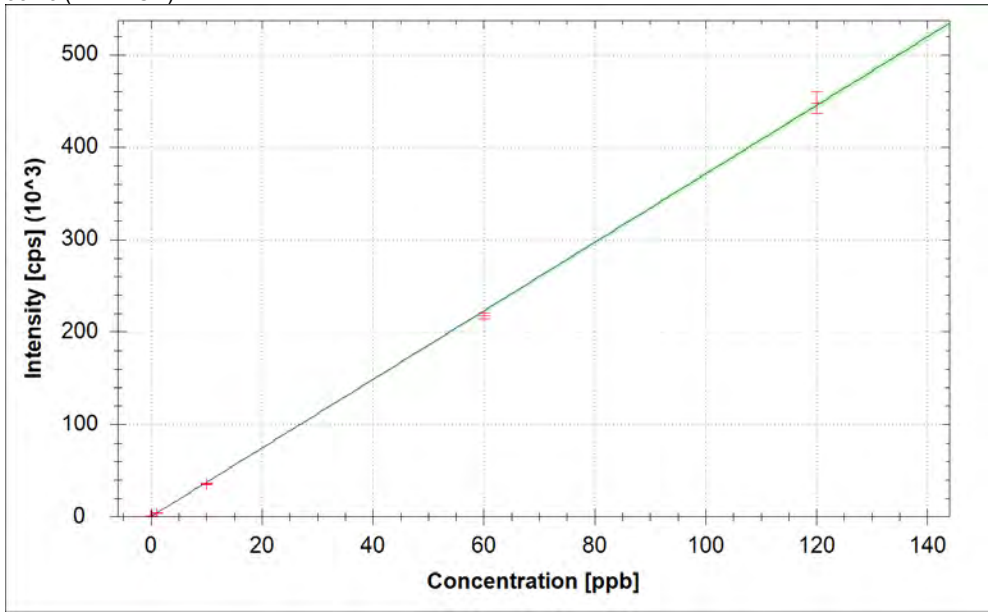
f(x) = 100.0103*x + 8.8063
R² = 0.9999
BEC = 0.088 ppb
LoD = 0.0422 ppb

88Sr (KED AGD)



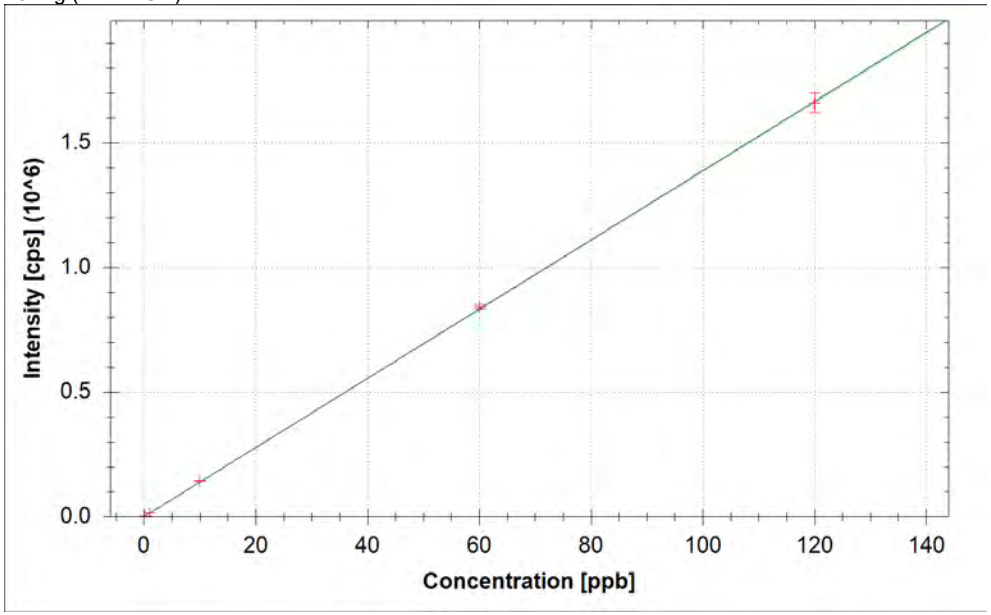
f(x) = 3329.1171*x + 54.3114
R² = 0.9993
BEC = 0.016 ppb
LoD = 0.0002 ppb

95Mo (KED AGD)



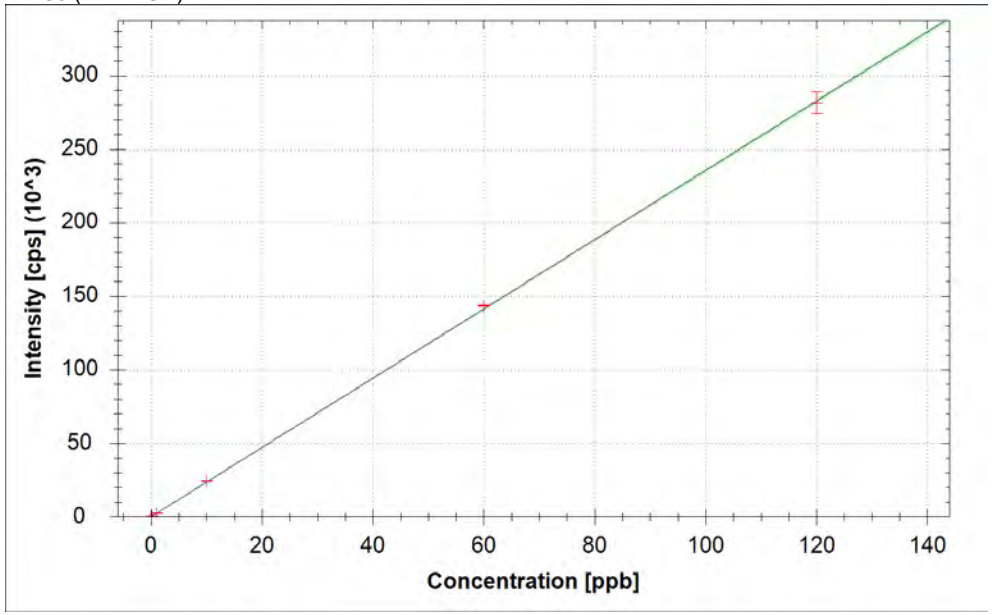
f(x) = 3707.4259*x + 224.4738
R² = 0.9998
BEC = 0.061 ppb
LoD = 0.0361 ppb

107Ag (KED AGD)



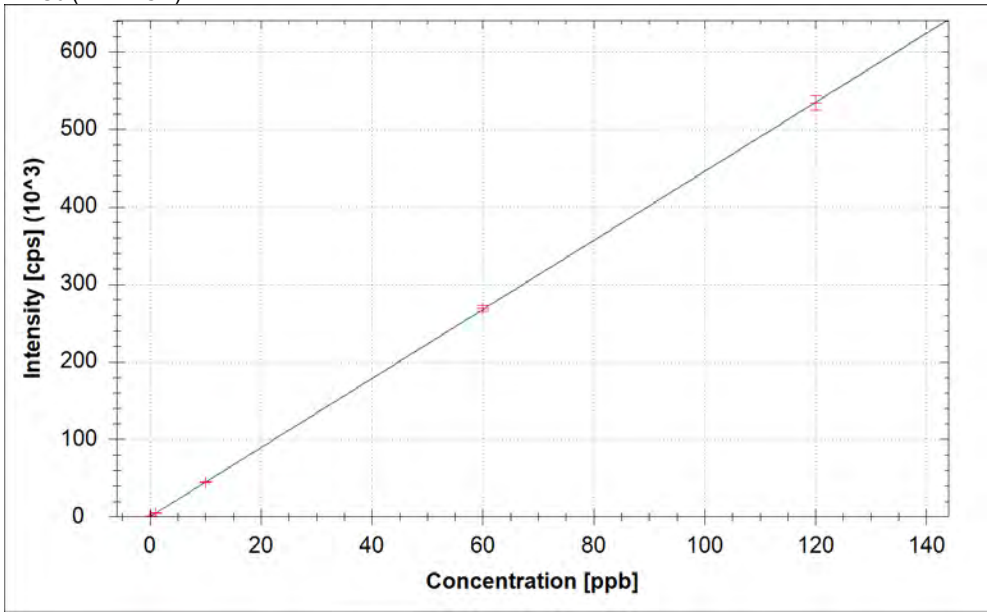
f(x) = 13873.0091*x + 60.0061
R² = 0.9999
BEC = 0.004 ppb
LoD = 0.0019 ppb

111Cd (KED AGD)



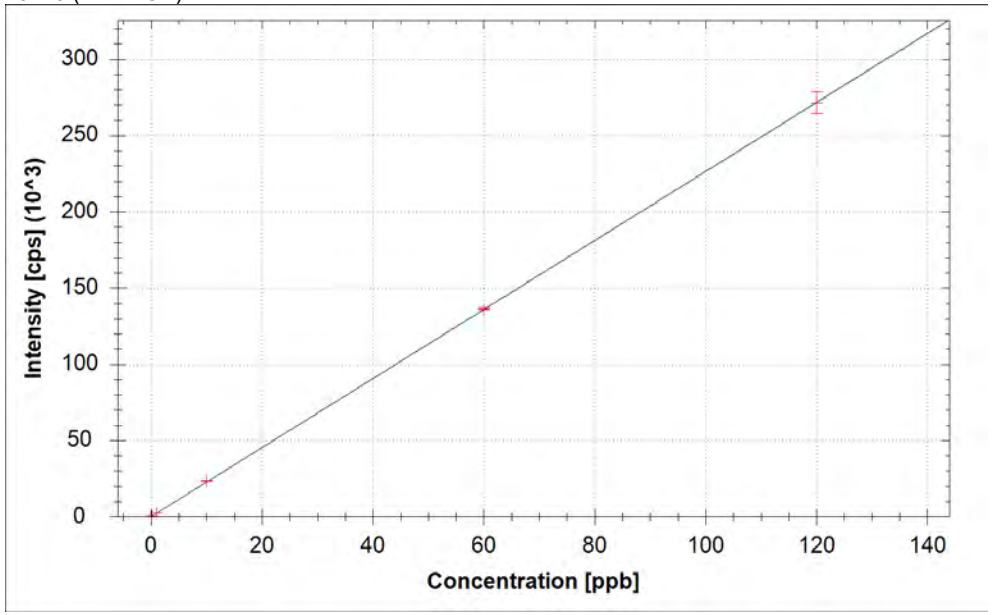
f(x) = 2354.6760*x + 2.2196
R² = 0.9999
BEC = 0.001 ppb
LoD = 0.0020 ppb

121Sb (KED AGD)



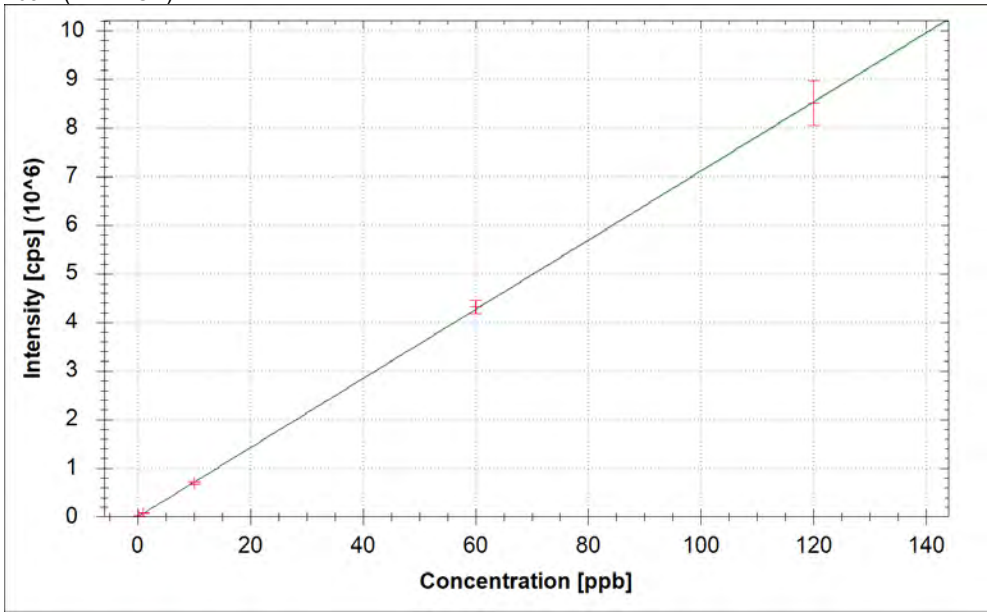
f(x) = 4456.1444*x + 75.9988
R² = 1.0000
BEC = 0.017 ppb
LoD = 0.0090 ppb

137Ba (KED AGD)



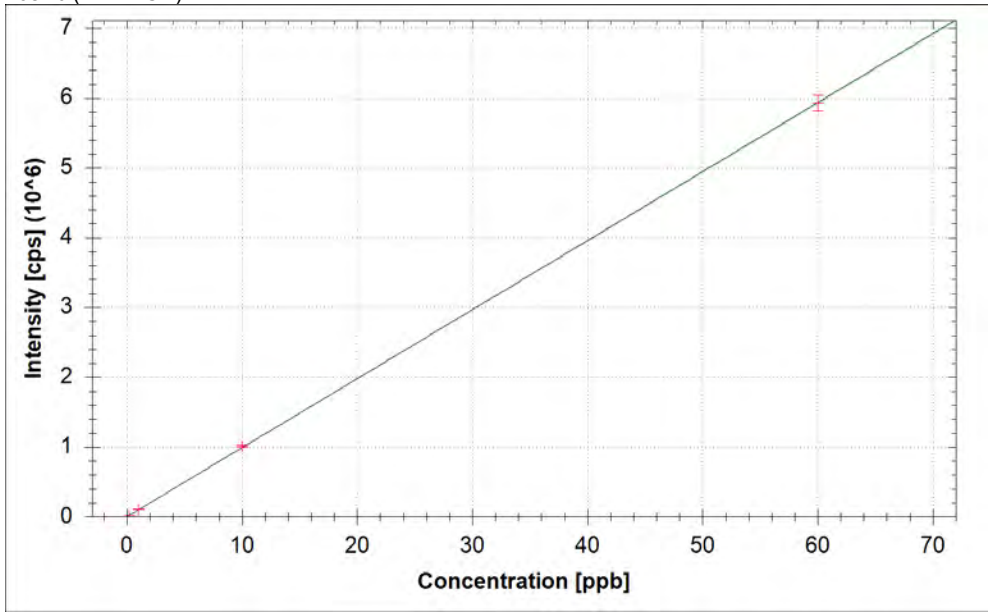
f(x) = 2262.9164*x + 72.2512
R² = 1.0000
BEC = 0.032 ppb
LoD = 0.0181 ppb

205Tl (KED AGD)



f(x) = 71117.6943*x + 202.2459
R² = 1.0000
BEC = 0.003 ppb
LoD = 0.0018 ppb

208Pb (KED AGD)



f(x) = 98878.5301*x + 1278.3467
R² = 1.0000
BEC = 0.013 ppb
LoD = 0.0029 ppb

Standards:

Analysis Index: 4
Analysis Name: 0.2/20 Cal
Analysis Type: STD
Analysis Started at: 12/2/2024 7:55:01 AM
Total Dilution Factor 50000
Rack 0
Vial 2

Category	Concentration average	Concentration RSD	Standard Concentration	Standard Relative Difference
6Li (STD AGD)	100.789 %	0.6 %		0.000 %
6Li (KED AGD)	100.955 %	2.9 %		0.000 %
9Be (STD AGD)	0.197 ppb	3.2 %	0.200 ppb	1.531 %
23Na (KED AGD)	16.301 ppb	25.6 %	20.000 ppb	18.494 %
24Mg (KED AGD)	17.820 ppb	2.6 %	20.000 ppb	10.901 %
27Al (KED AGD)	0.035 ppb	363.9 %	0.200 ppb	82.335 %
39K (KED AGD)	18.903 ppb	4.1 %	20.000 ppb	5.485 %
44Ca (KED AGD)	14.275 ppb	12.9 %	20.000 ppb	28.625 %
45Sc (STD AGD)	103.106 %	0.3 %		0.000 %
51V (KED AGD)	0.203 ppb	5.1 %	0.200 ppb	1.497 %
52Cr (KED AGD)	0.199 ppb	4.5 %	0.200 ppb	0.708 %
55Mn (KED AGD)	0.127 ppb	11.5 %	0.200 ppb	36.275 %
57Fe (KED AGD)	18.731 ppb	7.0 %	20.000 ppb	6.343 %
59Co (KED AGD)	0.191 ppb	5.7 %	0.200 ppb	4.587 %
60Ni (KED AGD)	-0.024 ppb	51.1 %	0.200 ppb	111.816 %
65Cu (KED AGD)	0.183 ppb	22.8 %	0.200 ppb	8.295 %
66Zn (KED AGD)	-0.085 ppb	171.6 %	0.200 ppb	142.683 %
74Ge (KED AGD)	103.608 %	1.6 %		0.000 %
75As (KED AGD)	0.200 ppb	13.3 %	0.200 ppb	0.020 %
78Se (KED AGD)	0.186 ppb	8.9 %	0.200 ppb	7.169 %
88Sr (KED AGD)	0.189 ppb	2.3 %	0.200 ppb	5.672 %
95Mo (KED AGD)	0.143 ppb	6.8 %	0.200 ppb	28.352 %
103Rh (KED AGD)	102.913 %	4.1 %		0.000 %
107Ag (KED AGD)	0.188 ppb	3.8 %	0.200 ppb	5.768 %
111Cd (KED AGD)	0.186 ppb	4.5 %	0.200 ppb	6.878 %
115In (KED AGD)	102.791 %	1.9 %		0.000 %
121Sb (KED AGD)	0.191 ppb	6.5 %	0.200 ppb	4.749 %
137Ba (KED AGD)	0.165 ppb	12.1 %	0.200 ppb	17.623 %
159Tb (KED AGD)	102.075 %	2.5 %		0.000 %
175Lu (KED AGD)	102.506 %	1.8 %		0.000 %
205Tl (KED AGD)	0.156 ppb	6.6 %	0.200 ppb	21.787 %
208Pb (KED AGD)	0.185 ppb	3.7 %	0.200 ppb	7.273 %
209Bi (KED AGD)	104.184 %	4.1 %		0.000 %

Standards:

Analysis Index: 5
Analysis Name: 1/100 Cal
Analysis Type: STD
Analysis Started at: 12/2/2024 7:59:39 AM
Total Dilution Factor 10000
Rack 0
Vial 3

Category	Concentration average	Concentration RSD	Standard Concentration	Standard Relative Difference
6Li (STD AGD)	100.805 %	1.2 %		0.000 %
6Li (KED AGD)	100.971 %	1.0 %		0.000 %
9Be (STD AGD)	1.005 ppb	2.4 %	1.000 ppb	0.458 %
23Na (KED AGD)	97.625 ppb	1.4 %	100.000 ppb	2.375 %
24Mg (KED AGD)	97.316 ppb	0.2 %	100.000 ppb	2.684 %
27Al (KED AGD)	0.937 ppb	3.4 %	1.000 ppb	6.338 %
39K (KED AGD)	99.395 ppb	0.9 %	100.000 ppb	0.605 %
44Ca (KED AGD)	101.997 ppb	3.9 %	100.000 ppb	1.997 %
45Sc (STD AGD)	95.544 %	1.2 %		0.000 %
51V (KED AGD)	1.068 ppb	3.6 %	1.000 ppb	6.828 %
52Cr (KED AGD)	1.049 ppb	4.5 %	1.000 ppb	4.850 %
55Mn (KED AGD)	1.008 ppb	3.5 %	1.000 ppb	0.802 %
57Fe (KED AGD)	98.986 ppb	3.1 %	100.000 ppb	1.014 %
59Co (KED AGD)	1.007 ppb	2.8 %	1.000 ppb	0.748 %
60Ni (KED AGD)	0.843 ppb	8.0 %	1.000 ppb	15.708 %
65Cu (KED AGD)	1.078 ppb	5.2 %	1.000 ppb	7.766 %
66Zn (KED AGD)	0.691 ppb	3.4 %	1.000 ppb	30.921 %
74Ge (KED AGD)	101.291 %	0.9 %		0.000 %
75As (KED AGD)	1.043 ppb	2.0 %	1.000 ppb	4.261 %
78Se (KED AGD)	1.115 ppb	3.7 %	1.000 ppb	11.488 %
88Sr (KED AGD)	0.980 ppb	1.0 %	1.000 ppb	2.002 %
95Mo (KED AGD)	0.899 ppb	6.9 %	1.000 ppb	10.105 %
103Rh (KED AGD)	101.416 %	1.1 %		0.000 %
107Ag (KED AGD)	1.017 ppb	2.1 %	1.000 ppb	1.713 %
111Cd (KED AGD)	1.014 ppb	3.0 %	1.000 ppb	1.404 %
115In (KED AGD)	101.676 %	1.8 %		0.000 %
121Sb (KED AGD)	0.985 ppb	3.1 %	1.000 ppb	1.541 %
137Ba (KED AGD)	1.017 ppb	2.7 %	1.000 ppb	1.717 %
159Tb (KED AGD)	99.732 %	1.1 %		0.000 %
175Lu (KED AGD)	99.634 %	1.3 %		0.000 %
205Tl (KED AGD)	0.944 ppb	9.2 %	1.000 ppb	5.644 %
208Pb (KED AGD)	1.045 ppb	5.8 %	1.000 ppb	4.517 %
209Bi (KED AGD)	97.743 %	6.8 %		0.000 %

Standards:

Analysis Index: 6
Analysis Name: 10/1000 Cal
Analysis Type: STD
Analysis Started at: 12/2/2024 8:04:17 AM
Total Dilution Factor 1000
Rack 0
Vial 4

Category	Concentration average	Concentration RSD	Standard Concentration	Standard Relative Difference
6Li (STD AGD)	100.644 %	1.6 %		0.000 %
6Li (KED AGD)	100.240 %	0.5 %		0.000 %
9Be (STD AGD)	10.276 ppb	1.2 %	10.000 ppb	2.763 %
23Na (KED AGD)	1,021.507 ppb	0.4 %	1,000.000 ppb	2.151 %
24Mg (KED AGD)	997.943 ppb	0.9 %	1,000.000 ppb	0.206 %
27Al (KED AGD)	10.311 ppb	2.7 %	10.000 ppb	3.108 %
39K (KED AGD)	1,016.580 ppb	0.5 %	1,000.000 ppb	1.658 %
44Ca (KED AGD)	1,038.741 ppb	1.4 %	1,000.000 ppb	3.874 %
45Sc (STD AGD)	101.385 %	1.9 %		0.000 %
51V (KED AGD)	10.315 ppb	2.0 %	10.000 ppb	3.148 %
52Cr (KED AGD)	10.508 ppb	2.1 %	10.000 ppb	5.078 %
55Mn (KED AGD)	10.676 ppb	2.0 %	10.000 ppb	6.756 %
57Fe (KED AGD)	1,042.166 ppb	1.0 %	1,000.000 ppb	4.217 %
59Co (KED AGD)	10.657 ppb	0.8 %	10.000 ppb	6.568 %
60Ni (KED AGD)	10.374 ppb	1.3 %	10.000 ppb	3.743 %
65Cu (KED AGD)	10.741 ppb	1.1 %	10.000 ppb	7.415 %
66Zn (KED AGD)	10.608 ppb	0.6 %	10.000 ppb	6.077 %
74Ge (KED AGD)	100.884 %	0.4 %		0.000 %
75As (KED AGD)	10.573 ppb	1.4 %	10.000 ppb	5.733 %
78Se (KED AGD)	10.879 ppb	1.0 %	10.000 ppb	8.787 %
88Sr (KED AGD)	10.605 ppb	0.2 %	10.000 ppb	6.053 %
95Mo (KED AGD)	9.452 ppb	2.7 %	10.000 ppb	5.480 %
103Rh (KED AGD)	100.391 %	0.4 %		0.000 %
107Ag (KED AGD)	10.296 ppb	0.4 %	10.000 ppb	2.962 %
111Cd (KED AGD)	10.323 ppb	0.5 %	10.000 ppb	3.229 %
115In (KED AGD)	103.308 %	1.3 %		0.000 %
121Sb (KED AGD)	10.035 ppb	1.8 %	10.000 ppb	0.345 %
137Ba (KED AGD)	10.300 ppb	1.1 %	10.000 ppb	2.996 %
159Tb (KED AGD)	99.504 %	0.4 %		0.000 %
175Lu (KED AGD)	99.885 %	0.7 %		0.000 %
205Tl (KED AGD)	9.754 ppb	4.3 %	10.000 ppb	2.456 %
208Pb (KED AGD)	10.251 ppb	2.1 %	10.000 ppb	2.514 %
209Bi (KED AGD)	101.364 %	2.7 %		0.000 %

Standards:

Analysis Index: 7
Analysis Name: 60/6000 Cal
Analysis Type: STD
Analysis Started at: 12/2/2024 8:08:56 AM
Total Dilution Factor 166.6666666
Rack 0
Vial 5

Category	Concentration average	Concentration RSD	Standard Concentration	Standard Relative Difference
6Li (STD AGD)	101.064 %	1.4 %		0.000 %
6Li (KED AGD)	100.376 %	0.3 %		0.000 %
9Be (STD AGD)	61.157 ppb	0.5 %	60.000 ppb	1.928 %
23Na (KED AGD)	6,006.857 ppb	0.3 %	6,000.000 ppb	0.114 %
24Mg (KED AGD)	5,940.242 ppb	0.6 %	6,000.000 ppb	0.996 %
27Al (KED AGD)	59.950 ppb	1.6 %	60.000 ppb	0.084 %
39K (KED AGD)	5,965.426 ppb	0.5 %	6,000.000 ppb	0.576 %
44Ca (KED AGD)	5,993.529 ppb	0.9 %	6,000.000 ppb	0.108 %
45Sc (STD AGD)	108.645 %	0.5 %		0.000 %
51V (KED AGD)	60.250 ppb	1.5 %	60.000 ppb	0.417 %
52Cr (KED AGD)	60.243 ppb	0.9 %	60.000 ppb	0.405 %
55Mn (KED AGD)	60.525 ppb	0.7 %	60.000 ppb	0.875 %
57Fe (KED AGD)	5,954.838 ppb	0.6 %	6,000.000 ppb	0.753 %
59Co (KED AGD)	59.324 ppb	1.7 %	60.000 ppb	1.126 %
60Ni (KED AGD)	59.684 ppb	1.3 %	60.000 ppb	0.526 %
65Cu (KED AGD)	59.773 ppb	0.9 %	60.000 ppb	0.378 %
66Zn (KED AGD)	59.991 ppb	0.9 %	60.000 ppb	0.014 %
74Ge (KED AGD)	107.417 %	1.3 %		0.000 %
75As (KED AGD)	59.131 ppb	1.6 %	60.000 ppb	1.448 %
78Se (KED AGD)	59.814 ppb	2.2 %	60.000 ppb	0.310 %
88Sr (KED AGD)	62.521 ppb	0.7 %	60.000 ppb	4.201 %
95Mo (KED AGD)	58.634 ppb	1.5 %	60.000 ppb	2.277 %
103Rh (KED AGD)	100.972 %	1.0 %		0.000 %
107Ag (KED AGD)	60.658 ppb	1.0 %	60.000 ppb	1.097 %
111Cd (KED AGD)	60.955 ppb	0.3 %	60.000 ppb	1.591 %
115In (KED AGD)	104.522 %	1.0 %		0.000 %
121Sb (KED AGD)	60.355 ppb	1.4 %	60.000 ppb	0.592 %
137Ba (KED AGD)	60.237 ppb	0.4 %	60.000 ppb	0.395 %
159Tb (KED AGD)	102.013 %	1.0 %		0.000 %
175Lu (KED AGD)	103.073 %	0.7 %		0.000 %
205Tl (KED AGD)	60.608 ppb	3.1 %	60.000 ppb	1.013 %
208Pb (KED AGD)	59.957 ppb	1.9 %	60.000 ppb	0.071 %
209Bi (KED AGD)	103.539 %	1.7 %		0.000 %

Standards:

Analysis Index: 8
Analysis Name: 120/12000 Cal
Analysis Type: STD
Analysis Started at: 12/2/2024 8:13:35 AM
Total Dilution Factor 83.33333333
Rack 0
Vial 6

Category	Concentration average	Concentration RSD	Standard Concentration	Standard Relative Difference
6Li (STD AGD)	103.786 %	0.2 %		0.000 %
6Li (KED AGD)	103.467 %	0.2 %		0.000 %
9Be (STD AGD)	119.399 ppb	0.1 %	120.000 ppb	0.501 %
23Na (KED AGD)	11,994.805 ppb	2.4 %	12,000.000 ppb	0.043 %
24Mg (KED AGD)	12,030.076 ppb	1.3 %	12,000.000 ppb	0.251 %
27Al (KED AGD)	117.585 ppb	2.0 %	120.000 ppb	2.012 %
39K (KED AGD)	12,015.912 ppb	4.5 %	12,000.000 ppb	0.133 %
44Ca (KED AGD)	11,883.886 ppb	3.1 %	12,000.000 ppb	0.968 %
45Sc (STD AGD)	114.919 %	1.0 %		0.000 %
51V (KED AGD)	119.848 ppb	2.9 %	120.000 ppb	0.127 %
52Cr (KED AGD)	119.836 ppb	3.5 %	120.000 ppb	0.137 %
55Mn (KED AGD)	119.681 ppb	4.0 %	120.000 ppb	0.266 %
57Fe (KED AGD)	12,019.077 ppb	4.1 %	12,000.000 ppb	0.159 %
59Co (KED AGD)	120.283 ppb	2.6 %	120.000 ppb	0.236 %
60Ni (KED AGD)	120.128 ppb	3.2 %	120.000 ppb	0.107 %
65Cu (KED AGD)	120.051 ppb	2.6 %	120.000 ppb	0.043 %
66Zn (KED AGD)	119.957 ppb	2.2 %	120.000 ppb	0.036 %
74Ge (KED AGD)	105.972 %	2.2 %		0.000 %
75As (KED AGD)	120.386 ppb	3.6 %	120.000 ppb	0.322 %
78Se (KED AGD)	120.019 ppb	4.8 %	120.000 ppb	0.016 %
88Sr (KED AGD)	118.689 ppb	2.8 %	120.000 ppb	1.092 %
95Mo (KED AGD)	120.730 ppb	2.6 %	120.000 ppb	0.608 %
103Rh (KED AGD)	103.509 %	1.8 %		0.000 %
107Ag (KED AGD)	119.646 ppb	2.4 %	120.000 ppb	0.295 %
111Cd (KED AGD)	119.496 ppb	2.6 %	120.000 ppb	0.420 %
115In (KED AGD)	106.194 %	2.0 %		0.000 %
121Sb (KED AGD)	119.820 ppb	1.7 %	120.000 ppb	0.150 %
137Ba (KED AGD)	119.857 ppb	2.6 %	120.000 ppb	0.120 %
159Tb (KED AGD)	104.502 %	0.9 %		0.000 %
175Lu (KED AGD)	105.472 %	0.9 %		0.000 %
205Tl (KED AGD)	119.717 ppb	5.4 %	120.000 ppb	0.236 %
208Pb (KED AGD)	118.864 ppb	4.6 %	120.000 ppb	0.947 %
209Bi (KED AGD)	104.182 %	3.4 %		0.000 %

Alpha ICPMSQ Data with SRD

12/2/2024 3:12:07 PM

Analysis index: 1
Analysis label: Rinse
Analysis started at: 12/2/2024 7:41:05 AM
User name ALPHALAB\Metals-Instrument
Rack 0
Vial 1
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	95.951 %	88.984 %	0.012 ppb	25.899 ppb	1.107 ppb	0.376 ppb	9.818 ppb	5.842 ppb	95.314 %
Concentration per Run 1	94.631 %	86.055 %	0.016 ppb	33.166 ppb	1.662 ppb	0.444 ppb	11.487 ppb	6.428 ppb	94.128 %
Concentration per Run 2	96.990 %	88.106 %	0.012 ppb	29.636 ppb	0.852 ppb	0.329 ppb	10.720 ppb	6.614 ppb	96.234 %
Concentration per Run 3	96.233 %	92.790 %	0.009 ppb	14.893 ppb	0.808 ppb	0.356 ppb	7.248 ppb	4.484 ppb	95.578 %
Concentration RSD	1.3 %	3.9 %	31.1 %	37.4 %	43.4 %	16.0 %	23.0 %	20.2 %	1.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.075 ppb	0.035 ppb	0.056 ppb	3.172 ppb	0.018 ppb	0.154 ppb	0.079 ppb	3.462 ppb	88.226 %
Concentration per Run 1	0.114 ppb	0.044 ppb	0.058 ppb	3.378 ppb	0.018 ppb	0.187 ppb	0.111 ppb	3.871 ppb	84.034 %
Concentration per Run 2	0.101 ppb	0.040 ppb	0.045 ppb	2.815 ppb	0.022 ppb	0.169 ppb	0.085 ppb	3.702 ppb	86.244 %
Concentration per Run 3	0.009 ppb	0.019 ppb	0.064 ppb	3.322 ppb	0.013 ppb	0.104 ppb	0.041 ppb	2.812 ppb	94.399 %
Concentration RSD	76.7 %	38.5 %	17.2 %	9.8 %	25.6 %	28.4 %	44.9 %	16.4 %	6.2 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.021 ppb	0.028 ppb	0.027 ppb	0.015 ppb	86.734 %	0.010 ppb	0.010 ppb	87.072 %	0.016 ppb
Concentration per Run 1	0.020 ppb	0.024 ppb	0.030 ppb	-0.006 ppb	81.969 %	0.013 ppb	0.010 ppb	81.922 %	0.012 ppb
Concentration per Run 2	0.029 ppb	0.036 ppb	0.026 ppb	0.021 ppb	85.858 %	0.009 ppb	0.014 ppb	85.506 %	0.022 ppb
Concentration per Run 3	0.013 ppb	0.025 ppb	0.025 ppb	0.030 ppb	92.375 %	0.008 ppb	0.005 ppb	93.787 %	0.015 ppb
Concentration RSD	36.8 %	24.0 %	9.6 %	125.3 %	6.1 %	23.6 %	46.5 %	7.0 %	30.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.016 ppb	88.102 %	88.916 %	0.011 ppb	0.020 ppb	83.419 %
Concentration per Run 1	0.027 ppb	83.265 %	84.462 %	0.011 ppb	0.025 ppb	77.318 %
Concentration per Run 2	0.023 ppb	86.048 %	87.652 %	0.013 ppb	0.020 ppb	83.754 %
Concentration per Run 3	-0.001 ppb	94.993 %	94.632 %	0.009 ppb	0.017 ppb	89.184 %
Concentration RSD	91.2 %	7.0 %	5.8 %	17.8 %	20.7 %	7.1 %

Alpha ICPMSQ Data with SRD

12/2/2024 3:12:07 PM

Analysis index: 2
Analysis label: CAL LOT #M24-1045
Analysis started at: 12/2/2024 7:45:42 AM
User name ALPHALAB\Metals-Instrument
Rack 0
Vial 1
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	99.042 %	98.564 %	0.013 ppb	1.757 ppb	1.211 ppb	0.213 ppb	4.054 ppb	3.844 ppb	99.003 %
Concentration per Run 1	97.381 %	101.311 %	0.010 ppb	-0.305 ppb	1.197 ppb	0.135 ppb	4.586 ppb	1.214 ppb	97.354 %
Concentration per Run 2	99.097 %	97.567 %	0.015 ppb	2.579 ppb	1.522 ppb	0.349 ppb	1.931 ppb	3.163 ppb	100.426 %
Concentration per Run 3	100.650 %	96.815 %	0.015 ppb	2.998 ppb	0.913 ppb	0.154 ppb	5.645 ppb	7.156 ppb	99.228 %
Concentration RSD	1.7 %	2.4 %	20.4 %	102.3 %	25.2 %	56.0 %	47.2 %	78.8 %	1.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.031 ppb	0.026 ppb	0.033 ppb	3.103 ppb	0.008 ppb	0.091 ppb	0.068 ppb	3.249 ppb	99.490 %
Concentration per Run 1	0.016 ppb	0.026 ppb	0.052 ppb	2.724 ppb	0.005 ppb	0.081 ppb	0.050 ppb	3.190 ppb	99.602 %
Concentration per Run 2	0.065 ppb	0.021 ppb	0.024 ppb	3.443 ppb	0.008 ppb	0.116 ppb	0.086 ppb	3.419 ppb	98.531 %
Concentration per Run 3	0.011 ppb	0.033 ppb	0.021 ppb	3.143 ppb	0.010 ppb	0.076 ppb	0.067 ppb	3.138 ppb	100.336 %
Concentration RSD	96.3 %	23.2 %	52.8 %	11.6 %	29.1 %	24.0 %	26.4 %	4.6 %	0.9 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.016 ppb	0.001 ppb	0.023 ppb	0.016 ppb	98.917 %	0.007 ppb	0.006 ppb	99.138 %	0.008 ppb
Concentration per Run 1	0.019 ppb	-0.023 ppb	0.023 ppb	0.002 ppb	101.126 %	0.007 ppb	0.006 ppb	100.607 %	0.001 ppb
Concentration per Run 2	0.024 ppb	0.030 ppb	0.022 ppb	0.008 ppb	97.116 %	0.010 ppb	0.006 ppb	98.057 %	0.013 ppb
Concentration per Run 3	0.006 ppb	-0.003 ppb	0.024 ppb	0.038 ppb	98.510 %	0.005 ppb	0.007 ppb	98.752 %	0.009 ppb
Concentration RSD	58.1 %	1,912.2 %	4.4 %	121.5 %	2.1 %	31.2 %	8.5 %	1.3 %	79.0 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.008 ppb	99.298 %	100.046 %	0.006 ppb	0.014 ppb	100.226 %
Concentration per Run 1	-0.004 ppb	99.361 %	100.284 %	0.006 ppb	0.013 ppb	101.114 %
Concentration per Run 2	0.028 ppb	98.371 %	98.811 %	0.007 ppb	0.014 ppb	100.289 %
Concentration per Run 3	0.001 ppb	100.163 %	101.043 %	0.006 ppb	0.014 ppb	99.275 %
Concentration RSD	209.5 %	0.9 %	1.1 %	8.5 %	5.6 %	0.9 %

Alpha ICPMSQ Data with SRD

12/2/2024 3:12:07 PM

Analysis index:	3	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	Blank NTB ICPMSQ	Rack	4		
Analysis started at:	12/2/2024 7:50:19 AM	Vial	49		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	100.000 %	100.000 %	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	100.000 %
Concentration per Run	100.000 %	100.000 %	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	100.000 %
Concentration RSD	0.0 %	0.0 %	0.2 %	0.0 %	0.2 %	0.1 %	0.0 %	0.2 %	0.0 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	100.000 %
Concentration per Run	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	100.000 %
Concentration RSD	0.2 %	0.0 %	0.2 %	0.3 %	0.7 %	0.1 %	0.1 %	0.0 %	0.0 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	100.000 %	0.000 ppb	0.000 ppb	100.000 %	0.000 ppb
Concentration per Run	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	100.000 %	0.000 ppb	0.000 ppb	100.000 %	0.000 ppb
Concentration RSD	0.2 %	0.2 %	0.0 %	0.2 %	0.0 %	0.1 %	0.7 %	0.0 %	0.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.000 ppb	100.000 %	100.000 %	0.000 ppb	0.000 ppb	100.000 %
Concentration per Run	0.000 ppb	100.000 %	100.000 %	0.000 ppb	0.000 ppb	100.000 %
Concentration RSD	0.2 %	0.0 %	0.0 %	0.2 %	0.1 %	0.0 %

Alpha ICPMSQ Data with SRD

12/2/2024 3:12:07 PM

Analysis index: 4
Analysis label: 0.2/20 Cal
Analysis started at: 12/2/2024 7:55:01 AM
User name ALPHALAB\Metals-Instrument
Rack 0
Vial 2
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	100.789 %	100.955 %	0.197 ppb	16.301 ppb	17.820 ppb	0.035 ppb	18.903 ppb	14.275 ppb	103.106 %
Concentration per Run 1	100.333 %	104.083 %	0.197 ppb	14.260 ppb	18.335 ppb	-0.086 ppb	18.375 ppb	15.153 ppb	102.948 %
Concentration per Run 2	100.598 %	98.178 %	0.191 ppb	21.096 ppb	17.474 ppb	0.023 ppb	19.782 ppb	15.512 ppb	103.494 %
Concentration per Run 3	101.437 %	100.606 %	0.204 ppb	13.548 ppb	17.651 ppb	0.170 ppb	18.552 ppb	12.161 ppb	102.876 %
Concentration RSD	0.6 %	2.9 %	3.2 %	25.6 %	2.6 %	363.9 %	4.1 %	12.9 %	0.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.203 ppb	0.199 ppb	0.127 ppb	18.731 ppb	0.191 ppb	-0.024 ppb	0.183 ppb	-0.085 ppb	103.608 %
Concentration per Run 1	0.213 ppb	0.193 ppb	0.111 ppb	17.437 ppb	0.201 ppb	-0.037 ppb	0.218 ppb	0.083 ppb	105.532 %
Concentration per Run 2	0.203 ppb	0.209 ppb	0.132 ppb	20.051 ppb	0.179 ppb	-0.013 ppb	0.195 ppb	-0.181 ppb	102.295 %
Concentration per Run 3	0.192 ppb	0.194 ppb	0.139 ppb	18.706 ppb	0.193 ppb	-0.021 ppb	0.137 ppb	-0.159 ppb	102.997 %
Concentration RSD	5.1 %	4.5 %	11.5 %	7.0 %	5.7 %	51.1 %	22.8 %	171.6 %	1.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.200 ppb	0.186 ppb	0.189 ppb	0.143 ppb	102.913 %	0.188 ppb	0.186 ppb	102.791 %	0.191 ppb
Concentration per Run 1	0.171 ppb	0.205 ppb	0.185 ppb	0.154 ppb	107.815 %	0.181 ppb	0.177 ppb	104.867 %	0.178 ppb
Concentration per Run 2	0.223 ppb	0.178 ppb	0.193 ppb	0.140 ppb	100.672 %	0.195 ppb	0.192 ppb	101.091 %	0.190 ppb
Concentration per Run 3	0.206 ppb	0.174 ppb	0.188 ppb	0.135 ppb	100.252 %	0.190 ppb	0.190 ppb	102.414 %	0.203 ppb
Concentration RSD	13.3 %	8.9 %	2.3 %	6.8 %	4.1 %	3.8 %	4.5 %	1.9 %	6.5 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.165 ppb	102.075 %	102.506 %	0.156 ppb	0.185 ppb	104.184 %
Concentration per Run 1	0.147 ppb	104.762 %	104.350 %	0.146 ppb	0.178 ppb	108.996 %
Concentration per Run 2	0.162 ppb	99.746 %	100.712 %	0.156 ppb	0.188 ppb	102.821 %
Concentration per Run 3	0.186 ppb	101.717 %	102.455 %	0.167 ppb	0.191 ppb	100.735 %
Concentration RSD	12.1 %	2.5 %	1.8 %	6.6 %	3.7 %	4.1 %

Alpha ICPMSQ Data with SRD

12/2/2024 3:12:07 PM

Analysis index:	5	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	1/100 Cal	Rack	0		
Analysis started at:	12/2/2024 7:59:39 AM	Vial	3		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	100.805 %	100.971 %	1.005 ppb	97.625 ppb	97.316 ppb	0.937 ppb	99.395 ppb	101.997 ppb	95.544 %
Concentration per Run 1	99.619 %	100.292 %	1.024 ppb	98.432 ppb	97.131 ppb	0.902 ppb	99.680 ppb	106.241 ppb	94.406 %
Concentration per Run 2	100.775 %	100.512 %	1.012 ppb	98.377 ppb	97.452 ppb	0.941 ppb	100.158 ppb	98.421 ppb	95.560 %
Concentration per Run 3	102.021 %	102.109 %	0.978 ppb	96.066 ppb	97.366 ppb	0.967 ppb	98.347 ppb	101.329 ppb	96.668 %
Concentration RSD	1.2 %	1.0 %	2.4 %	1.4 %	0.2 %	3.4 %	0.9 %	3.9 %	1.2 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	1.068 ppb	1.049 ppb	1.008 ppb	98.986 ppb	1.007 ppb	0.843 ppb	1.078 ppb	0.691 ppb	101.291 %
Concentration per Run 1	1.104 ppb	1.101 ppb	0.991 ppb	95.475 ppb	1.039 ppb	0.920 ppb	1.034 ppb	0.718 ppb	100.373 %
Concentration per Run 2	1.027 ppb	1.034 ppb	1.048 ppb	100.241 ppb	0.999 ppb	0.795 ppb	1.058 ppb	0.673 ppb	101.383 %
Concentration per Run 3	1.073 ppb	1.011 ppb	0.985 ppb	101.242 ppb	0.984 ppb	0.814 ppb	1.141 ppb	0.682 ppb	102.118 %
Concentration RSD	3.6 %	4.5 %	3.5 %	3.1 %	2.8 %	8.0 %	5.2 %	3.4 %	0.9 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	1.043 ppb	1.115 ppb	0.980 ppb	0.899 ppb	101.416 %	1.017 ppb	1.014 ppb	101.676 %	0.985 ppb
Concentration per Run 1	1.033 ppb	1.156 ppb	0.975 ppb	0.966 ppb	102.398 %	1.002 ppb	0.986 ppb	103.761 %	0.975 ppb
Concentration per Run 2	1.066 ppb	1.074 ppb	0.974 ppb	0.889 ppb	101.611 %	1.041 ppb	1.009 ppb	100.425 %	0.961 ppb
Concentration per Run 3	1.028 ppb	1.114 ppb	0.991 ppb	0.843 ppb	100.239 %	1.008 ppb	1.047 ppb	100.842 %	1.018 ppb
Concentration RSD	2.0 %	3.7 %	1.0 %	6.9 %	1.1 %	2.1 %	3.0 %	1.8 %	3.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	1.017 ppb	99.732 %	99.634 %	0.944 ppb	1.045 ppb	97.743 %
Concentration per Run 1	1.048 ppb	101.042 %	100.098 %	0.856 ppb	0.987 ppb	104.279 %
Concentration per Run 2	0.998 ppb	99.212 %	100.677 %	0.946 ppb	1.039 ppb	98.005 %
Concentration per Run 3	1.005 ppb	98.940 %	98.126 %	1.029 ppb	1.109 ppb	90.946 %
Concentration RSD	2.7 %	1.1 %	1.3 %	9.2 %	5.8 %	6.8 %

Alpha ICPMSQ Data with SRD

12/2/2024 3:12:07 PM

Analysis index: 6
Analysis label: 10/1000 Cal
Analysis started at: 12/2/2024 8:04:17 AM
User name ALPHALAB\Metals-Instrument
Rack 0
Vial 4
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	100.644 %	100.240 %	10.276 ppb	1,021.507 ppb	997.943 ppb	10.311 ppb	1,016.580 ppb	1,038.741 ppb	101.385 %
Concentration per Run 1	98.797 %	100.809 %	10.157 ppb	1,025.928 ppb	1,004.195 ppb	10.004 ppb	1,013.516 ppb	1,023.523 ppb	99.419 %
Concentration per Run 2	101.716 %	100.136 %	10.410 ppb	1,017.453 ppb	987.115 ppb	10.531 ppb	1,022.077 ppb	1,039.569 ppb	101.534 %
Concentration per Run 3	101.420 %	99.775 %	10.261 ppb	1,021.140 ppb	1,002.520 ppb	10.397 ppb	1,014.145 ppb	1,053.131 ppb	103.200 %
Concentration RSD	1.6 %	0.5 %	1.2 %	0.4 %	0.9 %	2.7 %	0.5 %	1.4 %	1.9 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	10.315 ppb	10.508 ppb	10.676 ppb	1,042.166 ppb	10.657 ppb	10.374 ppb	10.741 ppb	10.608 ppb	100.884 %
Concentration per Run 1	10.509 ppb	10.730 ppb	10.808 ppb	1,048.263 ppb	10.751 ppb	10.524 ppb	10.847 ppb	10.672 ppb	100.723 %
Concentration per Run 2	10.096 ppb	10.280 ppb	10.425 ppb	1,029.959 ppb	10.582 ppb	10.286 ppb	10.611 ppb	10.547 ppb	100.610 %
Concentration per Run 3	10.339 ppb	10.513 ppb	10.794 ppb	1,048.277 ppb	10.637 ppb	10.313 ppb	10.767 ppb	10.604 ppb	101.319 %
Concentration RSD	2.0 %	2.1 %	2.0 %	1.0 %	0.8 %	1.3 %	1.1 %	0.6 %	0.4 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	10.573 ppb	10.879 ppb	10.605 ppb	9.452 ppb	100.391 %	10.296 ppb	10.323 ppb	103.308 %	10.035 ppb
Concentration per Run 1	10.632 ppb	10.857 ppb	10.588 ppb	9.716 ppb	100.486 %	10.339 ppb	10.387 ppb	103.419 %	10.115 ppb
Concentration per Run 2	10.407 ppb	10.784 ppb	10.608 ppb	9.201 ppb	100.782 %	10.293 ppb	10.286 ppb	104.607 %	9.825 ppb
Concentration per Run 3	10.681 ppb	10.994 ppb	10.620 ppb	9.439 ppb	99.905 %	10.257 ppb	10.296 ppb	101.897 %	10.163 ppb
Concentration RSD	1.4 %	1.0 %	0.2 %	2.7 %	0.4 %	0.4 %	0.5 %	1.3 %	1.8 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	10.300 ppb	99.504 %	99.885 %	9.754 ppb	10.251 ppb	101.364 %
Concentration per Run 1	10.240 ppb	99.893 %	99.151 %	9.269 ppb	10.025 ppb	104.481 %
Concentration per Run 2	10.432 ppb	99.534 %	100.428 %	9.953 ppb	10.289 ppb	99.200 %
Concentration per Run 3	10.227 ppb	99.084 %	100.075 %	10.041 ppb	10.441 ppb	100.411 %
Concentration RSD	1.1 %	0.4 %	0.7 %	4.3 %	2.1 %	2.7 %

Alpha ICPMSQ Data with SRD

12/2/2024 3:12:07 PM

Analysis index:	7	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	60/6000 Cal	Rack	0		
Analysis started at:	12/2/2024 8:08:56 AM	Vial	5		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	101.064 %	100.376 %	61.157 ppb	6,006.857 ppb	5,940.242 ppb	59.950 ppb	5,965.426 ppb	5,993.529 ppb	108.645 %
Concentration per Run 1	99.489 %	100.778 %	61.380 ppb	5,989.498 ppb	5,948.642 ppb	58.815 ppb	5,968.143 ppb	6,033.372 ppb	108.371 %
Concentration per Run 2	101.803 %	100.136 %	61.274 ppb	6,024.432 ppb	5,970.389 ppb	60.568 ppb	5,936.802 ppb	5,932.602 ppb	109.300 %
Concentration per Run 3	101.902 %	100.214 %	60.816 ppb	6,006.640 ppb	5,901.696 ppb	60.466 ppb	5,991.332 ppb	6,014.612 ppb	108.262 %
Concentration RSD	1.4 %	0.3 %	0.5 %	0.3 %	0.6 %	1.6 %	0.5 %	0.9 %	0.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	60.250 ppb	60.243 ppb	60.525 ppb	5,954.838 ppb	59.324 ppb	59.684 ppb	59.773 ppb	59.991 ppb	107.417 %
Concentration per Run 1	60.381 ppb	60.064 ppb	60.356 ppb	5,939.101 ppb	58.438 ppb	59.845 ppb	59.415 ppb	59.485 ppb	108.982 %
Concentration per Run 2	59.280 ppb	59.826 ppb	61.018 ppb	5,931.412 ppb	59.093 ppb	58.831 ppb	59.503 ppb	59.909 ppb	106.629 %
Concentration per Run 3	61.090 ppb	60.839 ppb	60.200 ppb	5,994.003 ppb	60.442 ppb	60.377 ppb	60.402 ppb	60.581 ppb	106.639 %
Concentration RSD	1.5 %	0.9 %	0.7 %	0.6 %	1.7 %	1.3 %	0.9 %	0.9 %	1.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	59.131 ppb	59.814 ppb	62.521 ppb	58.634 ppb	100.972 %	60.658 ppb	60.955 ppb	104.522 %	60.355 ppb
Concentration per Run 1	58.041 ppb	58.327 ppb	62.124 ppb	59.566 ppb	100.225 %	61.329 ppb	60.893 ppb	103.986 %	61.301 ppb
Concentration per Run 2	59.794 ppb	60.298 ppb	63.026 ppb	58.489 ppb	100.544 %	60.417 ppb	61.152 ppb	105.676 %	59.866 ppb
Concentration per Run 3	59.559 ppb	60.817 ppb	62.412 ppb	57.846 ppb	102.147 %	60.229 ppb	60.819 ppb	103.904 %	59.898 ppb
Concentration RSD	1.6 %	2.2 %	0.7 %	1.5 %	1.0 %	1.0 %	0.3 %	1.0 %	1.4 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	60.237 ppb	102.013 %	103.073 %	60.608 ppb	59.957 ppb	103.539 %
Concentration per Run 1	60.346 ppb	102.280 %	102.571 %	58.433 ppb	58.655 ppb	105.575 %
Concentration per Run 2	60.406 ppb	100.897 %	103.854 %	61.795 ppb	60.433 ppb	102.801 %
Concentration per Run 3	59.959 ppb	102.862 %	102.793 %	61.595 ppb	60.785 ppb	102.240 %
Concentration RSD	0.4 %	1.0 %	0.7 %	3.1 %	1.9 %	1.7 %

Alpha ICPMSQ Data with SRD

12/2/2024 3:12:07 PM

Analysis index:	8	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	120/12000 Cal	Rack	0		
Analysis started at:	12/2/2024 8:13:35 AM	Vial	6		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	103.786 %	103.467 %	119.399 ppb	11,994.805 ppb	12,030.076 ppb	117.535 ppb	12,015.912 ppb	11,883.895 ppb	114.919 %
Concentration per Run 1	103.561 %	103.660 %	119.547 ppb	11,690.058 ppb	11,902.915 ppb	115.760 ppb	11,404.067 ppb	11,457.023 ppb	114.230 %
Concentration per Run 2	104.037 %	103.284 %	119.241 ppb	12,275.599 ppb	12,201.848 ppb	116.815 ppb	12,416.940 ppb	12,100.312 ppb	114.343 %
Concentration per Run 3	103.760 %	103.456 %	119.408 ppb	12,018.760 ppb	11,985.466 ppb	120.180 ppb	12,226.730 ppb	12,094.323 ppb	116.183 %
Concentration RSD	0.2 %	0.2 %	0.1 %	2.4 %	1.3 %	2.0 %	4.5 %	3.0 %	1.0 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	119.848 ppb	119.836 ppb	119.681 ppb	12,019.077 ppb	120.283 ppb	120.128 ppb	120.051 ppb	119.957 ppb	105.972 %
Concentration per Run 1	115.935 ppb	115.482 ppb	114.232 ppb	11,466.937 ppb	116.725 ppb	115.706 ppb	116.466 ppb	117.159 ppb	108.661 %
Concentration per Run 2	122.271 ppb	120.199 ppb	121.726 ppb	12,178.144 ppb	121.447 ppb	121.918 ppb	121.248 ppb	120.382 ppb	104.833 %
Concentration per Run 3	121.339 ppb	123.827 ppb	123.087 ppb	12,412.152 ppb	122.677 ppb	122.762 ppb	122.439 ppb	122.330 ppb	104.422 %
Concentration RSD	2.9 %	3.5 %	4.0 %	4.1 %	2.6 %	3.2 %	2.6 %	2.2 %	2.2 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	120.386 ppb	120.019 ppb	118.689 ppb	120.730 ppb	103.509 %	119.646 ppb	119.496 ppb	106.194 %	119.820 ppb
Concentration per Run 1	115.478 ppb	114.042 ppb	115.038 ppb	117.456 ppb	105.631 %	116.340 ppb	115.885 ppb	108.499 %	117.484 ppb
Concentration per Run 2	122.011 ppb	120.598 ppb	119.682 ppb	121.042 ppb	102.832 %	120.981 ppb	121.030 ppb	105.608 %	120.690 ppb
Concentration per Run 3	123.669 ppb	125.416 ppb	121.348 ppb	123.691 ppb	102.064 %	121.618 ppb	121.572 ppb	104.473 %	121.285 ppb
Concentration RSD	3.6 %	4.8 %	2.8 %	2.6 %	1.8 %	2.4 %	2.6 %	2.0 %	1.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	119.857 ppb	104.502 %	105.472 %	119.717 ppb	118.864 ppb	104.182 %
Concentration per Run 1	116.309 ppb	105.604 %	106.575 %	112.402 ppb	112.847 ppb	108.192 %
Concentration per Run 2	121.012 ppb	103.726 %	104.815 %	122.198 ppb	120.350 ppb	102.906 %
Concentration per Run 3	122.249 ppb	104.175 %	105.027 %	124.552 ppb	123.395 ppb	101.449 %
Concentration RSD	2.6 %	0.9 %	0.9 %	5.4 %	4.6 %	3.4 %

Alpha ICPMSQ Data with SRD

12/2/2024 3:12:07 PM

Analysis index:	10	User name	ALPHALAB\Metals-Instrument	Comment	Sr Inteference Check
Analysis label:	Sr 200ppb	Rack	4		
Analysis started at:	12/2/2024 8:23:55 AM	Vial	55		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	101.228 %	102.402 %	0.004 ppb	9.995 ppb	1.427 ppb	0.633 ppb	8.129 ppb	1.289 ppb	105.477 %
Concentration per Run 1	100.206 %	103.018 %	0.005 ppb	6.319 ppb	1.631 ppb	0.598 ppb	6.624 ppb	9.677 ppb	104.797 %
Concentration per Run 2	101.189 %	102.799 %	0.005 ppb	6.536 ppb	0.988 ppb	0.634 ppb	7.911 ppb	26.050 ppb	106.036 %
Concentration per Run 3	102.288 %	101.389 %	0.002 ppb	17.128 ppb	1.662 ppb	0.668 ppb	9.853 ppb	-31.862 ppb	105.599 %
Concentration RSD	1.0 %	0.9 %	40.2 %	61.8 %	26.7 %	5.5 %	20.0 %	2,316.8 %	0.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.066 ppb	0.027 ppb	0.074 ppb	8.144 ppb	0.006 ppb	-0.089 ppb	0.062 ppb	0.233 ppb	104.325 %
Concentration per Run 1	-0.057 ppb	0.025 ppb	0.054 ppb	6.792 ppb	0.004 ppb	-0.108 ppb	0.061 ppb	0.218 ppb	104.120 %
Concentration per Run 2	-0.055 ppb	0.026 ppb	0.099 ppb	8.881 ppb	0.006 ppb	-0.094 ppb	0.087 ppb	0.265 ppb	103.660 %
Concentration per Run 3	-0.086 ppb	0.030 ppb	0.069 ppb	8.759 ppb	0.008 ppb	-0.065 ppb	0.037 ppb	0.215 ppb	105.195 %
Concentration RSD	26.6 %	9.6 %	30.9 %	14.4 %	29.3 %	24.7 %	40.5 %	12.2 %	0.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.027 ppb	0.086 ppb	206.700 ppb	0.838 ppb	102.777 %	0.003 ppb	0.003 ppb	105.645 %	0.046 ppb
Concentration per Run 1	0.029 ppb	0.081 ppb	204.588 ppb	0.636 ppb	104.087 %	0.003 ppb	0.003 ppb	105.972 %	0.030 ppb
Concentration per Run 2	0.028 ppb	0.111 ppb	207.042 ppb	0.859 ppb	102.249 %	0.002 ppb	0.003 ppb	105.938 %	0.048 ppb
Concentration per Run 3	0.024 ppb	0.067 ppb	208.471 ppb	1.018 ppb	101.995 %	0.003 ppb	0.003 ppb	105.026 %	0.059 ppb
Concentration RSD	9.3 %	26.3 %	1.0 %	22.9 %	1.1 %	18.5 %	11.1 %	0.5 %	31.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.058 ppb	102.504 %	103.149 %	0.314 ppb	0.007 ppb	111.045 %
Concentration per Run 1	0.067 ppb	103.369 %	105.675 %	0.470 ppb	0.005 ppb	122.238 %
Concentration per Run 2	0.042 ppb	101.754 %	101.691 %	0.278 ppb	0.007 ppb	107.035 %
Concentration per Run 3	0.065 ppb	102.390 %	102.080 %	0.193 ppb	0.008 ppb	103.860 %
Concentration RSD	23.9 %	0.8 %	2.1 %	45.1 %	21.8 %	8.8 %

Alpha ICPMSQ Data with SRD

12/2/2024 3:12:07 PM

Analysis index: 11 User name ALPHALAB\Metals-Instrument Comment ICV
Analysis label: ICV Rack 0
Analysis started at: 12/2/2024 8:28:37 AM Vial 7

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	104.589 %	101.770 %	51.256 ppb	5,220.042 ppb	5,098.253 ppb	49.895 ppb	5,163.887 ppb	5,194.901 ppb	105.242 %
Concentration per Run 1	103.742 %	96.815 %	51.365 ppb	5,476.142 ppb	5,374.946 ppb	51.792 ppb	5,399.165 ppb	5,400.361 ppb	104.684 %
Concentration per Run 2	104.603 %	103.441 %	51.284 ppb	5,111.020 ppb	4,937.527 ppb	48.725 ppb	5,046.191 ppb	5,119.681 ppb	105.151 %
Concentration per Run 3	105.423 %	105.054 %	51.120 ppb	5,072.965 ppb	4,982.285 ppb	49.168 ppb	5,046.305 ppb	5,064.661 ppb	105.891 %
Recovery Percentage 1			102.513 %	104.401 %	101.965 %	99.790 %	103.278 %	103.898 %	
Concentration RSD	0.8 %	4.3 %	0.2 %	4.3 %	4.7 %	3.3 %	3.9 %	3.5 %	0.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	52.320 ppb	51.299 ppb	51.444 ppb	5,147.715 ppb	51.909 ppb	52.070 ppb	52.729 ppb	52.495 ppb	105.040 %
Concentration per Run 1	54.358 ppb	53.168 ppb	52.503 ppb	5,340.352 ppb	53.993 ppb	54.541 ppb	54.554 ppb	54.876 ppb	102.569 %
Concentration per Run 2	51.162 ppb	50.861 ppb	50.963 ppb	5,083.159 ppb	51.219 ppb	51.261 ppb	52.747 ppb	51.792 ppb	105.647 %
Concentration per Run 3	51.441 ppb	49.867 ppb	50.865 ppb	5,019.634 ppb	50.513 ppb	50.409 ppb	50.886 ppb	50.818 ppb	106.903 %
Recovery Percentage 1	104.640 %	102.597 %	102.887 %	102.954 %	103.817 %	104.140 %	105.458 %	104.991 %	
Concentration RSD	3.4 %	3.3 %	1.8 %	3.3 %	3.5 %	4.2 %	3.5 %	4.0 %	2.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	52.277 ppb	52.845 ppb	52.499 ppb	49.356 ppb	103.749 %	53.125 ppb	51.644 ppb	108.020 %	50.543 ppb
Concentration per Run 1	53.743 ppb	53.992 ppb	53.863 ppb	51.860 ppb	101.615 %	54.936 ppb	53.410 ppb	103.548 %	53.384 ppb
Concentration per Run 2	52.028 ppb	52.151 ppb	51.955 ppb	48.645 ppb	103.683 %	52.427 ppb	50.803 ppb	109.326 %	49.165 ppb
Concentration per Run 3	51.059 ppb	52.392 ppb	51.680 ppb	47.563 ppb	105.950 %	52.012 ppb	50.719 ppb	111.185 %	49.082 ppb
Recovery Percentage 1	104.553 %	105.691 %	104.998 %	98.712 %		106.249 %	103.288 %		101.087 %
Concentration RSD	2.6 %	1.9 %	2.3 %	4.5 %	2.1 %	3.0 %	3.0 %	3.7 %	4.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	50.049 ppb	102.079 %	102.728 %	52.165 ppb	51.229 ppb	95.174 %
Concentration per Run 1	52.907 ppb	98.532 %	99.325 %	53.267 ppb	53.570 ppb	92.773 %
Concentration per Run 2	49.049 ppb	103.092 %	103.863 %	51.329 ppb	49.775 ppb	93.289 %
Concentration per Run 3	48.190 ppb	104.614 %	104.995 %	51.899 ppb	50.340 ppb	99.459 %
Recovery Percentage 1	100.098 %			104.330 %	102.457 %	
Concentration RSD	5.0 %	3.1 %	2.9 %	1.9 %	4.0 %	3.9 %

Alpha ICPMSQ Data with SRD

12/2/2024 3:12:07 PM

Analysis index:	12	User name	ALPHALAB\Metals-Instrument	Comment	ICB
Analysis label:	ICB	Rack	0		
Analysis started at:	12/2/2024 8:33:17 AM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	102.944 %	104.031 %	0.006 ppb	-2.299 ppb	-0.467 ppb	-0.572 ppb	3.018 ppb	-2.860 ppb	103.053 %
Concentration per Run 1	101.395 %	105.696 %	0.005 ppb	-0.465 ppb	-0.388 ppb	-0.643 ppb	0.477 ppb	-2.214 ppb	103.159 %
Concentration per Run 2	102.492 %	102.564 %	0.006 ppb	-6.672 ppb	-0.253 ppb	-0.570 ppb	3.828 ppb	-4.241 ppb	102.937 %
Concentration per Run 3	104.945 %	103.832 %	0.007 ppb	0.240 ppb	-0.760 ppb	-0.503 ppb	4.749 ppb	-2.126 ppb	103.062 %
Recovery Percentage 1			1.170 %	-0.460 %	-0.667 %	-5.721 %	3.018 %	-2.860 %	
Concentration RSD	1.8 %	1.5 %	20.3 %	165.5 %	56.2 %	12.2 %	74.5 %	41.8 %	0.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.083 ppb	0.000 ppb	-0.031 ppb	8.620 ppb	0.001 ppb	-0.204 ppb	-0.076 ppb	-0.374 ppb	104.565 %
Concentration per Run 1	-0.064 ppb	-0.004 ppb	-0.040 ppb	7.295 ppb	0.001 ppb	-0.198 ppb	-0.072 ppb	-0.377 ppb	104.415 %
Concentration per Run 2	-0.095 ppb	-0.006 ppb	-0.025 ppb	8.718 ppb	0.003 ppb	-0.190 ppb	-0.081 ppb	-0.371 ppb	106.084 %
Concentration per Run 3	-0.089 ppb	0.009 ppb	-0.028 ppb	9.848 ppb	0.000 ppb	-0.225 ppb	-0.076 ppb	-0.375 ppb	103.197 %
Recovery Percentage 1	-1.653 %	-0.019 %	-3.142 %	17.241 %	0.286 %	-10.221 %	-7.635 %	-7.487 %	
Concentration RSD	19.6 %	4,307.5 %	25.3 %	14.8 %	125.2 %	8.8 %	5.9 %	0.9 %	1.4 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.047 ppb	0.159 ppb	-0.003 ppb	1.724 ppb	105.260 %	0.001 ppb	0.005 ppb	108.500 %	0.119 ppb
Concentration per Run 1	0.038 ppb	0.177 ppb	-0.003 ppb	1.215 ppb	106.068 %	0.002 ppb	0.006 ppb	109.352 %	0.072 ppb
Concentration per Run 2	0.059 ppb	0.133 ppb	-0.002 ppb	1.786 ppb	104.734 %	0.001 ppb	0.003 ppb	107.841 %	0.119 ppb
Concentration per Run 3	0.044 ppb	0.167 ppb	-0.002 ppb	2.171 ppb	104.978 %	0.001 ppb	0.006 ppb	108.307 %	0.165 ppb
Recovery Percentage 1	9.397 %	3.176 %	-0.026 %	86.193 %		0.312 %	2.601 %		2.969 %
Concentration RSD	23.8 %	14.4 %	28.0 %	27.9 %	0.7 %	25.9 %	32.2 %	0.7 %	39.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	-0.005 ppb	102.591 %	103.184 %	0.333 ppb	0.007 ppb	105.112 %
Concentration per Run 1	0.014 ppb	104.210 %	104.208 %	0.402 ppb	0.007 ppb	108.755 %
Concentration per Run 2	-0.008 ppb	100.330 %	101.933 %	0.332 ppb	0.007 ppb	102.814 %
Concentration per Run 3	-0.021 ppb	103.234 %	103.409 %	0.266 ppb	0.006 ppb	103.767 %
Recovery Percentage 1	-1.004 %			33.329 %	0.654 %	
Concentration RSD	345.9 %	2.0 %	1.1 %	20.5 %	12.2 %	3.0 %

Alpha ICPMSQ Data with SRD

12/2/2024 3:12:07 PM

Analysis index:	13	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	ICSA	Rack	4		
Analysis started at:	12/2/2024 8:43:49 AM	Vial	53		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	132.417 %	126.577 %	0.027 ppb	288,348.892 ppb	106,853.858 ppb	107,942.413 ppb	118,380.615 ppb	328,997.758 ppb	131.409 %
Concentration per Run 1	130.588 %	126.749 %	0.030 ppb	283,701.599 ppb	104,630.439 ppb	105,472.336 ppb	115,953.224 ppb	322,619.650 ppb	131.044 %
Concentration per Run 2	133.849 %	126.953 %	0.026 ppb	287,920.120 ppb	107,618.141 ppb	107,471.519 ppb	118,070.460 ppb	327,787.059 ppb	132.420 %
Concentration per Run 3	132.813 %	126.029 %	0.026 ppb	293,424.957 ppb	108,312.993 ppb	110,883.384 ppb	121,118.161 ppb	336,586.564 ppb	130.761 %
Recovery Percentage 1			2.734 %	115.340 %	106.854 %	107.942 %	118.381 %	109.666 %	
Concentration RSD	1.3 %	0.4 %	9.6 %	1.7 %	1.8 %	2.5 %	2.2 %	2.1 %	0.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.034 ppb	1.726 ppb	5.105 ppb	266,338.856 ppb	2.415 ppb	2.886 ppb	1.341 ppb	3.055 ppb	128.384 %
Concentration per Run 1	0.043 ppb	1.734 ppb	4.948 ppb	264,104.508 ppb	2.392 ppb	2.902 ppb	1.332 ppb	3.052 ppb	127.467 %
Concentration per Run 2	0.050 ppb	1.703 ppb	5.156 ppb	266,889.523 ppb	2.413 ppb	2.701 ppb	1.329 ppb	3.028 ppb	127.938 %
Concentration per Run 3	0.009 ppb	1.740 ppb	5.212 ppb	268,022.536 ppb	2.440 ppb	3.055 ppb	1.363 ppb	3.083 ppb	129.747 %
Recovery Percentage 1	0.677 %	52.300 %	89.567 %	106.536 %	84.139 %	47.315 %	47.565 %	26.794 %	
Concentration RSD	65.5 %	1.2 %	2.7 %	0.8 %	1.0 %	6.2 %	1.4 %	0.9 %	0.9 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.460 ppb	3.269 ppb	3.010 ppb	2,640.396 ppb	112.824 %	0.026 ppb	0.800 ppb	125.259 %	0.219 ppb
Concentration per Run 1	0.453 ppb	3.175 ppb	2.953 ppb	2,638.087 ppb	113.699 %	0.023 ppb	0.786 ppb	126.625 %	0.197 ppb
Concentration per Run 2	0.454 ppb	3.424 ppb	3.029 ppb	2,635.621 ppb	111.117 %	0.026 ppb	0.792 ppb	124.821 %	0.232 ppb
Concentration per Run 3	0.473 ppb	3.208 ppb	3.047 ppb	2,647.480 ppb	113.658 %	0.027 ppb	0.822 ppb	124.330 %	0.227 ppb
Recovery Percentage 1	28.218 %	25.342 %	111.476 %	132.020 %		3.201 %	199.977 %		2.732 %
Concentration RSD	2.4 %	4.1 %	1.7 %	0.2 %	1.3 %	9.2 %	2.4 %	1.0 %	8.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	1.464 ppb	103.706 %	98.468 %	0.069 ppb	1.806 ppb	91.604 %
Concentration per Run 1	1.490 ppb	103.523 %	99.170 %	0.065 ppb	1.690 ppb	95.719 %
Concentration per Run 2	1.481 ppb	103.160 %	97.674 %	0.076 ppb	1.861 ppb	89.151 %
Concentration per Run 3	1.421 ppb	104.435 %	98.559 %	0.067 ppb	1.865 ppb	89.941 %
Recovery Percentage 1	77.883 %			3.462 %	58.244 %	
Concentration RSD	2.6 %	0.6 %	0.8 %	8.4 %	5.5 %	3.9 %

Alpha ICPMSQ Data with SRD

12/2/2024 3:12:07 PM

Analysis index: 14
Analysis label: LDR Check
Analysis started at: 12/2/2024 8:48:30 AM
User name ALPHALAB\Metals-Instrument
Rack 4
Vial 1
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	124.083 %	118.322 %	0.006 ppb	-6.605 ppb	2.677 ppb	2.766 ppb	12.214 ppb	8.985 ppb	119.387 %
Concentration per Run 1	121.519 %	115.941 %	0.008 ppb	-1.491 ppb	2.547 ppb	2.860 ppb	13.364 ppb	8.060 ppb	118.606 %
Concentration per Run 2	127.370 %	119.826 %	0.003 ppb	-6.067 ppb	2.617 ppb	2.806 ppb	11.724 ppb	11.222 ppb	119.239 %
Concentration per Run 3	123.361 %	119.199 %	0.007 ppb	-12.257 ppb	2.867 ppb	2.633 ppb	11.555 ppb	7.673 ppb	120.315 %
Recovery Percentage 1									
Concentration RSD	2.4 %	1.8 %	39.6 %	81.8 %	6.3 %	4.3 %	8.2 %	21.7 %	0.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	1,023.847 ppb	1,031.914 ppb	10,316.649 ppb	78.607 ppb	0.035 ppb	10,749.760 ppb	10,845.511 ppb	10,862.862 ppb	122.737 %
Concentration per Run 1	1,042.067 ppb	1,051.526 ppb	10,466.663 ppb	76.224 ppb	0.040 ppb	10,980.483 ppb	11,054.113 ppb	11,002.135 ppb	121.460 %
Concentration per Run 2	1,017.980 ppb	1,021.247 ppb	10,120.467 ppb	79.053 ppb	0.032 ppb	10,633.102 ppb	10,776.665 ppb	10,854.686 ppb	122.605 %
Concentration per Run 3	1,011.493 ppb	1,022.968 ppb	10,362.818 ppb	80.543 ppb	0.033 ppb	10,635.696 ppb	10,705.754 ppb	10,731.766 ppb	124.146 %
Recovery Percentage 1	102.385 %	103.191 %	103.166 %			107.498 %	108.455 %	108.629 %	
Concentration RSD	1.6 %	1.6 %	1.7 %	2.8 %	12.8 %	1.9 %	1.7 %	1.2 %	1.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	1,063.197 ppb	0.728 ppb	0.265 ppb	22.642 ppb	122.768 %	0.101 ppb	0.028 ppb	130.668 %	0.033 ppb
Concentration per Run 1	1,073.698 ppb	0.732 ppb	0.266 ppb	18.192 ppb	122.201 %	0.100 ppb	0.031 ppb	130.895 %	0.025 ppb
Concentration per Run 2	1,055.593 ppb	0.684 ppb	0.268 ppb	23.823 ppb	123.493 %	0.100 ppb	0.023 ppb	130.509 %	0.035 ppb
Concentration per Run 3	1,060.301 ppb	0.767 ppb	0.260 ppb	25.911 ppb	122.609 %	0.102 ppb	0.031 ppb	130.602 %	0.038 ppb
Recovery Percentage 1	106.320 %								
Concentration RSD	0.9 %	5.7 %	1.7 %	17.6 %	0.5 %	1.4 %	15.4 %	0.2 %	20.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	10,343.730 ppb	115.410 %	114.324 %	0.069 ppb	10,395.705 ppb	108.092 %
Concentration per Run 1	10,458.842 ppb	113.157 %	112.745 %	0.065 ppb	10,693.905 ppb	107.097 %
Concentration per Run 2	10,301.001 ppb	116.977 %	116.216 %	0.070 ppb	10,263.269 ppb	108.232 %
Concentration per Run 3	10,271.348 ppb	116.098 %	114.010 %	0.071 ppb	10,229.941 ppb	108.946 %
Recovery Percentage 1	103.437 %				103.957 %	
Concentration RSD	1.0 %	1.7 %	1.5 %	4.7 %	2.5 %	0.9 %

Alpha ICPMSQ Data with SRD

12/2/2024 3:12:07 PM

Analysis index: 15
Analysis label: Rinse
Analysis started at: 12/2/2024 8:53:12 AM
User name ALPHALAB\Metals-Instrument
Rack 0
Vial 1
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	114.590 %	113.361 %	0.018 ppb	-3.864 ppb	0.994 ppb	0.138 ppb	15.114 ppb	1.937 ppb	113.938 %
Concentration per Run 1	112.861 %	114.171 %	0.015 ppb	-8.664 ppb	0.998 ppb	0.233 ppb	15.371 ppb	1.996 ppb	108.571 %
Concentration per Run 2	115.520 %	111.476 %	0.018 ppb	-0.976 ppb	1.039 ppb	0.143 ppb	17.039 ppb	2.324 ppb	117.751 %
Concentration per Run 3	115.388 %	114.437 %	0.021 ppb	-1.953 ppb	0.944 ppb	0.039 ppb	12.931 ppb	1.492 ppb	115.492 %
Concentration RSD	1.3 %	1.4 %	15.3 %	108.3 %	4.8 %	70.1 %	13.7 %	21.6 %	4.2 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.064 ppb	0.016 ppb	0.072 ppb	22.803 ppb	0.012 ppb	0.079 ppb	0.173 ppb	3.459 ppb	112.899 %
Concentration per Run 1	0.015 ppb	0.012 ppb	0.046 ppb	19.251 ppb	0.009 ppb	0.073 ppb	0.189 ppb	3.452 ppb	114.831 %
Concentration per Run 2	0.077 ppb	0.019 ppb	0.079 ppb	25.025 ppb	0.013 ppb	0.109 ppb	0.191 ppb	3.497 ppb	111.488 %
Concentration per Run 3	0.101 ppb	0.017 ppb	0.092 ppb	24.132 ppb	0.013 ppb	0.056 ppb	0.141 ppb	3.428 ppb	112.379 %
Concentration RSD	69.4 %	23.7 %	32.8 %	13.6 %	19.1 %	34.3 %	16.1 %	1.0 %	1.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.525 ppb	0.033 ppb	0.023 ppb	4.810 ppb	114.592 %	0.008 ppb	0.010 ppb	115.655 %	0.015 ppb
Concentration per Run 1	0.563 ppb	0.019 ppb	0.023 ppb	3.292 ppb	116.500 %	0.009 ppb	0.011 ppb	116.975 %	0.007 ppb
Concentration per Run 2	0.544 ppb	0.041 ppb	0.021 ppb	4.995 ppb	113.477 %	0.008 ppb	0.010 ppb	116.470 %	0.016 ppb
Concentration per Run 3	0.470 ppb	0.040 ppb	0.024 ppb	6.143 ppb	113.799 %	0.006 ppb	0.010 ppb	113.520 %	0.022 ppb
Concentration RSD	9.4 %	38.1 %	7.1 %	29.8 %	1.4 %	16.8 %	4.4 %	1.6 %	50.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.059 ppb	108.914 %	107.740 %	0.029 ppb	0.359 ppb	108.862 %
Concentration per Run 1	0.061 ppb	109.223 %	107.667 %	0.023 ppb	0.384 ppb	110.583 %
Concentration per Run 2	0.059 ppb	109.262 %	107.829 %	0.033 ppb	0.364 ppb	109.150 %
Concentration per Run 3	0.058 ppb	108.258 %	107.725 %	0.031 ppb	0.327 ppb	106.853 %
Concentration RSD	1.8 %	0.5 %	0.1 %	17.0 %	8.1 %	1.7 %

Alpha ICPMSQ Data with SRD

12/2/2024 3:12:07 PM

Analysis index: 16
Analysis label: CCV
Analysis started at: 12/2/2024 8:57:48 AM
User name ALPHALAB\Metals-Instrument
Rack 0
Vial 9
Comment CCV/MCCV

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	111.401 %	110.035 %	59.692 ppb	6,056.940 ppb	6,035.649 ppb	58.450 ppb	6,128.368 ppb	6,067.597 ppb	114.468 %
Concentration per Run 1	109.668 %	110.427 %	59.145 ppb	6,138.165 ppb	6,126.540 ppb	58.433 ppb	6,264.405 ppb	6,177.185 ppb	113.843 %
Concentration per Run 2	112.690 %	108.704 %	60.033 ppb	6,037.526 ppb	5,995.474 ppb	58.204 ppb	6,083.067 ppb	6,059.250 ppb	116.059 %
Concentration per Run 3	111.844 %	110.975 %	59.898 ppb	5,995.128 ppb	5,984.933 ppb	58.712 ppb	6,037.634 ppb	5,966.356 ppb	113.503 %
Recovery Percentage 1			99.487 %	100.949 %	100.594 %	97.416 %	102.139 %	101.127 %	
Concentration RSD	1.4 %	1.1 %	0.8 %	1.2 %	1.3 %	0.4 %	2.0 %	1.7 %	1.2 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	61.220 ppb	61.427 ppb	60.933 ppb	6,238.306 ppb	62.673 ppb	62.482 ppb	63.423 ppb	63.486 ppb	109.450 %
Concentration per Run 1	61.798 ppb	62.152 ppb	61.931 ppb	6,388.922 ppb	64.307 ppb	63.836 ppb	65.149 ppb	65.282 ppb	108.045 %
Concentration per Run 2	62.054 ppb	62.338 ppb	61.622 ppb	6,318.253 ppb	63.774 ppb	63.421 ppb	64.686 ppb	64.456 ppb	110.222 %
Concentration per Run 3	59.809 ppb	59.792 ppb	59.245 ppb	6,007.743 ppb	59.939 ppb	60.189 ppb	60.433 ppb	60.721 ppb	110.082 %
Recovery Percentage 1	102.034 %	102.378 %	101.555 %	103.972 %	104.455 %	104.137 %	105.704 %	105.810 %	
Concentration RSD	2.0 %	2.3 %	2.4 %	3.3 %	3.8 %	3.2 %	4.1 %	3.8 %	1.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	62.109 ppb	61.727 ppb	62.719 ppb	62.091 ppb	109.983 %	60.967 ppb	61.580 ppb	113.304 %	59.390 ppb
Concentration per Run 1	63.654 ppb	63.392 ppb	64.300 ppb	62.954 ppb	109.671 %	62.224 ppb	62.801 ppb	112.844 %	61.110 ppb
Concentration per Run 2	62.196 ppb	62.899 ppb	63.064 ppb	62.674 ppb	108.692 %	61.390 ppb	62.211 ppb	112.544 %	59.983 ppb
Concentration per Run 3	60.476 ppb	58.891 ppb	60.793 ppb	60.646 ppb	111.586 %	59.286 ppb	59.728 ppb	114.525 %	57.078 ppb
Recovery Percentage 1	103.515 %	102.879 %	104.532 %	103.486 %		101.611 %	102.634 %		98.983 %
Concentration RSD	2.6 %	4.0 %	2.8 %	2.0 %	1.3 %	2.5 %	2.6 %	0.9 %	3.5 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	57.952 ppb	107.960 %	108.029 %	63.176 ppb	64.018 ppb	102.682 %
Concentration per Run 1	59.209 ppb	106.139 %	104.742 %	62.926 ppb	64.742 ppb	102.644 %
Concentration per Run 2	59.249 ppb	106.670 %	108.174 %	64.922 ppb	65.250 ppb	99.827 %
Concentration per Run 3	55.397 ppb	111.071 %	111.171 %	61.681 ppb	62.061 ppb	105.576 %
Recovery Percentage 1	96.587 %			105.293 %	106.696 %	
Concentration RSD	3.8 %	2.5 %	3.0 %	2.6 %	2.7 %	2.8 %

Alpha ICPMSQ Data with SRD

12/2/2024 3:12:07 PM

Analysis index: 17 User name ALPHALAB\Metals-Instrument Comment CCB
Analysis label: CCB Rack 0
Analysis started at: 12/2/2024 9:02:30 AM Vial 10

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	111.044 %	110.683 %	0.008 ppb	-8.596 ppb	-0.624 ppb	-0.593 ppb	5.888 ppb	-3.101 ppb	112.316 %
Concentration per Run 1	111.599 %	112.322 %	0.007 ppb	-12.923 ppb	-0.771 ppb	-0.613 ppb	5.262 ppb	-2.982 ppb	111.164 %
Concentration per Run 2	110.936 %	108.954 %	0.009 ppb	-6.142 ppb	-0.850 ppb	-0.551 ppb	5.410 ppb	-3.355 ppb	112.222 %
Concentration per Run 3	110.596 %	110.771 %	0.007 ppb	-6.723 ppb	-0.252 ppb	-0.614 ppb	6.993 ppb	-2.966 ppb	113.561 %
Recovery Percentage 1			1.529 %	-1.719 %	-0.892 %	-5.928 %	5.888 %	-3.101 %	
Concentration RSD	0.5 %	1.5 %	18.1 %	43.7 %	52.0 %	6.1 %	16.3 %	7.1 %	1.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.093 ppb	-0.001 ppb	-0.023 ppb	14.718 ppb	0.001 ppb	-0.195 ppb	-0.067 ppb	-0.317 ppb	109.163 %
Concentration per Run 1	-0.109 ppb	-0.009 ppb	-0.043 ppb	13.074 ppb	0.001 ppb	-0.189 ppb	-0.061 ppb	-0.303 ppb	108.772 %
Concentration per Run 2	-0.083 ppb	0.009 ppb	-0.018 ppb	15.059 ppb	0.000 ppb	-0.189 ppb	-0.069 ppb	-0.321 ppb	109.513 %
Concentration per Run 3	-0.085 ppb	-0.002 ppb	-0.009 ppb	16.021 ppb	0.001 ppb	-0.208 ppb	-0.071 ppb	-0.328 ppb	109.206 %
Recovery Percentage 1	-1.851 %	-0.061 %	-2.340 %	29.436 %	0.104 %	-9.763 %	-6.747 %	-6.346 %	
Concentration RSD	15.8 %	1,446.2 %	76.6 %	10.2 %	127.2 %	5.5 %	7.8 %	4.1 %	0.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.085 ppb	0.154 ppb	-0.002 ppb	2.497 ppb	111.694 %	0.001 ppb	0.004 ppb	113.771 %	0.088 ppb
Concentration per Run 1	0.072 ppb	0.203 ppb	-0.002 ppb	1.802 ppb	112.236 %	0.001 ppb	0.002 ppb	115.810 %	0.060 ppb
Concentration per Run 2	0.081 ppb	0.144 ppb	-0.003 ppb	2.637 ppb	110.250 %	0.000 ppb	0.005 ppb	111.529 %	0.093 ppb
Concentration per Run 3	0.103 ppb	0.116 ppb	-0.002 ppb	3.054 ppb	112.596 %	0.001 ppb	0.004 ppb	113.974 %	0.109 ppb
Recovery Percentage 1	17.017 %	3.087 %	-0.023 %	124.873 %		0.201 %	1.788 %		2.190 %
Concentration RSD	18.5 %	28.8 %	31.9 %	25.5 %	1.1 %	45.7 %	38.6 %	1.9 %	28.4 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	-0.003 ppb	106.953 %	106.484 %	0.351 ppb	0.073 ppb	106.263 %
Concentration per Run 1	-0.006 ppb	107.820 %	106.390 %	0.429 ppb	0.075 ppb	106.295 %
Concentration per Run 2	-0.005 ppb	106.703 %	105.462 %	0.358 ppb	0.077 ppb	105.205 %
Concentration per Run 3	0.002 ppb	106.336 %	107.600 %	0.267 ppb	0.069 ppb	107.290 %
Recovery Percentage 1	-0.601 %			35.127 %	7.332 %	
Concentration RSD	130.4 %	0.7 %	1.0 %	23.2 %	5.8 %	1.0 %

Alpha ICPMSQ Data with SRD

12/2/2024 3:12:07 PM

Analysis index:	18	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	WG2003122-1 2008TL	Rack	1		
Analysis started at:	12/2/2024 9:22:09 AM	Vial	1		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	98.746 %	109.518 %	0.005 ppb	0.708 ppb	1.042 ppb	0.593 ppb	2.683 ppb	4.813 ppb	97.187 %
Concentration per Run 1	90.308 %	113.372 %	0.008 ppb	-4.749 ppb	0.915 ppb	0.499 ppb	3.718 ppb	5.463 ppb	93.105 %
Concentration per Run 2	100.375 %	107.889 %	0.001 ppb	-2.667 ppb	0.849 ppb	0.718 ppb	1.147 ppb	4.518 ppb	96.876 %
Concentration per Run 3	105.554 %	107.294 %	0.007 ppb	9.539 ppb	1.361 ppb	0.561 ppb	3.184 ppb	4.458 ppb	101.581 %
Concentration RSD	7.9 %	3.1 %	75.5 %	1,090.8 %	26.7 %	19.0 %	50.6 %	11.7 %	4.4 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.140 ppb	0.013 ppb	0.101 ppb	8.811 ppb	0.002 ppb	-0.164 ppb	-0.005 ppb	0.234 ppb	108.758 %
Concentration per Run 1	-0.142 ppb	0.010 ppb	0.098 ppb	8.830 ppb	0.002 ppb	-0.180 ppb	-0.013 ppb	0.217 ppb	109.736 %
Concentration per Run 2	-0.139 ppb	0.020 ppb	0.096 ppb	9.395 ppb	0.003 ppb	-0.149 ppb	-0.022 ppb	0.239 ppb	109.233 %
Concentration per Run 3	-0.139 ppb	0.010 ppb	0.109 ppb	8.208 ppb	0.001 ppb	-0.163 ppb	0.018 ppb	0.245 ppb	107.305 %
Concentration RSD	1.3 %	45.2 %	7.1 %	6.7 %	69.5 %	9.4 %	385.8 %	6.3 %	1.2 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.022 ppb	0.020 ppb	0.003 ppb	0.285 ppb	109.850 %	-0.002 ppb	0.000 ppb	112.436 %	0.006 ppb
Concentration per Run 1	0.014 ppb	0.029 ppb	0.004 ppb	0.183 ppb	111.291 %	-0.002 ppb	0.000 ppb	114.691 %	-0.001 ppb
Concentration per Run 2	0.019 ppb	0.040 ppb	0.003 ppb	0.309 ppb	109.043 %	-0.002 ppb	0.000 ppb	111.004 %	0.008 ppb
Concentration per Run 3	0.034 ppb	-0.008 ppb	0.004 ppb	0.365 ppb	109.217 %	-0.002 ppb	0.001 ppb	111.613 %	0.011 ppb
Concentration RSD	46.8 %	125.2 %	18.3 %	32.6 %	1.1 %	16.6 %	674.6 %	1.8 %	104.8 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	-0.004 ppb	104.847 %	104.873 %	0.023 ppb	0.039 ppb	100.392 %
Concentration per Run 1	-0.004 ppb	105.964 %	105.400 %	0.021 ppb	0.043 ppb	98.379 %
Concentration per Run 2	-0.003 ppb	103.999 %	106.259 %	0.026 ppb	0.039 ppb	99.992 %
Concentration per Run 3	-0.006 ppb	104.577 %	102.959 %	0.023 ppb	0.034 ppb	102.804 %
Concentration RSD	34.4 %	1.0 %	1.6 %	12.2 %	11.9 %	2.2 %

Alpha ICPMSQ Data with SRD

12/2/2024 3:12:07 PM

Analysis index:	19	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	WG2003122-2d10 2008TL	Rack	1		
Analysis started at:	12/2/2024 9:31:35 AM	Vial	2		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	112.373 %	110.223 %	5.151 ppb	1,027.019 ppb	971.731 ppb	195.525 ppb	998.070 ppb	977.177 ppb	116.431 %
Concentration per Run 1	110.732 %	111.743 %	5.182 ppb	1,016.823 ppb	956.900 ppb	189.782 ppb	969.752 ppb	953.155 ppb	115.436 %
Concentration per Run 2	114.133 %	107.639 %	5.129 ppb	1,022.141 ppb	971.879 ppb	201.154 ppb	1,016.050 ppb	1,003.850 ppb	117.481 %
Concentration per Run 3	112.254 %	111.288 %	5.141 ppb	1,042.094 ppb	986.413 ppb	195.641 ppb	1,008.409 ppb	974.526 ppb	116.377 %
Concentration RSD	1.5 %	2.0 %	0.5 %	1.3 %	1.5 %	2.9 %	2.5 %	2.6 %	0.9 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	49.101 ppb	19.992 ppb	51.038 ppb	109.721 ppb	51.517 ppb	51.526 ppb	26.095 ppb	52.702 ppb	111.844 %
Concentration per Run 1	48.640 ppb	20.042 ppb	50.462 ppb	109.144 ppb	50.872 ppb	50.731 ppb	25.689 ppb	52.486 ppb	110.773 %
Concentration per Run 2	49.577 ppb	19.964 ppb	51.512 ppb	111.931 ppb	52.478 ppb	52.918 ppb	26.629 ppb	52.847 ppb	112.765 %
Concentration per Run 3	49.086 ppb	19.970 ppb	51.139 ppb	108.089 ppb	51.200 ppb	50.929 ppb	25.966 ppb	52.773 ppb	111.993 %
Concentration RSD	1.0 %	0.2 %	1.0 %	1.8 %	1.6 %	2.3 %	1.9 %	0.4 %	0.9 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	12.391 ppb	12.313 ppb	99.995 ppb	106.262 ppb	110.306 %	5.696 ppb	5.423 ppb	113.181 %	43.317 ppb
Concentration per Run 1	12.415 ppb	12.240 ppb	100.386 ppb	108.118 ppb	108.304 %	5.759 ppb	5.328 ppb	111.975 %	43.748 ppb
Concentration per Run 2	12.438 ppb	12.365 ppb	98.712 ppb	105.528 ppb	110.536 %	5.684 ppb	5.399 ppb	112.950 %	43.110 ppb
Concentration per Run 3	12.320 ppb	12.332 ppb	100.888 ppb	105.139 ppb	112.077 %	5.644 ppb	5.541 ppb	114.618 %	43.092 ppb
Concentration RSD	0.5 %	0.5 %	1.1 %	1.5 %	1.7 %	1.0 %	2.0 %	1.2 %	0.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	193.865 ppb	106.962 %	107.486 %	12.584 ppb	54.571 ppb	106.330 %
Concentration per Run 1	195.961 ppb	106.095 %	106.386 %	12.484 ppb	54.162 ppb	107.068 %
Concentration per Run 2	192.171 ppb	107.576 %	108.761 %	12.464 ppb	54.440 ppb	105.802 %
Concentration per Run 3	193.464 ppb	107.216 %	107.310 %	12.803 ppb	55.110 ppb	106.121 %
Concentration RSD	1.0 %	0.7 %	1.1 %	1.5 %	0.9 %	0.6 %

Alpha ICPMSQ Data with SRD

12/2/2024 3:12:07 PM

Analysis index:	20	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	I2468916-01 2008TL	Rack	1		
Analysis started at:	12/2/2024 9:36:12 AM	Vial	3		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	123.250 %	111.341 %	0.006 ppb	27,378.168 ppb	7,745.338 ppb	16.831 ppb	2,078.656 ppb	23,966.647 ppb	121.014 %
Concentration per Run 1	115.306 %	110.756 %	0.007 ppb	27,031.500 ppb	7,687.606 ppb	16.879 ppb	2,095.985 ppb	24,164.994 ppb	111.293 %
Concentration per Run 2	117.791 %	111.273 %	0.007 ppb	27,544.063 ppb	7,813.132 ppb	16.854 ppb	2,045.421 ppb	23,998.071 ppb	120.060 %
Concentration per Run 3	136.654 %	111.993 %	0.005 ppb	27,558.942 ppb	7,735.276 ppb	16.761 ppb	2,094.560 ppb	23,736.877 ppb	131.688 %
Concentration RSD	9.5 %	0.6 %	17.8 %	1.1 %	0.8 %	0.4 %	1.4 %	0.9 %	8.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.041 ppb	0.235 ppb	1.896 ppb	13.341 ppb	0.151 ppb	1.429 ppb	19.223 ppb	458.481 ppb	113.413 %
Concentration per Run 1	0.026 ppb	0.272 ppb	1.905 ppb	12.499 ppb	0.150 ppb	1.456 ppb	19.232 ppb	464.792 ppb	109.656 %
Concentration per Run 2	0.040 ppb	0.218 ppb	1.926 ppb	14.510 ppb	0.151 ppb	1.381 ppb	19.152 ppb	455.235 ppb	114.382 %
Concentration per Run 3	0.055 ppb	0.214 ppb	1.858 ppb	13.013 ppb	0.153 ppb	1.451 ppb	19.286 ppb	455.418 ppb	116.201 %
Concentration RSD	35.1 %	13.8 %	1.8 %	7.8 %	1.0 %	2.9 %	0.3 %	1.2 %	3.0 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.166 ppb	0.165 ppb	90.604 ppb	4.673 ppb	109.702 %	0.000 ppb	0.068 ppb	115.686 %	2.362 ppb
Concentration per Run 1	0.149 ppb	0.164 ppb	90.842 ppb	3.428 ppb	108.878 %	0.000 ppb	0.076 ppb	114.023 %	2.215 ppb
Concentration per Run 2	0.170 ppb	0.162 ppb	90.980 ppb	4.945 ppb	108.865 %	0.000 ppb	0.061 ppb	116.497 %	2.447 ppb
Concentration per Run 3	0.179 ppb	0.168 ppb	89.988 ppb	5.648 ppb	111.363 %	0.000 ppb	0.067 ppb	116.539 %	2.423 ppb
Concentration RSD	9.2 %	1.8 %	0.6 %	24.3 %	1.3 %	81.2 %	11.1 %	1.2 %	5.4 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	30.468 ppb	107.526 %	107.457 %	0.051 ppb	0.125 ppb	94.670 %
Concentration per Run 1	30.461 ppb	105.117 %	107.116 %	0.051 ppb	0.122 ppb	94.542 %
Concentration per Run 2	30.540 ppb	108.364 %	106.088 %	0.055 ppb	0.129 ppb	93.686 %
Concentration per Run 3	30.403 ppb	109.096 %	109.167 %	0.046 ppb	0.125 ppb	95.783 %
Concentration RSD	0.2 %	2.0 %	1.5 %	8.1 %	2.9 %	1.1 %

Alpha ICPMSQ Data with SRD

12/2/2024 3:12:07 PM

Analysis index:	21	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	WG2003122-3d10 2008TL	Rack	1		
Analysis started at:	12/2/2024 9:40:50 AM	Vial	4		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	118.242 %	114.421 %	5.158 ppb	3,745.678 ppb	1,747.409 ppb	199.714 ppb	1,229.887 ppb	3,302.238 ppb	116.664 %
Concentration per Run 1	117.220 %	113.387 %	5.119 ppb	3,754.453 ppb	1,768.838 ppb	200.434 ppb	1,229.537 ppb	3,394.018 ppb	117.792 %
Concentration per Run 2	118.124 %	115.737 %	5.242 ppb	3,691.377 ppb	1,715.491 ppb	196.467 ppb	1,216.513 ppb	3,310.696 ppb	112.242 %
Concentration per Run 3	119.383 %	114.139 %	5.112 ppb	3,791.203 ppb	1,757.899 ppb	202.242 ppb	1,243.611 ppb	3,201.999 ppb	119.959 %
Concentration RSD	0.9 %	1.0 %	1.4 %	1.3 %	1.6 %	1.5 %	1.1 %	2.9 %	3.4 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	49.727 ppb	20.058 ppb	51.511 ppb	109.080 ppb	52.069 ppb	52.456 ppb	28.560 ppb	100.319 ppb	117.345 %
Concentration per Run 1	50.183 ppb	20.132 ppb	51.469 ppb	108.679 ppb	52.817 ppb	53.085 ppb	28.975 ppb	100.718 ppb	116.592 %
Concentration per Run 2	49.552 ppb	19.888 ppb	50.861 ppb	109.491 ppb	51.264 ppb	51.724 ppb	27.971 ppb	99.377 ppb	118.028 %
Concentration per Run 3	49.446 ppb	20.155 ppb	52.202 ppb	109.071 ppb	52.127 ppb	52.560 ppb	28.735 ppb	100.862 ppb	117.415 %
Concentration RSD	0.8 %	0.7 %	1.3 %	0.4 %	1.5 %	1.3 %	1.8 %	0.8 %	0.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	12.531 ppb	12.409 ppb	109.683 ppb	94.999 ppb	113.827 %	5.655 ppb	5.402 ppb	120.489 %	43.368 ppb
Concentration per Run 1	12.537 ppb	12.386 ppb	110.382 ppb	96.011 ppb	113.888 %	5.625 ppb	5.348 ppb	120.325 %	43.982 ppb
Concentration per Run 2	12.416 ppb	12.444 ppb	108.672 ppb	94.546 ppb	113.105 %	5.729 ppb	5.496 ppb	120.719 %	42.317 ppb
Concentration per Run 3	12.639 ppb	12.395 ppb	109.996 ppb	94.440 ppb	114.487 %	5.612 ppb	5.361 ppb	120.424 %	43.805 ppb
Concentration RSD	0.9 %	0.3 %	0.8 %	0.9 %	0.6 %	1.1 %	1.5 %	0.2 %	2.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	196.961 ppb	110.167 %	110.475 %	12.531 ppb	54.728 ppb	109.171 %
Concentration per Run 1	196.743 ppb	111.201 %	110.149 %	12.187 ppb	53.190 ppb	112.750 %
Concentration per Run 2	194.495 ppb	108.106 %	109.367 %	12.653 ppb	55.071 ppb	107.730 %
Concentration per Run 3	199.646 ppb	111.196 %	111.909 %	12.753 ppb	55.923 ppb	107.032 %
Concentration RSD	1.3 %	1.6 %	1.2 %	2.4 %	2.6 %	2.9 %

Alpha ICPMSQ Data with SRD

12/2/2024 3:12:07 PM

Analysis index: 22
Analysis label: WG2003122-4 2008TL
Analysis started at: 12/2/2024 9:45:29 AM
User name ALPHALAB\Metals-Instrument
Rack 1
Vial 5
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	125.665 %	114.896 %	0.007 ppb	27,148.383 ppb	7,829.254 ppb	17.411 ppb	2,110.830 ppb	23,992.760 ppb	123.209 %
Concentration per Run 1	117.604 %	112.291 %	0.006 ppb	28,420.586 ppb	8,033.621 ppb	17.320 ppb	2,199.043 ppb	24,998.897 ppb	114.480 %
Concentration per Run 2	122.845 %	115.565 %	0.007 ppb	25,789.303 ppb	7,784.801 ppb	17.549 ppb	2,034.008 ppb	23,571.619 ppb	120.165 %
Concentration per Run 3	136.546 %	116.834 %	0.009 ppb	27,235.259 ppb	7,669.340 ppb	17.366 ppb	2,099.438 ppb	23,407.764 ppb	134.982 %
Concentration RSD	7.8 %	2.0 %	17.5 %	4.9 %	2.4 %	0.7 %	3.9 %	3.6 %	8.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.063 ppb	0.184 ppb	1.759 ppb	12.336 ppb	0.158 ppb	1.340 ppb	19.427 ppb	460.026 ppb	116.015 %
Concentration per Run 1	0.084 ppb	0.193 ppb	1.797 ppb	11.690 ppb	0.163 ppb	1.396 ppb	19.986 ppb	472.254 ppb	112.812 %
Concentration per Run 2	0.054 ppb	0.172 ppb	1.816 ppb	12.999 ppb	0.167 ppb	1.343 ppb	19.367 ppb	456.277 ppb	117.077 %
Concentration per Run 3	0.053 ppb	0.186 ppb	1.665 ppb	12.320 ppb	0.145 ppb	1.281 ppb	18.928 ppb	451.547 ppb	118.155 %
Concentration RSD	27.7 %	5.8 %	4.7 %	5.3 %	7.4 %	4.3 %	2.7 %	2.4 %	2.4 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.159 ppb	0.175 ppb	90.570 ppb	4.239 ppb	114.388 %	0.000 ppb	0.068 ppb	122.926 %	1.663 ppb
Concentration per Run 1	0.176 ppb	0.201 ppb	91.847 ppb	3.293 ppb	112.702 %	0.001 ppb	0.077 ppb	120.674 %	1.582 ppb
Concentration per Run 2	0.153 ppb	0.173 ppb	90.197 ppb	4.440 ppb	114.221 %	0.000 ppb	0.067 ppb	122.373 %	1.695 ppb
Concentration per Run 3	0.147 ppb	0.150 ppb	89.665 ppb	4.984 ppb	116.241 %	0.000 ppb	0.060 ppb	125.730 %	1.714 ppb
Concentration RSD	9.5 %	14.5 %	1.3 %	20.4 %	1.6 %	115.6 %	12.8 %	2.1 %	4.3 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	29.496 ppb	111.595 %	111.617 %	0.039 ppb	0.121 ppb	97.283 %
Concentration per Run 1	29.986 ppb	108.617 %	107.960 %	0.042 ppb	0.124 ppb	93.283 %
Concentration per Run 2	29.532 ppb	112.793 %	114.181 %	0.041 ppb	0.120 ppb	97.568 %
Concentration per Run 3	28.970 ppb	113.374 %	112.709 %	0.033 ppb	0.118 ppb	100.998 %
Concentration RSD	1.7 %	2.3 %	2.9 %	12.7 %	2.5 %	4.0 %

Alpha ICPMSQ Data with SRD

12/2/2024 3:12:07 PM

Analysis index: 23
Analysis label: I2469706-01 2008TL
Analysis started at: 12/2/2024 9:50:07 AM
User name ALPHALAB\Metals-Instrument
Rack 1
Vial 6
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	110.182 %	109.315 %	0.037 ppb	36,280.865 ppb	4,367.076 ppb	359.723 ppb	2,907.189 ppb	23,898.435 ppb	114.864 %
Concentration per Run 1	109.224 %	109.377 %	0.036 ppb	35,923.886 ppb	4,336.910 ppb	353.294 ppb	2,885.761 ppb	23,841.078 ppb	114.097 %
Concentration per Run 2	111.184 %	108.798 %	0.037 ppb	36,093.526 ppb	4,347.234 ppb	363.494 ppb	2,890.973 ppb	23,702.975 ppb	114.888 %
Concentration per Run 3	110.139 %	109.769 %	0.038 ppb	36,825.184 ppb	4,417.083 ppb	362.380 ppb	2,944.833 ppb	24,151.253 ppb	115.607 %
Concentration RSD	0.9 %	0.4 %	3.2 %	1.3 %	1.0 %	1.6 %	1.1 %	1.0 %	0.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	1.352 ppb	0.999 ppb	188.709 ppb	2,421.153 ppb	2.817 ppb	3.593 ppb	1.117 ppb	43.891 ppb	107.991 %
Concentration per Run 1	1.349 ppb	0.980 ppb	188.637 ppb	2,391.414 ppb	2.774 ppb	3.511 ppb	1.110 ppb	43.372 ppb	107.851 %
Concentration per Run 2	1.394 ppb	1.011 ppb	191.281 ppb	2,449.036 ppb	2.817 ppb	3.604 ppb	1.159 ppb	44.232 ppb	107.342 %
Concentration per Run 3	1.312 ppb	1.006 ppb	186.208 ppb	2,423.009 ppb	2.860 ppb	3.665 ppb	1.083 ppb	44.069 ppb	108.780 %
Concentration RSD	3.1 %	1.7 %	1.3 %	1.2 %	1.5 %	2.2 %	3.4 %	1.0 %	0.7 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	3.230 ppb	0.136 ppb	106.205 ppb	2.047 ppb	106.756 %	-0.001 ppb	0.064 ppb	116.017 %	0.684 ppb
Concentration per Run 1	3.213 ppb	0.129 ppb	105.764 ppb	1.568 ppb	107.160 %	0.000 ppb	0.066 ppb	116.971 %	0.620 ppb
Concentration per Run 2	3.310 ppb	0.128 ppb	106.390 ppb	2.115 ppb	106.876 %	-0.002 ppb	0.061 ppb	115.984 %	0.695 ppb
Concentration per Run 3	3.169 ppb	0.150 ppb	106.462 ppb	2.458 ppb	106.233 %	0.000 ppb	0.065 ppb	115.096 %	0.738 ppb
Concentration RSD	2.2 %	9.2 %	0.4 %	21.9 %	0.4 %	110.9 %	4.2 %	0.8 %	8.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	31.263 ppb	106.594 %	106.609 %	0.026 ppb	0.751 ppb	100.892 %
Concentration per Run 1	30.813 ppb	106.524 %	107.878 %	0.023 ppb	0.741 ppb	102.543 %
Concentration per Run 2	31.038 ppb	106.592 %	105.805 %	0.026 ppb	0.758 ppb	99.145 %
Concentration per Run 3	31.938 ppb	106.665 %	106.144 %	0.029 ppb	0.755 ppb	100.987 %
Concentration RSD	1.9 %	0.1 %	1.0 %	12.2 %	1.2 %	1.7 %

Alpha ICPMSQ Data with SRD

12/2/2024 3:12:07 PM

Analysis index:	24	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	I2469706-05 2008TL	Rack	1		
Analysis started at:	12/2/2024 9:54:46 AM	Vial	7		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	115.562 %	113.560 %	0.005 ppb	41,251.363 ppb	5,306.853 ppb	14.467 ppb	5,956.746 ppb	25,469.593 ppb	113.495 %
Concentration per Run 1	115.296 %	115.471 %	0.004 ppb	40,140.870 ppb	5,173.657 ppb	13.843 ppb	5,820.053 ppb	24,786.143 ppb	114.084 %
Concentration per Run 2	115.963 %	111.539 %	0.006 ppb	41,792.365 ppb	5,338.637 ppb	14.823 ppb	5,982.206 ppb	26,038.856 ppb	114.403 %
Concentration per Run 3	115.426 %	113.669 %	0.006 ppb	41,820.853 ppb	5,408.263 ppb	14.736 ppb	6,067.980 ppb	25,583.779 ppb	111.998 %
Concentration RSD	0.3 %	1.7 %	13.1 %	2.3 %	2.3 %	3.7 %	2.1 %	2.5 %	1.2 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.011 ppb	0.537 ppb	1.759 ppb	49.803 ppb	0.407 ppb	16.104 ppb	0.795 ppb	98.593 ppb	111.473 %
Concentration per Run 1	-0.036 ppb	0.519 ppb	1.690 ppb	46.341 ppb	0.396 ppb	15.959 ppb	0.853 ppb	96.056 ppb	112.611 %
Concentration per Run 2	0.028 ppb	0.583 ppb	1.832 ppb	54.177 ppb	0.429 ppb	16.739 ppb	0.783 ppb	101.396 ppb	108.499 %
Concentration per Run 3	0.042 ppb	0.510 ppb	1.753 ppb	48.890 ppb	0.395 ppb	15.614 ppb	0.749 ppb	98.327 ppb	113.308 %
Concentration RSD	369.2 %	7.4 %	4.0 %	8.0 %	4.7 %	3.6 %	6.7 %	2.7 %	2.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.070 ppb	0.133 ppb	147.249 ppb	1.114 ppb	110.069 %	-0.002 ppb	0.001 ppb	118.681 %	0.514 ppb
Concentration per Run 1	0.069 ppb	0.130 ppb	142.457 ppb	0.859 ppb	112.714 %	-0.001 ppb	0.002 ppb	122.324 %	0.465 ppb
Concentration per Run 2	0.063 ppb	0.125 ppb	151.297 ppb	1.139 ppb	107.936 %	-0.001 ppb	0.002 ppb	117.261 %	0.512 ppb
Concentration per Run 3	0.079 ppb	0.143 ppb	147.992 ppb	1.343 ppb	109.557 %	-0.002 ppb	0.001 ppb	116.458 %	0.564 ppb
Concentration RSD	11.2 %	7.2 %	3.0 %	21.8 %	2.2 %	34.1 %	55.2 %	2.7 %	9.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	5.051 ppb	109.611 %	110.329 %	0.013 ppb	2.296 ppb	101.304 %
Concentration per Run 1	4.920 ppb	109.275 %	111.524 %	0.010 ppb	2.243 ppb	102.316 %
Concentration per Run 2	5.151 ppb	109.125 %	108.987 %	0.014 ppb	2.308 ppb	100.240 %
Concentration per Run 3	5.080 ppb	110.434 %	110.477 %	0.016 ppb	2.338 ppb	101.356 %
Concentration RSD	2.3 %	0.7 %	1.2 %	22.2 %	2.1 %	1.0 %

Alpha ICPMSQ Data with SRD

12/2/2024 3:12:07 PM

Analysis index:	25	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	I2469706-06 2008TL	Rack	1		
Analysis started at:	12/2/2024 9:59:25 AM	Vial	8		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	114.590 %	112.124 %	0.007 ppb	41,423.340 ppb	5,466.232 ppb	13.036 ppb	6,290.049 ppb	24,388.336 ppb	115.385 %
Concentration per Run 1	112.871 %	113.246 %	0.005 ppb	40,719.799 ppb	5,380.142 ppb	12.320 ppb	6,285.718 ppb	24,198.943 ppb	117.670 %
Concentration per Run 2	115.017 %	111.837 %	0.010 ppb	41,742.130 ppb	5,503.235 ppb	13.371 ppb	6,219.161 ppb	24,543.291 ppb	113.913 %
Concentration per Run 3	115.883 %	111.288 %	0.007 ppb	41,808.090 ppb	5,515.319 ppb	13.417 ppb	6,365.268 ppb	24,422.774 ppb	114.571 %
Concentration RSD	1.4 %	0.9 %	33.4 %	1.5 %	1.4 %	4.8 %	1.2 %	0.7 %	1.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.104 ppb	0.011 ppb	1.939 ppb	102.910 ppb	0.013 ppb	0.053 ppb	0.118 ppb	0.461 ppb	112.156 %
Concentration per Run 1	0.085 ppb	0.009 ppb	1.915 ppb	100.011 ppb	0.009 ppb	0.046 ppb	0.106 ppb	0.419 ppb	112.658 %
Concentration per Run 2	0.103 ppb	0.016 ppb	1.996 ppb	104.307 ppb	0.018 ppb	0.055 ppb	0.098 ppb	0.487 ppb	111.449 %
Concentration per Run 3	0.125 ppb	0.007 ppb	1.905 ppb	104.414 ppb	0.013 ppb	0.058 ppb	0.150 ppb	0.477 ppb	112.361 %
Concentration RSD	19.6 %	40.7 %	2.6 %	2.4 %	35.3 %	12.0 %	23.7 %	8.0 %	0.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.112 ppb	0.153 ppb	137.889 ppb	0.629 ppb	109.904 %	-0.003 ppb	0.000 ppb	119.232 %	0.383 ppb
Concentration per Run 1	0.111 ppb	0.156 ppb	134.943 ppb	0.418 ppb	112.204 %	-0.003 ppb	0.000 ppb	121.123 %	0.355 ppb
Concentration per Run 2	0.112 ppb	0.152 ppb	138.799 ppb	0.636 ppb	109.513 %	-0.002 ppb	0.000 ppb	117.788 %	0.394 ppb
Concentration per Run 3	0.114 ppb	0.151 ppb	139.924 ppb	0.832 ppb	107.997 %	-0.003 ppb	0.000 ppb	118.786 %	0.400 ppb
Concentration RSD	1.1 %	2.0 %	1.9 %	32.9 %	1.9 %	28.4 %	98.7 %	1.4 %	6.4 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	17.336 ppb	109.330 %	110.450 %	0.012 ppb	0.015 ppb	104.323 %
Concentration per Run 1	17.118 ppb	109.521 %	110.496 %	0.010 ppb	0.012 ppb	105.482 %
Concentration per Run 2	17.414 ppb	109.250 %	109.347 %	0.013 ppb	0.017 ppb	103.981 %
Concentration per Run 3	17.476 ppb	109.218 %	111.506 %	0.014 ppb	0.016 ppb	103.505 %
Concentration RSD	1.1 %	0.2 %	1.0 %	17.3 %	19.4 %	1.0 %

Alpha ICPMSQ Data with SRD

12/2/2024 3:12:07 PM

Analysis index:	26	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	I2469706-07 2008TL	Rack	1		
Analysis started at:	12/2/2024 10:04:05 AM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	115.608 %	112.761 %	0.006 ppb	41,965.186 ppb	6,185.382 ppb	4.282 ppb	5,979.611 ppb	26,473.369 ppb	112.346 %
Concentration per Run 1	114.716 %	117.210 %	0.003 ppb	40,596.136 ppb	5,960.422 ppb	3.771 ppb	5,846.121 ppb	25,893.338 ppb	110.134 %
Concentration per Run 2	115.962 %	113.951 %	0.007 ppb	41,371.604 ppb	6,088.265 ppb	4.379 ppb	5,778.982 ppb	26,042.094 ppb	115.379 %
Concentration per Run 3	116.146 %	107.122 %	0.007 ppb	43,927.819 ppb	6,507.458 ppb	4.696 ppb	6,313.730 ppb	27,484.676 ppb	111.526 %
Concentration RSD	0.7 %	4.6 %	40.3 %	4.2 %	4.6 %	11.0 %	4.9 %	3.3 %	2.4 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.123 ppb	0.054 ppb	16.680 ppb	30.901 ppb	0.225 ppb	5.304 ppb	1.598 ppb	15.501 ppb	110.603 %
Concentration per Run 1	0.089 ppb	0.079 ppb	16.391 ppb	31.834 ppb	0.231 ppb	5.542 ppb	1.565 ppb	15.334 ppb	111.966 %
Concentration per Run 2	0.131 ppb	0.037 ppb	16.364 ppb	29.159 ppb	0.218 ppb	5.052 ppb	1.613 ppb	15.238 ppb	112.866 %
Concentration per Run 3	0.149 ppb	0.047 ppb	17.284 ppb	31.710 ppb	0.226 ppb	5.318 ppb	1.615 ppb	15.930 ppb	106.976 %
Concentration RSD	25.2 %	39.6 %	3.1 %	4.9 %	2.9 %	4.6 %	1.8 %	2.4 %	2.9 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.065 ppb	0.049 ppb	138.986 ppb	0.503 ppb	108.880 %	-0.002 ppb	0.000 ppb	116.560 %	0.236 ppb
Concentration per Run 1	0.068 ppb	0.050 ppb	135.713 ppb	0.367 ppb	111.734 %	-0.002 ppb	0.001 ppb	119.958 %	0.209 ppb
Concentration per Run 2	0.077 ppb	0.058 ppb	136.696 ppb	0.489 ppb	110.517 %	-0.002 ppb	0.000 ppb	116.166 %	0.246 ppb
Concentration per Run 3	0.049 ppb	0.038 ppb	144.549 ppb	0.651 ppb	104.390 %	-0.003 ppb	0.001 ppb	113.557 %	0.252 ppb
Concentration RSD	22.8 %	20.6 %	3.5 %	28.3 %	3.6 %	32.8 %	76.5 %	2.8 %	10.0 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	2.558 ppb	107.701 %	107.235 %	0.017 ppb	0.437 ppb	98.909 %
Concentration per Run 1	2.480 ppb	110.901 %	110.297 %	0.014 ppb	0.405 ppb	103.701 %
Concentration per Run 2	2.568 ppb	108.230 %	107.729 %	0.017 ppb	0.434 ppb	98.806 %
Concentration per Run 3	2.626 ppb	103.972 %	103.679 %	0.021 ppb	0.473 ppb	94.221 %
Concentration RSD	2.9 %	3.2 %	3.1 %	19.6 %	7.9 %	4.8 %

Alpha ICPMSQ Data with SRD

12/2/2024 3:12:07 PM

Analysis index:	27	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	I2469706-08 2008TL	Rack	1		
Analysis started at:	12/2/2024 10:08:45 AM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	116.605 %	113.111 %	0.006 ppb	41,622.982 ppb	6,207.902 ppb	4.759 ppb	5,810.684 ppb	26,395.602 ppb	114.620 %
Concentration per Run 1	115.706 %	111.899 %	0.006 ppb	42,091.573 ppb	6,269.548 ppb	4.810 ppb	5,915.637 ppb	26,709.188 ppb	113.874 %
Concentration per Run 2	117.209 %	115.972 %	0.007 ppb	41,084.765 ppb	6,133.243 ppb	4.786 ppb	5,596.934 ppb	26,043.619 ppb	114.299 %
Concentration per Run 3	116.899 %	111.461 %	0.006 ppb	41,692.610 ppb	6,220.914 ppb	4.681 ppb	5,919.481 ppb	26,433.998 ppb	115.687 %
Concentration RSD	0.7 %	2.2 %	3.6 %	1.2 %	1.1 %	1.4 %	3.2 %	1.3 %	0.8 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.228 ppb	0.617 ppb	18.705 ppb	470.159 ppb	0.148 ppb	0.108 ppb	0.903 ppb	0.713 ppb	114.332 %
Concentration per Run 1	0.220 ppb	0.610 ppb	18.765 ppb	464.460 ppb	0.154 ppb	0.121 ppb	0.884 ppb	0.715 ppb	113.550 %
Concentration per Run 2	0.222 ppb	0.623 ppb	18.503 ppb	469.548 ppb	0.155 ppb	0.097 ppb	0.911 ppb	0.735 ppb	113.894 %
Concentration per Run 3	0.241 ppb	0.617 ppb	18.847 ppb	476.470 ppb	0.136 ppb	0.106 ppb	0.914 ppb	0.689 ppb	115.552 %
Concentration RSD	5.2 %	1.1 %	1.0 %	1.3 %	7.4 %	11.4 %	1.8 %	3.2 %	0.9 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.162 ppb	0.037 ppb	138.953 ppb	0.472 ppb	110.375 %	0.046 ppb	0.001 ppb	119.640 %	0.187 ppb
Concentration per Run 1	0.140 ppb	0.049 ppb	139.156 ppb	0.375 ppb	109.451 %	0.046 ppb	0.001 ppb	120.134 %	0.162 ppb
Concentration per Run 2	0.163 ppb	0.020 ppb	139.419 ppb	0.469 ppb	110.011 %	0.048 ppb	0.003 ppb	119.155 %	0.193 ppb
Concentration per Run 3	0.184 ppb	0.041 ppb	138.285 ppb	0.571 ppb	111.663 %	0.045 ppb	0.000 ppb	119.631 %	0.207 ppb
Concentration RSD	13.6 %	40.9 %	0.4 %	20.8 %	1.0 %	3.4 %	134.7 %	0.4 %	12.5 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	2.181 ppb	109.599 %	109.620 %	0.025 ppb	0.021 ppb	101.014 %
Concentration per Run 1	2.187 ppb	109.651 %	109.417 %	0.022 ppb	0.021 ppb	100.755 %
Concentration per Run 2	2.191 ppb	109.928 %	109.818 %	0.026 ppb	0.021 ppb	101.354 %
Concentration per Run 3	2.165 ppb	109.218 %	109.624 %	0.026 ppb	0.022 ppb	100.933 %
Concentration RSD	0.6 %	0.3 %	0.2 %	9.6 %	3.8 %	0.3 %

Alpha ICPMSQ Data with SRD

12/2/2024 3:12:07 PM

Analysis index: 28
Analysis label: CCV
Analysis started at: 12/2/2024 10:13:25 AM
User name ALPHALAB\Metals-Instrument
Rack 0
Vial 9
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	114.112 %	114.463 %	62.314 ppb	6,146.784 ppb	6,140.580 ppb	61.169 ppb	6,318.302 ppb	6,096.344 ppb	117.684 %
Concentration per Run 1	113.173 %	118.416 %	62.622 ppb	5,950.352 ppb	5,955.704 ppb	59.137 ppb	6,230.561 ppb	5,959.146 ppb	120.942 %
Concentration per Run 2	114.523 %	111.946 %	61.909 ppb	6,322.093 ppb	6,249.913 ppb	62.692 ppb	6,359.806 ppb	6,211.700 ppb	115.889 %
Concentration per Run 3	114.641 %	113.027 %	62.411 ppb	6,167.907 ppb	6,216.124 ppb	61.680 ppb	6,364.538 ppb	6,118.185 ppb	116.222 %
Recovery Percentage 1			103.857 %	102.446 %	102.343 %	101.949 %	105.305 %	101.606 %	
Concentration RSD	0.7 %	3.0 %	0.6 %	3.0 %	2.6 %	3.0 %	1.2 %	2.1 %	2.4 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	60.725 ppb	61.061 ppb	60.768 ppb	6,166.966 ppb	63.074 ppb	63.551 ppb	64.293 ppb	64.675 ppb	111.543 %
Concentration per Run 1	59.169 ppb	59.514 ppb	58.276 ppb	5,900.969 ppb	60.934 ppb	61.731 ppb	62.744 ppb	63.324 ppb	113.937 %
Concentration per Run 2	61.368 ppb	61.677 ppb	61.909 ppb	6,269.577 ppb	64.037 ppb	64.601 ppb	64.866 ppb	65.110 ppb	110.603 %
Concentration per Run 3	61.639 ppb	61.991 ppb	62.119 ppb	6,330.353 ppb	64.250 ppb	64.321 ppb	65.267 ppb	65.590 ppb	110.089 %
Recovery Percentage 1	101.209 %	101.768 %	101.280 %	102.783 %	105.123 %	105.919 %	107.154 %	107.791 %	
Concentration RSD	2.2 %	2.2 %	3.6 %	3.8 %	2.9 %	2.5 %	2.1 %	1.8 %	1.9 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	63.134 ppb	63.581 ppb	63.628 ppb	60.327 ppb	112.184 %	62.279 ppb	62.488 ppb	117.333 %	60.326 ppb
Concentration per Run 1	60.965 ppb	61.195 ppb	62.049 ppb	59.422 ppb	115.178 %	60.861 ppb	61.120 ppb	119.261 %	58.435 ppb
Concentration per Run 2	63.593 ppb	65.305 ppb	64.777 ppb	60.590 ppb	110.143 %	63.662 ppb	63.733 ppb	115.988 %	62.047 ppb
Concentration per Run 3	64.843 ppb	64.243 ppb	64.059 ppb	60.968 ppb	111.231 %	62.314 ppb	62.612 ppb	116.751 %	60.497 ppb
Recovery Percentage 1	105.223 %	105.968 %	106.047 %	100.545 %		103.798 %	104.147 %		100.543 %
Concentration RSD	3.1 %	3.4 %	2.2 %	1.3 %	2.4 %	2.2 %	2.1 %	1.5 %	3.0 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	57.484 ppb	108.627 %	108.593 %	60.020 ppb	60.949 ppb	110.371 %
Concentration per Run 1	55.677 ppb	110.677 %	109.381 %	56.235 ppb	58.025 ppb	115.665 %
Concentration per Run 2	58.965 ppb	107.568 %	108.738 %	59.863 ppb	61.638 ppb	108.644 %
Concentration per Run 3	57.811 ppb	107.636 %	107.661 %	63.962 ppb	63.184 ppb	106.804 %
Recovery Percentage 1	95.807 %			100.033 %	101.582 %	
Concentration RSD	2.9 %	1.6 %	0.8 %	6.4 %	4.3 %	4.2 %

Alpha ICPMSQ Data with SRD

12/2/2024 3:12:07 PM

Analysis index: 29
Analysis label: CCB
Analysis started at: 12/2/2024 10:18:07 AM
User name ALPHALAB\Metals-Instrument
Rack 0
Vial 10
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	113.399 %	111.294 %	0.007 ppb	6.731 ppb	-0.425 ppb	-0.571 ppb	4.705 ppb	-2.588 ppb	109.437 %
Concentration per Run 1	111.794 %	110.725 %	0.004 ppb	7.700 ppb	-0.480 ppb	-0.606 ppb	3.283 ppb	-3.304 ppb	110.067 %
Concentration per Run 2	114.244 %	113.074 %	0.011 ppb	4.607 ppb	-0.343 ppb	-0.592 ppb	4.477 ppb	-1.714 ppb	107.535 %
Concentration per Run 3	114.160 %	110.082 %	0.007 ppb	7.884 ppb	-0.451 ppb	-0.517 ppb	6.355 ppb	-2.747 ppb	110.708 %
Recovery Percentage 1			1.459 %	1.346 %	-0.607 %	-5.715 %	4.705 %	-2.588 %	
Concentration RSD	1.2 %	1.4 %	45.4 %	27.4 %	17.0 %	8.4 %	32.9 %	31.2 %	1.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.051 ppb	0.005 ppb	-0.029 ppb	10.861 ppb	0.001 ppb	-0.190 ppb	-0.075 ppb	-0.364 ppb	108.481 %
Concentration per Run 1	-0.052 ppb	0.008 ppb	-0.021 ppb	10.215 ppb	0.001 ppb	-0.203 ppb	-0.074 ppb	-0.370 ppb	106.484 %
Concentration per Run 2	-0.056 ppb	0.009 ppb	-0.027 ppb	11.897 ppb	-0.001 ppb	-0.200 ppb	-0.074 ppb	-0.352 ppb	109.064 %
Concentration per Run 3	-0.045 ppb	-0.001 ppb	-0.040 ppb	10.470 ppb	0.002 ppb	-0.166 ppb	-0.078 ppb	-0.370 ppb	109.895 %
Recovery Percentage 1	-1.014 %	0.547 %	-2.930 %	21.721 %	0.107 %	-9.485 %	-7.504 %	-7.278 %	
Concentration RSD	10.9 %	108.8 %	33.1 %	8.3 %	369.5 %	10.9 %	3.0 %	2.8 %	1.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.061 ppb	0.193 ppb	-0.003 ppb	1.709 ppb	111.342 %	0.001 ppb	0.002 ppb	115.482 %	0.181 ppb
Concentration per Run 1	0.065 ppb	0.202 ppb	-0.003 ppb	1.366 ppb	110.040 %	0.002 ppb	0.003 ppb	114.204 %	0.138 ppb
Concentration per Run 2	0.062 ppb	0.175 ppb	-0.003 ppb	1.819 ppb	111.225 %	0.000 ppb	0.002 ppb	116.379 %	0.186 ppb
Concentration per Run 3	0.055 ppb	0.201 ppb	-0.002 ppb	1.943 ppb	112.763 %	0.001 ppb	0.003 ppb	115.862 %	0.218 ppb
Recovery Percentage 1	12.158 %	3.855 %	-0.031 %	85.464 %		0.252 %	1.183 %		4.521 %
Concentration RSD	8.2 %	8.1 %	16.0 %	17.8 %	1.2 %	114.3 %	12.7 %	1.0 %	22.3 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	-0.007 ppb	105.614 %	105.757 %	0.380 ppb	0.016 ppb	102.093 %
Concentration per Run 1	-0.005 ppb	104.240 %	103.573 %	0.476 ppb	0.017 ppb	99.170 %
Concentration per Run 2	-0.008 ppb	106.144 %	105.860 %	0.386 ppb	0.017 ppb	102.936 %
Concentration per Run 3	-0.007 ppb	106.459 %	107.837 %	0.277 ppb	0.015 ppb	104.173 %
Recovery Percentage 1	-1.320 %			37.978 %	1.642 %	
Concentration RSD	23.9 %	1.1 %	2.0 %	26.4 %	5.1 %	2.6 %

Alpha ICPMSQ Data with SRD

12/2/2024 3:12:07 PM

Analysis index:	30	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	I2469706-11 2008TL	Rack	1		
Analysis started at:	12/2/2024 10:24:36 AM	Vial	11		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	118.612 %	113.058 %	0.006 ppb	41,927.427 ppb	6,160.437 ppb	6.893 ppb	5,935.430 ppb	26,272.248 ppb	116.913 %
Concentration per Run 1	117.590 %	109.785 %	0.008 ppb	42,162.317 ppb	6,168.606 ppb	6.873 ppb	5,908.317 ppb	26,647.378 ppb	118.075 %
Concentration per Run 2	118.895 %	114.594 %	0.005 ppb	41,336.595 ppb	6,106.962 ppb	7.109 ppb	5,905.546 ppb	25,616.676 ppb	112.745 %
Concentration per Run 3	119.351 %	114.797 %	0.004 ppb	42,283.369 ppb	6,205.743 ppb	6.699 ppb	5,992.426 ppb	26,552.689 ppb	119.920 %
Concentration RSD	0.8 %	2.5 %	32.5 %	1.2 %	0.8 %	3.0 %	0.8 %	2.2 %	3.2 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.079 ppb	0.015 ppb	17.973 ppb	21.515 ppb	0.053 ppb	-0.103 ppb	0.127 ppb	1.458 ppb	111.040 %
Concentration per Run 1	0.066 ppb	0.017 ppb	17.565 ppb	21.289 ppb	0.054 ppb	-0.117 ppb	0.142 ppb	1.484 ppb	109.078 %
Concentration per Run 2	0.079 ppb	0.011 ppb	17.980 ppb	20.762 ppb	0.056 ppb	-0.087 ppb	0.084 ppb	1.423 ppb	112.258 %
Concentration per Run 3	0.093 ppb	0.018 ppb	18.374 ppb	22.493 ppb	0.050 ppb	-0.105 ppb	0.154 ppb	1.467 ppb	111.785 %
Concentration RSD	17.2 %	24.3 %	2.3 %	4.1 %	5.5 %	14.8 %	29.6 %	2.1 %	1.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.057 ppb	0.082 ppb	134.966 ppb	0.567 ppb	109.141 %	-0.002 ppb	0.001 ppb	117.417 %	0.141 ppb
Concentration per Run 1	0.048 ppb	0.071 ppb	136.535 ppb	0.428 ppb	104.857 %	-0.002 ppb	0.001 ppb	111.860 %	0.126 ppb
Concentration per Run 2	0.062 ppb	0.083 ppb	133.062 ppb	0.602 ppb	110.620 %	-0.001 ppb	0.001 ppb	118.176 %	0.143 ppb
Concentration per Run 3	0.061 ppb	0.092 ppb	135.299 ppb	0.671 ppb	111.947 %	-0.001 ppb	0.000 ppb	122.214 %	0.155 ppb
Concentration RSD	13.7 %	12.7 %	1.3 %	22.1 %	3.5 %	31.7 %	38.9 %	4.4 %	10.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	2.425 ppb	108.244 %	108.222 %	0.071 ppb	0.035 ppb	95.833 %
Concentration per Run 1	2.546 ppb	103.983 %	105.005 %	0.061 ppb	0.037 ppb	93.185 %
Concentration per Run 2	2.318 ppb	110.654 %	109.144 %	0.080 ppb	0.035 ppb	94.602 %
Concentration per Run 3	2.410 ppb	110.095 %	110.516 %	0.071 ppb	0.034 ppb	99.711 %
Concentration RSD	4.7 %	3.4 %	2.7 %	13.5 %	4.3 %	3.6 %

Alpha ICPMSQ Data with SRD

12/2/2024 3:12:07 PM

Analysis index: 31
Analysis label: CCV
Analysis started at: 12/2/2024 10:32:08 AM
User name ALPHALAB\Metals-Instrument
Rack 0
Vial 9
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	114.032 %	111.602 %	63.432 ppb	6,243.560 ppb	6,223.323 ppb	62.101 ppb	6,417.902 ppb	6,237.707 ppb	113.197 %
Concentration per Run 1	113.810 %	112.636 %	62.998 ppb	6,185.680 ppb	6,200.268 ppb	61.393 ppb	6,406.361 ppb	6,169.903 ppb	113.695 %
Concentration per Run 2	113.249 %	112.902 %	63.657 ppb	6,119.764 ppb	6,034.418 ppb	61.984 ppb	6,262.318 ppb	6,160.777 ppb	112.709 %
Concentration per Run 3	115.035 %	109.268 %	63.641 ppb	6,425.234 ppb	6,435.282 ppb	62.926 ppb	6,585.027 ppb	6,382.443 ppb	113.186 %
Recovery Percentage 1			105.720 %	104.059 %	103.722 %	103.502 %	106.965 %	103.962 %	
Concentration RSD	0.8 %	1.8 %	0.6 %	2.6 %	3.2 %	1.2 %	2.5 %	2.0 %	0.4 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	63.134 ppb	63.349 ppb	63.024 ppb	6,416.294 ppb	65.105 ppb	65.103 ppb	65.166 ppb	65.951 ppb	110.331 %
Concentration per Run 1	62.594 ppb	63.213 ppb	62.205 ppb	6,322.500 ppb	64.007 ppb	63.873 ppb	64.205 ppb	64.973 ppb	111.889 %
Concentration per Run 2	63.557 ppb	62.954 ppb	63.342 ppb	6,352.790 ppb	64.914 ppb	64.683 ppb	64.758 ppb	66.076 ppb	110.091 %
Concentration per Run 3	63.249 ppb	63.879 ppb	63.524 ppb	6,573.593 ppb	66.393 ppb	66.754 ppb	66.533 ppb	66.806 ppb	109.012 %
Recovery Percentage 1	105.223 %	105.581 %	105.040 %	106.938 %	108.508 %	108.506 %	108.609 %	109.919 %	
Concentration RSD	0.8 %	0.8 %	1.1 %	2.1 %	1.9 %	2.3 %	1.9 %	1.4 %	1.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	64.362 ppb	64.172 ppb	64.828 ppb	62.104 ppb	109.166 %	64.558 ppb	65.197 ppb	113.511 %	62.579 ppb
Concentration per Run 1	63.826 ppb	63.361 ppb	63.940 ppb	61.786 ppb	109.551 %	64.516 ppb	65.572 ppb	113.711 %	63.325 ppb
Concentration per Run 2	64.752 ppb	63.249 ppb	64.515 ppb	61.948 ppb	109.245 %	63.972 ppb	64.395 ppb	114.335 %	61.253 ppb
Concentration per Run 3	64.508 ppb	65.907 ppb	66.031 ppb	62.579 ppb	108.702 %	65.185 ppb	65.623 ppb	112.488 %	63.158 ppb
Recovery Percentage 1	107.270 %	106.954 %	108.047 %	103.507 %		107.596 %	108.661 %		104.298 %
Concentration RSD	0.7 %	2.3 %	1.7 %	0.7 %	0.4 %	0.9 %	1.1 %	0.8 %	1.8 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	59.398 ppb	106.206 %	106.450 %	62.074 ppb	62.826 ppb	108.745 %
Concentration per Run 1	59.308 ppb	108.096 %	107.772 %	59.198 ppb	60.235 ppb	113.366 %
Concentration per Run 2	59.286 ppb	104.927 %	105.819 %	62.818 ppb	63.935 ppb	107.435 %
Concentration per Run 3	59.600 ppb	105.596 %	105.758 %	64.206 ppb	64.309 ppb	105.433 %
Recovery Percentage 1	98.996 %			103.456 %	104.711 %	
Concentration RSD	0.3 %	1.6 %	1.1 %	4.2 %	3.6 %	3.8 %

Alpha ICPMSQ Data with SRD

12/2/2024 3:12:07 PM

Analysis index: 32
Analysis label: CCB
Analysis started at: 12/2/2024 10:36:50 AM
User name ALPHALAB\Metals-Instrument
Rack 0
Vial 10
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	111.661 %	111.915 %	0.009 ppb	6.011 ppb	-0.510 ppb	-0.603 ppb	3.641 ppb	-1.602 ppb	112.405 %
Concentration per Run 1	107.537 %	115.189 %	0.010 ppb	2.696 ppb	-0.527 ppb	-0.602 ppb	4.216 ppb	-2.389 ppb	111.593 %
Concentration per Run 2	113.678 %	110.897 %	0.008 ppb	9.864 ppb	-0.453 ppb	-0.565 ppb	3.525 ppb	-1.395 ppb	113.187 %
Concentration per Run 3	113.766 %	109.659 %	0.008 ppb	5.473 ppb	-0.551 ppb	-0.641 ppb	3.182 ppb	-1.022 ppb	112.434 %
Recovery Percentage 1			1.729 %	1.202 %	-0.729 %	-6.028 %	3.641 %	-1.602 %	
Concentration RSD	3.2 %	2.6 %	13.6 %	60.1 %	10.1 %	6.4 %	14.5 %	44.1 %	0.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.071 ppb	0.004 ppb	-0.042 ppb	12.207 ppb	0.002 ppb	-0.201 ppb	-0.079 ppb	-0.375 ppb	108.970 %
Concentration per Run 1	-0.092 ppb	0.007 ppb	-0.044 ppb	12.417 ppb	0.000 ppb	-0.190 ppb	-0.060 ppb	-0.387 ppb	108.588 %
Concentration per Run 2	-0.057 ppb	0.004 ppb	-0.045 ppb	11.645 ppb	0.003 ppb	-0.199 ppb	-0.093 ppb	-0.366 ppb	107.992 %
Concentration per Run 3	-0.064 ppb	0.001 ppb	-0.036 ppb	12.561 ppb	0.003 ppb	-0.216 ppb	-0.086 ppb	-0.373 ppb	110.331 %
Recovery Percentage 1	-1.415 %	0.397 %	-4.165 %	24.415 %	0.368 %	-10.074 %	-7.934 %	-7.505 %	
Concentration RSD	26.2 %	73.6 %	11.3 %	4.0 %	95.5 %	6.7 %	21.9 %	2.8 %	1.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.049 ppb	0.186 ppb	-0.003 ppb	1.743 ppb	110.552 %	0.001 ppb	0.001 ppb	114.993 %	0.144 ppb
Concentration per Run 1	0.033 ppb	0.198 ppb	-0.004 ppb	1.370 ppb	110.245 %	0.001 ppb	0.002 ppb	114.442 %	0.102 ppb
Concentration per Run 2	0.065 ppb	0.195 ppb	-0.003 ppb	1.792 ppb	110.069 %	0.001 ppb	0.002 ppb	115.432 %	0.147 ppb
Concentration per Run 3	0.050 ppb	0.166 ppb	-0.002 ppb	2.068 ppb	111.342 %	0.000 ppb	0.001 ppb	115.106 %	0.185 ppb
Recovery Percentage 1	9.888 %	3.723 %	-0.032 %	87.164 %		0.152 %	0.694 %		3.608 %
Concentration RSD	31.9 %	9.5 %	32.9 %	20.2 %	0.6 %	64.4 %	55.5 %	0.4 %	28.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	-0.007 ppb	105.585 %	105.032 %	0.367 ppb	0.014 ppb	108.032 %
Concentration per Run 1	-0.016 ppb	104.420 %	103.715 %	0.427 ppb	0.013 ppb	110.698 %
Concentration per Run 2	0.008 ppb	106.964 %	106.988 %	0.379 ppb	0.014 ppb	107.232 %
Concentration per Run 3	-0.012 ppb	105.373 %	104.394 %	0.296 ppb	0.014 ppb	106.166 %
Recovery Percentage 1	-1.323 %			36.732 %	1.360 %	
Concentration RSD	191.1 %	1.2 %	1.6 %	18.0 %	4.5 %	2.2 %

Alpha ICPMSQ Data with SRD

12/2/2024 3:12:07 PM

Analysis index:	33	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	WG2003771-1 2008SL	Rack	1		
Analysis started at:	12/2/2024 10:44:48 AM	Vial	12		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	104.012 %	110.537 %	0.011 ppb	39.709 ppb	1.914 ppb	0.800 ppb	6.069 ppb	3.203 ppb	110.265 %
Concentration per Run 1	101.212 %	113.466 %	0.013 ppb	28.464 ppb	2.223 ppb	0.761 ppb	5.724 ppb	5.438 ppb	109.810 %
Concentration per Run 2	103.323 %	109.988 %	0.012 ppb	43.734 ppb	1.799 ppb	0.880 ppb	5.175 ppb	2.106 ppb	113.191 %
Concentration per Run 3	107.500 %	108.156 %	0.007 ppb	46.929 ppb	1.721 ppb	0.758 ppb	7.309 ppb	2.066 ppb	107.795 %
Concentration RSD	3.1 %	2.4 %	28.9 %	24.9 %	14.1 %	8.7 %	18.3 %	60.4 %	2.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.076 ppb	0.071 ppb	0.034 ppb	8.633 ppb	0.009 ppb	-0.204 ppb	0.153 ppb	0.299 ppb	107.036 %
Concentration per Run 1	-0.089 ppb	0.075 ppb	0.035 ppb	7.977 ppb	0.010 ppb	-0.189 ppb	0.137 ppb	0.290 ppb	108.244 %
Concentration per Run 2	-0.080 ppb	0.076 ppb	0.038 ppb	8.093 ppb	0.007 ppb	-0.208 ppb	0.151 ppb	0.300 ppb	105.299 %
Concentration per Run 3	-0.058 ppb	0.063 ppb	0.029 ppb	9.830 ppb	0.010 ppb	-0.217 ppb	0.170 ppb	0.307 ppb	107.566 %
Concentration RSD	20.8 %	10.1 %	12.7 %	12.0 %	22.0 %	7.0 %	11.0 %	2.9 %	1.4 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.020 ppb	0.054 ppb	0.020 ppb	0.821 ppb	110.789 %	-0.001 ppb	0.000 ppb	114.550 %	0.651 ppb
Concentration per Run 1	0.008 ppb	0.060 ppb	0.021 ppb	0.587 ppb	111.817 %	-0.001 ppb	0.000 ppb	114.519 %	0.616 ppb
Concentration per Run 2	0.020 ppb	0.037 ppb	0.020 ppb	0.834 ppb	109.867 %	-0.001 ppb	-0.001 ppb	113.837 %	0.673 ppb
Concentration per Run 3	0.033 ppb	0.064 ppb	0.019 ppb	1.042 ppb	110.684 %	-0.002 ppb	0.001 ppb	115.293 %	0.665 ppb
Concentration RSD	60.3 %	26.7 %	4.8 %	27.7 %	0.9 %	38.3 %	675.4 %	0.6 %	4.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.001 ppb	106.030 %	106.096 %	0.071 ppb	0.017 ppb	**121.516 %**
Concentration per Run 1	-0.003 ppb	107.200 %	105.834 %	0.063 ppb	0.014 ppb	**136.514 %**
Concentration per Run 2	0.000 ppb	105.214 %	106.140 %	0.081 ppb	0.017 ppb	116.484 %
Concentration per Run 3	0.005 ppb	105.676 %	106.312 %	0.068 ppb	0.018 ppb	111.551 %
Concentration RSD	401.7 %	1.0 %	0.2 %	12.7 %	11.6 %	**10.9 %**

Alpha ICPMSQ Data with SRD

12/2/2024 3:12:07 PM

Analysis index: 34
Analysis label: WG2003771-2d10 2008SL
Analysis started at: 12/2/2024 10:49:28 AM
User name ALPHALAB\Metals-Instrument
Rack 1
Vial 13
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	104.188 %	112.521 %	5.887 ppb	1,058.100 ppb	1,000.092 ppb	197.280 ppb	1,040.109 ppb	1,042.893 ppb	103.030 %
Concentration per Run 1	110.389 %	111.758 %	5.418 ppb	1,058.359 ppb	1,001.446 ppb	197.037 ppb	1,051.961 ppb	1,041.478 ppb	109.525 %
Concentration per Run 2	104.076 %	112.401 %	5.897 ppb	1,038.427 ppb	997.229 ppb	195.890 ppb	1,009.426 ppb	1,007.251 ppb	102.748 %
Concentration per Run 3	98.099 %	113.403 %	6.345 ppb	1,077.515 ppb	1,001.602 ppb	198.911 ppb	1,058.939 ppb	1,079.951 ppb	96.816 %
Concentration RSD	5.9 %	0.7 %	7.9 %	1.8 %	0.2 %	0.8 %	2.6 %	3.5 %	6.2 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	49.594 ppb	19.950 ppb	50.412 ppb	106.714 ppb	51.823 ppb	52.120 ppb	26.594 ppb	53.165 ppb	112.299 %
Concentration per Run 1	49.509 ppb	20.273 ppb	50.112 ppb	106.571 ppb	52.536 ppb	52.608 ppb	27.177 ppb	53.541 ppb	110.249 %
Concentration per Run 2	49.223 ppb	19.571 ppb	49.813 ppb	105.553 ppb	50.715 ppb	51.322 ppb	26.104 ppb	53.106 ppb	113.685 %
Concentration per Run 3	50.049 ppb	20.007 ppb	51.311 ppb	108.019 ppb	52.219 ppb	52.429 ppb	26.501 ppb	52.847 ppb	112.964 %
Concentration RSD	0.8 %	1.8 %	1.6 %	1.2 %	1.9 %	1.3 %	2.0 %	0.7 %	1.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	12.571 ppb	12.570 ppb	101.834 ppb	96.824 ppb	111.323 %	5.413 ppb	5.459 ppb	116.643 %	39.285 ppb
Concentration per Run 1	12.590 ppb	12.465 ppb	101.769 ppb	98.532 ppb	111.360 %	5.394 ppb	5.430 ppb	117.161 %	39.020 ppb
Concentration per Run 2	12.428 ppb	12.470 ppb	101.460 ppb	95.723 ppb	110.999 %	5.444 ppb	5.517 ppb	115.435 %	39.461 ppb
Concentration per Run 3	12.694 ppb	12.776 ppb	102.274 ppb	96.219 ppb	111.609 %	5.401 ppb	5.431 ppb	117.334 %	39.374 ppb
Concentration RSD	1.1 %	1.4 %	0.4 %	1.5 %	0.3 %	0.5 %	0.9 %	0.9 %	0.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	192.880 ppb	106.596 %	105.373 %	12.736 ppb	55.707 ppb	107.414 %
Concentration per Run 1	193.311 ppb	105.850 %	104.667 %	12.455 ppb	55.146 ppb	107.797 %
Concentration per Run 2	194.761 ppb	106.024 %	104.521 %	12.722 ppb	55.476 ppb	107.476 %
Concentration per Run 3	190.569 ppb	107.915 %	106.931 %	13.031 ppb	56.499 ppb	106.968 %
Concentration RSD	1.1 %	1.1 %	1.3 %	2.3 %	1.3 %	0.4 %

Alpha ICPMSQ Data with SRD

12/2/2024 3:12:07 PM

Analysis index:	35	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	L2470217-04d10 2008SL	Rack	1		
Analysis started at:	12/2/2024 10:54:04 AM	Vial	14		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	127.805 %	120.322 %	0.007 ppb	183,801.902 ppb	21,109.925 ppb	0.877 ppb	6,834.351 ppb	8,728.545 ppb	128.940 %
Concentration per Run 1	125.484 %	119.293 %	0.004 ppb	181,248.518 ppb	21,131.481 ppb	0.872 ppb	6,772.881 ppb	8,823.540 ppb	127.500 %
Concentration per Run 2	128.417 %	118.102 %	0.007 ppb	186,527.005 ppb	21,349.996 ppb	0.881 ppb	6,910.466 ppb	8,707.806 ppb	128.761 %
Concentration per Run 3	129.513 %	123.570 %	0.008 ppb	183,630.182 ppb	20,848.297 ppb	0.876 ppb	6,819.705 ppb	8,654.289 ppb	130.560 %
Concentration RSD	1.6 %	2.4 %	30.9 %	1.4 %	1.2 %	0.5 %	1.0 %	1.0 %	1.2 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.083 ppb	0.009 ppb	0.441 ppb	5.055 ppb	0.005 ppb	-0.140 ppb	0.175 ppb	-0.081 ppb	122.410 %
Concentration per Run 1	0.062 ppb	0.007 ppb	0.438 ppb	4.511 ppb	0.003 ppb	-0.135 ppb	0.150 ppb	-0.066 ppb	116.968 %
Concentration per Run 2	0.064 ppb	0.009 ppb	0.464 ppb	5.182 ppb	0.008 ppb	-0.139 ppb	0.201 ppb	-0.099 ppb	124.034 %
Concentration per Run 3	0.122 ppb	0.011 ppb	0.420 ppb	5.472 ppb	0.006 ppb	-0.145 ppb	0.174 ppb	-0.079 ppb	126.227 %
Concentration RSD	41.2 %	24.5 %	4.9 %	9.7 %	47.3 %	3.8 %	14.6 %	20.6 %	4.0 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.119 ppb	0.093 ppb	141.095 ppb	3.442 ppb	114.366 %	-0.002 ppb	0.005 ppb	121.860 %	1.786 ppb
Concentration per Run 1	0.119 ppb	0.088 ppb	140.568 ppb	2.658 ppb	112.742 %	-0.001 ppb	0.005 ppb	120.731 %	1.710 ppb
Concentration per Run 2	0.108 ppb	0.072 ppb	140.929 ppb	3.582 ppb	114.267 %	-0.002 ppb	0.004 ppb	122.464 %	1.799 ppb
Concentration per Run 3	0.131 ppb	0.119 ppb	141.788 ppb	4.085 ppb	116.091 %	-0.003 ppb	0.007 ppb	122.387 %	1.848 ppb
Concentration RSD	9.6 %	25.8 %	0.4 %	21.0 %	1.5 %	37.5 %	28.0 %	0.8 %	3.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	2.402 ppb	115.050 %	113.217 %	0.060 ppb	0.026 ppb	100.200 %
Concentration per Run 1	2.308 ppb	113.534 %	112.160 %	0.062 ppb	0.025 ppb	101.825 %
Concentration per Run 2	2.401 ppb	115.636 %	113.501 %	0.064 ppb	0.030 ppb	97.565 %
Concentration per Run 3	2.496 ppb	115.981 %	113.991 %	0.054 ppb	0.023 ppb	101.209 %
Concentration RSD	3.9 %	1.2 %	0.8 %	8.7 %	12.5 %	2.3 %

Alpha ICPMSQ Data with SRD

12/2/2024 3:12:07 PM

Analysis index:	36	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	WG2003771-3d10 2008SL	Rack	1		
Analysis started at:	12/2/2024 10:58:41 AM	Vial	15		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	125.943 %	121.925 %	4.593 ppb	187,188.107 ppb	22,121.464 ppb	186.408 ppb	7,870.325 ppb	9,607.679 ppb	125.789 %
Concentration per Run 1	124.930 %	120.906 %	4.556 ppb	185,819.931 ppb	21,654.700 ppb	182.192 ppb	7,825.215 ppb	9,599.958 ppb	126.017 %
Concentration per Run 2	126.892 %	122.394 %	4.594 ppb	187,211.747 ppb	22,126.428 ppb	186.767 ppb	7,830.705 ppb	9,493.079 ppb	126.247 %
Concentration per Run 3	126.008 %	122.473 %	4.630 ppb	188,532.643 ppb	22,583.264 ppb	190.264 ppb	7,955.055 ppb	9,730.000 ppb	125.103 %
Concentration RSD	0.8 %	0.7 %	0.8 %	0.7 %	2.1 %	2.2 %	0.9 %	1.2 %	0.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	45.480 ppb	17.373 ppb	43.968 ppb	97.689 ppb	47.630 ppb	46.159 ppb	24.414 ppb	42.535 ppb	122.223 %
Concentration per Run 1	45.253 ppb	17.142 ppb	43.209 ppb	100.039 ppb	47.170 ppb	45.869 ppb	24.396 ppb	42.166 ppb	121.866 %
Concentration per Run 2	45.847 ppb	17.804 ppb	45.117 ppb	96.475 ppb	48.321 ppb	47.109 ppb	24.526 ppb	42.755 ppb	121.122 %
Concentration per Run 3	45.340 ppb	17.175 ppb	43.579 ppb	96.554 ppb	47.400 ppb	45.499 ppb	24.319 ppb	42.684 ppb	123.682 %
Concentration RSD	0.7 %	2.1 %	2.3 %	2.1 %	1.3 %	1.8 %	0.4 %	0.8 %	1.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	11.734 ppb	10.355 ppb	240.310 ppb	96.953 ppb	114.607 %	4.753 ppb	4.663 ppb	121.639 %	46.953 ppb
Concentration per Run 1	11.554 ppb	10.243 ppb	237.456 ppb	96.984 ppb	113.665 %	4.683 ppb	4.642 ppb	122.034 %	46.482 ppb
Concentration per Run 2	11.935 ppb	10.564 ppb	242.433 ppb	96.650 ppb	114.495 %	4.853 ppb	4.712 ppb	119.511 %	47.260 ppb
Concentration per Run 3	11.714 ppb	10.258 ppb	241.041 ppb	97.224 ppb	115.661 %	4.723 ppb	4.635 ppb	123.371 %	47.118 ppb
Concentration RSD	1.6 %	1.7 %	1.1 %	0.3 %	0.9 %	1.9 %	0.9 %	1.6 %	0.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	180.477 ppb	113.725 %	113.045 %	11.710 ppb	54.020 ppb	98.787 %
Concentration per Run 1	178.377 ppb	111.072 %	110.798 %	11.163 ppb	52.435 ppb	100.700 %
Concentration per Run 2	181.166 ppb	115.649 %	114.463 %	11.886 ppb	54.790 ppb	97.541 %
Concentration per Run 3	181.887 ppb	114.454 %	113.875 %	12.079 ppb	54.836 ppb	98.119 %
Concentration RSD	1.0 %	2.1 %	1.7 %	4.1 %	2.5 %	1.7 %

Alpha ICPMSQ Data with SRD

12/2/2024 3:12:07 PM

Analysis index:	37	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	WG2003771-4d10 2008SL	Rack	1		
Analysis started at:	12/2/2024 11:03:18 AM	Vial	16		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	128.064 %	122.755 %	0.007 ppb	190,739.940 ppb	21,836.636 ppb	1.050 ppb	7,051.071 ppb	8,863.444 ppb	130.367 %
Concentration per Run 1	126.231 %	125.214 %	0.009 ppb	189,266.442 ppb	21,477.314 ppb	0.594 ppb	7,086.702 ppb	8,822.870 ppb	127.929 %
Concentration per Run 2	129.278 %	120.468 %	0.005 ppb	192,576.620 ppb	22,206.559 ppb	1.568 ppb	7,047.735 ppb	9,058.237 ppb	132.999 %
Concentration per Run 3	128.682 %	122.582 %	0.008 ppb	190,376.758 ppb	21,826.036 ppb	0.988 ppb	7,018.777 ppb	8,709.226 ppb	130.173 %
Concentration RSD	1.3 %	1.9 %	27.6 %	0.9 %	1.7 %	46.7 %	0.5 %	2.0 %	1.9 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.105 ppb	0.014 ppb	0.435 ppb	3.798 ppb	0.003 ppb	-0.122 ppb	0.211 ppb	-0.059 ppb	123.040 %
Concentration per Run 1	0.085 ppb	0.010 ppb	0.432 ppb	3.712 ppb	0.001 ppb	-0.108 ppb	0.204 ppb	-0.054 ppb	123.617 %
Concentration per Run 2	0.117 ppb	0.010 ppb	0.480 ppb	4.458 ppb	0.000 ppb	-0.132 ppb	0.205 ppb	-0.069 ppb	120.638 %
Concentration per Run 3	0.112 ppb	0.022 ppb	0.393 ppb	3.224 ppb	0.008 ppb	-0.125 ppb	0.225 ppb	-0.055 ppb	124.865 %
Concentration RSD	16.7 %	48.6 %	10.0 %	16.4 %	152.7 %	10.0 %	5.8 %	14.0 %	1.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.116 ppb	0.077 ppb	145.220 ppb	3.515 ppb	115.715 %	-0.002 ppb	0.003 ppb	123.967 %	0.449 ppb
Concentration per Run 1	0.127 ppb	0.080 ppb	143.413 ppb	2.579 ppb	117.887 %	-0.001 ppb	0.002 ppb	126.350 %	0.370 ppb
Concentration per Run 2	0.133 ppb	0.106 ppb	147.653 ppb	3.895 ppb	113.779 %	-0.002 ppb	0.004 ppb	122.841 %	0.470 ppb
Concentration per Run 3	0.089 ppb	0.045 ppb	144.594 ppb	4.071 ppb	115.480 %	-0.002 ppb	0.004 ppb	122.712 %	0.506 ppb
Concentration RSD	20.7 %	40.1 %	1.5 %	23.2 %	1.8 %	34.3 %	30.1 %	1.7 %	15.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	2.455 ppb	114.094 %	113.207 %	0.147 ppb	0.022 ppb	100.352 %
Concentration per Run 1	2.418 ppb	113.490 %	113.059 %	0.158 ppb	0.021 ppb	103.154 %
Concentration per Run 2	2.476 ppb	114.463 %	113.196 %	0.160 ppb	0.023 ppb	99.025 %
Concentration per Run 3	2.472 ppb	114.329 %	113.367 %	0.125 ppb	0.022 ppb	98.878 %
Concentration RSD	1.3 %	0.5 %	0.1 %	13.3 %	5.1 %	2.4 %

Alpha ICPMSQ Data with SRD

12/2/2024 3:12:07 PM

Analysis index:	38	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	L2470217-05d10 2008SL	Rack	1		
Analysis started at:	12/2/2024 11:07:56 AM	Vial	17		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	129.122 %	125.125 %	0.007 ppb	183,074.554 ppb	21,216.425 ppb	0.917 ppb	6,715.228 ppb	8,595.705 ppb	132.164 %
Concentration per Run 1	127.273 %	128.441 %	0.009 ppb	176,390.360 ppb	20,636.624 ppb	1.109 ppb	6,424.905 ppb	8,344.891 ppb	129.217 %
Concentration per Run 2	129.946 %	121.220 %	0.004 ppb	187,730.111 ppb	21,408.457 ppb	0.765 ppb	6,933.763 ppb	8,772.964 ppb	132.379 %
Concentration per Run 3	130.146 %	125.715 %	0.008 ppb	185,103.192 ppb	21,604.194 ppb	0.877 ppb	6,787.015 ppb	8,669.261 ppb	134.895 %
Concentration RSD	1.2 %	2.9 %	35.2 %	3.2 %	2.4 %	19.1 %	3.9 %	2.6 %	2.2 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.113 ppb	0.009 ppb	0.397 ppb	3.387 ppb	0.003 ppb	-0.120 ppb	0.189 ppb	-0.120 ppb	127.443 %
Concentration per Run 1	0.096 ppb	0.005 ppb	0.327 ppb	2.826 ppb	0.004 ppb	-0.133 ppb	0.166 ppb	-0.123 ppb	128.263 %
Concentration per Run 2	0.122 ppb	0.008 ppb	0.450 ppb	3.055 ppb	0.002 ppb	-0.135 ppb	0.190 ppb	-0.116 ppb	125.746 %
Concentration per Run 3	0.122 ppb	0.013 ppb	0.412 ppb	4.281 ppb	0.003 ppb	-0.091 ppb	0.211 ppb	-0.121 ppb	128.318 %
Concentration RSD	13.1 %	44.7 %	15.8 %	23.1 %	24.8 %	20.6 %	12.1 %	2.9 %	1.2 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.124 ppb	0.025 ppb	140.380 ppb	1.254 ppb	118.039 %	-0.002 ppb	0.002 ppb	125.269 %	0.227 ppb
Concentration per Run 1	0.114 ppb	0.025 ppb	137.316 ppb	0.855 ppb	120.120 %	-0.002 ppb	0.003 ppb	126.871 %	0.192 ppb
Concentration per Run 2	0.142 ppb	0.022 ppb	142.574 ppb	1.345 ppb	116.295 %	-0.003 ppb	0.001 ppb	122.992 %	0.228 ppb
Concentration per Run 3	0.117 ppb	0.028 ppb	141.249 ppb	1.562 ppb	117.702 %	-0.002 ppb	0.001 ppb	125.942 %	0.262 ppb
Concentration RSD	12.5 %	12.9 %	1.9 %	28.9 %	1.6 %	30.3 %	64.9 %	1.6 %	15.5 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	2.491 ppb	116.493 %	115.782 %	0.043 ppb	0.014 ppb	102.757 %
Concentration per Run 1	2.407 ppb	117.999 %	117.503 %	0.033 ppb	0.011 ppb	107.218 %
Concentration per Run 2	2.559 ppb	115.285 %	114.522 %	0.047 ppb	0.015 ppb	100.996 %
Concentration per Run 3	2.508 ppb	116.194 %	115.321 %	0.048 ppb	0.015 ppb	100.058 %
Concentration RSD	3.1 %	1.2 %	1.3 %	18.7 %	15.1 %	3.8 %

Alpha ICPMSQ Data with SRD

12/2/2024 3:12:07 PM

Analysis index:	39	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	L2470217-06d10 2008SL	Rack	1		
Analysis started at:	12/2/2024 11:12:34 AM	Vial	18		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	130.718 %	124.619 %	0.008 ppb	208,307.794 ppb	24,008.730 ppb	0.986 ppb	7,769.395 ppb	9,820.524 ppb	126.224 %
Concentration per Run 1	128.658 %	120.734 %	0.009 ppb	213,208.519 ppb	24,457.439 ppb	1.044 ppb	8,293.254 ppb	10,504.400 ppb	123.216 %
Concentration per Run 2	131.209 %	124.462 %	0.009 ppb	205,494.358 ppb	23,753.231 ppb	0.846 ppb	7,536.146 ppb	9,489.924 ppb	127.142 %
Concentration per Run 3	132.287 %	128.660 %	0.005 ppb	206,220.505 ppb	23,815.520 ppb	1.068 ppb	7,478.784 ppb	9,467.248 ppb	128.315 %
Concentration RSD	1.4 %	3.2 %	32.4 %	2.0 %	1.6 %	12.4 %	5.9 %	6.0 %	2.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.090 ppb	0.013 ppb	0.551 ppb	3.463 ppb	0.002 ppb	-0.140 ppb	0.189 ppb	-0.064 ppb	122.641 %
Concentration per Run 1	0.088 ppb	0.009 ppb	0.580 ppb	3.468 ppb	0.004 ppb	-0.107 ppb	0.198 ppb	-0.051 ppb	117.645 %
Concentration per Run 2	0.098 ppb	0.014 ppb	0.539 ppb	3.243 ppb	0.000 ppb	-0.135 ppb	0.202 ppb	-0.072 ppb	125.097 %
Concentration per Run 3	0.084 ppb	0.015 ppb	0.535 ppb	3.678 ppb	0.002 ppb	-0.178 ppb	0.167 ppb	-0.068 ppb	125.182 %
Concentration RSD	8.1 %	25.2 %	4.6 %	6.3 %	97.9 %	25.6 %	10.3 %	17.5 %	3.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.125 ppb	0.049 ppb	160.631 ppb	0.829 ppb	115.482 %	-0.002 ppb	0.003 ppb	122.219 %	0.173 ppb
Concentration per Run 1	0.129 ppb	0.046 ppb	166.341 ppb	0.656 ppb	112.262 %	-0.003 ppb	0.002 ppb	118.798 %	0.157 ppb
Concentration per Run 2	0.122 ppb	0.047 ppb	156.846 ppb	0.809 ppb	116.503 %	-0.002 ppb	0.003 ppb	124.174 %	0.169 ppb
Concentration per Run 3	0.125 ppb	0.054 ppb	158.706 ppb	1.022 ppb	117.681 %	-0.002 ppb	0.005 ppb	123.685 %	0.192 ppb
Concentration RSD	2.9 %	9.2 %	3.1 %	22.2 %	2.5 %	21.8 %	43.7 %	2.4 %	10.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	2.734 ppb	113.019 %	112.240 %	0.028 ppb	0.015 ppb	93.186 %
Concentration per Run 1	2.777 ppb	106.990 %	106.764 %	0.023 ppb	0.015 ppb	89.810 %
Concentration per Run 2	2.612 ppb	114.612 %	113.418 %	0.032 ppb	0.016 ppb	93.561 %
Concentration per Run 3	2.813 ppb	117.454 %	116.538 %	0.028 ppb	0.014 ppb	96.188 %
Concentration RSD	3.9 %	4.8 %	4.4 %	15.6 %	5.8 %	3.4 %

Alpha ICPMSQ Data with SRD

12/2/2024 3:12:07 PM

Analysis index: 40
Analysis label: L2470217-07d10 2008SL
Analysis started at: 12/2/2024 11:17:12 AM
User name ALPHALAB\Metals-Instrument
Rack 1
Vial 19
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	128.874 %	125.778 %	0.008 ppb	209,673.976 ppb	24,130.380 ppb	0.799 ppb	7,661.787 ppb	9,609.730 ppb	122.364 %
Concentration per Run 1	128.268 %	132.076 %	0.011 ppb	197,524.214 ppb	22,727.359 ppb	0.692 ppb	7,099.705 ppb	9,012.879 ppb	120.906 %
Concentration per Run 2	128.793 %	125.888 %	0.007 ppb	205,905.085 ppb	23,534.935 ppb	0.840 ppb	7,534.727 ppb	9,364.951 ppb	123.898 %
Concentration per Run 3	129.560 %	119.371 %	0.006 ppb	225,592.629 ppb	26,128.846 ppb	0.865 ppb	8,350.930 ppb	10,451.359 ppb	122.289 %
Concentration RSD	0.5 %	5.1 %	30.4 %	6.9 %	7.4 %	11.7 %	8.3 %	7.8 %	1.2 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.088 ppb	0.049 ppb	0.404 ppb	4.285 ppb	0.003 ppb	-0.129 ppb	0.200 ppb	-0.071 ppb	123.668 %
Concentration per Run 1	0.072 ppb	0.049 ppb	0.399 ppb	3.826 ppb	0.001 ppb	-0.114 ppb	0.172 ppb	-0.099 ppb	128.613 %
Concentration per Run 2	0.097 ppb	0.038 ppb	0.360 ppb	4.601 ppb	0.002 ppb	-0.146 ppb	0.210 ppb	-0.080 ppb	126.732 %
Concentration per Run 3	0.095 ppb	0.059 ppb	0.452 ppb	4.428 ppb	0.005 ppb	-0.126 ppb	0.218 ppb	-0.036 ppb	115.657 %
Concentration RSD	15.3 %	21.4 %	11.5 %	9.5 %	68.6 %	12.8 %	12.3 %	45.4 %	5.7 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.124 ppb	0.033 ppb	161.776 ppb	0.646 ppb	116.732 %	-0.003 ppb	0.004 ppb	123.536 %	0.134 ppb
Concentration per Run 1	0.098 ppb	0.025 ppb	151.293 ppb	0.447 ppb	123.079 %	-0.004 ppb	0.004 ppb	130.348 %	0.114 ppb
Concentration per Run 2	0.116 ppb	0.032 ppb	157.252 ppb	0.587 ppb	118.651 %	-0.003 ppb	0.006 ppb	123.891 %	0.130 ppb
Concentration per Run 3	0.159 ppb	0.043 ppb	176.782 ppb	0.903 ppb	108.465 %	-0.002 ppb	0.003 ppb	116.370 %	0.158 ppb
Concentration RSD	25.2 %	27.3 %	8.2 %	36.2 %	6.4 %	38.6 %	30.5 %	5.7 %	16.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	2.706 ppb	114.761 %	113.579 %	0.021 ppb	0.017 ppb	100.016 %
Concentration per Run 1	2.585 ppb	122.008 %	120.839 %	0.014 ppb	0.015 ppb	107.679 %
Concentration per Run 2	2.605 ppb	115.936 %	115.519 %	0.023 ppb	0.016 ppb	99.807 %
Concentration per Run 3	2.929 ppb	106.339 %	104.380 %	0.026 ppb	0.020 ppb	92.562 %
Concentration RSD	7.1 %	6.9 %	7.4 %	31.3 %	14.7 %	7.6 %

Alpha ICPMSQ Data with SRD

12/2/2024 3:12:07 PM

Analysis index:	41	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	L2470217-08d10 2008SL	Rack	1		
Analysis started at:	12/2/2024 11:21:50 AM	Vial	20		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	132.682 %	124.102 %	0.005 ppb	216,921.797 ppb	24,590.688 ppb	1.513 ppb	7,944.924 ppb	10,056.694 ppb	129.793 %
Concentration per Run 1	129.979 %	121.549 %	0.006 ppb	222,769.091 ppb	25,338.668 ppb	1.577 ppb	8,247.285 ppb	10,498.887 ppb	129.664 %
Concentration per Run 2	133.291 %	124.979 %	0.007 ppb	212,146.176 ppb	23,838.083 ppb	1.687 ppb	7,785.152 ppb	9,765.593 ppb	130.038 %
Concentration per Run 3	134.776 %	125.778 %	0.002 ppb	215,850.123 ppb	24,595.313 ppb	1.276 ppb	7,802.335 ppb	9,905.602 ppb	129.677 %
Concentration RSD	1.9 %	1.8 %	47.7 %	2.5 %	3.1 %	14.1 %	3.3 %	3.9 %	0.2 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.099 ppb	0.035 ppb	0.448 ppb	4.151 ppb	0.006 ppb	-0.098 ppb	0.218 ppb	0.020 ppb	125.226 %
Concentration per Run 1	0.096 ppb	0.035 ppb	0.465 ppb	3.986 ppb	0.004 ppb	-0.071 ppb	0.256 ppb	0.054 ppb	119.576 %
Concentration per Run 2	0.101 ppb	0.029 ppb	0.420 ppb	4.569 ppb	0.006 ppb	-0.104 ppb	0.157 ppb	-0.015 ppb	128.041 %
Concentration per Run 3	0.100 ppb	0.041 ppb	0.460 ppb	3.899 ppb	0.007 ppb	-0.118 ppb	0.242 ppb	0.021 ppb	128.060 %
Concentration RSD	2.5 %	17.1 %	5.5 %	8.8 %	31.5 %	24.9 %	24.5 %	173.7 %	3.9 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.121 ppb	0.054 ppb	164.678 ppb	0.532 ppb	115.709 %	-0.003 ppb	0.003 ppb	123.810 %	0.111 ppb
Concentration per Run 1	0.127 ppb	0.052 ppb	170.774 ppb	0.429 ppb	111.288 %	-0.002 ppb	0.004 ppb	119.572 %	0.102 ppb
Concentration per Run 2	0.112 ppb	0.056 ppb	160.298 ppb	0.537 ppb	118.720 %	-0.003 ppb	0.002 ppb	126.003 %	0.100 ppb
Concentration per Run 3	0.125 ppb	0.055 ppb	162.962 ppb	0.631 ppb	117.119 %	-0.003 ppb	0.002 ppb	125.855 %	0.132 ppb
Concentration RSD	6.5 %	4.3 %	3.3 %	19.0 %	3.4 %	10.3 %	48.7 %	3.0 %	15.8 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	2.773 ppb	114.677 %	113.923 %	0.017 ppb	0.015 ppb	95.015 %
Concentration per Run 1	2.930 ppb	110.890 %	109.205 %	0.013 ppb	0.015 ppb	94.211 %
Concentration per Run 2	2.680 ppb	116.068 %	116.074 %	0.019 ppb	0.014 ppb	93.941 %
Concentration per Run 3	2.708 ppb	117.074 %	116.490 %	0.019 ppb	0.015 ppb	96.893 %
Concentration RSD	4.9 %	2.9 %	3.6 %	21.0 %	3.6 %	1.7 %

Alpha ICPMSQ Data with SRD

12/2/2024 3:12:07 PM

Analysis index:	42	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	L2470217-09d10 2008SL	Rack	1		
Analysis started at:	12/2/2024 11:26:29 AM	Vial	21		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	131.007 %	127.345 %	0.007 ppb	208,607.058 ppb	23,826.686 ppb	0.968 ppb	7,618.416 ppb	9,681.595 ppb	129.699 %
Concentration per Run 1	129.890 %	125.919 %	0.009 ppb	210,549.655 ppb	23,924.443 ppb	1.012 ppb	7,752.518 ppb	9,900.362 ppb	130.257 %
Concentration per Run 2	130.333 %	128.222 %	0.007 ppb	205,342.575 ppb	23,833.936 ppb	0.827 ppb	7,512.469 ppb	9,576.780 ppb	127.806 %
Concentration per Run 3	132.797 %	127.893 %	0.005 ppb	209,928.944 ppb	23,721.678 ppb	1.064 ppb	7,590.261 ppb	9,567.644 ppb	131.034 %
Concentration RSD	1.2 %	1.0 %	29.0 %	1.4 %	0.4 %	12.9 %	1.6 %	2.0 %	1.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.079 ppb	0.008 ppb	0.457 ppb	3.198 ppb	0.004 ppb	-0.131 ppb	0.210 ppb	0.520 ppb	126.069 %
Concentration per Run 1	0.092 ppb	0.003 ppb	0.482 ppb	3.191 ppb	0.002 ppb	-0.127 ppb	0.240 ppb	1.131 ppb	123.452 %
Concentration per Run 2	0.093 ppb	0.006 ppb	0.445 ppb	3.811 ppb	0.006 ppb	-0.112 ppb	0.206 ppb	0.383 ppb	126.228 %
Concentration per Run 3	0.054 ppb	0.014 ppb	0.444 ppb	2.593 ppb	0.004 ppb	-0.153 ppb	0.184 ppb	0.046 ppb	128.527 %
Concentration RSD	27.7 %	72.0 %	4.7 %	19.0 %	52.4 %	15.8 %	13.3 %	106.7 %	2.0 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.131 ppb	0.028 ppb	159.565 ppb	0.481 ppb	118.089 %	-0.002 ppb	0.003 ppb	125.320 %	0.100 ppb
Concentration per Run 1	0.125 ppb	0.027 ppb	161.635 ppb	0.416 ppb	117.622 %	-0.002 ppb	0.003 ppb	123.678 %	0.089 ppb
Concentration per Run 2	0.139 ppb	-0.003 ppb	158.554 ppb	0.474 ppb	117.648 %	-0.003 ppb	0.001 ppb	126.254 %	0.094 ppb
Concentration per Run 3	0.128 ppb	0.060 ppb	158.507 ppb	0.553 ppb	118.997 %	-0.002 ppb	0.004 ppb	126.028 %	0.116 ppb
Concentration RSD	5.8 %	112.7 %	1.1 %	14.3 %	0.7 %	9.4 %	62.1 %	1.1 %	14.3 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	2.779 ppb	116.439 %	115.163 %	0.015 ppb	0.013 ppb	97.908 %
Concentration per Run 1	2.826 ppb	113.795 %	112.255 %	0.011 ppb	0.014 ppb	96.441 %
Concentration per Run 2	2.728 ppb	117.983 %	117.394 %	0.017 ppb	0.013 ppb	98.457 %
Concentration per Run 3	2.782 ppb	117.540 %	115.840 %	0.017 ppb	0.013 ppb	98.826 %
Concentration RSD	1.8 %	2.0 %	2.3 %	21.4 %	5.1 %	1.3 %

Alpha ICPMSQ Data with SRD

12/2/2024 3:12:07 PM

Analysis index: 43
Analysis label: CCV
Analysis started at: 12/2/2024 11:31:08 AM
User name ALPHALAB\Metals-Instrument
Rack 0
Vial 9
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	118.568 %	117.084 %	63.756 ppb	6,217.348 ppb	6,191.472 ppb	60.952 ppb	6,376.491 ppb	6,251.102 ppb	121.412 %
Concentration per Run 1	116.394 %	120.656 %	64.134 ppb	5,979.176 ppb	5,911.090 ppb	57.735 ppb	6,087.844 ppb	6,089.201 ppb	119.240 %
Concentration per Run 2	120.251 %	115.079 %	63.593 ppb	6,311.207 ppb	6,318.553 ppb	62.450 ppb	6,467.504 ppb	6,291.470 ppb	123.789 %
Concentration per Run 3	119.059 %	115.518 %	63.540 ppb	6,361.660 ppb	6,344.772 ppb	62.670 ppb	6,574.127 ppb	6,372.634 ppb	121.208 %
Recovery Percentage 1			106.259 %	103.622 %	103.191 %	101.586 %	106.275 %	104.185 %	
Concentration RSD	1.7 %	2.6 %	0.5 %	3.3 %	3.9 %	4.6 %	4.0 %	2.3 %	1.9 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	62.008 ppb	62.056 ppb	61.381 ppb	6,251.187 ppb	63.954 ppb	63.582 ppb	64.342 ppb	65.031 ppb	115.556 %
Concentration per Run 1	59.158 ppb	59.569 ppb	58.571 ppb	5,977.563 ppb	60.884 ppb	60.992 ppb	61.982 ppb	63.210 ppb	118.276 %
Concentration per Run 2	63.343 ppb	62.602 ppb	61.548 ppb	6,366.548 ppb	65.139 ppb	64.775 ppb	65.706 ppb	65.841 ppb	114.777 %
Concentration per Run 3	63.522 ppb	63.997 ppb	64.024 ppb	6,409.451 ppb	65.841 ppb	64.978 ppb	65.336 ppb	66.041 ppb	113.615 %
Recovery Percentage 1	103.347 %	103.427 %	102.302 %	104.186 %	106.591 %	105.969 %	107.236 %	108.385 %	
Concentration RSD	4.0 %	3.6 %	4.4 %	3.8 %	4.2 %	3.5 %	3.2 %	2.4 %	2.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	63.770 ppb	64.047 ppb	64.204 ppb	60.793 ppb	114.730 %	63.691 ppb	64.187 ppb	119.633 %	62.137 ppb
Concentration per Run 1	61.349 ppb	61.353 ppb	62.182 ppb	58.581 ppb	117.473 %	61.355 ppb	61.878 ppb	122.362 %	60.433 ppb
Concentration per Run 2	64.581 ppb	64.815 ppb	64.661 ppb	61.355 ppb	113.403 %	64.590 ppb	64.815 ppb	118.148 %	62.262 ppb
Concentration per Run 3	65.381 ppb	65.974 ppb	65.769 ppb	62.442 ppb	113.315 %	65.127 ppb	65.867 ppb	118.388 %	63.717 ppb
Recovery Percentage 1	106.284 %	106.746 %	107.007 %	101.321 %		106.151 %	106.978 %		103.562 %
Concentration RSD	3.3 %	3.8 %	2.9 %	3.3 %	2.1 %	3.2 %	3.2 %	2.0 %	2.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	59.089 ppb	109.629 %	109.267 %	60.568 ppb	63.010 ppb	110.772 %
Concentration per Run 1	57.308 ppb	112.614 %	112.867 %	56.018 ppb	58.727 ppb	116.737 %
Concentration per Run 2	59.301 ppb	107.370 %	107.907 %	62.150 ppb	64.493 ppb	108.462 %
Concentration per Run 3	60.658 ppb	108.902 %	107.027 %	63.536 ppb	65.810 ppb	107.118 %
Recovery Percentage 1	98.482 %			100.947 %	105.017 %	
Concentration RSD	2.9 %	2.5 %	2.9 %	6.6 %	6.0 %	4.7 %

Alpha ICPMSQ Data with SRD

12/2/2024 3:12:07 PM

Analysis index: 44
Analysis label: CCB
Analysis started at: 12/2/2024 11:35:50 AM
User name ALPHALAB\Metals-Instrument
Rack 0
Vial 10
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	115.535 %	111.769 %	0.009 ppb	32.450 ppb	-0.524 ppb	-0.555 ppb	6.522 ppb	-1.801 ppb	113.225 %
Concentration per Run 1	115.218 %	113.231 %	0.009 ppb	28.316 ppb	-0.718 ppb	-0.496 ppb	8.685 ppb	-2.014 ppb	109.693 %
Concentration per Run 2	115.724 %	109.550 %	0.008 ppb	43.383 ppb	-0.411 ppb	-0.582 ppb	4.093 ppb	-0.990 ppb	115.499 %
Concentration per Run 3	115.665 %	112.526 %	0.009 ppb	25.650 ppb	-0.444 ppb	-0.588 ppb	6.789 ppb	-2.400 ppb	114.483 %
Recovery Percentage 1			1.736 %	6.490 %	-0.749 %	-5.554 %	6.522 %	-1.801 %	
Concentration RSD	0.2 %	1.7 %	3.7 %	29.5 %	32.1 %	9.2 %	35.4 %	40.5 %	2.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.045 ppb	0.001 ppb	-0.028 ppb	11.103 ppb	0.001 ppb	-0.187 ppb	-0.087 ppb	-0.386 ppb	110.519 %
Concentration per Run 1	-0.056 ppb	-0.002 ppb	-0.037 ppb	9.351 ppb	0.001 ppb	-0.194 ppb	-0.102 ppb	-0.382 ppb	111.326 %
Concentration per Run 2	-0.039 ppb	0.006 ppb	-0.023 ppb	12.317 ppb	0.002 ppb	-0.189 ppb	-0.087 ppb	-0.383 ppb	109.570 %
Concentration per Run 3	-0.040 ppb	-0.003 ppb	-0.024 ppb	11.642 ppb	-0.001 ppb	-0.178 ppb	-0.072 ppb	-0.394 ppb	110.661 %
Recovery Percentage 1	-0.905 %	0.050 %	-2.807 %	22.207 %	0.137 %	-9.343 %	-8.719 %	-7.724 %	
Concentration RSD	21.5 %	992.0 %	26.9 %	14.0 %	202.0 %	4.5 %	16.9 %	1.7 %	0.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.047 ppb	0.199 ppb	-0.003 ppb	1.750 ppb	111.605 %	0.000 ppb	0.002 ppb	114.158 %	0.148 ppb
Concentration per Run 1	0.043 ppb	0.242 ppb	-0.003 ppb	1.327 ppb	113.123 %	0.001 ppb	0.003 ppb	114.985 %	0.111 ppb
Concentration per Run 2	0.050 ppb	0.184 ppb	-0.002 ppb	1.855 ppb	110.204 %	-0.001 ppb	0.002 ppb	113.407 %	0.154 ppb
Concentration per Run 3	0.048 ppb	0.171 ppb	-0.003 ppb	2.069 ppb	111.487 %	-0.001 ppb	0.002 ppb	114.083 %	0.178 ppb
Recovery Percentage 1	9.351 %	3.982 %	-0.027 %	87.524 %		-0.103 %	1.027 %		3.692 %
Concentration RSD	7.9 %	18.9 %	27.4 %	21.8 %	1.3 %	206.2 %	23.0 %	0.7 %	23.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	-0.003 ppb	105.079 %	104.676 %	0.392 ppb	0.009 ppb	106.123 %
Concentration per Run 1	0.005 ppb	105.769 %	105.391 %	0.449 ppb	0.009 ppb	108.801 %
Concentration per Run 2	-0.009 ppb	104.218 %	103.035 %	0.403 ppb	0.009 ppb	104.789 %
Concentration per Run 3	-0.006 ppb	105.251 %	105.601 %	0.323 ppb	0.008 ppb	104.780 %
Recovery Percentage 1	-0.659 %			39.152 %	0.892 %	
Concentration RSD	232.7 %	0.8 %	1.4 %	16.2 %	7.0 %	2.2 %

Alpha ICPMSQ Data with SRD

12/2/2024 3:12:07 PM

Analysis index:	45	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	xL2470217-13 2008SL	Rack	1		
Analysis started at:	12/2/2024 11:41:07 AM	Vial	25		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	136.755 %	139.182 %	0.009 ppb	2,214,463.546 ppb	247,120.163 ppb	5.432 ppb	62,303.036 ppb	68,791.916 ppb	132.289 %
Concentration per Run 1	136.207 %	141.585 %	0.010 ppb	2,150,120.765 ppb	242,883.312 ppb	5.128 ppb	62,401.360 ppb	68,871.334 ppb	131.462 %
Concentration per Run 2	136.337 %	136.744 %	0.007 ppb	2,246,350.247 ppb	248,145.407 ppb	5.580 ppb	62,798.331 ppb	68,729.440 ppb	132.932 %
Concentration per Run 3	137.720 %	139.219 %	0.010 ppb	2,246,919.626 ppb	250,331.769 ppb	5.587 ppb	61,709.417 ppb	68,774.976 ppb	132.473 %
Concentration RSD	0.6 %	1.7 %	16.3 %	2.5 %	1.5 %	4.8 %	0.9 %	0.1 %	0.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.301 ppb	0.111 ppb	3.091 ppb	16.586 ppb	0.029 ppb	0.352 ppb	1.808 ppb	1.093 ppb	121.405 %
Concentration per Run 1	0.273 ppb	0.105 ppb	2.964 ppb	16.235 ppb	0.025 ppb	0.384 ppb	1.785 ppb	1.058 ppb	120.313 %
Concentration per Run 2	0.307 ppb	0.112 ppb	3.158 ppb	16.661 ppb	0.029 ppb	0.292 ppb	1.767 ppb	1.129 ppb	123.133 %
Concentration per Run 3	0.322 ppb	0.118 ppb	3.151 ppb	16.862 ppb	0.032 ppb	0.380 ppb	1.873 ppb	1.093 ppb	120.769 %
Concentration RSD	8.4 %	6.0 %	3.6 %	1.9 %	12.1 %	14.7 %	3.1 %	3.2 %	1.2 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.882 ppb	0.120 ppb	1,473.360 ppb	3.874 ppb	106.182 %	-0.001 ppb	0.033 ppb	109.944 %	0.361 ppb
Concentration per Run 1	0.853 ppb	0.096 ppb	1,464.914 ppb	3.612 ppb	106.810 %	0.000 ppb	0.030 ppb	110.100 %	0.340 ppb
Concentration per Run 2	0.869 ppb	0.110 ppb	1,467.997 ppb	3.940 ppb	105.932 %	-0.001 ppb	0.032 ppb	109.787 %	0.373 ppb
Concentration per Run 3	0.926 ppb	0.153 ppb	1,487.169 ppb	4.071 ppb	105.805 %	-0.002 ppb	0.036 ppb	109.945 %	0.370 ppb
Concentration RSD	4.3 %	24.8 %	0.8 %	6.1 %	0.5 %	81.8 %	9.8 %	0.1 %	5.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	27.229 ppb	107.880 %	101.793 %	0.116 ppb	0.045 ppb	78.703 %
Concentration per Run 1	26.418 ppb	108.812 %	102.064 %	0.097 ppb	0.040 ppb	81.815 %
Concentration per Run 2	27.246 ppb	107.226 %	101.897 %	0.129 ppb	0.048 ppb	77.401 %
Concentration per Run 3	28.022 ppb	107.603 %	101.417 %	0.123 ppb	0.046 ppb	76.894 %
Concentration RSD	2.9 %	0.8 %	0.3 %	14.7 %	9.9 %	3.4 %

Alpha ICPMSQ Data with SRD

12/2/2024 3:12:07 PM

Analysis index:	46	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	L2470217-10d10 2008SL	Rack	1		
Analysis started at:	12/2/2024 11:45:43 AM	Vial	22		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	132.292 %	124.227 %	0.009 ppb	200,561.830 ppb	23,005.535 ppb	1.213 ppb	7,399.222 ppb	9,467.444 ppb	133.696 %
Concentration per Run 1	130.770 %	127.266 %	0.008 ppb	190,479.271 ppb	21,918.838 ppb	1.062 ppb	7,030.106 ppb	9,024.808 ppb	133.435 %
Concentration per Run 2	132.600 %	121.345 %	0.009 ppb	204,271.133 ppb	23,592.148 ppb	1.303 ppb	7,479.288 ppb	9,593.347 ppb	132.392 %
Concentration per Run 3	133.506 %	124.071 %	0.009 ppb	206,935.087 ppb	23,505.618 ppb	1.275 ppb	7,688.271 ppb	9,784.179 ppb	135.261 %
Concentration RSD	1.1 %	2.4 %	6.9 %	4.4 %	4.1 %	10.9 %	4.5 %	4.2 %	1.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.074 ppb	0.015 ppb	0.443 ppb	5.131 ppb	0.003 ppb	-0.139 ppb	0.234 ppb	-0.044 ppb	125.510 %
Concentration per Run 1	0.077 ppb	0.013 ppb	0.366 ppb	3.971 ppb	0.005 ppb	-0.142 ppb	0.230 ppb	-0.057 ppb	126.404 %
Concentration per Run 2	0.083 ppb	0.019 ppb	0.482 ppb	6.060 ppb	0.002 ppb	-0.154 ppb	0.223 ppb	-0.058 ppb	123.232 %
Concentration per Run 3	0.062 ppb	0.013 ppb	0.483 ppb	5.362 ppb	0.002 ppb	-0.121 ppb	0.251 ppb	-0.018 ppb	126.893 %
Concentration RSD	14.1 %	22.0 %	15.2 %	20.7 %	59.0 %	11.9 %	6.2 %	52.2 %	1.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.125 ppb	0.059 ppb	153.810 ppb	0.599 ppb	118.642 %	-0.003 ppb	0.003 ppb	126.910 %	0.082 ppb
Concentration per Run 1	0.126 ppb	0.048 ppb	147.639 ppb	0.463 ppb	120.866 %	-0.003 ppb	0.004 ppb	128.235 %	0.071 ppb
Concentration per Run 2	0.118 ppb	0.071 ppb	157.277 ppb	0.650 ppb	116.319 %	-0.002 ppb	0.003 ppb	124.490 %	0.083 ppb
Concentration per Run 3	0.131 ppb	0.057 ppb	156.513 ppb	0.684 ppb	118.741 %	-0.003 ppb	0.004 ppb	128.004 %	0.092 ppb
Concentration RSD	4.9 %	19.7 %	3.5 %	19.9 %	1.9 %	16.9 %	13.9 %	1.7 %	12.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	2.642 ppb	118.008 %	116.299 %	0.042 ppb	0.016 ppb	103.835 %
Concentration per Run 1	2.545 ppb	120.524 %	118.378 %	0.030 ppb	0.016 ppb	109.001 %
Concentration per Run 2	2.701 ppb	115.950 %	115.300 %	0.046 ppb	0.016 ppb	102.040 %
Concentration per Run 3	2.679 ppb	117.549 %	115.220 %	0.049 ppb	0.015 ppb	100.465 %
Concentration RSD	3.2 %	2.0 %	1.5 %	24.2 %	2.8 %	4.4 %

Alpha ICPMSQ Data with SRD

12/2/2024 3:12:07 PM

Analysis index:	47	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	L2470217-11d10 2008SL	Rack	1		
Analysis started at:	12/2/2024 11:50:23 AM	Vial	23		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	132.655 %	126.963 %	0.009 ppb	197,804.445 ppb	22,652.882 ppb	0.918 ppb	7,327.616 ppb	9,413.662 ppb	131.403 %
Concentration per Run 1	131.995 %	129.021 %	0.008 ppb	195,092.154 ppb	22,336.344 ppb	0.873 ppb	7,174.750 ppb	9,275.202 ppb	130.789 %
Concentration per Run 2	132.324 %	125.449 %	0.009 ppb	199,186.184 ppb	22,932.146 ppb	0.974 ppb	7,260.483 ppb	9,400.967 ppb	131.701 %
Concentration per Run 3	133.644 %	126.420 %	0.011 ppb	199,134.997 ppb	22,690.155 ppb	0.909 ppb	7,547.616 ppb	9,564.816 ppb	131.719 %
Concentration RSD	0.7 %	1.5 %	15.4 %	1.2 %	1.3 %	5.6 %	2.7 %	1.5 %	0.4 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.085 ppb	0.014 ppb	0.360 ppb	3.898 ppb	0.003 ppb	-0.108 ppb	0.222 ppb	-0.036 ppb	126.761 %
Concentration per Run 1	0.070 ppb	0.016 ppb	0.344 ppb	4.014 ppb	0.002 ppb	-0.093 ppb	0.214 ppb	-0.055 ppb	127.039 %
Concentration per Run 2	0.055 ppb	0.013 ppb	0.357 ppb	3.866 ppb	0.003 ppb	-0.125 ppb	0.240 ppb	-0.035 ppb	127.975 %
Concentration per Run 3	0.128 ppb	0.013 ppb	0.379 ppb	3.814 ppb	0.003 ppb	-0.106 ppb	0.212 ppb	-0.018 ppb	125.269 %
Concentration RSD	45.8 %	12.8 %	4.9 %	2.7 %	20.9 %	14.8 %	7.2 %	51.0 %	1.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.135 ppb	0.041 ppb	154.275 ppb	0.496 ppb	117.975 %	-0.002 ppb	0.002 ppb	125.804 %	0.064 ppb
Concentration per Run 1	0.129 ppb	0.030 ppb	150.317 ppb	0.413 ppb	119.908 %	-0.003 ppb	0.001 ppb	126.241 %	0.053 ppb
Concentration per Run 2	0.134 ppb	0.034 ppb	154.588 ppb	0.531 ppb	117.636 %	-0.002 ppb	0.002 ppb	125.929 %	0.066 ppb
Concentration per Run 3	0.141 ppb	0.060 ppb	157.919 ppb	0.545 ppb	116.382 %	-0.003 ppb	0.003 ppb	125.241 %	0.074 ppb
Concentration RSD	4.5 %	40.3 %	2.5 %	14.6 %	1.5 %	31.1 %	41.6 %	0.4 %	17.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	2.720 ppb	117.929 %	115.482 %	0.032 ppb	0.012 ppb	101.468 %
Concentration per Run 1	2.671 ppb	118.445 %	115.394 %	0.022 ppb	0.014 ppb	103.676 %
Concentration per Run 2	2.750 ppb	117.754 %	115.611 %	0.036 ppb	0.011 ppb	100.459 %
Concentration per Run 3	2.741 ppb	117.588 %	115.440 %	0.037 ppb	0.011 ppb	100.268 %
Concentration RSD	1.6 %	0.4 %	0.1 %	25.8 %	13.4 %	1.9 %

Alpha ICPMSQ Data with SRD

12/2/2024 3:12:07 PM

Analysis index:	48	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	xL2470217-12d10 2008SL	Rack	1		
Analysis started at:	12/2/2024 11:55:02 AM	Vial	24		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	128.547 %	125.397 %	0.005 ppb	75.928 ppb	3.518 ppb	0.517 ppb	9.243 ppb	1.890 ppb	120.364 %
Concentration per Run 1	129.183 %	125.653 %	0.004 ppb	82.566 ppb	3.775 ppb	0.494 ppb	11.296 ppb	2.718 ppb	120.902 %
Concentration per Run 2	125.699 %	125.026 %	0.006 ppb	67.385 ppb	2.954 ppb	0.522 ppb	6.887 ppb	0.666 ppb	120.187 %
Concentration per Run 3	130.759 %	125.512 %	0.005 ppb	77.833 ppb	3.826 ppb	0.534 ppb	9.545 ppb	2.287 ppb	120.004 %
Concentration RSD	2.0 %	0.3 %	15.8 %	10.2 %	13.9 %	3.9 %	24.0 %	57.2 %	0.4 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.070 ppb	0.004 ppb	0.022 ppb	7.112 ppb	0.002 ppb	-0.156 ppb	0.047 ppb	0.111 ppb	124.397 %
Concentration per Run 1	0.093 ppb	0.009 ppb	0.012 ppb	7.652 ppb	0.004 ppb	-0.157 ppb	0.059 ppb	0.104 ppb	122.988 %
Concentration per Run 2	0.017 ppb	-0.005 ppb	0.028 ppb	6.247 ppb	-0.002 ppb	-0.157 ppb	0.048 ppb	0.104 ppb	126.067 %
Concentration per Run 3	0.100 ppb	0.006 ppb	0.026 ppb	7.437 ppb	0.006 ppb	-0.155 ppb	0.035 ppb	0.125 ppb	124.136 %
Concentration RSD	66.0 %	210.0 %	40.0 %	10.6 %	183.2 %	0.5 %	25.7 %	10.7 %	1.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.020 ppb	0.027 ppb	0.017 ppb	0.141 ppb	124.279 %	-0.003 ppb	0.000 ppb	129.080 %	0.068 ppb
Concentration per Run 1	0.018 ppb	0.001 ppb	0.017 ppb	0.096 ppb	122.556 %	-0.002 ppb	0.000 ppb	128.851 %	0.062 ppb
Concentration per Run 2	0.023 ppb	0.027 ppb	0.019 ppb	0.129 ppb	126.288 %	-0.003 ppb	0.000 ppb	130.478 %	0.070 ppb
Concentration per Run 3	0.019 ppb	0.053 ppb	0.016 ppb	0.199 ppb	123.993 %	-0.003 ppb	-0.001 ppb	127.910 %	0.074 ppb
Concentration RSD	13.0 %	95.1 %	9.7 %	37.1 %	1.5 %	16.7 %	95.1 %	1.0 %	8.8 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.004 ppb	115.801 %	113.680 %	0.023 ppb	0.009 ppb	111.093 %
Concentration per Run 1	0.002 ppb	115.487 %	113.809 %	0.015 ppb	0.008 ppb	113.373 %
Concentration per Run 2	0.008 ppb	114.898 %	113.721 %	0.027 ppb	0.010 ppb	109.167 %
Concentration per Run 3	0.002 ppb	117.019 %	113.511 %	0.027 ppb	0.008 ppb	110.739 %
Concentration RSD	90.7 %	0.9 %	0.1 %	30.5 %	10.8 %	1.9 %

Alpha ICPMSQ Data with SRD

12/2/2024 3:12:07 PM

Analysis index:	49	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	OB 0217-13 10x	Rack	1		
Analysis started at:	12/2/2024 12:03:49 PM	Vial	34		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	119.935 %	117.356 %	0.005 ppb	325.623 ppb	21.515 ppb	2.725 ppb	19.858 ppb	9.153 ppb	115.301 %
Concentration per Run 1	118.918 %	116.755 %	0.004 ppb	327.397 ppb	21.391 ppb	2.823 ppb	21.238 ppb	9.502 ppb	115.161 %
Concentration per Run 2	121.082 %	118.212 %	0.006 ppb	318.786 ppb	21.567 ppb	2.794 ppb	17.885 ppb	8.499 ppb	116.144 %
Concentration per Run 3	119.805 %	117.100 %	0.004 ppb	330.688 ppb	21.588 ppb	2.559 ppb	20.451 ppb	9.457 ppb	114.598 %
Concentration RSD	0.9 %	0.6 %	28.6 %	1.9 %	0.5 %	5.3 %	8.8 %	6.2 %	0.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.078 ppb	0.021 ppb	0.009 ppb	2.084 ppb	0.028 ppb	0.299 ppb	-0.046 ppb	0.151 ppb	114.209 %
Concentration per Run 1	-0.101 ppb	0.018 ppb	-0.002 ppb	1.664 ppb	0.036 ppb	0.339 ppb	-0.035 ppb	0.108 ppb	111.362 %
Concentration per Run 2	-0.072 ppb	0.027 ppb	0.028 ppb	2.284 ppb	0.027 ppb	0.285 ppb	-0.049 ppb	0.162 ppb	114.886 %
Concentration per Run 3	-0.062 ppb	0.017 ppb	0.001 ppb	2.304 ppb	0.019 ppb	0.273 ppb	-0.054 ppb	0.183 ppb	116.380 %
Concentration RSD	26.1 %	27.8 %	178.0 %	17.5 %	31.9 %	11.9 %	21.6 %	25.7 %	2.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.014 ppb	0.013 ppb	0.142 ppb	0.069 ppb	116.993 %	-0.003 ppb	0.000 ppb	119.539 %	0.316 ppb
Concentration per Run 1	0.020 ppb	0.038 ppb	0.147 ppb	0.045 ppb	115.003 %	-0.003 ppb	-0.001 ppb	117.520 %	0.325 ppb
Concentration per Run 2	0.013 ppb	0.008 ppb	0.139 ppb	0.041 ppb	118.091 %	-0.003 ppb	0.000 ppb	119.780 %	0.307 ppb
Concentration per Run 3	0.009 ppb	-0.007 ppb	0.140 ppb	0.120 ppb	117.886 %	-0.003 ppb	0.000 ppb	121.316 %	0.316 ppb
Concentration RSD	40.8 %	174.6 %	3.1 %	65.0 %	1.5 %	3.2 %	472.0 %	1.6 %	2.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	-0.009 ppb	109.741 %	108.706 %	0.019 ppb	0.019 ppb	85.390 %
Concentration per Run 1	-0.008 ppb	107.127 %	105.172 %	0.016 ppb	0.021 ppb	78.866 %
Concentration per Run 2	-0.006 ppb	110.667 %	109.806 %	0.023 ppb	0.019 ppb	84.812 %
Concentration per Run 3	-0.012 ppb	111.428 %	111.140 %	0.018 ppb	0.016 ppb	92.492 %
Concentration RSD	30.6 %	2.1 %	2.9 %	19.9 %	13.0 %	8.0 %

Alpha ICPMSQ Data with SRD

12/2/2024 3:12:07 PM

Analysis index:	50	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	OB 0217-12 10x	Rack	1		
Analysis started at:	12/2/2024 12:08:28 PM	Vial	33		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	131.434 %	126.953 %	0.007 ppb	201,335.050 ppb	22,906.291 ppb	0.224 ppb	7,492.094 ppb	9,466.480 ppb	131.601 %
Concentration per Run 1	129.452 %	125.809 %	0.008 ppb	194,649.729 ppb	22,141.924 ppb	0.221 ppb	7,417.248 ppb	9,266.830 ppb	130.269 %
Concentration per Run 2	131.965 %	127.392 %	0.006 ppb	204,008.845 ppb	23,121.004 ppb	0.209 ppb	7,459.603 ppb	9,566.780 ppb	131.297 %
Concentration per Run 3	132.887 %	127.658 %	0.007 ppb	205,346.577 ppb	23,455.944 ppb	0.241 ppb	7,599.431 ppb	9,565.830 ppb	133.237 %
Concentration RSD	1.4 %	0.8 %	17.8 %	2.9 %	3.0 %	7.2 %	1.3 %	1.8 %	1.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.075 ppb	0.008 ppb	0.426 ppb	3.706 ppb	0.004 ppb	-0.115 ppb	0.194 ppb	5.492 ppb	122.282 %
Concentration per Run 1	0.034 ppb	0.010 ppb	0.389 ppb	3.888 ppb	0.006 ppb	-0.126 ppb	0.166 ppb	5.361 ppb	122.871 %
Concentration per Run 2	0.117 ppb	0.007 ppb	0.398 ppb	3.612 ppb	0.002 ppb	-0.091 ppb	0.207 ppb	5.621 ppb	120.696 %
Concentration per Run 3	0.074 ppb	0.008 ppb	0.491 ppb	3.620 ppb	0.004 ppb	-0.127 ppb	0.210 ppb	5.494 ppb	123.278 %
Concentration RSD	55.1 %	16.9 %	13.3 %	4.2 %	47.2 %	17.9 %	12.7 %	2.4 %	1.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.124 ppb	0.047 ppb	157.153 ppb	0.334 ppb	116.302 %	-0.003 ppb	0.004 ppb	122.193 %	0.062 ppb
Concentration per Run 1	0.109 ppb	0.029 ppb	153.878 ppb	0.282 ppb	116.374 %	-0.003 ppb	0.003 ppb	123.993 %	0.057 ppb
Concentration per Run 2	0.137 ppb	0.065 ppb	158.613 ppb	0.360 ppb	116.310 %	-0.003 ppb	0.004 ppb	119.876 %	0.065 ppb
Concentration per Run 3	0.126 ppb	0.049 ppb	158.969 ppb	0.361 ppb	116.221 %	-0.003 ppb	0.005 ppb	122.709 %	0.064 ppb
Concentration RSD	11.2 %	38.3 %	1.8 %	13.6 %	0.1 %	7.2 %	18.5 %	1.7 %	7.5 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	2.764 ppb	115.033 %	114.090 %	0.014 ppb	0.014 ppb	104.827 %
Concentration per Run 1	2.727 ppb	115.147 %	115.808 %	0.009 ppb	0.013 ppb	109.789 %
Concentration per Run 2	2.758 ppb	114.495 %	113.677 %	0.017 ppb	0.015 ppb	104.175 %
Concentration per Run 3	2.807 ppb	115.456 %	112.785 %	0.017 ppb	0.015 ppb	100.517 %
Concentration RSD	1.4 %	0.4 %	1.4 %	33.1 %	10.1 %	4.5 %

Alpha ICPMSQ Data with SRD

12/2/2024 3:12:07 PM

Analysis index:	51	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	L2470217-13 2008SL	Rack	1		
Analysis started at:	12/2/2024 12:33:09 PM	Vial	36		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	122.908 %	119.956 %	0.006 ppb	298.572 ppb	19.895 ppb	2.179 ppb	13.653 ppb	13.469 ppb	118.287 %
Concentration per Run 1	120.937 %	127.674 %	0.003 ppb	266.735 ppb	17.622 ppb	1.910 ppb	9.336 ppb	15.509 ppb	117.973 %
Concentration per Run 2	123.278 %	118.463 %	0.007 ppb	292.828 ppb	20.500 ppb	2.341 ppb	14.522 ppb	13.757 ppb	118.972 %
Concentration per Run 3	124.508 %	113.732 %	0.006 ppb	336.154 ppb	21.561 ppb	2.287 ppb	17.100 ppb	11.139 ppb	117.917 %
Concentration RSD	1.5 %	5.9 %	34.0 %	11.7 %	10.2 %	10.8 %	29.0 %	16.3 %	0.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.014 ppb	0.047 ppb	0.034 ppb	2.784 ppb	0.029 ppb	0.044 ppb	0.078 ppb	0.540 ppb	112.911 %
Concentration per Run 1	-0.026 ppb	0.047 ppb	0.044 ppb	2.379 ppb	0.031 ppb	0.017 ppb	0.094 ppb	0.482 ppb	117.434 %
Concentration per Run 2	-0.036 ppb	0.045 ppb	0.044 ppb	2.706 ppb	0.033 ppb	0.069 ppb	0.067 ppb	0.551 ppb	111.330 %
Concentration per Run 3	0.019 ppb	0.049 ppb	0.014 ppb	3.268 ppb	0.023 ppb	0.047 ppb	0.074 ppb	0.588 ppb	109.970 %
Concentration RSD	201.0 %	3.5 %	51.5 %	16.2 %	16.9 %	58.9 %	17.6 %	9.9 %	3.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.015 ppb	0.001 ppb	0.143 ppb	0.048 ppb	117.446 %	-0.003 ppb	0.000 ppb	118.338 %	0.370 ppb
Concentration per Run 1	0.010 ppb	0.002 ppb	0.134 ppb	0.017 ppb	122.571 %	-0.003 ppb	0.000 ppb	125.796 %	0.347 ppb
Concentration per Run 2	0.011 ppb	-0.001 ppb	0.148 ppb	0.037 ppb	112.972 %	-0.003 ppb	0.000 ppb	112.742 %	0.392 ppb
Concentration per Run 3	0.024 ppb	0.003 ppb	0.146 ppb	0.090 ppb	116.795 %	-0.003 ppb	-0.001 ppb	116.476 %	0.370 ppb
Concentration RSD	48.9 %	146.4 %	5.1 %	79.0 %	4.1 %	8.5 %	181.4 %	5.7 %	6.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.009 ppb	109.285 %	109.222 %	0.008 ppb	0.015 ppb	111.605 %
Concentration per Run 1	0.005 ppb	112.680 %	112.898 %	0.005 ppb	0.014 ppb	116.978 %
Concentration per Run 2	0.009 ppb	105.366 %	106.420 %	0.009 ppb	0.015 ppb	108.338 %
Concentration per Run 3	0.012 ppb	109.808 %	108.348 %	0.009 ppb	0.015 ppb	109.497 %
Concentration RSD	41.5 %	3.4 %	3.0 %	29.1 %	3.4 %	4.2 %

Alpha ICPMSQ Data with SRD

12/2/2024 3:12:07 PM

Analysis index:	52	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	L2470217-12d10 2008SL	Rack	1		
Analysis started at:	12/2/2024 12:37:49 PM	Vial	35		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	134.858 %	127.783 %	0.008 ppb	202,830.203 ppb	23,421.117 ppb	0.088 ppb	7,427.083 ppb	9,436.375 ppb	127.218 %
Concentration per Run 1	133.361 %	123.491 %	0.009 ppb	204,909.886 ppb	23,761.202 ppb	0.000 ppb	7,554.635 ppb	9,560.321 ppb	126.026 %
Concentration per Run 2	135.794 %	130.055 %	0.008 ppb	201,822.836 ppb	23,054.425 ppb	-0.002 ppb	7,343.869 ppb	9,378.846 ppb	128.616 %
Concentration per Run 3	135.419 %	129.804 %	0.008 ppb	201,757.888 ppb	23,447.725 ppb	0.266 ppb	7,382.745 ppb	9,369.959 ppb	127.013 %
Concentration RSD	1.0 %	2.9 %	8.3 %	0.9 %	1.5 %	174.8 %	1.5 %	1.1 %	1.0 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.102 ppb	0.015 ppb	0.412 ppb	3.563 ppb	0.003 ppb	-0.134 ppb	0.192 ppb	-0.006 ppb	123.261 %
Concentration per Run 1	0.079 ppb	0.007 ppb	0.415 ppb	4.162 ppb	0.003 ppb	-0.092 ppb	0.183 ppb	-0.026 ppb	118.564 %
Concentration per Run 2	0.094 ppb	0.017 ppb	0.436 ppb	3.150 ppb	0.005 ppb	-0.175 ppb	0.176 ppb	0.024 ppb	123.773 %
Concentration per Run 3	0.134 ppb	0.021 ppb	0.384 ppb	3.376 ppb	0.001 ppb	-0.137 ppb	0.217 ppb	-0.017 ppb	127.446 %
Concentration RSD	27.9 %	46.8 %	6.4 %	14.9 %	62.3 %	30.8 %	11.4 %	412.7 %	3.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.114 ppb	0.010 ppb	157.334 ppb	0.274 ppb	116.300 %	-0.002 ppb	0.005 ppb	122.386 %	0.052 ppb
Concentration per Run 1	0.105 ppb	0.038 ppb	159.665 ppb	0.278 ppb	111.737 %	-0.002 ppb	0.005 ppb	115.997 %	0.041 ppb
Concentration per Run 2	0.119 ppb	-0.011 ppb	157.348 ppb	0.256 ppb	116.903 %	-0.003 ppb	0.003 ppb	124.215 %	0.050 ppb
Concentration per Run 3	0.119 ppb	0.003 ppb	154.989 ppb	0.287 ppb	120.261 %	-0.002 ppb	0.005 ppb	126.947 %	0.065 ppb
Concentration RSD	7.0 %	253.7 %	1.5 %	5.8 %	3.7 %	17.5 %	27.0 %	4.7 %	22.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	2.830 ppb	116.594 %	114.482 %	0.009 ppb	0.015 ppb	95.319 %
Concentration per Run 1	2.923 ppb	111.951 %	110.190 %	0.007 ppb	0.016 ppb	94.557 %
Concentration per Run 2	2.765 ppb	117.591 %	116.048 %	0.010 ppb	0.015 ppb	93.842 %
Concentration per Run 3	2.801 ppb	120.241 %	117.207 %	0.010 ppb	0.016 ppb	97.558 %
Concentration RSD	2.9 %	3.6 %	3.3 %	16.7 %	1.4 %	2.1 %

Alpha ICPMSQ Data with SRD

12/2/2024 3:12:07 PM

Analysis index: 53
Analysis label: CCV
Analysis started at: 12/2/2024 12:45:17 PM
User name ALPHALAB\Metals-Instrument
Rack 0
Vial 9
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	125.319 %	120.442 %	64.948 ppb	6,316.806 ppb	6,292.103 ppb	63.339 ppb	6,413.927 ppb	6,277.835 ppb	124.485 %
Concentration per Run 1	122.830 %	123.287 %	65.618 ppb	6,168.009 ppb	6,075.822 ppb	60.291 ppb	6,346.041 ppb	6,125.824 ppb	121.281 %
Concentration per Run 2	126.905 %	119.403 %	64.221 ppb	6,374.525 ppb	6,357.295 ppb	64.024 ppb	6,345.687 ppb	6,311.061 ppb	126.653 %
Concentration per Run 3	126.222 %	118.635 %	65.005 ppb	6,407.885 ppb	6,443.193 ppb	65.703 ppb	6,550.053 ppb	6,396.619 ppb	125.520 %
Recovery Percentage 1			108.247 %	105.280 %	104.868 %	105.565 %	106.899 %	104.631 %	
Concentration RSD	1.7 %	2.1 %	1.1 %	2.1 %	3.1 %	4.4 %	1.8 %	2.2 %	2.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	63.589 ppb	63.301 ppb	62.810 ppb	6,473.697 ppb	66.052 ppb	65.781 ppb	64.158 ppb	65.498 ppb	117.412 %
Concentration per Run 1	61.004 ppb	61.149 ppb	59.742 ppb	6,184.947 ppb	63.383 ppb	63.707 ppb	61.066 ppb	64.487 ppb	120.049 %
Concentration per Run 2	65.516 ppb	64.211 ppb	64.901 ppb	6,632.063 ppb	67.518 ppb	66.464 ppb	65.107 ppb	66.284 ppb	115.160 %
Concentration per Run 3	64.248 ppb	64.542 ppb	63.788 ppb	6,604.083 ppb	67.255 ppb	67.173 ppb	66.300 ppb	65.722 ppb	117.028 %
Recovery Percentage 1	105.982 %	105.501 %	104.684 %	107.895 %	110.087 %	109.636 %	106.929 %	109.163 %	
Concentration RSD	3.7 %	3.0 %	4.3 %	3.9 %	3.5 %	2.8 %	4.3 %	1.4 %	2.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	64.717 ppb	64.854 ppb	64.789 ppb	61.978 ppb	116.379 %	65.829 ppb	65.806 ppb	119.489 %	62.661 ppb
Concentration per Run 1	62.354 ppb	62.188 ppb	63.399 ppb	61.900 ppb	116.384 %	65.264 ppb	65.060 ppb	119.935 %	62.104 ppb
Concentration per Run 2	66.607 ppb	66.212 ppb	65.407 ppb	61.710 ppb	115.230 %	66.455 ppb	66.128 ppb	118.418 %	62.799 ppb
Concentration per Run 3	65.189 ppb	66.161 ppb	65.560 ppb	62.325 ppb	117.524 %	65.767 ppb	66.231 ppb	120.113 %	63.081 ppb
Recovery Percentage 1	107.861 %	108.090 %	107.981 %	103.297 %		109.715 %	109.677 %		104.435 %
Concentration RSD	3.3 %	3.6 %	1.9 %	0.5 %	1.0 %	0.9 %	1.0 %	0.8 %	0.8 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	60.911 ppb	112.305 %	111.119 %	60.476 ppb	61.601 ppb	116.255 %
Concentration per Run 1	60.166 ppb	113.057 %	111.949 %	54.809 ppb	56.501 ppb	126.460 %
Concentration per Run 2	60.891 ppb	111.761 %	110.114 %	61.852 ppb	62.743 ppb	113.368 %
Concentration per Run 3	61.676 ppb	112.098 %	111.293 %	64.768 ppb	65.560 ppb	108.937 %
Recovery Percentage 1	101.518 %			100.794 %	102.669 %	
Concentration RSD	1.2 %	0.6 %	0.8 %	8.5 %	7.5 %	7.8 %

Alpha ICPMSQ Data with SRD

12/2/2024 3:12:07 PM

Analysis index: 54
Analysis label: CCB
Analysis started at: 12/2/2024 12:49:59 PM
User name ALPHALAB\Metals-Instrument
Rack 0
Vial 10
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	120.004 %	120.008 %	0.010 ppb	30.974 ppb	-0.663 ppb	-0.611 ppb	3.658 ppb	-3.087 ppb	114.642 %
Concentration per Run 1	121.225 %	120.577 %	0.013 ppb	32.461 ppb	-0.662 ppb	-0.645 ppb	1.699 ppb	-3.217 ppb	113.196 %
Concentration per Run 2	119.230 %	118.917 %	0.007 ppb	26.774 ppb	-0.550 ppb	-0.603 ppb	6.564 ppb	-5.163 ppb	115.192 %
Concentration per Run 3	119.558 %	120.530 %	0.008 ppb	33.688 ppb	-0.777 ppb	-0.583 ppb	2.712 ppb	-0.882 ppb	115.537 %
Recovery Percentage 1			1.905 %	6.195 %	-0.947 %	-6.107 %	3.658 %	-3.087 %	
Concentration RSD	0.9 %	0.8 %	34.3 %	11.9 %	17.2 %	5.2 %	70.2 %	69.4 %	1.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.020 ppb	0.002 ppb	-0.020 ppb	10.183 ppb	0.000 ppb	-0.193 ppb	-0.081 ppb	-0.369 ppb	116.024 %
Concentration per Run 1	-0.054 ppb	0.002 ppb	-0.025 ppb	9.114 ppb	0.003 ppb	-0.197 ppb	-0.079 ppb	-0.363 ppb	117.724 %
Concentration per Run 2	-0.021 ppb	0.002 ppb	-0.009 ppb	12.095 ppb	0.000 ppb	-0.206 ppb	-0.075 ppb	-0.361 ppb	116.109 %
Concentration per Run 3	0.014 ppb	0.002 ppb	-0.026 ppb	9.340 ppb	-0.001 ppb	-0.177 ppb	-0.089 ppb	-0.383 ppb	114.238 %
Recovery Percentage 1	-0.403 %	0.193 %	-1.998 %	20.366 %	0.083 %	-9.661 %	-8.073 %	-7.381 %	
Concentration RSD	168.2 %	17.6 %	47.2 %	16.3 %	463.6 %	7.5 %	8.9 %	3.3 %	1.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.055 ppb	0.182 ppb	-0.003 ppb	1.586 ppb	117.126 %	0.002 ppb	0.002 ppb	119.204 %	0.098 ppb
Concentration per Run 1	0.061 ppb	0.175 ppb	-0.003 ppb	1.232 ppb	115.556 %	0.003 ppb	0.001 ppb	120.235 %	0.063 ppb
Concentration per Run 2	0.059 ppb	0.166 ppb	-0.003 ppb	1.670 ppb	118.210 %	0.002 ppb	0.002 ppb	117.376 %	0.111 ppb
Concentration per Run 3	0.045 ppb	0.205 ppb	-0.003 ppb	1.856 ppb	117.613 %	0.001 ppb	0.002 ppb	120.002 %	0.121 ppb
Recovery Percentage 1	10.955 %	3.639 %	-0.028 %	79.310 %		0.467 %	0.962 %		2.459 %
Concentration RSD	16.2 %	11.0 %	4.0 %	20.2 %	1.2 %	79.5 %	24.4 %	1.3 %	31.8 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	-0.002 ppb	110.192 %	108.900 %	0.379 ppb	0.008 ppb	111.322 %
Concentration per Run 1	-0.008 ppb	110.275 %	108.417 %	0.441 ppb	0.007 ppb	114.173 %
Concentration per Run 2	0.008 ppb	110.747 %	109.627 %	0.393 ppb	0.009 ppb	109.721 %
Concentration per Run 3	-0.008 ppb	109.554 %	108.656 %	0.304 ppb	0.007 ppb	110.070 %
Recovery Percentage 1	-0.472 %			37.941 %	0.772 %	
Concentration RSD	383.9 %	0.5 %	0.6 %	18.4 %	9.2 %	2.2 %

Alpha ICPMSQ Data with SRD

12/2/2024 3:12:07 PM

Analysis index:	55	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	WG2003187-2d10 2008TL	Rack	1		
Analysis started at:	12/2/2024 1:01:02 PM	Vial	26		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	123.819 %	122.953 %	5.674 ppb	1,094.844 ppb	1,023.722 ppb	208.174 ppb	1,067.350 ppb	1,085.087 ppb	125.908 %
Concentration per Run 1	121.054 %	125.465 %	5.754 ppb	1,021.225 ppb	975.313 ppb	198.536 ppb	1,016.944 ppb	1,040.923 ppb	124.806 %
Concentration per Run 2	122.291 %	121.157 %	5.718 ppb	1,124.797 ppb	1,036.487 ppb	212.327 ppb	1,072.517 ppb	1,088.396 ppb	125.985 %
Concentration per Run 3	128.112 %	122.238 %	5.551 ppb	1,138.512 ppb	1,059.366 ppb	213.659 ppb	1,112.590 ppb	1,125.940 ppb	126.934 %
Concentration RSD	3.0 %	1.8 %	1.9 %	5.9 %	4.2 %	4.0 %	4.5 %	3.9 %	0.8 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	52.095 ppb	21.059 ppb	54.373 ppb	113.500 ppb	55.122 ppb	55.529 ppb	28.524 ppb	56.074 ppb	121.449 %
Concentration per Run 1	49.104 ppb	19.977 ppb	50.751 ppb	106.862 ppb	53.047 ppb	52.921 ppb	27.609 ppb	52.978 ppb	124.259 %
Concentration per Run 2	54.038 ppb	21.707 ppb	56.716 ppb	117.567 ppb	56.735 ppb	56.614 ppb	29.221 ppb	57.519 ppb	118.669 %
Concentration per Run 3	53.143 ppb	21.493 ppb	55.653 ppb	116.072 ppb	55.584 ppb	57.054 ppb	28.743 ppb	57.724 ppb	121.418 %
Concentration RSD	5.0 %	4.5 %	5.9 %	5.1 %	3.4 %	4.1 %	2.9 %	4.8 %	2.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	13.174 ppb	12.915 ppb	103.456 ppb	111.974 ppb	121.390 %	6.031 ppb	5.765 ppb	123.296 %	43.314 ppb
Concentration per Run 1	12.682 ppb	12.387 ppb	98.145 ppb	110.214 ppb	125.140 %	5.799 ppb	5.588 ppb	124.404 %	41.965 ppb
Concentration per Run 2	13.550 ppb	13.188 ppb	106.226 ppb	112.774 ppb	119.104 %	6.155 ppb	5.792 ppb	122.139 %	43.506 ppb
Concentration per Run 3	13.290 ppb	13.169 ppb	105.996 ppb	112.934 ppb	119.925 %	6.138 ppb	5.915 ppb	123.347 %	44.471 ppb
Concentration RSD	3.4 %	3.5 %	4.4 %	1.4 %	2.7 %	3.3 %	2.9 %	0.9 %	2.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	200.993 ppb	114.942 %	113.831 %	13.368 ppb	58.206 ppb	114.462 %
Concentration per Run 1	196.048 ppb	117.042 %	116.012 %	12.872 ppb	56.098 ppb	115.529 %
Concentration per Run 2	202.130 ppb	113.021 %	111.315 %	13.539 ppb	58.824 ppb	114.758 %
Concentration per Run 3	204.801 ppb	114.762 %	114.166 %	13.692 ppb	59.695 ppb	113.100 %
Concentration RSD	2.2 %	1.8 %	2.1 %	3.3 %	3.2 %	1.1 %

Alpha ICPMSQ Data with SRD

12/2/2024 3:12:07 PM

Analysis index:	56	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	L2468582-03 2008TL	Rack	1		
Analysis started at:	12/2/2024 1:05:39 PM	Vial	27		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	144.912 %	137.814 %	4.543 ppb	50,825.883 ppb	33,107.436 ppb	12,140.619 ppb	8,012.450 ppb	69,061.795 ppb	133.378 %
Concentration per Run 1	144.850 %	134.895 %	4.487 ppb	50,779.156 ppb	33,738.796 ppb	12,124.066 ppb	8,072.121 ppb	69,603.120 ppb	130.681 %
Concentration per Run 2	144.944 %	138.686 %	4.505 ppb	50,592.620 ppb	32,680.739 ppb	12,118.282 ppb	7,839.864 ppb	67,181.702 ppb	134.145 %
Concentration per Run 3	144.942 %	139.861 %	4.638 ppb	51,105.872 ppb	32,902.774 ppb	12,179.508 ppb	8,125.367 ppb	70,400.562 ppb	135.308 %
Concentration RSD	0.0 %	1.9 %	1.8 %	0.5 %	1.7 %	0.3 %	1.9 %	2.4 %	1.8 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.040 ppb	0.798 ppb	5,655.808 ppb	21,442.036 ppb	158.791 ppb	189.224 ppb	29.181 ppb	523.726 ppb	117.301 %
Concentration per Run 1	-0.037 ppb	0.801 ppb	5,679.379 ppb	21,844.243 ppb	162.064 ppb	191.265 ppb	29.806 ppb	536.098 ppb	113.515 %
Concentration per Run 2	-0.039 ppb	0.809 ppb	5,612.693 ppb	21,304.252 ppb	156.714 ppb	187.257 ppb	28.610 ppb	516.490 ppb	118.175 %
Concentration per Run 3	-0.044 ppb	0.785 ppb	5,675.352 ppb	21,177.614 ppb	157.594 ppb	189.151 ppb	29.126 ppb	518.590 ppb	120.212 %
Concentration RSD	10.1 %	1.5 %	0.7 %	1.7 %	1.8 %	1.1 %	2.1 %	2.1 %	2.9 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	1.473 ppb	3.088 ppb	997.813 ppb	4.010 ppb	114.810 %	0.007 ppb	5.779 ppb	124.417 %	3.084 ppb
Concentration per Run 1	1.567 ppb	3.219 ppb	1,012.405 ppb	3.037 ppb	111.576 %	0.006 ppb	5.908 ppb	120.661 %	3.034 ppb
Concentration per Run 2	1.383 ppb	3.062 ppb	988.634 ppb	4.302 ppb	115.502 %	0.006 ppb	5.659 ppb	125.408 %	3.090 ppb
Concentration per Run 3	1.468 ppb	2.985 ppb	992.400 ppb	4.691 ppb	117.352 %	0.010 ppb	5.770 ppb	127.181 %	3.128 ppb
Concentration RSD	6.3 %	3.9 %	1.3 %	21.6 %	2.6 %	28.6 %	2.2 %	2.7 %	1.5 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	25.546 ppb	114.539 %	108.876 %	0.569 ppb	3.546 ppb	98.365 %
Concentration per Run 1	26.366 ppb	110.124 %	105.385 %	0.591 ppb	3.611 ppb	94.872 %
Concentration per Run 2	25.094 ppb	115.045 %	108.713 %	0.567 ppb	3.548 ppb	98.191 %
Concentration per Run 3	25.178 ppb	118.447 %	112.531 %	0.549 ppb	3.478 ppb	102.032 %
Concentration RSD	2.8 %	3.7 %	3.3 %	3.8 %	1.9 %	3.6 %

Alpha ICPMSQ Data with SRD

12/2/2024 3:12:07 PM

Analysis index:	57	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	WG2003187-5d10 2008TL	Rack	1		
Analysis started at:	12/2/2024 1:10:16 PM	Vial	28		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	128.500 %	128.060 %	6.106 ppb	6,407.769 ppb	4,745.982 ppb	1,473.477 ppb	1,901.246 ppb	8,209.735 ppb	124.638 %
Concentration per Run 1	125.568 %	124.854 %	6.101 ppb	6,415.744 ppb	4,741.265 ppb	1,484.632 ppb	1,953.790 ppb	8,445.188 ppb	124.517 %
Concentration per Run 2	133.658 %	129.021 %	5.892 ppb	6,462.803 ppb	4,800.559 ppb	1,477.978 ppb	1,848.995 ppb	8,147.370 ppb	126.024 %
Concentration per Run 3	126.275 %	130.305 %	6.326 ppb	6,344.759 ppb	4,696.121 ppb	1,457.821 ppb	1,900.951 ppb	8,036.647 ppb	123.373 %
Concentration RSD	3.5 %	2.2 %	3.6 %	0.9 %	1.1 %	0.9 %	2.8 %	2.6 %	1.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	51.610 ppb	20.692 ppb	648.444 ppb	2,298.977 ppb	71.158 ppb	74.699 ppb	31.537 ppb	113.130 ppb	123.498 %
Concentration per Run 1	51.847 ppb	20.851 ppb	635.492 ppb	2,297.656 ppb	71.911 ppb	75.247 ppb	31.481 ppb	112.887 ppb	123.098 %
Concentration per Run 2	52.121 ppb	20.771 ppb	660.637 ppb	2,286.048 ppb	70.602 ppb	74.140 ppb	31.168 ppb	113.707 ppb	122.534 %
Concentration per Run 3	50.861 ppb	20.453 ppb	649.204 ppb	2,313.227 ppb	70.962 ppb	74.710 ppb	31.962 ppb	112.795 ppb	124.861 %
Concentration RSD	1.3 %	1.0 %	1.9 %	0.6 %	1.0 %	0.7 %	1.3 %	0.4 %	1.0 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	13.635 ppb	13.087 ppb	201.804 ppb	101.355 ppb	121.815 %	6.055 ppb	6.448 ppb	127.387 %	57.152 ppb
Concentration per Run 1	13.480 ppb	13.035 ppb	201.668 ppb	102.736 ppb	121.438 %	6.117 ppb	6.500 ppb	126.370 %	58.192 ppb
Concentration per Run 2	13.789 ppb	13.364 ppb	203.309 ppb	100.183 ppb	121.449 %	6.007 ppb	6.429 ppb	127.887 %	57.219 ppb
Concentration per Run 3	13.634 ppb	12.862 ppb	200.436 ppb	101.147 ppb	122.557 %	6.041 ppb	6.414 ppb	127.906 %	56.046 ppb
Concentration RSD	1.1 %	1.9 %	0.7 %	1.3 %	0.5 %	0.9 %	0.7 %	0.7 %	1.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	213.973 ppb	116.678 %	114.120 %	12.976 ppb	59.349 ppb	112.820 %
Concentration per Run 1	214.178 ppb	116.142 %	113.676 %	12.634 ppb	58.644 ppb	114.971 %
Concentration per Run 2	215.120 ppb	115.731 %	113.675 %	13.230 ppb	60.082 ppb	109.609 %
Concentration per Run 3	212.620 ppb	118.161 %	115.008 %	13.066 ppb	59.322 ppb	113.879 %
Concentration RSD	0.6 %	1.1 %	0.7 %	2.4 %	1.2 %	2.5 %

Alpha ICPMSQ Data with SRD

12/2/2024 3:12:07 PM

Analysis index:	58	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	WG2003187-6d10 2008TL	Rack	1		
Analysis started at:	12/2/2024 1:14:54 PM	Vial	29		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	129.461 %	123.590 %	5.963 ppb	6,569.796 ppb	4,853.552 ppb	1,514.950 ppb	1,896.087 ppb	8,340.297 ppb	119.978 %
Concentration per Run 1	128.281 %	122.191 %	5.918 ppb	6,691.673 ppb	4,860.019 ppb	1,525.509 ppb	1,925.037 ppb	8,476.181 ppb	118.404 %
Concentration per Run 2	130.439 %	123.428 %	5.934 ppb	6,506.772 ppb	4,873.629 ppb	1,511.486 ppb	1,876.431 ppb	8,249.669 ppb	120.899 %
Concentration per Run 3	129.664 %	125.152 %	6.037 ppb	6,510.942 ppb	4,827.007 ppb	1,507.854 ppb	1,886.792 ppb	8,295.041 ppb	120.632 %
Concentration RSD	0.8 %	1.2 %	1.1 %	1.6 %	0.5 %	0.6 %	1.4 %	1.4 %	1.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	52.850 ppb	21.191 ppb	667.164 ppb	2,350.973 ppb	71.958 ppb	76.104 ppb	31.747 ppb	114.395 ppb	120.867 %
Concentration per Run 1	53.042 ppb	21.542 ppb	668.900 ppb	2,361.310 ppb	72.374 ppb	76.901 ppb	31.787 ppb	114.136 ppb	121.069 %
Concentration per Run 2	52.921 ppb	21.074 ppb	671.025 ppb	2,341.091 ppb	71.982 ppb	75.630 ppb	31.800 ppb	114.175 ppb	120.134 %
Concentration per Run 3	52.588 ppb	20.958 ppb	661.566 ppb	2,350.519 ppb	71.517 ppb	75.780 ppb	31.656 ppb	114.875 ppb	121.400 %
Concentration RSD	0.4 %	1.5 %	0.7 %	0.4 %	0.6 %	0.9 %	0.3 %	0.4 %	0.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	13.465 ppb	13.419 ppb	203.977 ppb	104.627 ppb	118.234 %	6.061 ppb	6.332 ppb	123.748 %	52.306 ppb
Concentration per Run 1	13.354 ppb	13.301 ppb	203.956 ppb	104.804 ppb	117.894 %	6.118 ppb	6.402 ppb	123.036 %	53.029 ppb
Concentration per Run 2	13.519 ppb	13.596 ppb	204.339 ppb	103.556 ppb	118.217 %	6.025 ppb	6.267 ppb	124.571 %	50.873 ppb
Concentration per Run 3	13.521 ppb	13.361 ppb	203.637 ppb	105.523 ppb	118.590 %	6.041 ppb	6.328 ppb	123.637 %	53.016 ppb
Concentration RSD	0.7 %	1.2 %	0.2 %	1.0 %	0.3 %	0.8 %	1.1 %	0.6 %	2.4 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	207.537 ppb	113.467 %	111.308 %	13.308 ppb	59.272 ppb	110.138 %
Concentration per Run 1	211.558 ppb	112.337 %	109.977 %	12.731 ppb	57.755 ppb	112.112 %
Concentration per Run 2	203.293 ppb	113.235 %	110.934 %	13.581 ppb	60.107 ppb	108.371 %
Concentration per Run 3	207.760 ppb	114.829 %	113.012 %	13.614 ppb	59.955 ppb	109.931 %
Concentration RSD	2.0 %	1.1 %	1.4 %	3.8 %	2.2 %	1.7 %

Alpha ICPMSQ Data with SRD

12/2/2024 3:12:07 PM

Analysis index:	59	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	L2468582-01 2008TL	Rack	1		
Analysis started at:	12/2/2024 1:19:32 PM	Vial	30		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	143.461 %	138.394 %	0.585 ppb	49,890.457 ppb	90,420.580 ppb	23.560 ppb	14,640.631 ppb	183,371.525 ppb	141.425 %
Concentration per Run 1	144.932 %	139.861 %	0.576 ppb	48,722.198 ppb	89,377.448 ppb	23.279 ppb	14,674.829 ppb	182,502.746 ppb	141.439 %
Concentration per Run 2	143.489 %	139.360 %	0.589 ppb	49,648.630 ppb	89,019.497 ppb	23.510 ppb	14,173.890 ppb	180,591.541 ppb	142.988 %
Concentration per Run 3	141.962 %	135.961 %	0.591 ppb	51,300.543 ppb	92,864.795 ppb	23.892 ppb	15,073.175 ppb	187,020.290 ppb	139.848 %
Concentration RSD	1.0 %	1.5 %	1.4 %	2.6 %	2.3 %	1.3 %	3.1 %	1.8 %	1.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.139 ppb	0.094 ppb	408.365 ppb	861.296 ppb	20.658 ppb	193.453 ppb	2.352 ppb	53.595 ppb	129.770 %
Concentration per Run 1	0.092 ppb	0.096 ppb	402.036 ppb	863.844 ppb	20.681 ppb	191.619 ppb	2.442 ppb	53.720 ppb	127.439 %
Concentration per Run 2	0.157 ppb	0.090 ppb	417.746 ppb	873.360 ppb	20.760 ppb	197.320 ppb	2.320 ppb	54.496 ppb	131.145 %
Concentration per Run 3	0.168 ppb	0.098 ppb	405.312 ppb	846.685 ppb	20.534 ppb	191.421 ppb	2.293 ppb	52.569 ppb	130.725 %
Concentration RSD	29.3 %	4.5 %	2.0 %	1.6 %	0.6 %	1.7 %	3.4 %	1.8 %	1.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.307 ppb	0.581 ppb	1,128.331 ppb	4.495 ppb	124.521 %	-0.002 ppb	0.529 ppb	134.354 %	0.789 ppb
Concentration per Run 1	0.328 ppb	0.604 ppb	1,132.175 ppb	3.306 ppb	122.738 %	-0.002 ppb	0.516 ppb	132.114 %	0.676 ppb
Concentration per Run 2	0.283 ppb	0.600 ppb	1,130.035 ppb	4.752 ppb	124.080 %	-0.002 ppb	0.529 ppb	134.046 %	0.815 ppb
Concentration per Run 3	0.308 ppb	0.538 ppb	1,122.784 ppb	5.427 ppb	126.743 %	-0.002 ppb	0.543 ppb	136.902 %	0.876 ppb
Concentration RSD	7.4 %	6.4 %	0.4 %	24.1 %	1.6 %	12.6 %	2.6 %	1.8 %	13.0 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	20.690 ppb	123.359 %	120.159 %	0.156 ppb	0.136 ppb	103.676 %
Concentration per Run 1	20.804 ppb	121.582 %	117.593 %	0.157 ppb	0.135 ppb	103.804 %
Concentration per Run 2	20.891 ppb	122.868 %	118.953 %	0.170 ppb	0.139 ppb	102.939 %
Concentration per Run 3	20.375 ppb	125.627 %	123.932 %	0.142 ppb	0.135 ppb	104.287 %
Concentration RSD	1.3 %	1.7 %	2.8 %	8.7 %	1.7 %	0.7 %

Alpha ICPMSQ Data with SRD

12/2/2024 3:12:07 PM

Analysis index:	60	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	L2468582-02 2008TL	Rack	1		
Analysis started at:	12/2/2024 1:24:10 PM	Vial	31		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	140.246 %	137.240 %	0.588 ppb	48,657.133 ppb	87,750.116 ppb	22.604 ppb	14,316.768 ppb	181,372.532 ppb	138.161 %
Concentration per Run 1	140.152 %	137.621 %	0.588 ppb	49,307.992 ppb	88,461.768 ppb	22.613 ppb	14,654.513 ppb	184,780.223 ppb	136.691 %
Concentration per Run 2	142.480 %	141.240 %	0.586 ppb	47,321.156 ppb	84,979.507 ppb	22.154 ppb	13,692.483 ppb	172,873.941 ppb	138.717 %
Concentration per Run 3	138.106 %	132.859 %	0.590 ppb	49,342.251 ppb	89,809.074 ppb	23.045 ppb	14,603.306 ppb	186,463.432 ppb	139.075 %
Concentration RSD	1.6 %	3.1 %	0.4 %	2.4 %	2.8 %	2.0 %	3.8 %	4.1 %	0.9 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.142 ppb	0.068 ppb	404.703 ppb	823.951 ppb	20.430 ppb	195.385 ppb	2.366 ppb	53.169 ppb	126.780 %
Concentration per Run 1	0.177 ppb	0.068 ppb	415.941 ppb	847.457 ppb	21.105 ppb	199.569 ppb	2.326 ppb	54.395 ppb	123.332 %
Concentration per Run 2	0.117 ppb	0.062 ppb	384.180 ppb	793.756 ppb	19.533 ppb	187.757 ppb	2.264 ppb	51.216 ppb	131.169 %
Concentration per Run 3	0.133 ppb	0.073 ppb	413.987 ppb	830.639 ppb	20.652 ppb	198.827 ppb	2.509 ppb	53.895 ppb	125.840 %
Concentration RSD	21.7 %	7.9 %	4.4 %	3.3 %	4.0 %	3.4 %	5.4 %	3.2 %	3.2 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.308 ppb	0.594 ppb	1,130.295 ppb	1.482 ppb	120.711 %	-0.002 ppb	0.537 ppb	131.846 %	0.393 ppb
Concentration per Run 1	0.309 ppb	0.587 ppb	1,159.928 ppb	1.014 ppb	118.061 %	-0.002 ppb	0.556 ppb	129.010 %	0.332 ppb
Concentration per Run 2	0.290 ppb	0.542 ppb	1,088.212 ppb	1.516 ppb	125.911 %	-0.001 ppb	0.517 ppb	136.190 %	0.418 ppb
Concentration per Run 3	0.326 ppb	0.653 ppb	1,142.746 ppb	1.916 ppb	118.161 %	-0.002 ppb	0.540 ppb	130.339 %	0.430 ppb
Concentration RSD	5.8 %	9.4 %	3.3 %	30.5 %	3.7 %	42.7 %	3.7 %	2.9 %	13.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	20.510 ppb	120.428 %	119.195 %	0.062 ppb	0.110 ppb	102.562 %
Concentration per Run 1	21.002 ppb	119.703 %	115.936 %	0.055 ppb	0.116 ppb	96.071 %
Concentration per Run 2	20.328 ppb	121.103 %	123.606 %	0.070 ppb	0.113 ppb	99.483 %
Concentration per Run 3	20.199 ppb	120.479 %	118.042 %	0.062 ppb	0.100 ppb	112.134 %
Concentration RSD	2.1 %	0.6 %	3.3 %	11.7 %	7.9 %	8.3 %

Alpha ICPMSQ Data with SRD

12/2/2024 3:12:07 PM

Analysis index:	61	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	L2469455-01 2008TL	Rack	1		
Analysis started at:	12/2/2024 1:28:49 PM	Vial	32		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	132.363 %	126.044 %	0.008 ppb	406,127.280 ppb	35.088 ppb	20.701 ppb	328.415 ppb	208.523 ppb	131.556 %
Concentration per Run 1	130.859 %	130.305 %	0.008 ppb	383,328.215 ppb	32.680 ppb	19.013 ppb	316.003 ppb	201.284 ppb	130.747 %
Concentration per Run 2	132.238 %	118.525 %	0.009 ppb	434,457.949 ppb	38.434 ppb	22.115 ppb	334.592 ppb	216.114 ppb	132.517 %
Concentration per Run 3	133.992 %	129.303 %	0.006 ppb	400,595.676 ppb	34.150 ppb	20.974 ppb	334.651 ppb	208.169 ppb	131.404 %
Concentration RSD	1.2 %	5.2 %	21.9 %	6.4 %	8.5 %	7.6 %	3.3 %	3.6 %	0.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	1.713 ppb	0.591 ppb	14.020 ppb	33.564 ppb	0.027 ppb	0.225 ppb	3.726 ppb	19.364 ppb	120.965 %
Concentration per Run 1	1.629 ppb	0.546 ppb	13.274 ppb	31.535 ppb	0.021 ppb	0.197 ppb	3.570 ppb	18.307 ppb	126.757 %
Concentration per Run 2	1.717 ppb	0.629 ppb	14.727 ppb	34.428 ppb	0.023 ppb	0.279 ppb	3.895 ppb	20.522 ppb	116.350 %
Concentration per Run 3	1.793 ppb	0.599 ppb	14.058 ppb	34.731 ppb	0.038 ppb	0.199 ppb	3.712 ppb	19.263 ppb	119.787 %
Concentration RSD	4.8 %	7.1 %	5.2 %	5.3 %	34.1 %	20.8 %	4.4 %	5.7 %	4.4 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	5.065 ppb	2.722 ppb	2.879 ppb	41.170 ppb	114.200 %	-0.001 ppb	0.015 ppb	122.214 %	29.672 ppb
Concentration per Run 1	4.721 ppb	2.521 ppb	2.675 ppb	38.383 ppb	120.711 %	-0.001 ppb	0.014 ppb	128.629 %	27.822 ppb
Concentration per Run 2	5.291 ppb	2.732 ppb	3.034 ppb	43.523 ppb	108.318 %	-0.001 ppb	0.013 ppb	115.650 %	31.764 ppb
Concentration per Run 3	5.182 ppb	2.915 ppb	2.929 ppb	41.604 ppb	113.572 %	-0.001 ppb	0.019 ppb	122.362 %	29.432 ppb
Concentration RSD	6.0 %	7.2 %	6.4 %	6.3 %	5.4 %	24.4 %	20.1 %	5.3 %	6.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	7.371 ppb	117.212 %	115.052 %	0.038 ppb	1.946 ppb	94.910 %
Concentration per Run 1	7.053 ppb	123.438 %	119.868 %	0.027 ppb	1.827 ppb	98.964 %
Concentration per Run 2	7.701 ppb	110.434 %	109.933 %	0.044 ppb	2.023 ppb	91.846 %
Concentration per Run 3	7.357 ppb	117.765 %	115.357 %	0.043 ppb	1.987 ppb	93.921 %
Concentration RSD	4.4 %	5.6 %	4.3 %	24.6 %	5.4 %	3.9 %

Alpha ICPMSQ Data with SRD

12/2/2024 3:12:07 PM

Analysis index:	62	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	L2468582-03d10 2008TL	Rack	1		
Analysis started at:	12/2/2024 1:38:46 PM	Vial	37		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	130.931 %	123.971 %	0.547 ppb	5,569.742 ppb	3,801.315 ppb	1,327.729 ppb	837.061 ppb	7,514.971 ppb	119.328 %
Concentration per Run 1	130.197 %	124.838 %	0.554 ppb	5,539.884 ppb	3,785.526 ppb	1,328.791 ppb	841.794 ppb	7,671.639 ppb	117.410 %
Concentration per Run 2	131.185 %	121.705 %	0.537 ppb	5,595.405 ppb	3,810.980 ppb	1,335.129 ppb	839.982 ppb	7,550.947 ppb	116.848 %
Concentration per Run 3	131.412 %	125.371 %	0.550 ppb	5,573.938 ppb	3,807.439 ppb	1,319.267 ppb	829.407 ppb	7,322.326 ppb	123.726 %
Concentration RSD	0.5 %	1.6 %	1.6 %	0.5 %	0.4 %	0.6 %	0.8 %	2.4 %	3.2 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.042 ppb	0.085 ppb	640.849 ppb	2,315.304 ppb	16.807 ppb	20.597 ppb	3.101 ppb	60.677 ppb	117.123 %
Concentration per Run 1	0.058 ppb	0.086 ppb	646.676 ppb	2,348.755 ppb	17.192 ppb	21.359 ppb	3.191 ppb	62.009 ppb	113.660 %
Concentration per Run 2	0.046 ppb	0.085 ppb	644.834 ppb	2,330.887 ppb	16.922 ppb	20.338 ppb	3.159 ppb	60.281 ppb	117.841 %
Concentration per Run 3	0.023 ppb	0.083 ppb	631.038 ppb	2,266.270 ppb	16.307 ppb	20.093 ppb	2.954 ppb	59.741 ppb	119.869 %
Concentration RSD	41.5 %	2.0 %	1.3 %	1.9 %	2.7 %	3.3 %	4.1 %	2.0 %	2.7 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.184 ppb	0.353 ppb	100.513 ppb	0.472 ppb	116.823 %	-0.002 ppb	0.634 ppb	122.892 %	0.187 ppb
Concentration per Run 1	0.213 ppb	0.368 ppb	102.294 ppb	0.313 ppb	114.765 %	-0.002 ppb	0.652 ppb	118.124 %	0.165 ppb
Concentration per Run 2	0.185 ppb	0.338 ppb	99.769 ppb	0.502 ppb	118.553 %	-0.002 ppb	0.623 ppb	124.957 %	0.186 ppb
Concentration per Run 3	0.153 ppb	0.352 ppb	99.476 ppb	0.601 ppb	117.150 %	-0.002 ppb	0.628 ppb	125.595 %	0.209 ppb
Concentration RSD	16.4 %	4.3 %	1.5 %	31.0 %	1.6 %	4.8 %	2.4 %	3.4 %	12.0 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	2.663 ppb	112.683 %	111.007 %	0.066 ppb	0.350 ppb	106.240 %
Concentration per Run 1	2.729 ppb	108.232 %	106.826 %	0.061 ppb	0.351 ppb	105.613 %
Concentration per Run 2	2.588 ppb	114.578 %	112.889 %	0.068 ppb	0.355 ppb	104.821 %
Concentration per Run 3	2.672 ppb	115.238 %	113.307 %	0.068 ppb	0.345 ppb	108.288 %
Concentration RSD	2.7 %	3.4 %	3.3 %	5.9 %	1.4 %	1.7 %

Alpha ICPMSQ Data with SRD

12/2/2024 3:12:07 PM

Analysis index:	63	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	xLDR Check - 2x ICSA	Rack	1		
Analysis started at:	12/2/2024 1:43:43 PM	Vial	38		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	144.050 %	136.603 %	0.021 ppb	152,728.870 ppb	57,457.498 ppb	58,218.769 ppb	60,702.452 ppb	186,044.030 ppb	139.515 %
Concentration per Run 1	141.855 %	134.394 %	0.021 ppb	154,230.177 ppb	57,815.334 ppb	58,878.288 ppb	61,617.241 ppb	186,823.559 ppb	137.858 %
Concentration per Run 2	146.720 %	136.164 %	0.020 ppb	152,392.831 ppb	57,319.824 ppb	57,824.244 ppb	60,668.739 ppb	187,261.184 ppb	140.787 %
Concentration per Run 3	143.573 %	139.250 %	0.023 ppb	151,563.602 ppb	57,237.335 ppb	57,953.775 ppb	59,821.377 ppb	184,047.345 ppb	139.899 %
Concentration RSD	1.7 %	1.8 %	8.2 %	0.9 %	0.5 %	1.0 %	1.5 %	0.9 %	1.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.003 ppb	0.977 ppb	2.786 ppb	146,798.674 ppb	1.372 ppb	1.696 ppb	0.634 ppb	1.762 ppb	130.869 %
Concentration per Run 1	0.015 ppb	1.010 ppb	2.922 ppb	148,917.166 ppb	1.371 ppb	1.674 ppb	0.631 ppb	1.788 ppb	129.726 %
Concentration per Run 2	0.000 ppb	0.969 ppb	2.737 ppb	146,355.958 ppb	1.383 ppb	1.686 ppb	0.625 ppb	1.697 ppb	131.954 %
Concentration per Run 3	-0.025 ppb	0.952 ppb	2.697 ppb	145,122.898 ppb	1.362 ppb	1.728 ppb	0.647 ppb	1.800 ppb	130.929 %
Concentration RSD	594.5 %	3.0 %	4.3 %	1.3 %	0.8 %	1.7 %	1.8 %	3.2 %	0.9 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.285 ppb	1.939 ppb	1.596 ppb	1,362.625 ppb	122.089 %	0.010 ppb	0.418 ppb	134.963 %	0.314 ppb
Concentration per Run 1	0.284 ppb	1.909 ppb	1.591 ppb	1,362.260 ppb	120.859 %	0.008 ppb	0.422 ppb	134.255 %	0.263 ppb
Concentration per Run 2	0.281 ppb	1.991 ppb	1.589 ppb	1,352.399 ppb	121.267 %	0.010 ppb	0.406 ppb	135.491 %	0.321 ppb
Concentration per Run 3	0.290 ppb	1.918 ppb	1.607 ppb	1,373.218 ppb	124.142 %	0.011 ppb	0.425 ppb	135.143 %	0.358 ppb
Concentration RSD	1.5 %	2.3 %	0.6 %	0.8 %	1.5 %	18.7 %	2.5 %	0.5 %	15.3 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.786 ppb	110.687 %	105.737 %	0.023 ppb	1.001 ppb	100.482 %
Concentration per Run 1	0.774 ppb	109.185 %	104.842 %	0.018 ppb	0.976 ppb	102.639 %
Concentration per Run 2	0.813 ppb	111.437 %	107.446 %	0.024 ppb	1.015 ppb	99.636 %
Concentration per Run 3	0.771 ppb	111.441 %	104.923 %	0.026 ppb	1.012 ppb	99.173 %
Concentration RSD	3.0 %	1.2 %	1.4 %	17.7 %	2.2 %	1.9 %

Alpha ICPMSQ Data with SRD

12/2/2024 3:12:07 PM

Analysis index:	64	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	xWG2002749-6d5 6020TL	Rack	1		
Analysis started at:	12/2/2024 1:49:30 PM	Vial	45		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	141.876 %	136.718 %	0.013 ppb	211,365.085 ppb	21,567.614 ppb	62.084 ppb	14,221.723 ppb	22,824.273 ppb	143.993 %
Concentration per Run 1	142.584 %	136.963 %	0.011 ppb	206,749.899 ppb	20,985.387 ppb	61.039 ppb	13,897.462 ppb	22,183.258 ppb	142.112 %
Concentration per Run 2	143.793 %	138.796 %	0.012 ppb	209,862.091 ppb	21,406.692 ppb	61.472 ppb	13,833.576 ppb	22,696.963 ppb	144.170 %
Concentration per Run 3	139.250 %	134.394 %	0.014 ppb	217,483.267 ppb	22,310.763 ppb	63.740 ppb	14,934.132 ppb	23,592.596 ppb	145.697 %
Concentration RSD	1.7 %	1.6 %	12.7 %	2.6 %	3.1 %	2.3 %	4.3 %	3.1 %	1.2 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.723 ppb	0.514 ppb	95.660 ppb	4,756.996 ppb	0.526 ppb	0.395 ppb	0.343 ppb	2.781 ppb	128.734 %
Concentration per Run 1	0.686 ppb	0.513 ppb	94.468 ppb	4,644.011 ppb	0.506 ppb	0.434 ppb	0.328 ppb	2.689 ppb	129.728 %
Concentration per Run 2	0.694 ppb	0.495 ppb	94.292 ppb	4,707.322 ppb	0.522 ppb	0.390 ppb	0.369 ppb	2.774 ppb	128.743 %
Concentration per Run 3	0.790 ppb	0.534 ppb	98.221 ppb	4,919.655 ppb	0.551 ppb	0.361 ppb	0.331 ppb	2.881 ppb	127.731 %
Concentration RSD	8.0 %	3.8 %	2.3 %	3.0 %	4.4 %	9.3 %	6.6 %	3.5 %	0.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.653 ppb	0.128 ppb	222.663 ppb	10.919 ppb	122.282 %	-0.002 ppb	0.007 ppb	127.637 %	0.109 ppb
Concentration per Run 1	0.617 ppb	0.141 ppb	215.776 ppb	8.377 ppb	124.489 %	-0.002 ppb	0.009 ppb	130.926 %	0.088 ppb
Concentration per Run 2	0.650 ppb	0.132 ppb	225.640 ppb	11.621 ppb	120.969 %	-0.002 ppb	0.004 ppb	125.335 %	0.106 ppb
Concentration per Run 3	0.693 ppb	0.111 ppb	226.573 ppb	12.759 ppb	121.389 %	0.000 ppb	0.007 ppb	126.650 %	0.132 ppb
Concentration RSD	5.8 %	12.2 %	2.7 %	20.8 %	1.6 %	63.5 %	40.2 %	2.3 %	20.3 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	61.598 ppb	123.059 %	121.127 %	0.013 ppb	0.326 ppb	108.462 %
Concentration per Run 1	59.708 ppb	126.495 %	123.233 %	0.009 ppb	0.303 ppb	114.199 %
Concentration per Run 2	61.972 ppb	119.745 %	119.925 %	0.014 ppb	0.329 ppb	105.496 %
Concentration per Run 3	63.115 ppb	122.935 %	120.223 %	0.015 ppb	0.345 ppb	105.691 %
Concentration RSD	2.8 %	2.7 %	1.5 %	26.0 %	6.4 %	4.6 %

Alpha ICPMSQ Data with SRD

12/2/2024 3:12:07 PM

Analysis index:	65	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	CCV	Rack	0		
Analysis started at:	12/2/2024 1:54:09 PM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	134.256 %	129.736 %	65.554 ppb	6,497.918 ppb	6,482.430 ppb	65.181 ppb	6,760.040 ppb	6,493.295 ppb	134.268 %
Concentration per Run 1	133.695 %	130.243 %	65.555 ppb	6,405.412 ppb	6,331.876 ppb	64.142 ppb	6,586.919 ppb	6,453.385 ppb	132.339 %
Concentration per Run 2	136.864 %	128.551 %	64.180 ppb	6,590.928 ppb	6,629.634 ppb	65.432 ppb	7,020.967 ppb	6,546.367 ppb	135.470 %
Concentration per Run 3	132.209 %	130.415 %	66.926 ppb	6,497.412 ppb	6,485.779 ppb	65.969 ppb	6,672.234 ppb	6,480.132 ppb	134.994 %
Recovery Percentage 1			109.256 %	108.299 %	108.040 %	108.635 %	112.667 %	108.222 %	
Concentration RSD	1.8 %	0.8 %	2.1 %	1.4 %	2.3 %	1.4 %	3.4 %	0.7 %	1.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	65.012 ppb	64.590 ppb	64.081 ppb	6,759.314 ppb	68.994 ppb	68.486 ppb	69.785 ppb	68.675 ppb	127.150 %
Concentration per Run 1	64.563 ppb	63.886 ppb	63.951 ppb	6,669.850 ppb	68.984 ppb	68.322 ppb	70.011 ppb	68.038 ppb	129.210 %
Concentration per Run 2	66.015 ppb	64.908 ppb	64.059 ppb	6,778.119 ppb	69.622 ppb	69.263 ppb	69.954 ppb	68.796 ppb	125.718 %
Concentration per Run 3	64.458 ppb	64.975 ppb	64.233 ppb	6,829.974 ppb	68.376 ppb	67.872 ppb	69.390 ppb	69.192 ppb	126.522 %
Recovery Percentage 1	108.353 %	107.650 %	106.802 %	112.655 %	114.990 %	114.143 %	116.309 %	114.459 %	
Concentration RSD	1.3 %	0.9 %	0.2 %	1.2 %	0.9 %	1.0 %	0.5 %	0.9 %	1.4 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	66.946 ppb	66.310 ppb	65.713 ppb	68.053 ppb	127.523 %	66.080 ppb	66.175 ppb	132.105 %	64.004 ppb
Concentration per Run 1	66.072 ppb	64.888 ppb	64.563 ppb	66.121 ppb	129.979 %	65.565 ppb	65.654 ppb	132.959 %	63.952 ppb
Concentration per Run 2	67.608 ppb	67.375 ppb	66.149 ppb	68.934 ppb	127.056 %	66.167 ppb	66.370 ppb	132.914 %	63.885 ppb
Concentration per Run 3	67.158 ppb	66.666 ppb	66.427 ppb	69.104 ppb	125.535 %	66.508 ppb	66.501 ppb	130.442 %	64.173 ppb
Recovery Percentage 1	111.577 %	110.516 %	109.521 %	113.422 %		110.133 %	110.292 %		106.673 %
Concentration RSD	1.2 %	1.9 %	1.5 %	2.5 %	1.8 %	0.7 %	0.7 %	1.1 %	0.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	60.897 ppb	119.997 %	117.503 %	63.777 ppb	65.595 ppb	116.196 %
Concentration per Run 1	60.985 ppb	121.148 %	118.474 %	60.922 ppb	63.626 ppb	120.380 %
Concentration per Run 2	60.716 ppb	118.605 %	116.312 %	64.985 ppb	66.460 ppb	115.369 %
Concentration per Run 3	60.990 ppb	120.239 %	117.724 %	65.425 ppb	66.698 ppb	112.840 %
Recovery Percentage 1	101.495 %			106.295 %	109.324 %	
Concentration RSD	0.3 %	1.1 %	0.9 %	3.9 %	2.6 %	3.3 %

Alpha ICPMSQ Data with SRD

12/2/2024 3:12:07 PM

Analysis index:	66	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	CCB	Rack	0		
Analysis started at:	12/2/2024 1:58:52 PM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	121.827 %	128.415 %	0.011 ppb	19.640 ppb	-0.549 ppb	-0.550 ppb	5.362 ppb	-4.061 ppb	117.816 %
Concentration per Run 1	131.007 %	129.929 %	0.008 ppb	17.863 ppb	-0.578 ppb	-0.553 ppb	4.189 ppb	-4.585 ppb	123.541 %
Concentration per Run 2	120.529 %	126.373 %	0.016 ppb	21.040 ppb	-0.740 ppb	-0.525 ppb	4.822 ppb	-4.965 ppb	113.151 %
Concentration per Run 3	113.946 %	128.942 %	0.009 ppb	20.016 ppb	-0.328 ppb	-0.572 ppb	7.075 ppb	-2.634 ppb	116.757 %
Recovery Percentage 1			2.180 %	3.928 %	-0.784 %	-5.501 %	5.362 %	-4.061 %	
Concentration RSD	7.1 %	1.4 %	38.8 %	8.3 %	37.8 %	4.2 %	28.3 %	30.8 %	4.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.047 ppb	-0.004 ppb	-0.022 ppb	17.568 ppb	0.001 ppb	-0.209 ppb	-0.088 ppb	-0.384 ppb	124.324 %
Concentration per Run 1	-0.051 ppb	-0.004 ppb	-0.022 ppb	14.871 ppb	0.001 ppb	-0.214 ppb	-0.095 ppb	-0.392 ppb	127.810 %
Concentration per Run 2	-0.048 ppb	-0.008 ppb	-0.013 ppb	19.923 ppb	-0.001 ppb	-0.207 ppb	-0.085 ppb	-0.385 ppb	120.449 %
Concentration per Run 3	-0.042 ppb	0.000 ppb	-0.031 ppb	17.910 ppb	0.001 ppb	-0.207 ppb	-0.082 ppb	-0.374 ppb	124.714 %
Recovery Percentage 1	-0.943 %	-0.386 %	-2.197 %	35.136 %	0.100 %	-10.460 %	-8.765 %	-7.677 %	
Concentration RSD	10.1 %	110.1 %	39.7 %	14.5 %	180.9 %	1.8 %	7.8 %	2.4 %	3.0 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.045 ppb	0.172 ppb	-0.002 ppb	2.753 ppb	127.647 %	0.000 ppb	0.003 ppb	129.336 %	0.160 ppb
Concentration per Run 1	0.043 ppb	0.175 ppb	-0.002 ppb	2.007 ppb	130.599 %	0.000 ppb	0.004 ppb	134.840 %	0.116 ppb
Concentration per Run 2	0.054 ppb	0.205 ppb	-0.002 ppb	2.904 ppb	126.502 %	0.001 ppb	0.000 ppb	127.229 %	0.165 ppb
Concentration per Run 3	0.039 ppb	0.135 ppb	-0.002 ppb	3.348 ppb	125.841 %	-0.001 ppb	0.004 ppb	125.940 %	0.198 ppb
Recovery Percentage 1	9.094 %	3.437 %	-0.020 %	137.651 %		-0.051 %	1.279 %		3.998 %
Concentration RSD	17.8 %	20.7 %	21.0 %	24.8 %	2.0 %	411.0 %	73.3 %	3.7 %	26.0 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	-0.011 ppb	116.170 %	113.349 %	0.411 ppb	0.006 ppb	116.230 %
Concentration per Run 1	-0.009 ppb	116.942 %	113.955 %	0.463 ppb	0.007 ppb	119.396 %
Concentration per Run 2	-0.008 ppb	114.997 %	112.665 %	0.434 ppb	0.007 ppb	114.494 %
Concentration per Run 3	-0.016 ppb	116.571 %	113.425 %	0.337 ppb	0.005 ppb	114.800 %
Recovery Percentage 1	-2.151 %			41.131 %	0.616 %	
Concentration RSD	43.5 %	0.9 %	0.6 %	16.0 %	23.3 %	2.4 %

Alpha ICPMSQ Data with SRD

12/2/2024 3:12:07 PM

Analysis index: 67
Analysis label: CCV
Analysis started at: 12/2/2024 2:44:17 PM
User name ALPHALAB\Metals-Instrument
Rack 0
Vial 9
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	124.512 %	120.906 %	64.764 ppb	6,396.108 ppb	6,340.742 ppb	63.831 ppb	6,505.143 ppb	6,262.049 ppb	122.139 %
Concentration per Run 1	123.520 %	124.306 %	65.009 ppb	6,248.656 ppb	6,157.983 ppb	61.418 ppb	6,324.340 ppb	6,099.475 ppb	121.101 %
Concentration per Run 2	124.454 %	120.405 %	64.628 ppb	6,369.755 ppb	6,304.640 ppb	63.532 ppb	6,412.493 ppb	6,243.671 ppb	121.032 %
Concentration per Run 3	125.563 %	118.008 %	64.657 ppb	6,569.913 ppb	6,559.602 ppb	66.544 ppb	6,778.595 ppb	6,443.002 ppb	124.285 %
Recovery Percentage 1			107.941 %	106.602 %	105.679 %	106.386 %	108.419 %	104.367 %	
Concentration RSD	0.8 %	2.6 %	0.3 %	2.5 %	3.2 %	4.0 %	3.7 %	2.8 %	1.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	64.257 ppb	63.541 ppb	62.884 ppb	6,496.468 ppb	66.600 ppb	66.405 ppb	67.238 ppb	66.320 ppb	117.688 %
Concentration per Run 1	63.324 ppb	63.351 ppb	62.776 ppb	6,495.575 ppb	66.555 ppb	66.621 ppb	66.827 ppb	65.359 ppb	117.544 %
Concentration per Run 2	63.842 ppb	62.590 ppb	61.722 ppb	6,441.934 ppb	66.147 ppb	66.262 ppb	66.763 ppb	66.419 ppb	118.461 %
Concentration per Run 3	65.607 ppb	64.681 ppb	64.153 ppb	6,551.895 ppb	67.098 ppb	66.332 ppb	68.122 ppb	67.181 ppb	117.057 %
Recovery Percentage 1	107.096 %	105.901 %	104.806 %	108.274 %	111.000 %	110.675 %	112.063 %	110.533 %	
Concentration RSD	1.9 %	1.7 %	1.9 %	0.8 %	0.7 %	0.3 %	1.1 %	1.4 %	0.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	66.743 ppb	66.240 ppb	65.667 ppb	64.653 ppb	117.158 %	65.905 ppb	66.085 ppb	122.490 %	64.849 ppb
Concentration per Run 1	65.935 ppb	65.303 ppb	65.101 ppb	63.970 ppb	117.923 %	65.032 ppb	65.551 ppb	122.270 %	64.163 ppb
Concentration per Run 2	66.976 ppb	66.825 ppb	65.442 ppb	63.783 ppb	117.226 %	65.773 ppb	65.869 ppb	122.497 %	65.400 ppb
Concentration per Run 3	67.317 ppb	66.592 ppb	66.457 ppb	66.205 ppb	116.326 %	66.910 ppb	66.836 ppb	122.702 %	64.985 ppb
Recovery Percentage 1	111.238 %	110.401 %	109.445 %	107.755 %		109.842 %	110.142 %		108.082 %
Concentration RSD	1.1 %	1.2 %	1.1 %	2.1 %	0.7 %	1.4 %	1.0 %	0.2 %	1.0 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	60.636 ppb	111.669 %	110.603 %	63.838 ppb	65.167 ppb	110.890 %
Concentration per Run 1	60.027 ppb	113.240 %	111.191 %	61.005 ppb	62.699 ppb	114.098 %
Concentration per Run 2	60.978 ppb	110.281 %	110.057 %	64.751 ppb	65.731 ppb	110.142 %
Concentration per Run 3	60.902 ppb	111.485 %	110.560 %	65.758 ppb	67.071 ppb	108.428 %
Recovery Percentage 1	101.059 %			106.397 %	108.612 %	
Concentration RSD	0.9 %	1.3 %	0.5 %	3.9 %	3.4 %	2.6 %

Alpha ICPMSQ Data with SRD

12/2/2024 3:12:07 PM

Analysis index:	68	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	CCB	Rack	0		
Analysis started at:	12/2/2024 2:48:59 PM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	121.656 %	119.382 %	0.011 ppb	11.191 ppb	-0.302 ppb	-0.562 ppb	4.360 ppb	-2.407 ppb	115.837 %
Concentration per Run 1	116.391 %	120.718 %	0.014 ppb	8.528 ppb	-0.217 ppb	-0.607 ppb	3.919 ppb	-1.344 ppb	113.427 %
Concentration per Run 2	123.580 %	120.107 %	0.009 ppb	11.334 ppb	-0.149 ppb	-0.584 ppb	3.114 ppb	-2.342 ppb	116.803 %
Concentration per Run 3	124.996 %	117.319 %	0.008 ppb	13.711 ppb	-0.539 ppb	-0.496 ppb	6.049 ppb	-3.535 ppb	117.282 %
Recovery Percentage 1			2.115 %	2.238 %	-0.431 %	-5.624 %	4.360 %	-2.407 %	
Concentration RSD	3.8 %	1.5 %	30.7 %	23.2 %	68.9 %	10.4 %	34.8 %	45.6 %	1.8 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.060 ppb	-0.001 ppb	-0.034 ppb	13.777 ppb	0.001 ppb	-0.194 ppb	-0.094 ppb	-0.353 ppb	115.960 %
Concentration per Run 1	-0.072 ppb	0.001 ppb	-0.035 ppb	12.328 ppb	0.000 ppb	-0.197 ppb	-0.105 ppb	-0.347 ppb	115.257 %
Concentration per Run 2	-0.061 ppb	0.000 ppb	-0.033 ppb	15.371 ppb	0.000 ppb	-0.178 ppb	-0.092 ppb	-0.358 ppb	115.616 %
Concentration per Run 3	-0.047 ppb	-0.004 ppb	-0.033 ppb	13.631 ppb	0.001 ppb	-0.207 ppb	-0.086 ppb	-0.355 ppb	117.006 %
Recovery Percentage 1	-1.196 %	-0.124 %	-3.353 %	27.553 %	0.114 %	-9.688 %	-9.433 %	-7.061 %	
Concentration RSD	21.4 %	203.5 %	2.8 %	11.1 %	120.2 %	7.7 %	10.5 %	1.6 %	0.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.055 ppb	0.170 ppb	-0.002 ppb	1.906 ppb	118.314 %	0.000 ppb	0.002 ppb	121.673 %	0.128 ppb
Concentration per Run 1	0.045 ppb	0.134 ppb	-0.001 ppb	1.438 ppb	118.646 %	0.001 ppb	0.002 ppb	122.611 %	0.091 ppb
Concentration per Run 2	0.056 ppb	0.194 ppb	-0.002 ppb	2.051 ppb	117.872 %	-0.001 ppb	0.002 ppb	120.672 %	0.131 ppb
Concentration per Run 3	0.064 ppb	0.182 ppb	-0.003 ppb	2.229 ppb	118.424 %	0.000 ppb	0.002 ppb	121.737 %	0.162 ppb
Recovery Percentage 1	11.027 %	3.397 %	-0.021 %	95.294 %		-0.043 %	1.173 %		3.201 %
Concentration RSD	17.7 %	18.8 %	32.5 %	21.7 %	0.3 %	635.6 %	0.9 %	0.8 %	27.4 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	-0.009 ppb	110.499 %	109.294 %	0.450 ppb	0.009 ppb	111.067 %
Concentration per Run 1	-0.013 ppb	111.326 %	110.246 %	0.489 ppb	0.010 ppb	115.261 %
Concentration per Run 2	-0.006 ppb	108.956 %	107.452 %	0.486 ppb	0.009 ppb	108.066 %
Concentration per Run 3	-0.009 ppb	111.214 %	110.183 %	0.375 ppb	0.008 ppb	109.872 %
Recovery Percentage 1	-1.898 %			45.009 %	0.892 %	
Concentration RSD	35.8 %	1.2 %	1.5 %	14.4 %	8.8 %	3.4 %

Alpha ICPMSQ Data with SRD

12/2/2024 3:12:07 PM

Analysis index:	69	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	xWG2002749-1 6020TL	Rack	1		
Analysis started at:	12/2/2024 3:00:32 PM	Vial	39		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	123.126 %	118.959 %	0.006 ppb	1.740 ppb	0.616 ppb	0.544 ppb	1.723 ppb	25.283 ppb	124.032 %
Concentration per Run 1	121.956 %	121.157 %	0.009 ppb	-6.173 ppb	0.613 ppb	0.551 ppb	1.639 ppb	21.939 ppb	123.987 %
Concentration per Run 2	123.832 %	116.708 %	0.005 ppb	4.476 ppb	0.746 ppb	0.502 ppb	1.158 ppb	27.727 ppb	124.487 %
Concentration per Run 3	123.589 %	119.011 %	0.005 ppb	6.918 ppb	0.488 ppb	0.579 ppb	2.373 ppb	26.185 ppb	123.621 %
Concentration RSD	0.8 %	1.9 %	32.9 %	400.0 %	21.0 %	7.2 %	35.5 %	11.9 %	0.4 %

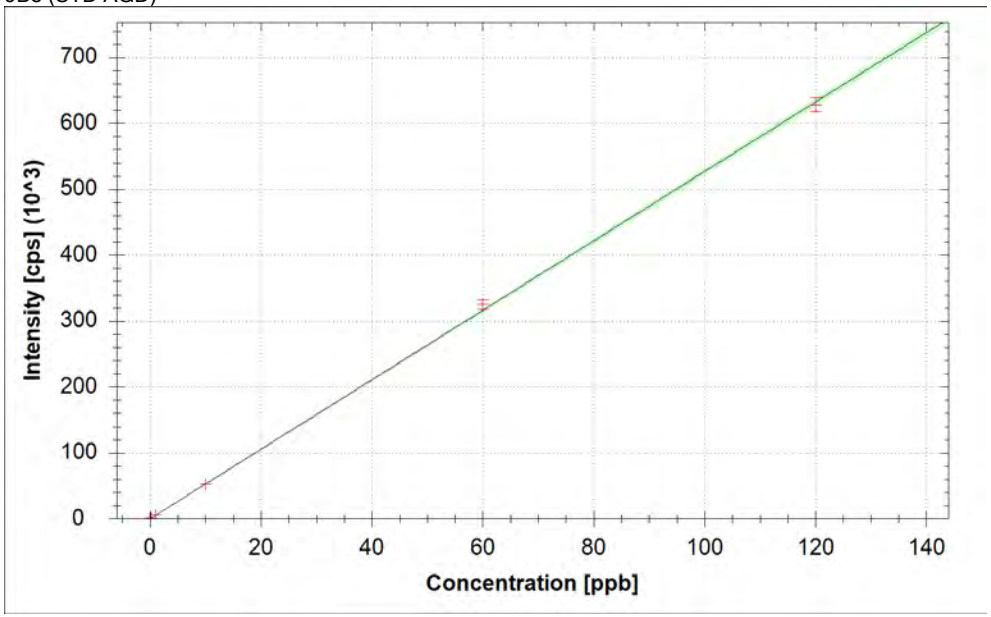
Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.000 ppb	0.034 ppb	0.197 ppb	4.038 ppb	0.000 ppb	-0.181 ppb	-0.063 ppb	0.943 ppb	116.939 %
Concentration per Run 1	0.004 ppb	0.034 ppb	0.193 ppb	3.191 ppb	0.000 ppb	-0.162 ppb	-0.067 ppb	0.896 ppb	116.855 %
Concentration per Run 2	0.008 ppb	0.041 ppb	0.216 ppb	3.905 ppb	0.003 ppb	-0.186 ppb	-0.056 ppb	0.889 ppb	116.946 %
Concentration per Run 3	-0.012 ppb	0.028 ppb	0.182 ppb	5.018 ppb	-0.002 ppb	-0.194 ppb	-0.065 ppb	1.044 ppb	117.016 %
Concentration RSD	7,452.7 %	18.5 %	8.8 %	22.8 %	671.0 %	9.1 %	9.7 %	9.3 %	0.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.014 ppb	0.046 ppb	0.011 ppb	0.829 ppb	119.330 %	-0.002 ppb	0.000 ppb	123.085 %	0.058 ppb
Concentration per Run 1	0.008 ppb	0.047 ppb	0.010 ppb	0.655 ppb	120.346 %	-0.002 ppb	0.000 ppb	124.729 %	0.041 ppb
Concentration per Run 2	0.014 ppb	0.026 ppb	0.012 ppb	0.898 ppb	118.618 %	-0.003 ppb	0.000 ppb	122.583 %	0.063 ppb
Concentration per Run 3	0.019 ppb	0.065 ppb	0.012 ppb	0.932 ppb	119.025 %	-0.003 ppb	0.000 ppb	121.944 %	0.068 ppb
Concentration RSD	41.0 %	42.1 %	9.6 %	18.3 %	0.8 %	32.7 %	2,857.0 %	1.2 %	24.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	-0.008 ppb	112.231 %	111.340 %	0.107 ppb	-0.001 ppb	**128.986 %**
Concentration per Run 1	-0.010 ppb	113.299 %	112.322 %	0.102 ppb	-0.001 ppb	**140.444 %**
Concentration per Run 2	-0.013 ppb	111.273 %	109.542 %	0.116 ppb	-0.001 ppb	**126.973 %**
Concentration per Run 3	0.000 ppb	112.123 %	112.156 %	0.102 ppb	-0.001 ppb	119.541 %
Concentration RSD	84.3 %	0.9 %	1.4 %	7.4 %	33.3 %	**8.2 %**

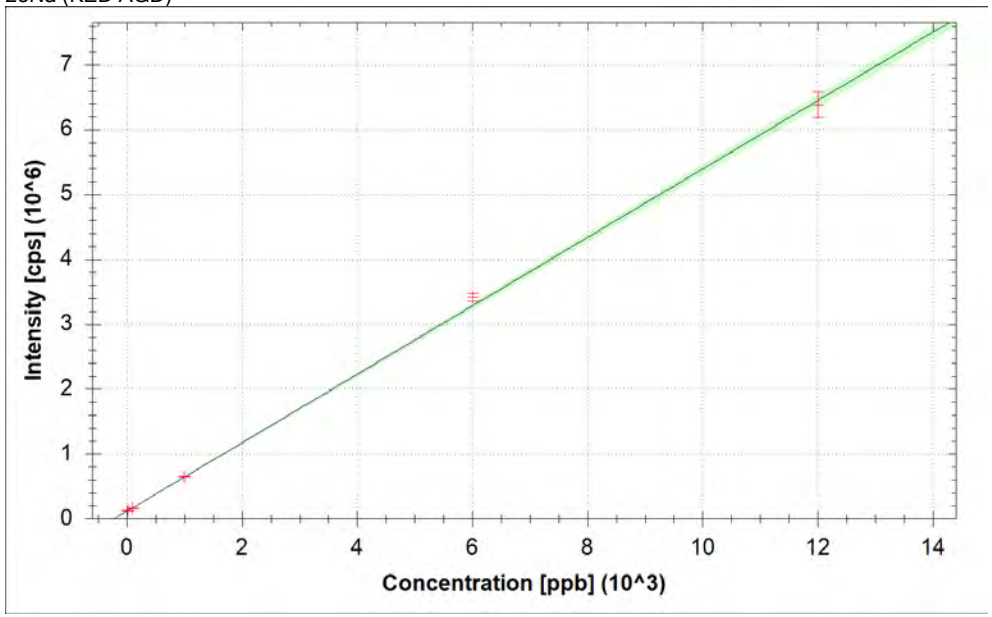
Calibration Curves:

9Be (STD AGD)



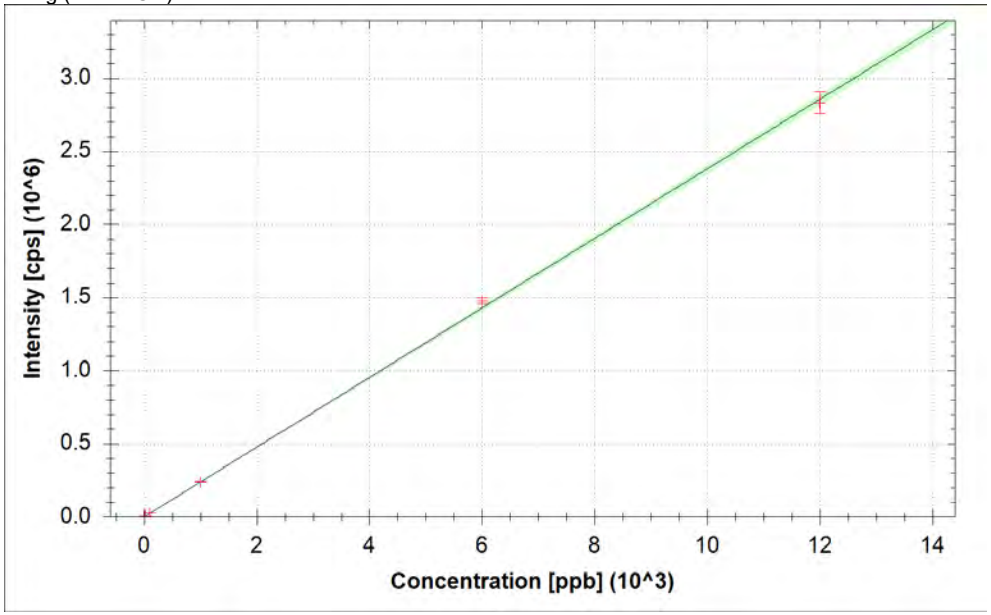
f(x) = 5267.1130*x + 66.6197
R² = 0.9997
BEC = 0.013 ppb
LoD = 0.0019 ppb

23Na (KED AGD)



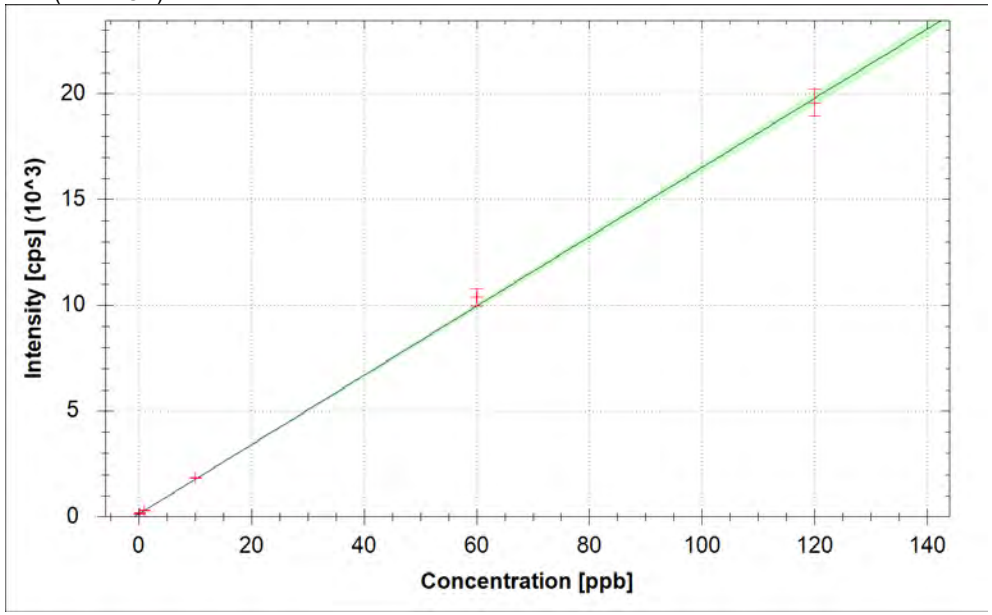
f(x) = 527.4774*x + 116840.2037
R² = 0.9993
BEC = 221.508 ppb
LoD = 10.6401 ppb

24Mg (KED AGD)



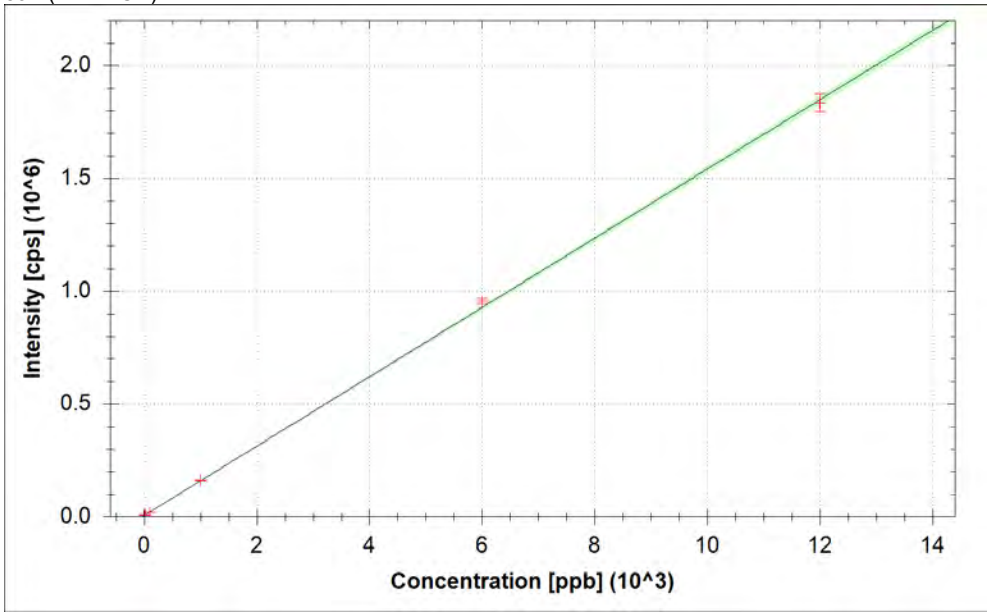
f(x) = 237.8891*x + 438.0875
R² = 0.9996
BEC = 1.842 ppb
LoD = 0.7198 ppb

27Al (KED AGD)



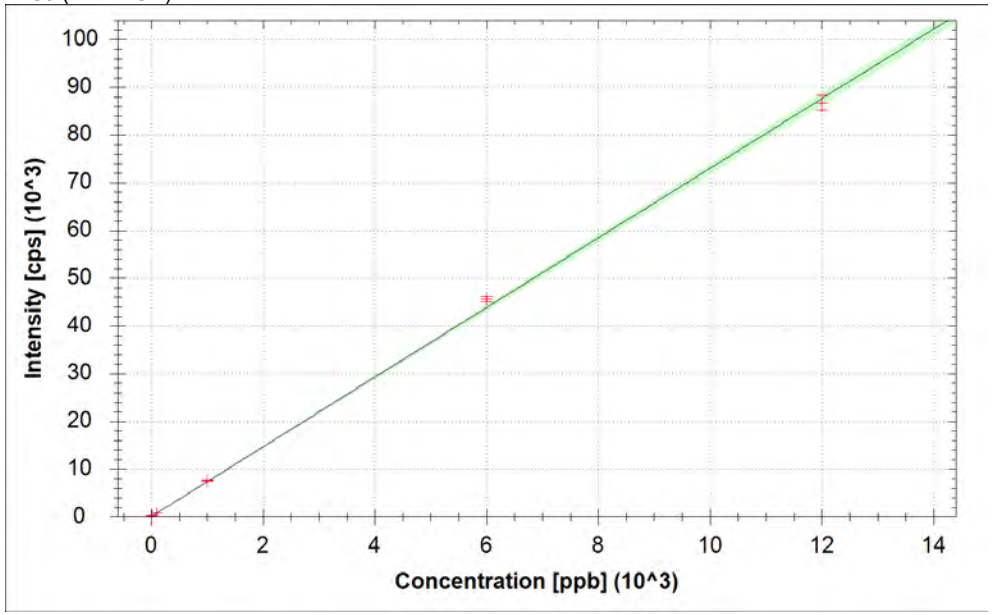
f(x) = 163.6513*x + 133.0949
R² = 0.9993
BEC = 0.813 ppb
LoD = 0.1364 ppb

39K (KED AGD)



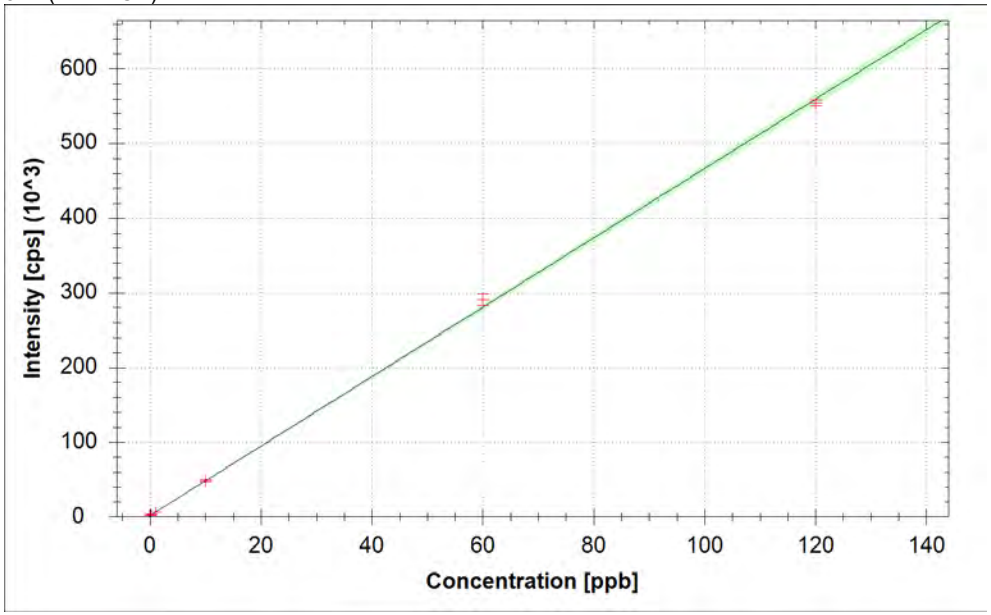
f(x) = 153.4782*x + 5974.2520
R² = 0.9997
BEC = 38.926 ppb
LoD = 2.2530 ppb

44Ca (KED AGD)



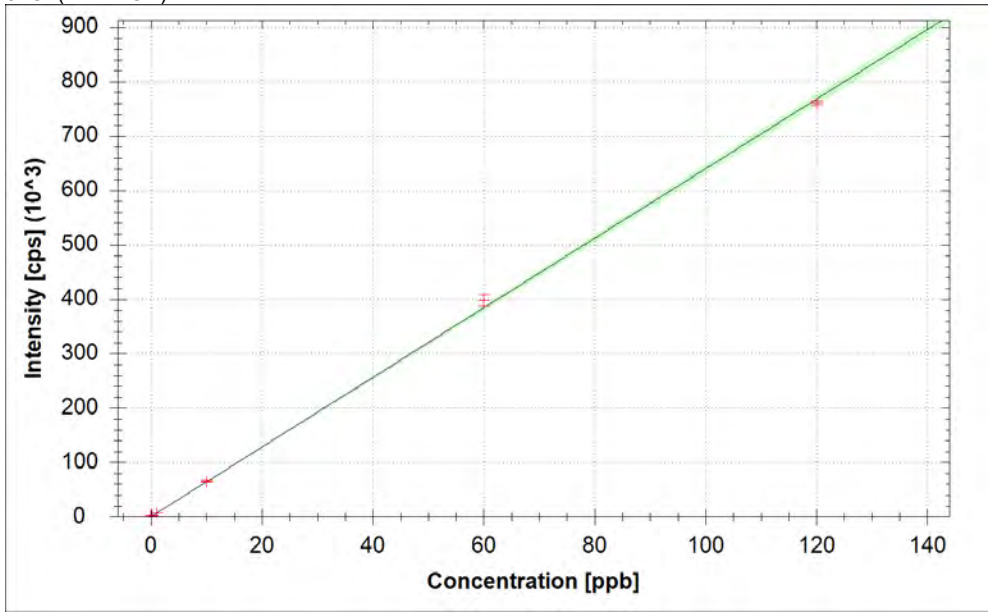
f(x) = 7.2923*x + 64.2154
R² = 0.9994
BEC = 8.806 ppb
LoD = 1.1046 ppb

51V (KED AGD)



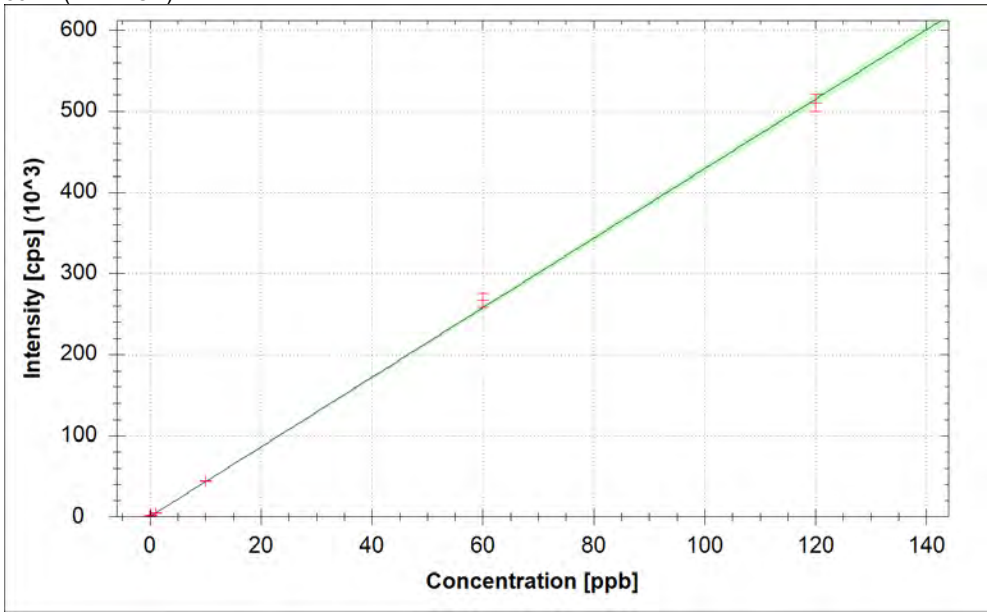
f(x) = 4645.6473*x + 1737.7992
R² = 0.9995
BEC = 0.374 ppb
LoD = 0.0166 ppb

52Cr (KED AGD)



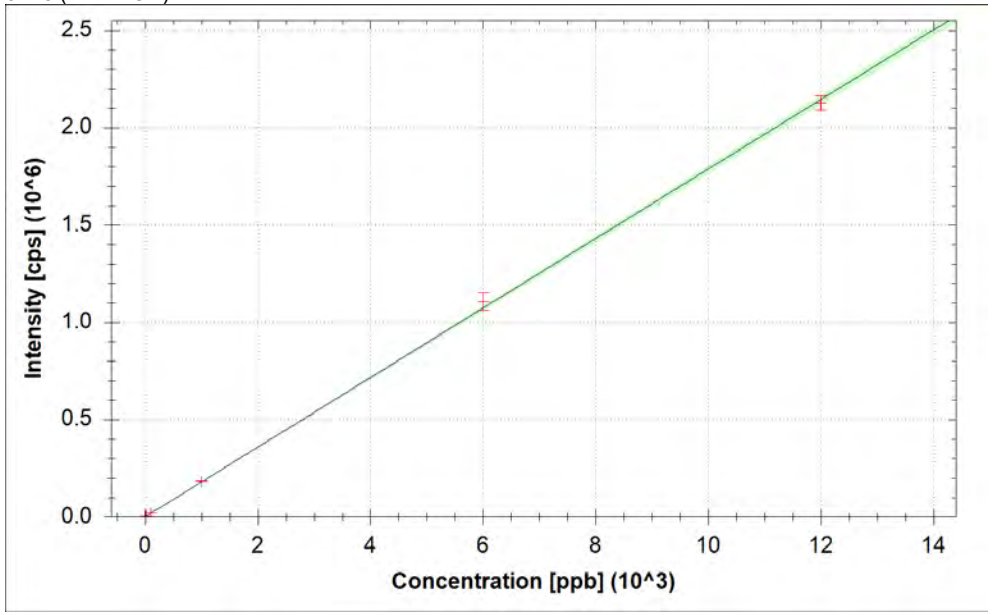
f(x) = 6395.9158*x + 273.4370
R² = 0.9995
BEC = 0.043 ppb
LoD = 0.0116 ppb

55Mn (KED AGD)



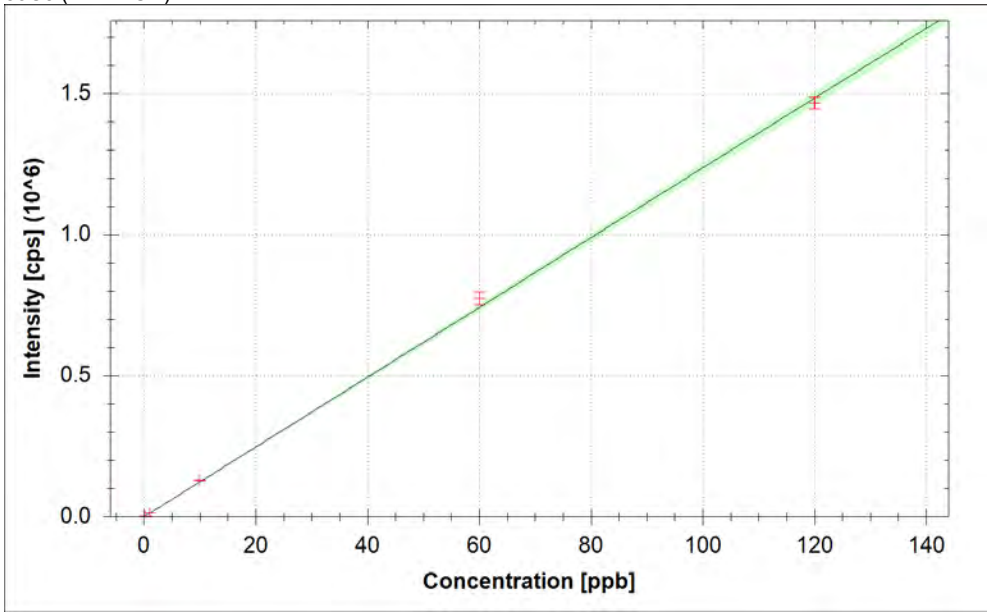
f(x) = 4286.8399*x + 277.8620
R² = 0.9995
BEC = 0.065 ppb
LoD = 0.0153 ppb

57Fe (KED AGD)



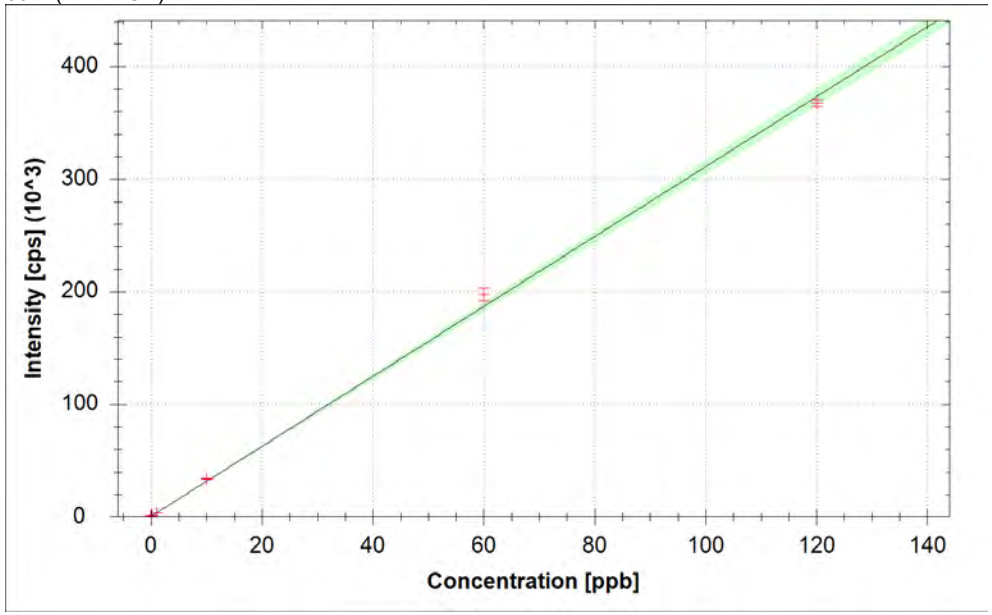
f(x) = 178.6474*x + 515.4184
R² = 0.9996
BEC = 2.885 ppb
LoD = 0.8639 ppb

59Co (KED AGD)



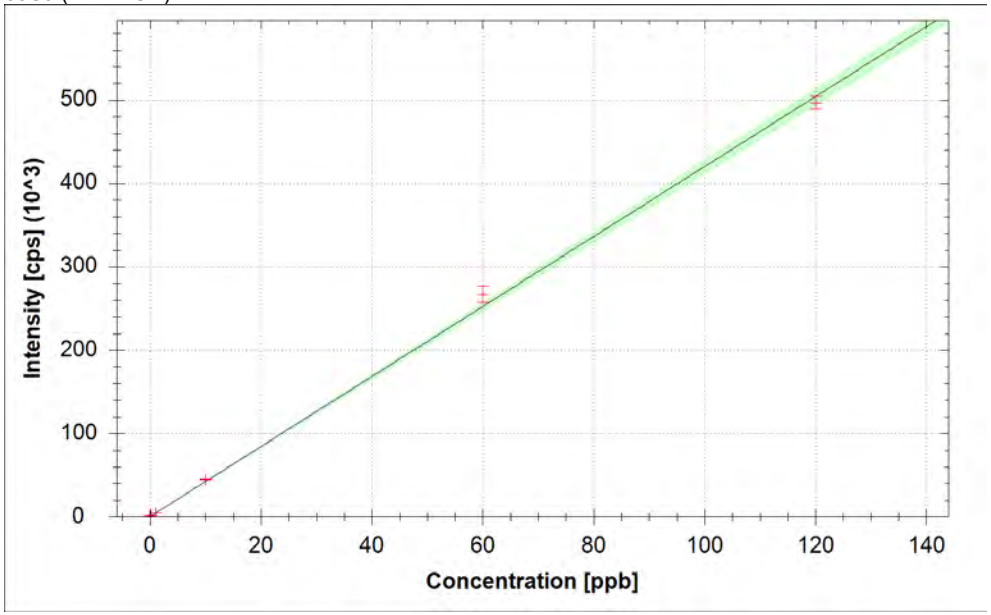
f(x) = 12367.2866*x + 60.0283
R² = 0.9993
BEC = 0.005 ppb
LoD = 0.0049 ppb

60Ni (KED AGD)



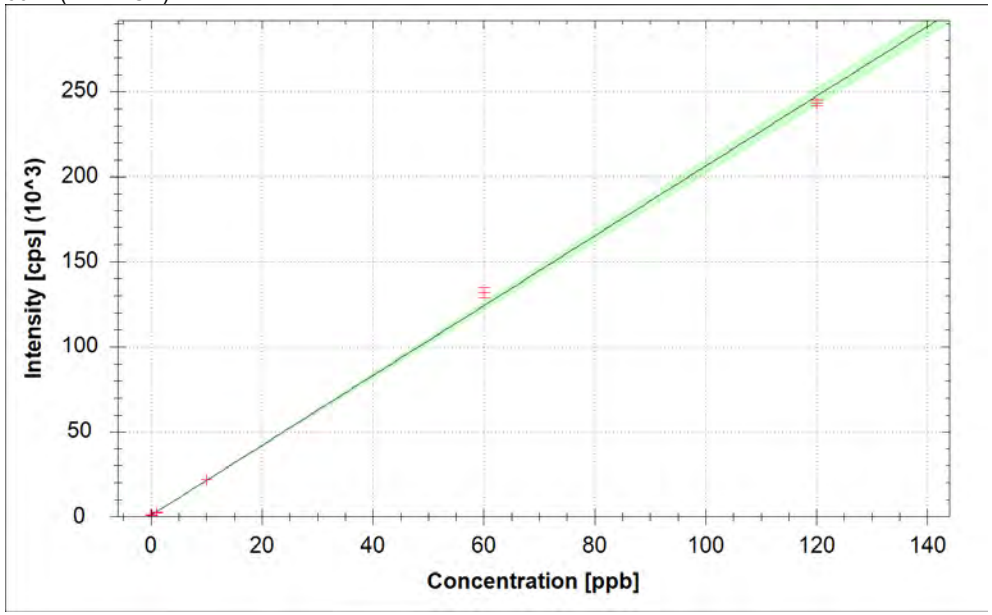
f(x) = 3104.8080*x + 413.6322
R² = 0.9987
BEC = 0.133 ppb
LoD = 0.0739 ppb

65Cu (KED AGD)



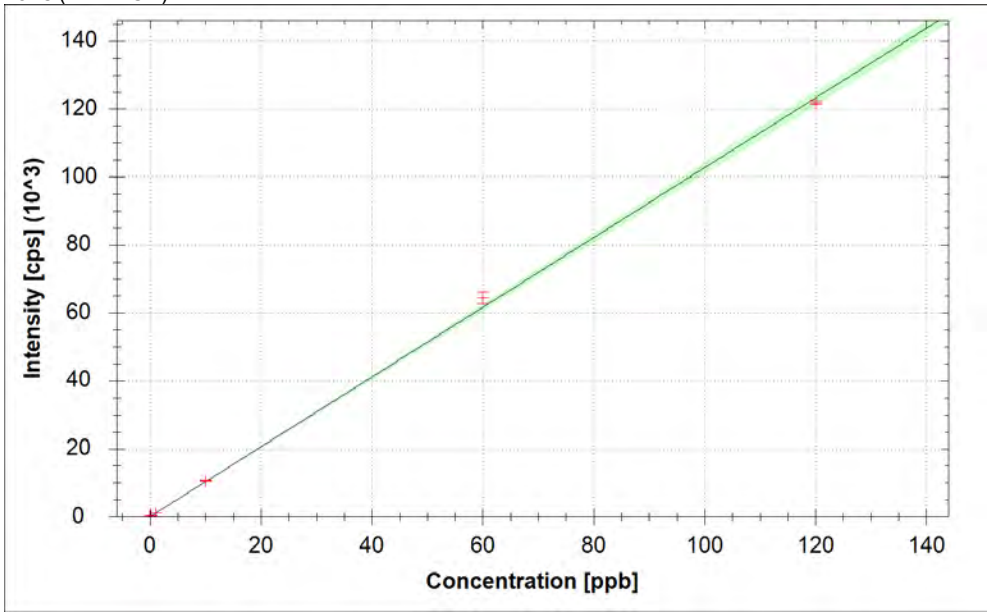
f(x) = 4197.6778*x + 277.7611
R² = 0.9987
BEC = 0.066 ppb
LoD = 0.0513 ppb

66Zn (KED AGD)



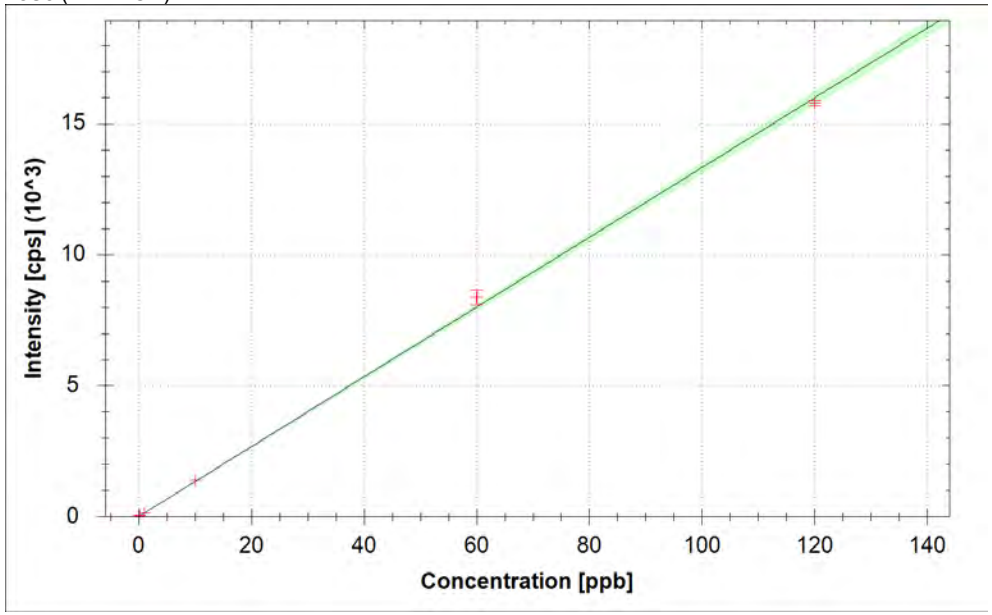
f(x) = 2052.9580*x + 869.1578
R² = 0.9985
BEC = 0.423 ppb
LoD = 0.0883 ppb

75As (KED AGD)



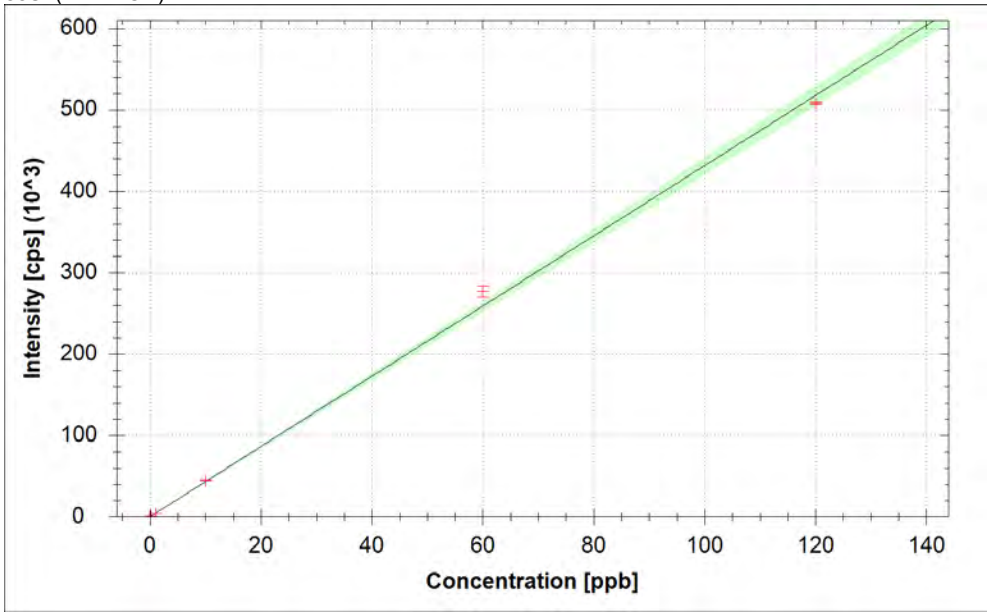
f(x) = 1026.3770*x + 43.0550
R² = 0.9992
BEC = 0.042 ppb
LoD = 0.0124 ppb

78Se (KED AGD)



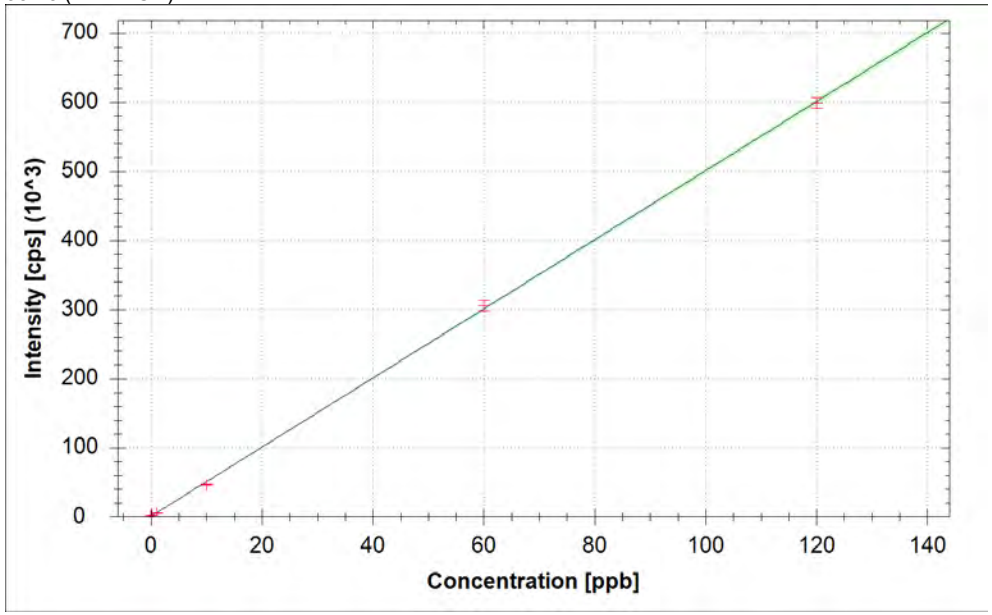
f(x) = 133.0531*x + 14.5748
R² = 0.9992
BEC = 0.110 ppb
LoD = 0.0069 ppb

88Sr (KED AGD)



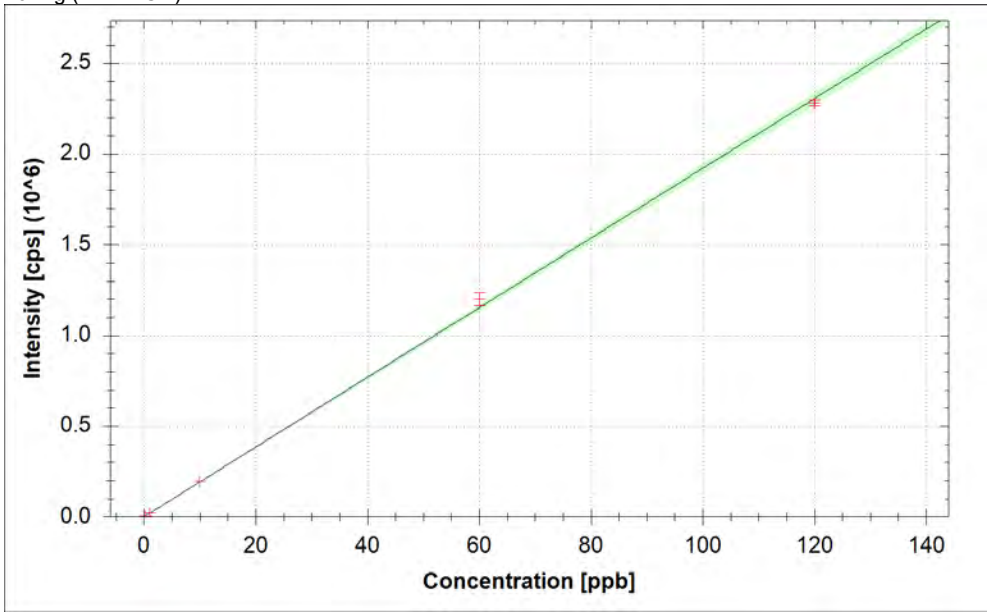
f(x) = 4313.7004*x + 81.6884
R² = 0.9982
BEC = 0.019 ppb
LoD = 0.0017 ppb

95Mo (KED AGD)



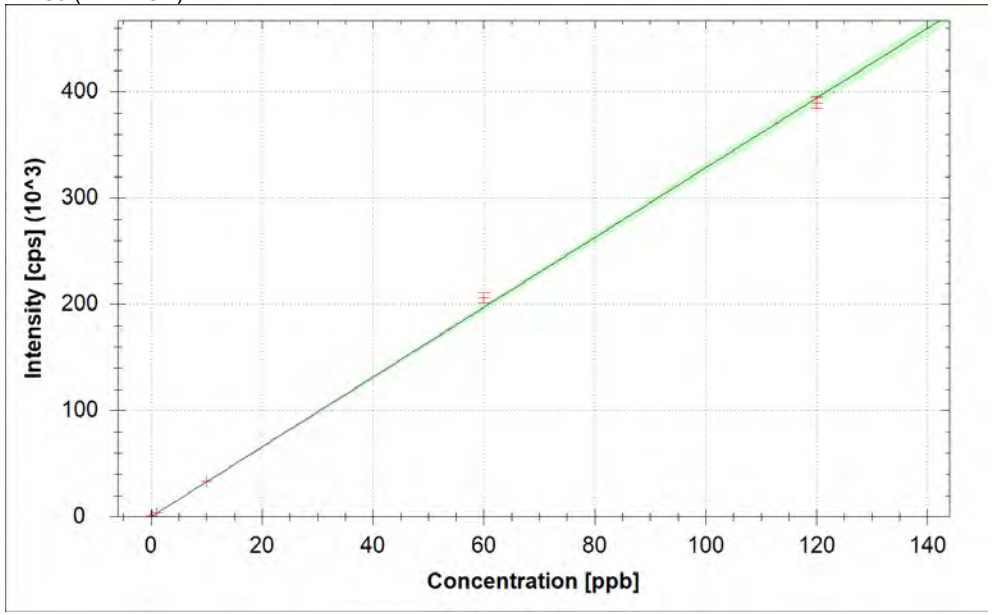
f(x) = 5000.7156*x + 791.3607
R² = 0.9998
BEC = 0.158 ppb
LoD = 0.1723 ppb

107Ag (KED AGD)



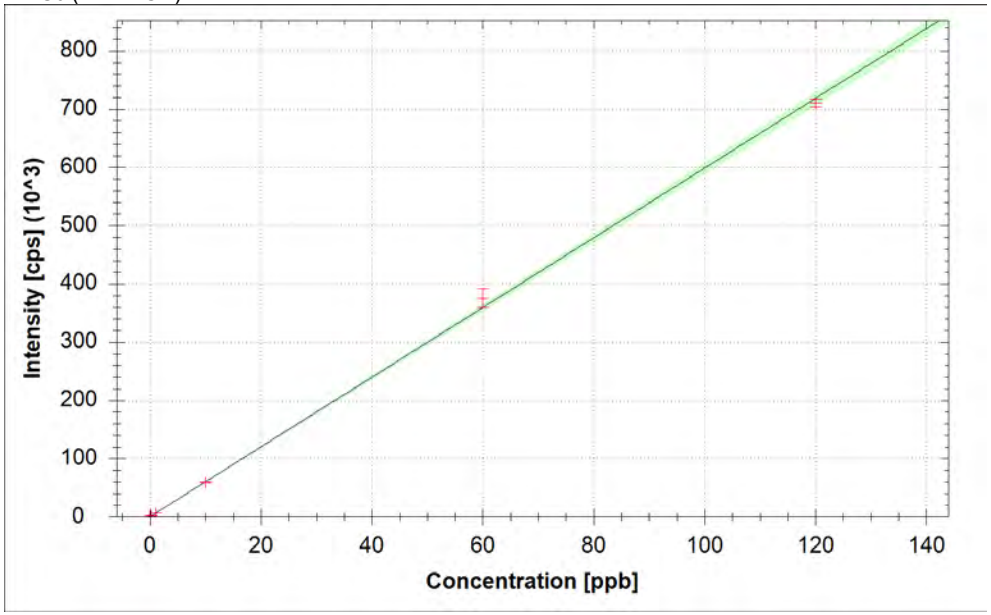
f(x) = 19199.4872*x + 25.5503
R² = 0.9994
BEC = 0.001 ppb
LoD = 0.0008 ppb

111Cd (KED AGD)



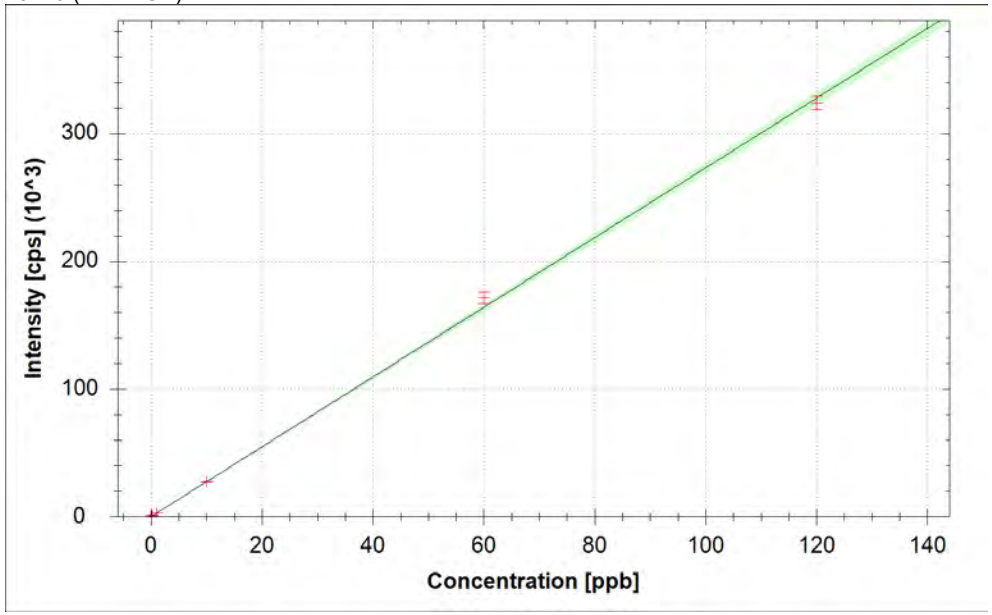
f(x) = 3282.7721*x + 2.2247
R² = 0.9992
BEC = 0.001 ppb
LoD = 0.0014 ppb

121Sb (KED AGD)



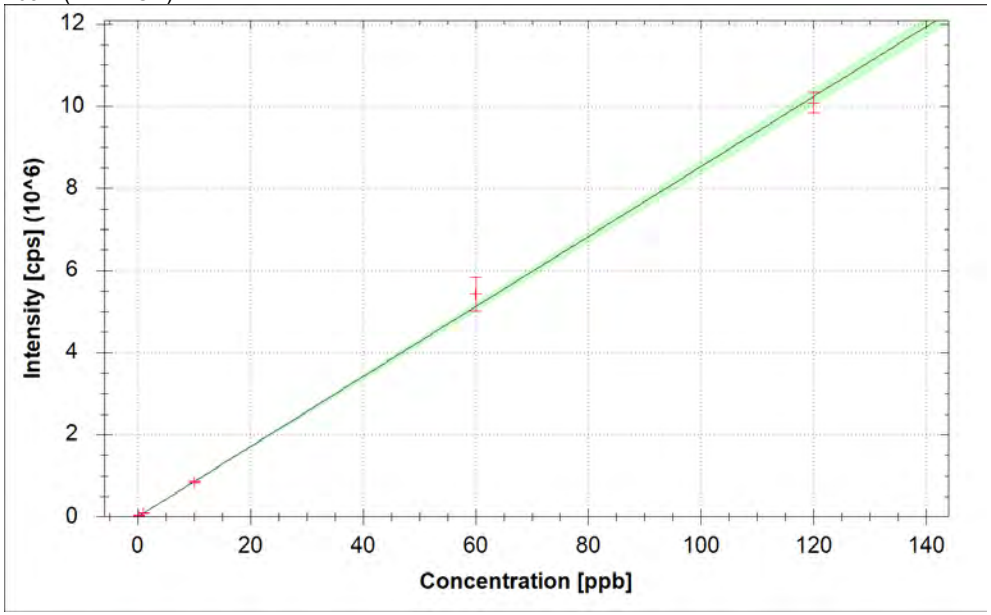
f(x) = 5984.0470*x + 200.8862
R² = 0.9993
BEC = 0.034 ppb
LoD = 0.0178 ppb

137Ba (KED AGD)



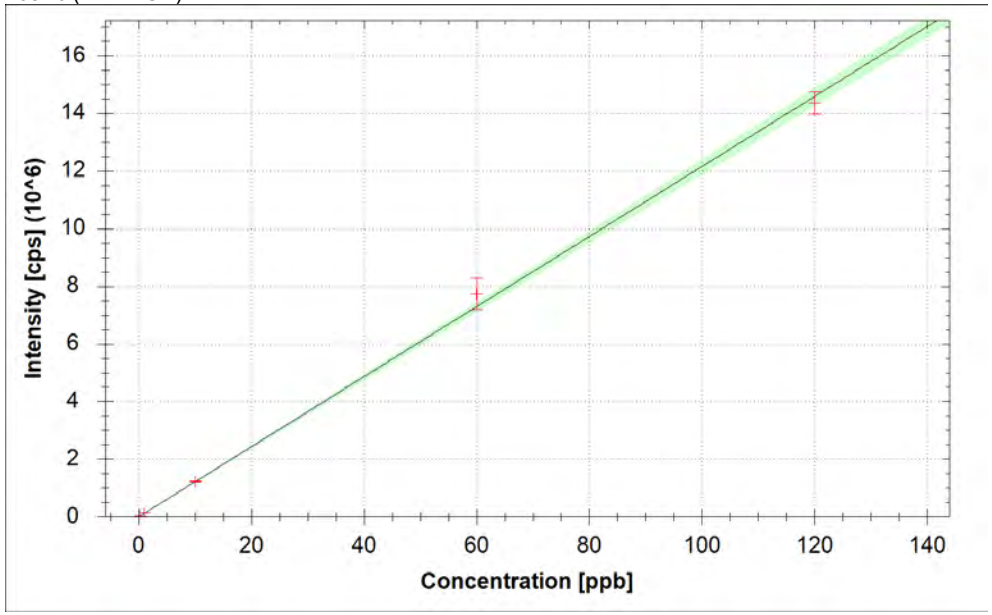
f(x) = 2728.0390*x + 97.7627
R² = 0.9992
BEC = 0.036 ppb
LoD = 0.0050 ppb

205Tl (KED AGD)



f(x) = 85209.5869*x + 2315.0498
R² = 0.9987
BEC = 0.027 ppb
LoD = 0.0227 ppb

208Pb (KED AGD)



f(x) = 121463.8727*x + 1254.3755
R² = 0.9986
BEC = 0.010 ppb
LoD = 0.0037 ppb

Standards:

Analysis Index: 4
Analysis Name: 0.2/20 Cal
Analysis Type: STD
Analysis Started at: 12/2/2024 3:21:44 PM
Total Dilution Factor 50000
Rack 0
Vial 2

Category	Concentration average	Concentration RSD	Standard Concentration	Standard Relative Difference
6Li (STD AGD)	100.666 %	1.8 %		0.000 %
6Li (KED AGD)	100.841 %	0.4 %		0.000 %
9Be (STD AGD)	0.193 ppb	7.2 %	0.200 ppb	3.721 %
23Na (KED AGD)	14.380 ppb	20.3 %	20.000 ppb	28.100 %
24Mg (KED AGD)	18.332 ppb	5.8 %	20.000 ppb	8.339 %
27Al (KED AGD)	0.154 ppb	43.2 %	0.200 ppb	23.172 %
39K (KED AGD)	14.969 ppb	10.5 %	20.000 ppb	25.155 %
44Ca (KED AGD)	16.598 ppb	10.1 %	20.000 ppb	17.009 %
45Sc (STD AGD)	100.198 %	0.5 %		0.000 %
51V (KED AGD)	0.230 ppb	5.6 %	0.200 ppb	15.158 %
52Cr (KED AGD)	0.191 ppb	3.0 %	0.200 ppb	4.298 %
55Mn (KED AGD)	0.171 ppb	16.9 %	0.200 ppb	14.573 %
57Fe (KED AGD)	17.869 ppb	5.5 %	20.000 ppb	10.657 %
59Co (KED AGD)	0.211 ppb	2.7 %	0.200 ppb	5.302 %
60Ni (KED AGD)	0.156 ppb	6.3 %	0.200 ppb	22.082 %
65Cu (KED AGD)	0.235 ppb	11.5 %	0.200 ppb	17.341 %
66Zn (KED AGD)	-0.114 ppb	9.7 %	0.200 ppb	157.060 %
74Ge (KED AGD)	101.692 %	0.8 %		0.000 %
75As (KED AGD)	0.206 ppb	12.4 %	0.200 ppb	3.209 %
78Se (KED AGD)	0.169 ppb	23.7 %	0.200 ppb	15.298 %
88Sr (KED AGD)	0.189 ppb	2.4 %	0.200 ppb	5.550 %
95Mo (KED AGD)	0.158 ppb	17.2 %	0.200 ppb	20.976 %
103Rh (KED AGD)	99.370 %	0.6 %		0.000 %
107Ag (KED AGD)	0.186 ppb	1.5 %	0.200 ppb	6.779 %
111Cd (KED AGD)	0.194 ppb	7.8 %	0.200 ppb	2.959 %
115In (KED AGD)	99.507 %	1.5 %		0.000 %
121Sb (KED AGD)	0.188 ppb	4.2 %	0.200 ppb	5.877 %
137Ba (KED AGD)	0.199 ppb	6.8 %	0.200 ppb	0.457 %
159Tb (KED AGD)	99.602 %	0.5 %		0.000 %
175Lu (KED AGD)	99.508 %	1.4 %		0.000 %
205Tl (KED AGD)	0.189 ppb	8.3 %	0.200 ppb	5.362 %
208Pb (KED AGD)	0.203 ppb	2.2 %	0.200 ppb	1.543 %
209Bi (KED AGD)	98.364 %	2.6 %		0.000 %

Alpha ICPMSQ Data with SRD

12/3/2024 6:38:28 AM

Standards:

Analysis Index: 5
Analysis Name: 1/100 Cal
Analysis Type: STD
Analysis Started at: 12/2/2024 3:26:21 PM
Total Dilution Factor 10000
Rack 0
Vial 3

Category	Concentration average	Concentration RSD	Standard Concentration	Standard Relative Difference
6Li (STD AGD)	98.977 %	1.4 %		0.000 %
6Li (KED AGD)	101.922 %	3.0 %		0.000 %
9Be (STD AGD)	1.009 ppb	1.3 %	1.000 ppb	0.868 %
23Na (KED AGD)	92.912 ppb	6.2 %	100.000 ppb	7.088 %
24Mg (KED AGD)	99.163 ppb	1.7 %	100.000 ppb	0.837 %
27Al (KED AGD)	0.989 ppb	6.3 %	1.000 ppb	1.101 %
39K (KED AGD)	95.496 ppb	1.7 %	100.000 ppb	4.504 %
44Ca (KED AGD)	95.090 ppb	1.7 %	100.000 ppb	4.910 %
45Sc (STD AGD)	102.886 %	1.5 %		0.000 %
51V (KED AGD)	0.958 ppb	1.1 %	1.000 ppb	4.192 %
52Cr (KED AGD)	0.998 ppb	2.4 %	1.000 ppb	0.243 %
55Mn (KED AGD)	0.933 ppb	4.0 %	1.000 ppb	6.654 %
57Fe (KED AGD)	96.872 ppb	1.0 %	100.000 ppb	3.128 %
59Co (KED AGD)	1.021 ppb	2.8 %	1.000 ppb	2.060 %
60Ni (KED AGD)	0.957 ppb	3.5 %	1.000 ppb	4.277 %
65Cu (KED AGD)	1.018 ppb	3.9 %	1.000 ppb	1.790 %
66Zn (KED AGD)	0.735 ppb	4.2 %	1.000 ppb	26.471 %
74Ge (KED AGD)	102.379 %	0.2 %		0.000 %
75As (KED AGD)	1.026 ppb	0.9 %	1.000 ppb	2.593 %
78Se (KED AGD)	1.014 ppb	0.9 %	1.000 ppb	1.367 %
88Sr (KED AGD)	0.948 ppb	0.5 %	1.000 ppb	5.242 %
95Mo (KED AGD)	0.859 ppb	7.4 %	1.000 ppb	14.052 %
103Rh (KED AGD)	100.601 %	1.4 %		0.000 %
107Ag (KED AGD)	0.987 ppb	0.4 %	1.000 ppb	1.257 %
111Cd (KED AGD)	1.029 ppb	0.9 %	1.000 ppb	2.875 %
115In (KED AGD)	101.317 %	1.1 %		0.000 %
121Sb (KED AGD)	0.971 ppb	0.8 %	1.000 ppb	2.865 %
137Ba (KED AGD)	0.985 ppb	3.5 %	1.000 ppb	1.530 %
159Tb (KED AGD)	101.490 %	1.0 %		0.000 %
175Lu (KED AGD)	100.582 %	0.9 %		0.000 %
205Tl (KED AGD)	0.944 ppb	5.0 %	1.000 ppb	5.609 %
208Pb (KED AGD)	0.997 ppb	2.8 %	1.000 ppb	0.256 %
209Bi (KED AGD)	103.211 %	2.4 %		0.000 %

Standards:

Analysis Index: 6
Analysis Name: 10/1000 Cal
Analysis Type: STD
Analysis Started at: 12/2/2024 3:31:00 PM
Total Dilution Factor 1000
Rack 0
Vial 4

Category	Concentration average	Concentration RSD	Standard Concentration	Standard Relative Difference
6Li (STD AGD)	100.053 %	1.0 %		0.000 %
6Li (KED AGD)	99.455 %	0.8 %		0.000 %
9Be (STD AGD)	9.956 ppb	0.8 %	10.000 ppb	0.440 %
23Na (KED AGD)	1,014.329 ppb	0.5 %	1,000.000 ppb	1.433 %
24Mg (KED AGD)	996.391 ppb	0.7 %	1,000.000 ppb	0.361 %
27Al (KED AGD)	10.408 ppb	0.8 %	10.000 ppb	4.084 %
39K (KED AGD)	1,012.619 ppb	1.2 %	1,000.000 ppb	1.262 %
44Ca (KED AGD)	1,021.897 ppb	1.4 %	1,000.000 ppb	2.190 %
45Sc (STD AGD)	102.407 %	0.3 %		0.000 %
51V (KED AGD)	9.969 ppb	3.4 %	10.000 ppb	0.309 %
52Cr (KED AGD)	10.173 ppb	2.1 %	10.000 ppb	1.733 %
55Mn (KED AGD)	10.186 ppb	1.0 %	10.000 ppb	1.859 %
57Fe (KED AGD)	1,015.202 ppb	1.2 %	1,000.000 ppb	1.520 %
59Co (KED AGD)	10.383 ppb	1.4 %	10.000 ppb	3.828 %
60Ni (KED AGD)	10.675 ppb	2.1 %	10.000 ppb	6.747 %
65Cu (KED AGD)	10.564 ppb	1.5 %	10.000 ppb	5.643 %
66Zn (KED AGD)	10.243 ppb	0.4 %	10.000 ppb	2.433 %
74Ge (KED AGD)	99.486 %	0.6 %		0.000 %
75As (KED AGD)	10.290 ppb	1.5 %	10.000 ppb	2.897 %
78Se (KED AGD)	10.412 ppb	0.3 %	10.000 ppb	4.117 %
88Sr (KED AGD)	10.271 ppb	0.5 %	10.000 ppb	2.708 %
95Mo (KED AGD)	9.061 ppb	2.3 %	10.000 ppb	9.386 %
103Rh (KED AGD)	99.504 %	1.2 %		0.000 %
107Ag (KED AGD)	10.132 ppb	0.5 %	10.000 ppb	1.319 %
111Cd (KED AGD)	10.103 ppb	0.3 %	10.000 ppb	1.030 %
115In (KED AGD)	99.607 %	1.5 %		0.000 %
121Sb (KED AGD)	9.844 ppb	0.5 %	10.000 ppb	1.558 %
137Ba (KED AGD)	10.000 ppb	0.7 %	10.000 ppb	0.005 %
159Tb (KED AGD)	101.738 %	0.5 %		0.000 %
175Lu (KED AGD)	102.236 %	0.9 %		0.000 %
205Tl (KED AGD)	9.926 ppb	2.8 %	10.000 ppb	0.745 %
208Pb (KED AGD)	10.053 ppb	1.6 %	10.000 ppb	0.531 %
209Bi (KED AGD)	103.360 %	1.9 %		0.000 %

Standards:

Analysis Index: 7
Analysis Name: 60/6000 Cal
Analysis Type: STD
Analysis Started at: 12/2/2024 3:35:38 PM
Total Dilution Factor 166.6666666
Rack 0
Vial 5

Category	Concentration average	Concentration RSD	Standard Concentration	Standard Relative Difference
6Li (STD AGD)	92.826 %	3.6 %		0.000 %
6Li (KED AGD)	93.159 %	2.8 %		0.000 %
9Be (STD AGD)	61.658 ppb	2.3 %	60.000 ppb	2.763 %
23Na (KED AGD)	6,248.663 ppb	1.8 %	6,000.000 ppb	4.144 %
24Mg (KED AGD)	6,205.803 ppb	1.4 %	6,000.000 ppb	3.430 %
27Al (KED AGD)	62.535 ppb	4.0 %	60.000 ppb	4.225 %
39K (KED AGD)	6,178.235 ppb	1.2 %	6,000.000 ppb	2.971 %
44Ca (KED AGD)	6,240.403 ppb	1.2 %	6,000.000 ppb	4.007 %
45Sc (STD AGD)	97.613 %	1.7 %		0.000 %
51V (KED AGD)	62.161 ppb	2.6 %	60.000 ppb	3.602 %
52Cr (KED AGD)	62.127 ppb	2.9 %	60.000 ppb	3.545 %
55Mn (KED AGD)	62.102 ppb	3.3 %	60.000 ppb	3.504 %
57Fe (KED AGD)	6,190.422 ppb	4.0 %	6,000.000 ppb	3.174 %
59Co (KED AGD)	62.622 ppb	3.1 %	60.000 ppb	4.370 %
60Ni (KED AGD)	63.402 ppb	3.1 %	60.000 ppb	5.670 %
65Cu (KED AGD)	63.505 ppb	3.7 %	60.000 ppb	5.842 %
66Zn (KED AGD)	63.778 ppb	2.4 %	60.000 ppb	6.297 %
74Ge (KED AGD)	93.233 %	2.8 %		0.000 %
75As (KED AGD)	62.765 ppb	2.7 %	60.000 ppb	4.608 %
78Se (KED AGD)	62.775 ppb	3.3 %	60.000 ppb	4.625 %
88Sr (KED AGD)	64.166 ppb	2.5 %	60.000 ppb	6.943 %
95Mo (KED AGD)	60.921 ppb	2.5 %	60.000 ppb	1.535 %
103Rh (KED AGD)	91.080 %	2.3 %		0.000 %
107Ag (KED AGD)	62.418 ppb	3.1 %	60.000 ppb	4.031 %
111Cd (KED AGD)	62.688 ppb	2.4 %	60.000 ppb	4.480 %
115In (KED AGD)	92.541 %	3.9 %		0.000 %
121Sb (KED AGD)	62.628 ppb	4.3 %	60.000 ppb	4.380 %
137Ba (KED AGD)	62.701 ppb	2.7 %	60.000 ppb	4.501 %
159Tb (KED AGD)	94.386 %	1.9 %		0.000 %
175Lu (KED AGD)	94.513 %	1.9 %		0.000 %
205Tl (KED AGD)	63.580 ppb	7.6 %	60.000 ppb	5.966 %
208Pb (KED AGD)	63.606 ppb	7.0 %	60.000 ppb	6.010 %
209Bi (KED AGD)	92.584 %	7.0 %		0.000 %

Standards:

Analysis Index: 8
Analysis Name: 120/12000 Cal
Analysis Type: STD
Analysis Started at: 12/2/2024 3:40:18 PM
Total Dilution Factor 83.33333333
Rack 0
Vial 6

Category	Concentration average	Concentration RSD	Standard Concentration	Standard Relative Difference
6Li (STD AGD)	93.976 %	2.7 %		0.000 %
6Li (KED AGD)	94.467 %	2.7 %		0.000 %
9Be (STD AGD)	119.175 ppb	1.6 %	120.000 ppb	0.688 %
23Na (KED AGD)	11,874.543 ppb	3.1 %	12,000.000 ppb	1.045 %
24Mg (KED AGD)	11,897.409 ppb	2.6 %	12,000.000 ppb	0.855 %
27Al (KED AGD)	118.699 ppb	3.3 %	120.000 ppb	1.084 %
39K (KED AGD)	11,909.877 ppb	2.1 %	12,000.000 ppb	0.751 %
44Ca (KED AGD)	11,878.020 ppb	1.8 %	12,000.000 ppb	1.016 %
45Sc (STD AGD)	104.425 %	1.1 %		0.000 %
51V (KED AGD)	118.922 ppb	0.7 %	120.000 ppb	0.898 %
52Cr (KED AGD)	118.922 ppb	0.5 %	120.000 ppb	0.898 %
55Mn (KED AGD)	118.934 ppb	2.0 %	120.000 ppb	0.888 %
57Fe (KED AGD)	11,903.552 ppb	1.8 %	12,000.000 ppb	0.804 %
59Co (KED AGD)	118.657 ppb	1.4 %	120.000 ppb	1.119 %
60Ni (KED AGD)	118.243 ppb	0.8 %	120.000 ppb	1.464 %
65Cu (KED AGD)	118.200 ppb	1.5 %	120.000 ppb	1.500 %
66Zn (KED AGD)	118.093 ppb	0.7 %	120.000 ppb	1.589 %
74Ge (KED AGD)	94.930 %	1.2 %		0.000 %
75As (KED AGD)	118.593 ppb	0.4 %	120.000 ppb	1.172 %
78Se (KED AGD)	118.578 ppb	0.7 %	120.000 ppb	1.185 %
88Sr (KED AGD)	117.895 ppb	0.3 %	120.000 ppb	1.754 %
95Mo (KED AGD)	119.619 ppb	1.2 %	120.000 ppb	0.318 %
103Rh (KED AGD)	91.507 %	0.9 %		0.000 %
107Ag (KED AGD)	118.780 ppb	0.7 %	120.000 ppb	1.017 %
111Cd (KED AGD)	118.647 ppb	1.3 %	120.000 ppb	1.127 %
115In (KED AGD)	93.932 %	0.9 %		0.000 %
121Sb (KED AGD)	118.699 ppb	1.0 %	120.000 ppb	1.084 %
137Ba (KED AGD)	118.650 ppb	1.6 %	120.000 ppb	1.125 %
159Tb (KED AGD)	97.759 %	1.0 %		0.000 %
175Lu (KED AGD)	98.041 %	0.8 %		0.000 %
205Tl (KED AGD)	118.217 ppb	2.5 %	120.000 ppb	1.486 %
208Pb (KED AGD)	118.192 ppb	2.6 %	120.000 ppb	1.506 %
209Bi (KED AGD)	95.833 %	2.3 %		0.000 %

Alpha ICPMSQ Data with SRD

12/3/2024 6:38:28 AM

Analysis index:	1	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	Rinse	Rack	0		
Analysis started at:	12/2/2024 3:07:48 PM	Vial	1		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	98.693 %	99.412 %	0.012 ppb	-2.940 ppb	0.964 ppb	0.411 ppb	-0.896 ppb	1.478 ppb	104.107 %
Concentration per Run 1	100.222 %	100.798 %	0.010 ppb	-8.363 ppb	0.408 ppb	0.357 ppb	-3.106 ppb	1.021 ppb	103.843 %
Concentration per Run 2	97.586 %	99.678 %	0.013 ppb	-6.072 ppb	1.071 ppb	0.452 ppb	-0.499 ppb	2.161 ppb	103.915 %
Concentration per Run 3	98.272 %	97.761 %	0.014 ppb	5.616 ppb	1.414 ppb	0.423 ppb	0.915 ppb	1.252 ppb	104.564 %
Concentration RSD	1.4 %	1.5 %	19.3 %	255.1 %	53.1 %	11.8 %	227.6 %	40.8 %	0.4 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.005 ppb	0.015 ppb	0.029 ppb	3.155 ppb	0.013 ppb	0.244 ppb	0.092 ppb	3.249 ppb	100.565 %
Concentration per Run 1	0.001 ppb	0.025 ppb	0.027 ppb	3.017 ppb	0.014 ppb	0.213 ppb	0.100 ppb	3.134 ppb	101.291 %
Concentration per Run 2	-0.052 ppb	0.001 ppb	0.037 ppb	3.520 ppb	0.009 ppb	0.284 ppb	0.072 ppb	3.250 ppb	101.170 %
Concentration per Run 3	0.037 ppb	0.020 ppb	0.022 ppb	2.928 ppb	0.015 ppb	0.236 ppb	0.102 ppb	3.362 ppb	99.233 %
Concentration RSD	960.3 %	81.0 %	26.9 %	10.1 %	25.0 %	14.9 %	18.3 %	3.5 %	1.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.012 ppb	0.002 ppb	0.020 ppb	0.150 ppb	99.440 %	0.009 ppb	0.006 ppb	98.121 %	0.021 ppb
Concentration per Run 1	0.003 ppb	-0.011 ppb	0.019 ppb	0.028 ppb	100.588 %	0.010 ppb	0.005 ppb	100.079 %	0.012 ppb
Concentration per Run 2	0.012 ppb	0.020 ppb	0.020 ppb	0.180 ppb	98.751 %	0.009 ppb	0.005 ppb	97.086 %	0.022 ppb
Concentration per Run 3	0.020 ppb	-0.003 ppb	0.021 ppb	0.243 ppb	98.981 %	0.008 ppb	0.008 ppb	97.200 %	0.028 ppb
Concentration RSD	74.0 %	746.8 %	7.1 %	73.4 %	1.0 %	11.9 %	28.0 %	1.7 %	37.4 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.008 ppb	100.732 %	100.191 %	0.021 ppb	0.012 ppb	108.540 %
Concentration per Run 1	0.014 ppb	102.582 %	101.820 %	0.007 ppb	0.012 ppb	119.375 %
Concentration per Run 2	0.009 ppb	99.524 %	98.728 %	0.030 ppb	0.012 ppb	104.533 %
Concentration per Run 3	0.003 ppb	100.090 %	100.026 %	0.026 ppb	0.012 ppb	101.711 %
Concentration RSD	66.3 %	1.6 %	1.5 %	58.6 %	3.9 %	8.7 %

Alpha ICPMSQ Data with SRD

12/3/2024 6:38:28 AM

Analysis index: 2
Analysis label: CAL LOT #M24-1045
Analysis started at: 12/2/2024 3:12:25 PM
User name ALPHALAB\Metals-Instrument
Rack 0
Vial 1
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	99.863 %	101.686 %	0.012 ppb	-4.294 ppb	1.103 ppb	0.404 ppb	2.520 ppb	1.825 ppb	102.726 %
Concentration per Run 1	99.739 %	102.792 %	0.014 ppb	-7.576 ppb	0.866 ppb	0.328 ppb	1.880 ppb	0.035 ppb	102.522 %
Concentration per Run 2	98.185 %	100.630 %	0.009 ppb	0.044 ppb	1.527 ppb	0.502 ppb	1.715 ppb	2.147 ppb	102.425 %
Concentration per Run 3	101.664 %	101.634 %	0.012 ppb	-5.350 ppb	0.916 ppb	0.381 ppb	3.964 ppb	3.294 ppb	103.231 %
Concentration RSD	1.7 %	1.1 %	20.9 %	91.2 %	33.4 %	22.0 %	49.7 %	90.6 %	0.4 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.002 ppb	0.018 ppb	0.025 ppb	2.649 ppb	0.011 ppb	0.264 ppb	0.109 ppb	3.222 ppb	101.324 %
Concentration per Run 1	0.002 ppb	0.028 ppb	0.025 ppb	1.766 ppb	0.012 ppb	0.261 ppb	0.109 ppb	3.122 ppb	101.605 %
Concentration per Run 2	0.028 ppb	0.011 ppb	0.023 ppb	3.153 ppb	0.007 ppb	0.267 ppb	0.112 ppb	3.284 ppb	100.789 %
Concentration per Run 3	-0.022 ppb	0.015 ppb	0.027 ppb	3.029 ppb	0.012 ppb	0.262 ppb	0.107 ppb	3.260 ppb	101.579 %
Concentration RSD	1,084.5 %	50.9 %	7.7 %	29.0 %	25.4 %	1.3 %	2.2 %	2.7 %	0.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.008 ppb	-0.012 ppb	0.019 ppb	0.039 ppb	100.945 %	0.009 ppb	0.007 ppb	99.670 %	0.015 ppb
Concentration per Run 1	0.008 ppb	-0.018 ppb	0.017 ppb	-0.022 ppb	102.081 %	0.009 ppb	0.007 ppb	103.015 %	0.007 ppb
Concentration per Run 2	0.007 ppb	0.018 ppb	0.019 ppb	0.028 ppb	99.351 %	0.007 ppb	0.008 ppb	97.651 %	0.015 ppb
Concentration per Run 3	0.010 ppb	-0.035 ppb	0.020 ppb	0.112 ppb	101.402 %	0.012 ppb	0.004 ppb	98.345 %	0.023 ppb
Concentration RSD	18.3 %	233.3 %	9.0 %	173.5 %	1.4 %	26.0 %	32.6 %	2.9 %	51.3 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.018 ppb	101.083 %	101.335 %	0.010 ppb	0.013 ppb	103.461 %
Concentration per Run 1	0.005 ppb	102.263 %	102.965 %	0.001 ppb	0.013 ppb	106.570 %
Concentration per Run 2	0.025 ppb	100.635 %	101.149 %	0.014 ppb	0.013 ppb	102.414 %
Concentration per Run 3	0.026 ppb	100.352 %	99.891 %	0.015 ppb	0.012 ppb	101.398 %
Concentration RSD	64.7 %	1.0 %	1.5 %	75.3 %	4.3 %	2.6 %

Alpha ICPMSQ Data with SRD

12/3/2024 6:38:28 AM

Analysis index:	3	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	Blank WKP ICPMSQ	Rack	4		
Analysis started at:	12/2/2024 3:17:02 PM	Vial	49		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	100.000 %	100.000 %	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	100.000 %
Concentration per Run	100.000 %	100.000 %	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	100.000 %
Concentration RSD	0.0 %	0.0 %	0.1 %	0.0 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	100.000 %
Concentration per Run	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	100.000 %
Concentration RSD	0.0 %	0.1 %	0.1 %	0.1 %	0.3 %	0.2 %	0.3 %	0.1 %	0.0 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	100.000 %	0.000 ppb	0.000 ppb	100.000 %	0.000 ppb
Concentration per Run	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	100.000 %	0.000 ppb	0.000 ppb	100.000 %	0.000 ppb
Concentration RSD	0.1 %	0.0 %	0.0 %	0.4 %	0.0 %	0.2 %	0.7 %	0.0 %	0.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.000 ppb	100.000 %	100.000 %	0.000 ppb	0.000 ppb	100.000 %
Concentration per Run	0.000 ppb	100.000 %	100.000 %	0.000 ppb	0.000 ppb	100.000 %
Concentration RSD	0.0 %	0.0 %	0.0 %	0.3 %	0.1 %	0.0 %

Alpha ICPMSQ Data with SRD

12/3/2024 6:38:28 AM

Analysis index:	4	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	0.2/20 Cal	Rack	0		
Analysis started at:	12/2/2024 3:21:44 PM	Vial	2		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	100.666 %	100.841 %	0.193 ppb	14.380 ppb	18.332 ppb	0.154 ppb	14.969 ppb	16.598 ppb	100.198 %
Concentration per Run 1	101.210 %	100.386 %	0.178 ppb	16.531 ppb	19.345 ppb	0.159 ppb	13.165 ppb	17.620 ppb	99.658 %
Concentration per Run 2	98.644 %	100.965 %	0.205 ppb	11.054 ppb	17.230 ppb	0.085 ppb	15.752 ppb	17.507 ppb	100.430 %
Concentration per Run 3	102.144 %	101.171 %	0.194 ppb	15.555 ppb	18.422 ppb	0.217 ppb	15.990 ppb	14.668 ppb	100.507 %
Concentration RSD	1.8 %	0.4 %	7.2 %	20.3 %	5.8 %	43.2 %	10.5 %	10.1 %	0.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.230 ppb	0.191 ppb	0.171 ppb	17.869 ppb	0.211 ppb	0.156 ppb	0.235 ppb	-0.114 ppb	101.692 %
Concentration per Run 1	0.233 ppb	0.185 ppb	0.185 ppb	16.841 ppb	0.214 ppb	0.146 ppb	0.253 ppb	-0.102 ppb	100.997 %
Concentration per Run 2	0.242 ppb	0.194 ppb	0.190 ppb	18.796 ppb	0.204 ppb	0.165 ppb	0.247 ppb	-0.123 ppb	101.541 %
Concentration per Run 3	0.216 ppb	0.195 ppb	0.138 ppb	17.969 ppb	0.214 ppb	0.157 ppb	0.204 ppb	-0.118 ppb	102.537 %
Concentration RSD	5.6 %	3.0 %	16.9 %	5.5 %	2.7 %	6.3 %	11.5 %	9.7 %	0.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.206 ppb	0.169 ppb	0.189 ppb	0.158 ppb	99.370 %	0.186 ppb	0.194 ppb	99.507 %	0.188 ppb
Concentration per Run 1	0.228 ppb	0.147 ppb	0.194 ppb	0.132 ppb	98.713 %	0.189 ppb	0.196 ppb	98.051 %	0.179 ppb
Concentration per Run 2	0.212 ppb	0.145 ppb	0.188 ppb	0.157 ppb	99.855 %	0.184 ppb	0.178 ppb	99.439 %	0.191 ppb
Concentration per Run 3	0.178 ppb	0.216 ppb	0.185 ppb	0.186 ppb	99.541 %	0.186 ppb	0.208 ppb	101.031 %	0.195 ppb
Concentration RSD	12.4 %	23.7 %	2.4 %	17.2 %	0.6 %	1.5 %	7.8 %	1.5 %	4.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.199 ppb	99.602 %	99.508 %	0.189 ppb	0.203 ppb	98.364 %
Concentration per Run 1	0.215 ppb	98.976 %	98.201 %	0.171 ppb	0.198 ppb	101.088 %
Concentration per Run 2	0.192 ppb	99.842 %	100.931 %	0.198 ppb	0.206 ppb	96.051 %
Concentration per Run 3	0.190 ppb	99.989 %	99.392 %	0.198 ppb	0.205 ppb	97.952 %
Concentration RSD	6.8 %	0.5 %	1.4 %	8.3 %	2.2 %	2.6 %

Alpha ICPMSQ Data with SRD

12/3/2024 6:38:28 AM

Analysis index:	5	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	1/100 Cal	Rack	0		
Analysis started at:	12/2/2024 3:26:21 PM	Vial	3		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	98.977 %	101.922 %	1.009 ppb	92.912 ppb	99.163 ppb	0.989 ppb	95.496 ppb	95.090 ppb	102.886 %
Concentration per Run 1	100.541 %	105.379 %	0.995 ppb	87.031 ppb	101.031 ppb	0.919 ppb	94.181 ppb	93.231 ppb	101.154 %
Concentration per Run 2	97.781 %	100.476 %	1.009 ppb	93.221 ppb	97.782 ppb	1.009 ppb	95.057 ppb	95.653 ppb	103.982 %
Concentration per Run 3	98.609 %	99.910 %	1.022 ppb	98.484 ppb	98.675 ppb	1.039 ppb	97.249 ppb	96.386 ppb	103.522 %
Concentration RSD	1.4 %	3.0 %	1.3 %	6.2 %	1.7 %	6.3 %	1.7 %	1.7 %	1.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.958 ppb	0.998 ppb	0.933 ppb	96.872 ppb	1.021 ppb	0.957 ppb	1.018 ppb	0.735 ppb	102.379 %
Concentration per Run 1	0.946 ppb	0.984 ppb	0.965 ppb	95.953 ppb	1.031 ppb	0.929 ppb	1.063 ppb	0.724 ppb	102.255 %
Concentration per Run 2	0.965 ppb	0.984 ppb	0.943 ppb	96.786 ppb	1.043 ppb	0.995 ppb	0.991 ppb	0.712 ppb	102.242 %
Concentration per Run 3	0.964 ppb	1.025 ppb	0.892 ppb	97.878 ppb	0.988 ppb	0.948 ppb	0.999 ppb	0.770 ppb	102.642 %
Concentration RSD	1.1 %	2.4 %	4.0 %	1.0 %	2.8 %	3.5 %	3.9 %	4.2 %	0.2 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	1.026 ppb	1.014 ppb	0.948 ppb	0.859 ppb	100.601 %	0.987 ppb	1.029 ppb	101.317 %	0.971 ppb
Concentration per Run 1	1.032 ppb	1.011 ppb	0.947 ppb	0.823 ppb	101.816 %	0.985 ppb	1.039 ppb	102.029 %	0.973 ppb
Concentration per Run 2	1.031 ppb	1.024 ppb	0.952 ppb	0.822 ppb	99.056 %	0.992 ppb	1.021 ppb	100.086 %	0.978 ppb
Concentration per Run 3	1.015 ppb	1.006 ppb	0.944 ppb	0.933 ppb	100.930 %	0.985 ppb	1.026 ppb	101.837 %	0.963 ppb
Concentration RSD	0.9 %	0.9 %	0.5 %	7.4 %	1.4 %	0.4 %	0.9 %	1.1 %	0.8 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.985 ppb	101.490 %	100.582 %	0.944 ppb	0.997 ppb	103.211 %
Concentration per Run 1	0.957 ppb	102.567 %	101.673 %	0.894 ppb	0.968 ppb	105.992 %
Concentration per Run 2	1.023 ppb	100.669 %	100.032 %	0.949 ppb	0.999 ppb	102.198 %
Concentration per Run 3	0.974 ppb	101.234 %	100.041 %	0.989 ppb	1.025 ppb	101.441 %
Concentration RSD	3.5 %	1.0 %	0.9 %	5.0 %	2.8 %	2.4 %

Alpha ICPMSQ Data with SRD

12/3/2024 6:38:28 AM

Analysis index:	6	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	10/1000 Cal	Rack	0		
Analysis started at:	12/2/2024 3:31:00 PM	Vial	4		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	100.053 %	99.455 %	9.956 ppb	1,014.329 ppb	996.391 ppb	10.408 ppb	1,012.619 ppb	1,021.897 ppb	102.407 %
Concentration per Run 1	99.132 %	99.576 %	9.885 ppb	1,012.708 ppb	1,004.449 ppb	10.482 ppb	1,024.822 ppb	1,034.501 ppb	102.145 %
Concentration per Run 2	99.982 %	100.219 %	9.947 ppb	1,010.201 ppb	990.449 ppb	10.325 ppb	999.643 ppb	1,006.014 ppb	102.344 %
Concentration per Run 3	101.046 %	98.572 %	10.036 ppb	1,020.078 ppb	994.274 ppb	10.419 ppb	1,013.393 ppb	1,025.178 ppb	102.731 %
Concentration RSD	1.0 %	0.8 %	0.8 %	0.5 %	0.7 %	0.8 %	1.2 %	1.4 %	0.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	9.969 ppb	10.173 ppb	10.186 ppb	1,015.202 ppb	10.383 ppb	10.675 ppb	10.564 ppb	10.243 ppb	99.486 %
Concentration per Run 1	10.312 ppb	10.416 ppb	10.285 ppb	1,025.844 ppb	10.486 ppb	10.931 ppb	10.747 ppb	10.217 ppb	98.790 %
Concentration per Run 2	9.640 ppb	9.994 ppb	10.086 ppb	1,001.756 ppb	10.215 ppb	10.597 ppb	10.458 ppb	10.287 ppb	99.881 %
Concentration per Run 3	9.955 ppb	10.110 ppb	10.186 ppb	1,018.006 ppb	10.448 ppb	10.496 ppb	10.488 ppb	10.226 ppb	99.788 %
Concentration RSD	3.4 %	2.1 %	1.0 %	1.2 %	1.4 %	2.1 %	1.5 %	0.4 %	0.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	10.290 ppb	10.412 ppb	10.271 ppb	9.061 ppb	99.504 %	10.132 ppb	10.103 ppb	99.607 %	9.844 ppb
Concentration per Run 1	10.465 ppb	10.433 ppb	10.219 ppb	9.295 ppb	100.550 %	10.098 ppb	10.063 ppb	100.967 %	9.846 ppb
Concentration per Run 2	10.211 ppb	10.431 ppb	10.267 ppb	8.977 ppb	99.708 %	10.110 ppb	10.127 ppb	99.782 %	9.790 ppb
Concentration per Run 3	10.193 ppb	10.372 ppb	10.326 ppb	8.912 ppb	98.254 %	10.187 ppb	10.119 ppb	98.071 %	9.897 ppb
Concentration RSD	1.5 %	0.3 %	0.5 %	2.3 %	1.2 %	0.5 %	0.3 %	1.5 %	0.5 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	10.000 ppb	101.738 %	102.236 %	9.926 ppb	10.053 ppb	103.360 %
Concentration per Run 1	9.985 ppb	102.305 %	103.183 %	9.606 ppb	9.866 ppb	105.647 %
Concentration per Run 2	9.940 ppb	101.321 %	102.248 %	10.076 ppb	10.163 ppb	102.179 %
Concentration per Run 3	10.077 ppb	101.587 %	101.278 %	10.094 ppb	10.130 ppb	102.254 %
Concentration RSD	0.7 %	0.5 %	0.9 %	2.8 %	1.6 %	1.9 %

Alpha ICPMSQ Data with SRD

12/3/2024 6:38:28 AM



Analysis index:	7	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	60/6000 Cal	Rack	0		
Analysis started at:	12/2/2024 3:35:38 PM	Vial	5		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	92.826 %	93.159 %	61.658 ppb	6,248.663 ppb	6,205.803 ppb	62.535 ppb	6,178.235 ppb	6,240.403 ppb	97.613 %
Concentration per Run 1	88.966 %	96.153 %	63.200 ppb	6,119.670 ppb	6,131.591 ppb	59.643 ppb	6,136.770 ppb	6,158.423 ppb	99.477 %
Concentration per Run 2	94.335 %	92.009 %	61.407 ppb	6,290.421 ppb	6,180.465 ppb	64.038 ppb	6,132.745 ppb	6,302.192 ppb	96.826 %
Concentration per Run 3	95.178 %	91.314 %	60.366 ppb	6,335.897 ppb	6,305.354 ppb	63.924 ppb	6,265.190 ppb	6,260.594 ppb	96.535 %
Concentration RSD	3.6 %	2.8 %	2.3 %	1.8 %	1.4 %	4.0 %	1.2 %	1.2 %	1.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	62.161 ppb	62.127 ppb	62.102 ppb	6,190.422 ppb	62.622 ppb	63.402 ppb	63.505 ppb	63.778 ppb	93.233 %
Concentration per Run 1	60.303 ppb	60.107 ppb	59.736 ppb	5,921.308 ppb	60.869 ppb	62.273 ppb	62.011 ppb	62.342 ppb	95.622 %
Concentration per Run 2	63.385 ppb	63.490 ppb	63.453 ppb	6,411.658 ppb	64.662 ppb	65.639 ppb	66.196 ppb	65.439 ppb	90.409 %
Concentration per Run 3	62.796 ppb	62.785 ppb	63.118 ppb	6,238.301 ppb	62.336 ppb	62.293 ppb	62.309 ppb	63.554 ppb	93.669 %
Concentration RSD	2.6 %	2.9 %	3.3 %	4.0 %	3.1 %	3.1 %	3.7 %	2.4 %	2.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	62.765 ppb	62.775 ppb	64.166 ppb	60.921 ppb	91.080 %	62.418 ppb	62.688 ppb	92.541 %	62.628 ppb
Concentration per Run 1	61.137 ppb	60.790 ppb	62.990 ppb	59.707 ppb	92.975 %	60.856 ppb	61.579 ppb	96.016 %	61.373 ppb
Concentration per Run 2	64.496 ppb	64.975 ppb	65.970 ppb	62.647 ppb	88.762 %	64.548 ppb	64.407 ppb	88.773 %	65.709 ppb
Concentration per Run 3	62.661 ppb	62.560 ppb	63.537 ppb	60.409 ppb	91.503 %	61.851 ppb	62.078 ppb	92.834 %	60.801 ppb
Concentration RSD	2.7 %	3.3 %	2.5 %	2.5 %	2.3 %	3.1 %	2.4 %	3.9 %	4.3 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	62.701 ppb	94.386 %	94.513 %	63.580 ppb	63.606 ppb	92.584 %
Concentration per Run 1	61.233 ppb	96.179 %	96.072 %	58.293 ppb	59.144 ppb	99.586 %
Concentration per Run 2	64.555 ppb	92.640 %	92.495 %	67.748 ppb	68.069 ppb	86.707 %
Concentration per Run 3	62.314 ppb	94.337 %	94.973 %	64.699 ppb	63.606 ppb	91.460 %
Concentration RSD	2.7 %	1.9 %	1.9 %	7.6 %	7.0 %	7.0 %

Alpha ICPMSQ Data with SRD

12/3/2024 6:38:28 AM

Analysis index:	8	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	120/12000 Cal	Rack	0		
Analysis started at:	12/2/2024 3:40:18 PM	Vial	6		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	93.976 %	94.467 %	119.175 ppb	11,874.543 ppb	11,897.409 ppb	118.699 ppb	11,909.877 ppb	11,878.020 ppb	104.425 %
Concentration per Run 1	93.069 %	97.388 %	119.741 ppb	11,447.085 ppb	11,542.292 ppb	114.181 ppb	11,698.180 ppb	11,668.024 ppb	105.377 %
Concentration per Run 2	91.992 %	93.077 %	120.782 ppb	12,073.883 ppb	12,090.272 ppb	120.784 ppb	12,193.232 ppb	12,102.514 ppb	103.087 %
Concentration per Run 3	96.867 %	92.936 %	117.002 ppb	12,102.661 ppb	12,059.663 ppb	121.131 ppb	11,838.218 ppb	11,863.523 ppb	104.812 %
Concentration RSD	2.7 %	2.7 %	1.6 %	3.1 %	2.6 %	3.3 %	2.1 %	1.8 %	1.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	118.922 ppb	118.922 ppb	118.934 ppb	11,903.552 ppb	118.657 ppb	118.243 ppb	118.200 ppb	118.093 ppb	94.930 %
Concentration per Run 1	118.852 ppb	118.295 ppb	116.386 ppb	11,701.818 ppb	117.429 ppb	117.681 ppb	116.403 ppb	117.179 ppb	94.034 %
Concentration per Run 2	119.818 ppb	119.318 ppb	121.195 ppb	12,119.114 ppb	120.539 ppb	119.385 ppb	119.911 ppb	118.883 ppb	94.574 %
Concentration per Run 3	118.096 ppb	119.153 ppb	119.221 ppb	11,889.723 ppb	118.003 ppb	117.663 ppb	118.286 ppb	118.217 ppb	96.184 %
Concentration RSD	0.7 %	0.5 %	2.0 %	1.8 %	1.4 %	0.8 %	1.5 %	0.7 %	1.2 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	118.593 ppb	118.578 ppb	117.895 ppb	119.619 ppb	91.507 %	118.780 ppb	118.647 ppb	93.932 %	118.699 ppb
Concentration per Run 1	118.219 ppb	117.691 ppb	118.007 ppb	119.844 ppb	92.414 %	117.869 ppb	116.869 ppb	94.924 %	117.484 ppb
Concentration per Run 2	119.096 ppb	118.847 ppb	118.237 ppb	118.047 ppb	91.346 %	119.033 ppb	119.209 ppb	93.651 %	118.786 ppb
Concentration per Run 3	118.465 ppb	119.196 ppb	117.441 ppb	120.966 ppb	90.760 %	119.437 ppb	119.863 ppb	93.221 %	119.828 ppb
Concentration RSD	0.4 %	0.7 %	0.3 %	1.2 %	0.9 %	0.7 %	1.3 %	0.9 %	1.0 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	118.650 ppb	97.759 %	98.041 %	118.217 ppb	118.192 ppb	95.833 %
Concentration per Run 1	117.144 ppb	97.651 %	97.762 %	114.929 ppb	114.594 ppb	98.304 %
Concentration per Run 2	120.820 ppb	96.874 %	97.445 %	120.564 ppb	119.715 ppb	94.150 %
Concentration per Run 3	117.986 ppb	98.753 %	98.917 %	119.158 ppb	120.268 ppb	95.044 %
Concentration RSD	1.6 %	1.0 %	0.8 %	2.5 %	2.6 %	2.3 %

Alpha ICPMSQ Data with SRD

12/3/2024 6:38:28 AM

Analysis index:	9	User name	ALPHALAB\Metals-Instrument	Comment	Sr Inteference Check
Analysis label:	Sr 200ppb	Rack	4		
Analysis started at:	12/2/2024 3:45:02 PM	Vial	55		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	94.658 %	95.063 %	0.003 ppb	12.095 ppb	1.310 ppb	0.934 ppb	2.245 ppb	-7.582 ppb	97.797 %
Concentration per Run 1	94.281 %	96.513 %	0.003 ppb	9.039 ppb	1.009 ppb	0.878 ppb	-0.593 ppb	-11.178 ppb	98.367 %
Concentration per Run 2	94.930 %	94.480 %	0.002 ppb	11.319 ppb	1.000 ppb	0.924 ppb	4.031 ppb	-33.521 ppb	95.792 %
Concentration per Run 3	94.762 %	94.197 %	0.003 ppb	15.926 ppb	1.922 ppb	0.999 ppb	3.297 ppb	21.955 ppb	99.231 %
Concentration RSD	0.4 %	1.3 %	21.9 %	29.0 %	40.5 %	6.5 %	110.7 %	368.2 %	1.8 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.232 ppb	0.019 ppb	0.055 ppb	17.446 ppb	0.010 ppb	0.072 ppb	0.042 ppb	0.363 ppb	95.605 %
Concentration per Run 1	-0.258 ppb	0.019 ppb	0.058 ppb	16.733 ppb	0.011 ppb	0.066 ppb	0.035 ppb	0.337 ppb	95.926 %
Concentration per Run 2	-0.215 ppb	0.016 ppb	0.046 ppb	17.957 ppb	0.007 ppb	0.050 ppb	0.034 ppb	0.360 ppb	95.293 %
Concentration per Run 3	-0.223 ppb	0.022 ppb	0.059 ppb	17.648 ppb	0.013 ppb	0.101 ppb	0.059 ppb	0.391 ppb	95.595 %
Concentration RSD	9.7 %	15.8 %	13.1 %	3.6 %	30.1 %	36.5 %	33.1 %	7.5 %	0.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.059 ppb	0.272 ppb	199.053 ppb	2.662 ppb	94.451 %	0.004 ppb	0.003 ppb	94.763 %	0.125 ppb
Concentration per Run 1	0.060 ppb	0.276 ppb	197.616 ppb	1.980 ppb	95.080 %	0.007 ppb	0.003 ppb	95.573 %	0.089 ppb
Concentration per Run 2	0.059 ppb	0.260 ppb	200.142 ppb	2.746 ppb	94.050 %	0.003 ppb	0.003 ppb	93.115 %	0.126 ppb
Concentration per Run 3	0.057 ppb	0.280 ppb	199.402 ppb	3.260 ppb	94.223 %	0.004 ppb	0.003 ppb	95.601 %	0.162 ppb
Concentration RSD	2.1 %	3.8 %	0.7 %	24.2 %	0.6 %	48.7 %	8.8 %	1.5 %	29.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.060 ppb	97.398 %	98.114 %	0.651 ppb	0.021 ppb	99.892 %
Concentration per Run 1	0.054 ppb	97.031 %	98.622 %	0.750 ppb	0.020 ppb	101.200 %
Concentration per Run 2	0.068 ppb	97.128 %	97.157 %	0.676 ppb	0.022 ppb	99.936 %
Concentration per Run 3	0.056 ppb	98.035 %	98.562 %	0.527 ppb	0.020 ppb	98.538 %
Concentration RSD	12.7 %	0.6 %	0.8 %	17.5 %	3.5 %	1.3 %

Alpha ICPMSQ Data with SRD

12/3/2024 6:38:28 AM

Analysis index:	10	User name	ALPHALAB\Metals-Instrument	Comment	ICV
Analysis label:	ICV	Rack	0		
Analysis started at:	12/2/2024 3:49:44 PM	Vial	7		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	94.022 %	92.816 %	50.681 ppb	5,146.316 ppb	5,112.025 ppb	50.907 ppb	5,053.291 ppb	5,099.831 ppb	98.022 %
Concentration per Run 1	93.154 %	95.522 %	50.520 ppb	4,919.512 ppb	4,827.926 ppb	48.300 ppb	4,907.282 ppb	4,970.342 ppb	97.318 %
Concentration per Run 2	94.738 %	89.706 %	50.339 ppb	5,430.836 ppb	5,336.320 ppb	52.828 ppb	5,215.260 ppb	5,251.155 ppb	99.065 %
Concentration per Run 3	94.175 %	93.219 %	51.184 ppb	5,088.598 ppb	5,171.830 ppb	51.594 ppb	5,037.332 ppb	5,077.996 ppb	97.683 %
Recovery Percentage 1			101.361 %	102.926 %	102.241 %	101.814 %	101.066 %	101.997 %	
Concentration RSD	0.9 %	3.2 %	0.9 %	5.1 %	5.1 %	4.6 %	3.1 %	2.8 %	0.9 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	51.169 ppb	50.838 ppb	51.550 ppb	5,070.605 ppb	51.573 ppb	52.032 ppb	51.531 ppb	52.073 ppb	93.509 %
Concentration per Run 1	49.728 ppb	49.320 ppb	48.577 ppb	4,905.348 ppb	50.284 ppb	50.190 ppb	49.503 ppb	50.640 ppb	96.309 %
Concentration per Run 2	52.428 ppb	52.313 ppb	53.436 ppb	5,215.336 ppb	53.211 ppb	53.502 ppb	53.704 ppb	54.116 ppb	90.582 %
Concentration per Run 3	51.352 ppb	50.880 ppb	52.637 ppb	5,091.130 ppb	51.225 ppb	52.403 ppb	51.385 ppb	51.463 ppb	93.635 %
Recovery Percentage 1	102.338 %	101.676 %	103.100 %	101.412 %	103.147 %	104.064 %	103.062 %	104.146 %	
Concentration RSD	2.7 %	2.9 %	5.1 %	3.1 %	2.9 %	3.2 %	4.1 %	3.5 %	3.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	52.058 ppb	52.098 ppb	52.404 ppb	49.556 ppb	90.664 %	53.364 ppb	51.952 ppb	92.211 %	51.164 ppb
Concentration per Run 1	50.732 ppb	49.835 ppb	50.028 ppb	47.881 ppb	94.502 %	50.972 ppb	50.133 ppb	96.191 %	49.393 ppb
Concentration per Run 2	54.250 ppb	54.671 ppb	54.682 ppb	51.130 ppb	87.196 %	55.696 ppb	53.686 ppb	88.909 %	53.363 ppb
Concentration per Run 3	51.193 ppb	51.789 ppb	52.500 ppb	49.658 ppb	90.294 %	53.426 ppb	52.036 ppb	91.534 %	50.737 ppb
Recovery Percentage 1	104.116 %	104.197 %	104.807 %	99.112 %		106.729 %	103.903 %		102.329 %
Concentration RSD	3.7 %	4.7 %	4.4 %	3.3 %	4.0 %	4.4 %	3.4 %	4.0 %	3.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	51.845 ppb	94.062 %	93.984 %	51.966 ppb	53.038 ppb	93.895 %
Concentration per Run 1	50.050 ppb	96.695 %	96.463 %	48.344 ppb	49.627 ppb	99.466 %
Concentration per Run 2	53.852 ppb	91.317 %	91.239 %	52.631 ppb	54.103 ppb	93.261 %
Concentration per Run 3	51.634 ppb	94.173 %	94.251 %	54.924 ppb	55.384 ppb	88.958 %
Recovery Percentage 1	103.690 %			103.933 %	106.076 %	
Concentration RSD	3.7 %	2.9 %	2.8 %	6.4 %	5.7 %	5.6 %

Alpha ICPMSQ Data with SRD

12/3/2024 6:38:28 AM

Analysis index:	11	User name	ALPHALAB\Metals-Instrument	Comment	ICB
Analysis label:	ICB	Rack	0		
Analysis started at:	12/2/2024 3:54:25 PM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	93.417 %	94.222 %	0.005 ppb	-2.032 ppb	-0.528 ppb	-0.291 ppb	-1.700 ppb	-4.162 ppb	92.998 %
Concentration per Run 1	92.429 %	94.017 %	0.004 ppb	0.013 ppb	-0.557 ppb	-0.296 ppb	-0.619 ppb	-5.594 ppb	92.787 %
Concentration per Run 2	93.832 %	95.741 %	0.005 ppb	-8.837 ppb	-0.549 ppb	-0.339 ppb	-2.529 ppb	-2.943 ppb	93.032 %
Concentration per Run 3	93.989 %	92.910 %	0.005 ppb	2.727 ppb	-0.479 ppb	-0.236 ppb	-1.950 ppb	-3.948 ppb	93.176 %
Recovery Percentage 1			0.975 %	-0.406 %	-0.755 %	-2.906 %	-1.700 %	-4.162 %	
Concentration RSD	0.9 %	1.5 %	14.8 %	297.6 %	8.2 %	17.8 %	57.6 %	32.2 %	0.2 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.236 ppb	0.000 ppb	-0.029 ppb	8.784 ppb	-0.002 ppb	-0.037 ppb	-0.033 ppb	-0.263 ppb	93.119 %
Concentration per Run 1	-0.248 ppb	0.005 ppb	-0.022 ppb	7.732 ppb	0.000 ppb	-0.044 ppb	-0.025 ppb	-0.277 ppb	93.332 %
Concentration per Run 2	-0.253 ppb	0.003 ppb	-0.039 ppb	7.979 ppb	-0.002 ppb	-0.038 ppb	-0.036 ppb	-0.252 ppb	94.499 %
Concentration per Run 3	-0.206 ppb	-0.009 ppb	-0.028 ppb	10.642 ppb	-0.003 ppb	-0.028 ppb	-0.038 ppb	-0.259 ppb	91.524 %
Recovery Percentage 1	-4.713 %	-0.026 %	-2.925 %	17.569 %	-0.318 %	-1.828 %	-3.327 %	-5.255 %	
Concentration RSD	11.1 %	2,921.2 %	29.5 %	18.4 %	110.3 %	21.7 %	20.9 %	4.8 %	1.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.050 ppb	0.175 ppb	-0.006 ppb	1.721 ppb	92.762 %	0.003 ppb	0.002 ppb	93.255 %	0.145 ppb
Concentration per Run 1	0.038 ppb	0.174 ppb	-0.006 ppb	1.295 ppb	94.875 %	0.003 ppb	0.002 ppb	95.028 %	0.091 ppb
Concentration per Run 2	0.062 ppb	0.183 ppb	-0.006 ppb	1.697 ppb	92.624 %	0.005 ppb	0.002 ppb	92.207 %	0.143 ppb
Concentration per Run 3	0.049 ppb	0.168 ppb	-0.006 ppb	2.172 ppb	90.787 %	0.001 ppb	0.003 ppb	92.530 %	0.202 ppb
Recovery Percentage 1	9.971 %	3.502 %	-0.060 %	86.072 %		0.756 %	1.189 %		3.634 %
Concentration RSD	24.1 %	4.4 %	5.0 %	25.5 %	2.2 %	68.5 %	19.0 %	1.7 %	38.0 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	-0.008 ppb	95.951 %	95.203 %	0.429 ppb	0.008 ppb	98.308 %
Concentration per Run 1	-0.010 ppb	96.713 %	95.375 %	0.455 ppb	0.008 ppb	100.421 %
Concentration per Run 2	-0.010 ppb	95.525 %	94.729 %	0.467 ppb	0.008 ppb	97.722 %
Concentration per Run 3	-0.003 ppb	95.614 %	95.505 %	0.365 ppb	0.008 ppb	96.780 %
Recovery Percentage 1	-1.567 %			42.883 %	0.804 %	
Concentration RSD	49.6 %	0.7 %	0.4 %	13.1 %	3.3 %	1.9 %

Alpha ICPMSQ Data with SRD

12/3/2024 6:38:28 AM

Analysis index:	12	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	ICSA	Rack	4		
Analysis started at:	12/2/2024 4:04:31 PM	Vial	53		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	108.332 %	111.097 %	0.025 ppb	268,228.384 ppb	98,835.947 ppb	102,538.182 ppb	106,375.086 ppb	306,725.821 ppb	109.447 %
Concentration per Run 1	109.641 %	111.375 %	0.024 ppb	258,834.278 ppb	94,739.902 ppb	99,348.890 ppb	104,596.546 ppb	303,734.533 ppb	109.017 %
Concentration per Run 2	106.741 %	110.899 %	0.025 ppb	273,040.752 ppb	100,595.985 ppb	103,865.728 ppb	105,396.528 ppb	304,755.835 ppb	109.514 %
Concentration per Run 3	108.615 %	111.015 %	0.026 ppb	272,810.122 ppb	101,171.956 ppb	104,399.929 ppb	109,132.184 ppb	311,687.096 ppb	109.809 %
Recovery Percentage 1			2.463 %	107.291 %	98.836 %	102.538 %	106.375 %	102.242 %	
Concentration RSD	1.4 %	0.2 %	4.4 %	3.0 %	3.6 %	2.7 %	2.3 %	1.4 %	0.4 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.169 ppb	1.517 ppb	4.553 ppb	239,078.656 ppb	2.190 ppb	2.801 ppb	1.009 ppb	2.694 ppb	109.236 %
Concentration per Run 1	-0.185 ppb	1.497 ppb	4.495 ppb	239,822.876 ppb	2.187 ppb	2.780 ppb	0.967 ppb	2.662 ppb	108.436 %
Concentration per Run 2	-0.146 ppb	1.522 ppb	4.562 ppb	238,274.535 ppb	2.182 ppb	2.814 ppb	1.032 ppb	2.703 ppb	109.756 %
Concentration per Run 3	-0.176 ppb	1.532 ppb	4.600 ppb	239,138.558 ppb	2.203 ppb	2.808 ppb	1.027 ppb	2.716 ppb	109.517 %
Recovery Percentage 1	-3.381 %	45.976 %	79.869 %	95.631 %	76.322 %	45.916 %	35.774 %	23.630 %	
Concentration RSD	12.1 %	1.2 %	1.2 %	0.3 %	0.5 %	0.6 %	3.6 %	1.1 %	0.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.458 ppb	2.962 ppb	2.769 ppb	2,395.737 ppb	94.608 %	0.026 ppb	0.736 ppb	103.732 %	0.205 ppb
Concentration per Run 1	0.446 ppb	2.861 ppb	2.722 ppb	2,323.679 ppb	93.865 %	0.021 ppb	0.719 ppb	102.373 %	0.189 ppb
Concentration per Run 2	0.439 ppb	2.964 ppb	2.771 ppb	2,419.155 ppb	96.369 %	0.026 ppb	0.748 ppb	103.219 %	0.211 ppb
Concentration per Run 3	0.488 ppb	3.062 ppb	2.812 ppb	2,444.378 ppb	93.588 %	0.030 ppb	0.741 ppb	105.603 %	0.215 ppb
Recovery Percentage 1	28.073 %	22.963 %	102.539 %	119.787 %		3.225 %	183.934 %		2.560 %
Concentration RSD	5.8 %	3.4 %	1.6 %	2.7 %	1.6 %	16.2 %	2.1 %	1.6 %	6.8 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	1.443 ppb	91.666 %	86.661 %	0.083 ppb	1.697 ppb	81.696 %
Concentration per Run 1	1.473 ppb	90.748 %	87.070 %	0.061 ppb	1.616 ppb	83.986 %
Concentration per Run 2	1.409 ppb	92.545 %	86.277 %	0.096 ppb	1.728 ppb	80.561 %
Concentration per Run 3	1.447 ppb	91.706 %	86.635 %	0.091 ppb	1.746 ppb	80.542 %
Recovery Percentage 1	76.743 %			4.132 %	54.732 %	
Concentration RSD	2.2 %	1.0 %	0.5 %	23.0 %	4.1 %	2.4 %

Alpha ICPMSQ Data with SRD

12/3/2024 6:38:28 AM

Analysis index:	13	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	LDR Check	Rack	4		
Analysis started at:	12/2/2024 4:09:14 PM	Vial	1		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	114.351 %	113.790 %	0.005 ppb	-11.843 ppb	2.554 ppb	3.393 ppb	4.991 ppb	9.702 ppb	117.804 %
Concentration per Run 1	113.109 %	115.480 %	0.003 ppb	-8.507 ppb	2.734 ppb	3.398 ppb	4.870 ppb	10.554 ppb	117.687 %
Concentration per Run 2	115.035 %	113.949 %	0.009 ppb	-18.868 ppb	2.314 ppb	3.245 ppb	3.798 ppb	9.260 ppb	117.530 %
Concentration per Run 3	114.909 %	111.941 %	0.004 ppb	-8.155 ppb	2.613 ppb	3.536 ppb	6.305 ppb	9.291 ppb	118.197 %
Recovery Percentage 1									
Concentration RSD	0.9 %	1.6 %	64.4 %	51.4 %	8.5 %	4.3 %	25.2 %	7.6 %	0.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	996.362 ppb	992.761 ppb	10,000.701 ppb	79.584 ppb	0.034 ppb	10,552.705 ppb	10,559.748 ppb	10,446.407 ppb	119.846 %
Concentration per Run 1	975.962 ppb	972.663 ppb	9,756.684 ppb	76.709 ppb	0.036 ppb	10,405.917 ppb	10,376.546 ppb	10,262.505 ppb	121.217 %
Concentration per Run 2	1,010.245 ppb	1,001.957 ppb	10,158.813 ppb	82.447 ppb	0.031 ppb	10,642.840 ppb	10,707.333 ppb	10,557.028 ppb	119.102 %
Concentration per Run 3	1,002.879 ppb	1,003.662 ppb	10,086.606 ppb	79.596 ppb	0.036 ppb	10,609.359 ppb	10,595.364 ppb	10,519.688 ppb	119.219 %
Recovery Percentage 1	99.636 %	99.276 %	100.007 %			105.527 %	105.597 %	104.464 %	
Concentration RSD	1.8 %	1.8 %	2.1 %	3.6 %	8.8 %	1.2 %	1.6 %	1.5 %	1.0 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	1,049.516 ppb	0.679 ppb	0.255 ppb	20.643 ppb	116.570 %	0.101 ppb	0.027 ppb	120.304 %	0.029 ppb
Concentration per Run 1	1,029.469 ppb	0.649 ppb	0.252 ppb	16.327 ppb	117.181 %	0.101 ppb	0.026 ppb	121.047 %	0.014 ppb
Concentration per Run 2	1,065.973 ppb	0.703 ppb	0.260 ppb	21.459 ppb	116.417 %	0.101 ppb	0.028 ppb	121.155 %	0.030 ppb
Concentration per Run 3	1,053.106 ppb	0.684 ppb	0.253 ppb	24.145 ppb	116.113 %	0.102 ppb	0.028 ppb	118.711 %	0.044 ppb
Recovery Percentage 1	104.952 %								
Concentration RSD	1.8 %	4.0 %	1.7 %	19.2 %	0.5 %	0.4 %	5.2 %	1.1 %	51.3 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	10,477.009 ppb	113.787 %	112.140 %	0.074 ppb	10,230.687 ppb	110.756 %
Concentration per Run 1	10,286.684 ppb	115.518 %	114.297 %	0.053 ppb	9,926.303 ppb	114.263 %
Concentration per Run 2	10,523.319 ppb	113.271 %	111.238 %	0.086 ppb	10,521.672 ppb	107.287 %
Concentration per Run 3	10,621.024 ppb	112.572 %	110.884 %	0.083 ppb	10,244.085 ppb	110.718 %
Recovery Percentage 1	104.770 %				102.307 %	
Concentration RSD	1.6 %	1.4 %	1.7 %	24.9 %	2.9 %	3.1 %

Alpha ICPMSQ Data with SRD

12/3/2024 6:38:28 AM

Analysis index:	14	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	Rinse	Rack	0		
Analysis started at:	12/2/2024 4:13:55 PM	Vial	1		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	105.107 %	109.274 %	0.017 ppb	-14.542 ppb	0.884 ppb	0.452 ppb	5.091 ppb	2.810 ppb	110.979 %
Concentration per Run 1	103.643 %	110.191 %	0.015 ppb	-16.088 ppb	0.803 ppb	0.403 ppb	3.240 ppb	1.345 ppb	109.401 %
Concentration per Run 2	105.234 %	109.149 %	0.018 ppb	-14.424 ppb	0.745 ppb	0.441 ppb	5.779 ppb	4.057 ppb	110.690 %
Concentration per Run 3	106.443 %	108.480 %	0.017 ppb	-13.115 ppb	1.105 ppb	0.513 ppb	6.253 ppb	3.029 ppb	112.847 %
Concentration RSD	1.3 %	0.8 %	9.5 %	10.2 %	21.8 %	12.4 %	31.8 %	48.7 %	1.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.145 ppb	0.021 ppb	0.078 ppb	20.920 ppb	0.018 ppb	0.332 ppb	0.233 ppb	3.625 ppb	109.590 %
Concentration per Run 1	-0.191 ppb	0.026 ppb	0.064 ppb	18.130 ppb	0.017 ppb	0.361 ppb	0.245 ppb	3.592 ppb	110.329 %
Concentration per Run 2	-0.136 ppb	0.022 ppb	0.070 ppb	21.296 ppb	0.018 ppb	0.339 ppb	0.208 ppb	3.653 ppb	110.150 %
Concentration per Run 3	-0.109 ppb	0.015 ppb	0.100 ppb	23.333 ppb	0.018 ppb	0.295 ppb	0.245 ppb	3.629 ppb	108.292 %
Concentration RSD	28.5 %	24.8 %	25.3 %	12.5 %	3.2 %	10.2 %	9.1 %	0.9 %	1.0 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.639 ppb	-0.011 ppb	0.019 ppb	4.209 ppb	108.911 %	0.008 ppb	0.008 ppb	107.704 %	0.010 ppb
Concentration per Run 1	0.736 ppb	-0.021 ppb	0.017 ppb	2.847 ppb	110.941 %	0.008 ppb	0.009 ppb	108.837 %	-0.002 ppb
Concentration per Run 2	0.651 ppb	0.016 ppb	0.019 ppb	4.426 ppb	108.705 %	0.006 ppb	0.005 ppb	107.383 %	0.012 ppb
Concentration per Run 3	0.530 ppb	-0.028 ppb	0.020 ppb	5.355 ppb	107.088 %	0.009 ppb	0.010 ppb	106.891 %	0.019 ppb
Concentration RSD	16.2 %	214.0 %	6.8 %	30.1 %	1.8 %	16.5 %	30.0 %	0.9 %	106.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.081 ppb	107.730 %	106.584 %	0.027 ppb	0.402 ppb	107.091 %
Concentration per Run 1	0.079 ppb	108.169 %	108.291 %	0.013 ppb	0.442 ppb	108.942 %
Concentration per Run 2	0.085 ppb	107.786 %	105.812 %	0.033 ppb	0.412 ppb	106.684 %
Concentration per Run 3	0.078 ppb	107.236 %	105.650 %	0.033 ppb	0.352 ppb	105.646 %
Concentration RSD	4.2 %	0.4 %	1.4 %	45.0 %	11.5 %	1.6 %

Alpha ICPMSQ Data with SRD

12/3/2024 6:38:28 AM

Analysis index: 15
Analysis label: CCV
Analysis started at: 12/2/2024 4:18:32 PM
User name ALPHALAB\Metals-Instrument
Rack 0
Vial 9
Comment CCV/MCCV

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	92.836 %	94.995 %	59.133 ppb	5,785.409 ppb	5,746.732 ppb	58.093 ppb	5,716.871 ppb	5,744.892 ppb	98.303 %
Concentration per Run 1	92.663 %	98.868 %	59.656 ppb	5,618.808 ppb	5,624.268 ppb	56.159 ppb	5,641.813 ppb	5,629.129 ppb	94.327 %
Concentration per Run 2	92.966 %	94.094 %	58.595 ppb	5,804.009 ppb	5,759.473 ppb	59.519 ppb	5,693.813 ppb	5,753.109 ppb	100.732 %
Concentration per Run 3	92.880 %	92.022 %	59.149 ppb	5,933.408 ppb	5,856.454 ppb	58.601 ppb	5,814.988 ppb	5,852.437 ppb	99.849 %
Recovery Percentage 1			98.556 %	96.423 %	95.779 %	96.821 %	95.281 %	95.748 %	
Concentration RSD	0.2 %	3.7 %	0.9 %	2.7 %	2.0 %	3.0 %	1.6 %	1.9 %	3.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	58.481 ppb	58.869 ppb	58.584 ppb	5,906.746 ppb	59.284 ppb	60.114 ppb	59.545 ppb	60.781 ppb	94.316 %
Concentration per Run 1	57.631 ppb	57.782 ppb	58.289 ppb	5,854.254 ppb	58.654 ppb	59.899 ppb	59.736 ppb	59.580 ppb	98.176 %
Concentration per Run 2	58.880 ppb	59.657 ppb	58.457 ppb	5,931.004 ppb	60.459 ppb	60.632 ppb	59.800 ppb	61.766 ppb	92.361 %
Concentration per Run 3	58.932 ppb	59.167 ppb	59.005 ppb	5,934.980 ppb	58.741 ppb	59.810 ppb	59.101 ppb	60.997 ppb	92.412 %
Recovery Percentage 1	97.468 %	98.114 %	97.640 %	98.446 %	98.807 %	100.189 %	99.242 %	101.302 %	
Concentration RSD	1.3 %	1.7 %	0.6 %	0.8 %	1.7 %	0.7 %	0.6 %	1.8 %	3.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	59.416 ppb	59.784 ppb	61.361 ppb	60.523 ppb	92.227 %	58.918 ppb	59.826 ppb	93.415 %	60.127 ppb
Concentration per Run 1	58.249 ppb	57.666 ppb	60.090 ppb	58.208 ppb	96.888 %	57.615 ppb	58.537 ppb	96.909 %	58.956 ppb
Concentration per Run 2	60.311 ppb	60.934 ppb	61.843 ppb	61.322 ppb	90.436 %	59.419 ppb	60.248 ppb	92.252 %	60.879 ppb
Concentration per Run 3	59.688 ppb	60.750 ppb	62.149 ppb	62.038 ppb	89.356 %	59.720 ppb	60.694 ppb	91.084 %	60.547 ppb
Recovery Percentage 1	99.027 %	99.639 %	102.268 %	100.871 %		98.197 %	99.710 %		100.212 %
Concentration RSD	1.8 %	3.1 %	1.8 %	3.4 %	4.4 %	1.9 %	1.9 %	3.3 %	1.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	60.024 ppb	97.987 %	97.464 %	58.632 ppb	59.458 ppb	96.681 %
Concentration per Run 1	58.720 ppb	100.700 %	100.534 %	54.942 ppb	56.523 ppb	102.172 %
Concentration per Run 2	60.964 ppb	97.975 %	96.380 %	59.808 ppb	59.956 ppb	95.036 %
Concentration per Run 3	60.389 ppb	95.285 %	95.477 %	61.145 ppb	61.895 ppb	92.837 %
Recovery Percentage 1	100.040 %			97.720 %	99.097 %	
Concentration RSD	1.9 %	2.8 %	2.8 %	5.6 %	4.6 %	5.0 %

Alpha ICPMSQ Data with SRD

12/3/2024 6:38:28 AM

Analysis index:	16	User name	ALPHALAB\Metals-Instrument	Comment	CCB
Analysis label:	CCB	Rack	0		
Analysis started at:	12/2/2024 4:23:14 PM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	90.725 %	90.641 %	0.005 ppb	5.108 ppb	-0.664 ppb	-0.331 ppb	1.415 ppb	-3.079 ppb	94.208 %
Concentration per Run 1	89.530 %	93.450 %	0.007 ppb	2.414 ppb	-0.578 ppb	-0.389 ppb	0.516 ppb	-2.991 ppb	93.604 %
Concentration per Run 2	91.270 %	87.879 %	0.006 ppb	5.949 ppb	-0.824 ppb	-0.282 ppb	1.843 ppb	-2.913 ppb	93.804 %
Concentration per Run 3	91.375 %	90.594 %	0.003 ppb	6.960 ppb	-0.591 ppb	-0.321 ppb	1.885 ppb	-3.334 ppb	95.215 %
Recovery Percentage 1			1.033 %	1.022 %	-0.949 %	-3.307 %	1.415 %	-3.079 %	
Concentration RSD	1.1 %	3.1 %	39.5 %	46.7 %	20.9 %	16.3 %	55.1 %	7.3 %	0.9 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.247 ppb	-0.005 ppb	-0.023 ppb	13.421 ppb	0.001 ppb	-0.046 ppb	-0.003 ppb	-0.209 ppb	89.317 %
Concentration per Run 1	-0.247 ppb	-0.006 ppb	-0.031 ppb	11.714 ppb	0.003 ppb	-0.059 ppb	-0.008 ppb	-0.210 ppb	92.238 %
Concentration per Run 2	-0.262 ppb	-0.004 ppb	-0.021 ppb	13.922 ppb	0.001 ppb	-0.022 ppb	0.005 ppb	-0.219 ppb	88.843 %
Concentration per Run 3	-0.232 ppb	-0.005 ppb	-0.017 ppb	14.628 ppb	-0.001 ppb	-0.057 ppb	-0.006 ppb	-0.197 ppb	86.869 %
Recovery Percentage 1	-4.944 %	-0.500 %	-2.307 %	26.843 %	0.186 %	-2.300 %	-0.282 %	-4.173 %	
Concentration RSD	6.0 %	19.1 %	31.7 %	11.3 %	178.2 %	45.6 %	255.0 %	5.3 %	3.0 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.108 ppb	0.127 ppb	-0.006 ppb	2.307 ppb	88.736 %	0.003 ppb	0.003 ppb	88.298 %	0.087 ppb
Concentration per Run 1	0.087 ppb	0.154 ppb	-0.007 ppb	1.571 ppb	89.770 %	0.002 ppb	0.003 ppb	90.462 %	0.056 ppb
Concentration per Run 2	0.119 ppb	0.078 ppb	-0.006 ppb	2.387 ppb	88.518 %	0.004 ppb	0.003 ppb	86.456 %	0.085 ppb
Concentration per Run 3	0.118 ppb	0.150 ppb	-0.006 ppb	2.964 ppb	87.921 %	0.003 ppb	0.002 ppb	87.976 %	0.121 ppb
Recovery Percentage 1	21.561 %	2.549 %	-0.062 %	115.366 %		0.714 %	1.268 %		2.177 %
Concentration RSD	17.0 %	33.6 %	8.2 %	30.3 %	1.1 %	23.5 %	31.0 %	2.3 %	37.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	-0.011 ppb	93.000 %	92.668 %	0.389 ppb	0.075 ppb	95.013 %
Concentration per Run 1	-0.003 ppb	94.968 %	94.311 %	0.421 ppb	0.073 ppb	97.814 %
Concentration per Run 2	-0.015 ppb	92.496 %	93.199 %	0.420 ppb	0.076 ppb	93.948 %
Concentration per Run 3	-0.014 ppb	91.537 %	90.494 %	0.326 ppb	0.075 ppb	93.276 %
Recovery Percentage 1	-2.153 %			38.881 %	7.463 %	
Concentration RSD	63.7 %	1.9 %	2.1 %	14.1 %	1.9 %	2.6 %

Alpha ICPMSQ Data with SRD

12/3/2024 6:38:28 AM

Analysis index:	17	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	WG2002749-1 6020TL	Rack	1		
Analysis started at:	12/2/2024 4:29:31 PM	Vial	39		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	90.101 %	90.079 %	0.003 ppb	-0.901 ppb	0.547 ppb	0.707 ppb	-1.349 ppb	20.087 ppb	92.655 %
Concentration per Run 1	88.687 %	90.581 %	0.000 ppb	-4.882 ppb	0.430 ppb	0.826 ppb	-2.284 ppb	20.806 ppb	93.108 %
Concentration per Run 2	90.412 %	88.857 %	0.004 ppb	-3.502 ppb	0.687 ppb	0.648 ppb	-0.832 ppb	21.788 ppb	94.844 %
Concentration per Run 3	91.203 %	90.800 %	0.004 ppb	5.680 ppb	0.525 ppb	0.647 ppb	-0.932 ppb	17.666 ppb	90.013 %
Concentration RSD	1.4 %	1.2 %	72.6 %	637.0 %	23.7 %	14.6 %	60.1 %	10.7 %	2.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.283 ppb	0.038 ppb	0.177 ppb	2.787 ppb	0.000 ppb	-0.039 ppb	0.007 ppb	0.916 ppb	88.164 %
Concentration per Run 1	-0.284 ppb	0.040 ppb	0.216 ppb	2.140 ppb	-0.001 ppb	-0.032 ppb	0.014 ppb	0.883 ppb	88.638 %
Concentration per Run 2	-0.291 ppb	0.037 ppb	0.169 ppb	3.623 ppb	0.000 ppb	-0.043 ppb	0.004 ppb	0.958 ppb	88.128 %
Concentration per Run 3	-0.274 ppb	0.038 ppb	0.146 ppb	2.597 ppb	0.002 ppb	-0.043 ppb	0.002 ppb	0.907 ppb	87.725 %
Concentration RSD	3.1 %	3.9 %	20.1 %	27.3 %	303.3 %	16.6 %	93.9 %	4.2 %	0.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.029 ppb	0.023 ppb	0.007 ppb	0.945 ppb	88.681 %	0.001 ppb	0.001 ppb	89.151 %	0.014 ppb
Concentration per Run 1	0.028 ppb	0.034 ppb	0.008 ppb	0.716 ppb	88.854 %	0.002 ppb	0.001 ppb	89.532 %	0.001 ppb
Concentration per Run 2	0.026 ppb	0.005 ppb	0.007 ppb	0.970 ppb	88.311 %	0.000 ppb	0.000 ppb	88.525 %	0.012 ppb
Concentration per Run 3	0.033 ppb	0.031 ppb	0.007 ppb	1.150 ppb	88.878 %	0.000 ppb	0.001 ppb	89.396 %	0.029 ppb
Concentration RSD	12.3 %	69.5 %	8.5 %	23.1 %	0.4 %	103.5 %	114.1 %	0.6 %	102.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	-0.009 ppb	92.716 %	92.715 %	0.082 ppb	0.035 ppb	100.884 %
Concentration per Run 1	-0.002 ppb	92.902 %	94.818 %	0.072 ppb	0.033 ppb	107.833 %
Concentration per Run 2	-0.018 ppb	91.911 %	90.478 %	0.092 ppb	0.036 ppb	98.222 %
Concentration per Run 3	-0.008 ppb	93.336 %	92.850 %	0.081 ppb	0.037 ppb	96.596 %
Concentration RSD	85.5 %	0.8 %	2.3 %	12.5 %	5.7 %	6.0 %

Alpha ICPMSQ Data with SRD

12/3/2024 6:38:28 AM

Analysis index:	18	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	WG2002749-2d10 6020TL	Rack	1		
Analysis started at:	12/2/2024 4:40:03 PM	Vial	40		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	90.336 %	91.906 %	5.133 ppb	1,010.702 ppb	943.913 ppb	196.501 ppb	940.405 ppb	960.020 ppb	98.131 %
Concentration per Run 1	89.951 %	93.553 %	5.150 ppb	962.439 ppb	908.863 ppb	190.130 ppb	934.876 ppb	973.678 ppb	97.445 %
Concentration per Run 2	90.875 %	91.546 %	5.063 ppb	1,023.217 ppb	948.446 ppb	200.653 ppb	926.418 ppb	934.474 ppb	98.967 %
Concentration per Run 3	90.181 %	90.620 %	5.184 ppb	1,046.449 ppb	974.432 ppb	198.718 ppb	959.920 ppb	971.908 ppb	97.980 %
Concentration RSD	0.5 %	1.6 %	1.2 %	4.3 %	3.5 %	2.9 %	1.9 %	2.3 %	0.8 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	49.533 ppb	19.927 ppb	52.504 ppb	111.060 ppb	51.023 ppb	51.323 ppb	26.279 ppb	52.412 ppb	89.981 %
Concentration per Run 1	48.781 ppb	19.758 ppb	50.913 ppb	105.429 ppb	49.976 ppb	50.990 ppb	26.330 ppb	51.465 ppb	90.130 %
Concentration per Run 2	49.011 ppb	19.841 ppb	53.502 ppb	111.400 ppb	51.614 ppb	51.471 ppb	26.519 ppb	53.014 ppb	89.998 %
Concentration per Run 3	50.807 ppb	20.184 ppb	53.097 ppb	116.351 ppb	51.480 ppb	51.507 ppb	25.986 ppb	52.758 ppb	89.816 %
Concentration RSD	2.2 %	1.1 %	2.7 %	4.9 %	1.8 %	0.6 %	1.0 %	1.6 %	0.2 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	12.137 ppb	12.240 ppb	99.501 ppb	104.975 ppb	88.567 %	4.603 ppb	5.281 ppb	89.339 %	42.867 ppb
Concentration per Run 1	11.834 ppb	12.100 ppb	97.224 ppb	104.445 ppb	89.704 %	4.527 ppb	5.244 ppb	89.048 %	41.967 ppb
Concentration per Run 2	12.219 ppb	12.350 ppb	100.267 ppb	105.059 ppb	87.586 %	4.608 ppb	5.260 ppb	89.944 %	43.240 ppb
Concentration per Run 3	12.359 ppb	12.270 ppb	101.012 ppb	105.421 ppb	88.410 %	4.674 ppb	5.340 ppb	89.026 %	43.394 ppb
Concentration RSD	2.2 %	1.0 %	2.0 %	0.5 %	1.2 %	1.6 %	1.0 %	0.6 %	1.8 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	203.607 ppb	93.885 %	94.044 %	12.629 ppb	53.859 ppb	94.681 %
Concentration per Run 1	201.191 ppb	93.815 %	94.200 %	12.554 ppb	52.771 ppb	95.480 %
Concentration per Run 2	204.708 ppb	94.074 %	93.559 %	12.474 ppb	54.101 ppb	95.087 %
Concentration per Run 3	204.922 ppb	93.767 %	94.372 %	12.858 ppb	54.704 ppb	93.475 %
Concentration RSD	1.0 %	0.2 %	0.5 %	1.6 %	1.8 %	1.1 %

Alpha ICPMSQ Data with SRD

12/3/2024 6:38:28 AM

Analysis index:	19	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	I2468276-02 6020TL	Rack	1		
Analysis started at:	12/2/2024 4:44:39 PM	Vial	41		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	117.669 %	111.350 %	0.023 ppb	1,061,120.183 ppb	105,329.134 ppb	303.438 ppb	59,698.900 ppb	100,667.634 ppb	117.398 %
Concentration per Run 1	116.685 %	110.706 %	0.020 ppb	1,035,812.816 ppb	102,812.098 ppb	292.572 ppb	58,133.955 ppb	97,876.674 ppb	116.515 %
Concentration per Run 2	116.809 %	108.737 %	0.026 ppb	1,070,651.579 ppb	107,507.609 ppb	308.808 ppb	59,959.036 ppb	102,900.434 ppb	115.960 %
Concentration per Run 3	119.515 %	114.605 %	0.023 ppb	1,076,896.155 ppb	105,667.696 ppb	308.934 ppb	61,003.710 ppb	101,225.793 ppb	119.719 %
Concentration RSD	1.4 %	2.7 %	12.1 %	2.1 %	2.2 %	3.1 %	2.4 %	2.5 %	1.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	2.937 ppb	2.073 ppb	443.836 ppb	20,587.559 ppb	2.501 ppb	2.611 ppb	1.596 ppb	10.921 ppb	91.315 %
Concentration per Run 1	3.016 ppb	2.052 ppb	431.485 ppb	20,035.253 ppb	2.452 ppb	2.642 ppb	1.530 ppb	10.872 ppb	89.220 %
Concentration per Run 2	2.947 ppb	2.084 ppb	454.456 ppb	21,159.825 ppb	2.506 ppb	2.635 ppb	1.599 ppb	10.829 ppb	91.598 %
Concentration per Run 3	2.848 ppb	2.084 ppb	445.566 ppb	20,567.600 ppb	2.545 ppb	2.557 ppb	1.660 ppb	11.061 ppb	93.127 %
Concentration RSD	2.9 %	0.9 %	2.6 %	2.7 %	1.9 %	1.8 %	4.1 %	1.1 %	2.2 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	2.988 ppb	0.485 ppb	1,168.595 ppb	4.296 ppb	83.363 %	0.005 ppb	0.015 ppb	87.781 %	2.441 ppb
Concentration per Run 1	2.918 ppb	0.502 ppb	1,164.990 ppb	3.329 ppb	81.216 %	0.004 ppb	0.020 ppb	86.127 %	2.374 ppb
Concentration per Run 2	2.984 ppb	0.425 ppb	1,164.963 ppb	4.392 ppb	84.220 %	0.005 ppb	0.010 ppb	88.005 %	2.440 ppb
Concentration per Run 3	3.062 ppb	0.528 ppb	1,175.834 ppb	5.166 ppb	84.651 %	0.006 ppb	0.014 ppb	89.209 %	2.511 ppb
Concentration RSD	2.4 %	11.0 %	0.5 %	21.5 %	2.2 %	17.7 %	34.4 %	1.8 %	2.8 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	333.438 ppb	96.084 %	94.340 %	0.059 ppb	1.749 ppb	74.351 %
Concentration per Run 1	331.021 ppb	94.775 %	92.961 %	0.055 ppb	1.741 ppb	74.984 %
Concentration per Run 2	336.936 ppb	96.149 %	95.469 %	0.062 ppb	1.729 ppb	75.134 %
Concentration per Run 3	332.356 ppb	97.328 %	94.590 %	0.060 ppb	1.775 ppb	72.937 %
Concentration RSD	0.9 %	1.3 %	1.3 %	6.3 %	1.4 %	1.7 %

Alpha ICPMSQ Data with SRD

12/3/2024 6:38:28 AM

Analysis index:	20	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	WG2002749-3d10 6020TL	Rack	1		
Analysis started at:	12/2/2024 4:49:16 PM	Vial	42		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	101.515 %	99.807 %	4.713 ppb	101,195.144 ppb	11,074.007 ppb	224.270 ppb	7,333.096 ppb	11,834.710 ppb	106.275 %
Concentration per Run 1	100.079 %	101.055 %	4.735 ppb	98,438.187 ppb	10,876.639 ppb	218.964 ppb	7,344.608 ppb	11,769.702 ppb	105.337 %
Concentration per Run 2	101.875 %	99.176 %	4.690 ppb	101,144.521 ppb	10,963.873 ppb	223.278 ppb	7,316.623 ppb	11,942.931 ppb	106.130 %
Concentration per Run 3	102.590 %	99.189 %	4.713 ppb	104,002.725 ppb	11,381.509 ppb	230.568 ppb	7,338.058 ppb	11,791.499 ppb	107.358 %
Concentration RSD	1.3 %	1.1 %	0.5 %	2.7 %	2.4 %	2.6 %	0.2 %	0.8 %	1.0 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	46.636 ppb	18.372 ppb	93.750 ppb	2,355.615 ppb	48.006 ppb	47.257 ppb	23.835 ppb	45.999 ppb	99.894 %
Concentration per Run 1	46.048 ppb	18.107 ppb	91.881 ppb	2,325.116 ppb	47.708 ppb	47.531 ppb	23.825 ppb	45.890 ppb	99.476 %
Concentration per Run 2	46.218 ppb	18.263 ppb	93.941 ppb	2,334.550 ppb	47.249 ppb	46.604 ppb	23.149 ppb	45.318 ppb	101.386 %
Concentration per Run 3	47.643 ppb	18.748 ppb	95.427 ppb	2,407.180 ppb	49.063 ppb	47.634 ppb	24.531 ppb	46.789 ppb	98.819 %
Concentration RSD	1.9 %	1.8 %	1.9 %	1.9 %	2.0 %	1.2 %	2.9 %	1.6 %	1.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	11.786 ppb	10.584 ppb	202.425 ppb	93.559 ppb	95.020 %	4.158 ppb	4.729 ppb	97.674 %	47.371 ppb
Concentration per Run 1	11.527 ppb	10.408 ppb	199.442 ppb	93.698 ppb	95.972 %	4.121 ppb	4.696 ppb	99.663 %	46.755 ppb
Concentration per Run 2	11.814 ppb	10.617 ppb	201.931 ppb	92.733 ppb	94.658 %	4.111 ppb	4.746 ppb	96.943 %	47.347 ppb
Concentration per Run 3	12.017 ppb	10.728 ppb	205.904 ppb	94.248 ppb	94.431 %	4.243 ppb	4.744 ppb	96.415 %	48.011 ppb
Concentration RSD	2.1 %	1.5 %	1.6 %	0.8 %	0.9 %	1.8 %	0.6 %	1.8 %	1.3 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	225.150 ppb	102.740 %	101.903 %	11.914 ppb	51.945 ppb	93.194 %
Concentration per Run 1	220.534 ppb	103.253 %	102.227 %	11.609 ppb	51.235 ppb	94.585 %
Concentration per Run 2	226.435 ppb	101.219 %	101.249 %	11.981 ppb	52.184 ppb	92.917 %
Concentration per Run 3	228.482 ppb	103.748 %	102.233 %	12.153 ppb	52.415 ppb	92.081 %
Concentration RSD	1.8 %	1.3 %	0.6 %	2.3 %	1.2 %	1.4 %

Alpha ICPMSQ Data with SRD

12/3/2024 6:38:28 AM

Analysis index:	21	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	WG2002749-4 6020TL	Rack	1		
Analysis started at:	12/2/2024 4:53:54 PM	Vial	43		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	120.514 %	120.349 %	0.028 ppb	1,068,901.874 ppb	105,184.863 ppb	310.172 ppb	59,683.367 ppb	99,350.468 ppb	118.022 %
Concentration per Run 1	118.290 %	120.268 %	0.029 ppb	1,075,473.509 ppb	106,111.051 ppb	313.936 ppb	59,939.714 ppb	100,512.315 ppb	117.878 %
Concentration per Run 2	121.683 %	119.174 %	0.027 ppb	1,079,781.170 ppb	106,491.900 ppb	310.562 ppb	59,122.340 ppb	98,471.988 ppb	118.061 %
Concentration per Run 3	121.568 %	121.606 %	0.030 ppb	1,051,450.943 ppb	102,951.640 ppb	306.017 ppb	59,988.049 ppb	99,067.102 ppb	118.126 %
Concentration RSD	1.6 %	1.0 %	5.6 %	1.4 %	1.8 %	1.3 %	0.8 %	1.1 %	0.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	2.955 ppb	1.709 ppb	434.965 ppb	20,307.101 ppb	2.563 ppb	2.680 ppb	1.589 ppb	14.045 ppb	100.373 %
Concentration per Run 1	3.024 ppb	1.686 ppb	430.983 ppb	20,303.676 ppb	2.570 ppb	2.707 ppb	1.575 ppb	13.948 ppb	99.767 %
Concentration per Run 2	2.992 ppb	1.737 ppb	438.531 ppb	20,522.558 ppb	2.566 ppb	2.687 ppb	1.627 ppb	14.108 ppb	100.896 %
Concentration per Run 3	2.850 ppb	1.703 ppb	435.382 ppb	20,095.068 ppb	2.554 ppb	2.646 ppb	1.566 ppb	14.078 ppb	100.454 %
Concentration RSD	3.1 %	1.5 %	0.9 %	1.1 %	0.3 %	1.2 %	2.1 %	0.6 %	0.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	2.983 ppb	0.514 ppb	1,137.749 ppb	3.704 ppb	89.880 %	0.006 ppb	0.019 ppb	93.143 %	0.577 ppb
Concentration per Run 1	2.958 ppb	0.473 ppb	1,137.476 ppb	2.813 ppb	89.756 %	0.006 ppb	0.022 ppb	94.488 %	0.485 ppb
Concentration per Run 2	2.989 ppb	0.567 ppb	1,132.899 ppb	3.789 ppb	90.044 %	0.004 ppb	0.016 ppb	92.363 %	0.577 ppb
Concentration per Run 3	3.001 ppb	0.503 ppb	1,142.872 ppb	4.510 ppb	89.842 %	0.007 ppb	0.019 ppb	92.579 %	0.669 ppb
Concentration RSD	0.7 %	9.4 %	0.4 %	23.0 %	0.2 %	27.4 %	17.6 %	1.3 %	15.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	336.537 ppb	100.666 %	98.466 %	0.072 ppb	1.715 ppb	77.112 %
Concentration per Run 1	330.498 ppb	100.690 %	99.435 %	0.069 ppb	1.693 ppb	78.467 %
Concentration per Run 2	342.858 ppb	100.769 %	97.319 %	0.082 ppb	1.735 ppb	77.125 %
Concentration per Run 3	336.254 ppb	100.538 %	98.644 %	0.067 ppb	1.715 ppb	75.743 %
Concentration RSD	1.8 %	0.1 %	1.1 %	11.4 %	1.2 %	1.8 %

Alpha ICPMSQ Data with SRD

12/3/2024 6:38:28 AM

Analysis index:	22	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	WG2002749-5d10 6020TL	Rack	1		
Analysis started at:	12/2/2024 4:58:32 PM	Vial	44		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	103.349 %	98.790 %	47.821 ppb	108,056.990 ppb	15,261.201 ppb	82.624 ppb	11,639.053 ppb	16,362.551 ppb	108.983 %
Concentration per Run 1	102.322 %	101.467 %	47.434 ppb	106,741.175 ppb	15,039.339 ppb	79.422 ppb	11,465.871 ppb	16,410.759 ppb	108.377 %
Concentration per Run 2	103.190 %	97.645 %	48.389 ppb	107,475.870 ppb	15,256.269 ppb	83.398 ppb	11,821.225 ppb	16,113.110 ppb	109.461 %
Concentration per Run 3	104.537 %	97.259 %	47.639 ppb	109,953.927 ppb	15,487.995 ppb	85.052 ppb	11,630.064 ppb	16,563.783 ppb	109.111 %
Concentration RSD	1.1 %	2.4 %	1.1 %	1.6 %	1.5 %	3.5 %	1.5 %	1.4 %	0.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	50.413 ppb	48.296 ppb	97.351 ppb	7,265.372 ppb	50.727 ppb	50.261 ppb	49.715 ppb	48.196 ppb	99.046 %
Concentration per Run 1	50.678 ppb	48.192 ppb	95.466 ppb	7,214.624 ppb	51.314 ppb	50.559 ppb	50.357 ppb	48.215 ppb	97.758 %
Concentration per Run 2	50.223 ppb	48.418 ppb	97.973 ppb	7,281.989 ppb	50.395 ppb	50.417 ppb	49.503 ppb	48.106 ppb	99.288 %
Concentration per Run 3	50.338 ppb	48.278 ppb	98.614 ppb	7,299.503 ppb	50.473 ppb	49.808 ppb	49.284 ppb	48.268 ppb	100.091 %
Concentration RSD	0.5 %	0.2 %	1.7 %	0.6 %	1.0 %	0.8 %	1.1 %	0.2 %	1.2 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	50.223 ppb	46.834 ppb	164.094 ppb	51.027 ppb	94.232 %	1.414 ppb	46.766 ppb	97.455 %	49.359 ppb
Concentration per Run 1	50.918 ppb	46.601 ppb	163.871 ppb	51.303 ppb	94.645 %	1.428 ppb	46.648 ppb	97.632 %	49.574 ppb
Concentration per Run 2	49.402 ppb	47.300 ppb	163.848 ppb	50.580 ppb	93.096 %	1.412 ppb	46.801 ppb	96.983 %	49.426 ppb
Concentration per Run 3	50.349 ppb	46.601 ppb	164.563 ppb	51.198 ppb	94.956 %	1.401 ppb	46.848 ppb	97.749 %	49.078 ppb
Concentration RSD	1.5 %	0.9 %	0.2 %	0.8 %	1.1 %	1.0 %	0.2 %	0.4 %	0.5 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	83.365 ppb	101.861 %	101.636 %	49.245 ppb	51.852 ppb	92.244 %
Concentration per Run 1	83.262 ppb	100.898 %	101.121 %	47.549 ppb	50.690 ppb	93.790 %
Concentration per Run 2	82.798 ppb	103.388 %	101.550 %	49.647 ppb	51.970 ppb	91.850 %
Concentration per Run 3	84.034 ppb	101.298 %	102.236 %	50.539 ppb	52.895 ppb	91.092 %
Concentration RSD	0.7 %	1.3 %	0.6 %	3.1 %	2.1 %	1.5 %

Alpha ICPMSQ Data with SRD

12/3/2024 6:38:28 AM

Analysis index:	23	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	WG2002749-6d5 6020TL	Rack	1		
Analysis started at:	12/2/2024 5:03:11 PM	Vial	45		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	106.628 %	103.539 %	0.007 ppb	197,676.997 ppb	20,194.874 ppb	59.054 ppb	12,935.637 ppb	21,563.999 ppb	111.817 %
Concentration per Run 1	105.961 %	102.779 %	0.007 ppb	195,998.349 ppb	20,391.557 ppb	60.263 ppb	13,303.402 ppb	21,953.954 ppb	112.124 %
Concentration per Run 2	106.146 %	103.899 %	0.007 ppb	197,636.968 ppb	20,004.369 ppb	58.648 ppb	12,714.737 ppb	21,235.573 ppb	111.290 %
Concentration per Run 3	107.777 %	103.938 %	0.008 ppb	199,395.675 ppb	20,188.695 ppb	58.252 ppb	12,788.774 ppb	21,502.468 ppb	112.037 %
Concentration RSD	0.9 %	0.6 %	7.9 %	0.9 %	1.0 %	1.8 %	2.5 %	1.7 %	0.4 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.525 ppb	0.485 ppb	91.440 ppb	4,393.940 ppb	0.475 ppb	0.484 ppb	0.369 ppb	2.637 ppb	100.252 %
Concentration per Run 1	0.505 ppb	0.501 ppb	90.954 ppb	4,316.347 ppb	0.477 ppb	0.489 ppb	0.353 ppb	2.601 ppb	99.747 %
Concentration per Run 2	0.542 ppb	0.476 ppb	91.467 ppb	4,413.485 ppb	0.448 ppb	0.501 ppb	0.350 ppb	2.618 ppb	101.050 %
Concentration per Run 3	0.530 ppb	0.477 ppb	91.900 ppb	4,451.987 ppb	0.501 ppb	0.461 ppb	0.403 ppb	2.693 ppb	99.958 %
Concentration RSD	3.6 %	2.9 %	0.5 %	1.6 %	5.6 %	4.2 %	8.1 %	1.9 %	0.7 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.630 ppb	0.257 ppb	212.924 ppb	2.163 ppb	94.102 %	0.002 ppb	0.006 ppb	97.589 %	0.303 ppb
Concentration per Run 1	0.629 ppb	0.269 ppb	212.695 ppb	1.605 ppb	93.729 %	0.002 ppb	0.007 ppb	97.289 %	0.225 ppb
Concentration per Run 2	0.613 ppb	0.268 ppb	210.713 ppb	2.219 ppb	94.555 %	0.002 ppb	0.005 ppb	98.052 %	0.306 ppb
Concentration per Run 3	0.647 ppb	0.233 ppb	215.364 ppb	2.665 ppb	94.023 %	0.001 ppb	0.005 ppb	97.426 %	0.376 ppb
Concentration RSD	2.8 %	8.1 %	1.1 %	24.6 %	0.4 %	54.7 %	16.2 %	0.4 %	25.0 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	61.775 ppb	104.106 %	103.160 %	0.323 ppb	0.317 ppb	90.449 %
Concentration per Run 1	61.457 ppb	104.199 %	102.839 %	0.360 ppb	0.314 ppb	90.947 %
Concentration per Run 2	62.150 ppb	104.356 %	102.899 %	0.348 ppb	0.319 ppb	89.818 %
Concentration per Run 3	61.718 ppb	103.763 %	103.741 %	0.261 ppb	0.319 ppb	90.581 %
Concentration RSD	0.6 %	0.3 %	0.5 %	16.7 %	0.8 %	0.6 %

Alpha ICPMSQ Data with SRD

12/3/2024 6:38:28 AM

Analysis index:	24	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	I2468276-01 6020TL	Rack	1		
Analysis started at:	12/2/2024 5:07:49 PM	Vial	46		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	110.800 %	108.514 %	0.024 ppb	301,286.958 ppb	67,100.701 ppb	83.715 ppb	25,659.150 ppb	89,129.713 ppb	119.910 %
Concentration per Run 1	110.720 %	110.024 %	0.025 ppb	293,032.374 ppb	65,540.291 ppb	82.748 ppb	25,135.393 ppb	87,531.776 ppb	118.810 %
Concentration per Run 2	112.863 %	108.030 %	0.023 ppb	299,394.189 ppb	66,170.983 ppb	82.497 ppb	25,628.393 ppb	89,482.437 ppb	119.709 %
Concentration per Run 3	108.816 %	107.489 %	0.024 ppb	311,434.311 ppb	69,590.830 ppb	85.900 ppb	26,213.664 ppb	90,374.928 ppb	121.209 %
Concentration RSD	1.8 %	1.2 %	3.6 %	3.1 %	3.2 %	2.3 %	2.1 %	1.6 %	1.0 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	2.170 ppb	1.724 ppb	1,372.500 ppb	1,699.323 ppb	0.470 ppb	0.970 ppb	0.715 ppb	1.972 ppb	107.420 %
Concentration per Run 1	2.146 ppb	1.677 ppb	1,336.342 ppb	1,673.218 ppb	0.465 ppb	0.901 ppb	0.691 ppb	1.961 ppb	108.475 %
Concentration per Run 2	2.209 ppb	1.691 ppb	1,346.482 ppb	1,669.820 ppb	0.469 ppb	1.020 ppb	0.708 ppb	1.899 ppb	108.889 %
Concentration per Run 3	2.153 ppb	1.805 ppb	1,434.677 ppb	1,754.932 ppb	0.475 ppb	0.989 ppb	0.746 ppb	2.058 ppb	104.896 %
Concentration RSD	1.6 %	4.1 %	3.9 %	2.8 %	1.0 %	6.4 %	3.9 %	4.1 %	2.0 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.763 ppb	0.138 ppb	649.669 ppb	0.805 ppb	98.811 %	0.001 ppb	0.003 ppb	105.004 %	0.163 ppb
Concentration per Run 1	0.719 ppb	0.126 ppb	642.024 ppb	0.484 ppb	99.518 %	0.001 ppb	0.004 ppb	104.419 %	0.127 ppb
Concentration per Run 2	0.777 ppb	0.171 ppb	637.910 ppb	0.808 ppb	100.885 %	0.000 ppb	0.002 ppb	106.735 %	0.167 ppb
Concentration per Run 3	0.793 ppb	0.118 ppb	669.073 ppb	1.123 ppb	96.030 %	0.001 ppb	0.004 ppb	103.858 %	0.193 ppb
Concentration RSD	5.1 %	20.6 %	2.6 %	39.7 %	2.5 %	143.2 %	33.2 %	1.5 %	20.3 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	1,115.029 ppb	107.948 %	106.255 %	0.073 ppb	1.476 ppb	87.571 %
Concentration per Run 1	1,118.638 ppb	108.782 %	107.207 %	0.052 ppb	1.480 ppb	87.294 %
Concentration per Run 2	1,099.866 ppb	108.885 %	106.661 %	0.086 ppb	1.454 ppb	88.956 %
Concentration per Run 3	1,126.584 ppb	106.179 %	104.898 %	0.080 ppb	1.493 ppb	86.462 %
Concentration RSD	1.2 %	1.4 %	1.1 %	24.7 %	1.4 %	1.5 %

Alpha ICPMSQ Data with SRD

12/3/2024 6:38:28 AM

Analysis index:	25	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	I2468416-10 6020TL	Rack	1		
Analysis started at:	12/2/2024 5:12:28 PM	Vial	47		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	105.571 %	104.113 %	0.170 ppb	176,634.111 ppb	18,513.597 ppb	3,452.947 ppb	17,969.315 ppb	85,998.215 ppb	113.020 %
Concentration per Run 1	105.480 %	106.640 %	0.164 ppb	169,380.903 ppb	17,802.206 ppb	3,325.158 ppb	17,620.691 ppb	84,212.784 ppb	113.121 %
Concentration per Run 2	105.549 %	101.261 %	0.183 ppb	182,250.376 ppb	19,094.176 ppb	3,559.067 ppb	18,597.367 ppb	88,673.632 ppb	113.239 %
Concentration per Run 3	105.685 %	104.439 %	0.164 ppb	178,271.055 ppb	18,644.409 ppb	3,474.616 ppb	17,689.886 ppb	85,108.230 ppb	112.699 %
Concentration RSD	0.1 %	2.6 %	6.4 %	3.7 %	3.5 %	3.4 %	3.0 %	2.7 %	0.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	11.643 ppb	29.503 ppb	1,969.878 ppb	30,859.283 ppb	4.532 ppb	14.824 ppb	25.828 ppb	24.114 ppb	102.131 %
Concentration per Run 1	11.064 ppb	28.451 ppb	1,930.178 ppb	30,212.055 ppb	4.461 ppb	14.647 ppb	25.111 ppb	23.561 ppb	104.823 %
Concentration per Run 2	12.044 ppb	30.511 ppb	2,005.570 ppb	31,276.145 ppb	4.611 ppb	14.802 ppb	26.448 ppb	24.545 ppb	100.313 %
Concentration per Run 3	11.821 ppb	29.547 ppb	1,973.887 ppb	31,089.648 ppb	4.524 ppb	15.024 ppb	25.926 ppb	24.237 ppb	101.257 %
Concentration RSD	4.4 %	3.5 %	1.9 %	1.8 %	1.7 %	1.3 %	2.6 %	2.1 %	2.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	2.599 ppb	0.740 ppb	440.129 ppb	6.168 ppb	96.427 %	0.075 ppb	0.108 ppb	102.166 %	0.494 ppb
Concentration per Run 1	2.523 ppb	0.751 ppb	430.088 ppb	6.042 ppb	96.738 %	0.073 ppb	0.116 ppb	104.221 %	0.457 ppb
Concentration per Run 2	2.614 ppb	0.772 ppb	445.374 ppb	6.181 ppb	96.207 %	0.079 ppb	0.100 ppb	101.691 %	0.511 ppb
Concentration per Run 3	2.659 ppb	0.696 ppb	444.926 ppb	6.280 ppb	96.338 %	0.073 ppb	0.109 ppb	100.586 %	0.513 ppb
Concentration RSD	2.7 %	5.3 %	2.0 %	1.9 %	0.3 %	4.4 %	7.6 %	1.8 %	6.5 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	294.768 ppb	103.713 %	102.563 %	0.107 ppb	11.691 ppb	92.135 %
Concentration per Run 1	284.548 ppb	105.115 %	102.978 %	0.085 ppb	11.270 ppb	94.470 %
Concentration per Run 2	300.976 ppb	102.136 %	101.879 %	0.120 ppb	11.948 ppb	91.619 %
Concentration per Run 3	298.780 ppb	103.886 %	102.831 %	0.117 ppb	11.853 ppb	90.315 %
Concentration RSD	3.0 %	1.4 %	0.6 %	18.3 %	3.1 %	2.3 %

Alpha ICPMSQ Data with SRD

12/3/2024 6:38:28 AM

Analysis index:	26	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	I2468416-11 6020TL	Rack	1		
Analysis started at:	12/2/2024 5:17:08 PM	Vial	48		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	107.099 %	106.147 %	0.125 ppb	160,562.320 ppb	18,812.059 ppb	2,150.795 ppb	19,691.712 ppb	106,284.274 ppb	113.976 %
Concentration per Run 1	103.126 %	108.235 %	0.118 ppb	157,969.460 ppb	18,422.152 ppb	2,114.389 ppb	19,632.425 ppb	103,693.884 ppb	111.570 %
Concentration per Run 2	108.826 %	105.417 %	0.129 ppb	161,475.232 ppb	18,927.208 ppb	2,164.296 ppb	19,782.656 ppb	106,951.552 ppb	115.216 %
Concentration per Run 3	109.346 %	104.787 %	0.129 ppb	162,242.268 ppb	19,086.817 ppb	2,173.700 ppb	19,660.056 ppb	108,207.387 ppb	115.142 %
Concentration RSD	3.2 %	1.7 %	4.9 %	1.4 %	1.8 %	1.5 %	0.4 %	2.2 %	1.8 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	5.766 ppb	5.254 ppb	538.069 ppb	22,332.426 ppb	2.618 ppb	6.271 ppb	17.024 ppb	70.455 ppb	102.171 %
Concentration per Run 1	5.650 ppb	5.166 ppb	530.611 ppb	22,153.603 ppb	2.589 ppb	6.257 ppb	16.999 ppb	69.853 ppb	103.098 %
Concentration per Run 2	5.707 ppb	5.309 ppb	538.006 ppb	22,339.874 ppb	2.628 ppb	6.334 ppb	16.829 ppb	70.489 ppb	101.765 %
Concentration per Run 3	5.940 ppb	5.287 ppb	545.590 ppb	22,503.800 ppb	2.638 ppb	6.223 ppb	17.245 ppb	71.022 ppb	101.651 %
Concentration RSD	2.7 %	1.5 %	1.4 %	0.8 %	1.0 %	0.9 %	1.2 %	0.8 %	0.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	2.819 ppb	0.356 ppb	701.673 ppb	2.938 ppb	97.109 %	0.086 ppb	0.526 ppb	102.676 %	0.531 ppb
Concentration per Run 1	2.737 ppb	0.358 ppb	698.940 ppb	2.803 ppb	97.437 %	0.090 ppb	0.529 ppb	103.910 %	0.513 ppb
Concentration per Run 2	2.839 ppb	0.372 ppb	701.131 ppb	2.965 ppb	96.850 %	0.084 ppb	0.519 ppb	102.630 %	0.523 ppb
Concentration per Run 3	2.881 ppb	0.339 ppb	704.948 ppb	3.045 ppb	97.041 %	0.085 ppb	0.530 ppb	101.487 %	0.556 ppb
Concentration RSD	2.6 %	4.7 %	0.4 %	4.2 %	0.3 %	3.9 %	1.2 %	1.2 %	4.3 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	697.603 ppb	105.020 %	103.060 %	0.064 ppb	65.578 ppb	92.162 %
Concentration per Run 1	683.967 ppb	105.568 %	103.554 %	0.053 ppb	64.215 ppb	93.650 %
Concentration per Run 2	701.728 ppb	105.024 %	102.801 %	0.069 ppb	65.987 ppb	91.768 %
Concentration per Run 3	707.114 ppb	104.470 %	102.825 %	0.071 ppb	66.531 ppb	91.068 %
Concentration RSD	1.7 %	0.5 %	0.4 %	15.7 %	1.8 %	1.4 %

Alpha ICPMSQ Data with SRD

12/3/2024 6:38:28 AM

Analysis index:	27	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	CCV	Rack	0		
Analysis started at:	12/2/2024 5:21:47 PM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	101.846 %	101.051 %	59.392 ppb	5,964.594 ppb	5,901.345 ppb	60.971 ppb	5,855.742 ppb	5,902.991 ppb	106.007 %
Concentration per Run 1	102.915 %	106.202 %	58.227 ppb	5,642.834 ppb	5,655.038 ppb	58.765 ppb	5,657.545 ppb	5,798.437 ppb	106.324 %
Concentration per Run 2	99.244 %	96.590 %	60.729 ppb	6,262.749 ppb	6,108.606 ppb	62.266 ppb	5,966.750 ppb	5,999.268 ppb	106.182 %
Concentration per Run 3	103.379 %	100.360 %	59.220 ppb	5,988.198 ppb	5,940.391 ppb	61.883 ppb	5,942.930 ppb	5,911.268 ppb	105.516 %
Recovery Percentage 1			98.987 %	99.410 %	98.356 %	101.619 %	97.596 %	98.383 %	
Concentration RSD	2.2 %	4.8 %	2.1 %	5.2 %	3.9 %	3.1 %	2.9 %	1.7 %	0.4 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	58.853 ppb	58.999 ppb	58.635 ppb	5,958.673 ppb	60.748 ppb	61.407 ppb	61.408 ppb	61.591 ppb	100.984 %
Concentration per Run 1	57.503 ppb	57.542 ppb	56.631 ppb	5,797.407 ppb	59.743 ppb	59.877 ppb	59.631 ppb	60.708 ppb	101.996 %
Concentration per Run 2	61.359 ppb	60.986 ppb	60.790 ppb	6,211.218 ppb	62.731 ppb	63.389 ppb	63.396 ppb	63.283 ppb	99.282 %
Concentration per Run 3	57.698 ppb	58.468 ppb	58.485 ppb	5,867.394 ppb	59.770 ppb	60.954 ppb	61.198 ppb	60.781 ppb	101.676 %
Recovery Percentage 1	98.089 %	98.331 %	97.725 %	99.311 %	101.247 %	102.344 %	102.347 %	102.651 %	
Concentration RSD	3.7 %	3.0 %	3.6 %	3.7 %	2.8 %	2.9 %	3.1 %	2.4 %	1.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	59.745 ppb	60.167 ppb	61.698 ppb	59.332 ppb	98.722 %	59.594 ppb	60.066 ppb	99.216 %	61.016 ppb
Concentration per Run 1	58.707 ppb	59.045 ppb	60.344 ppb	59.015 ppb	102.101 %	58.580 ppb	59.128 ppb	101.877 %	59.274 ppb
Concentration per Run 2	60.848 ppb	61.175 ppb	63.421 ppb	60.214 ppb	94.720 %	60.941 ppb	61.496 ppb	96.852 %	62.371 ppb
Concentration per Run 3	59.681 ppb	60.282 ppb	61.328 ppb	58.768 ppb	99.344 %	59.261 ppb	59.575 ppb	98.919 %	61.404 ppb
Recovery Percentage 1	99.576 %	100.279 %	102.830 %	98.887 %		99.324 %	100.110 %		101.694 %
Concentration RSD	1.8 %	1.8 %	2.5 %	1.3 %	3.8 %	2.0 %	2.1 %	2.5 %	2.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	60.947 ppb	101.444 %	101.257 %	58.377 ppb	58.972 ppb	100.466 %
Concentration per Run 1	58.955 ppb	102.650 %	102.536 %	56.045 ppb	57.137 ppb	103.180 %
Concentration per Run 2	62.035 ppb	100.002 %	98.376 %	59.077 ppb	60.397 ppb	98.212 %
Concentration per Run 3	61.851 ppb	101.679 %	102.860 %	60.009 ppb	59.383 ppb	100.006 %
Recovery Percentage 1	101.578 %			97.295 %	98.287 %	
Concentration RSD	2.8 %	1.3 %	2.5 %	3.6 %	2.8 %	2.5 %

Alpha ICPMSQ Data with SRD

12/3/2024 6:38:28 AM

Analysis index:	28	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	CCB	Rack	0		
Analysis started at:	12/2/2024 5:26:29 PM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	99.536 %	100.991 %	0.007 ppb	32.850 ppb	-0.660 ppb	-0.349 ppb	10.208 ppb	-3.227 ppb	102.475 %
Concentration per Run 1	98.339 %	101.261 %	0.007 ppb	38.072 ppb	-0.837 ppb	-0.370 ppb	11.142 ppb	-3.207 ppb	102.070 %
Concentration per Run 2	99.341 %	100.193 %	0.010 ppb	33.350 ppb	-0.413 ppb	-0.333 ppb	10.346 ppb	-3.603 ppb	101.506 %
Concentration per Run 3	100.928 %	101.518 %	0.005 ppb	27.127 ppb	-0.729 ppb	-0.344 ppb	9.135 ppb	-2.872 ppb	103.848 %
Recovery Percentage 1			1.499 %	6.570 %	-0.942 %	-3.490 %	10.208 %	-3.227 %	
Concentration RSD	1.3 %	0.7 %	32.5 %	16.7 %	33.4 %	5.6 %	9.9 %	11.3 %	1.2 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.221 ppb	-0.002 ppb	-0.023 ppb	14.668 ppb	0.000 ppb	-0.038 ppb	-0.030 ppb	-0.269 ppb	98.812 %
Concentration per Run 1	-0.229 ppb	-0.004 ppb	-0.029 ppb	13.422 ppb	-0.001 ppb	-0.040 ppb	-0.032 ppb	-0.270 ppb	98.074 %
Concentration per Run 2	-0.219 ppb	-0.002 ppb	-0.015 ppb	14.324 ppb	0.002 ppb	-0.047 ppb	-0.031 ppb	-0.279 ppb	99.621 %
Concentration per Run 3	-0.216 ppb	0.000 ppb	-0.024 ppb	16.258 ppb	-0.002 ppb	-0.027 ppb	-0.028 ppb	-0.258 ppb	98.740 %
Recovery Percentage 1	-4.426 %	-0.191 %	-2.260 %	29.336 %	-0.067 %	-1.902 %	-3.038 %	-5.381 %	
Concentration RSD	3.2 %	104.4 %	31.0 %	9.9 %	517.1 %	26.3 %	7.9 %	3.9 %	0.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.042 ppb	0.132 ppb	-0.006 ppb	1.512 ppb	99.205 %	0.002 ppb	0.002 ppb	98.056 %	0.131 ppb
Concentration per Run 1	0.036 ppb	0.126 ppb	-0.007 ppb	1.135 ppb	99.047 %	0.003 ppb	0.003 ppb	98.639 %	0.086 ppb
Concentration per Run 2	0.041 ppb	0.141 ppb	-0.006 ppb	1.591 ppb	97.989 %	0.002 ppb	0.001 ppb	97.628 %	0.133 ppb
Concentration per Run 3	0.048 ppb	0.129 ppb	-0.006 ppb	1.812 ppb	100.579 %	0.001 ppb	0.001 ppb	97.900 %	0.173 ppb
Recovery Percentage 1	8.368 %	2.639 %	-0.062 %	75.621 %		0.458 %	0.830 %		3.275 %
Concentration RSD	15.1 %	6.0 %	7.7 %	22.8 %	1.3 %	50.8 %	51.4 %	0.5 %	33.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	-0.007 ppb	101.139 %	100.526 %	0.355 ppb	0.012 ppb	101.150 %
Concentration per Run 1	-0.013 ppb	100.887 %	100.170 %	0.399 ppb	0.011 ppb	102.663 %
Concentration per Run 2	-0.008 ppb	101.132 %	101.063 %	0.373 ppb	0.013 ppb	100.011 %
Concentration per Run 3	-0.002 ppb	101.396 %	100.344 %	0.293 ppb	0.013 ppb	100.776 %
Recovery Percentage 1	-1.442 %			35.506 %	1.223 %	
Concentration RSD	76.9 %	0.3 %	0.5 %	15.6 %	6.5 %	1.3 %

Alpha ICPMSQ Data with SRD

12/3/2024 6:38:28 AM

Analysis index:	29	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	I2468430-03 6020TL	Rack	1		
Analysis started at:	12/2/2024 5:32:19 PM	Vial	49		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	105.748 %	105.533 %	0.193 ppb	84,178.978 ppb	39,750.223 ppb	1,407.392 ppb	33,433.265 ppb	176,222.525 ppb	117.646 %
Concentration per Run 1	103.446 %	106.048 %	0.202 ppb	83,179.859 ppb	39,206.173 ppb	1,370.787 ppb	32,911.797 ppb	171,096.142 ppb	117.161 %
Concentration per Run 2	104.979 %	106.421 %	0.190 ppb	83,342.227 ppb	39,305.836 ppb	1,395.590 ppb	32,168.116 ppb	174,620.562 ppb	117.086 %
Concentration per Run 3	108.820 %	104.131 %	0.188 ppb	86,014.848 ppb	40,738.659 ppb	1,455.798 ppb	35,219.884 ppb	182,950.870 ppb	118.690 %
Concentration RSD	2.6 %	1.2 %	3.8 %	1.9 %	2.2 %	3.1 %	4.8 %	3.5 %	0.8 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	11.679 ppb	5.380 ppb	1,442.546 ppb	21,399.336 ppb	5.737 ppb	2.401 ppb	3.436 ppb	5.472 ppb	103.442 %
Concentration per Run 1	11.481 ppb	5.224 ppb	1,416.766 ppb	20,980.330 ppb	5.694 ppb	2.354 ppb	3.397 ppb	5.325 ppb	103.676 %
Concentration per Run 2	11.728 ppb	5.482 ppb	1,458.043 ppb	21,714.309 ppb	5.797 ppb	2.450 ppb	3.485 ppb	5.494 ppb	103.105 %
Concentration per Run 3	11.829 ppb	5.435 ppb	1,452.829 ppb	21,503.367 ppb	5.722 ppb	2.399 ppb	3.427 ppb	5.596 ppb	103.546 %
Concentration RSD	1.5 %	2.6 %	1.6 %	1.8 %	0.9 %	2.0 %	1.3 %	2.5 %	0.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	17.738 ppb	0.762 ppb	680.925 ppb	1.940 ppb	97.622 %	0.011 ppb	0.005 ppb	102.545 %	0.258 ppb
Concentration per Run 1	17.431 ppb	0.804 ppb	676.101 ppb	1.824 ppb	97.157 %	0.009 ppb	0.004 ppb	101.788 %	0.249 ppb
Concentration per Run 2	17.997 ppb	0.744 ppb	681.922 ppb	1.872 ppb	96.528 %	0.013 ppb	0.003 ppb	103.155 %	0.249 ppb
Concentration per Run 3	17.784 ppb	0.739 ppb	684.752 ppb	2.123 ppb	99.180 %	0.011 ppb	0.007 ppb	102.692 %	0.277 ppb
Concentration RSD	1.6 %	4.7 %	0.6 %	8.3 %	1.4 %	17.2 %	37.9 %	0.7 %	6.3 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	594.025 ppb	103.273 %	101.808 %	0.084 ppb	1.556 ppb	97.530 %
Concentration per Run 1	595.176 ppb	103.611 %	102.173 %	0.067 ppb	1.437 ppb	104.020 %
Concentration per Run 2	594.543 ppb	102.329 %	100.760 %	0.097 ppb	1.589 ppb	95.603 %
Concentration per Run 3	592.355 ppb	103.880 %	102.491 %	0.086 ppb	1.642 ppb	92.967 %
Concentration RSD	0.2 %	0.8 %	0.9 %	17.9 %	6.8 %	5.9 %

Alpha ICPMSQ Data with SRD

12/3/2024 6:38:28 AM

Analysis index:	30	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	I2468276-02d10 6020TL	Rack	1		
Analysis started at:	12/2/2024 5:37:56 PM	Vial	50		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	106.969 %	103.847 %	0.006 ppb	108,039.588 ppb	11,014.661 ppb	31.507 ppb	6,978.141 ppb	11,743.096 ppb	111.083 %
Concentration per Run 1	107.832 %	102.960 %	0.004 ppb	107,820.873 ppb	11,132.223 ppb	32.059 ppb	7,061.927 ppb	11,863.283 ppb	111.176 %
Concentration per Run 2	107.434 %	103.796 %	0.008 ppb	106,867.732 ppb	10,844.329 ppb	31.175 ppb	6,921.155 ppb	11,638.235 ppb	111.499 %
Concentration per Run 3	105.642 %	104.787 %	0.007 ppb	109,430.160 ppb	11,067.431 ppb	31.287 ppb	6,951.340 ppb	11,727.772 ppb	110.575 %
Concentration RSD	1.1 %	0.9 %	32.0 %	1.2 %	1.4 %	1.5 %	1.1 %	1.0 %	0.4 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.218 ppb	0.265 ppb	51.577 ppb	2,452.295 ppb	0.257 ppb	0.266 ppb	0.144 ppb	1.269 ppb	100.992 %
Concentration per Run 1	0.250 ppb	0.270 ppb	51.459 ppb	2,435.227 ppb	0.260 ppb	0.240 ppb	0.134 ppb	1.248 ppb	99.335 %
Concentration per Run 2	0.186 ppb	0.265 ppb	51.587 ppb	2,454.193 ppb	0.254 ppb	0.290 ppb	0.169 ppb	1.276 ppb	101.534 %
Concentration per Run 3	0.219 ppb	0.261 ppb	51.685 ppb	2,467.464 ppb	0.258 ppb	0.268 ppb	0.128 ppb	1.282 ppb	102.107 %
Concentration RSD	14.6 %	1.7 %	0.2 %	0.7 %	1.2 %	9.4 %	15.6 %	1.4 %	1.4 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.331 ppb	0.080 ppb	115.183 ppb	0.269 ppb	94.978 %	0.000 ppb	0.003 ppb	96.546 %	0.046 ppb
Concentration per Run 1	0.302 ppb	0.084 ppb	116.112 ppb	0.138 ppb	93.817 %	0.000 ppb	0.003 ppb	94.615 %	0.027 ppb
Concentration per Run 2	0.347 ppb	0.038 ppb	114.847 ppb	0.281 ppb	95.511 %	0.001 ppb	0.001 ppb	97.642 %	0.049 ppb
Concentration per Run 3	0.343 ppb	0.117 ppb	114.590 ppb	0.388 ppb	95.607 %	0.000 ppb	0.004 ppb	97.382 %	0.061 ppb
Concentration RSD	7.6 %	49.8 %	0.7 %	46.6 %	1.1 %	120.5 %	41.7 %	1.7 %	37.8 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	34.124 ppb	101.986 %	101.795 %	0.023 ppb	0.164 ppb	92.869 %
Concentration per Run 1	34.335 ppb	100.371 %	100.370 %	0.008 ppb	0.161 ppb	92.780 %
Concentration per Run 2	33.983 ppb	103.401 %	102.687 %	0.030 ppb	0.165 ppb	93.642 %
Concentration per Run 3	34.054 ppb	102.186 %	102.327 %	0.030 ppb	0.166 ppb	92.186 %
Concentration RSD	0.5 %	1.5 %	1.2 %	54.7 %	1.5 %	0.8 %

Alpha ICPMSQ Data with SRD

12/3/2024 6:38:28 AM

Analysis index:	31	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	WG2002749-4d10 6020TL	Rack	1		
Analysis started at:	12/2/2024 5:42:34 PM	Vial	51		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	109.879 %	104.860 %	0.005 ppb	111,186.048 ppb	11,305.963 ppb	32.560 ppb	7,135.611 ppb	11,932.510 ppb	112.898 %
Concentration per Run 1	108.464 %	106.138 %	0.005 ppb	108,495.095 ppb	11,030.410 ppb	32.109 ppb	7,006.365 ppb	11,758.969 ppb	112.639 %
Concentration per Run 2	110.525 %	103.835 %	0.007 ppb	111,096.547 ppb	11,351.166 ppb	32.607 ppb	7,083.014 ppb	11,852.273 ppb	113.479 %
Concentration per Run 3	110.647 %	104.607 %	0.004 ppb	113,966.502 ppb	11,536.314 ppb	32.965 ppb	7,317.456 ppb	12,186.288 ppb	112.575 %
Concentration RSD	1.1 %	1.1 %	30.9 %	2.5 %	2.3 %	1.3 %	2.3 %	1.9 %	0.4 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.218 ppb	0.242 ppb	51.586 ppb	2,475.778 ppb	0.278 ppb	0.253 ppb	0.164 ppb	1.728 ppb	102.238 %
Concentration per Run 1	0.236 ppb	0.246 ppb	50.763 ppb	2,439.584 ppb	0.272 ppb	0.239 ppb	0.176 ppb	1.666 ppb	102.539 %
Concentration per Run 2	0.233 ppb	0.243 ppb	51.977 ppb	2,487.147 ppb	0.272 ppb	0.254 ppb	0.157 ppb	1.751 ppb	100.850 %
Concentration per Run 3	0.185 ppb	0.236 ppb	52.020 ppb	2,500.602 ppb	0.289 ppb	0.265 ppb	0.161 ppb	1.768 ppb	103.324 %
Concentration RSD	13.2 %	2.3 %	1.4 %	1.3 %	3.6 %	5.1 %	6.2 %	3.2 %	1.2 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.368 ppb	0.081 ppb	116.679 ppb	0.166 ppb	96.215 %	0.000 ppb	0.002 ppb	98.055 %	0.038 ppb
Concentration per Run 1	0.365 ppb	0.071 ppb	114.729 ppb	0.070 ppb	96.454 %	0.000 ppb	0.001 ppb	98.648 %	0.026 ppb
Concentration per Run 2	0.365 ppb	0.069 ppb	117.775 ppb	0.181 ppb	95.730 %	0.000 ppb	0.004 ppb	96.515 %	0.042 ppb
Concentration per Run 3	0.373 ppb	0.102 ppb	117.533 ppb	0.248 ppb	96.462 %	0.001 ppb	0.002 ppb	99.002 %	0.046 ppb
Concentration RSD	1.2 %	22.9 %	1.5 %	54.1 %	0.4 %	167.3 %	74.3 %	1.4 %	27.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	34.457 ppb	103.127 %	102.677 %	0.014 ppb	0.165 ppb	92.561 %
Concentration per Run 1	34.336 ppb	102.069 %	102.348 %	0.002 ppb	0.167 ppb	92.968 %
Concentration per Run 2	34.771 ppb	101.831 %	101.184 %	0.018 ppb	0.163 ppb	92.141 %
Concentration per Run 3	34.264 ppb	105.481 %	104.500 %	0.023 ppb	0.166 ppb	92.574 %
Concentration RSD	0.8 %	2.0 %	1.6 %	74.2 %	1.3 %	0.4 %

Alpha ICPMSQ Data with SRD

12/3/2024 6:38:28 AM

Analysis index:	32	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	WG2002749-6d50 6020TL	Rack	1		
Analysis started at:	12/2/2024 5:47:11 PM	Vial	52		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	104.229 %	106.125 %	0.002 ppb	21,026.652 ppb	2,240.411 ppb	5.962 ppb	1,355.467 ppb	2,301.400 ppb	105.549 %
Concentration per Run 1	101.747 %	106.794 %	0.004 ppb	20,557.440 ppb	2,197.298 ppb	5.594 ppb	1,337.160 ppb	2,247.570 ppb	103.137 %
Concentration per Run 2	103.870 %	107.090 %	0.000 ppb	20,992.585 ppb	2,200.351 ppb	6.079 ppb	1,341.402 ppb	2,279.215 ppb	105.518 %
Concentration per Run 3	107.070 %	104.491 %	0.001 ppb	21,529.930 ppb	2,323.585 ppb	6.214 ppb	1,387.839 ppb	2,377.413 ppb	107.993 %
Concentration RSD	2.6 %	1.3 %	110.4 %	2.3 %	3.2 %	5.5 %	2.1 %	2.9 %	2.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.101 ppb	0.045 ppb	9.909 ppb	470.611 ppb	0.047 ppb	0.018 ppb	0.019 ppb	0.215 ppb	106.922 %
Concentration per Run 1	-0.104 ppb	0.040 ppb	9.623 ppb	455.158 ppb	0.058 ppb	0.016 ppb	0.012 ppb	0.222 ppb	108.288 %
Concentration per Run 2	-0.108 ppb	0.049 ppb	9.657 ppb	472.800 ppb	0.039 ppb	0.040 ppb	0.031 ppb	0.189 ppb	106.741 %
Concentration per Run 3	-0.092 ppb	0.046 ppb	10.447 ppb	483.874 ppb	0.044 ppb	-0.001 ppb	0.014 ppb	0.235 ppb	105.736 %
Concentration RSD	8.3 %	10.7 %	4.7 %	3.1 %	20.9 %	111.8 %	55.7 %	11.2 %	1.2 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.071 ppb	0.020 ppb	21.118 ppb	0.065 ppb	101.281 %	0.000 ppb	0.000 ppb	101.919 %	0.021 ppb
Concentration per Run 1	0.062 ppb	-0.002 ppb	20.736 ppb	0.008 ppb	102.994 %	0.000 ppb	0.000 ppb	104.682 %	0.009 ppb
Concentration per Run 2	0.075 ppb	0.037 ppb	20.941 ppb	0.053 ppb	102.220 %	0.000 ppb	0.001 ppb	102.805 %	0.017 ppb
Concentration per Run 3	0.078 ppb	0.026 ppb	21.677 ppb	0.135 ppb	98.629 %	0.001 ppb	0.000 ppb	98.268 %	0.036 ppb
Concentration RSD	12.1 %	100.8 %	2.3 %	98.8 %	2.3 %	361.4 %	323.6 %	3.2 %	65.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	6.430 ppb	103.808 %	103.443 %	0.004 ppb	0.032 ppb	101.252 %
Concentration per Run 1	6.292 ppb	105.188 %	104.064 %	-0.006 ppb	0.030 ppb	103.504 %
Concentration per Run 2	6.540 ppb	105.197 %	105.257 %	0.006 ppb	0.031 ppb	102.186 %
Concentration per Run 3	6.457 ppb	101.039 %	101.009 %	0.011 ppb	0.034 ppb	98.065 %
Concentration RSD	2.0 %	2.3 %	2.1 %	231.9 %	5.4 %	2.8 %

Alpha ICPMSQ Data with SRD

12/3/2024 6:38:28 AM

Analysis index:	33	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	I2468276-01d10 6020TL	Rack	1		
Analysis started at:	12/2/2024 5:51:49 PM	Vial	53		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	109.337 %	109.535 %	0.003 ppb	30,424.214 ppb	7,279.327 ppb	8.595 ppb	2,743.742 ppb	9,262.635 ppb	116.929 %
Concentration per Run 1	108.897 %	110.951 %	0.004 ppb	29,679.042 ppb	7,156.854 ppb	8.867 ppb	2,706.413 ppb	9,174.732 ppb	116.026 %
Concentration per Run 2	109.549 %	108.300 %	0.005 ppb	31,014.233 ppb	7,449.173 ppb	8.325 ppb	2,712.660 ppb	9,268.290 ppb	117.258 %
Concentration per Run 3	109.565 %	109.355 %	0.000 ppb	30,579.368 ppb	7,231.956 ppb	8.594 ppb	2,812.154 ppb	9,344.882 ppb	117.503 %
Concentration RSD	0.3 %	1.2 %	78.0 %	2.2 %	2.1 %	3.2 %	2.2 %	0.9 %	0.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.125 ppb	0.177 ppb	156.559 ppb	184.246 ppb	0.045 ppb	0.089 ppb	0.073 ppb	0.096 ppb	108.457 %
Concentration per Run 1	0.092 ppb	0.179 ppb	150.958 ppb	177.078 ppb	0.049 ppb	0.087 ppb	0.079 ppb	0.069 ppb	108.872 %
Concentration per Run 2	0.128 ppb	0.183 ppb	157.011 ppb	184.639 ppb	0.047 ppb	0.111 ppb	0.075 ppb	0.103 ppb	108.267 %
Concentration per Run 3	0.154 ppb	0.168 ppb	161.707 ppb	191.022 ppb	0.039 ppb	0.071 ppb	0.064 ppb	0.116 ppb	108.232 %
Concentration RSD	25.0 %	4.3 %	3.4 %	3.8 %	11.3 %	22.5 %	10.6 %	25.4 %	0.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.093 ppb	0.002 ppb	67.192 ppb	0.038 ppb	104.645 %	0.000 ppb	0.000 ppb	104.800 %	0.017 ppb
Concentration per Run 1	0.109 ppb	-0.010 ppb	65.732 ppb	-0.012 ppb	104.593 %	0.000 ppb	0.000 ppb	105.171 %	0.008 ppb
Concentration per Run 2	0.088 ppb	0.015 ppb	67.967 ppb	0.066 ppb	104.011 %	0.000 ppb	0.000 ppb	105.371 %	0.018 ppb
Concentration per Run 3	0.082 ppb	0.002 ppb	67.876 ppb	0.060 ppb	105.332 %	0.000 ppb	0.001 ppb	103.859 %	0.025 ppb
Concentration RSD	15.2 %	514.9 %	1.9 %	114.2 %	0.6 %	167.5 %	166.5 %	0.8 %	51.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	113.984 ppb	107.707 %	105.946 %	0.000 ppb	0.144 ppb	99.722 %
Concentration per Run 1	110.538 ppb	108.587 %	106.550 %	-0.010 ppb	0.134 ppb	102.712 %
Concentration per Run 2	115.025 ppb	106.537 %	103.566 %	0.006 ppb	0.148 ppb	98.566 %
Concentration per Run 3	116.389 ppb	107.995 %	107.720 %	0.003 ppb	0.149 ppb	97.888 %
Concentration RSD	2.7 %	1.0 %	2.0 %	2,072.3 %	5.8 %	2.6 %

Alpha ICPMSQ Data with SRD

12/3/2024 6:38:28 AM

Analysis index:	34	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	CCV	Rack	0		
Analysis started at:	12/2/2024 5:56:59 PM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	104.410 %	105.881 %	60.421 ppb	5,949.328 ppb	5,880.798 ppb	61.407 ppb	5,993.968 ppb	5,812.358 ppb	111.601 %
Concentration per Run 1	102.124 %	106.524 %	61.391 ppb	6,016.615 ppb	5,983.285 ppb	60.115 ppb	6,057.850 ppb	5,857.701 ppb	110.479 %
Concentration per Run 2	106.093 %	105.057 %	58.546 ppb	5,845.677 ppb	5,773.514 ppb	61.606 ppb	6,009.737 ppb	5,821.500 ppb	111.818 %
Concentration per Run 3	105.014 %	106.061 %	61.327 ppb	5,985.693 ppb	5,885.594 ppb	62.501 ppb	5,914.318 ppb	5,757.873 ppb	112.507 %
Recovery Percentage 1			100.702 %	99.155 %	98.013 %	102.345 %	99.899 %	96.873 %	
Concentration RSD	2.0 %	0.7 %	2.7 %	1.5 %	1.8 %	2.0 %	1.2 %	0.9 %	0.9 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	59.600 ppb	59.386 ppb	59.498 ppb	5,997.652 ppb	60.897 ppb	61.928 ppb	61.264 ppb	61.640 ppb	105.174 %
Concentration per Run 1	59.600 ppb	59.683 ppb	59.155 ppb	5,974.360 ppb	60.983 ppb	62.464 ppb	61.873 ppb	61.756 ppb	105.127 %
Concentration per Run 2	60.379 ppb	59.468 ppb	59.424 ppb	5,987.828 ppb	60.974 ppb	61.759 ppb	60.433 ppb	61.490 ppb	104.518 %
Concentration per Run 3	58.822 ppb	59.006 ppb	59.915 ppb	6,030.767 ppb	60.736 ppb	61.563 ppb	61.487 ppb	61.673 ppb	105.876 %
Recovery Percentage 1	99.334 %	98.976 %	99.163 %	99.961 %	101.496 %	103.214 %	102.107 %	102.733 %	
Concentration RSD	1.3 %	0.6 %	0.6 %	0.5 %	0.2 %	0.8 %	1.2 %	0.2 %	0.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	60.469 ppb	60.586 ppb	61.826 ppb	58.912 ppb	101.891 %	59.745 ppb	59.553 ppb	101.982 %	60.886 ppb
Concentration per Run 1	60.185 ppb	60.183 ppb	61.519 ppb	58.863 ppb	104.478 %	59.054 ppb	59.171 ppb	104.587 %	59.972 ppb
Concentration per Run 2	61.091 ppb	60.135 ppb	62.206 ppb	59.298 ppb	101.690 %	60.005 ppb	59.605 ppb	101.816 %	60.770 ppb
Concentration per Run 3	60.130 ppb	61.439 ppb	61.752 ppb	58.573 ppb	99.506 %	60.176 ppb	59.884 ppb	99.543 %	61.916 ppb
Recovery Percentage 1	100.781 %	100.977 %	103.043 %	98.186 %		99.575 %	99.256 %		101.477 %
Concentration RSD	0.9 %	1.2 %	0.6 %	0.6 %	2.4 %	1.0 %	0.6 %	2.5 %	1.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	60.992 ppb	104.164 %	103.008 %	58.302 ppb	58.658 ppb	102.232 %
Concentration per Run 1	59.759 ppb	105.538 %	105.088 %	56.092 ppb	57.066 ppb	104.776 %
Concentration per Run 2	61.610 ppb	104.198 %	100.973 %	59.092 ppb	59.533 ppb	102.079 %
Concentration per Run 3	61.607 ppb	102.756 %	102.961 %	59.723 ppb	59.373 ppb	99.840 %
Recovery Percentage 1	101.653 %			97.170 %	97.763 %	
Concentration RSD	1.8 %	1.3 %	2.0 %	3.3 %	2.4 %	2.4 %

Alpha ICPMSQ Data with SRD

12/3/2024 6:38:28 AM

Analysis index: 35
Analysis label: CCB
Analysis started at: 12/2/2024 6:01:41 PM
User name ALPHALAB\Metals-Instrument
Rack 0
Vial 10
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	103.513 %	102.333 %	0.004 ppb	34.421 ppb	-0.768 ppb	-0.309 ppb	7.168 ppb	-3.671 ppb	104.312 %
Concentration per Run 1	103.719 %	102.651 %	0.002 ppb	35.291 ppb	-0.603 ppb	-0.349 ppb	8.440 ppb	-4.204 ppb	104.208 %
Concentration per Run 2	100.869 %	104.028 %	0.007 ppb	26.140 ppb	-0.890 ppb	-0.267 ppb	8.843 ppb	-3.354 ppb	104.322 %
Concentration per Run 3	105.950 %	100.322 %	0.003 ppb	41.833 ppb	-0.810 ppb	-0.311 ppb	4.220 ppb	-3.454 ppb	104.406 %
Recovery Percentage 1			0.817 %	6.884 %	-1.097 %	-3.089 %	7.168 %	-3.671 %	
Concentration RSD	2.5 %	1.8 %	66.0 %	22.9 %	19.3 %	13.2 %	35.7 %	12.7 %	0.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.189 ppb	-0.004 ppb	-0.031 ppb	11.001 ppb	-0.001 ppb	-0.051 ppb	-0.027 ppb	-0.274 ppb	100.349 %
Concentration per Run 1	-0.190 ppb	-0.006 ppb	-0.028 ppb	9.347 ppb	-0.002 ppb	-0.048 ppb	-0.025 ppb	-0.284 ppb	99.622 %
Concentration per Run 2	-0.201 ppb	0.001 ppb	-0.037 ppb	12.168 ppb	0.000 ppb	-0.048 ppb	-0.030 ppb	-0.273 ppb	100.528 %
Concentration per Run 3	-0.176 ppb	-0.008 ppb	-0.028 ppb	11.487 ppb	-0.003 ppb	-0.057 ppb	-0.025 ppb	-0.264 ppb	100.898 %
Recovery Percentage 1	-3.778 %	-0.407 %	-3.089 %	22.002 %	-0.258 %	-2.541 %	-2.670 %	-5.472 %	
Concentration RSD	6.5 %	116.7 %	17.8 %	13.4 %	125.2 %	9.8 %	10.7 %	3.7 %	0.7 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.041 ppb	0.159 ppb	-0.006 ppb	1.463 ppb	99.177 %	0.003 ppb	0.002 ppb	97.542 %	0.093 ppb
Concentration per Run 1	0.039 ppb	0.145 ppb	-0.006 ppb	1.087 ppb	100.620 %	0.005 ppb	0.001 ppb	98.329 %	0.064 ppb
Concentration per Run 2	0.037 ppb	0.172 ppb	-0.006 ppb	1.550 ppb	98.727 %	0.003 ppb	0.001 ppb	97.562 %	0.093 ppb
Concentration per Run 3	0.046 ppb	0.159 ppb	-0.007 ppb	1.751 ppb	98.184 %	0.002 ppb	0.004 ppb	96.735 %	0.123 ppb
Recovery Percentage 1	8.120 %	3.178 %	-0.061 %	73.125 %		0.809 %	0.907 %		2.331 %
Concentration RSD	11.3 %	8.5 %	8.8 %	23.3 %	1.3 %	46.6 %	80.5 %	0.8 %	31.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	-0.007 ppb	99.508 %	98.431 %	0.388 ppb	0.009 ppb	100.845 %
Concentration per Run 1	-0.003 ppb	100.794 %	100.043 %	0.431 ppb	0.009 ppb	104.312 %
Concentration per Run 2	-0.007 ppb	98.475 %	97.890 %	0.415 ppb	0.009 ppb	98.077 %
Concentration per Run 3	-0.012 ppb	99.255 %	97.359 %	0.317 ppb	0.010 ppb	100.145 %
Recovery Percentage 1	-1.467 %			38.781 %	0.895 %	
Concentration RSD	64.4 %	1.2 %	1.4 %	15.9 %	6.0 %	3.1 %

Alpha ICPMSQ Data with SRD

12/3/2024 6:38:28 AM

Analysis index:	36	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	WG2002206-2d10 6020TL	Rack	1		
Analysis started at:	12/2/2024 6:27:21 PM	Vial	55		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	106.920 %	108.308 %	5.777 ppb	1,164.078 ppb	1,079.689 ppb	225.608 ppb	1,083.963 ppb	1,121.166 ppb	112.533 %
Concentration per Run 1	106.706 %	106.370 %	5.763 ppb	1,153.101 ppb	1,071.844 ppb	225.276 ppb	1,077.754 ppb	1,136.354 ppb	111.794 %
Concentration per Run 2	106.661 %	109.715 %	5.798 ppb	1,136.369 ppb	1,052.660 ppb	222.691 ppb	1,055.350 ppb	1,089.907 ppb	112.122 %
Concentration per Run 3	107.394 %	108.840 %	5.769 ppb	1,202.764 ppb	1,114.564 ppb	228.857 ppb	1,118.784 ppb	1,137.237 ppb	113.684 %
Concentration RSD	0.4 %	1.6 %	0.3 %	3.0 %	2.9 %	1.4 %	3.0 %	2.4 %	0.9 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	54.815 ppb	21.945 ppb	56.407 ppb	117.692 ppb	57.642 ppb	58.150 ppb	29.335 ppb	57.352 ppb	105.428 %
Concentration per Run 1	54.836 ppb	22.131 ppb	56.112 ppb	117.570 ppb	58.221 ppb	58.929 ppb	29.742 ppb	57.531 ppb	103.046 %
Concentration per Run 2	54.686 ppb	21.644 ppb	55.887 ppb	117.738 ppb	56.933 ppb	57.576 ppb	28.682 ppb	56.298 ppb	107.235 %
Concentration per Run 3	54.924 ppb	22.059 ppb	57.223 ppb	117.768 ppb	57.772 ppb	57.945 ppb	29.580 ppb	58.228 ppb	106.003 %
Concentration RSD	0.2 %	1.2 %	1.3 %	0.1 %	1.1 %	1.2 %	1.9 %	1.7 %	2.0 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	13.930 ppb	13.416 ppb	112.187 ppb	119.452 ppb	102.580 %	5.347 ppb	5.878 ppb	100.140 %	60.075 ppb
Concentration per Run 1	13.686 ppb	13.217 ppb	111.202 ppb	120.940 ppb	102.649 %	5.289 ppb	5.843 ppb	99.848 %	59.492 ppb
Concentration per Run 2	13.947 ppb	13.388 ppb	111.828 ppb	119.321 ppb	100.986 %	5.351 ppb	5.911 ppb	99.057 %	60.801 ppb
Concentration per Run 3	14.158 ppb	13.642 ppb	113.531 ppb	118.094 ppb	104.104 %	5.402 ppb	5.881 ppb	101.514 %	59.934 ppb
Concentration RSD	1.7 %	1.6 %	1.1 %	1.2 %	1.5 %	1.1 %	0.6 %	1.3 %	1.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	230.544 ppb	103.105 %	102.016 %	13.751 ppb	60.729 ppb	101.121 %
Concentration per Run 1	226.406 ppb	102.722 %	102.381 %	13.335 ppb	60.533 ppb	100.642 %
Concentration per Run 2	232.069 ppb	103.475 %	101.548 %	13.814 ppb	61.016 ppb	101.192 %
Concentration per Run 3	233.157 ppb	103.119 %	102.119 %	14.104 ppb	60.637 ppb	101.527 %
Concentration RSD	1.6 %	0.4 %	0.4 %	2.8 %	0.4 %	0.4 %

Alpha ICPMSQ Data with SRD

12/3/2024 6:38:28 AM

Analysis index:	37	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	L2467934-05 6020TL	Rack	1		
Analysis started at:	12/2/2024 6:31:59 PM	Vial	56		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	105.315 %	103.586 %	0.167 ppb	5,515.347 ppb	921.020 ppb	36.977 ppb	732.765 ppb	3,476.049 ppb	109.979 %
Concentration per Run 1	102.903 %	104.478 %	0.167 ppb	5,498.316 ppb	914.181 ppb	36.092 ppb	726.703 ppb	3,481.743 ppb	109.001 %
Concentration per Run 2	104.342 %	103.281 %	0.162 ppb	5,434.096 ppb	902.016 ppb	37.329 ppb	734.761 ppb	3,462.747 ppb	110.969 %
Concentration per Run 3	108.700 %	102.998 %	0.172 ppb	5,613.629 ppb	946.863 ppb	37.509 ppb	736.833 ppb	3,483.658 ppb	109.968 %
Concentration RSD	2.9 %	0.8 %	3.1 %	1.6 %	2.5 %	2.1 %	0.7 %	0.3 %	0.9 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.008 ppb	0.455 ppb	14.100 ppb	40.488 ppb	0.061 ppb	0.769 ppb	0.413 ppb	7.755 ppb	102.933 %
Concentration per Run 1	-0.044 ppb	0.461 ppb	13.881 ppb	39.370 ppb	0.063 ppb	0.829 ppb	0.434 ppb	7.586 ppb	102.162 %
Concentration per Run 2	-0.010 ppb	0.444 ppb	14.058 ppb	41.525 ppb	0.061 ppb	0.743 ppb	0.428 ppb	7.733 ppb	104.323 %
Concentration per Run 3	0.030 ppb	0.461 ppb	14.359 ppb	40.569 ppb	0.059 ppb	0.735 ppb	0.376 ppb	7.947 ppb	102.314 %
Concentration RSD	484.7 %	2.1 %	1.7 %	2.7 %	3.4 %	6.8 %	7.8 %	2.3 %	1.2 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.154 ppb	0.406 ppb	18.276 ppb	3.267 ppb	100.590 %	0.001 ppb	0.087 ppb	102.434 %	0.850 ppb
Concentration per Run 1	0.154 ppb	0.361 ppb	18.275 ppb	2.461 ppb	100.247 %	0.002 ppb	0.083 ppb	101.162 %	0.771 ppb
Concentration per Run 2	0.160 ppb	0.421 ppb	18.196 ppb	3.398 ppb	100.971 %	0.000 ppb	0.087 ppb	102.021 %	0.871 ppb
Concentration per Run 3	0.148 ppb	0.437 ppb	18.358 ppb	3.942 ppb	100.550 %	0.001 ppb	0.092 ppb	104.120 %	0.906 ppb
Concentration RSD	3.9 %	9.8 %	0.4 %	22.9 %	0.4 %	87.0 %	4.9 %	1.5 %	8.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	4.054 ppb	102.820 %	101.804 %	0.142 ppb	0.055 ppb	98.915 %
Concentration per Run 1	4.149 ppb	102.418 %	100.341 %	0.154 ppb	0.057 ppb	96.401 %
Concentration per Run 2	3.942 ppb	104.414 %	104.181 %	0.156 ppb	0.056 ppb	99.703 %
Concentration per Run 3	4.070 ppb	101.629 %	100.891 %	0.115 ppb	0.054 ppb	100.641 %
Concentration RSD	2.6 %	1.4 %	2.0 %	16.3 %	2.3 %	2.3 %

Alpha ICPMSQ Data with SRD

12/3/2024 6:38:28 AM

Analysis index:	38	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	WG2002206-3d10 6020TL	Rack	1		
Analysis started at:	12/2/2024 6:36:37 PM	Vial	57		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	105.671 %	109.707 %	5.870 ppb	1,753.696 ppb	1,172.565 ppb	227.779 ppb	1,185.680 ppb	1,486.322 ppb	109.875 %
Concentration per Run 1	105.313 %	112.096 %	5.895 ppb	1,720.309 ppb	1,155.706 ppb	224.072 ppb	1,175.264 ppb	1,464.950 ppb	108.613 %
Concentration per Run 2	104.704 %	107.669 %	5.890 ppb	1,776.447 ppb	1,180.864 ppb	232.953 ppb	1,196.185 ppb	1,520.956 ppb	111.044 %
Concentration per Run 3	106.997 %	109.355 %	5.825 ppb	1,764.332 ppb	1,181.124 ppb	226.313 ppb	1,185.592 ppb	1,473.062 ppb	109.968 %
Concentration RSD	1.1 %	2.0 %	0.7 %	1.7 %	1.2 %	2.0 %	0.9 %	2.0 %	1.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	54.306 ppb	21.975 ppb	58.635 ppb	252.983 ppb	57.650 ppb	58.351 ppb	29.717 ppb	66.875 ppb	107.154 %
Concentration per Run 1	53.604 ppb	21.665 ppb	58.566 ppb	255.339 ppb	57.738 ppb	58.353 ppb	29.729 ppb	66.260 ppb	108.678 %
Concentration per Run 2	54.210 ppb	22.058 ppb	58.219 ppb	246.628 ppb	57.072 ppb	57.807 ppb	29.607 ppb	67.446 ppb	105.884 %
Concentration per Run 3	55.105 ppb	22.201 ppb	59.120 ppb	256.981 ppb	58.140 ppb	58.893 ppb	29.815 ppb	66.920 ppb	106.901 %
Concentration RSD	1.4 %	1.3 %	0.8 %	2.2 %	0.9 %	0.9 %	0.4 %	0.9 %	1.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	13.562 ppb	12.664 ppb	113.024 ppb	104.434 ppb	104.465 %	5.299 ppb	5.860 ppb	103.595 %	55.560 ppb
Concentration per Run 1	13.446 ppb	12.442 ppb	112.432 ppb	103.011 ppb	106.129 %	5.246 ppb	5.755 ppb	107.724 %	54.311 ppb
Concentration per Run 2	13.768 ppb	12.768 ppb	113.221 ppb	105.298 ppb	104.126 %	5.310 ppb	5.897 ppb	101.214 %	56.144 ppb
Concentration per Run 3	13.473 ppb	12.781 ppb	113.420 ppb	104.993 ppb	103.140 %	5.341 ppb	5.929 ppb	101.849 %	56.227 ppb
Concentration RSD	1.3 %	1.5 %	0.5 %	1.2 %	1.5 %	0.9 %	1.6 %	3.5 %	1.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	233.076 ppb	105.640 %	103.449 %	13.108 ppb	57.898 ppb	104.686 %
Concentration per Run 1	227.106 ppb	107.612 %	103.835 %	12.363 ppb	56.293 ppb	107.877 %
Concentration per Run 2	234.963 ppb	104.484 %	103.397 %	13.307 ppb	58.396 ppb	103.866 %
Concentration per Run 3	237.158 ppb	104.825 %	103.115 %	13.652 ppb	59.005 ppb	102.317 %
Concentration RSD	2.3 %	1.6 %	0.4 %	5.1 %	2.5 %	2.7 %

Alpha ICPMSQ Data with SRD

12/3/2024 6:38:28 AM

Analysis index:	39	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	WG2002206-4d10 6020TL	Rack	1		
Analysis started at:	12/2/2024 6:41:16 PM	Vial	58		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	104.582 %	107.378 %	5.824 ppb	1,716.910 ppb	1,157.016 ppb	229.462 ppb	1,161.735 ppb	1,437.584 ppb	109.004 %
Concentration per Run 1	103.244 %	106.936 %	5.749 ppb	1,698.850 ppb	1,137.560 ppb	228.654 ppb	1,169.274 ppb	1,422.949 ppb	108.015 %
Concentration per Run 2	104.709 %	108.737 %	5.884 ppb	1,707.772 ppb	1,155.893 ppb	225.666 ppb	1,148.618 ppb	1,431.159 ppb	108.536 %
Concentration per Run 3	105.794 %	106.460 %	5.840 ppb	1,744.109 ppb	1,177.595 ppb	234.066 ppb	1,167.314 ppb	1,458.643 ppb	110.461 %
Concentration RSD	1.2 %	1.1 %	1.2 %	1.4 %	1.7 %	1.9 %	1.0 %	1.3 %	1.2 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	54.184 ppb	22.144 ppb	57.879 ppb	125.186 ppb	57.528 ppb	57.911 ppb	29.308 ppb	59.938 ppb	105.060 %
Concentration per Run 1	52.929 ppb	22.212 ppb	57.987 ppb	122.834 ppb	57.056 ppb	57.875 ppb	29.302 ppb	59.627 ppb	105.504 %
Concentration per Run 2	54.564 ppb	21.752 ppb	56.602 ppb	123.120 ppb	57.407 ppb	56.953 ppb	28.994 ppb	59.572 ppb	105.770 %
Concentration per Run 3	55.061 ppb	22.468 ppb	59.048 ppb	129.606 ppb	58.120 ppb	58.905 ppb	29.629 ppb	60.615 ppb	103.904 %
Concentration RSD	2.1 %	1.6 %	2.1 %	3.1 %	0.9 %	1.7 %	1.1 %	1.0 %	1.0 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	13.382 ppb	13.138 ppb	111.650 ppb	106.676 ppb	101.986 %	5.301 ppb	5.923 ppb	100.416 %	55.552 ppb
Concentration per Run 1	13.152 ppb	12.744 ppb	110.356 ppb	105.302 ppb	103.600 %	5.259 ppb	5.883 ppb	101.761 %	55.337 ppb
Concentration per Run 2	13.531 ppb	13.099 ppb	111.248 ppb	106.330 ppb	101.123 %	5.325 ppb	6.074 ppb	98.569 %	55.975 ppb
Concentration per Run 3	13.461 ppb	13.571 ppb	113.345 ppb	108.395 ppb	101.236 %	5.320 ppb	5.813 ppb	100.918 %	55.344 ppb
Concentration RSD	1.5 %	3.2 %	1.4 %	1.5 %	1.4 %	0.7 %	2.3 %	1.6 %	0.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	230.890 ppb	104.110 %	103.161 %	13.295 ppb	57.495 ppb	103.153 %
Concentration per Run 1	226.446 ppb	105.523 %	104.874 %	12.833 ppb	55.991 ppb	105.416 %
Concentration per Run 2	234.846 ppb	102.530 %	100.821 %	13.622 ppb	58.619 ppb	100.860 %
Concentration per Run 3	231.379 ppb	104.277 %	103.789 %	13.430 ppb	57.876 ppb	103.183 %
Concentration RSD	1.8 %	1.4 %	2.0 %	3.1 %	2.4 %	2.2 %

Alpha ICPMSQ Data with SRD

12/3/2024 6:38:28 AM

Analysis index:	40	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	WG2002206-5d10 6020TL	Rack	1		
Analysis started at:	12/2/2024 6:45:55 PM	Vial	59		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	102.139 %	102.003 %	56.457 ppb	6,196.364 ppb	5,615.452 ppb	61.621 ppb	5,529.438 ppb	5,872.542 ppb	104.305 %
Concentration per Run 1	102.367 %	102.136 %	55.881 ppb	6,034.054 ppb	5,516.536 ppb	61.254 ppb	5,417.330 ppb	5,787.000 ppb	105.268 %
Concentration per Run 2	104.058 %	100.026 %	55.291 ppb	6,341.542 ppb	5,709.055 ppb	62.232 ppb	5,717.017 ppb	5,941.699 ppb	107.687 %
Concentration per Run 3	99.990 %	103.847 %	58.198 ppb	6,213.496 ppb	5,620.766 ppb	61.378 ppb	5,453.967 ppb	5,888.927 ppb	99.960 %
Concentration RSD	2.0 %	1.9 %	2.7 %	2.5 %	1.7 %	0.9 %	3.0 %	1.3 %	3.8 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	55.880 ppb	54.788 ppb	58.088 ppb	5,651.868 ppb	56.904 ppb	57.155 ppb	56.842 ppb	60.026 ppb	100.608 %
Concentration per Run 1	54.772 ppb	53.007 ppb	56.660 ppb	5,457.481 ppb	55.927 ppb	56.698 ppb	56.077 ppb	59.118 ppb	102.135 %
Concentration per Run 2	56.530 ppb	55.870 ppb	58.317 ppb	5,729.362 ppb	57.409 ppb	57.440 ppb	57.124 ppb	60.433 ppb	100.071 %
Concentration per Run 3	56.337 ppb	55.488 ppb	59.285 ppb	5,768.759 ppb	57.377 ppb	57.327 ppb	57.324 ppb	60.526 ppb	99.619 %
Concentration RSD	1.7 %	2.8 %	2.3 %	3.0 %	1.5 %	0.7 %	1.2 %	1.3 %	1.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	56.414 ppb	55.072 ppb	59.436 ppb	58.569 ppb	97.499 %	2.053 ppb	56.213 ppb	96.764 %	56.351 ppb
Concentration per Run 1	55.294 ppb	54.493 ppb	58.710 ppb	57.285 ppb	98.868 %	2.041 ppb	55.946 ppb	96.831 %	55.974 ppb
Concentration per Run 2	56.600 ppb	55.215 ppb	59.615 ppb	58.183 ppb	97.127 %	2.068 ppb	56.232 ppb	97.850 %	56.671 ppb
Concentration per Run 3	57.348 ppb	55.509 ppb	59.983 ppb	60.240 ppb	96.501 %	2.049 ppb	56.462 ppb	95.609 %	56.408 ppb
Concentration RSD	1.8 %	0.9 %	1.1 %	2.6 %	1.3 %	0.7 %	0.5 %	1.2 %	0.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	59.073 ppb	99.839 %	99.879 %	55.532 ppb	56.472 ppb	98.459 %
Concentration per Run 1	58.373 ppb	100.701 %	101.060 %	53.894 ppb	54.649 ppb	99.999 %
Concentration per Run 2	59.424 ppb	99.951 %	99.566 %	55.762 ppb	56.988 ppb	98.635 %
Concentration per Run 3	59.423 ppb	98.866 %	99.012 %	56.939 ppb	57.777 ppb	96.744 %
Concentration RSD	1.0 %	0.9 %	1.1 %	2.8 %	2.9 %	1.7 %

Alpha ICPMSQ Data with SRD

12/3/2024 6:38:28 AM

Analysis index:	41	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	WG2002206-6d5 6020TL	Rack	1		
Analysis started at:	12/2/2024 6:50:35 PM	Vial	60		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	100.498 %	99.339 %	0.037 ppb	1,166.034 ppb	185.185 ppb	8.513 ppb	153.369 ppb	708.490 ppb	102.190 %
Concentration per Run 1	99.911 %	100.502 %	0.035 ppb	1,161.344 ppb	184.586 ppb	8.391 ppb	152.578 ppb	730.454 ppb	100.082 %
Concentration per Run 2	99.140 %	97.529 %	0.040 ppb	1,155.391 ppb	184.918 ppb	8.671 ppb	155.516 ppb	708.371 ppb	103.199 %
Concentration per Run 3	102.443 %	99.987 %	0.035 ppb	1,181.366 ppb	186.053 ppb	8.478 ppb	152.011 ppb	686.644 ppb	103.290 %
Concentration RSD	1.7 %	1.6 %	7.0 %	1.2 %	0.4 %	1.7 %	1.2 %	3.1 %	1.8 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.103 ppb	0.103 ppb	2.792 ppb	17.501 ppb	0.013 ppb	0.135 ppb	0.078 ppb	0.202 ppb	95.385 %
Concentration per Run 1	-0.128 ppb	0.099 ppb	2.807 ppb	16.665 ppb	0.011 ppb	0.136 ppb	0.094 ppb	0.186 ppb	95.552 %
Concentration per Run 2	-0.150 ppb	0.106 ppb	2.737 ppb	17.528 ppb	0.007 ppb	0.143 ppb	0.067 ppb	0.201 ppb	96.206 %
Concentration per Run 3	-0.031 ppb	0.105 ppb	2.833 ppb	18.310 ppb	0.019 ppb	0.127 ppb	0.072 ppb	0.220 ppb	94.396 %
Concentration RSD	61.3 %	3.3 %	1.8 %	4.7 %	46.2 %	5.7 %	18.2 %	8.5 %	1.0 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.092 ppb	0.197 ppb	3.733 ppb	2.376 ppb	92.985 %	0.000 ppb	0.019 ppb	94.276 %	0.284 ppb
Concentration per Run 1	0.095 ppb	0.225 ppb	3.714 ppb	1.692 ppb	94.471 %	0.000 ppb	0.017 ppb	94.862 %	0.201 ppb
Concentration per Run 2	0.102 ppb	0.170 ppb	3.732 ppb	2.422 ppb	92.915 %	0.001 ppb	0.022 ppb	93.758 %	0.291 ppb
Concentration per Run 3	0.079 ppb	0.197 ppb	3.752 ppb	3.014 ppb	91.570 %	0.001 ppb	0.018 ppb	94.208 %	0.361 ppb
Concentration RSD	12.9 %	13.7 %	0.5 %	27.9 %	1.6 %	146.3 %	12.9 %	0.6 %	28.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.845 ppb	95.691 %	95.241 %	0.407 ppb	0.046 ppb	97.110 %
Concentration per Run 1	0.838 ppb	97.059 %	95.940 %	0.453 ppb	0.044 ppb	100.703 %
Concentration per Run 2	0.879 ppb	95.291 %	95.226 %	0.435 ppb	0.047 ppb	95.523 %
Concentration per Run 3	0.819 ppb	94.723 %	94.557 %	0.332 ppb	0.047 ppb	95.105 %
Concentration RSD	3.6 %	1.3 %	0.7 %	16.1 %	3.4 %	3.2 %

Alpha ICPMSQ Data with SRD

12/3/2024 6:38:28 AM

Analysis index:	42	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	L2467884-01 6020TL	Rack	2		
Analysis started at:	12/2/2024 6:55:15 PM	Vial	1		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	109.626 %	105.851 %	36.887 ppb	36,683.046 ppb	8,758.489 ppb	16.561 ppb	8,901.560 ppb	77,019.319 ppb	111.045 %
Concentration per Run 1	110.394 %	106.666 %	36.597 ppb	35,895.226 ppb	8,603.559 ppb	16.282 ppb	8,628.219 ppb	75,047.146 ppb	111.026 %
Concentration per Run 2	107.338 %	102.278 %	37.590 ppb	37,803.005 ppb	9,086.113 ppb	17.383 ppb	9,145.225 ppb	79,541.726 ppb	110.109 %
Concentration per Run 3	111.146 %	108.609 %	36.475 ppb	36,350.906 ppb	8,585.796 ppb	16.018 ppb	8,931.236 ppb	76,469.086 ppb	112.000 %
Concentration RSD	1.8 %	3.1 %	1.7 %	2.7 %	3.2 %	4.4 %	2.9 %	3.0 %	0.9 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.218 ppb	0.476 ppb	5,016.241 ppb	39,415.827 ppb	0.048 ppb	0.668 ppb	0.243 ppb	1.018 ppb	97.410 %
Concentration per Run 1	-0.220 ppb	0.445 ppb	4,877.874 ppb	37,978.866 ppb	0.050 ppb	0.640 ppb	0.209 ppb	0.942 ppb	99.361 %
Concentration per Run 2	-0.207 ppb	0.497 ppb	5,242.442 ppb	41,239.205 ppb	0.050 ppb	0.712 ppb	0.276 ppb	1.116 ppb	94.668 %
Concentration per Run 3	-0.226 ppb	0.486 ppb	4,928.409 ppb	39,029.410 ppb	0.044 ppb	0.652 ppb	0.243 ppb	0.997 ppb	98.202 %
Concentration RSD	4.4 %	5.8 %	3.9 %	4.2 %	6.7 %	5.8 %	13.7 %	8.7 %	2.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.214 ppb	0.170 ppb	339.141 ppb	1.523 ppb	93.285 %	0.002 ppb	0.002 ppb	97.847 %	0.180 ppb
Concentration per Run 1	0.191 ppb	0.178 ppb	325.612 ppb	0.984 ppb	94.999 %	0.003 ppb	0.001 ppb	98.695 %	0.138 ppb
Concentration per Run 2	0.238 ppb	0.158 ppb	354.034 ppb	1.688 ppb	89.135 %	0.002 ppb	0.002 ppb	93.978 %	0.189 ppb
Concentration per Run 3	0.212 ppb	0.172 ppb	337.777 ppb	1.896 ppb	95.719 %	0.003 ppb	0.003 ppb	100.867 %	0.213 ppb
Concentration RSD	11.0 %	6.0 %	4.2 %	31.4 %	3.9 %	18.7 %	48.2 %	3.6 %	21.3 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	147.372 ppb	99.247 %	99.283 %	0.113 ppb	0.134 ppb	90.216 %
Concentration per Run 1	143.411 ppb	100.692 %	100.997 %	0.075 ppb	0.128 ppb	95.155 %
Concentration per Run 2	155.042 ppb	96.447 %	95.971 %	0.136 ppb	0.139 ppb	86.897 %
Concentration per Run 3	143.664 ppb	100.601 %	100.883 %	0.127 ppb	0.134 ppb	88.597 %
Concentration RSD	4.5 %	2.4 %	2.9 %	29.1 %	3.9 %	4.8 %

Alpha ICPMSQ Data with SRD

12/3/2024 6:38:28 AM

Analysis index:	43	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	L2467884-02 6020TL	Rack	2		
Analysis started at:	12/2/2024 6:59:53 PM	Vial	2		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	106.083 %	102.441 %	9.452 ppb	50,737.025 ppb	12,405.492 ppb	6.820 ppb	10,412.432 ppb	74,888.238 ppb	110.592 %
Concentration per Run 1	106.616 %	102.046 %	9.319 ppb	50,606.630 ppb	12,227.094 ppb	6.686 ppb	10,393.462 ppb	74,176.858 ppb	109.811 %
Concentration per Run 2	104.055 %	101.789 %	9.671 ppb	50,641.318 ppb	12,583.955 ppb	6.886 ppb	10,671.156 ppb	76,308.422 ppb	110.981 %
Concentration per Run 3	107.577 %	103.487 %	9.367 ppb	50,963.128 ppb	12,405.428 ppb	6.888 ppb	10,172.677 ppb	74,179.433 ppb	110.983 %
Concentration RSD	1.7 %	0.9 %	2.0 %	0.4 %	1.4 %	1.7 %	2.4 %	1.6 %	0.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.266 ppb	0.504 ppb	6,867.342 ppb	11,124.333 ppb	0.230 ppb	0.969 ppb	0.266 ppb	78.674 ppb	99.129 %
Concentration per Run 1	-0.271 ppb	0.514 ppb	6,839.428 ppb	11,099.825 ppb	0.222 ppb	0.972 ppb	0.244 ppb	78.037 ppb	98.802 %
Concentration per Run 2	-0.281 ppb	0.497 ppb	6,842.185 ppb	11,077.214 ppb	0.246 ppb	1.025 ppb	0.262 ppb	79.292 ppb	98.745 %
Concentration per Run 3	-0.246 ppb	0.500 ppb	6,920.413 ppb	11,195.961 ppb	0.222 ppb	0.911 ppb	0.290 ppb	78.692 ppb	99.840 %
Concentration RSD	6.6 %	1.9 %	0.7 %	0.6 %	6.0 %	5.9 %	8.7 %	0.8 %	0.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.192 ppb	0.171 ppb	325.599 ppb	2.467 ppb	94.501 %	0.001 ppb	0.226 ppb	98.278 %	0.170 ppb
Concentration per Run 1	0.206 ppb	0.122 ppb	319.900 ppb	2.176 ppb	95.340 %	0.001 ppb	0.234 ppb	99.844 %	0.146 ppb
Concentration per Run 2	0.185 ppb	0.193 ppb	331.204 ppb	2.553 ppb	92.834 %	0.001 ppb	0.232 ppb	96.822 %	0.171 ppb
Concentration per Run 3	0.184 ppb	0.198 ppb	325.693 ppb	2.673 ppb	95.329 %	0.002 ppb	0.211 ppb	98.169 %	0.194 ppb
Concentration RSD	6.2 %	24.7 %	1.7 %	10.5 %	1.5 %	27.0 %	5.7 %	1.5 %	13.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	79.438 ppb	101.200 %	100.818 %	0.080 ppb	0.062 ppb	91.129 %
Concentration per Run 1	77.859 ppb	102.816 %	100.167 %	0.058 ppb	0.061 ppb	91.445 %
Concentration per Run 2	81.580 ppb	98.631 %	100.419 %	0.091 ppb	0.064 ppb	89.889 %
Concentration per Run 3	78.877 ppb	102.153 %	101.867 %	0.092 ppb	0.062 ppb	92.054 %
Concentration RSD	2.4 %	2.2 %	0.9 %	23.9 %	2.2 %	1.2 %

Alpha ICPMSQ Data with SRD

12/3/2024 6:38:28 AM

Analysis index:	44	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	L2467888-01 6020TL	Rack	2		
Analysis started at:	12/2/2024 7:04:32 PM	Vial	3		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	105.857 %	106.751 %	3.891 ppb	26,021.377 ppb	6,366.786 ppb	621.753 ppb	10,539.740 ppb	75,722.964 ppb	112.589 %
Concentration per Run 1	106.121 %	104.967 %	3.882 ppb	25,891.738 ppb	6,326.199 ppb	620.127 ppb	10,498.332 ppb	75,238.811 ppb	112.756 %
Concentration per Run 2	105.090 %	107.592 %	3.917 ppb	25,970.623 ppb	6,317.784 ppb	623.095 ppb	10,486.839 ppb	75,619.046 ppb	112.573 %
Concentration per Run 3	106.359 %	107.695 %	3.874 ppb	26,201.770 ppb	6,456.377 ppb	622.039 ppb	10,634.049 ppb	76,311.034 ppb	112.438 %
Concentration RSD	0.6 %	1.4 %	0.6 %	0.6 %	1.2 %	0.2 %	0.8 %	0.7 %	0.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.572 ppb	1.003 ppb	1,382.795 ppb	1,047.548 ppb	0.875 ppb	1.763 ppb	4.537 ppb	315.919 ppb	103.639 %
Concentration per Run 1	0.602 ppb	0.983 ppb	1,379.648 ppb	1,023.077 ppb	0.847 ppb	1.884 ppb	4.594 ppb	313.141 ppb	103.265 %
Concentration per Run 2	0.534 ppb	0.989 ppb	1,379.509 ppb	1,067.927 ppb	0.892 ppb	1.708 ppb	4.493 ppb	316.132 ppb	103.564 %
Concentration per Run 3	0.579 ppb	1.037 ppb	1,389.227 ppb	1,051.641 ppb	0.886 ppb	1.696 ppb	4.523 ppb	318.484 ppb	104.087 %
Concentration RSD	6.0 %	2.9 %	0.4 %	2.2 %	2.8 %	6.0 %	1.1 %	0.8 %	0.4 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.705 ppb	0.716 ppb	246.807 ppb	4.668 ppb	100.117 %	0.016 ppb	1.097 ppb	102.870 %	0.615 ppb
Concentration per Run 1	0.670 ppb	0.695 ppb	245.224 ppb	4.452 ppb	99.026 %	0.016 ppb	1.102 ppb	102.716 %	0.591 ppb
Concentration per Run 2	0.722 ppb	0.778 ppb	247.085 ppb	4.817 ppb	100.995 %	0.017 ppb	1.082 ppb	104.168 %	0.618 ppb
Concentration per Run 3	0.723 ppb	0.674 ppb	248.114 ppb	4.735 ppb	100.328 %	0.016 ppb	1.106 ppb	101.727 %	0.638 ppb
Concentration RSD	4.3 %	7.7 %	0.6 %	4.1 %	1.0 %	5.3 %	1.2 %	1.2 %	3.8 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	64.609 ppb	106.634 %	104.022 %	0.099 ppb	4.666 ppb	95.153 %
Concentration per Run 1	63.625 ppb	107.654 %	104.010 %	0.085 ppb	4.661 ppb	94.587 %
Concentration per Run 2	64.630 ppb	106.286 %	104.577 %	0.105 ppb	4.652 ppb	95.519 %
Concentration per Run 3	65.571 ppb	105.963 %	103.478 %	0.106 ppb	4.684 ppb	95.354 %
Concentration RSD	1.5 %	0.8 %	0.5 %	11.8 %	0.4 %	0.5 %

Alpha ICPMSQ Data with SRD

12/3/2024 6:38:28 AM

Analysis index:	45	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	L2467934-01 6020TL	Rack	2		
Analysis started at:	12/2/2024 7:09:10 PM	Vial	4		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	106.781 %	105.567 %	0.003 ppb	50,024.120 ppb	285.775 ppb	384.289 ppb	25,468.855 ppb	43,544.137 ppb	110.811 %
Concentration per Run 1	107.064 %	105.507 %	0.003 ppb	49,506.701 ppb	281.413 ppb	379.876 ppb	25,271.362 ppb	43,210.379 ppb	109.559 %
Concentration per Run 2	103.862 %	105.791 %	0.005 ppb	50,554.477 ppb	287.441 ppb	385.511 ppb	25,317.721 ppb	43,423.445 ppb	110.650 %
Concentration per Run 3	109.417 %	105.404 %	0.002 ppb	50,011.183 ppb	288.472 ppb	387.479 ppb	25,817.482 ppb	43,998.586 ppb	112.226 %
Concentration RSD	2.6 %	0.2 %	43.0 %	1.0 %	1.3 %	1.0 %	1.2 %	0.9 %	1.2 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	2.905 ppb	0.477 ppb	932.881 ppb	1,176.038 ppb	0.509 ppb	3.365 ppb	0.796 ppb	4.752 ppb	103.468 %
Concentration per Run 1	2.807 ppb	0.467 ppb	913.710 ppb	1,161.254 ppb	0.478 ppb	3.305 ppb	0.829 ppb	4.602 ppb	104.574 %
Concentration per Run 2	2.936 ppb	0.489 ppb	941.373 ppb	1,181.271 ppb	0.532 ppb	3.477 ppb	0.748 ppb	4.809 ppb	102.423 %
Concentration per Run 3	2.972 ppb	0.473 ppb	943.559 ppb	1,185.590 ppb	0.515 ppb	3.314 ppb	0.810 ppb	4.845 ppb	103.408 %
Concentration RSD	3.0 %	2.4 %	1.8 %	1.1 %	5.5 %	2.9 %	5.4 %	2.8 %	1.0 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	4.560 ppb	0.384 ppb	423.106 ppb	31.953 ppb	97.868 %	0.001 ppb	0.009 ppb	100.010 %	0.331 ppb
Concentration per Run 1	4.512 ppb	0.355 ppb	417.014 ppb	31.778 ppb	99.996 %	0.001 ppb	0.008 ppb	101.616 %	0.295 ppb
Concentration per Run 2	4.567 ppb	0.438 ppb	428.962 ppb	32.427 ppb	95.877 %	-0.001 ppb	0.010 ppb	98.434 %	0.338 ppb
Concentration per Run 3	4.600 ppb	0.360 ppb	423.343 ppb	31.653 ppb	97.731 %	0.001 ppb	0.010 ppb	99.981 %	0.359 ppb
Concentration RSD	1.0 %	12.1 %	1.4 %	1.3 %	2.1 %	161.5 %	11.0 %	1.6 %	9.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	16.116 ppb	104.836 %	103.584 %	0.055 ppb	0.070 ppb	95.238 %
Concentration per Run 1	15.766 ppb	104.829 %	104.078 %	0.042 ppb	0.065 ppb	97.280 %
Concentration per Run 2	16.539 ppb	104.116 %	103.426 %	0.059 ppb	0.072 ppb	94.134 %
Concentration per Run 3	16.044 ppb	105.562 %	103.248 %	0.063 ppb	0.074 ppb	94.299 %
Concentration RSD	2.4 %	0.7 %	0.4 %	19.9 %	6.5 %	1.9 %

Alpha ICPMSQ Data with SRD

12/3/2024 6:38:28 AM

Analysis index: 46
Analysis label: CCV
Analysis started at: 12/2/2024 7:13:48 PM
User name ALPHALAB\Metals-Instrument
Rack 0
Vial 9
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	103.253 %	102.286 %	60.767 ppb	6,149.140 ppb	6,023.538 ppb	62.282 ppb	6,016.519 ppb	6,071.514 ppb	109.149 %
Concentration per Run 1	101.607 %	103.899 %	61.488 ppb	6,121.338 ppb	5,978.931 ppb	61.326 ppb	6,065.078 ppb	6,029.098 ppb	108.052 %
Concentration per Run 2	102.588 %	101.312 %	61.038 ppb	6,086.098 ppb	5,952.525 ppb	62.850 ppb	5,986.073 ppb	6,020.490 ppb	109.158 %
Concentration per Run 3	105.564 %	101.647 %	59.775 ppb	6,239.985 ppb	6,139.157 ppb	62.671 ppb	5,998.407 ppb	6,164.953 ppb	110.237 %
Recovery Percentage 1			101.278 %	102.486 %	100.392 %	103.803 %	100.275 %	101.192 %	
Concentration RSD	2.0 %	1.4 %	1.5 %	1.3 %	1.7 %	1.3 %	0.7 %	1.3 %	1.0 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	60.876 ppb	60.604 ppb	60.502 ppb	6,099.031 ppb	62.347 ppb	62.992 ppb	62.409 ppb	63.078 ppb	100.285 %
Concentration per Run 1	59.889 ppb	59.557 ppb	58.706 ppb	5,915.405 ppb	61.816 ppb	62.240 ppb	62.083 ppb	62.413 ppb	99.996 %
Concentration per Run 2	61.695 ppb	61.750 ppb	61.312 ppb	6,191.436 ppb	63.135 ppb	63.677 ppb	62.795 ppb	63.805 ppb	100.643 %
Concentration per Run 3	61.044 ppb	60.505 ppb	61.489 ppb	6,190.253 ppb	62.089 ppb	63.060 ppb	62.349 ppb	63.015 ppb	100.216 %
Recovery Percentage 1	101.460 %	101.007 %	100.837 %	101.651 %	103.911 %	104.987 %	104.015 %	105.130 %	
Concentration RSD	1.5 %	1.8 %	2.6 %	2.6 %	1.1 %	1.1 %	0.6 %	1.1 %	0.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	61.750 ppb	62.194 ppb	63.127 ppb	62.221 ppb	97.355 %	60.868 ppb	61.472 ppb	96.998 %	62.183 ppb
Concentration per Run 1	62.179 ppb	62.050 ppb	63.086 ppb	62.610 ppb	98.385 %	60.767 ppb	61.679 ppb	96.548 %	62.263 ppb
Concentration per Run 2	60.999 ppb	62.279 ppb	62.745 ppb	61.251 ppb	97.992 %	60.885 ppb	61.839 ppb	96.837 %	62.812 ppb
Concentration per Run 3	62.070 ppb	62.254 ppb	63.551 ppb	62.801 ppb	95.687 %	60.953 ppb	60.899 ppb	97.609 %	61.475 ppb
Recovery Percentage 1	102.916 %	103.657 %	105.212 %	103.701 %		101.447 %	102.454 %		103.639 %
Concentration RSD	1.1 %	0.2 %	0.6 %	1.4 %	1.5 %	0.2 %	0.8 %	0.6 %	1.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	62.464 ppb	100.196 %	100.109 %	60.362 ppb	60.241 ppb	99.565 %
Concentration per Run 1	62.045 ppb	100.129 %	99.439 %	58.768 ppb	58.823 ppb	101.995 %
Concentration per Run 2	63.021 ppb	101.326 %	100.325 %	59.633 ppb	60.385 ppb	98.721 %
Concentration per Run 3	62.327 ppb	99.131 %	100.563 %	62.684 ppb	61.515 ppb	97.978 %
Recovery Percentage 1	104.107 %			100.603 %	100.402 %	
Concentration RSD	0.8 %	1.1 %	0.6 %	3.4 %	2.2 %	2.1 %

Alpha ICPMSQ Data with SRD

12/3/2024 6:38:28 AM

Analysis index: 47
Analysis label: CCB
Analysis started at: 12/2/2024 7:18:31 PM
User name ALPHALAB\Metals-Instrument
Rack 0
Vial 10
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	103.162 %	101.059 %	0.007 ppb	26.827 ppb	-0.795 ppb	-0.354 ppb	2.773 ppb	-3.625 ppb	103.227 %
Concentration per Run 1	103.483 %	101.711 %	0.006 ppb	32.701 ppb	-0.755 ppb	-0.351 ppb	2.760 ppb	-3.934 ppb	102.963 %
Concentration per Run 2	101.876 %	99.344 %	0.006 ppb	25.100 ppb	-0.620 ppb	-0.367 ppb	2.870 ppb	-4.436 ppb	103.647 %
Concentration per Run 3	104.128 %	102.123 %	0.007 ppb	22.680 ppb	-1.009 ppb	-0.345 ppb	2.690 ppb	-2.504 ppb	103.071 %
Recovery Percentage 1			1.330 %	5.365 %	-1.136 %	-3.541 %	2.773 %	-3.625 %	
Concentration RSD	1.1 %	1.5 %	8.7 %	19.5 %	24.9 %	3.2 %	3.3 %	27.7 %	0.4 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.141 ppb	0.000 ppb	-0.018 ppb	11.889 ppb	-0.002 ppb	-0.049 ppb	-0.033 ppb	-0.265 ppb	97.433 %
Concentration per Run 1	-0.127 ppb	-0.002 ppb	-0.024 ppb	11.359 ppb	-0.002 ppb	-0.068 ppb	-0.022 ppb	-0.280 ppb	97.447 %
Concentration per Run 2	-0.167 ppb	0.000 ppb	-0.020 ppb	11.818 ppb	-0.003 ppb	-0.032 ppb	-0.033 ppb	-0.268 ppb	96.848 %
Concentration per Run 3	-0.129 ppb	0.003 ppb	-0.010 ppb	12.491 ppb	0.000 ppb	-0.046 ppb	-0.044 ppb	-0.248 ppb	98.005 %
Recovery Percentage 1	-2.820 %	0.023 %	-1.798 %	23.779 %	-0.314 %	-2.430 %	-3.317 %	-5.309 %	
Concentration RSD	16.0 %	1,100.7 %	40.1 %	4.8 %	91.0 %	37.2 %	32.0 %	6.1 %	0.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.048 ppb	0.157 ppb	-0.006 ppb	1.671 ppb	95.943 %	0.003 ppb	0.002 ppb	94.010 %	0.116 ppb
Concentration per Run 1	0.041 ppb	0.129 ppb	-0.007 ppb	1.241 ppb	96.737 %	0.003 ppb	0.002 ppb	95.220 %	0.079 ppb
Concentration per Run 2	0.052 ppb	0.238 ppb	-0.005 ppb	1.737 ppb	94.985 %	0.002 ppb	0.002 ppb	93.123 %	0.120 ppb
Concentration per Run 3	0.051 ppb	0.103 ppb	-0.005 ppb	2.035 ppb	96.107 %	0.002 ppb	0.001 ppb	93.687 %	0.148 ppb
Recovery Percentage 1	9.620 %	3.133 %	-0.055 %	83.542 %		0.638 %	0.805 %		2.888 %
Concentration RSD	12.1 %	45.5 %	15.8 %	24.0 %	0.9 %	27.4 %	30.6 %	1.2 %	30.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	-0.012 ppb	97.790 %	96.560 %	0.389 ppb	0.009 ppb	99.126 %
Concentration per Run 1	-0.017 ppb	98.073 %	96.516 %	0.428 ppb	0.009 ppb	101.489 %
Concentration per Run 2	-0.008 ppb	97.927 %	96.244 %	0.416 ppb	0.009 ppb	97.490 %
Concentration per Run 3	-0.013 ppb	97.370 %	96.919 %	0.325 ppb	0.008 ppb	98.400 %
Recovery Percentage 1	-2.492 %			38.935 %	0.862 %	
Concentration RSD	36.9 %	0.4 %	0.4 %	14.5 %	9.3 %	2.1 %

Alpha ICPMSQ Data with SRD

12/3/2024 6:38:28 AM

Analysis index:	48	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	WG2002206-1 6020TL	Rack	1		
Analysis started at:	12/2/2024 7:34:14 PM	Vial	54		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	103.608 %	102.398 %	0.001 ppb	18.055 ppb	0.712 ppb	1.475 ppb	-0.242 ppb	7.425 ppb	104.901 %
Concentration per Run 1	101.339 %	102.213 %	-0.001 ppb	18.026 ppb	0.491 ppb	1.581 ppb	0.670 ppb	8.074 ppb	104.038 %
Concentration per Run 2	102.822 %	103.938 %	0.001 ppb	14.654 ppb	0.849 ppb	1.388 ppb	0.610 ppb	6.897 ppb	105.608 %
Concentration per Run 3	106.663 %	101.042 %	0.004 ppb	21.487 ppb	0.796 ppb	1.455 ppb	-2.004 ppb	7.304 ppb	105.056 %
Concentration RSD	2.7 %	1.4 %	258.5 %	18.9 %	27.1 %	6.7 %	631.9 %	8.0 %	0.8 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.099 ppb	0.065 ppb	0.070 ppb	4.790 ppb	-0.001 ppb	-0.039 ppb	0.147 ppb	0.434 ppb	98.320 %
Concentration per Run 1	-0.138 ppb	0.075 ppb	0.066 ppb	4.649 ppb	0.000 ppb	-0.048 ppb	0.117 ppb	0.388 ppb	97.352 %
Concentration per Run 2	-0.088 ppb	0.064 ppb	0.052 ppb	4.752 ppb	0.000 ppb	-0.039 ppb	0.140 ppb	0.472 ppb	96.964 %
Concentration per Run 3	-0.072 ppb	0.057 ppb	0.091 ppb	4.968 ppb	-0.003 ppb	-0.031 ppb	0.185 ppb	0.440 ppb	100.644 %
Concentration RSD	34.5 %	13.6 %	28.8 %	3.4 %	142.3 %	21.8 %	23.4 %	9.7 %	2.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.006 ppb	-0.013 ppb	0.007 ppb	0.108 ppb	97.082 %	0.000 ppb	0.001 ppb	95.273 %	0.038 ppb
Concentration per Run 1	0.010 ppb	-0.004 ppb	0.008 ppb	0.024 ppb	96.413 %	0.000 ppb	0.001 ppb	94.479 %	0.025 ppb
Concentration per Run 2	-0.008 ppb	-0.011 ppb	0.006 ppb	0.093 ppb	97.369 %	-0.001 ppb	0.000 ppb	94.975 %	0.040 ppb
Concentration per Run 3	0.017 ppb	-0.024 ppb	0.008 ppb	0.208 ppb	97.464 %	0.001 ppb	0.001 ppb	96.365 %	0.050 ppb
Concentration RSD	198.2 %	77.0 %	12.4 %	86.0 %	0.6 %	874.7 %	70.3 %	1.0 %	33.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.008 ppb	98.052 %	96.988 %	0.017 ppb	0.018 ppb	96.842 %
Concentration per Run 1	0.010 ppb	96.910 %	95.461 %	0.009 ppb	0.018 ppb	94.735 %
Concentration per Run 2	0.011 ppb	97.711 %	97.193 %	0.019 ppb	0.018 ppb	96.938 %
Concentration per Run 3	0.004 ppb	99.536 %	98.310 %	0.023 ppb	0.018 ppb	98.852 %
Concentration RSD	45.0 %	1.4 %	1.5 %	43.8 %	2.2 %	2.1 %

Alpha ICPMSQ Data with SRD

12/3/2024 6:38:28 AM

Analysis index:	49	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	WG2003197-1 6020SL	Rack	2		
Analysis started at:	12/2/2024 7:38:52 PM	Vial	13		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	102.895 %	104.757 %	0.004 ppb	16.737 ppb	0.110 ppb	0.904 ppb	1.336 ppb	3.349 ppb	105.420 %
Concentration per Run 1	102.168 %	105.842 %	0.001 ppb	6.948 ppb	0.003 ppb	0.782 ppb	1.290 ppb	3.009 ppb	104.315 %
Concentration per Run 2	103.213 %	103.770 %	0.003 ppb	21.808 ppb	-0.059 ppb	0.957 ppb	1.337 ppb	4.471 ppb	105.619 %
Concentration per Run 3	103.303 %	104.658 %	0.008 ppb	21.454 ppb	0.388 ppb	0.974 ppb	1.382 ppb	2.568 ppb	106.325 %
Concentration RSD	0.6 %	1.0 %	93.0 %	50.7 %	219.5 %	11.7 %	3.4 %	29.7 %	1.0 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.076 ppb	0.034 ppb	0.117 ppb	0.486 ppb	0.007 ppb	-0.035 ppb	0.124 ppb	0.191 ppb	99.553 %
Concentration per Run 1	-0.110 ppb	0.029 ppb	0.119 ppb	0.120 ppb	0.005 ppb	-0.041 ppb	0.147 ppb	0.143 ppb	102.131 %
Concentration per Run 2	-0.052 ppb	0.040 ppb	0.123 ppb	0.722 ppb	0.010 ppb	-0.025 ppb	0.100 ppb	0.185 ppb	97.851 %
Concentration per Run 3	-0.066 ppb	0.033 ppb	0.109 ppb	0.617 ppb	0.006 ppb	-0.039 ppb	0.124 ppb	0.244 ppb	98.677 %
Concentration RSD	39.8 %	16.1 %	6.2 %	66.0 %	34.1 %	25.4 %	19.3 %	26.5 %	2.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.000 ppb	0.002 ppb	0.004 ppb	0.032 ppb	99.811 %	0.000 ppb	0.001 ppb	98.906 %	0.011 ppb
Concentration per Run 1	0.001 ppb	-0.002 ppb	0.002 ppb	-0.042 ppb	100.387 %	0.000 ppb	0.001 ppb	99.585 %	0.001 ppb
Concentration per Run 2	0.002 ppb	0.012 ppb	0.005 ppb	0.057 ppb	99.774 %	0.000 ppb	0.001 ppb	98.785 %	0.006 ppb
Concentration per Run 3	-0.003 ppb	-0.004 ppb	0.003 ppb	0.080 ppb	99.273 %	0.001 ppb	0.002 ppb	98.347 %	0.024 ppb
Concentration RSD	3,000.1 %	476.4 %	41.5 %	205.1 %	0.6 %	58.9 %	51.0 %	0.6 %	114.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.077 ppb	99.351 %	98.734 %	0.008 ppb	0.003 ppb	96.603 %
Concentration per Run 1	0.075 ppb	100.748 %	98.963 %	-0.003 ppb	0.003 ppb	95.843 %
Concentration per Run 2	0.078 ppb	97.963 %	98.379 %	0.014 ppb	0.003 ppb	96.615 %
Concentration per Run 3	0.078 ppb	99.341 %	98.859 %	0.013 ppb	0.002 ppb	97.349 %
Concentration RSD	2.3 %	1.4 %	0.3 %	118.3 %	13.0 %	0.8 %

Alpha ICPMSQ Data with SRD

12/3/2024 6:38:28 AM

Analysis index: 50
Analysis label: L2467934-10 6020TL
Analysis started at: 12/2/2024 7:43:31 PM
User name ALPHALAB\Metals-Instrument
Rack 2
Vial 12
Comment fb

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	105.356 %	102.226 %	0.001 ppb	27.687 ppb	0.981 ppb	1.568 ppb	3.929 ppb	16.405 ppb	108.209 %
Concentration per Run 1	106.889 %	101.248 %	0.000 ppb	34.273 ppb	0.923 ppb	1.593 ppb	6.036 ppb	13.099 ppb	107.498 %
Concentration per Run 2	104.421 %	104.800 %	0.002 ppb	26.548 ppb	0.892 ppb	1.477 ppb	2.581 ppb	18.778 ppb	108.175 %
Concentration per Run 3	104.758 %	100.630 %	0.002 ppb	22.241 ppb	1.127 ppb	1.633 ppb	3.170 ppb	17.337 ppb	108.954 %
Concentration RSD	1.3 %	2.2 %	69.6 %	22.0 %	13.0 %	5.1 %	47.0 %	18.0 %	0.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.026 ppb	0.364 ppb	0.141 ppb	9.075 ppb	0.001 ppb	-0.022 ppb	0.117 ppb	0.491 ppb	100.022 %
Concentration per Run 1	-0.032 ppb	0.387 ppb	0.137 ppb	8.868 ppb	0.000 ppb	-0.011 ppb	0.126 ppb	0.478 ppb	97.918 %
Concentration per Run 2	-0.039 ppb	0.344 ppb	0.159 ppb	9.467 ppb	0.003 ppb	-0.025 ppb	0.117 ppb	0.502 ppb	100.018 %
Concentration per Run 3	-0.005 ppb	0.360 ppb	0.126 ppb	8.888 ppb	-0.001 ppb	-0.030 ppb	0.108 ppb	0.492 ppb	102.129 %
Concentration RSD	69.6 %	5.9 %	12.0 %	3.7 %	362.3 %	43.8 %	7.5 %	2.4 %	2.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.003 ppb	-0.007 ppb	0.024 ppb	0.009 ppb	100.122 %	0.000 ppb	0.000 ppb	99.199 %	0.024 ppb
Concentration per Run 1	0.011 ppb	-0.002 ppb	0.025 ppb	-0.032 ppb	99.548 %	0.000 ppb	0.000 ppb	97.713 %	0.012 ppb
Concentration per Run 2	-0.001 ppb	0.002 ppb	0.025 ppb	0.010 ppb	99.877 %	0.000 ppb	-0.001 ppb	99.235 %	0.024 ppb
Concentration per Run 3	-0.001 ppb	-0.021 ppb	0.024 ppb	0.050 ppb	100.941 %	0.001 ppb	0.001 ppb	100.648 %	0.035 ppb
Concentration RSD	258.7 %	176.4 %	3.0 %	439.4 %	0.7 %	471.1 %	71,542.9 %	1.5 %	49.0 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.023 ppb	99.828 %	98.354 %	0.005 ppb	0.010 ppb	100.499 %
Concentration per Run 1	0.025 ppb	98.984 %	96.071 %	-0.004 ppb	0.010 ppb	99.700 %
Concentration per Run 2	0.017 ppb	99.770 %	100.274 %	0.010 ppb	0.010 ppb	100.648 %
Concentration per Run 3	0.026 ppb	100.731 %	98.715 %	0.010 ppb	0.009 ppb	101.150 %
Concentration RSD	21.9 %	0.9 %	2.2 %	154.8 %	10.0 %	0.7 %

Alpha ICPMSQ Data with SRD

12/3/2024 6:38:28 AM

Analysis index:	51	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	L2467934-02 6020TL	Rack	2		
Analysis started at:	12/2/2024 7:48:11 PM	Vial	5		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	108.178 %	106.666 %	0.002 ppb	5,098.734 ppb	4,606.008 ppb	4.173 ppb	8,813.890 ppb	52,883.860 ppb	112.255 %
Concentration per Run 1	109.669 %	107.824 %	0.002 ppb	4,992.943 ppb	4,554.386 ppb	4.101 ppb	8,514.321 ppb	51,885.905 ppb	111.422 %
Concentration per Run 2	108.021 %	105.636 %	0.001 ppb	5,162.663 ppb	4,660.615 ppb	4.098 ppb	8,935.604 ppb	53,816.776 ppb	114.672 %
Concentration per Run 3	106.843 %	106.537 %	0.004 ppb	5,140.597 ppb	4,603.023 ppb	4.321 ppb	8,991.746 ppb	52,948.899 ppb	110.672 %
Concentration RSD	1.3 %	1.0 %	66.1 %	1.8 %	1.2 %	3.1 %	3.0 %	1.8 %	1.9 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.284 ppb	1.473 ppb	0.339 ppb	5.787 ppb	0.267 ppb	0.099 ppb	1.292 ppb	0.064 ppb	106.926 %
Concentration per Run 1	0.234 ppb	1.478 ppb	0.328 ppb	5.605 ppb	0.269 ppb	0.113 ppb	1.269 ppb	0.038 ppb	107.069 %
Concentration per Run 2	0.309 ppb	1.513 ppb	0.322 ppb	5.624 ppb	0.273 ppb	0.075 ppb	1.382 ppb	0.079 ppb	106.307 %
Concentration per Run 3	0.309 ppb	1.427 ppb	0.368 ppb	6.133 ppb	0.259 ppb	0.109 ppb	1.225 ppb	0.075 ppb	107.403 %
Concentration RSD	15.2 %	3.0 %	7.3 %	5.2 %	2.8 %	21.1 %	6.2 %	35.4 %	0.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.176 ppb	0.315 ppb	198.571 ppb	6.706 ppb	101.456 %	0.000 ppb	0.005 ppb	103.347 %	0.423 ppb
Concentration per Run 1	0.158 ppb	0.288 ppb	196.760 ppb	6.878 ppb	101.407 %	0.000 ppb	0.005 ppb	103.452 %	0.407 ppb
Concentration per Run 2	0.180 ppb	0.343 ppb	200.390 ppb	6.612 ppb	101.107 %	0.000 ppb	0.006 ppb	102.954 %	0.430 ppb
Concentration per Run 3	0.190 ppb	0.313 ppb	198.562 ppb	6.628 ppb	101.855 %	0.001 ppb	0.003 ppb	103.634 %	0.432 ppb
Concentration RSD	9.3 %	8.9 %	0.9 %	2.2 %	0.4 %	164.8 %	29.7 %	0.3 %	3.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	17.479 ppb	104.287 %	103.704 %	0.019 ppb	0.030 ppb	97.476 %
Concentration per Run 1	17.421 ppb	102.735 %	102.163 %	0.011 ppb	0.030 ppb	95.898 %
Concentration per Run 2	17.552 ppb	104.721 %	103.101 %	0.024 ppb	0.032 ppb	97.845 %
Concentration per Run 3	17.462 ppb	105.406 %	105.847 %	0.023 ppb	0.029 ppb	98.685 %
Concentration RSD	0.4 %	1.3 %	1.8 %	36.6 %	4.4 %	1.5 %

Alpha ICPMSQ Data with SRD

12/3/2024 6:38:28 AM

Analysis index:	52	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	L2467934-03 6020TL	Rack	2		
Analysis started at:	12/2/2024 7:52:49 PM	Vial	6		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	106.248 %	102.754 %	0.005 ppb	30,734.988 ppb	9,282.162 ppb	7.968 ppb	31,449.807 ppb	103,288.728 ppb	107.131 %
Concentration per Run 1	107.293 %	103.835 %	0.005 ppb	30,280.913 ppb	9,129.633 ppb	7.426 ppb	29,951.131 ppb	98,977.583 ppb	105.727 %
Concentration per Run 2	102.190 %	101.943 %	0.006 ppb	30,991.900 ppb	9,432.478 ppb	7.994 ppb	31,702.622 ppb	104,811.932 ppb	106.699 %
Concentration per Run 3	109.260 %	102.483 %	0.005 ppb	30,932.149 ppb	9,284.376 ppb	8.485 ppb	32,695.669 ppb	106,076.668 ppb	108.967 %
Concentration RSD	3.4 %	0.9 %	9.7 %	1.3 %	1.6 %	6.7 %	4.4 %	3.7 %	1.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	2.971 ppb	0.424 ppb	23.650 ppb	62.600 ppb	1.158 ppb	0.850 ppb	2.833 ppb	1.449 ppb	100.488 %
Concentration per Run 1	2.844 ppb	0.370 ppb	22.527 ppb	59.505 ppb	1.127 ppb	0.892 ppb	2.749 ppb	1.364 ppb	100.468 %
Concentration per Run 2	3.126 ppb	0.442 ppb	24.765 ppb	64.287 ppb	1.213 ppb	0.870 ppb	2.871 ppb	1.544 ppb	98.673 %
Concentration per Run 3	2.943 ppb	0.462 ppb	23.657 ppb	64.009 ppb	1.133 ppb	0.788 ppb	2.878 ppb	1.438 ppb	102.322 %
Concentration RSD	4.8 %	11.4 %	4.7 %	4.3 %	4.1 %	6.5 %	2.6 %	6.2 %	1.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.661 ppb	0.579 ppb	517.905 ppb	2.977 ppb	94.416 %	0.001 ppb	0.024 ppb	97.496 %	0.664 ppb
Concentration per Run 1	0.628 ppb	0.630 ppb	502.625 ppb	2.758 ppb	97.224 %	0.000 ppb	0.022 ppb	100.101 %	0.645 ppb
Concentration per Run 2	0.685 ppb	0.482 ppb	536.179 ppb	3.154 ppb	91.108 %	0.001 ppb	0.026 ppb	93.869 %	0.680 ppb
Concentration per Run 3	0.672 ppb	0.624 ppb	514.911 ppb	3.018 ppb	94.917 %	0.001 ppb	0.023 ppb	98.517 %	0.666 ppb
Concentration RSD	4.5 %	14.5 %	3.3 %	6.8 %	3.3 %	79.2 %	8.6 %	3.3 %	2.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	118.374 ppb	101.394 %	101.118 %	0.332 ppb	0.132 ppb	90.668 %
Concentration per Run 1	113.836 ppb	104.565 %	103.673 %	0.300 ppb	0.126 ppb	93.693 %
Concentration per Run 2	122.087 ppb	99.650 %	99.849 %	0.346 ppb	0.133 ppb	90.189 %
Concentration per Run 3	119.198 ppb	99.965 %	99.833 %	0.348 ppb	0.136 ppb	88.121 %
Concentration RSD	3.5 %	2.7 %	2.2 %	8.2 %	3.8 %	3.1 %

Alpha ICPMSQ Data with SRD

12/3/2024 6:38:28 AM

Analysis index:	53	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	L2467934-04 6020TL	Rack	2		
Analysis started at:	12/2/2024 7:57:28 PM	Vial	7		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	104.171 %	101.291 %	0.007 ppb	79,870.205 ppb	11,700.790 ppb	18.683 ppb	1,434.540 ppb	19,657.930 ppb	108.997 %
Concentration per Run 1	103.566 %	102.574 %	0.010 ppb	79,439.630 ppb	11,733.298 ppb	18.455 ppb	1,430.960 ppb	19,350.441 ppb	108.974 %
Concentration per Run 2	103.888 %	101.763 %	0.006 ppb	79,663.106 ppb	11,647.523 ppb	18.402 ppb	1,430.649 ppb	19,783.467 ppb	108.680 %
Concentration per Run 3	105.059 %	99.537 %	0.005 ppb	80,507.880 ppb	11,721.550 ppb	19.192 ppb	1,442.012 ppb	19,839.884 ppb	109.338 %
Concentration RSD	0.8 %	1.6 %	34.1 %	0.7 %	0.4 %	2.4 %	0.5 %	1.4 %	0.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.039 ppb	4.539 ppb	4.287 ppb	51.345 ppb	0.083 ppb	2.115 ppb	0.322 ppb	0.576 ppb	100.108 %
Concentration per Run 1	0.025 ppb	4.564 ppb	4.157 ppb	48.990 ppb	0.079 ppb	2.149 ppb	0.359 ppb	0.541 ppb	100.236 %
Concentration per Run 2	0.037 ppb	4.543 ppb	4.284 ppb	53.764 ppb	0.081 ppb	2.136 ppb	0.310 ppb	0.578 ppb	99.464 %
Concentration per Run 3	0.054 ppb	4.508 ppb	4.420 ppb	51.280 ppb	0.090 ppb	2.059 ppb	0.297 ppb	0.611 ppb	100.625 %
Concentration RSD	37.5 %	0.6 %	3.1 %	4.6 %	7.4 %	2.3 %	10.1 %	6.1 %	0.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.065 ppb	0.426 ppb	103.431 ppb	0.265 ppb	93.403 %	0.000 ppb	0.013 ppb	95.327 %	0.019 ppb
Concentration per Run 1	0.065 ppb	0.432 ppb	102.110 ppb	0.165 ppb	94.528 %	0.000 ppb	0.013 ppb	95.296 %	0.013 ppb
Concentration per Run 2	0.065 ppb	0.436 ppb	104.819 ppb	0.289 ppb	92.116 %	0.000 ppb	0.013 ppb	95.817 %	0.016 ppb
Concentration per Run 3	0.064 ppb	0.409 ppb	103.364 ppb	0.341 ppb	93.566 %	0.001 ppb	0.013 ppb	94.868 %	0.027 ppb
Concentration RSD	1.1 %	3.5 %	1.3 %	34.2 %	1.3 %	209.5 %	3.0 %	0.5 %	40.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	71.582 ppb	99.821 %	99.235 %	0.000 ppb	0.085 ppb	92.261 %
Concentration per Run 1	71.379 ppb	100.298 %	99.295 %	-0.005 ppb	0.083 ppb	92.866 %
Concentration per Run 2	70.776 ppb	100.179 %	99.487 %	0.001 ppb	0.086 ppb	92.279 %
Concentration per Run 3	72.592 ppb	98.987 %	98.921 %	0.004 ppb	0.085 ppb	91.639 %
Concentration RSD	1.3 %	0.7 %	0.3 %	5,027.9 %	1.9 %	0.7 %

Alpha ICPMSQ Data with SRD

12/3/2024 6:38:28 AM

Analysis index:	54	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	L2467934-06 6020TL	Rack	2		
Analysis started at:	12/2/2024 8:02:07 PM	Vial	8		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	104.815 %	102.423 %	0.017 ppb	35,317.059 ppb	21,221.796 ppb	261.225 ppb	23,148.462 ppb	86,921.412 ppb	109.361 %
Concentration per Run 1	104.833 %	101.300 %	0.016 ppb	35,336.809 ppb	21,401.138 ppb	264.359 ppb	23,617.522 ppb	88,487.286 ppb	108.018 %
Concentration per Run 2	105.952 %	102.509 %	0.015 ppb	35,187.700 ppb	21,006.014 ppb	256.684 ppb	22,810.813 ppb	85,563.271 ppb	109.136 %
Concentration per Run 3	103.661 %	103.461 %	0.018 ppb	35,426.670 ppb	21,258.235 ppb	262.633 ppb	23,017.052 ppb	86,713.679 ppb	110.929 %
Concentration RSD	1.1 %	1.1 %	8.7 %	0.3 %	0.9 %	1.5 %	1.8 %	1.7 %	1.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	2.008 ppb	23.076 ppb	2,230.248 ppb	868.866 ppb	0.911 ppb	13.191 ppb	4.512 ppb	1.761 ppb	99.652 %
Concentration per Run 1	1.964 ppb	23.030 ppb	2,219.217 ppb	858.525 ppb	0.942 ppb	13.034 ppb	4.470 ppb	1.687 ppb	98.914 %
Concentration per Run 2	2.051 ppb	22.884 ppb	2,199.989 ppb	856.768 ppb	0.885 ppb	13.113 ppb	4.489 ppb	1.827 ppb	101.909 %
Concentration per Run 3	2.008 ppb	23.314 ppb	2,271.538 ppb	891.306 ppb	0.907 ppb	13.426 ppb	4.578 ppb	1.770 ppb	98.134 %
Concentration RSD	2.2 %	0.9 %	1.7 %	2.2 %	3.1 %	1.6 %	1.3 %	4.0 %	2.0 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.597 ppb	0.204 ppb	262.560 ppb	0.687 ppb	94.157 %	0.011 ppb	0.049 ppb	96.400 %	0.040 ppb
Concentration per Run 1	0.583 ppb	0.176 ppb	260.859 ppb	0.645 ppb	94.770 %	0.011 ppb	0.044 ppb	95.635 %	0.036 ppb
Concentration per Run 2	0.574 ppb	0.177 ppb	259.943 ppb	0.640 ppb	94.460 %	0.012 ppb	0.046 ppb	97.331 %	0.035 ppb
Concentration per Run 3	0.635 ppb	0.259 ppb	266.879 ppb	0.775 ppb	93.240 %	0.011 ppb	0.059 ppb	96.233 %	0.047 ppb
Concentration RSD	5.5 %	23.4 %	1.4 %	11.1 %	0.9 %	6.1 %	16.5 %	0.9 %	17.3 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	58.899 ppb	101.917 %	101.024 %	0.134 ppb	0.606 ppb	88.845 %
Concentration per Run 1	59.020 ppb	101.137 %	99.874 %	0.123 ppb	0.606 ppb	88.705 %
Concentration per Run 2	58.125 ppb	101.799 %	100.370 %	0.141 ppb	0.608 ppb	87.875 %
Concentration per Run 3	59.552 ppb	102.816 %	102.828 %	0.137 ppb	0.606 ppb	89.954 %
Concentration RSD	1.2 %	0.8 %	1.6 %	7.0 %	0.2 %	1.2 %

Alpha ICPMSQ Data with SRD

12/3/2024 6:38:28 AM

Analysis index:	55	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	L2467934-07 6020TL	Rack	2		
Analysis started at:	12/2/2024 8:06:45 PM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	105.872 %	104.482 %	0.004 ppb	18,924.548 ppb	11,077.796 ppb	4.068 ppb	17,582.159 ppb	97,078.138 ppb	109.151 %
Concentration per Run 1	105.354 %	106.087 %	0.003 ppb	18,417.283 ppb	10,905.964 ppb	3.855 ppb	17,837.177 ppb	96,718.314 ppb	108.310 %
Concentration per Run 2	105.101 %	103.178 %	0.003 ppb	19,217.679 ppb	11,201.095 ppb	4.180 ppb	17,441.639 ppb	96,509.795 ppb	109.337 %
Concentration per Run 3	107.163 %	104.182 %	0.006 ppb	19,138.683 ppb	11,126.329 ppb	4.167 ppb	17,467.660 ppb	98,006.306 ppb	109.806 %
Concentration RSD	1.1 %	1.4 %	36.4 %	2.3 %	1.4 %	4.5 %	1.3 %	0.8 %	0.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.102 ppb	0.551 ppb	688.462 ppb	14.829 ppb	0.322 ppb	0.400 ppb	1.618 ppb	0.538 ppb	100.480 %
Concentration per Run 1	0.092 ppb	0.542 ppb	681.751 ppb	14.653 ppb	0.317 ppb	0.375 ppb	1.591 ppb	0.519 ppb	100.834 %
Concentration per Run 2	0.101 ppb	0.549 ppb	676.719 ppb	15.768 ppb	0.312 ppb	0.412 ppb	1.615 ppb	0.560 ppb	100.598 %
Concentration per Run 3	0.113 ppb	0.563 ppb	706.917 ppb	14.067 ppb	0.338 ppb	0.414 ppb	1.648 ppb	0.534 ppb	100.009 %
Concentration RSD	10.3 %	1.9 %	2.4 %	5.8 %	4.3 %	5.6 %	1.8 %	3.9 %	0.4 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.230 ppb	0.184 ppb	489.562 ppb	0.169 ppb	96.393 %	0.001 ppb	0.038 ppb	100.320 %	0.045 ppb
Concentration per Run 1	0.235 ppb	0.202 ppb	484.475 ppb	0.118 ppb	97.539 %	0.001 ppb	0.037 ppb	100.564 %	0.046 ppb
Concentration per Run 2	0.216 ppb	0.200 ppb	490.707 ppb	0.162 ppb	95.440 %	0.001 ppb	0.032 ppb	99.405 %	0.043 ppb
Concentration per Run 3	0.238 ppb	0.152 ppb	493.503 ppb	0.227 ppb	96.201 %	0.000 ppb	0.044 ppb	100.990 %	0.047 ppb
Concentration RSD	5.2 %	15.4 %	0.9 %	32.4 %	1.1 %	106.4 %	15.6 %	0.8 %	4.0 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	95.357 ppb	103.132 %	102.929 %	0.778 ppb	0.007 ppb	93.274 %
Concentration per Run 1	94.141 ppb	102.464 %	102.005 %	0.754 ppb	0.007 ppb	92.437 %
Concentration per Run 2	96.749 ppb	102.231 %	101.990 %	0.794 ppb	0.007 ppb	93.249 %
Concentration per Run 3	95.180 ppb	104.702 %	104.792 %	0.785 ppb	0.008 ppb	94.135 %
Concentration RSD	1.4 %	1.3 %	1.6 %	2.7 %	9.6 %	0.9 %

Alpha ICPMSQ Data with SRD

12/3/2024 6:38:28 AM

Analysis index:	56	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	L2467934-08 6020TL	Rack	2		
Analysis started at:	12/2/2024 8:11:24 PM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	106.110 %	100.553 %	0.007 ppb	31,357.510 ppb	4,349.691 ppb	5.644 ppb	23,132.245 ppb	40,242.273 ppb	112.871 %
Concentration per Run 1	108.032 %	101.107 %	0.008 ppb	31,345.632 ppb	4,284.831 ppb	5.352 ppb	22,796.470 ppb	39,514.938 ppb	114.299 %
Concentration per Run 2	105.036 %	98.224 %	0.006 ppb	32,232.123 ppb	4,522.251 ppb	6.068 ppb	24,148.952 ppb	41,921.957 ppb	113.584 %
Concentration per Run 3	105.262 %	102.329 %	0.007 ppb	30,494.775 ppb	4,241.991 ppb	5.512 ppb	22,451.313 ppb	39,289.924 ppb	110.729 %
Concentration RSD	1.6 %	2.1 %	16.8 %	2.8 %	3.5 %	6.7 %	3.9 %	3.6 %	1.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.177 ppb	1.893 ppb	2.037 ppb	24.505 ppb	0.230 ppb	2.097 ppb	2.164 ppb	0.439 ppb	96.949 %
Concentration per Run 1	0.196 ppb	1.841 ppb	1.987 ppb	24.912 ppb	0.230 ppb	2.073 ppb	2.154 ppb	0.372 ppb	98.962 %
Concentration per Run 2	0.204 ppb	1.983 ppb	2.206 ppb	23.392 ppb	0.228 ppb	2.190 ppb	2.216 ppb	0.495 ppb	92.441 %
Concentration per Run 3	0.132 ppb	1.855 ppb	1.918 ppb	25.211 ppb	0.232 ppb	2.029 ppb	2.122 ppb	0.451 ppb	99.445 %
Concentration RSD	22.3 %	4.1 %	7.4 %	4.0 %	0.9 %	4.0 %	2.2 %	14.2 %	4.0 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.234 ppb	0.212 ppb	161.595 ppb	4.637 ppb	92.360 %	0.001 ppb	0.011 ppb	93.538 %	0.066 ppb
Concentration per Run 1	0.245 ppb	0.199 ppb	159.017 ppb	4.676 ppb	93.501 %	0.001 ppb	0.010 ppb	95.118 %	0.061 ppb
Concentration per Run 2	0.219 ppb	0.219 ppb	169.986 ppb	4.905 ppb	89.138 %	0.001 ppb	0.012 ppb	89.927 %	0.068 ppb
Concentration per Run 3	0.238 ppb	0.218 ppb	155.782 ppb	4.330 ppb	94.442 %	0.001 ppb	0.011 ppb	95.570 %	0.069 ppb
Concentration RSD	5.7 %	5.4 %	4.6 %	6.2 %	3.1 %	11.1 %	11.1 %	3.4 %	6.3 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	98.248 ppb	97.438 %	97.738 %	0.268 ppb	0.024 ppb	84.123 %
Concentration per Run 1	96.659 ppb	98.188 %	97.799 %	0.243 ppb	0.023 ppb	89.292 %
Concentration per Run 2	104.131 ppb	92.747 %	93.520 %	0.295 ppb	0.026 ppb	77.731 %
Concentration per Run 3	93.954 ppb	101.379 %	101.895 %	0.266 ppb	0.023 ppb	85.346 %
Concentration RSD	5.4 %	4.5 %	4.3 %	9.8 %	7.2 %	7.0 %

Alpha ICPMSQ Data with SRD

12/3/2024 6:38:28 AM

Analysis index:	57	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	L2467934-09 6020TL	Rack	2		
Analysis started at:	12/2/2024 8:16:04 PM	Vial	11		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	104.218 %	100.197 %	0.005 ppb	18,394.678 ppb	10,902.819 ppb	2.773 ppb	17,250.709 ppb	93,968.303 ppb	107.354 %
Concentration per Run 1	102.723 %	100.824 %	0.003 ppb	18,450.543 ppb	10,902.241 ppb	2.667 ppb	17,873.294 ppb	94,067.177 ppb	106.586 %
Concentration per Run 2	104.476 %	99.575 %	0.006 ppb	18,353.668 ppb	10,632.106 ppb	2.798 ppb	16,528.561 ppb	92,904.055 ppb	107.074 %
Concentration per Run 3	105.455 %	100.193 %	0.006 ppb	18,379.822 ppb	11,174.109 ppb	2.855 ppb	17,350.272 ppb	94,933.678 ppb	108.401 %
Concentration RSD	1.3 %	0.6 %	40.8 %	0.3 %	2.5 %	3.5 %	3.9 %	1.1 %	0.9 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.108 ppb	0.556 ppb	670.901 ppb	29.969 ppb	0.313 ppb	0.374 ppb	1.648 ppb	3.079 ppb	98.787 %
Concentration per Run 1	0.094 ppb	0.586 ppb	666.450 ppb	29.359 ppb	0.312 ppb	0.355 ppb	1.648 ppb	3.028 ppb	97.279 %
Concentration per Run 2	0.137 ppb	0.543 ppb	660.177 ppb	29.539 ppb	0.300 ppb	0.400 ppb	1.596 ppb	3.007 ppb	100.037 %
Concentration per Run 3	0.092 ppb	0.539 ppb	686.076 ppb	31.010 ppb	0.328 ppb	0.366 ppb	1.700 ppb	3.202 ppb	99.046 %
Concentration RSD	23.9 %	4.7 %	2.0 %	3.0 %	4.5 %	6.2 %	3.2 %	3.5 %	1.4 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.215 ppb	0.148 ppb	475.532 ppb	0.298 ppb	93.708 %	0.000 ppb	0.042 ppb	97.377 %	0.047 ppb
Concentration per Run 1	0.208 ppb	0.159 ppb	478.373 ppb	0.204 ppb	94.004 %	0.001 ppb	0.042 ppb	96.586 %	0.045 ppb
Concentration per Run 2	0.226 ppb	0.154 ppb	470.097 ppb	0.332 ppb	93.788 %	0.000 ppb	0.042 ppb	97.524 %	0.040 ppb
Concentration per Run 3	0.209 ppb	0.132 ppb	478.126 ppb	0.357 ppb	93.331 %	0.000 ppb	0.042 ppb	98.020 %	0.056 ppb
Concentration RSD	4.8 %	9.8 %	1.0 %	27.5 %	0.4 %	196.7 %	0.6 %	0.7 %	16.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	92.658 ppb	100.891 %	99.887 %	0.733 ppb	0.009 ppb	91.979 %
Concentration per Run 1	93.713 ppb	99.606 %	98.680 %	0.726 ppb	0.011 ppb	90.987 %
Concentration per Run 2	91.082 ppb	102.349 %	100.719 %	0.730 ppb	0.008 ppb	92.398 %
Concentration per Run 3	93.179 ppb	100.719 %	100.263 %	0.744 ppb	0.008 ppb	92.554 %
Concentration RSD	1.5 %	1.4 %	1.1 %	1.2 %	19.8 %	0.9 %

Alpha ICPMSQ Data with SRD

12/3/2024 6:38:28 AM

Analysis index:	58	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	CCV	Rack	0		
Analysis started at:	12/2/2024 8:20:43 PM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	99.777 %	99.490 %	60.730 ppb	6,140.753 ppb	6,006.196 ppb	62.660 ppb	6,100.794 ppb	6,049.199 ppb	100.628 %
Concentration per Run 1	98.253 %	103.011 %	60.786 ppb	5,918.088 ppb	5,845.144 ppb	60.022 ppb	5,931.154 ppb	5,899.604 ppb	99.073 %
Concentration per Run 2	100.190 %	98.971 %	60.924 ppb	6,165.068 ppb	6,010.286 ppb	62.479 ppb	6,031.982 ppb	5,904.751 ppb	100.589 %
Concentration per Run 3	100.888 %	96.487 %	60.479 ppb	6,339.103 ppb	6,163.157 ppb	65.479 ppb	6,339.246 ppb	6,343.241 ppb	102.222 %
Recovery Percentage 1			101.216 %	102.346 %	100.103 %	104.434 %	101.680 %	100.820 %	
Concentration RSD	1.4 %	3.3 %	0.4 %	3.4 %	2.6 %	4.4 %	3.5 %	4.2 %	1.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	60.934 ppb	61.468 ppb	62.127 ppb	6,186.513 ppb	62.737 ppb	63.912 ppb	62.913 ppb	63.900 ppb	96.466 %
Concentration per Run 1	59.294 ppb	59.910 ppb	60.664 ppb	5,974.835 ppb	60.793 ppb	62.451 ppb	60.651 ppb	62.667 ppb	99.558 %
Concentration per Run 2	59.555 ppb	60.543 ppb	60.407 ppb	6,111.099 ppb	61.890 ppb	63.333 ppb	62.824 ppb	62.465 ppb	97.934 %
Concentration per Run 3	63.954 ppb	63.951 ppb	65.310 ppb	6,473.606 ppb	65.529 ppb	65.953 ppb	65.265 ppb	66.569 ppb	91.904 %
Recovery Percentage 1	101.557 %	102.447 %	103.545 %	103.109 %	104.562 %	106.520 %	104.855 %	106.501 %	
Concentration RSD	4.3 %	3.5 %	4.4 %	4.2 %	4.0 %	2.8 %	3.7 %	3.6 %	4.2 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	62.416 ppb	62.287 ppb	64.035 ppb	60.319 ppb	92.135 %	62.712 ppb	63.161 ppb	91.457 %	63.763 ppb
Concentration per Run 1	60.732 ppb	60.505 ppb	61.732 ppb	59.432 ppb	95.736 %	60.060 ppb	61.518 ppb	96.006 %	61.249 ppb
Concentration per Run 2	61.796 ppb	61.250 ppb	63.405 ppb	58.844 ppb	92.543 %	62.801 ppb	62.802 ppb	91.903 %	63.295 ppb
Concentration per Run 3	64.721 ppb	65.105 ppb	66.969 ppb	62.681 ppb	88.125 %	65.275 ppb	65.161 ppb	86.462 %	66.746 ppb
Recovery Percentage 1	104.027 %	103.811 %	106.726 %	100.532 %		104.520 %	105.268 %		106.272 %
Concentration RSD	3.3 %	4.0 %	4.2 %	3.4 %	4.1 %	4.2 %	2.9 %	5.2 %	4.4 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	64.411 ppb	95.843 %	95.316 %	59.734 ppb	59.982 ppb	98.179 %
Concentration per Run 1	61.387 ppb	98.539 %	99.075 %	56.116 ppb	56.738 ppb	102.858 %
Concentration per Run 2	64.237 ppb	96.591 %	94.608 %	60.208 ppb	59.786 ppb	98.498 %
Concentration per Run 3	67.607 ppb	92.400 %	92.264 %	62.877 ppb	63.423 ppb	93.180 %
Recovery Percentage 1	107.351 %			99.556 %	99.970 %	
Concentration RSD	4.8 %	3.3 %	3.6 %	5.7 %	5.6 %	4.9 %

Alpha ICPMSQ Data with SRD

12/3/2024 6:38:28 AM

Analysis index:	59	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	CCB	Rack	0		
Analysis started at:	12/2/2024 8:25:26 PM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	99.309 %	97.010 %	0.003 ppb	23.244 ppb	-0.945 ppb	-0.307 ppb	2.738 ppb	-2.611 ppb	99.519 %
Concentration per Run 1	95.635 %	96.320 %	0.004 ppb	26.886 ppb	-0.753 ppb	-0.312 ppb	3.033 ppb	-0.759 ppb	97.647 %
Concentration per Run 2	100.962 %	97.722 %	0.005 ppb	14.158 ppb	-1.117 ppb	-0.341 ppb	3.673 ppb	-3.750 ppb	101.096 %
Concentration per Run 3	101.331 %	96.989 %	0.000 ppb	28.688 ppb	-0.965 ppb	-0.269 ppb	1.508 ppb	-3.323 ppb	99.813 %
Recovery Percentage 1			0.601 %	4.649 %	-1.350 %	-3.073 %	2.738 %	-2.611 %	
Concentration RSD	3.2 %	0.7 %	77.1 %	34.1 %	19.3 %	11.8 %	40.6 %	62.0 %	1.8 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.153 ppb	-0.002 ppb	-0.025 ppb	8.094 ppb	0.001 ppb	-0.062 ppb	-0.038 ppb	-0.236 ppb	93.147 %
Concentration per Run 1	-0.177 ppb	0.000 ppb	-0.012 ppb	6.504 ppb	0.000 ppb	-0.057 ppb	-0.030 ppb	-0.251 ppb	92.438 %
Concentration per Run 2	-0.145 ppb	-0.009 ppb	-0.024 ppb	8.642 ppb	-0.001 ppb	-0.049 ppb	-0.043 ppb	-0.227 ppb	93.914 %
Concentration per Run 3	-0.137 ppb	0.004 ppb	-0.038 ppb	9.137 ppb	0.002 ppb	-0.078 ppb	-0.041 ppb	-0.232 ppb	93.090 %
Recovery Percentage 1	-3.057 %	-0.187 %	-2.463 %	16.188 %	0.100 %	-3.082 %	-3.788 %	-4.726 %	
Concentration RSD	13.7 %	338.1 %	54.5 %	17.3 %	290.3 %	24.3 %	17.5 %	5.4 %	0.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.051 ppb	0.146 ppb	-0.005 ppb	1.430 ppb	92.087 %	0.003 ppb	0.002 ppb	90.745 %	0.079 ppb
Concentration per Run 1	0.055 ppb	0.155 ppb	-0.005 ppb	1.011 ppb	91.563 %	0.003 ppb	0.003 ppb	91.159 %	0.048 ppb
Concentration per Run 2	0.051 ppb	0.147 ppb	-0.005 ppb	1.477 ppb	92.824 %	0.002 ppb	0.002 ppb	90.804 %	0.080 ppb
Concentration per Run 3	0.048 ppb	0.134 ppb	-0.005 ppb	1.801 ppb	91.873 %	0.004 ppb	0.001 ppb	90.273 %	0.108 ppb
Recovery Percentage 1	10.215 %	2.910 %	-0.051 %	71.493 %		0.773 %	0.997 %		1.969 %
Concentration RSD	6.7 %	7.2 %	3.0 %	27.8 %	0.7 %	29.6 %	44.4 %	0.5 %	38.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	-0.013 ppb	94.163 %	94.104 %	0.393 ppb	0.007 ppb	97.201 %
Concentration per Run 1	-0.019 ppb	95.596 %	94.215 %	0.439 ppb	0.007 ppb	99.830 %
Concentration per Run 2	-0.008 ppb	94.346 %	94.914 %	0.417 ppb	0.008 ppb	95.919 %
Concentration per Run 3	-0.013 ppb	92.547 %	93.184 %	0.323 ppb	0.007 ppb	95.854 %
Recovery Percentage 1	-2.670 %			39.285 %	0.745 %	
Concentration RSD	40.1 %	1.6 %	0.9 %	15.7 %	4.2 %	2.3 %

Alpha ICPMSQ Data with SRD

12/3/2024 6:38:28 AM

Analysis index:	60	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	WG2003197-2d10 6020SL	Rack	2		
Analysis started at:	12/2/2024 8:30:09 PM	Vial	14		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	97.205 %	96.080 %	5.276 ppb	1,115.049 ppb	1,024.865 ppb	211.880 ppb	1,042.804 ppb	1,057.584 ppb	99.213 %
Concentration per Run 1	96.567 %	95.290 %	5.243 ppb	1,125.308 ppb	1,021.007 ppb	208.032 ppb	1,030.752 ppb	1,031.404 ppb	101.112 %
Concentration per Run 2	96.568 %	97.143 %	5.364 ppb	1,090.653 ppb	1,014.089 ppb	211.002 ppb	1,039.170 ppb	1,065.065 ppb	98.449 %
Concentration per Run 3	98.480 %	95.805 %	5.219 ppb	1,129.186 ppb	1,039.501 ppb	216.605 ppb	1,058.490 ppb	1,076.282 ppb	98.080 %
Concentration RSD	1.1 %	1.0 %	1.5 %	1.9 %	1.3 %	2.1 %	1.4 %	2.2 %	1.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	52.137 ppb	21.340 ppb	54.555 ppb	112.925 ppb	54.287 ppb	54.489 ppb	27.395 ppb	54.650 ppb	93.290 %
Concentration per Run 1	51.774 ppb	21.326 ppb	54.185 ppb	110.743 ppb	54.084 ppb	53.970 ppb	27.144 ppb	54.303 ppb	92.956 %
Concentration per Run 2	51.626 ppb	21.025 ppb	54.018 ppb	114.168 ppb	54.032 ppb	53.975 ppb	27.005 ppb	54.483 ppb	93.456 %
Concentration per Run 3	53.013 ppb	21.670 ppb	55.462 ppb	113.866 ppb	54.746 ppb	55.521 ppb	28.036 ppb	55.165 ppb	93.459 %
Concentration RSD	1.5 %	1.5 %	1.4 %	1.7 %	0.7 %	1.6 %	2.0 %	0.8 %	0.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	12.575 ppb	12.405 ppb	103.309 ppb	97.143 ppb	91.694 %	5.762 ppb	5.540 ppb	90.519 %	37.578 ppb
Concentration per Run 1	12.525 ppb	12.215 ppb	102.803 ppb	95.831 ppb	91.568 %	5.771 ppb	5.463 ppb	90.471 %	37.508 ppb
Concentration per Run 2	12.484 ppb	12.528 ppb	103.474 ppb	98.990 ppb	91.862 %	5.745 ppb	5.623 ppb	90.393 %	36.943 ppb
Concentration per Run 3	12.714 ppb	12.471 ppb	103.649 ppb	96.608 ppb	91.652 %	5.769 ppb	5.535 ppb	90.694 %	38.282 ppb
Concentration RSD	1.0 %	1.3 %	0.4 %	1.7 %	0.2 %	0.3 %	1.4 %	0.2 %	1.8 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	219.748 ppb	95.145 %	94.527 %	12.938 ppb	54.992 ppb	96.266 %
Concentration per Run 1	218.010 ppb	94.523 %	93.910 %	12.468 ppb	53.377 ppb	98.628 %
Concentration per Run 2	220.660 ppb	95.177 %	93.519 %	13.264 ppb	55.894 ppb	94.585 %
Concentration per Run 3	220.574 ppb	95.734 %	96.151 %	13.084 ppb	55.704 ppb	95.586 %
Concentration RSD	0.7 %	0.6 %	1.5 %	3.2 %	2.5 %	2.2 %

Alpha ICPMSQ Data with SRD

12/3/2024 6:38:28 AM

Analysis index:	61	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	I2468567-11 6020SL	Rack	2		
Analysis started at:	12/2/2024 8:34:48 PM	Vial	15		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	99.458 %	96.560 %	0.012 ppb	7,520.063 ppb	2,426.300 ppb	6.147 ppb	2,277.383 ppb	16,326.551 ppb	100.523 %
Concentration per Run 1	98.536 %	96.976 %	0.011 ppb	7,363.793 ppb	2,364.791 ppb	6.162 ppb	2,204.890 ppb	15,988.117 ppb	100.398 %
Concentration per Run 2	99.318 %	96.268 %	0.012 ppb	7,565.353 ppb	2,486.150 ppb	6.398 ppb	2,291.248 ppb	16,413.241 ppb	99.820 %
Concentration per Run 3	100.520 %	96.436 %	0.012 ppb	7,631.042 ppb	2,427.958 ppb	5.880 ppb	2,336.009 ppb	16,578.294 ppb	101.351 %
Concentration RSD	1.0 %	0.4 %	2.8 %	1.9 %	2.5 %	4.2 %	2.9 %	1.9 %	0.8 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.063 ppb	1.581 ppb	2.775 ppb	9.371 ppb	0.037 ppb	0.089 ppb	0.469 ppb	0.747 ppb	94.056 %
Concentration per Run 1	-0.017 ppb	1.520 ppb	2.642 ppb	8.602 ppb	0.038 ppb	0.091 ppb	0.437 ppb	0.753 ppb	93.301 %
Concentration per Run 2	0.058 ppb	1.639 ppb	2.918 ppb	9.676 ppb	0.041 ppb	0.078 ppb	0.539 ppb	0.731 ppb	93.891 %
Concentration per Run 3	0.149 ppb	1.584 ppb	2.765 ppb	9.837 ppb	0.032 ppb	0.099 ppb	0.431 ppb	0.756 ppb	94.975 %
Concentration RSD	131.9 %	3.8 %	5.0 %	7.2 %	13.0 %	11.6 %	13.0 %	1.8 %	0.9 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.074 ppb	0.071 ppb	64.938 ppb	2.802 ppb	90.636 %	0.001 ppb	0.024 ppb	92.640 %	1.981 ppb
Concentration per Run 1	0.060 ppb	0.077 ppb	64.570 ppb	2.094 ppb	90.062 %	0.001 ppb	0.025 ppb	92.388 %	1.922 ppb
Concentration per Run 2	0.074 ppb	0.065 ppb	65.197 ppb	2.856 ppb	90.841 %	0.000 ppb	0.025 ppb	91.764 %	2.025 ppb
Concentration per Run 3	0.087 ppb	0.072 ppb	65.047 ppb	3.457 ppb	91.005 %	0.001 ppb	0.021 ppb	93.770 %	1.996 ppb
Concentration RSD	18.5 %	8.4 %	0.5 %	24.4 %	0.6 %	31.9 %	9.9 %	1.1 %	2.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	52.920 ppb	95.319 %	95.171 %	0.066 ppb	0.015 ppb	91.967 %
Concentration per Run 1	52.752 ppb	93.877 %	94.915 %	0.054 ppb	0.014 ppb	92.104 %
Concentration per Run 2	53.643 ppb	95.593 %	94.061 %	0.078 ppb	0.016 ppb	91.334 %
Concentration per Run 3	52.364 ppb	96.486 %	96.537 %	0.066 ppb	0.014 ppb	92.462 %
Concentration RSD	1.2 %	1.4 %	1.3 %	18.0 %	5.0 %	0.6 %

Alpha ICPMSQ Data with SRD

12/3/2024 6:38:28 AM

Analysis index:	62	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	WG2003197-3d10 6020SL	Rack	2		
Analysis started at:	12/2/2024 8:39:27 PM	Vial	16		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	99.918 %	97.650 %	5.436 ppb	1,906.952 ppb	1,268.837 ppb	216.563 ppb	1,267.499 ppb	2,668.144 ppb	100.663 %
Concentration per Run 1	99.077 %	96.757 %	5.433 ppb	1,906.627 ppb	1,274.304 ppb	217.830 ppb	1,271.301 ppb	2,639.069 ppb	99.752 %
Concentration per Run 2	102.086 %	98.533 %	5.322 ppb	1,919.033 ppb	1,266.938 ppb	216.603 ppb	1,265.627 ppb	2,670.102 ppb	102.375 %
Concentration per Run 3	98.593 %	97.658 %	5.552 ppb	1,895.197 ppb	1,265.268 ppb	215.256 ppb	1,265.569 ppb	2,695.261 ppb	99.862 %
Concentration RSD	1.9 %	0.9 %	2.1 %	0.6 %	0.4 %	0.6 %	0.3 %	1.1 %	1.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	53.423 ppb	21.438 ppb	55.169 ppb	111.224 ppb	54.935 ppb	55.620 ppb	27.733 ppb	55.521 ppb	96.619 %
Concentration per Run 1	53.114 ppb	21.488 ppb	54.366 ppb	110.756 ppb	54.756 ppb	55.905 ppb	28.105 ppb	55.214 ppb	96.706 %
Concentration per Run 2	53.114 ppb	21.407 ppb	54.892 ppb	112.660 ppb	54.287 ppb	55.264 ppb	27.162 ppb	55.538 ppb	96.792 %
Concentration per Run 3	54.041 ppb	21.418 ppb	56.249 ppb	110.256 ppb	55.762 ppb	55.691 ppb	27.933 ppb	55.811 ppb	96.358 %
Concentration RSD	1.0 %	0.2 %	1.8 %	1.1 %	1.4 %	0.6 %	1.8 %	0.5 %	0.2 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	12.766 ppb	12.645 ppb	110.941 ppb	98.601 ppb	93.894 %	5.876 ppb	5.606 ppb	93.059 %	38.813 ppb
Concentration per Run 1	12.683 ppb	12.597 ppb	109.980 ppb	97.494 ppb	94.052 %	5.876 ppb	5.531 ppb	92.148 %	39.096 ppb
Concentration per Run 2	12.912 ppb	12.727 ppb	111.824 ppb	98.745 ppb	93.821 %	5.844 ppb	5.619 ppb	92.754 %	38.714 ppb
Concentration per Run 3	12.703 ppb	12.609 ppb	111.020 ppb	99.563 ppb	93.809 %	5.909 ppb	5.667 ppb	94.274 %	38.628 ppb
Concentration RSD	1.0 %	0.6 %	0.8 %	1.1 %	0.1 %	0.6 %	1.2 %	1.2 %	0.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	231.952 ppb	96.195 %	96.009 %	13.017 ppb	55.562 ppb	97.255 %
Concentration per Run 1	234.892 ppb	96.710 %	97.224 %	12.588 ppb	53.797 ppb	99.810 %
Concentration per Run 2	232.044 ppb	95.326 %	93.688 %	13.333 ppb	56.397 ppb	95.164 %
Concentration per Run 3	228.921 ppb	96.549 %	97.116 %	13.131 ppb	56.490 ppb	96.790 %
Concentration RSD	1.3 %	0.8 %	2.1 %	3.0 %	2.8 %	2.4 %

Alpha ICPMSQ Data with SRD

12/3/2024 6:38:28 AM

Analysis index:	63	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	WG2003197-4d10 6020SL	Rack	2		
Analysis started at:	12/2/2024 8:44:06 PM	Vial	17		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	99.050 %	98.687 %	5.343 ppb	1,848.736 ppb	1,241.244 ppb	211.315 ppb	1,242.446 ppb	2,632.763 ppb	98.522 %
Concentration per Run 1	98.432 %	99.421 %	5.394 ppb	1,864.623 ppb	1,252.344 ppb	209.264 ppb	1,253.156 ppb	2,564.299 ppb	98.244 %
Concentration per Run 2	98.776 %	98.018 %	5.284 ppb	1,836.368 ppb	1,215.937 ppb	211.520 ppb	1,226.138 ppb	2,640.082 ppb	99.297 %
Concentration per Run 3	99.941 %	98.623 %	5.351 ppb	1,845.219 ppb	1,255.450 ppb	213.160 ppb	1,248.043 ppb	2,693.907 ppb	98.025 %
Concentration RSD	0.8 %	0.7 %	1.0 %	0.8 %	1.8 %	0.9 %	1.2 %	2.5 %	0.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	51.556 ppb	21.073 ppb	53.932 ppb	108.724 ppb	53.158 ppb	53.380 ppb	27.115 ppb	54.410 ppb	95.963 %
Concentration per Run 1	51.040 ppb	20.750 ppb	53.176 ppb	108.911 ppb	52.763 ppb	53.315 ppb	26.768 ppb	53.656 ppb	97.277 %
Concentration per Run 2	52.806 ppb	21.680 ppb	54.856 ppb	110.624 ppb	54.246 ppb	54.362 ppb	27.590 ppb	54.910 ppb	94.502 %
Concentration per Run 3	50.821 ppb	20.788 ppb	53.763 ppb	106.638 ppb	52.465 ppb	52.463 ppb	26.987 ppb	54.663 ppb	96.109 %
Concentration RSD	2.1 %	2.5 %	1.6 %	1.8 %	1.8 %	1.8 %	1.6 %	1.2 %	1.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	12.544 ppb	12.605 ppb	109.642 ppb	100.891 ppb	93.627 %	5.747 ppb	5.550 ppb	93.354 %	40.697 ppb
Concentration per Run 1	12.365 ppb	12.098 ppb	107.002 ppb	99.211 ppb	95.999 %	5.655 ppb	5.456 ppb	94.011 %	39.739 ppb
Concentration per Run 2	12.804 ppb	12.903 ppb	111.498 ppb	101.772 ppb	92.722 %	5.786 ppb	5.617 ppb	93.595 %	40.739 ppb
Concentration per Run 3	12.463 ppb	12.815 ppb	110.427 ppb	101.689 ppb	92.162 %	5.800 ppb	5.577 ppb	92.455 %	41.614 ppb
Concentration RSD	1.8 %	3.5 %	2.1 %	1.4 %	2.2 %	1.4 %	1.5 %	0.9 %	2.3 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	227.140 ppb	96.542 %	96.003 %	13.020 ppb	55.235 ppb	97.161 %
Concentration per Run 1	222.780 ppb	97.821 %	97.235 %	12.826 ppb	54.070 ppb	99.571 %
Concentration per Run 2	230.963 ppb	96.781 %	95.287 %	13.017 ppb	55.254 ppb	96.578 %
Concentration per Run 3	227.679 ppb	95.022 %	95.488 %	13.217 ppb	56.382 ppb	95.333 %
Concentration RSD	1.8 %	1.5 %	1.1 %	1.5 %	2.1 %	2.2 %

Alpha ICPMSQ Data with SRD

12/3/2024 6:38:28 AM

Analysis index:	64	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	WG2003197-5d10 6020SL	Rack	2		
Analysis started at:	12/2/2024 8:48:45 PM	Vial	18		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	93.576 %	92.018 %	45.105 ppb	5,379.187 ppb	4,768.546 ppb	47.480 ppb	4,710.784 ppb	6,117.553 ppb	95.209 %
Concentration per Run 1	94.719 %	91.019 %	44.339 ppb	5,441.248 ppb	4,804.512 ppb	47.928 ppb	4,759.374 ppb	6,207.167 ppb	96.211 %
Concentration per Run 2	92.197 %	92.009 %	45.952 ppb	5,382.680 ppb	4,817.793 ppb	46.685 ppb	4,738.435 ppb	6,148.317 ppb	95.187 %
Concentration per Run 3	93.813 %	93.026 %	45.025 ppb	5,313.634 ppb	4,683.334 ppb	47.828 ppb	4,634.543 ppb	5,997.174 ppb	94.229 %
Concentration RSD	1.4 %	1.1 %	1.8 %	1.2 %	1.6 %	1.5 %	1.4 %	1.8 %	1.0 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	45.113 ppb	45.409 ppb	46.359 ppb	4,563.779 ppb	45.790 ppb	46.104 ppb	45.980 ppb	46.517 ppb	90.006 %
Concentration per Run 1	45.485 ppb	45.958 ppb	46.415 ppb	4,565.572 ppb	46.050 ppb	46.002 ppb	46.491 ppb	46.773 ppb	89.256 %
Concentration per Run 2	44.454 ppb	44.951 ppb	46.306 ppb	4,563.651 ppb	45.830 ppb	46.131 ppb	45.822 ppb	46.260 ppb	90.373 %
Concentration per Run 3	45.401 ppb	45.318 ppb	46.355 ppb	4,562.113 ppb	45.490 ppb	46.180 ppb	45.627 ppb	46.518 ppb	90.388 %
Concentration RSD	1.3 %	1.1 %	0.1 %	0.0 %	0.6 %	0.2 %	1.0 %	0.6 %	0.7 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	46.042 ppb	45.182 ppb	53.224 ppb	47.706 ppb	87.512 %	1.418 ppb	45.689 ppb	87.903 %	48.637 ppb
Concentration per Run 1	46.640 ppb	45.193 ppb	54.004 ppb	47.450 ppb	87.119 %	1.417 ppb	45.285 ppb	88.888 %	48.533 ppb
Concentration per Run 2	45.740 ppb	45.544 ppb	53.071 ppb	47.626 ppb	86.806 %	1.399 ppb	46.026 ppb	86.248 %	49.048 ppb
Concentration per Run 3	45.747 ppb	44.810 ppb	52.597 ppb	48.043 ppb	88.612 %	1.439 ppb	45.755 ppb	88.574 %	48.330 ppb
Concentration RSD	1.1 %	0.8 %	1.3 %	0.6 %	1.1 %	1.4 %	0.8 %	1.6 %	0.8 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	53.052 ppb	91.737 %	91.674 %	45.512 ppb	46.025 ppb	92.588 %
Concentration per Run 1	53.240 ppb	91.326 %	90.032 %	45.026 ppb	45.316 ppb	95.297 %
Concentration per Run 2	52.499 ppb	92.283 %	92.620 %	45.216 ppb	45.951 ppb	92.537 %
Concentration per Run 3	53.416 ppb	91.602 %	92.372 %	46.296 ppb	46.807 ppb	89.931 %
Concentration RSD	0.9 %	0.5 %	1.6 %	1.5 %	1.6 %	2.9 %

Alpha ICPMSQ Data with SRD

12/3/2024 6:38:28 AM

Analysis index:	65	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	WG2003197-6d5 6020SL	Rack	2		
Analysis started at:	12/2/2024 8:53:24 PM	Vial	19		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	92.699 %	87.969 %	0.005 ppb	1,627.212 ppb	509.697 ppb	1.818 ppb	461.289 ppb	3,365.031 ppb	91.482 %
Concentration per Run 1	90.304 %	85.872 %	0.003 ppb	1,705.472 ppb	529.021 ppb	1.849 ppb	475.517 ppb	3,490.945 ppb	90.750 %
Concentration per Run 2	93.629 %	88.252 %	0.006 ppb	1,575.879 ppb	497.776 ppb	1.875 ppb	458.806 ppb	3,399.257 ppb	91.642 %
Concentration per Run 3	94.163 %	89.783 %	0.005 ppb	1,600.286 ppb	502.293 ppb	1.730 ppb	449.545 ppb	3,204.891 ppb	92.055 %
Concentration RSD	2.3 %	2.2 %	31.2 %	4.2 %	3.3 %	4.3 %	2.9 %	4.3 %	0.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.052 ppb	0.314 ppb	0.550 ppb	7.823 ppb	0.007 ppb	0.000 ppb	0.072 ppb	-0.003 ppb	84.982 %
Concentration per Run 1	-0.065 ppb	0.308 ppb	0.562 ppb	7.295 ppb	0.009 ppb	0.001 ppb	0.093 ppb	-0.016 ppb	82.329 %
Concentration per Run 2	-0.083 ppb	0.331 ppb	0.575 ppb	8.886 ppb	0.004 ppb	0.004 ppb	0.049 ppb	0.031 ppb	85.139 %
Concentration per Run 3	-0.010 ppb	0.303 ppb	0.512 ppb	7.287 ppb	0.007 ppb	-0.006 ppb	0.073 ppb	-0.024 ppb	87.477 %
Concentration RSD	72.4 %	4.8 %	6.0 %	11.8 %	40.0 %	2,695.4 %	30.8 %	935.8 %	3.0 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.058 ppb	0.160 ppb	13.575 ppb	2.286 ppb	82.962 %	0.000 ppb	0.006 ppb	83.487 %	1.244 ppb
Concentration per Run 1	0.059 ppb	0.190 ppb	14.118 ppb	1.639 ppb	79.993 %	-0.001 ppb	0.005 ppb	81.905 %	1.120 ppb
Concentration per Run 2	0.050 ppb	0.172 ppb	13.425 ppb	2.356 ppb	83.672 %	0.000 ppb	0.005 ppb	84.135 %	1.296 ppb
Concentration per Run 3	0.065 ppb	0.118 ppb	13.183 ppb	2.864 ppb	85.223 %	0.001 ppb	0.008 ppb	84.422 %	1.318 ppb
Concentration RSD	13.3 %	23.3 %	3.6 %	26.9 %	3.2 %	387.1 %	29.5 %	1.7 %	8.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	11.184 ppb	87.109 %	87.181 %	0.369 ppb	0.011 ppb	85.619 %
Concentration per Run 1	11.402 ppb	84.797 %	85.615 %	0.393 ppb	0.010 ppb	88.144 %
Concentration per Run 2	11.272 ppb	87.072 %	88.006 %	0.413 ppb	0.013 ppb	81.990 %
Concentration per Run 3	10.879 ppb	89.459 %	87.921 %	0.302 ppb	0.010 ppb	86.723 %
Concentration RSD	2.4 %	2.7 %	1.6 %	16.1 %	15.8 %	3.8 %

Alpha ICPMSQ Data with SRD

12/3/2024 6:38:28 AM

Analysis index:	66	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	I2469271-01 6020SL	Rack	2		
Analysis started at:	12/2/2024 8:58:03 PM	Vial	20		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	97.293 %	94.626 %	0.009 ppb	151,792.370 ppb	22,606.834 ppb	11.737 ppb	22,623.326 ppb	93,916.914 ppb	105.431 %
Concentration per Run 1	96.809 %	93.283 %	0.011 ppb	153,888.039 ppb	22,616.804 ppb	11.713 ppb	22,787.704 ppb	94,442.377 ppb	104.482 %
Concentration per Run 2	97.104 %	94.956 %	0.006 ppb	148,019.233 ppb	22,223.904 ppb	11.777 ppb	22,289.920 ppb	92,975.565 ppb	105.522 %
Concentration per Run 3	97.967 %	95.638 %	0.011 ppb	153,469.837 ppb	22,979.796 ppb	11.722 ppb	22,792.356 ppb	94,332.800 ppb	106.290 %
Concentration RSD	0.6 %	1.3 %	33.3 %	2.2 %	1.7 %	0.3 %	1.3 %	0.9 %	0.9 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	1.744 ppb	0.797 ppb	422.604 ppb	14,949.369 ppb	0.776 ppb	2.715 ppb	1.927 ppb	5.543 ppb	89.847 %
Concentration per Run 1	1.738 ppb	0.794 ppb	431.023 ppb	15,052.155 ppb	0.770 ppb	2.570 ppb	1.846 ppb	5.520 ppb	87.365 %
Concentration per Run 2	1.790 ppb	0.791 ppb	422.644 ppb	15,005.411 ppb	0.817 ppb	2.892 ppb	1.945 ppb	5.679 ppb	89.567 %
Concentration per Run 3	1.703 ppb	0.804 ppb	414.144 ppb	14,790.540 ppb	0.741 ppb	2.682 ppb	1.990 ppb	5.431 ppb	92.610 %
Concentration RSD	2.5 %	0.8 %	2.0 %	0.9 %	4.9 %	6.0 %	3.8 %	2.3 %	2.9 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	11.988 ppb	0.388 ppb	681.416 ppb	5.530 ppb	84.520 %	0.002 ppb	0.003 ppb	88.579 %	1.064 ppb
Concentration per Run 1	12.011 ppb	0.361 ppb	682.235 ppb	5.163 ppb	83.480 %	0.003 ppb	0.001 ppb	86.386 %	1.006 ppb
Concentration per Run 2	11.975 ppb	0.438 ppb	684.452 ppb	5.609 ppb	83.877 %	0.001 ppb	0.004 ppb	89.270 %	1.087 ppb
Concentration per Run 3	11.979 ppb	0.365 ppb	677.559 ppb	5.817 ppb	86.204 %	0.003 ppb	0.005 ppb	90.082 %	1.100 ppb
Concentration RSD	0.2 %	11.1 %	0.5 %	6.0 %	1.7 %	37.7 %	57.1 %	2.2 %	4.8 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	386.427 ppb	94.461 %	93.851 %	0.091 ppb	3.151 ppb	83.813 %
Concentration per Run 1	388.846 ppb	91.932 %	91.957 %	0.065 ppb	3.073 ppb	84.688 %
Concentration per Run 2	386.526 ppb	95.515 %	95.021 %	0.108 ppb	3.190 ppb	82.887 %
Concentration per Run 3	383.909 ppb	95.936 %	94.575 %	0.100 ppb	3.189 ppb	83.864 %
Concentration RSD	0.6 %	2.3 %	1.8 %	25.1 %	2.1 %	1.1 %

Alpha ICPMSQ Data with SRD

12/3/2024 6:38:28 AM

Analysis index:	67	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	I2469271-02 6020SL	Rack	2		
Analysis started at:	12/2/2024 9:02:42 PM	Vial	21		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	101.253 %	98.885 %	0.006 ppb	92,076.665 ppb	11.221 ppb	2,218.453 ppb	70,077.437 ppb	85,413.429 ppb	107.989 %
Concentration per Run 1	99.314 %	97.697 %	0.004 ppb	92,031.636 ppb	11.917 ppb	2,219.070 ppb	69,364.404 ppb	85,404.267 ppb	109.028 %
Concentration per Run 2	100.698 %	100.798 %	0.009 ppb	90,016.688 ppb	10.707 ppb	2,183.097 ppb	69,534.093 ppb	84,552.475 ppb	106.611 %
Concentration per Run 3	103.745 %	98.160 %	0.004 ppb	94,181.670 ppb	11.039 ppb	2,253.192 ppb	71,333.815 ppb	86,283.546 ppb	108.328 %
Concentration RSD	2.2 %	1.7 %	52.5 %	2.3 %	5.6 %	1.6 %	1.6 %	1.0 %	1.2 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	25.660 ppb	0.376 ppb	0.096 ppb	95.027 ppb	0.214 ppb	47.792 ppb	1.491 ppb	1.164 ppb	96.457 %
Concentration per Run 1	25.768 ppb	0.384 ppb	0.104 ppb	96.067 ppb	0.205 ppb	48.042 ppb	1.491 ppb	1.174 ppb	94.939 %
Concentration per Run 2	25.320 ppb	0.366 ppb	0.094 ppb	95.742 ppb	0.206 ppb	47.700 ppb	1.518 ppb	1.173 ppb	98.013 %
Concentration per Run 3	25.892 ppb	0.380 ppb	0.091 ppb	93.271 ppb	0.231 ppb	47.633 ppb	1.466 ppb	1.146 ppb	96.420 %
Concentration RSD	1.2 %	2.5 %	7.2 %	1.6 %	6.9 %	0.5 %	1.7 %	1.4 %	1.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	3.487 ppb	1.873 ppb	1,476.724 ppb	23.817 ppb	90.539 %	0.001 ppb	0.008 ppb	92.404 %	1.995 ppb
Concentration per Run 1	3.493 ppb	1.906 ppb	1,474.659 ppb	24.123 ppb	90.337 %	0.000 ppb	0.008 ppb	92.490 %	1.925 ppb
Concentration per Run 2	3.468 ppb	1.845 ppb	1,457.882 ppb	23.592 ppb	91.293 %	0.001 ppb	0.008 ppb	92.442 %	2.037 ppb
Concentration per Run 3	3.498 ppb	1.867 ppb	1,497.632 ppb	23.735 ppb	89.988 %	0.000 ppb	0.009 ppb	92.281 %	2.025 ppb
Concentration RSD	0.5 %	1.7 %	1.4 %	1.2 %	0.7 %	75.9 %	6.7 %	0.1 %	3.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	70.932 ppb	97.955 %	96.316 %	0.039 ppb	0.132 ppb	86.844 %
Concentration per Run 1	70.510 ppb	98.601 %	95.676 %	0.021 ppb	0.132 ppb	86.409 %
Concentration per Run 2	69.940 ppb	97.858 %	97.550 %	0.049 ppb	0.132 ppb	86.835 %
Concentration per Run 3	72.347 ppb	97.405 %	95.723 %	0.047 ppb	0.131 ppb	87.289 %
Concentration RSD	1.8 %	0.6 %	1.1 %	39.4 %	0.3 %	0.5 %

Alpha ICPMSQ Data with SRD

12/3/2024 6:38:28 AM

Analysis index: 68
Analysis label: I2469271-04 6020SL
Analysis started at: 12/2/2024 9:07:21 PM
User name ALPHALAB\Metals-Instrument
Rack 2
Vial 22
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	99.170 %	97.165 %	0.010 ppb	163,035.306 ppb	23,591.048 ppb	11.168 ppb	22,836.380 ppb	99,759.620 ppb	108.212 %
Concentration per Run 1	99.080 %	95.483 %	0.011 ppb	164,720.860 ppb	24,122.771 ppb	11.348 ppb	23,309.771 ppb	101,594.927 ppb	106.354 %
Concentration per Run 2	97.759 %	98.494 %	0.010 ppb	160,673.319 ppb	23,143.511 ppb	10.953 ppb	22,736.621 ppb	97,835.673 ppb	109.688 %
Concentration per Run 3	100.671 %	97.517 %	0.008 ppb	163,711.739 ppb	23,506.862 ppb	11.204 ppb	22,462.747 ppb	99,848.261 ppb	108.594 %
Concentration RSD	1.5 %	1.6 %	17.7 %	1.3 %	2.1 %	1.8 %	1.9 %	1.9 %	1.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	1.639 ppb	0.708 ppb	424.205 ppb	15,623.187 ppb	0.744 ppb	2.568 ppb	1.559 ppb	3.997 ppb	94.935 %
Concentration per Run 1	1.684 ppb	0.681 ppb	426.830 ppb	15,676.002 ppb	0.747 ppb	2.474 ppb	1.577 ppb	3.998 ppb	93.942 %
Concentration per Run 2	1.624 ppb	0.737 ppb	422.331 ppb	15,674.307 ppb	0.774 ppb	2.640 ppb	1.514 ppb	3.973 ppb	94.938 %
Concentration per Run 3	1.608 ppb	0.705 ppb	423.455 ppb	15,519.251 ppb	0.710 ppb	2.591 ppb	1.585 ppb	4.019 ppb	95.927 %
Concentration RSD	2.4 %	4.0 %	0.6 %	0.6 %	4.3 %	3.3 %	2.5 %	0.6 %	1.0 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	11.926 ppb	0.319 ppb	710.559 ppb	5.567 ppb	89.056 %	0.002 ppb	0.004 ppb	92.575 %	0.699 ppb
Concentration per Run 1	11.988 ppb	0.357 ppb	707.535 ppb	5.205 ppb	89.800 %	0.002 ppb	0.002 ppb	92.260 %	0.646 ppb
Concentration per Run 2	12.015 ppb	0.313 ppb	715.830 ppb	5.630 ppb	88.043 %	0.003 ppb	0.003 ppb	93.596 %	0.693 ppb
Concentration per Run 3	11.774 ppb	0.286 ppb	708.311 ppb	5.867 ppb	89.326 %	0.002 ppb	0.006 ppb	91.869 %	0.759 ppb
Concentration RSD	1.1 %	11.2 %	0.6 %	6.0 %	1.0 %	30.4 %	43.0 %	1.0 %	8.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	415.158 ppb	97.559 %	96.950 %	0.021 ppb	2.797 ppb	86.000 %
Concentration per Run 1	410.377 ppb	96.804 %	95.031 %	0.009 ppb	2.736 ppb	86.458 %
Concentration per Run 2	411.409 ppb	98.628 %	98.624 %	0.026 ppb	2.803 ppb	85.859 %
Concentration per Run 3	423.689 ppb	97.245 %	97.195 %	0.029 ppb	2.853 ppb	85.683 %
Concentration RSD	1.8 %	1.0 %	1.9 %	49.4 %	2.1 %	0.5 %

Alpha ICPMSQ Data with SRD

12/3/2024 6:38:28 AM

Analysis index: 69
Analysis label: CCV
Analysis started at: 12/2/2024 9:12:00 PM
User name ALPHALAB\Metals-Instrument
Rack 0
Vial 9
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	97.341 %	93.416 %	61.512 ppb	6,450.281 ppb	6,329.696 ppb	64.642 ppb	6,204.839 ppb	6,155.440 ppb	98.041 %
Concentration per Run 1	98.133 %	92.871 %	61.217 ppb	6,561.353 ppb	6,408.781 ppb	64.043 ppb	6,294.453 ppb	6,247.824 ppb	98.177 %
Concentration per Run 2	97.739 %	94.699 %	61.034 ppb	6,365.571 ppb	6,268.411 ppb	64.456 ppb	6,119.688 ppb	6,053.872 ppb	96.872 %
Concentration per Run 3	96.152 %	92.678 %	62.286 ppb	6,423.920 ppb	6,311.895 ppb	65.428 ppb	6,200.375 ppb	6,164.623 ppb	99.074 %
Recovery Percentage 1			102.520 %	107.505 %	105.495 %	107.737 %	103.414 %	102.591 %	
Concentration RSD	1.1 %	1.2 %	1.1 %	1.6 %	1.1 %	1.1 %	1.4 %	1.6 %	1.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	62.061 ppb	61.244 ppb	61.596 ppb	6,181.675 ppb	62.091 ppb	62.071 ppb	61.946 ppb	62.000 ppb	97.772 %
Concentration per Run 1	63.913 ppb	62.516 ppb	62.550 ppb	6,280.355 ppb	63.725 ppb	63.122 ppb	63.478 ppb	62.946 ppb	96.009 %
Concentration per Run 2	61.368 ppb	60.230 ppb	61.121 ppb	6,145.144 ppb	61.425 ppb	61.486 ppb	61.082 ppb	61.307 ppb	99.605 %
Concentration per Run 3	60.901 ppb	60.987 ppb	61.117 ppb	6,119.527 ppb	61.124 ppb	61.606 ppb	61.278 ppb	61.746 ppb	97.702 %
Recovery Percentage 1	103.434 %	102.074 %	102.660 %	103.028 %	103.485 %	103.452 %	103.243 %	103.333 %	
Concentration RSD	2.6 %	1.9 %	1.3 %	1.4 %	2.3 %	1.5 %	2.1 %	1.4 %	1.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	61.089 ppb	60.289 ppb	63.329 ppb	62.947 ppb	90.147 %	63.423 ppb	63.937 ppb	91.321 %	64.301 ppb
Concentration per Run 1	63.138 ppb	61.188 ppb	65.315 ppb	64.452 ppb	87.684 %	65.872 ppb	66.403 ppb	89.401 %	66.568 ppb
Concentration per Run 2	59.244 ppb	59.422 ppb	62.030 ppb	61.747 ppb	91.413 %	62.356 ppb	63.229 ppb	93.383 %	62.584 ppb
Concentration per Run 3	60.885 ppb	60.258 ppb	62.642 ppb	62.641 ppb	91.342 %	62.042 ppb	62.178 ppb	91.180 %	63.752 ppb
Recovery Percentage 1	101.815 %	100.482 %	105.548 %	104.911 %		105.705 %	106.561 %		107.169 %
Concentration RSD	3.2 %	1.5 %	2.8 %	2.2 %	2.4 %	3.4 %	3.4 %	2.2 %	3.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	65.843 ppb	92.480 %	92.231 %	65.099 ppb	65.586 ppb	89.322 %
Concentration per Run 1	68.584 ppb	89.179 %	88.477 %	65.330 ppb	66.486 ppb	88.668 %
Concentration per Run 2	63.518 ppb	94.620 %	94.455 %	65.038 ppb	65.862 ppb	88.577 %
Concentration per Run 3	65.427 ppb	93.642 %	93.762 %	64.928 ppb	64.411 ppb	90.721 %
Recovery Percentage 1	109.738 %			108.498 %	109.310 %	
Concentration RSD	3.9 %	3.1 %	3.5 %	0.3 %	1.6 %	1.4 %

Alpha ICPMSQ Data with SRD

12/3/2024 6:38:28 AM

Analysis index:	70	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	CCB	Rack	0		
Analysis started at:	12/2/2024 9:16:43 PM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	97.208 %	94.021 %	0.003 ppb	19.399 ppb	-0.816 ppb	-0.295 ppb	4.220 ppb	-3.898 ppb	99.328 %
Concentration per Run 1	96.848 %	93.360 %	0.003 ppb	20.020 ppb	-0.791 ppb	-0.228 ppb	7.741 ppb	-4.997 ppb	95.521 %
Concentration per Run 2	96.202 %	93.322 %	0.000 ppb	22.574 ppb	-0.846 ppb	-0.348 ppb	3.794 ppb	-2.989 ppb	100.900 %
Concentration per Run 3	98.573 %	95.381 %	0.005 ppb	15.603 ppb	-0.811 ppb	-0.308 ppb	1.126 ppb	-3.709 ppb	101.565 %
Recovery Percentage 1			0.517 %	3.880 %	-1.166 %	-2.948 %	4.220 %	-3.898 %	
Concentration RSD	1.3 %	1.3 %	108.9 %	18.2 %	3.4 %	20.7 %	78.9 %	26.1 %	3.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.192 ppb	-0.003 ppb	-0.032 ppb	11.304 ppb	-0.002 ppb	-0.070 ppb	-0.033 ppb	-0.264 ppb	93.202 %
Concentration per Run 1	-0.213 ppb	0.005 ppb	-0.026 ppb	10.362 ppb	-0.003 ppb	-0.078 ppb	-0.041 ppb	-0.263 ppb	93.218 %
Concentration per Run 2	-0.173 ppb	-0.005 ppb	-0.034 ppb	12.387 ppb	0.000 ppb	-0.059 ppb	-0.030 ppb	-0.261 ppb	91.735 %
Concentration per Run 3	-0.190 ppb	-0.009 ppb	-0.034 ppb	11.164 ppb	-0.002 ppb	-0.074 ppb	-0.028 ppb	-0.267 ppb	94.652 %
Recovery Percentage 1	-3.837 %	-0.313 %	-3.153 %	22.609 %	-0.353 %	-3.515 %	-3.271 %	-5.274 %	
Concentration RSD	10.2 %	228.6 %	14.0 %	9.0 %	84.3 %	14.7 %	21.2 %	1.2 %	1.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.045 ppb	0.113 ppb	-0.005 ppb	1.620 ppb	91.311 %	0.002 ppb	0.001 ppb	89.872 %	0.257 ppb
Concentration per Run 1	0.038 ppb	0.142 ppb	-0.005 ppb	1.106 ppb	91.488 %	0.002 ppb	0.002 ppb	90.190 %	0.196 ppb
Concentration per Run 2	0.053 ppb	0.105 ppb	-0.004 ppb	1.713 ppb	90.361 %	0.002 ppb	0.002 ppb	89.070 %	0.272 ppb
Concentration per Run 3	0.045 ppb	0.093 ppb	-0.006 ppb	2.041 ppb	92.085 %	0.002 ppb	-0.001 ppb	90.356 %	0.304 ppb
Recovery Percentage 1	9.054 %	2.265 %	-0.052 %	80.993 %		0.591 %	0.564 %		6.432 %
Concentration RSD	16.1 %	22.3 %	19.6 %	29.3 %	1.0 %	8.0 %	144.7 %	0.8 %	21.4 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	-0.006 ppb	92.524 %	92.262 %	0.397 ppb	0.007 ppb	95.450 %
Concentration per Run 1	-0.005 ppb	92.643 %	93.500 %	0.452 ppb	0.008 ppb	96.453 %
Concentration per Run 2	-0.012 ppb	92.391 %	92.238 %	0.413 ppb	0.007 ppb	94.896 %
Concentration per Run 3	-0.001 ppb	92.539 %	91.049 %	0.326 ppb	0.006 ppb	95.002 %
Recovery Percentage 1	-1.186 %			39.687 %	0.715 %	
Concentration RSD	89.4 %	0.1 %	1.3 %	16.2 %	12.1 %	0.9 %

Alpha ICPMSQ Data with SRD

12/3/2024 6:38:28 AM

Analysis index:	71	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	L2469271-01 6020TL	Rack	2		
Analysis started at:	12/2/2024 9:21:26 PM	Vial	23		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	96.592 %	91.700 %	0.028 ppb	165,768.910 ppb	23,810.800 ppb	286.584 ppb	21,544.565 ppb	98,894.856 ppb	105.015 %
Concentration per Run 1	94.871 %	92.048 %	0.029 ppb	161,542.349 ppb	23,201.440 ppb	276.938 ppb	21,115.093 ppb	97,106.108 ppb	104.465 %
Concentration per Run 2	96.620 %	89.114 %	0.030 ppb	169,881.240 ppb	24,348.650 ppb	291.990 ppb	22,206.892 ppb	101,559.194 ppb	104.078 %
Concentration per Run 3	98.285 %	93.939 %	0.027 ppb	165,883.143 ppb	23,882.309 ppb	290.823 ppb	21,311.710 ppb	98,019.265 ppb	106.504 %
Concentration RSD	1.8 %	2.7 %	4.9 %	2.5 %	2.4 %	2.9 %	2.7 %	2.4 %	1.2 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	2.197 ppb	1.306 ppb	422.325 ppb	16,443.455 ppb	0.922 ppb	2.718 ppb	4.009 ppb	7.346 ppb	90.479 %
Concentration per Run 1	2.231 ppb	1.332 ppb	418.347 ppb	16,240.114 ppb	0.928 ppb	2.787 ppb	4.010 ppb	7.257 ppb	90.344 %
Concentration per Run 2	2.274 ppb	1.348 ppb	431.081 ppb	16,615.163 ppb	0.939 ppb	2.680 ppb	4.030 ppb	7.520 ppb	89.473 %
Concentration per Run 3	2.085 ppb	1.237 ppb	417.548 ppb	16,475.089 ppb	0.898 ppb	2.686 ppb	3.988 ppb	7.262 ppb	91.621 %
Concentration RSD	4.5 %	4.6 %	1.8 %	1.2 %	2.3 %	2.2 %	0.5 %	2.0 %	1.2 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	10.852 ppb	0.344 ppb	703.750 ppb	4.397 ppb	84.232 %	0.007 ppb	0.013 ppb	88.768 %	0.496 ppb
Concentration per Run 1	10.544 ppb	0.336 ppb	696.157 ppb	4.165 ppb	85.453 %	0.006 ppb	0.012 ppb	89.809 %	0.475 ppb
Concentration per Run 2	10.953 ppb	0.327 ppb	700.694 ppb	4.593 ppb	82.207 %	0.007 ppb	0.013 ppb	87.212 %	0.485 ppb
Concentration per Run 3	11.059 ppb	0.368 ppb	714.399 ppb	4.433 ppb	85.037 %	0.007 ppb	0.013 ppb	89.282 %	0.528 ppb
Concentration RSD	2.5 %	6.2 %	1.3 %	4.9 %	2.1 %	8.2 %	2.3 %	1.5 %	5.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	418.417 ppb	93.578 %	92.462 %	0.100 ppb	14.588 ppb	83.189 %
Concentration per Run 1	406.134 ppb	94.896 %	93.182 %	0.073 ppb	14.342 ppb	83.170 %
Concentration per Run 2	423.816 ppb	92.039 %	91.420 %	0.117 ppb	14.739 ppb	82.606 %
Concentration per Run 3	425.301 ppb	93.798 %	92.784 %	0.111 ppb	14.684 ppb	83.792 %
Concentration RSD	2.5 %	1.5 %	1.0 %	23.6 %	1.5 %	0.7 %

Alpha ICPMSQ Data with SRD

12/3/2024 6:38:28 AM

Analysis index: 72
Analysis label: L2469271-02 6020TL
Analysis started at: 12/2/2024 9:26:06 PM
User name ALPHALAB\Metals-Instrument
Rack 2
Vial 24
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	101.645 %	97.165 %	0.066 ppb	98,489.511 ppb	394.507 ppb	3,499.200 ppb	74,436.544 ppb	92,250.585 ppb	107.023 %
Concentration per Run 1	99.963 %	96.873 %	0.073 ppb	97,817.211 ppb	389.755 ppb	3,444.668 ppb	75,306.296 ppb	91,701.282 ppb	105.119 %
Concentration per Run 2	102.124 %	98.031 %	0.061 ppb	97,715.389 ppb	388.487 ppb	3,502.506 ppb	73,538.831 ppb	91,342.372 ppb	108.258 %
Concentration per Run 3	102.849 %	96.590 %	0.063 ppb	99,935.934 ppb	405.278 ppb	3,550.426 ppb	74,464.504 ppb	93,708.100 ppb	107.693 %
Concentration RSD	1.5 %	0.8 %	9.4 %	1.3 %	2.4 %	1.5 %	1.2 %	1.4 %	1.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	32.923 ppb	2.996 ppb	28.007 ppb	1,702.812 ppb	0.945 ppb	56.343 ppb	6.124 ppb	17.276 ppb	94.662 %
Concentration per Run 1	32.504 ppb	2.972 ppb	27.400 ppb	1,684.069 ppb	0.965 ppb	56.136 ppb	6.201 ppb	17.154 ppb	92.985 %
Concentration per Run 2	32.765 ppb	2.913 ppb	27.585 ppb	1,666.217 ppb	0.906 ppb	55.875 ppb	6.074 ppb	17.115 ppb	96.600 %
Concentration per Run 3	33.501 ppb	3.102 ppb	29.036 ppb	1,758.150 ppb	0.965 ppb	57.020 ppb	6.099 ppb	17.558 ppb	94.401 %
Concentration RSD	1.6 %	3.2 %	3.2 %	2.9 %	3.6 %	1.1 %	1.1 %	1.4 %	1.9 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	4.095 ppb	2.112 ppb	1,605.799 ppb	24.217 ppb	89.277 %	0.014 ppb	0.042 ppb	91.812 %	1.800 ppb
Concentration per Run 1	4.059 ppb	2.153 ppb	1,584.981 ppb	24.180 ppb	89.563 %	0.013 ppb	0.042 ppb	91.417 %	1.761 ppb
Concentration per Run 2	4.114 ppb	2.059 ppb	1,605.639 ppb	23.905 ppb	88.632 %	0.012 ppb	0.041 ppb	92.157 %	1.815 ppb
Concentration per Run 3	4.111 ppb	2.124 ppb	1,626.776 ppb	24.567 ppb	89.636 %	0.015 ppb	0.042 ppb	91.862 %	1.824 ppb
Concentration RSD	0.8 %	2.3 %	1.3 %	1.4 %	0.6 %	12.4 %	1.2 %	0.4 %	1.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	100.807 ppb	96.842 %	95.694 %	0.060 ppb	27.357 ppb	84.940 %
Concentration per Run 1	99.115 ppb	96.578 %	95.782 %	0.040 ppb	27.385 ppb	83.648 %
Concentration per Run 2	101.833 ppb	96.625 %	96.005 %	0.074 ppb	27.321 ppb	85.270 %
Concentration per Run 3	101.472 ppb	97.325 %	95.297 %	0.066 ppb	27.365 ppb	85.900 %
Concentration RSD	1.5 %	0.4 %	0.4 %	30.3 %	0.1 %	1.4 %

Alpha ICPMSQ Data with SRD

12/3/2024 6:38:28 AM

Analysis index:	73	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	L2469271-04 6020TL	Rack	2		
Analysis started at:	12/2/2024 9:30:46 PM	Vial	25		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	99.237 %	96.307 %	0.031 ppb	166,023.371 ppb	23,900.273 ppb	272.862 ppb	21,260.189 ppb	101,475.064 ppb	105.717 %
Concentration per Run 1	98.780 %	96.153 %	0.030 ppb	165,747.903 ppb	23,912.434 ppb	270.238 ppb	21,278.805 ppb	101,250.304 ppb	105.663 %
Concentration per Run 2	99.256 %	96.564 %	0.032 ppb	166,442.719 ppb	24,057.736 ppb	274.695 ppb	21,203.843 ppb	102,130.814 ppb	105.828 %
Concentration per Run 3	99.675 %	96.204 %	0.029 ppb	165,879.491 ppb	23,730.651 ppb	273.655 ppb	21,297.918 ppb	101,044.074 ppb	105.658 %
Concentration RSD	0.5 %	0.2 %	4.9 %	0.2 %	0.7 %	0.9 %	0.2 %	0.6 %	0.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	2.049 ppb	1.252 ppb	424.756 ppb	16,733.585 ppb	0.894 ppb	2.583 ppb	3.884 ppb	7.715 ppb	93.407 %
Concentration per Run 1	2.037 ppb	1.216 ppb	420.103 ppb	16,663.971 ppb	0.864 ppb	2.596 ppb	3.863 ppb	7.803 ppb	93.092 %
Concentration per Run 2	2.040 ppb	1.301 ppb	424.370 ppb	16,791.890 ppb	0.920 ppb	2.530 ppb	3.870 ppb	7.741 ppb	92.885 %
Concentration per Run 3	2.070 ppb	1.240 ppb	429.796 ppb	16,744.893 ppb	0.899 ppb	2.622 ppb	3.918 ppb	7.602 ppb	94.245 %
Concentration RSD	0.9 %	3.5 %	1.1 %	0.4 %	3.2 %	1.8 %	0.8 %	1.3 %	0.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	11.008 ppb	0.313 ppb	702.523 ppb	4.863 ppb	87.712 %	0.007 ppb	0.015 ppb	91.516 %	0.449 ppb
Concentration per Run 1	11.026 ppb	0.332 ppb	710.361 ppb	4.622 ppb	86.813 %	0.007 ppb	0.015 ppb	92.169 %	0.442 ppb
Concentration per Run 2	11.069 ppb	0.332 ppb	699.948 ppb	4.869 ppb	88.589 %	0.008 ppb	0.016 ppb	91.969 %	0.446 ppb
Concentration per Run 3	10.931 ppb	0.276 ppb	697.261 ppb	5.099 ppb	87.733 %	0.006 ppb	0.015 ppb	90.410 %	0.458 ppb
Concentration RSD	0.6 %	10.3 %	1.0 %	4.9 %	1.0 %	13.8 %	3.8 %	1.1 %	1.8 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	432.686 ppb	95.902 %	95.507 %	0.035 ppb	10.316 ppb	84.055 %
Concentration per Run 1	428.753 ppb	94.981 %	94.548 %	0.021 ppb	10.181 ppb	85.458 %
Concentration per Run 2	433.621 ppb	96.485 %	96.186 %	0.040 ppb	10.342 ppb	83.573 %
Concentration per Run 3	435.684 ppb	96.239 %	95.789 %	0.042 ppb	10.425 ppb	83.133 %
Concentration RSD	0.8 %	0.8 %	0.9 %	34.0 %	1.2 %	1.5 %

Alpha ICPMSQ Data with SRD

12/3/2024 6:38:28 AM

Analysis index:	74	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	CCV	Rack	0		
Analysis started at:	12/2/2024 9:35:25 PM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	95.375 %	94.158 %	62.250 ppb	6,266.770 ppb	6,144.032 ppb	64.167 ppb	6,289.316 ppb	6,197.623 ppb	99.768 %
Concentration per Run 1	95.741 %	92.292 %	61.481 ppb	6,360.958 ppb	6,304.184 ppb	66.218 ppb	6,448.709 ppb	6,449.949 ppb	97.468 %
Concentration per Run 2	96.197 %	94.415 %	61.956 ppb	6,246.026 ppb	6,059.303 ppb	63.067 ppb	6,349.401 ppb	6,133.047 ppb	99.047 %
Concentration per Run 3	94.188 %	95.767 %	63.314 ppb	6,193.324 ppb	6,068.610 ppb	63.215 ppb	6,069.837 ppb	6,009.874 ppb	102.789 %
Recovery Percentage 1			103.750 %	104.446 %	102.401 %	106.945 %	104.822 %	103.294 %	
Concentration RSD	1.1 %	1.9 %	1.5 %	1.4 %	2.3 %	2.8 %	3.1 %	3.7 %	2.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	62.556 ppb	62.348 ppb	62.251 ppb	6,314.910 ppb	63.496 ppb	64.475 ppb	63.968 ppb	64.847 ppb	91.178 %
Concentration per Run 1	64.146 ppb	63.954 ppb	62.982 ppb	6,439.576 ppb	64.787 ppb	66.438 ppb	64.908 ppb	65.780 ppb	90.218 %
Concentration per Run 2	61.789 ppb	61.615 ppb	61.992 ppb	6,267.640 ppb	63.272 ppb	64.004 ppb	63.654 ppb	64.828 ppb	91.864 %
Concentration per Run 3	61.731 ppb	61.477 ppb	61.780 ppb	6,237.513 ppb	62.428 ppb	62.983 ppb	63.341 ppb	63.934 ppb	91.454 %
Recovery Percentage 1	104.259 %	103.914 %	103.752 %	105.248 %	105.826 %	107.458 %	106.613 %	108.079 %	
Concentration RSD	2.2 %	2.2 %	1.0 %	1.7 %	1.9 %	2.8 %	1.3 %	1.4 %	0.9 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	64.323 ppb	64.254 ppb	64.918 ppb	63.480 ppb	88.550 %	63.153 ppb	63.407 ppb	88.451 %	64.234 ppb
Concentration per Run 1	64.933 ppb	64.222 ppb	66.000 ppb	64.823 ppb	87.685 %	64.016 ppb	64.563 ppb	87.346 %	65.173 ppb
Concentration per Run 2	63.819 ppb	64.374 ppb	64.163 ppb	62.815 ppb	89.035 %	63.011 ppb	62.786 ppb	88.103 %	63.799 ppb
Concentration per Run 3	64.215 ppb	64.165 ppb	64.592 ppb	62.800 ppb	88.931 %	62.431 ppb	62.871 ppb	89.904 %	63.730 ppb
Recovery Percentage 1	107.204 %	107.089 %	108.197 %	105.799 %		105.255 %	105.678 %		107.057 %
Concentration RSD	0.9 %	0.2 %	1.5 %	1.8 %	0.8 %	1.3 %	1.6 %	1.5 %	1.3 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	66.245 ppb	92.499 %	91.705 %	63.716 ppb	63.604 ppb	90.821 %
Concentration per Run 1	66.832 ppb	91.587 %	89.907 %	62.479 ppb	63.101 ppb	91.951 %
Concentration per Run 2	66.133 ppb	93.598 %	93.317 %	64.005 ppb	63.580 ppb	90.483 %
Concentration per Run 3	65.770 ppb	92.312 %	91.890 %	64.664 ppb	64.130 ppb	90.028 %
Recovery Percentage 1	110.409 %			106.193 %	106.006 %	
Concentration RSD	0.8 %	1.1 %	1.9 %	1.8 %	0.8 %	1.1 %

Alpha ICPMSQ Data with SRD

12/3/2024 6:38:28 AM

Analysis index:	75	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	CCB	Rack	0		
Analysis started at:	12/2/2024 9:40:08 PM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	94.626 %	91.031 %	0.004 ppb	32.383 ppb	-0.758 ppb	-0.259 ppb	8.476 ppb	-3.028 ppb	94.921 %
Concentration per Run 1	94.015 %	91.417 %	0.002 ppb	31.950 ppb	-0.631 ppb	-0.257 ppb	8.828 ppb	-3.993 ppb	93.862 %
Concentration per Run 2	93.643 %	90.684 %	0.005 ppb	30.824 ppb	-0.913 ppb	-0.206 ppb	9.080 ppb	-3.047 ppb	96.018 %
Concentration per Run 3	96.219 %	90.993 %	0.005 ppb	34.375 ppb	-0.730 ppb	-0.315 ppb	7.521 ppb	-2.043 ppb	94.883 %
Recovery Percentage 1			0.822 %	6.477 %	-1.083 %	-2.594 %	8.476 %	-3.028 %	
Concentration RSD	1.5 %	0.4 %	35.7 %	5.6 %	18.9 %	21.0 %	9.9 %	32.2 %	1.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.189 ppb	0.001 ppb	-0.023 ppb	13.433 ppb	0.000 ppb	-0.041 ppb	-0.035 ppb	-0.263 ppb	89.186 %
Concentration per Run 1	-0.183 ppb	0.001 ppb	-0.016 ppb	11.499 ppb	-0.001 ppb	-0.041 ppb	-0.032 ppb	-0.268 ppb	87.152 %
Concentration per Run 2	-0.184 ppb	0.004 ppb	-0.029 ppb	13.709 ppb	0.000 ppb	-0.043 ppb	-0.042 ppb	-0.270 ppb	90.323 %
Concentration per Run 3	-0.199 ppb	-0.001 ppb	-0.025 ppb	15.092 ppb	0.001 ppb	-0.040 ppb	-0.033 ppb	-0.251 ppb	90.083 %
Recovery Percentage 1	-3.774 %	0.136 %	-2.315 %	26.866 %	-0.050 %	-2.066 %	-3.535 %	-5.262 %	
Concentration RSD	4.9 %	189.1 %	29.5 %	13.5 %	347.1 %	3.4 %	15.3 %	3.9 %	2.0 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.053 ppb	0.152 ppb	-0.005 ppb	1.593 ppb	88.816 %	0.003 ppb	0.002 ppb	86.351 %	0.155 ppb
Concentration per Run 1	0.047 ppb	0.158 ppb	-0.004 ppb	1.235 ppb	88.136 %	0.005 ppb	0.002 ppb	85.035 %	0.112 ppb
Concentration per Run 2	0.049 ppb	0.142 ppb	-0.006 ppb	1.552 ppb	88.984 %	0.002 ppb	0.002 ppb	86.456 %	0.159 ppb
Concentration per Run 3	0.064 ppb	0.155 ppb	-0.006 ppb	1.991 ppb	89.328 %	0.002 ppb	0.001 ppb	87.563 %	0.194 ppb
Recovery Percentage 1	10.596 %	3.037 %	-0.054 %	79.636 %		0.673 %	0.751 %		3.877 %
Concentration RSD	17.4 %	5.8 %	18.0 %	23.8 %	0.7 %	63.1 %	49.0 %	1.5 %	26.5 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	-0.011 ppb	89.977 %	89.282 %	0.409 ppb	0.007 ppb	93.093 %
Concentration per Run 1	-0.016 ppb	89.625 %	88.544 %	0.450 ppb	0.007 ppb	95.174 %
Concentration per Run 2	-0.011 ppb	90.415 %	88.722 %	0.428 ppb	0.008 ppb	91.803 %
Concentration per Run 3	-0.007 ppb	89.893 %	90.580 %	0.350 ppb	0.007 ppb	92.304 %
Recovery Percentage 1	-2.275 %			40.943 %	0.709 %	
Concentration RSD	41.1 %	0.4 %	1.3 %	12.9 %	6.3 %	2.0 %

Alpha ICPMSQ Data with SRD

12/3/2024 6:38:28 AM

Analysis index:	76	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	CCV	Rack	0		
Analysis started at:	12/2/2024 9:44:51 PM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	94.583 %	92.340 %	61.420 ppb	6,303.110 ppb	6,147.004 ppb	62.499 ppb	6,219.353 ppb	6,160.217 ppb	98.789 %
Concentration per Run 1	91.910 %	92.241 %	62.416 ppb	6,330.309 ppb	6,238.078 ppb	61.869 ppb	6,179.869 ppb	6,239.654 ppb	98.339 %
Concentration per Run 2	96.350 %	91.842 %	60.528 ppb	6,336.546 ppb	6,192.057 ppb	63.724 ppb	6,265.609 ppb	6,049.003 ppb	98.770 %
Concentration per Run 3	95.488 %	92.936 %	61.316 ppb	6,242.476 ppb	6,010.878 ppb	61.903 ppb	6,212.582 ppb	6,191.996 ppb	99.259 %
Recovery Percentage 1			102.367 %	105.052 %	102.450 %	104.165 %	103.656 %	102.670 %	
Concentration RSD	2.5 %	0.6 %	1.5 %	0.8 %	2.0 %	1.7 %	0.7 %	1.6 %	0.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	61.503 ppb	62.256 ppb	62.455 ppb	6,259.167 ppb	62.879 ppb	63.189 ppb	63.029 ppb	63.787 ppb	90.414 %
Concentration per Run 1	61.140 ppb	62.440 ppb	62.135 ppb	6,222.213 ppb	62.635 ppb	63.306 ppb	63.249 ppb	63.428 ppb	90.222 %
Concentration per Run 2	62.003 ppb	61.608 ppb	62.960 ppb	6,248.043 ppb	62.309 ppb	62.478 ppb	62.478 ppb	64.023 ppb	90.811 %
Concentration per Run 3	61.367 ppb	62.720 ppb	62.269 ppb	6,307.245 ppb	63.694 ppb	63.782 ppb	63.358 ppb	63.911 ppb	90.210 %
Recovery Percentage 1	102.506 %	103.760 %	104.091 %	104.319 %	104.799 %	105.315 %	105.048 %	106.312 %	
Concentration RSD	0.7 %	0.9 %	0.7 %	0.7 %	1.2 %	1.0 %	0.8 %	0.5 %	0.4 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	63.446 ppb	63.137 ppb	63.825 ppb	61.119 ppb	88.059 %	61.985 ppb	62.722 ppb	87.832 %	63.267 ppb
Concentration per Run 1	62.531 ppb	62.248 ppb	63.057 ppb	59.884 ppb	88.490 %	61.331 ppb	61.650 ppb	88.598 %	62.473 ppb
Concentration per Run 2	63.245 ppb	62.551 ppb	63.632 ppb	61.293 ppb	88.632 %	61.954 ppb	63.472 ppb	87.537 %	63.254 ppb
Concentration per Run 3	64.563 ppb	64.612 ppb	64.786 ppb	62.182 ppb	87.055 %	62.669 ppb	63.043 ppb	87.363 %	64.074 ppb
Recovery Percentage 1	105.744 %	105.229 %	106.375 %	101.866 %		103.308 %	104.536 %		105.445 %
Concentration RSD	1.6 %	2.0 %	1.4 %	1.9 %	1.0 %	1.1 %	1.5 %	0.8 %	1.3 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	64.527 ppb	91.952 %	91.918 %	62.376 ppb	62.470 ppb	90.950 %
Concentration per Run 1	63.393 ppb	92.834 %	91.905 %	59.463 ppb	61.476 ppb	92.757 %
Concentration per Run 2	65.022 ppb	91.379 %	92.022 %	64.164 ppb	62.682 ppb	90.432 %
Concentration per Run 3	65.166 ppb	91.642 %	91.828 %	63.502 ppb	63.252 ppb	89.661 %
Recovery Percentage 1	107.545 %			103.960 %	104.116 %	
Concentration RSD	1.5 %	0.8 %	0.1 %	4.1 %	1.5 %	1.8 %

Alpha ICPMSQ Data with SRD

12/3/2024 6:38:28 AM

Analysis index:	77	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	CCB	Rack	0		
Analysis started at:	12/2/2024 9:49:34 PM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	93.893 %	89.359 %	0.005 ppb	32.846 ppb	-0.712 ppb	-0.298 ppb	8.012 ppb	-3.932 ppb	90.901 %
Concentration per Run 1	92.657 %	92.846 %	0.009 ppb	19.740 ppb	-0.613 ppb	-0.419 ppb	7.672 ppb	-5.232 ppb	90.438 %
Concentration per Run 2	94.369 %	85.383 %	0.002 ppb	47.518 ppb	-0.819 ppb	-0.175 ppb	7.656 ppb	-3.284 ppb	90.188 %
Concentration per Run 3	94.652 %	89.848 %	0.003 ppb	31.280 ppb	-0.705 ppb	-0.298 ppb	8.708 ppb	-3.280 ppb	92.078 %
Recovery Percentage 1			1.007 %	6.569 %	-1.018 %	-2.976 %	8.012 %	-3.932 %	
Concentration RSD	1.1 %	4.2 %	73.2 %	42.5 %	14.5 %	41.0 %	7.5 %	28.6 %	1.1 %

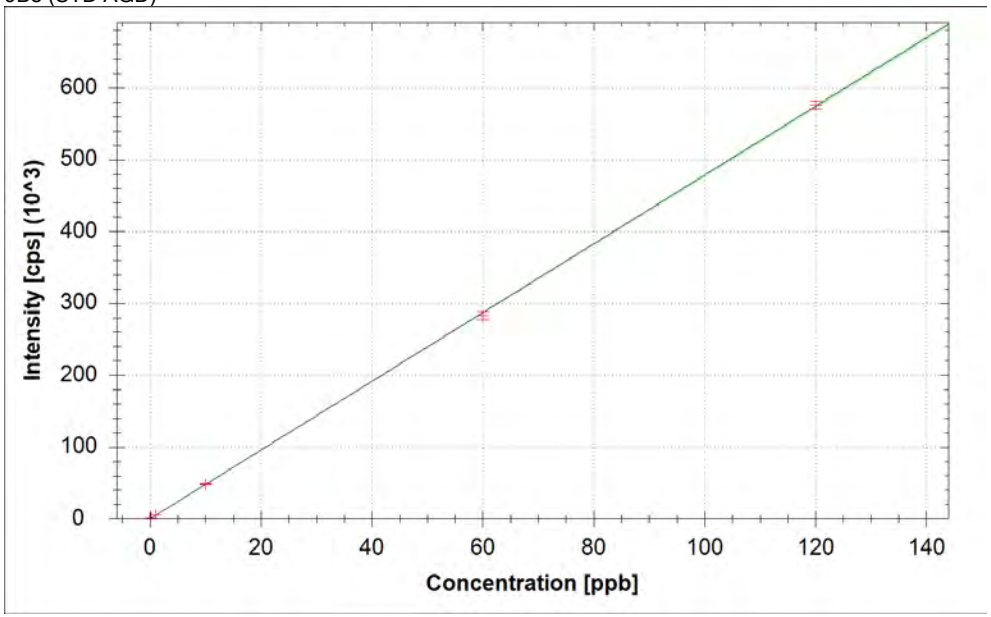
Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.186 ppb	0.003 ppb	-0.024 ppb	11.645 ppb	-0.002 ppb	-0.045 ppb	-0.024 ppb	-0.263 ppb	85.469 %
Concentration per Run 1	-0.206 ppb	0.008 ppb	-0.021 ppb	9.883 ppb	0.000 ppb	-0.036 ppb	-0.028 ppb	-0.261 ppb	86.745 %
Concentration per Run 2	-0.187 ppb	0.000 ppb	-0.030 ppb	13.033 ppb	-0.002 ppb	-0.054 ppb	-0.019 ppb	-0.266 ppb	83.766 %
Concentration per Run 3	-0.165 ppb	0.002 ppb	-0.022 ppb	12.020 ppb	-0.003 ppb	-0.047 ppb	-0.024 ppb	-0.262 ppb	85.897 %
Recovery Percentage 1	-3.720 %	0.326 %	-2.417 %	23.291 %	-0.349 %	-2.271 %	-2.362 %	-5.258 %	
Concentration RSD	11.0 %	124.6 %	20.0 %	13.8 %	90.9 %	20.4 %	19.5 %	0.9 %	1.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.050 ppb	0.158 ppb	-0.006 ppb	1.749 ppb	85.114 %	0.004 ppb	0.003 ppb	83.680 %	0.156 ppb
Concentration per Run 1	0.047 ppb	0.184 ppb	-0.005 ppb	1.264 ppb	86.459 %	0.005 ppb	0.003 ppb	85.656 %	0.114 ppb
Concentration per Run 2	0.051 ppb	0.183 ppb	-0.006 ppb	1.795 ppb	84.250 %	0.003 ppb	0.002 ppb	82.336 %	0.153 ppb
Concentration per Run 3	0.053 ppb	0.108 ppb	-0.005 ppb	2.188 ppb	84.635 %	0.003 ppb	0.003 ppb	83.048 %	0.200 ppb
Recovery Percentage 1	10.046 %	3.168 %	-0.055 %	87.449 %		0.913 %	1.350 %		3.893 %
Concentration RSD	5.8 %	27.5 %	5.4 %	26.5 %	1.4 %	21.2 %	17.7 %	2.1 %	27.8 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	-0.004 ppb	87.051 %	87.192 %	0.488 ppb	0.009 ppb	86.302 %
Concentration per Run 1	-0.012 ppb	88.013 %	87.930 %	0.524 ppb	0.008 ppb	89.638 %
Concentration per Run 2	-0.010 ppb	85.467 %	86.024 %	0.516 ppb	0.008 ppb	87.651 %
Concentration per Run 3	0.010 ppb	87.673 %	87.623 %	0.423 ppb	0.009 ppb	81.616 %
Recovery Percentage 1	-0.771 %			48.758 %	0.851 %	
Concentration RSD	312.0 %	1.6 %	1.2 %	11.5 %	8.0 %	4.8 %

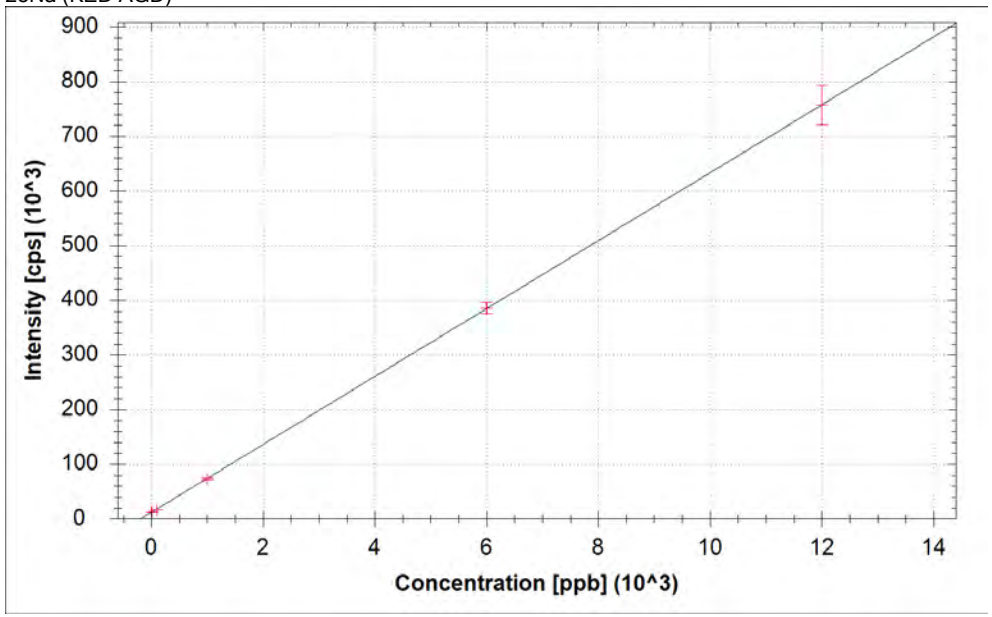
Calibration Curves:

9Be (STD AGD)



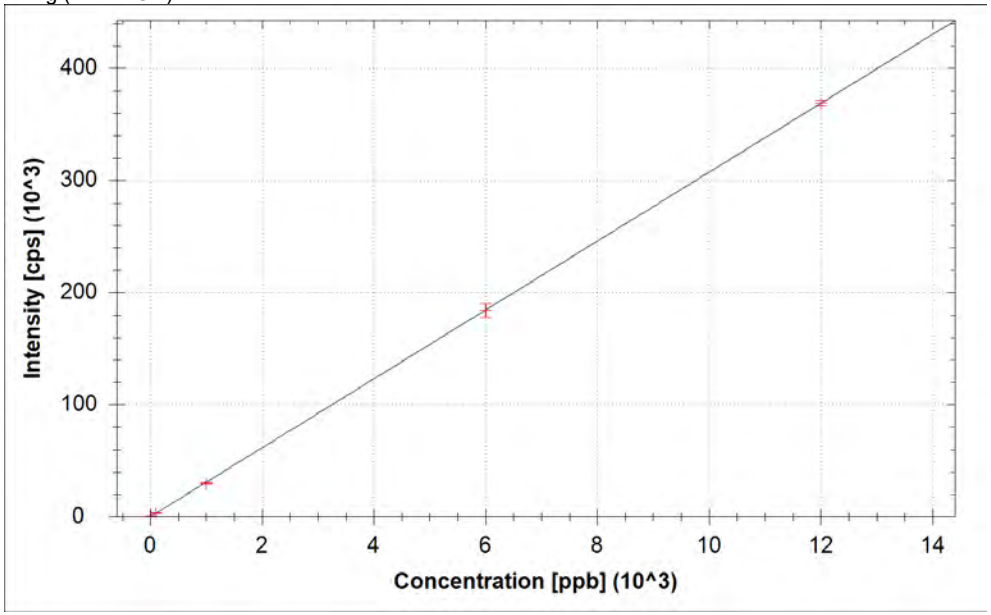
f(x) = 4782.1324*x + 17.8856
R² = 0.9999
BEC = 0.004 ppb
LoD = 0.0050 ppb

23Na (KED AGD)



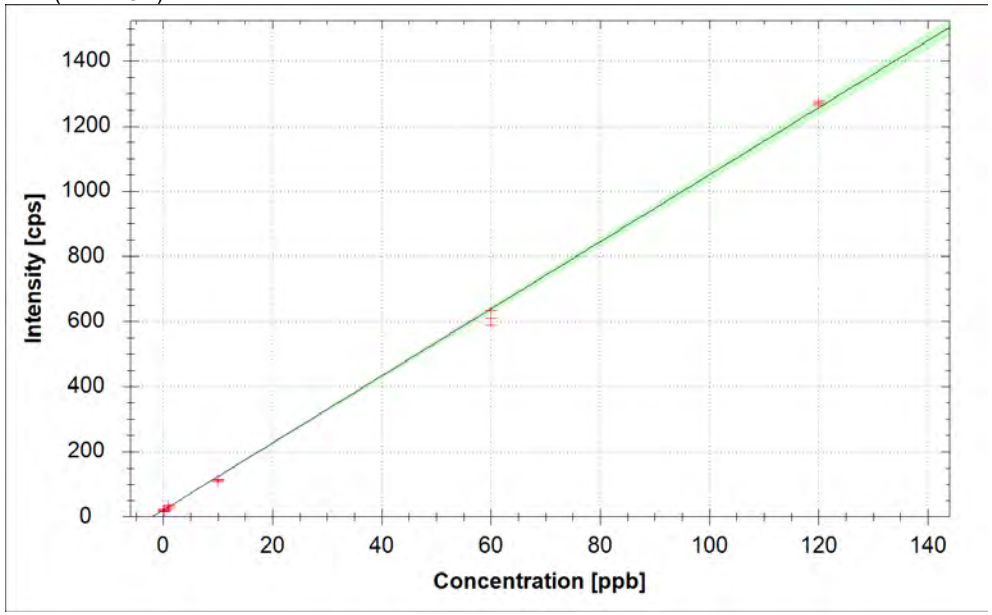
f(x) = 62.1395*x + 11678.6136
R² = 1.0000
BEC = 187.942 ppb
LoD = 4.6722 ppb

24Mg (KED AGD)



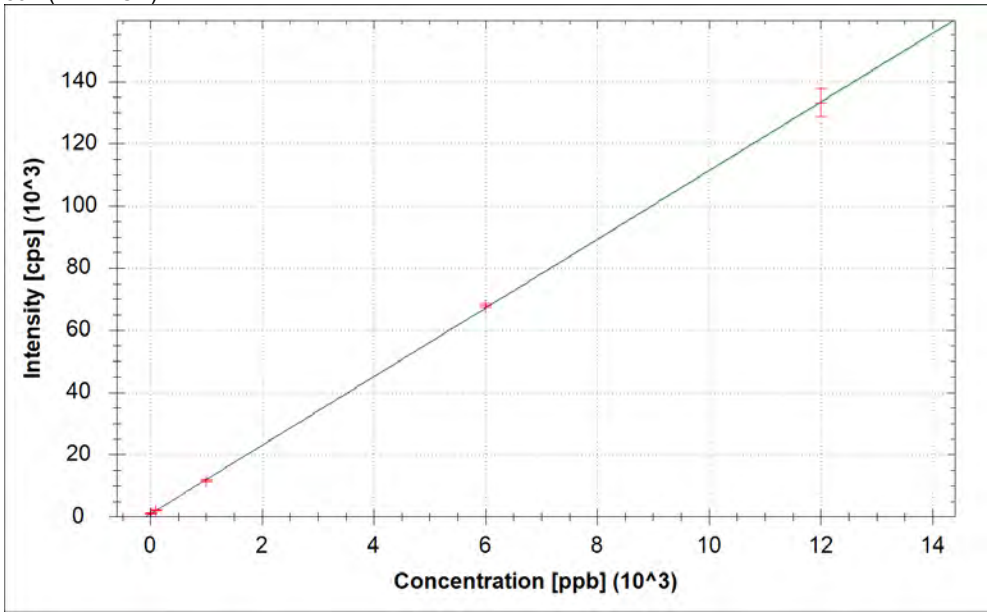
f(x) = 30.7284*x + 39.9111
R² = 1.0000
BEC = 1.299 ppb
LoD = 1.2665 ppb

27Al (KED AGD)



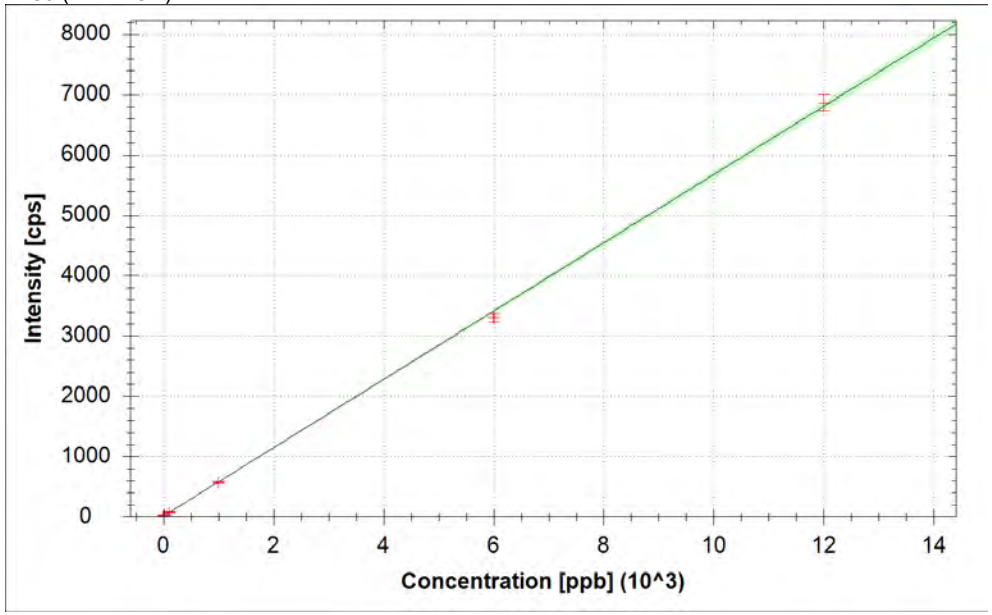
f(x) = 10.2961*x + 20.4593
R² = 0.9991
BEC = 1.987 ppb
LoD = 0.7354 ppb

39K (KED AGD)



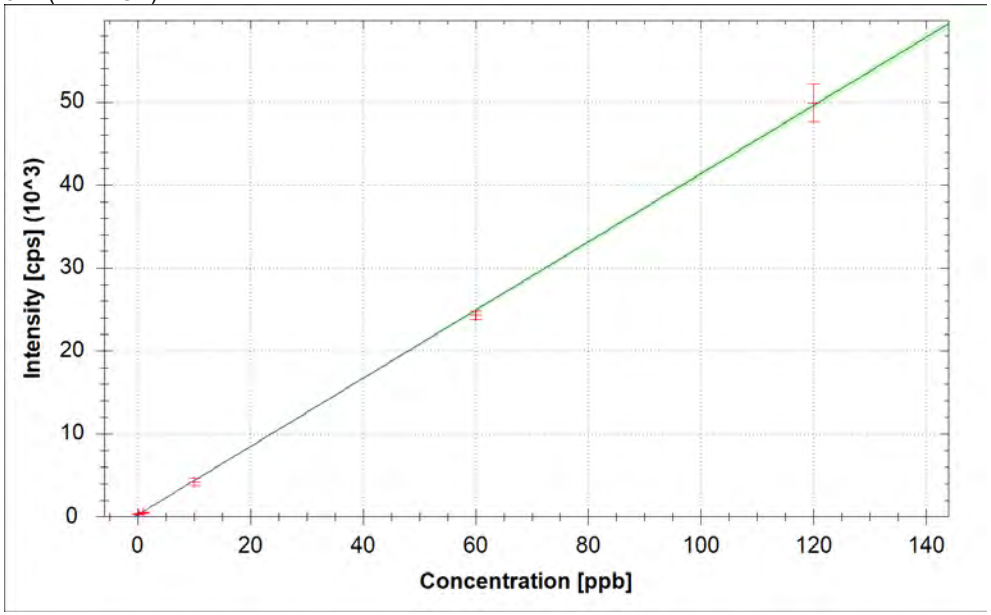
f(x) = 11.0403*x + 897.7311
R² = 1.0000
BEC = 81.314 ppb
LoD = 30.0974 ppb

44Ca (KED AGD)



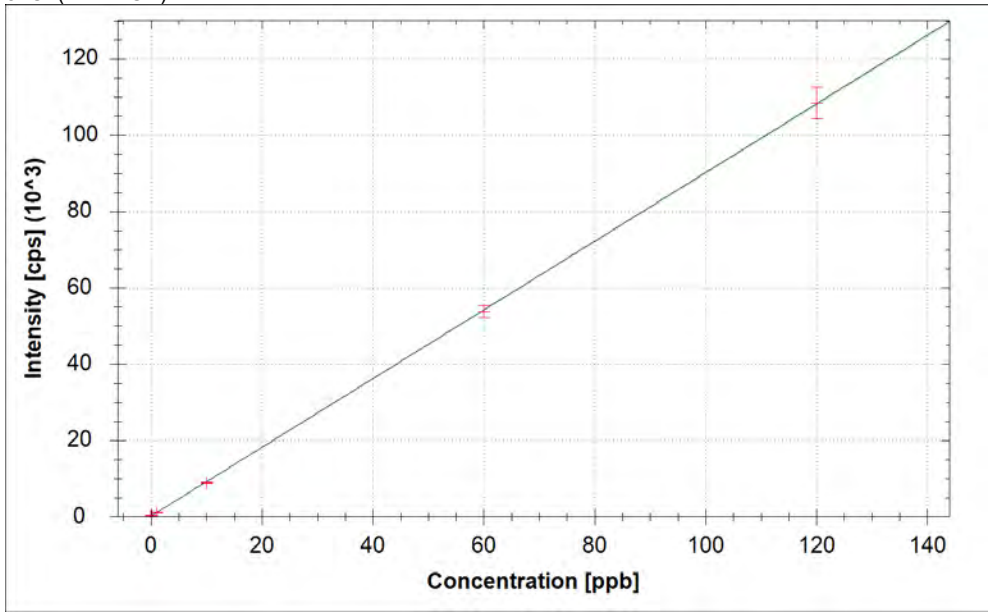
f(x) = 0.5662*x + 13.1051
R² = 0.9996
BEC = 23.146 ppb
LoD = 7.4148 ppb

51V (KED AGD)



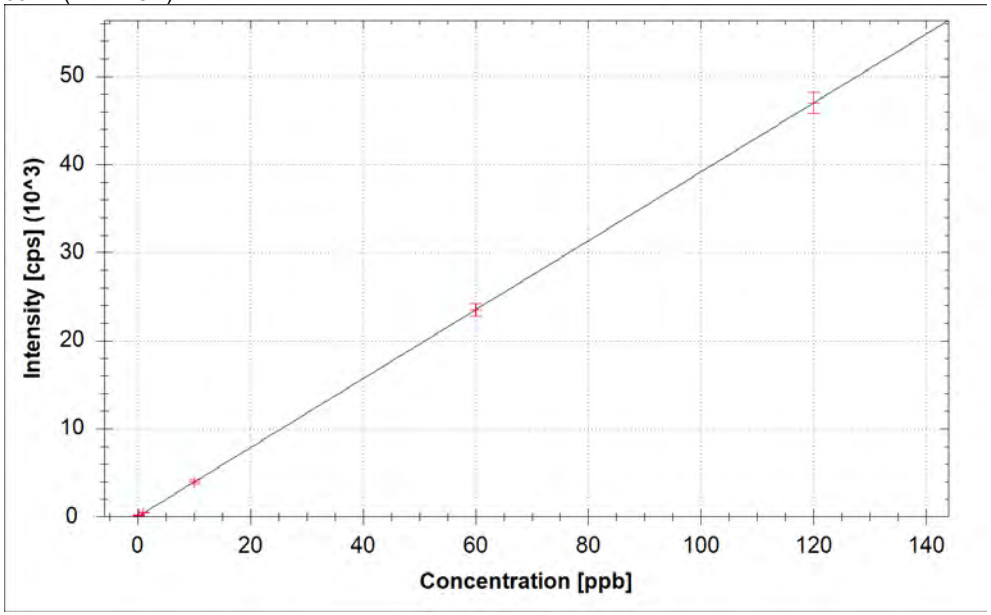
f(x) = 410.8695*x + 251.2222
R² = 0.9997
BEC = 0.611 ppb
LoD = 0.0963 ppb

52Cr (KED AGD)



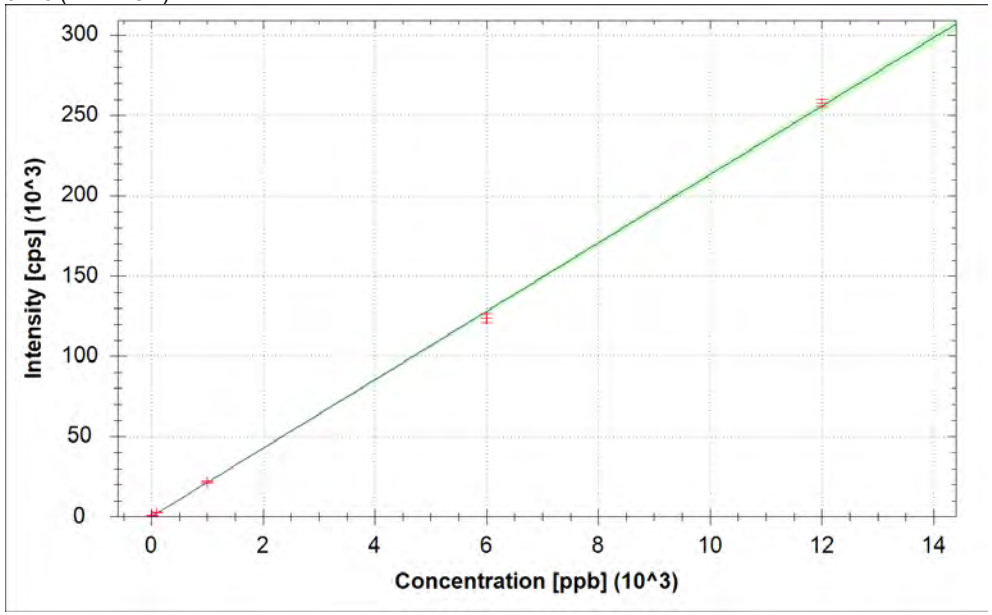
f(x) = 899.7066*x + 202.4240
R² = 1.0000
BEC = 0.225 ppb
LoD = 0.0860 ppb

55Mn (KED AGD)



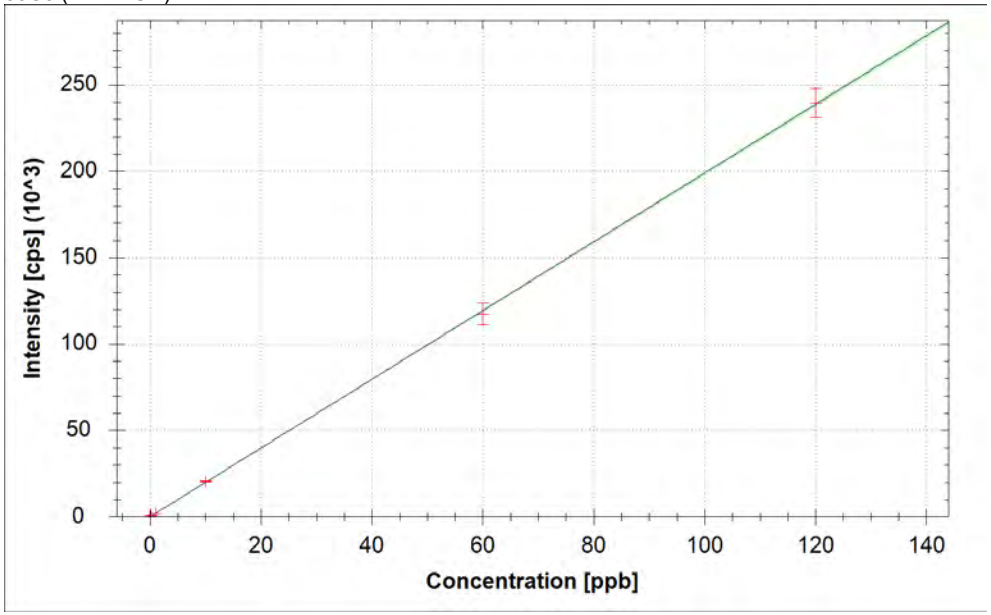
f(x) = 391.3092*x + 22.3597
R² = 1.0000
BEC = 0.057 ppb
LoD = 0.1079 ppb

57Fe (KED AGD)



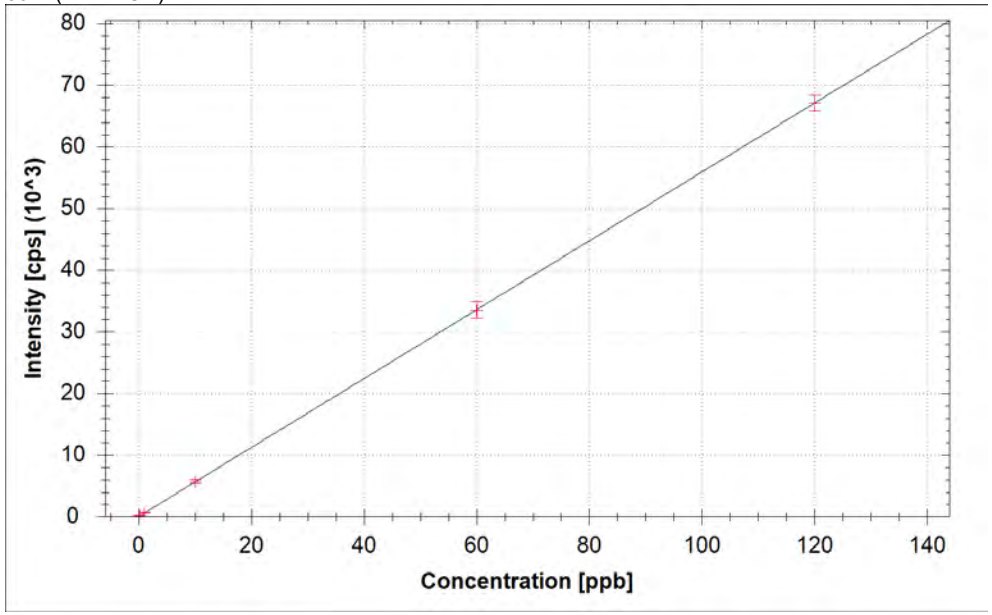
f(x) = 21.3082*x + 35.4905
R² = 0.9996
BEC = 1.666 ppb
LoD = 1.9354 ppb

59Co (KED AGD)



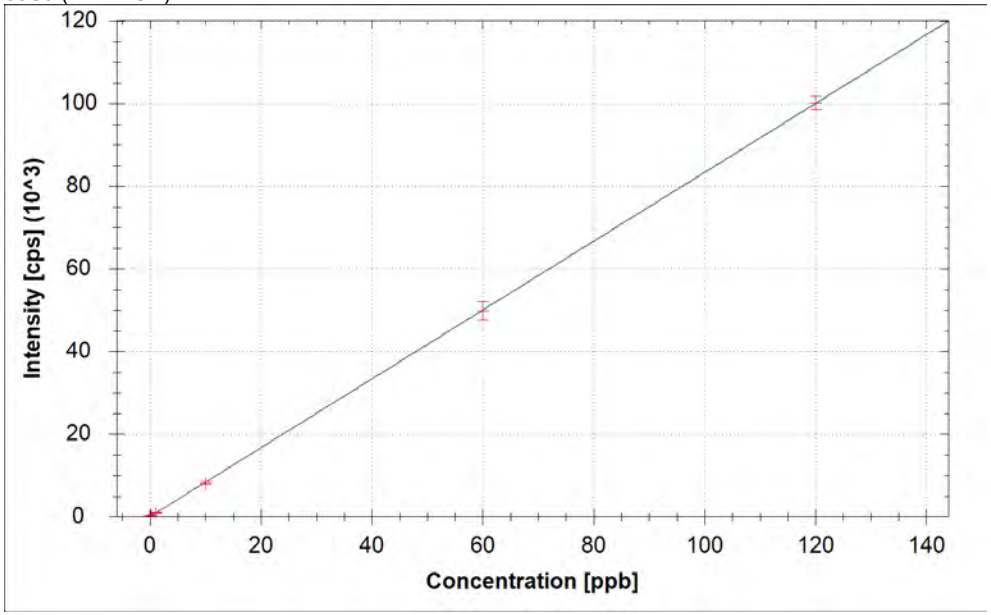
f(x) = 1987.9806*x + 19.9237
R² = 0.9999
BEC = 0.010 ppb
LoD = 0.0095 ppb

60Ni (KED AGD)



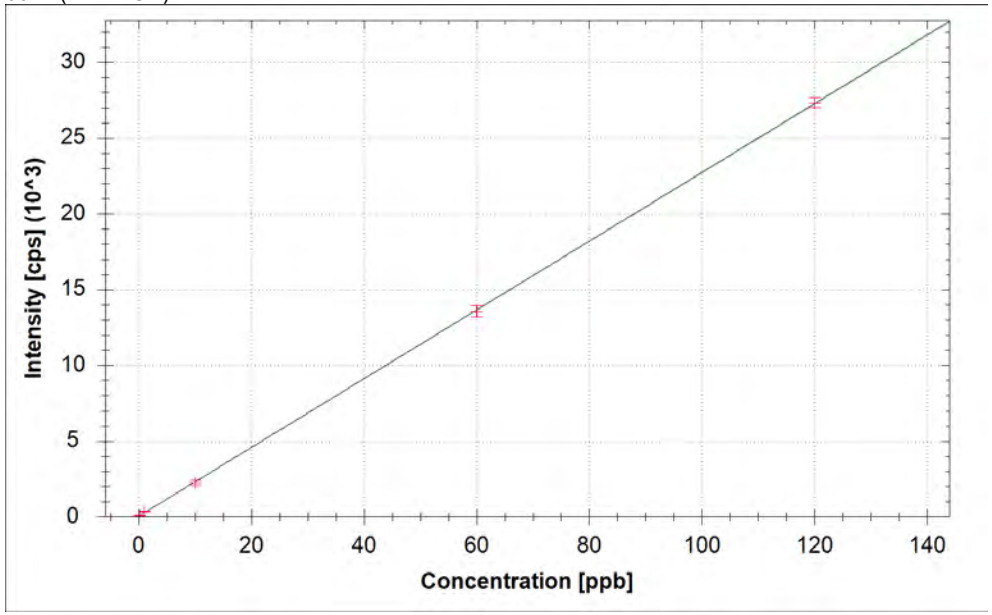
f(x) = 558.6298*x + 71.0284
R² = 1.0000
BEC = 0.127 ppb
LoD = 0.0332 ppb

65Cu (KED AGD)



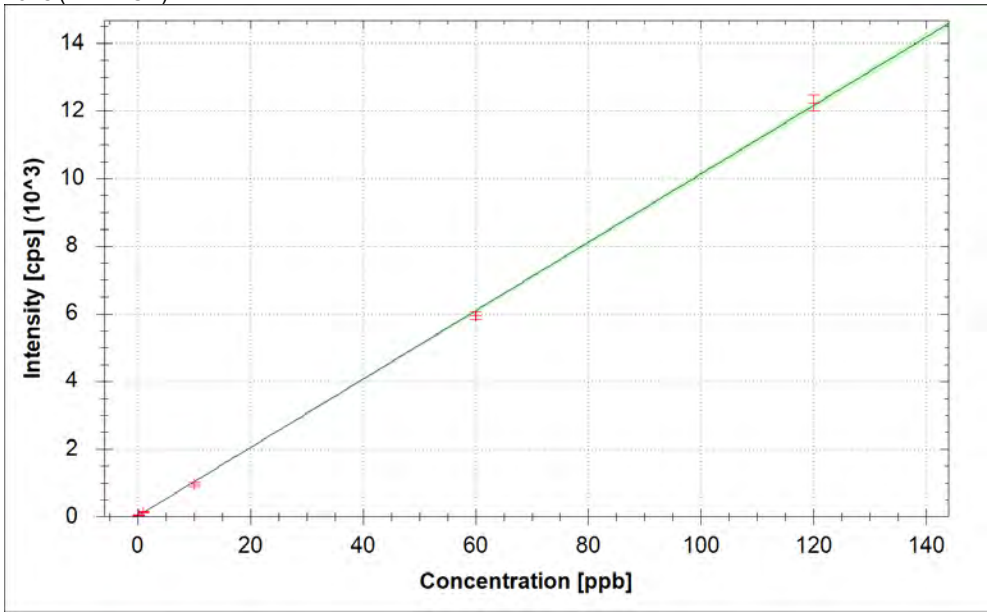
f(x) = 833.1199*x + 42.3475
R² = 1.0000
BEC = 0.051 ppb
LoD = 0.0390 ppb

66Zn (KED AGD)



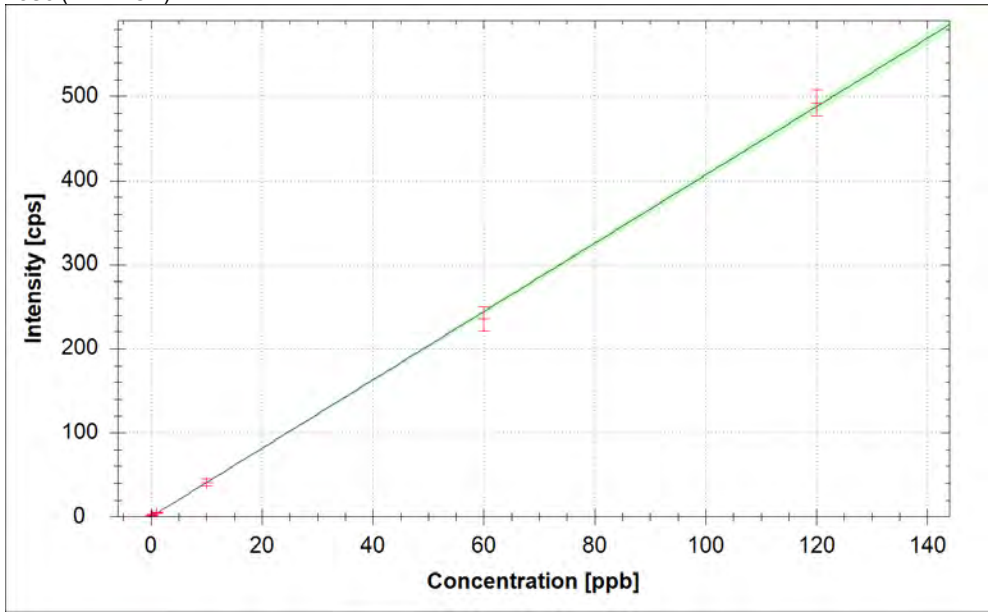
f(x) = 226.8066*x + 43.1120
R² = 1.0000
BEC = 0.190 ppb
LoD = 0.1155 ppb

75As (KED AGD)



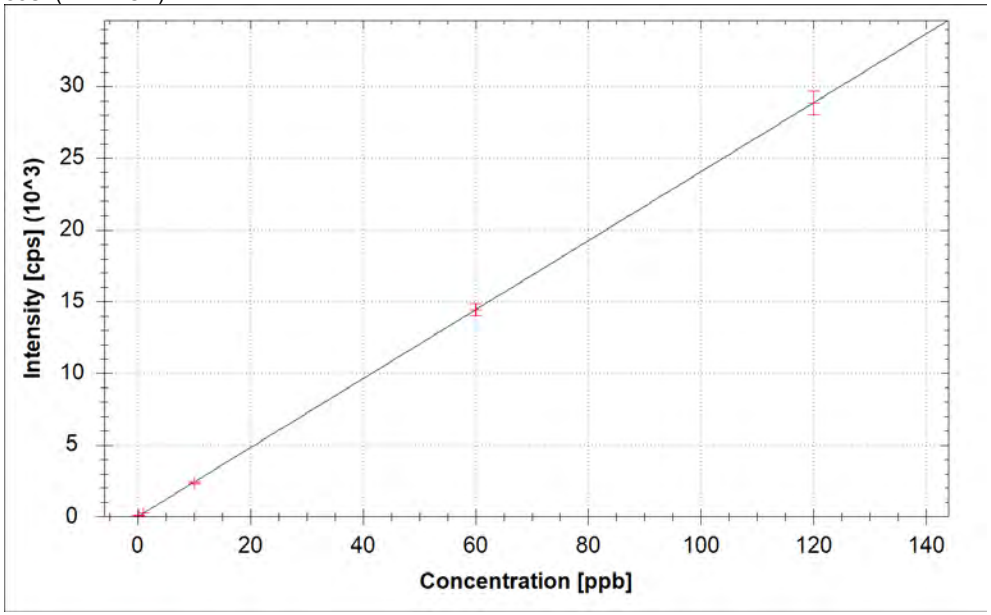
f(x) = 101.0684*x + 25.2015
R² = 0.9997
BEC = 0.249 ppb
LoD = 0.1126 ppb

78Se (KED AGD)



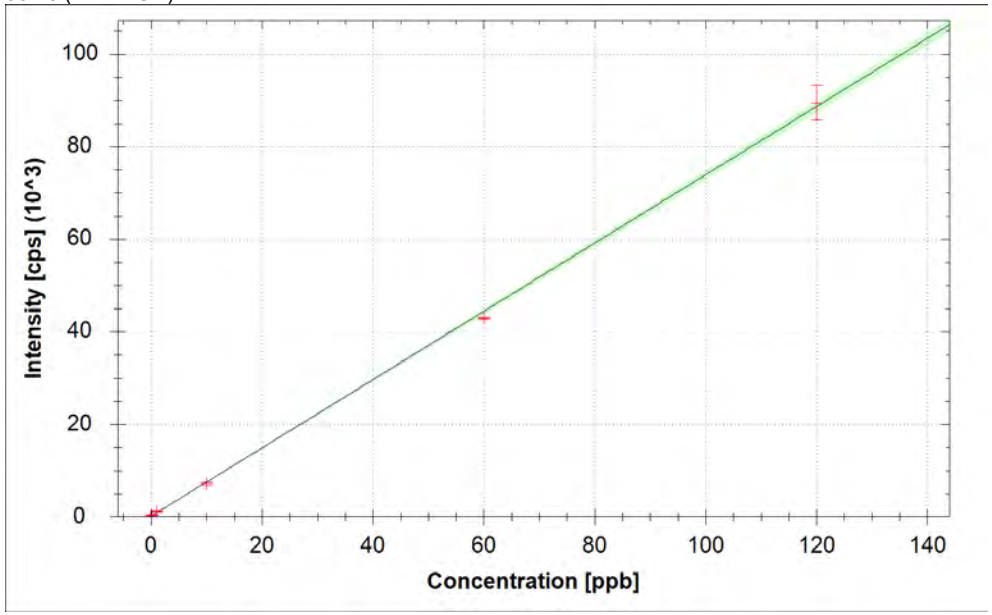
f(x) = 4.0648*x + 0.0843
R² = 0.9995
BEC = 0.021 ppb
LoD = 0.1059 ppb

88Sr (KED AGD)



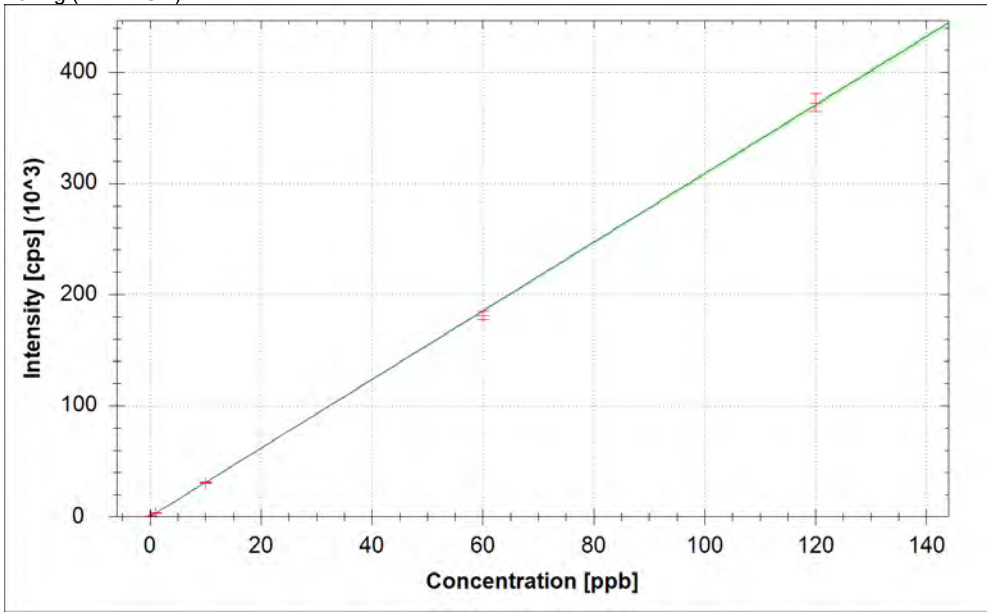
f(x) = 240.3272*x + 12.3629
R² = 1.0000
BEC = 0.051 ppb
LoD = 0.0078 ppb

95Mo (KED AGD)



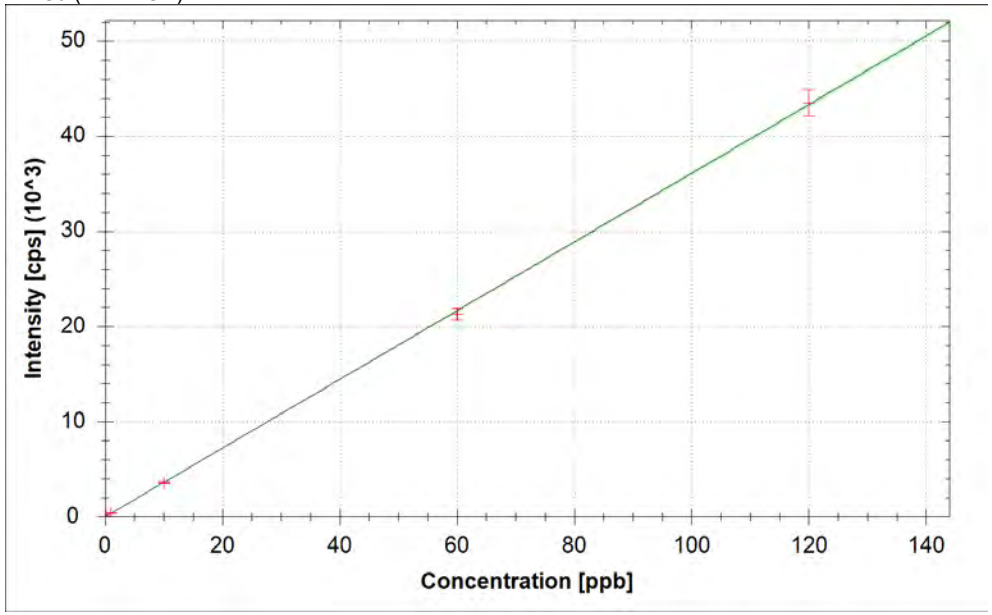
f(x) = 737.5559*x + 121.7936
R² = 0.9995
BEC = 0.165 ppb
LoD = 0.1743 ppb

107Ag (KED AGD)



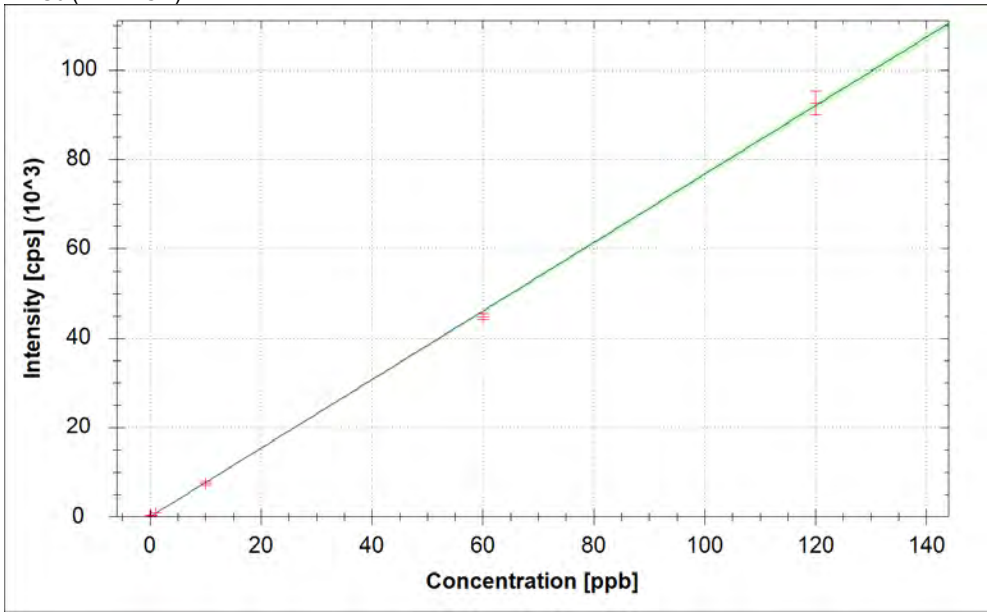
f(x) = 3085.5554*x + 8.9074
R² = 0.9998
BEC = 0.003 ppb
LoD = 0.0038 ppb

111Cd (KED AGD)



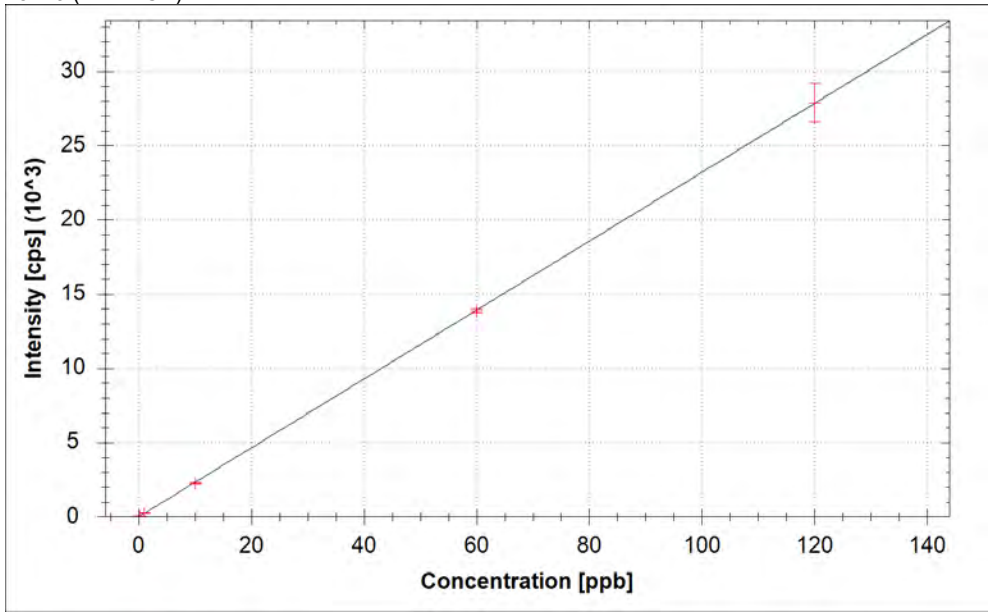
f(x) = 360.8447*x
R² = 0.9999
BEC = 0.000 ppb
LoD = 0.0000 ppb

121Sb (KED AGD)



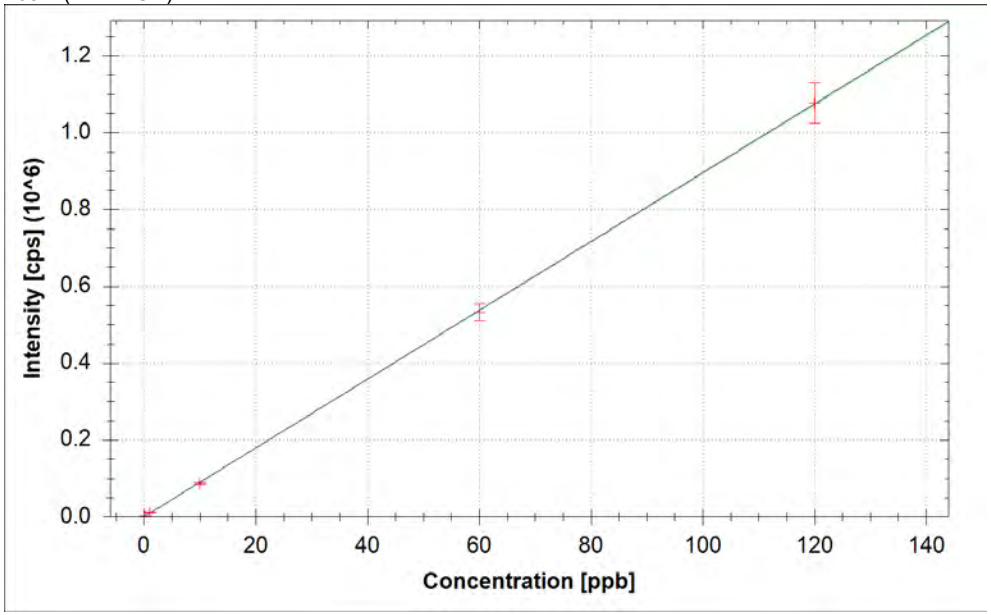
f(x) = 766.5565*x + 5.3464
R² = 0.9997
BEC = 0.007 ppb
LoD = 0.0055 ppb

137Ba (KED AGD)



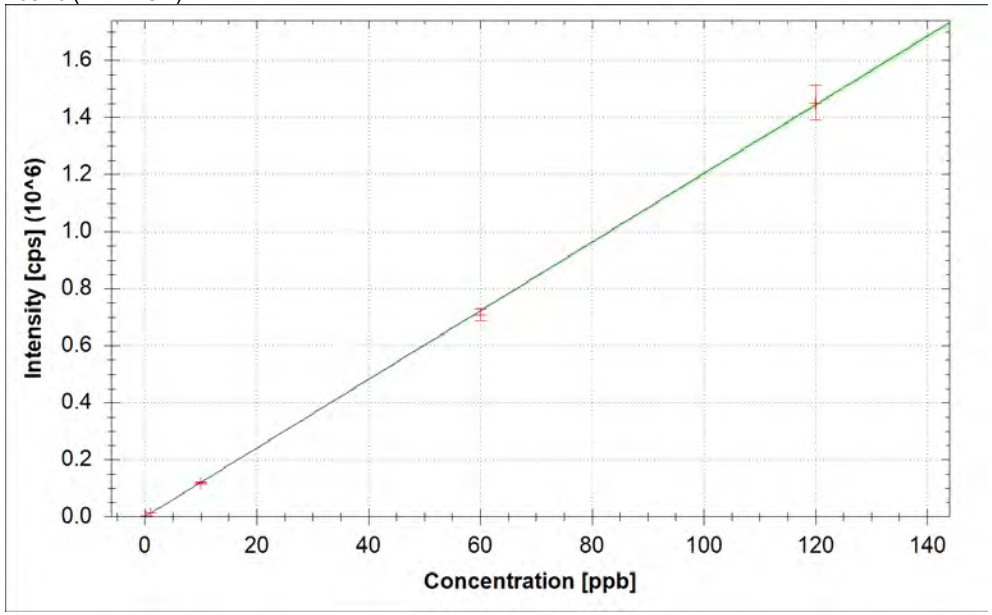
f(x) = 231.9344*x + 4.4209
R² = 1.0000
BEC = 0.019 ppb
LoD = 0.0654 ppb

205Tl (KED AGD)



f(x) = 8949.4973*x + 50.1460
R² = 1.0000
BEC = 0.006 ppb
LoD = 0.0047 ppb

208Pb (KED AGD)



f(x) = 12030.4041*x + 78.0986
R² = 0.9999
BEC = 0.006 ppb
LoD = 0.0057 ppb

Standards:

Analysis Index: 4
Analysis Name: 0.2/20 Cal
Analysis Type: STD
Analysis Started at: 12/3/2024 6:44:33 AM
Total Dilution Factor 50000
Rack 0
Vial 2

Category	Concentration average	Concentration RSD	Standard Concentration	Standard Relative Difference
6Li (STD AGD)	102.722 %	3.9 %		0.000 %
6Li (KED AGD)	107.071 %	6.6 %		0.000 %
9Be (STD AGD)	0.203 ppb	7.9 %	0.200 ppb	1.281 %
23Na (KED AGD)	12.675 ppb	76.2 %	20.000 ppb	36.627 %
24Mg (KED AGD)	18.191 ppb	4.9 %	20.000 ppb	9.045 %
27Al (KED AGD)	-0.061 ppb	591.0 %	0.200 ppb	130.452 %
39K (KED AGD)	18.667 ppb	66.9 %	20.000 ppb	6.666 %
44Ca (KED AGD)	16.916 ppb	23.8 %	20.000 ppb	15.421 %
45Sc (STD AGD)	99.245 %	0.7 %		0.000 %
51V (KED AGD)	0.184 ppb	56.7 %	0.200 ppb	7.864 %
52Cr (KED AGD)	0.141 ppb	19.6 %	0.200 ppb	29.719 %
55Mn (KED AGD)	0.409 ppb	21.0 %	0.200 ppb	104.434 %
57Fe (KED AGD)	18.632 ppb	22.3 %	20.000 ppb	6.842 %
59Co (KED AGD)	0.238 ppb	26.9 %	0.200 ppb	19.120 %
60Ni (KED AGD)	0.177 ppb	21.4 %	0.200 ppb	11.263 %
65Cu (KED AGD)	0.253 ppb	4.8 %	0.200 ppb	26.453 %
66Zn (KED AGD)	0.159 ppb	10.9 %	0.200 ppb	20.448 %
74Ge (KED AGD)	99.013 %	4.6 %		0.000 %
75As (KED AGD)	0.239 ppb	33.5 %	0.200 ppb	19.255 %
78Se (KED AGD)	0.340 ppb	76.0 %	0.200 ppb	70.067 %
88Sr (KED AGD)	0.206 ppb	13.4 %	0.200 ppb	3.108 %
95Mo (KED AGD)	0.236 ppb	56.3 %	0.200 ppb	17.777 %
103Rh (KED AGD)	101.192 %	6.8 %		0.000 %
107Ag (KED AGD)	0.188 ppb	7.9 %	0.200 ppb	6.144 %
111Cd (KED AGD)	0.188 ppb	13.8 %	0.200 ppb	5.776 %
115In (KED AGD)	100.633 %	4.7 %		0.000 %
121Sb (KED AGD)	0.206 ppb	12.3 %	0.200 ppb	2.980 %
137Ba (KED AGD)	0.151 ppb	30.1 %	0.200 ppb	24.588 %
159Tb (KED AGD)	101.166 %	5.7 %		0.000 %
175Lu (KED AGD)	101.053 %	6.4 %		0.000 %
205Tl (KED AGD)	0.193 ppb	10.3 %	0.200 ppb	3.402 %
208Pb (KED AGD)	0.200 ppb	7.7 %	0.200 ppb	0.091 %
209Bi (KED AGD)	101.796 %	6.2 %		0.000 %

Standards:

Analysis Index:	5
Analysis Name:	x1/100 Cal
Analysis Type:	STD
Analysis Started at:	12/3/2024 6:49:00 AM
Total Dilution Factor	10000
Rack	0
Vial	3

Standards:

Analysis Index: 6
Analysis Name: 10/1000 Cal
Analysis Type: STD
Analysis Started at: 12/3/2024 6:53:28 AM
Total Dilution Factor 1000
Rack 0
Vial 4

Category	Concentration average	Concentration RSD	Standard Concentration	Standard Relative Difference
6Li (STD AGD)	108.169 %	5.4 %		0.000 %
6Li (KED AGD)	114.703 %	4.9 %		0.000 %
9Be (STD AGD)	10.081 ppb	2.0 %	10.000 ppb	0.815 %
23Na (KED AGD)	988.615 ppb	3.9 %	1,000.000 ppb	1.138 %
24Mg (KED AGD)	972.587 ppb	2.7 %	1,000.000 ppb	2.741 %
27Al (KED AGD)	8.824 ppb	4.3 %	10.000 ppb	11.762 %
39K (KED AGD)	960.847 ppb	4.2 %	1,000.000 ppb	3.915 %
44Ca (KED AGD)	981.219 ppb	3.1 %	1,000.000 ppb	1.878 %
45Sc (STD AGD)	104.420 %	2.3 %		0.000 %
51V (KED AGD)	9.543 ppb	11.1 %	10.000 ppb	4.575 %
52Cr (KED AGD)	9.669 ppb	2.7 %	10.000 ppb	3.315 %
55Mn (KED AGD)	10.054 ppb	5.6 %	10.000 ppb	0.545 %
57Fe (KED AGD)	1,014.612 ppb	3.9 %	1,000.000 ppb	1.461 %
59Co (KED AGD)	10.294 ppb	2.0 %	10.000 ppb	2.938 %
60Ni (KED AGD)	10.134 ppb	5.9 %	10.000 ppb	1.343 %
65Cu (KED AGD)	9.688 ppb	5.2 %	10.000 ppb	3.123 %
66Zn (KED AGD)	9.718 ppb	7.6 %	10.000 ppb	2.819 %
74Ge (KED AGD)	110.287 %	5.2 %		0.000 %
75As (KED AGD)	9.204 ppb	7.4 %	10.000 ppb	7.960 %
78Se (KED AGD)	9.995 ppb	10.1 %	10.000 ppb	0.055 %
88Sr (KED AGD)	9.811 ppb	4.3 %	10.000 ppb	1.888 %
95Mo (KED AGD)	9.494 ppb	4.8 %	10.000 ppb	5.057 %
103Rh (KED AGD)	107.159 %	3.2 %		0.000 %
107Ag (KED AGD)	9.877 ppb	2.0 %	10.000 ppb	1.231 %
111Cd (KED AGD)	9.963 ppb	3.7 %	10.000 ppb	0.365 %
115In (KED AGD)	108.964 %	4.4 %		0.000 %
121Sb (KED AGD)	9.722 ppb	5.6 %	10.000 ppb	2.778 %
137Ba (KED AGD)	9.658 ppb	3.1 %	10.000 ppb	3.418 %
159Tb (KED AGD)	108.854 %	1.9 %		0.000 %
175Lu (KED AGD)	110.326 %	1.7 %		0.000 %
205Tl (KED AGD)	9.626 ppb	4.4 %	10.000 ppb	3.743 %
208Pb (KED AGD)	9.824 ppb	2.8 %	10.000 ppb	1.758 %
209Bi (KED AGD)	110.716 %	3.1 %		0.000 %

Standards:

Analysis Index: 7
Analysis Name: 60/6000 Cal
Analysis Type: STD
Analysis Started at: 12/3/2024 6:57:56 AM
Total Dilution Factor 166.6666666
Rack 0
Vial 5

Category	Concentration average	Concentration RSD	Standard Concentration	Standard Relative Difference
6Li (STD AGD)	107.436 %	4.4 %		0.000 %
6Li (KED AGD)	115.489 %	1.7 %		0.000 %
9Be (STD AGD)	59.072 ppb	2.0 %	60.000 ppb	1.546 %
23Na (KED AGD)	6,010.919 ppb	2.8 %	6,000.000 ppb	0.182 %
24Mg (KED AGD)	5,984.382 ppb	3.3 %	6,000.000 ppb	0.260 %
27Al (KED AGD)	57.287 ppb	4.0 %	60.000 ppb	4.522 %
39K (KED AGD)	6,060.335 ppb	0.9 %	6,000.000 ppb	1.006 %
44Ca (KED AGD)	5,807.476 ppb	2.1 %	6,000.000 ppb	3.209 %
45Sc (STD AGD)	105.977 %	0.6 %		0.000 %
51V (KED AGD)	58.527 ppb	2.2 %	60.000 ppb	2.455 %
52Cr (KED AGD)	59.478 ppb	3.0 %	60.000 ppb	0.870 %
55Mn (KED AGD)	59.947 ppb	3.0 %	60.000 ppb	0.088 %
57Fe (KED AGD)	5,805.118 ppb	2.3 %	6,000.000 ppb	3.248 %
59Co (KED AGD)	59.032 ppb	5.5 %	60.000 ppb	1.613 %
60Ni (KED AGD)	59.879 ppb	4.0 %	60.000 ppb	0.201 %
65Cu (KED AGD)	59.730 ppb	4.6 %	60.000 ppb	0.450 %
66Zn (KED AGD)	59.572 ppb	2.6 %	60.000 ppb	0.714 %
74Ge (KED AGD)	109.833 %	2.9 %		0.000 %
75As (KED AGD)	58.549 ppb	2.0 %	60.000 ppb	2.418 %
78Se (KED AGD)	57.831 ppb	6.1 %	60.000 ppb	3.614 %
88Sr (KED AGD)	60.095 ppb	2.8 %	60.000 ppb	0.158 %
95Mo (KED AGD)	57.931 ppb	0.5 %	60.000 ppb	3.449 %
103Rh (KED AGD)	108.445 %	2.7 %		0.000 %
107Ag (KED AGD)	58.734 ppb	2.0 %	60.000 ppb	2.111 %
111Cd (KED AGD)	58.987 ppb	3.0 %	60.000 ppb	1.688 %
115In (KED AGD)	110.456 %	1.6 %		0.000 %
121Sb (KED AGD)	58.434 ppb	1.6 %	60.000 ppb	2.610 %
137Ba (KED AGD)	59.773 ppb	0.9 %	60.000 ppb	0.378 %
159Tb (KED AGD)	110.766 %	0.6 %		0.000 %
175Lu (KED AGD)	110.304 %	1.9 %		0.000 %
205Tl (KED AGD)	59.435 ppb	4.1 %	60.000 ppb	0.942 %
208Pb (KED AGD)	58.856 ppb	3.0 %	60.000 ppb	1.907 %
209Bi (KED AGD)	111.548 %	2.0 %		0.000 %

Standards:

Analysis Index: 8
Analysis Name: 120/12000 Cal
Analysis Type: STD
Analysis Started at: 12/3/2024 7:02:24 AM
Total Dilution Factor 83.33333333
Rack 0
Vial 6

Category	Concentration average	Concentration RSD	Standard Concentration	Standard Relative Difference
6Li (STD AGD)	106.282 %	3.6 %		0.000 %
6Li (KED AGD)	117.789 %	0.7 %		0.000 %
9Be (STD AGD)	120.457 ppb	1.0 %	120.000 ppb	0.381 %
23Na (KED AGD)	11,995.681 ppb	4.8 %	12,000.000 ppb	0.036 %
24Mg (KED AGD)	12,010.072 ppb	0.6 %	12,000.000 ppb	0.084 %
27Al (KED AGD)	121.454 ppb	0.5 %	120.000 ppb	1.212 %
39K (KED AGD)	11,973.067 ppb	3.4 %	12,000.000 ppb	0.224 %
44Ca (KED AGD)	12,097.757 ppb	2.0 %	12,000.000 ppb	0.815 %
45Sc (STD AGD)	105.511 %	1.7 %		0.000 %
51V (KED AGD)	120.779 ppb	4.6 %	120.000 ppb	0.649 %
52Cr (KED AGD)	120.289 ppb	3.8 %	120.000 ppb	0.241 %
55Mn (KED AGD)	120.021 ppb	2.5 %	120.000 ppb	0.018 %
57Fe (KED AGD)	12,096.115 ppb	0.9 %	12,000.000 ppb	0.801 %
59Co (KED AGD)	120.460 ppb	3.5 %	120.000 ppb	0.383 %
60Ni (KED AGD)	120.049 ppb	1.9 %	120.000 ppb	0.041 %
65Cu (KED AGD)	120.161 ppb	1.6 %	120.000 ppb	0.134 %
66Zn (KED AGD)	120.236 ppb	1.2 %	120.000 ppb	0.197 %
74Ge (KED AGD)	110.009 %	2.4 %		0.000 %
75As (KED AGD)	120.791 ppb	1.9 %	120.000 ppb	0.659 %
78Se (KED AGD)	121.084 ppb	3.2 %	120.000 ppb	0.903 %
88Sr (KED AGD)	119.968 ppb	2.9 %	120.000 ppb	0.026 %
95Mo (KED AGD)	121.074 ppb	4.2 %	120.000 ppb	0.895 %
103Rh (KED AGD)	109.504 %	5.1 %		0.000 %
107Ag (KED AGD)	120.643 ppb	2.1 %	120.000 ppb	0.536 %
111Cd (KED AGD)	120.509 ppb	3.2 %	120.000 ppb	0.424 %
115In (KED AGD)	110.297 %	3.2 %		0.000 %
121Sb (KED AGD)	120.805 ppb	2.9 %	120.000 ppb	0.671 %
137Ba (KED AGD)	120.142 ppb	4.7 %	120.000 ppb	0.118 %
159Tb (KED AGD)	111.645 %	3.4 %		0.000 %
175Lu (KED AGD)	112.452 %	3.8 %		0.000 %
205Tl (KED AGD)	120.312 ppb	4.9 %	120.000 ppb	0.260 %
208Pb (KED AGD)	120.586 ppb	4.2 %	120.000 ppb	0.489 %
209Bi (KED AGD)	112.599 %	3.5 %		0.000 %

Standards:

Analysis Index: 9
Analysis Name: 1/100 Cal
Analysis Type: STD
Analysis Started at: 12/3/2024 7:07:58 AM
Total Dilution Factor 10000
Rack 0
Vial 3

Category	Concentration average	Concentration RSD	Standard Concentration	Standard Relative Difference
6Li (STD AGD)	107.604 %	3.7 %		0.000 %
6Li (KED AGD)	117.228 %	2.3 %		0.000 %
9Be (STD AGD)	1.053 ppb	0.8 %	1.000 ppb	5.289 %
23Na (KED AGD)	78.431 ppb	7.1 %	100.000 ppb	21.569 %
24Mg (KED AGD)	102.901 ppb	5.9 %	100.000 ppb	2.901 %
27Al (KED AGD)	1.067 ppb	46.5 %	1.000 ppb	6.696 %
39K (KED AGD)	103.585 ppb	16.1 %	100.000 ppb	3.585 %
44Ca (KED AGD)	109.031 ppb	23.2 %	100.000 ppb	9.031 %
45Sc (STD AGD)	101.882 %	1.1 %		0.000 %
51V (KED AGD)	0.509 ppb	23.3 %	1.000 ppb	49.122 %
52Cr (KED AGD)	0.977 ppb	8.9 %	1.000 ppb	2.263 %
55Mn (KED AGD)	1.058 ppb	8.0 %	1.000 ppb	5.822 %
57Fe (KED AGD)	113.297 ppb	8.3 %	100.000 ppb	13.297 %
59Co (KED AGD)	0.967 ppb	1.7 %	1.000 ppb	3.335 %
60Ni (KED AGD)	1.023 ppb	11.2 %	1.000 ppb	2.323 %
65Cu (KED AGD)	1.036 ppb	10.9 %	1.000 ppb	3.590 %
66Zn (KED AGD)	1.219 ppb	9.3 %	1.000 ppb	21.903 %
74Ge (KED AGD)	106.462 %	1.9 %		0.000 %
75As (KED AGD)	1.055 ppb	12.5 %	1.000 ppb	5.467 %
78Se (KED AGD)	1.088 ppb	14.6 %	1.000 ppb	8.841 %
88Sr (KED AGD)	0.997 ppb	1.2 %	1.000 ppb	0.281 %
95Mo (KED AGD)	1.387 ppb	18.4 %	1.000 ppb	38.711 %
103Rh (KED AGD)	110.221 %	1.6 %		0.000 %
107Ag (KED AGD)	1.004 ppb	2.5 %	1.000 ppb	0.371 %
111Cd (KED AGD)	1.013 ppb	3.0 %	1.000 ppb	1.267 %
115In (KED AGD)	108.737 %	1.6 %		0.000 %
121Sb (KED AGD)	1.101 ppb	4.4 %	1.000 ppb	10.063 %
137Ba (KED AGD)	1.034 ppb	8.2 %	1.000 ppb	3.404 %
159Tb (KED AGD)	113.222 %	1.7 %		0.000 %
175Lu (KED AGD)	110.657 %	1.4 %		0.000 %
205Tl (KED AGD)	1.188 ppb	2.9 %	1.000 ppb	18.824 %
208Pb (KED AGD)	1.041 ppb	1.1 %	1.000 ppb	4.095 %
209Bi (KED AGD)	114.126 %	1.8 %		0.000 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	1	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	Rinse	Rack	0		
Analysis started at:	12/3/2024 6:31:09 AM	Vial	1		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	104.396 %	113.019 %	0.014 ppb	13.493 ppb	4.744 ppb	10.123 ppb	5.094 ppb	19.867 ppb	100.167 %
Concentration per Run 1	99.654 %	115.320 %	0.013 ppb	14.984 ppb	6.819 ppb	10.124 ppb	6.768 ppb	4.449 ppb	99.464 %
Concentration per Run 2	106.179 %	107.744 %	0.014 ppb	21.395 ppb	3.089 ppb	11.205 ppb	4.589 ppb	29.911 ppb	101.952 %
Concentration per Run 3	107.354 %	115.994 %	0.015 ppb	4.101 ppb	4.326 ppb	9.041 ppb	3.925 ppb	25.239 ppb	99.085 %
Concentration RSD	4.0 %	4.1 %	6.6 %	64.8 %	40.0 %	10.7 %	29.2 %	68.2 %	1.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.124 ppb	0.137 ppb	0.490 ppb	68.729 ppb	0.027 ppb	2.873 ppb	0.571 ppb	2.468 ppb	110.119 %
Concentration per Run 1	-0.144 ppb	0.127 ppb	0.516 ppb	70.229 ppb	0.015 ppb	3.011 ppb	0.626 ppb	2.557 ppb	103.725 %
Concentration per Run 2	-0.067 ppb	0.181 ppb	0.420 ppb	73.795 ppb	0.038 ppb	2.865 ppb	0.575 ppb	2.453 ppb	111.699 %
Concentration per Run 3	-0.161 ppb	0.103 ppb	0.534 ppb	62.163 ppb	0.028 ppb	2.744 ppb	0.512 ppb	2.395 ppb	114.932 %
Concentration RSD	40.2 %	29.3 %	12.5 %	8.7 %	42.7 %	4.7 %	9.9 %	3.3 %	5.2 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.040 ppb	0.046 ppb	0.019 ppb	0.248 ppb	101.983 %	0.041 ppb	0.002 ppb	102.582 %	0.034 ppb
Concentration per Run 1	0.093 ppb	-0.050 ppb	0.018 ppb	0.274 ppb	102.516 %	0.044 ppb	0.000 ppb	103.713 %	0.025 ppb
Concentration per Run 2	-0.027 ppb	0.008 ppb	0.011 ppb	0.235 ppb	100.931 %	0.037 ppb	0.004 ppb	100.080 %	0.033 ppb
Concentration per Run 3	0.053 ppb	0.179 ppb	0.026 ppb	0.236 ppb	102.502 %	0.041 ppb	0.004 ppb	103.953 %	0.043 ppb
Concentration RSD	154.5 %	259.0 %	41.3 %	9.0 %	0.9 %	9.3 %	86.6 %	2.1 %	27.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.078 ppb	104.522 %	104.073 %	0.005 ppb	0.089 ppb	104.630 %
Concentration per Run 1	0.063 ppb	106.682 %	102.986 %	0.003 ppb	0.088 ppb	107.504 %
Concentration per Run 2	0.122 ppb	103.674 %	103.099 %	0.006 ppb	0.098 ppb	102.675 %
Concentration per Run 3	0.050 ppb	103.208 %	106.134 %	0.005 ppb	0.081 ppb	103.712 %
Concentration RSD	48.8 %	1.8 %	1.7 %	31.4 %	9.8 %	2.4 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index: 2
Analysis label: CAL LOT #M23-1225
Analysis started at: 12/3/2024 6:35:35 AM
User name ALPHALAB\a2-icpmsq2
Rack 0
Vial 1
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	99.786 %	111.111 %	0.016 ppb	6.954 ppb	5.992 ppb	9.533 ppb	11.375 ppb	15.948 ppb	95.904 %
Concentration per Run 1	95.234 %	117.677 %	0.015 ppb	-4.561 ppb	3.868 ppb	9.279 ppb	2.855 ppb	8.770 ppb	94.603 %
Concentration per Run 2	100.982 %	118.182 %	0.016 ppb	-0.534 ppb	6.728 ppb	9.155 ppb	17.837 ppb	24.172 ppb	94.873 %
Concentration per Run 3	103.143 %	97.475 %	0.018 ppb	25.957 ppb	7.380 ppb	10.166 ppb	13.433 ppb	14.901 ppb	98.236 %
Concentration RSD	4.1 %	10.6 %	9.6 %	238.4 %	31.2 %	5.8 %	67.7 %	48.6 %	2.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.157 ppb	0.167 ppb	0.432 ppb	73.240 ppb	0.017 ppb	3.045 ppb	0.575 ppb	2.553 ppb	99.832 %
Concentration per Run 1	-0.156 ppb	0.168 ppb	0.361 ppb	80.521 ppb	0.025 ppb	3.098 ppb	0.629 ppb	2.416 ppb	101.382 %
Concentration per Run 2	-0.170 ppb	0.152 ppb	0.557 ppb	72.858 ppb	0.016 ppb	2.909 ppb	0.556 ppb	2.817 ppb	100.554 %
Concentration per Run 3	-0.146 ppb	0.181 ppb	0.380 ppb	66.341 ppb	0.011 ppb	3.128 ppb	0.540 ppb	2.425 ppb	97.559 %
Concentration RSD	7.7 %	9.0 %	25.0 %	9.7 %	43.0 %	3.9 %	8.3 %	9.0 %	2.0 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.018 ppb	0.053 ppb	0.023 ppb	0.177 ppb	99.487 %	0.034 ppb	0.002 ppb	99.851 %	0.020 ppb
Concentration per Run 1	0.018 ppb	0.091 ppb	0.029 ppb	0.151 ppb	107.309 %	0.034 ppb	0.007 ppb	106.600 %	0.016 ppb
Concentration per Run 2	0.013 ppb	-0.046 ppb	0.017 ppb	0.203 ppb	97.480 %	0.037 ppb	0.000 ppb	98.186 %	0.018 ppb
Concentration per Run 3	0.021 ppb	0.112 ppb	0.023 ppb	0.178 ppb	93.670 %	0.032 ppb	0.000 ppb	94.768 %	0.026 ppb
Concentration RSD	23.2 %	163.2 %	24.7 %	14.4 %	7.1 %	7.8 %	173.2 %	6.1 %	27.4 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.087 ppb	101.362 %	101.252 %	0.004 ppb	0.093 ppb	101.953 %
Concentration per Run 1	0.048 ppb	107.992 %	110.855 %	0.001 ppb	0.088 ppb	108.473 %
Concentration per Run 2	0.096 ppb	101.310 %	98.916 %	0.001 ppb	0.106 ppb	99.461 %
Concentration per Run 3	0.117 ppb	94.784 %	93.986 %	0.008 ppb	0.084 ppb	97.925 %
Concentration RSD	40.9 %	6.5 %	8.6 %	114.4 %	12.9 %	5.6 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	3	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	Blank NTB ICPMSQ2	Rack	4		
Analysis started at:	12/3/2024 6:40:01 AM	Vial	49		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	100.000 %	100.000 %	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	100.000 %
Concentration per Run	100.000 %	100.000 %	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	100.000 %
Concentration RSD	0.0 %	0.0 %	0.4 %	0.0 %	0.3 %	0.1 %	0.1 %	0.1 %	0.0 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	100.000 %
Concentration per Run	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	100.000 %
Concentration RSD	0.1 %	0.1 %	0.6 %	0.4 %	0.3 %	0.1 %	0.3 %	0.2 %	0.0 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	100.000 %	0.000 ppb	0.000 ppb	100.000 %	0.000 ppb
Concentration per Run	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	100.000 %	0.000 ppb	0.000 ppb	100.000 %	0.000 ppb
Concentration RSD	0.2 %	1.7 %	0.1 %	0.4 %	0.0 %	0.4 %		0.0 %	0.3 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.000 ppb	100.000 %	100.000 %	0.000 ppb	0.000 ppb	100.000 %
Concentration per Run	0.000 ppb	100.000 %	100.000 %	0.000 ppb	0.000 ppb	100.000 %
Concentration RSD	1.1 %	0.0 %	0.0 %	0.3 %	0.3 %	0.0 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	4	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	0.2/20 Cal	Rack	0		
Analysis started at:	12/3/2024 6:44:33 AM	Vial	2		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	102.722 %	107.071 %	0.203 ppb	12.675 ppb	18.191 ppb	-0.061 ppb	18.667 ppb	16.916 ppb	99.245 %
Concentration per Run 1	98.276 %	114.815 %	0.221 ppb	1.861 ppb	18.851 ppb	-0.361 ppb	5.729 ppb	16.181 ppb	98.392 %
Concentration per Run 2	103.992 %	101.010 %	0.194 ppb	20.460 ppb	18.550 ppb	-0.160 ppb	30.629 ppb	13.305 ppb	99.720 %
Concentration per Run 3	105.897 %	105.387 %	0.193 ppb	15.703 ppb	17.171 ppb	0.338 ppb	19.642 ppb	21.262 ppb	99.623 %
Concentration RSD	3.9 %	6.6 %	7.9 %	76.2 %	4.9 %	591.0 %	66.9 %	23.8 %	0.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.184 ppb	0.141 ppb	0.409 ppb	18.632 ppb	0.238 ppb	0.177 ppb	0.253 ppb	0.159 ppb	99.013 %
Concentration per Run 1	0.081 ppb	0.109 ppb	0.420 ppb	18.552 ppb	0.179 ppb	0.154 ppb	0.253 ppb	0.156 ppb	104.100 %
Concentration per Run 2	0.290 ppb	0.161 ppb	0.488 ppb	14.523 ppb	0.306 ppb	0.158 ppb	0.241 ppb	0.178 ppb	95.177 %
Concentration per Run 3	0.181 ppb	0.152 ppb	0.318 ppb	22.820 ppb	0.229 ppb	0.221 ppb	0.265 ppb	0.144 ppb	97.761 %
Concentration RSD	56.7 %	19.6 %	21.0 %	22.3 %	26.9 %	21.4 %	4.8 %	10.9 %	4.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.239 ppb	0.340 ppb	0.206 ppb	0.236 ppb	101.192 %	0.188 ppb	0.188 ppb	100.633 %	0.206 ppb
Concentration per Run 1	0.154 ppb	0.176 ppb	0.177 ppb	0.087 ppb	108.730 %	0.178 ppb	0.176 ppb	106.113 %	0.189 ppb
Concentration per Run 2	0.313 ppb	0.638 ppb	0.211 ppb	0.276 ppb	99.440 %	0.205 ppb	0.218 ppb	97.510 %	0.235 ppb
Concentration per Run 3	0.249 ppb	0.206 ppb	0.231 ppb	0.343 ppb	95.405 %	0.180 ppb	0.171 ppb	98.276 %	0.193 ppb
Concentration RSD	33.5 %	76.0 %	13.4 %	56.3 %	6.8 %	7.9 %	13.8 %	4.7 %	12.3 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.151 ppb	101.166 %	101.053 %	0.193 ppb	0.200 ppb	101.796 %
Concentration per Run 1	0.183 ppb	107.723 %	108.279 %	0.175 ppb	0.183 ppb	108.418 %
Concentration per Run 2	0.171 ppb	99.061 %	99.036 %	0.189 ppb	0.213 ppb	101.111 %
Concentration per Run 3	0.099 ppb	96.715 %	95.845 %	0.215 ppb	0.205 ppb	95.859 %
Concentration RSD	30.1 %	5.7 %	6.4 %	10.3 %	7.7 %	6.2 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	5	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	x1/100 Cal	Rack	0		
Analysis started at:	12/3/2024 6:49:00 AM	Vial	3		

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	6	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	10/1000 Cal	Rack	0		
Analysis started at:	12/3/2024 6:53:28 AM	Vial	4		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	108.169 %	114.703 %	10.081 ppb	988.615 ppb	972.587 ppb	8.824 ppb	960.847 ppb	981.219 ppb	104.420 %
Concentration per Run 1	102.038 %	109.933 %	10.222 ppb	1,015.665 ppb	984.035 ppb	8.528 ppb	995.401 ppb	1,006.579 ppb	101.713 %
Concentration per Run 2	108.714 %	120.876 %	10.171 ppb	944.104 ppb	942.606 ppb	9.252 ppb	916.238 ppb	989.407 ppb	106.159 %
Concentration per Run 3	113.756 %	113.300 %	9.851 ppb	1,006.076 ppb	991.121 ppb	8.691 ppb	970.902 ppb	947.670 ppb	105.390 %
Concentration RSD	5.4 %	4.9 %	2.0 %	3.9 %	2.7 %	4.3 %	4.2 %	3.1 %	2.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	9.543 ppb	9.669 ppb	10.054 ppb	1,014.612 ppb	10.294 ppb	10.134 ppb	9.688 ppb	9.718 ppb	110.287 %
Concentration per Run 1	8.529 ppb	9.467 ppb	9.714 ppb	976.545 ppb	10.057 ppb	9.459 ppb	9.118 ppb	8.879 ppb	116.858 %
Concentration per Run 2	9.456 ppb	9.581 ppb	9.747 ppb	1,055.478 ppb	10.405 ppb	10.325 ppb	10.061 ppb	9.994 ppb	106.291 %
Concentration per Run 3	10.642 ppb	9.958 ppb	10.703 ppb	1,011.811 ppb	10.419 ppb	10.619 ppb	9.884 ppb	10.281 ppb	107.711 %
Concentration RSD	11.1 %	2.7 %	5.6 %	3.9 %	2.0 %	5.9 %	5.2 %	7.6 %	5.2 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	9.204 ppb	9.995 ppb	9.811 ppb	9.494 ppb	107.159 %	9.877 ppb	9.963 ppb	108.964 %	9.722 ppb
Concentration per Run 1	8.452 ppb	8.914 ppb	9.329 ppb	9.004 ppb	110.717 %	9.697 ppb	9.661 ppb	114.479 %	9.097 ppb
Concentration per Run 2	9.393 ppb	10.163 ppb	10.092 ppb	9.579 ppb	103.795 %	9.848 ppb	10.368 ppb	106.466 %	10.079 ppb
Concentration per Run 3	9.766 ppb	10.907 ppb	10.012 ppb	9.900 ppb	106.966 %	10.086 ppb	9.861 ppb	105.949 %	9.990 ppb
Concentration RSD	7.4 %	10.1 %	4.3 %	4.8 %	3.2 %	2.0 %	3.7 %	4.4 %	5.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	9.658 ppb	108.854 %	110.326 %	9.626 ppb	9.824 ppb	110.716 %
Concentration per Run 1	9.422 ppb	110.830 %	110.539 %	9.158 ppb	9.513 ppb	114.683 %
Concentration per Run 2	9.553 ppb	106.765 %	108.315 %	9.720 ppb	9.943 ppb	108.653 %
Concentration per Run 3	9.999 ppb	108.967 %	112.124 %	9.999 ppb	10.017 ppb	108.810 %
Concentration RSD	3.1 %	1.9 %	1.7 %	4.4 %	2.8 %	3.1 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index: 7
Analysis label: 60/6000 Cal
Analysis started at: 12/3/2024 6:57:56 AM
User name ALPHALAB\a2-icpmsq2
Rack 0
Vial 5
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	107.436 %	115.489 %	59.072 ppb	6,010.919 ppb	5,984.382 ppb	57.287 ppb	6,060.335 ppb	5,807.476 ppb	105.977 %
Concentration per Run 1	102.043 %	115.994 %	60.335 ppb	5,965.521 ppb	5,991.824 ppb	54.666 ppb	6,000.335 ppb	5,673.083 ppb	105.249 %
Concentration per Run 2	109.967 %	113.300 %	58.867 ppb	6,194.979 ppb	6,178.611 ppb	58.507 ppb	6,069.637 ppb	5,841.937 ppb	106.294 %
Concentration per Run 3	110.299 %	117.172 %	58.015 ppb	5,872.258 ppb	5,782.710 ppb	58.688 ppb	6,111.034 ppb	5,907.409 ppb	106.387 %
Concentration RSD	4.4 %	1.7 %	2.0 %	2.8 %	3.3 %	4.0 %	0.9 %	2.1 %	0.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	58.527 ppb	59.478 ppb	59.947 ppb	5,805.118 ppb	59.032 ppb	59.879 ppb	59.730 ppb	59.572 ppb	109.833 %
Concentration per Run 1	57.412 ppb	57.784 ppb	59.234 ppb	5,683.851 ppb	59.003 ppb	59.754 ppb	60.801 ppb	59.520 ppb	112.341 %
Concentration per Run 2	59.892 ppb	61.299 ppb	61.964 ppb	5,945.620 ppb	62.288 ppb	62.311 ppb	61.768 ppb	61.155 ppb	106.193 %
Concentration per Run 3	58.278 ppb	59.350 ppb	58.644 ppb	5,785.882 ppb	55.805 ppb	57.573 ppb	56.621 ppb	58.040 ppb	110.964 %
Concentration RSD	2.2 %	3.0 %	3.0 %	2.3 %	5.5 %	4.0 %	4.6 %	2.6 %	2.9 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	58.549 ppb	57.831 ppb	60.095 ppb	57.931 ppb	108.445 %	58.734 ppb	58.987 ppb	110.456 %	58.434 ppb
Concentration per Run 1	58.270 ppb	54.521 ppb	58.933 ppb	57.936 ppb	110.658 %	57.890 ppb	57.219 ppb	112.299 %	57.986 ppb
Concentration per Run 2	59.822 ppb	61.592 ppb	62.051 ppb	57.642 ppb	105.086 %	60.093 ppb	60.805 ppb	108.712 %	59.503 ppb
Concentration per Run 3	57.555 ppb	57.381 ppb	59.301 ppb	58.214 ppb	109.591 %	58.218 ppb	58.937 ppb	110.357 %	57.814 ppb
Concentration RSD	2.0 %	6.1 %	2.8 %	0.5 %	2.7 %	2.0 %	3.0 %	1.6 %	1.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	59.773 ppb	110.766 %	110.304 %	59.435 ppb	58.856 ppb	111.548 %
Concentration per Run 1	59.889 ppb	111.334 %	112.724 %	57.047 ppb	57.188 ppb	113.777 %
Concentration per Run 2	60.240 ppb	110.940 %	109.337 %	59.345 ppb	58.710 ppb	111.517 %
Concentration per Run 3	59.192 ppb	110.026 %	108.850 %	61.912 ppb	60.669 ppb	109.349 %
Concentration RSD	0.9 %	0.6 %	1.9 %	4.1 %	3.0 %	2.0 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	8	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	120/12000 Cal	Rack	0		
Analysis started at:	12/3/2024 7:02:24 AM	Vial	6		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	106.282 %	117.789 %	120.457 ppb	11,995.681 ppb	12,010.072 ppb	121.454 ppb	11,973.067 ppb	12,097.757 ppb	105.511 %
Concentration per Run 1	101.938 %	116.835 %	121.657 ppb	12,133.129 ppb	12,006.586 ppb	122.091 ppb	12,054.382 ppb	11,825.498 ppb	103.459 %
Concentration per Run 2	107.728 %	118.182 %	119.257 ppb	11,363.624 ppb	11,940.287 ppb	121.251 ppb	12,335.024 ppb	12,189.272 ppb	106.151 %
Concentration per Run 3	109.180 %	118.351 %	120.456 ppb	12,490.290 ppb	12,083.344 ppb	121.020 ppb	11,529.797 ppb	12,278.500 ppb	106.924 %
Concentration RSD	3.6 %	0.7 %	1.0 %	4.8 %	0.6 %	0.5 %	3.4 %	2.0 %	1.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	120.779 ppb	120.289 ppb	120.021 ppb	12,096.115 ppb	120.460 ppb	120.049 ppb	120.161 ppb	120.236 ppb	110.009 %
Concentration per Run 1	116.474 ppb	115.939 ppb	117.830 ppb	11,970.698 ppb	116.239 ppb	119.061 ppb	118.071 ppb	118.586 ppb	112.989 %
Concentration per Run 2	118.771 ppb	119.839 ppb	123.436 ppb	12,159.258 ppb	124.667 ppb	118.443 ppb	120.642 ppb	120.769 ppb	107.761 %
Concentration per Run 3	127.091 ppb	125.090 ppb	118.797 ppb	12,158.389 ppb	120.473 ppb	122.642 ppb	121.769 ppb	121.353 ppb	109.277 %
Concentration RSD	4.6 %	3.8 %	2.5 %	0.9 %	3.5 %	1.9 %	1.6 %	1.2 %	2.4 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	120.791 ppb	121.084 ppb	119.968 ppb	121.074 ppb	109.504 %	120.643 ppb	120.509 ppb	110.297 %	120.805 ppb
Concentration per Run 1	118.313 ppb	116.849 ppb	116.190 ppb	115.237 ppb	115.739 %	117.864 ppb	116.108 ppb	114.052 %	117.033 ppb
Concentration per Run 2	122.843 ppb	124.326 ppb	120.828 ppb	124.550 ppb	107.992 %	121.186 ppb	123.194 ppb	106.988 %	123.906 ppb
Concentration per Run 3	121.218 ppb	122.076 ppb	122.887 ppb	123.434 ppb	104.781 %	122.880 ppb	122.226 ppb	109.851 %	121.477 ppb
Concentration RSD	1.9 %	3.2 %	2.9 %	4.2 %	5.1 %	2.1 %	3.2 %	3.2 %	2.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	120.142 ppb	111.645 %	112.452 %	120.312 ppb	120.586 ppb	112.599 %
Concentration per Run 1	113.771 ppb	116.074 %	117.207 %	113.888 ppb	114.809 ppb	116.999 %
Concentration per Run 2	122.390 ppb	109.737 %	109.138 %	125.604 ppb	124.155 ppb	109.395 %
Concentration per Run 3	124.263 ppb	109.125 %	111.013 %	121.445 ppb	122.796 ppb	111.402 %
Concentration RSD	4.7 %	3.4 %	3.8 %	4.9 %	4.2 %	3.5 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	9	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	1/100 Cal	Rack	0		
Analysis started at:	12/3/2024 7:07:58 AM	Vial	3		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	107.604 %	117.228 %	1.053 ppb	78.431 ppb	102.901 ppb	1.067 ppb	103.585 ppb	109.031 ppb	101.882 %
Concentration per Run 1	103.051 %	119.866 %	1.043 ppb	72.238 ppb	99.295 ppb	0.806 ppb	84.461 ppb	112.934 ppb	101.619 %
Concentration per Run 2	109.674 %	117.340 %	1.057 ppb	80.023 ppb	99.504 ppb	0.756 ppb	111.316 ppb	82.034 ppb	103.098 %
Concentration per Run 3	110.085 %	114.478 %	1.058 ppb	83.030 ppb	109.904 ppb	1.639 ppb	114.977 ppb	132.126 ppb	100.929 %
Concentration RSD	3.7 %	2.3 %	0.8 %	7.1 %	5.9 %	46.5 %	16.1 %	23.2 %	1.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.509 ppb	0.977 ppb	1.058 ppb	113.297 ppb	0.967 ppb	1.023 ppb	1.036 ppb	1.219 ppb	106.462 %
Concentration per Run 1	0.408 ppb	0.881 ppb	0.990 ppb	120.917 ppb	0.976 ppb	0.917 ppb	1.075 ppb	1.147 ppb	107.074 %
Concentration per Run 2	0.479 ppb	1.001 ppb	1.032 ppb	102.816 ppb	0.948 ppb	1.145 ppb	0.908 ppb	1.160 ppb	104.235 %
Concentration per Run 3	0.640 ppb	1.050 ppb	1.152 ppb	116.160 ppb	0.976 ppb	1.007 ppb	1.125 ppb	1.349 ppb	108.078 %
Concentration RSD	23.3 %	8.9 %	8.0 %	8.3 %	1.7 %	11.2 %	10.9 %	9.3 %	1.9 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	1.055 ppb	1.088 ppb	0.997 ppb	1.387 ppb	110.221 %	1.004 ppb	1.013 ppb	108.737 %	1.101 ppb
Concentration per Run 1	0.942 ppb	0.927 ppb	0.985 ppb	1.190 ppb	112.081 %	0.992 ppb	0.982 ppb	107.630 %	1.046 ppb
Concentration per Run 2	1.022 ppb	1.245 ppb	1.008 ppb	1.295 ppb	109.933 %	1.032 ppb	1.014 ppb	110.730 %	1.116 ppb
Concentration per Run 3	1.200 ppb	1.093 ppb	0.999 ppb	1.676 ppb	108.648 %	0.987 ppb	1.042 ppb	107.853 %	1.139 ppb
Concentration RSD	12.5 %	14.6 %	1.2 %	18.4 %	1.6 %	2.5 %	3.0 %	1.6 %	4.4 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	1.034 ppb	113.222 %	110.657 %	1.188 ppb	1.041 ppb	114.126 %
Concentration per Run 1	0.999 ppb	115.356 %	112.269 %	1.148 ppb	1.053 ppb	116.303 %
Concentration per Run 2	1.130 ppb	111.844 %	109.063 %	1.212 ppb	1.033 ppb	112.112 %
Concentration per Run 3	0.972 ppb	112.466 %	110.639 %	1.204 ppb	1.037 ppb	113.962 %
Concentration RSD	8.2 %	1.7 %	1.4 %	2.9 %	1.1 %	1.8 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	10	User name	ALPHALAB\a2-icpmsq2	Comment	Sr Inteference Check
Analysis label:	Sr 200ppb	Rack	4		
Analysis started at:	12/3/2024 7:13:05 AM	Vial	55		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	108.497 %	114.703 %	0.007 ppb	-15.233 ppb	1.640 ppb	0.146 ppb	-1.545 ppb	-5.064 ppb	101.065 %
Concentration per Run 1	105.066 %	119.866 %	0.007 ppb	-21.019 ppb	1.669 ppb	0.237 ppb	-5.380 ppb	102.590 ppb	98.221 %
Concentration per Run 2	109.717 %	108.418 %	0.007 ppb	-7.878 ppb	1.910 ppb	0.049 ppb	-1.327 ppb	-119.648 ppb	102.036 %
Concentration per Run 3	110.708 %	115.825 %	0.005 ppb	-16.802 ppb	1.341 ppb	0.154 ppb	2.072 ppb	1.865 ppb	102.939 %
Concentration RSD	2.8 %	5.1 %	15.3 %	44.0 %	17.4 %	64.3 %	241.5 %	2,197.3 %	2.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.442 ppb	-0.043 ppb	0.060 ppb	2.660 ppb	0.009 ppb	-0.027 ppb	0.055 ppb	0.439 ppb	109.751 %
Concentration per Run 1	-0.424 ppb	-0.067 ppb	0.034 ppb	2.259 ppb	0.008 ppb	-0.020 ppb	0.029 ppb	0.370 ppb	108.843 %
Concentration per Run 2	-0.476 ppb	-0.005 ppb	0.069 ppb	2.982 ppb	0.012 ppb	-0.038 ppb	0.068 ppb	0.526 ppb	107.474 %
Concentration per Run 3	-0.426 ppb	-0.056 ppb	0.078 ppb	2.739 ppb	0.008 ppb	-0.022 ppb	0.069 ppb	0.422 ppb	112.936 %
Concentration RSD	6.6 %	77.5 %	38.2 %	13.8 %	24.6 %	38.2 %	41.4 %	18.0 %	2.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.019 ppb	0.040 ppb	192.217 ppb	0.102 ppb	110.959 %	0.003 ppb	0.006 ppb	109.681 %	0.014 ppb
Concentration per Run 1	0.038 ppb	-0.010 ppb	190.666 ppb	0.058 ppb	115.276 %	0.001 ppb	0.000 ppb	115.572 %	0.014 ppb
Concentration per Run 2	0.058 ppb	0.090 ppb	196.208 ppb	0.137 ppb	107.685 %	0.005 ppb	0.010 ppb	108.559 %	0.012 ppb
Concentration per Run 3	-0.037 ppb	0.039 ppb	189.776 ppb	0.112 ppb	109.915 %	0.003 ppb	0.007 ppb	104.914 %	0.016 ppb
Concentration RSD	259.3 %	125.5 %	1.8 %	39.6 %	3.5 %	70.4 %	91.3 %	4.9 %	13.8 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.041 ppb	111.960 %	111.655 %	0.059 ppb	0.007 ppb	114.043 %
Concentration per Run 1	0.056 ppb	114.764 %	114.976 %	0.044 ppb	0.006 ppb	118.358 %
Concentration per Run 2	0.033 ppb	111.470 %	110.213 %	0.068 ppb	0.008 ppb	111.689 %
Concentration per Run 3	0.035 ppb	109.647 %	109.775 %	0.067 ppb	0.006 ppb	112.081 %
Concentration RSD	30.8 %	2.3 %	2.6 %	22.9 %	15.6 %	3.3 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	11	User name	ALPHALAB\a2-icpmsq2	Comment	ICV
Analysis label:	ICV	Rack	0		
Analysis started at:	12/3/2024 7:17:37 AM	Vial	7		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	109.072 %	118.519 %	50.716 ppb	4,996.226 ppb	4,988.412 ppb	51.554 ppb	4,909.971 ppb	5,109.176 ppb	102.856 %
Concentration per Run 1	102.525 %	113.805 %	51.097 ppb	5,162.262 ppb	5,064.520 ppb	53.484 ppb	5,115.019 ppb	5,380.848 ppb	103.584 %
Concentration per Run 2	111.132 %	117.509 %	50.051 ppb	5,000.255 ppb	5,008.072 ppb	51.611 ppb	4,821.562 ppb	5,037.067 ppb	102.341 %
Concentration per Run 3	113.560 %	124.243 %	51.001 ppb	4,826.161 ppb	4,892.643 ppb	49.568 ppb	4,793.334 ppb	4,909.612 ppb	102.642 %
Recovery Percentage 1			101.433 %	99.925 %	99.768 %	103.108 %	98.199 %	102.184 %	
Concentration RSD	5.3 %	4.5 %	1.1 %	3.4 %	1.8 %	3.8 %	3.6 %	4.8 %	0.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	50.687 ppb	50.623 ppb	52.437 ppb	5,071.545 ppb	51.024 ppb	50.459 ppb	51.657 ppb	54.202 ppb	109.683 %
Concentration per Run 1	51.681 ppb	51.147 ppb	50.828 ppb	5,051.567 ppb	51.282 ppb	50.804 ppb	52.094 ppb	54.456 ppb	109.291 %
Concentration per Run 2	50.014 ppb	50.052 ppb	53.613 ppb	5,102.597 ppb	52.063 ppb	51.035 ppb	52.859 ppb	55.649 ppb	109.028 %
Concentration per Run 3	50.367 ppb	50.672 ppb	52.871 ppb	5,060.469 ppb	49.727 ppb	49.537 ppb	50.018 ppb	52.501 ppb	110.731 %
Recovery Percentage 1	101.374 %	101.247 %	104.875 %	101.431 %	102.048 %	100.918 %	103.314 %	108.404 %	
Concentration RSD	1.7 %	1.1 %	2.8 %	0.5 %	2.3 %	1.6 %	2.8 %	2.9 %	0.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	50.413 ppb	50.246 ppb	50.176 ppb	50.168 ppb	110.051 %	52.450 ppb	50.444 ppb	110.608 %	50.217 ppb
Concentration per Run 1	51.134 ppb	49.453 ppb	49.814 ppb	50.119 ppb	114.225 %	51.780 ppb	48.684 ppb	113.398 %	49.068 ppb
Concentration per Run 2	50.395 ppb	52.753 ppb	50.057 ppb	50.767 ppb	110.298 %	52.400 ppb	51.226 ppb	108.038 %	50.716 ppb
Concentration per Run 3	49.709 ppb	48.534 ppb	50.656 ppb	49.619 ppb	105.629 %	53.169 ppb	51.421 ppb	110.389 %	50.869 ppb
Recovery Percentage 1	100.825 %	100.493 %	100.351 %	100.337 %		104.899 %	100.888 %		100.435 %
Concentration RSD	1.4 %	4.4 %	0.9 %	1.1 %	3.9 %	1.3 %	3.0 %	2.4 %	2.0 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	50.429 ppb	113.058 %	112.168 %	50.283 ppb	50.543 ppb	114.001 %
Concentration per Run 1	48.673 ppb	115.116 %	115.481 %	49.075 ppb	49.529 ppb	116.057 %
Concentration per Run 2	51.300 ppb	114.274 %	110.007 %	49.795 ppb	50.831 ppb	112.174 %
Concentration per Run 3	51.315 ppb	109.783 %	111.017 %	51.979 ppb	51.268 ppb	113.773 %
Recovery Percentage 1	100.859 %			100.566 %	101.085 %	
Concentration RSD	3.0 %	2.5 %	2.6 %	3.0 %	1.8 %	1.7 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	12	User name	ALPHALAB\a2-icpmsq2	Comment	ICB
Analysis label:	ICB	Rack	0		
Analysis started at:	12/3/2024 7:22:07 AM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	109.773 %	112.739 %	0.020 ppb	-26.475 ppb	-0.118 ppb	0.344 ppb	-14.441 ppb	-6.774 ppb	101.144 %
Concentration per Run 1	104.764 %	118.856 %	0.018 ppb	-34.489 ppb	-1.113 ppb	0.348 ppb	-19.930 ppb	-0.991 ppb	100.400 %
Concentration per Run 2	110.940 %	107.744 %	0.030 ppb	-20.137 ppb	0.099 ppb	0.096 ppb	-12.884 ppb	-17.184 ppb	101.521 %
Concentration per Run 3	113.616 %	111.616 %	0.012 ppb	-24.798 ppb	0.660 ppb	0.589 ppb	-10.507 ppb	-2.148 ppb	101.512 %
Recovery Percentage 1			4.011 %	-5.295 %	-0.169 %	3.441 %	-14.441 %	-6.774 %	
Concentration RSD	4.1 %	5.0 %	44.3 %	27.7 %	768.0 %	71.7 %	33.9 %	133.4 %	0.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.426 ppb	-0.036 ppb	0.004 ppb	4.442 ppb	0.000 ppb	-0.016 ppb	0.022 ppb	0.302 ppb	110.215 %
Concentration per Run 1	-0.483 ppb	-0.020 ppb	-0.012 ppb	5.807 ppb	-0.001 ppb	0.021 ppb	-0.008 ppb	0.324 ppb	111.116 %
Concentration per Run 2	-0.479 ppb	-0.050 ppb	0.005 ppb	2.304 ppb	-0.007 ppb	-0.041 ppb	0.029 ppb	0.330 ppb	111.210 %
Concentration per Run 3	-0.315 ppb	-0.039 ppb	0.021 ppb	5.214 ppb	0.008 ppb	-0.029 ppb	0.045 ppb	0.253 ppb	108.319 %
Recovery Percentage 1	-8.511 %	-3.608 %	0.450 %	8.883 %	0.023 %	-0.804 %	2.182 %	6.049 %	
Concentration RSD	22.5 %	42.6 %	365.3 %	42.2 %	6,888.7 %	203.6 %	124.1 %	14.1 %	1.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	-0.007 ppb	0.234 ppb	0.007 ppb	0.392 ppb	110.130 %	0.006 ppb	0.003 ppb	107.631 %	0.067 ppb
Concentration per Run 1	-0.057 ppb	0.362 ppb	0.007 ppb	0.235 ppb	113.780 %	0.006 ppb	0.003 ppb	107.044 %	0.043 ppb
Concentration per Run 2	-0.005 ppb	0.165 ppb	0.008 ppb	0.466 ppb	109.860 %	0.002 ppb	0.007 ppb	103.760 %	0.070 ppb
Concentration per Run 3	0.040 ppb	0.175 ppb	0.006 ppb	0.476 ppb	106.752 %	0.009 ppb	0.000 ppb	112.089 %	0.089 ppb
Recovery Percentage 1	-1.408 %	4.679 %	0.071 %	19.612 %		1.418 %	1.728 %		1.677 %
Concentration RSD	687.2 %	47.6 %	10.3 %	34.8 %	3.2 %	61.2 %	101.1 %	3.9 %	34.5 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.007 ppb	113.487 %	110.653 %	0.189 ppb	0.012 ppb	111.857 %
Concentration per Run 1	-0.019 ppb	115.745 %	114.616 %	0.186 ppb	0.011 ppb	113.439 %
Concentration per Run 2	0.035 ppb	109.783 %	107.778 %	0.208 ppb	0.013 ppb	112.433 %
Concentration per Run 3	0.006 ppb	114.933 %	109.566 %	0.173 ppb	0.012 ppb	109.699 %
Recovery Percentage 1	1.465 %			18.925 %	1.177 %	
Concentration RSD	367.6 %	2.8 %	3.2 %	9.3 %	8.7 %	1.7 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	13	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	ICSA	Rack	4		
Analysis started at:	12/3/2024 7:28:46 AM	Vial	53		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	77.425 %	100.898 %	0.026 ppb	260,283.423 ppb	95,027.936 ppb	95,923.619 ppb	92,602.726 ppb	279,901.564 ppb	74.611 %
Concentration per Run 1	76.603 %	104.209 %	0.035 ppb	252,576.654 ppb	95,674.151 ppb	93,358.091 ppb	93,182.641 ppb	275,266.545 ppb	73.296 %
Concentration per Run 2	78.021 %	99.832 %	0.019 ppb	259,612.046 ppb	93,135.872 ppb	95,693.955 ppb	96,072.311 ppb	281,448.725 ppb	75.258 %
Concentration per Run 3	77.651 %	98.653 %	0.024 ppb	268,661.568 ppb	96,273.785 ppb	98,718.812 ppb	88,553.225 ppb	282,989.421 ppb	75.281 %
Recovery Percentage 1			2.617 %	104.113 %	95.028 %	95.924 %	92.603 %	93.301 %	
Concentration RSD	0.9 %	2.9 %	30.8 %	3.1 %	1.8 %	2.8 %	4.1 %	1.5 %	1.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.397 ppb	1.510 ppb	4.347 ppb	235,073.825 ppb	2.043 ppb	2.743 ppb	0.950 ppb	3.435 ppb	108.055 %
Concentration per Run 1	-0.356 ppb	1.415 ppb	4.324 ppb	236,338.259 ppb	2.054 ppb	2.666 ppb	1.017 ppb	3.617 ppb	110.179 %
Concentration per Run 2	-0.470 ppb	1.528 ppb	4.565 ppb	244,618.331 ppb	2.033 ppb	3.064 ppb	0.992 ppb	3.441 ppb	105.051 %
Concentration per Run 3	-0.365 ppb	1.589 ppb	4.152 ppb	224,264.885 ppb	2.040 ppb	2.499 ppb	0.842 ppb	3.248 ppb	108.933 %
Recovery Percentage 1	-7.945 %	45.772 %	76.257 %	94.030 %	71.172 %	44.966 %	115.899 %	30.135 %	
Concentration RSD	15.9 %	5.9 %	4.8 %	4.4 %	0.5 %	10.6 %	10.0 %	5.4 %	2.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.526 ppb	3.361 ppb	2.424 ppb	2,131.463 ppb	94.898 %	0.019 ppb	0.525 ppb	104.009 %	0.185 ppb
Concentration per Run 1	0.615 ppb	3.100 ppb	2.361 ppb	2,092.204 ppb	97.544 %	0.012 ppb	0.476 ppb	108.519 %	0.182 ppb
Concentration per Run 2	0.500 ppb	3.527 ppb	2.473 ppb	2,152.090 ppb	91.375 %	0.020 ppb	0.509 ppb	104.656 %	0.185 ppb
Concentration per Run 3	0.465 ppb	3.454 ppb	2.439 ppb	2,150.093 ppb	95.773 %	0.024 ppb	0.589 ppb	98.852 %	0.186 ppb
Recovery Percentage 1	32.299 %	26.051 %	484.786 %	106.573 %		2.318 %	131.142 %		2.307 %
Concentration RSD	14.9 %	6.8 %	2.4 %	1.6 %	3.3 %	32.4 %	11.1 %	4.7 %	1.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	1.311 ppb	105.281 %	101.358 %	0.052 ppb	1.539 ppb	98.793 %
Concentration per Run 1	1.181 ppb	107.132 %	104.218 %	0.037 ppb	1.503 ppb	103.198 %
Concentration per Run 2	1.188 ppb	102.454 %	99.837 %	0.058 ppb	1.566 ppb	97.213 %
Concentration per Run 3	1.565 ppb	106.257 %	100.019 %	0.062 ppb	1.548 ppb	95.968 %
Recovery Percentage 1	69.743 %			2.619 %	49.645 %	
Concentration RSD	16.7 %	2.4 %	2.4 %	26.4 %	2.1 %	3.9 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	14	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	LDR	Rack	4		
Analysis started at:	12/3/2024 7:33:17 AM	Vial	1		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	91.563 %	108.025 %	0.006 ppb	49.368 ppb	3.998 ppb	4.810 ppb	28.275 ppb	9.141 ppb	89.082 %
Concentration per Run 1	89.252 %	106.734 %	0.008 ppb	59.088 ppb	5.209 ppb	5.573 ppb	35.831 ppb	9.944 ppb	88.232 %
Concentration per Run 2	92.187 %	110.101 %	0.004 ppb	44.430 ppb	3.372 ppb	4.227 ppb	22.515 ppb	22.695 ppb	89.602 %
Concentration per Run 3	93.249 %	107.239 %	0.007 ppb	44.588 ppb	3.414 ppb	4.631 ppb	26.481 ppb	-5.217 ppb	89.411 %
Recovery Percentage 1									
Concentration RSD	2.3 %	1.7 %	27.5 %	17.1 %	26.2 %	14.4 %	24.2 %	152.9 %	0.8 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	925.491 ppb	964.981 ppb	9,083.550 ppb	32.988 ppb	0.016 ppb	9,816.044 ppb	9,961.563 ppb	9,467.192 ppb	97.937 %
Concentration per Run 1	930.436 ppb	984.825 ppb	9,192.936 ppb	32.478 ppb	0.021 ppb	9,932.172 ppb	10,267.736 ppb	9,604.056 ppb	93.933 %
Concentration per Run 2	930.791 ppb	953.733 ppb	9,074.874 ppb	31.844 ppb	0.010 ppb	9,703.260 ppb	9,946.986 ppb	9,515.339 ppb	97.750 %
Concentration per Run 3	915.244 ppb	956.385 ppb	8,982.839 ppb	34.643 ppb	0.016 ppb	9,812.698 ppb	9,669.966 ppb	9,282.180 ppb	102.130 %
Recovery Percentage 1	92.549 %	96.498 %	90.835 %			98.160 %	99.616 %	94.672 %	
Concentration RSD	1.0 %	1.8 %	1.2 %	4.4 %	35.6 %	1.2 %	3.0 %	1.8 %	4.2 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	904.370 ppb	2.342 ppb	0.240 ppb	4.413 ppb	101.381 %	0.114 ppb	0.029 ppb	97.220 %	0.029 ppb
Concentration per Run 1	908.778 ppb	2.361 ppb	0.245 ppb	3.449 ppb	105.832 %	0.106 ppb	0.022 ppb	98.870 %	0.025 ppb
Concentration per Run 2	921.059 ppb	2.292 ppb	0.222 ppb	4.441 ppb	98.003 %	0.107 ppb	0.031 ppb	95.258 %	0.024 ppb
Concentration per Run 3	883.273 ppb	2.374 ppb	0.254 ppb	5.350 ppb	100.309 %	0.129 ppb	0.034 ppb	97.533 %	0.037 ppb
Recovery Percentage 1	90.437 %								
Concentration RSD	2.1 %	1.9 %	6.9 %	21.5 %	4.0 %	11.3 %	21.4 %	1.9 %	26.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	9,782.000 ppb	99.911 %	97.335 %	0.057 ppb	9,928.163 ppb	100.110 %
Concentration per Run 1	10,021.895 ppb	99.184 %	97.443 %	0.057 ppb	9,801.199 ppb	100.374 %
Concentration per Run 2	9,217.024 ppb	100.550 %	98.028 %	0.056 ppb	10,086.648 ppb	98.549 %
Concentration per Run 3	10,107.080 ppb	100.001 %	96.534 %	0.057 ppb	9,896.640 ppb	101.408 %
Recovery Percentage 1	97.820 %				99.282 %	
Concentration RSD	5.0 %	0.7 %	0.8 %	1.1 %	1.5 %	1.4 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	15	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	Rinse	Rack	0		
Analysis started at:	12/3/2024 7:37:47 AM	Vial	1		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	100.788 %	110.382 %	0.017 ppb	39.912 ppb	5.670 ppb	10.397 ppb	25.473 ppb	19.955 ppb	102.010 %
Concentration per Run 1	96.880 %	118.856 %	0.024 ppb	23.922 ppb	5.366 ppb	8.545 ppb	13.801 ppb	2.393 ppb	100.133 %
Concentration per Run 2	102.505 %	103.704 %	0.015 ppb	44.003 ppb	4.834 ppb	9.710 ppb	26.792 ppb	25.210 ppb	101.012 %
Concentration per Run 3	102.979 %	108.586 %	0.014 ppb	51.809 ppb	6.812 ppb	12.936 ppb	35.826 ppb	32.262 ppb	104.884 %
Concentration RSD	3.4 %	7.0 %	31.4 %	36.0 %	18.0 %	21.9 %	43.5 %	78.2 %	2.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.406 ppb	0.155 ppb	0.942 ppb	77.426 ppb	0.014 ppb	3.504 ppb	2.104 ppb	2.973 ppb	100.790 %
Concentration per Run 1	-0.520 ppb	0.138 ppb	0.799 ppb	70.803 ppb	0.025 ppb	3.393 ppb	2.014 ppb	2.650 ppb	100.267 %
Concentration per Run 2	-0.274 ppb	0.183 ppb	0.874 ppb	80.483 ppb	0.013 ppb	3.512 ppb	1.949 ppb	2.920 ppb	99.503 %
Concentration per Run 3	-0.425 ppb	0.144 ppb	1.152 ppb	80.993 ppb	0.003 ppb	3.609 ppb	2.349 ppb	3.350 ppb	102.601 %
Concentration RSD	30.6 %	15.9 %	19.8 %	7.4 %	81.0 %	3.1 %	10.2 %	11.9 %	1.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.586 ppb	0.055 ppb	0.012 ppb	0.951 ppb	101.840 %	0.036 ppb	0.001 ppb	97.283 %	0.017 ppb
Concentration per Run 1	0.670 ppb	0.026 ppb	0.016 ppb	0.542 ppb	104.717 %	0.035 ppb	0.000 ppb	99.722 %	0.009 ppb
Concentration per Run 2	0.637 ppb	-0.051 ppb	0.003 ppb	0.862 ppb	100.671 %	0.035 ppb	0.000 ppb	96.206 %	0.018 ppb
Concentration per Run 3	0.450 ppb	0.191 ppb	0.017 ppb	1.449 ppb	100.133 %	0.037 ppb	0.004 ppb	95.921 %	0.026 ppb
Concentration RSD	20.2 %	223.3 %	62.7 %	48.3 %	2.5 %	2.4 %	173.2 %	2.2 %	48.5 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.475 ppb	99.889 %	99.173 %	0.019 ppb	2.074 ppb	101.436 %
Concentration per Run 1	0.293 ppb	102.762 %	101.038 %	0.006 ppb	2.041 ppb	104.116 %
Concentration per Run 2	0.231 ppb	99.287 %	97.918 %	0.025 ppb	1.691 ppb	99.055 %
Concentration per Run 3	0.902 ppb	97.617 %	98.563 %	0.025 ppb	2.490 ppb	101.135 %
Concentration RSD	78.0 %	2.6 %	1.7 %	57.8 %	19.3 %	2.5 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	16	User name	ALPHALAB\a2-icpmsq2	Comment	CCV/MCCV
Analysis label:	CCV	Rack	0		
Analysis started at:	12/3/2024 7:42:14 AM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	98.136 %	117.060 %	62.968 ppb	5,957.011 ppb	5,879.006 ppb	56.114 ppb	5,802.825 ppb	5,773.221 ppb	95.802 %
Concentration per Run 1	93.545 %	122.559 %	63.991 ppb	5,588.736 ppb	5,503.076 ppb	55.489 ppb	5,779.047 ppb	5,622.254 ppb	93.746 %
Concentration per Run 2	99.410 %	115.657 %	61.914 ppb	6,116.184 ppb	6,040.797 ppb	56.094 ppb	5,686.175 ppb	5,655.660 ppb	97.142 %
Concentration per Run 3	101.453 %	112.963 %	62.998 ppb	6,166.114 ppb	6,093.145 ppb	56.758 ppb	5,943.252 ppb	6,041.749 ppb	96.517 %
Recovery Percentage 1			104.946 %	99.284 %	97.983 %	93.523 %	96.714 %	96.220 %	
Concentration RSD	4.2 %	4.2 %	1.7 %	5.4 %	5.6 %	1.1 %	2.2 %	4.0 %	1.9 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	58.535 ppb	60.642 ppb	60.871 ppb	6,065.390 ppb	62.390 ppb	62.611 ppb	63.040 ppb	62.574 ppb	101.855 %
Concentration per Run 1	54.652 ppb	56.785 ppb	60.817 ppb	5,877.408 ppb	62.033 ppb	60.043 ppb	61.531 ppb	59.520 ppb	103.989 %
Concentration per Run 2	60.392 ppb	61.788 ppb	61.022 ppb	6,188.382 ppb	63.499 ppb	65.667 ppb	65.361 ppb	65.987 ppb	100.338 %
Concentration per Run 3	60.560 ppb	63.354 ppb	60.773 ppb	6,130.381 ppb	61.637 ppb	62.124 ppb	62.229 ppb	62.215 ppb	101.238 %
Recovery Percentage 1	97.558 %	101.071 %	101.451 %	101.090 %	103.983 %	104.352 %	105.067 %	104.290 %	
Concentration RSD	5.7 %	5.7 %	0.2 %	2.7 %	1.6 %	4.5 %	3.2 %	5.2 %	1.9 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	60.716 ppb	56.720 ppb	60.036 ppb	61.404 ppb	101.326 %	62.186 ppb	62.309 ppb	99.554 %	61.536 ppb
Concentration per Run 1	60.283 ppb	53.891 ppb	58.798 ppb	60.166 ppb	104.613 %	60.764 ppb	61.816 ppb	100.133 %	61.254 ppb
Concentration per Run 2	61.156 ppb	58.188 ppb	60.630 ppb	62.085 ppb	99.686 %	61.713 ppb	61.963 ppb	99.368 %	61.673 ppb
Concentration per Run 3	60.710 ppb	58.081 ppb	60.679 ppb	61.961 ppb	99.678 %	64.082 ppb	63.149 ppb	99.162 %	61.681 ppb
Recovery Percentage 1	101.194 %	94.534 %	100.059 %	102.340 %		103.644 %	103.849 %		102.560 %
Concentration RSD	0.7 %	4.3 %	1.8 %	1.7 %	2.8 %	2.7 %	1.2 %	0.5 %	0.4 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	60.769 ppb	104.360 %	101.665 %	62.292 ppb	62.750 ppb	102.010 %
Concentration per Run 1	59.858 ppb	107.228 %	104.106 %	61.333 ppb	61.783 ppb	103.617 %
Concentration per Run 2	59.796 ppb	102.769 %	98.174 %	62.516 ppb	63.597 ppb	100.620 %
Concentration per Run 3	62.652 ppb	103.084 %	102.715 %	63.029 ppb	62.871 ppb	101.795 %
Recovery Percentage 1	101.281 %			103.821 %	104.584 %	
Concentration RSD	2.7 %	2.4 %	3.1 %	1.4 %	1.5 %	1.5 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	17	User name	ALPHALAB\a2-icpmsq2	Comment	CCB
Analysis label:	CCB	Rack	0		
Analysis started at:	12/3/2024 7:46:45 AM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	97.755 %	116.106 %	0.095 ppb	-3.567 ppb	0.138 ppb	0.196 ppb	-0.022 ppb	-5.582 ppb	95.506 %
Concentration per Run 1	93.206 %	116.330 %	0.132 ppb	-3.977 ppb	0.265 ppb	0.012 ppb	-0.289 ppb	-10.176 ppb	94.760 %
Concentration per Run 2	100.347 %	110.943 %	0.100 ppb	6.059 ppb	0.129 ppb	0.404 ppb	5.263 ppb	-0.276 ppb	96.356 %
Concentration per Run 3	99.713 %	121.044 %	0.055 ppb	-12.782 ppb	0.021 ppb	0.170 ppb	-5.040 ppb	-6.294 ppb	95.402 %
Recovery Percentage 1			19.078 %	-0.713 %	0.198 %	1.956 %	-0.022 %	-5.582 %	
Concentration RSD	4.0 %	4.4 %	40.7 %	264.3 %	88.2 %	100.9 %	23,443.7 %	89.4 %	0.8 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.526 ppb	-0.014 ppb	0.077 ppb	6.763 ppb	-0.001 ppb	0.023 ppb	0.542 ppb	0.280 ppb	96.074 %
Concentration per Run 1	-0.470 ppb	-0.023 ppb	0.010 ppb	6.368 ppb	-0.007 ppb	0.016 ppb	0.564 ppb	0.335 ppb	96.229 %
Concentration per Run 2	-0.514 ppb	-0.001 ppb	0.099 ppb	5.362 ppb	-0.003 ppb	-0.004 ppb	0.567 ppb	0.271 ppb	93.608 %
Concentration per Run 3	-0.596 ppb	-0.018 ppb	0.122 ppb	8.558 ppb	0.006 ppb	0.058 ppb	0.494 ppb	0.235 ppb	98.384 %
Recovery Percentage 1	-10.529 %	-1.407 %	7.673 %	13.525 %	-0.242 %	1.156 %	54.152 %	5.601 %	
Concentration RSD	12.2 %	82.6 %	77.1 %	24.2 %	549.7 %	138.1 %	7.6 %	18.1 %	2.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.153 ppb	0.188 ppb	0.010 ppb	0.461 ppb	100.751 %	0.011 ppb	0.005 ppb	95.900 %	0.041 ppb
Concentration per Run 1	0.170 ppb	0.266 ppb	0.011 ppb	0.322 ppb	101.606 %	0.010 ppb	0.004 ppb	94.819 %	0.035 ppb
Concentration per Run 2	0.120 ppb	0.095 ppb	-0.001 ppb	0.420 ppb	98.831 %	0.013 ppb	0.004 ppb	95.202 %	0.038 ppb
Concentration per Run 3	0.169 ppb	0.203 ppb	0.020 ppb	0.641 ppb	101.817 %	0.010 ppb	0.007 ppb	97.680 %	0.050 ppb
Recovery Percentage 1	30.584 %	3.759 %	0.103 %	23.056 %		2.732 %	2.516 %		1.023 %
Concentration RSD	18.7 %	46.0 %	101.3 %	35.5 %	1.7 %	13.3 %	41.8 %	1.6 %	19.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.039 ppb	101.528 %	99.288 %	0.217 ppb	0.291 ppb	99.717 %
Concentration per Run 1	0.068 ppb	102.343 %	100.864 %	0.203 ppb	0.296 ppb	102.367 %
Concentration per Run 2	0.025 ppb	100.832 %	98.444 %	0.245 ppb	0.307 ppb	98.242 %
Concentration per Run 3	0.024 ppb	101.409 %	98.556 %	0.204 ppb	0.270 ppb	98.541 %
Recovery Percentage 1	7.840 %			21.723 %	29.092 %	
Concentration RSD	64.6 %	0.8 %	1.4 %	11.2 %	6.5 %	2.3 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	18	User name	ALPHALAB\a2-icpmsq2	Comment	FB
Analysis label:	I2469249-03 6020SL	Rack	1		
Analysis started at:	12/3/2024 7:57:42 AM	Vial	6		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	103.799 %	116.218 %	0.004 ppb	-11.258 ppb	1.095 ppb	2.638 ppb	0.309 ppb	19.959 ppb	98.443 %
Concentration per Run 1	100.318 %	119.529 %	0.006 ppb	-21.500 ppb	1.361 ppb	2.242 ppb	2.336 ppb	14.875 ppb	95.326 %
Concentration per Run 2	104.060 %	116.330 %	0.004 ppb	-10.231 ppb	1.428 ppb	2.990 ppb	-6.451 ppb	28.936 ppb	98.070 %
Concentration per Run 3	107.018 %	112.795 %	0.004 ppb	-2.042 ppb	0.495 ppb	2.680 ppb	5.043 ppb	16.067 ppb	101.933 %
Concentration RSD	3.2 %	2.9 %	32.6 %	86.8 %	47.6 %	14.3 %	1,942.3 %	39.1 %	3.4 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.497 ppb	0.010 ppb	0.349 ppb	12.543 ppb	0.001 ppb	0.017 ppb	0.704 ppb	0.911 ppb	98.321 %
Concentration per Run 1	-0.489 ppb	-0.001 ppb	0.413 ppb	12.122 ppb	0.006 ppb	0.000 ppb	0.789 ppb	0.821 ppb	99.333 %
Concentration per Run 2	-0.565 ppb	-0.011 ppb	0.324 ppb	11.785 ppb	-0.003 ppb	0.049 ppb	0.652 ppb	0.999 ppb	97.683 %
Concentration per Run 3	-0.438 ppb	0.042 ppb	0.310 ppb	13.722 ppb	0.000 ppb	0.003 ppb	0.670 ppb	0.913 ppb	97.948 %
Concentration RSD	12.8 %	278.0 %	16.1 %	8.3 %	556.7 %	160.8 %	10.5 %	9.7 %	0.9 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.102 ppb	-0.059 ppb	0.112 ppb	0.123 ppb	106.099 %	0.003 ppb	0.005 ppb	102.532 %	0.019 ppb
Concentration per Run 1	0.024 ppb	-0.060 ppb	0.096 ppb	0.063 ppb	109.808 %	0.004 ppb	0.003 ppb	104.745 %	0.013 ppb
Concentration per Run 2	0.096 ppb	-0.066 ppb	0.116 ppb	0.064 ppb	104.524 %	0.001 ppb	0.004 ppb	97.422 %	0.027 ppb
Concentration per Run 3	0.187 ppb	-0.051 ppb	0.123 ppb	0.241 ppb	103.966 %	0.002 ppb	0.007 ppb	105.428 %	0.018 ppb
Concentration RSD	80.3 %	13.0 %	12.7 %	83.6 %	3.0 %	54.5 %	42.2 %	4.3 %	36.5 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.193 ppb	106.203 %	106.136 %	0.030 ppb	0.116 ppb	111.216 %
Concentration per Run 1	0.102 ppb	109.096 %	108.956 %	0.019 ppb	0.114 ppb	114.181 %
Concentration per Run 2	0.236 ppb	105.191 %	103.461 %	0.033 ppb	0.128 ppb	110.354 %
Concentration per Run 3	0.241 ppb	104.323 %	105.990 %	0.038 ppb	0.107 ppb	109.114 %
Concentration RSD	40.9 %	2.4 %	2.6 %	31.8 %	9.4 %	2.4 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	19	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	I2469249-06 6020SL	Rack	1		
Analysis started at:	12/3/2024 8:02:11 AM	Vial	1		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	96.622 %	112.514 %	0.018 ppb	57,895.750 ppb	28,616.545 ppb	11.452 ppb	6,163.590 ppb	120,220.995 ppb	98.632 %
Concentration per Run 1	93.441 %	113.637 %	0.016 ppb	55,771.050 ppb	27,702.289 ppb	11.144 ppb	6,188.566 ppb	121,703.382 ppb	99.291 %
Concentration per Run 2	97.138 %	104.882 %	0.015 ppb	61,592.288 ppb	30,074.490 ppb	11.858 ppb	6,205.202 ppb	119,959.227 ppb	98.622 %
Concentration per Run 3	99.287 %	119.024 %	0.021 ppb	56,323.914 ppb	28,072.856 ppb	11.354 ppb	6,097.003 ppb	119,000.377 ppb	97.984 %
Concentration RSD	3.1 %	6.3 %	15.9 %	5.5 %	4.5 %	3.2 %	0.9 %	1.1 %	0.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.073 ppb	0.130 ppb	2,842.106 ppb	201.054 ppb	5.574 ppb	4.947 ppb	1.965 ppb	2.961 ppb	98.909 %
Concentration per Run 1	0.132 ppb	0.098 ppb	2,906.887 ppb	192.122 ppb	5.482 ppb	4.848 ppb	1.865 ppb	2.925 ppb	100.129 %
Concentration per Run 2	0.091 ppb	0.147 ppb	2,573.498 ppb	201.835 ppb	5.592 ppb	4.850 ppb	2.081 ppb	2.874 ppb	99.948 %
Concentration per Run 3	-0.004 ppb	0.146 ppb	3,045.932 ppb	209.205 ppb	5.647 ppb	5.142 ppb	1.950 ppb	3.084 ppb	96.650 %
Concentration RSD	95.9 %	21.7 %	8.5 %	4.3 %	1.5 %	3.4 %	5.5 %	3.7 %	2.0 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.422 ppb	2.005 ppb	772.012 ppb	4.104 ppb	101.671 %	0.001 ppb	0.070 ppb	103.751 %	1.331 ppb
Concentration per Run 1	0.499 ppb	1.699 ppb	748.964 ppb	4.157 ppb	105.112 %	0.001 ppb	0.070 ppb	105.899 %	1.277 ppb
Concentration per Run 2	0.403 ppb	1.346 ppb	780.085 ppb	3.977 ppb	98.770 %	0.001 ppb	0.067 ppb	99.370 %	1.324 ppb
Concentration per Run 3	0.364 ppb	2.968 ppb	786.987 ppb	4.179 ppb	101.132 %	0.000 ppb	0.074 ppb	105.984 %	1.392 ppb
Concentration RSD	16.5 %	42.5 %	2.6 %	2.7 %	3.2 %	64.6 %	5.2 %	3.7 %	4.4 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	50.904 ppb	107.345 %	107.070 %	0.023 ppb	0.333 ppb	103.176 %
Concentration per Run 1	50.048 ppb	109.386 %	109.147 %	0.012 ppb	0.337 ppb	106.843 %
Concentration per Run 2	52.318 ppb	106.965 %	105.485 %	0.028 ppb	0.326 ppb	101.499 %
Concentration per Run 3	50.346 ppb	105.685 %	106.580 %	0.030 ppb	0.335 ppb	101.185 %
Concentration RSD	2.4 %	1.8 %	1.8 %	42.9 %	1.8 %	3.1 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	20	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG2003419-7d10 6020SL	Rack	1		
Analysis started at:	12/3/2024 8:06:38 AM	Vial	2		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	101.506 %	114.422 %	5.735 ppb	6,976.933 ppb	4,000.102 ppb	248.614 ppb	1,679.115 ppb	13,074.101 ppb	99.150 %
Concentration per Run 1	97.967 %	124.580 %	5.780 ppb	6,533.581 ppb	3,726.763 ppb	231.190 ppb	1,525.745 ppb	12,031.698 ppb	96.836 %
Concentration per Run 2	102.166 %	110.775 %	5.802 ppb	7,172.622 ppb	4,135.505 ppb	257.174 ppb	1,826.722 ppb	13,483.236 ppb	101.176 %
Concentration per Run 3	104.386 %	107.913 %	5.624 ppb	7,224.594 ppb	4,138.037 ppb	257.479 ppb	1,684.878 ppb	13,707.368 ppb	99.436 %
Concentration RSD	3.2 %	7.8 %	1.7 %	5.5 %	5.9 %	6.1 %	9.0 %	7.0 %	2.2 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	50.891 ppb	20.996 ppb	360.497 ppb	138.093 ppb	55.195 ppb	55.222 ppb	28.765 ppb	55.875 ppb	100.577 %
Concentration per Run 1	46.158 ppb	20.426 ppb	353.896 ppb	131.493 ppb	53.198 ppb	53.555 ppb	28.955 ppb	55.390 ppb	101.656 %
Concentration per Run 2	52.698 ppb	21.423 ppb	369.981 ppb	141.568 ppb	58.028 ppb	57.234 ppb	29.198 ppb	56.047 ppb	97.645 %
Concentration per Run 3	53.819 ppb	21.139 ppb	357.614 ppb	141.220 ppb	54.360 ppb	54.877 ppb	28.143 ppb	56.188 ppb	102.432 %
Concentration RSD	8.1 %	2.4 %	2.3 %	4.1 %	4.6 %	3.4 %	1.9 %	0.8 %	2.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	13.390 ppb	12.144 ppb	180.776 ppb	106.136 ppb	103.356 %	5.866 ppb	5.615 ppb	101.883 %	52.739 ppb
Concentration per Run 1	13.379 ppb	10.231 ppb	179.007 ppb	105.489 ppb	104.879 %	5.657 ppb	5.488 ppb	101.989 %	52.838 ppb
Concentration per Run 2	14.086 ppb	13.118 ppb	183.224 ppb	107.209 ppb	103.294 %	6.018 ppb	5.666 ppb	103.319 %	51.778 ppb
Concentration per Run 3	12.705 ppb	13.084 ppb	180.098 ppb	105.709 ppb	101.895 %	5.922 ppb	5.690 ppb	100.340 %	53.600 ppb
Concentration RSD	5.2 %	13.6 %	1.2 %	0.9 %	1.4 %	3.2 %	2.0 %	1.5 %	1.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	220.821 ppb	105.505 %	104.293 %	12.038 ppb	54.706 ppb	106.054 %
Concentration per Run 1	219.571 ppb	106.902 %	105.096 %	11.545 ppb	52.762 ppb	110.504 %
Concentration per Run 2	217.503 ppb	104.543 %	103.945 %	12.398 ppb	56.176 ppb	102.169 %
Concentration per Run 3	225.391 ppb	105.069 %	103.837 %	12.172 ppb	55.179 ppb	105.489 %
Concentration RSD	1.9 %	1.2 %	0.7 %	3.7 %	3.2 %	4.0 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	21	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG2003419-8d10 6020SL	Rack	1		
Analysis started at:	12/3/2024 8:11:05 AM	Vial	3		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	100.915 %	114.198 %	5.306 ppb	6,744.577 ppb	3,886.548 ppb	194.927 ppb	1,590.965 ppb	12,534.160 ppb	98.582 %
Concentration per Run 1	97.363 %	116.667 %	5.357 ppb	6,554.353 ppb	3,821.019 ppb	196.101 ppb	1,599.943 ppb	12,092.311 ppb	96.811 %
Concentration per Run 2	102.700 %	111.953 %	5.202 ppb	6,992.378 ppb	3,992.697 ppb	195.730 ppb	1,626.974 ppb	13,021.268 ppb	100.122 %
Concentration per Run 3	102.681 %	113.973 %	5.358 ppb	6,687.000 ppb	3,845.927 ppb	192.949 ppb	1,545.979 ppb	12,488.900 ppb	98.813 %
Concentration RSD	3.0 %	2.1 %	1.7 %	3.3 %	2.4 %	0.9 %	2.6 %	3.7 %	1.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	49.311 ppb	20.433 ppb	347.618 ppb	149.096 ppb	53.664 ppb	53.620 ppb	27.404 ppb	52.971 ppb	100.291 %
Concentration per Run 1	46.611 ppb	19.636 ppb	340.027 ppb	129.947 ppb	53.715 ppb	54.478 ppb	27.271 ppb	52.174 ppb	99.954 %
Concentration per Run 2	49.961 ppb	20.744 ppb	358.932 ppb	154.865 ppb	54.963 ppb	55.809 ppb	29.166 ppb	54.448 ppb	98.348 %
Concentration per Run 3	51.363 ppb	20.918 ppb	343.895 ppb	162.476 ppb	52.314 ppb	50.572 ppb	25.775 ppb	52.291 ppb	102.571 %
Concentration RSD	5.0 %	3.4 %	2.9 %	11.4 %	2.5 %	5.1 %	6.2 %	2.4 %	2.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	12.457 ppb	13.101 ppb	175.034 ppb	101.614 ppb	103.099 %	5.631 ppb	5.459 ppb	103.110 %	50.336 ppb
Concentration per Run 1	12.765 ppb	11.652 ppb	172.713 ppb	100.373 ppb	106.270 %	5.380 ppb	5.346 ppb	105.199 %	49.207 ppb
Concentration per Run 2	12.239 ppb	14.364 ppb	179.600 ppb	104.537 ppb	99.365 %	5.811 ppb	5.612 ppb	101.229 %	51.663 ppb
Concentration per Run 3	12.367 ppb	13.287 ppb	172.788 ppb	99.931 ppb	103.662 %	5.702 ppb	5.420 ppb	102.903 %	50.137 ppb
Concentration RSD	2.2 %	10.4 %	2.3 %	2.5 %	3.4 %	4.0 %	2.5 %	1.9 %	2.5 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	208.765 ppb	104.727 %	104.320 %	11.957 ppb	54.004 ppb	104.970 %
Concentration per Run 1	201.992 ppb	109.524 %	107.108 %	11.494 ppb	52.862 ppb	106.213 %
Concentration per Run 2	211.999 ppb	104.095 %	101.215 %	11.884 ppb	54.588 ppb	105.416 %
Concentration per Run 3	212.305 ppb	100.561 %	104.639 %	12.493 ppb	54.564 ppb	103.282 %
Concentration RSD	2.8 %	4.3 %	2.8 %	4.2 %	1.8 %	1.4 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	22	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG2003419-9d10 6020SL	Rack	1		
Analysis started at:	12/3/2024 8:15:32 AM	Vial	4		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	99.503 %	109.764 %	51.588 ppb	10,856.918 ppb	7,994.707 ppb	50.526 ppb	5,496.138 ppb	16,673.424 ppb	98.676 %
Concentration per Run 1	96.489 %	110.438 %	52.895 ppb	10,878.663 ppb	8,097.928 ppb	50.850 ppb	5,433.931 ppb	16,119.880 ppb	95.720 %
Concentration per Run 2	99.055 %	109.933 %	51.305 ppb	10,888.781 ppb	7,941.706 ppb	50.432 ppb	5,649.882 ppb	17,204.716 ppb	100.488 %
Concentration per Run 3	102.966 %	108.923 %	50.565 ppb	10,803.312 ppb	7,944.486 ppb	50.296 ppb	5,404.601 ppb	16,695.676 ppb	99.820 %
Concentration RSD	3.3 %	0.7 %	2.3 %	0.4 %	1.1 %	0.6 %	2.4 %	3.3 %	2.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	48.079 ppb	50.578 ppb	339.173 ppb	5,105.797 ppb	52.022 ppb	51.685 ppb	51.531 ppb	51.280 ppb	102.230 %
Concentration per Run 1	46.225 ppb	49.417 ppb	343.145 ppb	5,147.360 ppb	53.573 ppb	52.650 ppb	51.414 ppb	51.899 ppb	102.827 %
Concentration per Run 2	50.516 ppb	52.589 ppb	349.887 ppb	5,264.448 ppb	52.866 ppb	52.347 ppb	52.696 ppb	52.222 ppb	98.748 %
Concentration per Run 3	47.495 ppb	49.728 ppb	324.488 ppb	4,905.584 ppb	49.626 ppb	50.058 ppb	50.483 ppb	49.720 ppb	105.115 %
Concentration RSD	4.6 %	3.5 %	3.9 %	3.6 %	4.0 %	2.7 %	2.2 %	2.7 %	3.2 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	50.996 ppb	50.648 ppb	123.392 ppb	51.435 ppb	102.305 %	1.517 ppb	50.951 ppb	102.400 %	49.926 ppb
Concentration per Run 1	50.725 ppb	50.417 ppb	122.123 ppb	50.066 ppb	103.885 %	1.445 ppb	49.315 ppb	105.804 %	49.508 ppb
Concentration per Run 2	52.403 ppb	53.862 ppb	126.277 ppb	52.037 ppb	100.805 %	1.568 ppb	52.575 ppb	101.955 %	49.836 ppb
Concentration per Run 3	49.862 ppb	47.667 ppb	121.777 ppb	52.201 ppb	102.226 %	1.537 ppb	50.963 ppb	99.442 %	50.433 ppb
Concentration RSD	2.5 %	6.1 %	2.0 %	2.3 %	1.5 %	4.2 %	3.2 %	3.1 %	0.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	53.839 ppb	106.015 %	105.339 %	49.844 ppb	50.213 ppb	106.071 %
Concentration per Run 1	52.642 ppb	108.655 %	106.577 %	47.209 ppb	48.513 ppb	110.027 %
Concentration per Run 2	54.953 ppb	102.598 %	104.835 %	52.055 ppb	51.923 ppb	103.499 %
Concentration per Run 3	53.920 ppb	106.793 %	104.605 %	50.267 ppb	50.204 ppb	104.687 %
Concentration RSD	2.2 %	2.9 %	1.0 %	4.9 %	3.4 %	3.3 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	23	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG2003419-10d5 6020SL	Rack	1		
Analysis started at:	12/3/2024 8:20:00 AM	Vial	5		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	101.929 %	113.637 %	0.011 ppb	11,201.603 ppb	5,726.170 ppb	2.956 ppb	1,209.648 ppb	23,721.463 ppb	100.876 %
Concentration per Run 1	94.719 %	112.121 %	0.014 ppb	11,083.805 ppb	5,685.581 ppb	2.869 ppb	1,191.629 ppb	23,410.754 ppb	96.358 %
Concentration per Run 2	103.865 %	115.152 %	0.011 ppb	11,491.823 ppb	5,780.521 ppb	2.761 ppb	1,218.735 ppb	23,454.717 ppb	102.194 %
Concentration per Run 3	107.203 %	113.637 %	0.009 ppb	11,029.182 ppb	5,712.409 ppb	3.239 ppb	1,218.581 ppb	24,298.917 ppb	104.077 %
Concentration RSD	6.3 %	1.3 %	21.3 %	2.3 %	0.9 %	8.5 %	1.3 %	2.1 %	4.0 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.325 ppb	0.012 ppb	593.566 ppb	44.115 ppb	1.175 ppb	1.120 ppb	0.641 ppb	1.798 ppb	101.939 %
Concentration per Run 1	-0.336 ppb	-0.029 ppb	596.580 ppb	41.986 ppb	1.228 ppb	1.101 ppb	0.624 ppb	1.751 ppb	103.110 %
Concentration per Run 2	-0.318 ppb	0.040 ppb	589.331 ppb	49.898 ppb	1.152 ppb	1.193 ppb	0.773 ppb	1.832 ppb	99.961 %
Concentration per Run 3	-0.322 ppb	0.026 ppb	594.786 ppb	40.460 ppb	1.145 ppb	1.066 ppb	0.525 ppb	1.810 ppb	102.745 %
Concentration RSD	3.0 %	299.6 %	0.6 %	11.5 %	3.9 %	5.8 %	19.5 %	2.3 %	1.7 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.118 ppb	0.228 ppb	147.731 ppb	1.154 ppb	105.638 %	0.000 ppb	0.019 ppb	103.991 %	0.394 ppb
Concentration per Run 1	0.054 ppb	0.559 ppb	145.933 ppb	0.929 ppb	107.955 %	0.001 ppb	0.014 ppb	105.539 %	0.352 ppb
Concentration per Run 2	0.179 ppb	0.031 ppb	151.399 ppb	1.133 ppb	102.282 %	-0.002 ppb	0.011 ppb	101.380 %	0.394 ppb
Concentration per Run 3	0.119 ppb	0.095 ppb	145.862 ppb	1.401 ppb	106.677 %	0.000 ppb	0.031 ppb	105.053 %	0.437 ppb
Concentration RSD	53.3 %	126.2 %	2.2 %	20.5 %	2.8 %	883.2 %	59.3 %	2.2 %	10.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	10.252 ppb	108.104 %	105.751 %	0.213 ppb	0.110 ppb	106.508 %
Concentration per Run 1	10.353 ppb	112.862 %	109.491 %	0.193 ppb	0.114 ppb	110.192 %
Concentration per Run 2	9.789 ppb	106.414 %	104.644 %	0.257 ppb	0.113 ppb	106.451 %
Concentration per Run 3	10.613 ppb	105.037 %	103.119 %	0.189 ppb	0.103 ppb	102.882 %
Concentration RSD	4.1 %	3.9 %	3.1 %	17.9 %	5.5 %	3.4 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	24	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	I2469249-04 6020SL	Rack	1		
Analysis started at:	12/3/2024 8:24:28 AM	Vial	7		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	90.788 %	112.514 %	0.287 ppb	37,249.992 ppb	16,277.286 ppb	547.921 ppb	26,200.079 ppb	270,097.769 ppb	92.670 %
Concentration per Run 1	87.434 %	115.825 %	0.282 ppb	36,402.653 ppb	15,601.990 ppb	528.462 ppb	25,641.173 ppb	265,553.256 ppb	92.040 %
Concentration per Run 2	91.788 %	116.162 %	0.283 ppb	35,796.538 ppb	15,653.599 ppb	528.319 ppb	25,422.491 ppb	261,750.387 ppb	92.160 %
Concentration per Run 3	93.142 %	105.556 %	0.295 ppb	39,550.786 ppb	17,576.268 ppb	586.981 ppb	27,536.574 ppb	282,989.664 ppb	93.809 %
Concentration RSD	3.3 %	5.4 %	2.5 %	5.4 %	6.9 %	6.2 %	4.4 %	4.2 %	1.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	1.476 ppb	1.790 ppb	1,411.684 ppb	26,561.440 ppb	42.604 ppb	103.134 ppb	3.278 ppb	2,851.621 ppb	96.632 %
Concentration per Run 1	1.547 ppb	1.719 ppb	1,421.085 ppb	27,059.087 ppb	42.675 ppb	103.091 ppb	3.095 ppb	2,853.180 ppb	97.577 %
Concentration per Run 2	1.497 ppb	1.767 ppb	1,361.103 ppb	25,195.690 ppb	41.350 ppb	101.044 ppb	3.013 ppb	2,777.019 ppb	97.592 %
Concentration per Run 3	1.384 ppb	1.883 ppb	1,452.864 ppb	27,429.543 ppb	43.786 ppb	105.268 ppb	3.728 ppb	2,924.663 ppb	94.727 %
Concentration RSD	5.7 %	4.7 %	3.3 %	4.5 %	2.9 %	2.0 %	11.9 %	2.6 %	1.7 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	9.342 ppb	4.029 ppb	1,147.893 ppb	2.486 ppb	98.785 %	0.003 ppb	1.280 ppb	100.155 %	58.824 ppb
Concentration per Run 1	9.729 ppb	3.687 ppb	1,129.492 ppb	2.321 ppb	102.905 %	0.008 ppb	1.258 ppb	104.955 %	56.560 ppb
Concentration per Run 2	9.293 ppb	4.383 ppb	1,150.072 ppb	2.384 ppb	96.511 %	-0.001 ppb	1.271 ppb	98.226 %	59.723 ppb
Concentration per Run 3	9.005 ppb	4.016 ppb	1,164.115 ppb	2.753 ppb	96.940 %	0.003 ppb	1.312 ppb	97.286 %	60.188 ppb
Concentration RSD	3.9 %	8.6 %	1.5 %	9.4 %	3.6 %	129.5 %	2.2 %	4.2 %	3.4 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	228.108 ppb	106.289 %	106.518 %	0.251 ppb	14.221 ppb	104.483 %
Concentration per Run 1	220.810 ppb	107.234 %	109.109 %	0.222 ppb	13.931 ppb	105.788 %
Concentration per Run 2	230.041 ppb	106.490 %	107.066 %	0.254 ppb	14.379 ppb	103.205 %
Concentration per Run 3	233.474 ppb	105.143 %	103.379 %	0.279 ppb	14.355 ppb	104.455 %
Concentration RSD	2.9 %	1.0 %	2.7 %	11.3 %	1.8 %	1.2 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	25	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	I2469249-07 6020SL	Rack	1		
Analysis started at:	12/3/2024 8:28:57 AM	Vial	8		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	96.409 %	112.458 %	0.007 ppb	77,926.151 ppb	5,045.840 ppb	4.450 ppb	9,933.261 ppb	108,788.875 ppb	97.510 %
Concentration per Run 1	93.087 %	119.192 %	0.007 ppb	75,086.765 ppb	4,737.815 ppb	4.339 ppb	9,380.911 ppb	104,098.989 ppb	94.860 %
Concentration per Run 2	97.999 %	105.724 %	0.009 ppb	80,798.628 ppb	5,311.582 ppb	4.889 ppb	10,291.605 ppb	109,796.788 ppb	99.082 %
Concentration per Run 3	98.141 %	112.458 %	0.005 ppb	77,893.061 ppb	5,088.123 ppb	4.122 ppb	10,127.269 ppb	112,470.848 ppb	98.589 %
Concentration RSD	3.0 %	6.0 %	28.8 %	3.7 %	5.7 %	8.9 %	4.9 %	3.9 %	2.4 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.256 ppb	0.025 ppb	764.992 ppb	759.876 ppb	0.839 ppb	3.442 ppb	5.316 ppb	2.117 ppb	96.195 %
Concentration per Run 1	-0.201 ppb	0.010 ppb	745.337 ppb	750.961 ppb	0.839 ppb	3.277 ppb	5.475 ppb	2.073 ppb	94.486 %
Concentration per Run 2	-0.300 ppb	0.030 ppb	776.069 ppb	776.234 ppb	0.863 ppb	3.546 ppb	5.564 ppb	2.200 ppb	95.746 %
Concentration per Run 3	-0.265 ppb	0.034 ppb	773.569 ppb	752.433 ppb	0.816 ppb	3.503 ppb	4.908 ppb	2.079 ppb	98.353 %
Concentration RSD	19.7 %	52.2 %	2.2 %	1.9 %	2.8 %	4.2 %	6.7 %	3.4 %	2.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.588 ppb	0.429 ppb	561.254 ppb	22.138 ppb	101.488 %	0.002 ppb	0.023 ppb	102.288 %	0.179 ppb
Concentration per Run 1	0.447 ppb	0.722 ppb	566.755 ppb	20.193 ppb	100.575 %	0.000 ppb	0.029 ppb	103.531 %	0.145 ppb
Concentration per Run 2	0.627 ppb	0.352 ppb	553.664 ppb	21.246 ppb	102.773 %	0.001 ppb	0.015 ppb	100.897 %	0.195 ppb
Concentration per Run 3	0.689 ppb	0.213 ppb	563.343 ppb	24.975 ppb	101.115 %	0.003 ppb	0.025 ppb	102.436 %	0.197 ppb
Concentration RSD	21.3 %	61.3 %	1.2 %	11.3 %	1.1 %	94.9 %	32.5 %	1.3 %	16.5 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	51.789 ppb	107.069 %	106.723 %	0.043 ppb	0.089 ppb	104.902 %
Concentration per Run 1	50.280 ppb	107.902 %	108.589 %	0.035 ppb	0.090 ppb	105.731 %
Concentration per Run 2	51.977 ppb	104.908 %	107.281 %	0.043 ppb	0.095 ppb	103.237 %
Concentration per Run 3	53.112 ppb	108.397 %	104.299 %	0.050 ppb	0.083 ppb	105.738 %
Concentration RSD	2.8 %	1.8 %	2.1 %	17.6 %	6.8 %	1.4 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	26	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	CCV	Rack	0		
Analysis started at:	12/3/2024 8:33:58 AM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	104.880 %	117.228 %	61.102 ppb	5,955.026 ppb	5,899.944 ppb	54.609 ppb	5,836.487 ppb	5,633.322 ppb	101.474 %
Concentration per Run 1	102.299 %	121.381 %	60.533 ppb	5,667.069 ppb	5,781.177 ppb	52.135 ppb	5,539.343 ppb	5,472.092 ppb	100.624 %
Concentration per Run 2	106.213 %	114.478 %	60.849 ppb	6,005.036 ppb	5,831.854 ppb	54.677 ppb	5,927.674 ppb	5,603.542 ppb	102.945 %
Concentration per Run 3	106.128 %	115.825 %	61.925 ppb	6,192.972 ppb	6,086.801 ppb	57.015 ppb	6,042.445 ppb	5,824.332 ppb	100.852 %
Recovery Percentage 1			101.837 %	99.250 %	98.332 %	91.015 %	97.275 %	93.889 %	
Concentration RSD	2.1 %	3.1 %	1.2 %	4.5 %	2.8 %	4.5 %	4.5 %	3.2 %	1.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	58.413 ppb	59.039 ppb	60.426 ppb	5,948.352 ppb	59.967 ppb	61.291 ppb	63.074 ppb	61.943 ppb	102.073 %
Concentration per Run 1	54.607 ppb	55.413 ppb	57.555 ppb	5,642.430 ppb	57.706 ppb	60.618 ppb	59.634 ppb	60.129 ppb	105.664 %
Concentration per Run 2	57.714 ppb	58.732 ppb	59.491 ppb	6,031.279 ppb	59.722 ppb	61.943 ppb	64.690 ppb	62.107 ppb	101.227 %
Concentration per Run 3	62.918 ppb	62.972 ppb	64.232 ppb	6,171.345 ppb	62.475 ppb	61.311 ppb	64.899 ppb	63.592 ppb	99.327 %
Recovery Percentage 1	97.355 %	98.399 %	100.710 %	99.139 %	99.946 %	102.151 %	105.124 %	103.238 %	
Concentration RSD	7.2 %	6.4 %	5.7 %	4.6 %	4.0 %	1.1 %	4.7 %	2.8 %	3.2 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	61.252 ppb	58.932 ppb	60.432 ppb	59.651 ppb	105.498 %	59.936 ppb	61.453 ppb	102.535 %	61.198 ppb
Concentration per Run 1	61.628 ppb	55.436 ppb	57.226 ppb	57.286 ppb	112.798 %	57.021 ppb	59.194 ppb	104.931 %	58.544 ppb
Concentration per Run 2	61.042 ppb	59.468 ppb	61.033 ppb	60.383 ppb	103.599 %	59.859 ppb	61.882 ppb	101.484 %	62.618 ppb
Concentration per Run 3	61.086 ppb	61.892 ppb	63.036 ppb	61.283 ppb	100.098 %	62.929 ppb	63.284 ppb	101.189 %	62.432 ppb
Recovery Percentage 1	102.087 %	98.220 %	100.719 %	99.418 %		99.893 %	102.422 %		101.996 %
Concentration RSD	0.5 %	5.5 %	4.9 %	3.5 %	6.2 %	4.9 %	3.4 %	2.0 %	3.8 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	59.541 ppb	108.351 %	107.775 %	59.822 ppb	59.942 ppb	109.521 %
Concentration per Run 1	57.929 ppb	113.355 %	113.468 %	56.724 ppb	57.044 ppb	112.884 %
Concentration per Run 2	59.953 ppb	106.218 %	105.175 %	60.478 ppb	61.151 ppb	108.383 %
Concentration per Run 3	60.741 ppb	105.479 %	104.682 %	62.264 ppb	61.631 ppb	107.296 %
Recovery Percentage 1	99.235 %			99.703 %	99.903 %	
Concentration RSD	2.4 %	4.0 %	4.6 %	4.7 %	4.2 %	2.7 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	27	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	CCB	Rack	0		
Analysis started at:	12/3/2024 8:38:29 AM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	103.977 %	115.152 %	0.011 ppb	-5.017 ppb	0.467 ppb	-0.197 ppb	5.301 ppb	-0.613 ppb	99.782 %
Concentration per Run 1	97.906 %	116.330 %	0.013 ppb	-7.770 ppb	0.058 ppb	-0.298 ppb	-8.208 ppb	7.131 ppb	96.008 %
Concentration per Run 2	105.230 %	117.004 %	0.010 ppb	-7.891 ppb	1.241 ppb	0.072 ppb	8.652 ppb	1.160 ppb	102.242 %
Concentration per Run 3	108.796 %	112.121 %	0.012 ppb	0.609 ppb	0.101 ppb	-0.367 ppb	15.459 ppb	-10.130 ppb	101.096 %
Recovery Percentage 1			2.287 %	-1.003 %	0.667 %	-1.973 %	5.301 %	-0.613 %	
Concentration RSD	5.3 %	2.3 %	10.9 %	97.1 %	143.7 %	119.7 %	229.8 %	1,430.6 %	3.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.523 ppb	-0.048 ppb	0.104 ppb	7.040 ppb	-0.003 ppb	0.007 ppb	0.231 ppb	0.283 ppb	97.473 %
Concentration per Run 1	-0.457 ppb	-0.059 ppb	0.106 ppb	6.173 ppb	-0.007 ppb	0.012 ppb	0.256 ppb	0.348 ppb	99.593 %
Concentration per Run 2	-0.516 ppb	-0.039 ppb	0.095 ppb	7.088 ppb	0.000 ppb	0.029 ppb	0.122 ppb	0.222 ppb	94.437 %
Concentration per Run 3	-0.596 ppb	-0.045 ppb	0.110 ppb	7.860 ppb	-0.003 ppb	-0.021 ppb	0.317 ppb	0.280 ppb	98.390 %
Recovery Percentage 1	-10.460 %	-4.776 %	10.361 %	14.080 %	-0.672 %	0.337 %	23.129 %	5.667 %	
Concentration RSD	13.3 %	21.5 %	7.3 %	12.0 %	102.2 %	379.9 %	43.1 %	22.4 %	2.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.105 ppb	0.147 ppb	0.016 ppb	0.575 ppb	104.361 %	0.004 ppb	0.005 ppb	99.067 %	0.074 ppb
Concentration per Run 1	0.097 ppb	0.189 ppb	0.018 ppb	0.435 ppb	107.730 %	0.006 ppb	0.007 ppb	102.872 %	0.043 ppb
Concentration per Run 2	0.108 ppb	0.210 ppb	0.016 ppb	0.526 ppb	103.006 %	0.005 ppb	0.004 ppb	98.046 %	0.074 ppb
Concentration per Run 3	0.110 ppb	0.042 ppb	0.015 ppb	0.763 ppb	102.347 %	0.002 ppb	0.004 ppb	96.283 %	0.104 ppb
Recovery Percentage 1	21.026 %	2.942 %	0.162 %	28.741 %		1.112 %	2.423 %		1.844 %
Concentration RSD	6.5 %	62.3 %	10.8 %	29.5 %	2.8 %	42.5 %	39.8 %	3.4 %	40.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.014 ppb	105.137 %	103.616 %	0.241 ppb	0.029 ppb	106.686 %
Concentration per Run 1	-0.005 ppb	107.808 %	107.265 %	0.228 ppb	0.030 ppb	110.318 %
Concentration per Run 2	0.038 ppb	103.183 %	101.486 %	0.279 ppb	0.028 ppb	104.981 %
Concentration per Run 3	0.010 ppb	104.420 %	102.098 %	0.217 ppb	0.029 ppb	104.759 %
Recovery Percentage 1	2.816 %			24.137 %	2.875 %	
Concentration RSD	156.9 %	2.3 %	3.1 %	13.6 %	4.1 %	3.0 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index: 28
Analysis label: WG2003472-1 6020TL
Analysis started at: 12/3/2024 8:50:16 AM
User name ALPHALAB\a2-icpmsq2
Rack 1
Vial 9
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	104.348 %	118.463 %	0.016 ppb	-17.156 ppb	0.509 ppb	0.501 ppb	-8.419 ppb	8.802 ppb	96.697 %
Concentration per Run 1	99.619 %	121.213 %	0.020 ppb	-21.457 ppb	-0.168 ppb	0.623 ppb	-12.201 ppb	17.610 ppb	92.397 %
Concentration per Run 2	106.886 %	119.192 %	0.019 ppb	-17.801 ppb	-0.141 ppb	0.689 ppb	-16.846 ppb	14.550 ppb	96.842 %
Concentration per Run 3	106.539 %	114.983 %	0.010 ppb	-12.209 ppb	1.837 ppb	0.191 ppb	3.789 ppb	-5.753 ppb	100.853 %
Concentration RSD	3.9 %	2.7 %	31.0 %	27.1 %	225.8 %	54.0 %	128.6 %	144.3 %	4.4 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.460 ppb	-0.014 ppb	0.339 ppb	0.385 ppb	-0.001 ppb	0.022 ppb	0.332 ppb	0.685 ppb	96.914 %
Concentration per Run 1	-0.550 ppb	0.006 ppb	0.398 ppb	-0.763 ppb	-0.004 ppb	0.047 ppb	0.352 ppb	0.712 ppb	98.293 %
Concentration per Run 2	-0.437 ppb	-0.021 ppb	0.298 ppb	1.150 ppb	0.003 ppb	0.042 ppb	0.345 ppb	0.570 ppb	93.618 %
Concentration per Run 3	-0.394 ppb	-0.026 ppb	0.322 ppb	0.768 ppb	-0.003 ppb	-0.022 ppb	0.298 ppb	0.773 ppb	98.832 %
Concentration RSD	17.6 %	128.0 %	15.5 %	263.2 %	344.8 %	173.0 %	8.9 %	15.2 %	3.0 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.070 ppb	0.163 ppb	0.008 ppb	0.186 ppb	106.624 %	0.001 ppb	0.000 ppb	104.794 %	0.016 ppb
Concentration per Run 1	0.060 ppb	0.156 ppb	0.017 ppb	0.112 ppb	106.623 %	-0.001 ppb	0.000 ppb	108.300 %	0.012 ppb
Concentration per Run 2	0.075 ppb	0.206 ppb	0.009 ppb	0.158 ppb	107.173 %	0.002 ppb	0.000 ppb	104.116 %	0.016 ppb
Concentration per Run 3	0.075 ppb	0.129 ppb	-0.002 ppb	0.286 ppb	106.075 %	0.001 ppb	0.000 ppb	101.966 %	0.018 ppb
Concentration RSD	12.3 %	23.8 %	112.2 %	48.7 %	0.5 %	183.4 %	N/A	3.1 %	19.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.166 ppb	106.999 %	107.332 %	0.023 ppb	0.013 ppb	109.777 %
Concentration per Run 1	0.248 ppb	107.092 %	106.892 %	0.017 ppb	0.010 ppb	110.167 %
Concentration per Run 2	0.119 ppb	104.322 %	107.208 %	0.028 ppb	0.016 ppb	110.039 %
Concentration per Run 3	0.130 ppb	109.584 %	107.895 %	0.023 ppb	0.012 ppb	109.125 %
Concentration RSD	43.1 %	2.5 %	0.5 %	23.9 %	25.7 %	0.5 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	29	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG2003472-2d10 6020TL	Rack	1		
Analysis started at:	12/3/2024 8:54:45 AM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	106.427 %	117.397 %	5.134 ppb	1,002.855 ppb	984.197 ppb	182.732 ppb	995.586 ppb	946.535 ppb	98.274 %
Concentration per Run 1	102.339 %	123.906 %	5.155 ppb	935.315 ppb	937.522 ppb	170.717 ppb	983.320 ppb	995.492 ppb	96.628 %
Concentration per Run 2	107.029 %	110.943 %	5.154 ppb	1,056.737 ppb	1,045.719 ppb	190.240 ppb	1,021.244 ppb	939.268 ppb	98.773 %
Concentration per Run 3	109.914 %	117.340 %	5.092 ppb	1,016.513 ppb	969.351 ppb	187.240 ppb	982.195 ppb	904.845 ppb	99.422 %
Concentration RSD	3.6 %	5.5 %	0.7 %	6.2 %	5.6 %	5.8 %	2.2 %	4.8 %	1.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	47.670 ppb	19.572 ppb	51.772 ppb	105.745 ppb	49.549 ppb	51.761 ppb	26.477 ppb	51.866 ppb	99.384 %
Concentration per Run 1	46.193 ppb	19.180 ppb	51.220 ppb	109.009 ppb	47.998 ppb	50.736 ppb	26.197 ppb	51.865 ppb	99.301 %
Concentration per Run 2	46.698 ppb	20.088 ppb	52.631 ppb	105.793 ppb	50.814 ppb	52.070 ppb	26.943 ppb	52.101 ppb	98.901 %
Concentration per Run 3	50.119 ppb	19.448 ppb	51.466 ppb	102.434 ppb	49.834 ppb	52.477 ppb	26.291 ppb	51.632 ppb	99.950 %
Concentration RSD	4.5 %	2.4 %	1.5 %	3.1 %	2.9 %	1.8 %	1.5 %	0.5 %	0.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	12.414 ppb	11.535 ppb	98.345 ppb	96.570 ppb	106.050 %	5.154 ppb	5.185 ppb	104.504 %	38.774 ppb
Concentration per Run 1	12.519 ppb	11.918 ppb	96.504 ppb	93.029 ppb	109.323 %	5.120 ppb	5.059 ppb	104.202 %	37.618 ppb
Concentration per Run 2	12.812 ppb	12.182 ppb	98.813 ppb	97.145 ppb	106.918 %	5.078 ppb	4.925 ppb	104.330 %	38.680 ppb
Concentration per Run 3	11.911 ppb	10.505 ppb	99.718 ppb	99.536 ppb	101.908 %	5.264 ppb	5.570 ppb	104.981 %	40.025 ppb
Concentration RSD	3.7 %	7.8 %	1.7 %	3.4 %	3.6 %	1.9 %	6.6 %	0.4 %	3.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	195.526 ppb	107.515 %	106.856 %	11.671 ppb	51.682 ppb	109.599 %
Concentration per Run 1	193.697 ppb	110.259 %	109.337 %	11.696 ppb	51.392 ppb	110.010 %
Concentration per Run 2	191.567 ppb	107.498 %	108.609 %	11.679 ppb	52.623 ppb	106.992 %
Concentration per Run 3	201.315 ppb	104.789 %	102.623 %	11.637 ppb	51.033 ppb	111.796 %
Concentration RSD	2.6 %	2.5 %	3.4 %	0.3 %	1.6 %	2.2 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	30	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2469261-01d10 6020TL	Rack	1		
Analysis started at:	12/3/2024 8:59:15 AM	Vial	11		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	100.236 %	116.274 %	0.037 ppb	1,170.726 ppb	921.186 ppb	364.707 ppb	679.445 ppb	9,872.538 ppb	97.992 %
Concentration per Run 1	97.362 %	113.300 %	0.034 ppb	1,188.536 ppb	940.084 ppb	368.939 ppb	690.412 ppb	9,812.497 ppb	96.168 %
Concentration per Run 2	99.268 %	113.973 %	0.040 ppb	1,179.867 ppb	916.912 ppb	372.128 ppb	637.870 ppb	9,794.169 ppb	96.977 %
Concentration per Run 3	104.079 %	121.549 %	0.037 ppb	1,143.777 ppb	906.561 ppb	353.053 ppb	710.053 ppb	10,010.948 ppb	100.830 %
Concentration RSD	3.5 %	3.9 %	8.3 %	2.0 %	1.9 %	2.8 %	5.5 %	1.2 %	2.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	1.303 ppb	875.972 ppb	59.213 ppb	647.324 ppb	1.327 ppb	1.058 ppb	7.967 ppb	4.789 ppb	101.981 %
Concentration per Run 1	1.515 ppb	870.648 ppb	59.316 ppb	695.775 ppb	1.288 ppb	1.083 ppb	7.996 ppb	4.622 ppb	103.550 %
Concentration per Run 2	1.221 ppb	889.364 ppb	58.609 ppb	620.437 ppb	1.390 ppb	1.211 ppb	8.102 ppb	4.928 ppb	99.615 %
Concentration per Run 3	1.173 ppb	867.903 ppb	59.714 ppb	625.759 ppb	1.304 ppb	0.880 ppb	7.804 ppb	4.816 ppb	102.779 %
Concentration RSD	14.2 %	1.3 %	0.9 %	6.5 %	4.1 %	15.8 %	1.9 %	3.2 %	2.0 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.517 ppb	0.795 ppb	30.830 ppb	1.292 ppb	107.101 %	0.011 ppb	0.041 ppb	105.258 %	1.540 ppb
Concentration per Run 1	0.466 ppb	0.611 ppb	30.889 ppb	1.179 ppb	108.201 %	0.010 ppb	0.052 ppb	106.425 %	1.329 ppb
Concentration per Run 2	0.510 ppb	1.173 ppb	31.099 ppb	1.289 ppb	106.304 %	0.012 ppb	0.035 ppb	104.288 %	1.507 ppb
Concentration per Run 3	0.576 ppb	0.600 ppb	30.503 ppb	1.409 ppb	106.796 %	0.011 ppb	0.035 ppb	105.059 %	1.785 ppb
Concentration RSD	10.7 %	41.3 %	1.0 %	8.9 %	0.9 %	10.1 %	23.7 %	1.0 %	14.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	4.643 ppb	109.684 %	108.361 %	0.023 ppb	1.551 ppb	111.226 %
Concentration per Run 1	4.654 ppb	113.808 %	112.462 %	0.015 ppb	1.505 ppb	113.926 %
Concentration per Run 2	4.541 ppb	106.272 %	106.072 %	0.026 ppb	1.576 ppb	110.522 %
Concentration per Run 3	4.735 ppb	108.971 %	106.549 %	0.030 ppb	1.572 ppb	109.230 %
Concentration RSD	2.1 %	3.5 %	3.3 %	33.2 %	2.6 %	2.2 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	31	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG2003472-3d10 6020TL	Rack	1		
Analysis started at:	12/3/2024 9:03:45 AM	Vial	12		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	103.244 %	119.024 %	5.371 ppb	2,230.851 ppb	1,943.920 ppb	743.216 ppb	1,663.294 ppb	11,213.259 ppb	97.892 %
Concentration per Run 1	99.075 %	120.876 %	5.486 ppb	2,233.435 ppb	1,917.759 ppb	727.458 ppb	1,612.642 ppb	11,161.731 ppb	93.835 %
Concentration per Run 2	103.901 %	119.866 %	5.274 ppb	2,199.818 ppb	1,937.202 ppb	724.769 ppb	1,659.416 ppb	11,104.766 ppb	99.344 %
Concentration per Run 3	106.757 %	116.330 %	5.354 ppb	2,259.300 ppb	1,976.799 ppb	777.421 ppb	1,717.824 ppb	11,373.280 ppb	100.497 %
Concentration RSD	3.8 %	2.0 %	2.0 %	1.3 %	1.5 %	4.0 %	3.2 %	1.3 %	3.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	50.823 ppb	886.207 ppb	110.471 ppb	720.348 ppb	52.287 ppb	51.756 ppb	33.796 ppb	56.144 ppb	103.449 %
Concentration per Run 1	50.297 ppb	882.706 ppb	114.110 ppb	729.110 ppb	52.473 ppb	52.192 ppb	34.058 ppb	56.930 ppb	103.085 %
Concentration per Run 2	50.962 ppb	872.441 ppb	107.175 ppb	731.509 ppb	52.376 ppb	50.903 ppb	33.053 ppb	55.747 ppb	103.524 %
Concentration per Run 3	51.210 ppb	903.476 ppb	110.130 ppb	700.425 ppb	52.012 ppb	52.172 ppb	34.275 ppb	55.756 ppb	103.737 %
Concentration RSD	0.9 %	1.8 %	3.2 %	2.4 %	0.5 %	1.4 %	1.9 %	1.2 %	0.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	12.509 ppb	10.389 ppb	130.804 ppb	92.589 ppb	107.951 %	5.313 ppb	5.252 ppb	105.702 %	43.324 ppb
Concentration per Run 1	12.747 ppb	10.822 ppb	131.185 ppb	92.330 ppb	109.063 %	5.228 ppb	5.090 ppb	108.587 %	42.772 ppb
Concentration per Run 2	12.617 ppb	9.915 ppb	129.129 ppb	90.194 ppb	110.345 %	5.362 ppb	5.259 ppb	105.347 %	42.821 ppb
Concentration per Run 3	12.163 ppb	10.430 ppb	132.099 ppb	95.243 ppb	104.445 %	5.350 ppb	5.408 ppb	103.173 %	44.379 ppb
Concentration RSD	2.4 %	4.4 %	1.2 %	2.7 %	2.9 %	1.4 %	3.0 %	2.6 %	2.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	206.464 ppb	110.751 %	109.863 %	11.825 ppb	54.212 ppb	113.028 %
Concentration per Run 1	202.515 ppb	110.894 %	111.333 %	11.476 ppb	52.465 ppb	116.398 %
Concentration per Run 2	205.394 ppb	110.108 %	109.682 %	12.374 ppb	56.216 ppb	109.201 %
Concentration per Run 3	211.483 ppb	111.250 %	108.574 %	11.625 ppb	53.954 ppb	113.487 %
Concentration RSD	2.2 %	0.5 %	1.3 %	4.1 %	3.5 %	3.2 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	32	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG2003472-4d10 6020TL	Rack	1		
Analysis started at:	12/3/2024 9:08:15 AM	Vial	13		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	109.063 %	119.417 %	0.037 ppb	1,222.267 ppb	954.399 ppb	390.399 ppb	724.449 ppb	10,185.538 ppb	100.298 %
Concentration per Run 1	104.460 %	119.024 %	0.036 ppb	1,196.307 ppb	924.907 ppb	401.191 ppb	724.118 ppb	9,932.683 ppb	101.079 %
Concentration per Run 2	110.278 %	123.906 %	0.039 ppb	1,221.339 ppb	948.980 ppb	381.774 ppb	703.660 ppb	10,182.464 ppb	100.924 %
Concentration per Run 3	112.450 %	115.320 %	0.037 ppb	1,249.154 ppb	989.308 ppb	388.233 ppb	745.569 ppb	10,441.467 ppb	98.890 %
Concentration RSD	3.8 %	3.6 %	3.7 %	2.2 %	3.4 %	2.5 %	2.9 %	2.5 %	1.2 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	1.215 ppb	803.893 ppb	58.780 ppb	704.452 ppb	1.419 ppb	1.080 ppb	8.056 ppb	4.921 ppb	105.751 %
Concentration per Run 1	1.387 ppb	825.182 ppb	59.266 ppb	656.295 ppb	1.506 ppb	0.908 ppb	7.880 ppb	4.754 ppb	108.525 %
Concentration per Run 2	1.200 ppb	715.116 ppb	60.456 ppb	755.699 ppb	1.385 ppb	1.129 ppb	8.372 ppb	5.156 ppb	103.117 %
Concentration per Run 3	1.057 ppb	871.381 ppb	56.617 ppb	701.361 ppb	1.366 ppb	1.204 ppb	7.916 ppb	4.854 ppb	105.612 %
Concentration RSD	13.6 %	10.0 %	3.3 %	7.1 %	5.4 %	14.2 %	3.4 %	4.3 %	2.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.504 ppb	1.037 ppb	31.944 ppb	1.298 ppb	109.835 %	0.006 ppb	0.054 ppb	109.554 %	0.324 ppb
Concentration per Run 1	0.532 ppb	1.041 ppb	30.972 ppb	0.987 ppb	113.657 %	0.009 ppb	0.059 ppb	112.144 %	0.274 ppb
Concentration per Run 2	0.573 ppb	0.716 ppb	32.435 ppb	1.315 ppb	108.340 %	0.006 ppb	0.037 ppb	108.479 %	0.316 ppb
Concentration per Run 3	0.406 ppb	1.355 ppb	32.424 ppb	1.592 ppb	107.508 %	0.003 ppb	0.065 ppb	108.038 %	0.382 ppb
Concentration RSD	17.3 %	30.8 %	2.6 %	23.4 %	3.0 %	45.9 %	26.9 %	2.1 %	16.8 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	4.551 ppb	111.445 %	109.943 %	0.020 ppb	1.532 ppb	115.807 %
Concentration per Run 1	4.533 ppb	115.169 %	111.780 %	0.013 ppb	1.524 ppb	115.525 %
Concentration per Run 2	4.546 ppb	110.671 %	108.738 %	0.017 ppb	1.555 ppb	117.016 %
Concentration per Run 3	4.574 ppb	108.496 %	109.310 %	0.031 ppb	1.517 ppb	114.881 %
Concentration RSD	0.5 %	3.1 %	1.5 %	48.4 %	1.3 %	0.9 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	33	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG2003472-5d10 6020TL	Rack	1		
Analysis started at:	12/3/2024 9:12:41 AM	Vial	14		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	105.764 %	115.264 %	48.427 ppb	5,967.445 ppb	5,847.899 ppb	462.378 ppb	5,687.239 ppb	15,381.779 ppb	100.150 %
Concentration per Run 1	100.278 %	115.320 %	49.931 ppb	5,940.474 ppb	5,810.633 ppb	460.350 ppb	5,605.885 ppb	15,291.063 ppb	97.825 %
Concentration per Run 2	106.548 %	115.152 %	47.961 ppb	5,875.724 ppb	5,953.060 ppb	466.937 ppb	5,755.777 ppb	15,408.999 ppb	102.678 %
Concentration per Run 3	110.465 %	115.320 %	47.388 ppb	6,086.136 ppb	5,780.004 ppb	459.846 ppb	5,700.054 ppb	15,445.275 ppb	99.946 %
Concentration RSD	4.9 %	0.1 %	2.8 %	1.8 %	1.6 %	0.9 %	1.3 %	0.5 %	2.4 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	50.735 ppb	928.937 ppb	106.066 ppb	5,475.165 ppb	50.175 ppb	49.780 ppb	57.194 ppb	54.298 ppb	105.832 %
Concentration per Run 1	49.066 ppb	899.936 ppb	103.623 ppb	5,349.299 ppb	48.887 ppb	50.440 ppb	55.687 ppb	53.429 ppb	109.718 %
Concentration per Run 2	52.460 ppb	951.538 ppb	111.186 ppb	5,664.250 ppb	51.259 ppb	50.742 ppb	60.920 ppb	56.226 ppb	101.883 %
Concentration per Run 3	50.679 ppb	935.338 ppb	103.387 ppb	5,411.946 ppb	50.378 ppb	48.159 ppb	54.975 ppb	53.239 ppb	105.894 %
Concentration RSD	3.3 %	2.8 %	4.2 %	3.0 %	2.4 %	2.8 %	5.7 %	3.1 %	3.7 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	50.288 ppb	47.170 ppb	78.632 ppb	48.215 ppb	110.271 %	5.776 ppb	48.364 ppb	107.903 %	48.320 ppb
Concentration per Run 1	49.368 ppb	49.051 ppb	76.727 ppb	46.283 ppb	113.100 %	5.710 ppb	47.756 ppb	109.425 %	47.669 ppb
Concentration per Run 2	52.101 ppb	47.624 ppb	80.200 ppb	48.700 ppb	107.220 %	5.862 ppb	49.352 ppb	107.101 %	49.793 ppb
Concentration per Run 3	49.395 ppb	44.835 ppb	78.970 ppb	49.660 ppb	110.492 %	5.755 ppb	47.982 ppb	107.183 %	47.498 ppb
Concentration RSD	3.1 %	4.5 %	2.2 %	3.6 %	2.7 %	1.3 %	1.8 %	1.2 %	2.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	51.780 ppb	114.040 %	112.072 %	47.975 ppb	50.021 ppb	112.703 %
Concentration per Run 1	51.327 ppb	118.486 %	115.352 %	45.766 ppb	48.899 ppb	115.305 %
Concentration per Run 2	51.630 ppb	111.787 %	109.402 %	48.139 ppb	50.615 ppb	114.166 %
Concentration per Run 3	52.384 ppb	111.847 %	111.460 %	50.020 ppb	50.549 ppb	108.639 %
Concentration RSD	1.1 %	3.4 %	2.7 %	4.4 %	1.9 %	3.2 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	34	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG2003472-6d50 6020TL	Rack	1		
Analysis started at:	12/3/2024 9:17:08 AM	Vial	15		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	104.442 %	113.749 %	0.013 ppb	223.164 ppb	194.414 ppb	76.291 ppb	154.264 ppb	2,120.425 ppb	100.195 %
Concentration per Run 1	99.102 %	112.626 %	0.010 ppb	221.574 ppb	194.661 ppb	79.960 ppb	165.022 ppb	2,108.095 ppb	97.367 %
Concentration per Run 2	104.276 %	115.152 %	0.018 ppb	229.672 ppb	200.050 ppb	77.071 ppb	145.507 ppb	2,212.131 ppb	100.759 %
Concentration per Run 3	109.948 %	113.468 %	0.012 ppb	218.245 ppb	188.532 ppb	71.842 ppb	152.262 ppb	2,041.050 ppb	102.459 %
Concentration RSD	5.2 %	1.1 %	30.4 %	2.6 %	3.0 %	5.4 %	6.4 %	4.1 %	2.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.150 ppb	182.110 ppb	11.980 ppb	132.891 ppb	0.272 ppb	0.097 ppb	1.747 ppb	1.131 ppb	102.791 %
Concentration per Run 1	-0.186 ppb	179.878 ppb	11.838 ppb	129.357 ppb	0.275 ppb	0.155 ppb	1.839 ppb	1.133 ppb	103.837 %
Concentration per Run 2	-0.193 ppb	187.800 ppb	12.622 ppb	120.558 ppb	0.273 ppb	0.105 ppb	1.816 ppb	1.121 ppb	99.518 %
Concentration per Run 3	-0.070 ppb	178.654 ppb	11.480 ppb	148.757 ppb	0.266 ppb	0.029 ppb	1.585 ppb	1.141 ppb	105.019 %
Concentration RSD	46.2 %	2.7 %	4.9 %	10.9 %	1.8 %	65.6 %	8.0 %	0.9 %	2.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.162 ppb	0.171 ppb	6.376 ppb	0.513 ppb	107.502 %	0.002 ppb	0.015 ppb	106.081 %	0.171 ppb
Concentration per Run 1	0.075 ppb	-0.009 ppb	6.259 ppb	0.238 ppb	112.344 %	0.006 ppb	0.007 ppb	110.996 %	0.119 ppb
Concentration per Run 2	0.189 ppb	0.036 ppb	6.553 ppb	0.737 ppb	104.665 %	-0.001 ppb	0.021 ppb	102.699 %	0.162 ppb
Concentration per Run 3	0.222 ppb	0.488 ppb	6.315 ppb	0.564 ppb	105.497 %	0.001 ppb	0.018 ppb	104.547 %	0.233 ppb
Concentration RSD	47.4 %	160.1 %	2.5 %	49.4 %	3.9 %	163.5 %	50.5 %	4.1 %	33.3 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.976 ppb	109.466 %	109.209 %	0.210 ppb	0.346 ppb	110.600 %
Concentration per Run 1	0.977 ppb	114.087 %	111.157 %	0.191 ppb	0.336 ppb	115.589 %
Concentration per Run 2	0.939 ppb	104.304 %	106.783 %	0.241 ppb	0.352 ppb	108.341 %
Concentration per Run 3	1.013 ppb	110.008 %	109.687 %	0.197 ppb	0.349 ppb	107.869 %
Concentration RSD	3.8 %	4.5 %	2.0 %	12.9 %	2.4 %	3.9 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	35	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2469261-02d10 6020TL	Rack	1		
Analysis started at:	12/3/2024 9:21:35 AM	Vial	16		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	107.949 %	114.983 %	0.041 ppb	1,207.407 ppb	987.032 ppb	458.142 ppb	719.481 ppb	10,417.879 ppb	101.252 %
Concentration per Run 1	103.105 %	120.708 %	0.036 ppb	1,158.911 ppb	976.966 ppb	442.780 ppb	719.016 ppb	10,301.846 ppb	98.700 %
Concentration per Run 2	107.872 %	112.458 %	0.043 ppb	1,224.041 ppb	972.783 ppb	464.794 ppb	687.179 ppb	10,299.354 ppb	102.693 %
Concentration per Run 3	112.871 %	111.785 %	0.043 ppb	1,239.270 ppb	1,011.347 ppb	466.853 ppb	752.246 ppb	10,652.436 ppb	102.363 %
Concentration RSD	4.5 %	4.3 %	9.6 %	3.5 %	2.1 %	2.9 %	4.5 %	1.9 %	2.2 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	1.629 ppb	922.199 ppb	58.715 ppb	776.744 ppb	1.402 ppb	1.095 ppb	8.437 ppb	5.325 ppb	105.430 %
Concentration per Run 1	1.572 ppb	804.620 ppb	58.003 ppb	801.911 ppb	1.362 ppb	1.068 ppb	8.235 ppb	5.440 ppb	104.501 %
Concentration per Run 2	1.711 ppb	960.150 ppb	57.496 ppb	737.162 ppb	1.377 ppb	1.072 ppb	8.206 ppb	5.555 ppb	106.195 %
Concentration per Run 3	1.604 ppb	1,001.829 ppb	60.645 ppb	791.160 ppb	1.467 ppb	1.146 ppb	8.870 ppb	4.980 ppb	105.594 %
Concentration RSD	4.5 %	11.3 %	2.9 %	4.5 %	4.1 %	4.0 %	4.4 %	5.7 %	0.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.525 ppb	0.970 ppb	30.967 ppb	0.639 ppb	107.737 %	0.006 ppb	0.057 ppb	105.334 %	0.201 ppb
Concentration per Run 1	0.664 ppb	0.619 ppb	30.859 ppb	0.575 ppb	110.270 %	0.001 ppb	0.054 ppb	108.946 %	0.144 ppb
Concentration per Run 2	0.473 ppb	1.411 ppb	31.091 ppb	0.554 ppb	105.255 %	0.007 ppb	0.053 ppb	103.915 %	0.207 ppb
Concentration per Run 3	0.437 ppb	0.880 ppb	30.951 ppb	0.789 ppb	107.685 %	0.009 ppb	0.064 ppb	103.141 %	0.252 ppb
Concentration RSD	23.2 %	41.6 %	0.4 %	20.3 %	2.3 %	73.1 %	10.2 %	3.0 %	27.0 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	5.103 ppb	111.586 %	110.214 %	0.058 ppb	1.669 ppb	113.214 %
Concentration per Run 1	5.217 ppb	114.486 %	110.995 %	0.040 ppb	1.611 ppb	116.067 %
Concentration per Run 2	5.238 ppb	109.328 %	108.751 %	0.065 ppb	1.686 ppb	113.161 %
Concentration per Run 3	4.855 ppb	110.943 %	110.896 %	0.070 ppb	1.709 ppb	110.414 %
Concentration RSD	4.2 %	2.4 %	1.2 %	27.3 %	3.1 %	2.5 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	36	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2469261-03d10 6020TL	Rack	1		
Analysis started at:	12/3/2024 9:26:02 AM	Vial	17		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	106.811 %	120.876 %	0.020 ppb	1,328.836 ppb	583.029 ppb	190.736 ppb	474.338 ppb	13,437.385 ppb	102.266 %
Concentration per Run 1	103.119 %	128.115 %	0.016 ppb	1,243.839 ppb	544.730 ppb	182.477 ppb	424.895 ppb	12,329.262 ppb	100.478 %
Concentration per Run 2	105.998 %	119.192 %	0.023 ppb	1,380.975 ppb	586.323 ppb	192.112 ppb	487.393 ppb	13,751.740 ppb	102.689 %
Concentration per Run 3	111.316 %	115.320 %	0.022 ppb	1,361.695 ppb	618.035 ppb	197.620 ppb	510.725 ppb	14,231.153 ppb	103.632 %
Concentration RSD	3.9 %	5.4 %	18.3 %	5.6 %	6.3 %	4.0 %	9.4 %	7.4 %	1.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.373 ppb	250.793 ppb	7.142 ppb	389.028 ppb	1.327 ppb	1.108 ppb	7.836 ppb	20.800 ppb	102.900 %
Concentration per Run 1	0.293 ppb	241.826 ppb	6.823 ppb	373.282 ppb	1.330 ppb	1.066 ppb	7.692 ppb	20.275 ppb	105.317 %
Concentration per Run 2	0.360 ppb	253.093 ppb	7.210 ppb	401.464 ppb	1.314 ppb	0.936 ppb	7.984 ppb	21.193 ppb	100.533 %
Concentration per Run 3	0.465 ppb	257.460 ppb	7.394 ppb	392.338 ppb	1.337 ppb	1.322 ppb	7.831 ppb	20.930 ppb	102.848 %
Concentration RSD	23.2 %	3.2 %	4.1 %	3.7 %	0.9 %	17.7 %	1.9 %	2.3 %	2.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.514 ppb	0.610 ppb	27.764 ppb	2.999 ppb	109.052 %	0.009 ppb	0.152 ppb	107.535 %	0.166 ppb
Concentration per Run 1	0.430 ppb	0.641 ppb	27.023 ppb	2.760 ppb	111.830 %	0.009 ppb	0.194 ppb	107.184 %	0.135 ppb
Concentration per Run 2	0.536 ppb	0.757 ppb	28.081 ppb	2.856 ppb	108.406 %	0.004 ppb	0.128 ppb	109.853 %	0.191 ppb
Concentration per Run 3	0.575 ppb	0.431 ppb	28.190 ppb	3.381 ppb	106.920 %	0.014 ppb	0.132 ppb	105.568 %	0.172 ppb
Concentration RSD	14.6 %	27.1 %	2.3 %	11.2 %	2.3 %	56.7 %	24.2 %	2.0 %	17.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	3.032 ppb	109.318 %	107.076 %	0.030 ppb	0.667 ppb	114.065 %
Concentration per Run 1	3.008 ppb	112.184 %	108.987 %	0.016 ppb	0.643 ppb	118.049 %
Concentration per Run 2	2.819 ppb	108.880 %	104.490 %	0.036 ppb	0.690 ppb	112.839 %
Concentration per Run 3	3.269 ppb	106.889 %	107.752 %	0.039 ppb	0.667 ppb	111.306 %
Concentration RSD	7.4 %	2.4 %	2.2 %	42.0 %	3.5 %	3.1 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	37	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2469261-04d10 6020TL	Rack	1		
Analysis started at:	12/3/2024 9:30:29 AM	Vial	18		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	110.416 %	125.253 %	0.020 ppb	1,332.001 ppb	580.880 ppb	176.377 ppb	466.198 ppb	12,887.785 ppb	102.124 %
Concentration per Run 1	104.035 %	127.442 %	0.020 ppb	1,294.308 ppb	573.056 ppb	170.621 ppb	455.961 ppb	12,703.518 ppb	101.500 %
Concentration per Run 2	110.988 %	126.095 %	0.021 ppb	1,347.688 ppb	579.526 ppb	174.986 ppb	454.766 ppb	12,822.277 ppb	101.835 %
Concentration per Run 3	116.226 %	122.223 %	0.017 ppb	1,354.005 ppb	590.058 ppb	183.525 ppb	487.867 ppb	13,137.560 ppb	103.038 %
Concentration RSD	5.5 %	2.2 %	11.4 %	2.5 %	1.5 %	3.7 %	4.0 %	1.7 %	0.8 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.528 ppb	249.875 ppb	6.966 ppb	380.827 ppb	1.187 ppb	1.145 ppb	7.382 ppb	14.553 ppb	103.047 %
Concentration per Run 1	0.616 ppb	238.659 ppb	6.928 ppb	368.027 ppb	1.155 ppb	0.954 ppb	7.781 ppb	14.711 ppb	104.598 %
Concentration per Run 2	0.432 ppb	250.681 ppb	6.977 ppb	399.717 ppb	1.187 ppb	1.464 ppb	7.186 ppb	14.384 ppb	102.381 %
Concentration per Run 3	0.535 ppb	260.286 ppb	6.994 ppb	374.736 ppb	1.220 ppb	1.018 ppb	7.181 ppb	14.564 ppb	102.162 %
Concentration RSD	17.5 %	4.3 %	0.5 %	4.4 %	2.7 %	24.3 %	4.7 %	1.1 %	1.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.513 ppb	0.607 ppb	28.412 ppb	3.010 ppb	109.107 %	0.004 ppb	0.160 ppb	106.110 %	0.158 ppb
Concentration per Run 1	0.435 ppb	0.946 ppb	27.748 ppb	2.971 ppb	112.234 %	0.002 ppb	0.111 ppb	108.246 %	0.133 ppb
Concentration per Run 2	0.547 ppb	0.597 ppb	28.488 ppb	2.990 ppb	106.983 %	0.002 ppb	0.187 ppb	106.738 %	0.157 ppb
Concentration per Run 3	0.556 ppb	0.278 ppb	29.000 ppb	3.070 ppb	108.103 %	0.008 ppb	0.183 ppb	103.347 %	0.183 ppb
Concentration RSD	13.2 %	55.0 %	2.2 %	1.7 %	2.5 %	86.4 %	26.5 %	2.4 %	15.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	3.098 ppb	110.912 %	110.760 %	0.017 ppb	0.694 ppb	112.172 %
Concentration per Run 1	3.092 ppb	114.407 %	114.478 %	0.009 ppb	0.658 ppb	116.168 %
Concentration per Run 2	3.092 ppb	107.587 %	108.074 %	0.015 ppb	0.710 ppb	112.334 %
Concentration per Run 3	3.109 ppb	110.741 %	109.728 %	0.027 ppb	0.712 ppb	108.014 %
Concentration RSD	0.3 %	3.1 %	3.0 %	54.8 %	4.5 %	3.6 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	38	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	xCCV	Rack	0		
Analysis started at:	12/3/2024 9:34:57 AM	Vial	9		

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	39	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	xCCB	Rack	0		
Analysis started at:	12/3/2024 9:39:28 AM	Vial	10		

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	40	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	CCV	Rack	0		
Analysis started at:	12/3/2024 9:44:34 AM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	103.951 %	121.269 %	56.922 ppb	5,611.965 ppb	5,531.306 ppb	56.704 ppb	5,698.359 ppb	5,834.630 ppb	100.391 %
Concentration per Run 1	99.406 %	125.085 %	57.946 ppb	5,403.079 ppb	5,318.340 ppb	57.065 ppb	5,638.954 ppb	5,729.499 ppb	99.934 %
Concentration per Run 2	104.090 %	117.677 %	56.806 ppb	5,863.072 ppb	5,831.633 ppb	57.379 ppb	5,706.473 ppb	6,062.521 ppb	99.914 %
Concentration per Run 3	108.357 %	121.044 %	56.014 ppb	5,569.745 ppb	5,443.946 ppb	55.670 ppb	5,749.649 ppb	5,711.872 ppb	101.323 %
Recovery Percentage 1			94.870 %	93.533 %	92.188 %	94.507 %	94.973 %	97.244 %	
Concentration RSD	4.3 %	3.1 %	1.7 %	4.1 %	4.8 %	1.6 %	1.0 %	3.4 %	0.8 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	56.999 ppb	57.194 ppb	58.343 ppb	5,780.953 ppb	58.592 ppb	59.314 ppb	58.598 ppb	59.515 ppb	101.977 %
Concentration per Run 1	53.017 ppb	54.777 ppb	58.043 ppb	5,636.597 ppb	57.248 ppb	58.450 ppb	57.901 ppb	58.875 ppb	103.475 %
Concentration per Run 2	60.028 ppb	58.652 ppb	59.008 ppb	5,972.972 ppb	60.735 ppb	61.236 ppb	59.920 ppb	61.276 ppb	99.694 %
Concentration per Run 3	57.952 ppb	58.153 ppb	57.979 ppb	5,733.292 ppb	57.792 ppb	58.255 ppb	57.973 ppb	58.393 ppb	102.761 %
Recovery Percentage 1	94.998 %	95.324 %	97.239 %	96.349 %	97.653 %	98.856 %	97.663 %	99.192 %	
Concentration RSD	6.3 %	3.7 %	1.0 %	3.0 %	3.2 %	2.8 %	2.0 %	2.6 %	2.0 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	59.513 ppb	58.831 ppb	58.487 ppb	57.265 ppb	106.638 %	57.482 ppb	57.815 ppb	106.411 %	56.883 ppb
Concentration per Run 1	59.458 ppb	55.488 ppb	57.446 ppb	55.729 ppb	111.018 %	56.663 ppb	56.589 ppb	108.757 %	56.190 ppb
Concentration per Run 2	60.161 ppb	61.934 ppb	60.229 ppb	57.861 ppb	103.065 %	57.455 ppb	57.485 ppb	105.894 %	57.103 ppb
Concentration per Run 3	58.920 ppb	59.071 ppb	57.786 ppb	58.205 ppb	105.830 %	58.328 ppb	59.373 ppb	104.582 %	57.357 ppb
Recovery Percentage 1	99.188 %	98.052 %	97.478 %	95.442 %		95.803 %	96.359 %		94.806 %
Concentration RSD	1.0 %	5.5 %	2.6 %	2.3 %	3.8 %	1.4 %	2.5 %	2.0 %	1.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	56.006 ppb	110.618 %	108.235 %	56.854 ppb	56.883 ppb	110.259 %
Concentration per Run 1	55.702 ppb	113.913 %	108.986 %	54.018 ppb	54.525 ppb	113.886 %
Concentration per Run 2	55.863 ppb	109.132 %	107.319 %	57.291 ppb	58.338 ppb	109.247 %
Concentration per Run 3	56.452 ppb	108.811 %	108.401 %	59.252 ppb	57.785 ppb	107.643 %
Recovery Percentage 1	93.343 %			94.756 %	94.805 %	
Concentration RSD	0.7 %	2.6 %	0.8 %	4.7 %	3.6 %	2.9 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	41	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	CCB	Rack	0		
Analysis started at:	12/3/2024 9:49:04 AM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	105.177 %	111.673 %	0.012 ppb	-25.893 ppb	0.222 ppb	-0.044 ppb	7.733 ppb	-2.256 ppb	97.409 %
Concentration per Run 1	101.145 %	112.795 %	0.014 ppb	-28.711 ppb	0.274 ppb	-0.338 ppb	0.631 ppb	-8.304 ppb	95.036 %
Concentration per Run 2	106.688 %	111.616 %	0.014 ppb	-23.614 ppb	0.298 ppb	0.286 ppb	13.570 ppb	5.406 ppb	98.782 %
Concentration per Run 3	107.699 %	110.606 %	0.008 ppb	-25.355 ppb	0.095 ppb	-0.081 ppb	8.999 ppb	-3.870 ppb	98.409 %
Recovery Percentage 1			2.372 %	-5.179 %	0.317 %	-0.444 %	7.733 %	-2.256 %	
Concentration RSD	3.4 %	1.0 %	28.3 %	10.0 %	50.0 %	707.2 %	84.8 %	310.1 %	2.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.468 ppb	-0.002 ppb	0.019 ppb	4.094 ppb	-0.003 ppb	0.002 ppb	0.149 ppb	0.296 ppb	102.911 %
Concentration per Run 1	-0.535 ppb	-0.016 ppb	0.007 ppb	3.357 ppb	0.000 ppb	0.020 ppb	0.155 ppb	0.304 ppb	103.589 %
Concentration per Run 2	-0.394 ppb	-0.033 ppb	0.058 ppb	4.690 ppb	-0.010 ppb	0.012 ppb	0.161 ppb	0.283 ppb	100.628 %
Concentration per Run 3	-0.474 ppb	0.043 ppb	-0.009 ppb	4.235 ppb	0.003 ppb	-0.026 ppb	0.132 ppb	0.302 ppb	104.518 %
Recovery Percentage 1	-9.357 %	-0.215 %	1.863 %	8.189 %	-0.525 %	0.106 %	14.922 %	5.924 %	
Concentration RSD	15.2 %	1,857.5 %	187.4 %	16.5 %	251.5 %	1,147.5 %	10.4 %	3.9 %	2.0 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.039 ppb	0.143 ppb	0.010 ppb	0.297 ppb	105.779 %	0.014 ppb	0.002 ppb	104.255 %	0.067 ppb
Concentration per Run 1	0.021 ppb	0.187 ppb	0.009 ppb	0.260 ppb	107.234 %	0.014 ppb	0.003 ppb	106.449 %	0.048 ppb
Concentration per Run 2	0.070 ppb	0.117 ppb	0.009 ppb	0.315 ppb	104.709 %	0.021 ppb	0.004 ppb	104.786 %	0.074 ppb
Concentration per Run 3	0.027 ppb	0.126 ppb	0.011 ppb	0.316 ppb	105.396 %	0.005 ppb	0.000 ppb	101.532 %	0.078 ppb
Recovery Percentage 1	7.826 %	2.866 %	0.097 %	14.856 %		3.378 %	1.165 %		1.674 %
Concentration RSD	68.2 %	26.5 %	15.7 %	10.7 %	1.2 %	57.3 %	86.6 %	2.4 %	24.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.017 ppb	106.638 %	106.649 %	0.238 ppb	0.020 ppb	109.571 %
Concentration per Run 1	0.021 ppb	108.508 %	108.216 %	0.215 ppb	0.022 ppb	113.525 %
Concentration per Run 2	0.022 ppb	104.190 %	103.754 %	0.275 ppb	0.021 ppb	106.484 %
Concentration per Run 3	0.008 ppb	107.216 %	107.977 %	0.225 ppb	0.017 ppb	108.704 %
Recovery Percentage 1	3.449 %			23.824 %	2.023 %	
Concentration RSD	44.2 %	2.1 %	2.4 %	13.4 %	12.1 %	3.3 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	42	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2469261-05 6020TL	Rack	1		
Analysis started at:	12/3/2024 9:54:58 AM	Vial	19		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	101.418 %	113.524 %	0.430 ppb	35,842.553 ppb	23,918.184 ppb	5,113.443 ppb	13,025.821 ppb	82,011.449 ppb	101.167 %
Concentration per Run 1	98.124 %	116.162 %	0.424 ppb	34,621.299 ppb	23,404.442 ppb	5,028.999 ppb	12,725.365 ppb	80,308.794 ppb	100.869 %
Concentration per Run 2	101.105 %	109.091 %	0.431 ppb	36,837.668 ppb	24,566.089 ppb	5,204.858 ppb	13,073.716 ppb	81,127.342 ppb	100.054 %
Concentration per Run 3	105.024 %	115.320 %	0.434 ppb	36,068.692 ppb	23,784.021 ppb	5,106.473 ppb	13,278.381 ppb	84,598.212 ppb	102.578 %
Concentration RSD	3.4 %	3.4 %	1.3 %	3.1 %	2.5 %	1.7 %	2.1 %	2.8 %	1.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	15.354 ppb	21.206 ppb	152.740 ppb	8,101.320 ppb	6.718 ppb	8.091 ppb	7.531 ppb	24.507 ppb	103.870 %
Concentration per Run 1	14.458 ppb	20.025 ppb	141.635 ppb	7,709.188 ppb	6.718 ppb	7.959 ppb	6.973 ppb	23.944 ppb	107.445 %
Concentration per Run 2	15.551 ppb	21.853 ppb	159.235 ppb	8,217.110 ppb	6.663 ppb	8.331 ppb	7.708 ppb	25.007 ppb	103.571 %
Concentration per Run 3	16.053 ppb	21.740 ppb	157.352 ppb	8,377.661 ppb	6.772 ppb	7.982 ppb	7.911 ppb	24.571 ppb	100.592 %
Concentration RSD	5.3 %	4.8 %	6.3 %	4.3 %	0.8 %	2.6 %	6.6 %	2.2 %	3.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	2.780 ppb	16.236 ppb	330.852 ppb	11.464 ppb	104.471 %	0.010 ppb	0.089 ppb	107.677 %	0.354 ppb
Concentration per Run 1	2.528 ppb	16.814 ppb	321.187 ppb	11.224 ppb	107.742 %	0.007 ppb	0.098 ppb	110.089 %	0.335 ppb
Concentration per Run 2	2.801 ppb	15.895 ppb	334.218 ppb	11.332 ppb	102.713 %	0.010 ppb	0.080 ppb	107.416 %	0.325 ppb
Concentration per Run 3	3.010 ppb	15.999 ppb	337.151 ppb	11.837 ppb	102.959 %	0.013 ppb	0.088 ppb	105.525 %	0.403 ppb
Concentration RSD	8.7 %	3.1 %	2.6 %	2.9 %	2.7 %	29.0 %	10.0 %	2.1 %	12.0 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	31.421 ppb	113.037 %	111.749 %	0.100 ppb	6.331 ppb	109.598 %
Concentration per Run 1	31.086 ppb	116.855 %	114.299 %	0.084 ppb	6.044 ppb	114.391 %
Concentration per Run 2	31.581 ppb	112.148 %	109.893 %	0.105 ppb	6.325 ppb	110.511 %
Concentration per Run 3	31.597 ppb	110.108 %	111.054 %	0.112 ppb	6.624 ppb	103.891 %
Concentration RSD	0.9 %	3.1 %	2.0 %	14.2 %	4.6 %	4.8 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	43	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2469261-06 6020TL	Rack	1		
Analysis started at:	12/3/2024 9:59:26 AM	Vial	20		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	102.117 %	116.386 %	0.399 ppb	35,359.547 ppb	23,209.747 ppb	4,743.207 ppb	12,746.705 ppb	79,571.817 ppb	102.444 %
Concentration per Run 1	98.558 %	114.815 %	0.394 ppb	34,908.803 ppb	22,635.723 ppb	4,714.798 ppb	12,872.423 ppb	80,407.871 ppb	102.218 %
Concentration per Run 2	104.340 %	116.499 %	0.384 ppb	36,243.530 ppb	23,489.271 ppb	4,746.522 ppb	12,593.848 ppb	78,382.162 ppb	103.018 %
Concentration per Run 3	103.453 %	117.845 %	0.419 ppb	34,926.308 ppb	23,504.248 ppb	4,768.302 ppb	12,773.844 ppb	79,925.418 ppb	102.096 %
Concentration RSD	3.0 %	1.3 %	4.6 %	2.2 %	2.1 %	0.6 %	1.1 %	1.3 %	0.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	14.752 ppb	20.551 ppb	143.418 ppb	7,770.787 ppb	6.463 ppb	7.646 ppb	7.533 ppb	24.099 ppb	99.742 %
Concentration per Run 1	13.941 ppb	19.429 ppb	136.190 ppb	7,604.058 ppb	6.318 ppb	7.132 ppb	7.302 ppb	23.645 ppb	101.922 %
Concentration per Run 2	14.727 ppb	20.683 ppb	147.746 ppb	8,045.488 ppb	6.566 ppb	7.602 ppb	8.248 ppb	24.684 ppb	97.954 %
Concentration per Run 3	15.587 ppb	21.540 ppb	146.317 ppb	7,662.816 ppb	6.504 ppb	8.204 ppb	7.049 ppb	23.967 ppb	99.350 %
Concentration RSD	5.6 %	5.2 %	4.4 %	3.1 %	2.0 %	7.0 %	8.4 %	2.2 %	2.0 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	2.559 ppb	15.118 ppb	329.564 ppb	11.906 ppb	104.274 %	0.010 ppb	0.062 ppb	104.431 %	0.333 ppb
Concentration per Run 1	2.553 ppb	14.653 ppb	318.858 ppb	11.700 ppb	107.145 %	0.009 ppb	0.052 ppb	105.486 %	0.372 ppb
Concentration per Run 2	2.467 ppb	14.842 ppb	338.449 ppb	11.762 ppb	100.884 %	0.011 ppb	0.091 ppb	102.555 %	0.351 ppb
Concentration per Run 3	2.658 ppb	15.860 ppb	331.385 ppb	12.257 ppb	104.792 %	0.010 ppb	0.042 ppb	105.252 %	0.276 ppb
Concentration RSD	3.7 %	4.3 %	3.0 %	2.6 %	3.0 %	8.5 %	41.4 %	1.6 %	15.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	30.479 ppb	110.259 %	109.135 %	0.074 ppb	6.006 ppb	107.364 %
Concentration per Run 1	30.450 ppb	112.785 %	111.292 %	0.054 ppb	5.744 ppb	111.537 %
Concentration per Run 2	30.981 ppb	108.829 %	108.054 %	0.083 ppb	6.096 ppb	107.456 %
Concentration per Run 3	30.006 ppb	109.162 %	108.060 %	0.086 ppb	6.177 ppb	103.100 %
Concentration RSD	1.6 %	2.0 %	1.7 %	24.2 %	3.8 %	3.9 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	44	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2469261-07 6020TL	Rack	1		
Analysis started at:	12/3/2024 10:03:54 AM	Vial	21		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	98.628 %	116.386 %	0.371 ppb	41,644.293 ppb	24,270.706 ppb	4,122.017 ppb	10,848.127 ppb	81,324.980 ppb	95.219 %
Concentration per Run 1	99.009 %	122.223 %	0.380 ppb	37,781.513 ppb	22,238.982 ppb	3,860.183 ppb	10,319.234 ppb	79,099.293 ppb	95.674 %
Concentration per Run 2	97.650 %	113.973 %	0.371 ppb	43,111.887 ppb	25,285.586 ppb	4,212.030 ppb	11,238.527 ppb	81,639.558 ppb	92.803 %
Concentration per Run 3	99.225 %	112.963 %	0.361 ppb	44,039.478 ppb	25,287.551 ppb	4,293.837 ppb	10,986.619 ppb	83,236.090 ppb	97.179 %
Concentration RSD	0.9 %	4.4 %	2.6 %	8.1 %	7.2 %	5.6 %	4.4 %	2.6 %	2.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	11.191 ppb	12.909 ppb	1,977.668 ppb	12,000.382 ppb	10.129 ppb	7.725 ppb	7.843 ppb	22.201 ppb	101.471 %
Concentration per Run 1	10.857 ppb	12.306 ppb	1,899.585 ppb	11,602.086 ppb	9.879 ppb	7.374 ppb	7.427 ppb	21.881 ppb	101.754 %
Concentration per Run 2	11.083 ppb	12.988 ppb	1,987.093 ppb	11,925.399 ppb	9.986 ppb	8.063 ppb	7.800 ppb	22.141 ppb	102.585 %
Concentration per Run 3	11.634 ppb	13.433 ppb	2,046.327 ppb	12,473.660 ppb	10.524 ppb	7.739 ppb	8.301 ppb	22.579 ppb	100.075 %
Concentration RSD	3.6 %	4.4 %	3.7 %	3.7 %	3.4 %	4.5 %	5.6 %	1.6 %	1.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	8.157 ppb	3.426 ppb	316.349 ppb	7.217 ppb	104.727 %	0.005 ppb	0.066 ppb	106.663 %	0.275 ppb
Concentration per Run 1	8.166 ppb	5.005 ppb	306.571 ppb	6.946 ppb	108.884 %	0.006 ppb	0.051 ppb	108.159 %	0.227 ppb
Concentration per Run 2	8.140 ppb	2.503 ppb	317.460 ppb	7.402 ppb	103.138 %	0.006 ppb	0.077 ppb	105.992 %	0.274 ppb
Concentration per Run 3	8.165 ppb	2.769 ppb	325.015 ppb	7.302 ppb	102.158 %	0.003 ppb	0.071 ppb	105.839 %	0.324 ppb
Concentration RSD	0.2 %	40.1 %	2.9 %	3.3 %	3.5 %	31.5 %	20.5 %	1.2 %	17.5 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	22.481 ppb	113.577 %	112.308 %	0.057 ppb	5.389 ppb	107.750 %
Concentration per Run 1	22.082 ppb	115.459 %	115.133 %	0.044 ppb	5.323 ppb	108.771 %
Concentration per Run 2	22.413 ppb	112.789 %	109.253 %	0.060 ppb	5.375 ppb	106.961 %
Concentration per Run 3	22.948 ppb	112.485 %	112.538 %	0.068 ppb	5.471 ppb	107.517 %
Concentration RSD	1.9 %	1.4 %	2.6 %	21.9 %	1.4 %	0.9 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	45	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2469261-08 6020TL	Rack	1		
Analysis started at:	12/3/2024 10:08:23 AM	Vial	22		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	99.110 %	114.871 %	0.269 ppb	42,191.983 ppb	23,784.367 ppb	3,033.873 ppb	10,970.872 ppb	81,367.570 ppb	99.723 %
Concentration per Run 1	93.699 %	117.004 %	0.274 ppb	41,882.632 ppb	23,778.587 ppb	2,974.511 ppb	10,694.645 ppb	78,593.570 ppb	97.371 %
Concentration per Run 2	100.133 %	114.478 %	0.277 ppb	42,414.080 ppb	24,089.368 ppb	3,086.873 ppb	11,117.864 ppb	80,572.636 ppb	101.973 %
Concentration per Run 3	103.499 %	113.132 %	0.257 ppb	42,279.237 ppb	23,485.145 ppb	3,040.236 ppb	11,100.106 ppb	84,936.504 ppb	99.824 %
Concentration RSD	5.0 %	1.7 %	4.0 %	0.7 %	1.3 %	1.9 %	2.2 %	4.0 %	2.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	8.441 ppb	9.517 ppb	1,992.352 ppb	9,264.653 ppb	8.867 ppb	5.312 ppb	5.486 ppb	16.177 ppb	101.499 %
Concentration per Run 1	7.618 ppb	8.997 ppb	1,893.890 ppb	9,052.854 ppb	8.380 ppb	5.005 ppb	5.249 ppb	15.566 ppb	104.681 %
Concentration per Run 2	8.623 ppb	9.616 ppb	2,038.163 ppb	9,541.660 ppb	9.358 ppb	5.400 ppb	6.105 ppb	16.902 ppb	100.021 %
Concentration per Run 3	9.081 ppb	9.939 ppb	2,045.002 ppb	9,199.446 ppb	8.862 ppb	5.530 ppb	5.103 ppb	16.063 ppb	99.796 %
Concentration RSD	8.9 %	5.0 %	4.3 %	2.7 %	5.5 %	5.1 %	9.9 %	4.2 %	2.7 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	8.116 ppb	3.181 ppb	308.178 ppb	9.028 ppb	106.671 %	0.006 ppb	0.047 ppb	107.975 %	0.260 ppb
Concentration per Run 1	7.628 ppb	2.075 ppb	299.787 ppb	8.549 ppb	107.423 %	0.003 ppb	0.047 ppb	111.070 %	0.262 ppb
Concentration per Run 2	8.285 ppb	3.417 ppb	312.200 ppb	9.397 ppb	104.874 %	0.008 ppb	0.053 ppb	104.957 %	0.263 ppb
Concentration per Run 3	8.435 ppb	4.051 ppb	312.547 ppb	9.139 ppb	107.716 %	0.007 ppb	0.041 ppb	107.897 %	0.255 ppb
Concentration RSD	5.3 %	31.7 %	2.4 %	4.8 %	1.5 %	45.0 %	12.4 %	2.8 %	1.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	19.728 ppb	112.485 %	112.328 %	0.039 ppb	3.962 ppb	107.055 %
Concentration per Run 1	19.603 ppb	116.773 %	115.667 %	0.026 ppb	3.796 ppb	108.761 %
Concentration per Run 2	20.072 ppb	110.122 %	111.220 %	0.048 ppb	3.986 ppb	108.701 %
Concentration per Run 3	19.511 ppb	110.562 %	110.097 %	0.044 ppb	4.103 ppb	103.702 %
Concentration RSD	1.5 %	3.3 %	2.6 %	29.9 %	3.9 %	2.7 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	46	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2469261-09 6020TL	Rack	1		
Analysis started at:	12/3/2024 10:12:52 AM	Vial	23		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	96.856 %	115.376 %	0.023 ppb	82,551.536 ppb	25,015.841 ppb	168.400 ppb	10,356.027 ppb	93,716.422 ppb	97.464 %
Concentration per Run 1	93.706 %	112.963 %	0.023 ppb	84,327.293 ppb	24,987.979 ppb	163.148 ppb	10,351.905 ppb	92,393.568 ppb	95.129 %
Concentration per Run 2	96.705 %	119.529 %	0.025 ppb	78,974.433 ppb	23,900.784 ppb	166.626 ppb	10,098.169 ppb	94,072.078 ppb	96.179 %
Concentration per Run 3	100.158 %	113.637 %	0.020 ppb	84,352.884 ppb	26,158.758 ppb	175.426 ppb	10,618.007 ppb	94,683.621 ppb	101.083 %
Concentration RSD	3.3 %	3.1 %	12.2 %	3.8 %	4.5 %	3.8 %	2.5 %	1.3 %	3.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.064 ppb	0.697 ppb	623.409 ppb	16,765.661 ppb	0.281 ppb	0.208 ppb	0.431 ppb	0.877 ppb	104.335 %
Concentration per Run 1	0.102 ppb	0.643 ppb	625.227 ppb	17,179.919 ppb	0.250 ppb	0.133 ppb	0.506 ppb	0.791 ppb	103.723 %
Concentration per Run 2	0.034 ppb	0.669 ppb	614.554 ppb	16,486.966 ppb	0.341 ppb	0.189 ppb	0.378 ppb	0.983 ppb	102.193 %
Concentration per Run 3	0.057 ppb	0.779 ppb	630.446 ppb	16,630.097 ppb	0.253 ppb	0.302 ppb	0.409 ppb	0.856 ppb	107.091 %
Concentration RSD	53.9 %	10.4 %	1.3 %	2.2 %	18.4 %	41.5 %	15.5 %	11.1 %	2.4 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.239 ppb	0.156 ppb	326.198 ppb	1.191 ppb	105.753 %	0.004 ppb	0.001 ppb	107.487 %	0.135 ppb
Concentration per Run 1	0.187 ppb	0.029 ppb	321.481 ppb	1.176 ppb	108.506 %	0.000 ppb	0.000 ppb	113.392 %	0.099 ppb
Concentration per Run 2	0.331 ppb	0.001 ppb	327.857 ppb	1.014 ppb	106.045 %	0.004 ppb	0.000 ppb	103.981 %	0.132 ppb
Concentration per Run 3	0.198 ppb	0.437 ppb	329.257 ppb	1.383 ppb	102.707 %	0.007 ppb	0.004 ppb	105.088 %	0.175 ppb
Concentration RSD	33.5 %	156.8 %	1.3 %	15.5 %	2.8 %	90.6 %	173.2 %	4.8 %	28.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	15.927 ppb	113.278 %	112.100 %	0.020 ppb	0.271 ppb	108.392 %
Concentration per Run 1	15.313 ppb	114.810 %	113.507 %	0.009 ppb	0.276 ppb	111.276 %
Concentration per Run 2	16.410 ppb	111.075 %	111.500 %	0.026 ppb	0.266 ppb	104.695 %
Concentration per Run 3	16.059 ppb	113.950 %	111.294 %	0.024 ppb	0.269 ppb	109.205 %
Concentration RSD	3.5 %	1.7 %	1.1 %	45.4 %	1.9 %	3.1 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	47	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2469261-10 6020TL	Rack	1		
Analysis started at:	12/3/2024 10:17:21 AM	Vial	24		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	104.010 %	115.376 %	0.017 ppb	82,471.080 ppb	24,701.561 ppb	167.805 ppb	10,122.669 ppb	92,165.646 ppb	106.326 %
Concentration per Run 1	102.362 %	117.172 %	0.020 ppb	79,905.877 ppb	24,148.790 ppb	161.919 ppb	9,779.584 ppb	89,033.977 ppb	108.967 %
Concentration per Run 2	105.398 %	114.310 %	0.016 ppb	84,732.125 ppb	24,909.309 ppb	171.981 ppb	10,322.399 ppb	92,927.081 ppb	106.215 %
Concentration per Run 3	104.268 %	114.647 %	0.016 ppb	82,775.237 ppb	25,046.583 ppb	169.515 ppb	10,266.026 ppb	94,535.878 ppb	103.796 %
Concentration RSD	1.5 %	1.4 %	13.3 %	2.9 %	2.0 %	3.1 %	2.9 %	3.1 %	2.4 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.162 ppb	0.725 ppb	617.905 ppb	16,742.015 ppb	0.186 ppb	0.123 ppb	0.434 ppb	1.071 ppb	102.369 %
Concentration per Run 1	0.223 ppb	0.702 ppb	599.272 ppb	15,635.240 ppb	0.146 ppb	0.140 ppb	0.378 ppb	1.090 ppb	104.653 %
Concentration per Run 2	-0.008 ppb	0.745 ppb	635.537 ppb	17,466.889 ppb	0.198 ppb	0.151 ppb	0.428 ppb	1.024 ppb	99.962 %
Concentration per Run 3	0.271 ppb	0.729 ppb	618.908 ppb	17,123.916 ppb	0.213 ppb	0.077 ppb	0.495 ppb	1.100 ppb	102.492 %
Concentration RSD	91.9 %	3.0 %	2.9 %	5.8 %	18.9 %	32.3 %	13.5 %	3.8 %	2.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.313 ppb	0.259 ppb	322.297 ppb	1.048 ppb	106.932 %	0.002 ppb	0.002 ppb	108.574 %	0.136 ppb
Concentration per Run 1	0.277 ppb	0.242 ppb	307.702 ppb	0.868 ppb	112.433 %	0.000 ppb	0.000 ppb	110.351 %	0.090 ppb
Concentration per Run 2	0.212 ppb	0.209 ppb	330.565 ppb	1.196 ppb	105.004 %	0.005 ppb	0.000 ppb	106.929 %	0.168 ppb
Concentration per Run 3	0.450 ppb	0.325 ppb	328.623 ppb	1.080 ppb	103.357 %	0.000 ppb	0.007 ppb	108.441 %	0.151 ppb
Concentration RSD	39.4 %	23.2 %	3.9 %	15.9 %	4.5 %	163.3 %	173.2 %	1.6 %	30.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	15.826 ppb	113.357 %	114.798 %	0.015 ppb	0.252 ppb	109.977 %
Concentration per Run 1	15.161 ppb	117.479 %	119.568 %	0.006 ppb	0.232 ppb	115.644 %
Concentration per Run 2	15.976 ppb	108.219 %	110.917 %	0.017 ppb	0.275 ppb	108.329 %
Concentration per Run 3	16.341 ppb	114.374 %	113.909 %	0.020 ppb	0.251 ppb	105.959 %
Concentration RSD	3.8 %	4.2 %	3.8 %	50.4 %	8.5 %	4.6 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	48	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2469261-11 6020TL	Rack	1		
Analysis started at:	12/3/2024 10:21:50 AM	Vial	25		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	98.693 %	116.499 %	0.015 ppb	84,334.351 ppb	23,524.095 ppb	162.033 ppb	11,669.312 ppb	87,206.405 ppb	98.314 %
Concentration per Run 1	95.231 %	115.825 %	0.014 ppb	84,458.889 ppb	23,820.543 ppb	157.777 ppb	11,562.686 ppb	83,713.438 ppb	96.180 %
Concentration per Run 2	99.410 %	119.697 %	0.018 ppb	81,451.319 ppb	22,732.907 ppb	162.075 ppb	11,402.550 ppb	85,894.791 ppb	99.792 %
Concentration per Run 3	101.438 %	113.973 %	0.014 ppb	87,092.845 ppb	24,018.834 ppb	166.246 ppb	12,042.698 ppb	92,010.986 ppb	98.969 %
Concentration RSD	3.2 %	2.5 %	14.2 %	3.3 %	2.9 %	2.6 %	2.9 %	4.9 %	1.9 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.112 ppb	1.238 ppb	503.185 ppb	13,137.190 ppb	0.219 ppb	0.266 ppb	0.759 ppb	1.219 ppb	101.071 %
Concentration per Run 1	-0.278 ppb	1.179 ppb	493.904 ppb	12,973.294 ppb	0.193 ppb	0.213 ppb	0.601 ppb	1.176 ppb	102.611 %
Concentration per Run 2	-0.039 ppb	1.236 ppb	507.044 ppb	13,256.362 ppb	0.241 ppb	0.280 ppb	0.879 ppb	1.123 ppb	101.718 %
Concentration per Run 3	-0.019 ppb	1.300 ppb	508.608 ppb	13,181.914 ppb	0.223 ppb	0.306 ppb	0.798 ppb	1.358 ppb	98.884 %
Concentration RSD	128.7 %	4.9 %	1.6 %	1.1 %	10.9 %	18.1 %	18.8 %	10.1 %	1.9 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.330 ppb	0.395 ppb	310.278 ppb	0.890 ppb	105.512 %	0.005 ppb	0.002 ppb	107.509 %	0.126 ppb
Concentration per Run 1	0.248 ppb	0.268 ppb	305.356 ppb	0.753 ppb	106.457 %	0.004 ppb	0.007 ppb	108.488 %	0.079 ppb
Concentration per Run 2	0.358 ppb	0.408 ppb	311.492 ppb	0.936 ppb	104.138 %	0.005 ppb	0.000 ppb	108.653 %	0.154 ppb
Concentration per Run 3	0.383 ppb	0.509 ppb	313.987 ppb	0.982 ppb	105.940 %	0.005 ppb	0.000 ppb	105.387 %	0.144 ppb
Concentration RSD	21.7 %	30.6 %	1.4 %	13.6 %	1.2 %	13.1 %	173.2 %	1.7 %	32.5 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	17.059 ppb	112.271 %	111.564 %	0.012 ppb	0.240 ppb	105.854 %
Concentration per Run 1	16.733 ppb	115.122 %	113.249 %	0.004 ppb	0.245 ppb	110.216 %
Concentration per Run 2	17.177 ppb	111.024 %	110.441 %	0.017 ppb	0.238 ppb	103.654 %
Concentration per Run 3	17.266 ppb	110.667 %	111.003 %	0.015 ppb	0.236 ppb	103.692 %
Concentration RSD	1.7 %	2.2 %	1.3 %	57.6 %	1.9 %	3.6 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	49	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2469261-12 6020TL	Rack	1		
Analysis started at:	12/3/2024 10:26:17 AM	Vial	26		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	96.533 %	110.494 %	0.015 ppb	85,093.292 ppb	23,717.814 ppb	112.830 ppb	11,231.518 ppb	83,789.523 ppb	98.643 %
Concentration per Run 1	93.376 %	107.576 %	0.015 ppb	88,402.364 ppb	24,852.109 ppb	117.601 ppb	11,467.012 ppb	85,153.482 ppb	94.698 %
Concentration per Run 2	98.130 %	118.519 %	0.015 ppb	79,055.557 ppb	21,711.936 ppb	108.065 ppb	10,858.529 ppb	81,215.895 ppb	100.880 %
Concentration per Run 3	98.092 %	105.387 %	0.015 ppb	87,821.954 ppb	24,589.395 ppb	112.823 ppb	11,369.013 ppb	84,999.193 ppb	100.350 %
Concentration RSD	2.8 %	6.4 %	0.2 %	6.2 %	7.3 %	4.2 %	2.9 %	2.7 %	3.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.267 ppb	1.092 ppb	473.694 ppb	11,561.777 ppb	0.101 ppb	0.479 ppb	0.664 ppb	0.887 ppb	102.803 %
Concentration per Run 1	-0.184 ppb	1.071 ppb	497.712 ppb	12,348.140 ppb	0.112 ppb	0.484 ppb	0.718 ppb	0.912 ppb	99.904 %
Concentration per Run 2	-0.253 ppb	1.106 ppb	455.093 ppb	10,884.633 ppb	0.094 ppb	0.455 ppb	0.663 ppb	0.827 ppb	103.405 %
Concentration per Run 3	-0.365 ppb	1.099 ppb	468.276 ppb	11,452.558 ppb	0.098 ppb	0.497 ppb	0.611 ppb	0.923 ppb	105.101 %
Concentration RSD	34.1 %	1.7 %	4.6 %	6.4 %	9.5 %	4.4 %	8.1 %	5.9 %	2.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.250 ppb	0.164 ppb	296.006 ppb	0.772 ppb	105.655 %	0.005 ppb	0.003 ppb	106.755 %	0.129 ppb
Concentration per Run 1	0.204 ppb	0.108 ppb	303.707 ppb	0.710 ppb	104.557 %	0.004 ppb	0.007 ppb	107.732 %	0.108 ppb
Concentration per Run 2	0.292 ppb	0.024 ppb	289.716 ppb	0.712 ppb	108.535 %	0.006 ppb	0.003 ppb	107.657 %	0.132 ppb
Concentration per Run 3	0.253 ppb	0.360 ppb	294.594 ppb	0.893 ppb	103.874 %	0.004 ppb	0.000 ppb	104.875 %	0.148 ppb
Concentration RSD	17.7 %	106.6 %	2.4 %	13.6 %	2.4 %	20.9 %	100.4 %	1.5 %	15.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	16.471 ppb	111.760 %	110.396 %	0.012 ppb	0.167 ppb	105.922 %
Concentration per Run 1	17.118 ppb	107.836 %	107.168 %	0.003 ppb	0.172 ppb	105.530 %
Concentration per Run 2	16.043 ppb	115.544 %	113.139 %	0.015 ppb	0.160 ppb	106.595 %
Concentration per Run 3	16.253 ppb	111.901 %	110.880 %	0.018 ppb	0.169 ppb	105.642 %
Concentration RSD	3.5 %	3.5 %	2.7 %	67.6 %	3.9 %	0.6 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	50	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2469261-13 6020TL	Rack	1		
Analysis started at:	12/3/2024 10:30:43 AM	Vial	27		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	99.415 %	115.376 %	0.250 ppb	36,528.686 ppb	22,185.494 ppb	2,999.603 ppb	13,842.910 ppb	79,019.307 ppb	100.983 %
Concentration per Run 1	93.041 %	115.657 %	0.258 ppb	35,866.740 ppb	21,977.528 ppb	2,965.293 ppb	13,680.411 ppb	78,060.255 ppb	96.511 %
Concentration per Run 2	102.038 %	110.606 %	0.247 ppb	38,105.572 ppb	23,093.258 ppb	3,096.760 ppb	14,022.356 ppb	80,635.308 ppb	101.754 %
Concentration per Run 3	103.167 %	119.866 %	0.243 ppb	35,613.746 ppb	21,485.695 ppb	2,936.757 ppb	13,825.964 ppb	78,362.359 ppb	104.686 %
Concentration RSD	5.6 %	4.0 %	3.0 %	3.8 %	3.7 %	2.8 %	1.2 %	1.8 %	4.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	9.950 ppb	10.370 ppb	140.368 ppb	4,773.990 ppb	4.350 ppb	4.839 ppb	4.844 ppb	14.883 ppb	100.999 %
Concentration per Run 1	9.614 ppb	9.721 ppb	137.691 ppb	4,594.123 ppb	4.409 ppb	4.661 ppb	4.775 ppb	14.312 ppb	103.725 %
Concentration per Run 2	10.196 ppb	10.843 ppb	143.718 ppb	5,018.622 ppb	4.513 ppb	5.042 ppb	4.803 ppb	15.507 ppb	98.682 %
Concentration per Run 3	10.040 ppb	10.548 ppb	139.696 ppb	4,709.225 ppb	4.127 ppb	4.815 ppb	4.954 ppb	14.832 ppb	100.591 %
Concentration RSD	3.0 %	5.6 %	2.2 %	4.6 %	4.6 %	4.0 %	2.0 %	4.0 %	2.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	2.007 ppb	14.746 ppb	324.729 ppb	17.440 ppb	104.738 %	0.007 ppb	0.046 ppb	105.789 %	0.338 ppb
Concentration per Run 1	2.212 ppb	14.831 ppb	314.720 ppb	16.484 ppb	107.212 %	0.010 ppb	0.031 ppb	105.924 %	0.338 ppb
Concentration per Run 2	1.955 ppb	13.555 ppb	334.180 ppb	18.205 ppb	101.034 %	0.007 ppb	0.047 ppb	103.608 %	0.348 ppb
Concentration per Run 3	1.853 ppb	15.853 ppb	325.286 ppb	17.631 ppb	105.968 %	0.004 ppb	0.059 ppb	107.835 %	0.329 ppb
Concentration RSD	9.2 %	7.8 %	3.0 %	5.0 %	3.1 %	43.3 %	30.1 %	2.0 %	2.8 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	26.951 ppb	111.739 %	108.527 %	0.035 ppb	3.890 ppb	105.591 %
Concentration per Run 1	25.519 ppb	113.953 %	108.687 %	0.033 ppb	3.738 ppb	109.076 %
Concentration per Run 2	28.060 ppb	110.099 %	107.578 %	0.038 ppb	3.997 ppb	104.103 %
Concentration per Run 3	27.276 ppb	111.164 %	109.314 %	0.034 ppb	3.934 ppb	103.593 %
Concentration RSD	4.8 %	1.8 %	0.8 %	7.8 %	3.5 %	2.9 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	51	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2469261-14 6020TL	Rack	1		
Analysis started at:	12/3/2024 10:35:10 AM	Vial	28		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	101.397 %	110.326 %	0.288 ppb	38,781.002 ppb	24,031.552 ppb	3,611.559 ppb	14,438.374 ppb	80,397.528 ppb	101.565 %
Concentration per Run 1	96.704 %	109.259 %	0.288 ppb	38,569.482 ppb	24,224.469 ppb	3,628.758 ppb	14,660.600 ppb	79,677.930 ppb	98.857 %
Concentration per Run 2	102.720 %	108.923 %	0.291 ppb	39,578.718 ppb	24,182.936 ppb	3,600.360 ppb	14,192.473 ppb	80,131.104 ppb	101.093 %
Concentration per Run 3	104.767 %	112.795 %	0.285 ppb	38,194.808 ppb	23,687.251 ppb	3,605.558 ppb	14,462.051 ppb	81,383.551 ppb	104.745 %
Concentration RSD	4.1 %	1.9 %	1.2 %	1.8 %	1.2 %	0.4 %	1.6 %	1.1 %	2.9 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	11.143 ppb	11.703 ppb	160.337 ppb	5,798.384 ppb	5.204 ppb	5.771 ppb	5.363 ppb	17.706 ppb	98.918 %
Concentration per Run 1	10.354 ppb	11.331 ppb	161.808 ppb	5,774.936 ppb	5.163 ppb	6.254 ppb	5.245 ppb	17.822 ppb	100.041 %
Concentration per Run 2	11.478 ppb	11.878 ppb	160.955 ppb	5,953.082 ppb	5.534 ppb	5.703 ppb	5.596 ppb	18.257 ppb	96.264 %
Concentration per Run 3	11.596 ppb	11.902 ppb	158.248 ppb	5,667.134 ppb	4.913 ppb	5.354 ppb	5.249 ppb	17.039 ppb	100.449 %
Concentration RSD	6.2 %	2.8 %	1.2 %	2.5 %	6.0 %	7.9 %	3.8 %	3.5 %	2.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	2.238 ppb	16.682 ppb	333.160 ppb	16.969 ppb	103.978 %	0.003 ppb	0.042 ppb	106.616 %	0.319 ppb
Concentration per Run 1	2.079 ppb	16.286 ppb	328.447 ppb	16.425 ppb	105.144 %	0.000 ppb	0.052 ppb	106.791 %	0.294 ppb
Concentration per Run 2	2.186 ppb	17.412 ppb	337.538 ppb	16.879 ppb	103.355 %	0.002 ppb	0.039 ppb	105.810 %	0.383 ppb
Concentration per Run 3	2.448 ppb	16.349 ppb	333.496 ppb	17.603 ppb	103.434 %	0.006 ppb	0.035 ppb	107.248 %	0.280 ppb
Concentration RSD	8.5 %	3.8 %	1.4 %	3.5 %	1.0 %	106.9 %	21.7 %	0.7 %	17.5 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	28.112 ppb	112.761 %	109.216 %	0.030 ppb	4.489 ppb	105.119 %
Concentration per Run 1	28.097 ppb	115.433 %	110.796 %	0.021 ppb	4.395 ppb	106.770 %
Concentration per Run 2	28.293 ppb	111.421 %	109.013 %	0.032 ppb	4.630 ppb	102.811 %
Concentration per Run 3	27.947 ppb	111.431 %	107.840 %	0.037 ppb	4.442 ppb	105.776 %
Concentration RSD	0.6 %	2.1 %	1.4 %	26.5 %	2.8 %	2.0 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index: 52
Analysis label: CCV
Analysis started at: 12/3/2024 10:39:37 AM
User name ALPHALAB\a2-icpmsq2
Rack 0
Vial 9
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	112.415 %	108.137 %	51.507 ppb	6,086.589 ppb	5,849.735 ppb	57.893 ppb	6,058.661 ppb	5,922.331 ppb	111.170 %
Concentration per Run 1	109.726 %	107.408 %	50.002 ppb	6,076.394 ppb	5,817.939 ppb	56.181 ppb	5,848.853 ppb	5,870.692 ppb	110.453 %
Concentration per Run 2	113.636 %	113.805 %	50.349 ppb	5,920.835 ppb	5,686.390 ppb	56.546 ppb	5,966.297 ppb	5,872.198 ppb	114.223 %
Concentration per Run 3	113.883 %	103.199 %	54.170 ppb	6,262.538 ppb	6,044.876 ppb	60.953 ppb	6,360.834 ppb	6,024.103 ppb	108.834 %
Recovery Percentage 1			85.845 %	101.443 %	97.496 %	96.489 %	100.978 %	98.706 %	
Concentration RSD	2.1 %	4.9 %	4.5 %	2.8 %	3.1 %	4.6 %	4.4 %	1.5 %	2.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	58.542 ppb	59.239 ppb	59.058 ppb	5,932.809 ppb	60.183 ppb	61.440 ppb	60.917 ppb	61.048 ppb	100.240 %
Concentration per Run 1	57.594 ppb	58.531 ppb	57.856 ppb	5,900.408 ppb	60.062 ppb	60.352 ppb	60.787 ppb	61.768 ppb	102.766 %
Concentration per Run 2	56.547 ppb	58.500 ppb	58.384 ppb	5,925.367 ppb	59.988 ppb	63.630 ppb	61.472 ppb	60.588 ppb	98.127 %
Concentration per Run 3	61.484 ppb	60.687 ppb	60.935 ppb	5,972.651 ppb	60.500 ppb	60.338 ppb	60.492 ppb	60.787 ppb	99.828 %
Recovery Percentage 1	97.570 %	98.732 %	98.430 %	98.880 %	100.305 %	102.400 %	101.528 %	101.746 %	
Concentration RSD	4.4 %	2.1 %	2.8 %	0.6 %	0.5 %	3.1 %	0.8 %	1.0 %	2.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	60.606 ppb	57.208 ppb	58.209 ppb	56.740 ppb	107.150 %	56.490 ppb	57.878 ppb	104.293 %	57.794 ppb
Concentration per Run 1	58.852 ppb	54.193 ppb	57.073 ppb	55.411 ppb	108.270 %	54.319 ppb	56.451 ppb	106.379 %	56.683 ppb
Concentration per Run 2	61.211 ppb	61.089 ppb	59.102 ppb	56.589 ppb	105.280 %	57.223 ppb	58.728 ppb	102.607 %	57.998 ppb
Concentration per Run 3	61.754 ppb	56.341 ppb	58.452 ppb	58.219 ppb	107.901 %	57.928 ppb	58.454 ppb	103.894 %	58.702 ppb
Recovery Percentage 1	101.010 %	95.346 %	97.015 %	94.566 %		94.150 %	96.463 %		96.324 %
Concentration RSD	2.5 %	6.2 %	1.8 %	2.5 %	1.5 %	3.4 %	2.1 %	1.8 %	1.8 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	58.102 ppb	107.228 %	106.888 %	55.166 ppb	56.410 ppb	108.892 %
Concentration per Run 1	58.154 ppb	107.348 %	106.772 %	53.449 ppb	55.357 ppb	110.393 %
Concentration per Run 2	57.859 ppb	105.599 %	105.952 %	56.075 ppb	57.159 ppb	106.681 %
Concentration per Run 3	58.292 ppb	108.737 %	107.941 %	55.975 ppb	56.715 ppb	109.603 %
Recovery Percentage 1	96.836 %			91.944 %	94.017 %	
Concentration RSD	0.4 %	1.5 %	0.9 %	2.7 %	1.7 %	1.8 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index: 53
Analysis label: CCB
Analysis started at: 12/3/2024 10:44:08 AM
User name ALPHALAB\a2-icpmsq2
Rack 0
Vial 10
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	108.508 %	110.943 %	0.299 ppb	37.943 ppb	5.640 ppb	0.287 ppb	5.756 ppb	16.688 ppb	98.103 %
Concentration per Run 1	106.335 %	115.488 %	0.322 ppb	32.561 ppb	6.112 ppb	-0.054 ppb	6.136 ppb	24.251 ppb	96.406 %
Concentration per Run 2	109.857 %	114.310 %	0.321 ppb	28.268 ppb	5.367 ppb	0.072 ppb	6.226 ppb	17.805 ppb	98.917 %
Concentration per Run 3	109.331 %	103.030 %	0.254 ppb	53.000 ppb	5.442 ppb	0.842 ppb	4.904 ppb	8.010 ppb	98.984 %
Recovery Percentage 1			59.832 %	7.589 %	8.058 %	2.867 %	5.756 %	16.688 %	
Concentration RSD	1.8 %	6.2 %	13.0 %	34.8 %	7.3 %	169.2 %	12.8 %	49.0 %	1.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.430 ppb	0.001 ppb	0.124 ppb	9.324 ppb	0.025 ppb	-0.004 ppb	0.108 ppb	0.297 ppb	100.959 %
Concentration per Run 1	-0.379 ppb	0.037 ppb	0.140 ppb	10.730 ppb	0.019 ppb	0.035 ppb	0.091 ppb	0.320 ppb	99.484 %
Concentration per Run 2	-0.442 ppb	-0.038 ppb	0.024 ppb	7.965 ppb	0.013 ppb	-0.046 ppb	0.098 ppb	0.316 ppb	100.509 %
Concentration per Run 3	-0.470 ppb	0.005 ppb	0.208 ppb	9.278 ppb	0.042 ppb	0.000 ppb	0.136 ppb	0.256 ppb	102.883 %
Recovery Percentage 1	-8.605 %	0.147 %	12.390 %	18.649 %	4.936 %	-0.175 %	10.816 %	5.948 %	
Concentration RSD	10.7 %	2,562.9 %	74.7 %	14.8 %	62.6 %	1,171.5 %	22.4 %	12.2 %	1.7 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.068 ppb	0.220 ppb	0.081 ppb	0.330 ppb	105.479 %	0.020 ppb	0.021 ppb	101.769 %	0.060 ppb
Concentration per Run 1	-0.026 ppb	0.457 ppb	0.105 ppb	0.291 ppb	109.930 %	0.023 ppb	0.027 ppb	107.527 %	0.045 ppb
Concentration per Run 2	0.136 ppb	0.127 ppb	0.081 ppb	0.332 ppb	104.757 %	0.022 ppb	0.026 ppb	98.973 %	0.051 ppb
Concentration per Run 3	0.095 ppb	0.076 ppb	0.058 ppb	0.366 ppb	101.751 %	0.015 ppb	0.011 ppb	98.807 %	0.084 ppb
Recovery Percentage 1	13.644 %	4.395 %	0.811 %	16.489 %		5.043 %	10.672 %		1.494 %
Concentration RSD	123.7 %	94.2 %	29.0 %	11.5 %	3.9 %	20.8 %	41.7 %	4.9 %	35.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.032 ppb	105.257 %	106.031 %	0.243 ppb	0.035 ppb	106.902 %
Concentration per Run 1	0.048 ppb	106.063 %	108.739 %	0.221 ppb	0.050 ppb	108.948 %
Concentration per Run 2	0.052 ppb	104.451 %	102.461 %	0.284 ppb	0.030 ppb	104.322 %
Concentration per Run 3	-0.005 ppb	105.256 %	106.894 %	0.224 ppb	0.024 ppb	107.436 %
Recovery Percentage 1	6.323 %			24.290 %	3.487 %	
Concentration RSD	100.4 %	0.8 %	3.0 %	14.5 %	37.8 %	2.2 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	54	User name	ALPHALAB\a2-icpmsq2	Comment	CCV/MCCV
Analysis label:	CCV	Rack	0		
Analysis started at:	12/3/2024 11:00:44 AM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	106.067 %	111.560 %	57.878 ppb	5,999.161 ppb	5,962.342 ppb	58.996 ppb	5,949.802 ppb	6,037.103 ppb	101.498 %
Concentration per Run 1	103.309 %	118.182 %	58.070 ppb	5,795.904 ppb	5,781.111 ppb	56.982 ppb	5,783.712 ppb	6,210.148 ppb	101.660 %
Concentration per Run 2	107.348 %	105.724 %	57.420 ppb	6,104.722 ppb	6,095.598 ppb	61.374 ppb	6,050.128 ppb	6,142.082 ppb	101.683 %
Concentration per Run 3	107.544 %	110.775 %	58.145 ppb	6,096.856 ppb	6,010.316 ppb	58.632 ppb	6,015.567 ppb	5,759.080 ppb	101.152 %
Recovery Percentage 1			96.463 %	99.986 %	99.372 %	98.326 %	99.163 %	100.618 %	
Concentration RSD	2.3 %	5.6 %	0.7 %	2.9 %	2.7 %	3.8 %	2.4 %	4.0 %	0.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	56.497 ppb	58.008 ppb	58.984 ppb	5,861.488 ppb	58.058 ppb	59.763 ppb	58.128 ppb	59.750 ppb	104.040 %
Concentration per Run 1	55.192 ppb	59.641 ppb	60.175 ppb	5,920.366 ppb	57.526 ppb	60.152 ppb	60.736 ppb	59.851 ppb	100.656 %
Concentration per Run 2	56.694 ppb	56.473 ppb	56.627 ppb	5,694.289 ppb	56.977 ppb	58.923 ppb	57.195 ppb	59.445 ppb	105.548 %
Concentration per Run 3	57.604 ppb	57.911 ppb	60.150 ppb	5,969.809 ppb	59.673 ppb	60.214 ppb	56.453 ppb	59.953 ppb	105.916 %
Recovery Percentage 1	94.161 %	96.680 %	98.307 %	97.691 %	96.764 %	99.605 %	96.880 %	99.583 %	
Concentration RSD	2.2 %	2.7 %	3.5 %	2.5 %	2.5 %	1.2 %	3.9 %	0.4 %	2.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	58.617 ppb	55.636 ppb	57.909 ppb	57.506 ppb	106.684 %	57.737 ppb	57.289 ppb	107.388 %	57.298 ppb
Concentration per Run 1	59.067 ppb	53.618 ppb	58.344 ppb	55.586 ppb	111.356 %	56.347 ppb	56.717 ppb	111.427 %	55.242 ppb
Concentration per Run 2	57.503 ppb	57.230 ppb	57.076 ppb	58.012 ppb	106.350 %	57.652 ppb	57.073 ppb	107.040 %	56.318 ppb
Concentration per Run 3	59.280 ppb	56.059 ppb	58.308 ppb	58.919 ppb	102.345 %	59.211 ppb	58.078 ppb	103.699 %	60.334 ppb
Recovery Percentage 1	97.694 %	92.727 %	96.515 %	95.843 %		96.228 %	95.482 %		95.496 %
Concentration RSD	1.7 %	3.3 %	1.2 %	3.0 %	4.2 %	2.5 %	1.2 %	3.6 %	4.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	56.582 ppb	108.976 %	108.243 %	55.907 ppb	56.529 ppb	111.635 %
Concentration per Run 1	54.389 ppb	112.384 %	110.387 %	55.225 ppb	56.021 ppb	113.701 %
Concentration per Run 2	56.835 ppb	108.662 %	108.456 %	56.179 ppb	56.774 ppb	109.345 %
Concentration per Run 3	58.523 ppb	105.883 %	105.885 %	56.318 ppb	56.792 ppb	111.858 %
Recovery Percentage 1	94.304 %			93.179 %	94.215 %	
Concentration RSD	3.7 %	3.0 %	2.1 %	1.1 %	0.8 %	2.0 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index: 55
Analysis label: CCB
Analysis started at: 12/3/2024 11:05:15 AM
User name ALPHALAB\a2-icpmsq2
Rack 0
Vial 10
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	102.940 %	113.637 %	0.120 ppb	24.195 ppb	17.998 ppb	0.508 ppb	25.216 ppb	29.599 ppb	94.943 %
Concentration per Run 1	100.060 %	116.667 %	0.128 ppb	6.481 ppb	6.802 ppb	0.388 ppb	15.633 ppb	17.401 ppb	94.815 %
Concentration per Run 2	104.403 %	112.627 %	0.118 ppb	28.691 ppb	20.278 ppb	0.862 ppb	27.526 ppb	48.110 ppb	94.632 %
Concentration per Run 3	104.357 %	111.616 %	0.114 ppb	37.412 ppb	26.914 ppb	0.274 ppb	32.488 ppb	23.285 ppb	95.381 %
Recovery Percentage 1			23.996 %	4.839 %	25.711 %	5.079 %	25.216 %	29.599 %	
Concentration RSD	2.4 %	2.4 %	5.9 %	65.9 %	56.9 %	61.3 %	34.3 %	55.1 %	0.4 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.365 ppb	0.142 ppb	0.284 ppb	19.491 ppb	0.166 ppb	0.301 ppb	0.262 ppb	0.535 ppb	101.525 %
Concentration per Run 1	-0.520 ppb	0.055 ppb	0.234 ppb	7.587 ppb	0.051 ppb	0.228 ppb	0.198 ppb	0.434 ppb	100.878 %
Concentration per Run 2	-0.333 ppb	0.114 ppb	0.269 ppb	22.989 ppb	0.207 ppb	0.265 ppb	0.245 ppb	0.509 ppb	101.202 %
Concentration per Run 3	-0.243 ppb	0.256 ppb	0.348 ppb	27.897 ppb	0.240 ppb	0.410 ppb	0.343 ppb	0.661 ppb	102.494 %
Recovery Percentage 1	-7.306 %	14.170 %	28.390 %	38.982 %	33.194 %	15.051 %	26.193 %	10.695 %	
Concentration RSD	38.7 %	73.2 %	20.6 %	54.4 %	60.8 %	32.0 %	28.2 %	21.7 %	0.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.199 ppb	0.299 ppb	0.165 ppb	0.425 ppb	106.205 %	0.162 ppb	0.150 ppb	104.755 %	0.203 ppb
Concentration per Run 1	0.117 ppb	0.326 ppb	0.068 ppb	0.168 ppb	111.422 %	0.056 ppb	0.061 ppb	108.022 %	0.094 ppb
Concentration per Run 2	0.231 ppb	0.121 ppb	0.195 ppb	0.553 ppb	102.199 %	0.187 ppb	0.179 ppb	103.444 %	0.199 ppb
Concentration per Run 3	0.249 ppb	0.448 ppb	0.231 ppb	0.554 ppb	104.995 %	0.245 ppb	0.211 ppb	102.800 %	0.315 ppb
Recovery Percentage 1	39.820 %	5.971 %	1.645 %	21.257 %		40.605 %	75.137 %		5.071 %
Concentration RSD	35.9 %	55.3 %	52.0 %	52.4 %	4.5 %	59.6 %	52.5 %	2.7 %	54.4 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.172 ppb	106.791 %	105.376 %	0.372 ppb	0.176 ppb	107.514 %
Concentration per Run 1	0.087 ppb	108.240 %	108.396 %	0.254 ppb	0.084 ppb	107.602 %
Concentration per Run 2	0.186 ppb	106.648 %	104.603 %	0.444 ppb	0.195 ppb	105.408 %
Concentration per Run 3	0.243 ppb	105.486 %	103.130 %	0.420 ppb	0.250 ppb	109.531 %
Recovery Percentage 1	34.438 %			37.240 %	17.634 %	
Concentration RSD	45.8 %	1.3 %	2.6 %	27.8 %	48.1 %	1.9 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	56	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG2003775-1 6020TL	Rack	1		
Analysis started at:	12/3/2024 11:11:12 AM	Vial	29		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	110.001 %	122.279 %	0.023 ppb	-11.968 ppb	1.957 ppb	2.181 ppb	-6.287 ppb	36.240 ppb	106.282 %
Concentration per Run 1	104.648 %	126.095 %	0.052 ppb	-16.849 ppb	1.369 ppb	1.536 ppb	-19.686 ppb	34.354 ppb	105.628 %
Concentration per Run 2	114.713 %	117.172 %	0.007 ppb	-5.978 ppb	1.387 ppb	2.679 ppb	-3.677 ppb	45.510 ppb	107.876 %
Concentration per Run 3	110.643 %	123.569 %	0.008 ppb	-13.077 ppb	3.115 ppb	2.328 ppb	4.500 ppb	28.857 ppb	105.341 %
Concentration RSD	4.6 %	3.8 %	115.0 %	46.1 %	51.2 %	26.8 %	195.7 %	23.4 %	1.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.543 ppb	0.059 ppb	0.109 ppb	3.279 ppb	0.008 ppb	-0.017 ppb	0.182 ppb	0.343 ppb	104.894 %
Concentration per Run 1	-0.555 ppb	0.022 ppb	0.061 ppb	4.348 ppb	0.014 ppb	-0.022 ppb	0.134 ppb	0.359 ppb	110.572 %
Concentration per Run 2	-0.520 ppb	0.094 ppb	0.087 ppb	3.668 ppb	0.006 ppb	-0.048 ppb	0.211 ppb	0.378 ppb	101.715 %
Concentration per Run 3	-0.552 ppb	0.060 ppb	0.179 ppb	1.821 ppb	0.006 ppb	0.018 ppb	0.200 ppb	0.292 ppb	102.396 %
Concentration RSD	3.6 %	61.9 %	56.4 %	39.9 %	53.4 %	192.7 %	23.0 %	13.2 %	4.7 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.047 ppb	0.041 ppb	0.041 ppb	0.010 ppb	110.882 %	0.009 ppb	0.007 ppb	114.449 %	0.019 ppb
Concentration per Run 1	0.003 ppb	0.072 ppb	0.032 ppb	-0.027 ppb	120.149 %	0.007 ppb	0.006 ppb	122.555 %	0.013 ppb
Concentration per Run 2	0.058 ppb	0.120 ppb	0.049 ppb	0.066 ppb	106.822 %	0.010 ppb	0.010 ppb	111.551 %	0.023 ppb
Concentration per Run 3	0.080 ppb	-0.069 ppb	0.040 ppb	-0.010 ppb	105.674 %	0.009 ppb	0.003 ppb	109.241 %	0.022 ppb
Concentration RSD	83.7 %	240.1 %	20.7 %	497.8 %	7.3 %	18.5 %	51.4 %	6.2 %	28.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.022 ppb	112.949 %	111.403 %	0.052 ppb	0.021 ppb	114.728 %
Concentration per Run 1	0.052 ppb	120.426 %	119.958 %	0.033 ppb	0.018 ppb	121.996 %
Concentration per Run 2	0.007 ppb	110.842 %	107.558 %	0.064 ppb	0.019 ppb	113.663 %
Concentration per Run 3	0.007 ppb	107.580 %	106.692 %	0.058 ppb	0.026 ppb	108.524 %
Concentration RSD	117.3 %	5.9 %	6.7 %	31.9 %	19.3 %	5.9 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	57	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG2003775-2d10 6020TL	Rack	1		
Analysis started at:	12/3/2024 11:15:40 AM	Vial	30		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	104.926 %	112.178 %	5.199 ppb	1,074.055 ppb	999.509 ppb	198.475 ppb	1,077.035 ppb	997.886 ppb	98.792 %
Concentration per Run 1	99.773 %	115.825 %	5.280 ppb	1,038.539 ppb	975.747 ppb	189.568 ppb	1,055.985 ppb	917.967 ppb	95.550 %
Concentration per Run 2	107.099 %	111.448 %	5.146 ppb	1,074.215 ppb	985.542 ppb	202.946 ppb	1,087.005 ppb	1,072.445 ppb	101.295 %
Concentration per Run 3	107.906 %	109.259 %	5.170 ppb	1,109.412 ppb	1,037.237 ppb	202.910 ppb	1,088.114 ppb	1,003.246 ppb	99.530 %
Concentration RSD	4.3 %	3.0 %	1.4 %	3.3 %	3.3 %	3.9 %	1.7 %	7.8 %	3.0 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	49.195 ppb	20.386 ppb	52.778 ppb	114.870 ppb	52.554 ppb	51.707 ppb	26.097 ppb	52.860 ppb	100.183 %
Concentration per Run 1	47.979 ppb	20.239 ppb	51.953 ppb	105.565 ppb	51.294 ppb	51.036 ppb	26.235 ppb	52.688 ppb	101.453 %
Concentration per Run 2	48.288 ppb	20.479 ppb	52.479 ppb	121.432 ppb	53.436 ppb	51.203 ppb	26.105 ppb	52.301 ppb	98.756 %
Concentration per Run 3	51.319 ppb	20.439 ppb	53.901 ppb	117.613 ppb	52.931 ppb	52.882 ppb	25.952 ppb	53.591 ppb	100.339 %
Concentration RSD	3.8 %	0.6 %	1.9 %	7.2 %	2.1 %	2.0 %	0.5 %	1.3 %	1.4 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	12.676 ppb	11.789 ppb	98.401 ppb	97.591 ppb	105.413 %	5.265 ppb	5.309 ppb	105.680 %	40.215 ppb
Concentration per Run 1	12.340 ppb	12.060 ppb	97.148 ppb	95.085 ppb	107.278 %	5.147 ppb	5.142 ppb	109.793 %	38.661 ppb
Concentration per Run 2	13.339 ppb	12.313 ppb	98.191 ppb	97.841 ppb	104.960 %	5.326 ppb	5.302 ppb	102.155 %	40.757 ppb
Concentration per Run 3	12.349 ppb	10.994 ppb	99.864 ppb	99.848 ppb	104.002 %	5.321 ppb	5.483 ppb	105.091 %	41.227 ppb
Concentration RSD	4.5 %	5.9 %	1.4 %	2.5 %	1.6 %	1.9 %	3.2 %	3.6 %	3.4 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	200.330 ppb	107.521 %	105.827 %	11.642 ppb	51.733 ppb	108.729 %
Concentration per Run 1	192.816 ppb	109.025 %	106.922 %	11.407 ppb	51.279 ppb	111.040 %
Concentration per Run 2	201.442 ppb	106.078 %	106.464 %	11.736 ppb	51.965 ppb	106.011 %
Concentration per Run 3	206.732 ppb	107.462 %	104.094 %	11.784 ppb	51.956 ppb	109.136 %
Concentration RSD	3.5 %	1.4 %	1.4 %	1.8 %	0.8 %	2.3 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	58	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2469249-06 6020TL	Rack	1		
Analysis started at:	12/3/2024 11:20:08 AM	Vial	31		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	96.006 %	113.244 %	0.400 ppb	61,483.067 ppb	31,129.826 ppb	3,638.650 ppb	7,228.747 ppb	122,167.322 ppb	100.498 %
Concentration per Run 1	91.622 %	110.943 %	0.458 ppb	61,701.003 ppb	31,248.185 ppb	3,642.293 ppb	7,072.227 ppb	120,466.866 ppb	97.658 %
Concentration per Run 2	96.166 %	116.162 %	0.387 ppb	59,335.734 ppb	30,497.846 ppb	3,575.730 ppb	7,172.276 ppb	123,754.279 ppb	101.627 %
Concentration per Run 3	100.229 %	112.626 %	0.355 ppb	63,412.465 ppb	31,643.446 ppb	3,697.927 ppb	7,441.739 ppb	122,280.823 ppb	102.210 %
Concentration RSD	4.5 %	2.4 %	13.2 %	3.3 %	1.9 %	1.7 %	2.6 %	1.3 %	2.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	11.679 ppb	11.676 ppb	3,472.910 ppb	6,933.646 ppb	8.805 ppb	13.448 ppb	20.055 ppb	93.196 ppb	102.605 %
Concentration per Run 1	11.760 ppb	11.427 ppb	3,449.666 ppb	6,917.748 ppb	8.863 ppb	12.970 ppb	19.746 ppb	92.927 ppb	105.642 %
Concentration per Run 2	11.630 ppb	11.885 ppb	3,443.924 ppb	6,965.831 ppb	8.690 ppb	13.926 ppb	20.669 ppb	94.466 ppb	100.498 %
Concentration per Run 3	11.647 ppb	11.717 ppb	3,525.141 ppb	6,917.360 ppb	8.863 ppb	13.449 ppb	19.750 ppb	92.195 ppb	101.676 %
Concentration RSD	0.6 %	2.0 %	1.3 %	0.4 %	1.1 %	3.6 %	2.7 %	1.2 %	2.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	2.014 ppb	2.793 ppb	820.582 ppb	2.766 ppb	104.742 %	0.041 ppb	0.351 ppb	108.707 %	2.972 ppb
Concentration per Run 1	2.101 ppb	2.087 ppb	818.827 ppb	2.503 ppb	103.866 %	0.047 ppb	0.362 ppb	110.345 %	2.995 ppb
Concentration per Run 2	2.076 ppb	2.932 ppb	821.478 ppb	2.839 ppb	105.912 %	0.044 ppb	0.332 ppb	109.092 %	2.918 ppb
Concentration per Run 3	1.865 ppb	3.361 ppb	821.440 ppb	2.956 ppb	104.448 %	0.031 ppb	0.359 ppb	106.685 %	3.003 ppb
Concentration RSD	6.4 %	23.2 %	0.2 %	8.5 %	1.0 %	20.8 %	4.8 %	1.7 %	1.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	93.636 ppb	111.439 %	111.802 %	0.134 ppb	38.082 ppb	107.235 %
Concentration per Run 1	93.258 ppb	113.720 %	110.403 %	0.113 ppb	37.374 ppb	108.968 %
Concentration per Run 2	91.455 ppb	107.960 %	112.959 %	0.152 ppb	38.645 ppb	105.750 %
Concentration per Run 3	96.195 ppb	112.638 %	112.042 %	0.138 ppb	38.227 ppb	106.987 %
Concentration RSD	2.6 %	2.7 %	1.2 %	14.6 %	1.7 %	1.5 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	59	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG2003775-3d10 6020TL	Rack	1		
Analysis started at:	12/3/2024 11:24:36 AM	Vial	32		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	109.384 %	120.988 %	4.771 ppb	6,699.680 ppb	3,945.424 ppb	597.867 ppb	1,604.475 ppb	12,285.881 ppb	104.250 %
Concentration per Run 1	104.958 %	122.391 %	4.773 ppb	6,438.087 ppb	3,839.269 ppb	588.764 ppb	1,592.254 ppb	12,078.111 ppb	101.164 %
Concentration per Run 2	111.617 %	119.866 %	4.728 ppb	6,821.298 ppb	3,968.138 ppb	596.163 ppb	1,560.704 ppb	12,219.050 ppb	107.215 %
Concentration per Run 3	111.578 %	120.707 %	4.811 ppb	6,839.654 ppb	4,028.865 ppb	608.674 ppb	1,660.468 ppb	12,560.483 ppb	104.371 %
Concentration RSD	3.5 %	1.1 %	0.9 %	3.4 %	2.5 %	1.7 %	3.2 %	2.0 %	2.9 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	45.752 ppb	19.600 ppb	381.111 ppb	743.806 ppb	48.399 ppb	49.575 ppb	26.236 ppb	57.457 ppb	106.560 %
Concentration per Run 1	42.592 ppb	18.644 ppb	365.397 ppb	713.461 ppb	47.127 ppb	48.308 ppb	26.068 ppb	56.348 ppb	108.463 %
Concentration per Run 2	45.718 ppb	20.207 ppb	392.412 ppb	753.954 ppb	50.346 ppb	50.627 ppb	26.232 ppb	59.209 ppb	104.789 %
Concentration per Run 3	48.945 ppb	19.949 ppb	385.526 ppb	764.002 ppb	47.723 ppb	49.789 ppb	26.407 ppb	56.814 ppb	106.428 %
Concentration RSD	6.9 %	4.3 %	3.7 %	3.6 %	3.5 %	2.4 %	0.6 %	2.7 %	1.7 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	11.184 ppb	10.876 ppb	169.928 ppb	87.998 ppb	110.893 %	4.897 ppb	4.904 ppb	109.724 %	36.944 ppb
Concentration per Run 1	10.469 ppb	11.420 ppb	163.022 ppb	83.675 ppb	115.286 %	4.584 ppb	4.534 ppb	113.757 %	35.227 ppb
Concentration per Run 2	11.615 ppb	9.690 ppb	174.857 ppb	90.468 ppb	107.373 %	5.074 ppb	5.166 ppb	106.623 %	38.929 ppb
Concentration per Run 3	11.467 ppb	11.518 ppb	171.905 ppb	89.849 ppb	110.021 %	5.034 ppb	5.012 ppb	108.791 %	36.674 ppb
Concentration RSD	5.6 %	9.5 %	3.6 %	4.3 %	3.6 %	5.6 %	6.7 %	3.3 %	5.0 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	193.933 ppb	112.241 %	110.896 %	11.048 ppb	53.007 ppb	112.134 %
Concentration per Run 1	184.830 ppb	117.887 %	115.776 %	10.126 ppb	49.532 ppb	117.729 %
Concentration per Run 2	199.527 ppb	108.133 %	107.984 %	11.471 ppb	55.152 ppb	108.599 %
Concentration per Run 3	197.442 ppb	110.703 %	108.928 %	11.545 ppb	54.336 ppb	110.073 %
Concentration RSD	4.1 %	4.5 %	3.8 %	7.2 %	5.7 %	4.4 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	60	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG2003775-4d10 6020TL	Rack	1		
Analysis started at:	12/3/2024 11:29:04 AM	Vial	33		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	108.299 %	118.294 %	4.765 ppb	6,728.602 ppb	3,919.314 ppb	604.463 ppb	1,619.042 ppb	12,269.519 ppb	103.214 %
Concentration per Run 1	105.133 %	116.835 %	4.831 ppb	6,815.853 ppb	3,960.790 ppb	606.536 ppb	1,610.404 ppb	11,882.252 ppb	99.277 %
Concentration per Run 2	109.890 %	120.202 %	4.648 ppb	6,619.642 ppb	3,886.431 ppb	596.101 ppb	1,641.630 ppb	12,683.807 ppb	105.933 %
Concentration per Run 3	109.872 %	117.845 %	4.817 ppb	6,750.311 ppb	3,910.720 ppb	610.753 ppb	1,605.093 ppb	12,242.497 ppb	104.431 %
Concentration RSD	2.5 %	1.5 %	2.1 %	1.5 %	1.0 %	1.2 %	1.2 %	3.3 %	3.4 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	46.361 ppb	19.318 ppb	375.511 ppb	758.418 ppb	48.156 ppb	48.888 ppb	25.784 ppb	57.266 ppb	105.502 %
Concentration per Run 1	45.204 ppb	19.116 ppb	382.228 ppb	794.084 ppb	48.430 ppb	49.720 ppb	26.431 ppb	57.880 ppb	103.696 %
Concentration per Run 2	47.264 ppb	19.392 ppb	372.537 ppb	755.439 ppb	48.542 ppb	48.914 ppb	25.201 ppb	58.235 ppb	102.075 %
Concentration per Run 3	46.614 ppb	19.447 ppb	371.767 ppb	725.730 ppb	47.496 ppb	48.030 ppb	25.719 ppb	55.683 ppb	110.735 %
Concentration RSD	2.3 %	0.9 %	1.6 %	4.5 %	1.2 %	1.7 %	2.4 %	2.4 %	4.4 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	11.352 ppb	11.398 ppb	169.364 ppb	87.816 ppb	106.600 %	4.835 ppb	4.908 ppb	107.526 %	37.008 ppb
Concentration per Run 1	11.242 ppb	12.288 ppb	169.392 ppb	85.322 ppb	107.627 %	4.725 ppb	4.891 ppb	110.859 %	36.409 ppb
Concentration per Run 2	11.615 ppb	11.531 ppb	172.082 ppb	90.718 ppb	106.747 %	4.846 ppb	4.770 ppb	107.093 %	36.944 ppb
Concentration per Run 3	11.200 ppb	10.375 ppb	166.619 ppb	87.407 ppb	105.425 %	4.935 ppb	5.062 ppb	104.627 %	37.670 ppb
Concentration RSD	2.0 %	8.5 %	1.6 %	3.1 %	1.0 %	2.2 %	3.0 %	2.9 %	1.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	194.636 ppb	110.746 %	108.108 %	10.857 ppb	52.090 ppb	110.226 %
Concentration per Run 1	195.075 ppb	113.787 %	110.382 %	10.684 ppb	51.629 ppb	112.021 %
Concentration per Run 2	194.898 ppb	109.878 %	108.881 %	11.025 ppb	52.550 ppb	108.848 %
Concentration per Run 3	193.935 ppb	108.574 %	105.060 %	10.863 ppb	52.090 ppb	109.808 %
Concentration RSD	0.3 %	2.4 %	2.5 %	1.6 %	0.9 %	1.5 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	61	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG2003775-5d10 6020TL	Rack	1		
Analysis started at:	12/3/2024 11:33:33 AM	Vial	34		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	106.308 %	119.753 %	47.815 ppb	10,699.989 ppb	7,837.444 ppb	406.943 ppb	5,454.736 ppb	16,729.146 ppb	99.863 %
Concentration per Run 1	102.691 %	128.283 %	47.966 ppb	9,957.468 ppb	7,260.830 ppb	379.718 ppb	5,312.264 ppb	15,860.630 ppb	98.025 %
Concentration per Run 2	109.076 %	117.677 %	47.458 ppb	10,831.441 ppb	8,088.622 ppb	425.359 ppb	5,430.310 ppb	16,791.915 ppb	101.747 %
Concentration per Run 3	107.157 %	113.300 %	48.022 ppb	11,311.058 ppb	8,162.880 ppb	415.753 ppb	5,621.635 ppb	17,534.894 ppb	99.817 %
Concentration RSD	3.1 %	6.4 %	0.6 %	6.4 %	6.4 %	5.9 %	2.9 %	5.0 %	1.9 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	46.914 ppb	48.668 ppb	398.211 ppb	5,480.582 ppb	48.918 ppb	50.154 ppb	50.753 ppb	59.675 ppb	105.912 %
Concentration per Run 1	44.545 ppb	46.008 ppb	385.883 ppb	5,273.446 ppb	46.656 ppb	48.844 ppb	49.749 ppb	57.876 ppb	107.953 %
Concentration per Run 2	45.906 ppb	48.868 ppb	392.793 ppb	5,413.845 ppb	48.681 ppb	49.635 ppb	51.441 ppb	59.123 ppb	106.188 %
Concentration per Run 3	50.293 ppb	51.128 ppb	415.955 ppb	5,754.456 ppb	51.417 ppb	51.982 ppb	51.069 ppb	62.026 ppb	103.595 %
Concentration RSD	6.4 %	5.3 %	4.0 %	4.5 %	4.9 %	3.3 %	1.8 %	3.6 %	2.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	49.494 ppb	45.162 ppb	130.824 ppb	49.511 ppb	106.742 %	2.406 ppb	48.011 ppb	106.453 %	49.376 ppb
Concentration per Run 1	49.215 ppb	42.798 ppb	127.503 ppb	47.101 ppb	109.928 %	2.388 ppb	46.274 ppb	111.735 %	46.715 ppb
Concentration per Run 2	49.967 ppb	45.668 ppb	131.063 ppb	51.083 ppb	106.291 %	2.344 ppb	48.613 ppb	103.237 %	50.886 ppb
Concentration per Run 3	49.300 ppb	47.020 ppb	133.906 ppb	50.350 ppb	104.006 %	2.486 ppb	49.147 ppb	104.387 %	50.525 ppb
Concentration RSD	0.8 %	4.8 %	2.5 %	4.3 %	2.8 %	3.0 %	3.2 %	4.3 %	4.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	58.086 ppb	108.887 %	109.356 %	47.410 ppb	52.289 ppb	108.802 %
Concentration per Run 1	55.593 ppb	111.785 %	113.386 %	47.021 ppb	50.926 ppb	111.150 %
Concentration per Run 2	58.134 ppb	108.885 %	106.099 %	46.204 ppb	52.246 ppb	109.145 %
Concentration per Run 3	60.530 ppb	105.992 %	108.584 %	49.005 ppb	53.693 ppb	106.111 %
Concentration RSD	4.3 %	2.7 %	3.4 %	3.0 %	2.6 %	2.3 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	62	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG2003775-6d5 6020TL	Rack	1		
Analysis started at:	12/3/2024 11:38:01 AM	Vial	35		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	107.274 %	114.198 %	0.310 ppb	11,636.485 ppb	6,117.689 ppb	710.048 ppb	1,397.568 ppb	23,662.861 ppb	103.188 %
Concentration per Run 1	100.935 %	114.310 %	0.429 ppb	11,157.331 ppb	6,136.936 ppb	690.043 ppb	1,376.579 ppb	23,745.673 ppb	97.418 %
Concentration per Run 2	104.271 %	114.647 %	0.281 ppb	11,599.120 ppb	5,946.184 ppb	708.946 ppb	1,375.551 ppb	23,482.407 ppb	100.223 %
Concentration per Run 3	116.615 %	113.637 %	0.219 ppb	12,153.003 ppb	6,269.947 ppb	731.156 ppb	1,440.574 ppb	23,760.501 ppb	111.925 %
Concentration RSD	7.7 %	0.5 %	34.9 %	4.3 %	2.7 %	2.9 %	2.7 %	0.7 %	7.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	2.205 ppb	2.290 ppb	678.330 ppb	1,364.489 ppb	1.808 ppb	2.662 ppb	3.880 ppb	19.033 ppb	105.944 %
Concentration per Run 1	2.166 ppb	2.178 ppb	676.714 ppb	1,375.173 ppb	1.819 ppb	2.758 ppb	3.655 ppb	18.542 ppb	105.783 %
Concentration per Run 2	2.085 ppb	2.422 ppb	666.518 ppb	1,330.692 ppb	1.776 ppb	2.769 ppb	3.895 ppb	19.201 ppb	107.809 %
Concentration per Run 3	2.364 ppb	2.269 ppb	691.757 ppb	1,387.602 ppb	1.829 ppb	2.458 ppb	4.092 ppb	19.356 ppb	104.239 %
Concentration RSD	6.5 %	5.4 %	1.9 %	2.2 %	1.6 %	6.6 %	5.6 %	2.3 %	1.7 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.538 ppb	0.743 ppb	157.048 ppb	0.924 ppb	109.369 %	0.007 ppb	0.066 ppb	108.203 %	0.637 ppb
Concentration per Run 1	0.629 ppb	0.719 ppb	154.652 ppb	0.745 ppb	113.245 %	0.009 ppb	0.062 ppb	114.314 %	0.575 ppb
Concentration per Run 2	0.546 ppb	0.712 ppb	156.604 ppb	0.956 ppb	108.099 %	0.006 ppb	0.070 ppb	103.440 %	0.663 ppb
Concentration per Run 3	0.438 ppb	0.799 ppb	159.888 ppb	1.071 ppb	106.763 %	0.006 ppb	0.066 ppb	106.855 %	0.672 ppb
Concentration RSD	17.8 %	6.5 %	1.7 %	17.9 %	3.1 %	19.0 %	6.7 %	5.1 %	8.4 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	18.313 ppb	111.932 %	110.833 %	0.252 ppb	7.631 ppb	109.744 %
Concentration per Run 1	17.767 ppb	113.439 %	111.832 %	0.232 ppb	7.430 ppb	111.548 %
Concentration per Run 2	18.471 ppb	111.905 %	112.039 %	0.293 ppb	7.684 ppb	107.697 %
Concentration per Run 3	18.701 ppb	110.451 %	108.627 %	0.231 ppb	7.778 ppb	109.985 %
Concentration RSD	2.7 %	1.3 %	1.7 %	14.1 %	2.4 %	1.8 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	63	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2469188-01 6020TL	Rack	1		
Analysis started at:	12/3/2024 11:42:31 AM	Vial	36		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	98.106 %	108.418 %	0.141 ppb	324,452.327 ppb	36,827.716 ppb	572.227 ppb	13,352.195 ppb	20,115.850 ppb	98.268 %
Concentration per Run 1	93.462 %	109.091 %	0.190 ppb	317,931.401 ppb	37,649.476 ppb	562.783 ppb	12,847.584 ppb	19,456.651 ppb	97.056 %
Concentration per Run 2	99.962 %	108.586 %	0.139 ppb	326,195.124 ppb	35,037.954 ppb	573.404 ppb	13,440.922 ppb	19,933.006 ppb	98.597 %
Concentration per Run 3	100.895 %	107.576 %	0.093 ppb	329,230.457 ppb	37,795.717 ppb	580.493 ppb	13,768.080 ppb	20,957.894 ppb	99.150 %
Concentration RSD	4.1 %	0.7 %	34.2 %	1.8 %	4.2 %	1.6 %	3.5 %	3.8 %	1.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	2.274 ppb	1.937 ppb	42.091 ppb	1,116.760 ppb	0.603 ppb	1.310 ppb	94.540 ppb	74.814 ppb	103.199 %
Concentration per Run 1	2.273 ppb	1.745 ppb	39.433 ppb	1,094.145 ppb	0.595 ppb	1.419 ppb	92.519 ppb	74.168 ppb	104.898 %
Concentration per Run 2	2.328 ppb	2.038 ppb	43.219 ppb	1,136.937 ppb	0.681 ppb	1.243 ppb	96.580 ppb	75.324 ppb	101.298 %
Concentration per Run 3	2.222 ppb	2.028 ppb	43.622 ppb	1,119.197 ppb	0.533 ppb	1.269 ppb	94.520 ppb	74.951 ppb	103.402 %
Concentration RSD	2.3 %	8.6 %	5.5 %	1.9 %	12.3 %	7.2 %	2.1 %	0.8 %	1.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.728 ppb	0.165 ppb	249.133 ppb	1.009 ppb	103.075 %	0.019 ppb	0.079 ppb	106.511 %	0.583 ppb
Concentration per Run 1	0.788 ppb	0.263 ppb	244.184 ppb	0.931 ppb	104.668 %	0.023 ppb	0.104 ppb	107.997 %	0.558 ppb
Concentration per Run 2	0.736 ppb	0.198 ppb	252.233 ppb	0.817 ppb	101.220 %	0.021 ppb	0.067 ppb	105.788 %	0.556 ppb
Concentration per Run 3	0.660 ppb	0.034 ppb	250.983 ppb	1.278 ppb	103.336 %	0.014 ppb	0.067 ppb	105.748 %	0.635 ppb
Concentration RSD	8.9 %	71.4 %	1.7 %	23.8 %	1.7 %	25.1 %	26.6 %	1.2 %	7.8 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	20.863 ppb	111.389 %	112.740 %	0.074 ppb	6.149 ppb	104.765 %
Concentration per Run 1	20.061 ppb	115.930 %	113.416 %	0.045 ppb	6.045 ppb	104.958 %
Concentration per Run 2	20.842 ppb	107.418 %	110.861 %	0.093 ppb	6.309 ppb	104.882 %
Concentration per Run 3	21.687 ppb	110.818 %	113.942 %	0.083 ppb	6.095 ppb	104.456 %
Concentration RSD	3.9 %	3.8 %	1.5 %	34.4 %	2.3 %	0.3 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	64	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2469188-02 6020TL	Rack	1		
Analysis started at:	12/3/2024 11:47:00 AM	Vial	37		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	53.024 %	89.169 %	0.021 ppb	4,929,163.522 ppb	539,908.301 ppb	114.657 ppb	121,048.554 ppb	109,867.157 ppb	52.978 %
Concentration per Run 1	51.585 %	94.781 %	0.023 ppb	4,677,933.012 ppb	516,947.853 ppb	110.643 ppb	117,502.189 ppb	109,905.533 ppb	53.220 %
Concentration per Run 2	53.902 %	84.512 %	0.022 ppb	5,068,244.519 ppb	562,633.462 ppb	119.885 ppb	126,369.745 ppb	111,496.619 ppb	53.154 %
Concentration per Run 3	53.583 %	88.215 %	0.018 ppb	5,041,313.034 ppb	540,143.588 ppb	113.444 ppb	119,273.729 ppb	108,199.318 ppb	52.559 %
Concentration RSD	2.4 %	5.8 %	13.8 %	4.4 %	4.2 %	4.1 %	3.9 %	1.5 %	0.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	1.085 ppb	0.540 ppb	25.633 ppb	308.277 ppb	0.219 ppb	0.917 ppb	75.973 ppb	74.955 ppb	112.782 %
Concentration per Run 1	1.062 ppb	0.501 ppb	26.953 ppb	322.171 ppb	0.205 ppb	0.914 ppb	82.215 ppb	79.072 ppb	100.998 %
Concentration per Run 2	1.200 ppb	0.578 ppb	25.989 ppb	320.181 ppb	0.235 ppb	0.958 ppb	77.770 ppb	76.439 ppb	111.080 %
Concentration per Run 3	0.991 ppb	0.542 ppb	23.955 ppb	282.479 ppb	0.218 ppb	0.881 ppb	67.935 ppb	69.354 ppb	126.267 %
Concentration RSD	9.8 %	7.1 %	6.0 %	7.3 %	6.9 %	4.2 %	9.6 %	6.7 %	11.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	1.360 ppb	0.142 ppb	3,190.282 ppb	4.993 ppb	85.365 %	0.021 ppb	0.065 ppb	96.112 %	0.465 ppb
Concentration per Run 1	1.523 ppb	0.177 ppb	3,206.530 ppb	4.816 ppb	86.846 %	0.024 ppb	0.060 ppb	94.052 %	0.399 ppb
Concentration per Run 2	1.413 ppb	0.104 ppb	3,265.488 ppb	5.326 ppb	83.637 %	0.022 ppb	0.064 ppb	95.705 %	0.457 ppb
Concentration per Run 3	1.144 ppb	0.146 ppb	3,098.829 ppb	4.839 ppb	85.612 %	0.018 ppb	0.071 ppb	98.579 %	0.537 ppb
Concentration RSD	14.3 %	25.7 %	2.6 %	5.8 %	1.9 %	15.1 %	7.8 %	2.4 %	14.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	52.947 ppb	102.346 %	103.943 %	0.045 ppb	2.407 ppb	86.345 %
Concentration per Run 1	52.639 ppb	104.413 %	102.266 %	0.037 ppb	2.368 ppb	85.801 %
Concentration per Run 2	53.263 ppb	100.057 %	103.471 %	0.042 ppb	2.404 ppb	85.730 %
Concentration per Run 3	52.938 ppb	102.568 %	106.091 %	0.055 ppb	2.450 ppb	87.504 %
Concentration RSD	0.6 %	2.1 %	1.9 %	21.3 %	1.7 %	1.2 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	65	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2469188-03 6020TL	Rack	1		
Analysis started at:	12/3/2024 11:51:27 AM	Vial	38		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	55.057 %	92.256 %	0.012 ppb	3,953,062.995 ppb	438,051.967 ppb	54.387 ppb	105,453.196 ppb	93,919.899 ppb	57.706 %
Concentration per Run 1	53.167 %	88.552 %	0.013 ppb	4,085,222.575 ppb	448,724.510 ppb	56.376 ppb	110,061.113 ppb	98,037.256 ppb	56.759 %
Concentration per Run 2	55.670 %	91.582 %	0.014 ppb	3,967,568.060 ppb	436,452.877 ppb	54.303 ppb	103,322.851 ppb	92,359.793 ppb	58.252 %
Concentration per Run 3	56.335 %	96.633 %	0.008 ppb	3,806,398.351 ppb	428,978.513 ppb	52.482 ppb	102,975.625 ppb	91,362.647 ppb	58.107 %
Concentration RSD	3.0 %	4.4 %	26.3 %	3.5 %	2.3 %	3.6 %	3.8 %	3.8 %	1.4 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.577 ppb	0.381 ppb	17.254 ppb	117.663 ppb	0.301 ppb	1.035 ppb	16.254 ppb	43.968 ppb	114.229 %
Concentration per Run 1	0.451 ppb	0.444 ppb	18.522 ppb	117.786 ppb	0.331 ppb	1.071 ppb	17.282 ppb	47.764 ppb	102.506 %
Concentration per Run 2	0.771 ppb	0.377 ppb	17.224 ppb	110.723 ppb	0.315 ppb	1.013 ppb	16.463 ppb	42.536 ppb	114.622 %
Concentration per Run 3	0.510 ppb	0.323 ppb	16.017 ppb	124.480 ppb	0.257 ppb	1.020 ppb	15.019 ppb	41.603 ppb	125.557 %
Concentration RSD	29.5 %	15.9 %	7.3 %	5.8 %	12.8 %	3.0 %	7.0 %	7.6 %	10.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	1.254 ppb	0.121 ppb	2,674.964 ppb	4.497 ppb	87.746 %	0.015 ppb	0.067 ppb	99.180 %	0.500 ppb
Concentration per Run 1	1.415 ppb	0.103 ppb	2,700.589 ppb	4.412 ppb	89.151 %	0.019 ppb	0.081 ppb	98.314 %	0.469 ppb
Concentration per Run 2	1.209 ppb	0.105 ppb	2,680.761 ppb	4.175 ppb	85.752 %	0.016 ppb	0.083 ppb	98.086 %	0.502 ppb
Concentration per Run 3	1.137 ppb	0.155 ppb	2,643.544 ppb	4.905 ppb	88.336 %	0.009 ppb	0.038 ppb	101.139 %	0.529 ppb
Concentration RSD	11.5 %	24.3 %	1.1 %	8.3 %	2.0 %	36.8 %	37.6 %	1.7 %	6.0 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	12.029 ppb	104.463 %	107.327 %	0.034 ppb	0.769 ppb	85.018 %
Concentration per Run 1	12.377 ppb	105.761 %	106.357 %	0.028 ppb	0.728 ppb	86.601 %
Concentration per Run 2	11.987 ppb	100.648 %	105.343 %	0.040 ppb	0.809 ppb	82.847 %
Concentration per Run 3	11.722 ppb	106.979 %	110.281 %	0.034 ppb	0.770 ppb	85.607 %
Concentration RSD	2.7 %	3.2 %	2.4 %	17.4 %	5.3 %	2.3 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index: 66
Analysis label: CCV
Analysis started at: 12/3/2024 11:55:54 AM
User name ALPHALAB\a2-icpmsq2
Rack 0
Vial 9
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	106.067 %	114.591 %	58.113 ppb	8,838.290 ppb	6,043.964 ppb	58.551 ppb	6,666.084 ppb	6,517.544 ppb	103.208 %
Concentration per Run 1	101.747 %	117.677 %	58.161 ppb	9,080.501 ppb	5,912.671 ppb	54.228 ppb	6,385.861 ppb	6,481.101 ppb	100.163 %
Concentration per Run 2	106.629 %	108.586 %	57.271 ppb	9,272.851 ppb	6,236.559 ppb	60.812 ppb	6,938.774 ppb	6,567.217 ppb	104.777 %
Concentration per Run 3	109.826 %	117.509 %	58.905 ppb	8,161.518 ppb	5,982.663 ppb	60.614 ppb	6,673.616 ppb	6,504.313 ppb	104.686 %
Recovery Percentage 1			96.854 %	147.305 %	100.733 %	97.585 %	111.101 %	108.626 %	
Concentration RSD	3.8 %	4.5 %	1.4 %	6.7 %	2.8 %	6.4 %	4.1 %	0.7 %	2.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	57.407 ppb	56.507 ppb	58.807 ppb	5,659.965 ppb	55.487 ppb	57.042 ppb	56.909 ppb	58.977 ppb	122.794 %
Concentration per Run 1	53.853 ppb	55.120 ppb	58.427 ppb	5,636.958 ppb	54.908 ppb	57.046 ppb	56.711 ppb	57.801 ppb	122.289 %
Concentration per Run 2	58.278 ppb	56.137 ppb	58.409 ppb	5,649.108 ppb	55.321 ppb	57.595 ppb	56.532 ppb	59.707 ppb	122.909 %
Concentration per Run 3	60.090 ppb	58.263 ppb	59.586 ppb	5,693.828 ppb	56.232 ppb	56.485 ppb	57.484 ppb	59.422 ppb	123.184 %
Recovery Percentage 1	95.679 %	94.178 %	98.012 %	94.333 %	92.479 %	95.070 %	94.849 %	98.295 %	
Concentration RSD	5.6 %	2.8 %	1.1 %	0.5 %	1.2 %	1.0 %	0.9 %	1.7 %	0.4 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	55.832 ppb	58.466 ppb	61.643 ppb	56.902 ppb	120.041 %	55.834 ppb	56.937 ppb	128.714 %	55.980 ppb
Concentration per Run 1	56.591 ppb	57.232 ppb	60.486 ppb	55.414 ppb	122.378 %	55.132 ppb	57.561 ppb	127.893 %	54.940 ppb
Concentration per Run 2	55.723 ppb	57.841 ppb	61.698 ppb	57.534 ppb	120.252 %	55.525 ppb	56.154 ppb	128.732 %	56.539 ppb
Concentration per Run 3	55.182 ppb	60.325 ppb	62.744 ppb	57.758 ppb	117.493 %	56.846 ppb	57.095 ppb	129.516 %	56.462 ppb
Recovery Percentage 1	93.053 %	97.443 %	102.738 %	94.836 %		93.057 %	94.895 %		93.301 %
Concentration RSD	1.3 %	2.8 %	1.8 %	2.3 %	2.0 %	1.6 %	1.3 %	0.6 %	1.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	57.583 ppb	127.793 %	129.078 %	55.492 ppb	57.278 ppb	121.459 %
Concentration per Run 1	55.849 ppb	130.197 %	131.128 %	54.129 ppb	55.091 ppb	121.652 %
Concentration per Run 2	57.323 ppb	127.943 %	126.663 %	55.104 ppb	57.900 ppb	121.146 %
Concentration per Run 3	59.575 ppb	125.239 %	129.444 %	57.244 ppb	58.844 ppb	121.580 %
Recovery Percentage 1	95.971 %			92.487 %	95.464 %	
Concentration RSD	3.3 %	1.9 %	1.7 %	2.9 %	3.4 %	0.2 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index: 67
Analysis label: CCB
Analysis started at: 12/3/2024 12:00:26 PM
User name ALPHALAB\a2-icpmsq2
Rack 0
Vial 10
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	108.239 %	117.958 %	0.456 ppb	1,274.649 ppb	39.120 ppb	-0.235 ppb	171.245 ppb	13.020 ppb	105.594 %
Concentration per Run 1	104.568 %	115.489 %	0.424 ppb	1,466.016 ppb	57.494 ppb	-0.095 ppb	193.048 ppb	21.665 ppb	101.521 %
Concentration per Run 2	109.515 %	112.795 %	0.418 ppb	1,385.614 ppb	47.912 ppb	-0.445 ppb	160.806 ppb	7.305 ppb	107.398 %
Concentration per Run 3	110.633 %	125.590 %	0.526 ppb	972.318 ppb	11.954 ppb	-0.163 ppb	159.882 ppb	10.090 ppb	107.863 %
Recovery Percentage 1			91.183 %	254.930 %	55.886 %	-2.345 %	171.245 %	13.020 %	
Concentration RSD	3.0 %	5.7 %	13.3 %	20.8 %	61.4 %	79.2 %	11.0 %	58.5 %	3.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.441 ppb	-0.053 ppb	0.131 ppb	6.647 ppb	0.015 ppb	0.153 ppb	0.210 ppb	0.376 ppb	118.093 %
Concentration per Run 1	-0.501 ppb	-0.045 ppb	0.189 ppb	6.579 ppb	0.021 ppb	0.177 ppb	0.241 ppb	0.368 ppb	118.369 %
Concentration per Run 2	-0.355 ppb	-0.033 ppb	0.107 ppb	7.097 ppb	0.016 ppb	0.165 ppb	0.236 ppb	0.390 ppb	114.745 %
Concentration per Run 3	-0.466 ppb	-0.080 ppb	0.096 ppb	6.267 ppb	0.006 ppb	0.117 ppb	0.153 ppb	0.370 ppb	121.165 %
Recovery Percentage 1	-8.815 %	-5.284 %	13.072 %	13.295 %	2.943 %	7.653 %	20.982 %	7.521 %	
Concentration RSD	17.2 %	45.8 %	39.0 %	6.3 %	51.4 %	20.6 %	23.5 %	3.2 %	2.7 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.002 ppb	0.466 ppb	0.245 ppb	0.298 ppb	120.811 %	0.017 ppb	0.010 ppb	128.025 %	0.077 ppb
Concentration per Run 1	-0.055 ppb	0.738 ppb	0.365 ppb	0.189 ppb	123.867 %	0.025 ppb	0.006 ppb	130.006 %	0.064 ppb
Concentration per Run 2	0.038 ppb	0.359 ppb	0.271 ppb	0.207 ppb	117.484 %	0.023 ppb	0.018 ppb	127.680 %	0.094 ppb
Concentration per Run 3	0.023 ppb	0.301 ppb	0.100 ppb	0.499 ppb	121.082 %	0.003 ppb	0.006 ppb	126.387 %	0.072 ppb
Recovery Percentage 1	0.405 %	9.323 %	2.452 %	14.920 %		4.239 %	4.924 %		1.918 %
Concentration RSD	2,450.7 %	50.9 %	54.9 %	58.3 %	2.6 %	70.1 %	70.3 %	1.4 %	20.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.019 ppb	124.988 %	125.092 %	0.220 ppb	0.025 ppb	121.448 %
Concentration per Run 1	0.025 ppb	132.238 %	129.628 %	0.210 ppb	0.030 ppb	123.702 %
Concentration per Run 2	-0.008 ppb	121.832 %	122.814 %	0.254 ppb	0.026 ppb	121.173 %
Concentration per Run 3	0.039 ppb	120.895 %	122.833 %	0.194 ppb	0.020 ppb	119.468 %
Recovery Percentage 1	3.753 %			21.953 %	2.506 %	
Concentration RSD	127.2 %	5.0 %	3.1 %	14.2 %	20.6 %	1.8 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	68	User name	ALPHALAB\a2-icpmsq2	Comment	CCV/MCCV
Analysis label:	CCV	Rack	0		
Analysis started at:	12/3/2024 12:35:53 PM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	115.770 %	125.702 %	57.412 ppb	5,980.172 ppb	5,527.372 ppb	56.252 ppb	5,392.506 ppb	5,181.352 ppb	111.018 %
Concentration per Run 1	110.616 %	128.115 %	58.287 ppb	5,742.952 ppb	5,364.572 ppb	54.335 ppb	5,533.381 ppb	5,311.729 ppb	109.074 %
Concentration per Run 2	117.068 %	125.421 %	57.030 ppb	6,037.258 ppb	5,606.486 ppb	56.443 ppb	5,222.496 ppb	4,983.339 ppb	112.565 %
Concentration per Run 3	119.627 %	123.569 %	56.918 ppb	6,160.306 ppb	5,611.060 ppb	57.979 ppb	5,421.640 ppb	5,248.987 ppb	111.413 %
Recovery Percentage 1			95.686 %	99.670 %	92.123 %	93.754 %	89.875 %	86.356 %	
Concentration RSD	4.0 %	1.8 %	1.3 %	3.6 %	2.6 %	3.3 %	2.9 %	3.4 %	1.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	53.785 ppb	53.778 ppb	55.737 ppb	5,743.402 ppb	56.127 ppb	56.681 ppb	56.664 ppb	56.695 ppb	119.388 %
Concentration per Run 1	49.431 ppb	51.042 ppb	53.815 ppb	5,625.969 ppb	54.448 ppb	56.508 ppb	55.360 ppb	55.758 ppb	122.764 %
Concentration per Run 2	55.465 ppb	54.282 ppb	57.206 ppb	5,832.807 ppb	56.836 ppb	57.728 ppb	57.716 ppb	58.821 ppb	115.458 %
Concentration per Run 3	56.460 ppb	56.011 ppb	56.189 ppb	5,771.431 ppb	57.099 ppb	55.808 ppb	56.915 ppb	55.506 ppb	119.943 %
Recovery Percentage 1	89.642 %	89.631 %	92.894 %	95.723 %	93.546 %	94.469 %	94.440 %	94.492 %	
Concentration RSD	7.1 %	4.7 %	3.1 %	1.8 %	2.6 %	1.7 %	2.1 %	3.3 %	3.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	55.197 ppb	55.240 ppb	58.435 ppb	56.869 ppb	114.889 %	57.012 ppb	56.662 ppb	118.981 %	55.519 ppb
Concentration per Run 1	54.756 ppb	55.153 ppb	56.597 ppb	55.512 ppb	119.470 %	56.801 ppb	55.887 ppb	121.805 %	53.923 ppb
Concentration per Run 2	56.623 ppb	53.355 ppb	60.162 ppb	57.172 ppb	110.969 %	56.459 ppb	57.237 ppb	117.243 %	55.824 ppb
Concentration per Run 3	54.210 ppb	57.211 ppb	58.546 ppb	57.922 ppb	114.229 %	57.776 ppb	56.862 ppb	117.894 %	56.811 ppb
Recovery Percentage 1	91.994 %	92.066 %	97.392 %	94.781 %		95.020 %	94.437 %		92.532 %
Concentration RSD	2.3 %	3.5 %	3.1 %	2.2 %	3.7 %	1.2 %	1.2 %	2.1 %	2.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	56.804 ppb	120.280 %	119.759 %	55.882 ppb	55.793 ppb	118.822 %
Concentration per Run 1	55.414 ppb	126.009 %	122.026 %	53.460 ppb	53.796 ppb	124.564 %
Concentration per Run 2	57.767 ppb	116.591 %	117.254 %	56.839 ppb	56.979 ppb	116.833 %
Concentration per Run 3	57.229 ppb	118.239 %	119.996 %	57.347 ppb	56.604 ppb	115.068 %
Recovery Percentage 1	94.673 %			93.136 %	92.988 %	
Concentration RSD	2.2 %	4.2 %	2.0 %	3.8 %	3.1 %	4.3 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	69	User name	ALPHALAB\a2-icpmsq2	Comment	CCB
Analysis label:	CCB	Rack	0		
Analysis started at:	12/3/2024 12:42:03 PM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	117.354 %	124.467 %	0.386 ppb	251.728 ppb	0.801 ppb	-0.651 ppb	39.318 ppb	1.008 ppb	108.564 %
Concentration per Run 1	113.137 %	131.145 %	0.613 ppb	230.037 ppb	-0.103 ppb	-0.654 ppb	54.187 ppb	-6.375 ppb	109.744 %
Concentration per Run 2	118.381 %	118.519 %	0.316 ppb	263.988 ppb	1.119 ppb	-0.707 ppb	28.333 ppb	7.117 ppb	108.493 %
Concentration per Run 3	120.544 %	123.738 %	0.230 ppb	261.160 ppb	1.388 ppb	-0.592 ppb	35.434 ppb	2.281 ppb	107.455 %
Recovery Percentage 1			77.263 %	50.346 %	1.145 %	-6.510 %	39.318 %	1.008 %	
Concentration RSD	3.2 %	5.1 %	52.0 %	7.5 %	99.1 %	8.8 %	34.0 %	678.4 %	1.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.436 ppb	-0.050 ppb	0.025 ppb	4.341 ppb	0.013 ppb	0.099 ppb	0.039 ppb	0.167 ppb	113.563 %
Concentration per Run 1	-0.423 ppb	-0.022 ppb	0.071 ppb	4.106 ppb	0.021 ppb	0.104 ppb	0.072 ppb	0.136 ppb	115.290 %
Concentration per Run 2	-0.440 ppb	-0.072 ppb	-0.027 ppb	3.860 ppb	0.014 ppb	0.042 ppb	0.013 ppb	0.234 ppb	111.488 %
Concentration per Run 3	-0.445 ppb	-0.057 ppb	0.030 ppb	5.056 ppb	0.004 ppb	0.151 ppb	0.033 ppb	0.132 ppb	113.910 %
Recovery Percentage 1	-8.726 %	-5.038 %	2.477 %	8.681 %	2.611 %	4.951 %	3.921 %	3.345 %	
Concentration RSD	2.7 %	51.0 %	198.9 %	14.6 %	63.8 %	55.2 %	76.2 %	34.5 %	1.7 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.080 ppb	0.174 ppb	0.017 ppb	0.206 ppb	115.330 %	0.019 ppb	0.017 ppb	117.306 %	0.054 ppb
Concentration per Run 1	0.022 ppb	-0.036 ppb	0.022 ppb	0.111 ppb	118.542 %	0.016 ppb	0.018 ppb	121.619 %	0.047 ppb
Concentration per Run 2	0.076 ppb	0.543 ppb	0.020 ppb	0.176 ppb	114.749 %	0.019 ppb	0.013 ppb	115.129 %	0.062 ppb
Concentration per Run 3	0.142 ppb	0.016 ppb	0.009 ppb	0.331 ppb	112.698 %	0.023 ppb	0.019 ppb	115.168 %	0.052 ppb
Recovery Percentage 1	15.970 %	3.488 %	0.167 %	10.307 %		4.803 %	8.438 %		1.347 %
Concentration RSD	75.0 %	183.7 %	41.6 %	54.6 %	2.6 %	17.6 %	20.9 %	3.2 %	14.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.038 ppb	117.878 %	118.387 %	0.192 ppb	0.024 ppb	117.668 %
Concentration per Run 1	0.016 ppb	122.992 %	122.859 %	0.216 ppb	0.030 ppb	121.642 %
Concentration per Run 2	0.055 ppb	118.089 %	117.538 %	0.204 ppb	0.025 ppb	116.831 %
Concentration per Run 3	0.044 ppb	112.554 %	114.765 %	0.156 ppb	0.016 ppb	114.529 %
Recovery Percentage 1	7.675 %			19.217 %	2.373 %	
Concentration RSD	52.0 %	4.4 %	3.5 %	16.5 %	31.8 %	3.1 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	70	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2469188-04d5 6020TL	Rack	1		
Analysis started at:	12/3/2024 12:47:59 PM	Vial	39		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	78.733 %	102.694 %	0.069 ppb	1,773,322.955 ppb	195,377.473 ppb	16.646 ppb	49,478.921 ppb	44,208.340 ppb	74.955 %
Concentration per Run 1	76.783 %	98.316 %	0.079 ppb	1,755,820.079 ppb	196,966.876 ppb	16.611 ppb	48,561.364 ppb	44,195.220 ppb	74.688 %
Concentration per Run 2	80.252 %	108.081 %	0.073 ppb	1,726,157.126 ppb	192,077.971 ppb	15.871 ppb	49,824.167 ppb	43,970.558 ppb	74.925 %
Concentration per Run 3	79.164 %	101.684 %	0.054 ppb	1,837,991.660 ppb	197,087.573 ppb	17.455 ppb	50,051.233 ppb	44,459.241 ppb	75.251 %
Concentration RSD	2.3 %	4.8 %	19.2 %	3.3 %	1.5 %	4.8 %	1.6 %	0.6 %	0.4 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.055 ppb	0.006 ppb	2.954 ppb	30.763 ppb	0.017 ppb	0.101 ppb	0.420 ppb	0.842 ppb	107.890 %
Concentration per Run 1	0.022 ppb	0.031 ppb	3.090 ppb	27.479 ppb	0.003 ppb	0.138 ppb	0.450 ppb	0.817 ppb	104.644 %
Concentration per Run 2	-0.086 ppb	-0.033 ppb	2.782 ppb	31.648 ppb	0.037 ppb	0.105 ppb	0.431 ppb	0.882 ppb	107.982 %
Concentration per Run 3	-0.100 ppb	0.019 ppb	2.991 ppb	33.162 ppb	0.012 ppb	0.059 ppb	0.379 ppb	0.826 ppb	111.043 %
Concentration RSD	121.8 %	598.8 %	5.3 %	9.6 %	102.6 %	39.7 %	8.7 %	4.2 %	3.0 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.386 ppb	0.292 ppb	1,174.444 ppb	1.570 ppb	97.251 %	0.016 ppb	0.007 ppb	103.286 %	0.060 ppb
Concentration per Run 1	0.461 ppb	0.409 ppb	1,144.923 ppb	1.634 ppb	99.563 %	0.020 ppb	0.007 ppb	101.534 %	0.046 ppb
Concentration per Run 2	0.387 ppb	0.332 ppb	1,189.332 ppb	1.597 ppb	96.973 %	0.018 ppb	0.011 ppb	103.578 %	0.075 ppb
Concentration per Run 3	0.310 ppb	0.136 ppb	1,189.078 ppb	1.478 ppb	95.216 %	0.010 ppb	0.004 ppb	104.746 %	0.061 ppb
Concentration RSD	19.5 %	48.1 %	2.2 %	5.2 %	2.2 %	31.3 %	50.0 %	1.6 %	23.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	2.754 ppb	107.902 %	108.189 %	0.043 ppb	0.071 ppb	90.735 %
Concentration per Run 1	2.876 ppb	106.982 %	107.706 %	0.026 ppb	0.074 ppb	92.920 %
Concentration per Run 2	2.826 ppb	109.601 %	107.626 %	0.050 ppb	0.072 ppb	90.571 %
Concentration per Run 3	2.559 ppb	107.124 %	109.234 %	0.054 ppb	0.066 ppb	88.714 %
Concentration RSD	6.2 %	1.4 %	0.8 %	35.0 %	5.9 %	2.3 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	71	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2469188-05d5 6020TL	Rack	1		
Analysis started at:	12/3/2024 12:52:26 PM	Vial	40		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	88.851 %	112.963 %	0.056 ppb	699,685.493 ppb	72,185.887 ppb	65.356 ppb	21,888.192 ppb	37,603.415 ppb	97.432 %
Concentration per Run 1	85.813 %	114.983 %	0.064 ppb	689,389.702 ppb	71,326.537 ppb	61.125 ppb	21,005.981 ppb	36,548.762 ppb	94.617 %
Concentration per Run 2	89.301 %	109.933 %	0.066 ppb	716,052.935 ppb	74,109.081 ppb	68.671 ppb	21,776.098 ppb	37,879.078 ppb	97.340 %
Concentration per Run 3	91.439 %	113.973 %	0.039 ppb	693,613.843 ppb	71,122.043 ppb	66.274 ppb	22,882.497 ppb	38,382.404 ppb	100.339 %
Concentration RSD	3.2 %	2.4 %	26.9 %	2.0 %	2.3 %	5.9 %	4.3 %	2.5 %	2.9 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.077 ppb	0.206 ppb	34.052 ppb	219.477 ppb	0.127 ppb	1.007 ppb	1.931 ppb	3.775 ppb	110.894 %
Concentration per Run 1	0.075 ppb	0.192 ppb	34.640 ppb	216.261 ppb	0.133 ppb	1.106 ppb	1.887 ppb	3.558 ppb	109.097 %
Concentration per Run 2	0.099 ppb	0.198 ppb	34.086 ppb	235.371 ppb	0.143 ppb	0.984 ppb	1.798 ppb	3.943 ppb	109.460 %
Concentration per Run 3	0.057 ppb	0.230 ppb	33.430 ppb	206.799 ppb	0.105 ppb	0.929 ppb	2.109 ppb	3.823 ppb	114.125 %
Concentration RSD	27.3 %	9.8 %	1.8 %	6.6 %	15.7 %	9.0 %	8.3 %	5.2 %	2.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.419 ppb	0.132 ppb	574.525 ppb	0.935 ppb	102.531 %	0.003 ppb	0.025 ppb	109.691 %	0.114 ppb
Concentration per Run 1	0.439 ppb	-0.076 ppb	568.559 ppb	0.990 ppb	104.269 %	0.006 ppb	0.027 ppb	110.566 %	0.101 ppb
Concentration per Run 2	0.408 ppb	0.387 ppb	579.853 ppb	0.907 ppb	101.529 %	0.002 ppb	0.028 ppb	109.085 %	0.113 ppb
Concentration per Run 3	0.411 ppb	0.085 ppb	575.163 ppb	0.909 ppb	101.795 %	0.001 ppb	0.021 ppb	109.421 %	0.128 ppb
Concentration RSD	4.2 %	178.0 %	1.0 %	5.1 %	1.5 %	80.6 %	15.5 %	0.7 %	11.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	22.088 ppb	114.185 %	112.891 %	0.032 ppb	0.262 ppb	98.227 %
Concentration per Run 1	21.942 ppb	115.529 %	112.710 %	0.019 ppb	0.268 ppb	98.976 %
Concentration per Run 2	21.943 ppb	113.855 %	111.427 %	0.040 ppb	0.259 ppb	97.266 %
Concentration per Run 3	22.378 ppb	113.172 %	114.536 %	0.037 ppb	0.260 ppb	98.437 %
Concentration RSD	1.1 %	1.1 %	1.4 %	34.9 %	2.0 %	0.9 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	72	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2469188-06d5 6020TL	Rack	1		
Analysis started at:	12/3/2024 12:56:53 PM	Vial	41		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	86.547 %	105.163 %	0.017 ppb	813,100.667 ppb	87,644.679 ppb	153.923 ppb	25,158.372 ppb	26,680.063 ppb	88.132 %
Concentration per Run 1	89.547 %	105.724 %	0.021 ppb	781,581.122 ppb	85,234.976 ppb	154.486 ppb	24,665.197 ppb	26,378.655 ppb	88.125 %
Concentration per Run 2	84.277 %	102.357 %	0.020 ppb	837,667.998 ppb	89,055.818 ppb	153.469 ppb	25,086.205 ppb	26,761.209 ppb	87.408 %
Concentration per Run 3	85.817 %	107.408 %	0.010 ppb	820,052.882 ppb	88,643.244 ppb	153.814 ppb	25,723.714 ppb	26,900.324 ppb	88.863 %
Concentration RSD	3.1 %	2.4 %	34.5 %	3.5 %	2.4 %	0.3 %	2.1 %	1.0 %	0.8 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.290 ppb	0.491 ppb	13.264 ppb	327.435 ppb	0.129 ppb	0.400 ppb	2.199 ppb	5.285 ppb	107.625 %
Concentration per Run 1	0.270 ppb	0.524 ppb	13.315 ppb	325.782 ppb	0.134 ppb	0.351 ppb	2.166 ppb	5.420 ppb	104.554 %
Concentration per Run 2	0.237 ppb	0.500 ppb	12.726 ppb	325.268 ppb	0.136 ppb	0.535 ppb	2.196 ppb	5.205 ppb	109.601 %
Concentration per Run 3	0.363 ppb	0.449 ppb	13.751 ppb	331.254 ppb	0.117 ppb	0.313 ppb	2.235 ppb	5.231 ppb	108.719 %
Concentration RSD	22.6 %	7.8 %	3.9 %	1.0 %	8.2 %	29.7 %	1.6 %	2.2 %	2.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.316 ppb	0.122 ppb	555.845 ppb	0.790 ppb	100.541 %	0.003 ppb	0.026 ppb	106.777 %	0.104 ppb
Concentration per Run 1	0.453 ppb	-0.069 ppb	550.506 ppb	0.746 ppb	102.714 %	0.000 ppb	0.028 ppb	107.783 %	0.091 ppb
Concentration per Run 2	0.219 ppb	0.321 ppb	553.542 ppb	0.788 ppb	99.645 %	0.003 ppb	0.025 ppb	105.656 %	0.103 ppb
Concentration per Run 3	0.276 ppb	0.113 ppb	563.488 ppb	0.838 ppb	99.263 %	0.006 ppb	0.025 ppb	106.893 %	0.118 ppb
Concentration RSD	38.7 %	159.9 %	1.2 %	5.8 %	1.9 %	87.4 %	6.7 %	1.0 %	13.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	6.340 ppb	111.894 %	110.391 %	0.029 ppb	0.733 ppb	94.003 %
Concentration per Run 1	6.214 ppb	114.961 %	112.257 %	0.018 ppb	0.713 ppb	96.086 %
Concentration per Run 2	6.625 ppb	111.095 %	108.520 %	0.034 ppb	0.742 ppb	93.051 %
Concentration per Run 3	6.181 ppb	109.626 %	110.395 %	0.036 ppb	0.745 ppb	92.873 %
Concentration RSD	3.9 %	2.5 %	1.7 %	33.0 %	2.4 %	1.9 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	73	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG2004404-1 MCP-6020SL-10	Rack	1		
Analysis started at:	12/3/2024 1:06:43 PM	Vial	42		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	119.738 %	119.080 %	0.008 ppb	579.585 ppb	7.845 ppb	0.453 ppb	48.880 ppb	5.376 ppb	113.743 %
Concentration per Run 1	114.522 %	117.677 %	0.009 ppb	587.087 ppb	10.990 ppb	0.338 ppb	43.052 ppb	9.388 ppb	111.048 %
Concentration per Run 2	118.879 %	120.202 %	0.007 ppb	569.222 ppb	7.551 ppb	0.331 ppb	52.974 ppb	3.493 ppb	115.095 %
Concentration per Run 3	125.812 %	119.361 %	0.009 ppb	582.447 ppb	4.994 ppb	0.691 ppb	50.616 ppb	3.246 ppb	115.088 %
Concentration RSD	4.8 %	1.1 %	13.8 %	1.6 %	38.4 %	45.4 %	10.6 %	64.7 %	2.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.267 ppb	-0.063 ppb	0.492 ppb	6.397 ppb	0.002 ppb	0.084 ppb	0.067 ppb	0.930 ppb	125.859 %
Concentration per Run 1	-0.219 ppb	-0.057 ppb	0.511 ppb	6.312 ppb	0.000 ppb	0.084 ppb	0.071 ppb	0.852 ppb	133.343 %
Concentration per Run 2	-0.328 ppb	-0.061 ppb	0.482 ppb	6.156 ppb	-0.002 ppb	0.092 ppb	0.076 ppb	1.035 ppb	119.930 %
Concentration per Run 3	-0.254 ppb	-0.071 ppb	0.483 ppb	6.724 ppb	0.006 ppb	0.076 ppb	0.053 ppb	0.903 ppb	124.303 %
Concentration RSD	20.8 %	11.0 %	3.3 %	4.6 %	249.7 %	9.3 %	18.4 %	10.2 %	5.4 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.006 ppb	0.058 ppb	0.050 ppb	-0.094 ppb	116.698 %	-0.001 ppb	0.000 ppb	116.696 %	0.026 ppb
Concentration per Run 1	0.018 ppb	0.062 ppb	0.073 ppb	-0.106 ppb	117.668 %	0.000 ppb	0.000 ppb	116.685 %	0.015 ppb
Concentration per Run 2	-0.015 ppb	-0.046 ppb	0.054 ppb	-0.095 ppb	114.269 %	0.000 ppb	0.000 ppb	118.490 %	0.036 ppb
Concentration per Run 3	0.016 ppb	0.158 ppb	0.024 ppb	-0.082 ppb	118.157 %	-0.002 ppb	0.000 ppb	114.913 %	0.026 ppb
Concentration RSD	296.7 %	175.3 %	48.5 %	12.6 %	1.8 %	148.1 %	N/A	1.5 %	39.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.030 ppb	115.985 %	112.947 %	0.014 ppb	0.005 ppb	111.124 %
Concentration per Run 1	0.042 ppb	118.633 %	113.532 %	0.011 ppb	0.005 ppb	116.420 %
Concentration per Run 2	0.018 ppb	114.652 %	111.601 %	0.014 ppb	0.005 ppb	106.585 %
Concentration per Run 3	0.031 ppb	114.670 %	113.708 %	0.016 ppb	0.006 ppb	110.367 %
Concentration RSD	39.8 %	2.0 %	1.0 %	18.8 %	3.5 %	4.5 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	74	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG2004404-2d10 MCP-6020SL-10	Rack	1		
Analysis started at:	12/3/2024 1:11:12 PM	Vial	43		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	116.525 %	122.616 %	5.028 ppb	1,595.172 ppb	942.869 ppb	181.662 ppb	977.265 ppb	773.433 ppb	111.806 %
Concentration per Run 1	112.131 %	124.243 %	5.063 ppb	1,585.214 ppb	954.217 ppb	181.031 ppb	991.516 ppb	667.077 ppb	109.748 %
Concentration per Run 2	117.823 %	123.064 %	5.035 ppb	1,603.355 ppb	937.892 ppb	184.134 ppb	993.861 ppb	826.528 ppb	113.404 %
Concentration per Run 3	119.620 %	120.539 %	4.985 ppb	1,596.946 ppb	936.499 ppb	179.821 ppb	946.417 ppb	826.695 ppb	112.267 %
Concentration RSD	3.4 %	1.5 %	0.8 %	0.6 %	1.0 %	1.2 %	2.7 %	11.9 %	1.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	42.409 ppb	17.748 ppb	48.844 ppb	96.671 ppb	48.376 ppb	49.752 ppb	25.027 ppb	48.406 ppb	111.870 %
Concentration per Run 1	40.610 ppb	17.605 ppb	50.176 ppb	94.030 ppb	47.449 ppb	49.399 ppb	24.713 ppb	49.023 ppb	112.044 %
Concentration per Run 2	43.065 ppb	18.096 ppb	48.641 ppb	98.149 ppb	49.369 ppb	51.882 ppb	25.504 ppb	47.947 ppb	109.865 %
Concentration per Run 3	43.552 ppb	17.543 ppb	47.715 ppb	97.834 ppb	48.309 ppb	47.975 ppb	24.865 ppb	48.248 ppb	113.702 %
Concentration RSD	3.7 %	1.7 %	2.5 %	2.4 %	2.0 %	4.0 %	1.7 %	1.1 %	1.7 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	11.298 ppb	11.368 ppb	95.149 ppb	94.496 ppb	111.882 %	4.961 ppb	5.023 ppb	115.162 %	38.072 ppb
Concentration per Run 1	10.742 ppb	10.672 ppb	93.918 ppb	92.585 ppb	115.394 %	4.866 ppb	4.770 ppb	118.367 %	36.137 ppb
Concentration per Run 2	11.722 ppb	12.107 ppb	96.888 ppb	94.401 ppb	109.736 %	5.016 ppb	5.110 ppb	113.800 %	38.442 ppb
Concentration per Run 3	11.430 ppb	11.324 ppb	94.639 ppb	96.501 ppb	110.517 %	5.002 ppb	5.189 ppb	113.320 %	39.637 ppb
Concentration RSD	4.5 %	6.3 %	1.6 %	2.1 %	2.7 %	1.7 %	4.4 %	2.4 %	4.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	189.043 ppb	114.304 %	112.275 %	11.142 ppb	49.325 ppb	110.840 %
Concentration per Run 1	184.861 ppb	117.812 %	112.378 %	10.714 ppb	47.251 ppb	114.903 %
Concentration per Run 2	189.735 ppb	112.846 %	111.200 %	11.276 ppb	50.642 ppb	109.076 %
Concentration per Run 3	192.534 ppb	112.252 %	113.245 %	11.435 ppb	50.081 ppb	108.540 %
Concentration RSD	2.1 %	2.7 %	0.9 %	3.4 %	3.7 %	3.2 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	75	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG2004404-3d10 MCP-6020SL-10	Rack	1		
Analysis started at:	12/3/2024 1:15:40 PM	Vial	44		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	118.673 %	123.345 %	4.959 ppb	1,530.872 ppb	938.063 ppb	179.486 ppb	955.533 ppb	870.804 ppb	111.347 %
Concentration per Run 1	113.096 %	128.788 %	5.039 ppb	1,493.250 ppb	920.303 ppb	172.610 ppb	910.183 ppb	836.873 ppb	106.474 %
Concentration per Run 2	120.759 %	125.085 %	4.960 ppb	1,490.505 ppb	915.781 ppb	174.699 ppb	944.349 ppb	875.169 ppb	112.757 %
Concentration per Run 3	122.165 %	116.162 %	4.877 ppb	1,608.861 ppb	978.105 ppb	191.148 ppb	1,012.066 ppb	900.370 ppb	114.809 %
Concentration RSD	4.1 %	5.3 %	1.6 %	4.4 %	3.7 %	5.7 %	5.4 %	3.7 %	3.9 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	42.234 ppb	17.916 ppb	48.422 ppb	95.336 ppb	49.139 ppb	49.367 ppb	24.340 ppb	48.276 ppb	108.723 %
Concentration per Run 1	40.807 ppb	17.408 ppb	49.667 ppb	91.353 ppb	49.439 ppb	51.347 ppb	24.436 ppb	49.039 ppb	106.870 %
Concentration per Run 2	43.660 ppb	18.230 ppb	48.550 ppb	99.430 ppb	49.935 ppb	49.058 ppb	24.590 ppb	49.019 ppb	106.453 %
Concentration per Run 3	42.235 ppb	18.109 ppb	47.049 ppb	95.226 ppb	48.041 ppb	47.698 ppb	23.995 ppb	46.770 ppb	112.845 %
Concentration RSD	3.4 %	2.5 %	2.7 %	4.2 %	2.0 %	3.7 %	1.3 %	2.7 %	3.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	11.805 ppb	12.217 ppb	95.124 ppb	92.805 ppb	111.616 %	4.990 ppb	4.939 ppb	112.042 %	39.531 ppb
Concentration per Run 1	12.308 ppb	10.441 ppb	95.766 ppb	90.007 ppb	113.588 %	4.937 ppb	4.926 ppb	114.817 %	38.503 ppb
Concentration per Run 2	11.933 ppb	13.067 ppb	96.881 ppb	92.639 ppb	109.005 %	5.006 ppb	4.882 ppb	110.256 %	39.645 ppb
Concentration per Run 3	11.174 ppb	13.144 ppb	92.725 ppb	95.769 ppb	112.256 %	5.026 ppb	5.010 ppb	111.054 %	40.446 ppb
Concentration RSD	4.9 %	12.6 %	2.3 %	3.1 %	2.1 %	0.9 %	1.3 %	2.2 %	2.5 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	191.455 ppb	110.955 %	109.650 %	11.375 ppb	49.773 ppb	109.273 %
Concentration per Run 1	188.763 ppb	111.436 %	109.738 %	11.091 ppb	48.964 ppb	111.177 %
Concentration per Run 2	197.204 ppb	109.051 %	108.296 %	11.768 ppb	50.402 ppb	106.032 %
Concentration per Run 3	188.398 ppb	112.377 %	110.915 %	11.264 ppb	49.954 ppb	110.611 %
Concentration RSD	2.6 %	1.5 %	1.2 %	3.1 %	1.5 %	2.6 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	76	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2469119-01 MCP-6020SL-10	Rack	1		
Analysis started at:	12/3/2024 1:20:09 PM	Vial	45		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	98.934 %	113.075 %	0.008 ppb	352,866.383 ppb	3,646.595 ppb	2.895 ppb	4,053.013 ppb	27,948.499 ppb	98.154 %
Concentration per Run 1	95.176 %	113.300 %	0.007 ppb	345,704.772 ppb	3,536.900 ppb	3.147 ppb	3,945.710 ppb	27,757.592 ppb	97.532 %
Concentration per Run 2	101.019 %	112.458 %	0.010 ppb	357,841.129 ppb	3,700.059 ppb	2.913 ppb	4,178.058 ppb	28,163.210 ppb	99.392 %
Concentration per Run 3	100.607 %	113.468 %	0.007 ppb	355,053.250 ppb	3,702.825 ppb	2.626 ppb	4,035.269 ppb	27,924.695 ppb	97.537 %
Concentration RSD	3.3 %	0.5 %	19.9 %	1.8 %	2.6 %	9.0 %	2.9 %	0.7 %	1.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.325 ppb	0.080 ppb	3,116.754 ppb	13,938.141 ppb	0.353 ppb	0.785 ppb	0.600 ppb	12.089 ppb	102.003 %
Concentration per Run 1	-0.197 ppb	0.035 ppb	3,082.917 ppb	13,687.604 ppb	0.331 ppb	0.836 ppb	0.523 ppb	12.509 ppb	101.744 %
Concentration per Run 2	-0.408 ppb	0.137 ppb	3,153.278 ppb	13,997.876 ppb	0.387 ppb	0.763 ppb	0.584 ppb	11.712 ppb	99.156 %
Concentration per Run 3	-0.371 ppb	0.067 ppb	3,114.067 ppb	14,128.942 ppb	0.341 ppb	0.755 ppb	0.695 ppb	12.046 ppb	105.110 %
Concentration RSD	34.7 %	65.4 %	1.1 %	1.6 %	8.5 %	5.6 %	14.6 %	3.3 %	2.9 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	16.038 ppb	0.244 ppb	184.175 ppb	7.079 ppb	104.568 %	-0.001 ppb	0.002 ppb	106.729 %	1.230 ppb
Concentration per Run 1	16.173 ppb	0.176 ppb	185.564 ppb	6.268 ppb	105.629 %	0.002 ppb	0.000 ppb	106.936 %	1.091 ppb
Concentration per Run 2	16.625 ppb	0.283 ppb	183.777 ppb	6.880 ppb	104.705 %	-0.002 ppb	0.003 ppb	106.647 %	1.280 ppb
Concentration per Run 3	15.316 ppb	0.273 ppb	183.183 ppb	8.088 ppb	103.371 %	-0.003 ppb	0.004 ppb	106.603 %	1.320 ppb
Concentration RSD	4.1 %	24.2 %	0.7 %	13.1 %	1.1 %	317.8 %	86.6 %	0.2 %	9.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	31.125 ppb	110.411 %	111.024 %	0.014 ppb	0.038 ppb	101.185 %
Concentration per Run 1	30.113 ppb	113.971 %	114.351 %	0.011 ppb	0.041 ppb	101.848 %
Concentration per Run 2	31.562 ppb	108.678 %	109.221 %	0.011 ppb	0.039 ppb	100.298 %
Concentration per Run 3	31.702 ppb	108.585 %	109.500 %	0.020 ppb	0.032 ppb	101.409 %
Concentration RSD	2.8 %	2.8 %	2.6 %	34.7 %	12.1 %	0.8 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	77	User name	ALPHALAB\a2-icpmsq2	Comment	CCV/MCCV
Analysis label:	CCV	Rack	0		
Analysis started at:	12/3/2024 1:30:45 PM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	114.890 %	119.641 %	59.218 ppb	6,473.200 ppb	5,753.076 ppb	54.772 ppb	5,759.568 ppb	5,551.802 ppb	106.643 %
Concentration per Run 1	110.268 %	125.421 %	59.311 ppb	6,211.606 ppb	5,542.746 ppb	51.850 ppb	5,577.762 ppb	5,363.165 ppb	104.391 %
Concentration per Run 2	115.705 %	117.845 %	59.181 ppb	6,544.396 ppb	5,770.704 ppb	56.149 ppb	5,784.414 ppb	5,710.529 ppb	106.666 %
Concentration per Run 3	118.697 %	115.657 %	59.161 ppb	6,663.598 ppb	5,945.777 ppb	56.317 ppb	5,916.529 ppb	5,581.711 ppb	108.871 %
Recovery Percentage 1			98.697 %	107.887 %	95.885 %	91.287 %	95.993 %	92.530 %	
Concentration RSD	3.7 %	4.3 %	0.1 %	3.6 %	3.5 %	4.6 %	3.0 %	3.2 %	2.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	55.466 ppb	55.585 ppb	59.394 ppb	5,934.901 ppb	58.515 ppb	60.096 ppb	60.051 ppb	60.662 ppb	107.203 %
Concentration per Run 1	55.289 ppb	54.809 ppb	60.683 ppb	5,982.886 ppb	59.890 ppb	61.645 ppb	58.676 ppb	60.862 ppb	104.852 %
Concentration per Run 2	55.854 ppb	55.301 ppb	60.193 ppb	5,906.309 ppb	57.021 ppb	59.516 ppb	60.875 ppb	60.600 ppb	106.640 %
Concentration per Run 3	55.257 ppb	56.647 ppb	57.306 ppb	5,915.510 ppb	58.634 ppb	59.128 ppb	60.602 ppb	60.524 ppb	110.117 %
Recovery Percentage 1	92.444 %	92.642 %	98.990 %	98.915 %	97.525 %	100.160 %	100.085 %	101.103 %	
Concentration RSD	0.6 %	1.7 %	3.1 %	0.7 %	2.5 %	2.3 %	2.0 %	0.3 %	2.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	59.229 ppb	59.465 ppb	59.373 ppb	57.973 ppb	111.494 %	56.003 ppb	56.011 ppb	115.054 %	55.292 ppb
Concentration per Run 1	60.203 ppb	60.816 ppb	58.857 ppb	55.400 ppb	115.330 %	54.706 ppb	53.753 ppb	118.427 %	53.496 ppb
Concentration per Run 2	59.723 ppb	61.199 ppb	60.308 ppb	58.008 ppb	110.012 %	56.534 ppb	56.959 ppb	113.922 %	55.669 ppb
Concentration per Run 3	57.761 ppb	56.378 ppb	58.954 ppb	60.512 ppb	109.141 %	56.771 ppb	57.322 ppb	112.814 %	56.711 ppb
Recovery Percentage 1	98.715 %	99.108 %	98.955 %	96.622 %		93.339 %	93.352 %		92.154 %
Concentration RSD	2.2 %	4.5 %	1.4 %	4.4 %	3.0 %	2.0 %	3.5 %	2.6 %	3.0 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	56.571 ppb	115.043 %	114.616 %	55.990 ppb	57.004 ppb	110.959 %
Concentration per Run 1	56.547 ppb	116.279 %	117.583 %	55.054 ppb	56.337 ppb	112.704 %
Concentration per Run 2	56.765 ppb	113.549 %	113.832 %	57.563 ppb	57.327 ppb	110.076 %
Concentration per Run 3	56.403 ppb	115.301 %	112.433 %	55.352 ppb	57.350 ppb	110.098 %
Recovery Percentage 1	94.286 %			93.316 %	95.007 %	
Concentration RSD	0.3 %	1.2 %	2.3 %	2.4 %	1.0 %	1.4 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	78	User name	ALPHALAB\a2-icpmsq2	Comment	CCB
Analysis label:	CCB	Rack	0		
Analysis started at:	12/3/2024 1:35:17 PM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	118.157 %	120.764 %	0.218 ppb	546.112 ppb	1.121 ppb	-0.684 ppb	71.287 ppb	0.699 ppb	107.057 %
Concentration per Run 1	113.438 %	124.580 %	0.304 ppb	510.437 ppb	1.050 ppb	-0.739 ppb	71.331 ppb	0.741 ppb	106.737 %
Concentration per Run 2	119.593 %	117.340 %	0.214 ppb	572.379 ppb	1.359 ppb	-0.792 ppb	71.113 ppb	8.083 ppb	106.220 %
Concentration per Run 3	121.440 %	120.371 %	0.136 ppb	555.520 ppb	0.955 ppb	-0.520 ppb	71.418 ppb	-6.727 ppb	108.214 %
Recovery Percentage 1			43.605 %	109.222 %	1.602 %	-6.835 %	71.287 %	0.699 %	
Concentration RSD	3.5 %	3.0 %	38.5 %	5.9 %	18.9 %	21.1 %	0.2 %	1,059.2 %	1.0 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.380 ppb	-0.019 ppb	0.099 ppb	7.334 ppb	0.020 ppb	0.118 ppb	0.088 ppb	0.146 ppb	105.134 %
Concentration per Run 1	-0.454 ppb	-0.005 ppb	0.064 ppb	6.450 ppb	0.026 ppb	0.142 ppb	0.110 ppb	0.169 ppb	107.544 %
Concentration per Run 2	-0.360 ppb	-0.019 ppb	0.177 ppb	8.124 ppb	0.012 ppb	0.116 ppb	0.106 ppb	0.183 ppb	105.766 %
Concentration per Run 3	-0.327 ppb	-0.033 ppb	0.054 ppb	7.427 ppb	0.022 ppb	0.098 ppb	0.049 ppb	0.086 ppb	102.092 %
Recovery Percentage 1	-7.604 %	-1.898 %	9.855 %	14.668 %	3.957 %	5.924 %	8.800 %	2.925 %	
Concentration RSD	17.4 %	72.4 %	69.4 %	11.5 %	37.4 %	18.3 %	38.7 %	35.8 %	2.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.039 ppb	0.018 ppb	0.034 ppb	0.370 ppb	110.475 %	0.023 ppb	0.026 ppb	109.867 %	0.157 ppb
Concentration per Run 1	0.118 ppb	0.089 ppb	0.036 ppb	0.205 ppb	114.360 %	0.028 ppb	0.027 ppb	109.973 %	0.120 ppb
Concentration per Run 2	-0.008 ppb	0.014 ppb	0.029 ppb	0.316 ppb	110.225 %	0.022 ppb	0.044 ppb	110.317 %	0.176 ppb
Concentration per Run 3	0.009 ppb	-0.050 ppb	0.038 ppb	0.589 ppb	106.841 %	0.020 ppb	0.007 ppb	109.311 %	0.175 ppb
Recovery Percentage 1	7.900 %	0.355 %	0.344 %	18.484 %		5.794 %	12.816 %		3.921 %
Concentration RSD	173.1 %	391.7 %	13.6 %	53.5 %	3.4 %	17.3 %	71.7 %	0.5 %	20.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.020 ppb	111.813 %	111.411 %	0.233 ppb	0.030 ppb	109.041 %
Concentration per Run 1	-0.006 ppb	114.529 %	115.994 %	0.218 ppb	0.029 ppb	111.797 %
Concentration per Run 2	0.046 ppb	112.056 %	109.879 %	0.287 ppb	0.034 ppb	108.619 %
Concentration per Run 3	0.020 ppb	108.855 %	108.358 %	0.196 ppb	0.028 ppb	106.706 %
Recovery Percentage 1	3.985 %			23.333 %	3.033 %	
Concentration RSD	130.1 %	2.5 %	3.6 %	20.3 %	11.4 %	2.4 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	79	User name	ALPHALAB\a2-icpmsq2	Comment	CCB
Analysis label:	CCB	Rack	0		
Analysis started at:	12/3/2024 1:45:22 PM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	118.704 %	119.024 %	0.006 ppb	280.745 ppb	-0.171 ppb	-0.666 ppb	30.777 ppb	-6.620 ppb	108.554 %
Concentration per Run 1	113.248 %	116.499 %	0.006 ppb	251.140 ppb	0.138 ppb	-0.974 ppb	28.930 ppb	-2.982 ppb	105.054 %
Concentration per Run 2	120.589 %	118.687 %	0.005 ppb	286.333 ppb	-0.231 ppb	-0.400 ppb	28.755 ppb	-10.323 ppb	110.697 %
Concentration per Run 3	122.275 %	121.886 %	0.007 ppb	304.762 ppb	-0.419 ppb	-0.624 ppb	34.646 ppb	-6.556 ppb	109.911 %
Recovery Percentage 1			1.174 %	56.149 %	-0.244 %	-6.663 %	30.777 %	-6.620 %	
Concentration RSD	4.0 %	2.3 %	11.2 %	9.7 %	166.2 %	43.4 %	10.9 %	55.4 %	2.8 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.381 ppb	-0.061 ppb	0.032 ppb	-0.423 ppb	0.005 ppb	0.043 ppb	0.031 ppb	0.117 ppb	130.208 %
Concentration per Run 1	-0.376 ppb	-0.085 ppb	0.064 ppb	-0.568 ppb	0.007 ppb	0.067 ppb	0.005 ppb	0.133 ppb	132.669 %
Concentration per Run 2	-0.352 ppb	-0.058 ppb	0.061 ppb	-0.792 ppb	0.008 ppb	0.013 ppb	0.050 ppb	0.107 ppb	130.754 %
Concentration per Run 3	-0.415 ppb	-0.041 ppb	-0.030 ppb	0.090 ppb	-0.001 ppb	0.050 ppb	0.039 ppb	0.111 ppb	127.201 %
Recovery Percentage 1	-7.626 %	-6.135 %	3.188 %	-0.846 %	0.971 %	2.170 %	3.110 %	2.341 %	
Concentration RSD	8.4 %	36.3 %	166.9 %	108.3 %	98.2 %	63.6 %	76.1 %	12.0 %	2.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.044 ppb	0.002 ppb	0.004 ppb	-0.053 ppb	111.015 %	0.002 ppb	0.001 ppb	109.483 %	0.044 ppb
Concentration per Run 1	0.077 ppb	-0.047 ppb	0.012 ppb	-0.071 ppb	115.778 %	0.001 ppb	0.000 ppb	114.476 %	0.051 ppb
Concentration per Run 2	0.012 ppb	0.035 ppb	-0.006 ppb	-0.050 ppb	110.261 %	0.002 ppb	0.000 ppb	106.734 %	0.043 ppb
Concentration per Run 3	0.043 ppb	0.018 ppb	0.005 ppb	-0.039 ppb	107.005 %	0.004 ppb	0.003 ppb	107.238 %	0.038 ppb
Recovery Percentage 1	8.756 %	0.040 %	0.036 %	-2.675 %		0.592 %	0.575 %		1.102 %
Concentration RSD	74.7 %	2,144.2 %	258.2 %	31.2 %	4.0 %	70.9 %	173.2 %	4.0 %	14.5 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.007 ppb	112.317 %	110.097 %	0.029 ppb	0.006 ppb	107.396 %
Concentration per Run 1	0.006 ppb	113.387 %	112.941 %	0.019 ppb	0.009 ppb	109.445 %
Concentration per Run 2	0.007 ppb	111.536 %	107.260 %	0.032 ppb	0.004 ppb	104.181 %
Concentration per Run 3	0.007 ppb	112.029 %	110.089 %	0.037 ppb	0.004 ppb	108.563 %
Recovery Percentage 1	1.374 %			2.939 %	0.568 %	
Concentration RSD	8.9 %	0.9 %	2.6 %	32.4 %	45.8 %	2.6 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	80	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG2004404-2d10 MCP-6020SL-10	Rack	1		
Analysis started at:	12/3/2024 2:02:11 PM	Vial	52		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	119.645 %	124.018 %	4.794 ppb	1,313.469 ppb	924.323 ppb	176.698 ppb	904.120 ppb	814.771 ppb	107.511 %
Concentration per Run 1	115.135 %	121.549 %	4.803 ppb	1,304.630 ppb	908.906 ppb	172.505 ppb	912.808 ppb	856.177 ppb	106.220 %
Concentration per Run 2	120.551 %	130.809 %	4.843 ppb	1,236.184 ppb	884.689 ppb	172.517 ppb	883.533 ppb	740.225 ppb	107.134 %
Concentration per Run 3	123.247 %	119.697 %	4.735 ppb	1,399.595 ppb	979.374 ppb	185.071 ppb	916.020 ppb	847.912 ppb	109.179 %
Concentration RSD	3.5 %	4.8 %	1.1 %	6.2 %	5.3 %	4.1 %	2.0 %	7.9 %	1.4 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	43.230 ppb	18.015 ppb	48.878 ppb	96.029 ppb	48.347 ppb	48.730 ppb	23.978 ppb	48.572 ppb	107.982 %
Concentration per Run 1	43.014 ppb	17.836 ppb	50.744 ppb	94.651 ppb	47.185 ppb	50.170 ppb	24.483 ppb	48.006 ppb	105.887 %
Concentration per Run 2	42.284 ppb	17.835 ppb	48.198 ppb	92.744 ppb	48.056 ppb	47.689 ppb	23.805 ppb	49.705 ppb	107.966 %
Concentration per Run 3	44.392 ppb	18.376 ppb	47.691 ppb	100.693 ppb	49.799 ppb	48.331 ppb	23.647 ppb	48.006 ppb	110.092 %
Concentration RSD	2.5 %	1.7 %	3.3 %	4.3 %	2.8 %	2.6 %	1.9 %	2.0 %	1.9 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	11.578 ppb	11.397 ppb	95.017 ppb	96.240 ppb	110.170 %	4.988 ppb	4.909 ppb	110.154 %	42.115 ppb
Concentration per Run 1	11.411 ppb	9.612 ppb	93.772 ppb	96.888 ppb	113.283 %	5.026 ppb	4.882 ppb	113.111 %	40.670 ppb
Concentration per Run 2	11.885 ppb	11.425 ppb	96.155 ppb	95.747 ppb	108.295 %	4.817 ppb	4.939 ppb	108.231 %	42.707 ppb
Concentration per Run 3	11.439 ppb	13.156 ppb	95.124 ppb	96.085 ppb	108.932 %	5.120 ppb	4.906 ppb	109.120 %	42.968 ppb
Concentration RSD	2.3 %	15.5 %	1.3 %	0.6 %	2.5 %	3.1 %	0.6 %	2.4 %	3.0 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	192.110 ppb	111.191 %	110.197 %	11.257 ppb	49.680 ppb	109.190 %
Concentration per Run 1	185.893 ppb	112.540 %	111.231 %	11.229 ppb	48.667 ppb	108.280 %
Concentration per Run 2	191.505 ppb	112.720 %	110.685 %	11.102 ppb	49.550 ppb	110.392 %
Concentration per Run 3	198.932 ppb	108.313 %	108.675 %	11.441 ppb	50.822 ppb	108.896 %
Concentration RSD	3.4 %	2.2 %	1.2 %	1.5 %	2.2 %	1.0 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	81	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG2004404-3d10 MCP-6020SL-10	Rack	1		
Analysis started at:	12/3/2024 2:06:37 PM	Vial	53		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	114.779 %	129.462 %	5.034 ppb	1,292.033 ppb	909.248 ppb	175.601 ppb	932.334 ppb	866.457 ppb	108.873 %
Concentration per Run 1	110.272 %	134.849 %	5.097 ppb	1,225.196 ppb	861.079 ppb	169.993 ppb	902.585 ppb	812.601 ppb	106.307 %
Concentration per Run 2	115.539 %	129.125 %	5.029 ppb	1,298.338 ppb	917.699 ppb	174.231 ppb	910.978 ppb	907.035 ppb	111.080 %
Concentration per Run 3	118.527 %	124.411 %	4.977 ppb	1,352.565 ppb	948.967 ppb	182.578 ppb	983.439 ppb	879.734 ppb	109.233 %
Concentration RSD	3.6 %	4.0 %	1.2 %	4.9 %	4.9 %	3.6 %	4.8 %	5.6 %	2.2 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	43.824 ppb	18.222 ppb	48.802 ppb	95.028 ppb	49.421 ppb	48.563 ppb	24.642 ppb	48.813 ppb	106.423 %
Concentration per Run 1	42.058 ppb	17.768 ppb	47.769 ppb	92.582 ppb	49.205 ppb	48.436 ppb	25.554 ppb	48.167 ppb	106.878 %
Concentration per Run 2	44.094 ppb	18.464 ppb	49.081 ppb	104.275 ppb	50.511 ppb	48.611 ppb	24.447 ppb	50.073 ppb	105.814 %
Concentration per Run 3	45.320 ppb	18.434 ppb	49.557 ppb	88.227 ppb	48.547 ppb	48.642 ppb	23.924 ppb	48.199 ppb	106.576 %
Concentration RSD	3.8 %	2.2 %	1.9 %	8.7 %	2.0 %	0.2 %	3.4 %	2.2 %	0.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	11.925 ppb	13.449 ppb	95.558 ppb	95.718 ppb	109.363 %	5.025 ppb	5.018 ppb	109.070 %	40.061 ppb
Concentration per Run 1	11.948 ppb	13.709 ppb	94.325 ppb	92.744 ppb	112.875 %	4.831 ppb	4.817 ppb	113.403 %	38.063 ppb
Concentration per Run 2	12.331 ppb	11.939 ppb	96.608 ppb	97.752 ppb	107.080 %	5.072 ppb	5.068 ppb	108.870 %	40.172 ppb
Concentration per Run 3	11.497 ppb	14.700 ppb	95.741 ppb	96.659 ppb	108.133 %	5.171 ppb	5.170 ppb	104.937 %	41.950 ppb
Concentration RSD	3.5 %	10.4 %	1.2 %	2.8 %	2.8 %	3.5 %	3.6 %	3.9 %	4.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	192.646 ppb	110.226 %	106.938 %	11.438 ppb	50.492 ppb	108.593 %
Concentration per Run 1	187.377 ppb	113.752 %	108.375 %	11.152 ppb	49.775 ppb	110.243 %
Concentration per Run 2	192.454 ppb	107.751 %	107.069 %	11.569 ppb	51.453 ppb	107.520 %
Concentration per Run 3	198.108 ppb	109.174 %	105.370 %	11.593 ppb	50.248 ppb	108.015 %
Concentration RSD	2.8 %	2.8 %	1.4 %	2.2 %	1.7 %	1.3 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	82	User name	ALPHALAB\a2-icpmsq2	Comment	ng
Analysis label:	L2469297-01d5 MCP-6020SL-10	Rack	1		
Analysis started at:	12/3/2024 2:11:05 PM	Vial	46		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	95.565 %	113.468 %	0.051 ppb	262,288.313 ppb	12,737.116 ppb	19.063 ppb	2,729.110 ppb	31,220.743 ppb	99.784 %
Concentration per Run 1	91.985 %	113.973 %	0.052 ppb	260,301.922 ppb	12,704.928 ppb	20.389 ppb	2,678.718 ppb	30,572.424 ppb	96.684 %
Concentration per Run 2	96.455 %	103.199 %	0.056 ppb	280,896.015 ppb	13,545.645 ppb	20.297 ppb	2,889.385 ppb	32,479.480 ppb	101.320 %
Concentration per Run 3	98.257 %	123.233 %	0.044 ppb	245,667.002 ppb	11,960.776 ppb	16.505 ppb	2,619.227 ppb	30,610.326 ppb	101.348 %
Concentration RSD	3.4 %	8.8 %	12.1 %	6.7 %	6.2 %	11.6 %	5.2 %	3.5 %	2.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.532 ppb	0.452 ppb	4,305.803 ppb	53,249.454 ppb	2.943 ppb	1.163 ppb	0.274 ppb	5.754 ppb	103.688 %
Concentration per Run 1	0.584 ppb	0.384 ppb	4,243.722 ppb	52,387.616 ppb	2.840 ppb	1.214 ppb	0.322 ppb	5.863 ppb	103.798 %
Concentration per Run 2	0.529 ppb	0.571 ppb	4,490.917 ppb	55,628.557 ppb	3.067 ppb	1.272 ppb	0.223 ppb	5.814 ppb	102.106 %
Concentration per Run 3	0.482 ppb	0.402 ppb	4,182.771 ppb	51,732.189 ppb	2.922 ppb	1.002 ppb	0.277 ppb	5.585 ppb	105.161 %
Concentration RSD	9.6 %	22.7 %	3.8 %	3.9 %	3.9 %	12.2 %	18.1 %	2.6 %	1.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.308 ppb	0.543 ppb	290.701 ppb	0.971 ppb	101.876 %	0.001 ppb	0.013 ppb	105.065 %	1.392 ppb
Concentration per Run 1	0.306 ppb	0.483 ppb	288.431 ppb	0.914 ppb	105.104 %	-0.001 ppb	0.010 ppb	108.168 %	1.221 ppb
Concentration per Run 2	0.357 ppb	0.842 ppb	294.158 ppb	0.911 ppb	99.161 %	0.001 ppb	0.022 ppb	102.988 %	1.444 ppb
Concentration per Run 3	0.261 ppb	0.304 ppb	289.515 ppb	1.088 ppb	101.363 %	0.001 ppb	0.007 ppb	104.038 %	1.510 ppb
Concentration RSD	15.6 %	50.4 %	1.0 %	10.5 %	2.9 %	202.8 %	58.7 %	2.6 %	10.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	590.919 ppb	108.192 %	107.327 %	0.021 ppb	0.085 ppb	100.466 %
Concentration per Run 1	574.236 ppb	111.709 %	108.266 %	0.019 ppb	0.087 ppb	102.559 %
Concentration per Run 2	595.804 ppb	105.626 %	106.575 %	0.027 ppb	0.090 ppb	100.203 %
Concentration per Run 3	602.716 ppb	107.240 %	107.139 %	0.018 ppb	0.077 ppb	98.636 %
Concentration RSD	2.5 %	2.9 %	0.8 %	22.3 %	8.0 %	2.0 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	83	User name	ALPHALAB\a2-icpmsq2	Comment	ng
Analysis label:	L2469297-02 MCP-6020SL-10	Rack	1		
Analysis started at:	12/3/2024 2:15:34 PM	Vial	47		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	107.239 %	119.473 %	0.153 ppb	158,770.819 ppb	1,167.201 ppb	1,917.651 ppb	2,604.533 ppb	3,522.550 ppb	103.404 %
Concentration per Run 1	103.700 %	121.381 %	0.160 ppb	156,001.447 ppb	1,141.175 ppb	1,842.772 ppb	2,452.845 ppb	3,405.931 ppb	100.754 %
Concentration per Run 2	108.198 %	119.361 %	0.146 ppb	156,217.482 ppb	1,150.585 ppb	1,919.118 ppb	2,611.065 ppb	3,549.758 ppb	104.315 %
Concentration per Run 3	109.819 %	117.677 %	0.153 ppb	164,093.528 ppb	1,209.842 ppb	1,991.064 ppb	2,749.690 ppb	3,611.960 ppb	105.141 %
Concentration RSD	3.0 %	1.6 %	4.6 %	2.9 %	3.2 %	3.9 %	5.7 %	3.0 %	2.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	5.622 ppb	7.497 ppb	419.777 ppb	2,233.456 ppb	2.657 ppb	13.380 ppb	26.053 ppb	20.104 ppb	99.231 %
Concentration per Run 1	5.250 ppb	7.150 ppb	413.250 ppb	2,215.950 ppb	2.715 ppb	13.253 ppb	24.931 ppb	19.832 ppb	99.869 %
Concentration per Run 2	5.953 ppb	7.664 ppb	419.792 ppb	2,215.413 ppb	2.727 ppb	13.011 ppb	26.406 ppb	19.789 ppb	98.119 %
Concentration per Run 3	5.663 ppb	7.677 ppb	426.289 ppb	2,269.004 ppb	2.530 ppb	13.876 ppb	26.821 ppb	20.691 ppb	99.705 %
Concentration RSD	6.3 %	4.0 %	1.6 %	1.4 %	4.2 %	3.3 %	3.8 %	2.5 %	1.0 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	3.727 ppb	3.994 ppb	29.539 ppb	8.858 ppb	103.097 %	0.022 ppb	0.036 ppb	104.182 %	1.036 ppb
Concentration per Run 1	3.555 ppb	3.536 ppb	28.761 ppb	8.252 ppb	107.617 %	0.021 ppb	0.034 ppb	109.506 %	1.004 ppb
Concentration per Run 2	3.889 ppb	3.559 ppb	29.779 ppb	8.766 ppb	101.297 %	0.018 ppb	0.029 ppb	101.389 %	1.014 ppb
Concentration per Run 3	3.736 ppb	4.887 ppb	30.077 ppb	9.554 ppb	100.377 %	0.027 ppb	0.044 ppb	101.652 %	1.091 ppb
Concentration RSD	4.5 %	19.4 %	2.3 %	7.4 %	3.8 %	20.1 %	20.9 %	4.4 %	4.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	45.962 ppb	108.618 %	108.131 %	0.041 ppb	5.277 ppb	104.441 %
Concentration per Run 1	43.665 ppb	109.312 %	107.497 %	0.039 ppb	5.162 ppb	107.020 %
Concentration per Run 2	45.741 ppb	108.761 %	109.351 %	0.044 ppb	5.307 ppb	104.018 %
Concentration per Run 3	48.479 ppb	107.783 %	107.544 %	0.041 ppb	5.362 ppb	102.283 %
Concentration RSD	5.3 %	0.7 %	1.0 %	5.7 %	2.0 %	2.3 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	84	User name	ALPHALAB\a2-icpmsq2	Comment	ng
Analysis label:	L2469297-03 MCP-6020SL-10	Rack	1		
Analysis started at:	12/3/2024 2:20:03 PM	Vial	48		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	106.634 %	113.019 %	0.042 ppb	95,399.357 ppb	1,208.509 ppb	655.969 ppb	1,699.731 ppb	4,803.282 ppb	102.586 %
Concentration per Run 1	102.268 %	113.300 %	0.043 ppb	95,502.456 ppb	1,183.711 ppb	639.846 ppb	1,677.611 ppb	4,854.386 ppb	98.690 %
Concentration per Run 2	107.933 %	108.923 %	0.041 ppb	97,087.707 ppb	1,236.388 ppb	668.369 ppb	1,802.081 ppb	4,960.612 ppb	104.240 %
Concentration per Run 3	109.700 %	116.835 %	0.044 ppb	93,607.909 ppb	1,205.428 ppb	659.693 ppb	1,619.502 ppb	4,594.848 ppb	104.828 %
Concentration RSD	3.6 %	3.5 %	4.1 %	1.8 %	2.2 %	2.2 %	5.5 %	3.9 %	3.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	5.794 ppb	35.278 ppb	38.395 ppb	576.055 ppb	0.450 ppb	1.581 ppb	6.351 ppb	15.282 ppb	99.178 %
Concentration per Run 1	5.079 ppb	34.301 ppb	38.752 ppb	559.118 ppb	0.525 ppb	1.572 ppb	6.229 ppb	15.443 ppb	100.664 %
Concentration per Run 2	6.243 ppb	37.012 ppb	39.386 ppb	590.932 ppb	0.439 ppb	1.364 ppb	6.289 ppb	15.340 ppb	96.735 %
Concentration per Run 3	6.062 ppb	34.522 ppb	37.046 ppb	578.115 ppb	0.387 ppb	1.809 ppb	6.534 ppb	15.064 ppb	100.135 %
Concentration RSD	10.8 %	4.3 %	3.2 %	2.8 %	15.4 %	14.1 %	2.5 %	1.3 %	2.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	2.440 ppb	0.783 ppb	30.784 ppb	13.077 ppb	102.913 %	0.016 ppb	0.017 ppb	105.017 %	0.941 ppb
Concentration per Run 1	2.506 ppb	0.501 ppb	30.087 ppb	12.816 ppb	105.654 %	0.012 ppb	0.010 ppb	107.846 %	0.852 ppb
Concentration per Run 2	2.422 ppb	0.527 ppb	31.031 ppb	13.447 ppb	102.221 %	0.017 ppb	0.029 ppb	102.409 %	0.987 ppb
Concentration per Run 3	2.393 ppb	1.320 ppb	31.234 ppb	12.968 ppb	100.864 %	0.017 ppb	0.011 ppb	104.794 %	0.983 ppb
Concentration RSD	2.4 %	59.5 %	2.0 %	2.5 %	2.4 %	18.0 %	63.7 %	2.6 %	8.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	13.015 ppb	106.876 %	103.702 %	0.020 ppb	1.198 ppb	101.253 %
Concentration per Run 1	12.978 ppb	108.037 %	105.742 %	0.017 ppb	1.155 ppb	103.014 %
Concentration per Run 2	12.881 ppb	107.300 %	103.649 %	0.024 ppb	1.232 ppb	98.238 %
Concentration per Run 3	13.186 ppb	105.293 %	101.715 %	0.019 ppb	1.206 ppb	102.506 %
Concentration RSD	1.2 %	1.3 %	1.9 %	18.0 %	3.3 %	2.6 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	85	User name	ALPHALAB\a2-icpmsq2	Comment	ng
Analysis label:	L2469297-04 MCP-6020SL-10	Rack	1		
Analysis started at:	12/3/2024 2:24:33 PM	Vial	49		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	105.938 %	119.192 %	0.021 ppb	177,643.475 ppb	12,703.940 ppb	199.180 ppb	3,574.213 ppb	40,299.648 ppb	109.042 %
Concentration per Run 1	103.394 %	119.361 %	0.022 ppb	174,194.783 ppb	12,309.737 ppb	200.115 ppb	3,464.115 ppb	39,217.927 ppb	106.149 %
Concentration per Run 2	106.654 %	119.697 %	0.021 ppb	176,682.784 ppb	12,595.233 ppb	188.557 ppb	3,522.036 ppb	39,545.910 ppb	111.896 %
Concentration per Run 3	107.764 %	118.519 %	0.020 ppb	182,052.859 ppb	13,206.849 ppb	208.869 ppb	3,736.487 ppb	42,135.106 ppb	109.083 %
Concentration RSD	2.1 %	0.5 %	5.6 %	2.3 %	3.6 %	5.1 %	4.0 %	4.0 %	2.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.513 ppb	0.732 ppb	365.058 ppb	230.628 ppb	0.548 ppb	2.049 ppb	2.105 ppb	14.100 ppb	99.638 %
Concentration per Run 1	0.495 ppb	0.694 ppb	363.699 ppb	233.409 ppb	0.556 ppb	2.044 ppb	2.131 ppb	14.116 ppb	98.478 %
Concentration per Run 2	0.526 ppb	0.733 ppb	374.307 ppb	242.858 ppb	0.566 ppb	1.963 ppb	2.022 ppb	14.110 ppb	100.533 %
Concentration per Run 3	0.519 ppb	0.768 ppb	357.168 ppb	215.617 ppb	0.522 ppb	2.139 ppb	2.162 ppb	14.075 ppb	99.902 %
Concentration RSD	3.1 %	5.1 %	2.4 %	6.0 %	4.2 %	4.3 %	3.5 %	0.2 %	1.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.373 ppb	0.482 ppb	259.054 ppb	26.055 ppb	103.393 %	0.002 ppb	0.023 ppb	103.437 %	0.208 ppb
Concentration per Run 1	0.361 ppb	0.585 ppb	257.476 ppb	24.651 ppb	104.138 %	0.004 ppb	0.028 ppb	108.967 %	0.151 ppb
Concentration per Run 2	0.406 ppb	0.615 ppb	258.609 ppb	25.986 ppb	102.859 %	0.001 ppb	0.022 ppb	99.696 %	0.186 ppb
Concentration per Run 3	0.352 ppb	0.246 ppb	261.079 ppb	27.529 ppb	103.184 %	0.001 ppb	0.018 ppb	101.648 %	0.288 ppb
Concentration RSD	7.8 %	42.4 %	0.7 %	5.5 %	0.6 %	72.9 %	21.1 %	4.7 %	34.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	63.194 ppb	109.079 %	106.300 %	0.031 ppb	0.355 ppb	100.531 %
Concentration per Run 1	60.156 ppb	109.129 %	104.492 %	0.025 ppb	0.332 ppb	104.339 %
Concentration per Run 2	62.531 ppb	108.697 %	106.549 %	0.038 ppb	0.368 ppb	98.880 %
Concentration per Run 3	66.894 ppb	109.412 %	107.859 %	0.029 ppb	0.367 ppb	98.373 %
Concentration RSD	5.4 %	0.3 %	1.6 %	21.0 %	5.8 %	3.3 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	86	User name	ALPHALAB\a2-icpmsq2	Comment	ng
Analysis label:	L2469297-05 MCP-6020SL-10	Rack	1		
Analysis started at:	12/3/2024 2:29:01 PM	Vial	50		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	91.437 %	113.524 %	0.014 ppb	1,245,482.649 ppb	9,911.556 ppb	89.297 ppb	11,064.752 ppb	39,351.478 ppb	84.984 %
Concentration per Run 1	89.395 %	120.034 %	0.013 ppb	1,169,546.179 ppb	9,070.247 ppb	81.109 ppb	10,209.708 ppb	36,804.542 ppb	84.762 %
Concentration per Run 2	93.113 %	109.428 %	0.014 ppb	1,267,191.456 ppb	10,166.027 ppb	92.951 ppb	11,657.719 ppb	40,991.680 ppb	86.281 %
Concentration per Run 3	91.803 %	111.111 %	0.017 ppb	1,299,710.314 ppb	10,498.394 ppb	93.833 ppb	11,326.828 ppb	40,258.212 ppb	83.907 %
Concentration RSD	2.1 %	5.0 %	15.1 %	5.4 %	7.5 %	8.0 %	6.9 %	5.7 %	1.4 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.170 ppb	0.467 ppb	3,026.198 ppb	140.553 ppb	4.206 ppb	5.455 ppb	5.843 ppb	18.181 ppb	99.844 %
Concentration per Run 1	0.157 ppb	0.458 ppb	3,006.584 ppb	140.839 ppb	4.243 ppb	5.643 ppb	5.650 ppb	17.941 ppb	94.951 %
Concentration per Run 2	0.256 ppb	0.480 ppb	3,019.473 ppb	141.767 ppb	4.280 ppb	5.073 ppb	5.990 ppb	18.285 ppb	102.271 %
Concentration per Run 3	0.097 ppb	0.462 ppb	3,052.537 ppb	139.053 ppb	4.096 ppb	5.650 ppb	5.890 ppb	18.317 ppb	102.311 %
Concentration RSD	47.1 %	2.5 %	0.8 %	1.0 %	2.3 %	6.1 %	3.0 %	1.1 %	4.2 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.404 ppb	0.387 ppb	448.409 ppb	11.096 ppb	98.722 %	0.132 ppb	0.507 ppb	103.114 %	0.186 ppb
Concentration per Run 1	0.323 ppb	0.441 ppb	444.910 ppb	10.971 ppb	100.846 %	0.139 ppb	0.533 ppb	104.503 %	0.164 ppb
Concentration per Run 2	0.510 ppb	0.358 ppb	445.652 ppb	11.088 ppb	98.182 %	0.133 ppb	0.463 ppb	101.861 %	0.196 ppb
Concentration per Run 3	0.380 ppb	0.363 ppb	454.664 ppb	11.228 ppb	97.138 %	0.124 ppb	0.527 ppb	102.979 %	0.199 ppb
Concentration RSD	23.7 %	12.0 %	1.2 %	1.2 %	1.9 %	5.9 %	7.7 %	1.3 %	10.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	236.210 ppb	108.539 %	108.513 %	0.053 ppb	0.184 ppb	94.761 %
Concentration per Run 1	229.661 ppb	108.109 %	107.705 %	0.052 ppb	0.183 ppb	93.041 %
Concentration per Run 2	238.275 ppb	108.787 %	109.787 %	0.054 ppb	0.182 ppb	94.979 %
Concentration per Run 3	240.696 ppb	108.720 %	108.048 %	0.054 ppb	0.187 ppb	96.264 %
Concentration RSD	2.5 %	0.3 %	1.0 %	2.0 %	1.2 %	1.7 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	87	User name	ALPHALAB\a2-icpmsq2	Comment	ng
Analysis label:	L2469297-06 MCP-6020SL-10	Rack	1		
Analysis started at:	12/3/2024 2:33:29 PM	Vial	51		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	116.131 %	123.064 %	0.029 ppb	80,490.670 ppb	514.058 ppb	85.081 ppb	1,611.620 ppb	1,929.628 ppb	107.881 %
Concentration per Run 1	113.765 %	119.866 %	0.028 ppb	79,852.296 ppb	491.902 ppb	80.759 ppb	1,620.403 ppb	1,864.030 ppb	105.862 %
Concentration per Run 2	117.112 %	125.421 %	0.031 ppb	78,406.207 ppb	518.177 ppb	86.312 ppb	1,560.358 ppb	1,953.811 ppb	109.176 %
Concentration per Run 3	117.517 %	123.906 %	0.029 ppb	83,213.508 ppb	532.095 ppb	88.173 ppb	1,654.099 ppb	1,971.043 ppb	108.604 %
Concentration RSD	1.8 %	2.3 %	5.8 %	3.1 %	4.0 %	4.5 %	2.9 %	3.0 %	1.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	4.785 ppb	0.563 ppb	244.079 ppb	651.032 ppb	0.738 ppb	1.718 ppb	1.978 ppb	16.715 ppb	105.228 %
Concentration per Run 1	4.586 ppb	0.568 ppb	246.926 ppb	660.153 ppb	0.809 ppb	1.652 ppb	1.912 ppb	16.940 ppb	105.739 %
Concentration per Run 2	4.784 ppb	0.540 ppb	241.474 ppb	632.343 ppb	0.744 ppb	1.649 ppb	1.875 ppb	16.326 ppb	105.401 %
Concentration per Run 3	4.983 ppb	0.581 ppb	243.837 ppb	660.600 ppb	0.659 ppb	1.852 ppb	2.146 ppb	16.878 ppb	104.545 %
Concentration RSD	4.1 %	3.7 %	1.1 %	2.5 %	10.3 %	6.8 %	7.4 %	2.0 %	0.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	5.578 ppb	0.915 ppb	17.302 ppb	11.678 ppb	108.249 %	0.002 ppb	0.010 ppb	109.485 %	0.312 ppb
Concentration per Run 1	5.355 ppb	0.924 ppb	16.944 ppb	10.698 ppb	111.109 %	0.000 ppb	0.007 ppb	110.955 %	0.295 ppb
Concentration per Run 2	5.588 ppb	1.254 ppb	17.255 ppb	11.876 ppb	108.558 %	0.003 ppb	0.021 ppb	107.325 %	0.317 ppb
Concentration per Run 3	5.791 ppb	0.568 ppb	17.705 ppb	12.459 ppb	105.079 %	0.004 ppb	0.003 ppb	110.176 %	0.323 ppb
Concentration RSD	3.9 %	37.5 %	2.2 %	7.7 %	2.8 %	88.3 %	89.3 %	1.7 %	4.8 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	22.927 ppb	113.308 %	110.441 %	0.013 ppb	0.225 ppb	105.805 %
Concentration per Run 1	22.106 ppb	112.554 %	112.066 %	0.008 ppb	0.212 ppb	105.583 %
Concentration per Run 2	23.176 ppb	114.427 %	111.961 %	0.014 ppb	0.234 ppb	106.025 %
Concentration per Run 3	23.498 ppb	112.943 %	107.295 %	0.015 ppb	0.229 ppb	105.806 %
Concentration RSD	3.2 %	0.9 %	2.5 %	31.6 %	5.1 %	0.2 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	88	User name	ALPHALAB\a2-icpmsq2	Comment	CCV/MCCV
Analysis label:	CCV	Rack	0		
Analysis started at:	12/3/2024 2:37:57 PM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	118.989 %	125.702 %	56.919 ppb	6,404.407 ppb	5,601.524 ppb	54.818 ppb	5,578.061 ppb	5,587.954 ppb	113.278 %
Concentration per Run 1	113.423 %	130.304 %	58.003 ppb	6,319.185 ppb	5,464.085 ppb	53.254 ppb	5,536.231 ppb	5,377.043 ppb	111.923 %
Concentration per Run 2	120.504 %	122.391 %	56.598 ppb	6,474.879 ppb	5,733.529 ppb	55.992 ppb	5,338.441 ppb	5,679.268 ppb	115.471 %
Concentration per Run 3	123.038 %	124.411 %	56.156 ppb	6,419.158 ppb	5,606.957 ppb	55.208 ppb	5,859.513 ppb	5,707.549 ppb	112.440 %
Recovery Percentage 1			94.865 %	106.740 %	93.359 %	91.363 %	92.968 %	93.133 %	
Concentration RSD	4.2 %	3.3 %	1.7 %	1.2 %	2.4 %	2.6 %	4.7 %	3.3 %	1.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	55.262 ppb	56.600 ppb	58.041 ppb	5,890.819 ppb	59.091 ppb	60.603 ppb	60.565 ppb	59.819 ppb	105.005 %
Concentration per Run 1	52.748 ppb	54.271 ppb	56.416 ppb	5,889.070 ppb	60.073 ppb	61.380 ppb	59.009 ppb	60.523 ppb	103.858 %
Concentration per Run 2	55.167 ppb	57.088 ppb	58.892 ppb	6,064.146 ppb	60.470 ppb	61.174 ppb	60.805 ppb	60.819 ppb	106.151 %
Concentration per Run 3	57.872 ppb	58.442 ppb	58.814 ppb	5,719.239 ppb	56.728 ppb	59.256 ppb	61.880 ppb	58.115 ppb	105.006 %
Recovery Percentage 1	92.104 %	94.333 %	96.734 %	98.180 %	98.484 %	101.005 %	100.941 %	99.699 %	
Concentration RSD	4.6 %	3.8 %	2.4 %	2.9 %	3.5 %	1.9 %	2.4 %	2.5 %	1.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	60.070 ppb	59.767 ppb	58.456 ppb	58.469 ppb	110.780 %	56.871 ppb	57.056 ppb	111.702 %	54.826 ppb
Concentration per Run 1	59.554 ppb	64.094 ppb	57.655 ppb	56.565 ppb	115.478 %	55.435 ppb	56.184 ppb	112.778 %	54.938 ppb
Concentration per Run 2	59.603 ppb	57.940 ppb	58.358 ppb	59.067 ppb	109.557 %	56.901 ppb	56.897 ppb	112.626 %	54.572 ppb
Concentration per Run 3	61.054 ppb	57.266 ppb	59.356 ppb	59.774 ppb	107.305 %	58.278 ppb	58.087 ppb	109.701 %	54.967 ppb
Recovery Percentage 1	100.117 %	99.611 %	97.427 %	97.448 %		94.785 %	95.094 %		91.376 %
Concentration RSD	1.4 %	6.3 %	1.5 %	2.9 %	3.8 %	2.5 %	1.7 %	1.6 %	0.4 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	55.510 ppb	112.569 %	110.460 %	56.444 ppb	56.976 ppb	107.887 %
Concentration per Run 1	54.918 ppb	115.271 %	113.329 %	54.490 ppb	55.489 ppb	110.117 %
Concentration per Run 2	55.889 ppb	110.015 %	109.028 %	55.988 ppb	57.425 ppb	108.330 %
Concentration per Run 3	55.723 ppb	112.421 %	109.023 %	58.854 ppb	58.015 ppb	105.213 %
Recovery Percentage 1	92.517 %			94.073 %	94.960 %	
Concentration RSD	0.9 %	2.3 %	2.2 %	3.9 %	2.3 %	2.3 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	89	User name	ALPHALAB\a2-icpmsq2	Comment	CCB
Analysis label:	CCB	Rack	0		
Analysis started at:	12/3/2024 2:42:28 PM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	118.973 %	126.824 %	0.007 ppb	654.026 ppb	0.196 ppb	-0.451 ppb	49.763 ppb	-4.203 ppb	105.078 %
Concentration per Run 1	116.977 %	122.559 %	0.008 ppb	686.756 ppb	-0.192 ppb	-0.490 ppb	52.797 ppb	-6.840 ppb	104.069 %
Concentration per Run 2	120.749 %	128.789 %	0.007 ppb	642.959 ppb	-0.042 ppb	-0.578 ppb	52.507 ppb	-4.633 ppb	106.578 %
Concentration per Run 3	119.192 %	129.125 %	0.007 ppb	632.363 ppb	0.821 ppb	-0.286 ppb	43.985 ppb	-1.136 ppb	104.587 %
Recovery Percentage 1			1.429 %	130.805 %	0.279 %	-4.513 %	49.763 %	-4.203 %	
Concentration RSD	1.6 %	2.9 %	11.1 %	4.4 %	279.4 %	33.2 %	10.1 %	68.4 %	1.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.456 ppb	-0.043 ppb	0.125 ppb	4.008 ppb	-0.004 ppb	0.044 ppb	0.050 ppb	0.203 ppb	102.622 %
Concentration per Run 1	-0.391 ppb	-0.033 ppb	0.130 ppb	4.389 ppb	-0.007 ppb	0.050 ppb	0.062 ppb	0.159 ppb	103.834 %
Concentration per Run 2	-0.522 ppb	-0.037 ppb	0.118 ppb	4.521 ppb	-0.004 ppb	0.078 ppb	0.066 ppb	0.172 ppb	98.663 %
Concentration per Run 3	-0.454 ppb	-0.058 ppb	0.125 ppb	3.113 ppb	-0.001 ppb	0.003 ppb	0.023 ppb	0.277 ppb	105.369 %
Recovery Percentage 1	-9.111 %	-4.257 %	12.452 %	8.015 %	-0.766 %	2.176 %	5.036 %	4.059 %	
Concentration RSD	14.4 %	31.5 %	5.0 %	19.4 %	78.2 %	87.1 %	47.4 %	31.9 %	3.4 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.114 ppb	0.154 ppb	0.005 ppb	0.331 ppb	109.601 %	0.007 ppb	0.000 ppb	107.719 %	0.086 ppb
Concentration per Run 1	0.083 ppb	0.152 ppb	0.014 ppb	0.215 ppb	111.529 %	0.004 ppb	0.000 ppb	110.457 %	0.067 ppb
Concentration per Run 2	0.142 ppb	0.190 ppb	0.005 ppb	0.336 ppb	109.360 %	0.008 ppb	0.000 ppb	105.620 %	0.080 ppb
Concentration per Run 3	0.118 ppb	0.120 ppb	-0.004 ppb	0.442 ppb	107.914 %	0.008 ppb	0.000 ppb	107.081 %	0.112 ppb
Recovery Percentage 1	22.893 %	3.081 %	0.047 %	16.548 %		1.681 %	0.000 %		2.155 %
Concentration RSD	25.8 %	22.7 %	187.1 %	34.3 %	1.7 %	36.2 %	N/A	2.3 %	26.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.012 ppb	108.753 %	108.277 %	0.207 ppb	0.015 ppb	107.168 %
Concentration per Run 1	0.007 ppb	110.221 %	109.213 %	0.213 ppb	0.020 ppb	107.195 %
Concentration per Run 2	-0.006 ppb	109.435 %	109.173 %	0.228 ppb	0.013 ppb	107.688 %
Concentration per Run 3	0.035 ppb	106.602 %	106.445 %	0.180 ppb	0.011 ppb	106.620 %
Recovery Percentage 1	2.403 %			20.699 %	1.453 %	
Concentration RSD	172.2 %	1.8 %	1.5 %	11.9 %	33.8 %	0.5 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	90	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	CCB	Rack	0		
Analysis started at:	12/3/2024 2:57:24 PM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	115.831 %	115.264 %	0.013 ppb	216.903 ppb	-0.030 ppb	-0.387 ppb	18.421 ppb	0.875 ppb	106.342 %
Concentration per Run 1	108.677 %	118.014 %	0.019 ppb	172.715 ppb	-0.943 ppb	-0.464 ppb	12.980 ppb	14.924 ppb	104.117 %
Concentration per Run 2	117.132 %	113.805 %	0.009 ppb	222.947 ppb	0.427 ppb	-0.464 ppb	15.477 ppb	-9.322 ppb	108.198 %
Concentration per Run 3	121.684 %	113.973 %	0.010 ppb	255.046 ppb	0.425 ppb	-0.234 ppb	26.807 ppb	-2.976 ppb	106.712 %
Recovery Percentage 1			2.584 %	43.381 %	-0.044 %	-3.873 %	18.421 %	0.875 %	
Concentration RSD	5.7 %	2.1 %	43.6 %	19.1 %	2,592.9 %	34.2 %	40.0 %	1,436.7 %	1.9 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.260 ppb	-0.054 ppb	0.087 ppb	0.448 ppb	-0.002 ppb	0.113 ppb	0.018 ppb	0.151 ppb	**147.676 %**
Concentration per Run 1	-0.351 ppb	-0.048 ppb	0.017 ppb	0.305 ppb	-0.004 ppb	0.054 ppb	0.007 ppb	0.257 ppb	**154.197 %**
Concentration per Run 2	-0.296 ppb	-0.081 ppb	0.129 ppb	1.232 ppb	-0.001 ppb	0.137 ppb	0.002 ppb	0.143 ppb	**145.144 %**
Concentration per Run 3	-0.133 ppb	-0.034 ppb	0.113 ppb	-0.194 ppb	-0.001 ppb	0.149 ppb	0.046 ppb	0.052 ppb	**143.687 %**
Recovery Percentage 1	-5.192 %	-5.434 %	8.650 %	0.895 %	-0.344 %	5.674 %	1.824 %	3.010 %	
Concentration RSD	43.7 %	44.9 %	70.4 %	161.6 %	110.4 %	45.4 %	132.6 %	68.3 %	**3.9 %**

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.067 ppb	0.120 ppb	0.002 ppb	-0.028 ppb	108.265 %	-0.001 ppb	0.001 ppb	107.468 %	0.049 ppb
Concentration per Run 1	0.047 ppb	-0.066 ppb	0.003 ppb	-0.067 ppb	110.934 %	-0.001 ppb	0.000 ppb	110.408 %	0.051 ppb
Concentration per Run 2	0.020 ppb	0.270 ppb	-0.002 ppb	-0.081 ppb	106.996 %	0.001 ppb	0.000 ppb	108.622 %	0.051 ppb
Concentration per Run 3	0.135 ppb	0.157 ppb	0.005 ppb	0.063 ppb	106.866 %	-0.003 ppb	0.004 ppb	103.372 %	0.045 ppb
Recovery Percentage 1	13.434 %	2.403 %	0.019 %	-1.420 %		-0.224 %	0.589 %		1.223 %
Concentration RSD	89.6 %	142.0 %	198.8 %	279.4 %	2.1 %	224.0 %	173.2 %	3.4 %	7.0 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.008 ppb	109.534 %	108.118 %	0.014 ppb	0.004 ppb	106.522 %
Concentration per Run 1	-0.006 ppb	114.975 %	108.793 %	0.009 ppb	0.004 ppb	109.777 %
Concentration per Run 2	-0.006 ppb	107.186 %	107.184 %	0.021 ppb	0.005 ppb	106.243 %
Concentration per Run 3	0.036 ppb	106.442 %	108.379 %	0.012 ppb	0.002 ppb	103.544 %
Recovery Percentage 1	1.579 %			1.422 %	0.371 %	
Concentration RSD	305.4 %	4.3 %	0.8 %	45.0 %	47.3 %	2.9 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	91	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	xWG2001986-1 6020TL	Rack	1		
Analysis started at:	12/3/2024 3:08:01 PM	Vial	54		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	117.069 %	127.049 %	0.008 ppb	344.191 ppb	0.787 ppb	1.407 ppb	12.068 ppb	0.482 ppb	112.395 %
Concentration per Run 1	114.157 %	140.068 %	0.007 ppb	272.129 ppb	0.666 ppb	0.973 ppb	-0.928 ppb	6.708 ppb	110.282 %
Concentration per Run 2	117.036 %	118.182 %	0.011 ppb	371.657 ppb	1.334 ppb	2.239 ppb	14.860 ppb	-2.704 ppb	112.798 %
Concentration per Run 3	120.014 %	122.896 %	0.008 ppb	388.788 ppb	0.362 ppb	1.010 ppb	22.273 ppb	-2.557 ppb	114.104 %
Concentration RSD	2.5 %	9.1 %	22.5 %	18.3 %	63.1 %	51.2 %	98.2 %	1,118.2 %	1.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.467 ppb	-0.032 ppb	0.314 ppb	4.365 ppb	-0.004 ppb	-0.015 ppb	0.116 ppb	0.545 ppb	107.249 %
Concentration per Run 1	-0.531 ppb	-0.007 ppb	0.371 ppb	4.663 ppb	-0.010 ppb	-0.046 ppb	0.150 ppb	0.506 ppb	111.499 %
Concentration per Run 2	-0.480 ppb	-0.035 ppb	0.205 ppb	4.580 ppb	-0.004 ppb	-0.029 ppb	0.111 ppb	0.480 ppb	107.547 %
Concentration per Run 3	-0.389 ppb	-0.055 ppb	0.367 ppb	3.851 ppb	0.002 ppb	0.029 ppb	0.086 ppb	0.649 ppb	102.702 %
Concentration RSD	15.4 %	74.7 %	30.1 %	10.2 %	164.1 %	257.7 %	28.2 %	16.7 %	4.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.019 ppb	0.102 ppb	0.016 ppb	-0.031 ppb	114.033 %	-0.001 ppb	0.001 ppb	113.535 %	0.027 ppb
Concentration per Run 1	0.016 ppb	0.027 ppb	0.016 ppb	-0.029 ppb	122.485 %	0.002 ppb	0.000 ppb	121.926 %	0.022 ppb
Concentration per Run 2	0.019 ppb	0.269 ppb	0.017 ppb	-0.042 ppb	111.691 %	-0.002 ppb	0.000 ppb	110.646 %	0.024 ppb
Concentration per Run 3	0.023 ppb	0.010 ppb	0.016 ppb	-0.021 ppb	107.922 %	-0.002 ppb	0.003 ppb	108.031 %	0.035 ppb
Concentration RSD	18.8 %	141.6 %	6.0 %	35.6 %	6.6 %	261.5 %	173.2 %	6.5 %	25.8 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.711 ppb	112.841 %	111.272 %	0.013 ppb	0.003 ppb	115.518 %
Concentration per Run 1	0.803 ppb	119.453 %	117.267 %	0.009 ppb	0.002 ppb	122.832 %
Concentration per Run 2	0.514 ppb	110.542 %	110.315 %	0.013 ppb	0.003 ppb	113.688 %
Concentration per Run 3	0.817 ppb	108.529 %	106.235 %	0.015 ppb	0.005 ppb	110.034 %
Concentration RSD	24.1 %	5.2 %	5.0 %	23.6 %	42.1 %	5.7 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	92	User name	ALPHALAB\a2-icpmsq2	Comment	fb
Analysis label:	xL2467975-08 6020TL	Rack	2		
Analysis started at:	12/3/2024 3:12:28 PM	Vial	1		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	116.040 %	127.554 %	0.009 ppb	383.742 ppb	1.451 ppb	1.665 ppb	11.839 ppb	4.084 ppb	109.731 %
Concentration per Run 1	111.371 %	130.977 %	0.009 ppb	356.462 ppb	2.020 ppb	1.801 ppb	7.317 ppb	2.521 ppb	109.106 %
Concentration per Run 2	116.374 %	124.411 %	0.008 ppb	398.999 ppb	1.094 ppb	2.449 ppb	11.102 ppb	-6.711 ppb	110.996 %
Concentration per Run 3	120.374 %	127.273 %	0.008 ppb	395.765 ppb	1.237 ppb	0.744 ppb	17.100 ppb	16.443 ppb	109.092 %
Concentration RSD	3.9 %	2.6 %	4.8 %	6.2 %	34.4 %	51.7 %	41.7 %	285.4 %	1.0 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.464 ppb	0.053 ppb	0.633 ppb	88.805 ppb	0.003 ppb	0.007 ppb	0.566 ppb	0.434 ppb	101.312 %
Concentration per Run 1	-0.455 ppb	0.081 ppb	0.654 ppb	90.431 ppb	0.002 ppb	-0.009 ppb	0.538 ppb	0.482 ppb	105.372 %
Concentration per Run 2	-0.536 ppb	0.071 ppb	0.822 ppb	95.897 ppb	0.006 ppb	0.010 ppb	0.610 ppb	0.481 ppb	99.639 %
Concentration per Run 3	-0.402 ppb	0.008 ppb	0.421 ppb	80.087 ppb	0.000 ppb	0.021 ppb	0.549 ppb	0.339 ppb	98.926 %
Concentration RSD	14.6 %	74.2 %	31.8 %	9.0 %	128.1 %	202.4 %	6.9 %	19.0 %	3.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.065 ppb	0.087 ppb	0.026 ppb	-0.030 ppb	109.446 %	-0.001 ppb	0.003 ppb	105.213 %	0.096 ppb
Concentration per Run 1	0.040 ppb	0.256 ppb	0.026 ppb	-0.039 ppb	108.759 %	-0.001 ppb	0.000 ppb	107.207 %	0.090 ppb
Concentration per Run 2	0.064 ppb	-0.036 ppb	0.028 ppb	-0.030 ppb	109.764 %	-0.002 ppb	0.003 ppb	104.797 %	0.121 ppb
Concentration per Run 3	0.091 ppb	0.041 ppb	0.024 ppb	-0.021 ppb	109.816 %	-0.001 ppb	0.007 ppb	103.635 %	0.077 ppb
Concentration RSD	39.4 %	173.4 %	8.7 %	30.0 %	0.5 %	47.4 %	100.2 %	1.7 %	23.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.043 ppb	106.550 %	105.326 %	0.005 ppb	0.022 ppb	107.388 %
Concentration per Run 1	0.114 ppb	109.486 %	107.812 %	0.002 ppb	0.018 ppb	109.161 %
Concentration per Run 2	0.022 ppb	104.732 %	103.479 %	0.005 ppb	0.025 ppb	105.805 %
Concentration per Run 3	-0.005 ppb	105.431 %	104.687 %	0.007 ppb	0.024 ppb	107.198 %
Concentration RSD	143.3 %	2.4 %	2.1 %	59.7 %	17.7 %	1.6 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	93	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	xWG2001986-2d10 6020TL	Rack	1		
Analysis started at:	12/3/2024 3:24:56 PM	Vial	55		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	119.163 %	121.493 %	4.956 ppb	1,334.106 ppb	955.871 ppb	184.299 ppb	953.118 ppb	774.250 ppb	112.106 %
Concentration per Run 1	112.261 %	119.192 %	5.219 ppb	1,311.603 ppb	949.984 ppb	183.383 ppb	935.587 ppb	774.253 ppb	108.928 %
Concentration per Run 2	121.819 %	122.896 %	4.818 ppb	1,338.842 ppb	956.168 ppb	185.744 ppb	969.791 ppb	718.211 ppb	113.916 %
Concentration per Run 3	123.408 %	122.391 %	4.832 ppb	1,351.872 ppb	961.461 ppb	183.769 ppb	953.974 ppb	830.287 ppb	113.475 %
Concentration RSD	5.1 %	1.7 %	4.6 %	1.5 %	0.6 %	0.7 %	1.8 %	7.2 %	2.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	45.142 ppb	18.992 ppb	50.448 ppb	105.847 ppb	50.320 ppb	51.277 ppb	25.943 ppb	50.923 ppb	105.764 %
Concentration per Run 1	42.667 ppb	17.834 ppb	48.176 ppb	106.604 ppb	49.252 ppb	49.462 ppb	24.945 ppb	49.615 ppb	109.007 %
Concentration per Run 2	47.018 ppb	19.750 ppb	52.098 ppb	113.178 ppb	52.017 ppb	53.842 ppb	26.322 ppb	53.053 ppb	101.800 %
Concentration per Run 3	45.741 ppb	19.392 ppb	51.070 ppb	97.758 ppb	49.689 ppb	50.527 ppb	26.563 ppb	50.100 ppb	106.485 %
Concentration RSD	5.0 %	5.4 %	4.0 %	7.3 %	3.0 %	4.5 %	3.4 %	3.7 %	3.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	12.515 ppb	12.179 ppb	97.562 ppb	97.470 ppb	109.129 %	4.703 ppb	5.196 ppb	108.711 %	45.180 ppb
Concentration per Run 1	12.281 ppb	12.012 ppb	94.044 ppb	96.158 ppb	111.774 %	4.538 ppb	4.936 ppb	112.005 %	43.811 ppb
Concentration per Run 2	13.143 ppb	11.698 ppb	100.440 ppb	97.774 ppb	106.487 %	4.822 ppb	5.446 ppb	107.274 %	46.527 ppb
Concentration per Run 3	12.122 ppb	12.826 ppb	98.202 ppb	98.478 ppb	109.127 %	4.747 ppb	5.206 ppb	106.853 %	45.203 ppb
Concentration RSD	4.4 %	4.8 %	3.3 %	1.2 %	2.4 %	3.1 %	4.9 %	2.6 %	3.0 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	193.414 ppb	110.804 %	107.448 %	11.829 ppb	51.871 ppb	106.870 %
Concentration per Run 1	190.803 ppb	112.222 %	109.440 %	11.318 ppb	50.535 ppb	108.530 %
Concentration per Run 2	194.436 ppb	109.917 %	105.310 %	11.674 ppb	52.013 ppb	108.526 %
Concentration per Run 3	195.004 ppb	110.272 %	107.593 %	12.495 ppb	53.063 ppb	103.553 %
Concentration RSD	1.2 %	1.1 %	1.9 %	5.1 %	2.4 %	2.7 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	94	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	xL2467975-04 6020TL	Rack	1		
Analysis started at:	12/3/2024 3:29:23 PM	Vial	56		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	118.012 %	126.375 %	0.025 ppb	38,257.664 ppb	1,862.106 ppb	51.710 ppb	2,969.846 ppb	9,274.901 ppb	108.085 %
Concentration per Run 1	114.586 %	128.957 %	0.027 ppb	36,330.063 ppb	1,768.358 ppb	50.221 ppb	2,798.286 ppb	9,088.065 ppb	108.564 %
Concentration per Run 2	119.838 %	130.472 %	0.023 ppb	38,080.094 ppb	1,875.390 ppb	50.037 ppb	3,046.039 ppb	9,200.062 ppb	107.190 %
Concentration per Run 3	119.613 %	119.697 %	0.026 ppb	40,362.835 ppb	1,942.570 ppb	54.872 ppb	3,065.212 ppb	9,536.576 ppb	108.502 %
Concentration RSD	2.5 %	4.6 %	7.8 %	5.3 %	4.7 %	5.3 %	5.0 %	2.5 %	0.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.270 ppb	0.340 ppb	65.045 ppb	343.764 ppb	0.130 ppb	0.713 ppb	1.152 ppb	4.989 ppb	103.811 %
Concentration per Run 1	-0.344 ppb	0.357 ppb	61.261 ppb	329.024 ppb	0.120 ppb	0.720 ppb	1.316 ppb	4.859 ppb	108.565 %
Concentration per Run 2	-0.289 ppb	0.303 ppb	66.428 ppb	346.007 ppb	0.128 ppb	0.667 ppb	1.029 ppb	5.301 ppb	100.534 %
Concentration per Run 3	-0.177 ppb	0.358 ppb	67.445 ppb	356.262 ppb	0.142 ppb	0.752 ppb	1.112 ppb	4.806 ppb	102.333 %
Concentration RSD	31.7 %	9.4 %	5.1 %	4.0 %	8.3 %	6.0 %	12.8 %	5.5 %	4.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.931 ppb	0.290 ppb	66.473 ppb	1.097 ppb	107.331 %	0.008 ppb	0.023 ppb	108.366 %	0.904 ppb
Concentration per Run 1	0.882 ppb	0.221 ppb	63.899 ppb	0.794 ppb	109.670 %	0.008 ppb	0.017 ppb	110.796 %	0.818 ppb
Concentration per Run 2	0.978 ppb	0.450 ppb	68.029 ppb	1.056 ppb	106.873 %	0.008 ppb	0.035 ppb	106.283 %	0.893 ppb
Concentration per Run 3	0.934 ppb	0.199 ppb	67.492 ppb	1.442 ppb	105.450 %	0.009 ppb	0.017 ppb	108.018 %	1.000 ppb
Concentration RSD	5.2 %	47.8 %	3.4 %	29.7 %	2.0 %	8.6 %	44.7 %	2.1 %	10.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	10.962 ppb	109.677 %	108.082 %	0.024 ppb	0.603 ppb	107.055 %
Concentration per Run 1	11.170 ppb	114.531 %	113.494 %	0.018 ppb	0.590 ppb	108.403 %
Concentration per Run 2	11.202 ppb	110.456 %	107.046 %	0.027 ppb	0.613 ppb	107.308 %
Concentration per Run 3	10.514 ppb	104.044 %	103.704 %	0.028 ppb	0.607 ppb	105.453 %
Concentration RSD	3.5 %	4.8 %	4.6 %	21.6 %	2.0 %	1.4 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	95	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	xWG2001986-3d10 6020TL	Rack	1		
Analysis started at:	12/3/2024 3:33:52 PM	Vial	57		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	117.968 %	124.748 %	4.926 ppb	4,969.620 ppb	1,101.332 ppb	181.836 ppb	1,239.796 ppb	1,778.622 ppb	112.480 %
Concentration per Run 1	111.772 %	127.273 %	5.134 ppb	4,833.452 ppb	1,071.242 ppb	176.822 ppb	1,266.386 ppb	1,654.655 ppb	112.149 %
Concentration per Run 2	117.937 %	123.064 %	4.923 ppb	5,071.230 ppb	1,137.838 ppb	187.652 ppb	1,245.368 ppb	1,823.266 ppb	112.285 %
Concentration per Run 3	124.195 %	123.906 %	4.722 ppb	5,004.176 ppb	1,094.915 ppb	181.033 ppb	1,207.633 ppb	1,857.945 ppb	113.006 %
Concentration RSD	5.3 %	1.8 %	4.2 %	2.5 %	3.1 %	3.0 %	2.4 %	6.1 %	0.4 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	43.428 ppb	18.522 ppb	53.698 ppb	135.093 ppb	49.232 ppb	51.167 ppb	25.239 ppb	49.600 ppb	104.808 %
Concentration per Run 1	40.544 ppb	17.127 ppb	53.499 ppb	127.062 ppb	47.144 ppb	48.841 ppb	24.389 ppb	46.761 ppb	108.929 %
Concentration per Run 2	44.483 ppb	19.372 ppb	54.271 ppb	140.788 ppb	51.277 ppb	52.830 ppb	26.330 ppb	51.976 ppb	100.727 %
Concentration per Run 3	45.256 ppb	19.065 ppb	53.322 ppb	137.429 ppb	49.276 ppb	51.831 ppb	24.999 ppb	50.063 ppb	104.770 %
Concentration RSD	5.8 %	6.6 %	0.9 %	5.3 %	4.2 %	4.1 %	3.9 %	5.3 %	3.9 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	11.611 ppb	11.864 ppb	100.206 ppb	91.560 ppb	109.362 %	4.568 ppb	4.876 ppb	108.024 %	41.750 ppb
Concentration per Run 1	11.309 ppb	12.253 ppb	95.999 ppb	86.218 ppb	115.195 %	4.377 ppb	4.608 ppb	114.173 %	39.661 ppb
Concentration per Run 2	11.956 ppb	12.086 ppb	104.354 ppb	93.803 ppb	104.671 %	4.710 ppb	5.018 ppb	106.510 %	42.911 ppb
Concentration per Run 3	11.566 ppb	11.254 ppb	100.266 ppb	94.659 ppb	108.220 %	4.618 ppb	5.001 ppb	103.390 %	42.678 ppb
Concentration RSD	2.8 %	4.5 %	4.2 %	5.1 %	4.9 %	3.8 %	4.8 %	5.1 %	4.3 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	188.853 ppb	108.990 %	107.927 %	11.250 ppb	49.591 ppb	105.605 %
Concentration per Run 1	181.813 ppb	114.649 %	110.431 %	10.732 ppb	48.116 ppb	108.301 %
Concentration per Run 2	189.971 ppb	104.453 %	106.122 %	11.498 ppb	50.594 ppb	104.139 %
Concentration per Run 3	194.775 ppb	107.867 %	107.228 %	11.519 ppb	50.062 ppb	104.374 %
Concentration RSD	3.5 %	4.8 %	2.1 %	4.0 %	2.6 %	2.2 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	96	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	xWG2001986-4 6020TL	Rack	1		
Analysis started at:	12/3/2024 3:38:21 PM	Vial	58		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	116.178 %	126.263 %	0.045 ppb	37,337.758 ppb	1,835.610 ppb	46.589 ppb	2,784.204 ppb	8,744.712 ppb	106.457 %
Concentration per Run 1	114.033 %	136.196 %	0.046 ppb	34,745.302 ppb	1,664.946 ppb	43.544 ppb	2,550.791 ppb	8,217.095 ppb	104.876 %
Concentration per Run 2	116.858 %	119.024 %	0.049 ppb	38,770.655 ppb	1,912.687 ppb	49.014 ppb	2,997.431 ppb	8,875.122 ppb	106.408 %
Concentration per Run 3	117.644 %	123.569 %	0.039 ppb	38,497.317 ppb	1,929.196 ppb	47.208 ppb	2,804.391 ppb	9,141.920 ppb	108.086 %
Concentration RSD	1.6 %	7.0 %	11.5 %	6.0 %	8.1 %	6.0 %	8.0 %	5.4 %	1.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.147 ppb	0.272 ppb	61.746 ppb	322.351 ppb	0.176 ppb	0.731 ppb	1.655 ppb	4.531 ppb	106.285 %
Concentration per Run 1	-0.173 ppb	0.149 ppb	56.534 ppb	307.457 ppb	0.165 ppb	0.528 ppb	1.468 ppb	4.070 ppb	109.161 %
Concentration per Run 2	-0.184 ppb	0.334 ppb	62.444 ppb	317.885 ppb	0.209 ppb	0.952 ppb	1.640 ppb	4.689 ppb	105.664 %
Concentration per Run 3	-0.083 ppb	0.332 ppb	66.259 ppb	341.710 ppb	0.154 ppb	0.712 ppb	1.856 ppb	4.836 ppb	104.031 %
Concentration RSD	37.6 %	39.2 %	7.9 %	5.4 %	16.6 %	29.1 %	11.7 %	9.0 %	2.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.767 ppb	0.097 ppb	62.446 ppb	1.129 ppb	108.626 %	0.016 ppb	0.016 ppb	106.593 %	0.790 ppb
Concentration per Run 1	0.746 ppb	0.097 ppb	59.578 ppb	0.932 ppb	115.412 %	0.022 ppb	0.027 ppb	109.265 %	0.699 ppb
Concentration per Run 2	0.711 ppb	0.111 ppb	63.644 ppb	1.158 ppb	105.087 %	0.017 ppb	0.007 ppb	105.515 %	0.760 ppb
Concentration per Run 3	0.844 ppb	0.084 ppb	64.116 ppb	1.298 ppb	105.379 %	0.008 ppb	0.014 ppb	104.998 %	0.912 ppb
Concentration RSD	9.0 %	13.9 %	4.0 %	16.4 %	5.4 %	43.5 %	62.3 %	2.2 %	13.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	11.083 ppb	109.716 %	107.802 %	0.036 ppb	0.631 ppb	107.204 %
Concentration per Run 1	10.653 ppb	115.649 %	113.137 %	0.028 ppb	0.612 ppb	110.872 %
Concentration per Run 2	11.145 ppb	107.945 %	106.289 %	0.044 ppb	0.640 ppb	104.578 %
Concentration per Run 3	11.450 ppb	105.554 %	103.980 %	0.035 ppb	0.640 ppb	106.161 %
Concentration RSD	3.6 %	4.8 %	4.4 %	22.4 %	2.5 %	3.1 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	97	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	xWG2001986-5d10 6020TL	Rack	1		
Analysis started at:	12/3/2024 3:42:50 PM	Vial	59		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	116.388 %	125.309 %	47.603 ppb	8,658.854 ppb	4,691.087 ppb	49.731 ppb	4,709.090 ppb	5,285.585 ppb	110.164 %
Concentration per Run 1	112.872 %	131.987 %	48.130 ppb	8,181.271 ppb	4,493.890 ppb	46.674 ppb	4,463.262 ppb	5,106.061 ppb	105.599 %
Concentration per Run 2	117.725 %	119.024 %	47.584 ppb	9,076.665 ppb	4,844.946 ppb	53.010 ppb	4,974.046 ppb	5,612.578 ppb	112.368 %
Concentration per Run 3	118.566 %	124.916 %	47.095 ppb	8,718.627 ppb	4,734.425 ppb	49.509 ppb	4,689.962 ppb	5,138.116 ppb	112.523 %
Concentration RSD	2.6 %	5.2 %	1.1 %	5.2 %	3.8 %	6.4 %	5.4 %	5.4 %	3.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	42.568 ppb	44.253 ppb	51.551 ppb	4,597.488 ppb	47.010 ppb	47.296 ppb	46.468 ppb	46.627 ppb	111.420 %
Concentration per Run 1	40.224 ppb	42.995 ppb	49.390 ppb	4,384.289 ppb	44.197 ppb	47.534 ppb	44.346 ppb	44.931 ppb	114.795 %
Concentration per Run 2	44.980 ppb	46.421 ppb	54.171 ppb	4,886.053 ppb	50.756 ppb	48.408 ppb	49.558 ppb	49.080 ppb	105.321 %
Concentration per Run 3	42.501 ppb	43.343 ppb	51.092 ppb	4,522.122 ppb	46.078 ppb	45.947 ppb	45.500 ppb	45.869 ppb	114.144 %
Concentration RSD	5.6 %	4.3 %	4.7 %	5.6 %	7.2 %	2.6 %	5.9 %	4.7 %	4.7 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	45.536 ppb	46.406 ppb	52.021 ppb	46.244 ppb	108.007 %	6.856 ppb	47.345 ppb	106.798 %	45.827 ppb
Concentration per Run 1	44.331 ppb	44.906 ppb	50.166 ppb	43.717 ppb	112.948 %	6.431 ppb	45.227 ppb	112.722 %	43.490 ppb
Concentration per Run 2	48.186 ppb	47.857 ppb	54.156 ppb	48.198 ppb	104.991 %	7.094 ppb	48.155 ppb	105.721 %	45.714 ppb
Concentration per Run 3	44.090 ppb	46.453 ppb	51.742 ppb	46.817 ppb	106.081 %	7.042 ppb	48.652 ppb	101.950 %	48.277 ppb
Concentration RSD	5.0 %	3.2 %	3.9 %	5.0 %	4.0 %	5.4 %	3.9 %	5.1 %	5.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	47.000 ppb	108.011 %	105.362 %	47.052 ppb	47.466 ppb	103.906 %
Concentration per Run 1	44.328 ppb	109.311 %	107.286 %	44.508 ppb	45.433 ppb	108.912 %
Concentration per Run 2	47.515 ppb	107.902 %	102.645 %	48.172 ppb	48.235 ppb	102.670 %
Concentration per Run 3	49.157 ppb	106.821 %	106.154 %	48.476 ppb	48.731 ppb	100.137 %
Concentration RSD	5.2 %	1.2 %	2.3 %	4.7 %	3.7 %	4.3 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	98	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	xWG2001986-6d5 6020TL	Rack	1		
Analysis started at:	12/3/2024 3:47:20 PM	Vial	60		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	116.721 %	125.870 %	0.090 ppb	7,621.251 ppb	367.747 ppb	10.527 ppb	574.443 ppb	1,774.770 ppb	106.180 %
Concentration per Run 1	114.605 %	129.967 %	0.099 ppb	7,392.384 ppb	342.006 ppb	11.202 ppb	595.834 ppb	1,775.865 ppb	102.840 %
Concentration per Run 2	115.667 %	128.957 %	0.078 ppb	7,391.948 ppb	361.196 ppb	10.133 ppb	551.206 ppb	1,871.609 ppb	107.145 %
Concentration per Run 3	119.892 %	118.687 %	0.094 ppb	8,079.419 ppb	400.039 ppb	10.245 ppb	576.290 ppb	1,676.835 ppb	108.557 %
Concentration RSD	2.4 %	5.0 %	12.1 %	5.2 %	8.0 %	5.6 %	3.9 %	5.5 %	2.8 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.450 ppb	0.028 ppb	12.336 ppb	65.898 ppb	0.018 ppb	0.127 ppb	0.230 ppb	1.012 ppb	113.487 %
Concentration per Run 1	-0.475 ppb	0.013 ppb	12.934 ppb	64.566 ppb	0.027 ppb	0.139 ppb	0.144 ppb	0.982 ppb	112.888 %
Concentration per Run 2	-0.459 ppb	0.048 ppb	11.812 ppb	70.409 ppb	-0.001 ppb	0.216 ppb	0.288 ppb	1.182 ppb	110.980 %
Concentration per Run 3	-0.418 ppb	0.025 ppb	12.261 ppb	62.721 ppb	0.027 ppb	0.026 ppb	0.257 ppb	0.872 ppb	116.592 %
Concentration RSD	6.5 %	62.7 %	4.6 %	6.1 %	92.8 %	75.3 %	33.1 %	15.6 %	2.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.160 ppb	0.297 ppb	12.383 ppb	0.387 ppb	105.100 %	0.003 ppb	0.004 ppb	105.485 %	0.191 ppb
Concentration per Run 1	0.109 ppb	0.250 ppb	12.292 ppb	0.237 ppb	106.012 %	0.003 ppb	0.000 ppb	109.920 %	0.166 ppb
Concentration per Run 2	0.145 ppb	0.189 ppb	12.529 ppb	0.361 ppb	104.790 %	0.002 ppb	0.004 ppb	104.838 %	0.185 ppb
Concentration per Run 3	0.226 ppb	0.453 ppb	12.326 ppb	0.564 ppb	104.496 %	0.002 ppb	0.007 ppb	101.698 %	0.223 ppb
Concentration RSD	37.4 %	46.4 %	1.0 %	42.6 %	0.8 %	19.2 %	100.7 %	3.9 %	15.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	2.138 ppb	106.533 %	106.314 %	0.197 ppb	0.134 ppb	107.355 %
Concentration per Run 1	2.081 ppb	109.070 %	108.952 %	0.169 ppb	0.137 ppb	112.811 %
Concentration per Run 2	2.058 ppb	105.496 %	105.324 %	0.237 ppb	0.130 ppb	104.113 %
Concentration per Run 3	2.275 ppb	105.032 %	104.666 %	0.185 ppb	0.136 ppb	105.142 %
Concentration RSD	5.6 %	2.1 %	2.2 %	18.0 %	2.9 %	4.4 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index: 99
Analysis label: xL2468003-01 6020TL
Analysis started at: 12/3/2024 3:51:50 PM
User name ALPHALAB\a2-icpmsq2
Rack 2
Vial 2
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	106.977 %	124.916 %	0.089 ppb	41,967.709 ppb	25,086.513 ppb	446.809 ppb	23,502.921 ppb	69,507.803 ppb	103.357 %
Concentration per Run 1	105.987 %	124.411 %	0.101 ppb	40,212.459 ppb	23,979.231 ppb	437.331 ppb	22,433.968 ppb	65,707.223 ppb	104.889 %
Concentration per Run 2	109.845 %	121.886 %	0.081 ppb	43,236.538 ppb	25,707.188 ppb	450.295 ppb	24,042.504 ppb	70,333.328 ppb	108.137 %
Concentration per Run 3	105.098 %	128.452 %	0.085 ppb	42,454.129 ppb	25,573.121 ppb	452.801 ppb	24,032.290 ppb	72,482.859 ppb	97.044 %
Concentration RSD	2.4 %	2.7 %	12.0 %	3.7 %	3.8 %	1.9 %	3.9 %	5.0 %	5.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	4.242 ppb	2.174 ppb	395.612 ppb	28,034.628 ppb	1.573 ppb	3.055 ppb	1.657 ppb	3.662 ppb	112.318 %
Concentration per Run 1	3.876 ppb	1.870 ppb	378.521 ppb	26,257.197 ppb	1.422 ppb	2.890 ppb	1.539 ppb	3.609 ppb	116.187 %
Concentration per Run 2	3.966 ppb	2.284 ppb	390.045 ppb	27,489.976 ppb	1.587 ppb	2.879 ppb	1.724 ppb	3.752 ppb	112.892 %
Concentration per Run 3	4.885 ppb	2.370 ppb	418.271 ppb	30,356.711 ppb	1.708 ppb	3.396 ppb	1.707 ppb	3.626 ppb	107.876 %
Concentration RSD	13.2 %	12.3 %	5.2 %	7.5 %	9.1 %	9.7 %	6.2 %	2.1 %	3.7 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	13.016 ppb	0.634 ppb	398.939 ppb	0.275 ppb	105.605 %	0.006 ppb	0.052 ppb	106.627 %	0.230 ppb
Concentration per Run 1	12.660 ppb	0.789 ppb	371.014 ppb	0.126 ppb	114.408 %	0.003 ppb	0.051 ppb	116.134 %	0.205 ppb
Concentration per Run 2	12.570 ppb	0.335 ppb	401.257 ppb	0.355 ppb	103.488 %	0.010 ppb	0.029 ppb	101.797 %	0.232 ppb
Concentration per Run 3	13.817 ppb	0.778 ppb	424.547 ppb	0.343 ppb	98.920 %	0.007 ppb	0.077 ppb	101.951 %	0.252 ppb
Concentration RSD	5.3 %	40.8 %	6.7 %	46.9 %	7.5 %	54.4 %	45.9 %	7.7 %	10.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	130.858 ppb	109.402 %	109.190 %	0.056 ppb	0.537 ppb	102.612 %
Concentration per Run 1	117.115 ppb	117.809 %	118.315 %	0.032 ppb	0.482 ppb	111.449 %
Concentration per Run 2	136.847 ppb	107.661 %	108.851 %	0.065 ppb	0.544 ppb	100.921 %
Concentration per Run 3	138.614 ppb	102.736 %	100.403 %	0.070 ppb	0.583 ppb	95.467 %
Concentration RSD	9.1 %	7.0 %	8.2 %	37.7 %	9.5 %	7.9 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	100	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	xL2468003-02 6020TL	Rack	2		
Analysis started at:	12/3/2024 3:56:18 PM	Vial	3		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	101.068 %	121.661 %	0.064 ppb	74,983.107 ppb	23,345.318 ppb	93.713 ppb	7,646.107 ppb	107,814.926 ppb	99.674 %
Concentration per Run 1	98.107 %	120.034 %	0.070 ppb	73,825.798 ppb	23,118.961 ppb	92.763 ppb	7,625.350 ppb	103,650.666 ppb	98.700 %
Concentration per Run 2	100.795 %	124.580 %	0.059 ppb	74,630.064 ppb	23,399.528 ppb	91.553 ppb	7,447.207 ppb	107,428.847 ppb	100.315 %
Concentration per Run 3	104.302 %	120.371 %	0.062 ppb	76,493.459 ppb	23,517.466 ppb	96.824 ppb	7,865.764 ppb	112,365.265 ppb	100.007 %
Concentration RSD	3.1 %	2.1 %	8.7 %	1.8 %	0.9 %	2.9 %	2.7 %	4.1 %	0.9 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.120 ppb	0.544 ppb	154.330 ppb	17,887.728 ppb	1.459 ppb	1.318 ppb	0.295 ppb	0.911 ppb	126.807 %
Concentration per Run 1	0.075 ppb	0.506 ppb	144.730 ppb	16,787.405 ppb	1.434 ppb	1.380 ppb	0.257 ppb	0.953 ppb	131.454 %
Concentration per Run 2	0.167 ppb	0.573 ppb	160.024 ppb	18,887.530 ppb	1.523 ppb	1.274 ppb	0.361 ppb	0.943 ppb	122.193 %
Concentration per Run 3	0.118 ppb	0.553 ppb	158.237 ppb	17,988.251 ppb	1.419 ppb	1.300 ppb	0.267 ppb	0.836 ppb	126.775 %
Concentration RSD	38.2 %	6.4 %	5.4 %	5.9 %	3.9 %	4.2 %	19.4 %	7.1 %	3.7 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	12.228 ppb	0.167 ppb	389.723 ppb	0.572 ppb	105.603 %	-0.002 ppb	0.018 ppb	104.774 %	0.123 ppb
Concentration per Run 1	11.486 ppb	0.195 ppb	370.935 ppb	0.468 ppb	111.472 %	-0.002 ppb	0.017 ppb	109.688 %	0.077 ppb
Concentration per Run 2	12.984 ppb	0.173 ppb	403.409 ppb	0.573 ppb	102.356 %	-0.001 ppb	0.025 ppb	102.627 %	0.125 ppb
Concentration per Run 3	12.216 ppb	0.134 ppb	394.824 ppb	0.677 ppb	102.981 %	-0.002 ppb	0.011 ppb	102.006 %	0.168 ppb
Concentration RSD	6.1 %	18.5 %	4.3 %	18.2 %	4.8 %	42.0 %	41.1 %	4.1 %	36.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	78.585 ppb	108.285 %	107.708 %	0.029 ppb	0.159 ppb	101.296 %
Concentration per Run 1	75.168 ppb	113.179 %	112.996 %	0.015 ppb	0.145 ppb	107.028 %
Concentration per Run 2	81.922 ppb	104.889 %	103.921 %	0.039 ppb	0.166 ppb	100.330 %
Concentration per Run 3	78.663 ppb	106.789 %	106.206 %	0.031 ppb	0.166 ppb	96.529 %
Concentration RSD	4.3 %	4.0 %	4.4 %	43.3 %	7.5 %	5.2 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	101	User name	ALPHALAB\a2-icpmsq2	Comment	CCV/MCCV
Analysis label:	CCV	Rack	0		
Analysis started at:	12/3/2024 4:00:46 PM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	112.215 %	123.513 %	57.781 ppb	5,728.917 ppb	5,252.295 ppb	50.077 ppb	5,090.437 ppb	5,029.905 ppb	105.018 %
Concentration per Run 1	109.361 %	131.987 %	56.080 ppb	5,317.253 ppb	4,893.203 ppb	46.317 ppb	5,062.571 ppb	4,973.202 ppb	105.558 %
Concentration per Run 2	112.191 %	125.758 %	58.168 ppb	5,659.809 ppb	5,120.852 ppb	50.498 ppb	5,049.656 ppb	4,998.935 ppb	102.739 %
Concentration per Run 3	115.092 %	112.795 %	59.096 ppb	6,209.688 ppb	5,742.829 ppb	53.417 ppb	5,159.084 ppb	5,117.579 ppb	106.756 %
Recovery Percentage 1			96.302 %	95.482 %	87.538 %	83.462 %	84.841 %	83.832 %	
Concentration RSD	2.6 %	7.9 %	2.7 %	7.9 %	8.4 %	7.1 %	1.2 %	1.5 %	2.0 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	49.163 ppb	50.493 ppb	51.963 ppb	5,693.709 ppb	56.430 ppb	57.336 ppb	57.303 ppb	56.234 ppb	117.174 %
Concentration per Run 1	46.133 ppb	47.049 ppb	50.201 ppb	5,079.936 ppb	50.420 ppb	50.486 ppb	51.224 ppb	50.156 ppb	117.823 %
Concentration per Run 2	48.868 ppb	50.509 ppb	51.743 ppb	5,779.392 ppb	58.997 ppb	60.189 ppb	60.579 ppb	59.360 ppb	116.029 %
Concentration per Run 3	52.489 ppb	53.922 ppb	53.945 ppb	6,221.801 ppb	59.872 ppb	61.332 ppb	60.105 ppb	59.186 ppb	117.672 %
Recovery Percentage 1	81.938 %	84.155 %	86.605 %	94.895 %	94.049 %	95.559 %	95.504 %	93.724 %	
Concentration RSD	6.5 %	6.8 %	3.6 %	10.1 %	9.3 %	10.4 %	9.2 %	9.4 %	0.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	55.813 ppb	54.524 ppb	54.279 ppb	54.080 ppb	106.611 %	56.746 ppb	55.913 ppb	105.426 %	54.527 ppb
Concentration per Run 1	49.785 ppb	49.139 ppb	49.170 ppb	51.915 ppb	115.243 %	54.641 ppb	52.594 ppb	109.047 %	51.127 ppb
Concentration per Run 2	59.303 ppb	56.661 ppb	56.813 ppb	55.333 ppb	102.024 %	57.436 ppb	56.857 ppb	103.925 %	56.259 ppb
Concentration per Run 3	58.349 ppb	57.771 ppb	56.855 ppb	54.994 ppb	102.567 %	58.161 ppb	58.288 ppb	103.305 %	56.196 ppb
Recovery Percentage 1	93.021 %	90.873 %	90.466 %	90.134 %		94.576 %	93.188 %		90.879 %
Concentration RSD	9.4 %	8.6 %	8.2 %	3.5 %	7.0 %	3.3 %	5.3 %	3.0 %	5.4 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	54.051 ppb	108.038 %	104.663 %	55.674 ppb	56.446 ppb	104.143 %
Concentration per Run 1	52.391 ppb	112.535 %	112.035 %	52.128 ppb	53.599 ppb	107.281 %
Concentration per Run 2	54.990 ppb	107.450 %	99.258 %	57.348 ppb	58.199 ppb	101.405 %
Concentration per Run 3	54.773 ppb	104.129 %	102.695 %	57.546 ppb	57.540 ppb	103.742 %
Recovery Percentage 1	90.086 %			92.789 %	94.076 %	
Concentration RSD	2.7 %	3.9 %	6.3 %	5.5 %	4.4 %	2.8 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index: 102 User name ALPHALAB\a2-icpmsq2 Comment CCB
Analysis label: CCB Rack 0
Analysis started at: 12/3/2024 4:05:18 PM Vial 10

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	116.435 %	123.177 %	0.104 ppb	285.504 ppb	-0.186 ppb	-0.410 ppb	27.653 ppb	5.271 ppb	107.058 %
Concentration per Run 1	106.443 %	128.620 %	0.074 ppb	259.793 ppb	0.412 ppb	-0.502 ppb	25.729 ppb	12.309 ppb	98.012 %
Concentration per Run 2	118.545 %	115.488 %	0.123 ppb	312.783 ppb	-0.368 ppb	-0.767 ppb	36.968 ppb	0.462 ppb	111.283 %
Concentration per Run 3	124.316 %	125.421 %	0.114 ppb	283.938 ppb	-0.603 ppb	0.038 ppb	20.261 ppb	3.041 ppb	111.879 %
Recovery Percentage 1			20.794 %	57.101 %	-0.266 %	-4.102 %	27.653 %	5.271 %	
Concentration RSD	7.8 %	5.6 %	25.1 %	9.3 %	285.4 %	100.0 %	30.8 %	118.2 %	7.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.546 ppb	-0.044 ppb	0.017 ppb	4.064 ppb	-0.003 ppb	0.021 ppb	0.021 ppb	0.036 ppb	121.385 %
Concentration per Run 1	-0.494 ppb	-0.022 ppb	0.026 ppb	4.419 ppb	-0.007 ppb	-0.001 ppb	0.028 ppb	0.031 ppb	121.658 %
Concentration per Run 2	-0.598 ppb	-0.037 ppb	0.015 ppb	3.616 ppb	0.004 ppb	0.104 ppb	-0.010 ppb	0.087 ppb	119.481 %
Concentration per Run 3	-0.546 ppb	-0.072 ppb	0.012 ppb	4.156 ppb	-0.005 ppb	-0.040 ppb	0.046 ppb	-0.009 ppb	123.017 %
Recovery Percentage 1	-10.915 %	-4.364 %	1.737 %	8.127 %	-0.519 %	1.048 %	2.118 %	0.722 %	
Concentration RSD	9.5 %	59.6 %	41.8 %	10.1 %	230.1 %	356.3 %	137.0 %	132.8 %	1.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.023 ppb	0.116 ppb	0.002 ppb	0.268 ppb	106.230 %	0.007 ppb	0.001 ppb	103.148 %	0.073 ppb
Concentration per Run 1	0.057 ppb	0.070 ppb	0.004 ppb	0.160 ppb	111.114 %	0.005 ppb	0.003 ppb	108.705 %	0.046 ppb
Concentration per Run 2	0.007 ppb	0.115 ppb	0.000 ppb	0.315 ppb	105.356 %	0.011 ppb	0.000 ppb	100.015 %	0.074 ppb
Concentration per Run 3	0.007 ppb	0.163 ppb	0.001 ppb	0.329 ppb	102.220 %	0.005 ppb	0.000 ppb	100.725 %	0.100 ppb
Recovery Percentage 1	4.694 %	2.319 %	0.019 %	13.391 %		1.681 %	0.562 %		1.834 %
Concentration RSD	122.0 %	40.2 %	112.3 %	35.0 %	4.2 %	51.0 %	173.2 %	4.7 %	36.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.060 ppb	104.980 %	103.016 %	0.230 ppb	0.016 ppb	102.465 %
Concentration per Run 1	0.020 ppb	109.314 %	106.496 %	0.200 ppb	0.017 ppb	108.827 %
Concentration per Run 2	0.094 ppb	103.110 %	101.205 %	0.276 ppb	0.015 ppb	98.105 %
Concentration per Run 3	0.066 ppb	102.516 %	101.348 %	0.214 ppb	0.015 ppb	100.462 %
Recovery Percentage 1	12.029 %			23.018 %	1.565 %	
Concentration RSD	61.8 %	3.6 %	2.9 %	17.5 %	5.9 %	5.5 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	103	User name	ALPHALAB\a2-icpmsq2	Comment	CCV/MCCV
Analysis label:	CCV	Rack	0		
Analysis started at:	12/3/2024 4:19:57 PM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	113.162 %	131.202 %	56.551 ppb	5,465.158 ppb	7,389.317 ppb	86.324 ppb	-20,657.458 ppb	-3,583.381 ppb	111.473 %
Concentration per Run 1	109.937 %	134.849 %	57.920 ppb	5,453.744 ppb	4,993.696 ppb	47.354 ppb	4,541.027 ppb	4,476.452 ppb	109.972 %
Concentration per Run 2	113.991 %	130.977 %	55.315 ppb	5,480.054 ppb	12,074.874 ppb	160.758 ppb	-71,525.118 ppb	-20,181.582 ppb	112.880 %
Concentration per Run 3	115.558 %	127.778 %	56.418 ppb	5,461.677 ppb	5,099.380 ppb	50.861 ppb	5,011.716 ppb	4,954.986 ppb	111.565 %
Recovery Percentage 1			94.252 %	91.086 %	123.155 %	143.874 %	-344.291 %	-59.723 %	
Concentration RSD	2.6 %	2.7 %	2.3 %	0.2 %	54.9 %	74.7 %	213.3 %	401.2 %	1.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	49.762 ppb	-3.324 ppb	4.126 ppb	5,616.690 ppb	56.290 ppb	57.172 ppb	56.317 ppb	56.211 ppb	43.318 %
Concentration per Run 1	48.883 ppb	44.159 ppb	45.338 ppb	5,543.553 ppb	55.497 ppb	57.442 ppb	55.041 ppb	55.549 ppb	149.491 %
Concentration per Run 2	49.894 ppb	-100.906 ppb	-80.569 ppb	5,728.707 ppb	58.222 ppb	57.950 ppb	59.053 ppb	58.265 ppb	-157.282 %
Concentration per Run 3	50.508 ppb	46.774 ppb	47.609 ppb	5,577.810 ppb	55.151 ppb	56.126 ppb	54.858 ppb	54.820 ppb	137.745 %
Recovery Percentage 1	82.936 %	-5.540 %	6.877 %	93.611 %	93.817 %	95.287 %	93.862 %	93.685 %	
Concentration RSD	1.6 %	2,542.5 %	1,777.9 %	1.8 %	3.0 %	1.6 %	4.2 %	3.2 %	401.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	55.240 ppb	54.979 ppb	56.649 ppb	27.041 ppb	111.114 %	55.657 ppb	56.075 ppb	111.885 %	55.110 ppb
Concentration per Run 1	52.696 ppb	53.240 ppb	54.659 ppb	54.872 ppb	115.730 %	52.706 ppb	53.071 ppb	115.833 %	53.166 ppb
Concentration per Run 2	57.330 ppb	55.381 ppb	58.591 ppb	-33.482 ppb	107.028 %	57.454 ppb	57.484 ppb	111.661 %	55.144 ppb
Concentration per Run 3	55.694 ppb	56.318 ppb	56.696 ppb	59.734 ppb	110.583 %	56.811 ppb	57.669 ppb	108.160 %	57.020 ppb
Recovery Percentage 1	92.067 %	91.632 %	94.415 %	45.069 %		92.762 %	93.458 %		91.850 %
Concentration RSD	4.3 %	2.9 %	3.5 %	194.0 %	3.9 %	4.6 %	4.6 %	3.4 %	3.5 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	55.651 ppb	114.248 %	113.515 %	55.238 ppb	55.289 ppb	114.811 %
Concentration per Run 1	54.137 ppb	120.076 %	119.541 %	51.797 ppb	52.112 ppb	124.393 %
Concentration per Run 2	56.999 ppb	108.565 %	110.781 %	56.981 ppb	57.362 ppb	108.089 %
Concentration per Run 3	55.817 ppb	114.104 %	110.223 %	56.937 ppb	56.394 ppb	111.951 %
Recovery Percentage 1	92.752 %			92.064 %	92.149 %	
Concentration RSD	2.6 %	5.0 %	4.6 %	5.4 %	5.1 %	7.4 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	104	User name	ALPHALAB\a2-icpmsq2	Comment	CCB
Analysis label:	CCB	Rack	0		
Analysis started at:	12/3/2024 4:24:28 PM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	110.591 %	120.595 %	0.369 ppb	238.903 ppb	0.198 ppb	-0.856 ppb	10.261 ppb	2.426 ppb	103.522 %
Concentration per Run 1	106.364 %	124.916 %	0.334 ppb	220.343 ppb	0.107 ppb	-1.041 ppb	6.614 ppb	5.410 ppb	101.130 %
Concentration per Run 2	110.389 %	122.728 %	0.477 ppb	229.100 ppb	0.293 ppb	-1.037 ppb	7.871 ppb	-2.416 ppb	104.087 %
Concentration per Run 3	115.021 %	114.142 %	0.295 ppb	267.265 ppb	0.193 ppb	-0.489 ppb	16.298 ppb	4.282 ppb	105.349 %
Recovery Percentage 1			73.708 %	47.781 %	0.283 %	-8.556 %	10.261 %	2.426 %	
Concentration RSD	3.9 %	4.7 %	26.1 %	10.4 %	47.2 %	37.1 %	51.3 %	174.4 %	2.1 %

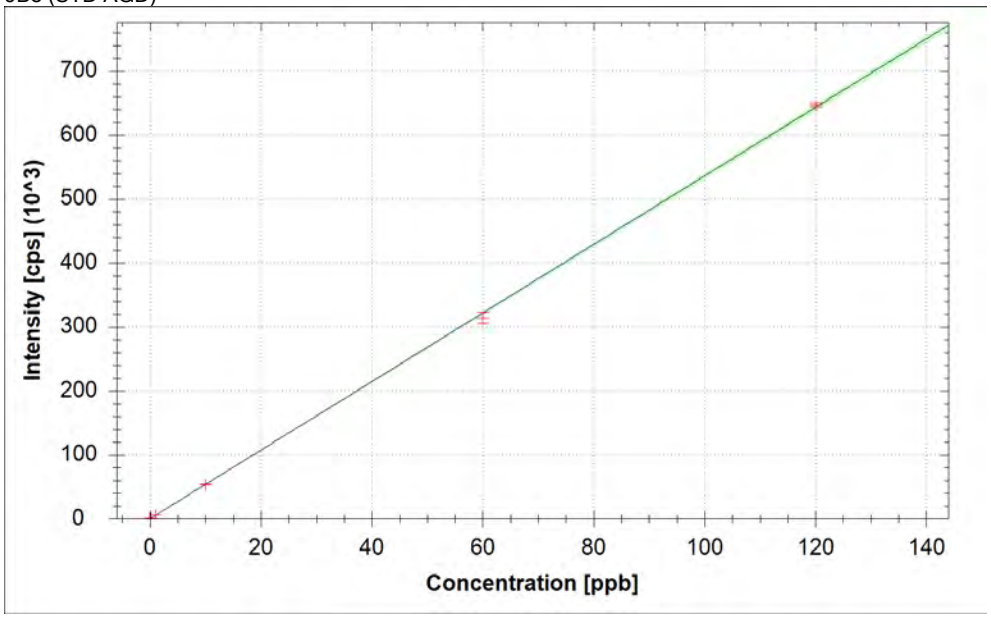
Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.531 ppb	-0.036 ppb	0.036 ppb	4.617 ppb	0.000 ppb	0.044 ppb	0.035 ppb	0.106 ppb	121.408 %
Concentration per Run 1	-0.571 ppb	-0.042 ppb	0.041 ppb	6.364 ppb	0.001 ppb	0.061 ppb	0.022 ppb	0.158 ppb	119.417 %
Concentration per Run 2	-0.532 ppb	-0.028 ppb	0.082 ppb	3.955 ppb	-0.002 ppb	0.019 ppb	0.067 ppb	0.050 ppb	122.375 %
Concentration per Run 3	-0.489 ppb	-0.039 ppb	-0.015 ppb	3.533 ppb	0.001 ppb	0.051 ppb	0.015 ppb	0.110 ppb	122.431 %
Recovery Percentage 1	-10.618 %	-3.643 %	3.628 %	9.235 %	0.026 %	2.180 %	3.479 %	2.117 %	
Concentration RSD	7.7 %	19.4 %	133.6 %	33.1 %	1,283.6 %	50.1 %	80.4 %	50.9 %	1.4 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	-0.004 ppb	0.195 ppb	0.000 ppb	0.312 ppb	109.296 %	0.015 ppb	0.007 ppb	103.486 %	0.109 ppb
Concentration per Run 1	0.007 ppb	0.430 ppb	0.005 ppb	0.182 ppb	112.537 %	0.025 ppb	0.014 ppb	107.710 %	0.086 ppb
Concentration per Run 2	0.069 ppb	0.082 ppb	0.003 ppb	0.345 ppb	107.482 %	0.012 ppb	0.004 ppb	99.577 %	0.097 ppb
Concentration per Run 3	-0.087 ppb	0.074 ppb	-0.009 ppb	0.408 ppb	107.869 %	0.008 ppb	0.004 ppb	103.172 %	0.145 ppb
Recovery Percentage 1	-0.785 %	3.910 %	-0.002 %	15.601 %		3.766 %	3.444 %		2.736 %
Concentration RSD	1,998.0 %	104.0 %	3,210.3 %	37.4 %	2.6 %	60.2 %	83.4 %	3.9 %	28.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.040 ppb	108.754 %	107.942 %	0.304 ppb	0.022 ppb	106.742 %
Concentration per Run 1	0.047 ppb	109.882 %	110.092 %	0.251 ppb	0.028 ppb	111.979 %
Concentration per Run 2	0.051 ppb	106.452 %	105.766 %	0.363 ppb	0.022 ppb	104.101 %
Concentration per Run 3	0.021 ppb	109.929 %	107.968 %	0.298 ppb	0.016 ppb	104.148 %
Recovery Percentage 1	7.939 %			30.418 %	2.208 %	
Concentration RSD	40.2 %	1.8 %	2.0 %	18.5 %	27.9 %	4.2 %

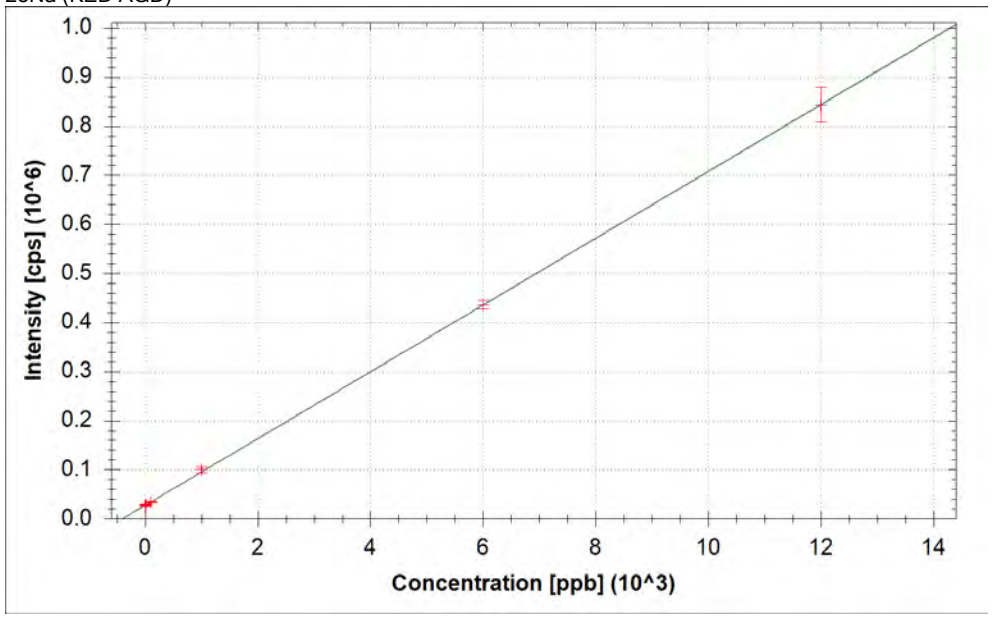
Calibration Curves:

9Be (STD AGD)



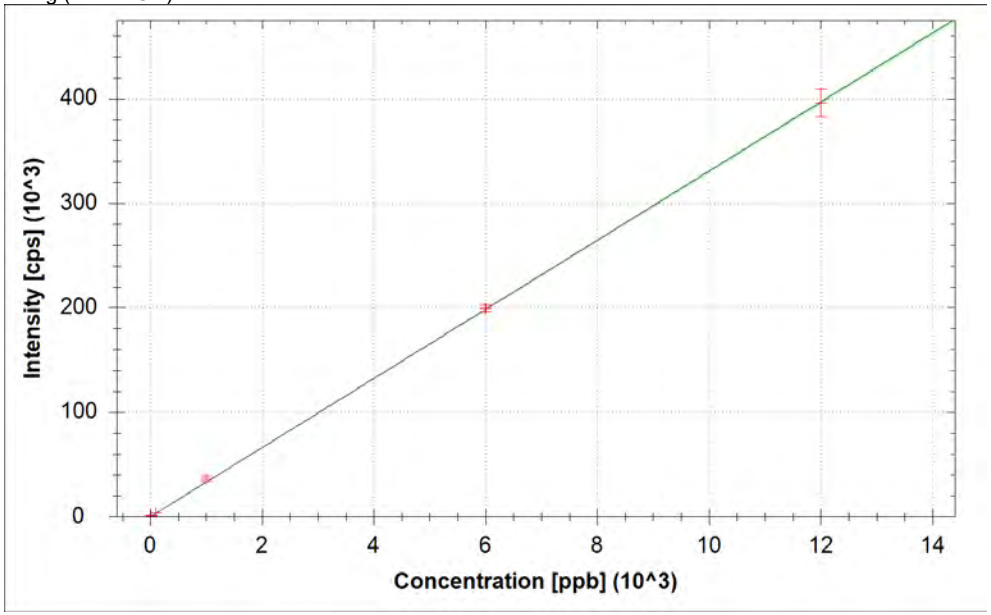
f(x) = 5358.0201*x + 246.3896
R² = 0.9998
BEC = 0.046 ppb
LoD = 0.0215 ppb

23Na (KED AGD)



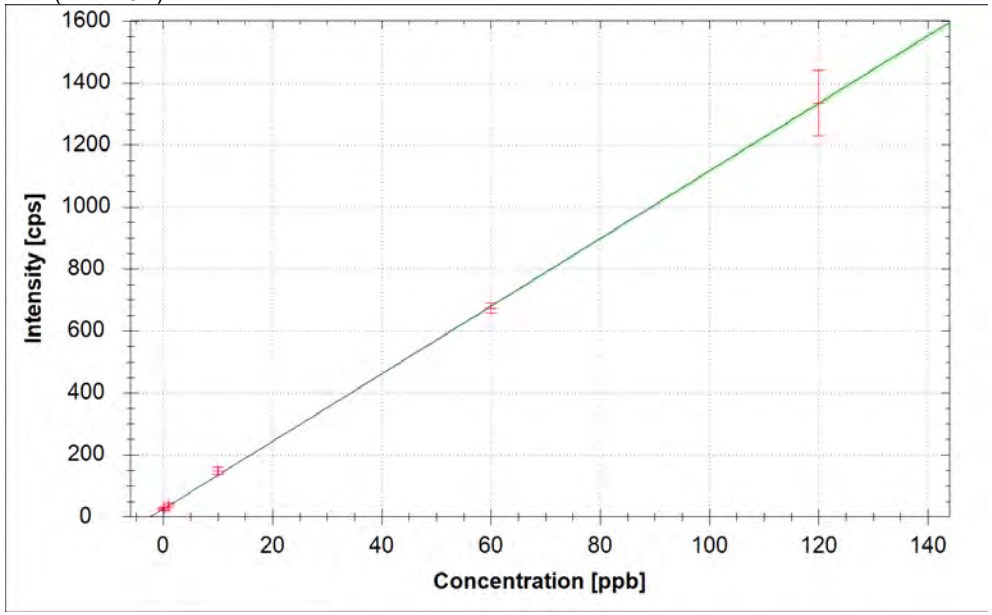
f(x) = 68.0355*x + 27193.9517
R² = 1.0000
BEC = 399.702 ppb
LoD = 75.8702 ppb

24Mg (KED AGD)



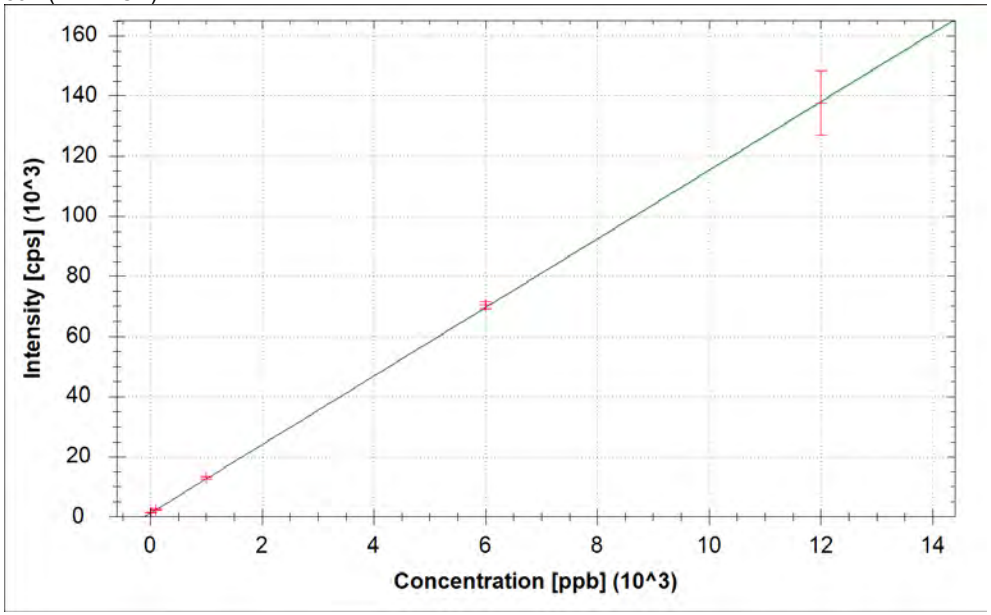
f(x) = 33.0497*x + 61.1301
R² = 0.9999
BEC = 1.850 ppb
LoD = 2.6194 ppb

27Al (KED AGD)



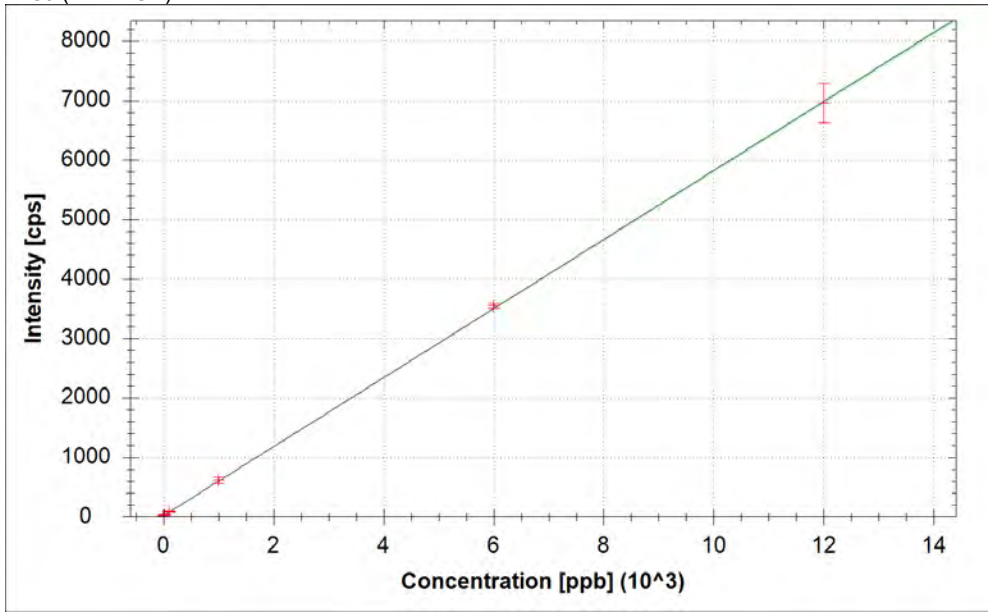
f(x) = 10.9043*x + 24.8638
R² = 0.9998
BEC = 2.280 ppb
LoD = 1.4080 ppb

39K (KED AGD)



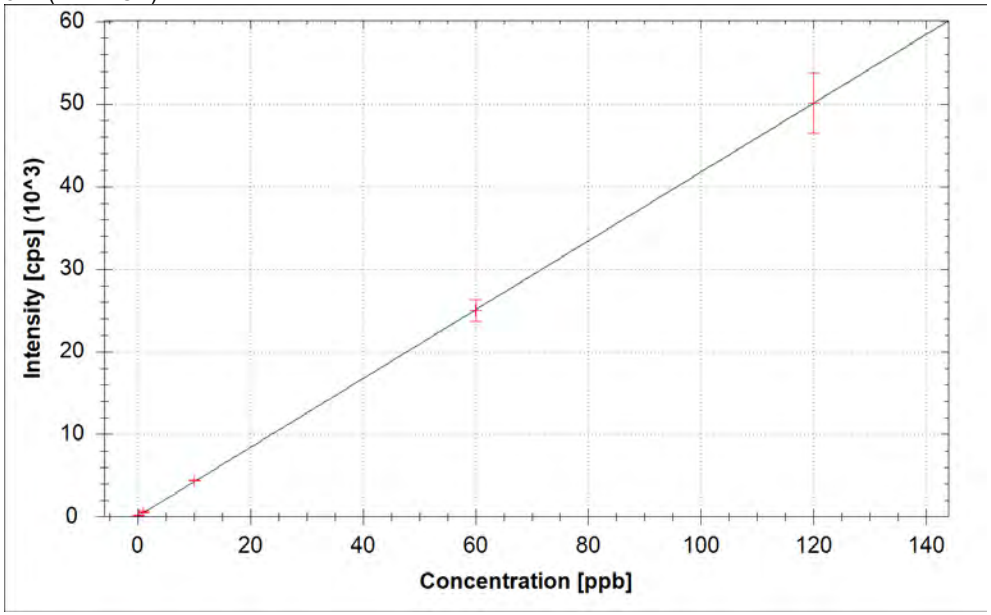
f(x) = 11.4039*x + 1167.7464
R² = 0.9999
BEC = 102.399 ppb
LoD = 6.6148 ppb

44Ca (KED AGD)



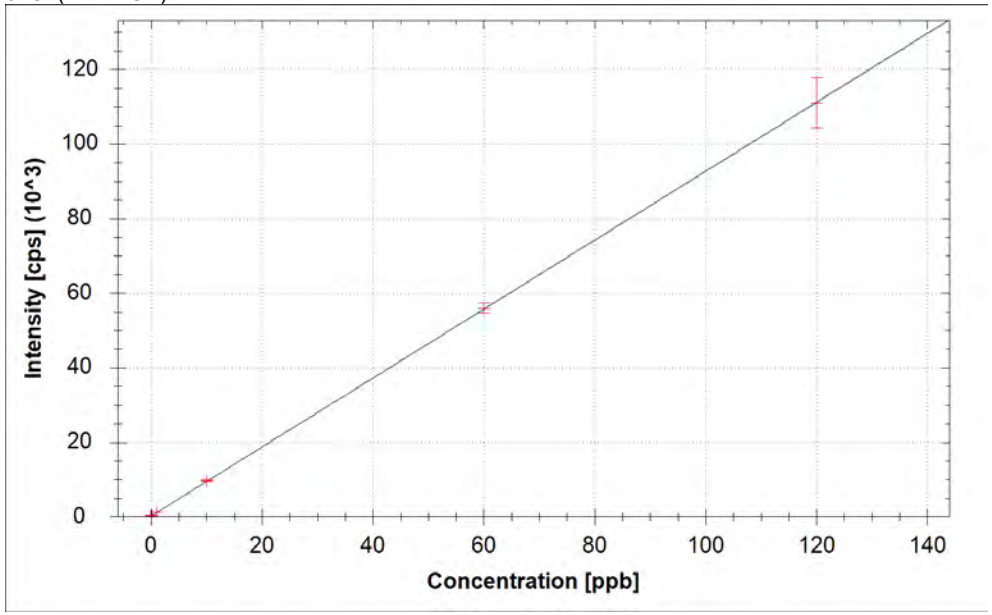
f(x) = 0.5803*x + 18.1578
R² = 0.9999
BEC = 31.290 ppb
LoD = 30.0410 ppb

51V (KED AGD)



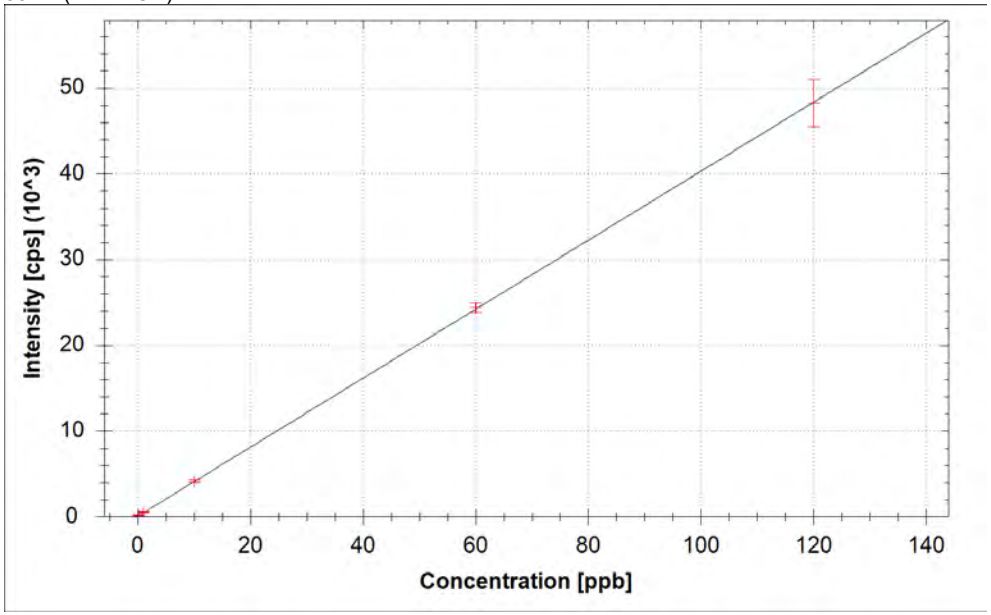
f(x) = 416.8402*x + 68.9380
R² = 1.0000
BEC = 0.165 ppb
LoD = 0.0217 ppb

52Cr (KED AGD)



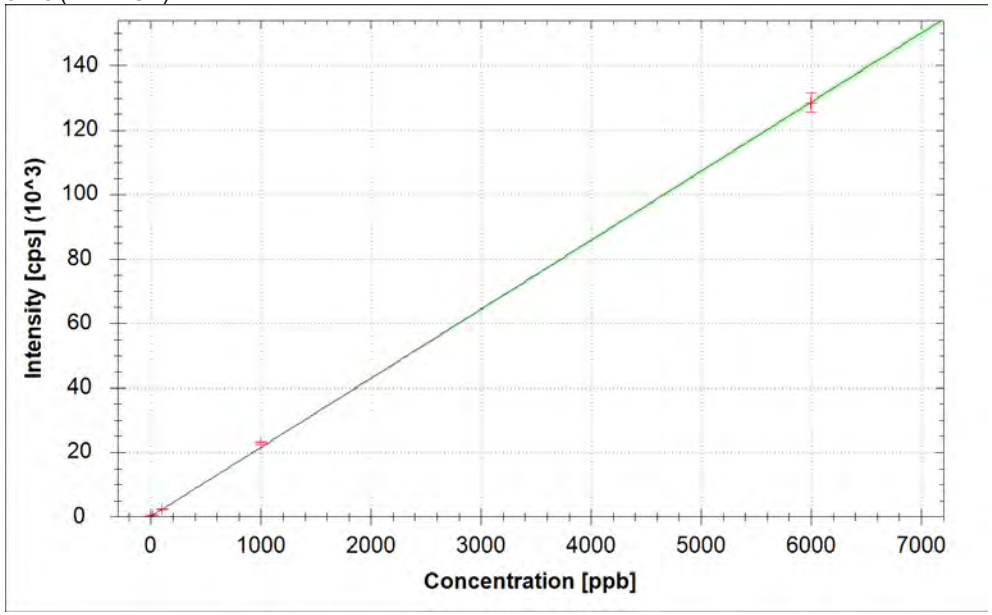
f(x) = 924.8543*x + 202.6089
R² = 1.0000
BEC = 0.219 ppb
LoD = 0.0433 ppb

55Mn (KED AGD)



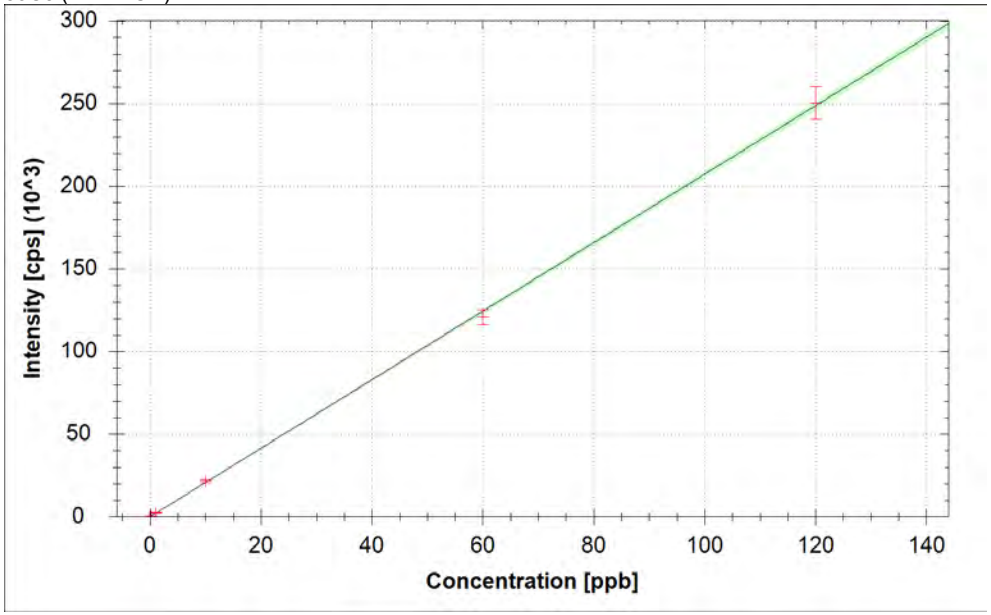
f(x) = 402.2037*x + 74.6918
R² = 1.0000
BEC = 0.186 ppb
LoD = 0.3045 ppb

57Fe (KED AGD)



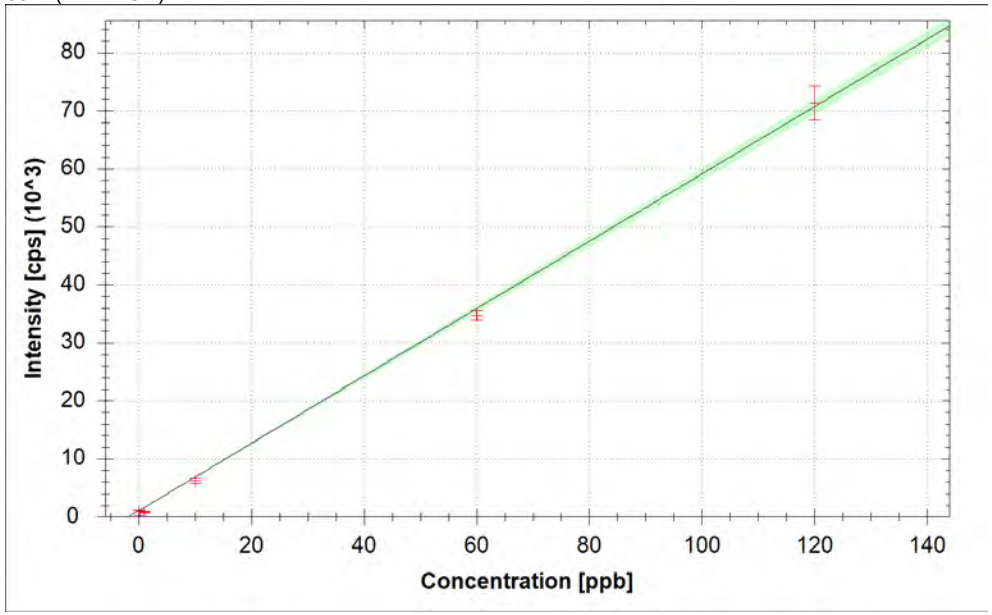
f(x) = 21.4226*x + 101.6325
R² = 0.9999
BEC = 4.744 ppb
LoD = 2.5881 ppb

59Co (KED AGD)



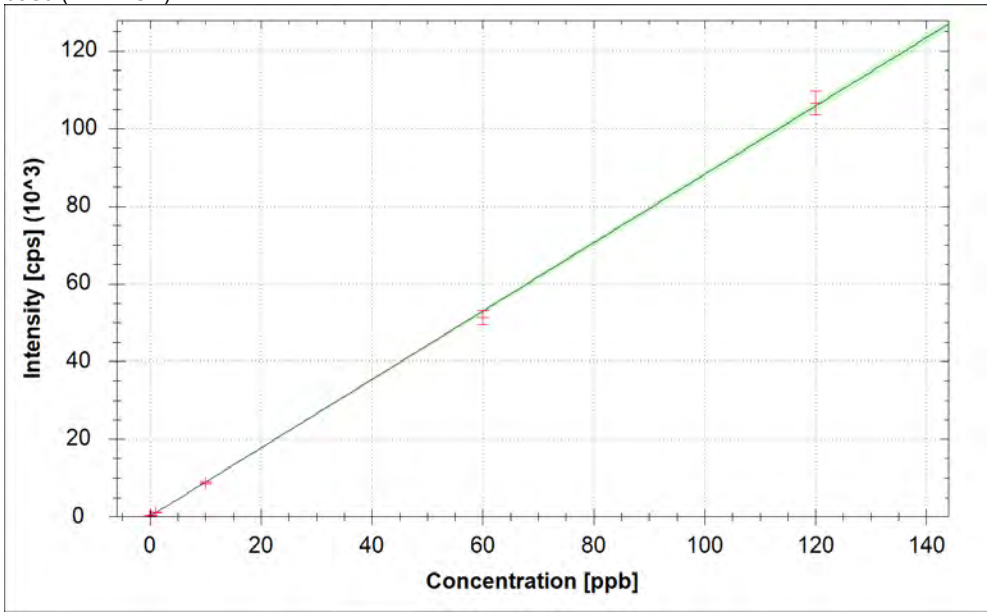
f(x) = 2071.6852*x + 13.0666
R² = 0.9997
BEC = 0.006 ppb
LoD = 0.0191 ppb

60Ni (KED AGD)



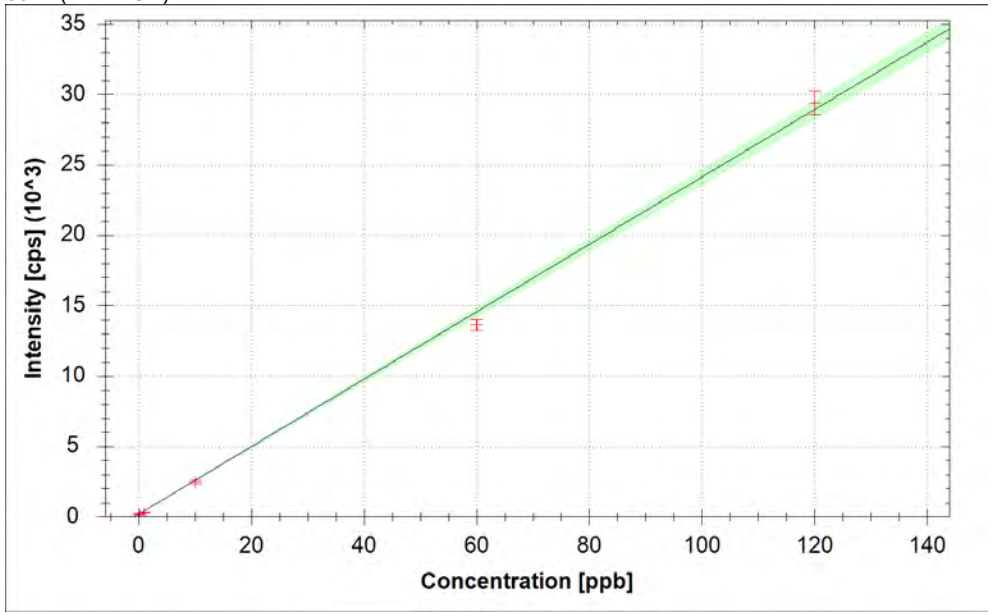
f(x) = 580.3269*x + 1049.2697
R² = 0.9990
BEC = 1.808 ppb
LoD = 0.4343 ppb

65Cu (KED AGD)



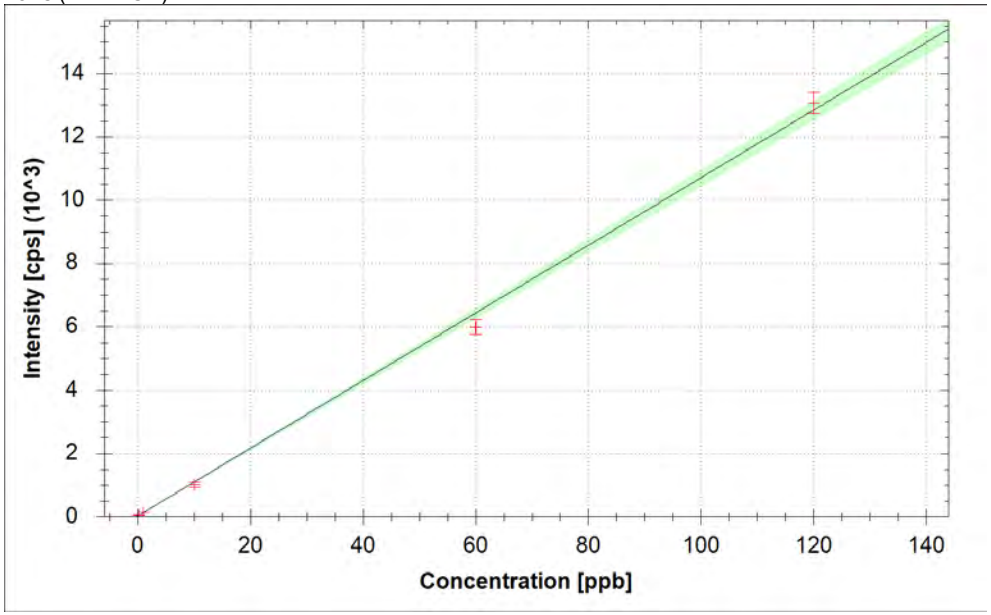
f(x) = 880.2671*x + 118.9946
R² = 0.9997
BEC = 0.135 ppb
LoD = 0.1911 ppb

66Zn (KED AGD)



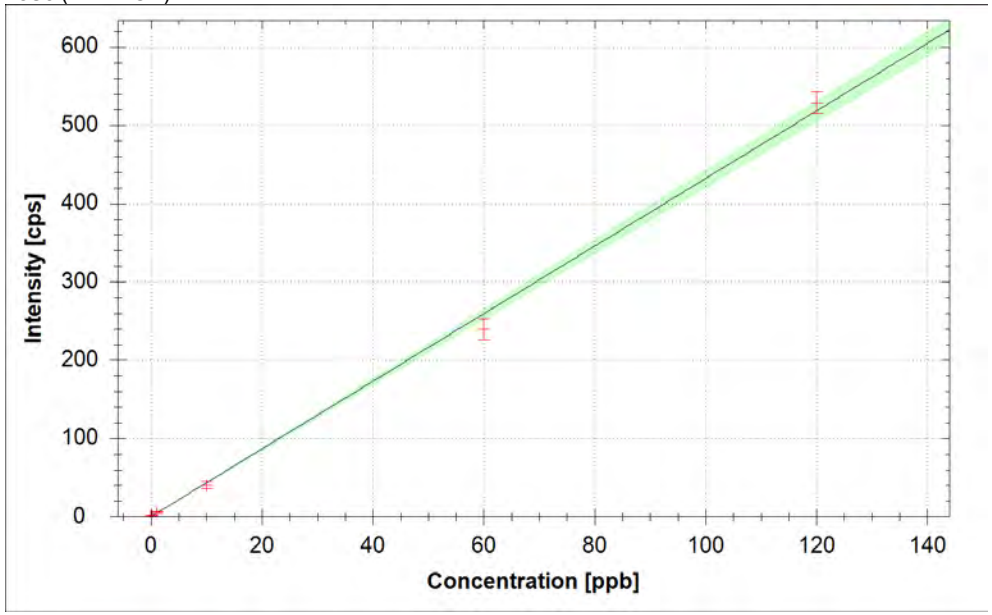
f(x) = 239.2791*x + 200.5034
R² = 0.9983
BEC = 0.838 ppb
LoD = 0.3681 ppb

75As (KED AGD)



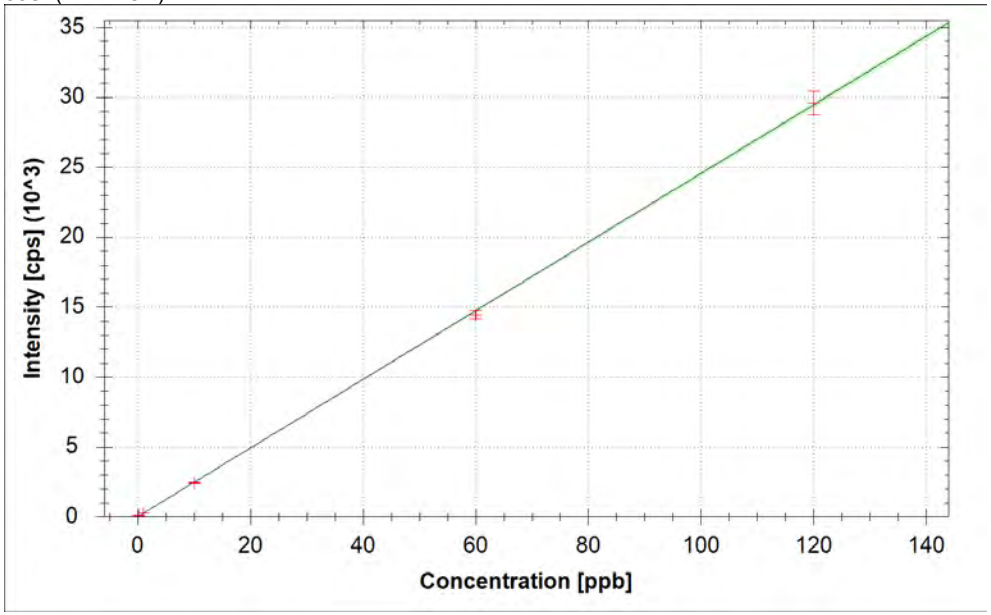
f(x) = 106.7135*x + 30.2392
R² = 0.9981
BEC = 0.283 ppb
LoD = 0.0653 ppb

78Se (KED AGD)



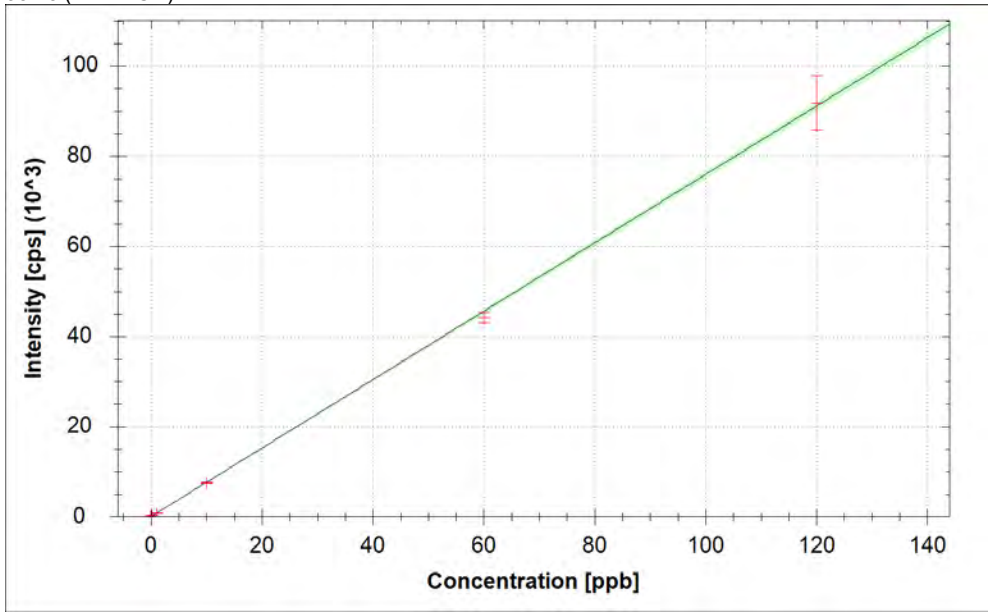
f(x) = 4.3161*x + 0.3194
R² = 0.9978
BEC = 0.074 ppb
LoD = 0.3245 ppb

88Sr (KED AGD)



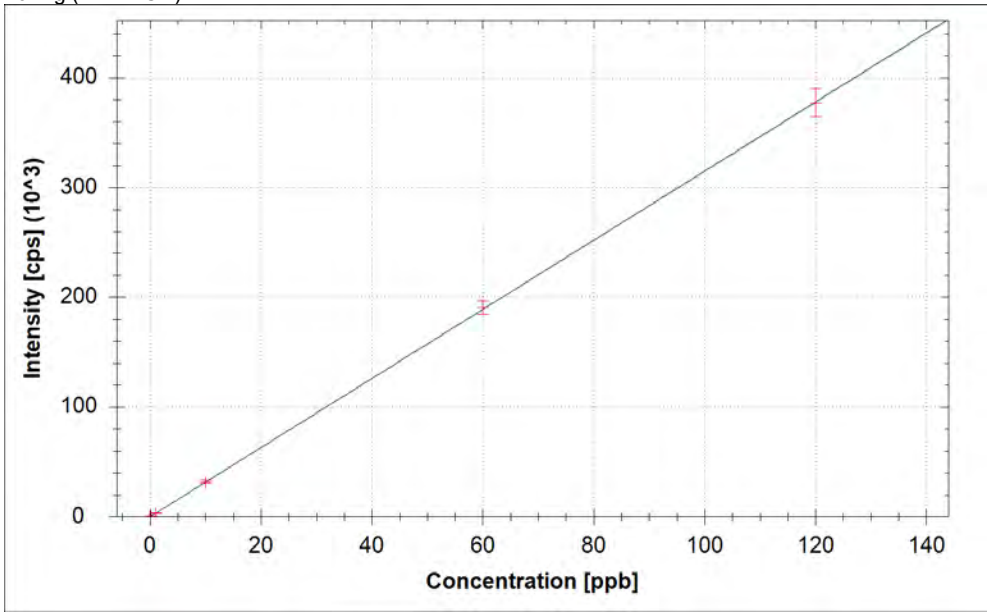
f(x) = 245.3233*x + 14.5966
R² = 0.9999
BEC = 0.059 ppb
LoD = 0.0068 ppb

95Mo (KED AGD)



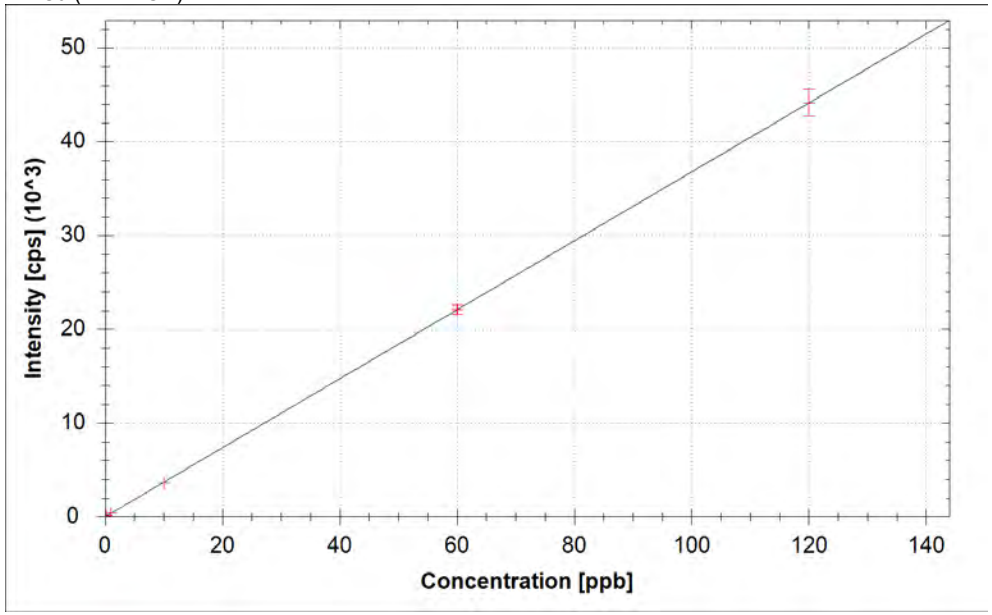
f(x) = 758.6228*x + 67.4780
R² = 0.9996
BEC = 0.089 ppb
LoD = 0.1255 ppb

107Ag (KED AGD)



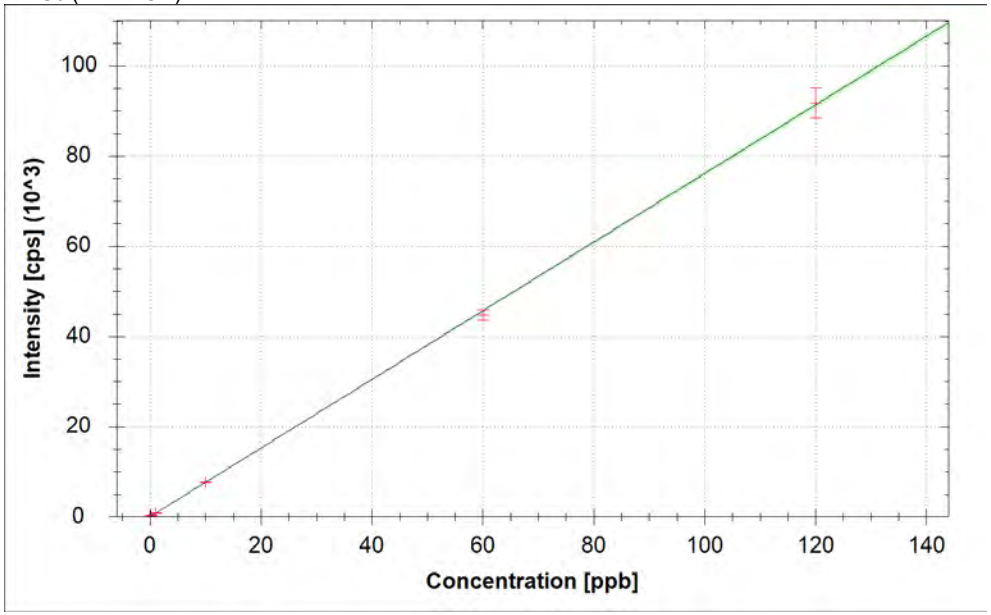
f(x) = 3147.3896*x + 26.6165
R² = 1.0000
BEC = 0.008 ppb
LoD = 0.0020 ppb

111Cd (KED AGD)



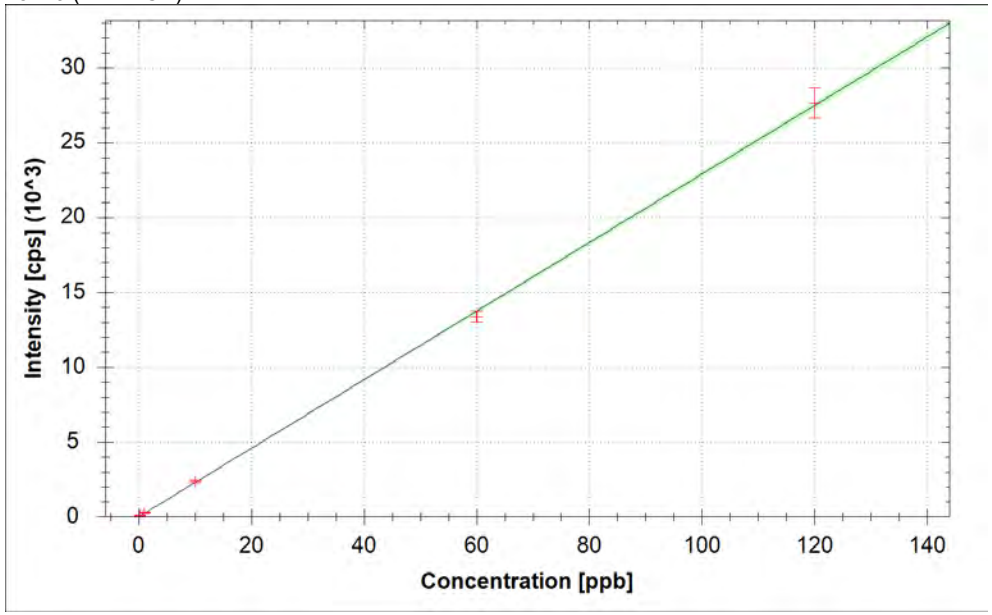
f(x) = 367.7090*x
R² = 1.0000
BEC = 0.000 ppb
LoD = 0.0000 ppb

121Sb (KED AGD)



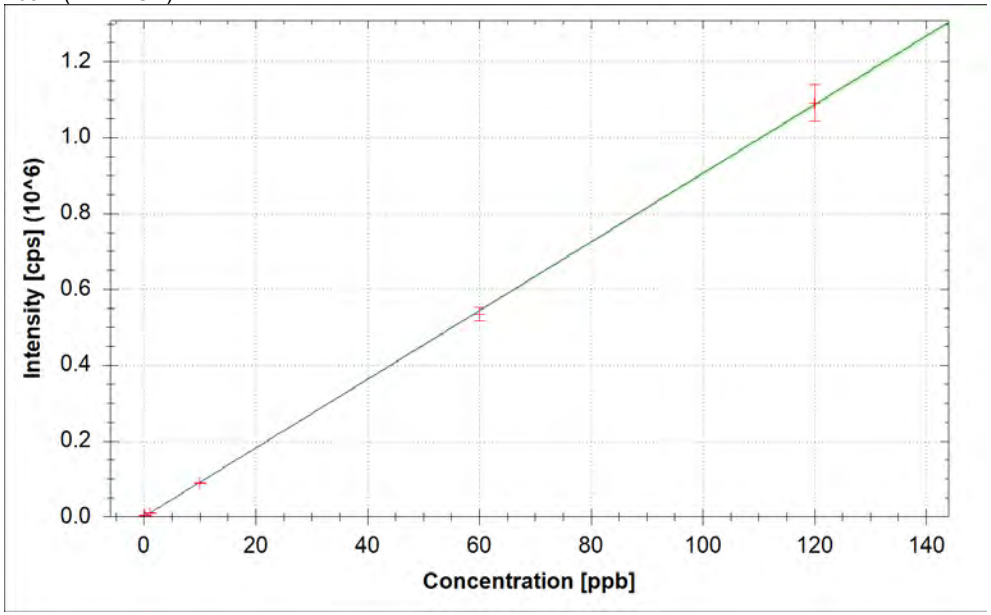
f(x) = 760.6175*x + 19.4937
R² = 0.9999
BEC = 0.026 ppb
LoD = 0.0264 ppb

137Ba (KED AGD)



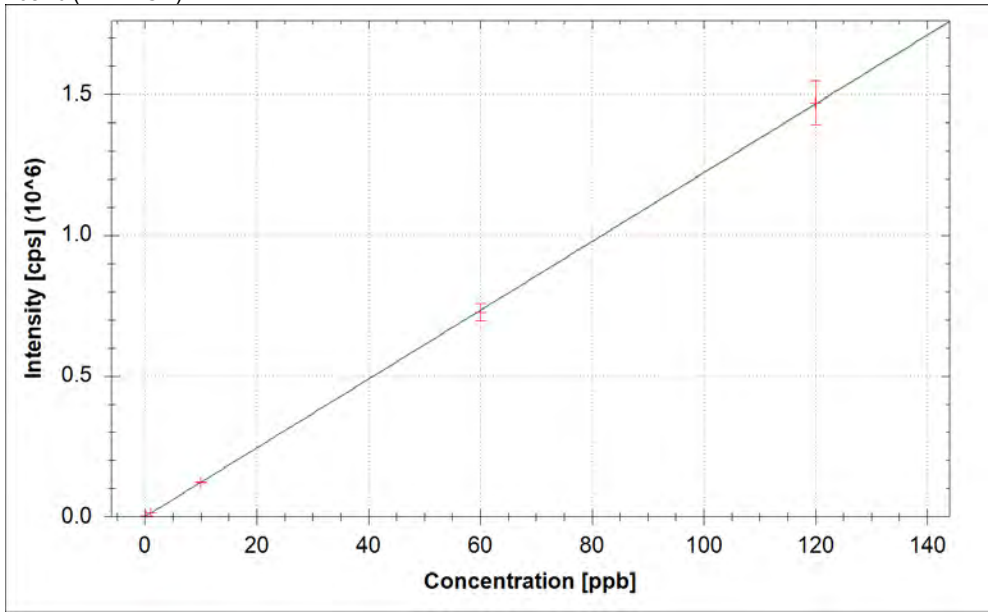
f(x) = 228.9826*x + 2.2049
R² = 0.9997
BEC = 0.010 ppb
LoD = 0.0251 ppb

205Tl (KED AGD)



f(x) = 9050.7602*x + 300.6795
R² = 0.9999
BEC = 0.033 ppb
LoD = 0.0459 ppb

208Pb (KED AGD)



f(x) = 12215.8504*x + 131.0963
R² = 1.0000
BEC = 0.011 ppb
LoD = 0.0044 ppb

Standards:

Analysis Index: 5
Analysis Name: 0.2/20 Cal
Analysis Type: STD
Analysis Started at: 12/3/2024 4:49:18 PM
Total Dilution Factor 50000
Rack 0
Vial 2

Category	Concentration average	Concentration RSD	Standard Concentration	Standard Relative Difference
6Li (STD AGD)	98.419 %	2.2 %		0.000 %
6Li (KED AGD)	94.567 %	4.1 %		0.000 %
9Be (STD AGD)	0.176 ppb	1.7 %	0.200 ppb	12.146 %
23Na (KED AGD)	18.478 ppb	121.9 %	20.000 ppb	7.611 %
24Mg (KED AGD)	18.621 ppb	15.3 %	20.000 ppb	6.893 %
27Al (KED AGD)	-0.008 ppb	6,052.1 %	0.200 ppb	104.182 %
39K (KED AGD)	25.466 ppb	7.6 %	20.000 ppb	27.328 %
44Ca (KED AGD)	20.115 ppb	63.6 %	20.000 ppb	0.574 %
45Sc (STD AGD)	101.418 %	1.4 %		0.000 %
45Sc (KED AGD)	97.687 %	3.7 %		0.000 %
51V (KED AGD)	0.177 ppb	19.8 %	0.200 ppb	11.446 %
52Cr (KED AGD)	0.140 ppb	41.8 %	0.200 ppb	29.969 %
55Mn (KED AGD)	0.171 ppb	68.3 %	0.200 ppb	14.380 %
57Fe (KED AGD)	20.519 ppb	16.9 %	20.000 ppb	2.593 %
59Co (KED AGD)	0.173 ppb	4.3 %	0.200 ppb	13.596 %
60Ni (KED AGD)	-1.488 ppb	0.5 %	0.200 ppb	844.168 %
65Cu (KED AGD)	0.145 ppb	63.0 %	0.200 ppb	27.462 %
66Zn (KED AGD)	-0.482 ppb	8.0 %	0.200 ppb	340.800 %
74Ge (KED AGD)	98.796 %	4.0 %		0.000 %
75As (KED AGD)	0.167 ppb	19.4 %	0.200 ppb	16.742 %
78Se (KED AGD)	0.199 ppb	37.1 %	0.200 ppb	0.546 %
88Sr (KED AGD)	0.196 ppb	12.5 %	0.200 ppb	2.188 %
95Mo (KED AGD)	0.189 ppb	10.0 %	0.200 ppb	5.571 %
103Rh (KED AGD)	100.960 %	5.2 %		0.000 %
107Ag (KED AGD)	0.185 ppb	3.4 %	0.200 ppb	7.426 %
111Cd (KED AGD)	0.215 ppb	16.5 %	0.200 ppb	7.456 %
115In (KED AGD)	100.818 %	3.9 %		0.000 %
121Sb (KED AGD)	0.204 ppb	18.4 %	0.200 ppb	2.009 %
137Ba (KED AGD)	0.233 ppb	4.8 %	0.200 ppb	16.361 %
159Tb (KED AGD)	99.580 %	4.5 %		0.000 %
175Lu (KED AGD)	98.277 %	3.3 %		0.000 %
205Tl (KED AGD)	0.188 ppb	7.8 %	0.200 ppb	5.865 %
208Pb (KED AGD)	0.193 ppb	7.8 %	0.200 ppb	3.365 %
209Bi (KED AGD)	99.075 %	3.3 %		0.000 %

Standards:

Analysis Index: 6
Analysis Name: 1/100 Cal
Analysis Type: STD
Analysis Started at: 12/3/2024 4:53:45 PM
Total Dilution Factor 10000
Rack 0
Vial 3

Category	Concentration average	Concentration RSD	Standard Concentration	Standard Relative Difference
6Li (STD AGD)	100.124 %	3.8 %		0.000 %
6Li (KED AGD)	92.546 %	1.1 %		0.000 %
9Be (STD AGD)	0.996 ppb	1.8 %	1.000 ppb	0.386 %
23Na (KED AGD)	99.455 ppb	20.0 %	100.000 ppb	0.545 %
24Mg (KED AGD)	108.082 ppb	6.4 %	100.000 ppb	8.082 %
27Al (KED AGD)	1.269 ppb	51.5 %	1.000 ppb	26.908 %
39K (KED AGD)	111.277 ppb	27.0 %	100.000 ppb	11.277 %
44Ca (KED AGD)	117.319 ppb	11.4 %	100.000 ppb	17.319 %
45Sc (STD AGD)	99.279 %	1.5 %		0.000 %
45Sc (KED AGD)	97.470 %	3.9 %		0.000 %
51V (KED AGD)	1.203 ppb	16.4 %	1.000 ppb	20.333 %
52Cr (KED AGD)	1.095 ppb	4.0 %	1.000 ppb	9.516 %
55Mn (KED AGD)	1.072 ppb	21.0 %	1.000 ppb	7.215 %
57Fe (KED AGD)	104.669 ppb	4.6 %	100.000 ppb	4.669 %
59Co (KED AGD)	1.087 ppb	9.6 %	1.000 ppb	8.721 %
60Ni (KED AGD)	-0.536 ppb	39.8 %	1.000 ppb	153.632 %
65Cu (KED AGD)	1.057 ppb	6.5 %	1.000 ppb	5.712 %
66Zn (KED AGD)	0.340 ppb	36.6 %	1.000 ppb	65.992 %
74Ge (KED AGD)	101.813 %	2.2 %		0.000 %
75As (KED AGD)	1.025 ppb	7.3 %	1.000 ppb	2.491 %
78Se (KED AGD)	1.157 ppb	22.0 %	1.000 ppb	15.716 %
88Sr (KED AGD)	0.988 ppb	3.9 %	1.000 ppb	1.234 %
95Mo (KED AGD)	0.889 ppb	10.0 %	1.000 ppb	11.068 %
103Rh (KED AGD)	98.978 %	4.3 %		0.000 %
107Ag (KED AGD)	0.990 ppb	1.1 %	1.000 ppb	1.037 %
111Cd (KED AGD)	1.095 ppb	5.4 %	1.000 ppb	9.466 %
115In (KED AGD)	101.178 %	5.2 %		0.000 %
121Sb (KED AGD)	1.023 ppb	6.2 %	1.000 ppb	2.346 %
137Ba (KED AGD)	1.103 ppb	11.0 %	1.000 ppb	10.309 %
159Tb (KED AGD)	96.594 %	4.2 %		0.000 %
175Lu (KED AGD)	96.516 %	2.4 %		0.000 %
205Tl (KED AGD)	1.005 ppb	7.1 %	1.000 ppb	0.462 %
208Pb (KED AGD)	1.036 ppb	4.1 %	1.000 ppb	3.647 %
209Bi (KED AGD)	97.997 %	3.5 %		0.000 %

Standards:

Analysis Index: 7
Analysis Name: 10/1000 Cal
Analysis Type: STD
Analysis Started at: 12/3/2024 4:58:13 PM
Total Dilution Factor 1000
Rack 0
Vial 4

Category	Concentration average	Concentration RSD	Standard Concentration	Standard Relative Difference
6Li (STD AGD)	97.631 %	2.8 %		0.000 %
6Li (KED AGD)	90.660 %	5.8 %		0.000 %
9Be (STD AGD)	9.940 ppb	0.3 %	10.000 ppb	0.600 %
23Na (KED AGD)	1,058.439 ppb	8.3 %	1,000.000 ppb	5.844 %
24Mg (KED AGD)	1,091.829 ppb	6.5 %	1,000.000 ppb	9.183 %
27Al (KED AGD)	11.314 ppb	9.3 %	10.000 ppb	13.141 %
39K (KED AGD)	1,034.867 ppb	4.7 %	1,000.000 ppb	3.487 %
44Ca (KED AGD)	1,034.207 ppb	9.0 %	1,000.000 ppb	3.421 %
45Sc (STD AGD)	93.570 %	2.7 %		0.000 %
45Sc (KED AGD)	98.173 %	4.4 %		0.000 %
51V (KED AGD)	10.294 ppb	1.2 %	10.000 ppb	2.945 %
52Cr (KED AGD)	10.245 ppb	2.9 %	10.000 ppb	2.448 %
55Mn (KED AGD)	10.114 ppb	5.1 %	10.000 ppb	1.135 %
57Fe (KED AGD)	1,061.894 ppb	2.0 %	1,000.000 ppb	6.189 %
59Co (KED AGD)	10.448 ppb	4.7 %	10.000 ppb	4.481 %
60Ni (KED AGD)	8.836 ppb	9.0 %	10.000 ppb	11.645 %
65Cu (KED AGD)	9.778 ppb	3.5 %	10.000 ppb	2.217 %
66Zn (KED AGD)	9.385 ppb	6.2 %	10.000 ppb	6.146 %
74Ge (KED AGD)	98.452 %	7.5 %		0.000 %
75As (KED AGD)	9.230 ppb	8.5 %	10.000 ppb	7.705 %
78Se (KED AGD)	9.266 ppb	12.2 %	10.000 ppb	7.345 %
88Sr (KED AGD)	9.813 ppb	2.6 %	10.000 ppb	1.871 %
95Mo (KED AGD)	9.811 ppb	2.1 %	10.000 ppb	1.890 %
103Rh (KED AGD)	98.605 %	3.6 %		0.000 %
107Ag (KED AGD)	10.051 ppb	4.8 %	10.000 ppb	0.513 %
111Cd (KED AGD)	9.849 ppb	0.5 %	10.000 ppb	1.513 %
115In (KED AGD)	99.181 %	3.9 %		0.000 %
121Sb (KED AGD)	10.000 ppb	1.3 %	10.000 ppb	0.003 %
137Ba (KED AGD)	10.230 ppb	3.5 %	10.000 ppb	2.303 %
159Tb (KED AGD)	98.239 %	3.1 %		0.000 %
175Lu (KED AGD)	97.489 %	0.9 %		0.000 %
205Tl (KED AGD)	9.754 ppb	1.8 %	10.000 ppb	2.455 %
208Pb (KED AGD)	10.002 ppb	1.1 %	10.000 ppb	0.021 %
209Bi (KED AGD)	97.362 %	1.6 %		0.000 %

Standards:

Analysis Index: 8
Analysis Name: 60/6000 Cal
Analysis Type: STD
Analysis Started at: 12/3/2024 5:02:41 PM
Total Dilution Factor 166.6666666
Rack 0
Vial 5

Category	Concentration average	Concentration RSD	Standard Concentration	Standard Relative Difference
6Li (STD AGD)	96.013 %	3.6 %		0.000 %
6Li (KED AGD)	95.061 %	4.3 %		0.000 %
9Be (STD AGD)	58.554 ppb	2.8 %	60.000 ppb	2.410 %
23Na (KED AGD)	6,005.320 ppb	2.1 %	6,000.000 ppb	0.089 %
24Mg (KED AGD)	6,034.429 ppb	1.6 %	6,000.000 ppb	0.574 %
27Al (KED AGD)	59.441 ppb	2.5 %	60.000 ppb	0.931 %
39K (KED AGD)	6,062.228 ppb	1.8 %	6,000.000 ppb	1.037 %
44Ca (KED AGD)	6,074.939 ppb	1.1 %	6,000.000 ppb	1.249 %
45Sc (STD AGD)	97.718 %	2.0 %		0.000 %
45Sc (KED AGD)	101.265 %	3.0 %		0.000 %
51V (KED AGD)	59.762 ppb	5.3 %	60.000 ppb	0.396 %
52Cr (KED AGD)	60.323 ppb	2.4 %	60.000 ppb	0.538 %
55Mn (KED AGD)	60.381 ppb	2.1 %	60.000 ppb	0.635 %
57Fe (KED AGD)	5,989.605 ppb	2.3 %	6,000.000 ppb	0.173 %
59Co (KED AGD)	58.274 ppb	3.8 %	60.000 ppb	2.877 %
60Ni (KED AGD)	58.001 ppb	2.5 %	60.000 ppb	3.332 %
65Cu (KED AGD)	58.205 ppb	3.6 %	60.000 ppb	2.992 %
66Zn (KED AGD)	56.077 ppb	2.9 %	60.000 ppb	6.538 %
74Ge (KED AGD)	100.281 %	3.5 %		0.000 %
75As (KED AGD)	55.823 ppb	4.1 %	60.000 ppb	6.961 %
78Se (KED AGD)	55.388 ppb	5.6 %	60.000 ppb	7.687 %
88Sr (KED AGD)	58.855 ppb	2.0 %	60.000 ppb	1.909 %
95Mo (KED AGD)	58.169 ppb	2.7 %	60.000 ppb	3.052 %
103Rh (KED AGD)	96.992 %	2.5 %		0.000 %
107Ag (KED AGD)	60.503 ppb	3.0 %	60.000 ppb	0.838 %
111Cd (KED AGD)	60.017 ppb	2.3 %	60.000 ppb	0.028 %
115In (KED AGD)	99.751 %	0.7 %		0.000 %
121Sb (KED AGD)	58.821 ppb	2.6 %	60.000 ppb	1.966 %
137Ba (KED AGD)	58.408 ppb	2.8 %	60.000 ppb	2.654 %
159Tb (KED AGD)	98.218 %	4.0 %		0.000 %
175Lu (KED AGD)	96.870 %	3.5 %		0.000 %
205Tl (KED AGD)	58.984 ppb	3.3 %	60.000 ppb	1.694 %
208Pb (KED AGD)	59.395 ppb	4.2 %	60.000 ppb	1.009 %
209Bi (KED AGD)	98.173 %	3.3 %		0.000 %

Standards:

Analysis Index: 9
Analysis Name: 120/12000 Cal
Analysis Type: STD
Analysis Started at: 12/3/2024 5:07:10 PM
Total Dilution Factor 83.33333333
Rack 0
Vial 6

Category	Concentration average	Concentration RSD	Standard Concentration	Standard Relative Difference
6Li (STD AGD)	97.099 %	2.7 %		0.000 %
6Li (KED AGD)	95.599 %	4.7 %		0.000 %
9Be (STD AGD)	120.728 ppb	0.5 %	120.000 ppb	0.607 %
23Na (KED AGD)	11,992.477 ppb	4.3 %	12,000.000 ppb	0.063 %
24Mg (KED AGD)	11,975.068 ppb	3.3 %	12,000.000 ppb	0.208 %
27Al (KED AGD)	120.168 ppb	8.0 %	120.000 ppb	0.140 %
39K (KED AGD)	11,965.877 ppb	7.8 %	12,000.000 ppb	0.284 %
44Ca (KED AGD)	11,959.535 ppb	4.7 %	12,000.000 ppb	0.337 %
45Sc (STD AGD)	96.903 %	0.9 %		0.000 %
45Sc (KED AGD)	105.941 %	5.4 %		0.000 %
51V (KED AGD)	120.093 ppb	7.3 %	120.000 ppb	0.077 %
52Cr (KED AGD)	119.818 ppb	6.1 %	120.000 ppb	0.152 %
55Mn (KED AGD)	119.799 ppb	5.7 %	120.000 ppb	0.167 %
57Fe (KED AGD)	12,425.877 ppb	3.5 %	12,000.000 ppb	3.549 %
59Co (KED AGD)	120.825 ppb	3.9 %	120.000 ppb	0.688 %
60Ni (KED AGD)	121.112 ppb	4.2 %	120.000 ppb	0.927 %
65Cu (KED AGD)	120.916 ppb	2.9 %	120.000 ppb	0.763 %
66Zn (KED AGD)	122.019 ppb	2.9 %	120.000 ppb	1.683 %
74Ge (KED AGD)	92.871 %	1.1 %		0.000 %
75As (KED AGD)	122.152 ppb	2.6 %	120.000 ppb	1.794 %
78Se (KED AGD)	122.366 ppb	2.6 %	120.000 ppb	1.972 %
88Sr (KED AGD)	120.588 ppb	2.8 %	120.000 ppb	0.490 %
95Mo (KED AGD)	120.932 ppb	6.6 %	120.000 ppb	0.777 %
103Rh (KED AGD)	99.231 %	4.6 %		0.000 %
107Ag (KED AGD)	119.744 ppb	3.4 %	120.000 ppb	0.213 %
111Cd (KED AGD)	120.003 ppb	3.3 %	120.000 ppb	0.003 %
115In (KED AGD)	101.722 %	2.5 %		0.000 %
121Sb (KED AGD)	120.590 ppb	3.6 %	120.000 ppb	0.491 %
137Ba (KED AGD)	120.776 ppb	3.6 %	120.000 ppb	0.647 %
159Tb (KED AGD)	100.614 %	5.6 %		0.000 %
175Lu (KED AGD)	99.862 %	6.5 %		0.000 %
205Tl (KED AGD)	120.529 ppb	4.5 %	120.000 ppb	0.441 %
208Pb (KED AGD)	120.302 ppb	5.3 %	120.000 ppb	0.252 %
209Bi (KED AGD)	99.944 %	4.3 %		0.000 %

Alpha ICPMSQ2 Data with SRD

12/4/2024 10:02:58 AM

Analysis index: 1 User name ALPHALAB\a2-icpmsq2 Comment <Comment>
Analysis label: Rinse Rack 0
Analysis started at: 12/3/2024 4:34:10 PM Vial 1

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	100.339 %	101.168 %	0.051 ppb	34.297 ppb	4.420 ppb	8.390 ppb	-3.783 ppb	11.121 ppb	99.586 %
Concentration per Run 1	99.207 %	102.784 %	0.033 ppb	7.661 ppb	4.077 ppb	8.090 ppb	-4.522 ppb	-0.269 ppb	100.684 %
Concentration per Run 2	100.599 %	102.515 %	0.026 ppb	41.238 ppb	4.838 ppb	8.646 ppb	-13.252 ppb	11.149 ppb	101.623 %
Concentration per Run 3	101.210 %	98.204 %	0.094 ppb	53.992 ppb	4.346 ppb	8.433 ppb	6.425 ppb	22.482 ppb	96.452 %
Concentration RSD	1.0 %	2.5 %	74.0 %	69.8 %	8.7 %	3.3 %	260.6 %	102.3 %	2.8 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	98.147 %	0.072 ppb	0.109 ppb	0.341 ppb	59.429 ppb	0.013 ppb	1.009 ppb	0.390 ppb	1.506 ppb
Concentration per Run 1	101.316 %	0.070 ppb	0.110 ppb	0.447 ppb	63.112 ppb	0.006 ppb	0.870 ppb	0.350 ppb	1.375 ppb
Concentration per Run 2	96.065 %	0.115 ppb	0.116 ppb	0.445 ppb	59.379 ppb	0.010 ppb	0.773 ppb	0.372 ppb	1.692 ppb
Concentration per Run 3	97.061 %	0.030 ppb	0.103 ppb	0.131 ppb	55.795 ppb	0.023 ppb	1.385 ppb	0.447 ppb	1.452 ppb
Concentration RSD	2.8 %	59.8 %	6.0 %	53.2 %	6.2 %	65.7 %	32.6 %	13.0 %	11.0 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	102.273 %	-0.022 ppb	0.102 ppb	0.012 ppb	0.123 ppb	102.719 %	0.026 ppb	0.001 ppb	105.206 %
Concentration per Run 1	103.642 %	-0.013 ppb	0.061 ppb	0.021 ppb	0.067 ppb	108.147 %	0.027 ppb	0.000 ppb	109.422 %
Concentration per Run 2	99.664 %	-0.072 ppb	0.116 ppb	0.002 ppb	0.098 ppb	98.700 %	0.023 ppb	0.000 ppb	100.929 %
Concentration per Run 3	103.512 %	0.019 ppb	0.128 ppb	0.014 ppb	0.204 ppb	101.310 %	0.028 ppb	0.003 ppb	105.269 %
Concentration RSD	2.2 %	209.8 %	35.3 %	79.4 %	58.5 %	4.7 %	8.4 %	173.2 %	4.0 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.044 ppb	0.037 ppb	101.720 %	101.395 %	0.044 ppb	0.084 ppb	102.835 %
Concentration per Run 1	0.024 ppb	0.057 ppb	108.876 %	108.206 %	0.018 ppb	0.080 ppb	106.003 %
Concentration per Run 2	0.065 ppb	0.005 ppb	98.183 %	96.246 %	0.055 ppb	0.084 ppb	101.707 %
Concentration per Run 3	0.043 ppb	0.048 ppb	98.102 %	99.734 %	0.059 ppb	0.089 ppb	100.793 %
Concentration RSD	46.4 %	75.9 %	6.1 %	6.1 %	51.8 %	5.4 %	2.7 %

Alpha ICPMSQ2 Data with SRD

12/4/2024 10:02:58 AM

Analysis index:	2	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	zCAL LOT #M23-1225	Rack	0		
Analysis started at:	12/3/2024 4:38:36 PM	Vial	1		

Alpha ICPMSQ2 Data with SRD

12/4/2024 10:02:58 AM

Analysis index: 3
Analysis label: CAL LOT #M23-1225
Analysis started at: 12/3/2024 4:40:22 PM
User name ALPHALAB\a2-icpmsq2
Rack 0
Vial 1
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	97.007 %	97.171 %	0.025 ppb	42.526 ppb	5.647 ppb	7.571 ppb	9.219 ppb	9.194 ppb	97.320 %
Concentration per Run 1	95.151 %	102.515 %	0.032 ppb	20.696 ppb	6.794 ppb	7.577 ppb	11.130 ppb	6.497 ppb	94.235 %
Concentration per Run 2	98.077 %	90.660 %	0.017 ppb	66.005 ppb	4.102 ppb	7.311 ppb	6.872 ppb	14.344 ppb	96.749 %
Concentration per Run 3	97.792 %	98.339 %	0.026 ppb	40.876 ppb	6.047 ppb	7.824 ppb	9.655 ppb	6.740 ppb	100.976 %
Concentration RSD	1.7 %	6.2 %	30.5 %	53.4 %	24.6 %	3.4 %	23.5 %	48.5 %	3.5 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	102.978 %	0.042 ppb	0.129 ppb	0.253 ppb	61.742 ppb	0.020 ppb	0.873 ppb	0.378 ppb	1.336 ppb
Concentration per Run 1	107.949 %	0.014 ppb	0.132 ppb	0.298 ppb	67.254 ppb	0.015 ppb	0.852 ppb	0.357 ppb	1.410 ppb
Concentration per Run 2	99.860 %	0.042 ppb	0.097 ppb	0.244 ppb	58.448 ppb	0.016 ppb	1.115 ppb	0.405 ppb	1.387 ppb
Concentration per Run 3	101.124 %	0.070 ppb	0.158 ppb	0.217 ppb	59.523 ppb	0.028 ppb	0.653 ppb	0.372 ppb	1.212 ppb
Concentration RSD	4.2 %	66.1 %	23.5 %	16.2 %	7.8 %	36.3 %	26.6 %	6.5 %	8.1 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	103.450 %	0.018 ppb	0.055 ppb	0.008 ppb	0.077 ppb	99.472 %	0.028 ppb	0.005 ppb	102.386 %
Concentration per Run 1	103.006 %	-0.041 ppb	-0.036 ppb	0.011 ppb	0.014 ppb	102.619 %	0.019 ppb	0.003 ppb	105.762 %
Concentration per Run 2	101.329 %	0.018 ppb	0.209 ppb	-0.002 ppb	0.036 ppb	97.798 %	0.035 ppb	0.004 ppb	100.194 %
Concentration per Run 3	106.014 %	0.079 ppb	-0.009 ppb	0.013 ppb	0.183 ppb	97.999 %	0.030 ppb	0.007 ppb	101.203 %
Concentration RSD	2.3 %	323.3 %	245.3 %	106.4 %	118.9 %	2.7 %	28.4 %	44.5 %	2.9 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.038 ppb	0.082 ppb	99.078 %	99.203 %	0.013 ppb	0.091 ppb	99.270 %
Concentration per Run 1	0.018 ppb	0.103 ppb	100.913 %	99.097 %	-0.008 ppb	0.088 ppb	102.305 %
Concentration per Run 2	0.031 ppb	0.080 ppb	95.412 %	98.752 %	0.018 ppb	0.095 ppb	95.688 %
Concentration per Run 3	0.066 ppb	0.062 ppb	100.909 %	99.760 %	0.031 ppb	0.089 ppb	99.817 %
Concentration RSD	65.6 %	25.0 %	3.2 %	0.5 %	145.5 %	4.4 %	3.4 %

Alpha ICPMSQ2 Data with SRD

12/4/2024 10:02:58 AM

Analysis index:	4	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	Blank MRC ICPMSQ2	Rack	4		
Analysis started at:	12/3/2024 4:44:47 PM	Vial	49		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	100.000 %	100.000 %	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	100.000 %
Concentration per Run	100.000 %	100.000 %	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	100.000 %
Concentration RSD	0.0 %	0.1 %	0.2 %	0.1 %	0.5 %	0.2 %	0.0 %	0.3 %	0.0 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	100.000 %	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb
Concentration per Run	100.000 %	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb
Concentration RSD	0.1 %	0.0 %	0.1 %	0.5 %	0.2 %	1.0 %	0.1 %	0.5 %	0.1 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	100.000 %	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	100.000 %	0.000 ppb	0.000 ppb	100.000 %
Concentration per Run	100.000 %	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	100.000 %	0.000 ppb	0.000 ppb	100.000 %
Concentration RSD	0.0 %	0.1 %	1.5 %	0.0 %	0.5 %	0.1 %	0.1 %		0.0 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.000 ppb	0.000 ppb	100.000 %	100.000 %	0.000 ppb	0.000 ppb	100.000 %
Concentration per Run	0.000 ppb	0.000 ppb	100.000 %	100.000 %	0.000 ppb	0.000 ppb	100.000 %
Concentration RSD	0.3 %	0.9 %	0.1 %	0.1 %	0.5 %	0.1 %	0.0 %

Alpha ICPMSQ2 Data with SRD

12/4/2024 10:02:58 AM

Analysis index:	5	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	0.2/20 Cal	Rack	0		
Analysis started at:	12/3/2024 4:49:18 PM	Vial	2		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	98.419 %	94.567 %	0.176 ppb	18.478 ppb	18.621 ppb	-0.008 ppb	25.466 ppb	20.115 ppb	101.418 %
Concentration per Run 1	96.022 %	97.396 %	0.179 ppb	-7.232 ppb	16.664 ppb	-0.436 ppb	27.178 ppb	5.339 ppb	102.807 %
Concentration per Run 2	99.171 %	96.183 %	0.175 ppb	27.967 ppb	21.885 ppb	0.551 ppb	23.369 ppb	27.409 ppb	101.385 %
Concentration per Run 3	100.065 %	90.121 %	0.173 ppb	34.699 ppb	17.315 ppb	-0.140 ppb	25.850 ppb	27.596 ppb	100.061 %
Concentration RSD	2.2 %	4.1 %	1.7 %	121.9 %	15.3 %	6,052.1 %	7.6 %	63.6 %	1.4 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	97.687 %	0.177 ppb	0.140 ppb	0.171 ppb	20.519 ppb	0.173 ppb	-1.488 ppb	0.145 ppb	-0.482 ppb
Concentration per Run 1	101.200 %	0.181 ppb	0.075 ppb	0.042 ppb	22.434 ppb	0.177 ppb	-1.493 ppb	0.183 ppb	-0.457 ppb
Concentration per Run 2	94.033 %	0.140 ppb	0.156 ppb	0.201 ppb	22.615 ppb	0.178 ppb	-1.480 ppb	0.041 ppb	-0.461 ppb
Concentration per Run 3	97.828 %	0.210 ppb	0.189 ppb	0.271 ppb	16.507 ppb	0.164 ppb	-1.492 ppb	0.211 ppb	-0.526 ppb
Concentration RSD	3.7 %	19.8 %	41.8 %	68.3 %	16.9 %	4.3 %	0.5 %	63.0 %	8.0 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	98.796 %	0.167 ppb	0.199 ppb	0.196 ppb	0.189 ppb	100.960 %	0.185 ppb	0.215 ppb	100.818 %
Concentration per Run 1	102.921 %	0.164 ppb	0.263 ppb	0.167 ppb	0.168 ppb	107.008 %	0.181 ppb	0.250 ppb	105.272 %
Concentration per Run 2	94.943 %	0.136 ppb	0.216 ppb	0.211 ppb	0.193 ppb	97.476 %	0.192 ppb	0.215 ppb	97.766 %
Concentration per Run 3	98.523 %	0.200 ppb	0.118 ppb	0.209 ppb	0.206 ppb	98.397 %	0.182 ppb	0.179 ppb	99.417 %
Concentration RSD	4.0 %	19.4 %	37.1 %	12.5 %	10.0 %	5.2 %	3.4 %	16.5 %	3.9 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.204 ppb	0.233 ppb	99.580 %	98.277 %	0.188 ppb	0.193 ppb	99.075 %
Concentration per Run 1	0.169 ppb	0.226 ppb	104.616 %	101.394 %	0.174 ppb	0.179 ppb	102.691 %
Concentration per Run 2	0.244 ppb	0.246 ppb	96.048 %	94.949 %	0.204 ppb	0.192 ppb	98.356 %
Concentration per Run 3	0.199 ppb	0.226 ppb	98.076 %	98.487 %	0.187 ppb	0.209 ppb	96.178 %
Concentration RSD	18.4 %	4.8 %	4.5 %	3.3 %	7.8 %	7.8 %	3.3 %

Alpha ICPMSQ2 Data with SRD

12/4/2024 10:02:58 AM

Analysis index:	6	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	1/100 Cal	Rack	0		
Analysis started at:	12/3/2024 4:53:45 PM	Vial	3		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	100.124 %	92.546 %	0.996 ppb	99.455 ppb	108.082 ppb	1.269 ppb	111.277 ppb	117.319 ppb	99.279 %
Concentration per Run 1	95.951 %	93.219 %	1.015 ppb	77.027 ppb	108.233 ppb	1.534 ppb	78.130 ppb	131.965 ppb	98.632 %
Concentration per Run 2	101.160 %	93.085 %	0.996 ppb	106.478 ppb	114.939 ppb	0.525 ppb	136.855 ppb	105.697 ppb	100.968 %
Concentration per Run 3	103.260 %	91.333 %	0.978 ppb	114.860 ppb	101.075 ppb	1.749 ppb	118.847 ppb	114.296 ppb	98.236 %
Concentration RSD	3.8 %	1.1 %	1.8 %	20.0 %	6.4 %	51.5 %	27.0 %	11.4 %	1.5 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	97.470 %	1.203 ppb	1.095 ppb	1.072 ppb	104.669 ppb	1.087 ppb	-0.536 ppb	1.057 ppb	0.340 ppb
Concentration per Run 1	101.699 %	1.024 ppb	1.049 ppb	1.010 ppb	99.188 ppb	1.032 ppb	-0.570 ppb	0.978 ppb	0.201 ppb
Concentration per Run 2	94.263 %	1.171 ppb	1.098 ppb	1.321 ppb	107.858 ppb	1.208 ppb	-0.308 ppb	1.085 ppb	0.377 ppb
Concentration per Run 3	96.448 %	1.416 ppb	1.138 ppb	0.885 ppb	106.960 ppb	1.021 ppb	-0.731 ppb	1.108 ppb	0.442 ppb
Concentration RSD	3.9 %	16.4 %	4.0 %	21.0 %	4.6 %	9.6 %	39.8 %	6.5 %	36.6 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	101.813 %	1.025 ppb	1.157 ppb	0.988 ppb	0.889 ppb	98.978 %	0.990 ppb	1.095 ppb	101.178 %
Concentration per Run 1	104.150 %	1.014 ppb	0.933 ppb	0.951 ppb	0.875 ppb	103.879 %	0.979 ppb	1.114 ppb	107.246 %
Concentration per Run 2	101.585 %	0.957 ppb	1.105 ppb	0.983 ppb	0.984 ppb	95.841 %	0.989 ppb	1.142 ppb	97.865 %
Concentration per Run 3	99.704 %	1.104 ppb	1.433 ppb	1.029 ppb	0.809 ppb	97.215 %	1.001 ppb	1.028 ppb	98.423 %
Concentration RSD	2.2 %	7.3 %	22.0 %	3.9 %	10.0 %	4.3 %	1.1 %	5.4 %	5.2 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	1.023 ppb	1.103 ppb	96.594 %	96.516 %	1.005 ppb	1.036 ppb	97.997 %
Concentration per Run 1	0.976 ppb	0.968 ppb	101.299 %	99.091 %	0.924 ppb	0.993 ppb	101.875 %
Concentration per Run 2	0.999 ppb	1.203 ppb	94.210 %	95.706 %	1.031 ppb	1.039 ppb	96.774 %
Concentration per Run 3	1.096 ppb	1.139 ppb	94.273 %	94.752 %	1.059 ppb	1.078 ppb	95.341 %
Concentration RSD	6.2 %	11.0 %	4.2 %	2.4 %	7.1 %	4.1 %	3.5 %

Alpha ICPMSQ2 Data with SRD

12/4/2024 10:02:58 AM



Analysis index:	7	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	10/1000 Cal	Rack	0		
Analysis started at:	12/3/2024 4:58:13 PM	Vial	4		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	97.631 %	90.660 %	9.940 ppb	1,058.439 ppb	1,091.829 ppb	11.314 ppb	1,034.867 ppb	1,034.207 ppb	93.570 %
Concentration per Run 1	94.659 %	95.914 %	9.912 ppb	969.935 ppb	1,019.057 ppb	10.842 ppb	988.409 ppb	972.626 ppb	91.186 %
Concentration per Run 2	99.914 %	90.660 %	9.976 ppb	1,060.568 ppb	1,094.551 ppb	10.580 ppb	1,030.360 ppb	989.077 ppb	93.354 %
Concentration per Run 3	98.320 %	85.406 %	9.931 ppb	1,144.813 ppb	1,161.877 ppb	12.521 ppb	1,085.832 ppb	1,140.919 ppb	96.170 %
Concentration RSD	2.8 %	5.8 %	0.3 %	8.3 %	6.5 %	9.3 %	4.7 %	9.0 %	2.7 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	98.173 %	10.294 ppb	10.245 ppb	10.114 ppb	1,061.894 ppb	10.448 ppb	8.836 ppb	9.778 ppb	9.385 ppb
Concentration per Run 1	102.964 %	10.393 ppb	10.114 ppb	10.298 ppb	1,047.400 ppb	10.532 ppb	8.619 ppb	9.951 ppb	9.390 ppb
Concentration per Run 2	94.454 %	10.328 ppb	10.588 ppb	10.510 ppb	1,086.839 ppb	10.894 ppb	9.720 ppb	10.000 ppb	9.967 ppb
Concentration per Run 3	97.100 %	10.162 ppb	10.032 ppb	9.532 ppb	1,051.443 ppb	9.919 ppb	8.168 ppb	9.384 ppb	8.799 ppb
Concentration RSD	4.4 %	1.2 %	2.9 %	5.1 %	2.0 %	4.7 %	9.0 %	3.5 %	6.2 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	98.452 %	9.230 ppb	9.266 ppb	9.813 ppb	9.811 ppb	98.605 %	10.051 ppb	9.849 ppb	99.181 %
Concentration per Run 1	93.728 %	9.757 ppb	10.545 ppb	9.828 ppb	9.956 ppb	102.674 %	9.495 ppb	9.800 ppb	103.304 %
Concentration per Run 2	94.719 %	9.601 ppb	8.842 ppb	10.061 ppb	9.906 ppb	97.274 %	10.270 ppb	9.849 ppb	95.741 %
Concentration per Run 3	106.908 %	8.330 ppb	8.409 ppb	9.550 ppb	9.571 ppb	95.867 %	10.388 ppb	9.897 ppb	98.497 %
Concentration RSD	7.5 %	8.5 %	12.2 %	2.6 %	2.1 %	3.6 %	4.8 %	0.5 %	3.9 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	10.000 ppb	10.230 ppb	98.239 %	97.489 %	9.754 ppb	10.002 ppb	97.362 %
Concentration per Run 1	9.852 ppb	10.060 ppb	101.717 %	98.443 %	9.565 ppb	9.873 ppb	98.508 %
Concentration per Run 2	10.095 ppb	10.640 ppb	97.009 %	96.672 %	9.799 ppb	10.091 ppb	95.545 %
Concentration per Run 3	10.052 ppb	9.991 ppb	95.991 %	97.351 %	9.899 ppb	10.043 ppb	98.034 %
Concentration RSD	1.3 %	3.5 %	3.1 %	0.9 %	1.8 %	1.1 %	1.6 %

Alpha ICPMSQ2 Data with SRD

12/4/2024 10:02:58 AM

Analysis index:	8	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	60/6000 Cal	Rack	0		
Analysis started at:	12/3/2024 5:02:41 PM	Vial	5		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	96.013 %	95.061 %	58.554 ppb	6,005.320 ppb	6,034.429 ppb	59.441 ppb	6,062.228 ppb	6,074.939 ppb	97.718 %
Concentration per Run 1	92.234 %	99.416 %	60.180 ppb	5,887.676 ppb	5,953.117 ppb	59.106 ppb	6,003.989 ppb	6,119.539 ppb	95.794 %
Concentration per Run 2	96.750 %	91.199 %	58.608 ppb	6,136.896 ppb	6,142.530 ppb	58.168 ppb	6,191.490 ppb	6,107.324 ppb	97.672 %
Concentration per Run 3	99.055 %	94.567 %	56.874 ppb	5,991.389 ppb	6,007.640 ppb	61.050 ppb	5,991.206 ppb	5,997.954 ppb	99.687 %
Concentration RSD	3.6 %	4.3 %	2.8 %	2.1 %	1.6 %	2.5 %	1.8 %	1.1 %	2.0 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	101.265 %	59.762 ppb	60.323 ppb	60.381 ppb	5,989.605 ppb	58.274 ppb	58.001 ppb	58.205 ppb	56.077 ppb
Concentration per Run 1	99.016 %	57.097 ppb	59.757 ppb	61.237 ppb	6,032.941 ppb	58.901 ppb	58.708 ppb	58.834 ppb	57.245 ppb
Concentration per Run 2	100.089 %	63.297 ppb	61.987 ppb	61.016 ppb	6,100.422 ppb	60.090 ppb	58.977 ppb	59.933 ppb	56.775 ppb
Concentration per Run 3	104.689 %	58.892 ppb	59.225 ppb	58.890 ppb	5,835.451 ppb	55.830 ppb	56.317 ppb	55.847 ppb	54.210 ppb
Concentration RSD	3.0 %	5.3 %	2.4 %	2.1 %	2.3 %	3.8 %	2.5 %	3.6 %	2.9 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	100.281 %	55.823 ppb	55.388 ppb	58.855 ppb	58.169 ppb	96.992 %	60.503 ppb	60.017 ppb	99.751 %
Concentration per Run 1	100.538 %	55.078 ppb	57.105 ppb	57.998 ppb	56.421 ppb	99.788 %	58.527 ppb	58.544 ppb	99.675 %
Concentration per Run 2	96.629 %	58.365 ppb	57.228 ppb	60.227 ppb	58.642 ppb	95.352 %	62.148 ppb	60.305 ppb	99.143 %
Concentration per Run 3	103.677 %	54.028 ppb	51.831 ppb	58.338 ppb	59.443 ppb	95.836 %	60.834 ppb	61.202 ppb	100.435 %
Concentration RSD	3.5 %	4.1 %	5.6 %	2.0 %	2.7 %	2.5 %	3.0 %	2.3 %	0.7 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	58.821 ppb	58.408 ppb	98.218 %	96.870 %	58.984 ppb	59.395 ppb	98.173 %
Concentration per Run 1	57.681 ppb	58.532 ppb	102.703 %	100.016 %	56.719 ppb	56.551 ppb	101.829 %
Concentration per Run 2	60.567 ppb	59.970 ppb	95.219 %	93.353 %	60.268 ppb	61.231 ppb	95.833 %
Concentration per Run 3	58.213 ppb	56.722 ppb	96.734 %	97.240 %	59.964 ppb	60.402 ppb	96.856 %
Concentration RSD	2.6 %	2.8 %	4.0 %	3.5 %	3.3 %	4.2 %	3.3 %

Alpha ICPMSQ2 Data with SRD

12/4/2024 10:02:58 AM

Analysis index: 9
Analysis label: 120/12000 Cal
Analysis started at: 12/3/2024 5:07:10 PM
User name ALPHALAB\a2-icpmsq2
Rack 0
Vial 6
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	97.099 %	95.599 %	120.728 ppb	11,992.477 ppb	11,975.068 ppb	120.168 ppb	11,965.877 ppb	11,959.535 ppb	96.903 %
Concentration per Run 1	94.268 %	99.686 %	120.133 ppb	11,436.571 ppb	11,520.439 ppb	109.869 ppb	11,109.553 ppb	11,494.288 ppb	97.085 %
Concentration per Run 2	97.578 %	96.318 %	120.800 ppb	12,073.323 ppb	12,266.645 ppb	129.011 ppb	12,962.794 ppb	12,592.215 ppb	95.952 %
Concentration per Run 3	99.451 %	90.795 %	121.251 ppb	12,467.537 ppb	12,138.121 ppb	121.624 ppb	11,825.284 ppb	11,792.103 ppb	97.673 %
Concentration RSD	2.7 %	4.7 %	0.5 %	4.3 %	3.3 %	8.0 %	7.8 %	4.7 %	0.9 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	105.941 %	120.093 ppb	119.818 ppb	119.799 ppb	12,425.877 ppb	120.825 ppb	121.112 ppb	120.916 ppb	122.019 ppb
Concentration per Run 1	109.558 %	110.935 ppb	112.834 ppb	114.014 ppb	11,957.956 ppb	115.681 ppb	116.840 ppb	117.197 ppb	118.078 ppb
Concentration per Run 2	99.322 %	128.459 ppb	127.439 ppb	127.274 ppb	12,818.589 ppb	125.087 ppb	126.790 ppb	124.061 ppb	124.813 ppb
Concentration per Run 3	108.944 %	120.885 ppb	119.180 ppb	118.111 ppb	12,501.085 ppb	121.708 ppb	119.707 ppb	121.490 ppb	123.168 ppb
Concentration RSD	5.4 %	7.3 %	6.1 %	5.7 %	3.5 %	3.9 %	4.2 %	2.9 %	2.9 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	92.871 %	122.152 ppb	122.366 ppb	120.588 ppb	120.932 ppb	99.231 %	119.744 ppb	120.003 ppb	101.722 %
Concentration per Run 1	93.754 %	118.547 ppb	118.699 ppb	116.683 ppb	111.760 ppb	104.487 %	115.059 ppb	115.506 ppb	104.575 %
Concentration per Run 2	91.793 %	124.245 ppb	124.212 ppb	122.228 ppb	126.304 ppb	96.054 %	121.492 ppb	122.495 ppb	100.759 %
Concentration per Run 3	93.067 %	123.665 ppb	124.187 ppb	122.855 ppb	124.733 ppb	97.152 %	122.682 ppb	122.008 ppb	99.833 %
Concentration RSD	1.1 %	2.6 %	2.6 %	2.8 %	6.6 %	4.6 %	3.4 %	3.3 %	2.5 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	120.590 ppb	120.776 ppb	100.614 %	99.862 %	120.529 ppb	120.302 ppb	99.944 %
Concentration per Run 1	116.005 ppb	117.165 ppb	107.142 %	107.313 %	114.323 ppb	113.246 ppb	104.876 %
Concentration per Run 2	121.078 ppb	119.504 ppb	97.778 %	96.005 %	123.217 ppb	122.086 ppb	97.992 %
Concentration per Run 3	124.686 ppb	125.659 ppb	96.923 %	96.267 %	124.046 ppb	125.574 ppb	96.965 %
Concentration RSD	3.6 %	3.6 %	5.6 %	6.5 %	4.5 %	5.3 %	4.3 %

Alpha ICPMSQ2 Data with SRD

12/4/2024 10:02:58 AM

Analysis index:	10	User name	ALPHALAB\a2-icpmsq2	Comment	Sr Inteference Check
Analysis label:	Sr 200ppb	Rack	4		
Analysis started at:	12/3/2024 5:12:19 PM	Vial	55		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	99.195 %	94.701 %	0.892 ppb	-15.186 ppb	5.177 ppb	0.819 ppb	-5.184 ppb	-3.041 ppb	95.006 %
Concentration per Run 1	93.829 %	92.546 %	0.708 ppb	-36.140 ppb	2.628 ppb	0.588 ppb	-10.154 ppb	143.805 ppb	92.840 %
Concentration per Run 2	101.729 %	94.297 %	1.195 ppb	5.243 ppb	6.429 ppb	0.868 ppb	-5.808 ppb	-126.618 ppb	97.304 %
Concentration per Run 3	102.028 %	97.261 %	0.773 ppb	-14.661 ppb	6.474 ppb	1.001 ppb	0.411 ppb	-26.309 ppb	94.873 %
Concentration RSD	4.7 %	2.5 %	29.7 %	136.3 %	42.6 %	25.8 %	102.4 %	4,495.6 %	2.4 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	99.732 %	-0.001 ppb	0.037 ppb	0.005 ppb	8.040 ppb	0.058 ppb	-1.588 ppb	0.044 ppb	-0.209 ppb
Concentration per Run 1	106.760 %	-0.089 ppb	0.017 ppb	0.008 ppb	4.123 ppb	0.029 ppb	-1.614 ppb	0.073 ppb	-0.218 ppb
Concentration per Run 2	95.873 %	0.068 ppb	0.115 ppb	0.056 ppb	13.085 ppb	0.071 ppb	-1.545 ppb	0.101 ppb	-0.177 ppb
Concentration per Run 3	96.562 %	0.017 ppb	-0.021 ppb	-0.048 ppb	6.913 ppb	0.074 ppb	-1.605 ppb	-0.040 ppb	-0.233 ppb
Concentration RSD	6.1 %	6,956.0 %	189.0 %	953.7 %	57.0 %	43.7 %	2.4 %	168.2 %	13.9 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	95.459 %	0.074 ppb	0.142 ppb	192.699 ppb	0.594 ppb	97.451 %	0.048 ppb	0.036 ppb	98.419 %
Concentration per Run 1	94.722 %	0.136 ppb	0.129 ppb	188.029 ppb	0.420 ppb	102.084 %	0.043 ppb	0.021 ppb	102.856 %
Concentration per Run 2	96.185 %	0.017 ppb	0.148 ppb	195.177 ppb	0.519 ppb	95.015 %	0.057 ppb	0.054 ppb	94.422 %
Concentration per Run 3	95.469 %	0.068 ppb	0.149 ppb	194.891 ppb	0.842 ppb	95.255 %	0.044 ppb	0.034 ppb	97.979 %
Concentration RSD	0.8 %	80.7 %	8.0 %	2.1 %	37.1 %	4.1 %	16.3 %	45.3 %	4.3 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.071 ppb	0.055 ppb	97.532 %	97.489 %	0.336 ppb	0.061 ppb	98.436 %
Concentration per Run 1	0.043 ppb	0.033 ppb	102.417 %	102.779 %	0.283 ppb	0.045 ppb	101.535 %
Concentration per Run 2	0.100 ppb	0.098 ppb	95.097 %	94.904 %	0.402 ppb	0.083 ppb	97.478 %
Concentration per Run 3	0.071 ppb	0.036 ppb	95.082 %	94.785 %	0.323 ppb	0.054 ppb	96.296 %
Concentration RSD	40.5 %	66.3 %	4.3 %	4.7 %	18.1 %	31.8 %	2.8 %

Alpha ICPMSQ2 Data with SRD

12/4/2024 10:02:58 AM

Analysis index:	11	User name	ALPHALAB\a2-icpmsq2	Comment	ICV
Analysis label:	ICV	Rack	0		
Analysis started at:	12/3/2024 5:16:50 PM	Vial	7		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	95.561 %	95.240 %	51.578 ppb	5,138.956 ppb	5,161.360 ppb	53.383 ppb	5,212.359 ppb	5,161.078 ppb	94.941 %
Concentration per Run 1	94.616 %	93.893 %	50.462 ppb	5,004.891 ppb	5,014.777 ppb	51.926 ppb	4,982.218 ppb	4,717.035 ppb	95.608 %
Concentration per Run 2	96.208 %	93.489 %	51.269 ppb	5,255.881 ppb	5,288.487 ppb	56.296 ppb	5,442.864 ppb	5,280.519 ppb	93.745 %
Concentration per Run 3	95.859 %	98.339 %	53.004 ppb	5,156.096 ppb	5,180.818 ppb	51.927 ppb	5,211.995 ppb	5,485.681 ppb	95.471 %
Recovery Percentage 1			103.157 %	102.779 %	103.227 %	106.766 %	104.247 %	103.222 %	
Concentration RSD	0.9 %	2.8 %	2.5 %	2.5 %	2.7 %	4.7 %	4.4 %	7.7 %	1.1 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	99.770 %	52.086 ppb	51.521 ppb	53.094 ppb	5,336.527 ppb	51.641 ppb	50.643 ppb	51.284 ppb	54.058 ppb
Concentration per Run 1	101.968 %	50.583 ppb	50.089 ppb	52.825 ppb	5,290.896 ppb	51.856 ppb	51.225 ppb	51.190 ppb	54.710 ppb
Concentration per Run 2	98.978 %	52.251 ppb	51.608 ppb	52.732 ppb	5,342.800 ppb	51.500 ppb	50.038 ppb	52.776 ppb	53.720 ppb
Concentration per Run 3	98.364 %	53.424 ppb	52.867 ppb	53.724 ppb	5,375.887 ppb	51.568 ppb	50.666 ppb	49.887 ppb	53.743 ppb
Recovery Percentage 1		104.172 %	103.043 %	106.187 %	106.731 %	103.283 %	101.285 %	102.568 %	108.115 %
Concentration RSD	1.9 %	2.7 %	2.7 %	1.0 %	0.8 %	0.4 %	1.2 %	2.8 %	1.0 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	95.167 %	49.260 ppb	48.841 ppb	50.356 ppb	50.340 ppb	98.128 %	51.632 ppb	49.333 ppb	100.544 %
Concentration per Run 1	94.226 %	49.814 ppb	47.307 ppb	49.988 ppb	48.416 ppb	99.331 %	49.246 ppb	47.305 ppb	105.911 %
Concentration per Run 2	92.768 %	50.528 ppb	50.872 ppb	51.619 ppb	51.355 ppb	96.823 %	53.328 ppb	51.642 ppb	95.956 %
Concentration per Run 3	98.508 %	47.438 ppb	48.344 ppb	49.461 ppb	51.248 ppb	98.230 %	52.324 ppb	49.052 ppb	99.765 %
Recovery Percentage 1		98.520 %	97.682 %	100.712 %	100.680 %		103.265 %	98.666 %	
Concentration RSD	3.1 %	3.3 %	3.8 %	2.2 %	3.3 %	1.3 %	4.1 %	4.4 %	5.0 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	50.236 ppb	51.068 ppb	99.949 %	98.642 %	49.943 ppb	50.096 ppb	99.625 %
Concentration per Run 1	48.180 ppb	49.450 ppb	104.219 %	101.265 %	47.991 ppb	48.575 ppb	102.512 %
Concentration per Run 2	52.192 ppb	52.222 ppb	98.951 %	98.849 %	50.389 ppb	50.199 ppb	98.450 %
Concentration per Run 3	50.336 ppb	51.531 ppb	96.676 %	95.813 %	51.450 ppb	51.513 ppb	97.914 %
Recovery Percentage 1	100.472 %	102.136 %			99.886 %	100.192 %	
Concentration RSD	4.0 %	2.8 %	3.9 %	2.8 %	3.5 %	2.9 %	2.5 %

Alpha ICPMSQ2 Data with SRD

12/4/2024 10:02:58 AM

Analysis index: 12 User name ALPHALAB\a2-icpmsq2 Comment ICB
Analysis label: ICB Rack 0
Analysis started at: 12/3/2024 5:21:20 PM Vial 10

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	94.339 %	97.440 %	0.228 ppb	-45.984 ppb	-0.861 ppb	-0.825 ppb	-3.934 ppb	-5.150 ppb	90.442 %
Concentration per Run 1	93.472 %	106.152 %	0.140 ppb	-83.907 ppb	-0.150 ppb	-0.907 ppb	-3.794 ppb	-12.487 ppb	90.402 %
Concentration per Run 2	94.517 %	93.354 %	0.339 ppb	-33.734 ppb	-1.008 ppb	-0.756 ppb	-9.228 ppb	3.143 ppb	89.241 %
Concentration per Run 3	95.026 %	92.815 %	0.206 ppb	-20.310 ppb	-1.427 ppb	-0.813 ppb	1.220 ppb	-6.105 ppb	91.684 %
Recovery Percentage 1			45.628 %	-9.197 %	-1.231 %	-8.254 %	-3.934 %	-5.150 %	
Concentration RSD	0.8 %	7.7 %	44.3 %	72.9 %	75.6 %	9.3 %	132.8 %	152.6 %	1.4 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	101.572 %	-0.087 ppb	-0.038 ppb	-0.065 ppb	1.156 ppb	0.003 ppb	-1.586 ppb	-0.036 ppb	-0.535 ppb
Concentration per Run 1	107.526 %	-0.059 ppb	-0.064 ppb	-0.058 ppb	0.693 ppb	0.006 ppb	-1.583 ppb	-0.029 ppb	-0.586 ppb
Concentration per Run 2	98.709 %	-0.084 ppb	-0.044 ppb	-0.102 ppb	3.156 ppb	0.000 ppb	-1.598 ppb	-0.035 ppb	-0.447 ppb
Concentration per Run 3	98.479 %	-0.117 ppb	-0.005 ppb	-0.036 ppb	-0.382 ppb	0.003 ppb	-1.579 ppb	-0.045 ppb	-0.573 ppb
Recovery Percentage 1		-1.735 %	-3.765 %	-6.517 %	2.312 %	0.656 %	-79.323 %	-3.641 %	-10.707 %
Concentration RSD	5.1 %	33.5 %	80.2 %	51.2 %	157.0 %	92.2 %	0.6 %	22.0 %	14.4 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	98.882 %	0.058 ppb	0.035 ppb	0.000 ppb	0.326 ppb	100.000 %	0.002 ppb	0.004 ppb	99.449 %
Concentration per Run 1	96.628 %	0.095 ppb	-0.024 ppb	-0.006 ppb	0.172 ppb	107.388 %	0.005 ppb	0.000 ppb	106.497 %
Concentration per Run 2	98.137 %	-0.013 ppb	0.148 ppb	0.004 ppb	0.357 ppb	95.839 %	0.003 ppb	0.008 ppb	95.172 %
Concentration per Run 3	101.881 %	0.093 ppb	-0.021 ppb	0.001 ppb	0.448 ppb	96.774 %	-0.001 ppb	0.004 ppb	96.678 %
Recovery Percentage 1		11.685 %	0.690 %	-0.004 %	16.291 %		0.601 %	1.892 %	
Concentration RSD	2.7 %	105.3 %	286.0 %	1,241.4 %	43.2 %	6.4 %	128.8 %	100.5 %	6.2 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.066 ppb	0.097 ppb	99.577 %	98.958 %	0.236 ppb	0.012 ppb	101.335 %
Concentration per Run 1	0.044 ppb	0.128 ppb	104.297 %	105.339 %	0.195 ppb	0.012 ppb	106.084 %
Concentration per Run 2	0.063 ppb	0.081 ppb	97.132 %	96.724 %	0.274 ppb	0.013 ppb	97.034 %
Concentration per Run 3	0.092 ppb	0.080 ppb	97.302 %	94.812 %	0.240 ppb	0.010 ppb	100.886 %
Recovery Percentage 1	1.653 %	19.341 %			23.635 %	1.156 %	
Concentration RSD	36.9 %	28.5 %	4.1 %	5.7 %	16.7 %	9.6 %	4.5 %

Alpha ICPMSQ2 Data with SRD

12/4/2024 10:02:58 AM

Analysis index: 13
Analysis label: ICSA
Analysis started at: 12/3/2024 5:32:00 PM
User name ALPHALAB\a2-icpmsq2
Rack 4
Vial 53
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	70.726 %	86.080 %	0.034 ppb	268,825.990 ppb	100,477.743 ppb	101,937.117 ppb	103,484.593 ppb	307,956.064 ppb	69.831 %
Concentration per Run 1	73.142 %	85.137 %	0.027 ppb	263,263.945 ppb	99,486.088 ppb	98,408.676 ppb	98,635.139 ppb	293,992.196 ppb	69.725 %
Concentration per Run 2	73.707 %	85.810 %	0.026 ppb	269,251.516 ppb	100,473.386 ppb	102,435.032 ppb	105,174.568 ppb	314,924.480 ppb	69.604 %
Concentration per Run 3	65.329 %	87.292 %	0.048 ppb	273,962.509 ppb	101,473.753 ppb	104,967.643 ppb	106,644.073 ppb	314,951.515 ppb	70.163 %
Recovery Percentage 1			3.366 %	107.530 %	100.478 %	101.937 %	103.485 %	102.652 %	
Concentration RSD	6.6 %	1.3 %	37.8 %	2.0 %	1.0 %	3.2 %	4.1 %	3.9 %	0.4 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	92.768 %	0.049 ppb	1.555 ppb	4.434 ppb	238,343.017 ppb	2.048 ppb	1.224 ppb	0.850 ppb	2.633 ppb
Concentration per Run 1	98.556 %	0.014 ppb	1.480 ppb	4.699 ppb	223,860.475 ppb	2.220 ppb	1.363 ppb	0.928 ppb	2.813 ppb
Concentration per Run 2	90.698 %	0.094 ppb	1.679 ppb	4.429 ppb	244,493.711 ppb	1.976 ppb	1.230 ppb	0.897 ppb	2.817 ppb
Concentration per Run 3	89.050 %	0.039 ppb	1.506 ppb	4.173 ppb	246,674.865 ppb	1.947 ppb	1.078 ppb	0.725 ppb	2.270 ppb
Recovery Percentage 1		0.975 %	47.125 %	77.783 %	95.337 %	71.344 %	20.058 %	103.672 %	23.098 %
Concentration RSD	5.5 %	84.2 %	7.0 %	5.9 %	5.3 %	7.3 %	11.7 %	12.9 %	12.0 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	103.298 %	0.422 ppb	2.770 ppb	2.341 ppb	2,129.193 ppb	86.587 %	0.026 ppb	0.501 ppb	92.801 %
Concentration per Run 1	97.142 %	0.547 ppb	2.822 ppb	2.348 ppb	2,089.227 ppb	90.476 %	0.018 ppb	0.492 ppb	97.278 %
Concentration per Run 2	99.579 %	0.473 ppb	2.357 ppb	2.422 ppb	2,191.034 ppb	84.664 %	0.025 ppb	0.545 ppb	90.348 %
Concentration per Run 3	113.171 %	0.246 ppb	3.131 ppb	2.254 ppb	2,107.318 ppb	84.619 %	0.034 ppb	0.466 ppb	90.779 %
Recovery Percentage 1		25.882 %	21.473 %	468.260 %	106.460 %		3.196 %	125.288 %	
Concentration RSD	8.4 %	37.2 %	14.1 %	3.6 %	2.6 %	3.9 %	32.4 %	8.1 %	4.2 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.242 ppb	1.495 ppb	92.920 %	91.889 %	0.042 ppb	1.582 ppb	88.781 %
Concentration per Run 1	0.179 ppb	1.229 ppb	95.480 %	96.760 %	0.026 ppb	1.532 ppb	92.345 %
Concentration per Run 2	0.267 ppb	1.714 ppb	92.119 %	88.909 %	0.052 ppb	1.591 ppb	87.133 %
Concentration per Run 3	0.281 ppb	1.543 ppb	91.159 %	89.998 %	0.047 ppb	1.623 ppb	86.864 %
Recovery Percentage 1	3.026 %	79.525 %			2.087 %	51.026 %	
Concentration RSD	22.9 %	16.4 %	2.4 %	4.6 %	33.4 %	2.9 %	3.5 %

Alpha ICPMSQ2 Data with SRD

12/4/2024 10:02:58 AM

Analysis index:	14	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	LDR	Rack	4		
Analysis started at:	12/3/2024 5:36:31 PM	Vial	1		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	82.282 %	91.693 %	-0.003 ppb	84.452 ppb	11.031 ppb	12.650 ppb	74.498 ppb	24.785 ppb	88.399 %
Concentration per Run 1	78.824 %	93.219 %	0.004 ppb	91.302 ppb	13.746 ppb	18.012 ppb	80.492 ppb	44.146 ppb	86.620 %
Concentration per Run 2	82.510 %	88.100 %	-0.003 ppb	108.776 ppb	11.159 ppb	10.551 ppb	87.931 ppb	16.179 ppb	89.860 %
Concentration per Run 3	85.513 %	93.758 %	-0.009 ppb	53.278 ppb	8.189 ppb	9.389 ppb	55.072 ppb	14.031 ppb	88.717 %
Recovery Percentage 1									
Concentration RSD	4.1 %	3.4 %	236.9 %	33.6 %	25.2 %	37.0 %	23.1 %	67.8 %	1.9 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	83.965 %	1,062.978 ppb	1,086.904 ppb	9,757.916 ppb	57.120 ppb	0.020 ppb	10,126.283 ppb	9,836.220 ppb	9,206.547 ppb
Concentration per Run 1	79.008 %	1,049.919 ppb	1,085.539 ppb	9,892.925 ppb	58.241 ppb	0.035 ppb	10,280.200 ppb	10,064.714 ppb	9,419.516 ppb
Concentration per Run 2	81.998 %	1,118.336 ppb	1,143.837 ppb	10,351.250 ppb	62.800 ppb	0.016 ppb	10,684.850 ppb	10,140.823 ppb	9,643.474 ppb
Concentration per Run 3	90.890 %	1,020.679 ppb	1,031.337 ppb	9,029.573 ppb	50.320 ppb	0.010 ppb	9,413.800 ppb	9,303.124 ppb	8,556.650 ppb
Recovery Percentage 1		106.298 %	108.690 %	97.579 %			101.263 %	98.362 %	92.065 %
Concentration RSD	7.4 %	4.7 %	5.2 %	6.9 %	11.1 %	62.7 %	6.4 %	4.7 %	6.2 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	96.637 %	811.879 ppb	1.893 ppb	0.224 ppb	4.321 ppb	95.384 %	0.090 ppb	0.032 ppb	94.354 %
Concentration per Run 1	94.657 %	837.096 ppb	2.062 ppb	0.203 ppb	3.578 ppb	98.633 %	0.086 ppb	0.044 ppb	97.473 %
Concentration per Run 2	93.180 %	830.710 ppb	1.978 ppb	0.241 ppb	4.510 ppb	91.450 %	0.094 ppb	0.027 ppb	93.727 %
Concentration per Run 3	102.075 %	767.831 ppb	1.639 ppb	0.228 ppb	4.876 ppb	96.069 %	0.091 ppb	0.023 ppb	91.863 %
Recovery Percentage 1		81.188 %							
Concentration RSD	4.9 %	4.7 %	11.8 %	8.5 %	15.5 %	3.8 %	4.1 %	35.4 %	3.0 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.029 ppb	10,193.868 ppb	91.869 %	90.179 %	0.039 ppb	9,984.088 ppb	92.094 %
Concentration per Run 1	0.027 ppb	10,003.105 ppb	95.063 %	93.006 %	0.019 ppb	9,601.532 ppb	95.876 %
Concentration per Run 2	0.012 ppb	9,964.921 ppb	87.882 %	86.217 %	0.054 ppb	10,410.026 ppb	89.259 %
Concentration per Run 3	0.049 ppb	10,613.579 ppb	92.663 %	91.316 %	0.045 ppb	9,940.707 ppb	91.147 %
Recovery Percentage 1		101.939 %				99.841 %	
Concentration RSD	63.2 %	3.6 %	4.0 %	3.9 %	46.4 %	4.1 %	3.7 %

Alpha ICPMSQ2 Data with SRD

12/4/2024 10:02:58 AM

Analysis index:	15	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	Rinse	Rack	0		
Analysis started at:	12/3/2024 5:41:01 PM	Vial	1		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	94.616 %	93.040 %	-0.005 ppb	40.392 ppb	9.800 ppb	12.222 ppb	53.103 ppb	26.113 ppb	96.038 %
Concentration per Run 1	89.124 %	96.048 %	-0.001 ppb	14.218 ppb	10.261 ppb	11.721 ppb	33.781 ppb	19.586 ppb	94.161 %
Concentration per Run 2	97.065 %	93.893 %	-0.012 ppb	47.998 ppb	11.575 ppb	13.972 ppb	60.823 ppb	34.835 ppb	97.442 %
Concentration per Run 3	97.658 %	89.178 %	-0.003 ppb	58.962 ppb	7.563 ppb	10.974 ppb	64.704 ppb	23.917 ppb	96.512 %
Concentration RSD	5.0 %	3.8 %	111.0 %	57.7 %	20.9 %	12.8 %	31.7 %	30.1 %	1.8 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	88.590 %	0.085 ppb	0.295 ppb	1.445 ppb	70.373 ppb	0.023 ppb	2.116 ppb	2.417 ppb	2.259 ppb
Concentration per Run 1	93.649 %	0.067 ppb	0.253 ppb	1.195 ppb	75.435 ppb	0.029 ppb	2.318 ppb	2.640 ppb	2.226 ppb
Concentration per Run 2	85.793 %	0.182 ppb	0.385 ppb	1.812 ppb	71.858 ppb	0.023 ppb	2.133 ppb	2.570 ppb	2.649 ppb
Concentration per Run 3	86.329 %	0.006 ppb	0.248 ppb	1.326 ppb	63.827 ppb	0.019 ppb	1.898 ppb	2.042 ppb	1.903 ppb
Concentration RSD	5.0 %	105.0 %	26.3 %	22.5 %	8.4 %	21.7 %	9.9 %	13.5 %	16.6 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	114.193 %	0.684 ppb	0.015 ppb	0.003 ppb	0.921 ppb	96.835 %	0.023 ppb	0.004 ppb	95.299 %
Concentration per Run 1	107.476 %	0.932 ppb	-0.028 ppb	0.005 ppb	0.604 ppb	102.705 %	0.023 ppb	0.007 ppb	99.932 %
Concentration per Run 2	116.083 %	0.617 ppb	0.038 ppb	0.004 ppb	0.802 ppb	94.663 %	0.015 ppb	0.000 ppb	90.770 %
Concentration per Run 3	119.019 %	0.503 ppb	0.035 ppb	0.001 ppb	1.357 ppb	93.137 %	0.030 ppb	0.004 ppb	95.196 %
Concentration RSD	5.3 %	32.5 %	249.5 %	55.4 %	42.4 %	5.3 %	32.1 %	97.9 %	4.8 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.009 ppb	1.210 ppb	93.595 %	93.444 %	0.003 ppb	2.418 ppb	93.907 %
Concentration per Run 1	0.004 ppb	1.190 ppb	96.630 %	97.272 %	-0.011 ppb	2.718 ppb	97.615 %
Concentration per Run 2	0.007 ppb	1.513 ppb	92.805 %	90.869 %	0.010 ppb	2.612 ppb	91.321 %
Concentration per Run 3	0.017 ppb	0.927 ppb	91.350 %	92.191 %	0.009 ppb	1.926 ppb	92.785 %
Concentration RSD	70.2 %	24.3 %	2.9 %	3.6 %	419.2 %	17.8 %	3.5 %

Alpha ICPMSQ2 Data with SRD

12/4/2024 10:02:58 AM

Analysis index: 16
Analysis label: CCV
Analysis started at: 12/3/2024 5:45:27 PM
User name ALPHALAB\a2-icpmsq2
Rack 0
Vial 9
Comment CCV/MCCV

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	91.681 %	92.860 %	58.458 ppb	6,396.627 ppb	6,370.769 ppb	63.074 ppb	6,444.983 ppb	6,222.743 ppb	94.214 %
Concentration per Run 1	89.056 %	94.836 %	57.191 ppb	6,174.517 ppb	6,138.876 ppb	59.359 ppb	6,424.436 ppb	6,003.991 ppb	93.953 %
Concentration per Run 2	93.019 %	88.639 %	58.151 ppb	6,608.289 ppb	6,512.582 ppb	66.897 ppb	6,476.214 ppb	6,466.334 ppb	95.117 %
Concentration per Run 3	92.967 %	95.105 %	60.034 ppb	6,407.074 ppb	6,460.850 ppb	62.966 ppb	6,434.298 ppb	6,197.904 ppb	93.574 %
Recovery Percentage 1			97.431 %	106.610 %	106.179 %	105.124 %	107.416 %	103.712 %	
Concentration RSD	2.5 %	3.9 %	2.5 %	3.4 %	3.2 %	6.0 %	0.4 %	3.7 %	0.9 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	92.986 %	60.063 ppb	61.207 ppb	60.570 ppb	6,129.463 ppb	58.326 ppb	56.395 ppb	57.187 ppb	54.657 ppb
Concentration per Run 1	94.264 %	58.772 ppb	57.773 ppb	59.958 ppb	6,072.527 ppb	57.660 ppb	54.636 ppb	55.733 ppb	53.431 ppb
Concentration per Run 2	90.621 %	60.533 ppb	62.040 ppb	60.876 ppb	6,140.839 ppb	58.667 ppb	58.767 ppb	57.818 ppb	55.409 ppb
Concentration per Run 3	94.072 %	60.884 ppb	63.808 ppb	60.875 ppb	6,175.023 ppb	58.651 ppb	55.782 ppb	58.010 ppb	55.131 ppb
Recovery Percentage 1		100.105 %	102.012 %	100.949 %	102.158 %	97.210 %	93.992 %	95.312 %	91.095 %
Concentration RSD	2.2 %	1.9 %	5.1 %	0.9 %	0.9 %	1.0 %	3.8 %	2.2 %	2.0 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	110.630 %	61.475 ppb	58.539 ppb	54.459 ppb	56.220 ppb	96.368 %	59.154 ppb	58.699 ppb	98.284 %
Concentration per Run 1	111.956 %	59.151 ppb	55.183 ppb	52.654 ppb	53.424 ppb	101.649 %	57.368 ppb	58.219 ppb	101.629 %
Concentration per Run 2	111.431 %	63.346 ppb	57.453 ppb	55.020 ppb	58.086 ppb	93.885 %	60.449 ppb	58.239 ppb	96.105 %
Concentration per Run 3	108.503 %	61.929 ppb	62.980 ppb	55.704 ppb	57.149 ppb	93.570 %	59.645 ppb	59.638 ppb	97.117 %
Recovery Percentage 1		102.459 %	97.564 %	90.766 %	93.700 %		98.590 %	97.831 %	
Concentration RSD	1.7 %	3.5 %	6.9 %	2.9 %	4.4 %	4.7 %	2.7 %	1.4 %	3.0 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	58.626 ppb	61.162 ppb	95.362 %	92.641 %	60.295 ppb	61.073 ppb	93.678 %
Concentration per Run 1	56.424 ppb	59.211 ppb	97.733 %	94.776 %	58.134 ppb	59.010 ppb	95.266 %
Concentration per Run 2	59.725 ppb	63.495 ppb	93.942 %	92.671 %	60.506 ppb	61.485 ppb	92.960 %
Concentration per Run 3	59.728 ppb	60.781 ppb	94.412 %	90.475 %	62.244 ppb	62.724 ppb	92.809 %
Recovery Percentage 1	97.709 %	101.937 %			100.491 %	101.788 %	
Concentration RSD	3.3 %	3.5 %	2.2 %	2.3 %	3.4 %	3.1 %	1.5 %

Alpha ICPMSQ2 Data with SRD

12/4/2024 10:02:58 AM

Analysis index: 17 User name ALPHALAB\a2-icpmsq2 Comment CCB
Analysis label: CCB Rack 0
Analysis started at: 12/3/2024 5:49:58 PM Vial 10

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	92.008 %	94.836 %	0.208 ppb	-37.780 ppb	-0.075 ppb	0.074 ppb	15.310 ppb	-0.414 ppb	94.551 %
Concentration per Run 1	89.994 %	103.054 %	0.303 ppb	-62.052 ppb	-0.868 ppb	-0.195 ppb	14.648 ppb	-2.638 ppb	92.293 %
Concentration per Run 2	92.979 %	88.370 %	0.155 ppb	-27.212 ppb	0.980 ppb	0.076 ppb	13.585 ppb	-1.159 ppb	94.935 %
Concentration per Run 3	93.050 %	93.085 %	0.164 ppb	-24.076 ppb	-0.336 ppb	0.340 ppb	17.697 ppb	2.555 ppb	96.425 %
Recovery Percentage 1			41.540 %	-7.556 %	-0.107 %	0.737 %	15.310 %	-0.414 %	
Concentration RSD	1.9 %	7.9 %	40.0 %	55.8 %	1,274.6 %	363.1 %	13.9 %	646.5 %	2.2 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	97.841 %	-0.026 ppb	0.003 ppb	0.137 ppb	3.403 ppb	0.005 ppb	-1.413 ppb	0.609 ppb	-0.342 ppb
Concentration per Run 1	102.274 %	0.054 ppb	0.007 ppb	0.156 ppb	1.681 ppb	0.022 ppb	-1.446 ppb	0.784 ppb	-0.260 ppb
Concentration per Run 2	97.713 %	-0.100 ppb	0.042 ppb	0.084 ppb	4.738 ppb	-0.003 ppb	-1.400 ppb	0.523 ppb	-0.360 ppb
Concentration per Run 3	93.535 %	-0.032 ppb	-0.040 ppb	0.171 ppb	3.789 ppb	-0.003 ppb	-1.393 ppb	0.520 ppb	-0.407 ppb
Recovery Percentage 1		-0.521 %	0.308 %	13.699 %	6.806 %	1.072 %	-70.664 %	60.899 %	-6.846 %
Concentration RSD	4.5 %	297.0 %	1,326.2 %	33.9 %	46.0 %	271.9 %	2.0 %	24.9 %	21.9 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	101.961 %	0.116 ppb	0.159 ppb	0.002 ppb	0.471 ppb	97.952 %	0.007 ppb	0.004 ppb	98.195 %
Concentration per Run 1	100.903 %	-0.005 ppb	0.132 ppb	0.005 ppb	0.377 ppb	102.309 %	0.011 ppb	0.007 ppb	104.735 %
Concentration per Run 2	99.508 %	0.251 ppb	0.223 ppb	0.000 ppb	0.415 ppb	96.902 %	0.007 ppb	0.004 ppb	94.459 %
Concentration per Run 3	105.472 %	0.103 ppb	0.122 ppb	0.001 ppb	0.622 ppb	94.644 %	0.002 ppb	0.000 ppb	95.391 %
Recovery Percentage 1		23.258 %	3.180 %	0.021 %	23.566 %		1.635 %	1.797 %	
Concentration RSD	3.1 %	110.4 %	35.2 %	134.7 %	28.0 %	4.0 %	72.6 %	97.2 %	5.8 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.045 ppb	0.205 ppb	95.272 %	94.658 %	0.238 ppb	0.420 ppb	96.392 %
Concentration per Run 1	0.030 ppb	0.245 ppb	101.361 %	97.927 %	0.214 ppb	0.453 ppb	102.453 %
Concentration per Run 2	0.041 ppb	0.224 ppb	92.466 %	94.227 %	0.298 ppb	0.431 ppb	93.037 %
Concentration per Run 3	0.063 ppb	0.146 ppb	91.988 %	91.819 %	0.202 ppb	0.376 ppb	93.687 %
Recovery Percentage 1	1.119 %	40.960 %			23.775 %	42.018 %	
Concentration RSD	37.6 %	25.5 %	5.5 %	3.3 %	22.0 %	9.4 %	5.5 %

Alpha ICPMSQ2 Data with SRD

12/4/2024 10:02:58 AM

Analysis index:	18	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG2001986-2d10 6020TL	Rack	1		
Analysis started at:	12/3/2024 5:55:27 PM	Vial	55		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	92.727 %	93.668 %	5.594 ppb	1,050.281 ppb	1,107.956 ppb	213.747 ppb	1,126.213 ppb	1,073.567 ppb	93.678 %
Concentration per Run 1	90.890 %	96.857 %	5.418 ppb	983.927 ppb	1,053.672 ppb	205.435 ppb	1,086.605 ppb	1,101.115 ppb	96.114 %
Concentration per Run 2	94.402 %	90.390 %	5.551 ppb	1,112.974 ppb	1,170.842 ppb	228.211 ppb	1,178.782 ppb	1,137.030 ppb	95.308 %
Concentration per Run 3	92.890 %	93.758 %	5.814 ppb	1,053.941 ppb	1,099.354 ppb	207.594 ppb	1,113.251 ppb	982.556 ppb	89.611 %
Concentration RSD	1.9 %	3.5 %	3.6 %	6.2 %	5.3 %	5.9 %	4.2 %	7.5 %	3.8 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	94.263 %	53.229 ppb	21.496 ppb	52.994 ppb	112.739 ppb	51.457 ppb	49.540 ppb	25.257 ppb	48.039 ppb
Concentration per Run 1	99.132 %	51.381 ppb	20.150 ppb	51.159 ppb	104.741 ppb	49.723 ppb	47.772 ppb	25.365 ppb	46.168 ppb
Concentration per Run 2	88.399 %	52.577 ppb	21.887 ppb	53.777 ppb	125.405 ppb	51.918 ppb	50.488 ppb	25.208 ppb	48.352 ppb
Concentration per Run 3	95.260 %	55.728 ppb	22.450 ppb	54.047 ppb	108.070 ppb	52.729 ppb	50.361 ppb	25.197 ppb	49.596 ppb
Concentration RSD	5.8 %	4.2 %	5.6 %	3.0 %	9.8 %	3.0 %	3.1 %	0.4 %	3.6 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	107.427 %	11.694 ppb	10.498 ppb	94.571 ppb	95.252 ppb	98.665 %	5.076 ppb	5.380 ppb	98.181 %
Concentration per Run 1	109.627 %	11.495 ppb	10.435 ppb	92.105 ppb	93.243 ppb	103.165 %	4.983 ppb	5.318 ppb	100.517 %
Concentration per Run 2	108.254 %	11.559 ppb	10.896 ppb	93.420 ppb	95.242 ppb	97.660 %	5.081 ppb	5.333 ppb	97.033 %
Concentration per Run 3	104.399 %	12.030 ppb	10.163 ppb	98.188 ppb	97.270 ppb	95.170 %	5.164 ppb	5.489 ppb	96.991 %
Concentration RSD	2.5 %	2.5 %	3.5 %	3.4 %	2.1 %	4.1 %	1.8 %	1.8 %	2.1 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	45.986 ppb	215.317 ppb	98.155 %	95.677 %	12.402 ppb	54.470 ppb	98.584 %
Concentration per Run 1	43.876 ppb	209.784 ppb	101.998 %	100.553 %	11.865 ppb	51.732 ppb	102.379 %
Concentration per Run 2	46.741 ppb	220.808 ppb	97.276 %	92.917 %	12.173 ppb	54.360 ppb	98.698 %
Concentration per Run 3	47.340 ppb	215.359 ppb	95.190 %	93.560 %	13.168 ppb	57.319 ppb	94.675 %
Concentration RSD	4.0 %	2.6 %	3.6 %	4.4 %	5.5 %	5.1 %	3.9 %

Alpha ICPMSQ2 Data with SRD

12/4/2024 10:02:58 AM

Analysis index:	19	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2468003-03 6020TL	Rack	2		
Analysis started at:	12/3/2024 5:59:53 PM	Vial	4		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	88.589 %	93.893 %	0.038 ppb	92,770.487 ppb	25,602.147 ppb	8.246 ppb	1,658.018 ppb	122,390.010 ppb	96.023 %
Concentration per Run 1	87.990 %	93.354 %	0.039 ppb	91,694.587 ppb	24,927.100 ppb	9.261 ppb	1,638.060 ppb	116,073.084 ppb	95.787 %
Concentration per Run 2	89.697 %	95.240 %	0.034 ppb	90,297.983 ppb	25,156.369 ppb	8.205 ppb	1,671.269 ppb	125,112.082 ppb	96.536 %
Concentration per Run 3	88.080 %	93.085 %	0.042 ppb	96,318.890 ppb	26,722.973 ppb	7.272 ppb	1,664.725 ppb	125,984.866 ppb	95.745 %
Concentration RSD	1.1 %	1.3 %	11.1 %	3.4 %	3.8 %	12.1 %	1.1 %	4.5 %	0.5 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	100.166 %	-0.068 ppb	0.434 ppb	197.843 ppb	12,300.779 ppb	6.291 ppb	3.410 ppb	0.707 ppb	1.628 ppb
Concentration per Run 1	103.962 %	-0.046 ppb	0.406 ppb	184.504 ppb	11,749.154 ppb	6.173 ppb	3.222 ppb	0.700 ppb	1.468 ppb
Concentration per Run 2	99.208 %	-0.056 ppb	0.461 ppb	199.066 ppb	12,095.483 ppb	6.088 ppb	3.429 ppb	0.775 ppb	1.634 ppb
Concentration per Run 3	97.330 %	-0.101 ppb	0.436 ppb	209.960 ppb	13,057.699 ppb	6.612 ppb	3.578 ppb	0.647 ppb	1.782 ppb
Concentration RSD	3.4 %	43.6 %	6.3 %	6.5 %	5.5 %	4.5 %	5.3 %	9.1 %	9.7 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	113.892 %	10.412 ppb	0.058 ppb	369.648 ppb	2.232 ppb	96.032 %	0.000 ppb	0.116 ppb	99.240 %
Concentration per Run 1	120.248 %	9.915 ppb	0.001 ppb	352.138 ppb	1.912 ppb	99.742 %	-0.001 ppb	0.106 ppb	103.594 %
Concentration per Run 2	112.257 %	10.627 ppb	-0.017 ppb	372.244 ppb	2.124 ppb	94.911 %	-0.001 ppb	0.121 ppb	96.089 %
Concentration per Run 3	109.170 %	10.695 ppb	0.188 ppb	384.563 ppb	2.661 ppb	93.445 %	0.002 ppb	0.120 ppb	98.037 %
Concentration RSD	5.0 %	4.2 %	196.4 %	4.4 %	17.3 %	3.4 %	2,002.0 %	7.2 %	3.9 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.547 ppb	52.830 ppb	99.264 %	99.845 %	0.094 ppb	0.225 ppb	95.811 %
Concentration per Run 1	0.471 ppb	50.722 ppb	100.405 %	101.199 %	0.071 ppb	0.231 ppb	98.198 %
Concentration per Run 2	0.551 ppb	54.659 ppb	100.314 %	99.947 %	0.111 ppb	0.225 ppb	94.999 %
Concentration per Run 3	0.621 ppb	53.108 ppb	97.073 %	98.387 %	0.101 ppb	0.219 ppb	94.236 %
Concentration RSD	13.7 %	3.8 %	1.9 %	1.4 %	22.2 %	2.6 %	2.2 %

Alpha ICPMSQ2 Data with SRD

12/4/2024 10:02:58 AM

Analysis index: 20
Analysis label: L2468003-04 6020TL
Analysis started at: 12/3/2024 6:04:21 PM
User name ALPHALAB\a2-icpmsq2
Rack 2
Vial 5
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	89.448 %	95.644 %	0.029 ppb	129,870.381 ppb	25,460.609 ppb	78.160 ppb	1,416.842 ppb	93,762.643 ppb	99.105 %
Concentration per Run 1	86.705 %	96.991 %	0.037 ppb	128,092.682 ppb	24,932.732 ppb	73.265 ppb	1,313.046 ppb	89,405.168 ppb	98.008 %
Concentration per Run 2	90.917 %	93.085 %	0.037 ppb	132,433.574 ppb	25,618.457 ppb	78.880 ppb	1,444.026 ppb	94,836.911 ppb	98.954 %
Concentration per Run 3	90.722 %	96.857 %	0.014 ppb	129,084.887 ppb	25,830.638 ppb	82.337 ppb	1,493.453 ppb	97,045.850 ppb	100.352 %
Concentration RSD	2.7 %	2.3 %	44.8 %	1.8 %	1.8 %	5.9 %	6.6 %	4.2 %	1.2 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	98.288 %	0.927 ppb	1.949 ppb	13.998 ppb	977.445 ppb	1.823 ppb	-1.000 ppb	13.193 ppb	7.502 ppb
Concentration per Run 1	99.782 %	0.865 ppb	1.971 ppb	12.906 ppb	946.271 ppb	1.815 ppb	-0.974 ppb	13.091 ppb	7.305 ppb
Concentration per Run 2	97.751 %	0.941 ppb	2.032 ppb	14.463 ppb	1,008.078 ppb	1.757 ppb	-1.081 ppb	13.308 ppb	8.172 ppb
Concentration per Run 3	97.329 %	0.973 ppb	1.844 ppb	14.623 ppb	977.986 ppb	1.895 ppb	-0.944 ppb	13.180 ppb	7.030 ppb
Concentration RSD	1.3 %	6.0 %	4.9 %	6.8 %	3.2 %	3.8 %	7.2 %	0.8 %	7.9 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	116.650 %	0.695 ppb	0.164 ppb	248.551 ppb	0.394 ppb	96.954 %	0.419 ppb	0.079 ppb	100.944 %
Concentration per Run 1	120.009 %	0.600 ppb	0.199 ppb	237.628 ppb	0.310 ppb	100.129 %	0.427 ppb	0.102 ppb	104.213 %
Concentration per Run 2	107.378 %	0.747 ppb	0.197 ppb	264.912 ppb	0.363 ppb	93.311 %	0.421 ppb	0.075 ppb	97.765 %
Concentration per Run 3	122.563 %	0.737 ppb	0.097 ppb	243.112 ppb	0.509 ppb	97.423 %	0.410 ppb	0.058 ppb	100.852 %
Concentration RSD	7.0 %	11.8 %	35.5 %	5.8 %	26.1 %	3.5 %	2.1 %	28.3 %	3.2 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.214 ppb	21.917 ppb	99.994 %	99.984 %	0.088 ppb	0.906 ppb	95.050 %
Concentration per Run 1	0.166 ppb	20.931 ppb	104.800 %	103.518 %	0.069 ppb	0.851 ppb	101.989 %
Concentration per Run 2	0.223 ppb	22.380 ppb	98.110 %	98.681 %	0.101 ppb	0.950 ppb	90.220 %
Concentration per Run 3	0.254 ppb	22.442 ppb	97.071 %	97.752 %	0.096 ppb	0.917 ppb	92.940 %
Concentration RSD	20.8 %	3.9 %	4.2 %	3.1 %	19.4 %	5.5 %	6.5 %

Alpha ICPMSQ2 Data with SRD

12/4/2024 10:02:58 AM

Analysis index: 21 User name ALPHALAB\a2-icpmsq2 Comment <Comment>
Analysis label: L2468003-05 6020TL Rack 2
Analysis started at: 12/3/2024 6:08:49 PM Vial 6

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	101.805 %	96.228 %	-0.004 ppb	17,259.563 ppb	8,186.472 ppb	11.695 ppb	772.067 ppb	19,741.641 ppb	105.508 %
Concentration per Run 1	95.076 %	101.168 %	-0.009 ppb	17,511.415 ppb	8,368.848 ppb	11.790 ppb	801.356 ppb	20,277.077 ppb	97.972 %
Concentration per Run 2	104.109 %	91.872 %	-0.005 ppb	16,930.112 ppb	8,013.776 ppb	11.440 ppb	745.444 ppb	18,969.381 ppb	107.930 %
Concentration per Run 3	106.230 %	95.644 %	0.002 ppb	17,337.161 ppb	8,176.791 ppb	11.856 ppb	769.400 ppb	19,978.464 ppb	110.622 %
Concentration RSD	5.8 %	4.9 %	145.9 %	1.7 %	2.2 %	1.9 %	3.6 %	3.5 %	6.3 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	93.535 %	0.352 ppb	0.526 ppb	2.780 ppb	23.631 ppb	0.034 ppb	-1.480 ppb	3.973 ppb	2.513 ppb
Concentration per Run 1	90.813 %	0.368 ppb	0.580 ppb	2.550 ppb	22.043 ppb	0.024 ppb	-1.450 ppb	4.206 ppb	2.513 ppb
Concentration per Run 2	95.873 %	0.369 ppb	0.530 ppb	3.017 ppb	26.142 ppb	0.024 ppb	-1.472 ppb	3.881 ppb	2.554 ppb
Concentration per Run 3	93.918 %	0.319 ppb	0.468 ppb	2.774 ppb	22.710 ppb	0.053 ppb	-1.516 ppb	3.832 ppb	2.472 ppb
Concentration RSD	2.7 %	8.0 %	10.6 %	8.4 %	9.3 %	49.7 %	2.3 %	5.1 %	1.6 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	99.879 %	0.099 ppb	0.034 ppb	40.875 ppb	0.160 ppb	98.843 %	0.001 ppb	0.006 ppb	98.364 %
Concentration per Run 1	101.580 %	0.117 ppb	0.136 ppb	40.193 ppb	0.112 ppb	100.096 %	0.002 ppb	0.011 ppb	102.313 %
Concentration per Run 2	95.510 %	0.076 ppb	-0.089 ppb	42.152 ppb	0.181 ppb	98.651 %	-0.001 ppb	0.000 ppb	98.459 %
Concentration per Run 3	102.547 %	0.106 ppb	0.055 ppb	40.281 ppb	0.186 ppb	97.782 %	0.001 ppb	0.008 ppb	94.319 %
Concentration RSD	3.8 %	21.1 %	335.1 %	2.7 %	25.8 %	1.2 %	187.2 %	90.3 %	4.1 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.104 ppb	5.301 ppb	99.118 %	97.628 %	-0.003 ppb	0.099 ppb	96.814 %
Concentration per Run 1	0.087 ppb	5.177 ppb	96.985 %	98.742 %	-0.009 ppb	0.100 ppb	99.964 %
Concentration per Run 2	0.116 ppb	5.129 ppb	101.566 %	97.128 %	0.001 ppb	0.103 ppb	94.326 %
Concentration per Run 3	0.109 ppb	5.599 ppb	98.802 %	97.015 %	-0.001 ppb	0.095 ppb	96.152 %
Concentration RSD	14.9 %	4.9 %	2.3 %	1.0 %	174.8 %	4.4 %	3.0 %

Alpha ICPMSQ2 Data with SRD

12/4/2024 10:02:58 AM

Analysis index: 22
Analysis label: L2468003-06 6020TL
Analysis started at: 12/3/2024 6:13:16 PM
User name ALPHALAB\a2-icpmsq2
Rack 2
Vial 7
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	97.024 %	98.159 %	-0.017 ppb	34,563.445 ppb	12,907.907 ppb	23.437 ppb	1,460.297 ppb	38,087.529 ppb	102.311 %
Concentration per Run 1	93.287 %	100.359 %	-0.021 ppb	34,487.636 ppb	12,756.755 ppb	22.074 ppb	1,436.341 ppb	37,419.069 ppb	101.970 %
Concentration per Run 2	98.642 %	98.339 %	-0.018 ppb	35,686.750 ppb	13,301.306 ppb	24.377 ppb	1,504.371 ppb	38,652.057 ppb	103.680 %
Concentration per Run 3	99.143 %	95.779 %	-0.013 ppb	33,515.950 ppb	12,665.658 ppb	23.859 ppb	1,440.179 ppb	38,191.461 ppb	101.282 %
Concentration RSD	3.3 %	2.3 %	20.9 %	3.1 %	2.7 %	5.2 %	2.6 %	1.6 %	1.2 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	95.336 %	0.380 ppb	0.492 ppb	67.416 ppb	1,095.896 ppb	0.129 ppb	-1.532 ppb	0.338 ppb	0.385 ppb
Concentration per Run 1	95.336 %	0.370 ppb	0.460 ppb	64.612 ppb	1,073.840 ppb	0.147 ppb	-1.597 ppb	0.384 ppb	0.480 ppb
Concentration per Run 2	91.196 %	0.397 ppb	0.489 ppb	69.485 ppb	1,153.078 ppb	0.113 ppb	-1.538 ppb	0.343 ppb	0.318 ppb
Concentration per Run 3	99.476 %	0.374 ppb	0.527 ppb	68.150 ppb	1,060.769 ppb	0.129 ppb	-1.461 ppb	0.288 ppb	0.357 ppb
Concentration RSD	4.3 %	3.9 %	6.8 %	3.7 %	4.6 %	13.1 %	4.5 %	14.3 %	22.0 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	106.958 %	0.574 ppb	0.082 ppb	84.625 ppb	0.188 ppb	99.595 %	-0.005 ppb	0.005 ppb	101.325 %
Concentration per Run 1	111.387 %	0.434 ppb	0.164 ppb	82.118 ppb	0.197 ppb	102.029 %	-0.003 ppb	0.000 ppb	104.948 %
Concentration per Run 2	103.770 %	0.697 ppb	0.114 ppb	86.780 ppb	0.201 ppb	98.477 %	-0.003 ppb	0.007 ppb	100.154 %
Concentration per Run 3	105.716 %	0.590 ppb	-0.032 ppb	84.975 ppb	0.165 ppb	98.279 %	-0.007 ppb	0.007 ppb	98.874 %
Concentration RSD	3.7 %	23.1 %	123.7 %	2.8 %	10.5 %	2.1 %	52.3 %	86.6 %	3.2 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.065 ppb	11.900 ppb	98.780 %	98.421 %	-0.013 ppb	0.114 ppb	97.001 %
Concentration per Run 1	0.040 ppb	11.474 ppb	101.449 %	101.187 %	-0.016 ppb	0.112 ppb	100.993 %
Concentration per Run 2	0.075 ppb	12.318 ppb	96.354 %	97.844 %	-0.007 ppb	0.110 ppb	97.089 %
Concentration per Run 3	0.081 ppb	11.908 ppb	98.536 %	96.232 %	-0.015 ppb	0.119 ppb	92.921 %
Concentration RSD	34.0 %	3.5 %	2.6 %	2.6 %	35.7 %	4.1 %	4.2 %

Alpha ICPMSQ2 Data with SRD

12/4/2024 10:02:58 AM

Analysis index:	23	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2468042-01 6020TL	Rack	2		
Analysis started at:	12/3/2024 6:17:44 PM	Vial	8		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	97.185 %	101.886 %	0.600 ppb	96,855.604 ppb	24,584.606 ppb	8,440.826 ppb	5,984.456 ppb	39,820.311 ppb	95.319 %
Concentration per Run 1	94.146 %	109.654 %	0.609 ppb	91,785.112 ppb	23,177.517 ppb	7,809.568 ppb	5,735.819 ppb	37,745.441 ppb	93.702 %
Concentration per Run 2	97.284 %	94.567 %	0.609 ppb	101,177.899 ppb	25,425.961 ppb	8,786.610 ppb	6,053.947 ppb	40,853.915 ppb	95.098 %
Concentration per Run 3	100.126 %	101.437 %	0.581 ppb	97,603.800 ppb	25,150.339 ppb	8,726.301 ppb	6,163.602 ppb	40,861.577 ppb	97.155 %
Concentration RSD	3.1 %	7.4 %	2.7 %	4.9 %	5.0 %	6.5 %	3.7 %	4.5 %	1.8 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	101.571 %	16.095 ppb	15.502 ppb	296.935 ppb	23,248.276 ppb	4.929 ppb	17.323 ppb	7.870 ppb	35.260 ppb
Concentration per Run 1	102.044 %	14.747 ppb	14.954 ppb	284.392 ppb	22,314.180 ppb	4.933 ppb	17.298 ppb	7.894 ppb	34.416 ppb
Concentration per Run 2	102.083 %	17.081 ppb	15.510 ppb	302.316 ppb	23,684.505 ppb	4.863 ppb	17.540 ppb	7.949 ppb	36.243 ppb
Concentration per Run 3	100.588 %	16.458 ppb	16.041 ppb	304.097 ppb	23,746.142 ppb	4.992 ppb	17.131 ppb	7.765 ppb	35.120 ppb
Concentration RSD	0.8 %	7.5 %	3.5 %	3.7 %	3.5 %	1.3 %	1.2 %	1.2 %	2.6 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	98.703 %	10.906 ppb	1.236 ppb	871.575 ppb	23.114 ppb	98.286 %	0.007 ppb	0.086 ppb	100.843 %
Concentration per Run 1	101.418 %	10.143 ppb	0.788 ppb	816.169 ppb	21.246 ppb	105.833 %	0.009 ppb	0.071 ppb	107.201 %
Concentration per Run 2	96.046 %	11.534 ppb	1.643 ppb	906.113 ppb	24.146 ppb	95.300 %	0.008 ppb	0.093 ppb	98.992 %
Concentration per Run 3	98.645 %	11.041 ppb	1.278 ppb	892.442 ppb	23.949 ppb	93.724 %	0.003 ppb	0.095 ppb	96.334 %
Concentration RSD	2.7 %	6.5 %	34.7 %	5.6 %	7.0 %	6.7 %	52.6 %	15.1 %	5.6 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.715 ppb	523.947 ppb	101.696 %	101.656 %	0.029 ppb	3.225 ppb	96.148 %
Concentration per Run 1	0.665 ppb	484.901 ppb	106.633 %	108.133 %	0.021 ppb	3.025 ppb	101.177 %
Concentration per Run 2	0.722 ppb	530.484 ppb	100.149 %	99.901 %	0.034 ppb	3.346 ppb	93.707 %
Concentration per Run 3	0.756 ppb	556.455 ppb	98.304 %	96.934 %	0.031 ppb	3.302 ppb	93.560 %
Concentration RSD	6.5 %	6.9 %	4.3 %	5.7 %	22.9 %	5.4 %	4.5 %

Alpha ICPMSQ2 Data with SRD

12/4/2024 10:02:58 AM

Analysis index: 24
Analysis label: L2468042-02 6020TL
Analysis started at: 12/3/2024 6:22:13 PM
User name ALPHALAB\a2-icpmsq2
Rack 2
Vial 9
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	83.220 %	94.971 %	0.079 ppb	127,089.258 ppb	66,948.434 ppb	2,293.574 ppb	28,483.865 ppb	188,487.647 ppb	90.395 %
Concentration per Run 1	69.551 %	97.800 %	0.102 ppb	122,776.248 ppb	63,115.392 ppb	2,148.480 ppb	26,606.175 ppb	171,811.774 ppb	72.671 %
Concentration per Run 2	91.040 %	97.934 %	0.060 ppb	122,129.602 ppb	66,155.937 ppb	2,288.809 ppb	29,429.511 ppb	196,175.828 ppb	98.902 %
Concentration per Run 3	89.067 %	89.178 %	0.076 ppb	136,361.925 ppb	71,573.972 ppb	2,443.435 ppb	29,415.908 ppb	197,475.338 ppb	99.614 %
Concentration RSD	14.3 %	5.3 %	26.7 %	6.3 %	6.4 %	6.4 %	5.7 %	7.7 %	17.0 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	100.907 %	3.770 ppb	4.734 ppb	4,922.071 ppb	31,378.843 ppb	4.111 ppb	11.608 ppb	4.164 ppb	10.782 ppb
Concentration per Run 1	106.031 %	3.323 ppb	4.304 ppb	4,963.268 ppb	30,562.966 ppb	3.788 ppb	11.190 ppb	3.881 ppb	10.376 ppb
Concentration per Run 2	98.556 %	4.494 ppb	4.817 ppb	4,900.850 ppb	31,829.650 ppb	4.221 ppb	12.188 ppb	4.389 ppb	11.218 ppb
Concentration per Run 3	98.134 %	3.493 ppb	5.081 ppb	4,902.096 ppb	31,743.914 ppb	4.324 ppb	11.445 ppb	4.223 ppb	10.751 ppb
Concentration RSD	4.4 %	16.8 %	8.3 %	0.7 %	2.3 %	6.9 %	4.5 %	6.2 %	3.9 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	102.288 %	11.719 ppb	0.830 ppb	1,048.394 ppb	1.367 ppb	95.930 %	0.018 ppb	0.019 ppb	99.402 %
Concentration per Run 1	103.241 %	10.852 ppb	0.983 ppb	1,005.020 ppb	1.311 ppb	101.114 %	0.015 ppb	0.014 ppb	105.117 %
Concentration per Run 2	100.088 %	12.653 ppb	0.341 ppb	1,074.776 ppb	1.417 ppb	93.234 %	0.020 ppb	0.023 ppb	94.928 %
Concentration per Run 3	103.534 %	11.652 ppb	1.165 ppb	1,065.387 ppb	1.372 ppb	93.442 %	0.019 ppb	0.019 ppb	98.161 %
Concentration RSD	1.9 %	7.7 %	52.2 %	3.6 %	3.9 %	4.7 %	13.6 %	24.4 %	5.2 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.178 ppb	666.560 ppb	100.639 %	100.848 %	-0.001 ppb	2.424 ppb	94.582 %
Concentration per Run 1	0.165 ppb	624.761 ppb	103.355 %	103.444 %	-0.011 ppb	2.276 ppb	99.165 %
Concentration per Run 2	0.166 ppb	695.623 ppb	97.024 %	100.955 %	0.001 ppb	2.577 ppb	91.287 %
Concentration per Run 3	0.202 ppb	679.296 ppb	101.538 %	98.145 %	0.009 ppb	2.419 ppb	93.294 %
Concentration RSD	11.9 %	5.6 %	3.2 %	2.6 %	1,823.6 %	6.2 %	4.3 %

Alpha ICPMSQ2 Data with SRD

12/4/2024 10:02:58 AM

Analysis index: 25
Analysis label: L2468042-03 6020TL
Analysis started at: 12/3/2024 6:26:41 PM
User name ALPHALAB\a2-icpmsq2
Rack 2
Vial 10
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	87.427 %	94.567 %	0.102 ppb	36,849.675 ppb	44,874.676 ppb	2,704.109 ppb	6,648.119 ppb	175,053.345 ppb	94.263 %
Concentration per Run 1	85.112 %	94.162 %	0.096 ppb	37,149.327 ppb	47,333.685 ppb	2,638.550 ppb	6,544.857 ppb	170,355.096 ppb	93.460 %
Concentration per Run 2	87.664 %	99.686 %	0.103 ppb	35,757.639 ppb	42,084.699 ppb	2,677.564 ppb	6,809.345 ppb	182,700.185 ppb	94.479 %
Concentration per Run 3	89.505 %	89.852 %	0.107 ppb	37,642.060 ppb	45,205.643 ppb	2,796.214 ppb	6,590.156 ppb	172,104.756 ppb	94.851 %
Concentration RSD	2.5 %	5.2 %	5.8 %	2.7 %	5.9 %	3.0 %	2.1 %	3.8 %	0.8 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	100.933 %	5.611 ppb	4.642 ppb	7,468.833 ppb	16,168.487 ppb	3.082 ppb	6.658 ppb	5.753 ppb	26.485 ppb
Concentration per Run 1	101.163 %	4.993 ppb	4.554 ppb	7,343.887 ppb	15,828.837 ppb	3.193 ppb	6.665 ppb	5.550 ppb	25.058 ppb
Concentration per Run 2	99.361 %	6.465 ppb	4.855 ppb	7,675.323 ppb	16,488.391 ppb	3.163 ppb	6.825 ppb	5.928 ppb	27.220 ppb
Concentration per Run 3	102.274 %	5.376 ppb	4.516 ppb	7,387.289 ppb	16,188.233 ppb	2.890 ppb	6.485 ppb	5.779 ppb	27.178 ppb
Concentration RSD	1.5 %	13.6 %	4.0 %	2.4 %	2.0 %	5.4 %	2.6 %	3.3 %	4.7 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	102.769 %	2.582 ppb	0.995 ppb	774.205 ppb	0.323 ppb	99.258 %	0.009 ppb	0.043 ppb	100.065 %
Concentration per Run 1	109.812 %	2.268 ppb	0.846 ppb	730.312 ppb	0.222 ppb	102.542 %	0.005 ppb	0.035 ppb	104.026 %
Concentration per Run 2	99.478 %	2.921 ppb	0.876 ppb	792.324 ppb	0.277 ppb	97.921 %	0.011 ppb	0.041 ppb	96.989 %
Concentration per Run 3	99.015 %	2.558 ppb	1.262 ppb	799.977 ppb	0.468 ppb	97.312 %	0.010 ppb	0.052 ppb	99.181 %
Concentration RSD	5.9 %	12.7 %	23.3 %	4.9 %	40.0 %	2.9 %	38.0 %	19.6 %	3.6 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.148 ppb	402.030 ppb	99.990 %	100.131 %	0.012 ppb	3.543 ppb	95.610 %
Concentration per Run 1	0.130 ppb	383.772 ppb	101.501 %	102.565 %	0.006 ppb	3.419 ppb	99.043 %
Concentration per Run 2	0.137 ppb	406.929 ppb	98.370 %	99.505 %	0.012 ppb	3.567 ppb	92.649 %
Concentration per Run 3	0.177 ppb	415.388 ppb	100.098 %	98.322 %	0.018 ppb	3.642 ppb	95.140 %
Concentration RSD	17.3 %	4.1 %	1.6 %	2.2 %	48.8 %	3.2 %	3.4 %

Alpha ICPMSQ2 Data with SRD

12/4/2024 10:02:58 AM

Analysis index: 26 User name ALPHALAB\a2-icpmsq2 Comment <Comment>
Analysis label: L2468042-04 6020TL Rack 2
Analysis started at: 12/3/2024 6:31:10 PM Vial 11

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	93.649 %	99.192 %	0.010 ppb	46,223.162 ppb	55,223.350 ppb	946.482 ppb	4,163.774 ppb	187,379.917 ppb	101.589 %
Concentration per Run 1	89.028 %	100.763 %	0.010 ppb	45,100.028 ppb	53,988.578 ppb	933.346 ppb	4,173.788 ppb	184,795.795 ppb	98.941 %
Concentration per Run 2	94.658 %	100.763 %	0.012 ppb	47,024.356 ppb	56,531.909 ppb	954.337 ppb	4,175.845 ppb	188,325.322 ppb	101.634 %
Concentration per Run 3	97.260 %	96.048 %	0.007 ppb	46,545.101 ppb	55,149.564 ppb	951.764 ppb	4,141.688 ppb	189,018.633 ppb	104.191 %
Concentration RSD	4.5 %	2.7 %	22.4 %	2.2 %	2.3 %	1.2 %	0.5 %	1.2 %	2.6 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	96.767 %	3.297 ppb	2.303 ppb	191.118 ppb	2,696.359 ppb	1.901 ppb	3.537 ppb	3.114 ppb	12.724 ppb
Concentration per Run 1	96.793 %	3.141 ppb	2.135 ppb	192.251 ppb	2,697.076 ppb	1.894 ppb	3.633 ppb	3.265 ppb	12.393 ppb
Concentration per Run 2	94.531 %	3.370 ppb	2.301 ppb	190.327 ppb	2,755.062 ppb	1.947 ppb	3.524 ppb	3.027 ppb	13.038 ppb
Concentration per Run 3	98.978 %	3.379 ppb	2.473 ppb	190.776 ppb	2,636.940 ppb	1.862 ppb	3.453 ppb	3.049 ppb	12.741 ppb
Concentration RSD	2.3 %	4.1 %	7.3 %	0.5 %	2.2 %	2.3 %	2.6 %	4.2 %	2.5 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	94.321 %	5.588 ppb	0.360 ppb	740.551 ppb	4.398 ppb	97.195 %	-0.001 ppb	0.022 ppb	99.535 %
Concentration per Run 1	96.618 %	5.593 ppb	0.210 ppb	710.012 ppb	4.334 ppb	100.404 %	0.003 ppb	0.021 ppb	102.919 %
Concentration per Run 2	94.659 %	5.699 ppb	0.463 ppb	749.450 ppb	4.420 ppb	94.227 %	-0.003 ppb	0.011 ppb	97.092 %
Concentration per Run 3	91.686 %	5.471 ppb	0.407 ppb	762.191 ppb	4.439 ppb	96.953 %	-0.002 ppb	0.033 ppb	98.593 %
Concentration RSD	2.6 %	2.0 %	36.9 %	3.7 %	1.3 %	3.2 %	537.3 %	50.1 %	3.0 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.839 ppb	47.540 ppb	100.465 %	98.814 %	0.006 ppb	1.088 ppb	96.064 %
Concentration per Run 1	0.801 ppb	46.295 ppb	104.099 %	100.255 %	-0.005 ppb	1.044 ppb	100.608 %
Concentration per Run 2	0.900 ppb	50.324 ppb	97.751 %	96.719 %	0.010 ppb	1.123 ppb	93.127 %
Concentration per Run 3	0.818 ppb	46.002 ppb	99.545 %	99.469 %	0.013 ppb	1.098 ppb	94.456 %
Concentration RSD	6.3 %	5.1 %	3.3 %	1.9 %	161.0 %	3.7 %	4.2 %

Alpha ICPMSQ2 Data with SRD

12/4/2024 10:02:58 AM

Analysis index: 27 User name ALPHALAB\a2-icpmsq2 Comment <Comment>
Analysis label: L2468042-05 6020TL Rack 2
Analysis started at: 12/3/2024 6:35:39 PM Vial 12

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	87.102 %	93.938 %	-0.034 ppb	96,113.293 ppb	43,389.623 ppb	41.708 ppb	11,321.351 ppb	132,934.564 ppb	94.595 %
Concentration per Run 1	83.715 %	98.069 %	-0.034 ppb	92,729.067 ppb	41,955.452 ppb	36.896 ppb	10,752.639 ppb	124,351.038 ppb	91.482 %
Concentration per Run 2	88.624 %	89.986 %	-0.033 ppb	97,675.177 ppb	44,994.753 ppb	45.073 ppb	11,601.653 ppb	137,067.012 ppb	96.270 %
Concentration per Run 3	88.966 %	93.758 %	-0.035 ppb	97,935.635 ppb	43,218.663 ppb	43.155 ppb	11,609.760 ppb	137,385.641 ppb	96.033 %
Concentration RSD	3.4 %	4.3 %	3.8 %	3.1 %	3.5 %	10.3 %	4.4 %	5.6 %	2.9 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	93.956 %	0.153 ppb	0.460 ppb	36.572 ppb	208.560 ppb	0.491 ppb	-0.630 ppb	1.349 ppb	1.018 ppb
Concentration per Run 1	94.187 %	0.088 ppb	0.446 ppb	35.375 ppb	208.657 ppb	0.495 ppb	-0.644 ppb	1.440 ppb	1.072 ppb
Concentration per Run 2	93.113 %	0.180 ppb	0.494 ppb	36.980 ppb	197.670 ppb	0.488 ppb	-0.655 ppb	1.186 ppb	0.936 ppb
Concentration per Run 3	94.569 %	0.192 ppb	0.440 ppb	37.362 ppb	219.353 ppb	0.490 ppb	-0.590 ppb	1.421 ppb	1.046 ppb
Concentration RSD	0.8 %	37.2 %	6.5 %	2.9 %	5.2 %	0.8 %	5.5 %	10.5 %	7.1 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	93.220 %	0.600 ppb	-0.022 ppb	777.419 ppb	0.481 ppb	97.592 %	-0.004 ppb	0.006 ppb	101.581 %
Concentration per Run 1	97.092 %	0.519 ppb	0.021 ppb	732.718 ppb	0.416 ppb	102.350 %	-0.004 ppb	0.007 ppb	105.359 %
Concentration per Run 2	90.309 %	0.718 ppb	-0.030 ppb	795.743 ppb	0.508 ppb	95.741 %	-0.005 ppb	0.007 ppb	100.408 %
Concentration per Run 3	92.259 %	0.562 ppb	-0.057 ppb	803.797 ppb	0.519 ppb	94.685 %	-0.003 ppb	0.004 ppb	98.976 %
Concentration RSD	3.7 %	17.4 %	181.5 %	5.0 %	11.7 %	4.3 %	27.2 %	33.1 %	3.3 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.049 ppb	56.758 ppb	98.546 %	98.300 %	-0.018 ppb	0.070 ppb	94.096 %
Concentration per Run 1	0.046 ppb	54.564 ppb	101.581 %	103.277 %	-0.027 ppb	0.066 ppb	99.357 %
Concentration per Run 2	0.030 ppb	55.831 ppb	98.913 %	96.103 %	-0.013 ppb	0.077 ppb	91.102 %
Concentration per Run 3	0.071 ppb	59.880 ppb	95.143 %	95.520 %	-0.013 ppb	0.067 ppb	91.829 %
Concentration RSD	41.2 %	4.9 %	3.3 %	4.4 %	44.8 %	8.6 %	4.9 %

Alpha ICPMSQ2 Data with SRD

12/4/2024 10:02:58 AM



Analysis index:	28	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	CCV	Rack	0		
Analysis started at:	12/3/2024 6:40:08 PM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	95.475 %	96.048 %	57.450 ppb	6,263.545 ppb	6,406.237 ppb	61.000 ppb	6,368.117 ppb	6,374.675 ppb	97.550 %
Concentration per Run 1	91.973 %	107.768 %	58.036 ppb	5,805.177 ppb	5,941.416 ppb	57.998 ppb	6,201.590 ppb	6,252.353 ppb	94.941 %
Concentration per Run 2	96.673 %	90.525 %	57.215 ppb	6,539.975 ppb	6,839.373 ppb	65.865 ppb	6,425.638 ppb	6,522.624 ppb	99.416 %
Concentration per Run 3	97.778 %	89.852 %	57.100 ppb	6,445.484 ppb	6,437.922 ppb	59.139 ppb	6,477.123 ppb	6,349.048 ppb	98.294 %
Recovery Percentage 1			95.751 %	104.392 %	106.771 %	101.667 %	106.135 %	106.245 %	
Concentration RSD	3.2 %	10.6 %	0.9 %	6.4 %	7.0 %	7.0 %	2.3 %	2.1 %	2.4 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	92.346 %	62.035 ppb	63.591 ppb	64.954 ppb	6,542.220 ppb	64.830 ppb	61.489 ppb	63.324 ppb	60.206 ppb
Concentration per Run 1	92.040 %	60.070 ppb	60.191 ppb	63.442 ppb	6,284.886 ppb	63.498 ppb	61.544 ppb	63.095 ppb	58.902 ppb
Concentration per Run 2	91.197 %	62.358 ppb	64.942 ppb	64.687 ppb	6,709.489 ppb	65.845 ppb	60.169 ppb	64.866 ppb	61.606 ppb
Concentration per Run 3	93.803 %	63.676 ppb	65.641 ppb	66.734 ppb	6,632.287 ppb	65.148 ppb	62.753 ppb	62.011 ppb	60.111 ppb
Recovery Percentage 1		103.391 %	105.985 %	108.257 %	109.037 %	108.051 %	102.481 %	105.540 %	100.343 %
Concentration RSD	1.4 %	2.9 %	4.7 %	2.6 %	3.5 %	1.9 %	2.1 %	2.3 %	2.3 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	94.997 %	59.232 ppb	57.914 ppb	58.988 ppb	57.209 ppb	99.456 %	58.502 ppb	57.835 ppb	99.407 %
Concentration per Run 1	97.287 %	57.899 ppb	56.238 ppb	56.764 ppb	54.992 ppb	103.595 %	56.482 ppb	56.303 ppb	102.400 %
Concentration per Run 2	94.702 %	58.388 ppb	55.401 ppb	60.030 ppb	57.392 ppb	97.244 %	59.234 ppb	57.568 ppb	98.533 %
Concentration per Run 3	93.003 %	61.410 ppb	62.102 ppb	60.172 ppb	59.243 ppb	97.529 %	59.790 ppb	59.633 ppb	97.288 %
Recovery Percentage 1		98.721 %	96.523 %	98.314 %	95.348 %		97.503 %	96.391 %	
Concentration RSD	2.3 %	3.2 %	6.3 %	3.3 %	3.7 %	3.6 %	3.0 %	2.9 %	2.7 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	58.745 ppb	60.010 ppb	98.581 %	97.242 %	59.037 ppb	59.154 ppb	96.676 %
Concentration per Run 1	55.148 ppb	57.947 ppb	101.765 %	100.593 %	55.814 ppb	56.432 ppb	100.255 %
Concentration per Run 2	60.442 ppb	61.595 ppb	95.197 %	95.787 %	60.130 ppb	60.924 ppb	94.303 %
Concentration per Run 3	60.643 ppb	60.489 ppb	98.781 %	95.346 %	61.168 ppb	60.107 ppb	95.472 %
Recovery Percentage 1	97.908 %	100.017 %			98.395 %	98.590 %	
Concentration RSD	5.3 %	3.1 %	3.3 %	3.0 %	4.8 %	4.0 %	3.3 %

Alpha ICPMSQ2 Data with SRD

12/4/2024 10:02:58 AM

Analysis index:	29	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	CCB	Rack	0		
Analysis started at:	12/3/2024 6:44:40 PM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	93.817 %	99.147 %	0.077 ppb	-63.189 ppb	10.998 ppb	-0.564 ppb	23.572 ppb	15.498 ppb	95.412 %
Concentration per Run 1	90.173 %	104.939 %	0.081 ppb	-84.223 ppb	7.821 ppb	-0.433 ppb	25.964 ppb	27.559 ppb	90.784 %
Concentration per Run 2	95.853 %	94.028 %	0.098 ppb	-52.405 ppb	10.280 ppb	-1.206 ppb	18.676 ppb	3.124 ppb	95.994 %
Concentration per Run 3	95.424 %	98.473 %	0.052 ppb	-52.938 ppb	14.893 ppb	-0.052 ppb	26.076 ppb	15.812 ppb	99.457 %
Recovery Percentage 1			15.401 %	-12.638 %	15.712 %	-5.637 %	23.572 %	15.498 %	
Concentration RSD	3.4 %	5.5 %	29.8 %	28.8 %	32.6 %	104.3 %	18.0 %	78.9 %	4.6 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	92.308 %	0.033 ppb	0.012 ppb	0.187 ppb	5.944 ppb	0.024 ppb	-1.582 ppb	0.170 ppb	-0.411 ppb
Concentration per Run 1	94.493 %	-0.012 ppb	-0.023 ppb	0.239 ppb	2.921 ppb	0.021 ppb	-1.623 ppb	0.151 ppb	-0.398 ppb
Concentration per Run 2	88.475 %	0.105 ppb	0.053 ppb	0.113 ppb	7.500 ppb	0.033 ppb	-1.615 ppb	0.187 ppb	-0.457 ppb
Concentration per Run 3	93.957 %	0.006 ppb	0.006 ppb	0.209 ppb	7.411 ppb	0.018 ppb	-1.507 ppb	0.173 ppb	-0.378 ppb
Recovery Percentage 1		0.662 %	1.190 %	18.693 %	11.887 %	4.865 %	-79.085 %	17.031 %	-8.224 %
Concentration RSD	3.6 %	190.2 %	323.1 %	35.4 %	44.1 %	33.1 %	4.1 %	10.7 %	10.0 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	90.364 %	0.116 ppb	0.115 ppb	0.148 ppb	0.381 ppb	98.577 %	0.023 ppb	0.027 ppb	97.771 %
Concentration per Run 1	91.809 %	0.115 ppb	-0.062 ppb	0.145 ppb	0.223 ppb	101.263 %	0.022 ppb	0.032 ppb	103.055 %
Concentration per Run 2	89.643 %	0.090 ppb	0.155 ppb	0.150 ppb	0.417 ppb	97.740 %	0.020 ppb	0.026 ppb	95.198 %
Concentration per Run 3	89.641 %	0.142 ppb	0.251 ppb	0.148 ppb	0.505 ppb	96.727 %	0.027 ppb	0.023 ppb	95.059 %
Recovery Percentage 1		23.158 %	2.300 %	1.476 %	19.075 %		5.703 %	13.506 %	
Concentration RSD	1.4 %	22.6 %	139.5 %	1.9 %	37.8 %	2.4 %	15.5 %	16.9 %	4.7 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.055 ppb	0.105 ppb	95.851 %	95.066 %	0.245 ppb	0.042 ppb	96.767 %
Concentration per Run 1	0.022 ppb	0.121 ppb	98.122 %	95.255 %	0.226 ppb	0.049 ppb	100.582 %
Concentration per Run 2	0.059 ppb	0.082 ppb	96.229 %	95.514 %	0.301 ppb	0.044 ppb	94.316 %
Concentration per Run 3	0.083 ppb	0.114 ppb	93.202 %	94.429 %	0.207 ppb	0.033 ppb	95.405 %
Recovery Percentage 1	1.373 %	21.089 %			24.492 %	4.192 %	
Concentration RSD	56.0 %	19.8 %	2.6 %	0.6 %	20.3 %	18.6 %	3.5 %

Alpha ICPMSQ2 Data with SRD

12/4/2024 10:02:58 AM

Analysis index: 30
Analysis label: WG2002010-1 6020SL
Analysis started at: 12/3/2024 7:01:20 PM
User name ALPHALAB\a2-icpmsq2
Rack 2
Vial 13
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	96.650 %	99.012 %	-0.013 ppb	-94.821 ppb	1.885 ppb	2.132 ppb	-6.722 ppb	9.861 ppb	103.197 %
Concentration per Run 1	93.915 %	106.556 %	-0.007 ppb	-123.804 ppb	1.469 ppb	2.419 ppb	-25.132 ppb	23.194 ppb	99.467 %
Concentration per Run 2	98.074 %	99.955 %	-0.016 ppb	-101.896 ppb	1.851 ppb	1.596 ppb	-0.689 ppb	-3.260 ppb	104.263 %
Concentration per Run 3	97.960 %	90.525 %	-0.016 ppb	-58.761 ppb	2.334 ppb	2.382 ppb	5.655 ppb	9.649 ppb	105.860 %
Concentration RSD	2.5 %	8.1 %	38.0 %	34.9 %	23.0 %	21.8 %	241.8 %	134.1 %	3.2 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	96.128 %	0.072 ppb	0.087 ppb	0.296 ppb	2.683 ppb	0.010 ppb	-1.550 ppb	0.247 ppb	-0.013 ppb
Concentration per Run 1	99.553 %	0.042 ppb	0.078 ppb	0.257 ppb	3.243 ppb	0.013 ppb	-1.582 ppb	0.257 ppb	-0.099 ppb
Concentration per Run 2	95.950 %	0.066 ppb	0.046 ppb	0.327 ppb	0.697 ppb	0.007 ppb	-1.537 ppb	0.251 ppb	0.030 ppb
Concentration per Run 3	92.883 %	0.107 ppb	0.137 ppb	0.305 ppb	4.108 ppb	0.011 ppb	-1.531 ppb	0.235 ppb	0.029 ppb
Concentration RSD	3.5 %	46.1 %	53.4 %	12.0 %	66.1 %	29.1 %	1.8 %	4.6 %	551.9 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	100.217 %	0.080 ppb	0.121 ppb	0.038 ppb	0.260 ppb	100.825 %	-0.001 ppb	0.005 ppb	103.001 %
Concentration per Run 1	103.797 %	0.116 ppb	0.100 ppb	0.033 ppb	0.264 ppb	101.467 %	-0.001 ppb	0.007 ppb	105.991 %
Concentration per Run 2	99.059 %	0.048 ppb	0.219 ppb	0.017 ppb	0.248 ppb	98.966 %	-0.002 ppb	0.004 ppb	100.915 %
Concentration per Run 3	97.795 %	0.075 ppb	0.045 ppb	0.065 ppb	0.268 ppb	102.042 %	0.001 ppb	0.004 ppb	102.098 %
Concentration RSD	3.2 %	42.9 %	73.4 %	63.6 %	4.0 %	1.6 %	187.0 %	41.2 %	2.6 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.042 ppb	0.053 ppb	97.703 %	97.356 %	0.042 ppb	0.012 ppb	103.487 %
Concentration per Run 1	0.048 ppb	0.076 ppb	97.333 %	97.463 %	0.038 ppb	0.013 ppb	107.059 %
Concentration per Run 2	0.036 ppb	0.064 ppb	96.667 %	96.010 %	0.052 ppb	0.010 ppb	102.550 %
Concentration per Run 3	0.042 ppb	0.019 ppb	99.108 %	98.595 %	0.036 ppb	0.014 ppb	100.853 %
Concentration RSD	14.9 %	56.4 %	1.3 %	1.3 %	21.2 %	16.9 %	3.1 %

Alpha ICPMSQ2 Data with SRD

12/4/2024 10:02:58 AM

Analysis index: 31
Analysis label: WG2002010-2d10 6020SL
Analysis started at: 12/3/2024 7:05:47 PM
User name ALPHALAB\a2-icpmsq2
Rack 2
Vial 14
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	98.802 %	96.318 %	5.013 ppb	1,091.174 ppb	1,099.181 ppb	217.979 ppb	1,140.324 ppb	1,070.180 ppb	98.834 %
Concentration per Run 1	94.014 %	95.510 %	4.996 ppb	1,111.558 ppb	1,111.915 ppb	216.478 ppb	1,205.631 ppb	1,132.456 ppb	95.700 %
Concentration per Run 2	99.722 %	93.893 %	5.043 ppb	1,081.809 ppb	1,088.021 ppb	215.728 ppb	1,151.557 ppb	1,094.189 ppb	99.037 %
Concentration per Run 3	102.669 %	99.551 %	4.998 ppb	1,080.155 ppb	1,097.607 ppb	221.730 ppb	1,063.785 ppb	983.894 ppb	101.766 %
Concentration RSD	4.5 %	3.0 %	0.5 %	1.6 %	1.1 %	1.5 %	6.3 %	7.2 %	3.1 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	90.596 %	54.755 ppb	22.230 ppb	57.502 ppb	114.369 ppb	56.764 ppb	54.409 ppb	27.190 ppb	53.629 ppb
Concentration per Run 1	88.858 %	52.910 ppb	22.487 ppb	56.365 ppb	113.108 ppb	55.952 ppb	53.860 ppb	27.135 ppb	53.101 ppb
Concentration per Run 2	91.196 %	54.315 ppb	21.676 ppb	58.605 ppb	113.175 ppb	56.503 ppb	53.968 ppb	27.119 ppb	54.050 ppb
Concentration per Run 3	91.733 %	57.039 ppb	22.526 ppb	57.536 ppb	116.825 ppb	57.838 ppb	55.400 ppb	27.317 ppb	53.735 ppb
Concentration RSD	1.7 %	3.8 %	2.2 %	1.9 %	1.9 %	1.7 %	1.6 %	0.4 %	0.9 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	93.270 %	13.157 ppb	12.770 ppb	102.058 ppb	99.352 ppb	101.556 %	4.837 ppb	5.202 ppb	99.912 %
Concentration per Run 1	93.023 %	13.627 ppb	11.393 ppb	99.882 ppb	95.610 ppb	106.233 %	4.701 ppb	5.056 ppb	103.850 %
Concentration per Run 2	92.775 %	13.138 ppb	13.065 ppb	102.319 ppb	102.227 ppb	100.435 %	4.933 ppb	5.139 ppb	97.344 %
Concentration per Run 3	94.011 %	12.706 ppb	13.852 ppb	103.974 ppb	100.217 ppb	98.000 %	4.877 ppb	5.412 ppb	98.542 %
Concentration RSD	0.7 %	3.5 %	9.8 %	2.0 %	3.4 %	4.2 %	2.5 %	3.6 %	3.5 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	45.171 ppb	210.786 ppb	97.972 %	97.341 %	12.391 ppb	54.098 ppb	99.572 %
Concentration per Run 1	42.552 ppb	201.414 ppb	99.516 %	101.730 %	12.298 ppb	53.550 ppb	101.197 %
Concentration per Run 2	46.072 ppb	214.644 ppb	97.220 %	94.388 %	12.256 ppb	54.472 ppb	98.195 %
Concentration per Run 3	46.890 ppb	216.299 ppb	97.180 %	95.906 %	12.619 ppb	54.272 ppb	99.324 %
Concentration RSD	5.1 %	3.9 %	1.4 %	4.0 %	1.6 %	0.9 %	1.5 %

Alpha ICPMSQ2 Data with SRD

12/4/2024 10:02:58 AM

Analysis index:	32	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2467934-05 6020SL	Rack	2		
Analysis started at:	12/3/2024 7:10:15 PM	Vial	15		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	95.572 %	98.788 %	0.129 ppb	5,056.431 ppb	883.615 ppb	28.503 ppb	728.428 ppb	3,478.798 ppb	99.254 %
Concentration per Run 1	93.041 %	100.224 %	0.126 ppb	5,002.222 ppb	885.674 ppb	26.304 ppb	669.195 ppb	3,429.382 ppb	97.628 %
Concentration per Run 2	96.904 %	98.877 %	0.136 ppb	5,109.814 ppb	882.351 ppb	28.767 ppb	733.025 ppb	3,417.788 ppb	99.037 %
Concentration per Run 3	96.772 %	97.261 %	0.126 ppb	5,057.255 ppb	882.819 ppb	30.439 ppb	783.064 ppb	3,589.224 ppb	101.096 %
Concentration RSD	2.3 %	1.5 %	4.6 %	1.1 %	0.2 %	7.3 %	7.8 %	2.8 %	1.8 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	92.551 %	0.177 ppb	0.410 ppb	14.089 ppb	40.706 ppb	0.089 ppb	-0.696 ppb	0.604 ppb	0.952 ppb
Concentration per Run 1	92.845 %	0.181 ppb	0.409 ppb	13.817 ppb	41.277 ppb	0.078 ppb	-0.694 ppb	0.644 ppb	1.005 ppb
Concentration per Run 2	91.886 %	0.116 ppb	0.383 ppb	14.608 ppb	40.411 ppb	0.122 ppb	-0.466 ppb	0.620 ppb	0.801 ppb
Concentration per Run 3	92.921 %	0.233 ppb	0.438 ppb	13.841 ppb	40.431 ppb	0.068 ppb	-0.927 ppb	0.549 ppb	1.049 ppb
Concentration RSD	0.6 %	33.4 %	6.7 %	3.2 %	1.2 %	32.6 %	33.1 %	8.2 %	13.9 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	89.508 %	0.166 ppb	1.091 ppb	16.533 ppb	1.102 ppb	100.874 %	-0.003 ppb	0.090 ppb	101.321 %
Concentration per Run 1	90.725 %	0.033 ppb	0.792 ppb	16.071 ppb	0.916 ppb	106.783 %	-0.005 ppb	0.109 ppb	106.598 %
Concentration per Run 2	88.018 %	0.194 ppb	1.159 ppb	16.848 ppb	1.140 ppb	97.763 %	-0.004 ppb	0.066 ppb	98.600 %
Concentration per Run 3	89.780 %	0.272 ppb	1.323 ppb	16.679 ppb	1.251 ppb	98.076 %	0.000 ppb	0.096 ppb	98.767 %
Concentration RSD	1.5 %	73.1 %	24.9 %	2.5 %	15.5 %	5.1 %	93.5 %	24.0 %	4.5 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.667 ppb	3.380 ppb	101.042 %	98.402 %	0.023 ppb	0.058 ppb	100.673 %
Concentration per Run 1	0.607 ppb	3.439 ppb	103.612 %	101.971 %	0.010 ppb	0.068 ppb	104.853 %
Concentration per Run 2	0.675 ppb	3.158 ppb	99.931 %	97.622 %	0.034 ppb	0.061 ppb	97.221 %
Concentration per Run 3	0.719 ppb	3.543 ppb	99.584 %	95.612 %	0.027 ppb	0.046 ppb	99.946 %
Concentration RSD	8.5 %	5.9 %	2.2 %	3.3 %	52.7 %	19.2 %	3.8 %

Alpha ICPMSQ2 Data with SRD

12/4/2024 10:02:58 AM

Analysis index:	33	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG2002010-3d10 6020SL	Rack	2		
Analysis started at:	12/3/2024 7:14:43 PM	Vial	16		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	95.186 %	95.779 %	5.218 ppb	1,579.114 ppb	1,159.214 ppb	212.758 ppb	1,231.287 ppb	1,428.139 ppb	97.463 %
Concentration per Run 1	91.279 %	95.105 %	5.269 ppb	1,546.245 ppb	1,168.464 ppb	213.752 ppb	1,229.574 ppb	1,327.295 ppb	95.365 %
Concentration per Run 2	96.641 %	96.587 %	5.225 ppb	1,601.792 ppb	1,160.832 ppb	208.837 ppb	1,219.567 ppb	1,491.963 ppb	98.498 %
Concentration per Run 3	97.639 %	95.644 %	5.161 ppb	1,589.306 ppb	1,148.345 ppb	215.685 ppb	1,244.719 ppb	1,465.158 ppb	98.526 %
Concentration RSD	3.6 %	0.8 %	1.0 %	1.8 %	0.9 %	1.7 %	1.0 %	6.2 %	1.9 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	90.008 %	55.048 ppb	22.196 ppb	60.055 ppb	126.704 ppb	56.662 ppb	55.189 ppb	28.289 ppb	54.253 ppb
Concentration per Run 1	89.203 %	52.795 ppb	21.376 ppb	57.113 ppb	117.497 ppb	55.911 ppb	55.855 ppb	28.359 ppb	54.021 ppb
Concentration per Run 2	89.165 %	56.934 ppb	22.685 ppb	62.599 ppb	133.532 ppb	58.822 ppb	54.790 ppb	28.253 ppb	56.207 ppb
Concentration per Run 3	91.657 %	55.416 ppb	22.528 ppb	60.453 ppb	129.081 ppb	55.254 ppb	54.924 ppb	28.255 ppb	52.530 ppb
Concentration RSD	1.6 %	3.8 %	3.2 %	4.6 %	6.5 %	3.4 %	1.1 %	0.2 %	3.4 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	89.799 %	13.109 ppb	12.714 ppb	102.757 ppb	97.757 ppb	98.488 %	5.019 ppb	5.322 ppb	99.527 %
Concentration per Run 1	92.056 %	12.389 ppb	13.538 ppb	99.348 ppb	95.272 ppb	101.392 %	4.850 ppb	4.923 ppb	102.568 %
Concentration per Run 2	87.996 %	13.477 ppb	12.207 ppb	103.274 ppb	96.435 ppb	98.666 %	5.048 ppb	5.436 ppb	100.359 %
Concentration per Run 3	89.345 %	13.460 ppb	12.398 ppb	105.649 ppb	101.564 ppb	95.406 %	5.160 ppb	5.608 ppb	95.652 %
Concentration RSD	2.3 %	4.8 %	5.7 %	3.1 %	3.4 %	3.0 %	3.1 %	6.7 %	3.5 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	43.736 ppb	211.447 ppb	97.115 %	96.250 %	12.031 ppb	52.649 ppb	99.453 %
Concentration per Run 1	41.524 ppb	205.667 ppb	101.225 %	99.522 %	11.458 ppb	50.532 ppb	103.674 %
Concentration per Run 2	43.985 ppb	214.034 ppb	95.755 %	94.672 %	12.425 ppb	54.294 ppb	96.927 %
Concentration per Run 3	45.701 ppb	214.639 ppb	94.366 %	94.557 %	12.210 ppb	53.122 ppb	97.757 %
Concentration RSD	4.8 %	2.4 %	3.7 %	2.9 %	4.2 %	3.7 %	3.7 %

Alpha ICPMSQ2 Data with SRD

12/4/2024 10:02:58 AM

Analysis index:	34	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG2002010-4d10 6020SL	Rack	2		
Analysis started at:	12/3/2024 7:19:11 PM	Vial	17		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	96.592 %	95.420 %	4.980 ppb	1,562.454 ppb	1,154.647 ppb	208.263 ppb	1,156.809 ppb	1,309.135 ppb	101.473 %
Concentration per Run 1	93.070 %	99.551 %	5.005 ppb	1,414.563 ppb	1,070.577 ppb	196.742 ppb	1,079.357 ppb	1,175.325 ppb	100.077 %
Concentration per Run 2	95.922 %	94.432 %	4.995 ppb	1,637.922 ppb	1,216.018 ppb	217.419 ppb	1,189.535 ppb	1,371.191 ppb	102.727 %
Concentration per Run 3	100.785 %	92.276 %	4.939 ppb	1,634.878 ppb	1,177.346 ppb	210.627 ppb	1,201.536 ppb	1,380.889 ppb	101.613 %
Concentration RSD	4.0 %	3.9 %	0.7 %	8.2 %	6.5 %	5.1 %	5.8 %	8.9 %	1.3 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	95.004 %	52.907 ppb	21.614 ppb	57.449 ppb	119.989 ppb	56.379 ppb	53.648 ppb	27.461 ppb	53.320 ppb
Concentration per Run 1	103.923 %	46.122 ppb	19.076 ppb	51.867 ppb	105.397 ppb	50.992 ppb	48.583 ppb	25.757 ppb	49.872 ppb
Concentration per Run 2	87.862 %	58.211 ppb	23.737 ppb	62.815 ppb	125.488 ppb	61.000 ppb	57.618 ppb	28.933 ppb	57.112 ppb
Concentration per Run 3	93.228 %	54.388 ppb	22.030 ppb	57.664 ppb	129.082 ppb	57.146 ppb	54.742 ppb	27.692 ppb	52.978 ppb
Concentration RSD	8.6 %	11.7 %	10.9 %	9.5 %	10.6 %	9.0 %	8.6 %	5.8 %	6.8 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	90.636 %	12.486 ppb	13.247 ppb	101.686 ppb	96.646 ppb	101.580 %	4.909 ppb	5.116 ppb	100.212 %
Concentration per Run 1	94.511 %	12.349 ppb	12.199 ppb	95.031 ppb	93.812 ppb	109.132 %	4.527 ppb	4.765 ppb	106.507 %
Concentration per Run 2	86.907 %	12.895 ppb	12.465 ppb	105.174 ppb	98.259 ppb	97.970 %	5.068 ppb	5.284 ppb	96.467 %
Concentration per Run 3	90.489 %	12.214 ppb	15.077 ppb	104.854 ppb	97.868 ppb	97.640 %	5.132 ppb	5.299 ppb	97.661 %
Concentration RSD	4.2 %	2.9 %	12.0 %	5.7 %	2.5 %	6.4 %	6.8 %	5.9 %	5.5 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	44.765 ppb	206.079 ppb	99.538 %	98.157 %	11.969 ppb	52.591 ppb	99.872 %
Concentration per Run 1	40.974 ppb	193.004 ppb	106.994 %	105.679 %	10.783 ppb	47.916 ppb	108.398 %
Concentration per Run 2	47.107 ppb	213.451 ppb	95.937 %	94.656 %	12.449 ppb	54.865 ppb	96.866 %
Concentration per Run 3	46.213 ppb	211.781 ppb	95.683 %	94.137 %	12.677 ppb	54.993 ppb	94.352 %
Concentration RSD	7.4 %	5.5 %	6.5 %	6.6 %	8.6 %	7.7 %	7.5 %

Alpha ICPMSQ2 Data with SRD

12/4/2024 10:02:58 AM

Analysis index:	35	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG2002010-5d10 6020SL	Rack	2		
Analysis started at:	12/3/2024 7:23:39 PM	Vial	18		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	95.025 %	99.282 %	47.182 ppb	5,394.959 ppb	5,085.194 ppb	51.455 ppb	5,042.241 ppb	5,231.398 ppb	96.303 %
Concentration per Run 1	93.470 %	96.048 %	45.780 ppb	5,485.130 ppb	5,208.779 ppb	52.694 ppb	5,135.979 ppb	5,168.224 ppb	97.263 %
Concentration per Run 2	97.175 %	102.515 %	47.263 ppb	5,141.184 ppb	4,875.986 ppb	50.199 ppb	4,924.978 ppb	5,380.749 ppb	94.447 %
Concentration per Run 3	94.430 %	99.282 %	48.502 ppb	5,558.563 ppb	5,170.816 ppb	51.472 ppb	5,065.766 ppb	5,145.222 ppb	97.198 %
Concentration RSD	2.0 %	3.3 %	2.9 %	4.1 %	3.6 %	2.4 %	2.1 %	2.5 %	1.7 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	96.767 %	51.026 ppb	51.371 ppb	53.737 ppb	5,418.005 ppb	53.763 ppb	52.310 ppb	53.438 ppb	51.520 ppb
Concentration per Run 1	95.298 %	49.632 ppb	49.554 ppb	52.170 ppb	5,253.041 ppb	53.584 ppb	50.850 ppb	52.047 ppb	51.179 ppb
Concentration per Run 2	99.284 %	49.993 ppb	50.175 ppb	52.664 ppb	5,248.140 ppb	52.391 ppb	53.071 ppb	53.050 ppb	50.696 ppb
Concentration per Run 3	95.720 %	53.453 ppb	54.386 ppb	56.378 ppb	5,752.832 ppb	55.313 ppb	53.008 ppb	55.219 ppb	52.687 ppb
Concentration RSD	2.3 %	4.1 %	5.1 %	4.3 %	5.4 %	2.7 %	2.4 %	3.0 %	2.0 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	90.151 %	51.407 ppb	48.681 ppb	51.210 ppb	50.236 ppb	100.121 %	1.785 ppb	47.309 ppb	100.761 %
Concentration per Run 1	93.303 %	50.095 ppb	45.539 ppb	49.447 ppb	49.239 ppb	103.623 %	1.710 ppb	46.771 ppb	99.054 %
Concentration per Run 2	89.994 %	52.946 ppb	47.487 ppb	51.170 ppb	49.757 ppb	99.773 %	1.756 ppb	46.403 ppb	103.184 %
Concentration per Run 3	87.158 %	51.179 ppb	53.018 ppb	53.014 ppb	51.713 ppb	96.967 %	1.888 ppb	48.751 ppb	100.043 %
Concentration RSD	3.4 %	2.8 %	8.0 %	3.5 %	2.6 %	3.3 %	5.2 %	2.7 %	2.1 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	49.071 ppb	49.395 ppb	99.519 %	98.011 %	48.310 ppb	48.428 ppb	99.367 %
Concentration per Run 1	48.429 ppb	47.454 ppb	102.231 %	100.826 %	47.494 ppb	47.509 ppb	101.763 %
Concentration per Run 2	48.589 ppb	51.163 ppb	96.494 %	95.924 %	49.023 ppb	48.923 ppb	97.092 %
Concentration per Run 3	50.194 ppb	49.568 ppb	99.831 %	97.284 %	48.412 ppb	48.853 ppb	99.245 %
Concentration RSD	2.0 %	3.8 %	2.9 %	2.6 %	1.6 %	1.6 %	2.4 %

Alpha ICPMSQ2 Data with SRD

12/4/2024 10:02:58 AM

Analysis index:	36	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG2002010-6d5 6020SL	Rack	2		
Analysis started at:	12/3/2024 7:28:07 PM	Vial	19		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	97.018 %	97.934 %	0.123 ppb	903.496 ppb	174.916 ppb	5.775 ppb	135.293 ppb	622.825 ppb	97.110 %
Concentration per Run 1	94.855 %	102.110 %	0.156 ppb	833.578 ppb	170.099 ppb	4.397 ppb	106.503 ppb	636.224 ppb	96.321 %
Concentration per Run 2	98.797 %	91.738 %	0.090 ppb	963.350 ppb	185.014 ppb	6.309 ppb	153.474 ppb	643.046 ppb	98.465 %
Concentration per Run 3	97.402 %	99.955 %	0.122 ppb	913.561 ppb	169.636 ppb	6.620 ppb	145.903 ppb	589.204 ppb	96.544 %
Concentration RSD	2.1 %	5.6 %	27.1 %	7.2 %	5.0 %	20.8 %	18.6 %	4.7 %	1.2 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	96.499 %	0.009 ppb	0.070 ppb	2.517 ppb	9.942 ppb	0.022 ppb	-1.530 ppb	0.199 ppb	-0.275 ppb
Concentration per Run 1	99.514 %	-0.018 ppb	0.103 ppb	2.233 ppb	8.536 ppb	0.041 ppb	-1.615 ppb	0.204 ppb	-0.325 ppb
Concentration per Run 2	93.228 %	0.025 ppb	0.074 ppb	2.489 ppb	12.276 ppb	0.018 ppb	-1.543 ppb	0.234 ppb	-0.157 ppb
Concentration per Run 3	96.754 %	0.020 ppb	0.033 ppb	2.831 ppb	9.012 ppb	0.008 ppb	-1.432 ppb	0.159 ppb	-0.341 ppb
Concentration RSD	3.3 %	261.4 %	50.1 %	11.9 %	20.5 %	75.9 %	6.0 %	19.0 %	37.1 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	89.046 %	0.100 ppb	0.351 ppb	3.267 ppb	0.602 ppb	99.063 %	-0.003 ppb	0.024 ppb	99.533 %
Concentration per Run 1	91.202 %	0.151 ppb	0.047 ppb	3.184 ppb	0.453 ppb	104.023 %	-0.004 ppb	0.028 ppb	103.651 %
Concentration per Run 2	88.856 %	0.102 ppb	0.586 ppb	3.271 ppb	0.630 ppb	97.895 %	-0.002 ppb	0.030 ppb	98.136 %
Concentration per Run 3	87.080 %	0.047 ppb	0.419 ppb	3.347 ppb	0.724 ppb	95.273 %	-0.002 ppb	0.015 ppb	96.811 %
Concentration RSD	2.3 %	51.9 %	78.7 %	2.5 %	22.8 %	4.5 %	52.7 %	32.9 %	3.6 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.353 ppb	0.710 ppb	97.576 %	96.550 %	0.221 ppb	0.032 ppb	100.311 %
Concentration per Run 1	0.284 ppb	0.655 ppb	102.320 %	103.248 %	0.199 ppb	0.038 ppb	102.864 %
Concentration per Run 2	0.338 ppb	0.740 ppb	95.969 %	93.989 %	0.269 ppb	0.031 ppb	97.918 %
Concentration per Run 3	0.438 ppb	0.736 ppb	94.440 %	92.414 %	0.195 ppb	0.027 ppb	100.152 %
Concentration RSD	22.0 %	6.8 %	4.3 %	6.1 %	18.6 %	16.6 %	2.5 %

Alpha ICPMSQ2 Data with SRD

12/4/2024 10:02:58 AM

Analysis index:	37	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2467884-01 6020SL	Rack	2		
Analysis started at:	12/3/2024 7:32:35 PM	Vial	20		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	96.990 %	101.033 %	32.407 ppb	35,221.753 ppb	8,598.076 ppb	10.360 ppb	8,667.957 ppb	74,320.490 ppb	98.042 %
Concentration per Run 1	93.597 %	103.053 %	32.945 ppb	34,643.687 ppb	8,311.409 ppb	11.095 ppb	8,753.474 ppb	72,698.793 ppb	95.987 %
Concentration per Run 2	99.262 %	101.302 %	32.258 ppb	35,087.826 ppb	8,760.572 ppb	10.399 ppb	8,623.168 ppb	74,875.125 ppb	100.904 %
Concentration per Run 3	98.111 %	98.743 %	32.018 ppb	35,933.745 ppb	8,722.246 ppb	9.585 ppb	8,627.227 ppb	75,387.552 ppb	97.235 %
Concentration RSD	3.1 %	2.1 %	1.5 %	1.9 %	2.9 %	7.3 %	0.9 %	1.9 %	2.6 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	98.313 %	-0.005 ppb	0.446 ppb	4,743.377 ppb	39,194.988 ppb	0.059 ppb	-0.962 ppb	0.856 ppb	4.629 ppb
Concentration per Run 1	100.127 %	-0.035 ppb	0.358 ppb	4,839.984 ppb	38,597.595 ppb	0.071 ppb	-1.124 ppb	0.821 ppb	4.746 ppb
Concentration per Run 2	97.636 %	0.018 ppb	0.476 ppb	4,666.319 ppb	39,329.434 ppb	0.035 ppb	-0.918 ppb	0.867 ppb	4.503 ppb
Concentration per Run 3	97.176 %	0.001 ppb	0.503 ppb	4,723.827 ppb	39,657.935 ppb	0.072 ppb	-0.845 ppb	0.880 ppb	4.637 ppb
Concentration RSD	1.6 %	521.2 %	17.3 %	1.9 %	1.4 %	35.4 %	15.1 %	3.7 %	2.6 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	90.575 %	0.345 ppb	0.350 ppb	296.946 ppb	1.180 ppb	99.941 %	-0.003 ppb	0.007 ppb	100.878 %
Concentration per Run 1	91.681 %	0.208 ppb	0.584 ppb	285.177 ppb	0.959 ppb	105.228 %	0.000 ppb	0.010 ppb	104.524 %
Concentration per Run 2	88.590 %	0.410 ppb	-0.002 ppb	305.431 ppb	1.237 ppb	98.034 %	-0.003 ppb	0.000 ppb	101.156 %
Concentration per Run 3	91.454 %	0.415 ppb	0.469 ppb	300.228 ppb	1.343 ppb	96.560 %	-0.006 ppb	0.011 ppb	96.954 %
Concentration RSD	1.9 %	34.3 %	88.5 %	3.5 %	16.8 %	4.6 %	90.4 %	86.8 %	3.8 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.256 ppb	132.201 ppb	100.646 %	100.417 %	0.050 ppb	0.083 ppb	98.591 %
Concentration per Run 1	0.230 ppb	126.459 ppb	106.010 %	105.402 %	0.023 ppb	0.080 ppb	104.577 %
Concentration per Run 2	0.241 ppb	131.535 ppb	100.654 %	97.576 %	0.056 ppb	0.083 ppb	95.572 %
Concentration per Run 3	0.295 ppb	138.609 ppb	95.274 %	98.274 %	0.071 ppb	0.087 ppb	95.623 %
Concentration RSD	13.5 %	4.6 %	5.3 %	4.3 %	48.9 %	4.6 %	5.3 %

Alpha ICPMSQ2 Data with SRD

12/4/2024 10:02:58 AM

Analysis index:	38	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2467884-02 6020SL	Rack	2		
Analysis started at:	12/3/2024 7:37:04 PM	Vial	21		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	89.782 %	96.632 %	7.840 ppb	49,614.751 ppb	12,619.542 ppb	18.938 ppb	10,041.038 ppb	71,330.652 ppb	91.752 %
Concentration per Run 1	88.760 %	95.375 %	7.759 ppb	49,995.474 ppb	12,883.160 ppb	19.545 ppb	9,980.113 ppb	69,219.953 ppb	93.635 %
Concentration per Run 2	93.919 %	96.048 %	7.528 ppb	50,557.453 ppb	12,632.456 ppb	17.506 ppb	9,998.274 ppb	71,932.804 ppb	96.929 %
Concentration per Run 3	86.666 %	98.473 %	8.234 ppb	48,291.326 ppb	12,343.010 ppb	19.763 ppb	10,144.727 ppb	72,839.199 ppb	84.692 %
Concentration RSD	4.2 %	1.7 %	4.6 %	2.4 %	2.1 %	6.6 %	0.9 %	2.6 %	6.9 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	98.301 %	-0.011 ppb	0.370 ppb	6,300.822 ppb	9,810.461 ppb	0.183 ppb	-0.556 ppb	0.481 ppb	83.150 ppb
Concentration per Run 1	97.215 %	-0.032 ppb	0.353 ppb	6,222.972 ppb	9,829.306 ppb	0.157 ppb	-0.624 ppb	0.467 ppb	81.879 ppb
Concentration per Run 2	96.141 %	-0.030 ppb	0.415 ppb	6,490.634 ppb	9,976.851 ppb	0.212 ppb	-0.435 ppb	0.465 ppb	85.447 ppb
Concentration per Run 3	101.546 %	0.028 ppb	0.342 ppb	6,188.861 ppb	9,625.226 ppb	0.181 ppb	-0.609 ppb	0.510 ppb	82.123 ppb
Concentration RSD	2.9 %	303.4 %	10.5 %	2.6 %	1.8 %	14.8 %	18.8 %	5.3 %	2.4 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	89.431 %	0.209 ppb	0.274 ppb	288.484 ppb	1.979 ppb	97.764 %	-0.004 ppb	0.204 ppb	99.007 %
Concentration per Run 1	91.244 %	0.237 ppb	0.191 ppb	281.877 ppb	1.960 ppb	100.307 %	-0.005 ppb	0.204 ppb	102.113 %
Concentration per Run 2	86.643 %	0.184 ppb	0.522 ppb	295.354 ppb	1.901 ppb	95.659 %	-0.004 ppb	0.172 ppb	97.951 %
Concentration per Run 3	90.405 %	0.208 ppb	0.108 ppb	288.220 ppb	2.076 ppb	97.326 %	-0.004 ppb	0.235 ppb	96.958 %
Concentration RSD	2.7 %	12.7 %	80.1 %	2.3 %	4.5 %	2.4 %	15.8 %	15.6 %	2.8 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.135 ppb	71.363 ppb	100.758 %	97.679 %	0.040 ppb	0.208 ppb	98.537 %
Concentration per Run 1	0.119 ppb	69.647 ppb	101.739 %	98.480 %	0.026 ppb	0.200 ppb	102.255 %
Concentration per Run 2	0.115 ppb	69.280 ppb	99.282 %	98.329 %	0.050 ppb	0.216 ppb	94.318 %
Concentration per Run 3	0.172 ppb	75.160 ppb	101.252 %	96.227 %	0.044 ppb	0.210 ppb	99.038 %
Concentration RSD	23.5 %	4.6 %	1.3 %	1.3 %	31.9 %	3.9 %	4.1 %

Alpha ICPMSQ2 Data with SRD

12/4/2024 10:02:58 AM

Analysis index:	39	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2467906-01 6020SL	Rack	2		
Analysis started at:	12/3/2024 7:41:33 PM	Vial	22		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	97.443 %	97.126 %	0.042 ppb	34,622.933 ppb	14,412.212 ppb	2.069 ppb	7,114.142 ppb	44,347.518 ppb	100.483 %
Concentration per Run 1	94.166 %	97.934 %	0.040 ppb	33,546.253 ppb	14,029.286 ppb	2.486 ppb	7,068.598 ppb	44,458.914 ppb	99.081 %
Concentration per Run 2	98.472 %	96.318 %	0.050 ppb	35,838.373 ppb	14,729.983 ppb	2.397 ppb	7,299.442 ppb	44,585.798 ppb	100.898 %
Concentration per Run 3	99.690 %	97.126 %	0.036 ppb	34,484.173 ppb	14,477.367 ppb	1.324 ppb	6,974.385 ppb	43,997.842 ppb	101.468 %
Concentration RSD	3.0 %	0.8 %	17.1 %	3.3 %	2.5 %	31.3 %	2.4 %	0.7 %	1.2 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	99.489 %	-0.024 ppb	0.072 ppb	589.915 ppb	3,728.401 ppb	4.592 ppb	4.467 ppb	0.246 ppb	1.694 ppb
Concentration per Run 1	99.477 %	0.011 ppb	0.073 ppb	603.422 ppb	3,779.634 ppb	4.872 ppb	4.531 ppb	0.325 ppb	1.895 ppb
Concentration per Run 2	99.514 %	-0.075 ppb	0.051 ppb	549.220 ppb	3,446.052 ppb	3.907 ppb	4.048 ppb	0.165 ppb	1.333 ppb
Concentration per Run 3	99.476 %	-0.007 ppb	0.091 ppb	617.105 ppb	3,959.516 ppb	4.998 ppb	4.823 ppb	0.250 ppb	1.854 ppb
Concentration RSD	0.0 %	191.6 %	27.5 %	6.1 %	7.0 %	13.0 %	8.8 %	32.3 %	18.5 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	113.919 %	0.463 ppb	0.047 ppb	209.075 ppb	0.158 ppb	98.140 %	-0.006 ppb	0.045 ppb	101.633 %
Concentration per Run 1	100.927 %	0.545 ppb	0.123 ppb	217.217 ppb	0.077 ppb	100.414 %	-0.003 ppb	0.039 ppb	104.587 %
Concentration per Run 2	134.344 %	0.362 ppb	-0.089 ppb	190.529 ppb	0.130 ppb	98.559 %	-0.006 ppb	0.058 ppb	100.815 %
Concentration per Run 3	106.487 %	0.482 ppb	0.106 ppb	219.479 ppb	0.268 ppb	95.448 %	-0.007 ppb	0.037 ppb	99.497 %
Concentration RSD	15.7 %	20.1 %	250.4 %	7.7 %	62.3 %	2.6 %	37.8 %	26.2 %	2.6 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.215 ppb	53.988 ppb	99.460 %	98.700 %	0.016 ppb	0.016 ppb	99.605 %
Concentration per Run 1	0.209 ppb	52.239 ppb	103.197 %	101.163 %	0.011 ppb	0.019 ppb	99.311 %
Concentration per Run 2	0.182 ppb	55.581 ppb	98.249 %	97.607 %	0.017 ppb	0.012 ppb	100.640 %
Concentration per Run 3	0.254 ppb	54.145 ppb	96.936 %	97.330 %	0.021 ppb	0.018 ppb	98.865 %
Concentration RSD	16.8 %	3.1 %	3.3 %	2.2 %	31.3 %	23.2 %	0.9 %

Alpha ICPMSQ2 Data with SRD

12/4/2024 10:02:58 AM

Analysis index: 40
Analysis label: CCV
Analysis started at: 12/3/2024 7:46:02 PM
User name ALPHALAB\a2-icpmsq2
Rack 0
Vial 9
Comment CCV/MCCV

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	100.529 %	97.890 %	55.900 ppb	6,196.005 ppb	6,288.075 ppb	58.819 ppb	6,288.710 ppb	6,167.083 ppb	101.668 %
Concentration per Run 1	96.464 %	102.515 %	56.193 ppb	5,862.386 ppb	6,094.362 ppb	55.508 ppb	6,242.447 ppb	6,235.888 ppb	100.934 %
Concentration per Run 2	103.328 %	93.489 %	55.131 ppb	6,330.238 ppb	6,320.487 ppb	62.349 ppb	6,479.175 ppb	6,109.214 ppb	102.593 %
Concentration per Run 3	101.794 %	97.665 %	56.376 ppb	6,395.389 ppb	6,449.377 ppb	58.601 ppb	6,144.508 ppb	6,156.147 ppb	101.478 %
Recovery Percentage 1			93.167 %	103.267 %	104.801 %	98.032 %	104.812 %	102.785 %	
Concentration RSD	3.6 %	4.6 %	1.2 %	4.7 %	2.9 %	5.8 %	2.7 %	1.0 %	0.8 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	98.735 %	61.655 ppb	62.738 ppb	63.569 ppb	6,357.687 ppb	62.402 ppb	60.820 ppb	60.532 ppb	59.527 ppb
Concentration per Run 1	98.594 %	59.414 ppb	59.183 ppb	58.808 ppb	6,142.149 ppb	58.688 ppb	58.879 ppb	57.518 ppb	55.779 ppb
Concentration per Run 2	98.364 %	62.409 ppb	62.701 ppb	64.976 ppb	6,239.326 ppb	63.523 ppb	61.646 ppb	61.355 ppb	60.216 ppb
Concentration per Run 3	99.246 %	63.142 ppb	66.331 ppb	66.924 ppb	6,691.587 ppb	64.995 ppb	61.935 ppb	62.723 ppb	62.586 ppb
Recovery Percentage 1		102.758 %	104.564 %	105.949 %	105.961 %	104.003 %	101.367 %	100.886 %	99.212 %
Concentration RSD	0.5 %	3.2 %	5.7 %	6.7 %	4.6 %	5.3 %	2.8 %	4.5 %	5.8 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	99.009 %	57.978 ppb	53.735 ppb	58.465 ppb	57.953 ppb	101.751 %	59.236 ppb	58.991 ppb	103.304 %
Concentration per Run 1	106.376 %	53.350 ppb	49.992 ppb	54.911 ppb	54.039 ppb	107.131 %	56.779 ppb	55.902 ppb	107.451 %
Concentration per Run 2	97.932 %	58.871 ppb	56.080 ppb	58.968 ppb	60.106 ppb	99.631 %	60.383 ppb	60.110 ppb	100.262 %
Concentration per Run 3	92.719 %	61.714 ppb	55.132 ppb	61.516 ppb	59.713 ppb	98.489 %	60.546 ppb	60.961 ppb	102.200 %
Recovery Percentage 1		96.630 %	89.558 %	97.442 %	96.588 %		98.727 %	98.318 %	
Concentration RSD	7.0 %	7.3 %	6.1 %	5.7 %	5.9 %	4.6 %	3.6 %	4.6 %	3.6 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	58.015 ppb	59.137 ppb	100.231 %	99.912 %	58.746 ppb	58.132 ppb	102.645 %
Concentration per Run 1	55.409 ppb	55.820 ppb	104.180 %	105.496 %	54.974 ppb	54.753 ppb	107.978 %
Concentration per Run 2	59.340 ppb	60.592 ppb	99.031 %	96.614 %	59.899 ppb	59.314 ppb	101.559 %
Concentration per Run 3	59.298 ppb	61.000 ppb	97.481 %	97.627 %	61.365 ppb	60.329 ppb	98.399 %
Recovery Percentage 1	96.692 %	98.562 %			97.910 %	96.887 %	
Concentration RSD	3.9 %	4.9 %	3.5 %	4.9 %	5.7 %	5.1 %	4.8 %

Alpha ICPMSQ2 Data with SRD

12/4/2024 10:02:58 AM

Analysis index: 41 User name ALPHALAB\a2-icpmsq2 Comment CCB
Analysis label: CCB Rack 0
Analysis started at: 12/3/2024 7:50:33 PM Vial 10

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	99.796 %	96.902 %	0.382 ppb	-72.759 ppb	3.569 ppb	-0.531 ppb	12.363 ppb	0.230 ppb	99.027 %
Concentration per Run 1	97.252 %	94.028 %	0.309 ppb	-65.336 ppb	3.898 ppb	-0.347 ppb	11.630 ppb	-10.538 ppb	96.762 %
Concentration per Run 2	101.731 %	98.204 %	0.497 ppb	-81.491 ppb	4.326 ppb	-0.845 ppb	11.753 ppb	0.652 ppb	99.992 %
Concentration per Run 3	100.405 %	98.473 %	0.339 ppb	-71.451 ppb	2.483 ppb	-0.402 ppb	13.707 ppb	10.575 ppb	100.329 %
Recovery Percentage 1			76.345 %	-14.552 %	5.099 %	-5.312 %	12.363 %	0.230 %	
Concentration RSD	2.3 %	2.6 %	26.4 %	11.2 %	27.0 %	51.4 %	9.4 %	4,593.1 %	2.0 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	96.767 %	-0.036 ppb	0.025 ppb	0.434 ppb	8.621 ppb	0.016 ppb	-1.538 ppb	0.079 ppb	-0.432 ppb
Concentration per Run 1	95.605 %	-0.063 ppb	0.013 ppb	0.496 ppb	7.808 ppb	0.018 ppb	-1.542 ppb	0.137 ppb	-0.468 ppb
Concentration per Run 2	97.751 %	0.002 ppb	0.053 ppb	0.500 ppb	12.561 ppb	0.008 ppb	-1.448 ppb	0.032 ppb	-0.492 ppb
Concentration per Run 3	96.946 %	-0.048 ppb	0.008 ppb	0.304 ppb	5.493 ppb	0.021 ppb	-1.624 ppb	0.070 ppb	-0.336 ppb
Recovery Percentage 1		-0.729 %	2.452 %	43.366 %	17.241 %	3.142 %	-76.898 %	7.939 %	-8.645 %
Concentration RSD	1.1 %	93.2 %	102.1 %	25.8 %	41.8 %	45.7 %	5.7 %	66.9 %	19.4 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	88.048 %	0.134 ppb	0.043 ppb	0.047 ppb	0.374 ppb	99.942 %	0.015 ppb	0.012 ppb	98.168 %
Concentration per Run 1	86.240 %	0.140 ppb	-0.106 ppb	0.047 ppb	0.221 ppb	100.483 %	0.022 ppb	0.011 ppb	97.774 %
Concentration per Run 2	87.497 %	0.045 ppb	0.165 ppb	0.059 ppb	0.377 ppb	99.562 %	0.016 ppb	0.022 ppb	97.724 %
Concentration per Run 3	90.407 %	0.216 ppb	0.069 ppb	0.034 ppb	0.526 ppb	99.782 %	0.005 ppb	0.004 ppb	99.005 %
Recovery Percentage 1		26.729 %	0.851 %	0.466 %	18.720 %		3.660 %	6.134 %	
Concentration RSD	2.4 %	63.9 %	322.7 %	26.7 %	40.8 %	0.5 %	58.8 %	75.8 %	0.7 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.102 ppb	0.094 ppb	98.118 %	95.467 %	0.239 ppb	0.026 ppb	98.904 %
Concentration per Run 1	0.071 ppb	0.065 ppb	97.492 %	95.547 %	0.223 ppb	0.030 ppb	98.146 %
Concentration per Run 2	0.132 ppb	0.123 ppb	99.324 %	94.862 %	0.268 ppb	0.032 ppb	97.520 %
Concentration per Run 3	0.104 ppb	0.094 ppb	97.539 %	95.993 %	0.225 ppb	0.016 ppb	101.047 %
Recovery Percentage 1	2.558 %	18.822 %			23.857 %	2.602 %	
Concentration RSD	29.7 %	31.0 %	1.1 %	0.6 %	10.6 %	34.4 %	1.9 %

Alpha ICPMSQ2 Data with SRD

12/4/2024 10:02:58 AM

Analysis index: 42
Analysis label: L2467906-02 6020SL
Analysis started at: 12/3/2024 7:55:05 PM
User name ALPHALAB\a2-icpmsq2
Rack 2
Vial 23
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	98.465 %	100.135 %	0.075 ppb	36,110.442 ppb	15,361.389 ppb	2.822 ppb	5,637.372 ppb	61,718.344 ppb	103.110 %
Concentration per Run 1	96.106 %	108.307 %	0.089 ppb	32,933.862 ppb	14,150.288 ppb	2.444 ppb	5,507.577 ppb	59,530.303 ppb	102.995 %
Concentration per Run 2	98.038 %	96.048 %	0.068 ppb	38,025.792 ppb	16,083.509 ppb	3.717 ppb	5,773.352 ppb	63,927.885 ppb	101.869 %
Concentration per Run 3	101.251 %	96.048 %	0.067 ppb	37,371.670 ppb	15,850.370 ppb	2.307 ppb	5,631.187 ppb	61,696.845 ppb	104.467 %
Concentration RSD	2.6 %	7.1 %	16.5 %	7.7 %	6.9 %	27.6 %	2.4 %	3.6 %	1.3 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	99.451 %	0.015 ppb	0.053 ppb	135.186 ppb	88.708 ppb	0.830 ppb	1.700 ppb	0.406 ppb	7.101 ppb
Concentration per Run 1	101.853 %	-0.006 ppb	0.062 ppb	125.290 ppb	83.619 ppb	0.679 ppb	1.446 ppb	0.391 ppb	6.734 ppb
Concentration per Run 2	95.643 %	0.004 ppb	0.071 ppb	139.998 ppb	86.052 ppb	0.929 ppb	1.994 ppb	0.481 ppb	7.519 ppb
Concentration per Run 3	100.856 %	0.046 ppb	0.027 ppb	140.272 ppb	96.451 ppb	0.880 ppb	1.660 ppb	0.347 ppb	7.049 ppb
Concentration RSD	3.4 %	188.9 %	43.1 %	6.3 %	7.7 %	15.9 %	16.3 %	16.8 %	5.6 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	91.227 %	0.271 ppb	0.296 ppb	313.739 ppb	0.205 ppb	101.346 %	0.011 ppb	0.040 ppb	104.670 %
Concentration per Run 1	94.030 %	0.295 ppb	0.129 ppb	297.278 ppb	0.082 ppb	106.078 %	0.016 ppb	0.034 ppb	107.219 %
Concentration per Run 2	90.644 %	0.223 ppb	0.201 ppb	320.942 ppb	0.156 ppb	99.403 %	0.009 ppb	0.043 ppb	103.438 %
Concentration per Run 3	89.008 %	0.294 ppb	0.558 ppb	322.995 ppb	0.378 ppb	98.559 %	0.006 ppb	0.043 ppb	103.355 %
Concentration RSD	2.8 %	15.2 %	77.7 %	4.6 %	75.1 %	4.1 %	48.1 %	12.7 %	2.1 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.247 ppb	53.091 ppb	103.752 %	101.358 %	0.054 ppb	0.045 ppb	102.333 %
Concentration per Run 1	0.226 ppb	50.691 ppb	107.769 %	104.053 %	0.033 ppb	0.041 ppb	106.296 %
Concentration per Run 2	0.225 ppb	55.730 ppb	104.615 %	102.746 %	0.066 ppb	0.050 ppb	101.280 %
Concentration per Run 3	0.292 ppb	52.852 ppb	98.874 %	97.274 %	0.064 ppb	0.044 ppb	99.424 %
Concentration RSD	15.5 %	4.8 %	4.3 %	3.5 %	33.5 %	10.5 %	3.5 %

Alpha ICPMSQ2 Data with SRD

12/4/2024 10:02:58 AM

Analysis index:	43	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2467906-03 6020SL	Rack	2		
Analysis started at:	12/3/2024 7:59:34 PM	Vial	24		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	96.658 %	99.865 %	0.011 ppb	39,267.061 ppb	34,831.061 ppb	5.227 ppb	11,007.200 ppb	120,970.398 ppb	100.448 %
Concentration per Run 1	94.486 %	101.572 %	0.014 ppb	37,121.774 ppb	33,935.650 ppb	4.034 ppb	10,918.134 ppb	116,854.814 ppb	100.072 %
Concentration per Run 2	96.658 %	98.743 %	0.010 ppb	40,332.584 ppb	34,035.521 ppb	5.325 ppb	11,262.357 ppb	124,421.954 ppb	98.978 %
Concentration per Run 3	98.828 %	99.282 %	0.009 ppb	40,346.825 ppb	36,522.011 ppb	6.321 ppb	10,841.108 ppb	121,634.425 ppb	102.295 %
Concentration RSD	2.2 %	1.5 %	25.4 %	4.7 %	4.2 %	21.9 %	2.0 %	3.2 %	1.7 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	98.160 %	0.018 ppb	0.114 ppb	1,169.756 ppb	477.729 ppb	0.430 ppb	-0.518 ppb	0.375 ppb	1.247 ppb
Concentration per Run 1	101.738 %	0.028 ppb	0.117 ppb	1,128.152 ppb	461.545 ppb	0.408 ppb	-0.528 ppb	0.345 ppb	1.168 ppb
Concentration per Run 2	93.036 %	0.026 ppb	0.091 ppb	1,188.378 ppb	486.844 ppb	0.443 ppb	-0.504 ppb	0.420 ppb	1.265 ppb
Concentration per Run 3	99.706 %	-0.001 ppb	0.134 ppb	1,192.738 ppb	484.798 ppb	0.438 ppb	-0.521 ppb	0.360 ppb	1.309 ppb
Concentration RSD	4.6 %	92.1 %	19.3 %	3.1 %	2.9 %	4.5 %	2.4 %	10.6 %	5.8 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	88.599 %	2.822 ppb	0.017 ppb	510.079 ppb	0.897 ppb	98.491 %	-0.001 ppb	0.006 ppb	102.117 %
Concentration per Run 1	89.015 %	2.647 ppb	-0.067 ppb	493.331 ppb	0.887 ppb	104.060 %	-0.001 ppb	0.000 ppb	104.363 %
Concentration per Run 2	88.583 %	3.004 ppb	0.051 ppb	516.396 ppb	0.788 ppb	96.356 %	-0.001 ppb	0.007 ppb	101.345 %
Concentration per Run 3	88.200 %	2.816 ppb	0.068 ppb	520.509 ppb	1.015 ppb	95.058 %	-0.001 ppb	0.011 ppb	100.642 %
Concentration RSD	0.5 %	6.3 %	421.5 %	2.9 %	12.7 %	4.9 %	28.2 %	91.9 %	1.9 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.188 ppb	57.794 ppb	100.847 %	99.539 %	0.020 ppb	0.024 ppb	98.864 %
Concentration per Run 1	0.195 ppb	54.182 ppb	103.713 %	104.210 %	0.003 ppb	0.021 ppb	100.337 %
Concentration per Run 2	0.175 ppb	58.345 ppb	100.128 %	97.833 %	0.034 ppb	0.023 ppb	97.514 %
Concentration per Run 3	0.193 ppb	60.855 ppb	98.701 %	96.574 %	0.023 ppb	0.027 ppb	98.741 %
Concentration RSD	5.7 %	5.8 %	2.6 %	4.1 %	78.6 %	13.0 %	1.4 %

Alpha ICPMSQ2 Data with SRD

12/4/2024 10:02:58 AM

Analysis index:	44	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2467906-04 6020SL	Rack	2		
Analysis started at:	12/3/2024 8:04:04 PM	Vial	25		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	96.595 %	98.832 %	-0.013 ppb	35,868.337 ppb	16,850.110 ppb	3.243 ppb	6,573.108 ppb	59,277.240 ppb	101.256 %
Concentration per Run 1	91.828 %	99.820 %	-0.007 ppb	35,144.532 ppb	16,524.583 ppb	3.532 ppb	6,286.710 ppb	56,915.617 ppb	99.052 %
Concentration per Run 2	95.815 %	97.261 %	-0.013 ppb	37,682.568 ppb	17,529.275 ppb	3.191 ppb	6,753.529 ppb	60,967.356 ppb	102.145 %
Concentration per Run 3	102.143 %	99.416 %	-0.019 ppb	34,777.912 ppb	16,496.472 ppb	3.006 ppb	6,679.085 ppb	59,948.747 ppb	102.569 %
Concentration RSD	5.4 %	1.4 %	47.0 %	4.4 %	3.5 %	8.2 %	3.8 %	3.6 %	1.9 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	97.521 %	0.114 ppb	0.088 ppb	391.338 ppb	558.588 ppb	2.234 ppb	2.776 ppb	0.402 ppb	8.188 ppb
Concentration per Run 1	100.013 %	0.046 ppb	0.097 ppb	367.123 ppb	531.173 ppb	2.110 ppb	2.526 ppb	0.500 ppb	7.798 ppb
Concentration per Run 2	93.036 %	0.131 ppb	0.076 ppb	416.419 ppb	591.084 ppb	2.388 ppb	2.935 ppb	0.351 ppb	8.496 ppb
Concentration per Run 3	99.514 %	0.164 ppb	0.091 ppb	390.472 ppb	553.506 ppb	2.205 ppb	2.867 ppb	0.356 ppb	8.272 ppb
Concentration RSD	4.0 %	53.6 %	12.3 %	6.3 %	5.4 %	6.3 %	7.9 %	21.0 %	4.4 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	88.587 %	0.615 ppb	0.148 ppb	301.604 ppb	0.210 ppb	98.192 %	0.016 ppb	0.048 ppb	98.669 %
Concentration per Run 1	91.649 %	0.633 ppb	0.300 ppb	284.915 ppb	0.139 ppb	103.335 %	0.034 ppb	0.068 ppb	100.802 %
Concentration per Run 2	86.914 %	0.550 ppb	-0.024 ppb	310.836 ppb	0.186 ppb	95.096 %	0.014 ppb	0.030 ppb	98.336 %
Concentration per Run 3	87.198 %	0.663 ppb	0.167 ppb	309.061 ppb	0.305 ppb	96.145 %	-0.001 ppb	0.045 ppb	96.868 %
Concentration RSD	3.0 %	9.5 %	110.1 %	4.8 %	40.7 %	4.6 %	111.9 %	40.2 %	2.0 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.222 ppb	55.228 ppb	99.048 %	95.995 %	0.031 ppb	0.040 ppb	97.501 %
Concentration per Run 1	0.240 ppb	54.296 ppb	101.632 %	99.574 %	0.027 ppb	0.050 ppb	103.093 %
Concentration per Run 2	0.200 ppb	55.361 ppb	94.939 %	93.398 %	0.034 ppb	0.035 ppb	94.940 %
Concentration per Run 3	0.226 ppb	56.025 ppb	100.571 %	95.012 %	0.032 ppb	0.036 ppb	94.470 %
Concentration RSD	9.2 %	1.6 %	3.6 %	3.3 %	11.1 %	20.7 %	5.0 %

Alpha ICPMSQ2 Data with SRD

12/4/2024 10:02:58 AM

Analysis index:	45	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2467906-05 6020SL	Rack	2		
Analysis started at:	12/3/2024 8:08:32 PM	Vial	26		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	92.966 %	97.306 %	-0.022 ppb	67,133.632 ppb	16,688.370 ppb	2.035 ppb	6,517.505 ppb	58,263.832 ppb	102.282 %
Concentration per Run 1	89.143 %	97.934 %	-0.020 ppb	67,779.147 ppb	17,157.103 ppb	1.600 ppb	6,552.871 ppb	58,664.569 ppb	103.001 %
Concentration per Run 2	93.781 %	98.743 %	-0.021 ppb	67,029.595 ppb	16,280.752 ppb	2.110 ppb	6,420.022 ppb	58,767.964 ppb	100.157 %
Concentration per Run 3	95.973 %	95.240 %	-0.026 ppb	66,592.153 ppb	16,627.256 ppb	2.396 ppb	6,579.623 ppb	57,358.963 ppb	103.690 %
Concentration RSD	3.8 %	1.9 %	15.8 %	0.9 %	2.6 %	19.8 %	1.3 %	1.3 %	1.8 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	97.151 %	0.008 ppb	0.056 ppb	0.939 ppb	1.883 ppb	0.213 ppb	-1.022 ppb	1.431 ppb	6.661 ppb
Concentration per Run 1	94.569 %	0.039 ppb	0.062 ppb	1.003 ppb	1.269 ppb	0.198 ppb	-1.214 ppb	1.335 ppb	6.622 ppb
Concentration per Run 2	96.410 %	0.020 ppb	0.058 ppb	0.959 ppb	0.902 ppb	0.228 ppb	-0.598 ppb	1.439 ppb	6.712 ppb
Concentration per Run 3	100.473 %	-0.034 ppb	0.048 ppb	0.855 ppb	3.480 ppb	0.214 ppb	-1.253 ppb	1.518 ppb	6.650 ppb
Concentration RSD	3.1 %	463.7 %	12.3 %	8.1 %	74.1 %	7.1 %	36.0 %	6.4 %	0.7 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	89.107 %	0.157 ppb	0.121 ppb	292.860 ppb	0.202 ppb	98.021 %	0.005 ppb	0.005 ppb	100.565 %
Concentration per Run 1	91.168 %	0.110 ppb	0.073 ppb	291.826 ppb	0.157 ppb	98.243 %	0.005 ppb	0.007 ppb	104.805 %
Concentration per Run 2	89.871 %	0.176 ppb	0.150 ppb	289.389 ppb	0.197 ppb	97.127 %	0.001 ppb	0.000 ppb	99.540 %
Concentration per Run 3	86.282 %	0.185 ppb	0.141 ppb	297.364 ppb	0.252 ppb	98.692 %	0.010 ppb	0.007 ppb	97.349 %
Concentration RSD	2.8 %	26.2 %	34.6 %	1.4 %	23.5 %	0.8 %	78.7 %	86.7 %	3.8 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.154 ppb	37.305 ppb	99.279 %	98.119 %	-0.003 ppb	0.099 ppb	97.659 %
Concentration per Run 1	0.126 ppb	36.051 ppb	100.579 %	99.194 %	-0.010 ppb	0.098 ppb	99.573 %
Concentration per Run 2	0.149 ppb	38.102 ppb	99.760 %	96.201 %	0.000 ppb	0.098 ppb	97.846 %
Concentration per Run 3	0.189 ppb	37.762 ppb	97.497 %	98.962 %	0.002 ppb	0.101 ppb	95.560 %
Concentration RSD	20.6 %	2.9 %	1.6 %	1.7 %	258.6 %	1.8 %	2.1 %

Alpha ICPMSQ2 Data with SRD

12/4/2024 10:02:58 AM

Analysis index: 46
Analysis label: L2467906-06 6020SL
Analysis started at: 12/3/2024 8:13:01 PM
User name ALPHALAB\a2-icpmsq2
Rack 2
Vial 27
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	93.830 %	97.845 %	-0.031 ppb	68,964.318 ppb	16,219.925 ppb	4.688 ppb	6,537.985 ppb	56,830.702 ppb	98.597 %
Concentration per Run 1	90.563 %	102.919 %	-0.032 ppb	64,205.618 ppb	15,176.251 ppb	4.679 ppb	6,252.497 ppb	53,724.210 ppb	98.862 %
Concentration per Run 2	95.737 %	95.914 %	-0.031 ppb	70,093.101 ppb	16,702.433 ppb	4.436 ppb	6,772.780 ppb	59,033.821 ppb	99.573 %
Concentration per Run 3	95.189 %	94.701 %	-0.030 ppb	72,594.236 ppb	16,781.092 ppb	4.950 ppb	6,588.678 ppb	57,734.074 ppb	97.357 %
Concentration RSD	3.0 %	4.5 %	2.5 %	6.2 %	5.6 %	5.5 %	4.0 %	4.9 %	1.1 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	95.349 %	0.101 ppb	0.052 ppb	0.327 ppb	6.330 ppb	0.075 ppb	-1.098 ppb	0.822 ppb	0.754 ppb
Concentration per Run 1	99.400 %	0.081 ppb	0.037 ppb	0.210 ppb	7.950 ppb	0.072 ppb	-1.141 ppb	0.784 ppb	0.724 ppb
Concentration per Run 2	91.925 %	0.045 ppb	0.090 ppb	0.272 ppb	3.885 ppb	0.087 ppb	-1.117 ppb	0.929 ppb	0.887 ppb
Concentration per Run 3	94.723 %	0.178 ppb	0.029 ppb	0.498 ppb	7.154 ppb	0.068 ppb	-1.036 ppb	0.754 ppb	0.650 ppb
Concentration RSD	4.0 %	67.8 %	63.7 %	46.3 %	34.0 %	13.2 %	5.0 %	11.4 %	16.1 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	88.308 %	0.092 ppb	0.125 ppb	286.219 ppb	0.177 ppb	97.088 %	-0.003 ppb	0.000 ppb	100.997 %
Concentration per Run 1	90.238 %	0.156 ppb	0.137 ppb	274.387 ppb	0.187 ppb	101.890 %	-0.002 ppb	0.000 ppb	103.912 %
Concentration per Run 2	87.647 %	0.028 ppb	-0.008 ppb	290.030 ppb	0.128 ppb	95.118 %	-0.004 ppb	0.000 ppb	100.391 %
Concentration per Run 3	87.039 %	0.092 ppb	0.245 ppb	294.240 ppb	0.216 ppb	94.257 %	-0.002 ppb	0.000 ppb	98.688 %
Concentration RSD	1.9 %	69.8 %	101.8 %	3.7 %	25.2 %	4.3 %	44.1 %	N/A	2.6 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.282 ppb	38.954 ppb	99.683 %	98.858 %	-0.008 ppb	0.047 ppb	97.777 %
Concentration per Run 1	0.270 ppb	37.144 ppb	102.959 %	105.319 %	-0.014 ppb	0.051 ppb	100.554 %
Concentration per Run 2	0.283 ppb	41.077 ppb	96.815 %	95.781 %	-0.005 ppb	0.044 ppb	95.949 %
Concentration per Run 3	0.292 ppb	38.639 ppb	99.275 %	95.472 %	-0.004 ppb	0.045 ppb	96.829 %
Concentration RSD	3.9 %	5.1 %	3.1 %	5.7 %	74.1 %	8.4 %	2.5 %

Alpha ICPMSQ2 Data with SRD

12/4/2024 10:02:58 AM

Analysis index: 47
Analysis label: L2467934-01 6020SL
Analysis started at: 12/3/2024 8:17:29 PM
User name ALPHALAB\a2-icpmsq2
Rack 2
Vial 28
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	92.858 %	98.428 %	-0.033 ppb	51,322.533 ppb	295.716 ppb	333.719 ppb	26,487.570 ppb	39,511.083 ppb	95.501 %
Concentration per Run 1	89.617 %	103.862 %	-0.028 ppb	48,614.096 ppb	274.752 ppb	324.565 ppb	25,449.164 ppb	38,667.676 ppb	95.392 %
Concentration per Run 2	93.939 %	92.815 %	-0.036 ppb	52,913.632 ppb	323.834 ppb	341.940 ppb	27,158.239 ppb	39,747.131 ppb	96.901 %
Concentration per Run 3	95.019 %	98.608 %	-0.034 ppb	52,439.873 ppb	288.561 ppb	334.651 ppb	26,855.306 ppb	40,118.444 ppb	94.210 %
Concentration RSD	3.1 %	5.6 %	12.1 %	4.6 %	8.6 %	2.6 %	3.4 %	1.9 %	1.4 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	94.634 %	2.587 ppb	0.410 ppb	1,124.070 ppb	1,152.203 ppb	0.496 ppb	1.581 ppb	0.529 ppb	-0.222 ppb
Concentration per Run 1	95.221 %	2.384 ppb	0.406 ppb	1,101.871 ppb	1,137.804 ppb	0.504 ppb	1.456 ppb	0.569 ppb	-0.284 ppb
Concentration per Run 2	94.301 %	2.811 ppb	0.422 ppb	1,119.618 ppb	1,136.410 ppb	0.558 ppb	1.514 ppb	0.505 ppb	-0.229 ppb
Concentration per Run 3	94.378 %	2.567 ppb	0.402 ppb	1,150.722 ppb	1,182.395 ppb	0.427 ppb	1.773 ppb	0.513 ppb	-0.155 ppb
Concentration RSD	0.5 %	8.3 %	2.6 %	2.2 %	2.3 %	13.3 %	10.7 %	6.6 %	28.9 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	89.562 %	4.479 ppb	0.573 ppb	352.793 ppb	35.600 ppb	98.415 %	-0.001 ppb	0.013 ppb	100.782 %
Concentration per Run 1	92.801 %	4.464 ppb	0.732 ppb	341.545 ppb	33.777 ppb	101.855 %	-0.001 ppb	0.007 ppb	103.312 %
Concentration per Run 2	87.843 %	4.695 ppb	0.507 ppb	356.427 ppb	36.152 ppb	96.768 %	0.000 ppb	0.026 ppb	98.913 %
Concentration per Run 3	88.041 %	4.278 ppb	0.479 ppb	360.406 ppb	36.872 ppb	96.622 %	-0.001 ppb	0.007 ppb	100.122 %
Concentration RSD	3.1 %	4.7 %	24.2 %	2.8 %	4.5 %	3.0 %	122.6 %	80.3 %	2.3 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.251 ppb	15.981 ppb	100.698 %	97.596 %	0.019 ppb	0.013 ppb	99.357 %
Concentration per Run 1	0.234 ppb	16.031 ppb	103.636 %	100.895 %	0.013 ppb	0.013 ppb	100.189 %
Concentration per Run 2	0.259 ppb	15.555 ppb	101.455 %	97.525 %	0.023 ppb	0.014 ppb	100.728 %
Concentration per Run 3	0.261 ppb	16.357 ppb	97.004 %	94.367 %	0.022 ppb	0.011 ppb	97.154 %
Concentration RSD	6.0 %	2.5 %	3.4 %	3.3 %	26.9 %	9.9 %	1.9 %

Alpha ICPMSQ2 Data with SRD

12/4/2024 10:02:58 AM

Analysis index:	48	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2467934-02 6020SL	Rack	2		
Analysis started at:	12/3/2024 8:21:58 PM	Vial	29		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	94.979 %	99.731 %	-0.032 ppb	5,033.906 ppb	4,762.560 ppb	3.213 ppb	9,313.543 ppb	56,003.187 ppb	99.756 %
Concentration per Run 1	91.602 %	101.572 %	-0.031 ppb	5,060.117 ppb	4,621.480 ppb	3.030 ppb	9,126.118 ppb	54,847.813 ppb	97.644 %
Concentration per Run 2	96.136 %	99.147 %	-0.033 ppb	4,982.792 ppb	4,756.891 ppb	3.097 ppb	9,477.161 ppb	56,125.292 ppb	100.463 %
Concentration per Run 3	97.198 %	98.473 %	-0.033 ppb	5,058.809 ppb	4,909.308 ppb	3.511 ppb	9,337.350 ppb	57,036.454 ppb	101.161 %
Concentration RSD	3.1 %	1.6 %	5.0 %	0.9 %	3.0 %	8.1 %	1.9 %	2.0 %	1.9 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	90.251 %	0.649 ppb	1.812 ppb	0.730 ppb	6.272 ppb	0.288 ppb	-1.511 ppb	1.477 ppb	-0.320 ppb
Concentration per Run 1	90.392 %	0.644 ppb	1.828 ppb	0.849 ppb	6.139 ppb	0.285 ppb	-1.533 ppb	1.359 ppb	-0.349 ppb
Concentration per Run 2	90.277 %	0.780 ppb	1.740 ppb	0.668 ppb	7.483 ppb	0.276 ppb	-1.459 ppb	1.563 ppb	-0.345 ppb
Concentration per Run 3	90.085 %	0.524 ppb	1.868 ppb	0.673 ppb	5.193 ppb	0.302 ppb	-1.543 ppb	1.507 ppb	-0.265 ppb
Concentration RSD	0.2 %	19.7 %	3.6 %	14.1 %	18.3 %	4.5 %	3.0 %	7.1 %	14.9 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	90.777 %	0.252 ppb	0.647 ppb	189.385 ppb	13.728 ppb	99.944 %	-0.005 ppb	0.006 ppb	98.985 %
Concentration per Run 1	93.076 %	0.310 ppb	0.373 ppb	185.418 ppb	12.779 ppb	101.440 %	-0.005 ppb	0.000 ppb	103.459 %
Concentration per Run 2	87.391 %	0.161 ppb	0.908 ppb	193.264 ppb	13.244 ppb	99.560 %	-0.005 ppb	0.011 ppb	95.264 %
Concentration per Run 3	91.864 %	0.285 ppb	0.660 ppb	189.473 ppb	15.162 ppb	98.831 %	-0.004 ppb	0.007 ppb	98.231 %
Concentration RSD	3.3 %	31.6 %	41.4 %	2.1 %	9.2 %	1.3 %	13.2 %	92.1 %	4.2 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.458 ppb	16.825 ppb	99.256 %	97.938 %	-0.002 ppb	0.020 ppb	98.852 %
Concentration per Run 1	0.379 ppb	16.143 ppb	101.335 %	100.788 %	-0.011 ppb	0.021 ppb	100.264 %
Concentration per Run 2	0.523 ppb	17.579 ppb	99.599 %	98.793 %	0.000 ppb	0.020 ppb	97.247 %
Concentration per Run 3	0.471 ppb	16.754 ppb	96.833 %	94.235 %	0.006 ppb	0.019 ppb	99.045 %
Concentration RSD	16.0 %	4.3 %	2.3 %	3.4 %	514.5 %	5.8 %	1.5 %

Alpha ICPMSQ2 Data with SRD

12/4/2024 10:02:58 AM

Analysis index: 49
Analysis label: L2467934-03 6020SL
Analysis started at: 12/3/2024 8:26:27 PM
User name ALPHALAB\a2-icpmsq2
Rack 2
Vial 30
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	94.458 %	99.102 %	-0.035 ppb	29,033.461 ppb	8,773.336 ppb	2.150 ppb	31,619.561 ppb	96,956.533 ppb	99.328 %
Concentration per Run 1	92.134 %	92.276 %	-0.035 ppb	29,552.086 ppb	8,744.089 ppb	2.096 ppb	30,972.331 ppb	94,462.611 ppb	99.681 %
Concentration per Run 2	94.371 %	108.307 %	-0.034 ppb	28,125.635 ppb	8,609.677 ppb	1.878 ppb	32,233.855 ppb	98,003.825 ppb	99.166 %
Concentration per Run 3	96.869 %	96.722 %	-0.036 ppb	29,422.663 ppb	8,966.242 ppb	2.476 ppb	31,652.495 ppb	98,403.163 ppb	99.137 %
Concentration RSD	2.5 %	8.4 %	2.3 %	2.7 %	2.1 %	14.1 %	2.0 %	2.2 %	0.3 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	95.515 %	2.736 ppb	0.305 ppb	10.181 ppb	6.538 ppb	0.626 ppb	-0.879 ppb	2.516 ppb	0.333 ppb
Concentration per Run 1	99.936 %	2.587 ppb	0.347 ppb	9.215 ppb	9.261 ppb	0.644 ppb	-1.015 ppb	2.295 ppb	0.315 ppb
Concentration per Run 2	92.845 %	2.761 ppb	0.261 ppb	10.091 ppb	5.194 ppb	0.623 ppb	-0.727 ppb	2.786 ppb	0.317 ppb
Concentration per Run 3	93.765 %	2.862 ppb	0.308 ppb	11.237 ppb	5.158 ppb	0.611 ppb	-0.894 ppb	2.466 ppb	0.368 ppb
Concentration RSD	4.0 %	5.1 %	14.2 %	10.0 %	36.1 %	2.6 %	16.5 %	9.9 %	9.0 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	91.804 %	0.435 ppb	0.538 ppb	454.423 ppb	8.043 ppb	99.238 %	-0.005 ppb	0.020 ppb	100.799 %
Concentration per Run 1	100.079 %	0.371 ppb	0.498 ppb	420.613 ppb	6.793 ppb	104.564 %	-0.004 ppb	0.024 ppb	104.420 %
Concentration per Run 2	87.914 %	0.452 ppb	0.680 ppb	470.593 ppb	7.678 ppb	96.069 %	-0.003 ppb	0.018 ppb	99.402 %
Concentration per Run 3	87.419 %	0.482 ppb	0.438 ppb	472.063 ppb	9.659 ppb	97.080 %	-0.006 ppb	0.018 ppb	98.577 %
Concentration RSD	7.8 %	13.2 %	23.5 %	6.4 %	18.2 %	4.7 %	36.0 %	16.5 %	3.1 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.587 ppb	105.235 ppb	99.705 %	98.910 %	0.258 ppb	0.020 ppb	97.930 %
Concentration per Run 1	0.556 ppb	96.901 ppb	105.113 %	100.203 %	0.248 ppb	0.014 ppb	100.970 %
Concentration per Run 2	0.618 ppb	107.796 ppb	99.318 %	98.546 %	0.250 ppb	0.019 ppb	96.897 %
Concentration per Run 3	0.588 ppb	111.007 ppb	94.684 %	97.982 %	0.276 ppb	0.026 ppb	95.922 %
Concentration RSD	5.3 %	7.0 %	5.2 %	1.2 %	6.1 %	30.2 %	2.7 %

Alpha ICPMSQ2 Data with SRD

12/4/2024 10:02:58 AM

Analysis index: 50
Analysis label: L2467934-04 6020SL
Analysis started at: 12/3/2024 8:30:55 PM
User name ALPHALAB\a2-icpmsq2
Rack 2
Vial 31
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	95.099 %	97.755 %	-0.030 ppb	80,500.037 ppb	12,164.172 ppb	2.507 ppb	1,520.416 ppb	19,290.400 ppb	101.838 %
Concentration per Run 1	88.363 %	104.939 %	-0.030 ppb	77,400.620 ppb	11,639.885 ppb	2.022 ppb	1,447.080 ppb	18,395.780 ppb	92.959 %
Concentration per Run 2	97.040 %	94.567 %	-0.030 ppb	81,752.074 ppb	12,363.865 ppb	2.014 ppb	1,520.280 ppb	19,996.602 ppb	104.869 %
Concentration per Run 3	99.895 %	93.758 %	-0.031 ppb	82,347.417 ppb	12,488.766 ppb	3.484 ppb	1,593.887 ppb	19,478.819 ppb	107.687 %
Concentration RSD	6.3 %	6.4 %	2.3 %	3.4 %	3.8 %	33.8 %	4.8 %	4.2 %	7.7 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	91.324 %	0.194 ppb	1.655 ppb	0.913 ppb	11.317 ppb	0.038 ppb	-0.302 ppb	0.275 ppb	0.032 ppb
Concentration per Run 1	92.155 %	0.132 ppb	1.581 ppb	0.799 ppb	11.728 ppb	0.029 ppb	-0.244 ppb	0.312 ppb	-0.017 ppb
Concentration per Run 2	90.813 %	0.316 ppb	1.728 ppb	0.803 ppb	10.744 ppb	0.045 ppb	-0.552 ppb	0.353 ppb	0.031 ppb
Concentration per Run 3	91.004 %	0.135 ppb	1.657 ppb	1.136 ppb	11.479 ppb	0.040 ppb	-0.109 ppb	0.161 ppb	0.083 ppb
Concentration RSD	0.8 %	54.4 %	4.4 %	21.2 %	4.5 %	21.0 %	75.3 %	36.8 %	154.9 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	87.521 %	0.127 ppb	0.362 ppb	97.068 ppb	3.213 ppb	96.773 %	-0.004 ppb	0.016 ppb	98.286 %
Concentration per Run 1	88.604 %	0.191 ppb	0.405 ppb	94.547 ppb	3.007 ppb	98.370 %	-0.003 ppb	0.018 ppb	102.459 %
Concentration per Run 2	85.006 %	0.193 ppb	0.352 ppb	100.607 ppb	3.208 ppb	93.532 %	-0.004 ppb	0.015 ppb	95.866 %
Concentration per Run 3	88.953 %	-0.003 ppb	0.328 ppb	96.049 ppb	3.425 ppb	98.417 %	-0.005 ppb	0.015 ppb	96.532 %
Concentration RSD	2.5 %	89.0 %	10.8 %	3.3 %	6.5 %	2.9 %	25.3 %	10.3 %	3.7 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.029 ppb	65.767 ppb	98.418 %	95.995 %	-0.015 ppb	0.015 ppb	96.887 %
Concentration per Run 1	0.019 ppb	61.147 ppb	101.366 %	99.003 %	-0.020 ppb	0.017 ppb	101.303 %
Concentration per Run 2	0.035 ppb	68.298 ppb	95.883 %	93.577 %	-0.011 ppb	0.017 ppb	93.437 %
Concentration per Run 3	0.034 ppb	67.858 ppb	98.004 %	95.404 %	-0.013 ppb	0.013 ppb	95.921 %
Concentration RSD	30.6 %	6.1 %	2.8 %	2.9 %	34.0 %	14.4 %	4.2 %

Alpha ICPMSQ2 Data with SRD

12/4/2024 10:02:58 AM

Analysis index:	51	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2467934-06 6020SL	Rack	2		
Analysis started at:	12/3/2024 8:35:24 PM	Vial	32		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	87.899 %	98.473 %	-0.033 ppb	35,461.681 ppb	22,208.680 ppb	2.126 ppb	24,410.310 ppb	84,517.544 ppb	92.291 %
Concentration per Run 1	85.291 %	100.629 %	-0.033 ppb	34,062.488 ppb	21,406.120 ppb	1.945 ppb	23,283.363 ppb	81,990.823 ppb	90.635 %
Concentration per Run 2	87.672 %	103.323 %	-0.034 ppb	34,794.010 ppb	22,134.529 ppb	2.328 ppb	24,903.803 ppb	86,518.599 ppb	93.967 %
Concentration per Run 3	90.735 %	91.468 %	-0.032 ppb	37,528.545 ppb	23,085.390 ppb	2.106 ppb	25,043.763 ppb	85,043.210 ppb	92.271 %
Concentration RSD	3.1 %	6.3 %	2.8 %	5.2 %	3.8 %	9.0 %	4.0 %	2.7 %	1.8 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	94.275 %	0.294 ppb	0.833 ppb	2,373.698 ppb	9.107 ppb	0.510 ppb	-0.900 ppb	1.264 ppb	0.148 ppb
Concentration per Run 1	96.486 %	0.418 ppb	0.713 ppb	2,305.761 ppb	10.577 ppb	0.453 ppb	-0.807 ppb	1.223 ppb	0.145 ppb
Concentration per Run 2	91.311 %	0.136 ppb	0.886 ppb	2,489.039 ppb	7.125 ppb	0.523 ppb	-0.939 ppb	1.229 ppb	0.136 ppb
Concentration per Run 3	95.029 %	0.328 ppb	0.901 ppb	2,326.294 ppb	9.619 ppb	0.555 ppb	-0.953 ppb	1.340 ppb	0.164 ppb
Concentration RSD	2.8 %	49.0 %	12.5 %	4.2 %	19.6 %	10.2 %	9.0 %	5.2 %	9.6 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	90.212 %	0.288 ppb	0.170 ppb	243.169 ppb	2.761 ppb	99.155 %	-0.001 ppb	0.051 ppb	99.975 %
Concentration per Run 1	94.027 %	0.180 ppb	0.211 ppb	231.326 ppb	1.983 ppb	101.857 %	0.001 ppb	0.055 ppb	106.296 %
Concentration per Run 2	86.079 %	0.340 ppb	0.241 ppb	252.491 ppb	2.972 ppb	97.641 %	-0.002 ppb	0.049 ppb	96.473 %
Concentration per Run 3	90.530 %	0.345 ppb	0.059 ppb	245.691 ppb	3.329 ppb	97.966 %	-0.002 ppb	0.048 ppb	97.154 %
Concentration RSD	4.4 %	32.4 %	57.4 %	4.4 %	25.3 %	2.4 %	150.8 %	7.8 %	5.5 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.027 ppb	52.922 ppb	99.185 %	99.139 %	0.085 ppb	0.012 ppb	96.169 %
Concentration per Run 1	0.034 ppb	49.647 ppb	101.357 %	100.958 %	0.073 ppb	0.009 ppb	99.676 %
Concentration per Run 2	0.033 ppb	55.028 ppb	95.907 %	97.344 %	0.100 ppb	0.015 ppb	91.843 %
Concentration per Run 3	0.016 ppb	54.090 ppb	100.290 %	99.116 %	0.082 ppb	0.010 ppb	96.989 %
Concentration RSD	37.2 %	5.4 %	2.9 %	1.8 %	16.6 %	28.0 %	4.1 %

Alpha ICPMSQ2 Data with SRD

12/4/2024 10:02:58 AM



Analysis index:	52	User name	ALPHALAB\a2-icpmsq2	Comment	CCV/MCCV
Analysis label:	CCV	Rack	0		
Analysis started at:	12/3/2024 8:39:52 PM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	93.757 %	96.587 %	56.752 ppb	6,348.661 ppb	6,475.308 ppb	64.610 ppb	6,371.464 ppb	6,225.766 ppb	97.392 %
Concentration per Run 1	90.281 %	97.126 %	56.482 ppb	6,243.333 ppb	6,514.019 ppb	65.504 ppb	6,466.255 ppb	6,062.747 ppb	97.349 %
Concentration per Run 2	96.393 %	89.447 %	56.501 ppb	6,850.359 ppb	6,817.501 ppb	69.127 ppb	6,674.074 ppb	6,448.223 ppb	99.942 %
Concentration per Run 3	94.595 %	103.188 %	57.275 ppb	5,952.291 ppb	6,094.405 ppb	59.198 ppb	5,974.062 ppb	6,166.328 ppb	94.885 %
Recovery Percentage 1			94.587 %	105.811 %	107.922 %	107.683 %	106.191 %	103.763 %	
Concentration RSD	3.4 %	7.1 %	0.8 %	7.2 %	5.6 %	7.8 %	5.6 %	3.2 %	2.6 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	93.739 %	61.587 ppb	64.295 ppb	60.154 ppb	6,562.676 ppb	65.923 ppb	65.527 ppb	63.609 ppb	63.574 ppb
Concentration per Run 1	93.305 %	58.918 ppb	62.143 ppb	59.523 ppb	6,244.526 ppb	64.004 ppb	62.401 ppb	63.771 ppb	63.223 ppb
Concentration per Run 2	90.928 %	63.113 ppb	65.696 ppb	66.029 ppb	6,835.589 ppb	68.001 ppb	69.546 ppb	64.004 ppb	64.701 ppb
Concentration per Run 3	96.984 %	62.729 ppb	65.045 ppb	54.910 ppb	6,607.913 ppb	65.764 ppb	64.635 ppb	63.052 ppb	62.798 ppb
Recovery Percentage 1		102.644 %	107.158 %	100.257 %	109.378 %	109.871 %	109.212 %	106.015 %	105.956 %
Concentration RSD	3.3 %	3.8 %	2.9 %	9.3 %	4.5 %	3.0 %	5.6 %	0.8 %	1.6 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	89.158 %	62.371 ppb	61.795 ppb	61.335 ppb	59.372 ppb	98.131 %	59.443 ppb	59.466 ppb	96.633 %
Concentration per Run 1	93.348 %	60.026 ppb	58.450 ppb	58.858 ppb	55.803 ppb	102.161 %	57.663 ppb	56.712 ppb	99.755 %
Concentration per Run 2	87.736 %	63.077 ppb	64.595 ppb	62.583 ppb	59.894 ppb	96.328 %	59.880 ppb	60.284 ppb	95.344 %
Concentration per Run 3	86.390 %	64.011 ppb	62.340 ppb	62.563 ppb	62.420 ppb	95.905 %	60.785 ppb	61.400 ppb	94.800 %
Recovery Percentage 1		103.952 %	102.992 %	102.225 %	98.954 %		99.071 %	99.109 %	
Concentration RSD	4.1 %	3.3 %	5.0 %	3.5 %	5.6 %	3.6 %	2.7 %	4.1 %	2.8 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	60.049 ppb	61.640 ppb	97.761 %	96.522 %	59.742 ppb	59.489 ppb	96.230 %
Concentration per Run 1	58.018 ppb	58.644 ppb	103.328 %	103.286 %	55.913 ppb	55.830 ppb	100.679 %
Concentration per Run 2	60.900 ppb	61.883 ppb	95.366 %	91.847 %	60.047 ppb	61.027 ppb	94.609 %
Concentration per Run 3	61.228 ppb	64.392 ppb	94.591 %	94.434 %	63.266 ppb	61.610 ppb	93.400 %
Recovery Percentage 1	100.081 %	102.733 %			99.570 %	99.148 %	
Concentration RSD	2.9 %	4.7 %	4.9 %	6.2 %	6.2 %	5.3 %	4.1 %

Alpha ICPMSQ2 Data with SRD

12/4/2024 10:02:58 AM

Analysis index: 53 User name ALPHALAB\a2-icpmsq2 Comment CCB
Analysis label: CCB Rack 0
Analysis started at: 12/3/2024 8:44:24 PM Vial 10

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	92.113 %	98.743 %	0.295 ppb	-120.126 ppb	4.429 ppb	-0.415 ppb	19.649 ppb	14.547 ppb	93.550 %
Concentration per Run 1	90.445 %	99.820 %	0.230 ppb	-117.468 ppb	10.031 ppb	-0.538 ppb	26.711 ppb	38.315 ppb	91.615 %
Concentration per Run 2	92.730 %	100.898 %	0.393 ppb	-127.981 ppb	2.092 ppb	-0.129 ppb	19.888 ppb	7.261 ppb	94.296 %
Concentration per Run 3	93.163 %	95.510 %	0.262 ppb	-114.930 ppb	1.164 ppb	-0.579 ppb	12.349 ppb	-1.935 ppb	94.739 %
Recovery Percentage 1			59.014 %	-24.025 %	6.327 %	-4.151 %	19.649 %	14.547 %	
Concentration RSD	1.6 %	2.9 %	29.3 %	5.8 %	110.0 %	59.9 %	36.6 %	145.0 %	1.8 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	93.829 %	0.042 ppb	0.014 ppb	0.231 ppb	3.253 ppb	0.022 ppb	-1.549 ppb	0.048 ppb	-0.441 ppb
Concentration per Run 1	96.908 %	-0.031 ppb	0.017 ppb	0.449 ppb	3.587 ppb	0.035 ppb	-1.460 ppb	0.123 ppb	-0.439 ppb
Concentration per Run 2	92.960 %	0.008 ppb	0.040 ppb	0.195 ppb	3.120 ppb	0.026 ppb	-1.567 ppb	-0.034 ppb	-0.402 ppb
Concentration per Run 3	91.618 %	0.149 ppb	-0.015 ppb	0.049 ppb	3.052 ppb	0.004 ppb	-1.620 ppb	0.054 ppb	-0.480 ppb
Recovery Percentage 1		0.840 %	1.391 %	23.125 %	6.506 %	4.342 %	-77.463 %	4.771 %	-8.811 %
Concentration RSD	2.9 %	224.4 %	197.4 %	87.6 %	9.0 %	73.3 %	5.3 %	164.6 %	8.9 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	89.581 %	0.117 ppb	0.287 ppb	0.062 ppb	0.613 ppb	99.153 %	0.014 ppb	0.016 ppb	98.881 %
Concentration per Run 1	88.383 %	0.103 ppb	0.574 ppb	0.117 ppb	0.538 ppb	101.730 %	0.031 ppb	0.028 ppb	102.606 %
Concentration per Run 2	88.270 %	0.166 ppb	-0.004 ppb	0.047 ppb	0.535 ppb	98.573 %	0.008 ppb	0.011 ppb	95.278 %
Concentration per Run 3	92.092 %	0.081 ppb	0.291 ppb	0.021 ppb	0.765 ppb	97.156 %	0.005 ppb	0.007 ppb	98.760 %
Recovery Percentage 1		23.330 %	5.748 %	0.617 %	30.639 %		3.615 %	7.837 %	
Concentration RSD	2.4 %	37.9 %	100.6 %	80.4 %	21.5 %	2.4 %	99.6 %	71.1 %	3.7 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.047 ppb	0.080 ppb	96.220 %	93.571 %	0.256 ppb	0.034 ppb	95.966 %
Concentration per Run 1	0.069 ppb	0.062 ppb	99.434 %	95.643 %	0.247 ppb	0.054 ppb	100.011 %
Concentration per Run 2	0.015 ppb	0.098 ppb	94.461 %	92.450 %	0.294 ppb	0.027 ppb	93.587 %
Concentration per Run 3	0.058 ppb	0.081 ppb	94.765 %	92.619 %	0.228 ppb	0.019 ppb	94.301 %
Recovery Percentage 1	1.182 %	16.056 %			25.640 %	3.353 %	
Concentration RSD	60.4 %	22.0 %	2.9 %	1.9 %	13.3 %	53.6 %	3.7 %

Alpha ICPMSQ2 Data with SRD

12/4/2024 10:02:58 AM

Analysis index:	54	User name	ALPHALAB\a2-icpmsq2	Comment	fb
Analysis label:	L2467934-10 6020SL	Rack	2		
Analysis started at:	12/3/2024 8:48:56 PM	Vial	36		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	96.523 %	98.383 %	0.051 ppb	742.782 ppb	17.106 ppb	2.419 ppb	18.931 ppb	148.545 ppb	100.086 %
Concentration per Run 1	93.970 %	101.976 %	0.064 ppb	702.943 ppb	14.605 ppb	2.049 ppb	21.668 ppb	135.771 ppb	98.943 %
Concentration per Run 2	96.363 %	93.758 %	0.050 ppb	789.347 ppb	19.145 ppb	3.037 ppb	19.700 ppb	161.604 ppb	101.586 %
Concentration per Run 3	99.235 %	99.416 %	0.040 ppb	736.056 ppb	17.568 ppb	2.171 ppb	15.423 ppb	148.258 ppb	99.729 %
Concentration RSD	2.7 %	4.3 %	23.4 %	5.9 %	13.5 %	22.3 %	16.9 %	8.7 %	1.4 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	93.330 %	0.147 ppb	0.116 ppb	0.368 ppb	5.362 ppb	0.038 ppb	-1.593 ppb	0.260 ppb	-0.015 ppb
Concentration per Run 1	96.180 %	0.069 ppb	0.069 ppb	0.409 ppb	5.461 ppb	0.059 ppb	-1.613 ppb	0.286 ppb	0.016 ppb
Concentration per Run 2	90.468 %	0.085 ppb	0.149 ppb	0.339 ppb	5.143 ppb	0.019 ppb	-1.637 ppb	0.258 ppb	0.001 ppb
Concentration per Run 3	93.343 %	0.285 ppb	0.129 ppb	0.357 ppb	5.482 ppb	0.036 ppb	-1.530 ppb	0.235 ppb	-0.062 ppb
Concentration RSD	3.1 %	82.0 %	36.2 %	9.9 %	3.5 %	51.7 %	3.5 %	9.8 %	274.9 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	88.470 %	0.108 ppb	0.055 ppb	0.218 ppb	0.268 ppb	98.661 %	0.004 ppb	0.010 ppb	100.346 %
Concentration per Run 1	92.203 %	0.130 ppb	0.154 ppb	0.209 ppb	0.276 ppb	101.068 %	-0.001 ppb	0.014 ppb	103.457 %
Concentration per Run 2	84.818 %	0.065 ppb	-0.023 ppb	0.231 ppb	0.210 ppb	97.506 %	0.011 ppb	0.011 ppb	98.666 %
Concentration per Run 3	88.390 %	0.130 ppb	0.035 ppb	0.213 ppb	0.318 ppb	97.407 %	0.002 ppb	0.004 ppb	98.915 %
Concentration RSD	4.2 %	34.9 %	162.3 %	5.3 %	20.3 %	2.1 %	154.3 %	55.8 %	2.7 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.434 ppb	0.238 ppb	94.944 %	94.963 %	0.054 ppb	0.026 ppb	98.714 %
Concentration per Run 1	0.386 ppb	0.310 ppb	96.982 %	96.161 %	0.026 ppb	0.030 ppb	101.751 %
Concentration per Run 2	0.474 ppb	0.158 ppb	92.392 %	92.475 %	0.075 ppb	0.024 ppb	98.063 %
Concentration per Run 3	0.443 ppb	0.245 ppb	95.459 %	96.252 %	0.063 ppb	0.024 ppb	96.327 %
Concentration RSD	10.3 %	32.1 %	2.5 %	2.3 %	46.8 %	13.8 %	2.8 %

Alpha ICPMSQ2 Data with SRD

12/4/2024 10:02:58 AM

Analysis index: 55
Analysis label: L2467934-07 6020SL
Analysis started at: 12/3/2024 8:53:26 PM
User name ALPHALAB\a2-icpmsq2
Rack 2
Vial 33
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	93.998 %	96.408 %	-0.007 ppb	17,048.316 ppb	10,736.655 ppb	2.266 ppb	16,786.931 ppb	86,144.038 ppb	99.506 %
Concentration per Run 1	92.955 %	94.701 %	-0.008 ppb	16,623.266 ppb	10,355.134 ppb	2.147 ppb	16,967.044 ppb	84,591.688 ppb	99.891 %
Concentration per Run 2	94.190 %	99.416 %	-0.005 ppb	17,115.203 ppb	10,910.115 ppb	2.595 ppb	16,611.773 ppb	85,500.679 ppb	100.204 %
Concentration per Run 3	94.851 %	95.105 %	-0.007 ppb	17,406.480 ppb	10,944.718 ppb	2.056 ppb	16,781.977 ppb	88,339.746 ppb	98.423 %
Concentration RSD	1.0 %	2.7 %	25.9 %	2.3 %	3.1 %	12.7 %	1.1 %	2.3 %	1.0 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	97.994 %	0.292 ppb	0.772 ppb	632.127 ppb	6.805 ppb	0.277 ppb	-1.278 ppb	1.698 ppb	0.324 ppb
Concentration per Run 1	98.365 %	0.388 ppb	0.731 ppb	598.656 ppb	5.720 ppb	0.312 ppb	-1.281 ppb	1.596 ppb	0.186 ppb
Concentration per Run 2	96.448 %	0.258 ppb	0.761 ppb	659.096 ppb	5.680 ppb	0.239 ppb	-1.306 ppb	1.793 ppb	0.356 ppb
Concentration per Run 3	99.170 %	0.230 ppb	0.824 ppb	638.628 ppb	9.014 ppb	0.280 ppb	-1.246 ppb	1.704 ppb	0.430 ppb
Concentration RSD	1.4 %	28.9 %	6.1 %	4.9 %	28.1 %	13.2 %	2.4 %	5.8 %	38.6 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	91.308 %	0.300 ppb	0.067 ppb	419.538 ppb	2.758 ppb	100.556 %	0.001 ppb	0.047 ppb	100.755 %
Concentration per Run 1	97.818 %	0.282 ppb	0.255 ppb	393.635 ppb	2.338 ppb	104.233 %	-0.003 ppb	0.042 ppb	103.137 %
Concentration per Run 2	87.008 %	0.306 ppb	-0.029 ppb	432.047 ppb	2.430 ppb	99.334 %	-0.001 ppb	0.041 ppb	97.871 %
Concentration per Run 3	89.098 %	0.311 ppb	-0.025 ppb	432.934 ppb	3.505 ppb	98.100 %	0.006 ppb	0.058 ppb	101.256 %
Concentration RSD	6.3 %	5.1 %	243.3 %	5.3 %	23.5 %	3.2 %	706.5 %	20.5 %	2.6 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.093 ppb	84.036 ppb	100.805 %	99.440 %	0.667 ppb	0.022 ppb	98.019 %
Concentration per Run 1	0.089 ppb	80.061 ppb	106.430 %	101.197 %	0.589 ppb	0.024 ppb	103.172 %
Concentration per Run 2	0.094 ppb	89.144 ppb	97.604 %	97.538 %	0.705 ppb	0.025 ppb	96.868 %
Concentration per Run 3	0.094 ppb	82.903 ppb	98.381 %	99.584 %	0.706 ppb	0.017 ppb	94.018 %
Concentration RSD	3.1 %	5.5 %	4.8 %	1.8 %	10.0 %	20.7 %	4.8 %

Alpha ICPMSQ2 Data with SRD

12/4/2024 10:02:58 AM

Analysis index: 56
Analysis label: L2467934-08 6020SL
Analysis started at: 12/3/2024 8:57:55 PM
User name ALPHALAB\a2-icpmsq2
Rack 2
Vial 34
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	93.516 %	96.048 %	-0.018 ppb	29,121.195 ppb	3,979.740 ppb	4.874 ppb	23,101.925 ppb	35,907.687 ppb	97.774 %
Concentration per Run 1	90.030 %	101.033 %	-0.020 ppb	27,149.654 ppb	3,739.714 ppb	5.131 ppb	22,390.479 ppb	34,502.591 ppb	95.286 %
Concentration per Run 2	95.910 %	92.411 %	-0.016 ppb	30,571.254 ppb	4,240.891 ppb	5.703 ppb	23,406.774 ppb	36,392.878 ppb	101.060 %
Concentration per Run 3	94.608 %	94.701 %	-0.017 ppb	29,642.678 ppb	3,958.616 ppb	3.789 ppb	23,508.522 ppb	36,827.592 ppb	96.975 %
Concentration RSD	3.3 %	4.6 %	11.0 %	6.1 %	6.3 %	20.2 %	2.7 %	3.4 %	3.0 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	92.857 %	0.303 ppb	0.356 ppb	1.666 ppb	4.433 ppb	0.179 ppb	-1.077 ppb	1.852 ppb	-0.112 ppb
Concentration per Run 1	95.719 %	0.287 ppb	0.302 ppb	1.849 ppb	2.773 ppb	0.149 ppb	-1.047 ppb	1.693 ppb	-0.233 ppb
Concentration per Run 2	90.047 %	0.402 ppb	0.380 ppb	1.539 ppb	3.515 ppb	0.228 ppb	-1.135 ppb	1.928 ppb	-0.095 ppb
Concentration per Run 3	92.806 %	0.220 ppb	0.386 ppb	1.610 ppb	7.010 ppb	0.159 ppb	-1.049 ppb	1.936 ppb	-0.008 ppb
Concentration RSD	3.1 %	30.4 %	13.1 %	9.8 %	51.0 %	24.1 %	4.7 %	7.4 %	101.6 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	90.508 %	0.251 ppb	0.692 ppb	135.513 ppb	5.783 ppb	98.804 %	-0.002 ppb	0.010 ppb	101.093 %
Concentration per Run 1	94.498 %	0.194 ppb	0.456 ppb	128.097 ppb	5.028 ppb	103.716 %	0.000 ppb	0.003 ppb	107.449 %
Concentration per Run 2	90.973 %	0.265 ppb	0.380 ppb	137.057 ppb	5.646 ppb	95.940 %	-0.001 ppb	0.011 ppb	97.068 %
Concentration per Run 3	86.055 %	0.295 ppb	1.239 ppb	141.384 ppb	6.676 ppb	96.755 %	-0.005 ppb	0.015 ppb	98.761 %
Concentration RSD	4.7 %	20.5 %	68.7 %	5.0 %	14.4 %	4.3 %	126.6 %	59.3 %	5.5 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.127 ppb	80.920 ppb	98.501 %	96.162 %	0.208 ppb	0.014 ppb	98.068 %
Concentration per Run 1	0.114 ppb	77.097 ppb	104.158 %	99.387 %	0.177 ppb	0.010 ppb	102.003 %
Concentration per Run 2	0.136 ppb	84.828 ppb	94.740 %	93.280 %	0.223 ppb	0.016 ppb	96.492 %
Concentration per Run 3	0.133 ppb	80.835 ppb	96.604 %	95.818 %	0.222 ppb	0.015 ppb	95.711 %
Concentration RSD	9.4 %	4.8 %	5.1 %	3.2 %	12.7 %	22.7 %	3.5 %

Alpha ICPMSQ2 Data with SRD

12/4/2024 10:02:58 AM

Analysis index: 57
Analysis label: L2467934-09 6020SL
Analysis started at: 12/3/2024 9:02:24 PM
User name ALPHALAB\a2-icpmsq2
Rack 2
Vial 35
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	95.723 %	97.755 %	-0.027 ppb	17,492.534 ppb	11,224.306 ppb	1.715 ppb	17,447.178 ppb	89,236.132 ppb	99.555 %
Concentration per Run 1	91.699 %	100.763 %	-0.027 ppb	16,379.265 ppb	10,401.704 ppb	1.447 ppb	16,325.425 ppb	84,897.929 ppb	97.995 %
Concentration per Run 2	96.875 %	96.183 %	-0.026 ppb	17,907.037 ppb	11,628.125 ppb	2.288 ppb	18,287.189 ppb	91,521.485 ppb	100.972 %
Concentration per Run 3	98.595 %	96.318 %	-0.029 ppb	18,191.301 ppb	11,643.090 ppb	1.410 ppb	17,728.918 ppb	91,288.981 ppb	99.697 %
Concentration RSD	3.7 %	2.7 %	6.1 %	5.6 %	6.3 %	29.0 %	5.8 %	4.2 %	1.5 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	94.608 %	0.323 ppb	0.371 ppb	660.238 ppb	3.326 ppb	0.337 ppb	-1.198 ppb	1.478 ppb	-0.187 ppb
Concentration per Run 1	99.476 %	0.211 ppb	0.361 ppb	627.239 ppb	4.311 ppb	0.364 ppb	-1.206 ppb	1.338 ppb	-0.190 ppb
Concentration per Run 2	91.541 %	0.487 ppb	0.334 ppb	677.586 ppb	2.185 ppb	0.306 ppb	-1.037 ppb	1.539 ppb	-0.158 ppb
Concentration per Run 3	92.806 %	0.270 ppb	0.418 ppb	675.890 ppb	3.481 ppb	0.342 ppb	-1.350 ppb	1.558 ppb	-0.214 ppb
Concentration RSD	4.5 %	45.1 %	11.5 %	4.3 %	32.2 %	8.6 %	13.1 %	8.2 %	14.9 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	88.990 %	0.367 ppb	0.448 ppb	435.714 ppb	1.489 ppb	99.561 %	-0.003 ppb	0.041 ppb	99.894 %
Concentration per Run 1	91.632 %	0.302 ppb	0.351 ppb	414.487 ppb	1.256 ppb	104.910 %	-0.002 ppb	0.032 ppb	101.782 %
Concentration per Run 2	87.381 %	0.296 ppb	0.417 ppb	447.591 ppb	1.366 ppb	96.015 %	-0.001 ppb	0.045 ppb	96.363 %
Concentration per Run 3	87.958 %	0.504 ppb	0.576 ppb	445.065 ppb	1.843 ppb	97.759 %	-0.005 ppb	0.047 ppb	101.538 %
Concentration RSD	2.6 %	32.3 %	25.7 %	4.2 %	21.0 %	4.7 %	82.2 %	20.2 %	3.1 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.038 ppb	87.580 ppb	97.828 %	97.240 %	0.662 ppb	0.007 ppb	94.479 %
Concentration per Run 1	0.029 ppb	84.277 ppb	101.660 %	103.153 %	0.636 ppb	0.008 ppb	98.692 %
Concentration per Run 2	0.033 ppb	91.888 ppb	96.734 %	93.164 %	0.676 ppb	0.005 ppb	92.140 %
Concentration per Run 3	0.053 ppb	86.574 ppb	95.089 %	95.403 %	0.674 ppb	0.008 ppb	92.604 %
Concentration RSD	33.0 %	4.5 %	3.5 %	5.4 %	3.4 %	28.4 %	3.9 %

Alpha ICPMSQ2 Data with SRD

12/4/2024 10:02:58 AM



Analysis index:	58	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	CCV	Rack	0		
Analysis started at:	12/3/2024 9:06:54 PM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	93.656 %	95.285 %	56.360 ppb	6,330.912 ppb	6,504.976 ppb	61.755 ppb	6,653.334 ppb	6,187.776 ppb	101.092 %
Concentration per Run 1	88.550 %	102.111 %	57.908 ppb	6,083.447 ppb	6,455.646 ppb	60.122 ppb	6,466.237 ppb	6,147.129 ppb	97.690 %
Concentration per Run 2	94.753 %	92.681 %	55.848 ppb	6,638.511 ppb	6,619.490 ppb	63.537 ppb	6,585.203 ppb	5,973.548 ppb	102.282 %
Concentration per Run 3	97.666 %	91.064 %	55.323 ppb	6,270.777 ppb	6,439.792 ppb	61.606 ppb	6,908.562 ppb	6,442.652 ppb	103.303 %
Recovery Percentage 1			93.933 %	105.515 %	108.416 %	102.925 %	110.889 %	103.130 %	
Concentration RSD	5.0 %	6.3 %	2.4 %	4.5 %	1.5 %	2.8 %	3.4 %	3.8 %	3.0 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	89.510 %	65.045 ppb	65.941 ppb	65.033 ppb	6,689.951 ppb	65.278 ppb	63.821 ppb	63.926 ppb	62.808 ppb
Concentration per Run 1	88.973 %	61.871 ppb	64.390 ppb	65.033 ppb	6,551.805 ppb	63.928 ppb	64.484 ppb	62.947 ppb	61.370 ppb
Concentration per Run 2	88.590 %	68.505 ppb	67.230 ppb	67.238 ppb	6,956.042 ppb	67.584 ppb	65.364 ppb	67.811 ppb	65.114 ppb
Concentration per Run 3	90.966 %	64.758 ppb	66.204 ppb	62.828 ppb	6,562.008 ppb	64.323 ppb	61.615 ppb	61.020 ppb	61.940 ppb
Recovery Percentage 1		108.408 %	109.902 %	108.388 %	111.499 %	108.797 %	106.369 %	106.544 %	104.680 %
Concentration RSD	1.4 %	5.1 %	2.2 %	3.4 %	3.4 %	3.1 %	3.1 %	5.5 %	3.2 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	89.660 %	62.741 ppb	63.182 ppb	60.089 ppb	58.630 ppb	98.191 %	58.127 ppb	57.635 ppb	97.774 %
Concentration per Run 1	94.479 %	59.531 ppb	58.527 ppb	57.122 ppb	55.495 ppb	100.938 %	56.336 ppb	55.665 ppb	101.611 %
Concentration per Run 2	85.443 %	65.047 ppb	65.548 ppb	61.685 ppb	59.547 ppb	97.081 %	58.729 ppb	58.706 ppb	95.661 %
Concentration per Run 3	89.056 %	63.646 ppb	65.471 ppb	61.460 ppb	60.847 ppb	96.554 %	59.316 ppb	58.533 ppb	96.052 %
Recovery Percentage 1		104.569 %	105.303 %	100.148 %	97.716 %		96.878 %	96.058 %	
Concentration RSD	5.1 %	4.6 %	6.4 %	4.3 %	4.8 %	2.4 %	2.7 %	3.0 %	3.4 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	58.629 ppb	59.954 ppb	94.941 %	93.656 %	58.564 ppb	58.725 ppb	95.921 %
Concentration per Run 1	55.655 ppb	57.406 ppb	101.229 %	97.573 %	55.404 ppb	56.470 ppb	98.979 %
Concentration per Run 2	61.200 ppb	61.976 ppb	92.175 %	90.985 %	59.617 ppb	59.466 ppb	95.737 %
Concentration per Run 3	59.033 ppb	60.480 ppb	91.420 %	92.411 %	60.670 ppb	60.239 ppb	93.047 %
Recovery Percentage 1	97.716 %	99.923 %			97.607 %	97.875 %	
Concentration RSD	4.8 %	3.9 %	5.7 %	3.7 %	4.8 %	3.4 %	3.1 %

Alpha ICPMSQ2 Data with SRD

12/4/2024 10:02:58 AM

Analysis index: 59
Analysis label: CCB
Analysis started at: 12/3/2024 9:11:25 PM
User name ALPHALAB\a2-icpmsq2
Rack 0
Vial 10
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	93.312 %	95.959 %	0.103 ppb	-103.962 ppb	6.989 ppb	-0.688 ppb	30.278 ppb	31.944 ppb	93.263 %
Concentration per Run 1	89.425 %	104.805 %	0.157 ppb	-120.425 ppb	8.856 ppb	-1.169 ppb	41.080 ppb	44.041 ppb	91.957 %
Concentration per Run 2	94.428 %	93.624 %	0.092 ppb	-99.801 ppb	7.834 ppb	0.130 ppb	32.046 ppb	48.828 ppb	93.840 %
Concentration per Run 3	96.084 %	89.447 %	0.061 ppb	-91.660 ppb	4.279 ppb	-1.026 ppb	17.709 ppb	2.964 ppb	93.994 %
Recovery Percentage 1			20.618 %	-20.792 %	9.985 %	-6.884 %	30.278 %	31.944 %	
Concentration RSD	3.7 %	8.3 %	47.5 %	14.3 %	34.4 %	103.5 %	38.9 %	78.9 %	1.2 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	92.934 %	0.031 ppb	0.001 ppb	0.299 ppb	6.388 ppb	0.038 ppb	-1.573 ppb	0.060 ppb	-0.367 ppb
Concentration per Run 1	94.109 %	0.022 ppb	-0.020 ppb	0.380 ppb	7.203 ppb	0.069 ppb	-1.538 ppb	0.059 ppb	-0.391 ppb
Concentration per Run 2	89.357 %	0.015 ppb	-0.020 ppb	0.434 ppb	6.927 ppb	0.034 ppb	-1.585 ppb	0.047 ppb	-0.287 ppb
Concentration per Run 3	95.336 %	0.056 ppb	0.043 ppb	0.082 ppb	5.035 ppb	0.011 ppb	-1.595 ppb	0.075 ppb	-0.423 ppb
Recovery Percentage 1		0.621 %	0.125 %	29.872 %	12.777 %	7.632 %	-78.637 %	6.040 %	-7.340 %
Concentration RSD	3.4 %	71.2 %	2,895.9 %	63.4 %	18.5 %	76.6 %	1.9 %	22.6 %	19.4 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	89.102 %	0.084 ppb	0.297 ppb	0.196 ppb	0.438 ppb	98.830 %	0.037 ppb	0.043 ppb	96.529 %
Concentration per Run 1	93.298 %	0.050 ppb	0.319 ppb	0.230 ppb	0.311 ppb	104.097 %	0.054 ppb	0.059 ppb	103.418 %
Concentration per Run 2	86.053 %	0.141 ppb	0.429 ppb	0.178 ppb	0.511 ppb	96.727 %	0.019 ppb	0.031 ppb	91.240 %
Concentration per Run 3	87.956 %	0.062 ppb	0.144 ppb	0.179 ppb	0.494 ppb	95.667 %	0.038 ppb	0.038 ppb	94.930 %
Recovery Percentage 1		16.885 %	5.941 %	1.956 %	21.919 %		9.279 %	21.457 %	
Concentration RSD	4.2 %	58.8 %	48.3 %	15.1 %	25.3 %	4.6 %	46.3 %	34.4 %	6.5 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.057 ppb	0.130 ppb	95.402 %	93.664 %	0.261 ppb	0.044 ppb	97.189 %
Concentration per Run 1	0.049 ppb	0.161 ppb	101.331 %	99.353 %	0.240 ppb	0.049 ppb	101.850 %
Concentration per Run 2	0.055 ppb	0.054 ppb	92.072 %	91.239 %	0.301 ppb	0.039 ppb	95.503 %
Concentration per Run 3	0.067 ppb	0.176 ppb	92.804 %	90.398 %	0.241 ppb	0.043 ppb	94.213 %
Recovery Percentage 1	1.426 %	26.092 %			26.087 %	4.387 %	
Concentration RSD	15.9 %	51.2 %	5.4 %	5.3 %	13.3 %	10.8 %	4.2 %

Alpha ICPMSQ2 Data with SRD

12/4/2024 10:02:58 AM

Analysis index: 60
Analysis label: CCV
Analysis started at: 12/3/2024 9:15:58 PM
User name ALPHALAB\a2-icpmsq2
Rack 0
Vial 9
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	89.984 %	97.575 %	59.257 ppb	6,006.409 ppb	6,074.716 ppb	59.297 ppb	6,206.243 ppb	5,989.785 ppb	93.080 %
Concentration per Run 1	87.023 %	103.188 %	60.832 ppb	5,760.730 ppb	5,795.593 ppb	53.744 ppb	5,923.352 ppb	5,789.881 ppb	92.344 %
Concentration per Run 2	90.650 %	96.453 %	59.331 ppb	5,915.929 ppb	6,049.520 ppb	60.042 ppb	6,097.555 ppb	5,947.314 ppb	91.661 %
Concentration per Run 3	92.279 %	93.085 %	57.606 ppb	6,342.567 ppb	6,379.036 ppb	64.105 ppb	6,597.823 ppb	6,232.160 ppb	95.236 %
Recovery Percentage 1			98.761 %	100.107 %	101.245 %	98.829 %	103.437 %	99.830 %	
Concentration RSD	3.0 %	5.3 %	2.7 %	5.0 %	4.8 %	8.8 %	5.6 %	3.7 %	2.0 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	95.566 %	60.598 ppb	61.968 ppb	62.488 ppb	6,350.671 ppb	62.380 ppb	60.975 ppb	61.477 ppb	61.119 ppb
Concentration per Run 1	96.793 %	58.392 ppb	58.860 ppb	61.256 ppb	6,168.423 ppb	61.486 ppb	60.370 ppb	59.496 ppb	57.810 ppb
Concentration per Run 2	96.601 %	61.540 ppb	62.632 ppb	63.245 ppb	6,409.126 ppb	62.362 ppb	61.522 ppb	62.737 ppb	64.095 ppb
Concentration per Run 3	93.305 %	61.863 ppb	64.412 ppb	62.963 ppb	6,474.464 ppb	63.291 ppb	61.034 ppb	62.199 ppb	61.452 ppb
Recovery Percentage 1		100.997 %	103.280 %	104.147 %	105.845 %	103.966 %	101.626 %	102.462 %	101.865 %
Concentration RSD	2.1 %	3.2 %	4.6 %	1.7 %	2.5 %	1.4 %	0.9 %	2.8 %	5.2 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	90.229 %	62.125 ppb	60.308 ppb	59.562 ppb	58.849 ppb	98.179 %	58.361 ppb	58.533 ppb	96.554 %
Concentration per Run 1	94.877 %	58.914 ppb	54.211 ppb	57.413 ppb	55.186 ppb	101.597 %	55.922 ppb	56.790 ppb	100.818 %
Concentration per Run 2	86.267 %	65.617 ppb	65.098 ppb	61.159 ppb	60.050 ppb	96.510 %	60.725 ppb	60.332 ppb	93.495 %
Concentration per Run 3	89.543 %	61.844 ppb	61.615 ppb	60.114 ppb	61.311 ppb	96.431 %	58.436 ppb	58.477 ppb	95.348 %
Recovery Percentage 1		103.541 %	100.513 %	99.269 %	98.081 %		97.268 %	97.555 %	
Concentration RSD	4.8 %	5.4 %	9.2 %	3.2 %	5.5 %	3.0 %	4.1 %	3.0 %	3.9 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	59.447 ppb	60.160 ppb	96.257 %	93.572 %	58.324 ppb	58.789 ppb	95.827 %
Concentration per Run 1	56.950 ppb	57.942 ppb	97.630 %	96.177 %	55.294 ppb	56.966 ppb	99.494 %
Concentration per Run 2	61.483 ppb	61.621 ppb	94.669 %	93.985 %	60.068 ppb	59.390 ppb	94.329 %
Concentration per Run 3	59.908 ppb	60.917 ppb	96.472 %	90.554 %	59.610 ppb	60.010 ppb	93.658 %
Recovery Percentage 1	99.079 %	100.267 %			97.207 %	97.982 %	
Concentration RSD	3.9 %	3.2 %	1.6 %	3.0 %	4.5 %	2.7 %	3.3 %

Alpha ICPMSQ2 Data with SRD

12/4/2024 10:02:58 AM

Analysis index: 61 User name ALPHALAB\a2-icpmsq2 Comment <Comment>
Analysis label: CCB Rack 0
Analysis started at: 12/3/2024 9:20:29 PM Vial 10

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	91.760 %	90.121 %	0.151 ppb	-106.212 ppb	3.604 ppb	-0.400 ppb	11.707 ppb	6.707 ppb	94.756 %
Concentration per Run 1	88.532 %	92.950 %	0.147 ppb	-111.059 ppb	5.637 ppb	-0.474 ppb	15.181 ppb	3.314 ppb	93.835 %
Concentration per Run 2	93.071 %	87.696 %	0.163 ppb	-102.565 ppb	1.516 ppb	-0.045 ppb	16.743 ppb	14.741 ppb	95.543 %
Concentration per Run 3	93.677 %	89.717 %	0.143 ppb	-105.012 ppb	3.661 ppb	-0.682 ppb	3.198 ppb	2.065 ppb	94.890 %
Recovery Percentage 1			30.182 %	-21.242 %	5.149 %	-4.005 %	11.707 %	6.707 %	
Concentration RSD	3.1 %	2.9 %	7.2 %	4.1 %	57.2 %	81.0 %	63.3 %	104.2 %	0.9 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	92.053 %	-0.044 ppb	0.029 ppb	0.050 ppb	5.083 ppb	0.031 ppb	-1.483 ppb	0.030 ppb	-0.492 ppb
Concentration per Run 1	90.047 %	-0.076 ppb	0.022 ppb	0.128 ppb	4.968 ppb	0.051 ppb	-1.539 ppb	0.017 ppb	-0.520 ppb
Concentration per Run 2	92.500 %	-0.062 ppb	0.002 ppb	0.028 ppb	4.269 ppb	0.021 ppb	-1.414 ppb	0.010 ppb	-0.422 ppb
Concentration per Run 3	93.612 %	0.006 ppb	0.064 ppb	-0.007 ppb	6.012 ppb	0.022 ppb	-1.497 ppb	0.063 ppb	-0.534 ppb
Recovery Percentage 1		-0.880 %	2.914 %	4.970 %	10.166 %	6.262 %	-74.174 %	3.001 %	-9.845 %
Concentration RSD	2.0 %	100.5 %	108.4 %	141.2 %	17.3 %	54.8 %	4.3 %	94.7 %	12.5 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	91.546 %	0.100 ppb	0.293 ppb	0.069 ppb	0.490 ppb	96.444 %	0.028 ppb	0.038 ppb	96.917 %
Concentration per Run 1	89.260 %	-0.004 ppb	0.326 ppb	0.063 ppb	0.515 ppb	98.720 %	0.020 ppb	0.036 ppb	99.676 %
Concentration per Run 2	94.246 %	0.272 ppb	0.310 ppb	0.081 ppb	0.383 ppb	95.254 %	0.031 ppb	0.034 ppb	96.937 %
Concentration per Run 3	91.132 %	0.033 ppb	0.242 ppb	0.064 ppb	0.573 ppb	95.357 %	0.033 ppb	0.042 ppb	94.138 %
Recovery Percentage 1		20.022 %	5.860 %	0.693 %	24.516 %		7.047 %	18.758 %	
Concentration RSD	2.8 %	149.5 %	15.2 %	14.7 %	19.9 %	2.0 %	24.0 %	11.3 %	2.9 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.068 ppb	0.128 ppb	94.021 %	92.738 %	0.284 ppb	0.042 ppb	94.053 %
Concentration per Run 1	0.056 ppb	0.111 ppb	94.181 %	93.573 %	0.241 ppb	0.049 ppb	96.096 %
Concentration per Run 2	0.065 ppb	0.112 ppb	94.185 %	92.224 %	0.358 ppb	0.041 ppb	91.149 %
Concentration per Run 3	0.084 ppb	0.161 ppb	93.698 %	92.418 %	0.254 ppb	0.036 ppb	94.914 %
Recovery Percentage 1	1.711 %	25.575 %			28.440 %	4.196 %	
Concentration RSD	21.2 %	22.4 %	0.3 %	0.8 %	22.6 %	15.0 %	2.7 %

Interference Check Solutions
(ICP-MS)

Solution Component	Solution A Concentration (ug/L)	Solution AB Concentration (ug/L)
Al	20,000	20,000
Ca	60,000	60,000
Fe	50,000	50,000
Mg	20,000	20,000
Na	50,000	50,000
K	20,000	20,000
Mo	400	400
As	0.0	20
Cd	0.0	20
Cr	0.0	40
Co	0.0	40
Cu	0.0	40
Mn	0.0	40
Ni	0.0	40
Se	0.0	20
Ag	0.0	10
V	0.0	40
Zn	0.0	20

LCS & MS Concentrations
(ICP-MS)

Element	Liquid Concentration (mg/L)
Aluminum	2.00
Antimony	0.5
Arsenic	0.12
Barium	2.00
Beryllium	0.05
Cadmium	0.051
Calcium	10.0
Chromium	0.20
Cobalt	0.50
Copper	0.25
Iron	1.00
Lead	0.51
Magnesium	10.0
Manganese	0.50
Molybdenum	1.00
Nickel	0.50
Potassium	10.0
Selenium	0.12
Silver	0.05
Sodium	10.0
Thallium	0.12
Vanadium	0.50
Zinc	0.50

▪ Certificate of Analysis ▪

Product: Metals in Soil
Catalog Number: 540
Lot No. D102-540
Certificate Issue Date: June 22, 2018
Expiration Date: January 31, 2022
Revision Number: Original

Product use instructions are included as part of the certification packet and are paginated separately from this Certificate of Analysis. Please reference the product use instructions for catalog #540 revision 030512.

CERTIFICATION

Parameter	Certified Value[1]	Reference Value	Uncertainty[2]	QC Performance Acceptance Limits[3]	PT Performance Acceptance Limits[4]
	mg/kg	mg/kg	%	mg/kg	mg/kg
Aluminum	10100	8160	6.36	3960 - 12400	4080 - 12200
Antimony	120	60.9	9.42	0.822 - 121	12.0 - 166
Arsenic	144	135	5.08	112 - 158	94.6 - 176
Barium	469	443	6.77	366 - 521	332 - 554
Beryllium	207	197	5.86	164 - 229	148 - 246
Boron	213	174	12.6	127 - 221	105 - 244
Cadmium	224	204	6.65	169 - 240	153 - 256
Calcium	5190	4830	9.12	3950 - 5700	3510 - 6150
Chromium	138	132	8.56	109 - 155	92.2 - 171
Cobalt	182	179	7.93	151 - 207	134 - 224
Copper	191	184	6.72	155 - 213	138 - 230
Iron	15000	14400	10.7	8770 - 20000	5120 - 23600
Lead	225	216	7.72	178 - 254	159 - 274
Magnesium	2570	2340	6.13	1780 - 2900	1460 - 3230
Manganese	331	323	6.71	266 - 380	242 - 404
Mercury	16.8	13.2	16.0	8.64 - 17.7	7.89 - 18.5
Molybdenum	193	175	2.39	141 - 209	125 - 226
Nickel	163	152	5.95	126 - 178	106 - 197
Potassium	2420	2050	6.31	1440 - 2660	1210 - 2890
Selenium	81.9	74.9	4.13	59.3 - 90.5	47.0 - 103
Silver	57.6	53.9	9.00	43.0 - 64.8	37.8 - 70.0
Sodium	161	149	12.1	111 - 188	57.7 - 241
Strontium	100	96.2	4.04	78.1 - 114	69.0 - 123
Thallium	253	232	3.54	188 - 276	168 - 296

16341 Table Mountain Pkwy ▪ Golden, CO 80403 ▪ T: 800.372.0122 ▪ 303.431.8454 ▪ www.eraqc.com

Parameter	Certified Value[1]	Reference Value	Uncertainty[2]	QC Performance Acceptance Limits[3]	PT Performance Acceptance Limits[4]
	mg/kg	mg/kg	%	mg/kg	mg/kg
Tin	146	134	10.8	106 - 163	79.5 - 189
Titanium	449	340	7.20	70.2 - 609	44.9 - 711
Uranium	114	113	7.10	85.5 - 140	71.9 - 153
Vanadium	180	172	8.85	137 - 207	126 - 218
Zinc	217	211	6.58	171 - 250	147 - 274

ANALYTICAL VERIFICATION

Parameter	Certified Value[1]	Proficiency Testing Study			NIST Traceability	
		Mean	Recovery[5]	n	SRM Number	Recovery
	mg/kg	mg/kg	%			%
Aluminum	10100	8160	80.8	138	-	-
Antimony	120	60.9	50.8	135	-	-
Arsenic	144	135	93.8	184	-	-
Barium	469	443	94.5	158	-	-
Beryllium	207	197	95.0	148	-	-
Boron	213	174	81.8	107	-	-
Cadmium	224	204	91.3	199	-	-
Calcium	5190	4830	93.0	122	-	-
Chromium	138	132	95.5	172	-	-
Cobalt	182	179	98.4	140	-	-
Copper	191	184	96.3	183	-	-
Iron	15000	14400	95.6	133	-	-
Lead	225	216	96.2	204	-	-
Magnesium	2570	2340	91.2	122	-	-
Manganese	331	323	97.6	147	-	-
Mercury	16.8	13.2	78.3	128	-	-
Molybdenum	193	175	90.8	143	-	-
Nickel	163	152	93.1	185	-	-
Potassium	2420	2050	84.7	121	-	-
Selenium	81.9	74.9	91.5	163	-	-

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▪ Certificate of Analysis ▪

Parameter	Certified Value[1]	Proficiency Testing Study			NIST Traceability	
		Mean	Recovery[5]	n	SRM Number	Recovery
	mg/kg	mg/kg	%			%
Silver	57.6	53.9	93.6	150	-	-
Sodium	161	149	92.8	105	-	-
Strontium	100	96.2	96.2	90	-	-
Thallium	253	232	91.6	147	-	-
Tin	146	134	92.0	100	-	-
Titanium	449	340	75.6	93	-	-
Uranium	114	113	98.8	35	-	-
Vanadium	180	172	95.4	139	-	-
Zinc	217	211	97.0	180	-	-

1. The **Certified Values** are the actual "made-to" concentrations confirmed by ERA analytical verification. The certified values are monitored and purchasers will be notified of any significant changes resulting in recertification or withdrawal of this certified reference material during the period of validity of this certificate.

2. The **Uncertainty** is the total propagated uncertainty at the 95% confidence interval. The uncertainty is based on the preparation and internal analytical verification of the product by ERA, multiplied by a coverage factor. The uncertainty applies to the product as supplied and does not take into account any required or optional dilution and/or preparations the laboratory may perform while using this product.

3. The **QC Performance Acceptance Limits (QC PALs™)**are based on actual historical data collected in ERA's Proficiency Testing program. The QC PALs™ reflect any inherent biases in the methods used to establish the limits and closely approximate a 95% confidence interval of the performance that experienced laboratories should achieve using accepted environmental methods. Use the QC PALs™ to realistically evaluate your performance against your peers.

4. The **PT Performance Acceptance Limits (PT PALs™)** are calculated using the regression equations and fixed acceptance criteria specified in the NELAC proficiency testing requirements. Use the PT PALs™ when analyzing this QC standard alongside USEPA and NELAC compliant PT standards. Please note that many PT study acceptance limits are concentration dependent (some non-linearly) and, therefore, the acceptance limits of this QC standard and any PT standard may differ relative to their difference in concentrations.

5. The **PT Data/Traceability** data include the mean value, percent recovery and number of data points reported by the laboratories in our Proficiency Testing study compared to the Certified Values. In addition, where NIST Standard Reference Materials (SRMs) are available, each analyte has been analytically traced to the NIST SRM listed. This product is traceable to the lot numbers of its starting materials. All gravimetric and volumetric measurements related to its manufacture are traceable to NIST through an unbroken chain of comparisons.
Traceability Recovery (%) = [(% recovery certified standard)/(% recovery NIST SRM)]*100
The traceability data shown were compiled by analyzing the ERA standards or their associated stock solutions against the applicable NIST SRMs.

6. For additional information on this product such as intended use, instructions for use, level of homogeneity, and safety information, please refer to the provided Instruction Sheet

If you have any questions or need technical assistance, please call ERA technical assistance at 1-800-372-0122 or send an email to info@eraqc.com.

Certifying Officer

Brian Miller



Quality Officer

Matthew Seebeck



ISO/IEC GUIDE 34:2009 ACCREDITED REFERENCE MATERIAL PRODUCER CERTIFICATE NO. 1539.03

ISO/IEC 17025:2005 ACCREDITED CHEMICAL TESTING LABORATORY CERTIFICATE NO. 1539.02

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ERA
A Waters Company

Reference Material

▪ Certificate of Analysis ▪

Product: Metals in Soil
Catalog Number: 540
Lot No. D105-540
Certificate Issue Date: March 19, 2019
Expiration Date: October 12, 2022
Revision Number: Original

Product use instructions are included as part of the certification packet and are paginated separately from this Certificate of Analysis. Please reference the product use instructions for catalog #540 revision 030512.

CERTIFICATION

Parameter	Certified Value[1]	Reference Value	Uncertainty[2]	QC Performance Acceptance Limits[3]	PT Performance Acceptance Limits[4]
	mg/kg	mg/kg	%	mg/kg	mg/kg
Aluminum	10100	8800	8.32	4600 - 13000	4470 - 13100
Antimony	282	147	7.70	6.17 - 289	28.2 - 366
Arsenic	155	143	6.34	119 - 168	100 - 186
Barium	439	415	5.37	343 - 488	311 - 519
Beryllium	192	179	2.78	149 - 210	134 - 224
Boron	216	160	7.08	113 - 208	96.1 - 238
Cadmium	61.5	56.2	0.528	46.6 - 65.9	42.2 - 70.3
Calcium	5190	4960	6.64	4090 - 5840	3610 - 6310
Chromium	104	101	4.75	83.2 - 118	70.5 - 131
Cobalt	196	189	0.500	158 - 219	141 - 236
Copper	65.0	63.1	2.65	53.1 - 73.1	47.3 - 78.9
Iron	15000	15700	8.94	10100 - 21300	6000 - 25400
Lead	126	125	4.77	103 - 146	89.3 - 160
Magnesium	2570	2410	6.26	1860 - 2970	1520 - 3310
Manganese	387	382	5.37	315 - 449	290 - 474
Mercury	7.76	7.61	13.7	5.53 - 9.69	4.57 - 10.7
Molybdenum	120	107	0.500	86.0 - 128	75.5 - 139
Nickel	117	108	0.514	89.5 - 127	75.7 - 141
Potassium	2420	2110	5.62	1500 - 2720	1260 - 2960
Selenium	84.6	77.9	7.10	61.8 - 94.0	49.2 - 107
Silver	34.6	34.3	8.34	27.8 - 40.9	23.6 - 45.1
Sodium	161	145	6.72	106 - 183	54.3 - 235
Strontium	104	104	3.95	85.1 - 123	74.8 - 133
Thallium	123	113	0.500	91.3 - 134	77.1 - 149

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Parameter	Certified Value[1]	Reference Value	Uncertainty[2]	QC Performance Acceptance Limits[3]	PT Performance Acceptance Limits[4]
	mg/kg	mg/kg	%	mg/kg	mg/kg
Tin	118	107	0.500	83.5 - 130	61.2 - 152
Titanium	512	421	5.80	114 - 728	0.00 - 854
Uranium	103	104	6.18	79.1 - 128	71.9 - 135
Vanadium	87.3	83.7	8.55	66.8 - 101	54.2 - 113
Zinc	251	240	3.98	194 - 285	168 - 312

ANALYTICAL VERIFICATION

Parameter	Certified Value[1]	Proficiency Testing Study			NIST Traceability	
		Mean	Recovery[5]	n	SRM Number	Recovery
	mg/kg	mg/kg	%			%
Aluminum	10100	8800	87.1	193	-	-
Antimony	282	147	52.3	216	-	-
Arsenic	155	143	92.5	240	-	-
Barium	439	415	94.6	222	-	-
Beryllium	192	179	93.4	220	-	-
Boron	216	160	74.2	152	-	-
Cadmium	61.5	56.2	91.5	239	-	-
Calcium	5190	4960	95.6	175	-	-
Chromium	104	101	96.8	237	-	-
Cobalt	196	189	96.2	215	-	-
Copper	65.0	63.1	97.1	237	-	-
Iron	15000	15700	105	195	-	-
Lead	126	125	99.0	243	-	-
Magnesium	2570	2410	93.9	177	-	-
Manganese	387	382	98.7	215	-	-
Mercury	7.76	7.61	98.0	157	-	-
Molybdenum	120	107	89.4	216	-	-
Nickel	117	108	92.5	235	-	-
Potassium	2420	2110	87.2	181	-	-
Selenium	84.6	77.9	92.1	231	-	-

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Reference Material

▪ Certificate of Analysis ▪

Parameter	Certified Value[1]	Proficiency Testing Study			NIST Traceability	
		Mean	Recovery[5]	n	SRM Number	Recovery
	mg/kg	mg/kg	%			%
Silver	34.6	34.3	99.3	216	-	-
Sodium	161	145	89.8	166	-	-
Strontium	104	104	99.9	148	-	-
Thallium	123	113	91.8	215	-	-
Tin	118	107	90.4	164	-	-
Titanium	512	421	82.2	157	-	-
Uranium	103	104	101	61	-	-
Vanadium	87.3	83.7	95.9	214	-	-
Zinc	251	240	95.5	234	-	-

1. The **Certified Values** are the actual "made-to" concentrations confirmed by ERA analytical verification. The certified values are monitored and purchasers will be notified of any significant changes resulting in recertification or withdrawal of this reference material during the period of validity of this certificate.

2. The **Uncertainty** is the total propagated uncertainty at the 95% confidence interval. The uncertainty is based on the preparation and internal analytical verification of the product by ERA, multiplied by a coverage factor. The uncertainty applies to the product as supplied and does not take into account any required or optional dilution and/or preparations the laboratory may perform while using this product.

3. The **QC Performance Acceptance Limits (QC PALs™)**are based on actual historical data collected in ERA's Proficiency Testing program. The QC PALs™ reflect any inherent biases in the methods used to establish the limits and closely approximate a 95% confidence interval of the performance that experienced laboratories should achieve using accepted environmental methods. Use the QC PALs™ to realistically evaluate your performance against your peers.

4. The **PT Performance Acceptance Limits (PT PALs™)** are calculated using the regression equations and fixed acceptance criteria specified in the NELAC proficiency testing requirements. Use the PT PALs™ when analyzing this QC standard alongside USEPA and NELAC compliant PT standards. Please note that many PT study acceptance limits are concentration dependent (some non-linearly) and, therefore, the acceptance limits of this QC standard and any PT standard may differ relative to their difference in concentrations.

5. The **PT Data/Traceability** data include the mean value, percent recovery and number of data points reported by the laboratories in our Proficiency Testing study compared to the Certified Values. In addition, where NIST Standard Reference Materials (SRMs) are available, each analyte has been analytically traced to the NIST SRM listed. This product is traceable to the lot numbers of its starting materials. All gravimetric and volumetric measurements related to its manufacture are traceable to NIST through an unbroken chain of comparisons.
Traceability Recovery (%) = [(% recovery certified standard)/(% recovery NIST SRM)]*100
The traceability data shown were compiled by analyzing the ERA standards or their associated stock solutions against the applicable NIST SRMs.

6. For additional information on this product such as intended use, instructions for use, level of homogeneity, and safety information, please refer to the provided Instruction Sheet

If you have any questions or need technical assistance, please call ERA technical assistance at 1-800-372-0122 or send an email to info@eraqc.com.

Certifying Officer

Brian Miller

Brian Miller

Quality Officer

Matthew Seebeck

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ERA
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Certified Reference Material

▪ Certificate of Analysis ▪

Product: Metals in Soil
Catalog Number: 540
Lot No. D109-540
Certificate Issue Date: March 24, 2020
Expiration Date: October 03, 2023
Revision Number: Original

Product use instructions are included as part of the certification packet and are paginated separately from this Certificate of Analysis. Please reference the product use instructions for catalog #540 revision 090119.

CERTIFICATION

Parameter	Certified Value[1]	Reference Value[7]	Uncertainty[2]	QC Performance Acceptance Limits[3]	PT Performance Acceptance Limits[4]
	mg/kg	mg/kg	%	mg/kg	mg/kg
Aluminum	10100	8130	2.54	3920 - 12300	4060 - 12200
Antimony	259	134	5.03	4.56 - 264	25.9 - 335
Arsenic	171	156	3.38	129 - 183	109 - 203
Barium	253	239	4.81	197 - 280	179 - 298
Beryllium	179	169	6.59	141 - 198	127 - 212
Boron	114	87.5	10.3	62.5 - 113	52.5 - 125
Cadmium	149	137	5.43	113 - 160	103 - 171
Calcium	5190	4760	3.48	3890 - 5640	3460 - 6070
Chromium	163	154	3.79	126 - 181	108 - 200
Cobalt	127	121	5.07	101 - 141	90.8 - 151
Copper	57.0	54.9	4.13	46.1 - 63.6	41.1 - 68.6
Iron	15000	14100	6.27	8470 - 19700	4920 - 23200
Lead	133	130	3.00	107 - 152	93.3 - 167
Magnesium	2570	2320	3.32	1760 - 2880	1440 - 3200
Manganese	277	269	2.67	221 - 317	199 - 340
Mercury	21.6	20.5	7.72	14.7 - 26.3	12.3 - 28.6
Molybdenum	108	95.4	2.61	76.4 - 114	66.9 - 124
Nickel	58.7	53.9	4.97	44.5 - 63.3	37.7 - 70.0
Potassium	2420	2020	3.06	1410 - 2630	1190 - 2850
Selenium	181	167	5.63	132 - 201	113 - 221
Silver	35.5	33.6	5.20	26.8 - 40.3	23.0 - 44.1
Sodium	161	133	2.76	95.1 - 171	46.5 - 220
Strontium	89.7	87.9	4.59	71.7 - 104	62.8 - 113
Thallium	121	112	5.19	90.3 - 133	76.1 - 147

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▪ Certificate of Analysis ▪

Parameter	Certified Value[1]	Reference Value[7]	Uncertainty[2]	QC Performance Acceptance Limits[3]	PT Performance Acceptance Limits[4]
	mg/kg	mg/kg	%	mg/kg	mg/kg
Tin	83.5	74.0	5.42	57.6 - 90.4	39.7 - 108
Titanium	474	333	7.17	48.6 - 617	46.3 - 620
Uranium	51.9	51.9	3.36	39.6 - 64.3	35.9 - 68.0
Vanadium	68.1	62.6	6.00	49.4 - 75.8	37.0 - 88.3
Zinc	165	158	2.34	128 - 188	111 - 205

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ANALYTICAL VERIFICATION

Parameter	Certified Value[1]	Proficiency Testing Study			NIST Traceability	
		Mean	Recovery[5]	n	SRM Number[6]	Recovery
	mg/kg	mg/kg	%			%
Aluminum	10100	8130	80.5	196	-	-
Antimony	259	134	51.8	217	-	-
Arsenic	171	156	91.3	243	-	-
Barium	253	239	94.3	230	-	-
Beryllium	179	169	94.6	223	-	-
Boron	114	87.5	76.7	150	-	-
Cadmium	149	137	91.8	249	-	-
Calcium	5190	4760	91.8	184	-	-
Chromium	163	154	94.4	245	-	-
Cobalt	127	121	95.3	221	-	-
Copper	57.0	54.9	96.2	243	-	-
Iron	15000	14100	93.9	199	-	-
Lead	133	130	97.7	251	-	-
Magnesium	2570	2320	90.1	182	-	-
Manganese	277	269	97.2	220	-	-
Mercury	21.6	20.5	94.7	172	-	-
Molybdenum	108	95.4	88.3	218	-	-
Nickel	58.7	53.9	91.8	242	-	-
Potassium	2420	2020	83.5	187	-	-
Selenium	181	167	92.2	235	-	-
Silver	35.5	33.6	94.5	222	-	-
Sodium	161	133	82.7	177	-	-
Strontium	89.7	87.9	98.0	151	-	-
Thallium	121	112	92.2	219	-	-
Tin	83.5	74.0	88.6	170	-	-
Titanium	474	333	70.3	157	-	-
Uranium	51.9	51.9	100	60	-	-
Vanadium	68.1	62.6	91.9	213	-	-
Zinc	165	158	95.8	238	-	-

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▪ Certificate of Analysis ▪

1. The **Certified Values** are the actual gravimetric/volumetric "made-to" concentrations confirmed by ERA analytical verification. The certified values are monitored and purchasers will be notified of any significant changes resulting in recertification or withdrawal of this certified reference material during the period of validity of this certificate.

2. The **Uncertainty** represents an expanded uncertainty and approximates a 95% confidence interval. The uncertainty is based on the characterization, homogeneity and stability characteristics of the product, multiplied by a coverage factor (k=2). The uncertainty applies to the product as supplied and does not take into account any required or optional dilution and/or preparations the laboratory may perform while using this product. The formula used to calculate the expanded uncertainty is:
$U_{expanded} = k * SQRT((U_{char}^2) + (U_{homogen}^2) + (U_{LTS}^2) + (U_{STS}^2) + (U_{RSS}^2))$

Where:

$U_{expanded}$ = Expanded uncertainty.
k = Coverage factor.
U_{char} = Combined standard uncertainty of the manufacturing and/or analytical verification assessment.
$U_{homogen}$ = Standard uncertainty of the homogeneity assessment.
U_{LTS} = Standard uncertainty associated with long-term stability.
U_{STS} = Standard uncertainty associated with short-term (transport) stability.
U_{RSS} = Standard uncertainty associated with repeated sampling of the product (where permitted by product use instructions).

3. The **QC Performance Acceptance Limits (QC PALs™)** are based on actual historical data collected in ERA's Proficiency Testing program. The QC PALs™ reflect any inherent biases in the methods used to establish the limits and closely approximate a 95% confidence interval of the performance that experienced laboratories should achieve using accepted environmental methods. Use the QC PALs™ to realistically evaluate your performance against your peers.

4. The **PT Performance Acceptance Limits (PT PALs™)** are calculated using the regression equations and fixed acceptance criteria specified in the NELAC proficiency testing requirements. Use the PT PALs™ when analyzing this certified reference material alongside USEPA and NELAC compliant PT study materials. Please note that many PT study acceptance limits are concentration dependent (some non-linearly) and therefore, the acceptance limits of this certified reference material and any PT study material may differ relative to their difference in concentrations.

5. The **PT Performance Data** include the mean value, percent recovery and number of data points reported by laboratories in our Proficiency Testing study compared to the Certified Values. In the event this lot was not used in a proficiency testing scheme, the data displayed was generated internally by ERA.

6. Where NIST Standard Reference Materials (SRMs) are available, each analyte has been analytically traced to the NIST SRM listed. **Analytical Traceability Recovery (%)** = [(% recovery ERA certified reference material)/(% recovery NIST SRM)]*100
The traceability data shown were compiled by analyzing this ERA certified reference material and/or it's associated stock solution(s) against the applicable NIST SRMs.

7. The **Reference Values** are equal to the mean recoveries for the parameters as determined in an interlaboratory round robin study. The **Reference Values** represent the expected performance for the analytes in this standard. ERA recommends using the **Reference Values** when assessing or evaluating your results.

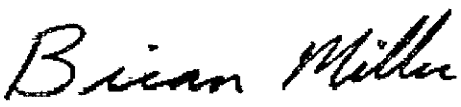
8. **Metrological Traceability**. This certified reference material is metrologically traceable to NIST mass reference materials through an unbroken chain of comparisons.

9. For additional information on this product such as intended use, storage information, instructions for use, minimum sample size, and safety information, please refer to the Product Use Instructions provided.

If you have any questions or need technical assistance, please call ERA technical assistance at 1-800-372-0122 or send an email to info@eraqc.com.

Certifying Officer

Brian Miller



Quality Officer

Matthew Seebeck



ERA
A Waters Company

Certified Reference Material

▪ Certificate of Analysis ▪

Product: Metals in Soil
Catalog Number: 540
Lot No. D113-540
Certificate Issue Date: March 23, 2021
Expiration Date: October 13, 2024
Revision Number: Original

Product use instructions are included as part of the certification packet and are paginated separately from this Certificate of Analysis. Please reference the product use instructions for catalog #540 revision 090119.

CERTIFICATION

Parameter	Certified Value[1]	Reference Value	Uncertainty[2]	QC Performance Acceptance Limits[3]	PT Performance Acceptance Limits[4]
	mg/kg	mg/kg	%	mg/kg	mg/kg
Aluminum	10100	8630	12.0	4420 - 12800	4370 - 12900
Antimony	256	129	16.8	0.742 - 257	25.6 - 323
Arsenic	91.6	84.5	15.1	70.0 - 99.0	59.2 - 110
Barium	259	249	9.94	206 - 292	187 - 311
Beryllium	175	163	3.89	135 - 191	122 - 204
Boron	95.7	76.7	12.8	55.7 - 97.7	48.0 - 107
Cadmium	107	99.0	11.5	82.2 - 116	74.2 - 124
Calcium	5190	4760	11.8	3890 - 5640	3460 - 6070
Chromium	129	122	14.6	101 - 144	85.7 - 159
Cobalt	63.6	61.7	11.5	51.9 - 71.6	46.3 - 77.2
Copper	62.3	61.5	12.3	51.9 - 71.0	46.1 - 76.8
Iron	15000	14500	15.7	8860 - 20100	5190 - 23800
Lead	122	123	13.9	103 - 144	88.3 - 158
Lithium	6.42	7.30	18.7	5.13 - 9.48	3.20 - 11.4
Magnesium	2570	2360	8.87	1810 - 2920	1480 - 3250
Manganese	470	456	13.4	375 - 538	350 - 563
Mercury	22.1	18.9	14.5	13.0 - 24.8	11.3 - 26.4
Molybdenum	80.1	72.8	11.0	58.7 - 87.0	50.5 - 95.2
Nickel	143	135	14.2	112 - 158	94.7 - 176
Potassium	2420	2090	8.21	1480 - 2700	1240 - 2940
Selenium	128	121	11.7	96.9 - 146	80.4 - 162
Silver	45.4	44.1	6.69	35.5 - 52.8	30.7 - 57.6
Sodium	161	136	9.34	97.4 - 174	48.1 - 223
Strontium	82.2	82.3	8.42	67.4 - 97.1	58.6 - 106

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▪ Certificate of Analysis ▪

Parameter	Certified Value[1]	Reference Value	Uncertainty[2]	QC Performance Acceptance Limits[3]	PT Performance Acceptance Limits[4]
	mg/kg	mg/kg	%	mg/kg	mg/kg
Thallium	154	144	7.54	117 - 171	101 - 187
Tin	89.7	79.8	14.0	62.2 - 97.4	43.5 - 116
Titanium	705	546	10.3	123 - 969	118 - 974
Uranium	29.5	30.9	3.38	23.9 - 37.9	21.3 - 40.5
Vanadium	196	186	14.2	148 - 224	138 - 235
Zinc	307	295	10.4	240 - 351	207 - 384

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Calculation of Method 6020 Metals

Aqueous Samples

The instrument will calculate the concentration (µg/L). This value is divided by 1000 to convert the units to mg/L. If the sample is diluted (DF), the result is multiplied by the DF to generate the final result.

$$\text{Result, mg/L} = C_s \times (1\text{mg}/1000\mu\text{g}) \times (DF)$$

Where:

C_s = Concentration of sample (µg/L)

DF = Dilution Factor

Alpha ICPMSQ2 Seq

11/27/2024 6:12:20 AM

Sample List Summary:

Instrument ID: iCAP Q

Index:	Label:	Rack	Vial	Main Runs:	Survey Runs:	Start Time:
1	Rinse	0	1	3	1	11/26/2024 7:04:01 AM
2	CAL LOT #M23-1225	0	1	3	1	11/26/2024 7:08:27 AM
3	Blank NTB ICPMSQ2	4	49	3	1	11/26/2024 7:12:53 AM
4	0.2/20 Cal	0	2	3	1	11/26/2024 7:17:25 AM
5	1/100 Cal	0	3	3	1	11/26/2024 7:21:52 AM
6	10/1000 Cal	0	4	3	1	11/26/2024 7:26:20 AM
7	60/6000 Cal	0	5	3	1	11/26/2024 7:30:48 AM
8	120/12000 Cal	0	6	3	1	11/26/2024 7:35:16 AM
9	Sr 200ppb	4	55	3	1	11/26/2024 7:40:08 AM
10	ICV	0	7	3	1	11/26/2024 7:44:40 AM
11	ICB	0	10	3	1	11/26/2024 7:49:10 AM
12	ICB	0	10	3	1	11/26/2024 7:54:15 AM
13	ICSA	4	53	3	1	11/26/2024 7:58:49 AM
14	LDR	4	1	3	1	11/26/2024 8:03:21 AM
15	Rinse	0	1	3	1	11/26/2024 8:07:51 AM
16	CCV	0	9	3	1	11/26/2024 8:12:17 AM
17	CCB	0	10	3	1	11/26/2024 8:16:48 AM
18	CCV	0	9	3	1	11/26/2024 8:23:46 AM
19	CCB	0	10	3	1	11/26/2024 8:29:06 AM
20	WG2000752-2d10 2008SL	1	1	3	1	11/26/2024 8:42:30 AM
21	L2467852-02 2008SL	1	2	3	1	11/26/2024 8:46:56 AM
22	L2467949-02d10 2008SL	1	3	3	1	11/26/2024 8:57:04 AM
23	L2467949-03d10 2008SL	1	4	3	1	11/26/2024 9:01:31 AM
24	L2467852-01 2008TL	1	5	3	1	11/26/2024 9:05:59 AM
25	L2467852-02 2008TL	1	6	3	1	11/26/2024 9:10:27 AM
26	L2467949-02d10 2008TL	1	7	3	1	11/26/2024 9:14:56 AM
27	L2467949-03d10 2008TL	1	8	3	1	11/26/2024 9:19:24 AM
28	CCV	0	9	3	1	11/26/2024 9:24:26 AM
29	CCB	0	10	3	1	11/26/2024 9:28:57 AM
30	xWG2001958-1 6020TL	1	9	3	1	11/26/2024 9:46:24 AM
31	WG2001958-2d10 6020TL	1	10	3	1	11/26/2024 9:54:15 AM
32	L2467845-01 6020TL	1	11	3	1	11/26/2024 9:58:42 AM
33	WG2001958-3d10 6020TL	1	12	3	1	11/26/2024 10:03:12 AM
34	WG2001958-4 6020TL	1	13	3	1	11/26/2024 10:07:43 AM
35	WG2001958-5d10 6020TL	1	14	3	1	11/26/2024 10:12:09 AM
36	WG2001958-6d5 6020TL	1	15	3	1	11/26/2024 10:16:35 AM
37	WG2001958-1 6020TL	1	16	3	1	11/26/2024 10:23:43 AM
38	L2469087-01d10 6020TL	1	17	3	1	11/26/2024 10:28:10 AM
39	CCV	0	9	3	1	11/26/2024 10:34:58 AM
40	CCB	0	10	3	1	11/26/2024 10:39:30 AM
41	L2467837-01 2008TL	1	18	3	1	11/26/2024 10:53:38 AM
42	L2467837-02 2008TL	1	19	3	1	11/26/2024 10:58:06 AM
43	L2467837-03 2008TL	1	20	3	1	11/26/2024 11:02:34 AM
44	L2467837-04 2008TL	1	21	3	1	11/26/2024 11:07:02 AM
45	L2467837-06 2008TL	1	22	3	1	11/26/2024 11:11:30 AM
46	L2467837-07 2008TL	1	23	3	1	11/26/2024 11:15:59 AM
47	CCV	0	9	3	1	11/26/2024 11:26:14 AM
48	CCB	0	10	3	1	11/26/2024 11:30:45 AM
49	WG2002380-1 6020TL	1	24	3	1	11/26/2024 11:37:38 AM
50	WG2002380-2d10 6020TL	1	25	3	1	11/26/2024 11:45:06 AM
51	L2469536-01d5 6020TL	1	26	3	1	11/26/2024 11:49:32 AM

Alpha ICPMSQ2 Seq

11/27/2024 6:12:20 AM

Index:	Label:	Rack	Vial	Main Runs:	Survey Runs:	Start Time:
52	WG2002380-3d10 6020TL	1	27	3	1	11/26/2024 11:53:58 AM
53	WG2002380-4d5 6020TL	1	28	3	1	11/26/2024 11:58:25 AM
54	WG2002380-5d10 6020TL	1	29	3	1	11/26/2024 12:02:52 PM
55	WG2002380-6d25 6020TL	1	30	3	1	11/26/2024 12:07:19 PM
56	L2469536-02d5 6020TL	1	31	3	1	11/26/2024 12:11:47 PM
57	L2469536-03d5 6020TL	1	32	3	1	11/26/2024 12:16:15 PM
58	L2469536-04d5 6020TL	1	33	3	1	11/26/2024 12:20:43 PM
59	CCV	0	9	3	1	11/26/2024 12:25:12 PM
60	CCB	0	10	3	1	11/26/2024 12:29:43 PM
61	L2469536-05d5 6020TL	1	34	3	1	11/26/2024 12:52:54 PM
62	L2469536-06d5 6020TL	1	35	3	1	11/26/2024 12:57:22 PM
63	L2469536-07d5 6020TL	1	36	3	1	11/26/2024 1:01:51 PM
64	L2469536-08d5 6020TL	1	37	3	1	11/26/2024 1:06:20 PM
65	L2469536-09d5 6020TL	1	38	3	1	11/26/2024 1:10:47 PM
66	L2469536-10d5 6020TL	1	39	3	1	11/26/2024 1:15:14 PM
67	L2469536-11d5 6020TL	1	40	3	1	11/26/2024 1:19:41 PM
68	CCV	0	9	3	1	11/26/2024 1:24:09 PM
69	CCB	0	10	3	1	11/26/2024 1:28:40 PM
70	WG2001909-1d10 A2-6020T	1	41	3	1	11/26/2024 1:35:07 PM
71	WG2001909-2d10 A2-6020T	1	42	3	1	11/26/2024 1:39:34 PM
72	L2462715-01d10 A2-6020T	1	43	3	1	11/26/2024 1:44:02 PM
73	WG2001909-3d10 A2-6020T	1	44	3	1	11/26/2024 1:48:30 PM
74	WG2001909-4d10 A2-6020T	1	45	3	1	11/26/2024 1:52:59 PM
75	WG2001909-5d10 A2-6020T	1	46	3	1	11/26/2024 1:57:28 PM
76	WG2001909-6d50 A2-6020T	1	47	3	1	11/26/2024 2:01:57 PM
77	L2462715-02d10 A2-6020T	1	48	3	1	11/26/2024 2:06:26 PM
78	L2462715-03d10 A2-6020T	1	49	3	1	11/26/2024 2:10:56 PM
79	CCV	0	9	3	1	11/26/2024 2:15:23 PM
80	CCB	0	10	3	1	11/26/2024 2:19:55 PM
81	WG2002471-1d10 6020TS	1	50	3	1	11/26/2024 2:35:19 PM
82	WG2002471-2d10 6020TS	1	51	3	1	11/26/2024 2:39:46 PM
83	I2467794-08d10 6020TS	1	52	3	1	11/26/2024 2:44:13 PM
84	WG2002471-3d10 6020TS	1	53	3	1	11/26/2024 2:48:41 PM
85	WG2002471-4d10 6020TS	1	54	3	1	11/26/2024 2:53:09 PM
86	WG2002471-5d10 6020TS	1	55	3	1	11/26/2024 2:57:37 PM
87	WG2002471-6d50 6020TS	1	56	3	1	11/26/2024 3:02:05 PM
88	I2467794-03d10 6020TS	1	57	3	1	11/26/2024 3:06:34 PM
89	I2467794-04d10 6020TS	1	58	3	1	11/26/2024 3:11:03 PM
90	I2467794-05d10 6020TS	1	59	3	1	11/26/2024 3:15:32 PM
91	CCV	0	9	3	1	11/26/2024 3:20:01 PM
92	CCB	0	10	3	1	11/26/2024 3:24:33 PM
93	CCV	0	9	3	1	11/26/2024 3:31:12 PM
94	CCB	0	10	3	1	11/26/2024 3:35:43 PM
95	I2467794-06d10 6020TS	1	60	3	1	11/26/2024 3:41:54 PM
96	I2467794-07d10 6020TS	2	1	3	1	11/26/2024 3:46:23 PM
97	LDR As 500	2	2	3	1	11/26/2024 3:50:51 PM
98	WG2002073-1d10 SPLP-6020T	2	3	3	1	11/26/2024 3:56:52 PM
99	WG2002073-2d10 SPLP-6020T	2	4	3	1	11/26/2024 4:01:20 PM
100	L2468082-04d10 SPLP-6020T	2	5	3	1	11/26/2024 4:05:48 PM
101	WG2002073-3d10 SPLP-6020T	2	6	3	1	11/26/2024 4:10:16 PM
102	WG2002073-4d10 SPLP-6020T	2	7	3	1	11/26/2024 4:14:45 PM
103	WG2002073-6d50 SPLP-6020T	2	9	3	1	11/26/2024 4:19:13 PM
104	xL2468082-08d10 SPLP-6020T	2	10	3	1	11/26/2024 4:23:42 PM
105	CCV	0	9	3	1	11/26/2024 4:28:11 PM
106	CCB	0	10	3	1	11/26/2024 4:32:43 PM
107	CCV	0	9	3	1	11/26/2024 5:02:09 PM

Alpha ICPMSQ2 Seq

11/27/2024 6:12:20 AM

Index:	Label:	Rack	Vial	Main Runs:	Survey Runs:	Start Time:
108	CCB	0	10	3	1	11/26/2024 5:07:53 PM
109	WG2002073-5d10 SPLP-6020T	2	8	3	1	11/26/2024 5:28:11 PM
110	L2467892-02d10 6020TL	2	11	3	1	11/26/2024 5:32:39 PM
111	L2468082-08d10 SPLP-6020T	2	10	3	1	11/26/2024 5:37:09 PM
112	WG2002206-1 6020TL	2	12	3	1	11/26/2024 5:51:21 PM
113	WG2002206-2d10 6020TL	2	13	3	1	11/26/2024 5:55:51 PM
114	L2467934-05 6020TL	2	14	3	1	11/26/2024 6:00:20 PM
115	WG2002206-3d10 6020TL	2	15	3	1	11/26/2024 6:04:48 PM
116	WG2002206-4d10 6020TL	2	16	3	1	11/26/2024 6:09:17 PM
117	WG2002206-5d10 6020TL	2	17	3	1	11/26/2024 6:13:45 PM
118	WG2002206-6d5 6020TL	2	18	3	1	11/26/2024 6:18:14 PM
119	CCV	0	9	3	1	11/26/2024 6:22:42 PM
120	CCB	0	10	3	1	11/26/2024 6:27:14 PM
121	CCV	0	9	3	1	11/26/2024 6:35:57 PM
122	CCB	0	10	3	1	11/26/2024 6:40:28 PM
123	WG2001705-1 6020SL	2	19	3	1	11/26/2024 6:58:38 PM
124	WG2001705-2d10 6020SL	2	20	3	1	11/26/2024 7:09:43 PM
125	L2467981-01 6020SL	2	21	3	1	11/26/2024 7:14:11 PM
126	WG2001705-3d10 6020SL	2	22	3	1	11/26/2024 7:18:41 PM
127	WG2001705-4 6020SL	2	23	3	1	11/26/2024 7:23:10 PM
128	WG2001705-5d10 6020SL	2	24	3	1	11/26/2024 7:27:40 PM
129	WG2001705-6d5 6020SL	2	25	3	1	11/26/2024 7:32:11 PM
130	L2467981-02 6020SL	2	26	3	1	11/26/2024 7:36:40 PM
131	L2467981-03 6020SL	2	27	3	1	11/26/2024 7:41:09 PM
132	L2467981-04 6020SL	2	28	3	1	11/26/2024 7:45:38 PM
133	CCV	0	9	3	1	11/26/2024 7:50:07 PM
134	CCB	0	10	3	1	11/26/2024 7:54:39 PM
135	L2467981-05 6020SL	2	29	3	1	11/26/2024 7:59:12 PM
136	L2467981-06 6020SL	2	30	3	1	11/26/2024 8:03:41 PM
137	L2467981-07 6020SL	2	31	3	1	11/26/2024 8:08:10 PM
138	L2467981-08 6020SL	2	32	3	1	11/26/2024 8:12:39 PM
139	L2467981-09 6020SL	2	33	3	1	11/26/2024 8:17:08 PM
140	L2467981-12 6020SL	2	34	3	1	11/26/2024 8:21:37 PM
141	L2467981-13 6020SL	2	35	3	1	11/26/2024 8:26:07 PM
142	L2467981-14 6020SL	2	36	3	1	11/26/2024 8:30:37 PM
143	L2467981-16 6020SL	2	37	3	1	11/26/2024 8:35:07 PM
144	L2467981-17 6020SL	2	38	3	1	11/26/2024 8:39:36 PM
145	CCV	0	9	3	1	11/26/2024 8:44:05 PM
146	CCB	0	10	3	1	11/26/2024 8:48:38 PM
147	L2467981-18 6020SL	2	39	3	1	11/26/2024 8:53:10 PM
148	L2467981-19 6020SL	2	40	3	1	11/26/2024 8:57:40 PM
149	L2468039-01 6020SL	2	41	3	1	11/26/2024 9:02:09 PM
150	L2468039-02 6020SL	2	42	3	1	11/26/2024 9:06:39 PM
151	L2468039-03 6020SL	2	43	3	1	11/26/2024 9:11:08 PM
152	CCV	0	9	3	1	11/26/2024 9:15:37 PM
153	CCB	0	10	3	1	11/26/2024 9:20:10 PM
154	CCV	0	9	3	1	11/26/2024 9:24:43 PM
155	CCB	0	10	3	1	11/26/2024 9:29:15 PM

Alpha ICPMSQ Seq

12/2/2024 3:13:10 PM

Sample List Summary:

Instrument ID: iCAP Q

Index:	Label:	Rack	Vial	Main Runs:	Survey Runs:	Start Time:
1	Rinse	0	1	3	1	12/2/2024 7:41:05 AM
2	CAL LOT #M24-1045	0	1	3	1	12/2/2024 7:45:42 AM
3	Blank NTB ICPMSQ	4	49	3	1	12/2/2024 7:50:19 AM
4	0.2/20 Cal	0	2	3	1	12/2/2024 7:55:01 AM
5	1/100 Cal	0	3	3	1	12/2/2024 7:59:39 AM
6	10/1000 Cal	0	4	3	1	12/2/2024 8:04:17 AM
7	60/6000 Cal	0	5	3	1	12/2/2024 8:08:56 AM
8	120/12000 Cal	0	6	3	1	12/2/2024 8:13:35 AM
9	xSr 200ppb	4	55	3	1	12/2/2024 8:23:08 AM
10	Sr 200ppb	4	55	3	1	12/2/2024 8:23:55 AM
11	ICV	0	7	3	1	12/2/2024 8:28:37 AM
12	ICB	0	10	3	1	12/2/2024 8:33:17 AM
13	ICSA	4	53	3	1	12/2/2024 8:43:49 AM
14	LDR Check	4	1	3	1	12/2/2024 8:48:30 AM
15	Rinse	0	1	3	1	12/2/2024 8:53:12 AM
16	CCV	0	9	3	1	12/2/2024 8:57:48 AM
17	CCB	0	10	3	1	12/2/2024 9:02:30 AM
18	WG2003122-1 2008TL	1	1	3	1	12/2/2024 9:22:09 AM
19	WG2003122-2d10 2008TL	1	2	3	1	12/2/2024 9:31:35 AM
20	I2468916-01 2008TL	1	3	3	1	12/2/2024 9:36:12 AM
21	WG2003122-3d10 2008TL	1	4	3	1	12/2/2024 9:40:50 AM
22	WG2003122-4 2008TL	1	5	3	1	12/2/2024 9:45:29 AM
23	I2469706-01 2008TL	1	6	3	1	12/2/2024 9:50:07 AM
24	I2469706-05 2008TL	1	7	3	1	12/2/2024 9:54:46 AM
25	I2469706-06 2008TL	1	8	3	1	12/2/2024 9:59:25 AM
26	I2469706-07 2008TL	1	9	3	1	12/2/2024 10:04:05 AM
27	I2469706-08 2008TL	1	10	3	1	12/2/2024 10:08:45 AM
28	CCV	0	9	3	1	12/2/2024 10:13:25 AM
29	CCB	0	10	3	1	12/2/2024 10:18:07 AM
30	I2469706-11 2008TL	1	11	3	1	12/2/2024 10:24:36 AM
31	CCV	0	9	3	1	12/2/2024 10:32:08 AM
32	CCB	0	10	3	1	12/2/2024 10:36:50 AM
33	WG2003771-1 2008SL	1	12	3	1	12/2/2024 10:44:48 AM
34	WG2003771-2d10 2008SL	1	13	3	1	12/2/2024 10:49:28 AM
35	L2470217-04d10 2008SL	1	14	3	1	12/2/2024 10:54:04 AM
36	WG2003771-3d10 2008SL	1	15	3	1	12/2/2024 10:58:41 AM
37	WG2003771-4d10 2008SL	1	16	3	1	12/2/2024 11:03:18 AM
38	L2470217-05d10 2008SL	1	17	3	1	12/2/2024 11:07:56 AM
39	L2470217-06d10 2008SL	1	18	3	1	12/2/2024 11:12:34 AM
40	L2470217-07d10 2008SL	1	19	3	1	12/2/2024 11:17:12 AM
41	L2470217-08d10 2008SL	1	20	3	1	12/2/2024 11:21:50 AM
42	L2470217-09d10 2008SL	1	21	3	1	12/2/2024 11:26:29 AM
43	CCV	0	9	3	1	12/2/2024 11:31:08 AM
44	CCB	0	10	3	1	12/2/2024 11:35:50 AM
45	xL2470217-13 2008SL	1	25	3	1	12/2/2024 11:41:07 AM
46	L2470217-10d10 2008SL	1	22	3	1	12/2/2024 11:45:43 AM
47	L2470217-11d10 2008SL	1	23	3	1	12/2/2024 11:50:23 AM
48	xL2470217-12d10 2008SL	1	24	3	1	12/2/2024 11:55:02 AM
49	OB 0217-13 10x	1	34	3	1	12/2/2024 12:03:49 PM
50	OB 0217-12 10x	1	33	3	1	12/2/2024 12:08:28 PM
51	L2470217-13 2008SL	1	36	3	1	12/2/2024 12:33:09 PM

Alpha ICPMSQ Seq

12/2/2024 3:13:10 PM

Index:	Label:	Rack	Vial	Main Runs:	Survey Runs:	Start Time:
52	L2470217-12d10 2008SL	1	35	3	1	12/2/2024 12:37:49 PM
53	CCV	0	9	3	1	12/2/2024 12:45:17 PM
54	CCB	0	10	3	1	12/2/2024 12:49:59 PM
55	WG2003187-2d10 2008TL	1	26	3	1	12/2/2024 1:01:02 PM
56	L2468582-03 2008TL	1	27	3	1	12/2/2024 1:05:39 PM
57	WG2003187-5d10 2008TL	1	28	3	1	12/2/2024 1:10:16 PM
58	WG2003187-6d10 2008TL	1	29	3	1	12/2/2024 1:14:54 PM
59	L2468582-01 2008TL	1	30	3	1	12/2/2024 1:19:32 PM
60	L2468582-02 2008TL	1	31	3	1	12/2/2024 1:24:10 PM
61	L2469455-01 2008TL	1	32	3	1	12/2/2024 1:28:49 PM
62	L2468582-03d10 2008TL	1	37	3	1	12/2/2024 1:38:46 PM
63	xLDR Check - 2x ICSA	1	38	3	1	12/2/2024 1:43:43 PM
64	xWG2002749-6d5 6020TL	1	45	3	1	12/2/2024 1:49:30 PM
65	CCV	0	9	3	1	12/2/2024 1:54:09 PM
66	CCB	0	10	3	1	12/2/2024 1:58:52 PM
67	CCV	0	9	3	1	12/2/2024 2:44:17 PM
68	CCB	0	10	3	1	12/2/2024 2:48:59 PM
69	xWG2002749-1 6020TL	1	39	3	1	12/2/2024 3:00:32 PM

Alpha ICPMSQ Seq

12/3/2024 6:39:50 AM

Sample List Summary:

Instrument ID: iCAP Q

Index:	Label:	Rack	Vial	Main Runs:	Survey Runs:	Start Time:
1	Rinse	0	1	3	1	12/2/2024 3:07:48 PM
2	CAL LOT #M24-1045	0	1	3	1	12/2/2024 3:12:25 PM
3	Blank WKP ICPMSQ	4	49	3	1	12/2/2024 3:17:02 PM
4	0.2/20 Cal	0	2	3	1	12/2/2024 3:21:44 PM
5	1/100 Cal	0	3	3	1	12/2/2024 3:26:21 PM
6	10/1000 Cal	0	4	3	1	12/2/2024 3:31:00 PM
7	60/6000 Cal	0	5	3	1	12/2/2024 3:35:38 PM
8	120/12000 Cal	0	6	3	1	12/2/2024 3:40:18 PM
9	Sr 200ppb	4	55	3	1	12/2/2024 3:45:02 PM
10	ICV	0	7	3	1	12/2/2024 3:49:44 PM
11	ICB	0	10	3	1	12/2/2024 3:54:25 PM
12	ICSA	4	53	3	1	12/2/2024 4:04:31 PM
13	LDR Check	4	1	3	1	12/2/2024 4:09:14 PM
14	Rinse	0	1	3	1	12/2/2024 4:13:55 PM
15	CCV	0	9	3	1	12/2/2024 4:18:32 PM
16	CCB	0	10	3	1	12/2/2024 4:23:14 PM
17	WG2002749-1 6020TL	1	39	3	1	12/2/2024 4:29:31 PM
18	WG2002749-2d10 6020TL	1	40	3	1	12/2/2024 4:40:03 PM
19	I2468276-02 6020TL	1	41	3	1	12/2/2024 4:44:39 PM
20	WG2002749-3d10 6020TL	1	42	3	1	12/2/2024 4:49:16 PM
21	WG2002749-4 6020TL	1	43	3	1	12/2/2024 4:53:54 PM
22	WG2002749-5d10 6020TL	1	44	3	1	12/2/2024 4:58:32 PM
23	WG2002749-6d5 6020TL	1	45	3	1	12/2/2024 5:03:11 PM
24	I2468276-01 6020TL	1	46	3	1	12/2/2024 5:07:49 PM
25	I2468416-10 6020TL	1	47	3	1	12/2/2024 5:12:28 PM
26	I2468416-11 6020TL	1	48	3	1	12/2/2024 5:17:08 PM
27	CCV	0	9	3	1	12/2/2024 5:21:47 PM
28	CCB	0	10	3	1	12/2/2024 5:26:29 PM
29	I2468430-03 6020TL	1	49	3	1	12/2/2024 5:32:19 PM
30	I2468276-02d10 6020TL	1	50	3	1	12/2/2024 5:37:56 PM
31	WG2002749-4d10 6020TL	1	51	3	1	12/2/2024 5:42:34 PM
32	WG2002749-6d50 6020TL	1	52	3	1	12/2/2024 5:47:11 PM
33	I2468276-01d10 6020TL	1	53	3	1	12/2/2024 5:51:49 PM
34	CCV	0	9	3	1	12/2/2024 5:56:59 PM
35	CCB	0	10	3	1	12/2/2024 6:01:41 PM
36	WG2002206-2d10 6020TL	1	55	3	1	12/2/2024 6:27:21 PM
37	L2467934-05 6020TL	1	56	3	1	12/2/2024 6:31:59 PM
38	WG2002206-3d10 6020TL	1	57	3	1	12/2/2024 6:36:37 PM
39	WG2002206-4d10 6020TL	1	58	3	1	12/2/2024 6:41:16 PM
40	WG2002206-5d10 6020TL	1	59	3	1	12/2/2024 6:45:55 PM
41	WG2002206-6d5 6020TL	1	60	3	1	12/2/2024 6:50:35 PM
42	L2467884-01 6020TL	2	1	3	1	12/2/2024 6:55:15 PM
43	L2467884-02 6020TL	2	2	3	1	12/2/2024 6:59:53 PM
44	L2467888-01 6020TL	2	3	3	1	12/2/2024 7:04:32 PM
45	L2467934-01 6020TL	2	4	3	1	12/2/2024 7:09:10 PM
46	CCV	0	9	3	1	12/2/2024 7:13:48 PM
47	CCB	0	10	3	1	12/2/2024 7:18:31 PM
48	WG2002206-1 6020TL	1	54	3	1	12/2/2024 7:34:14 PM
49	WG2003197-1 6020SL	2	13	3	1	12/2/2024 7:38:52 PM
50	L2467934-10 6020TL	2	12	3	1	12/2/2024 7:43:31 PM
51	L2467934-02 6020TL	2	5	3	1	12/2/2024 7:48:11 PM

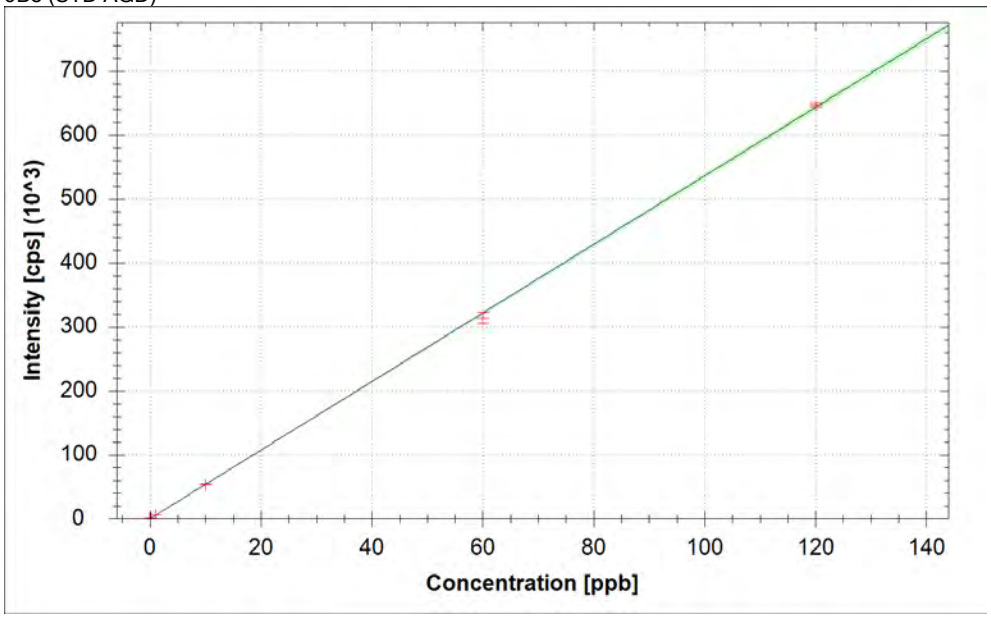
Alpha ICPMSQ Seq

12/3/2024 6:39:50 AM

Index:	Label:	Rack	Vial	Main Runs:	Survey Runs:	Start Time:
52	L2467934-03 6020TL	2	6	3	1	12/2/2024 7:52:49 PM
53	L2467934-04 6020TL	2	7	3	1	12/2/2024 7:57:28 PM
54	L2467934-06 6020TL	2	8	3	1	12/2/2024 8:02:07 PM
55	L2467934-07 6020TL	2	9	3	1	12/2/2024 8:06:45 PM
56	L2467934-08 6020TL	2	10	3	1	12/2/2024 8:11:24 PM
57	L2467934-09 6020TL	2	11	3	1	12/2/2024 8:16:04 PM
58	CCV	0	9	3	1	12/2/2024 8:20:43 PM
59	CCB	0	10	3	1	12/2/2024 8:25:26 PM
60	WG2003197-2d10 6020SL	2	14	3	1	12/2/2024 8:30:09 PM
61	I2468567-11 6020SL	2	15	3	1	12/2/2024 8:34:48 PM
62	WG2003197-3d10 6020SL	2	16	3	1	12/2/2024 8:39:27 PM
63	WG2003197-4d10 6020SL	2	17	3	1	12/2/2024 8:44:06 PM
64	WG2003197-5d10 6020SL	2	18	3	1	12/2/2024 8:48:45 PM
65	WG2003197-6d5 6020SL	2	19	3	1	12/2/2024 8:53:24 PM
66	I2469271-01 6020SL	2	20	3	1	12/2/2024 8:58:03 PM
67	I2469271-02 6020SL	2	21	3	1	12/2/2024 9:02:42 PM
68	I2469271-04 6020SL	2	22	3	1	12/2/2024 9:07:21 PM
69	CCV	0	9	3	1	12/2/2024 9:12:00 PM
70	CCB	0	10	3	1	12/2/2024 9:16:43 PM
71	L2469271-01 6020TL	2	23	3	1	12/2/2024 9:21:26 PM
72	L2469271-02 6020TL	2	24	3	1	12/2/2024 9:26:06 PM
73	L2469271-04 6020TL	2	25	3	1	12/2/2024 9:30:46 PM
74	CCV	0	9	3	1	12/2/2024 9:35:25 PM
75	CCB	0	10	3	1	12/2/2024 9:40:08 PM
76	CCV	0	9	3	1	12/2/2024 9:44:51 PM
77	CCB	0	10	3	1	12/2/2024 9:49:34 PM

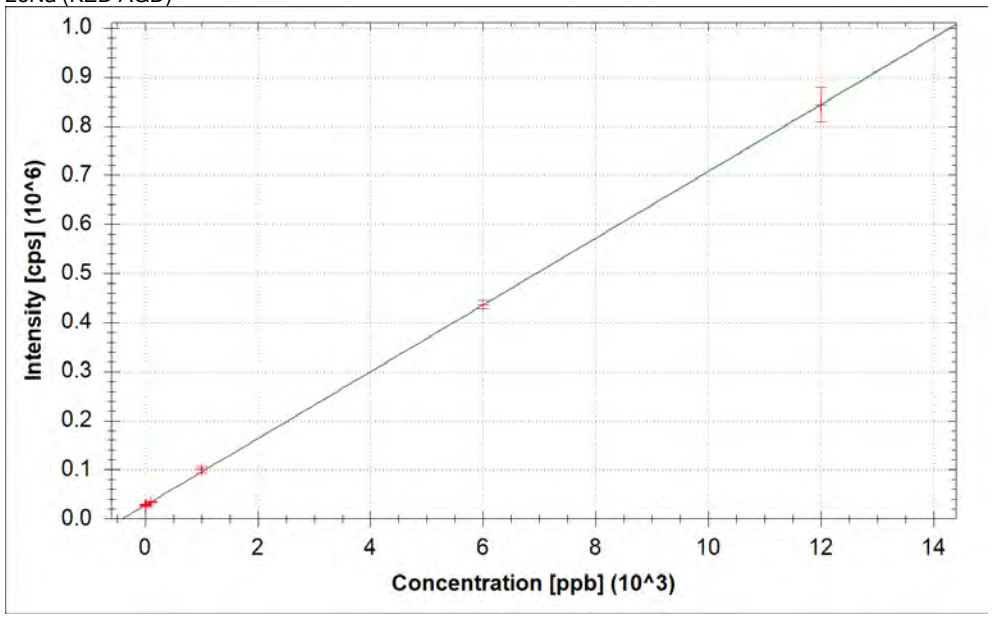
Calibration Curves:

9Be (STD AGD)



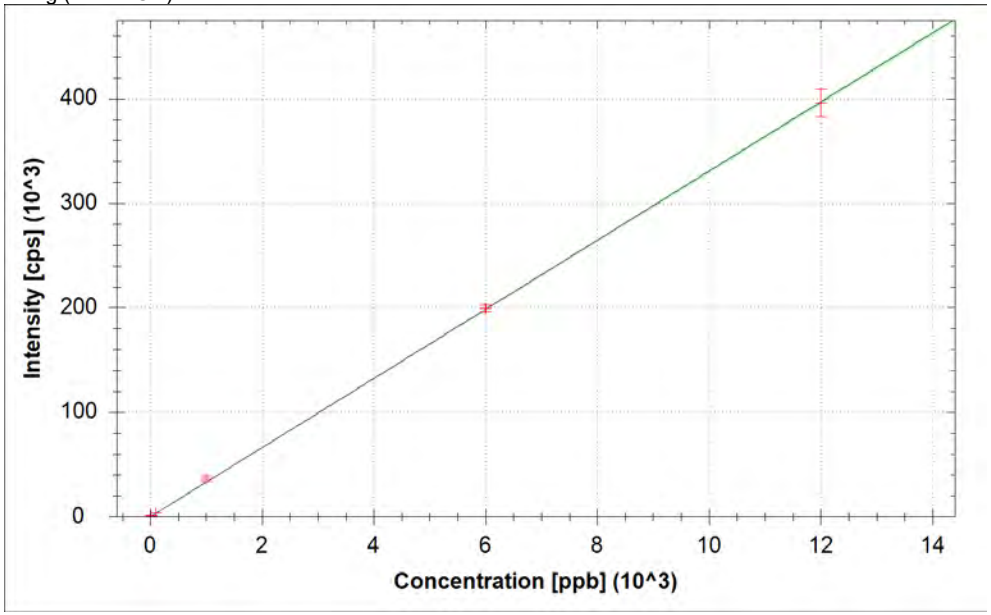
f(x) = 5358.0201*x + 246.3896
R² = 0.9998
BEC = 0.046 ppb
LoD = 0.0215 ppb

23Na (KED AGD)



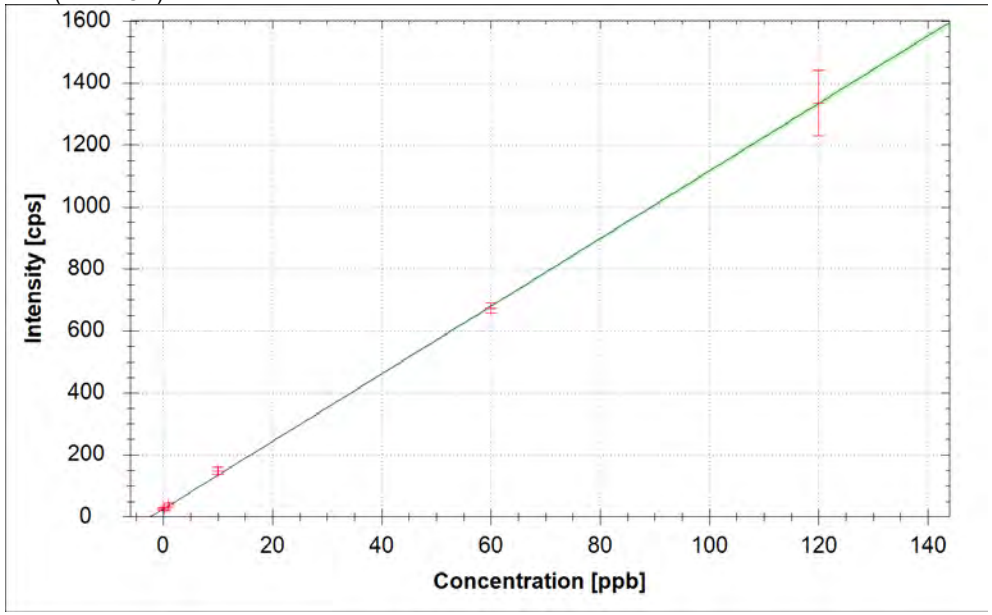
f(x) = 68.0355*x + 27193.9517
R² = 1.0000
BEC = 399.702 ppb
LoD = 75.8702 ppb

24Mg (KED AGD)



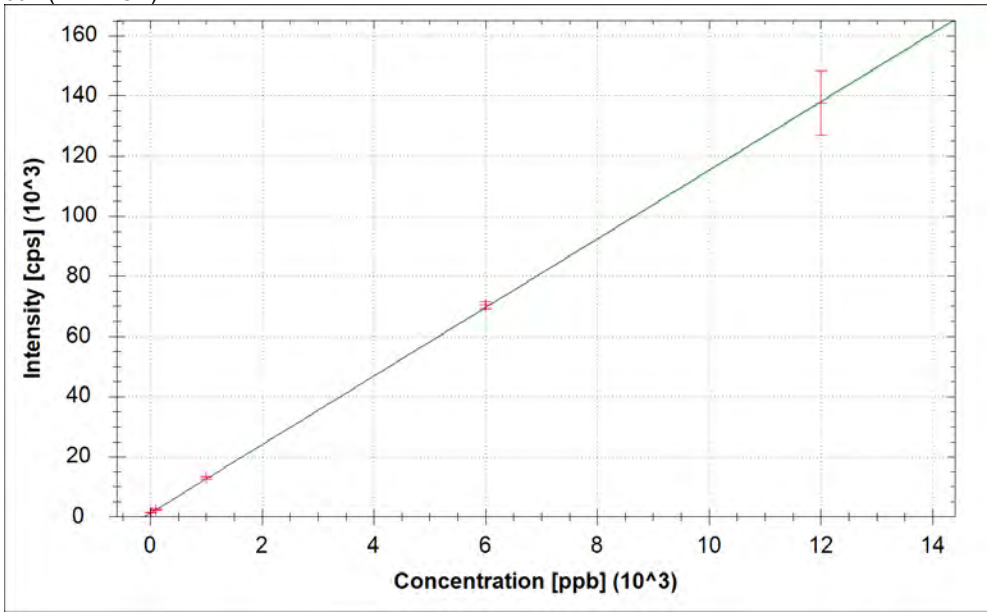
f(x) = 33.0497*x + 61.1301
R² = 0.9999
BEC = 1.850 ppb
LoD = 2.6194 ppb

27Al (KED AGD)



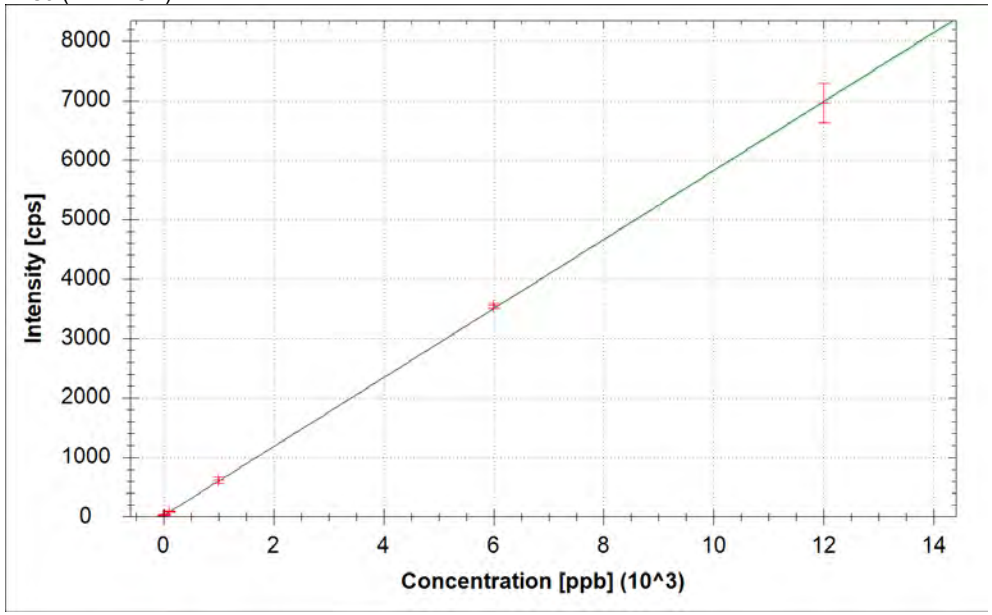
f(x) = 10.9043*x + 24.8638
R² = 0.9998
BEC = 2.280 ppb
LoD = 1.4080 ppb

39K (KED AGD)



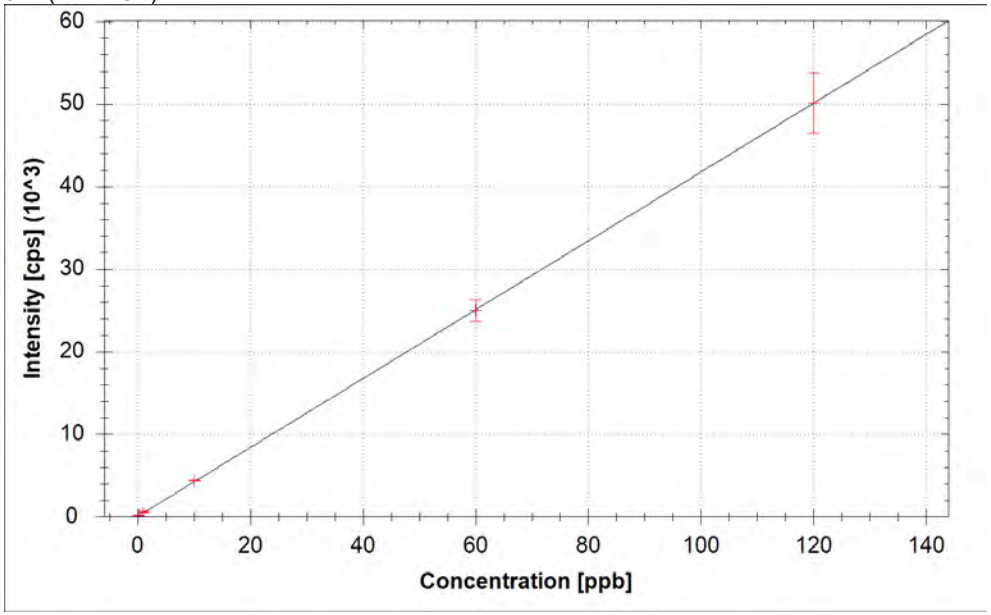
f(x) = 11.4039*x + 1167.7464
R² = 0.9999
BEC = 102.399 ppb
LoD = 6.6148 ppb

44Ca (KED AGD)



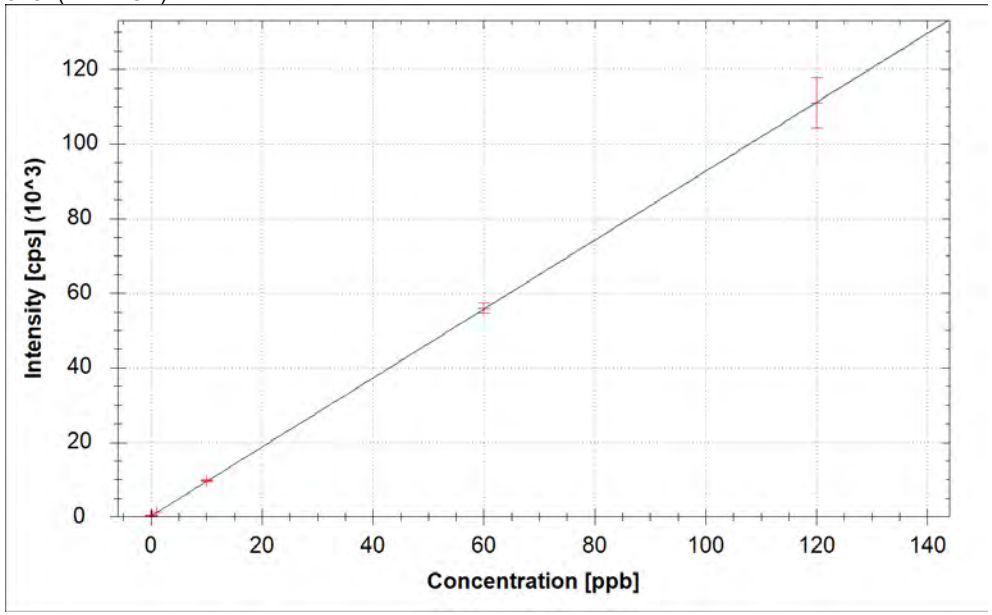
f(x) = 0.5803*x + 18.1578
R² = 0.9999
BEC = 31.290 ppb
LoD = 30.0410 ppb

51V (KED AGD)



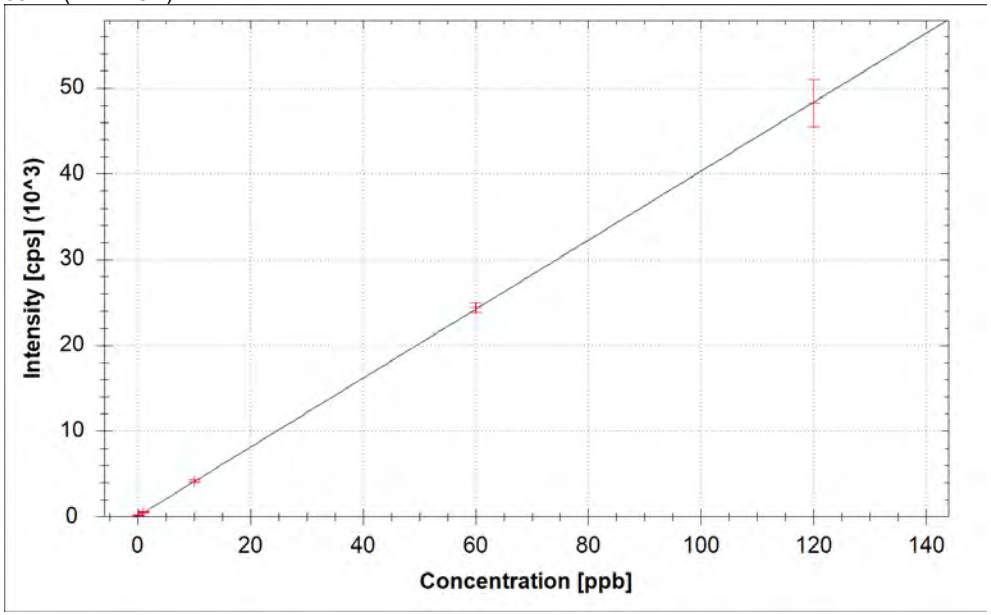
f(x) = 416.8402*x + 68.9380
R² = 1.0000
BEC = 0.165 ppb
LoD = 0.0217 ppb

52Cr (KED AGD)



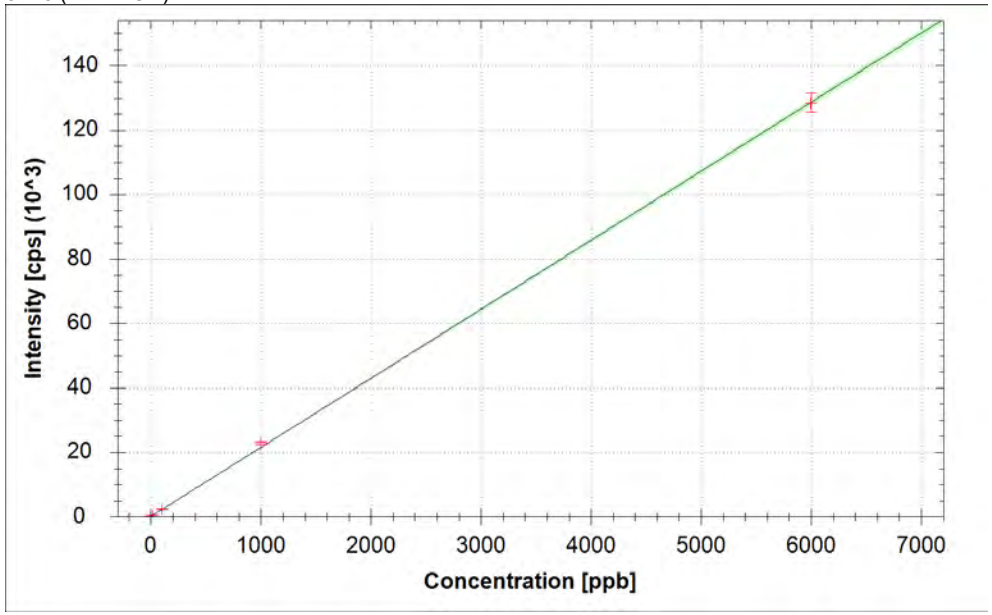
f(x) = 924.8543*x + 202.6089
R² = 1.0000
BEC = 0.219 ppb
LoD = 0.0433 ppb

55Mn (KED AGD)



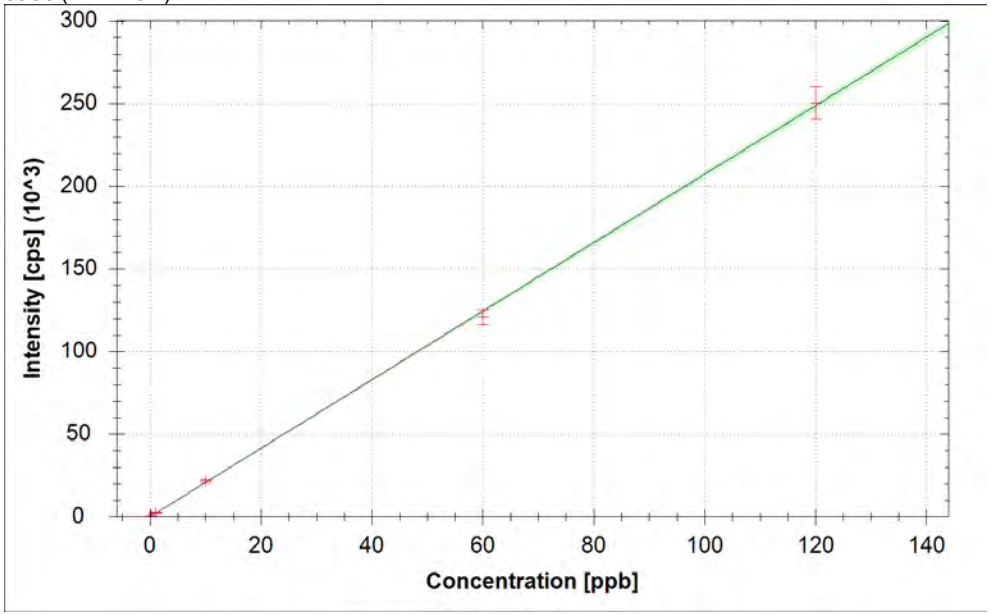
f(x) = 402.2037*x + 74.6918
R² = 1.0000
BEC = 0.186 ppb
LoD = 0.3045 ppb

57Fe (KED AGD)



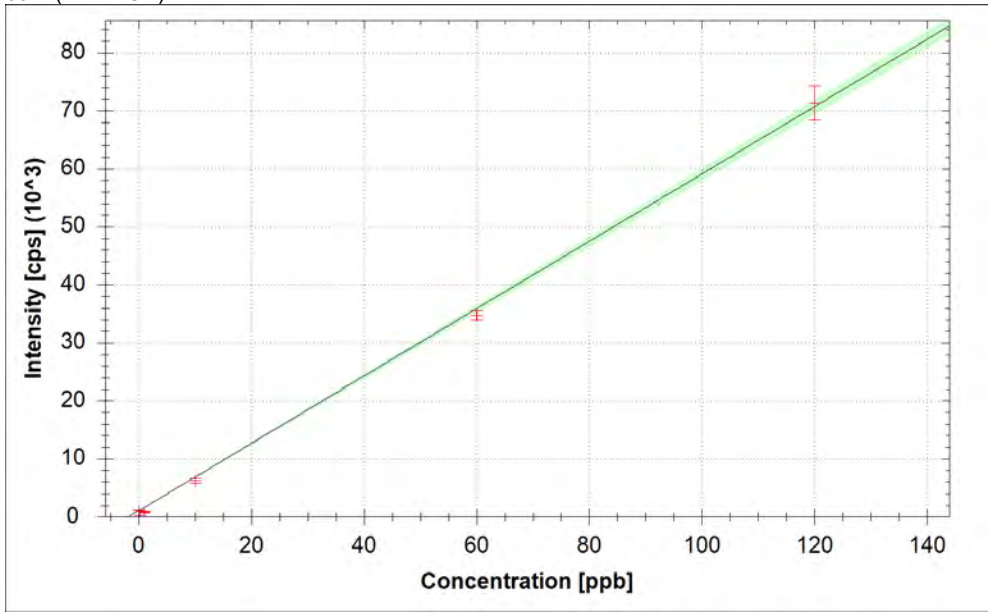
f(x) = 21.4226*x + 101.6325
R² = 0.9999
BEC = 4.744 ppb
LoD = 2.5881 ppb

59Co (KED AGD)



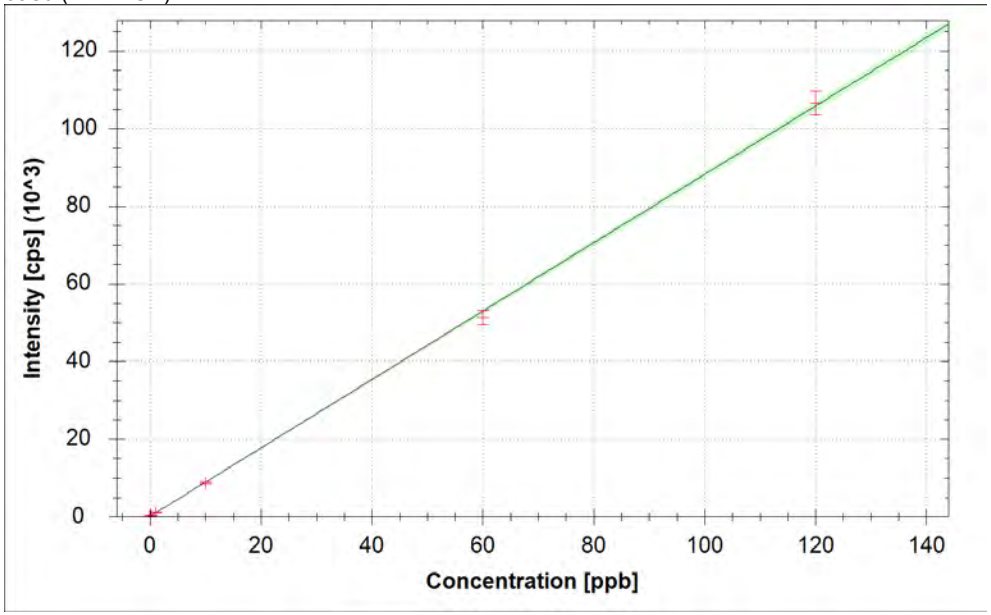
f(x) = 2071.6852*x + 13.0666
R² = 0.9997
BEC = 0.006 ppb
LoD = 0.0191 ppb

60Ni (KED AGD)



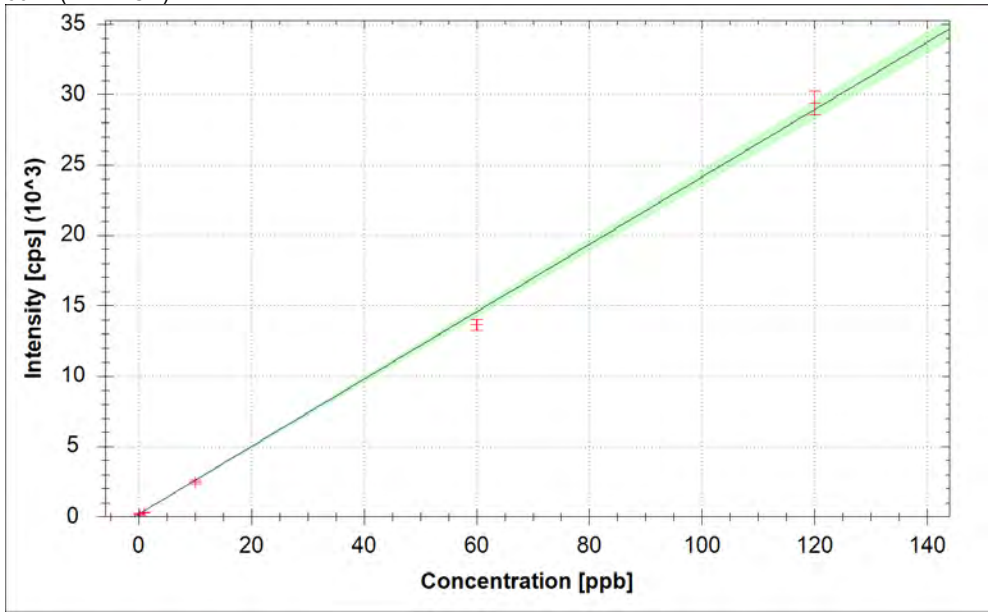
f(x) = 580.3269*x + 1049.2697
R² = 0.9990
BEC = 1.808 ppb
LoD = 0.4343 ppb

65Cu (KED AGD)



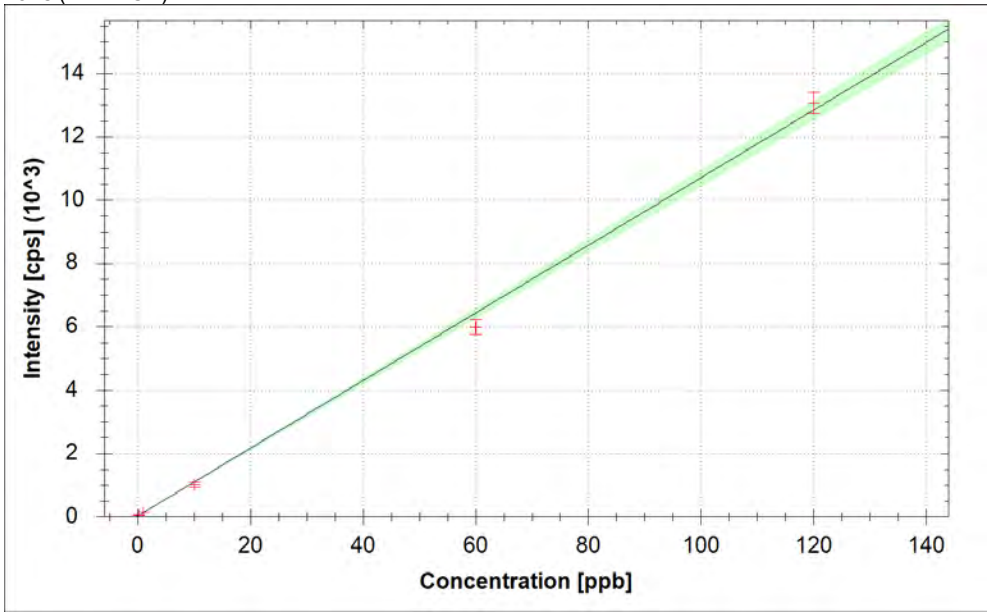
f(x) = 880.2671*x + 118.9946
R² = 0.9997
BEC = 0.135 ppb
LoD = 0.1911 ppb

66Zn (KED AGD)



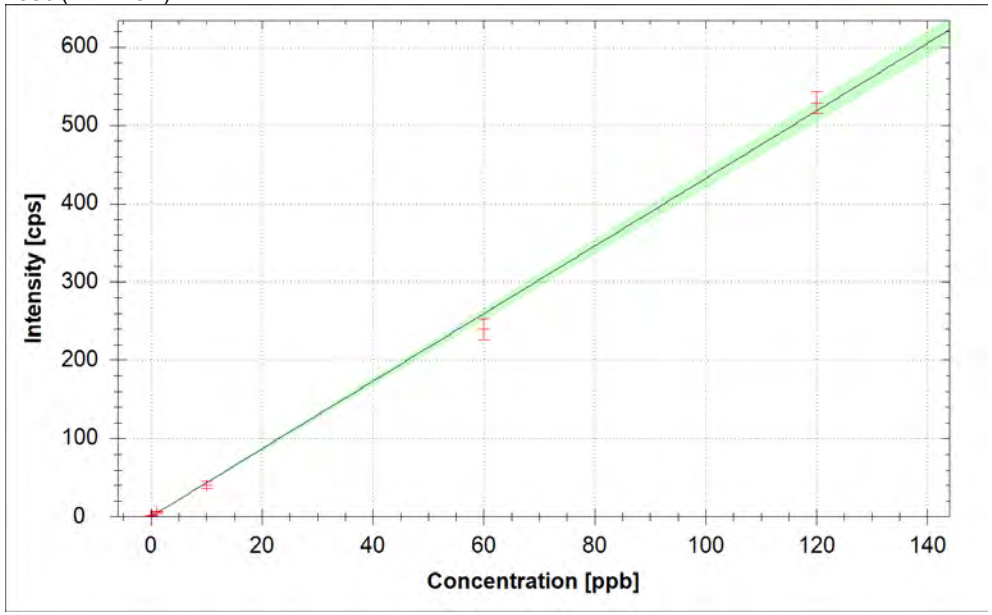
f(x) = 239.2791*x + 200.5034
R² = 0.9983
BEC = 0.838 ppb
LoD = 0.3681 ppb

75As (KED AGD)



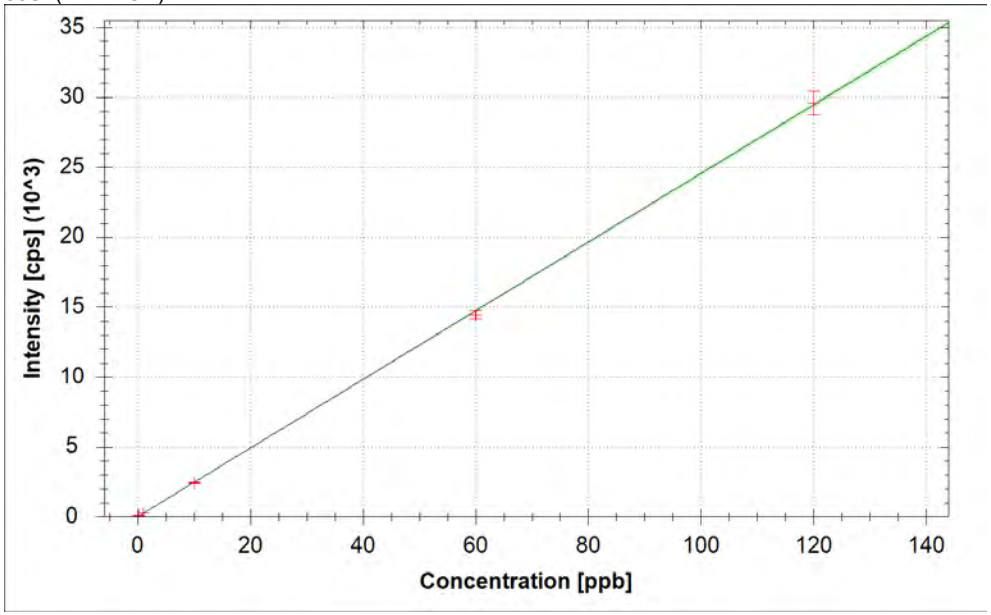
f(x) = 106.7135*x + 30.2392
R² = 0.9981
BEC = 0.283 ppb
LoD = 0.0653 ppb

78Se (KED AGD)



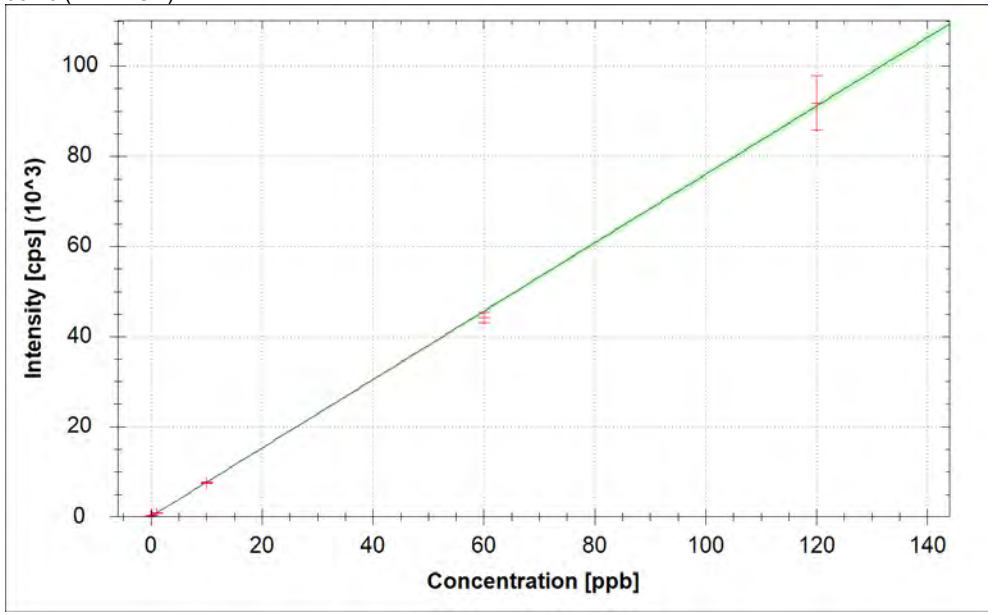
f(x) = 4.3161*x + 0.3194
R² = 0.9978
BEC = 0.074 ppb
LoD = 0.3245 ppb

88Sr (KED AGD)



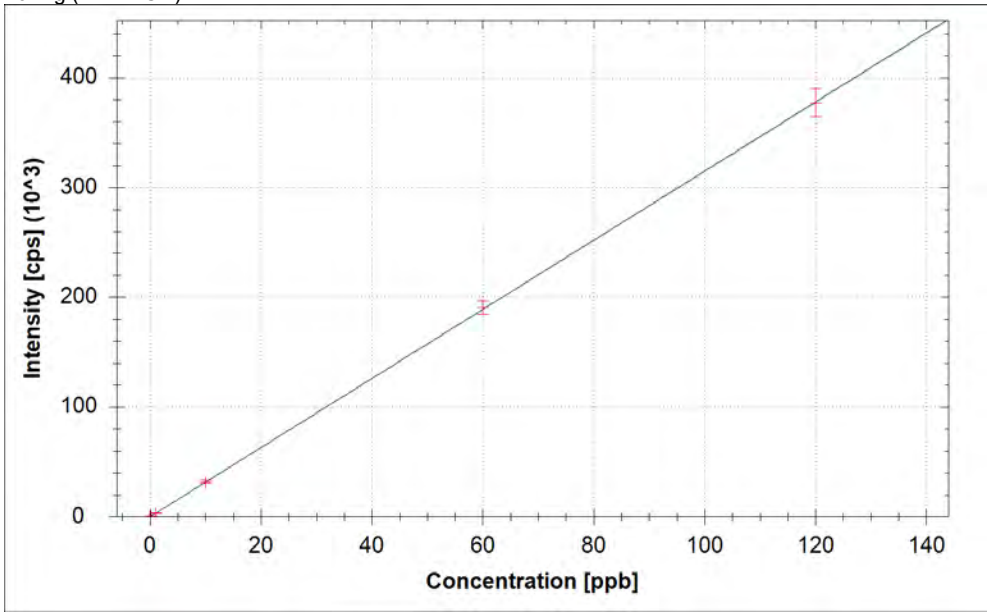
f(x) = 245.3233*x + 14.5966
R² = 0.9999
BEC = 0.059 ppb
LoD = 0.0068 ppb

95Mo (KED AGD)



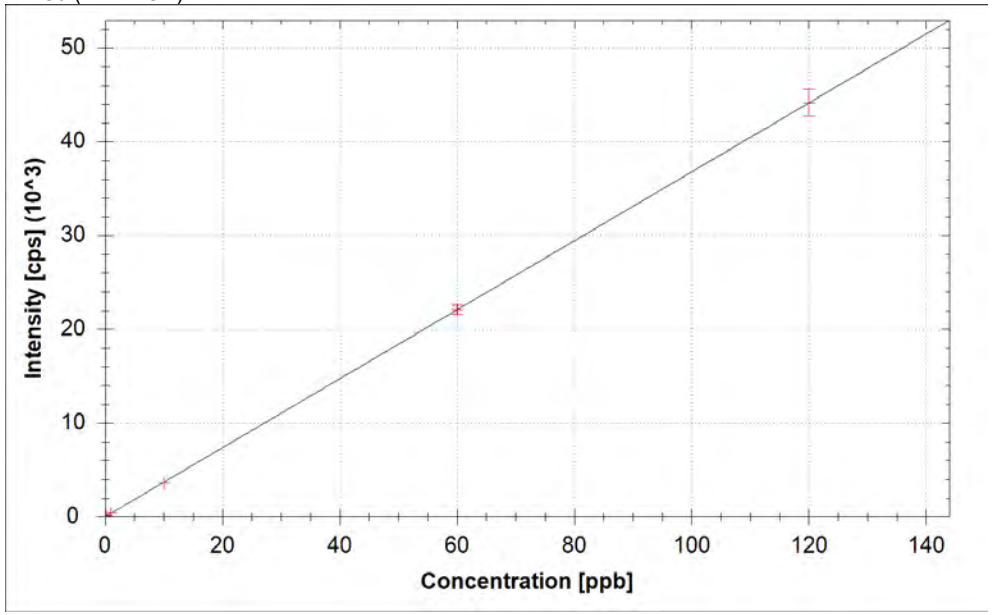
f(x) = 758.6228*x + 67.4780
R² = 0.9996
BEC = 0.089 ppb
LoD = 0.1255 ppb

107Ag (KED AGD)



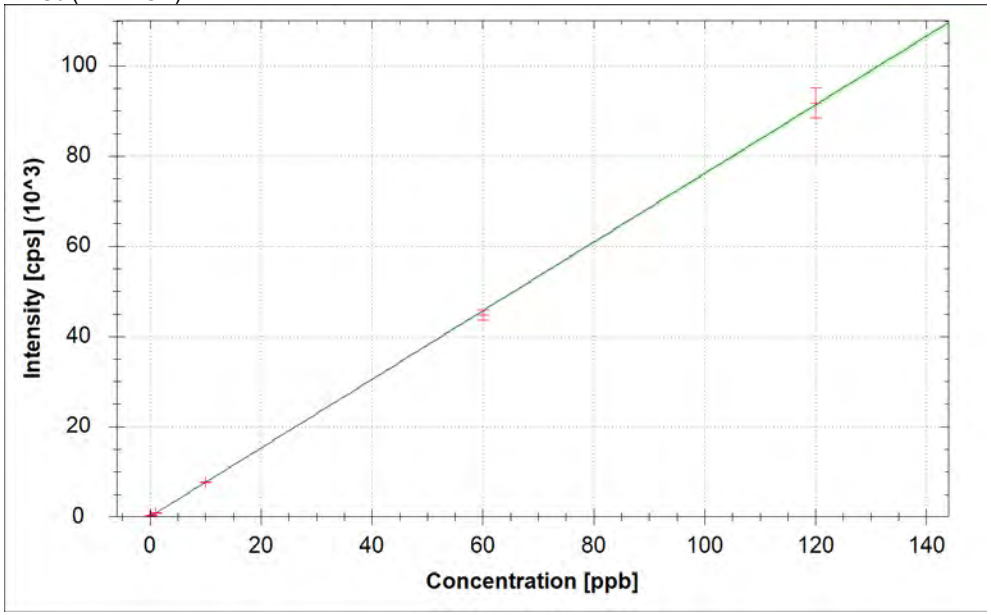
f(x) = 3147.3896*x + 26.6165
R² = 1.0000
BEC = 0.008 ppb
LoD = 0.0020 ppb

111Cd (KED AGD)



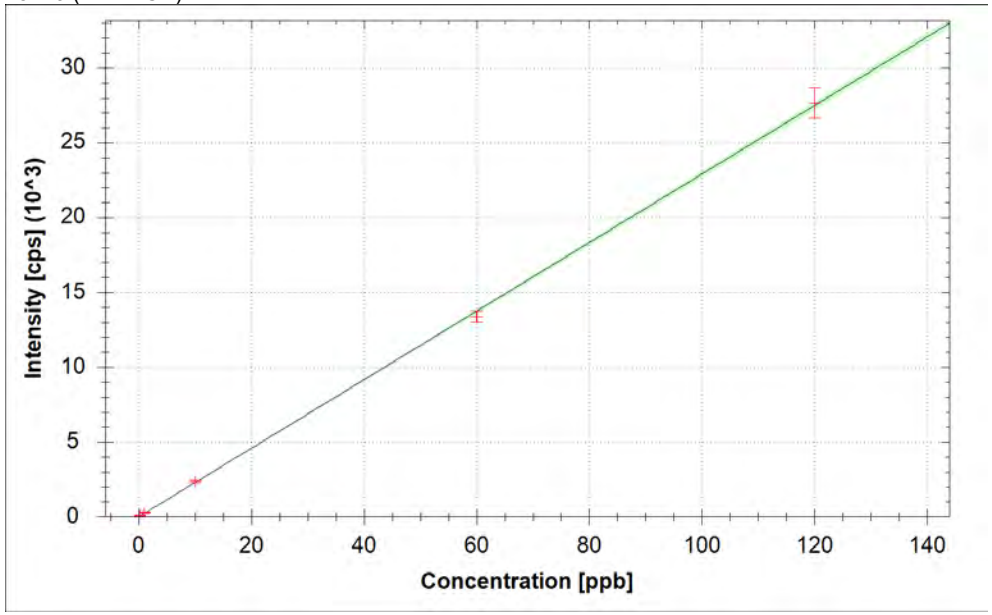
f(x) = 367.7090*x
R² = 1.0000
BEC = 0.000 ppb
LoD = 0.0000 ppb

121Sb (KED AGD)



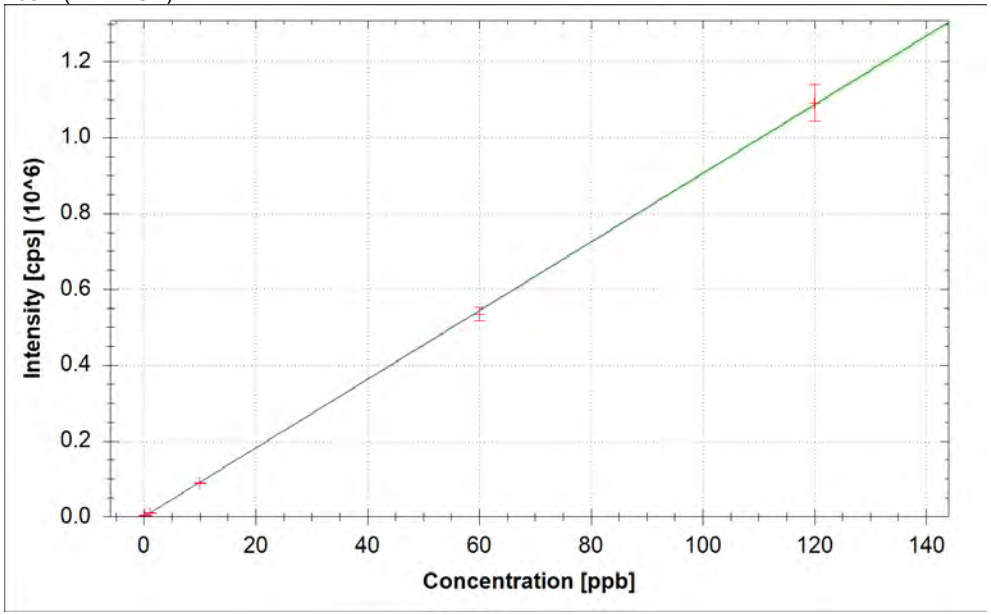
f(x) = 760.6175*x + 19.4937
R² = 0.9999
BEC = 0.026 ppb
LoD = 0.0264 ppb

137Ba (KED AGD)



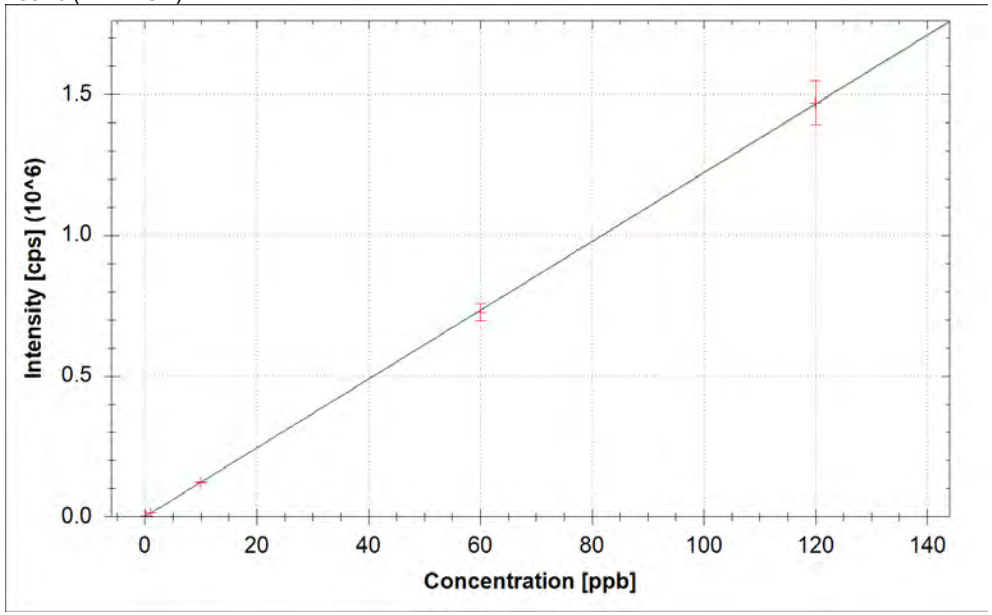
f(x) = 228.9826*x + 2.2049
R² = 0.9997
BEC = 0.010 ppb
LoD = 0.0251 ppb

205Tl (KED AGD)



f(x) = 9050.7602*x + 300.6795
R² = 0.9999
BEC = 0.033 ppb
LoD = 0.0459 ppb

208Pb (KED AGD)



f(x) = 12215.8504*x + 131.0963
R² = 1.0000
BEC = 0.011 ppb
LoD = 0.0044 ppb

Alpha ICPMSQ2 Data with SRD

12/4/2024 6:25:58 AM

Analysis index: 1
Analysis label: Rinse
Analysis started at: 12/3/2024 4:34:10 PM
User name ALPHALAB\a2-icpmsq2
Rack 0
Vial 1
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	100.339 %	101.168 %	0.051 ppb	34.297 ppb	4.420 ppb	8.390 ppb	-3.783 ppb	11.121 ppb	99.586 %
Concentration per Run 1	99.207 %	102.784 %	0.033 ppb	7.661 ppb	4.077 ppb	8.090 ppb	-4.522 ppb	-0.269 ppb	100.684 %
Concentration per Run 2	100.599 %	102.515 %	0.026 ppb	41.238 ppb	4.838 ppb	8.646 ppb	-13.252 ppb	11.149 ppb	101.623 %
Concentration per Run 3	101.210 %	98.204 %	0.094 ppb	53.992 ppb	4.346 ppb	8.433 ppb	6.425 ppb	22.482 ppb	96.452 %
Concentration RSD	1.0 %	2.5 %	74.0 %	69.8 %	8.7 %	3.3 %	260.6 %	102.3 %	2.8 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	98.147 %	0.072 ppb	0.109 ppb	0.341 ppb	59.429 ppb	0.013 ppb	1.009 ppb	0.390 ppb	1.506 ppb
Concentration per Run 1	101.316 %	0.070 ppb	0.110 ppb	0.447 ppb	63.112 ppb	0.006 ppb	0.870 ppb	0.350 ppb	1.375 ppb
Concentration per Run 2	96.065 %	0.115 ppb	0.116 ppb	0.445 ppb	59.379 ppb	0.010 ppb	0.773 ppb	0.372 ppb	1.692 ppb
Concentration per Run 3	97.061 %	0.030 ppb	0.103 ppb	0.131 ppb	55.795 ppb	0.023 ppb	1.385 ppb	0.447 ppb	1.452 ppb
Concentration RSD	2.8 %	59.8 %	6.0 %	53.2 %	6.2 %	65.7 %	32.6 %	13.0 %	11.0 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	102.273 %	-0.022 ppb	0.102 ppb	0.012 ppb	0.123 ppb	102.719 %	0.026 ppb	0.001 ppb	105.206 %
Concentration per Run 1	103.642 %	-0.013 ppb	0.061 ppb	0.021 ppb	0.067 ppb	108.147 %	0.027 ppb	0.000 ppb	109.422 %
Concentration per Run 2	99.664 %	-0.072 ppb	0.116 ppb	0.002 ppb	0.098 ppb	98.700 %	0.023 ppb	0.000 ppb	100.929 %
Concentration per Run 3	103.512 %	0.019 ppb	0.128 ppb	0.014 ppb	0.204 ppb	101.310 %	0.028 ppb	0.003 ppb	105.269 %
Concentration RSD	2.2 %	209.8 %	35.3 %	79.4 %	58.5 %	4.7 %	8.4 %	173.2 %	4.0 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.044 ppb	0.037 ppb	101.720 %	101.395 %	0.044 ppb	0.084 ppb	102.835 %
Concentration per Run 1	0.024 ppb	0.057 ppb	108.876 %	108.206 %	0.018 ppb	0.080 ppb	106.003 %
Concentration per Run 2	0.065 ppb	0.005 ppb	98.183 %	96.246 %	0.055 ppb	0.084 ppb	101.707 %
Concentration per Run 3	0.043 ppb	0.048 ppb	98.102 %	99.734 %	0.059 ppb	0.089 ppb	100.793 %
Concentration RSD	46.4 %	75.9 %	6.1 %	6.1 %	51.8 %	5.4 %	2.7 %

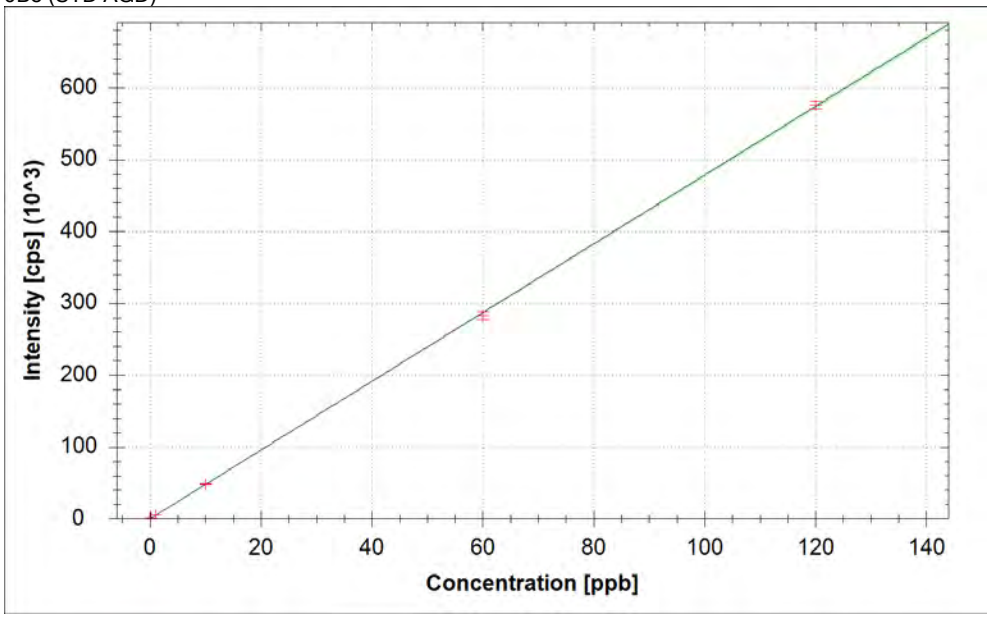
Alpha ICPMSQ2 Data with SRD

12/4/2024 6:25:58 AM

Analysis index:	2	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	zCAL LOT #M23-1225	Rack	0		
Analysis started at:	12/3/2024 4:38:36 PM	Vial	1		

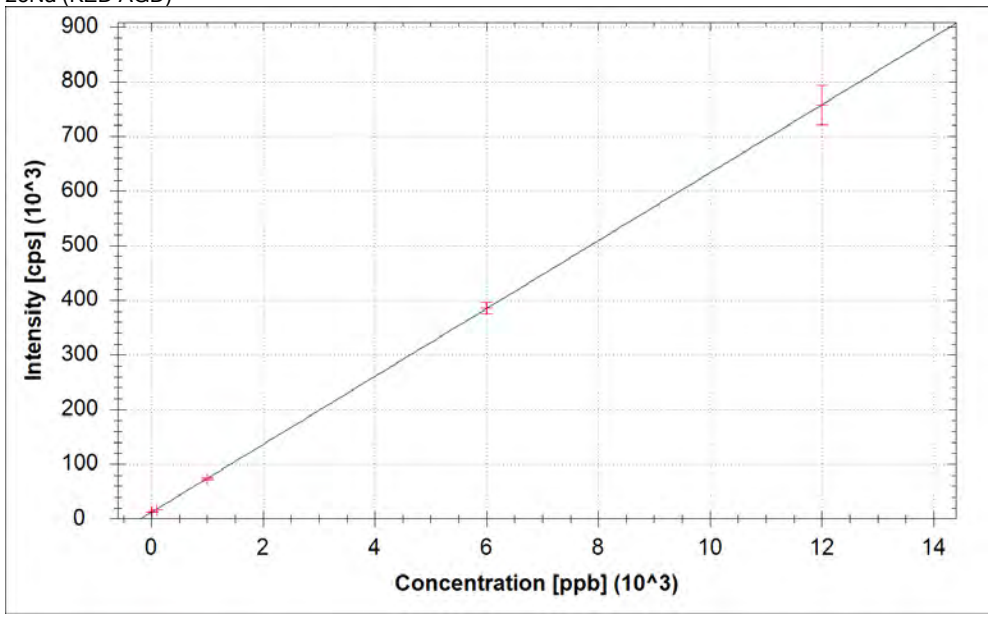
Calibration Curves:

9Be (STD AGD)



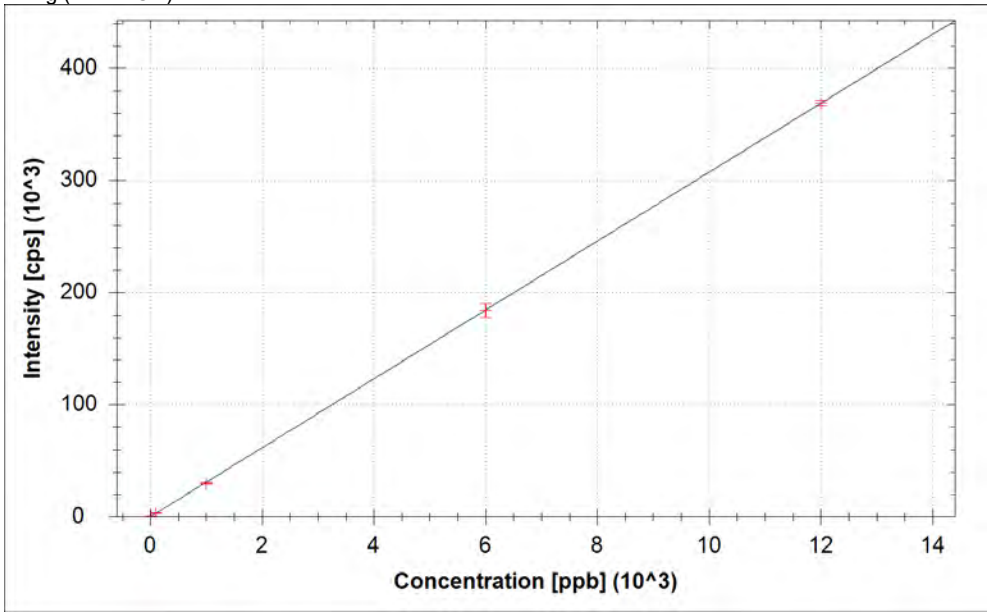
f(x) = 4782.1324*x + 17.8856
R² = 0.9999
BEC = 0.004 ppb
LoD = 0.0050 ppb

23Na (KED AGD)



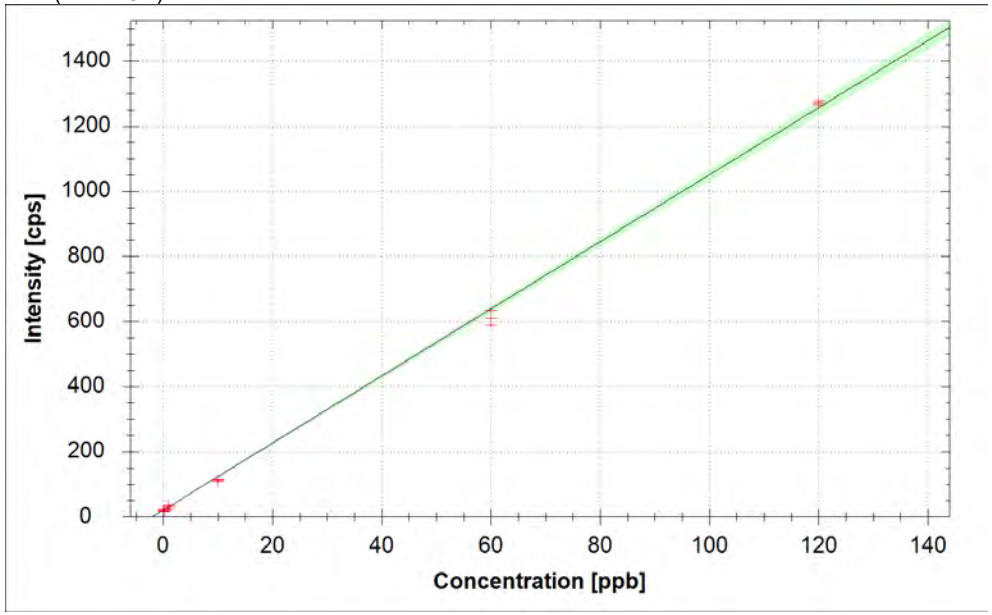
f(x) = 62.1395*x + 11678.6136
R² = 1.0000
BEC = 187.942 ppb
LoD = 4.6722 ppb

24Mg (KED AGD)



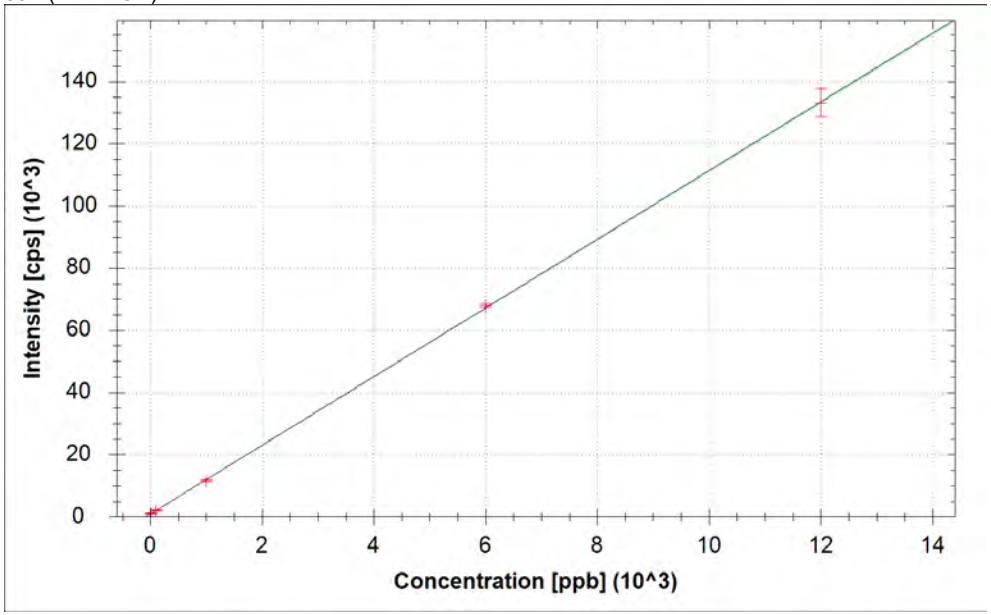
f(x) = 30.7284*x + 39.9111
R² = 1.0000
BEC = 1.299 ppb
LoD = 1.2665 ppb

27Al (KED AGD)



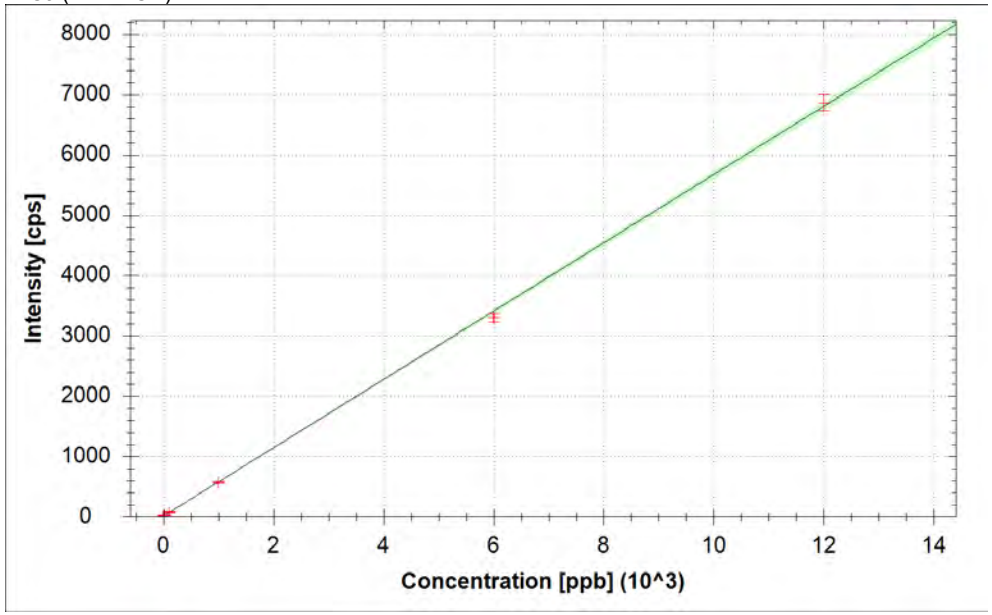
f(x) = 10.2961*x + 20.4593
R² = 0.9991
BEC = 1.987 ppb
LoD = 0.7354 ppb

39K (KED AGD)



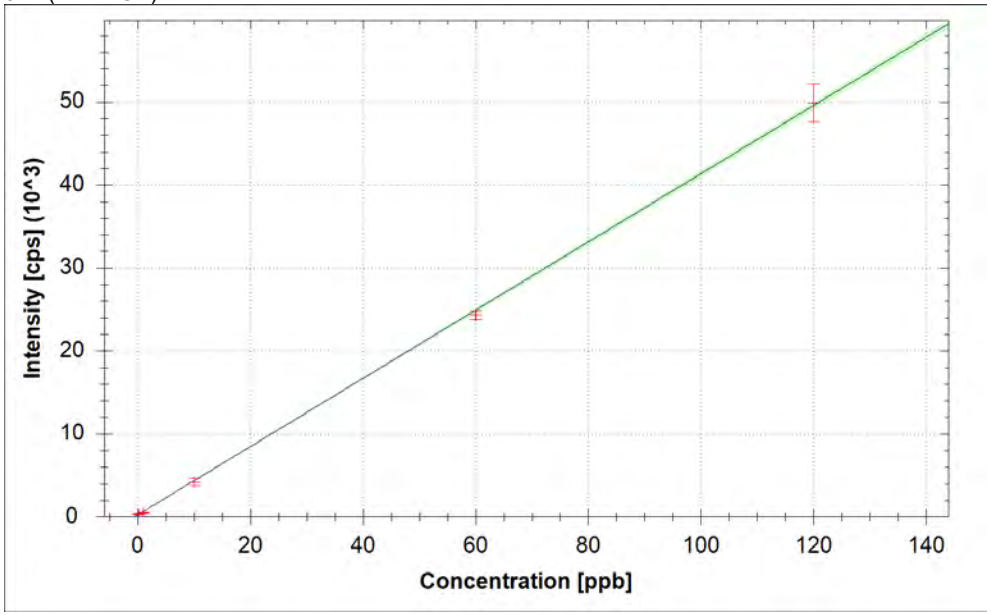
f(x) = 11.0403*x + 897.7311
R² = 1.0000
BEC = 81.314 ppb
LoD = 30.0974 ppb

44Ca (KED AGD)



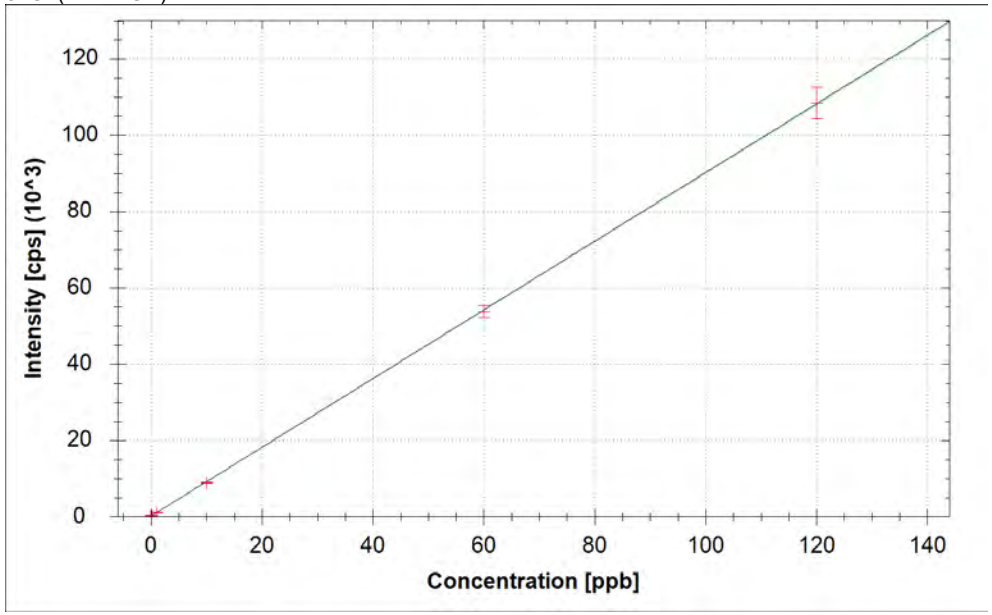
f(x) = 0.5662*x + 13.1051
R² = 0.9996
BEC = 23.146 ppb
LoD = 7.4148 ppb

51V (KED AGD)



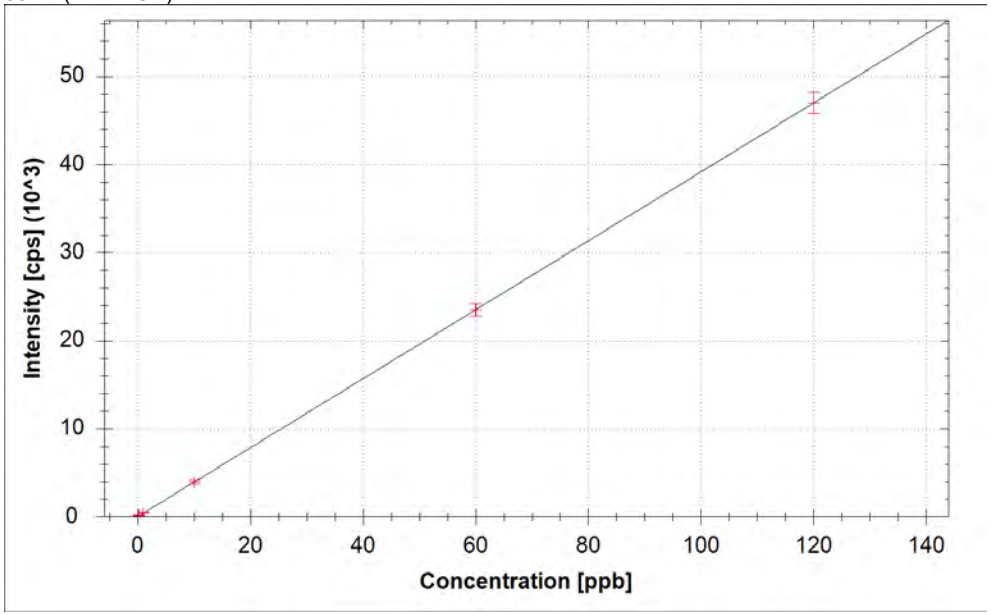
f(x) = 410.8695*x + 251.2222
R² = 0.9997
BEC = 0.611 ppb
LoD = 0.0963 ppb

52Cr (KED AGD)



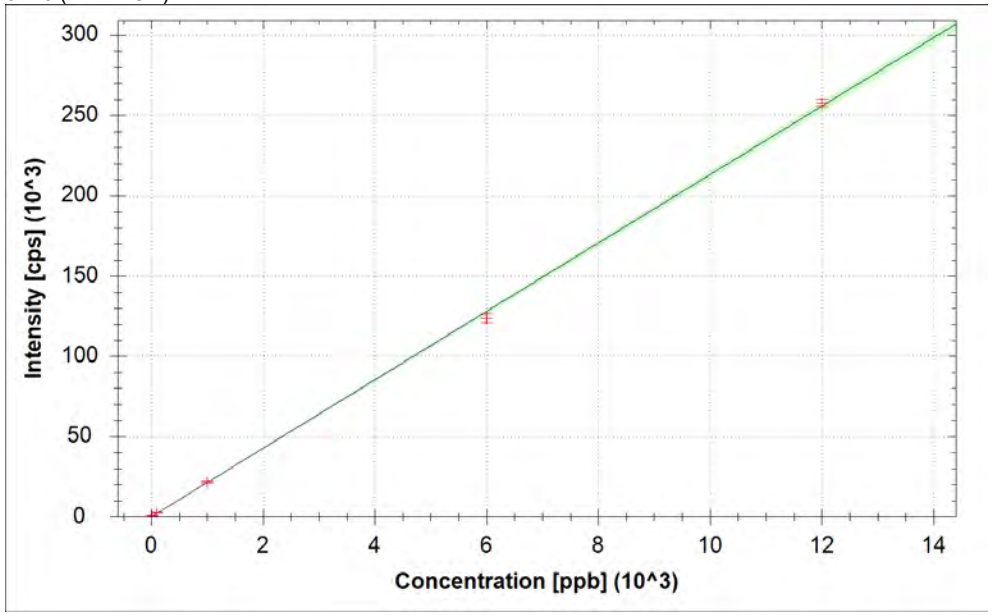
f(x) = 899.7066*x + 202.4240
R² = 1.0000
BEC = 0.225 ppb
LoD = 0.0860 ppb

55Mn (KED AGD)



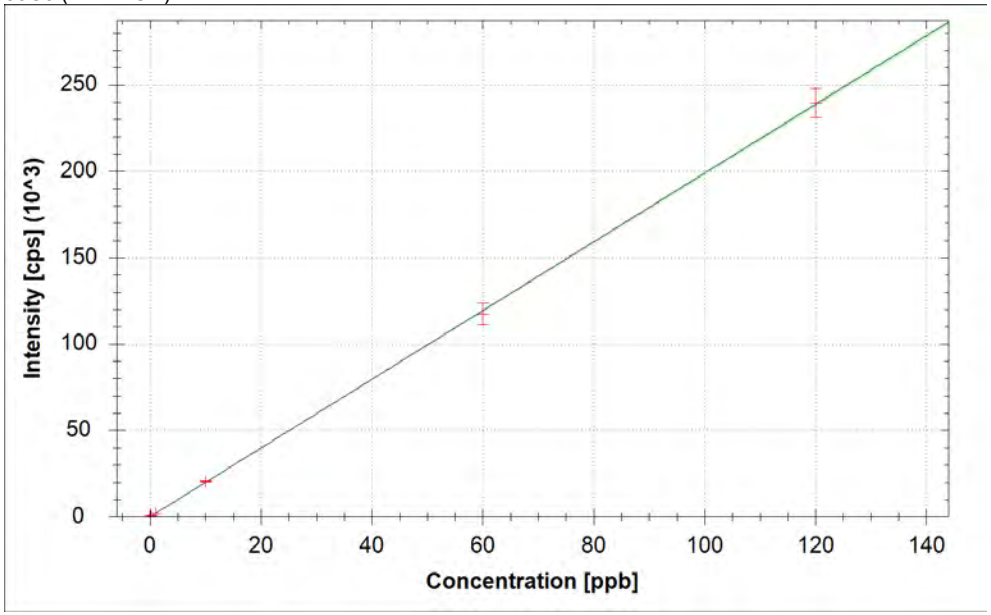
f(x) = 391.3092*x + 22.3597
R² = 1.0000
BEC = 0.057 ppb
LoD = 0.1079 ppb

57Fe (KED AGD)



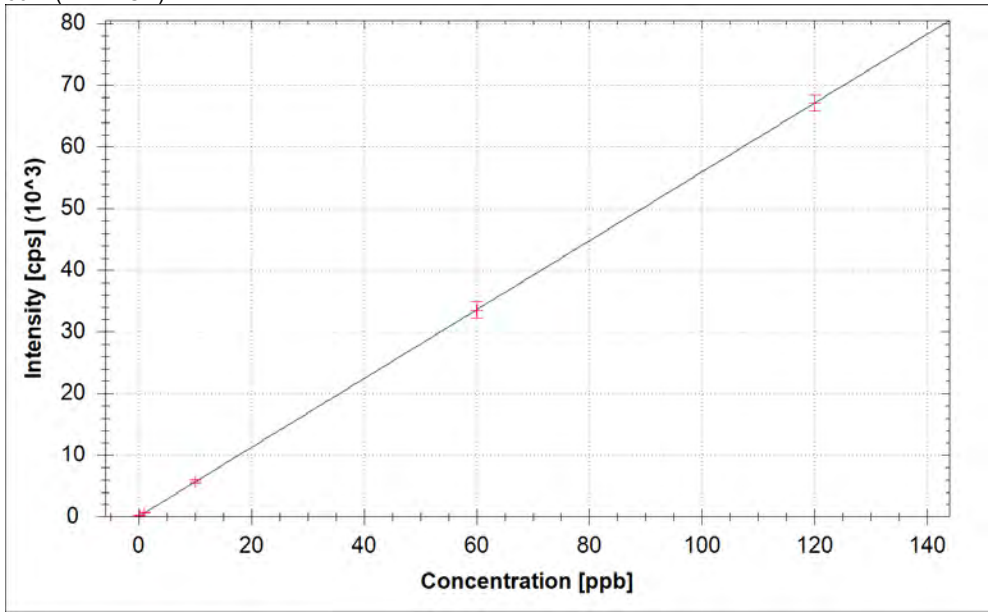
f(x) = 21.3082*x + 35.4905
R² = 0.9996
BEC = 1.666 ppb
LoD = 1.9354 ppb

59Co (KED AGD)



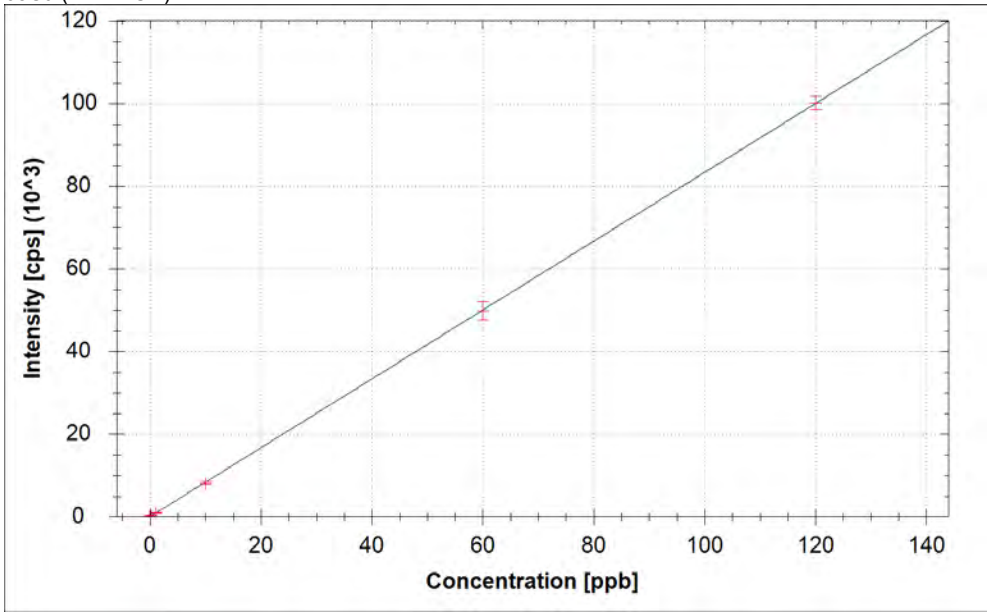
f(x) = 1987.9806*x + 19.9237
R² = 0.9999
BEC = 0.010 ppb
LoD = 0.0095 ppb

60Ni (KED AGD)



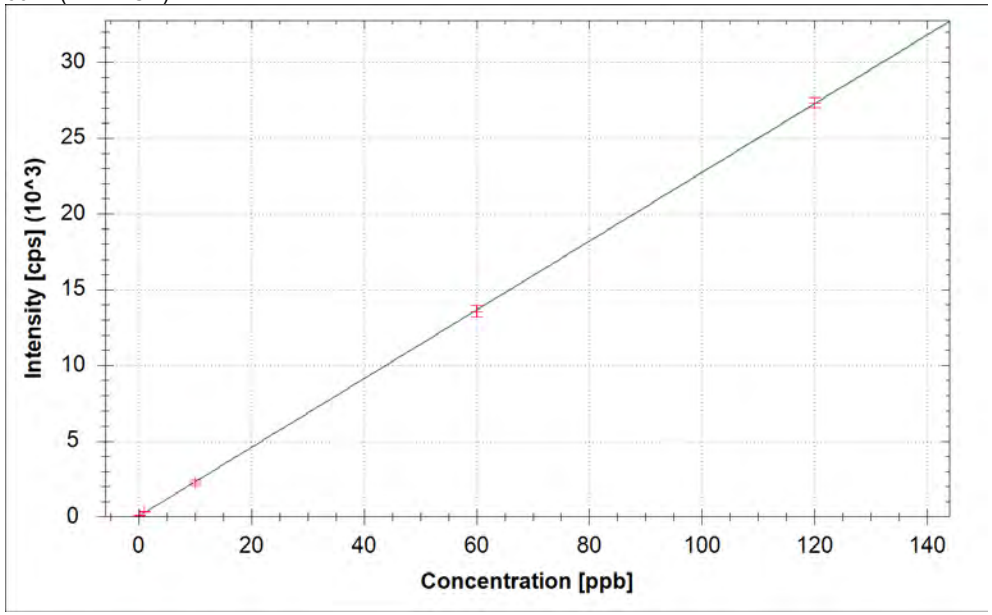
f(x) = 558.6298*x + 71.0284
R² = 1.0000
BEC = 0.127 ppb
LoD = 0.0332 ppb

65Cu (KED AGD)



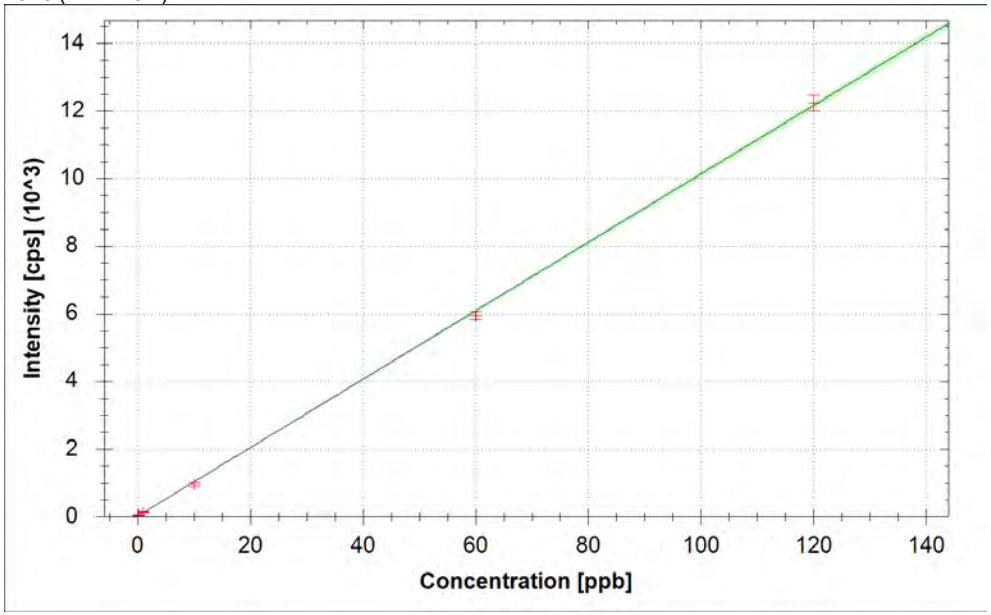
f(x) = 833.1199*x + 42.3475
R² = 1.0000
BEC = 0.051 ppb
LoD = 0.0390 ppb

66Zn (KED AGD)



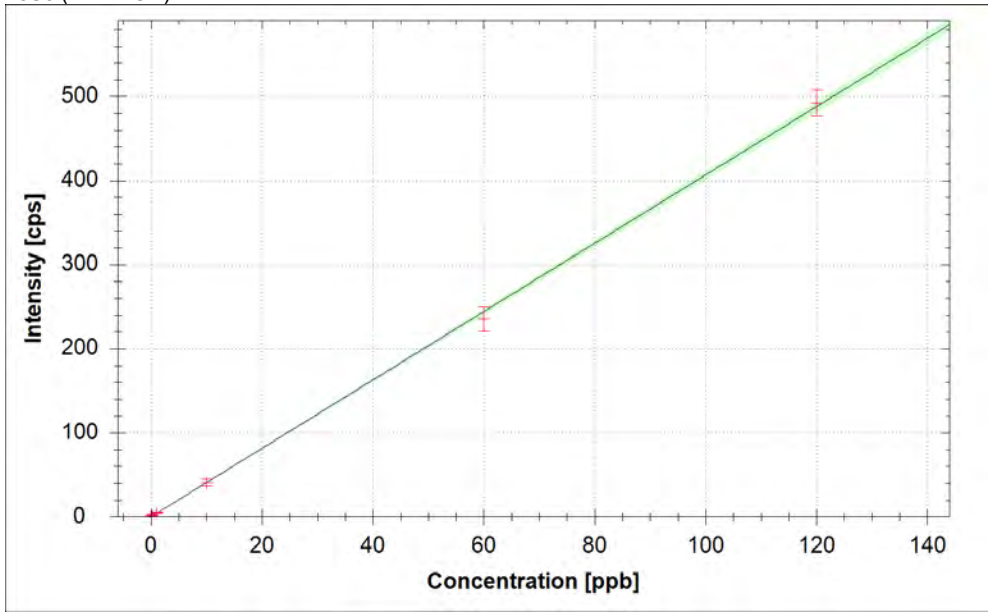
f(x) = 226.8066*x + 43.1120
R² = 1.0000
BEC = 0.190 ppb
LoD = 0.1155 ppb

75As (KED AGD)



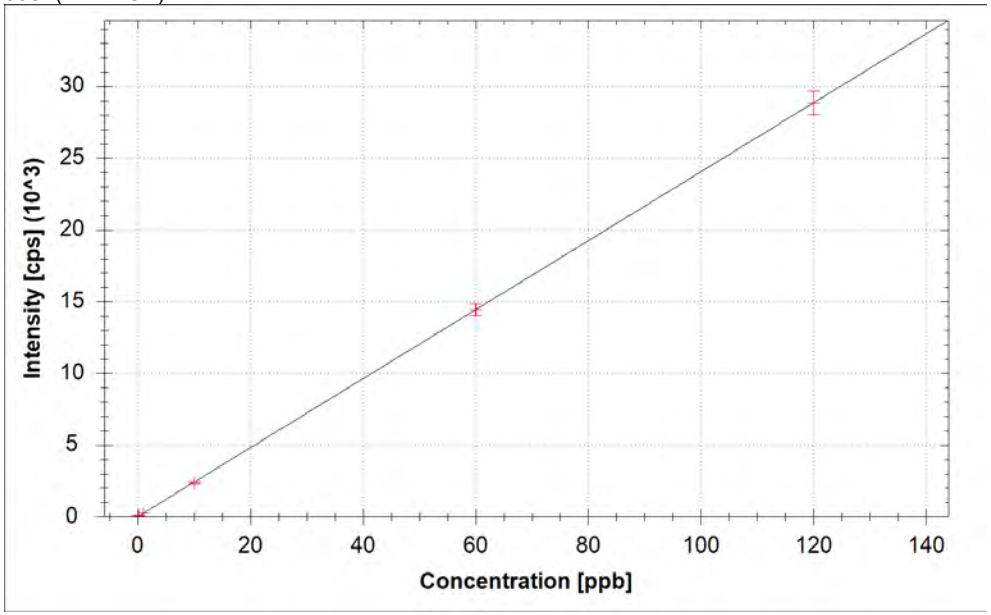
f(x) = 101.0684*x + 25.2015
R² = 0.9997
BEC = 0.249 ppb
LoD = 0.1126 ppb

78Se (KED AGD)



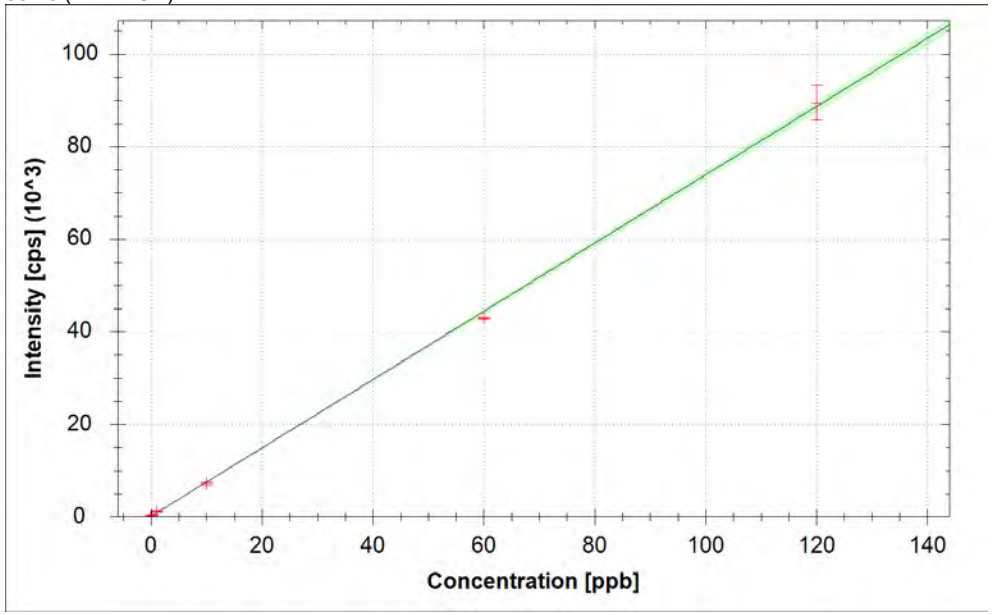
f(x) = 4.0648*x + 0.0843
R² = 0.9995
BEC = 0.021 ppb
LoD = 0.1059 ppb

88Sr (KED AGD)



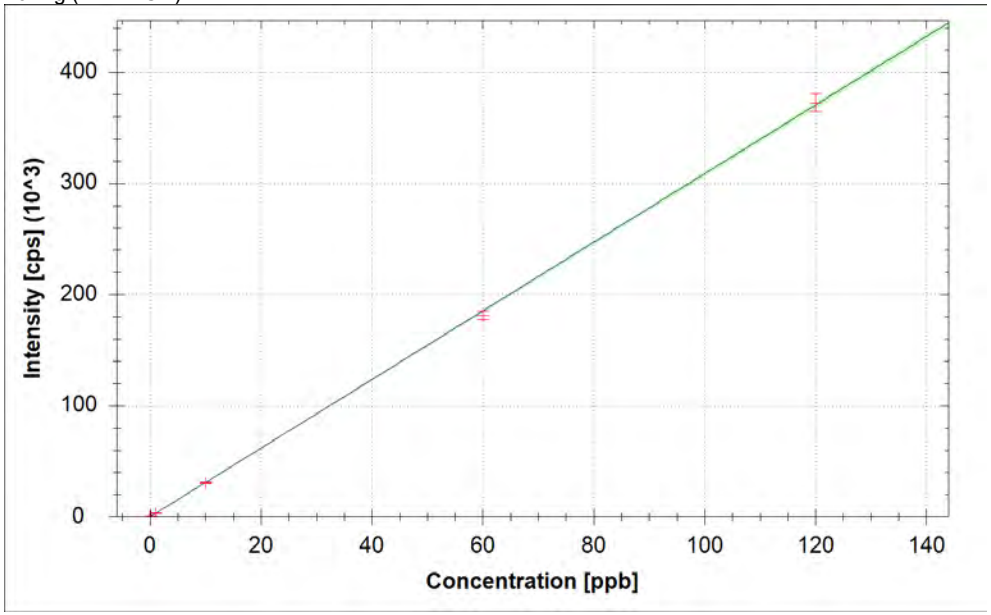
f(x) = 240.3272*x + 12.3629
R² = 1.0000
BEC = 0.051 ppb
LoD = 0.0078 ppb

95Mo (KED AGD)



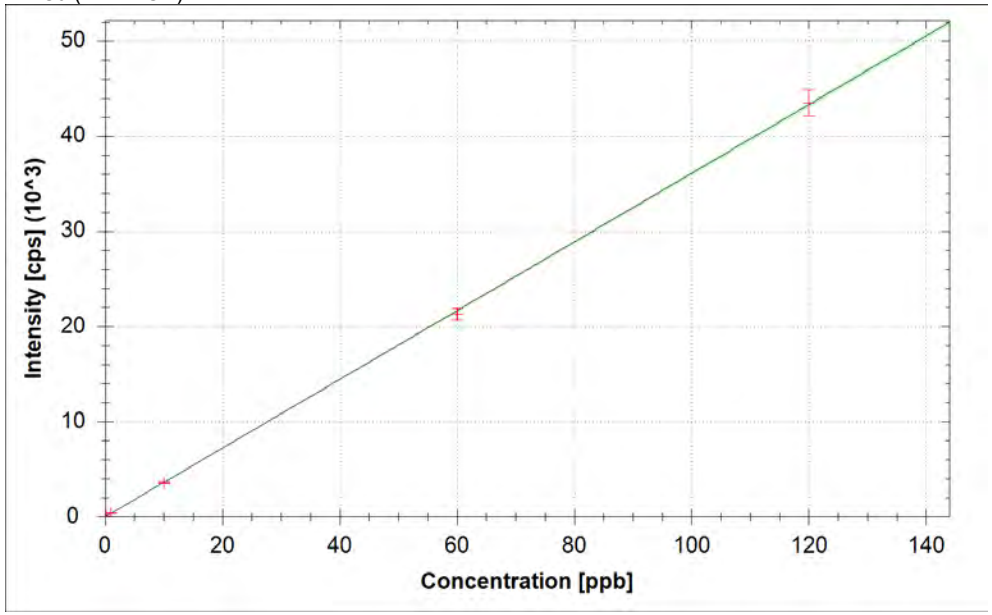
f(x) = 737.5559*x + 121.7936
R² = 0.9995
BEC = 0.165 ppb
LoD = 0.1743 ppb

107Ag (KED AGD)



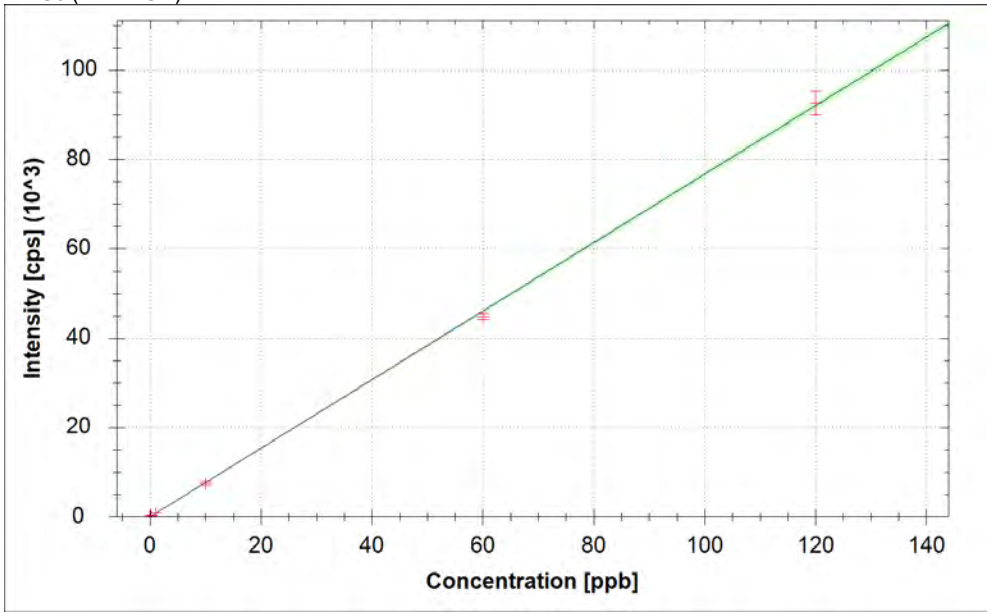
f(x) = 3085.5554*x + 8.9074
R² = 0.9998
BEC = 0.003 ppb
LoD = 0.0038 ppb

111Cd (KED AGD)



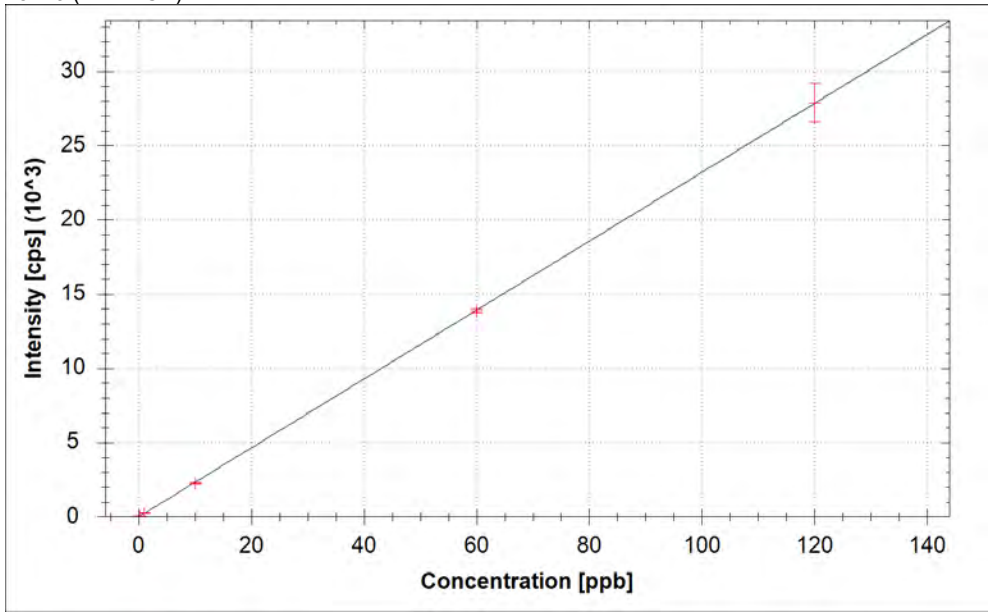
f(x) = 360.8447*x
R² = 0.9999
BEC = 0.000 ppb
LoD = 0.0000 ppb

121Sb (KED AGD)



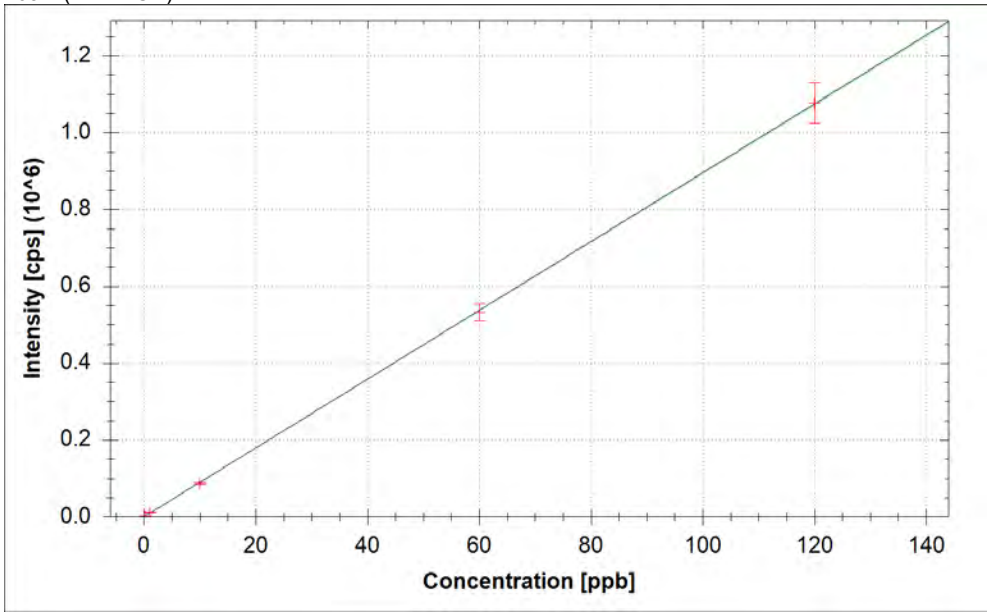
f(x) = 766.5565*x + 5.3464
R² = 0.9997
BEC = 0.007 ppb
LoD = 0.0055 ppb

137Ba (KED AGD)



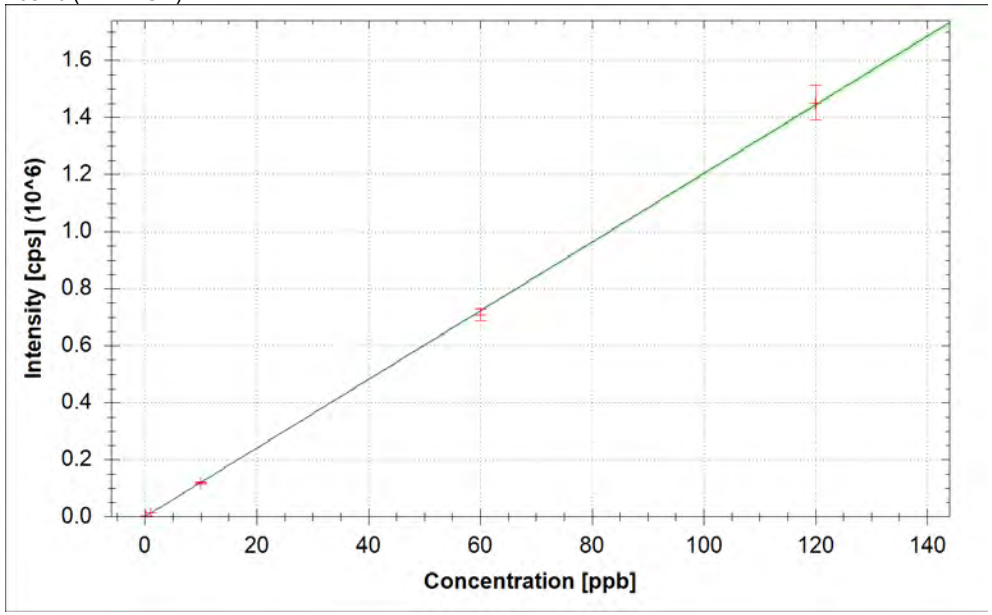
f(x) = 231.9344*x + 4.4209
R² = 1.0000
BEC = 0.019 ppb
LoD = 0.0654 ppb

205Tl (KED AGD)



f(x) = 8949.4973*x + 50.1460
R² = 1.0000
BEC = 0.006 ppb
LoD = 0.0047 ppb

208Pb (KED AGD)



f(x) = 12030.4041*x + 78.0986
R² = 0.9999
BEC = 0.006 ppb
LoD = 0.0057 ppb

Standards:

Analysis Index: 4
Analysis Name: 0.2/20 Cal
Analysis Type: STD
Analysis Started at: 12/3/2024 6:44:33 AM
Total Dilution Factor 50000
Rack 0
Vial 2

Category	Concentration average	Concentration RSD	Standard Concentration	Standard Relative Difference
6Li (STD AGD)	102.722 %	3.9 %		0.000 %
6Li (KED AGD)	107.071 %	6.6 %		0.000 %
9Be (STD AGD)	0.203 ppb	7.9 %	0.200 ppb	1.281 %
23Na (KED AGD)	12.675 ppb	76.2 %	20.000 ppb	36.627 %
24Mg (KED AGD)	18.191 ppb	4.9 %	20.000 ppb	9.045 %
27Al (KED AGD)	-0.061 ppb	591.0 %	0.200 ppb	130.452 %
39K (KED AGD)	18.667 ppb	66.9 %	20.000 ppb	6.666 %
44Ca (KED AGD)	16.916 ppb	23.8 %	20.000 ppb	15.421 %
45Sc (STD AGD)	99.245 %	0.7 %		0.000 %
51V (KED AGD)	0.184 ppb	56.7 %	0.200 ppb	7.864 %
52Cr (KED AGD)	0.141 ppb	19.6 %	0.200 ppb	29.719 %
55Mn (KED AGD)	0.409 ppb	21.0 %	0.200 ppb	104.434 %
57Fe (KED AGD)	18.632 ppb	22.3 %	20.000 ppb	6.842 %
59Co (KED AGD)	0.238 ppb	26.9 %	0.200 ppb	19.120 %
60Ni (KED AGD)	0.177 ppb	21.4 %	0.200 ppb	11.263 %
65Cu (KED AGD)	0.253 ppb	4.8 %	0.200 ppb	26.453 %
66Zn (KED AGD)	0.159 ppb	10.9 %	0.200 ppb	20.448 %
74Ge (KED AGD)	99.013 %	4.6 %		0.000 %
75As (KED AGD)	0.239 ppb	33.5 %	0.200 ppb	19.255 %
78Se (KED AGD)	0.340 ppb	76.0 %	0.200 ppb	70.067 %
88Sr (KED AGD)	0.206 ppb	13.4 %	0.200 ppb	3.108 %
95Mo (KED AGD)	0.236 ppb	56.3 %	0.200 ppb	17.777 %
103Rh (KED AGD)	101.192 %	6.8 %		0.000 %
107Ag (KED AGD)	0.188 ppb	7.9 %	0.200 ppb	6.144 %
111Cd (KED AGD)	0.188 ppb	13.8 %	0.200 ppb	5.776 %
115In (KED AGD)	100.633 %	4.7 %		0.000 %
121Sb (KED AGD)	0.206 ppb	12.3 %	0.200 ppb	2.980 %
137Ba (KED AGD)	0.151 ppb	30.1 %	0.200 ppb	24.588 %
159Tb (KED AGD)	101.166 %	5.7 %		0.000 %
175Lu (KED AGD)	101.053 %	6.4 %		0.000 %
205Tl (KED AGD)	0.193 ppb	10.3 %	0.200 ppb	3.402 %
208Pb (KED AGD)	0.200 ppb	7.7 %	0.200 ppb	0.091 %
209Bi (KED AGD)	101.796 %	6.2 %		0.000 %

Standards:

Analysis Index:	5
Analysis Name:	x1/100 Cal
Analysis Type:	STD
Analysis Started at:	12/3/2024 6:49:00 AM
Total Dilution Factor	10000
Rack	0
Vial	3

Standards:

Analysis Index: 6
Analysis Name: 10/1000 Cal
Analysis Type: STD
Analysis Started at: 12/3/2024 6:53:28 AM
Total Dilution Factor 1000
Rack 0
Vial 4

Category	Concentration average	Concentration RSD	Standard Concentration	Standard Relative Difference
6Li (STD AGD)	108.169 %	5.4 %		0.000 %
6Li (KED AGD)	114.703 %	4.9 %		0.000 %
9Be (STD AGD)	10.081 ppb	2.0 %	10.000 ppb	0.815 %
23Na (KED AGD)	988.615 ppb	3.9 %	1,000.000 ppb	1.138 %
24Mg (KED AGD)	972.587 ppb	2.7 %	1,000.000 ppb	2.741 %
27Al (KED AGD)	8.824 ppb	4.3 %	10.000 ppb	11.762 %
39K (KED AGD)	960.847 ppb	4.2 %	1,000.000 ppb	3.915 %
44Ca (KED AGD)	981.219 ppb	3.1 %	1,000.000 ppb	1.878 %
45Sc (STD AGD)	104.420 %	2.3 %		0.000 %
51V (KED AGD)	9.543 ppb	11.1 %	10.000 ppb	4.575 %
52Cr (KED AGD)	9.669 ppb	2.7 %	10.000 ppb	3.315 %
55Mn (KED AGD)	10.054 ppb	5.6 %	10.000 ppb	0.545 %
57Fe (KED AGD)	1,014.612 ppb	3.9 %	1,000.000 ppb	1.461 %
59Co (KED AGD)	10.294 ppb	2.0 %	10.000 ppb	2.938 %
60Ni (KED AGD)	10.134 ppb	5.9 %	10.000 ppb	1.343 %
65Cu (KED AGD)	9.688 ppb	5.2 %	10.000 ppb	3.123 %
66Zn (KED AGD)	9.718 ppb	7.6 %	10.000 ppb	2.819 %
74Ge (KED AGD)	110.287 %	5.2 %		0.000 %
75As (KED AGD)	9.204 ppb	7.4 %	10.000 ppb	7.960 %
78Se (KED AGD)	9.995 ppb	10.1 %	10.000 ppb	0.055 %
88Sr (KED AGD)	9.811 ppb	4.3 %	10.000 ppb	1.888 %
95Mo (KED AGD)	9.494 ppb	4.8 %	10.000 ppb	5.057 %
103Rh (KED AGD)	107.159 %	3.2 %		0.000 %
107Ag (KED AGD)	9.877 ppb	2.0 %	10.000 ppb	1.231 %
111Cd (KED AGD)	9.963 ppb	3.7 %	10.000 ppb	0.365 %
115In (KED AGD)	108.964 %	4.4 %		0.000 %
121Sb (KED AGD)	9.722 ppb	5.6 %	10.000 ppb	2.778 %
137Ba (KED AGD)	9.658 ppb	3.1 %	10.000 ppb	3.418 %
159Tb (KED AGD)	108.854 %	1.9 %		0.000 %
175Lu (KED AGD)	110.326 %	1.7 %		0.000 %
205Tl (KED AGD)	9.626 ppb	4.4 %	10.000 ppb	3.743 %
208Pb (KED AGD)	9.824 ppb	2.8 %	10.000 ppb	1.758 %
209Bi (KED AGD)	110.716 %	3.1 %		0.000 %

Standards:

Analysis Index: 7
Analysis Name: 60/6000 Cal
Analysis Type: STD
Analysis Started at: 12/3/2024 6:57:56 AM
Total Dilution Factor 166.6666666
Rack 0
Vial 5

Category	Concentration average	Concentration RSD	Standard Concentration	Standard Relative Difference
6Li (STD AGD)	107.436 %	4.4 %		0.000 %
6Li (KED AGD)	115.489 %	1.7 %		0.000 %
9Be (STD AGD)	59.072 ppb	2.0 %	60.000 ppb	1.546 %
23Na (KED AGD)	6,010.919 ppb	2.8 %	6,000.000 ppb	0.182 %
24Mg (KED AGD)	5,984.382 ppb	3.3 %	6,000.000 ppb	0.260 %
27Al (KED AGD)	57.287 ppb	4.0 %	60.000 ppb	4.522 %
39K (KED AGD)	6,060.335 ppb	0.9 %	6,000.000 ppb	1.006 %
44Ca (KED AGD)	5,807.476 ppb	2.1 %	6,000.000 ppb	3.209 %
45Sc (STD AGD)	105.977 %	0.6 %		0.000 %
51V (KED AGD)	58.527 ppb	2.2 %	60.000 ppb	2.455 %
52Cr (KED AGD)	59.478 ppb	3.0 %	60.000 ppb	0.870 %
55Mn (KED AGD)	59.947 ppb	3.0 %	60.000 ppb	0.088 %
57Fe (KED AGD)	5,805.118 ppb	2.3 %	6,000.000 ppb	3.248 %
59Co (KED AGD)	59.032 ppb	5.5 %	60.000 ppb	1.613 %
60Ni (KED AGD)	59.879 ppb	4.0 %	60.000 ppb	0.201 %
65Cu (KED AGD)	59.730 ppb	4.6 %	60.000 ppb	0.450 %
66Zn (KED AGD)	59.572 ppb	2.6 %	60.000 ppb	0.714 %
74Ge (KED AGD)	109.833 %	2.9 %		0.000 %
75As (KED AGD)	58.549 ppb	2.0 %	60.000 ppb	2.418 %
78Se (KED AGD)	57.831 ppb	6.1 %	60.000 ppb	3.614 %
88Sr (KED AGD)	60.095 ppb	2.8 %	60.000 ppb	0.158 %
95Mo (KED AGD)	57.931 ppb	0.5 %	60.000 ppb	3.449 %
103Rh (KED AGD)	108.445 %	2.7 %		0.000 %
107Ag (KED AGD)	58.734 ppb	2.0 %	60.000 ppb	2.111 %
111Cd (KED AGD)	58.987 ppb	3.0 %	60.000 ppb	1.688 %
115In (KED AGD)	110.456 %	1.6 %		0.000 %
121Sb (KED AGD)	58.434 ppb	1.6 %	60.000 ppb	2.610 %
137Ba (KED AGD)	59.773 ppb	0.9 %	60.000 ppb	0.378 %
159Tb (KED AGD)	110.766 %	0.6 %		0.000 %
175Lu (KED AGD)	110.304 %	1.9 %		0.000 %
205Tl (KED AGD)	59.435 ppb	4.1 %	60.000 ppb	0.942 %
208Pb (KED AGD)	58.856 ppb	3.0 %	60.000 ppb	1.907 %
209Bi (KED AGD)	111.548 %	2.0 %		0.000 %

Standards:

Analysis Index: 8
Analysis Name: 120/12000 Cal
Analysis Type: STD
Analysis Started at: 12/3/2024 7:02:24 AM
Total Dilution Factor 83.33333333
Rack 0
Vial 6

Category	Concentration average	Concentration RSD	Standard Concentration	Standard Relative Difference
6Li (STD AGD)	106.282 %	3.6 %		0.000 %
6Li (KED AGD)	117.789 %	0.7 %		0.000 %
9Be (STD AGD)	120.457 ppb	1.0 %	120.000 ppb	0.381 %
23Na (KED AGD)	11,995.681 ppb	4.8 %	12,000.000 ppb	0.036 %
24Mg (KED AGD)	12,010.072 ppb	0.6 %	12,000.000 ppb	0.084 %
27Al (KED AGD)	121.454 ppb	0.5 %	120.000 ppb	1.212 %
39K (KED AGD)	11,973.067 ppb	3.4 %	12,000.000 ppb	0.224 %
44Ca (KED AGD)	12,097.757 ppb	2.0 %	12,000.000 ppb	0.815 %
45Sc (STD AGD)	105.511 %	1.7 %		0.000 %
51V (KED AGD)	120.779 ppb	4.6 %	120.000 ppb	0.649 %
52Cr (KED AGD)	120.289 ppb	3.8 %	120.000 ppb	0.241 %
55Mn (KED AGD)	120.021 ppb	2.5 %	120.000 ppb	0.018 %
57Fe (KED AGD)	12,096.115 ppb	0.9 %	12,000.000 ppb	0.801 %
59Co (KED AGD)	120.460 ppb	3.5 %	120.000 ppb	0.383 %
60Ni (KED AGD)	120.049 ppb	1.9 %	120.000 ppb	0.041 %
65Cu (KED AGD)	120.161 ppb	1.6 %	120.000 ppb	0.134 %
66Zn (KED AGD)	120.236 ppb	1.2 %	120.000 ppb	0.197 %
74Ge (KED AGD)	110.009 %	2.4 %		0.000 %
75As (KED AGD)	120.791 ppb	1.9 %	120.000 ppb	0.659 %
78Se (KED AGD)	121.084 ppb	3.2 %	120.000 ppb	0.903 %
88Sr (KED AGD)	119.968 ppb	2.9 %	120.000 ppb	0.026 %
95Mo (KED AGD)	121.074 ppb	4.2 %	120.000 ppb	0.895 %
103Rh (KED AGD)	109.504 %	5.1 %		0.000 %
107Ag (KED AGD)	120.643 ppb	2.1 %	120.000 ppb	0.536 %
111Cd (KED AGD)	120.509 ppb	3.2 %	120.000 ppb	0.424 %
115In (KED AGD)	110.297 %	3.2 %		0.000 %
121Sb (KED AGD)	120.805 ppb	2.9 %	120.000 ppb	0.671 %
137Ba (KED AGD)	120.142 ppb	4.7 %	120.000 ppb	0.118 %
159Tb (KED AGD)	111.645 %	3.4 %		0.000 %
175Lu (KED AGD)	112.452 %	3.8 %		0.000 %
205Tl (KED AGD)	120.312 ppb	4.9 %	120.000 ppb	0.260 %
208Pb (KED AGD)	120.586 ppb	4.2 %	120.000 ppb	0.489 %
209Bi (KED AGD)	112.599 %	3.5 %		0.000 %

Standards:

Analysis Index: 9
Analysis Name: 1/100 Cal
Analysis Type: STD
Analysis Started at: 12/3/2024 7:07:58 AM
Total Dilution Factor 10000
Rack 0
Vial 3

Category	Concentration average	Concentration RSD	Standard Concentration	Standard Relative Difference
6Li (STD AGD)	107.604 %	3.7 %		0.000 %
6Li (KED AGD)	117.228 %	2.3 %		0.000 %
9Be (STD AGD)	1.053 ppb	0.8 %	1.000 ppb	5.289 %
23Na (KED AGD)	78.431 ppb	7.1 %	100.000 ppb	21.569 %
24Mg (KED AGD)	102.901 ppb	5.9 %	100.000 ppb	2.901 %
27Al (KED AGD)	1.067 ppb	46.5 %	1.000 ppb	6.696 %
39K (KED AGD)	103.585 ppb	16.1 %	100.000 ppb	3.585 %
44Ca (KED AGD)	109.031 ppb	23.2 %	100.000 ppb	9.031 %
45Sc (STD AGD)	101.882 %	1.1 %		0.000 %
51V (KED AGD)	0.509 ppb	23.3 %	1.000 ppb	49.122 %
52Cr (KED AGD)	0.977 ppb	8.9 %	1.000 ppb	2.263 %
55Mn (KED AGD)	1.058 ppb	8.0 %	1.000 ppb	5.822 %
57Fe (KED AGD)	113.297 ppb	8.3 %	100.000 ppb	13.297 %
59Co (KED AGD)	0.967 ppb	1.7 %	1.000 ppb	3.335 %
60Ni (KED AGD)	1.023 ppb	11.2 %	1.000 ppb	2.323 %
65Cu (KED AGD)	1.036 ppb	10.9 %	1.000 ppb	3.590 %
66Zn (KED AGD)	1.219 ppb	9.3 %	1.000 ppb	21.903 %
74Ge (KED AGD)	106.462 %	1.9 %		0.000 %
75As (KED AGD)	1.055 ppb	12.5 %	1.000 ppb	5.467 %
78Se (KED AGD)	1.088 ppb	14.6 %	1.000 ppb	8.841 %
88Sr (KED AGD)	0.997 ppb	1.2 %	1.000 ppb	0.281 %
95Mo (KED AGD)	1.387 ppb	18.4 %	1.000 ppb	38.711 %
103Rh (KED AGD)	110.221 %	1.6 %		0.000 %
107Ag (KED AGD)	1.004 ppb	2.5 %	1.000 ppb	0.371 %
111Cd (KED AGD)	1.013 ppb	3.0 %	1.000 ppb	1.267 %
115In (KED AGD)	108.737 %	1.6 %		0.000 %
121Sb (KED AGD)	1.101 ppb	4.4 %	1.000 ppb	10.063 %
137Ba (KED AGD)	1.034 ppb	8.2 %	1.000 ppb	3.404 %
159Tb (KED AGD)	113.222 %	1.7 %		0.000 %
175Lu (KED AGD)	110.657 %	1.4 %		0.000 %
205Tl (KED AGD)	1.188 ppb	2.9 %	1.000 ppb	18.824 %
208Pb (KED AGD)	1.041 ppb	1.1 %	1.000 ppb	4.095 %
209Bi (KED AGD)	114.126 %	1.8 %		0.000 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	1	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	Rinse	Rack	0		
Analysis started at:	12/3/2024 6:31:09 AM	Vial	1		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	104.396 %	113.019 %	0.014 ppb	13.493 ppb	4.744 ppb	10.123 ppb	5.094 ppb	19.867 ppb	100.167 %
Concentration per Run 1	99.654 %	115.320 %	0.013 ppb	14.984 ppb	6.819 ppb	10.124 ppb	6.768 ppb	4.449 ppb	99.464 %
Concentration per Run 2	106.179 %	107.744 %	0.014 ppb	21.395 ppb	3.089 ppb	11.205 ppb	4.589 ppb	29.911 ppb	101.952 %
Concentration per Run 3	107.354 %	115.994 %	0.015 ppb	4.101 ppb	4.326 ppb	9.041 ppb	3.925 ppb	25.239 ppb	99.085 %
Concentration RSD	4.0 %	4.1 %	6.6 %	64.8 %	40.0 %	10.7 %	29.2 %	68.2 %	1.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.124 ppb	0.137 ppb	0.490 ppb	68.729 ppb	0.027 ppb	2.873 ppb	0.571 ppb	2.468 ppb	110.119 %
Concentration per Run 1	-0.144 ppb	0.127 ppb	0.516 ppb	70.229 ppb	0.015 ppb	3.011 ppb	0.626 ppb	2.557 ppb	103.725 %
Concentration per Run 2	-0.067 ppb	0.181 ppb	0.420 ppb	73.795 ppb	0.038 ppb	2.865 ppb	0.575 ppb	2.453 ppb	111.699 %
Concentration per Run 3	-0.161 ppb	0.103 ppb	0.534 ppb	62.163 ppb	0.028 ppb	2.744 ppb	0.512 ppb	2.395 ppb	114.932 %
Concentration RSD	40.2 %	29.3 %	12.5 %	8.7 %	42.7 %	4.7 %	9.9 %	3.3 %	5.2 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.040 ppb	0.046 ppb	0.019 ppb	0.248 ppb	101.983 %	0.041 ppb	0.002 ppb	102.582 %	0.034 ppb
Concentration per Run 1	0.093 ppb	-0.050 ppb	0.018 ppb	0.274 ppb	102.516 %	0.044 ppb	0.000 ppb	103.713 %	0.025 ppb
Concentration per Run 2	-0.027 ppb	0.008 ppb	0.011 ppb	0.235 ppb	100.931 %	0.037 ppb	0.004 ppb	100.080 %	0.033 ppb
Concentration per Run 3	0.053 ppb	0.179 ppb	0.026 ppb	0.236 ppb	102.502 %	0.041 ppb	0.004 ppb	103.953 %	0.043 ppb
Concentration RSD	154.5 %	259.0 %	41.3 %	9.0 %	0.9 %	9.3 %	86.6 %	2.1 %	27.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.078 ppb	104.522 %	104.073 %	0.005 ppb	0.089 ppb	104.630 %
Concentration per Run 1	0.063 ppb	106.682 %	102.986 %	0.003 ppb	0.088 ppb	107.504 %
Concentration per Run 2	0.122 ppb	103.674 %	103.099 %	0.006 ppb	0.098 ppb	102.675 %
Concentration per Run 3	0.050 ppb	103.208 %	106.134 %	0.005 ppb	0.081 ppb	103.712 %
Concentration RSD	48.8 %	1.8 %	1.7 %	31.4 %	9.8 %	2.4 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index: 2
Analysis label: CAL LOT #M23-1225
Analysis started at: 12/3/2024 6:35:35 AM
User name ALPHALAB\a2-icpmsq2
Rack 0
Vial 1
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	99.786 %	111.111 %	0.016 ppb	6.954 ppb	5.992 ppb	9.533 ppb	11.375 ppb	15.948 ppb	95.904 %
Concentration per Run 1	95.234 %	117.677 %	0.015 ppb	-4.561 ppb	3.868 ppb	9.279 ppb	2.855 ppb	8.770 ppb	94.603 %
Concentration per Run 2	100.982 %	118.182 %	0.016 ppb	-0.534 ppb	6.728 ppb	9.155 ppb	17.837 ppb	24.172 ppb	94.873 %
Concentration per Run 3	103.143 %	97.475 %	0.018 ppb	25.957 ppb	7.380 ppb	10.166 ppb	13.433 ppb	14.901 ppb	98.236 %
Concentration RSD	4.1 %	10.6 %	9.6 %	238.4 %	31.2 %	5.8 %	67.7 %	48.6 %	2.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.157 ppb	0.167 ppb	0.432 ppb	73.240 ppb	0.017 ppb	3.045 ppb	0.575 ppb	2.553 ppb	99.832 %
Concentration per Run 1	-0.156 ppb	0.168 ppb	0.361 ppb	80.521 ppb	0.025 ppb	3.098 ppb	0.629 ppb	2.416 ppb	101.382 %
Concentration per Run 2	-0.170 ppb	0.152 ppb	0.557 ppb	72.858 ppb	0.016 ppb	2.909 ppb	0.556 ppb	2.817 ppb	100.554 %
Concentration per Run 3	-0.146 ppb	0.181 ppb	0.380 ppb	66.341 ppb	0.011 ppb	3.128 ppb	0.540 ppb	2.425 ppb	97.559 %
Concentration RSD	7.7 %	9.0 %	25.0 %	9.7 %	43.0 %	3.9 %	8.3 %	9.0 %	2.0 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.018 ppb	0.053 ppb	0.023 ppb	0.177 ppb	99.487 %	0.034 ppb	0.002 ppb	99.851 %	0.020 ppb
Concentration per Run 1	0.018 ppb	0.091 ppb	0.029 ppb	0.151 ppb	107.309 %	0.034 ppb	0.007 ppb	106.600 %	0.016 ppb
Concentration per Run 2	0.013 ppb	-0.046 ppb	0.017 ppb	0.203 ppb	97.480 %	0.037 ppb	0.000 ppb	98.186 %	0.018 ppb
Concentration per Run 3	0.021 ppb	0.112 ppb	0.023 ppb	0.178 ppb	93.670 %	0.032 ppb	0.000 ppb	94.768 %	0.026 ppb
Concentration RSD	23.2 %	163.2 %	24.7 %	14.4 %	7.1 %	7.8 %	173.2 %	6.1 %	27.4 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.087 ppb	101.362 %	101.252 %	0.004 ppb	0.093 ppb	101.953 %
Concentration per Run 1	0.048 ppb	107.992 %	110.855 %	0.001 ppb	0.088 ppb	108.473 %
Concentration per Run 2	0.096 ppb	101.310 %	98.916 %	0.001 ppb	0.106 ppb	99.461 %
Concentration per Run 3	0.117 ppb	94.784 %	93.986 %	0.008 ppb	0.084 ppb	97.925 %
Concentration RSD	40.9 %	6.5 %	8.6 %	114.4 %	12.9 %	5.6 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	3	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	Blank NTB ICPMSQ2	Rack	4		
Analysis started at:	12/3/2024 6:40:01 AM	Vial	49		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	100.000 %	100.000 %	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	100.000 %
Concentration per Run	100.000 %	100.000 %	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	100.000 %
Concentration RSD	0.0 %	0.0 %	0.4 %	0.0 %	0.3 %	0.1 %	0.1 %	0.1 %	0.0 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	100.000 %
Concentration per Run	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	100.000 %
Concentration RSD	0.1 %	0.1 %	0.6 %	0.4 %	0.3 %	0.1 %	0.3 %	0.2 %	0.0 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	100.000 %	0.000 ppb	0.000 ppb	100.000 %	0.000 ppb
Concentration per Run	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	100.000 %	0.000 ppb	0.000 ppb	100.000 %	0.000 ppb
Concentration RSD	0.2 %	1.7 %	0.1 %	0.4 %	0.0 %	0.4 %		0.0 %	0.3 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.000 ppb	100.000 %	100.000 %	0.000 ppb	0.000 ppb	100.000 %
Concentration per Run	0.000 ppb	100.000 %	100.000 %	0.000 ppb	0.000 ppb	100.000 %
Concentration RSD	1.1 %	0.0 %	0.0 %	0.3 %	0.3 %	0.0 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	4	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	0.2/20 Cal	Rack	0		
Analysis started at:	12/3/2024 6:44:33 AM	Vial	2		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	102.722 %	107.071 %	0.203 ppb	12.675 ppb	18.191 ppb	-0.061 ppb	18.667 ppb	16.916 ppb	99.245 %
Concentration per Run 1	98.276 %	114.815 %	0.221 ppb	1.861 ppb	18.851 ppb	-0.361 ppb	5.729 ppb	16.181 ppb	98.392 %
Concentration per Run 2	103.992 %	101.010 %	0.194 ppb	20.460 ppb	18.550 ppb	-0.160 ppb	30.629 ppb	13.305 ppb	99.720 %
Concentration per Run 3	105.897 %	105.387 %	0.193 ppb	15.703 ppb	17.171 ppb	0.338 ppb	19.642 ppb	21.262 ppb	99.623 %
Concentration RSD	3.9 %	6.6 %	7.9 %	76.2 %	4.9 %	591.0 %	66.9 %	23.8 %	0.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.184 ppb	0.141 ppb	0.409 ppb	18.632 ppb	0.238 ppb	0.177 ppb	0.253 ppb	0.159 ppb	99.013 %
Concentration per Run 1	0.081 ppb	0.109 ppb	0.420 ppb	18.552 ppb	0.179 ppb	0.154 ppb	0.253 ppb	0.156 ppb	104.100 %
Concentration per Run 2	0.290 ppb	0.161 ppb	0.488 ppb	14.523 ppb	0.306 ppb	0.158 ppb	0.241 ppb	0.178 ppb	95.177 %
Concentration per Run 3	0.181 ppb	0.152 ppb	0.318 ppb	22.820 ppb	0.229 ppb	0.221 ppb	0.265 ppb	0.144 ppb	97.761 %
Concentration RSD	56.7 %	19.6 %	21.0 %	22.3 %	26.9 %	21.4 %	4.8 %	10.9 %	4.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.239 ppb	0.340 ppb	0.206 ppb	0.236 ppb	101.192 %	0.188 ppb	0.188 ppb	100.633 %	0.206 ppb
Concentration per Run 1	0.154 ppb	0.176 ppb	0.177 ppb	0.087 ppb	108.730 %	0.178 ppb	0.176 ppb	106.113 %	0.189 ppb
Concentration per Run 2	0.313 ppb	0.638 ppb	0.211 ppb	0.276 ppb	99.440 %	0.205 ppb	0.218 ppb	97.510 %	0.235 ppb
Concentration per Run 3	0.249 ppb	0.206 ppb	0.231 ppb	0.343 ppb	95.405 %	0.180 ppb	0.171 ppb	98.276 %	0.193 ppb
Concentration RSD	33.5 %	76.0 %	13.4 %	56.3 %	6.8 %	7.9 %	13.8 %	4.7 %	12.3 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.151 ppb	101.166 %	101.053 %	0.193 ppb	0.200 ppb	101.796 %
Concentration per Run 1	0.183 ppb	107.723 %	108.279 %	0.175 ppb	0.183 ppb	108.418 %
Concentration per Run 2	0.171 ppb	99.061 %	99.036 %	0.189 ppb	0.213 ppb	101.111 %
Concentration per Run 3	0.099 ppb	96.715 %	95.845 %	0.215 ppb	0.205 ppb	95.859 %
Concentration RSD	30.1 %	5.7 %	6.4 %	10.3 %	7.7 %	6.2 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	5	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	x1/100 Cal	Rack	0		
Analysis started at:	12/3/2024 6:49:00 AM	Vial	3		

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	6	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	10/1000 Cal	Rack	0		
Analysis started at:	12/3/2024 6:53:28 AM	Vial	4		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	108.169 %	114.703 %	10.081 ppb	988.615 ppb	972.587 ppb	8.824 ppb	960.847 ppb	981.219 ppb	104.420 %
Concentration per Run 1	102.038 %	109.933 %	10.222 ppb	1,015.665 ppb	984.035 ppb	8.528 ppb	995.401 ppb	1,006.579 ppb	101.713 %
Concentration per Run 2	108.714 %	120.876 %	10.171 ppb	944.104 ppb	942.606 ppb	9.252 ppb	916.238 ppb	989.407 ppb	106.159 %
Concentration per Run 3	113.756 %	113.300 %	9.851 ppb	1,006.076 ppb	991.121 ppb	8.691 ppb	970.902 ppb	947.670 ppb	105.390 %
Concentration RSD	5.4 %	4.9 %	2.0 %	3.9 %	2.7 %	4.3 %	4.2 %	3.1 %	2.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	9.543 ppb	9.669 ppb	10.054 ppb	1,014.612 ppb	10.294 ppb	10.134 ppb	9.688 ppb	9.718 ppb	110.287 %
Concentration per Run 1	8.529 ppb	9.467 ppb	9.714 ppb	976.545 ppb	10.057 ppb	9.459 ppb	9.118 ppb	8.879 ppb	116.858 %
Concentration per Run 2	9.456 ppb	9.581 ppb	9.747 ppb	1,055.478 ppb	10.405 ppb	10.325 ppb	10.061 ppb	9.994 ppb	106.291 %
Concentration per Run 3	10.642 ppb	9.958 ppb	10.703 ppb	1,011.811 ppb	10.419 ppb	10.619 ppb	9.884 ppb	10.281 ppb	107.711 %
Concentration RSD	11.1 %	2.7 %	5.6 %	3.9 %	2.0 %	5.9 %	5.2 %	7.6 %	5.2 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	9.204 ppb	9.995 ppb	9.811 ppb	9.494 ppb	107.159 %	9.877 ppb	9.963 ppb	108.964 %	9.722 ppb
Concentration per Run 1	8.452 ppb	8.914 ppb	9.329 ppb	9.004 ppb	110.717 %	9.697 ppb	9.661 ppb	114.479 %	9.097 ppb
Concentration per Run 2	9.393 ppb	10.163 ppb	10.092 ppb	9.579 ppb	103.795 %	9.848 ppb	10.368 ppb	106.466 %	10.079 ppb
Concentration per Run 3	9.766 ppb	10.907 ppb	10.012 ppb	9.900 ppb	106.966 %	10.086 ppb	9.861 ppb	105.949 %	9.990 ppb
Concentration RSD	7.4 %	10.1 %	4.3 %	4.8 %	3.2 %	2.0 %	3.7 %	4.4 %	5.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	9.658 ppb	108.854 %	110.326 %	9.626 ppb	9.824 ppb	110.716 %
Concentration per Run 1	9.422 ppb	110.830 %	110.539 %	9.158 ppb	9.513 ppb	114.683 %
Concentration per Run 2	9.553 ppb	106.765 %	108.315 %	9.720 ppb	9.943 ppb	108.653 %
Concentration per Run 3	9.999 ppb	108.967 %	112.124 %	9.999 ppb	10.017 ppb	108.810 %
Concentration RSD	3.1 %	1.9 %	1.7 %	4.4 %	2.8 %	3.1 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	7	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	60/6000 Cal	Rack	0		
Analysis started at:	12/3/2024 6:57:56 AM	Vial	5		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	107.436 %	115.489 %	59.072 ppb	6,010.919 ppb	5,984.382 ppb	57.287 ppb	6,060.335 ppb	5,807.476 ppb	105.977 %
Concentration per Run 1	102.043 %	115.994 %	60.335 ppb	5,965.521 ppb	5,991.824 ppb	54.666 ppb	6,000.335 ppb	5,673.083 ppb	105.249 %
Concentration per Run 2	109.967 %	113.300 %	58.867 ppb	6,194.979 ppb	6,178.611 ppb	58.507 ppb	6,069.637 ppb	5,841.937 ppb	106.294 %
Concentration per Run 3	110.299 %	117.172 %	58.015 ppb	5,872.258 ppb	5,782.710 ppb	58.688 ppb	6,111.034 ppb	5,907.409 ppb	106.387 %
Concentration RSD	4.4 %	1.7 %	2.0 %	2.8 %	3.3 %	4.0 %	0.9 %	2.1 %	0.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	58.527 ppb	59.478 ppb	59.947 ppb	5,805.118 ppb	59.032 ppb	59.879 ppb	59.730 ppb	59.572 ppb	109.833 %
Concentration per Run 1	57.412 ppb	57.784 ppb	59.234 ppb	5,683.851 ppb	59.003 ppb	59.754 ppb	60.801 ppb	59.520 ppb	112.341 %
Concentration per Run 2	59.892 ppb	61.299 ppb	61.964 ppb	5,945.620 ppb	62.288 ppb	62.311 ppb	61.768 ppb	61.155 ppb	106.193 %
Concentration per Run 3	58.278 ppb	59.350 ppb	58.644 ppb	5,785.882 ppb	55.805 ppb	57.573 ppb	56.621 ppb	58.040 ppb	110.964 %
Concentration RSD	2.2 %	3.0 %	3.0 %	2.3 %	5.5 %	4.0 %	4.6 %	2.6 %	2.9 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	58.549 ppb	57.831 ppb	60.095 ppb	57.931 ppb	108.445 %	58.734 ppb	58.987 ppb	110.456 %	58.434 ppb
Concentration per Run 1	58.270 ppb	54.521 ppb	58.933 ppb	57.936 ppb	110.658 %	57.890 ppb	57.219 ppb	112.299 %	57.986 ppb
Concentration per Run 2	59.822 ppb	61.592 ppb	62.051 ppb	57.642 ppb	105.086 %	60.093 ppb	60.805 ppb	108.712 %	59.503 ppb
Concentration per Run 3	57.555 ppb	57.381 ppb	59.301 ppb	58.214 ppb	109.591 %	58.218 ppb	58.937 ppb	110.357 %	57.814 ppb
Concentration RSD	2.0 %	6.1 %	2.8 %	0.5 %	2.7 %	2.0 %	3.0 %	1.6 %	1.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	59.773 ppb	110.766 %	110.304 %	59.435 ppb	58.856 ppb	111.548 %
Concentration per Run 1	59.889 ppb	111.334 %	112.724 %	57.047 ppb	57.188 ppb	113.777 %
Concentration per Run 2	60.240 ppb	110.940 %	109.337 %	59.345 ppb	58.710 ppb	111.517 %
Concentration per Run 3	59.192 ppb	110.026 %	108.850 %	61.912 ppb	60.669 ppb	109.349 %
Concentration RSD	0.9 %	0.6 %	1.9 %	4.1 %	3.0 %	2.0 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	8	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	120/12000 Cal	Rack	0		
Analysis started at:	12/3/2024 7:02:24 AM	Vial	6		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	106.282 %	117.789 %	120.457 ppb	11,995.681 ppb	12,010.072 ppb	121.454 ppb	11,973.067 ppb	12,097.757 ppb	105.511 %
Concentration per Run 1	101.938 %	116.835 %	121.657 ppb	12,133.129 ppb	12,006.586 ppb	122.091 ppb	12,054.382 ppb	11,825.498 ppb	103.459 %
Concentration per Run 2	107.728 %	118.182 %	119.257 ppb	11,363.624 ppb	11,940.287 ppb	121.251 ppb	12,335.024 ppb	12,189.272 ppb	106.151 %
Concentration per Run 3	109.180 %	118.351 %	120.456 ppb	12,490.290 ppb	12,083.344 ppb	121.020 ppb	11,529.797 ppb	12,278.500 ppb	106.924 %
Concentration RSD	3.6 %	0.7 %	1.0 %	4.8 %	0.6 %	0.5 %	3.4 %	2.0 %	1.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	120.779 ppb	120.289 ppb	120.021 ppb	12,096.115 ppb	120.460 ppb	120.049 ppb	120.161 ppb	120.236 ppb	110.009 %
Concentration per Run 1	116.474 ppb	115.939 ppb	117.830 ppb	11,970.698 ppb	116.239 ppb	119.061 ppb	118.071 ppb	118.586 ppb	112.989 %
Concentration per Run 2	118.771 ppb	119.839 ppb	123.436 ppb	12,159.258 ppb	124.667 ppb	118.443 ppb	120.642 ppb	120.769 ppb	107.761 %
Concentration per Run 3	127.091 ppb	125.090 ppb	118.797 ppb	12,158.389 ppb	120.473 ppb	122.642 ppb	121.769 ppb	121.353 ppb	109.277 %
Concentration RSD	4.6 %	3.8 %	2.5 %	0.9 %	3.5 %	1.9 %	1.6 %	1.2 %	2.4 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	120.791 ppb	121.084 ppb	119.968 ppb	121.074 ppb	109.504 %	120.643 ppb	120.509 ppb	110.297 %	120.805 ppb
Concentration per Run 1	118.313 ppb	116.849 ppb	116.190 ppb	115.237 ppb	115.739 %	117.864 ppb	116.108 ppb	114.052 %	117.033 ppb
Concentration per Run 2	122.843 ppb	124.326 ppb	120.828 ppb	124.550 ppb	107.992 %	121.186 ppb	123.194 ppb	106.988 %	123.906 ppb
Concentration per Run 3	121.218 ppb	122.076 ppb	122.887 ppb	123.434 ppb	104.781 %	122.880 ppb	122.226 ppb	109.851 %	121.477 ppb
Concentration RSD	1.9 %	3.2 %	2.9 %	4.2 %	5.1 %	2.1 %	3.2 %	3.2 %	2.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	120.142 ppb	111.645 %	112.452 %	120.312 ppb	120.586 ppb	112.599 %
Concentration per Run 1	113.771 ppb	116.074 %	117.207 %	113.888 ppb	114.809 ppb	116.999 %
Concentration per Run 2	122.390 ppb	109.737 %	109.138 %	125.604 ppb	124.155 ppb	109.395 %
Concentration per Run 3	124.263 ppb	109.125 %	111.013 %	121.445 ppb	122.796 ppb	111.402 %
Concentration RSD	4.7 %	3.4 %	3.8 %	4.9 %	4.2 %	3.5 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	9	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	1/100 Cal	Rack	0		
Analysis started at:	12/3/2024 7:07:58 AM	Vial	3		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	107.604 %	117.228 %	1.053 ppb	78.431 ppb	102.901 ppb	1.067 ppb	103.585 ppb	109.031 ppb	101.882 %
Concentration per Run 1	103.051 %	119.866 %	1.043 ppb	72.238 ppb	99.295 ppb	0.806 ppb	84.461 ppb	112.934 ppb	101.619 %
Concentration per Run 2	109.674 %	117.340 %	1.057 ppb	80.023 ppb	99.504 ppb	0.756 ppb	111.316 ppb	82.034 ppb	103.098 %
Concentration per Run 3	110.085 %	114.478 %	1.058 ppb	83.030 ppb	109.904 ppb	1.639 ppb	114.977 ppb	132.126 ppb	100.929 %
Concentration RSD	3.7 %	2.3 %	0.8 %	7.1 %	5.9 %	46.5 %	16.1 %	23.2 %	1.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.509 ppb	0.977 ppb	1.058 ppb	113.297 ppb	0.967 ppb	1.023 ppb	1.036 ppb	1.219 ppb	106.462 %
Concentration per Run 1	0.408 ppb	0.881 ppb	0.990 ppb	120.917 ppb	0.976 ppb	0.917 ppb	1.075 ppb	1.147 ppb	107.074 %
Concentration per Run 2	0.479 ppb	1.001 ppb	1.032 ppb	102.816 ppb	0.948 ppb	1.145 ppb	0.908 ppb	1.160 ppb	104.235 %
Concentration per Run 3	0.640 ppb	1.050 ppb	1.152 ppb	116.160 ppb	0.976 ppb	1.007 ppb	1.125 ppb	1.349 ppb	108.078 %
Concentration RSD	23.3 %	8.9 %	8.0 %	8.3 %	1.7 %	11.2 %	10.9 %	9.3 %	1.9 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	1.055 ppb	1.088 ppb	0.997 ppb	1.387 ppb	110.221 %	1.004 ppb	1.013 ppb	108.737 %	1.101 ppb
Concentration per Run 1	0.942 ppb	0.927 ppb	0.985 ppb	1.190 ppb	112.081 %	0.992 ppb	0.982 ppb	107.630 %	1.046 ppb
Concentration per Run 2	1.022 ppb	1.245 ppb	1.008 ppb	1.295 ppb	109.933 %	1.032 ppb	1.014 ppb	110.730 %	1.116 ppb
Concentration per Run 3	1.200 ppb	1.093 ppb	0.999 ppb	1.676 ppb	108.648 %	0.987 ppb	1.042 ppb	107.853 %	1.139 ppb
Concentration RSD	12.5 %	14.6 %	1.2 %	18.4 %	1.6 %	2.5 %	3.0 %	1.6 %	4.4 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	1.034 ppb	113.222 %	110.657 %	1.188 ppb	1.041 ppb	114.126 %
Concentration per Run 1	0.999 ppb	115.356 %	112.269 %	1.148 ppb	1.053 ppb	116.303 %
Concentration per Run 2	1.130 ppb	111.844 %	109.063 %	1.212 ppb	1.033 ppb	112.112 %
Concentration per Run 3	0.972 ppb	112.466 %	110.639 %	1.204 ppb	1.037 ppb	113.962 %
Concentration RSD	8.2 %	1.7 %	1.4 %	2.9 %	1.1 %	1.8 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	10	User name	ALPHALAB\a2-icpmsq2	Comment	Sr Inteference Check
Analysis label:	Sr 200ppb	Rack	4		
Analysis started at:	12/3/2024 7:13:05 AM	Vial	55		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	108.497 %	114.703 %	0.007 ppb	-15.233 ppb	1.640 ppb	0.146 ppb	-1.545 ppb	-5.064 ppb	101.065 %
Concentration per Run 1	105.066 %	119.866 %	0.007 ppb	-21.019 ppb	1.669 ppb	0.237 ppb	-5.380 ppb	102.590 ppb	98.221 %
Concentration per Run 2	109.717 %	108.418 %	0.007 ppb	-7.878 ppb	1.910 ppb	0.049 ppb	-1.327 ppb	-119.648 ppb	102.036 %
Concentration per Run 3	110.708 %	115.825 %	0.005 ppb	-16.802 ppb	1.341 ppb	0.154 ppb	2.072 ppb	1.865 ppb	102.939 %
Concentration RSD	2.8 %	5.1 %	15.3 %	44.0 %	17.4 %	64.3 %	241.5 %	2,197.3 %	2.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.442 ppb	-0.043 ppb	0.060 ppb	2.660 ppb	0.009 ppb	-0.027 ppb	0.055 ppb	0.439 ppb	109.751 %
Concentration per Run 1	-0.424 ppb	-0.067 ppb	0.034 ppb	2.259 ppb	0.008 ppb	-0.020 ppb	0.029 ppb	0.370 ppb	108.843 %
Concentration per Run 2	-0.476 ppb	-0.005 ppb	0.069 ppb	2.982 ppb	0.012 ppb	-0.038 ppb	0.068 ppb	0.526 ppb	107.474 %
Concentration per Run 3	-0.426 ppb	-0.056 ppb	0.078 ppb	2.739 ppb	0.008 ppb	-0.022 ppb	0.069 ppb	0.422 ppb	112.936 %
Concentration RSD	6.6 %	77.5 %	38.2 %	13.8 %	24.6 %	38.2 %	41.4 %	18.0 %	2.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.019 ppb	0.040 ppb	192.217 ppb	0.102 ppb	110.959 %	0.003 ppb	0.006 ppb	109.681 %	0.014 ppb
Concentration per Run 1	0.038 ppb	-0.010 ppb	190.666 ppb	0.058 ppb	115.276 %	0.001 ppb	0.000 ppb	115.572 %	0.014 ppb
Concentration per Run 2	0.058 ppb	0.090 ppb	196.208 ppb	0.137 ppb	107.685 %	0.005 ppb	0.010 ppb	108.559 %	0.012 ppb
Concentration per Run 3	-0.037 ppb	0.039 ppb	189.776 ppb	0.112 ppb	109.915 %	0.003 ppb	0.007 ppb	104.914 %	0.016 ppb
Concentration RSD	259.3 %	125.5 %	1.8 %	39.6 %	3.5 %	70.4 %	91.3 %	4.9 %	13.8 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.041 ppb	111.960 %	111.655 %	0.059 ppb	0.007 ppb	114.043 %
Concentration per Run 1	0.056 ppb	114.764 %	114.976 %	0.044 ppb	0.006 ppb	118.358 %
Concentration per Run 2	0.033 ppb	111.470 %	110.213 %	0.068 ppb	0.008 ppb	111.689 %
Concentration per Run 3	0.035 ppb	109.647 %	109.775 %	0.067 ppb	0.006 ppb	112.081 %
Concentration RSD	30.8 %	2.3 %	2.6 %	22.9 %	15.6 %	3.3 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index: 11
Analysis label: ICV
Analysis started at: 12/3/2024 7:17:37 AM
User name ALPHALAB\a2-icpmsq2
Rack 0
Vial 7
Comment ICV

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	109.072 %	118.519 %	50.716 ppb	4,996.226 ppb	4,988.412 ppb	51.554 ppb	4,909.971 ppb	5,109.176 ppb	102.856 %
Concentration per Run 1	102.525 %	113.805 %	51.097 ppb	5,162.262 ppb	5,064.520 ppb	53.484 ppb	5,115.019 ppb	5,380.848 ppb	103.584 %
Concentration per Run 2	111.132 %	117.509 %	50.051 ppb	5,000.255 ppb	5,008.072 ppb	51.611 ppb	4,821.562 ppb	5,037.067 ppb	102.341 %
Concentration per Run 3	113.560 %	124.243 %	51.001 ppb	4,826.161 ppb	4,892.643 ppb	49.568 ppb	4,793.334 ppb	4,909.612 ppb	102.642 %
Recovery Percentage 1			101.433 %	99.925 %	99.768 %	103.108 %	98.199 %	102.184 %	
Concentration RSD	5.3 %	4.5 %	1.1 %	3.4 %	1.8 %	3.8 %	3.6 %	4.8 %	0.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	50.687 ppb	50.623 ppb	52.437 ppb	5,071.545 ppb	51.024 ppb	50.459 ppb	51.657 ppb	54.202 ppb	109.683 %
Concentration per Run 1	51.681 ppb	51.147 ppb	50.828 ppb	5,051.567 ppb	51.282 ppb	50.804 ppb	52.094 ppb	54.456 ppb	109.291 %
Concentration per Run 2	50.014 ppb	50.052 ppb	53.613 ppb	5,102.597 ppb	52.063 ppb	51.035 ppb	52.859 ppb	55.649 ppb	109.028 %
Concentration per Run 3	50.367 ppb	50.672 ppb	52.871 ppb	5,060.469 ppb	49.727 ppb	49.537 ppb	50.018 ppb	52.501 ppb	110.731 %
Recovery Percentage 1	101.374 %	101.247 %	104.875 %	101.431 %	102.048 %	100.918 %	103.314 %	108.404 %	
Concentration RSD	1.7 %	1.1 %	2.8 %	0.5 %	2.3 %	1.6 %	2.8 %	2.9 %	0.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	50.413 ppb	50.246 ppb	50.176 ppb	50.168 ppb	110.051 %	52.450 ppb	50.444 ppb	110.608 %	50.217 ppb
Concentration per Run 1	51.134 ppb	49.453 ppb	49.814 ppb	50.119 ppb	114.225 %	51.780 ppb	48.684 ppb	113.398 %	49.068 ppb
Concentration per Run 2	50.395 ppb	52.753 ppb	50.057 ppb	50.767 ppb	110.298 %	52.400 ppb	51.226 ppb	108.038 %	50.716 ppb
Concentration per Run 3	49.709 ppb	48.534 ppb	50.656 ppb	49.619 ppb	105.629 %	53.169 ppb	51.421 ppb	110.389 %	50.869 ppb
Recovery Percentage 1	100.825 %	100.493 %	100.351 %	100.337 %		104.899 %	100.888 %		100.435 %
Concentration RSD	1.4 %	4.4 %	0.9 %	1.1 %	3.9 %	1.3 %	3.0 %	2.4 %	2.0 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	50.429 ppb	113.058 %	112.168 %	50.283 ppb	50.543 ppb	114.001 %
Concentration per Run 1	48.673 ppb	115.116 %	115.481 %	49.075 ppb	49.529 ppb	116.057 %
Concentration per Run 2	51.300 ppb	114.274 %	110.007 %	49.795 ppb	50.831 ppb	112.174 %
Concentration per Run 3	51.315 ppb	109.783 %	111.017 %	51.979 ppb	51.268 ppb	113.773 %
Recovery Percentage 1	100.859 %			100.566 %	101.085 %	
Concentration RSD	3.0 %	2.5 %	2.6 %	3.0 %	1.8 %	1.7 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	12	User name	ALPHALAB\a2-icpmsq2	Comment	ICB
Analysis label:	ICB	Rack	0		
Analysis started at:	12/3/2024 7:22:07 AM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	109.773 %	112.739 %	0.020 ppb	-26.475 ppb	-0.118 ppb	0.344 ppb	-14.441 ppb	-6.774 ppb	101.144 %
Concentration per Run 1	104.764 %	118.856 %	0.018 ppb	-34.489 ppb	-1.113 ppb	0.348 ppb	-19.930 ppb	-0.991 ppb	100.400 %
Concentration per Run 2	110.940 %	107.744 %	0.030 ppb	-20.137 ppb	0.099 ppb	0.096 ppb	-12.884 ppb	-17.184 ppb	101.521 %
Concentration per Run 3	113.616 %	111.616 %	0.012 ppb	-24.798 ppb	0.660 ppb	0.589 ppb	-10.507 ppb	-2.148 ppb	101.512 %
Recovery Percentage 1			4.011 %	-5.295 %	-0.169 %	3.441 %	-14.441 %	-6.774 %	
Concentration RSD	4.1 %	5.0 %	44.3 %	27.7 %	768.0 %	71.7 %	33.9 %	133.4 %	0.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.426 ppb	-0.036 ppb	0.004 ppb	4.442 ppb	0.000 ppb	-0.016 ppb	0.022 ppb	0.302 ppb	110.215 %
Concentration per Run 1	-0.483 ppb	-0.020 ppb	-0.012 ppb	5.807 ppb	-0.001 ppb	0.021 ppb	-0.008 ppb	0.324 ppb	111.116 %
Concentration per Run 2	-0.479 ppb	-0.050 ppb	0.005 ppb	2.304 ppb	-0.007 ppb	-0.041 ppb	0.029 ppb	0.330 ppb	111.210 %
Concentration per Run 3	-0.315 ppb	-0.039 ppb	0.021 ppb	5.214 ppb	0.008 ppb	-0.029 ppb	0.045 ppb	0.253 ppb	108.319 %
Recovery Percentage 1	-8.511 %	-3.608 %	0.450 %	8.883 %	0.023 %	-0.804 %	2.182 %	6.049 %	
Concentration RSD	22.5 %	42.6 %	365.3 %	42.2 %	6,888.7 %	203.6 %	124.1 %	14.1 %	1.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	-0.007 ppb	0.234 ppb	0.007 ppb	0.392 ppb	110.130 %	0.006 ppb	0.003 ppb	107.631 %	0.067 ppb
Concentration per Run 1	-0.057 ppb	0.362 ppb	0.007 ppb	0.235 ppb	113.780 %	0.006 ppb	0.003 ppb	107.044 %	0.043 ppb
Concentration per Run 2	-0.005 ppb	0.165 ppb	0.008 ppb	0.466 ppb	109.860 %	0.002 ppb	0.007 ppb	103.760 %	0.070 ppb
Concentration per Run 3	0.040 ppb	0.175 ppb	0.006 ppb	0.476 ppb	106.752 %	0.009 ppb	0.000 ppb	112.089 %	0.089 ppb
Recovery Percentage 1	-1.408 %	4.679 %	0.071 %	19.612 %		1.418 %	1.728 %		1.677 %
Concentration RSD	687.2 %	47.6 %	10.3 %	34.8 %	3.2 %	61.2 %	101.1 %	3.9 %	34.5 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.007 ppb	113.487 %	110.653 %	0.189 ppb	0.012 ppb	111.857 %
Concentration per Run 1	-0.019 ppb	115.745 %	114.616 %	0.186 ppb	0.011 ppb	113.439 %
Concentration per Run 2	0.035 ppb	109.783 %	107.778 %	0.208 ppb	0.013 ppb	112.433 %
Concentration per Run 3	0.006 ppb	114.933 %	109.566 %	0.173 ppb	0.012 ppb	109.699 %
Recovery Percentage 1	1.465 %			18.925 %	1.177 %	
Concentration RSD	367.6 %	2.8 %	3.2 %	9.3 %	8.7 %	1.7 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	13	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	ICSA	Rack	4		
Analysis started at:	12/3/2024 7:28:46 AM	Vial	53		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	77.425 %	100.898 %	0.026 ppb	260,283.423 ppb	95,027.936 ppb	95,923.619 ppb	92,602.726 ppb	279,901.564 ppb	74.611 %
Concentration per Run 1	76.603 %	104.209 %	0.035 ppb	252,576.654 ppb	95,674.151 ppb	93,358.091 ppb	93,182.641 ppb	275,266.545 ppb	73.296 %
Concentration per Run 2	78.021 %	99.832 %	0.019 ppb	259,612.046 ppb	93,135.872 ppb	95,693.955 ppb	96,072.311 ppb	281,448.725 ppb	75.258 %
Concentration per Run 3	77.651 %	98.653 %	0.024 ppb	268,661.568 ppb	96,273.785 ppb	98,718.812 ppb	88,553.225 ppb	282,989.421 ppb	75.281 %
Recovery Percentage 1			2.617 %	104.113 %	95.028 %	95.924 %	92.603 %	93.301 %	
Concentration RSD	0.9 %	2.9 %	30.8 %	3.1 %	1.8 %	2.8 %	4.1 %	1.5 %	1.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.397 ppb	1.510 ppb	4.347 ppb	235,073.825 ppb	2.043 ppb	2.743 ppb	0.950 ppb	3.435 ppb	108.055 %
Concentration per Run 1	-0.356 ppb	1.415 ppb	4.324 ppb	236,338.259 ppb	2.054 ppb	2.666 ppb	1.017 ppb	3.617 ppb	110.179 %
Concentration per Run 2	-0.470 ppb	1.528 ppb	4.565 ppb	244,618.331 ppb	2.033 ppb	3.064 ppb	0.992 ppb	3.441 ppb	105.051 %
Concentration per Run 3	-0.365 ppb	1.589 ppb	4.152 ppb	224,264.885 ppb	2.040 ppb	2.499 ppb	0.842 ppb	3.248 ppb	108.933 %
Recovery Percentage 1	-7.945 %	45.772 %	76.257 %	94.030 %	71.172 %	44.966 %	115.899 %	30.135 %	
Concentration RSD	15.9 %	5.9 %	4.8 %	4.4 %	0.5 %	10.6 %	10.0 %	5.4 %	2.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.526 ppb	3.361 ppb	2.424 ppb	2,131.463 ppb	94.898 %	0.019 ppb	0.525 ppb	104.009 %	0.185 ppb
Concentration per Run 1	0.615 ppb	3.100 ppb	2.361 ppb	2,092.204 ppb	97.544 %	0.012 ppb	0.476 ppb	108.519 %	0.182 ppb
Concentration per Run 2	0.500 ppb	3.527 ppb	2.473 ppb	2,152.090 ppb	91.375 %	0.020 ppb	0.509 ppb	104.656 %	0.185 ppb
Concentration per Run 3	0.465 ppb	3.454 ppb	2.439 ppb	2,150.093 ppb	95.773 %	0.024 ppb	0.589 ppb	98.852 %	0.186 ppb
Recovery Percentage 1	32.299 %	26.051 %	484.786 %	106.573 %		2.318 %	131.142 %		2.307 %
Concentration RSD	14.9 %	6.8 %	2.4 %	1.6 %	3.3 %	32.4 %	11.1 %	4.7 %	1.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	1.311 ppb	105.281 %	101.358 %	0.052 ppb	1.539 ppb	98.793 %
Concentration per Run 1	1.181 ppb	107.132 %	104.218 %	0.037 ppb	1.503 ppb	103.198 %
Concentration per Run 2	1.188 ppb	102.454 %	99.837 %	0.058 ppb	1.566 ppb	97.213 %
Concentration per Run 3	1.565 ppb	106.257 %	100.019 %	0.062 ppb	1.548 ppb	95.968 %
Recovery Percentage 1	69.743 %			2.619 %	49.645 %	
Concentration RSD	16.7 %	2.4 %	2.4 %	26.4 %	2.1 %	3.9 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index: 14
Analysis label: LDR
Analysis started at: 12/3/2024 7:33:17 AM
User name ALPHALAB\a2-icpmsq2
Rack 4
Vial 1
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	91.563 %	108.025 %	0.006 ppb	49.368 ppb	3.998 ppb	4.810 ppb	28.275 ppb	9.141 ppb	89.082 %
Concentration per Run 1	89.252 %	106.734 %	0.008 ppb	59.088 ppb	5.209 ppb	5.573 ppb	35.831 ppb	9.944 ppb	88.232 %
Concentration per Run 2	92.187 %	110.101 %	0.004 ppb	44.430 ppb	3.372 ppb	4.227 ppb	22.515 ppb	22.695 ppb	89.602 %
Concentration per Run 3	93.249 %	107.239 %	0.007 ppb	44.588 ppb	3.414 ppb	4.631 ppb	26.481 ppb	-5.217 ppb	89.411 %
Recovery Percentage 1									
Concentration RSD	2.3 %	1.7 %	27.5 %	17.1 %	26.2 %	14.4 %	24.2 %	152.9 %	0.8 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	925.491 ppb	964.981 ppb	9,083.550 ppb	32.988 ppb	0.016 ppb	9,816.044 ppb	9,961.563 ppb	9,467.192 ppb	97.937 %
Concentration per Run 1	930.436 ppb	984.825 ppb	9,192.936 ppb	32.478 ppb	0.021 ppb	9,932.172 ppb	10,267.736 ppb	9,604.056 ppb	93.933 %
Concentration per Run 2	930.791 ppb	953.733 ppb	9,074.874 ppb	31.844 ppb	0.010 ppb	9,703.260 ppb	9,946.986 ppb	9,515.339 ppb	97.750 %
Concentration per Run 3	915.244 ppb	956.385 ppb	8,982.839 ppb	34.643 ppb	0.016 ppb	9,812.698 ppb	9,669.966 ppb	9,282.180 ppb	102.130 %
Recovery Percentage 1	92.549 %	96.498 %	90.835 %			98.160 %	99.616 %	94.672 %	
Concentration RSD	1.0 %	1.8 %	1.2 %	4.4 %	35.6 %	1.2 %	3.0 %	1.8 %	4.2 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	904.370 ppb	2.342 ppb	0.240 ppb	4.413 ppb	101.381 %	0.114 ppb	0.029 ppb	97.220 %	0.029 ppb
Concentration per Run 1	908.778 ppb	2.361 ppb	0.245 ppb	3.449 ppb	105.832 %	0.106 ppb	0.022 ppb	98.870 %	0.025 ppb
Concentration per Run 2	921.059 ppb	2.292 ppb	0.222 ppb	4.441 ppb	98.003 %	0.107 ppb	0.031 ppb	95.258 %	0.024 ppb
Concentration per Run 3	883.273 ppb	2.374 ppb	0.254 ppb	5.350 ppb	100.309 %	0.129 ppb	0.034 ppb	97.533 %	0.037 ppb
Recovery Percentage 1	90.437 %								
Concentration RSD	2.1 %	1.9 %	6.9 %	21.5 %	4.0 %	11.3 %	21.4 %	1.9 %	26.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	9,782.000 ppb	99.911 %	97.335 %	0.057 ppb	9,928.163 ppb	100.110 %
Concentration per Run 1	10,021.895 ppb	99.184 %	97.443 %	0.057 ppb	9,801.199 ppb	100.374 %
Concentration per Run 2	9,217.024 ppb	100.550 %	98.028 %	0.056 ppb	10,086.648 ppb	98.549 %
Concentration per Run 3	10,107.080 ppb	100.001 %	96.534 %	0.057 ppb	9,896.640 ppb	101.408 %
Recovery Percentage 1	97.820 %				99.282 %	
Concentration RSD	5.0 %	0.7 %	0.8 %	1.1 %	1.5 %	1.4 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	15	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	Rinse	Rack	0		
Analysis started at:	12/3/2024 7:37:47 AM	Vial	1		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	100.788 %	110.382 %	0.017 ppb	39.912 ppb	5.670 ppb	10.397 ppb	25.473 ppb	19.955 ppb	102.010 %
Concentration per Run 1	96.880 %	118.856 %	0.024 ppb	23.922 ppb	5.366 ppb	8.545 ppb	13.801 ppb	2.393 ppb	100.133 %
Concentration per Run 2	102.505 %	103.704 %	0.015 ppb	44.003 ppb	4.834 ppb	9.710 ppb	26.792 ppb	25.210 ppb	101.012 %
Concentration per Run 3	102.979 %	108.586 %	0.014 ppb	51.809 ppb	6.812 ppb	12.936 ppb	35.826 ppb	32.262 ppb	104.884 %
Concentration RSD	3.4 %	7.0 %	31.4 %	36.0 %	18.0 %	21.9 %	43.5 %	78.2 %	2.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.406 ppb	0.155 ppb	0.942 ppb	77.426 ppb	0.014 ppb	3.504 ppb	2.104 ppb	2.973 ppb	100.790 %
Concentration per Run 1	-0.520 ppb	0.138 ppb	0.799 ppb	70.803 ppb	0.025 ppb	3.393 ppb	2.014 ppb	2.650 ppb	100.267 %
Concentration per Run 2	-0.274 ppb	0.183 ppb	0.874 ppb	80.483 ppb	0.013 ppb	3.512 ppb	1.949 ppb	2.920 ppb	99.503 %
Concentration per Run 3	-0.425 ppb	0.144 ppb	1.152 ppb	80.993 ppb	0.003 ppb	3.609 ppb	2.349 ppb	3.350 ppb	102.601 %
Concentration RSD	30.6 %	15.9 %	19.8 %	7.4 %	81.0 %	3.1 %	10.2 %	11.9 %	1.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.586 ppb	0.055 ppb	0.012 ppb	0.951 ppb	101.840 %	0.036 ppb	0.001 ppb	97.283 %	0.017 ppb
Concentration per Run 1	0.670 ppb	0.026 ppb	0.016 ppb	0.542 ppb	104.717 %	0.035 ppb	0.000 ppb	99.722 %	0.009 ppb
Concentration per Run 2	0.637 ppb	-0.051 ppb	0.003 ppb	0.862 ppb	100.671 %	0.035 ppb	0.000 ppb	96.206 %	0.018 ppb
Concentration per Run 3	0.450 ppb	0.191 ppb	0.017 ppb	1.449 ppb	100.133 %	0.037 ppb	0.004 ppb	95.921 %	0.026 ppb
Concentration RSD	20.2 %	223.3 %	62.7 %	48.3 %	2.5 %	2.4 %	173.2 %	2.2 %	48.5 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.475 ppb	99.889 %	99.173 %	0.019 ppb	2.074 ppb	101.436 %
Concentration per Run 1	0.293 ppb	102.762 %	101.038 %	0.006 ppb	2.041 ppb	104.116 %
Concentration per Run 2	0.231 ppb	99.287 %	97.918 %	0.025 ppb	1.691 ppb	99.055 %
Concentration per Run 3	0.902 ppb	97.617 %	98.563 %	0.025 ppb	2.490 ppb	101.135 %
Concentration RSD	78.0 %	2.6 %	1.7 %	57.8 %	19.3 %	2.5 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	16	User name	ALPHALAB\a2-icpmsq2	Comment	CCV/MCCV
Analysis label:	CCV	Rack	0		
Analysis started at:	12/3/2024 7:42:14 AM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	98.136 %	117.060 %	62.968 ppb	5,957.011 ppb	5,879.006 ppb	56.114 ppb	5,802.825 ppb	5,773.221 ppb	95.802 %
Concentration per Run 1	93.545 %	122.559 %	63.991 ppb	5,588.736 ppb	5,503.076 ppb	55.489 ppb	5,779.047 ppb	5,622.254 ppb	93.746 %
Concentration per Run 2	99.410 %	115.657 %	61.914 ppb	6,116.184 ppb	6,040.797 ppb	56.094 ppb	5,686.175 ppb	5,655.660 ppb	97.142 %
Concentration per Run 3	101.453 %	112.963 %	62.998 ppb	6,166.114 ppb	6,093.145 ppb	56.758 ppb	5,943.252 ppb	6,041.749 ppb	96.517 %
Recovery Percentage 1			104.946 %	99.284 %	97.983 %	93.523 %	96.714 %	96.220 %	
Concentration RSD	4.2 %	4.2 %	1.7 %	5.4 %	5.6 %	1.1 %	2.2 %	4.0 %	1.9 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	58.535 ppb	60.642 ppb	60.871 ppb	6,065.390 ppb	62.390 ppb	62.611 ppb	63.040 ppb	62.574 ppb	101.855 %
Concentration per Run 1	54.652 ppb	56.785 ppb	60.817 ppb	5,877.408 ppb	62.033 ppb	60.043 ppb	61.531 ppb	59.520 ppb	103.989 %
Concentration per Run 2	60.392 ppb	61.788 ppb	61.022 ppb	6,188.382 ppb	63.499 ppb	65.667 ppb	65.361 ppb	65.987 ppb	100.338 %
Concentration per Run 3	60.560 ppb	63.354 ppb	60.773 ppb	6,130.381 ppb	61.637 ppb	62.124 ppb	62.229 ppb	62.215 ppb	101.238 %
Recovery Percentage 1	97.558 %	101.071 %	101.451 %	101.090 %	103.983 %	104.352 %	105.067 %	104.290 %	
Concentration RSD	5.7 %	5.7 %	0.2 %	2.7 %	1.6 %	4.5 %	3.2 %	5.2 %	1.9 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	60.716 ppb	56.720 ppb	60.036 ppb	61.404 ppb	101.326 %	62.186 ppb	62.309 ppb	99.554 %	61.536 ppb
Concentration per Run 1	60.283 ppb	53.891 ppb	58.798 ppb	60.166 ppb	104.613 %	60.764 ppb	61.816 ppb	100.133 %	61.254 ppb
Concentration per Run 2	61.156 ppb	58.188 ppb	60.630 ppb	62.085 ppb	99.686 %	61.713 ppb	61.963 ppb	99.368 %	61.673 ppb
Concentration per Run 3	60.710 ppb	58.081 ppb	60.679 ppb	61.961 ppb	99.678 %	64.082 ppb	63.149 ppb	99.162 %	61.681 ppb
Recovery Percentage 1	101.194 %	94.534 %	100.059 %	102.340 %		103.644 %	103.849 %		102.560 %
Concentration RSD	0.7 %	4.3 %	1.8 %	1.7 %	2.8 %	2.7 %	1.2 %	0.5 %	0.4 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	60.769 ppb	104.360 %	101.665 %	62.292 ppb	62.750 ppb	102.010 %
Concentration per Run 1	59.858 ppb	107.228 %	104.106 %	61.333 ppb	61.783 ppb	103.617 %
Concentration per Run 2	59.796 ppb	102.769 %	98.174 %	62.516 ppb	63.597 ppb	100.620 %
Concentration per Run 3	62.652 ppb	103.084 %	102.715 %	63.029 ppb	62.871 ppb	101.795 %
Recovery Percentage 1	101.281 %			103.821 %	104.584 %	
Concentration RSD	2.7 %	2.4 %	3.1 %	1.4 %	1.5 %	1.5 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	17	User name	ALPHALAB\a2-icpmsq2	Comment	CCB
Analysis label:	CCB	Rack	0		
Analysis started at:	12/3/2024 7:46:45 AM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	97.755 %	116.106 %	0.095 ppb	-3.567 ppb	0.138 ppb	0.196 ppb	-0.022 ppb	-5.582 ppb	95.506 %
Concentration per Run 1	93.206 %	116.330 %	0.132 ppb	-3.977 ppb	0.265 ppb	0.012 ppb	-0.289 ppb	-10.176 ppb	94.760 %
Concentration per Run 2	100.347 %	110.943 %	0.100 ppb	6.059 ppb	0.129 ppb	0.404 ppb	5.263 ppb	-0.276 ppb	96.356 %
Concentration per Run 3	99.713 %	121.044 %	0.055 ppb	-12.782 ppb	0.021 ppb	0.170 ppb	-5.040 ppb	-6.294 ppb	95.402 %
Recovery Percentage 1			19.078 %	-0.713 %	0.198 %	1.956 %	-0.022 %	-5.582 %	
Concentration RSD	4.0 %	4.4 %	40.7 %	264.3 %	88.2 %	100.9 %	23,443.7 %	89.4 %	0.8 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.526 ppb	-0.014 ppb	0.077 ppb	6.763 ppb	-0.001 ppb	0.023 ppb	0.542 ppb	0.280 ppb	96.074 %
Concentration per Run 1	-0.470 ppb	-0.023 ppb	0.010 ppb	6.368 ppb	-0.007 ppb	0.016 ppb	0.564 ppb	0.335 ppb	96.229 %
Concentration per Run 2	-0.514 ppb	-0.001 ppb	0.099 ppb	5.362 ppb	-0.003 ppb	-0.004 ppb	0.567 ppb	0.271 ppb	93.608 %
Concentration per Run 3	-0.596 ppb	-0.018 ppb	0.122 ppb	8.558 ppb	0.006 ppb	0.058 ppb	0.494 ppb	0.235 ppb	98.384 %
Recovery Percentage 1	-10.529 %	-1.407 %	7.673 %	13.525 %	-0.242 %	1.156 %	54.152 %	5.601 %	
Concentration RSD	12.2 %	82.6 %	77.1 %	24.2 %	549.7 %	138.1 %	7.6 %	18.1 %	2.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.153 ppb	0.188 ppb	0.010 ppb	0.461 ppb	100.751 %	0.011 ppb	0.005 ppb	95.900 %	0.041 ppb
Concentration per Run 1	0.170 ppb	0.266 ppb	0.011 ppb	0.322 ppb	101.606 %	0.010 ppb	0.004 ppb	94.819 %	0.035 ppb
Concentration per Run 2	0.120 ppb	0.095 ppb	-0.001 ppb	0.420 ppb	98.831 %	0.013 ppb	0.004 ppb	95.202 %	0.038 ppb
Concentration per Run 3	0.169 ppb	0.203 ppb	0.020 ppb	0.641 ppb	101.817 %	0.010 ppb	0.007 ppb	97.680 %	0.050 ppb
Recovery Percentage 1	30.584 %	3.759 %	0.103 %	23.056 %		2.732 %	2.516 %		1.023 %
Concentration RSD	18.7 %	46.0 %	101.3 %	35.5 %	1.7 %	13.3 %	41.8 %	1.6 %	19.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.039 ppb	101.528 %	99.288 %	0.217 ppb	0.291 ppb	99.717 %
Concentration per Run 1	0.068 ppb	102.343 %	100.864 %	0.203 ppb	0.296 ppb	102.367 %
Concentration per Run 2	0.025 ppb	100.832 %	98.444 %	0.245 ppb	0.307 ppb	98.242 %
Concentration per Run 3	0.024 ppb	101.409 %	98.556 %	0.204 ppb	0.270 ppb	98.541 %
Recovery Percentage 1	7.840 %			21.723 %	29.092 %	
Concentration RSD	64.6 %	0.8 %	1.4 %	11.2 %	6.5 %	2.3 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	18	User name	ALPHALAB\a2-icpmsq2	Comment	FB
Analysis label:	I2469249-03 6020SL	Rack	1		
Analysis started at:	12/3/2024 7:57:42 AM	Vial	6		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	103.799 %	116.218 %	0.004 ppb	-11.258 ppb	1.095 ppb	2.638 ppb	0.309 ppb	19.959 ppb	98.443 %
Concentration per Run 1	100.318 %	119.529 %	0.006 ppb	-21.500 ppb	1.361 ppb	2.242 ppb	2.336 ppb	14.875 ppb	95.326 %
Concentration per Run 2	104.060 %	116.330 %	0.004 ppb	-10.231 ppb	1.428 ppb	2.990 ppb	-6.451 ppb	28.936 ppb	98.070 %
Concentration per Run 3	107.018 %	112.795 %	0.004 ppb	-2.042 ppb	0.495 ppb	2.680 ppb	5.043 ppb	16.067 ppb	101.933 %
Concentration RSD	3.2 %	2.9 %	32.6 %	86.8 %	47.6 %	14.3 %	1,942.3 %	39.1 %	3.4 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.497 ppb	0.010 ppb	0.349 ppb	12.543 ppb	0.001 ppb	0.017 ppb	0.704 ppb	0.911 ppb	98.321 %
Concentration per Run 1	-0.489 ppb	-0.001 ppb	0.413 ppb	12.122 ppb	0.006 ppb	0.000 ppb	0.789 ppb	0.821 ppb	99.333 %
Concentration per Run 2	-0.565 ppb	-0.011 ppb	0.324 ppb	11.785 ppb	-0.003 ppb	0.049 ppb	0.652 ppb	0.999 ppb	97.683 %
Concentration per Run 3	-0.438 ppb	0.042 ppb	0.310 ppb	13.722 ppb	0.000 ppb	0.003 ppb	0.670 ppb	0.913 ppb	97.948 %
Concentration RSD	12.8 %	278.0 %	16.1 %	8.3 %	556.7 %	160.8 %	10.5 %	9.7 %	0.9 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.102 ppb	-0.059 ppb	0.112 ppb	0.123 ppb	106.099 %	0.003 ppb	0.005 ppb	102.532 %	0.019 ppb
Concentration per Run 1	0.024 ppb	-0.060 ppb	0.096 ppb	0.063 ppb	109.808 %	0.004 ppb	0.003 ppb	104.745 %	0.013 ppb
Concentration per Run 2	0.096 ppb	-0.066 ppb	0.116 ppb	0.064 ppb	104.524 %	0.001 ppb	0.004 ppb	97.422 %	0.027 ppb
Concentration per Run 3	0.187 ppb	-0.051 ppb	0.123 ppb	0.241 ppb	103.966 %	0.002 ppb	0.007 ppb	105.428 %	0.018 ppb
Concentration RSD	80.3 %	13.0 %	12.7 %	83.6 %	3.0 %	54.5 %	42.2 %	4.3 %	36.5 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.193 ppb	106.203 %	106.136 %	0.030 ppb	0.116 ppb	111.216 %
Concentration per Run 1	0.102 ppb	109.096 %	108.956 %	0.019 ppb	0.114 ppb	114.181 %
Concentration per Run 2	0.236 ppb	105.191 %	103.461 %	0.033 ppb	0.128 ppb	110.354 %
Concentration per Run 3	0.241 ppb	104.323 %	105.990 %	0.038 ppb	0.107 ppb	109.114 %
Concentration RSD	40.9 %	2.4 %	2.6 %	31.8 %	9.4 %	2.4 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	19	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	I2469249-06 6020SL	Rack	1		
Analysis started at:	12/3/2024 8:02:11 AM	Vial	1		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	96.622 %	112.514 %	0.018 ppb	57,895.750 ppb	28,616.545 ppb	11.452 ppb	6,163.590 ppb	120,220.995 ppb	98.632 %
Concentration per Run 1	93.441 %	113.637 %	0.016 ppb	55,771.050 ppb	27,702.289 ppb	11.144 ppb	6,188.566 ppb	121,703.382 ppb	99.291 %
Concentration per Run 2	97.138 %	104.882 %	0.015 ppb	61,592.288 ppb	30,074.490 ppb	11.858 ppb	6,205.202 ppb	119,959.227 ppb	98.622 %
Concentration per Run 3	99.287 %	119.024 %	0.021 ppb	56,323.914 ppb	28,072.856 ppb	11.354 ppb	6,097.003 ppb	119,000.377 ppb	97.984 %
Concentration RSD	3.1 %	6.3 %	15.9 %	5.5 %	4.5 %	3.2 %	0.9 %	1.1 %	0.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.073 ppb	0.130 ppb	2,842.106 ppb	201.054 ppb	5.574 ppb	4.947 ppb	1.965 ppb	2.961 ppb	98.909 %
Concentration per Run 1	0.132 ppb	0.098 ppb	2,906.887 ppb	192.122 ppb	5.482 ppb	4.848 ppb	1.865 ppb	2.925 ppb	100.129 %
Concentration per Run 2	0.091 ppb	0.147 ppb	2,573.498 ppb	201.835 ppb	5.592 ppb	4.850 ppb	2.081 ppb	2.874 ppb	99.948 %
Concentration per Run 3	-0.004 ppb	0.146 ppb	3,045.932 ppb	209.205 ppb	5.647 ppb	5.142 ppb	1.950 ppb	3.084 ppb	96.650 %
Concentration RSD	95.9 %	21.7 %	8.5 %	4.3 %	1.5 %	3.4 %	5.5 %	3.7 %	2.0 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.422 ppb	2.005 ppb	772.012 ppb	4.104 ppb	101.671 %	0.001 ppb	0.070 ppb	103.751 %	1.331 ppb
Concentration per Run 1	0.499 ppb	1.699 ppb	748.964 ppb	4.157 ppb	105.112 %	0.001 ppb	0.070 ppb	105.899 %	1.277 ppb
Concentration per Run 2	0.403 ppb	1.346 ppb	780.085 ppb	3.977 ppb	98.770 %	0.001 ppb	0.067 ppb	99.370 %	1.324 ppb
Concentration per Run 3	0.364 ppb	2.968 ppb	786.987 ppb	4.179 ppb	101.132 %	0.000 ppb	0.074 ppb	105.984 %	1.392 ppb
Concentration RSD	16.5 %	42.5 %	2.6 %	2.7 %	3.2 %	64.6 %	5.2 %	3.7 %	4.4 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	50.904 ppb	107.345 %	107.070 %	0.023 ppb	0.333 ppb	103.176 %
Concentration per Run 1	50.048 ppb	109.386 %	109.147 %	0.012 ppb	0.337 ppb	106.843 %
Concentration per Run 2	52.318 ppb	106.965 %	105.485 %	0.028 ppb	0.326 ppb	101.499 %
Concentration per Run 3	50.346 ppb	105.685 %	106.580 %	0.030 ppb	0.335 ppb	101.185 %
Concentration RSD	2.4 %	1.8 %	1.8 %	42.9 %	1.8 %	3.1 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	20	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG2003419-7d10 6020SL	Rack	1		
Analysis started at:	12/3/2024 8:06:38 AM	Vial	2		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	101.506 %	114.422 %	5.735 ppb	6,976.933 ppb	4,000.102 ppb	248.614 ppb	1,679.115 ppb	13,074.101 ppb	99.150 %
Concentration per Run 1	97.967 %	124.580 %	5.780 ppb	6,533.581 ppb	3,726.763 ppb	231.190 ppb	1,525.745 ppb	12,031.698 ppb	96.836 %
Concentration per Run 2	102.166 %	110.775 %	5.802 ppb	7,172.622 ppb	4,135.505 ppb	257.174 ppb	1,826.722 ppb	13,483.236 ppb	101.176 %
Concentration per Run 3	104.386 %	107.913 %	5.624 ppb	7,224.594 ppb	4,138.037 ppb	257.479 ppb	1,684.878 ppb	13,707.368 ppb	99.436 %
Concentration RSD	3.2 %	7.8 %	1.7 %	5.5 %	5.9 %	6.1 %	9.0 %	7.0 %	2.2 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	50.891 ppb	20.996 ppb	360.497 ppb	138.093 ppb	55.195 ppb	55.222 ppb	28.765 ppb	55.875 ppb	100.577 %
Concentration per Run 1	46.158 ppb	20.426 ppb	353.896 ppb	131.493 ppb	53.198 ppb	53.555 ppb	28.955 ppb	55.390 ppb	101.656 %
Concentration per Run 2	52.698 ppb	21.423 ppb	369.981 ppb	141.568 ppb	58.028 ppb	57.234 ppb	29.198 ppb	56.047 ppb	97.645 %
Concentration per Run 3	53.819 ppb	21.139 ppb	357.614 ppb	141.220 ppb	54.360 ppb	54.877 ppb	28.143 ppb	56.188 ppb	102.432 %
Concentration RSD	8.1 %	2.4 %	2.3 %	4.1 %	4.6 %	3.4 %	1.9 %	0.8 %	2.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	13.390 ppb	12.144 ppb	180.776 ppb	106.136 ppb	103.356 %	5.866 ppb	5.615 ppb	101.883 %	52.739 ppb
Concentration per Run 1	13.379 ppb	10.231 ppb	179.007 ppb	105.489 ppb	104.879 %	5.657 ppb	5.488 ppb	101.989 %	52.838 ppb
Concentration per Run 2	14.086 ppb	13.118 ppb	183.224 ppb	107.209 ppb	103.294 %	6.018 ppb	5.666 ppb	103.319 %	51.778 ppb
Concentration per Run 3	12.705 ppb	13.084 ppb	180.098 ppb	105.709 ppb	101.895 %	5.922 ppb	5.690 ppb	100.340 %	53.600 ppb
Concentration RSD	5.2 %	13.6 %	1.2 %	0.9 %	1.4 %	3.2 %	2.0 %	1.5 %	1.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	220.821 ppb	105.505 %	104.293 %	12.038 ppb	54.706 ppb	106.054 %
Concentration per Run 1	219.571 ppb	106.902 %	105.096 %	11.545 ppb	52.762 ppb	110.504 %
Concentration per Run 2	217.503 ppb	104.543 %	103.945 %	12.398 ppb	56.176 ppb	102.169 %
Concentration per Run 3	225.391 ppb	105.069 %	103.837 %	12.172 ppb	55.179 ppb	105.489 %
Concentration RSD	1.9 %	1.2 %	0.7 %	3.7 %	3.2 %	4.0 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	21	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG2003419-8d10 6020SL	Rack	1		
Analysis started at:	12/3/2024 8:11:05 AM	Vial	3		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	100.915 %	114.198 %	5.306 ppb	6,744.577 ppb	3,886.548 ppb	194.927 ppb	1,590.965 ppb	12,534.160 ppb	98.582 %
Concentration per Run 1	97.363 %	116.667 %	5.357 ppb	6,554.353 ppb	3,821.019 ppb	196.101 ppb	1,599.943 ppb	12,092.311 ppb	96.811 %
Concentration per Run 2	102.700 %	111.953 %	5.202 ppb	6,992.378 ppb	3,992.697 ppb	195.730 ppb	1,626.974 ppb	13,021.268 ppb	100.122 %
Concentration per Run 3	102.681 %	113.973 %	5.358 ppb	6,687.000 ppb	3,845.927 ppb	192.949 ppb	1,545.979 ppb	12,488.900 ppb	98.813 %
Concentration RSD	3.0 %	2.1 %	1.7 %	3.3 %	2.4 %	0.9 %	2.6 %	3.7 %	1.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	49.311 ppb	20.433 ppb	347.618 ppb	149.096 ppb	53.664 ppb	53.620 ppb	27.404 ppb	52.971 ppb	100.291 %
Concentration per Run 1	46.611 ppb	19.636 ppb	340.027 ppb	129.947 ppb	53.715 ppb	54.478 ppb	27.271 ppb	52.174 ppb	99.954 %
Concentration per Run 2	49.961 ppb	20.744 ppb	358.932 ppb	154.865 ppb	54.963 ppb	55.809 ppb	29.166 ppb	54.448 ppb	98.348 %
Concentration per Run 3	51.363 ppb	20.918 ppb	343.895 ppb	162.476 ppb	52.314 ppb	50.572 ppb	25.775 ppb	52.291 ppb	102.571 %
Concentration RSD	5.0 %	3.4 %	2.9 %	11.4 %	2.5 %	5.1 %	6.2 %	2.4 %	2.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	12.457 ppb	13.101 ppb	175.034 ppb	101.614 ppb	103.099 %	5.631 ppb	5.459 ppb	103.110 %	50.336 ppb
Concentration per Run 1	12.765 ppb	11.652 ppb	172.713 ppb	100.373 ppb	106.270 %	5.380 ppb	5.346 ppb	105.199 %	49.207 ppb
Concentration per Run 2	12.239 ppb	14.364 ppb	179.600 ppb	104.537 ppb	99.365 %	5.811 ppb	5.612 ppb	101.229 %	51.663 ppb
Concentration per Run 3	12.367 ppb	13.287 ppb	172.788 ppb	99.931 ppb	103.662 %	5.702 ppb	5.420 ppb	102.903 %	50.137 ppb
Concentration RSD	2.2 %	10.4 %	2.3 %	2.5 %	3.4 %	4.0 %	2.5 %	1.9 %	2.5 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	208.765 ppb	104.727 %	104.320 %	11.957 ppb	54.004 ppb	104.970 %
Concentration per Run 1	201.992 ppb	109.524 %	107.108 %	11.494 ppb	52.862 ppb	106.213 %
Concentration per Run 2	211.999 ppb	104.095 %	101.215 %	11.884 ppb	54.588 ppb	105.416 %
Concentration per Run 3	212.305 ppb	100.561 %	104.639 %	12.493 ppb	54.564 ppb	103.282 %
Concentration RSD	2.8 %	4.3 %	2.8 %	4.2 %	1.8 %	1.4 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	22	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG2003419-9d10 6020SL	Rack	1		
Analysis started at:	12/3/2024 8:15:32 AM	Vial	4		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	99.503 %	109.764 %	51.588 ppb	10,856.918 ppb	7,994.707 ppb	50.526 ppb	5,496.138 ppb	16,673.424 ppb	98.676 %
Concentration per Run 1	96.489 %	110.438 %	52.895 ppb	10,878.663 ppb	8,097.928 ppb	50.850 ppb	5,433.931 ppb	16,119.880 ppb	95.720 %
Concentration per Run 2	99.055 %	109.933 %	51.305 ppb	10,888.781 ppb	7,941.706 ppb	50.432 ppb	5,649.882 ppb	17,204.716 ppb	100.488 %
Concentration per Run 3	102.966 %	108.923 %	50.565 ppb	10,803.312 ppb	7,944.486 ppb	50.296 ppb	5,404.601 ppb	16,695.676 ppb	99.820 %
Concentration RSD	3.3 %	0.7 %	2.3 %	0.4 %	1.1 %	0.6 %	2.4 %	3.3 %	2.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	48.079 ppb	50.578 ppb	339.173 ppb	5,105.797 ppb	52.022 ppb	51.685 ppb	51.531 ppb	51.280 ppb	102.230 %
Concentration per Run 1	46.225 ppb	49.417 ppb	343.145 ppb	5,147.360 ppb	53.573 ppb	52.650 ppb	51.414 ppb	51.899 ppb	102.827 %
Concentration per Run 2	50.516 ppb	52.589 ppb	349.887 ppb	5,264.448 ppb	52.866 ppb	52.347 ppb	52.696 ppb	52.222 ppb	98.748 %
Concentration per Run 3	47.495 ppb	49.728 ppb	324.488 ppb	4,905.584 ppb	49.626 ppb	50.058 ppb	50.483 ppb	49.720 ppb	105.115 %
Concentration RSD	4.6 %	3.5 %	3.9 %	3.6 %	4.0 %	2.7 %	2.2 %	2.7 %	3.2 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	50.996 ppb	50.648 ppb	123.392 ppb	51.435 ppb	102.305 %	1.517 ppb	50.951 ppb	102.400 %	49.926 ppb
Concentration per Run 1	50.725 ppb	50.417 ppb	122.123 ppb	50.066 ppb	103.885 %	1.445 ppb	49.315 ppb	105.804 %	49.508 ppb
Concentration per Run 2	52.403 ppb	53.862 ppb	126.277 ppb	52.037 ppb	100.805 %	1.568 ppb	52.575 ppb	101.955 %	49.836 ppb
Concentration per Run 3	49.862 ppb	47.667 ppb	121.777 ppb	52.201 ppb	102.226 %	1.537 ppb	50.963 ppb	99.442 %	50.433 ppb
Concentration RSD	2.5 %	6.1 %	2.0 %	2.3 %	1.5 %	4.2 %	3.2 %	3.1 %	0.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	53.839 ppb	106.015 %	105.339 %	49.844 ppb	50.213 ppb	106.071 %
Concentration per Run 1	52.642 ppb	108.655 %	106.577 %	47.209 ppb	48.513 ppb	110.027 %
Concentration per Run 2	54.953 ppb	102.598 %	104.835 %	52.055 ppb	51.923 ppb	103.499 %
Concentration per Run 3	53.920 ppb	106.793 %	104.605 %	50.267 ppb	50.204 ppb	104.687 %
Concentration RSD	2.2 %	2.9 %	1.0 %	4.9 %	3.4 %	3.3 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	23	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG2003419-10d5 6020SL	Rack	1		
Analysis started at:	12/3/2024 8:20:00 AM	Vial	5		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	101.929 %	113.637 %	0.011 ppb	11,201.603 ppb	5,726.170 ppb	2.956 ppb	1,209.648 ppb	23,721.463 ppb	100.876 %
Concentration per Run 1	94.719 %	112.121 %	0.014 ppb	11,083.805 ppb	5,685.581 ppb	2.869 ppb	1,191.629 ppb	23,410.754 ppb	96.358 %
Concentration per Run 2	103.865 %	115.152 %	0.011 ppb	11,491.823 ppb	5,780.521 ppb	2.761 ppb	1,218.735 ppb	23,454.717 ppb	102.194 %
Concentration per Run 3	107.203 %	113.637 %	0.009 ppb	11,029.182 ppb	5,712.409 ppb	3.239 ppb	1,218.581 ppb	24,298.917 ppb	104.077 %
Concentration RSD	6.3 %	1.3 %	21.3 %	2.3 %	0.9 %	8.5 %	1.3 %	2.1 %	4.0 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.325 ppb	0.012 ppb	593.566 ppb	44.115 ppb	1.175 ppb	1.120 ppb	0.641 ppb	1.798 ppb	101.939 %
Concentration per Run 1	-0.336 ppb	-0.029 ppb	596.580 ppb	41.986 ppb	1.228 ppb	1.101 ppb	0.624 ppb	1.751 ppb	103.110 %
Concentration per Run 2	-0.318 ppb	0.040 ppb	589.331 ppb	49.898 ppb	1.152 ppb	1.193 ppb	0.773 ppb	1.832 ppb	99.961 %
Concentration per Run 3	-0.322 ppb	0.026 ppb	594.786 ppb	40.460 ppb	1.145 ppb	1.066 ppb	0.525 ppb	1.810 ppb	102.745 %
Concentration RSD	3.0 %	299.6 %	0.6 %	11.5 %	3.9 %	5.8 %	19.5 %	2.3 %	1.7 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.118 ppb	0.228 ppb	147.731 ppb	1.154 ppb	105.638 %	0.000 ppb	0.019 ppb	103.991 %	0.394 ppb
Concentration per Run 1	0.054 ppb	0.559 ppb	145.933 ppb	0.929 ppb	107.955 %	0.001 ppb	0.014 ppb	105.539 %	0.352 ppb
Concentration per Run 2	0.179 ppb	0.031 ppb	151.399 ppb	1.133 ppb	102.282 %	-0.002 ppb	0.011 ppb	101.380 %	0.394 ppb
Concentration per Run 3	0.119 ppb	0.095 ppb	145.862 ppb	1.401 ppb	106.677 %	0.000 ppb	0.031 ppb	105.053 %	0.437 ppb
Concentration RSD	53.3 %	126.2 %	2.2 %	20.5 %	2.8 %	883.2 %	59.3 %	2.2 %	10.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	10.252 ppb	108.104 %	105.751 %	0.213 ppb	0.110 ppb	106.508 %
Concentration per Run 1	10.353 ppb	112.862 %	109.491 %	0.193 ppb	0.114 ppb	110.192 %
Concentration per Run 2	9.789 ppb	106.414 %	104.644 %	0.257 ppb	0.113 ppb	106.451 %
Concentration per Run 3	10.613 ppb	105.037 %	103.119 %	0.189 ppb	0.103 ppb	102.882 %
Concentration RSD	4.1 %	3.9 %	3.1 %	17.9 %	5.5 %	3.4 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	24	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	I2469249-04 6020SL	Rack	1		
Analysis started at:	12/3/2024 8:24:28 AM	Vial	7		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	90.788 %	112.514 %	0.287 ppb	37,249.992 ppb	16,277.286 ppb	547.921 ppb	26,200.079 ppb	270,097.769 ppb	92.670 %
Concentration per Run 1	87.434 %	115.825 %	0.282 ppb	36,402.653 ppb	15,601.990 ppb	528.462 ppb	25,641.173 ppb	265,553.256 ppb	92.040 %
Concentration per Run 2	91.788 %	116.162 %	0.283 ppb	35,796.538 ppb	15,653.599 ppb	528.319 ppb	25,422.491 ppb	261,750.387 ppb	92.160 %
Concentration per Run 3	93.142 %	105.556 %	0.295 ppb	39,550.786 ppb	17,576.268 ppb	586.981 ppb	27,536.574 ppb	282,989.664 ppb	93.809 %
Concentration RSD	3.3 %	5.4 %	2.5 %	5.4 %	6.9 %	6.2 %	4.4 %	4.2 %	1.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	1.476 ppb	1.790 ppb	1,411.684 ppb	26,561.440 ppb	42.604 ppb	103.134 ppb	3.278 ppb	2,851.621 ppb	96.632 %
Concentration per Run 1	1.547 ppb	1.719 ppb	1,421.085 ppb	27,059.087 ppb	42.675 ppb	103.091 ppb	3.095 ppb	2,853.180 ppb	97.577 %
Concentration per Run 2	1.497 ppb	1.767 ppb	1,361.103 ppb	25,195.690 ppb	41.350 ppb	101.044 ppb	3.013 ppb	2,777.019 ppb	97.592 %
Concentration per Run 3	1.384 ppb	1.883 ppb	1,452.864 ppb	27,429.543 ppb	43.786 ppb	105.268 ppb	3.728 ppb	2,924.663 ppb	94.727 %
Concentration RSD	5.7 %	4.7 %	3.3 %	4.5 %	2.9 %	2.0 %	11.9 %	2.6 %	1.7 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	9.342 ppb	4.029 ppb	1,147.893 ppb	2.486 ppb	98.785 %	0.003 ppb	1.280 ppb	100.155 %	58.824 ppb
Concentration per Run 1	9.729 ppb	3.687 ppb	1,129.492 ppb	2.321 ppb	102.905 %	0.008 ppb	1.258 ppb	104.955 %	56.560 ppb
Concentration per Run 2	9.293 ppb	4.383 ppb	1,150.072 ppb	2.384 ppb	96.511 %	-0.001 ppb	1.271 ppb	98.226 %	59.723 ppb
Concentration per Run 3	9.005 ppb	4.016 ppb	1,164.115 ppb	2.753 ppb	96.940 %	0.003 ppb	1.312 ppb	97.286 %	60.188 ppb
Concentration RSD	3.9 %	8.6 %	1.5 %	9.4 %	3.6 %	129.5 %	2.2 %	4.2 %	3.4 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	228.108 ppb	106.289 %	106.518 %	0.251 ppb	14.221 ppb	104.483 %
Concentration per Run 1	220.810 ppb	107.234 %	109.109 %	0.222 ppb	13.931 ppb	105.788 %
Concentration per Run 2	230.041 ppb	106.490 %	107.066 %	0.254 ppb	14.379 ppb	103.205 %
Concentration per Run 3	233.474 ppb	105.143 %	103.379 %	0.279 ppb	14.355 ppb	104.455 %
Concentration RSD	2.9 %	1.0 %	2.7 %	11.3 %	1.8 %	1.2 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	25	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	I2469249-07 6020SL	Rack	1		
Analysis started at:	12/3/2024 8:28:57 AM	Vial	8		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	96.409 %	112.458 %	0.007 ppb	77,926.151 ppb	5,045.840 ppb	4.450 ppb	9,933.261 ppb	108,788.875 ppb	97.510 %
Concentration per Run 1	93.087 %	119.192 %	0.007 ppb	75,086.765 ppb	4,737.815 ppb	4.339 ppb	9,380.911 ppb	104,098.989 ppb	94.860 %
Concentration per Run 2	97.999 %	105.724 %	0.009 ppb	80,798.628 ppb	5,311.582 ppb	4.889 ppb	10,291.605 ppb	109,796.788 ppb	99.082 %
Concentration per Run 3	98.141 %	112.458 %	0.005 ppb	77,893.061 ppb	5,088.123 ppb	4.122 ppb	10,127.269 ppb	112,470.848 ppb	98.589 %
Concentration RSD	3.0 %	6.0 %	28.8 %	3.7 %	5.7 %	8.9 %	4.9 %	3.9 %	2.4 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.256 ppb	0.025 ppb	764.992 ppb	759.876 ppb	0.839 ppb	3.442 ppb	5.316 ppb	2.117 ppb	96.195 %
Concentration per Run 1	-0.201 ppb	0.010 ppb	745.337 ppb	750.961 ppb	0.839 ppb	3.277 ppb	5.475 ppb	2.073 ppb	94.486 %
Concentration per Run 2	-0.300 ppb	0.030 ppb	776.069 ppb	776.234 ppb	0.863 ppb	3.546 ppb	5.564 ppb	2.200 ppb	95.746 %
Concentration per Run 3	-0.265 ppb	0.034 ppb	773.569 ppb	752.433 ppb	0.816 ppb	3.503 ppb	4.908 ppb	2.079 ppb	98.353 %
Concentration RSD	19.7 %	52.2 %	2.2 %	1.9 %	2.8 %	4.2 %	6.7 %	3.4 %	2.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.588 ppb	0.429 ppb	561.254 ppb	22.138 ppb	101.488 %	0.002 ppb	0.023 ppb	102.288 %	0.179 ppb
Concentration per Run 1	0.447 ppb	0.722 ppb	566.755 ppb	20.193 ppb	100.575 %	0.000 ppb	0.029 ppb	103.531 %	0.145 ppb
Concentration per Run 2	0.627 ppb	0.352 ppb	553.664 ppb	21.246 ppb	102.773 %	0.001 ppb	0.015 ppb	100.897 %	0.195 ppb
Concentration per Run 3	0.689 ppb	0.213 ppb	563.343 ppb	24.975 ppb	101.115 %	0.003 ppb	0.025 ppb	102.436 %	0.197 ppb
Concentration RSD	21.3 %	61.3 %	1.2 %	11.3 %	1.1 %	94.9 %	32.5 %	1.3 %	16.5 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	51.789 ppb	107.069 %	106.723 %	0.043 ppb	0.089 ppb	104.902 %
Concentration per Run 1	50.280 ppb	107.902 %	108.589 %	0.035 ppb	0.090 ppb	105.731 %
Concentration per Run 2	51.977 ppb	104.908 %	107.281 %	0.043 ppb	0.095 ppb	103.237 %
Concentration per Run 3	53.112 ppb	108.397 %	104.299 %	0.050 ppb	0.083 ppb	105.738 %
Concentration RSD	2.8 %	1.8 %	2.1 %	17.6 %	6.8 %	1.4 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index: 26 User name ALPHALAB\a2-icpmsq2 Comment <Comment>
Analysis label: CCV Rack 0
Analysis started at: 12/3/2024 8:33:58 AM Vial 9

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	104.880 %	117.228 %	61.102 ppb	5,955.026 ppb	5,899.944 ppb	54.609 ppb	5,836.487 ppb	5,633.322 ppb	101.474 %
Concentration per Run 1	102.299 %	121.381 %	60.533 ppb	5,667.069 ppb	5,781.177 ppb	52.135 ppb	5,539.343 ppb	5,472.092 ppb	100.624 %
Concentration per Run 2	106.213 %	114.478 %	60.849 ppb	6,005.036 ppb	5,831.854 ppb	54.677 ppb	5,927.674 ppb	5,603.542 ppb	102.945 %
Concentration per Run 3	106.128 %	115.825 %	61.925 ppb	6,192.972 ppb	6,086.801 ppb	57.015 ppb	6,042.445 ppb	5,824.332 ppb	100.852 %
Recovery Percentage 1			101.837 %	99.250 %	98.332 %	91.015 %	97.275 %	93.889 %	
Concentration RSD	2.1 %	3.1 %	1.2 %	4.5 %	2.8 %	4.5 %	4.5 %	3.2 %	1.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	58.413 ppb	59.039 ppb	60.426 ppb	5,948.352 ppb	59.967 ppb	61.291 ppb	63.074 ppb	61.943 ppb	102.073 %
Concentration per Run 1	54.607 ppb	55.413 ppb	57.555 ppb	5,642.430 ppb	57.706 ppb	60.618 ppb	59.634 ppb	60.129 ppb	105.664 %
Concentration per Run 2	57.714 ppb	58.732 ppb	59.491 ppb	6,031.279 ppb	59.722 ppb	61.943 ppb	64.690 ppb	62.107 ppb	101.227 %
Concentration per Run 3	62.918 ppb	62.972 ppb	64.232 ppb	6,171.345 ppb	62.475 ppb	61.311 ppb	64.899 ppb	63.592 ppb	99.327 %
Recovery Percentage 1	97.355 %	98.399 %	100.710 %	99.139 %	99.946 %	102.151 %	105.124 %	103.238 %	
Concentration RSD	7.2 %	6.4 %	5.7 %	4.6 %	4.0 %	1.1 %	4.7 %	2.8 %	3.2 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	61.252 ppb	58.932 ppb	60.432 ppb	59.651 ppb	105.498 %	59.936 ppb	61.453 ppb	102.535 %	61.198 ppb
Concentration per Run 1	61.628 ppb	55.436 ppb	57.226 ppb	57.286 ppb	112.798 %	57.021 ppb	59.194 ppb	104.931 %	58.544 ppb
Concentration per Run 2	61.042 ppb	59.468 ppb	61.033 ppb	60.383 ppb	103.599 %	59.859 ppb	61.882 ppb	101.484 %	62.618 ppb
Concentration per Run 3	61.086 ppb	61.892 ppb	63.036 ppb	61.283 ppb	100.098 %	62.929 ppb	63.284 ppb	101.189 %	62.432 ppb
Recovery Percentage 1	102.087 %	98.220 %	100.719 %	99.418 %		99.893 %	102.422 %		101.996 %
Concentration RSD	0.5 %	5.5 %	4.9 %	3.5 %	6.2 %	4.9 %	3.4 %	2.0 %	3.8 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	59.541 ppb	108.351 %	107.775 %	59.822 ppb	59.942 ppb	109.521 %
Concentration per Run 1	57.929 ppb	113.355 %	113.468 %	56.724 ppb	57.044 ppb	112.884 %
Concentration per Run 2	59.953 ppb	106.218 %	105.175 %	60.478 ppb	61.151 ppb	108.383 %
Concentration per Run 3	60.741 ppb	105.479 %	104.682 %	62.264 ppb	61.631 ppb	107.296 %
Recovery Percentage 1	99.235 %			99.703 %	99.903 %	
Concentration RSD	2.4 %	4.0 %	4.6 %	4.7 %	4.2 %	2.7 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	27	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	CCB	Rack	0		
Analysis started at:	12/3/2024 8:38:29 AM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	103.977 %	115.152 %	0.011 ppb	-5.017 ppb	0.467 ppb	-0.197 ppb	5.301 ppb	-0.613 ppb	99.782 %
Concentration per Run 1	97.906 %	116.330 %	0.013 ppb	-7.770 ppb	0.058 ppb	-0.298 ppb	-8.208 ppb	7.131 ppb	96.008 %
Concentration per Run 2	105.230 %	117.004 %	0.010 ppb	-7.891 ppb	1.241 ppb	0.072 ppb	8.652 ppb	1.160 ppb	102.242 %
Concentration per Run 3	108.796 %	112.121 %	0.012 ppb	0.609 ppb	0.101 ppb	-0.367 ppb	15.459 ppb	-10.130 ppb	101.096 %
Recovery Percentage 1			2.287 %	-1.003 %	0.667 %	-1.973 %	5.301 %	-0.613 %	
Concentration RSD	5.3 %	2.3 %	10.9 %	97.1 %	143.7 %	119.7 %	229.8 %	1,430.6 %	3.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.523 ppb	-0.048 ppb	0.104 ppb	7.040 ppb	-0.003 ppb	0.007 ppb	0.231 ppb	0.283 ppb	97.473 %
Concentration per Run 1	-0.457 ppb	-0.059 ppb	0.106 ppb	6.173 ppb	-0.007 ppb	0.012 ppb	0.256 ppb	0.348 ppb	99.593 %
Concentration per Run 2	-0.516 ppb	-0.039 ppb	0.095 ppb	7.088 ppb	0.000 ppb	0.029 ppb	0.122 ppb	0.222 ppb	94.437 %
Concentration per Run 3	-0.596 ppb	-0.045 ppb	0.110 ppb	7.860 ppb	-0.003 ppb	-0.021 ppb	0.317 ppb	0.280 ppb	98.390 %
Recovery Percentage 1	-10.460 %	-4.776 %	10.361 %	14.080 %	-0.672 %	0.337 %	23.129 %	5.667 %	
Concentration RSD	13.3 %	21.5 %	7.3 %	12.0 %	102.2 %	379.9 %	43.1 %	22.4 %	2.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.105 ppb	0.147 ppb	0.016 ppb	0.575 ppb	104.361 %	0.004 ppb	0.005 ppb	99.067 %	0.074 ppb
Concentration per Run 1	0.097 ppb	0.189 ppb	0.018 ppb	0.435 ppb	107.730 %	0.006 ppb	0.007 ppb	102.872 %	0.043 ppb
Concentration per Run 2	0.108 ppb	0.210 ppb	0.016 ppb	0.526 ppb	103.006 %	0.005 ppb	0.004 ppb	98.046 %	0.074 ppb
Concentration per Run 3	0.110 ppb	0.042 ppb	0.015 ppb	0.763 ppb	102.347 %	0.002 ppb	0.004 ppb	96.283 %	0.104 ppb
Recovery Percentage 1	21.026 %	2.942 %	0.162 %	28.741 %		1.112 %	2.423 %		1.844 %
Concentration RSD	6.5 %	62.3 %	10.8 %	29.5 %	2.8 %	42.5 %	39.8 %	3.4 %	40.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.014 ppb	105.137 %	103.616 %	0.241 ppb	0.029 ppb	106.686 %
Concentration per Run 1	-0.005 ppb	107.808 %	107.265 %	0.228 ppb	0.030 ppb	110.318 %
Concentration per Run 2	0.038 ppb	103.183 %	101.486 %	0.279 ppb	0.028 ppb	104.981 %
Concentration per Run 3	0.010 ppb	104.420 %	102.098 %	0.217 ppb	0.029 ppb	104.759 %
Recovery Percentage 1	2.816 %			24.137 %	2.875 %	
Concentration RSD	156.9 %	2.3 %	3.1 %	13.6 %	4.1 %	3.0 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index: 28
Analysis label: WG2003472-1 6020TL
Analysis started at: 12/3/2024 8:50:16 AM
User name ALPHALAB\a2-icpmsq2
Rack 1
Vial 9
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	104.348 %	118.463 %	0.016 ppb	-17.156 ppb	0.509 ppb	0.501 ppb	-8.419 ppb	8.802 ppb	96.697 %
Concentration per Run 1	99.619 %	121.213 %	0.020 ppb	-21.457 ppb	-0.168 ppb	0.623 ppb	-12.201 ppb	17.610 ppb	92.397 %
Concentration per Run 2	106.886 %	119.192 %	0.019 ppb	-17.801 ppb	-0.141 ppb	0.689 ppb	-16.846 ppb	14.550 ppb	96.842 %
Concentration per Run 3	106.539 %	114.983 %	0.010 ppb	-12.209 ppb	1.837 ppb	0.191 ppb	3.789 ppb	-5.753 ppb	100.853 %
Concentration RSD	3.9 %	2.7 %	31.0 %	27.1 %	225.8 %	54.0 %	128.6 %	144.3 %	4.4 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.460 ppb	-0.014 ppb	0.339 ppb	0.385 ppb	-0.001 ppb	0.022 ppb	0.332 ppb	0.685 ppb	96.914 %
Concentration per Run 1	-0.550 ppb	0.006 ppb	0.398 ppb	-0.763 ppb	-0.004 ppb	0.047 ppb	0.352 ppb	0.712 ppb	98.293 %
Concentration per Run 2	-0.437 ppb	-0.021 ppb	0.298 ppb	1.150 ppb	0.003 ppb	0.042 ppb	0.345 ppb	0.570 ppb	93.618 %
Concentration per Run 3	-0.394 ppb	-0.026 ppb	0.322 ppb	0.768 ppb	-0.003 ppb	-0.022 ppb	0.298 ppb	0.773 ppb	98.832 %
Concentration RSD	17.6 %	128.0 %	15.5 %	263.2 %	344.8 %	173.0 %	8.9 %	15.2 %	3.0 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.070 ppb	0.163 ppb	0.008 ppb	0.186 ppb	106.624 %	0.001 ppb	0.000 ppb	104.794 %	0.016 ppb
Concentration per Run 1	0.060 ppb	0.156 ppb	0.017 ppb	0.112 ppb	106.623 %	-0.001 ppb	0.000 ppb	108.300 %	0.012 ppb
Concentration per Run 2	0.075 ppb	0.206 ppb	0.009 ppb	0.158 ppb	107.173 %	0.002 ppb	0.000 ppb	104.116 %	0.016 ppb
Concentration per Run 3	0.075 ppb	0.129 ppb	-0.002 ppb	0.286 ppb	106.075 %	0.001 ppb	0.000 ppb	101.966 %	0.018 ppb
Concentration RSD	12.3 %	23.8 %	112.2 %	48.7 %	0.5 %	183.4 %	N/A	3.1 %	19.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.166 ppb	106.999 %	107.332 %	0.023 ppb	0.013 ppb	109.777 %
Concentration per Run 1	0.248 ppb	107.092 %	106.892 %	0.017 ppb	0.010 ppb	110.167 %
Concentration per Run 2	0.119 ppb	104.322 %	107.208 %	0.028 ppb	0.016 ppb	110.039 %
Concentration per Run 3	0.130 ppb	109.584 %	107.895 %	0.023 ppb	0.012 ppb	109.125 %
Concentration RSD	43.1 %	2.5 %	0.5 %	23.9 %	25.7 %	0.5 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	29	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG2003472-2d10 6020TL	Rack	1		
Analysis started at:	12/3/2024 8:54:45 AM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	106.427 %	117.397 %	5.134 ppb	1,002.855 ppb	984.197 ppb	182.732 ppb	995.586 ppb	946.535 ppb	98.274 %
Concentration per Run 1	102.339 %	123.906 %	5.155 ppb	935.315 ppb	937.522 ppb	170.717 ppb	983.320 ppb	995.492 ppb	96.628 %
Concentration per Run 2	107.029 %	110.943 %	5.154 ppb	1,056.737 ppb	1,045.719 ppb	190.240 ppb	1,021.244 ppb	939.268 ppb	98.773 %
Concentration per Run 3	109.914 %	117.340 %	5.092 ppb	1,016.513 ppb	969.351 ppb	187.240 ppb	982.195 ppb	904.845 ppb	99.422 %
Concentration RSD	3.6 %	5.5 %	0.7 %	6.2 %	5.6 %	5.8 %	2.2 %	4.8 %	1.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	47.670 ppb	19.572 ppb	51.772 ppb	105.745 ppb	49.549 ppb	51.761 ppb	26.477 ppb	51.866 ppb	99.384 %
Concentration per Run 1	46.193 ppb	19.180 ppb	51.220 ppb	109.009 ppb	47.998 ppb	50.736 ppb	26.197 ppb	51.865 ppb	99.301 %
Concentration per Run 2	46.698 ppb	20.088 ppb	52.631 ppb	105.793 ppb	50.814 ppb	52.070 ppb	26.943 ppb	52.101 ppb	98.901 %
Concentration per Run 3	50.119 ppb	19.448 ppb	51.466 ppb	102.434 ppb	49.834 ppb	52.477 ppb	26.291 ppb	51.632 ppb	99.950 %
Concentration RSD	4.5 %	2.4 %	1.5 %	3.1 %	2.9 %	1.8 %	1.5 %	0.5 %	0.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	12.414 ppb	11.535 ppb	98.345 ppb	96.570 ppb	106.050 %	5.154 ppb	5.185 ppb	104.504 %	38.774 ppb
Concentration per Run 1	12.519 ppb	11.918 ppb	96.504 ppb	93.029 ppb	109.323 %	5.120 ppb	5.059 ppb	104.202 %	37.618 ppb
Concentration per Run 2	12.812 ppb	12.182 ppb	98.813 ppb	97.145 ppb	106.918 %	5.078 ppb	4.925 ppb	104.330 %	38.680 ppb
Concentration per Run 3	11.911 ppb	10.505 ppb	99.718 ppb	99.536 ppb	101.908 %	5.264 ppb	5.570 ppb	104.981 %	40.025 ppb
Concentration RSD	3.7 %	7.8 %	1.7 %	3.4 %	3.6 %	1.9 %	6.6 %	0.4 %	3.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	195.526 ppb	107.515 %	106.856 %	11.671 ppb	51.682 ppb	109.599 %
Concentration per Run 1	193.697 ppb	110.259 %	109.337 %	11.696 ppb	51.392 ppb	110.010 %
Concentration per Run 2	191.567 ppb	107.498 %	108.609 %	11.679 ppb	52.623 ppb	106.992 %
Concentration per Run 3	201.315 ppb	104.789 %	102.623 %	11.637 ppb	51.033 ppb	111.796 %
Concentration RSD	2.6 %	2.5 %	3.4 %	0.3 %	1.6 %	2.2 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	30	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2469261-01d10 6020TL	Rack	1		
Analysis started at:	12/3/2024 8:59:15 AM	Vial	11		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	100.236 %	116.274 %	0.037 ppb	1,170.726 ppb	921.186 ppb	364.707 ppb	679.445 ppb	9,872.538 ppb	97.992 %
Concentration per Run 1	97.362 %	113.300 %	0.034 ppb	1,188.536 ppb	940.084 ppb	368.939 ppb	690.412 ppb	9,812.497 ppb	96.168 %
Concentration per Run 2	99.268 %	113.973 %	0.040 ppb	1,179.867 ppb	916.912 ppb	372.128 ppb	637.870 ppb	9,794.169 ppb	96.977 %
Concentration per Run 3	104.079 %	121.549 %	0.037 ppb	1,143.777 ppb	906.561 ppb	353.053 ppb	710.053 ppb	10,010.948 ppb	100.830 %
Concentration RSD	3.5 %	3.9 %	8.3 %	2.0 %	1.9 %	2.8 %	5.5 %	1.2 %	2.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	1.303 ppb	875.972 ppb	59.213 ppb	647.324 ppb	1.327 ppb	1.058 ppb	7.967 ppb	4.789 ppb	101.981 %
Concentration per Run 1	1.515 ppb	870.648 ppb	59.316 ppb	695.775 ppb	1.288 ppb	1.083 ppb	7.996 ppb	4.622 ppb	103.550 %
Concentration per Run 2	1.221 ppb	889.364 ppb	58.609 ppb	620.437 ppb	1.390 ppb	1.211 ppb	8.102 ppb	4.928 ppb	99.615 %
Concentration per Run 3	1.173 ppb	867.903 ppb	59.714 ppb	625.759 ppb	1.304 ppb	0.880 ppb	7.804 ppb	4.816 ppb	102.779 %
Concentration RSD	14.2 %	1.3 %	0.9 %	6.5 %	4.1 %	15.8 %	1.9 %	3.2 %	2.0 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.517 ppb	0.795 ppb	30.830 ppb	1.292 ppb	107.101 %	0.011 ppb	0.041 ppb	105.258 %	1.540 ppb
Concentration per Run 1	0.466 ppb	0.611 ppb	30.889 ppb	1.179 ppb	108.201 %	0.010 ppb	0.052 ppb	106.425 %	1.329 ppb
Concentration per Run 2	0.510 ppb	1.173 ppb	31.099 ppb	1.289 ppb	106.304 %	0.012 ppb	0.035 ppb	104.288 %	1.507 ppb
Concentration per Run 3	0.576 ppb	0.600 ppb	30.503 ppb	1.409 ppb	106.796 %	0.011 ppb	0.035 ppb	105.059 %	1.785 ppb
Concentration RSD	10.7 %	41.3 %	1.0 %	8.9 %	0.9 %	10.1 %	23.7 %	1.0 %	14.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	4.643 ppb	109.684 %	108.361 %	0.023 ppb	1.551 ppb	111.226 %
Concentration per Run 1	4.654 ppb	113.808 %	112.462 %	0.015 ppb	1.505 ppb	113.926 %
Concentration per Run 2	4.541 ppb	106.272 %	106.072 %	0.026 ppb	1.576 ppb	110.522 %
Concentration per Run 3	4.735 ppb	108.971 %	106.549 %	0.030 ppb	1.572 ppb	109.230 %
Concentration RSD	2.1 %	3.5 %	3.3 %	33.2 %	2.6 %	2.2 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	31	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG2003472-3d10 6020TL	Rack	1		
Analysis started at:	12/3/2024 9:03:45 AM	Vial	12		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	103.244 %	119.024 %	5.371 ppb	2,230.851 ppb	1,943.920 ppb	743.216 ppb	1,663.294 ppb	11,213.259 ppb	97.892 %
Concentration per Run 1	99.075 %	120.876 %	5.486 ppb	2,233.435 ppb	1,917.759 ppb	727.458 ppb	1,612.642 ppb	11,161.731 ppb	93.835 %
Concentration per Run 2	103.901 %	119.866 %	5.274 ppb	2,199.818 ppb	1,937.202 ppb	724.769 ppb	1,659.416 ppb	11,104.766 ppb	99.344 %
Concentration per Run 3	106.757 %	116.330 %	5.354 ppb	2,259.300 ppb	1,976.799 ppb	777.421 ppb	1,717.824 ppb	11,373.280 ppb	100.497 %
Concentration RSD	3.8 %	2.0 %	2.0 %	1.3 %	1.5 %	4.0 %	3.2 %	1.3 %	3.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	50.823 ppb	886.207 ppb	110.471 ppb	720.348 ppb	52.287 ppb	51.756 ppb	33.796 ppb	56.144 ppb	103.449 %
Concentration per Run 1	50.297 ppb	882.706 ppb	114.110 ppb	729.110 ppb	52.473 ppb	52.192 ppb	34.058 ppb	56.930 ppb	103.085 %
Concentration per Run 2	50.962 ppb	872.441 ppb	107.175 ppb	731.509 ppb	52.376 ppb	50.903 ppb	33.053 ppb	55.747 ppb	103.524 %
Concentration per Run 3	51.210 ppb	903.476 ppb	110.130 ppb	700.425 ppb	52.012 ppb	52.172 ppb	34.275 ppb	55.756 ppb	103.737 %
Concentration RSD	0.9 %	1.8 %	3.2 %	2.4 %	0.5 %	1.4 %	1.9 %	1.2 %	0.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	12.509 ppb	10.389 ppb	130.804 ppb	92.589 ppb	107.951 %	5.313 ppb	5.252 ppb	105.702 %	43.324 ppb
Concentration per Run 1	12.747 ppb	10.822 ppb	131.185 ppb	92.330 ppb	109.063 %	5.228 ppb	5.090 ppb	108.587 %	42.772 ppb
Concentration per Run 2	12.617 ppb	9.915 ppb	129.129 ppb	90.194 ppb	110.345 %	5.362 ppb	5.259 ppb	105.347 %	42.821 ppb
Concentration per Run 3	12.163 ppb	10.430 ppb	132.099 ppb	95.243 ppb	104.445 %	5.350 ppb	5.408 ppb	103.173 %	44.379 ppb
Concentration RSD	2.4 %	4.4 %	1.2 %	2.7 %	2.9 %	1.4 %	3.0 %	2.6 %	2.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	206.464 ppb	110.751 %	109.863 %	11.825 ppb	54.212 ppb	113.028 %
Concentration per Run 1	202.515 ppb	110.894 %	111.333 %	11.476 ppb	52.465 ppb	116.398 %
Concentration per Run 2	205.394 ppb	110.108 %	109.682 %	12.374 ppb	56.216 ppb	109.201 %
Concentration per Run 3	211.483 ppb	111.250 %	108.574 %	11.625 ppb	53.954 ppb	113.487 %
Concentration RSD	2.2 %	0.5 %	1.3 %	4.1 %	3.5 %	3.2 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	32	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG2003472-4d10 6020TL	Rack	1		
Analysis started at:	12/3/2024 9:08:15 AM	Vial	13		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	109.063 %	119.417 %	0.037 ppb	1,222.267 ppb	954.399 ppb	390.399 ppb	724.449 ppb	10,185.538 ppb	100.298 %
Concentration per Run 1	104.460 %	119.024 %	0.036 ppb	1,196.307 ppb	924.907 ppb	401.191 ppb	724.118 ppb	9,932.683 ppb	101.079 %
Concentration per Run 2	110.278 %	123.906 %	0.039 ppb	1,221.339 ppb	948.980 ppb	381.774 ppb	703.660 ppb	10,182.464 ppb	100.924 %
Concentration per Run 3	112.450 %	115.320 %	0.037 ppb	1,249.154 ppb	989.308 ppb	388.233 ppb	745.569 ppb	10,441.467 ppb	98.890 %
Concentration RSD	3.8 %	3.6 %	3.7 %	2.2 %	3.4 %	2.5 %	2.9 %	2.5 %	1.2 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	1.215 ppb	803.893 ppb	58.780 ppb	704.452 ppb	1.419 ppb	1.080 ppb	8.056 ppb	4.921 ppb	105.751 %
Concentration per Run 1	1.387 ppb	825.182 ppb	59.266 ppb	656.295 ppb	1.506 ppb	0.908 ppb	7.880 ppb	4.754 ppb	108.525 %
Concentration per Run 2	1.200 ppb	715.116 ppb	60.456 ppb	755.699 ppb	1.385 ppb	1.129 ppb	8.372 ppb	5.156 ppb	103.117 %
Concentration per Run 3	1.057 ppb	871.381 ppb	56.617 ppb	701.361 ppb	1.366 ppb	1.204 ppb	7.916 ppb	4.854 ppb	105.612 %
Concentration RSD	13.6 %	10.0 %	3.3 %	7.1 %	5.4 %	14.2 %	3.4 %	4.3 %	2.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.504 ppb	1.037 ppb	31.944 ppb	1.298 ppb	109.835 %	0.006 ppb	0.054 ppb	109.554 %	0.324 ppb
Concentration per Run 1	0.532 ppb	1.041 ppb	30.972 ppb	0.987 ppb	113.657 %	0.009 ppb	0.059 ppb	112.144 %	0.274 ppb
Concentration per Run 2	0.573 ppb	0.716 ppb	32.435 ppb	1.315 ppb	108.340 %	0.006 ppb	0.037 ppb	108.479 %	0.316 ppb
Concentration per Run 3	0.406 ppb	1.355 ppb	32.424 ppb	1.592 ppb	107.508 %	0.003 ppb	0.065 ppb	108.038 %	0.382 ppb
Concentration RSD	17.3 %	30.8 %	2.6 %	23.4 %	3.0 %	45.9 %	26.9 %	2.1 %	16.8 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	4.551 ppb	111.445 %	109.943 %	0.020 ppb	1.532 ppb	115.807 %
Concentration per Run 1	4.533 ppb	115.169 %	111.780 %	0.013 ppb	1.524 ppb	115.525 %
Concentration per Run 2	4.546 ppb	110.671 %	108.738 %	0.017 ppb	1.555 ppb	117.016 %
Concentration per Run 3	4.574 ppb	108.496 %	109.310 %	0.031 ppb	1.517 ppb	114.881 %
Concentration RSD	0.5 %	3.1 %	1.5 %	48.4 %	1.3 %	0.9 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	33	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG2003472-5d10 6020TL	Rack	1		
Analysis started at:	12/3/2024 9:12:41 AM	Vial	14		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	105.764 %	115.264 %	48.427 ppb	5,967.445 ppb	5,847.899 ppb	462.378 ppb	5,687.239 ppb	15,381.779 ppb	100.150 %
Concentration per Run 1	100.278 %	115.320 %	49.931 ppb	5,940.474 ppb	5,810.633 ppb	460.350 ppb	5,605.885 ppb	15,291.063 ppb	97.825 %
Concentration per Run 2	106.548 %	115.152 %	47.961 ppb	5,875.724 ppb	5,953.060 ppb	466.937 ppb	5,755.777 ppb	15,408.999 ppb	102.678 %
Concentration per Run 3	110.465 %	115.320 %	47.388 ppb	6,086.136 ppb	5,780.004 ppb	459.846 ppb	5,700.054 ppb	15,445.275 ppb	99.946 %
Concentration RSD	4.9 %	0.1 %	2.8 %	1.8 %	1.6 %	0.9 %	1.3 %	0.5 %	2.4 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	50.735 ppb	928.937 ppb	106.066 ppb	5,475.165 ppb	50.175 ppb	49.780 ppb	57.194 ppb	54.298 ppb	105.832 %
Concentration per Run 1	49.066 ppb	899.936 ppb	103.623 ppb	5,349.299 ppb	48.887 ppb	50.440 ppb	55.687 ppb	53.429 ppb	109.718 %
Concentration per Run 2	52.460 ppb	951.538 ppb	111.186 ppb	5,664.250 ppb	51.259 ppb	50.742 ppb	60.920 ppb	56.226 ppb	101.883 %
Concentration per Run 3	50.679 ppb	935.338 ppb	103.387 ppb	5,411.946 ppb	50.378 ppb	48.159 ppb	54.975 ppb	53.239 ppb	105.894 %
Concentration RSD	3.3 %	2.8 %	4.2 %	3.0 %	2.4 %	2.8 %	5.7 %	3.1 %	3.7 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	50.288 ppb	47.170 ppb	78.632 ppb	48.215 ppb	110.271 %	5.776 ppb	48.364 ppb	107.903 %	48.320 ppb
Concentration per Run 1	49.368 ppb	49.051 ppb	76.727 ppb	46.283 ppb	113.100 %	5.710 ppb	47.756 ppb	109.425 %	47.669 ppb
Concentration per Run 2	52.101 ppb	47.624 ppb	80.200 ppb	48.700 ppb	107.220 %	5.862 ppb	49.352 ppb	107.101 %	49.793 ppb
Concentration per Run 3	49.395 ppb	44.835 ppb	78.970 ppb	49.660 ppb	110.492 %	5.755 ppb	47.982 ppb	107.183 %	47.498 ppb
Concentration RSD	3.1 %	4.5 %	2.2 %	3.6 %	2.7 %	1.3 %	1.8 %	1.2 %	2.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	51.780 ppb	114.040 %	112.072 %	47.975 ppb	50.021 ppb	112.703 %
Concentration per Run 1	51.327 ppb	118.486 %	115.352 %	45.766 ppb	48.899 ppb	115.305 %
Concentration per Run 2	51.630 ppb	111.787 %	109.402 %	48.139 ppb	50.615 ppb	114.166 %
Concentration per Run 3	52.384 ppb	111.847 %	111.460 %	50.020 ppb	50.549 ppb	108.639 %
Concentration RSD	1.1 %	3.4 %	2.7 %	4.4 %	1.9 %	3.2 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	34	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG2003472-6d50 6020TL	Rack	1		
Analysis started at:	12/3/2024 9:17:08 AM	Vial	15		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	104.442 %	113.749 %	0.013 ppb	223.164 ppb	194.414 ppb	76.291 ppb	154.264 ppb	2,120.425 ppb	100.195 %
Concentration per Run 1	99.102 %	112.626 %	0.010 ppb	221.574 ppb	194.661 ppb	79.960 ppb	165.022 ppb	2,108.095 ppb	97.367 %
Concentration per Run 2	104.276 %	115.152 %	0.018 ppb	229.672 ppb	200.050 ppb	77.071 ppb	145.507 ppb	2,212.131 ppb	100.759 %
Concentration per Run 3	109.948 %	113.468 %	0.012 ppb	218.245 ppb	188.532 ppb	71.842 ppb	152.262 ppb	2,041.050 ppb	102.459 %
Concentration RSD	5.2 %	1.1 %	30.4 %	2.6 %	3.0 %	5.4 %	6.4 %	4.1 %	2.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.150 ppb	182.110 ppb	11.980 ppb	132.891 ppb	0.272 ppb	0.097 ppb	1.747 ppb	1.131 ppb	102.791 %
Concentration per Run 1	-0.186 ppb	179.878 ppb	11.838 ppb	129.357 ppb	0.275 ppb	0.155 ppb	1.839 ppb	1.133 ppb	103.837 %
Concentration per Run 2	-0.193 ppb	187.800 ppb	12.622 ppb	120.558 ppb	0.273 ppb	0.105 ppb	1.816 ppb	1.121 ppb	99.518 %
Concentration per Run 3	-0.070 ppb	178.654 ppb	11.480 ppb	148.757 ppb	0.266 ppb	0.029 ppb	1.585 ppb	1.141 ppb	105.019 %
Concentration RSD	46.2 %	2.7 %	4.9 %	10.9 %	1.8 %	65.6 %	8.0 %	0.9 %	2.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.162 ppb	0.171 ppb	6.376 ppb	0.513 ppb	107.502 %	0.002 ppb	0.015 ppb	106.081 %	0.171 ppb
Concentration per Run 1	0.075 ppb	-0.009 ppb	6.259 ppb	0.238 ppb	112.344 %	0.006 ppb	0.007 ppb	110.996 %	0.119 ppb
Concentration per Run 2	0.189 ppb	0.036 ppb	6.553 ppb	0.737 ppb	104.665 %	-0.001 ppb	0.021 ppb	102.699 %	0.162 ppb
Concentration per Run 3	0.222 ppb	0.488 ppb	6.315 ppb	0.564 ppb	105.497 %	0.001 ppb	0.018 ppb	104.547 %	0.233 ppb
Concentration RSD	47.4 %	160.1 %	2.5 %	49.4 %	3.9 %	163.5 %	50.5 %	4.1 %	33.3 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.976 ppb	109.466 %	109.209 %	0.210 ppb	0.346 ppb	110.600 %
Concentration per Run 1	0.977 ppb	114.087 %	111.157 %	0.191 ppb	0.336 ppb	115.589 %
Concentration per Run 2	0.939 ppb	104.304 %	106.783 %	0.241 ppb	0.352 ppb	108.341 %
Concentration per Run 3	1.013 ppb	110.008 %	109.687 %	0.197 ppb	0.349 ppb	107.869 %
Concentration RSD	3.8 %	4.5 %	2.0 %	12.9 %	2.4 %	3.9 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	35	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2469261-02d10 6020TL	Rack	1		
Analysis started at:	12/3/2024 9:21:35 AM	Vial	16		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	107.949 %	114.983 %	0.041 ppb	1,207.407 ppb	987.032 ppb	458.142 ppb	719.481 ppb	10,417.879 ppb	101.252 %
Concentration per Run 1	103.105 %	120.708 %	0.036 ppb	1,158.911 ppb	976.966 ppb	442.780 ppb	719.016 ppb	10,301.846 ppb	98.700 %
Concentration per Run 2	107.872 %	112.458 %	0.043 ppb	1,224.041 ppb	972.783 ppb	464.794 ppb	687.179 ppb	10,299.354 ppb	102.693 %
Concentration per Run 3	112.871 %	111.785 %	0.043 ppb	1,239.270 ppb	1,011.347 ppb	466.853 ppb	752.246 ppb	10,652.436 ppb	102.363 %
Concentration RSD	4.5 %	4.3 %	9.6 %	3.5 %	2.1 %	2.9 %	4.5 %	1.9 %	2.2 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	1.629 ppb	922.199 ppb	58.715 ppb	776.744 ppb	1.402 ppb	1.095 ppb	8.437 ppb	5.325 ppb	105.430 %
Concentration per Run 1	1.572 ppb	804.620 ppb	58.003 ppb	801.911 ppb	1.362 ppb	1.068 ppb	8.235 ppb	5.440 ppb	104.501 %
Concentration per Run 2	1.711 ppb	960.150 ppb	57.496 ppb	737.162 ppb	1.377 ppb	1.072 ppb	8.206 ppb	5.555 ppb	106.195 %
Concentration per Run 3	1.604 ppb	1,001.829 ppb	60.645 ppb	791.160 ppb	1.467 ppb	1.146 ppb	8.870 ppb	4.980 ppb	105.594 %
Concentration RSD	4.5 %	11.3 %	2.9 %	4.5 %	4.1 %	4.0 %	4.4 %	5.7 %	0.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.525 ppb	0.970 ppb	30.967 ppb	0.639 ppb	107.737 %	0.006 ppb	0.057 ppb	105.334 %	0.201 ppb
Concentration per Run 1	0.664 ppb	0.619 ppb	30.859 ppb	0.575 ppb	110.270 %	0.001 ppb	0.054 ppb	108.946 %	0.144 ppb
Concentration per Run 2	0.473 ppb	1.411 ppb	31.091 ppb	0.554 ppb	105.255 %	0.007 ppb	0.053 ppb	103.915 %	0.207 ppb
Concentration per Run 3	0.437 ppb	0.880 ppb	30.951 ppb	0.789 ppb	107.685 %	0.009 ppb	0.064 ppb	103.141 %	0.252 ppb
Concentration RSD	23.2 %	41.6 %	0.4 %	20.3 %	2.3 %	73.1 %	10.2 %	3.0 %	27.0 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	5.103 ppb	111.586 %	110.214 %	0.058 ppb	1.669 ppb	113.214 %
Concentration per Run 1	5.217 ppb	114.486 %	110.995 %	0.040 ppb	1.611 ppb	116.067 %
Concentration per Run 2	5.238 ppb	109.328 %	108.751 %	0.065 ppb	1.686 ppb	113.161 %
Concentration per Run 3	4.855 ppb	110.943 %	110.896 %	0.070 ppb	1.709 ppb	110.414 %
Concentration RSD	4.2 %	2.4 %	1.2 %	27.3 %	3.1 %	2.5 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	36	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2469261-03d10 6020TL	Rack	1		
Analysis started at:	12/3/2024 9:26:02 AM	Vial	17		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	106.811 %	120.876 %	0.020 ppb	1,328.836 ppb	583.029 ppb	190.736 ppb	474.338 ppb	13,437.385 ppb	102.266 %
Concentration per Run 1	103.119 %	128.115 %	0.016 ppb	1,243.839 ppb	544.730 ppb	182.477 ppb	424.895 ppb	12,329.262 ppb	100.478 %
Concentration per Run 2	105.998 %	119.192 %	0.023 ppb	1,380.975 ppb	586.323 ppb	192.112 ppb	487.393 ppb	13,751.740 ppb	102.689 %
Concentration per Run 3	111.316 %	115.320 %	0.022 ppb	1,361.695 ppb	618.035 ppb	197.620 ppb	510.725 ppb	14,231.153 ppb	103.632 %
Concentration RSD	3.9 %	5.4 %	18.3 %	5.6 %	6.3 %	4.0 %	9.4 %	7.4 %	1.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.373 ppb	250.793 ppb	7.142 ppb	389.028 ppb	1.327 ppb	1.108 ppb	7.836 ppb	20.800 ppb	102.900 %
Concentration per Run 1	0.293 ppb	241.826 ppb	6.823 ppb	373.282 ppb	1.330 ppb	1.066 ppb	7.692 ppb	20.275 ppb	105.317 %
Concentration per Run 2	0.360 ppb	253.093 ppb	7.210 ppb	401.464 ppb	1.314 ppb	0.936 ppb	7.984 ppb	21.193 ppb	100.533 %
Concentration per Run 3	0.465 ppb	257.460 ppb	7.394 ppb	392.338 ppb	1.337 ppb	1.322 ppb	7.831 ppb	20.930 ppb	102.848 %
Concentration RSD	23.2 %	3.2 %	4.1 %	3.7 %	0.9 %	17.7 %	1.9 %	2.3 %	2.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.514 ppb	0.610 ppb	27.764 ppb	2.999 ppb	109.052 %	0.009 ppb	0.152 ppb	107.535 %	0.166 ppb
Concentration per Run 1	0.430 ppb	0.641 ppb	27.023 ppb	2.760 ppb	111.830 %	0.009 ppb	0.194 ppb	107.184 %	0.135 ppb
Concentration per Run 2	0.536 ppb	0.757 ppb	28.081 ppb	2.856 ppb	108.406 %	0.004 ppb	0.128 ppb	109.853 %	0.191 ppb
Concentration per Run 3	0.575 ppb	0.431 ppb	28.190 ppb	3.381 ppb	106.920 %	0.014 ppb	0.132 ppb	105.568 %	0.172 ppb
Concentration RSD	14.6 %	27.1 %	2.3 %	11.2 %	2.3 %	56.7 %	24.2 %	2.0 %	17.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	3.032 ppb	109.318 %	107.076 %	0.030 ppb	0.667 ppb	114.065 %
Concentration per Run 1	3.008 ppb	112.184 %	108.987 %	0.016 ppb	0.643 ppb	118.049 %
Concentration per Run 2	2.819 ppb	108.880 %	104.490 %	0.036 ppb	0.690 ppb	112.839 %
Concentration per Run 3	3.269 ppb	106.889 %	107.752 %	0.039 ppb	0.667 ppb	111.306 %
Concentration RSD	7.4 %	2.4 %	2.2 %	42.0 %	3.5 %	3.1 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	37	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2469261-04d10 6020TL	Rack	1		
Analysis started at:	12/3/2024 9:30:29 AM	Vial	18		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	110.416 %	125.253 %	0.020 ppb	1,332.001 ppb	580.880 ppb	176.377 ppb	466.198 ppb	12,887.785 ppb	102.124 %
Concentration per Run 1	104.035 %	127.442 %	0.020 ppb	1,294.308 ppb	573.056 ppb	170.621 ppb	455.961 ppb	12,703.518 ppb	101.500 %
Concentration per Run 2	110.988 %	126.095 %	0.021 ppb	1,347.688 ppb	579.526 ppb	174.986 ppb	454.766 ppb	12,822.277 ppb	101.835 %
Concentration per Run 3	116.226 %	122.223 %	0.017 ppb	1,354.005 ppb	590.058 ppb	183.525 ppb	487.867 ppb	13,137.560 ppb	103.038 %
Concentration RSD	5.5 %	2.2 %	11.4 %	2.5 %	1.5 %	3.7 %	4.0 %	1.7 %	0.8 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.528 ppb	249.875 ppb	6.966 ppb	380.827 ppb	1.187 ppb	1.145 ppb	7.382 ppb	14.553 ppb	103.047 %
Concentration per Run 1	0.616 ppb	238.659 ppb	6.928 ppb	368.027 ppb	1.155 ppb	0.954 ppb	7.781 ppb	14.711 ppb	104.598 %
Concentration per Run 2	0.432 ppb	250.681 ppb	6.977 ppb	399.717 ppb	1.187 ppb	1.464 ppb	7.186 ppb	14.384 ppb	102.381 %
Concentration per Run 3	0.535 ppb	260.286 ppb	6.994 ppb	374.736 ppb	1.220 ppb	1.018 ppb	7.181 ppb	14.564 ppb	102.162 %
Concentration RSD	17.5 %	4.3 %	0.5 %	4.4 %	2.7 %	24.3 %	4.7 %	1.1 %	1.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.513 ppb	0.607 ppb	28.412 ppb	3.010 ppb	109.107 %	0.004 ppb	0.160 ppb	106.110 %	0.158 ppb
Concentration per Run 1	0.435 ppb	0.946 ppb	27.748 ppb	2.971 ppb	112.234 %	0.002 ppb	0.111 ppb	108.246 %	0.133 ppb
Concentration per Run 2	0.547 ppb	0.597 ppb	28.488 ppb	2.990 ppb	106.983 %	0.002 ppb	0.187 ppb	106.738 %	0.157 ppb
Concentration per Run 3	0.556 ppb	0.278 ppb	29.000 ppb	3.070 ppb	108.103 %	0.008 ppb	0.183 ppb	103.347 %	0.183 ppb
Concentration RSD	13.2 %	55.0 %	2.2 %	1.7 %	2.5 %	86.4 %	26.5 %	2.4 %	15.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	3.098 ppb	110.912 %	110.760 %	0.017 ppb	0.694 ppb	112.172 %
Concentration per Run 1	3.092 ppb	114.407 %	114.478 %	0.009 ppb	0.658 ppb	116.168 %
Concentration per Run 2	3.092 ppb	107.587 %	108.074 %	0.015 ppb	0.710 ppb	112.334 %
Concentration per Run 3	3.109 ppb	110.741 %	109.728 %	0.027 ppb	0.712 ppb	108.014 %
Concentration RSD	0.3 %	3.1 %	3.0 %	54.8 %	4.5 %	3.6 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	38	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	xCCV	Rack	0		
Analysis started at:	12/3/2024 9:34:57 AM	Vial	9		

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	39	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	xCCB	Rack	0		
Analysis started at:	12/3/2024 9:39:28 AM	Vial	10		

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	40	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	CCV	Rack	0		
Analysis started at:	12/3/2024 9:44:34 AM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	103.951 %	121.269 %	56.922 ppb	5,611.965 ppb	5,531.306 ppb	56.704 ppb	5,698.359 ppb	5,834.630 ppb	100.391 %
Concentration per Run 1	99.406 %	125.085 %	57.946 ppb	5,403.079 ppb	5,318.340 ppb	57.065 ppb	5,638.954 ppb	5,729.499 ppb	99.934 %
Concentration per Run 2	104.090 %	117.677 %	56.806 ppb	5,863.072 ppb	5,831.633 ppb	57.379 ppb	5,706.473 ppb	6,062.521 ppb	99.914 %
Concentration per Run 3	108.357 %	121.044 %	56.014 ppb	5,569.745 ppb	5,443.946 ppb	55.670 ppb	5,749.649 ppb	5,711.872 ppb	101.323 %
Recovery Percentage 1			94.870 %	93.533 %	92.188 %	94.507 %	94.973 %	97.244 %	
Concentration RSD	4.3 %	3.1 %	1.7 %	4.1 %	4.8 %	1.6 %	1.0 %	3.4 %	0.8 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	56.999 ppb	57.194 ppb	58.343 ppb	5,780.953 ppb	58.592 ppb	59.314 ppb	58.598 ppb	59.515 ppb	101.977 %
Concentration per Run 1	53.017 ppb	54.777 ppb	58.043 ppb	5,636.597 ppb	57.248 ppb	58.450 ppb	57.901 ppb	58.875 ppb	103.475 %
Concentration per Run 2	60.028 ppb	58.652 ppb	59.008 ppb	5,972.972 ppb	60.735 ppb	61.236 ppb	59.920 ppb	61.276 ppb	99.694 %
Concentration per Run 3	57.952 ppb	58.153 ppb	57.979 ppb	5,733.292 ppb	57.792 ppb	58.255 ppb	57.973 ppb	58.393 ppb	102.761 %
Recovery Percentage 1	94.998 %	95.324 %	97.239 %	96.349 %	97.653 %	98.856 %	97.663 %	99.192 %	
Concentration RSD	6.3 %	3.7 %	1.0 %	3.0 %	3.2 %	2.8 %	2.0 %	2.6 %	2.0 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	59.513 ppb	58.831 ppb	58.487 ppb	57.265 ppb	106.638 %	57.482 ppb	57.815 ppb	106.411 %	56.883 ppb
Concentration per Run 1	59.458 ppb	55.488 ppb	57.446 ppb	55.729 ppb	111.018 %	56.663 ppb	56.589 ppb	108.757 %	56.190 ppb
Concentration per Run 2	60.161 ppb	61.934 ppb	60.229 ppb	57.861 ppb	103.065 %	57.455 ppb	57.485 ppb	105.894 %	57.103 ppb
Concentration per Run 3	58.920 ppb	59.071 ppb	57.786 ppb	58.205 ppb	105.830 %	58.328 ppb	59.373 ppb	104.582 %	57.357 ppb
Recovery Percentage 1	99.188 %	98.052 %	97.478 %	95.442 %		95.803 %	96.359 %		94.806 %
Concentration RSD	1.0 %	5.5 %	2.6 %	2.3 %	3.8 %	1.4 %	2.5 %	2.0 %	1.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	56.006 ppb	110.618 %	108.235 %	56.854 ppb	56.883 ppb	110.259 %
Concentration per Run 1	55.702 ppb	113.913 %	108.986 %	54.018 ppb	54.525 ppb	113.886 %
Concentration per Run 2	55.863 ppb	109.132 %	107.319 %	57.291 ppb	58.338 ppb	109.247 %
Concentration per Run 3	56.452 ppb	108.811 %	108.401 %	59.252 ppb	57.785 ppb	107.643 %
Recovery Percentage 1	93.343 %			94.756 %	94.805 %	
Concentration RSD	0.7 %	2.6 %	0.8 %	4.7 %	3.6 %	2.9 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	41	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	CCB	Rack	0		
Analysis started at:	12/3/2024 9:49:04 AM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	105.177 %	111.673 %	0.012 ppb	-25.893 ppb	0.222 ppb	-0.044 ppb	7.733 ppb	-2.256 ppb	97.409 %
Concentration per Run 1	101.145 %	112.795 %	0.014 ppb	-28.711 ppb	0.274 ppb	-0.338 ppb	0.631 ppb	-8.304 ppb	95.036 %
Concentration per Run 2	106.688 %	111.616 %	0.014 ppb	-23.614 ppb	0.298 ppb	0.286 ppb	13.570 ppb	5.406 ppb	98.782 %
Concentration per Run 3	107.699 %	110.606 %	0.008 ppb	-25.355 ppb	0.095 ppb	-0.081 ppb	8.999 ppb	-3.870 ppb	98.409 %
Recovery Percentage 1			2.372 %	-5.179 %	0.317 %	-0.444 %	7.733 %	-2.256 %	
Concentration RSD	3.4 %	1.0 %	28.3 %	10.0 %	50.0 %	707.2 %	84.8 %	310.1 %	2.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.468 ppb	-0.002 ppb	0.019 ppb	4.094 ppb	-0.003 ppb	0.002 ppb	0.149 ppb	0.296 ppb	102.911 %
Concentration per Run 1	-0.535 ppb	-0.016 ppb	0.007 ppb	3.357 ppb	0.000 ppb	0.020 ppb	0.155 ppb	0.304 ppb	103.589 %
Concentration per Run 2	-0.394 ppb	-0.033 ppb	0.058 ppb	4.690 ppb	-0.010 ppb	0.012 ppb	0.161 ppb	0.283 ppb	100.628 %
Concentration per Run 3	-0.474 ppb	0.043 ppb	-0.009 ppb	4.235 ppb	0.003 ppb	-0.026 ppb	0.132 ppb	0.302 ppb	104.518 %
Recovery Percentage 1	-9.357 %	-0.215 %	1.863 %	8.189 %	-0.525 %	0.106 %	14.922 %	5.924 %	
Concentration RSD	15.2 %	1,857.5 %	187.4 %	16.5 %	251.5 %	1,147.5 %	10.4 %	3.9 %	2.0 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.039 ppb	0.143 ppb	0.010 ppb	0.297 ppb	105.779 %	0.014 ppb	0.002 ppb	104.255 %	0.067 ppb
Concentration per Run 1	0.021 ppb	0.187 ppb	0.009 ppb	0.260 ppb	107.234 %	0.014 ppb	0.003 ppb	106.449 %	0.048 ppb
Concentration per Run 2	0.070 ppb	0.117 ppb	0.009 ppb	0.315 ppb	104.709 %	0.021 ppb	0.004 ppb	104.786 %	0.074 ppb
Concentration per Run 3	0.027 ppb	0.126 ppb	0.011 ppb	0.316 ppb	105.396 %	0.005 ppb	0.000 ppb	101.532 %	0.078 ppb
Recovery Percentage 1	7.826 %	2.866 %	0.097 %	14.856 %		3.378 %	1.165 %		1.674 %
Concentration RSD	68.2 %	26.5 %	15.7 %	10.7 %	1.2 %	57.3 %	86.6 %	2.4 %	24.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.017 ppb	106.638 %	106.649 %	0.238 ppb	0.020 ppb	109.571 %
Concentration per Run 1	0.021 ppb	108.508 %	108.216 %	0.215 ppb	0.022 ppb	113.525 %
Concentration per Run 2	0.022 ppb	104.190 %	103.754 %	0.275 ppb	0.021 ppb	106.484 %
Concentration per Run 3	0.008 ppb	107.216 %	107.977 %	0.225 ppb	0.017 ppb	108.704 %
Recovery Percentage 1	3.449 %			23.824 %	2.023 %	
Concentration RSD	44.2 %	2.1 %	2.4 %	13.4 %	12.1 %	3.3 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	42	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2469261-05 6020TL	Rack	1		
Analysis started at:	12/3/2024 9:54:58 AM	Vial	19		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	101.418 %	113.524 %	0.430 ppb	35,842.553 ppb	23,918.184 ppb	5,113.443 ppb	13,025.821 ppb	82,011.449 ppb	101.167 %
Concentration per Run 1	98.124 %	116.162 %	0.424 ppb	34,621.299 ppb	23,404.442 ppb	5,028.999 ppb	12,725.365 ppb	80,308.794 ppb	100.869 %
Concentration per Run 2	101.105 %	109.091 %	0.431 ppb	36,837.668 ppb	24,566.089 ppb	5,204.858 ppb	13,073.716 ppb	81,127.342 ppb	100.054 %
Concentration per Run 3	105.024 %	115.320 %	0.434 ppb	36,068.692 ppb	23,784.021 ppb	5,106.473 ppb	13,278.381 ppb	84,598.212 ppb	102.578 %
Concentration RSD	3.4 %	3.4 %	1.3 %	3.1 %	2.5 %	1.7 %	2.1 %	2.8 %	1.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	15.354 ppb	21.206 ppb	152.740 ppb	8,101.320 ppb	6.718 ppb	8.091 ppb	7.531 ppb	24.507 ppb	103.870 %
Concentration per Run 1	14.458 ppb	20.025 ppb	141.635 ppb	7,709.188 ppb	6.718 ppb	7.959 ppb	6.973 ppb	23.944 ppb	107.445 %
Concentration per Run 2	15.551 ppb	21.853 ppb	159.235 ppb	8,217.110 ppb	6.663 ppb	8.331 ppb	7.708 ppb	25.007 ppb	103.571 %
Concentration per Run 3	16.053 ppb	21.740 ppb	157.352 ppb	8,377.661 ppb	6.772 ppb	7.982 ppb	7.911 ppb	24.571 ppb	100.592 %
Concentration RSD	5.3 %	4.8 %	6.3 %	4.3 %	0.8 %	2.6 %	6.6 %	2.2 %	3.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	2.780 ppb	16.236 ppb	330.852 ppb	11.464 ppb	104.471 %	0.010 ppb	0.089 ppb	107.677 %	0.354 ppb
Concentration per Run 1	2.528 ppb	16.814 ppb	321.187 ppb	11.224 ppb	107.742 %	0.007 ppb	0.098 ppb	110.089 %	0.335 ppb
Concentration per Run 2	2.801 ppb	15.895 ppb	334.218 ppb	11.332 ppb	102.713 %	0.010 ppb	0.080 ppb	107.416 %	0.325 ppb
Concentration per Run 3	3.010 ppb	15.999 ppb	337.151 ppb	11.837 ppb	102.959 %	0.013 ppb	0.088 ppb	105.525 %	0.403 ppb
Concentration RSD	8.7 %	3.1 %	2.6 %	2.9 %	2.7 %	29.0 %	10.0 %	2.1 %	12.0 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	31.421 ppb	113.037 %	111.749 %	0.100 ppb	6.331 ppb	109.598 %
Concentration per Run 1	31.086 ppb	116.855 %	114.299 %	0.084 ppb	6.044 ppb	114.391 %
Concentration per Run 2	31.581 ppb	112.148 %	109.893 %	0.105 ppb	6.325 ppb	110.511 %
Concentration per Run 3	31.597 ppb	110.108 %	111.054 %	0.112 ppb	6.624 ppb	103.891 %
Concentration RSD	0.9 %	3.1 %	2.0 %	14.2 %	4.6 %	4.8 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	43	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2469261-06 6020TL	Rack	1		
Analysis started at:	12/3/2024 9:59:26 AM	Vial	20		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	102.117 %	116.386 %	0.399 ppb	35,359.547 ppb	23,209.747 ppb	4,743.207 ppb	12,746.705 ppb	79,571.817 ppb	102.444 %
Concentration per Run 1	98.558 %	114.815 %	0.394 ppb	34,908.803 ppb	22,635.723 ppb	4,714.798 ppb	12,872.423 ppb	80,407.871 ppb	102.218 %
Concentration per Run 2	104.340 %	116.499 %	0.384 ppb	36,243.530 ppb	23,489.271 ppb	4,746.522 ppb	12,593.848 ppb	78,382.162 ppb	103.018 %
Concentration per Run 3	103.453 %	117.845 %	0.419 ppb	34,926.308 ppb	23,504.248 ppb	4,768.302 ppb	12,773.844 ppb	79,925.418 ppb	102.096 %
Concentration RSD	3.0 %	1.3 %	4.6 %	2.2 %	2.1 %	0.6 %	1.1 %	1.3 %	0.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	14.752 ppb	20.551 ppb	143.418 ppb	7,770.787 ppb	6.463 ppb	7.646 ppb	7.533 ppb	24.099 ppb	99.742 %
Concentration per Run 1	13.941 ppb	19.429 ppb	136.190 ppb	7,604.058 ppb	6.318 ppb	7.132 ppb	7.302 ppb	23.645 ppb	101.922 %
Concentration per Run 2	14.727 ppb	20.683 ppb	147.746 ppb	8,045.488 ppb	6.566 ppb	7.602 ppb	8.248 ppb	24.684 ppb	97.954 %
Concentration per Run 3	15.587 ppb	21.540 ppb	146.317 ppb	7,662.816 ppb	6.504 ppb	8.204 ppb	7.049 ppb	23.967 ppb	99.350 %
Concentration RSD	5.6 %	5.2 %	4.4 %	3.1 %	2.0 %	7.0 %	8.4 %	2.2 %	2.0 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	2.559 ppb	15.118 ppb	329.564 ppb	11.906 ppb	104.274 %	0.010 ppb	0.062 ppb	104.431 %	0.333 ppb
Concentration per Run 1	2.553 ppb	14.653 ppb	318.858 ppb	11.700 ppb	107.145 %	0.009 ppb	0.052 ppb	105.486 %	0.372 ppb
Concentration per Run 2	2.467 ppb	14.842 ppb	338.449 ppb	11.762 ppb	100.884 %	0.011 ppb	0.091 ppb	102.555 %	0.351 ppb
Concentration per Run 3	2.658 ppb	15.860 ppb	331.385 ppb	12.257 ppb	104.792 %	0.010 ppb	0.042 ppb	105.252 %	0.276 ppb
Concentration RSD	3.7 %	4.3 %	3.0 %	2.6 %	3.0 %	8.5 %	41.4 %	1.6 %	15.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	30.479 ppb	110.259 %	109.135 %	0.074 ppb	6.006 ppb	107.364 %
Concentration per Run 1	30.450 ppb	112.785 %	111.292 %	0.054 ppb	5.744 ppb	111.537 %
Concentration per Run 2	30.981 ppb	108.829 %	108.054 %	0.083 ppb	6.096 ppb	107.456 %
Concentration per Run 3	30.006 ppb	109.162 %	108.060 %	0.086 ppb	6.177 ppb	103.100 %
Concentration RSD	1.6 %	2.0 %	1.7 %	24.2 %	3.8 %	3.9 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	44	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2469261-07 6020TL	Rack	1		
Analysis started at:	12/3/2024 10:03:54 AM	Vial	21		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	98.628 %	116.386 %	0.371 ppb	41,644.293 ppb	24,270.706 ppb	4,122.017 ppb	10,848.127 ppb	81,324.980 ppb	95.219 %
Concentration per Run 1	99.009 %	122.223 %	0.380 ppb	37,781.513 ppb	22,238.982 ppb	3,860.183 ppb	10,319.234 ppb	79,099.293 ppb	95.674 %
Concentration per Run 2	97.650 %	113.973 %	0.371 ppb	43,111.887 ppb	25,285.586 ppb	4,212.030 ppb	11,238.527 ppb	81,639.558 ppb	92.803 %
Concentration per Run 3	99.225 %	112.963 %	0.361 ppb	44,039.478 ppb	25,287.551 ppb	4,293.837 ppb	10,986.619 ppb	83,236.090 ppb	97.179 %
Concentration RSD	0.9 %	4.4 %	2.6 %	8.1 %	7.2 %	5.6 %	4.4 %	2.6 %	2.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	11.191 ppb	12.909 ppb	1,977.668 ppb	12,000.382 ppb	10.129 ppb	7.725 ppb	7.843 ppb	22.201 ppb	101.471 %
Concentration per Run 1	10.857 ppb	12.306 ppb	1,899.585 ppb	11,602.086 ppb	9.879 ppb	7.374 ppb	7.427 ppb	21.881 ppb	101.754 %
Concentration per Run 2	11.083 ppb	12.988 ppb	1,987.093 ppb	11,925.399 ppb	9.986 ppb	8.063 ppb	7.800 ppb	22.141 ppb	102.585 %
Concentration per Run 3	11.634 ppb	13.433 ppb	2,046.327 ppb	12,473.660 ppb	10.524 ppb	7.739 ppb	8.301 ppb	22.579 ppb	100.075 %
Concentration RSD	3.6 %	4.4 %	3.7 %	3.7 %	3.4 %	4.5 %	5.6 %	1.6 %	1.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	8.157 ppb	3.426 ppb	316.349 ppb	7.217 ppb	104.727 %	0.005 ppb	0.066 ppb	106.663 %	0.275 ppb
Concentration per Run 1	8.166 ppb	5.005 ppb	306.571 ppb	6.946 ppb	108.884 %	0.006 ppb	0.051 ppb	108.159 %	0.227 ppb
Concentration per Run 2	8.140 ppb	2.503 ppb	317.460 ppb	7.402 ppb	103.138 %	0.006 ppb	0.077 ppb	105.992 %	0.274 ppb
Concentration per Run 3	8.165 ppb	2.769 ppb	325.015 ppb	7.302 ppb	102.158 %	0.003 ppb	0.071 ppb	105.839 %	0.324 ppb
Concentration RSD	0.2 %	40.1 %	2.9 %	3.3 %	3.5 %	31.5 %	20.5 %	1.2 %	17.5 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	22.481 ppb	113.577 %	112.308 %	0.057 ppb	5.389 ppb	107.750 %
Concentration per Run 1	22.082 ppb	115.459 %	115.133 %	0.044 ppb	5.323 ppb	108.771 %
Concentration per Run 2	22.413 ppb	112.789 %	109.253 %	0.060 ppb	5.375 ppb	106.961 %
Concentration per Run 3	22.948 ppb	112.485 %	112.538 %	0.068 ppb	5.471 ppb	107.517 %
Concentration RSD	1.9 %	1.4 %	2.6 %	21.9 %	1.4 %	0.9 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	45	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2469261-08 6020TL	Rack	1		
Analysis started at:	12/3/2024 10:08:23 AM	Vial	22		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	99.110 %	114.871 %	0.269 ppb	42,191.983 ppb	23,784.367 ppb	3,033.873 ppb	10,970.872 ppb	81,367.570 ppb	99.723 %
Concentration per Run 1	93.699 %	117.004 %	0.274 ppb	41,882.632 ppb	23,778.587 ppb	2,974.511 ppb	10,694.645 ppb	78,593.570 ppb	97.371 %
Concentration per Run 2	100.133 %	114.478 %	0.277 ppb	42,414.080 ppb	24,089.368 ppb	3,086.873 ppb	11,117.864 ppb	80,572.636 ppb	101.973 %
Concentration per Run 3	103.499 %	113.132 %	0.257 ppb	42,279.237 ppb	23,485.145 ppb	3,040.236 ppb	11,100.106 ppb	84,936.504 ppb	99.824 %
Concentration RSD	5.0 %	1.7 %	4.0 %	0.7 %	1.3 %	1.9 %	2.2 %	4.0 %	2.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	8.441 ppb	9.517 ppb	1,992.352 ppb	9,264.653 ppb	8.867 ppb	5.312 ppb	5.486 ppb	16.177 ppb	101.499 %
Concentration per Run 1	7.618 ppb	8.997 ppb	1,893.890 ppb	9,052.854 ppb	8.380 ppb	5.005 ppb	5.249 ppb	15.566 ppb	104.681 %
Concentration per Run 2	8.623 ppb	9.616 ppb	2,038.163 ppb	9,541.660 ppb	9.358 ppb	5.400 ppb	6.105 ppb	16.902 ppb	100.021 %
Concentration per Run 3	9.081 ppb	9.939 ppb	2,045.002 ppb	9,199.446 ppb	8.862 ppb	5.530 ppb	5.103 ppb	16.063 ppb	99.796 %
Concentration RSD	8.9 %	5.0 %	4.3 %	2.7 %	5.5 %	5.1 %	9.9 %	4.2 %	2.7 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	8.116 ppb	3.181 ppb	308.178 ppb	9.028 ppb	106.671 %	0.006 ppb	0.047 ppb	107.975 %	0.260 ppb
Concentration per Run 1	7.628 ppb	2.075 ppb	299.787 ppb	8.549 ppb	107.423 %	0.003 ppb	0.047 ppb	111.070 %	0.262 ppb
Concentration per Run 2	8.285 ppb	3.417 ppb	312.200 ppb	9.397 ppb	104.874 %	0.008 ppb	0.053 ppb	104.957 %	0.263 ppb
Concentration per Run 3	8.435 ppb	4.051 ppb	312.547 ppb	9.139 ppb	107.716 %	0.007 ppb	0.041 ppb	107.897 %	0.255 ppb
Concentration RSD	5.3 %	31.7 %	2.4 %	4.8 %	1.5 %	45.0 %	12.4 %	2.8 %	1.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	19.728 ppb	112.485 %	112.328 %	0.039 ppb	3.962 ppb	107.055 %
Concentration per Run 1	19.603 ppb	116.773 %	115.667 %	0.026 ppb	3.796 ppb	108.761 %
Concentration per Run 2	20.072 ppb	110.122 %	111.220 %	0.048 ppb	3.986 ppb	108.701 %
Concentration per Run 3	19.511 ppb	110.562 %	110.097 %	0.044 ppb	4.103 ppb	103.702 %
Concentration RSD	1.5 %	3.3 %	2.6 %	29.9 %	3.9 %	2.7 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	46	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2469261-09 6020TL	Rack	1		
Analysis started at:	12/3/2024 10:12:52 AM	Vial	23		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	96.856 %	115.376 %	0.023 ppb	82,551.536 ppb	25,015.841 ppb	168.400 ppb	10,356.027 ppb	93,716.422 ppb	97.464 %
Concentration per Run 1	93.706 %	112.963 %	0.023 ppb	84,327.293 ppb	24,987.979 ppb	163.148 ppb	10,351.905 ppb	92,393.568 ppb	95.129 %
Concentration per Run 2	96.705 %	119.529 %	0.025 ppb	78,974.433 ppb	23,900.784 ppb	166.626 ppb	10,098.169 ppb	94,072.078 ppb	96.179 %
Concentration per Run 3	100.158 %	113.637 %	0.020 ppb	84,352.884 ppb	26,158.758 ppb	175.426 ppb	10,618.007 ppb	94,683.621 ppb	101.083 %
Concentration RSD	3.3 %	3.1 %	12.2 %	3.8 %	4.5 %	3.8 %	2.5 %	1.3 %	3.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.064 ppb	0.697 ppb	623.409 ppb	16,765.661 ppb	0.281 ppb	0.208 ppb	0.431 ppb	0.877 ppb	104.335 %
Concentration per Run 1	0.102 ppb	0.643 ppb	625.227 ppb	17,179.919 ppb	0.250 ppb	0.133 ppb	0.506 ppb	0.791 ppb	103.723 %
Concentration per Run 2	0.034 ppb	0.669 ppb	614.554 ppb	16,486.966 ppb	0.341 ppb	0.189 ppb	0.378 ppb	0.983 ppb	102.193 %
Concentration per Run 3	0.057 ppb	0.779 ppb	630.446 ppb	16,630.097 ppb	0.253 ppb	0.302 ppb	0.409 ppb	0.856 ppb	107.091 %
Concentration RSD	53.9 %	10.4 %	1.3 %	2.2 %	18.4 %	41.5 %	15.5 %	11.1 %	2.4 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.239 ppb	0.156 ppb	326.198 ppb	1.191 ppb	105.753 %	0.004 ppb	0.001 ppb	107.487 %	0.135 ppb
Concentration per Run 1	0.187 ppb	0.029 ppb	321.481 ppb	1.176 ppb	108.506 %	0.000 ppb	0.000 ppb	113.392 %	0.099 ppb
Concentration per Run 2	0.331 ppb	0.001 ppb	327.857 ppb	1.014 ppb	106.045 %	0.004 ppb	0.000 ppb	103.981 %	0.132 ppb
Concentration per Run 3	0.198 ppb	0.437 ppb	329.257 ppb	1.383 ppb	102.707 %	0.007 ppb	0.004 ppb	105.088 %	0.175 ppb
Concentration RSD	33.5 %	156.8 %	1.3 %	15.5 %	2.8 %	90.6 %	173.2 %	4.8 %	28.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	15.927 ppb	113.278 %	112.100 %	0.020 ppb	0.271 ppb	108.392 %
Concentration per Run 1	15.313 ppb	114.810 %	113.507 %	0.009 ppb	0.276 ppb	111.276 %
Concentration per Run 2	16.410 ppb	111.075 %	111.500 %	0.026 ppb	0.266 ppb	104.695 %
Concentration per Run 3	16.059 ppb	113.950 %	111.294 %	0.024 ppb	0.269 ppb	109.205 %
Concentration RSD	3.5 %	1.7 %	1.1 %	45.4 %	1.9 %	3.1 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index: 47
Analysis label: L2469261-10 6020TL
Analysis started at: 12/3/2024 10:17:21 AM
User name ALPHALAB\a2-icpmsq2
Rack 1
Vial 24
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	104.010 %	115.376 %	0.017 ppb	82,471.080 ppb	24,701.561 ppb	167.805 ppb	10,122.669 ppb	92,165.646 ppb	106.326 %
Concentration per Run 1	102.362 %	117.172 %	0.020 ppb	79,905.877 ppb	24,148.790 ppb	161.919 ppb	9,779.584 ppb	89,033.977 ppb	108.967 %
Concentration per Run 2	105.398 %	114.310 %	0.016 ppb	84,732.125 ppb	24,909.309 ppb	171.981 ppb	10,322.399 ppb	92,927.081 ppb	106.215 %
Concentration per Run 3	104.268 %	114.647 %	0.016 ppb	82,775.237 ppb	25,046.583 ppb	169.515 ppb	10,266.026 ppb	94,535.878 ppb	103.796 %
Concentration RSD	1.5 %	1.4 %	13.3 %	2.9 %	2.0 %	3.1 %	2.9 %	3.1 %	2.4 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.162 ppb	0.725 ppb	617.905 ppb	16,742.015 ppb	0.186 ppb	0.123 ppb	0.434 ppb	1.071 ppb	102.369 %
Concentration per Run 1	0.223 ppb	0.702 ppb	599.272 ppb	15,635.240 ppb	0.146 ppb	0.140 ppb	0.378 ppb	1.090 ppb	104.653 %
Concentration per Run 2	-0.008 ppb	0.745 ppb	635.537 ppb	17,466.889 ppb	0.198 ppb	0.151 ppb	0.428 ppb	1.024 ppb	99.962 %
Concentration per Run 3	0.271 ppb	0.729 ppb	618.908 ppb	17,123.916 ppb	0.213 ppb	0.077 ppb	0.495 ppb	1.100 ppb	102.492 %
Concentration RSD	91.9 %	3.0 %	2.9 %	5.8 %	18.9 %	32.3 %	13.5 %	3.8 %	2.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.313 ppb	0.259 ppb	322.297 ppb	1.048 ppb	106.932 %	0.002 ppb	0.002 ppb	108.574 %	0.136 ppb
Concentration per Run 1	0.277 ppb	0.242 ppb	307.702 ppb	0.868 ppb	112.433 %	0.000 ppb	0.000 ppb	110.351 %	0.090 ppb
Concentration per Run 2	0.212 ppb	0.209 ppb	330.565 ppb	1.196 ppb	105.004 %	0.005 ppb	0.000 ppb	106.929 %	0.168 ppb
Concentration per Run 3	0.450 ppb	0.325 ppb	328.623 ppb	1.080 ppb	103.357 %	0.000 ppb	0.007 ppb	108.441 %	0.151 ppb
Concentration RSD	39.4 %	23.2 %	3.9 %	15.9 %	4.5 %	163.3 %	173.2 %	1.6 %	30.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	15.826 ppb	113.357 %	114.798 %	0.015 ppb	0.252 ppb	109.977 %
Concentration per Run 1	15.161 ppb	117.479 %	119.568 %	0.006 ppb	0.232 ppb	115.644 %
Concentration per Run 2	15.976 ppb	108.219 %	110.917 %	0.017 ppb	0.275 ppb	108.329 %
Concentration per Run 3	16.341 ppb	114.374 %	113.909 %	0.020 ppb	0.251 ppb	105.959 %
Concentration RSD	3.8 %	4.2 %	3.8 %	50.4 %	8.5 %	4.6 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	48	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2469261-11 6020TL	Rack	1		
Analysis started at:	12/3/2024 10:21:50 AM	Vial	25		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	98.693 %	116.499 %	0.015 ppb	84,334.351 ppb	23,524.095 ppb	162.033 ppb	11,669.312 ppb	87,206.405 ppb	98.314 %
Concentration per Run 1	95.231 %	115.825 %	0.014 ppb	84,458.889 ppb	23,820.543 ppb	157.777 ppb	11,562.686 ppb	83,713.438 ppb	96.180 %
Concentration per Run 2	99.410 %	119.697 %	0.018 ppb	81,451.319 ppb	22,732.907 ppb	162.075 ppb	11,402.550 ppb	85,894.791 ppb	99.792 %
Concentration per Run 3	101.438 %	113.973 %	0.014 ppb	87,092.845 ppb	24,018.834 ppb	166.246 ppb	12,042.698 ppb	92,010.986 ppb	98.969 %
Concentration RSD	3.2 %	2.5 %	14.2 %	3.3 %	2.9 %	2.6 %	2.9 %	4.9 %	1.9 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.112 ppb	1.238 ppb	503.185 ppb	13,137.190 ppb	0.219 ppb	0.266 ppb	0.759 ppb	1.219 ppb	101.071 %
Concentration per Run 1	-0.278 ppb	1.179 ppb	493.904 ppb	12,973.294 ppb	0.193 ppb	0.213 ppb	0.601 ppb	1.176 ppb	102.611 %
Concentration per Run 2	-0.039 ppb	1.236 ppb	507.044 ppb	13,256.362 ppb	0.241 ppb	0.280 ppb	0.879 ppb	1.123 ppb	101.718 %
Concentration per Run 3	-0.019 ppb	1.300 ppb	508.608 ppb	13,181.914 ppb	0.223 ppb	0.306 ppb	0.798 ppb	1.358 ppb	98.884 %
Concentration RSD	128.7 %	4.9 %	1.6 %	1.1 %	10.9 %	18.1 %	18.8 %	10.1 %	1.9 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.330 ppb	0.395 ppb	310.278 ppb	0.890 ppb	105.512 %	0.005 ppb	0.002 ppb	107.509 %	0.126 ppb
Concentration per Run 1	0.248 ppb	0.268 ppb	305.356 ppb	0.753 ppb	106.457 %	0.004 ppb	0.007 ppb	108.488 %	0.079 ppb
Concentration per Run 2	0.358 ppb	0.408 ppb	311.492 ppb	0.936 ppb	104.138 %	0.005 ppb	0.000 ppb	108.653 %	0.154 ppb
Concentration per Run 3	0.383 ppb	0.509 ppb	313.987 ppb	0.982 ppb	105.940 %	0.005 ppb	0.000 ppb	105.387 %	0.144 ppb
Concentration RSD	21.7 %	30.6 %	1.4 %	13.6 %	1.2 %	13.1 %	173.2 %	1.7 %	32.5 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	17.059 ppb	112.271 %	111.564 %	0.012 ppb	0.240 ppb	105.854 %
Concentration per Run 1	16.733 ppb	115.122 %	113.249 %	0.004 ppb	0.245 ppb	110.216 %
Concentration per Run 2	17.177 ppb	111.024 %	110.441 %	0.017 ppb	0.238 ppb	103.654 %
Concentration per Run 3	17.266 ppb	110.667 %	111.003 %	0.015 ppb	0.236 ppb	103.692 %
Concentration RSD	1.7 %	2.2 %	1.3 %	57.6 %	1.9 %	3.6 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	49	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2469261-12 6020TL	Rack	1		
Analysis started at:	12/3/2024 10:26:17 AM	Vial	26		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	96.533 %	110.494 %	0.015 ppb	85,093.292 ppb	23,717.814 ppb	112.830 ppb	11,231.518 ppb	83,789.523 ppb	98.643 %
Concentration per Run 1	93.376 %	107.576 %	0.015 ppb	88,402.364 ppb	24,852.109 ppb	117.601 ppb	11,467.012 ppb	85,153.482 ppb	94.698 %
Concentration per Run 2	98.130 %	118.519 %	0.015 ppb	79,055.557 ppb	21,711.936 ppb	108.065 ppb	10,858.529 ppb	81,215.895 ppb	100.880 %
Concentration per Run 3	98.092 %	105.387 %	0.015 ppb	87,821.954 ppb	24,589.395 ppb	112.823 ppb	11,369.013 ppb	84,999.193 ppb	100.350 %
Concentration RSD	2.8 %	6.4 %	0.2 %	6.2 %	7.3 %	4.2 %	2.9 %	2.7 %	3.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.267 ppb	1.092 ppb	473.694 ppb	11,561.777 ppb	0.101 ppb	0.479 ppb	0.664 ppb	0.887 ppb	102.803 %
Concentration per Run 1	-0.184 ppb	1.071 ppb	497.712 ppb	12,348.140 ppb	0.112 ppb	0.484 ppb	0.718 ppb	0.912 ppb	99.904 %
Concentration per Run 2	-0.253 ppb	1.106 ppb	455.093 ppb	10,884.633 ppb	0.094 ppb	0.455 ppb	0.663 ppb	0.827 ppb	103.405 %
Concentration per Run 3	-0.365 ppb	1.099 ppb	468.276 ppb	11,452.558 ppb	0.098 ppb	0.497 ppb	0.611 ppb	0.923 ppb	105.101 %
Concentration RSD	34.1 %	1.7 %	4.6 %	6.4 %	9.5 %	4.4 %	8.1 %	5.9 %	2.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.250 ppb	0.164 ppb	296.006 ppb	0.772 ppb	105.655 %	0.005 ppb	0.003 ppb	106.755 %	0.129 ppb
Concentration per Run 1	0.204 ppb	0.108 ppb	303.707 ppb	0.710 ppb	104.557 %	0.004 ppb	0.007 ppb	107.732 %	0.108 ppb
Concentration per Run 2	0.292 ppb	0.024 ppb	289.716 ppb	0.712 ppb	108.535 %	0.006 ppb	0.003 ppb	107.657 %	0.132 ppb
Concentration per Run 3	0.253 ppb	0.360 ppb	294.594 ppb	0.893 ppb	103.874 %	0.004 ppb	0.000 ppb	104.875 %	0.148 ppb
Concentration RSD	17.7 %	106.6 %	2.4 %	13.6 %	2.4 %	20.9 %	100.4 %	1.5 %	15.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	16.471 ppb	111.760 %	110.396 %	0.012 ppb	0.167 ppb	105.922 %
Concentration per Run 1	17.118 ppb	107.836 %	107.168 %	0.003 ppb	0.172 ppb	105.530 %
Concentration per Run 2	16.043 ppb	115.544 %	113.139 %	0.015 ppb	0.160 ppb	106.595 %
Concentration per Run 3	16.253 ppb	111.901 %	110.880 %	0.018 ppb	0.169 ppb	105.642 %
Concentration RSD	3.5 %	3.5 %	2.7 %	67.6 %	3.9 %	0.6 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	50	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2469261-13 6020TL	Rack	1		
Analysis started at:	12/3/2024 10:30:43 AM	Vial	27		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	99.415 %	115.376 %	0.250 ppb	36,528.686 ppb	22,185.494 ppb	2,999.603 ppb	13,842.910 ppb	79,019.307 ppb	100.983 %
Concentration per Run 1	93.041 %	115.657 %	0.258 ppb	35,866.740 ppb	21,977.528 ppb	2,965.293 ppb	13,680.411 ppb	78,060.255 ppb	96.511 %
Concentration per Run 2	102.038 %	110.606 %	0.247 ppb	38,105.572 ppb	23,093.258 ppb	3,096.760 ppb	14,022.356 ppb	80,635.308 ppb	101.754 %
Concentration per Run 3	103.167 %	119.866 %	0.243 ppb	35,613.746 ppb	21,485.695 ppb	2,936.757 ppb	13,825.964 ppb	78,362.359 ppb	104.686 %
Concentration RSD	5.6 %	4.0 %	3.0 %	3.8 %	3.7 %	2.8 %	1.2 %	1.8 %	4.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	9.950 ppb	10.370 ppb	140.368 ppb	4,773.990 ppb	4.350 ppb	4.839 ppb	4.844 ppb	14.883 ppb	100.999 %
Concentration per Run 1	9.614 ppb	9.721 ppb	137.691 ppb	4,594.123 ppb	4.409 ppb	4.661 ppb	4.775 ppb	14.312 ppb	103.725 %
Concentration per Run 2	10.196 ppb	10.843 ppb	143.718 ppb	5,018.622 ppb	4.513 ppb	5.042 ppb	4.803 ppb	15.507 ppb	98.682 %
Concentration per Run 3	10.040 ppb	10.548 ppb	139.696 ppb	4,709.225 ppb	4.127 ppb	4.815 ppb	4.954 ppb	14.832 ppb	100.591 %
Concentration RSD	3.0 %	5.6 %	2.2 %	4.6 %	4.6 %	4.0 %	2.0 %	4.0 %	2.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	2.007 ppb	14.746 ppb	324.729 ppb	17.440 ppb	104.738 %	0.007 ppb	0.046 ppb	105.789 %	0.338 ppb
Concentration per Run 1	2.212 ppb	14.831 ppb	314.720 ppb	16.484 ppb	107.212 %	0.010 ppb	0.031 ppb	105.924 %	0.338 ppb
Concentration per Run 2	1.955 ppb	13.555 ppb	334.180 ppb	18.205 ppb	101.034 %	0.007 ppb	0.047 ppb	103.608 %	0.348 ppb
Concentration per Run 3	1.853 ppb	15.853 ppb	325.286 ppb	17.631 ppb	105.968 %	0.004 ppb	0.059 ppb	107.835 %	0.329 ppb
Concentration RSD	9.2 %	7.8 %	3.0 %	5.0 %	3.1 %	43.3 %	30.1 %	2.0 %	2.8 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	26.951 ppb	111.739 %	108.527 %	0.035 ppb	3.890 ppb	105.591 %
Concentration per Run 1	25.519 ppb	113.953 %	108.687 %	0.033 ppb	3.738 ppb	109.076 %
Concentration per Run 2	28.060 ppb	110.099 %	107.578 %	0.038 ppb	3.997 ppb	104.103 %
Concentration per Run 3	27.276 ppb	111.164 %	109.314 %	0.034 ppb	3.934 ppb	103.593 %
Concentration RSD	4.8 %	1.8 %	0.8 %	7.8 %	3.5 %	2.9 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	51	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2469261-14 6020TL	Rack	1		
Analysis started at:	12/3/2024 10:35:10 AM	Vial	28		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	101.397 %	110.326 %	0.288 ppb	38,781.002 ppb	24,031.552 ppb	3,611.559 ppb	14,438.374 ppb	80,397.528 ppb	101.565 %
Concentration per Run 1	96.704 %	109.259 %	0.288 ppb	38,569.482 ppb	24,224.469 ppb	3,628.758 ppb	14,660.600 ppb	79,677.930 ppb	98.857 %
Concentration per Run 2	102.720 %	108.923 %	0.291 ppb	39,578.718 ppb	24,182.936 ppb	3,600.360 ppb	14,192.473 ppb	80,131.104 ppb	101.093 %
Concentration per Run 3	104.767 %	112.795 %	0.285 ppb	38,194.808 ppb	23,687.251 ppb	3,605.558 ppb	14,462.051 ppb	81,383.551 ppb	104.745 %
Concentration RSD	4.1 %	1.9 %	1.2 %	1.8 %	1.2 %	0.4 %	1.6 %	1.1 %	2.9 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	11.143 ppb	11.703 ppb	160.337 ppb	5,798.384 ppb	5.204 ppb	5.771 ppb	5.363 ppb	17.706 ppb	98.918 %
Concentration per Run 1	10.354 ppb	11.331 ppb	161.808 ppb	5,774.936 ppb	5.163 ppb	6.254 ppb	5.245 ppb	17.822 ppb	100.041 %
Concentration per Run 2	11.478 ppb	11.878 ppb	160.955 ppb	5,953.082 ppb	5.534 ppb	5.703 ppb	5.596 ppb	18.257 ppb	96.264 %
Concentration per Run 3	11.596 ppb	11.902 ppb	158.248 ppb	5,667.134 ppb	4.913 ppb	5.354 ppb	5.249 ppb	17.039 ppb	100.449 %
Concentration RSD	6.2 %	2.8 %	1.2 %	2.5 %	6.0 %	7.9 %	3.8 %	3.5 %	2.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	2.238 ppb	16.682 ppb	333.160 ppb	16.969 ppb	103.978 %	0.003 ppb	0.042 ppb	106.616 %	0.319 ppb
Concentration per Run 1	2.079 ppb	16.286 ppb	328.447 ppb	16.425 ppb	105.144 %	0.000 ppb	0.052 ppb	106.791 %	0.294 ppb
Concentration per Run 2	2.186 ppb	17.412 ppb	337.538 ppb	16.879 ppb	103.355 %	0.002 ppb	0.039 ppb	105.810 %	0.383 ppb
Concentration per Run 3	2.448 ppb	16.349 ppb	333.496 ppb	17.603 ppb	103.434 %	0.006 ppb	0.035 ppb	107.248 %	0.280 ppb
Concentration RSD	8.5 %	3.8 %	1.4 %	3.5 %	1.0 %	106.9 %	21.7 %	0.7 %	17.5 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	28.112 ppb	112.761 %	109.216 %	0.030 ppb	4.489 ppb	105.119 %
Concentration per Run 1	28.097 ppb	115.433 %	110.796 %	0.021 ppb	4.395 ppb	106.770 %
Concentration per Run 2	28.293 ppb	111.421 %	109.013 %	0.032 ppb	4.630 ppb	102.811 %
Concentration per Run 3	27.947 ppb	111.431 %	107.840 %	0.037 ppb	4.442 ppb	105.776 %
Concentration RSD	0.6 %	2.1 %	1.4 %	26.5 %	2.8 %	2.0 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	52	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	CCV	Rack	0		
Analysis started at:	12/3/2024 10:39:37 AM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	112.415 %	108.137 %	51.507 ppb	6,086.589 ppb	5,849.735 ppb	57.893 ppb	6,058.661 ppb	5,922.331 ppb	111.170 %
Concentration per Run 1	109.726 %	107.408 %	50.002 ppb	6,076.394 ppb	5,817.939 ppb	56.181 ppb	5,848.853 ppb	5,870.692 ppb	110.453 %
Concentration per Run 2	113.636 %	113.805 %	50.349 ppb	5,920.835 ppb	5,686.390 ppb	56.546 ppb	5,966.297 ppb	5,872.198 ppb	114.223 %
Concentration per Run 3	113.883 %	103.199 %	54.170 ppb	6,262.538 ppb	6,044.876 ppb	60.953 ppb	6,360.834 ppb	6,024.103 ppb	108.834 %
Recovery Percentage 1			85.845 %	101.443 %	97.496 %	96.489 %	100.978 %	98.706 %	
Concentration RSD	2.1 %	4.9 %	4.5 %	2.8 %	3.1 %	4.6 %	4.4 %	1.5 %	2.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	58.542 ppb	59.239 ppb	59.058 ppb	5,932.809 ppb	60.183 ppb	61.440 ppb	60.917 ppb	61.048 ppb	100.240 %
Concentration per Run 1	57.594 ppb	58.531 ppb	57.856 ppb	5,900.408 ppb	60.062 ppb	60.352 ppb	60.787 ppb	61.768 ppb	102.766 %
Concentration per Run 2	56.547 ppb	58.500 ppb	58.384 ppb	5,925.367 ppb	59.988 ppb	63.630 ppb	61.472 ppb	60.588 ppb	98.127 %
Concentration per Run 3	61.484 ppb	60.687 ppb	60.935 ppb	5,972.651 ppb	60.500 ppb	60.338 ppb	60.492 ppb	60.787 ppb	99.828 %
Recovery Percentage 1	97.570 %	98.732 %	98.430 %	98.880 %	100.305 %	102.400 %	101.528 %	101.746 %	
Concentration RSD	4.4 %	2.1 %	2.8 %	0.6 %	0.5 %	3.1 %	0.8 %	1.0 %	2.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	60.606 ppb	57.208 ppb	58.209 ppb	56.740 ppb	107.150 %	56.490 ppb	57.878 ppb	104.293 %	57.794 ppb
Concentration per Run 1	58.852 ppb	54.193 ppb	57.073 ppb	55.411 ppb	108.270 %	54.319 ppb	56.451 ppb	106.379 %	56.683 ppb
Concentration per Run 2	61.211 ppb	61.089 ppb	59.102 ppb	56.589 ppb	105.280 %	57.223 ppb	58.728 ppb	102.607 %	57.998 ppb
Concentration per Run 3	61.754 ppb	56.341 ppb	58.452 ppb	58.219 ppb	107.901 %	57.928 ppb	58.454 ppb	103.894 %	58.702 ppb
Recovery Percentage 1	101.010 %	95.346 %	97.015 %	94.566 %		94.150 %	96.463 %		96.324 %
Concentration RSD	2.5 %	6.2 %	1.8 %	2.5 %	1.5 %	3.4 %	2.1 %	1.8 %	1.8 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	58.102 ppb	107.228 %	106.888 %	55.166 ppb	56.410 ppb	108.892 %
Concentration per Run 1	58.154 ppb	107.348 %	106.772 %	53.449 ppb	55.357 ppb	110.393 %
Concentration per Run 2	57.859 ppb	105.599 %	105.952 %	56.075 ppb	57.159 ppb	106.681 %
Concentration per Run 3	58.292 ppb	108.737 %	107.941 %	55.975 ppb	56.715 ppb	109.603 %
Recovery Percentage 1	96.836 %			91.944 %	94.017 %	
Concentration RSD	0.4 %	1.5 %	0.9 %	2.7 %	1.7 %	1.8 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index: 53
Analysis label: CCB
Analysis started at: 12/3/2024 10:44:08 AM
User name ALPHALAB\a2-icpmsq2
Rack 0
Vial 10
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	108.508 %	110.943 %	0.299 ppb	37.943 ppb	5.640 ppb	0.287 ppb	5.756 ppb	16.688 ppb	98.103 %
Concentration per Run 1	106.335 %	115.488 %	0.322 ppb	32.561 ppb	6.112 ppb	-0.054 ppb	6.136 ppb	24.251 ppb	96.406 %
Concentration per Run 2	109.857 %	114.310 %	0.321 ppb	28.268 ppb	5.367 ppb	0.072 ppb	6.226 ppb	17.805 ppb	98.917 %
Concentration per Run 3	109.331 %	103.030 %	0.254 ppb	53.000 ppb	5.442 ppb	0.842 ppb	4.904 ppb	8.010 ppb	98.984 %
Recovery Percentage 1			59.832 %	7.589 %	8.058 %	2.867 %	5.756 %	16.688 %	
Concentration RSD	1.8 %	6.2 %	13.0 %	34.8 %	7.3 %	169.2 %	12.8 %	49.0 %	1.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.430 ppb	0.001 ppb	0.124 ppb	9.324 ppb	0.025 ppb	-0.004 ppb	0.108 ppb	0.297 ppb	100.959 %
Concentration per Run 1	-0.379 ppb	0.037 ppb	0.140 ppb	10.730 ppb	0.019 ppb	0.035 ppb	0.091 ppb	0.320 ppb	99.484 %
Concentration per Run 2	-0.442 ppb	-0.038 ppb	0.024 ppb	7.965 ppb	0.013 ppb	-0.046 ppb	0.098 ppb	0.316 ppb	100.509 %
Concentration per Run 3	-0.470 ppb	0.005 ppb	0.208 ppb	9.278 ppb	0.042 ppb	0.000 ppb	0.136 ppb	0.256 ppb	102.883 %
Recovery Percentage 1	-8.605 %	0.147 %	12.390 %	18.649 %	4.936 %	-0.175 %	10.816 %	5.948 %	
Concentration RSD	10.7 %	2,562.9 %	74.7 %	14.8 %	62.6 %	1,171.5 %	22.4 %	12.2 %	1.7 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.068 ppb	0.220 ppb	0.081 ppb	0.330 ppb	105.479 %	0.020 ppb	0.021 ppb	101.769 %	0.060 ppb
Concentration per Run 1	-0.026 ppb	0.457 ppb	0.105 ppb	0.291 ppb	109.930 %	0.023 ppb	0.027 ppb	107.527 %	0.045 ppb
Concentration per Run 2	0.136 ppb	0.127 ppb	0.081 ppb	0.332 ppb	104.757 %	0.022 ppb	0.026 ppb	98.973 %	0.051 ppb
Concentration per Run 3	0.095 ppb	0.076 ppb	0.058 ppb	0.366 ppb	101.751 %	0.015 ppb	0.011 ppb	98.807 %	0.084 ppb
Recovery Percentage 1	13.644 %	4.395 %	0.811 %	16.489 %		5.043 %	10.672 %		1.494 %
Concentration RSD	123.7 %	94.2 %	29.0 %	11.5 %	3.9 %	20.8 %	41.7 %	4.9 %	35.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.032 ppb	105.257 %	106.031 %	0.243 ppb	0.035 ppb	106.902 %
Concentration per Run 1	0.048 ppb	106.063 %	108.739 %	0.221 ppb	0.050 ppb	108.948 %
Concentration per Run 2	0.052 ppb	104.451 %	102.461 %	0.284 ppb	0.030 ppb	104.322 %
Concentration per Run 3	-0.005 ppb	105.256 %	106.894 %	0.224 ppb	0.024 ppb	107.436 %
Recovery Percentage 1	6.323 %			24.290 %	3.487 %	
Concentration RSD	100.4 %	0.8 %	3.0 %	14.5 %	37.8 %	2.2 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	54	User name	ALPHALAB\a2-icpmsq2	Comment	CCV/MCCV
Analysis label:	CCV	Rack	0		
Analysis started at:	12/3/2024 11:00:44 AM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	106.067 %	111.560 %	57.878 ppb	5,999.161 ppb	5,962.342 ppb	58.996 ppb	5,949.802 ppb	6,037.103 ppb	101.498 %
Concentration per Run 1	103.309 %	118.182 %	58.070 ppb	5,795.904 ppb	5,781.111 ppb	56.982 ppb	5,783.712 ppb	6,210.148 ppb	101.660 %
Concentration per Run 2	107.348 %	105.724 %	57.420 ppb	6,104.722 ppb	6,095.598 ppb	61.374 ppb	6,050.128 ppb	6,142.082 ppb	101.683 %
Concentration per Run 3	107.544 %	110.775 %	58.145 ppb	6,096.856 ppb	6,010.316 ppb	58.632 ppb	6,015.567 ppb	5,759.080 ppb	101.152 %
Recovery Percentage 1			96.463 %	99.986 %	99.372 %	98.326 %	99.163 %	100.618 %	
Concentration RSD	2.3 %	5.6 %	0.7 %	2.9 %	2.7 %	3.8 %	2.4 %	4.0 %	0.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	56.497 ppb	58.008 ppb	58.984 ppb	5,861.488 ppb	58.058 ppb	59.763 ppb	58.128 ppb	59.750 ppb	104.040 %
Concentration per Run 1	55.192 ppb	59.641 ppb	60.175 ppb	5,920.366 ppb	57.526 ppb	60.152 ppb	60.736 ppb	59.851 ppb	100.656 %
Concentration per Run 2	56.694 ppb	56.473 ppb	56.627 ppb	5,694.289 ppb	56.977 ppb	58.923 ppb	57.195 ppb	59.445 ppb	105.548 %
Concentration per Run 3	57.604 ppb	57.911 ppb	60.150 ppb	5,969.809 ppb	59.673 ppb	60.214 ppb	56.453 ppb	59.953 ppb	105.916 %
Recovery Percentage 1	94.161 %	96.680 %	98.307 %	97.691 %	96.764 %	99.605 %	96.880 %	99.583 %	
Concentration RSD	2.2 %	2.7 %	3.5 %	2.5 %	2.5 %	1.2 %	3.9 %	0.4 %	2.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	58.617 ppb	55.636 ppb	57.909 ppb	57.506 ppb	106.684 %	57.737 ppb	57.289 ppb	107.388 %	57.298 ppb
Concentration per Run 1	59.067 ppb	53.618 ppb	58.344 ppb	55.586 ppb	111.356 %	56.347 ppb	56.717 ppb	111.427 %	55.242 ppb
Concentration per Run 2	57.503 ppb	57.230 ppb	57.076 ppb	58.012 ppb	106.350 %	57.652 ppb	57.073 ppb	107.040 %	56.318 ppb
Concentration per Run 3	59.280 ppb	56.059 ppb	58.308 ppb	58.919 ppb	102.345 %	59.211 ppb	58.078 ppb	103.699 %	60.334 ppb
Recovery Percentage 1	97.694 %	92.727 %	96.515 %	95.843 %		96.228 %	95.482 %		95.496 %
Concentration RSD	1.7 %	3.3 %	1.2 %	3.0 %	4.2 %	2.5 %	1.2 %	3.6 %	4.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	56.582 ppb	108.976 %	108.243 %	55.907 ppb	56.529 ppb	111.635 %
Concentration per Run 1	54.389 ppb	112.384 %	110.387 %	55.225 ppb	56.021 ppb	113.701 %
Concentration per Run 2	56.835 ppb	108.662 %	108.456 %	56.179 ppb	56.774 ppb	109.345 %
Concentration per Run 3	58.523 ppb	105.883 %	105.885 %	56.318 ppb	56.792 ppb	111.858 %
Recovery Percentage 1	94.304 %			93.179 %	94.215 %	
Concentration RSD	3.7 %	3.0 %	2.1 %	1.1 %	0.8 %	2.0 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	55	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	CCB	Rack	0		
Analysis started at:	12/3/2024 11:05:15 AM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	102.940 %	113.637 %	0.120 ppb	24.195 ppb	17.998 ppb	0.508 ppb	25.216 ppb	29.599 ppb	94.943 %
Concentration per Run 1	100.060 %	116.667 %	0.128 ppb	6.481 ppb	6.802 ppb	0.388 ppb	15.633 ppb	17.401 ppb	94.815 %
Concentration per Run 2	104.403 %	112.627 %	0.118 ppb	28.691 ppb	20.278 ppb	0.862 ppb	27.526 ppb	48.110 ppb	94.632 %
Concentration per Run 3	104.357 %	111.616 %	0.114 ppb	37.412 ppb	26.914 ppb	0.274 ppb	32.488 ppb	23.285 ppb	95.381 %
Recovery Percentage 1			23.996 %	4.839 %	25.711 %	5.079 %	25.216 %	29.599 %	
Concentration RSD	2.4 %	2.4 %	5.9 %	65.9 %	56.9 %	61.3 %	34.3 %	55.1 %	0.4 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.365 ppb	0.142 ppb	0.284 ppb	19.491 ppb	0.166 ppb	0.301 ppb	0.262 ppb	0.535 ppb	101.525 %
Concentration per Run 1	-0.520 ppb	0.055 ppb	0.234 ppb	7.587 ppb	0.051 ppb	0.228 ppb	0.198 ppb	0.434 ppb	100.878 %
Concentration per Run 2	-0.333 ppb	0.114 ppb	0.269 ppb	22.989 ppb	0.207 ppb	0.265 ppb	0.245 ppb	0.509 ppb	101.202 %
Concentration per Run 3	-0.243 ppb	0.256 ppb	0.348 ppb	27.897 ppb	0.240 ppb	0.410 ppb	0.343 ppb	0.661 ppb	102.494 %
Recovery Percentage 1	-7.306 %	14.170 %	28.390 %	38.982 %	33.194 %	15.051 %	26.193 %	10.695 %	
Concentration RSD	38.7 %	73.2 %	20.6 %	54.4 %	60.8 %	32.0 %	28.2 %	21.7 %	0.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.199 ppb	0.299 ppb	0.165 ppb	0.425 ppb	106.205 %	0.162 ppb	0.150 ppb	104.755 %	0.203 ppb
Concentration per Run 1	0.117 ppb	0.326 ppb	0.068 ppb	0.168 ppb	111.422 %	0.056 ppb	0.061 ppb	108.022 %	0.094 ppb
Concentration per Run 2	0.231 ppb	0.121 ppb	0.195 ppb	0.553 ppb	102.199 %	0.187 ppb	0.179 ppb	103.444 %	0.199 ppb
Concentration per Run 3	0.249 ppb	0.448 ppb	0.231 ppb	0.554 ppb	104.995 %	0.245 ppb	0.211 ppb	102.800 %	0.315 ppb
Recovery Percentage 1	39.820 %	5.971 %	1.645 %	21.257 %		40.605 %	75.137 %		5.071 %
Concentration RSD	35.9 %	55.3 %	52.0 %	52.4 %	4.5 %	59.6 %	52.5 %	2.7 %	54.4 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.172 ppb	106.791 %	105.376 %	0.372 ppb	0.176 ppb	107.514 %
Concentration per Run 1	0.087 ppb	108.240 %	108.396 %	0.254 ppb	0.084 ppb	107.602 %
Concentration per Run 2	0.186 ppb	106.648 %	104.603 %	0.444 ppb	0.195 ppb	105.408 %
Concentration per Run 3	0.243 ppb	105.486 %	103.130 %	0.420 ppb	0.250 ppb	109.531 %
Recovery Percentage 1	34.438 %			37.240 %	17.634 %	
Concentration RSD	45.8 %	1.3 %	2.6 %	27.8 %	48.1 %	1.9 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	56	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG2003775-1 6020TL	Rack	1		
Analysis started at:	12/3/2024 11:11:12 AM	Vial	29		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	110.001 %	122.279 %	0.023 ppb	-11.968 ppb	1.957 ppb	2.181 ppb	-6.287 ppb	36.240 ppb	106.282 %
Concentration per Run 1	104.648 %	126.095 %	0.052 ppb	-16.849 ppb	1.369 ppb	1.536 ppb	-19.686 ppb	34.354 ppb	105.628 %
Concentration per Run 2	114.713 %	117.172 %	0.007 ppb	-5.978 ppb	1.387 ppb	2.679 ppb	-3.677 ppb	45.510 ppb	107.876 %
Concentration per Run 3	110.643 %	123.569 %	0.008 ppb	-13.077 ppb	3.115 ppb	2.328 ppb	4.500 ppb	28.857 ppb	105.341 %
Concentration RSD	4.6 %	3.8 %	115.0 %	46.1 %	51.2 %	26.8 %	195.7 %	23.4 %	1.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.543 ppb	0.059 ppb	0.109 ppb	3.279 ppb	0.008 ppb	-0.017 ppb	0.182 ppb	0.343 ppb	104.894 %
Concentration per Run 1	-0.555 ppb	0.022 ppb	0.061 ppb	4.348 ppb	0.014 ppb	-0.022 ppb	0.134 ppb	0.359 ppb	110.572 %
Concentration per Run 2	-0.520 ppb	0.094 ppb	0.087 ppb	3.668 ppb	0.006 ppb	-0.048 ppb	0.211 ppb	0.378 ppb	101.715 %
Concentration per Run 3	-0.552 ppb	0.060 ppb	0.179 ppb	1.821 ppb	0.006 ppb	0.018 ppb	0.200 ppb	0.292 ppb	102.396 %
Concentration RSD	3.6 %	61.9 %	56.4 %	39.9 %	53.4 %	192.7 %	23.0 %	13.2 %	4.7 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.047 ppb	0.041 ppb	0.041 ppb	0.010 ppb	110.882 %	0.009 ppb	0.007 ppb	114.449 %	0.019 ppb
Concentration per Run 1	0.003 ppb	0.072 ppb	0.032 ppb	-0.027 ppb	120.149 %	0.007 ppb	0.006 ppb	122.555 %	0.013 ppb
Concentration per Run 2	0.058 ppb	0.120 ppb	0.049 ppb	0.066 ppb	106.822 %	0.010 ppb	0.010 ppb	111.551 %	0.023 ppb
Concentration per Run 3	0.080 ppb	-0.069 ppb	0.040 ppb	-0.010 ppb	105.674 %	0.009 ppb	0.003 ppb	109.241 %	0.022 ppb
Concentration RSD	83.7 %	240.1 %	20.7 %	497.8 %	7.3 %	18.5 %	51.4 %	6.2 %	28.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.022 ppb	112.949 %	111.403 %	0.052 ppb	0.021 ppb	114.728 %
Concentration per Run 1	0.052 ppb	120.426 %	119.958 %	0.033 ppb	0.018 ppb	121.996 %
Concentration per Run 2	0.007 ppb	110.842 %	107.558 %	0.064 ppb	0.019 ppb	113.663 %
Concentration per Run 3	0.007 ppb	107.580 %	106.692 %	0.058 ppb	0.026 ppb	108.524 %
Concentration RSD	117.3 %	5.9 %	6.7 %	31.9 %	19.3 %	5.9 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	57	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG2003775-2d10 6020TL	Rack	1		
Analysis started at:	12/3/2024 11:15:40 AM	Vial	30		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	104.926 %	112.178 %	5.199 ppb	1,074.055 ppb	999.509 ppb	198.475 ppb	1,077.035 ppb	997.886 ppb	98.792 %
Concentration per Run 1	99.773 %	115.825 %	5.280 ppb	1,038.539 ppb	975.747 ppb	189.568 ppb	1,055.985 ppb	917.967 ppb	95.550 %
Concentration per Run 2	107.099 %	111.448 %	5.146 ppb	1,074.215 ppb	985.542 ppb	202.946 ppb	1,087.005 ppb	1,072.445 ppb	101.295 %
Concentration per Run 3	107.906 %	109.259 %	5.170 ppb	1,109.412 ppb	1,037.237 ppb	202.910 ppb	1,088.114 ppb	1,003.246 ppb	99.530 %
Concentration RSD	4.3 %	3.0 %	1.4 %	3.3 %	3.3 %	3.9 %	1.7 %	7.8 %	3.0 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	49.195 ppb	20.386 ppb	52.778 ppb	114.870 ppb	52.554 ppb	51.707 ppb	26.097 ppb	52.860 ppb	100.183 %
Concentration per Run 1	47.979 ppb	20.239 ppb	51.953 ppb	105.565 ppb	51.294 ppb	51.036 ppb	26.235 ppb	52.688 ppb	101.453 %
Concentration per Run 2	48.288 ppb	20.479 ppb	52.479 ppb	121.432 ppb	53.436 ppb	51.203 ppb	26.105 ppb	52.301 ppb	98.756 %
Concentration per Run 3	51.319 ppb	20.439 ppb	53.901 ppb	117.613 ppb	52.931 ppb	52.882 ppb	25.952 ppb	53.591 ppb	100.339 %
Concentration RSD	3.8 %	0.6 %	1.9 %	7.2 %	2.1 %	2.0 %	0.5 %	1.3 %	1.4 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	12.676 ppb	11.789 ppb	98.401 ppb	97.591 ppb	105.413 %	5.265 ppb	5.309 ppb	105.680 %	40.215 ppb
Concentration per Run 1	12.340 ppb	12.060 ppb	97.148 ppb	95.085 ppb	107.278 %	5.147 ppb	5.142 ppb	109.793 %	38.661 ppb
Concentration per Run 2	13.339 ppb	12.313 ppb	98.191 ppb	97.841 ppb	104.960 %	5.326 ppb	5.302 ppb	102.155 %	40.757 ppb
Concentration per Run 3	12.349 ppb	10.994 ppb	99.864 ppb	99.848 ppb	104.002 %	5.321 ppb	5.483 ppb	105.091 %	41.227 ppb
Concentration RSD	4.5 %	5.9 %	1.4 %	2.5 %	1.6 %	1.9 %	3.2 %	3.6 %	3.4 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	200.330 ppb	107.521 %	105.827 %	11.642 ppb	51.733 ppb	108.729 %
Concentration per Run 1	192.816 ppb	109.025 %	106.922 %	11.407 ppb	51.279 ppb	111.040 %
Concentration per Run 2	201.442 ppb	106.078 %	106.464 %	11.736 ppb	51.965 ppb	106.011 %
Concentration per Run 3	206.732 ppb	107.462 %	104.094 %	11.784 ppb	51.956 ppb	109.136 %
Concentration RSD	3.5 %	1.4 %	1.4 %	1.8 %	0.8 %	2.3 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	58	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2469249-06 6020TL	Rack	1		
Analysis started at:	12/3/2024 11:20:08 AM	Vial	31		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	96.006 %	113.244 %	0.400 ppb	61,483.067 ppb	31,129.826 ppb	3,638.650 ppb	7,228.747 ppb	122,167.322 ppb	100.498 %
Concentration per Run 1	91.622 %	110.943 %	0.458 ppb	61,701.003 ppb	31,248.185 ppb	3,642.293 ppb	7,072.227 ppb	120,466.866 ppb	97.658 %
Concentration per Run 2	96.166 %	116.162 %	0.387 ppb	59,335.734 ppb	30,497.846 ppb	3,575.730 ppb	7,172.276 ppb	123,754.279 ppb	101.627 %
Concentration per Run 3	100.229 %	112.626 %	0.355 ppb	63,412.465 ppb	31,643.446 ppb	3,697.927 ppb	7,441.739 ppb	122,280.823 ppb	102.210 %
Concentration RSD	4.5 %	2.4 %	13.2 %	3.3 %	1.9 %	1.7 %	2.6 %	1.3 %	2.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	11.679 ppb	11.676 ppb	3,472.910 ppb	6,933.646 ppb	8.805 ppb	13.448 ppb	20.055 ppb	93.196 ppb	102.605 %
Concentration per Run 1	11.760 ppb	11.427 ppb	3,449.666 ppb	6,917.748 ppb	8.863 ppb	12.970 ppb	19.746 ppb	92.927 ppb	105.642 %
Concentration per Run 2	11.630 ppb	11.885 ppb	3,443.924 ppb	6,965.831 ppb	8.690 ppb	13.926 ppb	20.669 ppb	94.466 ppb	100.498 %
Concentration per Run 3	11.647 ppb	11.717 ppb	3,525.141 ppb	6,917.360 ppb	8.863 ppb	13.449 ppb	19.750 ppb	92.195 ppb	101.676 %
Concentration RSD	0.6 %	2.0 %	1.3 %	0.4 %	1.1 %	3.6 %	2.7 %	1.2 %	2.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	2.014 ppb	2.793 ppb	820.582 ppb	2.766 ppb	104.742 %	0.041 ppb	0.351 ppb	108.707 %	2.972 ppb
Concentration per Run 1	2.101 ppb	2.087 ppb	818.827 ppb	2.503 ppb	103.866 %	0.047 ppb	0.362 ppb	110.345 %	2.995 ppb
Concentration per Run 2	2.076 ppb	2.932 ppb	821.478 ppb	2.839 ppb	105.912 %	0.044 ppb	0.332 ppb	109.092 %	2.918 ppb
Concentration per Run 3	1.865 ppb	3.361 ppb	821.440 ppb	2.956 ppb	104.448 %	0.031 ppb	0.359 ppb	106.685 %	3.003 ppb
Concentration RSD	6.4 %	23.2 %	0.2 %	8.5 %	1.0 %	20.8 %	4.8 %	1.7 %	1.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	93.636 ppb	111.439 %	111.802 %	0.134 ppb	38.082 ppb	107.235 %
Concentration per Run 1	93.258 ppb	113.720 %	110.403 %	0.113 ppb	37.374 ppb	108.968 %
Concentration per Run 2	91.455 ppb	107.960 %	112.959 %	0.152 ppb	38.645 ppb	105.750 %
Concentration per Run 3	96.195 ppb	112.638 %	112.042 %	0.138 ppb	38.227 ppb	106.987 %
Concentration RSD	2.6 %	2.7 %	1.2 %	14.6 %	1.7 %	1.5 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	59	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG2003775-3d10 6020TL	Rack	1		
Analysis started at:	12/3/2024 11:24:36 AM	Vial	32		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	109.384 %	120.988 %	4.771 ppb	6,699.680 ppb	3,945.424 ppb	597.867 ppb	1,604.475 ppb	12,285.881 ppb	104.250 %
Concentration per Run 1	104.958 %	122.391 %	4.773 ppb	6,438.087 ppb	3,839.269 ppb	588.764 ppb	1,592.254 ppb	12,078.111 ppb	101.164 %
Concentration per Run 2	111.617 %	119.866 %	4.728 ppb	6,821.298 ppb	3,968.138 ppb	596.163 ppb	1,560.704 ppb	12,219.050 ppb	107.215 %
Concentration per Run 3	111.578 %	120.707 %	4.811 ppb	6,839.654 ppb	4,028.865 ppb	608.674 ppb	1,660.468 ppb	12,560.483 ppb	104.371 %
Concentration RSD	3.5 %	1.1 %	0.9 %	3.4 %	2.5 %	1.7 %	3.2 %	2.0 %	2.9 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	45.752 ppb	19.600 ppb	381.111 ppb	743.806 ppb	48.399 ppb	49.575 ppb	26.236 ppb	57.457 ppb	106.560 %
Concentration per Run 1	42.592 ppb	18.644 ppb	365.397 ppb	713.461 ppb	47.127 ppb	48.308 ppb	26.068 ppb	56.348 ppb	108.463 %
Concentration per Run 2	45.718 ppb	20.207 ppb	392.412 ppb	753.954 ppb	50.346 ppb	50.627 ppb	26.232 ppb	59.209 ppb	104.789 %
Concentration per Run 3	48.945 ppb	19.949 ppb	385.526 ppb	764.002 ppb	47.723 ppb	49.789 ppb	26.407 ppb	56.814 ppb	106.428 %
Concentration RSD	6.9 %	4.3 %	3.7 %	3.6 %	3.5 %	2.4 %	0.6 %	2.7 %	1.7 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	11.184 ppb	10.876 ppb	169.928 ppb	87.998 ppb	110.893 %	4.897 ppb	4.904 ppb	109.724 %	36.944 ppb
Concentration per Run 1	10.469 ppb	11.420 ppb	163.022 ppb	83.675 ppb	115.286 %	4.584 ppb	4.534 ppb	113.757 %	35.227 ppb
Concentration per Run 2	11.615 ppb	9.690 ppb	174.857 ppb	90.468 ppb	107.373 %	5.074 ppb	5.166 ppb	106.623 %	38.929 ppb
Concentration per Run 3	11.467 ppb	11.518 ppb	171.905 ppb	89.849 ppb	110.021 %	5.034 ppb	5.012 ppb	108.791 %	36.674 ppb
Concentration RSD	5.6 %	9.5 %	3.6 %	4.3 %	3.6 %	5.6 %	6.7 %	3.3 %	5.0 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	193.933 ppb	112.241 %	110.896 %	11.048 ppb	53.007 ppb	112.134 %
Concentration per Run 1	184.830 ppb	117.887 %	115.776 %	10.126 ppb	49.532 ppb	117.729 %
Concentration per Run 2	199.527 ppb	108.133 %	107.984 %	11.471 ppb	55.152 ppb	108.599 %
Concentration per Run 3	197.442 ppb	110.703 %	108.928 %	11.545 ppb	54.336 ppb	110.073 %
Concentration RSD	4.1 %	4.5 %	3.8 %	7.2 %	5.7 %	4.4 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	60	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG2003775-4d10 6020TL	Rack	1		
Analysis started at:	12/3/2024 11:29:04 AM	Vial	33		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	108.299 %	118.294 %	4.765 ppb	6,728.602 ppb	3,919.314 ppb	604.463 ppb	1,619.042 ppb	12,269.519 ppb	103.214 %
Concentration per Run 1	105.133 %	116.835 %	4.831 ppb	6,815.853 ppb	3,960.790 ppb	606.536 ppb	1,610.404 ppb	11,882.252 ppb	99.277 %
Concentration per Run 2	109.890 %	120.202 %	4.648 ppb	6,619.642 ppb	3,886.431 ppb	596.101 ppb	1,641.630 ppb	12,683.807 ppb	105.933 %
Concentration per Run 3	109.872 %	117.845 %	4.817 ppb	6,750.311 ppb	3,910.720 ppb	610.753 ppb	1,605.093 ppb	12,242.497 ppb	104.431 %
Concentration RSD	2.5 %	1.5 %	2.1 %	1.5 %	1.0 %	1.2 %	1.2 %	3.3 %	3.4 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	46.361 ppb	19.318 ppb	375.511 ppb	758.418 ppb	48.156 ppb	48.888 ppb	25.784 ppb	57.266 ppb	105.502 %
Concentration per Run 1	45.204 ppb	19.116 ppb	382.228 ppb	794.084 ppb	48.430 ppb	49.720 ppb	26.431 ppb	57.880 ppb	103.696 %
Concentration per Run 2	47.264 ppb	19.392 ppb	372.537 ppb	755.439 ppb	48.542 ppb	48.914 ppb	25.201 ppb	58.235 ppb	102.075 %
Concentration per Run 3	46.614 ppb	19.447 ppb	371.767 ppb	725.730 ppb	47.496 ppb	48.030 ppb	25.719 ppb	55.683 ppb	110.735 %
Concentration RSD	2.3 %	0.9 %	1.6 %	4.5 %	1.2 %	1.7 %	2.4 %	2.4 %	4.4 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	11.352 ppb	11.398 ppb	169.364 ppb	87.816 ppb	106.600 %	4.835 ppb	4.908 ppb	107.526 %	37.008 ppb
Concentration per Run 1	11.242 ppb	12.288 ppb	169.392 ppb	85.322 ppb	107.627 %	4.725 ppb	4.891 ppb	110.859 %	36.409 ppb
Concentration per Run 2	11.615 ppb	11.531 ppb	172.082 ppb	90.718 ppb	106.747 %	4.846 ppb	4.770 ppb	107.093 %	36.944 ppb
Concentration per Run 3	11.200 ppb	10.375 ppb	166.619 ppb	87.407 ppb	105.425 %	4.935 ppb	5.062 ppb	104.627 %	37.670 ppb
Concentration RSD	2.0 %	8.5 %	1.6 %	3.1 %	1.0 %	2.2 %	3.0 %	2.9 %	1.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	194.636 ppb	110.746 %	108.108 %	10.857 ppb	52.090 ppb	110.226 %
Concentration per Run 1	195.075 ppb	113.787 %	110.382 %	10.684 ppb	51.629 ppb	112.021 %
Concentration per Run 2	194.898 ppb	109.878 %	108.881 %	11.025 ppb	52.550 ppb	108.848 %
Concentration per Run 3	193.935 ppb	108.574 %	105.060 %	10.863 ppb	52.090 ppb	109.808 %
Concentration RSD	0.3 %	2.4 %	2.5 %	1.6 %	0.9 %	1.5 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	61	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG2003775-5d10 6020TL	Rack	1		
Analysis started at:	12/3/2024 11:33:33 AM	Vial	34		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	106.308 %	119.753 %	47.815 ppb	10,699.989 ppb	7,837.444 ppb	406.943 ppb	5,454.736 ppb	16,729.146 ppb	99.863 %
Concentration per Run 1	102.691 %	128.283 %	47.966 ppb	9,957.468 ppb	7,260.830 ppb	379.718 ppb	5,312.264 ppb	15,860.630 ppb	98.025 %
Concentration per Run 2	109.076 %	117.677 %	47.458 ppb	10,831.441 ppb	8,088.622 ppb	425.359 ppb	5,430.310 ppb	16,791.915 ppb	101.747 %
Concentration per Run 3	107.157 %	113.300 %	48.022 ppb	11,311.058 ppb	8,162.880 ppb	415.753 ppb	5,621.635 ppb	17,534.894 ppb	99.817 %
Concentration RSD	3.1 %	6.4 %	0.6 %	6.4 %	6.4 %	5.9 %	2.9 %	5.0 %	1.9 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	46.914 ppb	48.668 ppb	398.211 ppb	5,480.582 ppb	48.918 ppb	50.154 ppb	50.753 ppb	59.675 ppb	105.912 %
Concentration per Run 1	44.545 ppb	46.008 ppb	385.883 ppb	5,273.446 ppb	46.656 ppb	48.844 ppb	49.749 ppb	57.876 ppb	107.953 %
Concentration per Run 2	45.906 ppb	48.868 ppb	392.793 ppb	5,413.845 ppb	48.681 ppb	49.635 ppb	51.441 ppb	59.123 ppb	106.188 %
Concentration per Run 3	50.293 ppb	51.128 ppb	415.955 ppb	5,754.456 ppb	51.417 ppb	51.982 ppb	51.069 ppb	62.026 ppb	103.595 %
Concentration RSD	6.4 %	5.3 %	4.0 %	4.5 %	4.9 %	3.3 %	1.8 %	3.6 %	2.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	49.494 ppb	45.162 ppb	130.824 ppb	49.511 ppb	106.742 %	2.406 ppb	48.011 ppb	106.453 %	49.376 ppb
Concentration per Run 1	49.215 ppb	42.798 ppb	127.503 ppb	47.101 ppb	109.928 %	2.388 ppb	46.274 ppb	111.735 %	46.715 ppb
Concentration per Run 2	49.967 ppb	45.668 ppb	131.063 ppb	51.083 ppb	106.291 %	2.344 ppb	48.613 ppb	103.237 %	50.886 ppb
Concentration per Run 3	49.300 ppb	47.020 ppb	133.906 ppb	50.350 ppb	104.006 %	2.486 ppb	49.147 ppb	104.387 %	50.525 ppb
Concentration RSD	0.8 %	4.8 %	2.5 %	4.3 %	2.8 %	3.0 %	3.2 %	4.3 %	4.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	58.086 ppb	108.887 %	109.356 %	47.410 ppb	52.289 ppb	108.802 %
Concentration per Run 1	55.593 ppb	111.785 %	113.386 %	47.021 ppb	50.926 ppb	111.150 %
Concentration per Run 2	58.134 ppb	108.885 %	106.099 %	46.204 ppb	52.246 ppb	109.145 %
Concentration per Run 3	60.530 ppb	105.992 %	108.584 %	49.005 ppb	53.693 ppb	106.111 %
Concentration RSD	4.3 %	2.7 %	3.4 %	3.0 %	2.6 %	2.3 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	62	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG2003775-6d5 6020TL	Rack	1		
Analysis started at:	12/3/2024 11:38:01 AM	Vial	35		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	107.274 %	114.198 %	0.310 ppb	11,636.485 ppb	6,117.689 ppb	710.048 ppb	1,397.568 ppb	23,662.861 ppb	103.188 %
Concentration per Run 1	100.935 %	114.310 %	0.429 ppb	11,157.331 ppb	6,136.936 ppb	690.043 ppb	1,376.579 ppb	23,745.673 ppb	97.418 %
Concentration per Run 2	104.271 %	114.647 %	0.281 ppb	11,599.120 ppb	5,946.184 ppb	708.946 ppb	1,375.551 ppb	23,482.407 ppb	100.223 %
Concentration per Run 3	116.615 %	113.637 %	0.219 ppb	12,153.003 ppb	6,269.947 ppb	731.156 ppb	1,440.574 ppb	23,760.501 ppb	111.925 %
Concentration RSD	7.7 %	0.5 %	34.9 %	4.3 %	2.7 %	2.9 %	2.7 %	0.7 %	7.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	2.205 ppb	2.290 ppb	678.330 ppb	1,364.489 ppb	1.808 ppb	2.662 ppb	3.880 ppb	19.033 ppb	105.944 %
Concentration per Run 1	2.166 ppb	2.178 ppb	676.714 ppb	1,375.173 ppb	1.819 ppb	2.758 ppb	3.655 ppb	18.542 ppb	105.783 %
Concentration per Run 2	2.085 ppb	2.422 ppb	666.518 ppb	1,330.692 ppb	1.776 ppb	2.769 ppb	3.895 ppb	19.201 ppb	107.809 %
Concentration per Run 3	2.364 ppb	2.269 ppb	691.757 ppb	1,387.602 ppb	1.829 ppb	2.458 ppb	4.092 ppb	19.356 ppb	104.239 %
Concentration RSD	6.5 %	5.4 %	1.9 %	2.2 %	1.6 %	6.6 %	5.6 %	2.3 %	1.7 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.538 ppb	0.743 ppb	157.048 ppb	0.924 ppb	109.369 %	0.007 ppb	0.066 ppb	108.203 %	0.637 ppb
Concentration per Run 1	0.629 ppb	0.719 ppb	154.652 ppb	0.745 ppb	113.245 %	0.009 ppb	0.062 ppb	114.314 %	0.575 ppb
Concentration per Run 2	0.546 ppb	0.712 ppb	156.604 ppb	0.956 ppb	108.099 %	0.006 ppb	0.070 ppb	103.440 %	0.663 ppb
Concentration per Run 3	0.438 ppb	0.799 ppb	159.888 ppb	1.071 ppb	106.763 %	0.006 ppb	0.066 ppb	106.855 %	0.672 ppb
Concentration RSD	17.8 %	6.5 %	1.7 %	17.9 %	3.1 %	19.0 %	6.7 %	5.1 %	8.4 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	18.313 ppb	111.932 %	110.833 %	0.252 ppb	7.631 ppb	109.744 %
Concentration per Run 1	17.767 ppb	113.439 %	111.832 %	0.232 ppb	7.430 ppb	111.548 %
Concentration per Run 2	18.471 ppb	111.905 %	112.039 %	0.293 ppb	7.684 ppb	107.697 %
Concentration per Run 3	18.701 ppb	110.451 %	108.627 %	0.231 ppb	7.778 ppb	109.985 %
Concentration RSD	2.7 %	1.3 %	1.7 %	14.1 %	2.4 %	1.8 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	63	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2469188-01 6020TL	Rack	1		
Analysis started at:	12/3/2024 11:42:31 AM	Vial	36		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	98.106 %	108.418 %	0.141 ppb	324,452.327 ppb	36,827.716 ppb	572.227 ppb	13,352.195 ppb	20,115.850 ppb	98.268 %
Concentration per Run 1	93.462 %	109.091 %	0.190 ppb	317,931.401 ppb	37,649.476 ppb	562.783 ppb	12,847.584 ppb	19,456.651 ppb	97.056 %
Concentration per Run 2	99.962 %	108.586 %	0.139 ppb	326,195.124 ppb	35,037.954 ppb	573.404 ppb	13,440.922 ppb	19,933.006 ppb	98.597 %
Concentration per Run 3	100.895 %	107.576 %	0.093 ppb	329,230.457 ppb	37,795.717 ppb	580.493 ppb	13,768.080 ppb	20,957.894 ppb	99.150 %
Concentration RSD	4.1 %	0.7 %	34.2 %	1.8 %	4.2 %	1.6 %	3.5 %	3.8 %	1.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	2.274 ppb	1.937 ppb	42.091 ppb	1,116.760 ppb	0.603 ppb	1.310 ppb	94.540 ppb	74.814 ppb	103.199 %
Concentration per Run 1	2.273 ppb	1.745 ppb	39.433 ppb	1,094.145 ppb	0.595 ppb	1.419 ppb	92.519 ppb	74.168 ppb	104.898 %
Concentration per Run 2	2.328 ppb	2.038 ppb	43.219 ppb	1,136.937 ppb	0.681 ppb	1.243 ppb	96.580 ppb	75.324 ppb	101.298 %
Concentration per Run 3	2.222 ppb	2.028 ppb	43.622 ppb	1,119.197 ppb	0.533 ppb	1.269 ppb	94.520 ppb	74.951 ppb	103.402 %
Concentration RSD	2.3 %	8.6 %	5.5 %	1.9 %	12.3 %	7.2 %	2.1 %	0.8 %	1.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.728 ppb	0.165 ppb	249.133 ppb	1.009 ppb	103.075 %	0.019 ppb	0.079 ppb	106.511 %	0.583 ppb
Concentration per Run 1	0.788 ppb	0.263 ppb	244.184 ppb	0.931 ppb	104.668 %	0.023 ppb	0.104 ppb	107.997 %	0.558 ppb
Concentration per Run 2	0.736 ppb	0.198 ppb	252.233 ppb	0.817 ppb	101.220 %	0.021 ppb	0.067 ppb	105.788 %	0.556 ppb
Concentration per Run 3	0.660 ppb	0.034 ppb	250.983 ppb	1.278 ppb	103.336 %	0.014 ppb	0.067 ppb	105.748 %	0.635 ppb
Concentration RSD	8.9 %	71.4 %	1.7 %	23.8 %	1.7 %	25.1 %	26.6 %	1.2 %	7.8 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	20.863 ppb	111.389 %	112.740 %	0.074 ppb	6.149 ppb	104.765 %
Concentration per Run 1	20.061 ppb	115.930 %	113.416 %	0.045 ppb	6.045 ppb	104.958 %
Concentration per Run 2	20.842 ppb	107.418 %	110.861 %	0.093 ppb	6.309 ppb	104.882 %
Concentration per Run 3	21.687 ppb	110.818 %	113.942 %	0.083 ppb	6.095 ppb	104.456 %
Concentration RSD	3.9 %	3.8 %	1.5 %	34.4 %	2.3 %	0.3 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	64	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2469188-02 6020TL	Rack	1		
Analysis started at:	12/3/2024 11:47:00 AM	Vial	37		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	53.024 %	89.169 %	0.021 ppb	4,929,163.522 ppb	539,908.301 ppb	114.657 ppb	121,048.554 ppb	109,867.157 ppb	52.978 %
Concentration per Run 1	51.585 %	94.781 %	0.023 ppb	4,677,933.012 ppb	516,947.853 ppb	110.643 ppb	117,502.189 ppb	109,905.533 ppb	53.220 %
Concentration per Run 2	53.902 %	84.512 %	0.022 ppb	5,068,244.519 ppb	562,633.462 ppb	119.885 ppb	126,369.745 ppb	111,496.619 ppb	53.154 %
Concentration per Run 3	53.583 %	88.215 %	0.018 ppb	5,041,313.034 ppb	540,143.588 ppb	113.444 ppb	119,273.729 ppb	108,199.318 ppb	52.559 %
Concentration RSD	2.4 %	5.8 %	13.8 %	4.4 %	4.2 %	4.1 %	3.9 %	1.5 %	0.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	1.085 ppb	0.540 ppb	25.633 ppb	308.277 ppb	0.219 ppb	0.917 ppb	75.973 ppb	74.955 ppb	112.782 %
Concentration per Run 1	1.062 ppb	0.501 ppb	26.953 ppb	322.171 ppb	0.205 ppb	0.914 ppb	82.215 ppb	79.072 ppb	100.998 %
Concentration per Run 2	1.200 ppb	0.578 ppb	25.989 ppb	320.181 ppb	0.235 ppb	0.958 ppb	77.770 ppb	76.439 ppb	111.080 %
Concentration per Run 3	0.991 ppb	0.542 ppb	23.955 ppb	282.479 ppb	0.218 ppb	0.881 ppb	67.935 ppb	69.354 ppb	126.267 %
Concentration RSD	9.8 %	7.1 %	6.0 %	7.3 %	6.9 %	4.2 %	9.6 %	6.7 %	11.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	1.360 ppb	0.142 ppb	3,190.282 ppb	4.993 ppb	85.365 %	0.021 ppb	0.065 ppb	96.112 %	0.465 ppb
Concentration per Run 1	1.523 ppb	0.177 ppb	3,206.530 ppb	4.816 ppb	86.846 %	0.024 ppb	0.060 ppb	94.052 %	0.399 ppb
Concentration per Run 2	1.413 ppb	0.104 ppb	3,265.488 ppb	5.326 ppb	83.637 %	0.022 ppb	0.064 ppb	95.705 %	0.457 ppb
Concentration per Run 3	1.144 ppb	0.146 ppb	3,098.829 ppb	4.839 ppb	85.612 %	0.018 ppb	0.071 ppb	98.579 %	0.537 ppb
Concentration RSD	14.3 %	25.7 %	2.6 %	5.8 %	1.9 %	15.1 %	7.8 %	2.4 %	14.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	52.947 ppb	102.346 %	103.943 %	0.045 ppb	2.407 ppb	86.345 %
Concentration per Run 1	52.639 ppb	104.413 %	102.266 %	0.037 ppb	2.368 ppb	85.801 %
Concentration per Run 2	53.263 ppb	100.057 %	103.471 %	0.042 ppb	2.404 ppb	85.730 %
Concentration per Run 3	52.938 ppb	102.568 %	106.091 %	0.055 ppb	2.450 ppb	87.504 %
Concentration RSD	0.6 %	2.1 %	1.9 %	21.3 %	1.7 %	1.2 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	65	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2469188-03 6020TL	Rack	1		
Analysis started at:	12/3/2024 11:51:27 AM	Vial	38		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	55.057 %	92.256 %	0.012 ppb	3,953,062.995 ppb	438,051.967 ppb	54.387 ppb	105,453.196 ppb	93,919.899 ppb	57.706 %
Concentration per Run 1	53.167 %	88.552 %	0.013 ppb	4,085,222.575 ppb	448,724.510 ppb	56.376 ppb	110,061.113 ppb	98,037.256 ppb	56.759 %
Concentration per Run 2	55.670 %	91.582 %	0.014 ppb	3,967,568.060 ppb	436,452.877 ppb	54.303 ppb	103,322.851 ppb	92,359.793 ppb	58.252 %
Concentration per Run 3	56.335 %	96.633 %	0.008 ppb	3,806,398.351 ppb	428,978.513 ppb	52.482 ppb	102,975.625 ppb	91,362.647 ppb	58.107 %
Concentration RSD	3.0 %	4.4 %	26.3 %	3.5 %	2.3 %	3.6 %	3.8 %	3.8 %	1.4 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.577 ppb	0.381 ppb	17.254 ppb	117.663 ppb	0.301 ppb	1.035 ppb	16.254 ppb	43.968 ppb	114.229 %
Concentration per Run 1	0.451 ppb	0.444 ppb	18.522 ppb	117.786 ppb	0.331 ppb	1.071 ppb	17.282 ppb	47.764 ppb	102.506 %
Concentration per Run 2	0.771 ppb	0.377 ppb	17.224 ppb	110.723 ppb	0.315 ppb	1.013 ppb	16.463 ppb	42.536 ppb	114.622 %
Concentration per Run 3	0.510 ppb	0.323 ppb	16.017 ppb	124.480 ppb	0.257 ppb	1.020 ppb	15.019 ppb	41.603 ppb	125.557 %
Concentration RSD	29.5 %	15.9 %	7.3 %	5.8 %	12.8 %	3.0 %	7.0 %	7.6 %	10.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	1.254 ppb	0.121 ppb	2,674.964 ppb	4.497 ppb	87.746 %	0.015 ppb	0.067 ppb	99.180 %	0.500 ppb
Concentration per Run 1	1.415 ppb	0.103 ppb	2,700.589 ppb	4.412 ppb	89.151 %	0.019 ppb	0.081 ppb	98.314 %	0.469 ppb
Concentration per Run 2	1.209 ppb	0.105 ppb	2,680.761 ppb	4.175 ppb	85.752 %	0.016 ppb	0.083 ppb	98.086 %	0.502 ppb
Concentration per Run 3	1.137 ppb	0.155 ppb	2,643.544 ppb	4.905 ppb	88.336 %	0.009 ppb	0.038 ppb	101.139 %	0.529 ppb
Concentration RSD	11.5 %	24.3 %	1.1 %	8.3 %	2.0 %	36.8 %	37.6 %	1.7 %	6.0 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	12.029 ppb	104.463 %	107.327 %	0.034 ppb	0.769 ppb	85.018 %
Concentration per Run 1	12.377 ppb	105.761 %	106.357 %	0.028 ppb	0.728 ppb	86.601 %
Concentration per Run 2	11.987 ppb	100.648 %	105.343 %	0.040 ppb	0.809 ppb	82.847 %
Concentration per Run 3	11.722 ppb	106.979 %	110.281 %	0.034 ppb	0.770 ppb	85.607 %
Concentration RSD	2.7 %	3.2 %	2.4 %	17.4 %	5.3 %	2.3 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	66	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	CCV	Rack	0		
Analysis started at:	12/3/2024 11:55:54 AM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	106.067 %	114.591 %	58.113 ppb	8,838.290 ppb	6,043.964 ppb	58.551 ppb	6,666.084 ppb	6,517.544 ppb	103.208 %
Concentration per Run 1	101.747 %	117.677 %	58.161 ppb	9,080.501 ppb	5,912.671 ppb	54.228 ppb	6,385.861 ppb	6,481.101 ppb	100.163 %
Concentration per Run 2	106.629 %	108.586 %	57.271 ppb	9,272.851 ppb	6,236.559 ppb	60.812 ppb	6,938.774 ppb	6,567.217 ppb	104.777 %
Concentration per Run 3	109.826 %	117.509 %	58.905 ppb	8,161.518 ppb	5,982.663 ppb	60.614 ppb	6,673.616 ppb	6,504.313 ppb	104.686 %
Recovery Percentage 1			96.854 %	147.305 %	100.733 %	97.585 %	111.101 %	108.626 %	
Concentration RSD	3.8 %	4.5 %	1.4 %	6.7 %	2.8 %	6.4 %	4.1 %	0.7 %	2.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	57.407 ppb	56.507 ppb	58.807 ppb	5,659.965 ppb	55.487 ppb	57.042 ppb	56.909 ppb	58.977 ppb	122.794 %
Concentration per Run 1	53.853 ppb	55.120 ppb	58.427 ppb	5,636.958 ppb	54.908 ppb	57.046 ppb	56.711 ppb	57.801 ppb	122.289 %
Concentration per Run 2	58.278 ppb	56.137 ppb	58.409 ppb	5,649.108 ppb	55.321 ppb	57.595 ppb	56.532 ppb	59.707 ppb	122.909 %
Concentration per Run 3	60.090 ppb	58.263 ppb	59.586 ppb	5,693.828 ppb	56.232 ppb	56.485 ppb	57.484 ppb	59.422 ppb	123.184 %
Recovery Percentage 1	95.679 %	94.178 %	98.012 %	94.333 %	92.479 %	95.070 %	94.849 %	98.295 %	
Concentration RSD	5.6 %	2.8 %	1.1 %	0.5 %	1.2 %	1.0 %	0.9 %	1.7 %	0.4 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	55.832 ppb	58.466 ppb	61.643 ppb	56.902 ppb	120.041 %	55.834 ppb	56.937 ppb	128.714 %	55.980 ppb
Concentration per Run 1	56.591 ppb	57.232 ppb	60.486 ppb	55.414 ppb	122.378 %	55.132 ppb	57.561 ppb	127.893 %	54.940 ppb
Concentration per Run 2	55.723 ppb	57.841 ppb	61.698 ppb	57.534 ppb	120.252 %	55.525 ppb	56.154 ppb	128.732 %	56.539 ppb
Concentration per Run 3	55.182 ppb	60.325 ppb	62.744 ppb	57.758 ppb	117.493 %	56.846 ppb	57.095 ppb	129.516 %	56.462 ppb
Recovery Percentage 1	93.053 %	97.443 %	102.738 %	94.836 %		93.057 %	94.895 %		93.301 %
Concentration RSD	1.3 %	2.8 %	1.8 %	2.3 %	2.0 %	1.6 %	1.3 %	0.6 %	1.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	57.583 ppb	127.793 %	129.078 %	55.492 ppb	57.278 ppb	121.459 %
Concentration per Run 1	55.849 ppb	130.197 %	131.128 %	54.129 ppb	55.091 ppb	121.652 %
Concentration per Run 2	57.323 ppb	127.943 %	126.663 %	55.104 ppb	57.900 ppb	121.146 %
Concentration per Run 3	59.575 ppb	125.239 %	129.444 %	57.244 ppb	58.844 ppb	121.580 %
Recovery Percentage 1	95.971 %			92.487 %	95.464 %	
Concentration RSD	3.3 %	1.9 %	1.7 %	2.9 %	3.4 %	0.2 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	67	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	CCB	Rack	0		
Analysis started at:	12/3/2024 12:00:26 PM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	108.239 %	117.958 %	0.456 ppb	1,274.649 ppb	39.120 ppb	-0.235 ppb	171.245 ppb	13.020 ppb	105.594 %
Concentration per Run 1	104.568 %	115.489 %	0.424 ppb	1,466.016 ppb	57.494 ppb	-0.095 ppb	193.048 ppb	21.665 ppb	101.521 %
Concentration per Run 2	109.515 %	112.795 %	0.418 ppb	1,385.614 ppb	47.912 ppb	-0.445 ppb	160.806 ppb	7.305 ppb	107.398 %
Concentration per Run 3	110.633 %	125.590 %	0.526 ppb	972.318 ppb	11.954 ppb	-0.163 ppb	159.882 ppb	10.090 ppb	107.863 %
Recovery Percentage 1			91.183 %	254.930 %	55.886 %	-2.345 %	171.245 %	13.020 %	
Concentration RSD	3.0 %	5.7 %	13.3 %	20.8 %	61.4 %	79.2 %	11.0 %	58.5 %	3.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.441 ppb	-0.053 ppb	0.131 ppb	6.647 ppb	0.015 ppb	0.153 ppb	0.210 ppb	0.376 ppb	118.093 %
Concentration per Run 1	-0.501 ppb	-0.045 ppb	0.189 ppb	6.579 ppb	0.021 ppb	0.177 ppb	0.241 ppb	0.368 ppb	118.369 %
Concentration per Run 2	-0.355 ppb	-0.033 ppb	0.107 ppb	7.097 ppb	0.016 ppb	0.165 ppb	0.236 ppb	0.390 ppb	114.745 %
Concentration per Run 3	-0.466 ppb	-0.080 ppb	0.096 ppb	6.267 ppb	0.006 ppb	0.117 ppb	0.153 ppb	0.370 ppb	121.165 %
Recovery Percentage 1	-8.815 %	-5.284 %	13.072 %	13.295 %	2.943 %	7.653 %	20.982 %	7.521 %	
Concentration RSD	17.2 %	45.8 %	39.0 %	6.3 %	51.4 %	20.6 %	23.5 %	3.2 %	2.7 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.002 ppb	0.466 ppb	0.245 ppb	0.298 ppb	120.811 %	0.017 ppb	0.010 ppb	128.025 %	0.077 ppb
Concentration per Run 1	-0.055 ppb	0.738 ppb	0.365 ppb	0.189 ppb	123.867 %	0.025 ppb	0.006 ppb	130.006 %	0.064 ppb
Concentration per Run 2	0.038 ppb	0.359 ppb	0.271 ppb	0.207 ppb	117.484 %	0.023 ppb	0.018 ppb	127.680 %	0.094 ppb
Concentration per Run 3	0.023 ppb	0.301 ppb	0.100 ppb	0.499 ppb	121.082 %	0.003 ppb	0.006 ppb	126.387 %	0.072 ppb
Recovery Percentage 1	0.405 %	9.323 %	2.452 %	14.920 %		4.239 %	4.924 %		1.918 %
Concentration RSD	2,450.7 %	50.9 %	54.9 %	58.3 %	2.6 %	70.1 %	70.3 %	1.4 %	20.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.019 ppb	124.988 %	125.092 %	0.220 ppb	0.025 ppb	121.448 %
Concentration per Run 1	0.025 ppb	132.238 %	129.628 %	0.210 ppb	0.030 ppb	123.702 %
Concentration per Run 2	-0.008 ppb	121.832 %	122.814 %	0.254 ppb	0.026 ppb	121.173 %
Concentration per Run 3	0.039 ppb	120.895 %	122.833 %	0.194 ppb	0.020 ppb	119.468 %
Recovery Percentage 1	3.753 %			21.953 %	2.506 %	
Concentration RSD	127.2 %	5.0 %	3.1 %	14.2 %	20.6 %	1.8 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	68	User name	ALPHALAB\a2-icpmsq2	Comment	CCV/MCCV
Analysis label:	CCV	Rack	0		
Analysis started at:	12/3/2024 12:35:53 PM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	115.770 %	125.702 %	57.412 ppb	5,980.172 ppb	5,527.372 ppb	56.252 ppb	5,392.506 ppb	5,181.352 ppb	111.018 %
Concentration per Run 1	110.616 %	128.115 %	58.287 ppb	5,742.952 ppb	5,364.572 ppb	54.335 ppb	5,533.381 ppb	5,311.729 ppb	109.074 %
Concentration per Run 2	117.068 %	125.421 %	57.030 ppb	6,037.258 ppb	5,606.486 ppb	56.443 ppb	5,222.496 ppb	4,983.339 ppb	112.565 %
Concentration per Run 3	119.627 %	123.569 %	56.918 ppb	6,160.306 ppb	5,611.060 ppb	57.979 ppb	5,421.640 ppb	5,248.987 ppb	111.413 %
Recovery Percentage 1			95.686 %	99.670 %	92.123 %	93.754 %	89.875 %	86.356 %	
Concentration RSD	4.0 %	1.8 %	1.3 %	3.6 %	2.6 %	3.3 %	2.9 %	3.4 %	1.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	53.785 ppb	53.778 ppb	55.737 ppb	5,743.402 ppb	56.127 ppb	56.681 ppb	56.664 ppb	56.695 ppb	119.388 %
Concentration per Run 1	49.431 ppb	51.042 ppb	53.815 ppb	5,625.969 ppb	54.448 ppb	56.508 ppb	55.360 ppb	55.758 ppb	122.764 %
Concentration per Run 2	55.465 ppb	54.282 ppb	57.206 ppb	5,832.807 ppb	56.836 ppb	57.728 ppb	57.716 ppb	58.821 ppb	115.458 %
Concentration per Run 3	56.460 ppb	56.011 ppb	56.189 ppb	5,771.431 ppb	57.099 ppb	55.808 ppb	56.915 ppb	55.506 ppb	119.943 %
Recovery Percentage 1	89.642 %	89.631 %	92.894 %	95.723 %	93.546 %	94.469 %	94.440 %	94.492 %	
Concentration RSD	7.1 %	4.7 %	3.1 %	1.8 %	2.6 %	1.7 %	2.1 %	3.3 %	3.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	55.197 ppb	55.240 ppb	58.435 ppb	56.869 ppb	114.889 %	57.012 ppb	56.662 ppb	118.981 %	55.519 ppb
Concentration per Run 1	54.756 ppb	55.153 ppb	56.597 ppb	55.512 ppb	119.470 %	56.801 ppb	55.887 ppb	121.805 %	53.923 ppb
Concentration per Run 2	56.623 ppb	53.355 ppb	60.162 ppb	57.172 ppb	110.969 %	56.459 ppb	57.237 ppb	117.243 %	55.824 ppb
Concentration per Run 3	54.210 ppb	57.211 ppb	58.546 ppb	57.922 ppb	114.229 %	57.776 ppb	56.862 ppb	117.894 %	56.811 ppb
Recovery Percentage 1	91.994 %	92.066 %	97.392 %	94.781 %		95.020 %	94.437 %		92.532 %
Concentration RSD	2.3 %	3.5 %	3.1 %	2.2 %	3.7 %	1.2 %	1.2 %	2.1 %	2.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	56.804 ppb	120.280 %	119.759 %	55.882 ppb	55.793 ppb	118.822 %
Concentration per Run 1	55.414 ppb	126.009 %	122.026 %	53.460 ppb	53.796 ppb	124.564 %
Concentration per Run 2	57.767 ppb	116.591 %	117.254 %	56.839 ppb	56.979 ppb	116.833 %
Concentration per Run 3	57.229 ppb	118.239 %	119.996 %	57.347 ppb	56.604 ppb	115.068 %
Recovery Percentage 1	94.673 %			93.136 %	92.988 %	
Concentration RSD	2.2 %	4.2 %	2.0 %	3.8 %	3.1 %	4.3 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	69	User name	ALPHALAB\a2-icpmsq2	Comment	CCB
Analysis label:	CCB	Rack	0		
Analysis started at:	12/3/2024 12:42:03 PM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	117.354 %	124.467 %	0.386 ppb	251.728 ppb	0.801 ppb	-0.651 ppb	39.318 ppb	1.008 ppb	108.564 %
Concentration per Run 1	113.137 %	131.145 %	0.613 ppb	230.037 ppb	-0.103 ppb	-0.654 ppb	54.187 ppb	-6.375 ppb	109.744 %
Concentration per Run 2	118.381 %	118.519 %	0.316 ppb	263.988 ppb	1.119 ppb	-0.707 ppb	28.333 ppb	7.117 ppb	108.493 %
Concentration per Run 3	120.544 %	123.738 %	0.230 ppb	261.160 ppb	1.388 ppb	-0.592 ppb	35.434 ppb	2.281 ppb	107.455 %
Recovery Percentage 1			77.263 %	50.346 %	1.145 %	-6.510 %	39.318 %	1.008 %	
Concentration RSD	3.2 %	5.1 %	52.0 %	7.5 %	99.1 %	8.8 %	34.0 %	678.4 %	1.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.436 ppb	-0.050 ppb	0.025 ppb	4.341 ppb	0.013 ppb	0.099 ppb	0.039 ppb	0.167 ppb	113.563 %
Concentration per Run 1	-0.423 ppb	-0.022 ppb	0.071 ppb	4.106 ppb	0.021 ppb	0.104 ppb	0.072 ppb	0.136 ppb	115.290 %
Concentration per Run 2	-0.440 ppb	-0.072 ppb	-0.027 ppb	3.860 ppb	0.014 ppb	0.042 ppb	0.013 ppb	0.234 ppb	111.488 %
Concentration per Run 3	-0.445 ppb	-0.057 ppb	0.030 ppb	5.056 ppb	0.004 ppb	0.151 ppb	0.033 ppb	0.132 ppb	113.910 %
Recovery Percentage 1	-8.726 %	-5.038 %	2.477 %	8.681 %	2.611 %	4.951 %	3.921 %	3.345 %	
Concentration RSD	2.7 %	51.0 %	198.9 %	14.6 %	63.8 %	55.2 %	76.2 %	34.5 %	1.7 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.080 ppb	0.174 ppb	0.017 ppb	0.206 ppb	115.330 %	0.019 ppb	0.017 ppb	117.306 %	0.054 ppb
Concentration per Run 1	0.022 ppb	-0.036 ppb	0.022 ppb	0.111 ppb	118.542 %	0.016 ppb	0.018 ppb	121.619 %	0.047 ppb
Concentration per Run 2	0.076 ppb	0.543 ppb	0.020 ppb	0.176 ppb	114.749 %	0.019 ppb	0.013 ppb	115.129 %	0.062 ppb
Concentration per Run 3	0.142 ppb	0.016 ppb	0.009 ppb	0.331 ppb	112.698 %	0.023 ppb	0.019 ppb	115.168 %	0.052 ppb
Recovery Percentage 1	15.970 %	3.488 %	0.167 %	10.307 %		4.803 %	8.438 %		1.347 %
Concentration RSD	75.0 %	183.7 %	41.6 %	54.6 %	2.6 %	17.6 %	20.9 %	3.2 %	14.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.038 ppb	117.878 %	118.387 %	0.192 ppb	0.024 ppb	117.668 %
Concentration per Run 1	0.016 ppb	122.992 %	122.859 %	0.216 ppb	0.030 ppb	121.642 %
Concentration per Run 2	0.055 ppb	118.089 %	117.538 %	0.204 ppb	0.025 ppb	116.831 %
Concentration per Run 3	0.044 ppb	112.554 %	114.765 %	0.156 ppb	0.016 ppb	114.529 %
Recovery Percentage 1	7.675 %			19.217 %	2.373 %	
Concentration RSD	52.0 %	4.4 %	3.5 %	16.5 %	31.8 %	3.1 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	70	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2469188-04d5 6020TL	Rack	1		
Analysis started at:	12/3/2024 12:47:59 PM	Vial	39		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	78.733 %	102.694 %	0.069 ppb	1,773,322.955 ppb	195,377.473 ppb	16.646 ppb	49,478.921 ppb	44,208.340 ppb	74.955 %
Concentration per Run 1	76.783 %	98.316 %	0.079 ppb	1,755,820.079 ppb	196,966.876 ppb	16.611 ppb	48,561.364 ppb	44,195.220 ppb	74.688 %
Concentration per Run 2	80.252 %	108.081 %	0.073 ppb	1,726,157.126 ppb	192,077.971 ppb	15.871 ppb	49,824.167 ppb	43,970.558 ppb	74.925 %
Concentration per Run 3	79.164 %	101.684 %	0.054 ppb	1,837,991.660 ppb	197,087.573 ppb	17.455 ppb	50,051.233 ppb	44,459.241 ppb	75.251 %
Concentration RSD	2.3 %	4.8 %	19.2 %	3.3 %	1.5 %	4.8 %	1.6 %	0.6 %	0.4 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.055 ppb	0.006 ppb	2.954 ppb	30.763 ppb	0.017 ppb	0.101 ppb	0.420 ppb	0.842 ppb	107.890 %
Concentration per Run 1	0.022 ppb	0.031 ppb	3.090 ppb	27.479 ppb	0.003 ppb	0.138 ppb	0.450 ppb	0.817 ppb	104.644 %
Concentration per Run 2	-0.086 ppb	-0.033 ppb	2.782 ppb	31.648 ppb	0.037 ppb	0.105 ppb	0.431 ppb	0.882 ppb	107.982 %
Concentration per Run 3	-0.100 ppb	0.019 ppb	2.991 ppb	33.162 ppb	0.012 ppb	0.059 ppb	0.379 ppb	0.826 ppb	111.043 %
Concentration RSD	121.8 %	598.8 %	5.3 %	9.6 %	102.6 %	39.7 %	8.7 %	4.2 %	3.0 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.386 ppb	0.292 ppb	1,174.444 ppb	1.570 ppb	97.251 %	0.016 ppb	0.007 ppb	103.286 %	0.060 ppb
Concentration per Run 1	0.461 ppb	0.409 ppb	1,144.923 ppb	1.634 ppb	99.563 %	0.020 ppb	0.007 ppb	101.534 %	0.046 ppb
Concentration per Run 2	0.387 ppb	0.332 ppb	1,189.332 ppb	1.597 ppb	96.973 %	0.018 ppb	0.011 ppb	103.578 %	0.075 ppb
Concentration per Run 3	0.310 ppb	0.136 ppb	1,189.078 ppb	1.478 ppb	95.216 %	0.010 ppb	0.004 ppb	104.746 %	0.061 ppb
Concentration RSD	19.5 %	48.1 %	2.2 %	5.2 %	2.2 %	31.3 %	50.0 %	1.6 %	23.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	2.754 ppb	107.902 %	108.189 %	0.043 ppb	0.071 ppb	90.735 %
Concentration per Run 1	2.876 ppb	106.982 %	107.706 %	0.026 ppb	0.074 ppb	92.920 %
Concentration per Run 2	2.826 ppb	109.601 %	107.626 %	0.050 ppb	0.072 ppb	90.571 %
Concentration per Run 3	2.559 ppb	107.124 %	109.234 %	0.054 ppb	0.066 ppb	88.714 %
Concentration RSD	6.2 %	1.4 %	0.8 %	35.0 %	5.9 %	2.3 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	71	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2469188-05d5 6020TL	Rack	1		
Analysis started at:	12/3/2024 12:52:26 PM	Vial	40		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	88.851 %	112.963 %	0.056 ppb	699,685.493 ppb	72,185.887 ppb	65.356 ppb	21,888.192 ppb	37,603.415 ppb	97.432 %
Concentration per Run 1	85.813 %	114.983 %	0.064 ppb	689,389.702 ppb	71,326.537 ppb	61.125 ppb	21,005.981 ppb	36,548.762 ppb	94.617 %
Concentration per Run 2	89.301 %	109.933 %	0.066 ppb	716,052.935 ppb	74,109.081 ppb	68.671 ppb	21,776.098 ppb	37,879.078 ppb	97.340 %
Concentration per Run 3	91.439 %	113.973 %	0.039 ppb	693,613.843 ppb	71,122.043 ppb	66.274 ppb	22,882.497 ppb	38,382.404 ppb	100.339 %
Concentration RSD	3.2 %	2.4 %	26.9 %	2.0 %	2.3 %	5.9 %	4.3 %	2.5 %	2.9 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.077 ppb	0.206 ppb	34.052 ppb	219.477 ppb	0.127 ppb	1.007 ppb	1.931 ppb	3.775 ppb	110.894 %
Concentration per Run 1	0.075 ppb	0.192 ppb	34.640 ppb	216.261 ppb	0.133 ppb	1.106 ppb	1.887 ppb	3.558 ppb	109.097 %
Concentration per Run 2	0.099 ppb	0.198 ppb	34.086 ppb	235.371 ppb	0.143 ppb	0.984 ppb	1.798 ppb	3.943 ppb	109.460 %
Concentration per Run 3	0.057 ppb	0.230 ppb	33.430 ppb	206.799 ppb	0.105 ppb	0.929 ppb	2.109 ppb	3.823 ppb	114.125 %
Concentration RSD	27.3 %	9.8 %	1.8 %	6.6 %	15.7 %	9.0 %	8.3 %	5.2 %	2.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.419 ppb	0.132 ppb	574.525 ppb	0.935 ppb	102.531 %	0.003 ppb	0.025 ppb	109.691 %	0.114 ppb
Concentration per Run 1	0.439 ppb	-0.076 ppb	568.559 ppb	0.990 ppb	104.269 %	0.006 ppb	0.027 ppb	110.566 %	0.101 ppb
Concentration per Run 2	0.408 ppb	0.387 ppb	579.853 ppb	0.907 ppb	101.529 %	0.002 ppb	0.028 ppb	109.085 %	0.113 ppb
Concentration per Run 3	0.411 ppb	0.085 ppb	575.163 ppb	0.909 ppb	101.795 %	0.001 ppb	0.021 ppb	109.421 %	0.128 ppb
Concentration RSD	4.2 %	178.0 %	1.0 %	5.1 %	1.5 %	80.6 %	15.5 %	0.7 %	11.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	22.088 ppb	114.185 %	112.891 %	0.032 ppb	0.262 ppb	98.227 %
Concentration per Run 1	21.942 ppb	115.529 %	112.710 %	0.019 ppb	0.268 ppb	98.976 %
Concentration per Run 2	21.943 ppb	113.855 %	111.427 %	0.040 ppb	0.259 ppb	97.266 %
Concentration per Run 3	22.378 ppb	113.172 %	114.536 %	0.037 ppb	0.260 ppb	98.437 %
Concentration RSD	1.1 %	1.1 %	1.4 %	34.9 %	2.0 %	0.9 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	72	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2469188-06d5 6020TL	Rack	1		
Analysis started at:	12/3/2024 12:56:53 PM	Vial	41		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	86.547 %	105.163 %	0.017 ppb	813,100.667 ppb	87,644.679 ppb	153.923 ppb	25,158.372 ppb	26,680.063 ppb	88.132 %
Concentration per Run 1	89.547 %	105.724 %	0.021 ppb	781,581.122 ppb	85,234.976 ppb	154.486 ppb	24,665.197 ppb	26,378.655 ppb	88.125 %
Concentration per Run 2	84.277 %	102.357 %	0.020 ppb	837,667.998 ppb	89,055.818 ppb	153.469 ppb	25,086.205 ppb	26,761.209 ppb	87.408 %
Concentration per Run 3	85.817 %	107.408 %	0.010 ppb	820,052.882 ppb	88,643.244 ppb	153.814 ppb	25,723.714 ppb	26,900.324 ppb	88.863 %
Concentration RSD	3.1 %	2.4 %	34.5 %	3.5 %	2.4 %	0.3 %	2.1 %	1.0 %	0.8 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.290 ppb	0.491 ppb	13.264 ppb	327.435 ppb	0.129 ppb	0.400 ppb	2.199 ppb	5.285 ppb	107.625 %
Concentration per Run 1	0.270 ppb	0.524 ppb	13.315 ppb	325.782 ppb	0.134 ppb	0.351 ppb	2.166 ppb	5.420 ppb	104.554 %
Concentration per Run 2	0.237 ppb	0.500 ppb	12.726 ppb	325.268 ppb	0.136 ppb	0.535 ppb	2.196 ppb	5.205 ppb	109.601 %
Concentration per Run 3	0.363 ppb	0.449 ppb	13.751 ppb	331.254 ppb	0.117 ppb	0.313 ppb	2.235 ppb	5.231 ppb	108.719 %
Concentration RSD	22.6 %	7.8 %	3.9 %	1.0 %	8.2 %	29.7 %	1.6 %	2.2 %	2.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.316 ppb	0.122 ppb	555.845 ppb	0.790 ppb	100.541 %	0.003 ppb	0.026 ppb	106.777 %	0.104 ppb
Concentration per Run 1	0.453 ppb	-0.069 ppb	550.506 ppb	0.746 ppb	102.714 %	0.000 ppb	0.028 ppb	107.783 %	0.091 ppb
Concentration per Run 2	0.219 ppb	0.321 ppb	553.542 ppb	0.788 ppb	99.645 %	0.003 ppb	0.025 ppb	105.656 %	0.103 ppb
Concentration per Run 3	0.276 ppb	0.113 ppb	563.488 ppb	0.838 ppb	99.263 %	0.006 ppb	0.025 ppb	106.893 %	0.118 ppb
Concentration RSD	38.7 %	159.9 %	1.2 %	5.8 %	1.9 %	87.4 %	6.7 %	1.0 %	13.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	6.340 ppb	111.894 %	110.391 %	0.029 ppb	0.733 ppb	94.003 %
Concentration per Run 1	6.214 ppb	114.961 %	112.257 %	0.018 ppb	0.713 ppb	96.086 %
Concentration per Run 2	6.625 ppb	111.095 %	108.520 %	0.034 ppb	0.742 ppb	93.051 %
Concentration per Run 3	6.181 ppb	109.626 %	110.395 %	0.036 ppb	0.745 ppb	92.873 %
Concentration RSD	3.9 %	2.5 %	1.7 %	33.0 %	2.4 %	1.9 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	73	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG2004404-1 MCP-6020SL-10	Rack	1		
Analysis started at:	12/3/2024 1:06:43 PM	Vial	42		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	119.738 %	119.080 %	0.008 ppb	579.585 ppb	7.845 ppb	0.453 ppb	48.880 ppb	5.376 ppb	113.743 %
Concentration per Run 1	114.522 %	117.677 %	0.009 ppb	587.087 ppb	10.990 ppb	0.338 ppb	43.052 ppb	9.388 ppb	111.048 %
Concentration per Run 2	118.879 %	120.202 %	0.007 ppb	569.222 ppb	7.551 ppb	0.331 ppb	52.974 ppb	3.493 ppb	115.095 %
Concentration per Run 3	125.812 %	119.361 %	0.009 ppb	582.447 ppb	4.994 ppb	0.691 ppb	50.616 ppb	3.246 ppb	115.088 %
Concentration RSD	4.8 %	1.1 %	13.8 %	1.6 %	38.4 %	45.4 %	10.6 %	64.7 %	2.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.267 ppb	-0.063 ppb	0.492 ppb	6.397 ppb	0.002 ppb	0.084 ppb	0.067 ppb	0.930 ppb	125.859 %
Concentration per Run 1	-0.219 ppb	-0.057 ppb	0.511 ppb	6.312 ppb	0.000 ppb	0.084 ppb	0.071 ppb	0.852 ppb	133.343 %
Concentration per Run 2	-0.328 ppb	-0.061 ppb	0.482 ppb	6.156 ppb	-0.002 ppb	0.092 ppb	0.076 ppb	1.035 ppb	119.930 %
Concentration per Run 3	-0.254 ppb	-0.071 ppb	0.483 ppb	6.724 ppb	0.006 ppb	0.076 ppb	0.053 ppb	0.903 ppb	124.303 %
Concentration RSD	20.8 %	11.0 %	3.3 %	4.6 %	249.7 %	9.3 %	18.4 %	10.2 %	5.4 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.006 ppb	0.058 ppb	0.050 ppb	-0.094 ppb	116.698 %	-0.001 ppb	0.000 ppb	116.696 %	0.026 ppb
Concentration per Run 1	0.018 ppb	0.062 ppb	0.073 ppb	-0.106 ppb	117.668 %	0.000 ppb	0.000 ppb	116.685 %	0.015 ppb
Concentration per Run 2	-0.015 ppb	-0.046 ppb	0.054 ppb	-0.095 ppb	114.269 %	0.000 ppb	0.000 ppb	118.490 %	0.036 ppb
Concentration per Run 3	0.016 ppb	0.158 ppb	0.024 ppb	-0.082 ppb	118.157 %	-0.002 ppb	0.000 ppb	114.913 %	0.026 ppb
Concentration RSD	296.7 %	175.3 %	48.5 %	12.6 %	1.8 %	148.1 %	N/A	1.5 %	39.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.030 ppb	115.985 %	112.947 %	0.014 ppb	0.005 ppb	111.124 %
Concentration per Run 1	0.042 ppb	118.633 %	113.532 %	0.011 ppb	0.005 ppb	116.420 %
Concentration per Run 2	0.018 ppb	114.652 %	111.601 %	0.014 ppb	0.005 ppb	106.585 %
Concentration per Run 3	0.031 ppb	114.670 %	113.708 %	0.016 ppb	0.006 ppb	110.367 %
Concentration RSD	39.8 %	2.0 %	1.0 %	18.8 %	3.5 %	4.5 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	74	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG2004404-2d10 MCP-6020SL-10	Rack	1		
Analysis started at:	12/3/2024 1:11:12 PM	Vial	43		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	116.525 %	122.616 %	5.028 ppb	1,595.172 ppb	942.869 ppb	181.662 ppb	977.265 ppb	773.433 ppb	111.806 %
Concentration per Run 1	112.131 %	124.243 %	5.063 ppb	1,585.214 ppb	954.217 ppb	181.031 ppb	991.516 ppb	667.077 ppb	109.748 %
Concentration per Run 2	117.823 %	123.064 %	5.035 ppb	1,603.355 ppb	937.892 ppb	184.134 ppb	993.861 ppb	826.528 ppb	113.404 %
Concentration per Run 3	119.620 %	120.539 %	4.985 ppb	1,596.946 ppb	936.499 ppb	179.821 ppb	946.417 ppb	826.695 ppb	112.267 %
Concentration RSD	3.4 %	1.5 %	0.8 %	0.6 %	1.0 %	1.2 %	2.7 %	11.9 %	1.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	42.409 ppb	17.748 ppb	48.844 ppb	96.671 ppb	48.376 ppb	49.752 ppb	25.027 ppb	48.406 ppb	111.870 %
Concentration per Run 1	40.610 ppb	17.605 ppb	50.176 ppb	94.030 ppb	47.449 ppb	49.399 ppb	24.713 ppb	49.023 ppb	112.044 %
Concentration per Run 2	43.065 ppb	18.096 ppb	48.641 ppb	98.149 ppb	49.369 ppb	51.882 ppb	25.504 ppb	47.947 ppb	109.865 %
Concentration per Run 3	43.552 ppb	17.543 ppb	47.715 ppb	97.834 ppb	48.309 ppb	47.975 ppb	24.865 ppb	48.248 ppb	113.702 %
Concentration RSD	3.7 %	1.7 %	2.5 %	2.4 %	2.0 %	4.0 %	1.7 %	1.1 %	1.7 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	11.298 ppb	11.368 ppb	95.149 ppb	94.496 ppb	111.882 %	4.961 ppb	5.023 ppb	115.162 %	38.072 ppb
Concentration per Run 1	10.742 ppb	10.672 ppb	93.918 ppb	92.585 ppb	115.394 %	4.866 ppb	4.770 ppb	118.367 %	36.137 ppb
Concentration per Run 2	11.722 ppb	12.107 ppb	96.888 ppb	94.401 ppb	109.736 %	5.016 ppb	5.110 ppb	113.800 %	38.442 ppb
Concentration per Run 3	11.430 ppb	11.324 ppb	94.639 ppb	96.501 ppb	110.517 %	5.002 ppb	5.189 ppb	113.320 %	39.637 ppb
Concentration RSD	4.5 %	6.3 %	1.6 %	2.1 %	2.7 %	1.7 %	4.4 %	2.4 %	4.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	189.043 ppb	114.304 %	112.275 %	11.142 ppb	49.325 ppb	110.840 %
Concentration per Run 1	184.861 ppb	117.812 %	112.378 %	10.714 ppb	47.251 ppb	114.903 %
Concentration per Run 2	189.735 ppb	112.846 %	111.200 %	11.276 ppb	50.642 ppb	109.076 %
Concentration per Run 3	192.534 ppb	112.252 %	113.245 %	11.435 ppb	50.081 ppb	108.540 %
Concentration RSD	2.1 %	2.7 %	0.9 %	3.4 %	3.7 %	3.2 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	75	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG2004404-3d10 MCP-6020SL-10	Rack	1		
Analysis started at:	12/3/2024 1:15:40 PM	Vial	44		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	118.673 %	123.345 %	4.959 ppb	1,530.872 ppb	938.063 ppb	179.486 ppb	955.533 ppb	870.804 ppb	111.347 %
Concentration per Run 1	113.096 %	128.788 %	5.039 ppb	1,493.250 ppb	920.303 ppb	172.610 ppb	910.183 ppb	836.873 ppb	106.474 %
Concentration per Run 2	120.759 %	125.085 %	4.960 ppb	1,490.505 ppb	915.781 ppb	174.699 ppb	944.349 ppb	875.169 ppb	112.757 %
Concentration per Run 3	122.165 %	116.162 %	4.877 ppb	1,608.861 ppb	978.105 ppb	191.148 ppb	1,012.066 ppb	900.370 ppb	114.809 %
Concentration RSD	4.1 %	5.3 %	1.6 %	4.4 %	3.7 %	5.7 %	5.4 %	3.7 %	3.9 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	42.234 ppb	17.916 ppb	48.422 ppb	95.336 ppb	49.139 ppb	49.367 ppb	24.340 ppb	48.276 ppb	108.723 %
Concentration per Run 1	40.807 ppb	17.408 ppb	49.667 ppb	91.353 ppb	49.439 ppb	51.347 ppb	24.436 ppb	49.039 ppb	106.870 %
Concentration per Run 2	43.660 ppb	18.230 ppb	48.550 ppb	99.430 ppb	49.935 ppb	49.058 ppb	24.590 ppb	49.019 ppb	106.453 %
Concentration per Run 3	42.235 ppb	18.109 ppb	47.049 ppb	95.226 ppb	48.041 ppb	47.698 ppb	23.995 ppb	46.770 ppb	112.845 %
Concentration RSD	3.4 %	2.5 %	2.7 %	4.2 %	2.0 %	3.7 %	1.3 %	2.7 %	3.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	11.805 ppb	12.217 ppb	95.124 ppb	92.805 ppb	111.616 %	4.990 ppb	4.939 ppb	112.042 %	39.531 ppb
Concentration per Run 1	12.308 ppb	10.441 ppb	95.766 ppb	90.007 ppb	113.588 %	4.937 ppb	4.926 ppb	114.817 %	38.503 ppb
Concentration per Run 2	11.933 ppb	13.067 ppb	96.881 ppb	92.639 ppb	109.005 %	5.006 ppb	4.882 ppb	110.256 %	39.645 ppb
Concentration per Run 3	11.174 ppb	13.144 ppb	92.725 ppb	95.769 ppb	112.256 %	5.026 ppb	5.010 ppb	111.054 %	40.446 ppb
Concentration RSD	4.9 %	12.6 %	2.3 %	3.1 %	2.1 %	0.9 %	1.3 %	2.2 %	2.5 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	191.455 ppb	110.955 %	109.650 %	11.375 ppb	49.773 ppb	109.273 %
Concentration per Run 1	188.763 ppb	111.436 %	109.738 %	11.091 ppb	48.964 ppb	111.177 %
Concentration per Run 2	197.204 ppb	109.051 %	108.296 %	11.768 ppb	50.402 ppb	106.032 %
Concentration per Run 3	188.398 ppb	112.377 %	110.915 %	11.264 ppb	49.954 ppb	110.611 %
Concentration RSD	2.6 %	1.5 %	1.2 %	3.1 %	1.5 %	2.6 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	76	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2469119-01 MCP-6020SL-10	Rack	1		
Analysis started at:	12/3/2024 1:20:09 PM	Vial	45		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	98.934 %	113.075 %	0.008 ppb	352,866.383 ppb	3,646.595 ppb	2.895 ppb	4,053.013 ppb	27,948.499 ppb	98.154 %
Concentration per Run 1	95.176 %	113.300 %	0.007 ppb	345,704.772 ppb	3,536.900 ppb	3.147 ppb	3,945.710 ppb	27,757.592 ppb	97.532 %
Concentration per Run 2	101.019 %	112.458 %	0.010 ppb	357,841.129 ppb	3,700.059 ppb	2.913 ppb	4,178.058 ppb	28,163.210 ppb	99.392 %
Concentration per Run 3	100.607 %	113.468 %	0.007 ppb	355,053.250 ppb	3,702.825 ppb	2.626 ppb	4,035.269 ppb	27,924.695 ppb	97.537 %
Concentration RSD	3.3 %	0.5 %	19.9 %	1.8 %	2.6 %	9.0 %	2.9 %	0.7 %	1.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.325 ppb	0.080 ppb	3,116.754 ppb	13,938.141 ppb	0.353 ppb	0.785 ppb	0.600 ppb	12.089 ppb	102.003 %
Concentration per Run 1	-0.197 ppb	0.035 ppb	3,082.917 ppb	13,687.604 ppb	0.331 ppb	0.836 ppb	0.523 ppb	12.509 ppb	101.744 %
Concentration per Run 2	-0.408 ppb	0.137 ppb	3,153.278 ppb	13,997.876 ppb	0.387 ppb	0.763 ppb	0.584 ppb	11.712 ppb	99.156 %
Concentration per Run 3	-0.371 ppb	0.067 ppb	3,114.067 ppb	14,128.942 ppb	0.341 ppb	0.755 ppb	0.695 ppb	12.046 ppb	105.110 %
Concentration RSD	34.7 %	65.4 %	1.1 %	1.6 %	8.5 %	5.6 %	14.6 %	3.3 %	2.9 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	16.038 ppb	0.244 ppb	184.175 ppb	7.079 ppb	104.568 %	-0.001 ppb	0.002 ppb	106.729 %	1.230 ppb
Concentration per Run 1	16.173 ppb	0.176 ppb	185.564 ppb	6.268 ppb	105.629 %	0.002 ppb	0.000 ppb	106.936 %	1.091 ppb
Concentration per Run 2	16.625 ppb	0.283 ppb	183.777 ppb	6.880 ppb	104.705 %	-0.002 ppb	0.003 ppb	106.647 %	1.280 ppb
Concentration per Run 3	15.316 ppb	0.273 ppb	183.183 ppb	8.088 ppb	103.371 %	-0.003 ppb	0.004 ppb	106.603 %	1.320 ppb
Concentration RSD	4.1 %	24.2 %	0.7 %	13.1 %	1.1 %	317.8 %	86.6 %	0.2 %	9.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	31.125 ppb	110.411 %	111.024 %	0.014 ppb	0.038 ppb	101.185 %
Concentration per Run 1	30.113 ppb	113.971 %	114.351 %	0.011 ppb	0.041 ppb	101.848 %
Concentration per Run 2	31.562 ppb	108.678 %	109.221 %	0.011 ppb	0.039 ppb	100.298 %
Concentration per Run 3	31.702 ppb	108.585 %	109.500 %	0.020 ppb	0.032 ppb	101.409 %
Concentration RSD	2.8 %	2.8 %	2.6 %	34.7 %	12.1 %	0.8 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	77	User name	ALPHALAB\a2-icpmsq2	Comment	CCV/MCCV
Analysis label:	CCV	Rack	0		
Analysis started at:	12/3/2024 1:30:45 PM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	114.890 %	119.641 %	59.218 ppb	6,473.200 ppb	5,753.076 ppb	54.772 ppb	5,759.568 ppb	5,551.802 ppb	106.643 %
Concentration per Run 1	110.268 %	125.421 %	59.311 ppb	6,211.606 ppb	5,542.746 ppb	51.850 ppb	5,577.762 ppb	5,363.165 ppb	104.391 %
Concentration per Run 2	115.705 %	117.845 %	59.181 ppb	6,544.396 ppb	5,770.704 ppb	56.149 ppb	5,784.414 ppb	5,710.529 ppb	106.666 %
Concentration per Run 3	118.697 %	115.657 %	59.161 ppb	6,663.598 ppb	5,945.777 ppb	56.317 ppb	5,916.529 ppb	5,581.711 ppb	108.871 %
Recovery Percentage 1			98.697 %	107.887 %	95.885 %	91.287 %	95.993 %	92.530 %	
Concentration RSD	3.7 %	4.3 %	0.1 %	3.6 %	3.5 %	4.6 %	3.0 %	3.2 %	2.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	55.466 ppb	55.585 ppb	59.394 ppb	5,934.901 ppb	58.515 ppb	60.096 ppb	60.051 ppb	60.662 ppb	107.203 %
Concentration per Run 1	55.289 ppb	54.809 ppb	60.683 ppb	5,982.886 ppb	59.890 ppb	61.645 ppb	58.676 ppb	60.862 ppb	104.852 %
Concentration per Run 2	55.854 ppb	55.301 ppb	60.193 ppb	5,906.309 ppb	57.021 ppb	59.516 ppb	60.875 ppb	60.600 ppb	106.640 %
Concentration per Run 3	55.257 ppb	56.647 ppb	57.306 ppb	5,915.510 ppb	58.634 ppb	59.128 ppb	60.602 ppb	60.524 ppb	110.117 %
Recovery Percentage 1	92.444 %	92.642 %	98.990 %	98.915 %	97.525 %	100.160 %	100.085 %	101.103 %	
Concentration RSD	0.6 %	1.7 %	3.1 %	0.7 %	2.5 %	2.3 %	2.0 %	0.3 %	2.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	59.229 ppb	59.465 ppb	59.373 ppb	57.973 ppb	111.494 %	56.003 ppb	56.011 ppb	115.054 %	55.292 ppb
Concentration per Run 1	60.203 ppb	60.816 ppb	58.857 ppb	55.400 ppb	115.330 %	54.706 ppb	53.753 ppb	118.427 %	53.496 ppb
Concentration per Run 2	59.723 ppb	61.199 ppb	60.308 ppb	58.008 ppb	110.012 %	56.534 ppb	56.959 ppb	113.922 %	55.669 ppb
Concentration per Run 3	57.761 ppb	56.378 ppb	58.954 ppb	60.512 ppb	109.141 %	56.771 ppb	57.322 ppb	112.814 %	56.711 ppb
Recovery Percentage 1	98.715 %	99.108 %	98.955 %	96.622 %		93.339 %	93.352 %		92.154 %
Concentration RSD	2.2 %	4.5 %	1.4 %	4.4 %	3.0 %	2.0 %	3.5 %	2.6 %	3.0 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	56.571 ppb	115.043 %	114.616 %	55.990 ppb	57.004 ppb	110.959 %
Concentration per Run 1	56.547 ppb	116.279 %	117.583 %	55.054 ppb	56.337 ppb	112.704 %
Concentration per Run 2	56.765 ppb	113.549 %	113.832 %	57.563 ppb	57.327 ppb	110.076 %
Concentration per Run 3	56.403 ppb	115.301 %	112.433 %	55.352 ppb	57.350 ppb	110.098 %
Recovery Percentage 1	94.286 %			93.316 %	95.007 %	
Concentration RSD	0.3 %	1.2 %	2.3 %	2.4 %	1.0 %	1.4 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	78	User name	ALPHALAB\a2-icpmsq2	Comment	CCB
Analysis label:	CCB	Rack	0		
Analysis started at:	12/3/2024 1:35:17 PM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	118.157 %	120.764 %	0.218 ppb	546.112 ppb	1.121 ppb	-0.684 ppb	71.287 ppb	0.699 ppb	107.057 %
Concentration per Run 1	113.438 %	124.580 %	0.304 ppb	510.437 ppb	1.050 ppb	-0.739 ppb	71.331 ppb	0.741 ppb	106.737 %
Concentration per Run 2	119.593 %	117.340 %	0.214 ppb	572.379 ppb	1.359 ppb	-0.792 ppb	71.113 ppb	8.083 ppb	106.220 %
Concentration per Run 3	121.440 %	120.371 %	0.136 ppb	555.520 ppb	0.955 ppb	-0.520 ppb	71.418 ppb	-6.727 ppb	108.214 %
Recovery Percentage 1			43.605 %	109.222 %	1.602 %	-6.835 %	71.287 %	0.699 %	
Concentration RSD	3.5 %	3.0 %	38.5 %	5.9 %	18.9 %	21.1 %	0.2 %	1,059.2 %	1.0 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.380 ppb	-0.019 ppb	0.099 ppb	7.334 ppb	0.020 ppb	0.118 ppb	0.088 ppb	0.146 ppb	105.134 %
Concentration per Run 1	-0.454 ppb	-0.005 ppb	0.064 ppb	6.450 ppb	0.026 ppb	0.142 ppb	0.110 ppb	0.169 ppb	107.544 %
Concentration per Run 2	-0.360 ppb	-0.019 ppb	0.177 ppb	8.124 ppb	0.012 ppb	0.116 ppb	0.106 ppb	0.183 ppb	105.766 %
Concentration per Run 3	-0.327 ppb	-0.033 ppb	0.054 ppb	7.427 ppb	0.022 ppb	0.098 ppb	0.049 ppb	0.086 ppb	102.092 %
Recovery Percentage 1	-7.604 %	-1.898 %	9.855 %	14.668 %	3.957 %	5.924 %	8.800 %	2.925 %	
Concentration RSD	17.4 %	72.4 %	69.4 %	11.5 %	37.4 %	18.3 %	38.7 %	35.8 %	2.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.039 ppb	0.018 ppb	0.034 ppb	0.370 ppb	110.475 %	0.023 ppb	0.026 ppb	109.867 %	0.157 ppb
Concentration per Run 1	0.118 ppb	0.089 ppb	0.036 ppb	0.205 ppb	114.360 %	0.028 ppb	0.027 ppb	109.973 %	0.120 ppb
Concentration per Run 2	-0.008 ppb	0.014 ppb	0.029 ppb	0.316 ppb	110.225 %	0.022 ppb	0.044 ppb	110.317 %	0.176 ppb
Concentration per Run 3	0.009 ppb	-0.050 ppb	0.038 ppb	0.589 ppb	106.841 %	0.020 ppb	0.007 ppb	109.311 %	0.175 ppb
Recovery Percentage 1	7.900 %	0.355 %	0.344 %	18.484 %		5.794 %	12.816 %		3.921 %
Concentration RSD	173.1 %	391.7 %	13.6 %	53.5 %	3.4 %	17.3 %	71.7 %	0.5 %	20.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.020 ppb	111.813 %	111.411 %	0.233 ppb	0.030 ppb	109.041 %
Concentration per Run 1	-0.006 ppb	114.529 %	115.994 %	0.218 ppb	0.029 ppb	111.797 %
Concentration per Run 2	0.046 ppb	112.056 %	109.879 %	0.287 ppb	0.034 ppb	108.619 %
Concentration per Run 3	0.020 ppb	108.855 %	108.358 %	0.196 ppb	0.028 ppb	106.706 %
Recovery Percentage 1	3.985 %			23.333 %	3.033 %	
Concentration RSD	130.1 %	2.5 %	3.6 %	20.3 %	11.4 %	2.4 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	79	User name	ALPHALAB\a2-icpmsq2	Comment	CCB
Analysis label:	CCB	Rack	0		
Analysis started at:	12/3/2024 1:45:22 PM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	118.704 %	119.024 %	0.006 ppb	280.745 ppb	-0.171 ppb	-0.666 ppb	30.777 ppb	-6.620 ppb	108.554 %
Concentration per Run 1	113.248 %	116.499 %	0.006 ppb	251.140 ppb	0.138 ppb	-0.974 ppb	28.930 ppb	-2.982 ppb	105.054 %
Concentration per Run 2	120.589 %	118.687 %	0.005 ppb	286.333 ppb	-0.231 ppb	-0.400 ppb	28.755 ppb	-10.323 ppb	110.697 %
Concentration per Run 3	122.275 %	121.886 %	0.007 ppb	304.762 ppb	-0.419 ppb	-0.624 ppb	34.646 ppb	-6.556 ppb	109.911 %
Recovery Percentage 1			1.174 %	56.149 %	-0.244 %	-6.663 %	30.777 %	-6.620 %	
Concentration RSD	4.0 %	2.3 %	11.2 %	9.7 %	166.2 %	43.4 %	10.9 %	55.4 %	2.8 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.381 ppb	-0.061 ppb	0.032 ppb	-0.423 ppb	0.005 ppb	0.043 ppb	0.031 ppb	0.117 ppb	130.208 %
Concentration per Run 1	-0.376 ppb	-0.085 ppb	0.064 ppb	-0.568 ppb	0.007 ppb	0.067 ppb	0.005 ppb	0.133 ppb	132.669 %
Concentration per Run 2	-0.352 ppb	-0.058 ppb	0.061 ppb	-0.792 ppb	0.008 ppb	0.013 ppb	0.050 ppb	0.107 ppb	130.754 %
Concentration per Run 3	-0.415 ppb	-0.041 ppb	-0.030 ppb	0.090 ppb	-0.001 ppb	0.050 ppb	0.039 ppb	0.111 ppb	127.201 %
Recovery Percentage 1	-7.626 %	-6.135 %	3.188 %	-0.846 %	0.971 %	2.170 %	3.110 %	2.341 %	
Concentration RSD	8.4 %	36.3 %	166.9 %	108.3 %	98.2 %	63.6 %	76.1 %	12.0 %	2.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.044 ppb	0.002 ppb	0.004 ppb	-0.053 ppb	111.015 %	0.002 ppb	0.001 ppb	109.483 %	0.044 ppb
Concentration per Run 1	0.077 ppb	-0.047 ppb	0.012 ppb	-0.071 ppb	115.778 %	0.001 ppb	0.000 ppb	114.476 %	0.051 ppb
Concentration per Run 2	0.012 ppb	0.035 ppb	-0.006 ppb	-0.050 ppb	110.261 %	0.002 ppb	0.000 ppb	106.734 %	0.043 ppb
Concentration per Run 3	0.043 ppb	0.018 ppb	0.005 ppb	-0.039 ppb	107.005 %	0.004 ppb	0.003 ppb	107.238 %	0.038 ppb
Recovery Percentage 1	8.756 %	0.040 %	0.036 %	-2.675 %		0.592 %	0.575 %		1.102 %
Concentration RSD	74.7 %	2,144.2 %	258.2 %	31.2 %	4.0 %	70.9 %	173.2 %	4.0 %	14.5 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.007 ppb	112.317 %	110.097 %	0.029 ppb	0.006 ppb	107.396 %
Concentration per Run 1	0.006 ppb	113.387 %	112.941 %	0.019 ppb	0.009 ppb	109.445 %
Concentration per Run 2	0.007 ppb	111.536 %	107.260 %	0.032 ppb	0.004 ppb	104.181 %
Concentration per Run 3	0.007 ppb	112.029 %	110.089 %	0.037 ppb	0.004 ppb	108.563 %
Recovery Percentage 1	1.374 %			2.939 %	0.568 %	
Concentration RSD	8.9 %	0.9 %	2.6 %	32.4 %	45.8 %	2.6 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	80	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG2004404-2d10 MCP-6020SL-10	Rack	1		
Analysis started at:	12/3/2024 2:02:11 PM	Vial	52		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	119.645 %	124.018 %	4.794 ppb	1,313.469 ppb	924.323 ppb	176.698 ppb	904.120 ppb	814.771 ppb	107.511 %
Concentration per Run 1	115.135 %	121.549 %	4.803 ppb	1,304.630 ppb	908.906 ppb	172.505 ppb	912.808 ppb	856.177 ppb	106.220 %
Concentration per Run 2	120.551 %	130.809 %	4.843 ppb	1,236.184 ppb	884.689 ppb	172.517 ppb	883.533 ppb	740.225 ppb	107.134 %
Concentration per Run 3	123.247 %	119.697 %	4.735 ppb	1,399.595 ppb	979.374 ppb	185.071 ppb	916.020 ppb	847.912 ppb	109.179 %
Concentration RSD	3.5 %	4.8 %	1.1 %	6.2 %	5.3 %	4.1 %	2.0 %	7.9 %	1.4 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	43.230 ppb	18.015 ppb	48.878 ppb	96.029 ppb	48.347 ppb	48.730 ppb	23.978 ppb	48.572 ppb	107.982 %
Concentration per Run 1	43.014 ppb	17.836 ppb	50.744 ppb	94.651 ppb	47.185 ppb	50.170 ppb	24.483 ppb	48.006 ppb	105.887 %
Concentration per Run 2	42.284 ppb	17.835 ppb	48.198 ppb	92.744 ppb	48.056 ppb	47.689 ppb	23.805 ppb	49.705 ppb	107.966 %
Concentration per Run 3	44.392 ppb	18.376 ppb	47.691 ppb	100.693 ppb	49.799 ppb	48.331 ppb	23.647 ppb	48.006 ppb	110.092 %
Concentration RSD	2.5 %	1.7 %	3.3 %	4.3 %	2.8 %	2.6 %	1.9 %	2.0 %	1.9 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	11.578 ppb	11.397 ppb	95.017 ppb	96.240 ppb	110.170 %	4.988 ppb	4.909 ppb	110.154 %	42.115 ppb
Concentration per Run 1	11.411 ppb	9.612 ppb	93.772 ppb	96.888 ppb	113.283 %	5.026 ppb	4.882 ppb	113.111 %	40.670 ppb
Concentration per Run 2	11.885 ppb	11.425 ppb	96.155 ppb	95.747 ppb	108.295 %	4.817 ppb	4.939 ppb	108.231 %	42.707 ppb
Concentration per Run 3	11.439 ppb	13.156 ppb	95.124 ppb	96.085 ppb	108.932 %	5.120 ppb	4.906 ppb	109.120 %	42.968 ppb
Concentration RSD	2.3 %	15.5 %	1.3 %	0.6 %	2.5 %	3.1 %	0.6 %	2.4 %	3.0 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	192.110 ppb	111.191 %	110.197 %	11.257 ppb	49.680 ppb	109.190 %
Concentration per Run 1	185.893 ppb	112.540 %	111.231 %	11.229 ppb	48.667 ppb	108.280 %
Concentration per Run 2	191.505 ppb	112.720 %	110.685 %	11.102 ppb	49.550 ppb	110.392 %
Concentration per Run 3	198.932 ppb	108.313 %	108.675 %	11.441 ppb	50.822 ppb	108.896 %
Concentration RSD	3.4 %	2.2 %	1.2 %	1.5 %	2.2 %	1.0 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	81	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG2004404-3d10 MCP-6020SL-10	Rack	1		
Analysis started at:	12/3/2024 2:06:37 PM	Vial	53		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	114.779 %	129.462 %	5.034 ppb	1,292.033 ppb	909.248 ppb	175.601 ppb	932.334 ppb	866.457 ppb	108.873 %
Concentration per Run 1	110.272 %	134.849 %	5.097 ppb	1,225.196 ppb	861.079 ppb	169.993 ppb	902.585 ppb	812.601 ppb	106.307 %
Concentration per Run 2	115.539 %	129.125 %	5.029 ppb	1,298.338 ppb	917.699 ppb	174.231 ppb	910.978 ppb	907.035 ppb	111.080 %
Concentration per Run 3	118.527 %	124.411 %	4.977 ppb	1,352.565 ppb	948.967 ppb	182.578 ppb	983.439 ppb	879.734 ppb	109.233 %
Concentration RSD	3.6 %	4.0 %	1.2 %	4.9 %	4.9 %	3.6 %	4.8 %	5.6 %	2.2 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	43.824 ppb	18.222 ppb	48.802 ppb	95.028 ppb	49.421 ppb	48.563 ppb	24.642 ppb	48.813 ppb	106.423 %
Concentration per Run 1	42.058 ppb	17.768 ppb	47.769 ppb	92.582 ppb	49.205 ppb	48.436 ppb	25.554 ppb	48.167 ppb	106.878 %
Concentration per Run 2	44.094 ppb	18.464 ppb	49.081 ppb	104.275 ppb	50.511 ppb	48.611 ppb	24.447 ppb	50.073 ppb	105.814 %
Concentration per Run 3	45.320 ppb	18.434 ppb	49.557 ppb	88.227 ppb	48.547 ppb	48.642 ppb	23.924 ppb	48.199 ppb	106.576 %
Concentration RSD	3.8 %	2.2 %	1.9 %	8.7 %	2.0 %	0.2 %	3.4 %	2.2 %	0.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	11.925 ppb	13.449 ppb	95.558 ppb	95.718 ppb	109.363 %	5.025 ppb	5.018 ppb	109.070 %	40.061 ppb
Concentration per Run 1	11.948 ppb	13.709 ppb	94.325 ppb	92.744 ppb	112.875 %	4.831 ppb	4.817 ppb	113.403 %	38.063 ppb
Concentration per Run 2	12.331 ppb	11.939 ppb	96.608 ppb	97.752 ppb	107.080 %	5.072 ppb	5.068 ppb	108.870 %	40.172 ppb
Concentration per Run 3	11.497 ppb	14.700 ppb	95.741 ppb	96.659 ppb	108.133 %	5.171 ppb	5.170 ppb	104.937 %	41.950 ppb
Concentration RSD	3.5 %	10.4 %	1.2 %	2.8 %	2.8 %	3.5 %	3.6 %	3.9 %	4.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	192.646 ppb	110.226 %	106.938 %	11.438 ppb	50.492 ppb	108.593 %
Concentration per Run 1	187.377 ppb	113.752 %	108.375 %	11.152 ppb	49.775 ppb	110.243 %
Concentration per Run 2	192.454 ppb	107.751 %	107.069 %	11.569 ppb	51.453 ppb	107.520 %
Concentration per Run 3	198.108 ppb	109.174 %	105.370 %	11.593 ppb	50.248 ppb	108.015 %
Concentration RSD	2.8 %	2.8 %	1.4 %	2.2 %	1.7 %	1.3 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	82	User name	ALPHALAB\a2-icpmsq2	Comment	ng
Analysis label:	L2469297-01d5 MCP-6020SL-10	Rack	1		
Analysis started at:	12/3/2024 2:11:05 PM	Vial	46		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	95.565 %	113.468 %	0.051 ppb	262,288.313 ppb	12,737.116 ppb	19.063 ppb	2,729.110 ppb	31,220.743 ppb	99.784 %
Concentration per Run 1	91.985 %	113.973 %	0.052 ppb	260,301.922 ppb	12,704.928 ppb	20.389 ppb	2,678.718 ppb	30,572.424 ppb	96.684 %
Concentration per Run 2	96.455 %	103.199 %	0.056 ppb	280,896.015 ppb	13,545.645 ppb	20.297 ppb	2,889.385 ppb	32,479.480 ppb	101.320 %
Concentration per Run 3	98.257 %	123.233 %	0.044 ppb	245,667.002 ppb	11,960.776 ppb	16.505 ppb	2,619.227 ppb	30,610.326 ppb	101.348 %
Concentration RSD	3.4 %	8.8 %	12.1 %	6.7 %	6.2 %	11.6 %	5.2 %	3.5 %	2.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.532 ppb	0.452 ppb	4,305.803 ppb	53,249.454 ppb	2.943 ppb	1.163 ppb	0.274 ppb	5.754 ppb	103.688 %
Concentration per Run 1	0.584 ppb	0.384 ppb	4,243.722 ppb	52,387.616 ppb	2.840 ppb	1.214 ppb	0.322 ppb	5.863 ppb	103.798 %
Concentration per Run 2	0.529 ppb	0.571 ppb	4,490.917 ppb	55,628.557 ppb	3.067 ppb	1.272 ppb	0.223 ppb	5.814 ppb	102.106 %
Concentration per Run 3	0.482 ppb	0.402 ppb	4,182.771 ppb	51,732.189 ppb	2.922 ppb	1.002 ppb	0.277 ppb	5.585 ppb	105.161 %
Concentration RSD	9.6 %	22.7 %	3.8 %	3.9 %	3.9 %	12.2 %	18.1 %	2.6 %	1.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.308 ppb	0.543 ppb	290.701 ppb	0.971 ppb	101.876 %	0.001 ppb	0.013 ppb	105.065 %	1.392 ppb
Concentration per Run 1	0.306 ppb	0.483 ppb	288.431 ppb	0.914 ppb	105.104 %	-0.001 ppb	0.010 ppb	108.168 %	1.221 ppb
Concentration per Run 2	0.357 ppb	0.842 ppb	294.158 ppb	0.911 ppb	99.161 %	0.001 ppb	0.022 ppb	102.988 %	1.444 ppb
Concentration per Run 3	0.261 ppb	0.304 ppb	289.515 ppb	1.088 ppb	101.363 %	0.001 ppb	0.007 ppb	104.038 %	1.510 ppb
Concentration RSD	15.6 %	50.4 %	1.0 %	10.5 %	2.9 %	202.8 %	58.7 %	2.6 %	10.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	590.919 ppb	108.192 %	107.327 %	0.021 ppb	0.085 ppb	100.466 %
Concentration per Run 1	574.236 ppb	111.709 %	108.266 %	0.019 ppb	0.087 ppb	102.559 %
Concentration per Run 2	595.804 ppb	105.626 %	106.575 %	0.027 ppb	0.090 ppb	100.203 %
Concentration per Run 3	602.716 ppb	107.240 %	107.139 %	0.018 ppb	0.077 ppb	98.636 %
Concentration RSD	2.5 %	2.9 %	0.8 %	22.3 %	8.0 %	2.0 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	83	User name	ALPHALAB\a2-icpmsq2	Comment	ng
Analysis label:	L2469297-02 MCP-6020SL-10	Rack	1		
Analysis started at:	12/3/2024 2:15:34 PM	Vial	47		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	107.239 %	119.473 %	0.153 ppb	158,770.819 ppb	1,167.201 ppb	1,917.651 ppb	2,604.533 ppb	3,522.550 ppb	103.404 %
Concentration per Run 1	103.700 %	121.381 %	0.160 ppb	156,001.447 ppb	1,141.175 ppb	1,842.772 ppb	2,452.845 ppb	3,405.931 ppb	100.754 %
Concentration per Run 2	108.198 %	119.361 %	0.146 ppb	156,217.482 ppb	1,150.585 ppb	1,919.118 ppb	2,611.065 ppb	3,549.758 ppb	104.315 %
Concentration per Run 3	109.819 %	117.677 %	0.153 ppb	164,093.528 ppb	1,209.842 ppb	1,991.064 ppb	2,749.690 ppb	3,611.960 ppb	105.141 %
Concentration RSD	3.0 %	1.6 %	4.6 %	2.9 %	3.2 %	3.9 %	5.7 %	3.0 %	2.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	5.622 ppb	7.497 ppb	419.777 ppb	2,233.456 ppb	2.657 ppb	13.380 ppb	26.053 ppb	20.104 ppb	99.231 %
Concentration per Run 1	5.250 ppb	7.150 ppb	413.250 ppb	2,215.950 ppb	2.715 ppb	13.253 ppb	24.931 ppb	19.832 ppb	99.869 %
Concentration per Run 2	5.953 ppb	7.664 ppb	419.792 ppb	2,215.413 ppb	2.727 ppb	13.011 ppb	26.406 ppb	19.789 ppb	98.119 %
Concentration per Run 3	5.663 ppb	7.677 ppb	426.289 ppb	2,269.004 ppb	2.530 ppb	13.876 ppb	26.821 ppb	20.691 ppb	99.705 %
Concentration RSD	6.3 %	4.0 %	1.6 %	1.4 %	4.2 %	3.3 %	3.8 %	2.5 %	1.0 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	3.727 ppb	3.994 ppb	29.539 ppb	8.858 ppb	103.097 %	0.022 ppb	0.036 ppb	104.182 %	1.036 ppb
Concentration per Run 1	3.555 ppb	3.536 ppb	28.761 ppb	8.252 ppb	107.617 %	0.021 ppb	0.034 ppb	109.506 %	1.004 ppb
Concentration per Run 2	3.889 ppb	3.559 ppb	29.779 ppb	8.766 ppb	101.297 %	0.018 ppb	0.029 ppb	101.389 %	1.014 ppb
Concentration per Run 3	3.736 ppb	4.887 ppb	30.077 ppb	9.554 ppb	100.377 %	0.027 ppb	0.044 ppb	101.652 %	1.091 ppb
Concentration RSD	4.5 %	19.4 %	2.3 %	7.4 %	3.8 %	20.1 %	20.9 %	4.4 %	4.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	45.962 ppb	108.618 %	108.131 %	0.041 ppb	5.277 ppb	104.441 %
Concentration per Run 1	43.665 ppb	109.312 %	107.497 %	0.039 ppb	5.162 ppb	107.020 %
Concentration per Run 2	45.741 ppb	108.761 %	109.351 %	0.044 ppb	5.307 ppb	104.018 %
Concentration per Run 3	48.479 ppb	107.783 %	107.544 %	0.041 ppb	5.362 ppb	102.283 %
Concentration RSD	5.3 %	0.7 %	1.0 %	5.7 %	2.0 %	2.3 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	84	User name	ALPHALAB\a2-icpmsq2	Comment	ng
Analysis label:	L2469297-03 MCP-6020SL-10	Rack	1		
Analysis started at:	12/3/2024 2:20:03 PM	Vial	48		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	106.634 %	113.019 %	0.042 ppb	95,399.357 ppb	1,208.509 ppb	655.969 ppb	1,699.731 ppb	4,803.282 ppb	102.586 %
Concentration per Run 1	102.268 %	113.300 %	0.043 ppb	95,502.456 ppb	1,183.711 ppb	639.846 ppb	1,677.611 ppb	4,854.386 ppb	98.690 %
Concentration per Run 2	107.933 %	108.923 %	0.041 ppb	97,087.707 ppb	1,236.388 ppb	668.369 ppb	1,802.081 ppb	4,960.612 ppb	104.240 %
Concentration per Run 3	109.700 %	116.835 %	0.044 ppb	93,607.909 ppb	1,205.428 ppb	659.693 ppb	1,619.502 ppb	4,594.848 ppb	104.828 %
Concentration RSD	3.6 %	3.5 %	4.1 %	1.8 %	2.2 %	2.2 %	5.5 %	3.9 %	3.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	5.794 ppb	35.278 ppb	38.395 ppb	576.055 ppb	0.450 ppb	1.581 ppb	6.351 ppb	15.282 ppb	99.178 %
Concentration per Run 1	5.079 ppb	34.301 ppb	38.752 ppb	559.118 ppb	0.525 ppb	1.572 ppb	6.229 ppb	15.443 ppb	100.664 %
Concentration per Run 2	6.243 ppb	37.012 ppb	39.386 ppb	590.932 ppb	0.439 ppb	1.364 ppb	6.289 ppb	15.340 ppb	96.735 %
Concentration per Run 3	6.062 ppb	34.522 ppb	37.046 ppb	578.115 ppb	0.387 ppb	1.809 ppb	6.534 ppb	15.064 ppb	100.135 %
Concentration RSD	10.8 %	4.3 %	3.2 %	2.8 %	15.4 %	14.1 %	2.5 %	1.3 %	2.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	2.440 ppb	0.783 ppb	30.784 ppb	13.077 ppb	102.913 %	0.016 ppb	0.017 ppb	105.017 %	0.941 ppb
Concentration per Run 1	2.506 ppb	0.501 ppb	30.087 ppb	12.816 ppb	105.654 %	0.012 ppb	0.010 ppb	107.846 %	0.852 ppb
Concentration per Run 2	2.422 ppb	0.527 ppb	31.031 ppb	13.447 ppb	102.221 %	0.017 ppb	0.029 ppb	102.409 %	0.987 ppb
Concentration per Run 3	2.393 ppb	1.320 ppb	31.234 ppb	12.968 ppb	100.864 %	0.017 ppb	0.011 ppb	104.794 %	0.983 ppb
Concentration RSD	2.4 %	59.5 %	2.0 %	2.5 %	2.4 %	18.0 %	63.7 %	2.6 %	8.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	13.015 ppb	106.876 %	103.702 %	0.020 ppb	1.198 ppb	101.253 %
Concentration per Run 1	12.978 ppb	108.037 %	105.742 %	0.017 ppb	1.155 ppb	103.014 %
Concentration per Run 2	12.881 ppb	107.300 %	103.649 %	0.024 ppb	1.232 ppb	98.238 %
Concentration per Run 3	13.186 ppb	105.293 %	101.715 %	0.019 ppb	1.206 ppb	102.506 %
Concentration RSD	1.2 %	1.3 %	1.9 %	18.0 %	3.3 %	2.6 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	85	User name	ALPHALAB\a2-icpmsq2	Comment	ng
Analysis label:	L2469297-04 MCP-6020SL-10	Rack	1		
Analysis started at:	12/3/2024 2:24:33 PM	Vial	49		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	105.938 %	119.192 %	0.021 ppb	177,643.475 ppb	12,703.940 ppb	199.180 ppb	3,574.213 ppb	40,299.648 ppb	109.042 %
Concentration per Run 1	103.394 %	119.361 %	0.022 ppb	174,194.783 ppb	12,309.737 ppb	200.115 ppb	3,464.115 ppb	39,217.927 ppb	106.149 %
Concentration per Run 2	106.654 %	119.697 %	0.021 ppb	176,682.784 ppb	12,595.233 ppb	188.557 ppb	3,522.036 ppb	39,545.910 ppb	111.896 %
Concentration per Run 3	107.764 %	118.519 %	0.020 ppb	182,052.859 ppb	13,206.849 ppb	208.869 ppb	3,736.487 ppb	42,135.106 ppb	109.083 %
Concentration RSD	2.1 %	0.5 %	5.6 %	2.3 %	3.6 %	5.1 %	4.0 %	4.0 %	2.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.513 ppb	0.732 ppb	365.058 ppb	230.628 ppb	0.548 ppb	2.049 ppb	2.105 ppb	14.100 ppb	99.638 %
Concentration per Run 1	0.495 ppb	0.694 ppb	363.699 ppb	233.409 ppb	0.556 ppb	2.044 ppb	2.131 ppb	14.116 ppb	98.478 %
Concentration per Run 2	0.526 ppb	0.733 ppb	374.307 ppb	242.858 ppb	0.566 ppb	1.963 ppb	2.022 ppb	14.110 ppb	100.533 %
Concentration per Run 3	0.519 ppb	0.768 ppb	357.168 ppb	215.617 ppb	0.522 ppb	2.139 ppb	2.162 ppb	14.075 ppb	99.902 %
Concentration RSD	3.1 %	5.1 %	2.4 %	6.0 %	4.2 %	4.3 %	3.5 %	0.2 %	1.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.373 ppb	0.482 ppb	259.054 ppb	26.055 ppb	103.393 %	0.002 ppb	0.023 ppb	103.437 %	0.208 ppb
Concentration per Run 1	0.361 ppb	0.585 ppb	257.476 ppb	24.651 ppb	104.138 %	0.004 ppb	0.028 ppb	108.967 %	0.151 ppb
Concentration per Run 2	0.406 ppb	0.615 ppb	258.609 ppb	25.986 ppb	102.859 %	0.001 ppb	0.022 ppb	99.696 %	0.186 ppb
Concentration per Run 3	0.352 ppb	0.246 ppb	261.079 ppb	27.529 ppb	103.184 %	0.001 ppb	0.018 ppb	101.648 %	0.288 ppb
Concentration RSD	7.8 %	42.4 %	0.7 %	5.5 %	0.6 %	72.9 %	21.1 %	4.7 %	34.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	63.194 ppb	109.079 %	106.300 %	0.031 ppb	0.355 ppb	100.531 %
Concentration per Run 1	60.156 ppb	109.129 %	104.492 %	0.025 ppb	0.332 ppb	104.339 %
Concentration per Run 2	62.531 ppb	108.697 %	106.549 %	0.038 ppb	0.368 ppb	98.880 %
Concentration per Run 3	66.894 ppb	109.412 %	107.859 %	0.029 ppb	0.367 ppb	98.373 %
Concentration RSD	5.4 %	0.3 %	1.6 %	21.0 %	5.8 %	3.3 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	86	User name	ALPHALAB\a2-icpmsq2	Comment	ng
Analysis label:	L2469297-05 MCP-6020SL-10	Rack	1		
Analysis started at:	12/3/2024 2:29:01 PM	Vial	50		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	91.437 %	113.524 %	0.014 ppb	1,245,482.649 ppb	9,911.556 ppb	89.297 ppb	11,064.752 ppb	39,351.478 ppb	84.984 %
Concentration per Run 1	89.395 %	120.034 %	0.013 ppb	1,169,546.179 ppb	9,070.247 ppb	81.109 ppb	10,209.708 ppb	36,804.542 ppb	84.762 %
Concentration per Run 2	93.113 %	109.428 %	0.014 ppb	1,267,191.456 ppb	10,166.027 ppb	92.951 ppb	11,657.719 ppb	40,991.680 ppb	86.281 %
Concentration per Run 3	91.803 %	111.111 %	0.017 ppb	1,299,710.314 ppb	10,498.394 ppb	93.833 ppb	11,326.828 ppb	40,258.212 ppb	83.907 %
Concentration RSD	2.1 %	5.0 %	15.1 %	5.4 %	7.5 %	8.0 %	6.9 %	5.7 %	1.4 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.170 ppb	0.467 ppb	3,026.198 ppb	140.553 ppb	4.206 ppb	5.455 ppb	5.843 ppb	18.181 ppb	99.844 %
Concentration per Run 1	0.157 ppb	0.458 ppb	3,006.584 ppb	140.839 ppb	4.243 ppb	5.643 ppb	5.650 ppb	17.941 ppb	94.951 %
Concentration per Run 2	0.256 ppb	0.480 ppb	3,019.473 ppb	141.767 ppb	4.280 ppb	5.073 ppb	5.990 ppb	18.285 ppb	102.271 %
Concentration per Run 3	0.097 ppb	0.462 ppb	3,052.537 ppb	139.053 ppb	4.096 ppb	5.650 ppb	5.890 ppb	18.317 ppb	102.311 %
Concentration RSD	47.1 %	2.5 %	0.8 %	1.0 %	2.3 %	6.1 %	3.0 %	1.1 %	4.2 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.404 ppb	0.387 ppb	448.409 ppb	11.096 ppb	98.722 %	0.132 ppb	0.507 ppb	103.114 %	0.186 ppb
Concentration per Run 1	0.323 ppb	0.441 ppb	444.910 ppb	10.971 ppb	100.846 %	0.139 ppb	0.533 ppb	104.503 %	0.164 ppb
Concentration per Run 2	0.510 ppb	0.358 ppb	445.652 ppb	11.088 ppb	98.182 %	0.133 ppb	0.463 ppb	101.861 %	0.196 ppb
Concentration per Run 3	0.380 ppb	0.363 ppb	454.664 ppb	11.228 ppb	97.138 %	0.124 ppb	0.527 ppb	102.979 %	0.199 ppb
Concentration RSD	23.7 %	12.0 %	1.2 %	1.2 %	1.9 %	5.9 %	7.7 %	1.3 %	10.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	236.210 ppb	108.539 %	108.513 %	0.053 ppb	0.184 ppb	94.761 %
Concentration per Run 1	229.661 ppb	108.109 %	107.705 %	0.052 ppb	0.183 ppb	93.041 %
Concentration per Run 2	238.275 ppb	108.787 %	109.787 %	0.054 ppb	0.182 ppb	94.979 %
Concentration per Run 3	240.696 ppb	108.720 %	108.048 %	0.054 ppb	0.187 ppb	96.264 %
Concentration RSD	2.5 %	0.3 %	1.0 %	2.0 %	1.2 %	1.7 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	87	User name	ALPHALAB\a2-icpmsq2	Comment	ng
Analysis label:	L2469297-06 MCP-6020SL-10	Rack	1		
Analysis started at:	12/3/2024 2:33:29 PM	Vial	51		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	116.131 %	123.064 %	0.029 ppb	80,490.670 ppb	514.058 ppb	85.081 ppb	1,611.620 ppb	1,929.628 ppb	107.881 %
Concentration per Run 1	113.765 %	119.866 %	0.028 ppb	79,852.296 ppb	491.902 ppb	80.759 ppb	1,620.403 ppb	1,864.030 ppb	105.862 %
Concentration per Run 2	117.112 %	125.421 %	0.031 ppb	78,406.207 ppb	518.177 ppb	86.312 ppb	1,560.358 ppb	1,953.811 ppb	109.176 %
Concentration per Run 3	117.517 %	123.906 %	0.029 ppb	83,213.508 ppb	532.095 ppb	88.173 ppb	1,654.099 ppb	1,971.043 ppb	108.604 %
Concentration RSD	1.8 %	2.3 %	5.8 %	3.1 %	4.0 %	4.5 %	2.9 %	3.0 %	1.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	4.785 ppb	0.563 ppb	244.079 ppb	651.032 ppb	0.738 ppb	1.718 ppb	1.978 ppb	16.715 ppb	105.228 %
Concentration per Run 1	4.586 ppb	0.568 ppb	246.926 ppb	660.153 ppb	0.809 ppb	1.652 ppb	1.912 ppb	16.940 ppb	105.739 %
Concentration per Run 2	4.784 ppb	0.540 ppb	241.474 ppb	632.343 ppb	0.744 ppb	1.649 ppb	1.875 ppb	16.326 ppb	105.401 %
Concentration per Run 3	4.983 ppb	0.581 ppb	243.837 ppb	660.600 ppb	0.659 ppb	1.852 ppb	2.146 ppb	16.878 ppb	104.545 %
Concentration RSD	4.1 %	3.7 %	1.1 %	2.5 %	10.3 %	6.8 %	7.4 %	2.0 %	0.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	5.578 ppb	0.915 ppb	17.302 ppb	11.678 ppb	108.249 %	0.002 ppb	0.010 ppb	109.485 %	0.312 ppb
Concentration per Run 1	5.355 ppb	0.924 ppb	16.944 ppb	10.698 ppb	111.109 %	0.000 ppb	0.007 ppb	110.955 %	0.295 ppb
Concentration per Run 2	5.588 ppb	1.254 ppb	17.255 ppb	11.876 ppb	108.558 %	0.003 ppb	0.021 ppb	107.325 %	0.317 ppb
Concentration per Run 3	5.791 ppb	0.568 ppb	17.705 ppb	12.459 ppb	105.079 %	0.004 ppb	0.003 ppb	110.176 %	0.323 ppb
Concentration RSD	3.9 %	37.5 %	2.2 %	7.7 %	2.8 %	88.3 %	89.3 %	1.7 %	4.8 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	22.927 ppb	113.308 %	110.441 %	0.013 ppb	0.225 ppb	105.805 %
Concentration per Run 1	22.106 ppb	112.554 %	112.066 %	0.008 ppb	0.212 ppb	105.583 %
Concentration per Run 2	23.176 ppb	114.427 %	111.961 %	0.014 ppb	0.234 ppb	106.025 %
Concentration per Run 3	23.498 ppb	112.943 %	107.295 %	0.015 ppb	0.229 ppb	105.806 %
Concentration RSD	3.2 %	0.9 %	2.5 %	31.6 %	5.1 %	0.2 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	88	User name	ALPHALAB\a2-icpmsq2	Comment	CCV/MCCV
Analysis label:	CCV	Rack	0		
Analysis started at:	12/3/2024 2:37:57 PM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	118.989 %	125.702 %	56.919 ppb	6,404.407 ppb	5,601.524 ppb	54.818 ppb	5,578.061 ppb	5,587.954 ppb	113.278 %
Concentration per Run 1	113.423 %	130.304 %	58.003 ppb	6,319.185 ppb	5,464.085 ppb	53.254 ppb	5,536.231 ppb	5,377.043 ppb	111.923 %
Concentration per Run 2	120.504 %	122.391 %	56.598 ppb	6,474.879 ppb	5,733.529 ppb	55.992 ppb	5,338.441 ppb	5,679.268 ppb	115.471 %
Concentration per Run 3	123.038 %	124.411 %	56.156 ppb	6,419.158 ppb	5,606.957 ppb	55.208 ppb	5,859.513 ppb	5,707.549 ppb	112.440 %
Recovery Percentage 1			94.865 %	106.740 %	93.359 %	91.363 %	92.968 %	93.133 %	
Concentration RSD	4.2 %	3.3 %	1.7 %	1.2 %	2.4 %	2.6 %	4.7 %	3.3 %	1.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	55.262 ppb	56.600 ppb	58.041 ppb	5,890.819 ppb	59.091 ppb	60.603 ppb	60.565 ppb	59.819 ppb	105.005 %
Concentration per Run 1	52.748 ppb	54.271 ppb	56.416 ppb	5,889.070 ppb	60.073 ppb	61.380 ppb	59.009 ppb	60.523 ppb	103.858 %
Concentration per Run 2	55.167 ppb	57.088 ppb	58.892 ppb	6,064.146 ppb	60.470 ppb	61.174 ppb	60.805 ppb	60.819 ppb	106.151 %
Concentration per Run 3	57.872 ppb	58.442 ppb	58.814 ppb	5,719.239 ppb	56.728 ppb	59.256 ppb	61.880 ppb	58.115 ppb	105.006 %
Recovery Percentage 1	92.104 %	94.333 %	96.734 %	98.180 %	98.484 %	101.005 %	100.941 %	99.699 %	
Concentration RSD	4.6 %	3.8 %	2.4 %	2.9 %	3.5 %	1.9 %	2.4 %	2.5 %	1.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	60.070 ppb	59.767 ppb	58.456 ppb	58.469 ppb	110.780 %	56.871 ppb	57.056 ppb	111.702 %	54.826 ppb
Concentration per Run 1	59.554 ppb	64.094 ppb	57.655 ppb	56.565 ppb	115.478 %	55.435 ppb	56.184 ppb	112.778 %	54.938 ppb
Concentration per Run 2	59.603 ppb	57.940 ppb	58.358 ppb	59.067 ppb	109.557 %	56.901 ppb	56.897 ppb	112.626 %	54.572 ppb
Concentration per Run 3	61.054 ppb	57.266 ppb	59.356 ppb	59.774 ppb	107.305 %	58.278 ppb	58.087 ppb	109.701 %	54.967 ppb
Recovery Percentage 1	100.117 %	99.611 %	97.427 %	97.448 %		94.785 %	95.094 %		91.376 %
Concentration RSD	1.4 %	6.3 %	1.5 %	2.9 %	3.8 %	2.5 %	1.7 %	1.6 %	0.4 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	55.510 ppb	112.569 %	110.460 %	56.444 ppb	56.976 ppb	107.887 %
Concentration per Run 1	54.918 ppb	115.271 %	113.329 %	54.490 ppb	55.489 ppb	110.117 %
Concentration per Run 2	55.889 ppb	110.015 %	109.028 %	55.988 ppb	57.425 ppb	108.330 %
Concentration per Run 3	55.723 ppb	112.421 %	109.023 %	58.854 ppb	58.015 ppb	105.213 %
Recovery Percentage 1	92.517 %			94.073 %	94.960 %	
Concentration RSD	0.9 %	2.3 %	2.2 %	3.9 %	2.3 %	2.3 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	89	User name	ALPHALAB\a2-icpmsq2	Comment	CCB
Analysis label:	CCB	Rack	0		
Analysis started at:	12/3/2024 2:42:28 PM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	118.973 %	126.824 %	0.007 ppb	654.026 ppb	0.196 ppb	-0.451 ppb	49.763 ppb	-4.203 ppb	105.078 %
Concentration per Run 1	116.977 %	122.559 %	0.008 ppb	686.756 ppb	-0.192 ppb	-0.490 ppb	52.797 ppb	-6.840 ppb	104.069 %
Concentration per Run 2	120.749 %	128.789 %	0.007 ppb	642.959 ppb	-0.042 ppb	-0.578 ppb	52.507 ppb	-4.633 ppb	106.578 %
Concentration per Run 3	119.192 %	129.125 %	0.007 ppb	632.363 ppb	0.821 ppb	-0.286 ppb	43.985 ppb	-1.136 ppb	104.587 %
Recovery Percentage 1			1.429 %	130.805 %	0.279 %	-4.513 %	49.763 %	-4.203 %	
Concentration RSD	1.6 %	2.9 %	11.1 %	4.4 %	279.4 %	33.2 %	10.1 %	68.4 %	1.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.456 ppb	-0.043 ppb	0.125 ppb	4.008 ppb	-0.004 ppb	0.044 ppb	0.050 ppb	0.203 ppb	102.622 %
Concentration per Run 1	-0.391 ppb	-0.033 ppb	0.130 ppb	4.389 ppb	-0.007 ppb	0.050 ppb	0.062 ppb	0.159 ppb	103.834 %
Concentration per Run 2	-0.522 ppb	-0.037 ppb	0.118 ppb	4.521 ppb	-0.004 ppb	0.078 ppb	0.066 ppb	0.172 ppb	98.663 %
Concentration per Run 3	-0.454 ppb	-0.058 ppb	0.125 ppb	3.113 ppb	-0.001 ppb	0.003 ppb	0.023 ppb	0.277 ppb	105.369 %
Recovery Percentage 1	-9.111 %	-4.257 %	12.452 %	8.015 %	-0.766 %	2.176 %	5.036 %	4.059 %	
Concentration RSD	14.4 %	31.5 %	5.0 %	19.4 %	78.2 %	87.1 %	47.4 %	31.9 %	3.4 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.114 ppb	0.154 ppb	0.005 ppb	0.331 ppb	109.601 %	0.007 ppb	0.000 ppb	107.719 %	0.086 ppb
Concentration per Run 1	0.083 ppb	0.152 ppb	0.014 ppb	0.215 ppb	111.529 %	0.004 ppb	0.000 ppb	110.457 %	0.067 ppb
Concentration per Run 2	0.142 ppb	0.190 ppb	0.005 ppb	0.336 ppb	109.360 %	0.008 ppb	0.000 ppb	105.620 %	0.080 ppb
Concentration per Run 3	0.118 ppb	0.120 ppb	-0.004 ppb	0.442 ppb	107.914 %	0.008 ppb	0.000 ppb	107.081 %	0.112 ppb
Recovery Percentage 1	22.893 %	3.081 %	0.047 %	16.548 %		1.681 %	0.000 %		2.155 %
Concentration RSD	25.8 %	22.7 %	187.1 %	34.3 %	1.7 %	36.2 %	N/A	2.3 %	26.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.012 ppb	108.753 %	108.277 %	0.207 ppb	0.015 ppb	107.168 %
Concentration per Run 1	0.007 ppb	110.221 %	109.213 %	0.213 ppb	0.020 ppb	107.195 %
Concentration per Run 2	-0.006 ppb	109.435 %	109.173 %	0.228 ppb	0.013 ppb	107.688 %
Concentration per Run 3	0.035 ppb	106.602 %	106.445 %	0.180 ppb	0.011 ppb	106.620 %
Recovery Percentage 1	2.403 %			20.699 %	1.453 %	
Concentration RSD	172.2 %	1.8 %	1.5 %	11.9 %	33.8 %	0.5 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	90	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	CCB	Rack	0		
Analysis started at:	12/3/2024 2:57:24 PM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	115.831 %	115.264 %	0.013 ppb	216.903 ppb	-0.030 ppb	-0.387 ppb	18.421 ppb	0.875 ppb	106.342 %
Concentration per Run 1	108.677 %	118.014 %	0.019 ppb	172.715 ppb	-0.943 ppb	-0.464 ppb	12.980 ppb	14.924 ppb	104.117 %
Concentration per Run 2	117.132 %	113.805 %	0.009 ppb	222.947 ppb	0.427 ppb	-0.464 ppb	15.477 ppb	-9.322 ppb	108.198 %
Concentration per Run 3	121.684 %	113.973 %	0.010 ppb	255.046 ppb	0.425 ppb	-0.234 ppb	26.807 ppb	-2.976 ppb	106.712 %
Recovery Percentage 1			2.584 %	43.381 %	-0.044 %	-3.873 %	18.421 %	0.875 %	
Concentration RSD	5.7 %	2.1 %	43.6 %	19.1 %	2,592.9 %	34.2 %	40.0 %	1,436.7 %	1.9 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.260 ppb	-0.054 ppb	0.087 ppb	0.448 ppb	-0.002 ppb	0.113 ppb	0.018 ppb	0.151 ppb	147.676 %
Concentration per Run 1	-0.351 ppb	-0.048 ppb	0.017 ppb	0.305 ppb	-0.004 ppb	0.054 ppb	0.007 ppb	0.257 ppb	154.197 %
Concentration per Run 2	-0.296 ppb	-0.081 ppb	0.129 ppb	1.232 ppb	-0.001 ppb	0.137 ppb	0.002 ppb	0.143 ppb	145.144 %
Concentration per Run 3	-0.133 ppb	-0.034 ppb	0.113 ppb	-0.194 ppb	-0.001 ppb	0.149 ppb	0.046 ppb	0.052 ppb	143.687 %
Recovery Percentage 1	-5.192 %	-5.434 %	8.650 %	0.895 %	-0.344 %	5.674 %	1.824 %	3.010 %	
Concentration RSD	43.7 %	44.9 %	70.4 %	161.6 %	110.4 %	45.4 %	132.6 %	68.3 %	3.9 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.067 ppb	0.120 ppb	0.002 ppb	-0.028 ppb	108.265 %	-0.001 ppb	0.001 ppb	107.468 %	0.049 ppb
Concentration per Run 1	0.047 ppb	-0.066 ppb	0.003 ppb	-0.067 ppb	110.934 %	-0.001 ppb	0.000 ppb	110.408 %	0.051 ppb
Concentration per Run 2	0.020 ppb	0.270 ppb	-0.002 ppb	-0.081 ppb	106.996 %	0.001 ppb	0.000 ppb	108.622 %	0.051 ppb
Concentration per Run 3	0.135 ppb	0.157 ppb	0.005 ppb	0.063 ppb	106.866 %	-0.003 ppb	0.004 ppb	103.372 %	0.045 ppb
Recovery Percentage 1	13.434 %	2.403 %	0.019 %	-1.420 %		-0.224 %	0.589 %		1.223 %
Concentration RSD	89.6 %	142.0 %	198.8 %	279.4 %	2.1 %	224.0 %	173.2 %	3.4 %	7.0 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.008 ppb	109.534 %	108.118 %	0.014 ppb	0.004 ppb	106.522 %
Concentration per Run 1	-0.006 ppb	114.975 %	108.793 %	0.009 ppb	0.004 ppb	109.777 %
Concentration per Run 2	-0.006 ppb	107.186 %	107.184 %	0.021 ppb	0.005 ppb	106.243 %
Concentration per Run 3	0.036 ppb	106.442 %	108.379 %	0.012 ppb	0.002 ppb	103.544 %
Recovery Percentage 1	1.579 %			1.422 %	0.371 %	
Concentration RSD	305.4 %	4.3 %	0.8 %	45.0 %	47.3 %	2.9 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	91	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	xWG2001986-1 6020TL	Rack	1		
Analysis started at:	12/3/2024 3:08:01 PM	Vial	54		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	117.069 %	127.049 %	0.008 ppb	344.191 ppb	0.787 ppb	1.407 ppb	12.068 ppb	0.482 ppb	112.395 %
Concentration per Run 1	114.157 %	140.068 %	0.007 ppb	272.129 ppb	0.666 ppb	0.973 ppb	-0.928 ppb	6.708 ppb	110.282 %
Concentration per Run 2	117.036 %	118.182 %	0.011 ppb	371.657 ppb	1.334 ppb	2.239 ppb	14.860 ppb	-2.704 ppb	112.798 %
Concentration per Run 3	120.014 %	122.896 %	0.008 ppb	388.788 ppb	0.362 ppb	1.010 ppb	22.273 ppb	-2.557 ppb	114.104 %
Concentration RSD	2.5 %	9.1 %	22.5 %	18.3 %	63.1 %	51.2 %	98.2 %	1,118.2 %	1.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.467 ppb	-0.032 ppb	0.314 ppb	4.365 ppb	-0.004 ppb	-0.015 ppb	0.116 ppb	0.545 ppb	107.249 %
Concentration per Run 1	-0.531 ppb	-0.007 ppb	0.371 ppb	4.663 ppb	-0.010 ppb	-0.046 ppb	0.150 ppb	0.506 ppb	111.499 %
Concentration per Run 2	-0.480 ppb	-0.035 ppb	0.205 ppb	4.580 ppb	-0.004 ppb	-0.029 ppb	0.111 ppb	0.480 ppb	107.547 %
Concentration per Run 3	-0.389 ppb	-0.055 ppb	0.367 ppb	3.851 ppb	0.002 ppb	0.029 ppb	0.086 ppb	0.649 ppb	102.702 %
Concentration RSD	15.4 %	74.7 %	30.1 %	10.2 %	164.1 %	257.7 %	28.2 %	16.7 %	4.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.019 ppb	0.102 ppb	0.016 ppb	-0.031 ppb	114.033 %	-0.001 ppb	0.001 ppb	113.535 %	0.027 ppb
Concentration per Run 1	0.016 ppb	0.027 ppb	0.016 ppb	-0.029 ppb	122.485 %	0.002 ppb	0.000 ppb	121.926 %	0.022 ppb
Concentration per Run 2	0.019 ppb	0.269 ppb	0.017 ppb	-0.042 ppb	111.691 %	-0.002 ppb	0.000 ppb	110.646 %	0.024 ppb
Concentration per Run 3	0.023 ppb	0.010 ppb	0.016 ppb	-0.021 ppb	107.922 %	-0.002 ppb	0.003 ppb	108.031 %	0.035 ppb
Concentration RSD	18.8 %	141.6 %	6.0 %	35.6 %	6.6 %	261.5 %	173.2 %	6.5 %	25.8 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.711 ppb	112.841 %	111.272 %	0.013 ppb	0.003 ppb	115.518 %
Concentration per Run 1	0.803 ppb	119.453 %	117.267 %	0.009 ppb	0.002 ppb	122.832 %
Concentration per Run 2	0.514 ppb	110.542 %	110.315 %	0.013 ppb	0.003 ppb	113.688 %
Concentration per Run 3	0.817 ppb	108.529 %	106.235 %	0.015 ppb	0.005 ppb	110.034 %
Concentration RSD	24.1 %	5.2 %	5.0 %	23.6 %	42.1 %	5.7 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	92	User name	ALPHALAB\a2-icpmsq2	Comment	fb
Analysis label:	xL2467975-08 6020TL	Rack	2		
Analysis started at:	12/3/2024 3:12:28 PM	Vial	1		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	116.040 %	127.554 %	0.009 ppb	383.742 ppb	1.451 ppb	1.665 ppb	11.839 ppb	4.084 ppb	109.731 %
Concentration per Run 1	111.371 %	130.977 %	0.009 ppb	356.462 ppb	2.020 ppb	1.801 ppb	7.317 ppb	2.521 ppb	109.106 %
Concentration per Run 2	116.374 %	124.411 %	0.008 ppb	398.999 ppb	1.094 ppb	2.449 ppb	11.102 ppb	-6.711 ppb	110.996 %
Concentration per Run 3	120.374 %	127.273 %	0.008 ppb	395.765 ppb	1.237 ppb	0.744 ppb	17.100 ppb	16.443 ppb	109.092 %
Concentration RSD	3.9 %	2.6 %	4.8 %	6.2 %	34.4 %	51.7 %	41.7 %	285.4 %	1.0 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.464 ppb	0.053 ppb	0.633 ppb	88.805 ppb	0.003 ppb	0.007 ppb	0.566 ppb	0.434 ppb	101.312 %
Concentration per Run 1	-0.455 ppb	0.081 ppb	0.654 ppb	90.431 ppb	0.002 ppb	-0.009 ppb	0.538 ppb	0.482 ppb	105.372 %
Concentration per Run 2	-0.536 ppb	0.071 ppb	0.822 ppb	95.897 ppb	0.006 ppb	0.010 ppb	0.610 ppb	0.481 ppb	99.639 %
Concentration per Run 3	-0.402 ppb	0.008 ppb	0.421 ppb	80.087 ppb	0.000 ppb	0.021 ppb	0.549 ppb	0.339 ppb	98.926 %
Concentration RSD	14.6 %	74.2 %	31.8 %	9.0 %	128.1 %	202.4 %	6.9 %	19.0 %	3.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.065 ppb	0.087 ppb	0.026 ppb	-0.030 ppb	109.446 %	-0.001 ppb	0.003 ppb	105.213 %	0.096 ppb
Concentration per Run 1	0.040 ppb	0.256 ppb	0.026 ppb	-0.039 ppb	108.759 %	-0.001 ppb	0.000 ppb	107.207 %	0.090 ppb
Concentration per Run 2	0.064 ppb	-0.036 ppb	0.028 ppb	-0.030 ppb	109.764 %	-0.002 ppb	0.003 ppb	104.797 %	0.121 ppb
Concentration per Run 3	0.091 ppb	0.041 ppb	0.024 ppb	-0.021 ppb	109.816 %	-0.001 ppb	0.007 ppb	103.635 %	0.077 ppb
Concentration RSD	39.4 %	173.4 %	8.7 %	30.0 %	0.5 %	47.4 %	100.2 %	1.7 %	23.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.043 ppb	106.550 %	105.326 %	0.005 ppb	0.022 ppb	107.388 %
Concentration per Run 1	0.114 ppb	109.486 %	107.812 %	0.002 ppb	0.018 ppb	109.161 %
Concentration per Run 2	0.022 ppb	104.732 %	103.479 %	0.005 ppb	0.025 ppb	105.805 %
Concentration per Run 3	-0.005 ppb	105.431 %	104.687 %	0.007 ppb	0.024 ppb	107.198 %
Concentration RSD	143.3 %	2.4 %	2.1 %	59.7 %	17.7 %	1.6 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	93	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	xWG2001986-2d10 6020TL	Rack	1		
Analysis started at:	12/3/2024 3:24:56 PM	Vial	55		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	119.163 %	121.493 %	4.956 ppb	1,334.106 ppb	955.871 ppb	184.299 ppb	953.118 ppb	774.250 ppb	112.106 %
Concentration per Run 1	112.261 %	119.192 %	5.219 ppb	1,311.603 ppb	949.984 ppb	183.383 ppb	935.587 ppb	774.253 ppb	108.928 %
Concentration per Run 2	121.819 %	122.896 %	4.818 ppb	1,338.842 ppb	956.168 ppb	185.744 ppb	969.791 ppb	718.211 ppb	113.916 %
Concentration per Run 3	123.408 %	122.391 %	4.832 ppb	1,351.872 ppb	961.461 ppb	183.769 ppb	953.974 ppb	830.287 ppb	113.475 %
Concentration RSD	5.1 %	1.7 %	4.6 %	1.5 %	0.6 %	0.7 %	1.8 %	7.2 %	2.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	45.142 ppb	18.992 ppb	50.448 ppb	105.847 ppb	50.320 ppb	51.277 ppb	25.943 ppb	50.923 ppb	105.764 %
Concentration per Run 1	42.667 ppb	17.834 ppb	48.176 ppb	106.604 ppb	49.252 ppb	49.462 ppb	24.945 ppb	49.615 ppb	109.007 %
Concentration per Run 2	47.018 ppb	19.750 ppb	52.098 ppb	113.178 ppb	52.017 ppb	53.842 ppb	26.322 ppb	53.053 ppb	101.800 %
Concentration per Run 3	45.741 ppb	19.392 ppb	51.070 ppb	97.758 ppb	49.689 ppb	50.527 ppb	26.563 ppb	50.100 ppb	106.485 %
Concentration RSD	5.0 %	5.4 %	4.0 %	7.3 %	3.0 %	4.5 %	3.4 %	3.7 %	3.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	12.515 ppb	12.179 ppb	97.562 ppb	97.470 ppb	109.129 %	4.703 ppb	5.196 ppb	108.711 %	45.180 ppb
Concentration per Run 1	12.281 ppb	12.012 ppb	94.044 ppb	96.158 ppb	111.774 %	4.538 ppb	4.936 ppb	112.005 %	43.811 ppb
Concentration per Run 2	13.143 ppb	11.698 ppb	100.440 ppb	97.774 ppb	106.487 %	4.822 ppb	5.446 ppb	107.274 %	46.527 ppb
Concentration per Run 3	12.122 ppb	12.826 ppb	98.202 ppb	98.478 ppb	109.127 %	4.747 ppb	5.206 ppb	106.853 %	45.203 ppb
Concentration RSD	4.4 %	4.8 %	3.3 %	1.2 %	2.4 %	3.1 %	4.9 %	2.6 %	3.0 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	193.414 ppb	110.804 %	107.448 %	11.829 ppb	51.871 ppb	106.870 %
Concentration per Run 1	190.803 ppb	112.222 %	109.440 %	11.318 ppb	50.535 ppb	108.530 %
Concentration per Run 2	194.436 ppb	109.917 %	105.310 %	11.674 ppb	52.013 ppb	108.526 %
Concentration per Run 3	195.004 ppb	110.272 %	107.593 %	12.495 ppb	53.063 ppb	103.553 %
Concentration RSD	1.2 %	1.1 %	1.9 %	5.1 %	2.4 %	2.7 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	94	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	xL2467975-04 6020TL	Rack	1		
Analysis started at:	12/3/2024 3:29:23 PM	Vial	56		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	118.012 %	126.375 %	0.025 ppb	38,257.664 ppb	1,862.106 ppb	51.710 ppb	2,969.846 ppb	9,274.901 ppb	108.085 %
Concentration per Run 1	114.586 %	128.957 %	0.027 ppb	36,330.063 ppb	1,768.358 ppb	50.221 ppb	2,798.286 ppb	9,088.065 ppb	108.564 %
Concentration per Run 2	119.838 %	130.472 %	0.023 ppb	38,080.094 ppb	1,875.390 ppb	50.037 ppb	3,046.039 ppb	9,200.062 ppb	107.190 %
Concentration per Run 3	119.613 %	119.697 %	0.026 ppb	40,362.835 ppb	1,942.570 ppb	54.872 ppb	3,065.212 ppb	9,536.576 ppb	108.502 %
Concentration RSD	2.5 %	4.6 %	7.8 %	5.3 %	4.7 %	5.3 %	5.0 %	2.5 %	0.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.270 ppb	0.340 ppb	65.045 ppb	343.764 ppb	0.130 ppb	0.713 ppb	1.152 ppb	4.989 ppb	103.811 %
Concentration per Run 1	-0.344 ppb	0.357 ppb	61.261 ppb	329.024 ppb	0.120 ppb	0.720 ppb	1.316 ppb	4.859 ppb	108.565 %
Concentration per Run 2	-0.289 ppb	0.303 ppb	66.428 ppb	346.007 ppb	0.128 ppb	0.667 ppb	1.029 ppb	5.301 ppb	100.534 %
Concentration per Run 3	-0.177 ppb	0.358 ppb	67.445 ppb	356.262 ppb	0.142 ppb	0.752 ppb	1.112 ppb	4.806 ppb	102.333 %
Concentration RSD	31.7 %	9.4 %	5.1 %	4.0 %	8.3 %	6.0 %	12.8 %	5.5 %	4.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.931 ppb	0.290 ppb	66.473 ppb	1.097 ppb	107.331 %	0.008 ppb	0.023 ppb	108.366 %	0.904 ppb
Concentration per Run 1	0.882 ppb	0.221 ppb	63.899 ppb	0.794 ppb	109.670 %	0.008 ppb	0.017 ppb	110.796 %	0.818 ppb
Concentration per Run 2	0.978 ppb	0.450 ppb	68.029 ppb	1.056 ppb	106.873 %	0.008 ppb	0.035 ppb	106.283 %	0.893 ppb
Concentration per Run 3	0.934 ppb	0.199 ppb	67.492 ppb	1.442 ppb	105.450 %	0.009 ppb	0.017 ppb	108.018 %	1.000 ppb
Concentration RSD	5.2 %	47.8 %	3.4 %	29.7 %	2.0 %	8.6 %	44.7 %	2.1 %	10.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	10.962 ppb	109.677 %	108.082 %	0.024 ppb	0.603 ppb	107.055 %
Concentration per Run 1	11.170 ppb	114.531 %	113.494 %	0.018 ppb	0.590 ppb	108.403 %
Concentration per Run 2	11.202 ppb	110.456 %	107.046 %	0.027 ppb	0.613 ppb	107.308 %
Concentration per Run 3	10.514 ppb	104.044 %	103.704 %	0.028 ppb	0.607 ppb	105.453 %
Concentration RSD	3.5 %	4.8 %	4.6 %	21.6 %	2.0 %	1.4 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	95	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	xWG2001986-3d10 6020TL	Rack	1		
Analysis started at:	12/3/2024 3:33:52 PM	Vial	57		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	117.968 %	124.748 %	4.926 ppb	4,969.620 ppb	1,101.332 ppb	181.836 ppb	1,239.796 ppb	1,778.622 ppb	112.480 %
Concentration per Run 1	111.772 %	127.273 %	5.134 ppb	4,833.452 ppb	1,071.242 ppb	176.822 ppb	1,266.386 ppb	1,654.655 ppb	112.149 %
Concentration per Run 2	117.937 %	123.064 %	4.923 ppb	5,071.230 ppb	1,137.838 ppb	187.652 ppb	1,245.368 ppb	1,823.266 ppb	112.285 %
Concentration per Run 3	124.195 %	123.906 %	4.722 ppb	5,004.176 ppb	1,094.915 ppb	181.033 ppb	1,207.633 ppb	1,857.945 ppb	113.006 %
Concentration RSD	5.3 %	1.8 %	4.2 %	2.5 %	3.1 %	3.0 %	2.4 %	6.1 %	0.4 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	43.428 ppb	18.522 ppb	53.698 ppb	135.093 ppb	49.232 ppb	51.167 ppb	25.239 ppb	49.600 ppb	104.808 %
Concentration per Run 1	40.544 ppb	17.127 ppb	53.499 ppb	127.062 ppb	47.144 ppb	48.841 ppb	24.389 ppb	46.761 ppb	108.929 %
Concentration per Run 2	44.483 ppb	19.372 ppb	54.271 ppb	140.788 ppb	51.277 ppb	52.830 ppb	26.330 ppb	51.976 ppb	100.727 %
Concentration per Run 3	45.256 ppb	19.065 ppb	53.322 ppb	137.429 ppb	49.276 ppb	51.831 ppb	24.999 ppb	50.063 ppb	104.770 %
Concentration RSD	5.8 %	6.6 %	0.9 %	5.3 %	4.2 %	4.1 %	3.9 %	5.3 %	3.9 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	11.611 ppb	11.864 ppb	100.206 ppb	91.560 ppb	109.362 %	4.568 ppb	4.876 ppb	108.024 %	41.750 ppb
Concentration per Run 1	11.309 ppb	12.253 ppb	95.999 ppb	86.218 ppb	115.195 %	4.377 ppb	4.608 ppb	114.173 %	39.661 ppb
Concentration per Run 2	11.956 ppb	12.086 ppb	104.354 ppb	93.803 ppb	104.671 %	4.710 ppb	5.018 ppb	106.510 %	42.911 ppb
Concentration per Run 3	11.566 ppb	11.254 ppb	100.266 ppb	94.659 ppb	108.220 %	4.618 ppb	5.001 ppb	103.390 %	42.678 ppb
Concentration RSD	2.8 %	4.5 %	4.2 %	5.1 %	4.9 %	3.8 %	4.8 %	5.1 %	4.3 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	188.853 ppb	108.990 %	107.927 %	11.250 ppb	49.591 ppb	105.605 %
Concentration per Run 1	181.813 ppb	114.649 %	110.431 %	10.732 ppb	48.116 ppb	108.301 %
Concentration per Run 2	189.971 ppb	104.453 %	106.122 %	11.498 ppb	50.594 ppb	104.139 %
Concentration per Run 3	194.775 ppb	107.867 %	107.228 %	11.519 ppb	50.062 ppb	104.374 %
Concentration RSD	3.5 %	4.8 %	2.1 %	4.0 %	2.6 %	2.2 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	96	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	xWG2001986-4 6020TL	Rack	1		
Analysis started at:	12/3/2024 3:38:21 PM	Vial	58		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	116.178 %	126.263 %	0.045 ppb	37,337.758 ppb	1,835.610 ppb	46.589 ppb	2,784.204 ppb	8,744.712 ppb	106.457 %
Concentration per Run 1	114.033 %	136.196 %	0.046 ppb	34,745.302 ppb	1,664.946 ppb	43.544 ppb	2,550.791 ppb	8,217.095 ppb	104.876 %
Concentration per Run 2	116.858 %	119.024 %	0.049 ppb	38,770.655 ppb	1,912.687 ppb	49.014 ppb	2,997.431 ppb	8,875.122 ppb	106.408 %
Concentration per Run 3	117.644 %	123.569 %	0.039 ppb	38,497.317 ppb	1,929.196 ppb	47.208 ppb	2,804.391 ppb	9,141.920 ppb	108.086 %
Concentration RSD	1.6 %	7.0 %	11.5 %	6.0 %	8.1 %	6.0 %	8.0 %	5.4 %	1.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.147 ppb	0.272 ppb	61.746 ppb	322.351 ppb	0.176 ppb	0.731 ppb	1.655 ppb	4.531 ppb	106.285 %
Concentration per Run 1	-0.173 ppb	0.149 ppb	56.534 ppb	307.457 ppb	0.165 ppb	0.528 ppb	1.468 ppb	4.070 ppb	109.161 %
Concentration per Run 2	-0.184 ppb	0.334 ppb	62.444 ppb	317.885 ppb	0.209 ppb	0.952 ppb	1.640 ppb	4.689 ppb	105.664 %
Concentration per Run 3	-0.083 ppb	0.332 ppb	66.259 ppb	341.710 ppb	0.154 ppb	0.712 ppb	1.856 ppb	4.836 ppb	104.031 %
Concentration RSD	37.6 %	39.2 %	7.9 %	5.4 %	16.6 %	29.1 %	11.7 %	9.0 %	2.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.767 ppb	0.097 ppb	62.446 ppb	1.129 ppb	108.626 %	0.016 ppb	0.016 ppb	106.593 %	0.790 ppb
Concentration per Run 1	0.746 ppb	0.097 ppb	59.578 ppb	0.932 ppb	115.412 %	0.022 ppb	0.027 ppb	109.265 %	0.699 ppb
Concentration per Run 2	0.711 ppb	0.111 ppb	63.644 ppb	1.158 ppb	105.087 %	0.017 ppb	0.007 ppb	105.515 %	0.760 ppb
Concentration per Run 3	0.844 ppb	0.084 ppb	64.116 ppb	1.298 ppb	105.379 %	0.008 ppb	0.014 ppb	104.998 %	0.912 ppb
Concentration RSD	9.0 %	13.9 %	4.0 %	16.4 %	5.4 %	43.5 %	62.3 %	2.2 %	13.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	11.083 ppb	109.716 %	107.802 %	0.036 ppb	0.631 ppb	107.204 %
Concentration per Run 1	10.653 ppb	115.649 %	113.137 %	0.028 ppb	0.612 ppb	110.872 %
Concentration per Run 2	11.145 ppb	107.945 %	106.289 %	0.044 ppb	0.640 ppb	104.578 %
Concentration per Run 3	11.450 ppb	105.554 %	103.980 %	0.035 ppb	0.640 ppb	106.161 %
Concentration RSD	3.6 %	4.8 %	4.4 %	22.4 %	2.5 %	3.1 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	97	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	xWG2001986-5d10 6020TL	Rack	1		
Analysis started at:	12/3/2024 3:42:50 PM	Vial	59		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	116.388 %	125.309 %	47.603 ppb	8,658.854 ppb	4,691.087 ppb	49.731 ppb	4,709.090 ppb	5,285.585 ppb	110.164 %
Concentration per Run 1	112.872 %	131.987 %	48.130 ppb	8,181.271 ppb	4,493.890 ppb	46.674 ppb	4,463.262 ppb	5,106.061 ppb	105.599 %
Concentration per Run 2	117.725 %	119.024 %	47.584 ppb	9,076.665 ppb	4,844.946 ppb	53.010 ppb	4,974.046 ppb	5,612.578 ppb	112.368 %
Concentration per Run 3	118.566 %	124.916 %	47.095 ppb	8,718.627 ppb	4,734.425 ppb	49.509 ppb	4,689.962 ppb	5,138.116 ppb	112.523 %
Concentration RSD	2.6 %	5.2 %	1.1 %	5.2 %	3.8 %	6.4 %	5.4 %	5.4 %	3.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	42.568 ppb	44.253 ppb	51.551 ppb	4,597.488 ppb	47.010 ppb	47.296 ppb	46.468 ppb	46.627 ppb	111.420 %
Concentration per Run 1	40.224 ppb	42.995 ppb	49.390 ppb	4,384.289 ppb	44.197 ppb	47.534 ppb	44.346 ppb	44.931 ppb	114.795 %
Concentration per Run 2	44.980 ppb	46.421 ppb	54.171 ppb	4,886.053 ppb	50.756 ppb	48.408 ppb	49.558 ppb	49.080 ppb	105.321 %
Concentration per Run 3	42.501 ppb	43.343 ppb	51.092 ppb	4,522.122 ppb	46.078 ppb	45.947 ppb	45.500 ppb	45.869 ppb	114.144 %
Concentration RSD	5.6 %	4.3 %	4.7 %	5.6 %	7.2 %	2.6 %	5.9 %	4.7 %	4.7 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	45.536 ppb	46.406 ppb	52.021 ppb	46.244 ppb	108.007 %	6.856 ppb	47.345 ppb	106.798 %	45.827 ppb
Concentration per Run 1	44.331 ppb	44.906 ppb	50.166 ppb	43.717 ppb	112.948 %	6.431 ppb	45.227 ppb	112.722 %	43.490 ppb
Concentration per Run 2	48.186 ppb	47.857 ppb	54.156 ppb	48.198 ppb	104.991 %	7.094 ppb	48.155 ppb	105.721 %	45.714 ppb
Concentration per Run 3	44.090 ppb	46.453 ppb	51.742 ppb	46.817 ppb	106.081 %	7.042 ppb	48.652 ppb	101.950 %	48.277 ppb
Concentration RSD	5.0 %	3.2 %	3.9 %	5.0 %	4.0 %	5.4 %	3.9 %	5.1 %	5.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	47.000 ppb	108.011 %	105.362 %	47.052 ppb	47.466 ppb	103.906 %
Concentration per Run 1	44.328 ppb	109.311 %	107.286 %	44.508 ppb	45.433 ppb	108.912 %
Concentration per Run 2	47.515 ppb	107.902 %	102.645 %	48.172 ppb	48.235 ppb	102.670 %
Concentration per Run 3	49.157 ppb	106.821 %	106.154 %	48.476 ppb	48.731 ppb	100.137 %
Concentration RSD	5.2 %	1.2 %	2.3 %	4.7 %	3.7 %	4.3 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	98	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	xWG2001986-6d5 6020TL	Rack	1		
Analysis started at:	12/3/2024 3:47:20 PM	Vial	60		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	116.721 %	125.870 %	0.090 ppb	7,621.251 ppb	367.747 ppb	10.527 ppb	574.443 ppb	1,774.770 ppb	106.180 %
Concentration per Run 1	114.605 %	129.967 %	0.099 ppb	7,392.384 ppb	342.006 ppb	11.202 ppb	595.834 ppb	1,775.865 ppb	102.840 %
Concentration per Run 2	115.667 %	128.957 %	0.078 ppb	7,391.948 ppb	361.196 ppb	10.133 ppb	551.206 ppb	1,871.609 ppb	107.145 %
Concentration per Run 3	119.892 %	118.687 %	0.094 ppb	8,079.419 ppb	400.039 ppb	10.245 ppb	576.290 ppb	1,676.835 ppb	108.557 %
Concentration RSD	2.4 %	5.0 %	12.1 %	5.2 %	8.0 %	5.6 %	3.9 %	5.5 %	2.8 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.450 ppb	0.028 ppb	12.336 ppb	65.898 ppb	0.018 ppb	0.127 ppb	0.230 ppb	1.012 ppb	113.487 %
Concentration per Run 1	-0.475 ppb	0.013 ppb	12.934 ppb	64.566 ppb	0.027 ppb	0.139 ppb	0.144 ppb	0.982 ppb	112.888 %
Concentration per Run 2	-0.459 ppb	0.048 ppb	11.812 ppb	70.409 ppb	-0.001 ppb	0.216 ppb	0.288 ppb	1.182 ppb	110.980 %
Concentration per Run 3	-0.418 ppb	0.025 ppb	12.261 ppb	62.721 ppb	0.027 ppb	0.026 ppb	0.257 ppb	0.872 ppb	116.592 %
Concentration RSD	6.5 %	62.7 %	4.6 %	6.1 %	92.8 %	75.3 %	33.1 %	15.6 %	2.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.160 ppb	0.297 ppb	12.383 ppb	0.387 ppb	105.100 %	0.003 ppb	0.004 ppb	105.485 %	0.191 ppb
Concentration per Run 1	0.109 ppb	0.250 ppb	12.292 ppb	0.237 ppb	106.012 %	0.003 ppb	0.000 ppb	109.920 %	0.166 ppb
Concentration per Run 2	0.145 ppb	0.189 ppb	12.529 ppb	0.361 ppb	104.790 %	0.002 ppb	0.004 ppb	104.838 %	0.185 ppb
Concentration per Run 3	0.226 ppb	0.453 ppb	12.326 ppb	0.564 ppb	104.496 %	0.002 ppb	0.007 ppb	101.698 %	0.223 ppb
Concentration RSD	37.4 %	46.4 %	1.0 %	42.6 %	0.8 %	19.2 %	100.7 %	3.9 %	15.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	2.138 ppb	106.533 %	106.314 %	0.197 ppb	0.134 ppb	107.355 %
Concentration per Run 1	2.081 ppb	109.070 %	108.952 %	0.169 ppb	0.137 ppb	112.811 %
Concentration per Run 2	2.058 ppb	105.496 %	105.324 %	0.237 ppb	0.130 ppb	104.113 %
Concentration per Run 3	2.275 ppb	105.032 %	104.666 %	0.185 ppb	0.136 ppb	105.142 %
Concentration RSD	5.6 %	2.1 %	2.2 %	18.0 %	2.9 %	4.4 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index: 99
Analysis label: xL2468003-01 6020TL
Analysis started at: 12/3/2024 3:51:50 PM
User name ALPHALAB\a2-icpmsq2
Rack 2
Vial 2
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	106.977 %	124.916 %	0.089 ppb	41,967.709 ppb	25,086.513 ppb	446.809 ppb	23,502.921 ppb	69,507.803 ppb	103.357 %
Concentration per Run 1	105.987 %	124.411 %	0.101 ppb	40,212.459 ppb	23,979.231 ppb	437.331 ppb	22,433.968 ppb	65,707.223 ppb	104.889 %
Concentration per Run 2	109.845 %	121.886 %	0.081 ppb	43,236.538 ppb	25,707.188 ppb	450.295 ppb	24,042.504 ppb	70,333.328 ppb	108.137 %
Concentration per Run 3	105.098 %	128.452 %	0.085 ppb	42,454.129 ppb	25,573.121 ppb	452.801 ppb	24,032.290 ppb	72,482.859 ppb	97.044 %
Concentration RSD	2.4 %	2.7 %	12.0 %	3.7 %	3.8 %	1.9 %	3.9 %	5.0 %	5.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	4.242 ppb	2.174 ppb	395.612 ppb	28,034.628 ppb	1.573 ppb	3.055 ppb	1.657 ppb	3.662 ppb	112.318 %
Concentration per Run 1	3.876 ppb	1.870 ppb	378.521 ppb	26,257.197 ppb	1.422 ppb	2.890 ppb	1.539 ppb	3.609 ppb	116.187 %
Concentration per Run 2	3.966 ppb	2.284 ppb	390.045 ppb	27,489.976 ppb	1.587 ppb	2.879 ppb	1.724 ppb	3.752 ppb	112.892 %
Concentration per Run 3	4.885 ppb	2.370 ppb	418.271 ppb	30,356.711 ppb	1.708 ppb	3.396 ppb	1.707 ppb	3.626 ppb	107.876 %
Concentration RSD	13.2 %	12.3 %	5.2 %	7.5 %	9.1 %	9.7 %	6.2 %	2.1 %	3.7 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	13.016 ppb	0.634 ppb	398.939 ppb	0.275 ppb	105.605 %	0.006 ppb	0.052 ppb	106.627 %	0.230 ppb
Concentration per Run 1	12.660 ppb	0.789 ppb	371.014 ppb	0.126 ppb	114.408 %	0.003 ppb	0.051 ppb	116.134 %	0.205 ppb
Concentration per Run 2	12.570 ppb	0.335 ppb	401.257 ppb	0.355 ppb	103.488 %	0.010 ppb	0.029 ppb	101.797 %	0.232 ppb
Concentration per Run 3	13.817 ppb	0.778 ppb	424.547 ppb	0.343 ppb	98.920 %	0.007 ppb	0.077 ppb	101.951 %	0.252 ppb
Concentration RSD	5.3 %	40.8 %	6.7 %	46.9 %	7.5 %	54.4 %	45.9 %	7.7 %	10.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	130.858 ppb	109.402 %	109.190 %	0.056 ppb	0.537 ppb	102.612 %
Concentration per Run 1	117.115 ppb	117.809 %	118.315 %	0.032 ppb	0.482 ppb	111.449 %
Concentration per Run 2	136.847 ppb	107.661 %	108.851 %	0.065 ppb	0.544 ppb	100.921 %
Concentration per Run 3	138.614 ppb	102.736 %	100.403 %	0.070 ppb	0.583 ppb	95.467 %
Concentration RSD	9.1 %	7.0 %	8.2 %	37.7 %	9.5 %	7.9 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index: 100 User name ALPHALAB\a2-icpmsq2 Comment <Comment>
Analysis label: xL2468003-02 6020TL Rack 2
Analysis started at: 12/3/2024 3:56:18 PM Vial 3

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	101.068 %	121.661 %	0.064 ppb	74,983.107 ppb	23,345.318 ppb	93.713 ppb	7,646.107 ppb	107,814.926 ppb	99.674 %
Concentration per Run 1	98.107 %	120.034 %	0.070 ppb	73,825.798 ppb	23,118.961 ppb	92.763 ppb	7,625.350 ppb	103,650.666 ppb	98.700 %
Concentration per Run 2	100.795 %	124.580 %	0.059 ppb	74,630.064 ppb	23,399.528 ppb	91.553 ppb	7,447.207 ppb	107,428.847 ppb	100.315 %
Concentration per Run 3	104.302 %	120.371 %	0.062 ppb	76,493.459 ppb	23,517.466 ppb	96.824 ppb	7,865.764 ppb	112,365.265 ppb	100.007 %
Concentration RSD	3.1 %	2.1 %	8.7 %	1.8 %	0.9 %	2.9 %	2.7 %	4.1 %	0.9 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.120 ppb	0.544 ppb	154.330 ppb	17,887.728 ppb	1.459 ppb	1.318 ppb	0.295 ppb	0.911 ppb	126.807 %
Concentration per Run 1	0.075 ppb	0.506 ppb	144.730 ppb	16,787.405 ppb	1.434 ppb	1.380 ppb	0.257 ppb	0.953 ppb	131.454 %
Concentration per Run 2	0.167 ppb	0.573 ppb	160.024 ppb	18,887.530 ppb	1.523 ppb	1.274 ppb	0.361 ppb	0.943 ppb	122.193 %
Concentration per Run 3	0.118 ppb	0.553 ppb	158.237 ppb	17,988.251 ppb	1.419 ppb	1.300 ppb	0.267 ppb	0.836 ppb	126.775 %
Concentration RSD	38.2 %	6.4 %	5.4 %	5.9 %	3.9 %	4.2 %	19.4 %	7.1 %	3.7 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	12.228 ppb	0.167 ppb	389.723 ppb	0.572 ppb	105.603 %	-0.002 ppb	0.018 ppb	104.774 %	0.123 ppb
Concentration per Run 1	11.486 ppb	0.195 ppb	370.935 ppb	0.468 ppb	111.472 %	-0.002 ppb	0.017 ppb	109.688 %	0.077 ppb
Concentration per Run 2	12.984 ppb	0.173 ppb	403.409 ppb	0.573 ppb	102.356 %	-0.001 ppb	0.025 ppb	102.627 %	0.125 ppb
Concentration per Run 3	12.216 ppb	0.134 ppb	394.824 ppb	0.677 ppb	102.981 %	-0.002 ppb	0.011 ppb	102.006 %	0.168 ppb
Concentration RSD	6.1 %	18.5 %	4.3 %	18.2 %	4.8 %	42.0 %	41.1 %	4.1 %	36.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	78.585 ppb	108.285 %	107.708 %	0.029 ppb	0.159 ppb	101.296 %
Concentration per Run 1	75.168 ppb	113.179 %	112.996 %	0.015 ppb	0.145 ppb	107.028 %
Concentration per Run 2	81.922 ppb	104.889 %	103.921 %	0.039 ppb	0.166 ppb	100.330 %
Concentration per Run 3	78.663 ppb	106.789 %	106.206 %	0.031 ppb	0.166 ppb	96.529 %
Concentration RSD	4.3 %	4.0 %	4.4 %	43.3 %	7.5 %	5.2 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM



Analysis index:	101	User name	ALPHALAB\a2-icpmsq2	Comment	CCV/MCCV
Analysis label:	CCV	Rack	0		
Analysis started at:	12/3/2024 4:00:46 PM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	112.215 %	123.513 %	57.781 ppb	5,728.917 ppb	5,252.295 ppb	50.077 ppb	5,090.437 ppb	5,029.905 ppb	105.018 %
Concentration per Run 1	109.361 %	131.987 %	56.080 ppb	5,317.253 ppb	4,893.203 ppb	46.317 ppb	5,062.571 ppb	4,973.202 ppb	105.558 %
Concentration per Run 2	112.191 %	125.758 %	58.168 ppb	5,659.809 ppb	5,120.852 ppb	50.498 ppb	5,049.656 ppb	4,998.935 ppb	102.739 %
Concentration per Run 3	115.092 %	112.795 %	59.096 ppb	6,209.688 ppb	5,742.829 ppb	53.417 ppb	5,159.084 ppb	5,117.579 ppb	106.756 %
Recovery Percentage 1			96.302 %	95.482 %	87.538 %	83.462 %	84.841 %	83.832 %	
Concentration RSD	2.6 %	7.9 %	2.7 %	7.9 %	8.4 %	7.1 %	1.2 %	1.5 %	2.0 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	49.163 ppb	50.493 ppb	51.963 ppb	5,693.709 ppb	56.430 ppb	57.336 ppb	57.303 ppb	56.234 ppb	117.174 %
Concentration per Run 1	46.133 ppb	47.049 ppb	50.201 ppb	5,079.936 ppb	50.420 ppb	50.486 ppb	51.224 ppb	50.156 ppb	117.823 %
Concentration per Run 2	48.868 ppb	50.509 ppb	51.743 ppb	5,779.392 ppb	58.997 ppb	60.189 ppb	60.579 ppb	59.360 ppb	116.029 %
Concentration per Run 3	52.489 ppb	53.922 ppb	53.945 ppb	6,221.801 ppb	59.872 ppb	61.332 ppb	60.105 ppb	59.186 ppb	117.672 %
Recovery Percentage 1	81.938 %	84.155 %	86.605 %	94.895 %	94.049 %	95.559 %	95.504 %	93.724 %	
Concentration RSD	6.5 %	6.8 %	3.6 %	10.1 %	9.3 %	10.4 %	9.2 %	9.4 %	0.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	55.813 ppb	54.524 ppb	54.279 ppb	54.080 ppb	106.611 %	56.746 ppb	55.913 ppb	105.426 %	54.527 ppb
Concentration per Run 1	49.785 ppb	49.139 ppb	49.170 ppb	51.915 ppb	115.243 %	54.641 ppb	52.594 ppb	109.047 %	51.127 ppb
Concentration per Run 2	59.303 ppb	56.661 ppb	56.813 ppb	55.333 ppb	102.024 %	57.436 ppb	56.857 ppb	103.925 %	56.259 ppb
Concentration per Run 3	58.349 ppb	57.771 ppb	56.855 ppb	54.994 ppb	102.567 %	58.161 ppb	58.288 ppb	103.305 %	56.196 ppb
Recovery Percentage 1	93.021 %	90.873 %	90.466 %	90.134 %		94.576 %	93.188 %		90.879 %
Concentration RSD	9.4 %	8.6 %	8.2 %	3.5 %	7.0 %	3.3 %	5.3 %	3.0 %	5.4 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	54.051 ppb	108.038 %	104.663 %	55.674 ppb	56.446 ppb	104.143 %
Concentration per Run 1	52.391 ppb	112.535 %	112.035 %	52.128 ppb	53.599 ppb	107.281 %
Concentration per Run 2	54.990 ppb	107.450 %	99.258 %	57.348 ppb	58.199 ppb	101.405 %
Concentration per Run 3	54.773 ppb	104.129 %	102.695 %	57.546 ppb	57.540 ppb	103.742 %
Recovery Percentage 1	90.086 %			92.789 %	94.076 %	
Concentration RSD	2.7 %	3.9 %	6.3 %	5.5 %	4.4 %	2.8 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	102	User name	ALPHALAB\a2-icpmsq2	Comment	CCB
Analysis label:	CCB	Rack	0		
Analysis started at:	12/3/2024 4:05:18 PM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	116.435 %	123.177 %	0.104 ppb	285.504 ppb	-0.186 ppb	-0.410 ppb	27.653 ppb	5.271 ppb	107.058 %
Concentration per Run 1	106.443 %	128.620 %	0.074 ppb	259.793 ppb	0.412 ppb	-0.502 ppb	25.729 ppb	12.309 ppb	98.012 %
Concentration per Run 2	118.545 %	115.488 %	0.123 ppb	312.783 ppb	-0.368 ppb	-0.767 ppb	36.968 ppb	0.462 ppb	111.283 %
Concentration per Run 3	124.316 %	125.421 %	0.114 ppb	283.938 ppb	-0.603 ppb	0.038 ppb	20.261 ppb	3.041 ppb	111.879 %
Recovery Percentage 1			20.794 %	57.101 %	-0.266 %	-4.102 %	27.653 %	5.271 %	
Concentration RSD	7.8 %	5.6 %	25.1 %	9.3 %	285.4 %	100.0 %	30.8 %	118.2 %	7.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.546 ppb	-0.044 ppb	0.017 ppb	4.064 ppb	-0.003 ppb	0.021 ppb	0.021 ppb	0.036 ppb	121.385 %
Concentration per Run 1	-0.494 ppb	-0.022 ppb	0.026 ppb	4.419 ppb	-0.007 ppb	-0.001 ppb	0.028 ppb	0.031 ppb	121.658 %
Concentration per Run 2	-0.598 ppb	-0.037 ppb	0.015 ppb	3.616 ppb	0.004 ppb	0.104 ppb	-0.010 ppb	0.087 ppb	119.481 %
Concentration per Run 3	-0.546 ppb	-0.072 ppb	0.012 ppb	4.156 ppb	-0.005 ppb	-0.040 ppb	0.046 ppb	-0.009 ppb	123.017 %
Recovery Percentage 1	-10.915 %	-4.364 %	1.737 %	8.127 %	-0.519 %	1.048 %	2.118 %	0.722 %	
Concentration RSD	9.5 %	59.6 %	41.8 %	10.1 %	230.1 %	356.3 %	137.0 %	132.8 %	1.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.023 ppb	0.116 ppb	0.002 ppb	0.268 ppb	106.230 %	0.007 ppb	0.001 ppb	103.148 %	0.073 ppb
Concentration per Run 1	0.057 ppb	0.070 ppb	0.004 ppb	0.160 ppb	111.114 %	0.005 ppb	0.003 ppb	108.705 %	0.046 ppb
Concentration per Run 2	0.007 ppb	0.115 ppb	0.000 ppb	0.315 ppb	105.356 %	0.011 ppb	0.000 ppb	100.015 %	0.074 ppb
Concentration per Run 3	0.007 ppb	0.163 ppb	0.001 ppb	0.329 ppb	102.220 %	0.005 ppb	0.000 ppb	100.725 %	0.100 ppb
Recovery Percentage 1	4.694 %	2.319 %	0.019 %	13.391 %		1.681 %	0.562 %		1.834 %
Concentration RSD	122.0 %	40.2 %	112.3 %	35.0 %	4.2 %	51.0 %	173.2 %	4.7 %	36.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.060 ppb	104.980 %	103.016 %	0.230 ppb	0.016 ppb	102.465 %
Concentration per Run 1	0.020 ppb	109.314 %	106.496 %	0.200 ppb	0.017 ppb	108.827 %
Concentration per Run 2	0.094 ppb	103.110 %	101.205 %	0.276 ppb	0.015 ppb	98.105 %
Concentration per Run 3	0.066 ppb	102.516 %	101.348 %	0.214 ppb	0.015 ppb	100.462 %
Recovery Percentage 1	12.029 %			23.018 %	1.565 %	
Concentration RSD	61.8 %	3.6 %	2.9 %	17.5 %	5.9 %	5.5 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	103	User name	ALPHALAB\a2-icpmsq2	Comment	CCV/MCCV
Analysis label:	CCV	Rack	0		
Analysis started at:	12/3/2024 4:19:57 PM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	113.162 %	131.202 %	56.551 ppb	5,465.158 ppb	7,389.317 ppb	86.324 ppb	-20,657.458 ppb	-3,583.381 ppb	111.473 %
Concentration per Run 1	109.937 %	134.849 %	57.920 ppb	5,453.744 ppb	4,993.696 ppb	47.354 ppb	4,541.027 ppb	4,476.452 ppb	109.972 %
Concentration per Run 2	113.991 %	130.977 %	55.315 ppb	5,480.054 ppb	12,074.874 ppb	160.758 ppb	-71,525.118 ppb	-20,181.582 ppb	112.880 %
Concentration per Run 3	115.558 %	127.778 %	56.418 ppb	5,461.677 ppb	5,099.380 ppb	50.861 ppb	5,011.716 ppb	4,954.986 ppb	111.565 %
Recovery Percentage 1			94.252 %	91.086 %	123.155 %	143.874 %	-344.291 %	-59.723 %	
Concentration RSD	2.6 %	2.7 %	2.3 %	0.2 %	54.9 %	74.7 %	213.3 %	401.2 %	1.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	49.762 ppb	-3.324 ppb	4.126 ppb	5,616.690 ppb	56.290 ppb	57.172 ppb	56.317 ppb	56.211 ppb	43.318 %
Concentration per Run 1	48.883 ppb	44.159 ppb	45.338 ppb	5,543.553 ppb	55.497 ppb	57.442 ppb	55.041 ppb	55.549 ppb	149.491 %
Concentration per Run 2	49.894 ppb	-100.906 ppb	-80.569 ppb	5,728.707 ppb	58.222 ppb	57.950 ppb	59.053 ppb	58.265 ppb	-157.282 %
Concentration per Run 3	50.508 ppb	46.774 ppb	47.609 ppb	5,577.810 ppb	55.151 ppb	56.126 ppb	54.858 ppb	54.820 ppb	137.745 %
Recovery Percentage 1	82.936 %	-5.540 %	6.877 %	93.611 %	93.817 %	95.287 %	93.862 %	93.685 %	
Concentration RSD	1.6 %	2,542.5 %	1,777.9 %	1.8 %	3.0 %	1.6 %	4.2 %	3.2 %	401.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	55.240 ppb	54.979 ppb	56.649 ppb	27.041 ppb	111.114 %	55.657 ppb	56.075 ppb	111.885 %	55.110 ppb
Concentration per Run 1	52.696 ppb	53.240 ppb	54.659 ppb	54.872 ppb	115.730 %	52.706 ppb	53.071 ppb	115.833 %	53.166 ppb
Concentration per Run 2	57.330 ppb	55.381 ppb	58.591 ppb	-33.482 ppb	107.028 %	57.454 ppb	57.484 ppb	111.661 %	55.144 ppb
Concentration per Run 3	55.694 ppb	56.318 ppb	56.696 ppb	59.734 ppb	110.583 %	56.811 ppb	57.669 ppb	108.160 %	57.020 ppb
Recovery Percentage 1	92.067 %	91.632 %	94.415 %	45.069 %		92.762 %	93.458 %		91.850 %
Concentration RSD	4.3 %	2.9 %	3.5 %	194.0 %	3.9 %	4.6 %	4.6 %	3.4 %	3.5 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	55.651 ppb	114.248 %	113.515 %	55.238 ppb	55.289 ppb	114.811 %
Concentration per Run 1	54.137 ppb	120.076 %	119.541 %	51.797 ppb	52.112 ppb	124.393 %
Concentration per Run 2	56.999 ppb	108.565 %	110.781 %	56.981 ppb	57.362 ppb	108.089 %
Concentration per Run 3	55.817 ppb	114.104 %	110.223 %	56.937 ppb	56.394 ppb	111.951 %
Recovery Percentage 1	92.752 %			92.064 %	92.149 %	
Concentration RSD	2.6 %	5.0 %	4.6 %	5.4 %	5.1 %	7.4 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	104	User name	ALPHALAB\a2-icpmsq2	Comment	CCB
Analysis label:	CCB	Rack	0		
Analysis started at:	12/3/2024 4:24:28 PM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	110.591 %	120.595 %	0.369 ppb	238.903 ppb	0.198 ppb	-0.856 ppb	10.261 ppb	2.426 ppb	103.522 %
Concentration per Run 1	106.364 %	124.916 %	0.334 ppb	220.343 ppb	0.107 ppb	-1.041 ppb	6.614 ppb	5.410 ppb	101.130 %
Concentration per Run 2	110.389 %	122.728 %	0.477 ppb	229.100 ppb	0.293 ppb	-1.037 ppb	7.871 ppb	-2.416 ppb	104.087 %
Concentration per Run 3	115.021 %	114.142 %	0.295 ppb	267.265 ppb	0.193 ppb	-0.489 ppb	16.298 ppb	4.282 ppb	105.349 %
Recovery Percentage 1			73.708 %	47.781 %	0.283 %	-8.556 %	10.261 %	2.426 %	
Concentration RSD	3.9 %	4.7 %	26.1 %	10.4 %	47.2 %	37.1 %	51.3 %	174.4 %	2.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.531 ppb	-0.036 ppb	0.036 ppb	4.617 ppb	0.000 ppb	0.044 ppb	0.035 ppb	0.106 ppb	121.408 %
Concentration per Run 1	-0.571 ppb	-0.042 ppb	0.041 ppb	6.364 ppb	0.001 ppb	0.061 ppb	0.022 ppb	0.158 ppb	119.417 %
Concentration per Run 2	-0.532 ppb	-0.028 ppb	0.082 ppb	3.955 ppb	-0.002 ppb	0.019 ppb	0.067 ppb	0.050 ppb	122.375 %
Concentration per Run 3	-0.489 ppb	-0.039 ppb	-0.015 ppb	3.533 ppb	0.001 ppb	0.051 ppb	0.015 ppb	0.110 ppb	122.431 %
Recovery Percentage 1	-10.618 %	-3.643 %	3.628 %	9.235 %	0.026 %	2.180 %	3.479 %	2.117 %	
Concentration RSD	7.7 %	19.4 %	133.6 %	33.1 %	1,283.6 %	50.1 %	80.4 %	50.9 %	1.4 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	-0.004 ppb	0.195 ppb	0.000 ppb	0.312 ppb	109.296 %	0.015 ppb	0.007 ppb	103.486 %	0.109 ppb
Concentration per Run 1	0.007 ppb	0.430 ppb	0.005 ppb	0.182 ppb	112.537 %	0.025 ppb	0.014 ppb	107.710 %	0.086 ppb
Concentration per Run 2	0.069 ppb	0.082 ppb	0.003 ppb	0.345 ppb	107.482 %	0.012 ppb	0.004 ppb	99.577 %	0.097 ppb
Concentration per Run 3	-0.087 ppb	0.074 ppb	-0.009 ppb	0.408 ppb	107.869 %	0.008 ppb	0.004 ppb	103.172 %	0.145 ppb
Recovery Percentage 1	-0.785 %	3.910 %	-0.002 %	15.601 %		3.766 %	3.444 %		2.736 %
Concentration RSD	1,998.0 %	104.0 %	3,210.3 %	37.4 %	2.6 %	60.2 %	83.4 %	3.9 %	28.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.040 ppb	108.754 %	107.942 %	0.304 ppb	0.022 ppb	106.742 %
Concentration per Run 1	0.047 ppb	109.882 %	110.092 %	0.251 ppb	0.028 ppb	111.979 %
Concentration per Run 2	0.051 ppb	106.452 %	105.766 %	0.363 ppb	0.022 ppb	104.101 %
Concentration per Run 3	0.021 ppb	109.929 %	107.968 %	0.298 ppb	0.016 ppb	104.148 %
Recovery Percentage 1	7.939 %			30.418 %	2.208 %	
Concentration RSD	40.2 %	1.8 %	2.0 %	18.5 %	27.9 %	4.2 %

Alpha ICPMSQ2 Seq

12/3/2024 6:59:17 PM

Sample List Summary:

Instrument ID: iCAP Q

Index:	Label:	Rack	Vial	Main Runs:	Survey Runs:	Start Time:
1	Rinse	0	1	3	1	12/3/2024 6:31:09 AM
2	CAL LOT #M23-1225	0	1	3	1	12/3/2024 6:35:35 AM
3	Blank NTB ICPMSQ2	4	49	3	1	12/3/2024 6:40:01 AM
4	0.2/20 Cal	0	2	3	1	12/3/2024 6:44:33 AM
5	x1/100 Cal	0	3	3	1	12/3/2024 6:49:00 AM
6	10/1000 Cal	0	4	3	1	12/3/2024 6:53:28 AM
7	60/6000 Cal	0	5	3	1	12/3/2024 6:57:56 AM
8	120/12000 Cal	0	6	3	1	12/3/2024 7:02:24 AM
9	1/100 Cal	0	3	3	1	12/3/2024 7:07:58 AM
10	Sr 200ppb	4	55	3	1	12/3/2024 7:13:05 AM
11	ICV	0	7	3	1	12/3/2024 7:17:37 AM
12	ICB	0	10	3	1	12/3/2024 7:22:07 AM
13	ICSA	4	53	3	1	12/3/2024 7:28:46 AM
14	LDR	4	1	3	1	12/3/2024 7:33:17 AM
15	Rinse	0	1	3	1	12/3/2024 7:37:47 AM
16	CCV	0	9	3	1	12/3/2024 7:42:14 AM
17	CCB	0	10	3	1	12/3/2024 7:46:45 AM
18	I2469249-03 6020SL	1	6	3	1	12/3/2024 7:57:42 AM
19	I2469249-06 6020SL	1	1	3	1	12/3/2024 8:02:11 AM
20	WG2003419-7d10 6020SL	1	2	3	1	12/3/2024 8:06:38 AM
21	WG2003419-8d10 6020SL	1	3	3	1	12/3/2024 8:11:05 AM
22	WG2003419-9d10 6020SL	1	4	3	1	12/3/2024 8:15:32 AM
23	WG2003419-10d5 6020SL	1	5	3	1	12/3/2024 8:20:00 AM
24	I2469249-04 6020SL	1	7	3	1	12/3/2024 8:24:28 AM
25	I2469249-07 6020SL	1	8	3	1	12/3/2024 8:28:57 AM
26	CCV	0	9	3	1	12/3/2024 8:33:58 AM
27	CCB	0	10	3	1	12/3/2024 8:38:29 AM
28	WG2003472-1 6020TL	1	9	3	1	12/3/2024 8:50:16 AM
29	WG2003472-2d10 6020TL	1	10	3	1	12/3/2024 8:54:45 AM
30	L2469261-01d10 6020TL	1	11	3	1	12/3/2024 8:59:15 AM
31	WG2003472-3d10 6020TL	1	12	3	1	12/3/2024 9:03:45 AM
32	WG2003472-4d10 6020TL	1	13	3	1	12/3/2024 9:08:15 AM
33	WG2003472-5d10 6020TL	1	14	3	1	12/3/2024 9:12:41 AM
34	WG2003472-6d50 6020TL	1	15	3	1	12/3/2024 9:17:08 AM
35	L2469261-02d10 6020TL	1	16	3	1	12/3/2024 9:21:35 AM
36	L2469261-03d10 6020TL	1	17	3	1	12/3/2024 9:26:02 AM
37	L2469261-04d10 6020TL	1	18	3	1	12/3/2024 9:30:29 AM
38	xCCV	0	9	3	1	12/3/2024 9:34:57 AM
39	xCCB	0	10	3	1	12/3/2024 9:39:28 AM
40	CCV	0	9	3	1	12/3/2024 9:44:34 AM
41	CCB	0	10	3	1	12/3/2024 9:49:04 AM
42	L2469261-05 6020TL	1	19	3	1	12/3/2024 9:54:58 AM
43	L2469261-06 6020TL	1	20	3	1	12/3/2024 9:59:26 AM
44	L2469261-07 6020TL	1	21	3	1	12/3/2024 10:03:54 AM
45	L2469261-08 6020TL	1	22	3	1	12/3/2024 10:08:23 AM
46	L2469261-09 6020TL	1	23	3	1	12/3/2024 10:12:52 AM
47	L2469261-10 6020TL	1	24	3	1	12/3/2024 10:17:21 AM
48	L2469261-11 6020TL	1	25	3	1	12/3/2024 10:21:50 AM
49	L2469261-12 6020TL	1	26	3	1	12/3/2024 10:26:17 AM
50	L2469261-13 6020TL	1	27	3	1	12/3/2024 10:30:43 AM
51	L2469261-14 6020TL	1	28	3	1	12/3/2024 10:35:10 AM

Alpha ICPMSQ2 Seq

12/3/2024 6:59:17 PM

Index:	Label:	Rack	Vial	Main Runs:	Survey Runs:	Start Time:
52	CCV	0	9	3	1	12/3/2024 10:39:37 AM
53	CCB	0	10	3	1	12/3/2024 10:44:08 AM
54	CCV	0	9	3	1	12/3/2024 11:00:44 AM
55	CCB	0	10	3	1	12/3/2024 11:05:15 AM
56	WG2003775-1 6020TL	1	29	3	1	12/3/2024 11:11:12 AM
57	WG2003775-2d10 6020TL	1	30	3	1	12/3/2024 11:15:40 AM
58	L2469249-06 6020TL	1	31	3	1	12/3/2024 11:20:08 AM
59	WG2003775-3d10 6020TL	1	32	3	1	12/3/2024 11:24:36 AM
60	WG2003775-4d10 6020TL	1	33	3	1	12/3/2024 11:29:04 AM
61	WG2003775-5d10 6020TL	1	34	3	1	12/3/2024 11:33:33 AM
62	WG2003775-6d5 6020TL	1	35	3	1	12/3/2024 11:38:01 AM
63	L2469188-01 6020TL	1	36	3	1	12/3/2024 11:42:31 AM
64	L2469188-02 6020TL	1	37	3	1	12/3/2024 11:47:00 AM
65	L2469188-03 6020TL	1	38	3	1	12/3/2024 11:51:27 AM
66	CCV	0	9	3	1	12/3/2024 11:55:54 AM
67	CCB	0	10	3	1	12/3/2024 12:00:26 PM
68	CCV	0	9	3	1	12/3/2024 12:35:53 PM
69	CCB	0	10	3	1	12/3/2024 12:42:03 PM
70	L2469188-04d5 6020TL	1	39	3	1	12/3/2024 12:47:59 PM
71	L2469188-05d5 6020TL	1	40	3	1	12/3/2024 12:52:26 PM
72	L2469188-06d5 6020TL	1	41	3	1	12/3/2024 12:56:53 PM
73	WG2004404-1 MCP-6020SL-10	1	42	3	1	12/3/2024 1:06:43 PM
74	WG2004404-2d10 MCP-6020SL-10	1	43	3	1	12/3/2024 1:11:12 PM
75	WG2004404-3d10 MCP-6020SL-10	1	44	3	1	12/3/2024 1:15:40 PM
76	L2469119-01 MCP-6020SL-10	1	45	3	1	12/3/2024 1:20:09 PM
77	CCV	0	9	3	1	12/3/2024 1:30:45 PM
78	CCB	0	10	3	1	12/3/2024 1:35:17 PM
79	CCB	0	10	3	1	12/3/2024 1:45:22 PM
80	WG2004404-2d10 MCP-6020SL-10	1	52	3	1	12/3/2024 2:02:11 PM
81	WG2004404-3d10 MCP-6020SL-10	1	53	3	1	12/3/2024 2:06:37 PM
82	L2469297-01d5 MCP-6020SL-10	1	46	3	1	12/3/2024 2:11:05 PM
83	L2469297-02 MCP-6020SL-10	1	47	3	1	12/3/2024 2:15:34 PM
84	L2469297-03 MCP-6020SL-10	1	48	3	1	12/3/2024 2:20:03 PM
85	L2469297-04 MCP-6020SL-10	1	49	3	1	12/3/2024 2:24:33 PM
86	L2469297-05 MCP-6020SL-10	1	50	3	1	12/3/2024 2:29:01 PM
87	L2469297-06 MCP-6020SL-10	1	51	3	1	12/3/2024 2:33:29 PM
88	CCV	0	9	3	1	12/3/2024 2:37:57 PM
89	CCB	0	10	3	1	12/3/2024 2:42:28 PM
90	CCB	0	10	3	1	12/3/2024 2:57:24 PM
91	xWG2001986-1 6020TL	1	54	3	1	12/3/2024 3:08:01 PM
92	xL2467975-08 6020TL	2	1	3	1	12/3/2024 3:12:28 PM
93	xWG2001986-2d10 6020TL	1	55	3	1	12/3/2024 3:24:56 PM
94	xL2467975-04 6020TL	1	56	3	1	12/3/2024 3:29:23 PM
95	xWG2001986-3d10 6020TL	1	57	3	1	12/3/2024 3:33:52 PM
96	xWG2001986-4 6020TL	1	58	3	1	12/3/2024 3:38:21 PM
97	xWG2001986-5d10 6020TL	1	59	3	1	12/3/2024 3:42:50 PM
98	xWG2001986-6d5 6020TL	1	60	3	1	12/3/2024 3:47:20 PM
99	xL2468003-01 6020TL	2	2	3	1	12/3/2024 3:51:50 PM
100	xL2468003-02 6020TL	2	3	3	1	12/3/2024 3:56:18 PM
101	CCV	0	9	3	1	12/3/2024 4:00:46 PM
102	CCB	0	10	3	1	12/3/2024 4:05:18 PM
103	CCV	0	9	3	1	12/3/2024 4:19:57 PM
104	CCB	0	10	3	1	12/3/2024 4:24:28 PM

Alpha ICPMSQ2 Seq

12/4/2024 6:26:17 AM

Sample List Summary:

Instrument ID: iCAP Q

Index:	Label:	Rack	Vial	Main Runs:	Survey Runs:	Start Time:
1	Rinse	0	1	3	1	12/3/2024 4:34:10 PM
2	zCAL LOT #M23-1225	0	1	3	1	12/3/2024 4:38:36 PM
3	CAL LOT #M23-1225	0	1	3	1	12/3/2024 4:40:22 PM
4	Blank MRC ICPMSQ2	4	49	3	1	12/3/2024 4:44:47 PM
5	0.2/20 Cal	0	2	3	1	12/3/2024 4:49:18 PM
6	1/100 Cal	0	3	3	1	12/3/2024 4:53:45 PM
7	10/1000 Cal	0	4	3	1	12/3/2024 4:58:13 PM
8	60/6000 Cal	0	5	3	1	12/3/2024 5:02:41 PM
9	120/12000 Cal	0	6	3	1	12/3/2024 5:07:10 PM
10	Sr 200ppb	4	55	3	1	12/3/2024 5:12:19 PM
11	ICV	0	7	3	1	12/3/2024 5:16:50 PM
12	ICB	0	10	3	1	12/3/2024 5:21:20 PM
13	ICSA	4	53	3	1	12/3/2024 5:32:00 PM
14	LDR	4	1	3	1	12/3/2024 5:36:31 PM
15	Rinse	0	1	3	1	12/3/2024 5:41:01 PM
16	CCV	0	9	3	1	12/3/2024 5:45:27 PM
17	CCB	0	10	3	1	12/3/2024 5:49:58 PM
18	WG2001986-2d10 6020TL	1	55	3	1	12/3/2024 5:55:27 PM
19	L2468003-03 6020TL	2	4	3	1	12/3/2024 5:59:53 PM
20	L2468003-04 6020TL	2	5	3	1	12/3/2024 6:04:21 PM
21	L2468003-05 6020TL	2	6	3	1	12/3/2024 6:08:49 PM
22	L2468003-06 6020TL	2	7	3	1	12/3/2024 6:13:16 PM
23	L2468042-01 6020TL	2	8	3	1	12/3/2024 6:17:44 PM
24	L2468042-02 6020TL	2	9	3	1	12/3/2024 6:22:13 PM
25	L2468042-03 6020TL	2	10	3	1	12/3/2024 6:26:41 PM
26	L2468042-04 6020TL	2	11	3	1	12/3/2024 6:31:10 PM
27	L2468042-05 6020TL	2	12	3	1	12/3/2024 6:35:39 PM
28	CCV	0	9	3	1	12/3/2024 6:40:08 PM
29	CCB	0	10	3	1	12/3/2024 6:44:40 PM
30	WG2002010-1 6020SL	2	13	3	1	12/3/2024 7:01:20 PM
31	WG2002010-2d10 6020SL	2	14	3	1	12/3/2024 7:05:47 PM
32	L2467934-05 6020SL	2	15	3	1	12/3/2024 7:10:15 PM
33	WG2002010-3d10 6020SL	2	16	3	1	12/3/2024 7:14:43 PM
34	WG2002010-4d10 6020SL	2	17	3	1	12/3/2024 7:19:11 PM
35	WG2002010-5d10 6020SL	2	18	3	1	12/3/2024 7:23:39 PM
36	WG2002010-6d5 6020SL	2	19	3	1	12/3/2024 7:28:07 PM
37	L2467884-01 6020SL	2	20	3	1	12/3/2024 7:32:35 PM
38	L2467884-02 6020SL	2	21	3	1	12/3/2024 7:37:04 PM
39	L2467906-01 6020SL	2	22	3	1	12/3/2024 7:41:33 PM
40	CCV	0	9	3	1	12/3/2024 7:46:02 PM
41	CCB	0	10	3	1	12/3/2024 7:50:33 PM
42	L2467906-02 6020SL	2	23	3	1	12/3/2024 7:55:05 PM
43	L2467906-03 6020SL	2	24	3	1	12/3/2024 7:59:34 PM
44	L2467906-04 6020SL	2	25	3	1	12/3/2024 8:04:04 PM
45	L2467906-05 6020SL	2	26	3	1	12/3/2024 8:08:32 PM
46	L2467906-06 6020SL	2	27	3	1	12/3/2024 8:13:01 PM
47	L2467934-01 6020SL	2	28	3	1	12/3/2024 8:17:29 PM
48	L2467934-02 6020SL	2	29	3	1	12/3/2024 8:21:58 PM
49	L2467934-03 6020SL	2	30	3	1	12/3/2024 8:26:27 PM
50	L2467934-04 6020SL	2	31	3	1	12/3/2024 8:30:55 PM
51	L2467934-06 6020SL	2	32	3	1	12/3/2024 8:35:24 PM

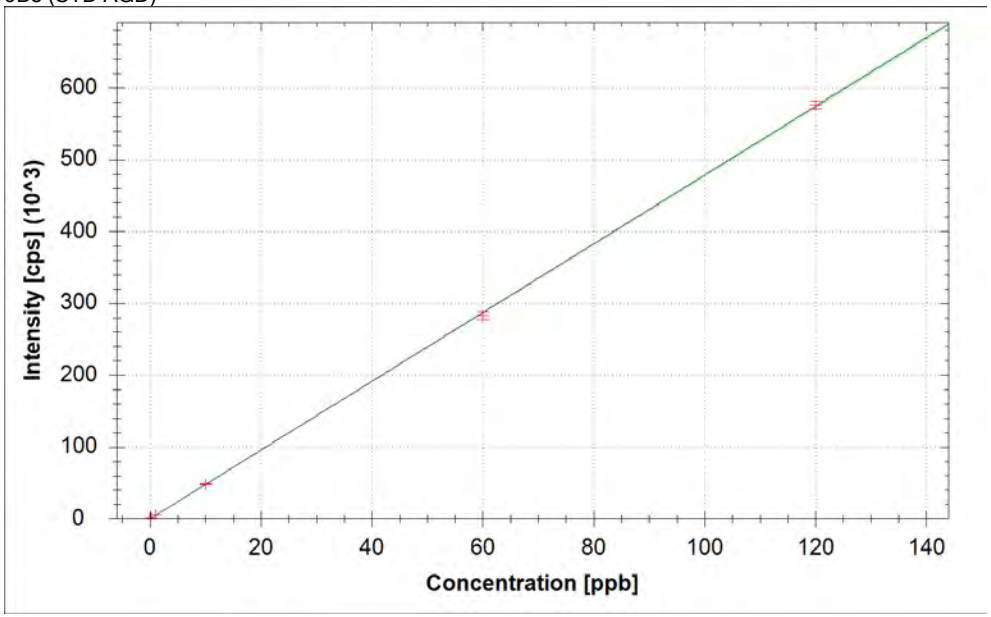
Alpha ICPMSQ2 Seq

12/4/2024 6:26:17 AM

Index:	Label:	Rack	Vial	Main Runs:	Survey Runs:	Start Time:
52	CCV	0	9	3	1	12/3/2024 8:39:52 PM
53	CCB	0	10	3	1	12/3/2024 8:44:24 PM
54	L2467934-10 6020SL	2	36	3	1	12/3/2024 8:48:56 PM
55	L2467934-07 6020SL	2	33	3	1	12/3/2024 8:53:26 PM
56	L2467934-08 6020SL	2	34	3	1	12/3/2024 8:57:55 PM
57	L2467934-09 6020SL	2	35	3	1	12/3/2024 9:02:24 PM
58	CCV	0	9	3	1	12/3/2024 9:06:54 PM
59	CCB	0	10	3	1	12/3/2024 9:11:25 PM
60	CCV	0	9	3	1	12/3/2024 9:15:58 PM
61	CCB	0	10	3	1	12/3/2024 9:20:29 PM

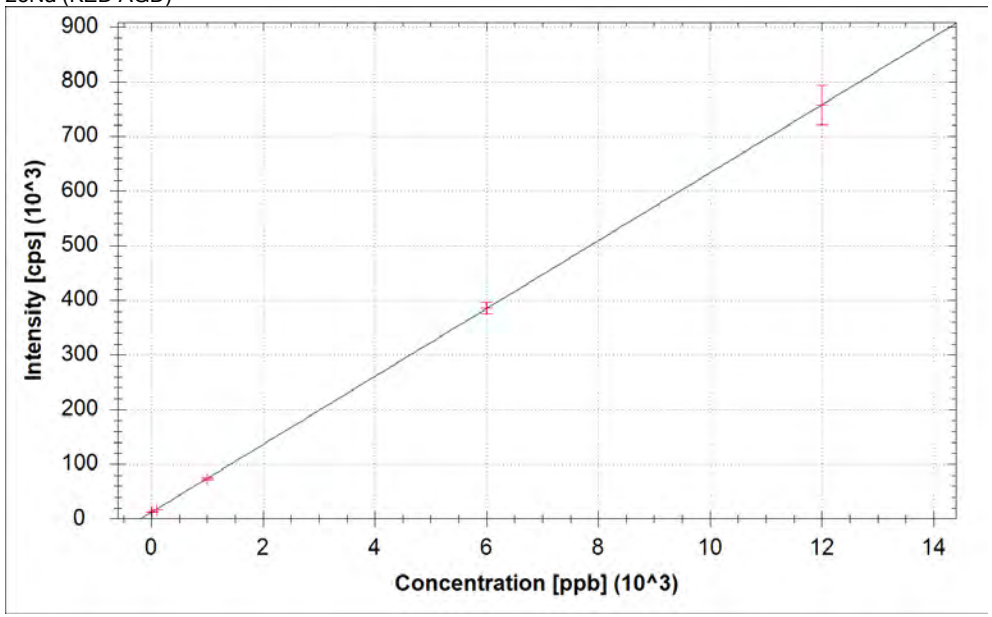
Calibration Curves:

9Be (STD AGD)



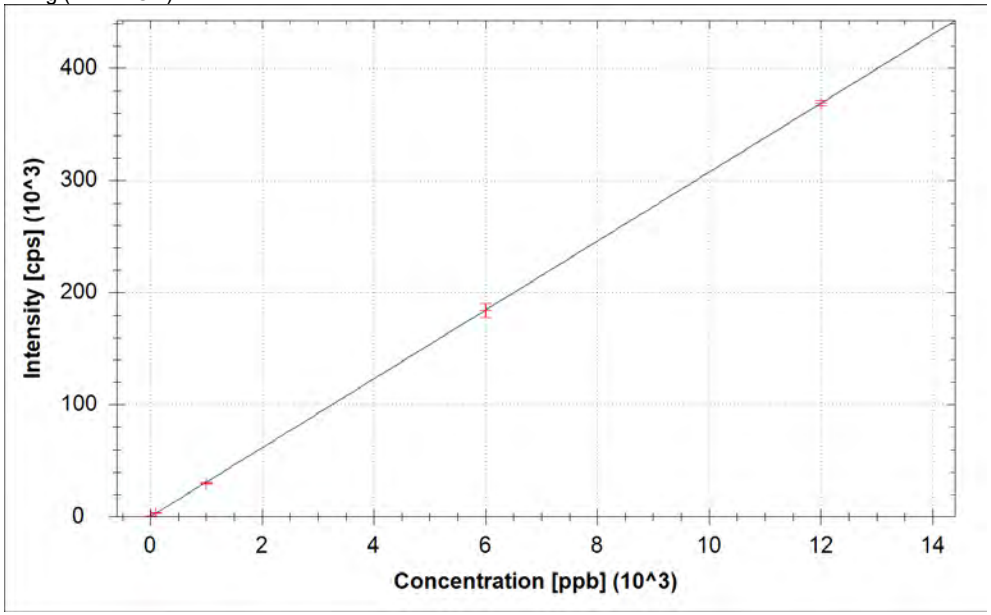
f(x) = 4782.1324*x + 17.8856
R² = 0.9999
BEC = 0.004 ppb
LoD = 0.0050 ppb

23Na (KED AGD)



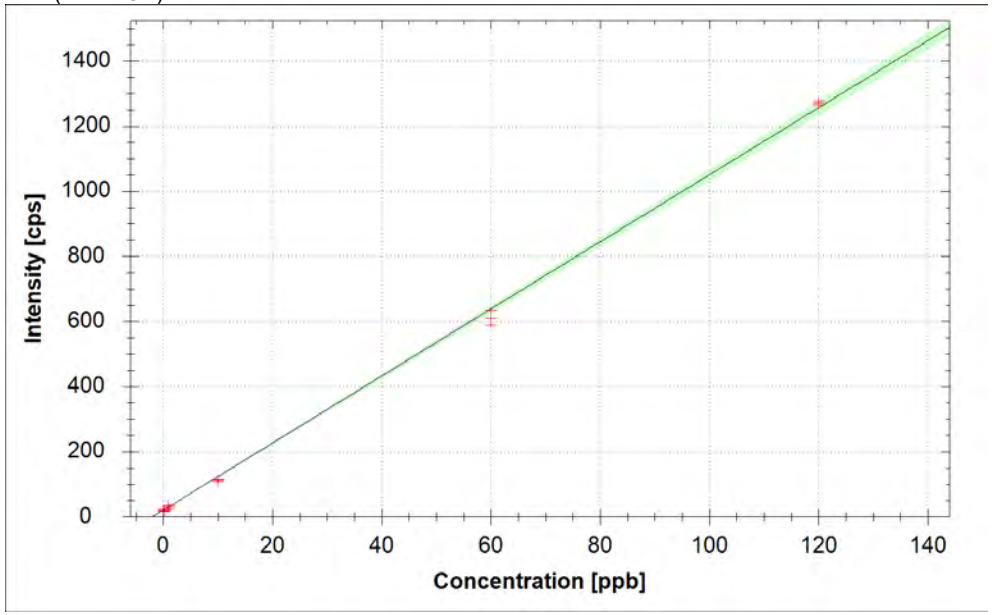
f(x) = 62.1395*x + 11678.6136
R² = 1.0000
BEC = 187.942 ppb
LoD = 4.6722 ppb

24Mg (KED AGD)



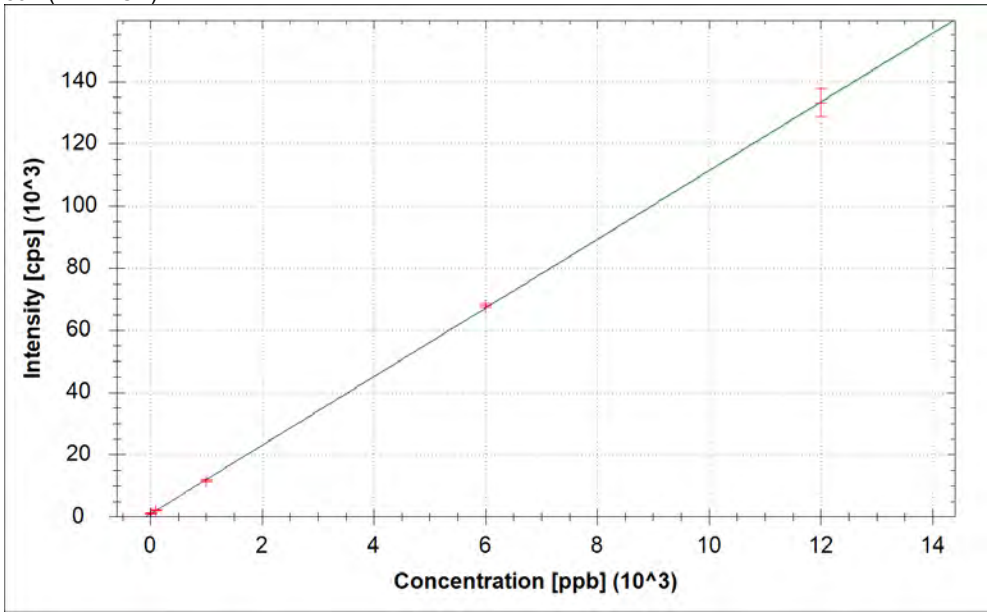
f(x) = 30.7284*x + 39.9111
R² = 1.0000
BEC = 1.299 ppb
LoD = 1.2665 ppb

27Al (KED AGD)



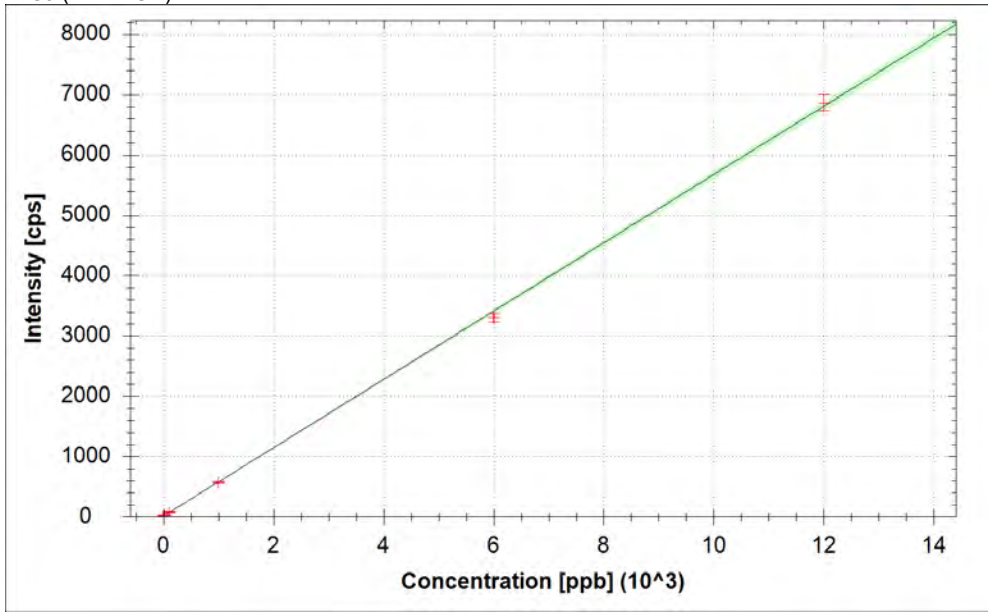
f(x) = 10.2961*x + 20.4593
R² = 0.9991
BEC = 1.987 ppb
LoD = 0.7354 ppb

39K (KED AGD)



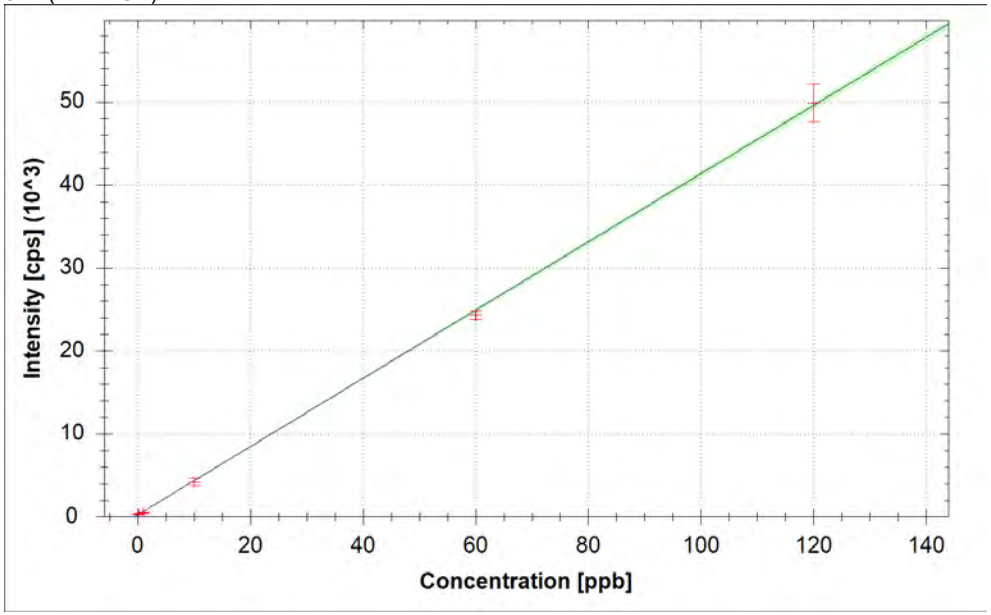
f(x) = 11.0403*x + 897.7311
R² = 1.0000
BEC = 81.314 ppb
LoD = 30.0974 ppb

44Ca (KED AGD)



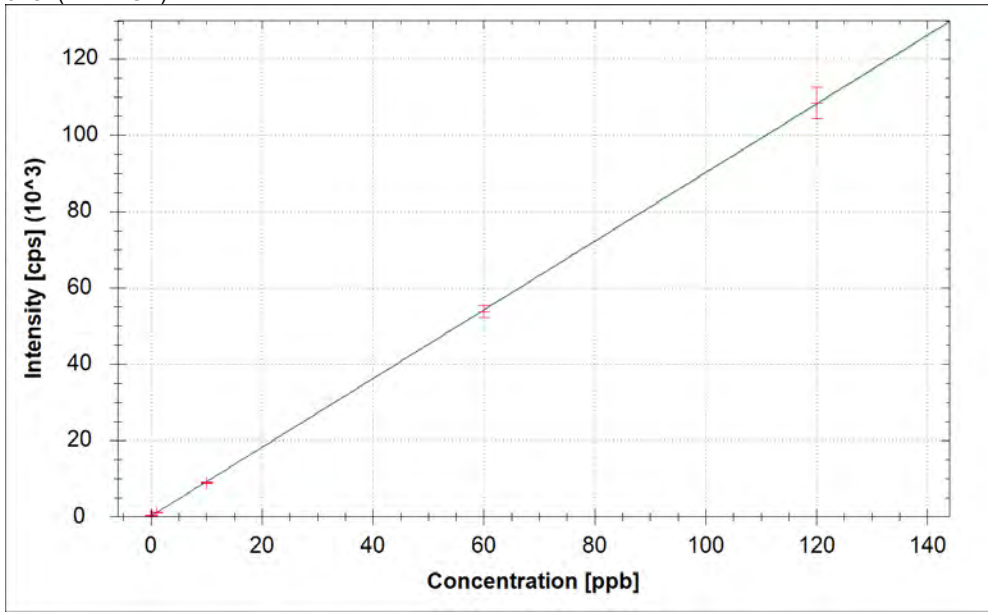
f(x) = 0.5662*x + 13.1051
R² = 0.9996
BEC = 23.146 ppb
LoD = 7.4148 ppb

51V (KED AGD)



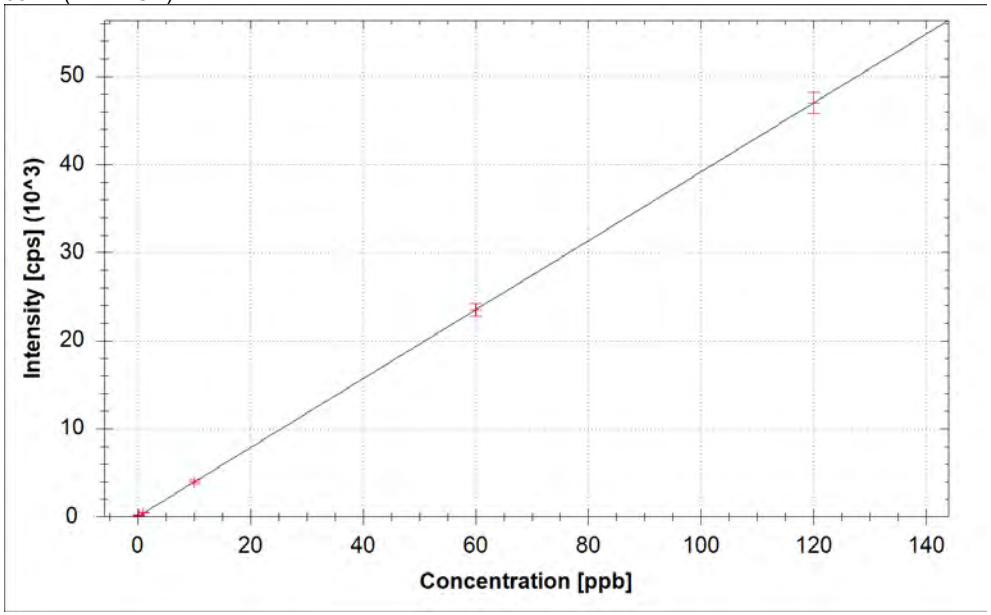
f(x) = 410.8695*x + 251.2222
R² = 0.9997
BEC = 0.611 ppb
LoD = 0.0963 ppb

52Cr (KED AGD)



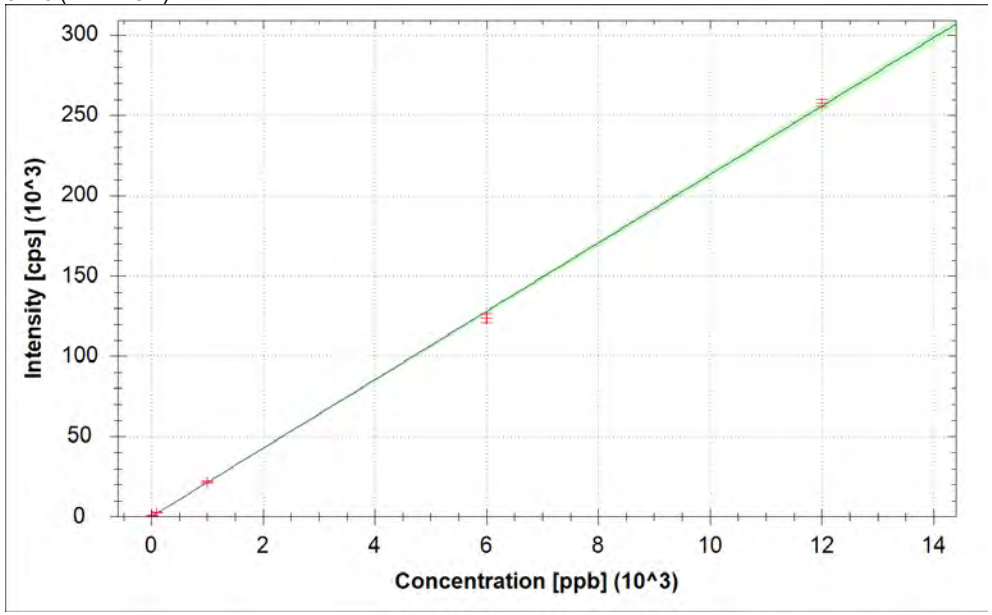
f(x) = 899.7066*x + 202.4240
R² = 1.0000
BEC = 0.225 ppb
LoD = 0.0860 ppb

55Mn (KED AGD)



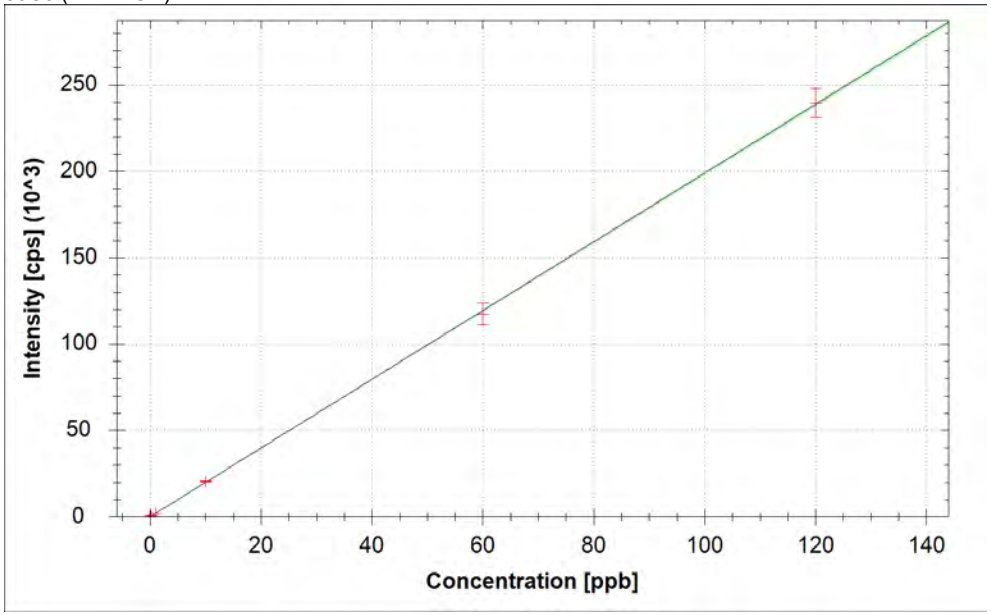
f(x) = 391.3092*x + 22.3597
R² = 1.0000
BEC = 0.057 ppb
LoD = 0.1079 ppb

57Fe (KED AGD)



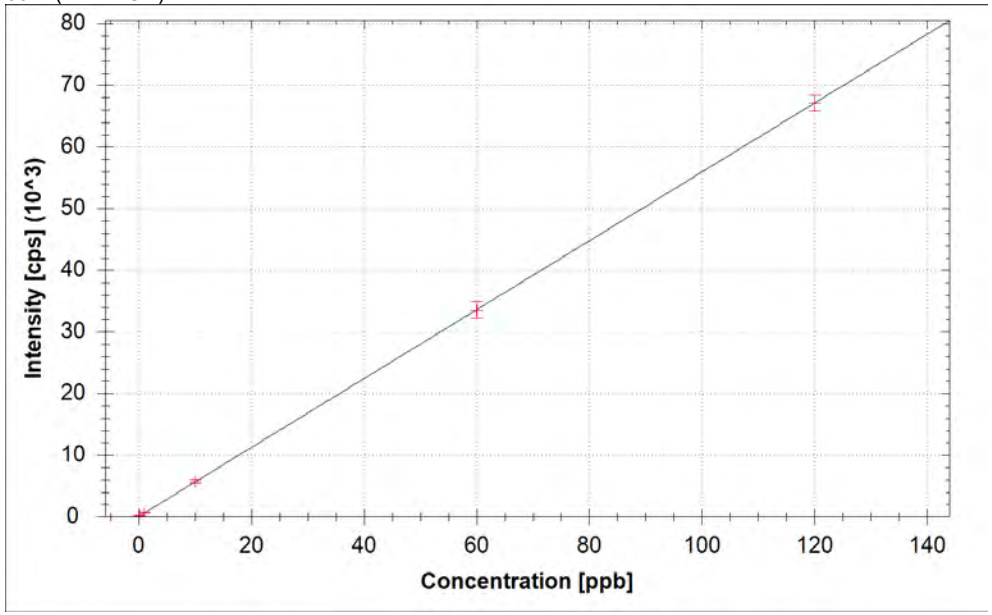
f(x) = 21.3082*x + 35.4905
R² = 0.9996
BEC = 1.666 ppb
LoD = 1.9354 ppb

59Co (KED AGD)



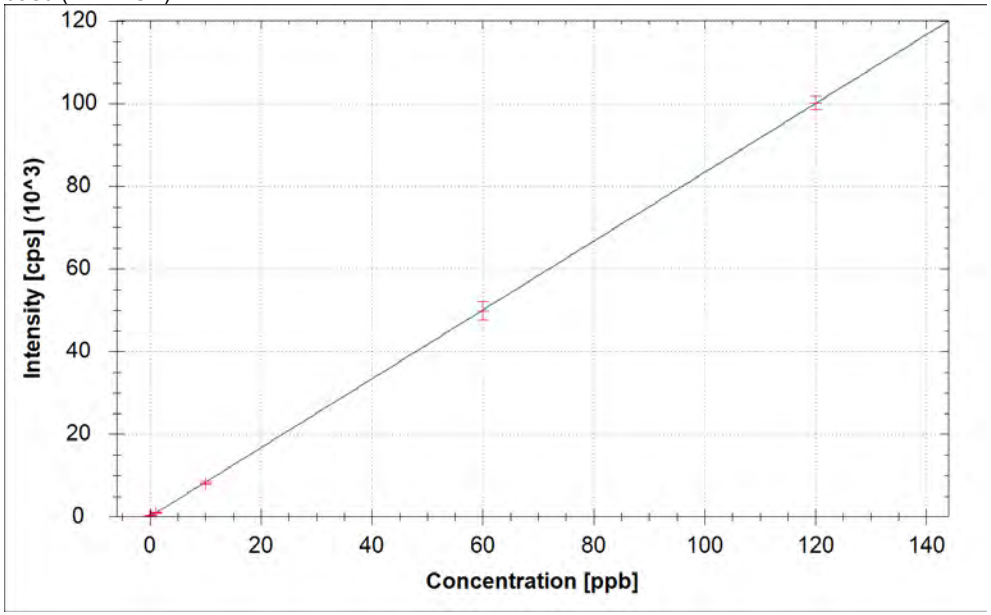
f(x) = 1987.9806*x + 19.9237
R² = 0.9999
BEC = 0.010 ppb
LoD = 0.0095 ppb

60Ni (KED AGD)



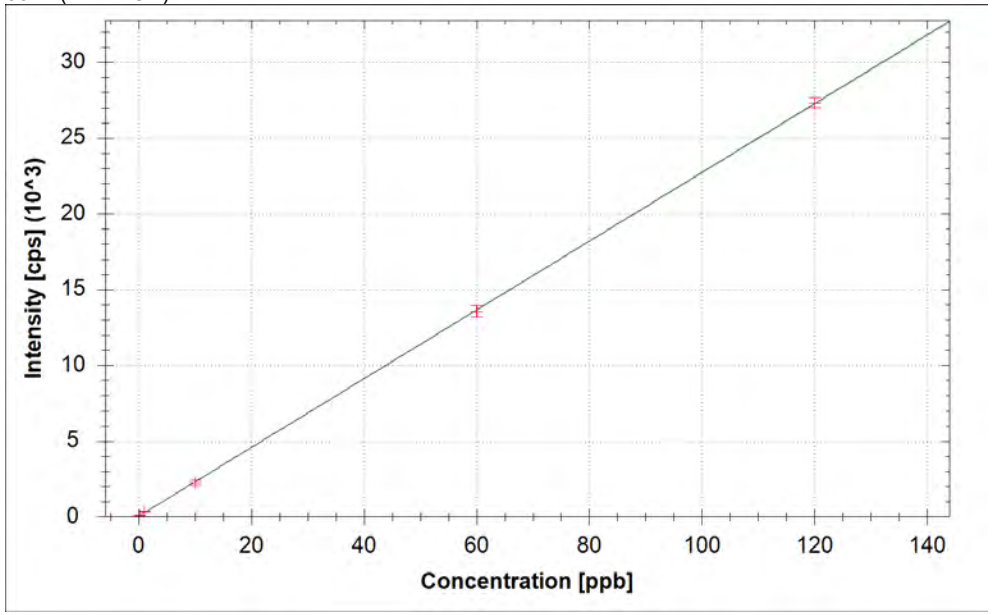
f(x) = 558.6298*x + 71.0284
R² = 1.0000
BEC = 0.127 ppb
LoD = 0.0332 ppb

65Cu (KED AGD)



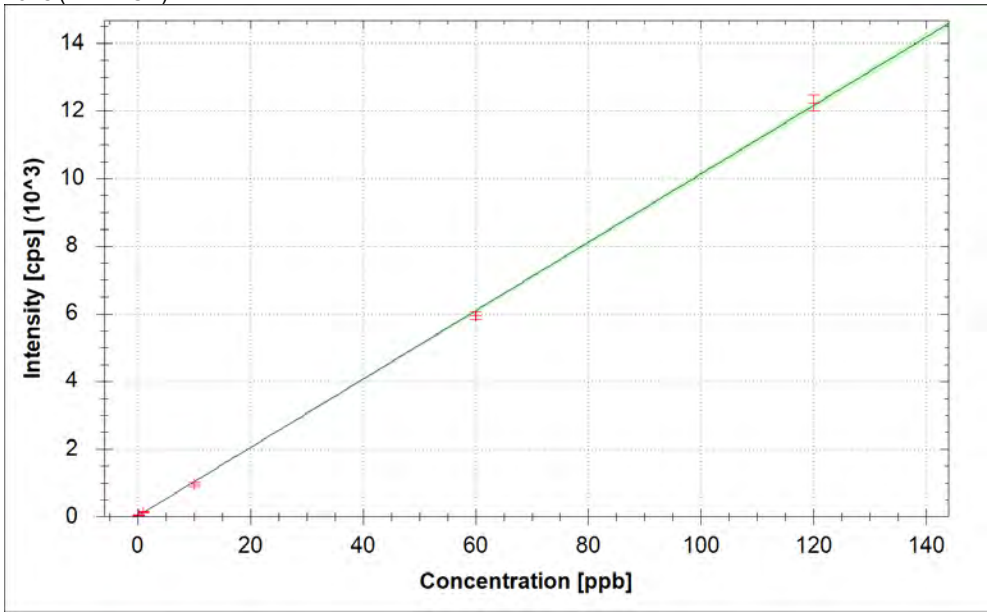
f(x) = 833.1199*x + 42.3475
R² = 1.0000
BEC = 0.051 ppb
LoD = 0.0390 ppb

66Zn (KED AGD)



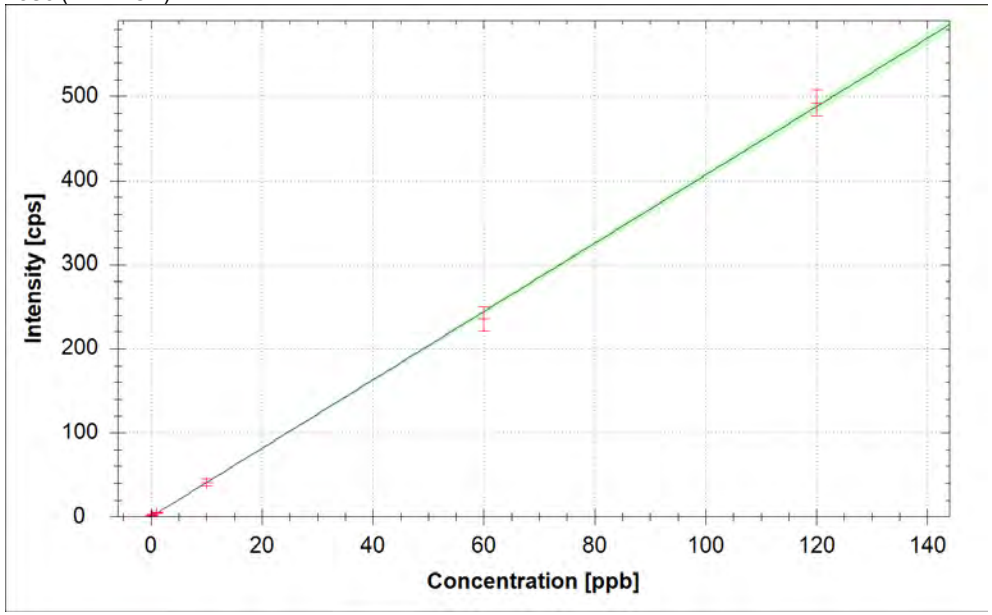
f(x) = 226.8066*x + 43.1120
R² = 1.0000
BEC = 0.190 ppb
LoD = 0.1155 ppb

75As (KED AGD)



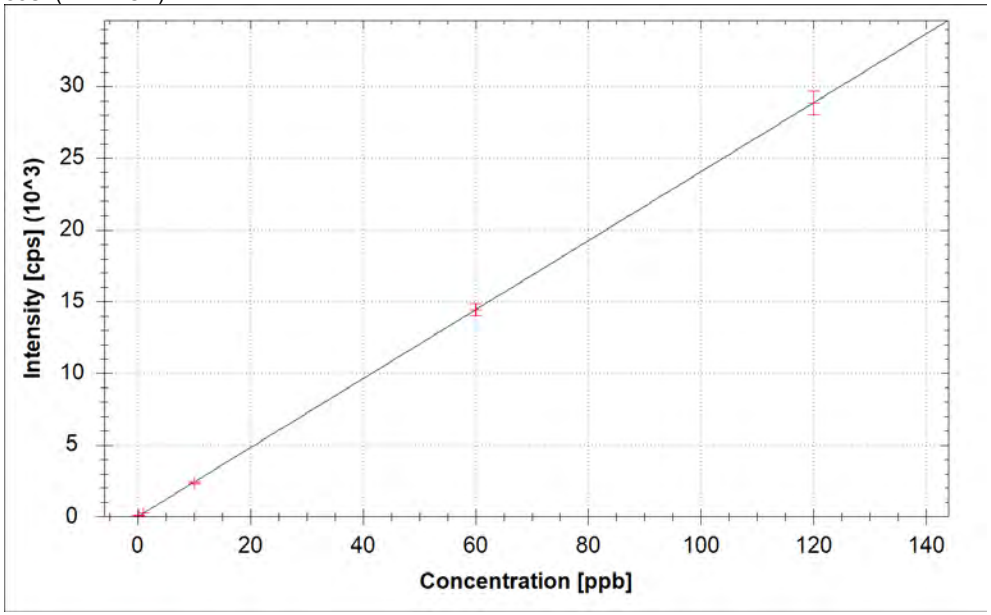
f(x) = 101.0684*x + 25.2015
R² = 0.9997
BEC = 0.249 ppb
LoD = 0.1126 ppb

78Se (KED AGD)



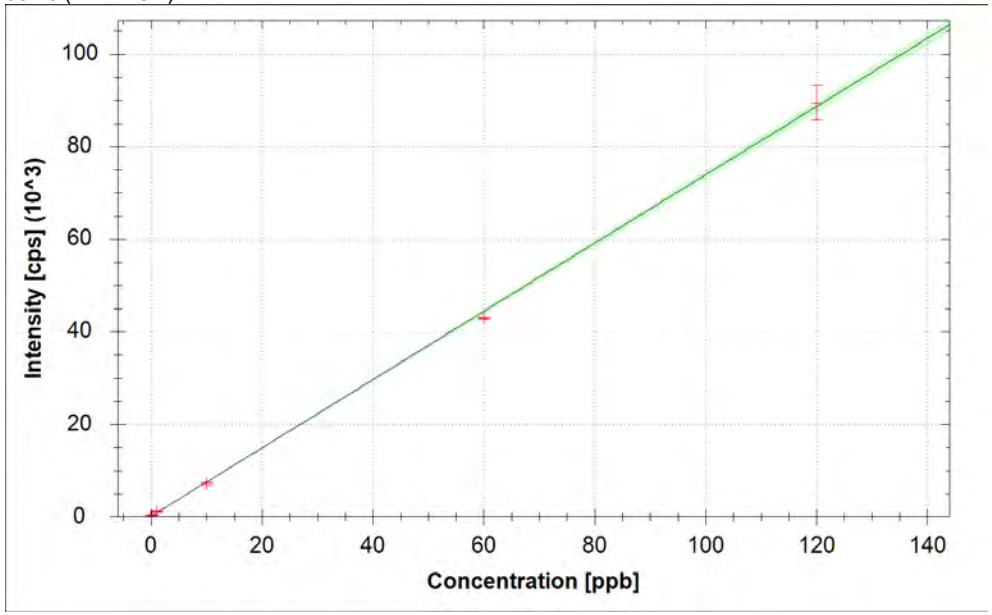
f(x) = 4.0648*x + 0.0843
R² = 0.9995
BEC = 0.021 ppb
LoD = 0.1059 ppb

88Sr (KED AGD)



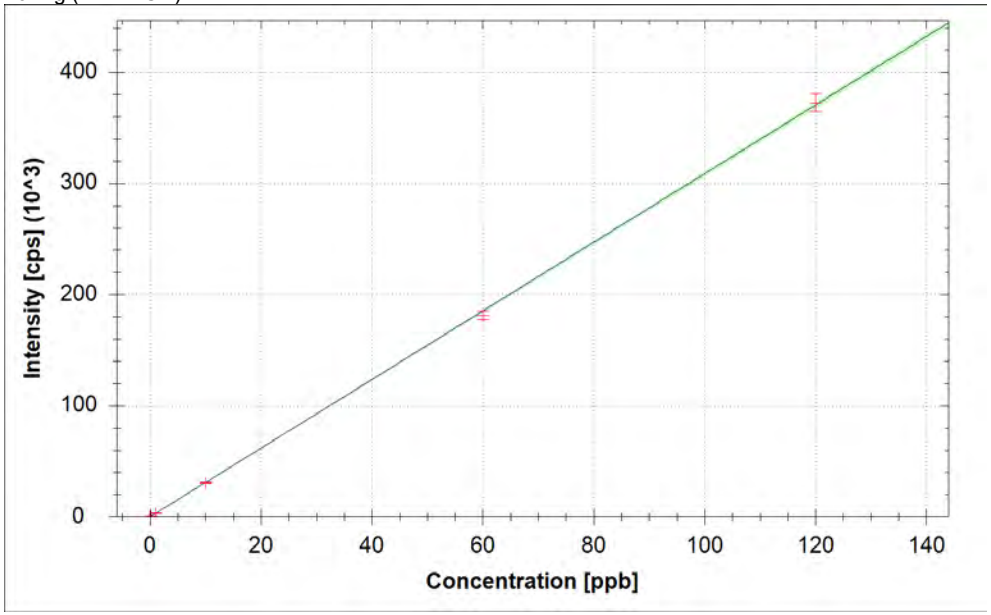
f(x) = 240.3272*x + 12.3629
R² = 1.0000
BEC = 0.051 ppb
LoD = 0.0078 ppb

95Mo (KED AGD)



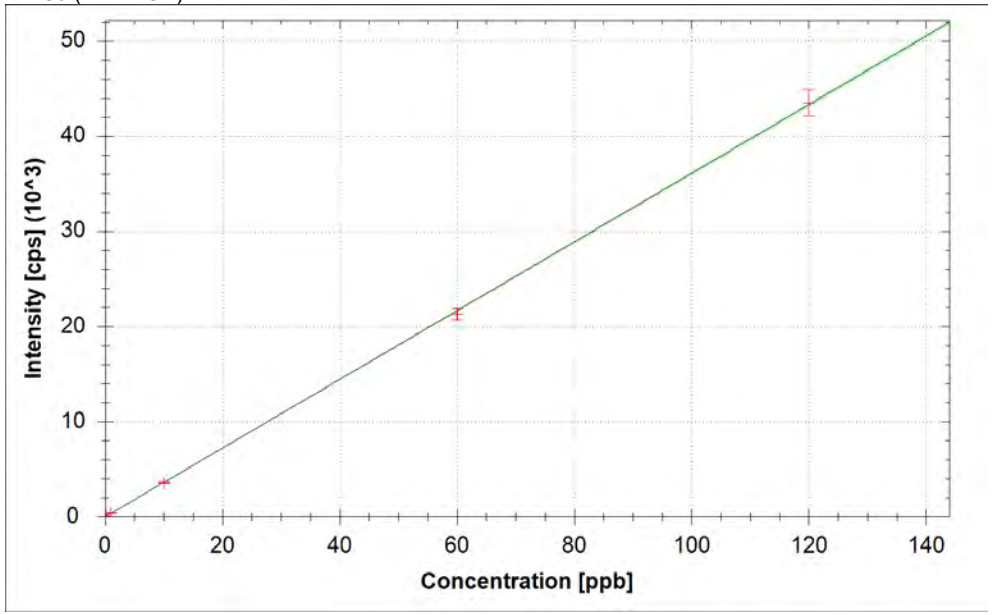
f(x) = 737.5559*x + 121.7936
R² = 0.9995
BEC = 0.165 ppb
LoD = 0.1743 ppb

107Ag (KED AGD)



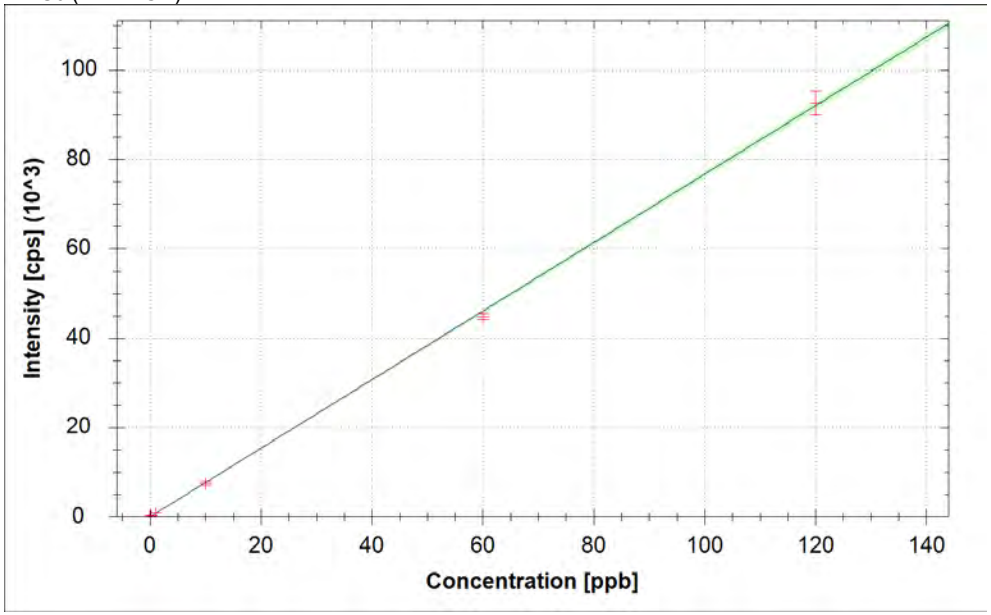
f(x) = 3085.5554*x + 8.9074
R² = 0.9998
BEC = 0.003 ppb
LoD = 0.0038 ppb

111Cd (KED AGD)



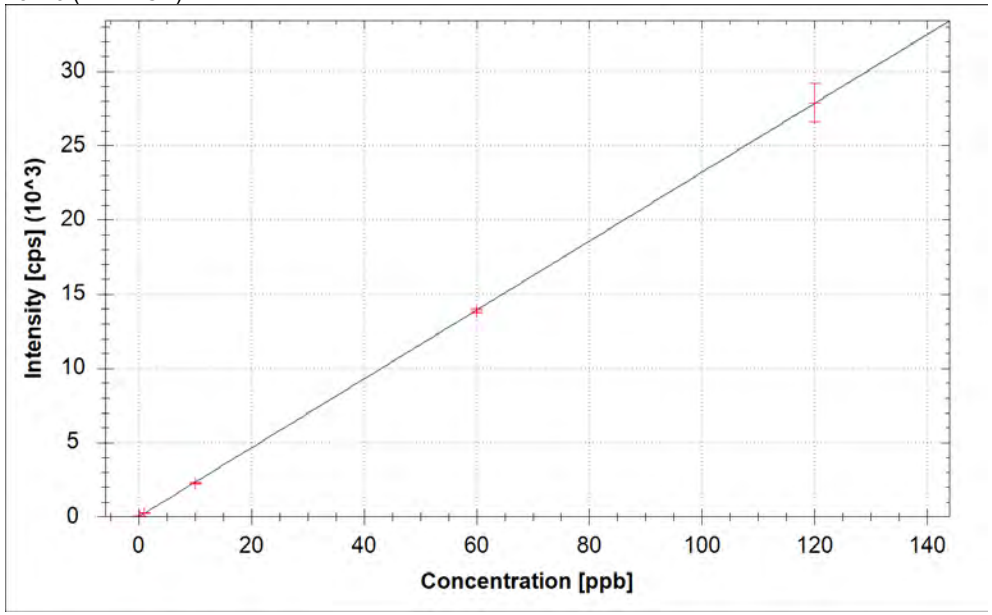
f(x) = 360.8447*x
R² = 0.9999
BEC = 0.000 ppb
LoD = 0.0000 ppb

121Sb (KED AGD)



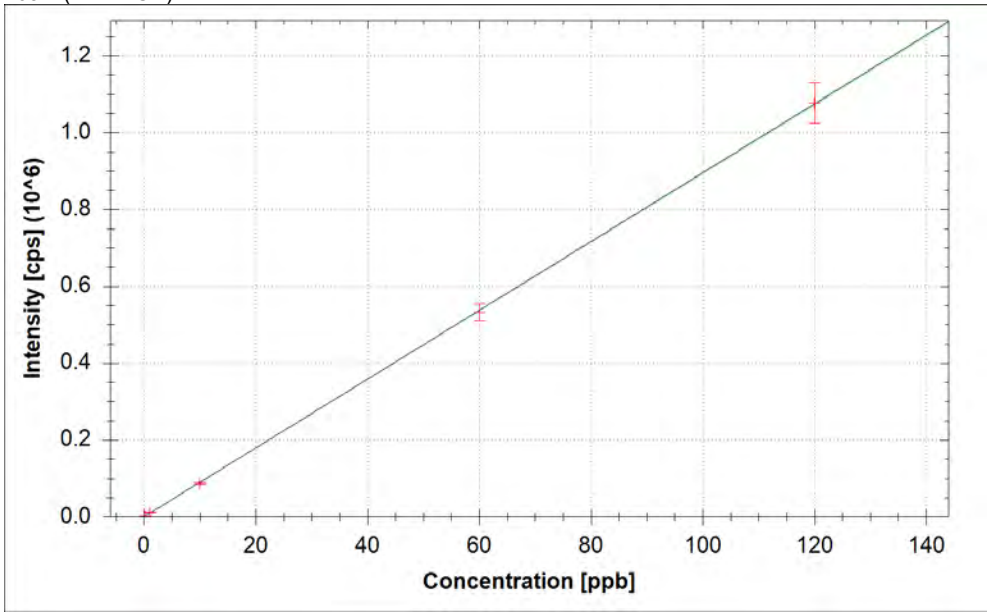
f(x) = 766.5565*x + 5.3464
R² = 0.9997
BEC = 0.007 ppb
LoD = 0.0055 ppb

137Ba (KED AGD)



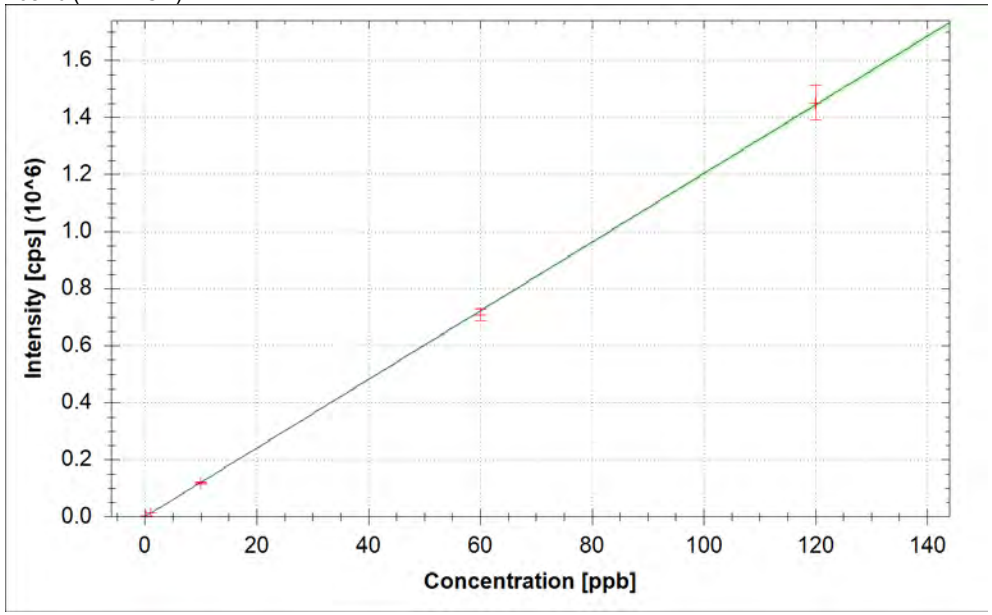
f(x) = 231.9344*x + 4.4209
R² = 1.0000
BEC = 0.019 ppb
LoD = 0.0654 ppb

205Tl (KED AGD)



f(x) = 8949.4973*x + 50.1460
R² = 1.0000
BEC = 0.006 ppb
LoD = 0.0047 ppb

208Pb (KED AGD)



f(x) = 12030.4041*x + 78.0986
R² = 0.9999
BEC = 0.006 ppb
LoD = 0.0057 ppb

Standards:

Analysis Index: 4
Analysis Name: 0.2/20 Cal
Analysis Type: STD
Analysis Started at: 12/3/2024 6:44:33 AM
Total Dilution Factor 50000
Rack 0
Vial 2

Category	Concentration average	Concentration RSD	Standard Concentration	Standard Relative Difference
6Li (STD AGD)	102.722 %	3.9 %		0.000 %
6Li (KED AGD)	107.071 %	6.6 %		0.000 %
9Be (STD AGD)	0.203 ppb	7.9 %	0.200 ppb	1.281 %
23Na (KED AGD)	12.675 ppb	76.2 %	20.000 ppb	36.627 %
24Mg (KED AGD)	18.191 ppb	4.9 %	20.000 ppb	9.045 %
27Al (KED AGD)	-0.061 ppb	591.0 %	0.200 ppb	130.452 %
39K (KED AGD)	18.667 ppb	66.9 %	20.000 ppb	6.666 %
44Ca (KED AGD)	16.916 ppb	23.8 %	20.000 ppb	15.421 %
45Sc (STD AGD)	99.245 %	0.7 %		0.000 %
51V (KED AGD)	0.184 ppb	56.7 %	0.200 ppb	7.864 %
52Cr (KED AGD)	0.141 ppb	19.6 %	0.200 ppb	29.719 %
55Mn (KED AGD)	0.409 ppb	21.0 %	0.200 ppb	104.434 %
57Fe (KED AGD)	18.632 ppb	22.3 %	20.000 ppb	6.842 %
59Co (KED AGD)	0.238 ppb	26.9 %	0.200 ppb	19.120 %
60Ni (KED AGD)	0.177 ppb	21.4 %	0.200 ppb	11.263 %
65Cu (KED AGD)	0.253 ppb	4.8 %	0.200 ppb	26.453 %
66Zn (KED AGD)	0.159 ppb	10.9 %	0.200 ppb	20.448 %
74Ge (KED AGD)	99.013 %	4.6 %		0.000 %
75As (KED AGD)	0.239 ppb	33.5 %	0.200 ppb	19.255 %
78Se (KED AGD)	0.340 ppb	76.0 %	0.200 ppb	70.067 %
88Sr (KED AGD)	0.206 ppb	13.4 %	0.200 ppb	3.108 %
95Mo (KED AGD)	0.236 ppb	56.3 %	0.200 ppb	17.777 %
103Rh (KED AGD)	101.192 %	6.8 %		0.000 %
107Ag (KED AGD)	0.188 ppb	7.9 %	0.200 ppb	6.144 %
111Cd (KED AGD)	0.188 ppb	13.8 %	0.200 ppb	5.776 %
115In (KED AGD)	100.633 %	4.7 %		0.000 %
121Sb (KED AGD)	0.206 ppb	12.3 %	0.200 ppb	2.980 %
137Ba (KED AGD)	0.151 ppb	30.1 %	0.200 ppb	24.588 %
159Tb (KED AGD)	101.166 %	5.7 %		0.000 %
175Lu (KED AGD)	101.053 %	6.4 %		0.000 %
205Tl (KED AGD)	0.193 ppb	10.3 %	0.200 ppb	3.402 %
208Pb (KED AGD)	0.200 ppb	7.7 %	0.200 ppb	0.091 %
209Bi (KED AGD)	101.796 %	6.2 %		0.000 %

Standards:

Analysis Index:	5
Analysis Name:	x1/100 Cal
Analysis Type:	STD
Analysis Started at:	12/3/2024 6:49:00 AM
Total Dilution Factor	10000
Rack	0
Vial	3

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Standards:

Analysis Index: 6
Analysis Name: 10/1000 Cal
Analysis Type: STD
Analysis Started at: 12/3/2024 6:53:28 AM
Total Dilution Factor 1000
Rack 0
Vial 4

Category	Concentration average	Concentration RSD	Standard Concentration	Standard Relative Difference
6Li (STD AGD)	108.169 %	5.4 %		0.000 %
6Li (KED AGD)	114.703 %	4.9 %		0.000 %
9Be (STD AGD)	10.081 ppb	2.0 %	10.000 ppb	0.815 %
23Na (KED AGD)	988.615 ppb	3.9 %	1,000.000 ppb	1.138 %
24Mg (KED AGD)	972.587 ppb	2.7 %	1,000.000 ppb	2.741 %
27Al (KED AGD)	8.824 ppb	4.3 %	10.000 ppb	11.762 %
39K (KED AGD)	960.847 ppb	4.2 %	1,000.000 ppb	3.915 %
44Ca (KED AGD)	981.219 ppb	3.1 %	1,000.000 ppb	1.878 %
45Sc (STD AGD)	104.420 %	2.3 %		0.000 %
51V (KED AGD)	9.543 ppb	11.1 %	10.000 ppb	4.575 %
52Cr (KED AGD)	9.669 ppb	2.7 %	10.000 ppb	3.315 %
55Mn (KED AGD)	10.054 ppb	5.6 %	10.000 ppb	0.545 %
57Fe (KED AGD)	1,014.612 ppb	3.9 %	1,000.000 ppb	1.461 %
59Co (KED AGD)	10.294 ppb	2.0 %	10.000 ppb	2.938 %
60Ni (KED AGD)	10.134 ppb	5.9 %	10.000 ppb	1.343 %
65Cu (KED AGD)	9.688 ppb	5.2 %	10.000 ppb	3.123 %
66Zn (KED AGD)	9.718 ppb	7.6 %	10.000 ppb	2.819 %
74Ge (KED AGD)	110.287 %	5.2 %		0.000 %
75As (KED AGD)	9.204 ppb	7.4 %	10.000 ppb	7.960 %
78Se (KED AGD)	9.995 ppb	10.1 %	10.000 ppb	0.055 %
88Sr (KED AGD)	9.811 ppb	4.3 %	10.000 ppb	1.888 %
95Mo (KED AGD)	9.494 ppb	4.8 %	10.000 ppb	5.057 %
103Rh (KED AGD)	107.159 %	3.2 %		0.000 %
107Ag (KED AGD)	9.877 ppb	2.0 %	10.000 ppb	1.231 %
111Cd (KED AGD)	9.963 ppb	3.7 %	10.000 ppb	0.365 %
115In (KED AGD)	108.964 %	4.4 %		0.000 %
121Sb (KED AGD)	9.722 ppb	5.6 %	10.000 ppb	2.778 %
137Ba (KED AGD)	9.658 ppb	3.1 %	10.000 ppb	3.418 %
159Tb (KED AGD)	108.854 %	1.9 %		0.000 %
175Lu (KED AGD)	110.326 %	1.7 %		0.000 %
205Tl (KED AGD)	9.626 ppb	4.4 %	10.000 ppb	3.743 %
208Pb (KED AGD)	9.824 ppb	2.8 %	10.000 ppb	1.758 %
209Bi (KED AGD)	110.716 %	3.1 %		0.000 %

Standards:

Analysis Index: 7
Analysis Name: 60/6000 Cal
Analysis Type: STD
Analysis Started at: 12/3/2024 6:57:56 AM
Total Dilution Factor 166.6666666
Rack 0
Vial 5

Category	Concentration average	Concentration RSD	Standard Concentration	Standard Relative Difference
6Li (STD AGD)	107.436 %	4.4 %		0.000 %
6Li (KED AGD)	115.489 %	1.7 %		0.000 %
9Be (STD AGD)	59.072 ppb	2.0 %	60.000 ppb	1.546 %
23Na (KED AGD)	6,010.919 ppb	2.8 %	6,000.000 ppb	0.182 %
24Mg (KED AGD)	5,984.382 ppb	3.3 %	6,000.000 ppb	0.260 %
27Al (KED AGD)	57.287 ppb	4.0 %	60.000 ppb	4.522 %
39K (KED AGD)	6,060.335 ppb	0.9 %	6,000.000 ppb	1.006 %
44Ca (KED AGD)	5,807.476 ppb	2.1 %	6,000.000 ppb	3.209 %
45Sc (STD AGD)	105.977 %	0.6 %		0.000 %
51V (KED AGD)	58.527 ppb	2.2 %	60.000 ppb	2.455 %
52Cr (KED AGD)	59.478 ppb	3.0 %	60.000 ppb	0.870 %
55Mn (KED AGD)	59.947 ppb	3.0 %	60.000 ppb	0.088 %
57Fe (KED AGD)	5,805.118 ppb	2.3 %	6,000.000 ppb	3.248 %
59Co (KED AGD)	59.032 ppb	5.5 %	60.000 ppb	1.613 %
60Ni (KED AGD)	59.879 ppb	4.0 %	60.000 ppb	0.201 %
65Cu (KED AGD)	59.730 ppb	4.6 %	60.000 ppb	0.450 %
66Zn (KED AGD)	59.572 ppb	2.6 %	60.000 ppb	0.714 %
74Ge (KED AGD)	109.833 %	2.9 %		0.000 %
75As (KED AGD)	58.549 ppb	2.0 %	60.000 ppb	2.418 %
78Se (KED AGD)	57.831 ppb	6.1 %	60.000 ppb	3.614 %
88Sr (KED AGD)	60.095 ppb	2.8 %	60.000 ppb	0.158 %
95Mo (KED AGD)	57.931 ppb	0.5 %	60.000 ppb	3.449 %
103Rh (KED AGD)	108.445 %	2.7 %		0.000 %
107Ag (KED AGD)	58.734 ppb	2.0 %	60.000 ppb	2.111 %
111Cd (KED AGD)	58.987 ppb	3.0 %	60.000 ppb	1.688 %
115In (KED AGD)	110.456 %	1.6 %		0.000 %
121Sb (KED AGD)	58.434 ppb	1.6 %	60.000 ppb	2.610 %
137Ba (KED AGD)	59.773 ppb	0.9 %	60.000 ppb	0.378 %
159Tb (KED AGD)	110.766 %	0.6 %		0.000 %
175Lu (KED AGD)	110.304 %	1.9 %		0.000 %
205Tl (KED AGD)	59.435 ppb	4.1 %	60.000 ppb	0.942 %
208Pb (KED AGD)	58.856 ppb	3.0 %	60.000 ppb	1.907 %
209Bi (KED AGD)	111.548 %	2.0 %		0.000 %

Standards:

Analysis Index: 8
Analysis Name: 120/12000 Cal
Analysis Type: STD
Analysis Started at: 12/3/2024 7:02:24 AM
Total Dilution Factor 83.33333333
Rack 0
Vial 6

Category	Concentration average	Concentration RSD	Standard Concentration	Standard Relative Difference
6Li (STD AGD)	106.282 %	3.6 %		0.000 %
6Li (KED AGD)	117.789 %	0.7 %		0.000 %
9Be (STD AGD)	120.457 ppb	1.0 %	120.000 ppb	0.381 %
23Na (KED AGD)	11,995.681 ppb	4.8 %	12,000.000 ppb	0.036 %
24Mg (KED AGD)	12,010.072 ppb	0.6 %	12,000.000 ppb	0.084 %
27Al (KED AGD)	121.454 ppb	0.5 %	120.000 ppb	1.212 %
39K (KED AGD)	11,973.067 ppb	3.4 %	12,000.000 ppb	0.224 %
44Ca (KED AGD)	12,097.757 ppb	2.0 %	12,000.000 ppb	0.815 %
45Sc (STD AGD)	105.511 %	1.7 %		0.000 %
51V (KED AGD)	120.779 ppb	4.6 %	120.000 ppb	0.649 %
52Cr (KED AGD)	120.289 ppb	3.8 %	120.000 ppb	0.241 %
55Mn (KED AGD)	120.021 ppb	2.5 %	120.000 ppb	0.018 %
57Fe (KED AGD)	12,096.115 ppb	0.9 %	12,000.000 ppb	0.801 %
59Co (KED AGD)	120.460 ppb	3.5 %	120.000 ppb	0.383 %
60Ni (KED AGD)	120.049 ppb	1.9 %	120.000 ppb	0.041 %
65Cu (KED AGD)	120.161 ppb	1.6 %	120.000 ppb	0.134 %
66Zn (KED AGD)	120.236 ppb	1.2 %	120.000 ppb	0.197 %
74Ge (KED AGD)	110.009 %	2.4 %		0.000 %
75As (KED AGD)	120.791 ppb	1.9 %	120.000 ppb	0.659 %
78Se (KED AGD)	121.084 ppb	3.2 %	120.000 ppb	0.903 %
88Sr (KED AGD)	119.968 ppb	2.9 %	120.000 ppb	0.026 %
95Mo (KED AGD)	121.074 ppb	4.2 %	120.000 ppb	0.895 %
103Rh (KED AGD)	109.504 %	5.1 %		0.000 %
107Ag (KED AGD)	120.643 ppb	2.1 %	120.000 ppb	0.536 %
111Cd (KED AGD)	120.509 ppb	3.2 %	120.000 ppb	0.424 %
115In (KED AGD)	110.297 %	3.2 %		0.000 %
121Sb (KED AGD)	120.805 ppb	2.9 %	120.000 ppb	0.671 %
137Ba (KED AGD)	120.142 ppb	4.7 %	120.000 ppb	0.118 %
159Tb (KED AGD)	111.645 %	3.4 %		0.000 %
175Lu (KED AGD)	112.452 %	3.8 %		0.000 %
205Tl (KED AGD)	120.312 ppb	4.9 %	120.000 ppb	0.260 %
208Pb (KED AGD)	120.586 ppb	4.2 %	120.000 ppb	0.489 %
209Bi (KED AGD)	112.599 %	3.5 %		0.000 %

Standards:

Analysis Index: 9
Analysis Name: 1/100 Cal
Analysis Type: STD
Analysis Started at: 12/3/2024 7:07:58 AM
Total Dilution Factor 10000
Rack 0
Vial 3

Category	Concentration average	Concentration RSD	Standard Concentration	Standard Relative Difference
6Li (STD AGD)	107.604 %	3.7 %		0.000 %
6Li (KED AGD)	117.228 %	2.3 %		0.000 %
9Be (STD AGD)	1.053 ppb	0.8 %	1.000 ppb	5.289 %
23Na (KED AGD)	78.431 ppb	7.1 %	100.000 ppb	21.569 %
24Mg (KED AGD)	102.901 ppb	5.9 %	100.000 ppb	2.901 %
27Al (KED AGD)	1.067 ppb	46.5 %	1.000 ppb	6.696 %
39K (KED AGD)	103.585 ppb	16.1 %	100.000 ppb	3.585 %
44Ca (KED AGD)	109.031 ppb	23.2 %	100.000 ppb	9.031 %
45Sc (STD AGD)	101.882 %	1.1 %		0.000 %
51V (KED AGD)	0.509 ppb	23.3 %	1.000 ppb	49.122 %
52Cr (KED AGD)	0.977 ppb	8.9 %	1.000 ppb	2.263 %
55Mn (KED AGD)	1.058 ppb	8.0 %	1.000 ppb	5.822 %
57Fe (KED AGD)	113.297 ppb	8.3 %	100.000 ppb	13.297 %
59Co (KED AGD)	0.967 ppb	1.7 %	1.000 ppb	3.335 %
60Ni (KED AGD)	1.023 ppb	11.2 %	1.000 ppb	2.323 %
65Cu (KED AGD)	1.036 ppb	10.9 %	1.000 ppb	3.590 %
66Zn (KED AGD)	1.219 ppb	9.3 %	1.000 ppb	21.903 %
74Ge (KED AGD)	106.462 %	1.9 %		0.000 %
75As (KED AGD)	1.055 ppb	12.5 %	1.000 ppb	5.467 %
78Se (KED AGD)	1.088 ppb	14.6 %	1.000 ppb	8.841 %
88Sr (KED AGD)	0.997 ppb	1.2 %	1.000 ppb	0.281 %
95Mo (KED AGD)	1.387 ppb	18.4 %	1.000 ppb	38.711 %
103Rh (KED AGD)	110.221 %	1.6 %		0.000 %
107Ag (KED AGD)	1.004 ppb	2.5 %	1.000 ppb	0.371 %
111Cd (KED AGD)	1.013 ppb	3.0 %	1.000 ppb	1.267 %
115In (KED AGD)	108.737 %	1.6 %		0.000 %
121Sb (KED AGD)	1.101 ppb	4.4 %	1.000 ppb	10.063 %
137Ba (KED AGD)	1.034 ppb	8.2 %	1.000 ppb	3.404 %
159Tb (KED AGD)	113.222 %	1.7 %		0.000 %
175Lu (KED AGD)	110.657 %	1.4 %		0.000 %
205Tl (KED AGD)	1.188 ppb	2.9 %	1.000 ppb	18.824 %
208Pb (KED AGD)	1.041 ppb	1.1 %	1.000 ppb	4.095 %
209Bi (KED AGD)	114.126 %	1.8 %		0.000 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index: 1
Analysis label: Rinse
Analysis started at: 12/3/2024 6:31:09 AM
User name ALPHALAB\a2-icpmsq2
Rack 0
Vial 1
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	104.396 %	113.019 %	0.014 ppb	13.493 ppb	4.744 ppb	10.123 ppb	5.094 ppb	19.867 ppb	100.167 %
Concentration per Run 1	99.654 %	115.320 %	0.013 ppb	14.984 ppb	6.819 ppb	10.124 ppb	6.768 ppb	4.449 ppb	99.464 %
Concentration per Run 2	106.179 %	107.744 %	0.014 ppb	21.395 ppb	3.089 ppb	11.205 ppb	4.589 ppb	29.911 ppb	101.952 %
Concentration per Run 3	107.354 %	115.994 %	0.015 ppb	4.101 ppb	4.326 ppb	9.041 ppb	3.925 ppb	25.239 ppb	99.085 %
Concentration RSD	4.0 %	4.1 %	6.6 %	64.8 %	40.0 %	10.7 %	29.2 %	68.2 %	1.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.124 ppb	0.137 ppb	0.490 ppb	68.729 ppb	0.027 ppb	2.873 ppb	0.571 ppb	2.468 ppb	110.119 %
Concentration per Run 1	-0.144 ppb	0.127 ppb	0.516 ppb	70.229 ppb	0.015 ppb	3.011 ppb	0.626 ppb	2.557 ppb	103.725 %
Concentration per Run 2	-0.067 ppb	0.181 ppb	0.420 ppb	73.795 ppb	0.038 ppb	2.865 ppb	0.575 ppb	2.453 ppb	111.699 %
Concentration per Run 3	-0.161 ppb	0.103 ppb	0.534 ppb	62.163 ppb	0.028 ppb	2.744 ppb	0.512 ppb	2.395 ppb	114.932 %
Concentration RSD	40.2 %	29.3 %	12.5 %	8.7 %	42.7 %	4.7 %	9.9 %	3.3 %	5.2 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.040 ppb	0.046 ppb	0.019 ppb	0.248 ppb	101.983 %	0.041 ppb	0.002 ppb	102.582 %	0.034 ppb
Concentration per Run 1	0.093 ppb	-0.050 ppb	0.018 ppb	0.274 ppb	102.516 %	0.044 ppb	0.000 ppb	103.713 %	0.025 ppb
Concentration per Run 2	-0.027 ppb	0.008 ppb	0.011 ppb	0.235 ppb	100.931 %	0.037 ppb	0.004 ppb	100.080 %	0.033 ppb
Concentration per Run 3	0.053 ppb	0.179 ppb	0.026 ppb	0.236 ppb	102.502 %	0.041 ppb	0.004 ppb	103.953 %	0.043 ppb
Concentration RSD	154.5 %	259.0 %	41.3 %	9.0 %	0.9 %	9.3 %	86.6 %	2.1 %	27.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.078 ppb	104.522 %	104.073 %	0.005 ppb	0.089 ppb	104.630 %
Concentration per Run 1	0.063 ppb	106.682 %	102.986 %	0.003 ppb	0.088 ppb	107.504 %
Concentration per Run 2	0.122 ppb	103.674 %	103.099 %	0.006 ppb	0.098 ppb	102.675 %
Concentration per Run 3	0.050 ppb	103.208 %	106.134 %	0.005 ppb	0.081 ppb	103.712 %
Concentration RSD	48.8 %	1.8 %	1.7 %	31.4 %	9.8 %	2.4 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index: 2
Analysis label: CAL LOT #M23-1225
Analysis started at: 12/3/2024 6:35:35 AM
User name ALPHALAB\a2-icpmsq2
Rack 0
Vial 1
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	99.786 %	111.111 %	0.016 ppb	6.954 ppb	5.992 ppb	9.533 ppb	11.375 ppb	15.948 ppb	95.904 %
Concentration per Run 1	95.234 %	117.677 %	0.015 ppb	-4.561 ppb	3.868 ppb	9.279 ppb	2.855 ppb	8.770 ppb	94.603 %
Concentration per Run 2	100.982 %	118.182 %	0.016 ppb	-0.534 ppb	6.728 ppb	9.155 ppb	17.837 ppb	24.172 ppb	94.873 %
Concentration per Run 3	103.143 %	97.475 %	0.018 ppb	25.957 ppb	7.380 ppb	10.166 ppb	13.433 ppb	14.901 ppb	98.236 %
Concentration RSD	4.1 %	10.6 %	9.6 %	238.4 %	31.2 %	5.8 %	67.7 %	48.6 %	2.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.157 ppb	0.167 ppb	0.432 ppb	73.240 ppb	0.017 ppb	3.045 ppb	0.575 ppb	2.553 ppb	99.832 %
Concentration per Run 1	-0.156 ppb	0.168 ppb	0.361 ppb	80.521 ppb	0.025 ppb	3.098 ppb	0.629 ppb	2.416 ppb	101.382 %
Concentration per Run 2	-0.170 ppb	0.152 ppb	0.557 ppb	72.858 ppb	0.016 ppb	2.909 ppb	0.556 ppb	2.817 ppb	100.554 %
Concentration per Run 3	-0.146 ppb	0.181 ppb	0.380 ppb	66.341 ppb	0.011 ppb	3.128 ppb	0.540 ppb	2.425 ppb	97.559 %
Concentration RSD	7.7 %	9.0 %	25.0 %	9.7 %	43.0 %	3.9 %	8.3 %	9.0 %	2.0 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.018 ppb	0.053 ppb	0.023 ppb	0.177 ppb	99.487 %	0.034 ppb	0.002 ppb	99.851 %	0.020 ppb
Concentration per Run 1	0.018 ppb	0.091 ppb	0.029 ppb	0.151 ppb	107.309 %	0.034 ppb	0.007 ppb	106.600 %	0.016 ppb
Concentration per Run 2	0.013 ppb	-0.046 ppb	0.017 ppb	0.203 ppb	97.480 %	0.037 ppb	0.000 ppb	98.186 %	0.018 ppb
Concentration per Run 3	0.021 ppb	0.112 ppb	0.023 ppb	0.178 ppb	93.670 %	0.032 ppb	0.000 ppb	94.768 %	0.026 ppb
Concentration RSD	23.2 %	163.2 %	24.7 %	14.4 %	7.1 %	7.8 %	173.2 %	6.1 %	27.4 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.087 ppb	101.362 %	101.252 %	0.004 ppb	0.093 ppb	101.953 %
Concentration per Run 1	0.048 ppb	107.992 %	110.855 %	0.001 ppb	0.088 ppb	108.473 %
Concentration per Run 2	0.096 ppb	101.310 %	98.916 %	0.001 ppb	0.106 ppb	99.461 %
Concentration per Run 3	0.117 ppb	94.784 %	93.986 %	0.008 ppb	0.084 ppb	97.925 %
Concentration RSD	40.9 %	6.5 %	8.6 %	114.4 %	12.9 %	5.6 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	3	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	Blank NTB ICPMSQ2	Rack	4		
Analysis started at:	12/3/2024 6:40:01 AM	Vial	49		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	100.000 %	100.000 %	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	100.000 %
Concentration per Run	100.000 %	100.000 %	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	100.000 %
Concentration RSD	0.0 %	0.0 %	0.4 %	0.0 %	0.3 %	0.1 %	0.1 %	0.1 %	0.0 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	100.000 %
Concentration per Run	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	100.000 %
Concentration RSD	0.1 %	0.1 %	0.6 %	0.4 %	0.3 %	0.1 %	0.3 %	0.2 %	0.0 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	100.000 %	0.000 ppb	0.000 ppb	100.000 %	0.000 ppb
Concentration per Run	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	100.000 %	0.000 ppb	0.000 ppb	100.000 %	0.000 ppb
Concentration RSD	0.2 %	1.7 %	0.1 %	0.4 %	0.0 %	0.4 %		0.0 %	0.3 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.000 ppb	100.000 %	100.000 %	0.000 ppb	0.000 ppb	100.000 %
Concentration per Run	0.000 ppb	100.000 %	100.000 %	0.000 ppb	0.000 ppb	100.000 %
Concentration RSD	1.1 %	0.0 %	0.0 %	0.3 %	0.3 %	0.0 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	4	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	0.2/20 Cal	Rack	0		
Analysis started at:	12/3/2024 6:44:33 AM	Vial	2		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	102.722 %	107.071 %	0.203 ppb	12.675 ppb	18.191 ppb	-0.061 ppb	18.667 ppb	16.916 ppb	99.245 %
Concentration per Run 1	98.276 %	114.815 %	0.221 ppb	1.861 ppb	18.851 ppb	-0.361 ppb	5.729 ppb	16.181 ppb	98.392 %
Concentration per Run 2	103.992 %	101.010 %	0.194 ppb	20.460 ppb	18.550 ppb	-0.160 ppb	30.629 ppb	13.305 ppb	99.720 %
Concentration per Run 3	105.897 %	105.387 %	0.193 ppb	15.703 ppb	17.171 ppb	0.338 ppb	19.642 ppb	21.262 ppb	99.623 %
Concentration RSD	3.9 %	6.6 %	7.9 %	76.2 %	4.9 %	591.0 %	66.9 %	23.8 %	0.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.184 ppb	0.141 ppb	0.409 ppb	18.632 ppb	0.238 ppb	0.177 ppb	0.253 ppb	0.159 ppb	99.013 %
Concentration per Run 1	0.081 ppb	0.109 ppb	0.420 ppb	18.552 ppb	0.179 ppb	0.154 ppb	0.253 ppb	0.156 ppb	104.100 %
Concentration per Run 2	0.290 ppb	0.161 ppb	0.488 ppb	14.523 ppb	0.306 ppb	0.158 ppb	0.241 ppb	0.178 ppb	95.177 %
Concentration per Run 3	0.181 ppb	0.152 ppb	0.318 ppb	22.820 ppb	0.229 ppb	0.221 ppb	0.265 ppb	0.144 ppb	97.761 %
Concentration RSD	56.7 %	19.6 %	21.0 %	22.3 %	26.9 %	21.4 %	4.8 %	10.9 %	4.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.239 ppb	0.340 ppb	0.206 ppb	0.236 ppb	101.192 %	0.188 ppb	0.188 ppb	100.633 %	0.206 ppb
Concentration per Run 1	0.154 ppb	0.176 ppb	0.177 ppb	0.087 ppb	108.730 %	0.178 ppb	0.176 ppb	106.113 %	0.189 ppb
Concentration per Run 2	0.313 ppb	0.638 ppb	0.211 ppb	0.276 ppb	99.440 %	0.205 ppb	0.218 ppb	97.510 %	0.235 ppb
Concentration per Run 3	0.249 ppb	0.206 ppb	0.231 ppb	0.343 ppb	95.405 %	0.180 ppb	0.171 ppb	98.276 %	0.193 ppb
Concentration RSD	33.5 %	76.0 %	13.4 %	56.3 %	6.8 %	7.9 %	13.8 %	4.7 %	12.3 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.151 ppb	101.166 %	101.053 %	0.193 ppb	0.200 ppb	101.796 %
Concentration per Run 1	0.183 ppb	107.723 %	108.279 %	0.175 ppb	0.183 ppb	108.418 %
Concentration per Run 2	0.171 ppb	99.061 %	99.036 %	0.189 ppb	0.213 ppb	101.111 %
Concentration per Run 3	0.099 ppb	96.715 %	95.845 %	0.215 ppb	0.205 ppb	95.859 %
Concentration RSD	30.1 %	5.7 %	6.4 %	10.3 %	7.7 %	6.2 %

Analysis index:	5	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	x1/100 Cal	Rack	0		
Analysis started at:	12/3/2024 6:49:00 AM	Vial	3		

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	6	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	10/1000 Cal	Rack	0		
Analysis started at:	12/3/2024 6:53:28 AM	Vial	4		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	108.169 %	114.703 %	10.081 ppb	988.615 ppb	972.587 ppb	8.824 ppb	960.847 ppb	981.219 ppb	104.420 %
Concentration per Run 1	102.038 %	109.933 %	10.222 ppb	1,015.665 ppb	984.035 ppb	8.528 ppb	995.401 ppb	1,006.579 ppb	101.713 %
Concentration per Run 2	108.714 %	120.876 %	10.171 ppb	944.104 ppb	942.606 ppb	9.252 ppb	916.238 ppb	989.407 ppb	106.159 %
Concentration per Run 3	113.756 %	113.300 %	9.851 ppb	1,006.076 ppb	991.121 ppb	8.691 ppb	970.902 ppb	947.670 ppb	105.390 %
Concentration RSD	5.4 %	4.9 %	2.0 %	3.9 %	2.7 %	4.3 %	4.2 %	3.1 %	2.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	9.543 ppb	9.669 ppb	10.054 ppb	1,014.612 ppb	10.294 ppb	10.134 ppb	9.688 ppb	9.718 ppb	110.287 %
Concentration per Run 1	8.529 ppb	9.467 ppb	9.714 ppb	976.545 ppb	10.057 ppb	9.459 ppb	9.118 ppb	8.879 ppb	116.858 %
Concentration per Run 2	9.456 ppb	9.581 ppb	9.747 ppb	1,055.478 ppb	10.405 ppb	10.325 ppb	10.061 ppb	9.994 ppb	106.291 %
Concentration per Run 3	10.642 ppb	9.958 ppb	10.703 ppb	1,011.811 ppb	10.419 ppb	10.619 ppb	9.884 ppb	10.281 ppb	107.711 %
Concentration RSD	11.1 %	2.7 %	5.6 %	3.9 %	2.0 %	5.9 %	5.2 %	7.6 %	5.2 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	9.204 ppb	9.995 ppb	9.811 ppb	9.494 ppb	107.159 %	9.877 ppb	9.963 ppb	108.964 %	9.722 ppb
Concentration per Run 1	8.452 ppb	8.914 ppb	9.329 ppb	9.004 ppb	110.717 %	9.697 ppb	9.661 ppb	114.479 %	9.097 ppb
Concentration per Run 2	9.393 ppb	10.163 ppb	10.092 ppb	9.579 ppb	103.795 %	9.848 ppb	10.368 ppb	106.466 %	10.079 ppb
Concentration per Run 3	9.766 ppb	10.907 ppb	10.012 ppb	9.900 ppb	106.966 %	10.086 ppb	9.861 ppb	105.949 %	9.990 ppb
Concentration RSD	7.4 %	10.1 %	4.3 %	4.8 %	3.2 %	2.0 %	3.7 %	4.4 %	5.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	9.658 ppb	108.854 %	110.326 %	9.626 ppb	9.824 ppb	110.716 %
Concentration per Run 1	9.422 ppb	110.830 %	110.539 %	9.158 ppb	9.513 ppb	114.683 %
Concentration per Run 2	9.553 ppb	106.765 %	108.315 %	9.720 ppb	9.943 ppb	108.653 %
Concentration per Run 3	9.999 ppb	108.967 %	112.124 %	9.999 ppb	10.017 ppb	108.810 %
Concentration RSD	3.1 %	1.9 %	1.7 %	4.4 %	2.8 %	3.1 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	7	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	60/6000 Cal	Rack	0		
Analysis started at:	12/3/2024 6:57:56 AM	Vial	5		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	107.436 %	115.489 %	59.072 ppb	6,010.919 ppb	5,984.382 ppb	57.287 ppb	6,060.335 ppb	5,807.476 ppb	105.977 %
Concentration per Run 1	102.043 %	115.994 %	60.335 ppb	5,965.521 ppb	5,991.824 ppb	54.666 ppb	6,000.335 ppb	5,673.083 ppb	105.249 %
Concentration per Run 2	109.967 %	113.300 %	58.867 ppb	6,194.979 ppb	6,178.611 ppb	58.507 ppb	6,069.637 ppb	5,841.937 ppb	106.294 %
Concentration per Run 3	110.299 %	117.172 %	58.015 ppb	5,872.258 ppb	5,782.710 ppb	58.688 ppb	6,111.034 ppb	5,907.409 ppb	106.387 %
Concentration RSD	4.4 %	1.7 %	2.0 %	2.8 %	3.3 %	4.0 %	0.9 %	2.1 %	0.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	58.527 ppb	59.478 ppb	59.947 ppb	5,805.118 ppb	59.032 ppb	59.879 ppb	59.730 ppb	59.572 ppb	109.833 %
Concentration per Run 1	57.412 ppb	57.784 ppb	59.234 ppb	5,683.851 ppb	59.003 ppb	59.754 ppb	60.801 ppb	59.520 ppb	112.341 %
Concentration per Run 2	59.892 ppb	61.299 ppb	61.964 ppb	5,945.620 ppb	62.288 ppb	62.311 ppb	61.768 ppb	61.155 ppb	106.193 %
Concentration per Run 3	58.278 ppb	59.350 ppb	58.644 ppb	5,785.882 ppb	55.805 ppb	57.573 ppb	56.621 ppb	58.040 ppb	110.964 %
Concentration RSD	2.2 %	3.0 %	3.0 %	2.3 %	5.5 %	4.0 %	4.6 %	2.6 %	2.9 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	58.549 ppb	57.831 ppb	60.095 ppb	57.931 ppb	108.445 %	58.734 ppb	58.987 ppb	110.456 %	58.434 ppb
Concentration per Run 1	58.270 ppb	54.521 ppb	58.933 ppb	57.936 ppb	110.658 %	57.890 ppb	57.219 ppb	112.299 %	57.986 ppb
Concentration per Run 2	59.822 ppb	61.592 ppb	62.051 ppb	57.642 ppb	105.086 %	60.093 ppb	60.805 ppb	108.712 %	59.503 ppb
Concentration per Run 3	57.555 ppb	57.381 ppb	59.301 ppb	58.214 ppb	109.591 %	58.218 ppb	58.937 ppb	110.357 %	57.814 ppb
Concentration RSD	2.0 %	6.1 %	2.8 %	0.5 %	2.7 %	2.0 %	3.0 %	1.6 %	1.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	59.773 ppb	110.766 %	110.304 %	59.435 ppb	58.856 ppb	111.548 %
Concentration per Run 1	59.889 ppb	111.334 %	112.724 %	57.047 ppb	57.188 ppb	113.777 %
Concentration per Run 2	60.240 ppb	110.940 %	109.337 %	59.345 ppb	58.710 ppb	111.517 %
Concentration per Run 3	59.192 ppb	110.026 %	108.850 %	61.912 ppb	60.669 ppb	109.349 %
Concentration RSD	0.9 %	0.6 %	1.9 %	4.1 %	3.0 %	2.0 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	8	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	120/12000 Cal	Rack	0		
Analysis started at:	12/3/2024 7:02:24 AM	Vial	6		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	106.282 %	117.789 %	120.457 ppb	11,995.681 ppb	12,010.072 ppb	121.454 ppb	11,973.067 ppb	12,097.757 ppb	105.511 %
Concentration per Run 1	101.938 %	116.835 %	121.657 ppb	12,133.129 ppb	12,006.586 ppb	122.091 ppb	12,054.382 ppb	11,825.498 ppb	103.459 %
Concentration per Run 2	107.728 %	118.182 %	119.257 ppb	11,363.624 ppb	11,940.287 ppb	121.251 ppb	12,335.024 ppb	12,189.272 ppb	106.151 %
Concentration per Run 3	109.180 %	118.351 %	120.456 ppb	12,490.290 ppb	12,083.344 ppb	121.020 ppb	11,529.797 ppb	12,278.500 ppb	106.924 %
Concentration RSD	3.6 %	0.7 %	1.0 %	4.8 %	0.6 %	0.5 %	3.4 %	2.0 %	1.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	120.779 ppb	120.289 ppb	120.021 ppb	12,096.115 ppb	120.460 ppb	120.049 ppb	120.161 ppb	120.236 ppb	110.009 %
Concentration per Run 1	116.474 ppb	115.939 ppb	117.830 ppb	11,970.698 ppb	116.239 ppb	119.061 ppb	118.071 ppb	118.586 ppb	112.989 %
Concentration per Run 2	118.771 ppb	119.839 ppb	123.436 ppb	12,159.258 ppb	124.667 ppb	118.443 ppb	120.642 ppb	120.769 ppb	107.761 %
Concentration per Run 3	127.091 ppb	125.090 ppb	118.797 ppb	12,158.389 ppb	120.473 ppb	122.642 ppb	121.769 ppb	121.353 ppb	109.277 %
Concentration RSD	4.6 %	3.8 %	2.5 %	0.9 %	3.5 %	1.9 %	1.6 %	1.2 %	2.4 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	120.791 ppb	121.084 ppb	119.968 ppb	121.074 ppb	109.504 %	120.643 ppb	120.509 ppb	110.297 %	120.805 ppb
Concentration per Run 1	118.313 ppb	116.849 ppb	116.190 ppb	115.237 ppb	115.739 %	117.864 ppb	116.108 ppb	114.052 %	117.033 ppb
Concentration per Run 2	122.843 ppb	124.326 ppb	120.828 ppb	124.550 ppb	107.992 %	121.186 ppb	123.194 ppb	106.988 %	123.906 ppb
Concentration per Run 3	121.218 ppb	122.076 ppb	122.887 ppb	123.434 ppb	104.781 %	122.880 ppb	122.226 ppb	109.851 %	121.477 ppb
Concentration RSD	1.9 %	3.2 %	2.9 %	4.2 %	5.1 %	2.1 %	3.2 %	3.2 %	2.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	120.142 ppb	111.645 %	112.452 %	120.312 ppb	120.586 ppb	112.599 %
Concentration per Run 1	113.771 ppb	116.074 %	117.207 %	113.888 ppb	114.809 ppb	116.999 %
Concentration per Run 2	122.390 ppb	109.737 %	109.138 %	125.604 ppb	124.155 ppb	109.395 %
Concentration per Run 3	124.263 ppb	109.125 %	111.013 %	121.445 ppb	122.796 ppb	111.402 %
Concentration RSD	4.7 %	3.4 %	3.8 %	4.9 %	4.2 %	3.5 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	9	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	1/100 Cal	Rack	0		
Analysis started at:	12/3/2024 7:07:58 AM	Vial	3		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	107.604 %	117.228 %	1.053 ppb	78.431 ppb	102.901 ppb	1.067 ppb	103.585 ppb	109.031 ppb	101.882 %
Concentration per Run 1	103.051 %	119.866 %	1.043 ppb	72.238 ppb	99.295 ppb	0.806 ppb	84.461 ppb	112.934 ppb	101.619 %
Concentration per Run 2	109.674 %	117.340 %	1.057 ppb	80.023 ppb	99.504 ppb	0.756 ppb	111.316 ppb	82.034 ppb	103.098 %
Concentration per Run 3	110.085 %	114.478 %	1.058 ppb	83.030 ppb	109.904 ppb	1.639 ppb	114.977 ppb	132.126 ppb	100.929 %
Concentration RSD	3.7 %	2.3 %	0.8 %	7.1 %	5.9 %	46.5 %	16.1 %	23.2 %	1.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.509 ppb	0.977 ppb	1.058 ppb	113.297 ppb	0.967 ppb	1.023 ppb	1.036 ppb	1.219 ppb	106.462 %
Concentration per Run 1	0.408 ppb	0.881 ppb	0.990 ppb	120.917 ppb	0.976 ppb	0.917 ppb	1.075 ppb	1.147 ppb	107.074 %
Concentration per Run 2	0.479 ppb	1.001 ppb	1.032 ppb	102.816 ppb	0.948 ppb	1.145 ppb	0.908 ppb	1.160 ppb	104.235 %
Concentration per Run 3	0.640 ppb	1.050 ppb	1.152 ppb	116.160 ppb	0.976 ppb	1.007 ppb	1.125 ppb	1.349 ppb	108.078 %
Concentration RSD	23.3 %	8.9 %	8.0 %	8.3 %	1.7 %	11.2 %	10.9 %	9.3 %	1.9 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	1.055 ppb	1.088 ppb	0.997 ppb	1.387 ppb	110.221 %	1.004 ppb	1.013 ppb	108.737 %	1.101 ppb
Concentration per Run 1	0.942 ppb	0.927 ppb	0.985 ppb	1.190 ppb	112.081 %	0.992 ppb	0.982 ppb	107.630 %	1.046 ppb
Concentration per Run 2	1.022 ppb	1.245 ppb	1.008 ppb	1.295 ppb	109.933 %	1.032 ppb	1.014 ppb	110.730 %	1.116 ppb
Concentration per Run 3	1.200 ppb	1.093 ppb	0.999 ppb	1.676 ppb	108.648 %	0.987 ppb	1.042 ppb	107.853 %	1.139 ppb
Concentration RSD	12.5 %	14.6 %	1.2 %	18.4 %	1.6 %	2.5 %	3.0 %	1.6 %	4.4 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	1.034 ppb	113.222 %	110.657 %	1.188 ppb	1.041 ppb	114.126 %
Concentration per Run 1	0.999 ppb	115.356 %	112.269 %	1.148 ppb	1.053 ppb	116.303 %
Concentration per Run 2	1.130 ppb	111.844 %	109.063 %	1.212 ppb	1.033 ppb	112.112 %
Concentration per Run 3	0.972 ppb	112.466 %	110.639 %	1.204 ppb	1.037 ppb	113.962 %
Concentration RSD	8.2 %	1.7 %	1.4 %	2.9 %	1.1 %	1.8 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	10	User name	ALPHALAB\a2-icpmsq2	Comment	Sr Inteference Check
Analysis label:	Sr 200ppb	Rack	4		
Analysis started at:	12/3/2024 7:13:05 AM	Vial	55		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	108.497 %	114.703 %	0.007 ppb	-15.233 ppb	1.640 ppb	0.146 ppb	-1.545 ppb	-5.064 ppb	101.065 %
Concentration per Run 1	105.066 %	119.866 %	0.007 ppb	-21.019 ppb	1.669 ppb	0.237 ppb	-5.380 ppb	102.590 ppb	98.221 %
Concentration per Run 2	109.717 %	108.418 %	0.007 ppb	-7.878 ppb	1.910 ppb	0.049 ppb	-1.327 ppb	-119.648 ppb	102.036 %
Concentration per Run 3	110.708 %	115.825 %	0.005 ppb	-16.802 ppb	1.341 ppb	0.154 ppb	2.072 ppb	1.865 ppb	102.939 %
Concentration RSD	2.8 %	5.1 %	15.3 %	44.0 %	17.4 %	64.3 %	241.5 %	2,197.3 %	2.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.442 ppb	-0.043 ppb	0.060 ppb	2.660 ppb	0.009 ppb	-0.027 ppb	0.055 ppb	0.439 ppb	109.751 %
Concentration per Run 1	-0.424 ppb	-0.067 ppb	0.034 ppb	2.259 ppb	0.008 ppb	-0.020 ppb	0.029 ppb	0.370 ppb	108.843 %
Concentration per Run 2	-0.476 ppb	-0.005 ppb	0.069 ppb	2.982 ppb	0.012 ppb	-0.038 ppb	0.068 ppb	0.526 ppb	107.474 %
Concentration per Run 3	-0.426 ppb	-0.056 ppb	0.078 ppb	2.739 ppb	0.008 ppb	-0.022 ppb	0.069 ppb	0.422 ppb	112.936 %
Concentration RSD	6.6 %	77.5 %	38.2 %	13.8 %	24.6 %	38.2 %	41.4 %	18.0 %	2.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.019 ppb	0.040 ppb	192.217 ppb	0.102 ppb	110.959 %	0.003 ppb	0.006 ppb	109.681 %	0.014 ppb
Concentration per Run 1	0.038 ppb	-0.010 ppb	190.666 ppb	0.058 ppb	115.276 %	0.001 ppb	0.000 ppb	115.572 %	0.014 ppb
Concentration per Run 2	0.058 ppb	0.090 ppb	196.208 ppb	0.137 ppb	107.685 %	0.005 ppb	0.010 ppb	108.559 %	0.012 ppb
Concentration per Run 3	-0.037 ppb	0.039 ppb	189.776 ppb	0.112 ppb	109.915 %	0.003 ppb	0.007 ppb	104.914 %	0.016 ppb
Concentration RSD	259.3 %	125.5 %	1.8 %	39.6 %	3.5 %	70.4 %	91.3 %	4.9 %	13.8 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.041 ppb	111.960 %	111.655 %	0.059 ppb	0.007 ppb	114.043 %
Concentration per Run 1	0.056 ppb	114.764 %	114.976 %	0.044 ppb	0.006 ppb	118.358 %
Concentration per Run 2	0.033 ppb	111.470 %	110.213 %	0.068 ppb	0.008 ppb	111.689 %
Concentration per Run 3	0.035 ppb	109.647 %	109.775 %	0.067 ppb	0.006 ppb	112.081 %
Concentration RSD	30.8 %	2.3 %	2.6 %	22.9 %	15.6 %	3.3 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index: 11
Analysis label: ICV
Analysis started at: 12/3/2024 7:17:37 AM
User name ALPHALAB\a2-icpmsq2
Rack 0
Vial 7
Comment ICV

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	109.072 %	118.519 %	50.716 ppb	4,996.226 ppb	4,988.412 ppb	51.554 ppb	4,909.971 ppb	5,109.176 ppb	102.856 %
Concentration per Run 1	102.525 %	113.805 %	51.097 ppb	5,162.262 ppb	5,064.520 ppb	53.484 ppb	5,115.019 ppb	5,380.848 ppb	103.584 %
Concentration per Run 2	111.132 %	117.509 %	50.051 ppb	5,000.255 ppb	5,008.072 ppb	51.611 ppb	4,821.562 ppb	5,037.067 ppb	102.341 %
Concentration per Run 3	113.560 %	124.243 %	51.001 ppb	4,826.161 ppb	4,892.643 ppb	49.568 ppb	4,793.334 ppb	4,909.612 ppb	102.642 %
Recovery Percentage 1			101.433 %	99.925 %	99.768 %	103.108 %	98.199 %	102.184 %	
Concentration RSD	5.3 %	4.5 %	1.1 %	3.4 %	1.8 %	3.8 %	3.6 %	4.8 %	0.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	50.687 ppb	50.623 ppb	52.437 ppb	5,071.545 ppb	51.024 ppb	50.459 ppb	51.657 ppb	54.202 ppb	109.683 %
Concentration per Run 1	51.681 ppb	51.147 ppb	50.828 ppb	5,051.567 ppb	51.282 ppb	50.804 ppb	52.094 ppb	54.456 ppb	109.291 %
Concentration per Run 2	50.014 ppb	50.052 ppb	53.613 ppb	5,102.597 ppb	52.063 ppb	51.035 ppb	52.859 ppb	55.649 ppb	109.028 %
Concentration per Run 3	50.367 ppb	50.672 ppb	52.871 ppb	5,060.469 ppb	49.727 ppb	49.537 ppb	50.018 ppb	52.501 ppb	110.731 %
Recovery Percentage 1	101.374 %	101.247 %	104.875 %	101.431 %	102.048 %	100.918 %	103.314 %	108.404 %	
Concentration RSD	1.7 %	1.1 %	2.8 %	0.5 %	2.3 %	1.6 %	2.8 %	2.9 %	0.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	50.413 ppb	50.246 ppb	50.176 ppb	50.168 ppb	110.051 %	52.450 ppb	50.444 ppb	110.608 %	50.217 ppb
Concentration per Run 1	51.134 ppb	49.453 ppb	49.814 ppb	50.119 ppb	114.225 %	51.780 ppb	48.684 ppb	113.398 %	49.068 ppb
Concentration per Run 2	50.395 ppb	52.753 ppb	50.057 ppb	50.767 ppb	110.298 %	52.400 ppb	51.226 ppb	108.038 %	50.716 ppb
Concentration per Run 3	49.709 ppb	48.534 ppb	50.656 ppb	49.619 ppb	105.629 %	53.169 ppb	51.421 ppb	110.389 %	50.869 ppb
Recovery Percentage 1	100.825 %	100.493 %	100.351 %	100.337 %		104.899 %	100.888 %		100.435 %
Concentration RSD	1.4 %	4.4 %	0.9 %	1.1 %	3.9 %	1.3 %	3.0 %	2.4 %	2.0 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	50.429 ppb	113.058 %	112.168 %	50.283 ppb	50.543 ppb	114.001 %
Concentration per Run 1	48.673 ppb	115.116 %	115.481 %	49.075 ppb	49.529 ppb	116.057 %
Concentration per Run 2	51.300 ppb	114.274 %	110.007 %	49.795 ppb	50.831 ppb	112.174 %
Concentration per Run 3	51.315 ppb	109.783 %	111.017 %	51.979 ppb	51.268 ppb	113.773 %
Recovery Percentage 1	100.859 %			100.566 %	101.085 %	
Concentration RSD	3.0 %	2.5 %	2.6 %	3.0 %	1.8 %	1.7 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	12	User name	ALPHALAB\a2-icpmsq2	Comment	ICB
Analysis label:	ICB	Rack	0		
Analysis started at:	12/3/2024 7:22:07 AM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	109.773 %	112.739 %	0.020 ppb	-26.475 ppb	-0.118 ppb	0.344 ppb	-14.441 ppb	-6.774 ppb	101.144 %
Concentration per Run 1	104.764 %	118.856 %	0.018 ppb	-34.489 ppb	-1.113 ppb	0.348 ppb	-19.930 ppb	-0.991 ppb	100.400 %
Concentration per Run 2	110.940 %	107.744 %	0.030 ppb	-20.137 ppb	0.099 ppb	0.096 ppb	-12.884 ppb	-17.184 ppb	101.521 %
Concentration per Run 3	113.616 %	111.616 %	0.012 ppb	-24.798 ppb	0.660 ppb	0.589 ppb	-10.507 ppb	-2.148 ppb	101.512 %
Recovery Percentage 1			4.011 %	-5.295 %	-0.169 %	3.441 %	-14.441 %	-6.774 %	
Concentration RSD	4.1 %	5.0 %	44.3 %	27.7 %	768.0 %	71.7 %	33.9 %	133.4 %	0.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.426 ppb	-0.036 ppb	0.004 ppb	4.442 ppb	0.000 ppb	-0.016 ppb	0.022 ppb	0.302 ppb	110.215 %
Concentration per Run 1	-0.483 ppb	-0.020 ppb	-0.012 ppb	5.807 ppb	-0.001 ppb	0.021 ppb	-0.008 ppb	0.324 ppb	111.116 %
Concentration per Run 2	-0.479 ppb	-0.050 ppb	0.005 ppb	2.304 ppb	-0.007 ppb	-0.041 ppb	0.029 ppb	0.330 ppb	111.210 %
Concentration per Run 3	-0.315 ppb	-0.039 ppb	0.021 ppb	5.214 ppb	0.008 ppb	-0.029 ppb	0.045 ppb	0.253 ppb	108.319 %
Recovery Percentage 1	-8.511 %	-3.608 %	0.450 %	8.883 %	0.023 %	-0.804 %	2.182 %	6.049 %	
Concentration RSD	22.5 %	42.6 %	365.3 %	42.2 %	6,888.7 %	203.6 %	124.1 %	14.1 %	1.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	-0.007 ppb	0.234 ppb	0.007 ppb	0.392 ppb	110.130 %	0.006 ppb	0.003 ppb	107.631 %	0.067 ppb
Concentration per Run 1	-0.057 ppb	0.362 ppb	0.007 ppb	0.235 ppb	113.780 %	0.006 ppb	0.003 ppb	107.044 %	0.043 ppb
Concentration per Run 2	-0.005 ppb	0.165 ppb	0.008 ppb	0.466 ppb	109.860 %	0.002 ppb	0.007 ppb	103.760 %	0.070 ppb
Concentration per Run 3	0.040 ppb	0.175 ppb	0.006 ppb	0.476 ppb	106.752 %	0.009 ppb	0.000 ppb	112.089 %	0.089 ppb
Recovery Percentage 1	-1.408 %	4.679 %	0.071 %	19.612 %		1.418 %	1.728 %		1.677 %
Concentration RSD	687.2 %	47.6 %	10.3 %	34.8 %	3.2 %	61.2 %	101.1 %	3.9 %	34.5 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.007 ppb	113.487 %	110.653 %	0.189 ppb	0.012 ppb	111.857 %
Concentration per Run 1	-0.019 ppb	115.745 %	114.616 %	0.186 ppb	0.011 ppb	113.439 %
Concentration per Run 2	0.035 ppb	109.783 %	107.778 %	0.208 ppb	0.013 ppb	112.433 %
Concentration per Run 3	0.006 ppb	114.933 %	109.566 %	0.173 ppb	0.012 ppb	109.699 %
Recovery Percentage 1	1.465 %			18.925 %	1.177 %	
Concentration RSD	367.6 %	2.8 %	3.2 %	9.3 %	8.7 %	1.7 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	13	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	ICSA	Rack	4		
Analysis started at:	12/3/2024 7:28:46 AM	Vial	53		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	77.425 %	100.898 %	0.026 ppb	260,283.423 ppb	95,027.936 ppb	95,923.619 ppb	92,602.726 ppb	279,901.564 ppb	74.611 %
Concentration per Run 1	76.603 %	104.209 %	0.035 ppb	252,576.654 ppb	95,674.151 ppb	93,358.091 ppb	93,182.641 ppb	275,266.545 ppb	73.296 %
Concentration per Run 2	78.021 %	99.832 %	0.019 ppb	259,612.046 ppb	93,135.872 ppb	95,693.955 ppb	96,072.311 ppb	281,448.725 ppb	75.258 %
Concentration per Run 3	77.651 %	98.653 %	0.024 ppb	268,661.568 ppb	96,273.785 ppb	98,718.812 ppb	88,553.225 ppb	282,989.421 ppb	75.281 %
Recovery Percentage 1			2.617 %	104.113 %	95.028 %	95.924 %	92.603 %	93.301 %	
Concentration RSD	0.9 %	2.9 %	30.8 %	3.1 %	1.8 %	2.8 %	4.1 %	1.5 %	1.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.397 ppb	1.510 ppb	4.347 ppb	235,073.825 ppb	2.043 ppb	2.743 ppb	0.950 ppb	3.435 ppb	108.055 %
Concentration per Run 1	-0.356 ppb	1.415 ppb	4.324 ppb	236,338.259 ppb	2.054 ppb	2.666 ppb	1.017 ppb	3.617 ppb	110.179 %
Concentration per Run 2	-0.470 ppb	1.528 ppb	4.565 ppb	244,618.331 ppb	2.033 ppb	3.064 ppb	0.992 ppb	3.441 ppb	105.051 %
Concentration per Run 3	-0.365 ppb	1.589 ppb	4.152 ppb	224,264.885 ppb	2.040 ppb	2.499 ppb	0.842 ppb	3.248 ppb	108.933 %
Recovery Percentage 1	-7.945 %	45.772 %	76.257 %	94.030 %	71.172 %	44.966 %	115.899 %	30.135 %	
Concentration RSD	15.9 %	5.9 %	4.8 %	4.4 %	0.5 %	10.6 %	10.0 %	5.4 %	2.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.526 ppb	3.361 ppb	2.424 ppb	2,131.463 ppb	94.898 %	0.019 ppb	0.525 ppb	104.009 %	0.185 ppb
Concentration per Run 1	0.615 ppb	3.100 ppb	2.361 ppb	2,092.204 ppb	97.544 %	0.012 ppb	0.476 ppb	108.519 %	0.182 ppb
Concentration per Run 2	0.500 ppb	3.527 ppb	2.473 ppb	2,152.090 ppb	91.375 %	0.020 ppb	0.509 ppb	104.656 %	0.185 ppb
Concentration per Run 3	0.465 ppb	3.454 ppb	2.439 ppb	2,150.093 ppb	95.773 %	0.024 ppb	0.589 ppb	98.852 %	0.186 ppb
Recovery Percentage 1	32.299 %	26.051 %	484.786 %	106.573 %		2.318 %	131.142 %		2.307 %
Concentration RSD	14.9 %	6.8 %	2.4 %	1.6 %	3.3 %	32.4 %	11.1 %	4.7 %	1.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	1.311 ppb	105.281 %	101.358 %	0.052 ppb	1.539 ppb	98.793 %
Concentration per Run 1	1.181 ppb	107.132 %	104.218 %	0.037 ppb	1.503 ppb	103.198 %
Concentration per Run 2	1.188 ppb	102.454 %	99.837 %	0.058 ppb	1.566 ppb	97.213 %
Concentration per Run 3	1.565 ppb	106.257 %	100.019 %	0.062 ppb	1.548 ppb	95.968 %
Recovery Percentage 1	69.743 %			2.619 %	49.645 %	
Concentration RSD	16.7 %	2.4 %	2.4 %	26.4 %	2.1 %	3.9 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	14	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	LDR	Rack	4		
Analysis started at:	12/3/2024 7:33:17 AM	Vial	1		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	91.563 %	108.025 %	0.006 ppb	49.368 ppb	3.998 ppb	4.810 ppb	28.275 ppb	9.141 ppb	89.082 %
Concentration per Run 1	89.252 %	106.734 %	0.008 ppb	59.088 ppb	5.209 ppb	5.573 ppb	35.831 ppb	9.944 ppb	88.232 %
Concentration per Run 2	92.187 %	110.101 %	0.004 ppb	44.430 ppb	3.372 ppb	4.227 ppb	22.515 ppb	22.695 ppb	89.602 %
Concentration per Run 3	93.249 %	107.239 %	0.007 ppb	44.588 ppb	3.414 ppb	4.631 ppb	26.481 ppb	-5.217 ppb	89.411 %
Recovery Percentage 1									
Concentration RSD	2.3 %	1.7 %	27.5 %	17.1 %	26.2 %	14.4 %	24.2 %	152.9 %	0.8 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	925.491 ppb	964.981 ppb	9,083.550 ppb	32.988 ppb	0.016 ppb	9,816.044 ppb	9,961.563 ppb	9,467.192 ppb	97.937 %
Concentration per Run 1	930.436 ppb	984.825 ppb	9,192.936 ppb	32.478 ppb	0.021 ppb	9,932.172 ppb	10,267.736 ppb	9,604.056 ppb	93.933 %
Concentration per Run 2	930.791 ppb	953.733 ppb	9,074.874 ppb	31.844 ppb	0.010 ppb	9,703.260 ppb	9,946.986 ppb	9,515.339 ppb	97.750 %
Concentration per Run 3	915.244 ppb	956.385 ppb	8,982.839 ppb	34.643 ppb	0.016 ppb	9,812.698 ppb	9,669.966 ppb	9,282.180 ppb	102.130 %
Recovery Percentage 1	92.549 %	96.498 %	90.835 %			98.160 %	99.616 %	94.672 %	
Concentration RSD	1.0 %	1.8 %	1.2 %	4.4 %	35.6 %	1.2 %	3.0 %	1.8 %	4.2 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	904.370 ppb	2.342 ppb	0.240 ppb	4.413 ppb	101.381 %	0.114 ppb	0.029 ppb	97.220 %	0.029 ppb
Concentration per Run 1	908.778 ppb	2.361 ppb	0.245 ppb	3.449 ppb	105.832 %	0.106 ppb	0.022 ppb	98.870 %	0.025 ppb
Concentration per Run 2	921.059 ppb	2.292 ppb	0.222 ppb	4.441 ppb	98.003 %	0.107 ppb	0.031 ppb	95.258 %	0.024 ppb
Concentration per Run 3	883.273 ppb	2.374 ppb	0.254 ppb	5.350 ppb	100.309 %	0.129 ppb	0.034 ppb	97.533 %	0.037 ppb
Recovery Percentage 1	90.437 %								
Concentration RSD	2.1 %	1.9 %	6.9 %	21.5 %	4.0 %	11.3 %	21.4 %	1.9 %	26.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	9,782.000 ppb	99.911 %	97.335 %	0.057 ppb	9,928.163 ppb	100.110 %
Concentration per Run 1	10,021.895 ppb	99.184 %	97.443 %	0.057 ppb	9,801.199 ppb	100.374 %
Concentration per Run 2	9,217.024 ppb	100.550 %	98.028 %	0.056 ppb	10,086.648 ppb	98.549 %
Concentration per Run 3	10,107.080 ppb	100.001 %	96.534 %	0.057 ppb	9,896.640 ppb	101.408 %
Recovery Percentage 1	97.820 %				99.282 %	
Concentration RSD	5.0 %	0.7 %	0.8 %	1.1 %	1.5 %	1.4 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	15	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	Rinse	Rack	0		
Analysis started at:	12/3/2024 7:37:47 AM	Vial	1		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	100.788 %	110.382 %	0.017 ppb	39.912 ppb	5.670 ppb	10.397 ppb	25.473 ppb	19.955 ppb	102.010 %
Concentration per Run 1	96.880 %	118.856 %	0.024 ppb	23.922 ppb	5.366 ppb	8.545 ppb	13.801 ppb	2.393 ppb	100.133 %
Concentration per Run 2	102.505 %	103.704 %	0.015 ppb	44.003 ppb	4.834 ppb	9.710 ppb	26.792 ppb	25.210 ppb	101.012 %
Concentration per Run 3	102.979 %	108.586 %	0.014 ppb	51.809 ppb	6.812 ppb	12.936 ppb	35.826 ppb	32.262 ppb	104.884 %
Concentration RSD	3.4 %	7.0 %	31.4 %	36.0 %	18.0 %	21.9 %	43.5 %	78.2 %	2.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.406 ppb	0.155 ppb	0.942 ppb	77.426 ppb	0.014 ppb	3.504 ppb	2.104 ppb	2.973 ppb	100.790 %
Concentration per Run 1	-0.520 ppb	0.138 ppb	0.799 ppb	70.803 ppb	0.025 ppb	3.393 ppb	2.014 ppb	2.650 ppb	100.267 %
Concentration per Run 2	-0.274 ppb	0.183 ppb	0.874 ppb	80.483 ppb	0.013 ppb	3.512 ppb	1.949 ppb	2.920 ppb	99.503 %
Concentration per Run 3	-0.425 ppb	0.144 ppb	1.152 ppb	80.993 ppb	0.003 ppb	3.609 ppb	2.349 ppb	3.350 ppb	102.601 %
Concentration RSD	30.6 %	15.9 %	19.8 %	7.4 %	81.0 %	3.1 %	10.2 %	11.9 %	1.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.586 ppb	0.055 ppb	0.012 ppb	0.951 ppb	101.840 %	0.036 ppb	0.001 ppb	97.283 %	0.017 ppb
Concentration per Run 1	0.670 ppb	0.026 ppb	0.016 ppb	0.542 ppb	104.717 %	0.035 ppb	0.000 ppb	99.722 %	0.009 ppb
Concentration per Run 2	0.637 ppb	-0.051 ppb	0.003 ppb	0.862 ppb	100.671 %	0.035 ppb	0.000 ppb	96.206 %	0.018 ppb
Concentration per Run 3	0.450 ppb	0.191 ppb	0.017 ppb	1.449 ppb	100.133 %	0.037 ppb	0.004 ppb	95.921 %	0.026 ppb
Concentration RSD	20.2 %	223.3 %	62.7 %	48.3 %	2.5 %	2.4 %	173.2 %	2.2 %	48.5 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.475 ppb	99.889 %	99.173 %	0.019 ppb	2.074 ppb	101.436 %
Concentration per Run 1	0.293 ppb	102.762 %	101.038 %	0.006 ppb	2.041 ppb	104.116 %
Concentration per Run 2	0.231 ppb	99.287 %	97.918 %	0.025 ppb	1.691 ppb	99.055 %
Concentration per Run 3	0.902 ppb	97.617 %	98.563 %	0.025 ppb	2.490 ppb	101.135 %
Concentration RSD	78.0 %	2.6 %	1.7 %	57.8 %	19.3 %	2.5 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	16	User name	ALPHALAB\a2-icpmsq2	Comment	CCV/MCCV
Analysis label:	CCV	Rack	0		
Analysis started at:	12/3/2024 7:42:14 AM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	98.136 %	117.060 %	62.968 ppb	5,957.011 ppb	5,879.006 ppb	56.114 ppb	5,802.825 ppb	5,773.221 ppb	95.802 %
Concentration per Run 1	93.545 %	122.559 %	63.991 ppb	5,588.736 ppb	5,503.076 ppb	55.489 ppb	5,779.047 ppb	5,622.254 ppb	93.746 %
Concentration per Run 2	99.410 %	115.657 %	61.914 ppb	6,116.184 ppb	6,040.797 ppb	56.094 ppb	5,686.175 ppb	5,655.660 ppb	97.142 %
Concentration per Run 3	101.453 %	112.963 %	62.998 ppb	6,166.114 ppb	6,093.145 ppb	56.758 ppb	5,943.252 ppb	6,041.749 ppb	96.517 %
Recovery Percentage 1			104.946 %	99.284 %	97.983 %	93.523 %	96.714 %	96.220 %	
Concentration RSD	4.2 %	4.2 %	1.7 %	5.4 %	5.6 %	1.1 %	2.2 %	4.0 %	1.9 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	58.535 ppb	60.642 ppb	60.871 ppb	6,065.390 ppb	62.390 ppb	62.611 ppb	63.040 ppb	62.574 ppb	101.855 %
Concentration per Run 1	54.652 ppb	56.785 ppb	60.817 ppb	5,877.408 ppb	62.033 ppb	60.043 ppb	61.531 ppb	59.520 ppb	103.989 %
Concentration per Run 2	60.392 ppb	61.788 ppb	61.022 ppb	6,188.382 ppb	63.499 ppb	65.667 ppb	65.361 ppb	65.987 ppb	100.338 %
Concentration per Run 3	60.560 ppb	63.354 ppb	60.773 ppb	6,130.381 ppb	61.637 ppb	62.124 ppb	62.229 ppb	62.215 ppb	101.238 %
Recovery Percentage 1	97.558 %	101.071 %	101.451 %	101.090 %	103.983 %	104.352 %	105.067 %	104.290 %	
Concentration RSD	5.7 %	5.7 %	0.2 %	2.7 %	1.6 %	4.5 %	3.2 %	5.2 %	1.9 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	60.716 ppb	56.720 ppb	60.036 ppb	61.404 ppb	101.326 %	62.186 ppb	62.309 ppb	99.554 %	61.536 ppb
Concentration per Run 1	60.283 ppb	53.891 ppb	58.798 ppb	60.166 ppb	104.613 %	60.764 ppb	61.816 ppb	100.133 %	61.254 ppb
Concentration per Run 2	61.156 ppb	58.188 ppb	60.630 ppb	62.085 ppb	99.686 %	61.713 ppb	61.963 ppb	99.368 %	61.673 ppb
Concentration per Run 3	60.710 ppb	58.081 ppb	60.679 ppb	61.961 ppb	99.678 %	64.082 ppb	63.149 ppb	99.162 %	61.681 ppb
Recovery Percentage 1	101.194 %	94.534 %	100.059 %	102.340 %		103.644 %	103.849 %		102.560 %
Concentration RSD	0.7 %	4.3 %	1.8 %	1.7 %	2.8 %	2.7 %	1.2 %	0.5 %	0.4 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	60.769 ppb	104.360 %	101.665 %	62.292 ppb	62.750 ppb	102.010 %
Concentration per Run 1	59.858 ppb	107.228 %	104.106 %	61.333 ppb	61.783 ppb	103.617 %
Concentration per Run 2	59.796 ppb	102.769 %	98.174 %	62.516 ppb	63.597 ppb	100.620 %
Concentration per Run 3	62.652 ppb	103.084 %	102.715 %	63.029 ppb	62.871 ppb	101.795 %
Recovery Percentage 1	101.281 %			103.821 %	104.584 %	
Concentration RSD	2.7 %	2.4 %	3.1 %	1.4 %	1.5 %	1.5 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	17	User name	ALPHALAB\a2-icpmsq2	Comment	CCB
Analysis label:	CCB	Rack	0		
Analysis started at:	12/3/2024 7:46:45 AM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	97.755 %	116.106 %	0.095 ppb	-3.567 ppb	0.138 ppb	0.196 ppb	-0.022 ppb	-5.582 ppb	95.506 %
Concentration per Run 1	93.206 %	116.330 %	0.132 ppb	-3.977 ppb	0.265 ppb	0.012 ppb	-0.289 ppb	-10.176 ppb	94.760 %
Concentration per Run 2	100.347 %	110.943 %	0.100 ppb	6.059 ppb	0.129 ppb	0.404 ppb	5.263 ppb	-0.276 ppb	96.356 %
Concentration per Run 3	99.713 %	121.044 %	0.055 ppb	-12.782 ppb	0.021 ppb	0.170 ppb	-5.040 ppb	-6.294 ppb	95.402 %
Recovery Percentage 1			19.078 %	-0.713 %	0.198 %	1.956 %	-0.022 %	-5.582 %	
Concentration RSD	4.0 %	4.4 %	40.7 %	264.3 %	88.2 %	100.9 %	23,443.7 %	89.4 %	0.8 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.526 ppb	-0.014 ppb	0.077 ppb	6.763 ppb	-0.001 ppb	0.023 ppb	0.542 ppb	0.280 ppb	96.074 %
Concentration per Run 1	-0.470 ppb	-0.023 ppb	0.010 ppb	6.368 ppb	-0.007 ppb	0.016 ppb	0.564 ppb	0.335 ppb	96.229 %
Concentration per Run 2	-0.514 ppb	-0.001 ppb	0.099 ppb	5.362 ppb	-0.003 ppb	-0.004 ppb	0.567 ppb	0.271 ppb	93.608 %
Concentration per Run 3	-0.596 ppb	-0.018 ppb	0.122 ppb	8.558 ppb	0.006 ppb	0.058 ppb	0.494 ppb	0.235 ppb	98.384 %
Recovery Percentage 1	-10.529 %	-1.407 %	7.673 %	13.525 %	-0.242 %	1.156 %	54.152 %	5.601 %	
Concentration RSD	12.2 %	82.6 %	77.1 %	24.2 %	549.7 %	138.1 %	7.6 %	18.1 %	2.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.153 ppb	0.188 ppb	0.010 ppb	0.461 ppb	100.751 %	0.011 ppb	0.005 ppb	95.900 %	0.041 ppb
Concentration per Run 1	0.170 ppb	0.266 ppb	0.011 ppb	0.322 ppb	101.606 %	0.010 ppb	0.004 ppb	94.819 %	0.035 ppb
Concentration per Run 2	0.120 ppb	0.095 ppb	-0.001 ppb	0.420 ppb	98.831 %	0.013 ppb	0.004 ppb	95.202 %	0.038 ppb
Concentration per Run 3	0.169 ppb	0.203 ppb	0.020 ppb	0.641 ppb	101.817 %	0.010 ppb	0.007 ppb	97.680 %	0.050 ppb
Recovery Percentage 1	30.584 %	3.759 %	0.103 %	23.056 %		2.732 %	2.516 %		1.023 %
Concentration RSD	18.7 %	46.0 %	101.3 %	35.5 %	1.7 %	13.3 %	41.8 %	1.6 %	19.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.039 ppb	101.528 %	99.288 %	0.217 ppb	0.291 ppb	99.717 %
Concentration per Run 1	0.068 ppb	102.343 %	100.864 %	0.203 ppb	0.296 ppb	102.367 %
Concentration per Run 2	0.025 ppb	100.832 %	98.444 %	0.245 ppb	0.307 ppb	98.242 %
Concentration per Run 3	0.024 ppb	101.409 %	98.556 %	0.204 ppb	0.270 ppb	98.541 %
Recovery Percentage 1	7.840 %			21.723 %	29.092 %	
Concentration RSD	64.6 %	0.8 %	1.4 %	11.2 %	6.5 %	2.3 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	18	User name	ALPHALAB\a2-icpmsq2	Comment	FB
Analysis label:	I2469249-03 6020SL	Rack	1		
Analysis started at:	12/3/2024 7:57:42 AM	Vial	6		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	103.799 %	116.218 %	0.004 ppb	-11.258 ppb	1.095 ppb	2.638 ppb	0.309 ppb	19.959 ppb	98.443 %
Concentration per Run 1	100.318 %	119.529 %	0.006 ppb	-21.500 ppb	1.361 ppb	2.242 ppb	2.336 ppb	14.875 ppb	95.326 %
Concentration per Run 2	104.060 %	116.330 %	0.004 ppb	-10.231 ppb	1.428 ppb	2.990 ppb	-6.451 ppb	28.936 ppb	98.070 %
Concentration per Run 3	107.018 %	112.795 %	0.004 ppb	-2.042 ppb	0.495 ppb	2.680 ppb	5.043 ppb	16.067 ppb	101.933 %
Concentration RSD	3.2 %	2.9 %	32.6 %	86.8 %	47.6 %	14.3 %	1,942.3 %	39.1 %	3.4 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.497 ppb	0.010 ppb	0.349 ppb	12.543 ppb	0.001 ppb	0.017 ppb	0.704 ppb	0.911 ppb	98.321 %
Concentration per Run 1	-0.489 ppb	-0.001 ppb	0.413 ppb	12.122 ppb	0.006 ppb	0.000 ppb	0.789 ppb	0.821 ppb	99.333 %
Concentration per Run 2	-0.565 ppb	-0.011 ppb	0.324 ppb	11.785 ppb	-0.003 ppb	0.049 ppb	0.652 ppb	0.999 ppb	97.683 %
Concentration per Run 3	-0.438 ppb	0.042 ppb	0.310 ppb	13.722 ppb	0.000 ppb	0.003 ppb	0.670 ppb	0.913 ppb	97.948 %
Concentration RSD	12.8 %	278.0 %	16.1 %	8.3 %	556.7 %	160.8 %	10.5 %	9.7 %	0.9 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.102 ppb	-0.059 ppb	0.112 ppb	0.123 ppb	106.099 %	0.003 ppb	0.005 ppb	102.532 %	0.019 ppb
Concentration per Run 1	0.024 ppb	-0.060 ppb	0.096 ppb	0.063 ppb	109.808 %	0.004 ppb	0.003 ppb	104.745 %	0.013 ppb
Concentration per Run 2	0.096 ppb	-0.066 ppb	0.116 ppb	0.064 ppb	104.524 %	0.001 ppb	0.004 ppb	97.422 %	0.027 ppb
Concentration per Run 3	0.187 ppb	-0.051 ppb	0.123 ppb	0.241 ppb	103.966 %	0.002 ppb	0.007 ppb	105.428 %	0.018 ppb
Concentration RSD	80.3 %	13.0 %	12.7 %	83.6 %	3.0 %	54.5 %	42.2 %	4.3 %	36.5 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.193 ppb	106.203 %	106.136 %	0.030 ppb	0.116 ppb	111.216 %
Concentration per Run 1	0.102 ppb	109.096 %	108.956 %	0.019 ppb	0.114 ppb	114.181 %
Concentration per Run 2	0.236 ppb	105.191 %	103.461 %	0.033 ppb	0.128 ppb	110.354 %
Concentration per Run 3	0.241 ppb	104.323 %	105.990 %	0.038 ppb	0.107 ppb	109.114 %
Concentration RSD	40.9 %	2.4 %	2.6 %	31.8 %	9.4 %	2.4 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	19	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	I2469249-06 6020SL	Rack	1		
Analysis started at:	12/3/2024 8:02:11 AM	Vial	1		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	96.622 %	112.514 %	0.018 ppb	57,895.750 ppb	28,616.545 ppb	11.452 ppb	6,163.590 ppb	120,220.995 ppb	98.632 %
Concentration per Run 1	93.441 %	113.637 %	0.016 ppb	55,771.050 ppb	27,702.289 ppb	11.144 ppb	6,188.566 ppb	121,703.382 ppb	99.291 %
Concentration per Run 2	97.138 %	104.882 %	0.015 ppb	61,592.288 ppb	30,074.490 ppb	11.858 ppb	6,205.202 ppb	119,959.227 ppb	98.622 %
Concentration per Run 3	99.287 %	119.024 %	0.021 ppb	56,323.914 ppb	28,072.856 ppb	11.354 ppb	6,097.003 ppb	119,000.377 ppb	97.984 %
Concentration RSD	3.1 %	6.3 %	15.9 %	5.5 %	4.5 %	3.2 %	0.9 %	1.1 %	0.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.073 ppb	0.130 ppb	2,842.106 ppb	201.054 ppb	5.574 ppb	4.947 ppb	1.965 ppb	2.961 ppb	98.909 %
Concentration per Run 1	0.132 ppb	0.098 ppb	2,906.887 ppb	192.122 ppb	5.482 ppb	4.848 ppb	1.865 ppb	2.925 ppb	100.129 %
Concentration per Run 2	0.091 ppb	0.147 ppb	2,573.498 ppb	201.835 ppb	5.592 ppb	4.850 ppb	2.081 ppb	2.874 ppb	99.948 %
Concentration per Run 3	-0.004 ppb	0.146 ppb	3,045.932 ppb	209.205 ppb	5.647 ppb	5.142 ppb	1.950 ppb	3.084 ppb	96.650 %
Concentration RSD	95.9 %	21.7 %	8.5 %	4.3 %	1.5 %	3.4 %	5.5 %	3.7 %	2.0 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.422 ppb	2.005 ppb	772.012 ppb	4.104 ppb	101.671 %	0.001 ppb	0.070 ppb	103.751 %	1.331 ppb
Concentration per Run 1	0.499 ppb	1.699 ppb	748.964 ppb	4.157 ppb	105.112 %	0.001 ppb	0.070 ppb	105.899 %	1.277 ppb
Concentration per Run 2	0.403 ppb	1.346 ppb	780.085 ppb	3.977 ppb	98.770 %	0.001 ppb	0.067 ppb	99.370 %	1.324 ppb
Concentration per Run 3	0.364 ppb	2.968 ppb	786.987 ppb	4.179 ppb	101.132 %	0.000 ppb	0.074 ppb	105.984 %	1.392 ppb
Concentration RSD	16.5 %	42.5 %	2.6 %	2.7 %	3.2 %	64.6 %	5.2 %	3.7 %	4.4 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	50.904 ppb	107.345 %	107.070 %	0.023 ppb	0.333 ppb	103.176 %
Concentration per Run 1	50.048 ppb	109.386 %	109.147 %	0.012 ppb	0.337 ppb	106.843 %
Concentration per Run 2	52.318 ppb	106.965 %	105.485 %	0.028 ppb	0.326 ppb	101.499 %
Concentration per Run 3	50.346 ppb	105.685 %	106.580 %	0.030 ppb	0.335 ppb	101.185 %
Concentration RSD	2.4 %	1.8 %	1.8 %	42.9 %	1.8 %	3.1 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	20	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG2003419-7d10 6020SL	Rack	1		
Analysis started at:	12/3/2024 8:06:38 AM	Vial	2		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	101.506 %	114.422 %	5.735 ppb	6,976.933 ppb	4,000.102 ppb	248.614 ppb	1,679.115 ppb	13,074.101 ppb	99.150 %
Concentration per Run 1	97.967 %	124.580 %	5.780 ppb	6,533.581 ppb	3,726.763 ppb	231.190 ppb	1,525.745 ppb	12,031.698 ppb	96.836 %
Concentration per Run 2	102.166 %	110.775 %	5.802 ppb	7,172.622 ppb	4,135.505 ppb	257.174 ppb	1,826.722 ppb	13,483.236 ppb	101.176 %
Concentration per Run 3	104.386 %	107.913 %	5.624 ppb	7,224.594 ppb	4,138.037 ppb	257.479 ppb	1,684.878 ppb	13,707.368 ppb	99.436 %
Concentration RSD	3.2 %	7.8 %	1.7 %	5.5 %	5.9 %	6.1 %	9.0 %	7.0 %	2.2 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	50.891 ppb	20.996 ppb	360.497 ppb	138.093 ppb	55.195 ppb	55.222 ppb	28.765 ppb	55.875 ppb	100.577 %
Concentration per Run 1	46.158 ppb	20.426 ppb	353.896 ppb	131.493 ppb	53.198 ppb	53.555 ppb	28.955 ppb	55.390 ppb	101.656 %
Concentration per Run 2	52.698 ppb	21.423 ppb	369.981 ppb	141.568 ppb	58.028 ppb	57.234 ppb	29.198 ppb	56.047 ppb	97.645 %
Concentration per Run 3	53.819 ppb	21.139 ppb	357.614 ppb	141.220 ppb	54.360 ppb	54.877 ppb	28.143 ppb	56.188 ppb	102.432 %
Concentration RSD	8.1 %	2.4 %	2.3 %	4.1 %	4.6 %	3.4 %	1.9 %	0.8 %	2.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	13.390 ppb	12.144 ppb	180.776 ppb	106.136 ppb	103.356 %	5.866 ppb	5.615 ppb	101.883 %	52.739 ppb
Concentration per Run 1	13.379 ppb	10.231 ppb	179.007 ppb	105.489 ppb	104.879 %	5.657 ppb	5.488 ppb	101.989 %	52.838 ppb
Concentration per Run 2	14.086 ppb	13.118 ppb	183.224 ppb	107.209 ppb	103.294 %	6.018 ppb	5.666 ppb	103.319 %	51.778 ppb
Concentration per Run 3	12.705 ppb	13.084 ppb	180.098 ppb	105.709 ppb	101.895 %	5.922 ppb	5.690 ppb	100.340 %	53.600 ppb
Concentration RSD	5.2 %	13.6 %	1.2 %	0.9 %	1.4 %	3.2 %	2.0 %	1.5 %	1.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	220.821 ppb	105.505 %	104.293 %	12.038 ppb	54.706 ppb	106.054 %
Concentration per Run 1	219.571 ppb	106.902 %	105.096 %	11.545 ppb	52.762 ppb	110.504 %
Concentration per Run 2	217.503 ppb	104.543 %	103.945 %	12.398 ppb	56.176 ppb	102.169 %
Concentration per Run 3	225.391 ppb	105.069 %	103.837 %	12.172 ppb	55.179 ppb	105.489 %
Concentration RSD	1.9 %	1.2 %	0.7 %	3.7 %	3.2 %	4.0 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	21	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG2003419-8d10 6020SL	Rack	1		
Analysis started at:	12/3/2024 8:11:05 AM	Vial	3		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	100.915 %	114.198 %	5.306 ppb	6,744.577 ppb	3,886.548 ppb	194.927 ppb	1,590.965 ppb	12,534.160 ppb	98.582 %
Concentration per Run 1	97.363 %	116.667 %	5.357 ppb	6,554.353 ppb	3,821.019 ppb	196.101 ppb	1,599.943 ppb	12,092.311 ppb	96.811 %
Concentration per Run 2	102.700 %	111.953 %	5.202 ppb	6,992.378 ppb	3,992.697 ppb	195.730 ppb	1,626.974 ppb	13,021.268 ppb	100.122 %
Concentration per Run 3	102.681 %	113.973 %	5.358 ppb	6,687.000 ppb	3,845.927 ppb	192.949 ppb	1,545.979 ppb	12,488.900 ppb	98.813 %
Concentration RSD	3.0 %	2.1 %	1.7 %	3.3 %	2.4 %	0.9 %	2.6 %	3.7 %	1.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	49.311 ppb	20.433 ppb	347.618 ppb	149.096 ppb	53.664 ppb	53.620 ppb	27.404 ppb	52.971 ppb	100.291 %
Concentration per Run 1	46.611 ppb	19.636 ppb	340.027 ppb	129.947 ppb	53.715 ppb	54.478 ppb	27.271 ppb	52.174 ppb	99.954 %
Concentration per Run 2	49.961 ppb	20.744 ppb	358.932 ppb	154.865 ppb	54.963 ppb	55.809 ppb	29.166 ppb	54.448 ppb	98.348 %
Concentration per Run 3	51.363 ppb	20.918 ppb	343.895 ppb	162.476 ppb	52.314 ppb	50.572 ppb	25.775 ppb	52.291 ppb	102.571 %
Concentration RSD	5.0 %	3.4 %	2.9 %	11.4 %	2.5 %	5.1 %	6.2 %	2.4 %	2.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	12.457 ppb	13.101 ppb	175.034 ppb	101.614 ppb	103.099 %	5.631 ppb	5.459 ppb	103.110 %	50.336 ppb
Concentration per Run 1	12.765 ppb	11.652 ppb	172.713 ppb	100.373 ppb	106.270 %	5.380 ppb	5.346 ppb	105.199 %	49.207 ppb
Concentration per Run 2	12.239 ppb	14.364 ppb	179.600 ppb	104.537 ppb	99.365 %	5.811 ppb	5.612 ppb	101.229 %	51.663 ppb
Concentration per Run 3	12.367 ppb	13.287 ppb	172.788 ppb	99.931 ppb	103.662 %	5.702 ppb	5.420 ppb	102.903 %	50.137 ppb
Concentration RSD	2.2 %	10.4 %	2.3 %	2.5 %	3.4 %	4.0 %	2.5 %	1.9 %	2.5 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	208.765 ppb	104.727 %	104.320 %	11.957 ppb	54.004 ppb	104.970 %
Concentration per Run 1	201.992 ppb	109.524 %	107.108 %	11.494 ppb	52.862 ppb	106.213 %
Concentration per Run 2	211.999 ppb	104.095 %	101.215 %	11.884 ppb	54.588 ppb	105.416 %
Concentration per Run 3	212.305 ppb	100.561 %	104.639 %	12.493 ppb	54.564 ppb	103.282 %
Concentration RSD	2.8 %	4.3 %	2.8 %	4.2 %	1.8 %	1.4 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	22	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG2003419-9d10 6020SL	Rack	1		
Analysis started at:	12/3/2024 8:15:32 AM	Vial	4		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	99.503 %	109.764 %	51.588 ppb	10,856.918 ppb	7,994.707 ppb	50.526 ppb	5,496.138 ppb	16,673.424 ppb	98.676 %
Concentration per Run 1	96.489 %	110.438 %	52.895 ppb	10,878.663 ppb	8,097.928 ppb	50.850 ppb	5,433.931 ppb	16,119.880 ppb	95.720 %
Concentration per Run 2	99.055 %	109.933 %	51.305 ppb	10,888.781 ppb	7,941.706 ppb	50.432 ppb	5,649.882 ppb	17,204.716 ppb	100.488 %
Concentration per Run 3	102.966 %	108.923 %	50.565 ppb	10,803.312 ppb	7,944.486 ppb	50.296 ppb	5,404.601 ppb	16,695.676 ppb	99.820 %
Concentration RSD	3.3 %	0.7 %	2.3 %	0.4 %	1.1 %	0.6 %	2.4 %	3.3 %	2.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	48.079 ppb	50.578 ppb	339.173 ppb	5,105.797 ppb	52.022 ppb	51.685 ppb	51.531 ppb	51.280 ppb	102.230 %
Concentration per Run 1	46.225 ppb	49.417 ppb	343.145 ppb	5,147.360 ppb	53.573 ppb	52.650 ppb	51.414 ppb	51.899 ppb	102.827 %
Concentration per Run 2	50.516 ppb	52.589 ppb	349.887 ppb	5,264.448 ppb	52.866 ppb	52.347 ppb	52.696 ppb	52.222 ppb	98.748 %
Concentration per Run 3	47.495 ppb	49.728 ppb	324.488 ppb	4,905.584 ppb	49.626 ppb	50.058 ppb	50.483 ppb	49.720 ppb	105.115 %
Concentration RSD	4.6 %	3.5 %	3.9 %	3.6 %	4.0 %	2.7 %	2.2 %	2.7 %	3.2 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	50.996 ppb	50.648 ppb	123.392 ppb	51.435 ppb	102.305 %	1.517 ppb	50.951 ppb	102.400 %	49.926 ppb
Concentration per Run 1	50.725 ppb	50.417 ppb	122.123 ppb	50.066 ppb	103.885 %	1.445 ppb	49.315 ppb	105.804 %	49.508 ppb
Concentration per Run 2	52.403 ppb	53.862 ppb	126.277 ppb	52.037 ppb	100.805 %	1.568 ppb	52.575 ppb	101.955 %	49.836 ppb
Concentration per Run 3	49.862 ppb	47.667 ppb	121.777 ppb	52.201 ppb	102.226 %	1.537 ppb	50.963 ppb	99.442 %	50.433 ppb
Concentration RSD	2.5 %	6.1 %	2.0 %	2.3 %	1.5 %	4.2 %	3.2 %	3.1 %	0.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	53.839 ppb	106.015 %	105.339 %	49.844 ppb	50.213 ppb	106.071 %
Concentration per Run 1	52.642 ppb	108.655 %	106.577 %	47.209 ppb	48.513 ppb	110.027 %
Concentration per Run 2	54.953 ppb	102.598 %	104.835 %	52.055 ppb	51.923 ppb	103.499 %
Concentration per Run 3	53.920 ppb	106.793 %	104.605 %	50.267 ppb	50.204 ppb	104.687 %
Concentration RSD	2.2 %	2.9 %	1.0 %	4.9 %	3.4 %	3.3 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	23	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG2003419-10d5 6020SL	Rack	1		
Analysis started at:	12/3/2024 8:20:00 AM	Vial	5		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	101.929 %	113.637 %	0.011 ppb	11,201.603 ppb	5,726.170 ppb	2.956 ppb	1,209.648 ppb	23,721.463 ppb	100.876 %
Concentration per Run 1	94.719 %	112.121 %	0.014 ppb	11,083.805 ppb	5,685.581 ppb	2.869 ppb	1,191.629 ppb	23,410.754 ppb	96.358 %
Concentration per Run 2	103.865 %	115.152 %	0.011 ppb	11,491.823 ppb	5,780.521 ppb	2.761 ppb	1,218.735 ppb	23,454.717 ppb	102.194 %
Concentration per Run 3	107.203 %	113.637 %	0.009 ppb	11,029.182 ppb	5,712.409 ppb	3.239 ppb	1,218.581 ppb	24,298.917 ppb	104.077 %
Concentration RSD	6.3 %	1.3 %	21.3 %	2.3 %	0.9 %	8.5 %	1.3 %	2.1 %	4.0 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.325 ppb	0.012 ppb	593.566 ppb	44.115 ppb	1.175 ppb	1.120 ppb	0.641 ppb	1.798 ppb	101.939 %
Concentration per Run 1	-0.336 ppb	-0.029 ppb	596.580 ppb	41.986 ppb	1.228 ppb	1.101 ppb	0.624 ppb	1.751 ppb	103.110 %
Concentration per Run 2	-0.318 ppb	0.040 ppb	589.331 ppb	49.898 ppb	1.152 ppb	1.193 ppb	0.773 ppb	1.832 ppb	99.961 %
Concentration per Run 3	-0.322 ppb	0.026 ppb	594.786 ppb	40.460 ppb	1.145 ppb	1.066 ppb	0.525 ppb	1.810 ppb	102.745 %
Concentration RSD	3.0 %	299.6 %	0.6 %	11.5 %	3.9 %	5.8 %	19.5 %	2.3 %	1.7 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.118 ppb	0.228 ppb	147.731 ppb	1.154 ppb	105.638 %	0.000 ppb	0.019 ppb	103.991 %	0.394 ppb
Concentration per Run 1	0.054 ppb	0.559 ppb	145.933 ppb	0.929 ppb	107.955 %	0.001 ppb	0.014 ppb	105.539 %	0.352 ppb
Concentration per Run 2	0.179 ppb	0.031 ppb	151.399 ppb	1.133 ppb	102.282 %	-0.002 ppb	0.011 ppb	101.380 %	0.394 ppb
Concentration per Run 3	0.119 ppb	0.095 ppb	145.862 ppb	1.401 ppb	106.677 %	0.000 ppb	0.031 ppb	105.053 %	0.437 ppb
Concentration RSD	53.3 %	126.2 %	2.2 %	20.5 %	2.8 %	883.2 %	59.3 %	2.2 %	10.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	10.252 ppb	108.104 %	105.751 %	0.213 ppb	0.110 ppb	106.508 %
Concentration per Run 1	10.353 ppb	112.862 %	109.491 %	0.193 ppb	0.114 ppb	110.192 %
Concentration per Run 2	9.789 ppb	106.414 %	104.644 %	0.257 ppb	0.113 ppb	106.451 %
Concentration per Run 3	10.613 ppb	105.037 %	103.119 %	0.189 ppb	0.103 ppb	102.882 %
Concentration RSD	4.1 %	3.9 %	3.1 %	17.9 %	5.5 %	3.4 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	24	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	I2469249-04 6020SL	Rack	1		
Analysis started at:	12/3/2024 8:24:28 AM	Vial	7		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	90.788 %	112.514 %	0.287 ppb	37,249.992 ppb	16,277.286 ppb	547.921 ppb	26,200.079 ppb	270,097.769 ppb	92.670 %
Concentration per Run 1	87.434 %	115.825 %	0.282 ppb	36,402.653 ppb	15,601.990 ppb	528.462 ppb	25,641.173 ppb	265,553.256 ppb	92.040 %
Concentration per Run 2	91.788 %	116.162 %	0.283 ppb	35,796.538 ppb	15,653.599 ppb	528.319 ppb	25,422.491 ppb	261,750.387 ppb	92.160 %
Concentration per Run 3	93.142 %	105.556 %	0.295 ppb	39,550.786 ppb	17,576.268 ppb	586.981 ppb	27,536.574 ppb	282,989.664 ppb	93.809 %
Concentration RSD	3.3 %	5.4 %	2.5 %	5.4 %	6.9 %	6.2 %	4.4 %	4.2 %	1.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	1.476 ppb	1.790 ppb	1,411.684 ppb	26,561.440 ppb	42.604 ppb	103.134 ppb	3.278 ppb	2,851.621 ppb	96.632 %
Concentration per Run 1	1.547 ppb	1.719 ppb	1,421.085 ppb	27,059.087 ppb	42.675 ppb	103.091 ppb	3.095 ppb	2,853.180 ppb	97.577 %
Concentration per Run 2	1.497 ppb	1.767 ppb	1,361.103 ppb	25,195.690 ppb	41.350 ppb	101.044 ppb	3.013 ppb	2,777.019 ppb	97.592 %
Concentration per Run 3	1.384 ppb	1.883 ppb	1,452.864 ppb	27,429.543 ppb	43.786 ppb	105.268 ppb	3.728 ppb	2,924.663 ppb	94.727 %
Concentration RSD	5.7 %	4.7 %	3.3 %	4.5 %	2.9 %	2.0 %	11.9 %	2.6 %	1.7 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	9.342 ppb	4.029 ppb	1,147.893 ppb	2.486 ppb	98.785 %	0.003 ppb	1.280 ppb	100.155 %	58.824 ppb
Concentration per Run 1	9.729 ppb	3.687 ppb	1,129.492 ppb	2.321 ppb	102.905 %	0.008 ppb	1.258 ppb	104.955 %	56.560 ppb
Concentration per Run 2	9.293 ppb	4.383 ppb	1,150.072 ppb	2.384 ppb	96.511 %	-0.001 ppb	1.271 ppb	98.226 %	59.723 ppb
Concentration per Run 3	9.005 ppb	4.016 ppb	1,164.115 ppb	2.753 ppb	96.940 %	0.003 ppb	1.312 ppb	97.286 %	60.188 ppb
Concentration RSD	3.9 %	8.6 %	1.5 %	9.4 %	3.6 %	129.5 %	2.2 %	4.2 %	3.4 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	228.108 ppb	106.289 %	106.518 %	0.251 ppb	14.221 ppb	104.483 %
Concentration per Run 1	220.810 ppb	107.234 %	109.109 %	0.222 ppb	13.931 ppb	105.788 %
Concentration per Run 2	230.041 ppb	106.490 %	107.066 %	0.254 ppb	14.379 ppb	103.205 %
Concentration per Run 3	233.474 ppb	105.143 %	103.379 %	0.279 ppb	14.355 ppb	104.455 %
Concentration RSD	2.9 %	1.0 %	2.7 %	11.3 %	1.8 %	1.2 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	25	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	I2469249-07 6020SL	Rack	1		
Analysis started at:	12/3/2024 8:28:57 AM	Vial	8		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	96.409 %	112.458 %	0.007 ppb	77,926.151 ppb	5,045.840 ppb	4.450 ppb	9,933.261 ppb	108,788.875 ppb	97.510 %
Concentration per Run 1	93.087 %	119.192 %	0.007 ppb	75,086.765 ppb	4,737.815 ppb	4.339 ppb	9,380.911 ppb	104,098.989 ppb	94.860 %
Concentration per Run 2	97.999 %	105.724 %	0.009 ppb	80,798.628 ppb	5,311.582 ppb	4.889 ppb	10,291.605 ppb	109,796.788 ppb	99.082 %
Concentration per Run 3	98.141 %	112.458 %	0.005 ppb	77,893.061 ppb	5,088.123 ppb	4.122 ppb	10,127.269 ppb	112,470.848 ppb	98.589 %
Concentration RSD	3.0 %	6.0 %	28.8 %	3.7 %	5.7 %	8.9 %	4.9 %	3.9 %	2.4 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.256 ppb	0.025 ppb	764.992 ppb	759.876 ppb	0.839 ppb	3.442 ppb	5.316 ppb	2.117 ppb	96.195 %
Concentration per Run 1	-0.201 ppb	0.010 ppb	745.337 ppb	750.961 ppb	0.839 ppb	3.277 ppb	5.475 ppb	2.073 ppb	94.486 %
Concentration per Run 2	-0.300 ppb	0.030 ppb	776.069 ppb	776.234 ppb	0.863 ppb	3.546 ppb	5.564 ppb	2.200 ppb	95.746 %
Concentration per Run 3	-0.265 ppb	0.034 ppb	773.569 ppb	752.433 ppb	0.816 ppb	3.503 ppb	4.908 ppb	2.079 ppb	98.353 %
Concentration RSD	19.7 %	52.2 %	2.2 %	1.9 %	2.8 %	4.2 %	6.7 %	3.4 %	2.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.588 ppb	0.429 ppb	561.254 ppb	22.138 ppb	101.488 %	0.002 ppb	0.023 ppb	102.288 %	0.179 ppb
Concentration per Run 1	0.447 ppb	0.722 ppb	566.755 ppb	20.193 ppb	100.575 %	0.000 ppb	0.029 ppb	103.531 %	0.145 ppb
Concentration per Run 2	0.627 ppb	0.352 ppb	553.664 ppb	21.246 ppb	102.773 %	0.001 ppb	0.015 ppb	100.897 %	0.195 ppb
Concentration per Run 3	0.689 ppb	0.213 ppb	563.343 ppb	24.975 ppb	101.115 %	0.003 ppb	0.025 ppb	102.436 %	0.197 ppb
Concentration RSD	21.3 %	61.3 %	1.2 %	11.3 %	1.1 %	94.9 %	32.5 %	1.3 %	16.5 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	51.789 ppb	107.069 %	106.723 %	0.043 ppb	0.089 ppb	104.902 %
Concentration per Run 1	50.280 ppb	107.902 %	108.589 %	0.035 ppb	0.090 ppb	105.731 %
Concentration per Run 2	51.977 ppb	104.908 %	107.281 %	0.043 ppb	0.095 ppb	103.237 %
Concentration per Run 3	53.112 ppb	108.397 %	104.299 %	0.050 ppb	0.083 ppb	105.738 %
Concentration RSD	2.8 %	1.8 %	2.1 %	17.6 %	6.8 %	1.4 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	26	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	CCV	Rack	0		
Analysis started at:	12/3/2024 8:33:58 AM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	104.880 %	117.228 %	61.102 ppb	5,955.026 ppb	5,899.944 ppb	54.609 ppb	5,836.487 ppb	5,633.322 ppb	101.474 %
Concentration per Run 1	102.299 %	121.381 %	60.533 ppb	5,667.069 ppb	5,781.177 ppb	52.135 ppb	5,539.343 ppb	5,472.092 ppb	100.624 %
Concentration per Run 2	106.213 %	114.478 %	60.849 ppb	6,005.036 ppb	5,831.854 ppb	54.677 ppb	5,927.674 ppb	5,603.542 ppb	102.945 %
Concentration per Run 3	106.128 %	115.825 %	61.925 ppb	6,192.972 ppb	6,086.801 ppb	57.015 ppb	6,042.445 ppb	5,824.332 ppb	100.852 %
Recovery Percentage 1			101.837 %	99.250 %	98.332 %	91.015 %	97.275 %	93.889 %	
Concentration RSD	2.1 %	3.1 %	1.2 %	4.5 %	2.8 %	4.5 %	4.5 %	3.2 %	1.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	58.413 ppb	59.039 ppb	60.426 ppb	5,948.352 ppb	59.967 ppb	61.291 ppb	63.074 ppb	61.943 ppb	102.073 %
Concentration per Run 1	54.607 ppb	55.413 ppb	57.555 ppb	5,642.430 ppb	57.706 ppb	60.618 ppb	59.634 ppb	60.129 ppb	105.664 %
Concentration per Run 2	57.714 ppb	58.732 ppb	59.491 ppb	6,031.279 ppb	59.722 ppb	61.943 ppb	64.690 ppb	62.107 ppb	101.227 %
Concentration per Run 3	62.918 ppb	62.972 ppb	64.232 ppb	6,171.345 ppb	62.475 ppb	61.311 ppb	64.899 ppb	63.592 ppb	99.327 %
Recovery Percentage 1	97.355 %	98.399 %	100.710 %	99.139 %	99.946 %	102.151 %	105.124 %	103.238 %	
Concentration RSD	7.2 %	6.4 %	5.7 %	4.6 %	4.0 %	1.1 %	4.7 %	2.8 %	3.2 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	61.252 ppb	58.932 ppb	60.432 ppb	59.651 ppb	105.498 %	59.936 ppb	61.453 ppb	102.535 %	61.198 ppb
Concentration per Run 1	61.628 ppb	55.436 ppb	57.226 ppb	57.286 ppb	112.798 %	57.021 ppb	59.194 ppb	104.931 %	58.544 ppb
Concentration per Run 2	61.042 ppb	59.468 ppb	61.033 ppb	60.383 ppb	103.599 %	59.859 ppb	61.882 ppb	101.484 %	62.618 ppb
Concentration per Run 3	61.086 ppb	61.892 ppb	63.036 ppb	61.283 ppb	100.098 %	62.929 ppb	63.284 ppb	101.189 %	62.432 ppb
Recovery Percentage 1	102.087 %	98.220 %	100.719 %	99.418 %		99.893 %	102.422 %		101.996 %
Concentration RSD	0.5 %	5.5 %	4.9 %	3.5 %	6.2 %	4.9 %	3.4 %	2.0 %	3.8 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	59.541 ppb	108.351 %	107.775 %	59.822 ppb	59.942 ppb	109.521 %
Concentration per Run 1	57.929 ppb	113.355 %	113.468 %	56.724 ppb	57.044 ppb	112.884 %
Concentration per Run 2	59.953 ppb	106.218 %	105.175 %	60.478 ppb	61.151 ppb	108.383 %
Concentration per Run 3	60.741 ppb	105.479 %	104.682 %	62.264 ppb	61.631 ppb	107.296 %
Recovery Percentage 1	99.235 %			99.703 %	99.903 %	
Concentration RSD	2.4 %	4.0 %	4.6 %	4.7 %	4.2 %	2.7 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	27	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	CCB	Rack	0		
Analysis started at:	12/3/2024 8:38:29 AM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	103.977 %	115.152 %	0.011 ppb	-5.017 ppb	0.467 ppb	-0.197 ppb	5.301 ppb	-0.613 ppb	99.782 %
Concentration per Run 1	97.906 %	116.330 %	0.013 ppb	-7.770 ppb	0.058 ppb	-0.298 ppb	-8.208 ppb	7.131 ppb	96.008 %
Concentration per Run 2	105.230 %	117.004 %	0.010 ppb	-7.891 ppb	1.241 ppb	0.072 ppb	8.652 ppb	1.160 ppb	102.242 %
Concentration per Run 3	108.796 %	112.121 %	0.012 ppb	0.609 ppb	0.101 ppb	-0.367 ppb	15.459 ppb	-10.130 ppb	101.096 %
Recovery Percentage 1			2.287 %	-1.003 %	0.667 %	-1.973 %	5.301 %	-0.613 %	
Concentration RSD	5.3 %	2.3 %	10.9 %	97.1 %	143.7 %	119.7 %	229.8 %	1,430.6 %	3.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.523 ppb	-0.048 ppb	0.104 ppb	7.040 ppb	-0.003 ppb	0.007 ppb	0.231 ppb	0.283 ppb	97.473 %
Concentration per Run 1	-0.457 ppb	-0.059 ppb	0.106 ppb	6.173 ppb	-0.007 ppb	0.012 ppb	0.256 ppb	0.348 ppb	99.593 %
Concentration per Run 2	-0.516 ppb	-0.039 ppb	0.095 ppb	7.088 ppb	0.000 ppb	0.029 ppb	0.122 ppb	0.222 ppb	94.437 %
Concentration per Run 3	-0.596 ppb	-0.045 ppb	0.110 ppb	7.860 ppb	-0.003 ppb	-0.021 ppb	0.317 ppb	0.280 ppb	98.390 %
Recovery Percentage 1	-10.460 %	-4.776 %	10.361 %	14.080 %	-0.672 %	0.337 %	23.129 %	5.667 %	
Concentration RSD	13.3 %	21.5 %	7.3 %	12.0 %	102.2 %	379.9 %	43.1 %	22.4 %	2.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.105 ppb	0.147 ppb	0.016 ppb	0.575 ppb	104.361 %	0.004 ppb	0.005 ppb	99.067 %	0.074 ppb
Concentration per Run 1	0.097 ppb	0.189 ppb	0.018 ppb	0.435 ppb	107.730 %	0.006 ppb	0.007 ppb	102.872 %	0.043 ppb
Concentration per Run 2	0.108 ppb	0.210 ppb	0.016 ppb	0.526 ppb	103.006 %	0.005 ppb	0.004 ppb	98.046 %	0.074 ppb
Concentration per Run 3	0.110 ppb	0.042 ppb	0.015 ppb	0.763 ppb	102.347 %	0.002 ppb	0.004 ppb	96.283 %	0.104 ppb
Recovery Percentage 1	21.026 %	2.942 %	0.162 %	28.741 %		1.112 %	2.423 %		1.844 %
Concentration RSD	6.5 %	62.3 %	10.8 %	29.5 %	2.8 %	42.5 %	39.8 %	3.4 %	40.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.014 ppb	105.137 %	103.616 %	0.241 ppb	0.029 ppb	106.686 %
Concentration per Run 1	-0.005 ppb	107.808 %	107.265 %	0.228 ppb	0.030 ppb	110.318 %
Concentration per Run 2	0.038 ppb	103.183 %	101.486 %	0.279 ppb	0.028 ppb	104.981 %
Concentration per Run 3	0.010 ppb	104.420 %	102.098 %	0.217 ppb	0.029 ppb	104.759 %
Recovery Percentage 1	2.816 %			24.137 %	2.875 %	
Concentration RSD	156.9 %	2.3 %	3.1 %	13.6 %	4.1 %	3.0 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index: 28
Analysis label: WG2003472-1 6020TL
Analysis started at: 12/3/2024 8:50:16 AM
User name ALPHALAB\a2-icpmsq2
Rack 1
Vial 9
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	104.348 %	118.463 %	0.016 ppb	-17.156 ppb	0.509 ppb	0.501 ppb	-8.419 ppb	8.802 ppb	96.697 %
Concentration per Run 1	99.619 %	121.213 %	0.020 ppb	-21.457 ppb	-0.168 ppb	0.623 ppb	-12.201 ppb	17.610 ppb	92.397 %
Concentration per Run 2	106.886 %	119.192 %	0.019 ppb	-17.801 ppb	-0.141 ppb	0.689 ppb	-16.846 ppb	14.550 ppb	96.842 %
Concentration per Run 3	106.539 %	114.983 %	0.010 ppb	-12.209 ppb	1.837 ppb	0.191 ppb	3.789 ppb	-5.753 ppb	100.853 %
Concentration RSD	3.9 %	2.7 %	31.0 %	27.1 %	225.8 %	54.0 %	128.6 %	144.3 %	4.4 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.460 ppb	-0.014 ppb	0.339 ppb	0.385 ppb	-0.001 ppb	0.022 ppb	0.332 ppb	0.685 ppb	96.914 %
Concentration per Run 1	-0.550 ppb	0.006 ppb	0.398 ppb	-0.763 ppb	-0.004 ppb	0.047 ppb	0.352 ppb	0.712 ppb	98.293 %
Concentration per Run 2	-0.437 ppb	-0.021 ppb	0.298 ppb	1.150 ppb	0.003 ppb	0.042 ppb	0.345 ppb	0.570 ppb	93.618 %
Concentration per Run 3	-0.394 ppb	-0.026 ppb	0.322 ppb	0.768 ppb	-0.003 ppb	-0.022 ppb	0.298 ppb	0.773 ppb	98.832 %
Concentration RSD	17.6 %	128.0 %	15.5 %	263.2 %	344.8 %	173.0 %	8.9 %	15.2 %	3.0 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.070 ppb	0.163 ppb	0.008 ppb	0.186 ppb	106.624 %	0.001 ppb	0.000 ppb	104.794 %	0.016 ppb
Concentration per Run 1	0.060 ppb	0.156 ppb	0.017 ppb	0.112 ppb	106.623 %	-0.001 ppb	0.000 ppb	108.300 %	0.012 ppb
Concentration per Run 2	0.075 ppb	0.206 ppb	0.009 ppb	0.158 ppb	107.173 %	0.002 ppb	0.000 ppb	104.116 %	0.016 ppb
Concentration per Run 3	0.075 ppb	0.129 ppb	-0.002 ppb	0.286 ppb	106.075 %	0.001 ppb	0.000 ppb	101.966 %	0.018 ppb
Concentration RSD	12.3 %	23.8 %	112.2 %	48.7 %	0.5 %	183.4 %	N/A	3.1 %	19.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.166 ppb	106.999 %	107.332 %	0.023 ppb	0.013 ppb	109.777 %
Concentration per Run 1	0.248 ppb	107.092 %	106.892 %	0.017 ppb	0.010 ppb	110.167 %
Concentration per Run 2	0.119 ppb	104.322 %	107.208 %	0.028 ppb	0.016 ppb	110.039 %
Concentration per Run 3	0.130 ppb	109.584 %	107.895 %	0.023 ppb	0.012 ppb	109.125 %
Concentration RSD	43.1 %	2.5 %	0.5 %	23.9 %	25.7 %	0.5 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	29	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG2003472-2d10 6020TL	Rack	1		
Analysis started at:	12/3/2024 8:54:45 AM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	106.427 %	117.397 %	5.134 ppb	1,002.855 ppb	984.197 ppb	182.732 ppb	995.586 ppb	946.535 ppb	98.274 %
Concentration per Run 1	102.339 %	123.906 %	5.155 ppb	935.315 ppb	937.522 ppb	170.717 ppb	983.320 ppb	995.492 ppb	96.628 %
Concentration per Run 2	107.029 %	110.943 %	5.154 ppb	1,056.737 ppb	1,045.719 ppb	190.240 ppb	1,021.244 ppb	939.268 ppb	98.773 %
Concentration per Run 3	109.914 %	117.340 %	5.092 ppb	1,016.513 ppb	969.351 ppb	187.240 ppb	982.195 ppb	904.845 ppb	99.422 %
Concentration RSD	3.6 %	5.5 %	0.7 %	6.2 %	5.6 %	5.8 %	2.2 %	4.8 %	1.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	47.670 ppb	19.572 ppb	51.772 ppb	105.745 ppb	49.549 ppb	51.761 ppb	26.477 ppb	51.866 ppb	99.384 %
Concentration per Run 1	46.193 ppb	19.180 ppb	51.220 ppb	109.009 ppb	47.998 ppb	50.736 ppb	26.197 ppb	51.865 ppb	99.301 %
Concentration per Run 2	46.698 ppb	20.088 ppb	52.631 ppb	105.793 ppb	50.814 ppb	52.070 ppb	26.943 ppb	52.101 ppb	98.901 %
Concentration per Run 3	50.119 ppb	19.448 ppb	51.466 ppb	102.434 ppb	49.834 ppb	52.477 ppb	26.291 ppb	51.632 ppb	99.950 %
Concentration RSD	4.5 %	2.4 %	1.5 %	3.1 %	2.9 %	1.8 %	1.5 %	0.5 %	0.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	12.414 ppb	11.535 ppb	98.345 ppb	96.570 ppb	106.050 %	5.154 ppb	5.185 ppb	104.504 %	38.774 ppb
Concentration per Run 1	12.519 ppb	11.918 ppb	96.504 ppb	93.029 ppb	109.323 %	5.120 ppb	5.059 ppb	104.202 %	37.618 ppb
Concentration per Run 2	12.812 ppb	12.182 ppb	98.813 ppb	97.145 ppb	106.918 %	5.078 ppb	4.925 ppb	104.330 %	38.680 ppb
Concentration per Run 3	11.911 ppb	10.505 ppb	99.718 ppb	99.536 ppb	101.908 %	5.264 ppb	5.570 ppb	104.981 %	40.025 ppb
Concentration RSD	3.7 %	7.8 %	1.7 %	3.4 %	3.6 %	1.9 %	6.6 %	0.4 %	3.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	195.526 ppb	107.515 %	106.856 %	11.671 ppb	51.682 ppb	109.599 %
Concentration per Run 1	193.697 ppb	110.259 %	109.337 %	11.696 ppb	51.392 ppb	110.010 %
Concentration per Run 2	191.567 ppb	107.498 %	108.609 %	11.679 ppb	52.623 ppb	106.992 %
Concentration per Run 3	201.315 ppb	104.789 %	102.623 %	11.637 ppb	51.033 ppb	111.796 %
Concentration RSD	2.6 %	2.5 %	3.4 %	0.3 %	1.6 %	2.2 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	30	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2469261-01d10 6020TL	Rack	1		
Analysis started at:	12/3/2024 8:59:15 AM	Vial	11		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	100.236 %	116.274 %	0.037 ppb	1,170.726 ppb	921.186 ppb	364.707 ppb	679.445 ppb	9,872.538 ppb	97.992 %
Concentration per Run 1	97.362 %	113.300 %	0.034 ppb	1,188.536 ppb	940.084 ppb	368.939 ppb	690.412 ppb	9,812.497 ppb	96.168 %
Concentration per Run 2	99.268 %	113.973 %	0.040 ppb	1,179.867 ppb	916.912 ppb	372.128 ppb	637.870 ppb	9,794.169 ppb	96.977 %
Concentration per Run 3	104.079 %	121.549 %	0.037 ppb	1,143.777 ppb	906.561 ppb	353.053 ppb	710.053 ppb	10,010.948 ppb	100.830 %
Concentration RSD	3.5 %	3.9 %	8.3 %	2.0 %	1.9 %	2.8 %	5.5 %	1.2 %	2.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	1.303 ppb	875.972 ppb	59.213 ppb	647.324 ppb	1.327 ppb	1.058 ppb	7.967 ppb	4.789 ppb	101.981 %
Concentration per Run 1	1.515 ppb	870.648 ppb	59.316 ppb	695.775 ppb	1.288 ppb	1.083 ppb	7.996 ppb	4.622 ppb	103.550 %
Concentration per Run 2	1.221 ppb	889.364 ppb	58.609 ppb	620.437 ppb	1.390 ppb	1.211 ppb	8.102 ppb	4.928 ppb	99.615 %
Concentration per Run 3	1.173 ppb	867.903 ppb	59.714 ppb	625.759 ppb	1.304 ppb	0.880 ppb	7.804 ppb	4.816 ppb	102.779 %
Concentration RSD	14.2 %	1.3 %	0.9 %	6.5 %	4.1 %	15.8 %	1.9 %	3.2 %	2.0 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.517 ppb	0.795 ppb	30.830 ppb	1.292 ppb	107.101 %	0.011 ppb	0.041 ppb	105.258 %	1.540 ppb
Concentration per Run 1	0.466 ppb	0.611 ppb	30.889 ppb	1.179 ppb	108.201 %	0.010 ppb	0.052 ppb	106.425 %	1.329 ppb
Concentration per Run 2	0.510 ppb	1.173 ppb	31.099 ppb	1.289 ppb	106.304 %	0.012 ppb	0.035 ppb	104.288 %	1.507 ppb
Concentration per Run 3	0.576 ppb	0.600 ppb	30.503 ppb	1.409 ppb	106.796 %	0.011 ppb	0.035 ppb	105.059 %	1.785 ppb
Concentration RSD	10.7 %	41.3 %	1.0 %	8.9 %	0.9 %	10.1 %	23.7 %	1.0 %	14.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	4.643 ppb	109.684 %	108.361 %	0.023 ppb	1.551 ppb	111.226 %
Concentration per Run 1	4.654 ppb	113.808 %	112.462 %	0.015 ppb	1.505 ppb	113.926 %
Concentration per Run 2	4.541 ppb	106.272 %	106.072 %	0.026 ppb	1.576 ppb	110.522 %
Concentration per Run 3	4.735 ppb	108.971 %	106.549 %	0.030 ppb	1.572 ppb	109.230 %
Concentration RSD	2.1 %	3.5 %	3.3 %	33.2 %	2.6 %	2.2 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	31	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG2003472-3d10 6020TL	Rack	1		
Analysis started at:	12/3/2024 9:03:45 AM	Vial	12		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	103.244 %	119.024 %	5.371 ppb	2,230.851 ppb	1,943.920 ppb	743.216 ppb	1,663.294 ppb	11,213.259 ppb	97.892 %
Concentration per Run 1	99.075 %	120.876 %	5.486 ppb	2,233.435 ppb	1,917.759 ppb	727.458 ppb	1,612.642 ppb	11,161.731 ppb	93.835 %
Concentration per Run 2	103.901 %	119.866 %	5.274 ppb	2,199.818 ppb	1,937.202 ppb	724.769 ppb	1,659.416 ppb	11,104.766 ppb	99.344 %
Concentration per Run 3	106.757 %	116.330 %	5.354 ppb	2,259.300 ppb	1,976.799 ppb	777.421 ppb	1,717.824 ppb	11,373.280 ppb	100.497 %
Concentration RSD	3.8 %	2.0 %	2.0 %	1.3 %	1.5 %	4.0 %	3.2 %	1.3 %	3.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	50.823 ppb	886.207 ppb	110.471 ppb	720.348 ppb	52.287 ppb	51.756 ppb	33.796 ppb	56.144 ppb	103.449 %
Concentration per Run 1	50.297 ppb	882.706 ppb	114.110 ppb	729.110 ppb	52.473 ppb	52.192 ppb	34.058 ppb	56.930 ppb	103.085 %
Concentration per Run 2	50.962 ppb	872.441 ppb	107.175 ppb	731.509 ppb	52.376 ppb	50.903 ppb	33.053 ppb	55.747 ppb	103.524 %
Concentration per Run 3	51.210 ppb	903.476 ppb	110.130 ppb	700.425 ppb	52.012 ppb	52.172 ppb	34.275 ppb	55.756 ppb	103.737 %
Concentration RSD	0.9 %	1.8 %	3.2 %	2.4 %	0.5 %	1.4 %	1.9 %	1.2 %	0.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	12.509 ppb	10.389 ppb	130.804 ppb	92.589 ppb	107.951 %	5.313 ppb	5.252 ppb	105.702 %	43.324 ppb
Concentration per Run 1	12.747 ppb	10.822 ppb	131.185 ppb	92.330 ppb	109.063 %	5.228 ppb	5.090 ppb	108.587 %	42.772 ppb
Concentration per Run 2	12.617 ppb	9.915 ppb	129.129 ppb	90.194 ppb	110.345 %	5.362 ppb	5.259 ppb	105.347 %	42.821 ppb
Concentration per Run 3	12.163 ppb	10.430 ppb	132.099 ppb	95.243 ppb	104.445 %	5.350 ppb	5.408 ppb	103.173 %	44.379 ppb
Concentration RSD	2.4 %	4.4 %	1.2 %	2.7 %	2.9 %	1.4 %	3.0 %	2.6 %	2.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	206.464 ppb	110.751 %	109.863 %	11.825 ppb	54.212 ppb	113.028 %
Concentration per Run 1	202.515 ppb	110.894 %	111.333 %	11.476 ppb	52.465 ppb	116.398 %
Concentration per Run 2	205.394 ppb	110.108 %	109.682 %	12.374 ppb	56.216 ppb	109.201 %
Concentration per Run 3	211.483 ppb	111.250 %	108.574 %	11.625 ppb	53.954 ppb	113.487 %
Concentration RSD	2.2 %	0.5 %	1.3 %	4.1 %	3.5 %	3.2 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	32	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG2003472-4d10 6020TL	Rack	1		
Analysis started at:	12/3/2024 9:08:15 AM	Vial	13		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	109.063 %	119.417 %	0.037 ppb	1,222.267 ppb	954.399 ppb	390.399 ppb	724.449 ppb	10,185.538 ppb	100.298 %
Concentration per Run 1	104.460 %	119.024 %	0.036 ppb	1,196.307 ppb	924.907 ppb	401.191 ppb	724.118 ppb	9,932.683 ppb	101.079 %
Concentration per Run 2	110.278 %	123.906 %	0.039 ppb	1,221.339 ppb	948.980 ppb	381.774 ppb	703.660 ppb	10,182.464 ppb	100.924 %
Concentration per Run 3	112.450 %	115.320 %	0.037 ppb	1,249.154 ppb	989.308 ppb	388.233 ppb	745.569 ppb	10,441.467 ppb	98.890 %
Concentration RSD	3.8 %	3.6 %	3.7 %	2.2 %	3.4 %	2.5 %	2.9 %	2.5 %	1.2 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	1.215 ppb	803.893 ppb	58.780 ppb	704.452 ppb	1.419 ppb	1.080 ppb	8.056 ppb	4.921 ppb	105.751 %
Concentration per Run 1	1.387 ppb	825.182 ppb	59.266 ppb	656.295 ppb	1.506 ppb	0.908 ppb	7.880 ppb	4.754 ppb	108.525 %
Concentration per Run 2	1.200 ppb	715.116 ppb	60.456 ppb	755.699 ppb	1.385 ppb	1.129 ppb	8.372 ppb	5.156 ppb	103.117 %
Concentration per Run 3	1.057 ppb	871.381 ppb	56.617 ppb	701.361 ppb	1.366 ppb	1.204 ppb	7.916 ppb	4.854 ppb	105.612 %
Concentration RSD	13.6 %	10.0 %	3.3 %	7.1 %	5.4 %	14.2 %	3.4 %	4.3 %	2.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.504 ppb	1.037 ppb	31.944 ppb	1.298 ppb	109.835 %	0.006 ppb	0.054 ppb	109.554 %	0.324 ppb
Concentration per Run 1	0.532 ppb	1.041 ppb	30.972 ppb	0.987 ppb	113.657 %	0.009 ppb	0.059 ppb	112.144 %	0.274 ppb
Concentration per Run 2	0.573 ppb	0.716 ppb	32.435 ppb	1.315 ppb	108.340 %	0.006 ppb	0.037 ppb	108.479 %	0.316 ppb
Concentration per Run 3	0.406 ppb	1.355 ppb	32.424 ppb	1.592 ppb	107.508 %	0.003 ppb	0.065 ppb	108.038 %	0.382 ppb
Concentration RSD	17.3 %	30.8 %	2.6 %	23.4 %	3.0 %	45.9 %	26.9 %	2.1 %	16.8 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	4.551 ppb	111.445 %	109.943 %	0.020 ppb	1.532 ppb	115.807 %
Concentration per Run 1	4.533 ppb	115.169 %	111.780 %	0.013 ppb	1.524 ppb	115.525 %
Concentration per Run 2	4.546 ppb	110.671 %	108.738 %	0.017 ppb	1.555 ppb	117.016 %
Concentration per Run 3	4.574 ppb	108.496 %	109.310 %	0.031 ppb	1.517 ppb	114.881 %
Concentration RSD	0.5 %	3.1 %	1.5 %	48.4 %	1.3 %	0.9 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	33	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG2003472-5d10 6020TL	Rack	1		
Analysis started at:	12/3/2024 9:12:41 AM	Vial	14		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	105.764 %	115.264 %	48.427 ppb	5,967.445 ppb	5,847.899 ppb	462.378 ppb	5,687.239 ppb	15,381.779 ppb	100.150 %
Concentration per Run 1	100.278 %	115.320 %	49.931 ppb	5,940.474 ppb	5,810.633 ppb	460.350 ppb	5,605.885 ppb	15,291.063 ppb	97.825 %
Concentration per Run 2	106.548 %	115.152 %	47.961 ppb	5,875.724 ppb	5,953.060 ppb	466.937 ppb	5,755.777 ppb	15,408.999 ppb	102.678 %
Concentration per Run 3	110.465 %	115.320 %	47.388 ppb	6,086.136 ppb	5,780.004 ppb	459.846 ppb	5,700.054 ppb	15,445.275 ppb	99.946 %
Concentration RSD	4.9 %	0.1 %	2.8 %	1.8 %	1.6 %	0.9 %	1.3 %	0.5 %	2.4 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	50.735 ppb	928.937 ppb	106.066 ppb	5,475.165 ppb	50.175 ppb	49.780 ppb	57.194 ppb	54.298 ppb	105.832 %
Concentration per Run 1	49.066 ppb	899.936 ppb	103.623 ppb	5,349.299 ppb	48.887 ppb	50.440 ppb	55.687 ppb	53.429 ppb	109.718 %
Concentration per Run 2	52.460 ppb	951.538 ppb	111.186 ppb	5,664.250 ppb	51.259 ppb	50.742 ppb	60.920 ppb	56.226 ppb	101.883 %
Concentration per Run 3	50.679 ppb	935.338 ppb	103.387 ppb	5,411.946 ppb	50.378 ppb	48.159 ppb	54.975 ppb	53.239 ppb	105.894 %
Concentration RSD	3.3 %	2.8 %	4.2 %	3.0 %	2.4 %	2.8 %	5.7 %	3.1 %	3.7 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	50.288 ppb	47.170 ppb	78.632 ppb	48.215 ppb	110.271 %	5.776 ppb	48.364 ppb	107.903 %	48.320 ppb
Concentration per Run 1	49.368 ppb	49.051 ppb	76.727 ppb	46.283 ppb	113.100 %	5.710 ppb	47.756 ppb	109.425 %	47.669 ppb
Concentration per Run 2	52.101 ppb	47.624 ppb	80.200 ppb	48.700 ppb	107.220 %	5.862 ppb	49.352 ppb	107.101 %	49.793 ppb
Concentration per Run 3	49.395 ppb	44.835 ppb	78.970 ppb	49.660 ppb	110.492 %	5.755 ppb	47.982 ppb	107.183 %	47.498 ppb
Concentration RSD	3.1 %	4.5 %	2.2 %	3.6 %	2.7 %	1.3 %	1.8 %	1.2 %	2.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	51.780 ppb	114.040 %	112.072 %	47.975 ppb	50.021 ppb	112.703 %
Concentration per Run 1	51.327 ppb	118.486 %	115.352 %	45.766 ppb	48.899 ppb	115.305 %
Concentration per Run 2	51.630 ppb	111.787 %	109.402 %	48.139 ppb	50.615 ppb	114.166 %
Concentration per Run 3	52.384 ppb	111.847 %	111.460 %	50.020 ppb	50.549 ppb	108.639 %
Concentration RSD	1.1 %	3.4 %	2.7 %	4.4 %	1.9 %	3.2 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	34	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG2003472-6d50 6020TL	Rack	1		
Analysis started at:	12/3/2024 9:17:08 AM	Vial	15		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	104.442 %	113.749 %	0.013 ppb	223.164 ppb	194.414 ppb	76.291 ppb	154.264 ppb	2,120.425 ppb	100.195 %
Concentration per Run 1	99.102 %	112.626 %	0.010 ppb	221.574 ppb	194.661 ppb	79.960 ppb	165.022 ppb	2,108.095 ppb	97.367 %
Concentration per Run 2	104.276 %	115.152 %	0.018 ppb	229.672 ppb	200.050 ppb	77.071 ppb	145.507 ppb	2,212.131 ppb	100.759 %
Concentration per Run 3	109.948 %	113.468 %	0.012 ppb	218.245 ppb	188.532 ppb	71.842 ppb	152.262 ppb	2,041.050 ppb	102.459 %
Concentration RSD	5.2 %	1.1 %	30.4 %	2.6 %	3.0 %	5.4 %	6.4 %	4.1 %	2.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.150 ppb	182.110 ppb	11.980 ppb	132.891 ppb	0.272 ppb	0.097 ppb	1.747 ppb	1.131 ppb	102.791 %
Concentration per Run 1	-0.186 ppb	179.878 ppb	11.838 ppb	129.357 ppb	0.275 ppb	0.155 ppb	1.839 ppb	1.133 ppb	103.837 %
Concentration per Run 2	-0.193 ppb	187.800 ppb	12.622 ppb	120.558 ppb	0.273 ppb	0.105 ppb	1.816 ppb	1.121 ppb	99.518 %
Concentration per Run 3	-0.070 ppb	178.654 ppb	11.480 ppb	148.757 ppb	0.266 ppb	0.029 ppb	1.585 ppb	1.141 ppb	105.019 %
Concentration RSD	46.2 %	2.7 %	4.9 %	10.9 %	1.8 %	65.6 %	8.0 %	0.9 %	2.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.162 ppb	0.171 ppb	6.376 ppb	0.513 ppb	107.502 %	0.002 ppb	0.015 ppb	106.081 %	0.171 ppb
Concentration per Run 1	0.075 ppb	-0.009 ppb	6.259 ppb	0.238 ppb	112.344 %	0.006 ppb	0.007 ppb	110.996 %	0.119 ppb
Concentration per Run 2	0.189 ppb	0.036 ppb	6.553 ppb	0.737 ppb	104.665 %	-0.001 ppb	0.021 ppb	102.699 %	0.162 ppb
Concentration per Run 3	0.222 ppb	0.488 ppb	6.315 ppb	0.564 ppb	105.497 %	0.001 ppb	0.018 ppb	104.547 %	0.233 ppb
Concentration RSD	47.4 %	160.1 %	2.5 %	49.4 %	3.9 %	163.5 %	50.5 %	4.1 %	33.3 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.976 ppb	109.466 %	109.209 %	0.210 ppb	0.346 ppb	110.600 %
Concentration per Run 1	0.977 ppb	114.087 %	111.157 %	0.191 ppb	0.336 ppb	115.589 %
Concentration per Run 2	0.939 ppb	104.304 %	106.783 %	0.241 ppb	0.352 ppb	108.341 %
Concentration per Run 3	1.013 ppb	110.008 %	109.687 %	0.197 ppb	0.349 ppb	107.869 %
Concentration RSD	3.8 %	4.5 %	2.0 %	12.9 %	2.4 %	3.9 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	35	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2469261-02d10 6020TL	Rack	1		
Analysis started at:	12/3/2024 9:21:35 AM	Vial	16		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	107.949 %	114.983 %	0.041 ppb	1,207.407 ppb	987.032 ppb	458.142 ppb	719.481 ppb	10,417.879 ppb	101.252 %
Concentration per Run 1	103.105 %	120.708 %	0.036 ppb	1,158.911 ppb	976.966 ppb	442.780 ppb	719.016 ppb	10,301.846 ppb	98.700 %
Concentration per Run 2	107.872 %	112.458 %	0.043 ppb	1,224.041 ppb	972.783 ppb	464.794 ppb	687.179 ppb	10,299.354 ppb	102.693 %
Concentration per Run 3	112.871 %	111.785 %	0.043 ppb	1,239.270 ppb	1,011.347 ppb	466.853 ppb	752.246 ppb	10,652.436 ppb	102.363 %
Concentration RSD	4.5 %	4.3 %	9.6 %	3.5 %	2.1 %	2.9 %	4.5 %	1.9 %	2.2 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	1.629 ppb	922.199 ppb	58.715 ppb	776.744 ppb	1.402 ppb	1.095 ppb	8.437 ppb	5.325 ppb	105.430 %
Concentration per Run 1	1.572 ppb	804.620 ppb	58.003 ppb	801.911 ppb	1.362 ppb	1.068 ppb	8.235 ppb	5.440 ppb	104.501 %
Concentration per Run 2	1.711 ppb	960.150 ppb	57.496 ppb	737.162 ppb	1.377 ppb	1.072 ppb	8.206 ppb	5.555 ppb	106.195 %
Concentration per Run 3	1.604 ppb	1,001.829 ppb	60.645 ppb	791.160 ppb	1.467 ppb	1.146 ppb	8.870 ppb	4.980 ppb	105.594 %
Concentration RSD	4.5 %	11.3 %	2.9 %	4.5 %	4.1 %	4.0 %	4.4 %	5.7 %	0.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.525 ppb	0.970 ppb	30.967 ppb	0.639 ppb	107.737 %	0.006 ppb	0.057 ppb	105.334 %	0.201 ppb
Concentration per Run 1	0.664 ppb	0.619 ppb	30.859 ppb	0.575 ppb	110.270 %	0.001 ppb	0.054 ppb	108.946 %	0.144 ppb
Concentration per Run 2	0.473 ppb	1.411 ppb	31.091 ppb	0.554 ppb	105.255 %	0.007 ppb	0.053 ppb	103.915 %	0.207 ppb
Concentration per Run 3	0.437 ppb	0.880 ppb	30.951 ppb	0.789 ppb	107.685 %	0.009 ppb	0.064 ppb	103.141 %	0.252 ppb
Concentration RSD	23.2 %	41.6 %	0.4 %	20.3 %	2.3 %	73.1 %	10.2 %	3.0 %	27.0 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	5.103 ppb	111.586 %	110.214 %	0.058 ppb	1.669 ppb	113.214 %
Concentration per Run 1	5.217 ppb	114.486 %	110.995 %	0.040 ppb	1.611 ppb	116.067 %
Concentration per Run 2	5.238 ppb	109.328 %	108.751 %	0.065 ppb	1.686 ppb	113.161 %
Concentration per Run 3	4.855 ppb	110.943 %	110.896 %	0.070 ppb	1.709 ppb	110.414 %
Concentration RSD	4.2 %	2.4 %	1.2 %	27.3 %	3.1 %	2.5 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	36	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2469261-03d10 6020TL	Rack	1		
Analysis started at:	12/3/2024 9:26:02 AM	Vial	17		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	106.811 %	120.876 %	0.020 ppb	1,328.836 ppb	583.029 ppb	190.736 ppb	474.338 ppb	13,437.385 ppb	102.266 %
Concentration per Run 1	103.119 %	128.115 %	0.016 ppb	1,243.839 ppb	544.730 ppb	182.477 ppb	424.895 ppb	12,329.262 ppb	100.478 %
Concentration per Run 2	105.998 %	119.192 %	0.023 ppb	1,380.975 ppb	586.323 ppb	192.112 ppb	487.393 ppb	13,751.740 ppb	102.689 %
Concentration per Run 3	111.316 %	115.320 %	0.022 ppb	1,361.695 ppb	618.035 ppb	197.620 ppb	510.725 ppb	14,231.153 ppb	103.632 %
Concentration RSD	3.9 %	5.4 %	18.3 %	5.6 %	6.3 %	4.0 %	9.4 %	7.4 %	1.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.373 ppb	250.793 ppb	7.142 ppb	389.028 ppb	1.327 ppb	1.108 ppb	7.836 ppb	20.800 ppb	102.900 %
Concentration per Run 1	0.293 ppb	241.826 ppb	6.823 ppb	373.282 ppb	1.330 ppb	1.066 ppb	7.692 ppb	20.275 ppb	105.317 %
Concentration per Run 2	0.360 ppb	253.093 ppb	7.210 ppb	401.464 ppb	1.314 ppb	0.936 ppb	7.984 ppb	21.193 ppb	100.533 %
Concentration per Run 3	0.465 ppb	257.460 ppb	7.394 ppb	392.338 ppb	1.337 ppb	1.322 ppb	7.831 ppb	20.930 ppb	102.848 %
Concentration RSD	23.2 %	3.2 %	4.1 %	3.7 %	0.9 %	17.7 %	1.9 %	2.3 %	2.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.514 ppb	0.610 ppb	27.764 ppb	2.999 ppb	109.052 %	0.009 ppb	0.152 ppb	107.535 %	0.166 ppb
Concentration per Run 1	0.430 ppb	0.641 ppb	27.023 ppb	2.760 ppb	111.830 %	0.009 ppb	0.194 ppb	107.184 %	0.135 ppb
Concentration per Run 2	0.536 ppb	0.757 ppb	28.081 ppb	2.856 ppb	108.406 %	0.004 ppb	0.128 ppb	109.853 %	0.191 ppb
Concentration per Run 3	0.575 ppb	0.431 ppb	28.190 ppb	3.381 ppb	106.920 %	0.014 ppb	0.132 ppb	105.568 %	0.172 ppb
Concentration RSD	14.6 %	27.1 %	2.3 %	11.2 %	2.3 %	56.7 %	24.2 %	2.0 %	17.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	3.032 ppb	109.318 %	107.076 %	0.030 ppb	0.667 ppb	114.065 %
Concentration per Run 1	3.008 ppb	112.184 %	108.987 %	0.016 ppb	0.643 ppb	118.049 %
Concentration per Run 2	2.819 ppb	108.880 %	104.490 %	0.036 ppb	0.690 ppb	112.839 %
Concentration per Run 3	3.269 ppb	106.889 %	107.752 %	0.039 ppb	0.667 ppb	111.306 %
Concentration RSD	7.4 %	2.4 %	2.2 %	42.0 %	3.5 %	3.1 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	37	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2469261-04d10 6020TL	Rack	1		
Analysis started at:	12/3/2024 9:30:29 AM	Vial	18		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	110.416 %	125.253 %	0.020 ppb	1,332.001 ppb	580.880 ppb	176.377 ppb	466.198 ppb	12,887.785 ppb	102.124 %
Concentration per Run 1	104.035 %	127.442 %	0.020 ppb	1,294.308 ppb	573.056 ppb	170.621 ppb	455.961 ppb	12,703.518 ppb	101.500 %
Concentration per Run 2	110.988 %	126.095 %	0.021 ppb	1,347.688 ppb	579.526 ppb	174.986 ppb	454.766 ppb	12,822.277 ppb	101.835 %
Concentration per Run 3	116.226 %	122.223 %	0.017 ppb	1,354.005 ppb	590.058 ppb	183.525 ppb	487.867 ppb	13,137.560 ppb	103.038 %
Concentration RSD	5.5 %	2.2 %	11.4 %	2.5 %	1.5 %	3.7 %	4.0 %	1.7 %	0.8 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.528 ppb	249.875 ppb	6.966 ppb	380.827 ppb	1.187 ppb	1.145 ppb	7.382 ppb	14.553 ppb	103.047 %
Concentration per Run 1	0.616 ppb	238.659 ppb	6.928 ppb	368.027 ppb	1.155 ppb	0.954 ppb	7.781 ppb	14.711 ppb	104.598 %
Concentration per Run 2	0.432 ppb	250.681 ppb	6.977 ppb	399.717 ppb	1.187 ppb	1.464 ppb	7.186 ppb	14.384 ppb	102.381 %
Concentration per Run 3	0.535 ppb	260.286 ppb	6.994 ppb	374.736 ppb	1.220 ppb	1.018 ppb	7.181 ppb	14.564 ppb	102.162 %
Concentration RSD	17.5 %	4.3 %	0.5 %	4.4 %	2.7 %	24.3 %	4.7 %	1.1 %	1.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.513 ppb	0.607 ppb	28.412 ppb	3.010 ppb	109.107 %	0.004 ppb	0.160 ppb	106.110 %	0.158 ppb
Concentration per Run 1	0.435 ppb	0.946 ppb	27.748 ppb	2.971 ppb	112.234 %	0.002 ppb	0.111 ppb	108.246 %	0.133 ppb
Concentration per Run 2	0.547 ppb	0.597 ppb	28.488 ppb	2.990 ppb	106.983 %	0.002 ppb	0.187 ppb	106.738 %	0.157 ppb
Concentration per Run 3	0.556 ppb	0.278 ppb	29.000 ppb	3.070 ppb	108.103 %	0.008 ppb	0.183 ppb	103.347 %	0.183 ppb
Concentration RSD	13.2 %	55.0 %	2.2 %	1.7 %	2.5 %	86.4 %	26.5 %	2.4 %	15.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	3.098 ppb	110.912 %	110.760 %	0.017 ppb	0.694 ppb	112.172 %
Concentration per Run 1	3.092 ppb	114.407 %	114.478 %	0.009 ppb	0.658 ppb	116.168 %
Concentration per Run 2	3.092 ppb	107.587 %	108.074 %	0.015 ppb	0.710 ppb	112.334 %
Concentration per Run 3	3.109 ppb	110.741 %	109.728 %	0.027 ppb	0.712 ppb	108.014 %
Concentration RSD	0.3 %	3.1 %	3.0 %	54.8 %	4.5 %	3.6 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	38	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	xCCV	Rack	0		
Analysis started at:	12/3/2024 9:34:57 AM	Vial	9		

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	39	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	xCCB	Rack	0		
Analysis started at:	12/3/2024 9:39:28 AM	Vial	10		

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index: 40
Analysis label: CCV
Analysis started at: 12/3/2024 9:44:34 AM
User name ALPHALAB\a2-icpmsq2
Rack 0
Vial 9
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	103.951 %	121.269 %	56.922 ppb	5,611.965 ppb	5,531.306 ppb	56.704 ppb	5,698.359 ppb	5,834.630 ppb	100.391 %
Concentration per Run 1	99.406 %	125.085 %	57.946 ppb	5,403.079 ppb	5,318.340 ppb	57.065 ppb	5,638.954 ppb	5,729.499 ppb	99.934 %
Concentration per Run 2	104.090 %	117.677 %	56.806 ppb	5,863.072 ppb	5,831.633 ppb	57.379 ppb	5,706.473 ppb	6,062.521 ppb	99.914 %
Concentration per Run 3	108.357 %	121.044 %	56.014 ppb	5,569.745 ppb	5,443.946 ppb	55.670 ppb	5,749.649 ppb	5,711.872 ppb	101.323 %
Recovery Percentage 1			94.870 %	93.533 %	92.188 %	94.507 %	94.973 %	97.244 %	
Concentration RSD	4.3 %	3.1 %	1.7 %	4.1 %	4.8 %	1.6 %	1.0 %	3.4 %	0.8 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	56.999 ppb	57.194 ppb	58.343 ppb	5,780.953 ppb	58.592 ppb	59.314 ppb	58.598 ppb	59.515 ppb	101.977 %
Concentration per Run 1	53.017 ppb	54.777 ppb	58.043 ppb	5,636.597 ppb	57.248 ppb	58.450 ppb	57.901 ppb	58.875 ppb	103.475 %
Concentration per Run 2	60.028 ppb	58.652 ppb	59.008 ppb	5,972.972 ppb	60.735 ppb	61.236 ppb	59.920 ppb	61.276 ppb	99.694 %
Concentration per Run 3	57.952 ppb	58.153 ppb	57.979 ppb	5,733.292 ppb	57.792 ppb	58.255 ppb	57.973 ppb	58.393 ppb	102.761 %
Recovery Percentage 1	94.998 %	95.324 %	97.239 %	96.349 %	97.653 %	98.856 %	97.663 %	99.192 %	
Concentration RSD	6.3 %	3.7 %	1.0 %	3.0 %	3.2 %	2.8 %	2.0 %	2.6 %	2.0 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	59.513 ppb	58.831 ppb	58.487 ppb	57.265 ppb	106.638 %	57.482 ppb	57.815 ppb	106.411 %	56.883 ppb
Concentration per Run 1	59.458 ppb	55.488 ppb	57.446 ppb	55.729 ppb	111.018 %	56.663 ppb	56.589 ppb	108.757 %	56.190 ppb
Concentration per Run 2	60.161 ppb	61.934 ppb	60.229 ppb	57.861 ppb	103.065 %	57.455 ppb	57.485 ppb	105.894 %	57.103 ppb
Concentration per Run 3	58.920 ppb	59.071 ppb	57.786 ppb	58.205 ppb	105.830 %	58.328 ppb	59.373 ppb	104.582 %	57.357 ppb
Recovery Percentage 1	99.188 %	98.052 %	97.478 %	95.442 %		95.803 %	96.359 %		94.806 %
Concentration RSD	1.0 %	5.5 %	2.6 %	2.3 %	3.8 %	1.4 %	2.5 %	2.0 %	1.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	56.006 ppb	110.618 %	108.235 %	56.854 ppb	56.883 ppb	110.259 %
Concentration per Run 1	55.702 ppb	113.913 %	108.986 %	54.018 ppb	54.525 ppb	113.886 %
Concentration per Run 2	55.863 ppb	109.132 %	107.319 %	57.291 ppb	58.338 ppb	109.247 %
Concentration per Run 3	56.452 ppb	108.811 %	108.401 %	59.252 ppb	57.785 ppb	107.643 %
Recovery Percentage 1	93.343 %			94.756 %	94.805 %	
Concentration RSD	0.7 %	2.6 %	0.8 %	4.7 %	3.6 %	2.9 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	41	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	CCB	Rack	0		
Analysis started at:	12/3/2024 9:49:04 AM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	105.177 %	111.673 %	0.012 ppb	-25.893 ppb	0.222 ppb	-0.044 ppb	7.733 ppb	-2.256 ppb	97.409 %
Concentration per Run 1	101.145 %	112.795 %	0.014 ppb	-28.711 ppb	0.274 ppb	-0.338 ppb	0.631 ppb	-8.304 ppb	95.036 %
Concentration per Run 2	106.688 %	111.616 %	0.014 ppb	-23.614 ppb	0.298 ppb	0.286 ppb	13.570 ppb	5.406 ppb	98.782 %
Concentration per Run 3	107.699 %	110.606 %	0.008 ppb	-25.355 ppb	0.095 ppb	-0.081 ppb	8.999 ppb	-3.870 ppb	98.409 %
Recovery Percentage 1			2.372 %	-5.179 %	0.317 %	-0.444 %	7.733 %	-2.256 %	
Concentration RSD	3.4 %	1.0 %	28.3 %	10.0 %	50.0 %	707.2 %	84.8 %	310.1 %	2.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.468 ppb	-0.002 ppb	0.019 ppb	4.094 ppb	-0.003 ppb	0.002 ppb	0.149 ppb	0.296 ppb	102.911 %
Concentration per Run 1	-0.535 ppb	-0.016 ppb	0.007 ppb	3.357 ppb	0.000 ppb	0.020 ppb	0.155 ppb	0.304 ppb	103.589 %
Concentration per Run 2	-0.394 ppb	-0.033 ppb	0.058 ppb	4.690 ppb	-0.010 ppb	0.012 ppb	0.161 ppb	0.283 ppb	100.628 %
Concentration per Run 3	-0.474 ppb	0.043 ppb	-0.009 ppb	4.235 ppb	0.003 ppb	-0.026 ppb	0.132 ppb	0.302 ppb	104.518 %
Recovery Percentage 1	-9.357 %	-0.215 %	1.863 %	8.189 %	-0.525 %	0.106 %	14.922 %	5.924 %	
Concentration RSD	15.2 %	1,857.5 %	187.4 %	16.5 %	251.5 %	1,147.5 %	10.4 %	3.9 %	2.0 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.039 ppb	0.143 ppb	0.010 ppb	0.297 ppb	105.779 %	0.014 ppb	0.002 ppb	104.255 %	0.067 ppb
Concentration per Run 1	0.021 ppb	0.187 ppb	0.009 ppb	0.260 ppb	107.234 %	0.014 ppb	0.003 ppb	106.449 %	0.048 ppb
Concentration per Run 2	0.070 ppb	0.117 ppb	0.009 ppb	0.315 ppb	104.709 %	0.021 ppb	0.004 ppb	104.786 %	0.074 ppb
Concentration per Run 3	0.027 ppb	0.126 ppb	0.011 ppb	0.316 ppb	105.396 %	0.005 ppb	0.000 ppb	101.532 %	0.078 ppb
Recovery Percentage 1	7.826 %	2.866 %	0.097 %	14.856 %		3.378 %	1.165 %		1.674 %
Concentration RSD	68.2 %	26.5 %	15.7 %	10.7 %	1.2 %	57.3 %	86.6 %	2.4 %	24.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.017 ppb	106.638 %	106.649 %	0.238 ppb	0.020 ppb	109.571 %
Concentration per Run 1	0.021 ppb	108.508 %	108.216 %	0.215 ppb	0.022 ppb	113.525 %
Concentration per Run 2	0.022 ppb	104.190 %	103.754 %	0.275 ppb	0.021 ppb	106.484 %
Concentration per Run 3	0.008 ppb	107.216 %	107.977 %	0.225 ppb	0.017 ppb	108.704 %
Recovery Percentage 1	3.449 %			23.824 %	2.023 %	
Concentration RSD	44.2 %	2.1 %	2.4 %	13.4 %	12.1 %	3.3 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	42	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2469261-05 6020TL	Rack	1		
Analysis started at:	12/3/2024 9:54:58 AM	Vial	19		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	101.418 %	113.524 %	0.430 ppb	35,842.553 ppb	23,918.184 ppb	5,113.443 ppb	13,025.821 ppb	82,011.449 ppb	101.167 %
Concentration per Run 1	98.124 %	116.162 %	0.424 ppb	34,621.299 ppb	23,404.442 ppb	5,028.999 ppb	12,725.365 ppb	80,308.794 ppb	100.869 %
Concentration per Run 2	101.105 %	109.091 %	0.431 ppb	36,837.668 ppb	24,566.089 ppb	5,204.858 ppb	13,073.716 ppb	81,127.342 ppb	100.054 %
Concentration per Run 3	105.024 %	115.320 %	0.434 ppb	36,068.692 ppb	23,784.021 ppb	5,106.473 ppb	13,278.381 ppb	84,598.212 ppb	102.578 %
Concentration RSD	3.4 %	3.4 %	1.3 %	3.1 %	2.5 %	1.7 %	2.1 %	2.8 %	1.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	15.354 ppb	21.206 ppb	152.740 ppb	8,101.320 ppb	6.718 ppb	8.091 ppb	7.531 ppb	24.507 ppb	103.870 %
Concentration per Run 1	14.458 ppb	20.025 ppb	141.635 ppb	7,709.188 ppb	6.718 ppb	7.959 ppb	6.973 ppb	23.944 ppb	107.445 %
Concentration per Run 2	15.551 ppb	21.853 ppb	159.235 ppb	8,217.110 ppb	6.663 ppb	8.331 ppb	7.708 ppb	25.007 ppb	103.571 %
Concentration per Run 3	16.053 ppb	21.740 ppb	157.352 ppb	8,377.661 ppb	6.772 ppb	7.982 ppb	7.911 ppb	24.571 ppb	100.592 %
Concentration RSD	5.3 %	4.8 %	6.3 %	4.3 %	0.8 %	2.6 %	6.6 %	2.2 %	3.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	2.780 ppb	16.236 ppb	330.852 ppb	11.464 ppb	104.471 %	0.010 ppb	0.089 ppb	107.677 %	0.354 ppb
Concentration per Run 1	2.528 ppb	16.814 ppb	321.187 ppb	11.224 ppb	107.742 %	0.007 ppb	0.098 ppb	110.089 %	0.335 ppb
Concentration per Run 2	2.801 ppb	15.895 ppb	334.218 ppb	11.332 ppb	102.713 %	0.010 ppb	0.080 ppb	107.416 %	0.325 ppb
Concentration per Run 3	3.010 ppb	15.999 ppb	337.151 ppb	11.837 ppb	102.959 %	0.013 ppb	0.088 ppb	105.525 %	0.403 ppb
Concentration RSD	8.7 %	3.1 %	2.6 %	2.9 %	2.7 %	29.0 %	10.0 %	2.1 %	12.0 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	31.421 ppb	113.037 %	111.749 %	0.100 ppb	6.331 ppb	109.598 %
Concentration per Run 1	31.086 ppb	116.855 %	114.299 %	0.084 ppb	6.044 ppb	114.391 %
Concentration per Run 2	31.581 ppb	112.148 %	109.893 %	0.105 ppb	6.325 ppb	110.511 %
Concentration per Run 3	31.597 ppb	110.108 %	111.054 %	0.112 ppb	6.624 ppb	103.891 %
Concentration RSD	0.9 %	3.1 %	2.0 %	14.2 %	4.6 %	4.8 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	43	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2469261-06 6020TL	Rack	1		
Analysis started at:	12/3/2024 9:59:26 AM	Vial	20		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	102.117 %	116.386 %	0.399 ppb	35,359.547 ppb	23,209.747 ppb	4,743.207 ppb	12,746.705 ppb	79,571.817 ppb	102.444 %
Concentration per Run 1	98.558 %	114.815 %	0.394 ppb	34,908.803 ppb	22,635.723 ppb	4,714.798 ppb	12,872.423 ppb	80,407.871 ppb	102.218 %
Concentration per Run 2	104.340 %	116.499 %	0.384 ppb	36,243.530 ppb	23,489.271 ppb	4,746.522 ppb	12,593.848 ppb	78,382.162 ppb	103.018 %
Concentration per Run 3	103.453 %	117.845 %	0.419 ppb	34,926.308 ppb	23,504.248 ppb	4,768.302 ppb	12,773.844 ppb	79,925.418 ppb	102.096 %
Concentration RSD	3.0 %	1.3 %	4.6 %	2.2 %	2.1 %	0.6 %	1.1 %	1.3 %	0.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	14.752 ppb	20.551 ppb	143.418 ppb	7,770.787 ppb	6.463 ppb	7.646 ppb	7.533 ppb	24.099 ppb	99.742 %
Concentration per Run 1	13.941 ppb	19.429 ppb	136.190 ppb	7,604.058 ppb	6.318 ppb	7.132 ppb	7.302 ppb	23.645 ppb	101.922 %
Concentration per Run 2	14.727 ppb	20.683 ppb	147.746 ppb	8,045.488 ppb	6.566 ppb	7.602 ppb	8.248 ppb	24.684 ppb	97.954 %
Concentration per Run 3	15.587 ppb	21.540 ppb	146.317 ppb	7,662.816 ppb	6.504 ppb	8.204 ppb	7.049 ppb	23.967 ppb	99.350 %
Concentration RSD	5.6 %	5.2 %	4.4 %	3.1 %	2.0 %	7.0 %	8.4 %	2.2 %	2.0 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	2.559 ppb	15.118 ppb	329.564 ppb	11.906 ppb	104.274 %	0.010 ppb	0.062 ppb	104.431 %	0.333 ppb
Concentration per Run 1	2.553 ppb	14.653 ppb	318.858 ppb	11.700 ppb	107.145 %	0.009 ppb	0.052 ppb	105.486 %	0.372 ppb
Concentration per Run 2	2.467 ppb	14.842 ppb	338.449 ppb	11.762 ppb	100.884 %	0.011 ppb	0.091 ppb	102.555 %	0.351 ppb
Concentration per Run 3	2.658 ppb	15.860 ppb	331.385 ppb	12.257 ppb	104.792 %	0.010 ppb	0.042 ppb	105.252 %	0.276 ppb
Concentration RSD	3.7 %	4.3 %	3.0 %	2.6 %	3.0 %	8.5 %	41.4 %	1.6 %	15.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	30.479 ppb	110.259 %	109.135 %	0.074 ppb	6.006 ppb	107.364 %
Concentration per Run 1	30.450 ppb	112.785 %	111.292 %	0.054 ppb	5.744 ppb	111.537 %
Concentration per Run 2	30.981 ppb	108.829 %	108.054 %	0.083 ppb	6.096 ppb	107.456 %
Concentration per Run 3	30.006 ppb	109.162 %	108.060 %	0.086 ppb	6.177 ppb	103.100 %
Concentration RSD	1.6 %	2.0 %	1.7 %	24.2 %	3.8 %	3.9 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	44	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2469261-07 6020TL	Rack	1		
Analysis started at:	12/3/2024 10:03:54 AM	Vial	21		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	98.628 %	116.386 %	0.371 ppb	41,644.293 ppb	24,270.706 ppb	4,122.017 ppb	10,848.127 ppb	81,324.980 ppb	95.219 %
Concentration per Run 1	99.009 %	122.223 %	0.380 ppb	37,781.513 ppb	22,238.982 ppb	3,860.183 ppb	10,319.234 ppb	79,099.293 ppb	95.674 %
Concentration per Run 2	97.650 %	113.973 %	0.371 ppb	43,111.887 ppb	25,285.586 ppb	4,212.030 ppb	11,238.527 ppb	81,639.558 ppb	92.803 %
Concentration per Run 3	99.225 %	112.963 %	0.361 ppb	44,039.478 ppb	25,287.551 ppb	4,293.837 ppb	10,986.619 ppb	83,236.090 ppb	97.179 %
Concentration RSD	0.9 %	4.4 %	2.6 %	8.1 %	7.2 %	5.6 %	4.4 %	2.6 %	2.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	11.191 ppb	12.909 ppb	1,977.668 ppb	12,000.382 ppb	10.129 ppb	7.725 ppb	7.843 ppb	22.201 ppb	101.471 %
Concentration per Run 1	10.857 ppb	12.306 ppb	1,899.585 ppb	11,602.086 ppb	9.879 ppb	7.374 ppb	7.427 ppb	21.881 ppb	101.754 %
Concentration per Run 2	11.083 ppb	12.988 ppb	1,987.093 ppb	11,925.399 ppb	9.986 ppb	8.063 ppb	7.800 ppb	22.141 ppb	102.585 %
Concentration per Run 3	11.634 ppb	13.433 ppb	2,046.327 ppb	12,473.660 ppb	10.524 ppb	7.739 ppb	8.301 ppb	22.579 ppb	100.075 %
Concentration RSD	3.6 %	4.4 %	3.7 %	3.7 %	3.4 %	4.5 %	5.6 %	1.6 %	1.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	8.157 ppb	3.426 ppb	316.349 ppb	7.217 ppb	104.727 %	0.005 ppb	0.066 ppb	106.663 %	0.275 ppb
Concentration per Run 1	8.166 ppb	5.005 ppb	306.571 ppb	6.946 ppb	108.884 %	0.006 ppb	0.051 ppb	108.159 %	0.227 ppb
Concentration per Run 2	8.140 ppb	2.503 ppb	317.460 ppb	7.402 ppb	103.138 %	0.006 ppb	0.077 ppb	105.992 %	0.274 ppb
Concentration per Run 3	8.165 ppb	2.769 ppb	325.015 ppb	7.302 ppb	102.158 %	0.003 ppb	0.071 ppb	105.839 %	0.324 ppb
Concentration RSD	0.2 %	40.1 %	2.9 %	3.3 %	3.5 %	31.5 %	20.5 %	1.2 %	17.5 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	22.481 ppb	113.577 %	112.308 %	0.057 ppb	5.389 ppb	107.750 %
Concentration per Run 1	22.082 ppb	115.459 %	115.133 %	0.044 ppb	5.323 ppb	108.771 %
Concentration per Run 2	22.413 ppb	112.789 %	109.253 %	0.060 ppb	5.375 ppb	106.961 %
Concentration per Run 3	22.948 ppb	112.485 %	112.538 %	0.068 ppb	5.471 ppb	107.517 %
Concentration RSD	1.9 %	1.4 %	2.6 %	21.9 %	1.4 %	0.9 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	45	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2469261-08 6020TL	Rack	1		
Analysis started at:	12/3/2024 10:08:23 AM	Vial	22		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	99.110 %	114.871 %	0.269 ppb	42,191.983 ppb	23,784.367 ppb	3,033.873 ppb	10,970.872 ppb	81,367.570 ppb	99.723 %
Concentration per Run 1	93.699 %	117.004 %	0.274 ppb	41,882.632 ppb	23,778.587 ppb	2,974.511 ppb	10,694.645 ppb	78,593.570 ppb	97.371 %
Concentration per Run 2	100.133 %	114.478 %	0.277 ppb	42,414.080 ppb	24,089.368 ppb	3,086.873 ppb	11,117.864 ppb	80,572.636 ppb	101.973 %
Concentration per Run 3	103.499 %	113.132 %	0.257 ppb	42,279.237 ppb	23,485.145 ppb	3,040.236 ppb	11,100.106 ppb	84,936.504 ppb	99.824 %
Concentration RSD	5.0 %	1.7 %	4.0 %	0.7 %	1.3 %	1.9 %	2.2 %	4.0 %	2.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	8.441 ppb	9.517 ppb	1,992.352 ppb	9,264.653 ppb	8.867 ppb	5.312 ppb	5.486 ppb	16.177 ppb	101.499 %
Concentration per Run 1	7.618 ppb	8.997 ppb	1,893.890 ppb	9,052.854 ppb	8.380 ppb	5.005 ppb	5.249 ppb	15.566 ppb	104.681 %
Concentration per Run 2	8.623 ppb	9.616 ppb	2,038.163 ppb	9,541.660 ppb	9.358 ppb	5.400 ppb	6.105 ppb	16.902 ppb	100.021 %
Concentration per Run 3	9.081 ppb	9.939 ppb	2,045.002 ppb	9,199.446 ppb	8.862 ppb	5.530 ppb	5.103 ppb	16.063 ppb	99.796 %
Concentration RSD	8.9 %	5.0 %	4.3 %	2.7 %	5.5 %	5.1 %	9.9 %	4.2 %	2.7 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	8.116 ppb	3.181 ppb	308.178 ppb	9.028 ppb	106.671 %	0.006 ppb	0.047 ppb	107.975 %	0.260 ppb
Concentration per Run 1	7.628 ppb	2.075 ppb	299.787 ppb	8.549 ppb	107.423 %	0.003 ppb	0.047 ppb	111.070 %	0.262 ppb
Concentration per Run 2	8.285 ppb	3.417 ppb	312.200 ppb	9.397 ppb	104.874 %	0.008 ppb	0.053 ppb	104.957 %	0.263 ppb
Concentration per Run 3	8.435 ppb	4.051 ppb	312.547 ppb	9.139 ppb	107.716 %	0.007 ppb	0.041 ppb	107.897 %	0.255 ppb
Concentration RSD	5.3 %	31.7 %	2.4 %	4.8 %	1.5 %	45.0 %	12.4 %	2.8 %	1.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	19.728 ppb	112.485 %	112.328 %	0.039 ppb	3.962 ppb	107.055 %
Concentration per Run 1	19.603 ppb	116.773 %	115.667 %	0.026 ppb	3.796 ppb	108.761 %
Concentration per Run 2	20.072 ppb	110.122 %	111.220 %	0.048 ppb	3.986 ppb	108.701 %
Concentration per Run 3	19.511 ppb	110.562 %	110.097 %	0.044 ppb	4.103 ppb	103.702 %
Concentration RSD	1.5 %	3.3 %	2.6 %	29.9 %	3.9 %	2.7 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	46	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2469261-09 6020TL	Rack	1		
Analysis started at:	12/3/2024 10:12:52 AM	Vial	23		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	96.856 %	115.376 %	0.023 ppb	82,551.536 ppb	25,015.841 ppb	168.400 ppb	10,356.027 ppb	93,716.422 ppb	97.464 %
Concentration per Run 1	93.706 %	112.963 %	0.023 ppb	84,327.293 ppb	24,987.979 ppb	163.148 ppb	10,351.905 ppb	92,393.568 ppb	95.129 %
Concentration per Run 2	96.705 %	119.529 %	0.025 ppb	78,974.433 ppb	23,900.784 ppb	166.626 ppb	10,098.169 ppb	94,072.078 ppb	96.179 %
Concentration per Run 3	100.158 %	113.637 %	0.020 ppb	84,352.884 ppb	26,158.758 ppb	175.426 ppb	10,618.007 ppb	94,683.621 ppb	101.083 %
Concentration RSD	3.3 %	3.1 %	12.2 %	3.8 %	4.5 %	3.8 %	2.5 %	1.3 %	3.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.064 ppb	0.697 ppb	623.409 ppb	16,765.661 ppb	0.281 ppb	0.208 ppb	0.431 ppb	0.877 ppb	104.335 %
Concentration per Run 1	0.102 ppb	0.643 ppb	625.227 ppb	17,179.919 ppb	0.250 ppb	0.133 ppb	0.506 ppb	0.791 ppb	103.723 %
Concentration per Run 2	0.034 ppb	0.669 ppb	614.554 ppb	16,486.966 ppb	0.341 ppb	0.189 ppb	0.378 ppb	0.983 ppb	102.193 %
Concentration per Run 3	0.057 ppb	0.779 ppb	630.446 ppb	16,630.097 ppb	0.253 ppb	0.302 ppb	0.409 ppb	0.856 ppb	107.091 %
Concentration RSD	53.9 %	10.4 %	1.3 %	2.2 %	18.4 %	41.5 %	15.5 %	11.1 %	2.4 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.239 ppb	0.156 ppb	326.198 ppb	1.191 ppb	105.753 %	0.004 ppb	0.001 ppb	107.487 %	0.135 ppb
Concentration per Run 1	0.187 ppb	0.029 ppb	321.481 ppb	1.176 ppb	108.506 %	0.000 ppb	0.000 ppb	113.392 %	0.099 ppb
Concentration per Run 2	0.331 ppb	0.001 ppb	327.857 ppb	1.014 ppb	106.045 %	0.004 ppb	0.000 ppb	103.981 %	0.132 ppb
Concentration per Run 3	0.198 ppb	0.437 ppb	329.257 ppb	1.383 ppb	102.707 %	0.007 ppb	0.004 ppb	105.088 %	0.175 ppb
Concentration RSD	33.5 %	156.8 %	1.3 %	15.5 %	2.8 %	90.6 %	173.2 %	4.8 %	28.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	15.927 ppb	113.278 %	112.100 %	0.020 ppb	0.271 ppb	108.392 %
Concentration per Run 1	15.313 ppb	114.810 %	113.507 %	0.009 ppb	0.276 ppb	111.276 %
Concentration per Run 2	16.410 ppb	111.075 %	111.500 %	0.026 ppb	0.266 ppb	104.695 %
Concentration per Run 3	16.059 ppb	113.950 %	111.294 %	0.024 ppb	0.269 ppb	109.205 %
Concentration RSD	3.5 %	1.7 %	1.1 %	45.4 %	1.9 %	3.1 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	47	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2469261-10 6020TL	Rack	1		
Analysis started at:	12/3/2024 10:17:21 AM	Vial	24		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	104.010 %	115.376 %	0.017 ppb	82,471.080 ppb	24,701.561 ppb	167.805 ppb	10,122.669 ppb	92,165.646 ppb	106.326 %
Concentration per Run 1	102.362 %	117.172 %	0.020 ppb	79,905.877 ppb	24,148.790 ppb	161.919 ppb	9,779.584 ppb	89,033.977 ppb	108.967 %
Concentration per Run 2	105.398 %	114.310 %	0.016 ppb	84,732.125 ppb	24,909.309 ppb	171.981 ppb	10,322.399 ppb	92,927.081 ppb	106.215 %
Concentration per Run 3	104.268 %	114.647 %	0.016 ppb	82,775.237 ppb	25,046.583 ppb	169.515 ppb	10,266.026 ppb	94,535.878 ppb	103.796 %
Concentration RSD	1.5 %	1.4 %	13.3 %	2.9 %	2.0 %	3.1 %	2.9 %	3.1 %	2.4 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.162 ppb	0.725 ppb	617.905 ppb	16,742.015 ppb	0.186 ppb	0.123 ppb	0.434 ppb	1.071 ppb	102.369 %
Concentration per Run 1	0.223 ppb	0.702 ppb	599.272 ppb	15,635.240 ppb	0.146 ppb	0.140 ppb	0.378 ppb	1.090 ppb	104.653 %
Concentration per Run 2	-0.008 ppb	0.745 ppb	635.537 ppb	17,466.889 ppb	0.198 ppb	0.151 ppb	0.428 ppb	1.024 ppb	99.962 %
Concentration per Run 3	0.271 ppb	0.729 ppb	618.908 ppb	17,123.916 ppb	0.213 ppb	0.077 ppb	0.495 ppb	1.100 ppb	102.492 %
Concentration RSD	91.9 %	3.0 %	2.9 %	5.8 %	18.9 %	32.3 %	13.5 %	3.8 %	2.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.313 ppb	0.259 ppb	322.297 ppb	1.048 ppb	106.932 %	0.002 ppb	0.002 ppb	108.574 %	0.136 ppb
Concentration per Run 1	0.277 ppb	0.242 ppb	307.702 ppb	0.868 ppb	112.433 %	0.000 ppb	0.000 ppb	110.351 %	0.090 ppb
Concentration per Run 2	0.212 ppb	0.209 ppb	330.565 ppb	1.196 ppb	105.004 %	0.005 ppb	0.000 ppb	106.929 %	0.168 ppb
Concentration per Run 3	0.450 ppb	0.325 ppb	328.623 ppb	1.080 ppb	103.357 %	0.000 ppb	0.007 ppb	108.441 %	0.151 ppb
Concentration RSD	39.4 %	23.2 %	3.9 %	15.9 %	4.5 %	163.3 %	173.2 %	1.6 %	30.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	15.826 ppb	113.357 %	114.798 %	0.015 ppb	0.252 ppb	109.977 %
Concentration per Run 1	15.161 ppb	117.479 %	119.568 %	0.006 ppb	0.232 ppb	115.644 %
Concentration per Run 2	15.976 ppb	108.219 %	110.917 %	0.017 ppb	0.275 ppb	108.329 %
Concentration per Run 3	16.341 ppb	114.374 %	113.909 %	0.020 ppb	0.251 ppb	105.959 %
Concentration RSD	3.8 %	4.2 %	3.8 %	50.4 %	8.5 %	4.6 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	48	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2469261-11 6020TL	Rack	1		
Analysis started at:	12/3/2024 10:21:50 AM	Vial	25		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	98.693 %	116.499 %	0.015 ppb	84,334.351 ppb	23,524.095 ppb	162.033 ppb	11,669.312 ppb	87,206.405 ppb	98.314 %
Concentration per Run 1	95.231 %	115.825 %	0.014 ppb	84,458.889 ppb	23,820.543 ppb	157.777 ppb	11,562.686 ppb	83,713.438 ppb	96.180 %
Concentration per Run 2	99.410 %	119.697 %	0.018 ppb	81,451.319 ppb	22,732.907 ppb	162.075 ppb	11,402.550 ppb	85,894.791 ppb	99.792 %
Concentration per Run 3	101.438 %	113.973 %	0.014 ppb	87,092.845 ppb	24,018.834 ppb	166.246 ppb	12,042.698 ppb	92,010.986 ppb	98.969 %
Concentration RSD	3.2 %	2.5 %	14.2 %	3.3 %	2.9 %	2.6 %	2.9 %	4.9 %	1.9 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.112 ppb	1.238 ppb	503.185 ppb	13,137.190 ppb	0.219 ppb	0.266 ppb	0.759 ppb	1.219 ppb	101.071 %
Concentration per Run 1	-0.278 ppb	1.179 ppb	493.904 ppb	12,973.294 ppb	0.193 ppb	0.213 ppb	0.601 ppb	1.176 ppb	102.611 %
Concentration per Run 2	-0.039 ppb	1.236 ppb	507.044 ppb	13,256.362 ppb	0.241 ppb	0.280 ppb	0.879 ppb	1.123 ppb	101.718 %
Concentration per Run 3	-0.019 ppb	1.300 ppb	508.608 ppb	13,181.914 ppb	0.223 ppb	0.306 ppb	0.798 ppb	1.358 ppb	98.884 %
Concentration RSD	128.7 %	4.9 %	1.6 %	1.1 %	10.9 %	18.1 %	18.8 %	10.1 %	1.9 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.330 ppb	0.395 ppb	310.278 ppb	0.890 ppb	105.512 %	0.005 ppb	0.002 ppb	107.509 %	0.126 ppb
Concentration per Run 1	0.248 ppb	0.268 ppb	305.356 ppb	0.753 ppb	106.457 %	0.004 ppb	0.007 ppb	108.488 %	0.079 ppb
Concentration per Run 2	0.358 ppb	0.408 ppb	311.492 ppb	0.936 ppb	104.138 %	0.005 ppb	0.000 ppb	108.653 %	0.154 ppb
Concentration per Run 3	0.383 ppb	0.509 ppb	313.987 ppb	0.982 ppb	105.940 %	0.005 ppb	0.000 ppb	105.387 %	0.144 ppb
Concentration RSD	21.7 %	30.6 %	1.4 %	13.6 %	1.2 %	13.1 %	173.2 %	1.7 %	32.5 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	17.059 ppb	112.271 %	111.564 %	0.012 ppb	0.240 ppb	105.854 %
Concentration per Run 1	16.733 ppb	115.122 %	113.249 %	0.004 ppb	0.245 ppb	110.216 %
Concentration per Run 2	17.177 ppb	111.024 %	110.441 %	0.017 ppb	0.238 ppb	103.654 %
Concentration per Run 3	17.266 ppb	110.667 %	111.003 %	0.015 ppb	0.236 ppb	103.692 %
Concentration RSD	1.7 %	2.2 %	1.3 %	57.6 %	1.9 %	3.6 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	49	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2469261-12 6020TL	Rack	1		
Analysis started at:	12/3/2024 10:26:17 AM	Vial	26		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	96.533 %	110.494 %	0.015 ppb	85,093.292 ppb	23,717.814 ppb	112.830 ppb	11,231.518 ppb	83,789.523 ppb	98.643 %
Concentration per Run 1	93.376 %	107.576 %	0.015 ppb	88,402.364 ppb	24,852.109 ppb	117.601 ppb	11,467.012 ppb	85,153.482 ppb	94.698 %
Concentration per Run 2	98.130 %	118.519 %	0.015 ppb	79,055.557 ppb	21,711.936 ppb	108.065 ppb	10,858.529 ppb	81,215.895 ppb	100.880 %
Concentration per Run 3	98.092 %	105.387 %	0.015 ppb	87,821.954 ppb	24,589.395 ppb	112.823 ppb	11,369.013 ppb	84,999.193 ppb	100.350 %
Concentration RSD	2.8 %	6.4 %	0.2 %	6.2 %	7.3 %	4.2 %	2.9 %	2.7 %	3.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.267 ppb	1.092 ppb	473.694 ppb	11,561.777 ppb	0.101 ppb	0.479 ppb	0.664 ppb	0.887 ppb	102.803 %
Concentration per Run 1	-0.184 ppb	1.071 ppb	497.712 ppb	12,348.140 ppb	0.112 ppb	0.484 ppb	0.718 ppb	0.912 ppb	99.904 %
Concentration per Run 2	-0.253 ppb	1.106 ppb	455.093 ppb	10,884.633 ppb	0.094 ppb	0.455 ppb	0.663 ppb	0.827 ppb	103.405 %
Concentration per Run 3	-0.365 ppb	1.099 ppb	468.276 ppb	11,452.558 ppb	0.098 ppb	0.497 ppb	0.611 ppb	0.923 ppb	105.101 %
Concentration RSD	34.1 %	1.7 %	4.6 %	6.4 %	9.5 %	4.4 %	8.1 %	5.9 %	2.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.250 ppb	0.164 ppb	296.006 ppb	0.772 ppb	105.655 %	0.005 ppb	0.003 ppb	106.755 %	0.129 ppb
Concentration per Run 1	0.204 ppb	0.108 ppb	303.707 ppb	0.710 ppb	104.557 %	0.004 ppb	0.007 ppb	107.732 %	0.108 ppb
Concentration per Run 2	0.292 ppb	0.024 ppb	289.716 ppb	0.712 ppb	108.535 %	0.006 ppb	0.003 ppb	107.657 %	0.132 ppb
Concentration per Run 3	0.253 ppb	0.360 ppb	294.594 ppb	0.893 ppb	103.874 %	0.004 ppb	0.000 ppb	104.875 %	0.148 ppb
Concentration RSD	17.7 %	106.6 %	2.4 %	13.6 %	2.4 %	20.9 %	100.4 %	1.5 %	15.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	16.471 ppb	111.760 %	110.396 %	0.012 ppb	0.167 ppb	105.922 %
Concentration per Run 1	17.118 ppb	107.836 %	107.168 %	0.003 ppb	0.172 ppb	105.530 %
Concentration per Run 2	16.043 ppb	115.544 %	113.139 %	0.015 ppb	0.160 ppb	106.595 %
Concentration per Run 3	16.253 ppb	111.901 %	110.880 %	0.018 ppb	0.169 ppb	105.642 %
Concentration RSD	3.5 %	3.5 %	2.7 %	67.6 %	3.9 %	0.6 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	50	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2469261-13 6020TL	Rack	1		
Analysis started at:	12/3/2024 10:30:43 AM	Vial	27		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	99.415 %	115.376 %	0.250 ppb	36,528.686 ppb	22,185.494 ppb	2,999.603 ppb	13,842.910 ppb	79,019.307 ppb	100.983 %
Concentration per Run 1	93.041 %	115.657 %	0.258 ppb	35,866.740 ppb	21,977.528 ppb	2,965.293 ppb	13,680.411 ppb	78,060.255 ppb	96.511 %
Concentration per Run 2	102.038 %	110.606 %	0.247 ppb	38,105.572 ppb	23,093.258 ppb	3,096.760 ppb	14,022.356 ppb	80,635.308 ppb	101.754 %
Concentration per Run 3	103.167 %	119.866 %	0.243 ppb	35,613.746 ppb	21,485.695 ppb	2,936.757 ppb	13,825.964 ppb	78,362.359 ppb	104.686 %
Concentration RSD	5.6 %	4.0 %	3.0 %	3.8 %	3.7 %	2.8 %	1.2 %	1.8 %	4.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	9.950 ppb	10.370 ppb	140.368 ppb	4,773.990 ppb	4.350 ppb	4.839 ppb	4.844 ppb	14.883 ppb	100.999 %
Concentration per Run 1	9.614 ppb	9.721 ppb	137.691 ppb	4,594.123 ppb	4.409 ppb	4.661 ppb	4.775 ppb	14.312 ppb	103.725 %
Concentration per Run 2	10.196 ppb	10.843 ppb	143.718 ppb	5,018.622 ppb	4.513 ppb	5.042 ppb	4.803 ppb	15.507 ppb	98.682 %
Concentration per Run 3	10.040 ppb	10.548 ppb	139.696 ppb	4,709.225 ppb	4.127 ppb	4.815 ppb	4.954 ppb	14.832 ppb	100.591 %
Concentration RSD	3.0 %	5.6 %	2.2 %	4.6 %	4.6 %	4.0 %	2.0 %	4.0 %	2.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	2.007 ppb	14.746 ppb	324.729 ppb	17.440 ppb	104.738 %	0.007 ppb	0.046 ppb	105.789 %	0.338 ppb
Concentration per Run 1	2.212 ppb	14.831 ppb	314.720 ppb	16.484 ppb	107.212 %	0.010 ppb	0.031 ppb	105.924 %	0.338 ppb
Concentration per Run 2	1.955 ppb	13.555 ppb	334.180 ppb	18.205 ppb	101.034 %	0.007 ppb	0.047 ppb	103.608 %	0.348 ppb
Concentration per Run 3	1.853 ppb	15.853 ppb	325.286 ppb	17.631 ppb	105.968 %	0.004 ppb	0.059 ppb	107.835 %	0.329 ppb
Concentration RSD	9.2 %	7.8 %	3.0 %	5.0 %	3.1 %	43.3 %	30.1 %	2.0 %	2.8 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	26.951 ppb	111.739 %	108.527 %	0.035 ppb	3.890 ppb	105.591 %
Concentration per Run 1	25.519 ppb	113.953 %	108.687 %	0.033 ppb	3.738 ppb	109.076 %
Concentration per Run 2	28.060 ppb	110.099 %	107.578 %	0.038 ppb	3.997 ppb	104.103 %
Concentration per Run 3	27.276 ppb	111.164 %	109.314 %	0.034 ppb	3.934 ppb	103.593 %
Concentration RSD	4.8 %	1.8 %	0.8 %	7.8 %	3.5 %	2.9 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	51	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2469261-14 6020TL	Rack	1		
Analysis started at:	12/3/2024 10:35:10 AM	Vial	28		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	101.397 %	110.326 %	0.288 ppb	38,781.002 ppb	24,031.552 ppb	3,611.559 ppb	14,438.374 ppb	80,397.528 ppb	101.565 %
Concentration per Run 1	96.704 %	109.259 %	0.288 ppb	38,569.482 ppb	24,224.469 ppb	3,628.758 ppb	14,660.600 ppb	79,677.930 ppb	98.857 %
Concentration per Run 2	102.720 %	108.923 %	0.291 ppb	39,578.718 ppb	24,182.936 ppb	3,600.360 ppb	14,192.473 ppb	80,131.104 ppb	101.093 %
Concentration per Run 3	104.767 %	112.795 %	0.285 ppb	38,194.808 ppb	23,687.251 ppb	3,605.558 ppb	14,462.051 ppb	81,383.551 ppb	104.745 %
Concentration RSD	4.1 %	1.9 %	1.2 %	1.8 %	1.2 %	0.4 %	1.6 %	1.1 %	2.9 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	11.143 ppb	11.703 ppb	160.337 ppb	5,798.384 ppb	5.204 ppb	5.771 ppb	5.363 ppb	17.706 ppb	98.918 %
Concentration per Run 1	10.354 ppb	11.331 ppb	161.808 ppb	5,774.936 ppb	5.163 ppb	6.254 ppb	5.245 ppb	17.822 ppb	100.041 %
Concentration per Run 2	11.478 ppb	11.878 ppb	160.955 ppb	5,953.082 ppb	5.534 ppb	5.703 ppb	5.596 ppb	18.257 ppb	96.264 %
Concentration per Run 3	11.596 ppb	11.902 ppb	158.248 ppb	5,667.134 ppb	4.913 ppb	5.354 ppb	5.249 ppb	17.039 ppb	100.449 %
Concentration RSD	6.2 %	2.8 %	1.2 %	2.5 %	6.0 %	7.9 %	3.8 %	3.5 %	2.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	2.238 ppb	16.682 ppb	333.160 ppb	16.969 ppb	103.978 %	0.003 ppb	0.042 ppb	106.616 %	0.319 ppb
Concentration per Run 1	2.079 ppb	16.286 ppb	328.447 ppb	16.425 ppb	105.144 %	0.000 ppb	0.052 ppb	106.791 %	0.294 ppb
Concentration per Run 2	2.186 ppb	17.412 ppb	337.538 ppb	16.879 ppb	103.355 %	0.002 ppb	0.039 ppb	105.810 %	0.383 ppb
Concentration per Run 3	2.448 ppb	16.349 ppb	333.496 ppb	17.603 ppb	103.434 %	0.006 ppb	0.035 ppb	107.248 %	0.280 ppb
Concentration RSD	8.5 %	3.8 %	1.4 %	3.5 %	1.0 %	106.9 %	21.7 %	0.7 %	17.5 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	28.112 ppb	112.761 %	109.216 %	0.030 ppb	4.489 ppb	105.119 %
Concentration per Run 1	28.097 ppb	115.433 %	110.796 %	0.021 ppb	4.395 ppb	106.770 %
Concentration per Run 2	28.293 ppb	111.421 %	109.013 %	0.032 ppb	4.630 ppb	102.811 %
Concentration per Run 3	27.947 ppb	111.431 %	107.840 %	0.037 ppb	4.442 ppb	105.776 %
Concentration RSD	0.6 %	2.1 %	1.4 %	26.5 %	2.8 %	2.0 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index: 52
Analysis label: CCV
Analysis started at: 12/3/2024 10:39:37 AM
User name ALPHALAB\a2-icpmsq2
Rack 0
Vial 9
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	112.415 %	108.137 %	51.507 ppb	6,086.589 ppb	5,849.735 ppb	57.893 ppb	6,058.661 ppb	5,922.331 ppb	111.170 %
Concentration per Run 1	109.726 %	107.408 %	50.002 ppb	6,076.394 ppb	5,817.939 ppb	56.181 ppb	5,848.853 ppb	5,870.692 ppb	110.453 %
Concentration per Run 2	113.636 %	113.805 %	50.349 ppb	5,920.835 ppb	5,686.390 ppb	56.546 ppb	5,966.297 ppb	5,872.198 ppb	114.223 %
Concentration per Run 3	113.883 %	103.199 %	54.170 ppb	6,262.538 ppb	6,044.876 ppb	60.953 ppb	6,360.834 ppb	6,024.103 ppb	108.834 %
Recovery Percentage 1			85.845 %	101.443 %	97.496 %	96.489 %	100.978 %	98.706 %	
Concentration RSD	2.1 %	4.9 %	4.5 %	2.8 %	3.1 %	4.6 %	4.4 %	1.5 %	2.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	58.542 ppb	59.239 ppb	59.058 ppb	5,932.809 ppb	60.183 ppb	61.440 ppb	60.917 ppb	61.048 ppb	100.240 %
Concentration per Run 1	57.594 ppb	58.531 ppb	57.856 ppb	5,900.408 ppb	60.062 ppb	60.352 ppb	60.787 ppb	61.768 ppb	102.766 %
Concentration per Run 2	56.547 ppb	58.500 ppb	58.384 ppb	5,925.367 ppb	59.988 ppb	63.630 ppb	61.472 ppb	60.588 ppb	98.127 %
Concentration per Run 3	61.484 ppb	60.687 ppb	60.935 ppb	5,972.651 ppb	60.500 ppb	60.338 ppb	60.492 ppb	60.787 ppb	99.828 %
Recovery Percentage 1	97.570 %	98.732 %	98.430 %	98.880 %	100.305 %	102.400 %	101.528 %	101.746 %	
Concentration RSD	4.4 %	2.1 %	2.8 %	0.6 %	0.5 %	3.1 %	0.8 %	1.0 %	2.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	60.606 ppb	57.208 ppb	58.209 ppb	56.740 ppb	107.150 %	56.490 ppb	57.878 ppb	104.293 %	57.794 ppb
Concentration per Run 1	58.852 ppb	54.193 ppb	57.073 ppb	55.411 ppb	108.270 %	54.319 ppb	56.451 ppb	106.379 %	56.683 ppb
Concentration per Run 2	61.211 ppb	61.089 ppb	59.102 ppb	56.589 ppb	105.280 %	57.223 ppb	58.728 ppb	102.607 %	57.998 ppb
Concentration per Run 3	61.754 ppb	56.341 ppb	58.452 ppb	58.219 ppb	107.901 %	57.928 ppb	58.454 ppb	103.894 %	58.702 ppb
Recovery Percentage 1	101.010 %	95.346 %	97.015 %	94.566 %		94.150 %	96.463 %		96.324 %
Concentration RSD	2.5 %	6.2 %	1.8 %	2.5 %	1.5 %	3.4 %	2.1 %	1.8 %	1.8 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	58.102 ppb	107.228 %	106.888 %	55.166 ppb	56.410 ppb	108.892 %
Concentration per Run 1	58.154 ppb	107.348 %	106.772 %	53.449 ppb	55.357 ppb	110.393 %
Concentration per Run 2	57.859 ppb	105.599 %	105.952 %	56.075 ppb	57.159 ppb	106.681 %
Concentration per Run 3	58.292 ppb	108.737 %	107.941 %	55.975 ppb	56.715 ppb	109.603 %
Recovery Percentage 1	96.836 %			91.944 %	94.017 %	
Concentration RSD	0.4 %	1.5 %	0.9 %	2.7 %	1.7 %	1.8 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	53	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	CCB	Rack	0		
Analysis started at:	12/3/2024 10:44:08 AM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	108.508 %	110.943 %	0.299 ppb	37.943 ppb	5.640 ppb	0.287 ppb	5.756 ppb	16.688 ppb	98.103 %
Concentration per Run 1	106.335 %	115.488 %	0.322 ppb	32.561 ppb	6.112 ppb	-0.054 ppb	6.136 ppb	24.251 ppb	96.406 %
Concentration per Run 2	109.857 %	114.310 %	0.321 ppb	28.268 ppb	5.367 ppb	0.072 ppb	6.226 ppb	17.805 ppb	98.917 %
Concentration per Run 3	109.331 %	103.030 %	0.254 ppb	53.000 ppb	5.442 ppb	0.842 ppb	4.904 ppb	8.010 ppb	98.984 %
Recovery Percentage 1			59.832 %	7.589 %	8.058 %	2.867 %	5.756 %	16.688 %	
Concentration RSD	1.8 %	6.2 %	13.0 %	34.8 %	7.3 %	169.2 %	12.8 %	49.0 %	1.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.430 ppb	0.001 ppb	0.124 ppb	9.324 ppb	0.025 ppb	-0.004 ppb	0.108 ppb	0.297 ppb	100.959 %
Concentration per Run 1	-0.379 ppb	0.037 ppb	0.140 ppb	10.730 ppb	0.019 ppb	0.035 ppb	0.091 ppb	0.320 ppb	99.484 %
Concentration per Run 2	-0.442 ppb	-0.038 ppb	0.024 ppb	7.965 ppb	0.013 ppb	-0.046 ppb	0.098 ppb	0.316 ppb	100.509 %
Concentration per Run 3	-0.470 ppb	0.005 ppb	0.208 ppb	9.278 ppb	0.042 ppb	0.000 ppb	0.136 ppb	0.256 ppb	102.883 %
Recovery Percentage 1	-8.605 %	0.147 %	12.390 %	18.649 %	4.936 %	-0.175 %	10.816 %	5.948 %	
Concentration RSD	10.7 %	2,562.9 %	74.7 %	14.8 %	62.6 %	1,171.5 %	22.4 %	12.2 %	1.7 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.068 ppb	0.220 ppb	0.081 ppb	0.330 ppb	105.479 %	0.020 ppb	0.021 ppb	101.769 %	0.060 ppb
Concentration per Run 1	-0.026 ppb	0.457 ppb	0.105 ppb	0.291 ppb	109.930 %	0.023 ppb	0.027 ppb	107.527 %	0.045 ppb
Concentration per Run 2	0.136 ppb	0.127 ppb	0.081 ppb	0.332 ppb	104.757 %	0.022 ppb	0.026 ppb	98.973 %	0.051 ppb
Concentration per Run 3	0.095 ppb	0.076 ppb	0.058 ppb	0.366 ppb	101.751 %	0.015 ppb	0.011 ppb	98.807 %	0.084 ppb
Recovery Percentage 1	13.644 %	4.395 %	0.811 %	16.489 %		5.043 %	10.672 %		1.494 %
Concentration RSD	123.7 %	94.2 %	29.0 %	11.5 %	3.9 %	20.8 %	41.7 %	4.9 %	35.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.032 ppb	105.257 %	106.031 %	0.243 ppb	0.035 ppb	106.902 %
Concentration per Run 1	0.048 ppb	106.063 %	108.739 %	0.221 ppb	0.050 ppb	108.948 %
Concentration per Run 2	0.052 ppb	104.451 %	102.461 %	0.284 ppb	0.030 ppb	104.322 %
Concentration per Run 3	-0.005 ppb	105.256 %	106.894 %	0.224 ppb	0.024 ppb	107.436 %
Recovery Percentage 1	6.323 %			24.290 %	3.487 %	
Concentration RSD	100.4 %	0.8 %	3.0 %	14.5 %	37.8 %	2.2 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	54	User name	ALPHALAB\a2-icpmsq2	Comment	CCV/MCCV
Analysis label:	CCV	Rack	0		
Analysis started at:	12/3/2024 11:00:44 AM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	106.067 %	111.560 %	57.878 ppb	5,999.161 ppb	5,962.342 ppb	58.996 ppb	5,949.802 ppb	6,037.103 ppb	101.498 %
Concentration per Run 1	103.309 %	118.182 %	58.070 ppb	5,795.904 ppb	5,781.111 ppb	56.982 ppb	5,783.712 ppb	6,210.148 ppb	101.660 %
Concentration per Run 2	107.348 %	105.724 %	57.420 ppb	6,104.722 ppb	6,095.598 ppb	61.374 ppb	6,050.128 ppb	6,142.082 ppb	101.683 %
Concentration per Run 3	107.544 %	110.775 %	58.145 ppb	6,096.856 ppb	6,010.316 ppb	58.632 ppb	6,015.567 ppb	5,759.080 ppb	101.152 %
Recovery Percentage 1			96.463 %	99.986 %	99.372 %	98.326 %	99.163 %	100.618 %	
Concentration RSD	2.3 %	5.6 %	0.7 %	2.9 %	2.7 %	3.8 %	2.4 %	4.0 %	0.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	56.497 ppb	58.008 ppb	58.984 ppb	5,861.488 ppb	58.058 ppb	59.763 ppb	58.128 ppb	59.750 ppb	104.040 %
Concentration per Run 1	55.192 ppb	59.641 ppb	60.175 ppb	5,920.366 ppb	57.526 ppb	60.152 ppb	60.736 ppb	59.851 ppb	100.656 %
Concentration per Run 2	56.694 ppb	56.473 ppb	56.627 ppb	5,694.289 ppb	56.977 ppb	58.923 ppb	57.195 ppb	59.445 ppb	105.548 %
Concentration per Run 3	57.604 ppb	57.911 ppb	60.150 ppb	5,969.809 ppb	59.673 ppb	60.214 ppb	56.453 ppb	59.953 ppb	105.916 %
Recovery Percentage 1	94.161 %	96.680 %	98.307 %	97.691 %	96.764 %	99.605 %	96.880 %	99.583 %	
Concentration RSD	2.2 %	2.7 %	3.5 %	2.5 %	2.5 %	1.2 %	3.9 %	0.4 %	2.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	58.617 ppb	55.636 ppb	57.909 ppb	57.506 ppb	106.684 %	57.737 ppb	57.289 ppb	107.388 %	57.298 ppb
Concentration per Run 1	59.067 ppb	53.618 ppb	58.344 ppb	55.586 ppb	111.356 %	56.347 ppb	56.717 ppb	111.427 %	55.242 ppb
Concentration per Run 2	57.503 ppb	57.230 ppb	57.076 ppb	58.012 ppb	106.350 %	57.652 ppb	57.073 ppb	107.040 %	56.318 ppb
Concentration per Run 3	59.280 ppb	56.059 ppb	58.308 ppb	58.919 ppb	102.345 %	59.211 ppb	58.078 ppb	103.699 %	60.334 ppb
Recovery Percentage 1	97.694 %	92.727 %	96.515 %	95.843 %		96.228 %	95.482 %		95.496 %
Concentration RSD	1.7 %	3.3 %	1.2 %	3.0 %	4.2 %	2.5 %	1.2 %	3.6 %	4.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	56.582 ppb	108.976 %	108.243 %	55.907 ppb	56.529 ppb	111.635 %
Concentration per Run 1	54.389 ppb	112.384 %	110.387 %	55.225 ppb	56.021 ppb	113.701 %
Concentration per Run 2	56.835 ppb	108.662 %	108.456 %	56.179 ppb	56.774 ppb	109.345 %
Concentration per Run 3	58.523 ppb	105.883 %	105.885 %	56.318 ppb	56.792 ppb	111.858 %
Recovery Percentage 1	94.304 %			93.179 %	94.215 %	
Concentration RSD	3.7 %	3.0 %	2.1 %	1.1 %	0.8 %	2.0 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index: 55
Analysis label: CCB
Analysis started at: 12/3/2024 11:05:15 AM
User name ALPHALAB\a2-icpmsq2
Rack 0
Vial 10
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	102.940 %	113.637 %	0.120 ppb	24.195 ppb	17.998 ppb	0.508 ppb	25.216 ppb	29.599 ppb	94.943 %
Concentration per Run 1	100.060 %	116.667 %	0.128 ppb	6.481 ppb	6.802 ppb	0.388 ppb	15.633 ppb	17.401 ppb	94.815 %
Concentration per Run 2	104.403 %	112.627 %	0.118 ppb	28.691 ppb	20.278 ppb	0.862 ppb	27.526 ppb	48.110 ppb	94.632 %
Concentration per Run 3	104.357 %	111.616 %	0.114 ppb	37.412 ppb	26.914 ppb	0.274 ppb	32.488 ppb	23.285 ppb	95.381 %
Recovery Percentage 1			23.996 %	4.839 %	25.711 %	5.079 %	25.216 %	29.599 %	
Concentration RSD	2.4 %	2.4 %	5.9 %	65.9 %	56.9 %	61.3 %	34.3 %	55.1 %	0.4 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.365 ppb	0.142 ppb	0.284 ppb	19.491 ppb	0.166 ppb	0.301 ppb	0.262 ppb	0.535 ppb	101.525 %
Concentration per Run 1	-0.520 ppb	0.055 ppb	0.234 ppb	7.587 ppb	0.051 ppb	0.228 ppb	0.198 ppb	0.434 ppb	100.878 %
Concentration per Run 2	-0.333 ppb	0.114 ppb	0.269 ppb	22.989 ppb	0.207 ppb	0.265 ppb	0.245 ppb	0.509 ppb	101.202 %
Concentration per Run 3	-0.243 ppb	0.256 ppb	0.348 ppb	27.897 ppb	0.240 ppb	0.410 ppb	0.343 ppb	0.661 ppb	102.494 %
Recovery Percentage 1	-7.306 %	14.170 %	28.390 %	38.982 %	33.194 %	15.051 %	26.193 %	10.695 %	
Concentration RSD	38.7 %	73.2 %	20.6 %	54.4 %	60.8 %	32.0 %	28.2 %	21.7 %	0.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.199 ppb	0.299 ppb	0.165 ppb	0.425 ppb	106.205 %	0.162 ppb	0.150 ppb	104.755 %	0.203 ppb
Concentration per Run 1	0.117 ppb	0.326 ppb	0.068 ppb	0.168 ppb	111.422 %	0.056 ppb	0.061 ppb	108.022 %	0.094 ppb
Concentration per Run 2	0.231 ppb	0.121 ppb	0.195 ppb	0.553 ppb	102.199 %	0.187 ppb	0.179 ppb	103.444 %	0.199 ppb
Concentration per Run 3	0.249 ppb	0.448 ppb	0.231 ppb	0.554 ppb	104.995 %	0.245 ppb	0.211 ppb	102.800 %	0.315 ppb
Recovery Percentage 1	39.820 %	5.971 %	1.645 %	21.257 %		40.605 %	75.137 %		5.071 %
Concentration RSD	35.9 %	55.3 %	52.0 %	52.4 %	4.5 %	59.6 %	52.5 %	2.7 %	54.4 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.172 ppb	106.791 %	105.376 %	0.372 ppb	0.176 ppb	107.514 %
Concentration per Run 1	0.087 ppb	108.240 %	108.396 %	0.254 ppb	0.084 ppb	107.602 %
Concentration per Run 2	0.186 ppb	106.648 %	104.603 %	0.444 ppb	0.195 ppb	105.408 %
Concentration per Run 3	0.243 ppb	105.486 %	103.130 %	0.420 ppb	0.250 ppb	109.531 %
Recovery Percentage 1	34.438 %			37.240 %	17.634 %	
Concentration RSD	45.8 %	1.3 %	2.6 %	27.8 %	48.1 %	1.9 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index: 56
Analysis label: WG2003775-1 6020TL
Analysis started at: 12/3/2024 11:11:12 AM
User name ALPHALAB\a2-icpmsq2
Rack 1
Vial 29
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	110.001 %	122.279 %	0.023 ppb	-11.968 ppb	1.957 ppb	2.181 ppb	-6.287 ppb	36.240 ppb	106.282 %
Concentration per Run 1	104.648 %	126.095 %	0.052 ppb	-16.849 ppb	1.369 ppb	1.536 ppb	-19.686 ppb	34.354 ppb	105.628 %
Concentration per Run 2	114.713 %	117.172 %	0.007 ppb	-5.978 ppb	1.387 ppb	2.679 ppb	-3.677 ppb	45.510 ppb	107.876 %
Concentration per Run 3	110.643 %	123.569 %	0.008 ppb	-13.077 ppb	3.115 ppb	2.328 ppb	4.500 ppb	28.857 ppb	105.341 %
Concentration RSD	4.6 %	3.8 %	115.0 %	46.1 %	51.2 %	26.8 %	195.7 %	23.4 %	1.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.543 ppb	0.059 ppb	0.109 ppb	3.279 ppb	0.008 ppb	-0.017 ppb	0.182 ppb	0.343 ppb	104.894 %
Concentration per Run 1	-0.555 ppb	0.022 ppb	0.061 ppb	4.348 ppb	0.014 ppb	-0.022 ppb	0.134 ppb	0.359 ppb	110.572 %
Concentration per Run 2	-0.520 ppb	0.094 ppb	0.087 ppb	3.668 ppb	0.006 ppb	-0.048 ppb	0.211 ppb	0.378 ppb	101.715 %
Concentration per Run 3	-0.552 ppb	0.060 ppb	0.179 ppb	1.821 ppb	0.006 ppb	0.018 ppb	0.200 ppb	0.292 ppb	102.396 %
Concentration RSD	3.6 %	61.9 %	56.4 %	39.9 %	53.4 %	192.7 %	23.0 %	13.2 %	4.7 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.047 ppb	0.041 ppb	0.041 ppb	0.010 ppb	110.882 %	0.009 ppb	0.007 ppb	114.449 %	0.019 ppb
Concentration per Run 1	0.003 ppb	0.072 ppb	0.032 ppb	-0.027 ppb	120.149 %	0.007 ppb	0.006 ppb	122.555 %	0.013 ppb
Concentration per Run 2	0.058 ppb	0.120 ppb	0.049 ppb	0.066 ppb	106.822 %	0.010 ppb	0.010 ppb	111.551 %	0.023 ppb
Concentration per Run 3	0.080 ppb	-0.069 ppb	0.040 ppb	-0.010 ppb	105.674 %	0.009 ppb	0.003 ppb	109.241 %	0.022 ppb
Concentration RSD	83.7 %	240.1 %	20.7 %	497.8 %	7.3 %	18.5 %	51.4 %	6.2 %	28.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.022 ppb	112.949 %	111.403 %	0.052 ppb	0.021 ppb	114.728 %
Concentration per Run 1	0.052 ppb	120.426 %	119.958 %	0.033 ppb	0.018 ppb	121.996 %
Concentration per Run 2	0.007 ppb	110.842 %	107.558 %	0.064 ppb	0.019 ppb	113.663 %
Concentration per Run 3	0.007 ppb	107.580 %	106.692 %	0.058 ppb	0.026 ppb	108.524 %
Concentration RSD	117.3 %	5.9 %	6.7 %	31.9 %	19.3 %	5.9 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	57	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG2003775-2d10 6020TL	Rack	1		
Analysis started at:	12/3/2024 11:15:40 AM	Vial	30		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	104.926 %	112.178 %	5.199 ppb	1,074.055 ppb	999.509 ppb	198.475 ppb	1,077.035 ppb	997.886 ppb	98.792 %
Concentration per Run 1	99.773 %	115.825 %	5.280 ppb	1,038.539 ppb	975.747 ppb	189.568 ppb	1,055.985 ppb	917.967 ppb	95.550 %
Concentration per Run 2	107.099 %	111.448 %	5.146 ppb	1,074.215 ppb	985.542 ppb	202.946 ppb	1,087.005 ppb	1,072.445 ppb	101.295 %
Concentration per Run 3	107.906 %	109.259 %	5.170 ppb	1,109.412 ppb	1,037.237 ppb	202.910 ppb	1,088.114 ppb	1,003.246 ppb	99.530 %
Concentration RSD	4.3 %	3.0 %	1.4 %	3.3 %	3.3 %	3.9 %	1.7 %	7.8 %	3.0 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	49.195 ppb	20.386 ppb	52.778 ppb	114.870 ppb	52.554 ppb	51.707 ppb	26.097 ppb	52.860 ppb	100.183 %
Concentration per Run 1	47.979 ppb	20.239 ppb	51.953 ppb	105.565 ppb	51.294 ppb	51.036 ppb	26.235 ppb	52.688 ppb	101.453 %
Concentration per Run 2	48.288 ppb	20.479 ppb	52.479 ppb	121.432 ppb	53.436 ppb	51.203 ppb	26.105 ppb	52.301 ppb	98.756 %
Concentration per Run 3	51.319 ppb	20.439 ppb	53.901 ppb	117.613 ppb	52.931 ppb	52.882 ppb	25.952 ppb	53.591 ppb	100.339 %
Concentration RSD	3.8 %	0.6 %	1.9 %	7.2 %	2.1 %	2.0 %	0.5 %	1.3 %	1.4 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	12.676 ppb	11.789 ppb	98.401 ppb	97.591 ppb	105.413 %	5.265 ppb	5.309 ppb	105.680 %	40.215 ppb
Concentration per Run 1	12.340 ppb	12.060 ppb	97.148 ppb	95.085 ppb	107.278 %	5.147 ppb	5.142 ppb	109.793 %	38.661 ppb
Concentration per Run 2	13.339 ppb	12.313 ppb	98.191 ppb	97.841 ppb	104.960 %	5.326 ppb	5.302 ppb	102.155 %	40.757 ppb
Concentration per Run 3	12.349 ppb	10.994 ppb	99.864 ppb	99.848 ppb	104.002 %	5.321 ppb	5.483 ppb	105.091 %	41.227 ppb
Concentration RSD	4.5 %	5.9 %	1.4 %	2.5 %	1.6 %	1.9 %	3.2 %	3.6 %	3.4 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	200.330 ppb	107.521 %	105.827 %	11.642 ppb	51.733 ppb	108.729 %
Concentration per Run 1	192.816 ppb	109.025 %	106.922 %	11.407 ppb	51.279 ppb	111.040 %
Concentration per Run 2	201.442 ppb	106.078 %	106.464 %	11.736 ppb	51.965 ppb	106.011 %
Concentration per Run 3	206.732 ppb	107.462 %	104.094 %	11.784 ppb	51.956 ppb	109.136 %
Concentration RSD	3.5 %	1.4 %	1.4 %	1.8 %	0.8 %	2.3 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	58	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2469249-06 6020TL	Rack	1		
Analysis started at:	12/3/2024 11:20:08 AM	Vial	31		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	96.006 %	113.244 %	0.400 ppb	61,483.067 ppb	31,129.826 ppb	3,638.650 ppb	7,228.747 ppb	122,167.322 ppb	100.498 %
Concentration per Run 1	91.622 %	110.943 %	0.458 ppb	61,701.003 ppb	31,248.185 ppb	3,642.293 ppb	7,072.227 ppb	120,466.866 ppb	97.658 %
Concentration per Run 2	96.166 %	116.162 %	0.387 ppb	59,335.734 ppb	30,497.846 ppb	3,575.730 ppb	7,172.276 ppb	123,754.279 ppb	101.627 %
Concentration per Run 3	100.229 %	112.626 %	0.355 ppb	63,412.465 ppb	31,643.446 ppb	3,697.927 ppb	7,441.739 ppb	122,280.823 ppb	102.210 %
Concentration RSD	4.5 %	2.4 %	13.2 %	3.3 %	1.9 %	1.7 %	2.6 %	1.3 %	2.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	11.679 ppb	11.676 ppb	3,472.910 ppb	6,933.646 ppb	8.805 ppb	13.448 ppb	20.055 ppb	93.196 ppb	102.605 %
Concentration per Run 1	11.760 ppb	11.427 ppb	3,449.666 ppb	6,917.748 ppb	8.863 ppb	12.970 ppb	19.746 ppb	92.927 ppb	105.642 %
Concentration per Run 2	11.630 ppb	11.885 ppb	3,443.924 ppb	6,965.831 ppb	8.690 ppb	13.926 ppb	20.669 ppb	94.466 ppb	100.498 %
Concentration per Run 3	11.647 ppb	11.717 ppb	3,525.141 ppb	6,917.360 ppb	8.863 ppb	13.449 ppb	19.750 ppb	92.195 ppb	101.676 %
Concentration RSD	0.6 %	2.0 %	1.3 %	0.4 %	1.1 %	3.6 %	2.7 %	1.2 %	2.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	2.014 ppb	2.793 ppb	820.582 ppb	2.766 ppb	104.742 %	0.041 ppb	0.351 ppb	108.707 %	2.972 ppb
Concentration per Run 1	2.101 ppb	2.087 ppb	818.827 ppb	2.503 ppb	103.866 %	0.047 ppb	0.362 ppb	110.345 %	2.995 ppb
Concentration per Run 2	2.076 ppb	2.932 ppb	821.478 ppb	2.839 ppb	105.912 %	0.044 ppb	0.332 ppb	109.092 %	2.918 ppb
Concentration per Run 3	1.865 ppb	3.361 ppb	821.440 ppb	2.956 ppb	104.448 %	0.031 ppb	0.359 ppb	106.685 %	3.003 ppb
Concentration RSD	6.4 %	23.2 %	0.2 %	8.5 %	1.0 %	20.8 %	4.8 %	1.7 %	1.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	93.636 ppb	111.439 %	111.802 %	0.134 ppb	38.082 ppb	107.235 %
Concentration per Run 1	93.258 ppb	113.720 %	110.403 %	0.113 ppb	37.374 ppb	108.968 %
Concentration per Run 2	91.455 ppb	107.960 %	112.959 %	0.152 ppb	38.645 ppb	105.750 %
Concentration per Run 3	96.195 ppb	112.638 %	112.042 %	0.138 ppb	38.227 ppb	106.987 %
Concentration RSD	2.6 %	2.7 %	1.2 %	14.6 %	1.7 %	1.5 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	59	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG2003775-3d10 6020TL	Rack	1		
Analysis started at:	12/3/2024 11:24:36 AM	Vial	32		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	109.384 %	120.988 %	4.771 ppb	6,699.680 ppb	3,945.424 ppb	597.867 ppb	1,604.475 ppb	12,285.881 ppb	104.250 %
Concentration per Run 1	104.958 %	122.391 %	4.773 ppb	6,438.087 ppb	3,839.269 ppb	588.764 ppb	1,592.254 ppb	12,078.111 ppb	101.164 %
Concentration per Run 2	111.617 %	119.866 %	4.728 ppb	6,821.298 ppb	3,968.138 ppb	596.163 ppb	1,560.704 ppb	12,219.050 ppb	107.215 %
Concentration per Run 3	111.578 %	120.707 %	4.811 ppb	6,839.654 ppb	4,028.865 ppb	608.674 ppb	1,660.468 ppb	12,560.483 ppb	104.371 %
Concentration RSD	3.5 %	1.1 %	0.9 %	3.4 %	2.5 %	1.7 %	3.2 %	2.0 %	2.9 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	45.752 ppb	19.600 ppb	381.111 ppb	743.806 ppb	48.399 ppb	49.575 ppb	26.236 ppb	57.457 ppb	106.560 %
Concentration per Run 1	42.592 ppb	18.644 ppb	365.397 ppb	713.461 ppb	47.127 ppb	48.308 ppb	26.068 ppb	56.348 ppb	108.463 %
Concentration per Run 2	45.718 ppb	20.207 ppb	392.412 ppb	753.954 ppb	50.346 ppb	50.627 ppb	26.232 ppb	59.209 ppb	104.789 %
Concentration per Run 3	48.945 ppb	19.949 ppb	385.526 ppb	764.002 ppb	47.723 ppb	49.789 ppb	26.407 ppb	56.814 ppb	106.428 %
Concentration RSD	6.9 %	4.3 %	3.7 %	3.6 %	3.5 %	2.4 %	0.6 %	2.7 %	1.7 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	11.184 ppb	10.876 ppb	169.928 ppb	87.998 ppb	110.893 %	4.897 ppb	4.904 ppb	109.724 %	36.944 ppb
Concentration per Run 1	10.469 ppb	11.420 ppb	163.022 ppb	83.675 ppb	115.286 %	4.584 ppb	4.534 ppb	113.757 %	35.227 ppb
Concentration per Run 2	11.615 ppb	9.690 ppb	174.857 ppb	90.468 ppb	107.373 %	5.074 ppb	5.166 ppb	106.623 %	38.929 ppb
Concentration per Run 3	11.467 ppb	11.518 ppb	171.905 ppb	89.849 ppb	110.021 %	5.034 ppb	5.012 ppb	108.791 %	36.674 ppb
Concentration RSD	5.6 %	9.5 %	3.6 %	4.3 %	3.6 %	5.6 %	6.7 %	3.3 %	5.0 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	193.933 ppb	112.241 %	110.896 %	11.048 ppb	53.007 ppb	112.134 %
Concentration per Run 1	184.830 ppb	117.887 %	115.776 %	10.126 ppb	49.532 ppb	117.729 %
Concentration per Run 2	199.527 ppb	108.133 %	107.984 %	11.471 ppb	55.152 ppb	108.599 %
Concentration per Run 3	197.442 ppb	110.703 %	108.928 %	11.545 ppb	54.336 ppb	110.073 %
Concentration RSD	4.1 %	4.5 %	3.8 %	7.2 %	5.7 %	4.4 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	60	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG2003775-4d10 6020TL	Rack	1		
Analysis started at:	12/3/2024 11:29:04 AM	Vial	33		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	108.299 %	118.294 %	4.765 ppb	6,728.602 ppb	3,919.314 ppb	604.463 ppb	1,619.042 ppb	12,269.519 ppb	103.214 %
Concentration per Run 1	105.133 %	116.835 %	4.831 ppb	6,815.853 ppb	3,960.790 ppb	606.536 ppb	1,610.404 ppb	11,882.252 ppb	99.277 %
Concentration per Run 2	109.890 %	120.202 %	4.648 ppb	6,619.642 ppb	3,886.431 ppb	596.101 ppb	1,641.630 ppb	12,683.807 ppb	105.933 %
Concentration per Run 3	109.872 %	117.845 %	4.817 ppb	6,750.311 ppb	3,910.720 ppb	610.753 ppb	1,605.093 ppb	12,242.497 ppb	104.431 %
Concentration RSD	2.5 %	1.5 %	2.1 %	1.5 %	1.0 %	1.2 %	1.2 %	3.3 %	3.4 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	46.361 ppb	19.318 ppb	375.511 ppb	758.418 ppb	48.156 ppb	48.888 ppb	25.784 ppb	57.266 ppb	105.502 %
Concentration per Run 1	45.204 ppb	19.116 ppb	382.228 ppb	794.084 ppb	48.430 ppb	49.720 ppb	26.431 ppb	57.880 ppb	103.696 %
Concentration per Run 2	47.264 ppb	19.392 ppb	372.537 ppb	755.439 ppb	48.542 ppb	48.914 ppb	25.201 ppb	58.235 ppb	102.075 %
Concentration per Run 3	46.614 ppb	19.447 ppb	371.767 ppb	725.730 ppb	47.496 ppb	48.030 ppb	25.719 ppb	55.683 ppb	110.735 %
Concentration RSD	2.3 %	0.9 %	1.6 %	4.5 %	1.2 %	1.7 %	2.4 %	2.4 %	4.4 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	11.352 ppb	11.398 ppb	169.364 ppb	87.816 ppb	106.600 %	4.835 ppb	4.908 ppb	107.526 %	37.008 ppb
Concentration per Run 1	11.242 ppb	12.288 ppb	169.392 ppb	85.322 ppb	107.627 %	4.725 ppb	4.891 ppb	110.859 %	36.409 ppb
Concentration per Run 2	11.615 ppb	11.531 ppb	172.082 ppb	90.718 ppb	106.747 %	4.846 ppb	4.770 ppb	107.093 %	36.944 ppb
Concentration per Run 3	11.200 ppb	10.375 ppb	166.619 ppb	87.407 ppb	105.425 %	4.935 ppb	5.062 ppb	104.627 %	37.670 ppb
Concentration RSD	2.0 %	8.5 %	1.6 %	3.1 %	1.0 %	2.2 %	3.0 %	2.9 %	1.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	194.636 ppb	110.746 %	108.108 %	10.857 ppb	52.090 ppb	110.226 %
Concentration per Run 1	195.075 ppb	113.787 %	110.382 %	10.684 ppb	51.629 ppb	112.021 %
Concentration per Run 2	194.898 ppb	109.878 %	108.881 %	11.025 ppb	52.550 ppb	108.848 %
Concentration per Run 3	193.935 ppb	108.574 %	105.060 %	10.863 ppb	52.090 ppb	109.808 %
Concentration RSD	0.3 %	2.4 %	2.5 %	1.6 %	0.9 %	1.5 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	61	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG2003775-5d10 6020TL	Rack	1		
Analysis started at:	12/3/2024 11:33:33 AM	Vial	34		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	106.308 %	119.753 %	47.815 ppb	10,699.989 ppb	7,837.444 ppb	406.943 ppb	5,454.736 ppb	16,729.146 ppb	99.863 %
Concentration per Run 1	102.691 %	128.283 %	47.966 ppb	9,957.468 ppb	7,260.830 ppb	379.718 ppb	5,312.264 ppb	15,860.630 ppb	98.025 %
Concentration per Run 2	109.076 %	117.677 %	47.458 ppb	10,831.441 ppb	8,088.622 ppb	425.359 ppb	5,430.310 ppb	16,791.915 ppb	101.747 %
Concentration per Run 3	107.157 %	113.300 %	48.022 ppb	11,311.058 ppb	8,162.880 ppb	415.753 ppb	5,621.635 ppb	17,534.894 ppb	99.817 %
Concentration RSD	3.1 %	6.4 %	0.6 %	6.4 %	6.4 %	5.9 %	2.9 %	5.0 %	1.9 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	46.914 ppb	48.668 ppb	398.211 ppb	5,480.582 ppb	48.918 ppb	50.154 ppb	50.753 ppb	59.675 ppb	105.912 %
Concentration per Run 1	44.545 ppb	46.008 ppb	385.883 ppb	5,273.446 ppb	46.656 ppb	48.844 ppb	49.749 ppb	57.876 ppb	107.953 %
Concentration per Run 2	45.906 ppb	48.868 ppb	392.793 ppb	5,413.845 ppb	48.681 ppb	49.635 ppb	51.441 ppb	59.123 ppb	106.188 %
Concentration per Run 3	50.293 ppb	51.128 ppb	415.955 ppb	5,754.456 ppb	51.417 ppb	51.982 ppb	51.069 ppb	62.026 ppb	103.595 %
Concentration RSD	6.4 %	5.3 %	4.0 %	4.5 %	4.9 %	3.3 %	1.8 %	3.6 %	2.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	49.494 ppb	45.162 ppb	130.824 ppb	49.511 ppb	106.742 %	2.406 ppb	48.011 ppb	106.453 %	49.376 ppb
Concentration per Run 1	49.215 ppb	42.798 ppb	127.503 ppb	47.101 ppb	109.928 %	2.388 ppb	46.274 ppb	111.735 %	46.715 ppb
Concentration per Run 2	49.967 ppb	45.668 ppb	131.063 ppb	51.083 ppb	106.291 %	2.344 ppb	48.613 ppb	103.237 %	50.886 ppb
Concentration per Run 3	49.300 ppb	47.020 ppb	133.906 ppb	50.350 ppb	104.006 %	2.486 ppb	49.147 ppb	104.387 %	50.525 ppb
Concentration RSD	0.8 %	4.8 %	2.5 %	4.3 %	2.8 %	3.0 %	3.2 %	4.3 %	4.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	58.086 ppb	108.887 %	109.356 %	47.410 ppb	52.289 ppb	108.802 %
Concentration per Run 1	55.593 ppb	111.785 %	113.386 %	47.021 ppb	50.926 ppb	111.150 %
Concentration per Run 2	58.134 ppb	108.885 %	106.099 %	46.204 ppb	52.246 ppb	109.145 %
Concentration per Run 3	60.530 ppb	105.992 %	108.584 %	49.005 ppb	53.693 ppb	106.111 %
Concentration RSD	4.3 %	2.7 %	3.4 %	3.0 %	2.6 %	2.3 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	62	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG2003775-6d5 6020TL	Rack	1		
Analysis started at:	12/3/2024 11:38:01 AM	Vial	35		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	107.274 %	114.198 %	0.310 ppb	11,636.485 ppb	6,117.689 ppb	710.048 ppb	1,397.568 ppb	23,662.861 ppb	103.188 %
Concentration per Run 1	100.935 %	114.310 %	0.429 ppb	11,157.331 ppb	6,136.936 ppb	690.043 ppb	1,376.579 ppb	23,745.673 ppb	97.418 %
Concentration per Run 2	104.271 %	114.647 %	0.281 ppb	11,599.120 ppb	5,946.184 ppb	708.946 ppb	1,375.551 ppb	23,482.407 ppb	100.223 %
Concentration per Run 3	116.615 %	113.637 %	0.219 ppb	12,153.003 ppb	6,269.947 ppb	731.156 ppb	1,440.574 ppb	23,760.501 ppb	111.925 %
Concentration RSD	7.7 %	0.5 %	34.9 %	4.3 %	2.7 %	2.9 %	2.7 %	0.7 %	7.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	2.205 ppb	2.290 ppb	678.330 ppb	1,364.489 ppb	1.808 ppb	2.662 ppb	3.880 ppb	19.033 ppb	105.944 %
Concentration per Run 1	2.166 ppb	2.178 ppb	676.714 ppb	1,375.173 ppb	1.819 ppb	2.758 ppb	3.655 ppb	18.542 ppb	105.783 %
Concentration per Run 2	2.085 ppb	2.422 ppb	666.518 ppb	1,330.692 ppb	1.776 ppb	2.769 ppb	3.895 ppb	19.201 ppb	107.809 %
Concentration per Run 3	2.364 ppb	2.269 ppb	691.757 ppb	1,387.602 ppb	1.829 ppb	2.458 ppb	4.092 ppb	19.356 ppb	104.239 %
Concentration RSD	6.5 %	5.4 %	1.9 %	2.2 %	1.6 %	6.6 %	5.6 %	2.3 %	1.7 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.538 ppb	0.743 ppb	157.048 ppb	0.924 ppb	109.369 %	0.007 ppb	0.066 ppb	108.203 %	0.637 ppb
Concentration per Run 1	0.629 ppb	0.719 ppb	154.652 ppb	0.745 ppb	113.245 %	0.009 ppb	0.062 ppb	114.314 %	0.575 ppb
Concentration per Run 2	0.546 ppb	0.712 ppb	156.604 ppb	0.956 ppb	108.099 %	0.006 ppb	0.070 ppb	103.440 %	0.663 ppb
Concentration per Run 3	0.438 ppb	0.799 ppb	159.888 ppb	1.071 ppb	106.763 %	0.006 ppb	0.066 ppb	106.855 %	0.672 ppb
Concentration RSD	17.8 %	6.5 %	1.7 %	17.9 %	3.1 %	19.0 %	6.7 %	5.1 %	8.4 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	18.313 ppb	111.932 %	110.833 %	0.252 ppb	7.631 ppb	109.744 %
Concentration per Run 1	17.767 ppb	113.439 %	111.832 %	0.232 ppb	7.430 ppb	111.548 %
Concentration per Run 2	18.471 ppb	111.905 %	112.039 %	0.293 ppb	7.684 ppb	107.697 %
Concentration per Run 3	18.701 ppb	110.451 %	108.627 %	0.231 ppb	7.778 ppb	109.985 %
Concentration RSD	2.7 %	1.3 %	1.7 %	14.1 %	2.4 %	1.8 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	63	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2469188-01 6020TL	Rack	1		
Analysis started at:	12/3/2024 11:42:31 AM	Vial	36		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	98.106 %	108.418 %	0.141 ppb	324,452.327 ppb	36,827.716 ppb	572.227 ppb	13,352.195 ppb	20,115.850 ppb	98.268 %
Concentration per Run 1	93.462 %	109.091 %	0.190 ppb	317,931.401 ppb	37,649.476 ppb	562.783 ppb	12,847.584 ppb	19,456.651 ppb	97.056 %
Concentration per Run 2	99.962 %	108.586 %	0.139 ppb	326,195.124 ppb	35,037.954 ppb	573.404 ppb	13,440.922 ppb	19,933.006 ppb	98.597 %
Concentration per Run 3	100.895 %	107.576 %	0.093 ppb	329,230.457 ppb	37,795.717 ppb	580.493 ppb	13,768.080 ppb	20,957.894 ppb	99.150 %
Concentration RSD	4.1 %	0.7 %	34.2 %	1.8 %	4.2 %	1.6 %	3.5 %	3.8 %	1.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	2.274 ppb	1.937 ppb	42.091 ppb	1,116.760 ppb	0.603 ppb	1.310 ppb	94.540 ppb	74.814 ppb	103.199 %
Concentration per Run 1	2.273 ppb	1.745 ppb	39.433 ppb	1,094.145 ppb	0.595 ppb	1.419 ppb	92.519 ppb	74.168 ppb	104.898 %
Concentration per Run 2	2.328 ppb	2.038 ppb	43.219 ppb	1,136.937 ppb	0.681 ppb	1.243 ppb	96.580 ppb	75.324 ppb	101.298 %
Concentration per Run 3	2.222 ppb	2.028 ppb	43.622 ppb	1,119.197 ppb	0.533 ppb	1.269 ppb	94.520 ppb	74.951 ppb	103.402 %
Concentration RSD	2.3 %	8.6 %	5.5 %	1.9 %	12.3 %	7.2 %	2.1 %	0.8 %	1.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.728 ppb	0.165 ppb	249.133 ppb	1.009 ppb	103.075 %	0.019 ppb	0.079 ppb	106.511 %	0.583 ppb
Concentration per Run 1	0.788 ppb	0.263 ppb	244.184 ppb	0.931 ppb	104.668 %	0.023 ppb	0.104 ppb	107.997 %	0.558 ppb
Concentration per Run 2	0.736 ppb	0.198 ppb	252.233 ppb	0.817 ppb	101.220 %	0.021 ppb	0.067 ppb	105.788 %	0.556 ppb
Concentration per Run 3	0.660 ppb	0.034 ppb	250.983 ppb	1.278 ppb	103.336 %	0.014 ppb	0.067 ppb	105.748 %	0.635 ppb
Concentration RSD	8.9 %	71.4 %	1.7 %	23.8 %	1.7 %	25.1 %	26.6 %	1.2 %	7.8 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	20.863 ppb	111.389 %	112.740 %	0.074 ppb	6.149 ppb	104.765 %
Concentration per Run 1	20.061 ppb	115.930 %	113.416 %	0.045 ppb	6.045 ppb	104.958 %
Concentration per Run 2	20.842 ppb	107.418 %	110.861 %	0.093 ppb	6.309 ppb	104.882 %
Concentration per Run 3	21.687 ppb	110.818 %	113.942 %	0.083 ppb	6.095 ppb	104.456 %
Concentration RSD	3.9 %	3.8 %	1.5 %	34.4 %	2.3 %	0.3 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	64	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2469188-02 6020TL	Rack	1		
Analysis started at:	12/3/2024 11:47:00 AM	Vial	37		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	53.024 %	89.169 %	0.021 ppb	4,929,163.522 ppb	539,908.301 ppb	114.657 ppb	121,048.554 ppb	109,867.157 ppb	52.978 %
Concentration per Run 1	51.585 %	94.781 %	0.023 ppb	4,677,933.012 ppb	516,947.853 ppb	110.643 ppb	117,502.189 ppb	109,905.533 ppb	53.220 %
Concentration per Run 2	53.902 %	84.512 %	0.022 ppb	5,068,244.519 ppb	562,633.462 ppb	119.885 ppb	126,369.745 ppb	111,496.619 ppb	53.154 %
Concentration per Run 3	53.583 %	88.215 %	0.018 ppb	5,041,313.034 ppb	540,143.588 ppb	113.444 ppb	119,273.729 ppb	108,199.318 ppb	52.559 %
Concentration RSD	2.4 %	5.8 %	13.8 %	4.4 %	4.2 %	4.1 %	3.9 %	1.5 %	0.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	1.085 ppb	0.540 ppb	25.633 ppb	308.277 ppb	0.219 ppb	0.917 ppb	75.973 ppb	74.955 ppb	112.782 %
Concentration per Run 1	1.062 ppb	0.501 ppb	26.953 ppb	322.171 ppb	0.205 ppb	0.914 ppb	82.215 ppb	79.072 ppb	100.998 %
Concentration per Run 2	1.200 ppb	0.578 ppb	25.989 ppb	320.181 ppb	0.235 ppb	0.958 ppb	77.770 ppb	76.439 ppb	111.080 %
Concentration per Run 3	0.991 ppb	0.542 ppb	23.955 ppb	282.479 ppb	0.218 ppb	0.881 ppb	67.935 ppb	69.354 ppb	126.267 %
Concentration RSD	9.8 %	7.1 %	6.0 %	7.3 %	6.9 %	4.2 %	9.6 %	6.7 %	11.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	1.360 ppb	0.142 ppb	3,190.282 ppb	4.993 ppb	85.365 %	0.021 ppb	0.065 ppb	96.112 %	0.465 ppb
Concentration per Run 1	1.523 ppb	0.177 ppb	3,206.530 ppb	4.816 ppb	86.846 %	0.024 ppb	0.060 ppb	94.052 %	0.399 ppb
Concentration per Run 2	1.413 ppb	0.104 ppb	3,265.488 ppb	5.326 ppb	83.637 %	0.022 ppb	0.064 ppb	95.705 %	0.457 ppb
Concentration per Run 3	1.144 ppb	0.146 ppb	3,098.829 ppb	4.839 ppb	85.612 %	0.018 ppb	0.071 ppb	98.579 %	0.537 ppb
Concentration RSD	14.3 %	25.7 %	2.6 %	5.8 %	1.9 %	15.1 %	7.8 %	2.4 %	14.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	52.947 ppb	102.346 %	103.943 %	0.045 ppb	2.407 ppb	86.345 %
Concentration per Run 1	52.639 ppb	104.413 %	102.266 %	0.037 ppb	2.368 ppb	85.801 %
Concentration per Run 2	53.263 ppb	100.057 %	103.471 %	0.042 ppb	2.404 ppb	85.730 %
Concentration per Run 3	52.938 ppb	102.568 %	106.091 %	0.055 ppb	2.450 ppb	87.504 %
Concentration RSD	0.6 %	2.1 %	1.9 %	21.3 %	1.7 %	1.2 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	65	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2469188-03 6020TL	Rack	1		
Analysis started at:	12/3/2024 11:51:27 AM	Vial	38		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	55.057 %	92.256 %	0.012 ppb	3,953,062.995 ppb	438,051.967 ppb	54.387 ppb	105,453.196 ppb	93,919.899 ppb	57.706 %
Concentration per Run 1	53.167 %	88.552 %	0.013 ppb	4,085,222.575 ppb	448,724.510 ppb	56.376 ppb	110,061.113 ppb	98,037.256 ppb	56.759 %
Concentration per Run 2	55.670 %	91.582 %	0.014 ppb	3,967,568.060 ppb	436,452.877 ppb	54.303 ppb	103,322.851 ppb	92,359.793 ppb	58.252 %
Concentration per Run 3	56.335 %	96.633 %	0.008 ppb	3,806,398.351 ppb	428,978.513 ppb	52.482 ppb	102,975.625 ppb	91,362.647 ppb	58.107 %
Concentration RSD	3.0 %	4.4 %	26.3 %	3.5 %	2.3 %	3.6 %	3.8 %	3.8 %	1.4 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.577 ppb	0.381 ppb	17.254 ppb	117.663 ppb	0.301 ppb	1.035 ppb	16.254 ppb	43.968 ppb	114.229 %
Concentration per Run 1	0.451 ppb	0.444 ppb	18.522 ppb	117.786 ppb	0.331 ppb	1.071 ppb	17.282 ppb	47.764 ppb	102.506 %
Concentration per Run 2	0.771 ppb	0.377 ppb	17.224 ppb	110.723 ppb	0.315 ppb	1.013 ppb	16.463 ppb	42.536 ppb	114.622 %
Concentration per Run 3	0.510 ppb	0.323 ppb	16.017 ppb	124.480 ppb	0.257 ppb	1.020 ppb	15.019 ppb	41.603 ppb	125.557 %
Concentration RSD	29.5 %	15.9 %	7.3 %	5.8 %	12.8 %	3.0 %	7.0 %	7.6 %	10.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	1.254 ppb	0.121 ppb	2,674.964 ppb	4.497 ppb	87.746 %	0.015 ppb	0.067 ppb	99.180 %	0.500 ppb
Concentration per Run 1	1.415 ppb	0.103 ppb	2,700.589 ppb	4.412 ppb	89.151 %	0.019 ppb	0.081 ppb	98.314 %	0.469 ppb
Concentration per Run 2	1.209 ppb	0.105 ppb	2,680.761 ppb	4.175 ppb	85.752 %	0.016 ppb	0.083 ppb	98.086 %	0.502 ppb
Concentration per Run 3	1.137 ppb	0.155 ppb	2,643.544 ppb	4.905 ppb	88.336 %	0.009 ppb	0.038 ppb	101.139 %	0.529 ppb
Concentration RSD	11.5 %	24.3 %	1.1 %	8.3 %	2.0 %	36.8 %	37.6 %	1.7 %	6.0 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	12.029 ppb	104.463 %	107.327 %	0.034 ppb	0.769 ppb	85.018 %
Concentration per Run 1	12.377 ppb	105.761 %	106.357 %	0.028 ppb	0.728 ppb	86.601 %
Concentration per Run 2	11.987 ppb	100.648 %	105.343 %	0.040 ppb	0.809 ppb	82.847 %
Concentration per Run 3	11.722 ppb	106.979 %	110.281 %	0.034 ppb	0.770 ppb	85.607 %
Concentration RSD	2.7 %	3.2 %	2.4 %	17.4 %	5.3 %	2.3 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	66	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	CCV	Rack	0		
Analysis started at:	12/3/2024 11:55:54 AM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	106.067 %	114.591 %	58.113 ppb	8,838.290 ppb	6,043.964 ppb	58.551 ppb	6,666.084 ppb	6,517.544 ppb	103.208 %
Concentration per Run 1	101.747 %	117.677 %	58.161 ppb	9,080.501 ppb	5,912.671 ppb	54.228 ppb	6,385.861 ppb	6,481.101 ppb	100.163 %
Concentration per Run 2	106.629 %	108.586 %	57.271 ppb	9,272.851 ppb	6,236.559 ppb	60.812 ppb	6,938.774 ppb	6,567.217 ppb	104.777 %
Concentration per Run 3	109.826 %	117.509 %	58.905 ppb	8,161.518 ppb	5,982.663 ppb	60.614 ppb	6,673.616 ppb	6,504.313 ppb	104.686 %
Recovery Percentage 1			96.854 %	147.305 %	100.733 %	97.585 %	111.101 %	108.626 %	
Concentration RSD	3.8 %	4.5 %	1.4 %	6.7 %	2.8 %	6.4 %	4.1 %	0.7 %	2.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	57.407 ppb	56.507 ppb	58.807 ppb	5,659.965 ppb	55.487 ppb	57.042 ppb	56.909 ppb	58.977 ppb	122.794 %
Concentration per Run 1	53.853 ppb	55.120 ppb	58.427 ppb	5,636.958 ppb	54.908 ppb	57.046 ppb	56.711 ppb	57.801 ppb	122.289 %
Concentration per Run 2	58.278 ppb	56.137 ppb	58.409 ppb	5,649.108 ppb	55.321 ppb	57.595 ppb	56.532 ppb	59.707 ppb	122.909 %
Concentration per Run 3	60.090 ppb	58.263 ppb	59.586 ppb	5,693.828 ppb	56.232 ppb	56.485 ppb	57.484 ppb	59.422 ppb	123.184 %
Recovery Percentage 1	95.679 %	94.178 %	98.012 %	94.333 %	92.479 %	95.070 %	94.849 %	98.295 %	
Concentration RSD	5.6 %	2.8 %	1.1 %	0.5 %	1.2 %	1.0 %	0.9 %	1.7 %	0.4 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	55.832 ppb	58.466 ppb	61.643 ppb	56.902 ppb	120.041 %	55.834 ppb	56.937 ppb	128.714 %	55.980 ppb
Concentration per Run 1	56.591 ppb	57.232 ppb	60.486 ppb	55.414 ppb	122.378 %	55.132 ppb	57.561 ppb	127.893 %	54.940 ppb
Concentration per Run 2	55.723 ppb	57.841 ppb	61.698 ppb	57.534 ppb	120.252 %	55.525 ppb	56.154 ppb	128.732 %	56.539 ppb
Concentration per Run 3	55.182 ppb	60.325 ppb	62.744 ppb	57.758 ppb	117.493 %	56.846 ppb	57.095 ppb	129.516 %	56.462 ppb
Recovery Percentage 1	93.053 %	97.443 %	102.738 %	94.836 %		93.057 %	94.895 %		93.301 %
Concentration RSD	1.3 %	2.8 %	1.8 %	2.3 %	2.0 %	1.6 %	1.3 %	0.6 %	1.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	57.583 ppb	127.793 %	129.078 %	55.492 ppb	57.278 ppb	121.459 %
Concentration per Run 1	55.849 ppb	130.197 %	131.128 %	54.129 ppb	55.091 ppb	121.652 %
Concentration per Run 2	57.323 ppb	127.943 %	126.663 %	55.104 ppb	57.900 ppb	121.146 %
Concentration per Run 3	59.575 ppb	125.239 %	129.444 %	57.244 ppb	58.844 ppb	121.580 %
Recovery Percentage 1	95.971 %			92.487 %	95.464 %	
Concentration RSD	3.3 %	1.9 %	1.7 %	2.9 %	3.4 %	0.2 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index: 67
Analysis label: CCB
Analysis started at: 12/3/2024 12:00:26 PM
User name ALPHALAB\a2-icpmsq2
Rack 0
Vial 10
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	108.239 %	117.958 %	0.456 ppb	1,274.649 ppb	39.120 ppb	-0.235 ppb	171.245 ppb	13.020 ppb	105.594 %
Concentration per Run 1	104.568 %	115.489 %	0.424 ppb	1,466.016 ppb	57.494 ppb	-0.095 ppb	193.048 ppb	21.665 ppb	101.521 %
Concentration per Run 2	109.515 %	112.795 %	0.418 ppb	1,385.614 ppb	47.912 ppb	-0.445 ppb	160.806 ppb	7.305 ppb	107.398 %
Concentration per Run 3	110.633 %	125.590 %	0.526 ppb	972.318 ppb	11.954 ppb	-0.163 ppb	159.882 ppb	10.090 ppb	107.863 %
Recovery Percentage 1			91.183 %	254.930 %	55.886 %	-2.345 %	171.245 %	13.020 %	
Concentration RSD	3.0 %	5.7 %	13.3 %	20.8 %	61.4 %	79.2 %	11.0 %	58.5 %	3.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.441 ppb	-0.053 ppb	0.131 ppb	6.647 ppb	0.015 ppb	0.153 ppb	0.210 ppb	0.376 ppb	118.093 %
Concentration per Run 1	-0.501 ppb	-0.045 ppb	0.189 ppb	6.579 ppb	0.021 ppb	0.177 ppb	0.241 ppb	0.368 ppb	118.369 %
Concentration per Run 2	-0.355 ppb	-0.033 ppb	0.107 ppb	7.097 ppb	0.016 ppb	0.165 ppb	0.236 ppb	0.390 ppb	114.745 %
Concentration per Run 3	-0.466 ppb	-0.080 ppb	0.096 ppb	6.267 ppb	0.006 ppb	0.117 ppb	0.153 ppb	0.370 ppb	121.165 %
Recovery Percentage 1	-8.815 %	-5.284 %	13.072 %	13.295 %	2.943 %	7.653 %	20.982 %	7.521 %	
Concentration RSD	17.2 %	45.8 %	39.0 %	6.3 %	51.4 %	20.6 %	23.5 %	3.2 %	2.7 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.002 ppb	0.466 ppb	0.245 ppb	0.298 ppb	120.811 %	0.017 ppb	0.010 ppb	128.025 %	0.077 ppb
Concentration per Run 1	-0.055 ppb	0.738 ppb	0.365 ppb	0.189 ppb	123.867 %	0.025 ppb	0.006 ppb	130.006 %	0.064 ppb
Concentration per Run 2	0.038 ppb	0.359 ppb	0.271 ppb	0.207 ppb	117.484 %	0.023 ppb	0.018 ppb	127.680 %	0.094 ppb
Concentration per Run 3	0.023 ppb	0.301 ppb	0.100 ppb	0.499 ppb	121.082 %	0.003 ppb	0.006 ppb	126.387 %	0.072 ppb
Recovery Percentage 1	0.405 %	9.323 %	2.452 %	14.920 %		4.239 %	4.924 %		1.918 %
Concentration RSD	2,450.7 %	50.9 %	54.9 %	58.3 %	2.6 %	70.1 %	70.3 %	1.4 %	20.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.019 ppb	124.988 %	125.092 %	0.220 ppb	0.025 ppb	121.448 %
Concentration per Run 1	0.025 ppb	132.238 %	129.628 %	0.210 ppb	0.030 ppb	123.702 %
Concentration per Run 2	-0.008 ppb	121.832 %	122.814 %	0.254 ppb	0.026 ppb	121.173 %
Concentration per Run 3	0.039 ppb	120.895 %	122.833 %	0.194 ppb	0.020 ppb	119.468 %
Recovery Percentage 1	3.753 %			21.953 %	2.506 %	
Concentration RSD	127.2 %	5.0 %	3.1 %	14.2 %	20.6 %	1.8 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	68	User name	ALPHALAB\a2-icpmsq2	Comment	CCV/MCCV
Analysis label:	CCV	Rack	0		
Analysis started at:	12/3/2024 12:35:53 PM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	115.770 %	125.702 %	57.412 ppb	5,980.172 ppb	5,527.372 ppb	56.252 ppb	5,392.506 ppb	5,181.352 ppb	111.018 %
Concentration per Run 1	110.616 %	128.115 %	58.287 ppb	5,742.952 ppb	5,364.572 ppb	54.335 ppb	5,533.381 ppb	5,311.729 ppb	109.074 %
Concentration per Run 2	117.068 %	125.421 %	57.030 ppb	6,037.258 ppb	5,606.486 ppb	56.443 ppb	5,222.496 ppb	4,983.339 ppb	112.565 %
Concentration per Run 3	119.627 %	123.569 %	56.918 ppb	6,160.306 ppb	5,611.060 ppb	57.979 ppb	5,421.640 ppb	5,248.987 ppb	111.413 %
Recovery Percentage 1			95.686 %	99.670 %	92.123 %	93.754 %	89.875 %	86.356 %	
Concentration RSD	4.0 %	1.8 %	1.3 %	3.6 %	2.6 %	3.3 %	2.9 %	3.4 %	1.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	53.785 ppb	53.778 ppb	55.737 ppb	5,743.402 ppb	56.127 ppb	56.681 ppb	56.664 ppb	56.695 ppb	119.388 %
Concentration per Run 1	49.431 ppb	51.042 ppb	53.815 ppb	5,625.969 ppb	54.448 ppb	56.508 ppb	55.360 ppb	55.758 ppb	122.764 %
Concentration per Run 2	55.465 ppb	54.282 ppb	57.206 ppb	5,832.807 ppb	56.836 ppb	57.728 ppb	57.716 ppb	58.821 ppb	115.458 %
Concentration per Run 3	56.460 ppb	56.011 ppb	56.189 ppb	5,771.431 ppb	57.099 ppb	55.808 ppb	56.915 ppb	55.506 ppb	119.943 %
Recovery Percentage 1	89.642 %	89.631 %	92.894 %	95.723 %	93.546 %	94.469 %	94.440 %	94.492 %	
Concentration RSD	7.1 %	4.7 %	3.1 %	1.8 %	2.6 %	1.7 %	2.1 %	3.3 %	3.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	55.197 ppb	55.240 ppb	58.435 ppb	56.869 ppb	114.889 %	57.012 ppb	56.662 ppb	118.981 %	55.519 ppb
Concentration per Run 1	54.756 ppb	55.153 ppb	56.597 ppb	55.512 ppb	119.470 %	56.801 ppb	55.887 ppb	121.805 %	53.923 ppb
Concentration per Run 2	56.623 ppb	53.355 ppb	60.162 ppb	57.172 ppb	110.969 %	56.459 ppb	57.237 ppb	117.243 %	55.824 ppb
Concentration per Run 3	54.210 ppb	57.211 ppb	58.546 ppb	57.922 ppb	114.229 %	57.776 ppb	56.862 ppb	117.894 %	56.811 ppb
Recovery Percentage 1	91.994 %	92.066 %	97.392 %	94.781 %		95.020 %	94.437 %		92.532 %
Concentration RSD	2.3 %	3.5 %	3.1 %	2.2 %	3.7 %	1.2 %	1.2 %	2.1 %	2.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	56.804 ppb	120.280 %	119.759 %	55.882 ppb	55.793 ppb	118.822 %
Concentration per Run 1	55.414 ppb	126.009 %	122.026 %	53.460 ppb	53.796 ppb	124.564 %
Concentration per Run 2	57.767 ppb	116.591 %	117.254 %	56.839 ppb	56.979 ppb	116.833 %
Concentration per Run 3	57.229 ppb	118.239 %	119.996 %	57.347 ppb	56.604 ppb	115.068 %
Recovery Percentage 1	94.673 %			93.136 %	92.988 %	
Concentration RSD	2.2 %	4.2 %	2.0 %	3.8 %	3.1 %	4.3 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	69	User name	ALPHALAB\a2-icpmsq2	Comment	CCB
Analysis label:	CCB	Rack	0		
Analysis started at:	12/3/2024 12:42:03 PM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	117.354 %	124.467 %	0.386 ppb	251.728 ppb	0.801 ppb	-0.651 ppb	39.318 ppb	1.008 ppb	108.564 %
Concentration per Run 1	113.137 %	131.145 %	0.613 ppb	230.037 ppb	-0.103 ppb	-0.654 ppb	54.187 ppb	-6.375 ppb	109.744 %
Concentration per Run 2	118.381 %	118.519 %	0.316 ppb	263.988 ppb	1.119 ppb	-0.707 ppb	28.333 ppb	7.117 ppb	108.493 %
Concentration per Run 3	120.544 %	123.738 %	0.230 ppb	261.160 ppb	1.388 ppb	-0.592 ppb	35.434 ppb	2.281 ppb	107.455 %
Recovery Percentage 1			77.263 %	50.346 %	1.145 %	-6.510 %	39.318 %	1.008 %	
Concentration RSD	3.2 %	5.1 %	52.0 %	7.5 %	99.1 %	8.8 %	34.0 %	678.4 %	1.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.436 ppb	-0.050 ppb	0.025 ppb	4.341 ppb	0.013 ppb	0.099 ppb	0.039 ppb	0.167 ppb	113.563 %
Concentration per Run 1	-0.423 ppb	-0.022 ppb	0.071 ppb	4.106 ppb	0.021 ppb	0.104 ppb	0.072 ppb	0.136 ppb	115.290 %
Concentration per Run 2	-0.440 ppb	-0.072 ppb	-0.027 ppb	3.860 ppb	0.014 ppb	0.042 ppb	0.013 ppb	0.234 ppb	111.488 %
Concentration per Run 3	-0.445 ppb	-0.057 ppb	0.030 ppb	5.056 ppb	0.004 ppb	0.151 ppb	0.033 ppb	0.132 ppb	113.910 %
Recovery Percentage 1	-8.726 %	-5.038 %	2.477 %	8.681 %	2.611 %	4.951 %	3.921 %	3.345 %	
Concentration RSD	2.7 %	51.0 %	198.9 %	14.6 %	63.8 %	55.2 %	76.2 %	34.5 %	1.7 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.080 ppb	0.174 ppb	0.017 ppb	0.206 ppb	115.330 %	0.019 ppb	0.017 ppb	117.306 %	0.054 ppb
Concentration per Run 1	0.022 ppb	-0.036 ppb	0.022 ppb	0.111 ppb	118.542 %	0.016 ppb	0.018 ppb	121.619 %	0.047 ppb
Concentration per Run 2	0.076 ppb	0.543 ppb	0.020 ppb	0.176 ppb	114.749 %	0.019 ppb	0.013 ppb	115.129 %	0.062 ppb
Concentration per Run 3	0.142 ppb	0.016 ppb	0.009 ppb	0.331 ppb	112.698 %	0.023 ppb	0.019 ppb	115.168 %	0.052 ppb
Recovery Percentage 1	15.970 %	3.488 %	0.167 %	10.307 %		4.803 %	8.438 %		1.347 %
Concentration RSD	75.0 %	183.7 %	41.6 %	54.6 %	2.6 %	17.6 %	20.9 %	3.2 %	14.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.038 ppb	117.878 %	118.387 %	0.192 ppb	0.024 ppb	117.668 %
Concentration per Run 1	0.016 ppb	122.992 %	122.859 %	0.216 ppb	0.030 ppb	121.642 %
Concentration per Run 2	0.055 ppb	118.089 %	117.538 %	0.204 ppb	0.025 ppb	116.831 %
Concentration per Run 3	0.044 ppb	112.554 %	114.765 %	0.156 ppb	0.016 ppb	114.529 %
Recovery Percentage 1	7.675 %			19.217 %	2.373 %	
Concentration RSD	52.0 %	4.4 %	3.5 %	16.5 %	31.8 %	3.1 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	70	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2469188-04d5 6020TL	Rack	1		
Analysis started at:	12/3/2024 12:47:59 PM	Vial	39		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	78.733 %	102.694 %	0.069 ppb	1,773,322.955 ppb	195,377.473 ppb	16.646 ppb	49,478.921 ppb	44,208.340 ppb	74.955 %
Concentration per Run 1	76.783 %	98.316 %	0.079 ppb	1,755,820.079 ppb	196,966.876 ppb	16.611 ppb	48,561.364 ppb	44,195.220 ppb	74.688 %
Concentration per Run 2	80.252 %	108.081 %	0.073 ppb	1,726,157.126 ppb	192,077.971 ppb	15.871 ppb	49,824.167 ppb	43,970.558 ppb	74.925 %
Concentration per Run 3	79.164 %	101.684 %	0.054 ppb	1,837,991.660 ppb	197,087.573 ppb	17.455 ppb	50,051.233 ppb	44,459.241 ppb	75.251 %
Concentration RSD	2.3 %	4.8 %	19.2 %	3.3 %	1.5 %	4.8 %	1.6 %	0.6 %	0.4 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.055 ppb	0.006 ppb	2.954 ppb	30.763 ppb	0.017 ppb	0.101 ppb	0.420 ppb	0.842 ppb	107.890 %
Concentration per Run 1	0.022 ppb	0.031 ppb	3.090 ppb	27.479 ppb	0.003 ppb	0.138 ppb	0.450 ppb	0.817 ppb	104.644 %
Concentration per Run 2	-0.086 ppb	-0.033 ppb	2.782 ppb	31.648 ppb	0.037 ppb	0.105 ppb	0.431 ppb	0.882 ppb	107.982 %
Concentration per Run 3	-0.100 ppb	0.019 ppb	2.991 ppb	33.162 ppb	0.012 ppb	0.059 ppb	0.379 ppb	0.826 ppb	111.043 %
Concentration RSD	121.8 %	598.8 %	5.3 %	9.6 %	102.6 %	39.7 %	8.7 %	4.2 %	3.0 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.386 ppb	0.292 ppb	1,174.444 ppb	1.570 ppb	97.251 %	0.016 ppb	0.007 ppb	103.286 %	0.060 ppb
Concentration per Run 1	0.461 ppb	0.409 ppb	1,144.923 ppb	1.634 ppb	99.563 %	0.020 ppb	0.007 ppb	101.534 %	0.046 ppb
Concentration per Run 2	0.387 ppb	0.332 ppb	1,189.332 ppb	1.597 ppb	96.973 %	0.018 ppb	0.011 ppb	103.578 %	0.075 ppb
Concentration per Run 3	0.310 ppb	0.136 ppb	1,189.078 ppb	1.478 ppb	95.216 %	0.010 ppb	0.004 ppb	104.746 %	0.061 ppb
Concentration RSD	19.5 %	48.1 %	2.2 %	5.2 %	2.2 %	31.3 %	50.0 %	1.6 %	23.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	2.754 ppb	107.902 %	108.189 %	0.043 ppb	0.071 ppb	90.735 %
Concentration per Run 1	2.876 ppb	106.982 %	107.706 %	0.026 ppb	0.074 ppb	92.920 %
Concentration per Run 2	2.826 ppb	109.601 %	107.626 %	0.050 ppb	0.072 ppb	90.571 %
Concentration per Run 3	2.559 ppb	107.124 %	109.234 %	0.054 ppb	0.066 ppb	88.714 %
Concentration RSD	6.2 %	1.4 %	0.8 %	35.0 %	5.9 %	2.3 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	71	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2469188-05d5 6020TL	Rack	1		
Analysis started at:	12/3/2024 12:52:26 PM	Vial	40		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	88.851 %	112.963 %	0.056 ppb	699,685.493 ppb	72,185.887 ppb	65.356 ppb	21,888.192 ppb	37,603.415 ppb	97.432 %
Concentration per Run 1	85.813 %	114.983 %	0.064 ppb	689,389.702 ppb	71,326.537 ppb	61.125 ppb	21,005.981 ppb	36,548.762 ppb	94.617 %
Concentration per Run 2	89.301 %	109.933 %	0.066 ppb	716,052.935 ppb	74,109.081 ppb	68.671 ppb	21,776.098 ppb	37,879.078 ppb	97.340 %
Concentration per Run 3	91.439 %	113.973 %	0.039 ppb	693,613.843 ppb	71,122.043 ppb	66.274 ppb	22,882.497 ppb	38,382.404 ppb	100.339 %
Concentration RSD	3.2 %	2.4 %	26.9 %	2.0 %	2.3 %	5.9 %	4.3 %	2.5 %	2.9 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.077 ppb	0.206 ppb	34.052 ppb	219.477 ppb	0.127 ppb	1.007 ppb	1.931 ppb	3.775 ppb	110.894 %
Concentration per Run 1	0.075 ppb	0.192 ppb	34.640 ppb	216.261 ppb	0.133 ppb	1.106 ppb	1.887 ppb	3.558 ppb	109.097 %
Concentration per Run 2	0.099 ppb	0.198 ppb	34.086 ppb	235.371 ppb	0.143 ppb	0.984 ppb	1.798 ppb	3.943 ppb	109.460 %
Concentration per Run 3	0.057 ppb	0.230 ppb	33.430 ppb	206.799 ppb	0.105 ppb	0.929 ppb	2.109 ppb	3.823 ppb	114.125 %
Concentration RSD	27.3 %	9.8 %	1.8 %	6.6 %	15.7 %	9.0 %	8.3 %	5.2 %	2.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.419 ppb	0.132 ppb	574.525 ppb	0.935 ppb	102.531 %	0.003 ppb	0.025 ppb	109.691 %	0.114 ppb
Concentration per Run 1	0.439 ppb	-0.076 ppb	568.559 ppb	0.990 ppb	104.269 %	0.006 ppb	0.027 ppb	110.566 %	0.101 ppb
Concentration per Run 2	0.408 ppb	0.387 ppb	579.853 ppb	0.907 ppb	101.529 %	0.002 ppb	0.028 ppb	109.085 %	0.113 ppb
Concentration per Run 3	0.411 ppb	0.085 ppb	575.163 ppb	0.909 ppb	101.795 %	0.001 ppb	0.021 ppb	109.421 %	0.128 ppb
Concentration RSD	4.2 %	178.0 %	1.0 %	5.1 %	1.5 %	80.6 %	15.5 %	0.7 %	11.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	22.088 ppb	114.185 %	112.891 %	0.032 ppb	0.262 ppb	98.227 %
Concentration per Run 1	21.942 ppb	115.529 %	112.710 %	0.019 ppb	0.268 ppb	98.976 %
Concentration per Run 2	21.943 ppb	113.855 %	111.427 %	0.040 ppb	0.259 ppb	97.266 %
Concentration per Run 3	22.378 ppb	113.172 %	114.536 %	0.037 ppb	0.260 ppb	98.437 %
Concentration RSD	1.1 %	1.1 %	1.4 %	34.9 %	2.0 %	0.9 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	72	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2469188-06d5 6020TL	Rack	1		
Analysis started at:	12/3/2024 12:56:53 PM	Vial	41		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	86.547 %	105.163 %	0.017 ppb	813,100.667 ppb	87,644.679 ppb	153.923 ppb	25,158.372 ppb	26,680.063 ppb	88.132 %
Concentration per Run 1	89.547 %	105.724 %	0.021 ppb	781,581.122 ppb	85,234.976 ppb	154.486 ppb	24,665.197 ppb	26,378.655 ppb	88.125 %
Concentration per Run 2	84.277 %	102.357 %	0.020 ppb	837,667.998 ppb	89,055.818 ppb	153.469 ppb	25,086.205 ppb	26,761.209 ppb	87.408 %
Concentration per Run 3	85.817 %	107.408 %	0.010 ppb	820,052.882 ppb	88,643.244 ppb	153.814 ppb	25,723.714 ppb	26,900.324 ppb	88.863 %
Concentration RSD	3.1 %	2.4 %	34.5 %	3.5 %	2.4 %	0.3 %	2.1 %	1.0 %	0.8 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.290 ppb	0.491 ppb	13.264 ppb	327.435 ppb	0.129 ppb	0.400 ppb	2.199 ppb	5.285 ppb	107.625 %
Concentration per Run 1	0.270 ppb	0.524 ppb	13.315 ppb	325.782 ppb	0.134 ppb	0.351 ppb	2.166 ppb	5.420 ppb	104.554 %
Concentration per Run 2	0.237 ppb	0.500 ppb	12.726 ppb	325.268 ppb	0.136 ppb	0.535 ppb	2.196 ppb	5.205 ppb	109.601 %
Concentration per Run 3	0.363 ppb	0.449 ppb	13.751 ppb	331.254 ppb	0.117 ppb	0.313 ppb	2.235 ppb	5.231 ppb	108.719 %
Concentration RSD	22.6 %	7.8 %	3.9 %	1.0 %	8.2 %	29.7 %	1.6 %	2.2 %	2.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.316 ppb	0.122 ppb	555.845 ppb	0.790 ppb	100.541 %	0.003 ppb	0.026 ppb	106.777 %	0.104 ppb
Concentration per Run 1	0.453 ppb	-0.069 ppb	550.506 ppb	0.746 ppb	102.714 %	0.000 ppb	0.028 ppb	107.783 %	0.091 ppb
Concentration per Run 2	0.219 ppb	0.321 ppb	553.542 ppb	0.788 ppb	99.645 %	0.003 ppb	0.025 ppb	105.656 %	0.103 ppb
Concentration per Run 3	0.276 ppb	0.113 ppb	563.488 ppb	0.838 ppb	99.263 %	0.006 ppb	0.025 ppb	106.893 %	0.118 ppb
Concentration RSD	38.7 %	159.9 %	1.2 %	5.8 %	1.9 %	87.4 %	6.7 %	1.0 %	13.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	6.340 ppb	111.894 %	110.391 %	0.029 ppb	0.733 ppb	94.003 %
Concentration per Run 1	6.214 ppb	114.961 %	112.257 %	0.018 ppb	0.713 ppb	96.086 %
Concentration per Run 2	6.625 ppb	111.095 %	108.520 %	0.034 ppb	0.742 ppb	93.051 %
Concentration per Run 3	6.181 ppb	109.626 %	110.395 %	0.036 ppb	0.745 ppb	92.873 %
Concentration RSD	3.9 %	2.5 %	1.7 %	33.0 %	2.4 %	1.9 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	73	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG2004404-1 MCP-6020SL-10	Rack	1		
Analysis started at:	12/3/2024 1:06:43 PM	Vial	42		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	119.738 %	119.080 %	0.008 ppb	579.585 ppb	7.845 ppb	0.453 ppb	48.880 ppb	5.376 ppb	113.743 %
Concentration per Run 1	114.522 %	117.677 %	0.009 ppb	587.087 ppb	10.990 ppb	0.338 ppb	43.052 ppb	9.388 ppb	111.048 %
Concentration per Run 2	118.879 %	120.202 %	0.007 ppb	569.222 ppb	7.551 ppb	0.331 ppb	52.974 ppb	3.493 ppb	115.095 %
Concentration per Run 3	125.812 %	119.361 %	0.009 ppb	582.447 ppb	4.994 ppb	0.691 ppb	50.616 ppb	3.246 ppb	115.088 %
Concentration RSD	4.8 %	1.1 %	13.8 %	1.6 %	38.4 %	45.4 %	10.6 %	64.7 %	2.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.267 ppb	-0.063 ppb	0.492 ppb	6.397 ppb	0.002 ppb	0.084 ppb	0.067 ppb	0.930 ppb	125.859 %
Concentration per Run 1	-0.219 ppb	-0.057 ppb	0.511 ppb	6.312 ppb	0.000 ppb	0.084 ppb	0.071 ppb	0.852 ppb	133.343 %
Concentration per Run 2	-0.328 ppb	-0.061 ppb	0.482 ppb	6.156 ppb	-0.002 ppb	0.092 ppb	0.076 ppb	1.035 ppb	119.930 %
Concentration per Run 3	-0.254 ppb	-0.071 ppb	0.483 ppb	6.724 ppb	0.006 ppb	0.076 ppb	0.053 ppb	0.903 ppb	124.303 %
Concentration RSD	20.8 %	11.0 %	3.3 %	4.6 %	249.7 %	9.3 %	18.4 %	10.2 %	5.4 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.006 ppb	0.058 ppb	0.050 ppb	-0.094 ppb	116.698 %	-0.001 ppb	0.000 ppb	116.696 %	0.026 ppb
Concentration per Run 1	0.018 ppb	0.062 ppb	0.073 ppb	-0.106 ppb	117.668 %	0.000 ppb	0.000 ppb	116.685 %	0.015 ppb
Concentration per Run 2	-0.015 ppb	-0.046 ppb	0.054 ppb	-0.095 ppb	114.269 %	0.000 ppb	0.000 ppb	118.490 %	0.036 ppb
Concentration per Run 3	0.016 ppb	0.158 ppb	0.024 ppb	-0.082 ppb	118.157 %	-0.002 ppb	0.000 ppb	114.913 %	0.026 ppb
Concentration RSD	296.7 %	175.3 %	48.5 %	12.6 %	1.8 %	148.1 %	N/A	1.5 %	39.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.030 ppb	115.985 %	112.947 %	0.014 ppb	0.005 ppb	111.124 %
Concentration per Run 1	0.042 ppb	118.633 %	113.532 %	0.011 ppb	0.005 ppb	116.420 %
Concentration per Run 2	0.018 ppb	114.652 %	111.601 %	0.014 ppb	0.005 ppb	106.585 %
Concentration per Run 3	0.031 ppb	114.670 %	113.708 %	0.016 ppb	0.006 ppb	110.367 %
Concentration RSD	39.8 %	2.0 %	1.0 %	18.8 %	3.5 %	4.5 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	74	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG2004404-2d10 MCP-6020SL-10	Rack	1		
Analysis started at:	12/3/2024 1:11:12 PM	Vial	43		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	116.525 %	122.616 %	5.028 ppb	1,595.172 ppb	942.869 ppb	181.662 ppb	977.265 ppb	773.433 ppb	111.806 %
Concentration per Run 1	112.131 %	124.243 %	5.063 ppb	1,585.214 ppb	954.217 ppb	181.031 ppb	991.516 ppb	667.077 ppb	109.748 %
Concentration per Run 2	117.823 %	123.064 %	5.035 ppb	1,603.355 ppb	937.892 ppb	184.134 ppb	993.861 ppb	826.528 ppb	113.404 %
Concentration per Run 3	119.620 %	120.539 %	4.985 ppb	1,596.946 ppb	936.499 ppb	179.821 ppb	946.417 ppb	826.695 ppb	112.267 %
Concentration RSD	3.4 %	1.5 %	0.8 %	0.6 %	1.0 %	1.2 %	2.7 %	11.9 %	1.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	42.409 ppb	17.748 ppb	48.844 ppb	96.671 ppb	48.376 ppb	49.752 ppb	25.027 ppb	48.406 ppb	111.870 %
Concentration per Run 1	40.610 ppb	17.605 ppb	50.176 ppb	94.030 ppb	47.449 ppb	49.399 ppb	24.713 ppb	49.023 ppb	112.044 %
Concentration per Run 2	43.065 ppb	18.096 ppb	48.641 ppb	98.149 ppb	49.369 ppb	51.882 ppb	25.504 ppb	47.947 ppb	109.865 %
Concentration per Run 3	43.552 ppb	17.543 ppb	47.715 ppb	97.834 ppb	48.309 ppb	47.975 ppb	24.865 ppb	48.248 ppb	113.702 %
Concentration RSD	3.7 %	1.7 %	2.5 %	2.4 %	2.0 %	4.0 %	1.7 %	1.1 %	1.7 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	11.298 ppb	11.368 ppb	95.149 ppb	94.496 ppb	111.882 %	4.961 ppb	5.023 ppb	115.162 %	38.072 ppb
Concentration per Run 1	10.742 ppb	10.672 ppb	93.918 ppb	92.585 ppb	115.394 %	4.866 ppb	4.770 ppb	118.367 %	36.137 ppb
Concentration per Run 2	11.722 ppb	12.107 ppb	96.888 ppb	94.401 ppb	109.736 %	5.016 ppb	5.110 ppb	113.800 %	38.442 ppb
Concentration per Run 3	11.430 ppb	11.324 ppb	94.639 ppb	96.501 ppb	110.517 %	5.002 ppb	5.189 ppb	113.320 %	39.637 ppb
Concentration RSD	4.5 %	6.3 %	1.6 %	2.1 %	2.7 %	1.7 %	4.4 %	2.4 %	4.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	189.043 ppb	114.304 %	112.275 %	11.142 ppb	49.325 ppb	110.840 %
Concentration per Run 1	184.861 ppb	117.812 %	112.378 %	10.714 ppb	47.251 ppb	114.903 %
Concentration per Run 2	189.735 ppb	112.846 %	111.200 %	11.276 ppb	50.642 ppb	109.076 %
Concentration per Run 3	192.534 ppb	112.252 %	113.245 %	11.435 ppb	50.081 ppb	108.540 %
Concentration RSD	2.1 %	2.7 %	0.9 %	3.4 %	3.7 %	3.2 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	75	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG2004404-3d10 MCP-6020SL-10	Rack	1		
Analysis started at:	12/3/2024 1:15:40 PM	Vial	44		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	118.673 %	123.345 %	4.959 ppb	1,530.872 ppb	938.063 ppb	179.486 ppb	955.533 ppb	870.804 ppb	111.347 %
Concentration per Run 1	113.096 %	128.788 %	5.039 ppb	1,493.250 ppb	920.303 ppb	172.610 ppb	910.183 ppb	836.873 ppb	106.474 %
Concentration per Run 2	120.759 %	125.085 %	4.960 ppb	1,490.505 ppb	915.781 ppb	174.699 ppb	944.349 ppb	875.169 ppb	112.757 %
Concentration per Run 3	122.165 %	116.162 %	4.877 ppb	1,608.861 ppb	978.105 ppb	191.148 ppb	1,012.066 ppb	900.370 ppb	114.809 %
Concentration RSD	4.1 %	5.3 %	1.6 %	4.4 %	3.7 %	5.7 %	5.4 %	3.7 %	3.9 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	42.234 ppb	17.916 ppb	48.422 ppb	95.336 ppb	49.139 ppb	49.367 ppb	24.340 ppb	48.276 ppb	108.723 %
Concentration per Run 1	40.807 ppb	17.408 ppb	49.667 ppb	91.353 ppb	49.439 ppb	51.347 ppb	24.436 ppb	49.039 ppb	106.870 %
Concentration per Run 2	43.660 ppb	18.230 ppb	48.550 ppb	99.430 ppb	49.935 ppb	49.058 ppb	24.590 ppb	49.019 ppb	106.453 %
Concentration per Run 3	42.235 ppb	18.109 ppb	47.049 ppb	95.226 ppb	48.041 ppb	47.698 ppb	23.995 ppb	46.770 ppb	112.845 %
Concentration RSD	3.4 %	2.5 %	2.7 %	4.2 %	2.0 %	3.7 %	1.3 %	2.7 %	3.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	11.805 ppb	12.217 ppb	95.124 ppb	92.805 ppb	111.616 %	4.990 ppb	4.939 ppb	112.042 %	39.531 ppb
Concentration per Run 1	12.308 ppb	10.441 ppb	95.766 ppb	90.007 ppb	113.588 %	4.937 ppb	4.926 ppb	114.817 %	38.503 ppb
Concentration per Run 2	11.933 ppb	13.067 ppb	96.881 ppb	92.639 ppb	109.005 %	5.006 ppb	4.882 ppb	110.256 %	39.645 ppb
Concentration per Run 3	11.174 ppb	13.144 ppb	92.725 ppb	95.769 ppb	112.256 %	5.026 ppb	5.010 ppb	111.054 %	40.446 ppb
Concentration RSD	4.9 %	12.6 %	2.3 %	3.1 %	2.1 %	0.9 %	1.3 %	2.2 %	2.5 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	191.455 ppb	110.955 %	109.650 %	11.375 ppb	49.773 ppb	109.273 %
Concentration per Run 1	188.763 ppb	111.436 %	109.738 %	11.091 ppb	48.964 ppb	111.177 %
Concentration per Run 2	197.204 ppb	109.051 %	108.296 %	11.768 ppb	50.402 ppb	106.032 %
Concentration per Run 3	188.398 ppb	112.377 %	110.915 %	11.264 ppb	49.954 ppb	110.611 %
Concentration RSD	2.6 %	1.5 %	1.2 %	3.1 %	1.5 %	2.6 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	76	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2469119-01 MCP-6020SL-10	Rack	1		
Analysis started at:	12/3/2024 1:20:09 PM	Vial	45		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	98.934 %	113.075 %	0.008 ppb	352,866.383 ppb	3,646.595 ppb	2.895 ppb	4,053.013 ppb	27,948.499 ppb	98.154 %
Concentration per Run 1	95.176 %	113.300 %	0.007 ppb	345,704.772 ppb	3,536.900 ppb	3.147 ppb	3,945.710 ppb	27,757.592 ppb	97.532 %
Concentration per Run 2	101.019 %	112.458 %	0.010 ppb	357,841.129 ppb	3,700.059 ppb	2.913 ppb	4,178.058 ppb	28,163.210 ppb	99.392 %
Concentration per Run 3	100.607 %	113.468 %	0.007 ppb	355,053.250 ppb	3,702.825 ppb	2.626 ppb	4,035.269 ppb	27,924.695 ppb	97.537 %
Concentration RSD	3.3 %	0.5 %	19.9 %	1.8 %	2.6 %	9.0 %	2.9 %	0.7 %	1.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.325 ppb	0.080 ppb	3,116.754 ppb	13,938.141 ppb	0.353 ppb	0.785 ppb	0.600 ppb	12.089 ppb	102.003 %
Concentration per Run 1	-0.197 ppb	0.035 ppb	3,082.917 ppb	13,687.604 ppb	0.331 ppb	0.836 ppb	0.523 ppb	12.509 ppb	101.744 %
Concentration per Run 2	-0.408 ppb	0.137 ppb	3,153.278 ppb	13,997.876 ppb	0.387 ppb	0.763 ppb	0.584 ppb	11.712 ppb	99.156 %
Concentration per Run 3	-0.371 ppb	0.067 ppb	3,114.067 ppb	14,128.942 ppb	0.341 ppb	0.755 ppb	0.695 ppb	12.046 ppb	105.110 %
Concentration RSD	34.7 %	65.4 %	1.1 %	1.6 %	8.5 %	5.6 %	14.6 %	3.3 %	2.9 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	16.038 ppb	0.244 ppb	184.175 ppb	7.079 ppb	104.568 %	-0.001 ppb	0.002 ppb	106.729 %	1.230 ppb
Concentration per Run 1	16.173 ppb	0.176 ppb	185.564 ppb	6.268 ppb	105.629 %	0.002 ppb	0.000 ppb	106.936 %	1.091 ppb
Concentration per Run 2	16.625 ppb	0.283 ppb	183.777 ppb	6.880 ppb	104.705 %	-0.002 ppb	0.003 ppb	106.647 %	1.280 ppb
Concentration per Run 3	15.316 ppb	0.273 ppb	183.183 ppb	8.088 ppb	103.371 %	-0.003 ppb	0.004 ppb	106.603 %	1.320 ppb
Concentration RSD	4.1 %	24.2 %	0.7 %	13.1 %	1.1 %	317.8 %	86.6 %	0.2 %	9.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	31.125 ppb	110.411 %	111.024 %	0.014 ppb	0.038 ppb	101.185 %
Concentration per Run 1	30.113 ppb	113.971 %	114.351 %	0.011 ppb	0.041 ppb	101.848 %
Concentration per Run 2	31.562 ppb	108.678 %	109.221 %	0.011 ppb	0.039 ppb	100.298 %
Concentration per Run 3	31.702 ppb	108.585 %	109.500 %	0.020 ppb	0.032 ppb	101.409 %
Concentration RSD	2.8 %	2.8 %	2.6 %	34.7 %	12.1 %	0.8 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	77	User name	ALPHALAB\a2-icpmsq2	Comment	CCV/MCCV
Analysis label:	CCV	Rack	0		
Analysis started at:	12/3/2024 1:30:45 PM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	114.890 %	119.641 %	59.218 ppb	6,473.200 ppb	5,753.076 ppb	54.772 ppb	5,759.568 ppb	5,551.802 ppb	106.643 %
Concentration per Run 1	110.268 %	125.421 %	59.311 ppb	6,211.606 ppb	5,542.746 ppb	51.850 ppb	5,577.762 ppb	5,363.165 ppb	104.391 %
Concentration per Run 2	115.705 %	117.845 %	59.181 ppb	6,544.396 ppb	5,770.704 ppb	56.149 ppb	5,784.414 ppb	5,710.529 ppb	106.666 %
Concentration per Run 3	118.697 %	115.657 %	59.161 ppb	6,663.598 ppb	5,945.777 ppb	56.317 ppb	5,916.529 ppb	5,581.711 ppb	108.871 %
Recovery Percentage 1			98.697 %	107.887 %	95.885 %	91.287 %	95.993 %	92.530 %	
Concentration RSD	3.7 %	4.3 %	0.1 %	3.6 %	3.5 %	4.6 %	3.0 %	3.2 %	2.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	55.466 ppb	55.585 ppb	59.394 ppb	5,934.901 ppb	58.515 ppb	60.096 ppb	60.051 ppb	60.662 ppb	107.203 %
Concentration per Run 1	55.289 ppb	54.809 ppb	60.683 ppb	5,982.886 ppb	59.890 ppb	61.645 ppb	58.676 ppb	60.862 ppb	104.852 %
Concentration per Run 2	55.854 ppb	55.301 ppb	60.193 ppb	5,906.309 ppb	57.021 ppb	59.516 ppb	60.875 ppb	60.600 ppb	106.640 %
Concentration per Run 3	55.257 ppb	56.647 ppb	57.306 ppb	5,915.510 ppb	58.634 ppb	59.128 ppb	60.602 ppb	60.524 ppb	110.117 %
Recovery Percentage 1	92.444 %	92.642 %	98.990 %	98.915 %	97.525 %	100.160 %	100.085 %	101.103 %	
Concentration RSD	0.6 %	1.7 %	3.1 %	0.7 %	2.5 %	2.3 %	2.0 %	0.3 %	2.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	59.229 ppb	59.465 ppb	59.373 ppb	57.973 ppb	111.494 %	56.003 ppb	56.011 ppb	115.054 %	55.292 ppb
Concentration per Run 1	60.203 ppb	60.816 ppb	58.857 ppb	55.400 ppb	115.330 %	54.706 ppb	53.753 ppb	118.427 %	53.496 ppb
Concentration per Run 2	59.723 ppb	61.199 ppb	60.308 ppb	58.008 ppb	110.012 %	56.534 ppb	56.959 ppb	113.922 %	55.669 ppb
Concentration per Run 3	57.761 ppb	56.378 ppb	58.954 ppb	60.512 ppb	109.141 %	56.771 ppb	57.322 ppb	112.814 %	56.711 ppb
Recovery Percentage 1	98.715 %	99.108 %	98.955 %	96.622 %		93.339 %	93.352 %		92.154 %
Concentration RSD	2.2 %	4.5 %	1.4 %	4.4 %	3.0 %	2.0 %	3.5 %	2.6 %	3.0 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	56.571 ppb	115.043 %	114.616 %	55.990 ppb	57.004 ppb	110.959 %
Concentration per Run 1	56.547 ppb	116.279 %	117.583 %	55.054 ppb	56.337 ppb	112.704 %
Concentration per Run 2	56.765 ppb	113.549 %	113.832 %	57.563 ppb	57.327 ppb	110.076 %
Concentration per Run 3	56.403 ppb	115.301 %	112.433 %	55.352 ppb	57.350 ppb	110.098 %
Recovery Percentage 1	94.286 %			93.316 %	95.007 %	
Concentration RSD	0.3 %	1.2 %	2.3 %	2.4 %	1.0 %	1.4 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	78	User name	ALPHALAB\a2-icpmsq2	Comment	CCB
Analysis label:	CCB	Rack	0		
Analysis started at:	12/3/2024 1:35:17 PM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	118.157 %	120.764 %	0.218 ppb	546.112 ppb	1.121 ppb	-0.684 ppb	71.287 ppb	0.699 ppb	107.057 %
Concentration per Run 1	113.438 %	124.580 %	0.304 ppb	510.437 ppb	1.050 ppb	-0.739 ppb	71.331 ppb	0.741 ppb	106.737 %
Concentration per Run 2	119.593 %	117.340 %	0.214 ppb	572.379 ppb	1.359 ppb	-0.792 ppb	71.113 ppb	8.083 ppb	106.220 %
Concentration per Run 3	121.440 %	120.371 %	0.136 ppb	555.520 ppb	0.955 ppb	-0.520 ppb	71.418 ppb	-6.727 ppb	108.214 %
Recovery Percentage 1			43.605 %	109.222 %	1.602 %	-6.835 %	71.287 %	0.699 %	
Concentration RSD	3.5 %	3.0 %	38.5 %	5.9 %	18.9 %	21.1 %	0.2 %	1,059.2 %	1.0 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.380 ppb	-0.019 ppb	0.099 ppb	7.334 ppb	0.020 ppb	0.118 ppb	0.088 ppb	0.146 ppb	105.134 %
Concentration per Run 1	-0.454 ppb	-0.005 ppb	0.064 ppb	6.450 ppb	0.026 ppb	0.142 ppb	0.110 ppb	0.169 ppb	107.544 %
Concentration per Run 2	-0.360 ppb	-0.019 ppb	0.177 ppb	8.124 ppb	0.012 ppb	0.116 ppb	0.106 ppb	0.183 ppb	105.766 %
Concentration per Run 3	-0.327 ppb	-0.033 ppb	0.054 ppb	7.427 ppb	0.022 ppb	0.098 ppb	0.049 ppb	0.086 ppb	102.092 %
Recovery Percentage 1	-7.604 %	-1.898 %	9.855 %	14.668 %	3.957 %	5.924 %	8.800 %	2.925 %	
Concentration RSD	17.4 %	72.4 %	69.4 %	11.5 %	37.4 %	18.3 %	38.7 %	35.8 %	2.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.039 ppb	0.018 ppb	0.034 ppb	0.370 ppb	110.475 %	0.023 ppb	0.026 ppb	109.867 %	0.157 ppb
Concentration per Run 1	0.118 ppb	0.089 ppb	0.036 ppb	0.205 ppb	114.360 %	0.028 ppb	0.027 ppb	109.973 %	0.120 ppb
Concentration per Run 2	-0.008 ppb	0.014 ppb	0.029 ppb	0.316 ppb	110.225 %	0.022 ppb	0.044 ppb	110.317 %	0.176 ppb
Concentration per Run 3	0.009 ppb	-0.050 ppb	0.038 ppb	0.589 ppb	106.841 %	0.020 ppb	0.007 ppb	109.311 %	0.175 ppb
Recovery Percentage 1	7.900 %	0.355 %	0.344 %	18.484 %		5.794 %	12.816 %		3.921 %
Concentration RSD	173.1 %	391.7 %	13.6 %	53.5 %	3.4 %	17.3 %	71.7 %	0.5 %	20.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.020 ppb	111.813 %	111.411 %	0.233 ppb	0.030 ppb	109.041 %
Concentration per Run 1	-0.006 ppb	114.529 %	115.994 %	0.218 ppb	0.029 ppb	111.797 %
Concentration per Run 2	0.046 ppb	112.056 %	109.879 %	0.287 ppb	0.034 ppb	108.619 %
Concentration per Run 3	0.020 ppb	108.855 %	108.358 %	0.196 ppb	0.028 ppb	106.706 %
Recovery Percentage 1	3.985 %			23.333 %	3.033 %	
Concentration RSD	130.1 %	2.5 %	3.6 %	20.3 %	11.4 %	2.4 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	79	User name	ALPHALAB\a2-icpmsq2	Comment	CCB
Analysis label:	CCB	Rack	0		
Analysis started at:	12/3/2024 1:45:22 PM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	118.704 %	119.024 %	0.006 ppb	280.745 ppb	-0.171 ppb	-0.666 ppb	30.777 ppb	-6.620 ppb	108.554 %
Concentration per Run 1	113.248 %	116.499 %	0.006 ppb	251.140 ppb	0.138 ppb	-0.974 ppb	28.930 ppb	-2.982 ppb	105.054 %
Concentration per Run 2	120.589 %	118.687 %	0.005 ppb	286.333 ppb	-0.231 ppb	-0.400 ppb	28.755 ppb	-10.323 ppb	110.697 %
Concentration per Run 3	122.275 %	121.886 %	0.007 ppb	304.762 ppb	-0.419 ppb	-0.624 ppb	34.646 ppb	-6.556 ppb	109.911 %
Recovery Percentage 1			1.174 %	56.149 %	-0.244 %	-6.663 %	30.777 %	-6.620 %	
Concentration RSD	4.0 %	2.3 %	11.2 %	9.7 %	166.2 %	43.4 %	10.9 %	55.4 %	2.8 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.381 ppb	-0.061 ppb	0.032 ppb	-0.423 ppb	0.005 ppb	0.043 ppb	0.031 ppb	0.117 ppb	130.208 %
Concentration per Run 1	-0.376 ppb	-0.085 ppb	0.064 ppb	-0.568 ppb	0.007 ppb	0.067 ppb	0.005 ppb	0.133 ppb	132.669 %
Concentration per Run 2	-0.352 ppb	-0.058 ppb	0.061 ppb	-0.792 ppb	0.008 ppb	0.013 ppb	0.050 ppb	0.107 ppb	130.754 %
Concentration per Run 3	-0.415 ppb	-0.041 ppb	-0.030 ppb	0.090 ppb	-0.001 ppb	0.050 ppb	0.039 ppb	0.111 ppb	127.201 %
Recovery Percentage 1	-7.626 %	-6.135 %	3.188 %	-0.846 %	0.971 %	2.170 %	3.110 %	2.341 %	
Concentration RSD	8.4 %	36.3 %	166.9 %	108.3 %	98.2 %	63.6 %	76.1 %	12.0 %	2.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.044 ppb	0.002 ppb	0.004 ppb	-0.053 ppb	111.015 %	0.002 ppb	0.001 ppb	109.483 %	0.044 ppb
Concentration per Run 1	0.077 ppb	-0.047 ppb	0.012 ppb	-0.071 ppb	115.778 %	0.001 ppb	0.000 ppb	114.476 %	0.051 ppb
Concentration per Run 2	0.012 ppb	0.035 ppb	-0.006 ppb	-0.050 ppb	110.261 %	0.002 ppb	0.000 ppb	106.734 %	0.043 ppb
Concentration per Run 3	0.043 ppb	0.018 ppb	0.005 ppb	-0.039 ppb	107.005 %	0.004 ppb	0.003 ppb	107.238 %	0.038 ppb
Recovery Percentage 1	8.756 %	0.040 %	0.036 %	-2.675 %		0.592 %	0.575 %		1.102 %
Concentration RSD	74.7 %	2,144.2 %	258.2 %	31.2 %	4.0 %	70.9 %	173.2 %	4.0 %	14.5 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.007 ppb	112.317 %	110.097 %	0.029 ppb	0.006 ppb	107.396 %
Concentration per Run 1	0.006 ppb	113.387 %	112.941 %	0.019 ppb	0.009 ppb	109.445 %
Concentration per Run 2	0.007 ppb	111.536 %	107.260 %	0.032 ppb	0.004 ppb	104.181 %
Concentration per Run 3	0.007 ppb	112.029 %	110.089 %	0.037 ppb	0.004 ppb	108.563 %
Recovery Percentage 1	1.374 %			2.939 %	0.568 %	
Concentration RSD	8.9 %	0.9 %	2.6 %	32.4 %	45.8 %	2.6 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	80	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG2004404-2d10 MCP-6020SL-10	Rack	1		
Analysis started at:	12/3/2024 2:02:11 PM	Vial	52		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	119.645 %	124.018 %	4.794 ppb	1,313.469 ppb	924.323 ppb	176.698 ppb	904.120 ppb	814.771 ppb	107.511 %
Concentration per Run 1	115.135 %	121.549 %	4.803 ppb	1,304.630 ppb	908.906 ppb	172.505 ppb	912.808 ppb	856.177 ppb	106.220 %
Concentration per Run 2	120.551 %	130.809 %	4.843 ppb	1,236.184 ppb	884.689 ppb	172.517 ppb	883.533 ppb	740.225 ppb	107.134 %
Concentration per Run 3	123.247 %	119.697 %	4.735 ppb	1,399.595 ppb	979.374 ppb	185.071 ppb	916.020 ppb	847.912 ppb	109.179 %
Concentration RSD	3.5 %	4.8 %	1.1 %	6.2 %	5.3 %	4.1 %	2.0 %	7.9 %	1.4 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	43.230 ppb	18.015 ppb	48.878 ppb	96.029 ppb	48.347 ppb	48.730 ppb	23.978 ppb	48.572 ppb	107.982 %
Concentration per Run 1	43.014 ppb	17.836 ppb	50.744 ppb	94.651 ppb	47.185 ppb	50.170 ppb	24.483 ppb	48.006 ppb	105.887 %
Concentration per Run 2	42.284 ppb	17.835 ppb	48.198 ppb	92.744 ppb	48.056 ppb	47.689 ppb	23.805 ppb	49.705 ppb	107.966 %
Concentration per Run 3	44.392 ppb	18.376 ppb	47.691 ppb	100.693 ppb	49.799 ppb	48.331 ppb	23.647 ppb	48.006 ppb	110.092 %
Concentration RSD	2.5 %	1.7 %	3.3 %	4.3 %	2.8 %	2.6 %	1.9 %	2.0 %	1.9 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	11.578 ppb	11.397 ppb	95.017 ppb	96.240 ppb	110.170 %	4.988 ppb	4.909 ppb	110.154 %	42.115 ppb
Concentration per Run 1	11.411 ppb	9.612 ppb	93.772 ppb	96.888 ppb	113.283 %	5.026 ppb	4.882 ppb	113.111 %	40.670 ppb
Concentration per Run 2	11.885 ppb	11.425 ppb	96.155 ppb	95.747 ppb	108.295 %	4.817 ppb	4.939 ppb	108.231 %	42.707 ppb
Concentration per Run 3	11.439 ppb	13.156 ppb	95.124 ppb	96.085 ppb	108.932 %	5.120 ppb	4.906 ppb	109.120 %	42.968 ppb
Concentration RSD	2.3 %	15.5 %	1.3 %	0.6 %	2.5 %	3.1 %	0.6 %	2.4 %	3.0 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	192.110 ppb	111.191 %	110.197 %	11.257 ppb	49.680 ppb	109.190 %
Concentration per Run 1	185.893 ppb	112.540 %	111.231 %	11.229 ppb	48.667 ppb	108.280 %
Concentration per Run 2	191.505 ppb	112.720 %	110.685 %	11.102 ppb	49.550 ppb	110.392 %
Concentration per Run 3	198.932 ppb	108.313 %	108.675 %	11.441 ppb	50.822 ppb	108.896 %
Concentration RSD	3.4 %	2.2 %	1.2 %	1.5 %	2.2 %	1.0 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	81	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG2004404-3d10 MCP-6020SL-10	Rack	1		
Analysis started at:	12/3/2024 2:06:37 PM	Vial	53		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	114.779 %	129.462 %	5.034 ppb	1,292.033 ppb	909.248 ppb	175.601 ppb	932.334 ppb	866.457 ppb	108.873 %
Concentration per Run 1	110.272 %	134.849 %	5.097 ppb	1,225.196 ppb	861.079 ppb	169.993 ppb	902.585 ppb	812.601 ppb	106.307 %
Concentration per Run 2	115.539 %	129.125 %	5.029 ppb	1,298.338 ppb	917.699 ppb	174.231 ppb	910.978 ppb	907.035 ppb	111.080 %
Concentration per Run 3	118.527 %	124.411 %	4.977 ppb	1,352.565 ppb	948.967 ppb	182.578 ppb	983.439 ppb	879.734 ppb	109.233 %
Concentration RSD	3.6 %	4.0 %	1.2 %	4.9 %	4.9 %	3.6 %	4.8 %	5.6 %	2.2 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	43.824 ppb	18.222 ppb	48.802 ppb	95.028 ppb	49.421 ppb	48.563 ppb	24.642 ppb	48.813 ppb	106.423 %
Concentration per Run 1	42.058 ppb	17.768 ppb	47.769 ppb	92.582 ppb	49.205 ppb	48.436 ppb	25.554 ppb	48.167 ppb	106.878 %
Concentration per Run 2	44.094 ppb	18.464 ppb	49.081 ppb	104.275 ppb	50.511 ppb	48.611 ppb	24.447 ppb	50.073 ppb	105.814 %
Concentration per Run 3	45.320 ppb	18.434 ppb	49.557 ppb	88.227 ppb	48.547 ppb	48.642 ppb	23.924 ppb	48.199 ppb	106.576 %
Concentration RSD	3.8 %	2.2 %	1.9 %	8.7 %	2.0 %	0.2 %	3.4 %	2.2 %	0.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	11.925 ppb	13.449 ppb	95.558 ppb	95.718 ppb	109.363 %	5.025 ppb	5.018 ppb	109.070 %	40.061 ppb
Concentration per Run 1	11.948 ppb	13.709 ppb	94.325 ppb	92.744 ppb	112.875 %	4.831 ppb	4.817 ppb	113.403 %	38.063 ppb
Concentration per Run 2	12.331 ppb	11.939 ppb	96.608 ppb	97.752 ppb	107.080 %	5.072 ppb	5.068 ppb	108.870 %	40.172 ppb
Concentration per Run 3	11.497 ppb	14.700 ppb	95.741 ppb	96.659 ppb	108.133 %	5.171 ppb	5.170 ppb	104.937 %	41.950 ppb
Concentration RSD	3.5 %	10.4 %	1.2 %	2.8 %	2.8 %	3.5 %	3.6 %	3.9 %	4.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	192.646 ppb	110.226 %	106.938 %	11.438 ppb	50.492 ppb	108.593 %
Concentration per Run 1	187.377 ppb	113.752 %	108.375 %	11.152 ppb	49.775 ppb	110.243 %
Concentration per Run 2	192.454 ppb	107.751 %	107.069 %	11.569 ppb	51.453 ppb	107.520 %
Concentration per Run 3	198.108 ppb	109.174 %	105.370 %	11.593 ppb	50.248 ppb	108.015 %
Concentration RSD	2.8 %	2.8 %	1.4 %	2.2 %	1.7 %	1.3 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	82	User name	ALPHALAB\a2-icpmsq2	Comment	ng
Analysis label:	L2469297-01d5 MCP-6020SL-10	Rack	1		
Analysis started at:	12/3/2024 2:11:05 PM	Vial	46		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	95.565 %	113.468 %	0.051 ppb	262,288.313 ppb	12,737.116 ppb	19.063 ppb	2,729.110 ppb	31,220.743 ppb	99.784 %
Concentration per Run 1	91.985 %	113.973 %	0.052 ppb	260,301.922 ppb	12,704.928 ppb	20.389 ppb	2,678.718 ppb	30,572.424 ppb	96.684 %
Concentration per Run 2	96.455 %	103.199 %	0.056 ppb	280,896.015 ppb	13,545.645 ppb	20.297 ppb	2,889.385 ppb	32,479.480 ppb	101.320 %
Concentration per Run 3	98.257 %	123.233 %	0.044 ppb	245,667.002 ppb	11,960.776 ppb	16.505 ppb	2,619.227 ppb	30,610.326 ppb	101.348 %
Concentration RSD	3.4 %	8.8 %	12.1 %	6.7 %	6.2 %	11.6 %	5.2 %	3.5 %	2.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.532 ppb	0.452 ppb	4,305.803 ppb	53,249.454 ppb	2.943 ppb	1.163 ppb	0.274 ppb	5.754 ppb	103.688 %
Concentration per Run 1	0.584 ppb	0.384 ppb	4,243.722 ppb	52,387.616 ppb	2.840 ppb	1.214 ppb	0.322 ppb	5.863 ppb	103.798 %
Concentration per Run 2	0.529 ppb	0.571 ppb	4,490.917 ppb	55,628.557 ppb	3.067 ppb	1.272 ppb	0.223 ppb	5.814 ppb	102.106 %
Concentration per Run 3	0.482 ppb	0.402 ppb	4,182.771 ppb	51,732.189 ppb	2.922 ppb	1.002 ppb	0.277 ppb	5.585 ppb	105.161 %
Concentration RSD	9.6 %	22.7 %	3.8 %	3.9 %	3.9 %	12.2 %	18.1 %	2.6 %	1.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.308 ppb	0.543 ppb	290.701 ppb	0.971 ppb	101.876 %	0.001 ppb	0.013 ppb	105.065 %	1.392 ppb
Concentration per Run 1	0.306 ppb	0.483 ppb	288.431 ppb	0.914 ppb	105.104 %	-0.001 ppb	0.010 ppb	108.168 %	1.221 ppb
Concentration per Run 2	0.357 ppb	0.842 ppb	294.158 ppb	0.911 ppb	99.161 %	0.001 ppb	0.022 ppb	102.988 %	1.444 ppb
Concentration per Run 3	0.261 ppb	0.304 ppb	289.515 ppb	1.088 ppb	101.363 %	0.001 ppb	0.007 ppb	104.038 %	1.510 ppb
Concentration RSD	15.6 %	50.4 %	1.0 %	10.5 %	2.9 %	202.8 %	58.7 %	2.6 %	10.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	590.919 ppb	108.192 %	107.327 %	0.021 ppb	0.085 ppb	100.466 %
Concentration per Run 1	574.236 ppb	111.709 %	108.266 %	0.019 ppb	0.087 ppb	102.559 %
Concentration per Run 2	595.804 ppb	105.626 %	106.575 %	0.027 ppb	0.090 ppb	100.203 %
Concentration per Run 3	602.716 ppb	107.240 %	107.139 %	0.018 ppb	0.077 ppb	98.636 %
Concentration RSD	2.5 %	2.9 %	0.8 %	22.3 %	8.0 %	2.0 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	83	User name	ALPHALAB\a2-icpmsq2	Comment	ng
Analysis label:	L2469297-02 MCP-6020SL-10	Rack	1		
Analysis started at:	12/3/2024 2:15:34 PM	Vial	47		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	107.239 %	119.473 %	0.153 ppb	158,770.819 ppb	1,167.201 ppb	1,917.651 ppb	2,604.533 ppb	3,522.550 ppb	103.404 %
Concentration per Run 1	103.700 %	121.381 %	0.160 ppb	156,001.447 ppb	1,141.175 ppb	1,842.772 ppb	2,452.845 ppb	3,405.931 ppb	100.754 %
Concentration per Run 2	108.198 %	119.361 %	0.146 ppb	156,217.482 ppb	1,150.585 ppb	1,919.118 ppb	2,611.065 ppb	3,549.758 ppb	104.315 %
Concentration per Run 3	109.819 %	117.677 %	0.153 ppb	164,093.528 ppb	1,209.842 ppb	1,991.064 ppb	2,749.690 ppb	3,611.960 ppb	105.141 %
Concentration RSD	3.0 %	1.6 %	4.6 %	2.9 %	3.2 %	3.9 %	5.7 %	3.0 %	2.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	5.622 ppb	7.497 ppb	419.777 ppb	2,233.456 ppb	2.657 ppb	13.380 ppb	26.053 ppb	20.104 ppb	99.231 %
Concentration per Run 1	5.250 ppb	7.150 ppb	413.250 ppb	2,215.950 ppb	2.715 ppb	13.253 ppb	24.931 ppb	19.832 ppb	99.869 %
Concentration per Run 2	5.953 ppb	7.664 ppb	419.792 ppb	2,215.413 ppb	2.727 ppb	13.011 ppb	26.406 ppb	19.789 ppb	98.119 %
Concentration per Run 3	5.663 ppb	7.677 ppb	426.289 ppb	2,269.004 ppb	2.530 ppb	13.876 ppb	26.821 ppb	20.691 ppb	99.705 %
Concentration RSD	6.3 %	4.0 %	1.6 %	1.4 %	4.2 %	3.3 %	3.8 %	2.5 %	1.0 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	3.727 ppb	3.994 ppb	29.539 ppb	8.858 ppb	103.097 %	0.022 ppb	0.036 ppb	104.182 %	1.036 ppb
Concentration per Run 1	3.555 ppb	3.536 ppb	28.761 ppb	8.252 ppb	107.617 %	0.021 ppb	0.034 ppb	109.506 %	1.004 ppb
Concentration per Run 2	3.889 ppb	3.559 ppb	29.779 ppb	8.766 ppb	101.297 %	0.018 ppb	0.029 ppb	101.389 %	1.014 ppb
Concentration per Run 3	3.736 ppb	4.887 ppb	30.077 ppb	9.554 ppb	100.377 %	0.027 ppb	0.044 ppb	101.652 %	1.091 ppb
Concentration RSD	4.5 %	19.4 %	2.3 %	7.4 %	3.8 %	20.1 %	20.9 %	4.4 %	4.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	45.962 ppb	108.618 %	108.131 %	0.041 ppb	5.277 ppb	104.441 %
Concentration per Run 1	43.665 ppb	109.312 %	107.497 %	0.039 ppb	5.162 ppb	107.020 %
Concentration per Run 2	45.741 ppb	108.761 %	109.351 %	0.044 ppb	5.307 ppb	104.018 %
Concentration per Run 3	48.479 ppb	107.783 %	107.544 %	0.041 ppb	5.362 ppb	102.283 %
Concentration RSD	5.3 %	0.7 %	1.0 %	5.7 %	2.0 %	2.3 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	84	User name	ALPHALAB\a2-icpmsq2	Comment	ng
Analysis label:	L2469297-03 MCP-6020SL-10	Rack	1		
Analysis started at:	12/3/2024 2:20:03 PM	Vial	48		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	106.634 %	113.019 %	0.042 ppb	95,399.357 ppb	1,208.509 ppb	655.969 ppb	1,699.731 ppb	4,803.282 ppb	102.586 %
Concentration per Run 1	102.268 %	113.300 %	0.043 ppb	95,502.456 ppb	1,183.711 ppb	639.846 ppb	1,677.611 ppb	4,854.386 ppb	98.690 %
Concentration per Run 2	107.933 %	108.923 %	0.041 ppb	97,087.707 ppb	1,236.388 ppb	668.369 ppb	1,802.081 ppb	4,960.612 ppb	104.240 %
Concentration per Run 3	109.700 %	116.835 %	0.044 ppb	93,607.909 ppb	1,205.428 ppb	659.693 ppb	1,619.502 ppb	4,594.848 ppb	104.828 %
Concentration RSD	3.6 %	3.5 %	4.1 %	1.8 %	2.2 %	2.2 %	5.5 %	3.9 %	3.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	5.794 ppb	35.278 ppb	38.395 ppb	576.055 ppb	0.450 ppb	1.581 ppb	6.351 ppb	15.282 ppb	99.178 %
Concentration per Run 1	5.079 ppb	34.301 ppb	38.752 ppb	559.118 ppb	0.525 ppb	1.572 ppb	6.229 ppb	15.443 ppb	100.664 %
Concentration per Run 2	6.243 ppb	37.012 ppb	39.386 ppb	590.932 ppb	0.439 ppb	1.364 ppb	6.289 ppb	15.340 ppb	96.735 %
Concentration per Run 3	6.062 ppb	34.522 ppb	37.046 ppb	578.115 ppb	0.387 ppb	1.809 ppb	6.534 ppb	15.064 ppb	100.135 %
Concentration RSD	10.8 %	4.3 %	3.2 %	2.8 %	15.4 %	14.1 %	2.5 %	1.3 %	2.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	2.440 ppb	0.783 ppb	30.784 ppb	13.077 ppb	102.913 %	0.016 ppb	0.017 ppb	105.017 %	0.941 ppb
Concentration per Run 1	2.506 ppb	0.501 ppb	30.087 ppb	12.816 ppb	105.654 %	0.012 ppb	0.010 ppb	107.846 %	0.852 ppb
Concentration per Run 2	2.422 ppb	0.527 ppb	31.031 ppb	13.447 ppb	102.221 %	0.017 ppb	0.029 ppb	102.409 %	0.987 ppb
Concentration per Run 3	2.393 ppb	1.320 ppb	31.234 ppb	12.968 ppb	100.864 %	0.017 ppb	0.011 ppb	104.794 %	0.983 ppb
Concentration RSD	2.4 %	59.5 %	2.0 %	2.5 %	2.4 %	18.0 %	63.7 %	2.6 %	8.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	13.015 ppb	106.876 %	103.702 %	0.020 ppb	1.198 ppb	101.253 %
Concentration per Run 1	12.978 ppb	108.037 %	105.742 %	0.017 ppb	1.155 ppb	103.014 %
Concentration per Run 2	12.881 ppb	107.300 %	103.649 %	0.024 ppb	1.232 ppb	98.238 %
Concentration per Run 3	13.186 ppb	105.293 %	101.715 %	0.019 ppb	1.206 ppb	102.506 %
Concentration RSD	1.2 %	1.3 %	1.9 %	18.0 %	3.3 %	2.6 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	85	User name	ALPHALAB\a2-icpmsq2	Comment	ng
Analysis label:	L2469297-04 MCP-6020SL-10	Rack	1		
Analysis started at:	12/3/2024 2:24:33 PM	Vial	49		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	105.938 %	119.192 %	0.021 ppb	177,643.475 ppb	12,703.940 ppb	199.180 ppb	3,574.213 ppb	40,299.648 ppb	109.042 %
Concentration per Run 1	103.394 %	119.361 %	0.022 ppb	174,194.783 ppb	12,309.737 ppb	200.115 ppb	3,464.115 ppb	39,217.927 ppb	106.149 %
Concentration per Run 2	106.654 %	119.697 %	0.021 ppb	176,682.784 ppb	12,595.233 ppb	188.557 ppb	3,522.036 ppb	39,545.910 ppb	111.896 %
Concentration per Run 3	107.764 %	118.519 %	0.020 ppb	182,052.859 ppb	13,206.849 ppb	208.869 ppb	3,736.487 ppb	42,135.106 ppb	109.083 %
Concentration RSD	2.1 %	0.5 %	5.6 %	2.3 %	3.6 %	5.1 %	4.0 %	4.0 %	2.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.513 ppb	0.732 ppb	365.058 ppb	230.628 ppb	0.548 ppb	2.049 ppb	2.105 ppb	14.100 ppb	99.638 %
Concentration per Run 1	0.495 ppb	0.694 ppb	363.699 ppb	233.409 ppb	0.556 ppb	2.044 ppb	2.131 ppb	14.116 ppb	98.478 %
Concentration per Run 2	0.526 ppb	0.733 ppb	374.307 ppb	242.858 ppb	0.566 ppb	1.963 ppb	2.022 ppb	14.110 ppb	100.533 %
Concentration per Run 3	0.519 ppb	0.768 ppb	357.168 ppb	215.617 ppb	0.522 ppb	2.139 ppb	2.162 ppb	14.075 ppb	99.902 %
Concentration RSD	3.1 %	5.1 %	2.4 %	6.0 %	4.2 %	4.3 %	3.5 %	0.2 %	1.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.373 ppb	0.482 ppb	259.054 ppb	26.055 ppb	103.393 %	0.002 ppb	0.023 ppb	103.437 %	0.208 ppb
Concentration per Run 1	0.361 ppb	0.585 ppb	257.476 ppb	24.651 ppb	104.138 %	0.004 ppb	0.028 ppb	108.967 %	0.151 ppb
Concentration per Run 2	0.406 ppb	0.615 ppb	258.609 ppb	25.986 ppb	102.859 %	0.001 ppb	0.022 ppb	99.696 %	0.186 ppb
Concentration per Run 3	0.352 ppb	0.246 ppb	261.079 ppb	27.529 ppb	103.184 %	0.001 ppb	0.018 ppb	101.648 %	0.288 ppb
Concentration RSD	7.8 %	42.4 %	0.7 %	5.5 %	0.6 %	72.9 %	21.1 %	4.7 %	34.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	63.194 ppb	109.079 %	106.300 %	0.031 ppb	0.355 ppb	100.531 %
Concentration per Run 1	60.156 ppb	109.129 %	104.492 %	0.025 ppb	0.332 ppb	104.339 %
Concentration per Run 2	62.531 ppb	108.697 %	106.549 %	0.038 ppb	0.368 ppb	98.880 %
Concentration per Run 3	66.894 ppb	109.412 %	107.859 %	0.029 ppb	0.367 ppb	98.373 %
Concentration RSD	5.4 %	0.3 %	1.6 %	21.0 %	5.8 %	3.3 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	86	User name	ALPHALAB\a2-icpmsq2	Comment	ng
Analysis label:	L2469297-05 MCP-6020SL-10	Rack	1		
Analysis started at:	12/3/2024 2:29:01 PM	Vial	50		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	91.437 %	113.524 %	0.014 ppb	1,245,482.649 ppb	9,911.556 ppb	89.297 ppb	11,064.752 ppb	39,351.478 ppb	84.984 %
Concentration per Run 1	89.395 %	120.034 %	0.013 ppb	1,169,546.179 ppb	9,070.247 ppb	81.109 ppb	10,209.708 ppb	36,804.542 ppb	84.762 %
Concentration per Run 2	93.113 %	109.428 %	0.014 ppb	1,267,191.456 ppb	10,166.027 ppb	92.951 ppb	11,657.719 ppb	40,991.680 ppb	86.281 %
Concentration per Run 3	91.803 %	111.111 %	0.017 ppb	1,299,710.314 ppb	10,498.394 ppb	93.833 ppb	11,326.828 ppb	40,258.212 ppb	83.907 %
Concentration RSD	2.1 %	5.0 %	15.1 %	5.4 %	7.5 %	8.0 %	6.9 %	5.7 %	1.4 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.170 ppb	0.467 ppb	3,026.198 ppb	140.553 ppb	4.206 ppb	5.455 ppb	5.843 ppb	18.181 ppb	99.844 %
Concentration per Run 1	0.157 ppb	0.458 ppb	3,006.584 ppb	140.839 ppb	4.243 ppb	5.643 ppb	5.650 ppb	17.941 ppb	94.951 %
Concentration per Run 2	0.256 ppb	0.480 ppb	3,019.473 ppb	141.767 ppb	4.280 ppb	5.073 ppb	5.990 ppb	18.285 ppb	102.271 %
Concentration per Run 3	0.097 ppb	0.462 ppb	3,052.537 ppb	139.053 ppb	4.096 ppb	5.650 ppb	5.890 ppb	18.317 ppb	102.311 %
Concentration RSD	47.1 %	2.5 %	0.8 %	1.0 %	2.3 %	6.1 %	3.0 %	1.1 %	4.2 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.404 ppb	0.387 ppb	448.409 ppb	11.096 ppb	98.722 %	0.132 ppb	0.507 ppb	103.114 %	0.186 ppb
Concentration per Run 1	0.323 ppb	0.441 ppb	444.910 ppb	10.971 ppb	100.846 %	0.139 ppb	0.533 ppb	104.503 %	0.164 ppb
Concentration per Run 2	0.510 ppb	0.358 ppb	445.652 ppb	11.088 ppb	98.182 %	0.133 ppb	0.463 ppb	101.861 %	0.196 ppb
Concentration per Run 3	0.380 ppb	0.363 ppb	454.664 ppb	11.228 ppb	97.138 %	0.124 ppb	0.527 ppb	102.979 %	0.199 ppb
Concentration RSD	23.7 %	12.0 %	1.2 %	1.2 %	1.9 %	5.9 %	7.7 %	1.3 %	10.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	236.210 ppb	108.539 %	108.513 %	0.053 ppb	0.184 ppb	94.761 %
Concentration per Run 1	229.661 ppb	108.109 %	107.705 %	0.052 ppb	0.183 ppb	93.041 %
Concentration per Run 2	238.275 ppb	108.787 %	109.787 %	0.054 ppb	0.182 ppb	94.979 %
Concentration per Run 3	240.696 ppb	108.720 %	108.048 %	0.054 ppb	0.187 ppb	96.264 %
Concentration RSD	2.5 %	0.3 %	1.0 %	2.0 %	1.2 %	1.7 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	87	User name	ALPHALAB\a2-icpmsq2	Comment	ng
Analysis label:	L2469297-06 MCP-6020SL-10	Rack	1		
Analysis started at:	12/3/2024 2:33:29 PM	Vial	51		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	116.131 %	123.064 %	0.029 ppb	80,490.670 ppb	514.058 ppb	85.081 ppb	1,611.620 ppb	1,929.628 ppb	107.881 %
Concentration per Run 1	113.765 %	119.866 %	0.028 ppb	79,852.296 ppb	491.902 ppb	80.759 ppb	1,620.403 ppb	1,864.030 ppb	105.862 %
Concentration per Run 2	117.112 %	125.421 %	0.031 ppb	78,406.207 ppb	518.177 ppb	86.312 ppb	1,560.358 ppb	1,953.811 ppb	109.176 %
Concentration per Run 3	117.517 %	123.906 %	0.029 ppb	83,213.508 ppb	532.095 ppb	88.173 ppb	1,654.099 ppb	1,971.043 ppb	108.604 %
Concentration RSD	1.8 %	2.3 %	5.8 %	3.1 %	4.0 %	4.5 %	2.9 %	3.0 %	1.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	4.785 ppb	0.563 ppb	244.079 ppb	651.032 ppb	0.738 ppb	1.718 ppb	1.978 ppb	16.715 ppb	105.228 %
Concentration per Run 1	4.586 ppb	0.568 ppb	246.926 ppb	660.153 ppb	0.809 ppb	1.652 ppb	1.912 ppb	16.940 ppb	105.739 %
Concentration per Run 2	4.784 ppb	0.540 ppb	241.474 ppb	632.343 ppb	0.744 ppb	1.649 ppb	1.875 ppb	16.326 ppb	105.401 %
Concentration per Run 3	4.983 ppb	0.581 ppb	243.837 ppb	660.600 ppb	0.659 ppb	1.852 ppb	2.146 ppb	16.878 ppb	104.545 %
Concentration RSD	4.1 %	3.7 %	1.1 %	2.5 %	10.3 %	6.8 %	7.4 %	2.0 %	0.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	5.578 ppb	0.915 ppb	17.302 ppb	11.678 ppb	108.249 %	0.002 ppb	0.010 ppb	109.485 %	0.312 ppb
Concentration per Run 1	5.355 ppb	0.924 ppb	16.944 ppb	10.698 ppb	111.109 %	0.000 ppb	0.007 ppb	110.955 %	0.295 ppb
Concentration per Run 2	5.588 ppb	1.254 ppb	17.255 ppb	11.876 ppb	108.558 %	0.003 ppb	0.021 ppb	107.325 %	0.317 ppb
Concentration per Run 3	5.791 ppb	0.568 ppb	17.705 ppb	12.459 ppb	105.079 %	0.004 ppb	0.003 ppb	110.176 %	0.323 ppb
Concentration RSD	3.9 %	37.5 %	2.2 %	7.7 %	2.8 %	88.3 %	89.3 %	1.7 %	4.8 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	22.927 ppb	113.308 %	110.441 %	0.013 ppb	0.225 ppb	105.805 %
Concentration per Run 1	22.106 ppb	112.554 %	112.066 %	0.008 ppb	0.212 ppb	105.583 %
Concentration per Run 2	23.176 ppb	114.427 %	111.961 %	0.014 ppb	0.234 ppb	106.025 %
Concentration per Run 3	23.498 ppb	112.943 %	107.295 %	0.015 ppb	0.229 ppb	105.806 %
Concentration RSD	3.2 %	0.9 %	2.5 %	31.6 %	5.1 %	0.2 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	88	User name	ALPHALAB\a2-icpmsq2	Comment	CCV/MCCV
Analysis label:	CCV	Rack	0		
Analysis started at:	12/3/2024 2:37:57 PM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	118.989 %	125.702 %	56.919 ppb	6,404.407 ppb	5,601.524 ppb	54.818 ppb	5,578.061 ppb	5,587.954 ppb	113.278 %
Concentration per Run 1	113.423 %	130.304 %	58.003 ppb	6,319.185 ppb	5,464.085 ppb	53.254 ppb	5,536.231 ppb	5,377.043 ppb	111.923 %
Concentration per Run 2	120.504 %	122.391 %	56.598 ppb	6,474.879 ppb	5,733.529 ppb	55.992 ppb	5,338.441 ppb	5,679.268 ppb	115.471 %
Concentration per Run 3	123.038 %	124.411 %	56.156 ppb	6,419.158 ppb	5,606.957 ppb	55.208 ppb	5,859.513 ppb	5,707.549 ppb	112.440 %
Recovery Percentage 1			94.865 %	106.740 %	93.359 %	91.363 %	92.968 %	93.133 %	
Concentration RSD	4.2 %	3.3 %	1.7 %	1.2 %	2.4 %	2.6 %	4.7 %	3.3 %	1.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	55.262 ppb	56.600 ppb	58.041 ppb	5,890.819 ppb	59.091 ppb	60.603 ppb	60.565 ppb	59.819 ppb	105.005 %
Concentration per Run 1	52.748 ppb	54.271 ppb	56.416 ppb	5,889.070 ppb	60.073 ppb	61.380 ppb	59.009 ppb	60.523 ppb	103.858 %
Concentration per Run 2	55.167 ppb	57.088 ppb	58.892 ppb	6,064.146 ppb	60.470 ppb	61.174 ppb	60.805 ppb	60.819 ppb	106.151 %
Concentration per Run 3	57.872 ppb	58.442 ppb	58.814 ppb	5,719.239 ppb	56.728 ppb	59.256 ppb	61.880 ppb	58.115 ppb	105.006 %
Recovery Percentage 1	92.104 %	94.333 %	96.734 %	98.180 %	98.484 %	101.005 %	100.941 %	99.699 %	
Concentration RSD	4.6 %	3.8 %	2.4 %	2.9 %	3.5 %	1.9 %	2.4 %	2.5 %	1.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	60.070 ppb	59.767 ppb	58.456 ppb	58.469 ppb	110.780 %	56.871 ppb	57.056 ppb	111.702 %	54.826 ppb
Concentration per Run 1	59.554 ppb	64.094 ppb	57.655 ppb	56.565 ppb	115.478 %	55.435 ppb	56.184 ppb	112.778 %	54.938 ppb
Concentration per Run 2	59.603 ppb	57.940 ppb	58.358 ppb	59.067 ppb	109.557 %	56.901 ppb	56.897 ppb	112.626 %	54.572 ppb
Concentration per Run 3	61.054 ppb	57.266 ppb	59.356 ppb	59.774 ppb	107.305 %	58.278 ppb	58.087 ppb	109.701 %	54.967 ppb
Recovery Percentage 1	100.117 %	99.611 %	97.427 %	97.448 %		94.785 %	95.094 %		91.376 %
Concentration RSD	1.4 %	6.3 %	1.5 %	2.9 %	3.8 %	2.5 %	1.7 %	1.6 %	0.4 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	55.510 ppb	112.569 %	110.460 %	56.444 ppb	56.976 ppb	107.887 %
Concentration per Run 1	54.918 ppb	115.271 %	113.329 %	54.490 ppb	55.489 ppb	110.117 %
Concentration per Run 2	55.889 ppb	110.015 %	109.028 %	55.988 ppb	57.425 ppb	108.330 %
Concentration per Run 3	55.723 ppb	112.421 %	109.023 %	58.854 ppb	58.015 ppb	105.213 %
Recovery Percentage 1	92.517 %			94.073 %	94.960 %	
Concentration RSD	0.9 %	2.3 %	2.2 %	3.9 %	2.3 %	2.3 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	89	User name	ALPHALAB\a2-icpmsq2	Comment	CCB
Analysis label:	CCB	Rack	0		
Analysis started at:	12/3/2024 2:42:28 PM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	118.973 %	126.824 %	0.007 ppb	654.026 ppb	0.196 ppb	-0.451 ppb	49.763 ppb	-4.203 ppb	105.078 %
Concentration per Run 1	116.977 %	122.559 %	0.008 ppb	686.756 ppb	-0.192 ppb	-0.490 ppb	52.797 ppb	-6.840 ppb	104.069 %
Concentration per Run 2	120.749 %	128.789 %	0.007 ppb	642.959 ppb	-0.042 ppb	-0.578 ppb	52.507 ppb	-4.633 ppb	106.578 %
Concentration per Run 3	119.192 %	129.125 %	0.007 ppb	632.363 ppb	0.821 ppb	-0.286 ppb	43.985 ppb	-1.136 ppb	104.587 %
Recovery Percentage 1			1.429 %	130.805 %	0.279 %	-4.513 %	49.763 %	-4.203 %	
Concentration RSD	1.6 %	2.9 %	11.1 %	4.4 %	279.4 %	33.2 %	10.1 %	68.4 %	1.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.456 ppb	-0.043 ppb	0.125 ppb	4.008 ppb	-0.004 ppb	0.044 ppb	0.050 ppb	0.203 ppb	102.622 %
Concentration per Run 1	-0.391 ppb	-0.033 ppb	0.130 ppb	4.389 ppb	-0.007 ppb	0.050 ppb	0.062 ppb	0.159 ppb	103.834 %
Concentration per Run 2	-0.522 ppb	-0.037 ppb	0.118 ppb	4.521 ppb	-0.004 ppb	0.078 ppb	0.066 ppb	0.172 ppb	98.663 %
Concentration per Run 3	-0.454 ppb	-0.058 ppb	0.125 ppb	3.113 ppb	-0.001 ppb	0.003 ppb	0.023 ppb	0.277 ppb	105.369 %
Recovery Percentage 1	-9.111 %	-4.257 %	12.452 %	8.015 %	-0.766 %	2.176 %	5.036 %	4.059 %	
Concentration RSD	14.4 %	31.5 %	5.0 %	19.4 %	78.2 %	87.1 %	47.4 %	31.9 %	3.4 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.114 ppb	0.154 ppb	0.005 ppb	0.331 ppb	109.601 %	0.007 ppb	0.000 ppb	107.719 %	0.086 ppb
Concentration per Run 1	0.083 ppb	0.152 ppb	0.014 ppb	0.215 ppb	111.529 %	0.004 ppb	0.000 ppb	110.457 %	0.067 ppb
Concentration per Run 2	0.142 ppb	0.190 ppb	0.005 ppb	0.336 ppb	109.360 %	0.008 ppb	0.000 ppb	105.620 %	0.080 ppb
Concentration per Run 3	0.118 ppb	0.120 ppb	-0.004 ppb	0.442 ppb	107.914 %	0.008 ppb	0.000 ppb	107.081 %	0.112 ppb
Recovery Percentage 1	22.893 %	3.081 %	0.047 %	16.548 %		1.681 %	0.000 %		2.155 %
Concentration RSD	25.8 %	22.7 %	187.1 %	34.3 %	1.7 %	36.2 %	N/A	2.3 %	26.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.012 ppb	108.753 %	108.277 %	0.207 ppb	0.015 ppb	107.168 %
Concentration per Run 1	0.007 ppb	110.221 %	109.213 %	0.213 ppb	0.020 ppb	107.195 %
Concentration per Run 2	-0.006 ppb	109.435 %	109.173 %	0.228 ppb	0.013 ppb	107.688 %
Concentration per Run 3	0.035 ppb	106.602 %	106.445 %	0.180 ppb	0.011 ppb	106.620 %
Recovery Percentage 1	2.403 %			20.699 %	1.453 %	
Concentration RSD	172.2 %	1.8 %	1.5 %	11.9 %	33.8 %	0.5 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index: 90 User name ALPHALAB\a2-icpmsq2 Comment <Comment>
Analysis label: CCB Rack 0
Analysis started at: 12/3/2024 2:57:24 PM Vial 10

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	115.831 %	115.264 %	0.013 ppb	216.903 ppb	-0.030 ppb	-0.387 ppb	18.421 ppb	0.875 ppb	106.342 %
Concentration per Run 1	108.677 %	118.014 %	0.019 ppb	172.715 ppb	-0.943 ppb	-0.464 ppb	12.980 ppb	14.924 ppb	104.117 %
Concentration per Run 2	117.132 %	113.805 %	0.009 ppb	222.947 ppb	0.427 ppb	-0.464 ppb	15.477 ppb	-9.322 ppb	108.198 %
Concentration per Run 3	121.684 %	113.973 %	0.010 ppb	255.046 ppb	0.425 ppb	-0.234 ppb	26.807 ppb	-2.976 ppb	106.712 %
Recovery Percentage 1			2.584 %	43.381 %	-0.044 %	-3.873 %	18.421 %	0.875 %	
Concentration RSD	5.7 %	2.1 %	43.6 %	19.1 %	2,592.9 %	34.2 %	40.0 %	1,436.7 %	1.9 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.260 ppb	-0.054 ppb	0.087 ppb	0.448 ppb	-0.002 ppb	0.113 ppb	0.018 ppb	0.151 ppb	147.676 %
Concentration per Run 1	-0.351 ppb	-0.048 ppb	0.017 ppb	0.305 ppb	-0.004 ppb	0.054 ppb	0.007 ppb	0.257 ppb	154.197 %
Concentration per Run 2	-0.296 ppb	-0.081 ppb	0.129 ppb	1.232 ppb	-0.001 ppb	0.137 ppb	0.002 ppb	0.143 ppb	145.144 %
Concentration per Run 3	-0.133 ppb	-0.034 ppb	0.113 ppb	-0.194 ppb	-0.001 ppb	0.149 ppb	0.046 ppb	0.052 ppb	143.687 %
Recovery Percentage 1	-5.192 %	-5.434 %	8.650 %	0.895 %	-0.344 %	5.674 %	1.824 %	3.010 %	
Concentration RSD	43.7 %	44.9 %	70.4 %	161.6 %	110.4 %	45.4 %	132.6 %	68.3 %	3.9 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.067 ppb	0.120 ppb	0.002 ppb	-0.028 ppb	108.265 %	-0.001 ppb	0.001 ppb	107.468 %	0.049 ppb
Concentration per Run 1	0.047 ppb	-0.066 ppb	0.003 ppb	-0.067 ppb	110.934 %	-0.001 ppb	0.000 ppb	110.408 %	0.051 ppb
Concentration per Run 2	0.020 ppb	0.270 ppb	-0.002 ppb	-0.081 ppb	106.996 %	0.001 ppb	0.000 ppb	108.622 %	0.051 ppb
Concentration per Run 3	0.135 ppb	0.157 ppb	0.005 ppb	0.063 ppb	106.866 %	-0.003 ppb	0.004 ppb	103.372 %	0.045 ppb
Recovery Percentage 1	13.434 %	2.403 %	0.019 %	-1.420 %		-0.224 %	0.589 %		1.223 %
Concentration RSD	89.6 %	142.0 %	198.8 %	279.4 %	2.1 %	224.0 %	173.2 %	3.4 %	7.0 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.008 ppb	109.534 %	108.118 %	0.014 ppb	0.004 ppb	106.522 %
Concentration per Run 1	-0.006 ppb	114.975 %	108.793 %	0.009 ppb	0.004 ppb	109.777 %
Concentration per Run 2	-0.006 ppb	107.186 %	107.184 %	0.021 ppb	0.005 ppb	106.243 %
Concentration per Run 3	0.036 ppb	106.442 %	108.379 %	0.012 ppb	0.002 ppb	103.544 %
Recovery Percentage 1	1.579 %			1.422 %	0.371 %	
Concentration RSD	305.4 %	4.3 %	0.8 %	45.0 %	47.3 %	2.9 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	91	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	xWG2001986-1 6020TL	Rack	1		
Analysis started at:	12/3/2024 3:08:01 PM	Vial	54		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	117.069 %	127.049 %	0.008 ppb	344.191 ppb	0.787 ppb	1.407 ppb	12.068 ppb	0.482 ppb	112.395 %
Concentration per Run 1	114.157 %	140.068 %	0.007 ppb	272.129 ppb	0.666 ppb	0.973 ppb	-0.928 ppb	6.708 ppb	110.282 %
Concentration per Run 2	117.036 %	118.182 %	0.011 ppb	371.657 ppb	1.334 ppb	2.239 ppb	14.860 ppb	-2.704 ppb	112.798 %
Concentration per Run 3	120.014 %	122.896 %	0.008 ppb	388.788 ppb	0.362 ppb	1.010 ppb	22.273 ppb	-2.557 ppb	114.104 %
Concentration RSD	2.5 %	9.1 %	22.5 %	18.3 %	63.1 %	51.2 %	98.2 %	1,118.2 %	1.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.467 ppb	-0.032 ppb	0.314 ppb	4.365 ppb	-0.004 ppb	-0.015 ppb	0.116 ppb	0.545 ppb	107.249 %
Concentration per Run 1	-0.531 ppb	-0.007 ppb	0.371 ppb	4.663 ppb	-0.010 ppb	-0.046 ppb	0.150 ppb	0.506 ppb	111.499 %
Concentration per Run 2	-0.480 ppb	-0.035 ppb	0.205 ppb	4.580 ppb	-0.004 ppb	-0.029 ppb	0.111 ppb	0.480 ppb	107.547 %
Concentration per Run 3	-0.389 ppb	-0.055 ppb	0.367 ppb	3.851 ppb	0.002 ppb	0.029 ppb	0.086 ppb	0.649 ppb	102.702 %
Concentration RSD	15.4 %	74.7 %	30.1 %	10.2 %	164.1 %	257.7 %	28.2 %	16.7 %	4.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.019 ppb	0.102 ppb	0.016 ppb	-0.031 ppb	114.033 %	-0.001 ppb	0.001 ppb	113.535 %	0.027 ppb
Concentration per Run 1	0.016 ppb	0.027 ppb	0.016 ppb	-0.029 ppb	122.485 %	0.002 ppb	0.000 ppb	121.926 %	0.022 ppb
Concentration per Run 2	0.019 ppb	0.269 ppb	0.017 ppb	-0.042 ppb	111.691 %	-0.002 ppb	0.000 ppb	110.646 %	0.024 ppb
Concentration per Run 3	0.023 ppb	0.010 ppb	0.016 ppb	-0.021 ppb	107.922 %	-0.002 ppb	0.003 ppb	108.031 %	0.035 ppb
Concentration RSD	18.8 %	141.6 %	6.0 %	35.6 %	6.6 %	261.5 %	173.2 %	6.5 %	25.8 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.711 ppb	112.841 %	111.272 %	0.013 ppb	0.003 ppb	115.518 %
Concentration per Run 1	0.803 ppb	119.453 %	117.267 %	0.009 ppb	0.002 ppb	122.832 %
Concentration per Run 2	0.514 ppb	110.542 %	110.315 %	0.013 ppb	0.003 ppb	113.688 %
Concentration per Run 3	0.817 ppb	108.529 %	106.235 %	0.015 ppb	0.005 ppb	110.034 %
Concentration RSD	24.1 %	5.2 %	5.0 %	23.6 %	42.1 %	5.7 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	92	User name	ALPHALAB\a2-icpmsq2	Comment	fb
Analysis label:	xL2467975-08 6020TL	Rack	2		
Analysis started at:	12/3/2024 3:12:28 PM	Vial	1		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	116.040 %	127.554 %	0.009 ppb	383.742 ppb	1.451 ppb	1.665 ppb	11.839 ppb	4.084 ppb	109.731 %
Concentration per Run 1	111.371 %	130.977 %	0.009 ppb	356.462 ppb	2.020 ppb	1.801 ppb	7.317 ppb	2.521 ppb	109.106 %
Concentration per Run 2	116.374 %	124.411 %	0.008 ppb	398.999 ppb	1.094 ppb	2.449 ppb	11.102 ppb	-6.711 ppb	110.996 %
Concentration per Run 3	120.374 %	127.273 %	0.008 ppb	395.765 ppb	1.237 ppb	0.744 ppb	17.100 ppb	16.443 ppb	109.092 %
Concentration RSD	3.9 %	2.6 %	4.8 %	6.2 %	34.4 %	51.7 %	41.7 %	285.4 %	1.0 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.464 ppb	0.053 ppb	0.633 ppb	88.805 ppb	0.003 ppb	0.007 ppb	0.566 ppb	0.434 ppb	101.312 %
Concentration per Run 1	-0.455 ppb	0.081 ppb	0.654 ppb	90.431 ppb	0.002 ppb	-0.009 ppb	0.538 ppb	0.482 ppb	105.372 %
Concentration per Run 2	-0.536 ppb	0.071 ppb	0.822 ppb	95.897 ppb	0.006 ppb	0.010 ppb	0.610 ppb	0.481 ppb	99.639 %
Concentration per Run 3	-0.402 ppb	0.008 ppb	0.421 ppb	80.087 ppb	0.000 ppb	0.021 ppb	0.549 ppb	0.339 ppb	98.926 %
Concentration RSD	14.6 %	74.2 %	31.8 %	9.0 %	128.1 %	202.4 %	6.9 %	19.0 %	3.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.065 ppb	0.087 ppb	0.026 ppb	-0.030 ppb	109.446 %	-0.001 ppb	0.003 ppb	105.213 %	0.096 ppb
Concentration per Run 1	0.040 ppb	0.256 ppb	0.026 ppb	-0.039 ppb	108.759 %	-0.001 ppb	0.000 ppb	107.207 %	0.090 ppb
Concentration per Run 2	0.064 ppb	-0.036 ppb	0.028 ppb	-0.030 ppb	109.764 %	-0.002 ppb	0.003 ppb	104.797 %	0.121 ppb
Concentration per Run 3	0.091 ppb	0.041 ppb	0.024 ppb	-0.021 ppb	109.816 %	-0.001 ppb	0.007 ppb	103.635 %	0.077 ppb
Concentration RSD	39.4 %	173.4 %	8.7 %	30.0 %	0.5 %	47.4 %	100.2 %	1.7 %	23.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.043 ppb	106.550 %	105.326 %	0.005 ppb	0.022 ppb	107.388 %
Concentration per Run 1	0.114 ppb	109.486 %	107.812 %	0.002 ppb	0.018 ppb	109.161 %
Concentration per Run 2	0.022 ppb	104.732 %	103.479 %	0.005 ppb	0.025 ppb	105.805 %
Concentration per Run 3	-0.005 ppb	105.431 %	104.687 %	0.007 ppb	0.024 ppb	107.198 %
Concentration RSD	143.3 %	2.4 %	2.1 %	59.7 %	17.7 %	1.6 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	93	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	xWG2001986-2d10 6020TL	Rack	1		
Analysis started at:	12/3/2024 3:24:56 PM	Vial	55		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	119.163 %	121.493 %	4.956 ppb	1,334.106 ppb	955.871 ppb	184.299 ppb	953.118 ppb	774.250 ppb	112.106 %
Concentration per Run 1	112.261 %	119.192 %	5.219 ppb	1,311.603 ppb	949.984 ppb	183.383 ppb	935.587 ppb	774.253 ppb	108.928 %
Concentration per Run 2	121.819 %	122.896 %	4.818 ppb	1,338.842 ppb	956.168 ppb	185.744 ppb	969.791 ppb	718.211 ppb	113.916 %
Concentration per Run 3	123.408 %	122.391 %	4.832 ppb	1,351.872 ppb	961.461 ppb	183.769 ppb	953.974 ppb	830.287 ppb	113.475 %
Concentration RSD	5.1 %	1.7 %	4.6 %	1.5 %	0.6 %	0.7 %	1.8 %	7.2 %	2.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	45.142 ppb	18.992 ppb	50.448 ppb	105.847 ppb	50.320 ppb	51.277 ppb	25.943 ppb	50.923 ppb	105.764 %
Concentration per Run 1	42.667 ppb	17.834 ppb	48.176 ppb	106.604 ppb	49.252 ppb	49.462 ppb	24.945 ppb	49.615 ppb	109.007 %
Concentration per Run 2	47.018 ppb	19.750 ppb	52.098 ppb	113.178 ppb	52.017 ppb	53.842 ppb	26.322 ppb	53.053 ppb	101.800 %
Concentration per Run 3	45.741 ppb	19.392 ppb	51.070 ppb	97.758 ppb	49.689 ppb	50.527 ppb	26.563 ppb	50.100 ppb	106.485 %
Concentration RSD	5.0 %	5.4 %	4.0 %	7.3 %	3.0 %	4.5 %	3.4 %	3.7 %	3.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	12.515 ppb	12.179 ppb	97.562 ppb	97.470 ppb	109.129 %	4.703 ppb	5.196 ppb	108.711 %	45.180 ppb
Concentration per Run 1	12.281 ppb	12.012 ppb	94.044 ppb	96.158 ppb	111.774 %	4.538 ppb	4.936 ppb	112.005 %	43.811 ppb
Concentration per Run 2	13.143 ppb	11.698 ppb	100.440 ppb	97.774 ppb	106.487 %	4.822 ppb	5.446 ppb	107.274 %	46.527 ppb
Concentration per Run 3	12.122 ppb	12.826 ppb	98.202 ppb	98.478 ppb	109.127 %	4.747 ppb	5.206 ppb	106.853 %	45.203 ppb
Concentration RSD	4.4 %	4.8 %	3.3 %	1.2 %	2.4 %	3.1 %	4.9 %	2.6 %	3.0 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	193.414 ppb	110.804 %	107.448 %	11.829 ppb	51.871 ppb	106.870 %
Concentration per Run 1	190.803 ppb	112.222 %	109.440 %	11.318 ppb	50.535 ppb	108.530 %
Concentration per Run 2	194.436 ppb	109.917 %	105.310 %	11.674 ppb	52.013 ppb	108.526 %
Concentration per Run 3	195.004 ppb	110.272 %	107.593 %	12.495 ppb	53.063 ppb	103.553 %
Concentration RSD	1.2 %	1.1 %	1.9 %	5.1 %	2.4 %	2.7 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	94	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	xL2467975-04 6020TL	Rack	1		
Analysis started at:	12/3/2024 3:29:23 PM	Vial	56		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	118.012 %	126.375 %	0.025 ppb	38,257.664 ppb	1,862.106 ppb	51.710 ppb	2,969.846 ppb	9,274.901 ppb	108.085 %
Concentration per Run 1	114.586 %	128.957 %	0.027 ppb	36,330.063 ppb	1,768.358 ppb	50.221 ppb	2,798.286 ppb	9,088.065 ppb	108.564 %
Concentration per Run 2	119.838 %	130.472 %	0.023 ppb	38,080.094 ppb	1,875.390 ppb	50.037 ppb	3,046.039 ppb	9,200.062 ppb	107.190 %
Concentration per Run 3	119.613 %	119.697 %	0.026 ppb	40,362.835 ppb	1,942.570 ppb	54.872 ppb	3,065.212 ppb	9,536.576 ppb	108.502 %
Concentration RSD	2.5 %	4.6 %	7.8 %	5.3 %	4.7 %	5.3 %	5.0 %	2.5 %	0.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.270 ppb	0.340 ppb	65.045 ppb	343.764 ppb	0.130 ppb	0.713 ppb	1.152 ppb	4.989 ppb	103.811 %
Concentration per Run 1	-0.344 ppb	0.357 ppb	61.261 ppb	329.024 ppb	0.120 ppb	0.720 ppb	1.316 ppb	4.859 ppb	108.565 %
Concentration per Run 2	-0.289 ppb	0.303 ppb	66.428 ppb	346.007 ppb	0.128 ppb	0.667 ppb	1.029 ppb	5.301 ppb	100.534 %
Concentration per Run 3	-0.177 ppb	0.358 ppb	67.445 ppb	356.262 ppb	0.142 ppb	0.752 ppb	1.112 ppb	4.806 ppb	102.333 %
Concentration RSD	31.7 %	9.4 %	5.1 %	4.0 %	8.3 %	6.0 %	12.8 %	5.5 %	4.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.931 ppb	0.290 ppb	66.473 ppb	1.097 ppb	107.331 %	0.008 ppb	0.023 ppb	108.366 %	0.904 ppb
Concentration per Run 1	0.882 ppb	0.221 ppb	63.899 ppb	0.794 ppb	109.670 %	0.008 ppb	0.017 ppb	110.796 %	0.818 ppb
Concentration per Run 2	0.978 ppb	0.450 ppb	68.029 ppb	1.056 ppb	106.873 %	0.008 ppb	0.035 ppb	106.283 %	0.893 ppb
Concentration per Run 3	0.934 ppb	0.199 ppb	67.492 ppb	1.442 ppb	105.450 %	0.009 ppb	0.017 ppb	108.018 %	1.000 ppb
Concentration RSD	5.2 %	47.8 %	3.4 %	29.7 %	2.0 %	8.6 %	44.7 %	2.1 %	10.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	10.962 ppb	109.677 %	108.082 %	0.024 ppb	0.603 ppb	107.055 %
Concentration per Run 1	11.170 ppb	114.531 %	113.494 %	0.018 ppb	0.590 ppb	108.403 %
Concentration per Run 2	11.202 ppb	110.456 %	107.046 %	0.027 ppb	0.613 ppb	107.308 %
Concentration per Run 3	10.514 ppb	104.044 %	103.704 %	0.028 ppb	0.607 ppb	105.453 %
Concentration RSD	3.5 %	4.8 %	4.6 %	21.6 %	2.0 %	1.4 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	95	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	xWG2001986-3d10 6020TL	Rack	1		
Analysis started at:	12/3/2024 3:33:52 PM	Vial	57		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	117.968 %	124.748 %	4.926 ppb	4,969.620 ppb	1,101.332 ppb	181.836 ppb	1,239.796 ppb	1,778.622 ppb	112.480 %
Concentration per Run 1	111.772 %	127.273 %	5.134 ppb	4,833.452 ppb	1,071.242 ppb	176.822 ppb	1,266.386 ppb	1,654.655 ppb	112.149 %
Concentration per Run 2	117.937 %	123.064 %	4.923 ppb	5,071.230 ppb	1,137.838 ppb	187.652 ppb	1,245.368 ppb	1,823.266 ppb	112.285 %
Concentration per Run 3	124.195 %	123.906 %	4.722 ppb	5,004.176 ppb	1,094.915 ppb	181.033 ppb	1,207.633 ppb	1,857.945 ppb	113.006 %
Concentration RSD	5.3 %	1.8 %	4.2 %	2.5 %	3.1 %	3.0 %	2.4 %	6.1 %	0.4 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	43.428 ppb	18.522 ppb	53.698 ppb	135.093 ppb	49.232 ppb	51.167 ppb	25.239 ppb	49.600 ppb	104.808 %
Concentration per Run 1	40.544 ppb	17.127 ppb	53.499 ppb	127.062 ppb	47.144 ppb	48.841 ppb	24.389 ppb	46.761 ppb	108.929 %
Concentration per Run 2	44.483 ppb	19.372 ppb	54.271 ppb	140.788 ppb	51.277 ppb	52.830 ppb	26.330 ppb	51.976 ppb	100.727 %
Concentration per Run 3	45.256 ppb	19.065 ppb	53.322 ppb	137.429 ppb	49.276 ppb	51.831 ppb	24.999 ppb	50.063 ppb	104.770 %
Concentration RSD	5.8 %	6.6 %	0.9 %	5.3 %	4.2 %	4.1 %	3.9 %	5.3 %	3.9 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	11.611 ppb	11.864 ppb	100.206 ppb	91.560 ppb	109.362 %	4.568 ppb	4.876 ppb	108.024 %	41.750 ppb
Concentration per Run 1	11.309 ppb	12.253 ppb	95.999 ppb	86.218 ppb	115.195 %	4.377 ppb	4.608 ppb	114.173 %	39.661 ppb
Concentration per Run 2	11.956 ppb	12.086 ppb	104.354 ppb	93.803 ppb	104.671 %	4.710 ppb	5.018 ppb	106.510 %	42.911 ppb
Concentration per Run 3	11.566 ppb	11.254 ppb	100.266 ppb	94.659 ppb	108.220 %	4.618 ppb	5.001 ppb	103.390 %	42.678 ppb
Concentration RSD	2.8 %	4.5 %	4.2 %	5.1 %	4.9 %	3.8 %	4.8 %	5.1 %	4.3 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	188.853 ppb	108.990 %	107.927 %	11.250 ppb	49.591 ppb	105.605 %
Concentration per Run 1	181.813 ppb	114.649 %	110.431 %	10.732 ppb	48.116 ppb	108.301 %
Concentration per Run 2	189.971 ppb	104.453 %	106.122 %	11.498 ppb	50.594 ppb	104.139 %
Concentration per Run 3	194.775 ppb	107.867 %	107.228 %	11.519 ppb	50.062 ppb	104.374 %
Concentration RSD	3.5 %	4.8 %	2.1 %	4.0 %	2.6 %	2.2 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	96	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	xWG2001986-4 6020TL	Rack	1		
Analysis started at:	12/3/2024 3:38:21 PM	Vial	58		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	116.178 %	126.263 %	0.045 ppb	37,337.758 ppb	1,835.610 ppb	46.589 ppb	2,784.204 ppb	8,744.712 ppb	106.457 %
Concentration per Run 1	114.033 %	136.196 %	0.046 ppb	34,745.302 ppb	1,664.946 ppb	43.544 ppb	2,550.791 ppb	8,217.095 ppb	104.876 %
Concentration per Run 2	116.858 %	119.024 %	0.049 ppb	38,770.655 ppb	1,912.687 ppb	49.014 ppb	2,997.431 ppb	8,875.122 ppb	106.408 %
Concentration per Run 3	117.644 %	123.569 %	0.039 ppb	38,497.317 ppb	1,929.196 ppb	47.208 ppb	2,804.391 ppb	9,141.920 ppb	108.086 %
Concentration RSD	1.6 %	7.0 %	11.5 %	6.0 %	8.1 %	6.0 %	8.0 %	5.4 %	1.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.147 ppb	0.272 ppb	61.746 ppb	322.351 ppb	0.176 ppb	0.731 ppb	1.655 ppb	4.531 ppb	106.285 %
Concentration per Run 1	-0.173 ppb	0.149 ppb	56.534 ppb	307.457 ppb	0.165 ppb	0.528 ppb	1.468 ppb	4.070 ppb	109.161 %
Concentration per Run 2	-0.184 ppb	0.334 ppb	62.444 ppb	317.885 ppb	0.209 ppb	0.952 ppb	1.640 ppb	4.689 ppb	105.664 %
Concentration per Run 3	-0.083 ppb	0.332 ppb	66.259 ppb	341.710 ppb	0.154 ppb	0.712 ppb	1.856 ppb	4.836 ppb	104.031 %
Concentration RSD	37.6 %	39.2 %	7.9 %	5.4 %	16.6 %	29.1 %	11.7 %	9.0 %	2.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.767 ppb	0.097 ppb	62.446 ppb	1.129 ppb	108.626 %	0.016 ppb	0.016 ppb	106.593 %	0.790 ppb
Concentration per Run 1	0.746 ppb	0.097 ppb	59.578 ppb	0.932 ppb	115.412 %	0.022 ppb	0.027 ppb	109.265 %	0.699 ppb
Concentration per Run 2	0.711 ppb	0.111 ppb	63.644 ppb	1.158 ppb	105.087 %	0.017 ppb	0.007 ppb	105.515 %	0.760 ppb
Concentration per Run 3	0.844 ppb	0.084 ppb	64.116 ppb	1.298 ppb	105.379 %	0.008 ppb	0.014 ppb	104.998 %	0.912 ppb
Concentration RSD	9.0 %	13.9 %	4.0 %	16.4 %	5.4 %	43.5 %	62.3 %	2.2 %	13.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	11.083 ppb	109.716 %	107.802 %	0.036 ppb	0.631 ppb	107.204 %
Concentration per Run 1	10.653 ppb	115.649 %	113.137 %	0.028 ppb	0.612 ppb	110.872 %
Concentration per Run 2	11.145 ppb	107.945 %	106.289 %	0.044 ppb	0.640 ppb	104.578 %
Concentration per Run 3	11.450 ppb	105.554 %	103.980 %	0.035 ppb	0.640 ppb	106.161 %
Concentration RSD	3.6 %	4.8 %	4.4 %	22.4 %	2.5 %	3.1 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	97	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	xWG2001986-5d10 6020TL	Rack	1		
Analysis started at:	12/3/2024 3:42:50 PM	Vial	59		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	116.388 %	125.309 %	47.603 ppb	8,658.854 ppb	4,691.087 ppb	49.731 ppb	4,709.090 ppb	5,285.585 ppb	110.164 %
Concentration per Run 1	112.872 %	131.987 %	48.130 ppb	8,181.271 ppb	4,493.890 ppb	46.674 ppb	4,463.262 ppb	5,106.061 ppb	105.599 %
Concentration per Run 2	117.725 %	119.024 %	47.584 ppb	9,076.665 ppb	4,844.946 ppb	53.010 ppb	4,974.046 ppb	5,612.578 ppb	112.368 %
Concentration per Run 3	118.566 %	124.916 %	47.095 ppb	8,718.627 ppb	4,734.425 ppb	49.509 ppb	4,689.962 ppb	5,138.116 ppb	112.523 %
Concentration RSD	2.6 %	5.2 %	1.1 %	5.2 %	3.8 %	6.4 %	5.4 %	5.4 %	3.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	42.568 ppb	44.253 ppb	51.551 ppb	4,597.488 ppb	47.010 ppb	47.296 ppb	46.468 ppb	46.627 ppb	111.420 %
Concentration per Run 1	40.224 ppb	42.995 ppb	49.390 ppb	4,384.289 ppb	44.197 ppb	47.534 ppb	44.346 ppb	44.931 ppb	114.795 %
Concentration per Run 2	44.980 ppb	46.421 ppb	54.171 ppb	4,886.053 ppb	50.756 ppb	48.408 ppb	49.558 ppb	49.080 ppb	105.321 %
Concentration per Run 3	42.501 ppb	43.343 ppb	51.092 ppb	4,522.122 ppb	46.078 ppb	45.947 ppb	45.500 ppb	45.869 ppb	114.144 %
Concentration RSD	5.6 %	4.3 %	4.7 %	5.6 %	7.2 %	2.6 %	5.9 %	4.7 %	4.7 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	45.536 ppb	46.406 ppb	52.021 ppb	46.244 ppb	108.007 %	6.856 ppb	47.345 ppb	106.798 %	45.827 ppb
Concentration per Run 1	44.331 ppb	44.906 ppb	50.166 ppb	43.717 ppb	112.948 %	6.431 ppb	45.227 ppb	112.722 %	43.490 ppb
Concentration per Run 2	48.186 ppb	47.857 ppb	54.156 ppb	48.198 ppb	104.991 %	7.094 ppb	48.155 ppb	105.721 %	45.714 ppb
Concentration per Run 3	44.090 ppb	46.453 ppb	51.742 ppb	46.817 ppb	106.081 %	7.042 ppb	48.652 ppb	101.950 %	48.277 ppb
Concentration RSD	5.0 %	3.2 %	3.9 %	5.0 %	4.0 %	5.4 %	3.9 %	5.1 %	5.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	47.000 ppb	108.011 %	105.362 %	47.052 ppb	47.466 ppb	103.906 %
Concentration per Run 1	44.328 ppb	109.311 %	107.286 %	44.508 ppb	45.433 ppb	108.912 %
Concentration per Run 2	47.515 ppb	107.902 %	102.645 %	48.172 ppb	48.235 ppb	102.670 %
Concentration per Run 3	49.157 ppb	106.821 %	106.154 %	48.476 ppb	48.731 ppb	100.137 %
Concentration RSD	5.2 %	1.2 %	2.3 %	4.7 %	3.7 %	4.3 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	98	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	xWG2001986-6d5 6020TL	Rack	1		
Analysis started at:	12/3/2024 3:47:20 PM	Vial	60		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	116.721 %	125.870 %	0.090 ppb	7,621.251 ppb	367.747 ppb	10.527 ppb	574.443 ppb	1,774.770 ppb	106.180 %
Concentration per Run 1	114.605 %	129.967 %	0.099 ppb	7,392.384 ppb	342.006 ppb	11.202 ppb	595.834 ppb	1,775.865 ppb	102.840 %
Concentration per Run 2	115.667 %	128.957 %	0.078 ppb	7,391.948 ppb	361.196 ppb	10.133 ppb	551.206 ppb	1,871.609 ppb	107.145 %
Concentration per Run 3	119.892 %	118.687 %	0.094 ppb	8,079.419 ppb	400.039 ppb	10.245 ppb	576.290 ppb	1,676.835 ppb	108.557 %
Concentration RSD	2.4 %	5.0 %	12.1 %	5.2 %	8.0 %	5.6 %	3.9 %	5.5 %	2.8 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.450 ppb	0.028 ppb	12.336 ppb	65.898 ppb	0.018 ppb	0.127 ppb	0.230 ppb	1.012 ppb	113.487 %
Concentration per Run 1	-0.475 ppb	0.013 ppb	12.934 ppb	64.566 ppb	0.027 ppb	0.139 ppb	0.144 ppb	0.982 ppb	112.888 %
Concentration per Run 2	-0.459 ppb	0.048 ppb	11.812 ppb	70.409 ppb	-0.001 ppb	0.216 ppb	0.288 ppb	1.182 ppb	110.980 %
Concentration per Run 3	-0.418 ppb	0.025 ppb	12.261 ppb	62.721 ppb	0.027 ppb	0.026 ppb	0.257 ppb	0.872 ppb	116.592 %
Concentration RSD	6.5 %	62.7 %	4.6 %	6.1 %	92.8 %	75.3 %	33.1 %	15.6 %	2.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.160 ppb	0.297 ppb	12.383 ppb	0.387 ppb	105.100 %	0.003 ppb	0.004 ppb	105.485 %	0.191 ppb
Concentration per Run 1	0.109 ppb	0.250 ppb	12.292 ppb	0.237 ppb	106.012 %	0.003 ppb	0.000 ppb	109.920 %	0.166 ppb
Concentration per Run 2	0.145 ppb	0.189 ppb	12.529 ppb	0.361 ppb	104.790 %	0.002 ppb	0.004 ppb	104.838 %	0.185 ppb
Concentration per Run 3	0.226 ppb	0.453 ppb	12.326 ppb	0.564 ppb	104.496 %	0.002 ppb	0.007 ppb	101.698 %	0.223 ppb
Concentration RSD	37.4 %	46.4 %	1.0 %	42.6 %	0.8 %	19.2 %	100.7 %	3.9 %	15.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	2.138 ppb	106.533 %	106.314 %	0.197 ppb	0.134 ppb	107.355 %
Concentration per Run 1	2.081 ppb	109.070 %	108.952 %	0.169 ppb	0.137 ppb	112.811 %
Concentration per Run 2	2.058 ppb	105.496 %	105.324 %	0.237 ppb	0.130 ppb	104.113 %
Concentration per Run 3	2.275 ppb	105.032 %	104.666 %	0.185 ppb	0.136 ppb	105.142 %
Concentration RSD	5.6 %	2.1 %	2.2 %	18.0 %	2.9 %	4.4 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	99	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	xL2468003-01 6020TL	Rack	2		
Analysis started at:	12/3/2024 3:51:50 PM	Vial	2		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	106.977 %	124.916 %	0.089 ppb	41,967.709 ppb	25,086.513 ppb	446.809 ppb	23,502.921 ppb	69,507.803 ppb	103.357 %
Concentration per Run 1	105.987 %	124.411 %	0.101 ppb	40,212.459 ppb	23,979.231 ppb	437.331 ppb	22,433.968 ppb	65,707.223 ppb	104.889 %
Concentration per Run 2	109.845 %	121.886 %	0.081 ppb	43,236.538 ppb	25,707.188 ppb	450.295 ppb	24,042.504 ppb	70,333.328 ppb	108.137 %
Concentration per Run 3	105.098 %	128.452 %	0.085 ppb	42,454.129 ppb	25,573.121 ppb	452.801 ppb	24,032.290 ppb	72,482.859 ppb	97.044 %
Concentration RSD	2.4 %	2.7 %	12.0 %	3.7 %	3.8 %	1.9 %	3.9 %	5.0 %	5.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	4.242 ppb	2.174 ppb	395.612 ppb	28,034.628 ppb	1.573 ppb	3.055 ppb	1.657 ppb	3.662 ppb	112.318 %
Concentration per Run 1	3.876 ppb	1.870 ppb	378.521 ppb	26,257.197 ppb	1.422 ppb	2.890 ppb	1.539 ppb	3.609 ppb	116.187 %
Concentration per Run 2	3.966 ppb	2.284 ppb	390.045 ppb	27,489.976 ppb	1.587 ppb	2.879 ppb	1.724 ppb	3.752 ppb	112.892 %
Concentration per Run 3	4.885 ppb	2.370 ppb	418.271 ppb	30,356.711 ppb	1.708 ppb	3.396 ppb	1.707 ppb	3.626 ppb	107.876 %
Concentration RSD	13.2 %	12.3 %	5.2 %	7.5 %	9.1 %	9.7 %	6.2 %	2.1 %	3.7 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	13.016 ppb	0.634 ppb	398.939 ppb	0.275 ppb	105.605 %	0.006 ppb	0.052 ppb	106.627 %	0.230 ppb
Concentration per Run 1	12.660 ppb	0.789 ppb	371.014 ppb	0.126 ppb	114.408 %	0.003 ppb	0.051 ppb	116.134 %	0.205 ppb
Concentration per Run 2	12.570 ppb	0.335 ppb	401.257 ppb	0.355 ppb	103.488 %	0.010 ppb	0.029 ppb	101.797 %	0.232 ppb
Concentration per Run 3	13.817 ppb	0.778 ppb	424.547 ppb	0.343 ppb	98.920 %	0.007 ppb	0.077 ppb	101.951 %	0.252 ppb
Concentration RSD	5.3 %	40.8 %	6.7 %	46.9 %	7.5 %	54.4 %	45.9 %	7.7 %	10.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	130.858 ppb	109.402 %	109.190 %	0.056 ppb	0.537 ppb	102.612 %
Concentration per Run 1	117.115 ppb	117.809 %	118.315 %	0.032 ppb	0.482 ppb	111.449 %
Concentration per Run 2	136.847 ppb	107.661 %	108.851 %	0.065 ppb	0.544 ppb	100.921 %
Concentration per Run 3	138.614 ppb	102.736 %	100.403 %	0.070 ppb	0.583 ppb	95.467 %
Concentration RSD	9.1 %	7.0 %	8.2 %	37.7 %	9.5 %	7.9 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	100	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	xL2468003-02 6020TL	Rack	2		
Analysis started at:	12/3/2024 3:56:18 PM	Vial	3		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	101.068 %	121.661 %	0.064 ppb	74,983.107 ppb	23,345.318 ppb	93.713 ppb	7,646.107 ppb	107,814.926 ppb	99.674 %
Concentration per Run 1	98.107 %	120.034 %	0.070 ppb	73,825.798 ppb	23,118.961 ppb	92.763 ppb	7,625.350 ppb	103,650.666 ppb	98.700 %
Concentration per Run 2	100.795 %	124.580 %	0.059 ppb	74,630.064 ppb	23,399.528 ppb	91.553 ppb	7,447.207 ppb	107,428.847 ppb	100.315 %
Concentration per Run 3	104.302 %	120.371 %	0.062 ppb	76,493.459 ppb	23,517.466 ppb	96.824 ppb	7,865.764 ppb	112,365.265 ppb	100.007 %
Concentration RSD	3.1 %	2.1 %	8.7 %	1.8 %	0.9 %	2.9 %	2.7 %	4.1 %	0.9 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.120 ppb	0.544 ppb	154.330 ppb	17,887.728 ppb	1.459 ppb	1.318 ppb	0.295 ppb	0.911 ppb	126.807 %
Concentration per Run 1	0.075 ppb	0.506 ppb	144.730 ppb	16,787.405 ppb	1.434 ppb	1.380 ppb	0.257 ppb	0.953 ppb	131.454 %
Concentration per Run 2	0.167 ppb	0.573 ppb	160.024 ppb	18,887.530 ppb	1.523 ppb	1.274 ppb	0.361 ppb	0.943 ppb	122.193 %
Concentration per Run 3	0.118 ppb	0.553 ppb	158.237 ppb	17,988.251 ppb	1.419 ppb	1.300 ppb	0.267 ppb	0.836 ppb	126.775 %
Concentration RSD	38.2 %	6.4 %	5.4 %	5.9 %	3.9 %	4.2 %	19.4 %	7.1 %	3.7 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	12.228 ppb	0.167 ppb	389.723 ppb	0.572 ppb	105.603 %	-0.002 ppb	0.018 ppb	104.774 %	0.123 ppb
Concentration per Run 1	11.486 ppb	0.195 ppb	370.935 ppb	0.468 ppb	111.472 %	-0.002 ppb	0.017 ppb	109.688 %	0.077 ppb
Concentration per Run 2	12.984 ppb	0.173 ppb	403.409 ppb	0.573 ppb	102.356 %	-0.001 ppb	0.025 ppb	102.627 %	0.125 ppb
Concentration per Run 3	12.216 ppb	0.134 ppb	394.824 ppb	0.677 ppb	102.981 %	-0.002 ppb	0.011 ppb	102.006 %	0.168 ppb
Concentration RSD	6.1 %	18.5 %	4.3 %	18.2 %	4.8 %	42.0 %	41.1 %	4.1 %	36.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	78.585 ppb	108.285 %	107.708 %	0.029 ppb	0.159 ppb	101.296 %
Concentration per Run 1	75.168 ppb	113.179 %	112.996 %	0.015 ppb	0.145 ppb	107.028 %
Concentration per Run 2	81.922 ppb	104.889 %	103.921 %	0.039 ppb	0.166 ppb	100.330 %
Concentration per Run 3	78.663 ppb	106.789 %	106.206 %	0.031 ppb	0.166 ppb	96.529 %
Concentration RSD	4.3 %	4.0 %	4.4 %	43.3 %	7.5 %	5.2 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index: 101 User name ALPHALAB\a2-icpmsq2 Comment CCV/MCCV
Analysis label: CCV Rack 0
Analysis started at: 12/3/2024 4:00:46 PM Vial 9

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	112.215 %	123.513 %	57.781 ppb	5,728.917 ppb	5,252.295 ppb	50.077 ppb	5,090.437 ppb	5,029.905 ppb	105.018 %
Concentration per Run 1	109.361 %	131.987 %	56.080 ppb	5,317.253 ppb	4,893.203 ppb	46.317 ppb	5,062.571 ppb	4,973.202 ppb	105.558 %
Concentration per Run 2	112.191 %	125.758 %	58.168 ppb	5,659.809 ppb	5,120.852 ppb	50.498 ppb	5,049.656 ppb	4,998.935 ppb	102.739 %
Concentration per Run 3	115.092 %	112.795 %	59.096 ppb	6,209.688 ppb	5,742.829 ppb	53.417 ppb	5,159.084 ppb	5,117.579 ppb	106.756 %
Recovery Percentage 1			96.302 %	95.482 %	87.538 %	83.462 %	84.841 %	83.832 %	
Concentration RSD	2.6 %	7.9 %	2.7 %	7.9 %	8.4 %	7.1 %	1.2 %	1.5 %	2.0 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	49.163 ppb	50.493 ppb	51.963 ppb	5,693.709 ppb	56.430 ppb	57.336 ppb	57.303 ppb	56.234 ppb	117.174 %
Concentration per Run 1	46.133 ppb	47.049 ppb	50.201 ppb	5,079.936 ppb	50.420 ppb	50.486 ppb	51.224 ppb	50.156 ppb	117.823 %
Concentration per Run 2	48.868 ppb	50.509 ppb	51.743 ppb	5,779.392 ppb	58.997 ppb	60.189 ppb	60.579 ppb	59.360 ppb	116.029 %
Concentration per Run 3	52.489 ppb	53.922 ppb	53.945 ppb	6,221.801 ppb	59.872 ppb	61.332 ppb	60.105 ppb	59.186 ppb	117.672 %
Recovery Percentage 1	81.938 %	84.155 %	86.605 %	94.895 %	94.049 %	95.559 %	95.504 %	93.724 %	
Concentration RSD	6.5 %	6.8 %	3.6 %	10.1 %	9.3 %	10.4 %	9.2 %	9.4 %	0.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	55.813 ppb	54.524 ppb	54.279 ppb	54.080 ppb	106.611 %	56.746 ppb	55.913 ppb	105.426 %	54.527 ppb
Concentration per Run 1	49.785 ppb	49.139 ppb	49.170 ppb	51.915 ppb	115.243 %	54.641 ppb	52.594 ppb	109.047 %	51.127 ppb
Concentration per Run 2	59.303 ppb	56.661 ppb	56.813 ppb	55.333 ppb	102.024 %	57.436 ppb	56.857 ppb	103.925 %	56.259 ppb
Concentration per Run 3	58.349 ppb	57.771 ppb	56.855 ppb	54.994 ppb	102.567 %	58.161 ppb	58.288 ppb	103.305 %	56.196 ppb
Recovery Percentage 1	93.021 %	90.873 %	90.466 %	90.134 %		94.576 %	93.188 %		90.879 %
Concentration RSD	9.4 %	8.6 %	8.2 %	3.5 %	7.0 %	3.3 %	5.3 %	3.0 %	5.4 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	54.051 ppb	108.038 %	104.663 %	55.674 ppb	56.446 ppb	104.143 %
Concentration per Run 1	52.391 ppb	112.535 %	112.035 %	52.128 ppb	53.599 ppb	107.281 %
Concentration per Run 2	54.990 ppb	107.450 %	99.258 %	57.348 ppb	58.199 ppb	101.405 %
Concentration per Run 3	54.773 ppb	104.129 %	102.695 %	57.546 ppb	57.540 ppb	103.742 %
Recovery Percentage 1	90.086 %			92.789 %	94.076 %	
Concentration RSD	2.7 %	3.9 %	6.3 %	5.5 %	4.4 %	2.8 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	102	User name	ALPHALAB\a2-icpmsq2	Comment	CCB
Analysis label:	CCB	Rack	0		
Analysis started at:	12/3/2024 4:05:18 PM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	116.435 %	123.177 %	0.104 ppb	285.504 ppb	-0.186 ppb	-0.410 ppb	27.653 ppb	5.271 ppb	107.058 %
Concentration per Run 1	106.443 %	128.620 %	0.074 ppb	259.793 ppb	0.412 ppb	-0.502 ppb	25.729 ppb	12.309 ppb	98.012 %
Concentration per Run 2	118.545 %	115.488 %	0.123 ppb	312.783 ppb	-0.368 ppb	-0.767 ppb	36.968 ppb	0.462 ppb	111.283 %
Concentration per Run 3	124.316 %	125.421 %	0.114 ppb	283.938 ppb	-0.603 ppb	0.038 ppb	20.261 ppb	3.041 ppb	111.879 %
Recovery Percentage 1			20.794 %	57.101 %	-0.266 %	-4.102 %	27.653 %	5.271 %	
Concentration RSD	7.8 %	5.6 %	25.1 %	9.3 %	285.4 %	100.0 %	30.8 %	118.2 %	7.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.546 ppb	-0.044 ppb	0.017 ppb	4.064 ppb	-0.003 ppb	0.021 ppb	0.021 ppb	0.036 ppb	121.385 %
Concentration per Run 1	-0.494 ppb	-0.022 ppb	0.026 ppb	4.419 ppb	-0.007 ppb	-0.001 ppb	0.028 ppb	0.031 ppb	121.658 %
Concentration per Run 2	-0.598 ppb	-0.037 ppb	0.015 ppb	3.616 ppb	0.004 ppb	0.104 ppb	-0.010 ppb	0.087 ppb	119.481 %
Concentration per Run 3	-0.546 ppb	-0.072 ppb	0.012 ppb	4.156 ppb	-0.005 ppb	-0.040 ppb	0.046 ppb	-0.009 ppb	123.017 %
Recovery Percentage 1	-10.915 %	-4.364 %	1.737 %	8.127 %	-0.519 %	1.048 %	2.118 %	0.722 %	
Concentration RSD	9.5 %	59.6 %	41.8 %	10.1 %	230.1 %	356.3 %	137.0 %	132.8 %	1.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.023 ppb	0.116 ppb	0.002 ppb	0.268 ppb	106.230 %	0.007 ppb	0.001 ppb	103.148 %	0.073 ppb
Concentration per Run 1	0.057 ppb	0.070 ppb	0.004 ppb	0.160 ppb	111.114 %	0.005 ppb	0.003 ppb	108.705 %	0.046 ppb
Concentration per Run 2	0.007 ppb	0.115 ppb	0.000 ppb	0.315 ppb	105.356 %	0.011 ppb	0.000 ppb	100.015 %	0.074 ppb
Concentration per Run 3	0.007 ppb	0.163 ppb	0.001 ppb	0.329 ppb	102.220 %	0.005 ppb	0.000 ppb	100.725 %	0.100 ppb
Recovery Percentage 1	4.694 %	2.319 %	0.019 %	13.391 %		1.681 %	0.562 %		1.834 %
Concentration RSD	122.0 %	40.2 %	112.3 %	35.0 %	4.2 %	51.0 %	173.2 %	4.7 %	36.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.060 ppb	104.980 %	103.016 %	0.230 ppb	0.016 ppb	102.465 %
Concentration per Run 1	0.020 ppb	109.314 %	106.496 %	0.200 ppb	0.017 ppb	108.827 %
Concentration per Run 2	0.094 ppb	103.110 %	101.205 %	0.276 ppb	0.015 ppb	98.105 %
Concentration per Run 3	0.066 ppb	102.516 %	101.348 %	0.214 ppb	0.015 ppb	100.462 %
Recovery Percentage 1	12.029 %			23.018 %	1.565 %	
Concentration RSD	61.8 %	3.6 %	2.9 %	17.5 %	5.9 %	5.5 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	103	User name	ALPHALAB\a2-icpmsq2	Comment	CCV/MCCV
Analysis label:	CCV	Rack	0		
Analysis started at:	12/3/2024 4:19:57 PM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	113.162 %	131.202 %	56.551 ppb	5,465.158 ppb	7,389.317 ppb	86.324 ppb	-20,657.458 ppb	-3,583.381 ppb	111.473 %
Concentration per Run 1	109.937 %	134.849 %	57.920 ppb	5,453.744 ppb	4,993.696 ppb	47.354 ppb	4,541.027 ppb	4,476.452 ppb	109.972 %
Concentration per Run 2	113.991 %	130.977 %	55.315 ppb	5,480.054 ppb	12,074.874 ppb	160.758 ppb	-71,525.118 ppb	-20,181.582 ppb	112.880 %
Concentration per Run 3	115.558 %	127.778 %	56.418 ppb	5,461.677 ppb	5,099.380 ppb	50.861 ppb	5,011.716 ppb	4,954.986 ppb	111.565 %
Recovery Percentage 1			94.252 %	91.086 %	123.155 %	143.874 %	-344.291 %	-59.723 %	
Concentration RSD	2.6 %	2.7 %	2.3 %	0.2 %	54.9 %	74.7 %	213.3 %	401.2 %	1.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	49.762 ppb	-3.324 ppb	4.126 ppb	5,616.690 ppb	56.290 ppb	57.172 ppb	56.317 ppb	56.211 ppb	43.318 %
Concentration per Run 1	48.883 ppb	44.159 ppb	45.338 ppb	5,543.553 ppb	55.497 ppb	57.442 ppb	55.041 ppb	55.549 ppb	149.491 %
Concentration per Run 2	49.894 ppb	-100.906 ppb	-80.569 ppb	5,728.707 ppb	58.222 ppb	57.950 ppb	59.053 ppb	58.265 ppb	-157.282 %
Concentration per Run 3	50.508 ppb	46.774 ppb	47.609 ppb	5,577.810 ppb	55.151 ppb	56.126 ppb	54.858 ppb	54.820 ppb	137.745 %
Recovery Percentage 1	82.936 %	-5.540 %	6.877 %	93.611 %	93.817 %	95.287 %	93.862 %	93.685 %	
Concentration RSD	1.6 %	2,542.5 %	1,777.9 %	1.8 %	3.0 %	1.6 %	4.2 %	3.2 %	401.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	55.240 ppb	54.979 ppb	56.649 ppb	27.041 ppb	111.114 %	55.657 ppb	56.075 ppb	111.885 %	55.110 ppb
Concentration per Run 1	52.696 ppb	53.240 ppb	54.659 ppb	54.872 ppb	115.730 %	52.706 ppb	53.071 ppb	115.833 %	53.166 ppb
Concentration per Run 2	57.330 ppb	55.381 ppb	58.591 ppb	-33.482 ppb	107.028 %	57.454 ppb	57.484 ppb	111.661 %	55.144 ppb
Concentration per Run 3	55.694 ppb	56.318 ppb	56.696 ppb	59.734 ppb	110.583 %	56.811 ppb	57.669 ppb	108.160 %	57.020 ppb
Recovery Percentage 1	92.067 %	91.632 %	94.415 %	45.069 %		92.762 %	93.458 %		91.850 %
Concentration RSD	4.3 %	2.9 %	3.5 %	194.0 %	3.9 %	4.6 %	4.6 %	3.4 %	3.5 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	55.651 ppb	114.248 %	113.515 %	55.238 ppb	55.289 ppb	114.811 %
Concentration per Run 1	54.137 ppb	120.076 %	119.541 %	51.797 ppb	52.112 ppb	124.393 %
Concentration per Run 2	56.999 ppb	108.565 %	110.781 %	56.981 ppb	57.362 ppb	108.089 %
Concentration per Run 3	55.817 ppb	114.104 %	110.223 %	56.937 ppb	56.394 ppb	111.951 %
Recovery Percentage 1	92.752 %			92.064 %	92.149 %	
Concentration RSD	2.6 %	5.0 %	4.6 %	5.4 %	5.1 %	7.4 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	104	User name	ALPHALAB\a2-icpmsq2	Comment	CCB
Analysis label:	CCB	Rack	0		
Analysis started at:	12/3/2024 4:24:28 PM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	110.591 %	120.595 %	0.369 ppb	238.903 ppb	0.198 ppb	-0.856 ppb	10.261 ppb	2.426 ppb	103.522 %
Concentration per Run 1	106.364 %	124.916 %	0.334 ppb	220.343 ppb	0.107 ppb	-1.041 ppb	6.614 ppb	5.410 ppb	101.130 %
Concentration per Run 2	110.389 %	122.728 %	0.477 ppb	229.100 ppb	0.293 ppb	-1.037 ppb	7.871 ppb	-2.416 ppb	104.087 %
Concentration per Run 3	115.021 %	114.142 %	0.295 ppb	267.265 ppb	0.193 ppb	-0.489 ppb	16.298 ppb	4.282 ppb	105.349 %
Recovery Percentage 1			73.708 %	47.781 %	0.283 %	-8.556 %	10.261 %	2.426 %	
Concentration RSD	3.9 %	4.7 %	26.1 %	10.4 %	47.2 %	37.1 %	51.3 %	174.4 %	2.1 %

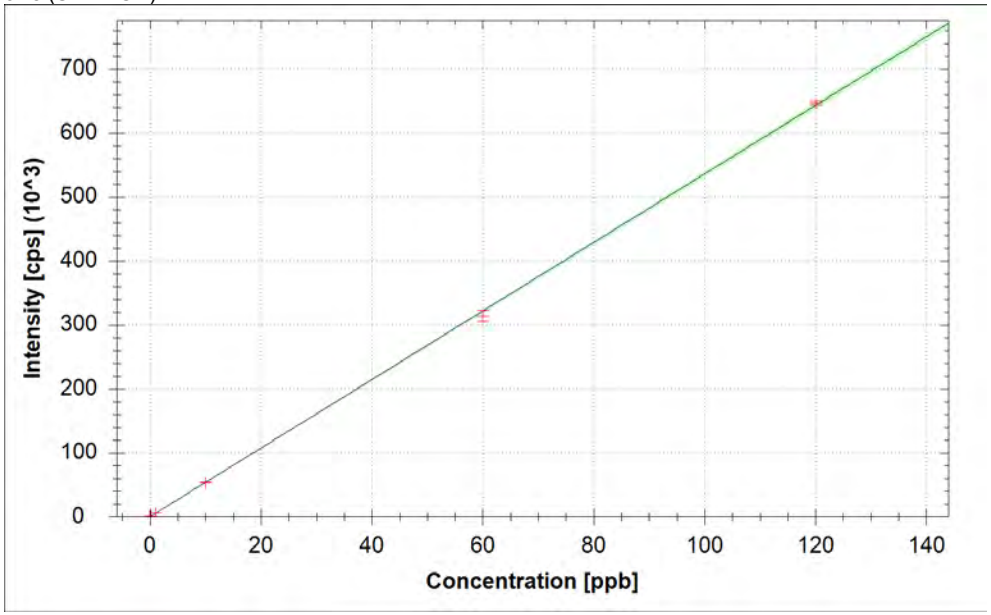
Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.531 ppb	-0.036 ppb	0.036 ppb	4.617 ppb	0.000 ppb	0.044 ppb	0.035 ppb	0.106 ppb	121.408 %
Concentration per Run 1	-0.571 ppb	-0.042 ppb	0.041 ppb	6.364 ppb	0.001 ppb	0.061 ppb	0.022 ppb	0.158 ppb	119.417 %
Concentration per Run 2	-0.532 ppb	-0.028 ppb	0.082 ppb	3.955 ppb	-0.002 ppb	0.019 ppb	0.067 ppb	0.050 ppb	122.375 %
Concentration per Run 3	-0.489 ppb	-0.039 ppb	-0.015 ppb	3.533 ppb	0.001 ppb	0.051 ppb	0.015 ppb	0.110 ppb	122.431 %
Recovery Percentage 1	-10.618 %	-3.643 %	3.628 %	9.235 %	0.026 %	2.180 %	3.479 %	2.117 %	
Concentration RSD	7.7 %	19.4 %	133.6 %	33.1 %	1,283.6 %	50.1 %	80.4 %	50.9 %	1.4 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	-0.004 ppb	0.195 ppb	0.000 ppb	0.312 ppb	109.296 %	0.015 ppb	0.007 ppb	103.486 %	0.109 ppb
Concentration per Run 1	0.007 ppb	0.430 ppb	0.005 ppb	0.182 ppb	112.537 %	0.025 ppb	0.014 ppb	107.710 %	0.086 ppb
Concentration per Run 2	0.069 ppb	0.082 ppb	0.003 ppb	0.345 ppb	107.482 %	0.012 ppb	0.004 ppb	99.577 %	0.097 ppb
Concentration per Run 3	-0.087 ppb	0.074 ppb	-0.009 ppb	0.408 ppb	107.869 %	0.008 ppb	0.004 ppb	103.172 %	0.145 ppb
Recovery Percentage 1	-0.785 %	3.910 %	-0.002 %	15.601 %		3.766 %	3.444 %		2.736 %
Concentration RSD	1,998.0 %	104.0 %	3,210.3 %	37.4 %	2.6 %	60.2 %	83.4 %	3.9 %	28.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.040 ppb	108.754 %	107.942 %	0.304 ppb	0.022 ppb	106.742 %
Concentration per Run 1	0.047 ppb	109.882 %	110.092 %	0.251 ppb	0.028 ppb	111.979 %
Concentration per Run 2	0.051 ppb	106.452 %	105.766 %	0.363 ppb	0.022 ppb	104.101 %
Concentration per Run 3	0.021 ppb	109.929 %	107.968 %	0.298 ppb	0.016 ppb	104.148 %
Recovery Percentage 1	7.939 %			30.418 %	2.208 %	
Concentration RSD	40.2 %	1.8 %	2.0 %	18.5 %	27.9 %	4.2 %

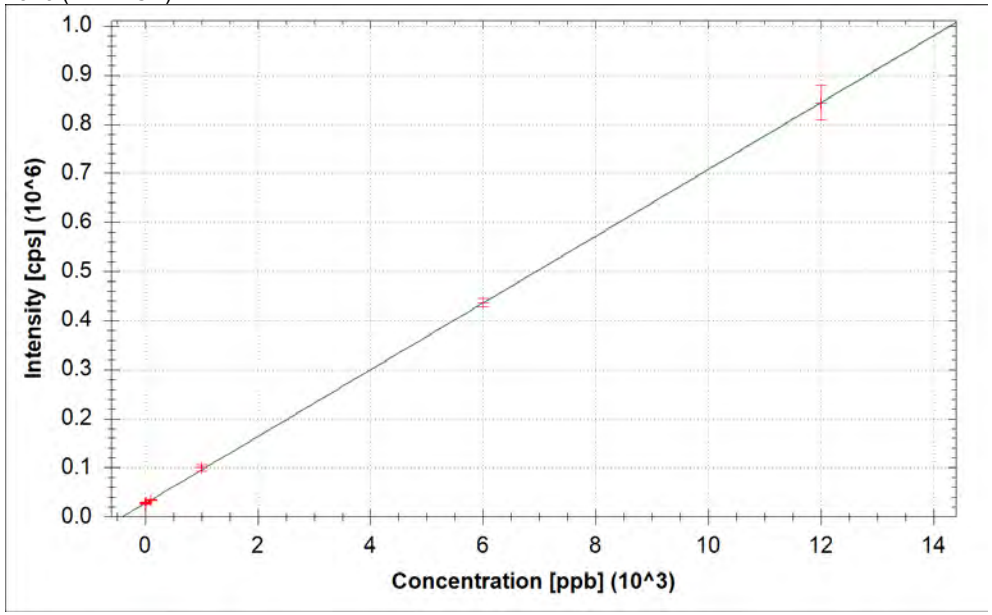
Calibration Curves:

9Be (STD AGD)



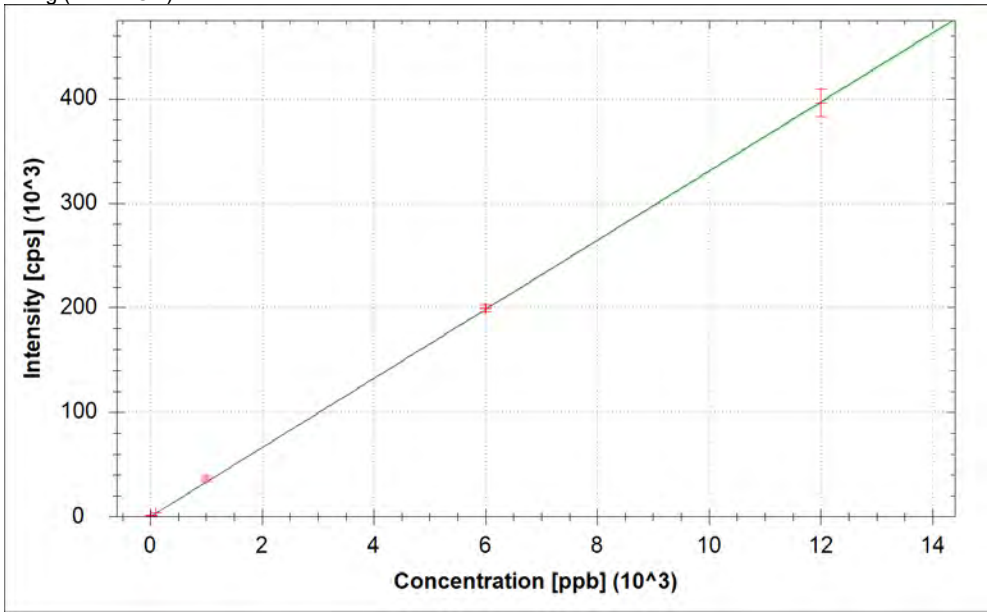
f(x) = 5358.0201*x + 246.3896
R² = 0.9998
BEC = 0.046 ppb
LoD = 0.0215 ppb

23Na (KED AGD)



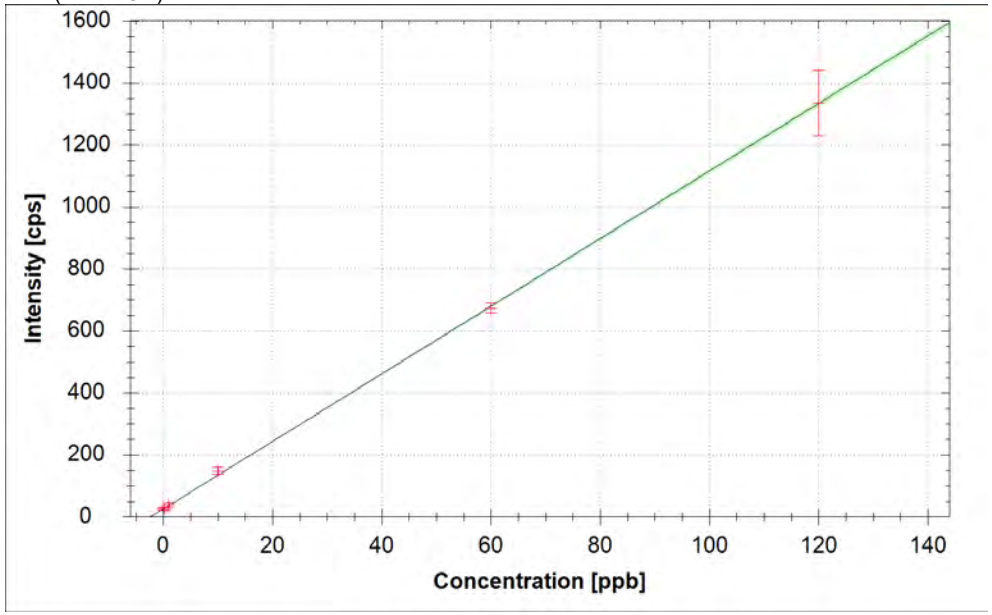
f(x) = 68.0355*x + 27193.9517
R² = 1.0000
BEC = 399.702 ppb
LoD = 75.8702 ppb

24Mg (KED AGD)



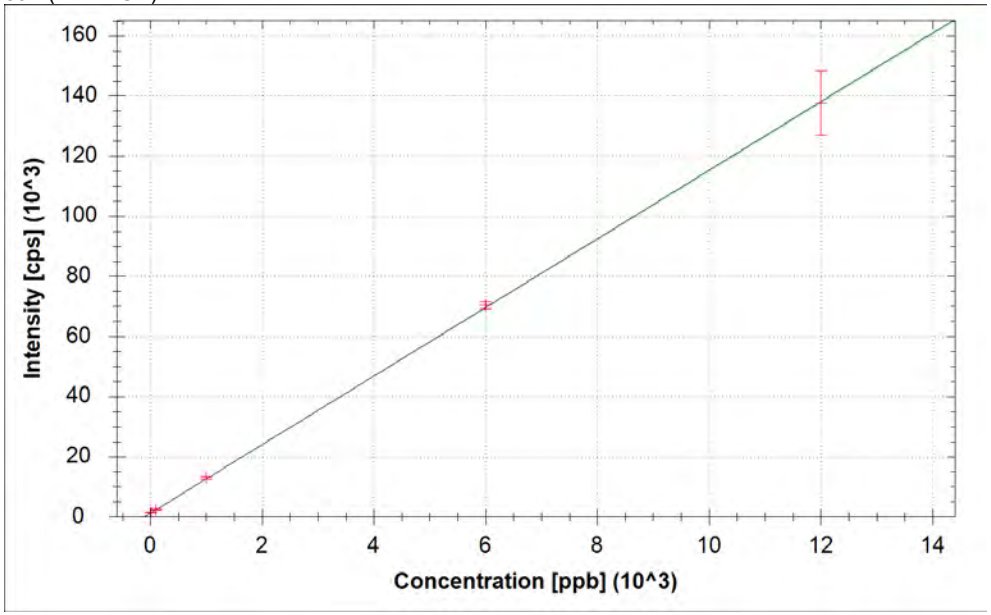
f(x) = 33.0497*x + 61.1301
R² = 0.9999
BEC = 1.850 ppb
LoD = 2.6194 ppb

27Al (KED AGD)



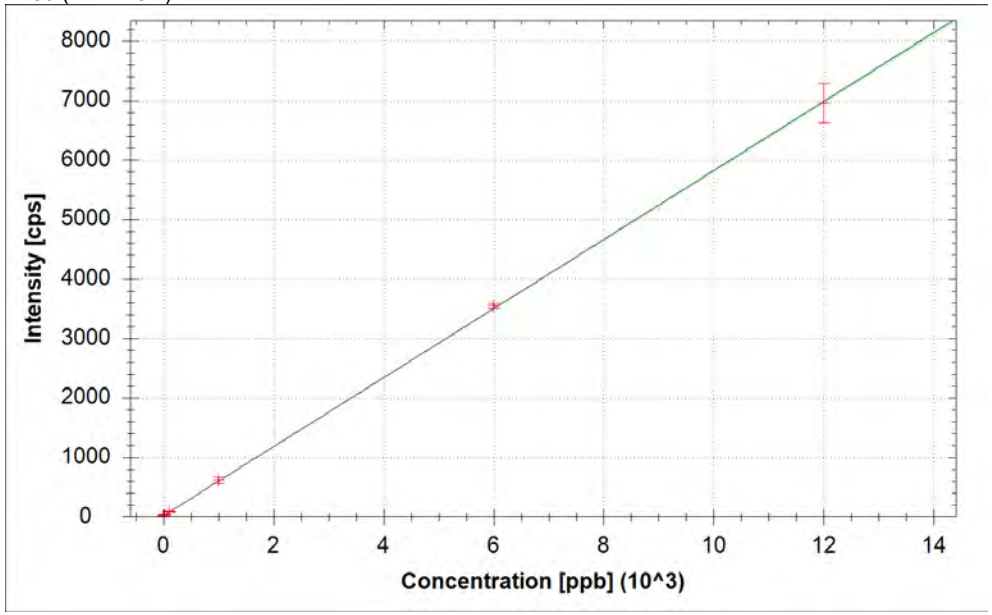
f(x) = 10.9043*x + 24.8638
R² = 0.9998
BEC = 2.280 ppb
LoD = 1.4080 ppb

39K (KED AGD)



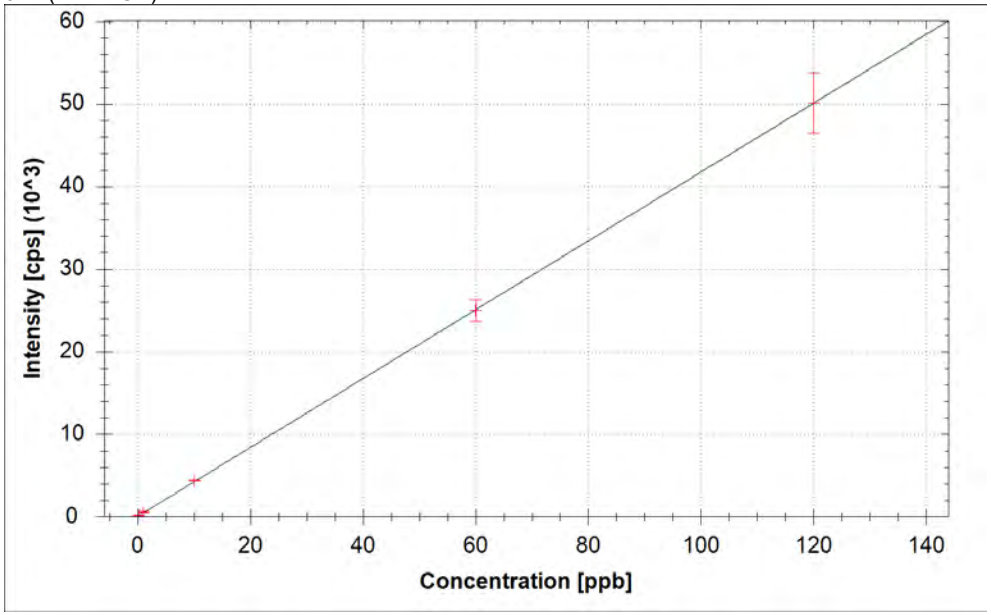
f(x) = 11.4039*x + 1167.7464
R² = 0.9999
BEC = 102.399 ppb
LoD = 6.6148 ppb

44Ca (KED AGD)



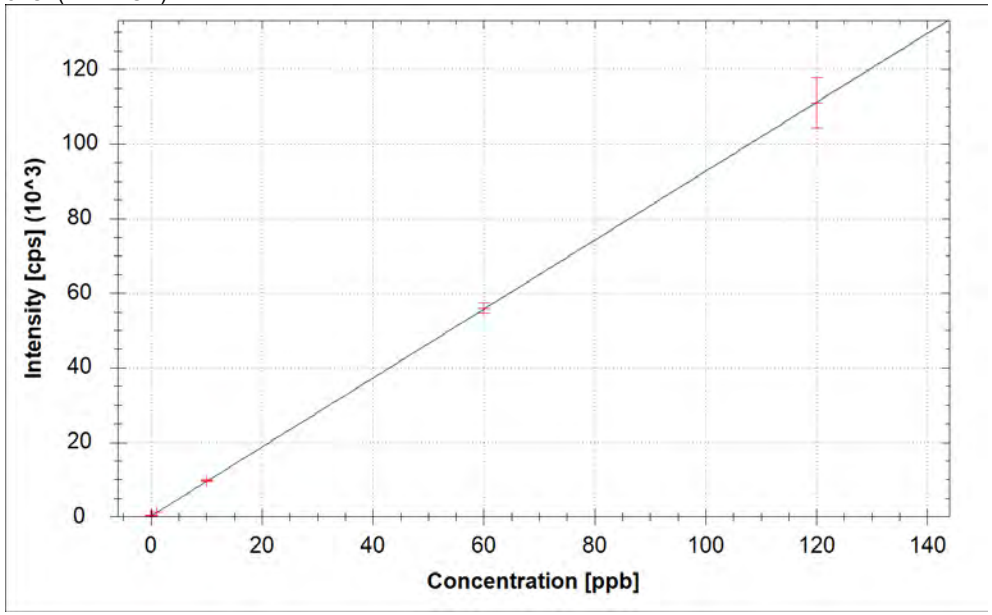
f(x) = 0.5803*x + 18.1578
R² = 0.9999
BEC = 31.290 ppb
LoD = 30.0410 ppb

51V (KED AGD)



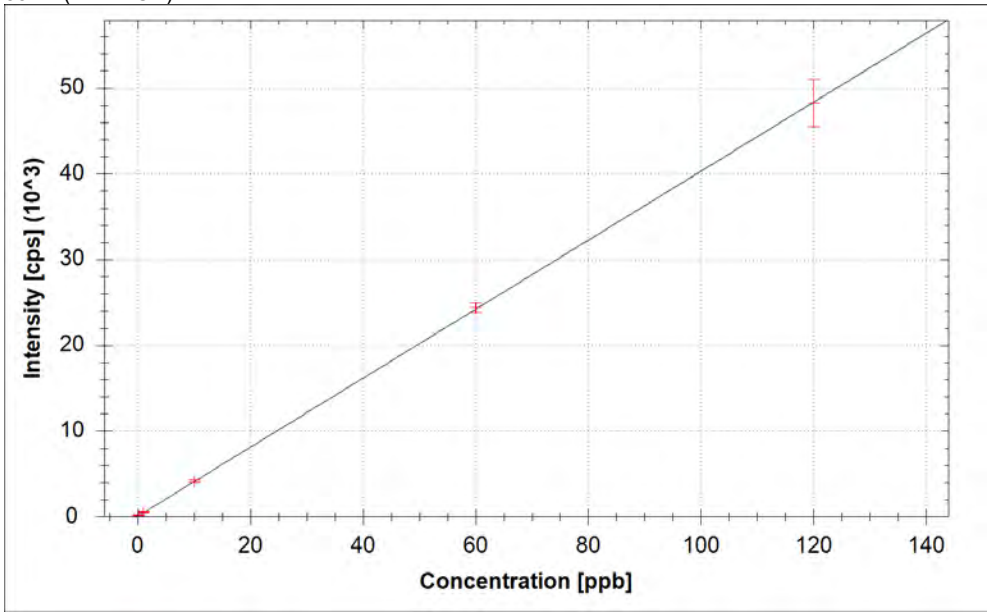
f(x) = 416.8402*x + 68.9380
R² = 1.0000
BEC = 0.165 ppb
LoD = 0.0217 ppb

52Cr (KED AGD)



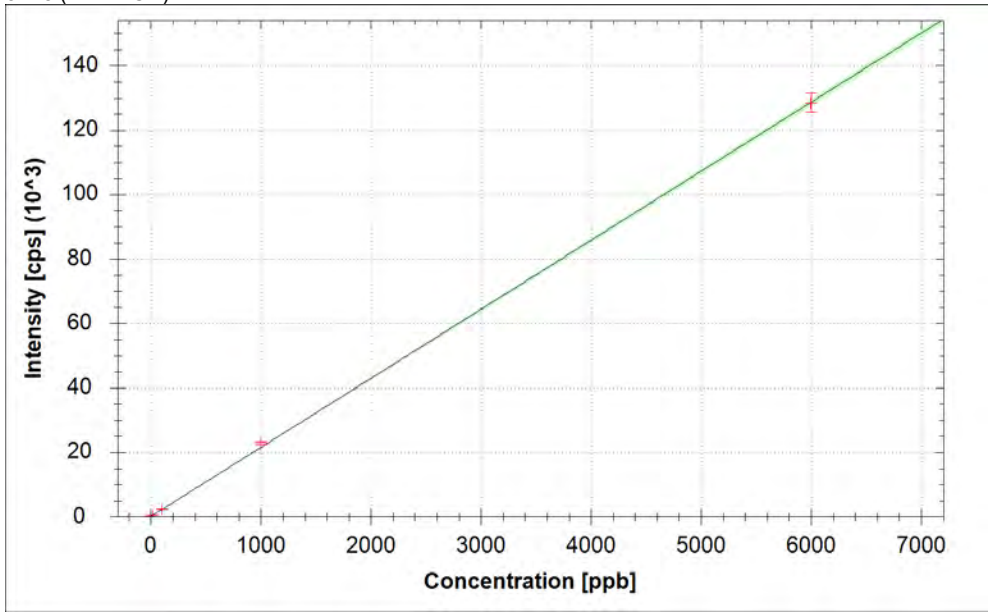
f(x) = 924.8543*x + 202.6089
R² = 1.0000
BEC = 0.219 ppb
LoD = 0.0433 ppb

55Mn (KED AGD)



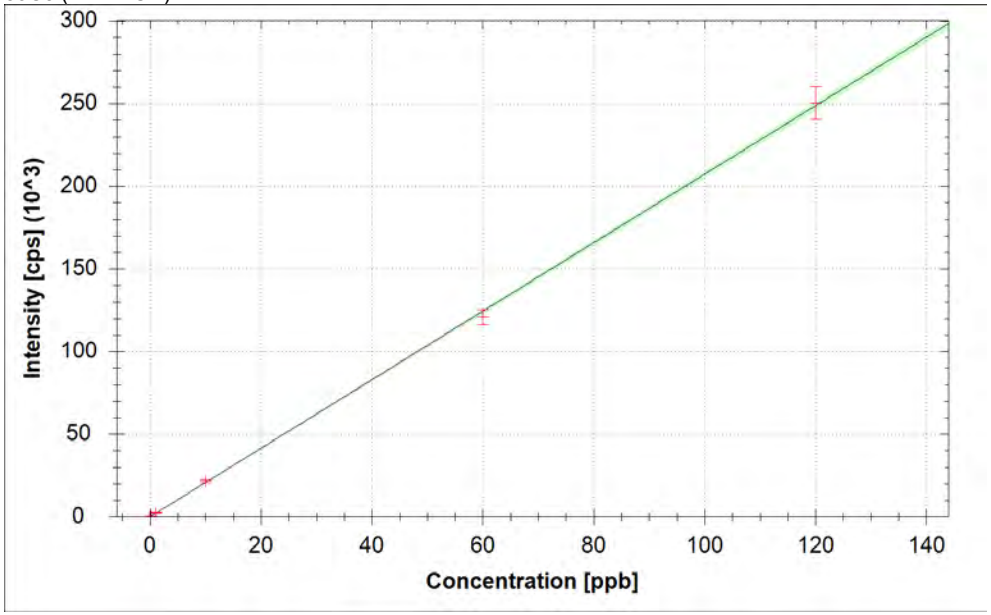
f(x) = 402.2037*x + 74.6918
R² = 1.0000
BEC = 0.186 ppb
LoD = 0.3045 ppb

57Fe (KED AGD)



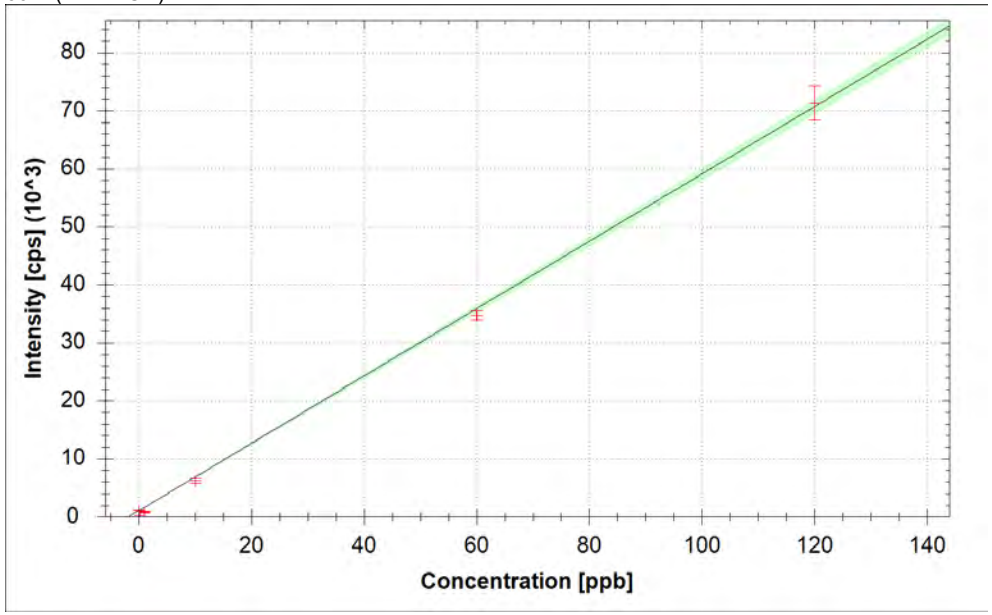
f(x) = 21.4226*x + 101.6325
R² = 0.9999
BEC = 4.744 ppb
LoD = 2.5881 ppb

59Co (KED AGD)



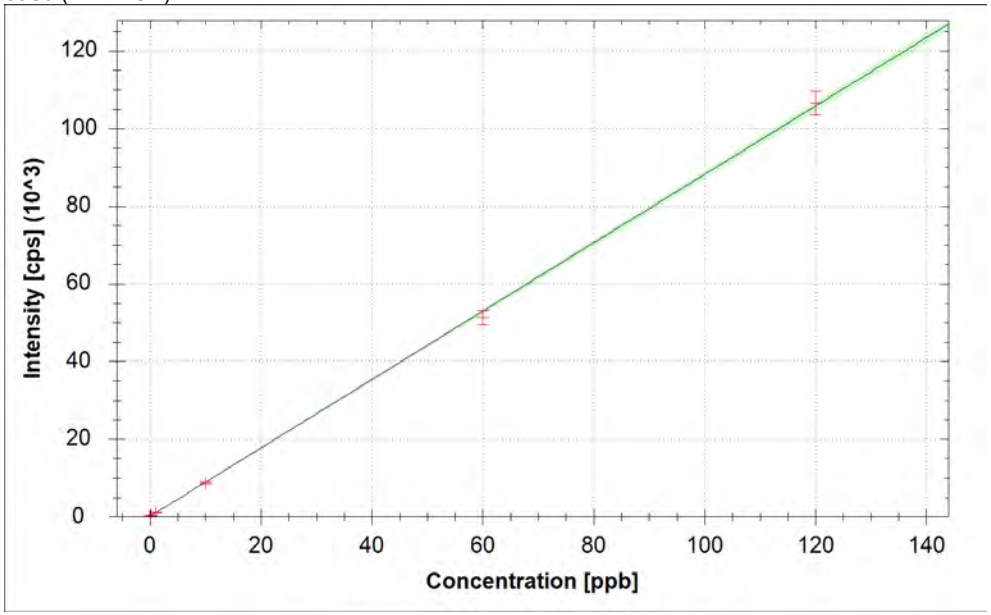
f(x) = 2071.6852*x + 13.0666
R² = 0.9997
BEC = 0.006 ppb
LoD = 0.0191 ppb

60Ni (KED AGD)



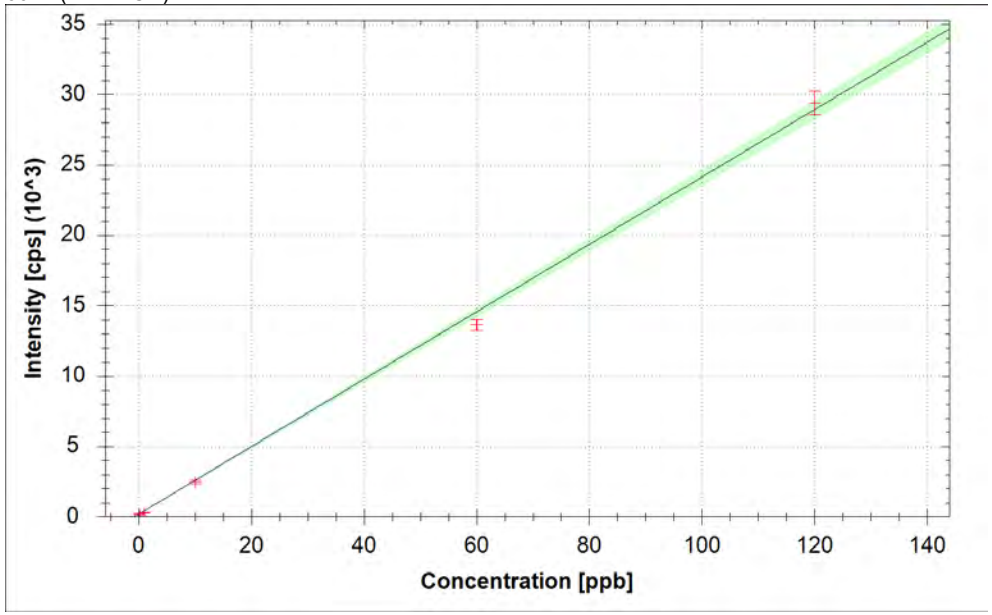
f(x) = 580.3269*x + 1049.2697
R² = 0.9990
BEC = 1.808 ppb
LoD = 0.4343 ppb

65Cu (KED AGD)



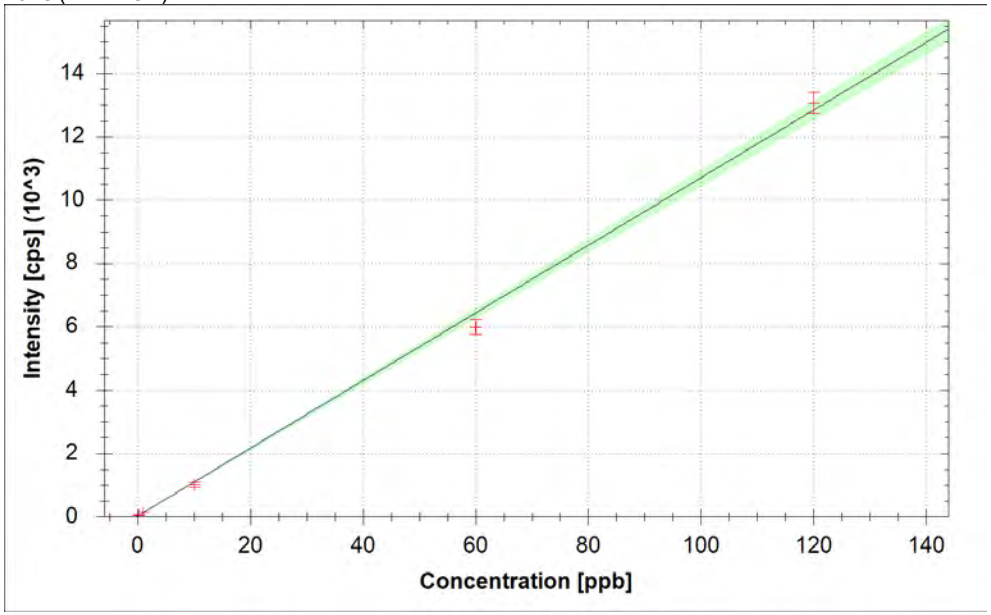
f(x) = 880.2671*x + 118.9946
R² = 0.9997
BEC = 0.135 ppb
LoD = 0.1911 ppb

66Zn (KED AGD)



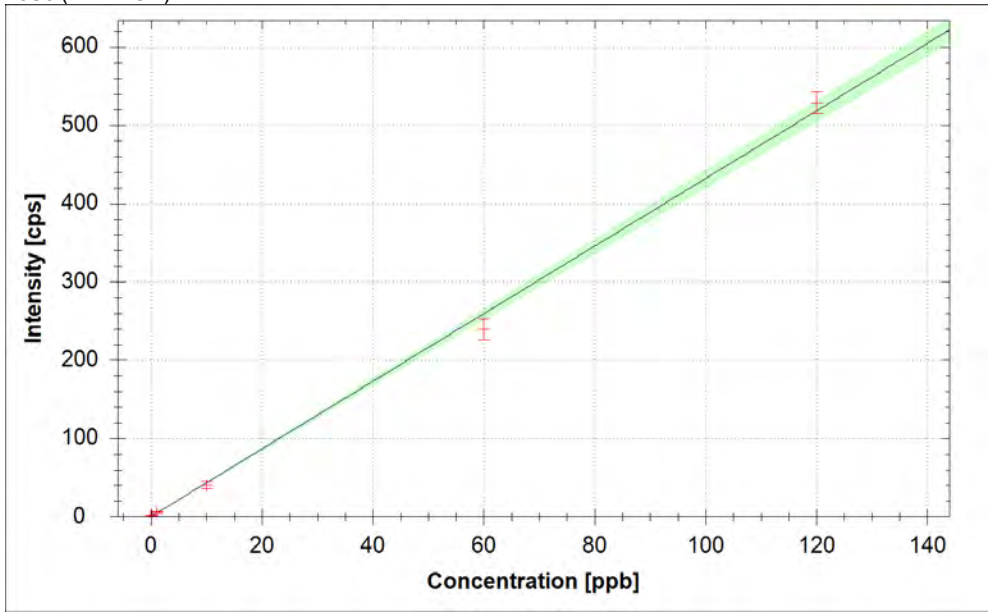
f(x) = 239.2791*x + 200.5034
R² = 0.9983
BEC = 0.838 ppb
LoD = 0.3681 ppb

75As (KED AGD)



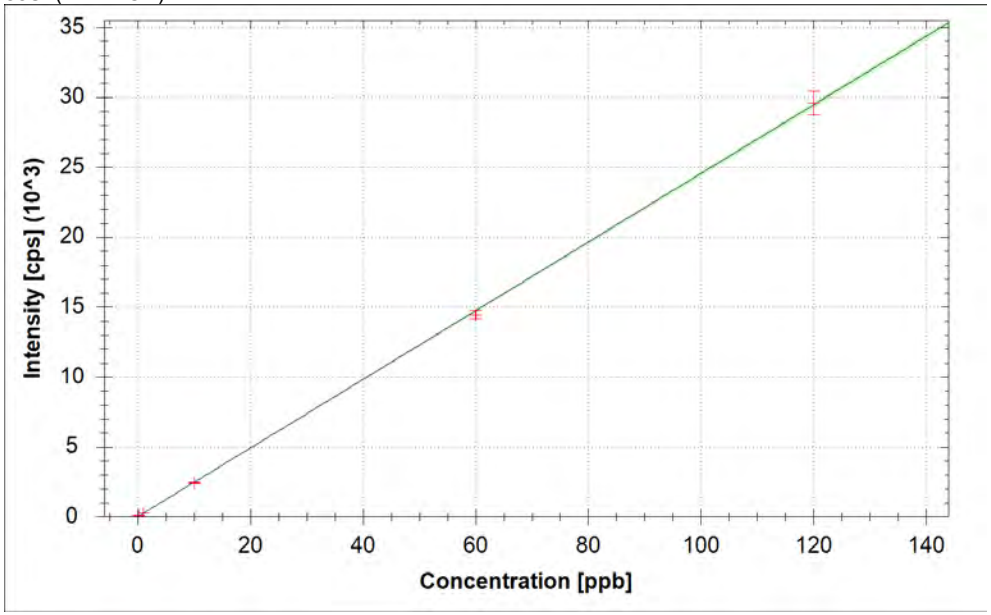
f(x) = 106.7135*x + 30.2392
R² = 0.9981
BEC = 0.283 ppb
LoD = 0.0653 ppb

78Se (KED AGD)



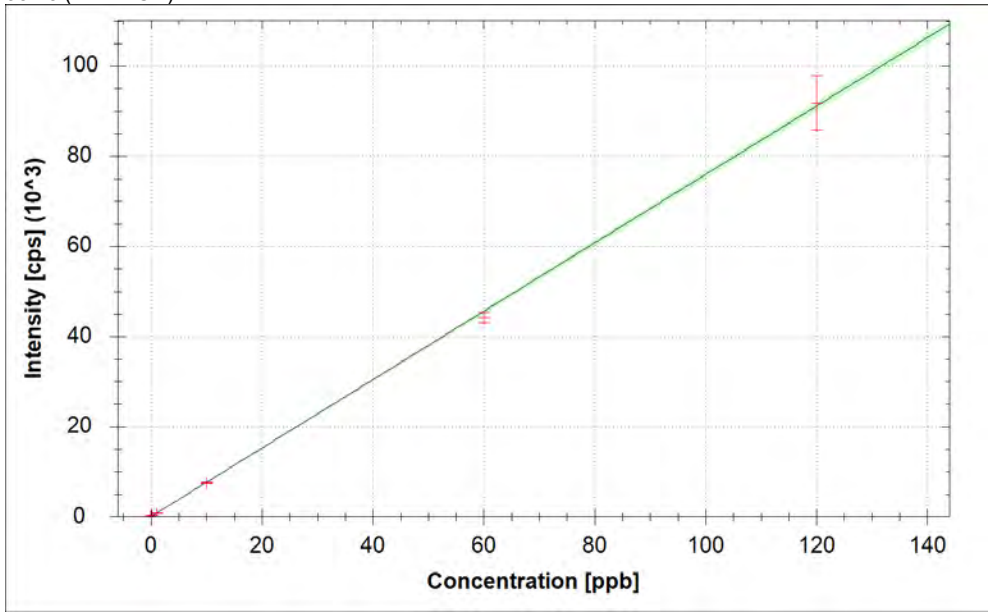
f(x) = 4.3161*x + 0.3194
R² = 0.9978
BEC = 0.074 ppb
LoD = 0.3245 ppb

88Sr (KED AGD)



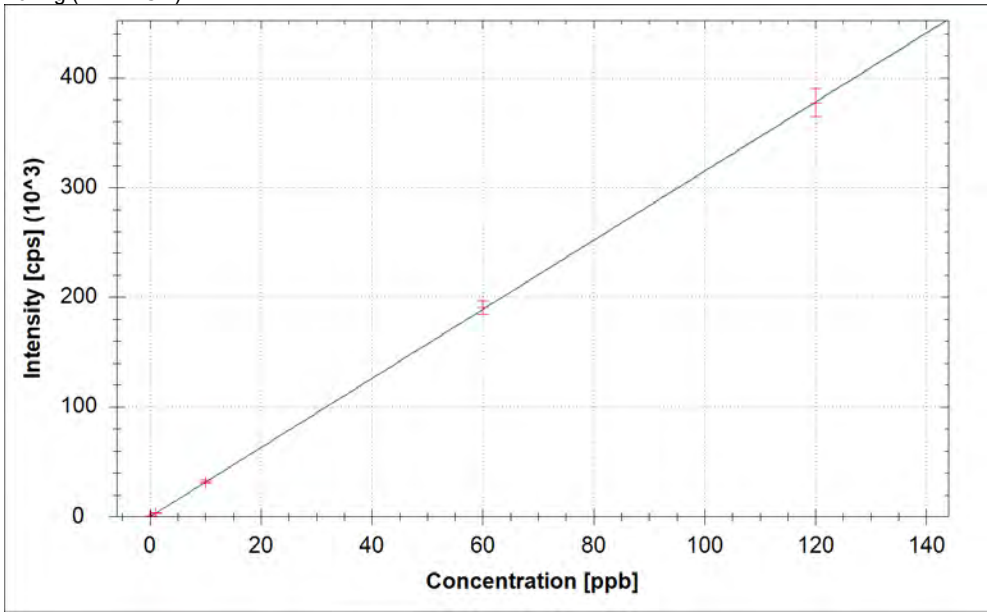
f(x) = 245.3233*x + 14.5966
R² = 0.9999
BEC = 0.059 ppb
LoD = 0.0068 ppb

95Mo (KED AGD)



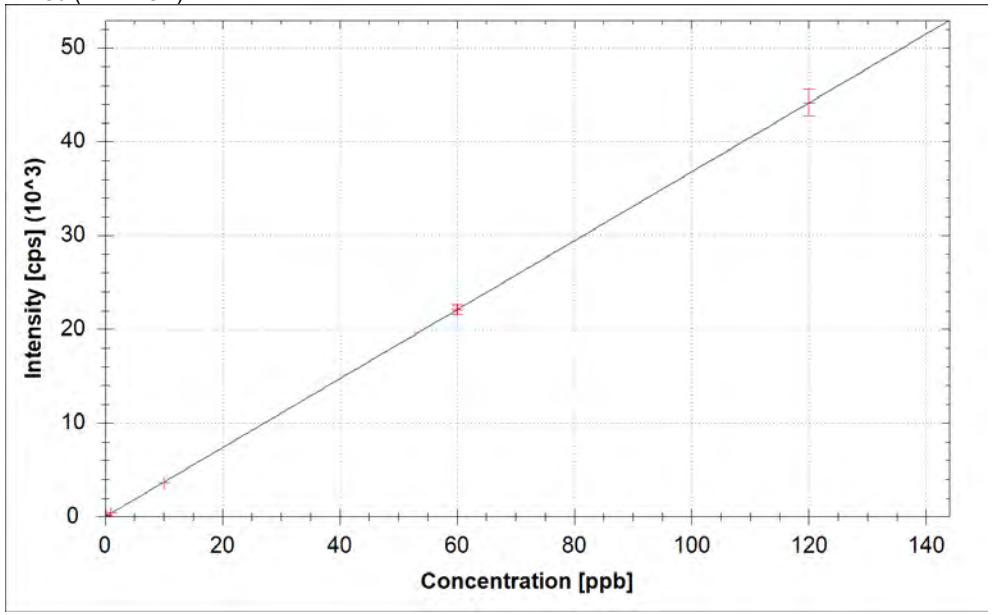
f(x) = 758.6228*x + 67.4780
R² = 0.9996
BEC = 0.089 ppb
LoD = 0.1255 ppb

107Ag (KED AGD)



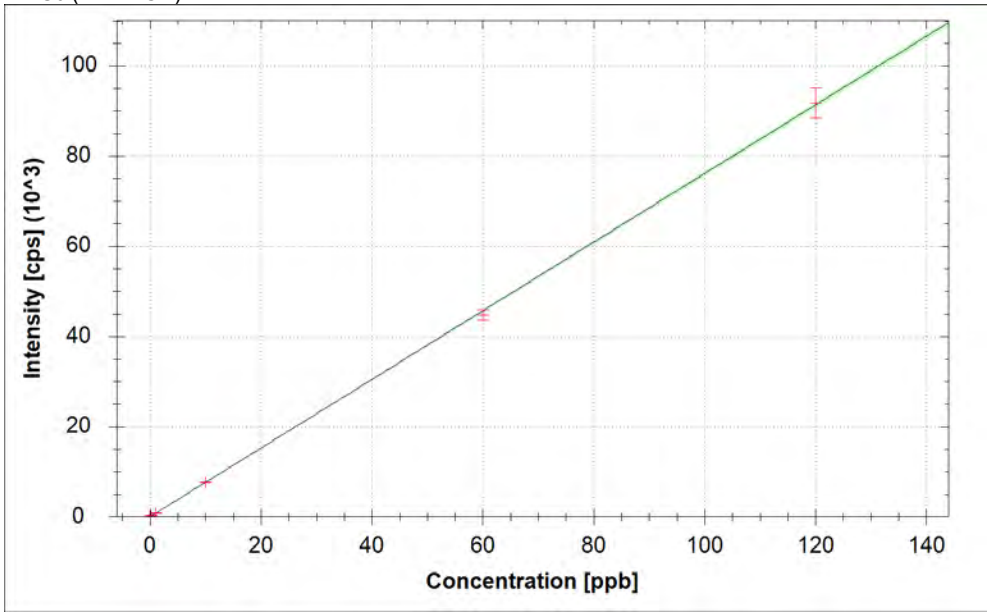
f(x) = 3147.3896*x + 26.6165
R² = 1.0000
BEC = 0.008 ppb
LoD = 0.0020 ppb

111Cd (KED AGD)



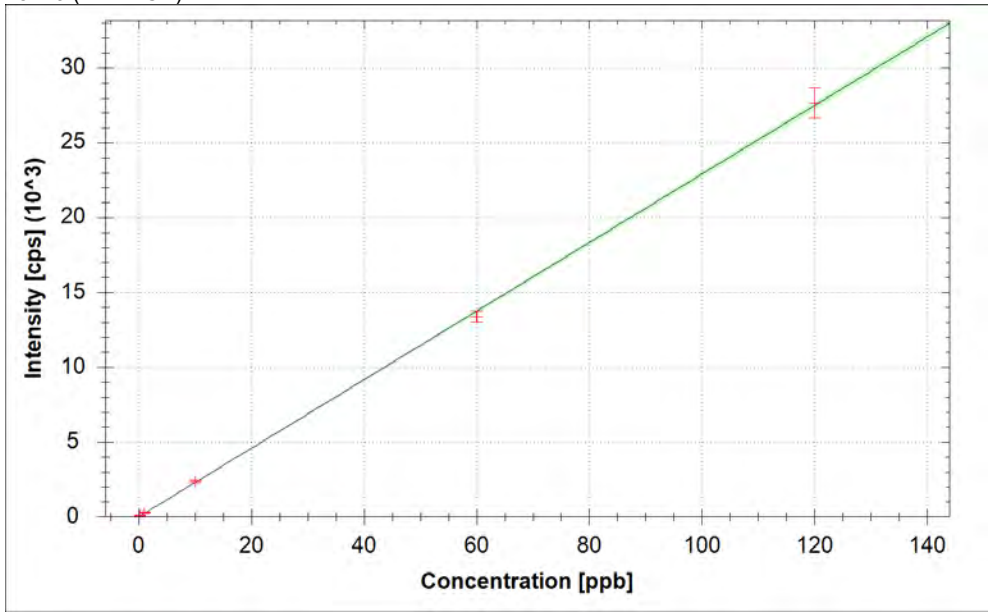
f(x) = 367.7090*x
R² = 1.0000
BEC = 0.000 ppb
LoD = 0.0000 ppb

121Sb (KED AGD)



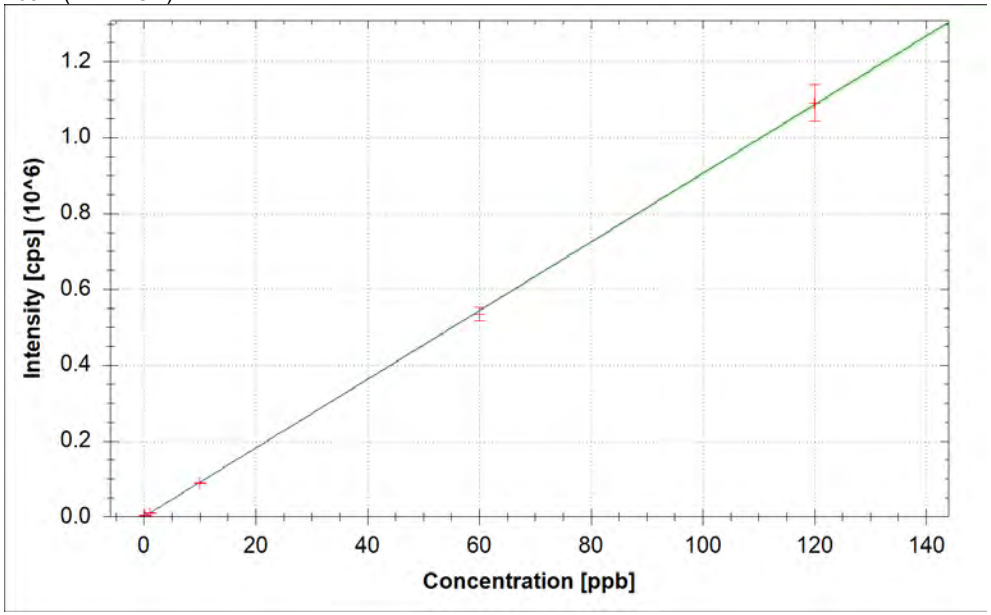
f(x) = 760.6175*x + 19.4937
R² = 0.9999
BEC = 0.026 ppb
LoD = 0.0264 ppb

137Ba (KED AGD)



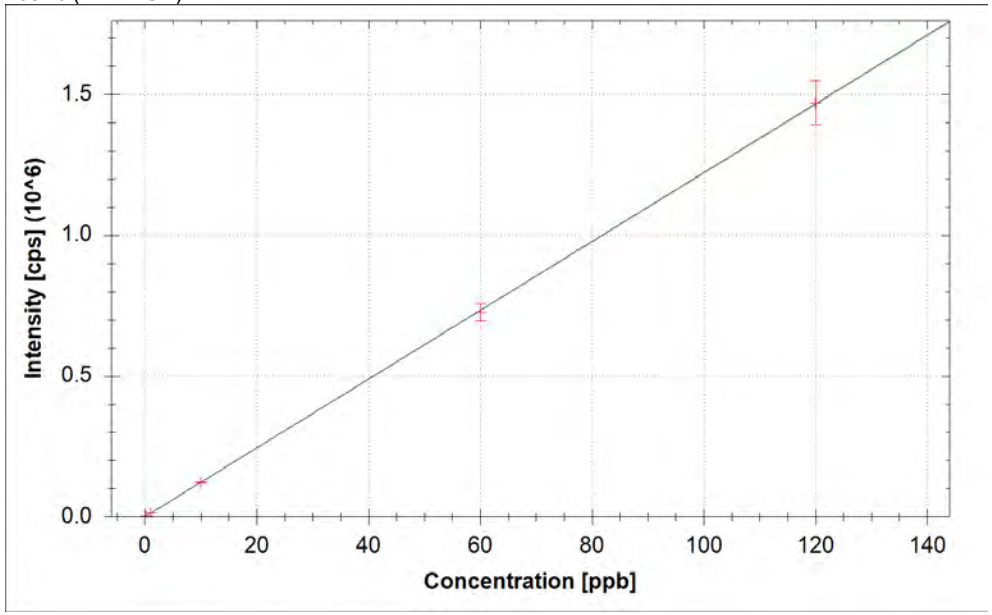
f(x) = 228.9826*x + 2.2049
R² = 0.9997
BEC = 0.010 ppb
LoD = 0.0251 ppb

205Tl (KED AGD)



f(x) = 9050.7602*x + 300.6795
R² = 0.9999
BEC = 0.033 ppb
LoD = 0.0459 ppb

208Pb (KED AGD)



f(x) = 12215.8504*x + 131.0963
R² = 1.0000
BEC = 0.011 ppb
LoD = 0.0044 ppb

Alpha ICPMSQ2 Data with SRD

12/4/2024 6:25:58 AM

Analysis index: 1
Analysis label: Rinse
Analysis started at: 12/3/2024 4:34:10 PM
User name ALPHALAB\a2-icpmsq2
Rack 0
Vial 1
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	100.339 %	101.168 %	0.051 ppb	34.297 ppb	4.420 ppb	8.390 ppb	-3.783 ppb	11.121 ppb	99.586 %
Concentration per Run 1	99.207 %	102.784 %	0.033 ppb	7.661 ppb	4.077 ppb	8.090 ppb	-4.522 ppb	-0.269 ppb	100.684 %
Concentration per Run 2	100.599 %	102.515 %	0.026 ppb	41.238 ppb	4.838 ppb	8.646 ppb	-13.252 ppb	11.149 ppb	101.623 %
Concentration per Run 3	101.210 %	98.204 %	0.094 ppb	53.992 ppb	4.346 ppb	8.433 ppb	6.425 ppb	22.482 ppb	96.452 %
Concentration RSD	1.0 %	2.5 %	74.0 %	69.8 %	8.7 %	3.3 %	260.6 %	102.3 %	2.8 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	98.147 %	0.072 ppb	0.109 ppb	0.341 ppb	59.429 ppb	0.013 ppb	1.009 ppb	0.390 ppb	1.506 ppb
Concentration per Run 1	101.316 %	0.070 ppb	0.110 ppb	0.447 ppb	63.112 ppb	0.006 ppb	0.870 ppb	0.350 ppb	1.375 ppb
Concentration per Run 2	96.065 %	0.115 ppb	0.116 ppb	0.445 ppb	59.379 ppb	0.010 ppb	0.773 ppb	0.372 ppb	1.692 ppb
Concentration per Run 3	97.061 %	0.030 ppb	0.103 ppb	0.131 ppb	55.795 ppb	0.023 ppb	1.385 ppb	0.447 ppb	1.452 ppb
Concentration RSD	2.8 %	59.8 %	6.0 %	53.2 %	6.2 %	65.7 %	32.6 %	13.0 %	11.0 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	102.273 %	-0.022 ppb	0.102 ppb	0.012 ppb	0.123 ppb	102.719 %	0.026 ppb	0.001 ppb	105.206 %
Concentration per Run 1	103.642 %	-0.013 ppb	0.061 ppb	0.021 ppb	0.067 ppb	108.147 %	0.027 ppb	0.000 ppb	109.422 %
Concentration per Run 2	99.664 %	-0.072 ppb	0.116 ppb	0.002 ppb	0.098 ppb	98.700 %	0.023 ppb	0.000 ppb	100.929 %
Concentration per Run 3	103.512 %	0.019 ppb	0.128 ppb	0.014 ppb	0.204 ppb	101.310 %	0.028 ppb	0.003 ppb	105.269 %
Concentration RSD	2.2 %	209.8 %	35.3 %	79.4 %	58.5 %	4.7 %	8.4 %	173.2 %	4.0 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.044 ppb	0.037 ppb	101.720 %	101.395 %	0.044 ppb	0.084 ppb	102.835 %
Concentration per Run 1	0.024 ppb	0.057 ppb	108.876 %	108.206 %	0.018 ppb	0.080 ppb	106.003 %
Concentration per Run 2	0.065 ppb	0.005 ppb	98.183 %	96.246 %	0.055 ppb	0.084 ppb	101.707 %
Concentration per Run 3	0.043 ppb	0.048 ppb	98.102 %	99.734 %	0.059 ppb	0.089 ppb	100.793 %
Concentration RSD	46.4 %	75.9 %	6.1 %	6.1 %	51.8 %	5.4 %	2.7 %

Alpha ICPMSQ2 Data with SRD

12/4/2024 6:25:58 AM

Analysis index:	2	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	zCAL LOT #M23-1225	Rack	0		
Analysis started at:	12/3/2024 4:38:36 PM	Vial	1		

Alpha ICPMSQ2 Seq

12/4/2024 6:26:17 AM

Sample List Summary:

Instrument ID: iCAP Q

Index:	Label:	Rack	Vial	Main Runs:	Survey Runs:	Start Time:
1	Rinse	0	1	3	1	12/3/2024 4:34:10 PM
2	zCAL LOT #M23-1225	0	1	3	1	12/3/2024 4:38:36 PM
3	CAL LOT #M23-1225	0	1	3	1	12/3/2024 4:40:22 PM
4	Blank MRC ICPMSQ2	4	49	3	1	12/3/2024 4:44:47 PM
5	0.2/20 Cal	0	2	3	1	12/3/2024 4:49:18 PM
6	1/100 Cal	0	3	3	1	12/3/2024 4:53:45 PM
7	10/1000 Cal	0	4	3	1	12/3/2024 4:58:13 PM
8	60/6000 Cal	0	5	3	1	12/3/2024 5:02:41 PM
9	120/12000 Cal	0	6	3	1	12/3/2024 5:07:10 PM
10	Sr 200ppb	4	55	3	1	12/3/2024 5:12:19 PM
11	ICV	0	7	3	1	12/3/2024 5:16:50 PM
12	ICB	0	10	3	1	12/3/2024 5:21:20 PM
13	ICSA	4	53	3	1	12/3/2024 5:32:00 PM
14	LDR	4	1	3	1	12/3/2024 5:36:31 PM
15	Rinse	0	1	3	1	12/3/2024 5:41:01 PM
16	CCV	0	9	3	1	12/3/2024 5:45:27 PM
17	CCB	0	10	3	1	12/3/2024 5:49:58 PM
18	WG2001986-2d10 6020TL	1	55	3	1	12/3/2024 5:55:27 PM
19	L2468003-03 6020TL	2	4	3	1	12/3/2024 5:59:53 PM
20	L2468003-04 6020TL	2	5	3	1	12/3/2024 6:04:21 PM
21	L2468003-05 6020TL	2	6	3	1	12/3/2024 6:08:49 PM
22	L2468003-06 6020TL	2	7	3	1	12/3/2024 6:13:16 PM
23	L2468042-01 6020TL	2	8	3	1	12/3/2024 6:17:44 PM
24	L2468042-02 6020TL	2	9	3	1	12/3/2024 6:22:13 PM
25	L2468042-03 6020TL	2	10	3	1	12/3/2024 6:26:41 PM
26	L2468042-04 6020TL	2	11	3	1	12/3/2024 6:31:10 PM
27	L2468042-05 6020TL	2	12	3	1	12/3/2024 6:35:39 PM
28	CCV	0	9	3	1	12/3/2024 6:40:08 PM
29	CCB	0	10	3	1	12/3/2024 6:44:40 PM
30	WG2002010-1 6020SL	2	13	3	1	12/3/2024 7:01:20 PM
31	WG2002010-2d10 6020SL	2	14	3	1	12/3/2024 7:05:47 PM
32	L2467934-05 6020SL	2	15	3	1	12/3/2024 7:10:15 PM
33	WG2002010-3d10 6020SL	2	16	3	1	12/3/2024 7:14:43 PM
34	WG2002010-4d10 6020SL	2	17	3	1	12/3/2024 7:19:11 PM
35	WG2002010-5d10 6020SL	2	18	3	1	12/3/2024 7:23:39 PM
36	WG2002010-6d5 6020SL	2	19	3	1	12/3/2024 7:28:07 PM
37	L2467884-01 6020SL	2	20	3	1	12/3/2024 7:32:35 PM
38	L2467884-02 6020SL	2	21	3	1	12/3/2024 7:37:04 PM
39	L2467906-01 6020SL	2	22	3	1	12/3/2024 7:41:33 PM
40	CCV	0	9	3	1	12/3/2024 7:46:02 PM
41	CCB	0	10	3	1	12/3/2024 7:50:33 PM
42	L2467906-02 6020SL	2	23	3	1	12/3/2024 7:55:05 PM
43	L2467906-03 6020SL	2	24	3	1	12/3/2024 7:59:34 PM
44	L2467906-04 6020SL	2	25	3	1	12/3/2024 8:04:04 PM
45	L2467906-05 6020SL	2	26	3	1	12/3/2024 8:08:32 PM
46	L2467906-06 6020SL	2	27	3	1	12/3/2024 8:13:01 PM
47	L2467934-01 6020SL	2	28	3	1	12/3/2024 8:17:29 PM
48	L2467934-02 6020SL	2	29	3	1	12/3/2024 8:21:58 PM
49	L2467934-03 6020SL	2	30	3	1	12/3/2024 8:26:27 PM
50	L2467934-04 6020SL	2	31	3	1	12/3/2024 8:30:55 PM
51	L2467934-06 6020SL	2	32	3	1	12/3/2024 8:35:24 PM

Alpha ICPMSQ2 Seq

12/4/2024 6:26:17 AM

Index:	Label:	Rack	Vial	Main Runs:	Survey Runs:	Start Time:
52	CCV	0	9	3	1	12/3/2024 8:39:52 PM
53	CCB	0	10	3	1	12/3/2024 8:44:24 PM
54	L2467934-10 6020SL	2	36	3	1	12/3/2024 8:48:56 PM
55	L2467934-07 6020SL	2	33	3	1	12/3/2024 8:53:26 PM
56	L2467934-08 6020SL	2	34	3	1	12/3/2024 8:57:55 PM
57	L2467934-09 6020SL	2	35	3	1	12/3/2024 9:02:24 PM
58	CCV	0	9	3	1	12/3/2024 9:06:54 PM
59	CCB	0	10	3	1	12/3/2024 9:11:25 PM
60	CCV	0	9	3	1	12/3/2024 9:15:58 PM
61	CCB	0	10	3	1	12/3/2024 9:20:29 PM

Alpha ICPMSQ2 Seq

12/3/2024 6:59:17 PM

Sample List Summary:

Instrument ID: iCAP Q

Index:	Label:	Rack	Vial	Main Runs:	Survey Runs:	Start Time:
1	Rinse	0	1	3	1	12/3/2024 6:31:09 AM
2	CAL LOT #M23-1225	0	1	3	1	12/3/2024 6:35:35 AM
3	Blank NTB ICPMSQ2	4	49	3	1	12/3/2024 6:40:01 AM
4	0.2/20 Cal	0	2	3	1	12/3/2024 6:44:33 AM
5	x1/100 Cal	0	3	3	1	12/3/2024 6:49:00 AM
6	10/1000 Cal	0	4	3	1	12/3/2024 6:53:28 AM
7	60/6000 Cal	0	5	3	1	12/3/2024 6:57:56 AM
8	120/12000 Cal	0	6	3	1	12/3/2024 7:02:24 AM
9	1/100 Cal	0	3	3	1	12/3/2024 7:07:58 AM
10	Sr 200ppb	4	55	3	1	12/3/2024 7:13:05 AM
11	ICV	0	7	3	1	12/3/2024 7:17:37 AM
12	ICB	0	10	3	1	12/3/2024 7:22:07 AM
13	ICSA	4	53	3	1	12/3/2024 7:28:46 AM
14	LDR	4	1	3	1	12/3/2024 7:33:17 AM
15	Rinse	0	1	3	1	12/3/2024 7:37:47 AM
16	CCV	0	9	3	1	12/3/2024 7:42:14 AM
17	CCB	0	10	3	1	12/3/2024 7:46:45 AM
18	I2469249-03 6020SL	1	6	3	1	12/3/2024 7:57:42 AM
19	I2469249-06 6020SL	1	1	3	1	12/3/2024 8:02:11 AM
20	WG2003419-7d10 6020SL	1	2	3	1	12/3/2024 8:06:38 AM
21	WG2003419-8d10 6020SL	1	3	3	1	12/3/2024 8:11:05 AM
22	WG2003419-9d10 6020SL	1	4	3	1	12/3/2024 8:15:32 AM
23	WG2003419-10d5 6020SL	1	5	3	1	12/3/2024 8:20:00 AM
24	I2469249-04 6020SL	1	7	3	1	12/3/2024 8:24:28 AM
25	I2469249-07 6020SL	1	8	3	1	12/3/2024 8:28:57 AM
26	CCV	0	9	3	1	12/3/2024 8:33:58 AM
27	CCB	0	10	3	1	12/3/2024 8:38:29 AM
28	WG2003472-1 6020TL	1	9	3	1	12/3/2024 8:50:16 AM
29	WG2003472-2d10 6020TL	1	10	3	1	12/3/2024 8:54:45 AM
30	L2469261-01d10 6020TL	1	11	3	1	12/3/2024 8:59:15 AM
31	WG2003472-3d10 6020TL	1	12	3	1	12/3/2024 9:03:45 AM
32	WG2003472-4d10 6020TL	1	13	3	1	12/3/2024 9:08:15 AM
33	WG2003472-5d10 6020TL	1	14	3	1	12/3/2024 9:12:41 AM
34	WG2003472-6d50 6020TL	1	15	3	1	12/3/2024 9:17:08 AM
35	L2469261-02d10 6020TL	1	16	3	1	12/3/2024 9:21:35 AM
36	L2469261-03d10 6020TL	1	17	3	1	12/3/2024 9:26:02 AM
37	L2469261-04d10 6020TL	1	18	3	1	12/3/2024 9:30:29 AM
38	xCCV	0	9	3	1	12/3/2024 9:34:57 AM
39	xCCB	0	10	3	1	12/3/2024 9:39:28 AM
40	CCV	0	9	3	1	12/3/2024 9:44:34 AM
41	CCB	0	10	3	1	12/3/2024 9:49:04 AM
42	L2469261-05 6020TL	1	19	3	1	12/3/2024 9:54:58 AM
43	L2469261-06 6020TL	1	20	3	1	12/3/2024 9:59:26 AM
44	L2469261-07 6020TL	1	21	3	1	12/3/2024 10:03:54 AM
45	L2469261-08 6020TL	1	22	3	1	12/3/2024 10:08:23 AM
46	L2469261-09 6020TL	1	23	3	1	12/3/2024 10:12:52 AM
47	L2469261-10 6020TL	1	24	3	1	12/3/2024 10:17:21 AM
48	L2469261-11 6020TL	1	25	3	1	12/3/2024 10:21:50 AM
49	L2469261-12 6020TL	1	26	3	1	12/3/2024 10:26:17 AM
50	L2469261-13 6020TL	1	27	3	1	12/3/2024 10:30:43 AM
51	L2469261-14 6020TL	1	28	3	1	12/3/2024 10:35:10 AM

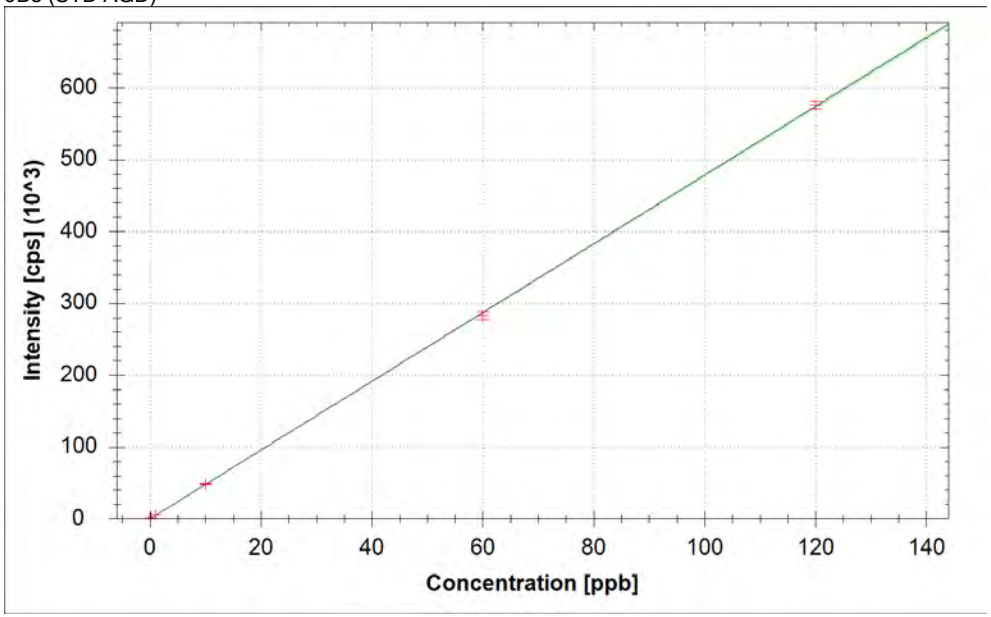
Alpha ICPMSQ2 Seq

12/3/2024 6:59:17 PM

Index:	Label:	Rack	Vial	Main Runs:	Survey Runs:	Start Time:
52	CCV	0	9	3	1	12/3/2024 10:39:37 AM
53	CCB	0	10	3	1	12/3/2024 10:44:08 AM
54	CCV	0	9	3	1	12/3/2024 11:00:44 AM
55	CCB	0	10	3	1	12/3/2024 11:05:15 AM
56	WG2003775-1 6020TL	1	29	3	1	12/3/2024 11:11:12 AM
57	WG2003775-2d10 6020TL	1	30	3	1	12/3/2024 11:15:40 AM
58	L2469249-06 6020TL	1	31	3	1	12/3/2024 11:20:08 AM
59	WG2003775-3d10 6020TL	1	32	3	1	12/3/2024 11:24:36 AM
60	WG2003775-4d10 6020TL	1	33	3	1	12/3/2024 11:29:04 AM
61	WG2003775-5d10 6020TL	1	34	3	1	12/3/2024 11:33:33 AM
62	WG2003775-6d5 6020TL	1	35	3	1	12/3/2024 11:38:01 AM
63	L2469188-01 6020TL	1	36	3	1	12/3/2024 11:42:31 AM
64	L2469188-02 6020TL	1	37	3	1	12/3/2024 11:47:00 AM
65	L2469188-03 6020TL	1	38	3	1	12/3/2024 11:51:27 AM
66	CCV	0	9	3	1	12/3/2024 11:55:54 AM
67	CCB	0	10	3	1	12/3/2024 12:00:26 PM
68	CCV	0	9	3	1	12/3/2024 12:35:53 PM
69	CCB	0	10	3	1	12/3/2024 12:42:03 PM
70	L2469188-04d5 6020TL	1	39	3	1	12/3/2024 12:47:59 PM
71	L2469188-05d5 6020TL	1	40	3	1	12/3/2024 12:52:26 PM
72	L2469188-06d5 6020TL	1	41	3	1	12/3/2024 12:56:53 PM
73	WG2004404-1 MCP-6020SL-10	1	42	3	1	12/3/2024 1:06:43 PM
74	WG2004404-2d10 MCP-6020SL-10	1	43	3	1	12/3/2024 1:11:12 PM
75	WG2004404-3d10 MCP-6020SL-10	1	44	3	1	12/3/2024 1:15:40 PM
76	L2469119-01 MCP-6020SL-10	1	45	3	1	12/3/2024 1:20:09 PM
77	CCV	0	9	3	1	12/3/2024 1:30:45 PM
78	CCB	0	10	3	1	12/3/2024 1:35:17 PM
79	CCB	0	10	3	1	12/3/2024 1:45:22 PM
80	WG2004404-2d10 MCP-6020SL-10	1	52	3	1	12/3/2024 2:02:11 PM
81	WG2004404-3d10 MCP-6020SL-10	1	53	3	1	12/3/2024 2:06:37 PM
82	L2469297-01d5 MCP-6020SL-10	1	46	3	1	12/3/2024 2:11:05 PM
83	L2469297-02 MCP-6020SL-10	1	47	3	1	12/3/2024 2:15:34 PM
84	L2469297-03 MCP-6020SL-10	1	48	3	1	12/3/2024 2:20:03 PM
85	L2469297-04 MCP-6020SL-10	1	49	3	1	12/3/2024 2:24:33 PM
86	L2469297-05 MCP-6020SL-10	1	50	3	1	12/3/2024 2:29:01 PM
87	L2469297-06 MCP-6020SL-10	1	51	3	1	12/3/2024 2:33:29 PM
88	CCV	0	9	3	1	12/3/2024 2:37:57 PM
89	CCB	0	10	3	1	12/3/2024 2:42:28 PM
90	CCB	0	10	3	1	12/3/2024 2:57:24 PM
91	xWG2001986-1 6020TL	1	54	3	1	12/3/2024 3:08:01 PM
92	xL2467975-08 6020TL	2	1	3	1	12/3/2024 3:12:28 PM
93	xWG2001986-2d10 6020TL	1	55	3	1	12/3/2024 3:24:56 PM
94	xL2467975-04 6020TL	1	56	3	1	12/3/2024 3:29:23 PM
95	xWG2001986-3d10 6020TL	1	57	3	1	12/3/2024 3:33:52 PM
96	xWG2001986-4 6020TL	1	58	3	1	12/3/2024 3:38:21 PM
97	xWG2001986-5d10 6020TL	1	59	3	1	12/3/2024 3:42:50 PM
98	xWG2001986-6d5 6020TL	1	60	3	1	12/3/2024 3:47:20 PM
99	xL2468003-01 6020TL	2	2	3	1	12/3/2024 3:51:50 PM
100	xL2468003-02 6020TL	2	3	3	1	12/3/2024 3:56:18 PM
101	CCV	0	9	3	1	12/3/2024 4:00:46 PM
102	CCB	0	10	3	1	12/3/2024 4:05:18 PM
103	CCV	0	9	3	1	12/3/2024 4:19:57 PM
104	CCB	0	10	3	1	12/3/2024 4:24:28 PM

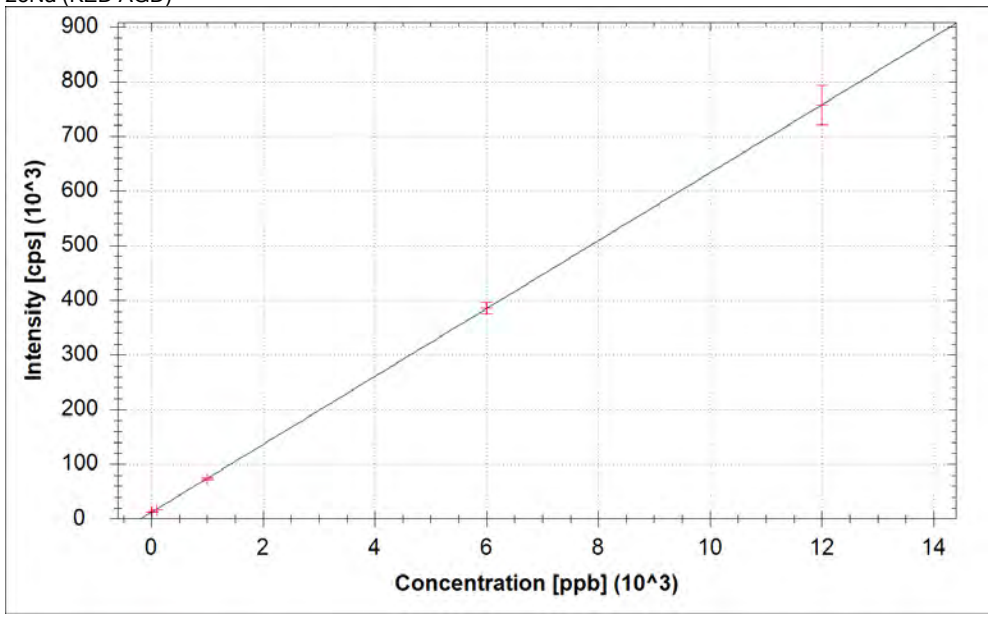
Calibration Curves:

9Be (STD AGD)



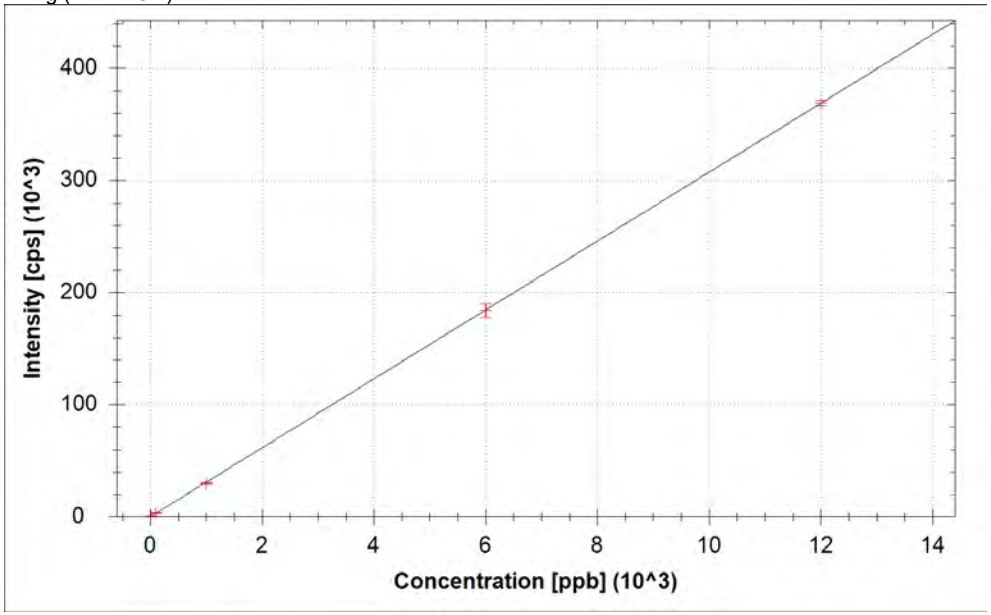
f(x) = 4782.1324*x + 17.8856
R² = 0.9999
BEC = 0.004 ppb
LoD = 0.0050 ppb

23Na (KED AGD)



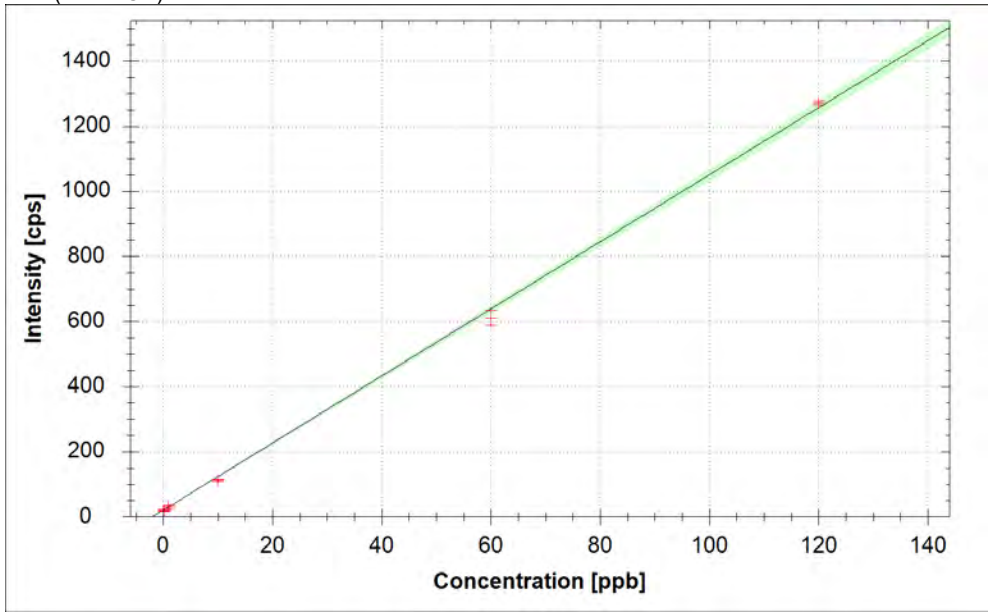
f(x) = 62.1395*x + 11678.6136
R² = 1.0000
BEC = 187.942 ppb
LoD = 4.6722 ppb

24Mg (KED AGD)



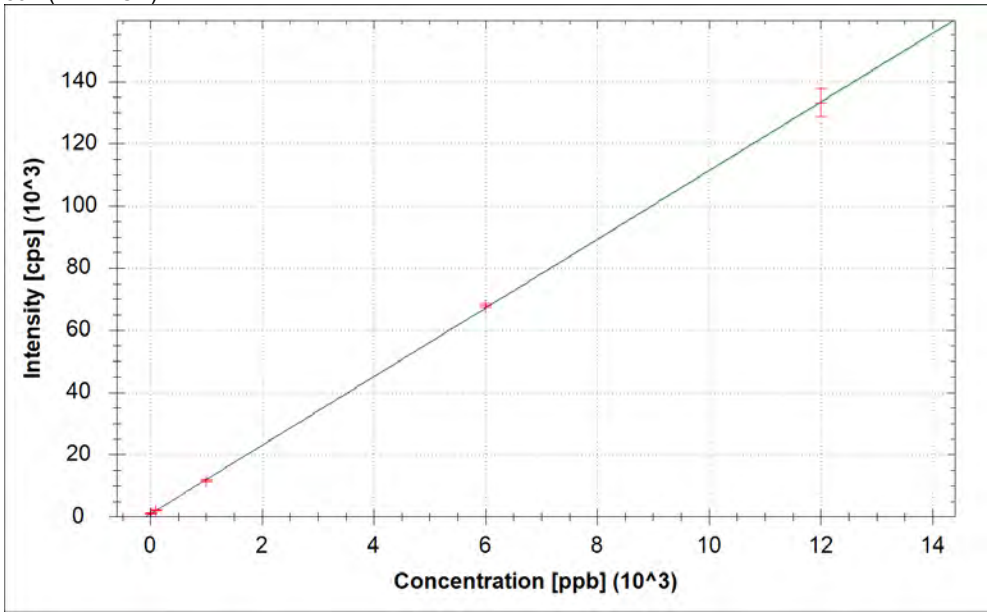
f(x) = 30.7284*x + 39.9111
R² = 1.0000
BEC = 1.299 ppb
LoD = 1.2665 ppb

27Al (KED AGD)



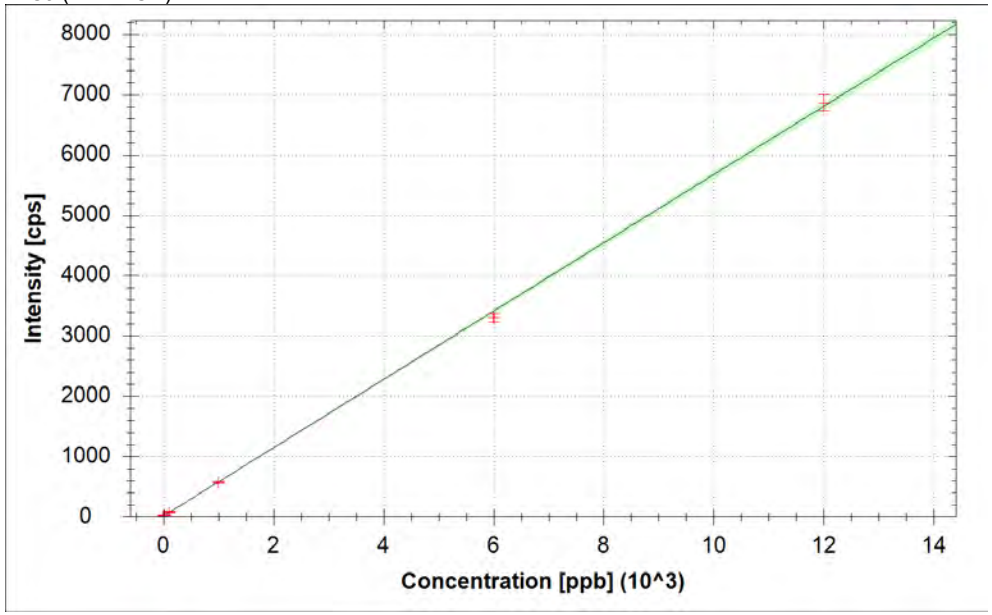
f(x) = 10.2961*x + 20.4593
R² = 0.9991
BEC = 1.987 ppb
LoD = 0.7354 ppb

39K (KED AGD)



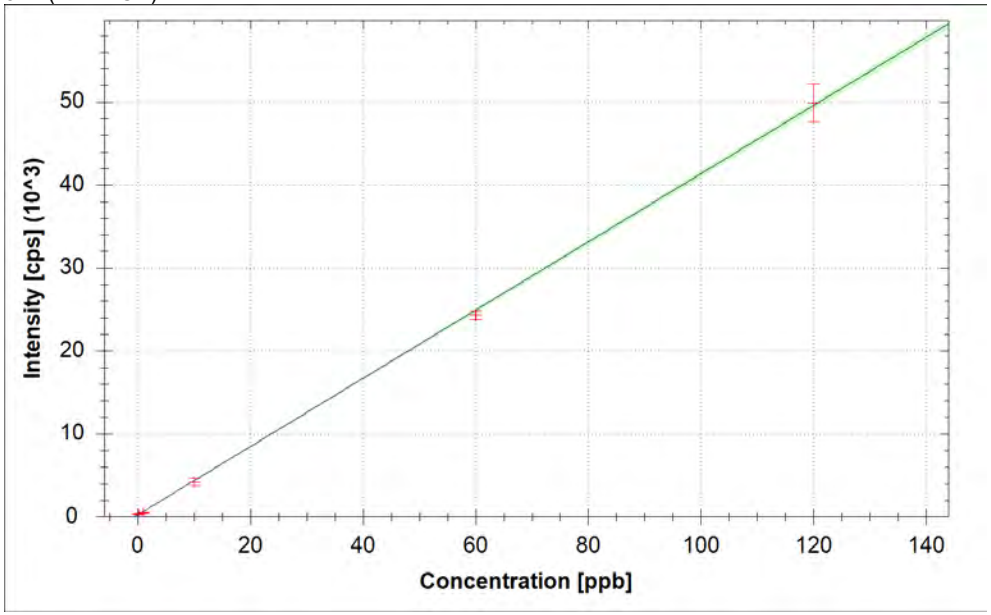
f(x) = 11.0403*x + 897.7311
R² = 1.0000
BEC = 81.314 ppb
LoD = 30.0974 ppb

44Ca (KED AGD)



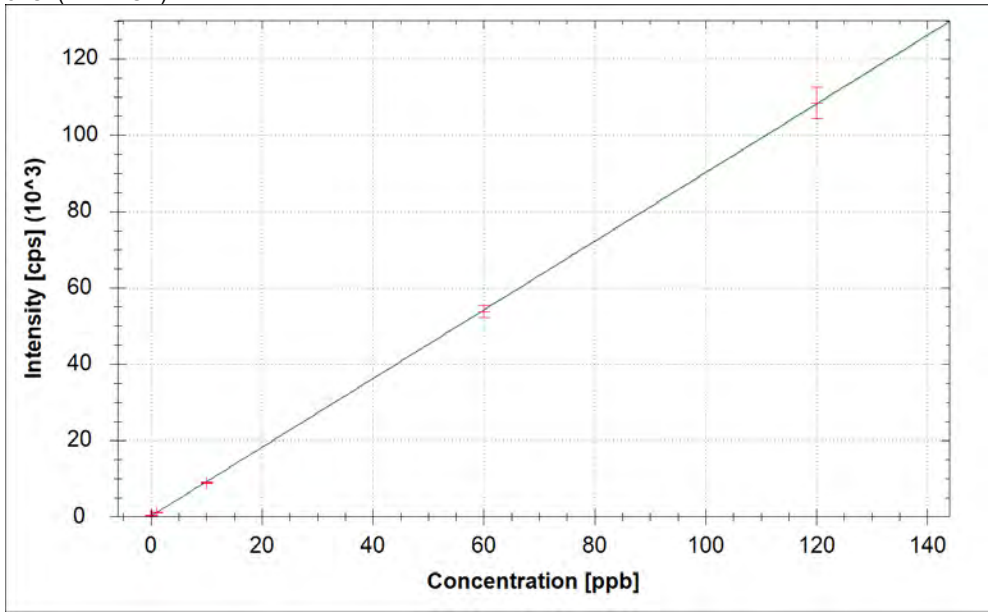
f(x) = 0.5662*x + 13.1051
R² = 0.9996
BEC = 23.146 ppb
LoD = 7.4148 ppb

51V (KED AGD)



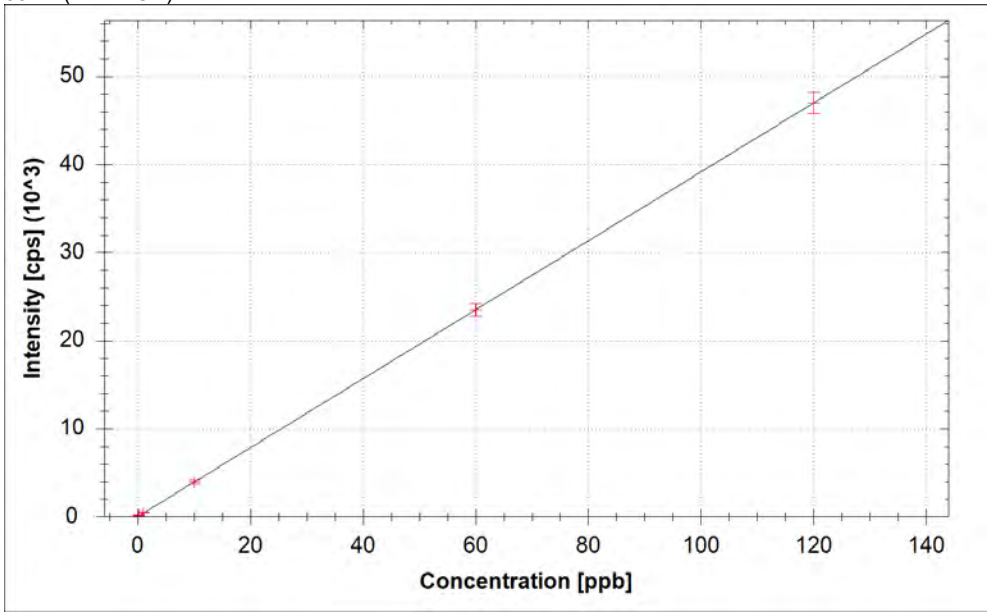
f(x) = 410.8695*x + 251.2222
R² = 0.9997
BEC = 0.611 ppb
LoD = 0.0963 ppb

52Cr (KED AGD)



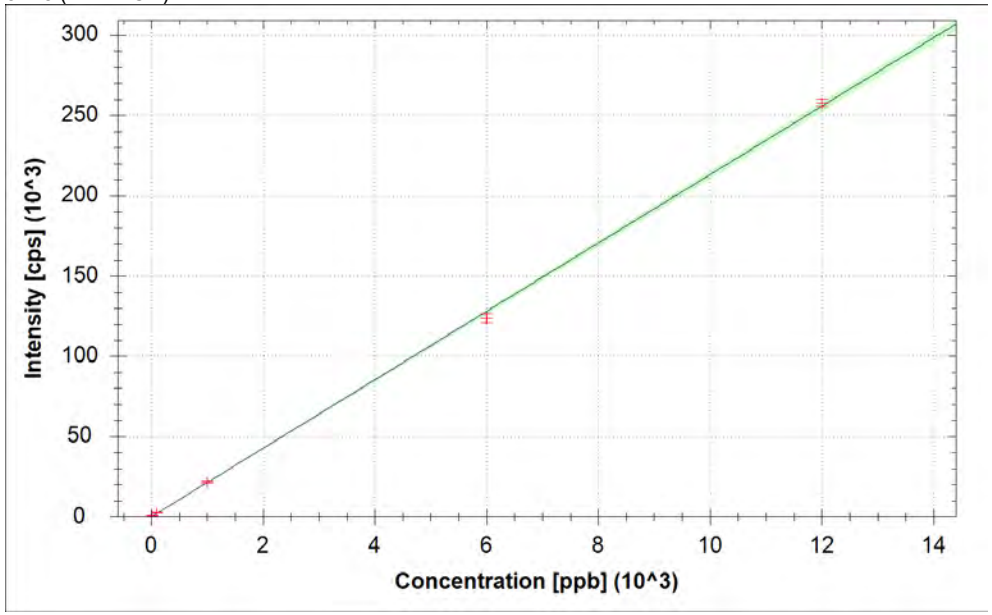
f(x) = 899.7066*x + 202.4240
R² = 1.0000
BEC = 0.225 ppb
LoD = 0.0860 ppb

55Mn (KED AGD)



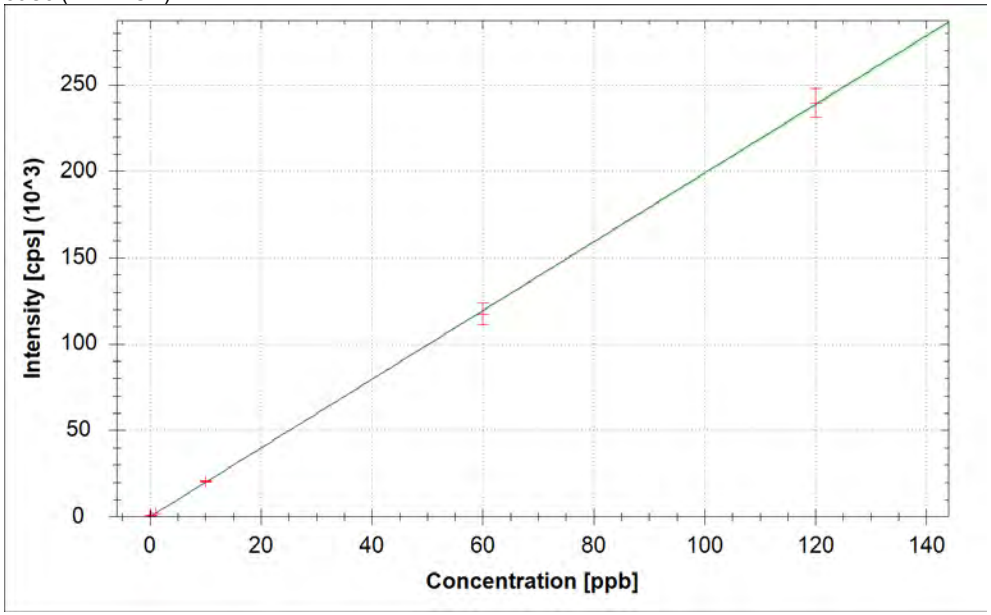
f(x) = 391.3092*x + 22.3597
R² = 1.0000
BEC = 0.057 ppb
LoD = 0.1079 ppb

57Fe (KED AGD)



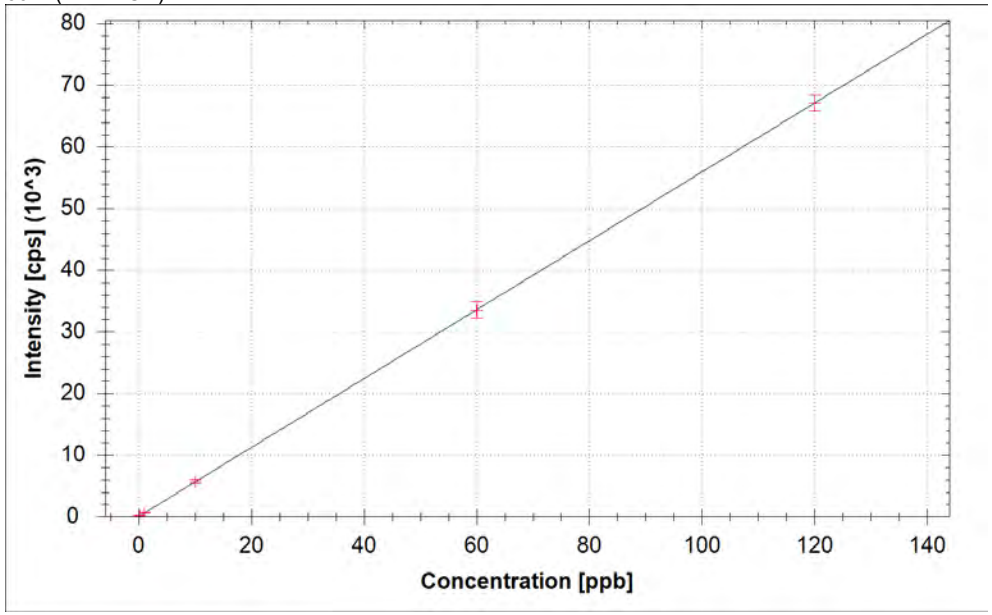
f(x) = 21.3082*x + 35.4905
R² = 0.9996
BEC = 1.666 ppb
LoD = 1.9354 ppb

59Co (KED AGD)



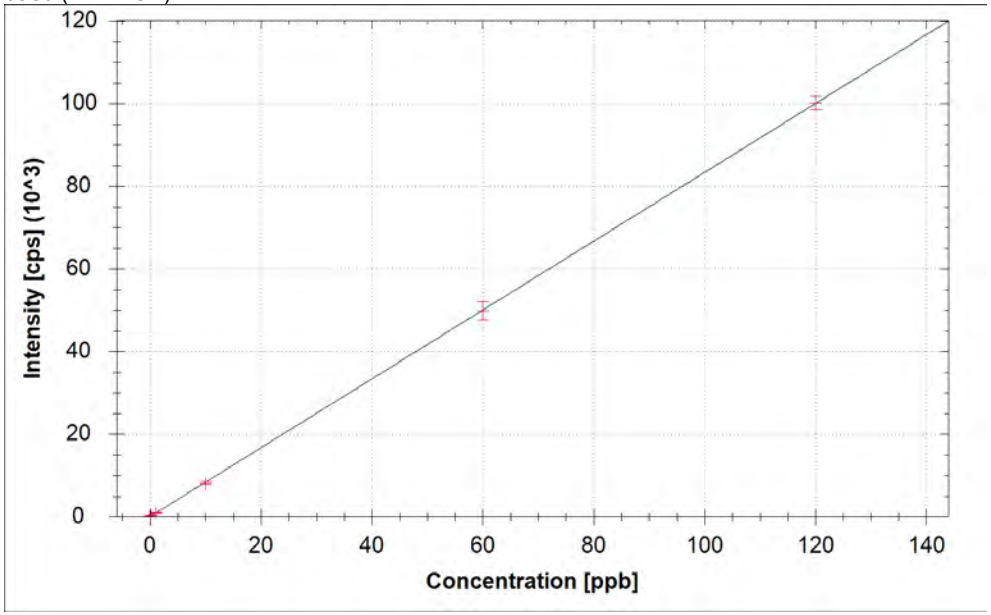
f(x) = 1987.9806*x + 19.9237
R² = 0.9999
BEC = 0.010 ppb
LoD = 0.0095 ppb

60Ni (KED AGD)



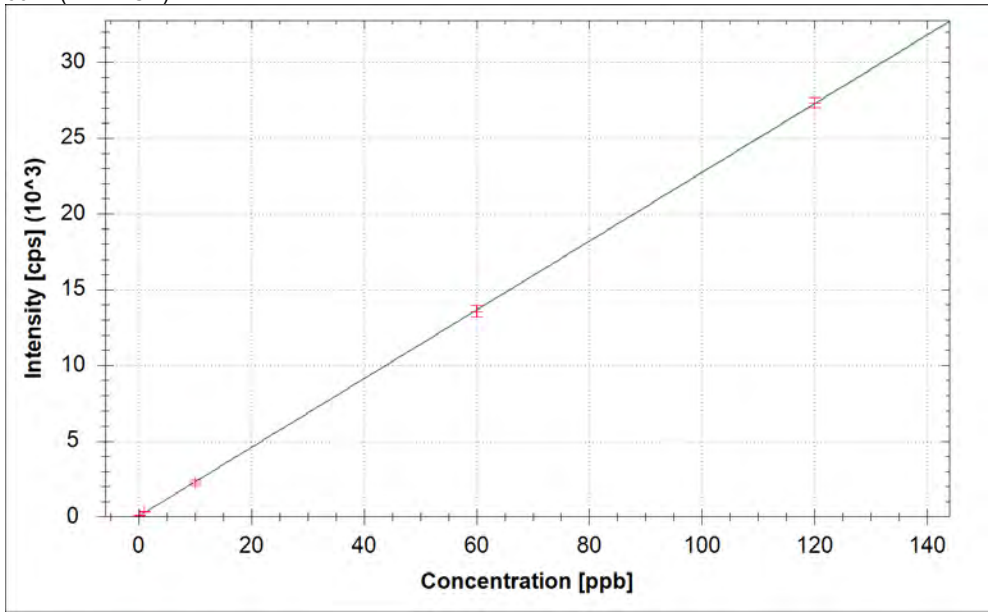
f(x) = 558.6298*x + 71.0284
R² = 1.0000
BEC = 0.127 ppb
LoD = 0.0332 ppb

65Cu (KED AGD)



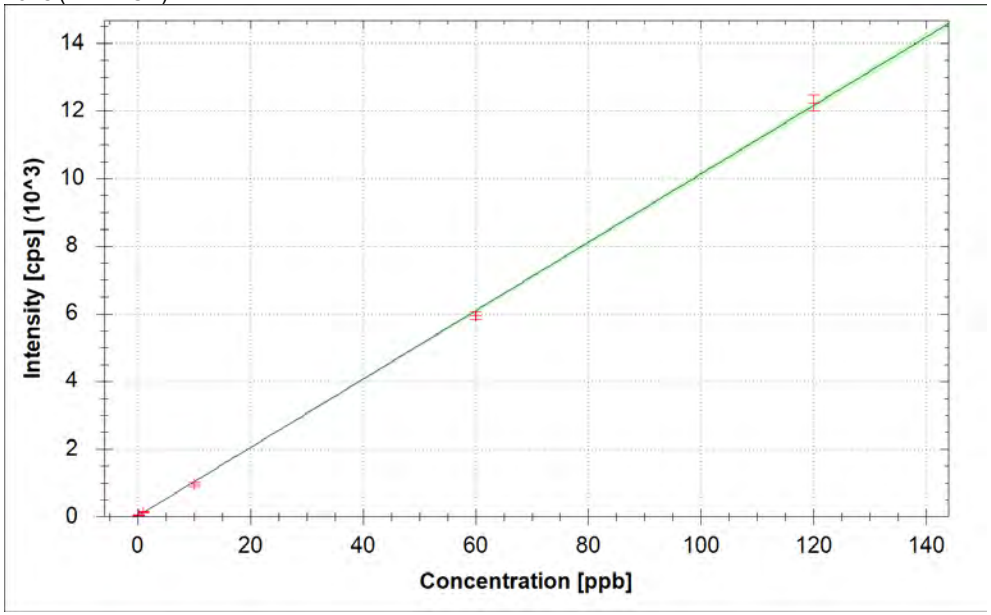
f(x) = 833.1199*x + 42.3475
R² = 1.0000
BEC = 0.051 ppb
LoD = 0.0390 ppb

66Zn (KED AGD)



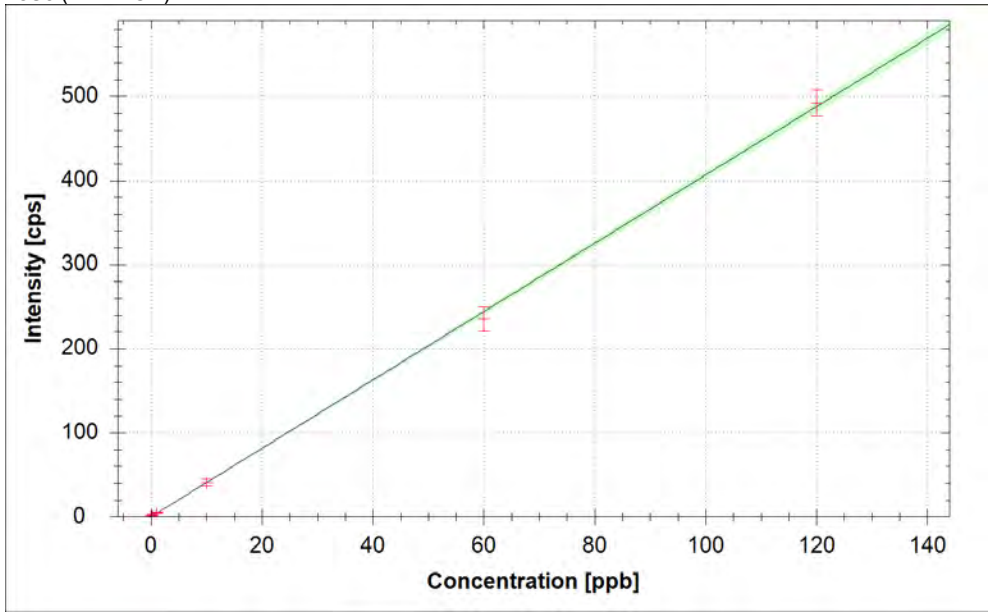
f(x) = 226.8066*x + 43.1120
R² = 1.0000
BEC = 0.190 ppb
LoD = 0.1155 ppb

75As (KED AGD)



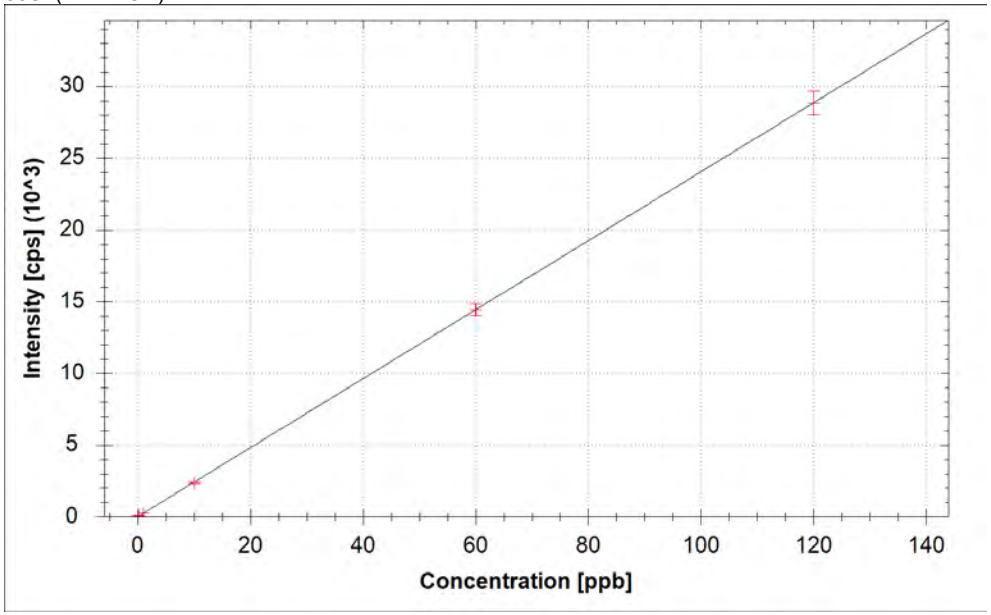
f(x) = 101.0684*x + 25.2015
R² = 0.9997
BEC = 0.249 ppb
LoD = 0.1126 ppb

78Se (KED AGD)



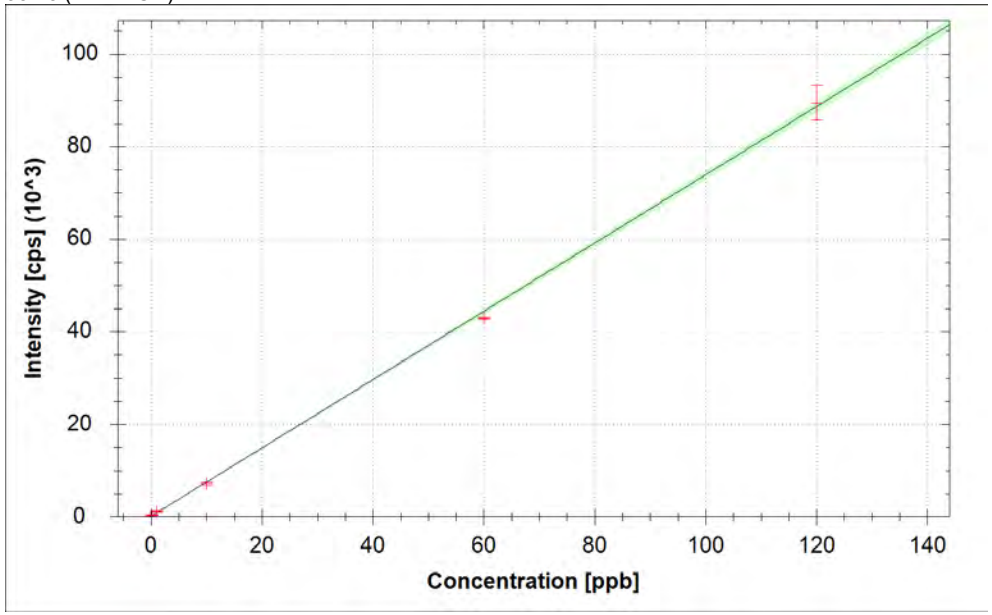
f(x) = 4.0648*x + 0.0843
R² = 0.9995
BEC = 0.021 ppb
LoD = 0.1059 ppb

88Sr (KED AGD)



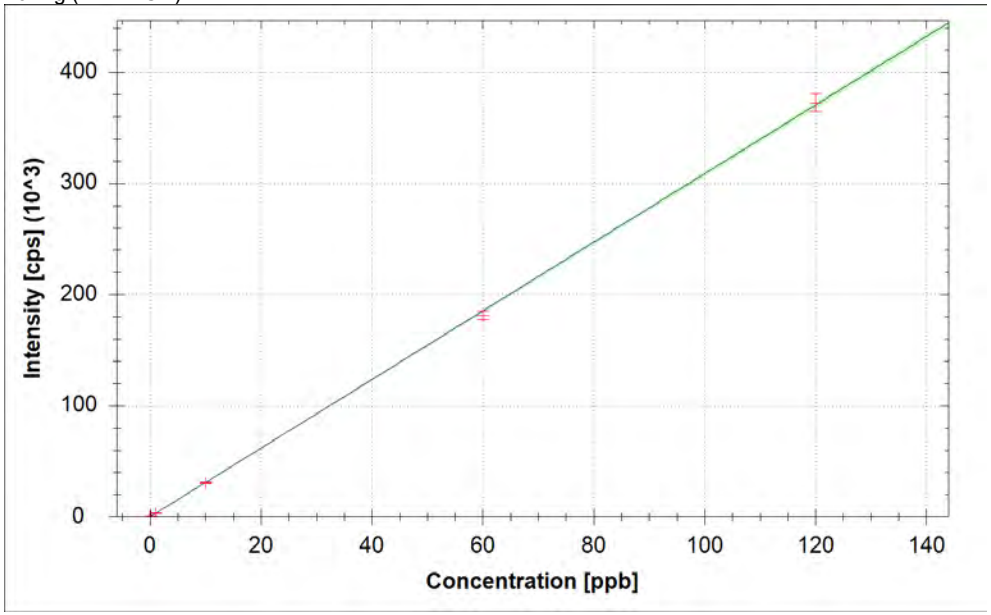
f(x) = 240.3272*x + 12.3629
R² = 1.0000
BEC = 0.051 ppb
LoD = 0.0078 ppb

95Mo (KED AGD)



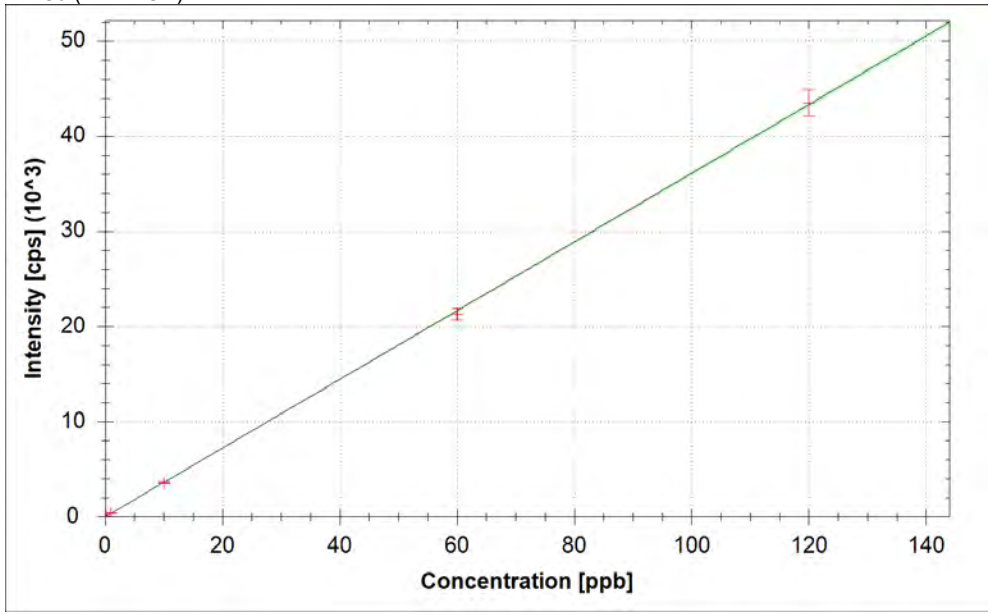
f(x) = 737.5559*x + 121.7936
R² = 0.9995
BEC = 0.165 ppb
LoD = 0.1743 ppb

107Ag (KED AGD)



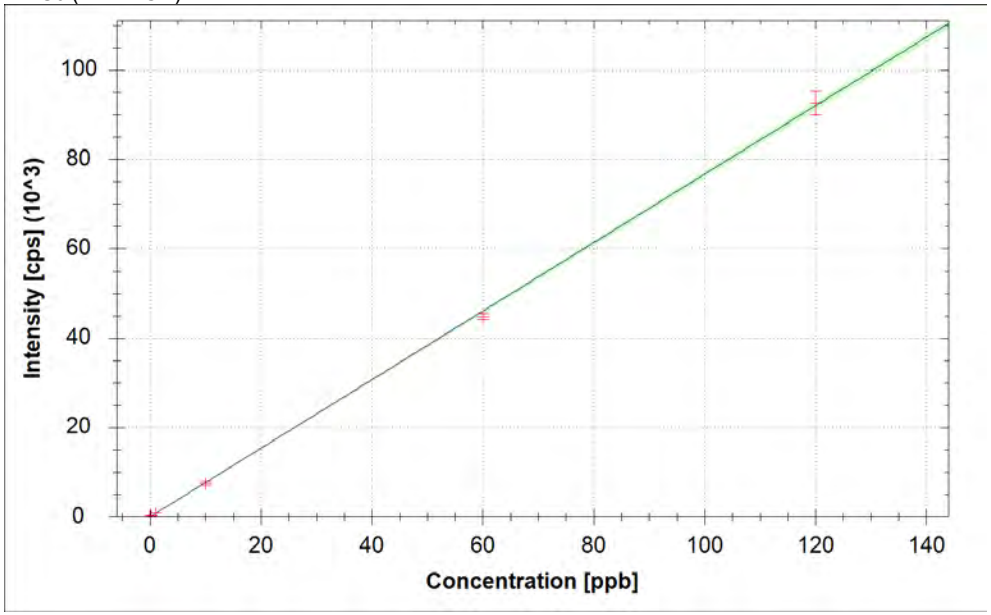
f(x) = 3085.5554*x + 8.9074
R² = 0.9998
BEC = 0.003 ppb
LoD = 0.0038 ppb

111Cd (KED AGD)



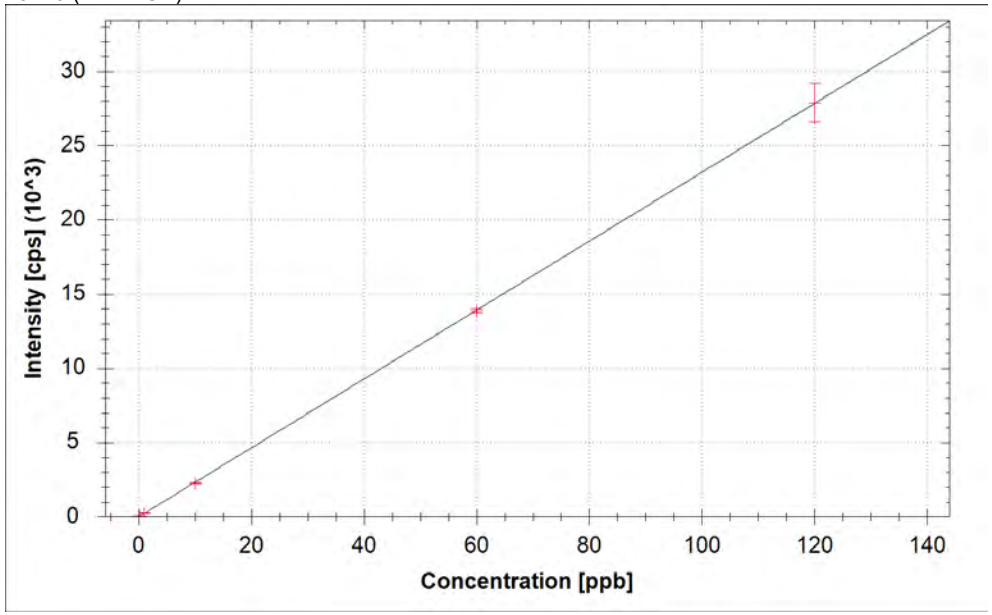
f(x) = 360.8447*x
R² = 0.9999
BEC = 0.000 ppb
LoD = 0.0000 ppb

121Sb (KED AGD)



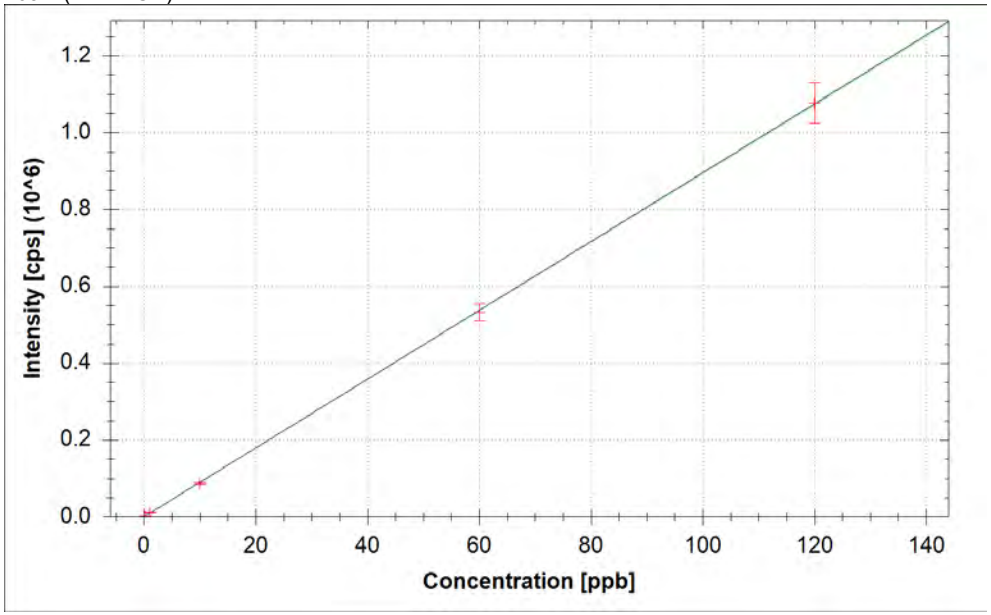
f(x) = 766.5565*x + 5.3464
R² = 0.9997
BEC = 0.007 ppb
LoD = 0.0055 ppb

137Ba (KED AGD)



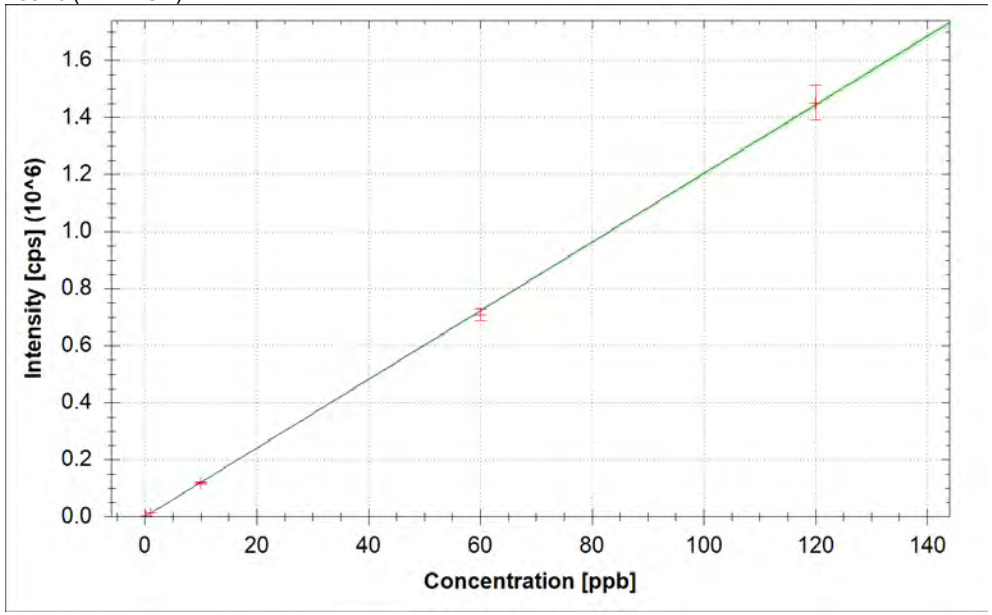
f(x) = 231.9344*x + 4.4209
R² = 1.0000
BEC = 0.019 ppb
LoD = 0.0654 ppb

205Tl (KED AGD)



f(x) = 8949.4973*x + 50.1460
R² = 1.0000
BEC = 0.006 ppb
LoD = 0.0047 ppb

208Pb (KED AGD)



f(x) = 12030.4041*x + 78.0986
R² = 0.9999
BEC = 0.006 ppb
LoD = 0.0057 ppb

Standards:

Analysis Index: 4
Analysis Name: 0.2/20 Cal
Analysis Type: STD
Analysis Started at: 12/3/2024 6:44:33 AM
Total Dilution Factor 50000
Rack 0
Vial 2

Category	Concentration average	Concentration RSD	Standard Concentration	Standard Relative Difference
6Li (STD AGD)	102.722 %	3.9 %		0.000 %
6Li (KED AGD)	107.071 %	6.6 %		0.000 %
9Be (STD AGD)	0.203 ppb	7.9 %	0.200 ppb	1.281 %
23Na (KED AGD)	12.675 ppb	76.2 %	20.000 ppb	36.627 %
24Mg (KED AGD)	18.191 ppb	4.9 %	20.000 ppb	9.045 %
27Al (KED AGD)	-0.061 ppb	591.0 %	0.200 ppb	130.452 %
39K (KED AGD)	18.667 ppb	66.9 %	20.000 ppb	6.666 %
44Ca (KED AGD)	16.916 ppb	23.8 %	20.000 ppb	15.421 %
45Sc (STD AGD)	99.245 %	0.7 %		0.000 %
51V (KED AGD)	0.184 ppb	56.7 %	0.200 ppb	7.864 %
52Cr (KED AGD)	0.141 ppb	19.6 %	0.200 ppb	29.719 %
55Mn (KED AGD)	0.409 ppb	21.0 %	0.200 ppb	104.434 %
57Fe (KED AGD)	18.632 ppb	22.3 %	20.000 ppb	6.842 %
59Co (KED AGD)	0.238 ppb	26.9 %	0.200 ppb	19.120 %
60Ni (KED AGD)	0.177 ppb	21.4 %	0.200 ppb	11.263 %
65Cu (KED AGD)	0.253 ppb	4.8 %	0.200 ppb	26.453 %
66Zn (KED AGD)	0.159 ppb	10.9 %	0.200 ppb	20.448 %
74Ge (KED AGD)	99.013 %	4.6 %		0.000 %
75As (KED AGD)	0.239 ppb	33.5 %	0.200 ppb	19.255 %
78Se (KED AGD)	0.340 ppb	76.0 %	0.200 ppb	70.067 %
88Sr (KED AGD)	0.206 ppb	13.4 %	0.200 ppb	3.108 %
95Mo (KED AGD)	0.236 ppb	56.3 %	0.200 ppb	17.777 %
103Rh (KED AGD)	101.192 %	6.8 %		0.000 %
107Ag (KED AGD)	0.188 ppb	7.9 %	0.200 ppb	6.144 %
111Cd (KED AGD)	0.188 ppb	13.8 %	0.200 ppb	5.776 %
115In (KED AGD)	100.633 %	4.7 %		0.000 %
121Sb (KED AGD)	0.206 ppb	12.3 %	0.200 ppb	2.980 %
137Ba (KED AGD)	0.151 ppb	30.1 %	0.200 ppb	24.588 %
159Tb (KED AGD)	101.166 %	5.7 %		0.000 %
175Lu (KED AGD)	101.053 %	6.4 %		0.000 %
205Tl (KED AGD)	0.193 ppb	10.3 %	0.200 ppb	3.402 %
208Pb (KED AGD)	0.200 ppb	7.7 %	0.200 ppb	0.091 %
209Bi (KED AGD)	101.796 %	6.2 %		0.000 %

Standards:

Analysis Index:	5
Analysis Name:	x1/100 Cal
Analysis Type:	STD
Analysis Started at:	12/3/2024 6:49:00 AM
Total Dilution Factor	10000
Rack	0
Vial	3

Standards:

Analysis Index: 6
Analysis Name: 10/1000 Cal
Analysis Type: STD
Analysis Started at: 12/3/2024 6:53:28 AM
Total Dilution Factor 1000
Rack 0
Vial 4

Category	Concentration average	Concentration RSD	Standard Concentration	Standard Relative Difference
6Li (STD AGD)	108.169 %	5.4 %		0.000 %
6Li (KED AGD)	114.703 %	4.9 %		0.000 %
9Be (STD AGD)	10.081 ppb	2.0 %	10.000 ppb	0.815 %
23Na (KED AGD)	988.615 ppb	3.9 %	1,000.000 ppb	1.138 %
24Mg (KED AGD)	972.587 ppb	2.7 %	1,000.000 ppb	2.741 %
27Al (KED AGD)	8.824 ppb	4.3 %	10.000 ppb	11.762 %
39K (KED AGD)	960.847 ppb	4.2 %	1,000.000 ppb	3.915 %
44Ca (KED AGD)	981.219 ppb	3.1 %	1,000.000 ppb	1.878 %
45Sc (STD AGD)	104.420 %	2.3 %		0.000 %
51V (KED AGD)	9.543 ppb	11.1 %	10.000 ppb	4.575 %
52Cr (KED AGD)	9.669 ppb	2.7 %	10.000 ppb	3.315 %
55Mn (KED AGD)	10.054 ppb	5.6 %	10.000 ppb	0.545 %
57Fe (KED AGD)	1,014.612 ppb	3.9 %	1,000.000 ppb	1.461 %
59Co (KED AGD)	10.294 ppb	2.0 %	10.000 ppb	2.938 %
60Ni (KED AGD)	10.134 ppb	5.9 %	10.000 ppb	1.343 %
65Cu (KED AGD)	9.688 ppb	5.2 %	10.000 ppb	3.123 %
66Zn (KED AGD)	9.718 ppb	7.6 %	10.000 ppb	2.819 %
74Ge (KED AGD)	110.287 %	5.2 %		0.000 %
75As (KED AGD)	9.204 ppb	7.4 %	10.000 ppb	7.960 %
78Se (KED AGD)	9.995 ppb	10.1 %	10.000 ppb	0.055 %
88Sr (KED AGD)	9.811 ppb	4.3 %	10.000 ppb	1.888 %
95Mo (KED AGD)	9.494 ppb	4.8 %	10.000 ppb	5.057 %
103Rh (KED AGD)	107.159 %	3.2 %		0.000 %
107Ag (KED AGD)	9.877 ppb	2.0 %	10.000 ppb	1.231 %
111Cd (KED AGD)	9.963 ppb	3.7 %	10.000 ppb	0.365 %
115In (KED AGD)	108.964 %	4.4 %		0.000 %
121Sb (KED AGD)	9.722 ppb	5.6 %	10.000 ppb	2.778 %
137Ba (KED AGD)	9.658 ppb	3.1 %	10.000 ppb	3.418 %
159Tb (KED AGD)	108.854 %	1.9 %		0.000 %
175Lu (KED AGD)	110.326 %	1.7 %		0.000 %
205Tl (KED AGD)	9.626 ppb	4.4 %	10.000 ppb	3.743 %
208Pb (KED AGD)	9.824 ppb	2.8 %	10.000 ppb	1.758 %
209Bi (KED AGD)	110.716 %	3.1 %		0.000 %

Standards:

Analysis Index: 7
Analysis Name: 60/6000 Cal
Analysis Type: STD
Analysis Started at: 12/3/2024 6:57:56 AM
Total Dilution Factor 166.6666666
Rack 0
Vial 5

Category	Concentration average	Concentration RSD	Standard Concentration	Standard Relative Difference
6Li (STD AGD)	107.436 %	4.4 %		0.000 %
6Li (KED AGD)	115.489 %	1.7 %		0.000 %
9Be (STD AGD)	59.072 ppb	2.0 %	60.000 ppb	1.546 %
23Na (KED AGD)	6,010.919 ppb	2.8 %	6,000.000 ppb	0.182 %
24Mg (KED AGD)	5,984.382 ppb	3.3 %	6,000.000 ppb	0.260 %
27Al (KED AGD)	57.287 ppb	4.0 %	60.000 ppb	4.522 %
39K (KED AGD)	6,060.335 ppb	0.9 %	6,000.000 ppb	1.006 %
44Ca (KED AGD)	5,807.476 ppb	2.1 %	6,000.000 ppb	3.209 %
45Sc (STD AGD)	105.977 %	0.6 %		0.000 %
51V (KED AGD)	58.527 ppb	2.2 %	60.000 ppb	2.455 %
52Cr (KED AGD)	59.478 ppb	3.0 %	60.000 ppb	0.870 %
55Mn (KED AGD)	59.947 ppb	3.0 %	60.000 ppb	0.088 %
57Fe (KED AGD)	5,805.118 ppb	2.3 %	6,000.000 ppb	3.248 %
59Co (KED AGD)	59.032 ppb	5.5 %	60.000 ppb	1.613 %
60Ni (KED AGD)	59.879 ppb	4.0 %	60.000 ppb	0.201 %
65Cu (KED AGD)	59.730 ppb	4.6 %	60.000 ppb	0.450 %
66Zn (KED AGD)	59.572 ppb	2.6 %	60.000 ppb	0.714 %
74Ge (KED AGD)	109.833 %	2.9 %		0.000 %
75As (KED AGD)	58.549 ppb	2.0 %	60.000 ppb	2.418 %
78Se (KED AGD)	57.831 ppb	6.1 %	60.000 ppb	3.614 %
88Sr (KED AGD)	60.095 ppb	2.8 %	60.000 ppb	0.158 %
95Mo (KED AGD)	57.931 ppb	0.5 %	60.000 ppb	3.449 %
103Rh (KED AGD)	108.445 %	2.7 %		0.000 %
107Ag (KED AGD)	58.734 ppb	2.0 %	60.000 ppb	2.111 %
111Cd (KED AGD)	58.987 ppb	3.0 %	60.000 ppb	1.688 %
115In (KED AGD)	110.456 %	1.6 %		0.000 %
121Sb (KED AGD)	58.434 ppb	1.6 %	60.000 ppb	2.610 %
137Ba (KED AGD)	59.773 ppb	0.9 %	60.000 ppb	0.378 %
159Tb (KED AGD)	110.766 %	0.6 %		0.000 %
175Lu (KED AGD)	110.304 %	1.9 %		0.000 %
205Tl (KED AGD)	59.435 ppb	4.1 %	60.000 ppb	0.942 %
208Pb (KED AGD)	58.856 ppb	3.0 %	60.000 ppb	1.907 %
209Bi (KED AGD)	111.548 %	2.0 %		0.000 %

Standards:

Analysis Index: 8
Analysis Name: 120/12000 Cal
Analysis Type: STD
Analysis Started at: 12/3/2024 7:02:24 AM
Total Dilution Factor 83.33333333
Rack 0
Vial 6

Category	Concentration average	Concentration RSD	Standard Concentration	Standard Relative Difference
6Li (STD AGD)	106.282 %	3.6 %		0.000 %
6Li (KED AGD)	117.789 %	0.7 %		0.000 %
9Be (STD AGD)	120.457 ppb	1.0 %	120.000 ppb	0.381 %
23Na (KED AGD)	11,995.681 ppb	4.8 %	12,000.000 ppb	0.036 %
24Mg (KED AGD)	12,010.072 ppb	0.6 %	12,000.000 ppb	0.084 %
27Al (KED AGD)	121.454 ppb	0.5 %	120.000 ppb	1.212 %
39K (KED AGD)	11,973.067 ppb	3.4 %	12,000.000 ppb	0.224 %
44Ca (KED AGD)	12,097.757 ppb	2.0 %	12,000.000 ppb	0.815 %
45Sc (STD AGD)	105.511 %	1.7 %		0.000 %
51V (KED AGD)	120.779 ppb	4.6 %	120.000 ppb	0.649 %
52Cr (KED AGD)	120.289 ppb	3.8 %	120.000 ppb	0.241 %
55Mn (KED AGD)	120.021 ppb	2.5 %	120.000 ppb	0.018 %
57Fe (KED AGD)	12,096.115 ppb	0.9 %	12,000.000 ppb	0.801 %
59Co (KED AGD)	120.460 ppb	3.5 %	120.000 ppb	0.383 %
60Ni (KED AGD)	120.049 ppb	1.9 %	120.000 ppb	0.041 %
65Cu (KED AGD)	120.161 ppb	1.6 %	120.000 ppb	0.134 %
66Zn (KED AGD)	120.236 ppb	1.2 %	120.000 ppb	0.197 %
74Ge (KED AGD)	110.009 %	2.4 %		0.000 %
75As (KED AGD)	120.791 ppb	1.9 %	120.000 ppb	0.659 %
78Se (KED AGD)	121.084 ppb	3.2 %	120.000 ppb	0.903 %
88Sr (KED AGD)	119.968 ppb	2.9 %	120.000 ppb	0.026 %
95Mo (KED AGD)	121.074 ppb	4.2 %	120.000 ppb	0.895 %
103Rh (KED AGD)	109.504 %	5.1 %		0.000 %
107Ag (KED AGD)	120.643 ppb	2.1 %	120.000 ppb	0.536 %
111Cd (KED AGD)	120.509 ppb	3.2 %	120.000 ppb	0.424 %
115In (KED AGD)	110.297 %	3.2 %		0.000 %
121Sb (KED AGD)	120.805 ppb	2.9 %	120.000 ppb	0.671 %
137Ba (KED AGD)	120.142 ppb	4.7 %	120.000 ppb	0.118 %
159Tb (KED AGD)	111.645 %	3.4 %		0.000 %
175Lu (KED AGD)	112.452 %	3.8 %		0.000 %
205Tl (KED AGD)	120.312 ppb	4.9 %	120.000 ppb	0.260 %
208Pb (KED AGD)	120.586 ppb	4.2 %	120.000 ppb	0.489 %
209Bi (KED AGD)	112.599 %	3.5 %		0.000 %

Standards:

Analysis Index: 9
Analysis Name: 1/100 Cal
Analysis Type: STD
Analysis Started at: 12/3/2024 7:07:58 AM
Total Dilution Factor 10000
Rack 0
Vial 3

Category	Concentration average	Concentration RSD	Standard Concentration	Standard Relative Difference
6Li (STD AGD)	107.604 %	3.7 %		0.000 %
6Li (KED AGD)	117.228 %	2.3 %		0.000 %
9Be (STD AGD)	1.053 ppb	0.8 %	1.000 ppb	5.289 %
23Na (KED AGD)	78.431 ppb	7.1 %	100.000 ppb	21.569 %
24Mg (KED AGD)	102.901 ppb	5.9 %	100.000 ppb	2.901 %
27Al (KED AGD)	1.067 ppb	46.5 %	1.000 ppb	6.696 %
39K (KED AGD)	103.585 ppb	16.1 %	100.000 ppb	3.585 %
44Ca (KED AGD)	109.031 ppb	23.2 %	100.000 ppb	9.031 %
45Sc (STD AGD)	101.882 %	1.1 %		0.000 %
51V (KED AGD)	0.509 ppb	23.3 %	1.000 ppb	49.122 %
52Cr (KED AGD)	0.977 ppb	8.9 %	1.000 ppb	2.263 %
55Mn (KED AGD)	1.058 ppb	8.0 %	1.000 ppb	5.822 %
57Fe (KED AGD)	113.297 ppb	8.3 %	100.000 ppb	13.297 %
59Co (KED AGD)	0.967 ppb	1.7 %	1.000 ppb	3.335 %
60Ni (KED AGD)	1.023 ppb	11.2 %	1.000 ppb	2.323 %
65Cu (KED AGD)	1.036 ppb	10.9 %	1.000 ppb	3.590 %
66Zn (KED AGD)	1.219 ppb	9.3 %	1.000 ppb	21.903 %
74Ge (KED AGD)	106.462 %	1.9 %		0.000 %
75As (KED AGD)	1.055 ppb	12.5 %	1.000 ppb	5.467 %
78Se (KED AGD)	1.088 ppb	14.6 %	1.000 ppb	8.841 %
88Sr (KED AGD)	0.997 ppb	1.2 %	1.000 ppb	0.281 %
95Mo (KED AGD)	1.387 ppb	18.4 %	1.000 ppb	38.711 %
103Rh (KED AGD)	110.221 %	1.6 %		0.000 %
107Ag (KED AGD)	1.004 ppb	2.5 %	1.000 ppb	0.371 %
111Cd (KED AGD)	1.013 ppb	3.0 %	1.000 ppb	1.267 %
115In (KED AGD)	108.737 %	1.6 %		0.000 %
121Sb (KED AGD)	1.101 ppb	4.4 %	1.000 ppb	10.063 %
137Ba (KED AGD)	1.034 ppb	8.2 %	1.000 ppb	3.404 %
159Tb (KED AGD)	113.222 %	1.7 %		0.000 %
175Lu (KED AGD)	110.657 %	1.4 %		0.000 %
205Tl (KED AGD)	1.188 ppb	2.9 %	1.000 ppb	18.824 %
208Pb (KED AGD)	1.041 ppb	1.1 %	1.000 ppb	4.095 %
209Bi (KED AGD)	114.126 %	1.8 %		0.000 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	1	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	Rinse	Rack	0		
Analysis started at:	12/3/2024 6:31:09 AM	Vial	1		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	104.396 %	113.019 %	0.014 ppb	13.493 ppb	4.744 ppb	10.123 ppb	5.094 ppb	19.867 ppb	100.167 %
Concentration per Run 1	99.654 %	115.320 %	0.013 ppb	14.984 ppb	6.819 ppb	10.124 ppb	6.768 ppb	4.449 ppb	99.464 %
Concentration per Run 2	106.179 %	107.744 %	0.014 ppb	21.395 ppb	3.089 ppb	11.205 ppb	4.589 ppb	29.911 ppb	101.952 %
Concentration per Run 3	107.354 %	115.994 %	0.015 ppb	4.101 ppb	4.326 ppb	9.041 ppb	3.925 ppb	25.239 ppb	99.085 %
Concentration RSD	4.0 %	4.1 %	6.6 %	64.8 %	40.0 %	10.7 %	29.2 %	68.2 %	1.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.124 ppb	0.137 ppb	0.490 ppb	68.729 ppb	0.027 ppb	2.873 ppb	0.571 ppb	2.468 ppb	110.119 %
Concentration per Run 1	-0.144 ppb	0.127 ppb	0.516 ppb	70.229 ppb	0.015 ppb	3.011 ppb	0.626 ppb	2.557 ppb	103.725 %
Concentration per Run 2	-0.067 ppb	0.181 ppb	0.420 ppb	73.795 ppb	0.038 ppb	2.865 ppb	0.575 ppb	2.453 ppb	111.699 %
Concentration per Run 3	-0.161 ppb	0.103 ppb	0.534 ppb	62.163 ppb	0.028 ppb	2.744 ppb	0.512 ppb	2.395 ppb	114.932 %
Concentration RSD	40.2 %	29.3 %	12.5 %	8.7 %	42.7 %	4.7 %	9.9 %	3.3 %	5.2 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.040 ppb	0.046 ppb	0.019 ppb	0.248 ppb	101.983 %	0.041 ppb	0.002 ppb	102.582 %	0.034 ppb
Concentration per Run 1	0.093 ppb	-0.050 ppb	0.018 ppb	0.274 ppb	102.516 %	0.044 ppb	0.000 ppb	103.713 %	0.025 ppb
Concentration per Run 2	-0.027 ppb	0.008 ppb	0.011 ppb	0.235 ppb	100.931 %	0.037 ppb	0.004 ppb	100.080 %	0.033 ppb
Concentration per Run 3	0.053 ppb	0.179 ppb	0.026 ppb	0.236 ppb	102.502 %	0.041 ppb	0.004 ppb	103.953 %	0.043 ppb
Concentration RSD	154.5 %	259.0 %	41.3 %	9.0 %	0.9 %	9.3 %	86.6 %	2.1 %	27.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.078 ppb	104.522 %	104.073 %	0.005 ppb	0.089 ppb	104.630 %
Concentration per Run 1	0.063 ppb	106.682 %	102.986 %	0.003 ppb	0.088 ppb	107.504 %
Concentration per Run 2	0.122 ppb	103.674 %	103.099 %	0.006 ppb	0.098 ppb	102.675 %
Concentration per Run 3	0.050 ppb	103.208 %	106.134 %	0.005 ppb	0.081 ppb	103.712 %
Concentration RSD	48.8 %	1.8 %	1.7 %	31.4 %	9.8 %	2.4 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index: 2
Analysis label: CAL LOT #M23-1225
Analysis started at: 12/3/2024 6:35:35 AM
User name ALPHALAB\a2-icpmsq2
Rack 0
Vial 1
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	99.786 %	111.111 %	0.016 ppb	6.954 ppb	5.992 ppb	9.533 ppb	11.375 ppb	15.948 ppb	95.904 %
Concentration per Run 1	95.234 %	117.677 %	0.015 ppb	-4.561 ppb	3.868 ppb	9.279 ppb	2.855 ppb	8.770 ppb	94.603 %
Concentration per Run 2	100.982 %	118.182 %	0.016 ppb	-0.534 ppb	6.728 ppb	9.155 ppb	17.837 ppb	24.172 ppb	94.873 %
Concentration per Run 3	103.143 %	97.475 %	0.018 ppb	25.957 ppb	7.380 ppb	10.166 ppb	13.433 ppb	14.901 ppb	98.236 %
Concentration RSD	4.1 %	10.6 %	9.6 %	238.4 %	31.2 %	5.8 %	67.7 %	48.6 %	2.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.157 ppb	0.167 ppb	0.432 ppb	73.240 ppb	0.017 ppb	3.045 ppb	0.575 ppb	2.553 ppb	99.832 %
Concentration per Run 1	-0.156 ppb	0.168 ppb	0.361 ppb	80.521 ppb	0.025 ppb	3.098 ppb	0.629 ppb	2.416 ppb	101.382 %
Concentration per Run 2	-0.170 ppb	0.152 ppb	0.557 ppb	72.858 ppb	0.016 ppb	2.909 ppb	0.556 ppb	2.817 ppb	100.554 %
Concentration per Run 3	-0.146 ppb	0.181 ppb	0.380 ppb	66.341 ppb	0.011 ppb	3.128 ppb	0.540 ppb	2.425 ppb	97.559 %
Concentration RSD	7.7 %	9.0 %	25.0 %	9.7 %	43.0 %	3.9 %	8.3 %	9.0 %	2.0 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.018 ppb	0.053 ppb	0.023 ppb	0.177 ppb	99.487 %	0.034 ppb	0.002 ppb	99.851 %	0.020 ppb
Concentration per Run 1	0.018 ppb	0.091 ppb	0.029 ppb	0.151 ppb	107.309 %	0.034 ppb	0.007 ppb	106.600 %	0.016 ppb
Concentration per Run 2	0.013 ppb	-0.046 ppb	0.017 ppb	0.203 ppb	97.480 %	0.037 ppb	0.000 ppb	98.186 %	0.018 ppb
Concentration per Run 3	0.021 ppb	0.112 ppb	0.023 ppb	0.178 ppb	93.670 %	0.032 ppb	0.000 ppb	94.768 %	0.026 ppb
Concentration RSD	23.2 %	163.2 %	24.7 %	14.4 %	7.1 %	7.8 %	173.2 %	6.1 %	27.4 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.087 ppb	101.362 %	101.252 %	0.004 ppb	0.093 ppb	101.953 %
Concentration per Run 1	0.048 ppb	107.992 %	110.855 %	0.001 ppb	0.088 ppb	108.473 %
Concentration per Run 2	0.096 ppb	101.310 %	98.916 %	0.001 ppb	0.106 ppb	99.461 %
Concentration per Run 3	0.117 ppb	94.784 %	93.986 %	0.008 ppb	0.084 ppb	97.925 %
Concentration RSD	40.9 %	6.5 %	8.6 %	114.4 %	12.9 %	5.6 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	3	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	Blank NTB ICPMSQ2	Rack	4		
Analysis started at:	12/3/2024 6:40:01 AM	Vial	49		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	100.000 %	100.000 %	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	100.000 %
Concentration per Run	100.000 %	100.000 %	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	100.000 %
Concentration RSD	0.0 %	0.0 %	0.4 %	0.0 %	0.3 %	0.1 %	0.1 %	0.1 %	0.0 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	100.000 %
Concentration per Run	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	100.000 %
Concentration RSD	0.1 %	0.1 %	0.6 %	0.4 %	0.3 %	0.1 %	0.3 %	0.2 %	0.0 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	100.000 %	0.000 ppb	0.000 ppb	100.000 %	0.000 ppb
Concentration per Run	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	100.000 %	0.000 ppb	0.000 ppb	100.000 %	0.000 ppb
Concentration RSD	0.2 %	1.7 %	0.1 %	0.4 %	0.0 %	0.4 %		0.0 %	0.3 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.000 ppb	100.000 %	100.000 %	0.000 ppb	0.000 ppb	100.000 %
Concentration per Run	0.000 ppb	100.000 %	100.000 %	0.000 ppb	0.000 ppb	100.000 %
Concentration RSD	1.1 %	0.0 %	0.0 %	0.3 %	0.3 %	0.0 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	4	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	0.2/20 Cal	Rack	0		
Analysis started at:	12/3/2024 6:44:33 AM	Vial	2		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	102.722 %	107.071 %	0.203 ppb	12.675 ppb	18.191 ppb	-0.061 ppb	18.667 ppb	16.916 ppb	99.245 %
Concentration per Run 1	98.276 %	114.815 %	0.221 ppb	1.861 ppb	18.851 ppb	-0.361 ppb	5.729 ppb	16.181 ppb	98.392 %
Concentration per Run 2	103.992 %	101.010 %	0.194 ppb	20.460 ppb	18.550 ppb	-0.160 ppb	30.629 ppb	13.305 ppb	99.720 %
Concentration per Run 3	105.897 %	105.387 %	0.193 ppb	15.703 ppb	17.171 ppb	0.338 ppb	19.642 ppb	21.262 ppb	99.623 %
Concentration RSD	3.9 %	6.6 %	7.9 %	76.2 %	4.9 %	591.0 %	66.9 %	23.8 %	0.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.184 ppb	0.141 ppb	0.409 ppb	18.632 ppb	0.238 ppb	0.177 ppb	0.253 ppb	0.159 ppb	99.013 %
Concentration per Run 1	0.081 ppb	0.109 ppb	0.420 ppb	18.552 ppb	0.179 ppb	0.154 ppb	0.253 ppb	0.156 ppb	104.100 %
Concentration per Run 2	0.290 ppb	0.161 ppb	0.488 ppb	14.523 ppb	0.306 ppb	0.158 ppb	0.241 ppb	0.178 ppb	95.177 %
Concentration per Run 3	0.181 ppb	0.152 ppb	0.318 ppb	22.820 ppb	0.229 ppb	0.221 ppb	0.265 ppb	0.144 ppb	97.761 %
Concentration RSD	56.7 %	19.6 %	21.0 %	22.3 %	26.9 %	21.4 %	4.8 %	10.9 %	4.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.239 ppb	0.340 ppb	0.206 ppb	0.236 ppb	101.192 %	0.188 ppb	0.188 ppb	100.633 %	0.206 ppb
Concentration per Run 1	0.154 ppb	0.176 ppb	0.177 ppb	0.087 ppb	108.730 %	0.178 ppb	0.176 ppb	106.113 %	0.189 ppb
Concentration per Run 2	0.313 ppb	0.638 ppb	0.211 ppb	0.276 ppb	99.440 %	0.205 ppb	0.218 ppb	97.510 %	0.235 ppb
Concentration per Run 3	0.249 ppb	0.206 ppb	0.231 ppb	0.343 ppb	95.405 %	0.180 ppb	0.171 ppb	98.276 %	0.193 ppb
Concentration RSD	33.5 %	76.0 %	13.4 %	56.3 %	6.8 %	7.9 %	13.8 %	4.7 %	12.3 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.151 ppb	101.166 %	101.053 %	0.193 ppb	0.200 ppb	101.796 %
Concentration per Run 1	0.183 ppb	107.723 %	108.279 %	0.175 ppb	0.183 ppb	108.418 %
Concentration per Run 2	0.171 ppb	99.061 %	99.036 %	0.189 ppb	0.213 ppb	101.111 %
Concentration per Run 3	0.099 ppb	96.715 %	95.845 %	0.215 ppb	0.205 ppb	95.859 %
Concentration RSD	30.1 %	5.7 %	6.4 %	10.3 %	7.7 %	6.2 %

Analysis index:	5	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	x1/100 Cal	Rack	0		
Analysis started at:	12/3/2024 6:49:00 AM	Vial	3		

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	6	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	10/1000 Cal	Rack	0		
Analysis started at:	12/3/2024 6:53:28 AM	Vial	4		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	108.169 %	114.703 %	10.081 ppb	988.615 ppb	972.587 ppb	8.824 ppb	960.847 ppb	981.219 ppb	104.420 %
Concentration per Run 1	102.038 %	109.933 %	10.222 ppb	1,015.665 ppb	984.035 ppb	8.528 ppb	995.401 ppb	1,006.579 ppb	101.713 %
Concentration per Run 2	108.714 %	120.876 %	10.171 ppb	944.104 ppb	942.606 ppb	9.252 ppb	916.238 ppb	989.407 ppb	106.159 %
Concentration per Run 3	113.756 %	113.300 %	9.851 ppb	1,006.076 ppb	991.121 ppb	8.691 ppb	970.902 ppb	947.670 ppb	105.390 %
Concentration RSD	5.4 %	4.9 %	2.0 %	3.9 %	2.7 %	4.3 %	4.2 %	3.1 %	2.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	9.543 ppb	9.669 ppb	10.054 ppb	1,014.612 ppb	10.294 ppb	10.134 ppb	9.688 ppb	9.718 ppb	110.287 %
Concentration per Run 1	8.529 ppb	9.467 ppb	9.714 ppb	976.545 ppb	10.057 ppb	9.459 ppb	9.118 ppb	8.879 ppb	116.858 %
Concentration per Run 2	9.456 ppb	9.581 ppb	9.747 ppb	1,055.478 ppb	10.405 ppb	10.325 ppb	10.061 ppb	9.994 ppb	106.291 %
Concentration per Run 3	10.642 ppb	9.958 ppb	10.703 ppb	1,011.811 ppb	10.419 ppb	10.619 ppb	9.884 ppb	10.281 ppb	107.711 %
Concentration RSD	11.1 %	2.7 %	5.6 %	3.9 %	2.0 %	5.9 %	5.2 %	7.6 %	5.2 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	9.204 ppb	9.995 ppb	9.811 ppb	9.494 ppb	107.159 %	9.877 ppb	9.963 ppb	108.964 %	9.722 ppb
Concentration per Run 1	8.452 ppb	8.914 ppb	9.329 ppb	9.004 ppb	110.717 %	9.697 ppb	9.661 ppb	114.479 %	9.097 ppb
Concentration per Run 2	9.393 ppb	10.163 ppb	10.092 ppb	9.579 ppb	103.795 %	9.848 ppb	10.368 ppb	106.466 %	10.079 ppb
Concentration per Run 3	9.766 ppb	10.907 ppb	10.012 ppb	9.900 ppb	106.966 %	10.086 ppb	9.861 ppb	105.949 %	9.990 ppb
Concentration RSD	7.4 %	10.1 %	4.3 %	4.8 %	3.2 %	2.0 %	3.7 %	4.4 %	5.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	9.658 ppb	108.854 %	110.326 %	9.626 ppb	9.824 ppb	110.716 %
Concentration per Run 1	9.422 ppb	110.830 %	110.539 %	9.158 ppb	9.513 ppb	114.683 %
Concentration per Run 2	9.553 ppb	106.765 %	108.315 %	9.720 ppb	9.943 ppb	108.653 %
Concentration per Run 3	9.999 ppb	108.967 %	112.124 %	9.999 ppb	10.017 ppb	108.810 %
Concentration RSD	3.1 %	1.9 %	1.7 %	4.4 %	2.8 %	3.1 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	7	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	60/6000 Cal	Rack	0		
Analysis started at:	12/3/2024 6:57:56 AM	Vial	5		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	107.436 %	115.489 %	59.072 ppb	6,010.919 ppb	5,984.382 ppb	57.287 ppb	6,060.335 ppb	5,807.476 ppb	105.977 %
Concentration per Run 1	102.043 %	115.994 %	60.335 ppb	5,965.521 ppb	5,991.824 ppb	54.666 ppb	6,000.335 ppb	5,673.083 ppb	105.249 %
Concentration per Run 2	109.967 %	113.300 %	58.867 ppb	6,194.979 ppb	6,178.611 ppb	58.507 ppb	6,069.637 ppb	5,841.937 ppb	106.294 %
Concentration per Run 3	110.299 %	117.172 %	58.015 ppb	5,872.258 ppb	5,782.710 ppb	58.688 ppb	6,111.034 ppb	5,907.409 ppb	106.387 %
Concentration RSD	4.4 %	1.7 %	2.0 %	2.8 %	3.3 %	4.0 %	0.9 %	2.1 %	0.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	58.527 ppb	59.478 ppb	59.947 ppb	5,805.118 ppb	59.032 ppb	59.879 ppb	59.730 ppb	59.572 ppb	109.833 %
Concentration per Run 1	57.412 ppb	57.784 ppb	59.234 ppb	5,683.851 ppb	59.003 ppb	59.754 ppb	60.801 ppb	59.520 ppb	112.341 %
Concentration per Run 2	59.892 ppb	61.299 ppb	61.964 ppb	5,945.620 ppb	62.288 ppb	62.311 ppb	61.768 ppb	61.155 ppb	106.193 %
Concentration per Run 3	58.278 ppb	59.350 ppb	58.644 ppb	5,785.882 ppb	55.805 ppb	57.573 ppb	56.621 ppb	58.040 ppb	110.964 %
Concentration RSD	2.2 %	3.0 %	3.0 %	2.3 %	5.5 %	4.0 %	4.6 %	2.6 %	2.9 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	58.549 ppb	57.831 ppb	60.095 ppb	57.931 ppb	108.445 %	58.734 ppb	58.987 ppb	110.456 %	58.434 ppb
Concentration per Run 1	58.270 ppb	54.521 ppb	58.933 ppb	57.936 ppb	110.658 %	57.890 ppb	57.219 ppb	112.299 %	57.986 ppb
Concentration per Run 2	59.822 ppb	61.592 ppb	62.051 ppb	57.642 ppb	105.086 %	60.093 ppb	60.805 ppb	108.712 %	59.503 ppb
Concentration per Run 3	57.555 ppb	57.381 ppb	59.301 ppb	58.214 ppb	109.591 %	58.218 ppb	58.937 ppb	110.357 %	57.814 ppb
Concentration RSD	2.0 %	6.1 %	2.8 %	0.5 %	2.7 %	2.0 %	3.0 %	1.6 %	1.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	59.773 ppb	110.766 %	110.304 %	59.435 ppb	58.856 ppb	111.548 %
Concentration per Run 1	59.889 ppb	111.334 %	112.724 %	57.047 ppb	57.188 ppb	113.777 %
Concentration per Run 2	60.240 ppb	110.940 %	109.337 %	59.345 ppb	58.710 ppb	111.517 %
Concentration per Run 3	59.192 ppb	110.026 %	108.850 %	61.912 ppb	60.669 ppb	109.349 %
Concentration RSD	0.9 %	0.6 %	1.9 %	4.1 %	3.0 %	2.0 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	8	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	120/12000 Cal	Rack	0		
Analysis started at:	12/3/2024 7:02:24 AM	Vial	6		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	106.282 %	117.789 %	120.457 ppb	11,995.681 ppb	12,010.072 ppb	121.454 ppb	11,973.067 ppb	12,097.757 ppb	105.511 %
Concentration per Run 1	101.938 %	116.835 %	121.657 ppb	12,133.129 ppb	12,006.586 ppb	122.091 ppb	12,054.382 ppb	11,825.498 ppb	103.459 %
Concentration per Run 2	107.728 %	118.182 %	119.257 ppb	11,363.624 ppb	11,940.287 ppb	121.251 ppb	12,335.024 ppb	12,189.272 ppb	106.151 %
Concentration per Run 3	109.180 %	118.351 %	120.456 ppb	12,490.290 ppb	12,083.344 ppb	121.020 ppb	11,529.797 ppb	12,278.500 ppb	106.924 %
Concentration RSD	3.6 %	0.7 %	1.0 %	4.8 %	0.6 %	0.5 %	3.4 %	2.0 %	1.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	120.779 ppb	120.289 ppb	120.021 ppb	12,096.115 ppb	120.460 ppb	120.049 ppb	120.161 ppb	120.236 ppb	110.009 %
Concentration per Run 1	116.474 ppb	115.939 ppb	117.830 ppb	11,970.698 ppb	116.239 ppb	119.061 ppb	118.071 ppb	118.586 ppb	112.989 %
Concentration per Run 2	118.771 ppb	119.839 ppb	123.436 ppb	12,159.258 ppb	124.667 ppb	118.443 ppb	120.642 ppb	120.769 ppb	107.761 %
Concentration per Run 3	127.091 ppb	125.090 ppb	118.797 ppb	12,158.389 ppb	120.473 ppb	122.642 ppb	121.769 ppb	121.353 ppb	109.277 %
Concentration RSD	4.6 %	3.8 %	2.5 %	0.9 %	3.5 %	1.9 %	1.6 %	1.2 %	2.4 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	120.791 ppb	121.084 ppb	119.968 ppb	121.074 ppb	109.504 %	120.643 ppb	120.509 ppb	110.297 %	120.805 ppb
Concentration per Run 1	118.313 ppb	116.849 ppb	116.190 ppb	115.237 ppb	115.739 %	117.864 ppb	116.108 ppb	114.052 %	117.033 ppb
Concentration per Run 2	122.843 ppb	124.326 ppb	120.828 ppb	124.550 ppb	107.992 %	121.186 ppb	123.194 ppb	106.988 %	123.906 ppb
Concentration per Run 3	121.218 ppb	122.076 ppb	122.887 ppb	123.434 ppb	104.781 %	122.880 ppb	122.226 ppb	109.851 %	121.477 ppb
Concentration RSD	1.9 %	3.2 %	2.9 %	4.2 %	5.1 %	2.1 %	3.2 %	3.2 %	2.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	120.142 ppb	111.645 %	112.452 %	120.312 ppb	120.586 ppb	112.599 %
Concentration per Run 1	113.771 ppb	116.074 %	117.207 %	113.888 ppb	114.809 ppb	116.999 %
Concentration per Run 2	122.390 ppb	109.737 %	109.138 %	125.604 ppb	124.155 ppb	109.395 %
Concentration per Run 3	124.263 ppb	109.125 %	111.013 %	121.445 ppb	122.796 ppb	111.402 %
Concentration RSD	4.7 %	3.4 %	3.8 %	4.9 %	4.2 %	3.5 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	9	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	1/100 Cal	Rack	0		
Analysis started at:	12/3/2024 7:07:58 AM	Vial	3		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	107.604 %	117.228 %	1.053 ppb	78.431 ppb	102.901 ppb	1.067 ppb	103.585 ppb	109.031 ppb	101.882 %
Concentration per Run 1	103.051 %	119.866 %	1.043 ppb	72.238 ppb	99.295 ppb	0.806 ppb	84.461 ppb	112.934 ppb	101.619 %
Concentration per Run 2	109.674 %	117.340 %	1.057 ppb	80.023 ppb	99.504 ppb	0.756 ppb	111.316 ppb	82.034 ppb	103.098 %
Concentration per Run 3	110.085 %	114.478 %	1.058 ppb	83.030 ppb	109.904 ppb	1.639 ppb	114.977 ppb	132.126 ppb	100.929 %
Concentration RSD	3.7 %	2.3 %	0.8 %	7.1 %	5.9 %	46.5 %	16.1 %	23.2 %	1.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.509 ppb	0.977 ppb	1.058 ppb	113.297 ppb	0.967 ppb	1.023 ppb	1.036 ppb	1.219 ppb	106.462 %
Concentration per Run 1	0.408 ppb	0.881 ppb	0.990 ppb	120.917 ppb	0.976 ppb	0.917 ppb	1.075 ppb	1.147 ppb	107.074 %
Concentration per Run 2	0.479 ppb	1.001 ppb	1.032 ppb	102.816 ppb	0.948 ppb	1.145 ppb	0.908 ppb	1.160 ppb	104.235 %
Concentration per Run 3	0.640 ppb	1.050 ppb	1.152 ppb	116.160 ppb	0.976 ppb	1.007 ppb	1.125 ppb	1.349 ppb	108.078 %
Concentration RSD	23.3 %	8.9 %	8.0 %	8.3 %	1.7 %	11.2 %	10.9 %	9.3 %	1.9 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	1.055 ppb	1.088 ppb	0.997 ppb	1.387 ppb	110.221 %	1.004 ppb	1.013 ppb	108.737 %	1.101 ppb
Concentration per Run 1	0.942 ppb	0.927 ppb	0.985 ppb	1.190 ppb	112.081 %	0.992 ppb	0.982 ppb	107.630 %	1.046 ppb
Concentration per Run 2	1.022 ppb	1.245 ppb	1.008 ppb	1.295 ppb	109.933 %	1.032 ppb	1.014 ppb	110.730 %	1.116 ppb
Concentration per Run 3	1.200 ppb	1.093 ppb	0.999 ppb	1.676 ppb	108.648 %	0.987 ppb	1.042 ppb	107.853 %	1.139 ppb
Concentration RSD	12.5 %	14.6 %	1.2 %	18.4 %	1.6 %	2.5 %	3.0 %	1.6 %	4.4 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	1.034 ppb	113.222 %	110.657 %	1.188 ppb	1.041 ppb	114.126 %
Concentration per Run 1	0.999 ppb	115.356 %	112.269 %	1.148 ppb	1.053 ppb	116.303 %
Concentration per Run 2	1.130 ppb	111.844 %	109.063 %	1.212 ppb	1.033 ppb	112.112 %
Concentration per Run 3	0.972 ppb	112.466 %	110.639 %	1.204 ppb	1.037 ppb	113.962 %
Concentration RSD	8.2 %	1.7 %	1.4 %	2.9 %	1.1 %	1.8 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	10	User name	ALPHALAB\a2-icpmsq2	Comment	Sr Inteference Check
Analysis label:	Sr 200ppb	Rack	4		
Analysis started at:	12/3/2024 7:13:05 AM	Vial	55		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	108.497 %	114.703 %	0.007 ppb	-15.233 ppb	1.640 ppb	0.146 ppb	-1.545 ppb	-5.064 ppb	101.065 %
Concentration per Run 1	105.066 %	119.866 %	0.007 ppb	-21.019 ppb	1.669 ppb	0.237 ppb	-5.380 ppb	102.590 ppb	98.221 %
Concentration per Run 2	109.717 %	108.418 %	0.007 ppb	-7.878 ppb	1.910 ppb	0.049 ppb	-1.327 ppb	-119.648 ppb	102.036 %
Concentration per Run 3	110.708 %	115.825 %	0.005 ppb	-16.802 ppb	1.341 ppb	0.154 ppb	2.072 ppb	1.865 ppb	102.939 %
Concentration RSD	2.8 %	5.1 %	15.3 %	44.0 %	17.4 %	64.3 %	241.5 %	2,197.3 %	2.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.442 ppb	-0.043 ppb	0.060 ppb	2.660 ppb	0.009 ppb	-0.027 ppb	0.055 ppb	0.439 ppb	109.751 %
Concentration per Run 1	-0.424 ppb	-0.067 ppb	0.034 ppb	2.259 ppb	0.008 ppb	-0.020 ppb	0.029 ppb	0.370 ppb	108.843 %
Concentration per Run 2	-0.476 ppb	-0.005 ppb	0.069 ppb	2.982 ppb	0.012 ppb	-0.038 ppb	0.068 ppb	0.526 ppb	107.474 %
Concentration per Run 3	-0.426 ppb	-0.056 ppb	0.078 ppb	2.739 ppb	0.008 ppb	-0.022 ppb	0.069 ppb	0.422 ppb	112.936 %
Concentration RSD	6.6 %	77.5 %	38.2 %	13.8 %	24.6 %	38.2 %	41.4 %	18.0 %	2.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.019 ppb	0.040 ppb	192.217 ppb	0.102 ppb	110.959 %	0.003 ppb	0.006 ppb	109.681 %	0.014 ppb
Concentration per Run 1	0.038 ppb	-0.010 ppb	190.666 ppb	0.058 ppb	115.276 %	0.001 ppb	0.000 ppb	115.572 %	0.014 ppb
Concentration per Run 2	0.058 ppb	0.090 ppb	196.208 ppb	0.137 ppb	107.685 %	0.005 ppb	0.010 ppb	108.559 %	0.012 ppb
Concentration per Run 3	-0.037 ppb	0.039 ppb	189.776 ppb	0.112 ppb	109.915 %	0.003 ppb	0.007 ppb	104.914 %	0.016 ppb
Concentration RSD	259.3 %	125.5 %	1.8 %	39.6 %	3.5 %	70.4 %	91.3 %	4.9 %	13.8 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.041 ppb	111.960 %	111.655 %	0.059 ppb	0.007 ppb	114.043 %
Concentration per Run 1	0.056 ppb	114.764 %	114.976 %	0.044 ppb	0.006 ppb	118.358 %
Concentration per Run 2	0.033 ppb	111.470 %	110.213 %	0.068 ppb	0.008 ppb	111.689 %
Concentration per Run 3	0.035 ppb	109.647 %	109.775 %	0.067 ppb	0.006 ppb	112.081 %
Concentration RSD	30.8 %	2.3 %	2.6 %	22.9 %	15.6 %	3.3 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	11	User name	ALPHALAB\a2-icpmsq2	Comment	ICV
Analysis label:	ICV	Rack	0		
Analysis started at:	12/3/2024 7:17:37 AM	Vial	7		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	109.072 %	118.519 %	50.716 ppb	4,996.226 ppb	4,988.412 ppb	51.554 ppb	4,909.971 ppb	5,109.176 ppb	102.856 %
Concentration per Run 1	102.525 %	113.805 %	51.097 ppb	5,162.262 ppb	5,064.520 ppb	53.484 ppb	5,115.019 ppb	5,380.848 ppb	103.584 %
Concentration per Run 2	111.132 %	117.509 %	50.051 ppb	5,000.255 ppb	5,008.072 ppb	51.611 ppb	4,821.562 ppb	5,037.067 ppb	102.341 %
Concentration per Run 3	113.560 %	124.243 %	51.001 ppb	4,826.161 ppb	4,892.643 ppb	49.568 ppb	4,793.334 ppb	4,909.612 ppb	102.642 %
Recovery Percentage 1			101.433 %	99.925 %	99.768 %	103.108 %	98.199 %	102.184 %	
Concentration RSD	5.3 %	4.5 %	1.1 %	3.4 %	1.8 %	3.8 %	3.6 %	4.8 %	0.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	50.687 ppb	50.623 ppb	52.437 ppb	5,071.545 ppb	51.024 ppb	50.459 ppb	51.657 ppb	54.202 ppb	109.683 %
Concentration per Run 1	51.681 ppb	51.147 ppb	50.828 ppb	5,051.567 ppb	51.282 ppb	50.804 ppb	52.094 ppb	54.456 ppb	109.291 %
Concentration per Run 2	50.014 ppb	50.052 ppb	53.613 ppb	5,102.597 ppb	52.063 ppb	51.035 ppb	52.859 ppb	55.649 ppb	109.028 %
Concentration per Run 3	50.367 ppb	50.672 ppb	52.871 ppb	5,060.469 ppb	49.727 ppb	49.537 ppb	50.018 ppb	52.501 ppb	110.731 %
Recovery Percentage 1	101.374 %	101.247 %	104.875 %	101.431 %	102.048 %	100.918 %	103.314 %	108.404 %	
Concentration RSD	1.7 %	1.1 %	2.8 %	0.5 %	2.3 %	1.6 %	2.8 %	2.9 %	0.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	50.413 ppb	50.246 ppb	50.176 ppb	50.168 ppb	110.051 %	52.450 ppb	50.444 ppb	110.608 %	50.217 ppb
Concentration per Run 1	51.134 ppb	49.453 ppb	49.814 ppb	50.119 ppb	114.225 %	51.780 ppb	48.684 ppb	113.398 %	49.068 ppb
Concentration per Run 2	50.395 ppb	52.753 ppb	50.057 ppb	50.767 ppb	110.298 %	52.400 ppb	51.226 ppb	108.038 %	50.716 ppb
Concentration per Run 3	49.709 ppb	48.534 ppb	50.656 ppb	49.619 ppb	105.629 %	53.169 ppb	51.421 ppb	110.389 %	50.869 ppb
Recovery Percentage 1	100.825 %	100.493 %	100.351 %	100.337 %		104.899 %	100.888 %		100.435 %
Concentration RSD	1.4 %	4.4 %	0.9 %	1.1 %	3.9 %	1.3 %	3.0 %	2.4 %	2.0 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	50.429 ppb	113.058 %	112.168 %	50.283 ppb	50.543 ppb	114.001 %
Concentration per Run 1	48.673 ppb	115.116 %	115.481 %	49.075 ppb	49.529 ppb	116.057 %
Concentration per Run 2	51.300 ppb	114.274 %	110.007 %	49.795 ppb	50.831 ppb	112.174 %
Concentration per Run 3	51.315 ppb	109.783 %	111.017 %	51.979 ppb	51.268 ppb	113.773 %
Recovery Percentage 1	100.859 %			100.566 %	101.085 %	
Concentration RSD	3.0 %	2.5 %	2.6 %	3.0 %	1.8 %	1.7 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	12	User name	ALPHALAB\a2-icpmsq2	Comment	ICB
Analysis label:	ICB	Rack	0		
Analysis started at:	12/3/2024 7:22:07 AM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	109.773 %	112.739 %	0.020 ppb	-26.475 ppb	-0.118 ppb	0.344 ppb	-14.441 ppb	-6.774 ppb	101.144 %
Concentration per Run 1	104.764 %	118.856 %	0.018 ppb	-34.489 ppb	-1.113 ppb	0.348 ppb	-19.930 ppb	-0.991 ppb	100.400 %
Concentration per Run 2	110.940 %	107.744 %	0.030 ppb	-20.137 ppb	0.099 ppb	0.096 ppb	-12.884 ppb	-17.184 ppb	101.521 %
Concentration per Run 3	113.616 %	111.616 %	0.012 ppb	-24.798 ppb	0.660 ppb	0.589 ppb	-10.507 ppb	-2.148 ppb	101.512 %
Recovery Percentage 1			4.011 %	-5.295 %	-0.169 %	3.441 %	-14.441 %	-6.774 %	
Concentration RSD	4.1 %	5.0 %	44.3 %	27.7 %	768.0 %	71.7 %	33.9 %	133.4 %	0.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.426 ppb	-0.036 ppb	0.004 ppb	4.442 ppb	0.000 ppb	-0.016 ppb	0.022 ppb	0.302 ppb	110.215 %
Concentration per Run 1	-0.483 ppb	-0.020 ppb	-0.012 ppb	5.807 ppb	-0.001 ppb	0.021 ppb	-0.008 ppb	0.324 ppb	111.116 %
Concentration per Run 2	-0.479 ppb	-0.050 ppb	0.005 ppb	2.304 ppb	-0.007 ppb	-0.041 ppb	0.029 ppb	0.330 ppb	111.210 %
Concentration per Run 3	-0.315 ppb	-0.039 ppb	0.021 ppb	5.214 ppb	0.008 ppb	-0.029 ppb	0.045 ppb	0.253 ppb	108.319 %
Recovery Percentage 1	-8.511 %	-3.608 %	0.450 %	8.883 %	0.023 %	-0.804 %	2.182 %	6.049 %	
Concentration RSD	22.5 %	42.6 %	365.3 %	42.2 %	6,888.7 %	203.6 %	124.1 %	14.1 %	1.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	-0.007 ppb	0.234 ppb	0.007 ppb	0.392 ppb	110.130 %	0.006 ppb	0.003 ppb	107.631 %	0.067 ppb
Concentration per Run 1	-0.057 ppb	0.362 ppb	0.007 ppb	0.235 ppb	113.780 %	0.006 ppb	0.003 ppb	107.044 %	0.043 ppb
Concentration per Run 2	-0.005 ppb	0.165 ppb	0.008 ppb	0.466 ppb	109.860 %	0.002 ppb	0.007 ppb	103.760 %	0.070 ppb
Concentration per Run 3	0.040 ppb	0.175 ppb	0.006 ppb	0.476 ppb	106.752 %	0.009 ppb	0.000 ppb	112.089 %	0.089 ppb
Recovery Percentage 1	-1.408 %	4.679 %	0.071 %	19.612 %		1.418 %	1.728 %		1.677 %
Concentration RSD	687.2 %	47.6 %	10.3 %	34.8 %	3.2 %	61.2 %	101.1 %	3.9 %	34.5 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.007 ppb	113.487 %	110.653 %	0.189 ppb	0.012 ppb	111.857 %
Concentration per Run 1	-0.019 ppb	115.745 %	114.616 %	0.186 ppb	0.011 ppb	113.439 %
Concentration per Run 2	0.035 ppb	109.783 %	107.778 %	0.208 ppb	0.013 ppb	112.433 %
Concentration per Run 3	0.006 ppb	114.933 %	109.566 %	0.173 ppb	0.012 ppb	109.699 %
Recovery Percentage 1	1.465 %			18.925 %	1.177 %	
Concentration RSD	367.6 %	2.8 %	3.2 %	9.3 %	8.7 %	1.7 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	13	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	ICSA	Rack	4		
Analysis started at:	12/3/2024 7:28:46 AM	Vial	53		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	77.425 %	100.898 %	0.026 ppb	260,283.423 ppb	95,027.936 ppb	95,923.619 ppb	92,602.726 ppb	279,901.564 ppb	74.611 %
Concentration per Run 1	76.603 %	104.209 %	0.035 ppb	252,576.654 ppb	95,674.151 ppb	93,358.091 ppb	93,182.641 ppb	275,266.545 ppb	73.296 %
Concentration per Run 2	78.021 %	99.832 %	0.019 ppb	259,612.046 ppb	93,135.872 ppb	95,693.955 ppb	96,072.311 ppb	281,448.725 ppb	75.258 %
Concentration per Run 3	77.651 %	98.653 %	0.024 ppb	268,661.568 ppb	96,273.785 ppb	98,718.812 ppb	88,553.225 ppb	282,989.421 ppb	75.281 %
Recovery Percentage 1			2.617 %	104.113 %	95.028 %	95.924 %	92.603 %	93.301 %	
Concentration RSD	0.9 %	2.9 %	30.8 %	3.1 %	1.8 %	2.8 %	4.1 %	1.5 %	1.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.397 ppb	1.510 ppb	4.347 ppb	235,073.825 ppb	2.043 ppb	2.743 ppb	0.950 ppb	3.435 ppb	108.055 %
Concentration per Run 1	-0.356 ppb	1.415 ppb	4.324 ppb	236,338.259 ppb	2.054 ppb	2.666 ppb	1.017 ppb	3.617 ppb	110.179 %
Concentration per Run 2	-0.470 ppb	1.528 ppb	4.565 ppb	244,618.331 ppb	2.033 ppb	3.064 ppb	0.992 ppb	3.441 ppb	105.051 %
Concentration per Run 3	-0.365 ppb	1.589 ppb	4.152 ppb	224,264.885 ppb	2.040 ppb	2.499 ppb	0.842 ppb	3.248 ppb	108.933 %
Recovery Percentage 1	-7.945 %	45.772 %	76.257 %	94.030 %	71.172 %	44.966 %	115.899 %	30.135 %	
Concentration RSD	15.9 %	5.9 %	4.8 %	4.4 %	0.5 %	10.6 %	10.0 %	5.4 %	2.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.526 ppb	3.361 ppb	2.424 ppb	2,131.463 ppb	94.898 %	0.019 ppb	0.525 ppb	104.009 %	0.185 ppb
Concentration per Run 1	0.615 ppb	3.100 ppb	2.361 ppb	2,092.204 ppb	97.544 %	0.012 ppb	0.476 ppb	108.519 %	0.182 ppb
Concentration per Run 2	0.500 ppb	3.527 ppb	2.473 ppb	2,152.090 ppb	91.375 %	0.020 ppb	0.509 ppb	104.656 %	0.185 ppb
Concentration per Run 3	0.465 ppb	3.454 ppb	2.439 ppb	2,150.093 ppb	95.773 %	0.024 ppb	0.589 ppb	98.852 %	0.186 ppb
Recovery Percentage 1	32.299 %	26.051 %	484.786 %	106.573 %		2.318 %	131.142 %		2.307 %
Concentration RSD	14.9 %	6.8 %	2.4 %	1.6 %	3.3 %	32.4 %	11.1 %	4.7 %	1.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	1.311 ppb	105.281 %	101.358 %	0.052 ppb	1.539 ppb	98.793 %
Concentration per Run 1	1.181 ppb	107.132 %	104.218 %	0.037 ppb	1.503 ppb	103.198 %
Concentration per Run 2	1.188 ppb	102.454 %	99.837 %	0.058 ppb	1.566 ppb	97.213 %
Concentration per Run 3	1.565 ppb	106.257 %	100.019 %	0.062 ppb	1.548 ppb	95.968 %
Recovery Percentage 1	69.743 %			2.619 %	49.645 %	
Concentration RSD	16.7 %	2.4 %	2.4 %	26.4 %	2.1 %	3.9 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	14	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	LDR	Rack	4		
Analysis started at:	12/3/2024 7:33:17 AM	Vial	1		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	91.563 %	108.025 %	0.006 ppb	49.368 ppb	3.998 ppb	4.810 ppb	28.275 ppb	9.141 ppb	89.082 %
Concentration per Run 1	89.252 %	106.734 %	0.008 ppb	59.088 ppb	5.209 ppb	5.573 ppb	35.831 ppb	9.944 ppb	88.232 %
Concentration per Run 2	92.187 %	110.101 %	0.004 ppb	44.430 ppb	3.372 ppb	4.227 ppb	22.515 ppb	22.695 ppb	89.602 %
Concentration per Run 3	93.249 %	107.239 %	0.007 ppb	44.588 ppb	3.414 ppb	4.631 ppb	26.481 ppb	-5.217 ppb	89.411 %
Recovery Percentage 1									
Concentration RSD	2.3 %	1.7 %	27.5 %	17.1 %	26.2 %	14.4 %	24.2 %	152.9 %	0.8 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	925.491 ppb	964.981 ppb	9,083.550 ppb	32.988 ppb	0.016 ppb	9,816.044 ppb	9,961.563 ppb	9,467.192 ppb	97.937 %
Concentration per Run 1	930.436 ppb	984.825 ppb	9,192.936 ppb	32.478 ppb	0.021 ppb	9,932.172 ppb	10,267.736 ppb	9,604.056 ppb	93.933 %
Concentration per Run 2	930.791 ppb	953.733 ppb	9,074.874 ppb	31.844 ppb	0.010 ppb	9,703.260 ppb	9,946.986 ppb	9,515.339 ppb	97.750 %
Concentration per Run 3	915.244 ppb	956.385 ppb	8,982.839 ppb	34.643 ppb	0.016 ppb	9,812.698 ppb	9,669.966 ppb	9,282.180 ppb	102.130 %
Recovery Percentage 1	92.549 %	96.498 %	90.835 %			98.160 %	99.616 %	94.672 %	
Concentration RSD	1.0 %	1.8 %	1.2 %	4.4 %	35.6 %	1.2 %	3.0 %	1.8 %	4.2 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	904.370 ppb	2.342 ppb	0.240 ppb	4.413 ppb	101.381 %	0.114 ppb	0.029 ppb	97.220 %	0.029 ppb
Concentration per Run 1	908.778 ppb	2.361 ppb	0.245 ppb	3.449 ppb	105.832 %	0.106 ppb	0.022 ppb	98.870 %	0.025 ppb
Concentration per Run 2	921.059 ppb	2.292 ppb	0.222 ppb	4.441 ppb	98.003 %	0.107 ppb	0.031 ppb	95.258 %	0.024 ppb
Concentration per Run 3	883.273 ppb	2.374 ppb	0.254 ppb	5.350 ppb	100.309 %	0.129 ppb	0.034 ppb	97.533 %	0.037 ppb
Recovery Percentage 1	90.437 %								
Concentration RSD	2.1 %	1.9 %	6.9 %	21.5 %	4.0 %	11.3 %	21.4 %	1.9 %	26.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	9,782.000 ppb	99.911 %	97.335 %	0.057 ppb	9,928.163 ppb	100.110 %
Concentration per Run 1	10,021.895 ppb	99.184 %	97.443 %	0.057 ppb	9,801.199 ppb	100.374 %
Concentration per Run 2	9,217.024 ppb	100.550 %	98.028 %	0.056 ppb	10,086.648 ppb	98.549 %
Concentration per Run 3	10,107.080 ppb	100.001 %	96.534 %	0.057 ppb	9,896.640 ppb	101.408 %
Recovery Percentage 1	97.820 %				99.282 %	
Concentration RSD	5.0 %	0.7 %	0.8 %	1.1 %	1.5 %	1.4 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	15	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	Rinse	Rack	0		
Analysis started at:	12/3/2024 7:37:47 AM	Vial	1		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	100.788 %	110.382 %	0.017 ppb	39.912 ppb	5.670 ppb	10.397 ppb	25.473 ppb	19.955 ppb	102.010 %
Concentration per Run 1	96.880 %	118.856 %	0.024 ppb	23.922 ppb	5.366 ppb	8.545 ppb	13.801 ppb	2.393 ppb	100.133 %
Concentration per Run 2	102.505 %	103.704 %	0.015 ppb	44.003 ppb	4.834 ppb	9.710 ppb	26.792 ppb	25.210 ppb	101.012 %
Concentration per Run 3	102.979 %	108.586 %	0.014 ppb	51.809 ppb	6.812 ppb	12.936 ppb	35.826 ppb	32.262 ppb	104.884 %
Concentration RSD	3.4 %	7.0 %	31.4 %	36.0 %	18.0 %	21.9 %	43.5 %	78.2 %	2.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.406 ppb	0.155 ppb	0.942 ppb	77.426 ppb	0.014 ppb	3.504 ppb	2.104 ppb	2.973 ppb	100.790 %
Concentration per Run 1	-0.520 ppb	0.138 ppb	0.799 ppb	70.803 ppb	0.025 ppb	3.393 ppb	2.014 ppb	2.650 ppb	100.267 %
Concentration per Run 2	-0.274 ppb	0.183 ppb	0.874 ppb	80.483 ppb	0.013 ppb	3.512 ppb	1.949 ppb	2.920 ppb	99.503 %
Concentration per Run 3	-0.425 ppb	0.144 ppb	1.152 ppb	80.993 ppb	0.003 ppb	3.609 ppb	2.349 ppb	3.350 ppb	102.601 %
Concentration RSD	30.6 %	15.9 %	19.8 %	7.4 %	81.0 %	3.1 %	10.2 %	11.9 %	1.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.586 ppb	0.055 ppb	0.012 ppb	0.951 ppb	101.840 %	0.036 ppb	0.001 ppb	97.283 %	0.017 ppb
Concentration per Run 1	0.670 ppb	0.026 ppb	0.016 ppb	0.542 ppb	104.717 %	0.035 ppb	0.000 ppb	99.722 %	0.009 ppb
Concentration per Run 2	0.637 ppb	-0.051 ppb	0.003 ppb	0.862 ppb	100.671 %	0.035 ppb	0.000 ppb	96.206 %	0.018 ppb
Concentration per Run 3	0.450 ppb	0.191 ppb	0.017 ppb	1.449 ppb	100.133 %	0.037 ppb	0.004 ppb	95.921 %	0.026 ppb
Concentration RSD	20.2 %	223.3 %	62.7 %	48.3 %	2.5 %	2.4 %	173.2 %	2.2 %	48.5 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.475 ppb	99.889 %	99.173 %	0.019 ppb	2.074 ppb	101.436 %
Concentration per Run 1	0.293 ppb	102.762 %	101.038 %	0.006 ppb	2.041 ppb	104.116 %
Concentration per Run 2	0.231 ppb	99.287 %	97.918 %	0.025 ppb	1.691 ppb	99.055 %
Concentration per Run 3	0.902 ppb	97.617 %	98.563 %	0.025 ppb	2.490 ppb	101.135 %
Concentration RSD	78.0 %	2.6 %	1.7 %	57.8 %	19.3 %	2.5 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index: 16
Analysis label: CCV
Analysis started at: 12/3/2024 7:42:14 AM
User name ALPHALAB\a2-icpmsq2
Rack 0
Vial 9
Comment CCV/MCCV

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	98.136 %	117.060 %	62.968 ppb	5,957.011 ppb	5,879.006 ppb	56.114 ppb	5,802.825 ppb	5,773.221 ppb	95.802 %
Concentration per Run 1	93.545 %	122.559 %	63.991 ppb	5,588.736 ppb	5,503.076 ppb	55.489 ppb	5,779.047 ppb	5,622.254 ppb	93.746 %
Concentration per Run 2	99.410 %	115.657 %	61.914 ppb	6,116.184 ppb	6,040.797 ppb	56.094 ppb	5,686.175 ppb	5,655.660 ppb	97.142 %
Concentration per Run 3	101.453 %	112.963 %	62.998 ppb	6,166.114 ppb	6,093.145 ppb	56.758 ppb	5,943.252 ppb	6,041.749 ppb	96.517 %
Recovery Percentage 1			104.946 %	99.284 %	97.983 %	93.523 %	96.714 %	96.220 %	
Concentration RSD	4.2 %	4.2 %	1.7 %	5.4 %	5.6 %	1.1 %	2.2 %	4.0 %	1.9 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	58.535 ppb	60.642 ppb	60.871 ppb	6,065.390 ppb	62.390 ppb	62.611 ppb	63.040 ppb	62.574 ppb	101.855 %
Concentration per Run 1	54.652 ppb	56.785 ppb	60.817 ppb	5,877.408 ppb	62.033 ppb	60.043 ppb	61.531 ppb	59.520 ppb	103.989 %
Concentration per Run 2	60.392 ppb	61.788 ppb	61.022 ppb	6,188.382 ppb	63.499 ppb	65.667 ppb	65.361 ppb	65.987 ppb	100.338 %
Concentration per Run 3	60.560 ppb	63.354 ppb	60.773 ppb	6,130.381 ppb	61.637 ppb	62.124 ppb	62.229 ppb	62.215 ppb	101.238 %
Recovery Percentage 1	97.558 %	101.071 %	101.451 %	101.090 %	103.983 %	104.352 %	105.067 %	104.290 %	
Concentration RSD	5.7 %	5.7 %	0.2 %	2.7 %	1.6 %	4.5 %	3.2 %	5.2 %	1.9 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	60.716 ppb	56.720 ppb	60.036 ppb	61.404 ppb	101.326 %	62.186 ppb	62.309 ppb	99.554 %	61.536 ppb
Concentration per Run 1	60.283 ppb	53.891 ppb	58.798 ppb	60.166 ppb	104.613 %	60.764 ppb	61.816 ppb	100.133 %	61.254 ppb
Concentration per Run 2	61.156 ppb	58.188 ppb	60.630 ppb	62.085 ppb	99.686 %	61.713 ppb	61.963 ppb	99.368 %	61.673 ppb
Concentration per Run 3	60.710 ppb	58.081 ppb	60.679 ppb	61.961 ppb	99.678 %	64.082 ppb	63.149 ppb	99.162 %	61.681 ppb
Recovery Percentage 1	101.194 %	94.534 %	100.059 %	102.340 %		103.644 %	103.849 %		102.560 %
Concentration RSD	0.7 %	4.3 %	1.8 %	1.7 %	2.8 %	2.7 %	1.2 %	0.5 %	0.4 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	60.769 ppb	104.360 %	101.665 %	62.292 ppb	62.750 ppb	102.010 %
Concentration per Run 1	59.858 ppb	107.228 %	104.106 %	61.333 ppb	61.783 ppb	103.617 %
Concentration per Run 2	59.796 ppb	102.769 %	98.174 %	62.516 ppb	63.597 ppb	100.620 %
Concentration per Run 3	62.652 ppb	103.084 %	102.715 %	63.029 ppb	62.871 ppb	101.795 %
Recovery Percentage 1	101.281 %			103.821 %	104.584 %	
Concentration RSD	2.7 %	2.4 %	3.1 %	1.4 %	1.5 %	1.5 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	17	User name	ALPHALAB\a2-icpmsq2	Comment	CCB
Analysis label:	CCB	Rack	0		
Analysis started at:	12/3/2024 7:46:45 AM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	97.755 %	116.106 %	0.095 ppb	-3.567 ppb	0.138 ppb	0.196 ppb	-0.022 ppb	-5.582 ppb	95.506 %
Concentration per Run 1	93.206 %	116.330 %	0.132 ppb	-3.977 ppb	0.265 ppb	0.012 ppb	-0.289 ppb	-10.176 ppb	94.760 %
Concentration per Run 2	100.347 %	110.943 %	0.100 ppb	6.059 ppb	0.129 ppb	0.404 ppb	5.263 ppb	-0.276 ppb	96.356 %
Concentration per Run 3	99.713 %	121.044 %	0.055 ppb	-12.782 ppb	0.021 ppb	0.170 ppb	-5.040 ppb	-6.294 ppb	95.402 %
Recovery Percentage 1			19.078 %	-0.713 %	0.198 %	1.956 %	-0.022 %	-5.582 %	
Concentration RSD	4.0 %	4.4 %	40.7 %	264.3 %	88.2 %	100.9 %	23,443.7 %	89.4 %	0.8 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.526 ppb	-0.014 ppb	0.077 ppb	6.763 ppb	-0.001 ppb	0.023 ppb	0.542 ppb	0.280 ppb	96.074 %
Concentration per Run 1	-0.470 ppb	-0.023 ppb	0.010 ppb	6.368 ppb	-0.007 ppb	0.016 ppb	0.564 ppb	0.335 ppb	96.229 %
Concentration per Run 2	-0.514 ppb	-0.001 ppb	0.099 ppb	5.362 ppb	-0.003 ppb	-0.004 ppb	0.567 ppb	0.271 ppb	93.608 %
Concentration per Run 3	-0.596 ppb	-0.018 ppb	0.122 ppb	8.558 ppb	0.006 ppb	0.058 ppb	0.494 ppb	0.235 ppb	98.384 %
Recovery Percentage 1	-10.529 %	-1.407 %	7.673 %	13.525 %	-0.242 %	1.156 %	54.152 %	5.601 %	
Concentration RSD	12.2 %	82.6 %	77.1 %	24.2 %	549.7 %	138.1 %	7.6 %	18.1 %	2.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.153 ppb	0.188 ppb	0.010 ppb	0.461 ppb	100.751 %	0.011 ppb	0.005 ppb	95.900 %	0.041 ppb
Concentration per Run 1	0.170 ppb	0.266 ppb	0.011 ppb	0.322 ppb	101.606 %	0.010 ppb	0.004 ppb	94.819 %	0.035 ppb
Concentration per Run 2	0.120 ppb	0.095 ppb	-0.001 ppb	0.420 ppb	98.831 %	0.013 ppb	0.004 ppb	95.202 %	0.038 ppb
Concentration per Run 3	0.169 ppb	0.203 ppb	0.020 ppb	0.641 ppb	101.817 %	0.010 ppb	0.007 ppb	97.680 %	0.050 ppb
Recovery Percentage 1	30.584 %	3.759 %	0.103 %	23.056 %		2.732 %	2.516 %		1.023 %
Concentration RSD	18.7 %	46.0 %	101.3 %	35.5 %	1.7 %	13.3 %	41.8 %	1.6 %	19.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.039 ppb	101.528 %	99.288 %	0.217 ppb	0.291 ppb	99.717 %
Concentration per Run 1	0.068 ppb	102.343 %	100.864 %	0.203 ppb	0.296 ppb	102.367 %
Concentration per Run 2	0.025 ppb	100.832 %	98.444 %	0.245 ppb	0.307 ppb	98.242 %
Concentration per Run 3	0.024 ppb	101.409 %	98.556 %	0.204 ppb	0.270 ppb	98.541 %
Recovery Percentage 1	7.840 %			21.723 %	29.092 %	
Concentration RSD	64.6 %	0.8 %	1.4 %	11.2 %	6.5 %	2.3 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	18	User name	ALPHALAB\a2-icpmsq2	Comment	FB
Analysis label:	I2469249-03 6020SL	Rack	1		
Analysis started at:	12/3/2024 7:57:42 AM	Vial	6		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	103.799 %	116.218 %	0.004 ppb	-11.258 ppb	1.095 ppb	2.638 ppb	0.309 ppb	19.959 ppb	98.443 %
Concentration per Run 1	100.318 %	119.529 %	0.006 ppb	-21.500 ppb	1.361 ppb	2.242 ppb	2.336 ppb	14.875 ppb	95.326 %
Concentration per Run 2	104.060 %	116.330 %	0.004 ppb	-10.231 ppb	1.428 ppb	2.990 ppb	-6.451 ppb	28.936 ppb	98.070 %
Concentration per Run 3	107.018 %	112.795 %	0.004 ppb	-2.042 ppb	0.495 ppb	2.680 ppb	5.043 ppb	16.067 ppb	101.933 %
Concentration RSD	3.2 %	2.9 %	32.6 %	86.8 %	47.6 %	14.3 %	1,942.3 %	39.1 %	3.4 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.497 ppb	0.010 ppb	0.349 ppb	12.543 ppb	0.001 ppb	0.017 ppb	0.704 ppb	0.911 ppb	98.321 %
Concentration per Run 1	-0.489 ppb	-0.001 ppb	0.413 ppb	12.122 ppb	0.006 ppb	0.000 ppb	0.789 ppb	0.821 ppb	99.333 %
Concentration per Run 2	-0.565 ppb	-0.011 ppb	0.324 ppb	11.785 ppb	-0.003 ppb	0.049 ppb	0.652 ppb	0.999 ppb	97.683 %
Concentration per Run 3	-0.438 ppb	0.042 ppb	0.310 ppb	13.722 ppb	0.000 ppb	0.003 ppb	0.670 ppb	0.913 ppb	97.948 %
Concentration RSD	12.8 %	278.0 %	16.1 %	8.3 %	556.7 %	160.8 %	10.5 %	9.7 %	0.9 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.102 ppb	-0.059 ppb	0.112 ppb	0.123 ppb	106.099 %	0.003 ppb	0.005 ppb	102.532 %	0.019 ppb
Concentration per Run 1	0.024 ppb	-0.060 ppb	0.096 ppb	0.063 ppb	109.808 %	0.004 ppb	0.003 ppb	104.745 %	0.013 ppb
Concentration per Run 2	0.096 ppb	-0.066 ppb	0.116 ppb	0.064 ppb	104.524 %	0.001 ppb	0.004 ppb	97.422 %	0.027 ppb
Concentration per Run 3	0.187 ppb	-0.051 ppb	0.123 ppb	0.241 ppb	103.966 %	0.002 ppb	0.007 ppb	105.428 %	0.018 ppb
Concentration RSD	80.3 %	13.0 %	12.7 %	83.6 %	3.0 %	54.5 %	42.2 %	4.3 %	36.5 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.193 ppb	106.203 %	106.136 %	0.030 ppb	0.116 ppb	111.216 %
Concentration per Run 1	0.102 ppb	109.096 %	108.956 %	0.019 ppb	0.114 ppb	114.181 %
Concentration per Run 2	0.236 ppb	105.191 %	103.461 %	0.033 ppb	0.128 ppb	110.354 %
Concentration per Run 3	0.241 ppb	104.323 %	105.990 %	0.038 ppb	0.107 ppb	109.114 %
Concentration RSD	40.9 %	2.4 %	2.6 %	31.8 %	9.4 %	2.4 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	19	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	I2469249-06 6020SL	Rack	1		
Analysis started at:	12/3/2024 8:02:11 AM	Vial	1		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	96.622 %	112.514 %	0.018 ppb	57,895.750 ppb	28,616.545 ppb	11.452 ppb	6,163.590 ppb	120,220.995 ppb	98.632 %
Concentration per Run 1	93.441 %	113.637 %	0.016 ppb	55,771.050 ppb	27,702.289 ppb	11.144 ppb	6,188.566 ppb	121,703.382 ppb	99.291 %
Concentration per Run 2	97.138 %	104.882 %	0.015 ppb	61,592.288 ppb	30,074.490 ppb	11.858 ppb	6,205.202 ppb	119,959.227 ppb	98.622 %
Concentration per Run 3	99.287 %	119.024 %	0.021 ppb	56,323.914 ppb	28,072.856 ppb	11.354 ppb	6,097.003 ppb	119,000.377 ppb	97.984 %
Concentration RSD	3.1 %	6.3 %	15.9 %	5.5 %	4.5 %	3.2 %	0.9 %	1.1 %	0.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.073 ppb	0.130 ppb	2,842.106 ppb	201.054 ppb	5.574 ppb	4.947 ppb	1.965 ppb	2.961 ppb	98.909 %
Concentration per Run 1	0.132 ppb	0.098 ppb	2,906.887 ppb	192.122 ppb	5.482 ppb	4.848 ppb	1.865 ppb	2.925 ppb	100.129 %
Concentration per Run 2	0.091 ppb	0.147 ppb	2,573.498 ppb	201.835 ppb	5.592 ppb	4.850 ppb	2.081 ppb	2.874 ppb	99.948 %
Concentration per Run 3	-0.004 ppb	0.146 ppb	3,045.932 ppb	209.205 ppb	5.647 ppb	5.142 ppb	1.950 ppb	3.084 ppb	96.650 %
Concentration RSD	95.9 %	21.7 %	8.5 %	4.3 %	1.5 %	3.4 %	5.5 %	3.7 %	2.0 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.422 ppb	2.005 ppb	772.012 ppb	4.104 ppb	101.671 %	0.001 ppb	0.070 ppb	103.751 %	1.331 ppb
Concentration per Run 1	0.499 ppb	1.699 ppb	748.964 ppb	4.157 ppb	105.112 %	0.001 ppb	0.070 ppb	105.899 %	1.277 ppb
Concentration per Run 2	0.403 ppb	1.346 ppb	780.085 ppb	3.977 ppb	98.770 %	0.001 ppb	0.067 ppb	99.370 %	1.324 ppb
Concentration per Run 3	0.364 ppb	2.968 ppb	786.987 ppb	4.179 ppb	101.132 %	0.000 ppb	0.074 ppb	105.984 %	1.392 ppb
Concentration RSD	16.5 %	42.5 %	2.6 %	2.7 %	3.2 %	64.6 %	5.2 %	3.7 %	4.4 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	50.904 ppb	107.345 %	107.070 %	0.023 ppb	0.333 ppb	103.176 %
Concentration per Run 1	50.048 ppb	109.386 %	109.147 %	0.012 ppb	0.337 ppb	106.843 %
Concentration per Run 2	52.318 ppb	106.965 %	105.485 %	0.028 ppb	0.326 ppb	101.499 %
Concentration per Run 3	50.346 ppb	105.685 %	106.580 %	0.030 ppb	0.335 ppb	101.185 %
Concentration RSD	2.4 %	1.8 %	1.8 %	42.9 %	1.8 %	3.1 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	20	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG2003419-7d10 6020SL	Rack	1		
Analysis started at:	12/3/2024 8:06:38 AM	Vial	2		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	101.506 %	114.422 %	5.735 ppb	6,976.933 ppb	4,000.102 ppb	248.614 ppb	1,679.115 ppb	13,074.101 ppb	99.150 %
Concentration per Run 1	97.967 %	124.580 %	5.780 ppb	6,533.581 ppb	3,726.763 ppb	231.190 ppb	1,525.745 ppb	12,031.698 ppb	96.836 %
Concentration per Run 2	102.166 %	110.775 %	5.802 ppb	7,172.622 ppb	4,135.505 ppb	257.174 ppb	1,826.722 ppb	13,483.236 ppb	101.176 %
Concentration per Run 3	104.386 %	107.913 %	5.624 ppb	7,224.594 ppb	4,138.037 ppb	257.479 ppb	1,684.878 ppb	13,707.368 ppb	99.436 %
Concentration RSD	3.2 %	7.8 %	1.7 %	5.5 %	5.9 %	6.1 %	9.0 %	7.0 %	2.2 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	50.891 ppb	20.996 ppb	360.497 ppb	138.093 ppb	55.195 ppb	55.222 ppb	28.765 ppb	55.875 ppb	100.577 %
Concentration per Run 1	46.158 ppb	20.426 ppb	353.896 ppb	131.493 ppb	53.198 ppb	53.555 ppb	28.955 ppb	55.390 ppb	101.656 %
Concentration per Run 2	52.698 ppb	21.423 ppb	369.981 ppb	141.568 ppb	58.028 ppb	57.234 ppb	29.198 ppb	56.047 ppb	97.645 %
Concentration per Run 3	53.819 ppb	21.139 ppb	357.614 ppb	141.220 ppb	54.360 ppb	54.877 ppb	28.143 ppb	56.188 ppb	102.432 %
Concentration RSD	8.1 %	2.4 %	2.3 %	4.1 %	4.6 %	3.4 %	1.9 %	0.8 %	2.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	13.390 ppb	12.144 ppb	180.776 ppb	106.136 ppb	103.356 %	5.866 ppb	5.615 ppb	101.883 %	52.739 ppb
Concentration per Run 1	13.379 ppb	10.231 ppb	179.007 ppb	105.489 ppb	104.879 %	5.657 ppb	5.488 ppb	101.989 %	52.838 ppb
Concentration per Run 2	14.086 ppb	13.118 ppb	183.224 ppb	107.209 ppb	103.294 %	6.018 ppb	5.666 ppb	103.319 %	51.778 ppb
Concentration per Run 3	12.705 ppb	13.084 ppb	180.098 ppb	105.709 ppb	101.895 %	5.922 ppb	5.690 ppb	100.340 %	53.600 ppb
Concentration RSD	5.2 %	13.6 %	1.2 %	0.9 %	1.4 %	3.2 %	2.0 %	1.5 %	1.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	220.821 ppb	105.505 %	104.293 %	12.038 ppb	54.706 ppb	106.054 %
Concentration per Run 1	219.571 ppb	106.902 %	105.096 %	11.545 ppb	52.762 ppb	110.504 %
Concentration per Run 2	217.503 ppb	104.543 %	103.945 %	12.398 ppb	56.176 ppb	102.169 %
Concentration per Run 3	225.391 ppb	105.069 %	103.837 %	12.172 ppb	55.179 ppb	105.489 %
Concentration RSD	1.9 %	1.2 %	0.7 %	3.7 %	3.2 %	4.0 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	21	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG2003419-8d10 6020SL	Rack	1		
Analysis started at:	12/3/2024 8:11:05 AM	Vial	3		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	100.915 %	114.198 %	5.306 ppb	6,744.577 ppb	3,886.548 ppb	194.927 ppb	1,590.965 ppb	12,534.160 ppb	98.582 %
Concentration per Run 1	97.363 %	116.667 %	5.357 ppb	6,554.353 ppb	3,821.019 ppb	196.101 ppb	1,599.943 ppb	12,092.311 ppb	96.811 %
Concentration per Run 2	102.700 %	111.953 %	5.202 ppb	6,992.378 ppb	3,992.697 ppb	195.730 ppb	1,626.974 ppb	13,021.268 ppb	100.122 %
Concentration per Run 3	102.681 %	113.973 %	5.358 ppb	6,687.000 ppb	3,845.927 ppb	192.949 ppb	1,545.979 ppb	12,488.900 ppb	98.813 %
Concentration RSD	3.0 %	2.1 %	1.7 %	3.3 %	2.4 %	0.9 %	2.6 %	3.7 %	1.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	49.311 ppb	20.433 ppb	347.618 ppb	149.096 ppb	53.664 ppb	53.620 ppb	27.404 ppb	52.971 ppb	100.291 %
Concentration per Run 1	46.611 ppb	19.636 ppb	340.027 ppb	129.947 ppb	53.715 ppb	54.478 ppb	27.271 ppb	52.174 ppb	99.954 %
Concentration per Run 2	49.961 ppb	20.744 ppb	358.932 ppb	154.865 ppb	54.963 ppb	55.809 ppb	29.166 ppb	54.448 ppb	98.348 %
Concentration per Run 3	51.363 ppb	20.918 ppb	343.895 ppb	162.476 ppb	52.314 ppb	50.572 ppb	25.775 ppb	52.291 ppb	102.571 %
Concentration RSD	5.0 %	3.4 %	2.9 %	11.4 %	2.5 %	5.1 %	6.2 %	2.4 %	2.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	12.457 ppb	13.101 ppb	175.034 ppb	101.614 ppb	103.099 %	5.631 ppb	5.459 ppb	103.110 %	50.336 ppb
Concentration per Run 1	12.765 ppb	11.652 ppb	172.713 ppb	100.373 ppb	106.270 %	5.380 ppb	5.346 ppb	105.199 %	49.207 ppb
Concentration per Run 2	12.239 ppb	14.364 ppb	179.600 ppb	104.537 ppb	99.365 %	5.811 ppb	5.612 ppb	101.229 %	51.663 ppb
Concentration per Run 3	12.367 ppb	13.287 ppb	172.788 ppb	99.931 ppb	103.662 %	5.702 ppb	5.420 ppb	102.903 %	50.137 ppb
Concentration RSD	2.2 %	10.4 %	2.3 %	2.5 %	3.4 %	4.0 %	2.5 %	1.9 %	2.5 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	208.765 ppb	104.727 %	104.320 %	11.957 ppb	54.004 ppb	104.970 %
Concentration per Run 1	201.992 ppb	109.524 %	107.108 %	11.494 ppb	52.862 ppb	106.213 %
Concentration per Run 2	211.999 ppb	104.095 %	101.215 %	11.884 ppb	54.588 ppb	105.416 %
Concentration per Run 3	212.305 ppb	100.561 %	104.639 %	12.493 ppb	54.564 ppb	103.282 %
Concentration RSD	2.8 %	4.3 %	2.8 %	4.2 %	1.8 %	1.4 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	22	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG2003419-9d10 6020SL	Rack	1		
Analysis started at:	12/3/2024 8:15:32 AM	Vial	4		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	99.503 %	109.764 %	51.588 ppb	10,856.918 ppb	7,994.707 ppb	50.526 ppb	5,496.138 ppb	16,673.424 ppb	98.676 %
Concentration per Run 1	96.489 %	110.438 %	52.895 ppb	10,878.663 ppb	8,097.928 ppb	50.850 ppb	5,433.931 ppb	16,119.880 ppb	95.720 %
Concentration per Run 2	99.055 %	109.933 %	51.305 ppb	10,888.781 ppb	7,941.706 ppb	50.432 ppb	5,649.882 ppb	17,204.716 ppb	100.488 %
Concentration per Run 3	102.966 %	108.923 %	50.565 ppb	10,803.312 ppb	7,944.486 ppb	50.296 ppb	5,404.601 ppb	16,695.676 ppb	99.820 %
Concentration RSD	3.3 %	0.7 %	2.3 %	0.4 %	1.1 %	0.6 %	2.4 %	3.3 %	2.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	48.079 ppb	50.578 ppb	339.173 ppb	5,105.797 ppb	52.022 ppb	51.685 ppb	51.531 ppb	51.280 ppb	102.230 %
Concentration per Run 1	46.225 ppb	49.417 ppb	343.145 ppb	5,147.360 ppb	53.573 ppb	52.650 ppb	51.414 ppb	51.899 ppb	102.827 %
Concentration per Run 2	50.516 ppb	52.589 ppb	349.887 ppb	5,264.448 ppb	52.866 ppb	52.347 ppb	52.696 ppb	52.222 ppb	98.748 %
Concentration per Run 3	47.495 ppb	49.728 ppb	324.488 ppb	4,905.584 ppb	49.626 ppb	50.058 ppb	50.483 ppb	49.720 ppb	105.115 %
Concentration RSD	4.6 %	3.5 %	3.9 %	3.6 %	4.0 %	2.7 %	2.2 %	2.7 %	3.2 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	50.996 ppb	50.648 ppb	123.392 ppb	51.435 ppb	102.305 %	1.517 ppb	50.951 ppb	102.400 %	49.926 ppb
Concentration per Run 1	50.725 ppb	50.417 ppb	122.123 ppb	50.066 ppb	103.885 %	1.445 ppb	49.315 ppb	105.804 %	49.508 ppb
Concentration per Run 2	52.403 ppb	53.862 ppb	126.277 ppb	52.037 ppb	100.805 %	1.568 ppb	52.575 ppb	101.955 %	49.836 ppb
Concentration per Run 3	49.862 ppb	47.667 ppb	121.777 ppb	52.201 ppb	102.226 %	1.537 ppb	50.963 ppb	99.442 %	50.433 ppb
Concentration RSD	2.5 %	6.1 %	2.0 %	2.3 %	1.5 %	4.2 %	3.2 %	3.1 %	0.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	53.839 ppb	106.015 %	105.339 %	49.844 ppb	50.213 ppb	106.071 %
Concentration per Run 1	52.642 ppb	108.655 %	106.577 %	47.209 ppb	48.513 ppb	110.027 %
Concentration per Run 2	54.953 ppb	102.598 %	104.835 %	52.055 ppb	51.923 ppb	103.499 %
Concentration per Run 3	53.920 ppb	106.793 %	104.605 %	50.267 ppb	50.204 ppb	104.687 %
Concentration RSD	2.2 %	2.9 %	1.0 %	4.9 %	3.4 %	3.3 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	23	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG2003419-10d5 6020SL	Rack	1		
Analysis started at:	12/3/2024 8:20:00 AM	Vial	5		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	101.929 %	113.637 %	0.011 ppb	11,201.603 ppb	5,726.170 ppb	2.956 ppb	1,209.648 ppb	23,721.463 ppb	100.876 %
Concentration per Run 1	94.719 %	112.121 %	0.014 ppb	11,083.805 ppb	5,685.581 ppb	2.869 ppb	1,191.629 ppb	23,410.754 ppb	96.358 %
Concentration per Run 2	103.865 %	115.152 %	0.011 ppb	11,491.823 ppb	5,780.521 ppb	2.761 ppb	1,218.735 ppb	23,454.717 ppb	102.194 %
Concentration per Run 3	107.203 %	113.637 %	0.009 ppb	11,029.182 ppb	5,712.409 ppb	3.239 ppb	1,218.581 ppb	24,298.917 ppb	104.077 %
Concentration RSD	6.3 %	1.3 %	21.3 %	2.3 %	0.9 %	8.5 %	1.3 %	2.1 %	4.0 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.325 ppb	0.012 ppb	593.566 ppb	44.115 ppb	1.175 ppb	1.120 ppb	0.641 ppb	1.798 ppb	101.939 %
Concentration per Run 1	-0.336 ppb	-0.029 ppb	596.580 ppb	41.986 ppb	1.228 ppb	1.101 ppb	0.624 ppb	1.751 ppb	103.110 %
Concentration per Run 2	-0.318 ppb	0.040 ppb	589.331 ppb	49.898 ppb	1.152 ppb	1.193 ppb	0.773 ppb	1.832 ppb	99.961 %
Concentration per Run 3	-0.322 ppb	0.026 ppb	594.786 ppb	40.460 ppb	1.145 ppb	1.066 ppb	0.525 ppb	1.810 ppb	102.745 %
Concentration RSD	3.0 %	299.6 %	0.6 %	11.5 %	3.9 %	5.8 %	19.5 %	2.3 %	1.7 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.118 ppb	0.228 ppb	147.731 ppb	1.154 ppb	105.638 %	0.000 ppb	0.019 ppb	103.991 %	0.394 ppb
Concentration per Run 1	0.054 ppb	0.559 ppb	145.933 ppb	0.929 ppb	107.955 %	0.001 ppb	0.014 ppb	105.539 %	0.352 ppb
Concentration per Run 2	0.179 ppb	0.031 ppb	151.399 ppb	1.133 ppb	102.282 %	-0.002 ppb	0.011 ppb	101.380 %	0.394 ppb
Concentration per Run 3	0.119 ppb	0.095 ppb	145.862 ppb	1.401 ppb	106.677 %	0.000 ppb	0.031 ppb	105.053 %	0.437 ppb
Concentration RSD	53.3 %	126.2 %	2.2 %	20.5 %	2.8 %	883.2 %	59.3 %	2.2 %	10.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	10.252 ppb	108.104 %	105.751 %	0.213 ppb	0.110 ppb	106.508 %
Concentration per Run 1	10.353 ppb	112.862 %	109.491 %	0.193 ppb	0.114 ppb	110.192 %
Concentration per Run 2	9.789 ppb	106.414 %	104.644 %	0.257 ppb	0.113 ppb	106.451 %
Concentration per Run 3	10.613 ppb	105.037 %	103.119 %	0.189 ppb	0.103 ppb	102.882 %
Concentration RSD	4.1 %	3.9 %	3.1 %	17.9 %	5.5 %	3.4 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	24	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	I2469249-04 6020SL	Rack	1		
Analysis started at:	12/3/2024 8:24:28 AM	Vial	7		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	90.788 %	112.514 %	0.287 ppb	37,249.992 ppb	16,277.286 ppb	547.921 ppb	26,200.079 ppb	270,097.769 ppb	92.670 %
Concentration per Run 1	87.434 %	115.825 %	0.282 ppb	36,402.653 ppb	15,601.990 ppb	528.462 ppb	25,641.173 ppb	265,553.256 ppb	92.040 %
Concentration per Run 2	91.788 %	116.162 %	0.283 ppb	35,796.538 ppb	15,653.599 ppb	528.319 ppb	25,422.491 ppb	261,750.387 ppb	92.160 %
Concentration per Run 3	93.142 %	105.556 %	0.295 ppb	39,550.786 ppb	17,576.268 ppb	586.981 ppb	27,536.574 ppb	282,989.664 ppb	93.809 %
Concentration RSD	3.3 %	5.4 %	2.5 %	5.4 %	6.9 %	6.2 %	4.4 %	4.2 %	1.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	1.476 ppb	1.790 ppb	1,411.684 ppb	26,561.440 ppb	42.604 ppb	103.134 ppb	3.278 ppb	2,851.621 ppb	96.632 %
Concentration per Run 1	1.547 ppb	1.719 ppb	1,421.085 ppb	27,059.087 ppb	42.675 ppb	103.091 ppb	3.095 ppb	2,853.180 ppb	97.577 %
Concentration per Run 2	1.497 ppb	1.767 ppb	1,361.103 ppb	25,195.690 ppb	41.350 ppb	101.044 ppb	3.013 ppb	2,777.019 ppb	97.592 %
Concentration per Run 3	1.384 ppb	1.883 ppb	1,452.864 ppb	27,429.543 ppb	43.786 ppb	105.268 ppb	3.728 ppb	2,924.663 ppb	94.727 %
Concentration RSD	5.7 %	4.7 %	3.3 %	4.5 %	2.9 %	2.0 %	11.9 %	2.6 %	1.7 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	9.342 ppb	4.029 ppb	1,147.893 ppb	2.486 ppb	98.785 %	0.003 ppb	1.280 ppb	100.155 %	58.824 ppb
Concentration per Run 1	9.729 ppb	3.687 ppb	1,129.492 ppb	2.321 ppb	102.905 %	0.008 ppb	1.258 ppb	104.955 %	56.560 ppb
Concentration per Run 2	9.293 ppb	4.383 ppb	1,150.072 ppb	2.384 ppb	96.511 %	-0.001 ppb	1.271 ppb	98.226 %	59.723 ppb
Concentration per Run 3	9.005 ppb	4.016 ppb	1,164.115 ppb	2.753 ppb	96.940 %	0.003 ppb	1.312 ppb	97.286 %	60.188 ppb
Concentration RSD	3.9 %	8.6 %	1.5 %	9.4 %	3.6 %	129.5 %	2.2 %	4.2 %	3.4 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	228.108 ppb	106.289 %	106.518 %	0.251 ppb	14.221 ppb	104.483 %
Concentration per Run 1	220.810 ppb	107.234 %	109.109 %	0.222 ppb	13.931 ppb	105.788 %
Concentration per Run 2	230.041 ppb	106.490 %	107.066 %	0.254 ppb	14.379 ppb	103.205 %
Concentration per Run 3	233.474 ppb	105.143 %	103.379 %	0.279 ppb	14.355 ppb	104.455 %
Concentration RSD	2.9 %	1.0 %	2.7 %	11.3 %	1.8 %	1.2 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	25	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	I2469249-07 6020SL	Rack	1		
Analysis started at:	12/3/2024 8:28:57 AM	Vial	8		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	96.409 %	112.458 %	0.007 ppb	77,926.151 ppb	5,045.840 ppb	4.450 ppb	9,933.261 ppb	108,788.875 ppb	97.510 %
Concentration per Run 1	93.087 %	119.192 %	0.007 ppb	75,086.765 ppb	4,737.815 ppb	4.339 ppb	9,380.911 ppb	104,098.989 ppb	94.860 %
Concentration per Run 2	97.999 %	105.724 %	0.009 ppb	80,798.628 ppb	5,311.582 ppb	4.889 ppb	10,291.605 ppb	109,796.788 ppb	99.082 %
Concentration per Run 3	98.141 %	112.458 %	0.005 ppb	77,893.061 ppb	5,088.123 ppb	4.122 ppb	10,127.269 ppb	112,470.848 ppb	98.589 %
Concentration RSD	3.0 %	6.0 %	28.8 %	3.7 %	5.7 %	8.9 %	4.9 %	3.9 %	2.4 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.256 ppb	0.025 ppb	764.992 ppb	759.876 ppb	0.839 ppb	3.442 ppb	5.316 ppb	2.117 ppb	96.195 %
Concentration per Run 1	-0.201 ppb	0.010 ppb	745.337 ppb	750.961 ppb	0.839 ppb	3.277 ppb	5.475 ppb	2.073 ppb	94.486 %
Concentration per Run 2	-0.300 ppb	0.030 ppb	776.069 ppb	776.234 ppb	0.863 ppb	3.546 ppb	5.564 ppb	2.200 ppb	95.746 %
Concentration per Run 3	-0.265 ppb	0.034 ppb	773.569 ppb	752.433 ppb	0.816 ppb	3.503 ppb	4.908 ppb	2.079 ppb	98.353 %
Concentration RSD	19.7 %	52.2 %	2.2 %	1.9 %	2.8 %	4.2 %	6.7 %	3.4 %	2.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.588 ppb	0.429 ppb	561.254 ppb	22.138 ppb	101.488 %	0.002 ppb	0.023 ppb	102.288 %	0.179 ppb
Concentration per Run 1	0.447 ppb	0.722 ppb	566.755 ppb	20.193 ppb	100.575 %	0.000 ppb	0.029 ppb	103.531 %	0.145 ppb
Concentration per Run 2	0.627 ppb	0.352 ppb	553.664 ppb	21.246 ppb	102.773 %	0.001 ppb	0.015 ppb	100.897 %	0.195 ppb
Concentration per Run 3	0.689 ppb	0.213 ppb	563.343 ppb	24.975 ppb	101.115 %	0.003 ppb	0.025 ppb	102.436 %	0.197 ppb
Concentration RSD	21.3 %	61.3 %	1.2 %	11.3 %	1.1 %	94.9 %	32.5 %	1.3 %	16.5 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	51.789 ppb	107.069 %	106.723 %	0.043 ppb	0.089 ppb	104.902 %
Concentration per Run 1	50.280 ppb	107.902 %	108.589 %	0.035 ppb	0.090 ppb	105.731 %
Concentration per Run 2	51.977 ppb	104.908 %	107.281 %	0.043 ppb	0.095 ppb	103.237 %
Concentration per Run 3	53.112 ppb	108.397 %	104.299 %	0.050 ppb	0.083 ppb	105.738 %
Concentration RSD	2.8 %	1.8 %	2.1 %	17.6 %	6.8 %	1.4 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	26	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	CCV	Rack	0		
Analysis started at:	12/3/2024 8:33:58 AM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	104.880 %	117.228 %	61.102 ppb	5,955.026 ppb	5,899.944 ppb	54.609 ppb	5,836.487 ppb	5,633.322 ppb	101.474 %
Concentration per Run 1	102.299 %	121.381 %	60.533 ppb	5,667.069 ppb	5,781.177 ppb	52.135 ppb	5,539.343 ppb	5,472.092 ppb	100.624 %
Concentration per Run 2	106.213 %	114.478 %	60.849 ppb	6,005.036 ppb	5,831.854 ppb	54.677 ppb	5,927.674 ppb	5,603.542 ppb	102.945 %
Concentration per Run 3	106.128 %	115.825 %	61.925 ppb	6,192.972 ppb	6,086.801 ppb	57.015 ppb	6,042.445 ppb	5,824.332 ppb	100.852 %
Recovery Percentage 1			101.837 %	99.250 %	98.332 %	91.015 %	97.275 %	93.889 %	
Concentration RSD	2.1 %	3.1 %	1.2 %	4.5 %	2.8 %	4.5 %	4.5 %	3.2 %	1.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	58.413 ppb	59.039 ppb	60.426 ppb	5,948.352 ppb	59.967 ppb	61.291 ppb	63.074 ppb	61.943 ppb	102.073 %
Concentration per Run 1	54.607 ppb	55.413 ppb	57.555 ppb	5,642.430 ppb	57.706 ppb	60.618 ppb	59.634 ppb	60.129 ppb	105.664 %
Concentration per Run 2	57.714 ppb	58.732 ppb	59.491 ppb	6,031.279 ppb	59.722 ppb	61.943 ppb	64.690 ppb	62.107 ppb	101.227 %
Concentration per Run 3	62.918 ppb	62.972 ppb	64.232 ppb	6,171.345 ppb	62.475 ppb	61.311 ppb	64.899 ppb	63.592 ppb	99.327 %
Recovery Percentage 1	97.355 %	98.399 %	100.710 %	99.139 %	99.946 %	102.151 %	105.124 %	103.238 %	
Concentration RSD	7.2 %	6.4 %	5.7 %	4.6 %	4.0 %	1.1 %	4.7 %	2.8 %	3.2 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	61.252 ppb	58.932 ppb	60.432 ppb	59.651 ppb	105.498 %	59.936 ppb	61.453 ppb	102.535 %	61.198 ppb
Concentration per Run 1	61.628 ppb	55.436 ppb	57.226 ppb	57.286 ppb	112.798 %	57.021 ppb	59.194 ppb	104.931 %	58.544 ppb
Concentration per Run 2	61.042 ppb	59.468 ppb	61.033 ppb	60.383 ppb	103.599 %	59.859 ppb	61.882 ppb	101.484 %	62.618 ppb
Concentration per Run 3	61.086 ppb	61.892 ppb	63.036 ppb	61.283 ppb	100.098 %	62.929 ppb	63.284 ppb	101.189 %	62.432 ppb
Recovery Percentage 1	102.087 %	98.220 %	100.719 %	99.418 %		99.893 %	102.422 %		101.996 %
Concentration RSD	0.5 %	5.5 %	4.9 %	3.5 %	6.2 %	4.9 %	3.4 %	2.0 %	3.8 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	59.541 ppb	108.351 %	107.775 %	59.822 ppb	59.942 ppb	109.521 %
Concentration per Run 1	57.929 ppb	113.355 %	113.468 %	56.724 ppb	57.044 ppb	112.884 %
Concentration per Run 2	59.953 ppb	106.218 %	105.175 %	60.478 ppb	61.151 ppb	108.383 %
Concentration per Run 3	60.741 ppb	105.479 %	104.682 %	62.264 ppb	61.631 ppb	107.296 %
Recovery Percentage 1	99.235 %			99.703 %	99.903 %	
Concentration RSD	2.4 %	4.0 %	4.6 %	4.7 %	4.2 %	2.7 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	27	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	CCB	Rack	0		
Analysis started at:	12/3/2024 8:38:29 AM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	103.977 %	115.152 %	0.011 ppb	-5.017 ppb	0.467 ppb	-0.197 ppb	5.301 ppb	-0.613 ppb	99.782 %
Concentration per Run 1	97.906 %	116.330 %	0.013 ppb	-7.770 ppb	0.058 ppb	-0.298 ppb	-8.208 ppb	7.131 ppb	96.008 %
Concentration per Run 2	105.230 %	117.004 %	0.010 ppb	-7.891 ppb	1.241 ppb	0.072 ppb	8.652 ppb	1.160 ppb	102.242 %
Concentration per Run 3	108.796 %	112.121 %	0.012 ppb	0.609 ppb	0.101 ppb	-0.367 ppb	15.459 ppb	-10.130 ppb	101.096 %
Recovery Percentage 1			2.287 %	-1.003 %	0.667 %	-1.973 %	5.301 %	-0.613 %	
Concentration RSD	5.3 %	2.3 %	10.9 %	97.1 %	143.7 %	119.7 %	229.8 %	1,430.6 %	3.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.523 ppb	-0.048 ppb	0.104 ppb	7.040 ppb	-0.003 ppb	0.007 ppb	0.231 ppb	0.283 ppb	97.473 %
Concentration per Run 1	-0.457 ppb	-0.059 ppb	0.106 ppb	6.173 ppb	-0.007 ppb	0.012 ppb	0.256 ppb	0.348 ppb	99.593 %
Concentration per Run 2	-0.516 ppb	-0.039 ppb	0.095 ppb	7.088 ppb	0.000 ppb	0.029 ppb	0.122 ppb	0.222 ppb	94.437 %
Concentration per Run 3	-0.596 ppb	-0.045 ppb	0.110 ppb	7.860 ppb	-0.003 ppb	-0.021 ppb	0.317 ppb	0.280 ppb	98.390 %
Recovery Percentage 1	-10.460 %	-4.776 %	10.361 %	14.080 %	-0.672 %	0.337 %	23.129 %	5.667 %	
Concentration RSD	13.3 %	21.5 %	7.3 %	12.0 %	102.2 %	379.9 %	43.1 %	22.4 %	2.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.105 ppb	0.147 ppb	0.016 ppb	0.575 ppb	104.361 %	0.004 ppb	0.005 ppb	99.067 %	0.074 ppb
Concentration per Run 1	0.097 ppb	0.189 ppb	0.018 ppb	0.435 ppb	107.730 %	0.006 ppb	0.007 ppb	102.872 %	0.043 ppb
Concentration per Run 2	0.108 ppb	0.210 ppb	0.016 ppb	0.526 ppb	103.006 %	0.005 ppb	0.004 ppb	98.046 %	0.074 ppb
Concentration per Run 3	0.110 ppb	0.042 ppb	0.015 ppb	0.763 ppb	102.347 %	0.002 ppb	0.004 ppb	96.283 %	0.104 ppb
Recovery Percentage 1	21.026 %	2.942 %	0.162 %	28.741 %		1.112 %	2.423 %		1.844 %
Concentration RSD	6.5 %	62.3 %	10.8 %	29.5 %	2.8 %	42.5 %	39.8 %	3.4 %	40.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.014 ppb	105.137 %	103.616 %	0.241 ppb	0.029 ppb	106.686 %
Concentration per Run 1	-0.005 ppb	107.808 %	107.265 %	0.228 ppb	0.030 ppb	110.318 %
Concentration per Run 2	0.038 ppb	103.183 %	101.486 %	0.279 ppb	0.028 ppb	104.981 %
Concentration per Run 3	0.010 ppb	104.420 %	102.098 %	0.217 ppb	0.029 ppb	104.759 %
Recovery Percentage 1	2.816 %			24.137 %	2.875 %	
Concentration RSD	156.9 %	2.3 %	3.1 %	13.6 %	4.1 %	3.0 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index: 28
Analysis label: WG2003472-1 6020TL
Analysis started at: 12/3/2024 8:50:16 AM
User name ALPHALAB\a2-icpmsq2
Rack 1
Vial 9
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	104.348 %	118.463 %	0.016 ppb	-17.156 ppb	0.509 ppb	0.501 ppb	-8.419 ppb	8.802 ppb	96.697 %
Concentration per Run 1	99.619 %	121.213 %	0.020 ppb	-21.457 ppb	-0.168 ppb	0.623 ppb	-12.201 ppb	17.610 ppb	92.397 %
Concentration per Run 2	106.886 %	119.192 %	0.019 ppb	-17.801 ppb	-0.141 ppb	0.689 ppb	-16.846 ppb	14.550 ppb	96.842 %
Concentration per Run 3	106.539 %	114.983 %	0.010 ppb	-12.209 ppb	1.837 ppb	0.191 ppb	3.789 ppb	-5.753 ppb	100.853 %
Concentration RSD	3.9 %	2.7 %	31.0 %	27.1 %	225.8 %	54.0 %	128.6 %	144.3 %	4.4 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.460 ppb	-0.014 ppb	0.339 ppb	0.385 ppb	-0.001 ppb	0.022 ppb	0.332 ppb	0.685 ppb	96.914 %
Concentration per Run 1	-0.550 ppb	0.006 ppb	0.398 ppb	-0.763 ppb	-0.004 ppb	0.047 ppb	0.352 ppb	0.712 ppb	98.293 %
Concentration per Run 2	-0.437 ppb	-0.021 ppb	0.298 ppb	1.150 ppb	0.003 ppb	0.042 ppb	0.345 ppb	0.570 ppb	93.618 %
Concentration per Run 3	-0.394 ppb	-0.026 ppb	0.322 ppb	0.768 ppb	-0.003 ppb	-0.022 ppb	0.298 ppb	0.773 ppb	98.832 %
Concentration RSD	17.6 %	128.0 %	15.5 %	263.2 %	344.8 %	173.0 %	8.9 %	15.2 %	3.0 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.070 ppb	0.163 ppb	0.008 ppb	0.186 ppb	106.624 %	0.001 ppb	0.000 ppb	104.794 %	0.016 ppb
Concentration per Run 1	0.060 ppb	0.156 ppb	0.017 ppb	0.112 ppb	106.623 %	-0.001 ppb	0.000 ppb	108.300 %	0.012 ppb
Concentration per Run 2	0.075 ppb	0.206 ppb	0.009 ppb	0.158 ppb	107.173 %	0.002 ppb	0.000 ppb	104.116 %	0.016 ppb
Concentration per Run 3	0.075 ppb	0.129 ppb	-0.002 ppb	0.286 ppb	106.075 %	0.001 ppb	0.000 ppb	101.966 %	0.018 ppb
Concentration RSD	12.3 %	23.8 %	112.2 %	48.7 %	0.5 %	183.4 %	N/A	3.1 %	19.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.166 ppb	106.999 %	107.332 %	0.023 ppb	0.013 ppb	109.777 %
Concentration per Run 1	0.248 ppb	107.092 %	106.892 %	0.017 ppb	0.010 ppb	110.167 %
Concentration per Run 2	0.119 ppb	104.322 %	107.208 %	0.028 ppb	0.016 ppb	110.039 %
Concentration per Run 3	0.130 ppb	109.584 %	107.895 %	0.023 ppb	0.012 ppb	109.125 %
Concentration RSD	43.1 %	2.5 %	0.5 %	23.9 %	25.7 %	0.5 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	29	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG2003472-2d10 6020TL	Rack	1		
Analysis started at:	12/3/2024 8:54:45 AM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	106.427 %	117.397 %	5.134 ppb	1,002.855 ppb	984.197 ppb	182.732 ppb	995.586 ppb	946.535 ppb	98.274 %
Concentration per Run 1	102.339 %	123.906 %	5.155 ppb	935.315 ppb	937.522 ppb	170.717 ppb	983.320 ppb	995.492 ppb	96.628 %
Concentration per Run 2	107.029 %	110.943 %	5.154 ppb	1,056.737 ppb	1,045.719 ppb	190.240 ppb	1,021.244 ppb	939.268 ppb	98.773 %
Concentration per Run 3	109.914 %	117.340 %	5.092 ppb	1,016.513 ppb	969.351 ppb	187.240 ppb	982.195 ppb	904.845 ppb	99.422 %
Concentration RSD	3.6 %	5.5 %	0.7 %	6.2 %	5.6 %	5.8 %	2.2 %	4.8 %	1.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	47.670 ppb	19.572 ppb	51.772 ppb	105.745 ppb	49.549 ppb	51.761 ppb	26.477 ppb	51.866 ppb	99.384 %
Concentration per Run 1	46.193 ppb	19.180 ppb	51.220 ppb	109.009 ppb	47.998 ppb	50.736 ppb	26.197 ppb	51.865 ppb	99.301 %
Concentration per Run 2	46.698 ppb	20.088 ppb	52.631 ppb	105.793 ppb	50.814 ppb	52.070 ppb	26.943 ppb	52.101 ppb	98.901 %
Concentration per Run 3	50.119 ppb	19.448 ppb	51.466 ppb	102.434 ppb	49.834 ppb	52.477 ppb	26.291 ppb	51.632 ppb	99.950 %
Concentration RSD	4.5 %	2.4 %	1.5 %	3.1 %	2.9 %	1.8 %	1.5 %	0.5 %	0.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	12.414 ppb	11.535 ppb	98.345 ppb	96.570 ppb	106.050 %	5.154 ppb	5.185 ppb	104.504 %	38.774 ppb
Concentration per Run 1	12.519 ppb	11.918 ppb	96.504 ppb	93.029 ppb	109.323 %	5.120 ppb	5.059 ppb	104.202 %	37.618 ppb
Concentration per Run 2	12.812 ppb	12.182 ppb	98.813 ppb	97.145 ppb	106.918 %	5.078 ppb	4.925 ppb	104.330 %	38.680 ppb
Concentration per Run 3	11.911 ppb	10.505 ppb	99.718 ppb	99.536 ppb	101.908 %	5.264 ppb	5.570 ppb	104.981 %	40.025 ppb
Concentration RSD	3.7 %	7.8 %	1.7 %	3.4 %	3.6 %	1.9 %	6.6 %	0.4 %	3.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	195.526 ppb	107.515 %	106.856 %	11.671 ppb	51.682 ppb	109.599 %
Concentration per Run 1	193.697 ppb	110.259 %	109.337 %	11.696 ppb	51.392 ppb	110.010 %
Concentration per Run 2	191.567 ppb	107.498 %	108.609 %	11.679 ppb	52.623 ppb	106.992 %
Concentration per Run 3	201.315 ppb	104.789 %	102.623 %	11.637 ppb	51.033 ppb	111.796 %
Concentration RSD	2.6 %	2.5 %	3.4 %	0.3 %	1.6 %	2.2 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	30	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2469261-01d10 6020TL	Rack	1		
Analysis started at:	12/3/2024 8:59:15 AM	Vial	11		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	100.236 %	116.274 %	0.037 ppb	1,170.726 ppb	921.186 ppb	364.707 ppb	679.445 ppb	9,872.538 ppb	97.992 %
Concentration per Run 1	97.362 %	113.300 %	0.034 ppb	1,188.536 ppb	940.084 ppb	368.939 ppb	690.412 ppb	9,812.497 ppb	96.168 %
Concentration per Run 2	99.268 %	113.973 %	0.040 ppb	1,179.867 ppb	916.912 ppb	372.128 ppb	637.870 ppb	9,794.169 ppb	96.977 %
Concentration per Run 3	104.079 %	121.549 %	0.037 ppb	1,143.777 ppb	906.561 ppb	353.053 ppb	710.053 ppb	10,010.948 ppb	100.830 %
Concentration RSD	3.5 %	3.9 %	8.3 %	2.0 %	1.9 %	2.8 %	5.5 %	1.2 %	2.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	1.303 ppb	875.972 ppb	59.213 ppb	647.324 ppb	1.327 ppb	1.058 ppb	7.967 ppb	4.789 ppb	101.981 %
Concentration per Run 1	1.515 ppb	870.648 ppb	59.316 ppb	695.775 ppb	1.288 ppb	1.083 ppb	7.996 ppb	4.622 ppb	103.550 %
Concentration per Run 2	1.221 ppb	889.364 ppb	58.609 ppb	620.437 ppb	1.390 ppb	1.211 ppb	8.102 ppb	4.928 ppb	99.615 %
Concentration per Run 3	1.173 ppb	867.903 ppb	59.714 ppb	625.759 ppb	1.304 ppb	0.880 ppb	7.804 ppb	4.816 ppb	102.779 %
Concentration RSD	14.2 %	1.3 %	0.9 %	6.5 %	4.1 %	15.8 %	1.9 %	3.2 %	2.0 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.517 ppb	0.795 ppb	30.830 ppb	1.292 ppb	107.101 %	0.011 ppb	0.041 ppb	105.258 %	1.540 ppb
Concentration per Run 1	0.466 ppb	0.611 ppb	30.889 ppb	1.179 ppb	108.201 %	0.010 ppb	0.052 ppb	106.425 %	1.329 ppb
Concentration per Run 2	0.510 ppb	1.173 ppb	31.099 ppb	1.289 ppb	106.304 %	0.012 ppb	0.035 ppb	104.288 %	1.507 ppb
Concentration per Run 3	0.576 ppb	0.600 ppb	30.503 ppb	1.409 ppb	106.796 %	0.011 ppb	0.035 ppb	105.059 %	1.785 ppb
Concentration RSD	10.7 %	41.3 %	1.0 %	8.9 %	0.9 %	10.1 %	23.7 %	1.0 %	14.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	4.643 ppb	109.684 %	108.361 %	0.023 ppb	1.551 ppb	111.226 %
Concentration per Run 1	4.654 ppb	113.808 %	112.462 %	0.015 ppb	1.505 ppb	113.926 %
Concentration per Run 2	4.541 ppb	106.272 %	106.072 %	0.026 ppb	1.576 ppb	110.522 %
Concentration per Run 3	4.735 ppb	108.971 %	106.549 %	0.030 ppb	1.572 ppb	109.230 %
Concentration RSD	2.1 %	3.5 %	3.3 %	33.2 %	2.6 %	2.2 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	31	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG2003472-3d10 6020TL	Rack	1		
Analysis started at:	12/3/2024 9:03:45 AM	Vial	12		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	103.244 %	119.024 %	5.371 ppb	2,230.851 ppb	1,943.920 ppb	743.216 ppb	1,663.294 ppb	11,213.259 ppb	97.892 %
Concentration per Run 1	99.075 %	120.876 %	5.486 ppb	2,233.435 ppb	1,917.759 ppb	727.458 ppb	1,612.642 ppb	11,161.731 ppb	93.835 %
Concentration per Run 2	103.901 %	119.866 %	5.274 ppb	2,199.818 ppb	1,937.202 ppb	724.769 ppb	1,659.416 ppb	11,104.766 ppb	99.344 %
Concentration per Run 3	106.757 %	116.330 %	5.354 ppb	2,259.300 ppb	1,976.799 ppb	777.421 ppb	1,717.824 ppb	11,373.280 ppb	100.497 %
Concentration RSD	3.8 %	2.0 %	2.0 %	1.3 %	1.5 %	4.0 %	3.2 %	1.3 %	3.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	50.823 ppb	886.207 ppb	110.471 ppb	720.348 ppb	52.287 ppb	51.756 ppb	33.796 ppb	56.144 ppb	103.449 %
Concentration per Run 1	50.297 ppb	882.706 ppb	114.110 ppb	729.110 ppb	52.473 ppb	52.192 ppb	34.058 ppb	56.930 ppb	103.085 %
Concentration per Run 2	50.962 ppb	872.441 ppb	107.175 ppb	731.509 ppb	52.376 ppb	50.903 ppb	33.053 ppb	55.747 ppb	103.524 %
Concentration per Run 3	51.210 ppb	903.476 ppb	110.130 ppb	700.425 ppb	52.012 ppb	52.172 ppb	34.275 ppb	55.756 ppb	103.737 %
Concentration RSD	0.9 %	1.8 %	3.2 %	2.4 %	0.5 %	1.4 %	1.9 %	1.2 %	0.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	12.509 ppb	10.389 ppb	130.804 ppb	92.589 ppb	107.951 %	5.313 ppb	5.252 ppb	105.702 %	43.324 ppb
Concentration per Run 1	12.747 ppb	10.822 ppb	131.185 ppb	92.330 ppb	109.063 %	5.228 ppb	5.090 ppb	108.587 %	42.772 ppb
Concentration per Run 2	12.617 ppb	9.915 ppb	129.129 ppb	90.194 ppb	110.345 %	5.362 ppb	5.259 ppb	105.347 %	42.821 ppb
Concentration per Run 3	12.163 ppb	10.430 ppb	132.099 ppb	95.243 ppb	104.445 %	5.350 ppb	5.408 ppb	103.173 %	44.379 ppb
Concentration RSD	2.4 %	4.4 %	1.2 %	2.7 %	2.9 %	1.4 %	3.0 %	2.6 %	2.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	206.464 ppb	110.751 %	109.863 %	11.825 ppb	54.212 ppb	113.028 %
Concentration per Run 1	202.515 ppb	110.894 %	111.333 %	11.476 ppb	52.465 ppb	116.398 %
Concentration per Run 2	205.394 ppb	110.108 %	109.682 %	12.374 ppb	56.216 ppb	109.201 %
Concentration per Run 3	211.483 ppb	111.250 %	108.574 %	11.625 ppb	53.954 ppb	113.487 %
Concentration RSD	2.2 %	0.5 %	1.3 %	4.1 %	3.5 %	3.2 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	32	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG2003472-4d10 6020TL	Rack	1		
Analysis started at:	12/3/2024 9:08:15 AM	Vial	13		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	109.063 %	119.417 %	0.037 ppb	1,222.267 ppb	954.399 ppb	390.399 ppb	724.449 ppb	10,185.538 ppb	100.298 %
Concentration per Run 1	104.460 %	119.024 %	0.036 ppb	1,196.307 ppb	924.907 ppb	401.191 ppb	724.118 ppb	9,932.683 ppb	101.079 %
Concentration per Run 2	110.278 %	123.906 %	0.039 ppb	1,221.339 ppb	948.980 ppb	381.774 ppb	703.660 ppb	10,182.464 ppb	100.924 %
Concentration per Run 3	112.450 %	115.320 %	0.037 ppb	1,249.154 ppb	989.308 ppb	388.233 ppb	745.569 ppb	10,441.467 ppb	98.890 %
Concentration RSD	3.8 %	3.6 %	3.7 %	2.2 %	3.4 %	2.5 %	2.9 %	2.5 %	1.2 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	1.215 ppb	803.893 ppb	58.780 ppb	704.452 ppb	1.419 ppb	1.080 ppb	8.056 ppb	4.921 ppb	105.751 %
Concentration per Run 1	1.387 ppb	825.182 ppb	59.266 ppb	656.295 ppb	1.506 ppb	0.908 ppb	7.880 ppb	4.754 ppb	108.525 %
Concentration per Run 2	1.200 ppb	715.116 ppb	60.456 ppb	755.699 ppb	1.385 ppb	1.129 ppb	8.372 ppb	5.156 ppb	103.117 %
Concentration per Run 3	1.057 ppb	871.381 ppb	56.617 ppb	701.361 ppb	1.366 ppb	1.204 ppb	7.916 ppb	4.854 ppb	105.612 %
Concentration RSD	13.6 %	10.0 %	3.3 %	7.1 %	5.4 %	14.2 %	3.4 %	4.3 %	2.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.504 ppb	1.037 ppb	31.944 ppb	1.298 ppb	109.835 %	0.006 ppb	0.054 ppb	109.554 %	0.324 ppb
Concentration per Run 1	0.532 ppb	1.041 ppb	30.972 ppb	0.987 ppb	113.657 %	0.009 ppb	0.059 ppb	112.144 %	0.274 ppb
Concentration per Run 2	0.573 ppb	0.716 ppb	32.435 ppb	1.315 ppb	108.340 %	0.006 ppb	0.037 ppb	108.479 %	0.316 ppb
Concentration per Run 3	0.406 ppb	1.355 ppb	32.424 ppb	1.592 ppb	107.508 %	0.003 ppb	0.065 ppb	108.038 %	0.382 ppb
Concentration RSD	17.3 %	30.8 %	2.6 %	23.4 %	3.0 %	45.9 %	26.9 %	2.1 %	16.8 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	4.551 ppb	111.445 %	109.943 %	0.020 ppb	1.532 ppb	115.807 %
Concentration per Run 1	4.533 ppb	115.169 %	111.780 %	0.013 ppb	1.524 ppb	115.525 %
Concentration per Run 2	4.546 ppb	110.671 %	108.738 %	0.017 ppb	1.555 ppb	117.016 %
Concentration per Run 3	4.574 ppb	108.496 %	109.310 %	0.031 ppb	1.517 ppb	114.881 %
Concentration RSD	0.5 %	3.1 %	1.5 %	48.4 %	1.3 %	0.9 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	33	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG2003472-5d10 6020TL	Rack	1		
Analysis started at:	12/3/2024 9:12:41 AM	Vial	14		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	105.764 %	115.264 %	48.427 ppb	5,967.445 ppb	5,847.899 ppb	462.378 ppb	5,687.239 ppb	15,381.779 ppb	100.150 %
Concentration per Run 1	100.278 %	115.320 %	49.931 ppb	5,940.474 ppb	5,810.633 ppb	460.350 ppb	5,605.885 ppb	15,291.063 ppb	97.825 %
Concentration per Run 2	106.548 %	115.152 %	47.961 ppb	5,875.724 ppb	5,953.060 ppb	466.937 ppb	5,755.777 ppb	15,408.999 ppb	102.678 %
Concentration per Run 3	110.465 %	115.320 %	47.388 ppb	6,086.136 ppb	5,780.004 ppb	459.846 ppb	5,700.054 ppb	15,445.275 ppb	99.946 %
Concentration RSD	4.9 %	0.1 %	2.8 %	1.8 %	1.6 %	0.9 %	1.3 %	0.5 %	2.4 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	50.735 ppb	928.937 ppb	106.066 ppb	5,475.165 ppb	50.175 ppb	49.780 ppb	57.194 ppb	54.298 ppb	105.832 %
Concentration per Run 1	49.066 ppb	899.936 ppb	103.623 ppb	5,349.299 ppb	48.887 ppb	50.440 ppb	55.687 ppb	53.429 ppb	109.718 %
Concentration per Run 2	52.460 ppb	951.538 ppb	111.186 ppb	5,664.250 ppb	51.259 ppb	50.742 ppb	60.920 ppb	56.226 ppb	101.883 %
Concentration per Run 3	50.679 ppb	935.338 ppb	103.387 ppb	5,411.946 ppb	50.378 ppb	48.159 ppb	54.975 ppb	53.239 ppb	105.894 %
Concentration RSD	3.3 %	2.8 %	4.2 %	3.0 %	2.4 %	2.8 %	5.7 %	3.1 %	3.7 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	50.288 ppb	47.170 ppb	78.632 ppb	48.215 ppb	110.271 %	5.776 ppb	48.364 ppb	107.903 %	48.320 ppb
Concentration per Run 1	49.368 ppb	49.051 ppb	76.727 ppb	46.283 ppb	113.100 %	5.710 ppb	47.756 ppb	109.425 %	47.669 ppb
Concentration per Run 2	52.101 ppb	47.624 ppb	80.200 ppb	48.700 ppb	107.220 %	5.862 ppb	49.352 ppb	107.101 %	49.793 ppb
Concentration per Run 3	49.395 ppb	44.835 ppb	78.970 ppb	49.660 ppb	110.492 %	5.755 ppb	47.982 ppb	107.183 %	47.498 ppb
Concentration RSD	3.1 %	4.5 %	2.2 %	3.6 %	2.7 %	1.3 %	1.8 %	1.2 %	2.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	51.780 ppb	114.040 %	112.072 %	47.975 ppb	50.021 ppb	112.703 %
Concentration per Run 1	51.327 ppb	118.486 %	115.352 %	45.766 ppb	48.899 ppb	115.305 %
Concentration per Run 2	51.630 ppb	111.787 %	109.402 %	48.139 ppb	50.615 ppb	114.166 %
Concentration per Run 3	52.384 ppb	111.847 %	111.460 %	50.020 ppb	50.549 ppb	108.639 %
Concentration RSD	1.1 %	3.4 %	2.7 %	4.4 %	1.9 %	3.2 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	34	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG2003472-6d50 6020TL	Rack	1		
Analysis started at:	12/3/2024 9:17:08 AM	Vial	15		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	104.442 %	113.749 %	0.013 ppb	223.164 ppb	194.414 ppb	76.291 ppb	154.264 ppb	2,120.425 ppb	100.195 %
Concentration per Run 1	99.102 %	112.626 %	0.010 ppb	221.574 ppb	194.661 ppb	79.960 ppb	165.022 ppb	2,108.095 ppb	97.367 %
Concentration per Run 2	104.276 %	115.152 %	0.018 ppb	229.672 ppb	200.050 ppb	77.071 ppb	145.507 ppb	2,212.131 ppb	100.759 %
Concentration per Run 3	109.948 %	113.468 %	0.012 ppb	218.245 ppb	188.532 ppb	71.842 ppb	152.262 ppb	2,041.050 ppb	102.459 %
Concentration RSD	5.2 %	1.1 %	30.4 %	2.6 %	3.0 %	5.4 %	6.4 %	4.1 %	2.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.150 ppb	182.110 ppb	11.980 ppb	132.891 ppb	0.272 ppb	0.097 ppb	1.747 ppb	1.131 ppb	102.791 %
Concentration per Run 1	-0.186 ppb	179.878 ppb	11.838 ppb	129.357 ppb	0.275 ppb	0.155 ppb	1.839 ppb	1.133 ppb	103.837 %
Concentration per Run 2	-0.193 ppb	187.800 ppb	12.622 ppb	120.558 ppb	0.273 ppb	0.105 ppb	1.816 ppb	1.121 ppb	99.518 %
Concentration per Run 3	-0.070 ppb	178.654 ppb	11.480 ppb	148.757 ppb	0.266 ppb	0.029 ppb	1.585 ppb	1.141 ppb	105.019 %
Concentration RSD	46.2 %	2.7 %	4.9 %	10.9 %	1.8 %	65.6 %	8.0 %	0.9 %	2.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.162 ppb	0.171 ppb	6.376 ppb	0.513 ppb	107.502 %	0.002 ppb	0.015 ppb	106.081 %	0.171 ppb
Concentration per Run 1	0.075 ppb	-0.009 ppb	6.259 ppb	0.238 ppb	112.344 %	0.006 ppb	0.007 ppb	110.996 %	0.119 ppb
Concentration per Run 2	0.189 ppb	0.036 ppb	6.553 ppb	0.737 ppb	104.665 %	-0.001 ppb	0.021 ppb	102.699 %	0.162 ppb
Concentration per Run 3	0.222 ppb	0.488 ppb	6.315 ppb	0.564 ppb	105.497 %	0.001 ppb	0.018 ppb	104.547 %	0.233 ppb
Concentration RSD	47.4 %	160.1 %	2.5 %	49.4 %	3.9 %	163.5 %	50.5 %	4.1 %	33.3 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.976 ppb	109.466 %	109.209 %	0.210 ppb	0.346 ppb	110.600 %
Concentration per Run 1	0.977 ppb	114.087 %	111.157 %	0.191 ppb	0.336 ppb	115.589 %
Concentration per Run 2	0.939 ppb	104.304 %	106.783 %	0.241 ppb	0.352 ppb	108.341 %
Concentration per Run 3	1.013 ppb	110.008 %	109.687 %	0.197 ppb	0.349 ppb	107.869 %
Concentration RSD	3.8 %	4.5 %	2.0 %	12.9 %	2.4 %	3.9 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	35	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2469261-02d10 6020TL	Rack	1		
Analysis started at:	12/3/2024 9:21:35 AM	Vial	16		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	107.949 %	114.983 %	0.041 ppb	1,207.407 ppb	987.032 ppb	458.142 ppb	719.481 ppb	10,417.879 ppb	101.252 %
Concentration per Run 1	103.105 %	120.708 %	0.036 ppb	1,158.911 ppb	976.966 ppb	442.780 ppb	719.016 ppb	10,301.846 ppb	98.700 %
Concentration per Run 2	107.872 %	112.458 %	0.043 ppb	1,224.041 ppb	972.783 ppb	464.794 ppb	687.179 ppb	10,299.354 ppb	102.693 %
Concentration per Run 3	112.871 %	111.785 %	0.043 ppb	1,239.270 ppb	1,011.347 ppb	466.853 ppb	752.246 ppb	10,652.436 ppb	102.363 %
Concentration RSD	4.5 %	4.3 %	9.6 %	3.5 %	2.1 %	2.9 %	4.5 %	1.9 %	2.2 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	1.629 ppb	922.199 ppb	58.715 ppb	776.744 ppb	1.402 ppb	1.095 ppb	8.437 ppb	5.325 ppb	105.430 %
Concentration per Run 1	1.572 ppb	804.620 ppb	58.003 ppb	801.911 ppb	1.362 ppb	1.068 ppb	8.235 ppb	5.440 ppb	104.501 %
Concentration per Run 2	1.711 ppb	960.150 ppb	57.496 ppb	737.162 ppb	1.377 ppb	1.072 ppb	8.206 ppb	5.555 ppb	106.195 %
Concentration per Run 3	1.604 ppb	1,001.829 ppb	60.645 ppb	791.160 ppb	1.467 ppb	1.146 ppb	8.870 ppb	4.980 ppb	105.594 %
Concentration RSD	4.5 %	11.3 %	2.9 %	4.5 %	4.1 %	4.0 %	4.4 %	5.7 %	0.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.525 ppb	0.970 ppb	30.967 ppb	0.639 ppb	107.737 %	0.006 ppb	0.057 ppb	105.334 %	0.201 ppb
Concentration per Run 1	0.664 ppb	0.619 ppb	30.859 ppb	0.575 ppb	110.270 %	0.001 ppb	0.054 ppb	108.946 %	0.144 ppb
Concentration per Run 2	0.473 ppb	1.411 ppb	31.091 ppb	0.554 ppb	105.255 %	0.007 ppb	0.053 ppb	103.915 %	0.207 ppb
Concentration per Run 3	0.437 ppb	0.880 ppb	30.951 ppb	0.789 ppb	107.685 %	0.009 ppb	0.064 ppb	103.141 %	0.252 ppb
Concentration RSD	23.2 %	41.6 %	0.4 %	20.3 %	2.3 %	73.1 %	10.2 %	3.0 %	27.0 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	5.103 ppb	111.586 %	110.214 %	0.058 ppb	1.669 ppb	113.214 %
Concentration per Run 1	5.217 ppb	114.486 %	110.995 %	0.040 ppb	1.611 ppb	116.067 %
Concentration per Run 2	5.238 ppb	109.328 %	108.751 %	0.065 ppb	1.686 ppb	113.161 %
Concentration per Run 3	4.855 ppb	110.943 %	110.896 %	0.070 ppb	1.709 ppb	110.414 %
Concentration RSD	4.2 %	2.4 %	1.2 %	27.3 %	3.1 %	2.5 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	36	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2469261-03d10 6020TL	Rack	1		
Analysis started at:	12/3/2024 9:26:02 AM	Vial	17		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	106.811 %	120.876 %	0.020 ppb	1,328.836 ppb	583.029 ppb	190.736 ppb	474.338 ppb	13,437.385 ppb	102.266 %
Concentration per Run 1	103.119 %	128.115 %	0.016 ppb	1,243.839 ppb	544.730 ppb	182.477 ppb	424.895 ppb	12,329.262 ppb	100.478 %
Concentration per Run 2	105.998 %	119.192 %	0.023 ppb	1,380.975 ppb	586.323 ppb	192.112 ppb	487.393 ppb	13,751.740 ppb	102.689 %
Concentration per Run 3	111.316 %	115.320 %	0.022 ppb	1,361.695 ppb	618.035 ppb	197.620 ppb	510.725 ppb	14,231.153 ppb	103.632 %
Concentration RSD	3.9 %	5.4 %	18.3 %	5.6 %	6.3 %	4.0 %	9.4 %	7.4 %	1.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.373 ppb	250.793 ppb	7.142 ppb	389.028 ppb	1.327 ppb	1.108 ppb	7.836 ppb	20.800 ppb	102.900 %
Concentration per Run 1	0.293 ppb	241.826 ppb	6.823 ppb	373.282 ppb	1.330 ppb	1.066 ppb	7.692 ppb	20.275 ppb	105.317 %
Concentration per Run 2	0.360 ppb	253.093 ppb	7.210 ppb	401.464 ppb	1.314 ppb	0.936 ppb	7.984 ppb	21.193 ppb	100.533 %
Concentration per Run 3	0.465 ppb	257.460 ppb	7.394 ppb	392.338 ppb	1.337 ppb	1.322 ppb	7.831 ppb	20.930 ppb	102.848 %
Concentration RSD	23.2 %	3.2 %	4.1 %	3.7 %	0.9 %	17.7 %	1.9 %	2.3 %	2.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.514 ppb	0.610 ppb	27.764 ppb	2.999 ppb	109.052 %	0.009 ppb	0.152 ppb	107.535 %	0.166 ppb
Concentration per Run 1	0.430 ppb	0.641 ppb	27.023 ppb	2.760 ppb	111.830 %	0.009 ppb	0.194 ppb	107.184 %	0.135 ppb
Concentration per Run 2	0.536 ppb	0.757 ppb	28.081 ppb	2.856 ppb	108.406 %	0.004 ppb	0.128 ppb	109.853 %	0.191 ppb
Concentration per Run 3	0.575 ppb	0.431 ppb	28.190 ppb	3.381 ppb	106.920 %	0.014 ppb	0.132 ppb	105.568 %	0.172 ppb
Concentration RSD	14.6 %	27.1 %	2.3 %	11.2 %	2.3 %	56.7 %	24.2 %	2.0 %	17.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	3.032 ppb	109.318 %	107.076 %	0.030 ppb	0.667 ppb	114.065 %
Concentration per Run 1	3.008 ppb	112.184 %	108.987 %	0.016 ppb	0.643 ppb	118.049 %
Concentration per Run 2	2.819 ppb	108.880 %	104.490 %	0.036 ppb	0.690 ppb	112.839 %
Concentration per Run 3	3.269 ppb	106.889 %	107.752 %	0.039 ppb	0.667 ppb	111.306 %
Concentration RSD	7.4 %	2.4 %	2.2 %	42.0 %	3.5 %	3.1 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	37	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2469261-04d10 6020TL	Rack	1		
Analysis started at:	12/3/2024 9:30:29 AM	Vial	18		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	110.416 %	125.253 %	0.020 ppb	1,332.001 ppb	580.880 ppb	176.377 ppb	466.198 ppb	12,887.785 ppb	102.124 %
Concentration per Run 1	104.035 %	127.442 %	0.020 ppb	1,294.308 ppb	573.056 ppb	170.621 ppb	455.961 ppb	12,703.518 ppb	101.500 %
Concentration per Run 2	110.988 %	126.095 %	0.021 ppb	1,347.688 ppb	579.526 ppb	174.986 ppb	454.766 ppb	12,822.277 ppb	101.835 %
Concentration per Run 3	116.226 %	122.223 %	0.017 ppb	1,354.005 ppb	590.058 ppb	183.525 ppb	487.867 ppb	13,137.560 ppb	103.038 %
Concentration RSD	5.5 %	2.2 %	11.4 %	2.5 %	1.5 %	3.7 %	4.0 %	1.7 %	0.8 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.528 ppb	249.875 ppb	6.966 ppb	380.827 ppb	1.187 ppb	1.145 ppb	7.382 ppb	14.553 ppb	103.047 %
Concentration per Run 1	0.616 ppb	238.659 ppb	6.928 ppb	368.027 ppb	1.155 ppb	0.954 ppb	7.781 ppb	14.711 ppb	104.598 %
Concentration per Run 2	0.432 ppb	250.681 ppb	6.977 ppb	399.717 ppb	1.187 ppb	1.464 ppb	7.186 ppb	14.384 ppb	102.381 %
Concentration per Run 3	0.535 ppb	260.286 ppb	6.994 ppb	374.736 ppb	1.220 ppb	1.018 ppb	7.181 ppb	14.564 ppb	102.162 %
Concentration RSD	17.5 %	4.3 %	0.5 %	4.4 %	2.7 %	24.3 %	4.7 %	1.1 %	1.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.513 ppb	0.607 ppb	28.412 ppb	3.010 ppb	109.107 %	0.004 ppb	0.160 ppb	106.110 %	0.158 ppb
Concentration per Run 1	0.435 ppb	0.946 ppb	27.748 ppb	2.971 ppb	112.234 %	0.002 ppb	0.111 ppb	108.246 %	0.133 ppb
Concentration per Run 2	0.547 ppb	0.597 ppb	28.488 ppb	2.990 ppb	106.983 %	0.002 ppb	0.187 ppb	106.738 %	0.157 ppb
Concentration per Run 3	0.556 ppb	0.278 ppb	29.000 ppb	3.070 ppb	108.103 %	0.008 ppb	0.183 ppb	103.347 %	0.183 ppb
Concentration RSD	13.2 %	55.0 %	2.2 %	1.7 %	2.5 %	86.4 %	26.5 %	2.4 %	15.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	3.098 ppb	110.912 %	110.760 %	0.017 ppb	0.694 ppb	112.172 %
Concentration per Run 1	3.092 ppb	114.407 %	114.478 %	0.009 ppb	0.658 ppb	116.168 %
Concentration per Run 2	3.092 ppb	107.587 %	108.074 %	0.015 ppb	0.710 ppb	112.334 %
Concentration per Run 3	3.109 ppb	110.741 %	109.728 %	0.027 ppb	0.712 ppb	108.014 %
Concentration RSD	0.3 %	3.1 %	3.0 %	54.8 %	4.5 %	3.6 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	38	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	xCCV	Rack	0		
Analysis started at:	12/3/2024 9:34:57 AM	Vial	9		

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	39	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	xCCB	Rack	0		
Analysis started at:	12/3/2024 9:39:28 AM	Vial	10		

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	40	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	CCV	Rack	0		
Analysis started at:	12/3/2024 9:44:34 AM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	103.951 %	121.269 %	56.922 ppb	5,611.965 ppb	5,531.306 ppb	56.704 ppb	5,698.359 ppb	5,834.630 ppb	100.391 %
Concentration per Run 1	99.406 %	125.085 %	57.946 ppb	5,403.079 ppb	5,318.340 ppb	57.065 ppb	5,638.954 ppb	5,729.499 ppb	99.934 %
Concentration per Run 2	104.090 %	117.677 %	56.806 ppb	5,863.072 ppb	5,831.633 ppb	57.379 ppb	5,706.473 ppb	6,062.521 ppb	99.914 %
Concentration per Run 3	108.357 %	121.044 %	56.014 ppb	5,569.745 ppb	5,443.946 ppb	55.670 ppb	5,749.649 ppb	5,711.872 ppb	101.323 %
Recovery Percentage 1			94.870 %	93.533 %	92.188 %	94.507 %	94.973 %	97.244 %	
Concentration RSD	4.3 %	3.1 %	1.7 %	4.1 %	4.8 %	1.6 %	1.0 %	3.4 %	0.8 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	56.999 ppb	57.194 ppb	58.343 ppb	5,780.953 ppb	58.592 ppb	59.314 ppb	58.598 ppb	59.515 ppb	101.977 %
Concentration per Run 1	53.017 ppb	54.777 ppb	58.043 ppb	5,636.597 ppb	57.248 ppb	58.450 ppb	57.901 ppb	58.875 ppb	103.475 %
Concentration per Run 2	60.028 ppb	58.652 ppb	59.008 ppb	5,972.972 ppb	60.735 ppb	61.236 ppb	59.920 ppb	61.276 ppb	99.694 %
Concentration per Run 3	57.952 ppb	58.153 ppb	57.979 ppb	5,733.292 ppb	57.792 ppb	58.255 ppb	57.973 ppb	58.393 ppb	102.761 %
Recovery Percentage 1	94.998 %	95.324 %	97.239 %	96.349 %	97.653 %	98.856 %	97.663 %	99.192 %	
Concentration RSD	6.3 %	3.7 %	1.0 %	3.0 %	3.2 %	2.8 %	2.0 %	2.6 %	2.0 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	59.513 ppb	58.831 ppb	58.487 ppb	57.265 ppb	106.638 %	57.482 ppb	57.815 ppb	106.411 %	56.883 ppb
Concentration per Run 1	59.458 ppb	55.488 ppb	57.446 ppb	55.729 ppb	111.018 %	56.663 ppb	56.589 ppb	108.757 %	56.190 ppb
Concentration per Run 2	60.161 ppb	61.934 ppb	60.229 ppb	57.861 ppb	103.065 %	57.455 ppb	57.485 ppb	105.894 %	57.103 ppb
Concentration per Run 3	58.920 ppb	59.071 ppb	57.786 ppb	58.205 ppb	105.830 %	58.328 ppb	59.373 ppb	104.582 %	57.357 ppb
Recovery Percentage 1	99.188 %	98.052 %	97.478 %	95.442 %		95.803 %	96.359 %		94.806 %
Concentration RSD	1.0 %	5.5 %	2.6 %	2.3 %	3.8 %	1.4 %	2.5 %	2.0 %	1.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	56.006 ppb	110.618 %	108.235 %	56.854 ppb	56.883 ppb	110.259 %
Concentration per Run 1	55.702 ppb	113.913 %	108.986 %	54.018 ppb	54.525 ppb	113.886 %
Concentration per Run 2	55.863 ppb	109.132 %	107.319 %	57.291 ppb	58.338 ppb	109.247 %
Concentration per Run 3	56.452 ppb	108.811 %	108.401 %	59.252 ppb	57.785 ppb	107.643 %
Recovery Percentage 1	93.343 %			94.756 %	94.805 %	
Concentration RSD	0.7 %	2.6 %	0.8 %	4.7 %	3.6 %	2.9 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	41	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	CCB	Rack	0		
Analysis started at:	12/3/2024 9:49:04 AM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	105.177 %	111.673 %	0.012 ppb	-25.893 ppb	0.222 ppb	-0.044 ppb	7.733 ppb	-2.256 ppb	97.409 %
Concentration per Run 1	101.145 %	112.795 %	0.014 ppb	-28.711 ppb	0.274 ppb	-0.338 ppb	0.631 ppb	-8.304 ppb	95.036 %
Concentration per Run 2	106.688 %	111.616 %	0.014 ppb	-23.614 ppb	0.298 ppb	0.286 ppb	13.570 ppb	5.406 ppb	98.782 %
Concentration per Run 3	107.699 %	110.606 %	0.008 ppb	-25.355 ppb	0.095 ppb	-0.081 ppb	8.999 ppb	-3.870 ppb	98.409 %
Recovery Percentage 1			2.372 %	-5.179 %	0.317 %	-0.444 %	7.733 %	-2.256 %	
Concentration RSD	3.4 %	1.0 %	28.3 %	10.0 %	50.0 %	707.2 %	84.8 %	310.1 %	2.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.468 ppb	-0.002 ppb	0.019 ppb	4.094 ppb	-0.003 ppb	0.002 ppb	0.149 ppb	0.296 ppb	102.911 %
Concentration per Run 1	-0.535 ppb	-0.016 ppb	0.007 ppb	3.357 ppb	0.000 ppb	0.020 ppb	0.155 ppb	0.304 ppb	103.589 %
Concentration per Run 2	-0.394 ppb	-0.033 ppb	0.058 ppb	4.690 ppb	-0.010 ppb	0.012 ppb	0.161 ppb	0.283 ppb	100.628 %
Concentration per Run 3	-0.474 ppb	0.043 ppb	-0.009 ppb	4.235 ppb	0.003 ppb	-0.026 ppb	0.132 ppb	0.302 ppb	104.518 %
Recovery Percentage 1	-9.357 %	-0.215 %	1.863 %	8.189 %	-0.525 %	0.106 %	14.922 %	5.924 %	
Concentration RSD	15.2 %	1,857.5 %	187.4 %	16.5 %	251.5 %	1,147.5 %	10.4 %	3.9 %	2.0 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.039 ppb	0.143 ppb	0.010 ppb	0.297 ppb	105.779 %	0.014 ppb	0.002 ppb	104.255 %	0.067 ppb
Concentration per Run 1	0.021 ppb	0.187 ppb	0.009 ppb	0.260 ppb	107.234 %	0.014 ppb	0.003 ppb	106.449 %	0.048 ppb
Concentration per Run 2	0.070 ppb	0.117 ppb	0.009 ppb	0.315 ppb	104.709 %	0.021 ppb	0.004 ppb	104.786 %	0.074 ppb
Concentration per Run 3	0.027 ppb	0.126 ppb	0.011 ppb	0.316 ppb	105.396 %	0.005 ppb	0.000 ppb	101.532 %	0.078 ppb
Recovery Percentage 1	7.826 %	2.866 %	0.097 %	14.856 %		3.378 %	1.165 %		1.674 %
Concentration RSD	68.2 %	26.5 %	15.7 %	10.7 %	1.2 %	57.3 %	86.6 %	2.4 %	24.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.017 ppb	106.638 %	106.649 %	0.238 ppb	0.020 ppb	109.571 %
Concentration per Run 1	0.021 ppb	108.508 %	108.216 %	0.215 ppb	0.022 ppb	113.525 %
Concentration per Run 2	0.022 ppb	104.190 %	103.754 %	0.275 ppb	0.021 ppb	106.484 %
Concentration per Run 3	0.008 ppb	107.216 %	107.977 %	0.225 ppb	0.017 ppb	108.704 %
Recovery Percentage 1	3.449 %			23.824 %	2.023 %	
Concentration RSD	44.2 %	2.1 %	2.4 %	13.4 %	12.1 %	3.3 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	42	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2469261-05 6020TL	Rack	1		
Analysis started at:	12/3/2024 9:54:58 AM	Vial	19		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	101.418 %	113.524 %	0.430 ppb	35,842.553 ppb	23,918.184 ppb	5,113.443 ppb	13,025.821 ppb	82,011.449 ppb	101.167 %
Concentration per Run 1	98.124 %	116.162 %	0.424 ppb	34,621.299 ppb	23,404.442 ppb	5,028.999 ppb	12,725.365 ppb	80,308.794 ppb	100.869 %
Concentration per Run 2	101.105 %	109.091 %	0.431 ppb	36,837.668 ppb	24,566.089 ppb	5,204.858 ppb	13,073.716 ppb	81,127.342 ppb	100.054 %
Concentration per Run 3	105.024 %	115.320 %	0.434 ppb	36,068.692 ppb	23,784.021 ppb	5,106.473 ppb	13,278.381 ppb	84,598.212 ppb	102.578 %
Concentration RSD	3.4 %	3.4 %	1.3 %	3.1 %	2.5 %	1.7 %	2.1 %	2.8 %	1.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	15.354 ppb	21.206 ppb	152.740 ppb	8,101.320 ppb	6.718 ppb	8.091 ppb	7.531 ppb	24.507 ppb	103.870 %
Concentration per Run 1	14.458 ppb	20.025 ppb	141.635 ppb	7,709.188 ppb	6.718 ppb	7.959 ppb	6.973 ppb	23.944 ppb	107.445 %
Concentration per Run 2	15.551 ppb	21.853 ppb	159.235 ppb	8,217.110 ppb	6.663 ppb	8.331 ppb	7.708 ppb	25.007 ppb	103.571 %
Concentration per Run 3	16.053 ppb	21.740 ppb	157.352 ppb	8,377.661 ppb	6.772 ppb	7.982 ppb	7.911 ppb	24.571 ppb	100.592 %
Concentration RSD	5.3 %	4.8 %	6.3 %	4.3 %	0.8 %	2.6 %	6.6 %	2.2 %	3.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	2.780 ppb	16.236 ppb	330.852 ppb	11.464 ppb	104.471 %	0.010 ppb	0.089 ppb	107.677 %	0.354 ppb
Concentration per Run 1	2.528 ppb	16.814 ppb	321.187 ppb	11.224 ppb	107.742 %	0.007 ppb	0.098 ppb	110.089 %	0.335 ppb
Concentration per Run 2	2.801 ppb	15.895 ppb	334.218 ppb	11.332 ppb	102.713 %	0.010 ppb	0.080 ppb	107.416 %	0.325 ppb
Concentration per Run 3	3.010 ppb	15.999 ppb	337.151 ppb	11.837 ppb	102.959 %	0.013 ppb	0.088 ppb	105.525 %	0.403 ppb
Concentration RSD	8.7 %	3.1 %	2.6 %	2.9 %	2.7 %	29.0 %	10.0 %	2.1 %	12.0 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	31.421 ppb	113.037 %	111.749 %	0.100 ppb	6.331 ppb	109.598 %
Concentration per Run 1	31.086 ppb	116.855 %	114.299 %	0.084 ppb	6.044 ppb	114.391 %
Concentration per Run 2	31.581 ppb	112.148 %	109.893 %	0.105 ppb	6.325 ppb	110.511 %
Concentration per Run 3	31.597 ppb	110.108 %	111.054 %	0.112 ppb	6.624 ppb	103.891 %
Concentration RSD	0.9 %	3.1 %	2.0 %	14.2 %	4.6 %	4.8 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	43	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2469261-06 6020TL	Rack	1		
Analysis started at:	12/3/2024 9:59:26 AM	Vial	20		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	102.117 %	116.386 %	0.399 ppb	35,359.547 ppb	23,209.747 ppb	4,743.207 ppb	12,746.705 ppb	79,571.817 ppb	102.444 %
Concentration per Run 1	98.558 %	114.815 %	0.394 ppb	34,908.803 ppb	22,635.723 ppb	4,714.798 ppb	12,872.423 ppb	80,407.871 ppb	102.218 %
Concentration per Run 2	104.340 %	116.499 %	0.384 ppb	36,243.530 ppb	23,489.271 ppb	4,746.522 ppb	12,593.848 ppb	78,382.162 ppb	103.018 %
Concentration per Run 3	103.453 %	117.845 %	0.419 ppb	34,926.308 ppb	23,504.248 ppb	4,768.302 ppb	12,773.844 ppb	79,925.418 ppb	102.096 %
Concentration RSD	3.0 %	1.3 %	4.6 %	2.2 %	2.1 %	0.6 %	1.1 %	1.3 %	0.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	14.752 ppb	20.551 ppb	143.418 ppb	7,770.787 ppb	6.463 ppb	7.646 ppb	7.533 ppb	24.099 ppb	99.742 %
Concentration per Run 1	13.941 ppb	19.429 ppb	136.190 ppb	7,604.058 ppb	6.318 ppb	7.132 ppb	7.302 ppb	23.645 ppb	101.922 %
Concentration per Run 2	14.727 ppb	20.683 ppb	147.746 ppb	8,045.488 ppb	6.566 ppb	7.602 ppb	8.248 ppb	24.684 ppb	97.954 %
Concentration per Run 3	15.587 ppb	21.540 ppb	146.317 ppb	7,662.816 ppb	6.504 ppb	8.204 ppb	7.049 ppb	23.967 ppb	99.350 %
Concentration RSD	5.6 %	5.2 %	4.4 %	3.1 %	2.0 %	7.0 %	8.4 %	2.2 %	2.0 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	2.559 ppb	15.118 ppb	329.564 ppb	11.906 ppb	104.274 %	0.010 ppb	0.062 ppb	104.431 %	0.333 ppb
Concentration per Run 1	2.553 ppb	14.653 ppb	318.858 ppb	11.700 ppb	107.145 %	0.009 ppb	0.052 ppb	105.486 %	0.372 ppb
Concentration per Run 2	2.467 ppb	14.842 ppb	338.449 ppb	11.762 ppb	100.884 %	0.011 ppb	0.091 ppb	102.555 %	0.351 ppb
Concentration per Run 3	2.658 ppb	15.860 ppb	331.385 ppb	12.257 ppb	104.792 %	0.010 ppb	0.042 ppb	105.252 %	0.276 ppb
Concentration RSD	3.7 %	4.3 %	3.0 %	2.6 %	3.0 %	8.5 %	41.4 %	1.6 %	15.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	30.479 ppb	110.259 %	109.135 %	0.074 ppb	6.006 ppb	107.364 %
Concentration per Run 1	30.450 ppb	112.785 %	111.292 %	0.054 ppb	5.744 ppb	111.537 %
Concentration per Run 2	30.981 ppb	108.829 %	108.054 %	0.083 ppb	6.096 ppb	107.456 %
Concentration per Run 3	30.006 ppb	109.162 %	108.060 %	0.086 ppb	6.177 ppb	103.100 %
Concentration RSD	1.6 %	2.0 %	1.7 %	24.2 %	3.8 %	3.9 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	44	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2469261-07 6020TL	Rack	1		
Analysis started at:	12/3/2024 10:03:54 AM	Vial	21		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	98.628 %	116.386 %	0.371 ppb	41,644.293 ppb	24,270.706 ppb	4,122.017 ppb	10,848.127 ppb	81,324.980 ppb	95.219 %
Concentration per Run 1	99.009 %	122.223 %	0.380 ppb	37,781.513 ppb	22,238.982 ppb	3,860.183 ppb	10,319.234 ppb	79,099.293 ppb	95.674 %
Concentration per Run 2	97.650 %	113.973 %	0.371 ppb	43,111.887 ppb	25,285.586 ppb	4,212.030 ppb	11,238.527 ppb	81,639.558 ppb	92.803 %
Concentration per Run 3	99.225 %	112.963 %	0.361 ppb	44,039.478 ppb	25,287.551 ppb	4,293.837 ppb	10,986.619 ppb	83,236.090 ppb	97.179 %
Concentration RSD	0.9 %	4.4 %	2.6 %	8.1 %	7.2 %	5.6 %	4.4 %	2.6 %	2.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	11.191 ppb	12.909 ppb	1,977.668 ppb	12,000.382 ppb	10.129 ppb	7.725 ppb	7.843 ppb	22.201 ppb	101.471 %
Concentration per Run 1	10.857 ppb	12.306 ppb	1,899.585 ppb	11,602.086 ppb	9.879 ppb	7.374 ppb	7.427 ppb	21.881 ppb	101.754 %
Concentration per Run 2	11.083 ppb	12.988 ppb	1,987.093 ppb	11,925.399 ppb	9.986 ppb	8.063 ppb	7.800 ppb	22.141 ppb	102.585 %
Concentration per Run 3	11.634 ppb	13.433 ppb	2,046.327 ppb	12,473.660 ppb	10.524 ppb	7.739 ppb	8.301 ppb	22.579 ppb	100.075 %
Concentration RSD	3.6 %	4.4 %	3.7 %	3.7 %	3.4 %	4.5 %	5.6 %	1.6 %	1.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	8.157 ppb	3.426 ppb	316.349 ppb	7.217 ppb	104.727 %	0.005 ppb	0.066 ppb	106.663 %	0.275 ppb
Concentration per Run 1	8.166 ppb	5.005 ppb	306.571 ppb	6.946 ppb	108.884 %	0.006 ppb	0.051 ppb	108.159 %	0.227 ppb
Concentration per Run 2	8.140 ppb	2.503 ppb	317.460 ppb	7.402 ppb	103.138 %	0.006 ppb	0.077 ppb	105.992 %	0.274 ppb
Concentration per Run 3	8.165 ppb	2.769 ppb	325.015 ppb	7.302 ppb	102.158 %	0.003 ppb	0.071 ppb	105.839 %	0.324 ppb
Concentration RSD	0.2 %	40.1 %	2.9 %	3.3 %	3.5 %	31.5 %	20.5 %	1.2 %	17.5 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	22.481 ppb	113.577 %	112.308 %	0.057 ppb	5.389 ppb	107.750 %
Concentration per Run 1	22.082 ppb	115.459 %	115.133 %	0.044 ppb	5.323 ppb	108.771 %
Concentration per Run 2	22.413 ppb	112.789 %	109.253 %	0.060 ppb	5.375 ppb	106.961 %
Concentration per Run 3	22.948 ppb	112.485 %	112.538 %	0.068 ppb	5.471 ppb	107.517 %
Concentration RSD	1.9 %	1.4 %	2.6 %	21.9 %	1.4 %	0.9 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	45	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2469261-08 6020TL	Rack	1		
Analysis started at:	12/3/2024 10:08:23 AM	Vial	22		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	99.110 %	114.871 %	0.269 ppb	42,191.983 ppb	23,784.367 ppb	3,033.873 ppb	10,970.872 ppb	81,367.570 ppb	99.723 %
Concentration per Run 1	93.699 %	117.004 %	0.274 ppb	41,882.632 ppb	23,778.587 ppb	2,974.511 ppb	10,694.645 ppb	78,593.570 ppb	97.371 %
Concentration per Run 2	100.133 %	114.478 %	0.277 ppb	42,414.080 ppb	24,089.368 ppb	3,086.873 ppb	11,117.864 ppb	80,572.636 ppb	101.973 %
Concentration per Run 3	103.499 %	113.132 %	0.257 ppb	42,279.237 ppb	23,485.145 ppb	3,040.236 ppb	11,100.106 ppb	84,936.504 ppb	99.824 %
Concentration RSD	5.0 %	1.7 %	4.0 %	0.7 %	1.3 %	1.9 %	2.2 %	4.0 %	2.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	8.441 ppb	9.517 ppb	1,992.352 ppb	9,264.653 ppb	8.867 ppb	5.312 ppb	5.486 ppb	16.177 ppb	101.499 %
Concentration per Run 1	7.618 ppb	8.997 ppb	1,893.890 ppb	9,052.854 ppb	8.380 ppb	5.005 ppb	5.249 ppb	15.566 ppb	104.681 %
Concentration per Run 2	8.623 ppb	9.616 ppb	2,038.163 ppb	9,541.660 ppb	9.358 ppb	5.400 ppb	6.105 ppb	16.902 ppb	100.021 %
Concentration per Run 3	9.081 ppb	9.939 ppb	2,045.002 ppb	9,199.446 ppb	8.862 ppb	5.530 ppb	5.103 ppb	16.063 ppb	99.796 %
Concentration RSD	8.9 %	5.0 %	4.3 %	2.7 %	5.5 %	5.1 %	9.9 %	4.2 %	2.7 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	8.116 ppb	3.181 ppb	308.178 ppb	9.028 ppb	106.671 %	0.006 ppb	0.047 ppb	107.975 %	0.260 ppb
Concentration per Run 1	7.628 ppb	2.075 ppb	299.787 ppb	8.549 ppb	107.423 %	0.003 ppb	0.047 ppb	111.070 %	0.262 ppb
Concentration per Run 2	8.285 ppb	3.417 ppb	312.200 ppb	9.397 ppb	104.874 %	0.008 ppb	0.053 ppb	104.957 %	0.263 ppb
Concentration per Run 3	8.435 ppb	4.051 ppb	312.547 ppb	9.139 ppb	107.716 %	0.007 ppb	0.041 ppb	107.897 %	0.255 ppb
Concentration RSD	5.3 %	31.7 %	2.4 %	4.8 %	1.5 %	45.0 %	12.4 %	2.8 %	1.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	19.728 ppb	112.485 %	112.328 %	0.039 ppb	3.962 ppb	107.055 %
Concentration per Run 1	19.603 ppb	116.773 %	115.667 %	0.026 ppb	3.796 ppb	108.761 %
Concentration per Run 2	20.072 ppb	110.122 %	111.220 %	0.048 ppb	3.986 ppb	108.701 %
Concentration per Run 3	19.511 ppb	110.562 %	110.097 %	0.044 ppb	4.103 ppb	103.702 %
Concentration RSD	1.5 %	3.3 %	2.6 %	29.9 %	3.9 %	2.7 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	46	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2469261-09 6020TL	Rack	1		
Analysis started at:	12/3/2024 10:12:52 AM	Vial	23		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	96.856 %	115.376 %	0.023 ppb	82,551.536 ppb	25,015.841 ppb	168.400 ppb	10,356.027 ppb	93,716.422 ppb	97.464 %
Concentration per Run 1	93.706 %	112.963 %	0.023 ppb	84,327.293 ppb	24,987.979 ppb	163.148 ppb	10,351.905 ppb	92,393.568 ppb	95.129 %
Concentration per Run 2	96.705 %	119.529 %	0.025 ppb	78,974.433 ppb	23,900.784 ppb	166.626 ppb	10,098.169 ppb	94,072.078 ppb	96.179 %
Concentration per Run 3	100.158 %	113.637 %	0.020 ppb	84,352.884 ppb	26,158.758 ppb	175.426 ppb	10,618.007 ppb	94,683.621 ppb	101.083 %
Concentration RSD	3.3 %	3.1 %	12.2 %	3.8 %	4.5 %	3.8 %	2.5 %	1.3 %	3.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.064 ppb	0.697 ppb	623.409 ppb	16,765.661 ppb	0.281 ppb	0.208 ppb	0.431 ppb	0.877 ppb	104.335 %
Concentration per Run 1	0.102 ppb	0.643 ppb	625.227 ppb	17,179.919 ppb	0.250 ppb	0.133 ppb	0.506 ppb	0.791 ppb	103.723 %
Concentration per Run 2	0.034 ppb	0.669 ppb	614.554 ppb	16,486.966 ppb	0.341 ppb	0.189 ppb	0.378 ppb	0.983 ppb	102.193 %
Concentration per Run 3	0.057 ppb	0.779 ppb	630.446 ppb	16,630.097 ppb	0.253 ppb	0.302 ppb	0.409 ppb	0.856 ppb	107.091 %
Concentration RSD	53.9 %	10.4 %	1.3 %	2.2 %	18.4 %	41.5 %	15.5 %	11.1 %	2.4 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.239 ppb	0.156 ppb	326.198 ppb	1.191 ppb	105.753 %	0.004 ppb	0.001 ppb	107.487 %	0.135 ppb
Concentration per Run 1	0.187 ppb	0.029 ppb	321.481 ppb	1.176 ppb	108.506 %	0.000 ppb	0.000 ppb	113.392 %	0.099 ppb
Concentration per Run 2	0.331 ppb	0.001 ppb	327.857 ppb	1.014 ppb	106.045 %	0.004 ppb	0.000 ppb	103.981 %	0.132 ppb
Concentration per Run 3	0.198 ppb	0.437 ppb	329.257 ppb	1.383 ppb	102.707 %	0.007 ppb	0.004 ppb	105.088 %	0.175 ppb
Concentration RSD	33.5 %	156.8 %	1.3 %	15.5 %	2.8 %	90.6 %	173.2 %	4.8 %	28.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	15.927 ppb	113.278 %	112.100 %	0.020 ppb	0.271 ppb	108.392 %
Concentration per Run 1	15.313 ppb	114.810 %	113.507 %	0.009 ppb	0.276 ppb	111.276 %
Concentration per Run 2	16.410 ppb	111.075 %	111.500 %	0.026 ppb	0.266 ppb	104.695 %
Concentration per Run 3	16.059 ppb	113.950 %	111.294 %	0.024 ppb	0.269 ppb	109.205 %
Concentration RSD	3.5 %	1.7 %	1.1 %	45.4 %	1.9 %	3.1 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index: 47
Analysis label: L2469261-10 6020TL
Analysis started at: 12/3/2024 10:17:21 AM
User name ALPHALAB\a2-icpmsq2
Rack 1
Vial 24
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	104.010 %	115.376 %	0.017 ppb	82,471.080 ppb	24,701.561 ppb	167.805 ppb	10,122.669 ppb	92,165.646 ppb	106.326 %
Concentration per Run 1	102.362 %	117.172 %	0.020 ppb	79,905.877 ppb	24,148.790 ppb	161.919 ppb	9,779.584 ppb	89,033.977 ppb	108.967 %
Concentration per Run 2	105.398 %	114.310 %	0.016 ppb	84,732.125 ppb	24,909.309 ppb	171.981 ppb	10,322.399 ppb	92,927.081 ppb	106.215 %
Concentration per Run 3	104.268 %	114.647 %	0.016 ppb	82,775.237 ppb	25,046.583 ppb	169.515 ppb	10,266.026 ppb	94,535.878 ppb	103.796 %
Concentration RSD	1.5 %	1.4 %	13.3 %	2.9 %	2.0 %	3.1 %	2.9 %	3.1 %	2.4 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.162 ppb	0.725 ppb	617.905 ppb	16,742.015 ppb	0.186 ppb	0.123 ppb	0.434 ppb	1.071 ppb	102.369 %
Concentration per Run 1	0.223 ppb	0.702 ppb	599.272 ppb	15,635.240 ppb	0.146 ppb	0.140 ppb	0.378 ppb	1.090 ppb	104.653 %
Concentration per Run 2	-0.008 ppb	0.745 ppb	635.537 ppb	17,466.889 ppb	0.198 ppb	0.151 ppb	0.428 ppb	1.024 ppb	99.962 %
Concentration per Run 3	0.271 ppb	0.729 ppb	618.908 ppb	17,123.916 ppb	0.213 ppb	0.077 ppb	0.495 ppb	1.100 ppb	102.492 %
Concentration RSD	91.9 %	3.0 %	2.9 %	5.8 %	18.9 %	32.3 %	13.5 %	3.8 %	2.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.313 ppb	0.259 ppb	322.297 ppb	1.048 ppb	106.932 %	0.002 ppb	0.002 ppb	108.574 %	0.136 ppb
Concentration per Run 1	0.277 ppb	0.242 ppb	307.702 ppb	0.868 ppb	112.433 %	0.000 ppb	0.000 ppb	110.351 %	0.090 ppb
Concentration per Run 2	0.212 ppb	0.209 ppb	330.565 ppb	1.196 ppb	105.004 %	0.005 ppb	0.000 ppb	106.929 %	0.168 ppb
Concentration per Run 3	0.450 ppb	0.325 ppb	328.623 ppb	1.080 ppb	103.357 %	0.000 ppb	0.007 ppb	108.441 %	0.151 ppb
Concentration RSD	39.4 %	23.2 %	3.9 %	15.9 %	4.5 %	163.3 %	173.2 %	1.6 %	30.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	15.826 ppb	113.357 %	114.798 %	0.015 ppb	0.252 ppb	109.977 %
Concentration per Run 1	15.161 ppb	117.479 %	119.568 %	0.006 ppb	0.232 ppb	115.644 %
Concentration per Run 2	15.976 ppb	108.219 %	110.917 %	0.017 ppb	0.275 ppb	108.329 %
Concentration per Run 3	16.341 ppb	114.374 %	113.909 %	0.020 ppb	0.251 ppb	105.959 %
Concentration RSD	3.8 %	4.2 %	3.8 %	50.4 %	8.5 %	4.6 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	48	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2469261-11 6020TL	Rack	1		
Analysis started at:	12/3/2024 10:21:50 AM	Vial	25		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	98.693 %	116.499 %	0.015 ppb	84,334.351 ppb	23,524.095 ppb	162.033 ppb	11,669.312 ppb	87,206.405 ppb	98.314 %
Concentration per Run 1	95.231 %	115.825 %	0.014 ppb	84,458.889 ppb	23,820.543 ppb	157.777 ppb	11,562.686 ppb	83,713.438 ppb	96.180 %
Concentration per Run 2	99.410 %	119.697 %	0.018 ppb	81,451.319 ppb	22,732.907 ppb	162.075 ppb	11,402.550 ppb	85,894.791 ppb	99.792 %
Concentration per Run 3	101.438 %	113.973 %	0.014 ppb	87,092.845 ppb	24,018.834 ppb	166.246 ppb	12,042.698 ppb	92,010.986 ppb	98.969 %
Concentration RSD	3.2 %	2.5 %	14.2 %	3.3 %	2.9 %	2.6 %	2.9 %	4.9 %	1.9 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.112 ppb	1.238 ppb	503.185 ppb	13,137.190 ppb	0.219 ppb	0.266 ppb	0.759 ppb	1.219 ppb	101.071 %
Concentration per Run 1	-0.278 ppb	1.179 ppb	493.904 ppb	12,973.294 ppb	0.193 ppb	0.213 ppb	0.601 ppb	1.176 ppb	102.611 %
Concentration per Run 2	-0.039 ppb	1.236 ppb	507.044 ppb	13,256.362 ppb	0.241 ppb	0.280 ppb	0.879 ppb	1.123 ppb	101.718 %
Concentration per Run 3	-0.019 ppb	1.300 ppb	508.608 ppb	13,181.914 ppb	0.223 ppb	0.306 ppb	0.798 ppb	1.358 ppb	98.884 %
Concentration RSD	128.7 %	4.9 %	1.6 %	1.1 %	10.9 %	18.1 %	18.8 %	10.1 %	1.9 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.330 ppb	0.395 ppb	310.278 ppb	0.890 ppb	105.512 %	0.005 ppb	0.002 ppb	107.509 %	0.126 ppb
Concentration per Run 1	0.248 ppb	0.268 ppb	305.356 ppb	0.753 ppb	106.457 %	0.004 ppb	0.007 ppb	108.488 %	0.079 ppb
Concentration per Run 2	0.358 ppb	0.408 ppb	311.492 ppb	0.936 ppb	104.138 %	0.005 ppb	0.000 ppb	108.653 %	0.154 ppb
Concentration per Run 3	0.383 ppb	0.509 ppb	313.987 ppb	0.982 ppb	105.940 %	0.005 ppb	0.000 ppb	105.387 %	0.144 ppb
Concentration RSD	21.7 %	30.6 %	1.4 %	13.6 %	1.2 %	13.1 %	173.2 %	1.7 %	32.5 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	17.059 ppb	112.271 %	111.564 %	0.012 ppb	0.240 ppb	105.854 %
Concentration per Run 1	16.733 ppb	115.122 %	113.249 %	0.004 ppb	0.245 ppb	110.216 %
Concentration per Run 2	17.177 ppb	111.024 %	110.441 %	0.017 ppb	0.238 ppb	103.654 %
Concentration per Run 3	17.266 ppb	110.667 %	111.003 %	0.015 ppb	0.236 ppb	103.692 %
Concentration RSD	1.7 %	2.2 %	1.3 %	57.6 %	1.9 %	3.6 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	49	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2469261-12 6020TL	Rack	1		
Analysis started at:	12/3/2024 10:26:17 AM	Vial	26		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	96.533 %	110.494 %	0.015 ppb	85,093.292 ppb	23,717.814 ppb	112.830 ppb	11,231.518 ppb	83,789.523 ppb	98.643 %
Concentration per Run 1	93.376 %	107.576 %	0.015 ppb	88,402.364 ppb	24,852.109 ppb	117.601 ppb	11,467.012 ppb	85,153.482 ppb	94.698 %
Concentration per Run 2	98.130 %	118.519 %	0.015 ppb	79,055.557 ppb	21,711.936 ppb	108.065 ppb	10,858.529 ppb	81,215.895 ppb	100.880 %
Concentration per Run 3	98.092 %	105.387 %	0.015 ppb	87,821.954 ppb	24,589.395 ppb	112.823 ppb	11,369.013 ppb	84,999.193 ppb	100.350 %
Concentration RSD	2.8 %	6.4 %	0.2 %	6.2 %	7.3 %	4.2 %	2.9 %	2.7 %	3.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.267 ppb	1.092 ppb	473.694 ppb	11,561.777 ppb	0.101 ppb	0.479 ppb	0.664 ppb	0.887 ppb	102.803 %
Concentration per Run 1	-0.184 ppb	1.071 ppb	497.712 ppb	12,348.140 ppb	0.112 ppb	0.484 ppb	0.718 ppb	0.912 ppb	99.904 %
Concentration per Run 2	-0.253 ppb	1.106 ppb	455.093 ppb	10,884.633 ppb	0.094 ppb	0.455 ppb	0.663 ppb	0.827 ppb	103.405 %
Concentration per Run 3	-0.365 ppb	1.099 ppb	468.276 ppb	11,452.558 ppb	0.098 ppb	0.497 ppb	0.611 ppb	0.923 ppb	105.101 %
Concentration RSD	34.1 %	1.7 %	4.6 %	6.4 %	9.5 %	4.4 %	8.1 %	5.9 %	2.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.250 ppb	0.164 ppb	296.006 ppb	0.772 ppb	105.655 %	0.005 ppb	0.003 ppb	106.755 %	0.129 ppb
Concentration per Run 1	0.204 ppb	0.108 ppb	303.707 ppb	0.710 ppb	104.557 %	0.004 ppb	0.007 ppb	107.732 %	0.108 ppb
Concentration per Run 2	0.292 ppb	0.024 ppb	289.716 ppb	0.712 ppb	108.535 %	0.006 ppb	0.003 ppb	107.657 %	0.132 ppb
Concentration per Run 3	0.253 ppb	0.360 ppb	294.594 ppb	0.893 ppb	103.874 %	0.004 ppb	0.000 ppb	104.875 %	0.148 ppb
Concentration RSD	17.7 %	106.6 %	2.4 %	13.6 %	2.4 %	20.9 %	100.4 %	1.5 %	15.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	16.471 ppb	111.760 %	110.396 %	0.012 ppb	0.167 ppb	105.922 %
Concentration per Run 1	17.118 ppb	107.836 %	107.168 %	0.003 ppb	0.172 ppb	105.530 %
Concentration per Run 2	16.043 ppb	115.544 %	113.139 %	0.015 ppb	0.160 ppb	106.595 %
Concentration per Run 3	16.253 ppb	111.901 %	110.880 %	0.018 ppb	0.169 ppb	105.642 %
Concentration RSD	3.5 %	3.5 %	2.7 %	67.6 %	3.9 %	0.6 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	50	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2469261-13 6020TL	Rack	1		
Analysis started at:	12/3/2024 10:30:43 AM	Vial	27		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	99.415 %	115.376 %	0.250 ppb	36,528.686 ppb	22,185.494 ppb	2,999.603 ppb	13,842.910 ppb	79,019.307 ppb	100.983 %
Concentration per Run 1	93.041 %	115.657 %	0.258 ppb	35,866.740 ppb	21,977.528 ppb	2,965.293 ppb	13,680.411 ppb	78,060.255 ppb	96.511 %
Concentration per Run 2	102.038 %	110.606 %	0.247 ppb	38,105.572 ppb	23,093.258 ppb	3,096.760 ppb	14,022.356 ppb	80,635.308 ppb	101.754 %
Concentration per Run 3	103.167 %	119.866 %	0.243 ppb	35,613.746 ppb	21,485.695 ppb	2,936.757 ppb	13,825.964 ppb	78,362.359 ppb	104.686 %
Concentration RSD	5.6 %	4.0 %	3.0 %	3.8 %	3.7 %	2.8 %	1.2 %	1.8 %	4.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	9.950 ppb	10.370 ppb	140.368 ppb	4,773.990 ppb	4.350 ppb	4.839 ppb	4.844 ppb	14.883 ppb	100.999 %
Concentration per Run 1	9.614 ppb	9.721 ppb	137.691 ppb	4,594.123 ppb	4.409 ppb	4.661 ppb	4.775 ppb	14.312 ppb	103.725 %
Concentration per Run 2	10.196 ppb	10.843 ppb	143.718 ppb	5,018.622 ppb	4.513 ppb	5.042 ppb	4.803 ppb	15.507 ppb	98.682 %
Concentration per Run 3	10.040 ppb	10.548 ppb	139.696 ppb	4,709.225 ppb	4.127 ppb	4.815 ppb	4.954 ppb	14.832 ppb	100.591 %
Concentration RSD	3.0 %	5.6 %	2.2 %	4.6 %	4.6 %	4.0 %	2.0 %	4.0 %	2.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	2.007 ppb	14.746 ppb	324.729 ppb	17.440 ppb	104.738 %	0.007 ppb	0.046 ppb	105.789 %	0.338 ppb
Concentration per Run 1	2.212 ppb	14.831 ppb	314.720 ppb	16.484 ppb	107.212 %	0.010 ppb	0.031 ppb	105.924 %	0.338 ppb
Concentration per Run 2	1.955 ppb	13.555 ppb	334.180 ppb	18.205 ppb	101.034 %	0.007 ppb	0.047 ppb	103.608 %	0.348 ppb
Concentration per Run 3	1.853 ppb	15.853 ppb	325.286 ppb	17.631 ppb	105.968 %	0.004 ppb	0.059 ppb	107.835 %	0.329 ppb
Concentration RSD	9.2 %	7.8 %	3.0 %	5.0 %	3.1 %	43.3 %	30.1 %	2.0 %	2.8 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	26.951 ppb	111.739 %	108.527 %	0.035 ppb	3.890 ppb	105.591 %
Concentration per Run 1	25.519 ppb	113.953 %	108.687 %	0.033 ppb	3.738 ppb	109.076 %
Concentration per Run 2	28.060 ppb	110.099 %	107.578 %	0.038 ppb	3.997 ppb	104.103 %
Concentration per Run 3	27.276 ppb	111.164 %	109.314 %	0.034 ppb	3.934 ppb	103.593 %
Concentration RSD	4.8 %	1.8 %	0.8 %	7.8 %	3.5 %	2.9 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	51	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2469261-14 6020TL	Rack	1		
Analysis started at:	12/3/2024 10:35:10 AM	Vial	28		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	101.397 %	110.326 %	0.288 ppb	38,781.002 ppb	24,031.552 ppb	3,611.559 ppb	14,438.374 ppb	80,397.528 ppb	101.565 %
Concentration per Run 1	96.704 %	109.259 %	0.288 ppb	38,569.482 ppb	24,224.469 ppb	3,628.758 ppb	14,660.600 ppb	79,677.930 ppb	98.857 %
Concentration per Run 2	102.720 %	108.923 %	0.291 ppb	39,578.718 ppb	24,182.936 ppb	3,600.360 ppb	14,192.473 ppb	80,131.104 ppb	101.093 %
Concentration per Run 3	104.767 %	112.795 %	0.285 ppb	38,194.808 ppb	23,687.251 ppb	3,605.558 ppb	14,462.051 ppb	81,383.551 ppb	104.745 %
Concentration RSD	4.1 %	1.9 %	1.2 %	1.8 %	1.2 %	0.4 %	1.6 %	1.1 %	2.9 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	11.143 ppb	11.703 ppb	160.337 ppb	5,798.384 ppb	5.204 ppb	5.771 ppb	5.363 ppb	17.706 ppb	98.918 %
Concentration per Run 1	10.354 ppb	11.331 ppb	161.808 ppb	5,774.936 ppb	5.163 ppb	6.254 ppb	5.245 ppb	17.822 ppb	100.041 %
Concentration per Run 2	11.478 ppb	11.878 ppb	160.955 ppb	5,953.082 ppb	5.534 ppb	5.703 ppb	5.596 ppb	18.257 ppb	96.264 %
Concentration per Run 3	11.596 ppb	11.902 ppb	158.248 ppb	5,667.134 ppb	4.913 ppb	5.354 ppb	5.249 ppb	17.039 ppb	100.449 %
Concentration RSD	6.2 %	2.8 %	1.2 %	2.5 %	6.0 %	7.9 %	3.8 %	3.5 %	2.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	2.238 ppb	16.682 ppb	333.160 ppb	16.969 ppb	103.978 %	0.003 ppb	0.042 ppb	106.616 %	0.319 ppb
Concentration per Run 1	2.079 ppb	16.286 ppb	328.447 ppb	16.425 ppb	105.144 %	0.000 ppb	0.052 ppb	106.791 %	0.294 ppb
Concentration per Run 2	2.186 ppb	17.412 ppb	337.538 ppb	16.879 ppb	103.355 %	0.002 ppb	0.039 ppb	105.810 %	0.383 ppb
Concentration per Run 3	2.448 ppb	16.349 ppb	333.496 ppb	17.603 ppb	103.434 %	0.006 ppb	0.035 ppb	107.248 %	0.280 ppb
Concentration RSD	8.5 %	3.8 %	1.4 %	3.5 %	1.0 %	106.9 %	21.7 %	0.7 %	17.5 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	28.112 ppb	112.761 %	109.216 %	0.030 ppb	4.489 ppb	105.119 %
Concentration per Run 1	28.097 ppb	115.433 %	110.796 %	0.021 ppb	4.395 ppb	106.770 %
Concentration per Run 2	28.293 ppb	111.421 %	109.013 %	0.032 ppb	4.630 ppb	102.811 %
Concentration per Run 3	27.947 ppb	111.431 %	107.840 %	0.037 ppb	4.442 ppb	105.776 %
Concentration RSD	0.6 %	2.1 %	1.4 %	26.5 %	2.8 %	2.0 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index: 52
Analysis label: CCV
Analysis started at: 12/3/2024 10:39:37 AM
User name ALPHALAB\a2-icpmsq2
Rack 0
Vial 9
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	112.415 %	108.137 %	51.507 ppb	6,086.589 ppb	5,849.735 ppb	57.893 ppb	6,058.661 ppb	5,922.331 ppb	111.170 %
Concentration per Run 1	109.726 %	107.408 %	50.002 ppb	6,076.394 ppb	5,817.939 ppb	56.181 ppb	5,848.853 ppb	5,870.692 ppb	110.453 %
Concentration per Run 2	113.636 %	113.805 %	50.349 ppb	5,920.835 ppb	5,686.390 ppb	56.546 ppb	5,966.297 ppb	5,872.198 ppb	114.223 %
Concentration per Run 3	113.883 %	103.199 %	54.170 ppb	6,262.538 ppb	6,044.876 ppb	60.953 ppb	6,360.834 ppb	6,024.103 ppb	108.834 %
Recovery Percentage 1			85.845 %	101.443 %	97.496 %	96.489 %	100.978 %	98.706 %	
Concentration RSD	2.1 %	4.9 %	4.5 %	2.8 %	3.1 %	4.6 %	4.4 %	1.5 %	2.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	58.542 ppb	59.239 ppb	59.058 ppb	5,932.809 ppb	60.183 ppb	61.440 ppb	60.917 ppb	61.048 ppb	100.240 %
Concentration per Run 1	57.594 ppb	58.531 ppb	57.856 ppb	5,900.408 ppb	60.062 ppb	60.352 ppb	60.787 ppb	61.768 ppb	102.766 %
Concentration per Run 2	56.547 ppb	58.500 ppb	58.384 ppb	5,925.367 ppb	59.988 ppb	63.630 ppb	61.472 ppb	60.588 ppb	98.127 %
Concentration per Run 3	61.484 ppb	60.687 ppb	60.935 ppb	5,972.651 ppb	60.500 ppb	60.338 ppb	60.492 ppb	60.787 ppb	99.828 %
Recovery Percentage 1	97.570 %	98.732 %	98.430 %	98.880 %	100.305 %	102.400 %	101.528 %	101.746 %	
Concentration RSD	4.4 %	2.1 %	2.8 %	0.6 %	0.5 %	3.1 %	0.8 %	1.0 %	2.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	60.606 ppb	57.208 ppb	58.209 ppb	56.740 ppb	107.150 %	56.490 ppb	57.878 ppb	104.293 %	57.794 ppb
Concentration per Run 1	58.852 ppb	54.193 ppb	57.073 ppb	55.411 ppb	108.270 %	54.319 ppb	56.451 ppb	106.379 %	56.683 ppb
Concentration per Run 2	61.211 ppb	61.089 ppb	59.102 ppb	56.589 ppb	105.280 %	57.223 ppb	58.728 ppb	102.607 %	57.998 ppb
Concentration per Run 3	61.754 ppb	56.341 ppb	58.452 ppb	58.219 ppb	107.901 %	57.928 ppb	58.454 ppb	103.894 %	58.702 ppb
Recovery Percentage 1	101.010 %	95.346 %	97.015 %	94.566 %		94.150 %	96.463 %		96.324 %
Concentration RSD	2.5 %	6.2 %	1.8 %	2.5 %	1.5 %	3.4 %	2.1 %	1.8 %	1.8 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	58.102 ppb	107.228 %	106.888 %	55.166 ppb	56.410 ppb	108.892 %
Concentration per Run 1	58.154 ppb	107.348 %	106.772 %	53.449 ppb	55.357 ppb	110.393 %
Concentration per Run 2	57.859 ppb	105.599 %	105.952 %	56.075 ppb	57.159 ppb	106.681 %
Concentration per Run 3	58.292 ppb	108.737 %	107.941 %	55.975 ppb	56.715 ppb	109.603 %
Recovery Percentage 1	96.836 %			91.944 %	94.017 %	
Concentration RSD	0.4 %	1.5 %	0.9 %	2.7 %	1.7 %	1.8 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	53	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	CCB	Rack	0		
Analysis started at:	12/3/2024 10:44:08 AM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	108.508 %	110.943 %	0.299 ppb	37.943 ppb	5.640 ppb	0.287 ppb	5.756 ppb	16.688 ppb	98.103 %
Concentration per Run 1	106.335 %	115.488 %	0.322 ppb	32.561 ppb	6.112 ppb	-0.054 ppb	6.136 ppb	24.251 ppb	96.406 %
Concentration per Run 2	109.857 %	114.310 %	0.321 ppb	28.268 ppb	5.367 ppb	0.072 ppb	6.226 ppb	17.805 ppb	98.917 %
Concentration per Run 3	109.331 %	103.030 %	0.254 ppb	53.000 ppb	5.442 ppb	0.842 ppb	4.904 ppb	8.010 ppb	98.984 %
Recovery Percentage 1			59.832 %	7.589 %	8.058 %	2.867 %	5.756 %	16.688 %	
Concentration RSD	1.8 %	6.2 %	13.0 %	34.8 %	7.3 %	169.2 %	12.8 %	49.0 %	1.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.430 ppb	0.001 ppb	0.124 ppb	9.324 ppb	0.025 ppb	-0.004 ppb	0.108 ppb	0.297 ppb	100.959 %
Concentration per Run 1	-0.379 ppb	0.037 ppb	0.140 ppb	10.730 ppb	0.019 ppb	0.035 ppb	0.091 ppb	0.320 ppb	99.484 %
Concentration per Run 2	-0.442 ppb	-0.038 ppb	0.024 ppb	7.965 ppb	0.013 ppb	-0.046 ppb	0.098 ppb	0.316 ppb	100.509 %
Concentration per Run 3	-0.470 ppb	0.005 ppb	0.208 ppb	9.278 ppb	0.042 ppb	0.000 ppb	0.136 ppb	0.256 ppb	102.883 %
Recovery Percentage 1	-8.605 %	0.147 %	12.390 %	18.649 %	4.936 %	-0.175 %	10.816 %	5.948 %	
Concentration RSD	10.7 %	2,562.9 %	74.7 %	14.8 %	62.6 %	1,171.5 %	22.4 %	12.2 %	1.7 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.068 ppb	0.220 ppb	0.081 ppb	0.330 ppb	105.479 %	0.020 ppb	0.021 ppb	101.769 %	0.060 ppb
Concentration per Run 1	-0.026 ppb	0.457 ppb	0.105 ppb	0.291 ppb	109.930 %	0.023 ppb	0.027 ppb	107.527 %	0.045 ppb
Concentration per Run 2	0.136 ppb	0.127 ppb	0.081 ppb	0.332 ppb	104.757 %	0.022 ppb	0.026 ppb	98.973 %	0.051 ppb
Concentration per Run 3	0.095 ppb	0.076 ppb	0.058 ppb	0.366 ppb	101.751 %	0.015 ppb	0.011 ppb	98.807 %	0.084 ppb
Recovery Percentage 1	13.644 %	4.395 %	0.811 %	16.489 %		5.043 %	10.672 %		1.494 %
Concentration RSD	123.7 %	94.2 %	29.0 %	11.5 %	3.9 %	20.8 %	41.7 %	4.9 %	35.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.032 ppb	105.257 %	106.031 %	0.243 ppb	0.035 ppb	106.902 %
Concentration per Run 1	0.048 ppb	106.063 %	108.739 %	0.221 ppb	0.050 ppb	108.948 %
Concentration per Run 2	0.052 ppb	104.451 %	102.461 %	0.284 ppb	0.030 ppb	104.322 %
Concentration per Run 3	-0.005 ppb	105.256 %	106.894 %	0.224 ppb	0.024 ppb	107.436 %
Recovery Percentage 1	6.323 %			24.290 %	3.487 %	
Concentration RSD	100.4 %	0.8 %	3.0 %	14.5 %	37.8 %	2.2 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	54	User name	ALPHALAB\a2-icpmsq2	Comment	CCV/MCCV
Analysis label:	CCV	Rack	0		
Analysis started at:	12/3/2024 11:00:44 AM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	106.067 %	111.560 %	57.878 ppb	5,999.161 ppb	5,962.342 ppb	58.996 ppb	5,949.802 ppb	6,037.103 ppb	101.498 %
Concentration per Run 1	103.309 %	118.182 %	58.070 ppb	5,795.904 ppb	5,781.111 ppb	56.982 ppb	5,783.712 ppb	6,210.148 ppb	101.660 %
Concentration per Run 2	107.348 %	105.724 %	57.420 ppb	6,104.722 ppb	6,095.598 ppb	61.374 ppb	6,050.128 ppb	6,142.082 ppb	101.683 %
Concentration per Run 3	107.544 %	110.775 %	58.145 ppb	6,096.856 ppb	6,010.316 ppb	58.632 ppb	6,015.567 ppb	5,759.080 ppb	101.152 %
Recovery Percentage 1			96.463 %	99.986 %	99.372 %	98.326 %	99.163 %	100.618 %	
Concentration RSD	2.3 %	5.6 %	0.7 %	2.9 %	2.7 %	3.8 %	2.4 %	4.0 %	0.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	56.497 ppb	58.008 ppb	58.984 ppb	5,861.488 ppb	58.058 ppb	59.763 ppb	58.128 ppb	59.750 ppb	104.040 %
Concentration per Run 1	55.192 ppb	59.641 ppb	60.175 ppb	5,920.366 ppb	57.526 ppb	60.152 ppb	60.736 ppb	59.851 ppb	100.656 %
Concentration per Run 2	56.694 ppb	56.473 ppb	56.627 ppb	5,694.289 ppb	56.977 ppb	58.923 ppb	57.195 ppb	59.445 ppb	105.548 %
Concentration per Run 3	57.604 ppb	57.911 ppb	60.150 ppb	5,969.809 ppb	59.673 ppb	60.214 ppb	56.453 ppb	59.953 ppb	105.916 %
Recovery Percentage 1	94.161 %	96.680 %	98.307 %	97.691 %	96.764 %	99.605 %	96.880 %	99.583 %	
Concentration RSD	2.2 %	2.7 %	3.5 %	2.5 %	2.5 %	1.2 %	3.9 %	0.4 %	2.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	58.617 ppb	55.636 ppb	57.909 ppb	57.506 ppb	106.684 %	57.737 ppb	57.289 ppb	107.388 %	57.298 ppb
Concentration per Run 1	59.067 ppb	53.618 ppb	58.344 ppb	55.586 ppb	111.356 %	56.347 ppb	56.717 ppb	111.427 %	55.242 ppb
Concentration per Run 2	57.503 ppb	57.230 ppb	57.076 ppb	58.012 ppb	106.350 %	57.652 ppb	57.073 ppb	107.040 %	56.318 ppb
Concentration per Run 3	59.280 ppb	56.059 ppb	58.308 ppb	58.919 ppb	102.345 %	59.211 ppb	58.078 ppb	103.699 %	60.334 ppb
Recovery Percentage 1	97.694 %	92.727 %	96.515 %	95.843 %		96.228 %	95.482 %		95.496 %
Concentration RSD	1.7 %	3.3 %	1.2 %	3.0 %	4.2 %	2.5 %	1.2 %	3.6 %	4.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	56.582 ppb	108.976 %	108.243 %	55.907 ppb	56.529 ppb	111.635 %
Concentration per Run 1	54.389 ppb	112.384 %	110.387 %	55.225 ppb	56.021 ppb	113.701 %
Concentration per Run 2	56.835 ppb	108.662 %	108.456 %	56.179 ppb	56.774 ppb	109.345 %
Concentration per Run 3	58.523 ppb	105.883 %	105.885 %	56.318 ppb	56.792 ppb	111.858 %
Recovery Percentage 1	94.304 %			93.179 %	94.215 %	
Concentration RSD	3.7 %	3.0 %	2.1 %	1.1 %	0.8 %	2.0 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index: 55
Analysis label: CCB
Analysis started at: 12/3/2024 11:05:15 AM
User name ALPHALAB\a2-icpmsq2
Rack 0
Vial 10
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	102.940 %	113.637 %	0.120 ppb	24.195 ppb	17.998 ppb	0.508 ppb	25.216 ppb	29.599 ppb	94.943 %
Concentration per Run 1	100.060 %	116.667 %	0.128 ppb	6.481 ppb	6.802 ppb	0.388 ppb	15.633 ppb	17.401 ppb	94.815 %
Concentration per Run 2	104.403 %	112.627 %	0.118 ppb	28.691 ppb	20.278 ppb	0.862 ppb	27.526 ppb	48.110 ppb	94.632 %
Concentration per Run 3	104.357 %	111.616 %	0.114 ppb	37.412 ppb	26.914 ppb	0.274 ppb	32.488 ppb	23.285 ppb	95.381 %
Recovery Percentage 1			23.996 %	4.839 %	25.711 %	5.079 %	25.216 %	29.599 %	
Concentration RSD	2.4 %	2.4 %	5.9 %	65.9 %	56.9 %	61.3 %	34.3 %	55.1 %	0.4 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.365 ppb	0.142 ppb	0.284 ppb	19.491 ppb	0.166 ppb	0.301 ppb	0.262 ppb	0.535 ppb	101.525 %
Concentration per Run 1	-0.520 ppb	0.055 ppb	0.234 ppb	7.587 ppb	0.051 ppb	0.228 ppb	0.198 ppb	0.434 ppb	100.878 %
Concentration per Run 2	-0.333 ppb	0.114 ppb	0.269 ppb	22.989 ppb	0.207 ppb	0.265 ppb	0.245 ppb	0.509 ppb	101.202 %
Concentration per Run 3	-0.243 ppb	0.256 ppb	0.348 ppb	27.897 ppb	0.240 ppb	0.410 ppb	0.343 ppb	0.661 ppb	102.494 %
Recovery Percentage 1	-7.306 %	14.170 %	28.390 %	38.982 %	33.194 %	15.051 %	26.193 %	10.695 %	
Concentration RSD	38.7 %	73.2 %	20.6 %	54.4 %	60.8 %	32.0 %	28.2 %	21.7 %	0.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.199 ppb	0.299 ppb	0.165 ppb	0.425 ppb	106.205 %	0.162 ppb	0.150 ppb	104.755 %	0.203 ppb
Concentration per Run 1	0.117 ppb	0.326 ppb	0.068 ppb	0.168 ppb	111.422 %	0.056 ppb	0.061 ppb	108.022 %	0.094 ppb
Concentration per Run 2	0.231 ppb	0.121 ppb	0.195 ppb	0.553 ppb	102.199 %	0.187 ppb	0.179 ppb	103.444 %	0.199 ppb
Concentration per Run 3	0.249 ppb	0.448 ppb	0.231 ppb	0.554 ppb	104.995 %	0.245 ppb	0.211 ppb	102.800 %	0.315 ppb
Recovery Percentage 1	39.820 %	5.971 %	1.645 %	21.257 %		40.605 %	75.137 %		5.071 %
Concentration RSD	35.9 %	55.3 %	52.0 %	52.4 %	4.5 %	59.6 %	52.5 %	2.7 %	54.4 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.172 ppb	106.791 %	105.376 %	0.372 ppb	0.176 ppb	107.514 %
Concentration per Run 1	0.087 ppb	108.240 %	108.396 %	0.254 ppb	0.084 ppb	107.602 %
Concentration per Run 2	0.186 ppb	106.648 %	104.603 %	0.444 ppb	0.195 ppb	105.408 %
Concentration per Run 3	0.243 ppb	105.486 %	103.130 %	0.420 ppb	0.250 ppb	109.531 %
Recovery Percentage 1	34.438 %			37.240 %	17.634 %	
Concentration RSD	45.8 %	1.3 %	2.6 %	27.8 %	48.1 %	1.9 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	56	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG2003775-1 6020TL	Rack	1		
Analysis started at:	12/3/2024 11:11:12 AM	Vial	29		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	110.001 %	122.279 %	0.023 ppb	-11.968 ppb	1.957 ppb	2.181 ppb	-6.287 ppb	36.240 ppb	106.282 %
Concentration per Run 1	104.648 %	126.095 %	0.052 ppb	-16.849 ppb	1.369 ppb	1.536 ppb	-19.686 ppb	34.354 ppb	105.628 %
Concentration per Run 2	114.713 %	117.172 %	0.007 ppb	-5.978 ppb	1.387 ppb	2.679 ppb	-3.677 ppb	45.510 ppb	107.876 %
Concentration per Run 3	110.643 %	123.569 %	0.008 ppb	-13.077 ppb	3.115 ppb	2.328 ppb	4.500 ppb	28.857 ppb	105.341 %
Concentration RSD	4.6 %	3.8 %	115.0 %	46.1 %	51.2 %	26.8 %	195.7 %	23.4 %	1.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.543 ppb	0.059 ppb	0.109 ppb	3.279 ppb	0.008 ppb	-0.017 ppb	0.182 ppb	0.343 ppb	104.894 %
Concentration per Run 1	-0.555 ppb	0.022 ppb	0.061 ppb	4.348 ppb	0.014 ppb	-0.022 ppb	0.134 ppb	0.359 ppb	110.572 %
Concentration per Run 2	-0.520 ppb	0.094 ppb	0.087 ppb	3.668 ppb	0.006 ppb	-0.048 ppb	0.211 ppb	0.378 ppb	101.715 %
Concentration per Run 3	-0.552 ppb	0.060 ppb	0.179 ppb	1.821 ppb	0.006 ppb	0.018 ppb	0.200 ppb	0.292 ppb	102.396 %
Concentration RSD	3.6 %	61.9 %	56.4 %	39.9 %	53.4 %	192.7 %	23.0 %	13.2 %	4.7 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.047 ppb	0.041 ppb	0.041 ppb	0.010 ppb	110.882 %	0.009 ppb	0.007 ppb	114.449 %	0.019 ppb
Concentration per Run 1	0.003 ppb	0.072 ppb	0.032 ppb	-0.027 ppb	120.149 %	0.007 ppb	0.006 ppb	122.555 %	0.013 ppb
Concentration per Run 2	0.058 ppb	0.120 ppb	0.049 ppb	0.066 ppb	106.822 %	0.010 ppb	0.010 ppb	111.551 %	0.023 ppb
Concentration per Run 3	0.080 ppb	-0.069 ppb	0.040 ppb	-0.010 ppb	105.674 %	0.009 ppb	0.003 ppb	109.241 %	0.022 ppb
Concentration RSD	83.7 %	240.1 %	20.7 %	497.8 %	7.3 %	18.5 %	51.4 %	6.2 %	28.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.022 ppb	112.949 %	111.403 %	0.052 ppb	0.021 ppb	114.728 %
Concentration per Run 1	0.052 ppb	120.426 %	119.958 %	0.033 ppb	0.018 ppb	121.996 %
Concentration per Run 2	0.007 ppb	110.842 %	107.558 %	0.064 ppb	0.019 ppb	113.663 %
Concentration per Run 3	0.007 ppb	107.580 %	106.692 %	0.058 ppb	0.026 ppb	108.524 %
Concentration RSD	117.3 %	5.9 %	6.7 %	31.9 %	19.3 %	5.9 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	57	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG2003775-2d10 6020TL	Rack	1		
Analysis started at:	12/3/2024 11:15:40 AM	Vial	30		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	104.926 %	112.178 %	5.199 ppb	1,074.055 ppb	999.509 ppb	198.475 ppb	1,077.035 ppb	997.886 ppb	98.792 %
Concentration per Run 1	99.773 %	115.825 %	5.280 ppb	1,038.539 ppb	975.747 ppb	189.568 ppb	1,055.985 ppb	917.967 ppb	95.550 %
Concentration per Run 2	107.099 %	111.448 %	5.146 ppb	1,074.215 ppb	985.542 ppb	202.946 ppb	1,087.005 ppb	1,072.445 ppb	101.295 %
Concentration per Run 3	107.906 %	109.259 %	5.170 ppb	1,109.412 ppb	1,037.237 ppb	202.910 ppb	1,088.114 ppb	1,003.246 ppb	99.530 %
Concentration RSD	4.3 %	3.0 %	1.4 %	3.3 %	3.3 %	3.9 %	1.7 %	7.8 %	3.0 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	49.195 ppb	20.386 ppb	52.778 ppb	114.870 ppb	52.554 ppb	51.707 ppb	26.097 ppb	52.860 ppb	100.183 %
Concentration per Run 1	47.979 ppb	20.239 ppb	51.953 ppb	105.565 ppb	51.294 ppb	51.036 ppb	26.235 ppb	52.688 ppb	101.453 %
Concentration per Run 2	48.288 ppb	20.479 ppb	52.479 ppb	121.432 ppb	53.436 ppb	51.203 ppb	26.105 ppb	52.301 ppb	98.756 %
Concentration per Run 3	51.319 ppb	20.439 ppb	53.901 ppb	117.613 ppb	52.931 ppb	52.882 ppb	25.952 ppb	53.591 ppb	100.339 %
Concentration RSD	3.8 %	0.6 %	1.9 %	7.2 %	2.1 %	2.0 %	0.5 %	1.3 %	1.4 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	12.676 ppb	11.789 ppb	98.401 ppb	97.591 ppb	105.413 %	5.265 ppb	5.309 ppb	105.680 %	40.215 ppb
Concentration per Run 1	12.340 ppb	12.060 ppb	97.148 ppb	95.085 ppb	107.278 %	5.147 ppb	5.142 ppb	109.793 %	38.661 ppb
Concentration per Run 2	13.339 ppb	12.313 ppb	98.191 ppb	97.841 ppb	104.960 %	5.326 ppb	5.302 ppb	102.155 %	40.757 ppb
Concentration per Run 3	12.349 ppb	10.994 ppb	99.864 ppb	99.848 ppb	104.002 %	5.321 ppb	5.483 ppb	105.091 %	41.227 ppb
Concentration RSD	4.5 %	5.9 %	1.4 %	2.5 %	1.6 %	1.9 %	3.2 %	3.6 %	3.4 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	200.330 ppb	107.521 %	105.827 %	11.642 ppb	51.733 ppb	108.729 %
Concentration per Run 1	192.816 ppb	109.025 %	106.922 %	11.407 ppb	51.279 ppb	111.040 %
Concentration per Run 2	201.442 ppb	106.078 %	106.464 %	11.736 ppb	51.965 ppb	106.011 %
Concentration per Run 3	206.732 ppb	107.462 %	104.094 %	11.784 ppb	51.956 ppb	109.136 %
Concentration RSD	3.5 %	1.4 %	1.4 %	1.8 %	0.8 %	2.3 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	58	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2469249-06 6020TL	Rack	1		
Analysis started at:	12/3/2024 11:20:08 AM	Vial	31		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	96.006 %	113.244 %	0.400 ppb	61,483.067 ppb	31,129.826 ppb	3,638.650 ppb	7,228.747 ppb	122,167.322 ppb	100.498 %
Concentration per Run 1	91.622 %	110.943 %	0.458 ppb	61,701.003 ppb	31,248.185 ppb	3,642.293 ppb	7,072.227 ppb	120,466.866 ppb	97.658 %
Concentration per Run 2	96.166 %	116.162 %	0.387 ppb	59,335.734 ppb	30,497.846 ppb	3,575.730 ppb	7,172.276 ppb	123,754.279 ppb	101.627 %
Concentration per Run 3	100.229 %	112.626 %	0.355 ppb	63,412.465 ppb	31,643.446 ppb	3,697.927 ppb	7,441.739 ppb	122,280.823 ppb	102.210 %
Concentration RSD	4.5 %	2.4 %	13.2 %	3.3 %	1.9 %	1.7 %	2.6 %	1.3 %	2.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	11.679 ppb	11.676 ppb	3,472.910 ppb	6,933.646 ppb	8.805 ppb	13.448 ppb	20.055 ppb	93.196 ppb	102.605 %
Concentration per Run 1	11.760 ppb	11.427 ppb	3,449.666 ppb	6,917.748 ppb	8.863 ppb	12.970 ppb	19.746 ppb	92.927 ppb	105.642 %
Concentration per Run 2	11.630 ppb	11.885 ppb	3,443.924 ppb	6,965.831 ppb	8.690 ppb	13.926 ppb	20.669 ppb	94.466 ppb	100.498 %
Concentration per Run 3	11.647 ppb	11.717 ppb	3,525.141 ppb	6,917.360 ppb	8.863 ppb	13.449 ppb	19.750 ppb	92.195 ppb	101.676 %
Concentration RSD	0.6 %	2.0 %	1.3 %	0.4 %	1.1 %	3.6 %	2.7 %	1.2 %	2.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	2.014 ppb	2.793 ppb	820.582 ppb	2.766 ppb	104.742 %	0.041 ppb	0.351 ppb	108.707 %	2.972 ppb
Concentration per Run 1	2.101 ppb	2.087 ppb	818.827 ppb	2.503 ppb	103.866 %	0.047 ppb	0.362 ppb	110.345 %	2.995 ppb
Concentration per Run 2	2.076 ppb	2.932 ppb	821.478 ppb	2.839 ppb	105.912 %	0.044 ppb	0.332 ppb	109.092 %	2.918 ppb
Concentration per Run 3	1.865 ppb	3.361 ppb	821.440 ppb	2.956 ppb	104.448 %	0.031 ppb	0.359 ppb	106.685 %	3.003 ppb
Concentration RSD	6.4 %	23.2 %	0.2 %	8.5 %	1.0 %	20.8 %	4.8 %	1.7 %	1.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	93.636 ppb	111.439 %	111.802 %	0.134 ppb	38.082 ppb	107.235 %
Concentration per Run 1	93.258 ppb	113.720 %	110.403 %	0.113 ppb	37.374 ppb	108.968 %
Concentration per Run 2	91.455 ppb	107.960 %	112.959 %	0.152 ppb	38.645 ppb	105.750 %
Concentration per Run 3	96.195 ppb	112.638 %	112.042 %	0.138 ppb	38.227 ppb	106.987 %
Concentration RSD	2.6 %	2.7 %	1.2 %	14.6 %	1.7 %	1.5 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	59	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG2003775-3d10 6020TL	Rack	1		
Analysis started at:	12/3/2024 11:24:36 AM	Vial	32		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	109.384 %	120.988 %	4.771 ppb	6,699.680 ppb	3,945.424 ppb	597.867 ppb	1,604.475 ppb	12,285.881 ppb	104.250 %
Concentration per Run 1	104.958 %	122.391 %	4.773 ppb	6,438.087 ppb	3,839.269 ppb	588.764 ppb	1,592.254 ppb	12,078.111 ppb	101.164 %
Concentration per Run 2	111.617 %	119.866 %	4.728 ppb	6,821.298 ppb	3,968.138 ppb	596.163 ppb	1,560.704 ppb	12,219.050 ppb	107.215 %
Concentration per Run 3	111.578 %	120.707 %	4.811 ppb	6,839.654 ppb	4,028.865 ppb	608.674 ppb	1,660.468 ppb	12,560.483 ppb	104.371 %
Concentration RSD	3.5 %	1.1 %	0.9 %	3.4 %	2.5 %	1.7 %	3.2 %	2.0 %	2.9 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	45.752 ppb	19.600 ppb	381.111 ppb	743.806 ppb	48.399 ppb	49.575 ppb	26.236 ppb	57.457 ppb	106.560 %
Concentration per Run 1	42.592 ppb	18.644 ppb	365.397 ppb	713.461 ppb	47.127 ppb	48.308 ppb	26.068 ppb	56.348 ppb	108.463 %
Concentration per Run 2	45.718 ppb	20.207 ppb	392.412 ppb	753.954 ppb	50.346 ppb	50.627 ppb	26.232 ppb	59.209 ppb	104.789 %
Concentration per Run 3	48.945 ppb	19.949 ppb	385.526 ppb	764.002 ppb	47.723 ppb	49.789 ppb	26.407 ppb	56.814 ppb	106.428 %
Concentration RSD	6.9 %	4.3 %	3.7 %	3.6 %	3.5 %	2.4 %	0.6 %	2.7 %	1.7 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	11.184 ppb	10.876 ppb	169.928 ppb	87.998 ppb	110.893 %	4.897 ppb	4.904 ppb	109.724 %	36.944 ppb
Concentration per Run 1	10.469 ppb	11.420 ppb	163.022 ppb	83.675 ppb	115.286 %	4.584 ppb	4.534 ppb	113.757 %	35.227 ppb
Concentration per Run 2	11.615 ppb	9.690 ppb	174.857 ppb	90.468 ppb	107.373 %	5.074 ppb	5.166 ppb	106.623 %	38.929 ppb
Concentration per Run 3	11.467 ppb	11.518 ppb	171.905 ppb	89.849 ppb	110.021 %	5.034 ppb	5.012 ppb	108.791 %	36.674 ppb
Concentration RSD	5.6 %	9.5 %	3.6 %	4.3 %	3.6 %	5.6 %	6.7 %	3.3 %	5.0 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	193.933 ppb	112.241 %	110.896 %	11.048 ppb	53.007 ppb	112.134 %
Concentration per Run 1	184.830 ppb	117.887 %	115.776 %	10.126 ppb	49.532 ppb	117.729 %
Concentration per Run 2	199.527 ppb	108.133 %	107.984 %	11.471 ppb	55.152 ppb	108.599 %
Concentration per Run 3	197.442 ppb	110.703 %	108.928 %	11.545 ppb	54.336 ppb	110.073 %
Concentration RSD	4.1 %	4.5 %	3.8 %	7.2 %	5.7 %	4.4 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	60	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG2003775-4d10 6020TL	Rack	1		
Analysis started at:	12/3/2024 11:29:04 AM	Vial	33		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	108.299 %	118.294 %	4.765 ppb	6,728.602 ppb	3,919.314 ppb	604.463 ppb	1,619.042 ppb	12,269.519 ppb	103.214 %
Concentration per Run 1	105.133 %	116.835 %	4.831 ppb	6,815.853 ppb	3,960.790 ppb	606.536 ppb	1,610.404 ppb	11,882.252 ppb	99.277 %
Concentration per Run 2	109.890 %	120.202 %	4.648 ppb	6,619.642 ppb	3,886.431 ppb	596.101 ppb	1,641.630 ppb	12,683.807 ppb	105.933 %
Concentration per Run 3	109.872 %	117.845 %	4.817 ppb	6,750.311 ppb	3,910.720 ppb	610.753 ppb	1,605.093 ppb	12,242.497 ppb	104.431 %
Concentration RSD	2.5 %	1.5 %	2.1 %	1.5 %	1.0 %	1.2 %	1.2 %	3.3 %	3.4 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	46.361 ppb	19.318 ppb	375.511 ppb	758.418 ppb	48.156 ppb	48.888 ppb	25.784 ppb	57.266 ppb	105.502 %
Concentration per Run 1	45.204 ppb	19.116 ppb	382.228 ppb	794.084 ppb	48.430 ppb	49.720 ppb	26.431 ppb	57.880 ppb	103.696 %
Concentration per Run 2	47.264 ppb	19.392 ppb	372.537 ppb	755.439 ppb	48.542 ppb	48.914 ppb	25.201 ppb	58.235 ppb	102.075 %
Concentration per Run 3	46.614 ppb	19.447 ppb	371.767 ppb	725.730 ppb	47.496 ppb	48.030 ppb	25.719 ppb	55.683 ppb	110.735 %
Concentration RSD	2.3 %	0.9 %	1.6 %	4.5 %	1.2 %	1.7 %	2.4 %	2.4 %	4.4 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	11.352 ppb	11.398 ppb	169.364 ppb	87.816 ppb	106.600 %	4.835 ppb	4.908 ppb	107.526 %	37.008 ppb
Concentration per Run 1	11.242 ppb	12.288 ppb	169.392 ppb	85.322 ppb	107.627 %	4.725 ppb	4.891 ppb	110.859 %	36.409 ppb
Concentration per Run 2	11.615 ppb	11.531 ppb	172.082 ppb	90.718 ppb	106.747 %	4.846 ppb	4.770 ppb	107.093 %	36.944 ppb
Concentration per Run 3	11.200 ppb	10.375 ppb	166.619 ppb	87.407 ppb	105.425 %	4.935 ppb	5.062 ppb	104.627 %	37.670 ppb
Concentration RSD	2.0 %	8.5 %	1.6 %	3.1 %	1.0 %	2.2 %	3.0 %	2.9 %	1.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	194.636 ppb	110.746 %	108.108 %	10.857 ppb	52.090 ppb	110.226 %
Concentration per Run 1	195.075 ppb	113.787 %	110.382 %	10.684 ppb	51.629 ppb	112.021 %
Concentration per Run 2	194.898 ppb	109.878 %	108.881 %	11.025 ppb	52.550 ppb	108.848 %
Concentration per Run 3	193.935 ppb	108.574 %	105.060 %	10.863 ppb	52.090 ppb	109.808 %
Concentration RSD	0.3 %	2.4 %	2.5 %	1.6 %	0.9 %	1.5 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	61	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG2003775-5d10 6020TL	Rack	1		
Analysis started at:	12/3/2024 11:33:33 AM	Vial	34		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	106.308 %	119.753 %	47.815 ppb	10,699.989 ppb	7,837.444 ppb	406.943 ppb	5,454.736 ppb	16,729.146 ppb	99.863 %
Concentration per Run 1	102.691 %	128.283 %	47.966 ppb	9,957.468 ppb	7,260.830 ppb	379.718 ppb	5,312.264 ppb	15,860.630 ppb	98.025 %
Concentration per Run 2	109.076 %	117.677 %	47.458 ppb	10,831.441 ppb	8,088.622 ppb	425.359 ppb	5,430.310 ppb	16,791.915 ppb	101.747 %
Concentration per Run 3	107.157 %	113.300 %	48.022 ppb	11,311.058 ppb	8,162.880 ppb	415.753 ppb	5,621.635 ppb	17,534.894 ppb	99.817 %
Concentration RSD	3.1 %	6.4 %	0.6 %	6.4 %	6.4 %	5.9 %	2.9 %	5.0 %	1.9 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	46.914 ppb	48.668 ppb	398.211 ppb	5,480.582 ppb	48.918 ppb	50.154 ppb	50.753 ppb	59.675 ppb	105.912 %
Concentration per Run 1	44.545 ppb	46.008 ppb	385.883 ppb	5,273.446 ppb	46.656 ppb	48.844 ppb	49.749 ppb	57.876 ppb	107.953 %
Concentration per Run 2	45.906 ppb	48.868 ppb	392.793 ppb	5,413.845 ppb	48.681 ppb	49.635 ppb	51.441 ppb	59.123 ppb	106.188 %
Concentration per Run 3	50.293 ppb	51.128 ppb	415.955 ppb	5,754.456 ppb	51.417 ppb	51.982 ppb	51.069 ppb	62.026 ppb	103.595 %
Concentration RSD	6.4 %	5.3 %	4.0 %	4.5 %	4.9 %	3.3 %	1.8 %	3.6 %	2.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	49.494 ppb	45.162 ppb	130.824 ppb	49.511 ppb	106.742 %	2.406 ppb	48.011 ppb	106.453 %	49.376 ppb
Concentration per Run 1	49.215 ppb	42.798 ppb	127.503 ppb	47.101 ppb	109.928 %	2.388 ppb	46.274 ppb	111.735 %	46.715 ppb
Concentration per Run 2	49.967 ppb	45.668 ppb	131.063 ppb	51.083 ppb	106.291 %	2.344 ppb	48.613 ppb	103.237 %	50.886 ppb
Concentration per Run 3	49.300 ppb	47.020 ppb	133.906 ppb	50.350 ppb	104.006 %	2.486 ppb	49.147 ppb	104.387 %	50.525 ppb
Concentration RSD	0.8 %	4.8 %	2.5 %	4.3 %	2.8 %	3.0 %	3.2 %	4.3 %	4.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	58.086 ppb	108.887 %	109.356 %	47.410 ppb	52.289 ppb	108.802 %
Concentration per Run 1	55.593 ppb	111.785 %	113.386 %	47.021 ppb	50.926 ppb	111.150 %
Concentration per Run 2	58.134 ppb	108.885 %	106.099 %	46.204 ppb	52.246 ppb	109.145 %
Concentration per Run 3	60.530 ppb	105.992 %	108.584 %	49.005 ppb	53.693 ppb	106.111 %
Concentration RSD	4.3 %	2.7 %	3.4 %	3.0 %	2.6 %	2.3 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	62	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG2003775-6d5 6020TL	Rack	1		
Analysis started at:	12/3/2024 11:38:01 AM	Vial	35		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	107.274 %	114.198 %	0.310 ppb	11,636.485 ppb	6,117.689 ppb	710.048 ppb	1,397.568 ppb	23,662.861 ppb	103.188 %
Concentration per Run 1	100.935 %	114.310 %	0.429 ppb	11,157.331 ppb	6,136.936 ppb	690.043 ppb	1,376.579 ppb	23,745.673 ppb	97.418 %
Concentration per Run 2	104.271 %	114.647 %	0.281 ppb	11,599.120 ppb	5,946.184 ppb	708.946 ppb	1,375.551 ppb	23,482.407 ppb	100.223 %
Concentration per Run 3	116.615 %	113.637 %	0.219 ppb	12,153.003 ppb	6,269.947 ppb	731.156 ppb	1,440.574 ppb	23,760.501 ppb	111.925 %
Concentration RSD	7.7 %	0.5 %	34.9 %	4.3 %	2.7 %	2.9 %	2.7 %	0.7 %	7.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	2.205 ppb	2.290 ppb	678.330 ppb	1,364.489 ppb	1.808 ppb	2.662 ppb	3.880 ppb	19.033 ppb	105.944 %
Concentration per Run 1	2.166 ppb	2.178 ppb	676.714 ppb	1,375.173 ppb	1.819 ppb	2.758 ppb	3.655 ppb	18.542 ppb	105.783 %
Concentration per Run 2	2.085 ppb	2.422 ppb	666.518 ppb	1,330.692 ppb	1.776 ppb	2.769 ppb	3.895 ppb	19.201 ppb	107.809 %
Concentration per Run 3	2.364 ppb	2.269 ppb	691.757 ppb	1,387.602 ppb	1.829 ppb	2.458 ppb	4.092 ppb	19.356 ppb	104.239 %
Concentration RSD	6.5 %	5.4 %	1.9 %	2.2 %	1.6 %	6.6 %	5.6 %	2.3 %	1.7 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.538 ppb	0.743 ppb	157.048 ppb	0.924 ppb	109.369 %	0.007 ppb	0.066 ppb	108.203 %	0.637 ppb
Concentration per Run 1	0.629 ppb	0.719 ppb	154.652 ppb	0.745 ppb	113.245 %	0.009 ppb	0.062 ppb	114.314 %	0.575 ppb
Concentration per Run 2	0.546 ppb	0.712 ppb	156.604 ppb	0.956 ppb	108.099 %	0.006 ppb	0.070 ppb	103.440 %	0.663 ppb
Concentration per Run 3	0.438 ppb	0.799 ppb	159.888 ppb	1.071 ppb	106.763 %	0.006 ppb	0.066 ppb	106.855 %	0.672 ppb
Concentration RSD	17.8 %	6.5 %	1.7 %	17.9 %	3.1 %	19.0 %	6.7 %	5.1 %	8.4 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	18.313 ppb	111.932 %	110.833 %	0.252 ppb	7.631 ppb	109.744 %
Concentration per Run 1	17.767 ppb	113.439 %	111.832 %	0.232 ppb	7.430 ppb	111.548 %
Concentration per Run 2	18.471 ppb	111.905 %	112.039 %	0.293 ppb	7.684 ppb	107.697 %
Concentration per Run 3	18.701 ppb	110.451 %	108.627 %	0.231 ppb	7.778 ppb	109.985 %
Concentration RSD	2.7 %	1.3 %	1.7 %	14.1 %	2.4 %	1.8 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	63	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2469188-01 6020TL	Rack	1		
Analysis started at:	12/3/2024 11:42:31 AM	Vial	36		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	98.106 %	108.418 %	0.141 ppb	324,452.327 ppb	36,827.716 ppb	572.227 ppb	13,352.195 ppb	20,115.850 ppb	98.268 %
Concentration per Run 1	93.462 %	109.091 %	0.190 ppb	317,931.401 ppb	37,649.476 ppb	562.783 ppb	12,847.584 ppb	19,456.651 ppb	97.056 %
Concentration per Run 2	99.962 %	108.586 %	0.139 ppb	326,195.124 ppb	35,037.954 ppb	573.404 ppb	13,440.922 ppb	19,933.006 ppb	98.597 %
Concentration per Run 3	100.895 %	107.576 %	0.093 ppb	329,230.457 ppb	37,795.717 ppb	580.493 ppb	13,768.080 ppb	20,957.894 ppb	99.150 %
Concentration RSD	4.1 %	0.7 %	34.2 %	1.8 %	4.2 %	1.6 %	3.5 %	3.8 %	1.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	2.274 ppb	1.937 ppb	42.091 ppb	1,116.760 ppb	0.603 ppb	1.310 ppb	94.540 ppb	74.814 ppb	103.199 %
Concentration per Run 1	2.273 ppb	1.745 ppb	39.433 ppb	1,094.145 ppb	0.595 ppb	1.419 ppb	92.519 ppb	74.168 ppb	104.898 %
Concentration per Run 2	2.328 ppb	2.038 ppb	43.219 ppb	1,136.937 ppb	0.681 ppb	1.243 ppb	96.580 ppb	75.324 ppb	101.298 %
Concentration per Run 3	2.222 ppb	2.028 ppb	43.622 ppb	1,119.197 ppb	0.533 ppb	1.269 ppb	94.520 ppb	74.951 ppb	103.402 %
Concentration RSD	2.3 %	8.6 %	5.5 %	1.9 %	12.3 %	7.2 %	2.1 %	0.8 %	1.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.728 ppb	0.165 ppb	249.133 ppb	1.009 ppb	103.075 %	0.019 ppb	0.079 ppb	106.511 %	0.583 ppb
Concentration per Run 1	0.788 ppb	0.263 ppb	244.184 ppb	0.931 ppb	104.668 %	0.023 ppb	0.104 ppb	107.997 %	0.558 ppb
Concentration per Run 2	0.736 ppb	0.198 ppb	252.233 ppb	0.817 ppb	101.220 %	0.021 ppb	0.067 ppb	105.788 %	0.556 ppb
Concentration per Run 3	0.660 ppb	0.034 ppb	250.983 ppb	1.278 ppb	103.336 %	0.014 ppb	0.067 ppb	105.748 %	0.635 ppb
Concentration RSD	8.9 %	71.4 %	1.7 %	23.8 %	1.7 %	25.1 %	26.6 %	1.2 %	7.8 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	20.863 ppb	111.389 %	112.740 %	0.074 ppb	6.149 ppb	104.765 %
Concentration per Run 1	20.061 ppb	115.930 %	113.416 %	0.045 ppb	6.045 ppb	104.958 %
Concentration per Run 2	20.842 ppb	107.418 %	110.861 %	0.093 ppb	6.309 ppb	104.882 %
Concentration per Run 3	21.687 ppb	110.818 %	113.942 %	0.083 ppb	6.095 ppb	104.456 %
Concentration RSD	3.9 %	3.8 %	1.5 %	34.4 %	2.3 %	0.3 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	64	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2469188-02 6020TL	Rack	1		
Analysis started at:	12/3/2024 11:47:00 AM	Vial	37		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	53.024 %	89.169 %	0.021 ppb	4,929,163.522 ppb	539,908.301 ppb	114.657 ppb	121,048.554 ppb	109,867.157 ppb	52.978 %
Concentration per Run 1	51.585 %	94.781 %	0.023 ppb	4,677,933.012 ppb	516,947.853 ppb	110.643 ppb	117,502.189 ppb	109,905.533 ppb	53.220 %
Concentration per Run 2	53.902 %	84.512 %	0.022 ppb	5,068,244.519 ppb	562,633.462 ppb	119.885 ppb	126,369.745 ppb	111,496.619 ppb	53.154 %
Concentration per Run 3	53.583 %	88.215 %	0.018 ppb	5,041,313.034 ppb	540,143.588 ppb	113.444 ppb	119,273.729 ppb	108,199.318 ppb	52.559 %
Concentration RSD	2.4 %	5.8 %	13.8 %	4.4 %	4.2 %	4.1 %	3.9 %	1.5 %	0.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	1.085 ppb	0.540 ppb	25.633 ppb	308.277 ppb	0.219 ppb	0.917 ppb	75.973 ppb	74.955 ppb	112.782 %
Concentration per Run 1	1.062 ppb	0.501 ppb	26.953 ppb	322.171 ppb	0.205 ppb	0.914 ppb	82.215 ppb	79.072 ppb	100.998 %
Concentration per Run 2	1.200 ppb	0.578 ppb	25.989 ppb	320.181 ppb	0.235 ppb	0.958 ppb	77.770 ppb	76.439 ppb	111.080 %
Concentration per Run 3	0.991 ppb	0.542 ppb	23.955 ppb	282.479 ppb	0.218 ppb	0.881 ppb	67.935 ppb	69.354 ppb	126.267 %
Concentration RSD	9.8 %	7.1 %	6.0 %	7.3 %	6.9 %	4.2 %	9.6 %	6.7 %	11.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	1.360 ppb	0.142 ppb	3,190.282 ppb	4.993 ppb	85.365 %	0.021 ppb	0.065 ppb	96.112 %	0.465 ppb
Concentration per Run 1	1.523 ppb	0.177 ppb	3,206.530 ppb	4.816 ppb	86.846 %	0.024 ppb	0.060 ppb	94.052 %	0.399 ppb
Concentration per Run 2	1.413 ppb	0.104 ppb	3,265.488 ppb	5.326 ppb	83.637 %	0.022 ppb	0.064 ppb	95.705 %	0.457 ppb
Concentration per Run 3	1.144 ppb	0.146 ppb	3,098.829 ppb	4.839 ppb	85.612 %	0.018 ppb	0.071 ppb	98.579 %	0.537 ppb
Concentration RSD	14.3 %	25.7 %	2.6 %	5.8 %	1.9 %	15.1 %	7.8 %	2.4 %	14.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	52.947 ppb	102.346 %	103.943 %	0.045 ppb	2.407 ppb	86.345 %
Concentration per Run 1	52.639 ppb	104.413 %	102.266 %	0.037 ppb	2.368 ppb	85.801 %
Concentration per Run 2	53.263 ppb	100.057 %	103.471 %	0.042 ppb	2.404 ppb	85.730 %
Concentration per Run 3	52.938 ppb	102.568 %	106.091 %	0.055 ppb	2.450 ppb	87.504 %
Concentration RSD	0.6 %	2.1 %	1.9 %	21.3 %	1.7 %	1.2 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	65	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2469188-03 6020TL	Rack	1		
Analysis started at:	12/3/2024 11:51:27 AM	Vial	38		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	55.057 %	92.256 %	0.012 ppb	3,953,062.995 ppb	438,051.967 ppb	54.387 ppb	105,453.196 ppb	93,919.899 ppb	57.706 %
Concentration per Run 1	53.167 %	88.552 %	0.013 ppb	4,085,222.575 ppb	448,724.510 ppb	56.376 ppb	110,061.113 ppb	98,037.256 ppb	56.759 %
Concentration per Run 2	55.670 %	91.582 %	0.014 ppb	3,967,568.060 ppb	436,452.877 ppb	54.303 ppb	103,322.851 ppb	92,359.793 ppb	58.252 %
Concentration per Run 3	56.335 %	96.633 %	0.008 ppb	3,806,398.351 ppb	428,978.513 ppb	52.482 ppb	102,975.625 ppb	91,362.647 ppb	58.107 %
Concentration RSD	3.0 %	4.4 %	26.3 %	3.5 %	2.3 %	3.6 %	3.8 %	3.8 %	1.4 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.577 ppb	0.381 ppb	17.254 ppb	117.663 ppb	0.301 ppb	1.035 ppb	16.254 ppb	43.968 ppb	114.229 %
Concentration per Run 1	0.451 ppb	0.444 ppb	18.522 ppb	117.786 ppb	0.331 ppb	1.071 ppb	17.282 ppb	47.764 ppb	102.506 %
Concentration per Run 2	0.771 ppb	0.377 ppb	17.224 ppb	110.723 ppb	0.315 ppb	1.013 ppb	16.463 ppb	42.536 ppb	114.622 %
Concentration per Run 3	0.510 ppb	0.323 ppb	16.017 ppb	124.480 ppb	0.257 ppb	1.020 ppb	15.019 ppb	41.603 ppb	125.557 %
Concentration RSD	29.5 %	15.9 %	7.3 %	5.8 %	12.8 %	3.0 %	7.0 %	7.6 %	10.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	1.254 ppb	0.121 ppb	2,674.964 ppb	4.497 ppb	87.746 %	0.015 ppb	0.067 ppb	99.180 %	0.500 ppb
Concentration per Run 1	1.415 ppb	0.103 ppb	2,700.589 ppb	4.412 ppb	89.151 %	0.019 ppb	0.081 ppb	98.314 %	0.469 ppb
Concentration per Run 2	1.209 ppb	0.105 ppb	2,680.761 ppb	4.175 ppb	85.752 %	0.016 ppb	0.083 ppb	98.086 %	0.502 ppb
Concentration per Run 3	1.137 ppb	0.155 ppb	2,643.544 ppb	4.905 ppb	88.336 %	0.009 ppb	0.038 ppb	101.139 %	0.529 ppb
Concentration RSD	11.5 %	24.3 %	1.1 %	8.3 %	2.0 %	36.8 %	37.6 %	1.7 %	6.0 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	12.029 ppb	104.463 %	107.327 %	0.034 ppb	0.769 ppb	85.018 %
Concentration per Run 1	12.377 ppb	105.761 %	106.357 %	0.028 ppb	0.728 ppb	86.601 %
Concentration per Run 2	11.987 ppb	100.648 %	105.343 %	0.040 ppb	0.809 ppb	82.847 %
Concentration per Run 3	11.722 ppb	106.979 %	110.281 %	0.034 ppb	0.770 ppb	85.607 %
Concentration RSD	2.7 %	3.2 %	2.4 %	17.4 %	5.3 %	2.3 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	66	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	CCV	Rack	0		
Analysis started at:	12/3/2024 11:55:54 AM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	106.067 %	114.591 %	58.113 ppb	8,838.290 ppb	6,043.964 ppb	58.551 ppb	6,666.084 ppb	6,517.544 ppb	103.208 %
Concentration per Run 1	101.747 %	117.677 %	58.161 ppb	9,080.501 ppb	5,912.671 ppb	54.228 ppb	6,385.861 ppb	6,481.101 ppb	100.163 %
Concentration per Run 2	106.629 %	108.586 %	57.271 ppb	9,272.851 ppb	6,236.559 ppb	60.812 ppb	6,938.774 ppb	6,567.217 ppb	104.777 %
Concentration per Run 3	109.826 %	117.509 %	58.905 ppb	8,161.518 ppb	5,982.663 ppb	60.614 ppb	6,673.616 ppb	6,504.313 ppb	104.686 %
Recovery Percentage 1			96.854 %	147.305 %	100.733 %	97.585 %	111.101 %	108.626 %	
Concentration RSD	3.8 %	4.5 %	1.4 %	6.7 %	2.8 %	6.4 %	4.1 %	0.7 %	2.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	57.407 ppb	56.507 ppb	58.807 ppb	5,659.965 ppb	55.487 ppb	57.042 ppb	56.909 ppb	58.977 ppb	122.794 %
Concentration per Run 1	53.853 ppb	55.120 ppb	58.427 ppb	5,636.958 ppb	54.908 ppb	57.046 ppb	56.711 ppb	57.801 ppb	122.289 %
Concentration per Run 2	58.278 ppb	56.137 ppb	58.409 ppb	5,649.108 ppb	55.321 ppb	57.595 ppb	56.532 ppb	59.707 ppb	122.909 %
Concentration per Run 3	60.090 ppb	58.263 ppb	59.586 ppb	5,693.828 ppb	56.232 ppb	56.485 ppb	57.484 ppb	59.422 ppb	123.184 %
Recovery Percentage 1	95.679 %	94.178 %	98.012 %	94.333 %	92.479 %	95.070 %	94.849 %	98.295 %	
Concentration RSD	5.6 %	2.8 %	1.1 %	0.5 %	1.2 %	1.0 %	0.9 %	1.7 %	0.4 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	55.832 ppb	58.466 ppb	61.643 ppb	56.902 ppb	120.041 %	55.834 ppb	56.937 ppb	128.714 %	55.980 ppb
Concentration per Run 1	56.591 ppb	57.232 ppb	60.486 ppb	55.414 ppb	122.378 %	55.132 ppb	57.561 ppb	127.893 %	54.940 ppb
Concentration per Run 2	55.723 ppb	57.841 ppb	61.698 ppb	57.534 ppb	120.252 %	55.525 ppb	56.154 ppb	128.732 %	56.539 ppb
Concentration per Run 3	55.182 ppb	60.325 ppb	62.744 ppb	57.758 ppb	117.493 %	56.846 ppb	57.095 ppb	129.516 %	56.462 ppb
Recovery Percentage 1	93.053 %	97.443 %	102.738 %	94.836 %		93.057 %	94.895 %		93.301 %
Concentration RSD	1.3 %	2.8 %	1.8 %	2.3 %	2.0 %	1.6 %	1.3 %	0.6 %	1.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	57.583 ppb	127.793 %	129.078 %	55.492 ppb	57.278 ppb	121.459 %
Concentration per Run 1	55.849 ppb	130.197 %	131.128 %	54.129 ppb	55.091 ppb	121.652 %
Concentration per Run 2	57.323 ppb	127.943 %	126.663 %	55.104 ppb	57.900 ppb	121.146 %
Concentration per Run 3	59.575 ppb	125.239 %	129.444 %	57.244 ppb	58.844 ppb	121.580 %
Recovery Percentage 1	95.971 %			92.487 %	95.464 %	
Concentration RSD	3.3 %	1.9 %	1.7 %	2.9 %	3.4 %	0.2 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	67	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	CCB	Rack	0		
Analysis started at:	12/3/2024 12:00:26 PM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	108.239 %	117.958 %	0.456 ppb	1,274.649 ppb	39.120 ppb	-0.235 ppb	171.245 ppb	13.020 ppb	105.594 %
Concentration per Run 1	104.568 %	115.489 %	0.424 ppb	1,466.016 ppb	57.494 ppb	-0.095 ppb	193.048 ppb	21.665 ppb	101.521 %
Concentration per Run 2	109.515 %	112.795 %	0.418 ppb	1,385.614 ppb	47.912 ppb	-0.445 ppb	160.806 ppb	7.305 ppb	107.398 %
Concentration per Run 3	110.633 %	125.590 %	0.526 ppb	972.318 ppb	11.954 ppb	-0.163 ppb	159.882 ppb	10.090 ppb	107.863 %
Recovery Percentage 1			91.183 %	254.930 %	55.886 %	-2.345 %	171.245 %	13.020 %	
Concentration RSD	3.0 %	5.7 %	13.3 %	20.8 %	61.4 %	79.2 %	11.0 %	58.5 %	3.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.441 ppb	-0.053 ppb	0.131 ppb	6.647 ppb	0.015 ppb	0.153 ppb	0.210 ppb	0.376 ppb	118.093 %
Concentration per Run 1	-0.501 ppb	-0.045 ppb	0.189 ppb	6.579 ppb	0.021 ppb	0.177 ppb	0.241 ppb	0.368 ppb	118.369 %
Concentration per Run 2	-0.355 ppb	-0.033 ppb	0.107 ppb	7.097 ppb	0.016 ppb	0.165 ppb	0.236 ppb	0.390 ppb	114.745 %
Concentration per Run 3	-0.466 ppb	-0.080 ppb	0.096 ppb	6.267 ppb	0.006 ppb	0.117 ppb	0.153 ppb	0.370 ppb	121.165 %
Recovery Percentage 1	-8.815 %	-5.284 %	13.072 %	13.295 %	2.943 %	7.653 %	20.982 %	7.521 %	
Concentration RSD	17.2 %	45.8 %	39.0 %	6.3 %	51.4 %	20.6 %	23.5 %	3.2 %	2.7 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.002 ppb	0.466 ppb	0.245 ppb	0.298 ppb	120.811 %	0.017 ppb	0.010 ppb	128.025 %	0.077 ppb
Concentration per Run 1	-0.055 ppb	0.738 ppb	0.365 ppb	0.189 ppb	123.867 %	0.025 ppb	0.006 ppb	130.006 %	0.064 ppb
Concentration per Run 2	0.038 ppb	0.359 ppb	0.271 ppb	0.207 ppb	117.484 %	0.023 ppb	0.018 ppb	127.680 %	0.094 ppb
Concentration per Run 3	0.023 ppb	0.301 ppb	0.100 ppb	0.499 ppb	121.082 %	0.003 ppb	0.006 ppb	126.387 %	0.072 ppb
Recovery Percentage 1	0.405 %	9.323 %	2.452 %	14.920 %		4.239 %	4.924 %		1.918 %
Concentration RSD	2,450.7 %	50.9 %	54.9 %	58.3 %	2.6 %	70.1 %	70.3 %	1.4 %	20.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.019 ppb	124.988 %	125.092 %	0.220 ppb	0.025 ppb	121.448 %
Concentration per Run 1	0.025 ppb	132.238 %	129.628 %	0.210 ppb	0.030 ppb	123.702 %
Concentration per Run 2	-0.008 ppb	121.832 %	122.814 %	0.254 ppb	0.026 ppb	121.173 %
Concentration per Run 3	0.039 ppb	120.895 %	122.833 %	0.194 ppb	0.020 ppb	119.468 %
Recovery Percentage 1	3.753 %			21.953 %	2.506 %	
Concentration RSD	127.2 %	5.0 %	3.1 %	14.2 %	20.6 %	1.8 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	68	User name	ALPHALAB\a2-icpmsq2	Comment	CCV/MCCV
Analysis label:	CCV	Rack	0		
Analysis started at:	12/3/2024 12:35:53 PM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	115.770 %	125.702 %	57.412 ppb	5,980.172 ppb	5,527.372 ppb	56.252 ppb	5,392.506 ppb	5,181.352 ppb	111.018 %
Concentration per Run 1	110.616 %	128.115 %	58.287 ppb	5,742.952 ppb	5,364.572 ppb	54.335 ppb	5,533.381 ppb	5,311.729 ppb	109.074 %
Concentration per Run 2	117.068 %	125.421 %	57.030 ppb	6,037.258 ppb	5,606.486 ppb	56.443 ppb	5,222.496 ppb	4,983.339 ppb	112.565 %
Concentration per Run 3	119.627 %	123.569 %	56.918 ppb	6,160.306 ppb	5,611.060 ppb	57.979 ppb	5,421.640 ppb	5,248.987 ppb	111.413 %
Recovery Percentage 1			95.686 %	99.670 %	92.123 %	93.754 %	89.875 %	86.356 %	
Concentration RSD	4.0 %	1.8 %	1.3 %	3.6 %	2.6 %	3.3 %	2.9 %	3.4 %	1.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	53.785 ppb	53.778 ppb	55.737 ppb	5,743.402 ppb	56.127 ppb	56.681 ppb	56.664 ppb	56.695 ppb	119.388 %
Concentration per Run 1	49.431 ppb	51.042 ppb	53.815 ppb	5,625.969 ppb	54.448 ppb	56.508 ppb	55.360 ppb	55.758 ppb	122.764 %
Concentration per Run 2	55.465 ppb	54.282 ppb	57.206 ppb	5,832.807 ppb	56.836 ppb	57.728 ppb	57.716 ppb	58.821 ppb	115.458 %
Concentration per Run 3	56.460 ppb	56.011 ppb	56.189 ppb	5,771.431 ppb	57.099 ppb	55.808 ppb	56.915 ppb	55.506 ppb	119.943 %
Recovery Percentage 1	89.642 %	89.631 %	92.894 %	95.723 %	93.546 %	94.469 %	94.440 %	94.492 %	
Concentration RSD	7.1 %	4.7 %	3.1 %	1.8 %	2.6 %	1.7 %	2.1 %	3.3 %	3.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	55.197 ppb	55.240 ppb	58.435 ppb	56.869 ppb	114.889 %	57.012 ppb	56.662 ppb	118.981 %	55.519 ppb
Concentration per Run 1	54.756 ppb	55.153 ppb	56.597 ppb	55.512 ppb	119.470 %	56.801 ppb	55.887 ppb	121.805 %	53.923 ppb
Concentration per Run 2	56.623 ppb	53.355 ppb	60.162 ppb	57.172 ppb	110.969 %	56.459 ppb	57.237 ppb	117.243 %	55.824 ppb
Concentration per Run 3	54.210 ppb	57.211 ppb	58.546 ppb	57.922 ppb	114.229 %	57.776 ppb	56.862 ppb	117.894 %	56.811 ppb
Recovery Percentage 1	91.994 %	92.066 %	97.392 %	94.781 %		95.020 %	94.437 %		92.532 %
Concentration RSD	2.3 %	3.5 %	3.1 %	2.2 %	3.7 %	1.2 %	1.2 %	2.1 %	2.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	56.804 ppb	120.280 %	119.759 %	55.882 ppb	55.793 ppb	118.822 %
Concentration per Run 1	55.414 ppb	126.009 %	122.026 %	53.460 ppb	53.796 ppb	124.564 %
Concentration per Run 2	57.767 ppb	116.591 %	117.254 %	56.839 ppb	56.979 ppb	116.833 %
Concentration per Run 3	57.229 ppb	118.239 %	119.996 %	57.347 ppb	56.604 ppb	115.068 %
Recovery Percentage 1	94.673 %			93.136 %	92.988 %	
Concentration RSD	2.2 %	4.2 %	2.0 %	3.8 %	3.1 %	4.3 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	69	User name	ALPHALAB\a2-icpmsq2	Comment	CCB
Analysis label:	CCB	Rack	0		
Analysis started at:	12/3/2024 12:42:03 PM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	117.354 %	124.467 %	0.386 ppb	251.728 ppb	0.801 ppb	-0.651 ppb	39.318 ppb	1.008 ppb	108.564 %
Concentration per Run 1	113.137 %	131.145 %	0.613 ppb	230.037 ppb	-0.103 ppb	-0.654 ppb	54.187 ppb	-6.375 ppb	109.744 %
Concentration per Run 2	118.381 %	118.519 %	0.316 ppb	263.988 ppb	1.119 ppb	-0.707 ppb	28.333 ppb	7.117 ppb	108.493 %
Concentration per Run 3	120.544 %	123.738 %	0.230 ppb	261.160 ppb	1.388 ppb	-0.592 ppb	35.434 ppb	2.281 ppb	107.455 %
Recovery Percentage 1			77.263 %	50.346 %	1.145 %	-6.510 %	39.318 %	1.008 %	
Concentration RSD	3.2 %	5.1 %	52.0 %	7.5 %	99.1 %	8.8 %	34.0 %	678.4 %	1.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.436 ppb	-0.050 ppb	0.025 ppb	4.341 ppb	0.013 ppb	0.099 ppb	0.039 ppb	0.167 ppb	113.563 %
Concentration per Run 1	-0.423 ppb	-0.022 ppb	0.071 ppb	4.106 ppb	0.021 ppb	0.104 ppb	0.072 ppb	0.136 ppb	115.290 %
Concentration per Run 2	-0.440 ppb	-0.072 ppb	-0.027 ppb	3.860 ppb	0.014 ppb	0.042 ppb	0.013 ppb	0.234 ppb	111.488 %
Concentration per Run 3	-0.445 ppb	-0.057 ppb	0.030 ppb	5.056 ppb	0.004 ppb	0.151 ppb	0.033 ppb	0.132 ppb	113.910 %
Recovery Percentage 1	-8.726 %	-5.038 %	2.477 %	8.681 %	2.611 %	4.951 %	3.921 %	3.345 %	
Concentration RSD	2.7 %	51.0 %	198.9 %	14.6 %	63.8 %	55.2 %	76.2 %	34.5 %	1.7 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.080 ppb	0.174 ppb	0.017 ppb	0.206 ppb	115.330 %	0.019 ppb	0.017 ppb	117.306 %	0.054 ppb
Concentration per Run 1	0.022 ppb	-0.036 ppb	0.022 ppb	0.111 ppb	118.542 %	0.016 ppb	0.018 ppb	121.619 %	0.047 ppb
Concentration per Run 2	0.076 ppb	0.543 ppb	0.020 ppb	0.176 ppb	114.749 %	0.019 ppb	0.013 ppb	115.129 %	0.062 ppb
Concentration per Run 3	0.142 ppb	0.016 ppb	0.009 ppb	0.331 ppb	112.698 %	0.023 ppb	0.019 ppb	115.168 %	0.052 ppb
Recovery Percentage 1	15.970 %	3.488 %	0.167 %	10.307 %		4.803 %	8.438 %		1.347 %
Concentration RSD	75.0 %	183.7 %	41.6 %	54.6 %	2.6 %	17.6 %	20.9 %	3.2 %	14.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.038 ppb	117.878 %	118.387 %	0.192 ppb	0.024 ppb	117.668 %
Concentration per Run 1	0.016 ppb	122.992 %	122.859 %	0.216 ppb	0.030 ppb	121.642 %
Concentration per Run 2	0.055 ppb	118.089 %	117.538 %	0.204 ppb	0.025 ppb	116.831 %
Concentration per Run 3	0.044 ppb	112.554 %	114.765 %	0.156 ppb	0.016 ppb	114.529 %
Recovery Percentage 1	7.675 %			19.217 %	2.373 %	
Concentration RSD	52.0 %	4.4 %	3.5 %	16.5 %	31.8 %	3.1 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	70	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2469188-04d5 6020TL	Rack	1		
Analysis started at:	12/3/2024 12:47:59 PM	Vial	39		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	78.733 %	102.694 %	0.069 ppb	1,773,322.955 ppb	195,377.473 ppb	16.646 ppb	49,478.921 ppb	44,208.340 ppb	74.955 %
Concentration per Run 1	76.783 %	98.316 %	0.079 ppb	1,755,820.079 ppb	196,966.876 ppb	16.611 ppb	48,561.364 ppb	44,195.220 ppb	74.688 %
Concentration per Run 2	80.252 %	108.081 %	0.073 ppb	1,726,157.126 ppb	192,077.971 ppb	15.871 ppb	49,824.167 ppb	43,970.558 ppb	74.925 %
Concentration per Run 3	79.164 %	101.684 %	0.054 ppb	1,837,991.660 ppb	197,087.573 ppb	17.455 ppb	50,051.233 ppb	44,459.241 ppb	75.251 %
Concentration RSD	2.3 %	4.8 %	19.2 %	3.3 %	1.5 %	4.8 %	1.6 %	0.6 %	0.4 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.055 ppb	0.006 ppb	2.954 ppb	30.763 ppb	0.017 ppb	0.101 ppb	0.420 ppb	0.842 ppb	107.890 %
Concentration per Run 1	0.022 ppb	0.031 ppb	3.090 ppb	27.479 ppb	0.003 ppb	0.138 ppb	0.450 ppb	0.817 ppb	104.644 %
Concentration per Run 2	-0.086 ppb	-0.033 ppb	2.782 ppb	31.648 ppb	0.037 ppb	0.105 ppb	0.431 ppb	0.882 ppb	107.982 %
Concentration per Run 3	-0.100 ppb	0.019 ppb	2.991 ppb	33.162 ppb	0.012 ppb	0.059 ppb	0.379 ppb	0.826 ppb	111.043 %
Concentration RSD	121.8 %	598.8 %	5.3 %	9.6 %	102.6 %	39.7 %	8.7 %	4.2 %	3.0 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.386 ppb	0.292 ppb	1,174.444 ppb	1.570 ppb	97.251 %	0.016 ppb	0.007 ppb	103.286 %	0.060 ppb
Concentration per Run 1	0.461 ppb	0.409 ppb	1,144.923 ppb	1.634 ppb	99.563 %	0.020 ppb	0.007 ppb	101.534 %	0.046 ppb
Concentration per Run 2	0.387 ppb	0.332 ppb	1,189.332 ppb	1.597 ppb	96.973 %	0.018 ppb	0.011 ppb	103.578 %	0.075 ppb
Concentration per Run 3	0.310 ppb	0.136 ppb	1,189.078 ppb	1.478 ppb	95.216 %	0.010 ppb	0.004 ppb	104.746 %	0.061 ppb
Concentration RSD	19.5 %	48.1 %	2.2 %	5.2 %	2.2 %	31.3 %	50.0 %	1.6 %	23.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	2.754 ppb	107.902 %	108.189 %	0.043 ppb	0.071 ppb	90.735 %
Concentration per Run 1	2.876 ppb	106.982 %	107.706 %	0.026 ppb	0.074 ppb	92.920 %
Concentration per Run 2	2.826 ppb	109.601 %	107.626 %	0.050 ppb	0.072 ppb	90.571 %
Concentration per Run 3	2.559 ppb	107.124 %	109.234 %	0.054 ppb	0.066 ppb	88.714 %
Concentration RSD	6.2 %	1.4 %	0.8 %	35.0 %	5.9 %	2.3 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	71	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2469188-05d5 6020TL	Rack	1		
Analysis started at:	12/3/2024 12:52:26 PM	Vial	40		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	88.851 %	112.963 %	0.056 ppb	699,685.493 ppb	72,185.887 ppb	65.356 ppb	21,888.192 ppb	37,603.415 ppb	97.432 %
Concentration per Run 1	85.813 %	114.983 %	0.064 ppb	689,389.702 ppb	71,326.537 ppb	61.125 ppb	21,005.981 ppb	36,548.762 ppb	94.617 %
Concentration per Run 2	89.301 %	109.933 %	0.066 ppb	716,052.935 ppb	74,109.081 ppb	68.671 ppb	21,776.098 ppb	37,879.078 ppb	97.340 %
Concentration per Run 3	91.439 %	113.973 %	0.039 ppb	693,613.843 ppb	71,122.043 ppb	66.274 ppb	22,882.497 ppb	38,382.404 ppb	100.339 %
Concentration RSD	3.2 %	2.4 %	26.9 %	2.0 %	2.3 %	5.9 %	4.3 %	2.5 %	2.9 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.077 ppb	0.206 ppb	34.052 ppb	219.477 ppb	0.127 ppb	1.007 ppb	1.931 ppb	3.775 ppb	110.894 %
Concentration per Run 1	0.075 ppb	0.192 ppb	34.640 ppb	216.261 ppb	0.133 ppb	1.106 ppb	1.887 ppb	3.558 ppb	109.097 %
Concentration per Run 2	0.099 ppb	0.198 ppb	34.086 ppb	235.371 ppb	0.143 ppb	0.984 ppb	1.798 ppb	3.943 ppb	109.460 %
Concentration per Run 3	0.057 ppb	0.230 ppb	33.430 ppb	206.799 ppb	0.105 ppb	0.929 ppb	2.109 ppb	3.823 ppb	114.125 %
Concentration RSD	27.3 %	9.8 %	1.8 %	6.6 %	15.7 %	9.0 %	8.3 %	5.2 %	2.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.419 ppb	0.132 ppb	574.525 ppb	0.935 ppb	102.531 %	0.003 ppb	0.025 ppb	109.691 %	0.114 ppb
Concentration per Run 1	0.439 ppb	-0.076 ppb	568.559 ppb	0.990 ppb	104.269 %	0.006 ppb	0.027 ppb	110.566 %	0.101 ppb
Concentration per Run 2	0.408 ppb	0.387 ppb	579.853 ppb	0.907 ppb	101.529 %	0.002 ppb	0.028 ppb	109.085 %	0.113 ppb
Concentration per Run 3	0.411 ppb	0.085 ppb	575.163 ppb	0.909 ppb	101.795 %	0.001 ppb	0.021 ppb	109.421 %	0.128 ppb
Concentration RSD	4.2 %	178.0 %	1.0 %	5.1 %	1.5 %	80.6 %	15.5 %	0.7 %	11.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	22.088 ppb	114.185 %	112.891 %	0.032 ppb	0.262 ppb	98.227 %
Concentration per Run 1	21.942 ppb	115.529 %	112.710 %	0.019 ppb	0.268 ppb	98.976 %
Concentration per Run 2	21.943 ppb	113.855 %	111.427 %	0.040 ppb	0.259 ppb	97.266 %
Concentration per Run 3	22.378 ppb	113.172 %	114.536 %	0.037 ppb	0.260 ppb	98.437 %
Concentration RSD	1.1 %	1.1 %	1.4 %	34.9 %	2.0 %	0.9 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	72	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2469188-06d5 6020TL	Rack	1		
Analysis started at:	12/3/2024 12:56:53 PM	Vial	41		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	86.547 %	105.163 %	0.017 ppb	813,100.667 ppb	87,644.679 ppb	153.923 ppb	25,158.372 ppb	26,680.063 ppb	88.132 %
Concentration per Run 1	89.547 %	105.724 %	0.021 ppb	781,581.122 ppb	85,234.976 ppb	154.486 ppb	24,665.197 ppb	26,378.655 ppb	88.125 %
Concentration per Run 2	84.277 %	102.357 %	0.020 ppb	837,667.998 ppb	89,055.818 ppb	153.469 ppb	25,086.205 ppb	26,761.209 ppb	87.408 %
Concentration per Run 3	85.817 %	107.408 %	0.010 ppb	820,052.882 ppb	88,643.244 ppb	153.814 ppb	25,723.714 ppb	26,900.324 ppb	88.863 %
Concentration RSD	3.1 %	2.4 %	34.5 %	3.5 %	2.4 %	0.3 %	2.1 %	1.0 %	0.8 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.290 ppb	0.491 ppb	13.264 ppb	327.435 ppb	0.129 ppb	0.400 ppb	2.199 ppb	5.285 ppb	107.625 %
Concentration per Run 1	0.270 ppb	0.524 ppb	13.315 ppb	325.782 ppb	0.134 ppb	0.351 ppb	2.166 ppb	5.420 ppb	104.554 %
Concentration per Run 2	0.237 ppb	0.500 ppb	12.726 ppb	325.268 ppb	0.136 ppb	0.535 ppb	2.196 ppb	5.205 ppb	109.601 %
Concentration per Run 3	0.363 ppb	0.449 ppb	13.751 ppb	331.254 ppb	0.117 ppb	0.313 ppb	2.235 ppb	5.231 ppb	108.719 %
Concentration RSD	22.6 %	7.8 %	3.9 %	1.0 %	8.2 %	29.7 %	1.6 %	2.2 %	2.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.316 ppb	0.122 ppb	555.845 ppb	0.790 ppb	100.541 %	0.003 ppb	0.026 ppb	106.777 %	0.104 ppb
Concentration per Run 1	0.453 ppb	-0.069 ppb	550.506 ppb	0.746 ppb	102.714 %	0.000 ppb	0.028 ppb	107.783 %	0.091 ppb
Concentration per Run 2	0.219 ppb	0.321 ppb	553.542 ppb	0.788 ppb	99.645 %	0.003 ppb	0.025 ppb	105.656 %	0.103 ppb
Concentration per Run 3	0.276 ppb	0.113 ppb	563.488 ppb	0.838 ppb	99.263 %	0.006 ppb	0.025 ppb	106.893 %	0.118 ppb
Concentration RSD	38.7 %	159.9 %	1.2 %	5.8 %	1.9 %	87.4 %	6.7 %	1.0 %	13.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	6.340 ppb	111.894 %	110.391 %	0.029 ppb	0.733 ppb	94.003 %
Concentration per Run 1	6.214 ppb	114.961 %	112.257 %	0.018 ppb	0.713 ppb	96.086 %
Concentration per Run 2	6.625 ppb	111.095 %	108.520 %	0.034 ppb	0.742 ppb	93.051 %
Concentration per Run 3	6.181 ppb	109.626 %	110.395 %	0.036 ppb	0.745 ppb	92.873 %
Concentration RSD	3.9 %	2.5 %	1.7 %	33.0 %	2.4 %	1.9 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	73	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG2004404-1 MCP-6020SL-10	Rack	1		
Analysis started at:	12/3/2024 1:06:43 PM	Vial	42		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	119.738 %	119.080 %	0.008 ppb	579.585 ppb	7.845 ppb	0.453 ppb	48.880 ppb	5.376 ppb	113.743 %
Concentration per Run 1	114.522 %	117.677 %	0.009 ppb	587.087 ppb	10.990 ppb	0.338 ppb	43.052 ppb	9.388 ppb	111.048 %
Concentration per Run 2	118.879 %	120.202 %	0.007 ppb	569.222 ppb	7.551 ppb	0.331 ppb	52.974 ppb	3.493 ppb	115.095 %
Concentration per Run 3	125.812 %	119.361 %	0.009 ppb	582.447 ppb	4.994 ppb	0.691 ppb	50.616 ppb	3.246 ppb	115.088 %
Concentration RSD	4.8 %	1.1 %	13.8 %	1.6 %	38.4 %	45.4 %	10.6 %	64.7 %	2.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.267 ppb	-0.063 ppb	0.492 ppb	6.397 ppb	0.002 ppb	0.084 ppb	0.067 ppb	0.930 ppb	125.859 %
Concentration per Run 1	-0.219 ppb	-0.057 ppb	0.511 ppb	6.312 ppb	0.000 ppb	0.084 ppb	0.071 ppb	0.852 ppb	133.343 %
Concentration per Run 2	-0.328 ppb	-0.061 ppb	0.482 ppb	6.156 ppb	-0.002 ppb	0.092 ppb	0.076 ppb	1.035 ppb	119.930 %
Concentration per Run 3	-0.254 ppb	-0.071 ppb	0.483 ppb	6.724 ppb	0.006 ppb	0.076 ppb	0.053 ppb	0.903 ppb	124.303 %
Concentration RSD	20.8 %	11.0 %	3.3 %	4.6 %	249.7 %	9.3 %	18.4 %	10.2 %	5.4 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.006 ppb	0.058 ppb	0.050 ppb	-0.094 ppb	116.698 %	-0.001 ppb	0.000 ppb	116.696 %	0.026 ppb
Concentration per Run 1	0.018 ppb	0.062 ppb	0.073 ppb	-0.106 ppb	117.668 %	0.000 ppb	0.000 ppb	116.685 %	0.015 ppb
Concentration per Run 2	-0.015 ppb	-0.046 ppb	0.054 ppb	-0.095 ppb	114.269 %	0.000 ppb	0.000 ppb	118.490 %	0.036 ppb
Concentration per Run 3	0.016 ppb	0.158 ppb	0.024 ppb	-0.082 ppb	118.157 %	-0.002 ppb	0.000 ppb	114.913 %	0.026 ppb
Concentration RSD	296.7 %	175.3 %	48.5 %	12.6 %	1.8 %	148.1 %	N/A	1.5 %	39.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.030 ppb	115.985 %	112.947 %	0.014 ppb	0.005 ppb	111.124 %
Concentration per Run 1	0.042 ppb	118.633 %	113.532 %	0.011 ppb	0.005 ppb	116.420 %
Concentration per Run 2	0.018 ppb	114.652 %	111.601 %	0.014 ppb	0.005 ppb	106.585 %
Concentration per Run 3	0.031 ppb	114.670 %	113.708 %	0.016 ppb	0.006 ppb	110.367 %
Concentration RSD	39.8 %	2.0 %	1.0 %	18.8 %	3.5 %	4.5 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	74	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG2004404-2d10 MCP-6020SL-10	Rack	1		
Analysis started at:	12/3/2024 1:11:12 PM	Vial	43		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	116.525 %	122.616 %	5.028 ppb	1,595.172 ppb	942.869 ppb	181.662 ppb	977.265 ppb	773.433 ppb	111.806 %
Concentration per Run 1	112.131 %	124.243 %	5.063 ppb	1,585.214 ppb	954.217 ppb	181.031 ppb	991.516 ppb	667.077 ppb	109.748 %
Concentration per Run 2	117.823 %	123.064 %	5.035 ppb	1,603.355 ppb	937.892 ppb	184.134 ppb	993.861 ppb	826.528 ppb	113.404 %
Concentration per Run 3	119.620 %	120.539 %	4.985 ppb	1,596.946 ppb	936.499 ppb	179.821 ppb	946.417 ppb	826.695 ppb	112.267 %
Concentration RSD	3.4 %	1.5 %	0.8 %	0.6 %	1.0 %	1.2 %	2.7 %	11.9 %	1.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	42.409 ppb	17.748 ppb	48.844 ppb	96.671 ppb	48.376 ppb	49.752 ppb	25.027 ppb	48.406 ppb	111.870 %
Concentration per Run 1	40.610 ppb	17.605 ppb	50.176 ppb	94.030 ppb	47.449 ppb	49.399 ppb	24.713 ppb	49.023 ppb	112.044 %
Concentration per Run 2	43.065 ppb	18.096 ppb	48.641 ppb	98.149 ppb	49.369 ppb	51.882 ppb	25.504 ppb	47.947 ppb	109.865 %
Concentration per Run 3	43.552 ppb	17.543 ppb	47.715 ppb	97.834 ppb	48.309 ppb	47.975 ppb	24.865 ppb	48.248 ppb	113.702 %
Concentration RSD	3.7 %	1.7 %	2.5 %	2.4 %	2.0 %	4.0 %	1.7 %	1.1 %	1.7 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	11.298 ppb	11.368 ppb	95.149 ppb	94.496 ppb	111.882 %	4.961 ppb	5.023 ppb	115.162 %	38.072 ppb
Concentration per Run 1	10.742 ppb	10.672 ppb	93.918 ppb	92.585 ppb	115.394 %	4.866 ppb	4.770 ppb	118.367 %	36.137 ppb
Concentration per Run 2	11.722 ppb	12.107 ppb	96.888 ppb	94.401 ppb	109.736 %	5.016 ppb	5.110 ppb	113.800 %	38.442 ppb
Concentration per Run 3	11.430 ppb	11.324 ppb	94.639 ppb	96.501 ppb	110.517 %	5.002 ppb	5.189 ppb	113.320 %	39.637 ppb
Concentration RSD	4.5 %	6.3 %	1.6 %	2.1 %	2.7 %	1.7 %	4.4 %	2.4 %	4.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	189.043 ppb	114.304 %	112.275 %	11.142 ppb	49.325 ppb	110.840 %
Concentration per Run 1	184.861 ppb	117.812 %	112.378 %	10.714 ppb	47.251 ppb	114.903 %
Concentration per Run 2	189.735 ppb	112.846 %	111.200 %	11.276 ppb	50.642 ppb	109.076 %
Concentration per Run 3	192.534 ppb	112.252 %	113.245 %	11.435 ppb	50.081 ppb	108.540 %
Concentration RSD	2.1 %	2.7 %	0.9 %	3.4 %	3.7 %	3.2 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	75	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG2004404-3d10 MCP-6020SL-10	Rack	1		
Analysis started at:	12/3/2024 1:15:40 PM	Vial	44		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	118.673 %	123.345 %	4.959 ppb	1,530.872 ppb	938.063 ppb	179.486 ppb	955.533 ppb	870.804 ppb	111.347 %
Concentration per Run 1	113.096 %	128.788 %	5.039 ppb	1,493.250 ppb	920.303 ppb	172.610 ppb	910.183 ppb	836.873 ppb	106.474 %
Concentration per Run 2	120.759 %	125.085 %	4.960 ppb	1,490.505 ppb	915.781 ppb	174.699 ppb	944.349 ppb	875.169 ppb	112.757 %
Concentration per Run 3	122.165 %	116.162 %	4.877 ppb	1,608.861 ppb	978.105 ppb	191.148 ppb	1,012.066 ppb	900.370 ppb	114.809 %
Concentration RSD	4.1 %	5.3 %	1.6 %	4.4 %	3.7 %	5.7 %	5.4 %	3.7 %	3.9 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	42.234 ppb	17.916 ppb	48.422 ppb	95.336 ppb	49.139 ppb	49.367 ppb	24.340 ppb	48.276 ppb	108.723 %
Concentration per Run 1	40.807 ppb	17.408 ppb	49.667 ppb	91.353 ppb	49.439 ppb	51.347 ppb	24.436 ppb	49.039 ppb	106.870 %
Concentration per Run 2	43.660 ppb	18.230 ppb	48.550 ppb	99.430 ppb	49.935 ppb	49.058 ppb	24.590 ppb	49.019 ppb	106.453 %
Concentration per Run 3	42.235 ppb	18.109 ppb	47.049 ppb	95.226 ppb	48.041 ppb	47.698 ppb	23.995 ppb	46.770 ppb	112.845 %
Concentration RSD	3.4 %	2.5 %	2.7 %	4.2 %	2.0 %	3.7 %	1.3 %	2.7 %	3.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	11.805 ppb	12.217 ppb	95.124 ppb	92.805 ppb	111.616 %	4.990 ppb	4.939 ppb	112.042 %	39.531 ppb
Concentration per Run 1	12.308 ppb	10.441 ppb	95.766 ppb	90.007 ppb	113.588 %	4.937 ppb	4.926 ppb	114.817 %	38.503 ppb
Concentration per Run 2	11.933 ppb	13.067 ppb	96.881 ppb	92.639 ppb	109.005 %	5.006 ppb	4.882 ppb	110.256 %	39.645 ppb
Concentration per Run 3	11.174 ppb	13.144 ppb	92.725 ppb	95.769 ppb	112.256 %	5.026 ppb	5.010 ppb	111.054 %	40.446 ppb
Concentration RSD	4.9 %	12.6 %	2.3 %	3.1 %	2.1 %	0.9 %	1.3 %	2.2 %	2.5 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	191.455 ppb	110.955 %	109.650 %	11.375 ppb	49.773 ppb	109.273 %
Concentration per Run 1	188.763 ppb	111.436 %	109.738 %	11.091 ppb	48.964 ppb	111.177 %
Concentration per Run 2	197.204 ppb	109.051 %	108.296 %	11.768 ppb	50.402 ppb	106.032 %
Concentration per Run 3	188.398 ppb	112.377 %	110.915 %	11.264 ppb	49.954 ppb	110.611 %
Concentration RSD	2.6 %	1.5 %	1.2 %	3.1 %	1.5 %	2.6 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	76	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2469119-01 MCP-6020SL-10	Rack	1		
Analysis started at:	12/3/2024 1:20:09 PM	Vial	45		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	98.934 %	113.075 %	0.008 ppb	352,866.383 ppb	3,646.595 ppb	2.895 ppb	4,053.013 ppb	27,948.499 ppb	98.154 %
Concentration per Run 1	95.176 %	113.300 %	0.007 ppb	345,704.772 ppb	3,536.900 ppb	3.147 ppb	3,945.710 ppb	27,757.592 ppb	97.532 %
Concentration per Run 2	101.019 %	112.458 %	0.010 ppb	357,841.129 ppb	3,700.059 ppb	2.913 ppb	4,178.058 ppb	28,163.210 ppb	99.392 %
Concentration per Run 3	100.607 %	113.468 %	0.007 ppb	355,053.250 ppb	3,702.825 ppb	2.626 ppb	4,035.269 ppb	27,924.695 ppb	97.537 %
Concentration RSD	3.3 %	0.5 %	19.9 %	1.8 %	2.6 %	9.0 %	2.9 %	0.7 %	1.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.325 ppb	0.080 ppb	3,116.754 ppb	13,938.141 ppb	0.353 ppb	0.785 ppb	0.600 ppb	12.089 ppb	102.003 %
Concentration per Run 1	-0.197 ppb	0.035 ppb	3,082.917 ppb	13,687.604 ppb	0.331 ppb	0.836 ppb	0.523 ppb	12.509 ppb	101.744 %
Concentration per Run 2	-0.408 ppb	0.137 ppb	3,153.278 ppb	13,997.876 ppb	0.387 ppb	0.763 ppb	0.584 ppb	11.712 ppb	99.156 %
Concentration per Run 3	-0.371 ppb	0.067 ppb	3,114.067 ppb	14,128.942 ppb	0.341 ppb	0.755 ppb	0.695 ppb	12.046 ppb	105.110 %
Concentration RSD	34.7 %	65.4 %	1.1 %	1.6 %	8.5 %	5.6 %	14.6 %	3.3 %	2.9 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	16.038 ppb	0.244 ppb	184.175 ppb	7.079 ppb	104.568 %	-0.001 ppb	0.002 ppb	106.729 %	1.230 ppb
Concentration per Run 1	16.173 ppb	0.176 ppb	185.564 ppb	6.268 ppb	105.629 %	0.002 ppb	0.000 ppb	106.936 %	1.091 ppb
Concentration per Run 2	16.625 ppb	0.283 ppb	183.777 ppb	6.880 ppb	104.705 %	-0.002 ppb	0.003 ppb	106.647 %	1.280 ppb
Concentration per Run 3	15.316 ppb	0.273 ppb	183.183 ppb	8.088 ppb	103.371 %	-0.003 ppb	0.004 ppb	106.603 %	1.320 ppb
Concentration RSD	4.1 %	24.2 %	0.7 %	13.1 %	1.1 %	317.8 %	86.6 %	0.2 %	9.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	31.125 ppb	110.411 %	111.024 %	0.014 ppb	0.038 ppb	101.185 %
Concentration per Run 1	30.113 ppb	113.971 %	114.351 %	0.011 ppb	0.041 ppb	101.848 %
Concentration per Run 2	31.562 ppb	108.678 %	109.221 %	0.011 ppb	0.039 ppb	100.298 %
Concentration per Run 3	31.702 ppb	108.585 %	109.500 %	0.020 ppb	0.032 ppb	101.409 %
Concentration RSD	2.8 %	2.8 %	2.6 %	34.7 %	12.1 %	0.8 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	77	User name	ALPHALAB\a2-icpmsq2	Comment	CCV/MCCV
Analysis label:	CCV	Rack	0		
Analysis started at:	12/3/2024 1:30:45 PM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	114.890 %	119.641 %	59.218 ppb	6,473.200 ppb	5,753.076 ppb	54.772 ppb	5,759.568 ppb	5,551.802 ppb	106.643 %
Concentration per Run 1	110.268 %	125.421 %	59.311 ppb	6,211.606 ppb	5,542.746 ppb	51.850 ppb	5,577.762 ppb	5,363.165 ppb	104.391 %
Concentration per Run 2	115.705 %	117.845 %	59.181 ppb	6,544.396 ppb	5,770.704 ppb	56.149 ppb	5,784.414 ppb	5,710.529 ppb	106.666 %
Concentration per Run 3	118.697 %	115.657 %	59.161 ppb	6,663.598 ppb	5,945.777 ppb	56.317 ppb	5,916.529 ppb	5,581.711 ppb	108.871 %
Recovery Percentage 1			98.697 %	107.887 %	95.885 %	91.287 %	95.993 %	92.530 %	
Concentration RSD	3.7 %	4.3 %	0.1 %	3.6 %	3.5 %	4.6 %	3.0 %	3.2 %	2.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	55.466 ppb	55.585 ppb	59.394 ppb	5,934.901 ppb	58.515 ppb	60.096 ppb	60.051 ppb	60.662 ppb	107.203 %
Concentration per Run 1	55.289 ppb	54.809 ppb	60.683 ppb	5,982.886 ppb	59.890 ppb	61.645 ppb	58.676 ppb	60.862 ppb	104.852 %
Concentration per Run 2	55.854 ppb	55.301 ppb	60.193 ppb	5,906.309 ppb	57.021 ppb	59.516 ppb	60.875 ppb	60.600 ppb	106.640 %
Concentration per Run 3	55.257 ppb	56.647 ppb	57.306 ppb	5,915.510 ppb	58.634 ppb	59.128 ppb	60.602 ppb	60.524 ppb	110.117 %
Recovery Percentage 1	92.444 %	92.642 %	98.990 %	98.915 %	97.525 %	100.160 %	100.085 %	101.103 %	
Concentration RSD	0.6 %	1.7 %	3.1 %	0.7 %	2.5 %	2.3 %	2.0 %	0.3 %	2.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	59.229 ppb	59.465 ppb	59.373 ppb	57.973 ppb	111.494 %	56.003 ppb	56.011 ppb	115.054 %	55.292 ppb
Concentration per Run 1	60.203 ppb	60.816 ppb	58.857 ppb	55.400 ppb	115.330 %	54.706 ppb	53.753 ppb	118.427 %	53.496 ppb
Concentration per Run 2	59.723 ppb	61.199 ppb	60.308 ppb	58.008 ppb	110.012 %	56.534 ppb	56.959 ppb	113.922 %	55.669 ppb
Concentration per Run 3	57.761 ppb	56.378 ppb	58.954 ppb	60.512 ppb	109.141 %	56.771 ppb	57.322 ppb	112.814 %	56.711 ppb
Recovery Percentage 1	98.715 %	99.108 %	98.955 %	96.622 %		93.339 %	93.352 %		92.154 %
Concentration RSD	2.2 %	4.5 %	1.4 %	4.4 %	3.0 %	2.0 %	3.5 %	2.6 %	3.0 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	56.571 ppb	115.043 %	114.616 %	55.990 ppb	57.004 ppb	110.959 %
Concentration per Run 1	56.547 ppb	116.279 %	117.583 %	55.054 ppb	56.337 ppb	112.704 %
Concentration per Run 2	56.765 ppb	113.549 %	113.832 %	57.563 ppb	57.327 ppb	110.076 %
Concentration per Run 3	56.403 ppb	115.301 %	112.433 %	55.352 ppb	57.350 ppb	110.098 %
Recovery Percentage 1	94.286 %			93.316 %	95.007 %	
Concentration RSD	0.3 %	1.2 %	2.3 %	2.4 %	1.0 %	1.4 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	78	User name	ALPHALAB\a2-icpmsq2	Comment	CCB
Analysis label:	CCB	Rack	0		
Analysis started at:	12/3/2024 1:35:17 PM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	118.157 %	120.764 %	0.218 ppb	546.112 ppb	1.121 ppb	-0.684 ppb	71.287 ppb	0.699 ppb	107.057 %
Concentration per Run 1	113.438 %	124.580 %	0.304 ppb	510.437 ppb	1.050 ppb	-0.739 ppb	71.331 ppb	0.741 ppb	106.737 %
Concentration per Run 2	119.593 %	117.340 %	0.214 ppb	572.379 ppb	1.359 ppb	-0.792 ppb	71.113 ppb	8.083 ppb	106.220 %
Concentration per Run 3	121.440 %	120.371 %	0.136 ppb	555.520 ppb	0.955 ppb	-0.520 ppb	71.418 ppb	-6.727 ppb	108.214 %
Recovery Percentage 1			43.605 %	109.222 %	1.602 %	-6.835 %	71.287 %	0.699 %	
Concentration RSD	3.5 %	3.0 %	38.5 %	5.9 %	18.9 %	21.1 %	0.2 %	1,059.2 %	1.0 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.380 ppb	-0.019 ppb	0.099 ppb	7.334 ppb	0.020 ppb	0.118 ppb	0.088 ppb	0.146 ppb	105.134 %
Concentration per Run 1	-0.454 ppb	-0.005 ppb	0.064 ppb	6.450 ppb	0.026 ppb	0.142 ppb	0.110 ppb	0.169 ppb	107.544 %
Concentration per Run 2	-0.360 ppb	-0.019 ppb	0.177 ppb	8.124 ppb	0.012 ppb	0.116 ppb	0.106 ppb	0.183 ppb	105.766 %
Concentration per Run 3	-0.327 ppb	-0.033 ppb	0.054 ppb	7.427 ppb	0.022 ppb	0.098 ppb	0.049 ppb	0.086 ppb	102.092 %
Recovery Percentage 1	-7.604 %	-1.898 %	9.855 %	14.668 %	3.957 %	5.924 %	8.800 %	2.925 %	
Concentration RSD	17.4 %	72.4 %	69.4 %	11.5 %	37.4 %	18.3 %	38.7 %	35.8 %	2.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.039 ppb	0.018 ppb	0.034 ppb	0.370 ppb	110.475 %	0.023 ppb	0.026 ppb	109.867 %	0.157 ppb
Concentration per Run 1	0.118 ppb	0.089 ppb	0.036 ppb	0.205 ppb	114.360 %	0.028 ppb	0.027 ppb	109.973 %	0.120 ppb
Concentration per Run 2	-0.008 ppb	0.014 ppb	0.029 ppb	0.316 ppb	110.225 %	0.022 ppb	0.044 ppb	110.317 %	0.176 ppb
Concentration per Run 3	0.009 ppb	-0.050 ppb	0.038 ppb	0.589 ppb	106.841 %	0.020 ppb	0.007 ppb	109.311 %	0.175 ppb
Recovery Percentage 1	7.900 %	0.355 %	0.344 %	18.484 %		5.794 %	12.816 %		3.921 %
Concentration RSD	173.1 %	391.7 %	13.6 %	53.5 %	3.4 %	17.3 %	71.7 %	0.5 %	20.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.020 ppb	111.813 %	111.411 %	0.233 ppb	0.030 ppb	109.041 %
Concentration per Run 1	-0.006 ppb	114.529 %	115.994 %	0.218 ppb	0.029 ppb	111.797 %
Concentration per Run 2	0.046 ppb	112.056 %	109.879 %	0.287 ppb	0.034 ppb	108.619 %
Concentration per Run 3	0.020 ppb	108.855 %	108.358 %	0.196 ppb	0.028 ppb	106.706 %
Recovery Percentage 1	3.985 %			23.333 %	3.033 %	
Concentration RSD	130.1 %	2.5 %	3.6 %	20.3 %	11.4 %	2.4 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	79	User name	ALPHALAB\a2-icpmsq2	Comment	CCB
Analysis label:	CCB	Rack	0		
Analysis started at:	12/3/2024 1:45:22 PM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	118.704 %	119.024 %	0.006 ppb	280.745 ppb	-0.171 ppb	-0.666 ppb	30.777 ppb	-6.620 ppb	108.554 %
Concentration per Run 1	113.248 %	116.499 %	0.006 ppb	251.140 ppb	0.138 ppb	-0.974 ppb	28.930 ppb	-2.982 ppb	105.054 %
Concentration per Run 2	120.589 %	118.687 %	0.005 ppb	286.333 ppb	-0.231 ppb	-0.400 ppb	28.755 ppb	-10.323 ppb	110.697 %
Concentration per Run 3	122.275 %	121.886 %	0.007 ppb	304.762 ppb	-0.419 ppb	-0.624 ppb	34.646 ppb	-6.556 ppb	109.911 %
Recovery Percentage 1			1.174 %	56.149 %	-0.244 %	-6.663 %	30.777 %	-6.620 %	
Concentration RSD	4.0 %	2.3 %	11.2 %	9.7 %	166.2 %	43.4 %	10.9 %	55.4 %	2.8 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.381 ppb	-0.061 ppb	0.032 ppb	-0.423 ppb	0.005 ppb	0.043 ppb	0.031 ppb	0.117 ppb	130.208 %
Concentration per Run 1	-0.376 ppb	-0.085 ppb	0.064 ppb	-0.568 ppb	0.007 ppb	0.067 ppb	0.005 ppb	0.133 ppb	132.669 %
Concentration per Run 2	-0.352 ppb	-0.058 ppb	0.061 ppb	-0.792 ppb	0.008 ppb	0.013 ppb	0.050 ppb	0.107 ppb	130.754 %
Concentration per Run 3	-0.415 ppb	-0.041 ppb	-0.030 ppb	0.090 ppb	-0.001 ppb	0.050 ppb	0.039 ppb	0.111 ppb	127.201 %
Recovery Percentage 1	-7.626 %	-6.135 %	3.188 %	-0.846 %	0.971 %	2.170 %	3.110 %	2.341 %	
Concentration RSD	8.4 %	36.3 %	166.9 %	108.3 %	98.2 %	63.6 %	76.1 %	12.0 %	2.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.044 ppb	0.002 ppb	0.004 ppb	-0.053 ppb	111.015 %	0.002 ppb	0.001 ppb	109.483 %	0.044 ppb
Concentration per Run 1	0.077 ppb	-0.047 ppb	0.012 ppb	-0.071 ppb	115.778 %	0.001 ppb	0.000 ppb	114.476 %	0.051 ppb
Concentration per Run 2	0.012 ppb	0.035 ppb	-0.006 ppb	-0.050 ppb	110.261 %	0.002 ppb	0.000 ppb	106.734 %	0.043 ppb
Concentration per Run 3	0.043 ppb	0.018 ppb	0.005 ppb	-0.039 ppb	107.005 %	0.004 ppb	0.003 ppb	107.238 %	0.038 ppb
Recovery Percentage 1	8.756 %	0.040 %	0.036 %	-2.675 %		0.592 %	0.575 %		1.102 %
Concentration RSD	74.7 %	2,144.2 %	258.2 %	31.2 %	4.0 %	70.9 %	173.2 %	4.0 %	14.5 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.007 ppb	112.317 %	110.097 %	0.029 ppb	0.006 ppb	107.396 %
Concentration per Run 1	0.006 ppb	113.387 %	112.941 %	0.019 ppb	0.009 ppb	109.445 %
Concentration per Run 2	0.007 ppb	111.536 %	107.260 %	0.032 ppb	0.004 ppb	104.181 %
Concentration per Run 3	0.007 ppb	112.029 %	110.089 %	0.037 ppb	0.004 ppb	108.563 %
Recovery Percentage 1	1.374 %			2.939 %	0.568 %	
Concentration RSD	8.9 %	0.9 %	2.6 %	32.4 %	45.8 %	2.6 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	80	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG2004404-2d10 MCP-6020SL-10	Rack	1		
Analysis started at:	12/3/2024 2:02:11 PM	Vial	52		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	119.645 %	124.018 %	4.794 ppb	1,313.469 ppb	924.323 ppb	176.698 ppb	904.120 ppb	814.771 ppb	107.511 %
Concentration per Run 1	115.135 %	121.549 %	4.803 ppb	1,304.630 ppb	908.906 ppb	172.505 ppb	912.808 ppb	856.177 ppb	106.220 %
Concentration per Run 2	120.551 %	130.809 %	4.843 ppb	1,236.184 ppb	884.689 ppb	172.517 ppb	883.533 ppb	740.225 ppb	107.134 %
Concentration per Run 3	123.247 %	119.697 %	4.735 ppb	1,399.595 ppb	979.374 ppb	185.071 ppb	916.020 ppb	847.912 ppb	109.179 %
Concentration RSD	3.5 %	4.8 %	1.1 %	6.2 %	5.3 %	4.1 %	2.0 %	7.9 %	1.4 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	43.230 ppb	18.015 ppb	48.878 ppb	96.029 ppb	48.347 ppb	48.730 ppb	23.978 ppb	48.572 ppb	107.982 %
Concentration per Run 1	43.014 ppb	17.836 ppb	50.744 ppb	94.651 ppb	47.185 ppb	50.170 ppb	24.483 ppb	48.006 ppb	105.887 %
Concentration per Run 2	42.284 ppb	17.835 ppb	48.198 ppb	92.744 ppb	48.056 ppb	47.689 ppb	23.805 ppb	49.705 ppb	107.966 %
Concentration per Run 3	44.392 ppb	18.376 ppb	47.691 ppb	100.693 ppb	49.799 ppb	48.331 ppb	23.647 ppb	48.006 ppb	110.092 %
Concentration RSD	2.5 %	1.7 %	3.3 %	4.3 %	2.8 %	2.6 %	1.9 %	2.0 %	1.9 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	11.578 ppb	11.397 ppb	95.017 ppb	96.240 ppb	110.170 %	4.988 ppb	4.909 ppb	110.154 %	42.115 ppb
Concentration per Run 1	11.411 ppb	9.612 ppb	93.772 ppb	96.888 ppb	113.283 %	5.026 ppb	4.882 ppb	113.111 %	40.670 ppb
Concentration per Run 2	11.885 ppb	11.425 ppb	96.155 ppb	95.747 ppb	108.295 %	4.817 ppb	4.939 ppb	108.231 %	42.707 ppb
Concentration per Run 3	11.439 ppb	13.156 ppb	95.124 ppb	96.085 ppb	108.932 %	5.120 ppb	4.906 ppb	109.120 %	42.968 ppb
Concentration RSD	2.3 %	15.5 %	1.3 %	0.6 %	2.5 %	3.1 %	0.6 %	2.4 %	3.0 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	192.110 ppb	111.191 %	110.197 %	11.257 ppb	49.680 ppb	109.190 %
Concentration per Run 1	185.893 ppb	112.540 %	111.231 %	11.229 ppb	48.667 ppb	108.280 %
Concentration per Run 2	191.505 ppb	112.720 %	110.685 %	11.102 ppb	49.550 ppb	110.392 %
Concentration per Run 3	198.932 ppb	108.313 %	108.675 %	11.441 ppb	50.822 ppb	108.896 %
Concentration RSD	3.4 %	2.2 %	1.2 %	1.5 %	2.2 %	1.0 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	81	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG2004404-3d10 MCP-6020SL-10	Rack	1		
Analysis started at:	12/3/2024 2:06:37 PM	Vial	53		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	114.779 %	129.462 %	5.034 ppb	1,292.033 ppb	909.248 ppb	175.601 ppb	932.334 ppb	866.457 ppb	108.873 %
Concentration per Run 1	110.272 %	134.849 %	5.097 ppb	1,225.196 ppb	861.079 ppb	169.993 ppb	902.585 ppb	812.601 ppb	106.307 %
Concentration per Run 2	115.539 %	129.125 %	5.029 ppb	1,298.338 ppb	917.699 ppb	174.231 ppb	910.978 ppb	907.035 ppb	111.080 %
Concentration per Run 3	118.527 %	124.411 %	4.977 ppb	1,352.565 ppb	948.967 ppb	182.578 ppb	983.439 ppb	879.734 ppb	109.233 %
Concentration RSD	3.6 %	4.0 %	1.2 %	4.9 %	4.9 %	3.6 %	4.8 %	5.6 %	2.2 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	43.824 ppb	18.222 ppb	48.802 ppb	95.028 ppb	49.421 ppb	48.563 ppb	24.642 ppb	48.813 ppb	106.423 %
Concentration per Run 1	42.058 ppb	17.768 ppb	47.769 ppb	92.582 ppb	49.205 ppb	48.436 ppb	25.554 ppb	48.167 ppb	106.878 %
Concentration per Run 2	44.094 ppb	18.464 ppb	49.081 ppb	104.275 ppb	50.511 ppb	48.611 ppb	24.447 ppb	50.073 ppb	105.814 %
Concentration per Run 3	45.320 ppb	18.434 ppb	49.557 ppb	88.227 ppb	48.547 ppb	48.642 ppb	23.924 ppb	48.199 ppb	106.576 %
Concentration RSD	3.8 %	2.2 %	1.9 %	8.7 %	2.0 %	0.2 %	3.4 %	2.2 %	0.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	11.925 ppb	13.449 ppb	95.558 ppb	95.718 ppb	109.363 %	5.025 ppb	5.018 ppb	109.070 %	40.061 ppb
Concentration per Run 1	11.948 ppb	13.709 ppb	94.325 ppb	92.744 ppb	112.875 %	4.831 ppb	4.817 ppb	113.403 %	38.063 ppb
Concentration per Run 2	12.331 ppb	11.939 ppb	96.608 ppb	97.752 ppb	107.080 %	5.072 ppb	5.068 ppb	108.870 %	40.172 ppb
Concentration per Run 3	11.497 ppb	14.700 ppb	95.741 ppb	96.659 ppb	108.133 %	5.171 ppb	5.170 ppb	104.937 %	41.950 ppb
Concentration RSD	3.5 %	10.4 %	1.2 %	2.8 %	2.8 %	3.5 %	3.6 %	3.9 %	4.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	192.646 ppb	110.226 %	106.938 %	11.438 ppb	50.492 ppb	108.593 %
Concentration per Run 1	187.377 ppb	113.752 %	108.375 %	11.152 ppb	49.775 ppb	110.243 %
Concentration per Run 2	192.454 ppb	107.751 %	107.069 %	11.569 ppb	51.453 ppb	107.520 %
Concentration per Run 3	198.108 ppb	109.174 %	105.370 %	11.593 ppb	50.248 ppb	108.015 %
Concentration RSD	2.8 %	2.8 %	1.4 %	2.2 %	1.7 %	1.3 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	82	User name	ALPHALAB\a2-icpmsq2	Comment	ng
Analysis label:	L2469297-01d5 MCP-6020SL-10	Rack	1		
Analysis started at:	12/3/2024 2:11:05 PM	Vial	46		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	95.565 %	113.468 %	0.051 ppb	262,288.313 ppb	12,737.116 ppb	19.063 ppb	2,729.110 ppb	31,220.743 ppb	99.784 %
Concentration per Run 1	91.985 %	113.973 %	0.052 ppb	260,301.922 ppb	12,704.928 ppb	20.389 ppb	2,678.718 ppb	30,572.424 ppb	96.684 %
Concentration per Run 2	96.455 %	103.199 %	0.056 ppb	280,896.015 ppb	13,545.645 ppb	20.297 ppb	2,889.385 ppb	32,479.480 ppb	101.320 %
Concentration per Run 3	98.257 %	123.233 %	0.044 ppb	245,667.002 ppb	11,960.776 ppb	16.505 ppb	2,619.227 ppb	30,610.326 ppb	101.348 %
Concentration RSD	3.4 %	8.8 %	12.1 %	6.7 %	6.2 %	11.6 %	5.2 %	3.5 %	2.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.532 ppb	0.452 ppb	4,305.803 ppb	53,249.454 ppb	2.943 ppb	1.163 ppb	0.274 ppb	5.754 ppb	103.688 %
Concentration per Run 1	0.584 ppb	0.384 ppb	4,243.722 ppb	52,387.616 ppb	2.840 ppb	1.214 ppb	0.322 ppb	5.863 ppb	103.798 %
Concentration per Run 2	0.529 ppb	0.571 ppb	4,490.917 ppb	55,628.557 ppb	3.067 ppb	1.272 ppb	0.223 ppb	5.814 ppb	102.106 %
Concentration per Run 3	0.482 ppb	0.402 ppb	4,182.771 ppb	51,732.189 ppb	2.922 ppb	1.002 ppb	0.277 ppb	5.585 ppb	105.161 %
Concentration RSD	9.6 %	22.7 %	3.8 %	3.9 %	3.9 %	12.2 %	18.1 %	2.6 %	1.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.308 ppb	0.543 ppb	290.701 ppb	0.971 ppb	101.876 %	0.001 ppb	0.013 ppb	105.065 %	1.392 ppb
Concentration per Run 1	0.306 ppb	0.483 ppb	288.431 ppb	0.914 ppb	105.104 %	-0.001 ppb	0.010 ppb	108.168 %	1.221 ppb
Concentration per Run 2	0.357 ppb	0.842 ppb	294.158 ppb	0.911 ppb	99.161 %	0.001 ppb	0.022 ppb	102.988 %	1.444 ppb
Concentration per Run 3	0.261 ppb	0.304 ppb	289.515 ppb	1.088 ppb	101.363 %	0.001 ppb	0.007 ppb	104.038 %	1.510 ppb
Concentration RSD	15.6 %	50.4 %	1.0 %	10.5 %	2.9 %	202.8 %	58.7 %	2.6 %	10.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	590.919 ppb	108.192 %	107.327 %	0.021 ppb	0.085 ppb	100.466 %
Concentration per Run 1	574.236 ppb	111.709 %	108.266 %	0.019 ppb	0.087 ppb	102.559 %
Concentration per Run 2	595.804 ppb	105.626 %	106.575 %	0.027 ppb	0.090 ppb	100.203 %
Concentration per Run 3	602.716 ppb	107.240 %	107.139 %	0.018 ppb	0.077 ppb	98.636 %
Concentration RSD	2.5 %	2.9 %	0.8 %	22.3 %	8.0 %	2.0 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	83	User name	ALPHALAB\a2-icpmsq2	Comment	ng
Analysis label:	L2469297-02 MCP-6020SL-10	Rack	1		
Analysis started at:	12/3/2024 2:15:34 PM	Vial	47		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	107.239 %	119.473 %	0.153 ppb	158,770.819 ppb	1,167.201 ppb	1,917.651 ppb	2,604.533 ppb	3,522.550 ppb	103.404 %
Concentration per Run 1	103.700 %	121.381 %	0.160 ppb	156,001.447 ppb	1,141.175 ppb	1,842.772 ppb	2,452.845 ppb	3,405.931 ppb	100.754 %
Concentration per Run 2	108.198 %	119.361 %	0.146 ppb	156,217.482 ppb	1,150.585 ppb	1,919.118 ppb	2,611.065 ppb	3,549.758 ppb	104.315 %
Concentration per Run 3	109.819 %	117.677 %	0.153 ppb	164,093.528 ppb	1,209.842 ppb	1,991.064 ppb	2,749.690 ppb	3,611.960 ppb	105.141 %
Concentration RSD	3.0 %	1.6 %	4.6 %	2.9 %	3.2 %	3.9 %	5.7 %	3.0 %	2.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	5.622 ppb	7.497 ppb	419.777 ppb	2,233.456 ppb	2.657 ppb	13.380 ppb	26.053 ppb	20.104 ppb	99.231 %
Concentration per Run 1	5.250 ppb	7.150 ppb	413.250 ppb	2,215.950 ppb	2.715 ppb	13.253 ppb	24.931 ppb	19.832 ppb	99.869 %
Concentration per Run 2	5.953 ppb	7.664 ppb	419.792 ppb	2,215.413 ppb	2.727 ppb	13.011 ppb	26.406 ppb	19.789 ppb	98.119 %
Concentration per Run 3	5.663 ppb	7.677 ppb	426.289 ppb	2,269.004 ppb	2.530 ppb	13.876 ppb	26.821 ppb	20.691 ppb	99.705 %
Concentration RSD	6.3 %	4.0 %	1.6 %	1.4 %	4.2 %	3.3 %	3.8 %	2.5 %	1.0 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	3.727 ppb	3.994 ppb	29.539 ppb	8.858 ppb	103.097 %	0.022 ppb	0.036 ppb	104.182 %	1.036 ppb
Concentration per Run 1	3.555 ppb	3.536 ppb	28.761 ppb	8.252 ppb	107.617 %	0.021 ppb	0.034 ppb	109.506 %	1.004 ppb
Concentration per Run 2	3.889 ppb	3.559 ppb	29.779 ppb	8.766 ppb	101.297 %	0.018 ppb	0.029 ppb	101.389 %	1.014 ppb
Concentration per Run 3	3.736 ppb	4.887 ppb	30.077 ppb	9.554 ppb	100.377 %	0.027 ppb	0.044 ppb	101.652 %	1.091 ppb
Concentration RSD	4.5 %	19.4 %	2.3 %	7.4 %	3.8 %	20.1 %	20.9 %	4.4 %	4.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	45.962 ppb	108.618 %	108.131 %	0.041 ppb	5.277 ppb	104.441 %
Concentration per Run 1	43.665 ppb	109.312 %	107.497 %	0.039 ppb	5.162 ppb	107.020 %
Concentration per Run 2	45.741 ppb	108.761 %	109.351 %	0.044 ppb	5.307 ppb	104.018 %
Concentration per Run 3	48.479 ppb	107.783 %	107.544 %	0.041 ppb	5.362 ppb	102.283 %
Concentration RSD	5.3 %	0.7 %	1.0 %	5.7 %	2.0 %	2.3 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	84	User name	ALPHALAB\a2-icpmsq2	Comment	ng
Analysis label:	L2469297-03 MCP-6020SL-10	Rack	1		
Analysis started at:	12/3/2024 2:20:03 PM	Vial	48		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	106.634 %	113.019 %	0.042 ppb	95,399.357 ppb	1,208.509 ppb	655.969 ppb	1,699.731 ppb	4,803.282 ppb	102.586 %
Concentration per Run 1	102.268 %	113.300 %	0.043 ppb	95,502.456 ppb	1,183.711 ppb	639.846 ppb	1,677.611 ppb	4,854.386 ppb	98.690 %
Concentration per Run 2	107.933 %	108.923 %	0.041 ppb	97,087.707 ppb	1,236.388 ppb	668.369 ppb	1,802.081 ppb	4,960.612 ppb	104.240 %
Concentration per Run 3	109.700 %	116.835 %	0.044 ppb	93,607.909 ppb	1,205.428 ppb	659.693 ppb	1,619.502 ppb	4,594.848 ppb	104.828 %
Concentration RSD	3.6 %	3.5 %	4.1 %	1.8 %	2.2 %	2.2 %	5.5 %	3.9 %	3.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	5.794 ppb	35.278 ppb	38.395 ppb	576.055 ppb	0.450 ppb	1.581 ppb	6.351 ppb	15.282 ppb	99.178 %
Concentration per Run 1	5.079 ppb	34.301 ppb	38.752 ppb	559.118 ppb	0.525 ppb	1.572 ppb	6.229 ppb	15.443 ppb	100.664 %
Concentration per Run 2	6.243 ppb	37.012 ppb	39.386 ppb	590.932 ppb	0.439 ppb	1.364 ppb	6.289 ppb	15.340 ppb	96.735 %
Concentration per Run 3	6.062 ppb	34.522 ppb	37.046 ppb	578.115 ppb	0.387 ppb	1.809 ppb	6.534 ppb	15.064 ppb	100.135 %
Concentration RSD	10.8 %	4.3 %	3.2 %	2.8 %	15.4 %	14.1 %	2.5 %	1.3 %	2.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	2.440 ppb	0.783 ppb	30.784 ppb	13.077 ppb	102.913 %	0.016 ppb	0.017 ppb	105.017 %	0.941 ppb
Concentration per Run 1	2.506 ppb	0.501 ppb	30.087 ppb	12.816 ppb	105.654 %	0.012 ppb	0.010 ppb	107.846 %	0.852 ppb
Concentration per Run 2	2.422 ppb	0.527 ppb	31.031 ppb	13.447 ppb	102.221 %	0.017 ppb	0.029 ppb	102.409 %	0.987 ppb
Concentration per Run 3	2.393 ppb	1.320 ppb	31.234 ppb	12.968 ppb	100.864 %	0.017 ppb	0.011 ppb	104.794 %	0.983 ppb
Concentration RSD	2.4 %	59.5 %	2.0 %	2.5 %	2.4 %	18.0 %	63.7 %	2.6 %	8.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	13.015 ppb	106.876 %	103.702 %	0.020 ppb	1.198 ppb	101.253 %
Concentration per Run 1	12.978 ppb	108.037 %	105.742 %	0.017 ppb	1.155 ppb	103.014 %
Concentration per Run 2	12.881 ppb	107.300 %	103.649 %	0.024 ppb	1.232 ppb	98.238 %
Concentration per Run 3	13.186 ppb	105.293 %	101.715 %	0.019 ppb	1.206 ppb	102.506 %
Concentration RSD	1.2 %	1.3 %	1.9 %	18.0 %	3.3 %	2.6 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	85	User name	ALPHALAB\a2-icpmsq2	Comment	ng
Analysis label:	L2469297-04 MCP-6020SL-10	Rack	1		
Analysis started at:	12/3/2024 2:24:33 PM	Vial	49		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	105.938 %	119.192 %	0.021 ppb	177,643.475 ppb	12,703.940 ppb	199.180 ppb	3,574.213 ppb	40,299.648 ppb	109.042 %
Concentration per Run 1	103.394 %	119.361 %	0.022 ppb	174,194.783 ppb	12,309.737 ppb	200.115 ppb	3,464.115 ppb	39,217.927 ppb	106.149 %
Concentration per Run 2	106.654 %	119.697 %	0.021 ppb	176,682.784 ppb	12,595.233 ppb	188.557 ppb	3,522.036 ppb	39,545.910 ppb	111.896 %
Concentration per Run 3	107.764 %	118.519 %	0.020 ppb	182,052.859 ppb	13,206.849 ppb	208.869 ppb	3,736.487 ppb	42,135.106 ppb	109.083 %
Concentration RSD	2.1 %	0.5 %	5.6 %	2.3 %	3.6 %	5.1 %	4.0 %	4.0 %	2.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.513 ppb	0.732 ppb	365.058 ppb	230.628 ppb	0.548 ppb	2.049 ppb	2.105 ppb	14.100 ppb	99.638 %
Concentration per Run 1	0.495 ppb	0.694 ppb	363.699 ppb	233.409 ppb	0.556 ppb	2.044 ppb	2.131 ppb	14.116 ppb	98.478 %
Concentration per Run 2	0.526 ppb	0.733 ppb	374.307 ppb	242.858 ppb	0.566 ppb	1.963 ppb	2.022 ppb	14.110 ppb	100.533 %
Concentration per Run 3	0.519 ppb	0.768 ppb	357.168 ppb	215.617 ppb	0.522 ppb	2.139 ppb	2.162 ppb	14.075 ppb	99.902 %
Concentration RSD	3.1 %	5.1 %	2.4 %	6.0 %	4.2 %	4.3 %	3.5 %	0.2 %	1.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.373 ppb	0.482 ppb	259.054 ppb	26.055 ppb	103.393 %	0.002 ppb	0.023 ppb	103.437 %	0.208 ppb
Concentration per Run 1	0.361 ppb	0.585 ppb	257.476 ppb	24.651 ppb	104.138 %	0.004 ppb	0.028 ppb	108.967 %	0.151 ppb
Concentration per Run 2	0.406 ppb	0.615 ppb	258.609 ppb	25.986 ppb	102.859 %	0.001 ppb	0.022 ppb	99.696 %	0.186 ppb
Concentration per Run 3	0.352 ppb	0.246 ppb	261.079 ppb	27.529 ppb	103.184 %	0.001 ppb	0.018 ppb	101.648 %	0.288 ppb
Concentration RSD	7.8 %	42.4 %	0.7 %	5.5 %	0.6 %	72.9 %	21.1 %	4.7 %	34.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	63.194 ppb	109.079 %	106.300 %	0.031 ppb	0.355 ppb	100.531 %
Concentration per Run 1	60.156 ppb	109.129 %	104.492 %	0.025 ppb	0.332 ppb	104.339 %
Concentration per Run 2	62.531 ppb	108.697 %	106.549 %	0.038 ppb	0.368 ppb	98.880 %
Concentration per Run 3	66.894 ppb	109.412 %	107.859 %	0.029 ppb	0.367 ppb	98.373 %
Concentration RSD	5.4 %	0.3 %	1.6 %	21.0 %	5.8 %	3.3 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	86	User name	ALPHALAB\a2-icpmsq2	Comment	ng
Analysis label:	L2469297-05 MCP-6020SL-10	Rack	1		
Analysis started at:	12/3/2024 2:29:01 PM	Vial	50		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	91.437 %	113.524 %	0.014 ppb	1,245,482.649 ppb	9,911.556 ppb	89.297 ppb	11,064.752 ppb	39,351.478 ppb	84.984 %
Concentration per Run 1	89.395 %	120.034 %	0.013 ppb	1,169,546.179 ppb	9,070.247 ppb	81.109 ppb	10,209.708 ppb	36,804.542 ppb	84.762 %
Concentration per Run 2	93.113 %	109.428 %	0.014 ppb	1,267,191.456 ppb	10,166.027 ppb	92.951 ppb	11,657.719 ppb	40,991.680 ppb	86.281 %
Concentration per Run 3	91.803 %	111.111 %	0.017 ppb	1,299,710.314 ppb	10,498.394 ppb	93.833 ppb	11,326.828 ppb	40,258.212 ppb	83.907 %
Concentration RSD	2.1 %	5.0 %	15.1 %	5.4 %	7.5 %	8.0 %	6.9 %	5.7 %	1.4 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.170 ppb	0.467 ppb	3,026.198 ppb	140.553 ppb	4.206 ppb	5.455 ppb	5.843 ppb	18.181 ppb	99.844 %
Concentration per Run 1	0.157 ppb	0.458 ppb	3,006.584 ppb	140.839 ppb	4.243 ppb	5.643 ppb	5.650 ppb	17.941 ppb	94.951 %
Concentration per Run 2	0.256 ppb	0.480 ppb	3,019.473 ppb	141.767 ppb	4.280 ppb	5.073 ppb	5.990 ppb	18.285 ppb	102.271 %
Concentration per Run 3	0.097 ppb	0.462 ppb	3,052.537 ppb	139.053 ppb	4.096 ppb	5.650 ppb	5.890 ppb	18.317 ppb	102.311 %
Concentration RSD	47.1 %	2.5 %	0.8 %	1.0 %	2.3 %	6.1 %	3.0 %	1.1 %	4.2 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.404 ppb	0.387 ppb	448.409 ppb	11.096 ppb	98.722 %	0.132 ppb	0.507 ppb	103.114 %	0.186 ppb
Concentration per Run 1	0.323 ppb	0.441 ppb	444.910 ppb	10.971 ppb	100.846 %	0.139 ppb	0.533 ppb	104.503 %	0.164 ppb
Concentration per Run 2	0.510 ppb	0.358 ppb	445.652 ppb	11.088 ppb	98.182 %	0.133 ppb	0.463 ppb	101.861 %	0.196 ppb
Concentration per Run 3	0.380 ppb	0.363 ppb	454.664 ppb	11.228 ppb	97.138 %	0.124 ppb	0.527 ppb	102.979 %	0.199 ppb
Concentration RSD	23.7 %	12.0 %	1.2 %	1.2 %	1.9 %	5.9 %	7.7 %	1.3 %	10.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	236.210 ppb	108.539 %	108.513 %	0.053 ppb	0.184 ppb	94.761 %
Concentration per Run 1	229.661 ppb	108.109 %	107.705 %	0.052 ppb	0.183 ppb	93.041 %
Concentration per Run 2	238.275 ppb	108.787 %	109.787 %	0.054 ppb	0.182 ppb	94.979 %
Concentration per Run 3	240.696 ppb	108.720 %	108.048 %	0.054 ppb	0.187 ppb	96.264 %
Concentration RSD	2.5 %	0.3 %	1.0 %	2.0 %	1.2 %	1.7 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	87	User name	ALPHALAB\a2-icpmsq2	Comment	ng
Analysis label:	L2469297-06 MCP-6020SL-10	Rack	1		
Analysis started at:	12/3/2024 2:33:29 PM	Vial	51		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	116.131 %	123.064 %	0.029 ppb	80,490.670 ppb	514.058 ppb	85.081 ppb	1,611.620 ppb	1,929.628 ppb	107.881 %
Concentration per Run 1	113.765 %	119.866 %	0.028 ppb	79,852.296 ppb	491.902 ppb	80.759 ppb	1,620.403 ppb	1,864.030 ppb	105.862 %
Concentration per Run 2	117.112 %	125.421 %	0.031 ppb	78,406.207 ppb	518.177 ppb	86.312 ppb	1,560.358 ppb	1,953.811 ppb	109.176 %
Concentration per Run 3	117.517 %	123.906 %	0.029 ppb	83,213.508 ppb	532.095 ppb	88.173 ppb	1,654.099 ppb	1,971.043 ppb	108.604 %
Concentration RSD	1.8 %	2.3 %	5.8 %	3.1 %	4.0 %	4.5 %	2.9 %	3.0 %	1.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	4.785 ppb	0.563 ppb	244.079 ppb	651.032 ppb	0.738 ppb	1.718 ppb	1.978 ppb	16.715 ppb	105.228 %
Concentration per Run 1	4.586 ppb	0.568 ppb	246.926 ppb	660.153 ppb	0.809 ppb	1.652 ppb	1.912 ppb	16.940 ppb	105.739 %
Concentration per Run 2	4.784 ppb	0.540 ppb	241.474 ppb	632.343 ppb	0.744 ppb	1.649 ppb	1.875 ppb	16.326 ppb	105.401 %
Concentration per Run 3	4.983 ppb	0.581 ppb	243.837 ppb	660.600 ppb	0.659 ppb	1.852 ppb	2.146 ppb	16.878 ppb	104.545 %
Concentration RSD	4.1 %	3.7 %	1.1 %	2.5 %	10.3 %	6.8 %	7.4 %	2.0 %	0.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	5.578 ppb	0.915 ppb	17.302 ppb	11.678 ppb	108.249 %	0.002 ppb	0.010 ppb	109.485 %	0.312 ppb
Concentration per Run 1	5.355 ppb	0.924 ppb	16.944 ppb	10.698 ppb	111.109 %	0.000 ppb	0.007 ppb	110.955 %	0.295 ppb
Concentration per Run 2	5.588 ppb	1.254 ppb	17.255 ppb	11.876 ppb	108.558 %	0.003 ppb	0.021 ppb	107.325 %	0.317 ppb
Concentration per Run 3	5.791 ppb	0.568 ppb	17.705 ppb	12.459 ppb	105.079 %	0.004 ppb	0.003 ppb	110.176 %	0.323 ppb
Concentration RSD	3.9 %	37.5 %	2.2 %	7.7 %	2.8 %	88.3 %	89.3 %	1.7 %	4.8 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	22.927 ppb	113.308 %	110.441 %	0.013 ppb	0.225 ppb	105.805 %
Concentration per Run 1	22.106 ppb	112.554 %	112.066 %	0.008 ppb	0.212 ppb	105.583 %
Concentration per Run 2	23.176 ppb	114.427 %	111.961 %	0.014 ppb	0.234 ppb	106.025 %
Concentration per Run 3	23.498 ppb	112.943 %	107.295 %	0.015 ppb	0.229 ppb	105.806 %
Concentration RSD	3.2 %	0.9 %	2.5 %	31.6 %	5.1 %	0.2 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	88	User name	ALPHALAB\a2-icpmsq2	Comment	CCV/MCCV
Analysis label:	CCV	Rack	0		
Analysis started at:	12/3/2024 2:37:57 PM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	118.989 %	125.702 %	56.919 ppb	6,404.407 ppb	5,601.524 ppb	54.818 ppb	5,578.061 ppb	5,587.954 ppb	113.278 %
Concentration per Run 1	113.423 %	130.304 %	58.003 ppb	6,319.185 ppb	5,464.085 ppb	53.254 ppb	5,536.231 ppb	5,377.043 ppb	111.923 %
Concentration per Run 2	120.504 %	122.391 %	56.598 ppb	6,474.879 ppb	5,733.529 ppb	55.992 ppb	5,338.441 ppb	5,679.268 ppb	115.471 %
Concentration per Run 3	123.038 %	124.411 %	56.156 ppb	6,419.158 ppb	5,606.957 ppb	55.208 ppb	5,859.513 ppb	5,707.549 ppb	112.440 %
Recovery Percentage 1			94.865 %	106.740 %	93.359 %	91.363 %	92.968 %	93.133 %	
Concentration RSD	4.2 %	3.3 %	1.7 %	1.2 %	2.4 %	2.6 %	4.7 %	3.3 %	1.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	55.262 ppb	56.600 ppb	58.041 ppb	5,890.819 ppb	59.091 ppb	60.603 ppb	60.565 ppb	59.819 ppb	105.005 %
Concentration per Run 1	52.748 ppb	54.271 ppb	56.416 ppb	5,889.070 ppb	60.073 ppb	61.380 ppb	59.009 ppb	60.523 ppb	103.858 %
Concentration per Run 2	55.167 ppb	57.088 ppb	58.892 ppb	6,064.146 ppb	60.470 ppb	61.174 ppb	60.805 ppb	60.819 ppb	106.151 %
Concentration per Run 3	57.872 ppb	58.442 ppb	58.814 ppb	5,719.239 ppb	56.728 ppb	59.256 ppb	61.880 ppb	58.115 ppb	105.006 %
Recovery Percentage 1	92.104 %	94.333 %	96.734 %	98.180 %	98.484 %	101.005 %	100.941 %	99.699 %	
Concentration RSD	4.6 %	3.8 %	2.4 %	2.9 %	3.5 %	1.9 %	2.4 %	2.5 %	1.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	60.070 ppb	59.767 ppb	58.456 ppb	58.469 ppb	110.780 %	56.871 ppb	57.056 ppb	111.702 %	54.826 ppb
Concentration per Run 1	59.554 ppb	64.094 ppb	57.655 ppb	56.565 ppb	115.478 %	55.435 ppb	56.184 ppb	112.778 %	54.938 ppb
Concentration per Run 2	59.603 ppb	57.940 ppb	58.358 ppb	59.067 ppb	109.557 %	56.901 ppb	56.897 ppb	112.626 %	54.572 ppb
Concentration per Run 3	61.054 ppb	57.266 ppb	59.356 ppb	59.774 ppb	107.305 %	58.278 ppb	58.087 ppb	109.701 %	54.967 ppb
Recovery Percentage 1	100.117 %	99.611 %	97.427 %	97.448 %		94.785 %	95.094 %		91.376 %
Concentration RSD	1.4 %	6.3 %	1.5 %	2.9 %	3.8 %	2.5 %	1.7 %	1.6 %	0.4 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	55.510 ppb	112.569 %	110.460 %	56.444 ppb	56.976 ppb	107.887 %
Concentration per Run 1	54.918 ppb	115.271 %	113.329 %	54.490 ppb	55.489 ppb	110.117 %
Concentration per Run 2	55.889 ppb	110.015 %	109.028 %	55.988 ppb	57.425 ppb	108.330 %
Concentration per Run 3	55.723 ppb	112.421 %	109.023 %	58.854 ppb	58.015 ppb	105.213 %
Recovery Percentage 1	92.517 %			94.073 %	94.960 %	
Concentration RSD	0.9 %	2.3 %	2.2 %	3.9 %	2.3 %	2.3 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	89	User name	ALPHALAB\a2-icpmsq2	Comment	CCB
Analysis label:	CCB	Rack	0		
Analysis started at:	12/3/2024 2:42:28 PM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	118.973 %	126.824 %	0.007 ppb	654.026 ppb	0.196 ppb	-0.451 ppb	49.763 ppb	-4.203 ppb	105.078 %
Concentration per Run 1	116.977 %	122.559 %	0.008 ppb	686.756 ppb	-0.192 ppb	-0.490 ppb	52.797 ppb	-6.840 ppb	104.069 %
Concentration per Run 2	120.749 %	128.789 %	0.007 ppb	642.959 ppb	-0.042 ppb	-0.578 ppb	52.507 ppb	-4.633 ppb	106.578 %
Concentration per Run 3	119.192 %	129.125 %	0.007 ppb	632.363 ppb	0.821 ppb	-0.286 ppb	43.985 ppb	-1.136 ppb	104.587 %
Recovery Percentage 1			1.429 %	130.805 %	0.279 %	-4.513 %	49.763 %	-4.203 %	
Concentration RSD	1.6 %	2.9 %	11.1 %	4.4 %	279.4 %	33.2 %	10.1 %	68.4 %	1.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.456 ppb	-0.043 ppb	0.125 ppb	4.008 ppb	-0.004 ppb	0.044 ppb	0.050 ppb	0.203 ppb	102.622 %
Concentration per Run 1	-0.391 ppb	-0.033 ppb	0.130 ppb	4.389 ppb	-0.007 ppb	0.050 ppb	0.062 ppb	0.159 ppb	103.834 %
Concentration per Run 2	-0.522 ppb	-0.037 ppb	0.118 ppb	4.521 ppb	-0.004 ppb	0.078 ppb	0.066 ppb	0.172 ppb	98.663 %
Concentration per Run 3	-0.454 ppb	-0.058 ppb	0.125 ppb	3.113 ppb	-0.001 ppb	0.003 ppb	0.023 ppb	0.277 ppb	105.369 %
Recovery Percentage 1	-9.111 %	-4.257 %	12.452 %	8.015 %	-0.766 %	2.176 %	5.036 %	4.059 %	
Concentration RSD	14.4 %	31.5 %	5.0 %	19.4 %	78.2 %	87.1 %	47.4 %	31.9 %	3.4 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.114 ppb	0.154 ppb	0.005 ppb	0.331 ppb	109.601 %	0.007 ppb	0.000 ppb	107.719 %	0.086 ppb
Concentration per Run 1	0.083 ppb	0.152 ppb	0.014 ppb	0.215 ppb	111.529 %	0.004 ppb	0.000 ppb	110.457 %	0.067 ppb
Concentration per Run 2	0.142 ppb	0.190 ppb	0.005 ppb	0.336 ppb	109.360 %	0.008 ppb	0.000 ppb	105.620 %	0.080 ppb
Concentration per Run 3	0.118 ppb	0.120 ppb	-0.004 ppb	0.442 ppb	107.914 %	0.008 ppb	0.000 ppb	107.081 %	0.112 ppb
Recovery Percentage 1	22.893 %	3.081 %	0.047 %	16.548 %		1.681 %	0.000 %		2.155 %
Concentration RSD	25.8 %	22.7 %	187.1 %	34.3 %	1.7 %	36.2 %	N/A	2.3 %	26.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.012 ppb	108.753 %	108.277 %	0.207 ppb	0.015 ppb	107.168 %
Concentration per Run 1	0.007 ppb	110.221 %	109.213 %	0.213 ppb	0.020 ppb	107.195 %
Concentration per Run 2	-0.006 ppb	109.435 %	109.173 %	0.228 ppb	0.013 ppb	107.688 %
Concentration per Run 3	0.035 ppb	106.602 %	106.445 %	0.180 ppb	0.011 ppb	106.620 %
Recovery Percentage 1	2.403 %			20.699 %	1.453 %	
Concentration RSD	172.2 %	1.8 %	1.5 %	11.9 %	33.8 %	0.5 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	90	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	CCB	Rack	0		
Analysis started at:	12/3/2024 2:57:24 PM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	115.831 %	115.264 %	0.013 ppb	216.903 ppb	-0.030 ppb	-0.387 ppb	18.421 ppb	0.875 ppb	106.342 %
Concentration per Run 1	108.677 %	118.014 %	0.019 ppb	172.715 ppb	-0.943 ppb	-0.464 ppb	12.980 ppb	14.924 ppb	104.117 %
Concentration per Run 2	117.132 %	113.805 %	0.009 ppb	222.947 ppb	0.427 ppb	-0.464 ppb	15.477 ppb	-9.322 ppb	108.198 %
Concentration per Run 3	121.684 %	113.973 %	0.010 ppb	255.046 ppb	0.425 ppb	-0.234 ppb	26.807 ppb	-2.976 ppb	106.712 %
Recovery Percentage 1			2.584 %	43.381 %	-0.044 %	-3.873 %	18.421 %	0.875 %	
Concentration RSD	5.7 %	2.1 %	43.6 %	19.1 %	2,592.9 %	34.2 %	40.0 %	1,436.7 %	1.9 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.260 ppb	-0.054 ppb	0.087 ppb	0.448 ppb	-0.002 ppb	0.113 ppb	0.018 ppb	0.151 ppb	**147.676 %**
Concentration per Run 1	-0.351 ppb	-0.048 ppb	0.017 ppb	0.305 ppb	-0.004 ppb	0.054 ppb	0.007 ppb	0.257 ppb	**154.197 %**
Concentration per Run 2	-0.296 ppb	-0.081 ppb	0.129 ppb	1.232 ppb	-0.001 ppb	0.137 ppb	0.002 ppb	0.143 ppb	**145.144 %**
Concentration per Run 3	-0.133 ppb	-0.034 ppb	0.113 ppb	-0.194 ppb	-0.001 ppb	0.149 ppb	0.046 ppb	0.052 ppb	**143.687 %**
Recovery Percentage 1	-5.192 %	-5.434 %	8.650 %	0.895 %	-0.344 %	5.674 %	1.824 %	3.010 %	
Concentration RSD	43.7 %	44.9 %	70.4 %	161.6 %	110.4 %	45.4 %	132.6 %	68.3 %	**3.9 %**

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.067 ppb	0.120 ppb	0.002 ppb	-0.028 ppb	108.265 %	-0.001 ppb	0.001 ppb	107.468 %	0.049 ppb
Concentration per Run 1	0.047 ppb	-0.066 ppb	0.003 ppb	-0.067 ppb	110.934 %	-0.001 ppb	0.000 ppb	110.408 %	0.051 ppb
Concentration per Run 2	0.020 ppb	0.270 ppb	-0.002 ppb	-0.081 ppb	106.996 %	0.001 ppb	0.000 ppb	108.622 %	0.051 ppb
Concentration per Run 3	0.135 ppb	0.157 ppb	0.005 ppb	0.063 ppb	106.866 %	-0.003 ppb	0.004 ppb	103.372 %	0.045 ppb
Recovery Percentage 1	13.434 %	2.403 %	0.019 %	-1.420 %		-0.224 %	0.589 %		1.223 %
Concentration RSD	89.6 %	142.0 %	198.8 %	279.4 %	2.1 %	224.0 %	173.2 %	3.4 %	7.0 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.008 ppb	109.534 %	108.118 %	0.014 ppb	0.004 ppb	106.522 %
Concentration per Run 1	-0.006 ppb	114.975 %	108.793 %	0.009 ppb	0.004 ppb	109.777 %
Concentration per Run 2	-0.006 ppb	107.186 %	107.184 %	0.021 ppb	0.005 ppb	106.243 %
Concentration per Run 3	0.036 ppb	106.442 %	108.379 %	0.012 ppb	0.002 ppb	103.544 %
Recovery Percentage 1	1.579 %			1.422 %	0.371 %	
Concentration RSD	305.4 %	4.3 %	0.8 %	45.0 %	47.3 %	2.9 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	91	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	xWG2001986-1 6020TL	Rack	1		
Analysis started at:	12/3/2024 3:08:01 PM	Vial	54		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	117.069 %	127.049 %	0.008 ppb	344.191 ppb	0.787 ppb	1.407 ppb	12.068 ppb	0.482 ppb	112.395 %
Concentration per Run 1	114.157 %	140.068 %	0.007 ppb	272.129 ppb	0.666 ppb	0.973 ppb	-0.928 ppb	6.708 ppb	110.282 %
Concentration per Run 2	117.036 %	118.182 %	0.011 ppb	371.657 ppb	1.334 ppb	2.239 ppb	14.860 ppb	-2.704 ppb	112.798 %
Concentration per Run 3	120.014 %	122.896 %	0.008 ppb	388.788 ppb	0.362 ppb	1.010 ppb	22.273 ppb	-2.557 ppb	114.104 %
Concentration RSD	2.5 %	9.1 %	22.5 %	18.3 %	63.1 %	51.2 %	98.2 %	1,118.2 %	1.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.467 ppb	-0.032 ppb	0.314 ppb	4.365 ppb	-0.004 ppb	-0.015 ppb	0.116 ppb	0.545 ppb	107.249 %
Concentration per Run 1	-0.531 ppb	-0.007 ppb	0.371 ppb	4.663 ppb	-0.010 ppb	-0.046 ppb	0.150 ppb	0.506 ppb	111.499 %
Concentration per Run 2	-0.480 ppb	-0.035 ppb	0.205 ppb	4.580 ppb	-0.004 ppb	-0.029 ppb	0.111 ppb	0.480 ppb	107.547 %
Concentration per Run 3	-0.389 ppb	-0.055 ppb	0.367 ppb	3.851 ppb	0.002 ppb	0.029 ppb	0.086 ppb	0.649 ppb	102.702 %
Concentration RSD	15.4 %	74.7 %	30.1 %	10.2 %	164.1 %	257.7 %	28.2 %	16.7 %	4.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.019 ppb	0.102 ppb	0.016 ppb	-0.031 ppb	114.033 %	-0.001 ppb	0.001 ppb	113.535 %	0.027 ppb
Concentration per Run 1	0.016 ppb	0.027 ppb	0.016 ppb	-0.029 ppb	122.485 %	0.002 ppb	0.000 ppb	121.926 %	0.022 ppb
Concentration per Run 2	0.019 ppb	0.269 ppb	0.017 ppb	-0.042 ppb	111.691 %	-0.002 ppb	0.000 ppb	110.646 %	0.024 ppb
Concentration per Run 3	0.023 ppb	0.010 ppb	0.016 ppb	-0.021 ppb	107.922 %	-0.002 ppb	0.003 ppb	108.031 %	0.035 ppb
Concentration RSD	18.8 %	141.6 %	6.0 %	35.6 %	6.6 %	261.5 %	173.2 %	6.5 %	25.8 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.711 ppb	112.841 %	111.272 %	0.013 ppb	0.003 ppb	115.518 %
Concentration per Run 1	0.803 ppb	119.453 %	117.267 %	0.009 ppb	0.002 ppb	122.832 %
Concentration per Run 2	0.514 ppb	110.542 %	110.315 %	0.013 ppb	0.003 ppb	113.688 %
Concentration per Run 3	0.817 ppb	108.529 %	106.235 %	0.015 ppb	0.005 ppb	110.034 %
Concentration RSD	24.1 %	5.2 %	5.0 %	23.6 %	42.1 %	5.7 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	92	User name	ALPHALAB\a2-icpmsq2	Comment	fb
Analysis label:	xL2467975-08 6020TL	Rack	2		
Analysis started at:	12/3/2024 3:12:28 PM	Vial	1		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	116.040 %	127.554 %	0.009 ppb	383.742 ppb	1.451 ppb	1.665 ppb	11.839 ppb	4.084 ppb	109.731 %
Concentration per Run 1	111.371 %	130.977 %	0.009 ppb	356.462 ppb	2.020 ppb	1.801 ppb	7.317 ppb	2.521 ppb	109.106 %
Concentration per Run 2	116.374 %	124.411 %	0.008 ppb	398.999 ppb	1.094 ppb	2.449 ppb	11.102 ppb	-6.711 ppb	110.996 %
Concentration per Run 3	120.374 %	127.273 %	0.008 ppb	395.765 ppb	1.237 ppb	0.744 ppb	17.100 ppb	16.443 ppb	109.092 %
Concentration RSD	3.9 %	2.6 %	4.8 %	6.2 %	34.4 %	51.7 %	41.7 %	285.4 %	1.0 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.464 ppb	0.053 ppb	0.633 ppb	88.805 ppb	0.003 ppb	0.007 ppb	0.566 ppb	0.434 ppb	101.312 %
Concentration per Run 1	-0.455 ppb	0.081 ppb	0.654 ppb	90.431 ppb	0.002 ppb	-0.009 ppb	0.538 ppb	0.482 ppb	105.372 %
Concentration per Run 2	-0.536 ppb	0.071 ppb	0.822 ppb	95.897 ppb	0.006 ppb	0.010 ppb	0.610 ppb	0.481 ppb	99.639 %
Concentration per Run 3	-0.402 ppb	0.008 ppb	0.421 ppb	80.087 ppb	0.000 ppb	0.021 ppb	0.549 ppb	0.339 ppb	98.926 %
Concentration RSD	14.6 %	74.2 %	31.8 %	9.0 %	128.1 %	202.4 %	6.9 %	19.0 %	3.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.065 ppb	0.087 ppb	0.026 ppb	-0.030 ppb	109.446 %	-0.001 ppb	0.003 ppb	105.213 %	0.096 ppb
Concentration per Run 1	0.040 ppb	0.256 ppb	0.026 ppb	-0.039 ppb	108.759 %	-0.001 ppb	0.000 ppb	107.207 %	0.090 ppb
Concentration per Run 2	0.064 ppb	-0.036 ppb	0.028 ppb	-0.030 ppb	109.764 %	-0.002 ppb	0.003 ppb	104.797 %	0.121 ppb
Concentration per Run 3	0.091 ppb	0.041 ppb	0.024 ppb	-0.021 ppb	109.816 %	-0.001 ppb	0.007 ppb	103.635 %	0.077 ppb
Concentration RSD	39.4 %	173.4 %	8.7 %	30.0 %	0.5 %	47.4 %	100.2 %	1.7 %	23.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.043 ppb	106.550 %	105.326 %	0.005 ppb	0.022 ppb	107.388 %
Concentration per Run 1	0.114 ppb	109.486 %	107.812 %	0.002 ppb	0.018 ppb	109.161 %
Concentration per Run 2	0.022 ppb	104.732 %	103.479 %	0.005 ppb	0.025 ppb	105.805 %
Concentration per Run 3	-0.005 ppb	105.431 %	104.687 %	0.007 ppb	0.024 ppb	107.198 %
Concentration RSD	143.3 %	2.4 %	2.1 %	59.7 %	17.7 %	1.6 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	93	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	xWG2001986-2d10 6020TL	Rack	1		
Analysis started at:	12/3/2024 3:24:56 PM	Vial	55		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	119.163 %	121.493 %	4.956 ppb	1,334.106 ppb	955.871 ppb	184.299 ppb	953.118 ppb	774.250 ppb	112.106 %
Concentration per Run 1	112.261 %	119.192 %	5.219 ppb	1,311.603 ppb	949.984 ppb	183.383 ppb	935.587 ppb	774.253 ppb	108.928 %
Concentration per Run 2	121.819 %	122.896 %	4.818 ppb	1,338.842 ppb	956.168 ppb	185.744 ppb	969.791 ppb	718.211 ppb	113.916 %
Concentration per Run 3	123.408 %	122.391 %	4.832 ppb	1,351.872 ppb	961.461 ppb	183.769 ppb	953.974 ppb	830.287 ppb	113.475 %
Concentration RSD	5.1 %	1.7 %	4.6 %	1.5 %	0.6 %	0.7 %	1.8 %	7.2 %	2.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	45.142 ppb	18.992 ppb	50.448 ppb	105.847 ppb	50.320 ppb	51.277 ppb	25.943 ppb	50.923 ppb	105.764 %
Concentration per Run 1	42.667 ppb	17.834 ppb	48.176 ppb	106.604 ppb	49.252 ppb	49.462 ppb	24.945 ppb	49.615 ppb	109.007 %
Concentration per Run 2	47.018 ppb	19.750 ppb	52.098 ppb	113.178 ppb	52.017 ppb	53.842 ppb	26.322 ppb	53.053 ppb	101.800 %
Concentration per Run 3	45.741 ppb	19.392 ppb	51.070 ppb	97.758 ppb	49.689 ppb	50.527 ppb	26.563 ppb	50.100 ppb	106.485 %
Concentration RSD	5.0 %	5.4 %	4.0 %	7.3 %	3.0 %	4.5 %	3.4 %	3.7 %	3.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	12.515 ppb	12.179 ppb	97.562 ppb	97.470 ppb	109.129 %	4.703 ppb	5.196 ppb	108.711 %	45.180 ppb
Concentration per Run 1	12.281 ppb	12.012 ppb	94.044 ppb	96.158 ppb	111.774 %	4.538 ppb	4.936 ppb	112.005 %	43.811 ppb
Concentration per Run 2	13.143 ppb	11.698 ppb	100.440 ppb	97.774 ppb	106.487 %	4.822 ppb	5.446 ppb	107.274 %	46.527 ppb
Concentration per Run 3	12.122 ppb	12.826 ppb	98.202 ppb	98.478 ppb	109.127 %	4.747 ppb	5.206 ppb	106.853 %	45.203 ppb
Concentration RSD	4.4 %	4.8 %	3.3 %	1.2 %	2.4 %	3.1 %	4.9 %	2.6 %	3.0 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	193.414 ppb	110.804 %	107.448 %	11.829 ppb	51.871 ppb	106.870 %
Concentration per Run 1	190.803 ppb	112.222 %	109.440 %	11.318 ppb	50.535 ppb	108.530 %
Concentration per Run 2	194.436 ppb	109.917 %	105.310 %	11.674 ppb	52.013 ppb	108.526 %
Concentration per Run 3	195.004 ppb	110.272 %	107.593 %	12.495 ppb	53.063 ppb	103.553 %
Concentration RSD	1.2 %	1.1 %	1.9 %	5.1 %	2.4 %	2.7 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	94	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	xL2467975-04 6020TL	Rack	1		
Analysis started at:	12/3/2024 3:29:23 PM	Vial	56		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	118.012 %	126.375 %	0.025 ppb	38,257.664 ppb	1,862.106 ppb	51.710 ppb	2,969.846 ppb	9,274.901 ppb	108.085 %
Concentration per Run 1	114.586 %	128.957 %	0.027 ppb	36,330.063 ppb	1,768.358 ppb	50.221 ppb	2,798.286 ppb	9,088.065 ppb	108.564 %
Concentration per Run 2	119.838 %	130.472 %	0.023 ppb	38,080.094 ppb	1,875.390 ppb	50.037 ppb	3,046.039 ppb	9,200.062 ppb	107.190 %
Concentration per Run 3	119.613 %	119.697 %	0.026 ppb	40,362.835 ppb	1,942.570 ppb	54.872 ppb	3,065.212 ppb	9,536.576 ppb	108.502 %
Concentration RSD	2.5 %	4.6 %	7.8 %	5.3 %	4.7 %	5.3 %	5.0 %	2.5 %	0.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.270 ppb	0.340 ppb	65.045 ppb	343.764 ppb	0.130 ppb	0.713 ppb	1.152 ppb	4.989 ppb	103.811 %
Concentration per Run 1	-0.344 ppb	0.357 ppb	61.261 ppb	329.024 ppb	0.120 ppb	0.720 ppb	1.316 ppb	4.859 ppb	108.565 %
Concentration per Run 2	-0.289 ppb	0.303 ppb	66.428 ppb	346.007 ppb	0.128 ppb	0.667 ppb	1.029 ppb	5.301 ppb	100.534 %
Concentration per Run 3	-0.177 ppb	0.358 ppb	67.445 ppb	356.262 ppb	0.142 ppb	0.752 ppb	1.112 ppb	4.806 ppb	102.333 %
Concentration RSD	31.7 %	9.4 %	5.1 %	4.0 %	8.3 %	6.0 %	12.8 %	5.5 %	4.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.931 ppb	0.290 ppb	66.473 ppb	1.097 ppb	107.331 %	0.008 ppb	0.023 ppb	108.366 %	0.904 ppb
Concentration per Run 1	0.882 ppb	0.221 ppb	63.899 ppb	0.794 ppb	109.670 %	0.008 ppb	0.017 ppb	110.796 %	0.818 ppb
Concentration per Run 2	0.978 ppb	0.450 ppb	68.029 ppb	1.056 ppb	106.873 %	0.008 ppb	0.035 ppb	106.283 %	0.893 ppb
Concentration per Run 3	0.934 ppb	0.199 ppb	67.492 ppb	1.442 ppb	105.450 %	0.009 ppb	0.017 ppb	108.018 %	1.000 ppb
Concentration RSD	5.2 %	47.8 %	3.4 %	29.7 %	2.0 %	8.6 %	44.7 %	2.1 %	10.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	10.962 ppb	109.677 %	108.082 %	0.024 ppb	0.603 ppb	107.055 %
Concentration per Run 1	11.170 ppb	114.531 %	113.494 %	0.018 ppb	0.590 ppb	108.403 %
Concentration per Run 2	11.202 ppb	110.456 %	107.046 %	0.027 ppb	0.613 ppb	107.308 %
Concentration per Run 3	10.514 ppb	104.044 %	103.704 %	0.028 ppb	0.607 ppb	105.453 %
Concentration RSD	3.5 %	4.8 %	4.6 %	21.6 %	2.0 %	1.4 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	95	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	xWG2001986-3d10 6020TL	Rack	1		
Analysis started at:	12/3/2024 3:33:52 PM	Vial	57		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	117.968 %	124.748 %	4.926 ppb	4,969.620 ppb	1,101.332 ppb	181.836 ppb	1,239.796 ppb	1,778.622 ppb	112.480 %
Concentration per Run 1	111.772 %	127.273 %	5.134 ppb	4,833.452 ppb	1,071.242 ppb	176.822 ppb	1,266.386 ppb	1,654.655 ppb	112.149 %
Concentration per Run 2	117.937 %	123.064 %	4.923 ppb	5,071.230 ppb	1,137.838 ppb	187.652 ppb	1,245.368 ppb	1,823.266 ppb	112.285 %
Concentration per Run 3	124.195 %	123.906 %	4.722 ppb	5,004.176 ppb	1,094.915 ppb	181.033 ppb	1,207.633 ppb	1,857.945 ppb	113.006 %
Concentration RSD	5.3 %	1.8 %	4.2 %	2.5 %	3.1 %	3.0 %	2.4 %	6.1 %	0.4 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	43.428 ppb	18.522 ppb	53.698 ppb	135.093 ppb	49.232 ppb	51.167 ppb	25.239 ppb	49.600 ppb	104.808 %
Concentration per Run 1	40.544 ppb	17.127 ppb	53.499 ppb	127.062 ppb	47.144 ppb	48.841 ppb	24.389 ppb	46.761 ppb	108.929 %
Concentration per Run 2	44.483 ppb	19.372 ppb	54.271 ppb	140.788 ppb	51.277 ppb	52.830 ppb	26.330 ppb	51.976 ppb	100.727 %
Concentration per Run 3	45.256 ppb	19.065 ppb	53.322 ppb	137.429 ppb	49.276 ppb	51.831 ppb	24.999 ppb	50.063 ppb	104.770 %
Concentration RSD	5.8 %	6.6 %	0.9 %	5.3 %	4.2 %	4.1 %	3.9 %	5.3 %	3.9 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	11.611 ppb	11.864 ppb	100.206 ppb	91.560 ppb	109.362 %	4.568 ppb	4.876 ppb	108.024 %	41.750 ppb
Concentration per Run 1	11.309 ppb	12.253 ppb	95.999 ppb	86.218 ppb	115.195 %	4.377 ppb	4.608 ppb	114.173 %	39.661 ppb
Concentration per Run 2	11.956 ppb	12.086 ppb	104.354 ppb	93.803 ppb	104.671 %	4.710 ppb	5.018 ppb	106.510 %	42.911 ppb
Concentration per Run 3	11.566 ppb	11.254 ppb	100.266 ppb	94.659 ppb	108.220 %	4.618 ppb	5.001 ppb	103.390 %	42.678 ppb
Concentration RSD	2.8 %	4.5 %	4.2 %	5.1 %	4.9 %	3.8 %	4.8 %	5.1 %	4.3 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	188.853 ppb	108.990 %	107.927 %	11.250 ppb	49.591 ppb	105.605 %
Concentration per Run 1	181.813 ppb	114.649 %	110.431 %	10.732 ppb	48.116 ppb	108.301 %
Concentration per Run 2	189.971 ppb	104.453 %	106.122 %	11.498 ppb	50.594 ppb	104.139 %
Concentration per Run 3	194.775 ppb	107.867 %	107.228 %	11.519 ppb	50.062 ppb	104.374 %
Concentration RSD	3.5 %	4.8 %	2.1 %	4.0 %	2.6 %	2.2 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	96	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	xWG2001986-4 6020TL	Rack	1		
Analysis started at:	12/3/2024 3:38:21 PM	Vial	58		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	116.178 %	126.263 %	0.045 ppb	37,337.758 ppb	1,835.610 ppb	46.589 ppb	2,784.204 ppb	8,744.712 ppb	106.457 %
Concentration per Run 1	114.033 %	136.196 %	0.046 ppb	34,745.302 ppb	1,664.946 ppb	43.544 ppb	2,550.791 ppb	8,217.095 ppb	104.876 %
Concentration per Run 2	116.858 %	119.024 %	0.049 ppb	38,770.655 ppb	1,912.687 ppb	49.014 ppb	2,997.431 ppb	8,875.122 ppb	106.408 %
Concentration per Run 3	117.644 %	123.569 %	0.039 ppb	38,497.317 ppb	1,929.196 ppb	47.208 ppb	2,804.391 ppb	9,141.920 ppb	108.086 %
Concentration RSD	1.6 %	7.0 %	11.5 %	6.0 %	8.1 %	6.0 %	8.0 %	5.4 %	1.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.147 ppb	0.272 ppb	61.746 ppb	322.351 ppb	0.176 ppb	0.731 ppb	1.655 ppb	4.531 ppb	106.285 %
Concentration per Run 1	-0.173 ppb	0.149 ppb	56.534 ppb	307.457 ppb	0.165 ppb	0.528 ppb	1.468 ppb	4.070 ppb	109.161 %
Concentration per Run 2	-0.184 ppb	0.334 ppb	62.444 ppb	317.885 ppb	0.209 ppb	0.952 ppb	1.640 ppb	4.689 ppb	105.664 %
Concentration per Run 3	-0.083 ppb	0.332 ppb	66.259 ppb	341.710 ppb	0.154 ppb	0.712 ppb	1.856 ppb	4.836 ppb	104.031 %
Concentration RSD	37.6 %	39.2 %	7.9 %	5.4 %	16.6 %	29.1 %	11.7 %	9.0 %	2.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.767 ppb	0.097 ppb	62.446 ppb	1.129 ppb	108.626 %	0.016 ppb	0.016 ppb	106.593 %	0.790 ppb
Concentration per Run 1	0.746 ppb	0.097 ppb	59.578 ppb	0.932 ppb	115.412 %	0.022 ppb	0.027 ppb	109.265 %	0.699 ppb
Concentration per Run 2	0.711 ppb	0.111 ppb	63.644 ppb	1.158 ppb	105.087 %	0.017 ppb	0.007 ppb	105.515 %	0.760 ppb
Concentration per Run 3	0.844 ppb	0.084 ppb	64.116 ppb	1.298 ppb	105.379 %	0.008 ppb	0.014 ppb	104.998 %	0.912 ppb
Concentration RSD	9.0 %	13.9 %	4.0 %	16.4 %	5.4 %	43.5 %	62.3 %	2.2 %	13.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	11.083 ppb	109.716 %	107.802 %	0.036 ppb	0.631 ppb	107.204 %
Concentration per Run 1	10.653 ppb	115.649 %	113.137 %	0.028 ppb	0.612 ppb	110.872 %
Concentration per Run 2	11.145 ppb	107.945 %	106.289 %	0.044 ppb	0.640 ppb	104.578 %
Concentration per Run 3	11.450 ppb	105.554 %	103.980 %	0.035 ppb	0.640 ppb	106.161 %
Concentration RSD	3.6 %	4.8 %	4.4 %	22.4 %	2.5 %	3.1 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	97	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	xWG2001986-5d10 6020TL	Rack	1		
Analysis started at:	12/3/2024 3:42:50 PM	Vial	59		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	116.388 %	125.309 %	47.603 ppb	8,658.854 ppb	4,691.087 ppb	49.731 ppb	4,709.090 ppb	5,285.585 ppb	110.164 %
Concentration per Run 1	112.872 %	131.987 %	48.130 ppb	8,181.271 ppb	4,493.890 ppb	46.674 ppb	4,463.262 ppb	5,106.061 ppb	105.599 %
Concentration per Run 2	117.725 %	119.024 %	47.584 ppb	9,076.665 ppb	4,844.946 ppb	53.010 ppb	4,974.046 ppb	5,612.578 ppb	112.368 %
Concentration per Run 3	118.566 %	124.916 %	47.095 ppb	8,718.627 ppb	4,734.425 ppb	49.509 ppb	4,689.962 ppb	5,138.116 ppb	112.523 %
Concentration RSD	2.6 %	5.2 %	1.1 %	5.2 %	3.8 %	6.4 %	5.4 %	5.4 %	3.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	42.568 ppb	44.253 ppb	51.551 ppb	4,597.488 ppb	47.010 ppb	47.296 ppb	46.468 ppb	46.627 ppb	111.420 %
Concentration per Run 1	40.224 ppb	42.995 ppb	49.390 ppb	4,384.289 ppb	44.197 ppb	47.534 ppb	44.346 ppb	44.931 ppb	114.795 %
Concentration per Run 2	44.980 ppb	46.421 ppb	54.171 ppb	4,886.053 ppb	50.756 ppb	48.408 ppb	49.558 ppb	49.080 ppb	105.321 %
Concentration per Run 3	42.501 ppb	43.343 ppb	51.092 ppb	4,522.122 ppb	46.078 ppb	45.947 ppb	45.500 ppb	45.869 ppb	114.144 %
Concentration RSD	5.6 %	4.3 %	4.7 %	5.6 %	7.2 %	2.6 %	5.9 %	4.7 %	4.7 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	45.536 ppb	46.406 ppb	52.021 ppb	46.244 ppb	108.007 %	6.856 ppb	47.345 ppb	106.798 %	45.827 ppb
Concentration per Run 1	44.331 ppb	44.906 ppb	50.166 ppb	43.717 ppb	112.948 %	6.431 ppb	45.227 ppb	112.722 %	43.490 ppb
Concentration per Run 2	48.186 ppb	47.857 ppb	54.156 ppb	48.198 ppb	104.991 %	7.094 ppb	48.155 ppb	105.721 %	45.714 ppb
Concentration per Run 3	44.090 ppb	46.453 ppb	51.742 ppb	46.817 ppb	106.081 %	7.042 ppb	48.652 ppb	101.950 %	48.277 ppb
Concentration RSD	5.0 %	3.2 %	3.9 %	5.0 %	4.0 %	5.4 %	3.9 %	5.1 %	5.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	47.000 ppb	108.011 %	105.362 %	47.052 ppb	47.466 ppb	103.906 %
Concentration per Run 1	44.328 ppb	109.311 %	107.286 %	44.508 ppb	45.433 ppb	108.912 %
Concentration per Run 2	47.515 ppb	107.902 %	102.645 %	48.172 ppb	48.235 ppb	102.670 %
Concentration per Run 3	49.157 ppb	106.821 %	106.154 %	48.476 ppb	48.731 ppb	100.137 %
Concentration RSD	5.2 %	1.2 %	2.3 %	4.7 %	3.7 %	4.3 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	98	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	xWG2001986-6d5 6020TL	Rack	1		
Analysis started at:	12/3/2024 3:47:20 PM	Vial	60		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	116.721 %	125.870 %	0.090 ppb	7,621.251 ppb	367.747 ppb	10.527 ppb	574.443 ppb	1,774.770 ppb	106.180 %
Concentration per Run 1	114.605 %	129.967 %	0.099 ppb	7,392.384 ppb	342.006 ppb	11.202 ppb	595.834 ppb	1,775.865 ppb	102.840 %
Concentration per Run 2	115.667 %	128.957 %	0.078 ppb	7,391.948 ppb	361.196 ppb	10.133 ppb	551.206 ppb	1,871.609 ppb	107.145 %
Concentration per Run 3	119.892 %	118.687 %	0.094 ppb	8,079.419 ppb	400.039 ppb	10.245 ppb	576.290 ppb	1,676.835 ppb	108.557 %
Concentration RSD	2.4 %	5.0 %	12.1 %	5.2 %	8.0 %	5.6 %	3.9 %	5.5 %	2.8 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.450 ppb	0.028 ppb	12.336 ppb	65.898 ppb	0.018 ppb	0.127 ppb	0.230 ppb	1.012 ppb	113.487 %
Concentration per Run 1	-0.475 ppb	0.013 ppb	12.934 ppb	64.566 ppb	0.027 ppb	0.139 ppb	0.144 ppb	0.982 ppb	112.888 %
Concentration per Run 2	-0.459 ppb	0.048 ppb	11.812 ppb	70.409 ppb	-0.001 ppb	0.216 ppb	0.288 ppb	1.182 ppb	110.980 %
Concentration per Run 3	-0.418 ppb	0.025 ppb	12.261 ppb	62.721 ppb	0.027 ppb	0.026 ppb	0.257 ppb	0.872 ppb	116.592 %
Concentration RSD	6.5 %	62.7 %	4.6 %	6.1 %	92.8 %	75.3 %	33.1 %	15.6 %	2.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.160 ppb	0.297 ppb	12.383 ppb	0.387 ppb	105.100 %	0.003 ppb	0.004 ppb	105.485 %	0.191 ppb
Concentration per Run 1	0.109 ppb	0.250 ppb	12.292 ppb	0.237 ppb	106.012 %	0.003 ppb	0.000 ppb	109.920 %	0.166 ppb
Concentration per Run 2	0.145 ppb	0.189 ppb	12.529 ppb	0.361 ppb	104.790 %	0.002 ppb	0.004 ppb	104.838 %	0.185 ppb
Concentration per Run 3	0.226 ppb	0.453 ppb	12.326 ppb	0.564 ppb	104.496 %	0.002 ppb	0.007 ppb	101.698 %	0.223 ppb
Concentration RSD	37.4 %	46.4 %	1.0 %	42.6 %	0.8 %	19.2 %	100.7 %	3.9 %	15.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	2.138 ppb	106.533 %	106.314 %	0.197 ppb	0.134 ppb	107.355 %
Concentration per Run 1	2.081 ppb	109.070 %	108.952 %	0.169 ppb	0.137 ppb	112.811 %
Concentration per Run 2	2.058 ppb	105.496 %	105.324 %	0.237 ppb	0.130 ppb	104.113 %
Concentration per Run 3	2.275 ppb	105.032 %	104.666 %	0.185 ppb	0.136 ppb	105.142 %
Concentration RSD	5.6 %	2.1 %	2.2 %	18.0 %	2.9 %	4.4 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	99	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	xL2468003-01 6020TL	Rack	2		
Analysis started at:	12/3/2024 3:51:50 PM	Vial	2		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	106.977 %	124.916 %	0.089 ppb	41,967.709 ppb	25,086.513 ppb	446.809 ppb	23,502.921 ppb	69,507.803 ppb	103.357 %
Concentration per Run 1	105.987 %	124.411 %	0.101 ppb	40,212.459 ppb	23,979.231 ppb	437.331 ppb	22,433.968 ppb	65,707.223 ppb	104.889 %
Concentration per Run 2	109.845 %	121.886 %	0.081 ppb	43,236.538 ppb	25,707.188 ppb	450.295 ppb	24,042.504 ppb	70,333.328 ppb	108.137 %
Concentration per Run 3	105.098 %	128.452 %	0.085 ppb	42,454.129 ppb	25,573.121 ppb	452.801 ppb	24,032.290 ppb	72,482.859 ppb	97.044 %
Concentration RSD	2.4 %	2.7 %	12.0 %	3.7 %	3.8 %	1.9 %	3.9 %	5.0 %	5.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	4.242 ppb	2.174 ppb	395.612 ppb	28,034.628 ppb	1.573 ppb	3.055 ppb	1.657 ppb	3.662 ppb	112.318 %
Concentration per Run 1	3.876 ppb	1.870 ppb	378.521 ppb	26,257.197 ppb	1.422 ppb	2.890 ppb	1.539 ppb	3.609 ppb	116.187 %
Concentration per Run 2	3.966 ppb	2.284 ppb	390.045 ppb	27,489.976 ppb	1.587 ppb	2.879 ppb	1.724 ppb	3.752 ppb	112.892 %
Concentration per Run 3	4.885 ppb	2.370 ppb	418.271 ppb	30,356.711 ppb	1.708 ppb	3.396 ppb	1.707 ppb	3.626 ppb	107.876 %
Concentration RSD	13.2 %	12.3 %	5.2 %	7.5 %	9.1 %	9.7 %	6.2 %	2.1 %	3.7 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	13.016 ppb	0.634 ppb	398.939 ppb	0.275 ppb	105.605 %	0.006 ppb	0.052 ppb	106.627 %	0.230 ppb
Concentration per Run 1	12.660 ppb	0.789 ppb	371.014 ppb	0.126 ppb	114.408 %	0.003 ppb	0.051 ppb	116.134 %	0.205 ppb
Concentration per Run 2	12.570 ppb	0.335 ppb	401.257 ppb	0.355 ppb	103.488 %	0.010 ppb	0.029 ppb	101.797 %	0.232 ppb
Concentration per Run 3	13.817 ppb	0.778 ppb	424.547 ppb	0.343 ppb	98.920 %	0.007 ppb	0.077 ppb	101.951 %	0.252 ppb
Concentration RSD	5.3 %	40.8 %	6.7 %	46.9 %	7.5 %	54.4 %	45.9 %	7.7 %	10.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	130.858 ppb	109.402 %	109.190 %	0.056 ppb	0.537 ppb	102.612 %
Concentration per Run 1	117.115 ppb	117.809 %	118.315 %	0.032 ppb	0.482 ppb	111.449 %
Concentration per Run 2	136.847 ppb	107.661 %	108.851 %	0.065 ppb	0.544 ppb	100.921 %
Concentration per Run 3	138.614 ppb	102.736 %	100.403 %	0.070 ppb	0.583 ppb	95.467 %
Concentration RSD	9.1 %	7.0 %	8.2 %	37.7 %	9.5 %	7.9 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	100	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	xL2468003-02 6020TL	Rack	2		
Analysis started at:	12/3/2024 3:56:18 PM	Vial	3		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	101.068 %	121.661 %	0.064 ppb	74,983.107 ppb	23,345.318 ppb	93.713 ppb	7,646.107 ppb	107,814.926 ppb	99.674 %
Concentration per Run 1	98.107 %	120.034 %	0.070 ppb	73,825.798 ppb	23,118.961 ppb	92.763 ppb	7,625.350 ppb	103,650.666 ppb	98.700 %
Concentration per Run 2	100.795 %	124.580 %	0.059 ppb	74,630.064 ppb	23,399.528 ppb	91.553 ppb	7,447.207 ppb	107,428.847 ppb	100.315 %
Concentration per Run 3	104.302 %	120.371 %	0.062 ppb	76,493.459 ppb	23,517.466 ppb	96.824 ppb	7,865.764 ppb	112,365.265 ppb	100.007 %
Concentration RSD	3.1 %	2.1 %	8.7 %	1.8 %	0.9 %	2.9 %	2.7 %	4.1 %	0.9 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.120 ppb	0.544 ppb	154.330 ppb	17,887.728 ppb	1.459 ppb	1.318 ppb	0.295 ppb	0.911 ppb	126.807 %
Concentration per Run 1	0.075 ppb	0.506 ppb	144.730 ppb	16,787.405 ppb	1.434 ppb	1.380 ppb	0.257 ppb	0.953 ppb	131.454 %
Concentration per Run 2	0.167 ppb	0.573 ppb	160.024 ppb	18,887.530 ppb	1.523 ppb	1.274 ppb	0.361 ppb	0.943 ppb	122.193 %
Concentration per Run 3	0.118 ppb	0.553 ppb	158.237 ppb	17,988.251 ppb	1.419 ppb	1.300 ppb	0.267 ppb	0.836 ppb	126.775 %
Concentration RSD	38.2 %	6.4 %	5.4 %	5.9 %	3.9 %	4.2 %	19.4 %	7.1 %	3.7 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	12.228 ppb	0.167 ppb	389.723 ppb	0.572 ppb	105.603 %	-0.002 ppb	0.018 ppb	104.774 %	0.123 ppb
Concentration per Run 1	11.486 ppb	0.195 ppb	370.935 ppb	0.468 ppb	111.472 %	-0.002 ppb	0.017 ppb	109.688 %	0.077 ppb
Concentration per Run 2	12.984 ppb	0.173 ppb	403.409 ppb	0.573 ppb	102.356 %	-0.001 ppb	0.025 ppb	102.627 %	0.125 ppb
Concentration per Run 3	12.216 ppb	0.134 ppb	394.824 ppb	0.677 ppb	102.981 %	-0.002 ppb	0.011 ppb	102.006 %	0.168 ppb
Concentration RSD	6.1 %	18.5 %	4.3 %	18.2 %	4.8 %	42.0 %	41.1 %	4.1 %	36.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	78.585 ppb	108.285 %	107.708 %	0.029 ppb	0.159 ppb	101.296 %
Concentration per Run 1	75.168 ppb	113.179 %	112.996 %	0.015 ppb	0.145 ppb	107.028 %
Concentration per Run 2	81.922 ppb	104.889 %	103.921 %	0.039 ppb	0.166 ppb	100.330 %
Concentration per Run 3	78.663 ppb	106.789 %	106.206 %	0.031 ppb	0.166 ppb	96.529 %
Concentration RSD	4.3 %	4.0 %	4.4 %	43.3 %	7.5 %	5.2 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	101	User name	ALPHALAB\a2-icpmsq2	Comment	CCV/MCCV
Analysis label:	CCV	Rack	0		
Analysis started at:	12/3/2024 4:00:46 PM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	112.215 %	123.513 %	57.781 ppb	5,728.917 ppb	5,252.295 ppb	50.077 ppb	5,090.437 ppb	5,029.905 ppb	105.018 %
Concentration per Run 1	109.361 %	131.987 %	56.080 ppb	5,317.253 ppb	4,893.203 ppb	46.317 ppb	5,062.571 ppb	4,973.202 ppb	105.558 %
Concentration per Run 2	112.191 %	125.758 %	58.168 ppb	5,659.809 ppb	5,120.852 ppb	50.498 ppb	5,049.656 ppb	4,998.935 ppb	102.739 %
Concentration per Run 3	115.092 %	112.795 %	59.096 ppb	6,209.688 ppb	5,742.829 ppb	53.417 ppb	5,159.084 ppb	5,117.579 ppb	106.756 %
Recovery Percentage 1			96.302 %	95.482 %	87.538 %	83.462 %	84.841 %	83.832 %	
Concentration RSD	2.6 %	7.9 %	2.7 %	7.9 %	8.4 %	7.1 %	1.2 %	1.5 %	2.0 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	49.163 ppb	50.493 ppb	51.963 ppb	5,693.709 ppb	56.430 ppb	57.336 ppb	57.303 ppb	56.234 ppb	117.174 %
Concentration per Run 1	46.133 ppb	47.049 ppb	50.201 ppb	5,079.936 ppb	50.420 ppb	50.486 ppb	51.224 ppb	50.156 ppb	117.823 %
Concentration per Run 2	48.868 ppb	50.509 ppb	51.743 ppb	5,779.392 ppb	58.997 ppb	60.189 ppb	60.579 ppb	59.360 ppb	116.029 %
Concentration per Run 3	52.489 ppb	53.922 ppb	53.945 ppb	6,221.801 ppb	59.872 ppb	61.332 ppb	60.105 ppb	59.186 ppb	117.672 %
Recovery Percentage 1	81.938 %	84.155 %	86.605 %	94.895 %	94.049 %	95.559 %	95.504 %	93.724 %	
Concentration RSD	6.5 %	6.8 %	3.6 %	10.1 %	9.3 %	10.4 %	9.2 %	9.4 %	0.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	55.813 ppb	54.524 ppb	54.279 ppb	54.080 ppb	106.611 %	56.746 ppb	55.913 ppb	105.426 %	54.527 ppb
Concentration per Run 1	49.785 ppb	49.139 ppb	49.170 ppb	51.915 ppb	115.243 %	54.641 ppb	52.594 ppb	109.047 %	51.127 ppb
Concentration per Run 2	59.303 ppb	56.661 ppb	56.813 ppb	55.333 ppb	102.024 %	57.436 ppb	56.857 ppb	103.925 %	56.259 ppb
Concentration per Run 3	58.349 ppb	57.771 ppb	56.855 ppb	54.994 ppb	102.567 %	58.161 ppb	58.288 ppb	103.305 %	56.196 ppb
Recovery Percentage 1	93.021 %	90.873 %	90.466 %	90.134 %		94.576 %	93.188 %		90.879 %
Concentration RSD	9.4 %	8.6 %	8.2 %	3.5 %	7.0 %	3.3 %	5.3 %	3.0 %	5.4 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	54.051 ppb	108.038 %	104.663 %	55.674 ppb	56.446 ppb	104.143 %
Concentration per Run 1	52.391 ppb	112.535 %	112.035 %	52.128 ppb	53.599 ppb	107.281 %
Concentration per Run 2	54.990 ppb	107.450 %	99.258 %	57.348 ppb	58.199 ppb	101.405 %
Concentration per Run 3	54.773 ppb	104.129 %	102.695 %	57.546 ppb	57.540 ppb	103.742 %
Recovery Percentage 1	90.086 %			92.789 %	94.076 %	
Concentration RSD	2.7 %	3.9 %	6.3 %	5.5 %	4.4 %	2.8 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index: 102 User name ALPHALAB\a2-icpmsq2 Comment CCB
Analysis label: CCB Rack 0
Analysis started at: 12/3/2024 4:05:18 PM Vial 10

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	116.435 %	123.177 %	0.104 ppb	285.504 ppb	-0.186 ppb	-0.410 ppb	27.653 ppb	5.271 ppb	107.058 %
Concentration per Run 1	106.443 %	128.620 %	0.074 ppb	259.793 ppb	0.412 ppb	-0.502 ppb	25.729 ppb	12.309 ppb	98.012 %
Concentration per Run 2	118.545 %	115.488 %	0.123 ppb	312.783 ppb	-0.368 ppb	-0.767 ppb	36.968 ppb	0.462 ppb	111.283 %
Concentration per Run 3	124.316 %	125.421 %	0.114 ppb	283.938 ppb	-0.603 ppb	0.038 ppb	20.261 ppb	3.041 ppb	111.879 %
Recovery Percentage 1			20.794 %	57.101 %	-0.266 %	-4.102 %	27.653 %	5.271 %	
Concentration RSD	7.8 %	5.6 %	25.1 %	9.3 %	285.4 %	100.0 %	30.8 %	118.2 %	7.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.546 ppb	-0.044 ppb	0.017 ppb	4.064 ppb	-0.003 ppb	0.021 ppb	0.021 ppb	0.036 ppb	121.385 %
Concentration per Run 1	-0.494 ppb	-0.022 ppb	0.026 ppb	4.419 ppb	-0.007 ppb	-0.001 ppb	0.028 ppb	0.031 ppb	121.658 %
Concentration per Run 2	-0.598 ppb	-0.037 ppb	0.015 ppb	3.616 ppb	0.004 ppb	0.104 ppb	-0.010 ppb	0.087 ppb	119.481 %
Concentration per Run 3	-0.546 ppb	-0.072 ppb	0.012 ppb	4.156 ppb	-0.005 ppb	-0.040 ppb	0.046 ppb	-0.009 ppb	123.017 %
Recovery Percentage 1	-10.915 %	-4.364 %	1.737 %	8.127 %	-0.519 %	1.048 %	2.118 %	0.722 %	
Concentration RSD	9.5 %	59.6 %	41.8 %	10.1 %	230.1 %	356.3 %	137.0 %	132.8 %	1.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.023 ppb	0.116 ppb	0.002 ppb	0.268 ppb	106.230 %	0.007 ppb	0.001 ppb	103.148 %	0.073 ppb
Concentration per Run 1	0.057 ppb	0.070 ppb	0.004 ppb	0.160 ppb	111.114 %	0.005 ppb	0.003 ppb	108.705 %	0.046 ppb
Concentration per Run 2	0.007 ppb	0.115 ppb	0.000 ppb	0.315 ppb	105.356 %	0.011 ppb	0.000 ppb	100.015 %	0.074 ppb
Concentration per Run 3	0.007 ppb	0.163 ppb	0.001 ppb	0.329 ppb	102.220 %	0.005 ppb	0.000 ppb	100.725 %	0.100 ppb
Recovery Percentage 1	4.694 %	2.319 %	0.019 %	13.391 %		1.681 %	0.562 %		1.834 %
Concentration RSD	122.0 %	40.2 %	112.3 %	35.0 %	4.2 %	51.0 %	173.2 %	4.7 %	36.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.060 ppb	104.980 %	103.016 %	0.230 ppb	0.016 ppb	102.465 %
Concentration per Run 1	0.020 ppb	109.314 %	106.496 %	0.200 ppb	0.017 ppb	108.827 %
Concentration per Run 2	0.094 ppb	103.110 %	101.205 %	0.276 ppb	0.015 ppb	98.105 %
Concentration per Run 3	0.066 ppb	102.516 %	101.348 %	0.214 ppb	0.015 ppb	100.462 %
Recovery Percentage 1	12.029 %			23.018 %	1.565 %	
Concentration RSD	61.8 %	3.6 %	2.9 %	17.5 %	5.9 %	5.5 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	103	User name	ALPHALAB\a2-icpmsq2	Comment	CCV/MCCV
Analysis label:	CCV	Rack	0		
Analysis started at:	12/3/2024 4:19:57 PM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	113.162 %	131.202 %	56.551 ppb	5,465.158 ppb	7,389.317 ppb	86.324 ppb	-20,657.458 ppb	-3,583.381 ppb	111.473 %
Concentration per Run 1	109.937 %	134.849 %	57.920 ppb	5,453.744 ppb	4,993.696 ppb	47.354 ppb	4,541.027 ppb	4,476.452 ppb	109.972 %
Concentration per Run 2	113.991 %	130.977 %	55.315 ppb	5,480.054 ppb	12,074.874 ppb	160.758 ppb	-71,525.118 ppb	-20,181.582 ppb	112.880 %
Concentration per Run 3	115.558 %	127.778 %	56.418 ppb	5,461.677 ppb	5,099.380 ppb	50.861 ppb	5,011.716 ppb	4,954.986 ppb	111.565 %
Recovery Percentage 1			94.252 %	91.086 %	123.155 %	143.874 %	-344.291 %	-59.723 %	
Concentration RSD	2.6 %	2.7 %	2.3 %	0.2 %	54.9 %	74.7 %	213.3 %	401.2 %	1.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	49.762 ppb	-3.324 ppb	4.126 ppb	5,616.690 ppb	56.290 ppb	57.172 ppb	56.317 ppb	56.211 ppb	43.318 %
Concentration per Run 1	48.883 ppb	44.159 ppb	45.338 ppb	5,543.553 ppb	55.497 ppb	57.442 ppb	55.041 ppb	55.549 ppb	149.491 %
Concentration per Run 2	49.894 ppb	-100.906 ppb	-80.569 ppb	5,728.707 ppb	58.222 ppb	57.950 ppb	59.053 ppb	58.265 ppb	-157.282 %
Concentration per Run 3	50.508 ppb	46.774 ppb	47.609 ppb	5,577.810 ppb	55.151 ppb	56.126 ppb	54.858 ppb	54.820 ppb	137.745 %
Recovery Percentage 1	82.936 %	-5.540 %	6.877 %	93.611 %	93.817 %	95.287 %	93.862 %	93.685 %	
Concentration RSD	1.6 %	2,542.5 %	1,777.9 %	1.8 %	3.0 %	1.6 %	4.2 %	3.2 %	401.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	55.240 ppb	54.979 ppb	56.649 ppb	27.041 ppb	111.114 %	55.657 ppb	56.075 ppb	111.885 %	55.110 ppb
Concentration per Run 1	52.696 ppb	53.240 ppb	54.659 ppb	54.872 ppb	115.730 %	52.706 ppb	53.071 ppb	115.833 %	53.166 ppb
Concentration per Run 2	57.330 ppb	55.381 ppb	58.591 ppb	-33.482 ppb	107.028 %	57.454 ppb	57.484 ppb	111.661 %	55.144 ppb
Concentration per Run 3	55.694 ppb	56.318 ppb	56.696 ppb	59.734 ppb	110.583 %	56.811 ppb	57.669 ppb	108.160 %	57.020 ppb
Recovery Percentage 1	92.067 %	91.632 %	94.415 %	45.069 %		92.762 %	93.458 %		91.850 %
Concentration RSD	4.3 %	2.9 %	3.5 %	194.0 %	3.9 %	4.6 %	4.6 %	3.4 %	3.5 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	55.651 ppb	114.248 %	113.515 %	55.238 ppb	55.289 ppb	114.811 %
Concentration per Run 1	54.137 ppb	120.076 %	119.541 %	51.797 ppb	52.112 ppb	124.393 %
Concentration per Run 2	56.999 ppb	108.565 %	110.781 %	56.981 ppb	57.362 ppb	108.089 %
Concentration per Run 3	55.817 ppb	114.104 %	110.223 %	56.937 ppb	56.394 ppb	111.951 %
Recovery Percentage 1	92.752 %			92.064 %	92.149 %	
Concentration RSD	2.6 %	5.0 %	4.6 %	5.4 %	5.1 %	7.4 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	104	User name	ALPHALAB\a2-icpmsq2	Comment	CCB
Analysis label:	CCB	Rack	0		
Analysis started at:	12/3/2024 4:24:28 PM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	110.591 %	120.595 %	0.369 ppb	238.903 ppb	0.198 ppb	-0.856 ppb	10.261 ppb	2.426 ppb	103.522 %
Concentration per Run 1	106.364 %	124.916 %	0.334 ppb	220.343 ppb	0.107 ppb	-1.041 ppb	6.614 ppb	5.410 ppb	101.130 %
Concentration per Run 2	110.389 %	122.728 %	0.477 ppb	229.100 ppb	0.293 ppb	-1.037 ppb	7.871 ppb	-2.416 ppb	104.087 %
Concentration per Run 3	115.021 %	114.142 %	0.295 ppb	267.265 ppb	0.193 ppb	-0.489 ppb	16.298 ppb	4.282 ppb	105.349 %
Recovery Percentage 1			73.708 %	47.781 %	0.283 %	-8.556 %	10.261 %	2.426 %	
Concentration RSD	3.9 %	4.7 %	26.1 %	10.4 %	47.2 %	37.1 %	51.3 %	174.4 %	2.1 %

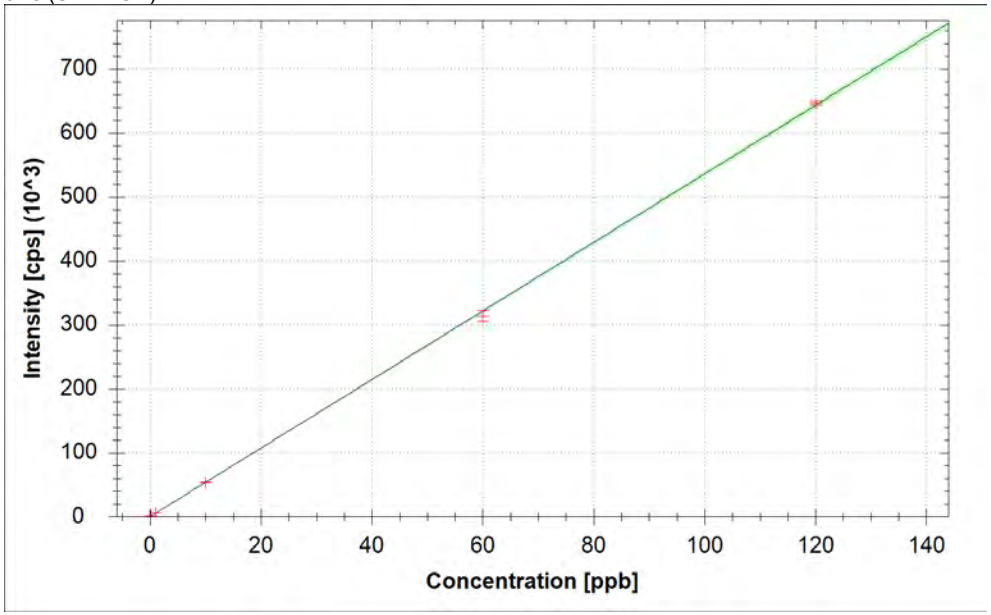
Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.531 ppb	-0.036 ppb	0.036 ppb	4.617 ppb	0.000 ppb	0.044 ppb	0.035 ppb	0.106 ppb	121.408 %
Concentration per Run 1	-0.571 ppb	-0.042 ppb	0.041 ppb	6.364 ppb	0.001 ppb	0.061 ppb	0.022 ppb	0.158 ppb	119.417 %
Concentration per Run 2	-0.532 ppb	-0.028 ppb	0.082 ppb	3.955 ppb	-0.002 ppb	0.019 ppb	0.067 ppb	0.050 ppb	122.375 %
Concentration per Run 3	-0.489 ppb	-0.039 ppb	-0.015 ppb	3.533 ppb	0.001 ppb	0.051 ppb	0.015 ppb	0.110 ppb	122.431 %
Recovery Percentage 1	-10.618 %	-3.643 %	3.628 %	9.235 %	0.026 %	2.180 %	3.479 %	2.117 %	
Concentration RSD	7.7 %	19.4 %	133.6 %	33.1 %	1,283.6 %	50.1 %	80.4 %	50.9 %	1.4 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	-0.004 ppb	0.195 ppb	0.000 ppb	0.312 ppb	109.296 %	0.015 ppb	0.007 ppb	103.486 %	0.109 ppb
Concentration per Run 1	0.007 ppb	0.430 ppb	0.005 ppb	0.182 ppb	112.537 %	0.025 ppb	0.014 ppb	107.710 %	0.086 ppb
Concentration per Run 2	0.069 ppb	0.082 ppb	0.003 ppb	0.345 ppb	107.482 %	0.012 ppb	0.004 ppb	99.577 %	0.097 ppb
Concentration per Run 3	-0.087 ppb	0.074 ppb	-0.009 ppb	0.408 ppb	107.869 %	0.008 ppb	0.004 ppb	103.172 %	0.145 ppb
Recovery Percentage 1	-0.785 %	3.910 %	-0.002 %	15.601 %		3.766 %	3.444 %		2.736 %
Concentration RSD	1,998.0 %	104.0 %	3,210.3 %	37.4 %	2.6 %	60.2 %	83.4 %	3.9 %	28.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.040 ppb	108.754 %	107.942 %	0.304 ppb	0.022 ppb	106.742 %
Concentration per Run 1	0.047 ppb	109.882 %	110.092 %	0.251 ppb	0.028 ppb	111.979 %
Concentration per Run 2	0.051 ppb	106.452 %	105.766 %	0.363 ppb	0.022 ppb	104.101 %
Concentration per Run 3	0.021 ppb	109.929 %	107.968 %	0.298 ppb	0.016 ppb	104.148 %
Recovery Percentage 1	7.939 %			30.418 %	2.208 %	
Concentration RSD	40.2 %	1.8 %	2.0 %	18.5 %	27.9 %	4.2 %

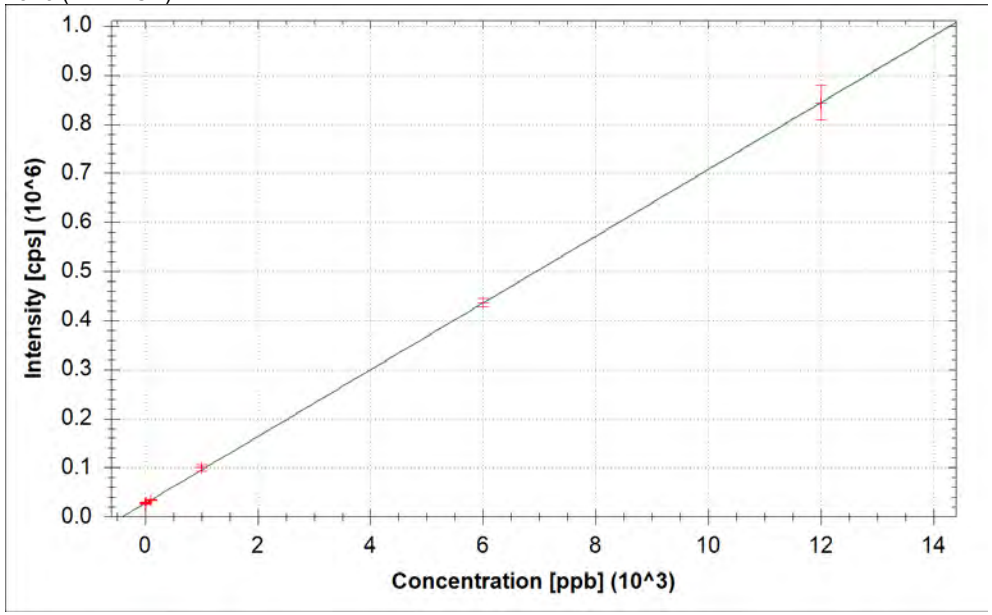
Calibration Curves:

9Be (STD AGD)



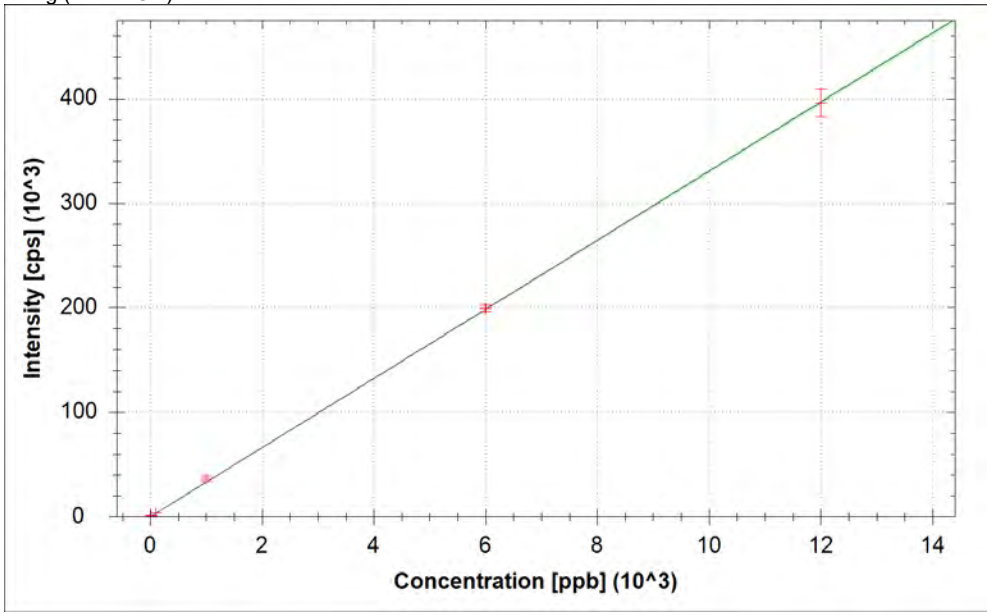
f(x) = 5358.0201*x + 246.3896
R² = 0.9998
BEC = 0.046 ppb
LoD = 0.0215 ppb

23Na (KED AGD)



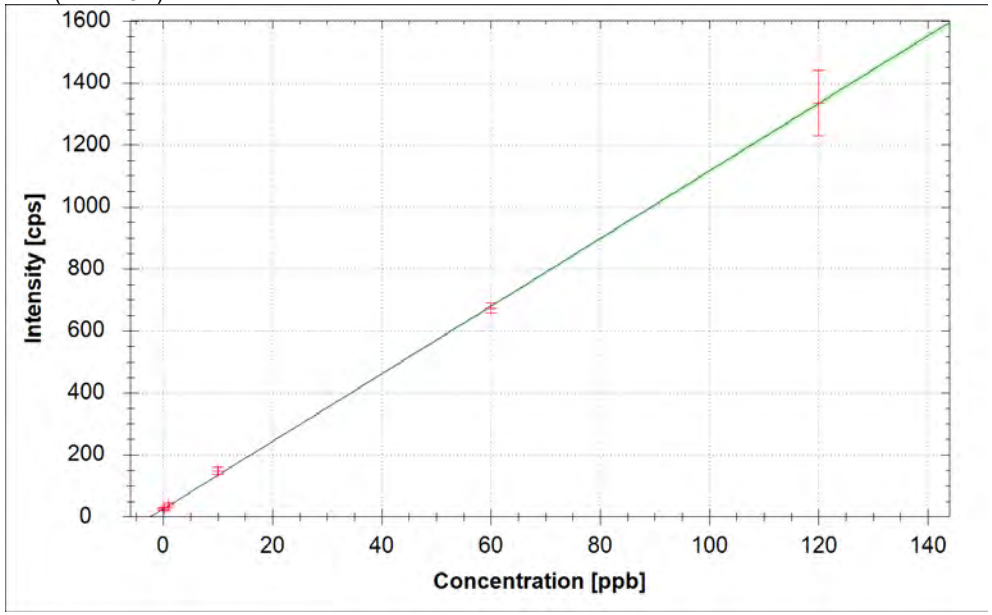
f(x) = 68.0355*x + 27193.9517
R² = 1.0000
BEC = 399.702 ppb
LoD = 75.8702 ppb

24Mg (KED AGD)



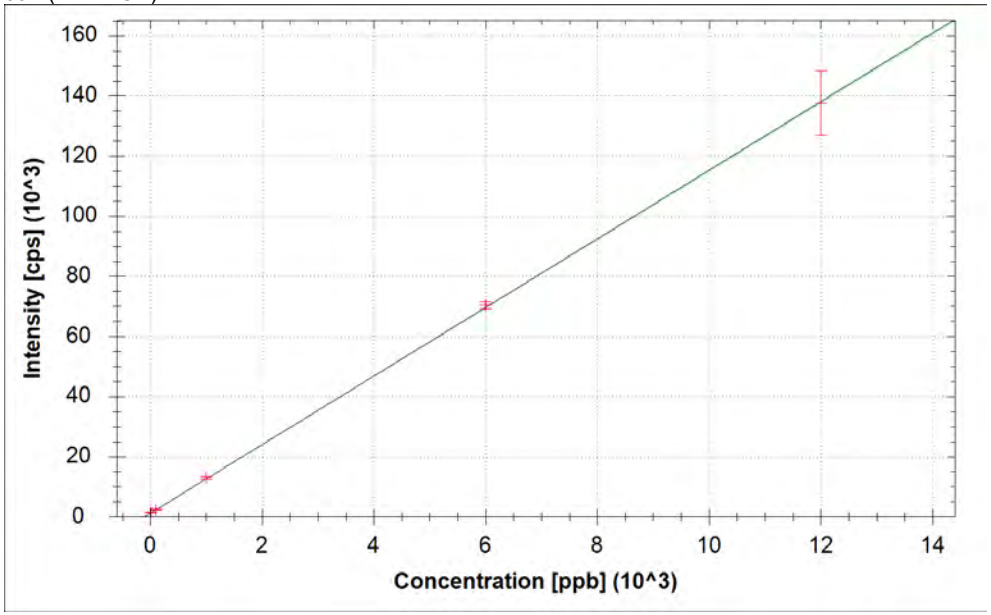
f(x) = 33.0497*x + 61.1301
R² = 0.9999
BEC = 1.850 ppb
LoD = 2.6194 ppb

27Al (KED AGD)



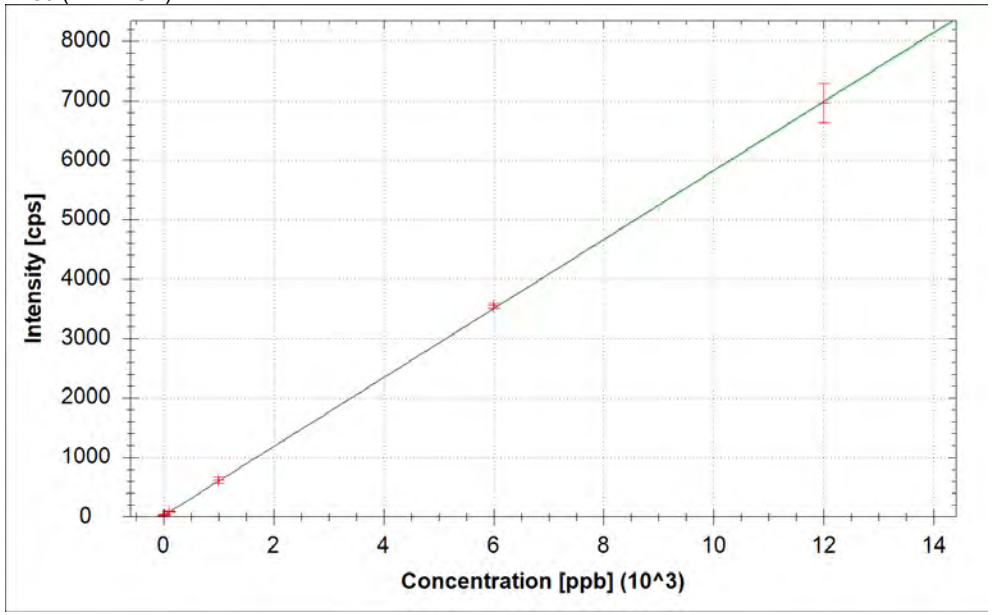
f(x) = 10.9043*x + 24.8638
R² = 0.9998
BEC = 2.280 ppb
LoD = 1.4080 ppb

39K (KED AGD)



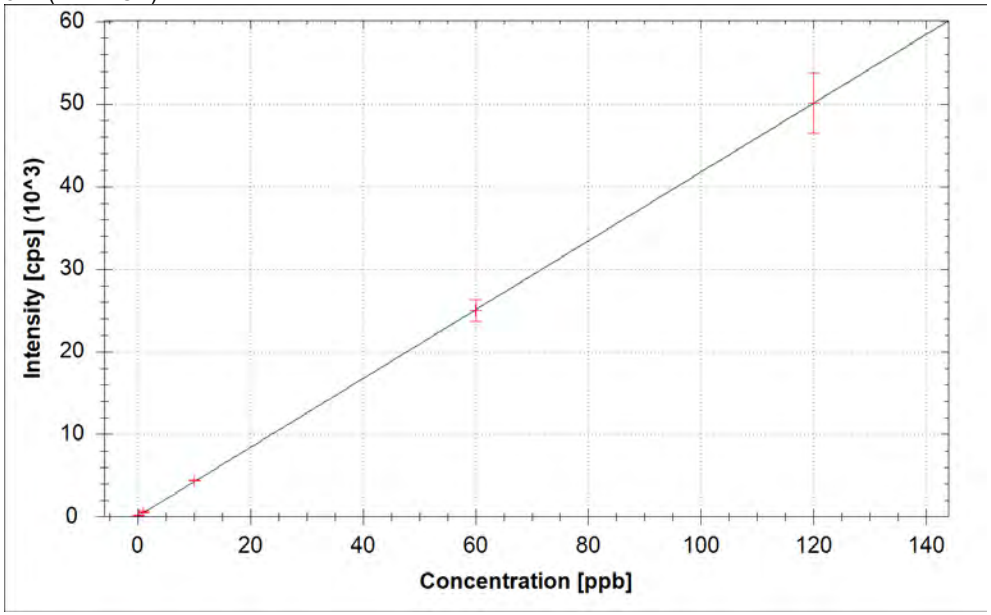
f(x) = 11.4039*x + 1167.7464
R² = 0.9999
BEC = 102.399 ppb
LoD = 6.6148 ppb

44Ca (KED AGD)



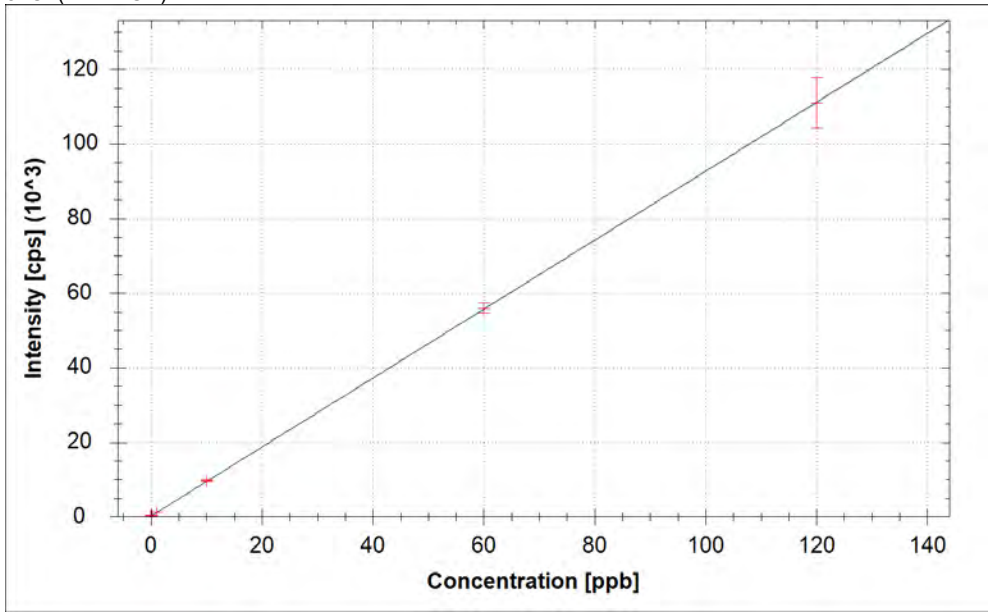
f(x) = 0.5803*x + 18.1578
R² = 0.9999
BEC = 31.290 ppb
LoD = 30.0410 ppb

51V (KED AGD)



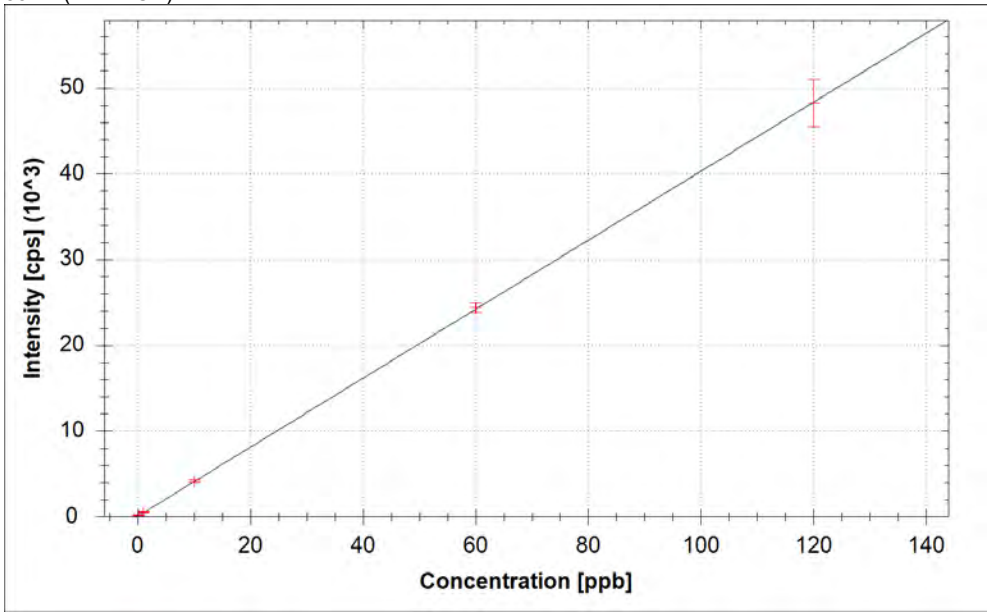
f(x) = 416.8402*x + 68.9380
R² = 1.0000
BEC = 0.165 ppb
LoD = 0.0217 ppb

52Cr (KED AGD)



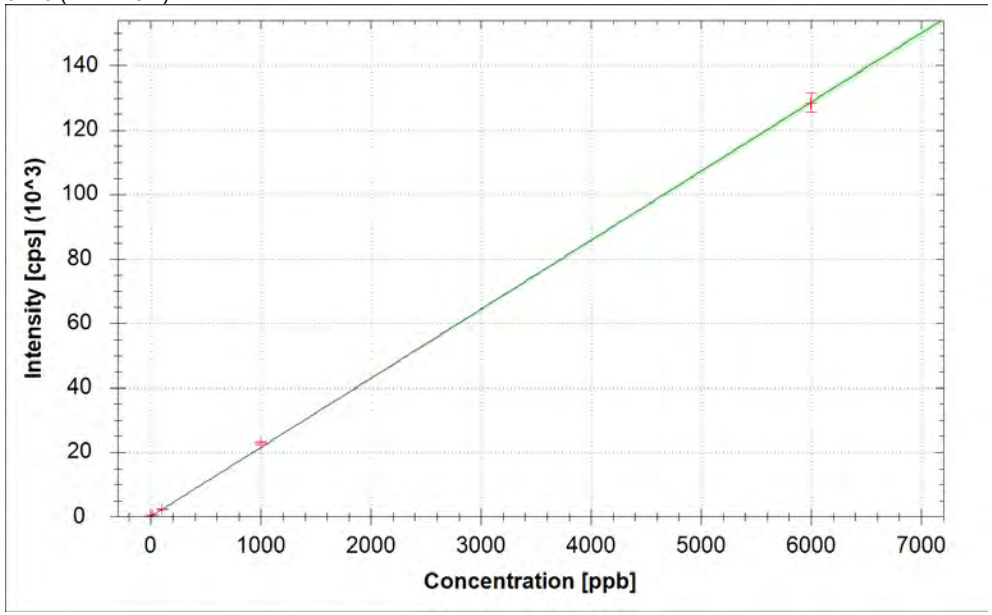
f(x) = 924.8543*x + 202.6089
R² = 1.0000
BEC = 0.219 ppb
LoD = 0.0433 ppb

55Mn (KED AGD)



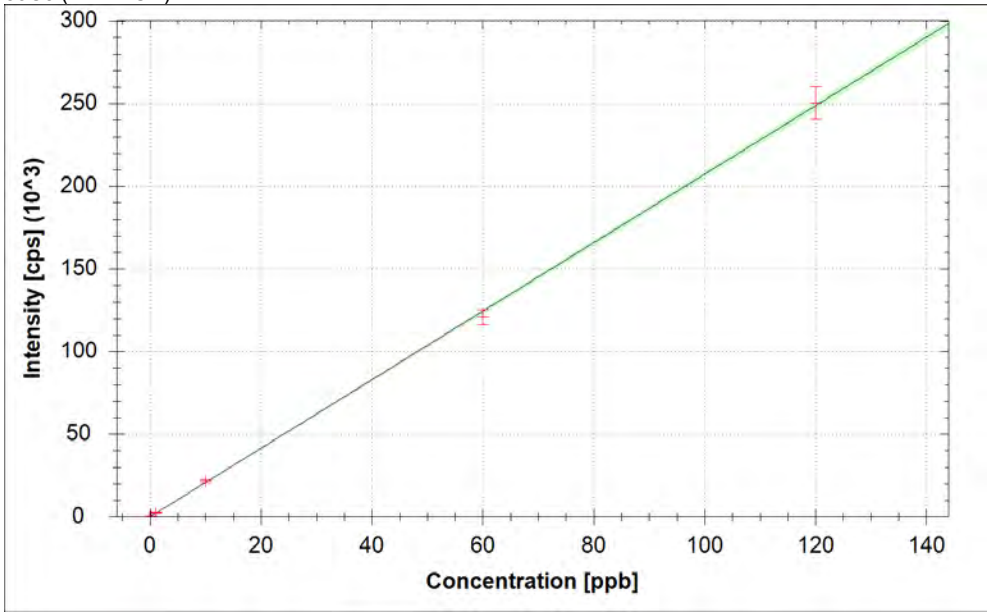
f(x) = 402.2037*x + 74.6918
R² = 1.0000
BEC = 0.186 ppb
LoD = 0.3045 ppb

57Fe (KED AGD)



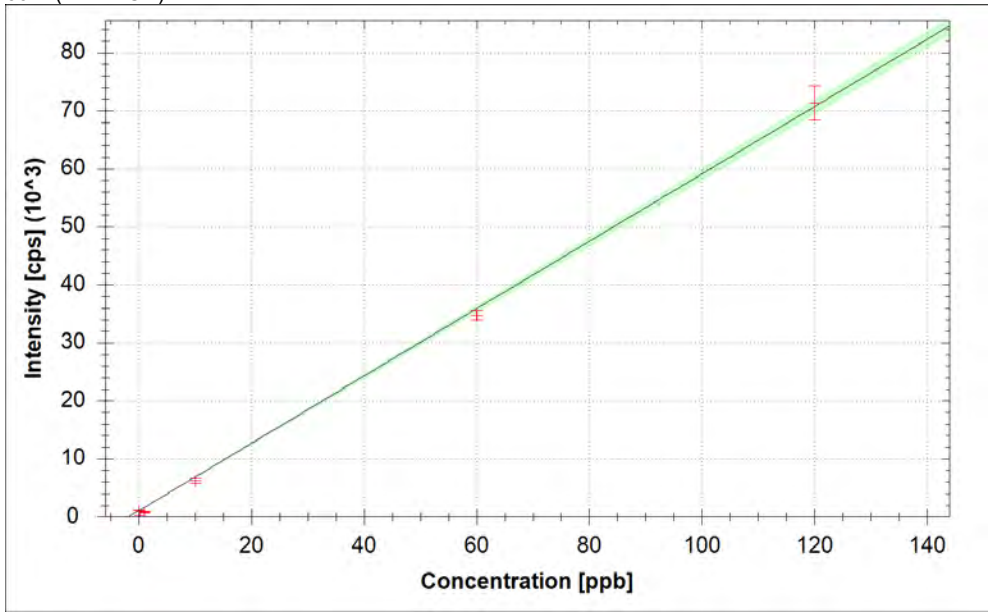
f(x) = 21.4226*x + 101.6325
R² = 0.9999
BEC = 4.744 ppb
LoD = 2.5881 ppb

59Co (KED AGD)



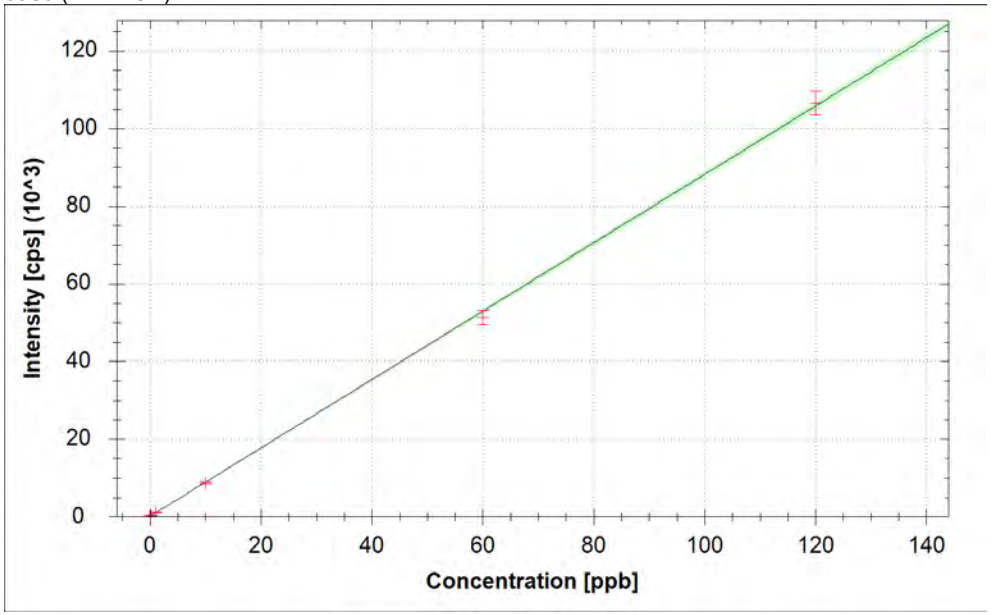
f(x) = 2071.6852*x + 13.0666
R² = 0.9997
BEC = 0.006 ppb
LoD = 0.0191 ppb

60Ni (KED AGD)



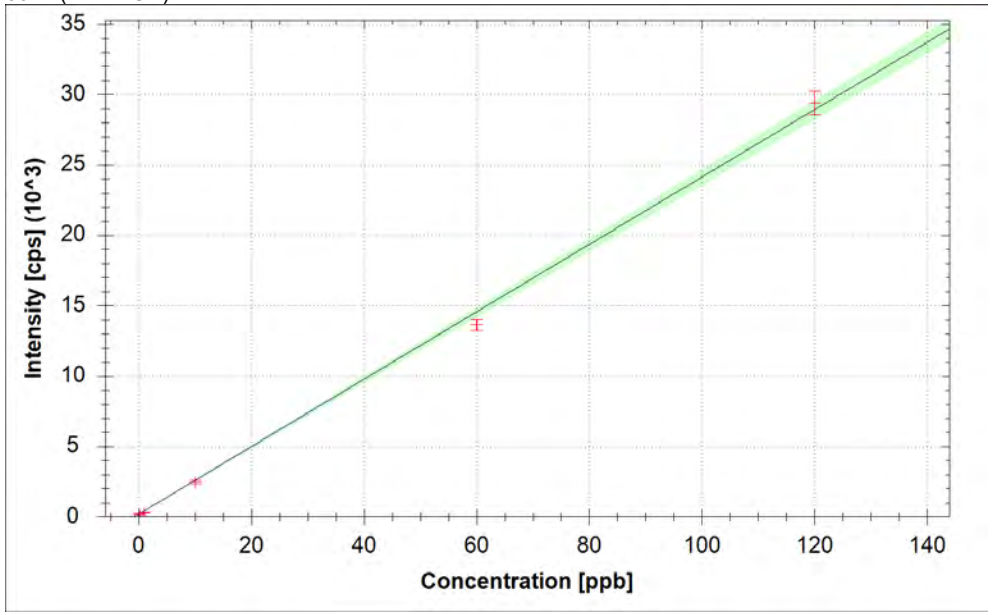
f(x) = 580.3269*x + 1049.2697
R² = 0.9990
BEC = 1.808 ppb
LoD = 0.4343 ppb

65Cu (KED AGD)



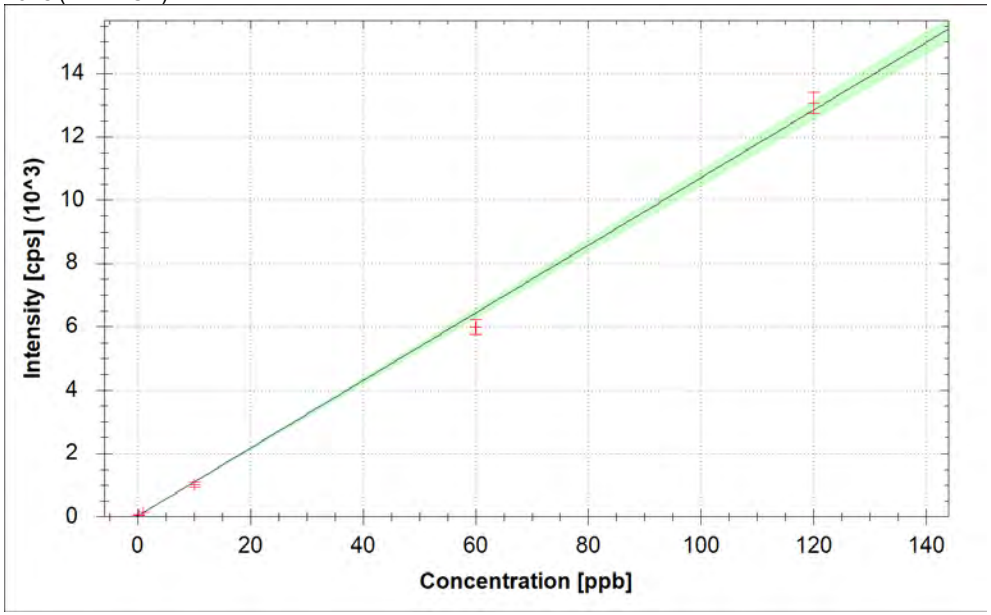
f(x) = 880.2671*x + 118.9946
R² = 0.9997
BEC = 0.135 ppb
LoD = 0.1911 ppb

66Zn (KED AGD)



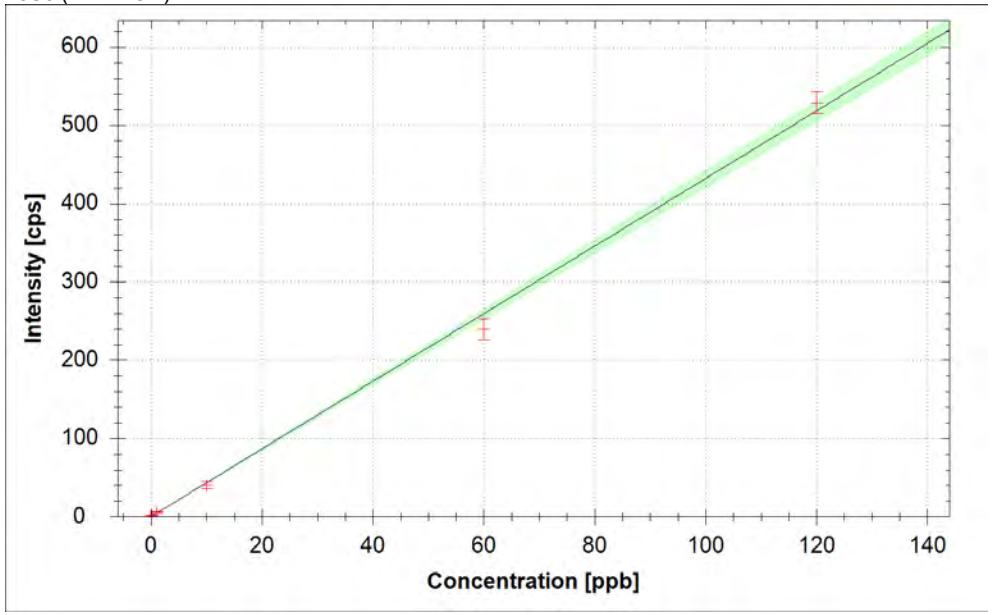
f(x) = 239.2791*x + 200.5034
R² = 0.9983
BEC = 0.838 ppb
LoD = 0.3681 ppb

75As (KED AGD)



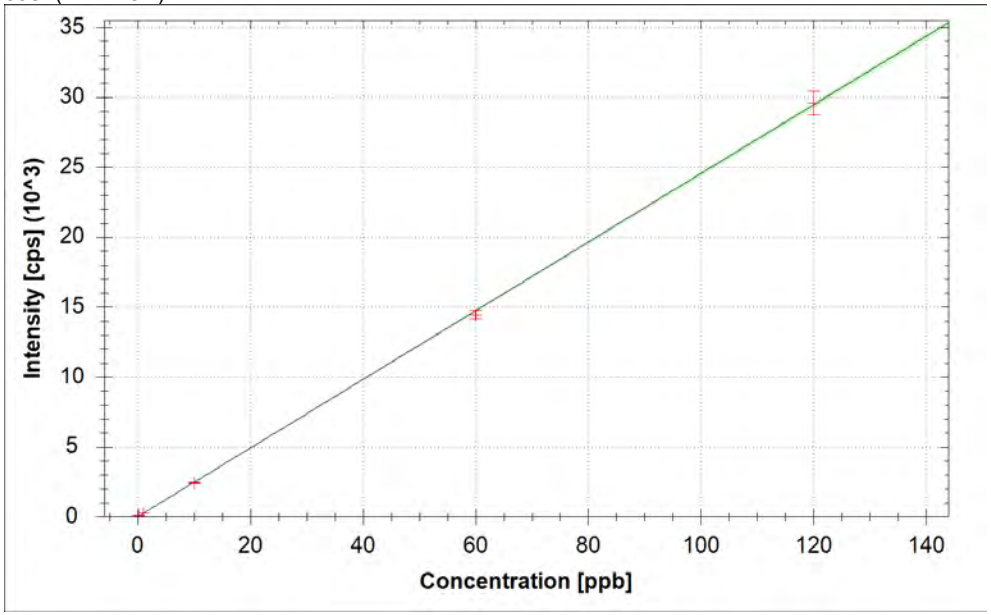
f(x) = 106.7135*x + 30.2392
R² = 0.9981
BEC = 0.283 ppb
LoD = 0.0653 ppb

78Se (KED AGD)



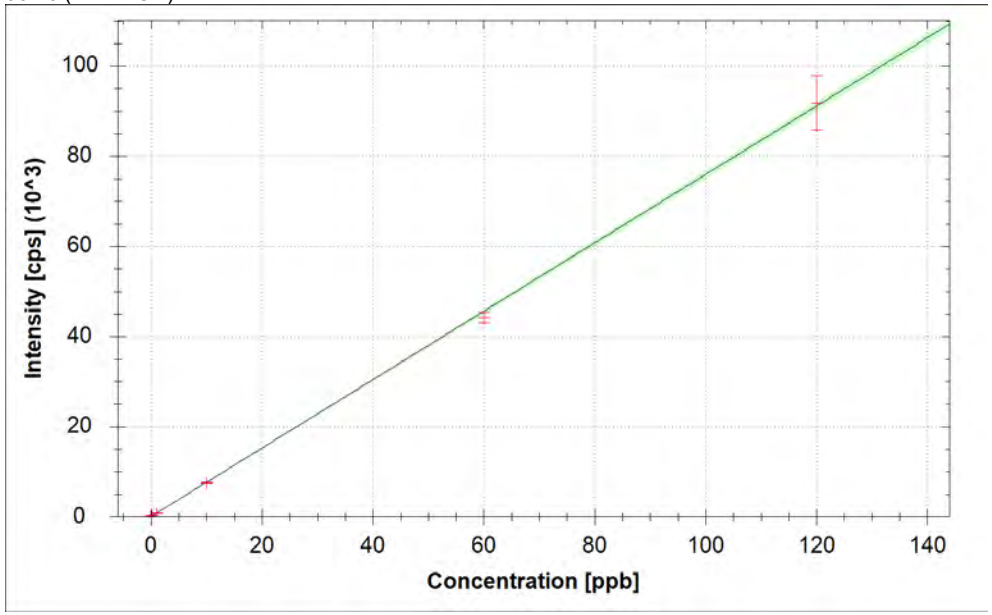
f(x) = 4.3161*x + 0.3194
R² = 0.9978
BEC = 0.074 ppb
LoD = 0.3245 ppb

88Sr (KED AGD)



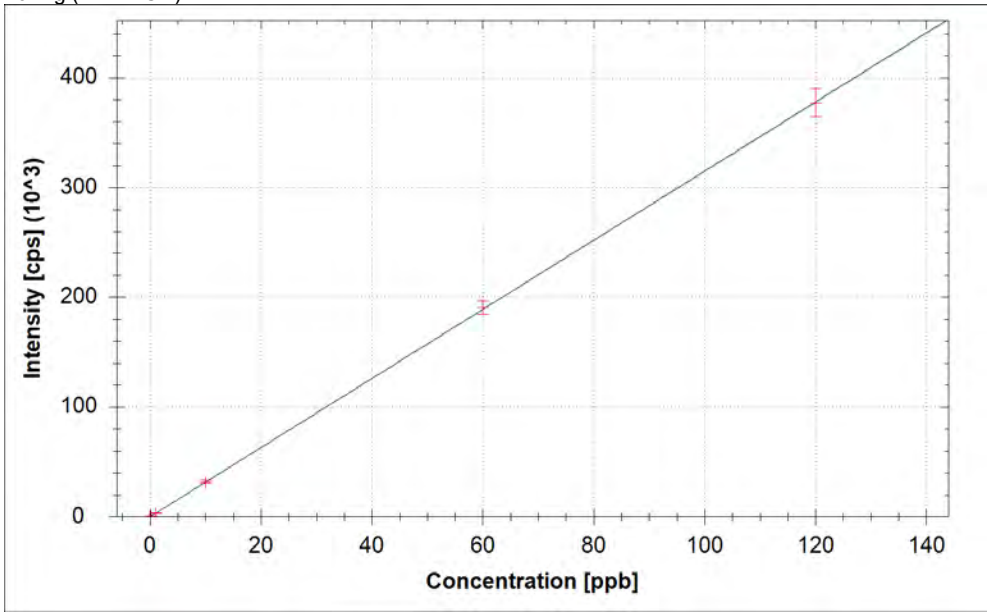
f(x) = 245.3233*x + 14.5966
R² = 0.9999
BEC = 0.059 ppb
LoD = 0.0068 ppb

95Mo (KED AGD)



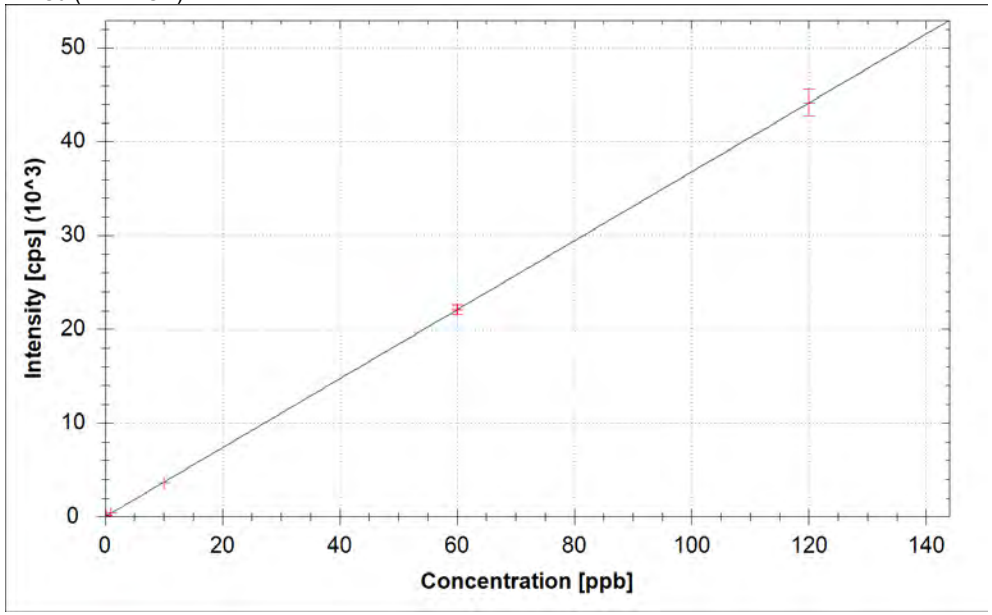
f(x) = 758.6228*x + 67.4780
R² = 0.9996
BEC = 0.089 ppb
LoD = 0.1255 ppb

107Ag (KED AGD)



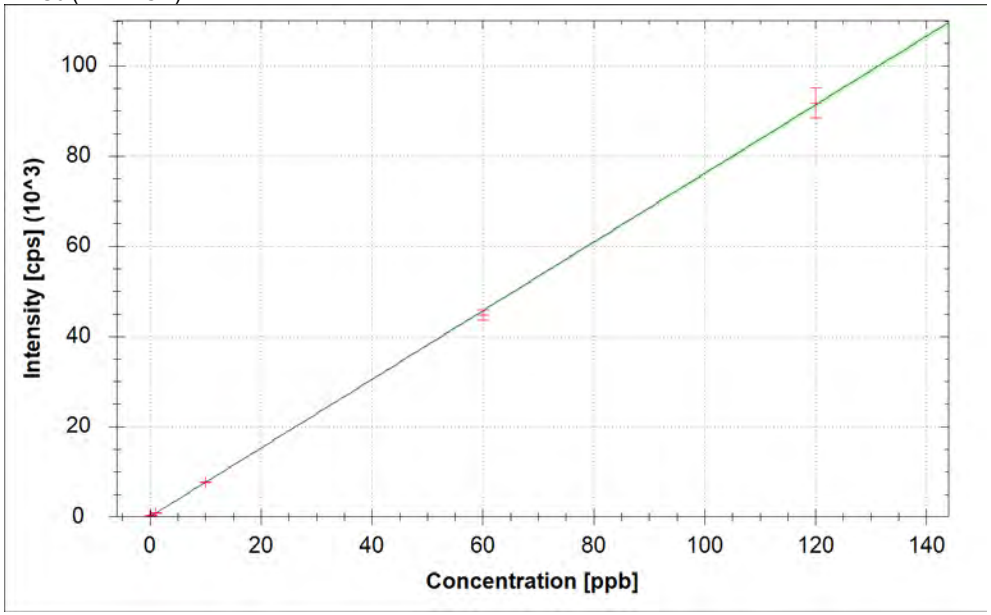
f(x) = 3147.3896*x + 26.6165
R² = 1.0000
BEC = 0.008 ppb
LoD = 0.0020 ppb

111Cd (KED AGD)



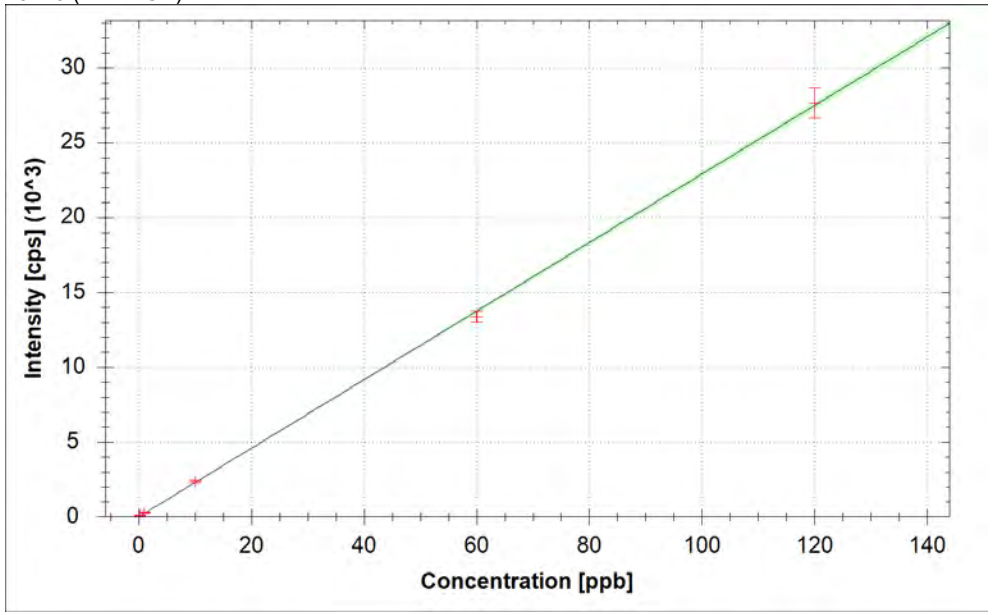
f(x) = 367.7090*x
R² = 1.0000
BEC = 0.000 ppb
LoD = 0.0000 ppb

121Sb (KED AGD)



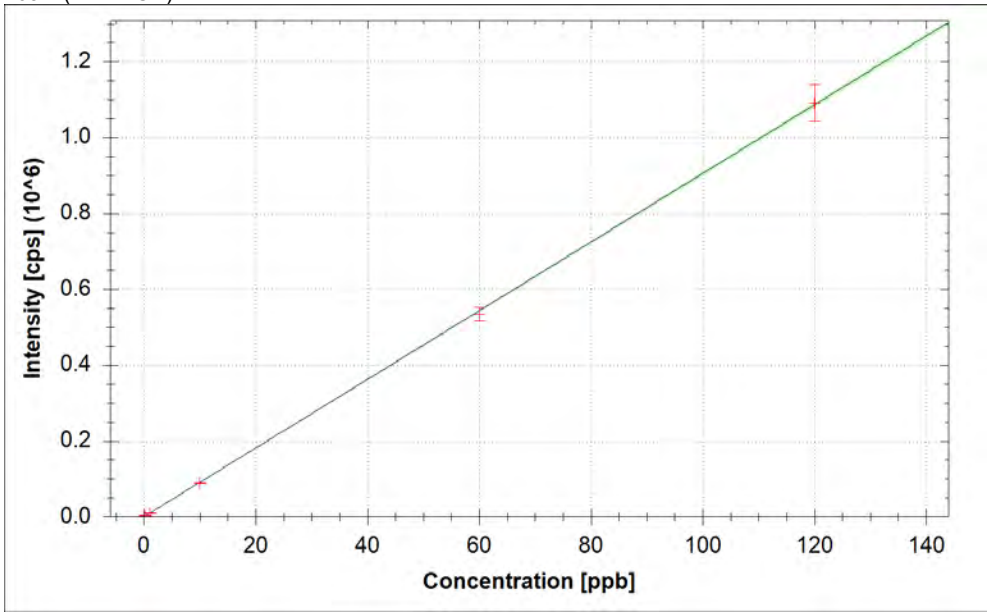
f(x) = 760.6175*x + 19.4937
R² = 0.9999
BEC = 0.026 ppb
LoD = 0.0264 ppb

137Ba (KED AGD)



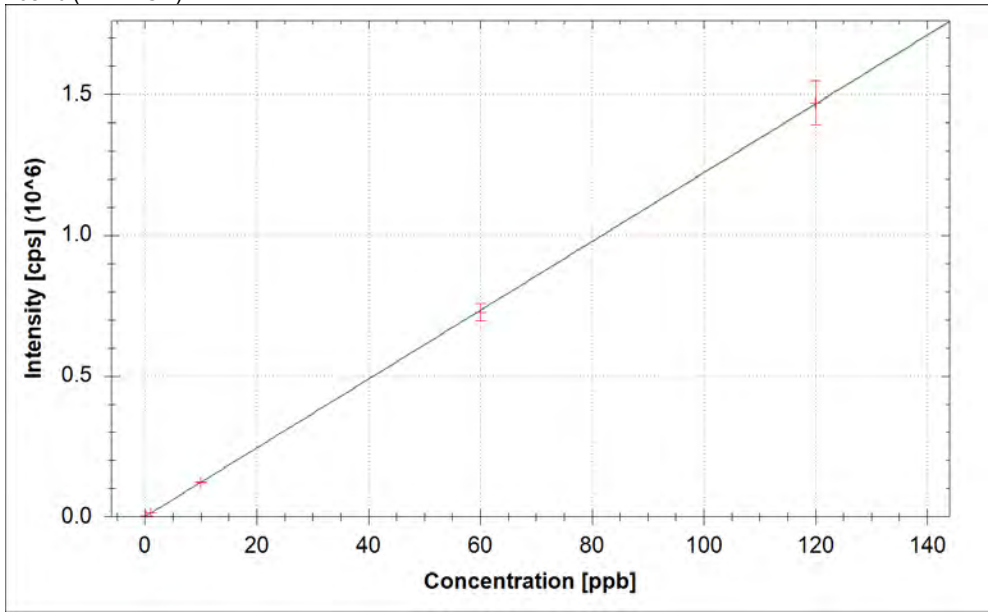
f(x) = 228.9826*x + 2.2049
R² = 0.9997
BEC = 0.010 ppb
LoD = 0.0251 ppb

205Tl (KED AGD)



f(x) = 9050.7602*x + 300.6795
R² = 0.9999
BEC = 0.033 ppb
LoD = 0.0459 ppb

208Pb (KED AGD)



f(x) = 12215.8504*x + 131.0963
R² = 1.0000
BEC = 0.011 ppb
LoD = 0.0044 ppb

Alpha ICPMSQ2 Data with SRD

12/4/2024 6:25:58 AM

Analysis index: 1
Analysis label: Rinse
Analysis started at: 12/3/2024 4:34:10 PM
User name ALPHALAB\a2-icpmsq2
Rack 0
Vial 1
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	100.339 %	101.168 %	0.051 ppb	34.297 ppb	4.420 ppb	8.390 ppb	-3.783 ppb	11.121 ppb	99.586 %
Concentration per Run 1	99.207 %	102.784 %	0.033 ppb	7.661 ppb	4.077 ppb	8.090 ppb	-4.522 ppb	-0.269 ppb	100.684 %
Concentration per Run 2	100.599 %	102.515 %	0.026 ppb	41.238 ppb	4.838 ppb	8.646 ppb	-13.252 ppb	11.149 ppb	101.623 %
Concentration per Run 3	101.210 %	98.204 %	0.094 ppb	53.992 ppb	4.346 ppb	8.433 ppb	6.425 ppb	22.482 ppb	96.452 %
Concentration RSD	1.0 %	2.5 %	74.0 %	69.8 %	8.7 %	3.3 %	260.6 %	102.3 %	2.8 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	98.147 %	0.072 ppb	0.109 ppb	0.341 ppb	59.429 ppb	0.013 ppb	1.009 ppb	0.390 ppb	1.506 ppb
Concentration per Run 1	101.316 %	0.070 ppb	0.110 ppb	0.447 ppb	63.112 ppb	0.006 ppb	0.870 ppb	0.350 ppb	1.375 ppb
Concentration per Run 2	96.065 %	0.115 ppb	0.116 ppb	0.445 ppb	59.379 ppb	0.010 ppb	0.773 ppb	0.372 ppb	1.692 ppb
Concentration per Run 3	97.061 %	0.030 ppb	0.103 ppb	0.131 ppb	55.795 ppb	0.023 ppb	1.385 ppb	0.447 ppb	1.452 ppb
Concentration RSD	2.8 %	59.8 %	6.0 %	53.2 %	6.2 %	65.7 %	32.6 %	13.0 %	11.0 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	102.273 %	-0.022 ppb	0.102 ppb	0.012 ppb	0.123 ppb	102.719 %	0.026 ppb	0.001 ppb	105.206 %
Concentration per Run 1	103.642 %	-0.013 ppb	0.061 ppb	0.021 ppb	0.067 ppb	108.147 %	0.027 ppb	0.000 ppb	109.422 %
Concentration per Run 2	99.664 %	-0.072 ppb	0.116 ppb	0.002 ppb	0.098 ppb	98.700 %	0.023 ppb	0.000 ppb	100.929 %
Concentration per Run 3	103.512 %	0.019 ppb	0.128 ppb	0.014 ppb	0.204 ppb	101.310 %	0.028 ppb	0.003 ppb	105.269 %
Concentration RSD	2.2 %	209.8 %	35.3 %	79.4 %	58.5 %	4.7 %	8.4 %	173.2 %	4.0 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.044 ppb	0.037 ppb	101.720 %	101.395 %	0.044 ppb	0.084 ppb	102.835 %
Concentration per Run 1	0.024 ppb	0.057 ppb	108.876 %	108.206 %	0.018 ppb	0.080 ppb	106.003 %
Concentration per Run 2	0.065 ppb	0.005 ppb	98.183 %	96.246 %	0.055 ppb	0.084 ppb	101.707 %
Concentration per Run 3	0.043 ppb	0.048 ppb	98.102 %	99.734 %	0.059 ppb	0.089 ppb	100.793 %
Concentration RSD	46.4 %	75.9 %	6.1 %	6.1 %	51.8 %	5.4 %	2.7 %

Alpha ICPMSQ2 Data with SRD

12/4/2024 6:25:58 AM

Analysis index:	2	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	zCAL LOT #M23-1225	Rack	0		
Analysis started at:	12/3/2024 4:38:36 PM	Vial	1		

Alpha ICPMSQ2 Seq

12/4/2024 6:26:17 AM

Sample List Summary:

Instrument ID: iCAP Q

Index:	Label:	Rack	Vial	Main Runs:	Survey Runs:	Start Time:
1	Rinse	0	1	3	1	12/3/2024 4:34:10 PM
2	zCAL LOT #M23-1225	0	1	3	1	12/3/2024 4:38:36 PM
3	CAL LOT #M23-1225	0	1	3	1	12/3/2024 4:40:22 PM
4	Blank MRC ICPMSQ2	4	49	3	1	12/3/2024 4:44:47 PM
5	0.2/20 Cal	0	2	3	1	12/3/2024 4:49:18 PM
6	1/100 Cal	0	3	3	1	12/3/2024 4:53:45 PM
7	10/1000 Cal	0	4	3	1	12/3/2024 4:58:13 PM
8	60/6000 Cal	0	5	3	1	12/3/2024 5:02:41 PM
9	120/12000 Cal	0	6	3	1	12/3/2024 5:07:10 PM
10	Sr 200ppb	4	55	3	1	12/3/2024 5:12:19 PM
11	ICV	0	7	3	1	12/3/2024 5:16:50 PM
12	ICB	0	10	3	1	12/3/2024 5:21:20 PM
13	ICSA	4	53	3	1	12/3/2024 5:32:00 PM
14	LDR	4	1	3	1	12/3/2024 5:36:31 PM
15	Rinse	0	1	3	1	12/3/2024 5:41:01 PM
16	CCV	0	9	3	1	12/3/2024 5:45:27 PM
17	CCB	0	10	3	1	12/3/2024 5:49:58 PM
18	WG2001986-2d10 6020TL	1	55	3	1	12/3/2024 5:55:27 PM
19	L2468003-03 6020TL	2	4	3	1	12/3/2024 5:59:53 PM
20	L2468003-04 6020TL	2	5	3	1	12/3/2024 6:04:21 PM
21	L2468003-05 6020TL	2	6	3	1	12/3/2024 6:08:49 PM
22	L2468003-06 6020TL	2	7	3	1	12/3/2024 6:13:16 PM
23	L2468042-01 6020TL	2	8	3	1	12/3/2024 6:17:44 PM
24	L2468042-02 6020TL	2	9	3	1	12/3/2024 6:22:13 PM
25	L2468042-03 6020TL	2	10	3	1	12/3/2024 6:26:41 PM
26	L2468042-04 6020TL	2	11	3	1	12/3/2024 6:31:10 PM
27	L2468042-05 6020TL	2	12	3	1	12/3/2024 6:35:39 PM
28	CCV	0	9	3	1	12/3/2024 6:40:08 PM
29	CCB	0	10	3	1	12/3/2024 6:44:40 PM
30	WG2002010-1 6020SL	2	13	3	1	12/3/2024 7:01:20 PM
31	WG2002010-2d10 6020SL	2	14	3	1	12/3/2024 7:05:47 PM
32	L2467934-05 6020SL	2	15	3	1	12/3/2024 7:10:15 PM
33	WG2002010-3d10 6020SL	2	16	3	1	12/3/2024 7:14:43 PM
34	WG2002010-4d10 6020SL	2	17	3	1	12/3/2024 7:19:11 PM
35	WG2002010-5d10 6020SL	2	18	3	1	12/3/2024 7:23:39 PM
36	WG2002010-6d5 6020SL	2	19	3	1	12/3/2024 7:28:07 PM
37	L2467884-01 6020SL	2	20	3	1	12/3/2024 7:32:35 PM
38	L2467884-02 6020SL	2	21	3	1	12/3/2024 7:37:04 PM
39	L2467906-01 6020SL	2	22	3	1	12/3/2024 7:41:33 PM
40	CCV	0	9	3	1	12/3/2024 7:46:02 PM
41	CCB	0	10	3	1	12/3/2024 7:50:33 PM
42	L2467906-02 6020SL	2	23	3	1	12/3/2024 7:55:05 PM
43	L2467906-03 6020SL	2	24	3	1	12/3/2024 7:59:34 PM
44	L2467906-04 6020SL	2	25	3	1	12/3/2024 8:04:04 PM
45	L2467906-05 6020SL	2	26	3	1	12/3/2024 8:08:32 PM
46	L2467906-06 6020SL	2	27	3	1	12/3/2024 8:13:01 PM
47	L2467934-01 6020SL	2	28	3	1	12/3/2024 8:17:29 PM
48	L2467934-02 6020SL	2	29	3	1	12/3/2024 8:21:58 PM
49	L2467934-03 6020SL	2	30	3	1	12/3/2024 8:26:27 PM
50	L2467934-04 6020SL	2	31	3	1	12/3/2024 8:30:55 PM
51	L2467934-06 6020SL	2	32	3	1	12/3/2024 8:35:24 PM

Alpha ICPMSQ2 Seq

12/4/2024 6:26:17 AM

Index:	Label:	Rack	Vial	Main Runs:	Survey Runs:	Start Time:
52	CCV	0	9	3	1	12/3/2024 8:39:52 PM
53	CCB	0	10	3	1	12/3/2024 8:44:24 PM
54	L2467934-10 6020SL	2	36	3	1	12/3/2024 8:48:56 PM
55	L2467934-07 6020SL	2	33	3	1	12/3/2024 8:53:26 PM
56	L2467934-08 6020SL	2	34	3	1	12/3/2024 8:57:55 PM
57	L2467934-09 6020SL	2	35	3	1	12/3/2024 9:02:24 PM
58	CCV	0	9	3	1	12/3/2024 9:06:54 PM
59	CCB	0	10	3	1	12/3/2024 9:11:25 PM
60	CCV	0	9	3	1	12/3/2024 9:15:58 PM
61	CCB	0	10	3	1	12/3/2024 9:20:29 PM

Alpha ICPMSQ2 Seq

12/3/2024 6:59:17 PM

Sample List Summary:

Instrument ID: iCAP Q

Index:	Label:	Rack	Vial	Main Runs:	Survey Runs:	Start Time:
1	Rinse	0	1	3	1	12/3/2024 6:31:09 AM
2	CAL LOT #M23-1225	0	1	3	1	12/3/2024 6:35:35 AM
3	Blank NTB ICPMSQ2	4	49	3	1	12/3/2024 6:40:01 AM
4	0.2/20 Cal	0	2	3	1	12/3/2024 6:44:33 AM
5	x1/100 Cal	0	3	3	1	12/3/2024 6:49:00 AM
6	10/1000 Cal	0	4	3	1	12/3/2024 6:53:28 AM
7	60/6000 Cal	0	5	3	1	12/3/2024 6:57:56 AM
8	120/12000 Cal	0	6	3	1	12/3/2024 7:02:24 AM
9	1/100 Cal	0	3	3	1	12/3/2024 7:07:58 AM
10	Sr 200ppb	4	55	3	1	12/3/2024 7:13:05 AM
11	ICV	0	7	3	1	12/3/2024 7:17:37 AM
12	ICB	0	10	3	1	12/3/2024 7:22:07 AM
13	ICSA	4	53	3	1	12/3/2024 7:28:46 AM
14	LDR	4	1	3	1	12/3/2024 7:33:17 AM
15	Rinse	0	1	3	1	12/3/2024 7:37:47 AM
16	CCV	0	9	3	1	12/3/2024 7:42:14 AM
17	CCB	0	10	3	1	12/3/2024 7:46:45 AM
18	I2469249-03 6020SL	1	6	3	1	12/3/2024 7:57:42 AM
19	I2469249-06 6020SL	1	1	3	1	12/3/2024 8:02:11 AM
20	WG2003419-7d10 6020SL	1	2	3	1	12/3/2024 8:06:38 AM
21	WG2003419-8d10 6020SL	1	3	3	1	12/3/2024 8:11:05 AM
22	WG2003419-9d10 6020SL	1	4	3	1	12/3/2024 8:15:32 AM
23	WG2003419-10d5 6020SL	1	5	3	1	12/3/2024 8:20:00 AM
24	I2469249-04 6020SL	1	7	3	1	12/3/2024 8:24:28 AM
25	I2469249-07 6020SL	1	8	3	1	12/3/2024 8:28:57 AM
26	CCV	0	9	3	1	12/3/2024 8:33:58 AM
27	CCB	0	10	3	1	12/3/2024 8:38:29 AM
28	WG2003472-1 6020TL	1	9	3	1	12/3/2024 8:50:16 AM
29	WG2003472-2d10 6020TL	1	10	3	1	12/3/2024 8:54:45 AM
30	L2469261-01d10 6020TL	1	11	3	1	12/3/2024 8:59:15 AM
31	WG2003472-3d10 6020TL	1	12	3	1	12/3/2024 9:03:45 AM
32	WG2003472-4d10 6020TL	1	13	3	1	12/3/2024 9:08:15 AM
33	WG2003472-5d10 6020TL	1	14	3	1	12/3/2024 9:12:41 AM
34	WG2003472-6d50 6020TL	1	15	3	1	12/3/2024 9:17:08 AM
35	L2469261-02d10 6020TL	1	16	3	1	12/3/2024 9:21:35 AM
36	L2469261-03d10 6020TL	1	17	3	1	12/3/2024 9:26:02 AM
37	L2469261-04d10 6020TL	1	18	3	1	12/3/2024 9:30:29 AM
38	xCCV	0	9	3	1	12/3/2024 9:34:57 AM
39	xCCB	0	10	3	1	12/3/2024 9:39:28 AM
40	CCV	0	9	3	1	12/3/2024 9:44:34 AM
41	CCB	0	10	3	1	12/3/2024 9:49:04 AM
42	L2469261-05 6020TL	1	19	3	1	12/3/2024 9:54:58 AM
43	L2469261-06 6020TL	1	20	3	1	12/3/2024 9:59:26 AM
44	L2469261-07 6020TL	1	21	3	1	12/3/2024 10:03:54 AM
45	L2469261-08 6020TL	1	22	3	1	12/3/2024 10:08:23 AM
46	L2469261-09 6020TL	1	23	3	1	12/3/2024 10:12:52 AM
47	L2469261-10 6020TL	1	24	3	1	12/3/2024 10:17:21 AM
48	L2469261-11 6020TL	1	25	3	1	12/3/2024 10:21:50 AM
49	L2469261-12 6020TL	1	26	3	1	12/3/2024 10:26:17 AM
50	L2469261-13 6020TL	1	27	3	1	12/3/2024 10:30:43 AM
51	L2469261-14 6020TL	1	28	3	1	12/3/2024 10:35:10 AM

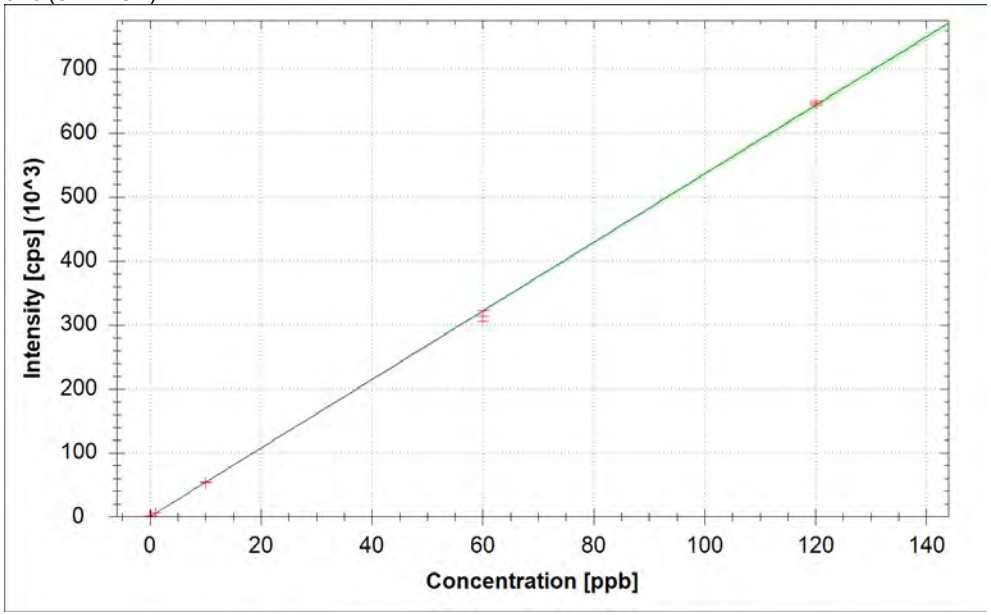
Alpha ICPMSQ2 Seq

12/3/2024 6:59:17 PM

Index:	Label:	Rack	Vial	Main Runs:	Survey Runs:	Start Time:
52	CCV	0	9	3	1	12/3/2024 10:39:37 AM
53	CCB	0	10	3	1	12/3/2024 10:44:08 AM
54	CCV	0	9	3	1	12/3/2024 11:00:44 AM
55	CCB	0	10	3	1	12/3/2024 11:05:15 AM
56	WG2003775-1 6020TL	1	29	3	1	12/3/2024 11:11:12 AM
57	WG2003775-2d10 6020TL	1	30	3	1	12/3/2024 11:15:40 AM
58	L2469249-06 6020TL	1	31	3	1	12/3/2024 11:20:08 AM
59	WG2003775-3d10 6020TL	1	32	3	1	12/3/2024 11:24:36 AM
60	WG2003775-4d10 6020TL	1	33	3	1	12/3/2024 11:29:04 AM
61	WG2003775-5d10 6020TL	1	34	3	1	12/3/2024 11:33:33 AM
62	WG2003775-6d5 6020TL	1	35	3	1	12/3/2024 11:38:01 AM
63	L2469188-01 6020TL	1	36	3	1	12/3/2024 11:42:31 AM
64	L2469188-02 6020TL	1	37	3	1	12/3/2024 11:47:00 AM
65	L2469188-03 6020TL	1	38	3	1	12/3/2024 11:51:27 AM
66	CCV	0	9	3	1	12/3/2024 11:55:54 AM
67	CCB	0	10	3	1	12/3/2024 12:00:26 PM
68	CCV	0	9	3	1	12/3/2024 12:35:53 PM
69	CCB	0	10	3	1	12/3/2024 12:42:03 PM
70	L2469188-04d5 6020TL	1	39	3	1	12/3/2024 12:47:59 PM
71	L2469188-05d5 6020TL	1	40	3	1	12/3/2024 12:52:26 PM
72	L2469188-06d5 6020TL	1	41	3	1	12/3/2024 12:56:53 PM
73	WG2004404-1 MCP-6020SL-10	1	42	3	1	12/3/2024 1:06:43 PM
74	WG2004404-2d10 MCP-6020SL-10	1	43	3	1	12/3/2024 1:11:12 PM
75	WG2004404-3d10 MCP-6020SL-10	1	44	3	1	12/3/2024 1:15:40 PM
76	L2469119-01 MCP-6020SL-10	1	45	3	1	12/3/2024 1:20:09 PM
77	CCV	0	9	3	1	12/3/2024 1:30:45 PM
78	CCB	0	10	3	1	12/3/2024 1:35:17 PM
79	CCB	0	10	3	1	12/3/2024 1:45:22 PM
80	WG2004404-2d10 MCP-6020SL-10	1	52	3	1	12/3/2024 2:02:11 PM
81	WG2004404-3d10 MCP-6020SL-10	1	53	3	1	12/3/2024 2:06:37 PM
82	L2469297-01d5 MCP-6020SL-10	1	46	3	1	12/3/2024 2:11:05 PM
83	L2469297-02 MCP-6020SL-10	1	47	3	1	12/3/2024 2:15:34 PM
84	L2469297-03 MCP-6020SL-10	1	48	3	1	12/3/2024 2:20:03 PM
85	L2469297-04 MCP-6020SL-10	1	49	3	1	12/3/2024 2:24:33 PM
86	L2469297-05 MCP-6020SL-10	1	50	3	1	12/3/2024 2:29:01 PM
87	L2469297-06 MCP-6020SL-10	1	51	3	1	12/3/2024 2:33:29 PM
88	CCV	0	9	3	1	12/3/2024 2:37:57 PM
89	CCB	0	10	3	1	12/3/2024 2:42:28 PM
90	CCB	0	10	3	1	12/3/2024 2:57:24 PM
91	xWG2001986-1 6020TL	1	54	3	1	12/3/2024 3:08:01 PM
92	xL2467975-08 6020TL	2	1	3	1	12/3/2024 3:12:28 PM
93	xWG2001986-2d10 6020TL	1	55	3	1	12/3/2024 3:24:56 PM
94	xL2467975-04 6020TL	1	56	3	1	12/3/2024 3:29:23 PM
95	xWG2001986-3d10 6020TL	1	57	3	1	12/3/2024 3:33:52 PM
96	xWG2001986-4 6020TL	1	58	3	1	12/3/2024 3:38:21 PM
97	xWG2001986-5d10 6020TL	1	59	3	1	12/3/2024 3:42:50 PM
98	xWG2001986-6d5 6020TL	1	60	3	1	12/3/2024 3:47:20 PM
99	xL2468003-01 6020TL	2	2	3	1	12/3/2024 3:51:50 PM
100	xL2468003-02 6020TL	2	3	3	1	12/3/2024 3:56:18 PM
101	CCV	0	9	3	1	12/3/2024 4:00:46 PM
102	CCB	0	10	3	1	12/3/2024 4:05:18 PM
103	CCV	0	9	3	1	12/3/2024 4:19:57 PM
104	CCB	0	10	3	1	12/3/2024 4:24:28 PM

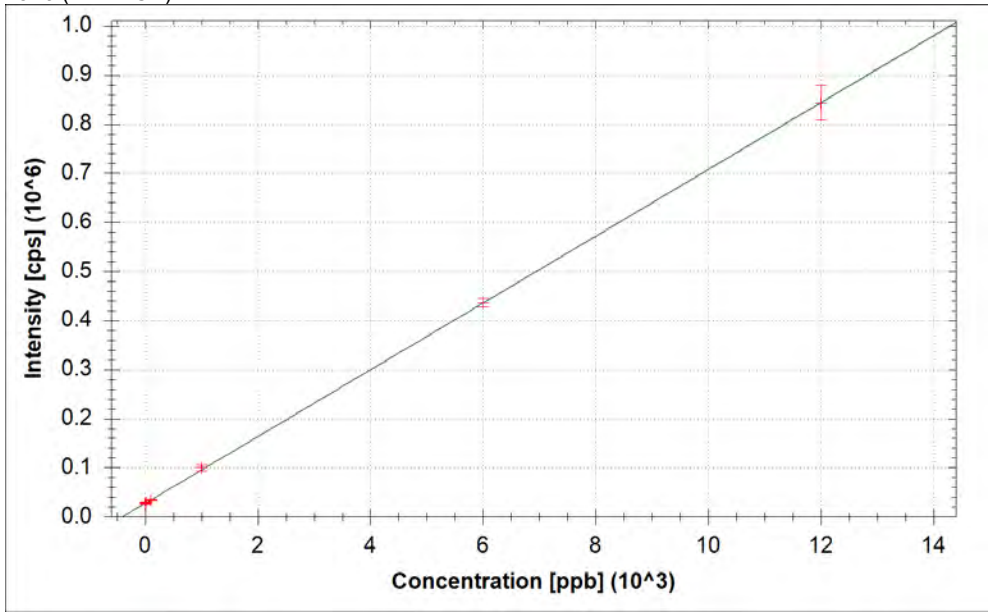
Calibration Curves:

9Be (STD AGD)



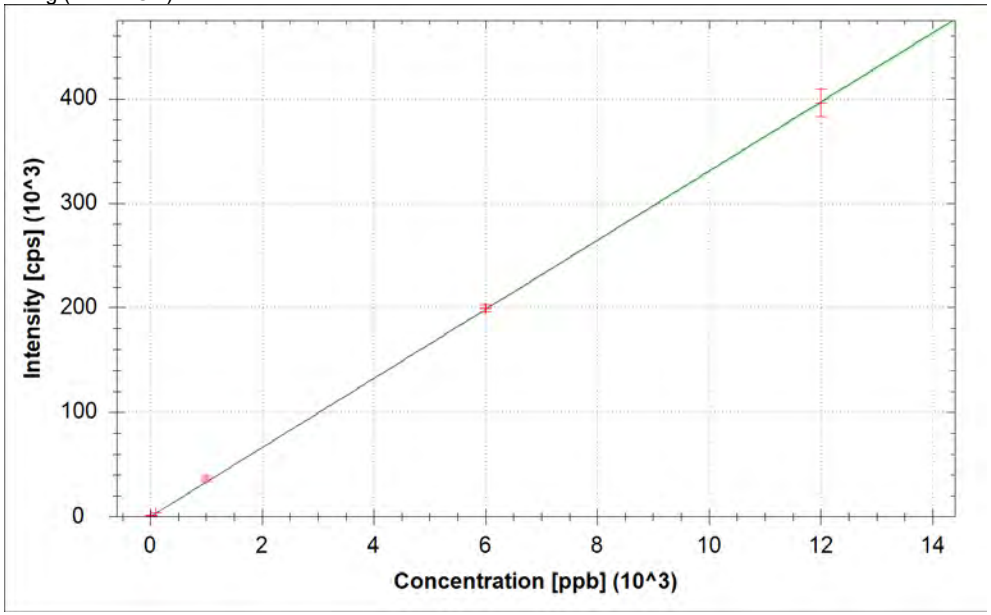
f(x) = 5358.0201*x + 246.3896
R² = 0.9998
BEC = 0.046 ppb
LoD = 0.0215 ppb

23Na (KED AGD)



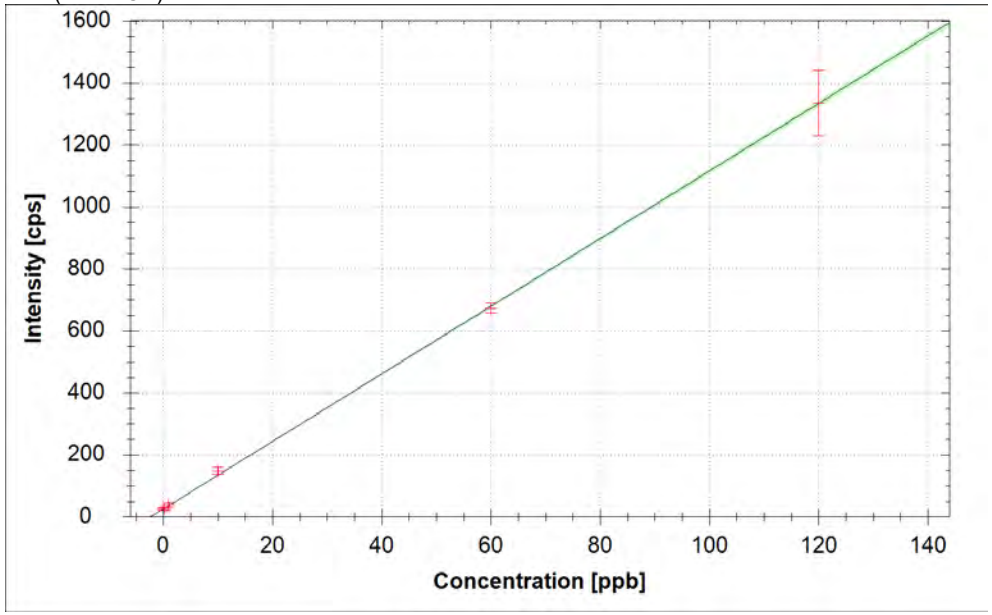
f(x) = 68.0355*x + 27193.9517
R² = 1.0000
BEC = 399.702 ppb
LoD = 75.8702 ppb

24Mg (KED AGD)



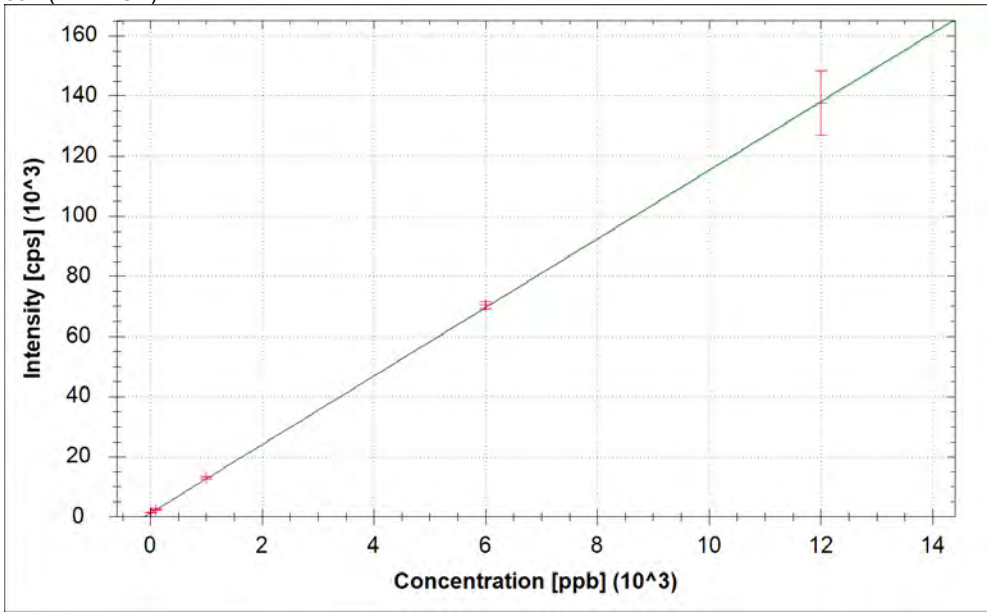
f(x) = 33.0497*x + 61.1301
R² = 0.9999
BEC = 1.850 ppb
LoD = 2.6194 ppb

27Al (KED AGD)



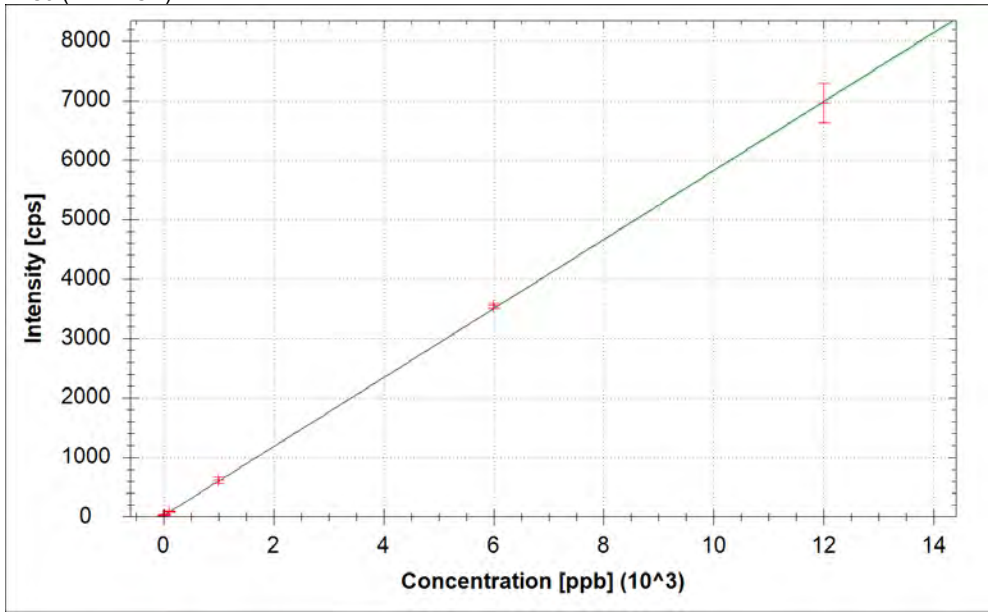
f(x) = 10.9043*x + 24.8638
R² = 0.9998
BEC = 2.280 ppb
LoD = 1.4080 ppb

39K (KED AGD)



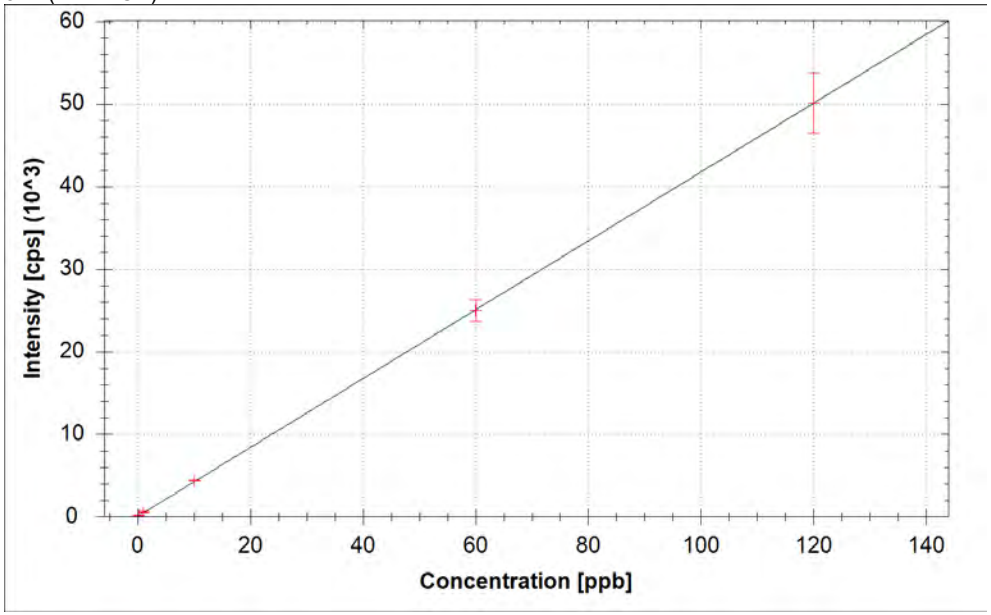
f(x) = 11.4039*x + 1167.7464
R² = 0.9999
BEC = 102.399 ppb
LoD = 6.6148 ppb

44Ca (KED AGD)



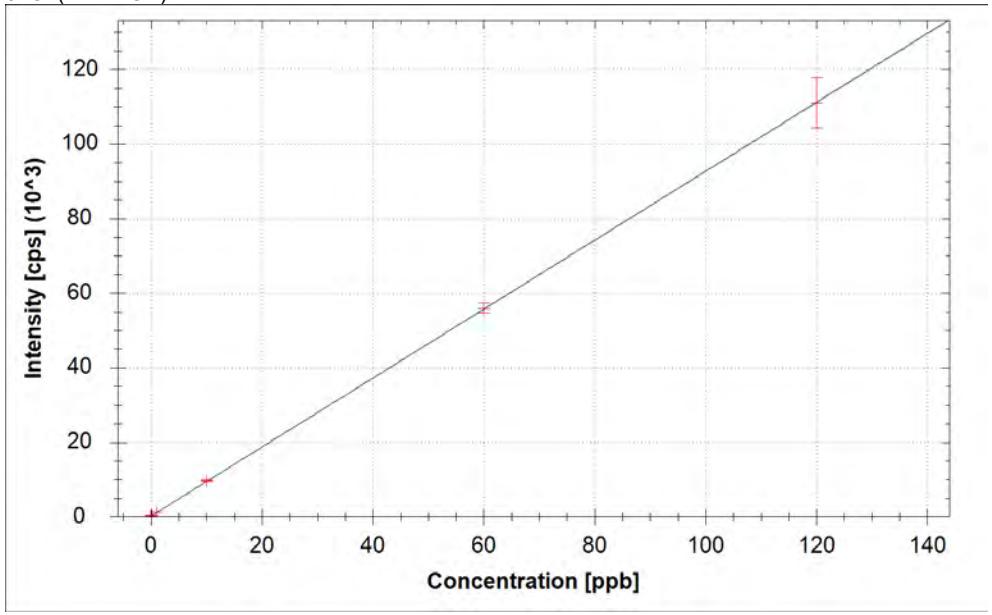
f(x) = 0.5803*x + 18.1578
R² = 0.9999
BEC = 31.290 ppb
LoD = 30.0410 ppb

51V (KED AGD)



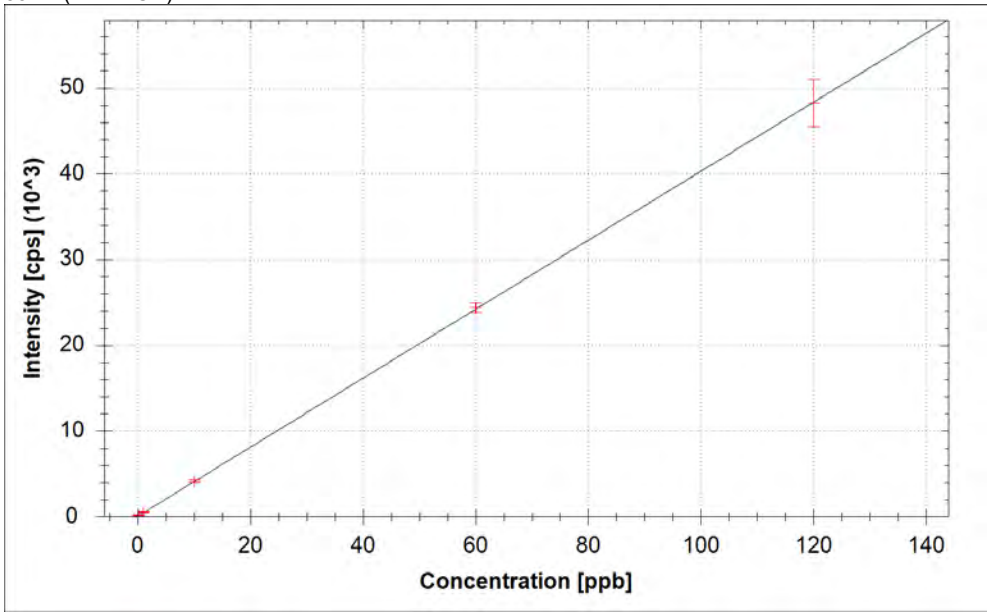
f(x) = 416.8402*x + 68.9380
R² = 1.0000
BEC = 0.165 ppb
LoD = 0.0217 ppb

52Cr (KED AGD)



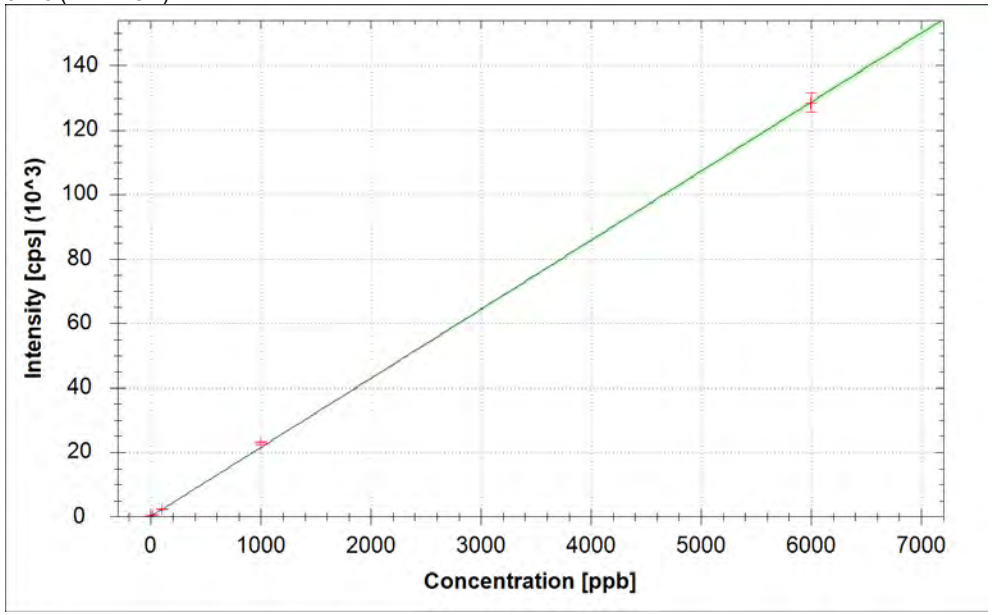
f(x) = 924.8543*x + 202.6089
R² = 1.0000
BEC = 0.219 ppb
LoD = 0.0433 ppb

55Mn (KED AGD)



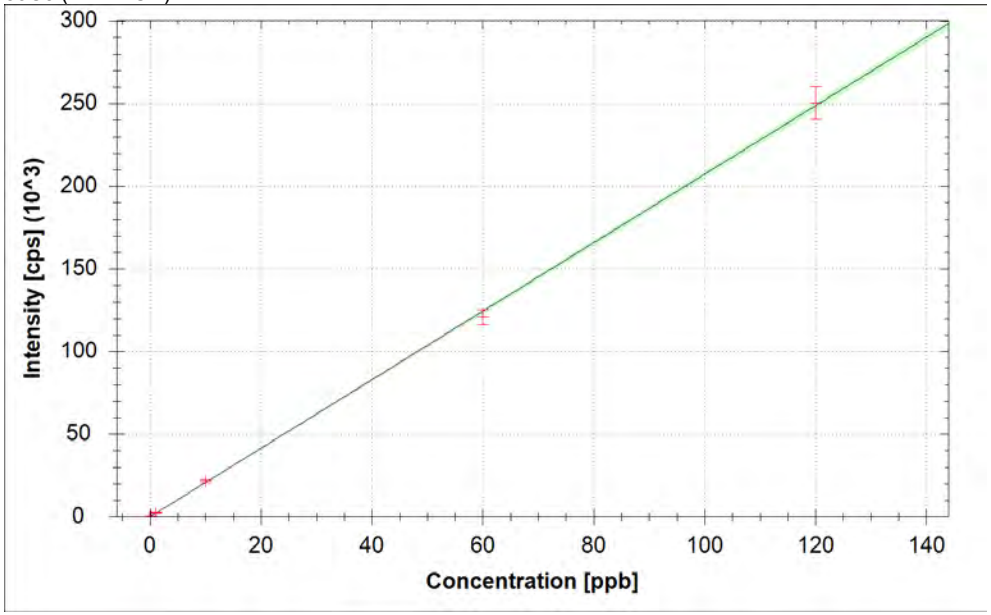
f(x) = 402.2037*x + 74.6918
R² = 1.0000
BEC = 0.186 ppb
LoD = 0.3045 ppb

57Fe (KED AGD)



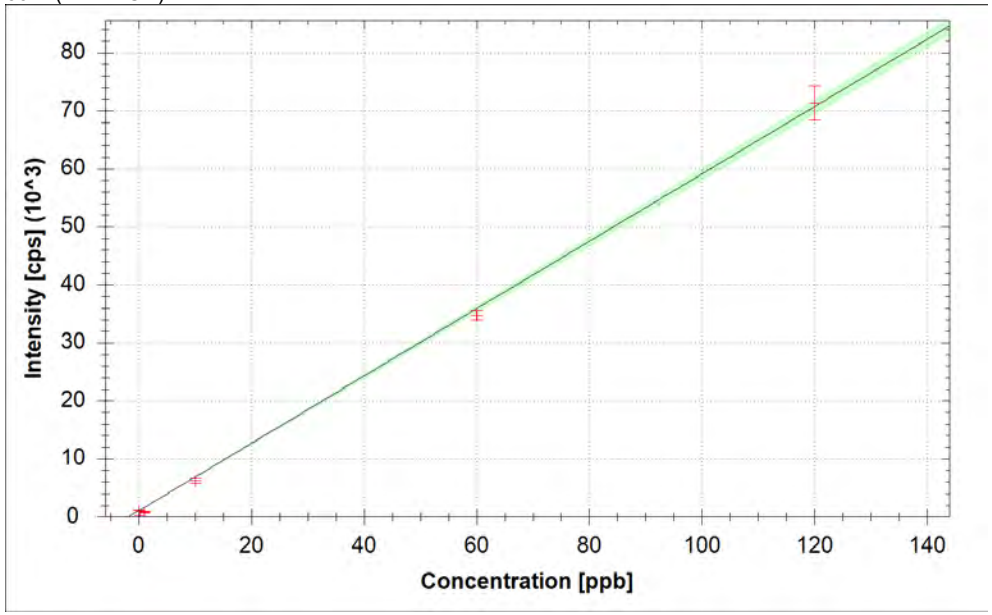
f(x) = 21.4226*x + 101.6325
R² = 0.9999
BEC = 4.744 ppb
LoD = 2.5881 ppb

59Co (KED AGD)



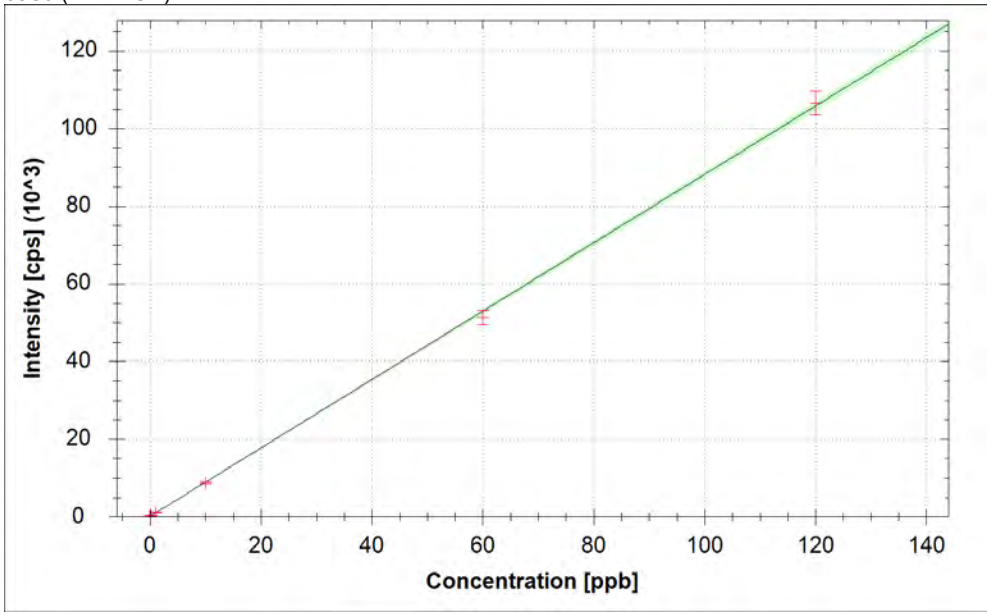
f(x) = 2071.6852*x + 13.0666
R² = 0.9997
BEC = 0.006 ppb
LoD = 0.0191 ppb

60Ni (KED AGD)



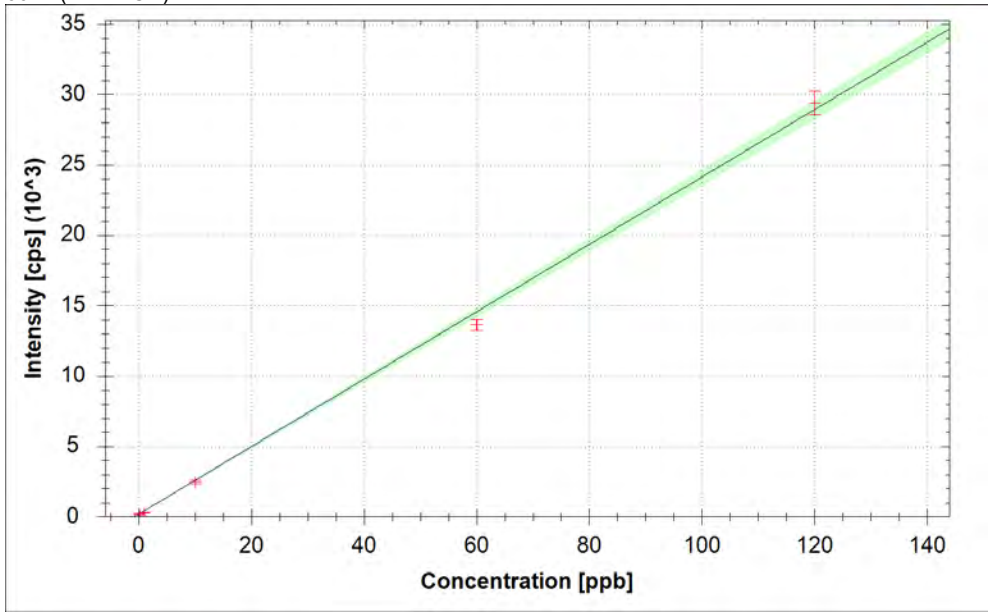
f(x) = 580.3269*x + 1049.2697
R² = 0.9990
BEC = 1.808 ppb
LoD = 0.4343 ppb

65Cu (KED AGD)



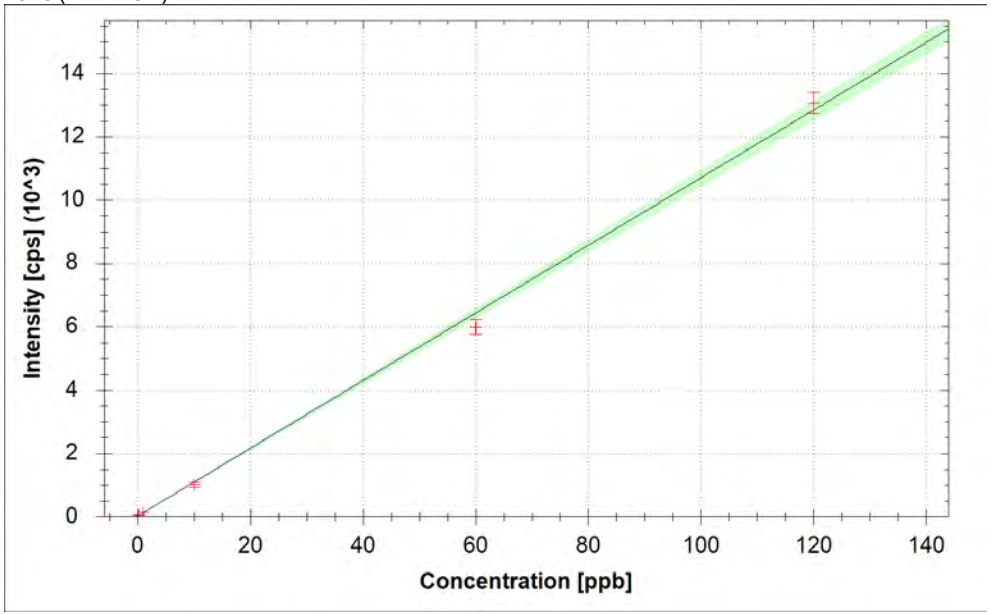
f(x) = 880.2671*x + 118.9946
R² = 0.9997
BEC = 0.135 ppb
LoD = 0.1911 ppb

66Zn (KED AGD)



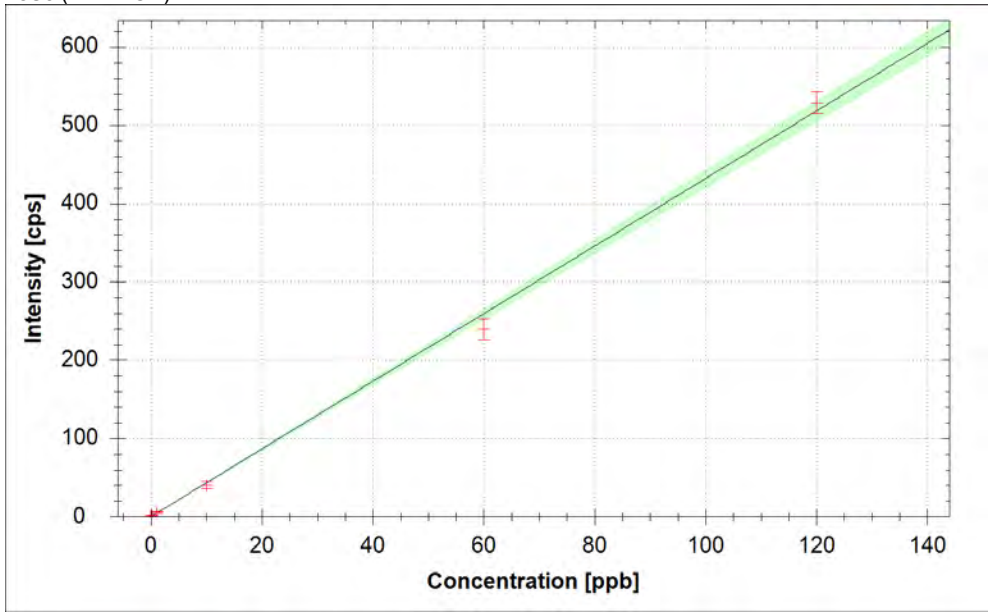
f(x) = 239.2791*x + 200.5034
R² = 0.9983
BEC = 0.838 ppb
LoD = 0.3681 ppb

75As (KED AGD)



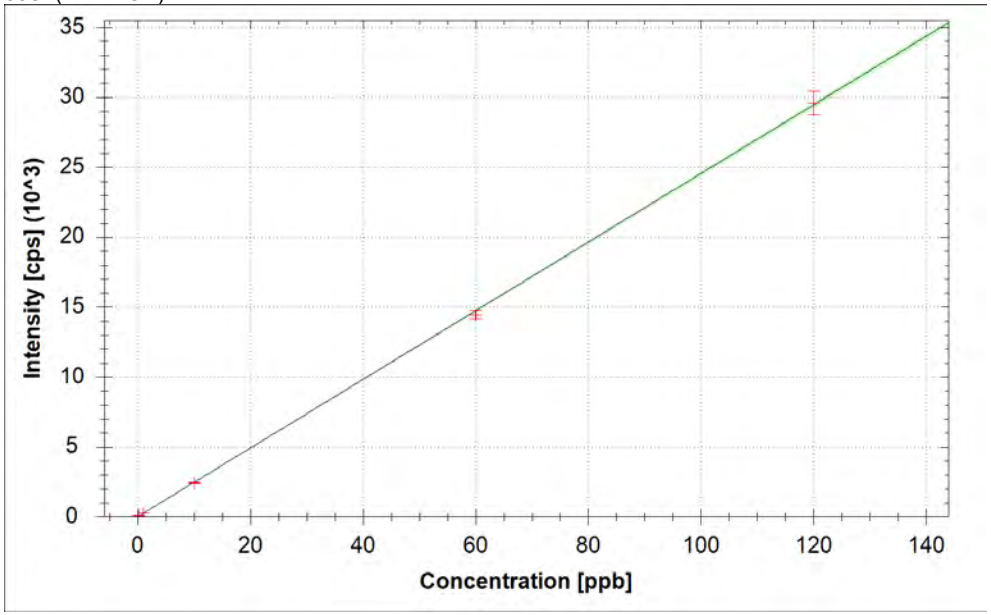
f(x) = 106.7135*x + 30.2392
R² = 0.9981
BEC = 0.283 ppb
LoD = 0.0653 ppb

78Se (KED AGD)



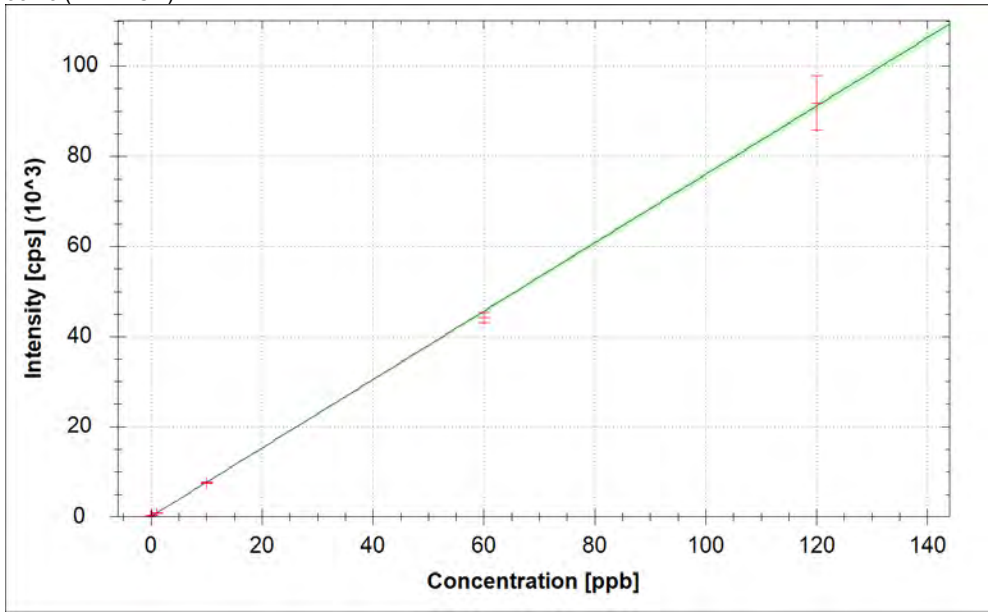
f(x) = 4.3161*x + 0.3194
R² = 0.9978
BEC = 0.074 ppb
LoD = 0.3245 ppb

88Sr (KED AGD)



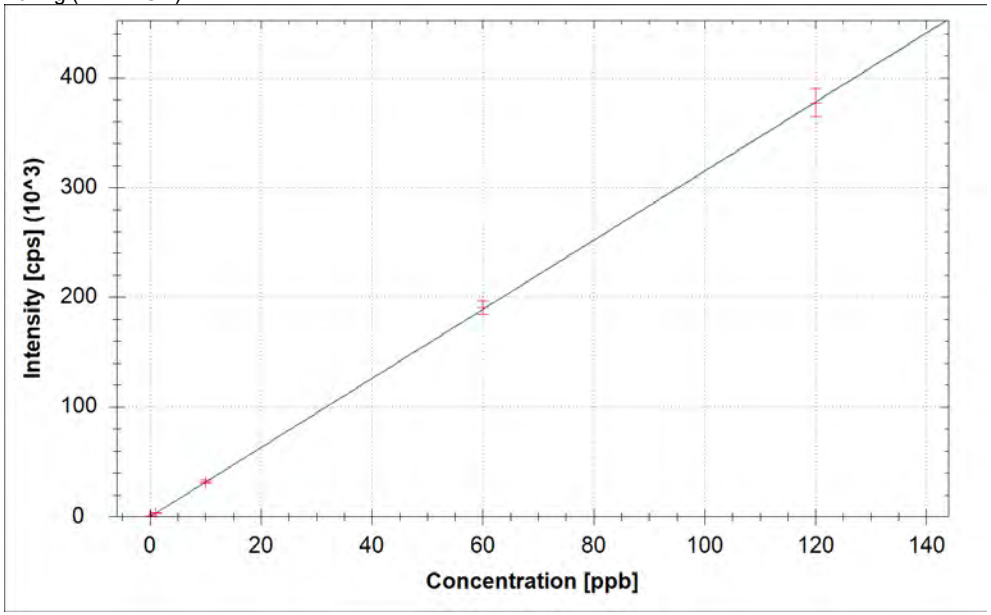
f(x) = 245.3233*x + 14.5966
R² = 0.9999
BEC = 0.059 ppb
LoD = 0.0068 ppb

95Mo (KED AGD)



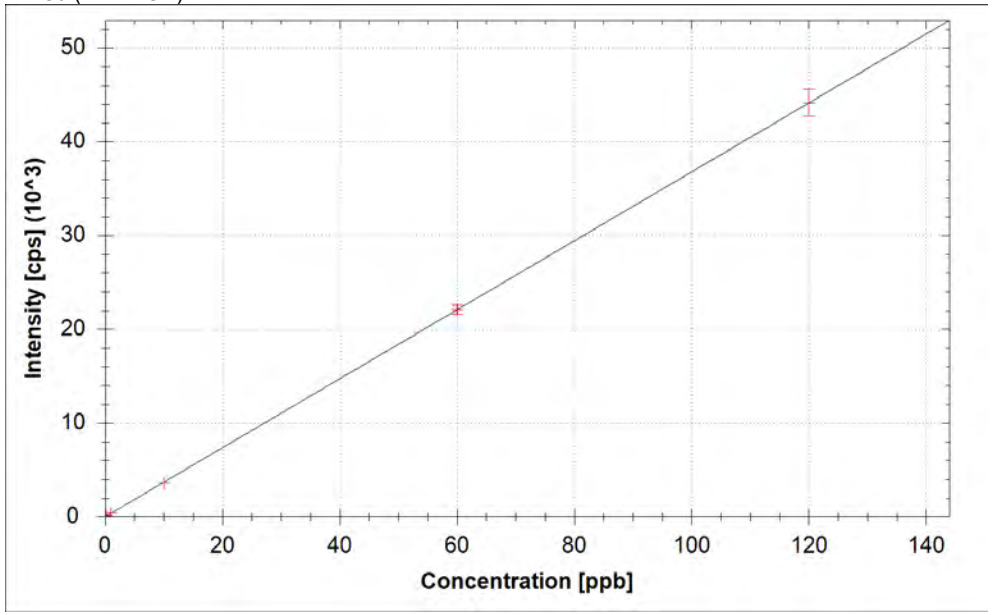
f(x) = 758.6228*x + 67.4780
R² = 0.9996
BEC = 0.089 ppb
LoD = 0.1255 ppb

107Ag (KED AGD)



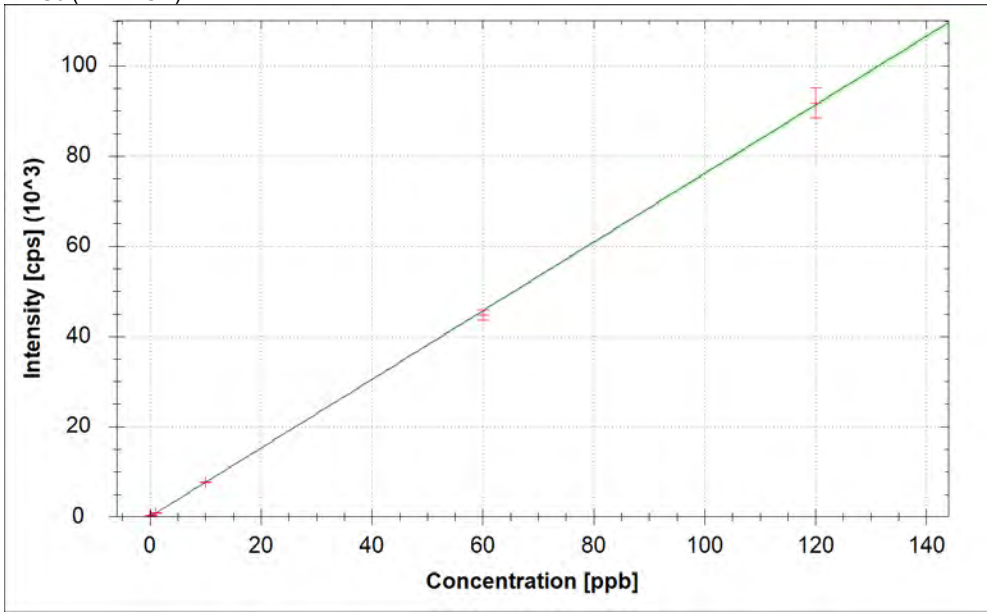
f(x) = 3147.3896*x + 26.6165
R² = 1.0000
BEC = 0.008 ppb
LoD = 0.0020 ppb

111Cd (KED AGD)



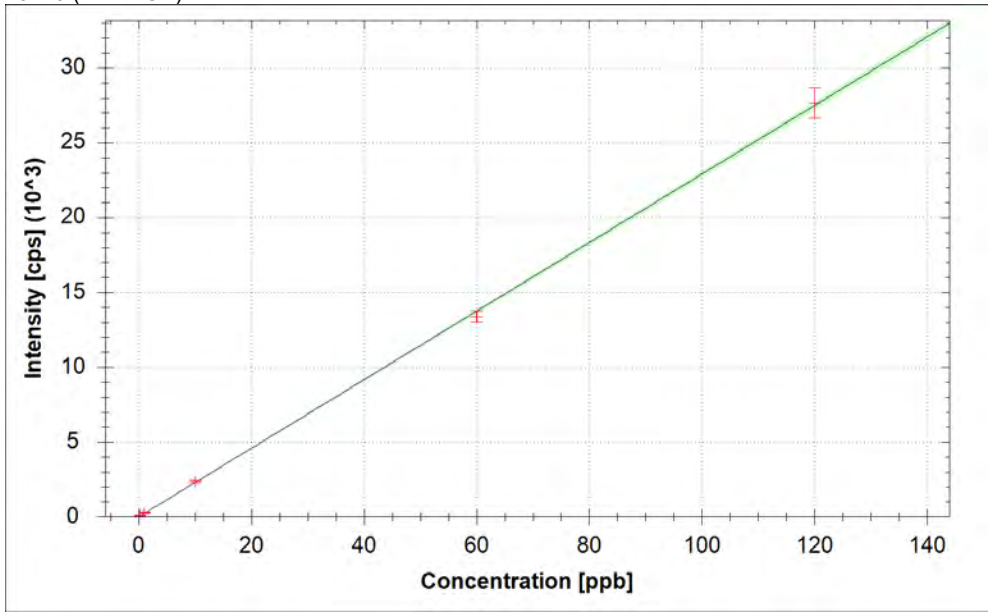
f(x) = 367.7090*x
R² = 1.0000
BEC = 0.000 ppb
LoD = 0.0000 ppb

121Sb (KED AGD)



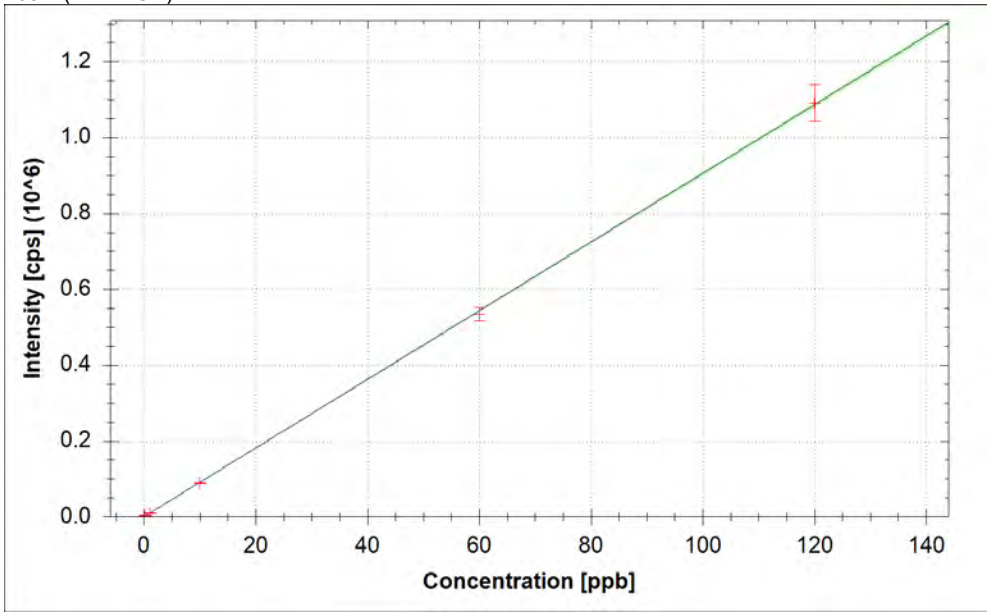
f(x) = 760.6175*x + 19.4937
R² = 0.9999
BEC = 0.026 ppb
LoD = 0.0264 ppb

137Ba (KED AGD)



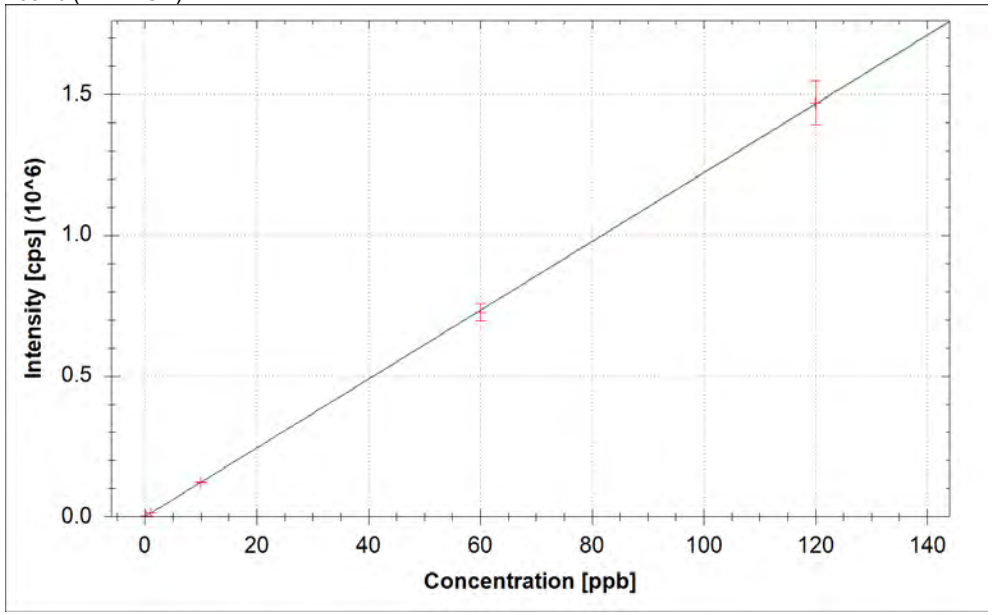
f(x) = 228.9826*x + 2.2049
R² = 0.9997
BEC = 0.010 ppb
LoD = 0.0251 ppb

205Tl (KED AGD)



f(x) = 9050.7602*x + 300.6795
R² = 0.9999
BEC = 0.033 ppb
LoD = 0.0459 ppb

208Pb (KED AGD)



f(x) = 12215.8504*x + 131.0963
R² = 1.0000
BEC = 0.011 ppb
LoD = 0.0044 ppb

Alpha ICPMSQ2 Data with SRD

12/4/2024 6:25:58 AM

Analysis index:	1	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	Rinse	Rack	0		
Analysis started at:	12/3/2024 4:34:10 PM	Vial	1		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	100.339 %	101.168 %	0.051 ppb	34.297 ppb	4.420 ppb	8.390 ppb	-3.783 ppb	11.121 ppb	99.586 %
Concentration per Run 1	99.207 %	102.784 %	0.033 ppb	7.661 ppb	4.077 ppb	8.090 ppb	-4.522 ppb	-0.269 ppb	100.684 %
Concentration per Run 2	100.599 %	102.515 %	0.026 ppb	41.238 ppb	4.838 ppb	8.646 ppb	-13.252 ppb	11.149 ppb	101.623 %
Concentration per Run 3	101.210 %	98.204 %	0.094 ppb	53.992 ppb	4.346 ppb	8.433 ppb	6.425 ppb	22.482 ppb	96.452 %
Concentration RSD	1.0 %	2.5 %	74.0 %	69.8 %	8.7 %	3.3 %	260.6 %	102.3 %	2.8 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	98.147 %	0.072 ppb	0.109 ppb	0.341 ppb	59.429 ppb	0.013 ppb	1.009 ppb	0.390 ppb	1.506 ppb
Concentration per Run 1	101.316 %	0.070 ppb	0.110 ppb	0.447 ppb	63.112 ppb	0.006 ppb	0.870 ppb	0.350 ppb	1.375 ppb
Concentration per Run 2	96.065 %	0.115 ppb	0.116 ppb	0.445 ppb	59.379 ppb	0.010 ppb	0.773 ppb	0.372 ppb	1.692 ppb
Concentration per Run 3	97.061 %	0.030 ppb	0.103 ppb	0.131 ppb	55.795 ppb	0.023 ppb	1.385 ppb	0.447 ppb	1.452 ppb
Concentration RSD	2.8 %	59.8 %	6.0 %	53.2 %	6.2 %	65.7 %	32.6 %	13.0 %	11.0 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	102.273 %	-0.022 ppb	0.102 ppb	0.012 ppb	0.123 ppb	102.719 %	0.026 ppb	0.001 ppb	105.206 %
Concentration per Run 1	103.642 %	-0.013 ppb	0.061 ppb	0.021 ppb	0.067 ppb	108.147 %	0.027 ppb	0.000 ppb	109.422 %
Concentration per Run 2	99.664 %	-0.072 ppb	0.116 ppb	0.002 ppb	0.098 ppb	98.700 %	0.023 ppb	0.000 ppb	100.929 %
Concentration per Run 3	103.512 %	0.019 ppb	0.128 ppb	0.014 ppb	0.204 ppb	101.310 %	0.028 ppb	0.003 ppb	105.269 %
Concentration RSD	2.2 %	209.8 %	35.3 %	79.4 %	58.5 %	4.7 %	8.4 %	173.2 %	4.0 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.044 ppb	0.037 ppb	101.720 %	101.395 %	0.044 ppb	0.084 ppb	102.835 %
Concentration per Run 1	0.024 ppb	0.057 ppb	108.876 %	108.206 %	0.018 ppb	0.080 ppb	106.003 %
Concentration per Run 2	0.065 ppb	0.005 ppb	98.183 %	96.246 %	0.055 ppb	0.084 ppb	101.707 %
Concentration per Run 3	0.043 ppb	0.048 ppb	98.102 %	99.734 %	0.059 ppb	0.089 ppb	100.793 %
Concentration RSD	46.4 %	75.9 %	6.1 %	6.1 %	51.8 %	5.4 %	2.7 %

Alpha ICPMSQ2 Data with SRD

12/4/2024 6:25:58 AM

Analysis index:	2	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	zCAL LOT #M23-1225	Rack	0		
Analysis started at:	12/3/2024 4:38:36 PM	Vial	1		

Alpha ICPMSQ2 Seq

12/4/2024 6:26:17 AM

Sample List Summary:

Instrument ID: iCAP Q

Index:	Label:	Rack	Vial	Main Runs:	Survey Runs:	Start Time:
1	Rinse	0	1	3	1	12/3/2024 4:34:10 PM
2	zCAL LOT #M23-1225	0	1	3	1	12/3/2024 4:38:36 PM
3	CAL LOT #M23-1225	0	1	3	1	12/3/2024 4:40:22 PM
4	Blank MRC ICPMSQ2	4	49	3	1	12/3/2024 4:44:47 PM
5	0.2/20 Cal	0	2	3	1	12/3/2024 4:49:18 PM
6	1/100 Cal	0	3	3	1	12/3/2024 4:53:45 PM
7	10/1000 Cal	0	4	3	1	12/3/2024 4:58:13 PM
8	60/6000 Cal	0	5	3	1	12/3/2024 5:02:41 PM
9	120/12000 Cal	0	6	3	1	12/3/2024 5:07:10 PM
10	Sr 200ppb	4	55	3	1	12/3/2024 5:12:19 PM
11	ICV	0	7	3	1	12/3/2024 5:16:50 PM
12	ICB	0	10	3	1	12/3/2024 5:21:20 PM
13	ICSA	4	53	3	1	12/3/2024 5:32:00 PM
14	LDR	4	1	3	1	12/3/2024 5:36:31 PM
15	Rinse	0	1	3	1	12/3/2024 5:41:01 PM
16	CCV	0	9	3	1	12/3/2024 5:45:27 PM
17	CCB	0	10	3	1	12/3/2024 5:49:58 PM
18	WG2001986-2d10 6020TL	1	55	3	1	12/3/2024 5:55:27 PM
19	L2468003-03 6020TL	2	4	3	1	12/3/2024 5:59:53 PM
20	L2468003-04 6020TL	2	5	3	1	12/3/2024 6:04:21 PM
21	L2468003-05 6020TL	2	6	3	1	12/3/2024 6:08:49 PM
22	L2468003-06 6020TL	2	7	3	1	12/3/2024 6:13:16 PM
23	L2468042-01 6020TL	2	8	3	1	12/3/2024 6:17:44 PM
24	L2468042-02 6020TL	2	9	3	1	12/3/2024 6:22:13 PM
25	L2468042-03 6020TL	2	10	3	1	12/3/2024 6:26:41 PM
26	L2468042-04 6020TL	2	11	3	1	12/3/2024 6:31:10 PM
27	L2468042-05 6020TL	2	12	3	1	12/3/2024 6:35:39 PM
28	CCV	0	9	3	1	12/3/2024 6:40:08 PM
29	CCB	0	10	3	1	12/3/2024 6:44:40 PM
30	WG2002010-1 6020SL	2	13	3	1	12/3/2024 7:01:20 PM
31	WG2002010-2d10 6020SL	2	14	3	1	12/3/2024 7:05:47 PM
32	L2467934-05 6020SL	2	15	3	1	12/3/2024 7:10:15 PM
33	WG2002010-3d10 6020SL	2	16	3	1	12/3/2024 7:14:43 PM
34	WG2002010-4d10 6020SL	2	17	3	1	12/3/2024 7:19:11 PM
35	WG2002010-5d10 6020SL	2	18	3	1	12/3/2024 7:23:39 PM
36	WG2002010-6d5 6020SL	2	19	3	1	12/3/2024 7:28:07 PM
37	L2467884-01 6020SL	2	20	3	1	12/3/2024 7:32:35 PM
38	L2467884-02 6020SL	2	21	3	1	12/3/2024 7:37:04 PM
39	L2467906-01 6020SL	2	22	3	1	12/3/2024 7:41:33 PM
40	CCV	0	9	3	1	12/3/2024 7:46:02 PM
41	CCB	0	10	3	1	12/3/2024 7:50:33 PM
42	L2467906-02 6020SL	2	23	3	1	12/3/2024 7:55:05 PM
43	L2467906-03 6020SL	2	24	3	1	12/3/2024 7:59:34 PM
44	L2467906-04 6020SL	2	25	3	1	12/3/2024 8:04:04 PM
45	L2467906-05 6020SL	2	26	3	1	12/3/2024 8:08:32 PM
46	L2467906-06 6020SL	2	27	3	1	12/3/2024 8:13:01 PM
47	L2467934-01 6020SL	2	28	3	1	12/3/2024 8:17:29 PM
48	L2467934-02 6020SL	2	29	3	1	12/3/2024 8:21:58 PM
49	L2467934-03 6020SL	2	30	3	1	12/3/2024 8:26:27 PM
50	L2467934-04 6020SL	2	31	3	1	12/3/2024 8:30:55 PM
51	L2467934-06 6020SL	2	32	3	1	12/3/2024 8:35:24 PM

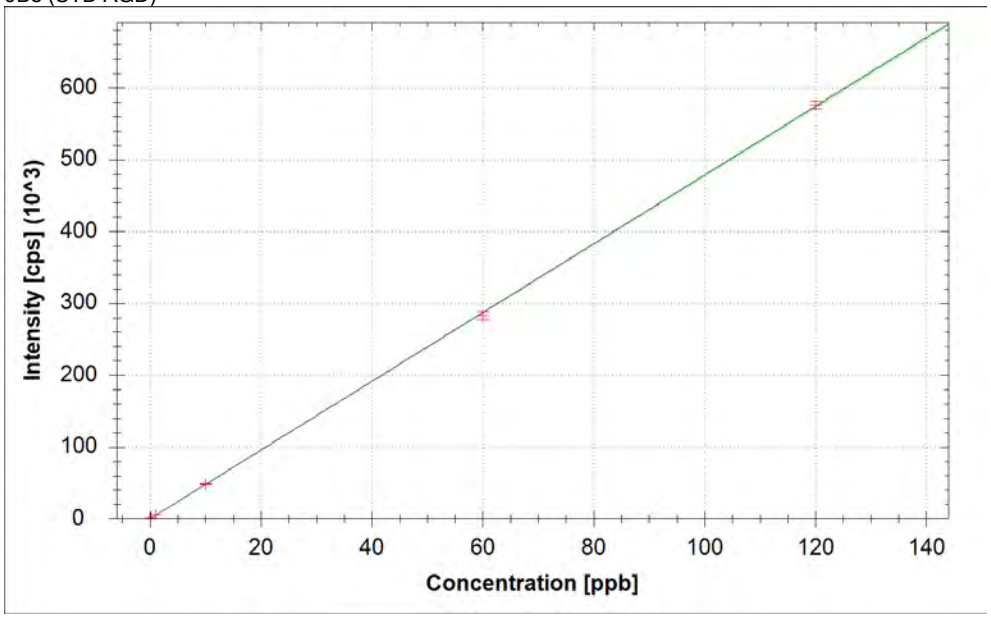
Alpha ICPMSQ2 Seq

12/4/2024 6:26:17 AM

Index:	Label:	Rack	Vial	Main Runs:	Survey Runs:	Start Time:
52	CCV	0	9	3	1	12/3/2024 8:39:52 PM
53	CCB	0	10	3	1	12/3/2024 8:44:24 PM
54	L2467934-10 6020SL	2	36	3	1	12/3/2024 8:48:56 PM
55	L2467934-07 6020SL	2	33	3	1	12/3/2024 8:53:26 PM
56	L2467934-08 6020SL	2	34	3	1	12/3/2024 8:57:55 PM
57	L2467934-09 6020SL	2	35	3	1	12/3/2024 9:02:24 PM
58	CCV	0	9	3	1	12/3/2024 9:06:54 PM
59	CCB	0	10	3	1	12/3/2024 9:11:25 PM
60	CCV	0	9	3	1	12/3/2024 9:15:58 PM
61	CCB	0	10	3	1	12/3/2024 9:20:29 PM

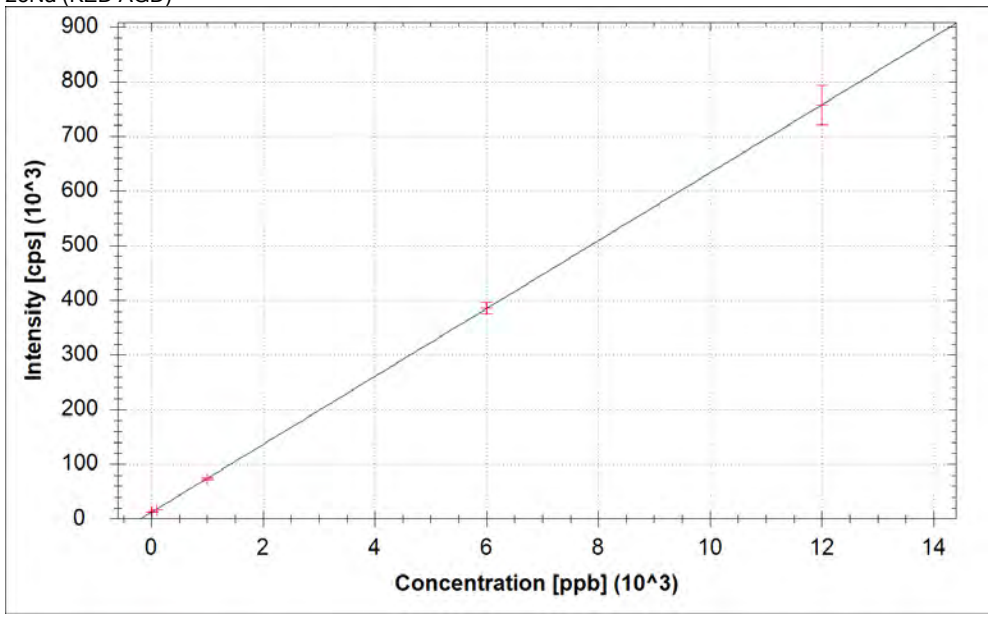
Calibration Curves:

9Be (STD AGD)



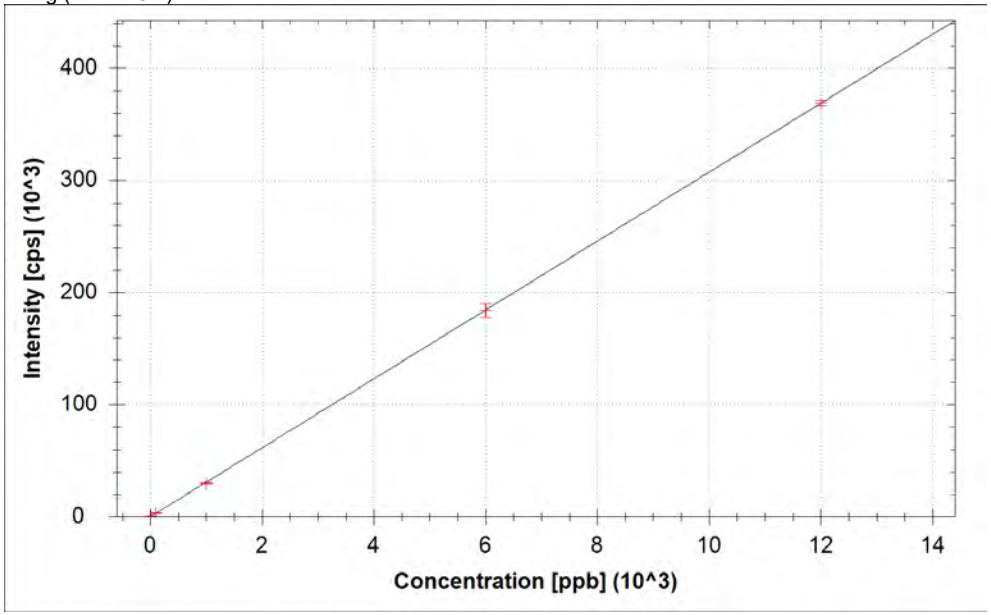
f(x) = 4782.1324*x + 17.8856
R² = 0.9999
BEC = 0.004 ppb
LoD = 0.0050 ppb

23Na (KED AGD)



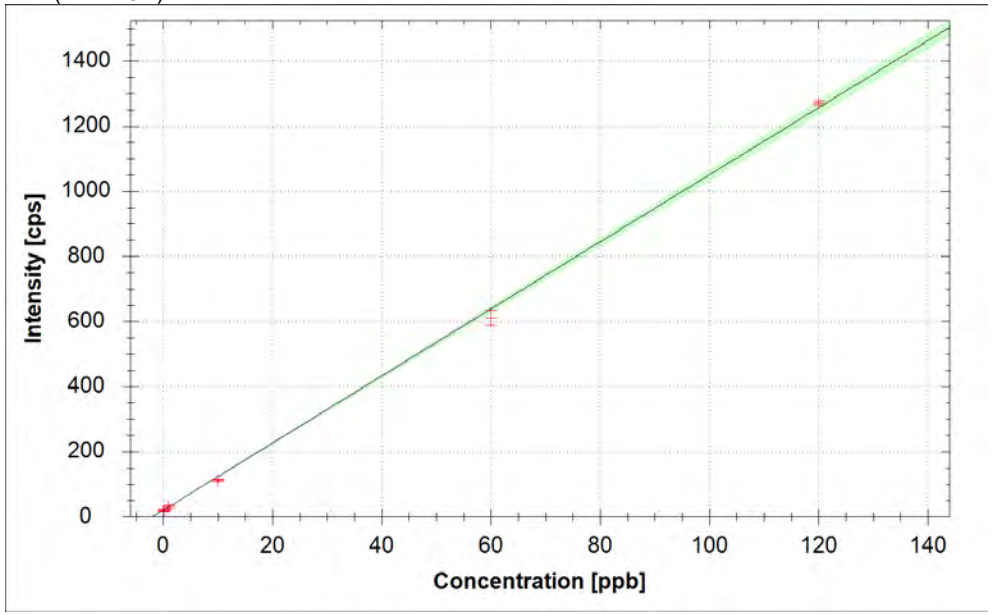
f(x) = 62.1395*x + 11678.6136
R² = 1.0000
BEC = 187.942 ppb
LoD = 4.6722 ppb

24Mg (KED AGD)



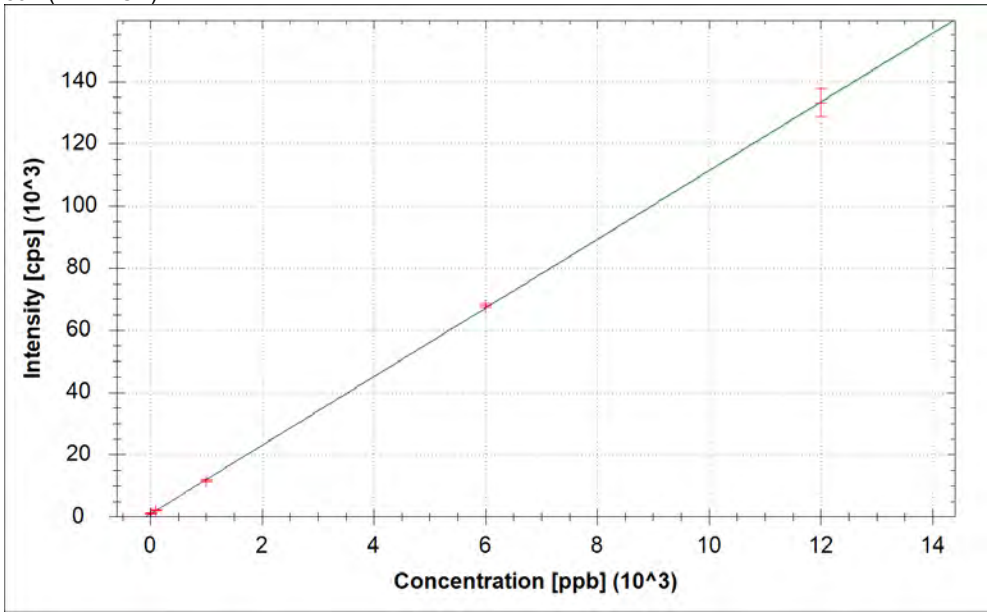
f(x) = 30.7284*x + 39.9111
R² = 1.0000
BEC = 1.299 ppb
LoD = 1.2665 ppb

27Al (KED AGD)



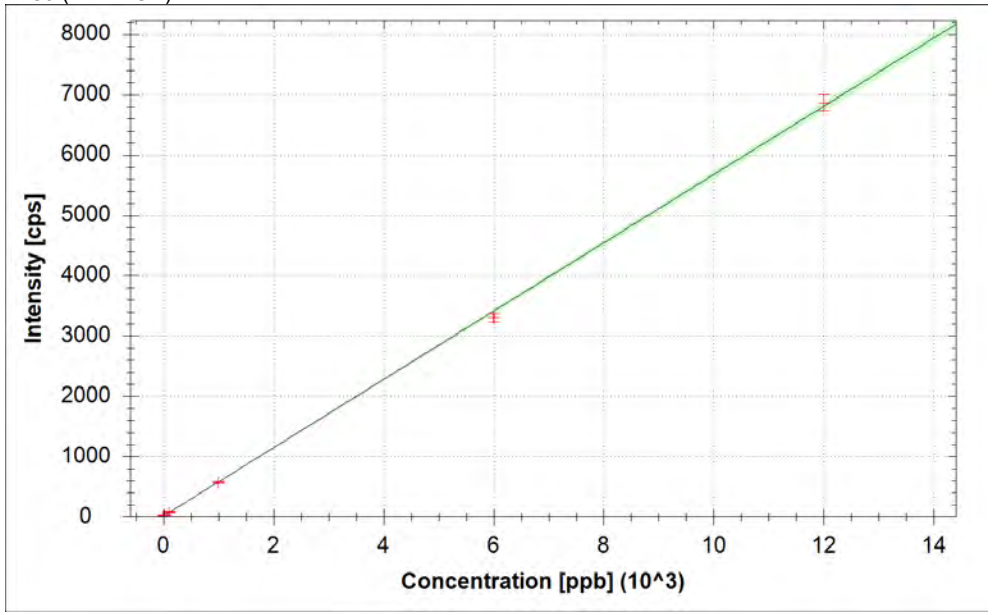
f(x) = 10.2961*x + 20.4593
R² = 0.9991
BEC = 1.987 ppb
LoD = 0.7354 ppb

39K (KED AGD)



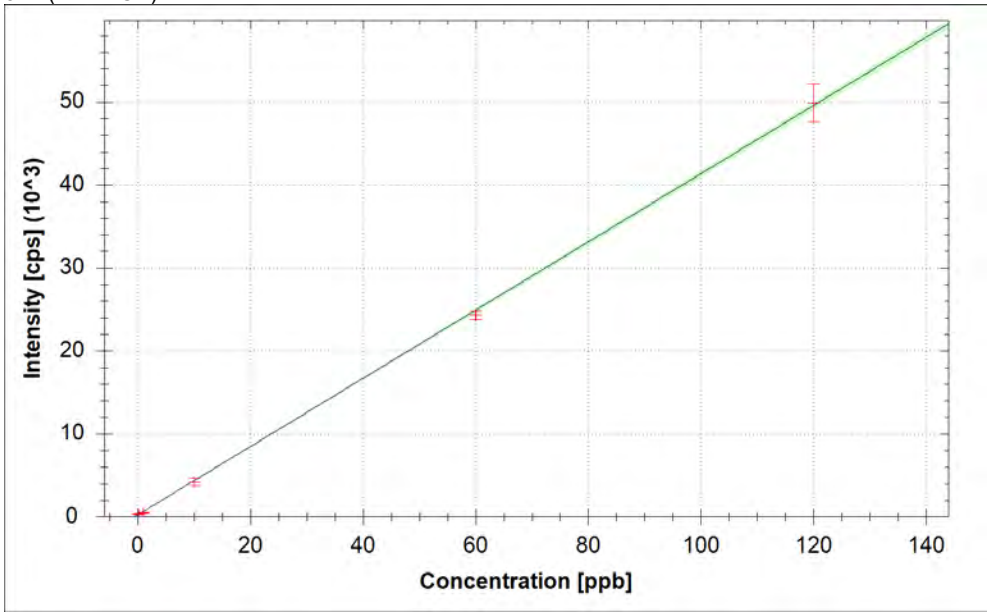
f(x) = 11.0403*x + 897.7311
R² = 1.0000
BEC = 81.314 ppb
LoD = 30.0974 ppb

44Ca (KED AGD)



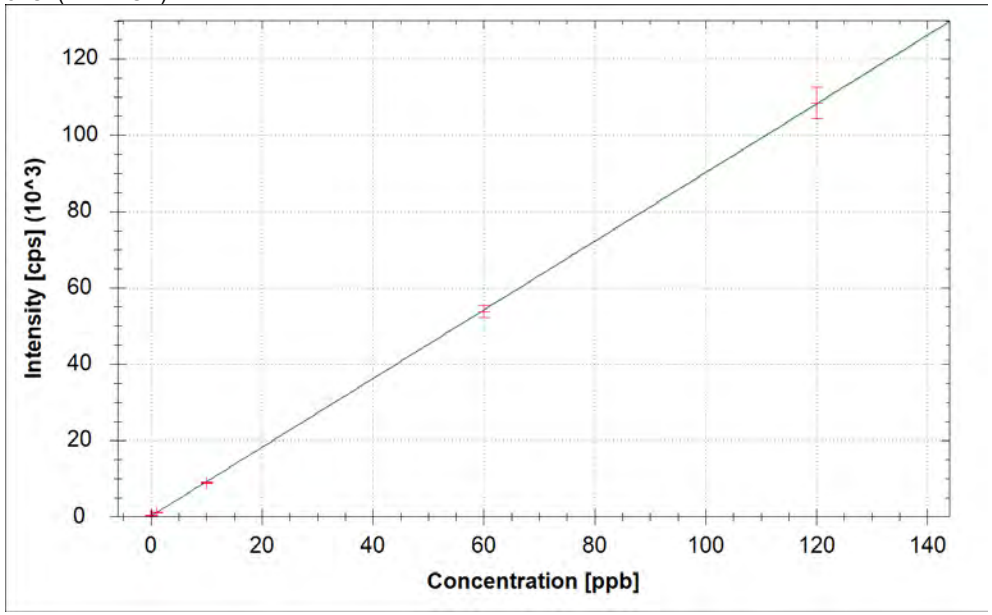
f(x) = 0.5662*x + 13.1051
R² = 0.9996
BEC = 23.146 ppb
LoD = 7.4148 ppb

51V (KED AGD)



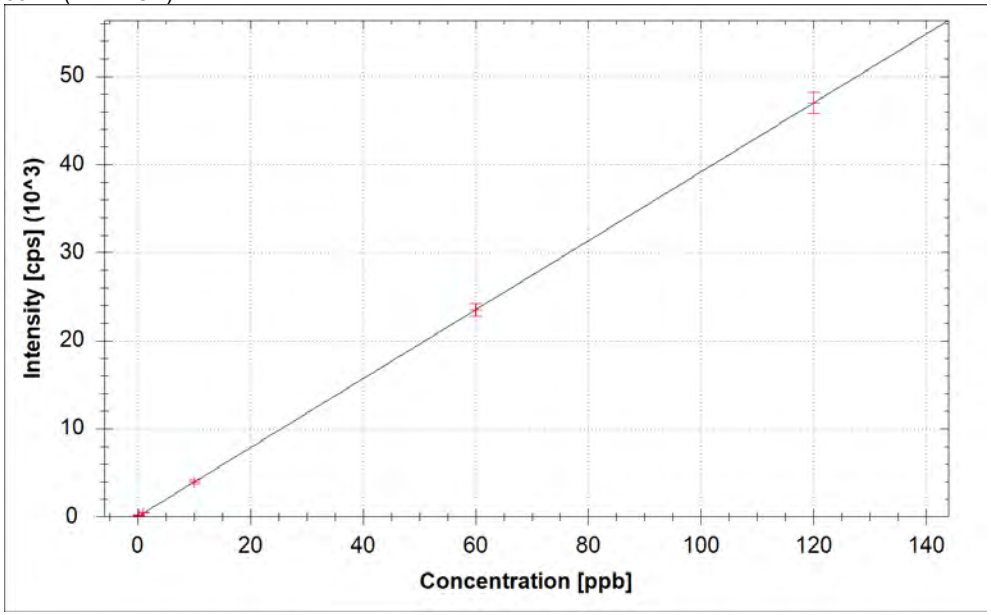
f(x) = 410.8695*x + 251.2222
R² = 0.9997
BEC = 0.611 ppb
LoD = 0.0963 ppb

52Cr (KED AGD)



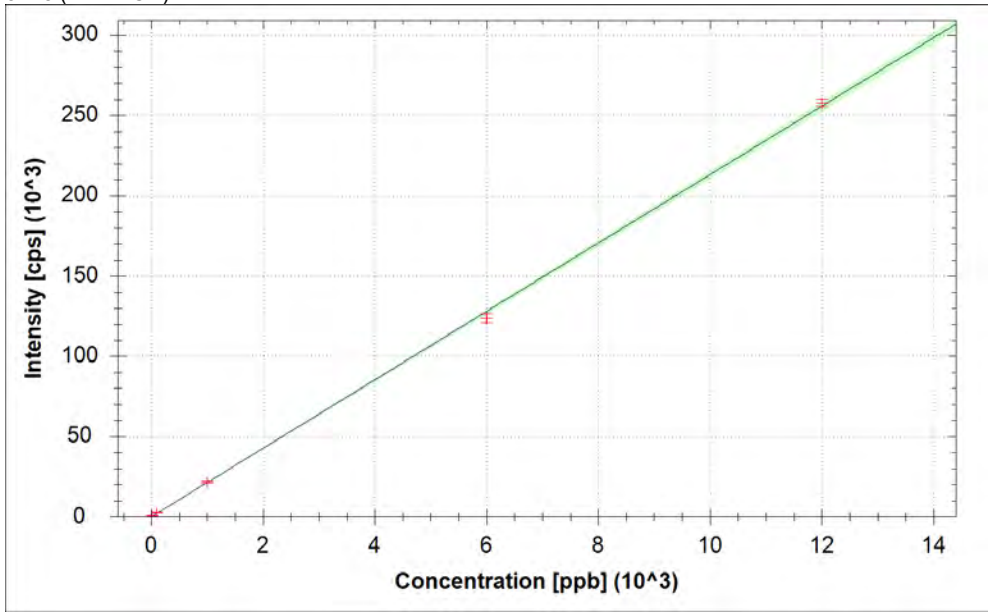
f(x) = 899.7066*x + 202.4240
R² = 1.0000
BEC = 0.225 ppb
LoD = 0.0860 ppb

55Mn (KED AGD)



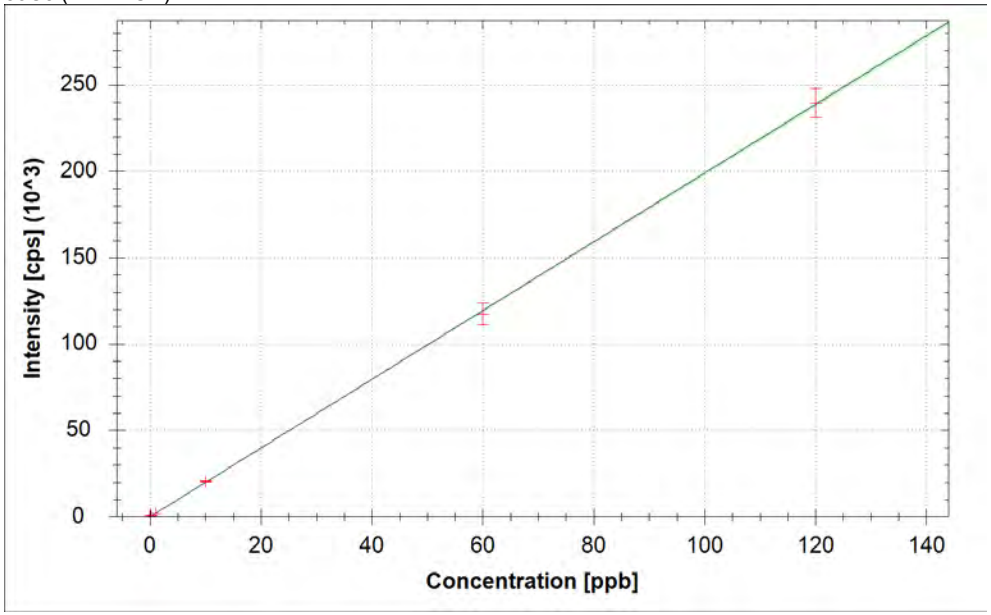
f(x) = 391.3092*x + 22.3597
R² = 1.0000
BEC = 0.057 ppb
LoD = 0.1079 ppb

57Fe (KED AGD)



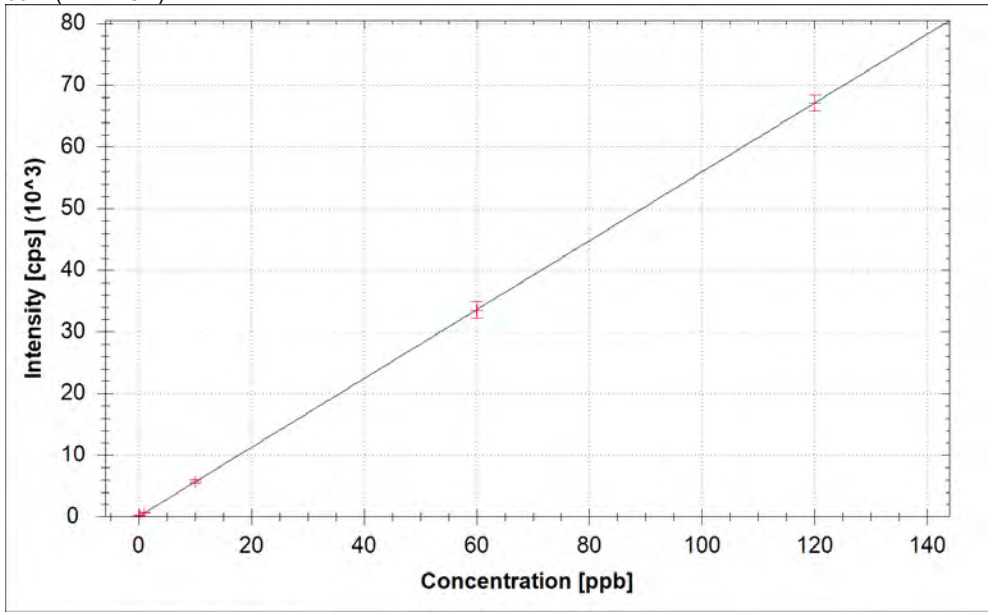
f(x) = 21.3082*x + 35.4905
R² = 0.9996
BEC = 1.666 ppb
LoD = 1.9354 ppb

59Co (KED AGD)



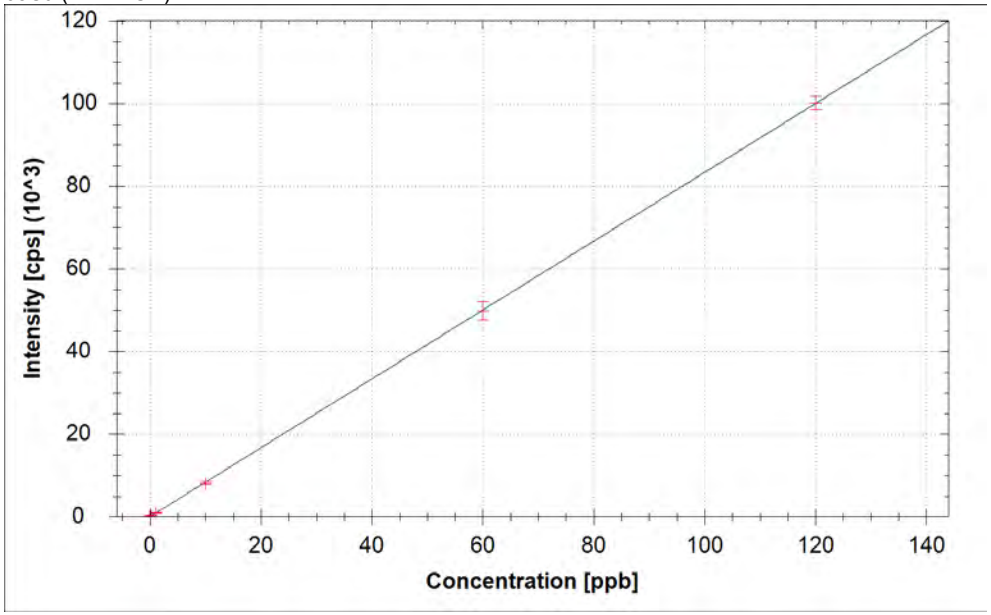
f(x) = 1987.9806*x + 19.9237
R² = 0.9999
BEC = 0.010 ppb
LoD = 0.0095 ppb

60Ni (KED AGD)



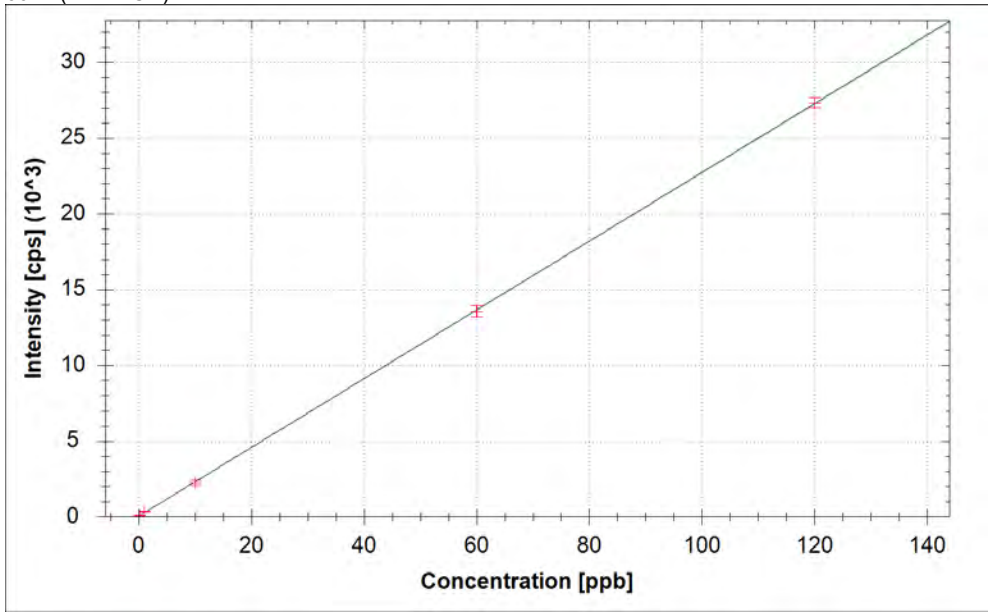
f(x) = 558.6298*x + 71.0284
R² = 1.0000
BEC = 0.127 ppb
LoD = 0.0332 ppb

65Cu (KED AGD)



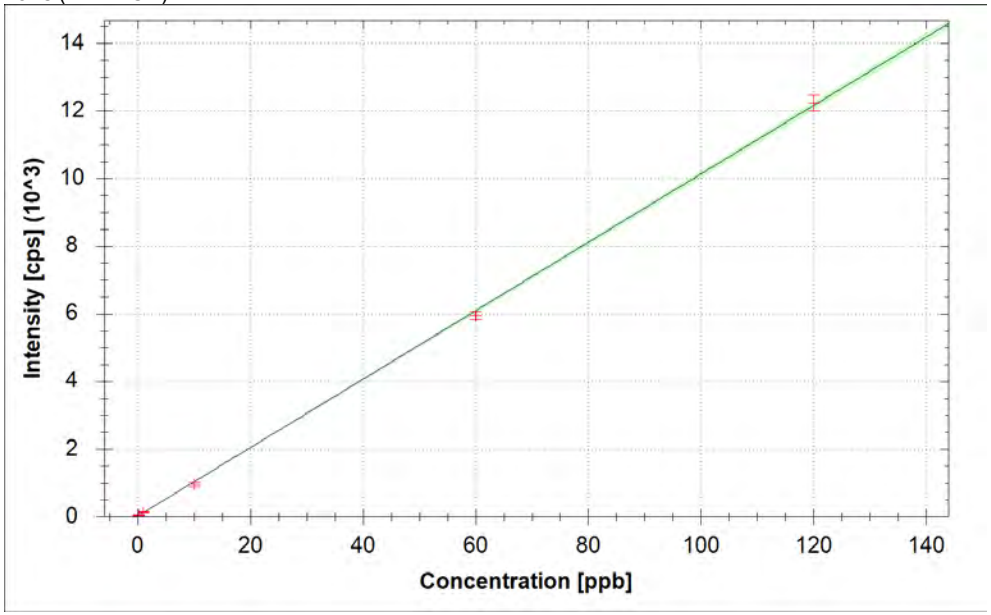
f(x) = 833.1199*x + 42.3475
R² = 1.0000
BEC = 0.051 ppb
LoD = 0.0390 ppb

66Zn (KED AGD)



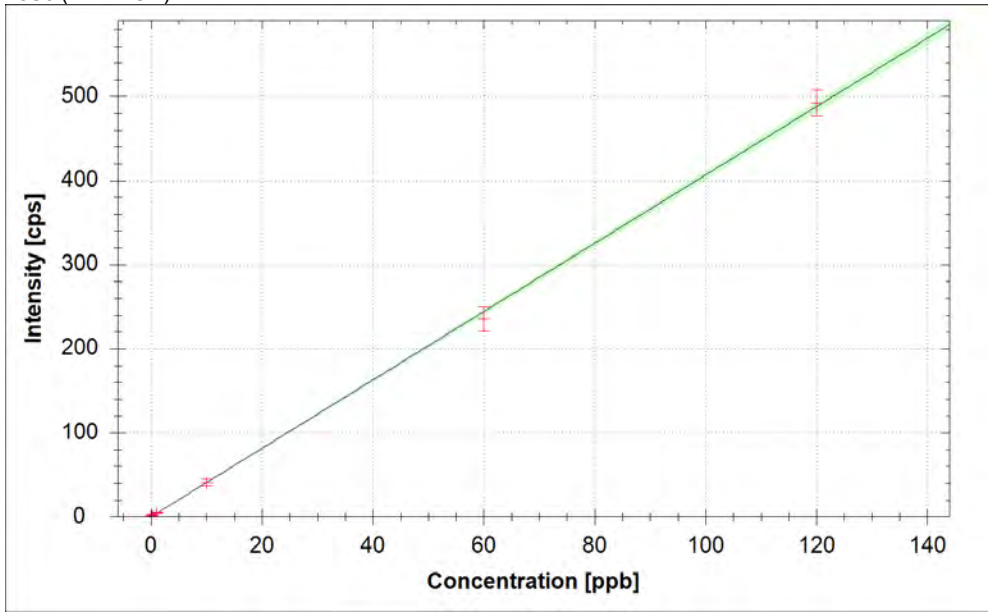
f(x) = 226.8066*x + 43.1120
R² = 1.0000
BEC = 0.190 ppb
LoD = 0.1155 ppb

75As (KED AGD)



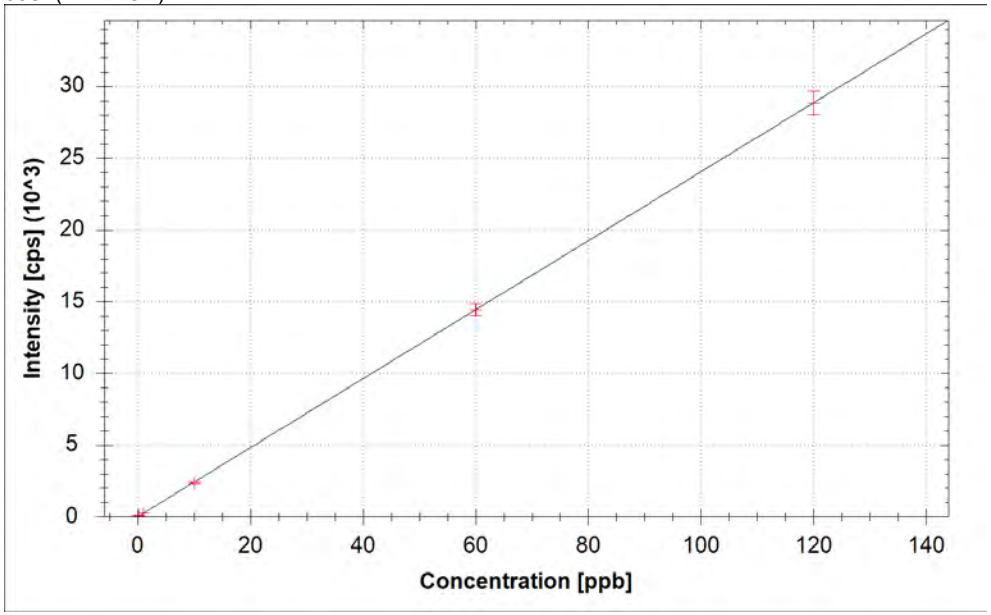
f(x) = 101.0684*x + 25.2015
R² = 0.9997
BEC = 0.249 ppb
LoD = 0.1126 ppb

78Se (KED AGD)



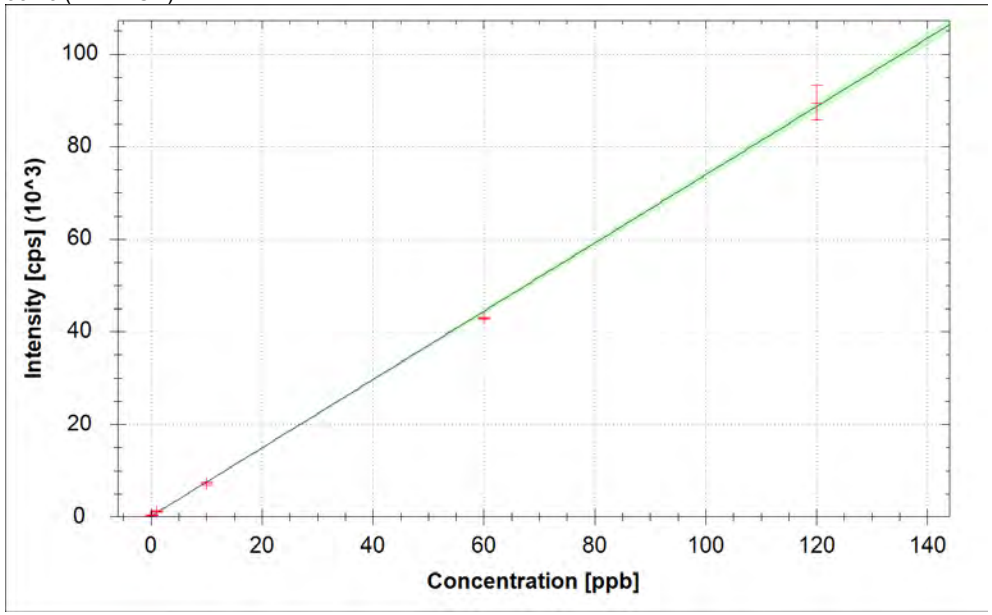
f(x) = 4.0648*x + 0.0843
R² = 0.9995
BEC = 0.021 ppb
LoD = 0.1059 ppb

88Sr (KED AGD)



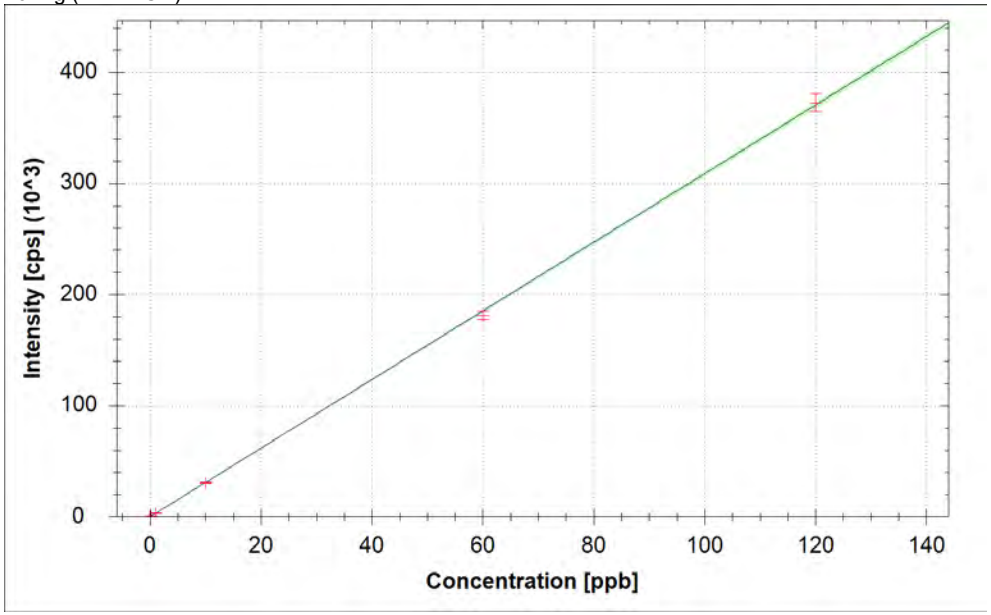
f(x) = 240.3272*x + 12.3629
R² = 1.0000
BEC = 0.051 ppb
LoD = 0.0078 ppb

95Mo (KED AGD)



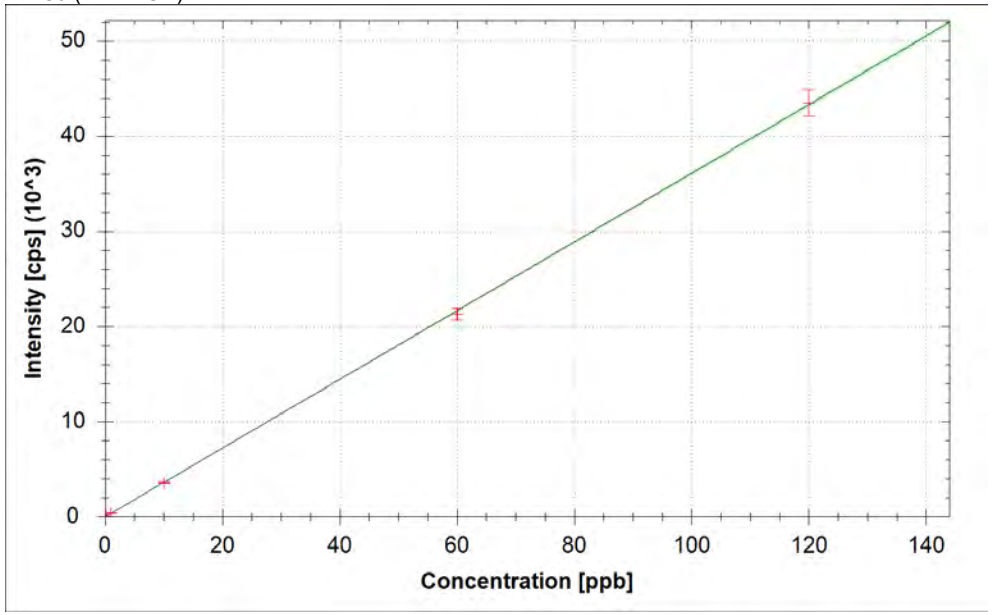
f(x) = 737.5559*x + 121.7936
R² = 0.9995
BEC = 0.165 ppb
LoD = 0.1743 ppb

107Ag (KED AGD)



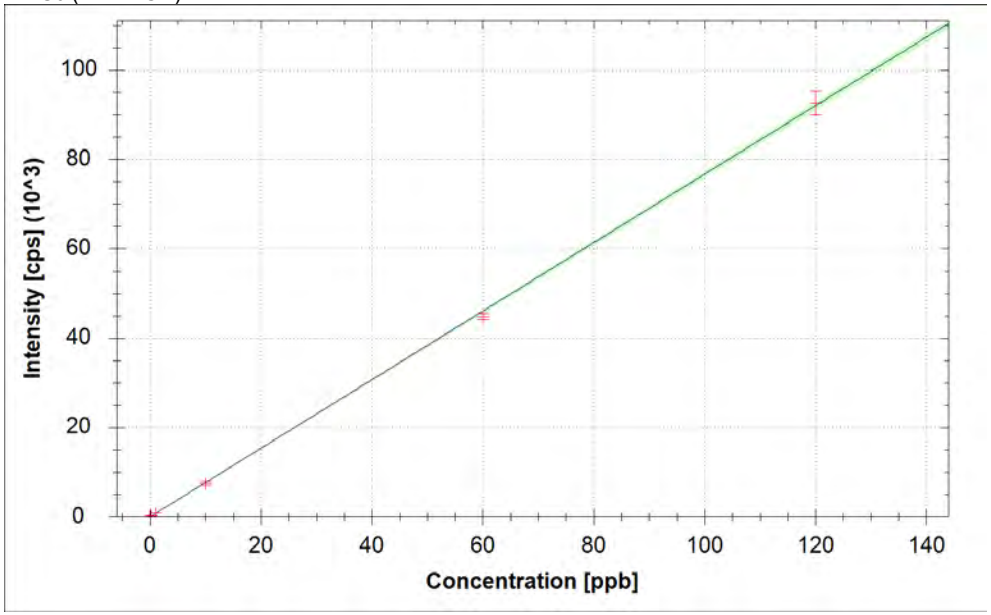
f(x) = 3085.5554*x + 8.9074
R² = 0.9998
BEC = 0.003 ppb
LoD = 0.0038 ppb

111Cd (KED AGD)



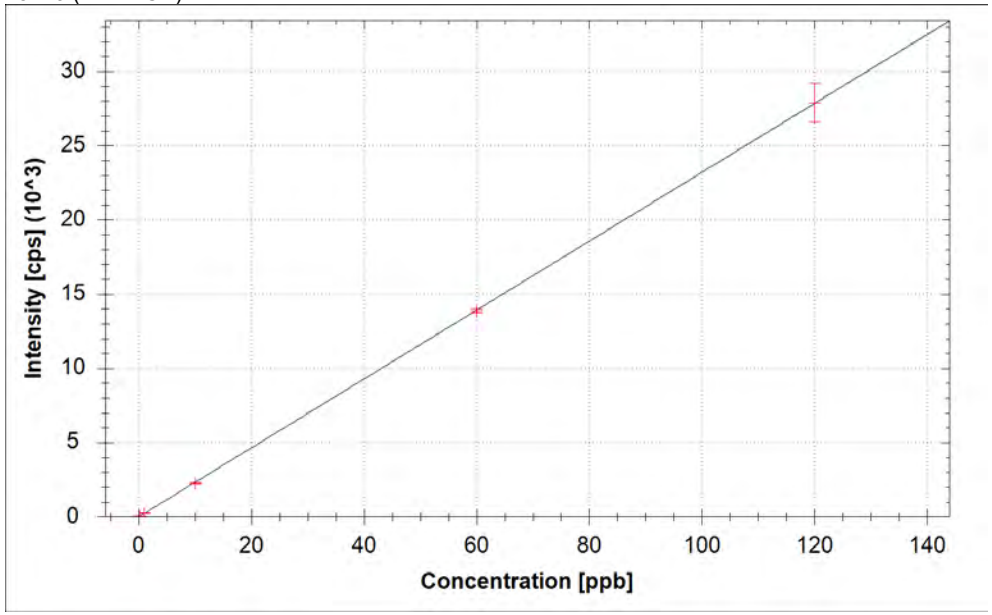
f(x) = 360.8447*x
R² = 0.9999
BEC = 0.000 ppb
LoD = 0.0000 ppb

121Sb (KED AGD)



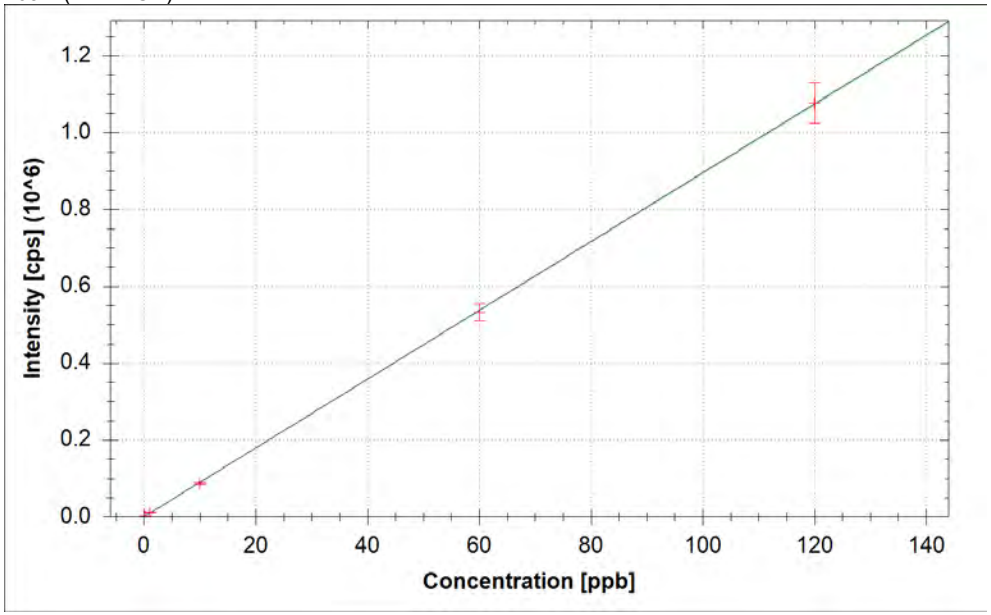
f(x) = 766.5565*x + 5.3464
R² = 0.9997
BEC = 0.007 ppb
LoD = 0.0055 ppb

137Ba (KED AGD)



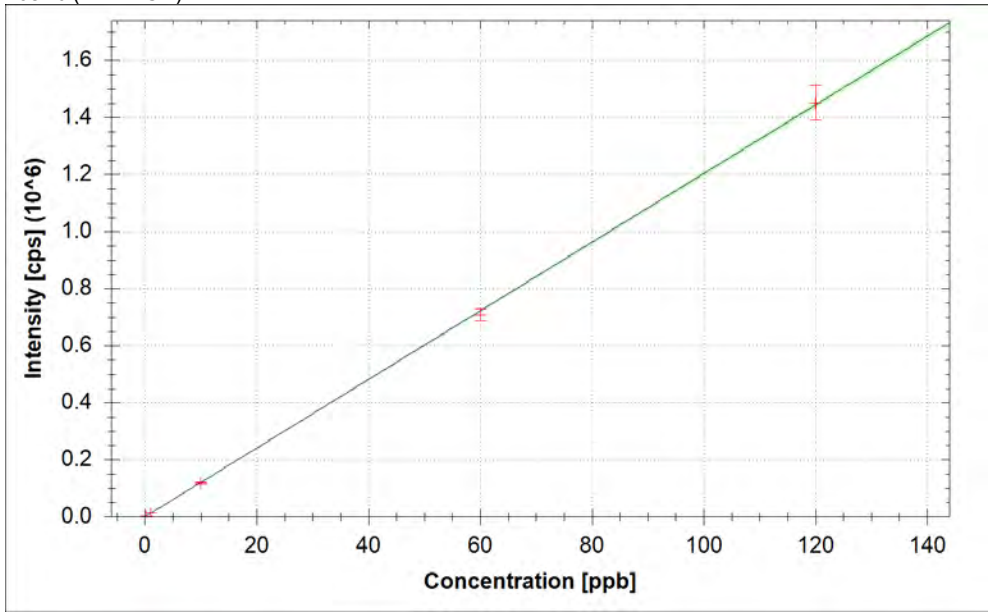
f(x) = 231.9344*x + 4.4209
R² = 1.0000
BEC = 0.019 ppb
LoD = 0.0654 ppb

205Tl (KED AGD)



f(x) = 8949.4973*x + 50.1460
R² = 1.0000
BEC = 0.006 ppb
LoD = 0.0047 ppb

208Pb (KED AGD)



f(x) = 12030.4041*x + 78.0986
R² = 0.9999
BEC = 0.006 ppb
LoD = 0.0057 ppb

Standards:

Analysis Index: 4
Analysis Name: 0.2/20 Cal
Analysis Type: STD
Analysis Started at: 12/3/2024 6:44:33 AM
Total Dilution Factor 50000
Rack 0
Vial 2

Category	Concentration average	Concentration RSD	Standard Concentration	Standard Relative Difference
6Li (STD AGD)	102.722 %	3.9 %		0.000 %
6Li (KED AGD)	107.071 %	6.6 %		0.000 %
9Be (STD AGD)	0.203 ppb	7.9 %	0.200 ppb	1.281 %
23Na (KED AGD)	12.675 ppb	76.2 %	20.000 ppb	36.627 %
24Mg (KED AGD)	18.191 ppb	4.9 %	20.000 ppb	9.045 %
27Al (KED AGD)	-0.061 ppb	591.0 %	0.200 ppb	130.452 %
39K (KED AGD)	18.667 ppb	66.9 %	20.000 ppb	6.666 %
44Ca (KED AGD)	16.916 ppb	23.8 %	20.000 ppb	15.421 %
45Sc (STD AGD)	99.245 %	0.7 %		0.000 %
51V (KED AGD)	0.184 ppb	56.7 %	0.200 ppb	7.864 %
52Cr (KED AGD)	0.141 ppb	19.6 %	0.200 ppb	29.719 %
55Mn (KED AGD)	0.409 ppb	21.0 %	0.200 ppb	104.434 %
57Fe (KED AGD)	18.632 ppb	22.3 %	20.000 ppb	6.842 %
59Co (KED AGD)	0.238 ppb	26.9 %	0.200 ppb	19.120 %
60Ni (KED AGD)	0.177 ppb	21.4 %	0.200 ppb	11.263 %
65Cu (KED AGD)	0.253 ppb	4.8 %	0.200 ppb	26.453 %
66Zn (KED AGD)	0.159 ppb	10.9 %	0.200 ppb	20.448 %
74Ge (KED AGD)	99.013 %	4.6 %		0.000 %
75As (KED AGD)	0.239 ppb	33.5 %	0.200 ppb	19.255 %
78Se (KED AGD)	0.340 ppb	76.0 %	0.200 ppb	70.067 %
88Sr (KED AGD)	0.206 ppb	13.4 %	0.200 ppb	3.108 %
95Mo (KED AGD)	0.236 ppb	56.3 %	0.200 ppb	17.777 %
103Rh (KED AGD)	101.192 %	6.8 %		0.000 %
107Ag (KED AGD)	0.188 ppb	7.9 %	0.200 ppb	6.144 %
111Cd (KED AGD)	0.188 ppb	13.8 %	0.200 ppb	5.776 %
115In (KED AGD)	100.633 %	4.7 %		0.000 %
121Sb (KED AGD)	0.206 ppb	12.3 %	0.200 ppb	2.980 %
137Ba (KED AGD)	0.151 ppb	30.1 %	0.200 ppb	24.588 %
159Tb (KED AGD)	101.166 %	5.7 %		0.000 %
175Lu (KED AGD)	101.053 %	6.4 %		0.000 %
205Tl (KED AGD)	0.193 ppb	10.3 %	0.200 ppb	3.402 %
208Pb (KED AGD)	0.200 ppb	7.7 %	0.200 ppb	0.091 %
209Bi (KED AGD)	101.796 %	6.2 %		0.000 %

Standards:

Analysis Index:	5
Analysis Name:	x1/100 Cal
Analysis Type:	STD
Analysis Started at:	12/3/2024 6:49:00 AM
Total Dilution Factor	10000
Rack	0
Vial	3

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Standards:

Analysis Index: 6
Analysis Name: 10/1000 Cal
Analysis Type: STD
Analysis Started at: 12/3/2024 6:53:28 AM
Total Dilution Factor 1000
Rack 0
Vial 4

Category	Concentration average	Concentration RSD	Standard Concentration	Standard Relative Difference
6Li (STD AGD)	108.169 %	5.4 %		0.000 %
6Li (KED AGD)	114.703 %	4.9 %		0.000 %
9Be (STD AGD)	10.081 ppb	2.0 %	10.000 ppb	0.815 %
23Na (KED AGD)	988.615 ppb	3.9 %	1,000.000 ppb	1.138 %
24Mg (KED AGD)	972.587 ppb	2.7 %	1,000.000 ppb	2.741 %
27Al (KED AGD)	8.824 ppb	4.3 %	10.000 ppb	11.762 %
39K (KED AGD)	960.847 ppb	4.2 %	1,000.000 ppb	3.915 %
44Ca (KED AGD)	981.219 ppb	3.1 %	1,000.000 ppb	1.878 %
45Sc (STD AGD)	104.420 %	2.3 %		0.000 %
51V (KED AGD)	9.543 ppb	11.1 %	10.000 ppb	4.575 %
52Cr (KED AGD)	9.669 ppb	2.7 %	10.000 ppb	3.315 %
55Mn (KED AGD)	10.054 ppb	5.6 %	10.000 ppb	0.545 %
57Fe (KED AGD)	1,014.612 ppb	3.9 %	1,000.000 ppb	1.461 %
59Co (KED AGD)	10.294 ppb	2.0 %	10.000 ppb	2.938 %
60Ni (KED AGD)	10.134 ppb	5.9 %	10.000 ppb	1.343 %
65Cu (KED AGD)	9.688 ppb	5.2 %	10.000 ppb	3.123 %
66Zn (KED AGD)	9.718 ppb	7.6 %	10.000 ppb	2.819 %
74Ge (KED AGD)	110.287 %	5.2 %		0.000 %
75As (KED AGD)	9.204 ppb	7.4 %	10.000 ppb	7.960 %
78Se (KED AGD)	9.995 ppb	10.1 %	10.000 ppb	0.055 %
88Sr (KED AGD)	9.811 ppb	4.3 %	10.000 ppb	1.888 %
95Mo (KED AGD)	9.494 ppb	4.8 %	10.000 ppb	5.057 %
103Rh (KED AGD)	107.159 %	3.2 %		0.000 %
107Ag (KED AGD)	9.877 ppb	2.0 %	10.000 ppb	1.231 %
111Cd (KED AGD)	9.963 ppb	3.7 %	10.000 ppb	0.365 %
115In (KED AGD)	108.964 %	4.4 %		0.000 %
121Sb (KED AGD)	9.722 ppb	5.6 %	10.000 ppb	2.778 %
137Ba (KED AGD)	9.658 ppb	3.1 %	10.000 ppb	3.418 %
159Tb (KED AGD)	108.854 %	1.9 %		0.000 %
175Lu (KED AGD)	110.326 %	1.7 %		0.000 %
205Tl (KED AGD)	9.626 ppb	4.4 %	10.000 ppb	3.743 %
208Pb (KED AGD)	9.824 ppb	2.8 %	10.000 ppb	1.758 %
209Bi (KED AGD)	110.716 %	3.1 %		0.000 %

Standards:

Analysis Index: 7
Analysis Name: 60/6000 Cal
Analysis Type: STD
Analysis Started at: 12/3/2024 6:57:56 AM
Total Dilution Factor 166.6666666
Rack 0
Vial 5

Category	Concentration average	Concentration RSD	Standard Concentration	Standard Relative Difference
6Li (STD AGD)	107.436 %	4.4 %		0.000 %
6Li (KED AGD)	115.489 %	1.7 %		0.000 %
9Be (STD AGD)	59.072 ppb	2.0 %	60.000 ppb	1.546 %
23Na (KED AGD)	6,010.919 ppb	2.8 %	6,000.000 ppb	0.182 %
24Mg (KED AGD)	5,984.382 ppb	3.3 %	6,000.000 ppb	0.260 %
27Al (KED AGD)	57.287 ppb	4.0 %	60.000 ppb	4.522 %
39K (KED AGD)	6,060.335 ppb	0.9 %	6,000.000 ppb	1.006 %
44Ca (KED AGD)	5,807.476 ppb	2.1 %	6,000.000 ppb	3.209 %
45Sc (STD AGD)	105.977 %	0.6 %		0.000 %
51V (KED AGD)	58.527 ppb	2.2 %	60.000 ppb	2.455 %
52Cr (KED AGD)	59.478 ppb	3.0 %	60.000 ppb	0.870 %
55Mn (KED AGD)	59.947 ppb	3.0 %	60.000 ppb	0.088 %
57Fe (KED AGD)	5,805.118 ppb	2.3 %	6,000.000 ppb	3.248 %
59Co (KED AGD)	59.032 ppb	5.5 %	60.000 ppb	1.613 %
60Ni (KED AGD)	59.879 ppb	4.0 %	60.000 ppb	0.201 %
65Cu (KED AGD)	59.730 ppb	4.6 %	60.000 ppb	0.450 %
66Zn (KED AGD)	59.572 ppb	2.6 %	60.000 ppb	0.714 %
74Ge (KED AGD)	109.833 %	2.9 %		0.000 %
75As (KED AGD)	58.549 ppb	2.0 %	60.000 ppb	2.418 %
78Se (KED AGD)	57.831 ppb	6.1 %	60.000 ppb	3.614 %
88Sr (KED AGD)	60.095 ppb	2.8 %	60.000 ppb	0.158 %
95Mo (KED AGD)	57.931 ppb	0.5 %	60.000 ppb	3.449 %
103Rh (KED AGD)	108.445 %	2.7 %		0.000 %
107Ag (KED AGD)	58.734 ppb	2.0 %	60.000 ppb	2.111 %
111Cd (KED AGD)	58.987 ppb	3.0 %	60.000 ppb	1.688 %
115In (KED AGD)	110.456 %	1.6 %		0.000 %
121Sb (KED AGD)	58.434 ppb	1.6 %	60.000 ppb	2.610 %
137Ba (KED AGD)	59.773 ppb	0.9 %	60.000 ppb	0.378 %
159Tb (KED AGD)	110.766 %	0.6 %		0.000 %
175Lu (KED AGD)	110.304 %	1.9 %		0.000 %
205Tl (KED AGD)	59.435 ppb	4.1 %	60.000 ppb	0.942 %
208Pb (KED AGD)	58.856 ppb	3.0 %	60.000 ppb	1.907 %
209Bi (KED AGD)	111.548 %	2.0 %		0.000 %

Standards:

Analysis Index: 8
Analysis Name: 120/12000 Cal
Analysis Type: STD
Analysis Started at: 12/3/2024 7:02:24 AM
Total Dilution Factor 83.33333333
Rack 0
Vial 6

Category	Concentration average	Concentration RSD	Standard Concentration	Standard Relative Difference
6Li (STD AGD)	106.282 %	3.6 %		0.000 %
6Li (KED AGD)	117.789 %	0.7 %		0.000 %
9Be (STD AGD)	120.457 ppb	1.0 %	120.000 ppb	0.381 %
23Na (KED AGD)	11,995.681 ppb	4.8 %	12,000.000 ppb	0.036 %
24Mg (KED AGD)	12,010.072 ppb	0.6 %	12,000.000 ppb	0.084 %
27Al (KED AGD)	121.454 ppb	0.5 %	120.000 ppb	1.212 %
39K (KED AGD)	11,973.067 ppb	3.4 %	12,000.000 ppb	0.224 %
44Ca (KED AGD)	12,097.757 ppb	2.0 %	12,000.000 ppb	0.815 %
45Sc (STD AGD)	105.511 %	1.7 %		0.000 %
51V (KED AGD)	120.779 ppb	4.6 %	120.000 ppb	0.649 %
52Cr (KED AGD)	120.289 ppb	3.8 %	120.000 ppb	0.241 %
55Mn (KED AGD)	120.021 ppb	2.5 %	120.000 ppb	0.018 %
57Fe (KED AGD)	12,096.115 ppb	0.9 %	12,000.000 ppb	0.801 %
59Co (KED AGD)	120.460 ppb	3.5 %	120.000 ppb	0.383 %
60Ni (KED AGD)	120.049 ppb	1.9 %	120.000 ppb	0.041 %
65Cu (KED AGD)	120.161 ppb	1.6 %	120.000 ppb	0.134 %
66Zn (KED AGD)	120.236 ppb	1.2 %	120.000 ppb	0.197 %
74Ge (KED AGD)	110.009 %	2.4 %		0.000 %
75As (KED AGD)	120.791 ppb	1.9 %	120.000 ppb	0.659 %
78Se (KED AGD)	121.084 ppb	3.2 %	120.000 ppb	0.903 %
88Sr (KED AGD)	119.968 ppb	2.9 %	120.000 ppb	0.026 %
95Mo (KED AGD)	121.074 ppb	4.2 %	120.000 ppb	0.895 %
103Rh (KED AGD)	109.504 %	5.1 %		0.000 %
107Ag (KED AGD)	120.643 ppb	2.1 %	120.000 ppb	0.536 %
111Cd (KED AGD)	120.509 ppb	3.2 %	120.000 ppb	0.424 %
115In (KED AGD)	110.297 %	3.2 %		0.000 %
121Sb (KED AGD)	120.805 ppb	2.9 %	120.000 ppb	0.671 %
137Ba (KED AGD)	120.142 ppb	4.7 %	120.000 ppb	0.118 %
159Tb (KED AGD)	111.645 %	3.4 %		0.000 %
175Lu (KED AGD)	112.452 %	3.8 %		0.000 %
205Tl (KED AGD)	120.312 ppb	4.9 %	120.000 ppb	0.260 %
208Pb (KED AGD)	120.586 ppb	4.2 %	120.000 ppb	0.489 %
209Bi (KED AGD)	112.599 %	3.5 %		0.000 %

Standards:

Analysis Index: 9
Analysis Name: 1/100 Cal
Analysis Type: STD
Analysis Started at: 12/3/2024 7:07:58 AM
Total Dilution Factor 10000
Rack 0
Vial 3

Category	Concentration average	Concentration RSD	Standard Concentration	Standard Relative Difference
6Li (STD AGD)	107.604 %	3.7 %		0.000 %
6Li (KED AGD)	117.228 %	2.3 %		0.000 %
9Be (STD AGD)	1.053 ppb	0.8 %	1.000 ppb	5.289 %
23Na (KED AGD)	78.431 ppb	7.1 %	100.000 ppb	21.569 %
24Mg (KED AGD)	102.901 ppb	5.9 %	100.000 ppb	2.901 %
27Al (KED AGD)	1.067 ppb	46.5 %	1.000 ppb	6.696 %
39K (KED AGD)	103.585 ppb	16.1 %	100.000 ppb	3.585 %
44Ca (KED AGD)	109.031 ppb	23.2 %	100.000 ppb	9.031 %
45Sc (STD AGD)	101.882 %	1.1 %		0.000 %
51V (KED AGD)	0.509 ppb	23.3 %	1.000 ppb	49.122 %
52Cr (KED AGD)	0.977 ppb	8.9 %	1.000 ppb	2.263 %
55Mn (KED AGD)	1.058 ppb	8.0 %	1.000 ppb	5.822 %
57Fe (KED AGD)	113.297 ppb	8.3 %	100.000 ppb	13.297 %
59Co (KED AGD)	0.967 ppb	1.7 %	1.000 ppb	3.335 %
60Ni (KED AGD)	1.023 ppb	11.2 %	1.000 ppb	2.323 %
65Cu (KED AGD)	1.036 ppb	10.9 %	1.000 ppb	3.590 %
66Zn (KED AGD)	1.219 ppb	9.3 %	1.000 ppb	21.903 %
74Ge (KED AGD)	106.462 %	1.9 %		0.000 %
75As (KED AGD)	1.055 ppb	12.5 %	1.000 ppb	5.467 %
78Se (KED AGD)	1.088 ppb	14.6 %	1.000 ppb	8.841 %
88Sr (KED AGD)	0.997 ppb	1.2 %	1.000 ppb	0.281 %
95Mo (KED AGD)	1.387 ppb	18.4 %	1.000 ppb	38.711 %
103Rh (KED AGD)	110.221 %	1.6 %		0.000 %
107Ag (KED AGD)	1.004 ppb	2.5 %	1.000 ppb	0.371 %
111Cd (KED AGD)	1.013 ppb	3.0 %	1.000 ppb	1.267 %
115In (KED AGD)	108.737 %	1.6 %		0.000 %
121Sb (KED AGD)	1.101 ppb	4.4 %	1.000 ppb	10.063 %
137Ba (KED AGD)	1.034 ppb	8.2 %	1.000 ppb	3.404 %
159Tb (KED AGD)	113.222 %	1.7 %		0.000 %
175Lu (KED AGD)	110.657 %	1.4 %		0.000 %
205Tl (KED AGD)	1.188 ppb	2.9 %	1.000 ppb	18.824 %
208Pb (KED AGD)	1.041 ppb	1.1 %	1.000 ppb	4.095 %
209Bi (KED AGD)	114.126 %	1.8 %		0.000 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	1	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	Rinse	Rack	0		
Analysis started at:	12/3/2024 6:31:09 AM	Vial	1		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	104.396 %	113.019 %	0.014 ppb	13.493 ppb	4.744 ppb	10.123 ppb	5.094 ppb	19.867 ppb	100.167 %
Concentration per Run 1	99.654 %	115.320 %	0.013 ppb	14.984 ppb	6.819 ppb	10.124 ppb	6.768 ppb	4.449 ppb	99.464 %
Concentration per Run 2	106.179 %	107.744 %	0.014 ppb	21.395 ppb	3.089 ppb	11.205 ppb	4.589 ppb	29.911 ppb	101.952 %
Concentration per Run 3	107.354 %	115.994 %	0.015 ppb	4.101 ppb	4.326 ppb	9.041 ppb	3.925 ppb	25.239 ppb	99.085 %
Concentration RSD	4.0 %	4.1 %	6.6 %	64.8 %	40.0 %	10.7 %	29.2 %	68.2 %	1.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.124 ppb	0.137 ppb	0.490 ppb	68.729 ppb	0.027 ppb	2.873 ppb	0.571 ppb	2.468 ppb	110.119 %
Concentration per Run 1	-0.144 ppb	0.127 ppb	0.516 ppb	70.229 ppb	0.015 ppb	3.011 ppb	0.626 ppb	2.557 ppb	103.725 %
Concentration per Run 2	-0.067 ppb	0.181 ppb	0.420 ppb	73.795 ppb	0.038 ppb	2.865 ppb	0.575 ppb	2.453 ppb	111.699 %
Concentration per Run 3	-0.161 ppb	0.103 ppb	0.534 ppb	62.163 ppb	0.028 ppb	2.744 ppb	0.512 ppb	2.395 ppb	114.932 %
Concentration RSD	40.2 %	29.3 %	12.5 %	8.7 %	42.7 %	4.7 %	9.9 %	3.3 %	5.2 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.040 ppb	0.046 ppb	0.019 ppb	0.248 ppb	101.983 %	0.041 ppb	0.002 ppb	102.582 %	0.034 ppb
Concentration per Run 1	0.093 ppb	-0.050 ppb	0.018 ppb	0.274 ppb	102.516 %	0.044 ppb	0.000 ppb	103.713 %	0.025 ppb
Concentration per Run 2	-0.027 ppb	0.008 ppb	0.011 ppb	0.235 ppb	100.931 %	0.037 ppb	0.004 ppb	100.080 %	0.033 ppb
Concentration per Run 3	0.053 ppb	0.179 ppb	0.026 ppb	0.236 ppb	102.502 %	0.041 ppb	0.004 ppb	103.953 %	0.043 ppb
Concentration RSD	154.5 %	259.0 %	41.3 %	9.0 %	0.9 %	9.3 %	86.6 %	2.1 %	27.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.078 ppb	104.522 %	104.073 %	0.005 ppb	0.089 ppb	104.630 %
Concentration per Run 1	0.063 ppb	106.682 %	102.986 %	0.003 ppb	0.088 ppb	107.504 %
Concentration per Run 2	0.122 ppb	103.674 %	103.099 %	0.006 ppb	0.098 ppb	102.675 %
Concentration per Run 3	0.050 ppb	103.208 %	106.134 %	0.005 ppb	0.081 ppb	103.712 %
Concentration RSD	48.8 %	1.8 %	1.7 %	31.4 %	9.8 %	2.4 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	2	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	CAL LOT #M23-1225	Rack	0		
Analysis started at:	12/3/2024 6:35:35 AM	Vial	1		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	99.786 %	111.111 %	0.016 ppb	6.954 ppb	5.992 ppb	9.533 ppb	11.375 ppb	15.948 ppb	95.904 %
Concentration per Run 1	95.234 %	117.677 %	0.015 ppb	-4.561 ppb	3.868 ppb	9.279 ppb	2.855 ppb	8.770 ppb	94.603 %
Concentration per Run 2	100.982 %	118.182 %	0.016 ppb	-0.534 ppb	6.728 ppb	9.155 ppb	17.837 ppb	24.172 ppb	94.873 %
Concentration per Run 3	103.143 %	97.475 %	0.018 ppb	25.957 ppb	7.380 ppb	10.166 ppb	13.433 ppb	14.901 ppb	98.236 %
Concentration RSD	4.1 %	10.6 %	9.6 %	238.4 %	31.2 %	5.8 %	67.7 %	48.6 %	2.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.157 ppb	0.167 ppb	0.432 ppb	73.240 ppb	0.017 ppb	3.045 ppb	0.575 ppb	2.553 ppb	99.832 %
Concentration per Run 1	-0.156 ppb	0.168 ppb	0.361 ppb	80.521 ppb	0.025 ppb	3.098 ppb	0.629 ppb	2.416 ppb	101.382 %
Concentration per Run 2	-0.170 ppb	0.152 ppb	0.557 ppb	72.858 ppb	0.016 ppb	2.909 ppb	0.556 ppb	2.817 ppb	100.554 %
Concentration per Run 3	-0.146 ppb	0.181 ppb	0.380 ppb	66.341 ppb	0.011 ppb	3.128 ppb	0.540 ppb	2.425 ppb	97.559 %
Concentration RSD	7.7 %	9.0 %	25.0 %	9.7 %	43.0 %	3.9 %	8.3 %	9.0 %	2.0 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.018 ppb	0.053 ppb	0.023 ppb	0.177 ppb	99.487 %	0.034 ppb	0.002 ppb	99.851 %	0.020 ppb
Concentration per Run 1	0.018 ppb	0.091 ppb	0.029 ppb	0.151 ppb	107.309 %	0.034 ppb	0.007 ppb	106.600 %	0.016 ppb
Concentration per Run 2	0.013 ppb	-0.046 ppb	0.017 ppb	0.203 ppb	97.480 %	0.037 ppb	0.000 ppb	98.186 %	0.018 ppb
Concentration per Run 3	0.021 ppb	0.112 ppb	0.023 ppb	0.178 ppb	93.670 %	0.032 ppb	0.000 ppb	94.768 %	0.026 ppb
Concentration RSD	23.2 %	163.2 %	24.7 %	14.4 %	7.1 %	7.8 %	173.2 %	6.1 %	27.4 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.087 ppb	101.362 %	101.252 %	0.004 ppb	0.093 ppb	101.953 %
Concentration per Run 1	0.048 ppb	107.992 %	110.855 %	0.001 ppb	0.088 ppb	108.473 %
Concentration per Run 2	0.096 ppb	101.310 %	98.916 %	0.001 ppb	0.106 ppb	99.461 %
Concentration per Run 3	0.117 ppb	94.784 %	93.986 %	0.008 ppb	0.084 ppb	97.925 %
Concentration RSD	40.9 %	6.5 %	8.6 %	114.4 %	12.9 %	5.6 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	3	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	Blank NTB ICPMSQ2	Rack	4		
Analysis started at:	12/3/2024 6:40:01 AM	Vial	49		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	100.000 %	100.000 %	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	100.000 %
Concentration per Run	100.000 %	100.000 %	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	100.000 %
Concentration RSD	0.0 %	0.0 %	0.4 %	0.0 %	0.3 %	0.1 %	0.1 %	0.1 %	0.0 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	100.000 %
Concentration per Run	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	100.000 %
Concentration RSD	0.1 %	0.1 %	0.6 %	0.4 %	0.3 %	0.1 %	0.3 %	0.2 %	0.0 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	100.000 %	0.000 ppb	0.000 ppb	100.000 %	0.000 ppb
Concentration per Run	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	100.000 %	0.000 ppb	0.000 ppb	100.000 %	0.000 ppb
Concentration RSD	0.2 %	1.7 %	0.1 %	0.4 %	0.0 %	0.4 %		0.0 %	0.3 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.000 ppb	100.000 %	100.000 %	0.000 ppb	0.000 ppb	100.000 %
Concentration per Run	0.000 ppb	100.000 %	100.000 %	0.000 ppb	0.000 ppb	100.000 %
Concentration RSD	1.1 %	0.0 %	0.0 %	0.3 %	0.3 %	0.0 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	4	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	0.2/20 Cal	Rack	0		
Analysis started at:	12/3/2024 6:44:33 AM	Vial	2		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	102.722 %	107.071 %	0.203 ppb	12.675 ppb	18.191 ppb	-0.061 ppb	18.667 ppb	16.916 ppb	99.245 %
Concentration per Run 1	98.276 %	114.815 %	0.221 ppb	1.861 ppb	18.851 ppb	-0.361 ppb	5.729 ppb	16.181 ppb	98.392 %
Concentration per Run 2	103.992 %	101.010 %	0.194 ppb	20.460 ppb	18.550 ppb	-0.160 ppb	30.629 ppb	13.305 ppb	99.720 %
Concentration per Run 3	105.897 %	105.387 %	0.193 ppb	15.703 ppb	17.171 ppb	0.338 ppb	19.642 ppb	21.262 ppb	99.623 %
Concentration RSD	3.9 %	6.6 %	7.9 %	76.2 %	4.9 %	591.0 %	66.9 %	23.8 %	0.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.184 ppb	0.141 ppb	0.409 ppb	18.632 ppb	0.238 ppb	0.177 ppb	0.253 ppb	0.159 ppb	99.013 %
Concentration per Run 1	0.081 ppb	0.109 ppb	0.420 ppb	18.552 ppb	0.179 ppb	0.154 ppb	0.253 ppb	0.156 ppb	104.100 %
Concentration per Run 2	0.290 ppb	0.161 ppb	0.488 ppb	14.523 ppb	0.306 ppb	0.158 ppb	0.241 ppb	0.178 ppb	95.177 %
Concentration per Run 3	0.181 ppb	0.152 ppb	0.318 ppb	22.820 ppb	0.229 ppb	0.221 ppb	0.265 ppb	0.144 ppb	97.761 %
Concentration RSD	56.7 %	19.6 %	21.0 %	22.3 %	26.9 %	21.4 %	4.8 %	10.9 %	4.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.239 ppb	0.340 ppb	0.206 ppb	0.236 ppb	101.192 %	0.188 ppb	0.188 ppb	100.633 %	0.206 ppb
Concentration per Run 1	0.154 ppb	0.176 ppb	0.177 ppb	0.087 ppb	108.730 %	0.178 ppb	0.176 ppb	106.113 %	0.189 ppb
Concentration per Run 2	0.313 ppb	0.638 ppb	0.211 ppb	0.276 ppb	99.440 %	0.205 ppb	0.218 ppb	97.510 %	0.235 ppb
Concentration per Run 3	0.249 ppb	0.206 ppb	0.231 ppb	0.343 ppb	95.405 %	0.180 ppb	0.171 ppb	98.276 %	0.193 ppb
Concentration RSD	33.5 %	76.0 %	13.4 %	56.3 %	6.8 %	7.9 %	13.8 %	4.7 %	12.3 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.151 ppb	101.166 %	101.053 %	0.193 ppb	0.200 ppb	101.796 %
Concentration per Run 1	0.183 ppb	107.723 %	108.279 %	0.175 ppb	0.183 ppb	108.418 %
Concentration per Run 2	0.171 ppb	99.061 %	99.036 %	0.189 ppb	0.213 ppb	101.111 %
Concentration per Run 3	0.099 ppb	96.715 %	95.845 %	0.215 ppb	0.205 ppb	95.859 %
Concentration RSD	30.1 %	5.7 %	6.4 %	10.3 %	7.7 %	6.2 %

Analysis index:	5	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	x1/100 Cal	Rack	0		
Analysis started at:	12/3/2024 6:49:00 AM	Vial	3		

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	6	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	10/1000 Cal	Rack	0		
Analysis started at:	12/3/2024 6:53:28 AM	Vial	4		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	108.169 %	114.703 %	10.081 ppb	988.615 ppb	972.587 ppb	8.824 ppb	960.847 ppb	981.219 ppb	104.420 %
Concentration per Run 1	102.038 %	109.933 %	10.222 ppb	1,015.665 ppb	984.035 ppb	8.528 ppb	995.401 ppb	1,006.579 ppb	101.713 %
Concentration per Run 2	108.714 %	120.876 %	10.171 ppb	944.104 ppb	942.606 ppb	9.252 ppb	916.238 ppb	989.407 ppb	106.159 %
Concentration per Run 3	113.756 %	113.300 %	9.851 ppb	1,006.076 ppb	991.121 ppb	8.691 ppb	970.902 ppb	947.670 ppb	105.390 %
Concentration RSD	5.4 %	4.9 %	2.0 %	3.9 %	2.7 %	4.3 %	4.2 %	3.1 %	2.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	9.543 ppb	9.669 ppb	10.054 ppb	1,014.612 ppb	10.294 ppb	10.134 ppb	9.688 ppb	9.718 ppb	110.287 %
Concentration per Run 1	8.529 ppb	9.467 ppb	9.714 ppb	976.545 ppb	10.057 ppb	9.459 ppb	9.118 ppb	8.879 ppb	116.858 %
Concentration per Run 2	9.456 ppb	9.581 ppb	9.747 ppb	1,055.478 ppb	10.405 ppb	10.325 ppb	10.061 ppb	9.994 ppb	106.291 %
Concentration per Run 3	10.642 ppb	9.958 ppb	10.703 ppb	1,011.811 ppb	10.419 ppb	10.619 ppb	9.884 ppb	10.281 ppb	107.711 %
Concentration RSD	11.1 %	2.7 %	5.6 %	3.9 %	2.0 %	5.9 %	5.2 %	7.6 %	5.2 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	9.204 ppb	9.995 ppb	9.811 ppb	9.494 ppb	107.159 %	9.877 ppb	9.963 ppb	108.964 %	9.722 ppb
Concentration per Run 1	8.452 ppb	8.914 ppb	9.329 ppb	9.004 ppb	110.717 %	9.697 ppb	9.661 ppb	114.479 %	9.097 ppb
Concentration per Run 2	9.393 ppb	10.163 ppb	10.092 ppb	9.579 ppb	103.795 %	9.848 ppb	10.368 ppb	106.466 %	10.079 ppb
Concentration per Run 3	9.766 ppb	10.907 ppb	10.012 ppb	9.900 ppb	106.966 %	10.086 ppb	9.861 ppb	105.949 %	9.990 ppb
Concentration RSD	7.4 %	10.1 %	4.3 %	4.8 %	3.2 %	2.0 %	3.7 %	4.4 %	5.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	9.658 ppb	108.854 %	110.326 %	9.626 ppb	9.824 ppb	110.716 %
Concentration per Run 1	9.422 ppb	110.830 %	110.539 %	9.158 ppb	9.513 ppb	114.683 %
Concentration per Run 2	9.553 ppb	106.765 %	108.315 %	9.720 ppb	9.943 ppb	108.653 %
Concentration per Run 3	9.999 ppb	108.967 %	112.124 %	9.999 ppb	10.017 ppb	108.810 %
Concentration RSD	3.1 %	1.9 %	1.7 %	4.4 %	2.8 %	3.1 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	7	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	60/6000 Cal	Rack	0		
Analysis started at:	12/3/2024 6:57:56 AM	Vial	5		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	107.436 %	115.489 %	59.072 ppb	6,010.919 ppb	5,984.382 ppb	57.287 ppb	6,060.335 ppb	5,807.476 ppb	105.977 %
Concentration per Run 1	102.043 %	115.994 %	60.335 ppb	5,965.521 ppb	5,991.824 ppb	54.666 ppb	6,000.335 ppb	5,673.083 ppb	105.249 %
Concentration per Run 2	109.967 %	113.300 %	58.867 ppb	6,194.979 ppb	6,178.611 ppb	58.507 ppb	6,069.637 ppb	5,841.937 ppb	106.294 %
Concentration per Run 3	110.299 %	117.172 %	58.015 ppb	5,872.258 ppb	5,782.710 ppb	58.688 ppb	6,111.034 ppb	5,907.409 ppb	106.387 %
Concentration RSD	4.4 %	1.7 %	2.0 %	2.8 %	3.3 %	4.0 %	0.9 %	2.1 %	0.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	58.527 ppb	59.478 ppb	59.947 ppb	5,805.118 ppb	59.032 ppb	59.879 ppb	59.730 ppb	59.572 ppb	109.833 %
Concentration per Run 1	57.412 ppb	57.784 ppb	59.234 ppb	5,683.851 ppb	59.003 ppb	59.754 ppb	60.801 ppb	59.520 ppb	112.341 %
Concentration per Run 2	59.892 ppb	61.299 ppb	61.964 ppb	5,945.620 ppb	62.288 ppb	62.311 ppb	61.768 ppb	61.155 ppb	106.193 %
Concentration per Run 3	58.278 ppb	59.350 ppb	58.644 ppb	5,785.882 ppb	55.805 ppb	57.573 ppb	56.621 ppb	58.040 ppb	110.964 %
Concentration RSD	2.2 %	3.0 %	3.0 %	2.3 %	5.5 %	4.0 %	4.6 %	2.6 %	2.9 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	58.549 ppb	57.831 ppb	60.095 ppb	57.931 ppb	108.445 %	58.734 ppb	58.987 ppb	110.456 %	58.434 ppb
Concentration per Run 1	58.270 ppb	54.521 ppb	58.933 ppb	57.936 ppb	110.658 %	57.890 ppb	57.219 ppb	112.299 %	57.986 ppb
Concentration per Run 2	59.822 ppb	61.592 ppb	62.051 ppb	57.642 ppb	105.086 %	60.093 ppb	60.805 ppb	108.712 %	59.503 ppb
Concentration per Run 3	57.555 ppb	57.381 ppb	59.301 ppb	58.214 ppb	109.591 %	58.218 ppb	58.937 ppb	110.357 %	57.814 ppb
Concentration RSD	2.0 %	6.1 %	2.8 %	0.5 %	2.7 %	2.0 %	3.0 %	1.6 %	1.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	59.773 ppb	110.766 %	110.304 %	59.435 ppb	58.856 ppb	111.548 %
Concentration per Run 1	59.889 ppb	111.334 %	112.724 %	57.047 ppb	57.188 ppb	113.777 %
Concentration per Run 2	60.240 ppb	110.940 %	109.337 %	59.345 ppb	58.710 ppb	111.517 %
Concentration per Run 3	59.192 ppb	110.026 %	108.850 %	61.912 ppb	60.669 ppb	109.349 %
Concentration RSD	0.9 %	0.6 %	1.9 %	4.1 %	3.0 %	2.0 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM



Analysis index:	8	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	120/12000 Cal	Rack	0		
Analysis started at:	12/3/2024 7:02:24 AM	Vial	6		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	106.282 %	117.789 %	120.457 ppb	11,995.681 ppb	12,010.072 ppb	121.454 ppb	11,973.067 ppb	12,097.757 ppb	105.511 %
Concentration per Run 1	101.938 %	116.835 %	121.657 ppb	12,133.129 ppb	12,006.586 ppb	122.091 ppb	12,054.382 ppb	11,825.498 ppb	103.459 %
Concentration per Run 2	107.728 %	118.182 %	119.257 ppb	11,363.624 ppb	11,940.287 ppb	121.251 ppb	12,335.024 ppb	12,189.272 ppb	106.151 %
Concentration per Run 3	109.180 %	118.351 %	120.456 ppb	12,490.290 ppb	12,083.344 ppb	121.020 ppb	11,529.797 ppb	12,278.500 ppb	106.924 %
Concentration RSD	3.6 %	0.7 %	1.0 %	4.8 %	0.6 %	0.5 %	3.4 %	2.0 %	1.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	120.779 ppb	120.289 ppb	120.021 ppb	12,096.115 ppb	120.460 ppb	120.049 ppb	120.161 ppb	120.236 ppb	110.009 %
Concentration per Run 1	116.474 ppb	115.939 ppb	117.830 ppb	11,970.698 ppb	116.239 ppb	119.061 ppb	118.071 ppb	118.586 ppb	112.989 %
Concentration per Run 2	118.771 ppb	119.839 ppb	123.436 ppb	12,159.258 ppb	124.667 ppb	118.443 ppb	120.642 ppb	120.769 ppb	107.761 %
Concentration per Run 3	127.091 ppb	125.090 ppb	118.797 ppb	12,158.389 ppb	120.473 ppb	122.642 ppb	121.769 ppb	121.353 ppb	109.277 %
Concentration RSD	4.6 %	3.8 %	2.5 %	0.9 %	3.5 %	1.9 %	1.6 %	1.2 %	2.4 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	120.791 ppb	121.084 ppb	119.968 ppb	121.074 ppb	109.504 %	120.643 ppb	120.509 ppb	110.297 %	120.805 ppb
Concentration per Run 1	118.313 ppb	116.849 ppb	116.190 ppb	115.237 ppb	115.739 %	117.864 ppb	116.108 ppb	114.052 %	117.033 ppb
Concentration per Run 2	122.843 ppb	124.326 ppb	120.828 ppb	124.550 ppb	107.992 %	121.186 ppb	123.194 ppb	106.988 %	123.906 ppb
Concentration per Run 3	121.218 ppb	122.076 ppb	122.887 ppb	123.434 ppb	104.781 %	122.880 ppb	122.226 ppb	109.851 %	121.477 ppb
Concentration RSD	1.9 %	3.2 %	2.9 %	4.2 %	5.1 %	2.1 %	3.2 %	3.2 %	2.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	120.142 ppb	111.645 %	112.452 %	120.312 ppb	120.586 ppb	112.599 %
Concentration per Run 1	113.771 ppb	116.074 %	117.207 %	113.888 ppb	114.809 ppb	116.999 %
Concentration per Run 2	122.390 ppb	109.737 %	109.138 %	125.604 ppb	124.155 ppb	109.395 %
Concentration per Run 3	124.263 ppb	109.125 %	111.013 %	121.445 ppb	122.796 ppb	111.402 %
Concentration RSD	4.7 %	3.4 %	3.8 %	4.9 %	4.2 %	3.5 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	9	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	1/100 Cal	Rack	0		
Analysis started at:	12/3/2024 7:07:58 AM	Vial	3		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	107.604 %	117.228 %	1.053 ppb	78.431 ppb	102.901 ppb	1.067 ppb	103.585 ppb	109.031 ppb	101.882 %
Concentration per Run 1	103.051 %	119.866 %	1.043 ppb	72.238 ppb	99.295 ppb	0.806 ppb	84.461 ppb	112.934 ppb	101.619 %
Concentration per Run 2	109.674 %	117.340 %	1.057 ppb	80.023 ppb	99.504 ppb	0.756 ppb	111.316 ppb	82.034 ppb	103.098 %
Concentration per Run 3	110.085 %	114.478 %	1.058 ppb	83.030 ppb	109.904 ppb	1.639 ppb	114.977 ppb	132.126 ppb	100.929 %
Concentration RSD	3.7 %	2.3 %	0.8 %	7.1 %	5.9 %	46.5 %	16.1 %	23.2 %	1.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.509 ppb	0.977 ppb	1.058 ppb	113.297 ppb	0.967 ppb	1.023 ppb	1.036 ppb	1.219 ppb	106.462 %
Concentration per Run 1	0.408 ppb	0.881 ppb	0.990 ppb	120.917 ppb	0.976 ppb	0.917 ppb	1.075 ppb	1.147 ppb	107.074 %
Concentration per Run 2	0.479 ppb	1.001 ppb	1.032 ppb	102.816 ppb	0.948 ppb	1.145 ppb	0.908 ppb	1.160 ppb	104.235 %
Concentration per Run 3	0.640 ppb	1.050 ppb	1.152 ppb	116.160 ppb	0.976 ppb	1.007 ppb	1.125 ppb	1.349 ppb	108.078 %
Concentration RSD	23.3 %	8.9 %	8.0 %	8.3 %	1.7 %	11.2 %	10.9 %	9.3 %	1.9 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	1.055 ppb	1.088 ppb	0.997 ppb	1.387 ppb	110.221 %	1.004 ppb	1.013 ppb	108.737 %	1.101 ppb
Concentration per Run 1	0.942 ppb	0.927 ppb	0.985 ppb	1.190 ppb	112.081 %	0.992 ppb	0.982 ppb	107.630 %	1.046 ppb
Concentration per Run 2	1.022 ppb	1.245 ppb	1.008 ppb	1.295 ppb	109.933 %	1.032 ppb	1.014 ppb	110.730 %	1.116 ppb
Concentration per Run 3	1.200 ppb	1.093 ppb	0.999 ppb	1.676 ppb	108.648 %	0.987 ppb	1.042 ppb	107.853 %	1.139 ppb
Concentration RSD	12.5 %	14.6 %	1.2 %	18.4 %	1.6 %	2.5 %	3.0 %	1.6 %	4.4 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	1.034 ppb	113.222 %	110.657 %	1.188 ppb	1.041 ppb	114.126 %
Concentration per Run 1	0.999 ppb	115.356 %	112.269 %	1.148 ppb	1.053 ppb	116.303 %
Concentration per Run 2	1.130 ppb	111.844 %	109.063 %	1.212 ppb	1.033 ppb	112.112 %
Concentration per Run 3	0.972 ppb	112.466 %	110.639 %	1.204 ppb	1.037 ppb	113.962 %
Concentration RSD	8.2 %	1.7 %	1.4 %	2.9 %	1.1 %	1.8 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	10	User name	ALPHALAB\a2-icpmsq2	Comment	Sr Inteference Check
Analysis label:	Sr 200ppb	Rack	4		
Analysis started at:	12/3/2024 7:13:05 AM	Vial	55		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	108.497 %	114.703 %	0.007 ppb	-15.233 ppb	1.640 ppb	0.146 ppb	-1.545 ppb	-5.064 ppb	101.065 %
Concentration per Run 1	105.066 %	119.866 %	0.007 ppb	-21.019 ppb	1.669 ppb	0.237 ppb	-5.380 ppb	102.590 ppb	98.221 %
Concentration per Run 2	109.717 %	108.418 %	0.007 ppb	-7.878 ppb	1.910 ppb	0.049 ppb	-1.327 ppb	-119.648 ppb	102.036 %
Concentration per Run 3	110.708 %	115.825 %	0.005 ppb	-16.802 ppb	1.341 ppb	0.154 ppb	2.072 ppb	1.865 ppb	102.939 %
Concentration RSD	2.8 %	5.1 %	15.3 %	44.0 %	17.4 %	64.3 %	241.5 %	2,197.3 %	2.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.442 ppb	-0.043 ppb	0.060 ppb	2.660 ppb	0.009 ppb	-0.027 ppb	0.055 ppb	0.439 ppb	109.751 %
Concentration per Run 1	-0.424 ppb	-0.067 ppb	0.034 ppb	2.259 ppb	0.008 ppb	-0.020 ppb	0.029 ppb	0.370 ppb	108.843 %
Concentration per Run 2	-0.476 ppb	-0.005 ppb	0.069 ppb	2.982 ppb	0.012 ppb	-0.038 ppb	0.068 ppb	0.526 ppb	107.474 %
Concentration per Run 3	-0.426 ppb	-0.056 ppb	0.078 ppb	2.739 ppb	0.008 ppb	-0.022 ppb	0.069 ppb	0.422 ppb	112.936 %
Concentration RSD	6.6 %	77.5 %	38.2 %	13.8 %	24.6 %	38.2 %	41.4 %	18.0 %	2.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.019 ppb	0.040 ppb	192.217 ppb	0.102 ppb	110.959 %	0.003 ppb	0.006 ppb	109.681 %	0.014 ppb
Concentration per Run 1	0.038 ppb	-0.010 ppb	190.666 ppb	0.058 ppb	115.276 %	0.001 ppb	0.000 ppb	115.572 %	0.014 ppb
Concentration per Run 2	0.058 ppb	0.090 ppb	196.208 ppb	0.137 ppb	107.685 %	0.005 ppb	0.010 ppb	108.559 %	0.012 ppb
Concentration per Run 3	-0.037 ppb	0.039 ppb	189.776 ppb	0.112 ppb	109.915 %	0.003 ppb	0.007 ppb	104.914 %	0.016 ppb
Concentration RSD	259.3 %	125.5 %	1.8 %	39.6 %	3.5 %	70.4 %	91.3 %	4.9 %	13.8 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.041 ppb	111.960 %	111.655 %	0.059 ppb	0.007 ppb	114.043 %
Concentration per Run 1	0.056 ppb	114.764 %	114.976 %	0.044 ppb	0.006 ppb	118.358 %
Concentration per Run 2	0.033 ppb	111.470 %	110.213 %	0.068 ppb	0.008 ppb	111.689 %
Concentration per Run 3	0.035 ppb	109.647 %	109.775 %	0.067 ppb	0.006 ppb	112.081 %
Concentration RSD	30.8 %	2.3 %	2.6 %	22.9 %	15.6 %	3.3 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index: 11
Analysis label: ICV
Analysis started at: 12/3/2024 7:17:37 AM
User name ALPHALAB\a2-icpmsq2
Rack 0
Vial 7
Comment ICV

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	109.072 %	118.519 %	50.716 ppb	4,996.226 ppb	4,988.412 ppb	51.554 ppb	4,909.971 ppb	5,109.176 ppb	102.856 %
Concentration per Run 1	102.525 %	113.805 %	51.097 ppb	5,162.262 ppb	5,064.520 ppb	53.484 ppb	5,115.019 ppb	5,380.848 ppb	103.584 %
Concentration per Run 2	111.132 %	117.509 %	50.051 ppb	5,000.255 ppb	5,008.072 ppb	51.611 ppb	4,821.562 ppb	5,037.067 ppb	102.341 %
Concentration per Run 3	113.560 %	124.243 %	51.001 ppb	4,826.161 ppb	4,892.643 ppb	49.568 ppb	4,793.334 ppb	4,909.612 ppb	102.642 %
Recovery Percentage 1			101.433 %	99.925 %	99.768 %	103.108 %	98.199 %	102.184 %	
Concentration RSD	5.3 %	4.5 %	1.1 %	3.4 %	1.8 %	3.8 %	3.6 %	4.8 %	0.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	50.687 ppb	50.623 ppb	52.437 ppb	5,071.545 ppb	51.024 ppb	50.459 ppb	51.657 ppb	54.202 ppb	109.683 %
Concentration per Run 1	51.681 ppb	51.147 ppb	50.828 ppb	5,051.567 ppb	51.282 ppb	50.804 ppb	52.094 ppb	54.456 ppb	109.291 %
Concentration per Run 2	50.014 ppb	50.052 ppb	53.613 ppb	5,102.597 ppb	52.063 ppb	51.035 ppb	52.859 ppb	55.649 ppb	109.028 %
Concentration per Run 3	50.367 ppb	50.672 ppb	52.871 ppb	5,060.469 ppb	49.727 ppb	49.537 ppb	50.018 ppb	52.501 ppb	110.731 %
Recovery Percentage 1	101.374 %	101.247 %	104.875 %	101.431 %	102.048 %	100.918 %	103.314 %	108.404 %	
Concentration RSD	1.7 %	1.1 %	2.8 %	0.5 %	2.3 %	1.6 %	2.8 %	2.9 %	0.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	50.413 ppb	50.246 ppb	50.176 ppb	50.168 ppb	110.051 %	52.450 ppb	50.444 ppb	110.608 %	50.217 ppb
Concentration per Run 1	51.134 ppb	49.453 ppb	49.814 ppb	50.119 ppb	114.225 %	51.780 ppb	48.684 ppb	113.398 %	49.068 ppb
Concentration per Run 2	50.395 ppb	52.753 ppb	50.057 ppb	50.767 ppb	110.298 %	52.400 ppb	51.226 ppb	108.038 %	50.716 ppb
Concentration per Run 3	49.709 ppb	48.534 ppb	50.656 ppb	49.619 ppb	105.629 %	53.169 ppb	51.421 ppb	110.389 %	50.869 ppb
Recovery Percentage 1	100.825 %	100.493 %	100.351 %	100.337 %		104.899 %	100.888 %		100.435 %
Concentration RSD	1.4 %	4.4 %	0.9 %	1.1 %	3.9 %	1.3 %	3.0 %	2.4 %	2.0 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	50.429 ppb	113.058 %	112.168 %	50.283 ppb	50.543 ppb	114.001 %
Concentration per Run 1	48.673 ppb	115.116 %	115.481 %	49.075 ppb	49.529 ppb	116.057 %
Concentration per Run 2	51.300 ppb	114.274 %	110.007 %	49.795 ppb	50.831 ppb	112.174 %
Concentration per Run 3	51.315 ppb	109.783 %	111.017 %	51.979 ppb	51.268 ppb	113.773 %
Recovery Percentage 1	100.859 %			100.566 %	101.085 %	
Concentration RSD	3.0 %	2.5 %	2.6 %	3.0 %	1.8 %	1.7 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index: 12 User name ALPHALAB\a2-icpmsq2 Comment ICB
Analysis label: ICB Rack 0
Analysis started at: 12/3/2024 7:22:07 AM Vial 10

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	109.773 %	112.739 %	0.020 ppb	-26.475 ppb	-0.118 ppb	0.344 ppb	-14.441 ppb	-6.774 ppb	101.144 %
Concentration per Run 1	104.764 %	118.856 %	0.018 ppb	-34.489 ppb	-1.113 ppb	0.348 ppb	-19.930 ppb	-0.991 ppb	100.400 %
Concentration per Run 2	110.940 %	107.744 %	0.030 ppb	-20.137 ppb	0.099 ppb	0.096 ppb	-12.884 ppb	-17.184 ppb	101.521 %
Concentration per Run 3	113.616 %	111.616 %	0.012 ppb	-24.798 ppb	0.660 ppb	0.589 ppb	-10.507 ppb	-2.148 ppb	101.512 %
Recovery Percentage 1			4.011 %	-5.295 %	-0.169 %	3.441 %	-14.441 %	-6.774 %	
Concentration RSD	4.1 %	5.0 %	44.3 %	27.7 %	768.0 %	71.7 %	33.9 %	133.4 %	0.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.426 ppb	-0.036 ppb	0.004 ppb	4.442 ppb	0.000 ppb	-0.016 ppb	0.022 ppb	0.302 ppb	110.215 %
Concentration per Run 1	-0.483 ppb	-0.020 ppb	-0.012 ppb	5.807 ppb	-0.001 ppb	0.021 ppb	-0.008 ppb	0.324 ppb	111.116 %
Concentration per Run 2	-0.479 ppb	-0.050 ppb	0.005 ppb	2.304 ppb	-0.007 ppb	-0.041 ppb	0.029 ppb	0.330 ppb	111.210 %
Concentration per Run 3	-0.315 ppb	-0.039 ppb	0.021 ppb	5.214 ppb	0.008 ppb	-0.029 ppb	0.045 ppb	0.253 ppb	108.319 %
Recovery Percentage 1	-8.511 %	-3.608 %	0.450 %	8.883 %	0.023 %	-0.804 %	2.182 %	6.049 %	
Concentration RSD	22.5 %	42.6 %	365.3 %	42.2 %	6,888.7 %	203.6 %	124.1 %	14.1 %	1.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	-0.007 ppb	0.234 ppb	0.007 ppb	0.392 ppb	110.130 %	0.006 ppb	0.003 ppb	107.631 %	0.067 ppb
Concentration per Run 1	-0.057 ppb	0.362 ppb	0.007 ppb	0.235 ppb	113.780 %	0.006 ppb	0.003 ppb	107.044 %	0.043 ppb
Concentration per Run 2	-0.005 ppb	0.165 ppb	0.008 ppb	0.466 ppb	109.860 %	0.002 ppb	0.007 ppb	103.760 %	0.070 ppb
Concentration per Run 3	0.040 ppb	0.175 ppb	0.006 ppb	0.476 ppb	106.752 %	0.009 ppb	0.000 ppb	112.089 %	0.089 ppb
Recovery Percentage 1	-1.408 %	4.679 %	0.071 %	19.612 %		1.418 %	1.728 %		1.677 %
Concentration RSD	687.2 %	47.6 %	10.3 %	34.8 %	3.2 %	61.2 %	101.1 %	3.9 %	34.5 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.007 ppb	113.487 %	110.653 %	0.189 ppb	0.012 ppb	111.857 %
Concentration per Run 1	-0.019 ppb	115.745 %	114.616 %	0.186 ppb	0.011 ppb	113.439 %
Concentration per Run 2	0.035 ppb	109.783 %	107.778 %	0.208 ppb	0.013 ppb	112.433 %
Concentration per Run 3	0.006 ppb	114.933 %	109.566 %	0.173 ppb	0.012 ppb	109.699 %
Recovery Percentage 1	1.465 %			18.925 %	1.177 %	
Concentration RSD	367.6 %	2.8 %	3.2 %	9.3 %	8.7 %	1.7 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	13	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	ICSA	Rack	4		
Analysis started at:	12/3/2024 7:28:46 AM	Vial	53		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	77.425 %	100.898 %	0.026 ppb	260,283.423 ppb	95,027.936 ppb	95,923.619 ppb	92,602.726 ppb	279,901.564 ppb	74.611 %
Concentration per Run 1	76.603 %	104.209 %	0.035 ppb	252,576.654 ppb	95,674.151 ppb	93,358.091 ppb	93,182.641 ppb	275,266.545 ppb	73.296 %
Concentration per Run 2	78.021 %	99.832 %	0.019 ppb	259,612.046 ppb	93,135.872 ppb	95,693.955 ppb	96,072.311 ppb	281,448.725 ppb	75.258 %
Concentration per Run 3	77.651 %	98.653 %	0.024 ppb	268,661.568 ppb	96,273.785 ppb	98,718.812 ppb	88,553.225 ppb	282,989.421 ppb	75.281 %
Recovery Percentage 1			2.617 %	104.113 %	95.028 %	95.924 %	92.603 %	93.301 %	
Concentration RSD	0.9 %	2.9 %	30.8 %	3.1 %	1.8 %	2.8 %	4.1 %	1.5 %	1.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.397 ppb	1.510 ppb	4.347 ppb	235,073.825 ppb	2.043 ppb	2.743 ppb	0.950 ppb	3.435 ppb	108.055 %
Concentration per Run 1	-0.356 ppb	1.415 ppb	4.324 ppb	236,338.259 ppb	2.054 ppb	2.666 ppb	1.017 ppb	3.617 ppb	110.179 %
Concentration per Run 2	-0.470 ppb	1.528 ppb	4.565 ppb	244,618.331 ppb	2.033 ppb	3.064 ppb	0.992 ppb	3.441 ppb	105.051 %
Concentration per Run 3	-0.365 ppb	1.589 ppb	4.152 ppb	224,264.885 ppb	2.040 ppb	2.499 ppb	0.842 ppb	3.248 ppb	108.933 %
Recovery Percentage 1	-7.945 %	45.772 %	76.257 %	94.030 %	71.172 %	44.966 %	115.899 %	30.135 %	
Concentration RSD	15.9 %	5.9 %	4.8 %	4.4 %	0.5 %	10.6 %	10.0 %	5.4 %	2.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.526 ppb	3.361 ppb	2.424 ppb	2,131.463 ppb	94.898 %	0.019 ppb	0.525 ppb	104.009 %	0.185 ppb
Concentration per Run 1	0.615 ppb	3.100 ppb	2.361 ppb	2,092.204 ppb	97.544 %	0.012 ppb	0.476 ppb	108.519 %	0.182 ppb
Concentration per Run 2	0.500 ppb	3.527 ppb	2.473 ppb	2,152.090 ppb	91.375 %	0.020 ppb	0.509 ppb	104.656 %	0.185 ppb
Concentration per Run 3	0.465 ppb	3.454 ppb	2.439 ppb	2,150.093 ppb	95.773 %	0.024 ppb	0.589 ppb	98.852 %	0.186 ppb
Recovery Percentage 1	32.299 %	26.051 %	484.786 %	106.573 %		2.318 %	131.142 %		2.307 %
Concentration RSD	14.9 %	6.8 %	2.4 %	1.6 %	3.3 %	32.4 %	11.1 %	4.7 %	1.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	1.311 ppb	105.281 %	101.358 %	0.052 ppb	1.539 ppb	98.793 %
Concentration per Run 1	1.181 ppb	107.132 %	104.218 %	0.037 ppb	1.503 ppb	103.198 %
Concentration per Run 2	1.188 ppb	102.454 %	99.837 %	0.058 ppb	1.566 ppb	97.213 %
Concentration per Run 3	1.565 ppb	106.257 %	100.019 %	0.062 ppb	1.548 ppb	95.968 %
Recovery Percentage 1	69.743 %			2.619 %	49.645 %	
Concentration RSD	16.7 %	2.4 %	2.4 %	26.4 %	2.1 %	3.9 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	14	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	LDR	Rack	4		
Analysis started at:	12/3/2024 7:33:17 AM	Vial	1		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	91.563 %	108.025 %	0.006 ppb	49.368 ppb	3.998 ppb	4.810 ppb	28.275 ppb	9.141 ppb	89.082 %
Concentration per Run 1	89.252 %	106.734 %	0.008 ppb	59.088 ppb	5.209 ppb	5.573 ppb	35.831 ppb	9.944 ppb	88.232 %
Concentration per Run 2	92.187 %	110.101 %	0.004 ppb	44.430 ppb	3.372 ppb	4.227 ppb	22.515 ppb	22.695 ppb	89.602 %
Concentration per Run 3	93.249 %	107.239 %	0.007 ppb	44.588 ppb	3.414 ppb	4.631 ppb	26.481 ppb	-5.217 ppb	89.411 %
Recovery Percentage 1									
Concentration RSD	2.3 %	1.7 %	27.5 %	17.1 %	26.2 %	14.4 %	24.2 %	152.9 %	0.8 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	925.491 ppb	964.981 ppb	9,083.550 ppb	32.988 ppb	0.016 ppb	9,816.044 ppb	9,961.563 ppb	9,467.192 ppb	97.937 %
Concentration per Run 1	930.436 ppb	984.825 ppb	9,192.936 ppb	32.478 ppb	0.021 ppb	9,932.172 ppb	10,267.736 ppb	9,604.056 ppb	93.933 %
Concentration per Run 2	930.791 ppb	953.733 ppb	9,074.874 ppb	31.844 ppb	0.010 ppb	9,703.260 ppb	9,946.986 ppb	9,515.339 ppb	97.750 %
Concentration per Run 3	915.244 ppb	956.385 ppb	8,982.839 ppb	34.643 ppb	0.016 ppb	9,812.698 ppb	9,669.966 ppb	9,282.180 ppb	102.130 %
Recovery Percentage 1	92.549 %	96.498 %	90.835 %			98.160 %	99.616 %	94.672 %	
Concentration RSD	1.0 %	1.8 %	1.2 %	4.4 %	35.6 %	1.2 %	3.0 %	1.8 %	4.2 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	904.370 ppb	2.342 ppb	0.240 ppb	4.413 ppb	101.381 %	0.114 ppb	0.029 ppb	97.220 %	0.029 ppb
Concentration per Run 1	908.778 ppb	2.361 ppb	0.245 ppb	3.449 ppb	105.832 %	0.106 ppb	0.022 ppb	98.870 %	0.025 ppb
Concentration per Run 2	921.059 ppb	2.292 ppb	0.222 ppb	4.441 ppb	98.003 %	0.107 ppb	0.031 ppb	95.258 %	0.024 ppb
Concentration per Run 3	883.273 ppb	2.374 ppb	0.254 ppb	5.350 ppb	100.309 %	0.129 ppb	0.034 ppb	97.533 %	0.037 ppb
Recovery Percentage 1	90.437 %								
Concentration RSD	2.1 %	1.9 %	6.9 %	21.5 %	4.0 %	11.3 %	21.4 %	1.9 %	26.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	9,782.000 ppb	99.911 %	97.335 %	0.057 ppb	9,928.163 ppb	100.110 %
Concentration per Run 1	10,021.895 ppb	99.184 %	97.443 %	0.057 ppb	9,801.199 ppb	100.374 %
Concentration per Run 2	9,217.024 ppb	100.550 %	98.028 %	0.056 ppb	10,086.648 ppb	98.549 %
Concentration per Run 3	10,107.080 ppb	100.001 %	96.534 %	0.057 ppb	9,896.640 ppb	101.408 %
Recovery Percentage 1	97.820 %				99.282 %	
Concentration RSD	5.0 %	0.7 %	0.8 %	1.1 %	1.5 %	1.4 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index: 15 User name ALPHALAB\a2-icpmsq2 Comment <Comment>
Analysis label: Rinse Rack 0
Analysis started at: 12/3/2024 7:37:47 AM Vial 1

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	100.788 %	110.382 %	0.017 ppb	39.912 ppb	5.670 ppb	10.397 ppb	25.473 ppb	19.955 ppb	102.010 %
Concentration per Run 1	96.880 %	118.856 %	0.024 ppb	23.922 ppb	5.366 ppb	8.545 ppb	13.801 ppb	2.393 ppb	100.133 %
Concentration per Run 2	102.505 %	103.704 %	0.015 ppb	44.003 ppb	4.834 ppb	9.710 ppb	26.792 ppb	25.210 ppb	101.012 %
Concentration per Run 3	102.979 %	108.586 %	0.014 ppb	51.809 ppb	6.812 ppb	12.936 ppb	35.826 ppb	32.262 ppb	104.884 %
Concentration RSD	3.4 %	7.0 %	31.4 %	36.0 %	18.0 %	21.9 %	43.5 %	78.2 %	2.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.406 ppb	0.155 ppb	0.942 ppb	77.426 ppb	0.014 ppb	3.504 ppb	2.104 ppb	2.973 ppb	100.790 %
Concentration per Run 1	-0.520 ppb	0.138 ppb	0.799 ppb	70.803 ppb	0.025 ppb	3.393 ppb	2.014 ppb	2.650 ppb	100.267 %
Concentration per Run 2	-0.274 ppb	0.183 ppb	0.874 ppb	80.483 ppb	0.013 ppb	3.512 ppb	1.949 ppb	2.920 ppb	99.503 %
Concentration per Run 3	-0.425 ppb	0.144 ppb	1.152 ppb	80.993 ppb	0.003 ppb	3.609 ppb	2.349 ppb	3.350 ppb	102.601 %
Concentration RSD	30.6 %	15.9 %	19.8 %	7.4 %	81.0 %	3.1 %	10.2 %	11.9 %	1.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.586 ppb	0.055 ppb	0.012 ppb	0.951 ppb	101.840 %	0.036 ppb	0.001 ppb	97.283 %	0.017 ppb
Concentration per Run 1	0.670 ppb	0.026 ppb	0.016 ppb	0.542 ppb	104.717 %	0.035 ppb	0.000 ppb	99.722 %	0.009 ppb
Concentration per Run 2	0.637 ppb	-0.051 ppb	0.003 ppb	0.862 ppb	100.671 %	0.035 ppb	0.000 ppb	96.206 %	0.018 ppb
Concentration per Run 3	0.450 ppb	0.191 ppb	0.017 ppb	1.449 ppb	100.133 %	0.037 ppb	0.004 ppb	95.921 %	0.026 ppb
Concentration RSD	20.2 %	223.3 %	62.7 %	48.3 %	2.5 %	2.4 %	173.2 %	2.2 %	48.5 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.475 ppb	99.889 %	99.173 %	0.019 ppb	2.074 ppb	101.436 %
Concentration per Run 1	0.293 ppb	102.762 %	101.038 %	0.006 ppb	2.041 ppb	104.116 %
Concentration per Run 2	0.231 ppb	99.287 %	97.918 %	0.025 ppb	1.691 ppb	99.055 %
Concentration per Run 3	0.902 ppb	97.617 %	98.563 %	0.025 ppb	2.490 ppb	101.135 %
Concentration RSD	78.0 %	2.6 %	1.7 %	57.8 %	19.3 %	2.5 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	16	User name	ALPHALAB\a2-icpmsq2	Comment	CCV/MCCV
Analysis label:	CCV	Rack	0		
Analysis started at:	12/3/2024 7:42:14 AM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	98.136 %	117.060 %	62.968 ppb	5,957.011 ppb	5,879.006 ppb	56.114 ppb	5,802.825 ppb	5,773.221 ppb	95.802 %
Concentration per Run 1	93.545 %	122.559 %	63.991 ppb	5,588.736 ppb	5,503.076 ppb	55.489 ppb	5,779.047 ppb	5,622.254 ppb	93.746 %
Concentration per Run 2	99.410 %	115.657 %	61.914 ppb	6,116.184 ppb	6,040.797 ppb	56.094 ppb	5,686.175 ppb	5,655.660 ppb	97.142 %
Concentration per Run 3	101.453 %	112.963 %	62.998 ppb	6,166.114 ppb	6,093.145 ppb	56.758 ppb	5,943.252 ppb	6,041.749 ppb	96.517 %
Recovery Percentage 1			104.946 %	99.284 %	97.983 %	93.523 %	96.714 %	96.220 %	
Concentration RSD	4.2 %	4.2 %	1.7 %	5.4 %	5.6 %	1.1 %	2.2 %	4.0 %	1.9 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	58.535 ppb	60.642 ppb	60.871 ppb	6,065.390 ppb	62.390 ppb	62.611 ppb	63.040 ppb	62.574 ppb	101.855 %
Concentration per Run 1	54.652 ppb	56.785 ppb	60.817 ppb	5,877.408 ppb	62.033 ppb	60.043 ppb	61.531 ppb	59.520 ppb	103.989 %
Concentration per Run 2	60.392 ppb	61.788 ppb	61.022 ppb	6,188.382 ppb	63.499 ppb	65.667 ppb	65.361 ppb	65.987 ppb	100.338 %
Concentration per Run 3	60.560 ppb	63.354 ppb	60.773 ppb	6,130.381 ppb	61.637 ppb	62.124 ppb	62.229 ppb	62.215 ppb	101.238 %
Recovery Percentage 1	97.558 %	101.071 %	101.451 %	101.090 %	103.983 %	104.352 %	105.067 %	104.290 %	
Concentration RSD	5.7 %	5.7 %	0.2 %	2.7 %	1.6 %	4.5 %	3.2 %	5.2 %	1.9 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	60.716 ppb	56.720 ppb	60.036 ppb	61.404 ppb	101.326 %	62.186 ppb	62.309 ppb	99.554 %	61.536 ppb
Concentration per Run 1	60.283 ppb	53.891 ppb	58.798 ppb	60.166 ppb	104.613 %	60.764 ppb	61.816 ppb	100.133 %	61.254 ppb
Concentration per Run 2	61.156 ppb	58.188 ppb	60.630 ppb	62.085 ppb	99.686 %	61.713 ppb	61.963 ppb	99.368 %	61.673 ppb
Concentration per Run 3	60.710 ppb	58.081 ppb	60.679 ppb	61.961 ppb	99.678 %	64.082 ppb	63.149 ppb	99.162 %	61.681 ppb
Recovery Percentage 1	101.194 %	94.534 %	100.059 %	102.340 %		103.644 %	103.849 %		102.560 %
Concentration RSD	0.7 %	4.3 %	1.8 %	1.7 %	2.8 %	2.7 %	1.2 %	0.5 %	0.4 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	60.769 ppb	104.360 %	101.665 %	62.292 ppb	62.750 ppb	102.010 %
Concentration per Run 1	59.858 ppb	107.228 %	104.106 %	61.333 ppb	61.783 ppb	103.617 %
Concentration per Run 2	59.796 ppb	102.769 %	98.174 %	62.516 ppb	63.597 ppb	100.620 %
Concentration per Run 3	62.652 ppb	103.084 %	102.715 %	63.029 ppb	62.871 ppb	101.795 %
Recovery Percentage 1	101.281 %			103.821 %	104.584 %	
Concentration RSD	2.7 %	2.4 %	3.1 %	1.4 %	1.5 %	1.5 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index: 17 User name ALPHALAB\a2-icpmsq2 Comment CCB
Analysis label: CCB Rack 0
Analysis started at: 12/3/2024 7:46:45 AM Vial 10

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	97.755 %	116.106 %	0.095 ppb	-3.567 ppb	0.138 ppb	0.196 ppb	-0.022 ppb	-5.582 ppb	95.506 %
Concentration per Run 1	93.206 %	116.330 %	0.132 ppb	-3.977 ppb	0.265 ppb	0.012 ppb	-0.289 ppb	-10.176 ppb	94.760 %
Concentration per Run 2	100.347 %	110.943 %	0.100 ppb	6.059 ppb	0.129 ppb	0.404 ppb	5.263 ppb	-0.276 ppb	96.356 %
Concentration per Run 3	99.713 %	121.044 %	0.055 ppb	-12.782 ppb	0.021 ppb	0.170 ppb	-5.040 ppb	-6.294 ppb	95.402 %
Recovery Percentage 1			19.078 %	-0.713 %	0.198 %	1.956 %	-0.022 %	-5.582 %	
Concentration RSD	4.0 %	4.4 %	40.7 %	264.3 %	88.2 %	100.9 %	23,443.7 %	89.4 %	0.8 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.526 ppb	-0.014 ppb	0.077 ppb	6.763 ppb	-0.001 ppb	0.023 ppb	0.542 ppb	0.280 ppb	96.074 %
Concentration per Run 1	-0.470 ppb	-0.023 ppb	0.010 ppb	6.368 ppb	-0.007 ppb	0.016 ppb	0.564 ppb	0.335 ppb	96.229 %
Concentration per Run 2	-0.514 ppb	-0.001 ppb	0.099 ppb	5.362 ppb	-0.003 ppb	-0.004 ppb	0.567 ppb	0.271 ppb	93.608 %
Concentration per Run 3	-0.596 ppb	-0.018 ppb	0.122 ppb	8.558 ppb	0.006 ppb	0.058 ppb	0.494 ppb	0.235 ppb	98.384 %
Recovery Percentage 1	-10.529 %	-1.407 %	7.673 %	13.525 %	-0.242 %	1.156 %	54.152 %	5.601 %	
Concentration RSD	12.2 %	82.6 %	77.1 %	24.2 %	549.7 %	138.1 %	7.6 %	18.1 %	2.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.153 ppb	0.188 ppb	0.010 ppb	0.461 ppb	100.751 %	0.011 ppb	0.005 ppb	95.900 %	0.041 ppb
Concentration per Run 1	0.170 ppb	0.266 ppb	0.011 ppb	0.322 ppb	101.606 %	0.010 ppb	0.004 ppb	94.819 %	0.035 ppb
Concentration per Run 2	0.120 ppb	0.095 ppb	-0.001 ppb	0.420 ppb	98.831 %	0.013 ppb	0.004 ppb	95.202 %	0.038 ppb
Concentration per Run 3	0.169 ppb	0.203 ppb	0.020 ppb	0.641 ppb	101.817 %	0.010 ppb	0.007 ppb	97.680 %	0.050 ppb
Recovery Percentage 1	30.584 %	3.759 %	0.103 %	23.056 %		2.732 %	2.516 %		1.023 %
Concentration RSD	18.7 %	46.0 %	101.3 %	35.5 %	1.7 %	13.3 %	41.8 %	1.6 %	19.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.039 ppb	101.528 %	99.288 %	0.217 ppb	0.291 ppb	99.717 %
Concentration per Run 1	0.068 ppb	102.343 %	100.864 %	0.203 ppb	0.296 ppb	102.367 %
Concentration per Run 2	0.025 ppb	100.832 %	98.444 %	0.245 ppb	0.307 ppb	98.242 %
Concentration per Run 3	0.024 ppb	101.409 %	98.556 %	0.204 ppb	0.270 ppb	98.541 %
Recovery Percentage 1	7.840 %			21.723 %	29.092 %	
Concentration RSD	64.6 %	0.8 %	1.4 %	11.2 %	6.5 %	2.3 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	18	User name	ALPHALAB\a2-icpmsq2	Comment	FB
Analysis label:	I2469249-03 6020SL	Rack	1		
Analysis started at:	12/3/2024 7:57:42 AM	Vial	6		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	103.799 %	116.218 %	0.004 ppb	-11.258 ppb	1.095 ppb	2.638 ppb	0.309 ppb	19.959 ppb	98.443 %
Concentration per Run 1	100.318 %	119.529 %	0.006 ppb	-21.500 ppb	1.361 ppb	2.242 ppb	2.336 ppb	14.875 ppb	95.326 %
Concentration per Run 2	104.060 %	116.330 %	0.004 ppb	-10.231 ppb	1.428 ppb	2.990 ppb	-6.451 ppb	28.936 ppb	98.070 %
Concentration per Run 3	107.018 %	112.795 %	0.004 ppb	-2.042 ppb	0.495 ppb	2.680 ppb	5.043 ppb	16.067 ppb	101.933 %
Concentration RSD	3.2 %	2.9 %	32.6 %	86.8 %	47.6 %	14.3 %	1,942.3 %	39.1 %	3.4 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.497 ppb	0.010 ppb	0.349 ppb	12.543 ppb	0.001 ppb	0.017 ppb	0.704 ppb	0.911 ppb	98.321 %
Concentration per Run 1	-0.489 ppb	-0.001 ppb	0.413 ppb	12.122 ppb	0.006 ppb	0.000 ppb	0.789 ppb	0.821 ppb	99.333 %
Concentration per Run 2	-0.565 ppb	-0.011 ppb	0.324 ppb	11.785 ppb	-0.003 ppb	0.049 ppb	0.652 ppb	0.999 ppb	97.683 %
Concentration per Run 3	-0.438 ppb	0.042 ppb	0.310 ppb	13.722 ppb	0.000 ppb	0.003 ppb	0.670 ppb	0.913 ppb	97.948 %
Concentration RSD	12.8 %	278.0 %	16.1 %	8.3 %	556.7 %	160.8 %	10.5 %	9.7 %	0.9 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.102 ppb	-0.059 ppb	0.112 ppb	0.123 ppb	106.099 %	0.003 ppb	0.005 ppb	102.532 %	0.019 ppb
Concentration per Run 1	0.024 ppb	-0.060 ppb	0.096 ppb	0.063 ppb	109.808 %	0.004 ppb	0.003 ppb	104.745 %	0.013 ppb
Concentration per Run 2	0.096 ppb	-0.066 ppb	0.116 ppb	0.064 ppb	104.524 %	0.001 ppb	0.004 ppb	97.422 %	0.027 ppb
Concentration per Run 3	0.187 ppb	-0.051 ppb	0.123 ppb	0.241 ppb	103.966 %	0.002 ppb	0.007 ppb	105.428 %	0.018 ppb
Concentration RSD	80.3 %	13.0 %	12.7 %	83.6 %	3.0 %	54.5 %	42.2 %	4.3 %	36.5 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.193 ppb	106.203 %	106.136 %	0.030 ppb	0.116 ppb	111.216 %
Concentration per Run 1	0.102 ppb	109.096 %	108.956 %	0.019 ppb	0.114 ppb	114.181 %
Concentration per Run 2	0.236 ppb	105.191 %	103.461 %	0.033 ppb	0.128 ppb	110.354 %
Concentration per Run 3	0.241 ppb	104.323 %	105.990 %	0.038 ppb	0.107 ppb	109.114 %
Concentration RSD	40.9 %	2.4 %	2.6 %	31.8 %	9.4 %	2.4 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	19	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	I2469249-06 6020SL	Rack	1		
Analysis started at:	12/3/2024 8:02:11 AM	Vial	1		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	96.622 %	112.514 %	0.018 ppb	57,895.750 ppb	28,616.545 ppb	11.452 ppb	6,163.590 ppb	120,220.995 ppb	98.632 %
Concentration per Run 1	93.441 %	113.637 %	0.016 ppb	55,771.050 ppb	27,702.289 ppb	11.144 ppb	6,188.566 ppb	121,703.382 ppb	99.291 %
Concentration per Run 2	97.138 %	104.882 %	0.015 ppb	61,592.288 ppb	30,074.490 ppb	11.858 ppb	6,205.202 ppb	119,959.227 ppb	98.622 %
Concentration per Run 3	99.287 %	119.024 %	0.021 ppb	56,323.914 ppb	28,072.856 ppb	11.354 ppb	6,097.003 ppb	119,000.377 ppb	97.984 %
Concentration RSD	3.1 %	6.3 %	15.9 %	5.5 %	4.5 %	3.2 %	0.9 %	1.1 %	0.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.073 ppb	0.130 ppb	2,842.106 ppb	201.054 ppb	5.574 ppb	4.947 ppb	1.965 ppb	2.961 ppb	98.909 %
Concentration per Run 1	0.132 ppb	0.098 ppb	2,906.887 ppb	192.122 ppb	5.482 ppb	4.848 ppb	1.865 ppb	2.925 ppb	100.129 %
Concentration per Run 2	0.091 ppb	0.147 ppb	2,573.498 ppb	201.835 ppb	5.592 ppb	4.850 ppb	2.081 ppb	2.874 ppb	99.948 %
Concentration per Run 3	-0.004 ppb	0.146 ppb	3,045.932 ppb	209.205 ppb	5.647 ppb	5.142 ppb	1.950 ppb	3.084 ppb	96.650 %
Concentration RSD	95.9 %	21.7 %	8.5 %	4.3 %	1.5 %	3.4 %	5.5 %	3.7 %	2.0 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.422 ppb	2.005 ppb	772.012 ppb	4.104 ppb	101.671 %	0.001 ppb	0.070 ppb	103.751 %	1.331 ppb
Concentration per Run 1	0.499 ppb	1.699 ppb	748.964 ppb	4.157 ppb	105.112 %	0.001 ppb	0.070 ppb	105.899 %	1.277 ppb
Concentration per Run 2	0.403 ppb	1.346 ppb	780.085 ppb	3.977 ppb	98.770 %	0.001 ppb	0.067 ppb	99.370 %	1.324 ppb
Concentration per Run 3	0.364 ppb	2.968 ppb	786.987 ppb	4.179 ppb	101.132 %	0.000 ppb	0.074 ppb	105.984 %	1.392 ppb
Concentration RSD	16.5 %	42.5 %	2.6 %	2.7 %	3.2 %	64.6 %	5.2 %	3.7 %	4.4 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	50.904 ppb	107.345 %	107.070 %	0.023 ppb	0.333 ppb	103.176 %
Concentration per Run 1	50.048 ppb	109.386 %	109.147 %	0.012 ppb	0.337 ppb	106.843 %
Concentration per Run 2	52.318 ppb	106.965 %	105.485 %	0.028 ppb	0.326 ppb	101.499 %
Concentration per Run 3	50.346 ppb	105.685 %	106.580 %	0.030 ppb	0.335 ppb	101.185 %
Concentration RSD	2.4 %	1.8 %	1.8 %	42.9 %	1.8 %	3.1 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	20	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG2003419-7d10 6020SL	Rack	1		
Analysis started at:	12/3/2024 8:06:38 AM	Vial	2		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	101.506 %	114.422 %	5.735 ppb	6,976.933 ppb	4,000.102 ppb	248.614 ppb	1,679.115 ppb	13,074.101 ppb	99.150 %
Concentration per Run 1	97.967 %	124.580 %	5.780 ppb	6,533.581 ppb	3,726.763 ppb	231.190 ppb	1,525.745 ppb	12,031.698 ppb	96.836 %
Concentration per Run 2	102.166 %	110.775 %	5.802 ppb	7,172.622 ppb	4,135.505 ppb	257.174 ppb	1,826.722 ppb	13,483.236 ppb	101.176 %
Concentration per Run 3	104.386 %	107.913 %	5.624 ppb	7,224.594 ppb	4,138.037 ppb	257.479 ppb	1,684.878 ppb	13,707.368 ppb	99.436 %
Concentration RSD	3.2 %	7.8 %	1.7 %	5.5 %	5.9 %	6.1 %	9.0 %	7.0 %	2.2 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	50.891 ppb	20.996 ppb	360.497 ppb	138.093 ppb	55.195 ppb	55.222 ppb	28.765 ppb	55.875 ppb	100.577 %
Concentration per Run 1	46.158 ppb	20.426 ppb	353.896 ppb	131.493 ppb	53.198 ppb	53.555 ppb	28.955 ppb	55.390 ppb	101.656 %
Concentration per Run 2	52.698 ppb	21.423 ppb	369.981 ppb	141.568 ppb	58.028 ppb	57.234 ppb	29.198 ppb	56.047 ppb	97.645 %
Concentration per Run 3	53.819 ppb	21.139 ppb	357.614 ppb	141.220 ppb	54.360 ppb	54.877 ppb	28.143 ppb	56.188 ppb	102.432 %
Concentration RSD	8.1 %	2.4 %	2.3 %	4.1 %	4.6 %	3.4 %	1.9 %	0.8 %	2.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	13.390 ppb	12.144 ppb	180.776 ppb	106.136 ppb	103.356 %	5.866 ppb	5.615 ppb	101.883 %	52.739 ppb
Concentration per Run 1	13.379 ppb	10.231 ppb	179.007 ppb	105.489 ppb	104.879 %	5.657 ppb	5.488 ppb	101.989 %	52.838 ppb
Concentration per Run 2	14.086 ppb	13.118 ppb	183.224 ppb	107.209 ppb	103.294 %	6.018 ppb	5.666 ppb	103.319 %	51.778 ppb
Concentration per Run 3	12.705 ppb	13.084 ppb	180.098 ppb	105.709 ppb	101.895 %	5.922 ppb	5.690 ppb	100.340 %	53.600 ppb
Concentration RSD	5.2 %	13.6 %	1.2 %	0.9 %	1.4 %	3.2 %	2.0 %	1.5 %	1.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	220.821 ppb	105.505 %	104.293 %	12.038 ppb	54.706 ppb	106.054 %
Concentration per Run 1	219.571 ppb	106.902 %	105.096 %	11.545 ppb	52.762 ppb	110.504 %
Concentration per Run 2	217.503 ppb	104.543 %	103.945 %	12.398 ppb	56.176 ppb	102.169 %
Concentration per Run 3	225.391 ppb	105.069 %	103.837 %	12.172 ppb	55.179 ppb	105.489 %
Concentration RSD	1.9 %	1.2 %	0.7 %	3.7 %	3.2 %	4.0 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	21	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG2003419-8d10 6020SL	Rack	1		
Analysis started at:	12/3/2024 8:11:05 AM	Vial	3		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	100.915 %	114.198 %	5.306 ppb	6,744.577 ppb	3,886.548 ppb	194.927 ppb	1,590.965 ppb	12,534.160 ppb	98.582 %
Concentration per Run 1	97.363 %	116.667 %	5.357 ppb	6,554.353 ppb	3,821.019 ppb	196.101 ppb	1,599.943 ppb	12,092.311 ppb	96.811 %
Concentration per Run 2	102.700 %	111.953 %	5.202 ppb	6,992.378 ppb	3,992.697 ppb	195.730 ppb	1,626.974 ppb	13,021.268 ppb	100.122 %
Concentration per Run 3	102.681 %	113.973 %	5.358 ppb	6,687.000 ppb	3,845.927 ppb	192.949 ppb	1,545.979 ppb	12,488.900 ppb	98.813 %
Concentration RSD	3.0 %	2.1 %	1.7 %	3.3 %	2.4 %	0.9 %	2.6 %	3.7 %	1.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	49.311 ppb	20.433 ppb	347.618 ppb	149.096 ppb	53.664 ppb	53.620 ppb	27.404 ppb	52.971 ppb	100.291 %
Concentration per Run 1	46.611 ppb	19.636 ppb	340.027 ppb	129.947 ppb	53.715 ppb	54.478 ppb	27.271 ppb	52.174 ppb	99.954 %
Concentration per Run 2	49.961 ppb	20.744 ppb	358.932 ppb	154.865 ppb	54.963 ppb	55.809 ppb	29.166 ppb	54.448 ppb	98.348 %
Concentration per Run 3	51.363 ppb	20.918 ppb	343.895 ppb	162.476 ppb	52.314 ppb	50.572 ppb	25.775 ppb	52.291 ppb	102.571 %
Concentration RSD	5.0 %	3.4 %	2.9 %	11.4 %	2.5 %	5.1 %	6.2 %	2.4 %	2.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	12.457 ppb	13.101 ppb	175.034 ppb	101.614 ppb	103.099 %	5.631 ppb	5.459 ppb	103.110 %	50.336 ppb
Concentration per Run 1	12.765 ppb	11.652 ppb	172.713 ppb	100.373 ppb	106.270 %	5.380 ppb	5.346 ppb	105.199 %	49.207 ppb
Concentration per Run 2	12.239 ppb	14.364 ppb	179.600 ppb	104.537 ppb	99.365 %	5.811 ppb	5.612 ppb	101.229 %	51.663 ppb
Concentration per Run 3	12.367 ppb	13.287 ppb	172.788 ppb	99.931 ppb	103.662 %	5.702 ppb	5.420 ppb	102.903 %	50.137 ppb
Concentration RSD	2.2 %	10.4 %	2.3 %	2.5 %	3.4 %	4.0 %	2.5 %	1.9 %	2.5 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	208.765 ppb	104.727 %	104.320 %	11.957 ppb	54.004 ppb	104.970 %
Concentration per Run 1	201.992 ppb	109.524 %	107.108 %	11.494 ppb	52.862 ppb	106.213 %
Concentration per Run 2	211.999 ppb	104.095 %	101.215 %	11.884 ppb	54.588 ppb	105.416 %
Concentration per Run 3	212.305 ppb	100.561 %	104.639 %	12.493 ppb	54.564 ppb	103.282 %
Concentration RSD	2.8 %	4.3 %	2.8 %	4.2 %	1.8 %	1.4 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	22	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG2003419-9d10 6020SL	Rack	1		
Analysis started at:	12/3/2024 8:15:32 AM	Vial	4		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	99.503 %	109.764 %	51.588 ppb	10,856.918 ppb	7,994.707 ppb	50.526 ppb	5,496.138 ppb	16,673.424 ppb	98.676 %
Concentration per Run 1	96.489 %	110.438 %	52.895 ppb	10,878.663 ppb	8,097.928 ppb	50.850 ppb	5,433.931 ppb	16,119.880 ppb	95.720 %
Concentration per Run 2	99.055 %	109.933 %	51.305 ppb	10,888.781 ppb	7,941.706 ppb	50.432 ppb	5,649.882 ppb	17,204.716 ppb	100.488 %
Concentration per Run 3	102.966 %	108.923 %	50.565 ppb	10,803.312 ppb	7,944.486 ppb	50.296 ppb	5,404.601 ppb	16,695.676 ppb	99.820 %
Concentration RSD	3.3 %	0.7 %	2.3 %	0.4 %	1.1 %	0.6 %	2.4 %	3.3 %	2.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	48.079 ppb	50.578 ppb	339.173 ppb	5,105.797 ppb	52.022 ppb	51.685 ppb	51.531 ppb	51.280 ppb	102.230 %
Concentration per Run 1	46.225 ppb	49.417 ppb	343.145 ppb	5,147.360 ppb	53.573 ppb	52.650 ppb	51.414 ppb	51.899 ppb	102.827 %
Concentration per Run 2	50.516 ppb	52.589 ppb	349.887 ppb	5,264.448 ppb	52.866 ppb	52.347 ppb	52.696 ppb	52.222 ppb	98.748 %
Concentration per Run 3	47.495 ppb	49.728 ppb	324.488 ppb	4,905.584 ppb	49.626 ppb	50.058 ppb	50.483 ppb	49.720 ppb	105.115 %
Concentration RSD	4.6 %	3.5 %	3.9 %	3.6 %	4.0 %	2.7 %	2.2 %	2.7 %	3.2 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	50.996 ppb	50.648 ppb	123.392 ppb	51.435 ppb	102.305 %	1.517 ppb	50.951 ppb	102.400 %	49.926 ppb
Concentration per Run 1	50.725 ppb	50.417 ppb	122.123 ppb	50.066 ppb	103.885 %	1.445 ppb	49.315 ppb	105.804 %	49.508 ppb
Concentration per Run 2	52.403 ppb	53.862 ppb	126.277 ppb	52.037 ppb	100.805 %	1.568 ppb	52.575 ppb	101.955 %	49.836 ppb
Concentration per Run 3	49.862 ppb	47.667 ppb	121.777 ppb	52.201 ppb	102.226 %	1.537 ppb	50.963 ppb	99.442 %	50.433 ppb
Concentration RSD	2.5 %	6.1 %	2.0 %	2.3 %	1.5 %	4.2 %	3.2 %	3.1 %	0.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	53.839 ppb	106.015 %	105.339 %	49.844 ppb	50.213 ppb	106.071 %
Concentration per Run 1	52.642 ppb	108.655 %	106.577 %	47.209 ppb	48.513 ppb	110.027 %
Concentration per Run 2	54.953 ppb	102.598 %	104.835 %	52.055 ppb	51.923 ppb	103.499 %
Concentration per Run 3	53.920 ppb	106.793 %	104.605 %	50.267 ppb	50.204 ppb	104.687 %
Concentration RSD	2.2 %	2.9 %	1.0 %	4.9 %	3.4 %	3.3 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	23	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG2003419-10d5 6020SL	Rack	1		
Analysis started at:	12/3/2024 8:20:00 AM	Vial	5		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	101.929 %	113.637 %	0.011 ppb	11,201.603 ppb	5,726.170 ppb	2.956 ppb	1,209.648 ppb	23,721.463 ppb	100.876 %
Concentration per Run 1	94.719 %	112.121 %	0.014 ppb	11,083.805 ppb	5,685.581 ppb	2.869 ppb	1,191.629 ppb	23,410.754 ppb	96.358 %
Concentration per Run 2	103.865 %	115.152 %	0.011 ppb	11,491.823 ppb	5,780.521 ppb	2.761 ppb	1,218.735 ppb	23,454.717 ppb	102.194 %
Concentration per Run 3	107.203 %	113.637 %	0.009 ppb	11,029.182 ppb	5,712.409 ppb	3.239 ppb	1,218.581 ppb	24,298.917 ppb	104.077 %
Concentration RSD	6.3 %	1.3 %	21.3 %	2.3 %	0.9 %	8.5 %	1.3 %	2.1 %	4.0 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.325 ppb	0.012 ppb	593.566 ppb	44.115 ppb	1.175 ppb	1.120 ppb	0.641 ppb	1.798 ppb	101.939 %
Concentration per Run 1	-0.336 ppb	-0.029 ppb	596.580 ppb	41.986 ppb	1.228 ppb	1.101 ppb	0.624 ppb	1.751 ppb	103.110 %
Concentration per Run 2	-0.318 ppb	0.040 ppb	589.331 ppb	49.898 ppb	1.152 ppb	1.193 ppb	0.773 ppb	1.832 ppb	99.961 %
Concentration per Run 3	-0.322 ppb	0.026 ppb	594.786 ppb	40.460 ppb	1.145 ppb	1.066 ppb	0.525 ppb	1.810 ppb	102.745 %
Concentration RSD	3.0 %	299.6 %	0.6 %	11.5 %	3.9 %	5.8 %	19.5 %	2.3 %	1.7 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.118 ppb	0.228 ppb	147.731 ppb	1.154 ppb	105.638 %	0.000 ppb	0.019 ppb	103.991 %	0.394 ppb
Concentration per Run 1	0.054 ppb	0.559 ppb	145.933 ppb	0.929 ppb	107.955 %	0.001 ppb	0.014 ppb	105.539 %	0.352 ppb
Concentration per Run 2	0.179 ppb	0.031 ppb	151.399 ppb	1.133 ppb	102.282 %	-0.002 ppb	0.011 ppb	101.380 %	0.394 ppb
Concentration per Run 3	0.119 ppb	0.095 ppb	145.862 ppb	1.401 ppb	106.677 %	0.000 ppb	0.031 ppb	105.053 %	0.437 ppb
Concentration RSD	53.3 %	126.2 %	2.2 %	20.5 %	2.8 %	883.2 %	59.3 %	2.2 %	10.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	10.252 ppb	108.104 %	105.751 %	0.213 ppb	0.110 ppb	106.508 %
Concentration per Run 1	10.353 ppb	112.862 %	109.491 %	0.193 ppb	0.114 ppb	110.192 %
Concentration per Run 2	9.789 ppb	106.414 %	104.644 %	0.257 ppb	0.113 ppb	106.451 %
Concentration per Run 3	10.613 ppb	105.037 %	103.119 %	0.189 ppb	0.103 ppb	102.882 %
Concentration RSD	4.1 %	3.9 %	3.1 %	17.9 %	5.5 %	3.4 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	24	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	I2469249-04 6020SL	Rack	1		
Analysis started at:	12/3/2024 8:24:28 AM	Vial	7		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	90.788 %	112.514 %	0.287 ppb	37,249.992 ppb	16,277.286 ppb	547.921 ppb	26,200.079 ppb	270,097.769 ppb	92.670 %
Concentration per Run 1	87.434 %	115.825 %	0.282 ppb	36,402.653 ppb	15,601.990 ppb	528.462 ppb	25,641.173 ppb	265,553.256 ppb	92.040 %
Concentration per Run 2	91.788 %	116.162 %	0.283 ppb	35,796.538 ppb	15,653.599 ppb	528.319 ppb	25,422.491 ppb	261,750.387 ppb	92.160 %
Concentration per Run 3	93.142 %	105.556 %	0.295 ppb	39,550.786 ppb	17,576.268 ppb	586.981 ppb	27,536.574 ppb	282,989.664 ppb	93.809 %
Concentration RSD	3.3 %	5.4 %	2.5 %	5.4 %	6.9 %	6.2 %	4.4 %	4.2 %	1.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	1.476 ppb	1.790 ppb	1,411.684 ppb	26,561.440 ppb	42.604 ppb	103.134 ppb	3.278 ppb	2,851.621 ppb	96.632 %
Concentration per Run 1	1.547 ppb	1.719 ppb	1,421.085 ppb	27,059.087 ppb	42.675 ppb	103.091 ppb	3.095 ppb	2,853.180 ppb	97.577 %
Concentration per Run 2	1.497 ppb	1.767 ppb	1,361.103 ppb	25,195.690 ppb	41.350 ppb	101.044 ppb	3.013 ppb	2,777.019 ppb	97.592 %
Concentration per Run 3	1.384 ppb	1.883 ppb	1,452.864 ppb	27,429.543 ppb	43.786 ppb	105.268 ppb	3.728 ppb	2,924.663 ppb	94.727 %
Concentration RSD	5.7 %	4.7 %	3.3 %	4.5 %	2.9 %	2.0 %	11.9 %	2.6 %	1.7 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	9.342 ppb	4.029 ppb	1,147.893 ppb	2.486 ppb	98.785 %	0.003 ppb	1.280 ppb	100.155 %	58.824 ppb
Concentration per Run 1	9.729 ppb	3.687 ppb	1,129.492 ppb	2.321 ppb	102.905 %	0.008 ppb	1.258 ppb	104.955 %	56.560 ppb
Concentration per Run 2	9.293 ppb	4.383 ppb	1,150.072 ppb	2.384 ppb	96.511 %	-0.001 ppb	1.271 ppb	98.226 %	59.723 ppb
Concentration per Run 3	9.005 ppb	4.016 ppb	1,164.115 ppb	2.753 ppb	96.940 %	0.003 ppb	1.312 ppb	97.286 %	60.188 ppb
Concentration RSD	3.9 %	8.6 %	1.5 %	9.4 %	3.6 %	129.5 %	2.2 %	4.2 %	3.4 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	228.108 ppb	106.289 %	106.518 %	0.251 ppb	14.221 ppb	104.483 %
Concentration per Run 1	220.810 ppb	107.234 %	109.109 %	0.222 ppb	13.931 ppb	105.788 %
Concentration per Run 2	230.041 ppb	106.490 %	107.066 %	0.254 ppb	14.379 ppb	103.205 %
Concentration per Run 3	233.474 ppb	105.143 %	103.379 %	0.279 ppb	14.355 ppb	104.455 %
Concentration RSD	2.9 %	1.0 %	2.7 %	11.3 %	1.8 %	1.2 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	25	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	I2469249-07 6020SL	Rack	1		
Analysis started at:	12/3/2024 8:28:57 AM	Vial	8		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	96.409 %	112.458 %	0.007 ppb	77,926.151 ppb	5,045.840 ppb	4.450 ppb	9,933.261 ppb	108,788.875 ppb	97.510 %
Concentration per Run 1	93.087 %	119.192 %	0.007 ppb	75,086.765 ppb	4,737.815 ppb	4.339 ppb	9,380.911 ppb	104,098.989 ppb	94.860 %
Concentration per Run 2	97.999 %	105.724 %	0.009 ppb	80,798.628 ppb	5,311.582 ppb	4.889 ppb	10,291.605 ppb	109,796.788 ppb	99.082 %
Concentration per Run 3	98.141 %	112.458 %	0.005 ppb	77,893.061 ppb	5,088.123 ppb	4.122 ppb	10,127.269 ppb	112,470.848 ppb	98.589 %
Concentration RSD	3.0 %	6.0 %	28.8 %	3.7 %	5.7 %	8.9 %	4.9 %	3.9 %	2.4 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.256 ppb	0.025 ppb	764.992 ppb	759.876 ppb	0.839 ppb	3.442 ppb	5.316 ppb	2.117 ppb	96.195 %
Concentration per Run 1	-0.201 ppb	0.010 ppb	745.337 ppb	750.961 ppb	0.839 ppb	3.277 ppb	5.475 ppb	2.073 ppb	94.486 %
Concentration per Run 2	-0.300 ppb	0.030 ppb	776.069 ppb	776.234 ppb	0.863 ppb	3.546 ppb	5.564 ppb	2.200 ppb	95.746 %
Concentration per Run 3	-0.265 ppb	0.034 ppb	773.569 ppb	752.433 ppb	0.816 ppb	3.503 ppb	4.908 ppb	2.079 ppb	98.353 %
Concentration RSD	19.7 %	52.2 %	2.2 %	1.9 %	2.8 %	4.2 %	6.7 %	3.4 %	2.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.588 ppb	0.429 ppb	561.254 ppb	22.138 ppb	101.488 %	0.002 ppb	0.023 ppb	102.288 %	0.179 ppb
Concentration per Run 1	0.447 ppb	0.722 ppb	566.755 ppb	20.193 ppb	100.575 %	0.000 ppb	0.029 ppb	103.531 %	0.145 ppb
Concentration per Run 2	0.627 ppb	0.352 ppb	553.664 ppb	21.246 ppb	102.773 %	0.001 ppb	0.015 ppb	100.897 %	0.195 ppb
Concentration per Run 3	0.689 ppb	0.213 ppb	563.343 ppb	24.975 ppb	101.115 %	0.003 ppb	0.025 ppb	102.436 %	0.197 ppb
Concentration RSD	21.3 %	61.3 %	1.2 %	11.3 %	1.1 %	94.9 %	32.5 %	1.3 %	16.5 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	51.789 ppb	107.069 %	106.723 %	0.043 ppb	0.089 ppb	104.902 %
Concentration per Run 1	50.280 ppb	107.902 %	108.589 %	0.035 ppb	0.090 ppb	105.731 %
Concentration per Run 2	51.977 ppb	104.908 %	107.281 %	0.043 ppb	0.095 ppb	103.237 %
Concentration per Run 3	53.112 ppb	108.397 %	104.299 %	0.050 ppb	0.083 ppb	105.738 %
Concentration RSD	2.8 %	1.8 %	2.1 %	17.6 %	6.8 %	1.4 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	26	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	CCV	Rack	0		
Analysis started at:	12/3/2024 8:33:58 AM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	104.880 %	117.228 %	61.102 ppb	5,955.026 ppb	5,899.944 ppb	54.609 ppb	5,836.487 ppb	5,633.322 ppb	101.474 %
Concentration per Run 1	102.299 %	121.381 %	60.533 ppb	5,667.069 ppb	5,781.177 ppb	52.135 ppb	5,539.343 ppb	5,472.092 ppb	100.624 %
Concentration per Run 2	106.213 %	114.478 %	60.849 ppb	6,005.036 ppb	5,831.854 ppb	54.677 ppb	5,927.674 ppb	5,603.542 ppb	102.945 %
Concentration per Run 3	106.128 %	115.825 %	61.925 ppb	6,192.972 ppb	6,086.801 ppb	57.015 ppb	6,042.445 ppb	5,824.332 ppb	100.852 %
Recovery Percentage 1			101.837 %	99.250 %	98.332 %	91.015 %	97.275 %	93.889 %	
Concentration RSD	2.1 %	3.1 %	1.2 %	4.5 %	2.8 %	4.5 %	4.5 %	3.2 %	1.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	58.413 ppb	59.039 ppb	60.426 ppb	5,948.352 ppb	59.967 ppb	61.291 ppb	63.074 ppb	61.943 ppb	102.073 %
Concentration per Run 1	54.607 ppb	55.413 ppb	57.555 ppb	5,642.430 ppb	57.706 ppb	60.618 ppb	59.634 ppb	60.129 ppb	105.664 %
Concentration per Run 2	57.714 ppb	58.732 ppb	59.491 ppb	6,031.279 ppb	59.722 ppb	61.943 ppb	64.690 ppb	62.107 ppb	101.227 %
Concentration per Run 3	62.918 ppb	62.972 ppb	64.232 ppb	6,171.345 ppb	62.475 ppb	61.311 ppb	64.899 ppb	63.592 ppb	99.327 %
Recovery Percentage 1	97.355 %	98.399 %	100.710 %	99.139 %	99.946 %	102.151 %	105.124 %	103.238 %	
Concentration RSD	7.2 %	6.4 %	5.7 %	4.6 %	4.0 %	1.1 %	4.7 %	2.8 %	3.2 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	61.252 ppb	58.932 ppb	60.432 ppb	59.651 ppb	105.498 %	59.936 ppb	61.453 ppb	102.535 %	61.198 ppb
Concentration per Run 1	61.628 ppb	55.436 ppb	57.226 ppb	57.286 ppb	112.798 %	57.021 ppb	59.194 ppb	104.931 %	58.544 ppb
Concentration per Run 2	61.042 ppb	59.468 ppb	61.033 ppb	60.383 ppb	103.599 %	59.859 ppb	61.882 ppb	101.484 %	62.618 ppb
Concentration per Run 3	61.086 ppb	61.892 ppb	63.036 ppb	61.283 ppb	100.098 %	62.929 ppb	63.284 ppb	101.189 %	62.432 ppb
Recovery Percentage 1	102.087 %	98.220 %	100.719 %	99.418 %		99.893 %	102.422 %		101.996 %
Concentration RSD	0.5 %	5.5 %	4.9 %	3.5 %	6.2 %	4.9 %	3.4 %	2.0 %	3.8 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	59.541 ppb	108.351 %	107.775 %	59.822 ppb	59.942 ppb	109.521 %
Concentration per Run 1	57.929 ppb	113.355 %	113.468 %	56.724 ppb	57.044 ppb	112.884 %
Concentration per Run 2	59.953 ppb	106.218 %	105.175 %	60.478 ppb	61.151 ppb	108.383 %
Concentration per Run 3	60.741 ppb	105.479 %	104.682 %	62.264 ppb	61.631 ppb	107.296 %
Recovery Percentage 1	99.235 %			99.703 %	99.903 %	
Concentration RSD	2.4 %	4.0 %	4.6 %	4.7 %	4.2 %	2.7 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	27	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	CCB	Rack	0		
Analysis started at:	12/3/2024 8:38:29 AM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	103.977 %	115.152 %	0.011 ppb	-5.017 ppb	0.467 ppb	-0.197 ppb	5.301 ppb	-0.613 ppb	99.782 %
Concentration per Run 1	97.906 %	116.330 %	0.013 ppb	-7.770 ppb	0.058 ppb	-0.298 ppb	-8.208 ppb	7.131 ppb	96.008 %
Concentration per Run 2	105.230 %	117.004 %	0.010 ppb	-7.891 ppb	1.241 ppb	0.072 ppb	8.652 ppb	1.160 ppb	102.242 %
Concentration per Run 3	108.796 %	112.121 %	0.012 ppb	0.609 ppb	0.101 ppb	-0.367 ppb	15.459 ppb	-10.130 ppb	101.096 %
Recovery Percentage 1			2.287 %	-1.003 %	0.667 %	-1.973 %	5.301 %	-0.613 %	
Concentration RSD	5.3 %	2.3 %	10.9 %	97.1 %	143.7 %	119.7 %	229.8 %	1,430.6 %	3.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.523 ppb	-0.048 ppb	0.104 ppb	7.040 ppb	-0.003 ppb	0.007 ppb	0.231 ppb	0.283 ppb	97.473 %
Concentration per Run 1	-0.457 ppb	-0.059 ppb	0.106 ppb	6.173 ppb	-0.007 ppb	0.012 ppb	0.256 ppb	0.348 ppb	99.593 %
Concentration per Run 2	-0.516 ppb	-0.039 ppb	0.095 ppb	7.088 ppb	0.000 ppb	0.029 ppb	0.122 ppb	0.222 ppb	94.437 %
Concentration per Run 3	-0.596 ppb	-0.045 ppb	0.110 ppb	7.860 ppb	-0.003 ppb	-0.021 ppb	0.317 ppb	0.280 ppb	98.390 %
Recovery Percentage 1	-10.460 %	-4.776 %	10.361 %	14.080 %	-0.672 %	0.337 %	23.129 %	5.667 %	
Concentration RSD	13.3 %	21.5 %	7.3 %	12.0 %	102.2 %	379.9 %	43.1 %	22.4 %	2.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.105 ppb	0.147 ppb	0.016 ppb	0.575 ppb	104.361 %	0.004 ppb	0.005 ppb	99.067 %	0.074 ppb
Concentration per Run 1	0.097 ppb	0.189 ppb	0.018 ppb	0.435 ppb	107.730 %	0.006 ppb	0.007 ppb	102.872 %	0.043 ppb
Concentration per Run 2	0.108 ppb	0.210 ppb	0.016 ppb	0.526 ppb	103.006 %	0.005 ppb	0.004 ppb	98.046 %	0.074 ppb
Concentration per Run 3	0.110 ppb	0.042 ppb	0.015 ppb	0.763 ppb	102.347 %	0.002 ppb	0.004 ppb	96.283 %	0.104 ppb
Recovery Percentage 1	21.026 %	2.942 %	0.162 %	28.741 %		1.112 %	2.423 %		1.844 %
Concentration RSD	6.5 %	62.3 %	10.8 %	29.5 %	2.8 %	42.5 %	39.8 %	3.4 %	40.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.014 ppb	105.137 %	103.616 %	0.241 ppb	0.029 ppb	106.686 %
Concentration per Run 1	-0.005 ppb	107.808 %	107.265 %	0.228 ppb	0.030 ppb	110.318 %
Concentration per Run 2	0.038 ppb	103.183 %	101.486 %	0.279 ppb	0.028 ppb	104.981 %
Concentration per Run 3	0.010 ppb	104.420 %	102.098 %	0.217 ppb	0.029 ppb	104.759 %
Recovery Percentage 1	2.816 %			24.137 %	2.875 %	
Concentration RSD	156.9 %	2.3 %	3.1 %	13.6 %	4.1 %	3.0 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index: 28
Analysis label: WG2003472-1 6020TL
Analysis started at: 12/3/2024 8:50:16 AM
User name ALPHALAB\a2-icpmsq2
Rack 1
Vial 9
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	104.348 %	118.463 %	0.016 ppb	-17.156 ppb	0.509 ppb	0.501 ppb	-8.419 ppb	8.802 ppb	96.697 %
Concentration per Run 1	99.619 %	121.213 %	0.020 ppb	-21.457 ppb	-0.168 ppb	0.623 ppb	-12.201 ppb	17.610 ppb	92.397 %
Concentration per Run 2	106.886 %	119.192 %	0.019 ppb	-17.801 ppb	-0.141 ppb	0.689 ppb	-16.846 ppb	14.550 ppb	96.842 %
Concentration per Run 3	106.539 %	114.983 %	0.010 ppb	-12.209 ppb	1.837 ppb	0.191 ppb	3.789 ppb	-5.753 ppb	100.853 %
Concentration RSD	3.9 %	2.7 %	31.0 %	27.1 %	225.8 %	54.0 %	128.6 %	144.3 %	4.4 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.460 ppb	-0.014 ppb	0.339 ppb	0.385 ppb	-0.001 ppb	0.022 ppb	0.332 ppb	0.685 ppb	96.914 %
Concentration per Run 1	-0.550 ppb	0.006 ppb	0.398 ppb	-0.763 ppb	-0.004 ppb	0.047 ppb	0.352 ppb	0.712 ppb	98.293 %
Concentration per Run 2	-0.437 ppb	-0.021 ppb	0.298 ppb	1.150 ppb	0.003 ppb	0.042 ppb	0.345 ppb	0.570 ppb	93.618 %
Concentration per Run 3	-0.394 ppb	-0.026 ppb	0.322 ppb	0.768 ppb	-0.003 ppb	-0.022 ppb	0.298 ppb	0.773 ppb	98.832 %
Concentration RSD	17.6 %	128.0 %	15.5 %	263.2 %	344.8 %	173.0 %	8.9 %	15.2 %	3.0 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.070 ppb	0.163 ppb	0.008 ppb	0.186 ppb	106.624 %	0.001 ppb	0.000 ppb	104.794 %	0.016 ppb
Concentration per Run 1	0.060 ppb	0.156 ppb	0.017 ppb	0.112 ppb	106.623 %	-0.001 ppb	0.000 ppb	108.300 %	0.012 ppb
Concentration per Run 2	0.075 ppb	0.206 ppb	0.009 ppb	0.158 ppb	107.173 %	0.002 ppb	0.000 ppb	104.116 %	0.016 ppb
Concentration per Run 3	0.075 ppb	0.129 ppb	-0.002 ppb	0.286 ppb	106.075 %	0.001 ppb	0.000 ppb	101.966 %	0.018 ppb
Concentration RSD	12.3 %	23.8 %	112.2 %	48.7 %	0.5 %	183.4 %	N/A	3.1 %	19.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.166 ppb	106.999 %	107.332 %	0.023 ppb	0.013 ppb	109.777 %
Concentration per Run 1	0.248 ppb	107.092 %	106.892 %	0.017 ppb	0.010 ppb	110.167 %
Concentration per Run 2	0.119 ppb	104.322 %	107.208 %	0.028 ppb	0.016 ppb	110.039 %
Concentration per Run 3	0.130 ppb	109.584 %	107.895 %	0.023 ppb	0.012 ppb	109.125 %
Concentration RSD	43.1 %	2.5 %	0.5 %	23.9 %	25.7 %	0.5 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	29	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG2003472-2d10 6020TL	Rack	1		
Analysis started at:	12/3/2024 8:54:45 AM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	106.427 %	117.397 %	5.134 ppb	1,002.855 ppb	984.197 ppb	182.732 ppb	995.586 ppb	946.535 ppb	98.274 %
Concentration per Run 1	102.339 %	123.906 %	5.155 ppb	935.315 ppb	937.522 ppb	170.717 ppb	983.320 ppb	995.492 ppb	96.628 %
Concentration per Run 2	107.029 %	110.943 %	5.154 ppb	1,056.737 ppb	1,045.719 ppb	190.240 ppb	1,021.244 ppb	939.268 ppb	98.773 %
Concentration per Run 3	109.914 %	117.340 %	5.092 ppb	1,016.513 ppb	969.351 ppb	187.240 ppb	982.195 ppb	904.845 ppb	99.422 %
Concentration RSD	3.6 %	5.5 %	0.7 %	6.2 %	5.6 %	5.8 %	2.2 %	4.8 %	1.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	47.670 ppb	19.572 ppb	51.772 ppb	105.745 ppb	49.549 ppb	51.761 ppb	26.477 ppb	51.866 ppb	99.384 %
Concentration per Run 1	46.193 ppb	19.180 ppb	51.220 ppb	109.009 ppb	47.998 ppb	50.736 ppb	26.197 ppb	51.865 ppb	99.301 %
Concentration per Run 2	46.698 ppb	20.088 ppb	52.631 ppb	105.793 ppb	50.814 ppb	52.070 ppb	26.943 ppb	52.101 ppb	98.901 %
Concentration per Run 3	50.119 ppb	19.448 ppb	51.466 ppb	102.434 ppb	49.834 ppb	52.477 ppb	26.291 ppb	51.632 ppb	99.950 %
Concentration RSD	4.5 %	2.4 %	1.5 %	3.1 %	2.9 %	1.8 %	1.5 %	0.5 %	0.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	12.414 ppb	11.535 ppb	98.345 ppb	96.570 ppb	106.050 %	5.154 ppb	5.185 ppb	104.504 %	38.774 ppb
Concentration per Run 1	12.519 ppb	11.918 ppb	96.504 ppb	93.029 ppb	109.323 %	5.120 ppb	5.059 ppb	104.202 %	37.618 ppb
Concentration per Run 2	12.812 ppb	12.182 ppb	98.813 ppb	97.145 ppb	106.918 %	5.078 ppb	4.925 ppb	104.330 %	38.680 ppb
Concentration per Run 3	11.911 ppb	10.505 ppb	99.718 ppb	99.536 ppb	101.908 %	5.264 ppb	5.570 ppb	104.981 %	40.025 ppb
Concentration RSD	3.7 %	7.8 %	1.7 %	3.4 %	3.6 %	1.9 %	6.6 %	0.4 %	3.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	195.526 ppb	107.515 %	106.856 %	11.671 ppb	51.682 ppb	109.599 %
Concentration per Run 1	193.697 ppb	110.259 %	109.337 %	11.696 ppb	51.392 ppb	110.010 %
Concentration per Run 2	191.567 ppb	107.498 %	108.609 %	11.679 ppb	52.623 ppb	106.992 %
Concentration per Run 3	201.315 ppb	104.789 %	102.623 %	11.637 ppb	51.033 ppb	111.796 %
Concentration RSD	2.6 %	2.5 %	3.4 %	0.3 %	1.6 %	2.2 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	30	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2469261-01d10 6020TL	Rack	1		
Analysis started at:	12/3/2024 8:59:15 AM	Vial	11		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	100.236 %	116.274 %	0.037 ppb	1,170.726 ppb	921.186 ppb	364.707 ppb	679.445 ppb	9,872.538 ppb	97.992 %
Concentration per Run 1	97.362 %	113.300 %	0.034 ppb	1,188.536 ppb	940.084 ppb	368.939 ppb	690.412 ppb	9,812.497 ppb	96.168 %
Concentration per Run 2	99.268 %	113.973 %	0.040 ppb	1,179.867 ppb	916.912 ppb	372.128 ppb	637.870 ppb	9,794.169 ppb	96.977 %
Concentration per Run 3	104.079 %	121.549 %	0.037 ppb	1,143.777 ppb	906.561 ppb	353.053 ppb	710.053 ppb	10,010.948 ppb	100.830 %
Concentration RSD	3.5 %	3.9 %	8.3 %	2.0 %	1.9 %	2.8 %	5.5 %	1.2 %	2.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	1.303 ppb	875.972 ppb	59.213 ppb	647.324 ppb	1.327 ppb	1.058 ppb	7.967 ppb	4.789 ppb	101.981 %
Concentration per Run 1	1.515 ppb	870.648 ppb	59.316 ppb	695.775 ppb	1.288 ppb	1.083 ppb	7.996 ppb	4.622 ppb	103.550 %
Concentration per Run 2	1.221 ppb	889.364 ppb	58.609 ppb	620.437 ppb	1.390 ppb	1.211 ppb	8.102 ppb	4.928 ppb	99.615 %
Concentration per Run 3	1.173 ppb	867.903 ppb	59.714 ppb	625.759 ppb	1.304 ppb	0.880 ppb	7.804 ppb	4.816 ppb	102.779 %
Concentration RSD	14.2 %	1.3 %	0.9 %	6.5 %	4.1 %	15.8 %	1.9 %	3.2 %	2.0 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.517 ppb	0.795 ppb	30.830 ppb	1.292 ppb	107.101 %	0.011 ppb	0.041 ppb	105.258 %	1.540 ppb
Concentration per Run 1	0.466 ppb	0.611 ppb	30.889 ppb	1.179 ppb	108.201 %	0.010 ppb	0.052 ppb	106.425 %	1.329 ppb
Concentration per Run 2	0.510 ppb	1.173 ppb	31.099 ppb	1.289 ppb	106.304 %	0.012 ppb	0.035 ppb	104.288 %	1.507 ppb
Concentration per Run 3	0.576 ppb	0.600 ppb	30.503 ppb	1.409 ppb	106.796 %	0.011 ppb	0.035 ppb	105.059 %	1.785 ppb
Concentration RSD	10.7 %	41.3 %	1.0 %	8.9 %	0.9 %	10.1 %	23.7 %	1.0 %	14.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	4.643 ppb	109.684 %	108.361 %	0.023 ppb	1.551 ppb	111.226 %
Concentration per Run 1	4.654 ppb	113.808 %	112.462 %	0.015 ppb	1.505 ppb	113.926 %
Concentration per Run 2	4.541 ppb	106.272 %	106.072 %	0.026 ppb	1.576 ppb	110.522 %
Concentration per Run 3	4.735 ppb	108.971 %	106.549 %	0.030 ppb	1.572 ppb	109.230 %
Concentration RSD	2.1 %	3.5 %	3.3 %	33.2 %	2.6 %	2.2 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	31	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG2003472-3d10 6020TL	Rack	1		
Analysis started at:	12/3/2024 9:03:45 AM	Vial	12		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	103.244 %	119.024 %	5.371 ppb	2,230.851 ppb	1,943.920 ppb	743.216 ppb	1,663.294 ppb	11,213.259 ppb	97.892 %
Concentration per Run 1	99.075 %	120.876 %	5.486 ppb	2,233.435 ppb	1,917.759 ppb	727.458 ppb	1,612.642 ppb	11,161.731 ppb	93.835 %
Concentration per Run 2	103.901 %	119.866 %	5.274 ppb	2,199.818 ppb	1,937.202 ppb	724.769 ppb	1,659.416 ppb	11,104.766 ppb	99.344 %
Concentration per Run 3	106.757 %	116.330 %	5.354 ppb	2,259.300 ppb	1,976.799 ppb	777.421 ppb	1,717.824 ppb	11,373.280 ppb	100.497 %
Concentration RSD	3.8 %	2.0 %	2.0 %	1.3 %	1.5 %	4.0 %	3.2 %	1.3 %	3.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	50.823 ppb	886.207 ppb	110.471 ppb	720.348 ppb	52.287 ppb	51.756 ppb	33.796 ppb	56.144 ppb	103.449 %
Concentration per Run 1	50.297 ppb	882.706 ppb	114.110 ppb	729.110 ppb	52.473 ppb	52.192 ppb	34.058 ppb	56.930 ppb	103.085 %
Concentration per Run 2	50.962 ppb	872.441 ppb	107.175 ppb	731.509 ppb	52.376 ppb	50.903 ppb	33.053 ppb	55.747 ppb	103.524 %
Concentration per Run 3	51.210 ppb	903.476 ppb	110.130 ppb	700.425 ppb	52.012 ppb	52.172 ppb	34.275 ppb	55.756 ppb	103.737 %
Concentration RSD	0.9 %	1.8 %	3.2 %	2.4 %	0.5 %	1.4 %	1.9 %	1.2 %	0.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	12.509 ppb	10.389 ppb	130.804 ppb	92.589 ppb	107.951 %	5.313 ppb	5.252 ppb	105.702 %	43.324 ppb
Concentration per Run 1	12.747 ppb	10.822 ppb	131.185 ppb	92.330 ppb	109.063 %	5.228 ppb	5.090 ppb	108.587 %	42.772 ppb
Concentration per Run 2	12.617 ppb	9.915 ppb	129.129 ppb	90.194 ppb	110.345 %	5.362 ppb	5.259 ppb	105.347 %	42.821 ppb
Concentration per Run 3	12.163 ppb	10.430 ppb	132.099 ppb	95.243 ppb	104.445 %	5.350 ppb	5.408 ppb	103.173 %	44.379 ppb
Concentration RSD	2.4 %	4.4 %	1.2 %	2.7 %	2.9 %	1.4 %	3.0 %	2.6 %	2.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	206.464 ppb	110.751 %	109.863 %	11.825 ppb	54.212 ppb	113.028 %
Concentration per Run 1	202.515 ppb	110.894 %	111.333 %	11.476 ppb	52.465 ppb	116.398 %
Concentration per Run 2	205.394 ppb	110.108 %	109.682 %	12.374 ppb	56.216 ppb	109.201 %
Concentration per Run 3	211.483 ppb	111.250 %	108.574 %	11.625 ppb	53.954 ppb	113.487 %
Concentration RSD	2.2 %	0.5 %	1.3 %	4.1 %	3.5 %	3.2 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	32	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG2003472-4d10 6020TL	Rack	1		
Analysis started at:	12/3/2024 9:08:15 AM	Vial	13		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	109.063 %	119.417 %	0.037 ppb	1,222.267 ppb	954.399 ppb	390.399 ppb	724.449 ppb	10,185.538 ppb	100.298 %
Concentration per Run 1	104.460 %	119.024 %	0.036 ppb	1,196.307 ppb	924.907 ppb	401.191 ppb	724.118 ppb	9,932.683 ppb	101.079 %
Concentration per Run 2	110.278 %	123.906 %	0.039 ppb	1,221.339 ppb	948.980 ppb	381.774 ppb	703.660 ppb	10,182.464 ppb	100.924 %
Concentration per Run 3	112.450 %	115.320 %	0.037 ppb	1,249.154 ppb	989.308 ppb	388.233 ppb	745.569 ppb	10,441.467 ppb	98.890 %
Concentration RSD	3.8 %	3.6 %	3.7 %	2.2 %	3.4 %	2.5 %	2.9 %	2.5 %	1.2 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	1.215 ppb	803.893 ppb	58.780 ppb	704.452 ppb	1.419 ppb	1.080 ppb	8.056 ppb	4.921 ppb	105.751 %
Concentration per Run 1	1.387 ppb	825.182 ppb	59.266 ppb	656.295 ppb	1.506 ppb	0.908 ppb	7.880 ppb	4.754 ppb	108.525 %
Concentration per Run 2	1.200 ppb	715.116 ppb	60.456 ppb	755.699 ppb	1.385 ppb	1.129 ppb	8.372 ppb	5.156 ppb	103.117 %
Concentration per Run 3	1.057 ppb	871.381 ppb	56.617 ppb	701.361 ppb	1.366 ppb	1.204 ppb	7.916 ppb	4.854 ppb	105.612 %
Concentration RSD	13.6 %	10.0 %	3.3 %	7.1 %	5.4 %	14.2 %	3.4 %	4.3 %	2.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.504 ppb	1.037 ppb	31.944 ppb	1.298 ppb	109.835 %	0.006 ppb	0.054 ppb	109.554 %	0.324 ppb
Concentration per Run 1	0.532 ppb	1.041 ppb	30.972 ppb	0.987 ppb	113.657 %	0.009 ppb	0.059 ppb	112.144 %	0.274 ppb
Concentration per Run 2	0.573 ppb	0.716 ppb	32.435 ppb	1.315 ppb	108.340 %	0.006 ppb	0.037 ppb	108.479 %	0.316 ppb
Concentration per Run 3	0.406 ppb	1.355 ppb	32.424 ppb	1.592 ppb	107.508 %	0.003 ppb	0.065 ppb	108.038 %	0.382 ppb
Concentration RSD	17.3 %	30.8 %	2.6 %	23.4 %	3.0 %	45.9 %	26.9 %	2.1 %	16.8 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	4.551 ppb	111.445 %	109.943 %	0.020 ppb	1.532 ppb	115.807 %
Concentration per Run 1	4.533 ppb	115.169 %	111.780 %	0.013 ppb	1.524 ppb	115.525 %
Concentration per Run 2	4.546 ppb	110.671 %	108.738 %	0.017 ppb	1.555 ppb	117.016 %
Concentration per Run 3	4.574 ppb	108.496 %	109.310 %	0.031 ppb	1.517 ppb	114.881 %
Concentration RSD	0.5 %	3.1 %	1.5 %	48.4 %	1.3 %	0.9 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	33	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG2003472-5d10 6020TL	Rack	1		
Analysis started at:	12/3/2024 9:12:41 AM	Vial	14		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	105.764 %	115.264 %	48.427 ppb	5,967.445 ppb	5,847.899 ppb	462.378 ppb	5,687.239 ppb	15,381.779 ppb	100.150 %
Concentration per Run 1	100.278 %	115.320 %	49.931 ppb	5,940.474 ppb	5,810.633 ppb	460.350 ppb	5,605.885 ppb	15,291.063 ppb	97.825 %
Concentration per Run 2	106.548 %	115.152 %	47.961 ppb	5,875.724 ppb	5,953.060 ppb	466.937 ppb	5,755.777 ppb	15,408.999 ppb	102.678 %
Concentration per Run 3	110.465 %	115.320 %	47.388 ppb	6,086.136 ppb	5,780.004 ppb	459.846 ppb	5,700.054 ppb	15,445.275 ppb	99.946 %
Concentration RSD	4.9 %	0.1 %	2.8 %	1.8 %	1.6 %	0.9 %	1.3 %	0.5 %	2.4 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	50.735 ppb	928.937 ppb	106.066 ppb	5,475.165 ppb	50.175 ppb	49.780 ppb	57.194 ppb	54.298 ppb	105.832 %
Concentration per Run 1	49.066 ppb	899.936 ppb	103.623 ppb	5,349.299 ppb	48.887 ppb	50.440 ppb	55.687 ppb	53.429 ppb	109.718 %
Concentration per Run 2	52.460 ppb	951.538 ppb	111.186 ppb	5,664.250 ppb	51.259 ppb	50.742 ppb	60.920 ppb	56.226 ppb	101.883 %
Concentration per Run 3	50.679 ppb	935.338 ppb	103.387 ppb	5,411.946 ppb	50.378 ppb	48.159 ppb	54.975 ppb	53.239 ppb	105.894 %
Concentration RSD	3.3 %	2.8 %	4.2 %	3.0 %	2.4 %	2.8 %	5.7 %	3.1 %	3.7 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	50.288 ppb	47.170 ppb	78.632 ppb	48.215 ppb	110.271 %	5.776 ppb	48.364 ppb	107.903 %	48.320 ppb
Concentration per Run 1	49.368 ppb	49.051 ppb	76.727 ppb	46.283 ppb	113.100 %	5.710 ppb	47.756 ppb	109.425 %	47.669 ppb
Concentration per Run 2	52.101 ppb	47.624 ppb	80.200 ppb	48.700 ppb	107.220 %	5.862 ppb	49.352 ppb	107.101 %	49.793 ppb
Concentration per Run 3	49.395 ppb	44.835 ppb	78.970 ppb	49.660 ppb	110.492 %	5.755 ppb	47.982 ppb	107.183 %	47.498 ppb
Concentration RSD	3.1 %	4.5 %	2.2 %	3.6 %	2.7 %	1.3 %	1.8 %	1.2 %	2.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	51.780 ppb	114.040 %	112.072 %	47.975 ppb	50.021 ppb	112.703 %
Concentration per Run 1	51.327 ppb	118.486 %	115.352 %	45.766 ppb	48.899 ppb	115.305 %
Concentration per Run 2	51.630 ppb	111.787 %	109.402 %	48.139 ppb	50.615 ppb	114.166 %
Concentration per Run 3	52.384 ppb	111.847 %	111.460 %	50.020 ppb	50.549 ppb	108.639 %
Concentration RSD	1.1 %	3.4 %	2.7 %	4.4 %	1.9 %	3.2 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	34	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG2003472-6d50 6020TL	Rack	1		
Analysis started at:	12/3/2024 9:17:08 AM	Vial	15		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	104.442 %	113.749 %	0.013 ppb	223.164 ppb	194.414 ppb	76.291 ppb	154.264 ppb	2,120.425 ppb	100.195 %
Concentration per Run 1	99.102 %	112.626 %	0.010 ppb	221.574 ppb	194.661 ppb	79.960 ppb	165.022 ppb	2,108.095 ppb	97.367 %
Concentration per Run 2	104.276 %	115.152 %	0.018 ppb	229.672 ppb	200.050 ppb	77.071 ppb	145.507 ppb	2,212.131 ppb	100.759 %
Concentration per Run 3	109.948 %	113.468 %	0.012 ppb	218.245 ppb	188.532 ppb	71.842 ppb	152.262 ppb	2,041.050 ppb	102.459 %
Concentration RSD	5.2 %	1.1 %	30.4 %	2.6 %	3.0 %	5.4 %	6.4 %	4.1 %	2.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.150 ppb	182.110 ppb	11.980 ppb	132.891 ppb	0.272 ppb	0.097 ppb	1.747 ppb	1.131 ppb	102.791 %
Concentration per Run 1	-0.186 ppb	179.878 ppb	11.838 ppb	129.357 ppb	0.275 ppb	0.155 ppb	1.839 ppb	1.133 ppb	103.837 %
Concentration per Run 2	-0.193 ppb	187.800 ppb	12.622 ppb	120.558 ppb	0.273 ppb	0.105 ppb	1.816 ppb	1.121 ppb	99.518 %
Concentration per Run 3	-0.070 ppb	178.654 ppb	11.480 ppb	148.757 ppb	0.266 ppb	0.029 ppb	1.585 ppb	1.141 ppb	105.019 %
Concentration RSD	46.2 %	2.7 %	4.9 %	10.9 %	1.8 %	65.6 %	8.0 %	0.9 %	2.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.162 ppb	0.171 ppb	6.376 ppb	0.513 ppb	107.502 %	0.002 ppb	0.015 ppb	106.081 %	0.171 ppb
Concentration per Run 1	0.075 ppb	-0.009 ppb	6.259 ppb	0.238 ppb	112.344 %	0.006 ppb	0.007 ppb	110.996 %	0.119 ppb
Concentration per Run 2	0.189 ppb	0.036 ppb	6.553 ppb	0.737 ppb	104.665 %	-0.001 ppb	0.021 ppb	102.699 %	0.162 ppb
Concentration per Run 3	0.222 ppb	0.488 ppb	6.315 ppb	0.564 ppb	105.497 %	0.001 ppb	0.018 ppb	104.547 %	0.233 ppb
Concentration RSD	47.4 %	160.1 %	2.5 %	49.4 %	3.9 %	163.5 %	50.5 %	4.1 %	33.3 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.976 ppb	109.466 %	109.209 %	0.210 ppb	0.346 ppb	110.600 %
Concentration per Run 1	0.977 ppb	114.087 %	111.157 %	0.191 ppb	0.336 ppb	115.589 %
Concentration per Run 2	0.939 ppb	104.304 %	106.783 %	0.241 ppb	0.352 ppb	108.341 %
Concentration per Run 3	1.013 ppb	110.008 %	109.687 %	0.197 ppb	0.349 ppb	107.869 %
Concentration RSD	3.8 %	4.5 %	2.0 %	12.9 %	2.4 %	3.9 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	35	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2469261-02d10 6020TL	Rack	1		
Analysis started at:	12/3/2024 9:21:35 AM	Vial	16		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	107.949 %	114.983 %	0.041 ppb	1,207.407 ppb	987.032 ppb	458.142 ppb	719.481 ppb	10,417.879 ppb	101.252 %
Concentration per Run 1	103.105 %	120.708 %	0.036 ppb	1,158.911 ppb	976.966 ppb	442.780 ppb	719.016 ppb	10,301.846 ppb	98.700 %
Concentration per Run 2	107.872 %	112.458 %	0.043 ppb	1,224.041 ppb	972.783 ppb	464.794 ppb	687.179 ppb	10,299.354 ppb	102.693 %
Concentration per Run 3	112.871 %	111.785 %	0.043 ppb	1,239.270 ppb	1,011.347 ppb	466.853 ppb	752.246 ppb	10,652.436 ppb	102.363 %
Concentration RSD	4.5 %	4.3 %	9.6 %	3.5 %	2.1 %	2.9 %	4.5 %	1.9 %	2.2 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	1.629 ppb	922.199 ppb	58.715 ppb	776.744 ppb	1.402 ppb	1.095 ppb	8.437 ppb	5.325 ppb	105.430 %
Concentration per Run 1	1.572 ppb	804.620 ppb	58.003 ppb	801.911 ppb	1.362 ppb	1.068 ppb	8.235 ppb	5.440 ppb	104.501 %
Concentration per Run 2	1.711 ppb	960.150 ppb	57.496 ppb	737.162 ppb	1.377 ppb	1.072 ppb	8.206 ppb	5.555 ppb	106.195 %
Concentration per Run 3	1.604 ppb	1,001.829 ppb	60.645 ppb	791.160 ppb	1.467 ppb	1.146 ppb	8.870 ppb	4.980 ppb	105.594 %
Concentration RSD	4.5 %	11.3 %	2.9 %	4.5 %	4.1 %	4.0 %	4.4 %	5.7 %	0.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.525 ppb	0.970 ppb	30.967 ppb	0.639 ppb	107.737 %	0.006 ppb	0.057 ppb	105.334 %	0.201 ppb
Concentration per Run 1	0.664 ppb	0.619 ppb	30.859 ppb	0.575 ppb	110.270 %	0.001 ppb	0.054 ppb	108.946 %	0.144 ppb
Concentration per Run 2	0.473 ppb	1.411 ppb	31.091 ppb	0.554 ppb	105.255 %	0.007 ppb	0.053 ppb	103.915 %	0.207 ppb
Concentration per Run 3	0.437 ppb	0.880 ppb	30.951 ppb	0.789 ppb	107.685 %	0.009 ppb	0.064 ppb	103.141 %	0.252 ppb
Concentration RSD	23.2 %	41.6 %	0.4 %	20.3 %	2.3 %	73.1 %	10.2 %	3.0 %	27.0 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	5.103 ppb	111.586 %	110.214 %	0.058 ppb	1.669 ppb	113.214 %
Concentration per Run 1	5.217 ppb	114.486 %	110.995 %	0.040 ppb	1.611 ppb	116.067 %
Concentration per Run 2	5.238 ppb	109.328 %	108.751 %	0.065 ppb	1.686 ppb	113.161 %
Concentration per Run 3	4.855 ppb	110.943 %	110.896 %	0.070 ppb	1.709 ppb	110.414 %
Concentration RSD	4.2 %	2.4 %	1.2 %	27.3 %	3.1 %	2.5 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	36	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2469261-03d10 6020TL	Rack	1		
Analysis started at:	12/3/2024 9:26:02 AM	Vial	17		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	106.811 %	120.876 %	0.020 ppb	1,328.836 ppb	583.029 ppb	190.736 ppb	474.338 ppb	13,437.385 ppb	102.266 %
Concentration per Run 1	103.119 %	128.115 %	0.016 ppb	1,243.839 ppb	544.730 ppb	182.477 ppb	424.895 ppb	12,329.262 ppb	100.478 %
Concentration per Run 2	105.998 %	119.192 %	0.023 ppb	1,380.975 ppb	586.323 ppb	192.112 ppb	487.393 ppb	13,751.740 ppb	102.689 %
Concentration per Run 3	111.316 %	115.320 %	0.022 ppb	1,361.695 ppb	618.035 ppb	197.620 ppb	510.725 ppb	14,231.153 ppb	103.632 %
Concentration RSD	3.9 %	5.4 %	18.3 %	5.6 %	6.3 %	4.0 %	9.4 %	7.4 %	1.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.373 ppb	250.793 ppb	7.142 ppb	389.028 ppb	1.327 ppb	1.108 ppb	7.836 ppb	20.800 ppb	102.900 %
Concentration per Run 1	0.293 ppb	241.826 ppb	6.823 ppb	373.282 ppb	1.330 ppb	1.066 ppb	7.692 ppb	20.275 ppb	105.317 %
Concentration per Run 2	0.360 ppb	253.093 ppb	7.210 ppb	401.464 ppb	1.314 ppb	0.936 ppb	7.984 ppb	21.193 ppb	100.533 %
Concentration per Run 3	0.465 ppb	257.460 ppb	7.394 ppb	392.338 ppb	1.337 ppb	1.322 ppb	7.831 ppb	20.930 ppb	102.848 %
Concentration RSD	23.2 %	3.2 %	4.1 %	3.7 %	0.9 %	17.7 %	1.9 %	2.3 %	2.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.514 ppb	0.610 ppb	27.764 ppb	2.999 ppb	109.052 %	0.009 ppb	0.152 ppb	107.535 %	0.166 ppb
Concentration per Run 1	0.430 ppb	0.641 ppb	27.023 ppb	2.760 ppb	111.830 %	0.009 ppb	0.194 ppb	107.184 %	0.135 ppb
Concentration per Run 2	0.536 ppb	0.757 ppb	28.081 ppb	2.856 ppb	108.406 %	0.004 ppb	0.128 ppb	109.853 %	0.191 ppb
Concentration per Run 3	0.575 ppb	0.431 ppb	28.190 ppb	3.381 ppb	106.920 %	0.014 ppb	0.132 ppb	105.568 %	0.172 ppb
Concentration RSD	14.6 %	27.1 %	2.3 %	11.2 %	2.3 %	56.7 %	24.2 %	2.0 %	17.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	3.032 ppb	109.318 %	107.076 %	0.030 ppb	0.667 ppb	114.065 %
Concentration per Run 1	3.008 ppb	112.184 %	108.987 %	0.016 ppb	0.643 ppb	118.049 %
Concentration per Run 2	2.819 ppb	108.880 %	104.490 %	0.036 ppb	0.690 ppb	112.839 %
Concentration per Run 3	3.269 ppb	106.889 %	107.752 %	0.039 ppb	0.667 ppb	111.306 %
Concentration RSD	7.4 %	2.4 %	2.2 %	42.0 %	3.5 %	3.1 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	37	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2469261-04d10 6020TL	Rack	1		
Analysis started at:	12/3/2024 9:30:29 AM	Vial	18		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	110.416 %	125.253 %	0.020 ppb	1,332.001 ppb	580.880 ppb	176.377 ppb	466.198 ppb	12,887.785 ppb	102.124 %
Concentration per Run 1	104.035 %	127.442 %	0.020 ppb	1,294.308 ppb	573.056 ppb	170.621 ppb	455.961 ppb	12,703.518 ppb	101.500 %
Concentration per Run 2	110.988 %	126.095 %	0.021 ppb	1,347.688 ppb	579.526 ppb	174.986 ppb	454.766 ppb	12,822.277 ppb	101.835 %
Concentration per Run 3	116.226 %	122.223 %	0.017 ppb	1,354.005 ppb	590.058 ppb	183.525 ppb	487.867 ppb	13,137.560 ppb	103.038 %
Concentration RSD	5.5 %	2.2 %	11.4 %	2.5 %	1.5 %	3.7 %	4.0 %	1.7 %	0.8 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.528 ppb	249.875 ppb	6.966 ppb	380.827 ppb	1.187 ppb	1.145 ppb	7.382 ppb	14.553 ppb	103.047 %
Concentration per Run 1	0.616 ppb	238.659 ppb	6.928 ppb	368.027 ppb	1.155 ppb	0.954 ppb	7.781 ppb	14.711 ppb	104.598 %
Concentration per Run 2	0.432 ppb	250.681 ppb	6.977 ppb	399.717 ppb	1.187 ppb	1.464 ppb	7.186 ppb	14.384 ppb	102.381 %
Concentration per Run 3	0.535 ppb	260.286 ppb	6.994 ppb	374.736 ppb	1.220 ppb	1.018 ppb	7.181 ppb	14.564 ppb	102.162 %
Concentration RSD	17.5 %	4.3 %	0.5 %	4.4 %	2.7 %	24.3 %	4.7 %	1.1 %	1.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.513 ppb	0.607 ppb	28.412 ppb	3.010 ppb	109.107 %	0.004 ppb	0.160 ppb	106.110 %	0.158 ppb
Concentration per Run 1	0.435 ppb	0.946 ppb	27.748 ppb	2.971 ppb	112.234 %	0.002 ppb	0.111 ppb	108.246 %	0.133 ppb
Concentration per Run 2	0.547 ppb	0.597 ppb	28.488 ppb	2.990 ppb	106.983 %	0.002 ppb	0.187 ppb	106.738 %	0.157 ppb
Concentration per Run 3	0.556 ppb	0.278 ppb	29.000 ppb	3.070 ppb	108.103 %	0.008 ppb	0.183 ppb	103.347 %	0.183 ppb
Concentration RSD	13.2 %	55.0 %	2.2 %	1.7 %	2.5 %	86.4 %	26.5 %	2.4 %	15.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	3.098 ppb	110.912 %	110.760 %	0.017 ppb	0.694 ppb	112.172 %
Concentration per Run 1	3.092 ppb	114.407 %	114.478 %	0.009 ppb	0.658 ppb	116.168 %
Concentration per Run 2	3.092 ppb	107.587 %	108.074 %	0.015 ppb	0.710 ppb	112.334 %
Concentration per Run 3	3.109 ppb	110.741 %	109.728 %	0.027 ppb	0.712 ppb	108.014 %
Concentration RSD	0.3 %	3.1 %	3.0 %	54.8 %	4.5 %	3.6 %

Analysis index:	38	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	xCCV	Rack	0		
Analysis started at:	12/3/2024 9:34:57 AM	Vial	9		

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	39	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	xCCB	Rack	0		
Analysis started at:	12/3/2024 9:39:28 AM	Vial	10		

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	40	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	CCV	Rack	0		
Analysis started at:	12/3/2024 9:44:34 AM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	103.951 %	121.269 %	56.922 ppb	5,611.965 ppb	5,531.306 ppb	56.704 ppb	5,698.359 ppb	5,834.630 ppb	100.391 %
Concentration per Run 1	99.406 %	125.085 %	57.946 ppb	5,403.079 ppb	5,318.340 ppb	57.065 ppb	5,638.954 ppb	5,729.499 ppb	99.934 %
Concentration per Run 2	104.090 %	117.677 %	56.806 ppb	5,863.072 ppb	5,831.633 ppb	57.379 ppb	5,706.473 ppb	6,062.521 ppb	99.914 %
Concentration per Run 3	108.357 %	121.044 %	56.014 ppb	5,569.745 ppb	5,443.946 ppb	55.670 ppb	5,749.649 ppb	5,711.872 ppb	101.323 %
Recovery Percentage 1			94.870 %	93.533 %	92.188 %	94.507 %	94.973 %	97.244 %	
Concentration RSD	4.3 %	3.1 %	1.7 %	4.1 %	4.8 %	1.6 %	1.0 %	3.4 %	0.8 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	56.999 ppb	57.194 ppb	58.343 ppb	5,780.953 ppb	58.592 ppb	59.314 ppb	58.598 ppb	59.515 ppb	101.977 %
Concentration per Run 1	53.017 ppb	54.777 ppb	58.043 ppb	5,636.597 ppb	57.248 ppb	58.450 ppb	57.901 ppb	58.875 ppb	103.475 %
Concentration per Run 2	60.028 ppb	58.652 ppb	59.008 ppb	5,972.972 ppb	60.735 ppb	61.236 ppb	59.920 ppb	61.276 ppb	99.694 %
Concentration per Run 3	57.952 ppb	58.153 ppb	57.979 ppb	5,733.292 ppb	57.792 ppb	58.255 ppb	57.973 ppb	58.393 ppb	102.761 %
Recovery Percentage 1	94.998 %	95.324 %	97.239 %	96.349 %	97.653 %	98.856 %	97.663 %	99.192 %	
Concentration RSD	6.3 %	3.7 %	1.0 %	3.0 %	3.2 %	2.8 %	2.0 %	2.6 %	2.0 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	59.513 ppb	58.831 ppb	58.487 ppb	57.265 ppb	106.638 %	57.482 ppb	57.815 ppb	106.411 %	56.883 ppb
Concentration per Run 1	59.458 ppb	55.488 ppb	57.446 ppb	55.729 ppb	111.018 %	56.663 ppb	56.589 ppb	108.757 %	56.190 ppb
Concentration per Run 2	60.161 ppb	61.934 ppb	60.229 ppb	57.861 ppb	103.065 %	57.455 ppb	57.485 ppb	105.894 %	57.103 ppb
Concentration per Run 3	58.920 ppb	59.071 ppb	57.786 ppb	58.205 ppb	105.830 %	58.328 ppb	59.373 ppb	104.582 %	57.357 ppb
Recovery Percentage 1	99.188 %	98.052 %	97.478 %	95.442 %		95.803 %	96.359 %		94.806 %
Concentration RSD	1.0 %	5.5 %	2.6 %	2.3 %	3.8 %	1.4 %	2.5 %	2.0 %	1.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	56.006 ppb	110.618 %	108.235 %	56.854 ppb	56.883 ppb	110.259 %
Concentration per Run 1	55.702 ppb	113.913 %	108.986 %	54.018 ppb	54.525 ppb	113.886 %
Concentration per Run 2	55.863 ppb	109.132 %	107.319 %	57.291 ppb	58.338 ppb	109.247 %
Concentration per Run 3	56.452 ppb	108.811 %	108.401 %	59.252 ppb	57.785 ppb	107.643 %
Recovery Percentage 1	93.343 %			94.756 %	94.805 %	
Concentration RSD	0.7 %	2.6 %	0.8 %	4.7 %	3.6 %	2.9 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	41	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	CCB	Rack	0		
Analysis started at:	12/3/2024 9:49:04 AM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	105.177 %	111.673 %	0.012 ppb	-25.893 ppb	0.222 ppb	-0.044 ppb	7.733 ppb	-2.256 ppb	97.409 %
Concentration per Run 1	101.145 %	112.795 %	0.014 ppb	-28.711 ppb	0.274 ppb	-0.338 ppb	0.631 ppb	-8.304 ppb	95.036 %
Concentration per Run 2	106.688 %	111.616 %	0.014 ppb	-23.614 ppb	0.298 ppb	0.286 ppb	13.570 ppb	5.406 ppb	98.782 %
Concentration per Run 3	107.699 %	110.606 %	0.008 ppb	-25.355 ppb	0.095 ppb	-0.081 ppb	8.999 ppb	-3.870 ppb	98.409 %
Recovery Percentage 1			2.372 %	-5.179 %	0.317 %	-0.444 %	7.733 %	-2.256 %	
Concentration RSD	3.4 %	1.0 %	28.3 %	10.0 %	50.0 %	707.2 %	84.8 %	310.1 %	2.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.468 ppb	-0.002 ppb	0.019 ppb	4.094 ppb	-0.003 ppb	0.002 ppb	0.149 ppb	0.296 ppb	102.911 %
Concentration per Run 1	-0.535 ppb	-0.016 ppb	0.007 ppb	3.357 ppb	0.000 ppb	0.020 ppb	0.155 ppb	0.304 ppb	103.589 %
Concentration per Run 2	-0.394 ppb	-0.033 ppb	0.058 ppb	4.690 ppb	-0.010 ppb	0.012 ppb	0.161 ppb	0.283 ppb	100.628 %
Concentration per Run 3	-0.474 ppb	0.043 ppb	-0.009 ppb	4.235 ppb	0.003 ppb	-0.026 ppb	0.132 ppb	0.302 ppb	104.518 %
Recovery Percentage 1	-9.357 %	-0.215 %	1.863 %	8.189 %	-0.525 %	0.106 %	14.922 %	5.924 %	
Concentration RSD	15.2 %	1,857.5 %	187.4 %	16.5 %	251.5 %	1,147.5 %	10.4 %	3.9 %	2.0 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.039 ppb	0.143 ppb	0.010 ppb	0.297 ppb	105.779 %	0.014 ppb	0.002 ppb	104.255 %	0.067 ppb
Concentration per Run 1	0.021 ppb	0.187 ppb	0.009 ppb	0.260 ppb	107.234 %	0.014 ppb	0.003 ppb	106.449 %	0.048 ppb
Concentration per Run 2	0.070 ppb	0.117 ppb	0.009 ppb	0.315 ppb	104.709 %	0.021 ppb	0.004 ppb	104.786 %	0.074 ppb
Concentration per Run 3	0.027 ppb	0.126 ppb	0.011 ppb	0.316 ppb	105.396 %	0.005 ppb	0.000 ppb	101.532 %	0.078 ppb
Recovery Percentage 1	7.826 %	2.866 %	0.097 %	14.856 %		3.378 %	1.165 %		1.674 %
Concentration RSD	68.2 %	26.5 %	15.7 %	10.7 %	1.2 %	57.3 %	86.6 %	2.4 %	24.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.017 ppb	106.638 %	106.649 %	0.238 ppb	0.020 ppb	109.571 %
Concentration per Run 1	0.021 ppb	108.508 %	108.216 %	0.215 ppb	0.022 ppb	113.525 %
Concentration per Run 2	0.022 ppb	104.190 %	103.754 %	0.275 ppb	0.021 ppb	106.484 %
Concentration per Run 3	0.008 ppb	107.216 %	107.977 %	0.225 ppb	0.017 ppb	108.704 %
Recovery Percentage 1	3.449 %			23.824 %	2.023 %	
Concentration RSD	44.2 %	2.1 %	2.4 %	13.4 %	12.1 %	3.3 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	42	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2469261-05 6020TL	Rack	1		
Analysis started at:	12/3/2024 9:54:58 AM	Vial	19		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	101.418 %	113.524 %	0.430 ppb	35,842.553 ppb	23,918.184 ppb	5,113.443 ppb	13,025.821 ppb	82,011.449 ppb	101.167 %
Concentration per Run 1	98.124 %	116.162 %	0.424 ppb	34,621.299 ppb	23,404.442 ppb	5,028.999 ppb	12,725.365 ppb	80,308.794 ppb	100.869 %
Concentration per Run 2	101.105 %	109.091 %	0.431 ppb	36,837.668 ppb	24,566.089 ppb	5,204.858 ppb	13,073.716 ppb	81,127.342 ppb	100.054 %
Concentration per Run 3	105.024 %	115.320 %	0.434 ppb	36,068.692 ppb	23,784.021 ppb	5,106.473 ppb	13,278.381 ppb	84,598.212 ppb	102.578 %
Concentration RSD	3.4 %	3.4 %	1.3 %	3.1 %	2.5 %	1.7 %	2.1 %	2.8 %	1.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	15.354 ppb	21.206 ppb	152.740 ppb	8,101.320 ppb	6.718 ppb	8.091 ppb	7.531 ppb	24.507 ppb	103.870 %
Concentration per Run 1	14.458 ppb	20.025 ppb	141.635 ppb	7,709.188 ppb	6.718 ppb	7.959 ppb	6.973 ppb	23.944 ppb	107.445 %
Concentration per Run 2	15.551 ppb	21.853 ppb	159.235 ppb	8,217.110 ppb	6.663 ppb	8.331 ppb	7.708 ppb	25.007 ppb	103.571 %
Concentration per Run 3	16.053 ppb	21.740 ppb	157.352 ppb	8,377.661 ppb	6.772 ppb	7.982 ppb	7.911 ppb	24.571 ppb	100.592 %
Concentration RSD	5.3 %	4.8 %	6.3 %	4.3 %	0.8 %	2.6 %	6.6 %	2.2 %	3.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	2.780 ppb	16.236 ppb	330.852 ppb	11.464 ppb	104.471 %	0.010 ppb	0.089 ppb	107.677 %	0.354 ppb
Concentration per Run 1	2.528 ppb	16.814 ppb	321.187 ppb	11.224 ppb	107.742 %	0.007 ppb	0.098 ppb	110.089 %	0.335 ppb
Concentration per Run 2	2.801 ppb	15.895 ppb	334.218 ppb	11.332 ppb	102.713 %	0.010 ppb	0.080 ppb	107.416 %	0.325 ppb
Concentration per Run 3	3.010 ppb	15.999 ppb	337.151 ppb	11.837 ppb	102.959 %	0.013 ppb	0.088 ppb	105.525 %	0.403 ppb
Concentration RSD	8.7 %	3.1 %	2.6 %	2.9 %	2.7 %	29.0 %	10.0 %	2.1 %	12.0 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	31.421 ppb	113.037 %	111.749 %	0.100 ppb	6.331 ppb	109.598 %
Concentration per Run 1	31.086 ppb	116.855 %	114.299 %	0.084 ppb	6.044 ppb	114.391 %
Concentration per Run 2	31.581 ppb	112.148 %	109.893 %	0.105 ppb	6.325 ppb	110.511 %
Concentration per Run 3	31.597 ppb	110.108 %	111.054 %	0.112 ppb	6.624 ppb	103.891 %
Concentration RSD	0.9 %	3.1 %	2.0 %	14.2 %	4.6 %	4.8 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	43	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2469261-06 6020TL	Rack	1		
Analysis started at:	12/3/2024 9:59:26 AM	Vial	20		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	102.117 %	116.386 %	0.399 ppb	35,359.547 ppb	23,209.747 ppb	4,743.207 ppb	12,746.705 ppb	79,571.817 ppb	102.444 %
Concentration per Run 1	98.558 %	114.815 %	0.394 ppb	34,908.803 ppb	22,635.723 ppb	4,714.798 ppb	12,872.423 ppb	80,407.871 ppb	102.218 %
Concentration per Run 2	104.340 %	116.499 %	0.384 ppb	36,243.530 ppb	23,489.271 ppb	4,746.522 ppb	12,593.848 ppb	78,382.162 ppb	103.018 %
Concentration per Run 3	103.453 %	117.845 %	0.419 ppb	34,926.308 ppb	23,504.248 ppb	4,768.302 ppb	12,773.844 ppb	79,925.418 ppb	102.096 %
Concentration RSD	3.0 %	1.3 %	4.6 %	2.2 %	2.1 %	0.6 %	1.1 %	1.3 %	0.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	14.752 ppb	20.551 ppb	143.418 ppb	7,770.787 ppb	6.463 ppb	7.646 ppb	7.533 ppb	24.099 ppb	99.742 %
Concentration per Run 1	13.941 ppb	19.429 ppb	136.190 ppb	7,604.058 ppb	6.318 ppb	7.132 ppb	7.302 ppb	23.645 ppb	101.922 %
Concentration per Run 2	14.727 ppb	20.683 ppb	147.746 ppb	8,045.488 ppb	6.566 ppb	7.602 ppb	8.248 ppb	24.684 ppb	97.954 %
Concentration per Run 3	15.587 ppb	21.540 ppb	146.317 ppb	7,662.816 ppb	6.504 ppb	8.204 ppb	7.049 ppb	23.967 ppb	99.350 %
Concentration RSD	5.6 %	5.2 %	4.4 %	3.1 %	2.0 %	7.0 %	8.4 %	2.2 %	2.0 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	2.559 ppb	15.118 ppb	329.564 ppb	11.906 ppb	104.274 %	0.010 ppb	0.062 ppb	104.431 %	0.333 ppb
Concentration per Run 1	2.553 ppb	14.653 ppb	318.858 ppb	11.700 ppb	107.145 %	0.009 ppb	0.052 ppb	105.486 %	0.372 ppb
Concentration per Run 2	2.467 ppb	14.842 ppb	338.449 ppb	11.762 ppb	100.884 %	0.011 ppb	0.091 ppb	102.555 %	0.351 ppb
Concentration per Run 3	2.658 ppb	15.860 ppb	331.385 ppb	12.257 ppb	104.792 %	0.010 ppb	0.042 ppb	105.252 %	0.276 ppb
Concentration RSD	3.7 %	4.3 %	3.0 %	2.6 %	3.0 %	8.5 %	41.4 %	1.6 %	15.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	30.479 ppb	110.259 %	109.135 %	0.074 ppb	6.006 ppb	107.364 %
Concentration per Run 1	30.450 ppb	112.785 %	111.292 %	0.054 ppb	5.744 ppb	111.537 %
Concentration per Run 2	30.981 ppb	108.829 %	108.054 %	0.083 ppb	6.096 ppb	107.456 %
Concentration per Run 3	30.006 ppb	109.162 %	108.060 %	0.086 ppb	6.177 ppb	103.100 %
Concentration RSD	1.6 %	2.0 %	1.7 %	24.2 %	3.8 %	3.9 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	44	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2469261-07 6020TL	Rack	1		
Analysis started at:	12/3/2024 10:03:54 AM	Vial	21		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	98.628 %	116.386 %	0.371 ppb	41,644.293 ppb	24,270.706 ppb	4,122.017 ppb	10,848.127 ppb	81,324.980 ppb	95.219 %
Concentration per Run 1	99.009 %	122.223 %	0.380 ppb	37,781.513 ppb	22,238.982 ppb	3,860.183 ppb	10,319.234 ppb	79,099.293 ppb	95.674 %
Concentration per Run 2	97.650 %	113.973 %	0.371 ppb	43,111.887 ppb	25,285.586 ppb	4,212.030 ppb	11,238.527 ppb	81,639.558 ppb	92.803 %
Concentration per Run 3	99.225 %	112.963 %	0.361 ppb	44,039.478 ppb	25,287.551 ppb	4,293.837 ppb	10,986.619 ppb	83,236.090 ppb	97.179 %
Concentration RSD	0.9 %	4.4 %	2.6 %	8.1 %	7.2 %	5.6 %	4.4 %	2.6 %	2.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	11.191 ppb	12.909 ppb	1,977.668 ppb	12,000.382 ppb	10.129 ppb	7.725 ppb	7.843 ppb	22.201 ppb	101.471 %
Concentration per Run 1	10.857 ppb	12.306 ppb	1,899.585 ppb	11,602.086 ppb	9.879 ppb	7.374 ppb	7.427 ppb	21.881 ppb	101.754 %
Concentration per Run 2	11.083 ppb	12.988 ppb	1,987.093 ppb	11,925.399 ppb	9.986 ppb	8.063 ppb	7.800 ppb	22.141 ppb	102.585 %
Concentration per Run 3	11.634 ppb	13.433 ppb	2,046.327 ppb	12,473.660 ppb	10.524 ppb	7.739 ppb	8.301 ppb	22.579 ppb	100.075 %
Concentration RSD	3.6 %	4.4 %	3.7 %	3.7 %	3.4 %	4.5 %	5.6 %	1.6 %	1.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	8.157 ppb	3.426 ppb	316.349 ppb	7.217 ppb	104.727 %	0.005 ppb	0.066 ppb	106.663 %	0.275 ppb
Concentration per Run 1	8.166 ppb	5.005 ppb	306.571 ppb	6.946 ppb	108.884 %	0.006 ppb	0.051 ppb	108.159 %	0.227 ppb
Concentration per Run 2	8.140 ppb	2.503 ppb	317.460 ppb	7.402 ppb	103.138 %	0.006 ppb	0.077 ppb	105.992 %	0.274 ppb
Concentration per Run 3	8.165 ppb	2.769 ppb	325.015 ppb	7.302 ppb	102.158 %	0.003 ppb	0.071 ppb	105.839 %	0.324 ppb
Concentration RSD	0.2 %	40.1 %	2.9 %	3.3 %	3.5 %	31.5 %	20.5 %	1.2 %	17.5 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	22.481 ppb	113.577 %	112.308 %	0.057 ppb	5.389 ppb	107.750 %
Concentration per Run 1	22.082 ppb	115.459 %	115.133 %	0.044 ppb	5.323 ppb	108.771 %
Concentration per Run 2	22.413 ppb	112.789 %	109.253 %	0.060 ppb	5.375 ppb	106.961 %
Concentration per Run 3	22.948 ppb	112.485 %	112.538 %	0.068 ppb	5.471 ppb	107.517 %
Concentration RSD	1.9 %	1.4 %	2.6 %	21.9 %	1.4 %	0.9 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	45	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2469261-08 6020TL	Rack	1		
Analysis started at:	12/3/2024 10:08:23 AM	Vial	22		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	99.110 %	114.871 %	0.269 ppb	42,191.983 ppb	23,784.367 ppb	3,033.873 ppb	10,970.872 ppb	81,367.570 ppb	99.723 %
Concentration per Run 1	93.699 %	117.004 %	0.274 ppb	41,882.632 ppb	23,778.587 ppb	2,974.511 ppb	10,694.645 ppb	78,593.570 ppb	97.371 %
Concentration per Run 2	100.133 %	114.478 %	0.277 ppb	42,414.080 ppb	24,089.368 ppb	3,086.873 ppb	11,117.864 ppb	80,572.636 ppb	101.973 %
Concentration per Run 3	103.499 %	113.132 %	0.257 ppb	42,279.237 ppb	23,485.145 ppb	3,040.236 ppb	11,100.106 ppb	84,936.504 ppb	99.824 %
Concentration RSD	5.0 %	1.7 %	4.0 %	0.7 %	1.3 %	1.9 %	2.2 %	4.0 %	2.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	8.441 ppb	9.517 ppb	1,992.352 ppb	9,264.653 ppb	8.867 ppb	5.312 ppb	5.486 ppb	16.177 ppb	101.499 %
Concentration per Run 1	7.618 ppb	8.997 ppb	1,893.890 ppb	9,052.854 ppb	8.380 ppb	5.005 ppb	5.249 ppb	15.566 ppb	104.681 %
Concentration per Run 2	8.623 ppb	9.616 ppb	2,038.163 ppb	9,541.660 ppb	9.358 ppb	5.400 ppb	6.105 ppb	16.902 ppb	100.021 %
Concentration per Run 3	9.081 ppb	9.939 ppb	2,045.002 ppb	9,199.446 ppb	8.862 ppb	5.530 ppb	5.103 ppb	16.063 ppb	99.796 %
Concentration RSD	8.9 %	5.0 %	4.3 %	2.7 %	5.5 %	5.1 %	9.9 %	4.2 %	2.7 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	8.116 ppb	3.181 ppb	308.178 ppb	9.028 ppb	106.671 %	0.006 ppb	0.047 ppb	107.975 %	0.260 ppb
Concentration per Run 1	7.628 ppb	2.075 ppb	299.787 ppb	8.549 ppb	107.423 %	0.003 ppb	0.047 ppb	111.070 %	0.262 ppb
Concentration per Run 2	8.285 ppb	3.417 ppb	312.200 ppb	9.397 ppb	104.874 %	0.008 ppb	0.053 ppb	104.957 %	0.263 ppb
Concentration per Run 3	8.435 ppb	4.051 ppb	312.547 ppb	9.139 ppb	107.716 %	0.007 ppb	0.041 ppb	107.897 %	0.255 ppb
Concentration RSD	5.3 %	31.7 %	2.4 %	4.8 %	1.5 %	45.0 %	12.4 %	2.8 %	1.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	19.728 ppb	112.485 %	112.328 %	0.039 ppb	3.962 ppb	107.055 %
Concentration per Run 1	19.603 ppb	116.773 %	115.667 %	0.026 ppb	3.796 ppb	108.761 %
Concentration per Run 2	20.072 ppb	110.122 %	111.220 %	0.048 ppb	3.986 ppb	108.701 %
Concentration per Run 3	19.511 ppb	110.562 %	110.097 %	0.044 ppb	4.103 ppb	103.702 %
Concentration RSD	1.5 %	3.3 %	2.6 %	29.9 %	3.9 %	2.7 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	46	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2469261-09 6020TL	Rack	1		
Analysis started at:	12/3/2024 10:12:52 AM	Vial	23		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	96.856 %	115.376 %	0.023 ppb	82,551.536 ppb	25,015.841 ppb	168.400 ppb	10,356.027 ppb	93,716.422 ppb	97.464 %
Concentration per Run 1	93.706 %	112.963 %	0.023 ppb	84,327.293 ppb	24,987.979 ppb	163.148 ppb	10,351.905 ppb	92,393.568 ppb	95.129 %
Concentration per Run 2	96.705 %	119.529 %	0.025 ppb	78,974.433 ppb	23,900.784 ppb	166.626 ppb	10,098.169 ppb	94,072.078 ppb	96.179 %
Concentration per Run 3	100.158 %	113.637 %	0.020 ppb	84,352.884 ppb	26,158.758 ppb	175.426 ppb	10,618.007 ppb	94,683.621 ppb	101.083 %
Concentration RSD	3.3 %	3.1 %	12.2 %	3.8 %	4.5 %	3.8 %	2.5 %	1.3 %	3.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.064 ppb	0.697 ppb	623.409 ppb	16,765.661 ppb	0.281 ppb	0.208 ppb	0.431 ppb	0.877 ppb	104.335 %
Concentration per Run 1	0.102 ppb	0.643 ppb	625.227 ppb	17,179.919 ppb	0.250 ppb	0.133 ppb	0.506 ppb	0.791 ppb	103.723 %
Concentration per Run 2	0.034 ppb	0.669 ppb	614.554 ppb	16,486.966 ppb	0.341 ppb	0.189 ppb	0.378 ppb	0.983 ppb	102.193 %
Concentration per Run 3	0.057 ppb	0.779 ppb	630.446 ppb	16,630.097 ppb	0.253 ppb	0.302 ppb	0.409 ppb	0.856 ppb	107.091 %
Concentration RSD	53.9 %	10.4 %	1.3 %	2.2 %	18.4 %	41.5 %	15.5 %	11.1 %	2.4 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.239 ppb	0.156 ppb	326.198 ppb	1.191 ppb	105.753 %	0.004 ppb	0.001 ppb	107.487 %	0.135 ppb
Concentration per Run 1	0.187 ppb	0.029 ppb	321.481 ppb	1.176 ppb	108.506 %	0.000 ppb	0.000 ppb	113.392 %	0.099 ppb
Concentration per Run 2	0.331 ppb	0.001 ppb	327.857 ppb	1.014 ppb	106.045 %	0.004 ppb	0.000 ppb	103.981 %	0.132 ppb
Concentration per Run 3	0.198 ppb	0.437 ppb	329.257 ppb	1.383 ppb	102.707 %	0.007 ppb	0.004 ppb	105.088 %	0.175 ppb
Concentration RSD	33.5 %	156.8 %	1.3 %	15.5 %	2.8 %	90.6 %	173.2 %	4.8 %	28.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	15.927 ppb	113.278 %	112.100 %	0.020 ppb	0.271 ppb	108.392 %
Concentration per Run 1	15.313 ppb	114.810 %	113.507 %	0.009 ppb	0.276 ppb	111.276 %
Concentration per Run 2	16.410 ppb	111.075 %	111.500 %	0.026 ppb	0.266 ppb	104.695 %
Concentration per Run 3	16.059 ppb	113.950 %	111.294 %	0.024 ppb	0.269 ppb	109.205 %
Concentration RSD	3.5 %	1.7 %	1.1 %	45.4 %	1.9 %	3.1 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	47	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2469261-10 6020TL	Rack	1		
Analysis started at:	12/3/2024 10:17:21 AM	Vial	24		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	104.010 %	115.376 %	0.017 ppb	82,471.080 ppb	24,701.561 ppb	167.805 ppb	10,122.669 ppb	92,165.646 ppb	106.326 %
Concentration per Run 1	102.362 %	117.172 %	0.020 ppb	79,905.877 ppb	24,148.790 ppb	161.919 ppb	9,779.584 ppb	89,033.977 ppb	108.967 %
Concentration per Run 2	105.398 %	114.310 %	0.016 ppb	84,732.125 ppb	24,909.309 ppb	171.981 ppb	10,322.399 ppb	92,927.081 ppb	106.215 %
Concentration per Run 3	104.268 %	114.647 %	0.016 ppb	82,775.237 ppb	25,046.583 ppb	169.515 ppb	10,266.026 ppb	94,535.878 ppb	103.796 %
Concentration RSD	1.5 %	1.4 %	13.3 %	2.9 %	2.0 %	3.1 %	2.9 %	3.1 %	2.4 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.162 ppb	0.725 ppb	617.905 ppb	16,742.015 ppb	0.186 ppb	0.123 ppb	0.434 ppb	1.071 ppb	102.369 %
Concentration per Run 1	0.223 ppb	0.702 ppb	599.272 ppb	15,635.240 ppb	0.146 ppb	0.140 ppb	0.378 ppb	1.090 ppb	104.653 %
Concentration per Run 2	-0.008 ppb	0.745 ppb	635.537 ppb	17,466.889 ppb	0.198 ppb	0.151 ppb	0.428 ppb	1.024 ppb	99.962 %
Concentration per Run 3	0.271 ppb	0.729 ppb	618.908 ppb	17,123.916 ppb	0.213 ppb	0.077 ppb	0.495 ppb	1.100 ppb	102.492 %
Concentration RSD	91.9 %	3.0 %	2.9 %	5.8 %	18.9 %	32.3 %	13.5 %	3.8 %	2.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.313 ppb	0.259 ppb	322.297 ppb	1.048 ppb	106.932 %	0.002 ppb	0.002 ppb	108.574 %	0.136 ppb
Concentration per Run 1	0.277 ppb	0.242 ppb	307.702 ppb	0.868 ppb	112.433 %	0.000 ppb	0.000 ppb	110.351 %	0.090 ppb
Concentration per Run 2	0.212 ppb	0.209 ppb	330.565 ppb	1.196 ppb	105.004 %	0.005 ppb	0.000 ppb	106.929 %	0.168 ppb
Concentration per Run 3	0.450 ppb	0.325 ppb	328.623 ppb	1.080 ppb	103.357 %	0.000 ppb	0.007 ppb	108.441 %	0.151 ppb
Concentration RSD	39.4 %	23.2 %	3.9 %	15.9 %	4.5 %	163.3 %	173.2 %	1.6 %	30.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	15.826 ppb	113.357 %	114.798 %	0.015 ppb	0.252 ppb	109.977 %
Concentration per Run 1	15.161 ppb	117.479 %	119.568 %	0.006 ppb	0.232 ppb	115.644 %
Concentration per Run 2	15.976 ppb	108.219 %	110.917 %	0.017 ppb	0.275 ppb	108.329 %
Concentration per Run 3	16.341 ppb	114.374 %	113.909 %	0.020 ppb	0.251 ppb	105.959 %
Concentration RSD	3.8 %	4.2 %	3.8 %	50.4 %	8.5 %	4.6 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	48	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2469261-11 6020TL	Rack	1		
Analysis started at:	12/3/2024 10:21:50 AM	Vial	25		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	98.693 %	116.499 %	0.015 ppb	84,334.351 ppb	23,524.095 ppb	162.033 ppb	11,669.312 ppb	87,206.405 ppb	98.314 %
Concentration per Run 1	95.231 %	115.825 %	0.014 ppb	84,458.889 ppb	23,820.543 ppb	157.777 ppb	11,562.686 ppb	83,713.438 ppb	96.180 %
Concentration per Run 2	99.410 %	119.697 %	0.018 ppb	81,451.319 ppb	22,732.907 ppb	162.075 ppb	11,402.550 ppb	85,894.791 ppb	99.792 %
Concentration per Run 3	101.438 %	113.973 %	0.014 ppb	87,092.845 ppb	24,018.834 ppb	166.246 ppb	12,042.698 ppb	92,010.986 ppb	98.969 %
Concentration RSD	3.2 %	2.5 %	14.2 %	3.3 %	2.9 %	2.6 %	2.9 %	4.9 %	1.9 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.112 ppb	1.238 ppb	503.185 ppb	13,137.190 ppb	0.219 ppb	0.266 ppb	0.759 ppb	1.219 ppb	101.071 %
Concentration per Run 1	-0.278 ppb	1.179 ppb	493.904 ppb	12,973.294 ppb	0.193 ppb	0.213 ppb	0.601 ppb	1.176 ppb	102.611 %
Concentration per Run 2	-0.039 ppb	1.236 ppb	507.044 ppb	13,256.362 ppb	0.241 ppb	0.280 ppb	0.879 ppb	1.123 ppb	101.718 %
Concentration per Run 3	-0.019 ppb	1.300 ppb	508.608 ppb	13,181.914 ppb	0.223 ppb	0.306 ppb	0.798 ppb	1.358 ppb	98.884 %
Concentration RSD	128.7 %	4.9 %	1.6 %	1.1 %	10.9 %	18.1 %	18.8 %	10.1 %	1.9 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.330 ppb	0.395 ppb	310.278 ppb	0.890 ppb	105.512 %	0.005 ppb	0.002 ppb	107.509 %	0.126 ppb
Concentration per Run 1	0.248 ppb	0.268 ppb	305.356 ppb	0.753 ppb	106.457 %	0.004 ppb	0.007 ppb	108.488 %	0.079 ppb
Concentration per Run 2	0.358 ppb	0.408 ppb	311.492 ppb	0.936 ppb	104.138 %	0.005 ppb	0.000 ppb	108.653 %	0.154 ppb
Concentration per Run 3	0.383 ppb	0.509 ppb	313.987 ppb	0.982 ppb	105.940 %	0.005 ppb	0.000 ppb	105.387 %	0.144 ppb
Concentration RSD	21.7 %	30.6 %	1.4 %	13.6 %	1.2 %	13.1 %	173.2 %	1.7 %	32.5 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	17.059 ppb	112.271 %	111.564 %	0.012 ppb	0.240 ppb	105.854 %
Concentration per Run 1	16.733 ppb	115.122 %	113.249 %	0.004 ppb	0.245 ppb	110.216 %
Concentration per Run 2	17.177 ppb	111.024 %	110.441 %	0.017 ppb	0.238 ppb	103.654 %
Concentration per Run 3	17.266 ppb	110.667 %	111.003 %	0.015 ppb	0.236 ppb	103.692 %
Concentration RSD	1.7 %	2.2 %	1.3 %	57.6 %	1.9 %	3.6 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	49	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2469261-12 6020TL	Rack	1		
Analysis started at:	12/3/2024 10:26:17 AM	Vial	26		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	96.533 %	110.494 %	0.015 ppb	85,093.292 ppb	23,717.814 ppb	112.830 ppb	11,231.518 ppb	83,789.523 ppb	98.643 %
Concentration per Run 1	93.376 %	107.576 %	0.015 ppb	88,402.364 ppb	24,852.109 ppb	117.601 ppb	11,467.012 ppb	85,153.482 ppb	94.698 %
Concentration per Run 2	98.130 %	118.519 %	0.015 ppb	79,055.557 ppb	21,711.936 ppb	108.065 ppb	10,858.529 ppb	81,215.895 ppb	100.880 %
Concentration per Run 3	98.092 %	105.387 %	0.015 ppb	87,821.954 ppb	24,589.395 ppb	112.823 ppb	11,369.013 ppb	84,999.193 ppb	100.350 %
Concentration RSD	2.8 %	6.4 %	0.2 %	6.2 %	7.3 %	4.2 %	2.9 %	2.7 %	3.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.267 ppb	1.092 ppb	473.694 ppb	11,561.777 ppb	0.101 ppb	0.479 ppb	0.664 ppb	0.887 ppb	102.803 %
Concentration per Run 1	-0.184 ppb	1.071 ppb	497.712 ppb	12,348.140 ppb	0.112 ppb	0.484 ppb	0.718 ppb	0.912 ppb	99.904 %
Concentration per Run 2	-0.253 ppb	1.106 ppb	455.093 ppb	10,884.633 ppb	0.094 ppb	0.455 ppb	0.663 ppb	0.827 ppb	103.405 %
Concentration per Run 3	-0.365 ppb	1.099 ppb	468.276 ppb	11,452.558 ppb	0.098 ppb	0.497 ppb	0.611 ppb	0.923 ppb	105.101 %
Concentration RSD	34.1 %	1.7 %	4.6 %	6.4 %	9.5 %	4.4 %	8.1 %	5.9 %	2.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.250 ppb	0.164 ppb	296.006 ppb	0.772 ppb	105.655 %	0.005 ppb	0.003 ppb	106.755 %	0.129 ppb
Concentration per Run 1	0.204 ppb	0.108 ppb	303.707 ppb	0.710 ppb	104.557 %	0.004 ppb	0.007 ppb	107.732 %	0.108 ppb
Concentration per Run 2	0.292 ppb	0.024 ppb	289.716 ppb	0.712 ppb	108.535 %	0.006 ppb	0.003 ppb	107.657 %	0.132 ppb
Concentration per Run 3	0.253 ppb	0.360 ppb	294.594 ppb	0.893 ppb	103.874 %	0.004 ppb	0.000 ppb	104.875 %	0.148 ppb
Concentration RSD	17.7 %	106.6 %	2.4 %	13.6 %	2.4 %	20.9 %	100.4 %	1.5 %	15.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	16.471 ppb	111.760 %	110.396 %	0.012 ppb	0.167 ppb	105.922 %
Concentration per Run 1	17.118 ppb	107.836 %	107.168 %	0.003 ppb	0.172 ppb	105.530 %
Concentration per Run 2	16.043 ppb	115.544 %	113.139 %	0.015 ppb	0.160 ppb	106.595 %
Concentration per Run 3	16.253 ppb	111.901 %	110.880 %	0.018 ppb	0.169 ppb	105.642 %
Concentration RSD	3.5 %	3.5 %	2.7 %	67.6 %	3.9 %	0.6 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	50	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2469261-13 6020TL	Rack	1		
Analysis started at:	12/3/2024 10:30:43 AM	Vial	27		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	99.415 %	115.376 %	0.250 ppb	36,528.686 ppb	22,185.494 ppb	2,999.603 ppb	13,842.910 ppb	79,019.307 ppb	100.983 %
Concentration per Run 1	93.041 %	115.657 %	0.258 ppb	35,866.740 ppb	21,977.528 ppb	2,965.293 ppb	13,680.411 ppb	78,060.255 ppb	96.511 %
Concentration per Run 2	102.038 %	110.606 %	0.247 ppb	38,105.572 ppb	23,093.258 ppb	3,096.760 ppb	14,022.356 ppb	80,635.308 ppb	101.754 %
Concentration per Run 3	103.167 %	119.866 %	0.243 ppb	35,613.746 ppb	21,485.695 ppb	2,936.757 ppb	13,825.964 ppb	78,362.359 ppb	104.686 %
Concentration RSD	5.6 %	4.0 %	3.0 %	3.8 %	3.7 %	2.8 %	1.2 %	1.8 %	4.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	9.950 ppb	10.370 ppb	140.368 ppb	4,773.990 ppb	4.350 ppb	4.839 ppb	4.844 ppb	14.883 ppb	100.999 %
Concentration per Run 1	9.614 ppb	9.721 ppb	137.691 ppb	4,594.123 ppb	4.409 ppb	4.661 ppb	4.775 ppb	14.312 ppb	103.725 %
Concentration per Run 2	10.196 ppb	10.843 ppb	143.718 ppb	5,018.622 ppb	4.513 ppb	5.042 ppb	4.803 ppb	15.507 ppb	98.682 %
Concentration per Run 3	10.040 ppb	10.548 ppb	139.696 ppb	4,709.225 ppb	4.127 ppb	4.815 ppb	4.954 ppb	14.832 ppb	100.591 %
Concentration RSD	3.0 %	5.6 %	2.2 %	4.6 %	4.6 %	4.0 %	2.0 %	4.0 %	2.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	2.007 ppb	14.746 ppb	324.729 ppb	17.440 ppb	104.738 %	0.007 ppb	0.046 ppb	105.789 %	0.338 ppb
Concentration per Run 1	2.212 ppb	14.831 ppb	314.720 ppb	16.484 ppb	107.212 %	0.010 ppb	0.031 ppb	105.924 %	0.338 ppb
Concentration per Run 2	1.955 ppb	13.555 ppb	334.180 ppb	18.205 ppb	101.034 %	0.007 ppb	0.047 ppb	103.608 %	0.348 ppb
Concentration per Run 3	1.853 ppb	15.853 ppb	325.286 ppb	17.631 ppb	105.968 %	0.004 ppb	0.059 ppb	107.835 %	0.329 ppb
Concentration RSD	9.2 %	7.8 %	3.0 %	5.0 %	3.1 %	43.3 %	30.1 %	2.0 %	2.8 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	26.951 ppb	111.739 %	108.527 %	0.035 ppb	3.890 ppb	105.591 %
Concentration per Run 1	25.519 ppb	113.953 %	108.687 %	0.033 ppb	3.738 ppb	109.076 %
Concentration per Run 2	28.060 ppb	110.099 %	107.578 %	0.038 ppb	3.997 ppb	104.103 %
Concentration per Run 3	27.276 ppb	111.164 %	109.314 %	0.034 ppb	3.934 ppb	103.593 %
Concentration RSD	4.8 %	1.8 %	0.8 %	7.8 %	3.5 %	2.9 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	51	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2469261-14 6020TL	Rack	1		
Analysis started at:	12/3/2024 10:35:10 AM	Vial	28		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	101.397 %	110.326 %	0.288 ppb	38,781.002 ppb	24,031.552 ppb	3,611.559 ppb	14,438.374 ppb	80,397.528 ppb	101.565 %
Concentration per Run 1	96.704 %	109.259 %	0.288 ppb	38,569.482 ppb	24,224.469 ppb	3,628.758 ppb	14,660.600 ppb	79,677.930 ppb	98.857 %
Concentration per Run 2	102.720 %	108.923 %	0.291 ppb	39,578.718 ppb	24,182.936 ppb	3,600.360 ppb	14,192.473 ppb	80,131.104 ppb	101.093 %
Concentration per Run 3	104.767 %	112.795 %	0.285 ppb	38,194.808 ppb	23,687.251 ppb	3,605.558 ppb	14,462.051 ppb	81,383.551 ppb	104.745 %
Concentration RSD	4.1 %	1.9 %	1.2 %	1.8 %	1.2 %	0.4 %	1.6 %	1.1 %	2.9 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	11.143 ppb	11.703 ppb	160.337 ppb	5,798.384 ppb	5.204 ppb	5.771 ppb	5.363 ppb	17.706 ppb	98.918 %
Concentration per Run 1	10.354 ppb	11.331 ppb	161.808 ppb	5,774.936 ppb	5.163 ppb	6.254 ppb	5.245 ppb	17.822 ppb	100.041 %
Concentration per Run 2	11.478 ppb	11.878 ppb	160.955 ppb	5,953.082 ppb	5.534 ppb	5.703 ppb	5.596 ppb	18.257 ppb	96.264 %
Concentration per Run 3	11.596 ppb	11.902 ppb	158.248 ppb	5,667.134 ppb	4.913 ppb	5.354 ppb	5.249 ppb	17.039 ppb	100.449 %
Concentration RSD	6.2 %	2.8 %	1.2 %	2.5 %	6.0 %	7.9 %	3.8 %	3.5 %	2.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	2.238 ppb	16.682 ppb	333.160 ppb	16.969 ppb	103.978 %	0.003 ppb	0.042 ppb	106.616 %	0.319 ppb
Concentration per Run 1	2.079 ppb	16.286 ppb	328.447 ppb	16.425 ppb	105.144 %	0.000 ppb	0.052 ppb	106.791 %	0.294 ppb
Concentration per Run 2	2.186 ppb	17.412 ppb	337.538 ppb	16.879 ppb	103.355 %	0.002 ppb	0.039 ppb	105.810 %	0.383 ppb
Concentration per Run 3	2.448 ppb	16.349 ppb	333.496 ppb	17.603 ppb	103.434 %	0.006 ppb	0.035 ppb	107.248 %	0.280 ppb
Concentration RSD	8.5 %	3.8 %	1.4 %	3.5 %	1.0 %	106.9 %	21.7 %	0.7 %	17.5 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	28.112 ppb	112.761 %	109.216 %	0.030 ppb	4.489 ppb	105.119 %
Concentration per Run 1	28.097 ppb	115.433 %	110.796 %	0.021 ppb	4.395 ppb	106.770 %
Concentration per Run 2	28.293 ppb	111.421 %	109.013 %	0.032 ppb	4.630 ppb	102.811 %
Concentration per Run 3	27.947 ppb	111.431 %	107.840 %	0.037 ppb	4.442 ppb	105.776 %
Concentration RSD	0.6 %	2.1 %	1.4 %	26.5 %	2.8 %	2.0 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	52	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	CCV	Rack	0		
Analysis started at:	12/3/2024 10:39:37 AM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	112.415 %	108.137 %	51.507 ppb	6,086.589 ppb	5,849.735 ppb	57.893 ppb	6,058.661 ppb	5,922.331 ppb	111.170 %
Concentration per Run 1	109.726 %	107.408 %	50.002 ppb	6,076.394 ppb	5,817.939 ppb	56.181 ppb	5,848.853 ppb	5,870.692 ppb	110.453 %
Concentration per Run 2	113.636 %	113.805 %	50.349 ppb	5,920.835 ppb	5,686.390 ppb	56.546 ppb	5,966.297 ppb	5,872.198 ppb	114.223 %
Concentration per Run 3	113.883 %	103.199 %	54.170 ppb	6,262.538 ppb	6,044.876 ppb	60.953 ppb	6,360.834 ppb	6,024.103 ppb	108.834 %
Recovery Percentage 1			85.845 %	101.443 %	97.496 %	96.489 %	100.978 %	98.706 %	
Concentration RSD	2.1 %	4.9 %	4.5 %	2.8 %	3.1 %	4.6 %	4.4 %	1.5 %	2.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	58.542 ppb	59.239 ppb	59.058 ppb	5,932.809 ppb	60.183 ppb	61.440 ppb	60.917 ppb	61.048 ppb	100.240 %
Concentration per Run 1	57.594 ppb	58.531 ppb	57.856 ppb	5,900.408 ppb	60.062 ppb	60.352 ppb	60.787 ppb	61.768 ppb	102.766 %
Concentration per Run 2	56.547 ppb	58.500 ppb	58.384 ppb	5,925.367 ppb	59.988 ppb	63.630 ppb	61.472 ppb	60.588 ppb	98.127 %
Concentration per Run 3	61.484 ppb	60.687 ppb	60.935 ppb	5,972.651 ppb	60.500 ppb	60.338 ppb	60.492 ppb	60.787 ppb	99.828 %
Recovery Percentage 1	97.570 %	98.732 %	98.430 %	98.880 %	100.305 %	102.400 %	101.528 %	101.746 %	
Concentration RSD	4.4 %	2.1 %	2.8 %	0.6 %	0.5 %	3.1 %	0.8 %	1.0 %	2.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	60.606 ppb	57.208 ppb	58.209 ppb	56.740 ppb	107.150 %	56.490 ppb	57.878 ppb	104.293 %	57.794 ppb
Concentration per Run 1	58.852 ppb	54.193 ppb	57.073 ppb	55.411 ppb	108.270 %	54.319 ppb	56.451 ppb	106.379 %	56.683 ppb
Concentration per Run 2	61.211 ppb	61.089 ppb	59.102 ppb	56.589 ppb	105.280 %	57.223 ppb	58.728 ppb	102.607 %	57.998 ppb
Concentration per Run 3	61.754 ppb	56.341 ppb	58.452 ppb	58.219 ppb	107.901 %	57.928 ppb	58.454 ppb	103.894 %	58.702 ppb
Recovery Percentage 1	101.010 %	95.346 %	97.015 %	94.566 %		94.150 %	96.463 %		96.324 %
Concentration RSD	2.5 %	6.2 %	1.8 %	2.5 %	1.5 %	3.4 %	2.1 %	1.8 %	1.8 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	58.102 ppb	107.228 %	106.888 %	55.166 ppb	56.410 ppb	108.892 %
Concentration per Run 1	58.154 ppb	107.348 %	106.772 %	53.449 ppb	55.357 ppb	110.393 %
Concentration per Run 2	57.859 ppb	105.599 %	105.952 %	56.075 ppb	57.159 ppb	106.681 %
Concentration per Run 3	58.292 ppb	108.737 %	107.941 %	55.975 ppb	56.715 ppb	109.603 %
Recovery Percentage 1	96.836 %			91.944 %	94.017 %	
Concentration RSD	0.4 %	1.5 %	0.9 %	2.7 %	1.7 %	1.8 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	53	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	CCB	Rack	0		
Analysis started at:	12/3/2024 10:44:08 AM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	108.508 %	110.943 %	0.299 ppb	37.943 ppb	5.640 ppb	0.287 ppb	5.756 ppb	16.688 ppb	98.103 %
Concentration per Run 1	106.335 %	115.488 %	0.322 ppb	32.561 ppb	6.112 ppb	-0.054 ppb	6.136 ppb	24.251 ppb	96.406 %
Concentration per Run 2	109.857 %	114.310 %	0.321 ppb	28.268 ppb	5.367 ppb	0.072 ppb	6.226 ppb	17.805 ppb	98.917 %
Concentration per Run 3	109.331 %	103.030 %	0.254 ppb	53.000 ppb	5.442 ppb	0.842 ppb	4.904 ppb	8.010 ppb	98.984 %
Recovery Percentage 1			59.832 %	7.589 %	8.058 %	2.867 %	5.756 %	16.688 %	
Concentration RSD	1.8 %	6.2 %	13.0 %	34.8 %	7.3 %	169.2 %	12.8 %	49.0 %	1.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.430 ppb	0.001 ppb	0.124 ppb	9.324 ppb	0.025 ppb	-0.004 ppb	0.108 ppb	0.297 ppb	100.959 %
Concentration per Run 1	-0.379 ppb	0.037 ppb	0.140 ppb	10.730 ppb	0.019 ppb	0.035 ppb	0.091 ppb	0.320 ppb	99.484 %
Concentration per Run 2	-0.442 ppb	-0.038 ppb	0.024 ppb	7.965 ppb	0.013 ppb	-0.046 ppb	0.098 ppb	0.316 ppb	100.509 %
Concentration per Run 3	-0.470 ppb	0.005 ppb	0.208 ppb	9.278 ppb	0.042 ppb	0.000 ppb	0.136 ppb	0.256 ppb	102.883 %
Recovery Percentage 1	-8.605 %	0.147 %	12.390 %	18.649 %	4.936 %	-0.175 %	10.816 %	5.948 %	
Concentration RSD	10.7 %	2,562.9 %	74.7 %	14.8 %	62.6 %	1,171.5 %	22.4 %	12.2 %	1.7 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.068 ppb	0.220 ppb	0.081 ppb	0.330 ppb	105.479 %	0.020 ppb	0.021 ppb	101.769 %	0.060 ppb
Concentration per Run 1	-0.026 ppb	0.457 ppb	0.105 ppb	0.291 ppb	109.930 %	0.023 ppb	0.027 ppb	107.527 %	0.045 ppb
Concentration per Run 2	0.136 ppb	0.127 ppb	0.081 ppb	0.332 ppb	104.757 %	0.022 ppb	0.026 ppb	98.973 %	0.051 ppb
Concentration per Run 3	0.095 ppb	0.076 ppb	0.058 ppb	0.366 ppb	101.751 %	0.015 ppb	0.011 ppb	98.807 %	0.084 ppb
Recovery Percentage 1	13.644 %	4.395 %	0.811 %	16.489 %		5.043 %	10.672 %		1.494 %
Concentration RSD	123.7 %	94.2 %	29.0 %	11.5 %	3.9 %	20.8 %	41.7 %	4.9 %	35.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.032 ppb	105.257 %	106.031 %	0.243 ppb	0.035 ppb	106.902 %
Concentration per Run 1	0.048 ppb	106.063 %	108.739 %	0.221 ppb	0.050 ppb	108.948 %
Concentration per Run 2	0.052 ppb	104.451 %	102.461 %	0.284 ppb	0.030 ppb	104.322 %
Concentration per Run 3	-0.005 ppb	105.256 %	106.894 %	0.224 ppb	0.024 ppb	107.436 %
Recovery Percentage 1	6.323 %			24.290 %	3.487 %	
Concentration RSD	100.4 %	0.8 %	3.0 %	14.5 %	37.8 %	2.2 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	54	User name	ALPHALAB\a2-icpmsq2	Comment	CCV/MCCV
Analysis label:	CCV	Rack	0		
Analysis started at:	12/3/2024 11:00:44 AM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	106.067 %	111.560 %	57.878 ppb	5,999.161 ppb	5,962.342 ppb	58.996 ppb	5,949.802 ppb	6,037.103 ppb	101.498 %
Concentration per Run 1	103.309 %	118.182 %	58.070 ppb	5,795.904 ppb	5,781.111 ppb	56.982 ppb	5,783.712 ppb	6,210.148 ppb	101.660 %
Concentration per Run 2	107.348 %	105.724 %	57.420 ppb	6,104.722 ppb	6,095.598 ppb	61.374 ppb	6,050.128 ppb	6,142.082 ppb	101.683 %
Concentration per Run 3	107.544 %	110.775 %	58.145 ppb	6,096.856 ppb	6,010.316 ppb	58.632 ppb	6,015.567 ppb	5,759.080 ppb	101.152 %
Recovery Percentage 1			96.463 %	99.986 %	99.372 %	98.326 %	99.163 %	100.618 %	
Concentration RSD	2.3 %	5.6 %	0.7 %	2.9 %	2.7 %	3.8 %	2.4 %	4.0 %	0.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	56.497 ppb	58.008 ppb	58.984 ppb	5,861.488 ppb	58.058 ppb	59.763 ppb	58.128 ppb	59.750 ppb	104.040 %
Concentration per Run 1	55.192 ppb	59.641 ppb	60.175 ppb	5,920.366 ppb	57.526 ppb	60.152 ppb	60.736 ppb	59.851 ppb	100.656 %
Concentration per Run 2	56.694 ppb	56.473 ppb	56.627 ppb	5,694.289 ppb	56.977 ppb	58.923 ppb	57.195 ppb	59.445 ppb	105.548 %
Concentration per Run 3	57.604 ppb	57.911 ppb	60.150 ppb	5,969.809 ppb	59.673 ppb	60.214 ppb	56.453 ppb	59.953 ppb	105.916 %
Recovery Percentage 1	94.161 %	96.680 %	98.307 %	97.691 %	96.764 %	99.605 %	96.880 %	99.583 %	
Concentration RSD	2.2 %	2.7 %	3.5 %	2.5 %	2.5 %	1.2 %	3.9 %	0.4 %	2.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	58.617 ppb	55.636 ppb	57.909 ppb	57.506 ppb	106.684 %	57.737 ppb	57.289 ppb	107.388 %	57.298 ppb
Concentration per Run 1	59.067 ppb	53.618 ppb	58.344 ppb	55.586 ppb	111.356 %	56.347 ppb	56.717 ppb	111.427 %	55.242 ppb
Concentration per Run 2	57.503 ppb	57.230 ppb	57.076 ppb	58.012 ppb	106.350 %	57.652 ppb	57.073 ppb	107.040 %	56.318 ppb
Concentration per Run 3	59.280 ppb	56.059 ppb	58.308 ppb	58.919 ppb	102.345 %	59.211 ppb	58.078 ppb	103.699 %	60.334 ppb
Recovery Percentage 1	97.694 %	92.727 %	96.515 %	95.843 %		96.228 %	95.482 %		95.496 %
Concentration RSD	1.7 %	3.3 %	1.2 %	3.0 %	4.2 %	2.5 %	1.2 %	3.6 %	4.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	56.582 ppb	108.976 %	108.243 %	55.907 ppb	56.529 ppb	111.635 %
Concentration per Run 1	54.389 ppb	112.384 %	110.387 %	55.225 ppb	56.021 ppb	113.701 %
Concentration per Run 2	56.835 ppb	108.662 %	108.456 %	56.179 ppb	56.774 ppb	109.345 %
Concentration per Run 3	58.523 ppb	105.883 %	105.885 %	56.318 ppb	56.792 ppb	111.858 %
Recovery Percentage 1	94.304 %			93.179 %	94.215 %	
Concentration RSD	3.7 %	3.0 %	2.1 %	1.1 %	0.8 %	2.0 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index: 55
Analysis label: CCB
Analysis started at: 12/3/2024 11:05:15 AM
User name ALPHALAB\a2-icpmsq2
Rack 0
Vial 10
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	102.940 %	113.637 %	0.120 ppb	24.195 ppb	17.998 ppb	0.508 ppb	25.216 ppb	29.599 ppb	94.943 %
Concentration per Run 1	100.060 %	116.667 %	0.128 ppb	6.481 ppb	6.802 ppb	0.388 ppb	15.633 ppb	17.401 ppb	94.815 %
Concentration per Run 2	104.403 %	112.627 %	0.118 ppb	28.691 ppb	20.278 ppb	0.862 ppb	27.526 ppb	48.110 ppb	94.632 %
Concentration per Run 3	104.357 %	111.616 %	0.114 ppb	37.412 ppb	26.914 ppb	0.274 ppb	32.488 ppb	23.285 ppb	95.381 %
Recovery Percentage 1			23.996 %	4.839 %	25.711 %	5.079 %	25.216 %	29.599 %	
Concentration RSD	2.4 %	2.4 %	5.9 %	65.9 %	56.9 %	61.3 %	34.3 %	55.1 %	0.4 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.365 ppb	0.142 ppb	0.284 ppb	19.491 ppb	0.166 ppb	0.301 ppb	0.262 ppb	0.535 ppb	101.525 %
Concentration per Run 1	-0.520 ppb	0.055 ppb	0.234 ppb	7.587 ppb	0.051 ppb	0.228 ppb	0.198 ppb	0.434 ppb	100.878 %
Concentration per Run 2	-0.333 ppb	0.114 ppb	0.269 ppb	22.989 ppb	0.207 ppb	0.265 ppb	0.245 ppb	0.509 ppb	101.202 %
Concentration per Run 3	-0.243 ppb	0.256 ppb	0.348 ppb	27.897 ppb	0.240 ppb	0.410 ppb	0.343 ppb	0.661 ppb	102.494 %
Recovery Percentage 1	-7.306 %	14.170 %	28.390 %	38.982 %	33.194 %	15.051 %	26.193 %	10.695 %	
Concentration RSD	38.7 %	73.2 %	20.6 %	54.4 %	60.8 %	32.0 %	28.2 %	21.7 %	0.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.199 ppb	0.299 ppb	0.165 ppb	0.425 ppb	106.205 %	0.162 ppb	0.150 ppb	104.755 %	0.203 ppb
Concentration per Run 1	0.117 ppb	0.326 ppb	0.068 ppb	0.168 ppb	111.422 %	0.056 ppb	0.061 ppb	108.022 %	0.094 ppb
Concentration per Run 2	0.231 ppb	0.121 ppb	0.195 ppb	0.553 ppb	102.199 %	0.187 ppb	0.179 ppb	103.444 %	0.199 ppb
Concentration per Run 3	0.249 ppb	0.448 ppb	0.231 ppb	0.554 ppb	104.995 %	0.245 ppb	0.211 ppb	102.800 %	0.315 ppb
Recovery Percentage 1	39.820 %	5.971 %	1.645 %	21.257 %		40.605 %	75.137 %		5.071 %
Concentration RSD	35.9 %	55.3 %	52.0 %	52.4 %	4.5 %	59.6 %	52.5 %	2.7 %	54.4 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.172 ppb	106.791 %	105.376 %	0.372 ppb	0.176 ppb	107.514 %
Concentration per Run 1	0.087 ppb	108.240 %	108.396 %	0.254 ppb	0.084 ppb	107.602 %
Concentration per Run 2	0.186 ppb	106.648 %	104.603 %	0.444 ppb	0.195 ppb	105.408 %
Concentration per Run 3	0.243 ppb	105.486 %	103.130 %	0.420 ppb	0.250 ppb	109.531 %
Recovery Percentage 1	34.438 %			37.240 %	17.634 %	
Concentration RSD	45.8 %	1.3 %	2.6 %	27.8 %	48.1 %	1.9 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index: 56
Analysis label: WG2003775-1 6020TL
Analysis started at: 12/3/2024 11:11:12 AM
User name ALPHALAB\a2-icpmsq2
Rack 1
Vial 29
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	110.001 %	122.279 %	0.023 ppb	-11.968 ppb	1.957 ppb	2.181 ppb	-6.287 ppb	36.240 ppb	106.282 %
Concentration per Run 1	104.648 %	126.095 %	0.052 ppb	-16.849 ppb	1.369 ppb	1.536 ppb	-19.686 ppb	34.354 ppb	105.628 %
Concentration per Run 2	114.713 %	117.172 %	0.007 ppb	-5.978 ppb	1.387 ppb	2.679 ppb	-3.677 ppb	45.510 ppb	107.876 %
Concentration per Run 3	110.643 %	123.569 %	0.008 ppb	-13.077 ppb	3.115 ppb	2.328 ppb	4.500 ppb	28.857 ppb	105.341 %
Concentration RSD	4.6 %	3.8 %	115.0 %	46.1 %	51.2 %	26.8 %	195.7 %	23.4 %	1.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.543 ppb	0.059 ppb	0.109 ppb	3.279 ppb	0.008 ppb	-0.017 ppb	0.182 ppb	0.343 ppb	104.894 %
Concentration per Run 1	-0.555 ppb	0.022 ppb	0.061 ppb	4.348 ppb	0.014 ppb	-0.022 ppb	0.134 ppb	0.359 ppb	110.572 %
Concentration per Run 2	-0.520 ppb	0.094 ppb	0.087 ppb	3.668 ppb	0.006 ppb	-0.048 ppb	0.211 ppb	0.378 ppb	101.715 %
Concentration per Run 3	-0.552 ppb	0.060 ppb	0.179 ppb	1.821 ppb	0.006 ppb	0.018 ppb	0.200 ppb	0.292 ppb	102.396 %
Concentration RSD	3.6 %	61.9 %	56.4 %	39.9 %	53.4 %	192.7 %	23.0 %	13.2 %	4.7 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.047 ppb	0.041 ppb	0.041 ppb	0.010 ppb	110.882 %	0.009 ppb	0.007 ppb	114.449 %	0.019 ppb
Concentration per Run 1	0.003 ppb	0.072 ppb	0.032 ppb	-0.027 ppb	120.149 %	0.007 ppb	0.006 ppb	122.555 %	0.013 ppb
Concentration per Run 2	0.058 ppb	0.120 ppb	0.049 ppb	0.066 ppb	106.822 %	0.010 ppb	0.010 ppb	111.551 %	0.023 ppb
Concentration per Run 3	0.080 ppb	-0.069 ppb	0.040 ppb	-0.010 ppb	105.674 %	0.009 ppb	0.003 ppb	109.241 %	0.022 ppb
Concentration RSD	83.7 %	240.1 %	20.7 %	497.8 %	7.3 %	18.5 %	51.4 %	6.2 %	28.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.022 ppb	112.949 %	111.403 %	0.052 ppb	0.021 ppb	114.728 %
Concentration per Run 1	0.052 ppb	120.426 %	119.958 %	0.033 ppb	0.018 ppb	121.996 %
Concentration per Run 2	0.007 ppb	110.842 %	107.558 %	0.064 ppb	0.019 ppb	113.663 %
Concentration per Run 3	0.007 ppb	107.580 %	106.692 %	0.058 ppb	0.026 ppb	108.524 %
Concentration RSD	117.3 %	5.9 %	6.7 %	31.9 %	19.3 %	5.9 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	57	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG2003775-2d10 6020TL	Rack	1		
Analysis started at:	12/3/2024 11:15:40 AM	Vial	30		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	104.926 %	112.178 %	5.199 ppb	1,074.055 ppb	999.509 ppb	198.475 ppb	1,077.035 ppb	997.886 ppb	98.792 %
Concentration per Run 1	99.773 %	115.825 %	5.280 ppb	1,038.539 ppb	975.747 ppb	189.568 ppb	1,055.985 ppb	917.967 ppb	95.550 %
Concentration per Run 2	107.099 %	111.448 %	5.146 ppb	1,074.215 ppb	985.542 ppb	202.946 ppb	1,087.005 ppb	1,072.445 ppb	101.295 %
Concentration per Run 3	107.906 %	109.259 %	5.170 ppb	1,109.412 ppb	1,037.237 ppb	202.910 ppb	1,088.114 ppb	1,003.246 ppb	99.530 %
Concentration RSD	4.3 %	3.0 %	1.4 %	3.3 %	3.3 %	3.9 %	1.7 %	7.8 %	3.0 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	49.195 ppb	20.386 ppb	52.778 ppb	114.870 ppb	52.554 ppb	51.707 ppb	26.097 ppb	52.860 ppb	100.183 %
Concentration per Run 1	47.979 ppb	20.239 ppb	51.953 ppb	105.565 ppb	51.294 ppb	51.036 ppb	26.235 ppb	52.688 ppb	101.453 %
Concentration per Run 2	48.288 ppb	20.479 ppb	52.479 ppb	121.432 ppb	53.436 ppb	51.203 ppb	26.105 ppb	52.301 ppb	98.756 %
Concentration per Run 3	51.319 ppb	20.439 ppb	53.901 ppb	117.613 ppb	52.931 ppb	52.882 ppb	25.952 ppb	53.591 ppb	100.339 %
Concentration RSD	3.8 %	0.6 %	1.9 %	7.2 %	2.1 %	2.0 %	0.5 %	1.3 %	1.4 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	12.676 ppb	11.789 ppb	98.401 ppb	97.591 ppb	105.413 %	5.265 ppb	5.309 ppb	105.680 %	40.215 ppb
Concentration per Run 1	12.340 ppb	12.060 ppb	97.148 ppb	95.085 ppb	107.278 %	5.147 ppb	5.142 ppb	109.793 %	38.661 ppb
Concentration per Run 2	13.339 ppb	12.313 ppb	98.191 ppb	97.841 ppb	104.960 %	5.326 ppb	5.302 ppb	102.155 %	40.757 ppb
Concentration per Run 3	12.349 ppb	10.994 ppb	99.864 ppb	99.848 ppb	104.002 %	5.321 ppb	5.483 ppb	105.091 %	41.227 ppb
Concentration RSD	4.5 %	5.9 %	1.4 %	2.5 %	1.6 %	1.9 %	3.2 %	3.6 %	3.4 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	200.330 ppb	107.521 %	105.827 %	11.642 ppb	51.733 ppb	108.729 %
Concentration per Run 1	192.816 ppb	109.025 %	106.922 %	11.407 ppb	51.279 ppb	111.040 %
Concentration per Run 2	201.442 ppb	106.078 %	106.464 %	11.736 ppb	51.965 ppb	106.011 %
Concentration per Run 3	206.732 ppb	107.462 %	104.094 %	11.784 ppb	51.956 ppb	109.136 %
Concentration RSD	3.5 %	1.4 %	1.4 %	1.8 %	0.8 %	2.3 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	58	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2469249-06 6020TL	Rack	1		
Analysis started at:	12/3/2024 11:20:08 AM	Vial	31		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	96.006 %	113.244 %	0.400 ppb	61,483.067 ppb	31,129.826 ppb	3,638.650 ppb	7,228.747 ppb	122,167.322 ppb	100.498 %
Concentration per Run 1	91.622 %	110.943 %	0.458 ppb	61,701.003 ppb	31,248.185 ppb	3,642.293 ppb	7,072.227 ppb	120,466.866 ppb	97.658 %
Concentration per Run 2	96.166 %	116.162 %	0.387 ppb	59,335.734 ppb	30,497.846 ppb	3,575.730 ppb	7,172.276 ppb	123,754.279 ppb	101.627 %
Concentration per Run 3	100.229 %	112.626 %	0.355 ppb	63,412.465 ppb	31,643.446 ppb	3,697.927 ppb	7,441.739 ppb	122,280.823 ppb	102.210 %
Concentration RSD	4.5 %	2.4 %	13.2 %	3.3 %	1.9 %	1.7 %	2.6 %	1.3 %	2.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	11.679 ppb	11.676 ppb	3,472.910 ppb	6,933.646 ppb	8.805 ppb	13.448 ppb	20.055 ppb	93.196 ppb	102.605 %
Concentration per Run 1	11.760 ppb	11.427 ppb	3,449.666 ppb	6,917.748 ppb	8.863 ppb	12.970 ppb	19.746 ppb	92.927 ppb	105.642 %
Concentration per Run 2	11.630 ppb	11.885 ppb	3,443.924 ppb	6,965.831 ppb	8.690 ppb	13.926 ppb	20.669 ppb	94.466 ppb	100.498 %
Concentration per Run 3	11.647 ppb	11.717 ppb	3,525.141 ppb	6,917.360 ppb	8.863 ppb	13.449 ppb	19.750 ppb	92.195 ppb	101.676 %
Concentration RSD	0.6 %	2.0 %	1.3 %	0.4 %	1.1 %	3.6 %	2.7 %	1.2 %	2.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	2.014 ppb	2.793 ppb	820.582 ppb	2.766 ppb	104.742 %	0.041 ppb	0.351 ppb	108.707 %	2.972 ppb
Concentration per Run 1	2.101 ppb	2.087 ppb	818.827 ppb	2.503 ppb	103.866 %	0.047 ppb	0.362 ppb	110.345 %	2.995 ppb
Concentration per Run 2	2.076 ppb	2.932 ppb	821.478 ppb	2.839 ppb	105.912 %	0.044 ppb	0.332 ppb	109.092 %	2.918 ppb
Concentration per Run 3	1.865 ppb	3.361 ppb	821.440 ppb	2.956 ppb	104.448 %	0.031 ppb	0.359 ppb	106.685 %	3.003 ppb
Concentration RSD	6.4 %	23.2 %	0.2 %	8.5 %	1.0 %	20.8 %	4.8 %	1.7 %	1.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	93.636 ppb	111.439 %	111.802 %	0.134 ppb	38.082 ppb	107.235 %
Concentration per Run 1	93.258 ppb	113.720 %	110.403 %	0.113 ppb	37.374 ppb	108.968 %
Concentration per Run 2	91.455 ppb	107.960 %	112.959 %	0.152 ppb	38.645 ppb	105.750 %
Concentration per Run 3	96.195 ppb	112.638 %	112.042 %	0.138 ppb	38.227 ppb	106.987 %
Concentration RSD	2.6 %	2.7 %	1.2 %	14.6 %	1.7 %	1.5 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	59	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG2003775-3d10 6020TL	Rack	1		
Analysis started at:	12/3/2024 11:24:36 AM	Vial	32		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	109.384 %	120.988 %	4.771 ppb	6,699.680 ppb	3,945.424 ppb	597.867 ppb	1,604.475 ppb	12,285.881 ppb	104.250 %
Concentration per Run 1	104.958 %	122.391 %	4.773 ppb	6,438.087 ppb	3,839.269 ppb	588.764 ppb	1,592.254 ppb	12,078.111 ppb	101.164 %
Concentration per Run 2	111.617 %	119.866 %	4.728 ppb	6,821.298 ppb	3,968.138 ppb	596.163 ppb	1,560.704 ppb	12,219.050 ppb	107.215 %
Concentration per Run 3	111.578 %	120.707 %	4.811 ppb	6,839.654 ppb	4,028.865 ppb	608.674 ppb	1,660.468 ppb	12,560.483 ppb	104.371 %
Concentration RSD	3.5 %	1.1 %	0.9 %	3.4 %	2.5 %	1.7 %	3.2 %	2.0 %	2.9 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	45.752 ppb	19.600 ppb	381.111 ppb	743.806 ppb	48.399 ppb	49.575 ppb	26.236 ppb	57.457 ppb	106.560 %
Concentration per Run 1	42.592 ppb	18.644 ppb	365.397 ppb	713.461 ppb	47.127 ppb	48.308 ppb	26.068 ppb	56.348 ppb	108.463 %
Concentration per Run 2	45.718 ppb	20.207 ppb	392.412 ppb	753.954 ppb	50.346 ppb	50.627 ppb	26.232 ppb	59.209 ppb	104.789 %
Concentration per Run 3	48.945 ppb	19.949 ppb	385.526 ppb	764.002 ppb	47.723 ppb	49.789 ppb	26.407 ppb	56.814 ppb	106.428 %
Concentration RSD	6.9 %	4.3 %	3.7 %	3.6 %	3.5 %	2.4 %	0.6 %	2.7 %	1.7 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	11.184 ppb	10.876 ppb	169.928 ppb	87.998 ppb	110.893 %	4.897 ppb	4.904 ppb	109.724 %	36.944 ppb
Concentration per Run 1	10.469 ppb	11.420 ppb	163.022 ppb	83.675 ppb	115.286 %	4.584 ppb	4.534 ppb	113.757 %	35.227 ppb
Concentration per Run 2	11.615 ppb	9.690 ppb	174.857 ppb	90.468 ppb	107.373 %	5.074 ppb	5.166 ppb	106.623 %	38.929 ppb
Concentration per Run 3	11.467 ppb	11.518 ppb	171.905 ppb	89.849 ppb	110.021 %	5.034 ppb	5.012 ppb	108.791 %	36.674 ppb
Concentration RSD	5.6 %	9.5 %	3.6 %	4.3 %	3.6 %	5.6 %	6.7 %	3.3 %	5.0 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	193.933 ppb	112.241 %	110.896 %	11.048 ppb	53.007 ppb	112.134 %
Concentration per Run 1	184.830 ppb	117.887 %	115.776 %	10.126 ppb	49.532 ppb	117.729 %
Concentration per Run 2	199.527 ppb	108.133 %	107.984 %	11.471 ppb	55.152 ppb	108.599 %
Concentration per Run 3	197.442 ppb	110.703 %	108.928 %	11.545 ppb	54.336 ppb	110.073 %
Concentration RSD	4.1 %	4.5 %	3.8 %	7.2 %	5.7 %	4.4 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	60	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG2003775-4d10 6020TL	Rack	1		
Analysis started at:	12/3/2024 11:29:04 AM	Vial	33		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	108.299 %	118.294 %	4.765 ppb	6,728.602 ppb	3,919.314 ppb	604.463 ppb	1,619.042 ppb	12,269.519 ppb	103.214 %
Concentration per Run 1	105.133 %	116.835 %	4.831 ppb	6,815.853 ppb	3,960.790 ppb	606.536 ppb	1,610.404 ppb	11,882.252 ppb	99.277 %
Concentration per Run 2	109.890 %	120.202 %	4.648 ppb	6,619.642 ppb	3,886.431 ppb	596.101 ppb	1,641.630 ppb	12,683.807 ppb	105.933 %
Concentration per Run 3	109.872 %	117.845 %	4.817 ppb	6,750.311 ppb	3,910.720 ppb	610.753 ppb	1,605.093 ppb	12,242.497 ppb	104.431 %
Concentration RSD	2.5 %	1.5 %	2.1 %	1.5 %	1.0 %	1.2 %	1.2 %	3.3 %	3.4 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	46.361 ppb	19.318 ppb	375.511 ppb	758.418 ppb	48.156 ppb	48.888 ppb	25.784 ppb	57.266 ppb	105.502 %
Concentration per Run 1	45.204 ppb	19.116 ppb	382.228 ppb	794.084 ppb	48.430 ppb	49.720 ppb	26.431 ppb	57.880 ppb	103.696 %
Concentration per Run 2	47.264 ppb	19.392 ppb	372.537 ppb	755.439 ppb	48.542 ppb	48.914 ppb	25.201 ppb	58.235 ppb	102.075 %
Concentration per Run 3	46.614 ppb	19.447 ppb	371.767 ppb	725.730 ppb	47.496 ppb	48.030 ppb	25.719 ppb	55.683 ppb	110.735 %
Concentration RSD	2.3 %	0.9 %	1.6 %	4.5 %	1.2 %	1.7 %	2.4 %	2.4 %	4.4 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	11.352 ppb	11.398 ppb	169.364 ppb	87.816 ppb	106.600 %	4.835 ppb	4.908 ppb	107.526 %	37.008 ppb
Concentration per Run 1	11.242 ppb	12.288 ppb	169.392 ppb	85.322 ppb	107.627 %	4.725 ppb	4.891 ppb	110.859 %	36.409 ppb
Concentration per Run 2	11.615 ppb	11.531 ppb	172.082 ppb	90.718 ppb	106.747 %	4.846 ppb	4.770 ppb	107.093 %	36.944 ppb
Concentration per Run 3	11.200 ppb	10.375 ppb	166.619 ppb	87.407 ppb	105.425 %	4.935 ppb	5.062 ppb	104.627 %	37.670 ppb
Concentration RSD	2.0 %	8.5 %	1.6 %	3.1 %	1.0 %	2.2 %	3.0 %	2.9 %	1.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	194.636 ppb	110.746 %	108.108 %	10.857 ppb	52.090 ppb	110.226 %
Concentration per Run 1	195.075 ppb	113.787 %	110.382 %	10.684 ppb	51.629 ppb	112.021 %
Concentration per Run 2	194.898 ppb	109.878 %	108.881 %	11.025 ppb	52.550 ppb	108.848 %
Concentration per Run 3	193.935 ppb	108.574 %	105.060 %	10.863 ppb	52.090 ppb	109.808 %
Concentration RSD	0.3 %	2.4 %	2.5 %	1.6 %	0.9 %	1.5 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	61	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG2003775-5d10 6020TL	Rack	1		
Analysis started at:	12/3/2024 11:33:33 AM	Vial	34		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	106.308 %	119.753 %	47.815 ppb	10,699.989 ppb	7,837.444 ppb	406.943 ppb	5,454.736 ppb	16,729.146 ppb	99.863 %
Concentration per Run 1	102.691 %	128.283 %	47.966 ppb	9,957.468 ppb	7,260.830 ppb	379.718 ppb	5,312.264 ppb	15,860.630 ppb	98.025 %
Concentration per Run 2	109.076 %	117.677 %	47.458 ppb	10,831.441 ppb	8,088.622 ppb	425.359 ppb	5,430.310 ppb	16,791.915 ppb	101.747 %
Concentration per Run 3	107.157 %	113.300 %	48.022 ppb	11,311.058 ppb	8,162.880 ppb	415.753 ppb	5,621.635 ppb	17,534.894 ppb	99.817 %
Concentration RSD	3.1 %	6.4 %	0.6 %	6.4 %	6.4 %	5.9 %	2.9 %	5.0 %	1.9 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	46.914 ppb	48.668 ppb	398.211 ppb	5,480.582 ppb	48.918 ppb	50.154 ppb	50.753 ppb	59.675 ppb	105.912 %
Concentration per Run 1	44.545 ppb	46.008 ppb	385.883 ppb	5,273.446 ppb	46.656 ppb	48.844 ppb	49.749 ppb	57.876 ppb	107.953 %
Concentration per Run 2	45.906 ppb	48.868 ppb	392.793 ppb	5,413.845 ppb	48.681 ppb	49.635 ppb	51.441 ppb	59.123 ppb	106.188 %
Concentration per Run 3	50.293 ppb	51.128 ppb	415.955 ppb	5,754.456 ppb	51.417 ppb	51.982 ppb	51.069 ppb	62.026 ppb	103.595 %
Concentration RSD	6.4 %	5.3 %	4.0 %	4.5 %	4.9 %	3.3 %	1.8 %	3.6 %	2.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	49.494 ppb	45.162 ppb	130.824 ppb	49.511 ppb	106.742 %	2.406 ppb	48.011 ppb	106.453 %	49.376 ppb
Concentration per Run 1	49.215 ppb	42.798 ppb	127.503 ppb	47.101 ppb	109.928 %	2.388 ppb	46.274 ppb	111.735 %	46.715 ppb
Concentration per Run 2	49.967 ppb	45.668 ppb	131.063 ppb	51.083 ppb	106.291 %	2.344 ppb	48.613 ppb	103.237 %	50.886 ppb
Concentration per Run 3	49.300 ppb	47.020 ppb	133.906 ppb	50.350 ppb	104.006 %	2.486 ppb	49.147 ppb	104.387 %	50.525 ppb
Concentration RSD	0.8 %	4.8 %	2.5 %	4.3 %	2.8 %	3.0 %	3.2 %	4.3 %	4.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	58.086 ppb	108.887 %	109.356 %	47.410 ppb	52.289 ppb	108.802 %
Concentration per Run 1	55.593 ppb	111.785 %	113.386 %	47.021 ppb	50.926 ppb	111.150 %
Concentration per Run 2	58.134 ppb	108.885 %	106.099 %	46.204 ppb	52.246 ppb	109.145 %
Concentration per Run 3	60.530 ppb	105.992 %	108.584 %	49.005 ppb	53.693 ppb	106.111 %
Concentration RSD	4.3 %	2.7 %	3.4 %	3.0 %	2.6 %	2.3 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	62	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG2003775-6d5 6020TL	Rack	1		
Analysis started at:	12/3/2024 11:38:01 AM	Vial	35		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	107.274 %	114.198 %	0.310 ppb	11,636.485 ppb	6,117.689 ppb	710.048 ppb	1,397.568 ppb	23,662.861 ppb	103.188 %
Concentration per Run 1	100.935 %	114.310 %	0.429 ppb	11,157.331 ppb	6,136.936 ppb	690.043 ppb	1,376.579 ppb	23,745.673 ppb	97.418 %
Concentration per Run 2	104.271 %	114.647 %	0.281 ppb	11,599.120 ppb	5,946.184 ppb	708.946 ppb	1,375.551 ppb	23,482.407 ppb	100.223 %
Concentration per Run 3	116.615 %	113.637 %	0.219 ppb	12,153.003 ppb	6,269.947 ppb	731.156 ppb	1,440.574 ppb	23,760.501 ppb	111.925 %
Concentration RSD	7.7 %	0.5 %	34.9 %	4.3 %	2.7 %	2.9 %	2.7 %	0.7 %	7.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	2.205 ppb	2.290 ppb	678.330 ppb	1,364.489 ppb	1.808 ppb	2.662 ppb	3.880 ppb	19.033 ppb	105.944 %
Concentration per Run 1	2.166 ppb	2.178 ppb	676.714 ppb	1,375.173 ppb	1.819 ppb	2.758 ppb	3.655 ppb	18.542 ppb	105.783 %
Concentration per Run 2	2.085 ppb	2.422 ppb	666.518 ppb	1,330.692 ppb	1.776 ppb	2.769 ppb	3.895 ppb	19.201 ppb	107.809 %
Concentration per Run 3	2.364 ppb	2.269 ppb	691.757 ppb	1,387.602 ppb	1.829 ppb	2.458 ppb	4.092 ppb	19.356 ppb	104.239 %
Concentration RSD	6.5 %	5.4 %	1.9 %	2.2 %	1.6 %	6.6 %	5.6 %	2.3 %	1.7 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.538 ppb	0.743 ppb	157.048 ppb	0.924 ppb	109.369 %	0.007 ppb	0.066 ppb	108.203 %	0.637 ppb
Concentration per Run 1	0.629 ppb	0.719 ppb	154.652 ppb	0.745 ppb	113.245 %	0.009 ppb	0.062 ppb	114.314 %	0.575 ppb
Concentration per Run 2	0.546 ppb	0.712 ppb	156.604 ppb	0.956 ppb	108.099 %	0.006 ppb	0.070 ppb	103.440 %	0.663 ppb
Concentration per Run 3	0.438 ppb	0.799 ppb	159.888 ppb	1.071 ppb	106.763 %	0.006 ppb	0.066 ppb	106.855 %	0.672 ppb
Concentration RSD	17.8 %	6.5 %	1.7 %	17.9 %	3.1 %	19.0 %	6.7 %	5.1 %	8.4 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	18.313 ppb	111.932 %	110.833 %	0.252 ppb	7.631 ppb	109.744 %
Concentration per Run 1	17.767 ppb	113.439 %	111.832 %	0.232 ppb	7.430 ppb	111.548 %
Concentration per Run 2	18.471 ppb	111.905 %	112.039 %	0.293 ppb	7.684 ppb	107.697 %
Concentration per Run 3	18.701 ppb	110.451 %	108.627 %	0.231 ppb	7.778 ppb	109.985 %
Concentration RSD	2.7 %	1.3 %	1.7 %	14.1 %	2.4 %	1.8 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	63	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2469188-01 6020TL	Rack	1		
Analysis started at:	12/3/2024 11:42:31 AM	Vial	36		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	98.106 %	108.418 %	0.141 ppb	324,452.327 ppb	36,827.716 ppb	572.227 ppb	13,352.195 ppb	20,115.850 ppb	98.268 %
Concentration per Run 1	93.462 %	109.091 %	0.190 ppb	317,931.401 ppb	37,649.476 ppb	562.783 ppb	12,847.584 ppb	19,456.651 ppb	97.056 %
Concentration per Run 2	99.962 %	108.586 %	0.139 ppb	326,195.124 ppb	35,037.954 ppb	573.404 ppb	13,440.922 ppb	19,933.006 ppb	98.597 %
Concentration per Run 3	100.895 %	107.576 %	0.093 ppb	329,230.457 ppb	37,795.717 ppb	580.493 ppb	13,768.080 ppb	20,957.894 ppb	99.150 %
Concentration RSD	4.1 %	0.7 %	34.2 %	1.8 %	4.2 %	1.6 %	3.5 %	3.8 %	1.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	2.274 ppb	1.937 ppb	42.091 ppb	1,116.760 ppb	0.603 ppb	1.310 ppb	94.540 ppb	74.814 ppb	103.199 %
Concentration per Run 1	2.273 ppb	1.745 ppb	39.433 ppb	1,094.145 ppb	0.595 ppb	1.419 ppb	92.519 ppb	74.168 ppb	104.898 %
Concentration per Run 2	2.328 ppb	2.038 ppb	43.219 ppb	1,136.937 ppb	0.681 ppb	1.243 ppb	96.580 ppb	75.324 ppb	101.298 %
Concentration per Run 3	2.222 ppb	2.028 ppb	43.622 ppb	1,119.197 ppb	0.533 ppb	1.269 ppb	94.520 ppb	74.951 ppb	103.402 %
Concentration RSD	2.3 %	8.6 %	5.5 %	1.9 %	12.3 %	7.2 %	2.1 %	0.8 %	1.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.728 ppb	0.165 ppb	249.133 ppb	1.009 ppb	103.075 %	0.019 ppb	0.079 ppb	106.511 %	0.583 ppb
Concentration per Run 1	0.788 ppb	0.263 ppb	244.184 ppb	0.931 ppb	104.668 %	0.023 ppb	0.104 ppb	107.997 %	0.558 ppb
Concentration per Run 2	0.736 ppb	0.198 ppb	252.233 ppb	0.817 ppb	101.220 %	0.021 ppb	0.067 ppb	105.788 %	0.556 ppb
Concentration per Run 3	0.660 ppb	0.034 ppb	250.983 ppb	1.278 ppb	103.336 %	0.014 ppb	0.067 ppb	105.748 %	0.635 ppb
Concentration RSD	8.9 %	71.4 %	1.7 %	23.8 %	1.7 %	25.1 %	26.6 %	1.2 %	7.8 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	20.863 ppb	111.389 %	112.740 %	0.074 ppb	6.149 ppb	104.765 %
Concentration per Run 1	20.061 ppb	115.930 %	113.416 %	0.045 ppb	6.045 ppb	104.958 %
Concentration per Run 2	20.842 ppb	107.418 %	110.861 %	0.093 ppb	6.309 ppb	104.882 %
Concentration per Run 3	21.687 ppb	110.818 %	113.942 %	0.083 ppb	6.095 ppb	104.456 %
Concentration RSD	3.9 %	3.8 %	1.5 %	34.4 %	2.3 %	0.3 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	64	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2469188-02 6020TL	Rack	1		
Analysis started at:	12/3/2024 11:47:00 AM	Vial	37		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	53.024 %	89.169 %	0.021 ppb	4,929,163.522 ppb	539,908.301 ppb	114.657 ppb	121,048.554 ppb	109,867.157 ppb	52.978 %
Concentration per Run 1	51.585 %	94.781 %	0.023 ppb	4,677,933.012 ppb	516,947.853 ppb	110.643 ppb	117,502.189 ppb	109,905.533 ppb	53.220 %
Concentration per Run 2	53.902 %	84.512 %	0.022 ppb	5,068,244.519 ppb	562,633.462 ppb	119.885 ppb	126,369.745 ppb	111,496.619 ppb	53.154 %
Concentration per Run 3	53.583 %	88.215 %	0.018 ppb	5,041,313.034 ppb	540,143.588 ppb	113.444 ppb	119,273.729 ppb	108,199.318 ppb	52.559 %
Concentration RSD	2.4 %	5.8 %	13.8 %	4.4 %	4.2 %	4.1 %	3.9 %	1.5 %	0.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	1.085 ppb	0.540 ppb	25.633 ppb	308.277 ppb	0.219 ppb	0.917 ppb	75.973 ppb	74.955 ppb	112.782 %
Concentration per Run 1	1.062 ppb	0.501 ppb	26.953 ppb	322.171 ppb	0.205 ppb	0.914 ppb	82.215 ppb	79.072 ppb	100.998 %
Concentration per Run 2	1.200 ppb	0.578 ppb	25.989 ppb	320.181 ppb	0.235 ppb	0.958 ppb	77.770 ppb	76.439 ppb	111.080 %
Concentration per Run 3	0.991 ppb	0.542 ppb	23.955 ppb	282.479 ppb	0.218 ppb	0.881 ppb	67.935 ppb	69.354 ppb	126.267 %
Concentration RSD	9.8 %	7.1 %	6.0 %	7.3 %	6.9 %	4.2 %	9.6 %	6.7 %	11.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	1.360 ppb	0.142 ppb	3,190.282 ppb	4.993 ppb	85.365 %	0.021 ppb	0.065 ppb	96.112 %	0.465 ppb
Concentration per Run 1	1.523 ppb	0.177 ppb	3,206.530 ppb	4.816 ppb	86.846 %	0.024 ppb	0.060 ppb	94.052 %	0.399 ppb
Concentration per Run 2	1.413 ppb	0.104 ppb	3,265.488 ppb	5.326 ppb	83.637 %	0.022 ppb	0.064 ppb	95.705 %	0.457 ppb
Concentration per Run 3	1.144 ppb	0.146 ppb	3,098.829 ppb	4.839 ppb	85.612 %	0.018 ppb	0.071 ppb	98.579 %	0.537 ppb
Concentration RSD	14.3 %	25.7 %	2.6 %	5.8 %	1.9 %	15.1 %	7.8 %	2.4 %	14.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	52.947 ppb	102.346 %	103.943 %	0.045 ppb	2.407 ppb	86.345 %
Concentration per Run 1	52.639 ppb	104.413 %	102.266 %	0.037 ppb	2.368 ppb	85.801 %
Concentration per Run 2	53.263 ppb	100.057 %	103.471 %	0.042 ppb	2.404 ppb	85.730 %
Concentration per Run 3	52.938 ppb	102.568 %	106.091 %	0.055 ppb	2.450 ppb	87.504 %
Concentration RSD	0.6 %	2.1 %	1.9 %	21.3 %	1.7 %	1.2 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	65	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2469188-03 6020TL	Rack	1		
Analysis started at:	12/3/2024 11:51:27 AM	Vial	38		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	55.057 %	92.256 %	0.012 ppb	3,953,062.995 ppb	438,051.967 ppb	54.387 ppb	105,453.196 ppb	93,919.899 ppb	57.706 %
Concentration per Run 1	53.167 %	88.552 %	0.013 ppb	4,085,222.575 ppb	448,724.510 ppb	56.376 ppb	110,061.113 ppb	98,037.256 ppb	56.759 %
Concentration per Run 2	55.670 %	91.582 %	0.014 ppb	3,967,568.060 ppb	436,452.877 ppb	54.303 ppb	103,322.851 ppb	92,359.793 ppb	58.252 %
Concentration per Run 3	56.335 %	96.633 %	0.008 ppb	3,806,398.351 ppb	428,978.513 ppb	52.482 ppb	102,975.625 ppb	91,362.647 ppb	58.107 %
Concentration RSD	3.0 %	4.4 %	26.3 %	3.5 %	2.3 %	3.6 %	3.8 %	3.8 %	1.4 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.577 ppb	0.381 ppb	17.254 ppb	117.663 ppb	0.301 ppb	1.035 ppb	16.254 ppb	43.968 ppb	114.229 %
Concentration per Run 1	0.451 ppb	0.444 ppb	18.522 ppb	117.786 ppb	0.331 ppb	1.071 ppb	17.282 ppb	47.764 ppb	102.506 %
Concentration per Run 2	0.771 ppb	0.377 ppb	17.224 ppb	110.723 ppb	0.315 ppb	1.013 ppb	16.463 ppb	42.536 ppb	114.622 %
Concentration per Run 3	0.510 ppb	0.323 ppb	16.017 ppb	124.480 ppb	0.257 ppb	1.020 ppb	15.019 ppb	41.603 ppb	125.557 %
Concentration RSD	29.5 %	15.9 %	7.3 %	5.8 %	12.8 %	3.0 %	7.0 %	7.6 %	10.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	1.254 ppb	0.121 ppb	2,674.964 ppb	4.497 ppb	87.746 %	0.015 ppb	0.067 ppb	99.180 %	0.500 ppb
Concentration per Run 1	1.415 ppb	0.103 ppb	2,700.589 ppb	4.412 ppb	89.151 %	0.019 ppb	0.081 ppb	98.314 %	0.469 ppb
Concentration per Run 2	1.209 ppb	0.105 ppb	2,680.761 ppb	4.175 ppb	85.752 %	0.016 ppb	0.083 ppb	98.086 %	0.502 ppb
Concentration per Run 3	1.137 ppb	0.155 ppb	2,643.544 ppb	4.905 ppb	88.336 %	0.009 ppb	0.038 ppb	101.139 %	0.529 ppb
Concentration RSD	11.5 %	24.3 %	1.1 %	8.3 %	2.0 %	36.8 %	37.6 %	1.7 %	6.0 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	12.029 ppb	104.463 %	107.327 %	0.034 ppb	0.769 ppb	85.018 %
Concentration per Run 1	12.377 ppb	105.761 %	106.357 %	0.028 ppb	0.728 ppb	86.601 %
Concentration per Run 2	11.987 ppb	100.648 %	105.343 %	0.040 ppb	0.809 ppb	82.847 %
Concentration per Run 3	11.722 ppb	106.979 %	110.281 %	0.034 ppb	0.770 ppb	85.607 %
Concentration RSD	2.7 %	3.2 %	2.4 %	17.4 %	5.3 %	2.3 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	66	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	CCV	Rack	0		
Analysis started at:	12/3/2024 11:55:54 AM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	106.067 %	114.591 %	58.113 ppb	8,838.290 ppb	6,043.964 ppb	58.551 ppb	6,666.084 ppb	6,517.544 ppb	103.208 %
Concentration per Run 1	101.747 %	117.677 %	58.161 ppb	9,080.501 ppb	5,912.671 ppb	54.228 ppb	6,385.861 ppb	6,481.101 ppb	100.163 %
Concentration per Run 2	106.629 %	108.586 %	57.271 ppb	9,272.851 ppb	6,236.559 ppb	60.812 ppb	6,938.774 ppb	6,567.217 ppb	104.777 %
Concentration per Run 3	109.826 %	117.509 %	58.905 ppb	8,161.518 ppb	5,982.663 ppb	60.614 ppb	6,673.616 ppb	6,504.313 ppb	104.686 %
Recovery Percentage 1			96.854 %	147.305 %	100.733 %	97.585 %	111.101 %	108.626 %	
Concentration RSD	3.8 %	4.5 %	1.4 %	6.7 %	2.8 %	6.4 %	4.1 %	0.7 %	2.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	57.407 ppb	56.507 ppb	58.807 ppb	5,659.965 ppb	55.487 ppb	57.042 ppb	56.909 ppb	58.977 ppb	122.794 %
Concentration per Run 1	53.853 ppb	55.120 ppb	58.427 ppb	5,636.958 ppb	54.908 ppb	57.046 ppb	56.711 ppb	57.801 ppb	122.289 %
Concentration per Run 2	58.278 ppb	56.137 ppb	58.409 ppb	5,649.108 ppb	55.321 ppb	57.595 ppb	56.532 ppb	59.707 ppb	122.909 %
Concentration per Run 3	60.090 ppb	58.263 ppb	59.586 ppb	5,693.828 ppb	56.232 ppb	56.485 ppb	57.484 ppb	59.422 ppb	123.184 %
Recovery Percentage 1	95.679 %	94.178 %	98.012 %	94.333 %	92.479 %	95.070 %	94.849 %	98.295 %	
Concentration RSD	5.6 %	2.8 %	1.1 %	0.5 %	1.2 %	1.0 %	0.9 %	1.7 %	0.4 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	55.832 ppb	58.466 ppb	61.643 ppb	56.902 ppb	120.041 %	55.834 ppb	56.937 ppb	128.714 %	55.980 ppb
Concentration per Run 1	56.591 ppb	57.232 ppb	60.486 ppb	55.414 ppb	122.378 %	55.132 ppb	57.561 ppb	127.893 %	54.940 ppb
Concentration per Run 2	55.723 ppb	57.841 ppb	61.698 ppb	57.534 ppb	120.252 %	55.525 ppb	56.154 ppb	128.732 %	56.539 ppb
Concentration per Run 3	55.182 ppb	60.325 ppb	62.744 ppb	57.758 ppb	117.493 %	56.846 ppb	57.095 ppb	129.516 %	56.462 ppb
Recovery Percentage 1	93.053 %	97.443 %	102.738 %	94.836 %		93.057 %	94.895 %		93.301 %
Concentration RSD	1.3 %	2.8 %	1.8 %	2.3 %	2.0 %	1.6 %	1.3 %	0.6 %	1.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	57.583 ppb	127.793 %	129.078 %	55.492 ppb	57.278 ppb	121.459 %
Concentration per Run 1	55.849 ppb	130.197 %	131.128 %	54.129 ppb	55.091 ppb	121.652 %
Concentration per Run 2	57.323 ppb	127.943 %	126.663 %	55.104 ppb	57.900 ppb	121.146 %
Concentration per Run 3	59.575 ppb	125.239 %	129.444 %	57.244 ppb	58.844 ppb	121.580 %
Recovery Percentage 1	95.971 %			92.487 %	95.464 %	
Concentration RSD	3.3 %	1.9 %	1.7 %	2.9 %	3.4 %	0.2 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	67	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	CCB	Rack	0		
Analysis started at:	12/3/2024 12:00:26 PM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	108.239 %	117.958 %	0.456 ppb	1,274.649 ppb	39.120 ppb	-0.235 ppb	171.245 ppb	13.020 ppb	105.594 %
Concentration per Run 1	104.568 %	115.489 %	0.424 ppb	1,466.016 ppb	57.494 ppb	-0.095 ppb	193.048 ppb	21.665 ppb	101.521 %
Concentration per Run 2	109.515 %	112.795 %	0.418 ppb	1,385.614 ppb	47.912 ppb	-0.445 ppb	160.806 ppb	7.305 ppb	107.398 %
Concentration per Run 3	110.633 %	125.590 %	0.526 ppb	972.318 ppb	11.954 ppb	-0.163 ppb	159.882 ppb	10.090 ppb	107.863 %
Recovery Percentage 1			91.183 %	254.930 %	55.886 %	-2.345 %	171.245 %	13.020 %	
Concentration RSD	3.0 %	5.7 %	13.3 %	20.8 %	61.4 %	79.2 %	11.0 %	58.5 %	3.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.441 ppb	-0.053 ppb	0.131 ppb	6.647 ppb	0.015 ppb	0.153 ppb	0.210 ppb	0.376 ppb	118.093 %
Concentration per Run 1	-0.501 ppb	-0.045 ppb	0.189 ppb	6.579 ppb	0.021 ppb	0.177 ppb	0.241 ppb	0.368 ppb	118.369 %
Concentration per Run 2	-0.355 ppb	-0.033 ppb	0.107 ppb	7.097 ppb	0.016 ppb	0.165 ppb	0.236 ppb	0.390 ppb	114.745 %
Concentration per Run 3	-0.466 ppb	-0.080 ppb	0.096 ppb	6.267 ppb	0.006 ppb	0.117 ppb	0.153 ppb	0.370 ppb	121.165 %
Recovery Percentage 1	-8.815 %	-5.284 %	13.072 %	13.295 %	2.943 %	7.653 %	20.982 %	7.521 %	
Concentration RSD	17.2 %	45.8 %	39.0 %	6.3 %	51.4 %	20.6 %	23.5 %	3.2 %	2.7 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.002 ppb	0.466 ppb	0.245 ppb	0.298 ppb	120.811 %	0.017 ppb	0.010 ppb	128.025 %	0.077 ppb
Concentration per Run 1	-0.055 ppb	0.738 ppb	0.365 ppb	0.189 ppb	123.867 %	0.025 ppb	0.006 ppb	130.006 %	0.064 ppb
Concentration per Run 2	0.038 ppb	0.359 ppb	0.271 ppb	0.207 ppb	117.484 %	0.023 ppb	0.018 ppb	127.680 %	0.094 ppb
Concentration per Run 3	0.023 ppb	0.301 ppb	0.100 ppb	0.499 ppb	121.082 %	0.003 ppb	0.006 ppb	126.387 %	0.072 ppb
Recovery Percentage 1	0.405 %	9.323 %	2.452 %	14.920 %		4.239 %	4.924 %		1.918 %
Concentration RSD	2,450.7 %	50.9 %	54.9 %	58.3 %	2.6 %	70.1 %	70.3 %	1.4 %	20.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.019 ppb	124.988 %	125.092 %	0.220 ppb	0.025 ppb	121.448 %
Concentration per Run 1	0.025 ppb	132.238 %	129.628 %	0.210 ppb	0.030 ppb	123.702 %
Concentration per Run 2	-0.008 ppb	121.832 %	122.814 %	0.254 ppb	0.026 ppb	121.173 %
Concentration per Run 3	0.039 ppb	120.895 %	122.833 %	0.194 ppb	0.020 ppb	119.468 %
Recovery Percentage 1	3.753 %			21.953 %	2.506 %	
Concentration RSD	127.2 %	5.0 %	3.1 %	14.2 %	20.6 %	1.8 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	68	User name	ALPHALAB\a2-icpmsq2	Comment	CCV/MCCV
Analysis label:	CCV	Rack	0		
Analysis started at:	12/3/2024 12:35:53 PM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	115.770 %	125.702 %	57.412 ppb	5,980.172 ppb	5,527.372 ppb	56.252 ppb	5,392.506 ppb	5,181.352 ppb	111.018 %
Concentration per Run 1	110.616 %	128.115 %	58.287 ppb	5,742.952 ppb	5,364.572 ppb	54.335 ppb	5,533.381 ppb	5,311.729 ppb	109.074 %
Concentration per Run 2	117.068 %	125.421 %	57.030 ppb	6,037.258 ppb	5,606.486 ppb	56.443 ppb	5,222.496 ppb	4,983.339 ppb	112.565 %
Concentration per Run 3	119.627 %	123.569 %	56.918 ppb	6,160.306 ppb	5,611.060 ppb	57.979 ppb	5,421.640 ppb	5,248.987 ppb	111.413 %
Recovery Percentage 1			95.686 %	99.670 %	92.123 %	93.754 %	89.875 %	86.356 %	
Concentration RSD	4.0 %	1.8 %	1.3 %	3.6 %	2.6 %	3.3 %	2.9 %	3.4 %	1.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	53.785 ppb	53.778 ppb	55.737 ppb	5,743.402 ppb	56.127 ppb	56.681 ppb	56.664 ppb	56.695 ppb	119.388 %
Concentration per Run 1	49.431 ppb	51.042 ppb	53.815 ppb	5,625.969 ppb	54.448 ppb	56.508 ppb	55.360 ppb	55.758 ppb	122.764 %
Concentration per Run 2	55.465 ppb	54.282 ppb	57.206 ppb	5,832.807 ppb	56.836 ppb	57.728 ppb	57.716 ppb	58.821 ppb	115.458 %
Concentration per Run 3	56.460 ppb	56.011 ppb	56.189 ppb	5,771.431 ppb	57.099 ppb	55.808 ppb	56.915 ppb	55.506 ppb	119.943 %
Recovery Percentage 1	89.642 %	89.631 %	92.894 %	95.723 %	93.546 %	94.469 %	94.440 %	94.492 %	
Concentration RSD	7.1 %	4.7 %	3.1 %	1.8 %	2.6 %	1.7 %	2.1 %	3.3 %	3.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	55.197 ppb	55.240 ppb	58.435 ppb	56.869 ppb	114.889 %	57.012 ppb	56.662 ppb	118.981 %	55.519 ppb
Concentration per Run 1	54.756 ppb	55.153 ppb	56.597 ppb	55.512 ppb	119.470 %	56.801 ppb	55.887 ppb	121.805 %	53.923 ppb
Concentration per Run 2	56.623 ppb	53.355 ppb	60.162 ppb	57.172 ppb	110.969 %	56.459 ppb	57.237 ppb	117.243 %	55.824 ppb
Concentration per Run 3	54.210 ppb	57.211 ppb	58.546 ppb	57.922 ppb	114.229 %	57.776 ppb	56.862 ppb	117.894 %	56.811 ppb
Recovery Percentage 1	91.994 %	92.066 %	97.392 %	94.781 %		95.020 %	94.437 %		92.532 %
Concentration RSD	2.3 %	3.5 %	3.1 %	2.2 %	3.7 %	1.2 %	1.2 %	2.1 %	2.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	56.804 ppb	120.280 %	119.759 %	55.882 ppb	55.793 ppb	118.822 %
Concentration per Run 1	55.414 ppb	126.009 %	122.026 %	53.460 ppb	53.796 ppb	124.564 %
Concentration per Run 2	57.767 ppb	116.591 %	117.254 %	56.839 ppb	56.979 ppb	116.833 %
Concentration per Run 3	57.229 ppb	118.239 %	119.996 %	57.347 ppb	56.604 ppb	115.068 %
Recovery Percentage 1	94.673 %			93.136 %	92.988 %	
Concentration RSD	2.2 %	4.2 %	2.0 %	3.8 %	3.1 %	4.3 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	69	User name	ALPHALAB\a2-icpmsq2	Comment	CCB
Analysis label:	CCB	Rack	0		
Analysis started at:	12/3/2024 12:42:03 PM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	117.354 %	124.467 %	0.386 ppb	251.728 ppb	0.801 ppb	-0.651 ppb	39.318 ppb	1.008 ppb	108.564 %
Concentration per Run 1	113.137 %	131.145 %	0.613 ppb	230.037 ppb	-0.103 ppb	-0.654 ppb	54.187 ppb	-6.375 ppb	109.744 %
Concentration per Run 2	118.381 %	118.519 %	0.316 ppb	263.988 ppb	1.119 ppb	-0.707 ppb	28.333 ppb	7.117 ppb	108.493 %
Concentration per Run 3	120.544 %	123.738 %	0.230 ppb	261.160 ppb	1.388 ppb	-0.592 ppb	35.434 ppb	2.281 ppb	107.455 %
Recovery Percentage 1			77.263 %	50.346 %	1.145 %	-6.510 %	39.318 %	1.008 %	
Concentration RSD	3.2 %	5.1 %	52.0 %	7.5 %	99.1 %	8.8 %	34.0 %	678.4 %	1.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.436 ppb	-0.050 ppb	0.025 ppb	4.341 ppb	0.013 ppb	0.099 ppb	0.039 ppb	0.167 ppb	113.563 %
Concentration per Run 1	-0.423 ppb	-0.022 ppb	0.071 ppb	4.106 ppb	0.021 ppb	0.104 ppb	0.072 ppb	0.136 ppb	115.290 %
Concentration per Run 2	-0.440 ppb	-0.072 ppb	-0.027 ppb	3.860 ppb	0.014 ppb	0.042 ppb	0.013 ppb	0.234 ppb	111.488 %
Concentration per Run 3	-0.445 ppb	-0.057 ppb	0.030 ppb	5.056 ppb	0.004 ppb	0.151 ppb	0.033 ppb	0.132 ppb	113.910 %
Recovery Percentage 1	-8.726 %	-5.038 %	2.477 %	8.681 %	2.611 %	4.951 %	3.921 %	3.345 %	
Concentration RSD	2.7 %	51.0 %	198.9 %	14.6 %	63.8 %	55.2 %	76.2 %	34.5 %	1.7 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.080 ppb	0.174 ppb	0.017 ppb	0.206 ppb	115.330 %	0.019 ppb	0.017 ppb	117.306 %	0.054 ppb
Concentration per Run 1	0.022 ppb	-0.036 ppb	0.022 ppb	0.111 ppb	118.542 %	0.016 ppb	0.018 ppb	121.619 %	0.047 ppb
Concentration per Run 2	0.076 ppb	0.543 ppb	0.020 ppb	0.176 ppb	114.749 %	0.019 ppb	0.013 ppb	115.129 %	0.062 ppb
Concentration per Run 3	0.142 ppb	0.016 ppb	0.009 ppb	0.331 ppb	112.698 %	0.023 ppb	0.019 ppb	115.168 %	0.052 ppb
Recovery Percentage 1	15.970 %	3.488 %	0.167 %	10.307 %		4.803 %	8.438 %		1.347 %
Concentration RSD	75.0 %	183.7 %	41.6 %	54.6 %	2.6 %	17.6 %	20.9 %	3.2 %	14.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.038 ppb	117.878 %	118.387 %	0.192 ppb	0.024 ppb	117.668 %
Concentration per Run 1	0.016 ppb	122.992 %	122.859 %	0.216 ppb	0.030 ppb	121.642 %
Concentration per Run 2	0.055 ppb	118.089 %	117.538 %	0.204 ppb	0.025 ppb	116.831 %
Concentration per Run 3	0.044 ppb	112.554 %	114.765 %	0.156 ppb	0.016 ppb	114.529 %
Recovery Percentage 1	7.675 %			19.217 %	2.373 %	
Concentration RSD	52.0 %	4.4 %	3.5 %	16.5 %	31.8 %	3.1 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	70	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2469188-04d5 6020TL	Rack	1		
Analysis started at:	12/3/2024 12:47:59 PM	Vial	39		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	78.733 %	102.694 %	0.069 ppb	1,773,322.955 ppb	195,377.473 ppb	16.646 ppb	49,478.921 ppb	44,208.340 ppb	74.955 %
Concentration per Run 1	76.783 %	98.316 %	0.079 ppb	1,755,820.079 ppb	196,966.876 ppb	16.611 ppb	48,561.364 ppb	44,195.220 ppb	74.688 %
Concentration per Run 2	80.252 %	108.081 %	0.073 ppb	1,726,157.126 ppb	192,077.971 ppb	15.871 ppb	49,824.167 ppb	43,970.558 ppb	74.925 %
Concentration per Run 3	79.164 %	101.684 %	0.054 ppb	1,837,991.660 ppb	197,087.573 ppb	17.455 ppb	50,051.233 ppb	44,459.241 ppb	75.251 %
Concentration RSD	2.3 %	4.8 %	19.2 %	3.3 %	1.5 %	4.8 %	1.6 %	0.6 %	0.4 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.055 ppb	0.006 ppb	2.954 ppb	30.763 ppb	0.017 ppb	0.101 ppb	0.420 ppb	0.842 ppb	107.890 %
Concentration per Run 1	0.022 ppb	0.031 ppb	3.090 ppb	27.479 ppb	0.003 ppb	0.138 ppb	0.450 ppb	0.817 ppb	104.644 %
Concentration per Run 2	-0.086 ppb	-0.033 ppb	2.782 ppb	31.648 ppb	0.037 ppb	0.105 ppb	0.431 ppb	0.882 ppb	107.982 %
Concentration per Run 3	-0.100 ppb	0.019 ppb	2.991 ppb	33.162 ppb	0.012 ppb	0.059 ppb	0.379 ppb	0.826 ppb	111.043 %
Concentration RSD	121.8 %	598.8 %	5.3 %	9.6 %	102.6 %	39.7 %	8.7 %	4.2 %	3.0 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.386 ppb	0.292 ppb	1,174.444 ppb	1.570 ppb	97.251 %	0.016 ppb	0.007 ppb	103.286 %	0.060 ppb
Concentration per Run 1	0.461 ppb	0.409 ppb	1,144.923 ppb	1.634 ppb	99.563 %	0.020 ppb	0.007 ppb	101.534 %	0.046 ppb
Concentration per Run 2	0.387 ppb	0.332 ppb	1,189.332 ppb	1.597 ppb	96.973 %	0.018 ppb	0.011 ppb	103.578 %	0.075 ppb
Concentration per Run 3	0.310 ppb	0.136 ppb	1,189.078 ppb	1.478 ppb	95.216 %	0.010 ppb	0.004 ppb	104.746 %	0.061 ppb
Concentration RSD	19.5 %	48.1 %	2.2 %	5.2 %	2.2 %	31.3 %	50.0 %	1.6 %	23.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	2.754 ppb	107.902 %	108.189 %	0.043 ppb	0.071 ppb	90.735 %
Concentration per Run 1	2.876 ppb	106.982 %	107.706 %	0.026 ppb	0.074 ppb	92.920 %
Concentration per Run 2	2.826 ppb	109.601 %	107.626 %	0.050 ppb	0.072 ppb	90.571 %
Concentration per Run 3	2.559 ppb	107.124 %	109.234 %	0.054 ppb	0.066 ppb	88.714 %
Concentration RSD	6.2 %	1.4 %	0.8 %	35.0 %	5.9 %	2.3 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	71	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2469188-05d5 6020TL	Rack	1		
Analysis started at:	12/3/2024 12:52:26 PM	Vial	40		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	88.851 %	112.963 %	0.056 ppb	699,685.493 ppb	72,185.887 ppb	65.356 ppb	21,888.192 ppb	37,603.415 ppb	97.432 %
Concentration per Run 1	85.813 %	114.983 %	0.064 ppb	689,389.702 ppb	71,326.537 ppb	61.125 ppb	21,005.981 ppb	36,548.762 ppb	94.617 %
Concentration per Run 2	89.301 %	109.933 %	0.066 ppb	716,052.935 ppb	74,109.081 ppb	68.671 ppb	21,776.098 ppb	37,879.078 ppb	97.340 %
Concentration per Run 3	91.439 %	113.973 %	0.039 ppb	693,613.843 ppb	71,122.043 ppb	66.274 ppb	22,882.497 ppb	38,382.404 ppb	100.339 %
Concentration RSD	3.2 %	2.4 %	26.9 %	2.0 %	2.3 %	5.9 %	4.3 %	2.5 %	2.9 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.077 ppb	0.206 ppb	34.052 ppb	219.477 ppb	0.127 ppb	1.007 ppb	1.931 ppb	3.775 ppb	110.894 %
Concentration per Run 1	0.075 ppb	0.192 ppb	34.640 ppb	216.261 ppb	0.133 ppb	1.106 ppb	1.887 ppb	3.558 ppb	109.097 %
Concentration per Run 2	0.099 ppb	0.198 ppb	34.086 ppb	235.371 ppb	0.143 ppb	0.984 ppb	1.798 ppb	3.943 ppb	109.460 %
Concentration per Run 3	0.057 ppb	0.230 ppb	33.430 ppb	206.799 ppb	0.105 ppb	0.929 ppb	2.109 ppb	3.823 ppb	114.125 %
Concentration RSD	27.3 %	9.8 %	1.8 %	6.6 %	15.7 %	9.0 %	8.3 %	5.2 %	2.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.419 ppb	0.132 ppb	574.525 ppb	0.935 ppb	102.531 %	0.003 ppb	0.025 ppb	109.691 %	0.114 ppb
Concentration per Run 1	0.439 ppb	-0.076 ppb	568.559 ppb	0.990 ppb	104.269 %	0.006 ppb	0.027 ppb	110.566 %	0.101 ppb
Concentration per Run 2	0.408 ppb	0.387 ppb	579.853 ppb	0.907 ppb	101.529 %	0.002 ppb	0.028 ppb	109.085 %	0.113 ppb
Concentration per Run 3	0.411 ppb	0.085 ppb	575.163 ppb	0.909 ppb	101.795 %	0.001 ppb	0.021 ppb	109.421 %	0.128 ppb
Concentration RSD	4.2 %	178.0 %	1.0 %	5.1 %	1.5 %	80.6 %	15.5 %	0.7 %	11.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	22.088 ppb	114.185 %	112.891 %	0.032 ppb	0.262 ppb	98.227 %
Concentration per Run 1	21.942 ppb	115.529 %	112.710 %	0.019 ppb	0.268 ppb	98.976 %
Concentration per Run 2	21.943 ppb	113.855 %	111.427 %	0.040 ppb	0.259 ppb	97.266 %
Concentration per Run 3	22.378 ppb	113.172 %	114.536 %	0.037 ppb	0.260 ppb	98.437 %
Concentration RSD	1.1 %	1.1 %	1.4 %	34.9 %	2.0 %	0.9 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	72	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2469188-06d5 6020TL	Rack	1		
Analysis started at:	12/3/2024 12:56:53 PM	Vial	41		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	86.547 %	105.163 %	0.017 ppb	813,100.667 ppb	87,644.679 ppb	153.923 ppb	25,158.372 ppb	26,680.063 ppb	88.132 %
Concentration per Run 1	89.547 %	105.724 %	0.021 ppb	781,581.122 ppb	85,234.976 ppb	154.486 ppb	24,665.197 ppb	26,378.655 ppb	88.125 %
Concentration per Run 2	84.277 %	102.357 %	0.020 ppb	837,667.998 ppb	89,055.818 ppb	153.469 ppb	25,086.205 ppb	26,761.209 ppb	87.408 %
Concentration per Run 3	85.817 %	107.408 %	0.010 ppb	820,052.882 ppb	88,643.244 ppb	153.814 ppb	25,723.714 ppb	26,900.324 ppb	88.863 %
Concentration RSD	3.1 %	2.4 %	34.5 %	3.5 %	2.4 %	0.3 %	2.1 %	1.0 %	0.8 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.290 ppb	0.491 ppb	13.264 ppb	327.435 ppb	0.129 ppb	0.400 ppb	2.199 ppb	5.285 ppb	107.625 %
Concentration per Run 1	0.270 ppb	0.524 ppb	13.315 ppb	325.782 ppb	0.134 ppb	0.351 ppb	2.166 ppb	5.420 ppb	104.554 %
Concentration per Run 2	0.237 ppb	0.500 ppb	12.726 ppb	325.268 ppb	0.136 ppb	0.535 ppb	2.196 ppb	5.205 ppb	109.601 %
Concentration per Run 3	0.363 ppb	0.449 ppb	13.751 ppb	331.254 ppb	0.117 ppb	0.313 ppb	2.235 ppb	5.231 ppb	108.719 %
Concentration RSD	22.6 %	7.8 %	3.9 %	1.0 %	8.2 %	29.7 %	1.6 %	2.2 %	2.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.316 ppb	0.122 ppb	555.845 ppb	0.790 ppb	100.541 %	0.003 ppb	0.026 ppb	106.777 %	0.104 ppb
Concentration per Run 1	0.453 ppb	-0.069 ppb	550.506 ppb	0.746 ppb	102.714 %	0.000 ppb	0.028 ppb	107.783 %	0.091 ppb
Concentration per Run 2	0.219 ppb	0.321 ppb	553.542 ppb	0.788 ppb	99.645 %	0.003 ppb	0.025 ppb	105.656 %	0.103 ppb
Concentration per Run 3	0.276 ppb	0.113 ppb	563.488 ppb	0.838 ppb	99.263 %	0.006 ppb	0.025 ppb	106.893 %	0.118 ppb
Concentration RSD	38.7 %	159.9 %	1.2 %	5.8 %	1.9 %	87.4 %	6.7 %	1.0 %	13.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	6.340 ppb	111.894 %	110.391 %	0.029 ppb	0.733 ppb	94.003 %
Concentration per Run 1	6.214 ppb	114.961 %	112.257 %	0.018 ppb	0.713 ppb	96.086 %
Concentration per Run 2	6.625 ppb	111.095 %	108.520 %	0.034 ppb	0.742 ppb	93.051 %
Concentration per Run 3	6.181 ppb	109.626 %	110.395 %	0.036 ppb	0.745 ppb	92.873 %
Concentration RSD	3.9 %	2.5 %	1.7 %	33.0 %	2.4 %	1.9 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	73	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG2004404-1 MCP-6020SL-10	Rack	1		
Analysis started at:	12/3/2024 1:06:43 PM	Vial	42		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	119.738 %	119.080 %	0.008 ppb	579.585 ppb	7.845 ppb	0.453 ppb	48.880 ppb	5.376 ppb	113.743 %
Concentration per Run 1	114.522 %	117.677 %	0.009 ppb	587.087 ppb	10.990 ppb	0.338 ppb	43.052 ppb	9.388 ppb	111.048 %
Concentration per Run 2	118.879 %	120.202 %	0.007 ppb	569.222 ppb	7.551 ppb	0.331 ppb	52.974 ppb	3.493 ppb	115.095 %
Concentration per Run 3	125.812 %	119.361 %	0.009 ppb	582.447 ppb	4.994 ppb	0.691 ppb	50.616 ppb	3.246 ppb	115.088 %
Concentration RSD	4.8 %	1.1 %	13.8 %	1.6 %	38.4 %	45.4 %	10.6 %	64.7 %	2.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.267 ppb	-0.063 ppb	0.492 ppb	6.397 ppb	0.002 ppb	0.084 ppb	0.067 ppb	0.930 ppb	125.859 %
Concentration per Run 1	-0.219 ppb	-0.057 ppb	0.511 ppb	6.312 ppb	0.000 ppb	0.084 ppb	0.071 ppb	0.852 ppb	133.343 %
Concentration per Run 2	-0.328 ppb	-0.061 ppb	0.482 ppb	6.156 ppb	-0.002 ppb	0.092 ppb	0.076 ppb	1.035 ppb	119.930 %
Concentration per Run 3	-0.254 ppb	-0.071 ppb	0.483 ppb	6.724 ppb	0.006 ppb	0.076 ppb	0.053 ppb	0.903 ppb	124.303 %
Concentration RSD	20.8 %	11.0 %	3.3 %	4.6 %	249.7 %	9.3 %	18.4 %	10.2 %	5.4 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.006 ppb	0.058 ppb	0.050 ppb	-0.094 ppb	116.698 %	-0.001 ppb	0.000 ppb	116.696 %	0.026 ppb
Concentration per Run 1	0.018 ppb	0.062 ppb	0.073 ppb	-0.106 ppb	117.668 %	0.000 ppb	0.000 ppb	116.685 %	0.015 ppb
Concentration per Run 2	-0.015 ppb	-0.046 ppb	0.054 ppb	-0.095 ppb	114.269 %	0.000 ppb	0.000 ppb	118.490 %	0.036 ppb
Concentration per Run 3	0.016 ppb	0.158 ppb	0.024 ppb	-0.082 ppb	118.157 %	-0.002 ppb	0.000 ppb	114.913 %	0.026 ppb
Concentration RSD	296.7 %	175.3 %	48.5 %	12.6 %	1.8 %	148.1 %	N/A	1.5 %	39.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.030 ppb	115.985 %	112.947 %	0.014 ppb	0.005 ppb	111.124 %
Concentration per Run 1	0.042 ppb	118.633 %	113.532 %	0.011 ppb	0.005 ppb	116.420 %
Concentration per Run 2	0.018 ppb	114.652 %	111.601 %	0.014 ppb	0.005 ppb	106.585 %
Concentration per Run 3	0.031 ppb	114.670 %	113.708 %	0.016 ppb	0.006 ppb	110.367 %
Concentration RSD	39.8 %	2.0 %	1.0 %	18.8 %	3.5 %	4.5 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	74	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG2004404-2d10 MCP-6020SL-10	Rack	1		
Analysis started at:	12/3/2024 1:11:12 PM	Vial	43		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	116.525 %	122.616 %	5.028 ppb	1,595.172 ppb	942.869 ppb	181.662 ppb	977.265 ppb	773.433 ppb	111.806 %
Concentration per Run 1	112.131 %	124.243 %	5.063 ppb	1,585.214 ppb	954.217 ppb	181.031 ppb	991.516 ppb	667.077 ppb	109.748 %
Concentration per Run 2	117.823 %	123.064 %	5.035 ppb	1,603.355 ppb	937.892 ppb	184.134 ppb	993.861 ppb	826.528 ppb	113.404 %
Concentration per Run 3	119.620 %	120.539 %	4.985 ppb	1,596.946 ppb	936.499 ppb	179.821 ppb	946.417 ppb	826.695 ppb	112.267 %
Concentration RSD	3.4 %	1.5 %	0.8 %	0.6 %	1.0 %	1.2 %	2.7 %	11.9 %	1.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	42.409 ppb	17.748 ppb	48.844 ppb	96.671 ppb	48.376 ppb	49.752 ppb	25.027 ppb	48.406 ppb	111.870 %
Concentration per Run 1	40.610 ppb	17.605 ppb	50.176 ppb	94.030 ppb	47.449 ppb	49.399 ppb	24.713 ppb	49.023 ppb	112.044 %
Concentration per Run 2	43.065 ppb	18.096 ppb	48.641 ppb	98.149 ppb	49.369 ppb	51.882 ppb	25.504 ppb	47.947 ppb	109.865 %
Concentration per Run 3	43.552 ppb	17.543 ppb	47.715 ppb	97.834 ppb	48.309 ppb	47.975 ppb	24.865 ppb	48.248 ppb	113.702 %
Concentration RSD	3.7 %	1.7 %	2.5 %	2.4 %	2.0 %	4.0 %	1.7 %	1.1 %	1.7 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	11.298 ppb	11.368 ppb	95.149 ppb	94.496 ppb	111.882 %	4.961 ppb	5.023 ppb	115.162 %	38.072 ppb
Concentration per Run 1	10.742 ppb	10.672 ppb	93.918 ppb	92.585 ppb	115.394 %	4.866 ppb	4.770 ppb	118.367 %	36.137 ppb
Concentration per Run 2	11.722 ppb	12.107 ppb	96.888 ppb	94.401 ppb	109.736 %	5.016 ppb	5.110 ppb	113.800 %	38.442 ppb
Concentration per Run 3	11.430 ppb	11.324 ppb	94.639 ppb	96.501 ppb	110.517 %	5.002 ppb	5.189 ppb	113.320 %	39.637 ppb
Concentration RSD	4.5 %	6.3 %	1.6 %	2.1 %	2.7 %	1.7 %	4.4 %	2.4 %	4.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	189.043 ppb	114.304 %	112.275 %	11.142 ppb	49.325 ppb	110.840 %
Concentration per Run 1	184.861 ppb	117.812 %	112.378 %	10.714 ppb	47.251 ppb	114.903 %
Concentration per Run 2	189.735 ppb	112.846 %	111.200 %	11.276 ppb	50.642 ppb	109.076 %
Concentration per Run 3	192.534 ppb	112.252 %	113.245 %	11.435 ppb	50.081 ppb	108.540 %
Concentration RSD	2.1 %	2.7 %	0.9 %	3.4 %	3.7 %	3.2 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	75	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG2004404-3d10 MCP-6020SL-10	Rack	1		
Analysis started at:	12/3/2024 1:15:40 PM	Vial	44		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	118.673 %	123.345 %	4.959 ppb	1,530.872 ppb	938.063 ppb	179.486 ppb	955.533 ppb	870.804 ppb	111.347 %
Concentration per Run 1	113.096 %	128.788 %	5.039 ppb	1,493.250 ppb	920.303 ppb	172.610 ppb	910.183 ppb	836.873 ppb	106.474 %
Concentration per Run 2	120.759 %	125.085 %	4.960 ppb	1,490.505 ppb	915.781 ppb	174.699 ppb	944.349 ppb	875.169 ppb	112.757 %
Concentration per Run 3	122.165 %	116.162 %	4.877 ppb	1,608.861 ppb	978.105 ppb	191.148 ppb	1,012.066 ppb	900.370 ppb	114.809 %
Concentration RSD	4.1 %	5.3 %	1.6 %	4.4 %	3.7 %	5.7 %	5.4 %	3.7 %	3.9 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	42.234 ppb	17.916 ppb	48.422 ppb	95.336 ppb	49.139 ppb	49.367 ppb	24.340 ppb	48.276 ppb	108.723 %
Concentration per Run 1	40.807 ppb	17.408 ppb	49.667 ppb	91.353 ppb	49.439 ppb	51.347 ppb	24.436 ppb	49.039 ppb	106.870 %
Concentration per Run 2	43.660 ppb	18.230 ppb	48.550 ppb	99.430 ppb	49.935 ppb	49.058 ppb	24.590 ppb	49.019 ppb	106.453 %
Concentration per Run 3	42.235 ppb	18.109 ppb	47.049 ppb	95.226 ppb	48.041 ppb	47.698 ppb	23.995 ppb	46.770 ppb	112.845 %
Concentration RSD	3.4 %	2.5 %	2.7 %	4.2 %	2.0 %	3.7 %	1.3 %	2.7 %	3.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	11.805 ppb	12.217 ppb	95.124 ppb	92.805 ppb	111.616 %	4.990 ppb	4.939 ppb	112.042 %	39.531 ppb
Concentration per Run 1	12.308 ppb	10.441 ppb	95.766 ppb	90.007 ppb	113.588 %	4.937 ppb	4.926 ppb	114.817 %	38.503 ppb
Concentration per Run 2	11.933 ppb	13.067 ppb	96.881 ppb	92.639 ppb	109.005 %	5.006 ppb	4.882 ppb	110.256 %	39.645 ppb
Concentration per Run 3	11.174 ppb	13.144 ppb	92.725 ppb	95.769 ppb	112.256 %	5.026 ppb	5.010 ppb	111.054 %	40.446 ppb
Concentration RSD	4.9 %	12.6 %	2.3 %	3.1 %	2.1 %	0.9 %	1.3 %	2.2 %	2.5 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	191.455 ppb	110.955 %	109.650 %	11.375 ppb	49.773 ppb	109.273 %
Concentration per Run 1	188.763 ppb	111.436 %	109.738 %	11.091 ppb	48.964 ppb	111.177 %
Concentration per Run 2	197.204 ppb	109.051 %	108.296 %	11.768 ppb	50.402 ppb	106.032 %
Concentration per Run 3	188.398 ppb	112.377 %	110.915 %	11.264 ppb	49.954 ppb	110.611 %
Concentration RSD	2.6 %	1.5 %	1.2 %	3.1 %	1.5 %	2.6 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	76	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2469119-01 MCP-6020SL-10	Rack	1		
Analysis started at:	12/3/2024 1:20:09 PM	Vial	45		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	98.934 %	113.075 %	0.008 ppb	352,866.383 ppb	3,646.595 ppb	2.895 ppb	4,053.013 ppb	27,948.499 ppb	98.154 %
Concentration per Run 1	95.176 %	113.300 %	0.007 ppb	345,704.772 ppb	3,536.900 ppb	3.147 ppb	3,945.710 ppb	27,757.592 ppb	97.532 %
Concentration per Run 2	101.019 %	112.458 %	0.010 ppb	357,841.129 ppb	3,700.059 ppb	2.913 ppb	4,178.058 ppb	28,163.210 ppb	99.392 %
Concentration per Run 3	100.607 %	113.468 %	0.007 ppb	355,053.250 ppb	3,702.825 ppb	2.626 ppb	4,035.269 ppb	27,924.695 ppb	97.537 %
Concentration RSD	3.3 %	0.5 %	19.9 %	1.8 %	2.6 %	9.0 %	2.9 %	0.7 %	1.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.325 ppb	0.080 ppb	3,116.754 ppb	13,938.141 ppb	0.353 ppb	0.785 ppb	0.600 ppb	12.089 ppb	102.003 %
Concentration per Run 1	-0.197 ppb	0.035 ppb	3,082.917 ppb	13,687.604 ppb	0.331 ppb	0.836 ppb	0.523 ppb	12.509 ppb	101.744 %
Concentration per Run 2	-0.408 ppb	0.137 ppb	3,153.278 ppb	13,997.876 ppb	0.387 ppb	0.763 ppb	0.584 ppb	11.712 ppb	99.156 %
Concentration per Run 3	-0.371 ppb	0.067 ppb	3,114.067 ppb	14,128.942 ppb	0.341 ppb	0.755 ppb	0.695 ppb	12.046 ppb	105.110 %
Concentration RSD	34.7 %	65.4 %	1.1 %	1.6 %	8.5 %	5.6 %	14.6 %	3.3 %	2.9 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	16.038 ppb	0.244 ppb	184.175 ppb	7.079 ppb	104.568 %	-0.001 ppb	0.002 ppb	106.729 %	1.230 ppb
Concentration per Run 1	16.173 ppb	0.176 ppb	185.564 ppb	6.268 ppb	105.629 %	0.002 ppb	0.000 ppb	106.936 %	1.091 ppb
Concentration per Run 2	16.625 ppb	0.283 ppb	183.777 ppb	6.880 ppb	104.705 %	-0.002 ppb	0.003 ppb	106.647 %	1.280 ppb
Concentration per Run 3	15.316 ppb	0.273 ppb	183.183 ppb	8.088 ppb	103.371 %	-0.003 ppb	0.004 ppb	106.603 %	1.320 ppb
Concentration RSD	4.1 %	24.2 %	0.7 %	13.1 %	1.1 %	317.8 %	86.6 %	0.2 %	9.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	31.125 ppb	110.411 %	111.024 %	0.014 ppb	0.038 ppb	101.185 %
Concentration per Run 1	30.113 ppb	113.971 %	114.351 %	0.011 ppb	0.041 ppb	101.848 %
Concentration per Run 2	31.562 ppb	108.678 %	109.221 %	0.011 ppb	0.039 ppb	100.298 %
Concentration per Run 3	31.702 ppb	108.585 %	109.500 %	0.020 ppb	0.032 ppb	101.409 %
Concentration RSD	2.8 %	2.8 %	2.6 %	34.7 %	12.1 %	0.8 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	77	User name	ALPHALAB\a2-icpmsq2	Comment	CCV/MCCV
Analysis label:	CCV	Rack	0		
Analysis started at:	12/3/2024 1:30:45 PM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	114.890 %	119.641 %	59.218 ppb	6,473.200 ppb	5,753.076 ppb	54.772 ppb	5,759.568 ppb	5,551.802 ppb	106.643 %
Concentration per Run 1	110.268 %	125.421 %	59.311 ppb	6,211.606 ppb	5,542.746 ppb	51.850 ppb	5,577.762 ppb	5,363.165 ppb	104.391 %
Concentration per Run 2	115.705 %	117.845 %	59.181 ppb	6,544.396 ppb	5,770.704 ppb	56.149 ppb	5,784.414 ppb	5,710.529 ppb	106.666 %
Concentration per Run 3	118.697 %	115.657 %	59.161 ppb	6,663.598 ppb	5,945.777 ppb	56.317 ppb	5,916.529 ppb	5,581.711 ppb	108.871 %
Recovery Percentage 1			98.697 %	107.887 %	95.885 %	91.287 %	95.993 %	92.530 %	
Concentration RSD	3.7 %	4.3 %	0.1 %	3.6 %	3.5 %	4.6 %	3.0 %	3.2 %	2.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	55.466 ppb	55.585 ppb	59.394 ppb	5,934.901 ppb	58.515 ppb	60.096 ppb	60.051 ppb	60.662 ppb	107.203 %
Concentration per Run 1	55.289 ppb	54.809 ppb	60.683 ppb	5,982.886 ppb	59.890 ppb	61.645 ppb	58.676 ppb	60.862 ppb	104.852 %
Concentration per Run 2	55.854 ppb	55.301 ppb	60.193 ppb	5,906.309 ppb	57.021 ppb	59.516 ppb	60.875 ppb	60.600 ppb	106.640 %
Concentration per Run 3	55.257 ppb	56.647 ppb	57.306 ppb	5,915.510 ppb	58.634 ppb	59.128 ppb	60.602 ppb	60.524 ppb	110.117 %
Recovery Percentage 1	92.444 %	92.642 %	98.990 %	98.915 %	97.525 %	100.160 %	100.085 %	101.103 %	
Concentration RSD	0.6 %	1.7 %	3.1 %	0.7 %	2.5 %	2.3 %	2.0 %	0.3 %	2.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	59.229 ppb	59.465 ppb	59.373 ppb	57.973 ppb	111.494 %	56.003 ppb	56.011 ppb	115.054 %	55.292 ppb
Concentration per Run 1	60.203 ppb	60.816 ppb	58.857 ppb	55.400 ppb	115.330 %	54.706 ppb	53.753 ppb	118.427 %	53.496 ppb
Concentration per Run 2	59.723 ppb	61.199 ppb	60.308 ppb	58.008 ppb	110.012 %	56.534 ppb	56.959 ppb	113.922 %	55.669 ppb
Concentration per Run 3	57.761 ppb	56.378 ppb	58.954 ppb	60.512 ppb	109.141 %	56.771 ppb	57.322 ppb	112.814 %	56.711 ppb
Recovery Percentage 1	98.715 %	99.108 %	98.955 %	96.622 %		93.339 %	93.352 %		92.154 %
Concentration RSD	2.2 %	4.5 %	1.4 %	4.4 %	3.0 %	2.0 %	3.5 %	2.6 %	3.0 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	56.571 ppb	115.043 %	114.616 %	55.990 ppb	57.004 ppb	110.959 %
Concentration per Run 1	56.547 ppb	116.279 %	117.583 %	55.054 ppb	56.337 ppb	112.704 %
Concentration per Run 2	56.765 ppb	113.549 %	113.832 %	57.563 ppb	57.327 ppb	110.076 %
Concentration per Run 3	56.403 ppb	115.301 %	112.433 %	55.352 ppb	57.350 ppb	110.098 %
Recovery Percentage 1	94.286 %			93.316 %	95.007 %	
Concentration RSD	0.3 %	1.2 %	2.3 %	2.4 %	1.0 %	1.4 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	78	User name	ALPHALAB\a2-icpmsq2	Comment	CCB
Analysis label:	CCB	Rack	0		
Analysis started at:	12/3/2024 1:35:17 PM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	118.157 %	120.764 %	0.218 ppb	546.112 ppb	1.121 ppb	-0.684 ppb	71.287 ppb	0.699 ppb	107.057 %
Concentration per Run 1	113.438 %	124.580 %	0.304 ppb	510.437 ppb	1.050 ppb	-0.739 ppb	71.331 ppb	0.741 ppb	106.737 %
Concentration per Run 2	119.593 %	117.340 %	0.214 ppb	572.379 ppb	1.359 ppb	-0.792 ppb	71.113 ppb	8.083 ppb	106.220 %
Concentration per Run 3	121.440 %	120.371 %	0.136 ppb	555.520 ppb	0.955 ppb	-0.520 ppb	71.418 ppb	-6.727 ppb	108.214 %
Recovery Percentage 1			43.605 %	109.222 %	1.602 %	-6.835 %	71.287 %	0.699 %	
Concentration RSD	3.5 %	3.0 %	38.5 %	5.9 %	18.9 %	21.1 %	0.2 %	1,059.2 %	1.0 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.380 ppb	-0.019 ppb	0.099 ppb	7.334 ppb	0.020 ppb	0.118 ppb	0.088 ppb	0.146 ppb	105.134 %
Concentration per Run 1	-0.454 ppb	-0.005 ppb	0.064 ppb	6.450 ppb	0.026 ppb	0.142 ppb	0.110 ppb	0.169 ppb	107.544 %
Concentration per Run 2	-0.360 ppb	-0.019 ppb	0.177 ppb	8.124 ppb	0.012 ppb	0.116 ppb	0.106 ppb	0.183 ppb	105.766 %
Concentration per Run 3	-0.327 ppb	-0.033 ppb	0.054 ppb	7.427 ppb	0.022 ppb	0.098 ppb	0.049 ppb	0.086 ppb	102.092 %
Recovery Percentage 1	-7.604 %	-1.898 %	9.855 %	14.668 %	3.957 %	5.924 %	8.800 %	2.925 %	
Concentration RSD	17.4 %	72.4 %	69.4 %	11.5 %	37.4 %	18.3 %	38.7 %	35.8 %	2.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.039 ppb	0.018 ppb	0.034 ppb	0.370 ppb	110.475 %	0.023 ppb	0.026 ppb	109.867 %	0.157 ppb
Concentration per Run 1	0.118 ppb	0.089 ppb	0.036 ppb	0.205 ppb	114.360 %	0.028 ppb	0.027 ppb	109.973 %	0.120 ppb
Concentration per Run 2	-0.008 ppb	0.014 ppb	0.029 ppb	0.316 ppb	110.225 %	0.022 ppb	0.044 ppb	110.317 %	0.176 ppb
Concentration per Run 3	0.009 ppb	-0.050 ppb	0.038 ppb	0.589 ppb	106.841 %	0.020 ppb	0.007 ppb	109.311 %	0.175 ppb
Recovery Percentage 1	7.900 %	0.355 %	0.344 %	18.484 %		5.794 %	12.816 %		3.921 %
Concentration RSD	173.1 %	391.7 %	13.6 %	53.5 %	3.4 %	17.3 %	71.7 %	0.5 %	20.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.020 ppb	111.813 %	111.411 %	0.233 ppb	0.030 ppb	109.041 %
Concentration per Run 1	-0.006 ppb	114.529 %	115.994 %	0.218 ppb	0.029 ppb	111.797 %
Concentration per Run 2	0.046 ppb	112.056 %	109.879 %	0.287 ppb	0.034 ppb	108.619 %
Concentration per Run 3	0.020 ppb	108.855 %	108.358 %	0.196 ppb	0.028 ppb	106.706 %
Recovery Percentage 1	3.985 %			23.333 %	3.033 %	
Concentration RSD	130.1 %	2.5 %	3.6 %	20.3 %	11.4 %	2.4 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	79	User name	ALPHALAB\a2-icpmsq2	Comment	CCB
Analysis label:	CCB	Rack	0		
Analysis started at:	12/3/2024 1:45:22 PM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	118.704 %	119.024 %	0.006 ppb	280.745 ppb	-0.171 ppb	-0.666 ppb	30.777 ppb	-6.620 ppb	108.554 %
Concentration per Run 1	113.248 %	116.499 %	0.006 ppb	251.140 ppb	0.138 ppb	-0.974 ppb	28.930 ppb	-2.982 ppb	105.054 %
Concentration per Run 2	120.589 %	118.687 %	0.005 ppb	286.333 ppb	-0.231 ppb	-0.400 ppb	28.755 ppb	-10.323 ppb	110.697 %
Concentration per Run 3	122.275 %	121.886 %	0.007 ppb	304.762 ppb	-0.419 ppb	-0.624 ppb	34.646 ppb	-6.556 ppb	109.911 %
Recovery Percentage 1			1.174 %	56.149 %	-0.244 %	-6.663 %	30.777 %	-6.620 %	
Concentration RSD	4.0 %	2.3 %	11.2 %	9.7 %	166.2 %	43.4 %	10.9 %	55.4 %	2.8 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.381 ppb	-0.061 ppb	0.032 ppb	-0.423 ppb	0.005 ppb	0.043 ppb	0.031 ppb	0.117 ppb	130.208 %
Concentration per Run 1	-0.376 ppb	-0.085 ppb	0.064 ppb	-0.568 ppb	0.007 ppb	0.067 ppb	0.005 ppb	0.133 ppb	132.669 %
Concentration per Run 2	-0.352 ppb	-0.058 ppb	0.061 ppb	-0.792 ppb	0.008 ppb	0.013 ppb	0.050 ppb	0.107 ppb	130.754 %
Concentration per Run 3	-0.415 ppb	-0.041 ppb	-0.030 ppb	0.090 ppb	-0.001 ppb	0.050 ppb	0.039 ppb	0.111 ppb	127.201 %
Recovery Percentage 1	-7.626 %	-6.135 %	3.188 %	-0.846 %	0.971 %	2.170 %	3.110 %	2.341 %	
Concentration RSD	8.4 %	36.3 %	166.9 %	108.3 %	98.2 %	63.6 %	76.1 %	12.0 %	2.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.044 ppb	0.002 ppb	0.004 ppb	-0.053 ppb	111.015 %	0.002 ppb	0.001 ppb	109.483 %	0.044 ppb
Concentration per Run 1	0.077 ppb	-0.047 ppb	0.012 ppb	-0.071 ppb	115.778 %	0.001 ppb	0.000 ppb	114.476 %	0.051 ppb
Concentration per Run 2	0.012 ppb	0.035 ppb	-0.006 ppb	-0.050 ppb	110.261 %	0.002 ppb	0.000 ppb	106.734 %	0.043 ppb
Concentration per Run 3	0.043 ppb	0.018 ppb	0.005 ppb	-0.039 ppb	107.005 %	0.004 ppb	0.003 ppb	107.238 %	0.038 ppb
Recovery Percentage 1	8.756 %	0.040 %	0.036 %	-2.675 %		0.592 %	0.575 %		1.102 %
Concentration RSD	74.7 %	2,144.2 %	258.2 %	31.2 %	4.0 %	70.9 %	173.2 %	4.0 %	14.5 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.007 ppb	112.317 %	110.097 %	0.029 ppb	0.006 ppb	107.396 %
Concentration per Run 1	0.006 ppb	113.387 %	112.941 %	0.019 ppb	0.009 ppb	109.445 %
Concentration per Run 2	0.007 ppb	111.536 %	107.260 %	0.032 ppb	0.004 ppb	104.181 %
Concentration per Run 3	0.007 ppb	112.029 %	110.089 %	0.037 ppb	0.004 ppb	108.563 %
Recovery Percentage 1	1.374 %			2.939 %	0.568 %	
Concentration RSD	8.9 %	0.9 %	2.6 %	32.4 %	45.8 %	2.6 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	80	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG2004404-2d10 MCP-6020SL-10	Rack	1		
Analysis started at:	12/3/2024 2:02:11 PM	Vial	52		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	119.645 %	124.018 %	4.794 ppb	1,313.469 ppb	924.323 ppb	176.698 ppb	904.120 ppb	814.771 ppb	107.511 %
Concentration per Run 1	115.135 %	121.549 %	4.803 ppb	1,304.630 ppb	908.906 ppb	172.505 ppb	912.808 ppb	856.177 ppb	106.220 %
Concentration per Run 2	120.551 %	130.809 %	4.843 ppb	1,236.184 ppb	884.689 ppb	172.517 ppb	883.533 ppb	740.225 ppb	107.134 %
Concentration per Run 3	123.247 %	119.697 %	4.735 ppb	1,399.595 ppb	979.374 ppb	185.071 ppb	916.020 ppb	847.912 ppb	109.179 %
Concentration RSD	3.5 %	4.8 %	1.1 %	6.2 %	5.3 %	4.1 %	2.0 %	7.9 %	1.4 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	43.230 ppb	18.015 ppb	48.878 ppb	96.029 ppb	48.347 ppb	48.730 ppb	23.978 ppb	48.572 ppb	107.982 %
Concentration per Run 1	43.014 ppb	17.836 ppb	50.744 ppb	94.651 ppb	47.185 ppb	50.170 ppb	24.483 ppb	48.006 ppb	105.887 %
Concentration per Run 2	42.284 ppb	17.835 ppb	48.198 ppb	92.744 ppb	48.056 ppb	47.689 ppb	23.805 ppb	49.705 ppb	107.966 %
Concentration per Run 3	44.392 ppb	18.376 ppb	47.691 ppb	100.693 ppb	49.799 ppb	48.331 ppb	23.647 ppb	48.006 ppb	110.092 %
Concentration RSD	2.5 %	1.7 %	3.3 %	4.3 %	2.8 %	2.6 %	1.9 %	2.0 %	1.9 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	11.578 ppb	11.397 ppb	95.017 ppb	96.240 ppb	110.170 %	4.988 ppb	4.909 ppb	110.154 %	42.115 ppb
Concentration per Run 1	11.411 ppb	9.612 ppb	93.772 ppb	96.888 ppb	113.283 %	5.026 ppb	4.882 ppb	113.111 %	40.670 ppb
Concentration per Run 2	11.885 ppb	11.425 ppb	96.155 ppb	95.747 ppb	108.295 %	4.817 ppb	4.939 ppb	108.231 %	42.707 ppb
Concentration per Run 3	11.439 ppb	13.156 ppb	95.124 ppb	96.085 ppb	108.932 %	5.120 ppb	4.906 ppb	109.120 %	42.968 ppb
Concentration RSD	2.3 %	15.5 %	1.3 %	0.6 %	2.5 %	3.1 %	0.6 %	2.4 %	3.0 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	192.110 ppb	111.191 %	110.197 %	11.257 ppb	49.680 ppb	109.190 %
Concentration per Run 1	185.893 ppb	112.540 %	111.231 %	11.229 ppb	48.667 ppb	108.280 %
Concentration per Run 2	191.505 ppb	112.720 %	110.685 %	11.102 ppb	49.550 ppb	110.392 %
Concentration per Run 3	198.932 ppb	108.313 %	108.675 %	11.441 ppb	50.822 ppb	108.896 %
Concentration RSD	3.4 %	2.2 %	1.2 %	1.5 %	2.2 %	1.0 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	81	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG2004404-3d10 MCP-6020SL-10	Rack	1		
Analysis started at:	12/3/2024 2:06:37 PM	Vial	53		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	114.779 %	129.462 %	5.034 ppb	1,292.033 ppb	909.248 ppb	175.601 ppb	932.334 ppb	866.457 ppb	108.873 %
Concentration per Run 1	110.272 %	134.849 %	5.097 ppb	1,225.196 ppb	861.079 ppb	169.993 ppb	902.585 ppb	812.601 ppb	106.307 %
Concentration per Run 2	115.539 %	129.125 %	5.029 ppb	1,298.338 ppb	917.699 ppb	174.231 ppb	910.978 ppb	907.035 ppb	111.080 %
Concentration per Run 3	118.527 %	124.411 %	4.977 ppb	1,352.565 ppb	948.967 ppb	182.578 ppb	983.439 ppb	879.734 ppb	109.233 %
Concentration RSD	3.6 %	4.0 %	1.2 %	4.9 %	4.9 %	3.6 %	4.8 %	5.6 %	2.2 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	43.824 ppb	18.222 ppb	48.802 ppb	95.028 ppb	49.421 ppb	48.563 ppb	24.642 ppb	48.813 ppb	106.423 %
Concentration per Run 1	42.058 ppb	17.768 ppb	47.769 ppb	92.582 ppb	49.205 ppb	48.436 ppb	25.554 ppb	48.167 ppb	106.878 %
Concentration per Run 2	44.094 ppb	18.464 ppb	49.081 ppb	104.275 ppb	50.511 ppb	48.611 ppb	24.447 ppb	50.073 ppb	105.814 %
Concentration per Run 3	45.320 ppb	18.434 ppb	49.557 ppb	88.227 ppb	48.547 ppb	48.642 ppb	23.924 ppb	48.199 ppb	106.576 %
Concentration RSD	3.8 %	2.2 %	1.9 %	8.7 %	2.0 %	0.2 %	3.4 %	2.2 %	0.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	11.925 ppb	13.449 ppb	95.558 ppb	95.718 ppb	109.363 %	5.025 ppb	5.018 ppb	109.070 %	40.061 ppb
Concentration per Run 1	11.948 ppb	13.709 ppb	94.325 ppb	92.744 ppb	112.875 %	4.831 ppb	4.817 ppb	113.403 %	38.063 ppb
Concentration per Run 2	12.331 ppb	11.939 ppb	96.608 ppb	97.752 ppb	107.080 %	5.072 ppb	5.068 ppb	108.870 %	40.172 ppb
Concentration per Run 3	11.497 ppb	14.700 ppb	95.741 ppb	96.659 ppb	108.133 %	5.171 ppb	5.170 ppb	104.937 %	41.950 ppb
Concentration RSD	3.5 %	10.4 %	1.2 %	2.8 %	2.8 %	3.5 %	3.6 %	3.9 %	4.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	192.646 ppb	110.226 %	106.938 %	11.438 ppb	50.492 ppb	108.593 %
Concentration per Run 1	187.377 ppb	113.752 %	108.375 %	11.152 ppb	49.775 ppb	110.243 %
Concentration per Run 2	192.454 ppb	107.751 %	107.069 %	11.569 ppb	51.453 ppb	107.520 %
Concentration per Run 3	198.108 ppb	109.174 %	105.370 %	11.593 ppb	50.248 ppb	108.015 %
Concentration RSD	2.8 %	2.8 %	1.4 %	2.2 %	1.7 %	1.3 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	82	User name	ALPHALAB\a2-icpmsq2	Comment	ng
Analysis label:	L2469297-01d5 MCP-6020SL-10	Rack	1		
Analysis started at:	12/3/2024 2:11:05 PM	Vial	46		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	95.565 %	113.468 %	0.051 ppb	262,288.313 ppb	12,737.116 ppb	19.063 ppb	2,729.110 ppb	31,220.743 ppb	99.784 %
Concentration per Run 1	91.985 %	113.973 %	0.052 ppb	260,301.922 ppb	12,704.928 ppb	20.389 ppb	2,678.718 ppb	30,572.424 ppb	96.684 %
Concentration per Run 2	96.455 %	103.199 %	0.056 ppb	280,896.015 ppb	13,545.645 ppb	20.297 ppb	2,889.385 ppb	32,479.480 ppb	101.320 %
Concentration per Run 3	98.257 %	123.233 %	0.044 ppb	245,667.002 ppb	11,960.776 ppb	16.505 ppb	2,619.227 ppb	30,610.326 ppb	101.348 %
Concentration RSD	3.4 %	8.8 %	12.1 %	6.7 %	6.2 %	11.6 %	5.2 %	3.5 %	2.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.532 ppb	0.452 ppb	4,305.803 ppb	53,249.454 ppb	2.943 ppb	1.163 ppb	0.274 ppb	5.754 ppb	103.688 %
Concentration per Run 1	0.584 ppb	0.384 ppb	4,243.722 ppb	52,387.616 ppb	2.840 ppb	1.214 ppb	0.322 ppb	5.863 ppb	103.798 %
Concentration per Run 2	0.529 ppb	0.571 ppb	4,490.917 ppb	55,628.557 ppb	3.067 ppb	1.272 ppb	0.223 ppb	5.814 ppb	102.106 %
Concentration per Run 3	0.482 ppb	0.402 ppb	4,182.771 ppb	51,732.189 ppb	2.922 ppb	1.002 ppb	0.277 ppb	5.585 ppb	105.161 %
Concentration RSD	9.6 %	22.7 %	3.8 %	3.9 %	3.9 %	12.2 %	18.1 %	2.6 %	1.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.308 ppb	0.543 ppb	290.701 ppb	0.971 ppb	101.876 %	0.001 ppb	0.013 ppb	105.065 %	1.392 ppb
Concentration per Run 1	0.306 ppb	0.483 ppb	288.431 ppb	0.914 ppb	105.104 %	-0.001 ppb	0.010 ppb	108.168 %	1.221 ppb
Concentration per Run 2	0.357 ppb	0.842 ppb	294.158 ppb	0.911 ppb	99.161 %	0.001 ppb	0.022 ppb	102.988 %	1.444 ppb
Concentration per Run 3	0.261 ppb	0.304 ppb	289.515 ppb	1.088 ppb	101.363 %	0.001 ppb	0.007 ppb	104.038 %	1.510 ppb
Concentration RSD	15.6 %	50.4 %	1.0 %	10.5 %	2.9 %	202.8 %	58.7 %	2.6 %	10.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	590.919 ppb	108.192 %	107.327 %	0.021 ppb	0.085 ppb	100.466 %
Concentration per Run 1	574.236 ppb	111.709 %	108.266 %	0.019 ppb	0.087 ppb	102.559 %
Concentration per Run 2	595.804 ppb	105.626 %	106.575 %	0.027 ppb	0.090 ppb	100.203 %
Concentration per Run 3	602.716 ppb	107.240 %	107.139 %	0.018 ppb	0.077 ppb	98.636 %
Concentration RSD	2.5 %	2.9 %	0.8 %	22.3 %	8.0 %	2.0 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	83	User name	ALPHALAB\a2-icpmsq2	Comment	ng
Analysis label:	L2469297-02 MCP-6020SL-10	Rack	1		
Analysis started at:	12/3/2024 2:15:34 PM	Vial	47		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	107.239 %	119.473 %	0.153 ppb	158,770.819 ppb	1,167.201 ppb	1,917.651 ppb	2,604.533 ppb	3,522.550 ppb	103.404 %
Concentration per Run 1	103.700 %	121.381 %	0.160 ppb	156,001.447 ppb	1,141.175 ppb	1,842.772 ppb	2,452.845 ppb	3,405.931 ppb	100.754 %
Concentration per Run 2	108.198 %	119.361 %	0.146 ppb	156,217.482 ppb	1,150.585 ppb	1,919.118 ppb	2,611.065 ppb	3,549.758 ppb	104.315 %
Concentration per Run 3	109.819 %	117.677 %	0.153 ppb	164,093.528 ppb	1,209.842 ppb	1,991.064 ppb	2,749.690 ppb	3,611.960 ppb	105.141 %
Concentration RSD	3.0 %	1.6 %	4.6 %	2.9 %	3.2 %	3.9 %	5.7 %	3.0 %	2.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	5.622 ppb	7.497 ppb	419.777 ppb	2,233.456 ppb	2.657 ppb	13.380 ppb	26.053 ppb	20.104 ppb	99.231 %
Concentration per Run 1	5.250 ppb	7.150 ppb	413.250 ppb	2,215.950 ppb	2.715 ppb	13.253 ppb	24.931 ppb	19.832 ppb	99.869 %
Concentration per Run 2	5.953 ppb	7.664 ppb	419.792 ppb	2,215.413 ppb	2.727 ppb	13.011 ppb	26.406 ppb	19.789 ppb	98.119 %
Concentration per Run 3	5.663 ppb	7.677 ppb	426.289 ppb	2,269.004 ppb	2.530 ppb	13.876 ppb	26.821 ppb	20.691 ppb	99.705 %
Concentration RSD	6.3 %	4.0 %	1.6 %	1.4 %	4.2 %	3.3 %	3.8 %	2.5 %	1.0 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	3.727 ppb	3.994 ppb	29.539 ppb	8.858 ppb	103.097 %	0.022 ppb	0.036 ppb	104.182 %	1.036 ppb
Concentration per Run 1	3.555 ppb	3.536 ppb	28.761 ppb	8.252 ppb	107.617 %	0.021 ppb	0.034 ppb	109.506 %	1.004 ppb
Concentration per Run 2	3.889 ppb	3.559 ppb	29.779 ppb	8.766 ppb	101.297 %	0.018 ppb	0.029 ppb	101.389 %	1.014 ppb
Concentration per Run 3	3.736 ppb	4.887 ppb	30.077 ppb	9.554 ppb	100.377 %	0.027 ppb	0.044 ppb	101.652 %	1.091 ppb
Concentration RSD	4.5 %	19.4 %	2.3 %	7.4 %	3.8 %	20.1 %	20.9 %	4.4 %	4.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	45.962 ppb	108.618 %	108.131 %	0.041 ppb	5.277 ppb	104.441 %
Concentration per Run 1	43.665 ppb	109.312 %	107.497 %	0.039 ppb	5.162 ppb	107.020 %
Concentration per Run 2	45.741 ppb	108.761 %	109.351 %	0.044 ppb	5.307 ppb	104.018 %
Concentration per Run 3	48.479 ppb	107.783 %	107.544 %	0.041 ppb	5.362 ppb	102.283 %
Concentration RSD	5.3 %	0.7 %	1.0 %	5.7 %	2.0 %	2.3 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	84	User name	ALPHALAB\a2-icpmsq2	Comment	ng
Analysis label:	L2469297-03 MCP-6020SL-10	Rack	1		
Analysis started at:	12/3/2024 2:20:03 PM	Vial	48		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	106.634 %	113.019 %	0.042 ppb	95,399.357 ppb	1,208.509 ppb	655.969 ppb	1,699.731 ppb	4,803.282 ppb	102.586 %
Concentration per Run 1	102.268 %	113.300 %	0.043 ppb	95,502.456 ppb	1,183.711 ppb	639.846 ppb	1,677.611 ppb	4,854.386 ppb	98.690 %
Concentration per Run 2	107.933 %	108.923 %	0.041 ppb	97,087.707 ppb	1,236.388 ppb	668.369 ppb	1,802.081 ppb	4,960.612 ppb	104.240 %
Concentration per Run 3	109.700 %	116.835 %	0.044 ppb	93,607.909 ppb	1,205.428 ppb	659.693 ppb	1,619.502 ppb	4,594.848 ppb	104.828 %
Concentration RSD	3.6 %	3.5 %	4.1 %	1.8 %	2.2 %	2.2 %	5.5 %	3.9 %	3.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	5.794 ppb	35.278 ppb	38.395 ppb	576.055 ppb	0.450 ppb	1.581 ppb	6.351 ppb	15.282 ppb	99.178 %
Concentration per Run 1	5.079 ppb	34.301 ppb	38.752 ppb	559.118 ppb	0.525 ppb	1.572 ppb	6.229 ppb	15.443 ppb	100.664 %
Concentration per Run 2	6.243 ppb	37.012 ppb	39.386 ppb	590.932 ppb	0.439 ppb	1.364 ppb	6.289 ppb	15.340 ppb	96.735 %
Concentration per Run 3	6.062 ppb	34.522 ppb	37.046 ppb	578.115 ppb	0.387 ppb	1.809 ppb	6.534 ppb	15.064 ppb	100.135 %
Concentration RSD	10.8 %	4.3 %	3.2 %	2.8 %	15.4 %	14.1 %	2.5 %	1.3 %	2.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	2.440 ppb	0.783 ppb	30.784 ppb	13.077 ppb	102.913 %	0.016 ppb	0.017 ppb	105.017 %	0.941 ppb
Concentration per Run 1	2.506 ppb	0.501 ppb	30.087 ppb	12.816 ppb	105.654 %	0.012 ppb	0.010 ppb	107.846 %	0.852 ppb
Concentration per Run 2	2.422 ppb	0.527 ppb	31.031 ppb	13.447 ppb	102.221 %	0.017 ppb	0.029 ppb	102.409 %	0.987 ppb
Concentration per Run 3	2.393 ppb	1.320 ppb	31.234 ppb	12.968 ppb	100.864 %	0.017 ppb	0.011 ppb	104.794 %	0.983 ppb
Concentration RSD	2.4 %	59.5 %	2.0 %	2.5 %	2.4 %	18.0 %	63.7 %	2.6 %	8.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	13.015 ppb	106.876 %	103.702 %	0.020 ppb	1.198 ppb	101.253 %
Concentration per Run 1	12.978 ppb	108.037 %	105.742 %	0.017 ppb	1.155 ppb	103.014 %
Concentration per Run 2	12.881 ppb	107.300 %	103.649 %	0.024 ppb	1.232 ppb	98.238 %
Concentration per Run 3	13.186 ppb	105.293 %	101.715 %	0.019 ppb	1.206 ppb	102.506 %
Concentration RSD	1.2 %	1.3 %	1.9 %	18.0 %	3.3 %	2.6 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	85	User name	ALPHALAB\a2-icpmsq2	Comment	ng
Analysis label:	L2469297-04 MCP-6020SL-10	Rack	1		
Analysis started at:	12/3/2024 2:24:33 PM	Vial	49		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	105.938 %	119.192 %	0.021 ppb	177,643.475 ppb	12,703.940 ppb	199.180 ppb	3,574.213 ppb	40,299.648 ppb	109.042 %
Concentration per Run 1	103.394 %	119.361 %	0.022 ppb	174,194.783 ppb	12,309.737 ppb	200.115 ppb	3,464.115 ppb	39,217.927 ppb	106.149 %
Concentration per Run 2	106.654 %	119.697 %	0.021 ppb	176,682.784 ppb	12,595.233 ppb	188.557 ppb	3,522.036 ppb	39,545.910 ppb	111.896 %
Concentration per Run 3	107.764 %	118.519 %	0.020 ppb	182,052.859 ppb	13,206.849 ppb	208.869 ppb	3,736.487 ppb	42,135.106 ppb	109.083 %
Concentration RSD	2.1 %	0.5 %	5.6 %	2.3 %	3.6 %	5.1 %	4.0 %	4.0 %	2.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.513 ppb	0.732 ppb	365.058 ppb	230.628 ppb	0.548 ppb	2.049 ppb	2.105 ppb	14.100 ppb	99.638 %
Concentration per Run 1	0.495 ppb	0.694 ppb	363.699 ppb	233.409 ppb	0.556 ppb	2.044 ppb	2.131 ppb	14.116 ppb	98.478 %
Concentration per Run 2	0.526 ppb	0.733 ppb	374.307 ppb	242.858 ppb	0.566 ppb	1.963 ppb	2.022 ppb	14.110 ppb	100.533 %
Concentration per Run 3	0.519 ppb	0.768 ppb	357.168 ppb	215.617 ppb	0.522 ppb	2.139 ppb	2.162 ppb	14.075 ppb	99.902 %
Concentration RSD	3.1 %	5.1 %	2.4 %	6.0 %	4.2 %	4.3 %	3.5 %	0.2 %	1.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.373 ppb	0.482 ppb	259.054 ppb	26.055 ppb	103.393 %	0.002 ppb	0.023 ppb	103.437 %	0.208 ppb
Concentration per Run 1	0.361 ppb	0.585 ppb	257.476 ppb	24.651 ppb	104.138 %	0.004 ppb	0.028 ppb	108.967 %	0.151 ppb
Concentration per Run 2	0.406 ppb	0.615 ppb	258.609 ppb	25.986 ppb	102.859 %	0.001 ppb	0.022 ppb	99.696 %	0.186 ppb
Concentration per Run 3	0.352 ppb	0.246 ppb	261.079 ppb	27.529 ppb	103.184 %	0.001 ppb	0.018 ppb	101.648 %	0.288 ppb
Concentration RSD	7.8 %	42.4 %	0.7 %	5.5 %	0.6 %	72.9 %	21.1 %	4.7 %	34.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	63.194 ppb	109.079 %	106.300 %	0.031 ppb	0.355 ppb	100.531 %
Concentration per Run 1	60.156 ppb	109.129 %	104.492 %	0.025 ppb	0.332 ppb	104.339 %
Concentration per Run 2	62.531 ppb	108.697 %	106.549 %	0.038 ppb	0.368 ppb	98.880 %
Concentration per Run 3	66.894 ppb	109.412 %	107.859 %	0.029 ppb	0.367 ppb	98.373 %
Concentration RSD	5.4 %	0.3 %	1.6 %	21.0 %	5.8 %	3.3 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	86	User name	ALPHALAB\a2-icpmsq2	Comment	ng
Analysis label:	L2469297-05 MCP-6020SL-10	Rack	1		
Analysis started at:	12/3/2024 2:29:01 PM	Vial	50		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	91.437 %	113.524 %	0.014 ppb	1,245,482.649 ppb	9,911.556 ppb	89.297 ppb	11,064.752 ppb	39,351.478 ppb	84.984 %
Concentration per Run 1	89.395 %	120.034 %	0.013 ppb	1,169,546.179 ppb	9,070.247 ppb	81.109 ppb	10,209.708 ppb	36,804.542 ppb	84.762 %
Concentration per Run 2	93.113 %	109.428 %	0.014 ppb	1,267,191.456 ppb	10,166.027 ppb	92.951 ppb	11,657.719 ppb	40,991.680 ppb	86.281 %
Concentration per Run 3	91.803 %	111.111 %	0.017 ppb	1,299,710.314 ppb	10,498.394 ppb	93.833 ppb	11,326.828 ppb	40,258.212 ppb	83.907 %
Concentration RSD	2.1 %	5.0 %	15.1 %	5.4 %	7.5 %	8.0 %	6.9 %	5.7 %	1.4 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.170 ppb	0.467 ppb	3,026.198 ppb	140.553 ppb	4.206 ppb	5.455 ppb	5.843 ppb	18.181 ppb	99.844 %
Concentration per Run 1	0.157 ppb	0.458 ppb	3,006.584 ppb	140.839 ppb	4.243 ppb	5.643 ppb	5.650 ppb	17.941 ppb	94.951 %
Concentration per Run 2	0.256 ppb	0.480 ppb	3,019.473 ppb	141.767 ppb	4.280 ppb	5.073 ppb	5.990 ppb	18.285 ppb	102.271 %
Concentration per Run 3	0.097 ppb	0.462 ppb	3,052.537 ppb	139.053 ppb	4.096 ppb	5.650 ppb	5.890 ppb	18.317 ppb	102.311 %
Concentration RSD	47.1 %	2.5 %	0.8 %	1.0 %	2.3 %	6.1 %	3.0 %	1.1 %	4.2 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.404 ppb	0.387 ppb	448.409 ppb	11.096 ppb	98.722 %	0.132 ppb	0.507 ppb	103.114 %	0.186 ppb
Concentration per Run 1	0.323 ppb	0.441 ppb	444.910 ppb	10.971 ppb	100.846 %	0.139 ppb	0.533 ppb	104.503 %	0.164 ppb
Concentration per Run 2	0.510 ppb	0.358 ppb	445.652 ppb	11.088 ppb	98.182 %	0.133 ppb	0.463 ppb	101.861 %	0.196 ppb
Concentration per Run 3	0.380 ppb	0.363 ppb	454.664 ppb	11.228 ppb	97.138 %	0.124 ppb	0.527 ppb	102.979 %	0.199 ppb
Concentration RSD	23.7 %	12.0 %	1.2 %	1.2 %	1.9 %	5.9 %	7.7 %	1.3 %	10.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	236.210 ppb	108.539 %	108.513 %	0.053 ppb	0.184 ppb	94.761 %
Concentration per Run 1	229.661 ppb	108.109 %	107.705 %	0.052 ppb	0.183 ppb	93.041 %
Concentration per Run 2	238.275 ppb	108.787 %	109.787 %	0.054 ppb	0.182 ppb	94.979 %
Concentration per Run 3	240.696 ppb	108.720 %	108.048 %	0.054 ppb	0.187 ppb	96.264 %
Concentration RSD	2.5 %	0.3 %	1.0 %	2.0 %	1.2 %	1.7 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	87	User name	ALPHALAB\a2-icpmsq2	Comment	ng
Analysis label:	L2469297-06 MCP-6020SL-10	Rack	1		
Analysis started at:	12/3/2024 2:33:29 PM	Vial	51		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	116.131 %	123.064 %	0.029 ppb	80,490.670 ppb	514.058 ppb	85.081 ppb	1,611.620 ppb	1,929.628 ppb	107.881 %
Concentration per Run 1	113.765 %	119.866 %	0.028 ppb	79,852.296 ppb	491.902 ppb	80.759 ppb	1,620.403 ppb	1,864.030 ppb	105.862 %
Concentration per Run 2	117.112 %	125.421 %	0.031 ppb	78,406.207 ppb	518.177 ppb	86.312 ppb	1,560.358 ppb	1,953.811 ppb	109.176 %
Concentration per Run 3	117.517 %	123.906 %	0.029 ppb	83,213.508 ppb	532.095 ppb	88.173 ppb	1,654.099 ppb	1,971.043 ppb	108.604 %
Concentration RSD	1.8 %	2.3 %	5.8 %	3.1 %	4.0 %	4.5 %	2.9 %	3.0 %	1.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	4.785 ppb	0.563 ppb	244.079 ppb	651.032 ppb	0.738 ppb	1.718 ppb	1.978 ppb	16.715 ppb	105.228 %
Concentration per Run 1	4.586 ppb	0.568 ppb	246.926 ppb	660.153 ppb	0.809 ppb	1.652 ppb	1.912 ppb	16.940 ppb	105.739 %
Concentration per Run 2	4.784 ppb	0.540 ppb	241.474 ppb	632.343 ppb	0.744 ppb	1.649 ppb	1.875 ppb	16.326 ppb	105.401 %
Concentration per Run 3	4.983 ppb	0.581 ppb	243.837 ppb	660.600 ppb	0.659 ppb	1.852 ppb	2.146 ppb	16.878 ppb	104.545 %
Concentration RSD	4.1 %	3.7 %	1.1 %	2.5 %	10.3 %	6.8 %	7.4 %	2.0 %	0.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	5.578 ppb	0.915 ppb	17.302 ppb	11.678 ppb	108.249 %	0.002 ppb	0.010 ppb	109.485 %	0.312 ppb
Concentration per Run 1	5.355 ppb	0.924 ppb	16.944 ppb	10.698 ppb	111.109 %	0.000 ppb	0.007 ppb	110.955 %	0.295 ppb
Concentration per Run 2	5.588 ppb	1.254 ppb	17.255 ppb	11.876 ppb	108.558 %	0.003 ppb	0.021 ppb	107.325 %	0.317 ppb
Concentration per Run 3	5.791 ppb	0.568 ppb	17.705 ppb	12.459 ppb	105.079 %	0.004 ppb	0.003 ppb	110.176 %	0.323 ppb
Concentration RSD	3.9 %	37.5 %	2.2 %	7.7 %	2.8 %	88.3 %	89.3 %	1.7 %	4.8 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	22.927 ppb	113.308 %	110.441 %	0.013 ppb	0.225 ppb	105.805 %
Concentration per Run 1	22.106 ppb	112.554 %	112.066 %	0.008 ppb	0.212 ppb	105.583 %
Concentration per Run 2	23.176 ppb	114.427 %	111.961 %	0.014 ppb	0.234 ppb	106.025 %
Concentration per Run 3	23.498 ppb	112.943 %	107.295 %	0.015 ppb	0.229 ppb	105.806 %
Concentration RSD	3.2 %	0.9 %	2.5 %	31.6 %	5.1 %	0.2 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	88	User name	ALPHALAB\a2-icpmsq2	Comment	CCV/MCCV
Analysis label:	CCV	Rack	0		
Analysis started at:	12/3/2024 2:37:57 PM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	118.989 %	125.702 %	56.919 ppb	6,404.407 ppb	5,601.524 ppb	54.818 ppb	5,578.061 ppb	5,587.954 ppb	113.278 %
Concentration per Run 1	113.423 %	130.304 %	58.003 ppb	6,319.185 ppb	5,464.085 ppb	53.254 ppb	5,536.231 ppb	5,377.043 ppb	111.923 %
Concentration per Run 2	120.504 %	122.391 %	56.598 ppb	6,474.879 ppb	5,733.529 ppb	55.992 ppb	5,338.441 ppb	5,679.268 ppb	115.471 %
Concentration per Run 3	123.038 %	124.411 %	56.156 ppb	6,419.158 ppb	5,606.957 ppb	55.208 ppb	5,859.513 ppb	5,707.549 ppb	112.440 %
Recovery Percentage 1			94.865 %	106.740 %	93.359 %	91.363 %	92.968 %	93.133 %	
Concentration RSD	4.2 %	3.3 %	1.7 %	1.2 %	2.4 %	2.6 %	4.7 %	3.3 %	1.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	55.262 ppb	56.600 ppb	58.041 ppb	5,890.819 ppb	59.091 ppb	60.603 ppb	60.565 ppb	59.819 ppb	105.005 %
Concentration per Run 1	52.748 ppb	54.271 ppb	56.416 ppb	5,889.070 ppb	60.073 ppb	61.380 ppb	59.009 ppb	60.523 ppb	103.858 %
Concentration per Run 2	55.167 ppb	57.088 ppb	58.892 ppb	6,064.146 ppb	60.470 ppb	61.174 ppb	60.805 ppb	60.819 ppb	106.151 %
Concentration per Run 3	57.872 ppb	58.442 ppb	58.814 ppb	5,719.239 ppb	56.728 ppb	59.256 ppb	61.880 ppb	58.115 ppb	105.006 %
Recovery Percentage 1	92.104 %	94.333 %	96.734 %	98.180 %	98.484 %	101.005 %	100.941 %	99.699 %	
Concentration RSD	4.6 %	3.8 %	2.4 %	2.9 %	3.5 %	1.9 %	2.4 %	2.5 %	1.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	60.070 ppb	59.767 ppb	58.456 ppb	58.469 ppb	110.780 %	56.871 ppb	57.056 ppb	111.702 %	54.826 ppb
Concentration per Run 1	59.554 ppb	64.094 ppb	57.655 ppb	56.565 ppb	115.478 %	55.435 ppb	56.184 ppb	112.778 %	54.938 ppb
Concentration per Run 2	59.603 ppb	57.940 ppb	58.358 ppb	59.067 ppb	109.557 %	56.901 ppb	56.897 ppb	112.626 %	54.572 ppb
Concentration per Run 3	61.054 ppb	57.266 ppb	59.356 ppb	59.774 ppb	107.305 %	58.278 ppb	58.087 ppb	109.701 %	54.967 ppb
Recovery Percentage 1	100.117 %	99.611 %	97.427 %	97.448 %		94.785 %	95.094 %		91.376 %
Concentration RSD	1.4 %	6.3 %	1.5 %	2.9 %	3.8 %	2.5 %	1.7 %	1.6 %	0.4 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	55.510 ppb	112.569 %	110.460 %	56.444 ppb	56.976 ppb	107.887 %
Concentration per Run 1	54.918 ppb	115.271 %	113.329 %	54.490 ppb	55.489 ppb	110.117 %
Concentration per Run 2	55.889 ppb	110.015 %	109.028 %	55.988 ppb	57.425 ppb	108.330 %
Concentration per Run 3	55.723 ppb	112.421 %	109.023 %	58.854 ppb	58.015 ppb	105.213 %
Recovery Percentage 1	92.517 %			94.073 %	94.960 %	
Concentration RSD	0.9 %	2.3 %	2.2 %	3.9 %	2.3 %	2.3 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	89	User name	ALPHALAB\a2-icpmsq2	Comment	CCB
Analysis label:	CCB	Rack	0		
Analysis started at:	12/3/2024 2:42:28 PM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	118.973 %	126.824 %	0.007 ppb	654.026 ppb	0.196 ppb	-0.451 ppb	49.763 ppb	-4.203 ppb	105.078 %
Concentration per Run 1	116.977 %	122.559 %	0.008 ppb	686.756 ppb	-0.192 ppb	-0.490 ppb	52.797 ppb	-6.840 ppb	104.069 %
Concentration per Run 2	120.749 %	128.789 %	0.007 ppb	642.959 ppb	-0.042 ppb	-0.578 ppb	52.507 ppb	-4.633 ppb	106.578 %
Concentration per Run 3	119.192 %	129.125 %	0.007 ppb	632.363 ppb	0.821 ppb	-0.286 ppb	43.985 ppb	-1.136 ppb	104.587 %
Recovery Percentage 1			1.429 %	130.805 %	0.279 %	-4.513 %	49.763 %	-4.203 %	
Concentration RSD	1.6 %	2.9 %	11.1 %	4.4 %	279.4 %	33.2 %	10.1 %	68.4 %	1.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.456 ppb	-0.043 ppb	0.125 ppb	4.008 ppb	-0.004 ppb	0.044 ppb	0.050 ppb	0.203 ppb	102.622 %
Concentration per Run 1	-0.391 ppb	-0.033 ppb	0.130 ppb	4.389 ppb	-0.007 ppb	0.050 ppb	0.062 ppb	0.159 ppb	103.834 %
Concentration per Run 2	-0.522 ppb	-0.037 ppb	0.118 ppb	4.521 ppb	-0.004 ppb	0.078 ppb	0.066 ppb	0.172 ppb	98.663 %
Concentration per Run 3	-0.454 ppb	-0.058 ppb	0.125 ppb	3.113 ppb	-0.001 ppb	0.003 ppb	0.023 ppb	0.277 ppb	105.369 %
Recovery Percentage 1	-9.111 %	-4.257 %	12.452 %	8.015 %	-0.766 %	2.176 %	5.036 %	4.059 %	
Concentration RSD	14.4 %	31.5 %	5.0 %	19.4 %	78.2 %	87.1 %	47.4 %	31.9 %	3.4 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.114 ppb	0.154 ppb	0.005 ppb	0.331 ppb	109.601 %	0.007 ppb	0.000 ppb	107.719 %	0.086 ppb
Concentration per Run 1	0.083 ppb	0.152 ppb	0.014 ppb	0.215 ppb	111.529 %	0.004 ppb	0.000 ppb	110.457 %	0.067 ppb
Concentration per Run 2	0.142 ppb	0.190 ppb	0.005 ppb	0.336 ppb	109.360 %	0.008 ppb	0.000 ppb	105.620 %	0.080 ppb
Concentration per Run 3	0.118 ppb	0.120 ppb	-0.004 ppb	0.442 ppb	107.914 %	0.008 ppb	0.000 ppb	107.081 %	0.112 ppb
Recovery Percentage 1	22.893 %	3.081 %	0.047 %	16.548 %		1.681 %	0.000 %		2.155 %
Concentration RSD	25.8 %	22.7 %	187.1 %	34.3 %	1.7 %	36.2 %	N/A	2.3 %	26.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.012 ppb	108.753 %	108.277 %	0.207 ppb	0.015 ppb	107.168 %
Concentration per Run 1	0.007 ppb	110.221 %	109.213 %	0.213 ppb	0.020 ppb	107.195 %
Concentration per Run 2	-0.006 ppb	109.435 %	109.173 %	0.228 ppb	0.013 ppb	107.688 %
Concentration per Run 3	0.035 ppb	106.602 %	106.445 %	0.180 ppb	0.011 ppb	106.620 %
Recovery Percentage 1	2.403 %			20.699 %	1.453 %	
Concentration RSD	172.2 %	1.8 %	1.5 %	11.9 %	33.8 %	0.5 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	90	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	CCB	Rack	0		
Analysis started at:	12/3/2024 2:57:24 PM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	115.831 %	115.264 %	0.013 ppb	216.903 ppb	-0.030 ppb	-0.387 ppb	18.421 ppb	0.875 ppb	106.342 %
Concentration per Run 1	108.677 %	118.014 %	0.019 ppb	172.715 ppb	-0.943 ppb	-0.464 ppb	12.980 ppb	14.924 ppb	104.117 %
Concentration per Run 2	117.132 %	113.805 %	0.009 ppb	222.947 ppb	0.427 ppb	-0.464 ppb	15.477 ppb	-9.322 ppb	108.198 %
Concentration per Run 3	121.684 %	113.973 %	0.010 ppb	255.046 ppb	0.425 ppb	-0.234 ppb	26.807 ppb	-2.976 ppb	106.712 %
Recovery Percentage 1			2.584 %	43.381 %	-0.044 %	-3.873 %	18.421 %	0.875 %	
Concentration RSD	5.7 %	2.1 %	43.6 %	19.1 %	2,592.9 %	34.2 %	40.0 %	1,436.7 %	1.9 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.260 ppb	-0.054 ppb	0.087 ppb	0.448 ppb	-0.002 ppb	0.113 ppb	0.018 ppb	0.151 ppb	147.676 %
Concentration per Run 1	-0.351 ppb	-0.048 ppb	0.017 ppb	0.305 ppb	-0.004 ppb	0.054 ppb	0.007 ppb	0.257 ppb	154.197 %
Concentration per Run 2	-0.296 ppb	-0.081 ppb	0.129 ppb	1.232 ppb	-0.001 ppb	0.137 ppb	0.002 ppb	0.143 ppb	145.144 %
Concentration per Run 3	-0.133 ppb	-0.034 ppb	0.113 ppb	-0.194 ppb	-0.001 ppb	0.149 ppb	0.046 ppb	0.052 ppb	143.687 %
Recovery Percentage 1	-5.192 %	-5.434 %	8.650 %	0.895 %	-0.344 %	5.674 %	1.824 %	3.010 %	
Concentration RSD	43.7 %	44.9 %	70.4 %	161.6 %	110.4 %	45.4 %	132.6 %	68.3 %	3.9 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.067 ppb	0.120 ppb	0.002 ppb	-0.028 ppb	108.265 %	-0.001 ppb	0.001 ppb	107.468 %	0.049 ppb
Concentration per Run 1	0.047 ppb	-0.066 ppb	0.003 ppb	-0.067 ppb	110.934 %	-0.001 ppb	0.000 ppb	110.408 %	0.051 ppb
Concentration per Run 2	0.020 ppb	0.270 ppb	-0.002 ppb	-0.081 ppb	106.996 %	0.001 ppb	0.000 ppb	108.622 %	0.051 ppb
Concentration per Run 3	0.135 ppb	0.157 ppb	0.005 ppb	0.063 ppb	106.866 %	-0.003 ppb	0.004 ppb	103.372 %	0.045 ppb
Recovery Percentage 1	13.434 %	2.403 %	0.019 %	-1.420 %		-0.224 %	0.589 %		1.223 %
Concentration RSD	89.6 %	142.0 %	198.8 %	279.4 %	2.1 %	224.0 %	173.2 %	3.4 %	7.0 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.008 ppb	109.534 %	108.118 %	0.014 ppb	0.004 ppb	106.522 %
Concentration per Run 1	-0.006 ppb	114.975 %	108.793 %	0.009 ppb	0.004 ppb	109.777 %
Concentration per Run 2	-0.006 ppb	107.186 %	107.184 %	0.021 ppb	0.005 ppb	106.243 %
Concentration per Run 3	0.036 ppb	106.442 %	108.379 %	0.012 ppb	0.002 ppb	103.544 %
Recovery Percentage 1	1.579 %			1.422 %	0.371 %	
Concentration RSD	305.4 %	4.3 %	0.8 %	45.0 %	47.3 %	2.9 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	91	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	xWG2001986-1 6020TL	Rack	1		
Analysis started at:	12/3/2024 3:08:01 PM	Vial	54		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	117.069 %	127.049 %	0.008 ppb	344.191 ppb	0.787 ppb	1.407 ppb	12.068 ppb	0.482 ppb	112.395 %
Concentration per Run 1	114.157 %	140.068 %	0.007 ppb	272.129 ppb	0.666 ppb	0.973 ppb	-0.928 ppb	6.708 ppb	110.282 %
Concentration per Run 2	117.036 %	118.182 %	0.011 ppb	371.657 ppb	1.334 ppb	2.239 ppb	14.860 ppb	-2.704 ppb	112.798 %
Concentration per Run 3	120.014 %	122.896 %	0.008 ppb	388.788 ppb	0.362 ppb	1.010 ppb	22.273 ppb	-2.557 ppb	114.104 %
Concentration RSD	2.5 %	9.1 %	22.5 %	18.3 %	63.1 %	51.2 %	98.2 %	1,118.2 %	1.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.467 ppb	-0.032 ppb	0.314 ppb	4.365 ppb	-0.004 ppb	-0.015 ppb	0.116 ppb	0.545 ppb	107.249 %
Concentration per Run 1	-0.531 ppb	-0.007 ppb	0.371 ppb	4.663 ppb	-0.010 ppb	-0.046 ppb	0.150 ppb	0.506 ppb	111.499 %
Concentration per Run 2	-0.480 ppb	-0.035 ppb	0.205 ppb	4.580 ppb	-0.004 ppb	-0.029 ppb	0.111 ppb	0.480 ppb	107.547 %
Concentration per Run 3	-0.389 ppb	-0.055 ppb	0.367 ppb	3.851 ppb	0.002 ppb	0.029 ppb	0.086 ppb	0.649 ppb	102.702 %
Concentration RSD	15.4 %	74.7 %	30.1 %	10.2 %	164.1 %	257.7 %	28.2 %	16.7 %	4.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.019 ppb	0.102 ppb	0.016 ppb	-0.031 ppb	114.033 %	-0.001 ppb	0.001 ppb	113.535 %	0.027 ppb
Concentration per Run 1	0.016 ppb	0.027 ppb	0.016 ppb	-0.029 ppb	122.485 %	0.002 ppb	0.000 ppb	121.926 %	0.022 ppb
Concentration per Run 2	0.019 ppb	0.269 ppb	0.017 ppb	-0.042 ppb	111.691 %	-0.002 ppb	0.000 ppb	110.646 %	0.024 ppb
Concentration per Run 3	0.023 ppb	0.010 ppb	0.016 ppb	-0.021 ppb	107.922 %	-0.002 ppb	0.003 ppb	108.031 %	0.035 ppb
Concentration RSD	18.8 %	141.6 %	6.0 %	35.6 %	6.6 %	261.5 %	173.2 %	6.5 %	25.8 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.711 ppb	112.841 %	111.272 %	0.013 ppb	0.003 ppb	115.518 %
Concentration per Run 1	0.803 ppb	119.453 %	117.267 %	0.009 ppb	0.002 ppb	122.832 %
Concentration per Run 2	0.514 ppb	110.542 %	110.315 %	0.013 ppb	0.003 ppb	113.688 %
Concentration per Run 3	0.817 ppb	108.529 %	106.235 %	0.015 ppb	0.005 ppb	110.034 %
Concentration RSD	24.1 %	5.2 %	5.0 %	23.6 %	42.1 %	5.7 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	92	User name	ALPHALAB\a2-icpmsq2	Comment	fb
Analysis label:	xL2467975-08 6020TL	Rack	2		
Analysis started at:	12/3/2024 3:12:28 PM	Vial	1		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	116.040 %	127.554 %	0.009 ppb	383.742 ppb	1.451 ppb	1.665 ppb	11.839 ppb	4.084 ppb	109.731 %
Concentration per Run 1	111.371 %	130.977 %	0.009 ppb	356.462 ppb	2.020 ppb	1.801 ppb	7.317 ppb	2.521 ppb	109.106 %
Concentration per Run 2	116.374 %	124.411 %	0.008 ppb	398.999 ppb	1.094 ppb	2.449 ppb	11.102 ppb	-6.711 ppb	110.996 %
Concentration per Run 3	120.374 %	127.273 %	0.008 ppb	395.765 ppb	1.237 ppb	0.744 ppb	17.100 ppb	16.443 ppb	109.092 %
Concentration RSD	3.9 %	2.6 %	4.8 %	6.2 %	34.4 %	51.7 %	41.7 %	285.4 %	1.0 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.464 ppb	0.053 ppb	0.633 ppb	88.805 ppb	0.003 ppb	0.007 ppb	0.566 ppb	0.434 ppb	101.312 %
Concentration per Run 1	-0.455 ppb	0.081 ppb	0.654 ppb	90.431 ppb	0.002 ppb	-0.009 ppb	0.538 ppb	0.482 ppb	105.372 %
Concentration per Run 2	-0.536 ppb	0.071 ppb	0.822 ppb	95.897 ppb	0.006 ppb	0.010 ppb	0.610 ppb	0.481 ppb	99.639 %
Concentration per Run 3	-0.402 ppb	0.008 ppb	0.421 ppb	80.087 ppb	0.000 ppb	0.021 ppb	0.549 ppb	0.339 ppb	98.926 %
Concentration RSD	14.6 %	74.2 %	31.8 %	9.0 %	128.1 %	202.4 %	6.9 %	19.0 %	3.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.065 ppb	0.087 ppb	0.026 ppb	-0.030 ppb	109.446 %	-0.001 ppb	0.003 ppb	105.213 %	0.096 ppb
Concentration per Run 1	0.040 ppb	0.256 ppb	0.026 ppb	-0.039 ppb	108.759 %	-0.001 ppb	0.000 ppb	107.207 %	0.090 ppb
Concentration per Run 2	0.064 ppb	-0.036 ppb	0.028 ppb	-0.030 ppb	109.764 %	-0.002 ppb	0.003 ppb	104.797 %	0.121 ppb
Concentration per Run 3	0.091 ppb	0.041 ppb	0.024 ppb	-0.021 ppb	109.816 %	-0.001 ppb	0.007 ppb	103.635 %	0.077 ppb
Concentration RSD	39.4 %	173.4 %	8.7 %	30.0 %	0.5 %	47.4 %	100.2 %	1.7 %	23.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.043 ppb	106.550 %	105.326 %	0.005 ppb	0.022 ppb	107.388 %
Concentration per Run 1	0.114 ppb	109.486 %	107.812 %	0.002 ppb	0.018 ppb	109.161 %
Concentration per Run 2	0.022 ppb	104.732 %	103.479 %	0.005 ppb	0.025 ppb	105.805 %
Concentration per Run 3	-0.005 ppb	105.431 %	104.687 %	0.007 ppb	0.024 ppb	107.198 %
Concentration RSD	143.3 %	2.4 %	2.1 %	59.7 %	17.7 %	1.6 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	93	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	xWG2001986-2d10 6020TL	Rack	1		
Analysis started at:	12/3/2024 3:24:56 PM	Vial	55		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	119.163 %	121.493 %	4.956 ppb	1,334.106 ppb	955.871 ppb	184.299 ppb	953.118 ppb	774.250 ppb	112.106 %
Concentration per Run 1	112.261 %	119.192 %	5.219 ppb	1,311.603 ppb	949.984 ppb	183.383 ppb	935.587 ppb	774.253 ppb	108.928 %
Concentration per Run 2	121.819 %	122.896 %	4.818 ppb	1,338.842 ppb	956.168 ppb	185.744 ppb	969.791 ppb	718.211 ppb	113.916 %
Concentration per Run 3	123.408 %	122.391 %	4.832 ppb	1,351.872 ppb	961.461 ppb	183.769 ppb	953.974 ppb	830.287 ppb	113.475 %
Concentration RSD	5.1 %	1.7 %	4.6 %	1.5 %	0.6 %	0.7 %	1.8 %	7.2 %	2.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	45.142 ppb	18.992 ppb	50.448 ppb	105.847 ppb	50.320 ppb	51.277 ppb	25.943 ppb	50.923 ppb	105.764 %
Concentration per Run 1	42.667 ppb	17.834 ppb	48.176 ppb	106.604 ppb	49.252 ppb	49.462 ppb	24.945 ppb	49.615 ppb	109.007 %
Concentration per Run 2	47.018 ppb	19.750 ppb	52.098 ppb	113.178 ppb	52.017 ppb	53.842 ppb	26.322 ppb	53.053 ppb	101.800 %
Concentration per Run 3	45.741 ppb	19.392 ppb	51.070 ppb	97.758 ppb	49.689 ppb	50.527 ppb	26.563 ppb	50.100 ppb	106.485 %
Concentration RSD	5.0 %	5.4 %	4.0 %	7.3 %	3.0 %	4.5 %	3.4 %	3.7 %	3.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	12.515 ppb	12.179 ppb	97.562 ppb	97.470 ppb	109.129 %	4.703 ppb	5.196 ppb	108.711 %	45.180 ppb
Concentration per Run 1	12.281 ppb	12.012 ppb	94.044 ppb	96.158 ppb	111.774 %	4.538 ppb	4.936 ppb	112.005 %	43.811 ppb
Concentration per Run 2	13.143 ppb	11.698 ppb	100.440 ppb	97.774 ppb	106.487 %	4.822 ppb	5.446 ppb	107.274 %	46.527 ppb
Concentration per Run 3	12.122 ppb	12.826 ppb	98.202 ppb	98.478 ppb	109.127 %	4.747 ppb	5.206 ppb	106.853 %	45.203 ppb
Concentration RSD	4.4 %	4.8 %	3.3 %	1.2 %	2.4 %	3.1 %	4.9 %	2.6 %	3.0 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	193.414 ppb	110.804 %	107.448 %	11.829 ppb	51.871 ppb	106.870 %
Concentration per Run 1	190.803 ppb	112.222 %	109.440 %	11.318 ppb	50.535 ppb	108.530 %
Concentration per Run 2	194.436 ppb	109.917 %	105.310 %	11.674 ppb	52.013 ppb	108.526 %
Concentration per Run 3	195.004 ppb	110.272 %	107.593 %	12.495 ppb	53.063 ppb	103.553 %
Concentration RSD	1.2 %	1.1 %	1.9 %	5.1 %	2.4 %	2.7 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	94	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	xL2467975-04 6020TL	Rack	1		
Analysis started at:	12/3/2024 3:29:23 PM	Vial	56		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	118.012 %	126.375 %	0.025 ppb	38,257.664 ppb	1,862.106 ppb	51.710 ppb	2,969.846 ppb	9,274.901 ppb	108.085 %
Concentration per Run 1	114.586 %	128.957 %	0.027 ppb	36,330.063 ppb	1,768.358 ppb	50.221 ppb	2,798.286 ppb	9,088.065 ppb	108.564 %
Concentration per Run 2	119.838 %	130.472 %	0.023 ppb	38,080.094 ppb	1,875.390 ppb	50.037 ppb	3,046.039 ppb	9,200.062 ppb	107.190 %
Concentration per Run 3	119.613 %	119.697 %	0.026 ppb	40,362.835 ppb	1,942.570 ppb	54.872 ppb	3,065.212 ppb	9,536.576 ppb	108.502 %
Concentration RSD	2.5 %	4.6 %	7.8 %	5.3 %	4.7 %	5.3 %	5.0 %	2.5 %	0.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.270 ppb	0.340 ppb	65.045 ppb	343.764 ppb	0.130 ppb	0.713 ppb	1.152 ppb	4.989 ppb	103.811 %
Concentration per Run 1	-0.344 ppb	0.357 ppb	61.261 ppb	329.024 ppb	0.120 ppb	0.720 ppb	1.316 ppb	4.859 ppb	108.565 %
Concentration per Run 2	-0.289 ppb	0.303 ppb	66.428 ppb	346.007 ppb	0.128 ppb	0.667 ppb	1.029 ppb	5.301 ppb	100.534 %
Concentration per Run 3	-0.177 ppb	0.358 ppb	67.445 ppb	356.262 ppb	0.142 ppb	0.752 ppb	1.112 ppb	4.806 ppb	102.333 %
Concentration RSD	31.7 %	9.4 %	5.1 %	4.0 %	8.3 %	6.0 %	12.8 %	5.5 %	4.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.931 ppb	0.290 ppb	66.473 ppb	1.097 ppb	107.331 %	0.008 ppb	0.023 ppb	108.366 %	0.904 ppb
Concentration per Run 1	0.882 ppb	0.221 ppb	63.899 ppb	0.794 ppb	109.670 %	0.008 ppb	0.017 ppb	110.796 %	0.818 ppb
Concentration per Run 2	0.978 ppb	0.450 ppb	68.029 ppb	1.056 ppb	106.873 %	0.008 ppb	0.035 ppb	106.283 %	0.893 ppb
Concentration per Run 3	0.934 ppb	0.199 ppb	67.492 ppb	1.442 ppb	105.450 %	0.009 ppb	0.017 ppb	108.018 %	1.000 ppb
Concentration RSD	5.2 %	47.8 %	3.4 %	29.7 %	2.0 %	8.6 %	44.7 %	2.1 %	10.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	10.962 ppb	109.677 %	108.082 %	0.024 ppb	0.603 ppb	107.055 %
Concentration per Run 1	11.170 ppb	114.531 %	113.494 %	0.018 ppb	0.590 ppb	108.403 %
Concentration per Run 2	11.202 ppb	110.456 %	107.046 %	0.027 ppb	0.613 ppb	107.308 %
Concentration per Run 3	10.514 ppb	104.044 %	103.704 %	0.028 ppb	0.607 ppb	105.453 %
Concentration RSD	3.5 %	4.8 %	4.6 %	21.6 %	2.0 %	1.4 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	95	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	xWG2001986-3d10 6020TL	Rack	1		
Analysis started at:	12/3/2024 3:33:52 PM	Vial	57		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	117.968 %	124.748 %	4.926 ppb	4,969.620 ppb	1,101.332 ppb	181.836 ppb	1,239.796 ppb	1,778.622 ppb	112.480 %
Concentration per Run 1	111.772 %	127.273 %	5.134 ppb	4,833.452 ppb	1,071.242 ppb	176.822 ppb	1,266.386 ppb	1,654.655 ppb	112.149 %
Concentration per Run 2	117.937 %	123.064 %	4.923 ppb	5,071.230 ppb	1,137.838 ppb	187.652 ppb	1,245.368 ppb	1,823.266 ppb	112.285 %
Concentration per Run 3	124.195 %	123.906 %	4.722 ppb	5,004.176 ppb	1,094.915 ppb	181.033 ppb	1,207.633 ppb	1,857.945 ppb	113.006 %
Concentration RSD	5.3 %	1.8 %	4.2 %	2.5 %	3.1 %	3.0 %	2.4 %	6.1 %	0.4 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	43.428 ppb	18.522 ppb	53.698 ppb	135.093 ppb	49.232 ppb	51.167 ppb	25.239 ppb	49.600 ppb	104.808 %
Concentration per Run 1	40.544 ppb	17.127 ppb	53.499 ppb	127.062 ppb	47.144 ppb	48.841 ppb	24.389 ppb	46.761 ppb	108.929 %
Concentration per Run 2	44.483 ppb	19.372 ppb	54.271 ppb	140.788 ppb	51.277 ppb	52.830 ppb	26.330 ppb	51.976 ppb	100.727 %
Concentration per Run 3	45.256 ppb	19.065 ppb	53.322 ppb	137.429 ppb	49.276 ppb	51.831 ppb	24.999 ppb	50.063 ppb	104.770 %
Concentration RSD	5.8 %	6.6 %	0.9 %	5.3 %	4.2 %	4.1 %	3.9 %	5.3 %	3.9 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	11.611 ppb	11.864 ppb	100.206 ppb	91.560 ppb	109.362 %	4.568 ppb	4.876 ppb	108.024 %	41.750 ppb
Concentration per Run 1	11.309 ppb	12.253 ppb	95.999 ppb	86.218 ppb	115.195 %	4.377 ppb	4.608 ppb	114.173 %	39.661 ppb
Concentration per Run 2	11.956 ppb	12.086 ppb	104.354 ppb	93.803 ppb	104.671 %	4.710 ppb	5.018 ppb	106.510 %	42.911 ppb
Concentration per Run 3	11.566 ppb	11.254 ppb	100.266 ppb	94.659 ppb	108.220 %	4.618 ppb	5.001 ppb	103.390 %	42.678 ppb
Concentration RSD	2.8 %	4.5 %	4.2 %	5.1 %	4.9 %	3.8 %	4.8 %	5.1 %	4.3 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	188.853 ppb	108.990 %	107.927 %	11.250 ppb	49.591 ppb	105.605 %
Concentration per Run 1	181.813 ppb	114.649 %	110.431 %	10.732 ppb	48.116 ppb	108.301 %
Concentration per Run 2	189.971 ppb	104.453 %	106.122 %	11.498 ppb	50.594 ppb	104.139 %
Concentration per Run 3	194.775 ppb	107.867 %	107.228 %	11.519 ppb	50.062 ppb	104.374 %
Concentration RSD	3.5 %	4.8 %	2.1 %	4.0 %	2.6 %	2.2 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	96	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	xWG2001986-4 6020TL	Rack	1		
Analysis started at:	12/3/2024 3:38:21 PM	Vial	58		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	116.178 %	126.263 %	0.045 ppb	37,337.758 ppb	1,835.610 ppb	46.589 ppb	2,784.204 ppb	8,744.712 ppb	106.457 %
Concentration per Run 1	114.033 %	136.196 %	0.046 ppb	34,745.302 ppb	1,664.946 ppb	43.544 ppb	2,550.791 ppb	8,217.095 ppb	104.876 %
Concentration per Run 2	116.858 %	119.024 %	0.049 ppb	38,770.655 ppb	1,912.687 ppb	49.014 ppb	2,997.431 ppb	8,875.122 ppb	106.408 %
Concentration per Run 3	117.644 %	123.569 %	0.039 ppb	38,497.317 ppb	1,929.196 ppb	47.208 ppb	2,804.391 ppb	9,141.920 ppb	108.086 %
Concentration RSD	1.6 %	7.0 %	11.5 %	6.0 %	8.1 %	6.0 %	8.0 %	5.4 %	1.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.147 ppb	0.272 ppb	61.746 ppb	322.351 ppb	0.176 ppb	0.731 ppb	1.655 ppb	4.531 ppb	106.285 %
Concentration per Run 1	-0.173 ppb	0.149 ppb	56.534 ppb	307.457 ppb	0.165 ppb	0.528 ppb	1.468 ppb	4.070 ppb	109.161 %
Concentration per Run 2	-0.184 ppb	0.334 ppb	62.444 ppb	317.885 ppb	0.209 ppb	0.952 ppb	1.640 ppb	4.689 ppb	105.664 %
Concentration per Run 3	-0.083 ppb	0.332 ppb	66.259 ppb	341.710 ppb	0.154 ppb	0.712 ppb	1.856 ppb	4.836 ppb	104.031 %
Concentration RSD	37.6 %	39.2 %	7.9 %	5.4 %	16.6 %	29.1 %	11.7 %	9.0 %	2.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.767 ppb	0.097 ppb	62.446 ppb	1.129 ppb	108.626 %	0.016 ppb	0.016 ppb	106.593 %	0.790 ppb
Concentration per Run 1	0.746 ppb	0.097 ppb	59.578 ppb	0.932 ppb	115.412 %	0.022 ppb	0.027 ppb	109.265 %	0.699 ppb
Concentration per Run 2	0.711 ppb	0.111 ppb	63.644 ppb	1.158 ppb	105.087 %	0.017 ppb	0.007 ppb	105.515 %	0.760 ppb
Concentration per Run 3	0.844 ppb	0.084 ppb	64.116 ppb	1.298 ppb	105.379 %	0.008 ppb	0.014 ppb	104.998 %	0.912 ppb
Concentration RSD	9.0 %	13.9 %	4.0 %	16.4 %	5.4 %	43.5 %	62.3 %	2.2 %	13.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	11.083 ppb	109.716 %	107.802 %	0.036 ppb	0.631 ppb	107.204 %
Concentration per Run 1	10.653 ppb	115.649 %	113.137 %	0.028 ppb	0.612 ppb	110.872 %
Concentration per Run 2	11.145 ppb	107.945 %	106.289 %	0.044 ppb	0.640 ppb	104.578 %
Concentration per Run 3	11.450 ppb	105.554 %	103.980 %	0.035 ppb	0.640 ppb	106.161 %
Concentration RSD	3.6 %	4.8 %	4.4 %	22.4 %	2.5 %	3.1 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	97	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	xWG2001986-5d10 6020TL	Rack	1		
Analysis started at:	12/3/2024 3:42:50 PM	Vial	59		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	116.388 %	125.309 %	47.603 ppb	8,658.854 ppb	4,691.087 ppb	49.731 ppb	4,709.090 ppb	5,285.585 ppb	110.164 %
Concentration per Run 1	112.872 %	131.987 %	48.130 ppb	8,181.271 ppb	4,493.890 ppb	46.674 ppb	4,463.262 ppb	5,106.061 ppb	105.599 %
Concentration per Run 2	117.725 %	119.024 %	47.584 ppb	9,076.665 ppb	4,844.946 ppb	53.010 ppb	4,974.046 ppb	5,612.578 ppb	112.368 %
Concentration per Run 3	118.566 %	124.916 %	47.095 ppb	8,718.627 ppb	4,734.425 ppb	49.509 ppb	4,689.962 ppb	5,138.116 ppb	112.523 %
Concentration RSD	2.6 %	5.2 %	1.1 %	5.2 %	3.8 %	6.4 %	5.4 %	5.4 %	3.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	42.568 ppb	44.253 ppb	51.551 ppb	4,597.488 ppb	47.010 ppb	47.296 ppb	46.468 ppb	46.627 ppb	111.420 %
Concentration per Run 1	40.224 ppb	42.995 ppb	49.390 ppb	4,384.289 ppb	44.197 ppb	47.534 ppb	44.346 ppb	44.931 ppb	114.795 %
Concentration per Run 2	44.980 ppb	46.421 ppb	54.171 ppb	4,886.053 ppb	50.756 ppb	48.408 ppb	49.558 ppb	49.080 ppb	105.321 %
Concentration per Run 3	42.501 ppb	43.343 ppb	51.092 ppb	4,522.122 ppb	46.078 ppb	45.947 ppb	45.500 ppb	45.869 ppb	114.144 %
Concentration RSD	5.6 %	4.3 %	4.7 %	5.6 %	7.2 %	2.6 %	5.9 %	4.7 %	4.7 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	45.536 ppb	46.406 ppb	52.021 ppb	46.244 ppb	108.007 %	6.856 ppb	47.345 ppb	106.798 %	45.827 ppb
Concentration per Run 1	44.331 ppb	44.906 ppb	50.166 ppb	43.717 ppb	112.948 %	6.431 ppb	45.227 ppb	112.722 %	43.490 ppb
Concentration per Run 2	48.186 ppb	47.857 ppb	54.156 ppb	48.198 ppb	104.991 %	7.094 ppb	48.155 ppb	105.721 %	45.714 ppb
Concentration per Run 3	44.090 ppb	46.453 ppb	51.742 ppb	46.817 ppb	106.081 %	7.042 ppb	48.652 ppb	101.950 %	48.277 ppb
Concentration RSD	5.0 %	3.2 %	3.9 %	5.0 %	4.0 %	5.4 %	3.9 %	5.1 %	5.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	47.000 ppb	108.011 %	105.362 %	47.052 ppb	47.466 ppb	103.906 %
Concentration per Run 1	44.328 ppb	109.311 %	107.286 %	44.508 ppb	45.433 ppb	108.912 %
Concentration per Run 2	47.515 ppb	107.902 %	102.645 %	48.172 ppb	48.235 ppb	102.670 %
Concentration per Run 3	49.157 ppb	106.821 %	106.154 %	48.476 ppb	48.731 ppb	100.137 %
Concentration RSD	5.2 %	1.2 %	2.3 %	4.7 %	3.7 %	4.3 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	98	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	xWG2001986-6d5 6020TL	Rack	1		
Analysis started at:	12/3/2024 3:47:20 PM	Vial	60		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	116.721 %	125.870 %	0.090 ppb	7,621.251 ppb	367.747 ppb	10.527 ppb	574.443 ppb	1,774.770 ppb	106.180 %
Concentration per Run 1	114.605 %	129.967 %	0.099 ppb	7,392.384 ppb	342.006 ppb	11.202 ppb	595.834 ppb	1,775.865 ppb	102.840 %
Concentration per Run 2	115.667 %	128.957 %	0.078 ppb	7,391.948 ppb	361.196 ppb	10.133 ppb	551.206 ppb	1,871.609 ppb	107.145 %
Concentration per Run 3	119.892 %	118.687 %	0.094 ppb	8,079.419 ppb	400.039 ppb	10.245 ppb	576.290 ppb	1,676.835 ppb	108.557 %
Concentration RSD	2.4 %	5.0 %	12.1 %	5.2 %	8.0 %	5.6 %	3.9 %	5.5 %	2.8 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.450 ppb	0.028 ppb	12.336 ppb	65.898 ppb	0.018 ppb	0.127 ppb	0.230 ppb	1.012 ppb	113.487 %
Concentration per Run 1	-0.475 ppb	0.013 ppb	12.934 ppb	64.566 ppb	0.027 ppb	0.139 ppb	0.144 ppb	0.982 ppb	112.888 %
Concentration per Run 2	-0.459 ppb	0.048 ppb	11.812 ppb	70.409 ppb	-0.001 ppb	0.216 ppb	0.288 ppb	1.182 ppb	110.980 %
Concentration per Run 3	-0.418 ppb	0.025 ppb	12.261 ppb	62.721 ppb	0.027 ppb	0.026 ppb	0.257 ppb	0.872 ppb	116.592 %
Concentration RSD	6.5 %	62.7 %	4.6 %	6.1 %	92.8 %	75.3 %	33.1 %	15.6 %	2.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.160 ppb	0.297 ppb	12.383 ppb	0.387 ppb	105.100 %	0.003 ppb	0.004 ppb	105.485 %	0.191 ppb
Concentration per Run 1	0.109 ppb	0.250 ppb	12.292 ppb	0.237 ppb	106.012 %	0.003 ppb	0.000 ppb	109.920 %	0.166 ppb
Concentration per Run 2	0.145 ppb	0.189 ppb	12.529 ppb	0.361 ppb	104.790 %	0.002 ppb	0.004 ppb	104.838 %	0.185 ppb
Concentration per Run 3	0.226 ppb	0.453 ppb	12.326 ppb	0.564 ppb	104.496 %	0.002 ppb	0.007 ppb	101.698 %	0.223 ppb
Concentration RSD	37.4 %	46.4 %	1.0 %	42.6 %	0.8 %	19.2 %	100.7 %	3.9 %	15.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	2.138 ppb	106.533 %	106.314 %	0.197 ppb	0.134 ppb	107.355 %
Concentration per Run 1	2.081 ppb	109.070 %	108.952 %	0.169 ppb	0.137 ppb	112.811 %
Concentration per Run 2	2.058 ppb	105.496 %	105.324 %	0.237 ppb	0.130 ppb	104.113 %
Concentration per Run 3	2.275 ppb	105.032 %	104.666 %	0.185 ppb	0.136 ppb	105.142 %
Concentration RSD	5.6 %	2.1 %	2.2 %	18.0 %	2.9 %	4.4 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	99	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	xL2468003-01 6020TL	Rack	2		
Analysis started at:	12/3/2024 3:51:50 PM	Vial	2		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	106.977 %	124.916 %	0.089 ppb	41,967.709 ppb	25,086.513 ppb	446.809 ppb	23,502.921 ppb	69,507.803 ppb	103.357 %
Concentration per Run 1	105.987 %	124.411 %	0.101 ppb	40,212.459 ppb	23,979.231 ppb	437.331 ppb	22,433.968 ppb	65,707.223 ppb	104.889 %
Concentration per Run 2	109.845 %	121.886 %	0.081 ppb	43,236.538 ppb	25,707.188 ppb	450.295 ppb	24,042.504 ppb	70,333.328 ppb	108.137 %
Concentration per Run 3	105.098 %	128.452 %	0.085 ppb	42,454.129 ppb	25,573.121 ppb	452.801 ppb	24,032.290 ppb	72,482.859 ppb	97.044 %
Concentration RSD	2.4 %	2.7 %	12.0 %	3.7 %	3.8 %	1.9 %	3.9 %	5.0 %	5.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	4.242 ppb	2.174 ppb	395.612 ppb	28,034.628 ppb	1.573 ppb	3.055 ppb	1.657 ppb	3.662 ppb	112.318 %
Concentration per Run 1	3.876 ppb	1.870 ppb	378.521 ppb	26,257.197 ppb	1.422 ppb	2.890 ppb	1.539 ppb	3.609 ppb	116.187 %
Concentration per Run 2	3.966 ppb	2.284 ppb	390.045 ppb	27,489.976 ppb	1.587 ppb	2.879 ppb	1.724 ppb	3.752 ppb	112.892 %
Concentration per Run 3	4.885 ppb	2.370 ppb	418.271 ppb	30,356.711 ppb	1.708 ppb	3.396 ppb	1.707 ppb	3.626 ppb	107.876 %
Concentration RSD	13.2 %	12.3 %	5.2 %	7.5 %	9.1 %	9.7 %	6.2 %	2.1 %	3.7 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	13.016 ppb	0.634 ppb	398.939 ppb	0.275 ppb	105.605 %	0.006 ppb	0.052 ppb	106.627 %	0.230 ppb
Concentration per Run 1	12.660 ppb	0.789 ppb	371.014 ppb	0.126 ppb	114.408 %	0.003 ppb	0.051 ppb	116.134 %	0.205 ppb
Concentration per Run 2	12.570 ppb	0.335 ppb	401.257 ppb	0.355 ppb	103.488 %	0.010 ppb	0.029 ppb	101.797 %	0.232 ppb
Concentration per Run 3	13.817 ppb	0.778 ppb	424.547 ppb	0.343 ppb	98.920 %	0.007 ppb	0.077 ppb	101.951 %	0.252 ppb
Concentration RSD	5.3 %	40.8 %	6.7 %	46.9 %	7.5 %	54.4 %	45.9 %	7.7 %	10.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	130.858 ppb	109.402 %	109.190 %	0.056 ppb	0.537 ppb	102.612 %
Concentration per Run 1	117.115 ppb	117.809 %	118.315 %	0.032 ppb	0.482 ppb	111.449 %
Concentration per Run 2	136.847 ppb	107.661 %	108.851 %	0.065 ppb	0.544 ppb	100.921 %
Concentration per Run 3	138.614 ppb	102.736 %	100.403 %	0.070 ppb	0.583 ppb	95.467 %
Concentration RSD	9.1 %	7.0 %	8.2 %	37.7 %	9.5 %	7.9 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	100	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	xL2468003-02 6020TL	Rack	2		
Analysis started at:	12/3/2024 3:56:18 PM	Vial	3		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	101.068 %	121.661 %	0.064 ppb	74,983.107 ppb	23,345.318 ppb	93.713 ppb	7,646.107 ppb	107,814.926 ppb	99.674 %
Concentration per Run 1	98.107 %	120.034 %	0.070 ppb	73,825.798 ppb	23,118.961 ppb	92.763 ppb	7,625.350 ppb	103,650.666 ppb	98.700 %
Concentration per Run 2	100.795 %	124.580 %	0.059 ppb	74,630.064 ppb	23,399.528 ppb	91.553 ppb	7,447.207 ppb	107,428.847 ppb	100.315 %
Concentration per Run 3	104.302 %	120.371 %	0.062 ppb	76,493.459 ppb	23,517.466 ppb	96.824 ppb	7,865.764 ppb	112,365.265 ppb	100.007 %
Concentration RSD	3.1 %	2.1 %	8.7 %	1.8 %	0.9 %	2.9 %	2.7 %	4.1 %	0.9 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.120 ppb	0.544 ppb	154.330 ppb	17,887.728 ppb	1.459 ppb	1.318 ppb	0.295 ppb	0.911 ppb	126.807 %
Concentration per Run 1	0.075 ppb	0.506 ppb	144.730 ppb	16,787.405 ppb	1.434 ppb	1.380 ppb	0.257 ppb	0.953 ppb	131.454 %
Concentration per Run 2	0.167 ppb	0.573 ppb	160.024 ppb	18,887.530 ppb	1.523 ppb	1.274 ppb	0.361 ppb	0.943 ppb	122.193 %
Concentration per Run 3	0.118 ppb	0.553 ppb	158.237 ppb	17,988.251 ppb	1.419 ppb	1.300 ppb	0.267 ppb	0.836 ppb	126.775 %
Concentration RSD	38.2 %	6.4 %	5.4 %	5.9 %	3.9 %	4.2 %	19.4 %	7.1 %	3.7 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	12.228 ppb	0.167 ppb	389.723 ppb	0.572 ppb	105.603 %	-0.002 ppb	0.018 ppb	104.774 %	0.123 ppb
Concentration per Run 1	11.486 ppb	0.195 ppb	370.935 ppb	0.468 ppb	111.472 %	-0.002 ppb	0.017 ppb	109.688 %	0.077 ppb
Concentration per Run 2	12.984 ppb	0.173 ppb	403.409 ppb	0.573 ppb	102.356 %	-0.001 ppb	0.025 ppb	102.627 %	0.125 ppb
Concentration per Run 3	12.216 ppb	0.134 ppb	394.824 ppb	0.677 ppb	102.981 %	-0.002 ppb	0.011 ppb	102.006 %	0.168 ppb
Concentration RSD	6.1 %	18.5 %	4.3 %	18.2 %	4.8 %	42.0 %	41.1 %	4.1 %	36.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	78.585 ppb	108.285 %	107.708 %	0.029 ppb	0.159 ppb	101.296 %
Concentration per Run 1	75.168 ppb	113.179 %	112.996 %	0.015 ppb	0.145 ppb	107.028 %
Concentration per Run 2	81.922 ppb	104.889 %	103.921 %	0.039 ppb	0.166 ppb	100.330 %
Concentration per Run 3	78.663 ppb	106.789 %	106.206 %	0.031 ppb	0.166 ppb	96.529 %
Concentration RSD	4.3 %	4.0 %	4.4 %	43.3 %	7.5 %	5.2 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	101	User name	ALPHALAB\a2-icpmsq2	Comment	CCV/MCCV
Analysis label:	CCV	Rack	0		
Analysis started at:	12/3/2024 4:00:46 PM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	112.215 %	123.513 %	57.781 ppb	5,728.917 ppb	5,252.295 ppb	50.077 ppb	5,090.437 ppb	5,029.905 ppb	105.018 %
Concentration per Run 1	109.361 %	131.987 %	56.080 ppb	5,317.253 ppb	4,893.203 ppb	46.317 ppb	5,062.571 ppb	4,973.202 ppb	105.558 %
Concentration per Run 2	112.191 %	125.758 %	58.168 ppb	5,659.809 ppb	5,120.852 ppb	50.498 ppb	5,049.656 ppb	4,998.935 ppb	102.739 %
Concentration per Run 3	115.092 %	112.795 %	59.096 ppb	6,209.688 ppb	5,742.829 ppb	53.417 ppb	5,159.084 ppb	5,117.579 ppb	106.756 %
Recovery Percentage 1			96.302 %	95.482 %	87.538 %	83.462 %	84.841 %	83.832 %	
Concentration RSD	2.6 %	7.9 %	2.7 %	7.9 %	8.4 %	7.1 %	1.2 %	1.5 %	2.0 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	49.163 ppb	50.493 ppb	51.963 ppb	5,693.709 ppb	56.430 ppb	57.336 ppb	57.303 ppb	56.234 ppb	117.174 %
Concentration per Run 1	46.133 ppb	47.049 ppb	50.201 ppb	5,079.936 ppb	50.420 ppb	50.486 ppb	51.224 ppb	50.156 ppb	117.823 %
Concentration per Run 2	48.868 ppb	50.509 ppb	51.743 ppb	5,779.392 ppb	58.997 ppb	60.189 ppb	60.579 ppb	59.360 ppb	116.029 %
Concentration per Run 3	52.489 ppb	53.922 ppb	53.945 ppb	6,221.801 ppb	59.872 ppb	61.332 ppb	60.105 ppb	59.186 ppb	117.672 %
Recovery Percentage 1	81.938 %	84.155 %	86.605 %	94.895 %	94.049 %	95.559 %	95.504 %	93.724 %	
Concentration RSD	6.5 %	6.8 %	3.6 %	10.1 %	9.3 %	10.4 %	9.2 %	9.4 %	0.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	55.813 ppb	54.524 ppb	54.279 ppb	54.080 ppb	106.611 %	56.746 ppb	55.913 ppb	105.426 %	54.527 ppb
Concentration per Run 1	49.785 ppb	49.139 ppb	49.170 ppb	51.915 ppb	115.243 %	54.641 ppb	52.594 ppb	109.047 %	51.127 ppb
Concentration per Run 2	59.303 ppb	56.661 ppb	56.813 ppb	55.333 ppb	102.024 %	57.436 ppb	56.857 ppb	103.925 %	56.259 ppb
Concentration per Run 3	58.349 ppb	57.771 ppb	56.855 ppb	54.994 ppb	102.567 %	58.161 ppb	58.288 ppb	103.305 %	56.196 ppb
Recovery Percentage 1	93.021 %	90.873 %	90.466 %	90.134 %		94.576 %	93.188 %		90.879 %
Concentration RSD	9.4 %	8.6 %	8.2 %	3.5 %	7.0 %	3.3 %	5.3 %	3.0 %	5.4 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	54.051 ppb	108.038 %	104.663 %	55.674 ppb	56.446 ppb	104.143 %
Concentration per Run 1	52.391 ppb	112.535 %	112.035 %	52.128 ppb	53.599 ppb	107.281 %
Concentration per Run 2	54.990 ppb	107.450 %	99.258 %	57.348 ppb	58.199 ppb	101.405 %
Concentration per Run 3	54.773 ppb	104.129 %	102.695 %	57.546 ppb	57.540 ppb	103.742 %
Recovery Percentage 1	90.086 %			92.789 %	94.076 %	
Concentration RSD	2.7 %	3.9 %	6.3 %	5.5 %	4.4 %	2.8 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index: 102 User name ALPHALAB\a2-icpmsq2 Comment CCB
Analysis label: CCB Rack 0
Analysis started at: 12/3/2024 4:05:18 PM Vial 10

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	116.435 %	123.177 %	0.104 ppb	285.504 ppb	-0.186 ppb	-0.410 ppb	27.653 ppb	5.271 ppb	107.058 %
Concentration per Run 1	106.443 %	128.620 %	0.074 ppb	259.793 ppb	0.412 ppb	-0.502 ppb	25.729 ppb	12.309 ppb	98.012 %
Concentration per Run 2	118.545 %	115.488 %	0.123 ppb	312.783 ppb	-0.368 ppb	-0.767 ppb	36.968 ppb	0.462 ppb	111.283 %
Concentration per Run 3	124.316 %	125.421 %	0.114 ppb	283.938 ppb	-0.603 ppb	0.038 ppb	20.261 ppb	3.041 ppb	111.879 %
Recovery Percentage 1			20.794 %	57.101 %	-0.266 %	-4.102 %	27.653 %	5.271 %	
Concentration RSD	7.8 %	5.6 %	25.1 %	9.3 %	285.4 %	100.0 %	30.8 %	118.2 %	7.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.546 ppb	-0.044 ppb	0.017 ppb	4.064 ppb	-0.003 ppb	0.021 ppb	0.021 ppb	0.036 ppb	121.385 %
Concentration per Run 1	-0.494 ppb	-0.022 ppb	0.026 ppb	4.419 ppb	-0.007 ppb	-0.001 ppb	0.028 ppb	0.031 ppb	121.658 %
Concentration per Run 2	-0.598 ppb	-0.037 ppb	0.015 ppb	3.616 ppb	0.004 ppb	0.104 ppb	-0.010 ppb	0.087 ppb	119.481 %
Concentration per Run 3	-0.546 ppb	-0.072 ppb	0.012 ppb	4.156 ppb	-0.005 ppb	-0.040 ppb	0.046 ppb	-0.009 ppb	123.017 %
Recovery Percentage 1	-10.915 %	-4.364 %	1.737 %	8.127 %	-0.519 %	1.048 %	2.118 %	0.722 %	
Concentration RSD	9.5 %	59.6 %	41.8 %	10.1 %	230.1 %	356.3 %	137.0 %	132.8 %	1.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.023 ppb	0.116 ppb	0.002 ppb	0.268 ppb	106.230 %	0.007 ppb	0.001 ppb	103.148 %	0.073 ppb
Concentration per Run 1	0.057 ppb	0.070 ppb	0.004 ppb	0.160 ppb	111.114 %	0.005 ppb	0.003 ppb	108.705 %	0.046 ppb
Concentration per Run 2	0.007 ppb	0.115 ppb	0.000 ppb	0.315 ppb	105.356 %	0.011 ppb	0.000 ppb	100.015 %	0.074 ppb
Concentration per Run 3	0.007 ppb	0.163 ppb	0.001 ppb	0.329 ppb	102.220 %	0.005 ppb	0.000 ppb	100.725 %	0.100 ppb
Recovery Percentage 1	4.694 %	2.319 %	0.019 %	13.391 %		1.681 %	0.562 %		1.834 %
Concentration RSD	122.0 %	40.2 %	112.3 %	35.0 %	4.2 %	51.0 %	173.2 %	4.7 %	36.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.060 ppb	104.980 %	103.016 %	0.230 ppb	0.016 ppb	102.465 %
Concentration per Run 1	0.020 ppb	109.314 %	106.496 %	0.200 ppb	0.017 ppb	108.827 %
Concentration per Run 2	0.094 ppb	103.110 %	101.205 %	0.276 ppb	0.015 ppb	98.105 %
Concentration per Run 3	0.066 ppb	102.516 %	101.348 %	0.214 ppb	0.015 ppb	100.462 %
Recovery Percentage 1	12.029 %			23.018 %	1.565 %	
Concentration RSD	61.8 %	3.6 %	2.9 %	17.5 %	5.9 %	5.5 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	103	User name	ALPHALAB\a2-icpmsq2	Comment	CCV/MCCV
Analysis label:	CCV	Rack	0		
Analysis started at:	12/3/2024 4:19:57 PM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	113.162 %	131.202 %	56.551 ppb	5,465.158 ppb	7,389.317 ppb	86.324 ppb	-20,657.458 ppb	-3,583.381 ppb	111.473 %
Concentration per Run 1	109.937 %	134.849 %	57.920 ppb	5,453.744 ppb	4,993.696 ppb	47.354 ppb	4,541.027 ppb	4,476.452 ppb	109.972 %
Concentration per Run 2	113.991 %	130.977 %	55.315 ppb	5,480.054 ppb	12,074.874 ppb	160.758 ppb	-71,525.118 ppb	-20,181.582 ppb	112.880 %
Concentration per Run 3	115.558 %	127.778 %	56.418 ppb	5,461.677 ppb	5,099.380 ppb	50.861 ppb	5,011.716 ppb	4,954.986 ppb	111.565 %
Recovery Percentage 1			94.252 %	91.086 %	123.155 %	143.874 %	-344.291 %	-59.723 %	
Concentration RSD	2.6 %	2.7 %	2.3 %	0.2 %	54.9 %	74.7 %	213.3 %	401.2 %	1.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	49.762 ppb	-3.324 ppb	4.126 ppb	5,616.690 ppb	56.290 ppb	57.172 ppb	56.317 ppb	56.211 ppb	43.318 %
Concentration per Run 1	48.883 ppb	44.159 ppb	45.338 ppb	5,543.553 ppb	55.497 ppb	57.442 ppb	55.041 ppb	55.549 ppb	149.491 %
Concentration per Run 2	49.894 ppb	-100.906 ppb	-80.569 ppb	5,728.707 ppb	58.222 ppb	57.950 ppb	59.053 ppb	58.265 ppb	-157.282 %
Concentration per Run 3	50.508 ppb	46.774 ppb	47.609 ppb	5,577.810 ppb	55.151 ppb	56.126 ppb	54.858 ppb	54.820 ppb	137.745 %
Recovery Percentage 1	82.936 %	-5.540 %	6.877 %	93.611 %	93.817 %	95.287 %	93.862 %	93.685 %	
Concentration RSD	1.6 %	2,542.5 %	1,777.9 %	1.8 %	3.0 %	1.6 %	4.2 %	3.2 %	401.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	55.240 ppb	54.979 ppb	56.649 ppb	27.041 ppb	111.114 %	55.657 ppb	56.075 ppb	111.885 %	55.110 ppb
Concentration per Run 1	52.696 ppb	53.240 ppb	54.659 ppb	54.872 ppb	115.730 %	52.706 ppb	53.071 ppb	115.833 %	53.166 ppb
Concentration per Run 2	57.330 ppb	55.381 ppb	58.591 ppb	-33.482 ppb	107.028 %	57.454 ppb	57.484 ppb	111.661 %	55.144 ppb
Concentration per Run 3	55.694 ppb	56.318 ppb	56.696 ppb	59.734 ppb	110.583 %	56.811 ppb	57.669 ppb	108.160 %	57.020 ppb
Recovery Percentage 1	92.067 %	91.632 %	94.415 %	45.069 %		92.762 %	93.458 %		91.850 %
Concentration RSD	4.3 %	2.9 %	3.5 %	194.0 %	3.9 %	4.6 %	4.6 %	3.4 %	3.5 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	55.651 ppb	114.248 %	113.515 %	55.238 ppb	55.289 ppb	114.811 %
Concentration per Run 1	54.137 ppb	120.076 %	119.541 %	51.797 ppb	52.112 ppb	124.393 %
Concentration per Run 2	56.999 ppb	108.565 %	110.781 %	56.981 ppb	57.362 ppb	108.089 %
Concentration per Run 3	55.817 ppb	114.104 %	110.223 %	56.937 ppb	56.394 ppb	111.951 %
Recovery Percentage 1	92.752 %			92.064 %	92.149 %	
Concentration RSD	2.6 %	5.0 %	4.6 %	5.4 %	5.1 %	7.4 %

Alpha ICPMSQ2 Data with SRD

12/3/2024 6:58:54 PM

Analysis index:	104	User name	ALPHALAB\a2-icpmsq2	Comment	CCB
Analysis label:	CCB	Rack	0		
Analysis started at:	12/3/2024 4:24:28 PM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	110.591 %	120.595 %	0.369 ppb	238.903 ppb	0.198 ppb	-0.856 ppb	10.261 ppb	2.426 ppb	103.522 %
Concentration per Run 1	106.364 %	124.916 %	0.334 ppb	220.343 ppb	0.107 ppb	-1.041 ppb	6.614 ppb	5.410 ppb	101.130 %
Concentration per Run 2	110.389 %	122.728 %	0.477 ppb	229.100 ppb	0.293 ppb	-1.037 ppb	7.871 ppb	-2.416 ppb	104.087 %
Concentration per Run 3	115.021 %	114.142 %	0.295 ppb	267.265 ppb	0.193 ppb	-0.489 ppb	16.298 ppb	4.282 ppb	105.349 %
Recovery Percentage 1			73.708 %	47.781 %	0.283 %	-8.556 %	10.261 %	2.426 %	
Concentration RSD	3.9 %	4.7 %	26.1 %	10.4 %	47.2 %	37.1 %	51.3 %	174.4 %	2.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.531 ppb	-0.036 ppb	0.036 ppb	4.617 ppb	0.000 ppb	0.044 ppb	0.035 ppb	0.106 ppb	121.408 %
Concentration per Run 1	-0.571 ppb	-0.042 ppb	0.041 ppb	6.364 ppb	0.001 ppb	0.061 ppb	0.022 ppb	0.158 ppb	119.417 %
Concentration per Run 2	-0.532 ppb	-0.028 ppb	0.082 ppb	3.955 ppb	-0.002 ppb	0.019 ppb	0.067 ppb	0.050 ppb	122.375 %
Concentration per Run 3	-0.489 ppb	-0.039 ppb	-0.015 ppb	3.533 ppb	0.001 ppb	0.051 ppb	0.015 ppb	0.110 ppb	122.431 %
Recovery Percentage 1	-10.618 %	-3.643 %	3.628 %	9.235 %	0.026 %	2.180 %	3.479 %	2.117 %	
Concentration RSD	7.7 %	19.4 %	133.6 %	33.1 %	1,283.6 %	50.1 %	80.4 %	50.9 %	1.4 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	-0.004 ppb	0.195 ppb	0.000 ppb	0.312 ppb	109.296 %	0.015 ppb	0.007 ppb	103.486 %	0.109 ppb
Concentration per Run 1	0.007 ppb	0.430 ppb	0.005 ppb	0.182 ppb	112.537 %	0.025 ppb	0.014 ppb	107.710 %	0.086 ppb
Concentration per Run 2	0.069 ppb	0.082 ppb	0.003 ppb	0.345 ppb	107.482 %	0.012 ppb	0.004 ppb	99.577 %	0.097 ppb
Concentration per Run 3	-0.087 ppb	0.074 ppb	-0.009 ppb	0.408 ppb	107.869 %	0.008 ppb	0.004 ppb	103.172 %	0.145 ppb
Recovery Percentage 1	-0.785 %	3.910 %	-0.002 %	15.601 %		3.766 %	3.444 %		2.736 %
Concentration RSD	1,998.0 %	104.0 %	3,210.3 %	37.4 %	2.6 %	60.2 %	83.4 %	3.9 %	28.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.040 ppb	108.754 %	107.942 %	0.304 ppb	0.022 ppb	106.742 %
Concentration per Run 1	0.047 ppb	109.882 %	110.092 %	0.251 ppb	0.028 ppb	111.979 %
Concentration per Run 2	0.051 ppb	106.452 %	105.766 %	0.363 ppb	0.022 ppb	104.101 %
Concentration per Run 3	0.021 ppb	109.929 %	107.968 %	0.298 ppb	0.016 ppb	104.148 %
Recovery Percentage 1	7.939 %			30.418 %	2.208 %	
Concentration RSD	40.2 %	1.8 %	2.0 %	18.5 %	27.9 %	4.2 %

Alpha ICPMSQ2 Seq

12/3/2024 6:59:17 PM

Sample List Summary:

Instrument ID: iCAP Q

Index:	Label:	Rack	Vial	Main Runs:	Survey Runs:	Start Time:
1	Rinse	0	1	3	1	12/3/2024 6:31:09 AM
2	CAL LOT #M23-1225	0	1	3	1	12/3/2024 6:35:35 AM
3	Blank NTB ICPMSQ2	4	49	3	1	12/3/2024 6:40:01 AM
4	0.2/20 Cal	0	2	3	1	12/3/2024 6:44:33 AM
5	x1/100 Cal	0	3	3	1	12/3/2024 6:49:00 AM
6	10/1000 Cal	0	4	3	1	12/3/2024 6:53:28 AM
7	60/6000 Cal	0	5	3	1	12/3/2024 6:57:56 AM
8	120/12000 Cal	0	6	3	1	12/3/2024 7:02:24 AM
9	1/100 Cal	0	3	3	1	12/3/2024 7:07:58 AM
10	Sr 200ppb	4	55	3	1	12/3/2024 7:13:05 AM
11	ICV	0	7	3	1	12/3/2024 7:17:37 AM
12	ICB	0	10	3	1	12/3/2024 7:22:07 AM
13	ICSA	4	53	3	1	12/3/2024 7:28:46 AM
14	LDR	4	1	3	1	12/3/2024 7:33:17 AM
15	Rinse	0	1	3	1	12/3/2024 7:37:47 AM
16	CCV	0	9	3	1	12/3/2024 7:42:14 AM
17	CCB	0	10	3	1	12/3/2024 7:46:45 AM
18	I2469249-03 6020SL	1	6	3	1	12/3/2024 7:57:42 AM
19	I2469249-06 6020SL	1	1	3	1	12/3/2024 8:02:11 AM
20	WG2003419-7d10 6020SL	1	2	3	1	12/3/2024 8:06:38 AM
21	WG2003419-8d10 6020SL	1	3	3	1	12/3/2024 8:11:05 AM
22	WG2003419-9d10 6020SL	1	4	3	1	12/3/2024 8:15:32 AM
23	WG2003419-10d5 6020SL	1	5	3	1	12/3/2024 8:20:00 AM
24	I2469249-04 6020SL	1	7	3	1	12/3/2024 8:24:28 AM
25	I2469249-07 6020SL	1	8	3	1	12/3/2024 8:28:57 AM
26	CCV	0	9	3	1	12/3/2024 8:33:58 AM
27	CCB	0	10	3	1	12/3/2024 8:38:29 AM
28	WG2003472-1 6020TL	1	9	3	1	12/3/2024 8:50:16 AM
29	WG2003472-2d10 6020TL	1	10	3	1	12/3/2024 8:54:45 AM
30	L2469261-01d10 6020TL	1	11	3	1	12/3/2024 8:59:15 AM
31	WG2003472-3d10 6020TL	1	12	3	1	12/3/2024 9:03:45 AM
32	WG2003472-4d10 6020TL	1	13	3	1	12/3/2024 9:08:15 AM
33	WG2003472-5d10 6020TL	1	14	3	1	12/3/2024 9:12:41 AM
34	WG2003472-6d50 6020TL	1	15	3	1	12/3/2024 9:17:08 AM
35	L2469261-02d10 6020TL	1	16	3	1	12/3/2024 9:21:35 AM
36	L2469261-03d10 6020TL	1	17	3	1	12/3/2024 9:26:02 AM
37	L2469261-04d10 6020TL	1	18	3	1	12/3/2024 9:30:29 AM
38	xCCV	0	9	3	1	12/3/2024 9:34:57 AM
39	xCCB	0	10	3	1	12/3/2024 9:39:28 AM
40	CCV	0	9	3	1	12/3/2024 9:44:34 AM
41	CCB	0	10	3	1	12/3/2024 9:49:04 AM
42	L2469261-05 6020TL	1	19	3	1	12/3/2024 9:54:58 AM
43	L2469261-06 6020TL	1	20	3	1	12/3/2024 9:59:26 AM
44	L2469261-07 6020TL	1	21	3	1	12/3/2024 10:03:54 AM
45	L2469261-08 6020TL	1	22	3	1	12/3/2024 10:08:23 AM
46	L2469261-09 6020TL	1	23	3	1	12/3/2024 10:12:52 AM
47	L2469261-10 6020TL	1	24	3	1	12/3/2024 10:17:21 AM
48	L2469261-11 6020TL	1	25	3	1	12/3/2024 10:21:50 AM
49	L2469261-12 6020TL	1	26	3	1	12/3/2024 10:26:17 AM
50	L2469261-13 6020TL	1	27	3	1	12/3/2024 10:30:43 AM
51	L2469261-14 6020TL	1	28	3	1	12/3/2024 10:35:10 AM

Alpha ICPMSQ2 Seq

12/3/2024 6:59:17 PM

Index:	Label:	Rack	Vial	Main Runs:	Survey Runs:	Start Time:
52	CCV	0	9	3	1	12/3/2024 10:39:37 AM
53	CCB	0	10	3	1	12/3/2024 10:44:08 AM
54	CCV	0	9	3	1	12/3/2024 11:00:44 AM
55	CCB	0	10	3	1	12/3/2024 11:05:15 AM
56	WG2003775-1 6020TL	1	29	3	1	12/3/2024 11:11:12 AM
57	WG2003775-2d10 6020TL	1	30	3	1	12/3/2024 11:15:40 AM
58	L2469249-06 6020TL	1	31	3	1	12/3/2024 11:20:08 AM
59	WG2003775-3d10 6020TL	1	32	3	1	12/3/2024 11:24:36 AM
60	WG2003775-4d10 6020TL	1	33	3	1	12/3/2024 11:29:04 AM
61	WG2003775-5d10 6020TL	1	34	3	1	12/3/2024 11:33:33 AM
62	WG2003775-6d5 6020TL	1	35	3	1	12/3/2024 11:38:01 AM
63	L2469188-01 6020TL	1	36	3	1	12/3/2024 11:42:31 AM
64	L2469188-02 6020TL	1	37	3	1	12/3/2024 11:47:00 AM
65	L2469188-03 6020TL	1	38	3	1	12/3/2024 11:51:27 AM
66	CCV	0	9	3	1	12/3/2024 11:55:54 AM
67	CCB	0	10	3	1	12/3/2024 12:00:26 PM
68	CCV	0	9	3	1	12/3/2024 12:35:53 PM
69	CCB	0	10	3	1	12/3/2024 12:42:03 PM
70	L2469188-04d5 6020TL	1	39	3	1	12/3/2024 12:47:59 PM
71	L2469188-05d5 6020TL	1	40	3	1	12/3/2024 12:52:26 PM
72	L2469188-06d5 6020TL	1	41	3	1	12/3/2024 12:56:53 PM
73	WG2004404-1 MCP-6020SL-10	1	42	3	1	12/3/2024 1:06:43 PM
74	WG2004404-2d10 MCP-6020SL-10	1	43	3	1	12/3/2024 1:11:12 PM
75	WG2004404-3d10 MCP-6020SL-10	1	44	3	1	12/3/2024 1:15:40 PM
76	L2469119-01 MCP-6020SL-10	1	45	3	1	12/3/2024 1:20:09 PM
77	CCV	0	9	3	1	12/3/2024 1:30:45 PM
78	CCB	0	10	3	1	12/3/2024 1:35:17 PM
79	CCB	0	10	3	1	12/3/2024 1:45:22 PM
80	WG2004404-2d10 MCP-6020SL-10	1	52	3	1	12/3/2024 2:02:11 PM
81	WG2004404-3d10 MCP-6020SL-10	1	53	3	1	12/3/2024 2:06:37 PM
82	L2469297-01d5 MCP-6020SL-10	1	46	3	1	12/3/2024 2:11:05 PM
83	L2469297-02 MCP-6020SL-10	1	47	3	1	12/3/2024 2:15:34 PM
84	L2469297-03 MCP-6020SL-10	1	48	3	1	12/3/2024 2:20:03 PM
85	L2469297-04 MCP-6020SL-10	1	49	3	1	12/3/2024 2:24:33 PM
86	L2469297-05 MCP-6020SL-10	1	50	3	1	12/3/2024 2:29:01 PM
87	L2469297-06 MCP-6020SL-10	1	51	3	1	12/3/2024 2:33:29 PM
88	CCV	0	9	3	1	12/3/2024 2:37:57 PM
89	CCB	0	10	3	1	12/3/2024 2:42:28 PM
90	CCB	0	10	3	1	12/3/2024 2:57:24 PM
91	xWG2001986-1 6020TL	1	54	3	1	12/3/2024 3:08:01 PM
92	xL2467975-08 6020TL	2	1	3	1	12/3/2024 3:12:28 PM
93	xWG2001986-2d10 6020TL	1	55	3	1	12/3/2024 3:24:56 PM
94	xL2467975-04 6020TL	1	56	3	1	12/3/2024 3:29:23 PM
95	xWG2001986-3d10 6020TL	1	57	3	1	12/3/2024 3:33:52 PM
96	xWG2001986-4 6020TL	1	58	3	1	12/3/2024 3:38:21 PM
97	xWG2001986-5d10 6020TL	1	59	3	1	12/3/2024 3:42:50 PM
98	xWG2001986-6d5 6020TL	1	60	3	1	12/3/2024 3:47:20 PM
99	xL2468003-01 6020TL	2	2	3	1	12/3/2024 3:51:50 PM
100	xL2468003-02 6020TL	2	3	3	1	12/3/2024 3:56:18 PM
101	CCV	0	9	3	1	12/3/2024 4:00:46 PM
102	CCB	0	10	3	1	12/3/2024 4:05:18 PM
103	CCV	0	9	3	1	12/3/2024 4:19:57 PM
104	CCB	0	10	3	1	12/3/2024 4:24:28 PM

METALS ELN REPORT

Workgroup: WG2002010

Digestion

Prep Method	Acid Type 1	Acid 1 Lot	Acid Type 2	Acid 2 Lot	Spike Type	Lims Spike Lot	Spike Lot	Post Spike Spikelot	Spike Lot	Pipette Id
EPA 3005A	1:1 HNO3	tHNO324461 50445CLH	1:1 HCl	tHCL244720 1337JDH	METALS	METSPIKE2	IPS, FPS, MIX	METPSMS	IPS, FPS, MIX	140, 326

Additional Reagent/Std

Sample/ Type	Digestion Date	Analyst	Lab Filtration Date	Sample Vol	Ph	Spike Amt ml	Start Date/Time	Hot Block Unit	Temperature (C)	Stop Date/Time	Final Vol ml	Comments
L2467884-01 SAMP	11/25/24 20:03	Maisie Mcqueen	NA	50	<2		11/25/24 20:03	7	94.8	11/25/24 23:03	50	
L2467884-02 SAMP	11/25/24 20:03	Maisie Mcqueen	NA	50	<2		11/25/24 20:03	7	94.8	11/25/24 23:03	50	
L2467906-01 SAMP	11/25/24 20:03	Maisie Mcqueen	11-20-24 10:25	50	<2		11/25/24 20:03	7	94.8	11/25/24 23:03	50	
L2467906-02 SAMP	11/25/24 20:03	Maisie Mcqueen	11-20-24 10:25	50	<2		11/25/24 20:03	7	94.8	11/25/24 23:03	50	
L2467906-03 SAMP	11/25/24 20:03	Maisie Mcqueen	11-20-24 10:25	50	<2		11/25/24 20:03	7	94.8	11/25/24 23:03	50	
L2467906-04 SAMP	11/25/24 20:03	Maisie Mcqueen	11-20-24 10:25	50	<2		11/25/24 20:03	7	94.8	11/25/24 23:03	50	
L2467906-05 SAMP	11/25/24 20:03	Maisie Mcqueen	11-20-24 10:25	50	<2		11/25/24 20:03	7	94.8	11/25/24 23:03	50	
L2467906-06 SAMP	11/25/24 20:03	Maisie Mcqueen	11-20-24 10:25	50	<2		11/25/24 20:03	7	94.8	11/25/24 23:03	50	
L2467934-01 SAMP	11/25/24 20:03	Maisie Mcqueen	NA	50	<2		11/25/24 20:03	7	94.8	11/25/24 23:03	50	
L2467934-02 SAMP	11/25/24 20:03	Maisie Mcqueen	NA	50	<2		11/25/24 20:03	7	94.8	11/25/24 23:03	50	
L2467934-03 SAMP	11/25/24 20:03	Maisie Mcqueen	NA	50	<2		11/25/24 20:03	7	94.8	11/25/24 23:03	50	
L2467934-04 SAMP	11/25/24 20:03	Maisie Mcqueen	NA	50	<2		11/25/24 20:03	7	94.8	11/25/24 23:03	50	
L2467934-05 SAMP	11/25/24 20:03	Maisie Mcqueen	NA	50	<2		11/25/24 20:03	7	94.8	11/25/24 23:03	50	
L2467934-06 SAMP	11/25/24 20:03	Maisie Mcqueen	NA	50	<2		11/25/24 20:03	7	94.8	11/25/24 23:03	50	

Reported: 04-DEC-24 11:35 AM

METALS ELN REPORT

Workgroup: WG2002010

Sample/ Type	Digestion Date	Analyst	Lab Filtration Date	Sample Vol	Ph	Spike Amt ml	Start Date/Time	Hot Block Unit	Temperature (C)	Stop Date/Time	Final Vol ml	Comments
L2467934-07 SAMP	11/25/24 20:03	Maisie Mcqueen	NA	50	<2		11/25/24 20:03	7	94.8	11/25/24 23:03	50	
L2467934-08 SAMP	11/25/24 20:03	Maisie Mcqueen	NA	50	<2		11/25/24 20:03	7	94.8	11/25/24 23:03	50	
L2467934-09 SAMP	11/25/24 20:03	Maisie Mcqueen	NA	50	<2		11/25/24 20:03	7	94.8	11/25/24 23:03	50	
L2467934-10 SAMP	11/25/24 20:03	Maisie Mcqueen	11-21-24 06:54	50	<2		11/25/24 20:03	7	94.8	11/25/24 23:03	50	
WG2002010-1 BLANK	11/25/24 20:03	Maisie Mcqueen	NA	50	<2		11/25/24 20:03	7	94.8	11/25/24 23:03	50	FM2447181212 JDH
WG2002010-2 LCS	11/25/24 20:03	Maisie Mcqueen	NA	50	<2	0.5	11/25/24 20:03	7	94.8	11/25/24 23:03	50	IPS2445062030 CLH
WG2002010-3 MS	11/25/24 20:03	Maisie Mcqueen	NA	50	<2	0.5	11/25/24 20:03	7	94.8	11/25/24 23:03	50	ELN: CLH
WG2002010-4 MSD	11/25/24 20:03	Maisie Mcqueen	NA	50	<2	0.5	11/25/24 20:03	7	94.8	11/25/24 23:03	50	
WG2002010-5 PS	11/25/24 20:03	Maisie Mcqueen	NA	50	<2		11/25/24 20:03	7	94.8	11/25/24 23:03	50	
WG2002010-6 SERDIL	11/25/24 20:03	Maisie Mcqueen	NA	50	<2		11/25/24 20:03	7	94.8	11/25/24 23:03	50	

Reagent	Actual Volume	Units
1:1 Hydrochloric Acid (H	.5	ml
1:1 Nitric Acid (HNO3)	1	ml

Reported: 04-DEC-24 11:35 AM

METALS ELN REPORT

Workgroup: WG2002206

Digestion

Prep Method	Acid Type 1	Acid 1 Lot	Acid Type 2	Acid 2 Lot	Spike Type	Lims Spike Lot	Spike Lot	Post Spike Spikelot	Spike Lot	Pipette Id
EPA 3005A	1:1 HNO3	tHNO324471 80755CME	1:1 HCl	tHCL244614 0154FAC	METALS	METSPIKE2	IPS, FPS, MIX	METPSMS	IPS, FPS, MIX	140, 326

Additional Reagent/Std

Sample/ Type	Digestion Date	Analyst	Sample Vol ml	Ph	Spike Amt ml	Start Date/Time	Hot Block Unit	Temperature (C)	Stop Date/Time	Final Vol	Comments
L2467884-01 SAMP	11/26/24 11:00	Cristy Estevez	50	<2		11/26/24 11:00	9	94.2	11/26/24 14:00	50	
L2467884-02 SAMP	11/26/24 11:00	Cristy Estevez	50	<2		11/26/24 11:00	9	94.2	11/26/24 14:00	50	
L2467888-01 SAMP	11/26/24 11:00	Cristy Estevez	50	<2		11/26/24 11:00	9	94.2	11/26/24 14:00	50	
L2467934-01 SAMP	11/26/24 11:00	Cristy Estevez	50	<2		11/26/24 11:00	9	94.2	11/26/24 14:00	50	
L2467934-02 SAMP	11/26/24 11:00	Cristy Estevez	50	<2		11/26/24 11:00	9	94.2	11/26/24 14:00	50	
L2467934-03 SAMP	11/26/24 11:00	Cristy Estevez	50	<2		11/26/24 11:00	9	94.2	11/26/24 14:00	50	
L2467934-04 SAMP	11/26/24 11:00	Cristy Estevez	50	<2		11/26/24 11:00	9	94.2	11/26/24 14:00	50	
L2467934-05 SAMP	11/26/24 11:00	Cristy Estevez	50	<2		11/26/24 11:00	9	94.2	11/26/24 14:00	50	
L2467934-06 SAMP	11/26/24 11:00	Cristy Estevez	50	<2		11/26/24 11:00	9	94.2	11/26/24 14:00	50	
L2467934-07 SAMP	11/26/24 11:00	Cristy Estevez	50	<2		11/26/24 11:00	9	94.2	11/26/24 14:00	50	
L2467934-08 SAMP	11/26/24 11:00	Cristy Estevez	50	<2		11/26/24 11:00	9	94.2	11/26/24 14:00	50	
L2467934-09 SAMP	11/26/24 11:00	Cristy Estevez	50	<2		11/26/24 11:00	9	94.2	11/26/24 14:00	50	
L2467934-10 SAMP	11/26/24 11:00	Cristy Estevez	50	<2		11/26/24 11:00	9	94.2	11/26/24 14:00	50	
WG2002206-1 BLANK	11/26/24 11:00	Cristy Estevez	50	<2		11/26/24 11:00	9	94.2	11/26/24 14:00	50	ELN: SAM

Reported: 04-DEC-24 11:35 AM

METALS ELN REPORT

Workgroup: WG2002206

Sample/ Type	Digestion Date	Analyst	Sample Vol ml	Ph	Spike Amt ml	Start Date/Time	Hot Block Unit	Temperature (C)	Stop Date/Time	Final Vol	Comments
WG2002206-2 LCS	11/26/24 11:00	Cristy Estevez	50	<2	0.5	11/26/24 11:00	9	94.2	11/26/24 14:00	50	
WG2002206-3 MS	11/26/24 11:00	Cristy Estevez	50	<2	0.5	11/26/24 11:00	9	94.2	11/26/24 14:00	50	FM2447181212 JDH
WG2002206-4 MSD	11/26/24 11:00	Cristy Estevez	50	<2	0.5	11/26/24 11:00	9	94.2	11/26/24 14:00	50	IPS2445062030 CLH
WG2002206-5 PS	11/26/24 11:00	Cristy Estevez	50	<2		11/26/24 11:00	9	94.2	11/26/24 14:00	50	
WG2002206-6 SERDIL	11/26/24 11:00	Cristy Estevez	50	<2		11/26/24 11:00	9	94.2	11/26/24 14:00	50	

Reagent	Actual Volume	Units
1:1 Hydrochloric Acid (H	.5	ml
1:1 Nitric Acid (HNO3)	1	ml

Reported: 04-DEC-24 11:35 AM

Inorganic Data
(Mercury Analysis)

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Lab ID	: L2467934-01	**Date Collected**	: 11/18/24 15:46
Client ID	: MW-1S	**Date Received**	: 11/19/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 11/27/24 11:27
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,7470A	**Analyst**	: MJR
Lab File ID	: WG2003107.pdf	**Instrument ID**	: NIC4
Sample Amount	: 25ml	**%Solids**	: N/A
Digestion Method	: EPA 7470A	**Date Digested**	: 11/25/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7439-97-6	Mercury, Dissolved	ND	0.00020	0.00009	U

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Lab ID	: L2467934-02	**Date Collected**	: 11/18/24 14:33
Client ID	: MW-2S	**Date Received**	: 11/19/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 11/27/24 11:31
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,7470A	**Analyst**	: MJR
Lab File ID	: WG2003107.pdf	**Instrument ID**	: NIC4
Sample Amount	: 25ml	**%Solids**	: N/A
Digestion Method	: EPA 7470A	**Date Digested**	: 11/25/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7439-97-6	Mercury, Dissolved	ND	0.00020	0.00009	U

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Lab ID	: L2467934-03	**Date Collected**	: 11/18/24 13:31
Client ID	: MW-3S	**Date Received**	: 11/19/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 11/27/24 11:34
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,7470A	**Analyst**	: MJR
Lab File ID	: WG2003107.pdf	**Instrument ID**	: NIC4
Sample Amount	: 25ml	**%Solids**	: N/A
Digestion Method	: EPA 7470A	**Date Digested**	: 11/25/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7439-97-6	Mercury, Dissolved	ND	0.00020	0.00009	U

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Lab ID	: L2467934-04	**Date Collected**	: 11/19/24 09:35
Client ID	: MW-4D	**Date Received**	: 11/19/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 11/27/24 11:37
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,7470A	**Analyst**	: MJR
Lab File ID	: WG2003107.pdf	**Instrument ID**	: NIC4
Sample Amount	: 25ml	**%Solids**	: N/A
Digestion Method	: EPA 7470A	**Date Digested**	: 11/25/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7439-97-6	Mercury, Dissolved	ND	0.00020	0.00009	U

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Lab ID	: L2467934-05	**Date Collected**	: 11/19/24 08:10
Client ID	: MW-5S	**Date Received**	: 11/19/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 11/27/24 11:18
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,7470A	**Analyst**	: MJR
Lab File ID	: WG2003107.pdf	**Instrument ID**	: NIC4
Sample Amount	: 25ml	**%Solids**	: N/A
Digestion Method	: EPA 7470A	**Date Digested**	: 11/25/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7439-97-6	Mercury, Dissolved	ND	0.00020	0.00009	U

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Lab ID	: L2467934-06	**Date Collected**	: 11/18/24 15:40
Client ID	: MW-6D	**Date Received**	: 11/19/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 11/27/24 11:41
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,7470A	**Analyst**	: MJR
Lab File ID	: WG2003107.pdf	**Instrument ID**	: NIC4
Sample Amount	: 25ml	**%Solids**	: N/A
Digestion Method	: EPA 7470A	**Date Digested**	: 11/25/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7439-97-6	Mercury, Dissolved	ND	0.00020	0.00009	U

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Lab ID	: L2467934-07	**Date Collected**	: 11/18/24 14:15
Client ID	: MW-7S	**Date Received**	: 11/19/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 11/27/24 11:51
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,7470A	**Analyst**	: MJR
Lab File ID	: WG2003107.pdf	**Instrument ID**	: NIC4
Sample Amount	: 25ml	**%Solids**	: N/A
Digestion Method	: EPA 7470A	**Date Digested**	: 11/25/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7439-97-6	Mercury, Dissolved	ND	0.00020	0.00009	U

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Lab ID	: L2467934-08	**Date Collected**	: 11/18/24 16:45
Client ID	: MW-8S	**Date Received**	: 11/19/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 11/27/24 11:54
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,7470A	**Analyst**	: MJR
Lab File ID	: WG2003107.pdf	**Instrument ID**	: NIC4
Sample Amount	: 25ml	**%Solids**	: N/A
Digestion Method	: EPA 7470A	**Date Digested**	: 11/25/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7439-97-6	Mercury, Dissolved	ND	0.00020	0.00009	U

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Lab ID	: L2467934-09	**Date Collected**	: 11/18/24 00:00
Client ID	: DUP	**Date Received**	: 11/19/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 11/27/24 11:57
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,7470A	**Analyst**	: MJR
Lab File ID	: WG2003107.pdf	**Instrument ID**	: NIC4
Sample Amount	: 25ml	**%Solids**	: N/A
Digestion Method	: EPA 7470A	**Date Digested**	: 11/25/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7439-97-6	Mercury, Dissolved	ND	0.00020	0.00009	U

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Lab ID	: L2467934-10	**Date Collected**	: 11/18/24 16:30
Client ID	: FIELD BLANK	**Date Received**	: 11/19/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 11/27/24 12:01
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,7470A	**Analyst**	: MJR
Lab File ID	: WG2003107.pdf	**Instrument ID**	: NIC4
Sample Amount	: 25ml	**%Solids**	: N/A
Digestion Method	: EPA 7470A	**Date Digested**	: 11/25/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7439-97-6	Mercury, Dissolved	ND	0.00020	0.00009	U

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Lab ID	: WG2002013-1	**Date Collected**	: NA
Client ID	: WG2002013-1BLANK	**Date Received**	: NA
Sample Location	:	**Date Analyzed**	: 11/27/24 11:09
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,7470A	**Analyst**	: MJR
Lab File ID	: WG2003107.pdf	**Instrument ID**	: NIC4
Sample Amount	: 25ml	**%Solids**	: N/A
Digestion Method	: EPA 7470A	**Date Digested**	: 11/25/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7439-97-6	Mercury, Dissolved	ND	0.00020	0.00009	U

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Lab ID	: L2467934-01	**Date Collected**	: 11/18/24 15:46
Client ID	: MW-1S	**Date Received**	: 11/19/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 11/27/24 20:59
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,7470A	**Analyst**	: MJR
Lab File ID	: WG2003119.pdf	**Instrument ID**	: NIC3
Sample Amount	: 25ml	**%Solids**	: N/A
Digestion Method	: EPA 7470A	**Date Digested**	: 11/26/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7439-97-6	Mercury, Total	ND	0.00020	0.00009	U

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Lab ID	: L2467934-02	**Date Collected**	: 11/18/24 14:33
Client ID	: MW-2S	**Date Received**	: 11/19/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 11/27/24 21:02
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,7470A	**Analyst**	: MJR
Lab File ID	: WG2003119.pdf	**Instrument ID**	: NIC3
Sample Amount	: 25ml	**%Solids**	: N/A
Digestion Method	: EPA 7470A	**Date Digested**	: 11/26/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7439-97-6	Mercury, Total	ND	0.00020	0.00009	U

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Lab ID	: L2467934-03	**Date Collected**	: 11/18/24 13:31
Client ID	: MW-3S	**Date Received**	: 11/19/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 11/27/24 21:06
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,7470A	**Analyst**	: MJR
Lab File ID	: WG2003119.pdf	**Instrument ID**	: NIC3
Sample Amount	: 25ml	**%Solids**	: N/A
Digestion Method	: EPA 7470A	**Date Digested**	: 11/26/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7439-97-6	Mercury, Total	ND	0.00020	0.00009	U

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Lab ID	: L2467934-04	**Date Collected**	: 11/19/24 09:35
Client ID	: MW-4D	**Date Received**	: 11/19/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 11/27/24 21:16
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,7470A	**Analyst**	: MJR
Lab File ID	: WG2003119.pdf	**Instrument ID**	: NIC3
Sample Amount	: 25ml	**%Solids**	: N/A
Digestion Method	: EPA 7470A	**Date Digested**	: 11/26/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7439-97-6	Mercury, Total	ND	0.00020	0.00009	U

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Lab ID	: L2467934-05	**Date Collected**	: 11/19/24 08:10
Client ID	: MW-5S	**Date Received**	: 11/19/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 11/27/24 20:43
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,7470A	**Analyst**	: MJR
Lab File ID	: WG2003119.pdf	**Instrument ID**	: NIC3
Sample Amount	: 25ml	**%Solids**	: N/A
Digestion Method	: EPA 7470A	**Date Digested**	: 11/26/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7439-97-6	Mercury, Total	ND	0.00020	0.00009	U

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Lab ID	: L2467934-06	**Date Collected**	: 11/18/24 15:40
Client ID	: MW-6D	**Date Received**	: 11/19/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 11/27/24 21:19
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,7470A	**Analyst**	: MJR
Lab File ID	: WG2003119.pdf	**Instrument ID**	: NIC3
Sample Amount	: 25ml	**%Solids**	: N/A
Digestion Method	: EPA 7470A	**Date Digested**	: 11/26/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7439-97-6	Mercury, Total	ND	0.00020	0.00009	U

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Lab ID	: L2467934-07	**Date Collected**	: 11/18/24 14:15
Client ID	: MW-7S	**Date Received**	: 11/19/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 11/27/24 21:22
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,7470A	**Analyst**	: MJR
Lab File ID	: WG2003119.pdf	**Instrument ID**	: NIC3
Sample Amount	: 25ml	**%Solids**	: N/A
Digestion Method	: EPA 7470A	**Date Digested**	: 11/26/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7439-97-6	Mercury, Total	ND	0.00020	0.00009	U

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Lab ID	: L2467934-08	**Date Collected**	: 11/18/24 16:45
Client ID	: MW-8S	**Date Received**	: 11/19/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 11/27/24 21:26
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,7470A	**Analyst**	: MJR
Lab File ID	: WG2003119.pdf	**Instrument ID**	: NIC3
Sample Amount	: 25ml	**%Solids**	: N/A
Digestion Method	: EPA 7470A	**Date Digested**	: 11/26/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7439-97-6	Mercury, Total	ND	0.00020	0.00009	U

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Lab ID	: L2467934-09	**Date Collected**	: 11/18/24 00:00
Client ID	: DUP	**Date Received**	: 11/19/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 11/27/24 21:29
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,7470A	**Analyst**	: MJR
Lab File ID	: WG2003119.pdf	**Instrument ID**	: NIC3
Sample Amount	: 25ml	**%Solids**	: N/A
Digestion Method	: EPA 7470A	**Date Digested**	: 11/26/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7439-97-6	Mercury, Total	ND	0.00020	0.00009	U

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Lab ID	: L2467934-10	**Date Collected**	: 11/18/24 16:30
Client ID	: FIELD BLANK	**Date Received**	: 11/19/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 11/27/24 21:32
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,7470A	**Analyst**	: MJR
Lab File ID	: WG2003119.pdf	**Instrument ID**	: NIC3
Sample Amount	: 25ml	**%Solids**	: N/A
Digestion Method	: EPA 7470A	**Date Digested**	: 11/26/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7439-97-6	Mercury, Total	ND	0.00020	0.00009	U

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Lab ID	: WG2002207-1	**Date Collected**	: NA
Client ID	: WG2002207-1BLANK	**Date Received**	: NA
Sample Location	:	**Date Analyzed**	: 11/27/24 20:36
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,7470A	**Analyst**	: MJR
Lab File ID	: WG2003119.pdf	**Instrument ID**	: NIC3
Sample Amount	: 25ml	**%Solids**	: N/A
Digestion Method	: EPA 7470A	**Date Digested**	: 11/26/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7439-97-6	Mercury, Total	ND	0.00020	0.00009	U

Form 2A
Initial and Continuing Calibration Verification

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Instrument ID	: NIC4	**Units**	: mg/l

		Initial Calibration			Continuing Calibration(s)						
Lab ID	:	R1905538-1			R1905538-3			R1905538-5		R1905538-7	
Date Analyzed	:	11/27/24 09:23			11/27/24 10:13			11/27/24 10:53		11/27/24 11:44	
Parameter		**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Mercury		0.00300	0.0028	94	0.0050	0.00500	100	0.00500	100	0.00500	100

Acceptance Criteria:

ICV:	95-105%	(Methods 200.7, 245.1)
	90-110%	(Methods 200.8, 6010, 6020, 7470, 7471, 7474)
	85-115%	(Method 1631)
CCV:	90-110%	(Methods 200.7, 245.1, 6010, 6020, 7474)
	85-115%	(Methods 200.8, 1631)
	80-120%	(Methods 7470, 7471)

Form 2A
Initial and Continuing Calibration Verification

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Instrument ID	: NIC4	**Units**	: mg/l

	Initial Calibration			Continuing Calibration(s)						
Lab ID :				R1905538-9						
Date Analyzed :				11/27/24 12:24						
Parameter	**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Mercury				0.0050	0.00500	99				

Acceptance Criteria:

ICV:	**95-105%**	**(Methods 200.7, 245.1)**
	90-110%	**(Methods 200.8, 6010, 6020, 7470, 7471, 7474)**
	85-115%	**(Method 1631)**
CCV:	**90-110%**	**(Methods 200.7, 245.1, 6010, 6020, 7474)**
	85-115%	**(Methods 200.8, 1631)**
	80-120%	**(Methods 7470, 7471)**

Form 2A
Initial and Continuing Calibration Verification

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Instrument ID	: NIC3	**Units**	: mg/l

		Initial Calibration			Continuing Calibration(s)						
Lab ID	:	R1905543-1			R1905543-3			R1905543-5		R1905543-7	
Date Analyzed	:	11/27/24 09:41			11/27/24 10:46			11/27/24 11:57		11/27/24 13:12	
Parameter		**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Mercury		0.00300	0.0029	95	0.0050	0.00510	102	0.00500	101	0.00510	102

Acceptance Criteria:

ICV:	95-105%	(Methods 200.7, 245.1)
	90-110%	(Methods 200.8, 6010, 6020, 7470, 7471, 7474)
	85-115%	(Method 1631)
CCV:	90-110%	(Methods 200.7, 245.1, 6010, 6020, 7474)
	85-115%	(Methods 200.8, 1631)
	80-120%	(Methods 7470, 7471)

Form 2A
Initial and Continuing Calibration Verification

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Instrument ID	: NIC3	**Units**	: mg/l

	Initial Calibration			Continuing Calibration(s)						
Lab ID :				R1905543-9			R1905543-11		R1905543-13	
Date Analyzed :				11/27/24 13:52			11/27/24 15:04		11/27/24 15:30	
Parameter	**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Mercury				0.0050	0.00500	101	0.00490	98	0.00500	99

Acceptance Criteria:

ICV:	**95-105%**	**(Methods 200.7, 245.1)**
	90-110%	**(Methods 200.8, 6010, 6020, 7470, 7471, 7474)**
	85-115%	**(Method 1631)**
CCV:	**90-110%**	**(Methods 200.7, 245.1, 6010, 6020, 7474)**
	85-115%	**(Methods 200.8, 1631)**
	80-120%	**(Methods 7470, 7471)**

Form 2A
Initial and Continuing Calibration Verification

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Instrument ID	: NIC3	**Units**	: mg/l

	Initial Calibration			Continuing Calibration(s)						
Lab ID :				R1905543-15			R1905543-17		R1905543-19	
Date Analyzed :				11/27/24 16:37			11/27/24 17:04		11/27/24 19:56	
Parameter	**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Mercury				0.0050	0.00510	102	0.00500	101	0.00500	99

Acceptance Criteria:

ICV:	95-105%	(Methods 200.7, 245.1)
	90-110%	(Methods 200.8, 6010, 6020, 7470, 7471, 7474)
	85-115%	(Method 1631)
CCV:	90-110%	(Methods 200.7, 245.1, 6010, 6020, 7474)
	85-115%	(Methods 200.8, 1631)
	80-120%	(Methods 7470, 7471)

Form 2A
Initial and Continuing Calibration Verification

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Instrument ID	: NIC3	**Units**	: mg/l

	Initial Calibration			Continuing Calibration(s)						
Lab ID :				R1905543-21			R1905543-23			
Date Analyzed :				11/27/24 21:09			11/27/24 22:10			
Parameter	**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Mercury				0.0050	0.00500	100	0.00500	100		

Acceptance Criteria:

ICV:	**95-105%**	**(Methods 200.7, 245.1)**
	90-110%	**(Methods 200.8, 6010, 6020, 7470, 7471, 7474)**
	85-115%	**(Method 1631)**
CCV:	**90-110%**	**(Methods 200.7, 245.1, 6010, 6020, 7474)**
	85-115%	**(Methods 200.8, 1631)**
	80-120%	**(Methods 7470, 7471)**

Form 3
Blanks

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Instrument ID	: NIC4		

	Initial Calibration Blank	Continuing Calibration Blank(s)			Preparation Blank
Lab ID :	R1905538-2	R1905538-4	R1905538-6	R1905538-8	WG2002013-1
Date Analyzed :	11/27/24 09:26	11/27/24 10:16	11/27/24 10:56	11/27/24 11:47	11/27/24 11:09
Parameter	mg/l Q	mg/l Q	mg/l Q	mg/l Q	mg/l Q
Mercury	0.0000915 U	0.0000915 U	0.0000915 U	0.0000915 U	0.00009 U

Form 3
Blanks

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Instrument ID	: NIC4		

	Initial Calibration Blank		Continuing Calibration Blank(s)						Preparation Blank	
Lab ID :			R1905538-10							
Date Analyzed :			11/27/24 12:28							
Parameter	mg/l	Q	mg/l	Q	mg/l	Q	mg/l	Q		Q
Mercury			0.0000915	U						

Form 3
Blanks

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Instrument ID	: NIC3		

	Initial Calibration Blank	Continuing Calibration Blank(s)			Preparation Blank
Lab ID :	R1905543-2	R1905543-4	R1905543-6	R1905543-8	WG2002207-1
Date Analyzed :	11/27/24 09:44	11/27/24 10:49	11/27/24 12:00	11/27/24 13:15	11/27/24 20:36
Parameter	mg/l Q	mg/l Q	mg/l Q	mg/l Q	mg/l Q
Mercury	0.0000915 U	0.0000915 U	0.0000915 U	0.0000915 U	0.00009 U

Form 3
Blanks

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Instrument ID	: NIC3		

	Initial Calibration Blank		Continuing Calibration Blank(s)						Preparation Blank	
Lab ID :			R1905543-10		R1905543-12		R1905543-14			
Date Analyzed :			11/27/24 13:56		11/27/24 15:07		11/27/24 15:33			
Parameter	mg/l	Q	mg/l	Q	mg/l	Q	mg/l	Q		Q
Mercury			0.0000915	U	0.0000915	U	0.0000915	U		

Form 3
Blanks

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Instrument ID	: NIC3		

		Initial Calibration Blank		Continuing Calibration Blank(s)						Preparation Blank	
Lab ID	:			R1905543-16		R1905543-18		R1905543-20			
Date Analyzed	:			11/27/24 16:41		11/27/24 17:07		11/27/24 20:00			
Parameter		mg/l	Q	mg/l	Q	mg/l	Q	mg/l	Q		Q
Mercury				0.0000915	U	0.0000915	U	0.0000915	U		

Form 3
Blanks

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Instrument ID	: NIC3		

	Initial Calibration Blank		Continuing Calibration Blank(s)						Preparation Blank	
Lab ID :			R1905543-22		R1905543-24					
Date Analyzed :			11/27/24 21:12		11/27/24 22:13					
Parameter	mg/l	Q	mg/l	Q	mg/l	Q	mg/l	Q		Q
Mercury			0.0000915	U	0.0000915	U				

Form 5a
Matrix Spike

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Client Sample ID	: MW-5S	**Matrix**	: WATER
Lab Sample ID	: L2467934-05		
Matrix Spike	: WG2002013-3	**MS Analysis Date**	: 11/27/24 11:21
Matrix Spike Dup	: WG2002013-4	**MSD Analysis Date**	: 11/27/24 11:24

		Matrix Spike Sample			Matrix Spike Duplicate					
Parameter	Sample Conc. (mg/l)	Spike Added (mg/l)	Spike Conc. (mg/l)	%R	Spike Added (mg/l)	Spike Conc. (mg/l)	%R	RPD	Recovery Limits	RPD Limit
Mercury, Dissolved	ND	0.005	0.00513	103	0.005	0.00502	100	2	75-125	20

Form 5a
Matrix Spike

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Client Sample ID	: MW-5S	**Matrix**	: WATER
Lab Sample ID	: L2467934-05		
Matrix Spike	: WG2002207-3	**MS Analysis Date**	: 11/27/24 20:46
Matrix Spike Dup	: WG2002207-4	**MSD Analysis Date**	: 11/27/24 20:49

		Matrix Spike Sample			Matrix Spike Duplicate					
Parameter	Sample Conc. (mg/l)	Spike Added (mg/l)	Spike Conc. (mg/l)	%R	Spike Added (mg/l)	Spike Conc. (mg/l)	%R	RPD	Recovery Limits	RPD Limit
Mercury, Total	ND	0.005	0.00569	114	0.005	0.00557	111	2	75-125	20

Form 7
Laboratory Control Sample

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Client Sample ID	: NA	**Matrix**	: WATER
Lab Sample ID	: WG2002013-2	**LCS Analysis Date**	: 11/27/24 11:13
Dup Sample ID	:	**LCSD Analysis Date**	:

	Laboratory Control Sample			Laboratory Control Duplicate					
	True	Found	%R	True	Found	%R	RPD	Recovery	RPD
Parameter	(mg/l)	(mg/l)		(mg/l)	(mg/l)			Limits	Limit
Mercury, Dissolved	0.00100	0.000990	99.					80-120	20

Form 7
Laboratory Control Sample

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Client Sample ID	: NA	**Matrix**	: WATER
Lab Sample ID	: WG2002207-2	**LCS Analysis Date**	: 11/27/24 20:39
Dup Sample ID	:	**LCSD Analysis Date**	:

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	**True (mg/l)**	**Found (mg/l)**	**%R**	**True (mg/l)**	**Found (mg/l)**	**%R**	**RPD**	**Recovery Limits**	**RPD Limit**
Mercury, Total	**0.00100**	**0.00107**	**107.**					**80-120**	**20**

Form 12
Preparation Log

Client	:	**Alpha Geoscience**	**Lab Number**	:	**L2467934**
Project Name	:	**HUNTINGTON READY MIXED**	**Project Number**	:	**20116**
Matrix	:	**WATER**	**Prep Method**	:	**EPA 7470A**

Sample Number	Preparation Date	Weight (gram)	Volume (mL)
L2467934-01	11/25/24 21:22	-	25
L2467934-02	11/25/24 21:22	-	25
L2467934-03	11/25/24 21:22	-	25
L2467934-04	11/25/24 21:22	-	25
L2467934-05	11/25/24 21:22	-	25
L2467934-06	11/25/24 21:22	-	25
L2467934-07	11/25/24 21:22	-	25
L2467934-08	11/25/24 21:22	-	25
L2467934-09	11/25/24 21:22	-	25
L2467934-10	11/25/24 21:22	-	25
WG2002013-1	11/25/24 21:22	-	25
WG2002013-2	11/25/24 21:22	-	25
WG2002013-3	11/25/24 21:22	-	25
WG2002013-4	11/25/24 21:22	-	25

Form 12
Preparation Log

Client	:	**Alpha Geoscience**	**Lab Number**	:	**L2467934**
Project Name	:	**HUNTINGTON READY MIXED**	**Project Number**	:	**20116**
Matrix	:	**WATER**	**Prep Method**	:	**EPA 7470A**

Sample Number	Preparation Date	Weight (gram)	Volume (mL)
L2467934-01	11/26/24 11:53	-	25
L2467934-02	11/26/24 11:53	-	25
L2467934-03	11/26/24 11:53	-	25
L2467934-04	11/26/24 11:53	-	25
L2467934-05	11/26/24 11:53	-	25
L2467934-06	11/26/24 11:53	-	25
L2467934-07	11/26/24 11:53	-	25
L2467934-08	11/26/24 11:53	-	25
L2467934-09	11/26/24 11:53	-	25
L2467934-10	11/26/24 11:53	-	25
WG2002207-1	11/26/24 11:53	-	25
WG2002207-2	11/26/24 11:53	-	25
WG2002207-3	11/26/24 11:53	-	25
WG2002207-4	11/26/24 11:53	-	25

Form 13
Analysis Run Log

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Instrument ID	: NIC4	**Analysis Method**	: 1,7470A
Start Date	: 11/27/24 09:23	**End Date**	: 11/27/24 12:28

Sample Number	Dilution Factor	Analysis Time	Mercury, Dissolved
R1905538-1 ICV	1	09:23:38	X
R1905538-2 ICB	1	09:26:58	X
R1905538-3 CCV	1	10:13:31	X
R1905538-4 CCB	1	10:16:51	X
R1905538-5 CCV	1	10:53:24	X
R1905538-6 CCB	1	10:56:43	X
WG2002013-1 BLANK	1	11:09:43	X
WG2002013-2 LCS	1	11:13:03	X
L2467934-05	1	11:18:00	X
WG2002013-3 MS	1	11:21:20	X
WG2002013-4 MSD	1	11:24:38	X
L2467934-01	1	11:27:58	X
L2467934-02	1	11:31:17	X
L2467934-03	1	11:34:37	X
L2467934-04	1	11:37:56	X
L2467934-06	1	11:41:16	X
R1905538-7 CCV	1	11:44:35	X
R1905538-8 CCB	1	11:47:55	X
L2467934-07	1	11:51:14	X
L2467934-08	1	11:54:34	X
L2467934-09	1	11:57:53	X
L2467934-10	1	12:01:12	X
R1905538-9 CCV	1	12:24:45	X
R1905538-10 CCB	1	12:28:03	X

Form 13
Analysis Run Log

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Instrument ID	: NIC3	**Analysis Method**	: 1,7470A
Start Date	: 11/27/24 09:41	**End Date**	: 11/27/24 22:13

Sample Number	Dilution Factor	Analysis Time	Mercury, Total
R1905543-1 ICV	1	09:41:21	X
R1905543-2 ICB	1	09:44:39	X
R1905543-3 CCV	1	10:46:19	X
R1905543-4 CCB	1	10:49:37	X
R1905543-5 CCV	1	11:57:15	X
R1905543-6 CCB	1	12:00:33	X
R1905543-7 CCV	1	13:12:14	X
R1905543-8 CCB	1	13:15:32	X
R1905543-9 CCV	1	13:52:53	X
R1905543-10 CCB	1	13:56:11	X
R1905543-11 CCV	1	15:04:28	X
R1905543-12 CCB	1	15:07:46	X
R1905543-13 CCV	1	15:30:34	X
R1905543-14 CCB	1	15:33:52	X
R1905543-15 CCV	1	16:37:50	X
R1905543-16 CCB	1	16:41:07	X
R1905543-17 CCV	1	17:04:28	X
R1905543-18 CCB	1	17:07:47	X
R1905543-19 CCV	1	19:56:48	X
R1905543-20 CCB	1	20:00:06	X
WG2002207-1 BLANK	1	20:36:25	X
WG2002207-2 LCS	1	20:39:44	X
L2467934-05	1	20:43:02	X
WG2002207-3 MS	1	20:46:19	X
WG2002207-4 MSD	1	20:49:37	X
L2467934-01	1	20:59:33	X
L2467934-02	1	21:02:51	X

Form 13
Analysis Run Log

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Instrument ID	: NIC3	**Analysis Method**	: 1,7470A
Start Date	: 11/27/24 09:41	**End Date**	: 11/27/24 22:13

Sample Number	Dilution Factor	Analysis Time	Mercury, Total
L2467934-03	1	21:06:09	X
R1905543-21 CCV	1	21:09:28	X
R1905543-22 CCB	1	21:12:46	X
L2467934-04	1	21:16:05	X
L2467934-06	1	21:19:23	X
L2467934-07	1	21:22:42	X
L2467934-08	1	21:26:00	X
L2467934-09	1	21:29:19	X
L2467934-10	1	21:32:37	X
R1905543-23 CCV	1	22:10:21	X
R1905543-24 CCB	1	22:13:39	X

Date Created: 03/19/18
Created By: Jason Hebert
File: PM4631-1
Page: 1

MERCURY by 7470A, 245.1 (WATER)

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Surrogate Criteria	Holding Time	Container/Sample Preservation
Mercury, Total	7439-97-6	0.0002	0.0000915	mg/l	80-120	20	75-125	20	20		28 days	1 - Plastic 500ml HNO3 preserved

Please Note that the RL information provided in this table is calculated using a 100% Solids factor. ***(Soil/Solids only)***
Please Note that the information provided in this table is subject to change at anytime at the discretion of Alpha Analytical, Inc.

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Created By: Jason Hebert
File: PM9836-1
Page: 1

METALS by 7470A (WATER)

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Surrogate Criteria	Holding Time	Container/Sample Preservation
Mercury, Total	7439-97-6	0.0002	0.0000915	mg/l	80-120		75-125	20	20		28 days	1 - Plastic 500ml HNO3 preserved

Please Note that the RL information provided in this table is calculated using a 100% Solids factor. ***(Soil/Solids only)***
Please Note that the information provided in this table is subject to change at anytime at the discretion of Alpha Analytical, Inc.

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Page: 1

METALS by 7471B (SOIL)

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Surrogate Criteria	Holding Time	Container/Sample Preservation
Mercury, Total	7439-97-6	0.08	0.05216	mg/kg	72-128		80-120	20	20		28 days	Metals Only-Glass 60mL/2oz unpreserv

Please Note that the RL information provided in this table is calculated using a 100% Solids factor. *(Soil/Solids only)*
Please Note that the information provided in this table is subject to change at anytime at the discretion of Alpha Analytical, Inc.

Title :
Date : 11/27/2024
Name :

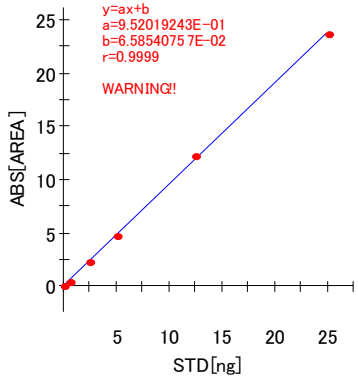
Method

STD
HONH3Cl : 0.0mL
(1+1)H2SO4 : 0.0mL
10w/v% SnCl2 : 0.3mL

SMP
HONH3Cl : 0.0mL
(1+1)H2SO4 : 0.0mL
10w/v% SnCl2 : 0.3mL

Measurement Time(sec) : 120sec

Calib



STD

No.	STD [ug/L]	SVOL [mL]	CVOL [mL]	DVOL [mL]	STD [ng]	AREA [ON]	MEAS [ng]	Dev [%]	M. TIME	Note
1	0.000	2.500	2.500	2.500	0.000	0.0431	-0.0239	-	11/27/2024 09:14	MJR,NIC3
2	0.200	2.500	2.500	2.500	0.500	0.4885	0.4439	11.2	11/27/2024 09:17	MJR,NIC3
3	1.000	2.500	2.500	2.500	2.500	2.3736	2.4241	3.0	11/27/2024 09:20	MJR,NIC3
4	2.000	2.500	2.500	2.500	5.000	4.8251	4.9991	0.0	11/27/2024 09:24	MJR,NIC3
5	5.000	2.500	2.500	2.500	12.500	12.2477	12.7958	2.4	11/27/2024 09:27	MJR,NIC3
6	10.000	2.500	2.500	2.500	25.000	23.7340	24.8610	0.6	11/27/2024 09:30	MJR,NIC3

SMP

No.	NAME	SVOL [mL]	CVOL [mL]	DVOL [mL]	AREA [ON]	MEAS [ng]	CONC [ug/L]	Recovery [%]	M. TIME	Note
1	XICV	2.500	2.500	2.500	6.8169	7.0913	2.837	-	11/27/2024 09:34	MJR,NIC3
2	XICB	2.500	2.500	2.500	0.0447	-0.0222	-0.009	-	11/27/2024 09:38	MJR,NIC3
3	ICV	2.500	2.500	2.500	6.8553	7.1316	2.853	-	11/27/2024 09:41	MJR,NIC3
4	ICB	2.500	2.500	2.500	0.0361	-0.0313	-0.013	-	11/27/2024 09:44	MJR,NIC3
5	I2468194-01 wg2001642	2.500	2.500	2.500	0.0478	-0.0190	-0.008	-	11/27/2024 10:19	MJR,NIC3
6	wg2001642-5 wg2001642	2.500	2.500	2.500	14.9406	15.6244	6.250	-	11/27/2024 10:23	MJR,NIC3

NIC NIPPON INSTRUMENTS CORPORATION

No.	NAME	SVOL [mL]	CVOL [mL]	DVOL [mL]	AREA [ON]	MEAS [ng]	CONC [ug/L]	Recovery [%]	M. TIME	Note
7	wg2001642-6 wg2001642	2.500	2.500	2.500	0.0453	-0.0216	-0.009	-	11/27/2024 10:26	MJR,NIC3
8	I2468194-02 wg2001642	2.500	2.500	2.500	0.0377	-0.0296	-0.012	-	11/27/2024 10:29	MJR,NIC3
9	I2468194-03 wg2001642	2.500	2.500	2.500	0.0810	0.0159	0.006	-	11/27/2024 10:33	MJR,NIC3
10	I2468194-04 wg2001642	2.500	2.500	2.500	0.0356	-0.0318	-0.013	-	11/27/2024 10:36	MJR,NIC3
11	I2468194-05 wg2001642	2.500	2.500	2.500	0.0401	-0.0271	-0.011	-	11/27/2024 10:39	MJR,NIC3
12	I2468194-06 wg2001642	2.500	2.500	2.500	0.0347	-0.0327	-0.013	-	11/27/2024 10:43	MJR,NIC3
13	Check STD(5ug/L)	2.500	2.500	2.500	12.1862	12.7312	5.092	101.8	11/27/2024 10:46	MJR,NIC3
14	Check Blank	2.500	2.500	2.500	0.0359	-0.0315	-0.013	-	11/27/2024 10:49	MJR,NIC3
15	wg2002008-1 wg2002008	2.500	2.500	2.500	0.0281	-0.0397	-0.016	-	11/27/2024 10:53	MJR,NIC3
16	wg2002008-2 wg2002008	2.500	2.500	2.500	2.7114	2.7789	1.112	-	11/27/2024 10:56	MJR,NIC3
17	I2467987-01 wg2002008	2.500	2.500	2.500	0.0330	-0.0345	-0.014	-	11/27/2024 10:59	MJR,NIC3
18	wg2002008-3 wg2002008	2.500	2.500	2.500	12.3792	12.9339	5.174	-	11/27/2024 11:03	MJR,NIC3
19	wg2002008-4 wg2002008	2.500	2.500	2.500	0.0357	-0.0317	-0.013	-	11/27/2024 11:06	MJR,NIC3
20	WG2002924-1 WG2002924	2.500	2.500	2.500	0.0272	-0.0406	-0.016	-	11/27/2024 11:40	MJR,NIC3
21	WG2002924-2 WG2002924	2.500	2.500	2.500	2.4116	2.4640	0.986	-	11/27/2024 11:44	MJR,NIC3
22	L2468320-01 WG2002924	2.500	2.500	2.500	0.1110	0.0474	0.019	-	11/27/2024 11:47	MJR,NIC3
23	WG2002924-3 WG2002924	2.500	2.500	2.500	12.3246	12.8766	5.151	-	11/27/2024 11:50	MJR,NIC3
24	WG2002924-4 WG2002924	2.500	2.500	2.500	0.1424	0.0804	0.032	-	11/27/2024 11:53	MJR,NIC3
25	Check STD(5ug/L)	2.500	2.500	2.500	12.0744	12.6138	5.046	100.9	11/27/2024 11:57	MJR,NIC3
26	Check Blank	2.500	2.500	2.500	0.0317	-0.0359	-0.014	-	11/27/2024 12:00	MJR,NIC3
27	L2469227-01 WG2002924	2.500	2.500	2.500	0.0624	-0.0036	-0.001	-	11/27/2024 12:03	MJR,NIC3
28	L2468139-01 WG2002924	2.500	2.500	2.500	0.1174	0.0541	0.022	-	11/27/2024 12:07	MJR,NIC3
29	L2468323-01 WG2002924	2.500	2.500	2.500	0.1643	0.1034	0.041	-	11/27/2024 12:10	MJR,NIC3
30	L2468346-02 WG2002924	2.500	2.500	2.500	0.2098	0.1512	0.060	-	11/27/2024 12:13	MJR,NIC3
31	L2468438-01 WG2002924	2.500	2.500	2.500	0.1514	0.0899	0.036	-	11/27/2024 12:17	MJR,NIC3
32	L2468964-01 WG2002924	2.500	2.500	2.500	0.1717	0.1112	0.044	-	11/27/2024 12:20	MJR,NIC3
33	wg2002752-1 wg2002752	2.500	2.500	2.500	0.0673	0.0015	0.001	-	11/27/2024 12:59	MJR,NIC3
34	wg2002752-2 wg2002752	2.500	2.500	2.500	2.3220	2.3699	0.948	-	11/27/2024 13:02	MJR,NIC3
35	I2468276-02 wg2002752	2.500	2.500	2.500	0.1079	0.0442	0.018	-	11/27/2024 13:05	MJR,NIC3
36	wg2002752-3 wg2002752	2.500	2.500	2.500	11.1778	11.6720	4.669	-	11/27/2024 13:08	MJR,NIC3
37	Check STD(5ug/L)	2.500	2.500	2.500	12.1632	12.7070	5.083	101.7	11/27/2024 13:12	MJR,NIC3
38	Check Blank	2.500	2.500	2.500	0.0343	-0.0331	-0.013	-	11/27/2024 13:15	MJR,NIC3

NIC NIPPON INSTRUMENTS CORPORATION

No.	NAME	SVOL [mL]	CVOL [mL]	DVOL [mL]	AREA [ON]	MEAS [ng]	CONC [ug/L]	Recovery [%]	M. TIME	Note
39	wg2002752-4 wg2002752	2.500	2.500	2.500	0.1108	0.0472	0.019	-	11/27/2024 13:19	MJR,NIC3
40	I2468276-01 wg2002752	2.500	2.500	2.500	0.1370	0.0747	0.030	-	11/27/2024 13:23	MJR,NIC3
41	I2468416-10 wg2002752	2.500	2.500	2.500	0.1599	0.0988	0.040	-	11/27/2024 13:26	MJR,NIC3
42	I2468416-11 wg2002752	2.500	2.500	2.500	0.2510	0.1945	0.078	-	11/27/2024 13:29	MJR,NIC3
43	I2468430-03 wg2002752	2.500	2.500	2.500	0.1873	0.1276	0.051	-	11/27/2024 13:33	MJR,NIC3
44	I2468449-01 wg2002752	2.500	2.500	2.500	0.2448	0.1880	0.075	-	11/27/2024 13:36	MJR,NIC3
45	I2468449-02 wg2002752	2.500	2.500	2.500	0.2840	0.2291	0.092	-	11/27/2024 13:39	MJR,NIC3
46	I2468449-03 wg2002752	2.500	2.500	2.500	0.2786	0.2235	0.089	-	11/27/2024 13:43	MJR,NIC3
47	I2468449-04 wg2002752	2.500	2.500	2.500	0.3118	0.2583	0.103	-	11/27/2024 13:46	MJR,NIC3
48	I2468449-05 wg2002752	2.500	2.500	2.500	0.3243	0.2715	0.109	-	11/27/2024 13:49	MJR,NIC3
49	Check STD(5ug/L)	2.500	2.500	2.500	12.0748	12.6142	5.046	100.9	11/27/2024 13:52	MJR,NIC3
50	Check Blank	2.500	2.500	2.500	0.0363	-0.0310	-0.012	-	11/27/2024 13:56	MJR,NIC3
51	I2468449-06 wg2002752	2.500	2.500	2.500	0.5213	0.4784	0.191	-	11/27/2024 13:59	MJR,NIC3
52	wg2002456-1 wg2002456	2.500	2.500	2.500	0.0424	-0.0246	-0.010	-	11/27/2024 14:12	MJR,NIC3
53	wg2002456-2 wg2002456	2.500	2.500	2.500	2.7551	2.8248	1.130	-	11/27/2024 14:16	MJR,NIC3
54	wg2002456-3 wg2002456	2.500	2.500	2.500	2.6878	2.7541	1.102	-	11/27/2024 14:19	MJR,NIC3
55	I2467825-01 wg2002456	2.500	2.500	2.500	0.1999	0.1408	0.056	-	11/27/2024 14:22	MJR,NIC3
56	I2467825-02 wg2002456	2.500	2.500	2.500	0.1019	0.0379	0.015	-	11/27/2024 14:26	MJR,NIC3
57	I2468044-02 wg2002456	2.500	2.500	2.500	0.0449	-0.0220	-0.009	-	11/27/2024 14:29	MJR,NIC3
58	wg2002703-1 wg2002703	2.500	2.500	2.500	0.0512	-0.0154	-0.006	-	11/27/2024 14:46	MJR,NIC3
59	wg2002703-2 wg2002703	2.500	2.500	2.500	2.7564	2.8261	1.130	-	11/27/2024 14:50	MJR,NIC3
60	wg2002703-3 wg2002703	2.500	2.500	2.500	3.3205	3.4187	1.367	-	11/27/2024 14:53	MJR,NIC3
61	XMISINJECTION	2.500	2.500	2.500	-0.0041	-0.0735	-0.029	-	11/27/2024 14:56	MJR,NIC3/ Flow Error!!(0.00L/min)/Che
62	Check STD(5ug/L)	2.500	2.500	2.500	11.7716	12.2957	4.918	98.4	11/27/2024 15:04	MJR,NIC3
63	Check Blank	2.500	2.500	2.500	0.0416	-0.0255	-0.010	-	11/27/2024 15:07	MJR,NIC3
64	I2469316-01 wg2002703	2.500	2.500	2.500	0.0713	0.0057	0.002	-	11/27/2024 15:11	MJR,NIC3
65	I2469316-02 wg2002703	2.500	2.500	2.500	0.1295	0.0669	0.027	-	11/27/2024 15:14	MJR,NIC3
66	I2469316-03 wg2002703	2.500	2.500	2.500	0.0943	0.0299	0.012	-	11/27/2024 15:17	MJR,NIC3
67	Check STD(5ug/L)	2.500	2.500	2.500	11.8501	12.3782	4.951	99.0	11/27/2024 15:30	MJR,NIC3
68	Check Blank	2.500	2.500	2.500	0.0416	-0.0255	-0.010	-	11/27/2024 15:33	MJR,NIC3
69	wg2002972-1 wg2002972	2.500	2.500	2.500	0.0502	-0.0164	-0.007	-	11/27/2024 15:52	MJR,NIC3
70	wg2002972-2 wg2002972	2.500	2.500	2.500	2.4339	2.4874	0.995	-	11/27/2024 15:56	MJR,NIC3

NIC NIPPON INSTRUMENTS CORPORATION

No.	NAME	SVOL [mL]	CVOL [mL]	DVOL [mL]	AREA [ON]	MEAS [ng]	CONC [ug/L]	Recovery [%]	M. TIME	Note
71	I2468359-01 wg2002972	2.500	2.500	2.500	0.0613	-0.0048	-0.002	-	11/27/2024 15:59	MJR,NIC3
72	wg2002972-3 wg2002972	2.500	2.500	2.500	9.7693	10.1925	4.077	-	11/27/2024 16:02	MJR,NIC3
73	wg2002972-4 wg2002972	2.500	2.500	2.500	0.0609	-0.0052	-0.002	-	11/27/2024 16:06	MJR,NIC3
74	Xwg2002703-3 wg2002703	2.500	2.500	2.500	3.3298	3.4284	1.371	-	11/27/2024 16:10	MJR,NIC3
75	I2468433-22 wg2002972	2.500	2.500	2.500	0.0493	-0.0174	-0.007	-	11/27/2024 16:24	MJR,NIC3
76	I2468237-01 wg2002972	2.500	2.500	2.500	0.0551	-0.0113	-0.005	-	11/27/2024 16:27	MJR,NIC3
77	I2468359-02 wg2002972	2.500	2.500	2.500	0.0686	0.0029	0.001	-	11/27/2024 16:31	MJR,NIC3
78	I2468396-01 wg2002972	2.500	2.500	2.500	0.9375	0.9156	0.366	-	11/27/2024 16:34	MJR,NIC3
79	Check STD(5ug/L)	2.500	2.500	2.500	12.1496	12.6928	5.077	101.5	11/27/2024 16:37	MJR,NIC3
80	Check Blank	2.500	2.500	2.500	0.0427	-0.0243	-0.010	-	11/27/2024 16:41	MJR,NIC3
81	I2468396-02 wg2002972	2.500	2.500	2.500	3.7710	3.8919	1.557	-	11/27/2024 16:44	MJR,NIC3
82	I2468440-01 wg2002972	2.500	2.500	2.500	0.0975	0.0332	0.013	-	11/27/2024 16:47	MJR,NIC3
83	I2468676-06 wg2002972	2.500	2.500	2.500	0.0584	-0.0078	-0.003	-	11/27/2024 16:51	MJR,NIC3
84	I2468676-07 wg2002972	2.500	2.500	2.500	0.3073	0.2536	0.101	-	11/27/2024 16:54	MJR,NIC3
85	I2469255-01 wg2002972	2.500	2.500	2.500	0.0582	-0.0080	-0.003	-	11/27/2024 16:57	MJR,NIC3
86	Check STD(5ug/L)	2.500	2.500	2.500	12.0636	12.6024	5.041	100.8	11/27/2024 17:04	DJR,NIC3
87	Check Blank	2.500	2.500	2.500	0.0389	-0.0283	-0.011	-	11/27/2024 17:07	DJR,NIC3
88	XHG2448271505AJT	2.500	2.500	2.500	2.1816	2.2224	0.889	-	11/27/2024 18:06	DJR,NIC3
89	XHG2448271505AJT	2.500	2.500	2.500	2.2568	2.3014	0.921	-	11/27/2024 18:09	DJR,NIC3
90	Check STD(5ug/L)	2.500	2.500	2.500	11.8644	12.3932	4.957	99.1	11/27/2024 19:56	DJR,NIC3
91	Check Blank	2.500	2.500	2.500	0.0347	-0.0327	-0.013	-	11/27/2024 20:00	DJR,NIC3
92	WG2002207-1 WG2002207	2.500	2.500	2.500	0.0377	-0.0296	-0.012	-	11/27/2024 20:36	DJR,NIC3
93	WG2002207-2 WG2002207	2.500	2.500	2.500	2.6174	2.6801	1.072	-	11/27/2024 20:39	DJR,NIC3
94	L2467934-05 WG2002207	2.500	2.500	2.500	0.0382	-0.0290	-0.012	-	11/27/2024 20:43	DJR,NIC3
95	WG2002207-3 WG2002207	2.500	2.500	2.500	13.6079	14.2246	5.690	-	11/27/2024 20:46	DJR,NIC3
96	WG2002207-4 WG2002207	2.500	2.500	2.500	13.3313	13.9340	5.574	-	11/27/2024 20:49	DJR,NIC3
97	L2467884-01 WG2002207	2.500	2.500	2.500	0.0734	0.0079	0.003	-	11/27/2024 20:52	DJR,NIC3
98	L2467884-02 WG2002207	2.500	2.500	2.500	0.0570	-0.0093	-0.004	-	11/27/2024 20:56	DJR,NIC3
99	L2467934-01 WG2002207	2.500	2.500	2.500	0.0717	0.0061	0.002	-	11/27/2024 20:59	DJR,NIC3
100	L2467934-02 WG2002207	2.500	2.500	2.500	0.0574	-0.0089	-0.004	-	11/27/2024 21:02	DJR,NIC3
101	L2467934-03 WG2002207	2.500	2.500	2.500	0.0588	-0.0074	-0.003	-	11/27/2024 21:06	DJR,NIC3
102	Check STD(5ug/L)	2.500	2.500	2.500	11.9835	12.5183	5.007	100.1	11/27/2024 21:09	DJR,NIC3

NIC NIPPON INSTRUMENTS CORPORATION

No.	NAME	SVOL [mL]	CVOL [mL]	DVOL [mL]	AREA [ON]	MEAS [ng]	CONC [ug/L]	Recovery [%]	M. TIME	Note
103	Check Blank	2.500	2.500	2.500	0.0439	-0.0231	-0.009	-	11/27/2024 21:12	DJR,NIC3
104	L2467934-04 WG2002207	2.500	2.500	2.500	0.0680	0.0023	0.001	-	11/27/2024 21:16	DJR,NIC3
105	L2467934-06 WG2002207	2.500	2.500	2.500	0.0868	0.0220	0.009	-	11/27/2024 21:19	DJR,NIC3
106	L2467934-07 WG2002207	2.500	2.500	2.500	0.0547	-0.0117	-0.005	-	11/27/2024 21:22	DJR,NIC3
107	L2467934-08 WG2002207	2.500	2.500	2.500	0.0538	-0.0127	-0.005	-	11/27/2024 21:26	DJR,NIC3
108	L2467934-09 WG2002207	2.500	2.500	2.500	0.0484	-0.0183	-0.007	-	11/27/2024 21:29	DJR,NIC3
109	L2467934-10 WG2002207	2.500	2.500	2.500	0.0500	-0.0167	-0.007	-	11/27/2024 21:32	DJR,NIC3
110	wg2002784-1 wg2002784	2.500	2.500	2.500	0.0497	-0.0170	-0.007	-	11/27/2024 21:57	DJR,NIC3
111	wg2002784-2 wg2002784	2.500	2.500	2.500	2.5137	2.5712	1.028	-	11/27/2024 22:00	DJR,NIC3
112	wg2002784-3 wg2002784	2.500	2.500	2.500	2.4521	2.5065	1.003	-	11/27/2024 22:03	DJR,NIC3
113	l2468144-04 wg2002784	2.500	2.500	2.500	0.0522	-0.0143	-0.006	-	11/27/2024 22:07	DJR,NIC3
114	Check STD(5ug/L)	2.500	2.500	2.500	11.9829	12.5177	5.007	100.1	11/27/2024 22:10	DJR,NIC3
115	Check Blank	2.500	2.500	2.500	0.0406	-0.0265	-0.011	-	11/27/2024 22:13	DJR,NIC3

NIC NIPPON INSTRUMENTS CORPORATION

Title :
Date : 11/27/2024
Name :

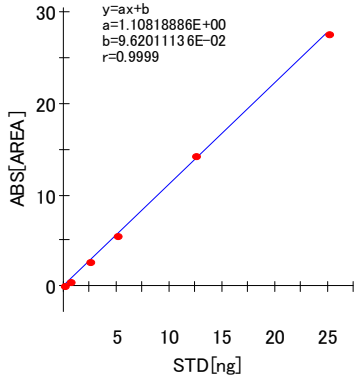
Method

STD
HONH3Cl : 0.0mL
(1+1)H2SO4 : 0.0mL
10w/v% SnCl2 : 0.3mL

SMP
HONH3Cl : 0.0mL
(1+1)H2SO4 : 0.0mL
10w/v% SnCl2 : 0.3mL

Measurement Time(sec) : 120sec

Calib



STD

No.	STD [ug/L]	SVOL [mL]	CVOL [mL]	DVOL [mL]	STD [ng]	AREA [ON]	MEAS [ng]	Dev [%]	M. TIME	Note
1	0.000	2.500	2.500	2.500	0.000	0.0885	-0.0069	-	11/27/2024 09:03	MJR,NIC4
2	0.200	2.500	2.500	2.500	0.500	0.5913	0.4468	10.6	11/27/2024 09:07	MJR,NIC4
3	1.000	2.500	2.500	2.500	2.500	2.7999	2.4397	2.4	11/27/2024 09:10	MJR,NIC4
4	2.000	2.500	2.500	2.500	5.000	5.6067	4.9725	0.5	11/27/2024 09:13	MJR,NIC4
5	5.000	2.500	2.500	2.500	12.500	14.2485	12.7707	2.2	11/27/2024 09:16	MJR,NIC4
6	10.000	2.500	2.500	2.500	25.000	27.6649	24.8773	0.5	11/27/2024 09:20	MJR,NIC4

SMP

No.	NAME	SVOL [mL]	CVOL [mL]	DVOL [mL]	AREA [ON]	MEAS [ng]	CONC [ug/L]	Recovery [%]	M. TIME	Note
1	ICV	2.500	2.500	2.500	7.8952	7.0376	2.815	-	11/27/2024 09:23	MJR,NIC4
2	ICB	2.500	2.500	2.500	0.0691	-0.0245	-0.010	-	11/27/2024 09:26	MJR,NIC4
3	XICV	2.500	2.500	2.500	7.7455	6.9025	2.761	-	11/27/2024 09:33	MJR,NIC4
4	XICB	2.500	2.500	2.500	0.0626	-0.0303	-0.012	-	11/27/2024 09:36	MJR,NIC4
5	WG2002596-1 WG2002596	2.500	2.500	2.500	0.0687	-0.0248	-0.010	-	11/27/2024 09:46	MJR,NIC4
6	WG2002596-2 WG2002596	2.500	2.500	2.500	2.7909	2.4316	0.973	-	11/27/2024 09:50	MJR,NIC4

NIC NIPPON INSTRUMENTS CORPORATION

No.	NAME	SVOL [mL]	CVOL [mL]	DVOL [mL]	AREA [ON]	MEAS [ng]	CONC [ug/L]	Recovery [%]	M. TIME	Note
7	L2468284-04 WG2002596	2.500	2.500	2.500	0.0583	-0.0342	-0.014	-	11/27/2024 09:53	MJR,NIC4
8	WG2002596-3 WG2002596	2.500	2.500	2.500	13.9374	12.4899	4.996	-	11/27/2024 09:56	MJR,NIC4
9	WG2002596-4 WG2002596	2.500	2.500	2.500	13.9280	12.4814	4.993	-	11/27/2024 10:00	MJR,NIC4
10	L2468219-03 WG2002596	2.500	2.500	2.500	0.0644	-0.0287	-0.011	-	11/27/2024 10:03	MJR,NIC4
11	L2468219-04 WG2002596	2.500	2.500	2.500	0.0689	-0.0246	-0.010	-	11/27/2024 10:06	MJR,NIC4
12	L2468284-01 WG2002596	2.500	2.500	2.500	0.0700	-0.0236	-0.009	-	11/27/2024 10:10	MJR,NIC4
13	Check STD(5ug/L)	2.500	2.500	2.500	13.9570	12.5076	5.003	100.1	11/27/2024 10:13	MJR,NIC4
14	Check Blank	2.500	2.500	2.500	0.0614	-0.0314	-0.013	-	11/27/2024 10:16	MJR,NIC4
15	L2468284-02 WG2002596	2.500	2.500	2.500	0.0676	-0.0258	-0.010	-	11/27/2024 10:20	MJR,NIC4
16	L2468284-03 WG2002596	2.500	2.500	2.500	0.0797	-0.0149	-0.006	-	11/27/2024 10:23	MJR,NIC4
17	L2468284-05 WG2002596	2.500	2.500	2.500	0.0672	-0.0262	-0.010	-	11/27/2024 10:26	MJR,NIC4
18	L2468284-06 WG2002596	2.500	2.500	2.500	0.0675	-0.0259	-0.010	-	11/27/2024 10:30	MJR,NIC4
19	L2468319-01 WG2002596	2.500	2.500	2.500	0.0992	0.0027	0.001	-	11/27/2024 10:33	MJR,NIC4
20	L2468319-02 WG2002596	2.500	2.500	2.500	0.1845	0.0797	0.032	-	11/27/2024 10:36	MJR,NIC4
21	L2468319-03 WG2002596	2.500	2.500	2.500	0.0861	-0.0091	-0.004	-	11/27/2024 10:40	MJR,NIC4
22	L2468319-04 WG2002596	2.500	2.500	2.500	0.1047	0.0077	0.003	-	11/27/2024 10:43	MJR,NIC4
23	L2468319-05 WG2002596	2.500	2.500	2.500	0.6814	0.5281	0.211	-	11/27/2024 10:46	MJR,NIC4
24	L2468319-06 WG2002596	2.500	2.500	2.500	0.0909	-0.0048	-0.002	-	11/27/2024 10:50	MJR,NIC4
25	Check STD(5ug/L)	2.500	2.500	2.500	13.9925	12.5396	5.016	100.3	11/27/2024 10:53	MJR,NIC4
26	Check Blank	2.500	2.500	2.500	0.0584	-0.0341	-0.014	-	11/27/2024 10:56	MJR,NIC4
27	WG2002013-1 WG2002013	2.500	2.500	2.500	0.0592	-0.0334	-0.013	-	11/27/2024 11:09	MJR,NIC4
28	WG2002013-2 WG2002013	2.500	2.500	2.500	2.8420	2.4777	0.991	-	11/27/2024 11:13	MJR,NIC4
29	L2467934-05 WG2002013	2.500	2.500	2.500	0.0646	-0.0285	-0.011	-	11/27/2024 11:18	MJR,NIC4
30	WG2002013-3 WG2002013	2.500	2.500	2.500	14.3318	12.8458	5.138	-	11/27/2024 11:21	MJR,NIC4
31	WG2002013-4 WG2002013	2.500	2.500	2.500	14.0092	12.5547	5.022	-	11/27/2024 11:24	MJR,NIC4
32	L2467934-01 WG2002013	2.500	2.500	2.500	0.0717	-0.0221	-0.009	-	11/27/2024 11:27	MJR,NIC4
33	L2467934-02 WG2002013	2.500	2.500	2.500	0.0533	-0.0387	-0.015	-	11/27/2024 11:31	MJR,NIC4
34	L2467934-03 WG2002013	2.500	2.500	2.500	0.0585	-0.0340	-0.014	-	11/27/2024 11:34	MJR,NIC4
35	L2467934-04 WG2002013	2.500	2.500	2.500	0.0546	-0.0375	-0.015	-	11/27/2024 11:37	MJR,NIC4
36	L2467934-06 WG2002013	2.500	2.500	2.500	0.0566	-0.0357	-0.014	-	11/27/2024 11:41	MJR,NIC4
37	Check STD(5ug/L)	2.500	2.500	2.500	13.8921	12.4491	4.980	99.6	11/27/2024 11:44	MJR,NIC4
38	Check Blank	2.500	2.500	2.500	0.0595	-0.0331	-0.013	-	11/27/2024 11:47	MJR,NIC4

NIC NIPPON INSTRUMENTS CORPORATION

No.	NAME	SVOL [mL]	CVOL [mL]	DVOL [mL]	AREA [ON]	MEAS [ng]	CONC [ug/L]	Recovery [%]	M. TIME	Note
39	L2467934-07 WG2002013	2.500	2.500	2.500	0.0570	-0.0354	-0.014	-	11/27/2024 11:51	MJR,NIC4
40	L2467934-08 WG2002013	2.500	2.500	2.500	0.0568	-0.0356	-0.014	-	11/27/2024 11:54	MJR,NIC4
41	L2467934-09 WG2002013	2.500	2.500	2.500	0.0564	-0.0359	-0.014	-	11/27/2024 11:57	MJR,NIC4
42	L2467934-10 WG2002013	2.500	2.500	2.500	0.0544	-0.0377	-0.015	-	11/27/2024 12:01	MJR,NIC4
43	WG2002555-1 WG2002555	2.500	2.500	2.500	0.0793	-0.0153	-0.006	-	11/27/2024 12:04	MJR,NIC4
44	WG2002555-2 WG2002555	2.500	2.500	2.500	2.8329	2.4695	0.988	-	11/27/2024 12:08	MJR,NIC4
45	WG2002555-3 WG2002555	2.500	2.500	2.500	2.8385	2.4746	0.990	-	11/27/2024 12:11	MJR,NIC4
46	L2468435-01 WG2002555	2.500	2.500	2.500	0.0796	-0.0150	-0.006	-	11/27/2024 12:14	MJR,NIC4
47	L2468435-02 WG2002555	2.500	2.500	2.500	0.0658	-0.0274	-0.011	-	11/27/2024 12:18	MJR,NIC4
48	L2468435-03 WG2002555	2.500	2.500	2.500	0.0715	-0.0223	-0.009	-	11/27/2024 12:21	MJR,NIC4
49	Check STD(5ug/L)	2.500	2.500	2.500	13.8703	12.4294	4.972	99.4	11/27/2024 12:24	MJR,NIC4
50	Check Blank	2.500	2.500	2.500	0.0560	-0.0363	-0.015	-	11/27/2024 12:28	MJR,NIC4
51	WG2002927-1 WG2002927	2.500	2.500	2.500	0.0630	-0.0300	-0.012	-	11/27/2024 13:33	MJR,NIC4
52	WG2002927-2 WG2002927	2.500	2.500	2.500	2.7881	2.4291	0.972	-	11/27/2024 13:36	MJR,NIC4
53	L2469536-01 WG2002927	2.500	2.500	2.500	0.0649	-0.0282	-0.011	-	11/27/2024 13:42	MJR,NIC4
54	WG2002927-3 WG2002927	2.500	2.500	2.500	13.7425	12.3141	4.926	-	11/27/2024 13:45	MJR,NIC4
55	WG2002927-4 WG2002927	2.500	2.500	2.500	0.0598	-0.0328	-0.013	-	11/27/2024 13:48	MJR,NIC4
56	L2468430-03 WG2002927	2.500	2.500	2.500	0.0556	-0.0366	-0.015	-	11/27/2024 13:52	MJR,NIC4
57	L2469536-02 WG2002927	2.500	2.500	2.500	0.0539	-0.0382	-0.015	-	11/27/2024 13:55	MJR,NIC4
58	L2469536-03 WG2002927	2.500	2.500	2.500	0.0565	-0.0358	-0.014	-	11/27/2024 13:58	MJR,NIC4
59	L2469536-04 WG2002927	2.500	2.500	2.500	0.0554	-0.0368	-0.015	-	11/27/2024 14:01	MJR,NIC4
60	L2469536-05 WG2002927	2.500	2.500	2.500	0.0537	-0.0384	-0.015	-	11/27/2024 14:05	MJR,NIC4
61	Check STD(5ug/L)	2.500	2.500	2.500	13.9973	12.5440	5.018	100.4	11/27/2024 14:08	MJR,NIC4
62	Check Blank	2.500	2.500	2.500	0.0576	-0.0348	-0.014	-	11/27/2024 14:12	MJR,NIC4
63	L2469536-06 WG2002927	2.500	2.500	2.500	0.0635	-0.0295	-0.012	-	11/27/2024 14:15	MJR,NIC4
64	L2469536-07 WG2002927	2.500	2.500	2.500	0.0538	-0.0383	-0.015	-	11/27/2024 14:18	MJR,NIC4
65	L2469536-08 WG2002927	2.500	2.500	2.500	0.0605	-0.0322	-0.013	-	11/27/2024 14:22	MJR,NIC4
66	L2469536-09 WG2002927	2.500	2.500	2.500	0.0549	-0.0373	-0.015	-	11/27/2024 14:25	MJR,NIC4
67	L2469536-10 WG2002927	2.500	2.500	2.500	0.0596	-0.0330	-0.013	-	11/27/2024 14:28	MJR,NIC4
68	L2469536-11 WG2002927	2.500	2.500	2.500	0.0607	-0.0320	-0.013	-	11/27/2024 14:32	MJR,NIC4
69	Check STD(5ug/L)	2.500	2.500	2.500	13.9187	12.4731	4.989	99.8	11/27/2024 14:52	MJR,NIC4
70	Check Blank	2.500	2.500	2.500	0.0554	-0.0368	-0.015	-	11/27/2024 14:56	MJR,NIC4

NIC NIPPON INSTRUMENTS CORPORATION

No.	NAME	SVOL [mL]	CVOL [mL]	DVOL [mL]	AREA [ON]	MEAS [ng]	CONC [ug/L]	Recovery [%]	M. TIME	Note
71	WG2002938-1 WG2002938	2.500	2.500	2.500	0.0892	-0.0063	-0.003	-	11/27/2024 15:07	MJR,NIC4
72	WG2002938-2 WG2002938	2.500	2.500	2.500	3.3737	2.9575	1.183	-	11/27/2024 15:10	MJR,NIC4
73	L2469828-01 WG2002938	2.500	2.500	2.500	0.0952	-0.0009	-0.000	-	11/27/2024 15:13	MJR,NIC4
74	WG2002938-3 WG2002938	2.500	2.500	2.500	16.2984	14.6204	5.848	-	11/27/2024 15:17	MJR,NIC4
75	WG2002938-4 WG2002938	2.500	2.500	2.500	16.3249	14.6443	5.858	-	11/27/2024 15:20	MJR,NIC4
76	L2469828-02 WG2002938	2.500	2.500	2.500	0.1027	0.0059	0.002	-	11/27/2024 15:23	MJR,NIC4
77	L2469828-03 WG2002938	2.500	2.500	2.500	0.0722	-0.0217	-0.009	-	11/27/2024 15:27	MJR,NIC4
78	L2469829-01 WG2002938	2.500	2.500	2.500	0.1417	0.0411	0.016	-	11/27/2024 15:30	MJR,NIC4
79	L2469829-02 WG2002938	2.500	2.500	2.500	0.2058	0.0989	0.040	-	11/27/2024 15:33	MJR,NIC4
80	L2469829-03 WG2002938	2.500	2.500	2.500	0.1011	0.0044	0.002	-	11/27/2024 15:37	MJR,NIC4
81	Check STD(5ug/L)	2.500	2.500	2.500	13.8712	12.4302	4.972	99.4	11/27/2024 15:40	MJR,NIC4
82	Check Blank	2.500	2.500	2.500	0.0662	-0.0271	-0.011	-	11/27/2024 15:43	MJR,NIC4
83	L2468246-01 WG2002938	2.500	2.500	2.500	0.1112	0.0135	0.005	-	11/27/2024 15:52	MJR,NIC4
84	L2468246-02 WG2002938	2.500	2.500	2.500	0.4801	0.3464	0.139	-	11/27/2024 15:55	MJR,NIC4
85	L2468246-03 WG2002938	2.500	2.500	2.500	0.1326	0.0328	0.013	-	11/27/2024 15:59	MJR,NIC4
86	L2468246-04 WG2002938	2.500	2.500	2.500	0.0940	-0.0020	-0.001	-	11/27/2024 16:02	MJR,NIC4
87	L2468246-05 WG2002938	2.500	2.500	2.500	0.0963	0.0001	0.000	-	11/27/2024 16:05	MJR,NIC4
88	L2468443-01 WG2002938	2.500	2.500	2.500	0.1115	0.0138	0.006	-	11/27/2024 16:09	MJR,NIC4
89	L2468443-02 WG2002938	2.500	2.500	2.500	0.1100	0.0125	0.005	-	11/27/2024 16:12	MJR,NIC4
90	L2468567-01 WG2002938	2.500	2.500	2.500	0.0785	-0.0160	-0.006	-	11/27/2024 16:15	MJR,NIC4
91	L2468567-02 WG2002938	2.500	2.500	2.500	0.0807	-0.0140	-0.006	-	11/27/2024 16:18	MJR,NIC4
92	L2468567-03 WG2002938	2.500	2.500	2.500	0.0823	-0.0125	-0.005	-	11/27/2024 16:22	MJR,NIC4
93	Check STD(5ug/L)	2.500	2.500	2.500	13.8229	12.3866	4.955	99.1	11/27/2024 16:25	MJR,NIC4
94	Check Blank	2.500	2.500	2.500	0.0672	-0.0262	-0.010	-	11/27/2024 16:28	MJR,NIC4
95	L2469271-01 WG2002938	2.500	2.500	2.500	0.1043	0.0073	0.003	-	11/27/2024 16:32	MJR,NIC4
96	L2469271-02 WG2002938	2.500	2.500	2.500	0.3335	0.2141	0.086	-	11/27/2024 16:35	MJR,NIC4
97	L2469271-04 WG2002938	2.500	2.500	2.500	0.1001	0.0035	0.001	-	11/27/2024 16:38	MJR,NIC4
98	Check STD(5ug/L)	2.500	2.500	2.500	13.6682	12.2470	4.899	98.0	11/27/2024 16:49	DJR,NIC4
99	Check Blank	2.500	2.500	2.500	0.0597	-0.0329	-0.013	-	11/27/2024 16:52	DJR,NIC4
100	WG2002767-1 WG2002767	2.500	2.500	2.500	0.0928	-0.0031	-0.001	-	11/27/2024 18:30	DJR,NIC4
101	WG2002767-2 WG2002767	2.500	2.500	2.500	2.7687	2.4116	0.965	-	11/27/2024 18:33	DJR,NIC4
102	L2468439-01 WG2002767	2.500	2.500	2.500	0.1033	0.0064	0.003	-	11/27/2024 18:37	DJR,NIC4

No.	NAME	SVOL [mL]	CVOL [mL]	DVOL [mL]	AREA [ON]	MEAS [ng]	CONC [ug/L]	Recovery [%]	M. TIME	Note
103	WG2002767-3 WG2002767	2.500	2.500	2.500	13.1011	11.7353	4.694	-	11/27/2024 18:40	DJR,NIC4
104	WG2002767-4 WG2002767	2.500	2.500	2.500	0.0907	-0.0050	-0.002	-	11/27/2024 18:43	DJR,NIC4
105	Check STD(5ug/L)	2.500	2.500	2.500	14.0473	12.5891	5.036	100.7	11/27/2024 18:47	DJR,NIC4
106	Check Blank	2.500	2.500	2.500	0.0614	-0.0314	-0.013	-	11/27/2024 18:50	DJR,NIC4
107	L2468349-03 WG2002767	2.500	2.500	2.500	0.0836	-0.0114	-0.005	-	11/27/2024 18:53	DJR,NIC4
108	L2468409-03 WG2002767	2.500	2.500	2.500	0.0568	-0.0356	-0.014	-	11/27/2024 18:57	DJR,NIC4
109	L2468199-01 WG2001695	2.500	2.500	2.500	0.0827	-0.0122	-0.005	-	11/27/2024 19:50	DJR,NIC4
110	L2468201-01 WG2001695	2.500	2.500	2.500	0.0741	-0.0199	-0.008	-	11/27/2024 19:53	DJR,NIC4
111	L2468201-02 WG2001695	2.500	2.500	2.500	0.0772	-0.0171	-0.007	-	11/27/2024 19:57	DJR,NIC4
112	L2468221-01 WG2001695	2.500	2.500	2.500	0.0753	-0.0189	-0.008	-	11/27/2024 20:00	DJR,NIC4
113	L2468221-02 WG2001695	2.500	2.500	2.500	0.0715	-0.0223	-0.009	-	11/27/2024 20:03	DJR,NIC4
114	Check STD(5ug/L)	2.500	2.500	2.500	13.8979	12.4543	4.982	99.6	11/27/2024 20:07	DJR,NIC4
115	Check Blank	2.500	2.500	2.500	0.0681	-0.0254	-0.010	-	11/27/2024 20:10	DJR,NIC4

MERCURY TRUE VALUE CRITERIA

ICV	3 ug/l
LCSW	1 ug/l
MS	1 ug/l
CCV	5 ug/l

As of 6/1/13, Mercury True Value criteria is as follows:

ICV	3 ug/l
LCSW	1 ug/l
MS(aq)	5 ug/l
MS(soil)	1 ug/l
CCV	10 ug/l

▪ Certificate of Analysis ▪

Product: Metals in Soil
Catalog Number: 540
Lot No. D102-540
Certificate Issue Date: June 22, 2018
Expiration Date: January 31, 2022
Revision Number: Original

Product use instructions are included as part of the certification packet and are paginated separately from this Certificate of Analysis. Please reference the product use instructions for catalog #540 revision 030512.

CERTIFICATION

Parameter	Certified Value[1]	Reference Value	Uncertainty[2]	QC Performance Acceptance Limits[3]	PT Performance Acceptance Limits[4]
	mg/kg	mg/kg	%	mg/kg	mg/kg
Aluminum	10100	8160	6.36	3960 - 12400	4080 - 12200
Antimony	120	60.9	9.42	0.822 - 121	12.0 - 166
Arsenic	144	135	5.08	112 - 158	94.6 - 176
Barium	469	443	6.77	366 - 521	332 - 554
Beryllium	207	197	5.86	164 - 229	148 - 246
Boron	213	174	12.6	127 - 221	105 - 244
Cadmium	224	204	6.65	169 - 240	153 - 256
Calcium	5190	4830	9.12	3950 - 5700	3510 - 6150
Chromium	138	132	8.56	109 - 155	92.2 - 171
Cobalt	182	179	7.93	151 - 207	134 - 224
Copper	191	184	6.72	155 - 213	138 - 230
Iron	15000	14400	10.7	8770 - 20000	5120 - 23600
Lead	225	216	7.72	178 - 254	159 - 274
Magnesium	2570	2340	6.13	1780 - 2900	1460 - 3230
Manganese	331	323	6.71	266 - 380	242 - 404
Mercury	16.8	13.2	16.0	8.64 - 17.7	7.89 - 18.5
Molybdenum	193	175	2.39	141 - 209	125 - 226
Nickel	163	152	5.95	126 - 178	106 - 197
Potassium	2420	2050	6.31	1440 - 2660	1210 - 2890
Selenium	81.9	74.9	4.13	59.3 - 90.5	47.0 - 103
Silver	57.6	53.9	9.00	43.0 - 64.8	37.8 - 70.0
Sodium	161	149	12.1	111 - 188	57.7 - 241
Strontium	100	96.2	4.04	78.1 - 114	69.0 - 123
Thallium	253	232	3.54	188 - 276	168 - 296

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Parameter	Certified Value[1]	Reference Value	Uncertainty[2]	QC Performance Acceptance Limits[3]	PT Performance Acceptance Limits[4]
	mg/kg	mg/kg	%	mg/kg	mg/kg
Tin	146	134	10.8	106 - 163	79.5 - 189
Titanium	449	340	7.20	70.2 - 609	44.9 - 711
Uranium	114	113	7.10	85.5 - 140	71.9 - 153
Vanadium	180	172	8.85	137 - 207	126 - 218
Zinc	217	211	6.58	171 - 250	147 - 274

ANALYTICAL VERIFICATION

Parameter	Certified Value[1]	Proficiency Testing Study			NIST Traceability	
		Mean	Recovery[5]	n	SRM Number	Recovery
	mg/kg	mg/kg	%			%
Aluminum	10100	8160	80.8	138	-	-
Antimony	120	60.9	50.8	135	-	-
Arsenic	144	135	93.8	184	-	-
Barium	469	443	94.5	158	-	-
Beryllium	207	197	95.0	148	-	-
Boron	213	174	81.8	107	-	-
Cadmium	224	204	91.3	199	-	-
Calcium	5190	4830	93.0	122	-	-
Chromium	138	132	95.5	172	-	-
Cobalt	182	179	98.4	140	-	-
Copper	191	184	96.3	183	-	-
Iron	15000	14400	95.6	133	-	-
Lead	225	216	96.2	204	-	-
Magnesium	2570	2340	91.2	122	-	-
Manganese	331	323	97.6	147	-	-
Mercury	16.8	13.2	78.3	128	-	-
Molybdenum	193	175	90.8	143	-	-
Nickel	163	152	93.1	185	-	-
Potassium	2420	2050	84.7	121	-	-
Selenium	81.9	74.9	91.5	163	-	-

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Parameter	Certified Value[1]	Proficiency Testing Study			NIST Traceability	
		Mean	Recovery[5]	n	SRM Number	Recovery
	mg/kg	mg/kg	%			%
Silver	57.6	53.9	93.6	150	-	-
Sodium	161	149	92.8	105	-	-
Strontium	100	96.2	96.2	90	-	-
Thallium	253	232	91.6	147	-	-
Tin	146	134	92.0	100	-	-
Titanium	449	340	75.6	93	-	-
Uranium	114	113	98.8	35	-	-
Vanadium	180	172	95.4	139	-	-
Zinc	217	211	97.0	180	-	-

1. The **Certified Values** are the actual "made-to" concentrations confirmed by ERA analytical verification. The certified values are monitored and purchasers will be notified of any significant changes resulting in recertification or withdrawal of this certified reference material during the period of validity of this certificate.

2. The **Uncertainty** is the total propagated uncertainty at the 95% confidence interval. The uncertainty is based on the preparation and internal analytical verification of the product by ERA, multiplied by a coverage factor. The uncertainty applies to the product as supplied and does not take into account any required or optional dilution and/or preparations the laboratory may perform while using this product.

3. The **QC Performance Acceptance Limits (QC PALs™)**are based on actual historical data collected in ERA's Proficiency Testing program. The QC PALs™ reflect any inherent biases in the methods used to establish the limits and closely approximate a 95% confidence interval of the performance that experienced laboratories should achieve using accepted environmental methods. Use the QC PALs™ to realistically evaluate your performance against your peers.

4. The **PT Performance Acceptance Limits (PT PALs™)** are calculated using the regression equations and fixed acceptance criteria specified in the NELAC proficiency testing requirements. Use the PT PALs™ when analyzing this QC standard alongside USEPA and NELAC compliant PT standards. Please note that many PT study acceptance limits are concentration dependent (some non-linearly) and, therefore, the acceptance limits of this QC standard and any PT standard may differ relative to their difference in concentrations.

5. The **PT Data/Traceability** data include the mean value, percent recovery and number of data points reported by the laboratories in our Proficiency Testing study compared to the Certified Values. In addition, where NIST Standard Reference Materials (SRMs) are available, each analyte has been analytically traced to the NIST SRM listed. This product is traceable to the lot numbers of its starting materials. All gravimetric and volumetric measurements related to its manufacture are traceable to NIST through an unbroken chain of comparisons.
Traceability Recovery (%) = [(% recovery certified standard)/(% recovery NIST SRM)]*100
The traceability data shown were compiled by analyzing the ERA standards or their associated stock solutions against the applicable NIST SRMs.

6. For additional information on this product such as intended use, instructions for use, level of homogeneity, and safety information, please refer to the provided Instruction Sheet

If you have any questions or need technical assistance, please call ERA technical assistance at 1-800-372-0122 or send an email to info@eraqc.com.

Certifying Officer

Brian Miller



Quality Officer

Matthew Seebeck



ISO/IEC GUIDE 34:2009 ACCREDITED REFERENCE MATERIAL PRODUCER CERTIFICATE NO. 1539.03

ISO/IEC 17025:2005 ACCREDITED CHEMICAL TESTING LABORATORY CERTIFICATE NO. 1539.02

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ERA
A Waters Company

Reference Material

▪ Certificate of Analysis ▪

Product: Metals in Soil
Catalog Number: 540
Lot No. D105-540
Certificate Issue Date: March 19, 2019
Expiration Date: October 12, 2022
Revision Number: Original

Product use instructions are included as part of the certification packet and are paginated separately from this Certificate of Analysis. Please reference the product use instructions for catalog #540 revision 030512.

CERTIFICATION

Parameter	Certified Value[1]	Reference Value	Uncertainty[2]	QC Performance Acceptance Limits[3]	PT Performance Acceptance Limits[4]
	mg/kg	mg/kg	%	mg/kg	mg/kg
Aluminum	10100	8800	8.32	4600 - 13000	4470 - 13100
Antimony	282	147	7.70	6.17 - 289	28.2 - 366
Arsenic	155	143	6.34	119 - 168	100 - 186
Barium	439	415	5.37	343 - 488	311 - 519
Beryllium	192	179	2.78	149 - 210	134 - 224
Boron	216	160	7.08	113 - 208	96.1 - 238
Cadmium	61.5	56.2	0.528	46.6 - 65.9	42.2 - 70.3
Calcium	5190	4960	6.64	4090 - 5840	3610 - 6310
Chromium	104	101	4.75	83.2 - 118	70.5 - 131
Cobalt	196	189	0.500	158 - 219	141 - 236
Copper	65.0	63.1	2.65	53.1 - 73.1	47.3 - 78.9
Iron	15000	15700	8.94	10100 - 21300	6000 - 25400
Lead	126	125	4.77	103 - 146	89.3 - 160
Magnesium	2570	2410	6.26	1860 - 2970	1520 - 3310
Manganese	387	382	5.37	315 - 449	290 - 474
Mercury	7.76	7.61	13.7	5.53 - 9.69	4.57 - 10.7
Molybdenum	120	107	0.500	86.0 - 128	75.5 - 139
Nickel	117	108	0.514	89.5 - 127	75.7 - 141
Potassium	2420	2110	5.62	1500 - 2720	1260 - 2960
Selenium	84.6	77.9	7.10	61.8 - 94.0	49.2 - 107
Silver	34.6	34.3	8.34	27.8 - 40.9	23.6 - 45.1
Sodium	161	145	6.72	106 - 183	54.3 - 235
Strontium	104	104	3.95	85.1 - 123	74.8 - 133
Thallium	123	113	0.500	91.3 - 134	77.1 - 149

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Parameter	Certified Value[1]	Reference Value	Uncertainty[2]	QC Performance Acceptance Limits[3]	PT Performance Acceptance Limits[4]
	mg/kg	mg/kg	%	mg/kg	mg/kg
Tin	118	107	0.500	83.5 - 130	61.2 - 152
Titanium	512	421	5.80	114 - 728	0.00 - 854
Uranium	103	104	6.18	79.1 - 128	71.9 - 135
Vanadium	87.3	83.7	8.55	66.8 - 101	54.2 - 113
Zinc	251	240	3.98	194 - 285	168 - 312

ANALYTICAL VERIFICATION

Parameter	Certified Value[1]	Proficiency Testing Study			NIST Traceability	
		Mean	Recovery[5]	n	SRM Number	Recovery
	mg/kg	mg/kg	%			%
Aluminum	10100	8800	87.1	193	-	-
Antimony	282	147	52.3	216	-	-
Arsenic	155	143	92.5	240	-	-
Barium	439	415	94.6	222	-	-
Beryllium	192	179	93.4	220	-	-
Boron	216	160	74.2	152	-	-
Cadmium	61.5	56.2	91.5	239	-	-
Calcium	5190	4960	95.6	175	-	-
Chromium	104	101	96.8	237	-	-
Cobalt	196	189	96.2	215	-	-
Copper	65.0	63.1	97.1	237	-	-
Iron	15000	15700	105	195	-	-
Lead	126	125	99.0	243	-	-
Magnesium	2570	2410	93.9	177	-	-
Manganese	387	382	98.7	215	-	-
Mercury	7.76	7.61	98.0	157	-	-
Molybdenum	120	107	89.4	216	-	-
Nickel	117	108	92.5	235	-	-
Potassium	2420	2110	87.2	181	-	-
Selenium	84.6	77.9	92.1	231	-	-

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Parameter	Certified Value[1]	Proficiency Testing Study			NIST Traceability	
		Mean	Recovery[5]	n	SRM Number	Recovery
	mg/kg	mg/kg	%			%
Silver	34.6	34.3	99.3	216	-	-
Sodium	161	145	89.8	166	-	-
Strontium	104	104	99.9	148	-	-
Thallium	123	113	91.8	215	-	-
Tin	118	107	90.4	164	-	-
Titanium	512	421	82.2	157	-	-
Uranium	103	104	101	61	-	-
Vanadium	87.3	83.7	95.9	214	-	-
Zinc	251	240	95.5	234	-	-

1. The **Certified Values** are the actual "made-to" concentrations confirmed by ERA analytical verification. The certified values are monitored and purchasers will be notified of any significant changes resulting in recertification or withdrawal of this reference material during the period of validity of this certificate.

2. The **Uncertainty** is the total propagated uncertainty at the 95% confidence interval. The uncertainty is based on the preparation and internal analytical verification of the product by ERA, multiplied by a coverage factor. The uncertainty applies to the product as supplied and does not take into account any required or optional dilution and/or preparations the laboratory may perform while using this product.

3. The **QC Performance Acceptance Limits (QC PALs™)**are based on actual historical data collected in ERA's Proficiency Testing program. The QC PALs™ reflect any inherent biases in the methods used to establish the limits and closely approximate a 95% confidence interval of the performance that experienced laboratories should achieve using accepted environmental methods. Use the QC PALs™ to realistically evaluate your performance against your peers.

4. The **PT Performance Acceptance Limits (PT PALs™)** are calculated using the regression equations and fixed acceptance criteria specified in the NELAC proficiency testing requirements. Use the PT PALs™ when analyzing this QC standard alongside USEPA and NELAC compliant PT standards. Please note that many PT study acceptance limits are concentration dependent (some non-linearly) and, therefore, the acceptance limits of this QC standard and any PT standard may differ relative to their difference in concentrations.

5. The **PT Data/Traceability** data include the mean value, percent recovery and number of data points reported by the laboratories in our Proficiency Testing study compared to the Certified Values. In addition, where NIST Standard Reference Materials (SRMs) are available, each analyte has been analytically traced to the NIST SRM listed. This product is traceable to the lot numbers of its starting materials. All gravimetric and volumetric measurements related to its manufacture are traceable to NIST through an unbroken chain of comparisons.
Traceability Recovery (%) = [(% recovery certified standard)/(% recovery NIST SRM)]*100
The traceability data shown were compiled by analyzing the ERA standards or their associated stock solutions against the applicable NIST SRMs.

6. For additional information on this product such as intended use, instructions for use, level of homogeneity, and safety information, please refer to the provided Instruction Sheet

If you have any questions or need technical assistance, please call ERA technical assistance at 1-800-372-0122 or send an email to info@eraqc.com.

Certifying Officer

Brian Miller

Brian Miller

Quality Officer

Matthew Seebeck

ACCREDITED ACCREDITED

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Certified Reference Material

▪ Certificate of Analysis ▪

Product: Metals in Soil
Catalog Number: 540
Lot No. D109-540
Certificate Issue Date: March 24, 2020
Expiration Date: October 03, 2023
Revision Number: Original

Product use instructions are included as part of the certification packet and are paginated separately from this Certificate of Analysis. Please reference the product use instructions for catalog #540 revision 090119.

CERTIFICATION

Parameter	Certified Value[1]	Reference Value[7]	Uncertainty[2]	QC Performance Acceptance Limits[3]	PT Performance Acceptance Limits[4]
	mg/kg	mg/kg	%	mg/kg	mg/kg
Aluminum	10100	8130	2.54	3920 - 12300	4060 - 12200
Antimony	259	134	5.03	4.56 - 264	25.9 - 335
Arsenic	171	156	3.38	129 - 183	109 - 203
Barium	253	239	4.81	197 - 280	179 - 298
Beryllium	179	169	6.59	141 - 198	127 - 212
Boron	114	87.5	10.3	62.5 - 113	52.5 - 125
Cadmium	149	137	5.43	113 - 160	103 - 171
Calcium	5190	4760	3.48	3890 - 5640	3460 - 6070
Chromium	163	154	3.79	126 - 181	108 - 200
Cobalt	127	121	5.07	101 - 141	90.8 - 151
Copper	57.0	54.9	4.13	46.1 - 63.6	41.1 - 68.6
Iron	15000	14100	6.27	8470 - 19700	4920 - 23200
Lead	133	130	3.00	107 - 152	93.3 - 167
Magnesium	2570	2320	3.32	1760 - 2880	1440 - 3200
Manganese	277	269	2.67	221 - 317	199 - 340
Mercury	21.6	20.5	7.72	14.7 - 26.3	12.3 - 28.6
Molybdenum	108	95.4	2.61	76.4 - 114	66.9 - 124
Nickel	58.7	53.9	4.97	44.5 - 63.3	37.7 - 70.0
Potassium	2420	2020	3.06	1410 - 2630	1190 - 2850
Selenium	181	167	5.63	132 - 201	113 - 221
Silver	35.5	33.6	5.20	26.8 - 40.3	23.0 - 44.1
Sodium	161	133	2.76	95.1 - 171	46.5 - 220
Strontium	89.7	87.9	4.59	71.7 - 104	62.8 - 113
Thallium	121	112	5.19	90.3 - 133	76.1 - 147

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▪ Certificate of Analysis ▪

Parameter	Certified Value[1]	Reference Value[7]	Uncertainty[2]	QC Performance Acceptance Limits[3]	PT Performance Acceptance Limits[4]
	mg/kg	mg/kg	%	mg/kg	mg/kg
Tin	83.5	74.0	5.42	57.6 - 90.4	39.7 - 108
Titanium	474	333	7.17	48.6 - 617	46.3 - 620
Uranium	51.9	51.9	3.36	39.6 - 64.3	35.9 - 68.0
Vanadium	68.1	62.6	6.00	49.4 - 75.8	37.0 - 88.3
Zinc	165	158	2.34	128 - 188	111 - 205

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ANALYTICAL VERIFICATION

Parameter	Certified Value[1]	Proficiency Testing Study			NIST Traceability	
		Mean	Recovery[5]	n	SRM Number[6]	Recovery
	mg/kg	mg/kg	%			%
Aluminum	10100	8130	80.5	196	-	-
Antimony	259	134	51.8	217	-	-
Arsenic	171	156	91.3	243	-	-
Barium	253	239	94.3	230	-	-
Beryllium	179	169	94.6	223	-	-
Boron	114	87.5	76.7	150	-	-
Cadmium	149	137	91.8	249	-	-
Calcium	5190	4760	91.8	184	-	-
Chromium	163	154	94.4	245	-	-
Cobalt	127	121	95.3	221	-	-
Copper	57.0	54.9	96.2	243	-	-
Iron	15000	14100	93.9	199	-	-
Lead	133	130	97.7	251	-	-
Magnesium	2570	2320	90.1	182	-	-
Manganese	277	269	97.2	220	-	-
Mercury	21.6	20.5	94.7	172	-	-
Molybdenum	108	95.4	88.3	218	-	-
Nickel	58.7	53.9	91.8	242	-	-
Potassium	2420	2020	83.5	187	-	-
Selenium	181	167	92.2	235	-	-
Silver	35.5	33.6	94.5	222	-	-
Sodium	161	133	82.7	177	-	-
Strontium	89.7	87.9	98.0	151	-	-
Thallium	121	112	92.2	219	-	-
Tin	83.5	74.0	88.6	170	-	-
Titanium	474	333	70.3	157	-	-
Uranium	51.9	51.9	100	60	-	-
Vanadium	68.1	62.6	91.9	213	-	-
Zinc	165	158	95.8	238	-	-

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▪ Certificate of Analysis ▪

1. The **Certified Values** are the actual gravimetric/volumetric "made-to" concentrations confirmed by ERA analytical verification. The certified values are monitored and purchasers will be notified of any significant changes resulting in recertification or withdrawal of this certified reference material during the period of validity of this certificate.

2. The **Uncertainty** represents an expanded uncertainty and approximates a 95% confidence interval. The uncertainty is based on the characterization, homogeneity and stability characteristics of the product, multiplied by a coverage factor (k=2). The uncertainty applies to the product as supplied and does not take into account any required or optional dilution and/or preparations the laboratory may perform while using this product. The formula used to calculate the expanded uncertainty is:
$U_{expanded} = k * SQRT((U_{char}^2) + (U_{homogen}^2) + (U_{LTS}^2) + (U_{STS}^2) + (U_{RSS}^2))$

Where:

$U_{expanded}$ = Expanded uncertainty.
k = Coverage factor.
U_{char} = Combined standard uncertainty of the manufacturing and/or analytical verification assessment.
$U_{homogen}$ = Standard uncertainty of the homogeneity assessment.
U_{LTS} = Standard uncertainty associated with long-term stability.
U_{STS} = Standard uncertainty associated with short-term (transport) stability.
U_{RSS} = Standard uncertainty associated with repeated sampling of the product (where permitted by product use instructions).

3. The **QC Performance Acceptance Limits (QC PALs™)** are based on actual historical data collected in ERA's Proficiency Testing program. The QC PALs™ reflect any inherent biases in the methods used to establish the limits and closely approximate a 95% confidence interval of the performance that experienced laboratories should achieve using accepted environmental methods. Use the QC PALs™ to realistically evaluate your performance against your peers.

4. The **PT Performance Acceptance Limits (PT PALs™)** are calculated using the regression equations and fixed acceptance criteria specified in the NELAC proficiency testing requirements. Use the PT PALs™ when analyzing this certified reference material alongside USEPA and NELAC compliant PT study materials. Please note that many PT study acceptance limits are concentration dependent (some non-linearly) and therefore, the acceptance limits of this certified reference material and any PT study material may differ relative to their difference in concentrations.

5. The **PT Performance Data** include the mean value, percent recovery and number of data points reported by laboratories in our Proficiency Testing study compared to the Certified Values. In the event this lot was not used in a proficiency testing scheme, the data displayed was generated internally by ERA.

6. Where NIST Standard Reference Materials (SRMs) are available, each analyte has been analytically traced to the NIST SRM listed. **Analytical Traceability Recovery (%)** = [(% recovery ERA certified reference material)/(% recovery NIST SRM)]*100
The traceability data shown were compiled by analyzing this ERA certified reference material and/or it's associated stock solution(s) against the applicable NIST SRMs.

7. The **Reference Values** are equal to the mean recoveries for the parameters as determined in an interlaboratory round robin study. The **Reference Values** represent the expected performance for the analytes in this standard. ERA recommends using the **Reference Values** when assessing or evaluating your results.

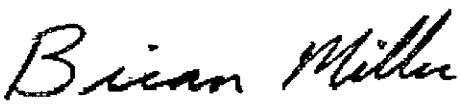
8. **Metrological Traceability**. This certified reference material is metrologically traceable to NIST mass reference materials through an unbroken chain of comparisons.

9. For additional information on this product such as intended use, storage information, instructions for use, minimum sample size, and safety information, please refer to the Product Use Instructions provided.

If you have any questions or need technical assistance, please call ERA technical assistance at 1-800-372-0122 or send an email to info@eraqc.com.

Certifying Officer

Brian Miller



Quality Officer

Matthew Seebeck



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Certified Reference Material

▪ Certificate of Analysis ▪

Product: Metals in Soil
Catalog Number: 540
Lot No. D113-540
Certificate Issue Date: March 23, 2021
Expiration Date: October 13, 2024
Revision Number: Original

Product use instructions are included as part of the certification packet and are paginated separately from this Certificate of Analysis. Please reference the product use instructions for catalog #540 revision 090119.

CERTIFICATION

Parameter	Certified Value[1]	Reference Value	Uncertainty[2]	QC Performance Acceptance Limits[3]	PT Performance Acceptance Limits[4]
	mg/kg	mg/kg	%	mg/kg	mg/kg
Aluminum	10100	8630	12.0	4420 - 12800	4370 - 12900
Antimony	256	129	16.8	0.742 - 257	25.6 - 323
Arsenic	91.6	84.5	15.1	70.0 - 99.0	59.2 - 110
Barium	259	249	9.94	206 - 292	187 - 311
Beryllium	175	163	3.89	135 - 191	122 - 204
Boron	95.7	76.7	12.8	55.7 - 97.7	48.0 - 107
Cadmium	107	99.0	11.5	82.2 - 116	74.2 - 124
Calcium	5190	4760	11.8	3890 - 5640	3460 - 6070
Chromium	129	122	14.6	101 - 144	85.7 - 159
Cobalt	63.6	61.7	11.5	51.9 - 71.6	46.3 - 77.2
Copper	62.3	61.5	12.3	51.9 - 71.0	46.1 - 76.8
Iron	15000	14500	15.7	8860 - 20100	5190 - 23800
Lead	122	123	13.9	103 - 144	88.3 - 158
Lithium	6.42	7.30	18.7	5.13 - 9.48	3.20 - 11.4
Magnesium	2570	2360	8.87	1810 - 2920	1480 - 3250
Manganese	470	456	13.4	375 - 538	350 - 563
Mercury	22.1	18.9	14.5	13.0 - 24.8	11.3 - 26.4
Molybdenum	80.1	72.8	11.0	58.7 - 87.0	50.5 - 95.2
Nickel	143	135	14.2	112 - 158	94.7 - 176
Potassium	2420	2090	8.21	1480 - 2700	1240 - 2940
Selenium	128	121	11.7	96.9 - 146	80.4 - 162
Silver	45.4	44.1	6.69	35.5 - 52.8	30.7 - 57.6
Sodium	161	136	9.34	97.4 - 174	48.1 - 223
Strontium	82.2	82.3	8.42	67.4 - 97.1	58.6 - 106

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Parameter	Certified Value[1]	Reference Value	Uncertainty[2]	QC Performance Acceptance Limits[3]	PT Performance Acceptance Limits[4]
	mg/kg	mg/kg	%	mg/kg	mg/kg
Thallium	154	144	7.54	117 - 171	101 - 187
Tin	89.7	79.8	14.0	62.2 - 97.4	43.5 - 116
Titanium	705	546	10.3	123 - 969	118 - 974
Uranium	29.5	30.9	3.38	23.9 - 37.9	21.3 - 40.5
Vanadium	196	186	14.2	148 - 224	138 - 235
Zinc	307	295	10.4	240 - 351	207 - 384

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Calculation of 7470A Mercury

Calculate Mercury concentration from the daily calibration curve. The curve is generated utilizing a straight-line equation defined as:

$$A = k1 + k2C$$

Where:

A = Average peak height of the sample/standard integrations
C = Sample/Standard Concentration, µg/L
k1 = y-intercept
k2 = slope

The instrument will plot peak height against concentration (µg/L). The result is generated in µg/L . This value is divided by 1000 to convert the units to mg/L. If the sample is diluted (DF), the result is multiplied by the DF to generate the final result.

Result, mg/L = (concentration, µg/L) x (1mg/1000µg) x (DF)

Calculation of 7471B Mercury

Calculate Mercury concentration from the daily calibration curve. The curve is generated utilizing a straight-line equation defined as:

$$A = k1 + k2C$$

Where:

A = Average peak height of the sample/standard integrations
C = Sample/Standard Concentration, µg/L
k1 = y-intercept
k2 = slope

The instrument will plot peak height against concentration (µg/L). The result is generated in µg/L . This value is divided by 1000 to convert the units to mg/L. If the sample is diluted (DF), the result is multiplied by the DF to generate the final result.

Result, mg/L = (concentration, µg/L) x (1mg/1000µg) x (DF)

The result in mg/kg is calculated on a dry weight basis using the sample weight digested(Wt), the final volume of the digestate(FV), and the percent total solids(%TS).

Result, mg/kg, wet = ((result, mg/L) x (FV)) /Wt

Result, mg/kg, dry wt = (Result, mg/kg wet)/(%TS)

No.	Sample No.	NAME	CURVE: WG2002748
1	1	STD	
2	2	STD	
3	3	STD	
4	4	STD	
5	5	STD	
6	6	STD	
1	7	XICV	
2	8	XICB	
3	9	ICV	
4	10	ICB	
5	11	l2468194-01 wg2001642	
6	12	wg2001642-5 wg2001642	
7	13	wg2001642-6 wg2001642	
8	14	l2468194-02 wg2001642	
9	15	l2468194-03 wg2001642	
10	16	l2468194-04 wg2001642	
11	17	l2468194-05 wg2001642	
12	18	l2468194-06 wg2001642	
13	19	Check STD(5ug/L)	
14	20	Check Blank	
15	21	wg2002008-1 wg2002008	
16	22	wg2002008-2 wg2002008	
17	23	l2467987-01 wg2002008	
18	24	wg2002008-3 wg2002008	
19	25	wg2002008-4 wg2002008	
20	26	WG2002924-1 WG2002924	
21	27	WG2002924-2 WG2002924	
22	28	L2468320-01 WG2002924	
23	29	WG2002924-3 WG2002924	
24	30	WG2002924-4 WG2002924	
25	31	Check STD(5ug/L)	
26	32	Check Blank	
27	33	L2469227-01 WG2002924	
28	34	L2468139-01 WG2002924	
29	35	L2468323-01 WG2002924	
30	36	L2468346-02 WG2002924	
31	37	L2468438-01 WG2002924	
32	38	L2468964-01 WG2002924	
33	39	wg2002752-1 wg2002752	
34	40	wg2002752-2 wg2002752	
35	41	l2468276-02 wg2002752	
36	42	wg2002752-3 wg2002752	
37	43	Check STD(5ug/L)	

38	44	Check Blank
39	45	wg2002752-4 wg2002752
40	46	l2468276-01 wg2002752
41	47	l2468416-10 wg2002752
42	48	l2468416-11 wg2002752
43	49	l2468430-03 wg2002752
44	50	l2468449-01 wg2002752
45	51	l2468449-02 wg2002752
46	52	l2468449-03 wg2002752
47	53	l2468449-04 wg2002752
48	54	l2468449-05 wg2002752
49	55	Check STD(5ug/L)
50	56	Check Blank
51	57	l2468449-06 wg2002752
52	58	wg2002456-1 wg2002456
53	59	wg2002456-2 wg2002456
54	60	wg2002456-3 wg2002456
55	61	l2467825-01 wg2002456
56	62	l2467825-02 wg2002456
57	63	l2468044-02 wg2002456
58	64	wg2002703-1 wg2002703
59	65	wg2002703-2 wg2002703
60	66	wg2002703-3 wg2002703
61	67	XMISINJECTION
62	67	Check STD(5ug/L)
63	68	Check Blank
64	69	l2469316-01 wg2002703
65	70	l2469316-02 wg2002703
66	71	l2469316-03 wg2002703
67	79	Check STD(5ug/L)
68	80	Check Blank
69	1	wg2002972-1 wg2002972
70	2	wg2002972-2 wg2002972
71	3	l2468359-01 wg2002972
72	4	wg2002972-3 wg2002972
73	5	wg2002972-4 wg2002972
74	6	Xwg2002703-3 wg2002703
75	7	l2468433-22 wg2002972
76	8	l2468237-01 wg2002972
77	9	l2468359-02 wg2002972
78	10	l2468396-01 wg2002972
79	11	Check STD(5ug/L)
80	12	Check Blank
81	13	l2468396-02 wg2002972

82	14	l2468440-01 wg2002972
83	15	l2468676-06 wg2002972
84	16	l2468676-07 wg2002972
85	17	l2469255-01 wg2002972
86	18	Check STD(5ug/L)
87	19	Check Blank
88	20	XHG2448271505AJT
89	21	XHG2448271505AJT
90	23	Check STD(5ug/L)
91	24	Check Blank
92	25	WG2002207-1 WG2002207
93	26	WG2002207-2 WG2002207
94	27	L2467934-05 WG2002207
95	28	WG2002207-3 WG2002207
96	29	WG2002207-4 WG2002207
97	30	L2467884-01 WG2002207
98	31	L2467884-02 WG2002207
99	32	L2467934-01 WG2002207
100	33	L2467934-02 WG2002207
101	34	L2467934-03 WG2002207
102	35	Check STD(5ug/L)
103	36	Check Blank
104	37	L2467934-04 WG2002207
105	38	L2467934-06 WG2002207
106	39	L2467934-07 WG2002207
107	40	L2467934-08 WG2002207
108	41	L2467934-09 WG2002207
109	42	L2467934-10 WG2002207
110	43	wg2002784-1 wg2002784
111	44	wg2002784-2 wg2002784
112	45	wg2002784-3 wg2002784
113	46	l2468144-04 wg2002784
114	47	Check STD(5ug/L)
115	48	Check Blank

No.	Sample No.	NAME	CURVE: WG2002428
1	1	STD	
2	2	STD	
3	3	STD	
4	4	STD	
5	5	STD	
6	6	STD	
1	7	ICV	
2	8	ICB	
3	9	XICV	
4	10	XICB	
5	11	WG2002596-1	WG2002596
6	12	WG2002596-2	WG2002596
7	13	L2468284-04	WG2002596
8	14	WG2002596-3	WG2002596
9	15	WG2002596-4	WG2002596
10	16	L2468219-03	WG2002596
11	17	L2468219-04	WG2002596
12	18	L2468284-01	WG2002596
13	19	Check STD(5ug/L)	
14	20	Check Blank	
15	21	L2468284-02	WG2002596
16	22	L2468284-03	WG2002596
17	23	L2468284-05	WG2002596
18	24	L2468284-06	WG2002596
19	25	L2468319-01	WG2002596
20	26	L2468319-02	WG2002596
21	27	L2468319-03	WG2002596
22	28	L2468319-04	WG2002596
23	29	L2468319-05	WG2002596
24	30	L2468319-06	WG2002596
25	31	Check STD(5ug/L)	
26	32	Check Blank	
27	33	WG2002013-1	WG2002013
28	34	WG2002013-2	WG2002013
29	35	L2467934-05	WG2002013
30	36	WG2002013-3	WG2002013
31	37	WG2002013-4	WG2002013
32	38	L2467934-01	WG2002013
33	39	L2467934-02	WG2002013
34	40	L2467934-03	WG2002013
35	41	L2467934-04	WG2002013
36	42	L2467934-06	WG2002013
37	43	Check STD(5ug/L)	

38	44	Check Blank
39	45	L2467934-07 WG2002013
40	46	L2467934-08 WG2002013
41	47	L2467934-09 WG2002013
42	48	L2467934-10 WG2002013
43	49	WG2002555-1 WG2002555
44	50	WG2002555-2 WG2002555
45	51	WG2002555-3 WG2002555
46	52	L2468435-01 WG2002555
47	53	L2468435-02 WG2002555
48	54	L2468435-03 WG2002555
49	55	Check STD(5ug/L)
50	56	Check Blank
51	57	WG2002927-1 WG2002927
52	58	WG2002927-2 WG2002927
53	59	L2469536-01 WG2002927
54	60	WG2002927-3 WG2002927
55	61	WG2002927-4 WG2002927
56	62	L2468430-03 WG2002927
57	63	L2469536-02 WG2002927
58	64	L2469536-03 WG2002927
59	65	L2469536-04 WG2002927
60	66	L2469536-05 WG2002927
61	67	Check STD(5ug/L)
62	68	Check Blank
63	69	L2469536-06 WG2002927
64	70	L2469536-07 WG2002927
65	71	L2469536-08 WG2002927
66	72	L2469536-09 WG2002927
67	73	L2469536-10 WG2002927
68	74	L2469536-11 WG2002927
69	79	Check STD(5ug/L)
70	80	Check Blank
71	1	WG2002938-1 WG2002938
72	2	WG2002938-2 WG2002938
73	3	L2469828-01 WG2002938
74	4	WG2002938-3 WG2002938
75	5	WG2002938-4 WG2002938
76	6	L2469828-02 WG2002938
77	7	L2469828-03 WG2002938
78	8	L2469829-01 WG2002938
79	9	L2469829-02 WG2002938
80	10	L2469829-03 WG2002938
81	11	Check STD(5ug/L)

82	12	Check Blank
83	13	L2468246-01 WG2002938
84	14	L2468246-02 WG2002938
85	15	L2468246-03 WG2002938
86	16	L2468246-04 WG2002938
87	17	L2468246-05 WG2002938
88	18	L2468443-01 WG2002938
89	19	L2468443-02 WG2002938
90	20	L2468567-01 WG2002938
91	21	L2468567-02 WG2002938
92	22	L2468567-03 WG2002938
93	23	Check STD(5ug/L)
94	24	Check Blank
95	25	L2469271-01 WG2002938
96	26	L2469271-02 WG2002938
97	27	L2469271-04 WG2002938
98	28	Check STD(5ug/L)
99	29	Check Blank
100	30	WG2002767-1 WG2002767
101	31	WG2002767-2 WG2002767
102	32	L2468439-01 WG2002767
103	33	WG2002767-3 WG2002767
104	34	WG2002767-4 WG2002767
105	35	Check STD(5ug/L)
106	36	Check Blank
107	37	L2468349-03 WG2002767
108	38	L2468409-03 WG2002767
109	39	L2468199-01 WG2001695
110	40	L2468201-01 WG2001695
111	41	L2468201-02 WG2001695
112	42	L2468221-01 WG2001695
113	43	L2468221-02 WG2001695
114	47	Check STD(5ug/L)
115	48	Check Blank

METALS ELN REPORT

Workgroup: WG2002013

Digestion

Prep Method	Acid Type 1	Acid 1 Lot	Acid Type 2	Acid 2 Lot	Spike Type	Lims Spike Lot	Spike Lot	Post Spike Spikelot	Spike Lot	Pipette Id
EPA 7470A	HNO3	24015917	H2SO4	24014954	METALS	METSPIKE	HG24471904 22FAC	METSPIKE	HG24471904 22FAC	320, 348

Additional Reagent/Std	K2O8S2	PS2447181130JDH
	KMnO4	PP2447221100AJT
	NaCl-NH2OH.HCl	HH2447222109DJR
		ICV2446111315AJT

Sample/ Type	Digestion Date	Analyst	Lab Filtration Date	Sample Vol ml	Spike Amt	Start Date/Time	Hot Block Unit	Temperature (C)	Stop Date/Time	Final Vol	Comments
L2467934-01 SAMP	11/25/24 21:22	Maisie Mcqueen	NA	25		11/25/24 21:22	5	94.9	11/25/24 23:22	25	
L2467934-02 SAMP	11/25/24 21:22	Maisie Mcqueen	NA	25		11/25/24 21:22	5	94.9	11/25/24 23:22	25	
L2467934-03 SAMP	11/25/24 21:22	Maisie Mcqueen	NA	25		11/25/24 21:22	5	94.9	11/25/24 23:22	25	
L2467934-04 SAMP	11/25/24 21:22	Maisie Mcqueen	NA	25		11/25/24 21:22	5	94.9	11/25/24 23:22	25	
L2467934-05 SAMP	11/25/24 21:22	Maisie Mcqueen	NA	25		11/25/24 21:22	5	94.9	11/25/24 23:22	25	
L2467934-06 SAMP	11/25/24 21:22	Maisie Mcqueen	NA	25		11/25/24 21:22	5	94.9	11/25/24 23:22	25	
L2467934-07 SAMP	11/25/24 21:22	Maisie Mcqueen	NA	25		11/25/24 21:22	5	94.9	11/25/24 23:22	25	
L2467934-08 SAMP	11/25/24 21:22	Maisie Mcqueen	NA	25		11/25/24 21:22	5	94.9	11/25/24 23:22	25	
L2467934-09 SAMP	11/25/24 21:22	Maisie Mcqueen	NA	25		11/25/24 21:22	5	94.9	11/25/24 23:22	25	
L2467934-10 SAMP	11/25/24 21:22	Maisie Mcqueen	11-21-24 06:54	25		11/25/24 21:22	5	94.9	11/25/24 23:22	25	
WG2002013-1 BLANK	11/25/24 21:22	Maisie Mcqueen	NA	25		11/25/24 21:22	5	94.9	11/25/24 23:22	25	ELN: CLH

Reported: 28-NOV-24 05:41 AM

METALS ELN REPORT

Workgroup: WG2002013

Sample/ Type	Digestion Date	Analyst	Lab Filtration Date	Sample Vol	Spike Amt ml	Start Date/Time	Hot Block Unit	Temperature (C)	Stop Date/Time	Final Vol	Comments
WG2002013-2 LCS	11/25/24 21:22	Maisie Mcqueen	NA	25	0.25	11/25/24 21:22	5	94.9	11/25/24 23:22	25	
WG2002013-3 MS	11/25/24 21:22	Maisie Mcqueen	NA	25	1.25	11/25/24 21:22	5	94.9	11/25/24 23:22	25	
WG2002013-4 MSD	11/25/24 21:22	Maisie Mcqueen	NA	25	1.25	11/25/24 21:22	5	94.9	11/25/24 23:22	25	

Reagent	Actual Volume	Units
Sulfuric Acid (H2SO4)	1.25	ml
Nitric Acid (HNO3)	.625	ml
Potassium Permanganat	3.75	ml
Potassium Persulfate (K	2	ml
NaCl-Hydroxylamine Hy	1.5	ml

Reported: 28-NOV-24 05:41 AM

METALS ELN REPORT

Workgroup: WG2002207

Digestion

Prep Method	Acid Type 1	Acid 1 Lot	Acid Type 2	Acid 2 Lot	Spike Type	Lims Spike Lot	Spike Lot	Post Spike Spikelot	Spike Lot	Pipette Id
EPA 7470A	HNO3	24015917	H2SO4	24014954	METALS	METSPIKE	HG24471904 22FAC	METSPIKE	HG24471904 22FAC	320, 348

Additional Reagent/Std	K2O8S2	PS2447211200JDH
	KMnO4	PP2447221100AJT
	NaCl-NH2OH.HCl	HH2447222109DJR
		ICV2446111315AJT

Sample/ Type	Digestion Date	Analyst	Sample Vol ml	Spike Amt ml	Start Date/Time	Hot Block Unit	Temperature (C)	Stop Date/Time	Final Vol	Comments
L2467884-01 SAMP	11/26/24 11:53	Cristy Estevez	25		11/26/24 11:53	8	95.0	11/26/24 13:53	25	
L2467884-02 SAMP	11/26/24 11:53	Cristy Estevez	25		11/26/24 11:53	8	95.0	11/26/24 13:53	25	
L2467934-01 SAMP	11/26/24 11:53	Cristy Estevez	25		11/26/24 11:53	8	95.0	11/26/24 13:53	25	
L2467934-02 SAMP	11/26/24 11:53	Cristy Estevez	25		11/26/24 11:53	8	95.0	11/26/24 13:53	25	
L2467934-03 SAMP	11/26/24 11:53	Cristy Estevez	25		11/26/24 11:53	8	95.0	11/26/24 13:53	25	
L2467934-04 SAMP	11/26/24 11:53	Cristy Estevez	25		11/26/24 11:53	8	95.0	11/26/24 13:53	25	
L2467934-05 SAMP	11/26/24 11:53	Cristy Estevez	25		11/26/24 11:53	8	95.0	11/26/24 13:53	25	
L2467934-06 SAMP	11/26/24 11:53	Cristy Estevez	25		11/26/24 11:53	8	95.0	11/26/24 13:53	25	
L2467934-07 SAMP	11/26/24 11:53	Cristy Estevez	25		11/26/24 11:53	8	95.0	11/26/24 13:53	25	
L2467934-08 SAMP	11/26/24 11:53	Cristy Estevez	25		11/26/24 11:53	8	95.0	11/26/24 13:53	25	
L2467934-09 SAMP	11/26/24 11:53	Cristy Estevez	25		11/26/24 11:53	8	95.0	11/26/24 13:53	25	
L2467934-10 SAMP	11/26/24 11:53	Cristy Estevez	25		11/26/24 11:53	8	95.0	11/26/24 13:53	25	

Reported: 28-NOV-24 05:41 AM

METALS ELN REPORT

Workgroup: WG2002207

Sample/ Type	Digestion Date	Analyst	Sample Vol ml	Spike Amt ml	Start Date/Time	Hot Block Unit	Temperature (C)	Stop Date/Time	Final Vol	Comments
WG2002207-1 BLANK	11/26/24 11:53	Cristy Estevez	25		11/26/24 11:53	8	95.0	11/26/24 13:53	25	ELN: SAM
WG2002207-2 LCS	11/26/24 11:53	Cristy Estevez	25	0.25	11/26/24 11:53	8	95.0	11/26/24 13:53	25	
WG2002207-3 MS	11/26/24 11:53	Cristy Estevez	25	1.25	11/26/24 11:53	8	95.0	11/26/24 13:53	25	
WG2002207-4 MSD	11/26/24 11:53	Cristy Estevez	25	1.25	11/26/24 11:53	8	95.0	11/26/24 13:53	25	

Reagent	Actual Volume	Units
Sulfuric Acid (H2SO4)	1.25	ml
Nitric Acid (HNO3)	.625	ml
Potassium Permanganat	3.75	ml
Potassium Persulfate (K	2	ml
NaCl-Hydroxylamine Hy	1.5	ml

Reported: 28-NOV-24 05:41 AM

Wet Chemistry

Total Nitrogen Analysis

Results

Form 1
WETCHEM

Client	:	**Alpha Geoscience**	**Lab Number**	:	**L2467934**
Project Name	:	**HUNTINGTON READY MIXED**	**Project Number**	:	**20116**
Lab ID	:	**L2467934-01**	**Date Collected**	:	**11/18/24 15:46**
Client ID	:	**MW-1S**	**Date Received**	:	**11/19/24**
Sample Location	:	**SPEONK, NY**	**Date Analyzed**	:	**11/27/24 15:15**
Sample Matrix	:	**WATER**	**Dilution Factor**	:	**1**
Analytical Method	:	**107,-**	**Analyst**	:	**JRO**
Lab File ID	:	**WG2003289.csv**	**Instrument ID**	:	
Sample Amount	:		**%Solids**	:	**N/A**
Digestion Method	:		**Date Digested**	:	

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	**Total Nitrogen**	**3.4**	**0.30**	**0.30**	

Form 1
WETCHEM

Client	:	**Alpha Geoscience**	**Lab Number**	:	**L2467934**
Project Name	:	**HUNTINGTON READY MIXED**	**Project Number**	:	**20116**
Lab ID	:	**L2467934-02**	**Date Collected**	:	**11/18/24 14:33**
Client ID	:	**MW-2S**	**Date Received**	:	**11/19/24**
Sample Location	:	**SPEONK, NY**	**Date Analyzed**	:	**11/27/24 15:15**
Sample Matrix	:	**WATER**	**Dilution Factor**	:	**1**
Analytical Method	:	**107,-**	**Analyst**	:	**JRO**
Lab File ID	:	**WG2003289.csv**	**Instrument ID**	:	
Sample Amount	:		**%Solids**	:	**N/A**
Digestion Method	:		**Date Digested**	:	

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	**Total Nitrogen**	**0.98**	**0.30**	**0.30**	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Lab ID	: L2467934-03	**Date Collected**	: 11/18/24 13:31
Client ID	: MW-3S	**Date Received**	: 11/19/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 11/27/24 15:15
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 107,-	**Analyst**	: JRO
Lab File ID	: WG2003289.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	Total Nitrogen	6.6	0.30	0.30	

Form 1
WETCHEM

Client	:	Alpha Geoscience	**Lab Number**	:	L2467934
Project Name	:	HUNTINGTON READY MIXED	**Project Number**	:	20116
Lab ID	:	L2467934-04	**Date Collected**	:	11/19/24 09:35
Client ID	:	MW-4D	**Date Received**	:	11/19/24
Sample Location	:	SPEONK, NY	**Date Analyzed**	:	11/27/24 15:15
Sample Matrix	:	WATER	**Dilution Factor**	:	1
Analytical Method	:	107,-	**Analyst**	:	JRO
Lab File ID	:	WG2003289.csv	**Instrument ID**	:	
Sample Amount	:		**%Solids**	:	N/A
Digestion Method	:		**Date Digested**	:	

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	Total Nitrogen	0.56	0.30	0.30	

Form 1
WETCHEM

Client	:	**Alpha Geoscience**	**Lab Number**	:	**L2467934**
Project Name	:	**HUNTINGTON READY MIXED**	**Project Number**	:	**20116**
Lab ID	:	**L2467934-05**	**Date Collected**	:	**11/19/24 08:10**
Client ID	:	**MW-5S**	**Date Received**	:	**11/19/24**
Sample Location	:	**SPEONK, NY**	**Date Analyzed**	:	**11/27/24 15:15**
Sample Matrix	:	**WATER**	**Dilution Factor**	:	**1**
Analytical Method	:	**107,-**	**Analyst**	:	**JRO**
Lab File ID	:	**WG2003289.csv**	**Instrument ID**	:	
Sample Amount	:		**%Solids**	:	**N/A**
Digestion Method	:		**Date Digested**	:	

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	**Total Nitrogen**	**0.98**	**0.30**	**0.30**	

Form 1
WETCHEM

Client	:	Alpha Geoscience	**Lab Number**	:	L2467934
Project Name	:	HUNTINGTON READY MIXED	**Project Number**	:	20116
Lab ID	:	L2467934-06	**Date Collected**	:	11/18/24 15:40
Client ID	:	MW-6D	**Date Received**	:	11/19/24
Sample Location	:	SPEONK, NY	**Date Analyzed**	:	11/27/24 15:15
Sample Matrix	:	WATER	**Dilution Factor**	:	1
Analytical Method	:	107,-	**Analyst**	:	JRO
Lab File ID	:	WG2003289.csv	**Instrument ID**	:	
Sample Amount	:		**%Solids**	:	N/A
Digestion Method	:		**Date Digested**	:	

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	Total Nitrogen	3.9	0.30	0.30	

Form 1
WETCHEM

Client	:	**Alpha Geoscience**	**Lab Number**	:	**L2467934**
Project Name	:	**HUNTINGTON READY MIXED**	**Project Number**	:	**20116**
Lab ID	:	**L2467934-07**	**Date Collected**	:	**11/18/24 14:15**
Client ID	:	**MW-7S**	**Date Received**	:	**11/19/24**
Sample Location	:	**SPEONK, NY**	**Date Analyzed**	:	**11/27/24 15:15**
Sample Matrix	:	**WATER**	**Dilution Factor**	:	**1**
Analytical Method	:	**107,-**	**Analyst**	:	**JRO**
Lab File ID	:	**WG2003289.csv**	**Instrument ID**	:	
Sample Amount	:		**%Solids**	:	**N/A**
Digestion Method	:		**Date Digested**	:	

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	**Total Nitrogen**	**2.5**	**0.30**	**0.30**	

Form 1
WETCHEM

Client	:	**Alpha Geoscience**	**Lab Number**	:	**L2467934**
Project Name	:	**HUNTINGTON READY MIXED**	**Project Number**	:	**20116**
Lab ID	:	**L2467934-08**	**Date Collected**	:	**11/18/24 16:45**
Client ID	:	**MW-8S**	**Date Received**	:	**11/19/24**
Sample Location	:	**SPEONK, NY**	**Date Analyzed**	:	**11/27/24 15:15**
Sample Matrix	:	**WATER**	**Dilution Factor**	:	**1**
Analytical Method	:	**107,-**	**Analyst**	:	**JRO**
Lab File ID	:	**WG2003289.csv**	**Instrument ID**	:	
Sample Amount	:		**%Solids**	:	**N/A**
Digestion Method	:		**Date Digested**	:	

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	**Total Nitrogen**	**0.35**	**0.30**	**0.30**	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Lab ID	: L2467934-09	**Date Collected**	: 11/18/24 00:00
Client ID	: DUP	**Date Received**	: 11/19/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 11/27/24 15:15
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 107,-	**Analyst**	: JRO
Lab File ID	: WG2003289.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	Total Nitrogen	2.1	0.30	0.30	

Sample Raw Data

PACE ANALYTICAL LABS

WET CHEMISTRY DEPARTMENT

TOTAL NITROGEN

Last Change 3/5/13 GFF
File tnitrogen.xlt

Sample #: _____

Client: _____

Analysis: Total Nitrogen

Method: *Calculation from TKN & NO3/NO2*

Product: TNITROGEN
Analyte: Total Nitrogen,
Analysis Date: ##########
Technician: JRO
Work group: WG2003289
RL: 0.3 mg/L

	Sample Number	TKN (mg/L)	NO3/NO2 (mg/L)	RL Multiplier	Result (mg/L)
SAMP	L2467934-01	3.38	0	1.0	3.38
SAMP	L2467934-02	0.275	0.98	1.0	0.98
SAMP	L2467934-03	0.315	6.3	1.0	6.615
SAMP	L2467934-04	0.0735	0.56	1.0	0.56
SAMP	L2467934-05	0	0.98	1.0	0.98
SAMP	L2467934-06	2.94	0.94	1.0	3.88
SAMP	L2467934-07	0.366	2.1	1.0	2.466
SAMP	L2467934-08	0.235	0.35	1.0	0.35
SAMP	L2467934-09	0.287	2.1	1.0	2.1
	L2468038-01	10.3	0	2.0	10.3
	L2468038-02	6.85	0	1.0	6.85
	L2468038-04	0.213	5	1.0	5
	L2468038-05	5.2	0.17	1.0	5.37
SAMP	L2468186-01	11	41.56	10.0	52.56
	L2468287-01	62.6	12	10.0	74.6
	L2468292-01	89.2	0.054	20.0	89.254
	L2468292-02	85.1	0	20.0	85.1

Calculations of Total Nitrogen

Calculate the concentration value based on results for TKN-N and N03/NO2-N.

Aqueous samples:

mgTN-N/L = TKN-N(mg/l) + NO3/NO2-N (mg/l)

Soil samples:

mgTN-N/Kg = TKN-N(mg/Kg) + NO3/NO2-N(mg/Kg)

Total Kjeldahl Nitrogen Analysis

Results

Form 1
WETCHEM

Client	:	Alpha Geoscience	**Lab Number**	:	L2467934
Project Name	:	HUNTINGTON READY MIXED	**Project Number**	:	20116
Lab ID	:	L2467934-01	**Date Collected**	:	11/18/24 15:46
Client ID	:	MW-1S	**Date Received**	:	11/19/24
Sample Location	:	SPEONK, NY	**Date Analyzed**	:	11/27/24 13:04
Sample Matrix	:	WATER	**Dilution Factor**	:	1
Analytical Method	:	121,4500NH3-H	**Analyst**	:	KEM
Lab File ID	:	NH320241127-B	**Instrument ID**	:	LACHAT
Sample Amount	:		**%Solids**	:	N/A
Digestion Method	:		**Date Digested**	:	11/27/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	Nitrogen, Total Kjeldahl	3.38	0.300	0.066	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Lab ID	: L2467934-02	**Date Collected**	: 11/18/24 14:33
Client ID	: MW-2S	**Date Received**	: 11/19/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 11/27/24 13:05
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,4500NH3-H	**Analyst**	: KEM
Lab File ID	: NH320241127-B	**Instrument ID**	: LACHAT
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	: 11/27/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	Nitrogen, Total Kjeldahl	0.275	0.300	0.066	J

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Lab ID	: L2467934-03	**Date Collected**	: 11/18/24 13:31
Client ID	: MW-3S	**Date Received**	: 11/19/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 11/27/24 13:06
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,4500NH3-H	**Analyst**	: KEM
Lab File ID	: NH320241127-B	**Instrument ID**	: LACHAT
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	: 11/27/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	Nitrogen, Total Kjeldahl	0.315	0.300	0.066	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Lab ID	: L2467934-04	**Date Collected**	: 11/19/24 09:35
Client ID	: MW-4D	**Date Received**	: 11/19/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 11/27/24 13:07
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,4500NH3-H	**Analyst**	: KEM
Lab File ID	: NH320241127-B	**Instrument ID**	: LACHAT
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	: 11/27/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	Nitrogen, Total Kjeldahl	0.073	0.300	0.066	J

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Lab ID	: L2467934-05	**Date Collected**	: 11/19/24 08:10
Client ID	: MW-5S	**Date Received**	: 11/19/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 11/27/24 13:08
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,4500NH3-H	**Analyst**	: KEM
Lab File ID	: NH320241127-B	**Instrument ID**	: LACHAT
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	: 11/27/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	Nitrogen, Total Kjeldahl	ND	0.300	0.066	U

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Lab ID	: L2467934-06	**Date Collected**	: 11/18/24 15:40
Client ID	: MW-6D	**Date Received**	: 11/19/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 11/27/24 13:09
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,4500NH3-H	**Analyst**	: KEM
Lab File ID	: NH320241127-B	**Instrument ID**	: LACHAT
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	: 11/27/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	Nitrogen, Total Kjeldahl	2.94	0.300	0.066	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Lab ID	: L2467934-07	**Date Collected**	: 11/18/24 14:15
Client ID	: MW-7S	**Date Received**	: 11/19/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 11/27/24 13:10
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,4500NH3-H	**Analyst**	: KEM
Lab File ID	: NH320241127-B	**Instrument ID**	: LACHAT
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	: 11/27/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	Nitrogen, Total Kjeldahl	0.366	0.300	0.066	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Lab ID	: L2467934-08	**Date Collected**	: 11/18/24 16:45
Client ID	: MW-8S	**Date Received**	: 11/19/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 11/27/24 13:14
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,4500NH3-H	**Analyst**	: KEM
Lab File ID	: NH320241127-B	**Instrument ID**	: LACHAT
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	: 11/27/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	Nitrogen, Total Kjeldahl	0.235	0.300	0.066	J

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Lab ID	: L2467934-09	**Date Collected**	: 11/18/24 00:00
Client ID	: DUP	**Date Received**	: 11/19/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 11/27/24 13:15
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,4500NH3-H	**Analyst**	: KEM
Lab File ID	: NH320241127-B	**Instrument ID**	: LACHAT
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	: 11/27/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	Nitrogen, Total Kjeldahl	0.287	0.300	0.066	J

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Lab ID	: WG2002509-1	**Date Collected**	: NA
Client ID	: WG2002509-1BLANK	**Date Received**	: NA
Sample Location	:	**Date Analyzed**	: 11/27/24 13:02
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,4500NH3-H	**Analyst**	: KEM
Lab File ID	: NH320241127-B	**Instrument ID**	: LACHAT
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	: 11/27/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	Nitrogen, Total Kjeldahl	0.029	0.300	0.022	J

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Lab ID	: WG2002509-3	**Date Collected**	: 11/19/24 12:45
Client ID	: WG2002509-3 DUP	**Date Received**	: 11/19/24
Sample Location	:	**Date Analyzed**	: 11/27/24 13:20
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,4500NH3-H	**Analyst**	: KEM
Lab File ID	: NH320241127-B	**Instrument ID**	: LACHAT
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	: 11/27/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	Nitrogen, Total Kjeldahl	5.71	0.300	0.066	

Sample Raw Data

Original Run Filename: OM_11-27-2024_11-48-13AM.OMN Created: 11/27/2024 11:48:13 AM
Original Run Author's Signature: [A1WETCHEMINSTRUMENT]
Current Run Filename: OM_11-27-2024_11-48-13AM.OMN Last Modified: 11/27/2024 12:14:53 PM
Current Run Author's Signature: [A1WETCHEMINSTRUMENT]
Description: Default New Run

	Sample	Rep.	Cup No.	Channel 2 Ammonia (mg N/L)	ADF	MDF	Weight	TRAY A
	STD 1	1	S1	10.00000				
	STD 2	1	S2	8.00000				
	STD 3	1	S3	4.00000				
	STD 4	1	S4	2.00000				
	STD 5	1	S5	1.00000				
	STD 6	1	S6	0.40000				
	STD 7	1	S7	0.20000				
	STD 8	1	S8	0.10000				
	STD 9	1	S9	0.05000				
	STD 10	1	S10	0.00000				
	CCV 0.4000	1	S6	0.36909				92%
			Known Conc:	100.00000				
			Calibration:	Table/Fig. : 1				
	CCV 4.0000	1	S3	4.01058				100%
			Known Conc:	100.00000				
	CCB	1	S10	0.00993				
			Known Conc:	100.00000				
	HI ICV 8.0	1	1	8.10282				101%
	LO ICV 1.0	1	2	0.97998				98%
	ICB	1	3	0.00883				
	WG2002913-1	1	4	0.00586		1.50		
	WG2002913-2	1	5	18.65947		7.50		93%
	LCS LO	1	6	1.91317		1.50		96%
X	L2464259-19	1	7	39.73431		1.50		
X	L2467994-01	1	8	14.24349		1.50		
	L2467994-02	1	9	9.67611		1.50		
X	L2467994-03	1	10	24.37930		1.50		
X	CCV 0.4000	1	S6	0.67390				168%, RERUN OK
			Known Conc:	100.00000				
	CCV 4.0000	1	S3	4.14707				
			Known Conc:	100.00000				

Author: A1WETCHEMINSTRUMENT Date : 11/27/2024

Channel 2 (Ammonia High) - Current View

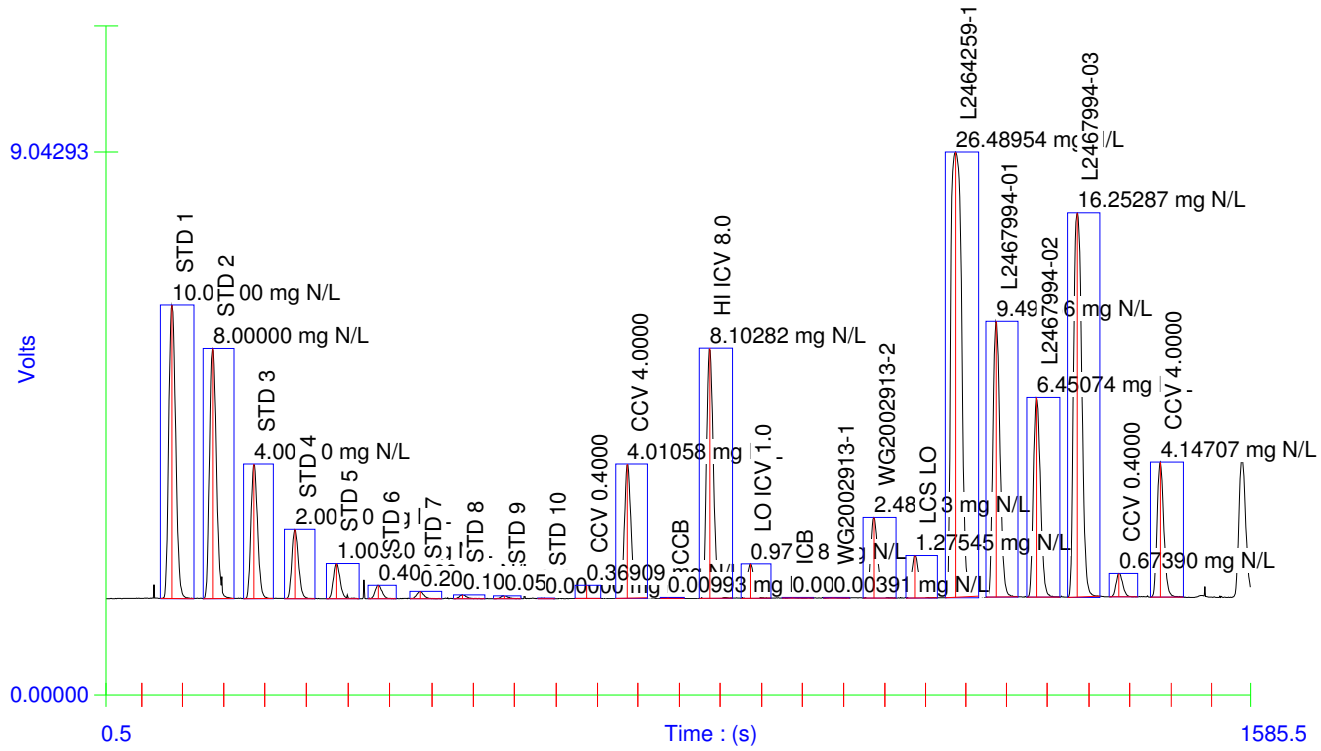
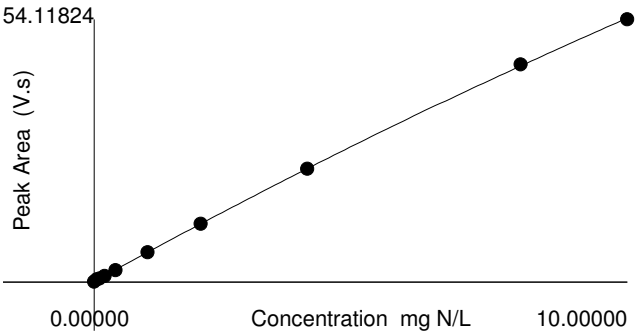


Table : 1 (Ammonia)

	Known Conc. (mg N/L)	Rep.	Peak Area (V.s)	Peak Height (V)	% RSD	% Residual	Det. Conc (mg N/L)	Detection Date	Detection Time
1	10.00000	1	54.11824	4.88747	0.0	0.5	9.93540	11/27/2024	11:49:13 AM
2	8.00000	1	44.86792	4.16193	0.0	-0.7	8.07622	11/27/2024	11:50:10 AM
3	4.00000	1	23.34496	2.23972	0.0	0.1	4.00142	11/27/2024	11:51:07 AM
4	2.00000	1	12.01958	1.15028	0.0	-0.1	1.99825	11/27/2024	11:52:04 AM
5	1.00000	1	6.16325	0.58536	0.0	-0.5	1.00054	11/27/2024	11:53:02 AM
6	0.40000	1	2.42804	0.22580	0.0	4.8	0.37777	11/27/2024	11:53:59 AM
7	0.20000	1	1.28075	0.11867	0.0	4.7	0.18861	11/27/2024	11:54:58 AM
8	0.10000	1	0.74175	0.06584	0.0	-0.2	0.10008	11/27/2024	11:55:56 AM
9	0.05000	1	0.51940	0.04716	0.0	-18.7	0.06363	11/27/2024	11:56:54 AM
10	0.00000	1	0.08067	0.00693			-0.00819	11/27/2024	11:57:51 AM

Figure : 1 (Ammonia)



Area = - 0.06382 * Conc^2 + 6.06182 * Conc + 0.13467
Conc = 0.00038 * Area^2 + 0.16347 * Area - 0.02138
Correlation Coefficient (r) = 0.99999

Weighting : 1/x

Original Run Filename: OM_11-27-2024_12-23-10PM.OMN Created: 11/27/2024 12:23:10 PM
Original Run Author's Signature: [A1WETCHEMINSTRUMENT]
Current Run Filename: OM_11-27-2024_12-23-10PM.OMN Last Modified: 11/27/2024 12:47:50 PM
Current Run Author's Signature: [A1WETCHEMINSTRUMENT]
Description: Default New Run

TRAY A

	Sample	Rep.	Cup No.	Channel 2 Ammonia (mg N/L)	ADF	MDF	Weight	
	CCV 0.4000	1	S6	0.38471				96%
			Known Conc:	100.00000				
			Calibration:	Table/Fig. : 1				
	CCV 4.0000	1	S3	4.05165				101%
			Known Conc:	100.00000				
	CCB	1	S10	0.01680				
			Known Conc:	100.00000				
	L2467994-04	1	11	6.58913		1.50		
	L2467994-05	1	12	11.12123		1.50		
	L2467994-06	1	13	0.90175		1.50		
	L2467994-07	1	14	0.51148		1.50		
X	L2467994-08	1	15	22.40883		1.50		
X	L2469455-01	1	16	0.48180		1.50		
	WG2002913-4	1	17	4.61636		1.50		111%
	WG2002913-3	1	18	0.19246		1.50		RPD=5%
	L2467994-01	1	8	13.71325		1.50		
	L2464259-19; 30X	1	7	76.37031		45.00		
	CCV 0.4000	1	S6	0.43080				
			Known Conc:	100.00000				
	CCV 4.0000	1	S3	4.05212				
			Known Conc:	100.00000				
	CCB	1	S10	0.02861				
			Known Conc:	100.00000				
	L2467994-03; 20X	1	10	25.00253		30.00		
	L2467994-08; 10X	1	15	22.95106		15.00		
	L2469455-01	1	16	0.18225		1.50		
	CCV 0.4000	1	S6	0.38678				97%
			Known Conc:	100.00000				
	CCV 4.0000	1	S3	4.04430				101%
			Known Conc:	100.00000				
	CCB	1	S10	0.01855				
			Known Conc:	100.00000				

Author: A1WETCHEMINSTRUMENT Date : 11/27/2024

Channel 2 (Ammonia High) - Current View

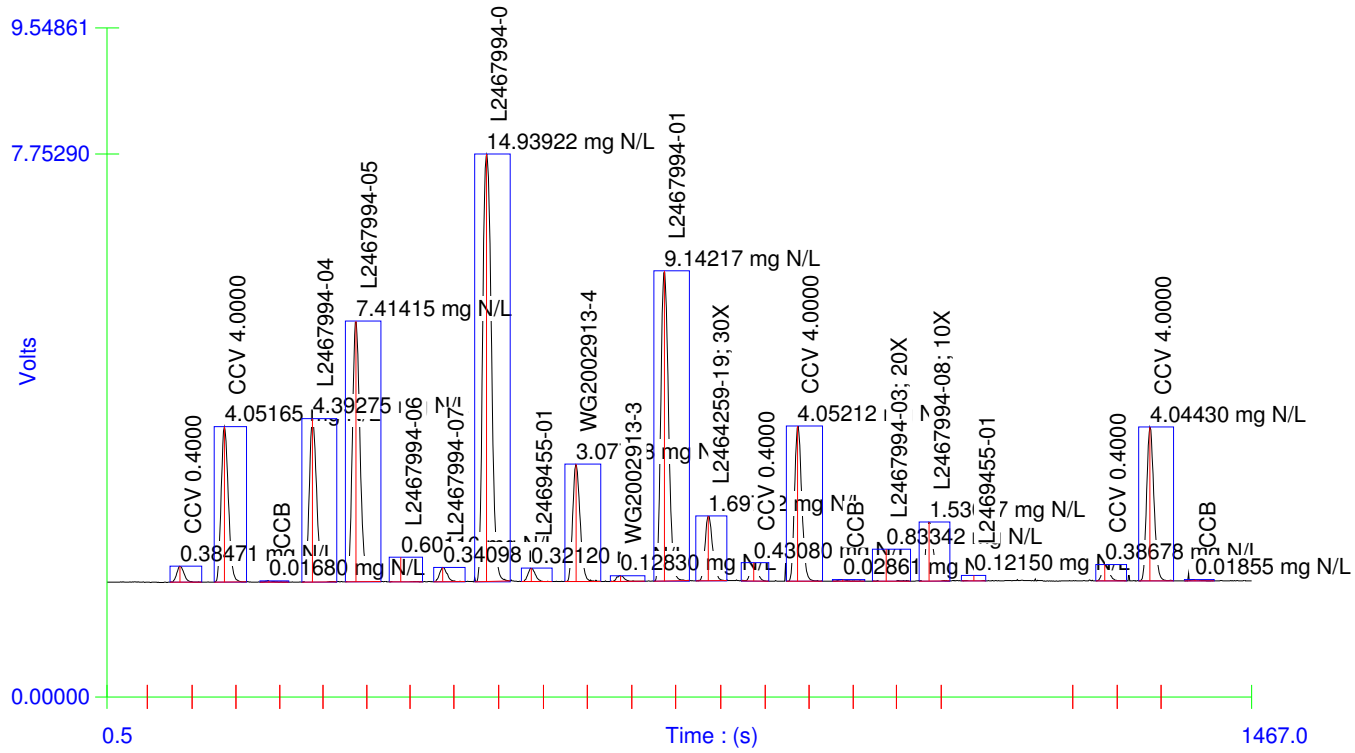
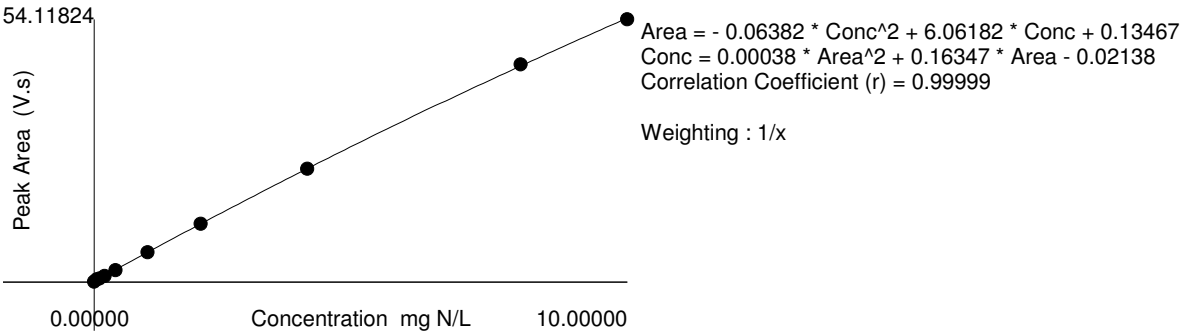


Table : 1 (Ammonia)

	Known Conc. (mg N/L)	Rep.	Peak Area (V.s)	Peak Height (V)	% RSD	% Residual	Det. Conc (mg N/L)	Detection Date	Detection Time
1	10.00000	1	54.11824	4.88747	0.0	0.5	9.93540	11/27/2024	11:49:13 AM
2	8.00000	1	44.86792	4.16193	0.0	-0.7	8.07622	11/27/2024	11:50:10 AM
3	4.00000	1	23.34496	2.23972	0.0	0.1	4.00142	11/27/2024	11:51:07 AM
4	2.00000	1	12.01958	1.15028	0.0	-0.1	1.99825	11/27/2024	11:52:04 AM
5	1.00000	1	6.16325	0.58536	0.0	-0.5	1.00054	11/27/2024	11:53:02 AM
6	0.40000	1	2.42804	0.22580	0.0	4.8	0.37777	11/27/2024	11:53:59 AM
7	0.20000	1	1.28075	0.11867	0.0	4.7	0.18861	11/27/2024	11:54:58 AM
8	0.10000	1	0.74175	0.06584	0.0	-0.2	0.10008	11/27/2024	11:55:56 AM
9	0.05000	1	0.51940	0.04716	0.0	-18.7	0.06363	11/27/2024	11:56:54 AM
10	0.00000	1	0.08067	0.00693			-0.00819	11/27/2024	11:57:51 AM

Figure : 1 (Ammonia)



Original Run Filename: OM_11-27-2024_12-58-08PM.OMN Created: 11/27/2024 12:58:08 PM
Original Run Author's Signature: [A1WETCHEMINSTRUMENT]
Current Run Filename: OM_11-27-2024_12-58-08PM.OMN Last Modified: 11/27/2024 1:29:27 PM
Current Run Author's Signature: [A1WETCHEMINSTRUMENT]
Description: Default New Run

Sample	Rep.	Cup No.	Channel 2 Ammonia (mg N/L)	ADF	MDF	Weight	TRAY B
CCV 0.4000	1	S6	0.37192				93%
	Known Conc:		100.00000				
CCV 4.0000	1	S3	4.04452				101%
	Known Conc:		100.00000				
	Calibration:		Table/Fig. : 1				
CCB	1	S10	0.01712				
	Known Conc:		100.00000				
WG2002509-1 T	1	1	0.00958				
WG2002509-2 T	1	2	37.72990		15.00		94%
LCS LO T	1	3	4.02330		3.00		101%
L2467934-01 T	1	4	3.37976		3.00		
L2467934-02 T	1	5	0.27541		3.00		
L2467934-03 T	1	6	0.31465		3.00		
L2467934-04 T	1	7	0.07351		3.00		
L2467934-05 T	1	8	0.04730		3.00		
L2467934-06 T	1	9	2.93510		3.00		
L2467934-07 T	1	10	0.36611		3.00		
CCV 0.4000	1	S6	0.38973				97%
	Known Conc:		100.00000				
CCV 4.0000	1	S3	4.03772				101%
	Known Conc:		100.00000				
CCB	1	S10	0.01705				
	Known Conc:		100.00000				
L2467934-08 T	1	11	0.23489		3.00		
L2467934-09 T	1	12	0.28669		3.00		
L2468038-01 T	1	13	10.29637		6.00		
L2468038-02 T	1	14	6.84988		3.00		
L2468038-04 T	1	15	0.21290		3.00		
L2468038-05 T	1	16	5.20599		3.00		
WG2002509-4 T	1	17	14.61562		3.00		118%
WG2002509-3 T	1	18	5.71265		3.00		RPD=9%
L2468131-01 T	1	19	1.86984		6.00		
L2468131-02 T	1	20	0.60151		6.00		
CCV 0.4000	1	S6	0.38494				96%
	Known Conc:		100.00000				
CCV 4.0000	1	S3	4.04396				101%
	Known Conc:		100.00000				
CCB	1	S10	0.02241				
	Known Conc:		100.00000				

Author: A1WETCHEMINSTRUMENT Date : 11/27/2024

Channel 2 (Ammonia High) - Current View

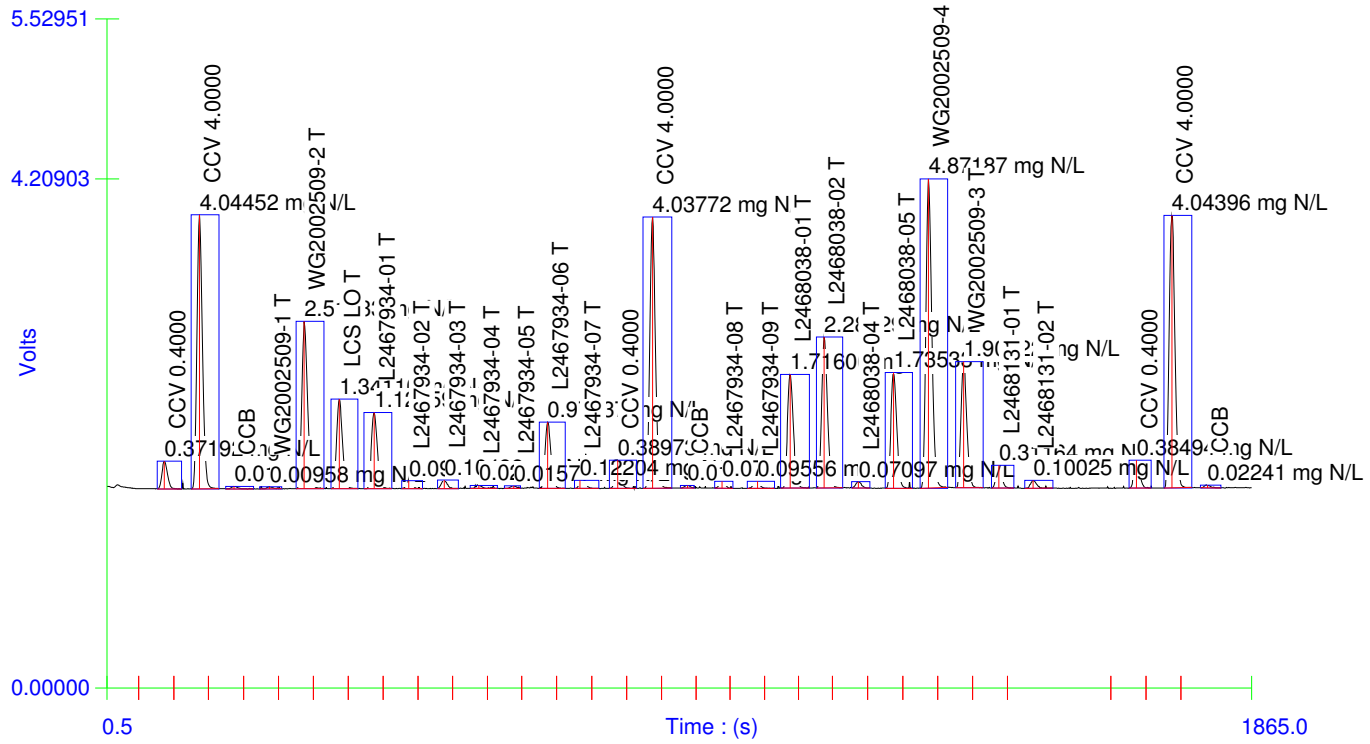
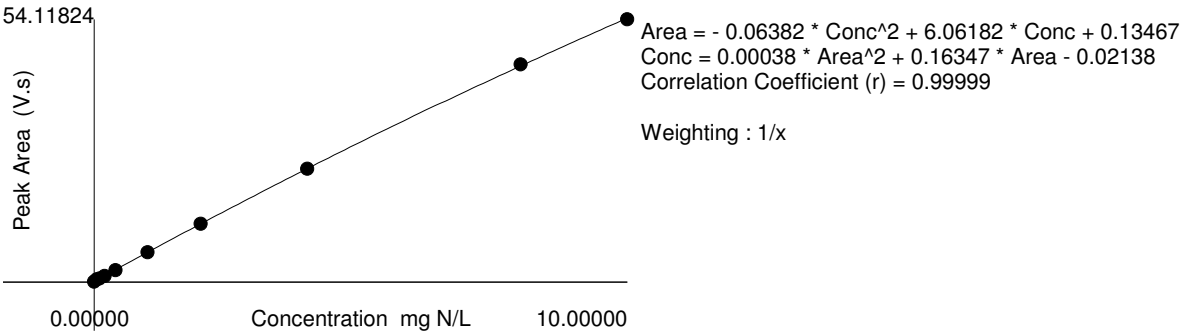


Table : 1 (Ammonia)

	Known Conc. (mg N/L)	Rep.	Peak Area (V.s)	Peak Height (V)	% RSD	% Residual	Det. Conc (mg N/L)	Detection Date	Detection Time
1	10.00000	1	54.11824	4.88747	0.0	0.5	9.93540	11/27/2024	11:49:13 AM
2	8.00000	1	44.86792	4.16193	0.0	-0.7	8.07622	11/27/2024	11:50:10 AM
3	4.00000	1	23.34496	2.23972	0.0	0.1	4.00142	11/27/2024	11:51:07 AM
4	2.00000	1	12.01958	1.15028	0.0	-0.1	1.99825	11/27/2024	11:52:04 AM
5	1.00000	1	6.16325	0.58536	0.0	-0.5	1.00054	11/27/2024	11:53:02 AM
6	0.40000	1	2.42804	0.22580	0.0	4.8	0.37777	11/27/2024	11:53:59 AM
7	0.20000	1	1.28075	0.11867	0.0	4.7	0.18861	11/27/2024	11:54:58 AM
8	0.10000	1	0.74175	0.06584	0.0	-0.2	0.10008	11/27/2024	11:55:56 AM
9	0.05000	1	0.51940	0.04716	0.0	-18.7	0.06363	11/27/2024	11:56:54 AM
10	0.00000	1	0.08067	0.00693			-0.00819	11/27/2024	11:57:51 AM

Figure : 1 (Ammonia)



Quality Control

Form 5a
Matrix Spike

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Client Sample ID	: NA	**Matrix**	: WATER
Lab Sample ID	: L2468038-05		
Matrix Spike	: WG2002509-4	**MS Analysis Date**	: 11/27/24 13:19
Matrix Spike Dup	:	**MSD Analysis Date**	:

		Matrix Spike Sample				Matrix Spike Duplicate					
Parameter	Sample Conc. (mg/l)	Spike Added (mg/l)	Spike Conc. (mg/l)	%R		Spike Added (mg/l)	Spike Conc. (mg/l)	%R	RPD	Recovery Limits	RPD Limit
Nitrogen, Total Kjeldahl	5.20	8	14.6	118	Q					77-111	24

Form 6
Lab Duplicates

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Client Sample ID	: NA	**Matrix**	: WATER
Lab Sample ID	: NA	**Analysis Date**	: 11/27/24 13:19
Dup Sample ID	: WG2002509-3	**DUP Analysis Date**	: 11/27/24 13:20

Parameter	Sample Concentration (mg/l)	Duplicate Concentration (mg/l)	RPD	RPD Limit
Nitrogen, Total Kjeldahl	5.20	5.71	9	24

Form 7
Laboratory Control Sample

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Client Sample ID	: NA	**Matrix**	: WATER
Lab Sample ID	: WG2002509-2	**LCS Analysis Date**	: 11/27/24 13:02
Dup Sample ID	:	**LCSD Analysis Date**	:

	Laboratory Control Sample			Laboratory Control Duplicate					
	True	Found	%R	True	Found	%R	RPD	Recovery	RPD
Parameter	(mg/l)	(mg/l)		(mg/l)	(mg/l)			Limits	Limit
Nitrogen, Total Kjeldahl	40.0	37.7	94.					78-122	24

Date Created: 11/11/21
Created By: Jason Hebert
File: PM11467-1
Page: 1

WETCHEM (WATER)

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Method	Holding Time	Container / Sample Preservation
Nitrogen, Total Kjeldahl	NONE	0.3	0.066	mg/l	78-122		77-111	24	24	4500NH3-H	28 days	1 - Plastic 500ml H2SO4 preserved
Nitrogen, Total Kjeldahl	NONE	0.3	0.066	mg/l	78-122		77-111	24	24	351.1	28 days	1 - Plastic 500ml H2SO4 preserved

Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)
Please Note that the information provided in this table is subject to change at anytime at the discretion of Alpha Analytical, Inc.

Date Created: 11/11/21
Created By: Jason Hebert
File: PM11468-1
Page: 1

WETCHEM (SOIL)

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Method	Holding Time	Container / Sample Preservation
Nitrogen, Total Kjeldahl	NONE	150	31.5	mg/kg	81-115	26	43-160	26	26	4500NH3-H	28 days	1 - Glass 250ml/8oz unpreserved

Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)
Please Note that the information provided in this table is subject to change at anytime at the discretion of Alpha Analytical, Inc.

Calculations of Nitrogen in TKN

Aqueous samples:

Compute sample TKN –N concentration by comparing sample peak areas with standard curve, as determined by the Lachat instrument software.

If the sample has a concentration of less than 2ppm, calculate results by using the low curve generated on Channel 1.

If the sample concentration is greater than 2ppm, calculate the results by using the high curve generated on Channel 2.

To Compute the final results for aqueous samples, multiply the direct reading by the dilution factor based on the initial preparation volume. (also done using software)

TKN-N mg/L = mg/L direct reading x dilution factor

Sequence Logs

Tray A(11-48-13AM, 12-23-10PM)
prep 11/27/24 @ 5:21

1	Hi ICV 8.0
2	Lo ICV 1.0
3	ICB
4	WG2002913-1, Blk
5	-2; LCS Hi; 5x
6	LCS Lo
7	64259-19; 30x 1730
8	67994-01
9	-02
10	-03; 20x 0.5710
11	-04
12	-05
13	-06
14	-07
15	-08; 10x 1710
16	69455-01
17	-01 MS
18	-01 Dup

Tray B(12-58-08PM)
prep 11/26/24 @ 17:50

1	WG2002509-1T Blk
2	-2T; LCS Hi; 5x
3	LCS LoT
4	67934-01T
5	-02T
6	-03T
7	-04T
8	-05T
9	-06T
10	-07T
11	-08T
12	-09T
13	68038-01T (2x)
14	-02T
15	-04T
16	-05T
17	-05T MS
18	-05T Dup
19	68131-01T (2x)
20	-02T (2x)

Date: 11/27/24
Sodium Phenolate: 11/1/24 R-4065
Sodium Hypochlorite: 11/1/24 staplshop
Sodium Nitropruisside: 11/1/24 R-3969
Borric Acid Soln.: 11/1/24 R-4019
ICV 1.0: 11/20/24 wc-3508
ICV 8.0: 11/20/24 wc-3438
See Front Page for Instructions:

KEM

KEM

To Page No.

essed & Understood by me,
Date
Invented by:
Date
Recorded by:

Sample Preparation

Sample	Dilution	Volume	Final Vol.
Blank	1X	50mL	150mL
Low			
High			
L2467934-01			
-02			
-03			
-04			
-05			
-06			
-07			
-08			
-09			
68038-01	2X (25+50) ~~Silte~~ Matrix SAD 11 26 24		
-02	1X		
-04			
-05 Pt			
68131-01	2X (25+50) matrix		
-02			
68038-05 Dup	1X		
-05 MS			

Same Standards & Reagents as previous pg #73

Nitrates checked ✓

11 26 24 @ 17:50 SAD

Witnessed & Understood by me, Date | Invented by: Date

Recorded by:

Ammonia Analysis

Results

Form 1
WETCHEM

Client	:	**Alpha Geoscience**	**Lab Number**	:	**L2467934**
Project Name	:	**HUNTINGTON READY MIXED**	**Project Number**	:	**20116**
Lab ID	:	**L2467934-01**	**Date Collected**	:	**11/18/24 15:46**
Client ID	:	**MW-1S**	**Date Received**	:	**11/19/24**
Sample Location	:	**SPEONK, NY**	**Date Analyzed**	:	**11/26/24 20:25**
Sample Matrix	:	**WATER**	**Dilution Factor**	:	**1**
Analytical Method	:	**44,350.1**	**Analyst**	:	**AT**
Lab File ID	:	**NH320241126-J**	**Instrument ID**	:	**LACHAT**
Sample Amount	:		**%Solids**	:	**N/A**
Digestion Method	:		**Date Digested**	:	**11/26/24**

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7664-41-7	**Nitrogen, Ammonia**	**2.68**	**0.075**	**0.024**	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Lab ID	: L2467934-02	**Date Collected**	: 11/18/24 14:33
Client ID	: MW-2S	**Date Received**	: 11/19/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 11/26/24 20:26
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 44,350.1	**Analyst**	: AT
Lab File ID	: NH320241126-J	**Instrument ID**	: LACHAT
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	: 11/26/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7664-41-7	Nitrogen, Ammonia	0.076	0.075	0.024	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Lab ID	: L2467934-03	**Date Collected**	: 11/18/24 13:31
Client ID	: MW-3S	**Date Received**	: 11/19/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 11/26/24 20:27
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 44,350.1	**Analyst**	: AT
Lab File ID	: NH320241126-J	**Instrument ID**	: LACHAT
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	: 11/26/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7664-41-7	Nitrogen, Ammonia	0.061	0.075	0.024	J

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Lab ID	: L2467934-04	**Date Collected**	: 11/19/24 09:35
Client ID	: MW-4D	**Date Received**	: 11/19/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 11/26/24 20:30
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 44,350.1	**Analyst**	: AT
Lab File ID	: NH320241126-J	**Instrument ID**	: LACHAT
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	: 11/26/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7664-41-7	Nitrogen, Ammonia	ND	0.075	0.024	U

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Lab ID	: L2467934-05	**Date Collected**	: 11/19/24 08:10
Client ID	: MW-5S	**Date Received**	: 11/19/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 11/26/24 20:39
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 44,350.1	**Analyst**	: AT
Lab File ID	: NH320241126-J	**Instrument ID**	: LACHAT
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	: 11/26/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7664-41-7	Nitrogen, Ammonia	0.027	0.075	0.024	J

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Lab ID	: L2467934-06	**Date Collected**	: 11/18/24 15:40
Client ID	: MW-6D	**Date Received**	: 11/19/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 11/26/24 20:46
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 44,350.1	**Analyst**	: AT
Lab File ID	: NH320241126-J	**Instrument ID**	: LACHAT
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	: 11/26/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7664-41-7	Nitrogen, Ammonia	2.69	0.075	0.024	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Lab ID	: L2467934-07	**Date Collected**	: 11/18/24 14:15
Client ID	: MW-7S	**Date Received**	: 11/19/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 11/26/24 20:47
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 44,350.1	**Analyst**	: AT
Lab File ID	: NH320241126-J	**Instrument ID**	: LACHAT
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	: 11/26/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7664-41-7	Nitrogen, Ammonia	0.152	0.075	0.024	

Form 1
WETCHEM

Client	:	**Alpha Geoscience**	**Lab Number**	:	**L2467934**
Project Name	:	**HUNTINGTON READY MIXED**	**Project Number**	:	**20116**
Lab ID	:	**L2467934-08**	**Date Collected**	:	**11/18/24 16:45**
Client ID	:	**MW-8S**	**Date Received**	:	**11/19/24**
Sample Location	:	**SPEONK, NY**	**Date Analyzed**	:	**11/26/24 20:48**
Sample Matrix	:	**WATER**	**Dilution Factor**	:	**1**
Analytical Method	:	**44,350.1**	**Analyst**	:	**AT**
Lab File ID	:	**NH320241126-J**	**Instrument ID**	:	**LACHAT**
Sample Amount	:		**%Solids**	:	**N/A**
Digestion Method	:		**Date Digested**	:	**11/26/24**

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7664-41-7	**Nitrogen, Ammonia**	**ND**	**0.075**	**0.024**	**U**

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Lab ID	: L2467934-09	**Date Collected**	: 11/18/24 00:00
Client ID	: DUP	**Date Received**	: 11/19/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 11/26/24 20:49
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 44,350.1	**Analyst**	: AT
Lab File ID	: NH320241126-J	**Instrument ID**	: LACHAT
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	: 11/26/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7664-41-7	Nitrogen, Ammonia	0.106	0.075	0.024	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Lab ID	: WG2002511-1	**Date Collected**	: NA
Client ID	: WG2002511-1BLANK	**Date Received**	: NA
Sample Location	:	**Date Analyzed**	: 11/26/24 20:18
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 44,350.1	**Analyst**	: AT
Lab File ID	: NH320241126-J	**Instrument ID**	: LACHAT
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	: 11/26/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7664-41-7	Nitrogen, Ammonia	ND	0.075	0.024	U

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Lab ID	: WG2002511-3	**Date Collected**	: 11/19/24 10:20
Client ID	: WG2002511-3 DUP	**Date Received**	: 11/19/24
Sample Location	:	**Date Analyzed**	: 11/26/24 20:24
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 44,350.1	**Analyst**	: AT
Lab File ID	: NH320241126-J	**Instrument ID**	: LACHAT
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	: 11/26/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7664-41-7	Nitrogen, Ammonia	0.113	0.075	0.024	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Lab ID	: WG2002511-5	**Date Collected**	: 11/19/24 10:44
Client ID	: WG2002511-5 DUP	**Date Received**	: 11/19/24
Sample Location	:	**Date Analyzed**	: 11/26/24 20:33
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 44,350.1	**Analyst**	: AT
Lab File ID	: NH320241126-J	**Instrument ID**	: LACHAT
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	: 11/26/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7664-41-7	Nitrogen, Ammonia	0.055	0.075	0.024	J

Sample Raw Data

Author: A1WETCHEMINSTRUMENT Date : 11/26/2024

Original Run Filename: OM_11-26-2024_10-19-40AM.OMN Created: 11/26/2024 10:19:40 AM
Original Run Author's Signature: [A1WETCHEMINSTRUMENT]
Current Run Filename: OM_11-26-2024_10-19-40AM.OMN Last Modified: 11/26/2024 10:56:48 AM
Current Run Author's Signature: [A1WETCHEMINSTRUMENT]
Description: Default New Run

	Sample	Rep.	Cup No.	Channel 2 Ammonia (mg N/L)	ADF	MDF	Weight	TRAY A
	STD 1	1	S1	10.00000				
	STD 2	1	S2	8.00000				
	STD 3	1	S3	4.00000				
	STD 4	1	S4	2.00000				
	STD 5	1	S5	1.00000				
	STD 6	1	S6	0.40000				
	STD 7	1	S7	0.20000				
	STD 8	1	S8	0.10000				
	STD 9	1	S9	0.05000				
	STD 10	1	S10	0.00000				
	CCV 0.4000	1	S6	0.37633				94%
		Known Conc:		100.00000				
		Calibration:		Table/Fig. : 1				
	CCV 4.0000	1	S3	4.04376				101%
		Known Conc:		100.00000				
	CCB	1	S10	0.00783				
		Known Conc:		100.00000				
	HI ICV 8.0	1	1	7.88855				99%
	LO ICV 1.0	1	2	1.00088				100%
	ICB	1	3	0.00581				
	WG2001824-1 T	1	4	-0.00052				
	WG2001824-2 T	1	5	38.36921		15.00		96%
	LCS LO T	1	6	4.01215		3.00		100%
	L2467273-01 T	1	7	5.89918		3.00		
	L2467273-02 T	1	8	0.64064		3.00		
	L2467273-03 T	1	9	1.34198		3.00		
	L2467273-04 T	1	10	0.22065		3.00		
	CCV 0.4000	1	S6	0.37833				95%
		Known Conc:		100.00000				
	CCV 4.0000	1	S3	4.03402				101%
		Known Conc:		100.00000				
	CCB	1	S10	0.01161				
		Known Conc:		100.00000				
	L2467273-05 T	1	11	0.24480		3.00		
X	L2467419-01 T	1	12	66.04545		3.00		
X	L2467419-02 T	1	13	1.32492		3.00		
	L2467440-01 T	1	14	2.88903		3.00		
X	L2467442-01 T	1	15	43.31955		3.00		
X	L2467442-02 T	1	16	1.38694		3.00		
	L2468187-01 T	1	17	6.08580		3.00		
	L2468203-01 T	1	18	10.37116		3.00		
	L2468203-02 T	1	19	6.86871		3.00		
	WG2001824-3 T	1	20	7.01916		3.00		RPD=2%
X	CCV 0.4000	1	S6	0.46318				116%, RERUN OK
		Known Conc:		100.00000				

Author: A1WETCHEMINSTRUMENT

Date : 11/26/2024

Channel 2 (Ammonia High) - Current View

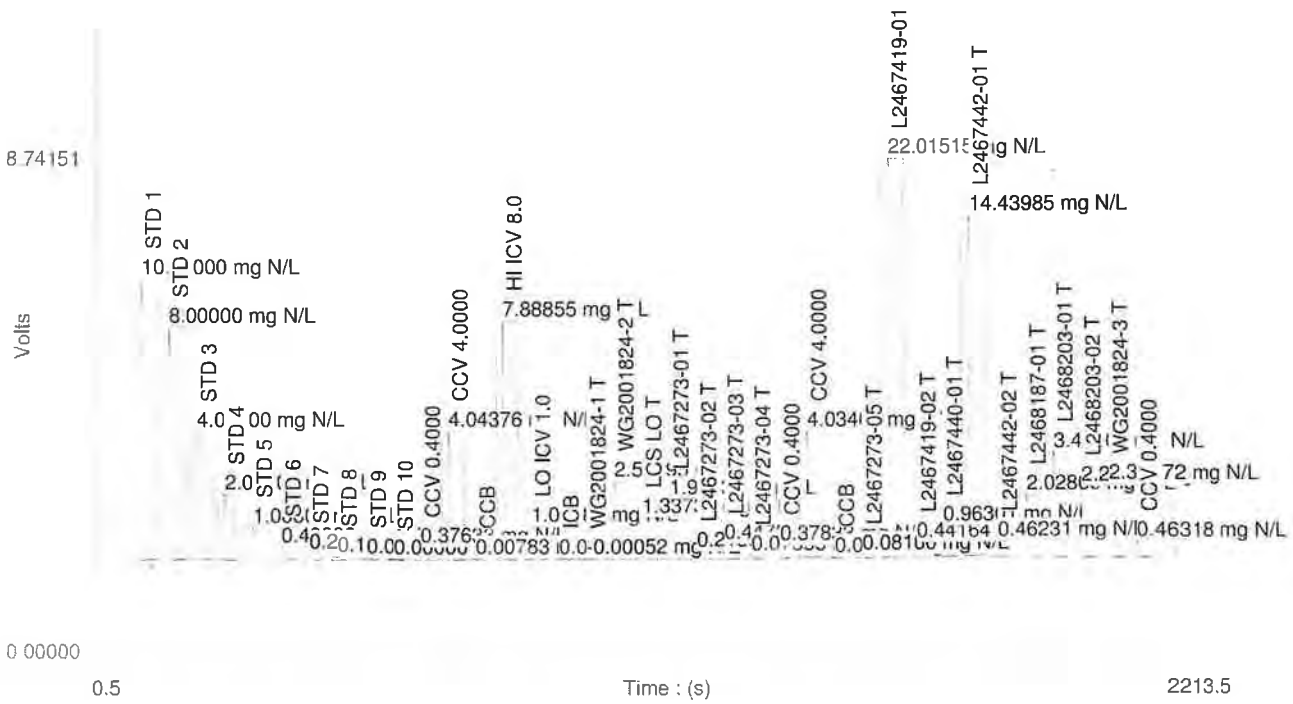
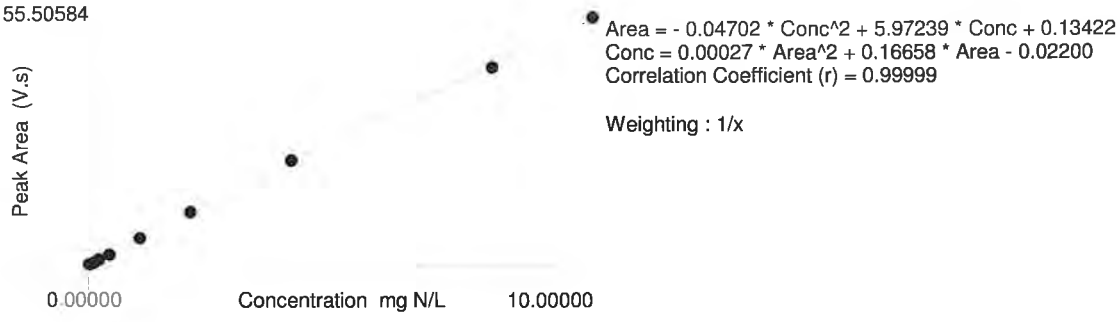


Table : 1 (Ammonia)

	Known Conc. (mg N/L)	Rep.	Peak Area (V.s)	Peak Height (V)	% RSD	% Residual	Det. Conc (mg N/L)	Detection Date	Detection Time
1	10.00000	1	55.50584	4.98714	0.0	-0.6	10.06087	11/26/2024	10:20:40 AM
2	8.00000	1	44.31467	4.13035	0.0	1.3	7.89326	11/26/2024	10:21:37 AM
3	4.00000	1	23.52495	2.26934	0.0	-1.1	4.04709	11/26/2024	10:22:34 AM
4	2.00000	1	11.98665	1.16425	0.0	-0.8	2.01376	11/26/2024	10:23:31 AM
5	1.00000	1	6.10180	0.58836	0.0	-0.7	1.00455	11/26/2024	10:24:29 AM
6	0.40000	1	2.44965	0.23289	0.0	2.6	0.38770	11/26/2024	10:25:27 AM
7	0.20000	1	1.33907	0.12297	0.0	-0.9	0.20155	11/26/2024	10:26:25 AM
8	0.10000	1	0.67481	0.06297	0.0	7.7	0.09054	11/26/2024	10:27:24 AM
9	0.05000	1	0.39064	0.03245	0.0	9.7	0.04312	11/26/2024	10:28:20 AM
10	0.00000	1	0.20383	0.00934			0.01197	11/26/2024	10:29:16 AM

Figure : 1 (Ammonia)



Author: A1WETCHEMINSTRUMENT

Date : 11/26/2024

Original Run Filename: OM_11-26-2024_11-01-40AM.OMN Created: 11/26/2024 11:01:40 AM
Original Run Author's Signature: [A1WETCHEMINSTRUMENT]
Current Run Filename: OM_11-26-2024_11-01-40AM.OMN Last Modified: 11/26/2024 11:19:41 AM
Current Run Author's Signature: [A1WETCHEMINSTRUMENT]
Description: Default New Run

TRAY A

	Sample	Rep.	Cup No.	Channel 2 Ammonia (mg N/L)	ADF	MDF	Weight	
	CCV 0.4000	1	S6	0.39542				99%
		Known Conc:		100.00000				
	CCV 4.0000	1	S3	4.05538				101%
		Known Conc:		100.00000				
		Calibration:		Table/Fig. : 1				
	CCB	1	S10	0.01060				
		Known Conc:		100.00000				
	WG2001824-4 T	1	21	15.89343		3.00		113%
X	L2468281-01 T	1	22	40.90477		3.00		
X	L2468281-02 T	1	23	0.83409		3.00		
	L2467419-01 T; 20X	1	12	109.50372		60.00		
	L2467419-02 T	1	13	0.25272		3.00		
	L2467442-01 T; 10X	1	15	46.14355		30.00		
	L2467442-02 T	1	16	0.75382		3.00		
	L2468281-01 T; 10X	1	22	44.16996		30.00		
	L2468281-02 T	1	23	0.22209		3.00		
	CCV 0.4000	1	S6	0.37113				93%
		Known Conc:		100.00000				
	CCV 4.0000	1	S3	4.11389				103%
		Known Conc:		100.00000				
	CCB	1	S10	0.01346				
		Known Conc:		100.00000				

Channel 2 (Ammonia High) - Current View

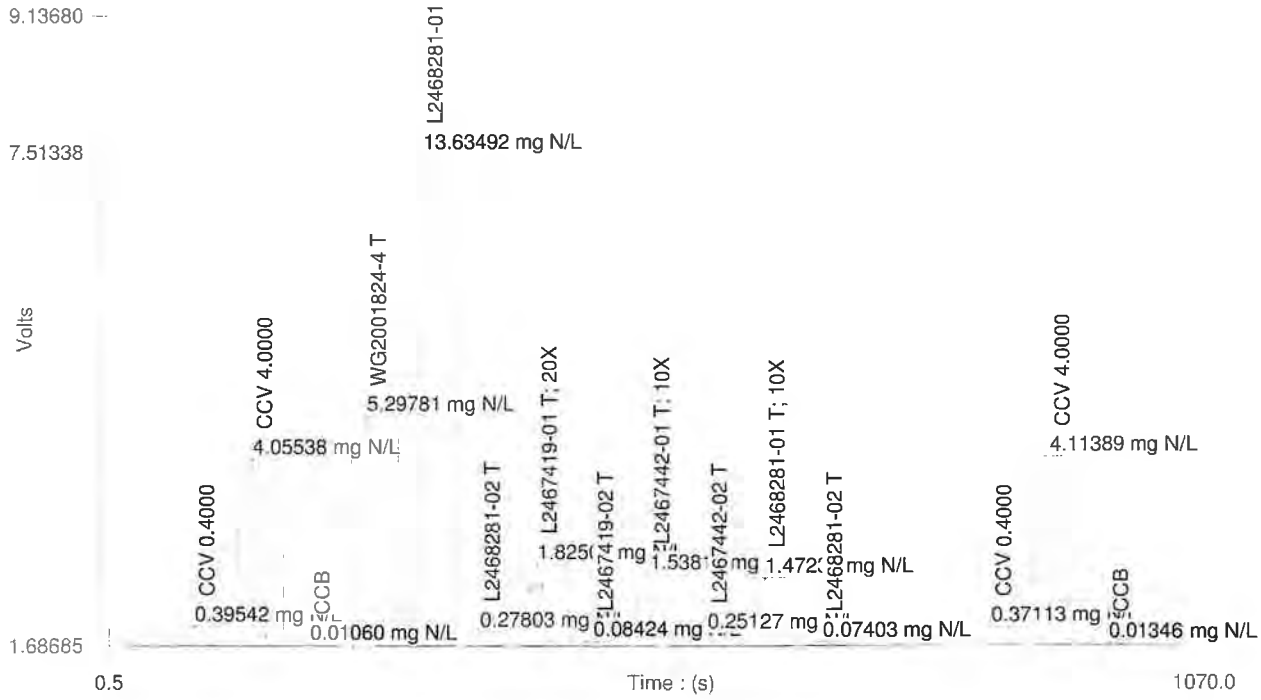
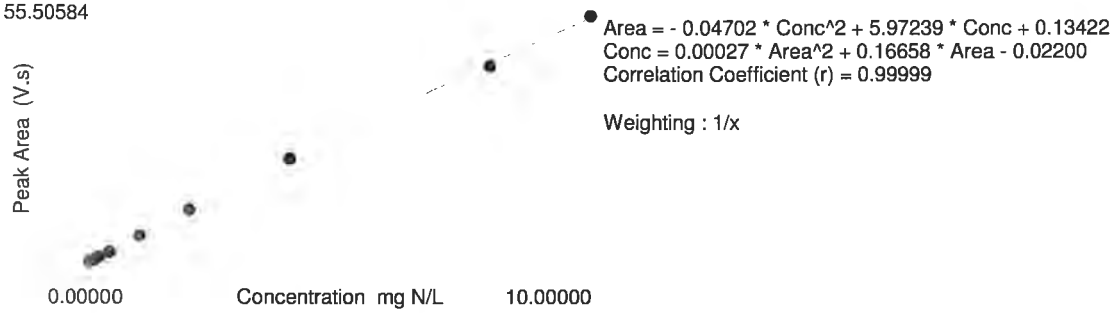


Table : 1 (Ammonia)

	Known Conc. (mg N/L)	Rep.	Peak Area (V.s)	Peak Height (V)	% RSD	% Residual	Det. Conc (mg N/L)	Detection Date	Detection Time
1	10.00000	1	55.50584	4.98714	0.0	-0.6	10.06087	11/26/2024	10:20:40 AM
2	8.00000	1	44.31467	4.13035	0.0	1.3	7.89326	11/26/2024	10:21:37 AM
3	4.00000	1	23.52495	2.26934	0.0	-1.1	4.04709	11/26/2024	10:22:34 AM
4	2.00000	1	11.98665	1.16425	0.0	-0.8	2.01376	11/26/2024	10:23:31 AM
5	1.00000	1	6.10180	0.58836	0.0	-0.7	1.00455	11/26/2024	10:24:29 AM
6	0.40000	1	2.44965	0.23289	0.0	2.6	0.38770	11/26/2024	10:25:27 AM
7	0.20000	1	1.33907	0.12297	0.0	-0.9	0.20155	11/26/2024	10:26:25 AM
8	0.10000	1	0.67481	0.06297	0.0	7.7	0.09054	11/26/2024	10:27:24 AM
9	0.05000	1	0.39064	0.03245	0.0	9.7	0.04312	11/26/2024	10:28:20 AM
10	0.00000	1	0.20383	0.00934			0.01197	11/26/2024	10:29:16 AM

Figure : 1 (Ammonia)



Author: A1WETCHEMINSTRUMENT Date : 11/26/2024

Original Run Filename: OM_11-26-2024_06-57-41PM.OMN Created: 11/26/2024 6:57:41 PM
Original Run Author's Signature: [A1WETCHEMINSTRUMENT]
Current Run Filename: OM_11-26-2024_06-57-41PM.OMN Last Modified: 11/26/2024 7:35:37 PM
Current Run Author's Signature: [A1WETCHEMINSTRUMENT]
Description: Default New Run

H

Sample	Rep.	Cup No.	Channel 2 Ammonia (mg N/L)	ADF	MDF	Weight
CCV 0.4000	1	S6	0.40214	101%		
	Known Conc:		100.00000			
CCV 4.0000	1	S3	3.80559	95%		
	Known Conc:		100.00000			
	Calibration:		Table/Fig. : 1			
CCB	1	S10	0.01863			
	Known Conc:		100.00000			
WG2002174-1 T; BLK 11/25	1	1	0.05157			
WG2002174-2 T; HI LCS; 5X	1	2	36.45747		15.00	91%
LO LCS T	1	3	3.71247		3.00	93%
L2467779-02 T	1	4	3.34763		3.00	
WG2002174-4 T; 67779.2 MS	1	5	8.76997		3.00	68%
WG2002174-3 T; 67779.2 DUP	1	6	2.70763		3.00	21%
L2467561-01 T	1	7	0.10443		3.00	
L2467570-01 T	1	8	1.02238		3.00	
L2467741-01 T	1	9	2.70921		3.00	
L2467756-01 T	1	10	0.58423		3.00	
CCV 0.4000	1	S6	0.42694	107%		
	Known Conc:		100.00000			
CCV 4.0000	1	S3	3.82303	96%		
	Known Conc:		100.00000			
CCB	1	S10	0.02491			
	Known Conc:		100.00000			
L2467745-01 T	1	11	6.81028		3.00	
L2467796-01 T	1	12	56.22955		6.00	
L2467796-02 T	1	13	22.45695		3.00	
L2467820-01 T	1	14	1.51779		3.00	
L2467831-02 T	1	15	40.44852		15.00	
L2467831-03 T	1	16	2.35371		3.00	
~~L2467867-01 T~~	~~1~~	~~17~~	~~41.06069~~		~~3.00~~	w/dilution.
~~L2467916-01 T~~	~~1~~	~~18~~	~~1.44489~~		~~3.00~~	
L2467866-01 T	1	19	3.98608		30.00	
L2467865-01 T	1	20	11.27032		60.00	
CCV 0.4000	1	S6	0.42680	107%		
	Known Conc:		100.00000			
CCV 4.0000	1	S3	3.82742	96%		
	Known Conc:		100.00000			
CCB	1	S10	0.03045			
	Known Conc:		100.00000			
L2467867-01 T; 10X	1	21	50.43658		30.00	
L2467916-01 T	1	22	0.76479		3.00	
CCV 0.4000	1	S6	0.42281	106%		
	Known Conc:		100.00000	96%		
CCV 4.0000	1	S3	3.81981			
	Known Conc:		100.00000			
CCB	1	S10	0.02172			
	Known Conc:		100.00000			

Author: A1WETCHEMINSTRUMENT

Date : 11/26/2024

Channel 2 (Ammonia High) - Current View

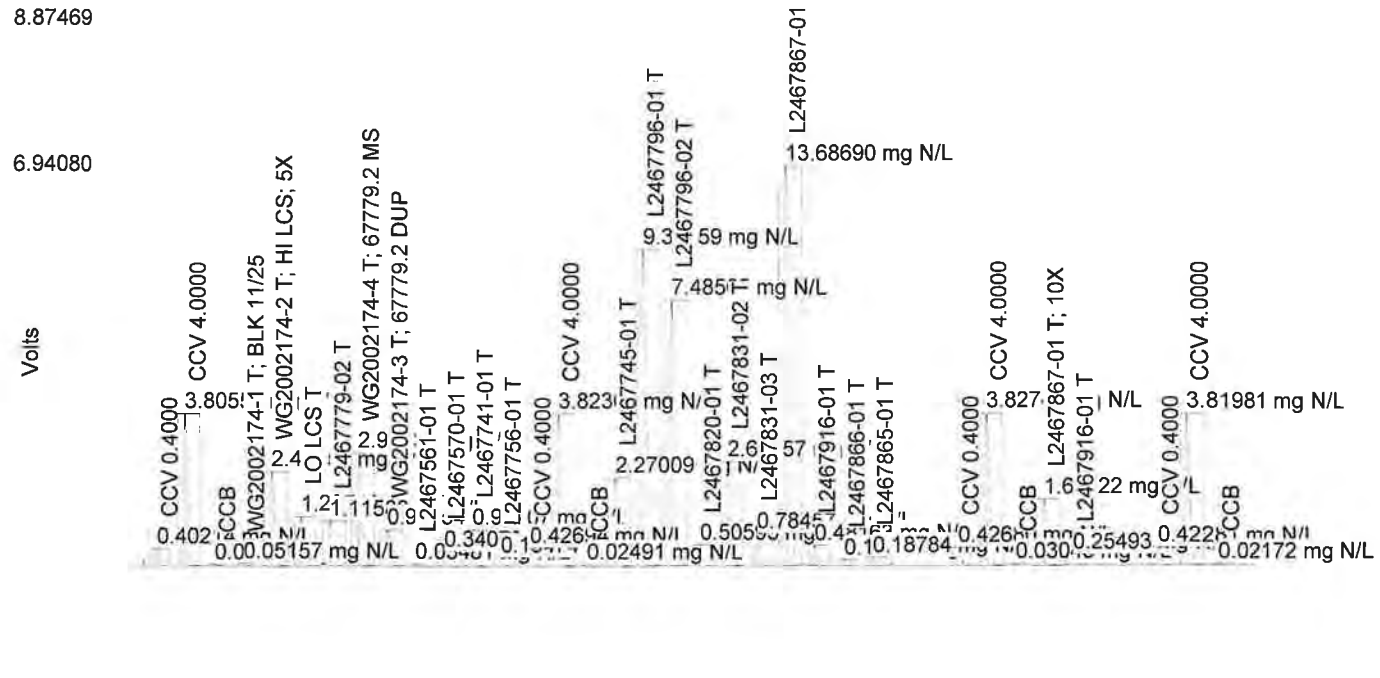
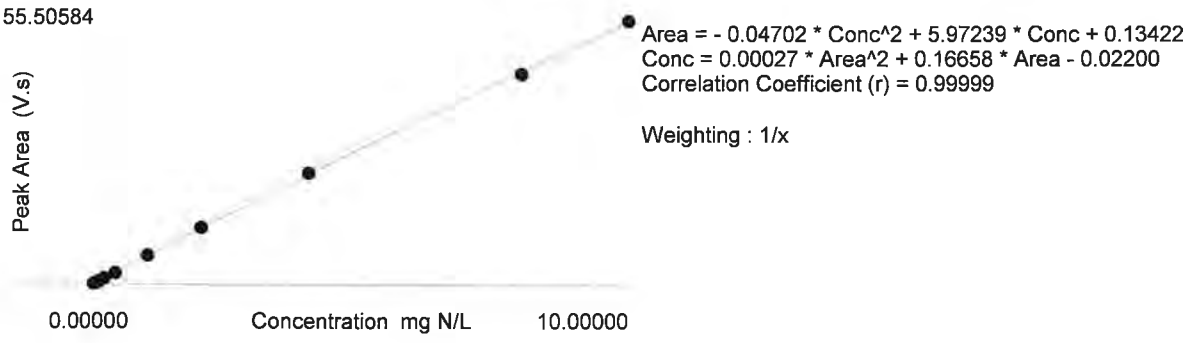


Table : 1 (Ammonia)

	Known Conc. (mg N/L)	Rep.	Peak Area (V.s)	Peak Height (V)	% RSD	% Residual	Det. Conc (mg N/L)	Detection Date	Detection Time
1	10.00000	1	55.50584	4.98714	0.0	-0.6	10.06087	11/26/2024	10:20:40 AM
2	8.00000	1	44.31467	4.13035	0.0	1.3	7.89326	11/26/2024	10:21:37 AM
3	4.00000	1	23.52495	2.26934	0.0	-1.1	4.04709	11/26/2024	10:22:34 AM
4	2.00000	1	11.98665	1.16425	0.0	-0.8	2.01376	11/26/2024	10:23:31 AM
5	1.00000	1	6.10180	0.58836	0.0	-0.7	1.00455	11/26/2024	10:24:29 AM
6	0.40000	1	2.44965	0.23289	0.0	2.6	0.38770	11/26/2024	10:25:27 AM
7	0.20000	1	1.33907	0.12297	0.0	-0.9	0.20155	11/26/2024	10:26:25 AM
8	0.10000	1	0.67481	0.06297	0.0	7.7	0.09054	11/26/2024	10:27:24 AM
9	0.05000	1	0.39064	0.03245	0.0	9.7	0.04312	11/26/2024	10:28:20 AM
10	0.00000	1	0.20383	0.00934			0.01197	11/26/2024	10:29:16 AM

Figure : 1 (Ammonia)



Author: A1WETCHEMINSTRUMENT

Date : 11/26/2024

Original Run Filename: OM_11-26-2024_07-37-10PM.OMN Created: 11/26/2024 7:37:10 PM
Original Run Author's Signature: [A1WETCHEMINSTRUMENT]
Current Run Filename: OM_11-26-2024_07-37-10PM.OMN Last Modified: 11/26/2024 8:08:31 PM
Current Run Author's Signature: [A1WETCHEMINSTRUMENT]
Description: Default New Run

Sample	Rep.	Cup No.	Channel 2 Ammonia (mg N/L)	ADF	MDF	Weight
CCV 0.4000	1	S6	0.37295			
	Known Conc:		100.00000			
	Calibration:		Table/Fig. : 1			
CCV 4.0000	1	S3	3.80056			
	Known Conc:		100.00000			
CCB	1	S10	0.01962			
	Known Conc:		100.00000			
WG2002502-1 T; BLK 11/26	1	1	0.04550			
WG2002502-2 T; HI LCS; 5X	1	2	38.80362		15.00	
LO LCS T	1	3	3.88576		3.00	
L2468015-01 T	1	4	0.12568		3.00	
WG2002502-4 T; 68015.1 MS	1	5	-0.00408		3.00	
WG2002502-3 T; 68015.1 DUP	1	6	-0.01118		3.00	
L2467585-07 T	1	7	0.55911		3.00	
L2467924-02 T	1	8	2.28906		3.00	
L2467945-01 T	1	9	0.57075		3.00	
L2467947-01 T	1	10	1.11493		30.00	
CCV 0.4000	1	S6	0.37407			
	Known Conc:		100.00000			
CCV 4.0000	1	S3	3.81286			
	Known Conc:		100.00000			
CCB	1	S10	0.01831			
	Known Conc:		100.00000			
L2467948-02 T	1	11	5.42720		3.00	
L2467990-01 T	1	12	0.61303		3.00	
L2467990-02 T	1	13	0.46261		3.00	
L2467990-03 T	1	14	0.19501		3.00	
L2467990-04 T	1	15	0.30153		3.00	
L2467956-01 T	1	16	-0.00275		3.00	
L2467956-02 T	1	17	0.32656		3.00	
L2467956-03 T	1	18	0.04230		3.00	
L2467956-04 T	1	19	0.13638		3.00	
L2467917-01 T	1	20	0.48237		30.00	
CCV 0.4000	1	S6	0.37133			
	Known Conc:		100.00000			
CCV 4.0000	1	S3	3.81523			
	Known Conc:		100.00000			
CCB	1	S10	0.01700			
	Known Conc:		100.00000			

Author: A1WETCHEMINSTRUMENT

Date : 11/26/2024

Channel 2 (Ammonia High) - Current View

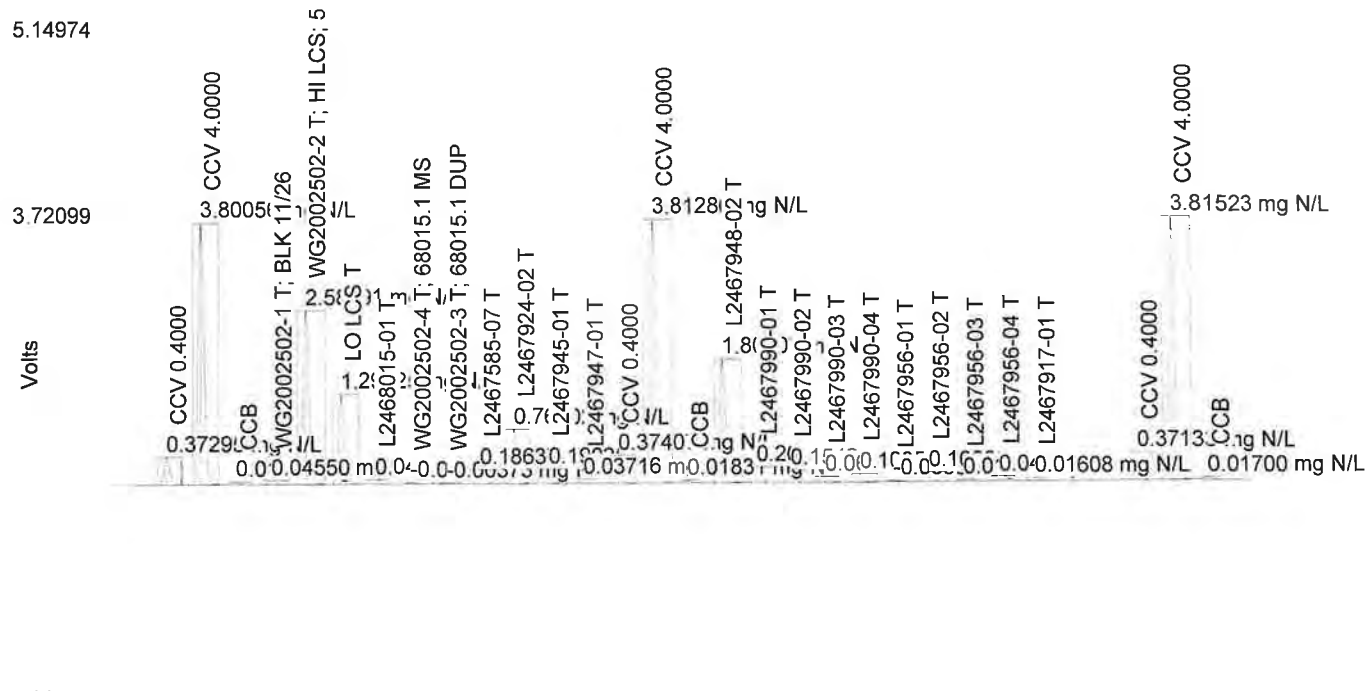
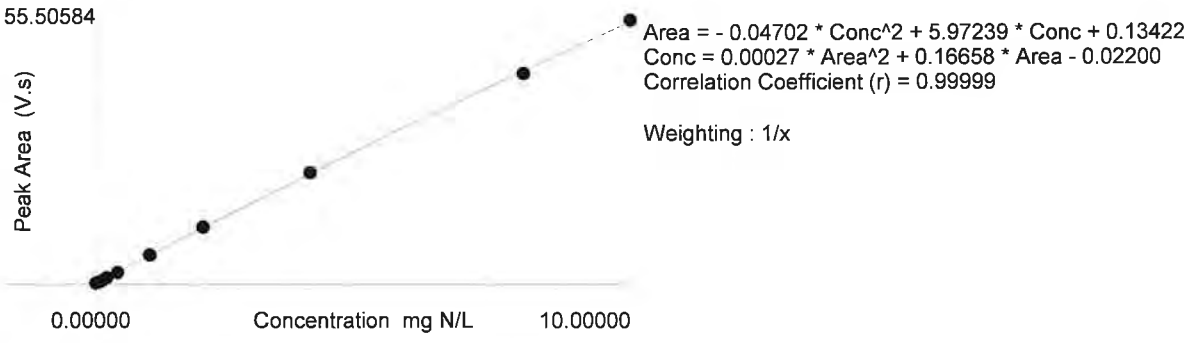


Table : 1 (Ammonia)

	Known Conc. (mg N/L)	Rep.	Peak Area (V.s)	Peak Height (V)	% RSD	% Residual	Det. Conc (mg N/L)	Detection Date	Detection Time
1	10.00000	1	55.50584	4.98714	0.0	-0.6	10.06087	11/26/2024	10:20:40 AM
2	8.00000	1	44.31467	4.13035	0.0	1.3	7.89326	11/26/2024	10:21:37 AM
3	4.00000	1	23.52495	2.26934	0.0	-1.1	4.04709	11/26/2024	10:22:34 AM
4	2.00000	1	11.98665	1.16425	0.0	-0.8	2.01376	11/26/2024	10:23:31 AM
5	1.00000	1	6.10180	0.58836	0.0	-0.7	1.00455	11/26/2024	10:24:29 AM
6	0.40000	1	2.44965	0.23289	0.0	2.6	0.38770	11/26/2024	10:25:27 AM
7	0.20000	1	1.33907	0.12297	0.0	-0.9	0.20155	11/26/2024	10:26:25 AM
8	0.10000	1	0.67481	0.06297	0.0	7.7	0.09054	11/26/2024	10:27:24 AM
9	0.05000	1	0.39064	0.03245	0.0	9.7	0.04312	11/26/2024	10:28:20 AM
10	0.00000	1	0.20383	0.00934			0.01197	11/26/2024	10:29:16 AM

Figure : 1 (Ammonia)



Author: A1WETCHEMINSTRUMENT

Date : 11/26/2024

Original Run Filename: OM_11-26-2024_08-13-40PM.OMN Created: 11/26/2024 8:13:40 PM
Original Run Author's Signature: [A1WETCHEMINSTRUMENT]
Current Run Filename: OM_11-26-2024_08-13-40PM.OMN Last Modified: 11/26/2024 8:58:12 PM
Current Run Author's Signature: [A1WETCHEMINSTRUMENT]
Description: Default New Run

Sample	Rep.	Cup No.	Channel 2 Ammonia (mg N/L)	ADF	MDF	Weight
CCV 0.4000	1	S6	0.37015	93%		
	Known Conc:		100.00000			
CCV 4.0000	1	S3	3.79966	95%		
	Known Conc:		100.00000			
	Calibration:		Table/Fig. : 1			
CCB	1	S10	0.02304			
	Known Conc:		100.00000			
WG2002511-1; BLK 11/26	1	1	-0.01706		1.50	
WG2002511-2; HI LCS; 5X	1	2	20.20913		7.50	101%
LO LCS	1	3	1.82405		1.50	91%
L2467901-03	1	4	0.11708		1.50	
L2467901-04	1	5	0.06935		1.50	101%
WG2002511-4; 67901.4 MS	1	6	4.02782		1.50	
WG2002511-3; 67901.4 DUP	1	7	0.11336		1.50	NC (<4x)
L2467934-01	1	8	2.67669		1.50	
L2467934-02	1	9	0.07599		1.50	
L2467934-03	1	10	0.06113		1.50	
CCV 0.4000	1	S6	0.37575	94%		
	Known Conc:		100.00000			
CCV 4.0000	1	S3	3.80233	95%		
	Known Conc:		100.00000			
CCB	1	S10	0.02030			
	Known Conc:		100.00000			
L2467934-04	1	11	-0.01793		1.50	104%
L2467901-05	1	12	0.00114		1.50	
WG2002511-6; 67901.5 MS	1	13	4.15234		1.50	pc
WG2002511-5; 67901.5 DUP	1	14	0.05508		1.50	
L2467901-06	1	15	-0.01451		1.50	
L2468042-01	1	16	2.77620		3.00	
L2468003-01	1	~~17~~	~~24.12516~~		~~1.50~~	w/ dilution.
L2468003-02	1	~~18~~	~~9.47592~~		~~1.50~~	
L2468003-03	1	19	0.31698		1.50	
L2467934-05	1	20	0.02780		1.50	
CCV 0.4000	1	S6	0.39014	98%		
	Known Conc:		100.00000			
CCV 4.0000	1	S3	3.78293	95%		
	Known Conc:		100.00000			
CCB	1	S10	0.03017			
	Known Conc:		100.00000			
WG2002511-7; LOQ1	1	21	0.02636		1.50	
L2468003-04	1	22	-0.01338		1.50	
L2468003-05	1	23	0.16356		1.50	
L2468003-06	1	24	0.32932		1.50	
L2467934-06	1	25	2.69009		1.50	
L2467934-07	1	26	0.15177		1.50	
L2467934-08	1	27	0.00398		1.50	
L2467934-09	1	28	0.10563		1.50	
L2468003-02	1	29	9.10630		1.50	
L2468003-01; 10X	1	30	35.54626		15.00	
CCV 0.4000	1	S6	0.38498	96%		
	Known Conc:		100.00000			
CCV 4.0000	1	S3	3.78505	95%		
	Known Conc:		100.00000			
CCB	1	S10	0.02263			
	Known Conc:		100.00000			

Author: A1WETCHEMINSTRUMENT

Date : 11/26/2024

Channel 2 (Ammonia High) - Current View

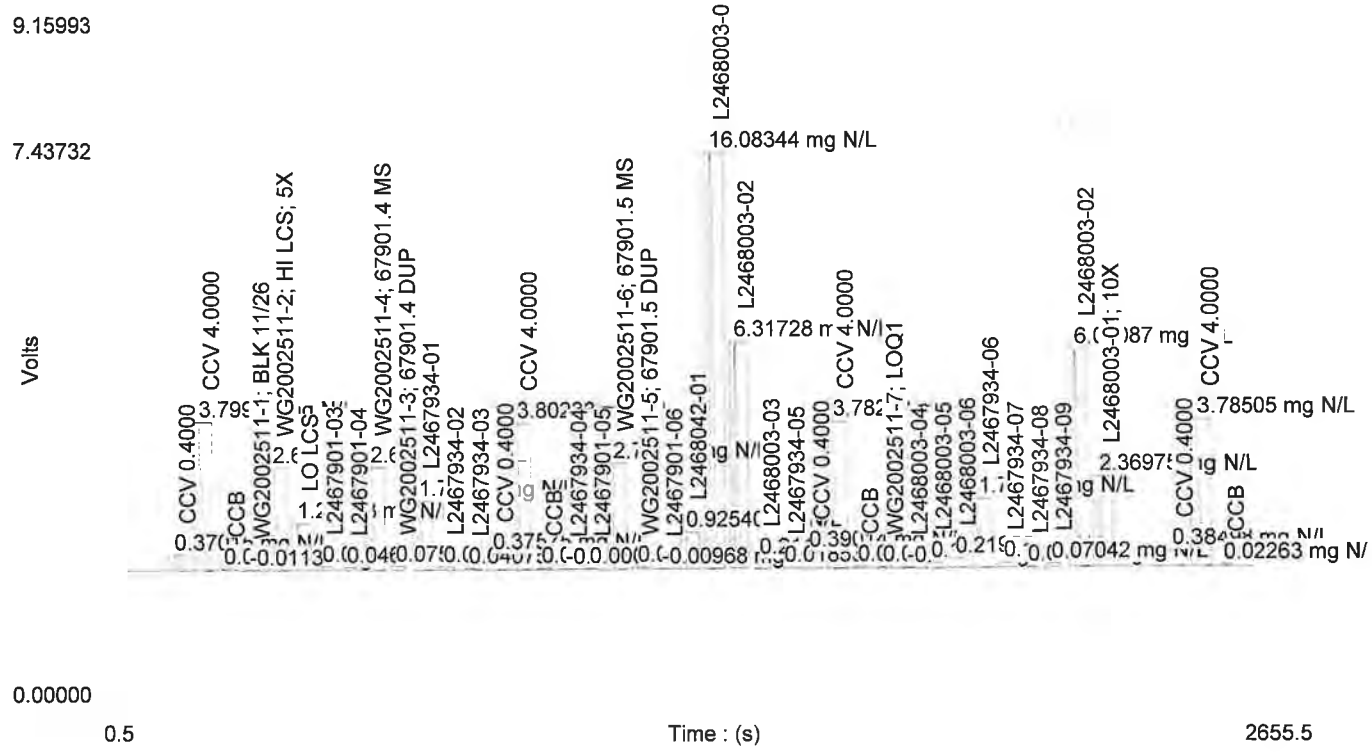
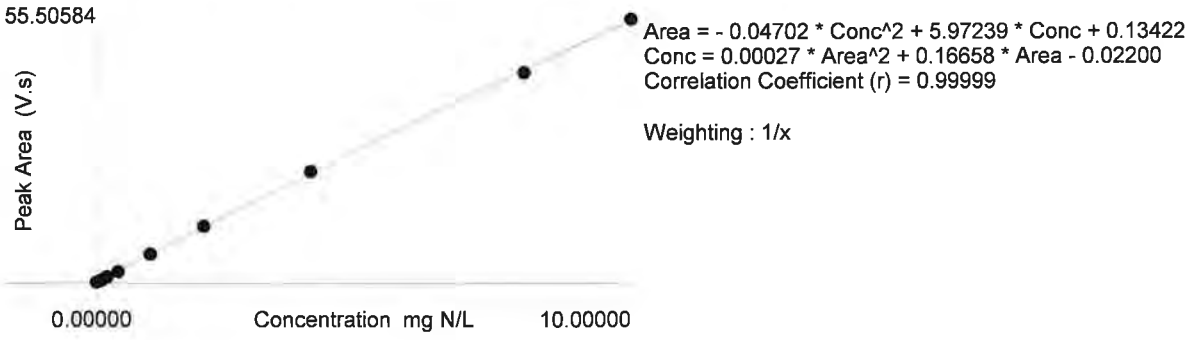


Table : 1 (Ammonia)

	Known Conc. (mg N/L)	Rep	Peak Area (V.s)	Peak Height (V)	% RSD	% Residual	Det. Conc (mg N/L)	Detection Date	Detection Time
1	10.00000	1	55.50584	4.98714	0.0	-0.6	10.06087	11/26/2024	10:20:40 AM
2	8.00000	1	44.31467	4.13035	0.0	1.3	7.89326	11/26/2024	10:21:37 AM
3	4.00000	1	23.52495	2.26934	0.0	-1.1	4.04709	11/26/2024	10:22:34 AM
4	2.00000	1	11.98665	1.16425	0.0	-0.8	2.01376	11/26/2024	10:23:31 AM
5	1.00000	1	6.10180	0.58836	0.0	-0.7	1.00455	11/26/2024	10:24:29 AM
6	0.40000	1	2.44965	0.23289	0.0	2.6	0.38770	11/26/2024	10:25:27 AM
7	0.20000	1	1.33907	0.12297	0.0	-0.9	0.20155	11/26/2024	10:26:25 AM
8	0.10000	1	0.67481	0.06297	0.0	7.7	0.09054	11/26/2024	10:27:24 AM
9	0.05000	1	0.39064	0.03245	0.0	9.7	0.04312	11/26/2024	10:28:20 AM
10	0.00000	1	0.20383	0.00934			0.01197	11/26/2024	10:29:16 AM

Figure : 1 (Ammonia)



Quality Control

Form 5a
Matrix Spike

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Client Sample ID	: NA	**Matrix**	: WATER
Lab Sample ID	: L2467901-04		
Matrix Spike	: WG2002511-4	**MS Analysis Date**	: 11/26/24 20:23
Matrix Spike Dup	:	**MSD Analysis Date**	:

		Matrix Spike Sample			Matrix Spike Duplicate					
Parameter	Sample Conc. (mg/l)	Spike Added (mg/l)	Spike Conc. (mg/l)	%R	Spike Added (mg/l)	Spike Conc. (mg/l)	%R	RPD	Recovery Limits	RPD Limit
Nitrogen, Ammonia	0.069J	4	4.03	101					90-110	20

Form 5a
Matrix Spike

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Client Sample ID	: NA	**Matrix**	: WATER
Lab Sample ID	: L2467901-05		
Matrix Spike	: WG2002511-6	**MS Analysis Date**	: 11/26/24 20:32
Matrix Spike Dup	:	**MSD Analysis Date**	:

		Matrix Spike Sample			Matrix Spike Duplicate					
Parameter	Sample Conc. (mg/l)	Spike Added (mg/l)	Spike Conc. (mg/l)	%R	Spike Added (mg/l)	Spike Conc. (mg/l)	%R	RPD	Recovery Limits	RPD Limit
Nitrogen, Ammonia	ND	4	4.15	104					90-110	20

Form 6
Lab Duplicates

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Client Sample ID	: NA	**Matrix**	: WATER
Lab Sample ID	: NA	**Analysis Date**	: 11/26/24 20:22
Dup Sample ID	: WG2002511-3	**DUP Analysis Date**	: 11/26/24 20:24

Parameter	Sample Concentration (mg/l)	Duplicate Concentration (mg/l)	RPD	RPD Limit
Nitrogen, Ammonia	0.069J	0.113	NC	20

Form 6
Lab Duplicates

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Client Sample ID	: NA	**Matrix**	: WATER
Lab Sample ID	: NA	**Analysis Date**	: 11/26/24 20:31
Dup Sample ID	: WG2002511-5	**DUP Analysis Date**	: 11/26/24 20:33

Parameter	Sample Concentration (mg/l)	Duplicate Concentration (mg/l)	RPD	RPD Limit
Nitrogen, Ammonia	ND	0.055J	NC	20

Form 7
Laboratory Control Sample

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Client Sample ID	: NA	**Matrix**	: WATER
Lab Sample ID	: WG2002511-2	**LCS Analysis Date**	: 11/26/24 20:19
Dup Sample ID	:	**LCSD Analysis Date**	:

	Laboratory Control Sample			Laboratory Control Duplicate					
	True	Found	%R	True	Found	%R	RPD	Recovery	RPD
Parameter	(mg/l)	(mg/l)		(mg/l)	(mg/l)			Limits	Limit
Nitrogen, Ammonia	20.0	20.2	101.					90-110	20

Date Created: 11/11/21
Created By: Jason Hebert
File: PM11467-1
Page: 1

WETCHEM (WATER)

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Method	Holding Time	Container / Sample Preservation
Nitrogen, Ammonia	7664-41-7	0.075	0.024	mg/l	80-120	20	80-120	20	20	4500NH3-BH	28 days	1 - Plastic 500ml H2SO4 preserved
Nitrogen, Ammonia	7664-41-7	0.075	0.024	mg/l	90-110	20	90-110	20	20	350.1	28 days	1 - Plastic 500ml H2SO4 preserved

Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)
Please Note that the information provided in this table is subject to change at anytime at the discretion of Alpha Analytical, Inc.

Date Created: 11/11/21
Created By: Jason Hebert
File: PM11468-1
Page: 1

WETCHEM (SOIL)

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Method	Holding Time	Container / Sample Preservation
Nitrogen, Ammonia	7664-41-7	7.5	2.79	mg/kg	83-115	20	55-144	20	20	4500NH3-BH	28 days	1 - Glass 250ml/8oz unpreserved

Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)
Please Note that the information provided in this table is subject to change at anytime at the discretion of Alpha Analytical, Inc.

Calculations of Nitrogen in Ammonia

Aqueous samples:

Compute sample NH_3 –N concentration by comparing sample peak areas with standard curve, as determined by the Lachat instrument software.

If the sample has a concentration of less than 2ppm, calculate results by using the low curve generated on Channel 1.

If the sample concentration is greater than 2ppm, calculate the results by using the high curve generated on Channel 2.

To Compute the final results for aqueous samples, multiply the direct reading by the dilution factor based on the initial preparation volume. (also done using software)

NH_3-N mg/L = mg/L direct reading x dilution factor

Sequence Logs

Tray A (10-19-40AM, 11-01-40 AM)
prep 11/25/24 @6:28

Hi ICV 8.0
Lo ICV 1.0
ICB
WG2001824-1T; Blk
-2T; LCS Hi; 5X
LCS LoT
67273-01T
-02T
-03T
-04T
-05T
67419-01T; 20x 0.5T10
-02T
67440-01T
67442-01T; 10x 1T10
-02T
68187-01T
68203-01T
-02T
-02T Dup
-02T MS
68281-01T;
-02T

Tray B (11-23-57AM)
prep 11/25/24 @22:34

1	WG2002172-1 Blk soil	(1.3179)
2	-2; LCS Hi; 5x	(1.1313)
3	LCS Lo	(1.1230)
4	66873-01; 10x 1T10	(1.2975)
5	67584-01	(1.1161)
6	-02	(1.2056)
7	-03	(1.1186)
⊗ 8	-04; 10x 1T10	(1.1181)
⊗ 9	-05	(1.1186)
10	-06	(1.1368)
11	-07	(1.2943)
12	-08	(1.1144)
13	-08 MS	(1.2421)
14	-08 Dup	(1.1152)

Date: 11/26/24
Sodium Phenolate: 11/1/24 R-4065
Sodium Hypochlorate: 11/1/24 stockshop KFM
Sodium Nitropruisside: 11/1/24 ~~R-4017~~ R-3969
Borric Acid Soln.: 11/1/24 R-4019
ICV 1.0:
ICV 8.0: 11/20/24 wc-3508
Cal. Std: 11/20/24 wc-3438
See Front Page for Instructions:

KFM

KFM

To Page No.

sad & Understood by me, | Date | Invented by: | Date
Recorded by:

TITLE NH3 11/26/24 KEM cont. Project No. Book No. Confi

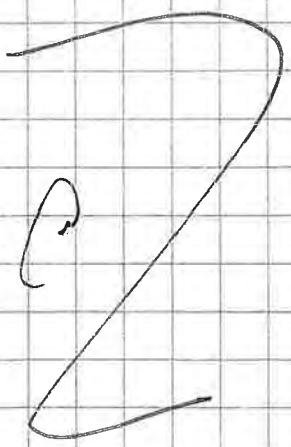
From Page No.

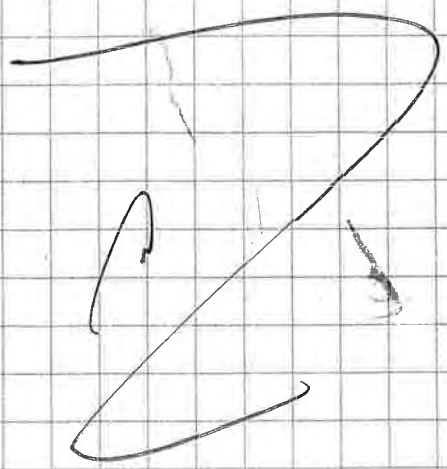
Tray G (04:46-09PM, 05:08-07PM)
prep 11/25/24 @ 6:31

1	WW-2001827-1T Blk	
2	-2T LCS Hi, 5X	
3	LCS LoT	
4	68134-01T	
5	02T	
6	03T	
7	04T	
8	05T	
9	06T	
10	07T	
11	68141-01T	
12	01T MS	
13	01T Dup	
14	02T	
15	03T	
16	04T	
17	05T	
18	06T	
19	07T	
20	68186-01T (10X)	

tray-H (06-57-41 pm)
prep 11/25/24 @ 22:58

1	WW-2002174-1 T; Blk 11/27
2	WW-2002174-2 T; Hi WS-T
3	WWS T
4	67779.2 T
5	WW-2002174-4 T; 67779.2 MS
6	WW-2002174-3 T; 67779.2 Dup
7	67561.1 T
8	67570.1 T
9	67741.1 T
10	67756-1 T
11	67745-1 T
12	67796-1 T (2T)
13	.2T
14	67720-1 T
15	67731.2 T (5T)
16	.3T
17	67867-1 T -10T
18	67916-1 T
19	67866-1 T (10T)
20	67765-1 T (20T)





To Page N

Witnessed & Understood by me,	Date	Invented by:	Date
		Recorded by:	

Project No. _____ TITLE WHs 11/26/24 (AP Cont.

ential Book No. _____

age No. ____

fuj - I (07:51:10 PM)
Prep 11/26/24 @ 7:45

1 WC 2002502-1 T; Blk 11/26
2 WC 2002502-2 T; Hi WB 5 P
3 Lo WB T
4 68015-1 T
5 WC 2002502-4 T; 68015-1 MS
6 WC 2002502-3 T; 68015-1 DP
7 67585.7 T
8 67924.2 T
9 67925.1 T
10 67947.1 T (10 +)
11 67948.2 T
12 67990.1 T
13 .2 T
14 .3 T
15 .4 T
16 67956.1 T
17 .2 T
18 .3 T
19 .4 T
20 67917.1 T (10 +)

fuj - J (08:13:40 PM)
Prep 11/26/24 @ 1730

1 WC 2002511-1; Blk 11/26
2 WC 2002511-2; Hi WB 5 +
3 Lo WB
4 67901.3
5 .4
6 WC 2002511-4; 67901.4 MS
7 WC 2002511-3; 67901.4 DP
8 67934.1
9 .2
10 .3
11 .4
12 67901.5
13 WC 2002511-6; 67901.5 MS
14 WC 2002511-5; 67901.5 DP
15 67901.6
16 68042.1 (2 +)
X 17 68003.1 -10 +
X 18 .2
19 .3
20 67934.5
21 C/G WC 2002511-7; LOQ 1
22 68003.4
23 .5
24 .6
25 67934.6
26 .7
27 .8
28 .9

To Page No. ____

ssed & Understood by me, | Date | Invented by: | Date

Recorded by:

Sample Preparation

Sample	Dil.	Volum.	Int. pH	Adj. pH	Final Volum.
Blank	1X	100ml	<2	9.5	150mL
LOQI					
LOW					
High					
L2467901-03					
-04 PE1					
-04 Dup1					
-04 MS1					
-05 PE2					
-05 Dup 2					
-05 MS2					
67934 -01					
-02					
-03					
-04					
-05					
-06					
-07					
-08					
-09					
68003 -01					
-02					
-03					
-04					
-05					
-06					
68042 -01	2X (50+100) Matrix				

Same Standards & Reagents as previous BS # 32

11/26/24 @ 17:30 SAD

Witnessed & Understood by me, Date

Invented by: Date

Recorded by:

Nitrate and Nitrite Analysis

Results

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Lab ID	: L2467934-01	**Date Collected**	: 11/18/24 15:46
Client ID	: MW-1S	**Date Received**	: 11/19/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 11/26/24 09:25
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,4500NO3-F	**Analyst**	: KAF
Lab File ID	: NO3241126-C1	**Instrument ID**	: FIA1
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	Nitrogen, Nitrate/Nitrite	ND	0.10	0.046	U

Form 1
WETCHEM

Client	:	**Alpha Geoscience**	**Lab Number**	:	**L2467934**
Project Name	:	**HUNTINGTON READY MIXED**	**Project Number**	:	**20116**
Lab ID	:	**L2467934-02**	**Date Collected**	:	**11/18/24 14:33**
Client ID	:	**MW-2S**	**Date Received**	:	**11/19/24**
Sample Location	:	**SPEONK, NY**	**Date Analyzed**	:	**11/26/24 09:26**
Sample Matrix	:	**WATER**	**Dilution Factor**	:	**1**
Analytical Method	:	**121,4500NO3-F**	**Analyst**	:	**KAF**
Lab File ID	:	**NO3241126-C1**	**Instrument ID**	:	**FIA1**
Sample Amount	:		**%Solids**	:	**N/A**
Digestion Method	:		**Date Digested**	:	

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	**Nitrogen, Nitrate/Nitrite**	**0.98**	**0.10**	**0.046**	

Form 1
WETCHEM

Client	:	**Alpha Geoscience**	**Lab Number**	:	**L2467934**
Project Name	:	**HUNTINGTON READY MIXED**	**Project Number**	:	**20116**
Lab ID	:	**L2467934-03**	**Date Collected**	:	**11/18/24 13:31**
Client ID	:	**MW-3S**	**Date Received**	:	**11/19/24**
Sample Location	:	**SPEONK, NY**	**Date Analyzed**	:	**11/26/24 09:30**
Sample Matrix	:	**WATER**	**Dilution Factor**	:	**1**
Analytical Method	:	**121,4500NO3-F**	**Analyst**	:	**KAF**
Lab File ID	:	**NO3241126-C1**	**Instrument ID**	:	**FIA1**
Sample Amount	:		**%Solids**	:	**N/A**
Digestion Method	:		**Date Digested**	:	

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	**Nitrogen, Nitrate/Nitrite**	**6.3**	**0.10**	**0.046**	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Lab ID	: L2467934-04	**Date Collected**	: 11/19/24 09:35
Client ID	: MW-4D	**Date Received**	: 11/19/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 11/26/24 09:32
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,4500NO3-F	**Analyst**	: KAF
Lab File ID	: NO3241126-C1	**Instrument ID**	: FIA1
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	Nitrogen, Nitrate/Nitrite	0.56	0.10	0.046	

Form 1
WETCHEM

Client	:	**Alpha Geoscience**	**Lab Number**	:	**L2467934**
Project Name	:	**HUNTINGTON READY MIXED**	**Project Number**	:	**20116**
Lab ID	:	**L2467934-05**	**Date Collected**	:	**11/19/24 08:10**
Client ID	:	**MW-5S**	**Date Received**	:	**11/19/24**
Sample Location	:	**SPEONK, NY**	**Date Analyzed**	:	**11/26/24 09:33**
Sample Matrix	:	**WATER**	**Dilution Factor**	:	**1**
Analytical Method	:	**121,4500NO3-F**	**Analyst**	:	**KAF**
Lab File ID	:	**NO3241126-C1**	**Instrument ID**	:	**FIA1**
Sample Amount	:		**%Solids**	:	**N/A**
Digestion Method	:		**Date Digested**	:	

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	**Nitrogen, Nitrate/Nitrite**	**0.98**	**0.10**	**0.046**	

Form 1
WETCHEM

Client	:	**Alpha Geoscience**	**Lab Number**	:	**L2467934**
Project Name	:	**HUNTINGTON READY MIXED**	**Project Number**	:	**20116**
Lab ID	:	**L2467934-06**	**Date Collected**	:	**11/18/24 15:40**
Client ID	:	**MW-6D**	**Date Received**	:	**11/19/24**
Sample Location	:	**SPEONK, NY**	**Date Analyzed**	:	**11/26/24 09:34**
Sample Matrix	:	**WATER**	**Dilution Factor**	:	**1**
Analytical Method	:	**121,4500NO3-F**	**Analyst**	:	**KAF**
Lab File ID	:	**NO3241126-C1**	**Instrument ID**	:	**FIA1**
Sample Amount	:		**%Solids**	:	**N/A**
Digestion Method	:		**Date Digested**	:	

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	**Nitrogen, Nitrate/Nitrite**	**0.94**	**0.10**	**0.046**	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Lab ID	: L2467934-07	**Date Collected**	: 11/18/24 14:15
Client ID	: MW-7S	**Date Received**	: 11/19/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 11/26/24 09:35
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,4500NO3-F	**Analyst**	: KAF
Lab File ID	: NO3241126-C1	**Instrument ID**	: FIA1
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	Nitrogen, Nitrate/Nitrite	2.1	0.10	0.046	

Form 1
WETCHEM

Client	:	**Alpha Geoscience**	**Lab Number**	:	**L2467934**
Project Name	:	**HUNTINGTON READY MIXED**	**Project Number**	:	**20116**
Lab ID	:	**L2467934-08**	**Date Collected**	:	**11/18/24 16:45**
Client ID	:	**MW-8S**	**Date Received**	:	**11/19/24**
Sample Location	:	**SPEONK, NY**	**Date Analyzed**	:	**11/26/24 09:36**
Sample Matrix	:	**WATER**	**Dilution Factor**	:	**1**
Analytical Method	:	**121,4500NO3-F**	**Analyst**	:	**KAF**
Lab File ID	:	**NO3241126-C1**	**Instrument ID**	:	**FIA1**
Sample Amount	:		**%Solids**	:	**N/A**
Digestion Method	:		**Date Digested**	:	

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	**Nitrogen, Nitrate/Nitrite**	**0.35**	**0.10**	**0.046**	

Form 1
WETCHEM

Client	:	**Alpha Geoscience**	**Lab Number**	:	**L2467934**
Project Name	:	**HUNTINGTON READY MIXED**	**Project Number**	:	**20116**
Lab ID	:	**L2467934-09**	**Date Collected**	:	**11/18/24 00:00**
Client ID	:	**DUP**	**Date Received**	:	**11/19/24**
Sample Location	:	**SPEONK, NY**	**Date Analyzed**	:	**11/26/24 09:37**
Sample Matrix	:	**WATER**	**Dilution Factor**	:	**1**
Analytical Method	:	**121,4500NO3-F**	**Analyst**	:	**KAF**
Lab File ID	:	**NO3241126-C1**	**Instrument ID**	:	**FIA1**
Sample Amount	:		**%Solids**	:	**N/A**
Digestion Method	:		**Date Digested**	:	

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	**Nitrogen, Nitrate/Nitrite**	**2.1**	**0.10**	**0.046**	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Lab ID	: WG2002312-1	**Date Collected**	: NA
Client ID	: WG2002312-1BLANK	**Date Received**	: NA
Sample Location	:	**Date Analyzed**	: 11/26/24 04:42
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,4500NO3-F	**Analyst**	: KAF
Lab File ID	: NO3241126-A1	**Instrument ID**	: FIA1
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	Nitrogen, Nitrate/Nitrite	ND	0.10	0.046	U

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Lab ID	: WG2002312-3	**Date Collected**	: 11/19/24 06:36
Client ID	: WG2002312-3 DUP	**Date Received**	: 11/19/24
Sample Location	:	**Date Analyzed**	: 11/26/24 09:22
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,4500NO3-F	**Analyst**	: KAF
Lab File ID	: NO3241126-C1	**Instrument ID**	: FIA1
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	Nitrogen, Nitrate/Nitrite	ND	0.10	0.05	U

Sample Raw Data

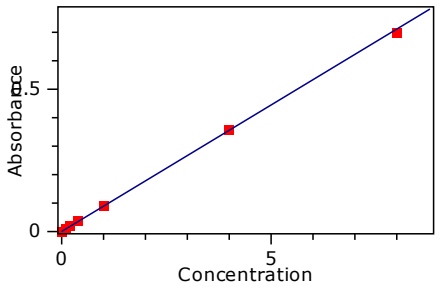
Graphical report generated by FIAsoft v3.1.10
Report generated on 2024-11-26 06:55:13
Data file (.dat): C:\FIAlab\Autosave Data\2024-11-26-065429.dat

Dataset Notes:

Analyst	

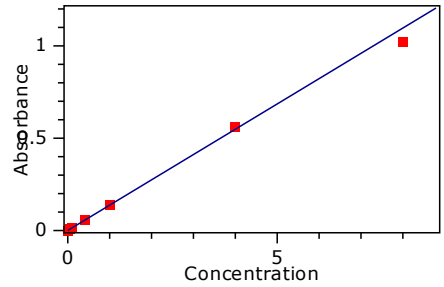
Dataset Notes Table Location: C:\FIAlab\FIAlab User Files\Tables\Dataset Notes\Analyst.csv

Calibrations:



Channel: 1-NOx
Fit_Order: 1
Weighting: 1/response
Standard relation
Coefficients:
A: 0.00029
B: 0.08888
R^2: 0.99983
RSE(%): 1.69071
% Max. for OVR: 100

InjNo	Name	Response	Known Conc. mg/L	Calc. Conc. mg/L	% Error	Time
2	NOx 8.0ppm	0.69660	8.00000	7.83410	2.07	2024-11-26T03:52:17
3	NOx 4.0ppm	0.35810	4.00000	4.02590	0.65	2024-11-26T03:53:27
4	NOx 1.0ppm	0.08930	1.00000	1.00100	0.10	2024-11-26T03:54:34
5	NOx 0.4ppm	0.03670	0.40000	0.40990	2.49	2024-11-26T03:55:41
6	NOx 0.2ppm	0.01800	0.20000	0.19870	0.67	2024-11-26T03:56:51
7	NOx 0.1ppm	0.00920	0.10000	0.09970	0.27	2024-11-26T03:58:01
8	NOx 0.0ppm	0.00010	0.00000	-0.00260	NA	2024-11-26T03:59:12



Channel: 2-NO2
Fit_Order: 1
Weighting: 1/response
Standard relation
Coefficients:
A: 0.00040
B: 0.13703
R^2: 0.99812
RSE(%): 4.62001
% Max. for OVR: 100

InjNo	Name	Response	Known Conc. mg/L	Calc. Conc. mg/L	% Error	Time
9	Nitrite 8.0ppm	1.02060	8.00000	7.44540	6.93	2024-11-26T04:00:09
10	Nitrite 4.0ppm	0.55840	4.00000	4.07210	1.80	2024-11-26T04:01:19
11	Nitrite 1.0ppm	0.13960	1.00000	1.01580	1.58	2024-11-26T04:02:25
12	Nitrite 0.4ppm	0.05800	0.40000	0.42050	5.13	2024-11-26T04:03:34
13	Nitrite 0.1ppm	0.01430	0.10000	0.10170	1.71	2024-11-26T04:04:44
14	Nitrite 0.05ppm	0.00710	0.05000	0.04920	1.53	2024-11-26T04:05:54
15	Nitrite 0.0ppm	0.00010	0.00000	-0.00200	NA	2024-11-26T04:07:08

Results:

Channel: 1-NOx

Name	Inj. No.	Type	Known Conc. mg/L	Response	MDF	ADF	Weight	Calc. Conc. mg/L	Flags	Time
Stabil	1	Unknown	?	0.0004	1	1	1	0.0017		2024-11-26T03:51:02
NOx 8.0ppm	2	Standard	8	0.6966	1	1	1	7.8341		2024-11-26T03:52:17
NOx 4.0ppm	3	Standard	4	0.3581	1	1	1	4.0259		2024-11-26T03:53:27
NOx 1.0ppm	4	Standard	1	0.0893	1	1	1	1.0010		2024-11-26T03:54:34
NOx 0.4ppm	5	Standard	0.4	0.0367	1	1	1	0.4099		2024-11-26T03:55:41
NOx 0.2ppm	6	Standard	0.2	0.0180	1	1	1	0.1987		2024-11-26T03:56:51
NOx 0.1ppm	7	Standard	0.1	0.0092	1	1	1	0.0997		2024-11-26T03:58:01
NOx 0.0ppm	8	Standard	0	0.0001	1	1	1	-0.0026		2024-11-26T03:59:12
Nitrite 8.0ppm	9	Standard	?	0.7075	1	1	1	7.9573	OVR	2024-11-26T04:00:20
Nitrite 4.0ppm	10	Standard	?	0.3709	1	1	1	4.1700		2024-11-26T04:01:30
Nitrite 1.0ppm	11	Standard	?	0.0909	1	1	1	1.0197		2024-11-26T04:02:38
Nitrite 0.4ppm	12	Standard	?	0.0379	1	1	1	0.4231		2024-11-26T04:03:46
Nitrite 0.1ppm	13	Standard	?	0.0093	1	1	1	0.1016		2024-11-26T04:04:56
Nitrite 0.05ppm	14	Standard	?	0.0047	1	1	1	0.0493		2024-11-26T04:06:05
Nitrite 0.0ppm	15	Standard	?	0.0001	1	1	1	-0.0023		2024-11-26T04:07:16
CCV NO3	16	QC	1	0.0906	1	1	1	1.0157		2024-11-26T04:08:22
CCV NO2	17	QC	?	0.0922	1	1	1	1.0336		2024-11-26T04:09:29
CCB	18	QC	0	0.0002	1	1	1	-0.0012		2024-11-26T04:10:39
ICV NO3 5.0	19	QC	5	0.4391	1	1	1	4.9372		2024-11-26T04:11:48
ICV NO2 5.0	20	QC	?	0.4436	1	1	1	4.9876		2024-11-26T04:12:56
ICV NO3 0.5	21	QC	0.5	0.0439	1	1	1	0.4911		2024-11-26T04:14:05
ICV NO2 0.5	22	QC	?	0.0453	1	1	1	0.5062		2024-11-26T04:15:13
ICB	23	QC	0	0.0000	1	1	1	-0.0032		2024-11-26T04:16:19
Diluter CHK 8PPM	24	Unknown	?	0.1431	1	5	1	8.0363		2024-11-26T04:17:29
BLANK NO3	25	Unknown	?	0.0000	1	1	1	-0.0038		2024-11-26T04:18:10
LCS NO3	26	Unknown	?	0.4471	1	1	1	5.0271		2024-11-26T04:19:43
BLANK NO2	27	Unknown	?	-0.0001	1	1	1	-0.0046		2024-11-26T04:20:22
LCS NO2	28	Unknown	?	0.4461	1	1	1	5.0159		2024-11-26T04:21:56
CCV NO3	29	QC	1	0.0880	1	1	1	0.9868		2024-11-26T04:23:01
CCV NO2	30	QC	?	0.0921	1	1	1	1.0330		2024-11-26T04:24:07
CCB	31	QC	0	0.0002	1	1	1	-0.0013		2024-11-26T04:25:17
WG2002302-1	32	Unknown	?	0.0001	1	1	1	-0.0027		2024-11-26T04:26:24

Name	Inj. No.	Type	Known Conc. mg/L	Response	MDF	ADF	Weight	Calc. Conc. mg/L	Flags	Time
WG2002302-2	33	Unknown	?	0.4490	1	1	1	5.0480		2024-11-26T04:27:33
WG2002303-1	34	Unknown	?	-0.0002	1	1	1	-0.0053		2024-11-26T04:28:10
WG2002303-2	35	Unknown	?	0.4507	1	1	1	5.0671		2024-11-26T04:29:43
WG2002304-1; WG2002306-1	36	Unknown	?	-0.0002	1	1	1	-0.0050		2024-11-26T04:30:21
WG2002304-2; WG2002306-2	37	Unknown	?	0.4503	1	1	1	5.0631		2024-11-26T04:31:55
WG2002305-1; WG2002307-1	38	Unknown	?	-0.0001	1	1	1	-0.0043		2024-11-26T04:32:35
WG2002305-2; WG2002307-2	39	Unknown	?	0.4431	1	1	1	4.9820		2024-11-26T04:34:09
WG2002308-1	40	Unknown	?	-0.0001	1	1	1	-0.0045		2024-11-26T04:34:48
WG2002308-2	41	Unknown	?	0.4486	1	1	1	5.0443		2024-11-26T04:36:22
CCV NO3	42	QC	1	0.0894	1	1	1	1.0024		2024-11-26T04:37:27
CCV NO2	43	QC	?	0.0922	1	1	1	1.0344		2024-11-26T04:38:32
CCB	44	QC	0	0.0002	1	1	1	-0.0009		2024-11-26T04:39:42
WG2002310-1	45	Unknown	?	0.0001	1	1	1	-0.0027		2024-11-26T04:40:51
WG2002310-2	46	Unknown	?	0.4446	1	1	1	4.9991		2024-11-26T04:41:58
WG2002312-1	47	Unknown	?	-0.0001	1	1	1	-0.0046		2024-11-26T04:42:36
WG2002312-2	48	Unknown	?	0.4463	1	1	1	5.0181		2024-11-26T04:44:10
L2469161-13	49	Unknown	?	0.0021	1	1	1	0.0207		2024-11-26T04:45:16
L2469161-14	50	Unknown	?	0.0027	1	1	1	0.0276		2024-11-26T04:46:20
L2469161-15	51	Unknown	?	0.0029	1	1	1	0.0288		2024-11-26T04:47:26
L2469161-16	52	Unknown	?	0.0014	1	1	1	0.0125		2024-11-26T04:48:30
L2469161-17	53	Unknown	?	0.0230	1	1	1	0.2560		2024-11-26T04:49:34
L2469161-18	54	Unknown	?	0.0015	1	1	1	0.0137		2024-11-26T04:50:38
CCV NO3	55	QC	1	0.0892	1	1	1	1.0004		2024-11-26T04:51:42
CCV NO2	56	QC	?	0.0919	1	1	1	1.0305		2024-11-26T04:52:47
CCB	57	QC	0	0.0002	1	1	1	-0.0016		2024-11-26T04:53:55
L2469451-01	58	Unknown	?	0.0004	1	1	1	0.0009		2024-11-26T04:55:06
WG2002305-3	59	Unknown	?	0.0002	1	1	1	-0.0014		2024-11-26T04:56:12
WG2002305-4	60	Unknown	?	0.3609	1	1	1	4.0571		2024-11-26T04:57:19
WG2002303-3	61	Unknown	?	-0.0001	1	1	1	-0.0044		2024-11-26T04:57:58
WG2002303-4	62	Unknown	?	0.3604	1	1	1	4.0519		2024-11-26T04:59:32

Name	Inj. No.	Type	Known Conc. mg/L	Response	MDF	ADF	Weight	Calc. Conc. mg/L	Flags	Time
L2469451-02	63	Unknown	?	0.0024	1	1	1	0.0242		2024-11-26T05:00:37
L2469451-03	64	Unknown	?	0.0207	1	1	1	0.2291		2024-11-26T05:01:43
L2469451-04	65	Unknown	?	0.0049	1	1	1	0.0519		2024-11-26T05:02:49
L2469451-05	66	Unknown	?	0.0373	1	1	1	0.4166		2024-11-26T05:03:54
L2469451-06	67	Unknown	?	0.0068	1	1	1	0.0736		2024-11-26T05:05:00
CCV NO3	68	QC	1	0.0894	1	1	1	1.0022		2024-11-26T05:06:04
CCV NO2	69	QC	?	0.0919	1	1	1	1.0303		2024-11-26T05:07:10
CCB	70	QC	0	0.0001	1	1	1	-0.0018		2024-11-26T05:08:18
L2469451-07	71	Unknown	?	0.0229	1	1	1	0.2542		2024-11-26T05:09:26
L2469451-08	72	Unknown	?	0.0274	1	1	1	0.3052		2024-11-26T05:10:31
L2469452-01	73	Unknown	?	0.0015	1	1	1	0.0139		2024-11-26T05:11:35
WG2002304-3	74	Unknown	?	0.0009	1	1	1	0.0066		2024-11-26T05:12:39
WG2002304-4	75	Unknown	?	0.3554	1	1	1	3.9955		2024-11-26T05:13:43
WG2002302-3	76	Unknown	?	0.0006	1	1	1	0.0039		2024-11-26T05:14:49
WG2002302-4	77	Unknown	?	0.3553	1	1	1	3.9942		2024-11-26T05:15:56
L2469452-02	78	Unknown	?	0.0015	1	1	1	0.0135		2024-11-26T05:17:03
L2469452-03	79	Unknown	?	0.3382	1	1	1	3.8016		2024-11-26T05:18:10
L2469468-01	80	Unknown	?	0.1640	1	1	1	1.8419		2024-11-26T05:19:16
CCV NO3	81	QC	1	0.0890	1	1	1	0.9980		2024-11-26T05:20:21
CCV NO2	82	QC	?	0.0905	1	1	1	1.0150		2024-11-26T05:21:27
CCB	83	QC	0	0.0001	1	1	1	-0.0016		2024-11-26T05:22:36
WG2002302-5	84	Unknown	?	0.1634	1	1	1	1.8347		2024-11-26T05:23:45
WG2002302-6	85	Unknown	?	0.5036	1	1	1	5.6629		2024-11-26T05:24:52
L2469416-01	86	Unknown	?	0.0056	1	1	1	0.0601		2024-11-26T05:25:57
L2469416-02	87	Unknown	?	0.0066	1	1	1	0.0707		2024-11-26T05:27:02
L2469416-03	88	Unknown	?	0.0069	1	1	1	0.0743		2024-11-26T05:28:07
L2469416-04	89	Unknown	?	0.0013	1	1	1	0.0109		2024-11-26T05:29:12
L2469416-05	90	Unknown	?	0.0009	1	1	1	0.0066		2024-11-26T05:30:16
L2469416-06	91	Unknown	?	0.0012	1	1	1	0.0096		2024-11-26T05:31:21
L2469416-07	92	Unknown	?	0.0010	1	1	1	0.0079		2024-11-26T05:32:25
L2469419-01	93	Unknown	?	0.0079	1	1	1	0.0858		2024-11-26T05:33:30
CCV NO3	94	QC	1	0.0896	1	1	1	1.0044		2024-11-26T05:34:34
CCV NO2	95	QC	?	0.0920	1	1	1	1.0316		2024-11-26T05:35:40

Name	Inj. No.	Type	Known Conc. mg/L	Response	MDF	ADF	Weight	Calc. Conc. mg/L	Flags	Time
CCB	96	QC	0	0.0002	1	1	1	-0.0016		2024-11-26T05:36:48
L2469419-02	97	Unknown	?	0.0009	1	1	1	0.0070		2024-11-26T05:38:00
L2469430-01	98	Unknown	?	0.0422	1	1	1	0.4713		2024-11-26T05:39:09
WG2002306-3	99	Unknown	?	0.0414	1	1	1	0.4623		2024-11-26T05:40:16
WG2002306-4	100	Unknown	?	0.3806	1	1	1	4.2794		2024-11-26T05:41:22
L2469430-02	101	Unknown	?	0.0014	1	1	1	0.0121		2024-11-26T05:42:28
L2469430-03	102	Unknown	?	0.0629	1	1	1	0.7049		2024-11-26T05:43:34
L2469430-04	103	Unknown	?	0.0018	1	1	1	0.0167		2024-11-26T05:44:40
L2469430-05	104	Unknown	?	0.0039	1	1	1	0.0411		2024-11-26T05:45:47
L2469430-06	105	Unknown	?	0.0028	1	1	1	0.0282		2024-11-26T05:46:51
L2469430-07	106	Unknown	?	0.0424	1	1	1	0.4733		2024-11-26T05:47:56
CCV NO3	107	QC	1	0.0897	1	1	1	1.0065		2024-11-26T05:49:00
CCV NO2	108	QC	?	0.0915	1	1	1	1.0262		2024-11-26T05:50:06
CCB	109	QC	0	0.0001	1	1	1	-0.0019		2024-11-26T05:51:17
L2469426-01	110	Unknown	?	0.0309	1	1	1	0.3440		2024-11-26T05:52:25
WG2002307-3	111	Unknown	?	0.0302	1	1	1	0.3369		2024-11-26T05:53:32
WG2002307-4	112	Unknown	?	0.3810	1	1	1	4.2832		2024-11-26T05:54:36
L2469426-02	113	Unknown	?	0.0044	1	1	1	0.0467		2024-11-26T05:55:41
L2469426-03	114	Unknown	?	0.0071	1	1	1	0.0761		2024-11-26T05:56:45
CCV NO3	115	QC	1	0.0891	1	1	1	0.9991		2024-11-26T05:57:49
CCV NO2	116	QC	?	0.0915	1	1	1	1.0265		2024-11-26T05:58:55
CCB	117	QC	0	0.0001	1	1	1	-0.0021		2024-11-26T06:00:04

Channel: 2-NO2

Name	Inj. No.	Type	Known Conc. mg/L	Response	MDF	ADF	Weight	Calc. Conc. mg/L	Flags	Time
Stabil	1	Unknown	?	0.0001	1	1	1	-0.0024		2024-11-26T03:50:47
NOx 8.0ppm	2	Standard	?	0.0001	1	1	1	-0.0023		2024-11-26T03:52:04
NOx 4.0ppm	3	Standard	?	0.0001	1	1	1	-0.0024		2024-11-26T03:53:44
NOx 1.0ppm	4	Standard	?	0.0002	1	1	1	-0.0018		2024-11-26T03:54:20
NOx 0.4ppm	5	Standard	?	0.0000	1	1	1	-0.0027		2024-11-26T03:56:18
NOx 0.2ppm	6	Standard	?	0.0001	1	1	1	-0.0023		2024-11-26T03:57:29
NOx 0.1ppm	7	Standard	?	0.0001	1	1	1	-0.0024		2024-11-26T03:57:54
NOx 0.0ppm	8	Standard	?	0.0001	1	1	1	-0.0023		2024-11-26T03:58:58
Nitrite	9	Standard	8	1.0206	1	1	1	7.4454		2024-11-

Name	Inj. No.	Type	Known Conc. mg/L	Response	MDF	ADF	Weight	Calc. Conc. mg/L	Flags	Time
8.0ppm										26T04:00:09
Nitrite 4.0ppm	10	Standard	4	0.5584	1	1	1	4.0721		2024-11-26T04:01:19
Nitrite 1.0ppm	11	Standard	1	0.1396	1	1	1	1.0158		2024-11-26T04:02:25
Nitrite 0.4ppm	12	Standard	0.4	0.0580	1	1	1	0.4205		2024-11-26T04:03:34
Nitrite 0.1ppm	13	Standard	0.1	0.0143	1	1	1	0.1017		2024-11-26T04:04:44
Nitrite 0.05ppm	14	Standard	0.05	0.0071	1	1	1	0.0492		2024-11-26T04:05:54
Nitrite 0.0ppm	15	Standard	0	0.0001	1	1	1	-0.0020		2024-11-26T04:07:08
CCV NO3	16	QC	?	0.0002	1	1	1	-0.0017		2024-11-26T04:08:11
CCV NO2	17	QC	1	0.1396	1	1	1	1.0158		2024-11-26T04:09:16
CCB	18	QC	0	0.0002	1	1	1	-0.0018		2024-11-26T04:10:28
ICV NO3 5.0	19	QC	?	0.0001	1	1	1	-0.0020		2024-11-26T04:11:38
ICV NO2 5.0	20	QC	5	0.6655	1	1	1	4.8534		2024-11-26T04:12:45
ICV NO3 0.5	21	QC	?	0.0002	1	1	1	-0.0014		2024-11-26T04:13:53
ICV NO2 0.5	22	QC	0.5	0.0689	1	1	1	0.4998		2024-11-26T04:15:01
ICB	23	QC	0	0.0001	1	1	1	-0.0021		2024-11-26T04:16:10
Diluter CHK 8PPM	24	Unknown	?	0.0001	1	5	1	-0.0093		2024-11-26T04:17:14
BLANK NO3	25	Unknown	?	0.0001	1	1	1	-0.0025		2024-11-26T04:18:26
LCS NO3	26	Unknown	?	0.0001	1	1	1	-0.0020		2024-11-26T04:19:31
BLANK NO2	27	Unknown	?	0.0001	1	1	1	-0.0024		2024-11-26T04:20:36
LCS NO2	28	Unknown	?	0.6632	1	1	1	4.8373		2024-11-26T04:21:43
CCV NO3	29	QC	?	0.0003	1	1	1	-0.0010		2024-11-26T04:22:51
CCV NO2	30	QC	1	0.1396	1	1	1	1.0156		2024-11-26T04:23:54
CCB	31	QC	0	0.0002	1	1	1	-0.0015		2024-11-26T04:25:07
WG2002302-1	32	Unknown	?	0.0001	1	1	1	-0.0023		2024-11-26T04:26:14
WG2002302-2	33	Unknown	?	0.6654	1	1	1	4.8530		2024-11-26T04:27:20
WG2002303-1	34	Unknown	?	0.0002	1	1	1	-0.0014		2024-11-26T04:28:27
WG2002303-2	35	Unknown	?	0.6649	1	1	1	4.8494		2024-11-26T04:29:30
WG2002304-1; WG2002306-1	36	Unknown	?	0.0002	1	1	1	-0.0012		2024-11-26T04:30:36
WG2002304-2; WG2002306-2	37	Unknown	?	0.0001	1	1	1	-0.0019		2024-11-26T04:31:43
WG2002305-1; WG2002307-1	38	Unknown	?	0.0001	1	1	1	-0.0019		2024-11-26T04:32:55
WG2002305-2;	39	Unknown	?	0.0002	1	1	1	-0.0018		2024-11-26T04:33:58

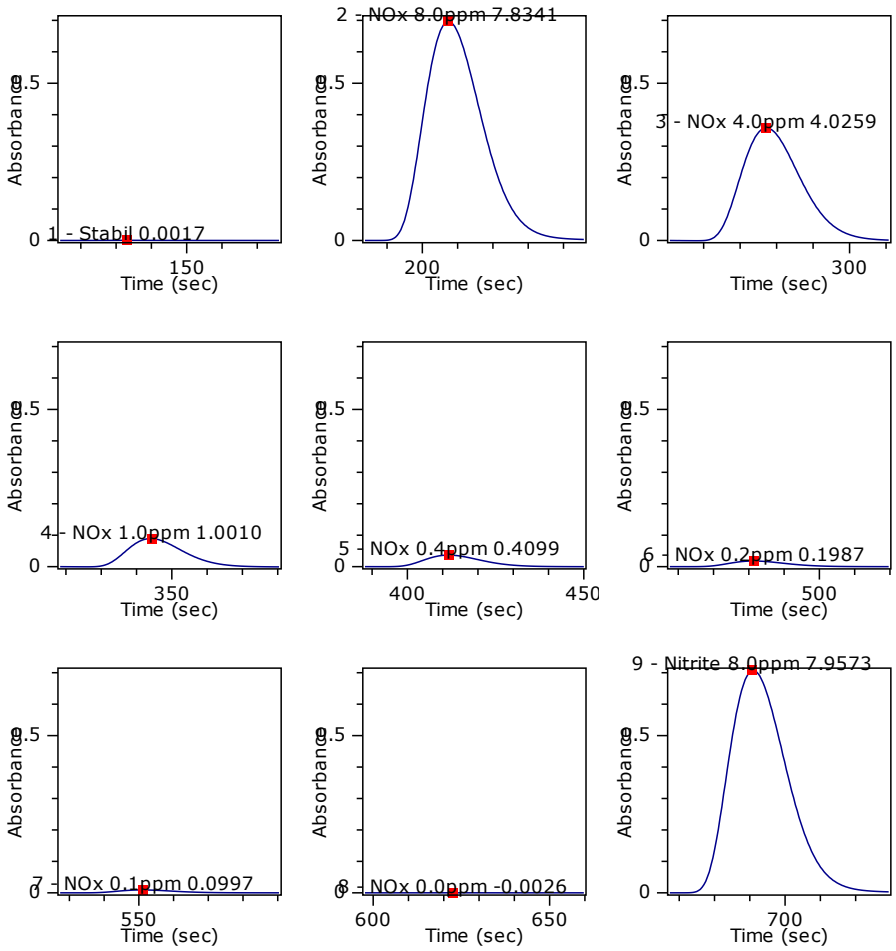
Name	Inj. No.	Type	Known Conc. mg/L	Response	MDF	ADF	Weight	Calc. Conc. mg/L	Flags	Time
WG2002307-2										
WG2002308-1	40	Unknown	?	0.0001	1	1	1	-0.0024		2024-11-26T04:35:12
WG2002308-2	41	Unknown	?	0.0001	1	1	1	-0.0021		2024-11-26T04:36:14
CCV NO3	42	QC	?	0.0001	1	1	1	-0.0020		2024-11-26T04:37:14
CCV NO2	43	QC	1	0.1400	1	1	1	1.0189		2024-11-26T04:38:20
CCB	44	QC	0	0.0002	1	1	1	-0.0017		2024-11-26T04:39:31
WG2002310-1	45	Unknown	?	0.0001	1	1	1	-0.0023		2024-11-26T04:40:40
WG2002310-2	46	Unknown	?	0.0002	1	1	1	-0.0015		2024-11-26T04:41:45
WG2002312-1	47	Unknown	?	0.0001	1	1	1	-0.0024		2024-11-26T04:42:54
WG2002312-2	48	Unknown	?	0.0001	1	1	1	-0.0020		2024-11-26T04:43:57
L2469161-13	49	Unknown	?	0.0022	1	1	1	0.0133		2024-11-26T04:45:02
L2469161-14	50	Unknown	?	0.0012	1	1	1	0.0060		2024-11-26T04:46:07
L2469161-15	51	Unknown	?	0.0020	1	1	1	0.0114		2024-11-26T04:47:11
L2469161-16	52	Unknown	?	0.0011	1	1	1	0.0048		2024-11-26T04:48:16
L2469161-17	53	Unknown	?	0.0014	1	1	1	0.0071		2024-11-26T04:49:20
L2469161-18	54	Unknown	?	0.0009	1	1	1	0.0039		2024-11-26T04:50:24
CCV NO3	55	QC	?	0.0002	1	1	1	-0.0017		2024-11-26T04:51:28
CCV NO2	56	QC	1	0.1407	1	1	1	1.0241		2024-11-26T04:52:35
CCB	57	QC	0	0.0001	1	1	1	-0.0019		2024-11-26T04:53:42
L2469451-01	58	Unknown	?	0.0001	1	1	1	-0.0022		2024-11-26T04:54:53
WG2002305-3	59	Unknown	?	0.0002	1	1	1	-0.0017		2024-11-26T04:56:01
WG2002305-4	60	Unknown	?	0.0001	1	1	1	-0.0020		2024-11-26T04:57:03
WG2002303-3	61	Unknown	?	0.0001	1	1	1	-0.0023		2024-11-26T04:58:13
WG2002303-4	62	Unknown	?	0.5412	1	1	1	3.9463		2024-11-26T04:59:18
L2469451-02	63	Unknown	?	0.0024	1	1	1	0.0143		2024-11-26T05:00:23
L2469451-03	64	Unknown	?	0.0012	1	1	1	0.0058		2024-11-26T05:01:30
L2469451-04	65	Unknown	?	0.0013	1	1	1	0.0064		2024-11-26T05:02:36
L2469451-05	66	Unknown	?	0.0010	1	1	1	0.0045		2024-11-26T05:03:40
L2469451-06	67	Unknown	?	0.0014	1	1	1	0.0072		2024-11-26T05:04:46
CCV NO3	68	QC	?	0.0001	1	1	1	-0.0019		2024-11-26T05:05:51
CCV NO2	69	QC	1	0.1413	1	1	1	1.0282		2024-11-26T05:06:57
CCB	70	QC	0	0.0001	1	1	1	-0.0021		2024-11-26T05:08:10
L2469451-07	71	Unknown	?	0.0010	1	1	1	0.0040		2024-11-26T05:09:12

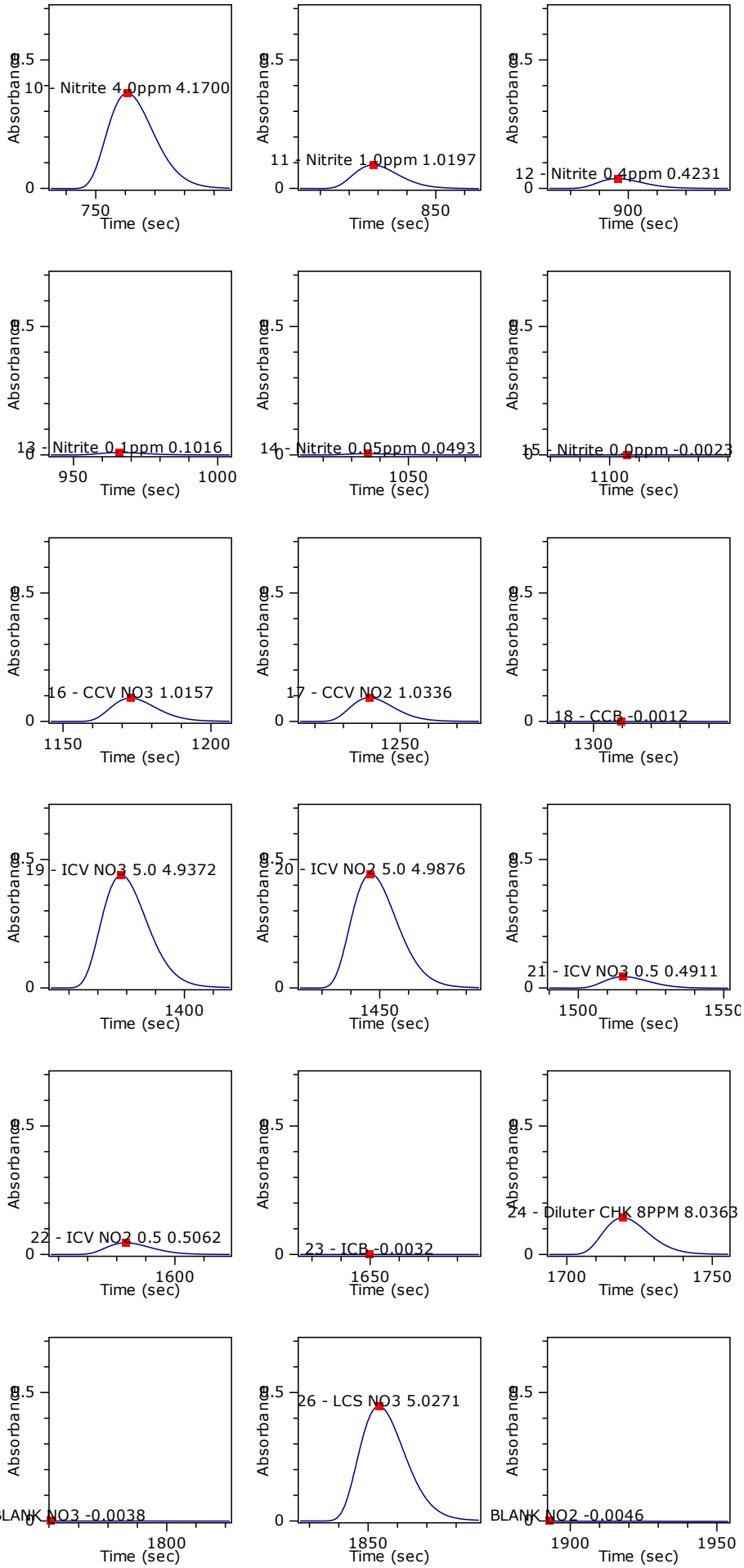
Name	Inj. No.	Type	Known Conc. mg/L	Response	MDF	ADF	Weight	Calc. Conc. mg/L	Flags	Time
L2469451-08	72	Unknown	?	0.0009	1	1	1	0.0037		2024-11-26T05:10:17
L2469452-01	73	Unknown	?	0.0009	1	1	1	0.0035		2024-11-26T05:11:22
WG2002304-3	74	Unknown	?	0.0001	1	1	1	-0.0020		2024-11-26T05:12:28
WG2002304-4	75	Unknown	?	0.0025	1	1	1	0.0150		2024-11-26T05:13:30
WG2002302-3	76	Unknown	?	0.0001	1	1	1	-0.0019		2024-11-26T05:14:39
WG2002302-4	77	Unknown	?	0.5338	1	1	1	3.8928		2024-11-26T05:15:44
L2469452-02	78	Unknown	?	0.0013	1	1	1	0.0068		2024-11-26T05:16:51
L2469452-03	79	Unknown	?	0.0035	1	1	1	0.0229		2024-11-26T05:17:57
L2469468-01	80	Unknown	?	0.0815	1	1	1	0.5915		2024-11-26T05:19:03
CCV NO3	81	QC	?	0.0002	1	1	1	-0.0015		2024-11-26T05:20:11
CCV NO2	82	QC	1	0.1405	1	1	1	1.0226		2024-11-26T05:21:14
CCB	83	QC	0	0.0002	1	1	1	-0.0017		2024-11-26T05:22:29
WG2002302-5	84	Unknown	?	0.0805	1	1	1	0.5842		2024-11-26T05:23:32
WG2002302-6	85	Unknown	?	0.6136	1	1	1	4.4752		2024-11-26T05:24:38
L2469416-01	86	Unknown	?	0.0018	1	1	1	0.0103		2024-11-26T05:25:44
L2469416-02	87	Unknown	?	0.0017	1	1	1	0.0092		2024-11-26T05:26:48
L2469416-03	88	Unknown	?	0.0019	1	1	1	0.0112		2024-11-26T05:27:54
L2469416-04	89	Unknown	?	0.0013	1	1	1	0.0063		2024-11-26T05:28:58
L2469416-05	90	Unknown	?	0.0009	1	1	1	0.0034		2024-11-26T05:30:02
L2469416-06	91	Unknown	?	0.0012	1	1	1	0.0055		2024-11-26T05:31:08
L2469416-07	92	Unknown	?	0.0010	1	1	1	0.0043		2024-11-26T05:32:11
L2469419-01	93	Unknown	?	0.0027	1	1	1	0.0166		2024-11-26T05:33:16
CCV NO3	94	QC	?	0.0002	1	1	1	-0.0017		2024-11-26T05:34:21
CCV NO2	95	QC	1	0.1408	1	1	1	1.0245		2024-11-26T05:35:27
CCB	96	QC	0	0.0001	1	1	1	-0.0019		2024-11-26T05:36:44
L2469419-02	97	Unknown	?	0.0009	1	1	1	0.0037		2024-11-26T05:37:48
L2469430-01	98	Unknown	?	0.0009	1	1	1	0.0038		2024-11-26T05:38:56
WG2002306-3	99	Unknown	?	0.0002	1	1	1	-0.0015		2024-11-26T05:40:02
WG2002306-4	100	Unknown	?	0.0037	1	1	1	0.0243		2024-11-26T05:41:09
L2469430-02	101	Unknown	?	0.0012	1	1	1	0.0060		2024-11-26T05:42:15
L2469430-03	102	Unknown	?	0.0014	1	1	1	0.0073		2024-11-26T05:43:21
L2469430-04	103	Unknown	?	0.0011	1	1	1	0.0050		2024-11-26T05:44:27
L2469430-05	104	Unknown	?	0.0027	1	1	1	0.0170		2024-11-26T05:45:32

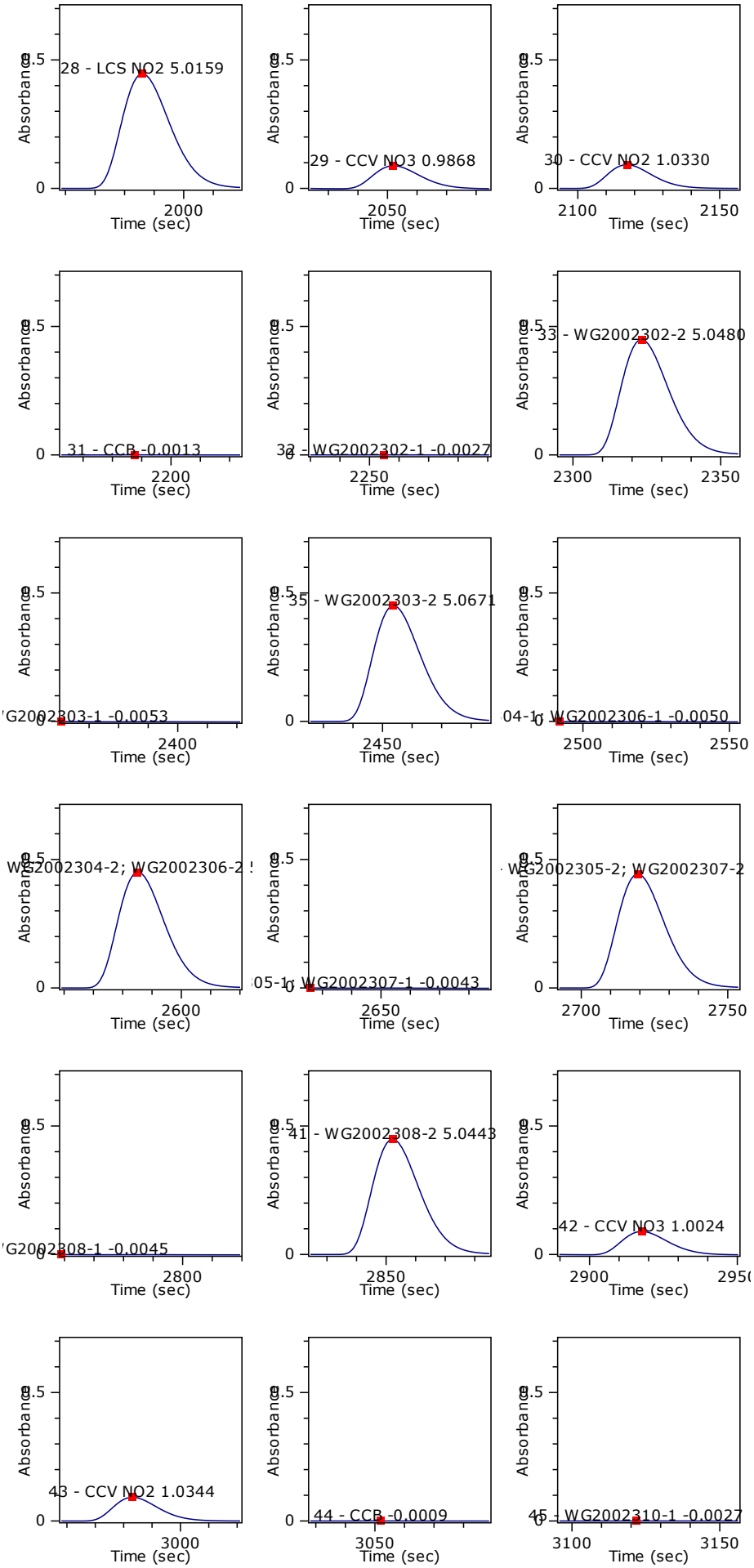
Name	Inj. No.	Type	Known Conc. mg/L	Response	MDF	ADF	Weight	Calc. Conc. mg/L	Flags	Time
L2469430-06	105	Unknown	?	0.0009	1	1	1	0.0037		2024-11-26T05:46:37
L2469430-07	106	Unknown	?	0.0008	1	1	1	0.0029		2024-11-26T05:47:42
CCV NO3	107	QC	?	0.0001	1	1	1	-0.0020		2024-11-26T05:48:47
CCV NO2	108	QC	1	0.1404	1	1	1	1.0219		2024-11-26T05:49:53
CCB	109	QC	0	0.0001	1	1	1	-0.0019		2024-11-26T05:51:05
L2469426-01	110	Unknown	?	0.0010	1	1	1	0.0043		2024-11-26T05:52:11
WG2002307-3	111	Unknown	?	0.0003	1	1	1	-0.0007		2024-11-26T05:53:15
WG2002307-4	112	Unknown	?	0.0002	1	1	1	-0.0016		2024-11-26T05:54:21
L2469426-02	113	Unknown	?	0.0030	1	1	1	0.0190		2024-11-26T05:55:27
L2469426-03	114	Unknown	?	0.0011	1	1	1	0.0049		2024-11-26T05:56:31
CCV NO3	115	QC	?	0.0001	1	1	1	-0.0022		2024-11-26T05:57:35
CCV NO2	116	QC	1	0.1399	1	1	1	1.0179		2024-11-26T05:58:42
CCB	117	QC	0	0.0001	1	1	1	-0.0020		2024-11-26T05:59:55

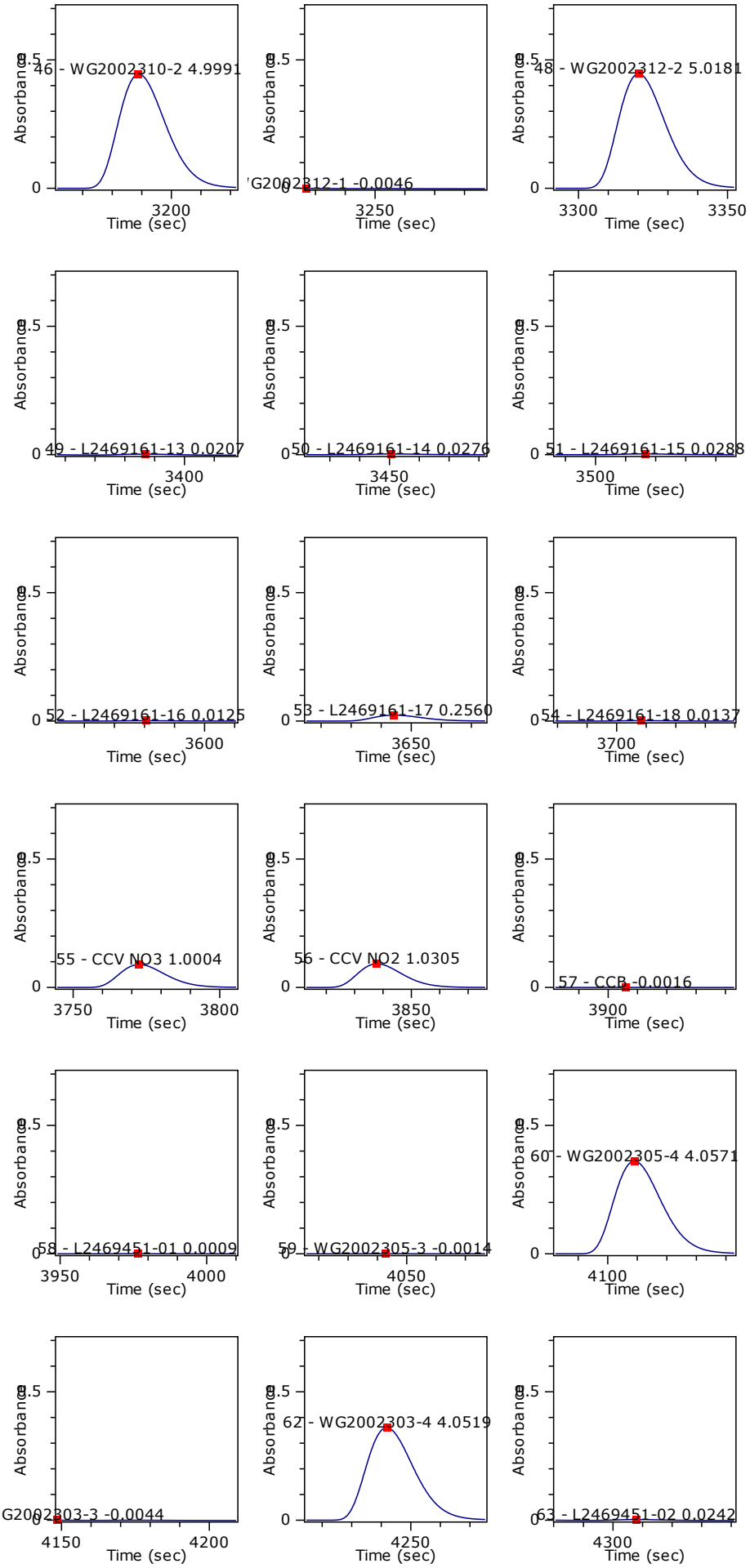
Peaks:

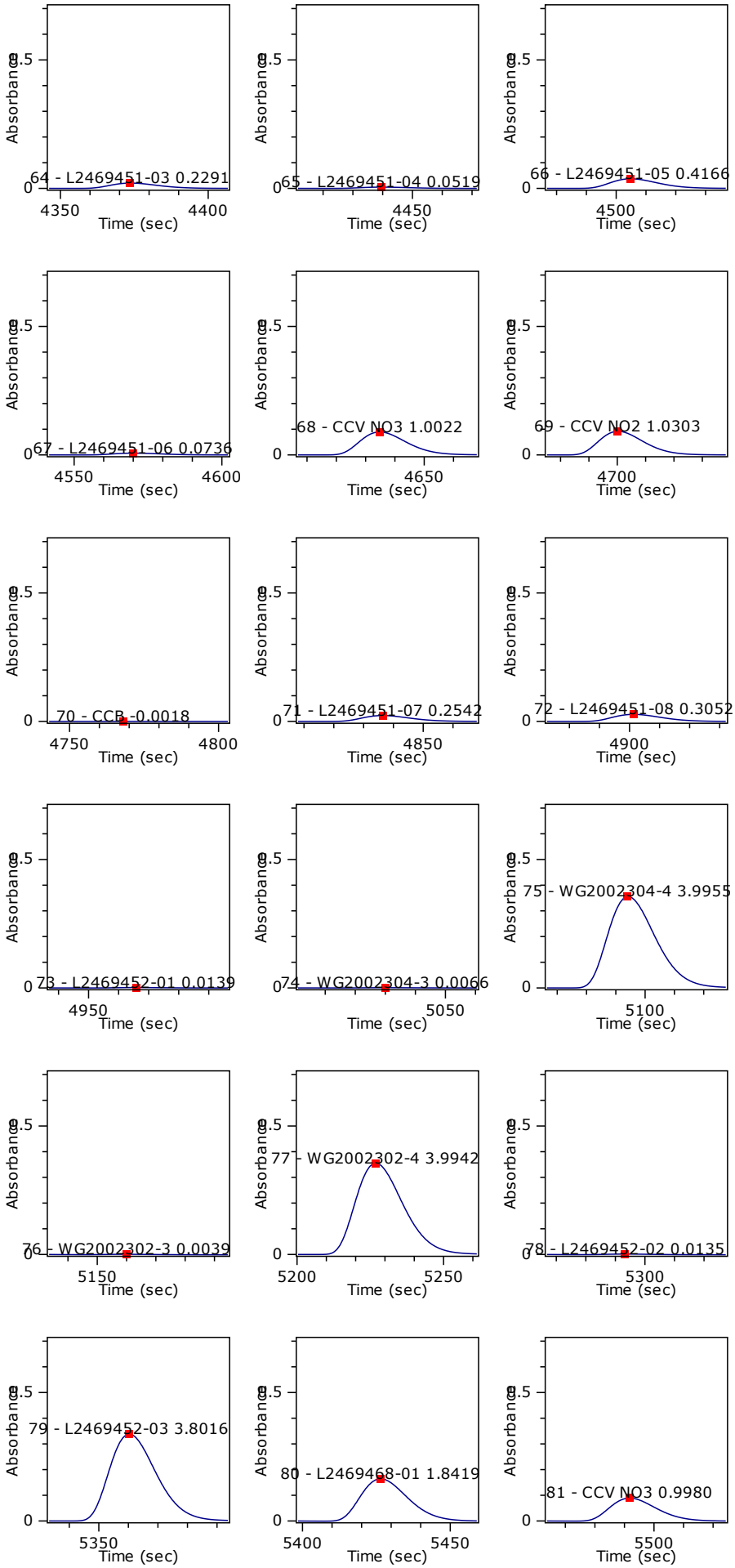
Channel: 1-NOx

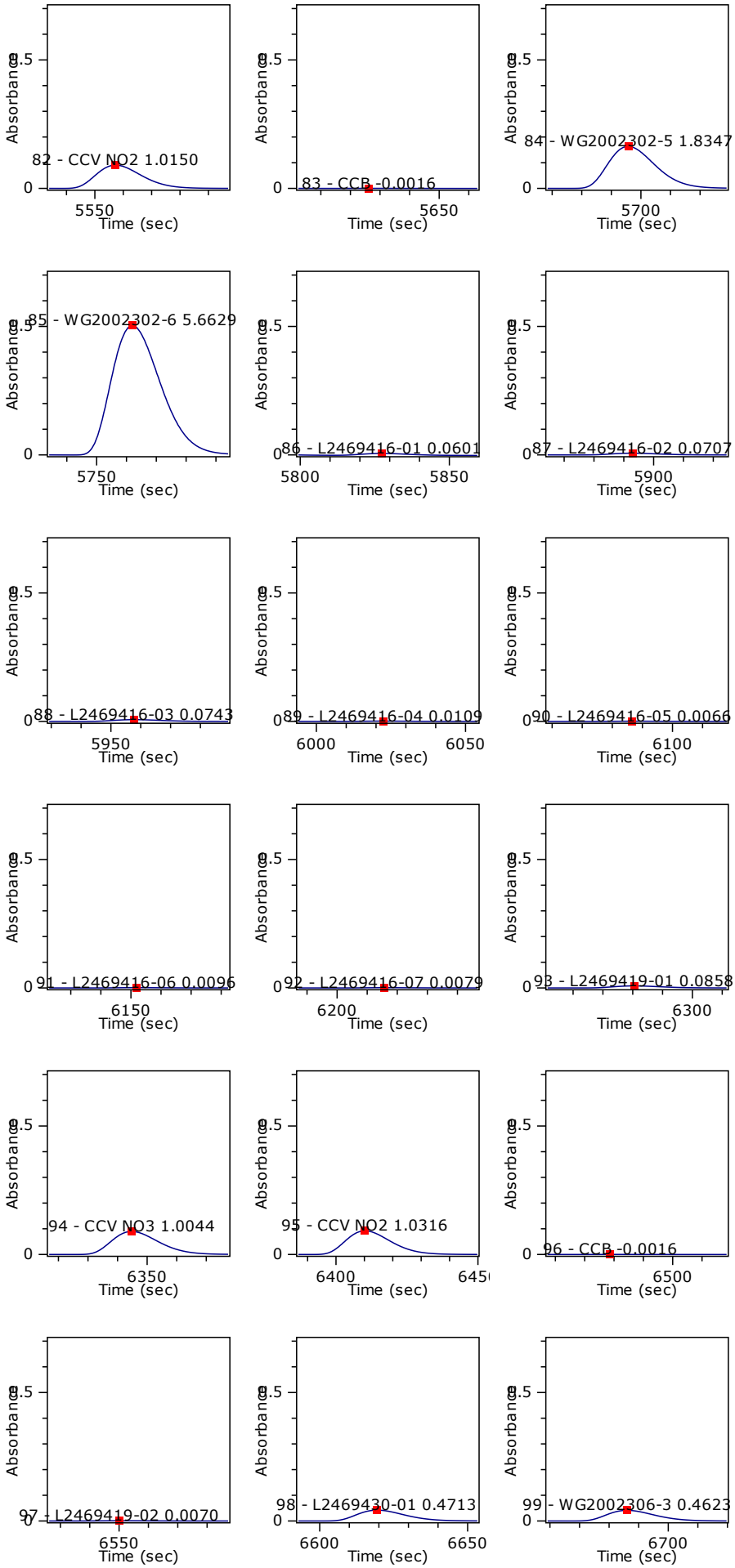


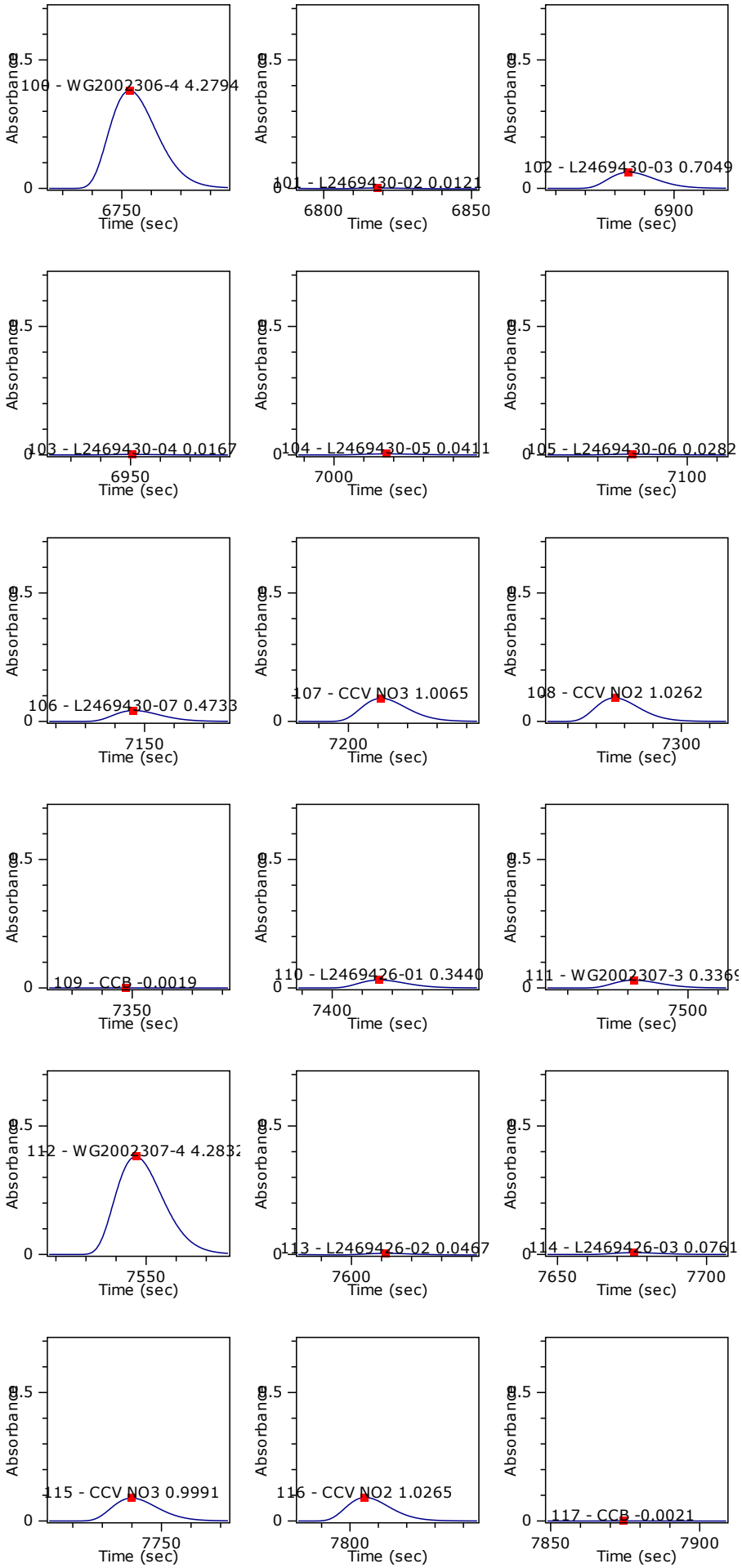

10 - Nitrite 4.0ppm 4.1700
11 - Nitrite 1.0ppm 1.0197
12 - Nitrite 0.4ppm 0.4231
13 - Nitrite 0.1ppm 0.1016
14 - Nitrite 0.05ppm 0.0493
15 - Nitrite 0.0ppm -0.0023
16 - CCV NO3 1.0157
17 - CCV NO2 1.0336
18 - CCB -0.0012
19 - ICV NO3 5.0 4.9372
20 - ICV NO2 5.0 4.9876
21 - ICV NO3 0.5 0.4911
22 - ICV NO2 0.5 0.5062
23 - ICB -0.0032
24 - Diluter CHK 8PPM 8.0363
26 - LCS NO3 5.0271
BLANK NO3 -0.0038
BLANK NO2 -0.0046
Absorbance
Time (sec)


28 - LCS NO2 5.0159
29 - CCV NO3 0.9868
30 - CCV NO2 1.0330
31 - CCB -0.0013
32 - WG2002302-1 -0.0027
33 - WG2002302-2 5.0480
WG2002303-1 -0.0053
35 - WG2002303-2 5.0671
04-1 WG2002306-1 -0.0050
WG2002304-2; WG2002306-2
05-1 WG2002307-1 -0.0043
WG2002305-2; WG2002307-2
WG2002308-1 -0.0045
41 - WG2002308-2 5.0443
42 - CCV NO3 1.0024
43 - CCV NO2 1.0344
44 - CCB -0.0009
45 - WG2002310-1 -0.0027
Absorbance
Time (sec)

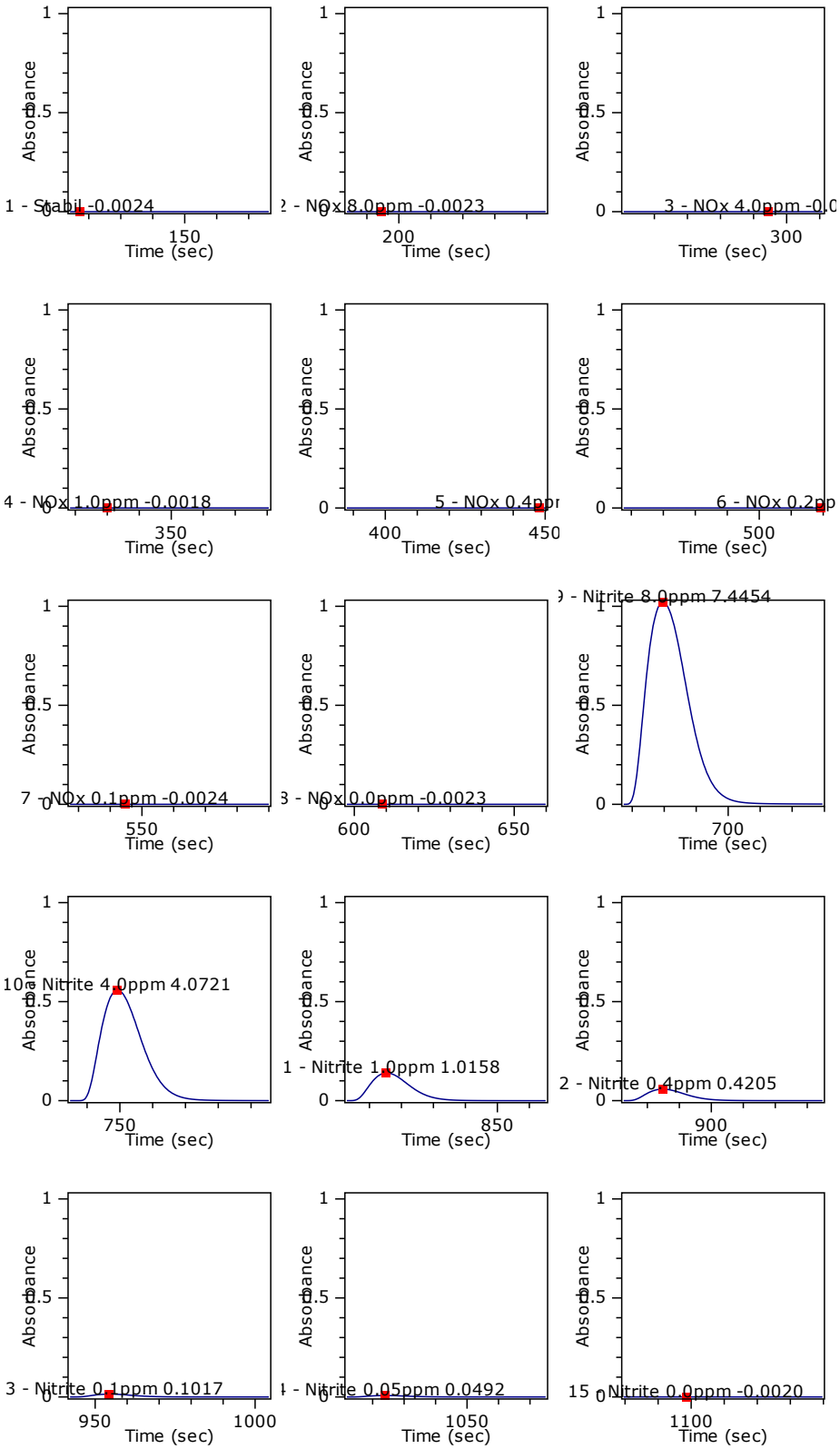

46 - WG2002310-2 4.9991
'G2002312-1 -0.0046
48 - WG2002312-2 5.0181
49 - L2469161-13 0.0207
50 - L2469161-14 0.0276
51 - L2469161-15 0.0288
52 - L2469161-16 0.0125
53 - L2469161-17 0.2560
54 - L2469161-18 0.0137
55 - CCV NO3 1.0004
56 - CCV NO2 1.0305
57 - CCB -0.0016
58 - L2469451-01 0.0009
59 - WG2002305-3 -0.0014
60 - WG2002305-4 4.0571
'G2002303-3 -0.0044
62 - WG2002303-4 4.0519
63 - L2469451-02 0.0242
Absorbance
Time (sec)

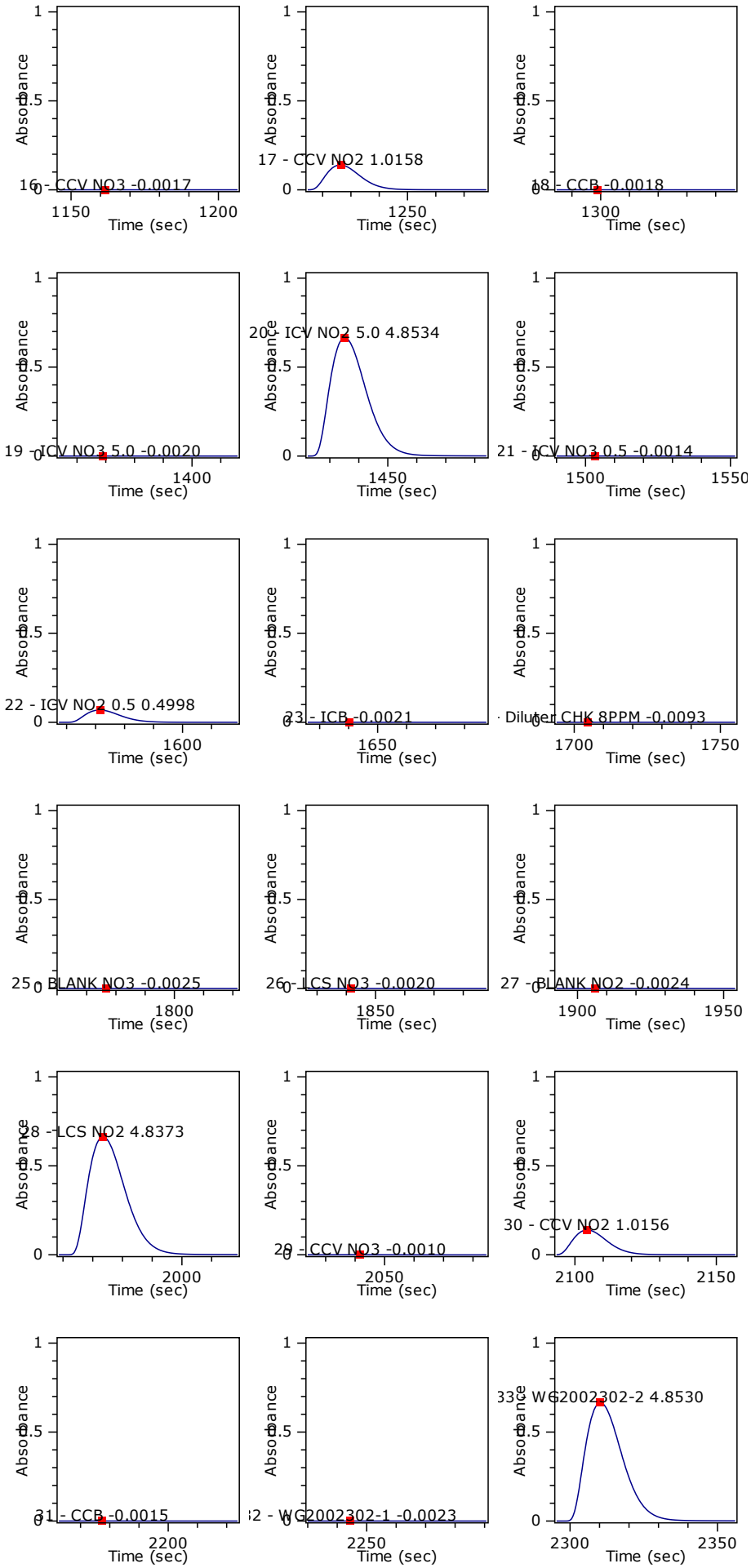

64 - L2469451-03 0.2291
65 - L2469451-04 0.0519
66 - L2469451-05 0.4166
67 - L2469451-06 0.0736
68 - CCV NO3 1.0022
69 - CCV NO2 1.0303
70 - CCB -0.0018
71 - L2469451-07 0.2542
72 - L2469451-08 0.3052
73 - L2469452-01 0.0139
74 - WG2002304-3 0.0066
75 - WG2002304-4 3.9955
76 - WG2002302-3 0.0039
77 - WG2002302-4 3.9942
78 - L2469452-02 0.0135
79 - L2469452-03 3.8016
80 - L2469468-01 1.8419
81 - CCV NO3 0.9980
Absorbance
Time (sec)

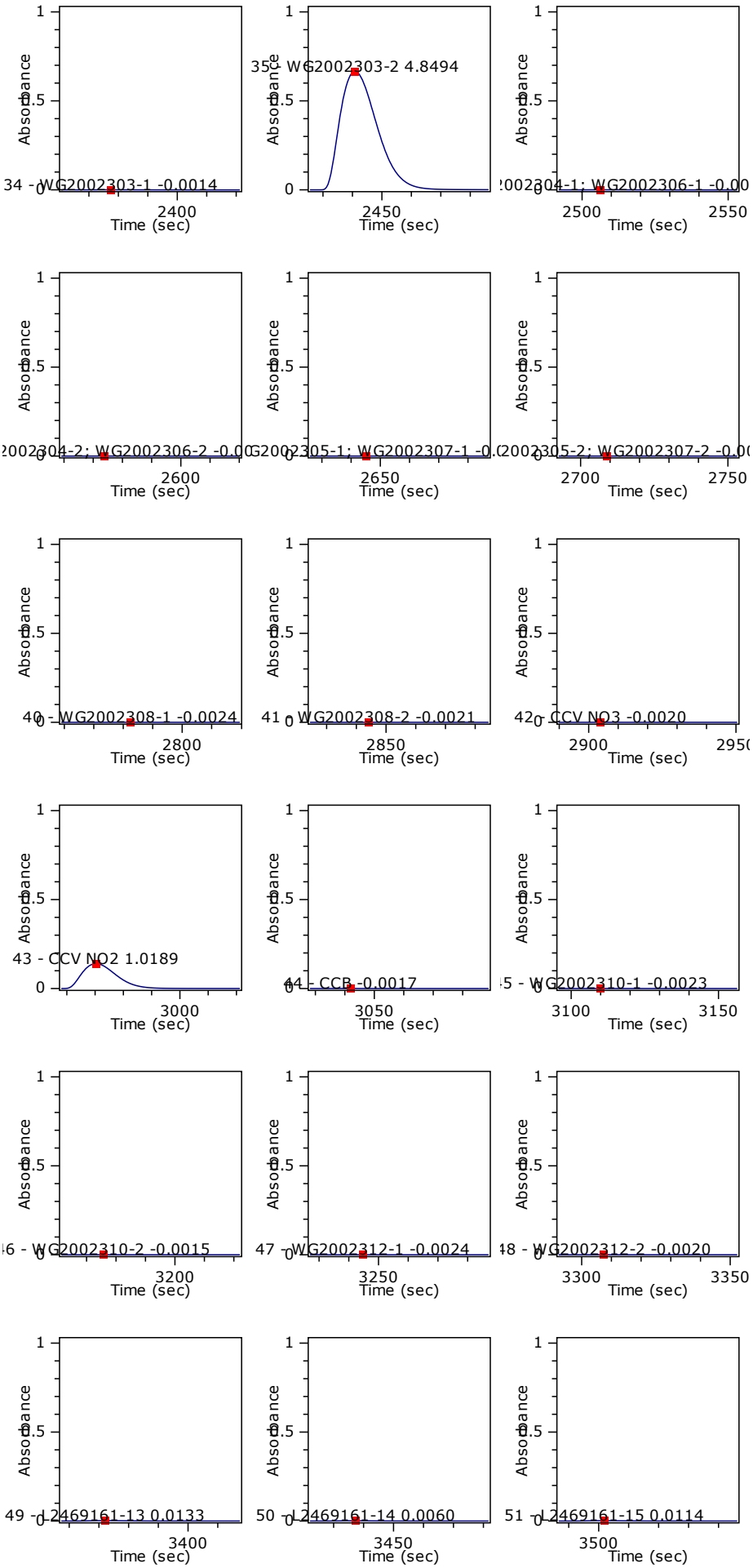

82 - CCV NO2 1.0150
83 - CCB -0.0016
84 - WG2002302-5 1.8347
85 - WG2002302-6 5.6629
86 - L2469416-01 0.0601
87 - L2469416-02 0.0707
88 - L2469416-03 0.0743
89 - L2469416-04 0.0109
90 - L2469416-05 0.0066
91 - L2469416-06 0.0096
92 - L2469416-07 0.0079
93 - L2469419-01 0.0858
94 - CCV NO3 1.0044
95 - CCV NO2 1.0316
96 - CCB -0.0016
97 - L2469419-02 0.0070
98 - L2469430-01 0.4713
99 - WG2002306-3 0.4623
Absorbance
Time (sec)

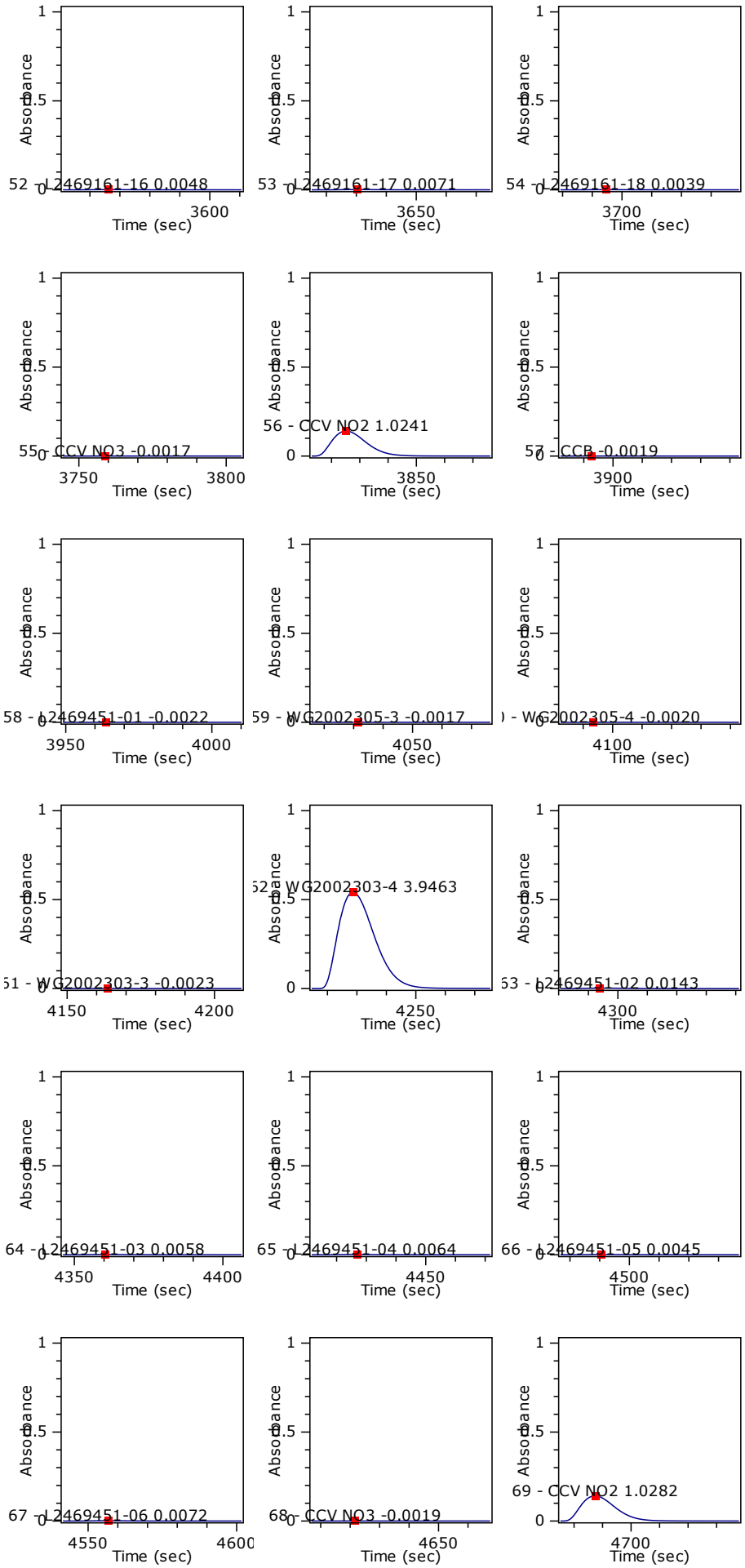

100 - WG2002306-4 4.2794
101 - L2469430-02 0.0121
102 - L2469430-03 0.7049
103 - L2469430-04 0.0167
104 - L2469430-05 0.0411
105 - L2469430-06 0.0282
106 - L2469430-07 0.4733
107 - CCV NO3 1.0065
108 - CCV NO2 1.0262
109 - CCB -0.0019
110 - L2469426-01 0.3440
111 - WG2002307-3 0.3369
112 - WG2002307-4 4.2832
113 - L2469426-02 0.0467
114 - L2469426-03 0.0761
115 - CCV NO3 0.9991
116 - CCV NO2 1.0265
117 - CCB -0.0021
Absorbance
Time (sec)

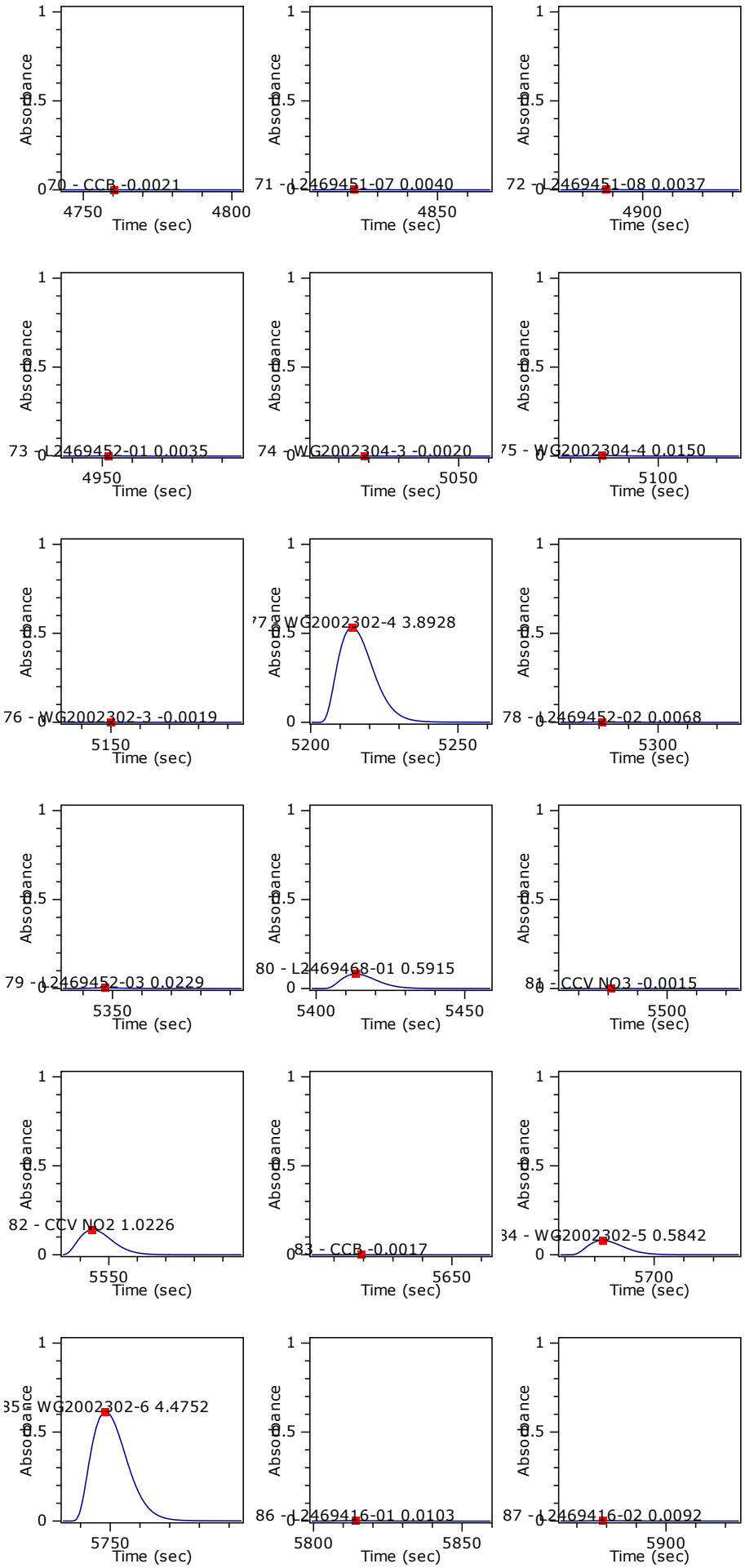
Channel: 2-NO2

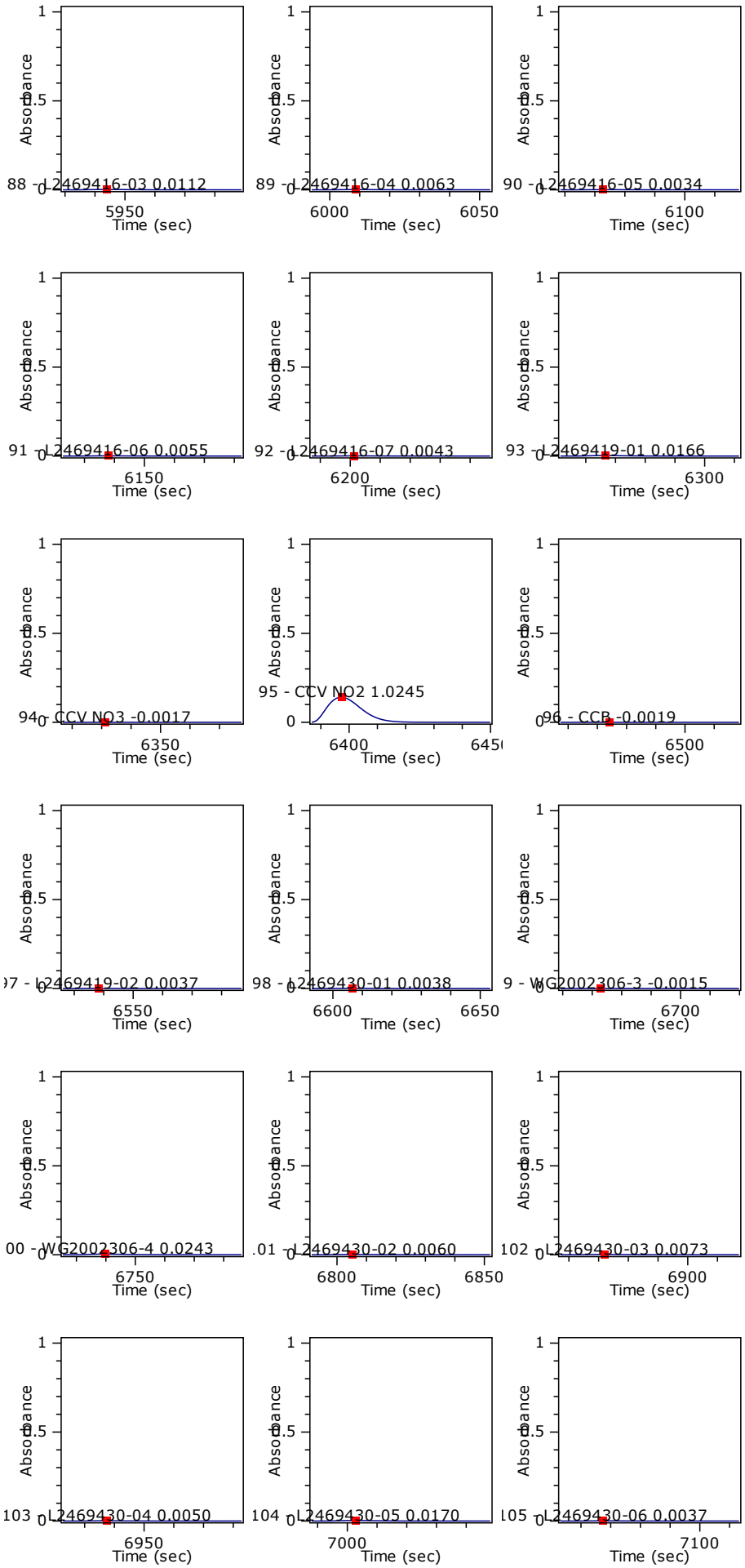


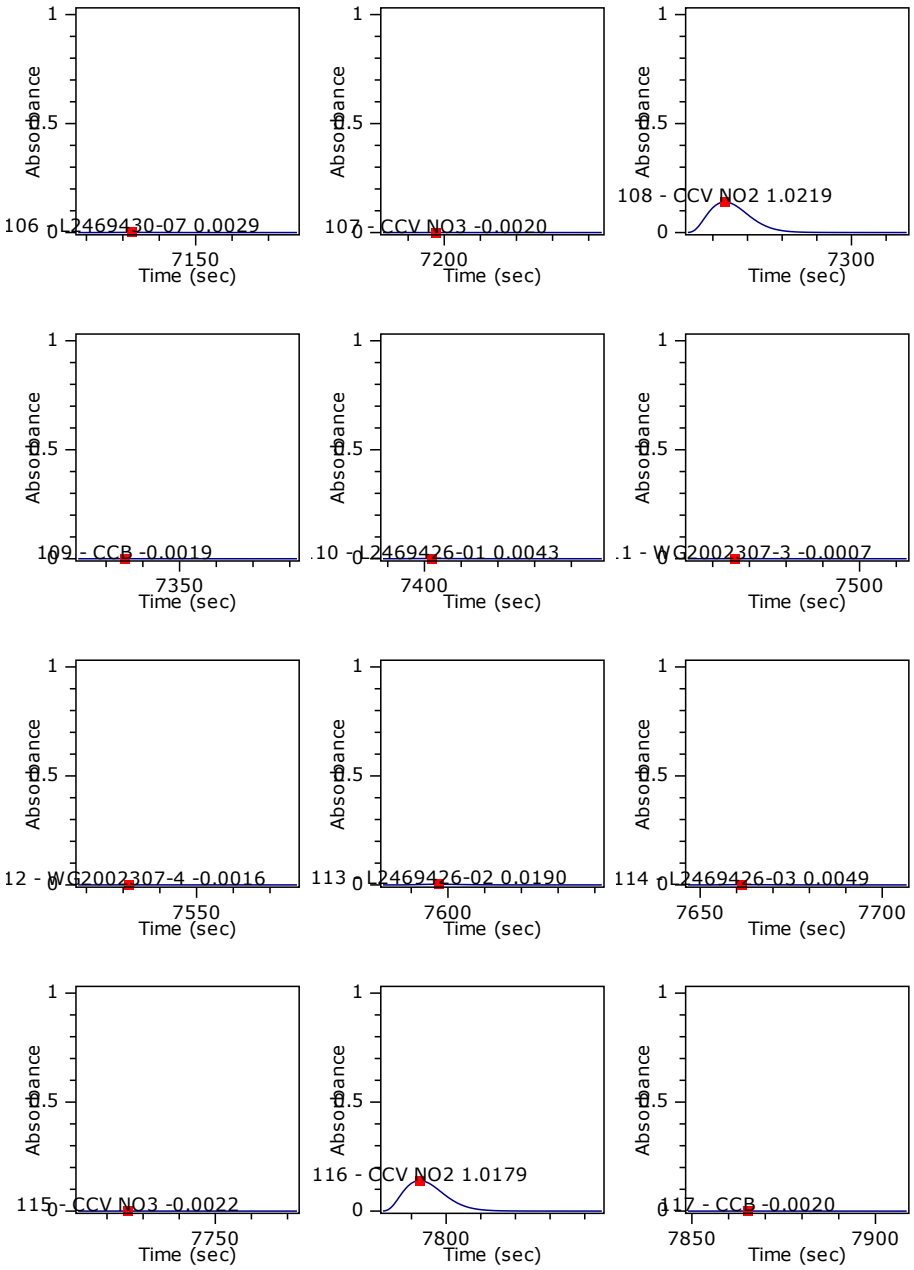

16 - CCV NO3 -0.0017
17 - CCV NO2 1.0158
18 - CCB -0.0018
19 - ICV NO3 5.0 -0.0020
20 - ICV NO2 5.0 4.8534
21 - ICV NO3 0.5 -0.0014
22 - IGV NO2 0.5 0.4998
23 - ICB -0.0021
Diluter CHK 8PPM -0.0093
25 - BLANK NO3 -0.0025
26 - LCS NO3 -0.0020
27 - BLANK NO2 -0.0024
28 - LCS NO2 4.8373
29 - CCV NO3 -0.0010
30 - CCV NO2 1.0156
31 - CCB -0.0015
32 - WG2002302-1 -0.0023
33 - WG2002302-2 4.8530
Absorbance
Time (sec)


34 - WG2002303-1 -0.0014
35 - WG2002303-2 4.8494
2002304-1; WG2002306-1 -0.00
2002304-2; WG2002306-2 -0.00
G2002305-1; WG2002307-1 -0.
2002305-2; WG2002307-2 -0.0
40 - WG2002308-1 -0.0024
41 - WG2002308-2 -0.0021
42 - CCV NO3 -0.0020
43 - CCV NO2 1.0189
44 - CCB -0.0017
5 - WG2002310-1 -0.0023
6 - WG2002310-2 -0.0015
47 - WG2002312-1 -0.0024
48 - WG2002312-2 -0.0020
49 - L2469161-13 0.0133
50 - L2469161-14 0.0060
51 - L2469161-15 0.0114
Absorbance
Time (sec)


52 - L2469161-16 0.0048
53 - L2469161-17 0.0071
54 - L2469161-18 0.0039
55 - CCV NO3 -0.0017
56 - CCV NO2 1.0241
57 - CCB -0.0019
58 - L2469451-01 -0.0022
59 - WG2002305-3 -0.0017
- WG2002305-4 -0.0020
51 - WG2002303-3 -0.0023
52 - WG2002303-4 3.9463
53 - L2469451-02 0.0143
64 - L2469451-03 0.0058
65 - L2469451-04 0.0064
66 - L2469451-05 0.0045
67 - L2469451-06 0.0072
68 - CCV NO3 -0.0019
69 - CCV NO2 1.0282
Absorbance
Time (sec)


70 - CCB -0.0021
71 - L2469451-07 0.0040
72 - L2469451-08 0.0037
73 - L2469452-01 0.0035
74 - WG2002304-3 -0.0020
75 - WG2002304-4 0.0150
76 - WG2002302-3 -0.0019
77 - WG2002302-4 3.8928
78 - L2469452-02 0.0068
79 - L2469452-03 0.0229
80 - L2469468-01 0.5915
81 - CCV NO3 -0.0015
82 - CCV NO2 1.0226
83 - CCB -0.0017
84 - WG2002302-5 0.5842
85 - WG2002302-6 4.4752
86 - L2469416-01 0.0103
87 - L2469416-02 0.0092
Absorbance
Time (sec)


88 - L2469416-03 0.0112
89 - L2469416-04 0.0063
90 - L2469416-05 0.0034
91 - L2469416-06 0.0055
92 - L2469416-07 0.0043
93 - L2469419-01 0.0166
94 - CCV NO3 -0.0017
95 - CCV NO2 1.0245
96 - CCB -0.0019
97 - L2469419-02 0.0037
98 - L2469430-01 0.0038
9 - WG2002306-3 -0.0015
00 - WG2002306-4 0.0243
.01 - L2469430-02 0.0060
102 - L2469430-03 0.0073
103 - L2469430-04 0.0050
104 - L2469430-05 0.0170
105 - L2469430-06 0.0037
Absorbance
Time (sec)



Data Processing Parameters:

Channel: 1-NOx

Response parameter	Peak Height
Filter Type	None
Filter Window	3
Enable Peak Window	False
Peak Window Start	0
Peak Window Stop	0
Enable Baseline Correction	False
Enable 2 Point Correction	False
Baseline Start	0
Baseline Stop	0
Point 2 Baseline Start	0
Point 2 Baseline Stop	0
Background Correction	Single Wavelength
Ref Wavelength 1	600
Ref Wavelength 2	0

Channel: 2-NO2

Response parameter	Peak Height
Filter Type	None
Filter Window	3
Enable Peak Window	False
Peak Window Start	0
Peak Window Stop	0
Enable Baseline Correction	False
Enable 2 Point Correction	False
Baseline Start	0
Baseline Stop	0
Point 2 Baseline Start	0
Point 2 Baseline Stop	0
Background Correction	Single Wavelength
Ref Wavelength 1	600
Ref Wavelength 2	0

Method Log:

```
FIAsoft FIAsoft v3.1.10

FIAlyzer Settings
------------
FIAlab1 Serial Number: FIA31428
FIAlab2 Serial Number: FIA31429
Pump: Connected on COM8

Spectrometer Settings
Spectrometer1
------------
Spectrometer Type: tec5
Integration Time: 3.3
Bandwidth: 2
Data Acq Rate: 2
Use Full Spectrum: False
        |---  Low: 500nm
        |--- High: 650nm
Reduce to Boxcar: True

Spectrometer2
------------
Spectrometer Type: tec5
Integration Time: 3.8
Bandwidth: 2
Data Acq Rate: 2
Use Full Spectrum: False
        |---  Low: 500nm
        |--- High: 650nm
Reduce to Boxcar: True

Start Time
------------
2024-11-26T03:48:50

Method
------------
' Method Script for NOx-NO2

Autosave Data C:\FIAlab\Autosave Data\DateTime
FIAlab Injection Valve Sample Load
Message Cadmium Column on for NOx
FIAlab Peristaltic Pump Clockwise(%) 55

Autosampler Wash
Delay (sec) 2
Next Sample
Delay (sec) 35  'StartDelay2 - Controls initial sample introduction.
```

```
FIAlab1 Injection Valve Sample Inject
Autosampler Probe Up
Delay (sec) 2
Autosampler Position (#) Rinse
FIAlab2 Injection Valve Sample Inject
Delay (sec) 15   'StartDelay3 - Should be set equal to LoopDelay3

Autosampler Probe Up
Delay (sec) 5   'StartDelay4 - Should be set equal to LoopDelay4

Loop Start

   Analyte New Sample
   Delay (sec) 1
   Next Sample
   Autosampler Probe Force Down

   Spectrometer Reference Scan
   Spectrometer Absorbance Scanning

   Delay (sec) 3   ' LoopDelay1 - Controls sample transit & loop empty. Controls back baseline.

   FIAlab Injection Valve Sample Load

   Delay (sec) 35   ' LoopDelay2 - Controls sample transit & loop fill. Controls back baseline.

   FIAlab1 Injection Valve Sample Inject
   Autosampler Probe Up
   Delay (sec) 5
   Autosampler Position (#) Rinse
   FIAlab2 Injection Valve Sample Inject

   Delay (sec) 10   ' LoopDelay3 - Controls loop empty & probe rinse time. Inverse controls front baseline.

   Autosampler Probe Up

   Delay (sec) 3   ' LoopDelay4 - Controls loop empty. Inverse controls front baseline.

   Spectrometer Stop Scanning

Loop End

Autosampler Position (#) Rinse
Delay (sec) 20
Autosampler Probe Up
Delay (sec) 30
FIAlab Peristaltic Pump Clockwise(%) 5
Autoexport Report C:\FIAlab\autoreport\NOxNO2\DateTime
Message Run is Complete
```

Method File Location: C:\FIAlab\FIAlab User Files\Methods\Method_NOx+NO2.fia

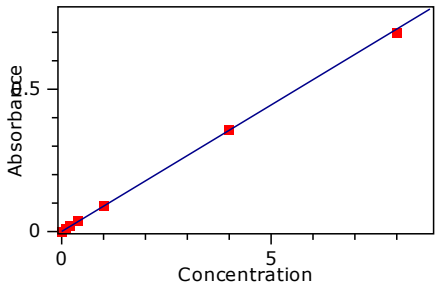
Graphical report generated by FIAsoft v3.1.10
Report generated on 2024-11-26 09:01:30
Data file (.dat): C:\FIAlab\Autosave Data\2024-11-26-090109.dat

Dataset Notes:

Analyst	

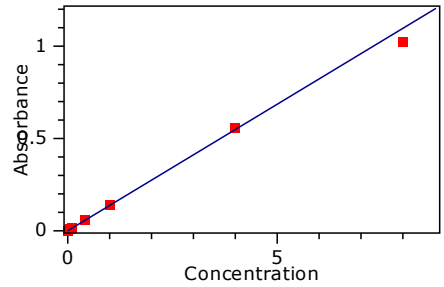
Dataset Notes Table Location: C:\FIAlab\FIAlab User Files\Tables\Dataset Notes\Analyst.csv

Calibrations:



Channel: 1-NOx
Fit_Order: 1
Weighting: 1/response
Standard relation
Coefficients:
A: 0.00029
B: 0.08888
R^2: 0.99983
RSE(%): 1.69071
% Max. for OVR: 100

InjNo	Name	Response	Known Conc. mg/L	Calc. Conc. mg/L	% Error	Time
10001	NOx 8.0ppm	0.69660	8.00000	7.83410	2.07	N/A
10002	NOx 4.0ppm	0.35810	4.00000	4.02590	0.65	N/A
10003	NOx 1.0ppm	0.08930	1.00000	1.00100	0.10	N/A
10004	NOx 0.4ppm	0.03670	0.40000	0.40990	2.49	N/A
10005	NOx 0.2ppm	0.01800	0.20000	0.19870	0.67	N/A
10006	NOx 0.1ppm	0.00920	0.10000	0.09970	0.27	N/A
10007	NOx 0.0ppm	0.00010	0.00000	-0.00260	NA	N/A



Channel: 2-NO2
Fit_Order: 1
Weighting: 1/response
Standard relation
Coefficients:
A: 0.00040
B: 0.13703
R^2: 0.99812
RSE(%): 4.62001
% Max. for OVR: 100

InjNo	Name	Response	Known Conc. mg/L	Calc. Conc. mg/L	% Error	Time
10001	Nitrite 8.0ppm	1.02060	8.00000	7.44540	6.93	N/A
10002	Nitrite 4.0ppm	0.55840	4.00000	4.07210	1.80	N/A
10003	Nitrite 1.0ppm	0.13960	1.00000	1.01580	1.58	N/A
10004	Nitrite 0.4ppm	0.05800	0.40000	0.42050	5.13	N/A
10005	Nitrite 0.1ppm	0.01430	0.10000	0.10170	1.71	N/A
10006	Nitrite 0.05ppm	0.00710	0.05000	0.04920	1.53	N/A
10007	Nitrite 0.0ppm	0.00010	0.00000	-0.00200	NA	N/A

Results:

Channel: 1-NOx

Name	Inj. No.	Type	Known Conc. mg/L	Response	MDF	ADF	Weight	Calc. Conc. mg/L	Flags	Time
Stabil	1	Unknown	?	0.0002	1	1	1	-0.0005		2024-11-26T07:14:04
CCV NO3	2	QC	1	0.0906	1	1	1	1.0155		2024-11-26T07:15:15
CCV NO2	3	QC	?	0.0931	1	1	1	1.0447		2024-11-26T07:16:21
CCB	4	QC	0	0.0001	1	1	1	-0.0018		2024-11-26T07:17:30

Name	Inj. No.	Type	Known Conc. mg/L	Response	MDF	ADF	Weight	Calc. Conc. mg/L	Flags	Time
L2467843-01	5	Unknown	?	0.0022	1	1	1	0.0214		2024-11-26T07:18:38
WG2002308-3	6	Unknown	?	0.0023	1	1	1	0.0224		2024-11-26T07:19:46
WG2002308-4	7	Unknown	?	0.3624	1	1	1	4.0741		2024-11-26T07:20:52
L2467843-02	8	Unknown	?	0.0014	1	1	1	0.0124		2024-11-26T07:21:58
L2467852-01	9	Unknown	?	0.0057	1	1	1	0.0607		2024-11-26T07:23:05
WG2002308-5	10	Unknown	?	0.0050	1	1	1	0.0528		2024-11-26T07:24:11
WG2002308-6	11	Unknown	?	0.3540	1	1	1	3.9799		2024-11-26T07:25:17
L2467852-02	12	Unknown	?	0.0006	1	1	1	0.0031		2024-11-26T07:26:22
L2467949-02	13	Unknown	?	0.0042	1	1	1	0.0441		2024-11-26T07:27:28
L2467949-03	14	Unknown	?	0.0042	1	1	1	0.0437		2024-11-26T07:28:33
CCV NO3	15	QC	1	0.0886	1	1	1	0.9933		2024-11-26T07:29:38
CCV NO2	16	QC	?	0.0907	1	1	1	1.0177		2024-11-26T07:30:43
CCB	17	QC	0	0.0001	1	1	1	-0.0020		2024-11-26T07:31:53
L2468049-01	18	Unknown	?	0.0030	1	1	1	0.0302		2024-11-26T07:33:01
L2468054-01	19	Unknown	?	0.0040	1	1	1	0.0414		2024-11-26T07:34:08
L2468054-02	20	Unknown	?	0.0027	1	1	1	0.0276		2024-11-26T07:35:12
L2468059-01	21	Unknown	?	0.6619	1	1	1	7.4443		2024-11-26T07:36:17
L2468061-01	22	Unknown	?	0.0008	1	1	1	0.0057		2024-11-26T07:37:22
L2468061-02	23	Unknown	?	0.0898	1	1	1	1.0069		2024-11-26T07:38:28
L2468065-01	24	Unknown	?	0.0953	1	1	1	1.0686		2024-11-26T07:39:35
L2468134-02	25	Unknown	?	0.3055	1	1	1	3.4341		2024-11-26T07:40:42
L2468134-04	26	Unknown	?	0.2509	1	1	1	2.8199		2024-11-26T07:41:49
L2468134-07	27	Unknown	?	0.1484	1	1	1	1.6666		2024-11-26T07:42:55
CCV NO3	28	QC	1	0.0894	1	1	1	1.0028		2024-11-26T07:44:00
CCV NO2	29	QC	?	0.0915	1	1	1	1.0260		2024-11-26T07:45:05
CCB	30	QC	0	0.0002	1	1	1	-0.0009		2024-11-26T07:46:14
L2468203-01	31	Unknown	?	0.0572	1	1	1	0.6404		2024-11-26T07:47:25
L2468203-02	32	Unknown	?	0.0011	1	1	1	0.0096		2024-11-26T07:48:32
L2468289-01	33	Unknown	?	0.0025	1	1	1	0.0247		2024-11-26T07:49:38
L2468289-02	34	Unknown	?	0.0674	1	1	1	0.7548		2024-11-26T07:50:44
CCV NO3	35	QC	1	0.0894	1	1	1	1.0020		2024-11-26T07:51:48
CCV NO2	36	QC	?	0.0923	1	1	1	1.0352		2024-11-26T07:52:54
CCB	37	QC	0	0.0001	1	1	1	-0.0020		2024-11-26T07:54:03

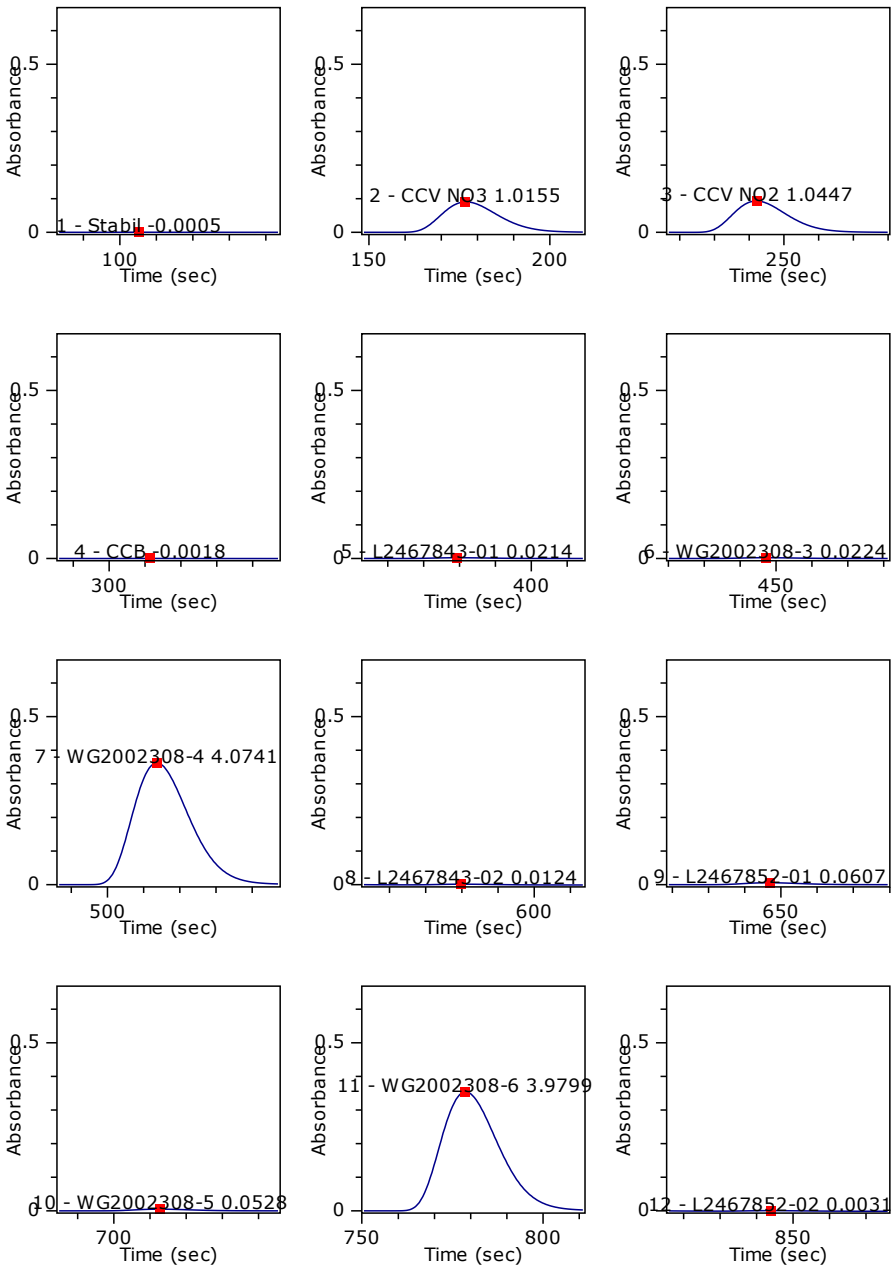
Channel: 2-NO2

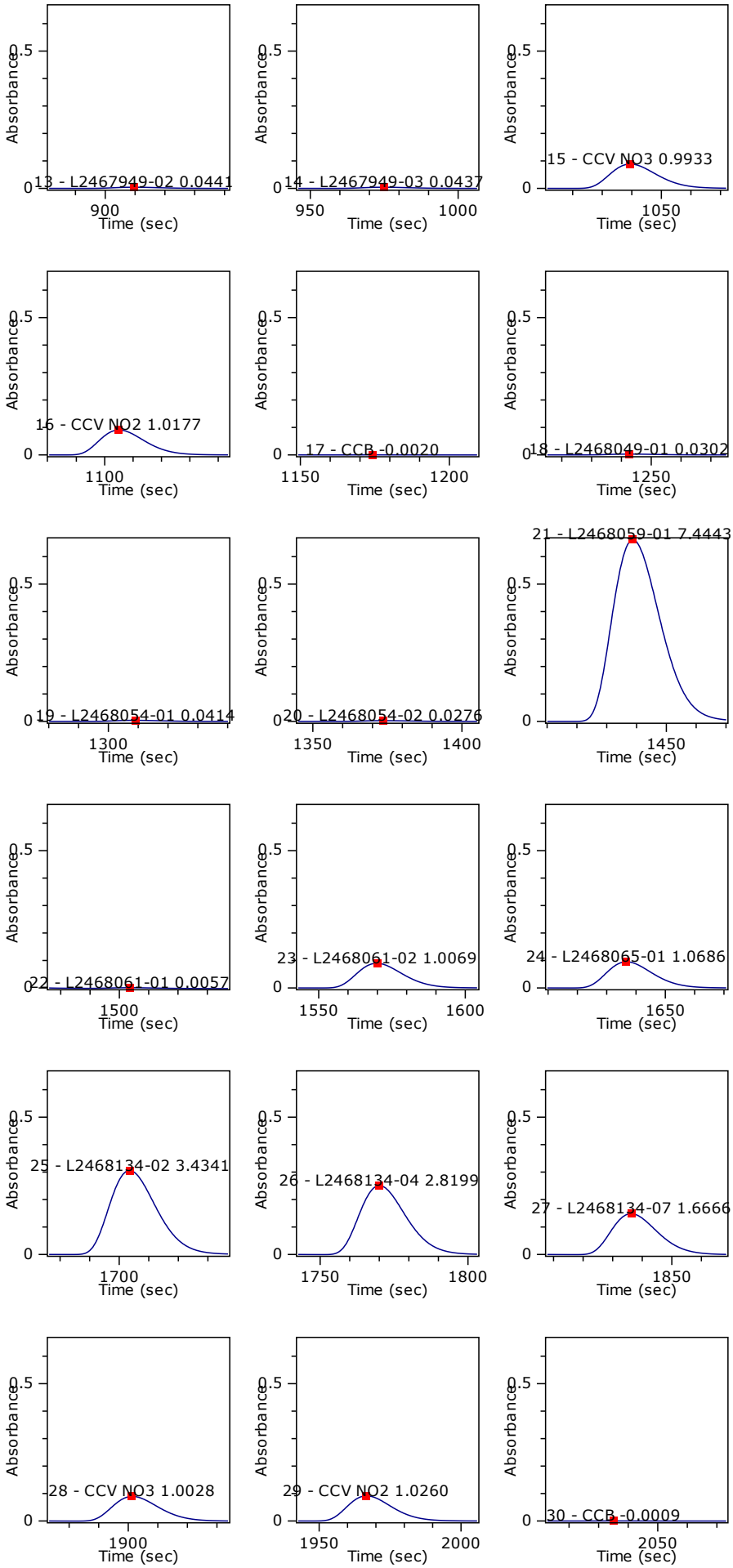
Name	Inj. No.	Type	Known Conc. mg/L	Response	MDF	ADF	Weight	Calc. Conc. mg/L	Flags	Time
Stabil	1	Unknown	?	0.0002	1	1	1	-0.0015		2024-11-26T07:13:48
CCV NO3	2	QC	?	0.0002	1	1	1	-0.0018		2024-11-26T07:15:00
CCV NO2	3	QC	1	0.1400	1	1	1	1.0189		2024-11-26T07:16:08
CCB	4	QC	0	0.0001	1	1	1	-0.0020		2024-11-26T07:17:18
L2467843-01	5	Unknown	?	0.0012	1	1	1	0.0061		2024-11-26T07:18:26
WG2002308-3	6	Unknown	?	0.0014	1	1	1	0.0070		2024-11-26T07:19:33
WG2002308-4	7	Unknown	?	0.0004	1	1	1	-0.0003		2024-11-26T07:20:37
L2467843-02	8	Unknown	?	0.0013	1	1	1	0.0069		2024-11-26T07:21:46
L2467852-01	9	Unknown	?	0.0013	1	1	1	0.0063		2024-11-26T07:22:52
WG2002308-5	10	Unknown	?	0.0005	1	1	1	0.0010		2024-11-26T07:23:57
WG2002308-6	11	Unknown	?	0.0007	1	1	1	0.0021		2024-11-26T07:25:04
L2467852-02	12	Unknown	?	0.0010	1	1	1	0.0041		2024-11-26T07:26:09
L2467949-02	13	Unknown	?	0.0036	1	1	1	0.0232		2024-11-26T07:27:15
L2467949-03	14	Unknown	?	0.0010	1	1	1	0.0041		2024-11-26T07:28:19
CCV NO3	15	QC	?	0.0002	1	1	1	-0.0018		2024-11-26T07:29:25
CCV NO2	16	QC	1	0.1406	1	1	1	1.0229		2024-11-26T07:30:30
CCB	17	QC	0	0.0001	1	1	1	-0.0020		2024-11-26T07:31:42
L2468049-01	18	Unknown	?	0.0009	1	1	1	0.0035		2024-11-26T07:32:47
L2468054-01	19	Unknown	?	0.0033	1	1	1	0.0209		2024-11-26T07:33:53
L2468054-02	20	Unknown	?	0.0025	1	1	1	0.0150		2024-11-26T07:34:58
L2468059-01	21	Unknown	?	0.0031	1	1	1	0.0196		2024-11-26T07:36:03
L2468061-01	22	Unknown	?	0.0017	1	1	1	0.0092		2024-11-26T07:37:08
L2468061-02	23	Unknown	?	0.0163	1	1	1	0.1159		2024-11-26T07:38:15
L2468065-01	24	Unknown	?	0.0177	1	1	1	0.1266		2024-11-26T07:39:23
L2468134-02	25	Unknown	?	0.0019	1	1	1	0.0108		2024-11-26T07:40:28
L2468134-04	26	Unknown	?	0.0021	1	1	1	0.0122		2024-11-26T07:41:34
L2468134-07	27	Unknown	?	0.0021	1	1	1	0.0126		2024-11-26T07:42:41
CCV NO3	28	QC	?	0.0002	1	1	1	-0.0018		2024-11-26T07:43:49
CCV NO2	29	QC	1	0.1391	1	1	1	1.0120		2024-11-26T07:44:52
CCB	30	QC	0	0.0001	1	1	1	-0.0020		2024-11-26T07:46:04
L2468203-01	31	Unknown	?	0.0235	1	1	1	0.1685		2024-11-26T07:47:11
L2468203-02	32	Unknown	?	0.0010	1	1	1	0.0042		2024-11-26T07:48:19

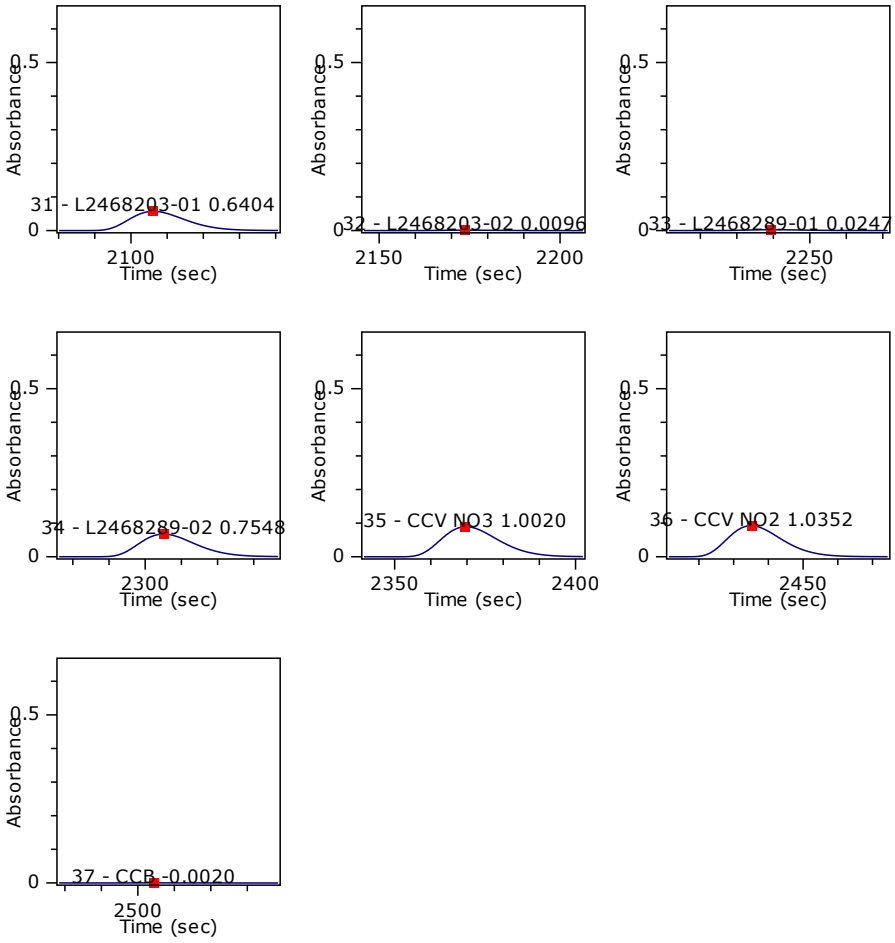
Name	Inj. No.	Type	Known Conc. mg/L	Response	MDF	ADF	Weight	Calc. Conc. mg/L	Flags	Time
L2468289-01	33	Unknown	?	0.0023	1	1	1	0.0141		2024-11-26T07:49:25
L2468289-02	34	Unknown	?	0.0213	1	1	1	0.1525		2024-11-26T07:50:30
CCV NO3	35	QC	?	0.0001	1	1	1	-0.0019		2024-11-26T07:51:35
CCV NO2	36	QC	1	0.1391	1	1	1	1.0119		2024-11-26T07:52:41
CCB	37	QC	0	0.0001	1	1	1	-0.0021		2024-11-26T07:53:53

Peaks:

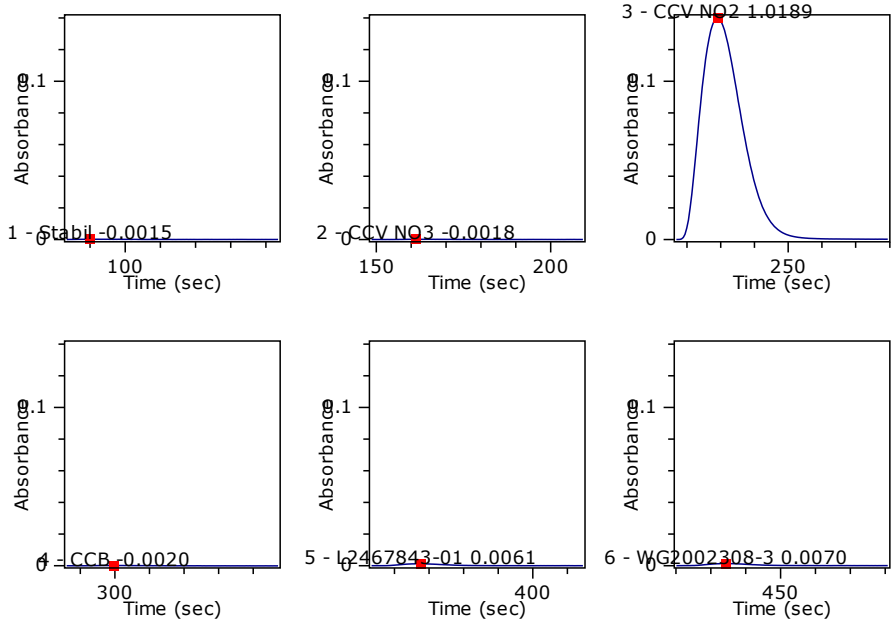
Channel: 1-NOx

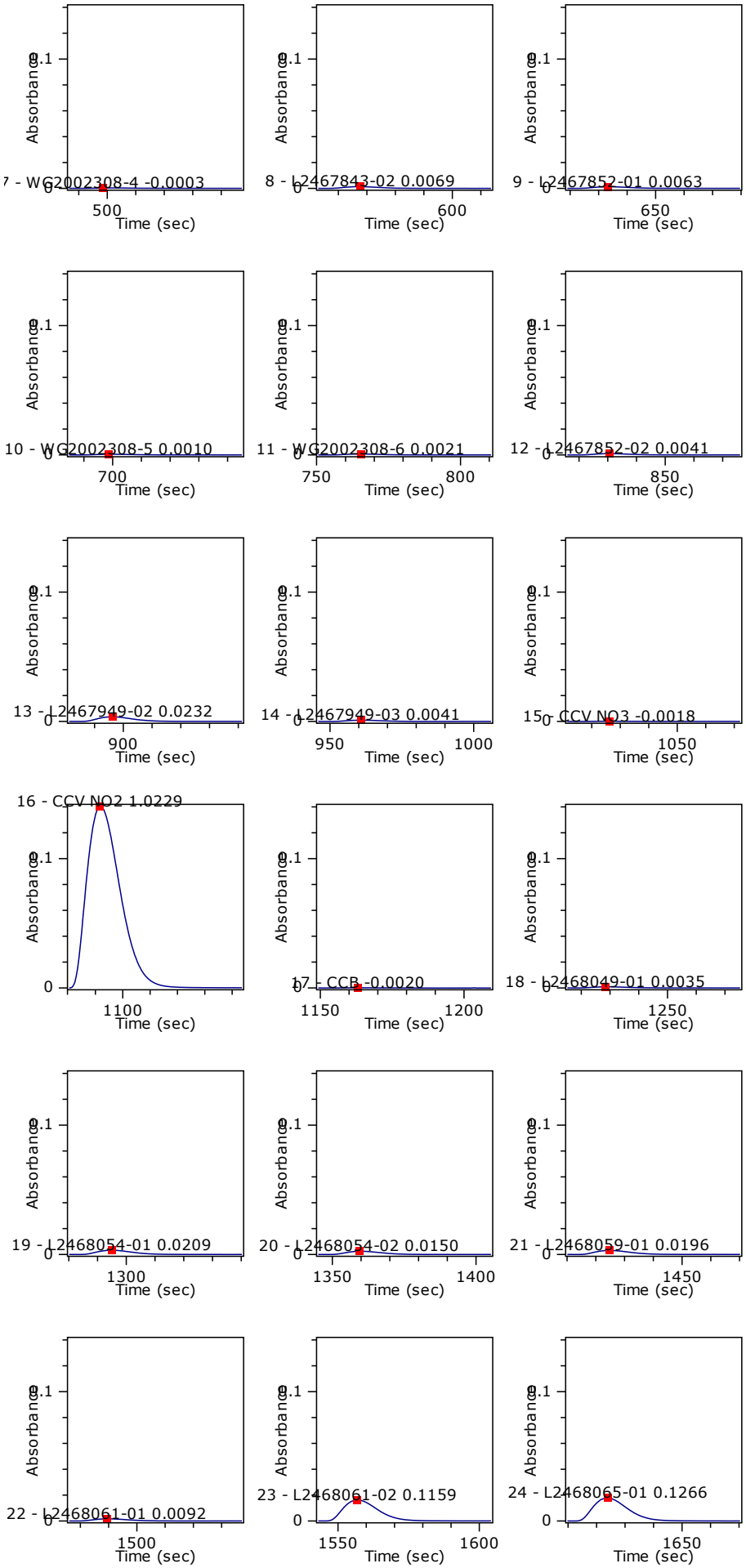


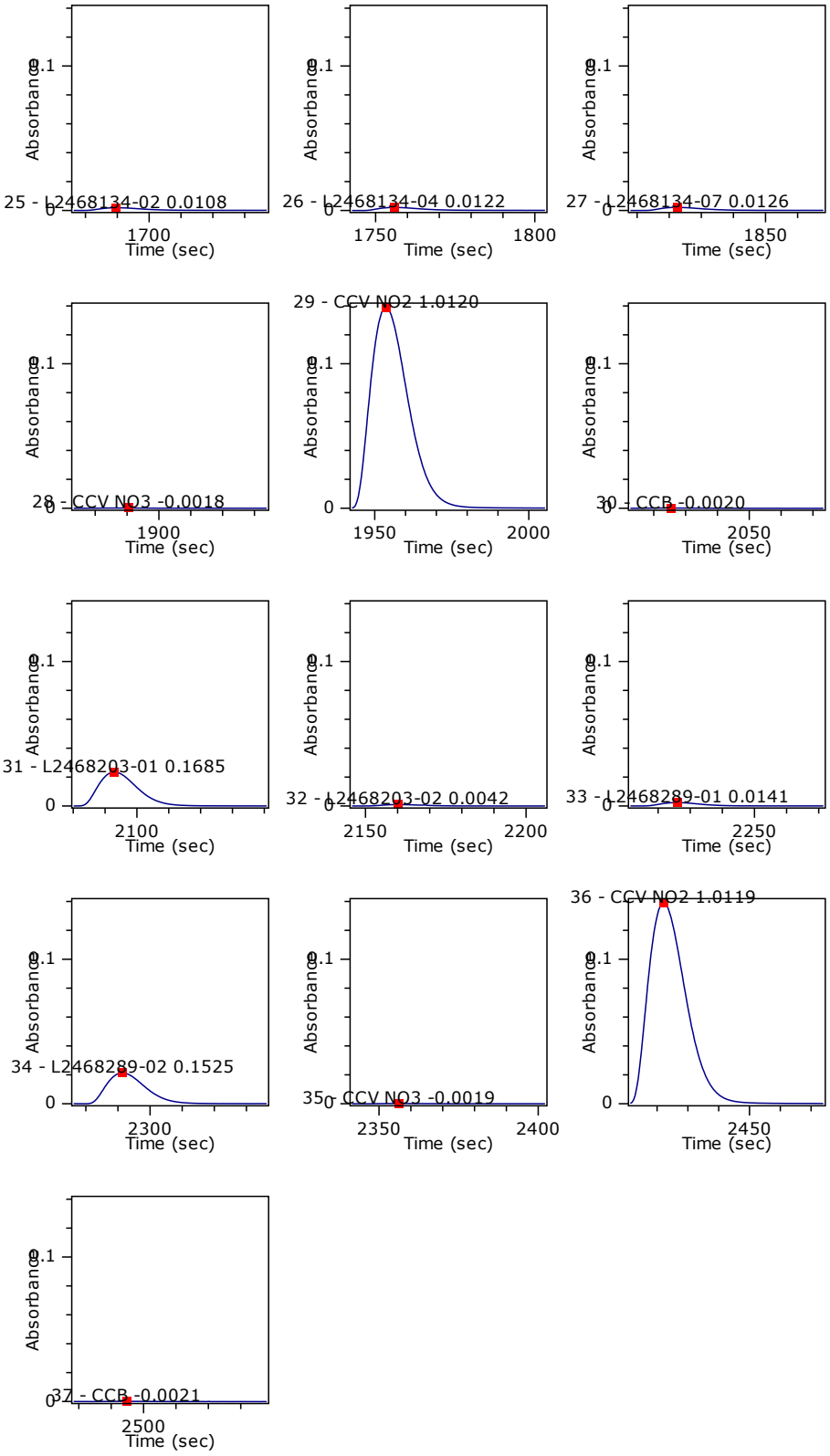

13 - L2467949-02 0.0441
14 - L2467949-03 0.0437
15 - CCV NO3 0.9933
16 - CCV NO2 1.0177
17 - CCB -0.0020
18 - L2468049-01 0.0302
19 - L2468054-01 0.0414
20 - L2468054-02 0.0276
21 - L2468059-01 7.4443
22 - L2468061-01 0.0057
23 - L2468061-02 1.0069
24 - L2468065-01 1.0686
25 - L2468134-02 3.4341
26 - L2468134-04 2.8199
27 - L2468134-07 1.6666
28 - CCV NO3 1.0028
29 - CCV NO2 1.0260
30 - CCB -0.0009
Absorbance
Time (sec)



Channel: 2-NO2




7 - WG2002308-4 -0.0003
8 - L2467843-02 0.0069
9 - L2467852-01 0.0063
10 - WG2002308-5 0.0010
11 - WG2002308-6 0.0021
12 - L2467852-02 0.0041
13 - L2467949-02 0.0232
14 - L2467949-03 0.0041
15 - CCV NO3 -0.0018
16 - CCV NO2 1.0229
17 - CCB -0.0020
18 - L2468049-01 0.0035
19 - L2468054-01 0.0209
20 - L2468054-02 0.0150
21 - L2468059-01 0.0196
22 - L2468061-01 0.0092
23 - L2468061-02 0.1159
24 - L2468065-01 0.1266
Absorbance
Time (sec)



Data Processing Parameters:

Channel: 1-NOx

Response parameter	Peak Height
Filter Type	None
Filter Window	3
Enable Peak Window	False
Peak Window Start	0
Peak Window Stop	0

Enable Baseline Correction	False
Enable 2 Point Correction	False
Baseline Start	0
Baseline Stop	0
Point 2 Baseline Start	0
Point 2 Baseline Stop	0
Background Correction	Single Wavelength
Ref Wavelength 1	600
Ref Wavelength 2	0

Channel: 2-NO2

Response parameter	Peak Height
Filter Type	None
Filter Window	3
Enable Peak Window	False
Peak Window Start	0
Peak Window Stop	0
Enable Baseline Correction	False
Enable 2 Point Correction	False
Baseline Start	0
Baseline Stop	0
Point 2 Baseline Start	0
Point 2 Baseline Stop	0
Background Correction	Single Wavelength
Ref Wavelength 1	600
Ref Wavelength 2	0

Method Log:

```
FIAsoft FIAsoft v3.1.10

FIAlyzer Settings
------------
FIAlab1 Serial Number: FIA31428
FIAlab2 Serial Number: FIA31429
Pump: Connected on COM8

Spectrometer Settings
Spectrometer1
------------
Spectrometer Type: tec5
Integration Time: 3.3
Bandwidth: 2
Data Acq Rate: 2
Use Full Spectrum: False
        |---  Low: 500nm
        |--- High: 650nm
Reduce to Boxcar: True

Spectrometer2
------------
Spectrometer Type: tec5
Integration Time: 3.8
Bandwidth: 2
Data Acq Rate: 2
Use Full Spectrum: False
        |---  Low: 500nm
        |--- High: 650nm
Reduce to Boxcar: True

Start Time
------------
2024-11-26T07:12:19

Method
------------
```

```
' Method Script for NOx-NO2

Autosave Data C:\FIAlab\Autosave Data\DateTime
FIAlab Injection Valve Sample Load
Message Cadmium Column on for NOx
FIAlab Peristaltic Pump Clockwise(%) 55

Autosampler Wash
Delay (sec) 2
Next Sample
Delay (sec) 35  'StartDelay2 - Controls initial sample introduction.

FIAlab1 Injection Valve Sample Inject
Autosampler Probe Up
Delay (sec) 2
Autosampler Position (#) Rinse
FIAlab2 Injection Valve Sample Inject
Delay (sec) 15   'StartDelay3 - Should be set equal to LoopDelay3

Autosampler Probe Up
Delay (sec) 5   'StartDelay4 - Should be set equal to LoopDelay4

Loop Start

   Analyte New Sample
   Delay (sec) 1
   Next Sample
   Autosampler Probe Force Down

   Spectrometer Reference Scan
   Spectrometer Absorbance Scanning

   Delay (sec) 3   ' LoopDelay1 - Controls sample transit & loop empty. Controls back baseline.

   FIAlab Injection Valve Sample Load

   Delay (sec) 35   ' LoopDelay2 - Controls sample transit & loop fill. Controls back baseline.

   FIAlab1 Injection Valve Sample Inject
   Autosampler Probe Up
   Delay (sec) 5
   Autosampler Position (#) Rinse
   FIAlab2 Injection Valve Sample Inject

   Delay (sec) 10   ' LoopDelay3 - Controls loop empty & probe rinse time. Inverse controls front baseline.

   Autosampler Probe Up

   Delay (sec) 3   ' LoopDelay4 - Controls loop empty. Inverse controls front baseline.

   Spectrometer Stop Scanning

Loop End

Autosampler Position (#) Rinse
Delay (sec) 20
Autosampler Probe Up
Delay (sec) 30
FIAlab Peristaltic Pump Clockwise(%) 5
Autoexport Report C:\FIAlab\autoreport\NOxNO2\DateTime
Message Run is Complete
```

Method File Location: C:\FIAlab\FIAlab User Files\Methods\Method_NOx+NO2.fia

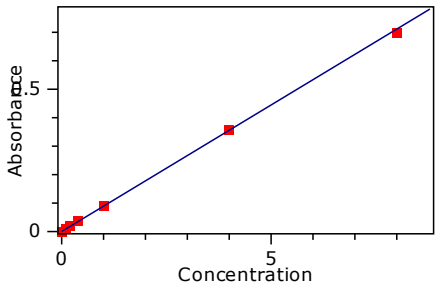
Graphical report generated by FIAsoft v3.1.10
Report generated on 2024-11-26 09:56:56
Data file (.dat): C:\FIAlab\Autosave Data\2024-11-26-095636.dat

Dataset Notes:

Analyst	

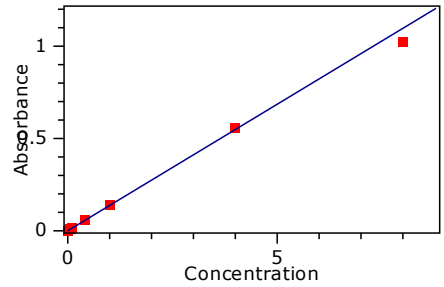
Dataset Notes Table Location: C:\FIAlab\FIAlab User Files\Tables\Dataset Notes\Analyst.csv

Calibrations:



Channel: 1-NOx
Fit_Order: 1
Weighting: 1/response
Standard relation
Coefficients:
A: 0.00029
B: 0.08888
R^2: 0.99983
RSE(%): 1.69071
% Max. for OVR: 100

InjNo	Name	Response	Known Conc. mg/L	Calc. Conc. mg/L	% Error	Time
10001	NOx 8.0ppm	0.69660	8.00000	7.83410	2.07	N/A
10002	NOx 4.0ppm	0.35810	4.00000	4.02590	0.65	N/A
10003	NOx 1.0ppm	0.08930	1.00000	1.00100	0.10	N/A
10004	NOx 0.4ppm	0.03670	0.40000	0.40990	2.49	N/A
10005	NOx 0.2ppm	0.01800	0.20000	0.19870	0.67	N/A
10006	NOx 0.1ppm	0.00920	0.10000	0.09970	0.27	N/A
10007	NOx 0.0ppm	0.00010	0.00000	-0.00260	NA	N/A



Channel: 2-NO2
Fit_Order: 1
Weighting: 1/response
Standard relation
Coefficients:
A: 0.00040
B: 0.13703
R^2: 0.99812
RSE(%): 4.62001
% Max. for OVR: 100

InjNo	Name	Response	Known Conc. mg/L	Calc. Conc. mg/L	% Error	Time
10001	Nitrite 8.0ppm	1.02060	8.00000	7.44540	6.93	N/A
10002	Nitrite 4.0ppm	0.55840	4.00000	4.07210	1.80	N/A
10003	Nitrite 1.0ppm	0.13960	1.00000	1.01580	1.58	N/A
10004	Nitrite 0.4ppm	0.05800	0.40000	0.42050	5.13	N/A
10005	Nitrite 0.1ppm	0.01430	0.10000	0.10170	1.71	N/A
10006	Nitrite 0.05ppm	0.00710	0.05000	0.04920	1.53	N/A
10007	Nitrite 0.0ppm	0.00010	0.00000	-0.00200	NA	N/A

Results:

Channel: 1-NOx

Name	Inj. No.	Type	Known Conc. mg/L	Response	MDF	ADF	Weight	Calc. Conc. mg/L	Flags	Time
Stabil	1	Unknown	?	0.0002	1	1	1	-0.0007		2024-11-26T09:12:19
CCV NO3	2	QC	1	0.0921	1	1	1	1.0331		2024-11-26T09:13:28
CCV NO2	3	QC	?	0.0934	1	1	1	1.0479		2024-11-26T09:14:34
CCB	4	QC	0	0.0001	1	1	1	-0.0022		2024-11-26T09:15:41

Name	Inj. No.	Type	Known Conc. mg/L	Response	MDF	ADF	Weight	Calc. Conc. mg/L	Flags	Time
L2467923-01	5	Unknown	?	0.0066	1	1	1	0.0706		2024-11-26T09:16:51
WG2002310-3	6	Unknown	?	0.0059	1	1	1	0.0626		2024-11-26T09:17:57
WG2002310-4	7	Unknown	?	0.3794	1	1	1	4.2658		2024-11-26T09:19:02
L2467923-02	8	Unknown	?	0.0021	1	1	1	0.0209		2024-11-26T09:20:08
L2467831-02	9	Unknown	?	0.0043	1	1	1	0.0448		2024-11-26T09:21:13
WG2002312-3	10	Unknown	?	0.0035	1	1	1	0.0357		2024-11-26T09:22:18
WG2002312-4	11	Unknown	?	0.3235	1	1	1	3.6369		2024-11-26T09:23:25
L2467831-03	12	Unknown	?	0.4447	1	1	1	4.9996		2024-11-26T09:24:32
L2467934-01	13	Unknown	?	0.0010	1	1	1	0.0082		2024-11-26T09:25:38
L2467934-02	14	Unknown	?	0.0872	1	1	1	0.9782		2024-11-26T09:26:45
CCV NO3	15	QC	1	0.0913	1	1	1	1.0236		2024-11-26T09:27:50
CCV NO2	16	QC	?	0.0931	1	1	1	1.0447		2024-11-26T09:28:56
CCB	17	QC	0	0.0001	1	1	1	-0.0019		2024-11-26T09:30:03
L2467934-03	18	Unknown	?	0.5598	1	1	1	6.2948		2024-11-26T09:31:12
L2467934-04	19	Unknown	?	0.0506	1	1	1	0.5659		2024-11-26T09:32:18
L2467934-05	20	Unknown	?	0.0871	1	1	1	0.9762		2024-11-26T09:33:24
L2467934-06	21	Unknown	?	0.0844	1	1	1	0.9458		2024-11-26T09:34:30
L2467934-07	22	Unknown	?	0.1886	1	1	1	2.1182		2024-11-26T09:35:36
L2467934-08	23	Unknown	?	0.0313	1	1	1	0.3493		2024-11-26T09:36:41
L2467934-09	24	Unknown	?	0.1899	1	1	1	2.1335		2024-11-26T09:37:47
L2468141-01	25	Unknown	?	0.0840	1	1	1	0.9419		2024-11-26T09:38:53
L2468141-02	26	Unknown	?	0.0893	1	1	1	1.0016		2024-11-26T09:39:58
L2468141-03	27	Unknown	?	0.1045	1	1	1	1.1730		2024-11-26T09:41:04
CCV NO3	28	QC	1	0.0905	1	1	1	1.0152		2024-11-26T09:42:09
CCV NO2	29	QC	?	0.0924	1	1	1	1.0367		2024-11-26T09:43:14
CCB	30	QC	0	0.0002	1	1	1	-0.0015		2024-11-26T09:44:23
L2468141-04	31	Unknown	?	0.0877	1	1	1	0.9834		2024-11-26T09:45:34
L2468141-05	32	Unknown	?	0.0627	1	1	1	0.7023		2024-11-26T09:46:42
L2468141-06	33	Unknown	?	0.0655	1	1	1	0.7334		2024-11-26T09:47:48
L2468141-07	34	Unknown	?	0.0622	1	1	1	0.6961		2024-11-26T09:48:55
CCV NO3	35	QC	1	0.0904	1	1	1	1.0141		2024-11-26T09:50:00
CCV NO2	36	QC	?	0.0922	1	1	1	1.0343		2024-11-26T09:51:06
CCB	37	QC	0	0.0001	1	1	1	-0.0024		2024-11-26T09:52:16

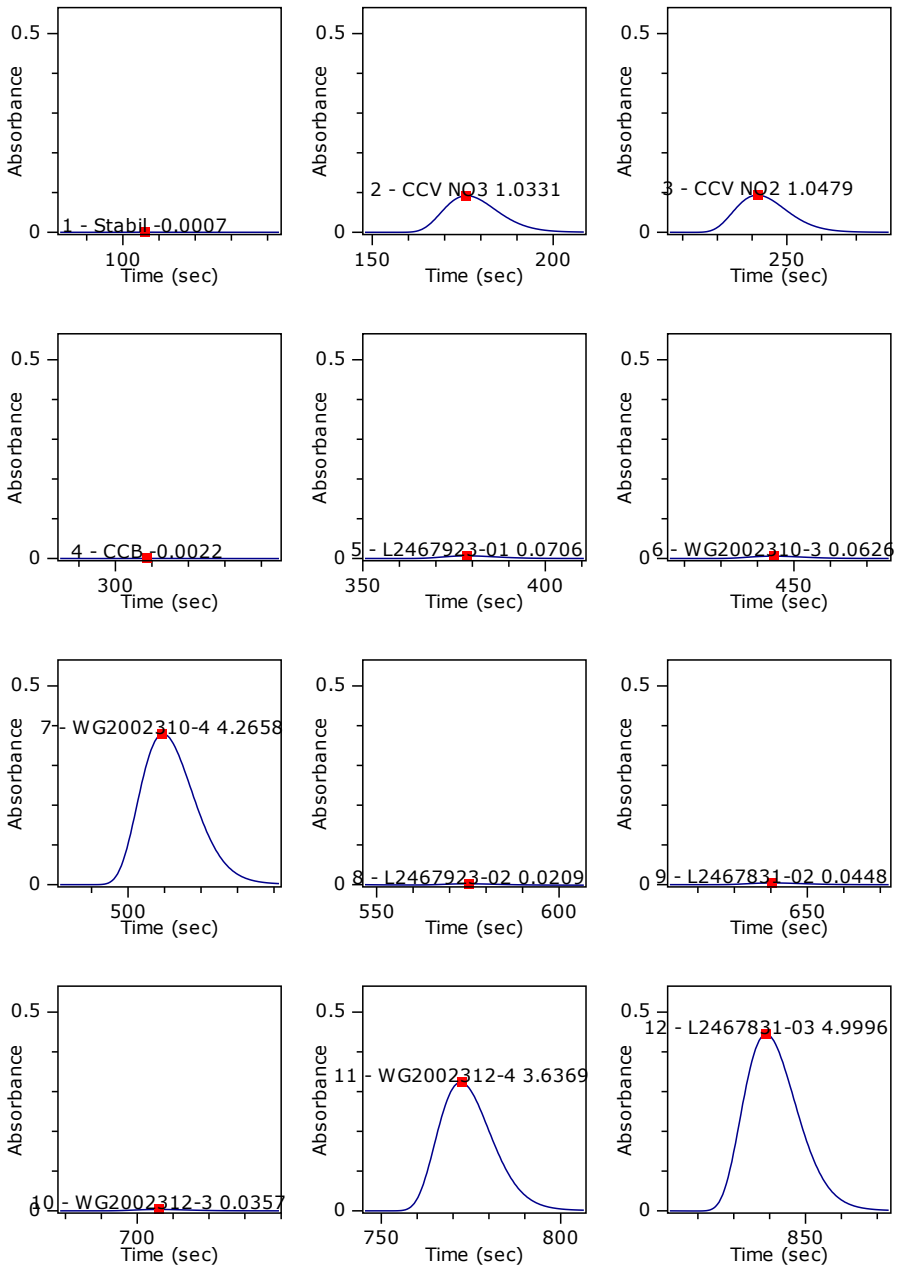
Channel: 2-NO2

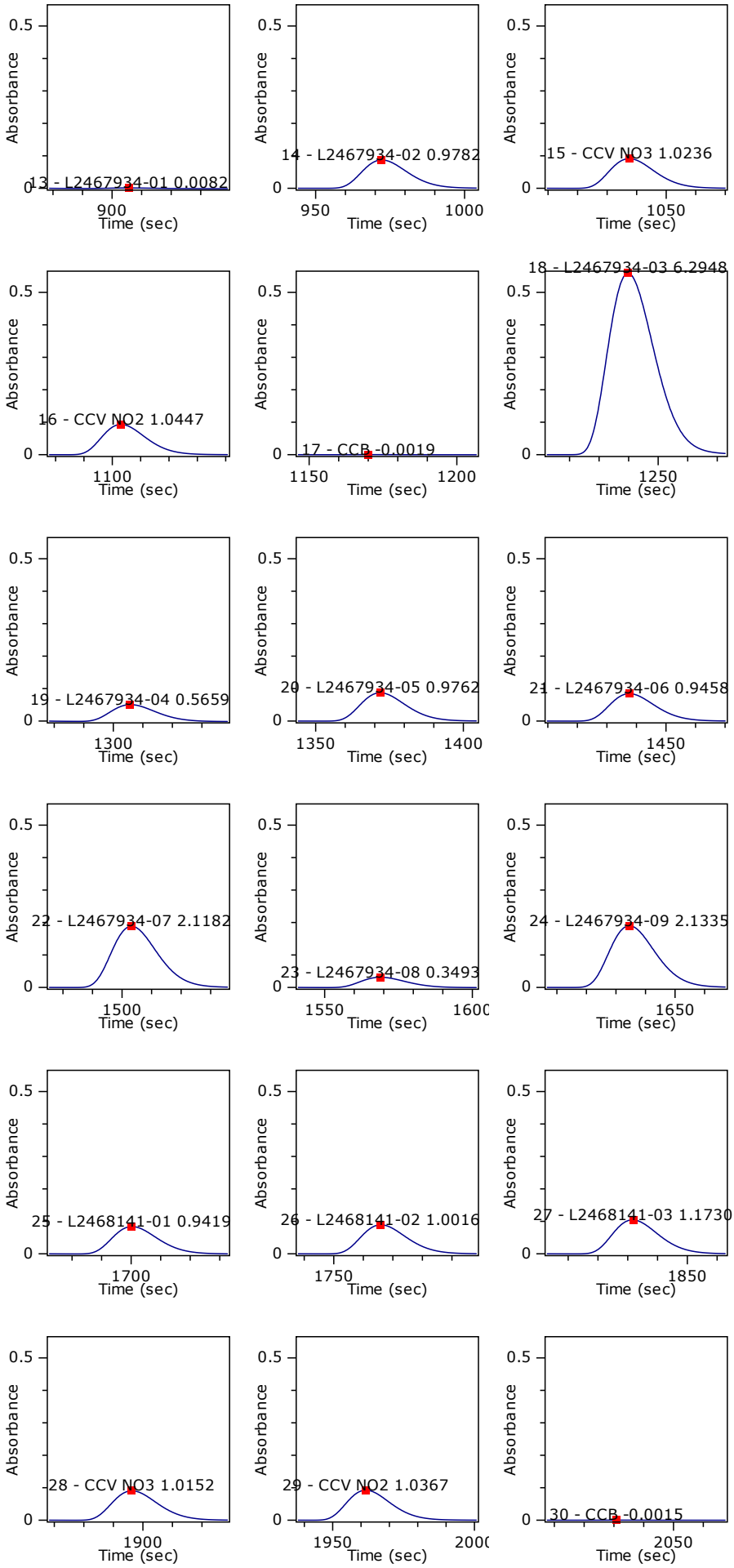
Name	Inj. No.	Type	Known Conc. mg/L	Response	MDF	ADF	Weight	Calc. Conc. mg/L	Flags	Time
Stabil	1	Unknown	?	0.0002	1	1	1	-0.0017		2024-11-26T09:12:04
CCV NO3	2	QC	?	0.0002	1	1	1	-0.0018		2024-11-26T09:13:16
CCV NO2	3	QC	1	0.1401	1	1	1	1.0195		2024-11-26T09:14:21
CCB	4	QC	0	0.0001	1	1	1	-0.0019		2024-11-26T09:15:34
L2467923-01	5	Unknown	?	0.0037	1	1	1	0.0241		2024-11-26T09:16:38
WG2002310-3	6	Unknown	?	0.0031	1	1	1	0.0200		2024-11-26T09:17:43
WG2002310-4	7	Unknown	?	0.0030	1	1	1	0.0193		2024-11-26T09:18:48
L2467923-02	8	Unknown	?	0.0023	1	1	1	0.0135		2024-11-26T09:19:54
L2467831-02	9	Unknown	?	0.0024	1	1	1	0.0146		2024-11-26T09:20:59
WG2002312-3	10	Unknown	?	0.0016	1	1	1	0.0089		2024-11-26T09:22:04
WG2002312-4	11	Unknown	?	0.0018	1	1	1	0.0103		2024-11-26T09:23:12
L2467831-03	12	Unknown	?	0.0022	1	1	1	0.0128		2024-11-26T09:24:19
L2467934-01	13	Unknown	?	0.0012	1	1	1	0.0055		2024-11-26T09:25:26
L2467934-02	14	Unknown	?	0.0009	1	1	1	0.0036		2024-11-26T09:26:32
CCV NO3	15	QC	?	0.0002	1	1	1	-0.0016		2024-11-26T09:27:36
CCV NO2	16	QC	1	0.1403	1	1	1	1.0207		2024-11-26T09:28:43
CCB	17	QC	0	0.0001	1	1	1	-0.0019		2024-11-26T09:29:51
L2467934-03	18	Unknown	?	0.0009	1	1	1	0.0039		2024-11-26T09:30:59
L2467934-04	19	Unknown	?	0.0009	1	1	1	0.0040		2024-11-26T09:32:06
L2467934-05	20	Unknown	?	0.0010	1	1	1	0.0045		2024-11-26T09:33:11
L2467934-06	21	Unknown	?	0.0011	1	1	1	0.0047		2024-11-26T09:34:17
L2467934-07	22	Unknown	?	0.0012	1	1	1	0.0061		2024-11-26T09:35:22
L2467934-08	23	Unknown	?	0.0054	1	1	1	0.0364		2024-11-26T09:36:28
L2467934-09	24	Unknown	?	0.0012	1	1	1	0.0058		2024-11-26T09:37:33
L2468141-01	25	Unknown	?	0.0017	1	1	1	0.0098		2024-11-26T09:38:40
L2468141-02	26	Unknown	?	0.0016	1	1	1	0.0088		2024-11-26T09:39:45
L2468141-03	27	Unknown	?	0.0018	1	1	1	0.0099		2024-11-26T09:40:51
CCV NO3	28	QC	?	0.0001	1	1	1	-0.0019		2024-11-26T09:41:53
CCV NO2	29	QC	1	0.1400	1	1	1	1.0188		2024-11-26T09:43:01
CCB	30	QC	0	0.0002	1	1	1	-0.0015		2024-11-26T09:44:12
L2468141-04	31	Unknown	?	0.0011	1	1	1	0.0048		2024-11-26T09:45:20
L2468141-05	32	Unknown	?	0.0011	1	1	1	0.0049		2024-11-26T09:46:28

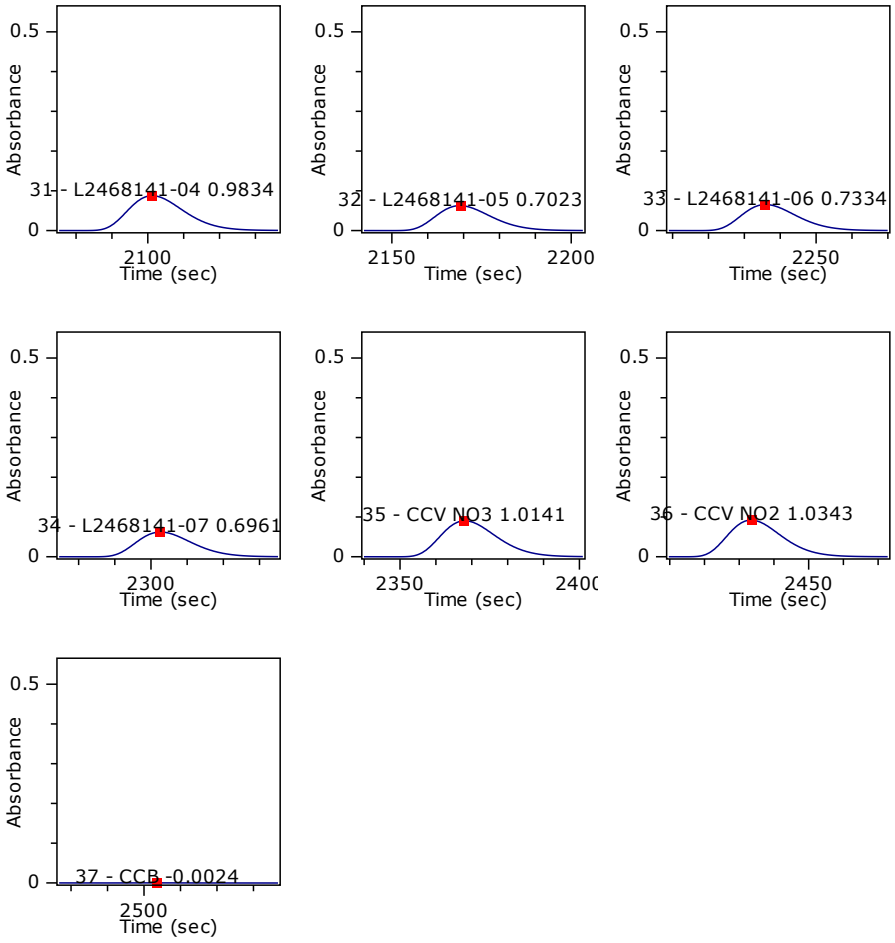
Name	Inj. No.	Type	Known Conc. mg/L	Response	MDF	ADF	Weight	Calc. Conc. mg/L	Flags	Time
L2468141-06	33	Unknown	?	0.0013	1	1	1	0.0062		2024-11-26T09:47:36
L2468141-07	34	Unknown	?	0.0013	1	1	1	0.0064		2024-11-26T09:48:42
CCV NO3	35	QC	?	0.0002	1	1	1	-0.0015		2024-11-26T09:49:49
CCV NO2	36	QC	1	0.1407	1	1	1	1.0241		2024-11-26T09:50:53
CCB	37	QC	0	0.0002	1	1	1	-0.0015		2024-11-26T09:52:05

Peaks:

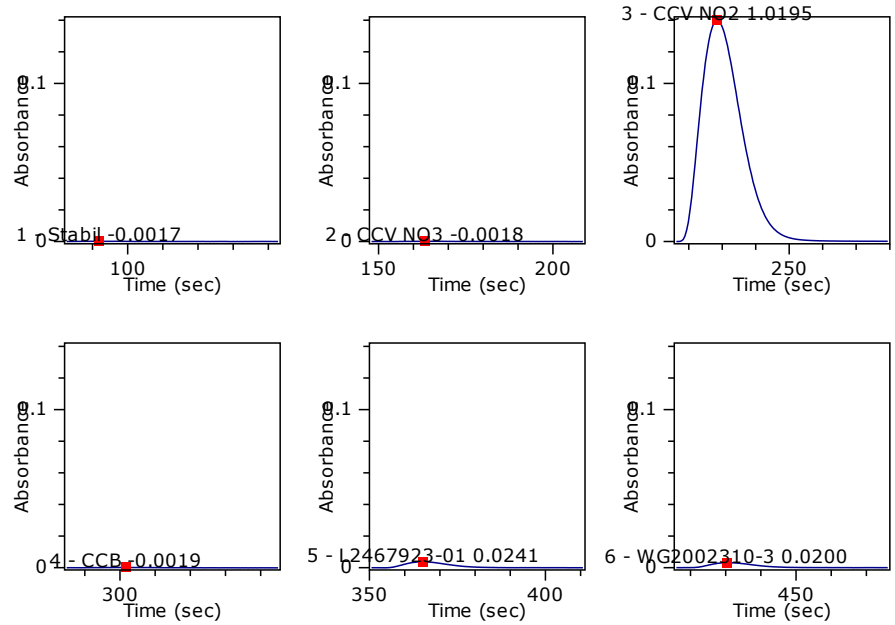
Channel: 1-NOx

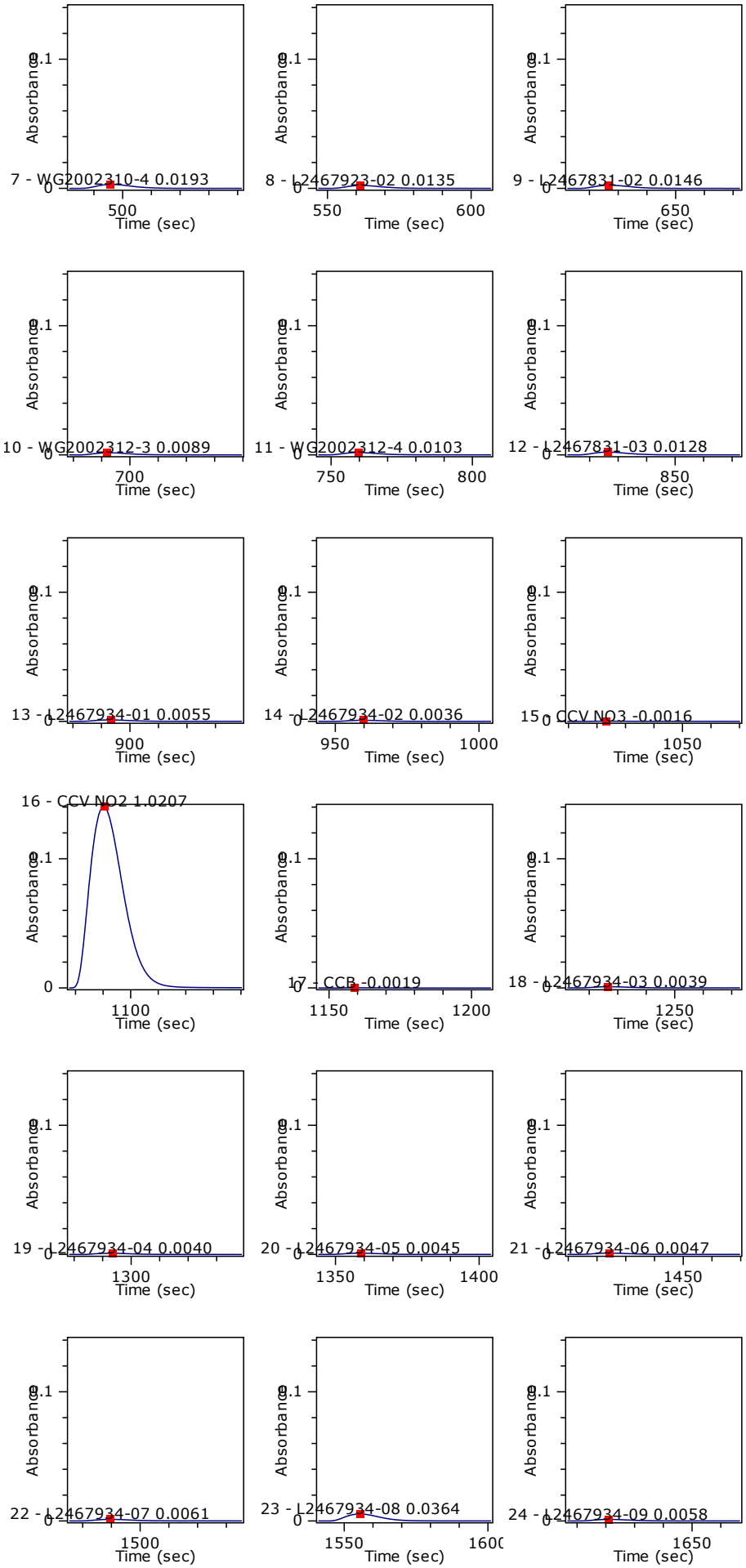


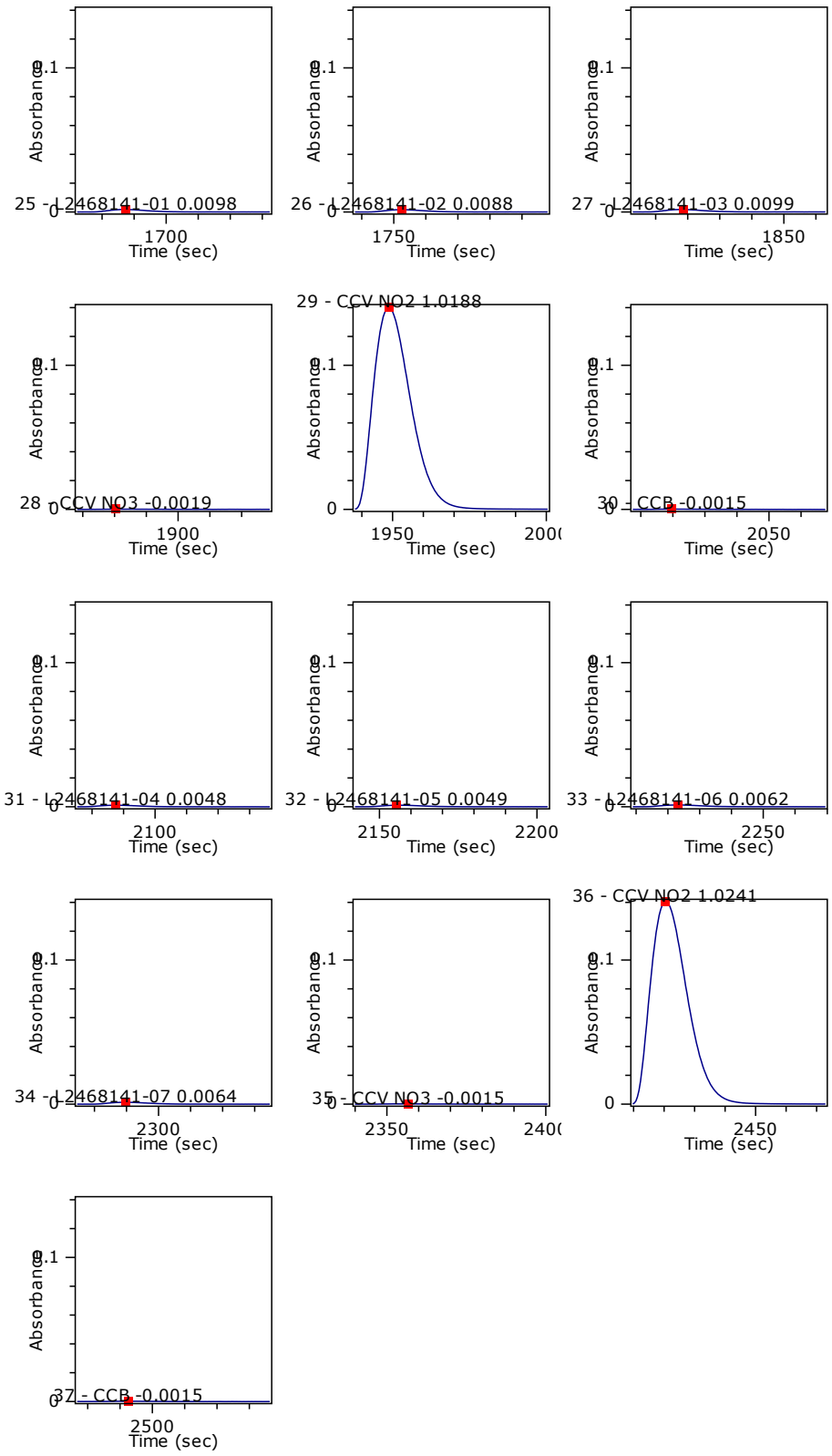

13 - L2467934-01 0.0082
14 - L2467934-02 0.9782
15 - CCV NO3 1.0236
16 - CCV NO2 1.0447
17 - CCB -0.0019
18 - L2467934-03 6.2948
19 - L2467934-04 0.5659
20 - L2467934-05 0.9762
21 - L2467934-06 0.9458
22 - L2467934-07 2.1182
23 - L2467934-08 0.3493
24 - L2467934-09 2.1335
25 - L2468141-01 0.9419
26 - L2468141-02 1.0016
27 - L2468141-03 1.1730
28 - CCV NO3 1.0152
29 - CCV NO2 1.0367
30 - CCB -0.0015
Absorbance
Time (sec)



Channel: 2-NO2




7 - WG2002310-4 0.0193
8 - L2467923-02 0.0135
9 - L2467831-02 0.0146
10 - WG2002312-3 0.0089
11 - WG2002312-4 0.0103
12 - L2467831-03 0.0128
13 - L2467934-01 0.0055
14 - L2467934-02 0.0036
15 - CCV NO3 -0.0016
16 - CCV NO2 1.0207
17 - CCB -0.0019
18 - L2467934-03 0.0039
19 - L2467934-04 0.0040
20 - L2467934-05 0.0045
21 - L2467934-06 0.0047
22 - L2467934-07 0.0061
23 - L2467934-08 0.0364
24 - L2467934-09 0.0058
Absorbance
Time (sec)



Data Processing Parameters:

Channel: 1-NOx

Response parameter	Peak Height
Filter Type	None
Filter Window	3
Enable Peak Window	False
Peak Window Start	0
Peak Window Stop	0

Enable Baseline Correction	False
Enable 2 Point Correction	False
Baseline Start	0
Baseline Stop	0
Point 2 Baseline Start	0
Point 2 Baseline Stop	0
Background Correction	Single Wavelength
Ref Wavelength 1	600
Ref Wavelength 2	0

Channel: 2-NO2

Response parameter	Peak Height
Filter Type	None
Filter Window	3
Enable Peak Window	False
Peak Window Start	0
Peak Window Stop	0
Enable Baseline Correction	False
Enable 2 Point Correction	False
Baseline Start	0
Baseline Stop	0
Point 2 Baseline Start	0
Point 2 Baseline Stop	0
Background Correction	Single Wavelength
Ref Wavelength 1	600
Ref Wavelength 2	0

Method Log:

```
FIAsoft FIAsoft v3.1.10

FIAlyzer Settings
------------
FIAlab1 Serial Number: FIA31428
FIAlab2 Serial Number: FIA31429
Pump: Connected on COM8

Spectrometer Settings
Spectrometer1
------------
Spectrometer Type: tec5
Integration Time: 3.3
Bandwidth: 2
Data Acq Rate: 2
Use Full Spectrum: False
        |---  Low: 500nm
        |--- High: 650nm
Reduce to Boxcar: True

Spectrometer2
------------
Spectrometer Type: tec5
Integration Time: 3.8
Bandwidth: 2
Data Acq Rate: 2
Use Full Spectrum: False
        |---  Low: 500nm
        |--- High: 650nm
Reduce to Boxcar: True

Start Time
------------
2024-11-26T09:10:33

Method
------------
```

```
' Method Script for NOx-NO2

Autosave Data C:\FIAlab\Autosave Data\DateTime
FIAlab Injection Valve Sample Load
Message Cadmium Column on for NOx
FIAlab Peristaltic Pump Clockwise(%) 55

Autosampler Wash
Delay (sec) 2
Next Sample
Delay (sec) 35  'StartDelay2 - Controls initial sample introduction.

FIAlab1 Injection Valve Sample Inject
Autosampler Probe Up
Delay (sec) 2
Autosampler Position (#) Rinse
FIAlab2 Injection Valve Sample Inject
Delay (sec) 15   'StartDelay3 - Should be set equal to LoopDelay3

Autosampler Probe Up
Delay (sec) 5   'StartDelay4 - Should be set equal to LoopDelay4

Loop Start

   Analyte New Sample
   Delay (sec) 1
   Next Sample
   Autosampler Probe Force Down

   Spectrometer Reference Scan
   Spectrometer Absorbance Scanning

   Delay (sec) 3   ' LoopDelay1 - Controls sample transit & loop empty. Controls back baseline.

   FIAlab Injection Valve Sample Load

   Delay (sec) 35   ' LoopDelay2 - Controls sample transit & loop fill. Controls back baseline.

   FIAlab1 Injection Valve Sample Inject
   Autosampler Probe Up
   Delay (sec) 5
   Autosampler Position (#) Rinse
   FIAlab2 Injection Valve Sample Inject

   Delay (sec) 10   ' LoopDelay3 - Controls loop empty & probe rinse time. Inverse controls front baseline.

   Autosampler Probe Up

   Delay (sec) 3   ' LoopDelay4 - Controls loop empty. Inverse controls front baseline.

   Spectrometer Stop Scanning

Loop End

Autosampler Position (#) Rinse
Delay (sec) 20
Autosampler Probe Up
Delay (sec) 30
FIAlab Peristaltic Pump Clockwise(%) 5
Autoexport Report C:\FIAlab\autoreport\NOxNO2\DateTime
Message Run is Complete
```

Method File Location: C:\FIAlab\FIAlab User Files\Methods\Method_NOx+NO2.fia

Quality Control

Form 5a
Matrix Spike

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Client Sample ID	: NA	**Matrix**	: WATER
Lab Sample ID	: L2467831-02		
Matrix Spike	: WG2002312-4	**MS Analysis Date**	: 11/26/24 09:23
Matrix Spike Dup	:	**MSD Analysis Date**	:

		Matrix Spike Sample			Matrix Spike Duplicate					
Parameter	Sample Conc. (mg/l)	Spike Added (mg/l)	Spike Conc. (mg/l)	%R	Spike Added (mg/l)	Spike Conc. (mg/l)	%R	RPD	Recovery Limits	RPD Limit
Nitrogen, Nitrate/Nitrite	ND	4	3.6	90					80-120	20

Form 6
Lab Duplicates

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Client Sample ID	: NA	**Matrix**	: WATER
Lab Sample ID	: NA	**Analysis Date**	: 11/26/24 09:20
Dup Sample ID	: WG2002312-3	**DUP Analysis Date**	: 11/26/24 09:22

Parameter	Sample Concentration (mg/l)	Duplicate Concentration (mg/l)	RPD	RPD Limit
Nitrogen, Nitrate/Nitrite	ND	ND	NC	20

Form 7
Laboratory Control Sample

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Client Sample ID	: NA	**Matrix**	: WATER
Lab Sample ID	: WG2002312-2	**LCS Analysis Date**	: 11/26/24 04:43
Dup Sample ID	:	**LCSD Analysis Date**	:

	Laboratory Control Sample			Laboratory Control Duplicate					
	True	Found	%R	True	Found	%R	RPD	Recovery	RPD
Parameter	(mg/l)	(mg/l)		(mg/l)	(mg/l)			Limits	Limit
Nitrogen, Nitrate/Nitrite	5.00	5.00	100.					90-110	20

Date Created: 11/11/21
Created By: Jason Hebert
File: PM11467-1
Page: 1

WETCHEM (WATER)

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Method	Holding Time	Container/Sample Preservation
Nitrogen, Nitrate	14797-55-8	0.1	0.0228	mg/l	90-110		83-113	6	6	353.2	48 hours	1 - Plastic 250ml unpreserved
Nitrogen, Nitrate	14797-55-8	0.1	0.0228	mg/l	90-110		83-113	17	17	4500NO3-F	48 hours	1 - Plastic 250ml unpreserved
Nitrogen, Nitrite	NONE	0.05	0.0143	mg/l	90-110	20	80-120	20	20	353.2	48 hours	1 - Plastic 250ml unpreserved
Nitrogen, Nitrite	NONE	0.05	0.0143	mg/l	90-110	20	80-120	20	20	4500NO3-F	48 hours	1 - Plastic 250ml unpreserved

Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)
Please Note that the information provided in this table is subject to change at anytime at the discretion of Alpha Analytical, Inc.

Date Created: 11/11/21
Created By: Jason Hebert
File: PM11468-1
Page: 1

WETCHEM (SOIL)

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Method	Holding Time	Container/Sample Preservation
Nitrogen, Nitrate	14797-55-8	1	0.261	mg/kg	90-110	20	80-120	20	20	4500NO3-F	48 hours	1 - Glass 250ml/8oz unpreserved
Nitrogen, Nitrite	NONE	1	0.282	mg/kg	90-110	20	80-120	20	20	4500NO3-F	48 hours	1 - Glass 250ml/8oz unpreserved

Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)
Please Note that the information provided in this table is subject to change at anytime at the discretion of Alpha Analytical, Inc.

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Calculations of Nitrogen, Nitrate

Aqueous Samples:
Compute sample N in NO3 concentration by comparing sample peak areas with standard curve, as determined by the Lachat instrument software.

Calculate results by using reading on Channel 1 (NO3+NO2) and Channel 2 (NO2)

$$NO3\ mg/I = (NO3+NO2)\ mg/L - (NO2)\ mg/L$$

To compute final results for aqueous samples, multiply the direct reading by the dilution factor (also done using software)

$$(NO3)\text{-}N\ mg/L = mg/L\ direct\ reading \times dilution\ factor$$

Calculations of Nitrogen, Nitrite

Aqueous Samples:
Compute sample N in NO2 concentration by comparing sample peak areas with standard curve, as determined by the Lachat instrument software.

Calculate results by using reading on Channel 2 (NO2)

To compute final results for aqueous samples, multiply the direct reading by the dilution factor (also done using software)

$$(NO2)\text{-}N\ mg/L = mg/L\ direct\ reading \times dilution\ factor$$

Sequence Logs

Date:	Initals:	Syringe Lot:	Syringe Lot: 20230620
112624	KAF	Filter Lot:	Filter Lot: 18048470A

Injection #	Rack #	Sample ID:	Comments:
19	RA1	ICV NO3 5	*Buffer: NO3NO2_112224_BUFFER*
20	RA2	ICV NO2 5	*Color: NO3NO2_111924_COLOR*
21	RA3	ICV NO3 0.5	*NO3 MS: NO3_111424_200PPM_CAL*
22	RA4	ICV NO2 0.5	*NO2 MS: NO2_111624_200PPM_CAL*
23	RA5	ICB	*ICV NO3 5: NO3_112624_5PPM_ICV*
24	RA6	5X DILUTER CHECK	*ICV NO2 5: NO2_111624_5PPM_ICV*
25	RA7	BLANK NO3	*ICV NO3 0.5: NO3_112624_0.5PPM_ICV*
26	RA8	LCS NO3	*ICV NO2 0.5: NO2_112624_0.5PPM_ICV*
27	RA9	BLANK NO2	
28	RA10	LCS NO2	*OOH*
32	RA11	WG2002302-1; NO2	*DW*
33	RA12	WG2002302-2; NO2	GOING OOH
34	RA13	WG2002303-1; NO2	FIELD BLANK
35	RA14	WG2002303-2; NO2	
36	RA15	WG2002304/306-1; NO3	
37	RA16	WG2002304/306-2; NO3	
38	RA17	WG2002305/307-1; NO3	
39	RA18	WG2002305/307-2; NO3	
40	RA19	WG2002308-1; CNO3	
41	RA20	WG2002308-2; CNO3	
45	RA21	WG2002310-1; CNO3	
46	RA22	WG2002310-2; CNO3	
47	RA23	WG2002312-1; CNO3	
48	RA24	WG2002312-2; CNO3	
49	RA25	L2469161-13	
50	RA26	L2469161-14	
51	RA27	L2469161-15	
52	RA28	L2469161-16	
53	RA29	L2469161-17	
54	RA30	L2469161-18	
58	RA31	L2469451-01	
59	RA32	WG2002305-3; NO3	
60	RA33	WG2002305-4; NO3	
61	RA34	WG2002303-3; NO2	
62	RA35	WG2002303-4; NO2	
63	RA36	L2469451-02	
64	RA37	L2469451-03	
65	RA38	L2469451-04	
66	RA39	L2469451-05	
67	RA40	L2469451-06	
71	RA41	L2469451-07	
72	RA42	L2469451-08	
73	RA43	L2469452-01	

Injection #	Rack #	Sample ID:	Comments:
74	RA44	WG2002304-3; NO3	
75	RA45	WG2002304-4; NO3	
76	RA46	WG2002302-3; NO2	
77	RA47	WG2002302-4; NO2	
78	RA48	L2469452-02	
79	RA49	L2469452-03	
80	RA50	L2469468-01	
84	RA51	WG2002302-5; NO2	
85	RA52	WG2002302-6; NO2	
86	RA53	L2469416-01	
87	RA54	L2469416-02	
88	RA55	L2469416-03	
89	RA56	L2469416-04	
90	RA57	L2469416-05	
91	RA58	L2469416-06	
92	RA59	L2469416-07	
93	RA60	L2469419-01	
97	RA61	L2469419-02	
98	RA62	L2469430-01	
99	RA63	WG2002306-3; NO3	
100	RA64	WG2002306-4; NO3	
101	RA65	L2469430-02	
102	RA66	L2469430-03	
103	RA67	L2469430-04	
104	RA68	L2469430-05	
105	RA69	L2469430-06	
106	RA70	L2469430-07	
110	RA71	L2469426-01	
111	RA72	WG2002307-3; NO3	
112	RA73	WG2002307-4; NO3	
113	RA74	L2469426-02	
114	RA75	L2469426-03	
5	RA76	L2467843-01	
6	RA77	WG2002308-3; CNO3	
7	RA78	WG2002308-4; CNO3	
8	RA79	L2467843-02	
9	RA80	L2467852-01	
10	RA81	WG2002308-5; CNO3	
11	RA82	WG2002308-6; CNO3	
12	RA83	L2467852-02	
13	RA84	L2467949-02	
14	RA85	L2467949-03	
18	RA86	L2468049-01	
19	RA87	L2468054-01	
20	RA88	L2468054-02	
21	RA89	L2468059-01	

Injection #	Rack #	Sample ID:	Comments:
22	RA90	L2468061-01	
23	RB1	L2468061-02	
24	RB2	L2468065-01	
25	RB3	L2468134-02	
26	RB4	L2468134-04	
27	RB5	L2468134-07	
31	RB6	L2468203-01	
32	RB7	L2468203-02	
33	RB8	L2468289-01	
34	RB9	L2468289-02	
5	RB10	L2467923-01	
6	RB11	WG2002310-3; CNO3	
7	RB12	WG2002310-4; CNO3	
8	RB13	L2467923-02	
9	RB14	L2467831-02	
10	RB15	WG2002312-3; CNO3	
11	RB16	WG2002312-4; CNO3	
12	RB17	L2467831-03	
13	RB18	L2467934-01	
14	RB19	L2467934-02	
18	RB20	L2467934-03	
19	RB21	L2467934-04	
20	RB22	L2467934-05	
21	RB23	L2467934-06	
22	RB24	L2467934-07	
23	RB25	L2467934-08	
24	RB26	L2467934-09	
25	RB27	L2468141-01	
26	RB28	L2468141-02	
27	RB29	L2468141-03	
31	RB30	L2468141-04	
32	RB31	L2468141-05	
33	RB32	L2468141-06	
34	RB33	L2468141-07	

Total Dissolved Solids Analysis

Results

Form 1
WETCHEM

Client	:	**Alpha Geoscience**	**Lab Number**	:	**L2467934**
Project Name	:	**HUNTINGTON READY MIXED**	**Project Number**	:	**20116**
Lab ID	:	**L2467934-01**	**Date Collected**	:	**11/18/24 15:46**
Client ID	:	**MW-1S**	**Date Received**	:	**11/19/24**
Sample Location	:	**SPEONK, NY**	**Date Analyzed**	:	**11/22/24 03:25**
Sample Matrix	:	**WATER**	**Dilution Factor**	:	**1.3**
Analytical Method	:	**121,2540C**	**Analyst**	:	**DEW**
Lab File ID	:	**WG2000844.pdf**	**Instrument ID**	:	**BALANCE#22**
Sample Amount	:		**%Solids**	:	**N/A**
Digestion Method	:		**Date Digested**	:	

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	**Solids, Total Dissolved**	**320**	**13**	**4.0**	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Lab ID	: L2467934-02	**Date Collected**	: 11/18/24 14:33
Client ID	: MW-2S	**Date Received**	: 11/19/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 11/22/24 03:25
Sample Matrix	: WATER	**Dilution Factor**	: 1.3
Analytical Method	: 121,2540C	**Analyst**	: DEW
Lab File ID	: WG2000844.pdf	**Instrument ID**	: BALANCE#22
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	Solids, Total Dissolved	180	13	4.0	

Form 1
WETCHEM

Client	:	**Alpha Geoscience**	**Lab Number**	:	**L2467934**
Project Name	:	**HUNTINGTON READY MIXED**	**Project Number**	:	**20116**
Lab ID	:	**L2467934-03**	**Date Collected**	:	**11/18/24 13:31**
Client ID	:	**MW-3S**	**Date Received**	:	**11/19/24**
Sample Location	:	**SPEONK, NY**	**Date Analyzed**	:	**11/22/24 03:25**
Sample Matrix	:	**WATER**	**Dilution Factor**	:	**1.3**
Analytical Method	:	**121,2540C**	**Analyst**	:	**DEW**
Lab File ID	:	**WG2000844.pdf**	**Instrument ID**	:	**BALANCE#22**
Sample Amount	:		**%Solids**	:	**N/A**
Digestion Method	:		**Date Digested**	:	

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	**Solids, Total Dissolved**	**480**	**13**	**4.0**	

Form 1
WETCHEM

Client	:	**Alpha Geoscience**	**Lab Number**	:	**L2467934**
Project Name	:	**HUNTINGTON READY MIXED**	**Project Number**	:	**20116**
Lab ID	:	**L2467934-04**	**Date Collected**	:	**11/19/24 09:35**
Client ID	:	**MW-4D**	**Date Received**	:	**11/19/24**
Sample Location	:	**SPEONK, NY**	**Date Analyzed**	:	**11/22/24 03:25**
Sample Matrix	:	**WATER**	**Dilution Factor**	:	**1.3**
Analytical Method	:	**121,2540C**	**Analyst**	:	**DEW**
Lab File ID	:	**WG2000844.pdf**	**Instrument ID**	:	**BALANCE#22**
Sample Amount	:		**%Solids**	:	**N/A**
Digestion Method	:		**Date Digested**	:	

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	**Solids, Total Dissolved**	**310**	**13**	**4.0**	

Form 1
WETCHEM

Client	:	**Alpha Geoscience**	**Lab Number**	:	**L2467934**
Project Name	:	**HUNTINGTON READY MIXED**	**Project Number**	:	**20116**
Lab ID	:	**L2467934-05**	**Date Collected**	:	**11/19/24 08:10**
Client ID	:	**MW-5S**	**Date Received**	:	**11/19/24**
Sample Location	:	**SPEONK, NY**	**Date Analyzed**	:	**11/22/24 03:25**
Sample Matrix	:	**WATER**	**Dilution Factor**	:	**1.3**
Analytical Method	:	**121,2540C**	**Analyst**	:	**DEW**
Lab File ID	:	**WG2000844.pdf**	**Instrument ID**	:	**BALANCE#22**
Sample Amount	:		**%Solids**	:	**N/A**
Digestion Method	:		**Date Digested**	:	

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	**Solids, Total Dissolved**	**34.**	**13**	**4.0**	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Lab ID	: L2467934-06	**Date Collected**	: 11/18/24 15:40
Client ID	: MW-6D	**Date Received**	: 11/19/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 11/22/24 03:25
Sample Matrix	: WATER	**Dilution Factor**	: 1.3
Analytical Method	: 121,2540C	**Analyst**	: DEW
Lab File ID	: WG2000844.pdf	**Instrument ID**	: BALANCE#22
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	Solids, Total Dissolved	450	13	4.0	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Lab ID	: L2467934-07	**Date Collected**	: 11/18/24 14:15
Client ID	: MW-7S	**Date Received**	: 11/19/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 11/22/24 03:25
Sample Matrix	: WATER	**Dilution Factor**	: 1.3
Analytical Method	: 121,2540C	**Analyst**	: DEW
Lab File ID	: WG2000844.pdf	**Instrument ID**	: BALANCE#22
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	Solids, Total Dissolved	370	13	4.0	

Form 1
WETCHEM

Client	:	**Alpha Geoscience**	**Lab Number**	:	**L2467934**
Project Name	:	**HUNTINGTON READY MIXED**	**Project Number**	:	**20116**
Lab ID	:	**L2467934-08**	**Date Collected**	:	**11/18/24 16:45**
Client ID	:	**MW-8S**	**Date Received**	:	**11/19/24**
Sample Location	:	**SPEONK, NY**	**Date Analyzed**	:	**11/22/24 03:25**
Sample Matrix	:	**WATER**	**Dilution Factor**	:	**1.3**
Analytical Method	:	**121,2540C**	**Analyst**	:	**DEW**
Lab File ID	:	**WG2000844.pdf**	**Instrument ID**	:	**BALANCE#22**
Sample Amount	:		**%Solids**	:	**N/A**
Digestion Method	:		**Date Digested**	:	

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	**Solids, Total Dissolved**	**240**	**13**	**4.0**	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Lab ID	: L2467934-09	**Date Collected**	: 11/18/24 00:00
Client ID	: DUP	**Date Received**	: 11/19/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 11/22/24 03:25
Sample Matrix	: WATER	**Dilution Factor**	: 1.3
Analytical Method	: 121,2540C	**Analyst**	: DEW
Lab File ID	: WG2000844.pdf	**Instrument ID**	: BALANCE#22
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	Solids, Total Dissolved	360	13	4.0	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Lab ID	: WG2000844-1	**Date Collected**	: NA
Client ID	: WG2000844-1BLANK	**Date Received**	: NA
Sample Location	:	**Date Analyzed**	: 11/22/24 03:25
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,2540C	**Analyst**	: DEW
Lab File ID	: WG2000844.pdf	**Instrument ID**	: BALANCE#22
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	Solids, Total Dissolved	ND	10	3.1	U

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Lab ID	: WG2000844-3	**Date Collected**	: 11/19/24 09:55
Client ID	: WG2000844-3 DUP	**Date Received**	: 11/19/24
Sample Location	:	**Date Analyzed**	: 11/22/24 03:25
Sample Matrix	: WATER	**Dilution Factor**	: 2
Analytical Method	: 121,2540C	**Analyst**	: DEW
Lab File ID	: WG2000844.pdf	**Instrument ID**	: BALANCE#22
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	Solids, Total Dissolved	1000	20	6.1	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Lab ID	: WG2000844-4	**Date Collected**	: 11/19/24 09:00
Client ID	: WG2000844-4 DUP	**Date Received**	: 11/19/24
Sample Location	:	**Date Analyzed**	: 11/22/24 03:25
Sample Matrix	: WATER	**Dilution Factor**	: 1.3
Analytical Method	: 121,2540C	**Analyst**	: DEW
Lab File ID	: WG2000844.pdf	**Instrument ID**	: BALANCE#22
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	Solids, Total Dissolved	650	13	4.0	

Sample Raw Data

Wet Chemistry Gravimetric ELN

Printed: NOV-23-24 02:19:58

WorkGroup	WG2000844	**Temp In (C)**	180	**Temp In (C)**	180	**Temp In (C)**	180	**Temp In (C)**		**Temp In (C)**					
Title	Solids, Total Dissolved	**Temp Out (C)**	180	**Temp Out (C)**	180	**Temp Out (C)**	180	**Temp Out (C)**		**Temp Out (C)**					
Method	SM2540C	**Time In**	22-NOV-24 15:30	**Time In**	22-NOV-24 20:05	**Time In**	23-NOV-24 00:00	**Time In**		**Time In**					
Instrument	BALANCE#22	**Time Out**	22-NOV-24 18:45	**Time Out**	22-NOV-24 22:05	**Time Out**	23-NOV-24 01:02	**Time Out**		**Time Out**					

Evaporation	**Temp In (C)**	**Time In**
	90	22-NOV-24 06:00

LCS Lot #	**TrueValue**	**Units**
103024D	500	mg/l

Sample #	Analysis Date	Analyst	Cup ID	Filter Lot	Tare Weight (gm)	Sample Volume (ml)	Net Weight (1) (gm)	Net Weight (2) (gm)	Net Weight (3) (gm)	Net Weight (4) (gm)	Net Weight (5) (gm)	Result mg/L	Dil	Comment
L2467934-01	22-NOV-24 03:25	DEB WHELAN	B45	78981823	64.4922	80	64.5179	64.5183				321.25	1.3	
L2467934-02	22-NOV-24 03:25	DEB WHELAN	M	78981823	63.6037	80	63.6185	63.6198	63.6197			185.00	1.3	
L2467934-03	22-NOV-24 03:25	DEB WHELAN	EX	78981823	66.3892	80	66.4278	66.4279				482.50	1.3	
L2467934-04	22-NOV-24 03:25	DEB WHELAN	W44	78981823	72.6527	80	72.6777	72.678				312.50	1.3	
L2467934-05	22-NOV-24 03:25	DEB WHELAN	H8	78981823	64.2329	80	64.2356	64.2367	64.2367			33.75	1.3	
L2467934-06	22-NOV-24 03:25	DEB WHELAN	BUG	78981823	106.8127	80	106.849	106.8494				453.75	1.3	
L2467934-07	22-NOV-24 03:25	DEB WHELAN	AD2	78981823	128.8174	80	128.8469	128.8472				368.75	1.3	
L2467934-08	22-NOV-24 03:25	DEB WHELAN	PW	78981823	134.8315	80	134.8505	134.8509				237.50	1.3	
L2467934-09	22-NOV-24 03:25	DEB WHELAN	XY	78981823	136.4018	80	136.4305	136.4315	136.4316			358.75	1.3	
L2467994-01	22-NOV-24 03:25	DEB WHELAN	PS	78981823	135.3978	50	135.4484	135.4507	135.4507			1012.00	2	
L2467994-02	22-NOV-24 03:25	DEB WHELAN	OG	78981823	138.4977	80	138.5455	138.5476	138.5477			597.50	1.3	
L2467994-03	22-NOV-24 03:25	DEB WHELAN	RB	78981823	137.8861	50	137.9523	137.9562	137.9558			1324.00	2	
L2467994-04	22-NOV-24 03:25	DEB WHELAN	XM	78981823	128.4576	50	128.4915	128.4946	128.4945			678.00	2	
L2467994-05	22-NOV-24 03:25	DEB WHELAN	RG	78981823	137.1761	80	137.2315	137.2341	137.234			692.50	1.3	
L2467994-06	22-NOV-24 03:25	DEB WHELAN	SW	78981823	130.1521	80	130.174	130.1771	130.1768			273.75	1.3	
L2467994-07	22-NOV-24 03:25	DEB WHELAN	XE	78981823	139.0528	80	139.0759	139.0785	139.0784			288.75	1.3	
L2467994-08	22-NOV-24 03:25	DEB WHELAN	OW	78981823	144.0761	80	144.1511	144.1525	144.1522			937.50	1.3	
L2467994-09	22-NOV-24 03:25	DEB WHELAN	LN	78981823	147.3847	80	147.4114	147.4143	147.4142			333.75	1.3	
L2467994-10	22-NOV-24 03:25	DEB WHELAN	BQ	78981823	147.4007	80	147.4188	147.4222	147.4218			226.25	1.3	
L2467994-11	22-NOV-24 03:25	DEB WHELAN	MB	78981823	142.4255	80	142.4746	142.4768	142.4767			613.75	1.3	
WG2000844-1	22-NOV-24 03:25	DEB WHELAN	A	78981823	56.8267	100	56.8269	56.8268				1.00	1	
WG2000844-2	22-NOV-24 03:25	DEB WHELAN	F	78981823	59.1972	50	59.2217	59.2214				484.00	2	
WG2000844-3	22-NOV-24 03:25	DEB WHELAN	RA	78981823	73.4409	50	73.4926	73.4929				1034.00	2	

Alpha Analytical

Wet Chemistry Gravimetric ELN

Printed: NOV-23-24 02:19:58

WorkGroup	WG2000844	**Temp In (C)**	180	**Temp In (C)**	180	**Temp In (C)**	180	**Temp In (C)**		**Temp In (C)**					
Title	Solids, Total Dissolved	**Temp Out (C)**	180	**Temp Out (C)**	180	**Temp Out (C)**	180	**Temp Out (C)**		**Temp Out (C)**					
Method	SM2540C	**Time In**	22-NOV-24 15:30	**Time In**	22-NOV-24 20:05	**Time In**	23-NOV-24 00:00	**Time In**		**Time In**					
Instrument	BALANCE#22	**Time Out**	22-NOV-24 18:45	**Time Out**	22-NOV-24 22:05	**Time Out**	23-NOV-24 01:02	**Time Out**		**Time Out**					

Temp In (C)	**Time In**
90	22-NOV-24 06:00

LCS Lot #	**TrueValue**	**Units**
103024D	500	mg/l

Sample #	**Analysis Date**	**Analyst**	**Cup ID**			**Sample Volume (ml)**					**Result mg/L**	**Dil**	**Comment**
WG2000844-4	22-NOV-24 03:25	DEB WHELAN	CH	78981823	67.3066	80	67.3584	67.3586			647.50	1.3	

Quality Control

Form 6
Lab Duplicates

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Client Sample ID	: NA	**Matrix**	: WATER
Lab Sample ID	: NA	**Analysis Date**	: 11/22/24 03:25
Dup Sample ID	: WG2000844-3	**DUP Analysis Date**	: 11/22/24 03:25

Parameter	Sample Concentration (mg/l)	Duplicate Concentration (mg/l)	RPD	RPD Limit
Solids, Total Dissolved	1000	1000	0	10

Form 6
Lab Duplicates

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Client Sample ID	: NA	**Matrix**	: WATER
Lab Sample ID	: NA	**Analysis Date**	: 11/22/24 03:25
Dup Sample ID	: WG2000844-4	**DUP Analysis Date**	: 11/22/24 03:25

Parameter	Sample Concentration (mg/l)	Duplicate Concentration (mg/l)	RPD	RPD Limit
Solids, Total Dissolved	600	650	8	10

Form 7
Laboratory Control Sample

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Client Sample ID	: NA	**Matrix**	: WATER
Lab Sample ID	: WG2000844-2	**LCS Analysis Date**	: 11/22/24 03:25
Dup Sample ID	:	**LCSD Analysis Date**	:

	Laboratory Control Sample			Laboratory Control Duplicate					
	True	Found	%R	True	Found	%R	RPD	Recovery	RPD
Parameter	(mg/l)	(mg/l)		(mg/l)	(mg/l)			Limits	Limit
Solids, Total Dissolved	500.	480.	97.					80-120	10

Date Created: 11/11/21
Created By: Jason Hebert
File: PM11467-1
Page: 1

WETCHEM (WATER)

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Method	Holding Time	Container/Sample Preservation
Solids, Total Dissolved	NONE	10	3.07	mg/l	80-120			10	10	2540C	7 days	1 - Plastic 500ml unpreserved

Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)
Please Note that the information provided in this table is subject to change at anytime at the discretion of Alpha Analytical, Inc.

Calculations of TDS

$$\text{mgTDS/L} = \frac{(A - B) \times 1000}{\text{Sample volume, (L)}}$$

Where:

A = Final weight (weight of dish + dried residue, g)
B = Initial weight (weight of clean dish, g)

Alkalinity Analysis

Results

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Lab ID	: L2467934-02	**Date Collected**	: 11/18/24 14:33
Client ID	: MW-2S	**Date Received**	: 11/19/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 11/22/24 21:03
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,2320B	**Analyst**	: MKT
Lab File ID	: 241122-1	**Instrument ID**	: TITR5
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg CaCO3/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
3812-32-6	Alkalinity, Carbonate	ND	2.00	NA	U
71-52-3	Alkalinity, Bicarbonate	136.	2.00	NA	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Lab ID	: L2467934-03	**Date Collected**	: 11/18/24 13:31
Client ID	: MW-3S	**Date Received**	: 11/19/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 11/22/24 21:07
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,2320B	**Analyst**	: MKT
Lab File ID	: 241122-1	**Instrument ID**	: TITR5
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg CaCO3/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
3812-32-6	Alkalinity, Carbonate	ND	2.00	NA	U
71-52-3	Alkalinity, Bicarbonate	93.9	2.00	NA	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Lab ID	: L2467934-04	**Date Collected**	: 11/19/24 09:35
Client ID	: MW-4D	**Date Received**	: 11/19/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 11/22/24 21:10
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,2320B	**Analyst**	: MKT
Lab File ID	: 241122-1	**Instrument ID**	: TITR5
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg CaCO3/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
3812-32-6	Alkalinity, Carbonate	ND	2.00	NA	U
71-52-3	Alkalinity, Bicarbonate	48.4	2.00	NA	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Lab ID	: L2467934-05	**Date Collected**	: 11/19/24 08:10
Client ID	: MW-5S	**Date Received**	: 11/19/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 11/22/24 21:15
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,2320B	**Analyst**	: MKT
Lab File ID	: 241122-1	**Instrument ID**	: TITR5
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg CaCO3/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
3812-32-6	Alkalinity, Carbonate	ND	2.00	NA	U
71-52-3	Alkalinity, Bicarbonate	7.32	2.00	NA	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Lab ID	: L2467934-06	**Date Collected**	: 11/18/24 15:40
Client ID	: MW-6D	**Date Received**	: 11/19/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 11/22/24 21:16
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,2320B	**Analyst**	: MKT
Lab File ID	: 241122-1	**Instrument ID**	: TITR5
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg CaCO3/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
3812-32-6	Alkalinity, Carbonate	ND	2.00	NA	U
71-52-3	Alkalinity, Bicarbonate	188.	2.00	NA	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Lab ID	: L2467934-07	**Date Collected**	: 11/18/24 14:15
Client ID	: MW-7S	**Date Received**	: 11/19/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 11/22/24 21:21
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,2320B	**Analyst**	: MKT
Lab File ID	: 241122-1	**Instrument ID**	: TITR5
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg CaCO3/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
3812-32-6	Alkalinity, Carbonate	ND	2.00	NA	U
71-52-3	Alkalinity, Bicarbonate	211.	2.00	NA	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Lab ID	: L2467934-08	**Date Collected**	: 11/18/24 16:45
Client ID	: MW-8S	**Date Received**	: 11/19/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 11/22/24 21:27
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,2320B	**Analyst**	: MKT
Lab File ID	: 241122-1	**Instrument ID**	: TITR5
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg CaCO3/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
3812-32-6	Alkalinity, Carbonate	ND	2.00	NA	U
71-52-3	Alkalinity, Bicarbonate	86.6	2.00	NA	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Lab ID	: L2467934-09	**Date Collected**	: 11/18/24 00:00
Client ID	: DUP	**Date Received**	: 11/19/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 11/22/24 21:30
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,2320B	**Analyst**	: MKT
Lab File ID	: 241122-1	**Instrument ID**	: TITR5
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg CaCO3/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
3812-32-6	Alkalinity, Carbonate	ND	2.00	NA	U
71-52-3	Alkalinity, Bicarbonate	215.	2.00	NA	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Lab ID	: WG2001244-1	**Date Collected**	: NA
Client ID	: WG2001244-1BLANK	**Date Received**	: NA
Sample Location	:	**Date Analyzed**	: 11/22/24 21:39
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,2320B	**Analyst**	: MKT
Lab File ID	: 241122-1	**Instrument ID**	: TITR5
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg CaCO3/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
3812-32-6	Alkalinity, Carbonate	ND	2.00	NA	U
71-52-3	Alkalinity, Bicarbonate	ND	2.00	NA	U

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Lab ID	: WG2001244-3	**Date Collected**	: 11/19/24 09:35
Client ID	: MW-4DDUP	**Date Received**	: 11/19/24
Sample Location	:	**Date Analyzed**	: 11/22/24 21:12
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,2320B	**Analyst**	: MKT
Lab File ID	: 241122-1	**Instrument ID**	: TITR5
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg CaCO3/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
71-52-3	Alkalinity, Bicarbonate	52.7	2.00	NA	
3812-32-6	Alkalinity, Carbonate	ND	2.00	NA	U

Form 1
WETCHEM

Client	:	**Alpha Geoscience**	**Lab Number**	:	**L2467934**
Project Name	:	**HUNTINGTON READY MIXED**	**Project Number**	:	**20116**
Lab ID	:	**L2467934-01**	**Date Collected**	:	**11/18/24 15:46**
Client ID	:	**MW-1S**	**Date Received**	:	**11/19/24**
Sample Location	:	**SPEONK, NY**	**Date Analyzed**	:	**11/22/24 20:59**
Sample Matrix	:	**WATER**	**Dilution Factor**	:	**1**
Analytical Method	:	**121,2320B**	**Analyst**	:	**MRM**
Lab File ID	:	**WG2001324.csv**	**Instrument ID**	:	
Sample Amount	:		**%Solids**	:	**N/A**
Digestion Method	:		**Date Digested**	:	

		mg CaCO3/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
3812-32-6	**Alkalinity, Carbonate**	**18.7**	**2.00**	**NA**	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Lab ID	: WG2001324-1	**Date Collected**	: NA
Client ID	: WG2001324-1BLANK	**Date Received**	: NA
Sample Location	:	**Date Analyzed**	: 11/22/24 20:59
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,2320B	**Analyst**	: MRM
Lab File ID	: WG2001324.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg CaCO3/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
3812-32-6	Alkalinity, Carbonate	ND	2.00	NA	U

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Lab ID	: WG2001324-2	**Date Collected**	: 11/08/24 00:00
Client ID	: WG2001324-2 DUP	**Date Received**	: 11/08/24
Sample Location	:	**Date Analyzed**	: 11/22/24 20:59
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,2320B	**Analyst**	: MRM
Lab File ID	: WG2001324.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg CaCO3/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
3812-32-6	Alkalinity, Carbonate	ND	2.00	NA	U

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Lab ID	: L2467934-01	**Date Collected**	: 11/18/24 15:46
Client ID	: MW-1S	**Date Received**	: 11/19/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 11/22/24 20:59
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,2320B	**Analyst**	: MRM
Lab File ID	: WG2001322.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg CaCO3/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
71-52-3	Alkalinity, Bicarbonate	66.6	2.00	NA	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Lab ID	: WG2001322-1	**Date Collected**	: NA
Client ID	: WG2001322-1BLANK	**Date Received**	: NA
Sample Location	:	**Date Analyzed**	: 11/22/24 20:59
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,2320B	**Analyst**	: MRM
Lab File ID	: WG2001322.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg CaCO3/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
71-52-3	Alkalinity, Bicarbonate	ND	2.00	NA	U

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Lab ID	: WG2001322-2	**Date Collected**	: 11/08/24 00:00
Client ID	: WG2001322-2 DUP	**Date Received**	: 11/08/24
Sample Location	:	**Date Analyzed**	: 11/22/24 20:59
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,2320B	**Analyst**	: MRM
Lab File ID	: WG2001322.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg CaCO3/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
71-52-3	Alkalinity, Bicarbonate	52.7	2.00	NA	

Sample Raw Data

Results Editor

LabX

Result Overview

Sample start t	Zero poin	Unit of Ze	Data marl	Slope 1 (C	Unit of Sl	Data marl	Sensor ty	List of sta	Standard	Comment	Temperat
	7.124	pH		-54.57	mV/pH						

Results Editor

Result Overview

Sample ID1	Potentia	Unit of P	Data ma	Sample start	Volume	Unit of V	Density [	Unit of D	Cor	Uni	Tempera	Unit of T	Commer
--	7.02	pH		11/22/2024	0	mL	1.0	g/mL	1.0		25.0	°C	

Titration report

Method

Method ID	Alk Total (2)	**Release state**	Released
Name	EP/EP	**Modified by**	SystemInternal
Modified on	10/14/2023 11:44:43 AM		

Summary

Samples

	Sample ID	Name	Result	State
1	Rinse,MKT	Sample size	50 mL	
		Potential R4	6.89 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	0.888 mL	OK
		Consumption 4.2 R3	0.894 mL	OK
		Content R5	17.760 mg/L	OK
		ALK LOW R6	17.640 mg/L	OK
2	Rinse,MKT	Sample size	50 mL	
		Potential R4	5.19 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	0.042 mL	OK
		Consumption 4.2 R3	0.046 mL	OK
		Content R5	0.840 mg/L	OK
		ALK LOW R6	0.760 mg/L	OK
3	WG2000937-1	Sample size	50 mL	
		Potential R4	5.03 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	0.022 mL	OK
		Consumption 4.2 R3	0.026 mL	OK
		Content R5	0.440 mg/L	OK
		ALK LOW R6	0.360 mg/L	OK
4	WG2000937-2	Sample size	50 mL	
		Potential R4	10.91 pH	OK
		Consumption 8.3 R1	4.799 mL	OK
		Consumption 4.5 R2	5.254 mL	OK
		Consumption 4.2 R3	5.256 mL	OK
		Content R5	105.080 mg/L	OK
		ALK LOW R6	105.040 mg/L	OK
5	I2467709-01	Sample size	50 mL	
		Potential R4	5.99 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	17.748 mL	OK
		Consumption 4.2 R3	17.939 mL	OK
		Content R5	354.960 mg/L	OK
		ALK LOW R6	351.140 mg/L	OK
6	I2467709-02	Sample size	50 mL	

Titration report

		Potential R4	6.14 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	13.084 mL	OK
		Consumption 4.2 R3	13.210 mL	OK
		Content R5	261.680 mg/L	OK
		ALK LOW R6	259.160 mg/L	OK
7	I2467709-03	Sample size	50 mL	
		Potential R4	6.42 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	13.302 mL	OK
		Consumption 4.2 R3	13.462 mL	OK
		Content R5	266.040 mg/L	OK
		ALK LOW R6	262.840 mg/L	OK
8	I2467709-04	Sample size	50 mL	
		Potential R4	6.26 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	18.461 mL	OK
		Consumption 4.2 R3	18.677 mL	OK
		Content R5	369.220 mg/L	OK
		ALK LOW R6	364.900 mg/L	OK
9	I2467709-05	Sample size	50 mL	
		Potential R4	6.81 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	NaN mL	Not OK
		Consumption 4.2 R3	NaN mL	Not OK
		Content R5	NaN mg/L	Not OK
		ALK LOW R6	NaN mg/L	Not OK
10	I2467585-07	Sample size	50 mL	
		Potential R4	7.57 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	6.547 mL	OK
		Consumption 4.2 R3	6.593 mL	OK
		Content R5	130.940 mg/L	OK
		ALK LOW R6	130.020 mg/L	OK
11	I2467892-01	Sample size	50 mL	
		Potential R4	5.82 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	11.559 mL	OK
		Consumption 4.2 R3	11.693 mL	OK
		Content R5	231.180 mg/L	OK
		ALK LOW R6	228.500 mg/L	OK
12	I2467892-02	Sample size	50 mL	
		Potential R4	5.66 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	6.288 mL	OK
		Consumption 4.2 R3	6.378 mL	OK
		Content R5	125.760 mg/L	OK

Titration report

		ALK LOW R6	123.960 mg/L	OK
13	I2467892-03	Sample size	50 mL	
		Potential R4	5.94 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	8.832 mL	OK
		Consumption 4.2 R3	8.928 mL	OK
		Content R5	176.640 mg/L	OK
		ALK LOW R6	174.720 mg/L	OK
14	I2467892-04	Sample size	50 mL	
		Potential R4	5.95 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	16.135 mL	OK
		Consumption 4.2 R3	16.374 mL	OK
		Content R5	322.700 mg/L	OK
		ALK LOW R6	317.920 mg/L	OK
15	I2467892-05	Sample size	50 mL	
		Potential R4	5.81 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	8.426 mL	OK
		Consumption 4.2 R3	8.545 mL	OK
		Content R5	168.520 mg/L	OK
		ALK LOW R6	166.140 mg/L	OK
16	I2467901-01	Sample size	50 mL	
		Potential R4	6.12 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	NaN mL	Not OK
		Consumption 4.2 R3	NaN mL	Not OK
		Content R5	NaN mg/L	Not OK
		ALK LOW R6	NaN mg/L	Not OK
17	I2467901-02	Sample size	50 mL	
		Potential R4	6.54 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	16.345 mL	OK
		Consumption 4.2 R3	16.527 mL	OK
		Content R5	326.900 mg/L	OK
		ALK LOW R6	323.260 mg/L	OK
18	I2467901-03	Sample size	50 mL	
		Potential R4	6.43 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	NaN mL	Not OK
		Consumption 4.2 R3	NaN mL	Not OK
		Content R5	NaN mg/L	Not OK
		ALK LOW R6	NaN mg/L	Not OK
19	I2467901-04	Sample size	50 mL	
		Potential R4	6.57 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	17.838 mL	OK

Titration report

		Consumption 4.2 R3	18.068 mL	OK
		Content R5	356.760 mg/L	OK
		ALK LOW R6	352.160 mg/L	OK
20	I2467901-05	Sample size	50 mL	
		Potential R4	6.21 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	15.486 mL	OK
		Consumption 4.2 R3	15.655 mL	OK
		Content R5	309.720 mg/L	OK
		ALK LOW R6	306.340 mg/L	OK
21	WG2000937-3	Sample size	50 mL	
		Potential R4	6.37 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	15.460 mL	OK
		Consumption 4.2 R3	15.634 mL	OK
		Content R5	309.200 mg/L	OK
		ALK LOW R6	305.720 mg/L	OK
22	WG2000937-4	Sample size	50 mL	
		Potential R4	6.95 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	19.082 mL	OK
		Consumption 4.2 R3	NaN mL	Not OK
		Content R5	381.640 mg/L	OK
		ALK LOW R6	NaN mg/L	Not OK
23	I2467901-06	Sample size	50 mL	
		Potential R4	6.23 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	12.869 mL	OK
		Consumption 4.2 R3	13.043 mL	OK
		Content R5	257.380 mg/L	OK
		ALK LOW R6	253.900 mg/L	OK
24	I2467975-01	Sample size	50 mL	
		Potential R4	5.82 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	5.492 mL	OK
		Consumption 4.2 R3	5.564 mL	OK
		Content R5	109.840 mg/L	OK
		ALK LOW R6	108.400 mg/L	OK
25	I2467975-02	Sample size	50 mL	
		Potential R4	5.52 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	1.880 mL	OK
		Consumption 4.2 R3	1.895 mL	OK
		Content R5	37.600 mg/L	OK
		ALK LOW R6	37.300 mg/L	OK
26	I2467975-03	Sample size	50 mL	
		Potential R4	5.72 pH	OK

Titration report

		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	7.081 mL	OK
		Consumption 4.2 R3	7.246 mL	OK
		Content R5	141.620 mg/L	OK
		ALK LOW R6	138.320 mg/L	OK
27	L2467709-05 2x+10	Sample size	50 mL	
		Potential R4	6.44 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	NaN mL	Not OK
		Consumption 4.2 R3	NaN mL	Not OK
		Content R5	NaN mg/L	Not OK
		ALK LOW R6	NaN mg/L	Not OK
28	L2467901-01 2x+10	Sample size	50 mL	
		Potential R4	6.08 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	7.856 mL	OK
		Consumption 4.2 R3	8.084 mL	OK
		Content R5	157.120 mg/L	OK
		ALK LOW R6	152.560 mg/L	OK
29	L2467901-03 2x+10	Sample size	50 mL	
		Potential R4	5.60 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	4.401 mL	OK
		Consumption 4.2 R3	4.527 mL	OK
		Content R5	88.020 mg/L	OK
		ALK LOW R6	85.500 mg/L	OK
30	WG2001084-2	Sample size	50 mL	
		Potential R4	10.98 pH	OK
		Consumption 8.3 R1	4.829 mL	OK
		Consumption 4.5 R2	5.187 mL	OK
		Consumption 4.2 R3	5.195 mL	OK
		Content R5	103.740 mg/L	OK
		ALK LOW R6	103.580 mg/L	OK
31	WG2001084-1	Sample size	50 mL	
		Potential R4	5.24 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	0.032 mL	OK
		Consumption 4.2 R3	0.035 mL	OK
		Content R5	0.640 mg/L	OK
		ALK LOW R6	0.580 mg/L	OK
~~32~~	~~l2467975-04~~	~~Sample size~~	~~50 mL~~	
		~~Potential R4~~	~~5.26 pH~~	~~OK~~
		~~Consumption 8.3 R1~~	~~NaN mL~~	~~Not OK~~
		~~Consumption 4.5 R2~~	~~0.960 mL~~	~~OK~~
		~~Consumption 4.2 R3~~	~~0.973 mL~~	~~OK~~
		~~Content R5~~	~~19.200 mg/L~~	~~OK~~
		~~ALK LOW R6~~	~~18.940 mg/L~~	~~OK~~

Titration report

33	I2467975-05	Sample size	50 mL	
		Potential R4	6.52 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	NaN mL	Not OK
		Consumption 4.2 R3	NaN mL	Not OK
		Content R5	NaN mg/L	Not OK
		ALK LOW R6	NaN mg/L	Not OK
34	I2467975-06	Sample size	50 mL	
		Potential R4	7.52 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	5.889 mL	OK
		Consumption 4.2 R3	5.946 mL	OK
		Content R5	117.780 mg/L	OK
		ALK LOW R6	116.640 mg/L	OK
35	I2467975-07	Sample size	50 mL	
		Potential R4	6.67 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	NaN mL	Not OK
		Consumption 4.2 R3	NaN mL	Not OK
		Content R5	NaN mg/L	Not OK
		ALK LOW R6	NaN mg/L	Not OK
36	I2467975-08	Sample size	50 mL	
		Potential R4	8.30 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	0.540 mL	OK
		Consumption 4.2 R3	0.542 mL	OK
		Content R5	10.800 mg/L	OK
		ALK LOW R6	10.760 mg/L	OK
37	I2467975-08 CONF	Sample size	50 mL	
		Potential R4	5.38 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	0.124 mL	OK
		Consumption 4.2 R3	0.137 mL	OK
		Content R5	2.480 mg/L	OK
		ALK LOW R6	2.220 mg/L	OK
38	I2467994-01	Sample size	50 mL	
		Potential R4	6.38 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	NaN mL	Not OK
		Consumption 4.2 R3	NaN mL	Not OK
		Content R5	NaN mg/L	Not OK
		ALK LOW R6	NaN mg/L	Not OK
39	I2467994-02	Sample size	50 mL	
		Potential R4	6.84 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	NaN mL	Not OK
		Consumption 4.2 R3	NaN mL	Not OK

Titration report

		Content R5	NaN mg/L	Not OK
		ALK LOW R6	NaN mg/L	Not OK
40	I2467994-03	Sample size	50 mL	
		Potential R4	6.84 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	NaN mL	Not OK
		Consumption 4.2 R3	NaN mL	Not OK
		Content R5	NaN mg/L	Not OK
		ALK LOW R6	NaN mg/L	Not OK
41	I2467994-04	Sample size	50 mL	
		Potential R4	6.78 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	NaN mL	Not OK
		Consumption 4.2 R3	NaN mL	Not OK
		Content R5	NaN mg/L	Not OK
		ALK LOW R6	NaN mg/L	Not OK
42	I2467994-05	Sample size	50 mL	
		Potential R4	6.57 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	NaN mL	Not OK
		Consumption 4.2 R3	NaN mL	Not OK
		Content R5	NaN mg/L	Not OK
		ALK LOW R6	NaN mg/L	Not OK
43	I2467994-06	Sample size	50 mL	
		Potential R4	6.99 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	10.054 mL	OK
		Consumption 4.2 R3	10.150 mL	OK
		Content R5	201.080 mg/L	OK
		ALK LOW R6	199.160 mg/L	OK
44	I2467994-07	Sample size	50 mL	
		Potential R4	6.58 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	10.308 mL	OK
		Consumption 4.2 R3	10.431 mL	OK
		Content R5	206.160 mg/L	OK
		ALK LOW R6	203.700 mg/L	OK
45	I2467994-08	Sample size	50 mL	
		Potential R4	7.66 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	NaN mL	Not OK
		Consumption 4.2 R3	NaN mL	Not OK
		Content R5	NaN mg/L	Not OK
		ALK LOW R6	NaN mg/L	Not OK
46	I2467994-09	Sample size	50 mL	
		Potential R4	6.77 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK

Titration report

		Consumption 4.5 R2	10.904 mL	OK
		Consumption 4.2 R3	11.016 mL	OK
		Content R5	218.080 mg/L	OK
		ALK LOW R6	215.840 mg/L	OK
47	I2467994-10	Sample size	50 mL	
		Potential R4	6.62 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	6.358 mL	OK
		Consumption 4.2 R3	6.406 mL	OK
		Content R5	127.160 mg/L	OK
		ALK LOW R6	126.200 mg/L	OK
48	I2467994-11	Sample size	50 mL	
		Potential R4	8.78 pH	OK
		Consumption 8.3 R1	1.714 mL	OK
		Consumption 4.5 R2	NaN mL	Not OK
		Consumption 4.2 R3	NaN mL	Not OK
		Content R5	NaN mg/L	Not OK
		ALK LOW R6	NaN mg/L	Not OK
49	I2468003-01	Sample size	50 mL	
		Potential R4	6.30 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	NaN mL	Not OK
		Consumption 4.2 R3	NaN mL	Not OK
		Content R5	NaN mg/L	Not OK
		ALK LOW R6	NaN mg/L	Not OK
50	I2468003-02	Sample size	50 mL	
		Potential R4	6.39 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	NaN mL	Not OK
		Consumption 4.2 R3	NaN mL	Not OK
		Content R5	NaN mg/L	Not OK
		ALK LOW R6	NaN mg/L	Not OK
51	I2468003-03	Sample size	50 mL	
		Potential R4	6.44 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	18.318 mL	OK
		Consumption 4.2 R3	18.548 mL	OK
		Content R5	366.360 mg/L	OK
		ALK LOW R6	361.760 mg/L	OK
52	I2468003-04	Sample size	50 mL	
		Potential R4	6.59 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	NaN mL	Not OK
		Consumption 4.2 R3	NaN mL	Not OK
		Content R5	NaN mg/L	Not OK
		ALK LOW R6	NaN mg/L	Not OK
53	WG2001084-3	Sample size	50 mL	

Titration report

		~~Potential R4~~	~~6.88 pH~~	~~OK~~
		~~Consumption 8.3 R1~~	~~NaN mL~~	~~Not OK~~
		~~Consumption 4.5 R2~~	~~NaN mL~~	~~Not OK~~
		~~Consumption 4.2 R3~~	~~NaN mL~~	~~Not OK~~
		~~Content R5~~	~~NaN mg/L~~	~~Not OK~~
		~~ALK LOW R6~~	~~NaN mg/L~~	~~Not OK~~
~~54~~	~~WG2001084-4~~	~~Sample size~~	~~50 mL~~	
		~~Potential R4~~	~~8.37 pH~~	~~OK~~
		~~Consumption 8.3 R1~~	~~NaN mL~~	~~Not OK~~
		~~Consumption 4.5 R2~~	~~NaN mL~~	~~Not OK~~
		~~Consumption 4.2 R3~~	~~NaN mL~~	~~Not OK~~
		~~Content R5~~	~~NaN mg/L~~	~~Not OK~~
		~~ALK LOW R6~~	~~NaN mg/L~~	~~Not OK~~
~~55~~	~~XCCV~~	~~Sample size~~	~~50 mL~~	
		~~Potential R4~~	~~11.38 pH~~	~~OK~~
		~~Consumption 8.3 R1~~	~~NaN mL~~	~~Not OK~~
		~~Consumption 4.5 R2~~	~~NaN mL~~	~~Not OK~~
		~~Consumption 4.2 R3~~	~~NaN mL~~	~~Not OK~~
		~~Content R5~~	~~NaN mg/L~~	~~Not OK~~
		~~ALK LOW R6~~	~~NaN mg/L~~	~~Not OK~~
~~56~~	~~XCCB~~	~~Sample size~~	~~50 mL~~	
		~~Potential R4~~	~~8.40 pH~~	~~OK~~
		~~Consumption 8.3 R1~~	~~NaN mL~~	~~Not OK~~
		~~Consumption 4.5 R2~~	~~6.746 mL~~	~~OK~~
		~~Consumption 4.2 R3~~	~~6.747 mL~~	~~OK~~
		~~Content R5~~	~~134.920 mg/L~~	~~OK~~
		~~ALK LOW R6~~	~~134.900 mg/L~~	~~OK~~
~~57~~	~~CCV~~	~~Sample size~~	~~50 mL~~	
		~~Potential R4~~	~~11.30 pH~~	~~OK~~
		~~Consumption 8.3 R1~~	~~8.954 mL~~	~~OK~~
		~~Consumption 4.5 R2~~	~~9.358 mL~~	~~OK~~
		~~Consumption 4.2 R3~~	~~9.364 mL~~	~~OK~~
		~~Content R5~~	~~187.160 mg/L~~	~~OK~~
		~~ALK LOW R6~~	~~187.040 mg/L~~	~~OK~~
~~58~~	~~CCB~~	~~Sample size~~	~~50 mL~~	
		~~Potential R4~~	~~4.81 pH~~	~~OK~~
		~~Consumption 8.3 R1~~	~~NaN mL~~	~~Not OK~~
		~~Consumption 4.5 R2~~	~~0.021 mL~~	~~OK~~
		~~Consumption 4.2 R3~~	~~0.026 mL~~	~~OK~~
		~~Content R5~~	~~0.420 mg/L~~	~~OK~~
		~~ALK LOW R6~~	~~0.320 mg/L~~	~~OK~~
59	WG2001084-1	Sample size	50 mL	
		Potential R4	11.54 pH	OK
		Consumption 8.3 R1	4.973 mL	OK
		Consumption 4.5 R2	5.376 mL	OK
		Consumption 4.2 R3	5.378 mL	OK
		Content R5	107.520 mg/L	OK

Titration report

		ALK LOW R6	107.480 mg/L	OK
60	WG2001084-2	Sample size	50 mL	
		Potential R4	4.91 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	0.029 mL	OK
		Consumption 4.2 R3	0.034 mL	OK
		Content R5	0.580 mg/L	OK
		ALK LOW R6	0.480 mg/L	OK
61	I2467975-05 10x	Sample size	50 mL	
		Potential R4	6.33 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	9.068 mL	OK
		Consumption 4.2 R3	9.227 mL	OK
		Content R5	181.360 mg/L	OK
		ALK LOW R6	178.180 mg/L	OK
62	I2467975-07 10x	Sample size	50 mL	
		Potential R4	6.42 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	9.570 mL	OK
		Consumption 4.2 R3	9.706 mL	OK
		Content R5	191.400 mg/L	OK
		ALK LOW R6	188.680 mg/L	OK
63	I2467994-01 10x	Sample size	50 mL	
		Potential R4	5.82 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	4.648 mL	OK
		Consumption 4.2 R3	4.684 mL	OK
		Content R5	92.960 mg/L	OK
		ALK LOW R6	92.240 mg/L	OK
64	I2467994-02 10x	Sample size	50 mL	
		Potential R4	5.68 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	2.847 mL	OK
		Consumption 4.2 R3	2.864 mL	OK
		Content R5	56.940 mg/L	OK
		ALK LOW R6	56.600 mg/L	OK
65	I2467994-03 10x	Sample size	50 mL	
		Potential R4	5.81 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	3.769 mL	OK
		Consumption 4.2 R3	3.790 mL	OK
		Content R5	75.380 mg/L	OK
		ALK LOW R6	74.960 mg/L	OK
66	I2467994-04 10x	Sample size	50 mL	
		Potential R4	5.75 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	3.100 mL	OK

Titration report

		Consumption 4.2 R3	3.119 mL	OK
		Content R5	62.000 mg/L	OK
		ALK LOW R6	61.620 mg/L	OK
67	I2467994-05 10x	Sample size	50 mL	
		Potential R4	5.66 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	2.792 mL	OK
		Consumption 4.2 R3	2.807 mL	OK
		Content R5	55.840 mg/L	OK
		ALK LOW R6	55.540 mg/L	OK
68	I2467994-08 10x	Sample size	50 mL	
		Potential R4	6.41 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	4.280 mL	OK
		Consumption 4.2 R3	4.302 mL	OK
		Content R5	85.600 mg/L	OK
		ALK LOW R6	85.160 mg/L	OK
69	I2467994-11 10x	Sample size	50 mL	
		Potential R4	8.14 pH	OK
		Consumption 8.3 R1	0.000 mL	OK
		Consumption 4.5 R2	2.574 mL	OK
		Consumption 4.2 R3	2.574 mL	OK
		Content R5	51.480 mg/L	OK
		ALK LOW R6	51.480 mg/L	OK
70	I2468003-01 10x	Sample size	50 mL	
		Potential R4	5.52 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	2.820 mL	OK
		Consumption 4.2 R3	2.840 mL	OK
		Content R5	56.400 mg/L	OK
		ALK LOW R6	56.000 mg/L	OK
71	I2468003-02 10x	Sample size	50 mL	
		Potential R4	5.56 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	2.616 mL	OK
		Consumption 4.2 R3	2.630 mL	OK
		Content R5	52.320 mg/L	OK
		ALK LOW R6	52.040 mg/L	OK
72	I2468003-04	Sample size	50 mL	
		Potential R4	6.58 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	15.835 mL	OK
		Consumption 4.2 R3	15.998 mL	OK
		Content R5	316.700 mg/L	OK
		ALK LOW R6	313.440 mg/L	OK
73	I2467975-04	Sample size	50 mL	
		Potential R4	5.53 pH	OK

Titration report

		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	1.131 mL	OK
		Consumption 4.2 R3	1.138 mL	OK
		Content R5	22.620 mg/L	OK
		ALK LOW R6	22.480 mg/L	OK
74	I2467975-06	Sample size	50 mL	
		Potential R4	5.74 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	5.827 mL	OK
		Consumption 4.2 R3	5.910 mL	OK
		Content R5	116.540 mg/L	OK
		ALK LOW R6	114.880 mg/L	OK
75	I2467975-08	Sample size	50 mL	
		Potential R4	4.96 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	0.042 mL	OK
		Consumption 4.2 R3	0.051 mL	OK
		Content R5	0.840 mg/L	OK
		ALK LOW R6	0.660 mg/L	OK
76	I2467975-08	Sample size	50 mL	
		Potential R4	4.82 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	0.031 mL	OK
		Consumption 4.2 R3	0.044 mL	OK
		Content R5	0.620 mg/L	OK
		ALK LOW R6	0.360 mg/L	OK
77	I2467994-06	Sample size	50 mL	
		Potential R4	6.42 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	11.908 mL	OK
		Consumption 4.2 R3	12.022 mL	OK
		Content R5	238.160 mg/L	OK
		ALK LOW R6	235.880 mg/L	OK
78	I2467994-07	Sample size	50 mL	
		Potential R4	6.55 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	11.604 mL	OK
		Consumption 4.2 R3	11.918 mL	OK
		Content R5	232.080 mg/L	OK
		ALK LOW R6	225.800 mg/L	OK
79	I2467994-09	Sample size	50 mL	
		Potential R4	6.24 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	11.580 mL	OK
		Consumption 4.2 R3	11.703 mL	OK
		Content R5	231.600 mg/L	OK
		ALK LOW R6	229.140 mg/L	OK

Titration report

80	I2467994-10	Sample size	50 mL	
		Potential R4	6.19 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	6.502 mL	OK
		Consumption 4.2 R3	6.557 mL	OK
		Content R5	130.040 mg/L	OK
		ALK LOW R6	128.940 mg/L	OK
81	WG2001084-3	Sample size	50 mL	
		Potential R4	6.22 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	6.396 mL	OK
		Consumption 4.2 R3	6.452 mL	OK
		Content R5	127.920 mg/L	OK
		ALK LOW R6	126.800 mg/L	OK
82	WG2001084-4	Sample size	50 mL	
		Potential R4	9.66 pH	OK
		Consumption 8.3 R1	2.808 mL	OK
		Consumption 4.5 R2	7.693 mL	OK
		Consumption 4.2 R3	10.919 mL	OK
		Content R5	153.860 mg/L	OK
		ALK LOW R6	89.340 mg/L	OK
83	I2468003-03	Sample size	50 mL	
		Potential R4	6.22 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	19.031 mL	OK
		Consumption 4.2 R3	19.273 mL	OK
		Content R5	380.620 mg/L	OK
		ALK LOW R6	375.780 mg/L	OK
84	CCV	Sample size	50 mL	
		Potential R4	10.97 pH	OK
		Consumption 8.3 R1	4.881 mL	OK
		Consumption 4.5 R2	5.275 mL	OK
		Consumption 4.2 R3	5.282 mL	OK
		Content R5	105.500 mg/L	OK
		ALK LOW R6	105.360 mg/L	OK
85	CCB	Sample size	50 mL	
		Potential R4	4.85 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	0.027 mL	OK
		Consumption 4.2 R3	0.039 mL	OK
		Content R5	0.540 mg/L	OK
		ALK LOW R6	0.300 mg/L	OK
86	WG2001243-2	Sample size	50 mL	
		Potential R4	10.91 pH	OK
		Consumption 8.3 R1	4.888 mL	OK
		Consumption 4.5 R2	5.360 mL	OK
		Consumption 4.2 R3	5.367 mL	OK

Titration report

		Content R5	107.200 mg/L	OK
		ALK LOW R6	107.060 mg/L	OK
87	WG2001243-1	Sample size	50 mL	
		Potential R4	4.64 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	0.005 mL	OK
		Consumption 4.2 R3	0.019 mL	OK
		Content R5	0.100 mg/L	OK
		ALK LOW R6	-0.180 mg/L	OK
88	I2468003-05	Sample size	50 mL	
		Potential R4	5.69 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	3.457 mL	OK
		Consumption 4.2 R3	3.479 mL	OK
		Content R5	69.140 mg/L	OK
		ALK LOW R6	68.700 mg/L	OK
89	I2468003-06	Sample size	50 mL	
		Potential R4	5.88 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	6.232 mL	OK
		Consumption 4.2 R3	6.283 mL	OK
		Content R5	124.640 mg/L	OK
		ALK LOW R6	123.620 mg/L	OK
90	I2468131-01	Sample size	50 mL	
		Potential R4	6.08 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	NaN mL	Not OK
		Consumption 4.2 R3	NaN mL	Not OK
		Content R5	NaN mg/L	Not OK
		ALK LOW R6	NaN mg/L	Not OK
91	I2468131-02 5x	Sample size	50 mL	
		Potential R4	6.03 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	4.611 mL	OK
		Consumption 4.2 R3	4.930 mL	OK
		Content R5	92.220 mg/L	OK
		ALK LOW R6	85.840 mg/L	OK
92	WG2001243-3 5x	Sample size	50 mL	
		Potential R4	5.83 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	4.684 mL	OK
		Consumption 4.2 R3	4.926 mL	OK
		Content R5	93.680 mg/L	OK
		ALK LOW R6	88.840 mg/L	OK
93	WG2001243-4 5x	Sample size	50 mL	
		Potential R4	10.24 pH	OK
		Consumption 8.3 R1	4.835 mL	OK

Titration report

		Consumption 4.5 R2	9.385 mL	OK
		Consumption 4.2 R3	9.842 mL	OK
		Content R5	187.700 mg/L	OK
		ALK LOW R6	178.560 mg/L	OK
94	I2468038-01 5x	Sample size	50 mL	
		Potential R4	5.47 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	2.335 mL	OK
		Consumption 4.2 R3	2.365 mL	OK
		Content R5	46.700 mg/L	OK
		ALK LOW R6	46.100 mg/L	OK
95	I2468038-02 5x	Sample size	50 mL	
		Potential R4	5.49 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	2.764 mL	OK
		Consumption 4.2 R3	2.800 mL	OK
		Content R5	55.280 mg/L	OK
		ALK LOW R6	54.560 mg/L	OK
96	I2468038-03	Sample size	50 mL	
		Potential R4	5.00 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	0.301 mL	OK
		Consumption 4.2 R3	0.326 mL	OK
		Content R5	6.020 mg/L	OK
		ALK LOW R6	5.520 mg/L	OK
97	I2468038-04	Sample size	50 mL	
		Potential R4	5.04 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	1.036 mL	OK
		Consumption 4.2 R3	1.165 mL	OK
		Content R5	20.720 mg/L	OK
		ALK LOW R6	18.140 mg/L	OK
98	I2468038-05	Sample size	50 mL	
		Potential R4	5.67 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	6.586 mL	OK
		Consumption 4.2 R3	6.728 mL	OK
		Content R5	131.720 mg/L	OK
		ALK LOW R6	128.880 mg/L	OK
99	I2468038-06	Sample size	50 mL	
		Potential R4	4.95 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	0.568 mL	OK
		Consumption 4.2 R3	0.654 mL	OK
		Content R5	11.360 mg/L	OK
		ALK LOW R6	9.640 mg/L	OK
100	I2468042-02	Sample size	50 mL	

Titration report

		Potential R4	6.37 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	NaN mL	Not OK
		Consumption 4.2 R3	NaN mL	Not OK
		Content R5	NaN mg/L	Not OK
		ALK LOW R6	NaN mg/L	Not OK
101	I2468042-03	Sample size	50 mL	
		Potential R4	6.70 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	NaN mL	Not OK
		Consumption 4.2 R3	NaN mL	Not OK
		Content R5	NaN mg/L	Not OK
		ALK LOW R6	NaN mg/L	Not OK
102	I2468042-04	Sample size	50 mL	
		Potential R4	6.72 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	NaN mL	Not OK
		Consumption 4.2 R3	NaN mL	Not OK
		Content R5	NaN mg/L	Not OK
		ALK LOW R6	NaN mg/L	Not OK
103	I2468042-05	Sample size	50 mL	
		Potential R4	7.74 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	NaN mL	Not OK
		Consumption 4.2 R3	NaN mL	Not OK
		Content R5	NaN mg/L	Not OK
		ALK LOW R6	NaN mg/L	Not OK
104	L2468131-01 10x	Sample size	50 mL	
		Potential R4	6.16 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	2.180 mL	OK
		Consumption 4.2 R3	2.192 mL	OK
		Content R5	43.600 mg/L	OK
		ALK LOW R6	43.360 mg/L	OK
105	I2467934-01	Sample size	50 mL	
		Potential R4	8.42 pH	OK
		Consumption 8.3 R1	0.467 mL	OK
		Consumption 4.5 R2	4.265 mL	OK
		Consumption 4.2 R3	4.278 mL	OK
		Content R5	85.300 mg/L	OK
		ALK LOW R6	85.040 mg/L	OK
106	I2467934-02	Sample size	50 mL	
		Potential R4	5.98 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	6.827 mL	OK
		Consumption 4.2 R3	6.899 mL	OK
		Content R5	136.540 mg/L	OK

Titration report

		ALK LOW R6	135.100 mg/L	OK
107	I2467934-03	Sample size	50 mL	
		Potential R4	5.83 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	4.697 mL	OK
		Consumption 4.2 R3	4.754 mL	OK
		Content R5	93.940 mg/L	OK
		ALK LOW R6	92.800 mg/L	OK
108	I2467934-04	Sample size	50 mL	
		Potential R4	5.64 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	2.419 mL	OK
		Consumption 4.2 R3	2.438 mL	OK
		Content R5	48.380 mg/L	OK
		ALK LOW R6	48.000 mg/L	OK
109	WG2001244-3	Sample size	50 mL	
		Potential R4	5.63 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	2.633 mL	OK
		Consumption 4.2 R3	2.663 mL	OK
		Content R5	52.660 mg/L	OK
		ALK LOW R6	52.060 mg/L	OK
110	I2467934-05	Sample size	50 mL	
		Potential R4	5.06 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	0.390 mL	OK
		Consumption 4.2 R3	0.414 mL	OK
		Content R5	7.800 mg/L	OK
		ALK LOW R6	7.320 mg/L	OK
111	I2467934-06	Sample size	50 mL	
		Potential R4	5.90 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	9.417 mL	OK
		Consumption 4.2 R3	9.560 mL	OK
		Content R5	188.340 mg/L	OK
		ALK LOW R6	185.480 mg/L	OK
112	I2467934-07	Sample size	50 mL	
		Potential R4	5.99 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	10.567 mL	OK
		Consumption 4.2 R3	10.730 mL	OK
		Content R5	211.340 mg/L	OK
		ALK LOW R6	208.080 mg/L	OK
113	I2467934-08	Sample size	50 mL	
		Potential R4	5.84 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	4.332 mL	OK

Titration report

		Consumption 4.2 R3	4.373 mL	OK
		Content R5	86.640 mg/L	OK
		ALK LOW R6	85.820 mg/L	OK
114	I2467934-09	Sample size	50 mL	
		Potential R4	5.98 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	10.750 mL	OK
		Consumption 4.2 R3	10.922 mL	OK
		Content R5	215.000 mg/L	OK
		ALK LOW R6	211.560 mg/L	OK
115	CCV	Sample size	50 mL	
		Potential R4	10.90 pH	OK
		Consumption 8.3 R1	4.768 mL	OK
		Consumption 4.5 R2	5.290 mL	OK
		Consumption 4.2 R3	5.295 mL	OK
		Content R5	105.800 mg/L	OK
		ALK LOW R6	105.700 mg/L	OK
116	WG2001244-1	Sample size	50 mL	
		Potential R4	4.84 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	0.032 mL	OK
		Consumption 4.2 R3	0.035 mL	OK
		Content R5	0.640 mg/L	OK
		ALK LOW R6	0.580 mg/L	OK
117	CCV	Sample size	50 mL	
		Potential R4	10.90 pH	OK
		Consumption 8.3 R1	4.852 mL	OK
		Consumption 4.5 R2	5.406 mL	OK
		Consumption 4.2 R3	5.410 mL	OK
		Content R5	108.120 mg/L	OK
		ALK LOW R6	108.040 mg/L	OK
118	CCB	Sample size	50 mL	
		Potential R4	4.74 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	0.011 mL	OK
		Consumption 4.2 R3	0.019 mL	OK
		Content R5	0.220 mg/L	OK
		ALK LOW R6	0.060 mg/L	OK

Statistics

R1

Mean	NaN mL		
Maximum	8.954 mL	**Minimum**	0.000 mL
Standard deviation	NaN mL	**Rel. standard deviation**	NaN %
Total samples	118	**Samples excluded**	0

Titration report

R2

Mean	NaN mL		
Maximum	19.082 mL	**Minimum**	0.005 mL
Standard deviation	NaN mL	**Rel. standard deviation**	NaN %
Total samples	118	**Samples excluded**	0

R3

Mean	NaN mL		
Maximum	19.273 mL	**Minimum**	0.019 mL
Standard deviation	NaN mL	**Rel. standard deviation**	NaN %
Total samples	118	**Samples excluded**	0

R4

Mean	6.60 pH		
Maximum	11.54 pH	**Minimum**	4.64 pH
Standard deviation	1.61 pH	**Rel. standard deviation**	24.319 %
Total samples	118	**Samples excluded**	0

R5

Mean	NaN mg/L		
Maximum	381.640 mg/L	**Minimum**	0.100 mg/L
Standard deviation	NaN mg/L	**Rel. standard deviation**	NaN %
Total samples	118	**Samples excluded**	0

R6

Mean	NaN mg/L		
Maximum	375.780 mg/L	**Minimum**	-0.180 mg/L
Standard deviation	NaN mg/L	**Rel. standard deviation**	NaN %
Total samples	118	**Samples excluded**	0

Used Instruments

Name	T7 Excellence Titrator	**Serial number**	C329519495

Responsible User

Time	Login name	Full name
11/22/2024 8:08:36 AM	SystemInternal	System internal account

(17) Data compression on instrument occurred

Results Editor

LabX

Result Overview

Sample start t	Zero poin	Unit of Ze	Data marl	Slope 1 (C	Unit of Sl	Data marl	Sensor ty	List of sta	Standard	Comment	Temperat
	7.124	pH		-54.57	mV/pH						

Results Editor

LabX

Result Overview

Sample ID1	Potentia	Unit of P	Data ma	Sample start	Volume	Unit of V	Density [	Unit of D	Cor	Uni	Tempera	Unit of T	Commer
--	7.02	pH		11/22/2024	0	mL	1.0	g/mL	1.0		25.0	°C	

Titration report

Method

Method ID	Alk Total (2)	**Release state**	Released
Name	EP/EP	**Modified by**	SystemInternal
Modified on	10/14/2023 11:44:43 AM		

Summary

Samples

	Sample ID	Name	Result	State
1	Rinse,MKT	Sample size	50 mL	
		Potential R4	6.89 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	0.888 mL	OK
		Consumption 4.2 R3	0.894 mL	OK
		Content R5	17.760 mg/L	OK
		ALK LOW R6	17.640 mg/L	OK
2	Rinse,MKT	Sample size	50 mL	
		Potential R4	5.19 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	0.042 mL	OK
		Consumption 4.2 R3	0.046 mL	OK
		Content R5	0.840 mg/L	OK
		ALK LOW R6	0.760 mg/L	OK
3	WG2000937-1	Sample size	50 mL	
		Potential R4	5.03 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	0.022 mL	OK
		Consumption 4.2 R3	0.026 mL	OK
		Content R5	0.440 mg/L	OK
		ALK LOW R6	0.360 mg/L	OK
4	WG2000937-2	Sample size	50 mL	
		Potential R4	10.91 pH	OK
		Consumption 8.3 R1	4.799 mL	OK
		Consumption 4.5 R2	5.254 mL	OK
		Consumption 4.2 R3	5.256 mL	OK
		Content R5	105.080 mg/L	OK
		ALK LOW R6	105.040 mg/L	OK
5	I2467709-01	Sample size	50 mL	
		Potential R4	5.99 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	17.748 mL	OK
		Consumption 4.2 R3	17.939 mL	OK
		Content R5	354.960 mg/L	OK
		ALK LOW R6	351.140 mg/L	OK
6	I2467709-02	Sample size	50 mL	

Titration report

		Potential R4	6.14 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	13.084 mL	OK
		Consumption 4.2 R3	13.210 mL	OK
		Content R5	261.680 mg/L	OK
		ALK LOW R6	259.160 mg/L	OK
7	I2467709-03	Sample size	50 mL	
		Potential R4	6.42 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	13.302 mL	OK
		Consumption 4.2 R3	13.462 mL	OK
		Content R5	266.040 mg/L	OK
		ALK LOW R6	262.840 mg/L	OK
8	I2467709-04	Sample size	50 mL	
		Potential R4	6.26 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	18.461 mL	OK
		Consumption 4.2 R3	18.677 mL	OK
		Content R5	369.220 mg/L	OK
		ALK LOW R6	364.900 mg/L	OK
9	I2467709-05	Sample size	50 mL	
		Potential R4	6.81 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	NaN mL	Not OK
		Consumption 4.2 R3	NaN mL	Not OK
		Content R5	NaN mg/L	Not OK
		ALK LOW R6	NaN mg/L	Not OK
10	I2467585-07	Sample size	50 mL	
		Potential R4	7.57 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	6.547 mL	OK
		Consumption 4.2 R3	6.593 mL	OK
		Content R5	130.940 mg/L	OK
		ALK LOW R6	130.020 mg/L	OK
11	I2467892-01	Sample size	50 mL	
		Potential R4	5.82 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	11.559 mL	OK
		Consumption 4.2 R3	11.693 mL	OK
		Content R5	231.180 mg/L	OK
		ALK LOW R6	228.500 mg/L	OK
12	I2467892-02	Sample size	50 mL	
		Potential R4	5.66 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	6.288 mL	OK
		Consumption 4.2 R3	6.378 mL	OK
		Content R5	125.760 mg/L	OK

Titration report

		ALK LOW R6	123.960 mg/L	OK
13	I2467892-03	Sample size	50 mL	
		Potential R4	5.94 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	8.832 mL	OK
		Consumption 4.2 R3	8.928 mL	OK
		Content R5	176.640 mg/L	OK
		ALK LOW R6	174.720 mg/L	OK
14	I2467892-04	Sample size	50 mL	
		Potential R4	5.95 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	16.135 mL	OK
		Consumption 4.2 R3	16.374 mL	OK
		Content R5	322.700 mg/L	OK
		ALK LOW R6	317.920 mg/L	OK
15	I2467892-05	Sample size	50 mL	
		Potential R4	5.81 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	8.426 mL	OK
		Consumption 4.2 R3	8.545 mL	OK
		Content R5	168.520 mg/L	OK
		ALK LOW R6	166.140 mg/L	OK
16	I2467901-01	Sample size	50 mL	
		Potential R4	6.12 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	NaN mL	Not OK
		Consumption 4.2 R3	NaN mL	Not OK
		Content R5	NaN mg/L	Not OK
		ALK LOW R6	NaN mg/L	Not OK
17	I2467901-02	Sample size	50 mL	
		Potential R4	6.54 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	16.345 mL	OK
		Consumption 4.2 R3	16.527 mL	OK
		Content R5	326.900 mg/L	OK
		ALK LOW R6	323.260 mg/L	OK
18	I2467901-03	Sample size	50 mL	
		Potential R4	6.43 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	NaN mL	Not OK
		Consumption 4.2 R3	NaN mL	Not OK
		Content R5	NaN mg/L	Not OK
		ALK LOW R6	NaN mg/L	Not OK
19	I2467901-04	Sample size	50 mL	
		Potential R4	6.57 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	17.838 mL	OK

Titration report

		Consumption 4.2 R3	18.068 mL	OK
		Content R5	356.760 mg/L	OK
		ALK LOW R6	352.160 mg/L	OK
20	I2467901-05	Sample size	50 mL	
		Potential R4	6.21 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	15.486 mL	OK
		Consumption 4.2 R3	15.655 mL	OK
		Content R5	309.720 mg/L	OK
		ALK LOW R6	306.340 mg/L	OK
21	WG2000937-3	Sample size	50 mL	
		Potential R4	6.37 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	15.460 mL	OK
		Consumption 4.2 R3	15.634 mL	OK
		Content R5	309.200 mg/L	OK
		ALK LOW R6	305.720 mg/L	OK
22	WG2000937-4	Sample size	50 mL	
		Potential R4	6.95 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	19.082 mL	OK
		Consumption 4.2 R3	NaN mL	Not OK
		Content R5	381.640 mg/L	OK
		ALK LOW R6	NaN mg/L	Not OK
23	I2467901-06	Sample size	50 mL	
		Potential R4	6.23 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	12.869 mL	OK
		Consumption 4.2 R3	13.043 mL	OK
		Content R5	257.380 mg/L	OK
		ALK LOW R6	253.900 mg/L	OK
24	I2467975-01	Sample size	50 mL	
		Potential R4	5.82 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	5.492 mL	OK
		Consumption 4.2 R3	5.564 mL	OK
		Content R5	109.840 mg/L	OK
		ALK LOW R6	108.400 mg/L	OK
25	I2467975-02	Sample size	50 mL	
		Potential R4	5.52 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	1.880 mL	OK
		Consumption 4.2 R3	1.895 mL	OK
		Content R5	37.600 mg/L	OK
		ALK LOW R6	37.300 mg/L	OK
26	I2467975-03	Sample size	50 mL	
		Potential R4	5.72 pH	OK

Titration report

		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	7.081 mL	OK
		Consumption 4.2 R3	7.246 mL	OK
		Content R5	141.620 mg/L	OK
		ALK LOW R6	138.320 mg/L	OK
27	L2467709-05 2x+10	Sample size	50 mL	
		Potential R4	6.44 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	NaN mL	Not OK
		Consumption 4.2 R3	NaN mL	Not OK
		Content R5	NaN mg/L	Not OK
		ALK LOW R6	NaN mg/L	Not OK
28	L2467901-01 2x+10	Sample size	50 mL	
		Potential R4	6.08 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	7.856 mL	OK
		Consumption 4.2 R3	8.084 mL	OK
		Content R5	157.120 mg/L	OK
		ALK LOW R6	152.560 mg/L	OK
29	L2467901-03 2x+10	Sample size	50 mL	
		Potential R4	5.60 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	4.401 mL	OK
		Consumption 4.2 R3	4.527 mL	OK
		Content R5	88.020 mg/L	OK
		ALK LOW R6	85.500 mg/L	OK
30	WG2001084-2	Sample size	50 mL	
		Potential R4	10.98 pH	OK
		Consumption 8.3 R1	4.829 mL	OK
		Consumption 4.5 R2	5.187 mL	OK
		Consumption 4.2 R3	5.195 mL	OK
		Content R5	103.740 mg/L	OK
		ALK LOW R6	103.580 mg/L	OK
31	WG2001084-1	Sample size	50 mL	
		Potential R4	5.24 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	0.032 mL	OK
		Consumption 4.2 R3	0.035 mL	OK
		Content R5	0.640 mg/L	OK
		ALK LOW R6	0.580 mg/L	OK
~~32~~	~~I2467975-04~~	~~Sample size~~	~~50 mL~~	
		~~Potential R4~~	~~5.26 pH~~	~~OK~~
		~~Consumption 8.3 R1~~	~~NaN mL~~	~~Not OK~~
		~~Consumption 4.5 R2~~	~~0.960 mL~~	~~OK~~
		~~Consumption 4.2 R3~~	~~0.973 mL~~	~~OK~~
		~~Content R5~~	~~19.200 mg/L~~	~~OK~~
		~~ALK LOW R6~~	~~18.940 mg/L~~	~~OK~~

Titration report

33	I2467975-05	Sample size	50 mL	
		Potential R4	6.52 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	NaN mL	Not OK
		Consumption 4.2 R3	NaN mL	Not OK
		Content R5	NaN mg/L	Not OK
		ALK LOW R6	NaN mg/L	Not OK
34	I2467975-06	Sample size	50 mL	
		Potential R4	7.52 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	5.889 mL	OK
		Consumption 4.2 R3	5.946 mL	OK
		Content R5	117.780 mg/L	OK
		ALK LOW R6	116.640 mg/L	OK
35	I2467975-07	Sample size	50 mL	
		Potential R4	6.67 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	NaN mL	Not OK
		Consumption 4.2 R3	NaN mL	Not OK
		Content R5	NaN mg/L	Not OK
		ALK LOW R6	NaN mg/L	Not OK
36	I2467975-08	Sample size	50 mL	
		Potential R4	8.30 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	0.540 mL	OK
		Consumption 4.2 R3	0.542 mL	OK
		Content R5	10.800 mg/L	OK
		ALK LOW R6	10.760 mg/L	OK
37	I2467975-08 CONF	Sample size	50 mL	
		Potential R4	5.38 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	0.124 mL	OK
		Consumption 4.2 R3	0.137 mL	OK
		Content R5	2.480 mg/L	OK
		ALK LOW R6	2.220 mg/L	OK
38	I2467994-01	Sample size	50 mL	
		Potential R4	6.38 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	NaN mL	Not OK
		Consumption 4.2 R3	NaN mL	Not OK
		Content R5	NaN mg/L	Not OK
		ALK LOW R6	NaN mg/L	Not OK
39	I2467994-02	Sample size	50 mL	
		Potential R4	6.84 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	NaN mL	Not OK
		Consumption 4.2 R3	NaN mL	Not OK

Titration report

		Content R5	NaN mg/L	Not OK
		ALK LOW R6	NaN mg/L	Not OK
40	I2467994-03	Sample size	50 mL	
		Potential R4	6.84 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	NaN mL	Not OK
		Consumption 4.2 R3	NaN mL	Not OK
		Content R5	NaN mg/L	Not OK
		ALK LOW R6	NaN mg/L	Not OK
41	I2467994-04	Sample size	50 mL	
		Potential R4	6.78 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	NaN mL	Not OK
		Consumption 4.2 R3	NaN mL	Not OK
		Content R5	NaN mg/L	Not OK
		ALK LOW R6	NaN mg/L	Not OK
42	I2467994-05	Sample size	50 mL	
		Potential R4	6.57 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	NaN mL	Not OK
		Consumption 4.2 R3	NaN mL	Not OK
		Content R5	NaN mg/L	Not OK
		ALK LOW R6	NaN mg/L	Not OK
43	I2467994-06	Sample size	50 mL	
		Potential R4	6.99 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	10.054 mL	OK
		Consumption 4.2 R3	10.150 mL	OK
		Content R5	201.080 mg/L	OK
		ALK LOW R6	199.160 mg/L	OK
44	I2467994-07	Sample size	50 mL	
		Potential R4	6.58 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	10.308 mL	OK
		Consumption 4.2 R3	10.431 mL	OK
		Content R5	206.160 mg/L	OK
		ALK LOW R6	203.700 mg/L	OK
45	I2467994-08	Sample size	50 mL	
		Potential R4	7.66 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	NaN mL	Not OK
		Consumption 4.2 R3	NaN mL	Not OK
		Content R5	NaN mg/L	Not OK
		ALK LOW R6	NaN mg/L	Not OK
46	I2467994-09	Sample size	50 mL	
		Potential R4	6.77 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK

Titration report

		Consumption 4.5 R2	10.904 mL	OK
		Consumption 4.2 R3	11.016 mL	OK
		Content R5	218.080 mg/L	OK
		ALK LOW R6	215.840 mg/L	OK
47	I2467994-10	Sample size	50 mL	
		Potential R4	6.62 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	6.358 mL	OK
		Consumption 4.2 R3	6.406 mL	OK
		Content R5	127.160 mg/L	OK
		ALK LOW R6	126.200 mg/L	OK
48	I2467994-11	Sample size	50 mL	
		Potential R4	8.78 pH	OK
		Consumption 8.3 R1	1.714 mL	OK
		Consumption 4.5 R2	NaN mL	Not OK
		Consumption 4.2 R3	NaN mL	Not OK
		Content R5	NaN mg/L	Not OK
		ALK LOW R6	NaN mg/L	Not OK
49	I2468003-01	Sample size	50 mL	
		Potential R4	6.30 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	NaN mL	Not OK
		Consumption 4.2 R3	NaN mL	Not OK
		Content R5	NaN mg/L	Not OK
		ALK LOW R6	NaN mg/L	Not OK
50	I2468003-02	Sample size	50 mL	
		Potential R4	6.39 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	NaN mL	Not OK
		Consumption 4.2 R3	NaN mL	Not OK
		Content R5	NaN mg/L	Not OK
		ALK LOW R6	NaN mg/L	Not OK
51	I2468003-03	Sample size	50 mL	
		Potential R4	6.44 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	18.318 mL	OK
		Consumption 4.2 R3	18.548 mL	OK
		Content R5	366.360 mg/L	OK
		ALK LOW R6	361.760 mg/L	OK
52	I2468003-04	Sample size	50 mL	
		Potential R4	6.59 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	NaN mL	Not OK
		Consumption 4.2 R3	NaN mL	Not OK
		Content R5	NaN mg/L	Not OK
		ALK LOW R6	NaN mg/L	Not OK
53	WG2001084-3	Sample size	50 mL	

Titration report

		~~Potential R4~~	~~6.88 pH~~	~~OK~~
		~~Consumption 8.3 R1~~	~~NaN mL~~	~~Not OK~~
		~~Consumption 4.5 R2~~	~~NaN mL~~	~~Not OK~~
		~~Consumption 4.2 R3~~	~~NaN mL~~	~~Not OK~~
		~~Content R5~~	~~NaN mg/L~~	~~Not OK~~
		~~ALK LOW R6~~	~~NaN mg/L~~	~~Not OK~~
~~54~~	~~WG2001084-4~~	~~Sample size~~	~~50 mL~~	
		~~Potential R4~~	~~8.37 pH~~	~~OK~~
		~~Consumption 8.3 R1~~	~~NaN mL~~	~~Not OK~~
		~~Consumption 4.5 R2~~	~~NaN mL~~	~~Not OK~~
		~~Consumption 4.2 R3~~	~~NaN mL~~	~~Not OK~~
		~~Content R5~~	~~NaN mg/L~~	~~Not OK~~
		~~ALK LOW R6~~	~~NaN mg/L~~	~~Not OK~~
~~55~~	~~XCCV~~	~~Sample size~~	~~50 mL~~	
		~~Potential R4~~	~~11.38 pH~~	~~OK~~
		~~Consumption 8.3 R1~~	~~NaN mL~~	~~Not OK~~
		~~Consumption 4.5 R2~~	~~NaN mL~~	~~Not OK~~
		~~Consumption 4.2 R3~~	~~NaN mL~~	~~Not OK~~
		~~Content R5~~	~~NaN mg/L~~	~~Not OK~~
		~~ALK LOW R6~~	~~NaN mg/L~~	~~Not OK~~
~~56~~	~~XCCB~~	~~Sample size~~	~~50 mL~~	
		~~Potential R4~~	~~8.40 pH~~	~~OK~~
		~~Consumption 8.3 R1~~	~~NaN mL~~	~~Not OK~~
		~~Consumption 4.5 R2~~	~~6.746 mL~~	~~OK~~
		~~Consumption 4.2 R3~~	~~6.747 mL~~	~~OK~~
		~~Content R5~~	~~134.920 mg/L~~	~~OK~~
		~~ALK LOW R6~~	~~134.900 mg/L~~	~~OK~~
~~57~~	~~CCV~~	~~Sample size~~	~~50 mL~~	
		~~Potential R4~~	~~11.30 pH~~	~~OK~~
		~~Consumption 8.3 R1~~	~~8.954 mL~~	~~OK~~
		~~Consumption 4.5 R2~~	~~9.358 mL~~	~~OK~~
		~~Consumption 4.2 R3~~	~~9.364 mL~~	~~OK~~
		~~Content R5~~	~~187.160 mg/L~~	~~OK~~
		~~ALK LOW R6~~	~~187.040 mg/L~~	~~OK~~
~~58~~	~~CCB~~	~~Sample size~~	~~50 mL~~	
		~~Potential R4~~	~~4.81 pH~~	~~OK~~
		~~Consumption 8.3 R1~~	~~NaN mL~~	~~Not OK~~
		~~Consumption 4.5 R2~~	~~0.021 mL~~	~~OK~~
		~~Consumption 4.2 R3~~	~~0.026 mL~~	~~OK~~
		~~Content R5~~	~~0.420 mg/L~~	~~OK~~
		~~ALK LOW R6~~	~~0.320 mg/L~~	~~OK~~
59	WG2001084-1	Sample size	50 mL	
		Potential R4	11.54 pH	OK
		Consumption 8.3 R1	4.973 mL	OK
		Consumption 4.5 R2	5.376 mL	OK
		Consumption 4.2 R3	5.378 mL	OK
		Content R5	107.520 mg/L	OK

Titration report

		ALK LOW R6	107.480 mg/L	OK
60	WG2001084-2	Sample size	50 mL	
		Potential R4	4.91 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	0.029 mL	OK
		Consumption 4.2 R3	0.034 mL	OK
		Content R5	0.580 mg/L	OK
		ALK LOW R6	0.480 mg/L	OK
61	I2467975-05 10x	Sample size	50 mL	
		Potential R4	6.33 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	9.068 mL	OK
		Consumption 4.2 R3	9.227 mL	OK
		Content R5	181.360 mg/L	OK
		ALK LOW R6	178.180 mg/L	OK
62	I2467975-07 10x	Sample size	50 mL	
		Potential R4	6.42 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	9.570 mL	OK
		Consumption 4.2 R3	9.706 mL	OK
		Content R5	191.400 mg/L	OK
		ALK LOW R6	188.680 mg/L	OK
63	I2467994-01 10x	Sample size	50 mL	
		Potential R4	5.82 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	4.648 mL	OK
		Consumption 4.2 R3	4.684 mL	OK
		Content R5	92.960 mg/L	OK
		ALK LOW R6	92.240 mg/L	OK
64	I2467994-02 10x	Sample size	50 mL	
		Potential R4	5.68 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	2.847 mL	OK
		Consumption 4.2 R3	2.864 mL	OK
		Content R5	56.940 mg/L	OK
		ALK LOW R6	56.600 mg/L	OK
65	I2467994-03 10x	Sample size	50 mL	
		Potential R4	5.81 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	3.769 mL	OK
		Consumption 4.2 R3	3.790 mL	OK
		Content R5	75.380 mg/L	OK
		ALK LOW R6	74.960 mg/L	OK
66	I2467994-04 10x	Sample size	50 mL	
		Potential R4	5.75 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	3.100 mL	OK

Titration report

		Consumption 4.2 R3	3.119 mL	OK
		Content R5	62.000 mg/L	OK
		ALK LOW R6	61.620 mg/L	OK
67	I2467994-05 10x	Sample size	50 mL	
		Potential R4	5.66 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	2.792 mL	OK
		Consumption 4.2 R3	2.807 mL	OK
		Content R5	55.840 mg/L	OK
		ALK LOW R6	55.540 mg/L	OK
68	I2467994-08 10x	Sample size	50 mL	
		Potential R4	6.41 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	4.280 mL	OK
		Consumption 4.2 R3	4.302 mL	OK
		Content R5	85.600 mg/L	OK
		ALK LOW R6	85.160 mg/L	OK
69	I2467994-11 10x	Sample size	50 mL	
		Potential R4	8.14 pH	OK
		Consumption 8.3 R1	0.000 mL	OK
		Consumption 4.5 R2	2.574 mL	OK
		Consumption 4.2 R3	2.574 mL	OK
		Content R5	51.480 mg/L	OK
		ALK LOW R6	51.480 mg/L	OK
70	I2468003-01 10x	Sample size	50 mL	
		Potential R4	5.52 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	2.820 mL	OK
		Consumption 4.2 R3	2.840 mL	OK
		Content R5	56.400 mg/L	OK
		ALK LOW R6	56.000 mg/L	OK
71	I2468003-02 10x	Sample size	50 mL	
		Potential R4	5.56 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	2.616 mL	OK
		Consumption 4.2 R3	2.630 mL	OK
		Content R5	52.320 mg/L	OK
		ALK LOW R6	52.040 mg/L	OK
72	I2468003-04	Sample size	50 mL	
		Potential R4	6.58 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	15.835 mL	OK
		Consumption 4.2 R3	15.998 mL	OK
		Content R5	316.700 mg/L	OK
		ALK LOW R6	313.440 mg/L	OK
73	I2467975-04	Sample size	50 mL	
		Potential R4	5.53 pH	OK

Titration report

		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	1.131 mL	OK
		Consumption 4.2 R3	1.138 mL	OK
		Content R5	22.620 mg/L	OK
		ALK LOW R6	22.480 mg/L	OK
74	I2467975-06	Sample size	50 mL	
		Potential R4	5.74 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	5.827 mL	OK
		Consumption 4.2 R3	5.910 mL	OK
		Content R5	116.540 mg/L	OK
		ALK LOW R6	114.880 mg/L	OK
75	I2467975-08	Sample size	50 mL	
		Potential R4	4.96 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	0.042 mL	OK
		Consumption 4.2 R3	0.051 mL	OK
		Content R5	0.840 mg/L	OK
		ALK LOW R6	0.660 mg/L	OK
76	I2467975-08	Sample size	50 mL	
		Potential R4	4.82 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	0.031 mL	OK
		Consumption 4.2 R3	0.044 mL	OK
		Content R5	0.620 mg/L	OK
		ALK LOW R6	0.360 mg/L	OK
77	I2467994-06	Sample size	50 mL	
		Potential R4	6.42 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	11.908 mL	OK
		Consumption 4.2 R3	12.022 mL	OK
		Content R5	238.160 mg/L	OK
		ALK LOW R6	235.880 mg/L	OK
78	I2467994-07	Sample size	50 mL	
		Potential R4	6.55 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	11.604 mL	OK
		Consumption 4.2 R3	11.918 mL	OK
		Content R5	232.080 mg/L	OK
		ALK LOW R6	225.800 mg/L	OK
79	I2467994-09	Sample size	50 mL	
		Potential R4	6.24 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	11.580 mL	OK
		Consumption 4.2 R3	11.703 mL	OK
		Content R5	231.600 mg/L	OK
		ALK LOW R6	229.140 mg/L	OK

Titration report

80	I2467994-10	Sample size	50 mL	
		Potential R4	6.19 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	6.502 mL	OK
		Consumption 4.2 R3	6.557 mL	OK
		Content R5	130.040 mg/L	OK
		ALK LOW R6	128.940 mg/L	OK
81	WG2001084-3	Sample size	50 mL	
		Potential R4	6.22 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	6.396 mL	OK
		Consumption 4.2 R3	6.452 mL	OK
		Content R5	127.920 mg/L	OK
		ALK LOW R6	126.800 mg/L	OK
82	WG2001084-4	Sample size	50 mL	
		Potential R4	9.66 pH	OK
		Consumption 8.3 R1	2.808 mL	OK
		Consumption 4.5 R2	7.693 mL	OK
		Consumption 4.2 R3	10.919 mL	OK
		Content R5	153.860 mg/L	OK
		ALK LOW R6	89.340 mg/L	OK
83	I2468003-03	Sample size	50 mL	
		Potential R4	6.22 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	19.031 mL	OK
		Consumption 4.2 R3	19.273 mL	OK
		Content R5	380.620 mg/L	OK
		ALK LOW R6	375.780 mg/L	OK
84	CCV	Sample size	50 mL	
		Potential R4	10.97 pH	OK
		Consumption 8.3 R1	4.881 mL	OK
		Consumption 4.5 R2	5.275 mL	OK
		Consumption 4.2 R3	5.282 mL	OK
		Content R5	105.500 mg/L	OK
		ALK LOW R6	105.360 mg/L	OK
85	CCB	Sample size	50 mL	
		Potential R4	4.85 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	0.027 mL	OK
		Consumption 4.2 R3	0.039 mL	OK
		Content R5	0.540 mg/L	OK
		ALK LOW R6	0.300 mg/L	OK
86	WG2001243-2	Sample size	50 mL	
		Potential R4	10.91 pH	OK
		Consumption 8.3 R1	4.888 mL	OK
		Consumption 4.5 R2	5.360 mL	OK
		Consumption 4.2 R3	5.367 mL	OK

Titration report

		Content R5	107.200 mg/L	OK
		ALK LOW R6	107.060 mg/L	OK
87	WG2001243-1	Sample size	50 mL	
		Potential R4	4.64 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	0.005 mL	OK
		Consumption 4.2 R3	0.019 mL	OK
		Content R5	0.100 mg/L	OK
		ALK LOW R6	-0.180 mg/L	OK
88	I2468003-05	Sample size	50 mL	
		Potential R4	5.69 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	3.457 mL	OK
		Consumption 4.2 R3	3.479 mL	OK
		Content R5	69.140 mg/L	OK
		ALK LOW R6	68.700 mg/L	OK
89	I2468003-06	Sample size	50 mL	
		Potential R4	5.88 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	6.232 mL	OK
		Consumption 4.2 R3	6.283 mL	OK
		Content R5	124.640 mg/L	OK
		ALK LOW R6	123.620 mg/L	OK
90	I2468131-01	Sample size	50 mL	
		Potential R4	6.08 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	NaN mL	Not OK
		Consumption 4.2 R3	NaN mL	Not OK
		Content R5	NaN mg/L	Not OK
		ALK LOW R6	NaN mg/L	Not OK
91	I2468131-02 5x	Sample size	50 mL	
		Potential R4	6.03 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	4.611 mL	OK
		Consumption 4.2 R3	4.930 mL	OK
		Content R5	92.220 mg/L	OK
		ALK LOW R6	85.840 mg/L	OK
92	WG2001243-3 5x	Sample size	50 mL	
		Potential R4	5.83 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	4.684 mL	OK
		Consumption 4.2 R3	4.926 mL	OK
		Content R5	93.680 mg/L	OK
		ALK LOW R6	88.840 mg/L	OK
93	WG2001243-4 5x	Sample size	50 mL	
		Potential R4	10.24 pH	OK
		Consumption 8.3 R1	4.835 mL	OK

Titration report

		Consumption 4.5 R2	9.385 mL	OK
		Consumption 4.2 R3	9.842 mL	OK
		Content R5	187.700 mg/L	OK
		ALK LOW R6	178.560 mg/L	OK
94	I2468038-01 5x	Sample size	50 mL	
		Potential R4	5.47 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	2.335 mL	OK
		Consumption 4.2 R3	2.365 mL	OK
		Content R5	46.700 mg/L	OK
		ALK LOW R6	46.100 mg/L	OK
95	I2468038-02 5x	Sample size	50 mL	
		Potential R4	5.49 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	2.764 mL	OK
		Consumption 4.2 R3	2.800 mL	OK
		Content R5	55.280 mg/L	OK
		ALK LOW R6	54.560 mg/L	OK
96	I2468038-03	Sample size	50 mL	
		Potential R4	5.00 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	0.301 mL	OK
		Consumption 4.2 R3	0.326 mL	OK
		Content R5	6.020 mg/L	OK
		ALK LOW R6	5.520 mg/L	OK
97	I2468038-04	Sample size	50 mL	
		Potential R4	5.04 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	1.036 mL	OK
		Consumption 4.2 R3	1.165 mL	OK
		Content R5	20.720 mg/L	OK
		ALK LOW R6	18.140 mg/L	OK
98	I2468038-05	Sample size	50 mL	
		Potential R4	5.67 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	6.586 mL	OK
		Consumption 4.2 R3	6.728 mL	OK
		Content R5	131.720 mg/L	OK
		ALK LOW R6	128.880 mg/L	OK
99	I2468038-06	Sample size	50 mL	
		Potential R4	4.95 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	0.568 mL	OK
		Consumption 4.2 R3	0.654 mL	OK
		Content R5	11.360 mg/L	OK
		ALK LOW R6	9.640 mg/L	OK
100	I2468042-02	Sample size	50 mL	

Titration report

		Potential R4	6.37 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	NaN mL	Not OK
		Consumption 4.2 R3	NaN mL	Not OK
		Content R5	NaN mg/L	Not OK
		ALK LOW R6	NaN mg/L	Not OK
101	I2468042-03	Sample size	50 mL	
		Potential R4	6.70 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	NaN mL	Not OK
		Consumption 4.2 R3	NaN mL	Not OK
		Content R5	NaN mg/L	Not OK
		ALK LOW R6	NaN mg/L	Not OK
102	I2468042-04	Sample size	50 mL	
		Potential R4	6.72 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	NaN mL	Not OK
		Consumption 4.2 R3	NaN mL	Not OK
		Content R5	NaN mg/L	Not OK
		ALK LOW R6	NaN mg/L	Not OK
103	I2468042-05	Sample size	50 mL	
		Potential R4	7.74 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	NaN mL	Not OK
		Consumption 4.2 R3	NaN mL	Not OK
		Content R5	NaN mg/L	Not OK
		ALK LOW R6	NaN mg/L	Not OK
104	L2468131-01 10x	Sample size	50 mL	
		Potential R4	6.16 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	2.180 mL	OK
		Consumption 4.2 R3	2.192 mL	OK
		Content R5	43.600 mg/L	OK
		ALK LOW R6	43.360 mg/L	OK
105	I2467934-01	Sample size	50 mL	
		Potential R4	8.42 pH	OK
		Consumption 8.3 R1	0.467 mL	OK
		Consumption 4.5 R2	4.265 mL	OK
		Consumption 4.2 R3	4.278 mL	OK
		Content R5	85.300 mg/L	OK
		ALK LOW R6	85.040 mg/L	OK
106	I2467934-02	Sample size	50 mL	
		Potential R4	5.98 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	6.827 mL	OK
		Consumption 4.2 R3	6.899 mL	OK
		Content R5	136.540 mg/L	OK

Titration report

		ALK LOW R6	135.100 mg/L	OK
107	I2467934-03	Sample size	50 mL	
		Potential R4	5.83 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	4.697 mL	OK
		Consumption 4.2 R3	4.754 mL	OK
		Content R5	93.940 mg/L	OK
		ALK LOW R6	92.800 mg/L	OK
108	I2467934-04	Sample size	50 mL	
		Potential R4	5.64 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	2.419 mL	OK
		Consumption 4.2 R3	2.438 mL	OK
		Content R5	48.380 mg/L	OK
		ALK LOW R6	48.000 mg/L	OK
109	WG2001244-3	Sample size	50 mL	
		Potential R4	5.63 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	2.633 mL	OK
		Consumption 4.2 R3	2.663 mL	OK
		Content R5	52.660 mg/L	OK
		ALK LOW R6	52.060 mg/L	OK
110	I2467934-05	Sample size	50 mL	
		Potential R4	5.06 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	0.390 mL	OK
		Consumption 4.2 R3	0.414 mL	OK
		Content R5	7.800 mg/L	OK
		ALK LOW R6	7.320 mg/L	OK
111	I2467934-06	Sample size	50 mL	
		Potential R4	5.90 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	9.417 mL	OK
		Consumption 4.2 R3	9.560 mL	OK
		Content R5	188.340 mg/L	OK
		ALK LOW R6	185.480 mg/L	OK
112	I2467934-07	Sample size	50 mL	
		Potential R4	5.99 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	10.567 mL	OK
		Consumption 4.2 R3	10.730 mL	OK
		Content R5	211.340 mg/L	OK
		ALK LOW R6	208.080 mg/L	OK
113	I2467934-08	Sample size	50 mL	
		Potential R4	5.84 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	4.332 mL	OK

Titration report

		Consumption 4.2 R3	4.373 mL	OK
		Content R5	86.640 mg/L	OK
		ALK LOW R6	85.820 mg/L	OK
114	I2467934-09	Sample size	50 mL	
		Potential R4	5.98 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	10.750 mL	OK
		Consumption 4.2 R3	10.922 mL	OK
		Content R5	215.000 mg/L	OK
		ALK LOW R6	211.560 mg/L	OK
115	CCV	Sample size	50 mL	
		Potential R4	10.90 pH	OK
		Consumption 8.3 R1	4.768 mL	OK
		Consumption 4.5 R2	5.290 mL	OK
		Consumption 4.2 R3	5.295 mL	OK
		Content R5	105.800 mg/L	OK
		ALK LOW R6	105.700 mg/L	OK
116	WG2001244-1	Sample size	50 mL	
		Potential R4	4.84 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	0.032 mL	OK
		Consumption 4.2 R3	0.035 mL	OK
		Content R5	0.640 mg/L	OK
		ALK LOW R6	0.580 mg/L	OK
117	CCV	Sample size	50 mL	
		Potential R4	10.90 pH	OK
		Consumption 8.3 R1	4.852 mL	OK
		Consumption 4.5 R2	5.406 mL	OK
		Consumption 4.2 R3	5.410 mL	OK
		Content R5	108.120 mg/L	OK
		ALK LOW R6	108.040 mg/L	OK
118	CCB	Sample size	50 mL	
		Potential R4	4.74 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	0.011 mL	OK
		Consumption 4.2 R3	0.019 mL	OK
		Content R5	0.220 mg/L	OK
		ALK LOW R6	0.060 mg/L	OK

Statistics

R1

Mean	NaN mL		
Maximum	8.954 mL	**Minimum**	0.000 mL
Standard deviation	NaN mL	**Rel. standard deviation**	NaN %
Total samples	118	**Samples excluded**	0

Titration report

R2

Mean	NaN mL		
Maximum	19.082 mL	**Minimum**	0.005 mL
Standard deviation	NaN mL	**Rel. standard deviation**	NaN %
Total samples	118	**Samples excluded**	0

R3

Mean	NaN mL		
Maximum	19.273 mL	**Minimum**	0.019 mL
Standard deviation	NaN mL	**Rel. standard deviation**	NaN %
Total samples	118	**Samples excluded**	0

R4

Mean	6.60 pH		
Maximum	11.54 pH	**Minimum**	4.64 pH
Standard deviation	1.61 pH	**Rel. standard deviation**	24.319 %
Total samples	118	**Samples excluded**	0

R5

Mean	NaN mg/L		
Maximum	381.640 mg/L	**Minimum**	0.100 mg/L
Standard deviation	NaN mg/L	**Rel. standard deviation**	NaN %
Total samples	118	**Samples excluded**	0

R6

Mean	NaN mg/L		
Maximum	375.780 mg/L	**Minimum**	-0.180 mg/L
Standard deviation	NaN mg/L	**Rel. standard deviation**	NaN %
Total samples	118	**Samples excluded**	0

Used Instruments

Name	T7 Excellence Titrator	**Serial number**	C329519495

Responsible User

Time	Login name	Full name
11/22/2024 8:08:36 AM	SystemInternal	System internal account

(17) Data compression on instrument occurred

Results Editor

LabX

Result Overview

Sample start t	Zero poin	Unit of Ze	Data marl	Slope 1 (C	Unit of Sl	Data marl	Sensor ty	List of sta	Standard	Comment	Temperat
	7.124	pH		-54.57	mV/pH						

Results Editor

Result Overview

Sample ID1	Potentia	Unit of P	Data ma	Sample start	Volume	Unit of V	Density [	Unit of D	Cor	Uni	Tempera	Unit of T	Commer
--	7.02	pH		11/22/2024	0	mL	1.0	g/mL	1.0		25.0	°C	

Titration report

Method

Method ID	Alk Total (2)	**Release state**	Released
Name	EP/EP	**Modified by**	SystemInternal
Modified on	10/14/2023 11:44:43 AM		

Summary

Samples

	Sample ID	Name	Result	State
1	Rinse,MKT	Sample size	50 mL	
		Potential R4	6.89 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	0.888 mL	OK
		Consumption 4.2 R3	0.894 mL	OK
		Content R5	17.760 mg/L	OK
		ALK LOW R6	17.640 mg/L	OK
2	Rinse,MKT	Sample size	50 mL	
		Potential R4	5.19 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	0.042 mL	OK
		Consumption 4.2 R3	0.046 mL	OK
		Content R5	0.840 mg/L	OK
		ALK LOW R6	0.760 mg/L	OK
3	WG2000937-1	Sample size	50 mL	
		Potential R4	5.03 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	0.022 mL	OK
		Consumption 4.2 R3	0.026 mL	OK
		Content R5	0.440 mg/L	OK
		ALK LOW R6	0.360 mg/L	OK
4	WG2000937-2	Sample size	50 mL	
		Potential R4	10.91 pH	OK
		Consumption 8.3 R1	4.799 mL	OK
		Consumption 4.5 R2	5.254 mL	OK
		Consumption 4.2 R3	5.256 mL	OK
		Content R5	105.080 mg/L	OK
		ALK LOW R6	105.040 mg/L	OK
5	I2467709-01	Sample size	50 mL	
		Potential R4	5.99 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	17.748 mL	OK
		Consumption 4.2 R3	17.939 mL	OK
		Content R5	354.960 mg/L	OK
		ALK LOW R6	351.140 mg/L	OK
6	I2467709-02	Sample size	50 mL	

Titration report

		Potential R4	6.14 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	13.084 mL	OK
		Consumption 4.2 R3	13.210 mL	OK
		Content R5	261.680 mg/L	OK
		ALK LOW R6	259.160 mg/L	OK
7	I2467709-03	Sample size	50 mL	
		Potential R4	6.42 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	13.302 mL	OK
		Consumption 4.2 R3	13.462 mL	OK
		Content R5	266.040 mg/L	OK
		ALK LOW R6	262.840 mg/L	OK
8	I2467709-04	Sample size	50 mL	
		Potential R4	6.26 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	18.461 mL	OK
		Consumption 4.2 R3	18.677 mL	OK
		Content R5	369.220 mg/L	OK
		ALK LOW R6	364.900 mg/L	OK
9	I2467709-05	Sample size	50 mL	
		Potential R4	6.81 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	NaN mL	Not OK
		Consumption 4.2 R3	NaN mL	Not OK
		Content R5	NaN mg/L	Not OK
		ALK LOW R6	NaN mg/L	Not OK
10	I2467585-07	Sample size	50 mL	
		Potential R4	7.57 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	6.547 mL	OK
		Consumption 4.2 R3	6.593 mL	OK
		Content R5	130.940 mg/L	OK
		ALK LOW R6	130.020 mg/L	OK
11	I2467892-01	Sample size	50 mL	
		Potential R4	5.82 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	11.559 mL	OK
		Consumption 4.2 R3	11.693 mL	OK
		Content R5	231.180 mg/L	OK
		ALK LOW R6	228.500 mg/L	OK
12	I2467892-02	Sample size	50 mL	
		Potential R4	5.66 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	6.288 mL	OK
		Consumption 4.2 R3	6.378 mL	OK
		Content R5	125.760 mg/L	OK

Titration report

		ALK LOW R6	123.960 mg/L	OK
13	I2467892-03	Sample size	50 mL	
		Potential R4	5.94 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	8.832 mL	OK
		Consumption 4.2 R3	8.928 mL	OK
		Content R5	176.640 mg/L	OK
		ALK LOW R6	174.720 mg/L	OK
14	I2467892-04	Sample size	50 mL	
		Potential R4	5.95 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	16.135 mL	OK
		Consumption 4.2 R3	16.374 mL	OK
		Content R5	322.700 mg/L	OK
		ALK LOW R6	317.920 mg/L	OK
15	I2467892-05	Sample size	50 mL	
		Potential R4	5.81 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	8.426 mL	OK
		Consumption 4.2 R3	8.545 mL	OK
		Content R5	168.520 mg/L	OK
		ALK LOW R6	166.140 mg/L	OK
16	I2467901-01	Sample size	50 mL	
		Potential R4	6.12 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	NaN mL	Not OK
		Consumption 4.2 R3	NaN mL	Not OK
		Content R5	NaN mg/L	Not OK
		ALK LOW R6	NaN mg/L	Not OK
17	I2467901-02	Sample size	50 mL	
		Potential R4	6.54 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	16.345 mL	OK
		Consumption 4.2 R3	16.527 mL	OK
		Content R5	326.900 mg/L	OK
		ALK LOW R6	323.260 mg/L	OK
18	I2467901-03	Sample size	50 mL	
		Potential R4	6.43 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	NaN mL	Not OK
		Consumption 4.2 R3	NaN mL	Not OK
		Content R5	NaN mg/L	Not OK
		ALK LOW R6	NaN mg/L	Not OK
19	I2467901-04	Sample size	50 mL	
		Potential R4	6.57 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	17.838 mL	OK

Titration report

		Consumption 4.2 R3	18.068 mL	OK
		Content R5	356.760 mg/L	OK
		ALK LOW R6	352.160 mg/L	OK
20	I2467901-05	Sample size	50 mL	
		Potential R4	6.21 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	15.486 mL	OK
		Consumption 4.2 R3	15.655 mL	OK
		Content R5	309.720 mg/L	OK
		ALK LOW R6	306.340 mg/L	OK
21	WG2000937-3	Sample size	50 mL	
		Potential R4	6.37 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	15.460 mL	OK
		Consumption 4.2 R3	15.634 mL	OK
		Content R5	309.200 mg/L	OK
		ALK LOW R6	305.720 mg/L	OK
22	WG2000937-4	Sample size	50 mL	
		Potential R4	6.95 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	19.082 mL	OK
		Consumption 4.2 R3	NaN mL	Not OK
		Content R5	381.640 mg/L	OK
		ALK LOW R6	NaN mg/L	Not OK
23	I2467901-06	Sample size	50 mL	
		Potential R4	6.23 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	12.869 mL	OK
		Consumption 4.2 R3	13.043 mL	OK
		Content R5	257.380 mg/L	OK
		ALK LOW R6	253.900 mg/L	OK
24	I2467975-01	Sample size	50 mL	
		Potential R4	5.82 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	5.492 mL	OK
		Consumption 4.2 R3	5.564 mL	OK
		Content R5	109.840 mg/L	OK
		ALK LOW R6	108.400 mg/L	OK
25	I2467975-02	Sample size	50 mL	
		Potential R4	5.52 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	1.880 mL	OK
		Consumption 4.2 R3	1.895 mL	OK
		Content R5	37.600 mg/L	OK
		ALK LOW R6	37.300 mg/L	OK
26	I2467975-03	Sample size	50 mL	
		Potential R4	5.72 pH	OK

Titration report

		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	7.081 mL	OK
		Consumption 4.2 R3	7.246 mL	OK
		Content R5	141.620 mg/L	OK
		ALK LOW R6	138.320 mg/L	OK
27	L2467709-05 2x+10	Sample size	50 mL	
		Potential R4	6.44 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	NaN mL	Not OK
		Consumption 4.2 R3	NaN mL	Not OK
		Content R5	NaN mg/L	Not OK
		ALK LOW R6	NaN mg/L	Not OK
28	L2467901-01 2x+10	Sample size	50 mL	
		Potential R4	6.08 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	7.856 mL	OK
		Consumption 4.2 R3	8.084 mL	OK
		Content R5	157.120 mg/L	OK
		ALK LOW R6	152.560 mg/L	OK
29	L2467901-03 2x+10	Sample size	50 mL	
		Potential R4	5.60 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	4.401 mL	OK
		Consumption 4.2 R3	4.527 mL	OK
		Content R5	88.020 mg/L	OK
		ALK LOW R6	85.500 mg/L	OK
30	WG2001084-2	Sample size	50 mL	
		Potential R4	10.98 pH	OK
		Consumption 8.3 R1	4.829 mL	OK
		Consumption 4.5 R2	5.187 mL	OK
		Consumption 4.2 R3	5.195 mL	OK
		Content R5	103.740 mg/L	OK
		ALK LOW R6	103.580 mg/L	OK
31	WG2001084-1	Sample size	50 mL	
		Potential R4	5.24 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	0.032 mL	OK
		Consumption 4.2 R3	0.035 mL	OK
		Content R5	0.640 mg/L	OK
		ALK LOW R6	0.580 mg/L	OK
~~32~~	~~l2467975-04~~	~~Sample size~~	~~50 mL~~	
		~~Potential R4~~	~~5.26 pH~~	~~OK~~
		~~Consumption 8.3 R1~~	~~NaN mL~~	~~Not OK~~
		~~Consumption 4.5 R2~~	~~0.960 mL~~	~~OK~~
		~~Consumption 4.2 R3~~	~~0.973 mL~~	~~OK~~
		~~Content R5~~	~~19.200 mg/L~~	~~OK~~
		~~ALK LOW R6~~	~~18.940 mg/L~~	~~OK~~

Titration report

33	I2467975-05	Sample size	50 mL	
		Potential R4	6.52 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	NaN mL	Not OK
		Consumption 4.2 R3	NaN mL	Not OK
		Content R5	NaN mg/L	Not OK
		ALK LOW R6	NaN mg/L	Not OK
34	I2467975-06	Sample size	50 mL	
		Potential R4	7.52 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	5.889 mL	OK
		Consumption 4.2 R3	5.946 mL	OK
		Content R5	117.780 mg/L	OK
		ALK LOW R6	116.640 mg/L	OK
35	I2467975-07	Sample size	50 mL	
		Potential R4	6.67 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	NaN mL	Not OK
		Consumption 4.2 R3	NaN mL	Not OK
		Content R5	NaN mg/L	Not OK
		ALK LOW R6	NaN mg/L	Not OK
36	I2467975-08	Sample size	50 mL	
		Potential R4	8.30 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	0.540 mL	OK
		Consumption 4.2 R3	0.542 mL	OK
		Content R5	10.800 mg/L	OK
		ALK LOW R6	10.760 mg/L	OK
37	I2467975-08 CONF	Sample size	50 mL	
		Potential R4	5.38 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	0.124 mL	OK
		Consumption 4.2 R3	0.137 mL	OK
		Content R5	2.480 mg/L	OK
		ALK LOW R6	2.220 mg/L	OK
38	I2467994-01	Sample size	50 mL	
		Potential R4	6.38 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	NaN mL	Not OK
		Consumption 4.2 R3	NaN mL	Not OK
		Content R5	NaN mg/L	Not OK
		ALK LOW R6	NaN mg/L	Not OK
39	I2467994-02	Sample size	50 mL	
		Potential R4	6.84 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	NaN mL	Not OK
		Consumption 4.2 R3	NaN mL	Not OK

Titration report

		Content R5	NaN mg/L	Not OK
		ALK LOW R6	NaN mg/L	Not OK
40	I2467994-03	Sample size	50 mL	
		Potential R4	6.84 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	NaN mL	Not OK
		Consumption 4.2 R3	NaN mL	Not OK
		Content R5	NaN mg/L	Not OK
		ALK LOW R6	NaN mg/L	Not OK
41	I2467994-04	Sample size	50 mL	
		Potential R4	6.78 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	NaN mL	Not OK
		Consumption 4.2 R3	NaN mL	Not OK
		Content R5	NaN mg/L	Not OK
		ALK LOW R6	NaN mg/L	Not OK
42	I2467994-05	Sample size	50 mL	
		Potential R4	6.57 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	NaN mL	Not OK
		Consumption 4.2 R3	NaN mL	Not OK
		Content R5	NaN mg/L	Not OK
		ALK LOW R6	NaN mg/L	Not OK
43	I2467994-06	Sample size	50 mL	
		Potential R4	6.99 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	10.054 mL	OK
		Consumption 4.2 R3	10.150 mL	OK
		Content R5	201.080 mg/L	OK
		ALK LOW R6	199.160 mg/L	OK
44	I2467994-07	Sample size	50 mL	
		Potential R4	6.58 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	10.308 mL	OK
		Consumption 4.2 R3	10.431 mL	OK
		Content R5	206.160 mg/L	OK
		ALK LOW R6	203.700 mg/L	OK
45	I2467994-08	Sample size	50 mL	
		Potential R4	7.66 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	NaN mL	Not OK
		Consumption 4.2 R3	NaN mL	Not OK
		Content R5	NaN mg/L	Not OK
		ALK LOW R6	NaN mg/L	Not OK
46	I2467994-09	Sample size	50 mL	
		Potential R4	6.77 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK

Titration report

		Consumption 4.5 R2	10.904 mL	OK
		Consumption 4.2 R3	11.016 mL	OK
		Content R5	218.080 mg/L	OK
		ALK LOW R6	215.840 mg/L	OK
47	I2467994-10	Sample size	50 mL	
		Potential R4	6.62 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	6.358 mL	OK
		Consumption 4.2 R3	6.406 mL	OK
		Content R5	127.160 mg/L	OK
		ALK LOW R6	126.200 mg/L	OK
48	I2467994-11	Sample size	50 mL	
		Potential R4	8.78 pH	OK
		Consumption 8.3 R1	1.714 mL	OK
		Consumption 4.5 R2	NaN mL	Not OK
		Consumption 4.2 R3	NaN mL	Not OK
		Content R5	NaN mg/L	Not OK
		ALK LOW R6	NaN mg/L	Not OK
49	I2468003-01	Sample size	50 mL	
		Potential R4	6.30 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	NaN mL	Not OK
		Consumption 4.2 R3	NaN mL	Not OK
		Content R5	NaN mg/L	Not OK
		ALK LOW R6	NaN mg/L	Not OK
50	I2468003-02	Sample size	50 mL	
		Potential R4	6.39 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	NaN mL	Not OK
		Consumption 4.2 R3	NaN mL	Not OK
		Content R5	NaN mg/L	Not OK
		ALK LOW R6	NaN mg/L	Not OK
51	I2468003-03	Sample size	50 mL	
		Potential R4	6.44 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	18.318 mL	OK
		Consumption 4.2 R3	18.548 mL	OK
		Content R5	366.360 mg/L	OK
		ALK LOW R6	361.760 mg/L	OK
52	I2468003-04	Sample size	50 mL	
		Potential R4	6.59 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	NaN mL	Not OK
		Consumption 4.2 R3	NaN mL	Not OK
		Content R5	NaN mg/L	Not OK
		ALK LOW R6	NaN mg/L	Not OK
53	WG2001084-3	Sample size	50 mL	

Titration report

		~~Potential R4~~	~~6.88 pH~~	~~OK~~
		~~Consumption 8.3 R1~~	~~NaN mL~~	~~Not OK~~
		~~Consumption 4.5 R2~~	~~NaN mL~~	~~Not OK~~
		~~Consumption 4.2 R3~~	~~NaN mL~~	~~Not OK~~
		~~Content R5~~	~~NaN mg/L~~	~~Not OK~~
		~~ALK LOW R6~~	~~NaN mg/L~~	~~Not OK~~
~~54~~	~~WG2001084-4~~	~~Sample size~~	~~50 mL~~	
		~~Potential R4~~	~~8.37 pH~~	~~OK~~
		~~Consumption 8.3 R1~~	~~NaN mL~~	~~Not OK~~
		~~Consumption 4.5 R2~~	~~NaN mL~~	~~Not OK~~
		~~Consumption 4.2 R3~~	~~NaN mL~~	~~Not OK~~
		~~Content R5~~	~~NaN mg/L~~	~~Not OK~~
		~~ALK LOW R6~~	~~NaN mg/L~~	~~Not OK~~
~~55~~	~~XCCV~~	~~Sample size~~	~~50 mL~~	
		~~Potential R4~~	~~11.38 pH~~	~~OK~~
		~~Consumption 8.3 R1~~	~~NaN mL~~	~~Not OK~~
		~~Consumption 4.5 R2~~	~~NaN mL~~	~~Not OK~~
		~~Consumption 4.2 R3~~	~~NaN mL~~	~~Not OK~~
		~~Content R5~~	~~NaN mg/L~~	~~Not OK~~
		~~ALK LOW R6~~	~~NaN mg/L~~	~~Not OK~~
~~56~~	~~XCCB~~	~~Sample size~~	~~50 mL~~	
		~~Potential R4~~	~~8.40 pH~~	~~OK~~
		~~Consumption 8.3 R1~~	~~NaN mL~~	~~Not OK~~
		~~Consumption 4.5 R2~~	~~6.746 mL~~	~~OK~~
		~~Consumption 4.2 R3~~	~~6.747 mL~~	~~OK~~
		~~Content R5~~	~~134.920 mg/L~~	~~OK~~
		~~ALK LOW R6~~	~~134.900 mg/L~~	~~OK~~
~~57~~	~~CCV~~	~~Sample size~~	~~50 mL~~	
		~~Potential R4~~	~~11.30 pH~~	~~OK~~
		~~Consumption 8.3 R1~~	~~8.954 mL~~	~~OK~~
		~~Consumption 4.5 R2~~	~~9.358 mL~~	~~OK~~
		~~Consumption 4.2 R3~~	~~9.364 mL~~	~~OK~~
		~~Content R5~~	~~187.160 mg/L~~	~~OK~~
		~~ALK LOW R6~~	~~187.040 mg/L~~	~~OK~~
~~58~~	~~CCB~~	~~Sample size~~	~~50 mL~~	
		~~Potential R4~~	~~4.81 pH~~	~~OK~~
		~~Consumption 8.3 R1~~	~~NaN mL~~	~~Not OK~~
		~~Consumption 4.5 R2~~	~~0.021 mL~~	~~OK~~
		~~Consumption 4.2 R3~~	~~0.026 mL~~	~~OK~~
		~~Content R5~~	~~0.420 mg/L~~	~~OK~~
		~~ALK LOW R6~~	~~0.320 mg/L~~	~~OK~~
59	WG2001084-1	Sample size	50 mL	
		Potential R4	11.54 pH	OK
		Consumption 8.3 R1	4.973 mL	OK
		Consumption 4.5 R2	5.376 mL	OK
		Consumption 4.2 R3	5.378 mL	OK
		Content R5	107.520 mg/L	OK

Titration report

		ALK LOW R6	107.480 mg/L	OK
60	WG2001084-2	Sample size	50 mL	
		Potential R4	4.91 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	0.029 mL	OK
		Consumption 4.2 R3	0.034 mL	OK
		Content R5	0.580 mg/L	OK
		ALK LOW R6	0.480 mg/L	OK
61	I2467975-05 10x	Sample size	50 mL	
		Potential R4	6.33 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	9.068 mL	OK
		Consumption 4.2 R3	9.227 mL	OK
		Content R5	181.360 mg/L	OK
		ALK LOW R6	178.180 mg/L	OK
62	I2467975-07 10x	Sample size	50 mL	
		Potential R4	6.42 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	9.570 mL	OK
		Consumption 4.2 R3	9.706 mL	OK
		Content R5	191.400 mg/L	OK
		ALK LOW R6	188.680 mg/L	OK
63	I2467994-01 10x	Sample size	50 mL	
		Potential R4	5.82 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	4.648 mL	OK
		Consumption 4.2 R3	4.684 mL	OK
		Content R5	92.960 mg/L	OK
		ALK LOW R6	92.240 mg/L	OK
64	I2467994-02 10x	Sample size	50 mL	
		Potential R4	5.68 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	2.847 mL	OK
		Consumption 4.2 R3	2.864 mL	OK
		Content R5	56.940 mg/L	OK
		ALK LOW R6	56.600 mg/L	OK
65	I2467994-03 10x	Sample size	50 mL	
		Potential R4	5.81 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	3.769 mL	OK
		Consumption 4.2 R3	3.790 mL	OK
		Content R5	75.380 mg/L	OK
		ALK LOW R6	74.960 mg/L	OK
66	I2467994-04 10x	Sample size	50 mL	
		Potential R4	5.75 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	3.100 mL	OK

Titration report

		Consumption 4.2 R3	3.119 mL	OK
		Content R5	62.000 mg/L	OK
		ALK LOW R6	61.620 mg/L	OK
67	I2467994-05 10x	Sample size	50 mL	
		Potential R4	5.66 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	2.792 mL	OK
		Consumption 4.2 R3	2.807 mL	OK
		Content R5	55.840 mg/L	OK
		ALK LOW R6	55.540 mg/L	OK
68	I2467994-08 10x	Sample size	50 mL	
		Potential R4	6.41 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	4.280 mL	OK
		Consumption 4.2 R3	4.302 mL	OK
		Content R5	85.600 mg/L	OK
		ALK LOW R6	85.160 mg/L	OK
69	I2467994-11 10x	Sample size	50 mL	
		Potential R4	8.14 pH	OK
		Consumption 8.3 R1	0.000 mL	OK
		Consumption 4.5 R2	2.574 mL	OK
		Consumption 4.2 R3	2.574 mL	OK
		Content R5	51.480 mg/L	OK
		ALK LOW R6	51.480 mg/L	OK
70	I2468003-01 10x	Sample size	50 mL	
		Potential R4	5.52 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	2.820 mL	OK
		Consumption 4.2 R3	2.840 mL	OK
		Content R5	56.400 mg/L	OK
		ALK LOW R6	56.000 mg/L	OK
71	I2468003-02 10x	Sample size	50 mL	
		Potential R4	5.56 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	2.616 mL	OK
		Consumption 4.2 R3	2.630 mL	OK
		Content R5	52.320 mg/L	OK
		ALK LOW R6	52.040 mg/L	OK
72	I2468003-04	Sample size	50 mL	
		Potential R4	6.58 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	15.835 mL	OK
		Consumption 4.2 R3	15.998 mL	OK
		Content R5	316.700 mg/L	OK
		ALK LOW R6	313.440 mg/L	OK
73	I2467975-04	Sample size	50 mL	
		Potential R4	5.53 pH	OK

Titration report

		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	1.131 mL	OK
		Consumption 4.2 R3	1.138 mL	OK
		Content R5	22.620 mg/L	OK
		ALK LOW R6	22.480 mg/L	OK
74	I2467975-06	Sample size	50 mL	
		Potential R4	5.74 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	5.827 mL	OK
		Consumption 4.2 R3	5.910 mL	OK
		Content R5	116.540 mg/L	OK
		ALK LOW R6	114.880 mg/L	OK
75	I2467975-08	Sample size	50 mL	
		Potential R4	4.96 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	0.042 mL	OK
		Consumption 4.2 R3	0.051 mL	OK
		Content R5	0.840 mg/L	OK
		ALK LOW R6	0.660 mg/L	OK
76	I2467975-08	Sample size	50 mL	
		Potential R4	4.82 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	0.031 mL	OK
		Consumption 4.2 R3	0.044 mL	OK
		Content R5	0.620 mg/L	OK
		ALK LOW R6	0.360 mg/L	OK
77	I2467994-06	Sample size	50 mL	
		Potential R4	6.42 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	11.908 mL	OK
		Consumption 4.2 R3	12.022 mL	OK
		Content R5	238.160 mg/L	OK
		ALK LOW R6	235.880 mg/L	OK
78	I2467994-07	Sample size	50 mL	
		Potential R4	6.55 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	11.604 mL	OK
		Consumption 4.2 R3	11.918 mL	OK
		Content R5	232.080 mg/L	OK
		ALK LOW R6	225.800 mg/L	OK
79	I2467994-09	Sample size	50 mL	
		Potential R4	6.24 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	11.580 mL	OK
		Consumption 4.2 R3	11.703 mL	OK
		Content R5	231.600 mg/L	OK
		ALK LOW R6	229.140 mg/L	OK

Titration report

80	I2467994-10	Sample size	50 mL	
		Potential R4	6.19 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	6.502 mL	OK
		Consumption 4.2 R3	6.557 mL	OK
		Content R5	130.040 mg/L	OK
		ALK LOW R6	128.940 mg/L	OK
81	WG2001084-3	Sample size	50 mL	
		Potential R4	6.22 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	6.396 mL	OK
		Consumption 4.2 R3	6.452 mL	OK
		Content R5	127.920 mg/L	OK
		ALK LOW R6	126.800 mg/L	OK
82	WG2001084-4	Sample size	50 mL	
		Potential R4	9.66 pH	OK
		Consumption 8.3 R1	2.808 mL	OK
		Consumption 4.5 R2	7.693 mL	OK
		Consumption 4.2 R3	10.919 mL	OK
		Content R5	153.860 mg/L	OK
		ALK LOW R6	89.340 mg/L	OK
83	I2468003-03	Sample size	50 mL	
		Potential R4	6.22 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	19.031 mL	OK
		Consumption 4.2 R3	19.273 mL	OK
		Content R5	380.620 mg/L	OK
		ALK LOW R6	375.780 mg/L	OK
84	CCV	Sample size	50 mL	
		Potential R4	10.97 pH	OK
		Consumption 8.3 R1	4.881 mL	OK
		Consumption 4.5 R2	5.275 mL	OK
		Consumption 4.2 R3	5.282 mL	OK
		Content R5	105.500 mg/L	OK
		ALK LOW R6	105.360 mg/L	OK
85	CCB	Sample size	50 mL	
		Potential R4	4.85 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	0.027 mL	OK
		Consumption 4.2 R3	0.039 mL	OK
		Content R5	0.540 mg/L	OK
		ALK LOW R6	0.300 mg/L	OK
86	WG2001243-2	Sample size	50 mL	
		Potential R4	10.91 pH	OK
		Consumption 8.3 R1	4.888 mL	OK
		Consumption 4.5 R2	5.360 mL	OK
		Consumption 4.2 R3	5.367 mL	OK

Titration report

		Content R5	107.200 mg/L	OK
		ALK LOW R6	107.060 mg/L	OK
87	WG2001243-1	Sample size	50 mL	
		Potential R4	4.64 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	0.005 mL	OK
		Consumption 4.2 R3	0.019 mL	OK
		Content R5	0.100 mg/L	OK
		ALK LOW R6	-0.180 mg/L	OK
88	I2468003-05	Sample size	50 mL	
		Potential R4	5.69 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	3.457 mL	OK
		Consumption 4.2 R3	3.479 mL	OK
		Content R5	69.140 mg/L	OK
		ALK LOW R6	68.700 mg/L	OK
89	I2468003-06	Sample size	50 mL	
		Potential R4	5.88 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	6.232 mL	OK
		Consumption 4.2 R3	6.283 mL	OK
		Content R5	124.640 mg/L	OK
		ALK LOW R6	123.620 mg/L	OK
90	I2468131-01	Sample size	50 mL	
		Potential R4	6.08 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	NaN mL	Not OK
		Consumption 4.2 R3	NaN mL	Not OK
		Content R5	NaN mg/L	Not OK
		ALK LOW R6	NaN mg/L	Not OK
91	I2468131-02 5x	Sample size	50 mL	
		Potential R4	6.03 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	4.611 mL	OK
		Consumption 4.2 R3	4.930 mL	OK
		Content R5	92.220 mg/L	OK
		ALK LOW R6	85.840 mg/L	OK
92	WG2001243-3 5x	Sample size	50 mL	
		Potential R4	5.83 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	4.684 mL	OK
		Consumption 4.2 R3	4.926 mL	OK
		Content R5	93.680 mg/L	OK
		ALK LOW R6	88.840 mg/L	OK
93	WG2001243-4 5x	Sample size	50 mL	
		Potential R4	10.24 pH	OK
		Consumption 8.3 R1	4.835 mL	OK

Titration report

		Consumption 4.5 R2	9.385 mL	OK
		Consumption 4.2 R3	9.842 mL	OK
		Content R5	187.700 mg/L	OK
		ALK LOW R6	178.560 mg/L	OK
94	I2468038-01 5x	Sample size	50 mL	
		Potential R4	5.47 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	2.335 mL	OK
		Consumption 4.2 R3	2.365 mL	OK
		Content R5	46.700 mg/L	OK
		ALK LOW R6	46.100 mg/L	OK
95	I2468038-02 5x	Sample size	50 mL	
		Potential R4	5.49 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	2.764 mL	OK
		Consumption 4.2 R3	2.800 mL	OK
		Content R5	55.280 mg/L	OK
		ALK LOW R6	54.560 mg/L	OK
96	I2468038-03	Sample size	50 mL	
		Potential R4	5.00 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	0.301 mL	OK
		Consumption 4.2 R3	0.326 mL	OK
		Content R5	6.020 mg/L	OK
		ALK LOW R6	5.520 mg/L	OK
97	I2468038-04	Sample size	50 mL	
		Potential R4	5.04 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	1.036 mL	OK
		Consumption 4.2 R3	1.165 mL	OK
		Content R5	20.720 mg/L	OK
		ALK LOW R6	18.140 mg/L	OK
98	I2468038-05	Sample size	50 mL	
		Potential R4	5.67 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	6.586 mL	OK
		Consumption 4.2 R3	6.728 mL	OK
		Content R5	131.720 mg/L	OK
		ALK LOW R6	128.880 mg/L	OK
99	I2468038-06	Sample size	50 mL	
		Potential R4	4.95 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	0.568 mL	OK
		Consumption 4.2 R3	0.654 mL	OK
		Content R5	11.360 mg/L	OK
		ALK LOW R6	9.640 mg/L	OK
100	I2468042-02	Sample size	50 mL	

Titration report

		Potential R4	6.37 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	NaN mL	Not OK
		Consumption 4.2 R3	NaN mL	Not OK
		Content R5	NaN mg/L	Not OK
		ALK LOW R6	NaN mg/L	Not OK
101	I2468042-03	Sample size	50 mL	
		Potential R4	6.70 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	NaN mL	Not OK
		Consumption 4.2 R3	NaN mL	Not OK
		Content R5	NaN mg/L	Not OK
		ALK LOW R6	NaN mg/L	Not OK
102	I2468042-04	Sample size	50 mL	
		Potential R4	6.72 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	NaN mL	Not OK
		Consumption 4.2 R3	NaN mL	Not OK
		Content R5	NaN mg/L	Not OK
		ALK LOW R6	NaN mg/L	Not OK
103	I2468042-05	Sample size	50 mL	
		Potential R4	7.74 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	NaN mL	Not OK
		Consumption 4.2 R3	NaN mL	Not OK
		Content R5	NaN mg/L	Not OK
		ALK LOW R6	NaN mg/L	Not OK
104	L2468131-01 10x	Sample size	50 mL	
		Potential R4	6.16 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	2.180 mL	OK
		Consumption 4.2 R3	2.192 mL	OK
		Content R5	43.600 mg/L	OK
		ALK LOW R6	43.360 mg/L	OK
105	I2467934-01	Sample size	50 mL	
		Potential R4	8.42 pH	OK
		Consumption 8.3 R1	0.467 mL	OK
		Consumption 4.5 R2	4.265 mL	OK
		Consumption 4.2 R3	4.278 mL	OK
		Content R5	85.300 mg/L	OK
		ALK LOW R6	85.040 mg/L	OK
106	I2467934-02	Sample size	50 mL	
		Potential R4	5.98 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	6.827 mL	OK
		Consumption 4.2 R3	6.899 mL	OK
		Content R5	136.540 mg/L	OK

Titration report

		ALK LOW R6	135.100 mg/L	OK
107	I2467934-03	Sample size	50 mL	
		Potential R4	5.83 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	4.697 mL	OK
		Consumption 4.2 R3	4.754 mL	OK
		Content R5	93.940 mg/L	OK
		ALK LOW R6	92.800 mg/L	OK
108	I2467934-04	Sample size	50 mL	
		Potential R4	5.64 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	2.419 mL	OK
		Consumption 4.2 R3	2.438 mL	OK
		Content R5	48.380 mg/L	OK
		ALK LOW R6	48.000 mg/L	OK
109	WG2001244-3	Sample size	50 mL	
		Potential R4	5.63 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	2.633 mL	OK
		Consumption 4.2 R3	2.663 mL	OK
		Content R5	52.660 mg/L	OK
		ALK LOW R6	52.060 mg/L	OK
110	I2467934-05	Sample size	50 mL	
		Potential R4	5.06 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	0.390 mL	OK
		Consumption 4.2 R3	0.414 mL	OK
		Content R5	7.800 mg/L	OK
		ALK LOW R6	7.320 mg/L	OK
111	I2467934-06	Sample size	50 mL	
		Potential R4	5.90 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	9.417 mL	OK
		Consumption 4.2 R3	9.560 mL	OK
		Content R5	188.340 mg/L	OK
		ALK LOW R6	185.480 mg/L	OK
112	I2467934-07	Sample size	50 mL	
		Potential R4	5.99 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	10.567 mL	OK
		Consumption 4.2 R3	10.730 mL	OK
		Content R5	211.340 mg/L	OK
		ALK LOW R6	208.080 mg/L	OK
113	I2467934-08	Sample size	50 mL	
		Potential R4	5.84 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	4.332 mL	OK

Titration report

		Consumption 4.2 R3	4.373 mL	OK
		Content R5	86.640 mg/L	OK
		ALK LOW R6	85.820 mg/L	OK
114	I2467934-09	Sample size	50 mL	
		Potential R4	5.98 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	10.750 mL	OK
		Consumption 4.2 R3	10.922 mL	OK
		Content R5	215.000 mg/L	OK
		ALK LOW R6	211.560 mg/L	OK
115	CCV	Sample size	50 mL	
		Potential R4	10.90 pH	OK
		Consumption 8.3 R1	4.768 mL	OK
		Consumption 4.5 R2	5.290 mL	OK
		Consumption 4.2 R3	5.295 mL	OK
		Content R5	105.800 mg/L	OK
		ALK LOW R6	105.700 mg/L	OK
116	WG2001244-1	Sample size	50 mL	
		Potential R4	4.84 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	0.032 mL	OK
		Consumption 4.2 R3	0.035 mL	OK
		Content R5	0.640 mg/L	OK
		ALK LOW R6	0.580 mg/L	OK
117	CCV	Sample size	50 mL	
		Potential R4	10.90 pH	OK
		Consumption 8.3 R1	4.852 mL	OK
		Consumption 4.5 R2	5.406 mL	OK
		Consumption 4.2 R3	5.410 mL	OK
		Content R5	108.120 mg/L	OK
		ALK LOW R6	108.040 mg/L	OK
118	CCB	Sample size	50 mL	
		Potential R4	4.74 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	0.011 mL	OK
		Consumption 4.2 R3	0.019 mL	OK
		Content R5	0.220 mg/L	OK
		ALK LOW R6	0.060 mg/L	OK

Statistics

R1

Mean	NaN mL		
Maximum	8.954 mL	**Minimum**	0.000 mL
Standard deviation	NaN mL	**Rel. standard deviation**	NaN %
Total samples	118	**Samples excluded**	0

Titration report

R2

Mean	NaN mL		
Maximum	19.082 mL	**Minimum**	0.005 mL
Standard deviation	NaN mL	**Rel. standard deviation**	NaN %
Total samples	118	**Samples excluded**	0

R3

Mean	NaN mL		
Maximum	19.273 mL	**Minimum**	0.019 mL
Standard deviation	NaN mL	**Rel. standard deviation**	NaN %
Total samples	118	**Samples excluded**	0

R4

Mean	6.60 pH		
Maximum	11.54 pH	**Minimum**	4.64 pH
Standard deviation	1.61 pH	**Rel. standard deviation**	24.319 %
Total samples	118	**Samples excluded**	0

R5

Mean	NaN mg/L		
Maximum	381.640 mg/L	**Minimum**	0.100 mg/L
Standard deviation	NaN mg/L	**Rel. standard deviation**	NaN %
Total samples	118	**Samples excluded**	0

R6

Mean	NaN mg/L		
Maximum	375.780 mg/L	**Minimum**	-0.180 mg/L
Standard deviation	NaN mg/L	**Rel. standard deviation**	NaN %
Total samples	118	**Samples excluded**	0

Used Instruments

Name	T7 Excellence Titrator	**Serial number**	C329519495

Responsible User

Time	Login name	Full name
11/22/2024 8:08:36 AM	SystemInternal	System internal account

(17) Data compression on instrument occurred

Quality Control

Form 6
Lab Duplicates

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Client Sample ID	: MW-4D	**Matrix**	: WATER
Lab Sample ID	: L2467934-04	**Analysis Date**	: 11/22/24 21:10
Dup Sample ID	: WG2001244-3	**DUP Analysis Date**	: 11/22/24 21:12

Parameter	Sample Concentration (mg CaCO3/L)	Duplicate Concentration (mg CaCO3/L)	RPD	RPD Limit
Alkalinity, Carbonate	ND	ND	NC	10
Alkalinity, Bicarbonate	48.4	52.7	8	9

Form 6
Lab Duplicates

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Client Sample ID	: NA	**Matrix**	: WATER
Lab Sample ID	: NA	**Analysis Date**	: 11/22/24 20:59
Dup Sample ID	: WG2001324-2	**DUP Analysis Date**	: 11/22/24 20:59

Parameter	Sample Concentration (mg CaCO3/L)	Duplicate Concentration (mg CaCO3/L)	RPD	RPD Limit
Alkalinity, Carbonate	ND	ND	NC	10

Form 6
Lab Duplicates

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Client Sample ID	: NA	**Matrix**	: WATER
Lab Sample ID	: NA	**Analysis Date**	: 11/22/24 20:59
Dup Sample ID	: WG2001322-2	**DUP Analysis Date**	: 11/22/24 20:59

Parameter	Sample Concentration (mg CaCO3/L)	Duplicate Concentration (mg CaCO3/L)	RPD	RPD Limit
Alkalinity, Bicarbonate	48.4	52.7	9	9

Date Created: 11/11/21
Created By: Jason Hebert
File: PM11467-1
Page: 1

WETCHEM (WATER)

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Method	Holding Time	Container/Sample Preservation
Alkalinity, Total	471-34-1	2		mg CaCO3/L	90-110	10	86-116	10	10	2320B	14 days	1 - Plastic 250ml unpreserved/No Headspace

Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)
Please Note that the information provided in this table is subject to change at anytime at the discretion of Alpha Analytical, Inc.

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Calculations of Alkalinity

$$\text{Alkalinity, mg } CaCO_3/L = \frac{A \times N \times 50{,}000}{\text{mL Sample}}$$

Where:

A = mL of the standard acid titrated

N = normality of the standard acid

Results are calculated using Mettler Toledo software.

Standard sample size is 50mL, 0.02N Sulfuric acid for titration

Sequence Logs

CAL	241122	LCS	7.03	INT:	MKT/MRM
pH 4	3295	Titrant:	4193		
pH 7	3386	LCS:	3257		
pH 10	3298	MS:	3255		
LCS	3409				

1	Rinse,MKT	42	l2467994-05	83	l2468003-03
2	Rinse,MKT	43	l2467994-06	84	CCV
3	WG2000937-1	44	l2467994-07	85	CCB
4	WG2000937-2	45	l2467994-08	86	WG2001243-2
5	l2467709-01	46	l2467994-09	87	WG2001243-1
6	l2467709-02	47	l2467994-10	88	l2468003-05
7	l2467709-03	48	l2467994-11	89	l2468003-06
8	l2467709-04	49	l2468003-01	90	l2468131-01
9	l2467709-05	50	l2468003-02	91	l2468131-02 5x
10	l2467585-07	51	l2468003-03	92	WG2001243-3 5x
11	l2467892-01	52	l2468003-04	93	WG2001243-4 5x
12	l2467892-02	53	WG2001084-3	94	l2468038-01 5x
13	l2467892-03	54	WG2001084-4	95	l2468038-02 5x
14	l2467892-04	55	XCCV	96	l2468038-03
15	l2467892-05	56	XCCB	97	l2468038-04
16	l2467901-01	57	CCV	98	l2468038-05
17	l2467901-02	58	CCB	99	l2468038-06
18	l2467901-03	59	WG2001084-1	100	l2468042-02
19	l2467901-04	60	WG2001084-2	101	l2468042-03
20	l2467901-05	61	l2467975-05 10x	102	l2468042-04
21	WG2000937-3	62	l2467975-07 10x	103	l2468042-05
22	WG2000937-4	63	l2467994-01 10x	104	L2468131-01 10x
23	l2467901-06	64	l2467994-02 10x	105	l2467934-01
24	l2467975-01	65	l2467994-03 10x	106	l2467934-02
25	l2467975-02	66	l2467994-04 10x	107	l2467934-03
26	l2467975-03	67	l2467994-05 10x	108	l2467934-04
27	L2467709-05 2x+10	68	l2467994-08 10x	109	WG2001244-3
28	L2467901-01 2x+10	69	l2467994-11 10x	110	l2467934-05
29	L2467901-03 2x+10	70	l2468003-01 10x	111	l2467934-06
30	WG2001084-2	71	l2468003-02 10x	112	l2467934-07
31	WG2001084-1	72	l2468003-04	113	l2467934-08
32	l2467975-04	73	l2467975-04	114	l2467934-09
33	l2467975-05	74	l2467975-06	115	CCV
34	l2467975-06	75	l2467975-08	116	WG2001244-1
35	l2467975-07	76	l2467975-08	117	CCV
36	l2467975-08	77	l2467994-06	118	CCB
37	l2467975-08 CONF	78	l2467994-07		
38	l2467994-01	79	l2467994-09		5x = 10 mL
39	l2467994-02	80	l2467994-10		10x = 5 mL
40	l2467994-03	81	WG2001084-3		
41	l2467994-04	82	WG2001084-4		

CAL	241122	LCS	7.03	INT:	MKT/MRM
pH 4	3295	Titrant:	4193		
pH 7	3386	LCS:	3257		
pH 10	3298	MS:	3255		
LCS	3409				

1	Rinse,MKT	42	l2467994-05	83	l2468003-03
2	Rinse,MKT	43	l2467994-06	84	CCV
3	WG2000937-1	44	l2467994-07	85	CCB
4	WG2000937-2	45	l2467994-08	86	WG2001243-2
5	l2467709-01	46	l2467994-09	87	WG2001243-1
6	l2467709-02	47	l2467994-10	88	l2468003-05
7	l2467709-03	48	l2467994-11	89	l2468003-06
8	l2467709-04	49	l2468003-01	90	l2468131-01
9	l2467709-05	50	l2468003-02	91	l2468131-02 5x
10	l2467585-07	51	l2468003-03	92	WG2001243-3 5x
11	l2467892-01	52	l2468003-04	93	WG2001243-4 5x
12	l2467892-02	53	WG2001084-3	94	l2468038-01 5x
13	l2467892-03	54	WG2001084-4	95	l2468038-02 5x
14	l2467892-04	55	XCCV	96	l2468038-03
15	l2467892-05	56	XCCB	97	l2468038-04
16	l2467901-01	57	CCV	98	l2468038-05
17	l2467901-02	58	CCB	99	l2468038-06
18	l2467901-03	59	WG2001084-1	100	l2468042-02
19	l2467901-04	60	WG2001084-2	101	l2468042-03
20	l2467901-05	61	l2467975-05 10x	102	l2468042-04
21	WG2000937-3	62	l2467975-07 10x	103	l2468042-05
22	WG2000937-4	63	l2467994-01 10x	104	L2468131-01 10x
23	l2467901-06	64	l2467994-02 10x	105	l2467934-01
24	l2467975-01	65	l2467994-03 10x	106	l2467934-02
25	l2467975-02	66	l2467994-04 10x	107	l2467934-03
26	l2467975-03	67	l2467994-05 10x	108	l2467934-04
27	L2467709-05 2x+10	68	l2467994-08 10x	109	WG2001244-3
28	L2467901-01 2x+10	69	l2467994-11 10x	110	l2467934-05
29	L2467901-03 2x+10	70	l2468003-01 10x	111	l2467934-06
30	WG2001084-2	71	l2468003-02 10x	112	l2467934-07
31	WG2001084-1	72	l2468003-04	113	l2467934-08
32	l2467975-04	73	l2467975-04	114	l2467934-09
33	l2467975-05	74	l2467975-06	115	CCV
34	l2467975-06	75	l2467975-08	116	WG2001244-1
35	l2467975-07	76	l2467975-08	117	CCV
36	l2467975-08	77	l2467994-06	118	CCB
37	l2467975-08 CONF	78	l2467994-07		
38	l2467994-01	79	l2467994-09		5x = 10 mL
39	l2467994-02	80	l2467994-10		10x = 5 mL
40	l2467994-03	81	WG2001084-3		
41	l2467994-04	82	WG2001084-4		

CAL	241122	LCS	7.03	INT:	MKT/MRM
pH 4	3295	Titrant:	4193		
pH 7	3386	LCS:	3257		
pH 10	3298	MS:	3255		
LCS	3409				

1	Rinse,MKT	42	l2467994-05	83	l2468003-03
2	Rinse,MKT	43	l2467994-06	84	CCV
3	WG2000937-1	44	l2467994-07	85	CCB
4	WG2000937-2	45	l2467994-08	86	WG2001243-2
5	l2467709-01	46	l2467994-09	87	WG2001243-1
6	l2467709-02	47	l2467994-10	88	l2468003-05
7	l2467709-03	48	l2467994-11	89	l2468003-06
8	l2467709-04	49	l2468003-01	90	l2468131-01
9	l2467709-05	50	l2468003-02	91	l2468131-02 5x
10	l2467585-07	51	l2468003-03	92	WG2001243-3 5x
11	l2467892-01	52	l2468003-04	93	WG2001243-4 5x
12	l2467892-02	53	WG2001084-3	94	l2468038-01 5x
13	l2467892-03	54	WG2001084-4	95	l2468038-02 5x
14	l2467892-04	55	XCCV	96	l2468038-03
15	l2467892-05	56	XCCB	97	l2468038-04
16	l2467901-01	57	CCV	98	l2468038-05
17	l2467901-02	58	CCB	99	l2468038-06
18	l2467901-03	59	WG2001084-1	100	l2468042-02
19	l2467901-04	60	WG2001084-2	101	l2468042-03
20	l2467901-05	61	l2467975-05 10x	102	l2468042-04
21	WG2000937-3	62	l2467975-07 10x	103	l2468042-05
22	WG2000937-4	63	l2467994-01 10x	104	L2468131-01 10x
23	l2467901-06	64	l2467994-02 10x	105	l2467934-01
24	l2467975-01	65	l2467994-03 10x	106	l2467934-02
25	l2467975-02	66	l2467994-04 10x	107	l2467934-03
26	l2467975-03	67	l2467994-05 10x	108	l2467934-04
27	L2467709-05 2x+10	68	l2467994-08 10x	109	WG2001244-3
28	L2467901-01 2x+10	69	l2467994-11 10x	110	l2467934-05
29	L2467901-03 2x+10	70	l2468003-01 10x	111	l2467934-06
30	WG2001084-2	71	l2468003-02 10x	112	l2467934-07
31	WG2001084-1	72	l2468003-04	113	l2467934-08
32	l2467975-04	73	l2467975-04	114	l2467934-09
33	l2467975-05	74	l2467975-06	115	CCV
34	l2467975-06	75	l2467975-08	116	WG2001244-1
35	l2467975-07	76	l2467975-08	117	CCV
36	l2467975-08	77	l2467994-06	118	CCB
37	l2467975-08 CONF	78	l2467994-07		
38	l2467994-01	79	l2467994-09		5x = 10 mL
39	l2467994-02	80	l2467994-10		10x = 5 mL
40	l2467994-03	81	WG2001084-3		
41	l2467994-04	82	WG2001084-4		

Phosphates Analysis

Results

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Lab ID	: L2467934-01	**Date Collected**	: 11/18/24 15:46
Client ID	: MW-1S	**Date Received**	: 11/19/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 11/21/24 13:13
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,4500P-E(M)	**Analyst**	: EYA
Lab File ID	: PHOS112124-WG2000294.csv	**Instrument ID**	: SEAL2
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	: 11/21/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7723-14-0	Phosphate, Total	0.040	0.031	0.012	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Lab ID	: L2467934-02	**Date Collected**	: 11/18/24 14:33
Client ID	: MW-2S	**Date Received**	: 11/19/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 11/21/24 13:14
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,4500P-E(M)	**Analyst**	: EYA
Lab File ID	: PHOS112124-WG2000294.csv	**Instrument ID**	: SEAL2
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	: 11/21/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7723-14-0	Phosphate, Total	0.015	0.031	0.012	J

Form 1
WETCHEM

Client	:	Alpha Geoscience	**Lab Number**	:	L2467934
Project Name	:	HUNTINGTON READY MIXED	**Project Number**	:	20116
Lab ID	:	L2467934-03	**Date Collected**	:	11/18/24 13:31
Client ID	:	MW-3S	**Date Received**	:	11/19/24
Sample Location	:	SPEONK, NY	**Date Analyzed**	:	11/21/24 13:15
Sample Matrix	:	WATER	**Dilution Factor**	:	1
Analytical Method	:	121,4500P-E(M)	**Analyst**	:	EYA
Lab File ID	:	PHOS112124-WG2000294.csv	**Instrument ID**	:	SEAL2
Sample Amount	:		**%Solids**	:	N/A
Digestion Method	:		**Date Digested**	:	11/21/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7723-14-0	Phosphate, Total	0.022	0.031	0.012	J

Form 1
WETCHEM

Client	:	Alpha Geoscience	**Lab Number**	:	L2467934
Project Name	:	HUNTINGTON READY MIXED	**Project Number**	:	20116
Lab ID	:	L2467934-04	**Date Collected**	:	11/19/24 09:35
Client ID	:	MW-4D	**Date Received**	:	11/19/24
Sample Location	:	SPEONK, NY	**Date Analyzed**	:	11/21/24 13:16
Sample Matrix	:	WATER	**Dilution Factor**	:	1
Analytical Method	:	121,4500P-E(M)	**Analyst**	:	EYA
Lab File ID	:	PHOS112124-WG2000294.csv	**Instrument ID**	:	SEAL2
Sample Amount	:		**%Solids**	:	N/A
Digestion Method	:		**Date Digested**	:	11/21/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7723-14-0	Phosphate, Total	0.025	0.031	0.012	J

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Lab ID	: L2467934-05	**Date Collected**	: 11/19/24 08:10
Client ID	: MW-5S	**Date Received**	: 11/19/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 11/21/24 13:17
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,4500P-E(M)	**Analyst**	: EYA
Lab File ID	: PHOS112124-WG2000294.csv	**Instrument ID**	: SEAL2
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	: 11/21/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7723-14-0	Phosphate, Total	ND	0.031	0.012	U

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Lab ID	: L2467934-06	**Date Collected**	: 11/18/24 15:40
Client ID	: MW-6D	**Date Received**	: 11/19/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 11/21/24 13:18
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,4500P-E(M)	**Analyst**	: EYA
Lab File ID	: PHOS112124-WG2000294.csv	**Instrument ID**	: SEAL2
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	: 11/21/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7723-14-0	Phosphate, Total	0.080	0.031	0.012	

Form 1
WETCHEM

Client	:	Alpha Geoscience	**Lab Number**	:	L2467934
Project Name	:	HUNTINGTON READY MIXED	**Project Number**	:	20116
Lab ID	:	L2467934-07	**Date Collected**	:	11/18/24 14:15
Client ID	:	MW-7S	**Date Received**	:	11/19/24
Sample Location	:	SPEONK, NY	**Date Analyzed**	:	11/21/24 13:20
Sample Matrix	:	WATER	**Dilution Factor**	:	1
Analytical Method	:	121,4500P-E(M)	**Analyst**	:	EYA
Lab File ID	:	PHOS112124-WG2000294.csv	**Instrument ID**	:	SEAL2
Sample Amount	:		**%Solids**	:	N/A
Digestion Method	:		**Date Digested**	:	11/21/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7723-14-0	Phosphate, Total	ND	0.031	0.012	U

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Lab ID	: L2467934-08	**Date Collected**	: 11/18/24 16:45
Client ID	: MW-8S	**Date Received**	: 11/19/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 11/21/24 13:21
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,4500P-E(M)	**Analyst**	: EYA
Lab File ID	: PHOS112124-WG2000294.csv	**Instrument ID**	: SEAL2
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	: 11/21/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7723-14-0	Phosphate, Total	ND	0.031	0.012	U

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Lab ID	: L2467934-09	**Date Collected**	: 11/18/24 00:00
Client ID	: DUP	**Date Received**	: 11/19/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 11/21/24 13:22
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,4500P-E(M)	**Analyst**	: EYA
Lab File ID	: PHOS112124-WG2000294.csv	**Instrument ID**	: SEAL2
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	: 11/21/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7723-14-0	Phosphate, Total	ND	0.031	0.012	U

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Lab ID	: WG2000294-1	**Date Collected**	: NA
Client ID	: WG2000294-1BLANK	**Date Received**	: NA
Sample Location	:	**Date Analyzed**	: 11/21/24 12:58
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,4500P-E(M)	**Analyst**	: EYA
Lab File ID	: PHOS112124-WG2000294.csv	**Instrument ID**	: SEAL2
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	: 11/21/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7723-14-0	Phosphate, Total	ND	0.031	0.012	U

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Lab ID	: WG2000294-3	**Date Collected**	: 11/19/24 07:25
Client ID	: WG2000294-3 DUP	**Date Received**	: 11/19/24
Sample Location	:	**Date Analyzed**	: 11/21/24 13:10
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,4500P-E(M)	**Analyst**	: EYA
Lab File ID	: PHOS112124-WG2000294.csv	**Instrument ID**	: SEAL2
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	: 11/21/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7723-14-0	Phosphate, Total	0.055	0.031	0.012	

Sample Raw Data

AQ2 Tray Report

Software version :	2.4.5
Report requested by :	EAsamoah
Date \ Time :	21-Nov-2024 14:01:13
Tray number :	2
Tray name :	WG2000294

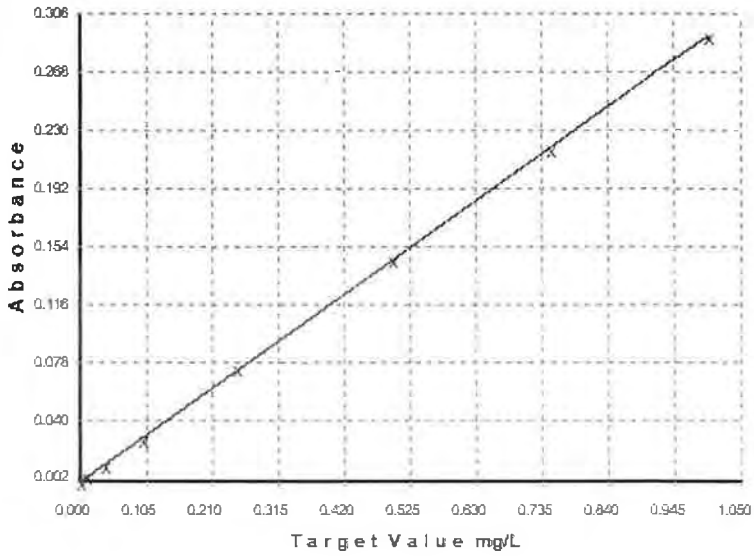
T-Phos 1

Calibration Chart

Type	Absorbance	Calc mg/L	Target mg/L	% Error
S1	0.0022	0.001	0.000	
S90	0.0051	0.011	0.010	8.32
S91	0.0132	0.039	0.040	-3.00
S92	0.0296	0.096	0.100	-4.42
S93	0.0756	0.254	0.250	1.80
S94	0.1469	0.501	0.500	0.18
S95	0.2186	0.749	0.750	-0.19
S96	0.2913	1.000	1.000	-0.00
S0	0.0023	0.001	0.000	

Polynomial Order :	1
Correlation Coefficient :	1.0000
Carryover(%) :	0.0
Calibration equation:	y = bx + a
y =:	Concentration mg/L
x =:	Measured absorbance
a =:	-6.886275E-03
b =:	3.455913E+00
Date & Time :	21-Nov-2024 11:02:20

Calibration Graph



Reagents

Reagent Name	Batch Number	Operator	Expiry Date
TP Working Color	TP Color-11172024	MEF	08-Dec-2024 00:00:00
TP Ascorbic	TP Ascorbic-11119024	EYA	26-Nov-2024 00:00:00

Test Results

Cup	Type	ID	Sample Details	Result	Units	QC Pro	Raw Data	Auto Dil.	Man Dil.	User	Time & Date
2	ICV	ICV	21-NOV-2024 10-41	0.493	mg/L		0.144638			EYA	21-Nov-2024 12:56:10
3	ICB	ICB	21-NOV-2024 10-41	-0.001	mg/L		0.001847			EYA	21-Nov-2024 12:57:11
4	U1	WG2000294-1	21-NOV-2024 10-41	-0.001ELL	mg/L		0.001678			EYA	21-Nov-2024 12:58:12
5	U2	WG2000294-2	21-NOV-2024 10-41	0.495	mg/L		0.145344			EYA	21-Nov-2024 12:59:10
6	U3	L2467528-01	21-NOV-2024 10-41	0.007	mg/L		0.004051			EYA	21-Nov-2024 13:00:10
7	U4	L2467792-01	21-NOV-2024 10-41	0.013	mg/L		0.005635			EYA	21-Nov-2024 13:01:09
8	U5	L2467810-01	21-NOV-2024 10-41	0.037	mg/L		0.012557			EYA	21-Nov-2024 13:02:08
9	U6	L2467810-02	21-NOV-2024 10-41	0.031	mg/L		0.011086			EYA	21-Nov-2024 13:03:07
10	U7	L2467810-03	21-NOV-2024 10-41	0.037	mg/L		0.012843			EYA	21-Nov-2024 13:04:06
11	U8	L2467811-01	21-NOV-2024 10-41	0.017	mg/L		0.006785			EYA	21-Nov-2024 13:05:05
12	U9	L2467811-02	21-NOV-2024 10-41	0.014	mg/L		0.006046			EYA	21-Nov-2024 13:06:03
13	U10	L2467811-03	21-NOV-2024 10-41	0.018	mg/L		0.007150			EYA	21-Nov-2024 13:07:02
	CCV	CCV		0.493	mg/L		0.144605			EYA	21-Nov-2024 13:08:01
	CCB	CCB		0.002	mg/L		0.002447			EYA	21-Nov-2024 13:09:02
14	U11	WG2000294-3	21-NOV-2024 10-41	0.018	mg/L		0.007135			EYA	21-Nov-2024 13:10:02
15	U12	WG2000294-4	21-NOV-2024 10-41	0.537	mg/L		0.157403			EYA	21-Nov-2024 13:11:01
16	U13	L2467887-01-5	21-NOV-2024 10-41	43.159	mg/L		0.101901	x25.0000	x5.0000	EYA	21-Nov-2024 13:56:26
16	U13	L2467887-01-5	21-NOV-2024 10-41	40.250	mg/L		0.467865	x5.0000	x5.0000	EYA	21-Nov-2024 13:39:27
16	U13	L2467887-01-5	21-NOV-2024 10-41	15.745	mg/L		0.913174		x5.0000	EYA	21-Nov-2024 13:11:59

17	U14	L2467890-01	21-NOV-2024 10-41	0.077	mg/L	0.024224	EYA	21-Nov-2024 13:12:57
18	U15	L2467934-01	21-NOV-2024 10-41	0.013	mg/L	0.005645	EYA	21-Nov-2024 13:13:57
19	U16	L2467934-02	21-NOV-2024 10-41	0.005	mg/L	0.003325	EYA	21-Nov-2024 13:14:58
20	U17	L2467934-03	21-NOV-2024 10-41	0.007	mg/L	0.003998	EYA	21-Nov-2024 13:15:31
21	U18	L2467934-04	21-NOV-2024 10-41	0.008	mg/L	0.004445	EYA	21-Nov-2024 13:16:28
22	U19	L2467934-05	21-NOV-2024 10-41	0.001	mg/L	0.002397	EYA	21-Nov-2024 13:17:20
23	U20	L2467934-06	21-NOV-2024 10-41	0.026	mg/L	0.009388	EYA	21-Nov-2024 13:18:11
	CCV	CCV		0.486	mg/L	0.142556	EYA	21-Nov-2024 13:19:02
	CCB	CCB		0.000	mg/L	0.002097	EYA	21-Nov-2024 13:19:53
24	U21	L2467934-07	21-NOV-2024 10-41	0.002	mg/L	0.002601	EYA	21-Nov-2024 13:20:45
25	U22	L2467934-08	21-NOV-2024 10-41	0.002	mg/L	0.002467	EYA	21-Nov-2024 13:21:36
26	U23	L2467934-09	21-NOV-2024 10-41	0.003	mg/L	0.002841	EYA	21-Nov-2024 13:22:27
	CCV	CCV		0.494	mg/L	0.144914	EYA	21-Nov-2024 13:23:18
	CCB	CCB		0.001	mg/L	0.002312	EYA	21-Nov-2024 13:24:10
	CCV	CCV		0.486	mg/L	0.142572	EYA	21-Nov-2024 13:37:44
	CCB	CCB		0.001	mg/L	0.002166	EYA	21-Nov-2024 13:38:35
	CCV	CCV		0.487	mg/L	0.142876	EYA	21-Nov-2024 13:40:18
	CCB	CCB		0.002	mg/L	0.002658	EYA	21-Nov-2024 13:41:10
	CCV	CCV		0.478	mg/L	0.140239	EYA	21-Nov-2024 13:54:43
	CCB	CCB		0.002	mg/L	0.002573	EYA	21-Nov-2024 13:55:35
	CCV	CCV		0.491	mg/L	0.144040	EYA	21-Nov-2024 13:57:17
	CCB	CCB		0.007	mg/L	0.004003	EYA	21-Nov-2024 13:58:09

Quality Control

Form 5a
Matrix Spike

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Client Sample ID	: NA	**Matrix**	: WATER
Lab Sample ID	: L2467811-03		
Matrix Spike	: WG2000294-4	**MS Analysis Date**	: 11/21/24 13:11
Matrix Spike Dup	:	**MSD Analysis Date**	:

		Matrix Spike Sample			Matrix Spike Duplicate					
Parameter	Sample Conc. (mg/l)	Spike Added (mg/l)	Spike Conc. (mg/l)	%R	Spike Added (mg/l)	Spike Conc. (mg/l)	%R	RPD	Recovery Limits	RPD Limit
Phosphate, Total	0.055	1.53	1.65	104					80-120	15

Form 6
Lab Duplicates

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Client Sample ID	: NA	**Matrix**	: WATER
Lab Sample ID	: NA	**Analysis Date**	: 11/21/24 13:07
Dup Sample ID	: WG2000294-3	**DUP Analysis Date**	: 11/21/24 13:10

Parameter	Sample Concentration (mg/l)	Duplicate Concentration (mg/l)	RPD	RPD Limit
Phosphate, Total	0.055	0.055	0	15

Form 7
Laboratory Control Sample

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Client Sample ID	: NA	**Matrix**	: WATER
Lab Sample ID	: WG2000294-2	**LCS Analysis Date**	: 11/21/24 12:59
Dup Sample ID	:	**LCSD Analysis Date**	:

	Laboratory Control Sample			Laboratory Control Duplicate					
	True	Found	%R	True	Found	%R	RPD	Recovery	RPD
Parameter	(mg/l)	(mg/l)		(mg/l)	(mg/l)			Limits	Limit
Phosphate, Total	1.53	1.52	99.					84-118	15

Date Created: 11/11/21
Created By: Jason Hebert
File: PM11467-1
Page: 1

WETCHEM (WATER)

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Method	Holding Time	Container/Sample Preservation
Phosphorus, Total	7723-14-0	0.01	0.004	mg/l	80-120		75-125	20	20	4500P-E	28 days	1 - Plastic 500ml H2SO4 preserved

Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)
Please Note that the information provided in this table is subject to change at anytime at the discretion of Alpha Analytical, Inc.

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Page: 1

WETCHEM (SOIL)

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Method	Holding Time	Container / Sample Preservation
Phosphorus, Total	7723-14-0	5	1.67	mg/kg	52-148	20	75-125	20	20	4500P-E	28 days	1 - Glass 250ml/8oz unpreserved

Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)
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Date Created: 11/11/21
Created By: Jason Hebert
File: PM11467-1
Page: 1

WETCHEM (WATER)

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Method	Holding Time	Container/Sample Preservation
Phosphorus, Orthophosphate	7723-14-0	0.005	0.001	mg/l	90-110		80-120	20	20	4500P-E	48 hours	1 - Plastic 500ml unpreserved

Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)
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Date Created: 11/11/21
Created By: Jason Hebert
File: PM11468-1
Page: 1

WETCHEM (SOIL)

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Method	Holding Time	Container / Sample Preservation
Phosphorus, Orthophosphate	7723-14-0	0.05	0.05	mg/kg						4500P-E	48 hours	1 - Glass 250ml/8oz unpreserved

Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)
Please Note that the information provided in this table is subject to change at anytime at the discretion of Alpha Analytical, Inc.

Calculations of TPhosphorus

Aqueous samples:

Calculate the concentration value of the sample directly from the standard curve. All calculations are done by SEAL (segmant flow spectrometer).

$$\text{Mg TPhosphorus/L} = \frac{\text{absorbance - y-intercept}}{\text{slope}} \times \text{Dilution Factor}$$

Wet Chemistry
By
IC Methods

Results

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Lab ID	: L2467934-01	**Date Collected**	: 11/18/24 15:46
Client ID	: MW-1S	**Date Received**	: 11/19/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 11/22/24 04:38
Sample Matrix	: WATER	**Dilution Factor**	: 5
Analytical Method	: 44,300.0	**Analyst**	: CVN,
Lab File ID	: WG2000807-808	**Instrument ID**	: IC3
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
24959-67-9	Bromide	0.353	0.250	0.066	
16887-00-6	Chloride	52.8	2.50	0.420	
14808-79-8	Sulfate	99.7	5.00	2.27	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Lab ID	: L2467934-01	**Date Collected**	: 11/18/24 15:46
Client ID	: MW-1S	**Date Received**	: 11/19/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 11/23/24 05:23
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 44,300.0	**Analyst**	: CVN,
Lab File ID	: WG20001300	**Instrument ID**	: IC3
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
16984-48-8	Fluoride	0.107	0.050	0.037	

Form 1
WETCHEM

Client	:	**Alpha Geoscience**	**Lab Number**	:	**L2467934**
Project Name	:	**HUNTINGTON READY MIXED**	**Project Number**	:	**20116**
Lab ID	:	**L2467934-02**	**Date Collected**	:	**11/18/24 14:33**
Client ID	:	**MW-2S**	**Date Received**	:	**11/19/24**
Sample Location	:	**SPEONK, NY**	**Date Analyzed**	:	**11/23/24 06:39**
Sample Matrix	:	**WATER**	**Dilution Factor**	:	**1**
Analytical Method	:	**44,300.0**	**Analyst**	:	**CVN,**
Lab File ID	:	**WG20001300**	**Instrument ID**	:	**IC3**
Sample Amount	:		**%Solids**	:	**N/A**
Digestion Method	:		**Date Digested**	:	

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
16984-48-8	**Fluoride**	**0.061**	**0.050**	**0.037**	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Lab ID	: L2467934-02	**Date Collected**	: 11/18/24 14:33
Client ID	: MW-2S	**Date Received**	: 11/19/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 11/22/24 03:38
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 44,300.0	**Analyst**	: CVN,
Lab File ID	: WG2000807-808	**Instrument ID**	: IC3
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
24959-67-9	Bromide	ND	0.050	0.013	U
16887-00-6	Chloride	5.82	0.500	0.083	
14808-79-8	Sulfate	25.6	1.00	0.454	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Lab ID	: L2467934-03	**Date Collected**	: 11/18/24 13:31
Client ID	: MW-3S	**Date Received**	: 11/19/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 11/23/24 05:34
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 44,300.0	**Analyst**	: CVN,
Lab File ID	: WG20001300	**Instrument ID**	: IC3
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
16984-48-8	Fluoride	0.050	0.050	0.037	

Form 1
WETCHEM

Client	:	**Alpha Geoscience**	**Lab Number**	:	**L2467934**
Project Name	:	**HUNTINGTON READY MIXED**	**Project Number**	:	**20116**
Lab ID	:	**L2467934-03**	**Date Collected**	:	**11/18/24 13:31**
Client ID	:	**MW-3S**	**Date Received**	:	**11/19/24**
Sample Location	:	**SPEONK, NY**	**Date Analyzed**	:	**11/21/24 23:45**
Sample Matrix	:	**WATER**	**Dilution Factor**	:	**10**
Analytical Method	:	**44,300.0**	**Analyst**	:	**CVN,**
Lab File ID	:	**WG2000807-808**	**Instrument ID**	:	**IC3**
Sample Amount	:		**%Solids**	:	**N/A**
Digestion Method	:		**Date Digested**	:	

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
14808-79-8	**Sulfate**	**200.**	**10.0**	**4.54**	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Lab ID	: L2467934-03	**Date Collected**	: 11/18/24 13:31
Client ID	: MW-3S	**Date Received**	: 11/19/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 11/22/24 04:14
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 44,300.0	**Analyst**	: CVN,
Lab File ID	: WG2000807-808	**Instrument ID**	: IC3
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
24959-67-9	Bromide	0.094	0.050	0.013	
16887-00-6	Chloride	34.7	0.500	0.083	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Lab ID	: L2467934-04	**Date Collected**	: 11/19/24 09:35
Client ID	: MW-4D	**Date Received**	: 11/19/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 11/23/24 05:44
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 44,300.0	**Analyst**	: CVN,
Lab File ID	: WG20001300	**Instrument ID**	: IC3
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
16984-48-8	Fluoride	ND	0.050	0.037	U

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Lab ID	: L2467934-04	**Date Collected**	: 11/19/24 09:35
Client ID	: MW-4D	**Date Received**	: 11/19/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 11/22/24 04:26
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 44,300.0	**Analyst**	: CVN,
Lab File ID	: WG2000807-808	**Instrument ID**	: IC3
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
24959-67-9	Bromide	ND	0.050	0.013	U
14808-79-8	Sulfate	10.5	1.00	0.454	

Form 1
WETCHEM

Client	:	**Alpha Geoscience**	**Lab Number**	:	**L2467934**
Project Name	:	**HUNTINGTON READY MIXED**	**Project Number**	:	**20116**
Lab ID	:	**L2467934-04**	**Date Collected**	:	**11/19/24 09:35**
Client ID	:	**MW-4D**	**Date Received**	:	**11/19/24**
Sample Location	:	**SPEONK, NY**	**Date Analyzed**	:	**11/21/24 23:57**
Sample Matrix	:	**WATER**	**Dilution Factor**	:	**10**
Analytical Method	:	**44,300.0**	**Analyst**	:	**CVN,**
Lab File ID	:	**WG2000807-808**	**Instrument ID**	:	**IC3**
Sample Amount	:		**%Solids**	:	**N/A**
Digestion Method	:		**Date Digested**	:	

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
16887-00-6	**Chloride**	**146.**	**5.00**	**0.839**	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Lab ID	: L2467934-05	**Date Collected**	: 11/19/24 08:10
Client ID	: MW-5S	**Date Received**	: 11/19/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 11/22/24 04:50
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 44,300.0	**Analyst**	: CVN,
Lab File ID	: WG2000807-808	**Instrument ID**	: IC3
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
24959-67-9	Bromide	ND	0.050	0.013	U
16887-00-6	Chloride	8.74	0.500	0.083	
14808-79-8	Sulfate	2.92	1.00	0.454	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Lab ID	: L2467934-05	**Date Collected**	: 11/19/24 08:10
Client ID	: MW-5S	**Date Received**	: 11/19/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 11/23/24 05:55
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 44,300.0	**Analyst**	: CVN,
Lab File ID	: WG20001300	**Instrument ID**	: IC3
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
16984-48-8	Fluoride	ND	0.050	0.037	U

Form 1
WETCHEM

Client	:	Alpha Geoscience	**Lab Number**	:	L2467934
Project Name	:	HUNTINGTON READY MIXED	**Project Number**	:	20116
Lab ID	:	L2467934-06	**Date Collected**	:	11/18/24 15:40
Client ID	:	MW-6D	**Date Received**	:	11/19/24
Sample Location	:	SPEONK, NY	**Date Analyzed**	:	11/22/24 00:21
Sample Matrix	:	WATER	**Dilution Factor**	:	10
Analytical Method	:	44,300.0	**Analyst**	:	CVN,
Lab File ID	:	WG2000807-808	**Instrument ID**	:	IC3
Sample Amount	:		**%Solids**	:	N/A
Digestion Method	:		**Date Digested**	:	

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
16887-00-6	Chloride	83.2	5.00	0.839	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Lab ID	: L2467934-06	**Date Collected**	: 11/18/24 15:40
Client ID	: MW-6D	**Date Received**	: 11/19/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 11/22/24 05:02
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 44,300.0	**Analyst**	: CVN,
Lab File ID	: WG2000807-808	**Instrument ID**	: IC3
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
24959-67-9	Bromide	0.190	0.050	0.013	
14808-79-8	Sulfate	96.0	1.00	0.454	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Lab ID	: L2467934-06	**Date Collected**	: 11/18/24 15:40
Client ID	: MW-6D	**Date Received**	: 11/19/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 11/23/24 06:06
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 44,300.0	**Analyst**	: CVN,
Lab File ID	: WG20001300	**Instrument ID**	: IC3
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
16984-48-8	Fluoride	ND	0.050	0.037	U

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Lab ID	: L2467934-07	**Date Collected**	: 11/18/24 14:15
Client ID	: MW-7S	**Date Received**	: 11/19/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 11/22/24 05:14
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 44,300.0	**Analyst**	: CVN,
Lab File ID	: WG2000807-808	**Instrument ID**	: IC3
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
24959-67-9	Bromide	0.102	0.050	0.013	
16887-00-6	Chloride	17.3	0.500	0.083	
14808-79-8	Sulfate	78.8	1.00	0.454	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Lab ID	: L2467934-07	**Date Collected**	: 11/18/24 14:15
Client ID	: MW-7S	**Date Received**	: 11/19/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 11/23/24 07:12
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 44,300.0	**Analyst**	: CVN,
Lab File ID	: WG20001300	**Instrument ID**	: IC3
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
16984-48-8	Fluoride	ND	0.050	0.037	U

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Lab ID	: L2467934-08	**Date Collected**	: 11/18/24 16:45
Client ID	: MW-8S	**Date Received**	: 11/19/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 11/23/24 07:23
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 44,300.0	**Analyst**	: CVN,
Lab File ID	: WG20001300	**Instrument ID**	: IC3
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
16984-48-8	Fluoride	ND	0.050	0.037	U

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Lab ID	: L2467934-08	**Date Collected**	: 11/18/24 16:45
Client ID	: MW-8S	**Date Received**	: 11/19/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 11/22/24 05:27
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 44,300.0	**Analyst**	: CVN,
Lab File ID	: WG2000807-808	**Instrument ID**	: IC3
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
24959-67-9	Bromide	0.102	0.050	0.013	
16887-00-6	Chloride	34.7	0.500	0.083	
14808-79-8	Sulfate	61.9	1.00	0.454	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Lab ID	: L2467934-09	**Date Collected**	: 11/18/24 00:00
Client ID	: DUP	**Date Received**	: 11/19/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 11/22/24 05:39
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 44,300.0	**Analyst**	: CVN,
Lab File ID	: WG2000807-808	**Instrument ID**	: IC3
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
24959-67-9	Bromide	0.101	0.050	0.013	
16887-00-6	Chloride	17.5	0.500	0.083	
14808-79-8	Sulfate	78.9	1.00	0.454	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Lab ID	: L2467934-09	**Date Collected**	: 11/18/24 00:00
Client ID	: DUP	**Date Received**	: 11/19/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 11/23/24 07:34
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 44,300.0	**Analyst**	: CVN,
Lab File ID	: WG20001300	**Instrument ID**	: IC3
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
16984-48-8	Fluoride	ND	0.050	0.037	U

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Lab ID	: WG2000808-5	**Date Collected**	: NA
Client ID	: WG2000808-5BLANK	**Date Received**	: NA
Sample Location	:	**Date Analyzed**	: 11/21/24 21:20
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 44,300.0	**Analyst**	: CVN,
Lab File ID	: WG2000808	**Instrument ID**	: IC3
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
24959-67-9	Bromide	ND	0.050	0.013	U
16887-00-6	Chloride	0.186	0.500	0.083	J
14808-79-8	Sulfate	ND	1.00	0.454	U

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Lab ID	: WG2000808-8	**Date Collected**	: 11/18/24 14:33
Client ID	: MW-2SDUP	**Date Received**	: 11/19/24
Sample Location	:	**Date Analyzed**	: 11/22/24 03:26
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 44,300.0	**Analyst**	: CVN,
Lab File ID	: WG2000807-808	**Instrument ID**	: IC3
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
14808-79-8	Sulfate	25.5	1.00	0.454	
16887-00-6	Chloride	5.82	0.500	0.084	
24959-67-9	Bromide	ND	0.050	0.013	U

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Lab ID	: WG2001300-1	**Date Collected**	: NA
Client ID	: WG2001300-1BLANK	**Date Received**	: NA
Sample Location	:	**Date Analyzed**	: 11/23/24 05:01
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 44,300.0	**Analyst**	: CVN,
Lab File ID	: WG20001300	**Instrument ID**	: IC3
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
16984-48-8	Fluoride	ND	0.050	0.037	U

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Lab ID	: WG2001300-4	**Date Collected**	: 11/18/24 14:33
Client ID	: MW-2SDUP	**Date Received**	: 11/19/24
Sample Location	:	**Date Analyzed**	: 11/23/24 06:28
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 44,300.0	**Analyst**	: CVN,
Lab File ID	: WG20001300	**Instrument ID**	: IC3
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

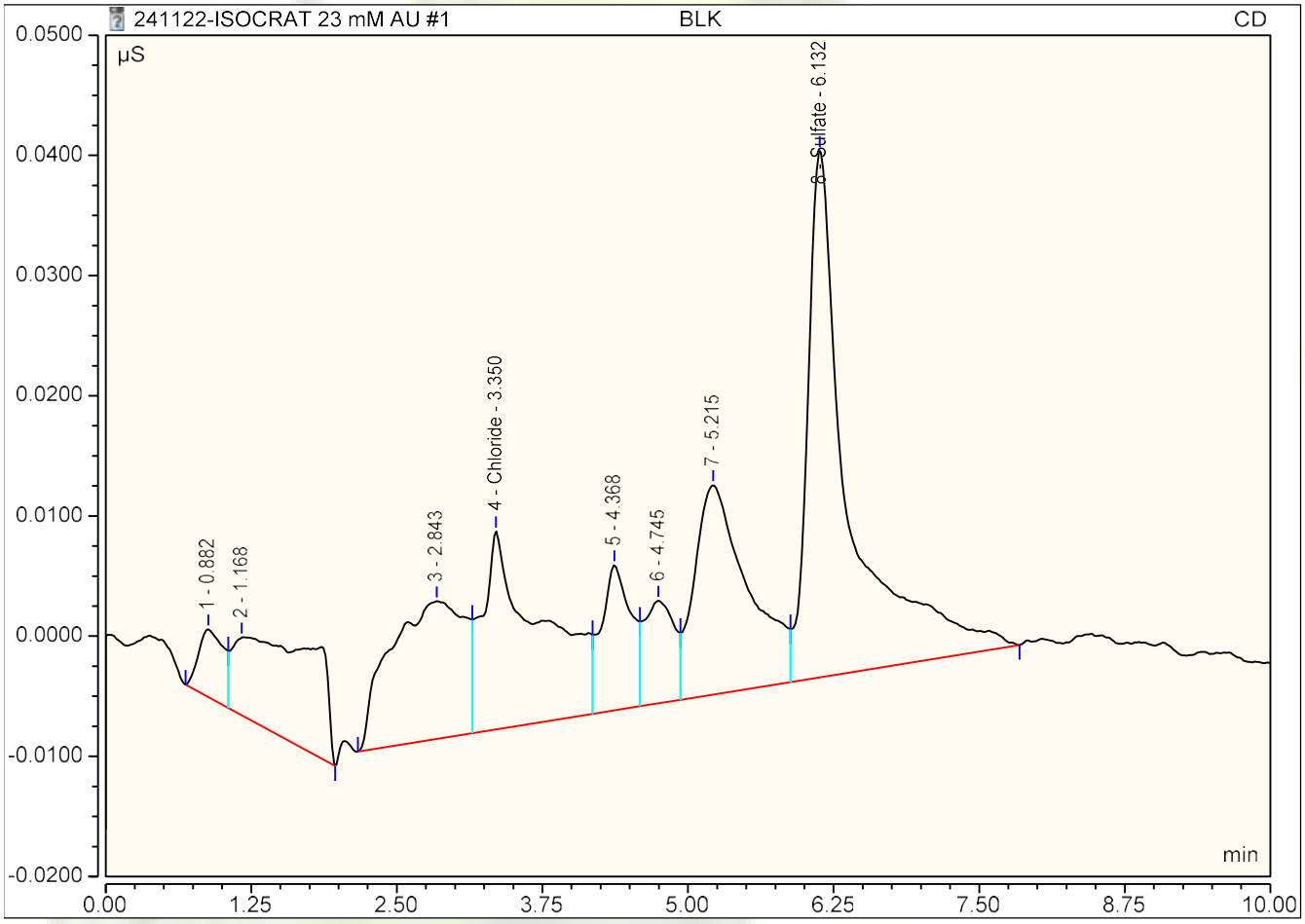
		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
16984-48-8	Fluoride	0.066	0.050	0.037	

Sample Raw Data

Peak Integration Report

Sample Name:	**BLK**	*Inj. Vol.:*	**5000.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**IC 3 method 23 mM**	*Operator:*	**Wetchem25**
Inj. Date / Time:	**19-Nov-2024 / 14:54**	*Run Time:*	**10.00**

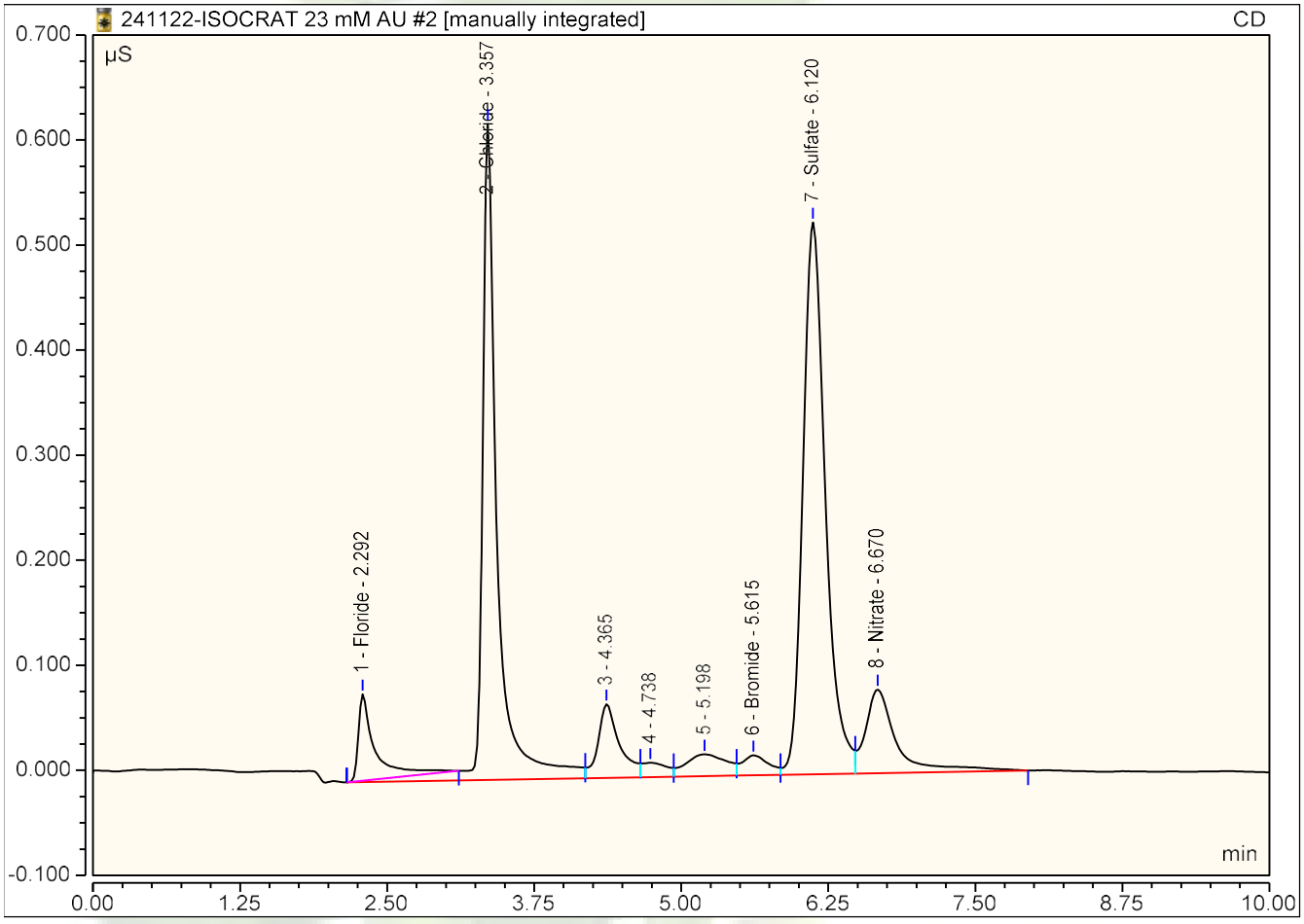
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
4	3.35	**Chloride**	M	0.010	0.017	0.1574
8	6.13	**Sulfate**	MB	0.018	0.044	0.3319
TOTAL:				0.03	0.06	0.49



Peak Integration Report

Sample Name:	**STD 0.5**	*Inj. Vol.:*	**5000.00**
Injection Type:	**Calibration Standard**	*Dilution Factor:*	**1.0000**
Instrument Method:	**IC 3 method 23 mM**	*Operator:*	**Wetchem25**
Inj. Date / Time:	**19-Nov-2024 / 15:05**	*Run Time:*	**10.00**

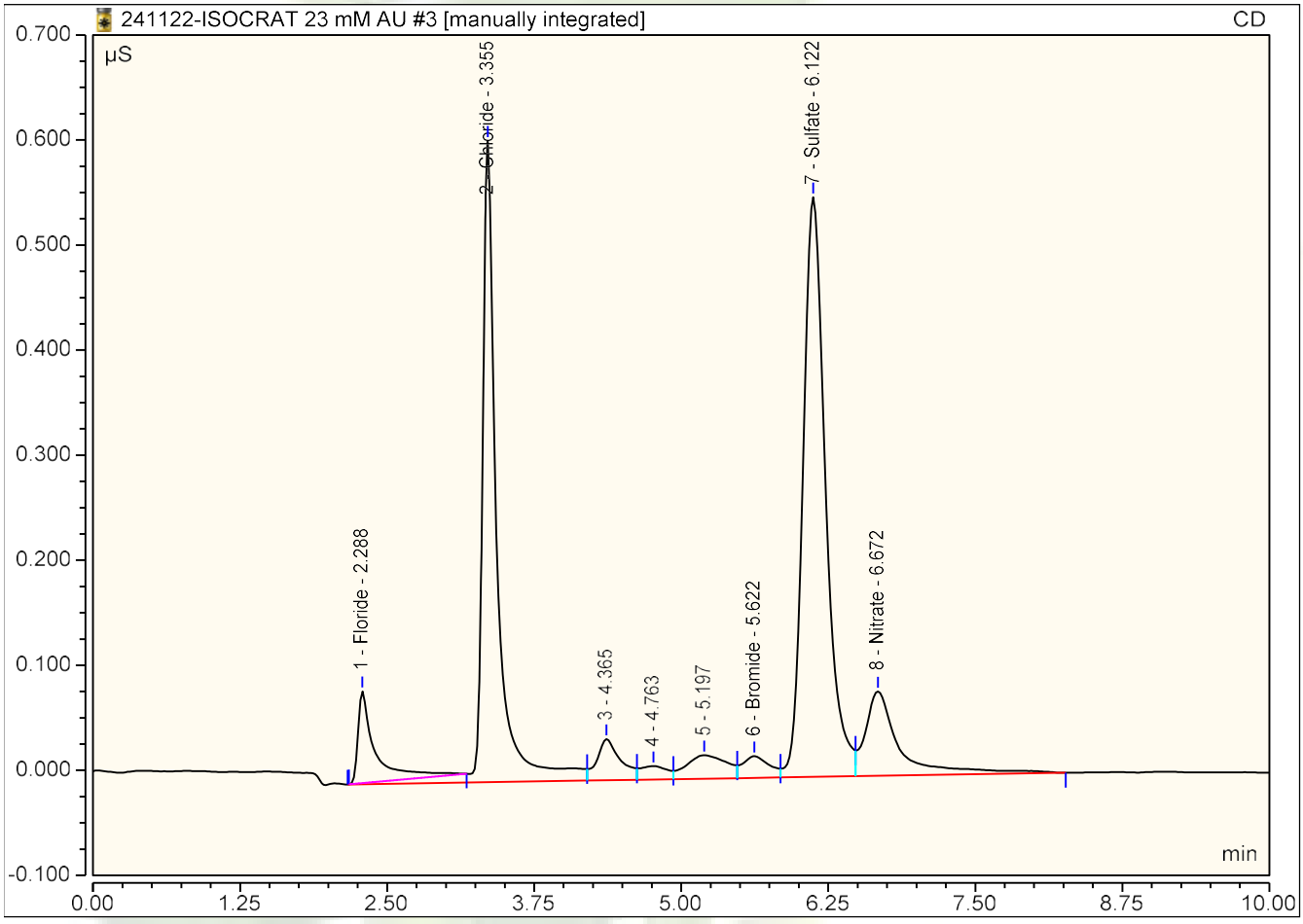
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	2.29	**Floride**	Ru	0.013	0.082	0.0393
2	3.36	**Chloride**	BM	0.093	0.625	0.3799
6	5.62	**Bromide**	M	0.005	0.019	0.0622
7	6.12	**Sulfate**	M *	0.117	0.525	0.6890
8	6.67	**Nitrate**	MB*	0.024	0.080	0.0442
TOTAL:				0.25	1.33	1.21



Peak Integration Report

Sample Name:	**STD 1.0**	*Inj. Vol.:*	**5000.00**
Injection Type:	**Calibration Standard**	*Dilution Factor:*	**1.0000**
Instrument Method:	**IC 3 method 23 mM**	*Operator:*	**Wetchem25**
Inj. Date / Time:	**19-Nov-2024 / 15:16**	*Run Time:*	**10.00**

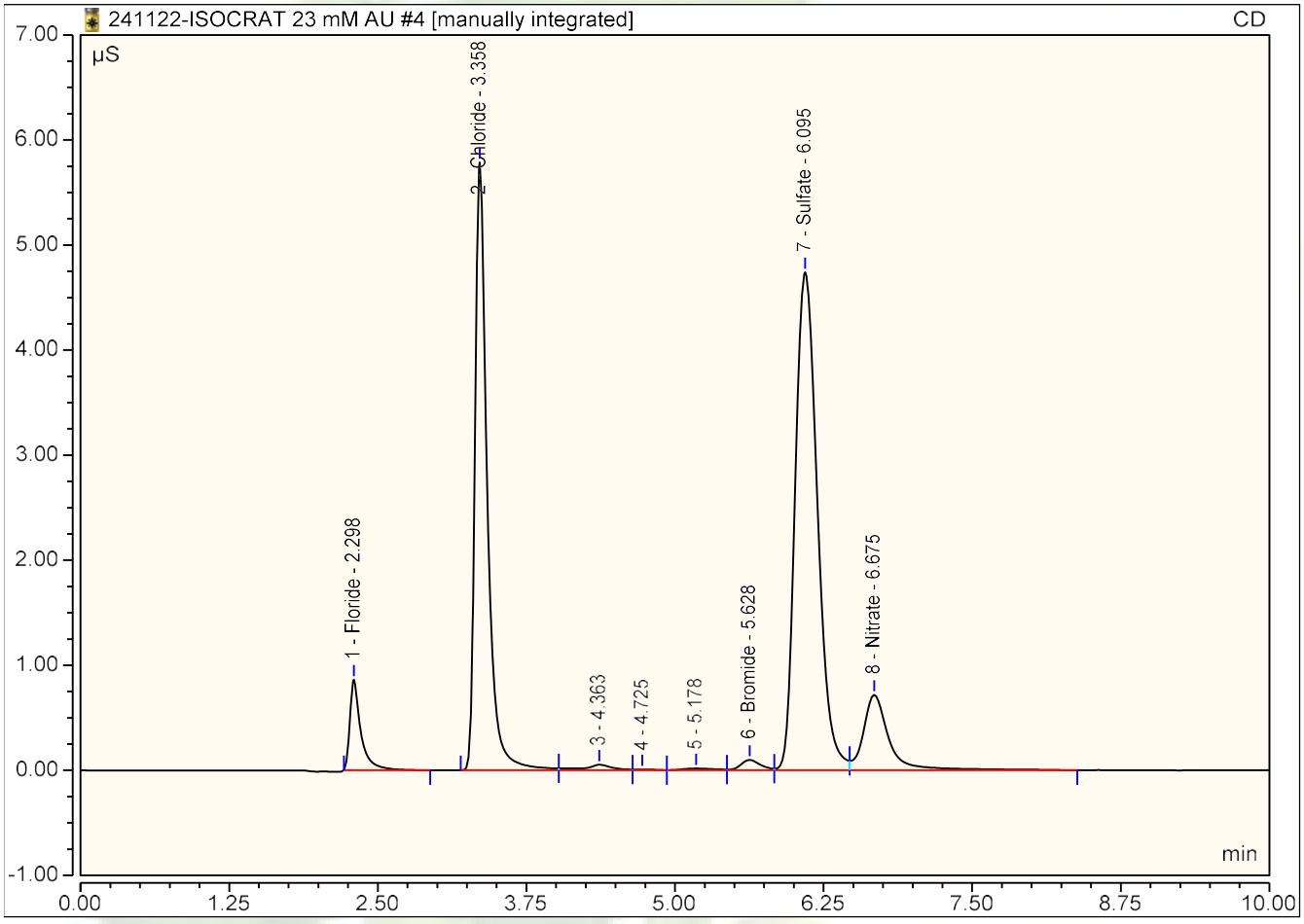
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	2.29	**Floride**	Ru	0.015	0.087	0.0416
2	3.36	**Chloride**	BM	0.090	0.611	0.3715
6	5.62	**Bromide**	M	0.005	0.021	0.0659
7	6.12	**Sulfate**	M *	0.123	0.552	0.7109
8	6.67	**Nitrate**	MB*	0.027	0.080	0.0466
TOTAL:				0.26	1.35	1.24



Peak Integration Report

Sample Name:	**STD 2.0**	*Inj. Vol.:*	**5000.00**
Injection Type:	**Calibration Standard**	*Dilution Factor:*	**1.0000**
Instrument Method:	**IC 3 method 23 mM**	*Operator:*	**Wetchem25**
Inj. Date / Time:	**19-Nov-2024 / 15:26**	*Run Time:*	**10.00**

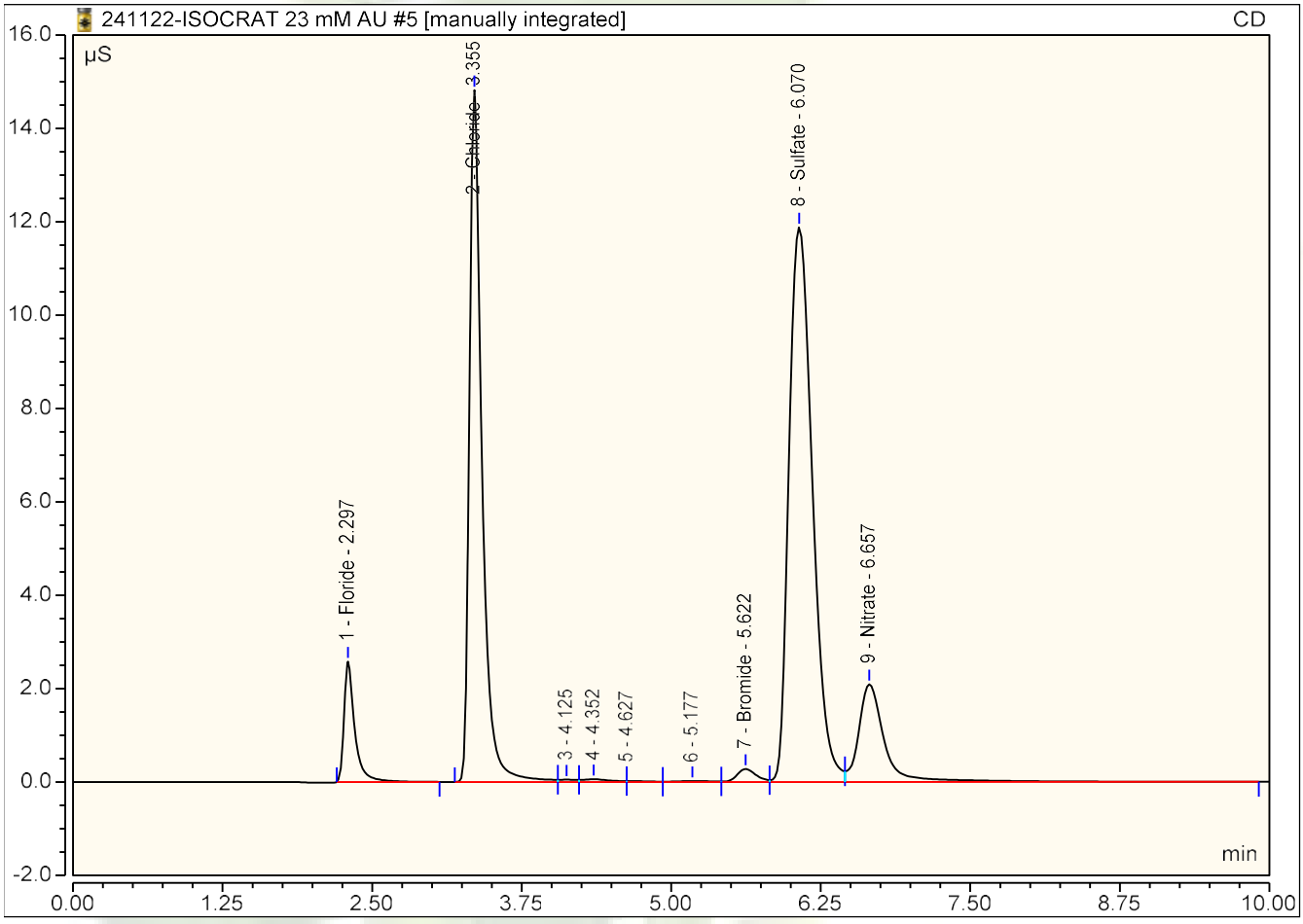
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	2.30	**Floride**	BMB	0.092	0.861	0.1737
2	3.36	**Chloride**	BM	0.688	5.786	1.9708
6	5.63	**Bromide**	M	0.019	0.098	0.1747
7	6.10	**Sulfate**	M *	1.024	4.739	3.9818
8	6.68	**Nitrate**	MB*	0.180	0.718	0.1779
TOTAL:				2.00	12.20	6.48



Peak Integration Report

Sample Name:	**STD 3.0**	*Inj. Vol.:*	**5000.00**
Injection Type:	**Calibration Standard**	*Dilution Factor:*	**1.0000**
Instrument Method:	**IC 3 method 23 mM**	*Operator:*	**Wetchem25**
Inj. Date / Time:	**19-Nov-2024 / 15:37**	*Run Time:*	**10.00**

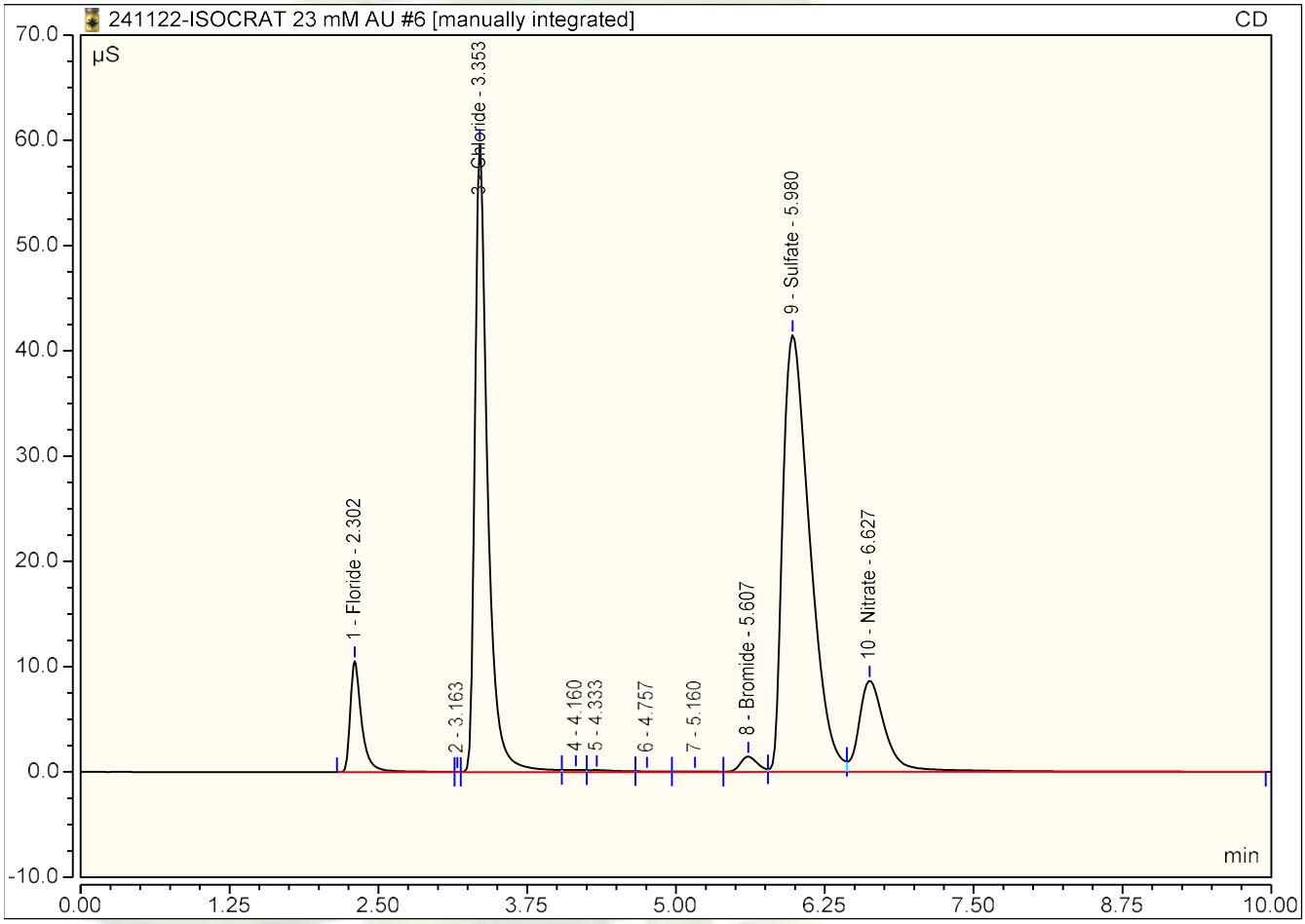
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	2.30	**Floride**	BMB	0.269	2.580	0.4761
2	3.36	**Chloride**	BM	1.803	14.814	4.9509
7	5.62	**Bromide**	M	0.051	0.277	0.4314
8	6.07	**Sulfate**	M *	2.675	11.878	9.9766
9	6.66	**Nitrate**	MB*	0.528	2.092	0.4774
TOTAL:				5.33	31.64	16.31



Peak Integration Report

Sample Name:	**STD 4.0**	*Inj. Vol.:*	**5000.00**
Injection Type:	**Calibration Standard**	*Dilution Factor:*	**1.0000**
Instrument Method:	**IC 3 method 23 mM**	*Operator:*	**Wetchem25**
Inj. Date / Time:	**19-Nov-2024 / 15:48**	*Run Time:*	**10.00**

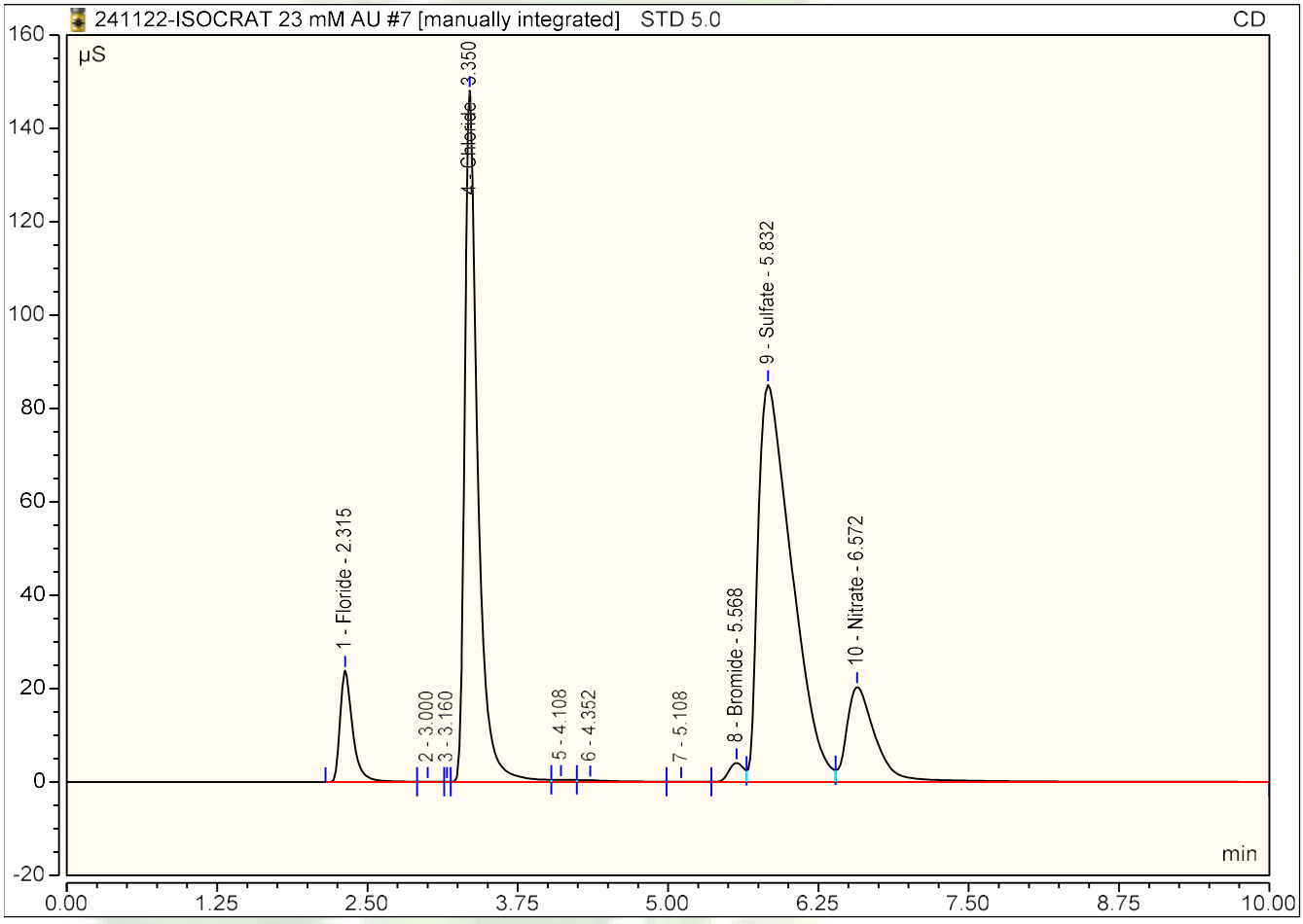
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	2.30	**Floride**	BM	1.184	10.540	2.0412
3	3.35	**Chloride**	M	7.394	59.691	19.8973
8	5.61	**Bromide**	M	0.247	1.470	2.0188
9	5.98	**Sulfate**	M *	10.886	41.510	39.7848
10	6.63	**Nitrate**	MB*	2.304	8.677	2.0041
TOTAL:				22.01	121.89	65.75



Peak Integration Report

Sample Name:	**STD 5.0**	*Inj. Vol.:*	**5000.00**
Injection Type:	**Calibration Standard**	*Dilution Factor:*	**1.0000**
Instrument Method:	**IC 3 method 23 mM**	*Operator:*	**Wetchem25**
Inj. Date / Time:	**19-Nov-2024 / 15:59**	*Run Time:*	**10.00**

No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	2.32	**Floride**	BM	2.906	23.872	4.9870
4	3.35	**Chloride**	M	18.673	148.051	50.0478
8	5.57	**Bromide**	M	0.581	4.072	4.7244
9	5.83	**Sulfate**	M *	27.498	85.049	100.0911
10	6.57	**Nitrate**	MB*	5.789	20.373	5.0014
TOTAL:				55.45	281.42	164.85



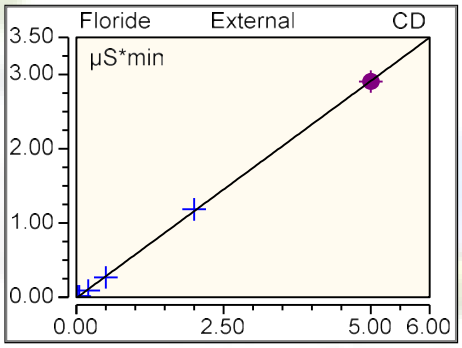
Calibration Batch Report

Sequence:	**241122-ISOCRAT 23 mM AU**	*Injection Volume:*	**5,000.00**
Instrument Method:	**IC 3 method 23 mM**	*Operator:*	**Wetchem25**
Inj. Date / Time:	**19-Nov-2024 / 15:59**	*Run Time:*	**10**

Calibration Summary

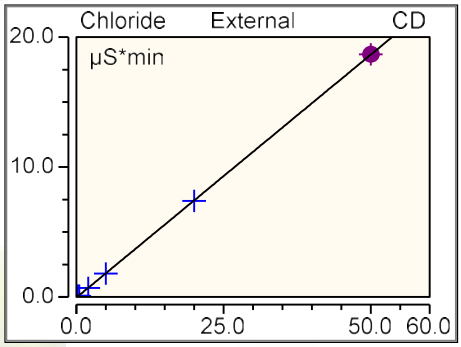
Peak Name	Eval.Type	Cal.Type	Points	Offset (C0)	Slope (C1)	Curve (C2)	Coeff.Det. %
Floride	Area	Lin, AddZero	7.000	-0.009	0.585	0.000	99.9822
Chloride	Area	Lin, AddZero	7.000	-0.049	0.374	0.000	99.9968
Bromide	Area	Lin, AddZero	6.000	-0.003	0.124	0.000	99.7406
Sulfate	Area	Lin, AddZero	7.000	-0.073	0.275	0.000	99.9970
Nitrate	Area	Lin, AddZero	7.000	-0.027	1.163	0.000	99.9906
		AVERAGE:		-0.0324	0.5041	0.0000	99.9414

Injection Name	Ret.Time min CD	Area µS*min CD	Height µS CD	Amount CD
	Floride	Floride	Floride	Floride
STD 0.5	2.292	0.0135	0.082	0.039
STD 1.0	2.288	0.0149	0.087	0.042
STD 2.0	2.298	0.0921	0.861	0.174
STD 3.0	2.297	0.2689	2.580	0.476
STD 4.0	2.302	1.1840	10.540	2.041
STD 5.0	2.315	2.9063	23.872	4.987
Average	2.299			
Rel. Std. Dev.	0.406 %			

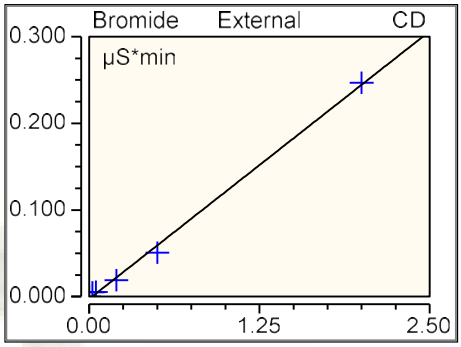


No.	Peak Name	Ret. Time	Window	Standard	Eval.Type	Cal. Type	Peak Type
1	Floride	2.330	0.249 AN	External	Area	Lin, AddZ	BM
2	Chloride	3.500	0.692 AN	External	Area	Lin, AddZ	M
3	Bromide	5.700	0.290 AF	External	Area	Lin, AddZ	M
4	Sulfate	6.100	0.604 AN	External	Area	Lin, AddZ	M *
5	Nitrate	6.800	0.491 AN	External	Area	Lin, AddZ	MB*

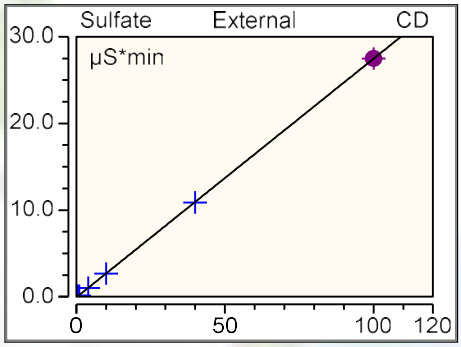
Injection Name	Ret.Time min CD	Area µS*min CD	Height µS CD	Amount CD
	Chloride	Chloride	Chloride	Chloride
STD 0.5	3.357	0.0928	0.625	0.380
STD 1.0	3.355	0.0896	0.611	0.371
STD 2.0	3.358	0.6879	5.786	1.971
STD 3.0	3.355	1.8027	14.814	4.951
STD 4.0	3.353	7.3940	59.691	19.897
STD 5.0	3.350	18.6729	148.051	50.048
Average	3.355			
Rel. Std. Dev.	0.086 %			



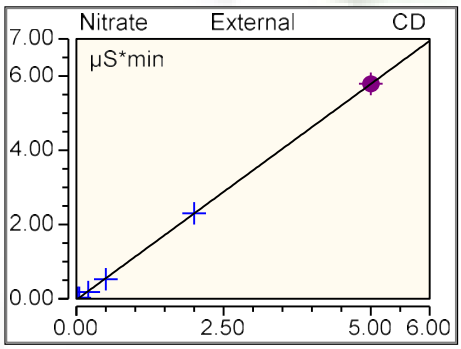
Injection Name	Ret.Time min CD	Area µS*min CD	Height µS CD	Amount CD
	Bromide	Bromide	Bromide	Bromide
STD 0.5	5.615	0.0050	0.019	0.062
STD 1.0	5.622	0.0054	0.021	0.066
STD 2.0	5.628	0.0189	0.098	0.175
STD 3.0	5.622	0.0506	0.277	0.431
STD 4.0	5.607	0.2468	1.470	2.019
STD 5.0	5.568	0.5813	4.072	4.724
Average	5.610			
Rel. Std. Dev.	0.389 %			



Injection Name	Ret.Time min CD	Area µS*min CD	Height µS CD	Amount CD
	Sulfate	Sulfate	Sulfate	Sulfate
STD 0.5	6.120	0.1166	0.525	0.689
STD 1.0	6.122	0.1226	0.552	0.711
STD 2.0	6.095	1.0236	4.739	3.982
STD 3.0	6.070	2.6749	11.878	9.977
STD 4.0	5.980	10.8860	41.510	39.785
STD 5.0	5.832	27.4981	85.049	100.091
Average	6.036			
Rel. Std. Dev.	1.873 %			



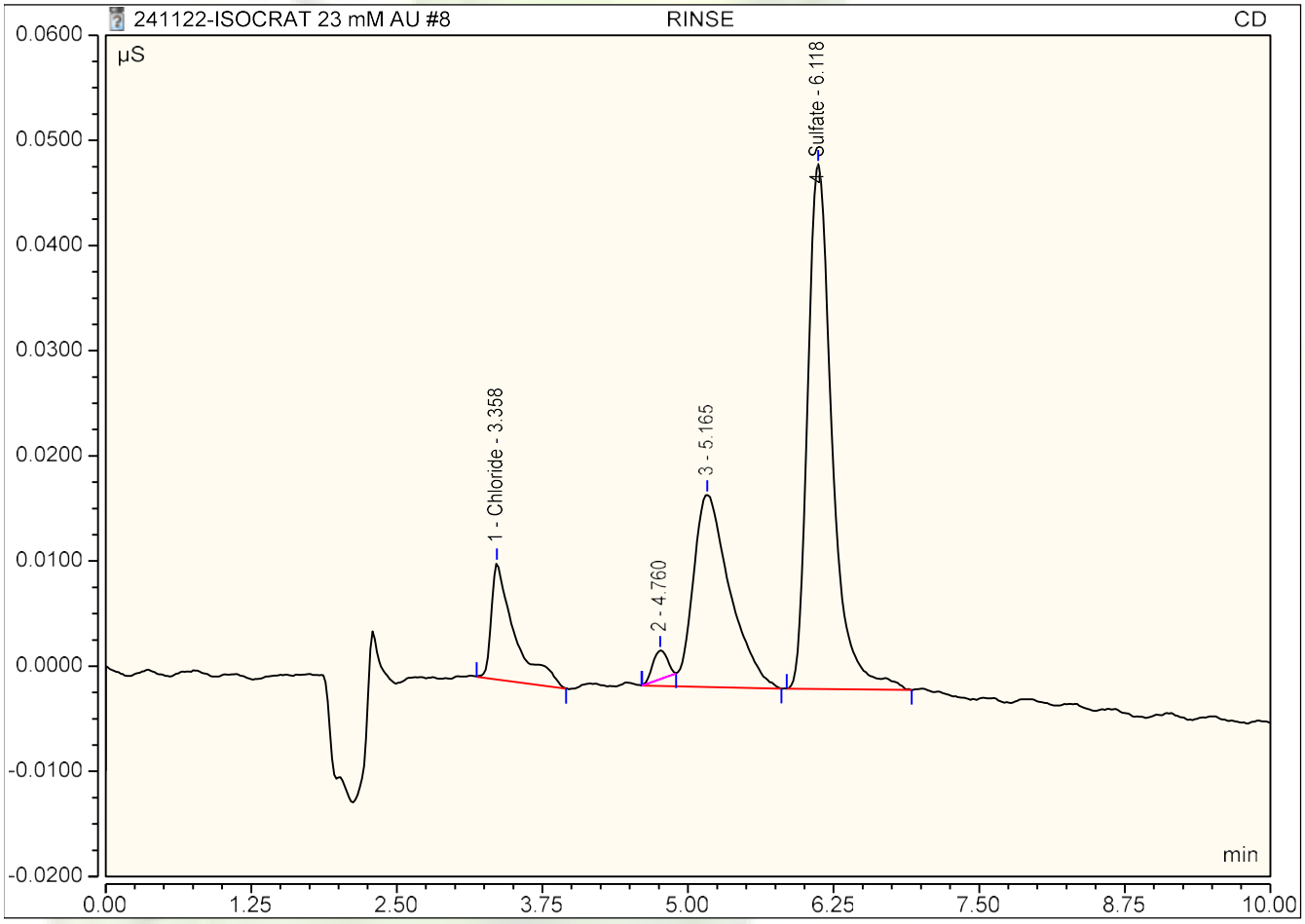
Injection Name	Ret.Time min CD	Area µS*min CD	Height µS CD	Amount CD
	Nitrate	Nitrate	Nitrate	Nitrate
STD 0.5	6.670	0.0244	0.080	0.044
STD 1.0	6.672	0.0272	0.080	0.047
STD 2.0	6.675	0.1799	0.718	0.178
STD 3.0	6.657	0.5282	2.092	0.477
STD 4.0	6.627	2.3036	8.677	2.004
STD 5.0	6.572	5.7891	20.373	5.001
Average	6.645			
Rel. Std. Dev.	0.605 %			



Peak Integration Report

Sample Name:	**RINSE**	*Inj. Vol.:*	**5000.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**IC 3 method 23 mM**	*Operator:*	**Wetchem25**
Inj. Date / Time:	**22-Nov-2024 / 19:44**	*Run Time:*	**10.00**

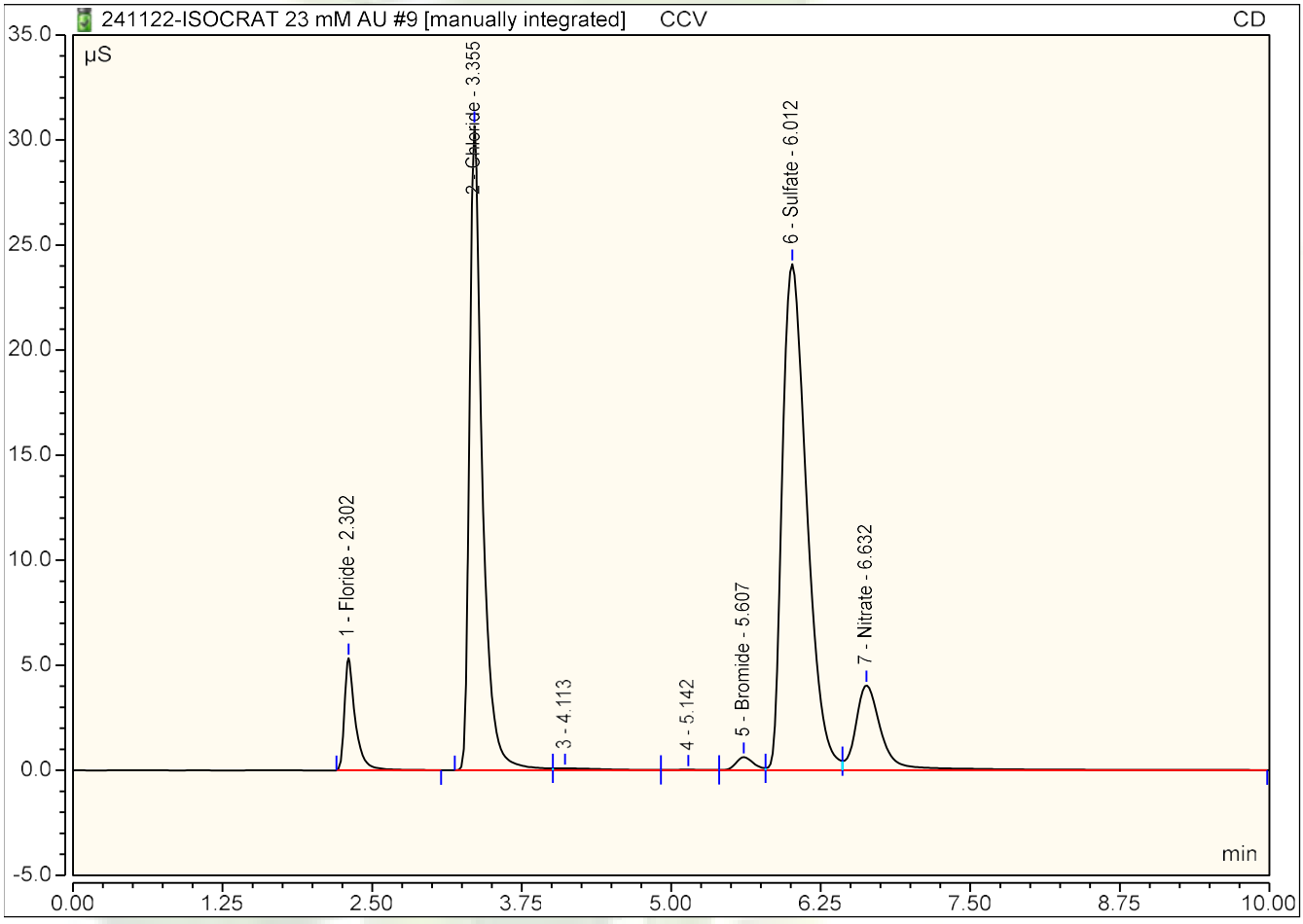
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	3.36	**Chloride**	BMB	0.003	0.011	0.1387
4	6.12	**Sulfate**	BMB	0.012	0.050	0.3101
TOTAL:				0.01	0.06	0.45



Peak Integration Report

Sample Name:	**CCV**	*Inj. Vol.:*	**5000.00**
Injection Type:	**Check Standard**	*Dilution Factor:*	**1.0000**
Instrument Method:	**IC 3 method 23 mM**	*Operator:*	**Wetchem25**
Inj. Date / Time:	**22-Nov-2024 / 19:55**	*Run Time:*	**10.00**

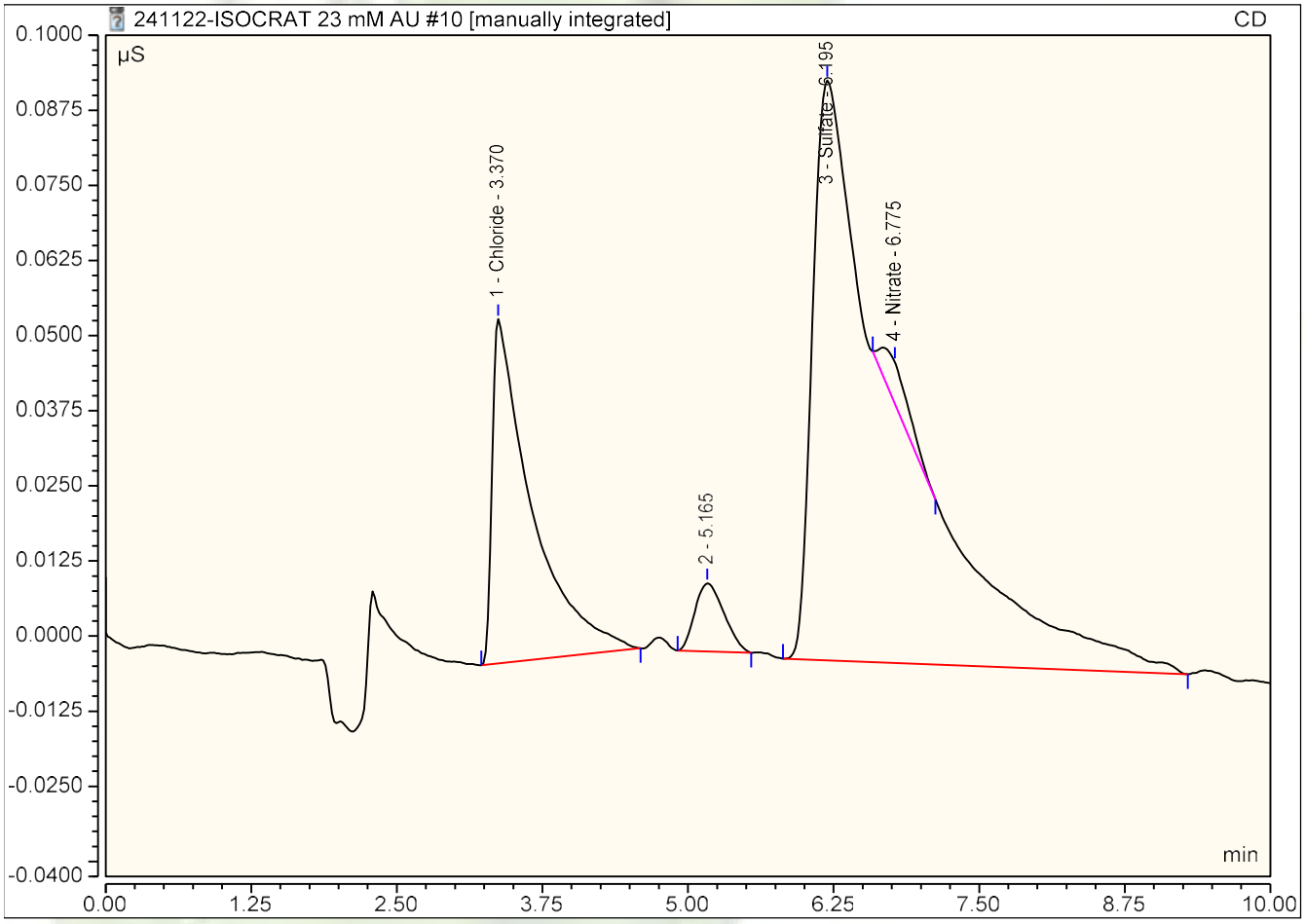
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	2.30	**Floride**	BMB	0.562	5.331	0.9772
2	3.36	**Chloride**	BM	3.823	30.651	10.3527
5	5.61	**Bromide**	M	0.104	0.620	0.8632
6	6.01	**Sulfate**	M *	5.672	24.085	20.8562
7	6.63	**Nitrate**	MB*	1.035	4.033	0.9131
TOTAL:				11.20	64.72	33.96



Peak Integration Report

Sample Name:	**CCB**	*Inj. Vol.:*	**5000.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**IC 3 method 23 mM**	*Operator:*	**Wetchem25**
Inj. Date / Time:	**22-Nov-2024 / 20:06**	*Run Time:*	**10.00**

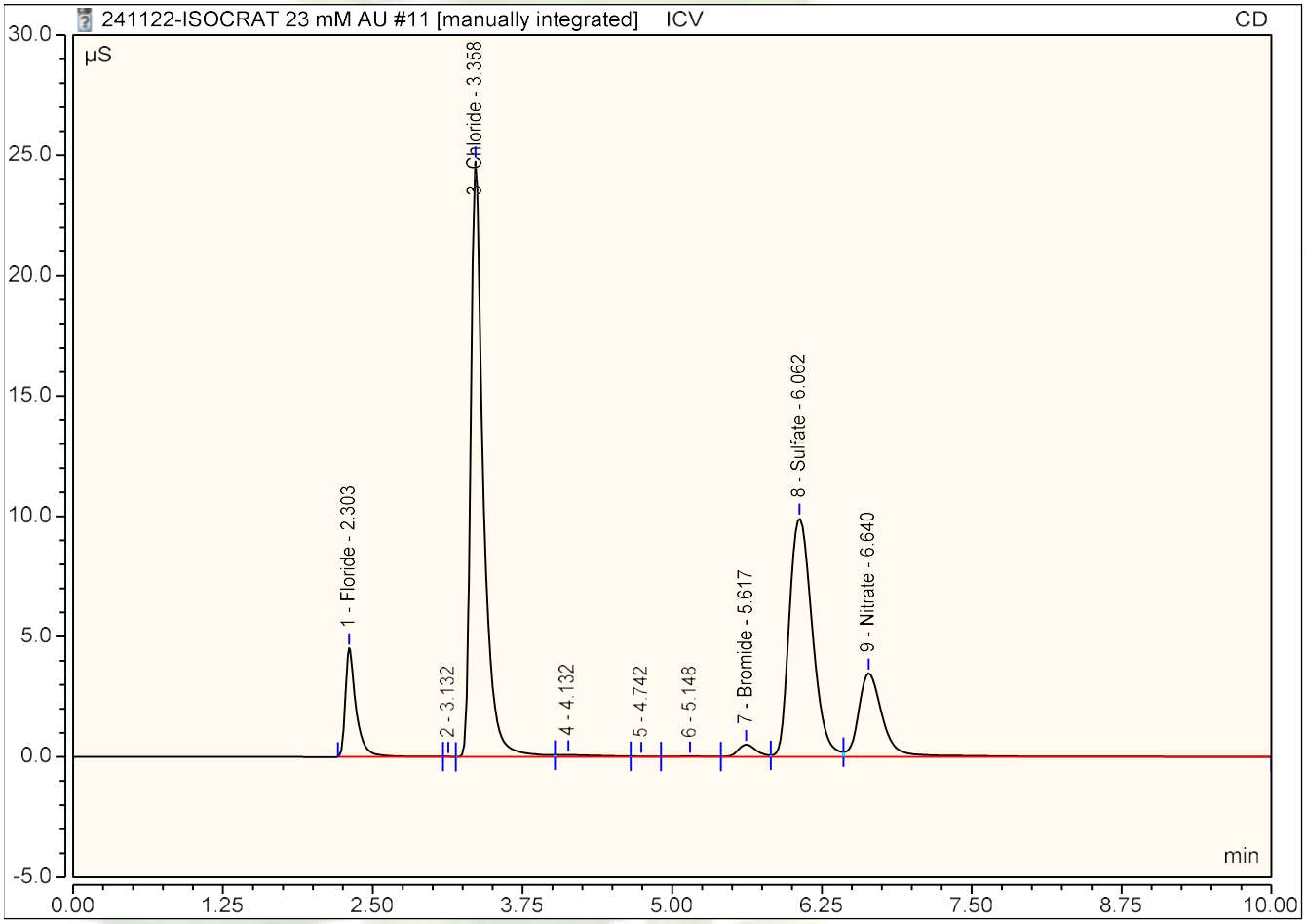
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	3.37	**Chloride**	BMB	0.022	0.057	0.1914
3	6.20	**Sulfate**	BMB*	0.082	0.096	0.5642
4	6.78	**Nitrate**	Rd*	0.002	0.007	0.0249
TOTAL:				0.11	0.16	0.78



Peak Integration Report

Sample Name:	**ICV**	*Inj. Vol.:*	**5000.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**IC 3 method 23 mM**	*Operator:*	**Wetchem25**
Inj. Date / Time:	**22-Nov-2024 / 20:17**	*Run Time:*	**10.00**

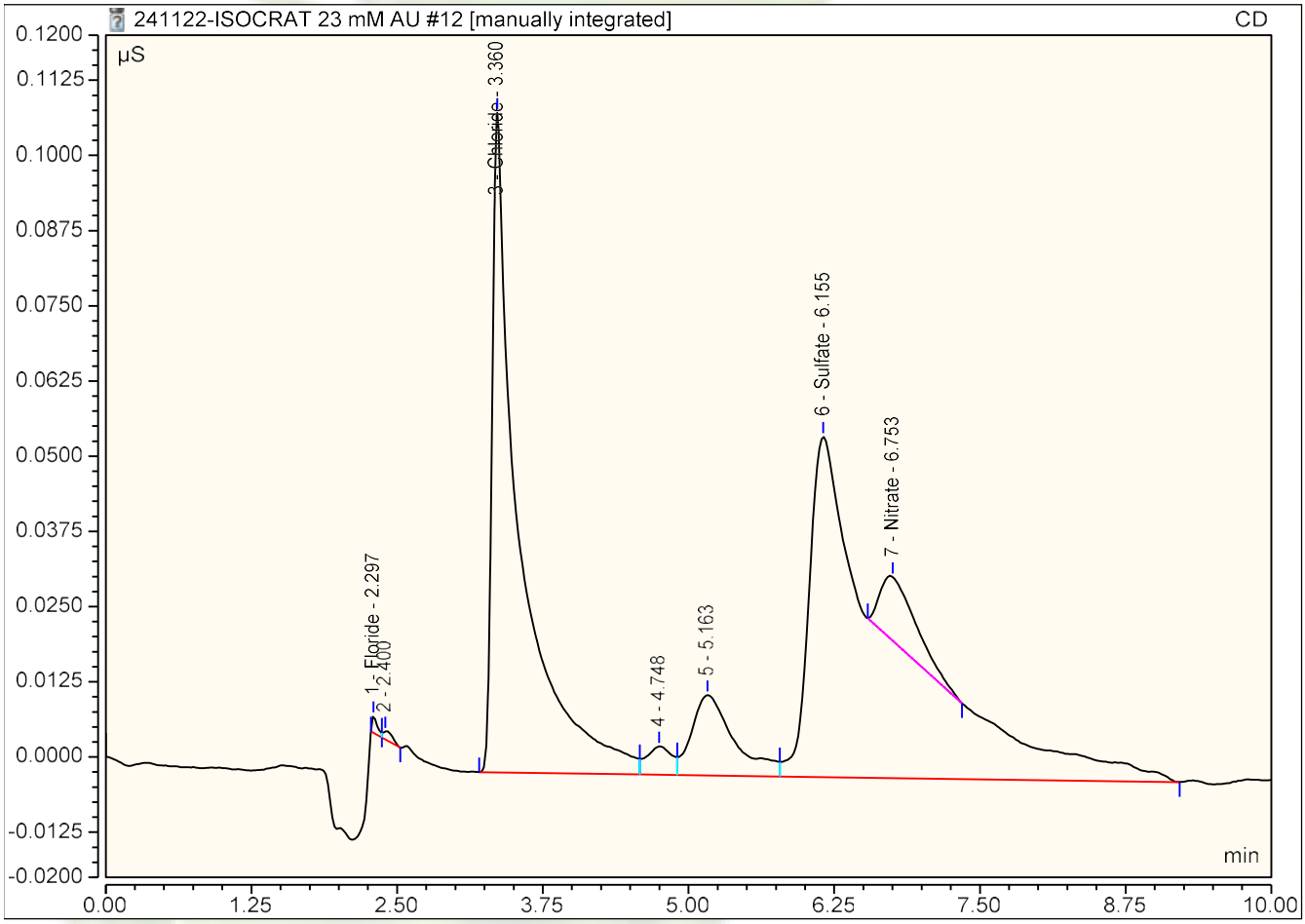
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	2.30	**Floride**	BM	0.472	4.518	0.8239
3	3.36	**Chloride**	M	3.036	24.748	8.2466
7	5.62	**Bromide**	M	0.089	0.505	0.7413
8	6.06	**Sulfate**	M *	2.188	9.914	8.2081
9	6.64	**Nitrate**	MB*	0.828	3.469	0.7353
TOTAL:				6.61	43.15	18.76



Peak Integration Report

Sample Name:	**ICB**	*Inj. Vol.:*	**5000.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**IC 3 method 23 mM**	*Operator:*	**Wetchem25**
Inj. Date / Time:	**22-Nov-2024 / 20:28**	*Run Time:*	**10.00**

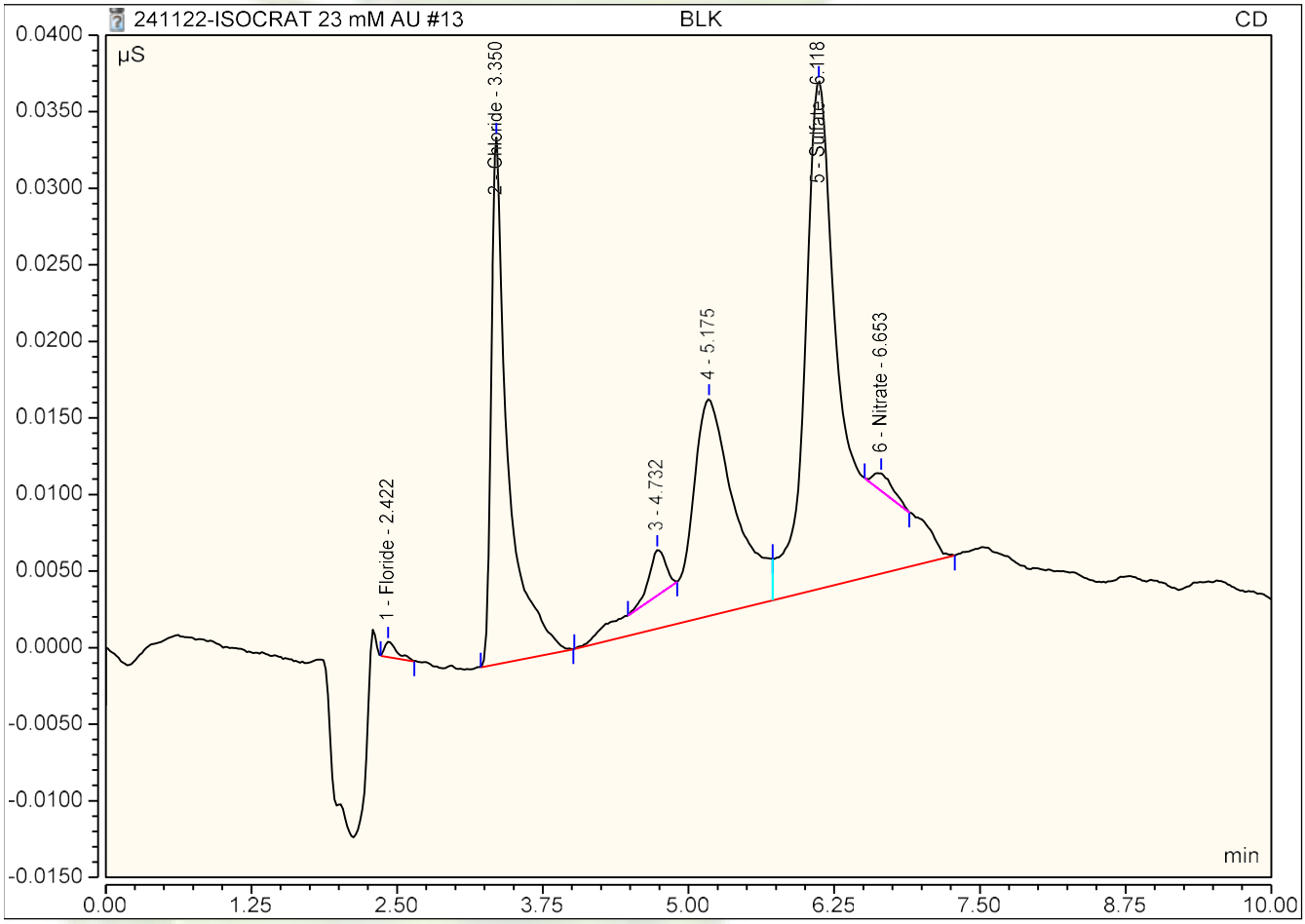
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	2.30	**Floride**	BM	0.000	0.003	0.0165
3	3.36	**Chloride**	BM	0.030	0.110	0.2110
6	6.16	**Sulfate**	MB*	0.048	0.057	0.4400
7	6.75	**Nitrate**	Rd*	0.004	0.011	0.0266
TOTAL:				0.08	0.18	0.69



Peak Integration Report

Sample Name:	**BLK**	*Inj. Vol.:*	**5000.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**IC 3 method 23 mM**	*Operator:*	**Wetchem25**
Inj. Date / Time:	**22-Nov-2024 / 20:38**	*Run Time:*	**10.00**

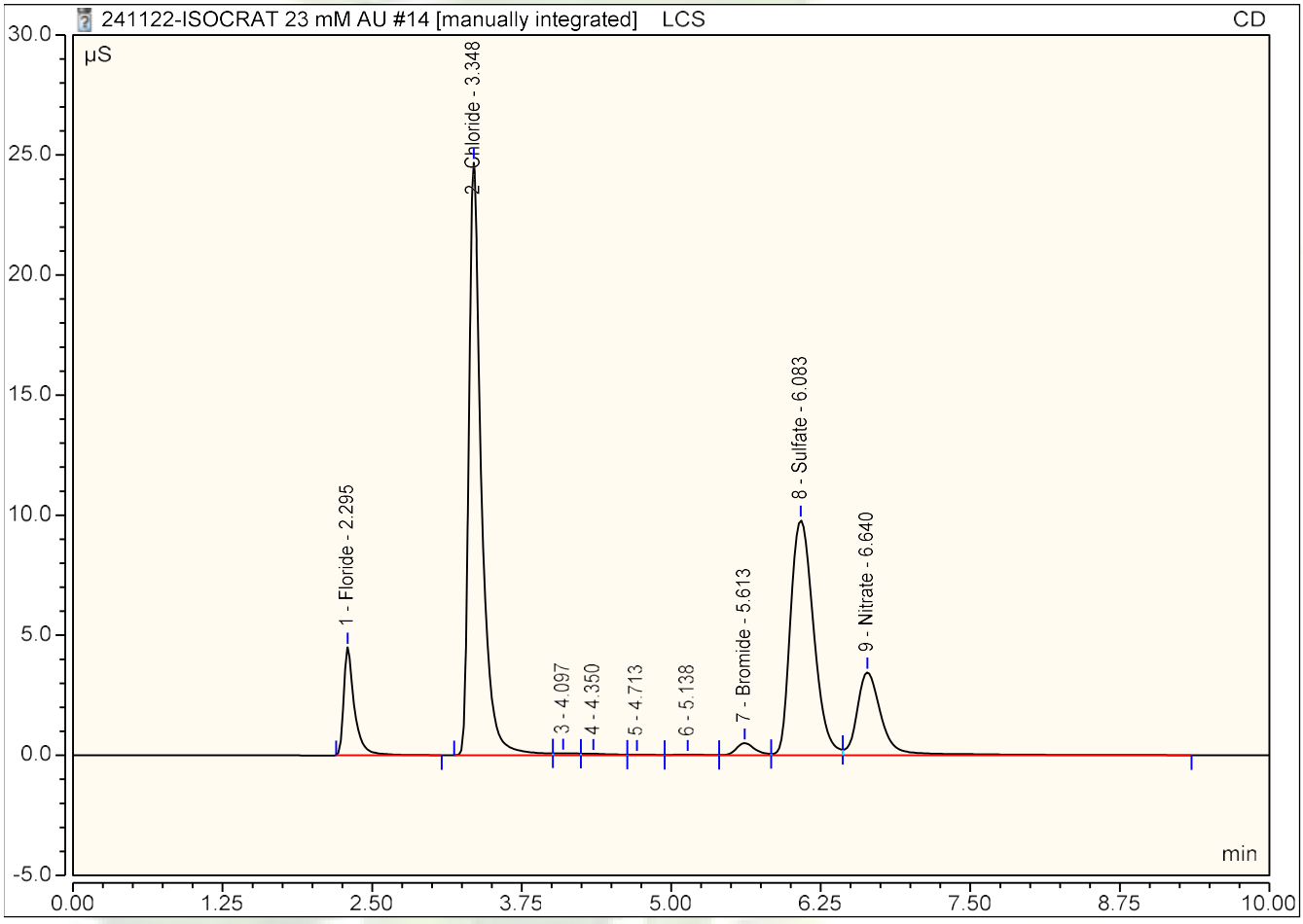
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	2.42	**Floride**	BMB	0.000	0.001	0.0164
2	3.35	**Chloride**	BMB	0.006	0.034	0.1473
5	6.12	**Sulfate**	MB	0.013	0.033	0.3140
6	6.65	**Nitrate**	Rd	0.000	0.001	0.0234
TOTAL:				0.02	0.07	0.50



Peak Integration Report

Sample Name:	**LCS**	*Inj. Vol.:*	**5000.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**IC 3 method 23 mM**	*Operator:*	**Wetchem25**
Inj. Date / Time:	**22-Nov-2024 / 20:49**	*Run Time:*	**10.00**

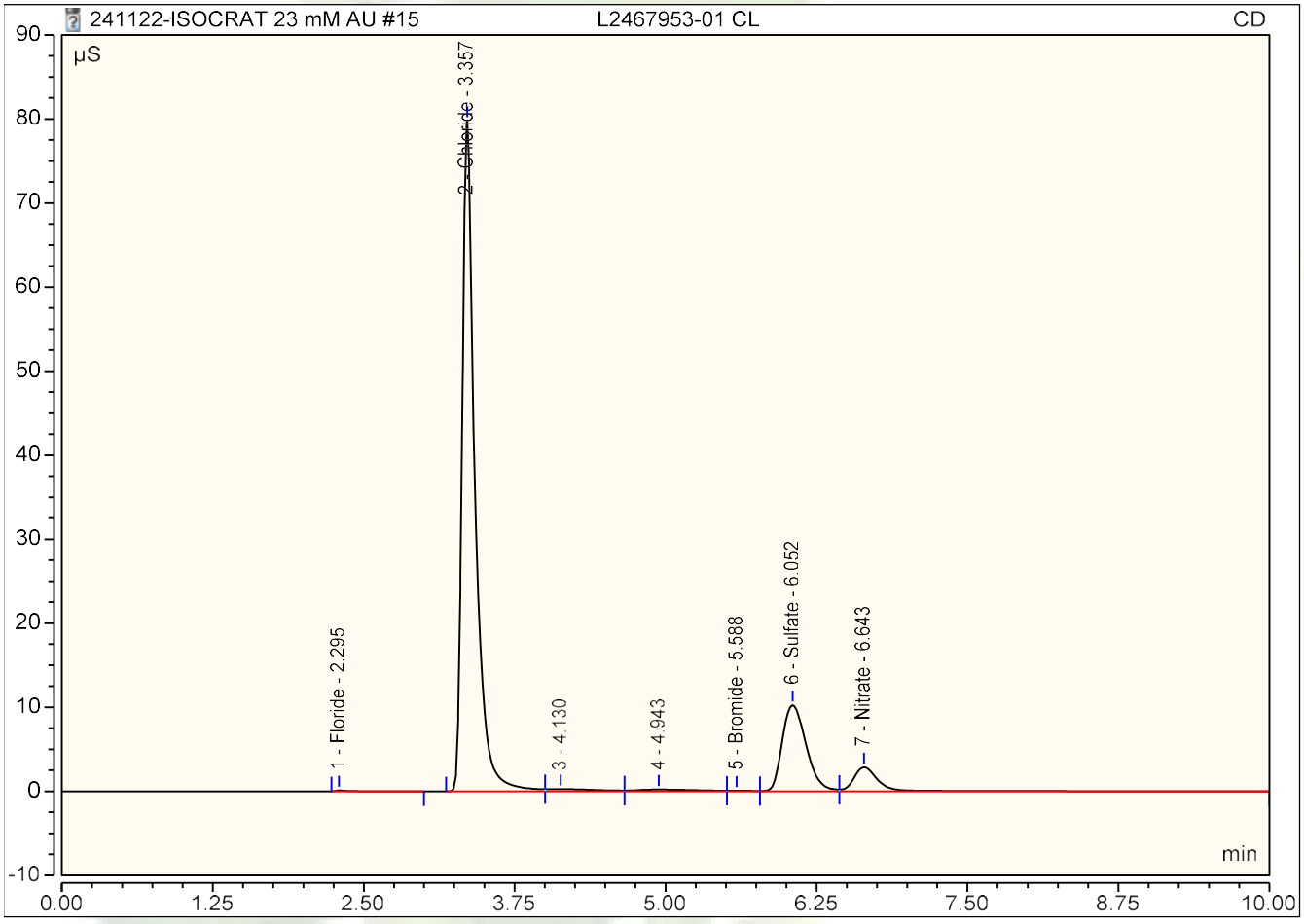
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	2.30	**Floride**	BMB	0.466	4.490	0.8128
2	3.35	**Chloride**	BM	3.012	24.676	8.1836
7	5.61	**Bromide**	M	0.089	0.503	0.7442
8	6.08	**Sulfate**	M *	2.176	9.781	8.1636
9	6.64	**Nitrate**	MB*	0.829	3.451	0.7362
TOTAL:				6.57	42.90	18.64



Peak Integration Report

Sample Name:	**L2467953-01 CL**	*Inj. Vol.:*	**5000.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**IC 3 method 23 mM**	*Operator:*	**Wetchem25**
Inj. Date / Time:	**22-Nov-2024 / 21:00**	*Run Time:*	**10.00**

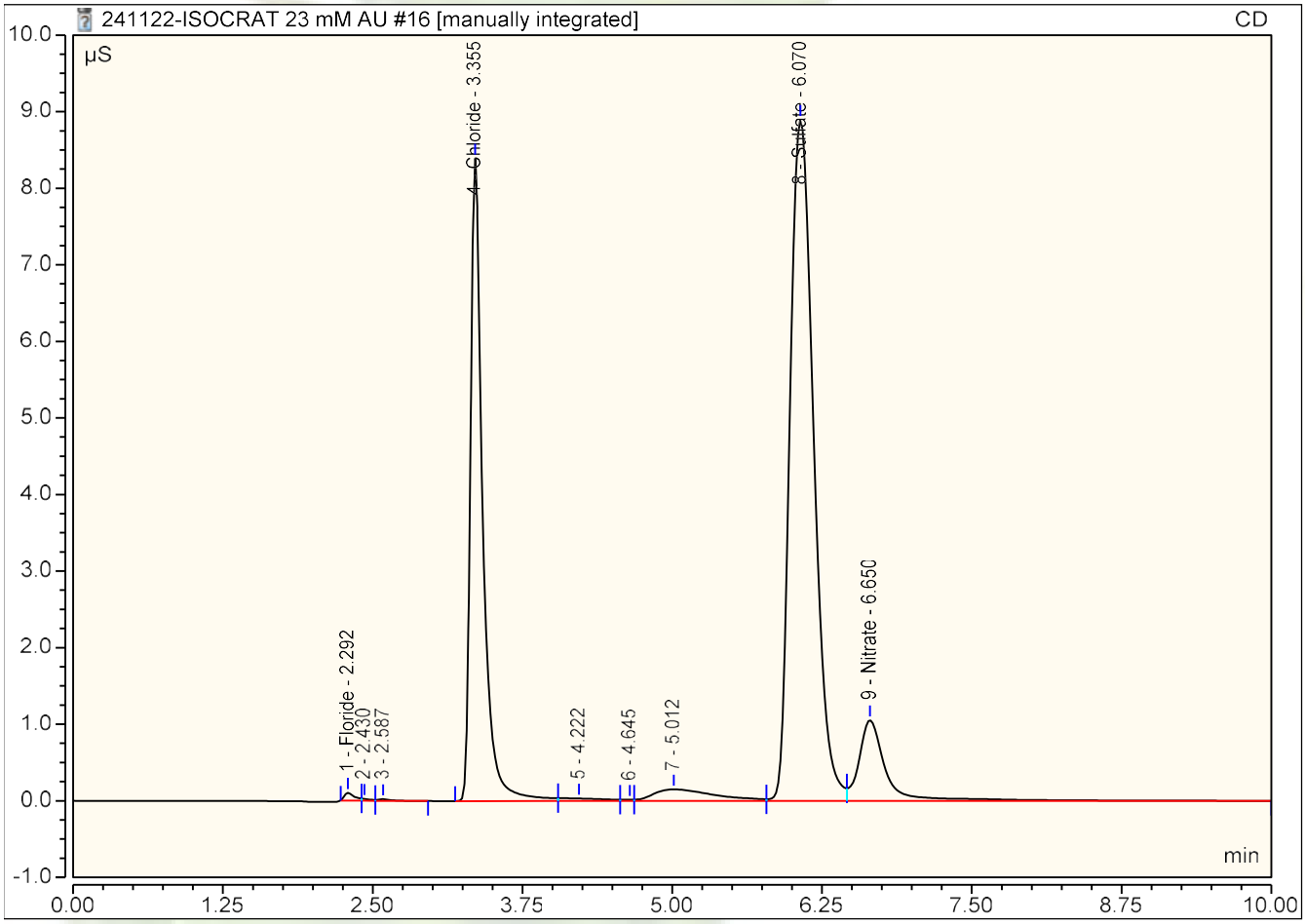
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	2.30	**Floride**	BMB	0.012	0.100	0.0376
2	3.36	**Chloride**	BM	9.844	79.779	26.4466
5	5.59	**Bromide**	M	0.018	0.077	0.1650
6	6.05	**Sulfate**	M	2.358	10.253	8.8275
7	6.64	**Nitrate**	MB	0.702	2.860	0.6268
TOTAL:				12.93	93.07	36.10



Peak Integration Report

Sample Name:	**L2468411-01 CL SO4**	*Inj. Vol.:*	**5000.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**IC 3 method 23 mM**	*Operator:*	**Wetchem25**
Inj. Date / Time:	**22-Nov-2024 / 21:11**	*Run Time:*	**10.00**

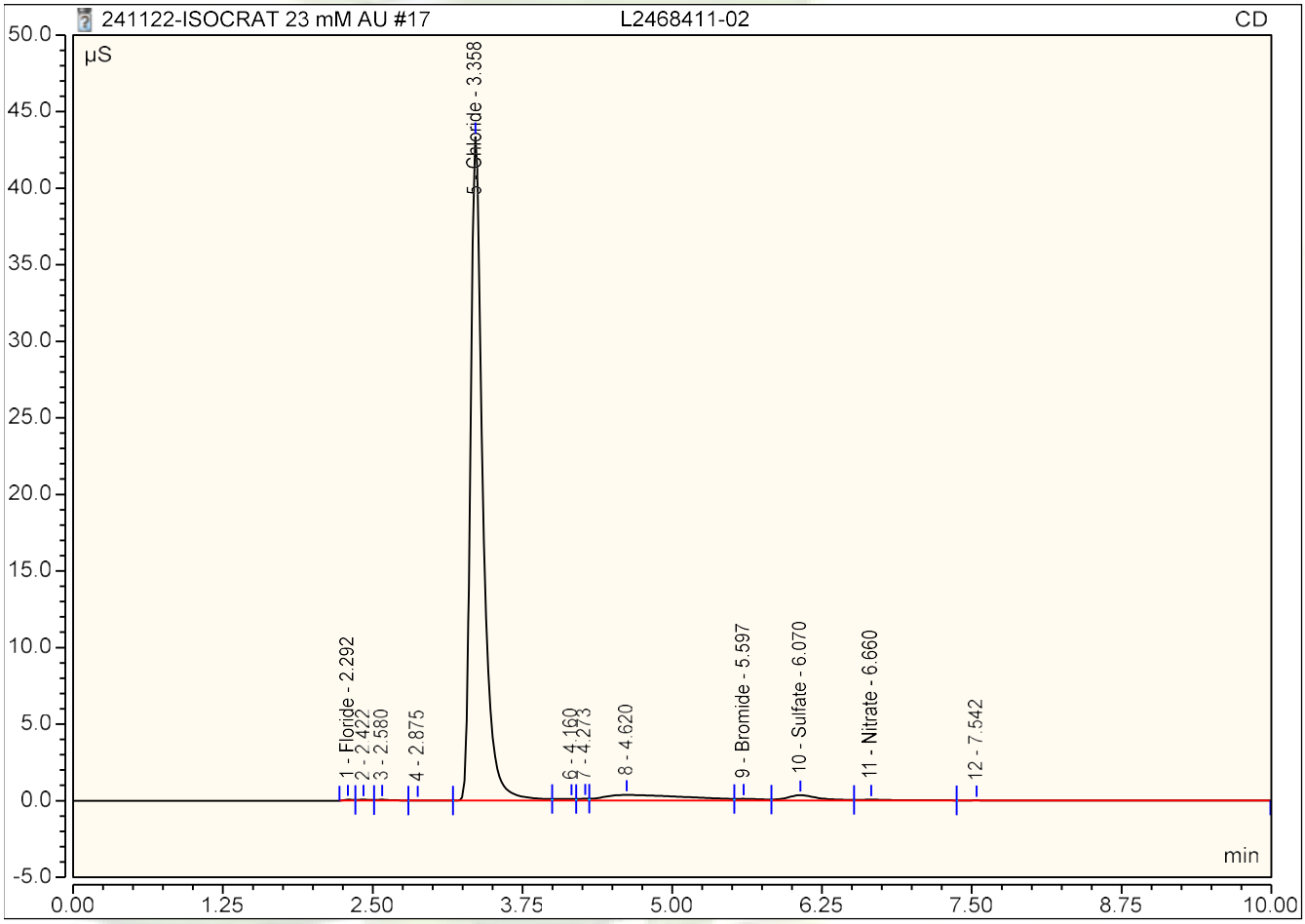
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	2.29	**Floride**	BM	0.010	0.104	0.0334
4	3.36	**Chloride**	BM	1.004	8.395	2.8161
8	6.07	**Sulfate**	M *	2.021	8.897	7.6010
9	6.65	**Nitrate**	MB*	0.280	1.055	0.2636
TOTAL:				3.31	18.45	10.71



Peak Integration Report

Sample Name:	**L2468411-02**	*Inj. Vol.:*	**5000.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**IC 3 method 23 mM**	*Operator:*	**Wetchem25**
Inj. Date / Time:	**22-Nov-2024 / 21:22**	*Run Time:*	**10.00**

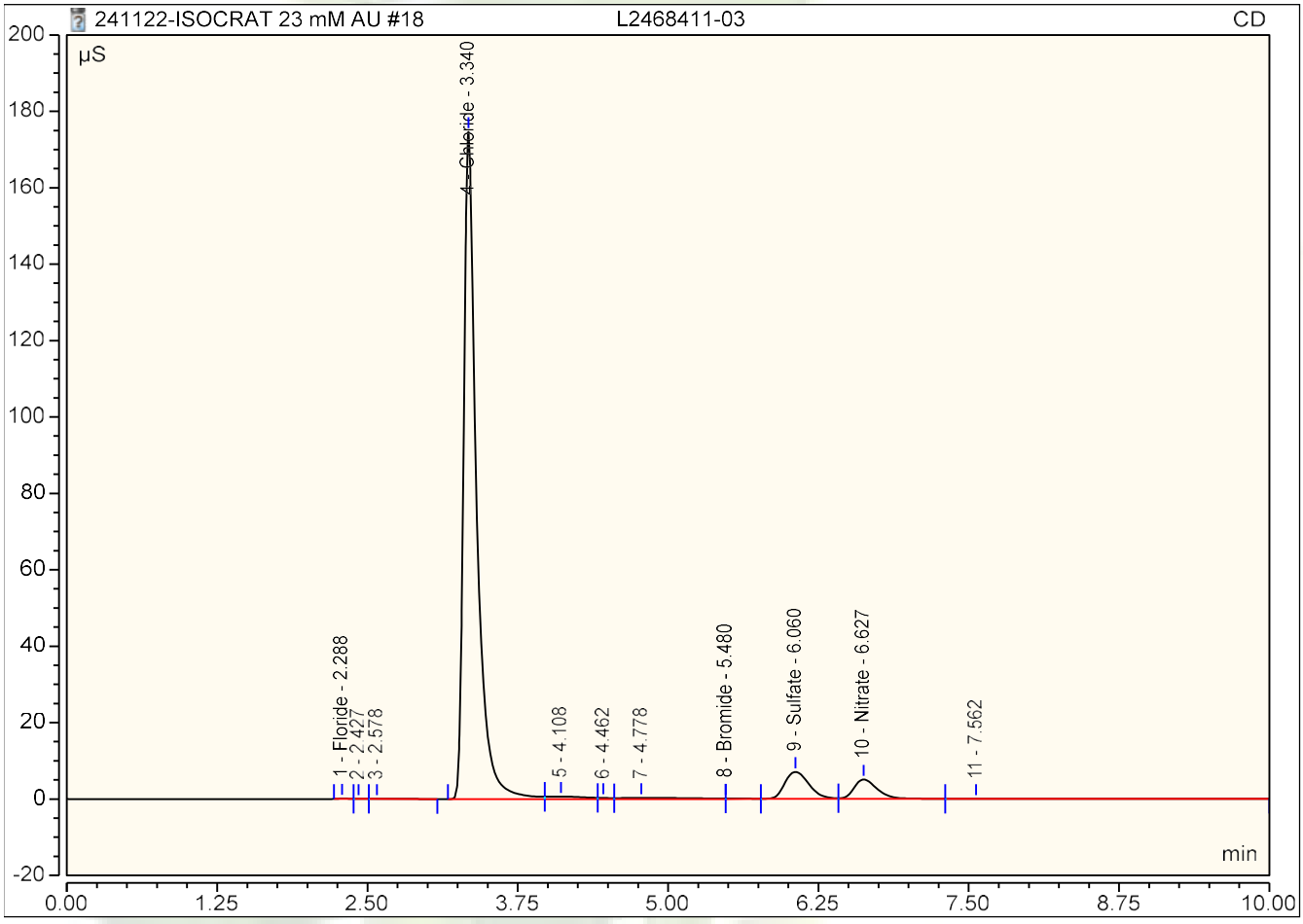
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	2.29	**Floride**	BM	0.006	0.069	0.0270
5	3.36	**Chloride**	M	5.209	43.326	14.0577
9	5.60	**Bromide**	M	0.032	0.121	0.2786
10	6.07	**Sulfate**	M	0.114	0.357	0.6780
11	6.66	**Nitrate**	M	0.030	0.063	0.0491
TOTAL:				5.39	43.94	15.09



Peak Integration Report

Sample Name:	**L2468411-03**	*Inj. Vol.:*	**5000.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**IC 3 method 23 mM**	*Operator:*	**Wetchem25**
Inj. Date / Time:	**22-Nov-2024 / 21:33**	*Run Time:*	**10.00**

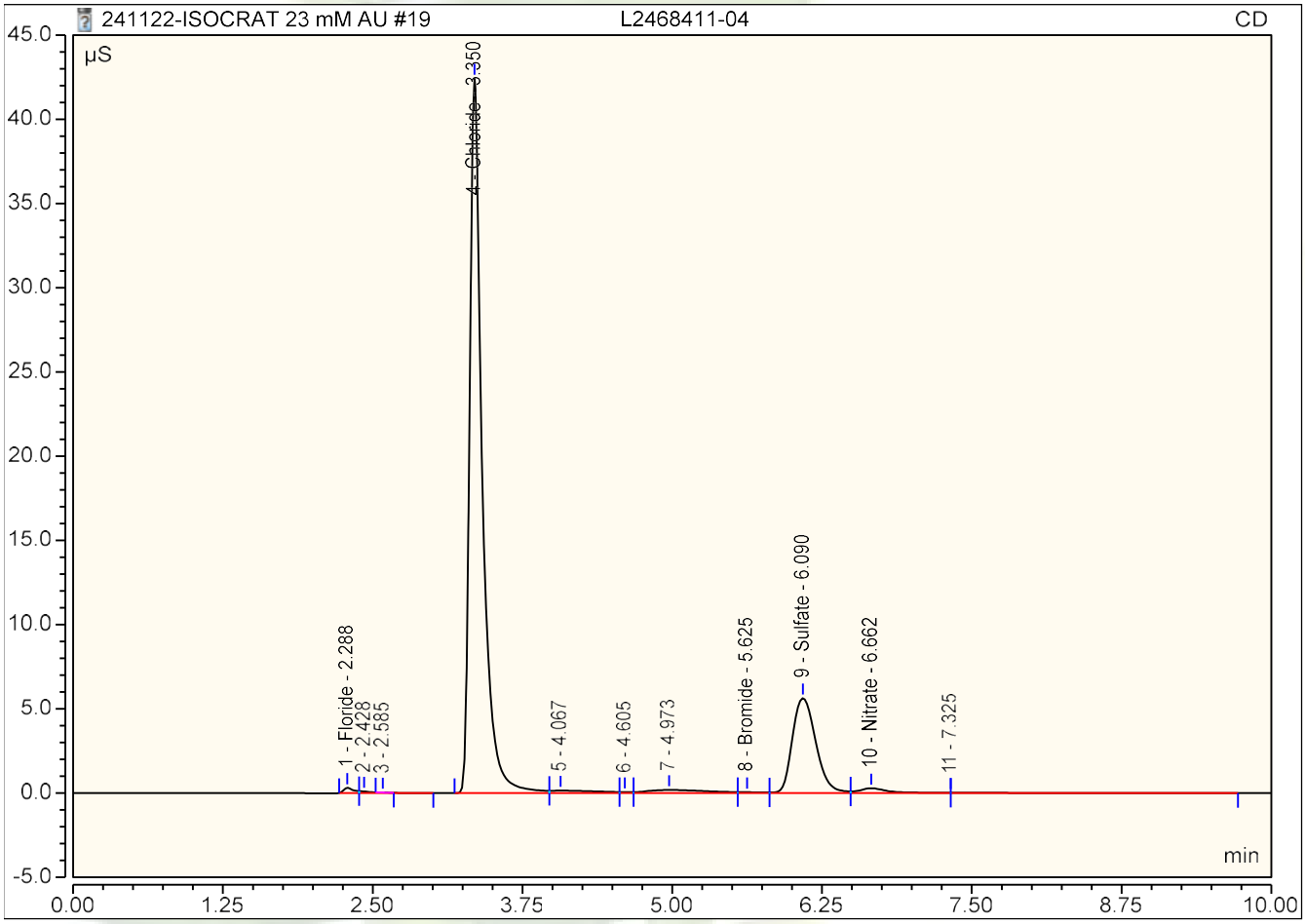
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	2.29	**Floride**	BM	0.014	0.142	0.0396
4	3.34	**Chloride**	BM	21.727	174.660	58.2126
8	5.48	**Bromide**	M	0.027	0.108	0.2442
9	6.06	**Sulfate**	M	1.664	7.090	6.3074
10	6.63	**Nitrate**	M	1.171	5.113	1.0304
TOTAL:				24.60	187.11	65.83



Peak Integration Report

Sample Name:	**L2468411-04**	*Inj. Vol.:*	**5000.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**IC 3 method 23 mM**	*Operator:*	**Wetchem25**
Inj. Date / Time:	**22-Nov-2024 / 21:44**	*Run Time:*	**10.00**

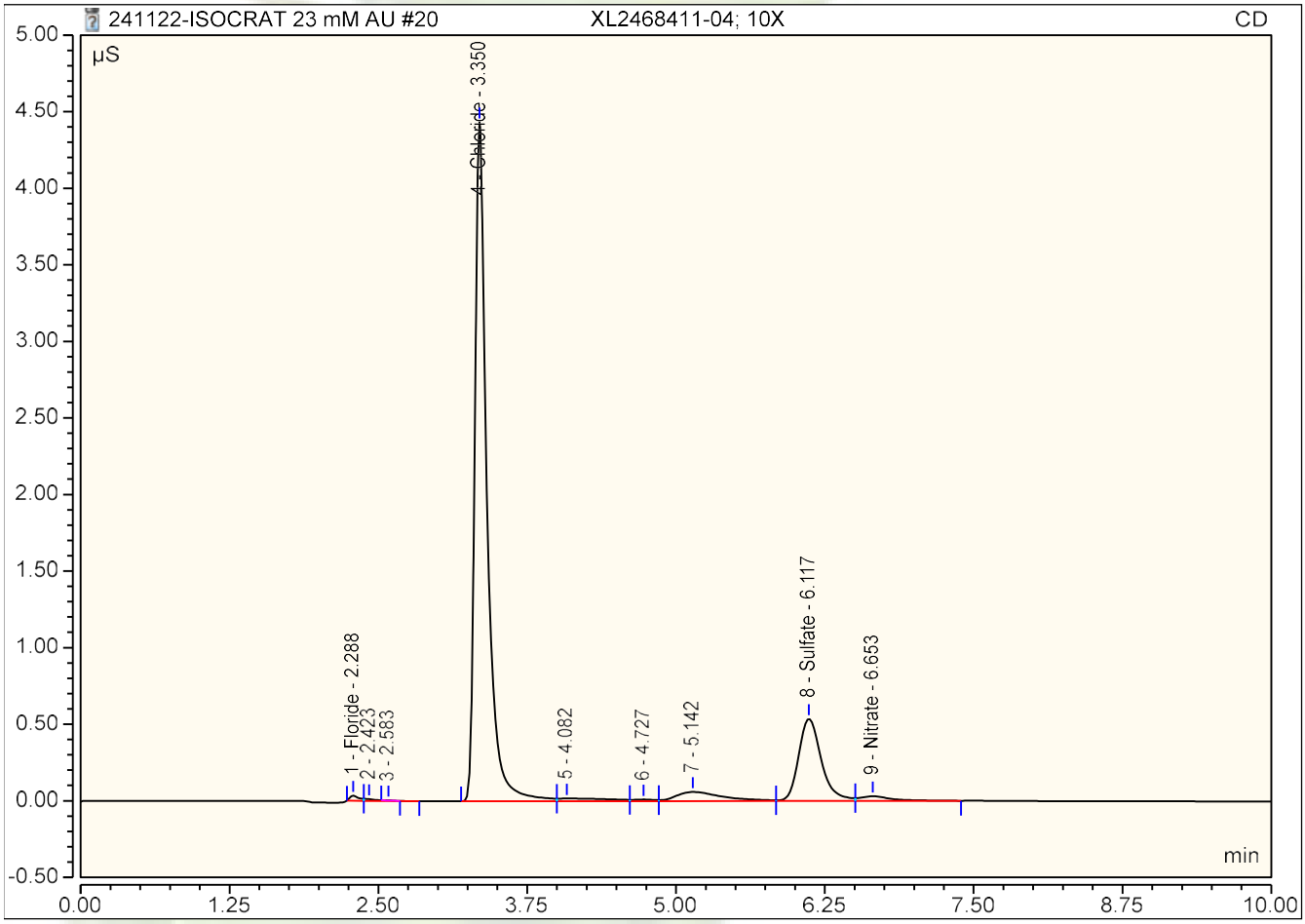
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	2.29	**Floride**	BM	0.028	0.302	0.0644
4	3.35	**Chloride**	BM	5.174	42.427	13.9633
8	5.63	**Bromide**	M	0.012	0.054	0.1225
9	6.09	**Sulfate**	M	1.270	5.632	4.8775
10	6.66	**Nitrate**	M	0.083	0.288	0.0948
TOTAL:				6.57	48.70	19.12



Peak Integration Report

Sample Name:	**XL2468411-04; 10X**	*Inj. Vol.:*	**5000.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**10.0000**
Instrument Method:	**IC 3 method 23 mM**	*Operator:*	**Wetchem25**
Inj. Date / Time:	**22-Nov-2024 / 21:55**	*Run Time:*	**10.00**

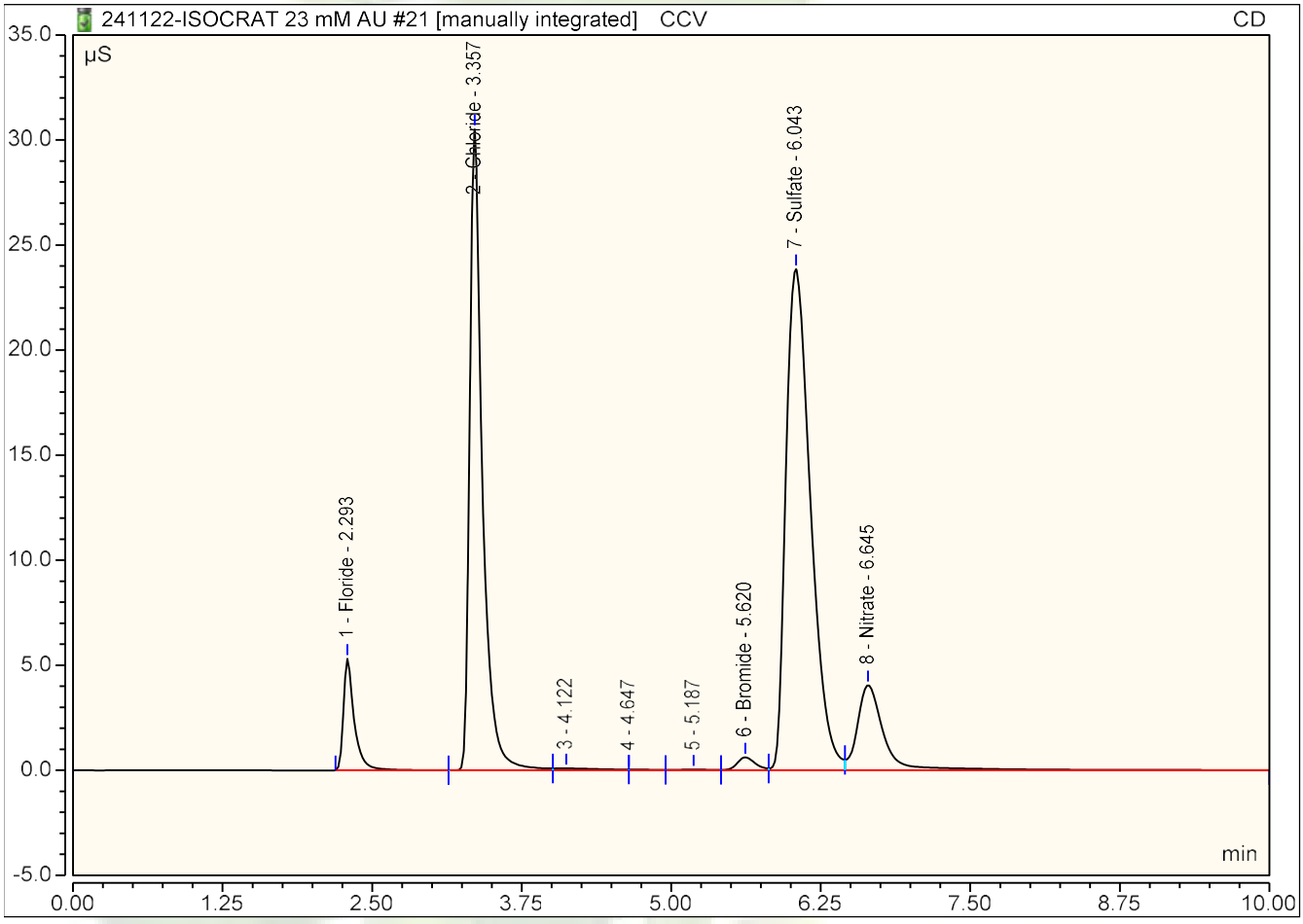
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	2.29	**Floride**	BM	0.003	0.033	0.2120
4	3.35	**Chloride**	BM	0.524	4.435	15.3195
8	6.12	**Sulfate**	M	0.118	0.536	6.9477
9	6.65	**Nitrate**	MB	0.009	0.031	0.3112
TOTAL:				0.65	5.04	22.79



Peak Integration Report

Sample Name:	**CCV**	*Inj. Vol.:*	**5000.00**
Injection Type:	**Check Standard**	*Dilution Factor:*	**1.0000**
Instrument Method:	**IC 3 method 23 mM**	*Operator:*	**Wetchem25**
Inj. Date / Time:	**22-Nov-2024 / 22:06**	*Run Time:*	**10.00**

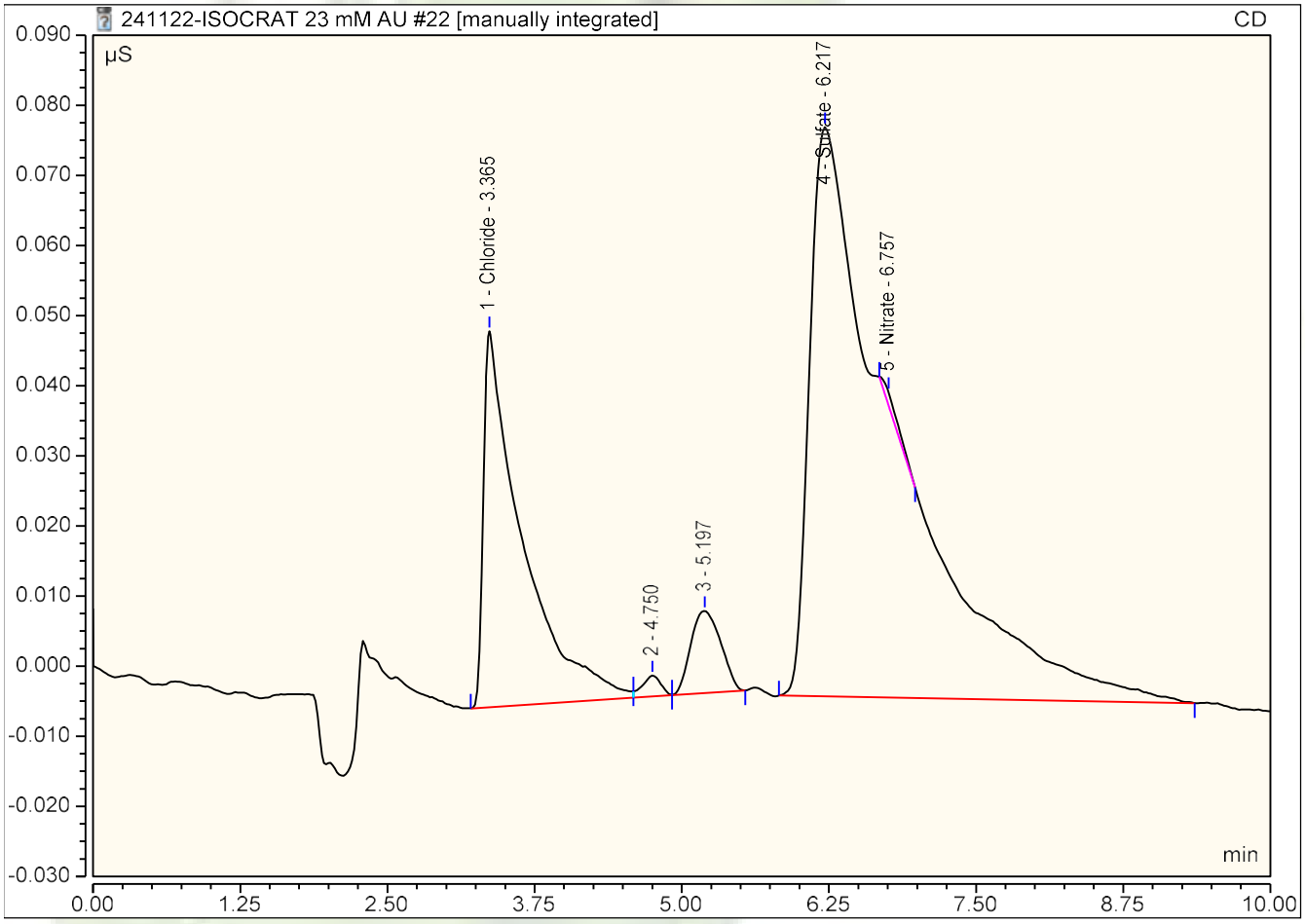
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	2.29	**Floride**	BM *	0.559	5.311	0.9725
2	3.36	**Chloride**	M *	3.778	30.516	10.2305
6	5.62	**Bromide**	M	0.107	0.615	0.8915
7	6.04	**Sulfate**	M *	5.669	23.856	20.8462
8	6.65	**Nitrate**	MB*	1.053	4.045	0.9283
TOTAL:				11.17	64.34	33.87



Peak Integration Report

Sample Name:	**CCB**	*Inj. Vol.:*	**5000.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**IC 3 method 23 mM**	*Operator:*	**Wetchem25**
Inj. Date / Time:	**22-Nov-2024 / 22:17**	*Run Time:*	**10.00**

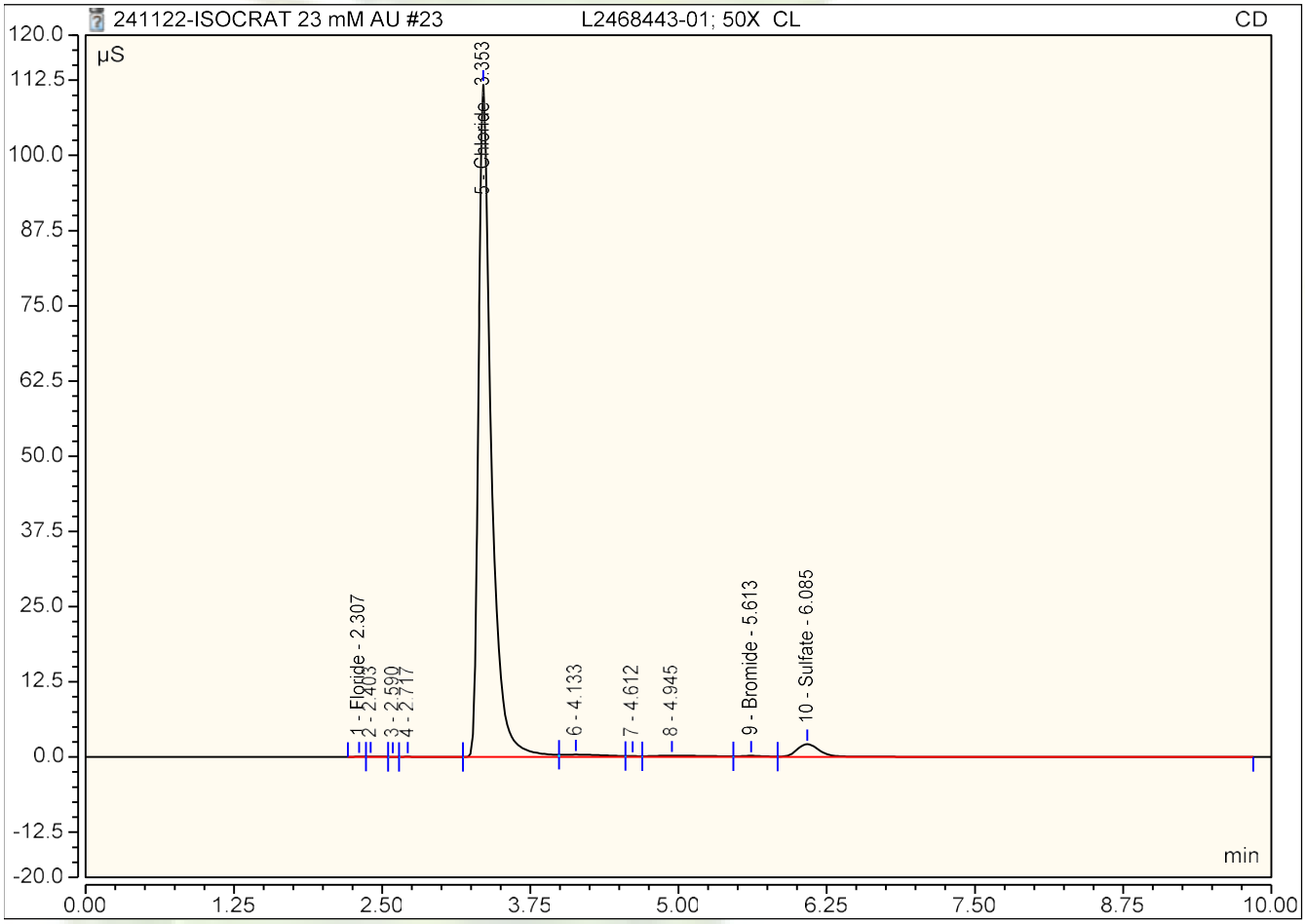
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	3.37	**Chloride**	BM	0.020	0.054	0.1861
4	6.22	**Sulfate**	BMB*	0.070	0.081	0.5190
5	6.76	**Nitrate**	Rd*	0.000	0.002	0.0235
TOTAL:				0.09	0.14	0.73



Peak Integration Report

Sample Name:	**L2468443-01; 50X CL**	*Inj. Vol.:*	**5000.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**50.0000**
Instrument Method:	**IC 3 method 23 mM**	*Operator:*	**Wetchem25**
Inj. Date / Time:	**22-Nov-2024 / 22:28**	*Run Time:*	**10.00**

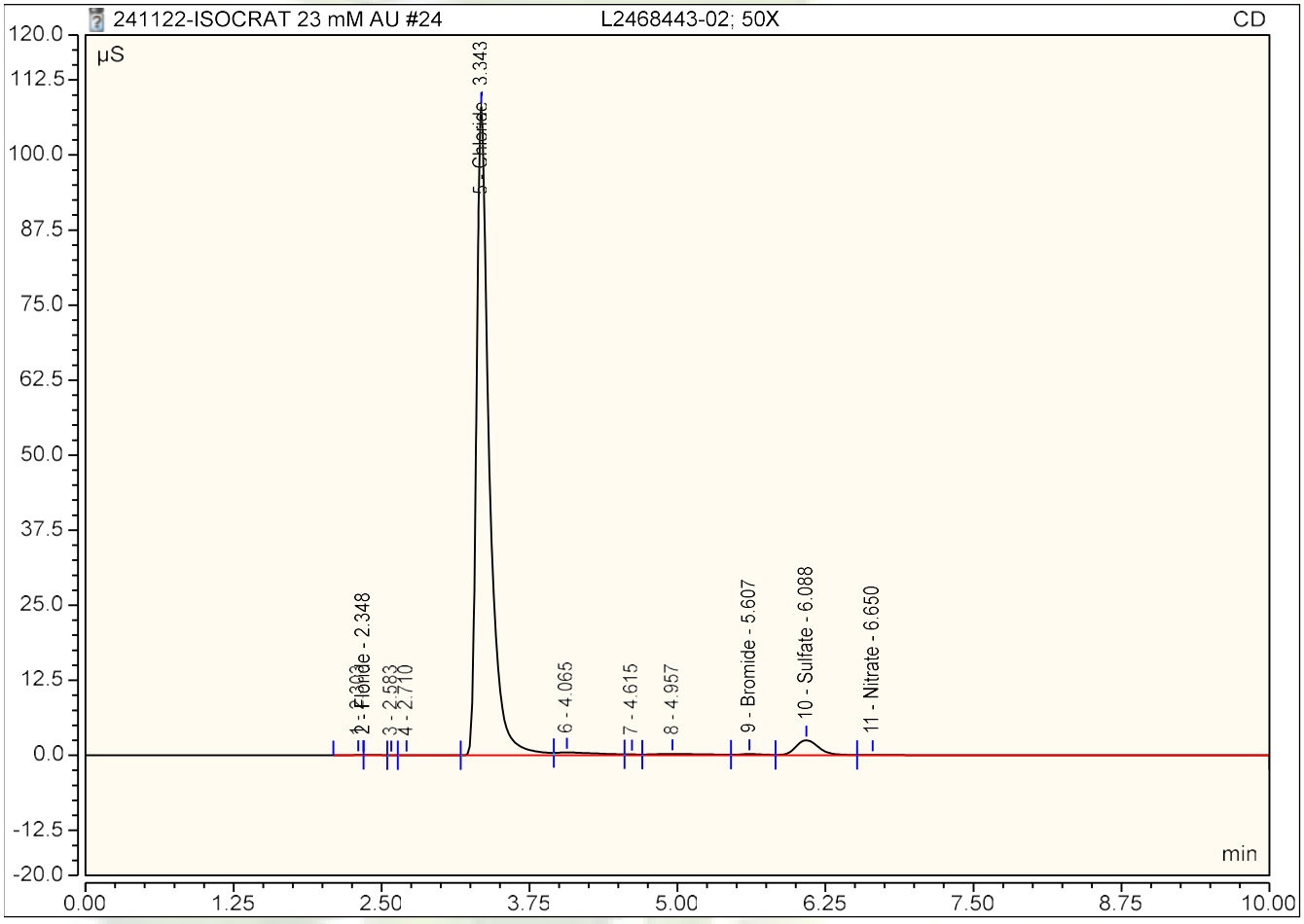
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	2.31	**Floride**	BM	0.006	0.055	1.3151
5	3.35	**Chloride**	M	13.946	111.725	1870.6272
9	5.61	**Bromide**	M	0.050	0.198	21.2717
10	6.09	**Sulfate**	MB	0.526	2.112	108.7068
TOTAL:				14.53	114.09	2001.92



Peak Integration Report

Sample Name:	**L2468443-02; 50X**	*Inj. Vol.:*	**5000.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**50.0000**
Instrument Method:	**IC 3 method 23 mM**	*Operator:*	**Wetchem25**
Inj. Date / Time:	**22-Nov-2024 / 22:39**	*Run Time:*	**10.00**

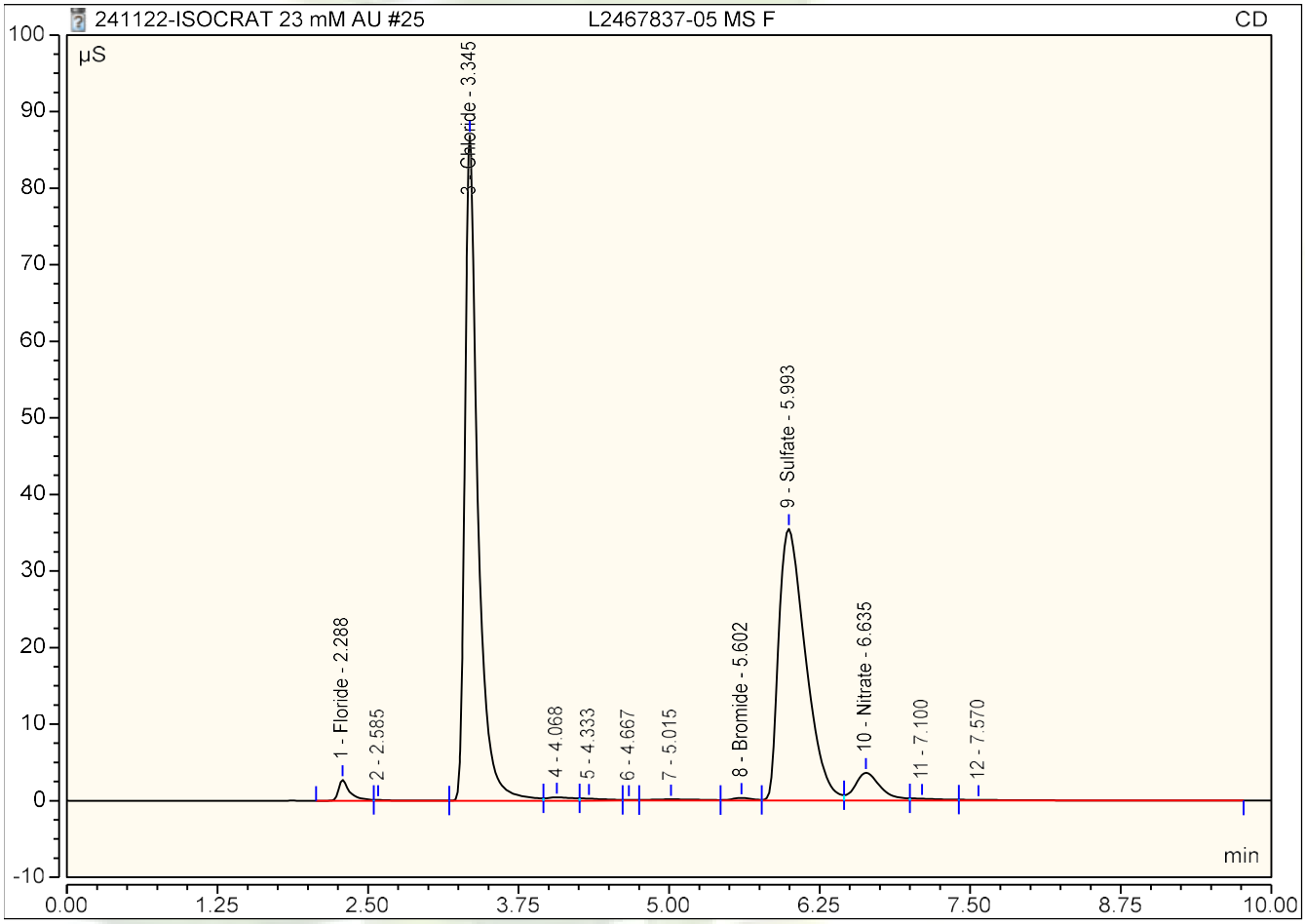
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.35	**Floride**	M	0.011	0.061	1.7514
5	3.34	**Chloride**	M	13.522	108.037	1813.9901
9	5.61	**Bromide**	M	0.057	0.228	24.3411
10	6.09	**Sulfate**	M	0.578	2.503	118.1676
11	6.65	**Nitrate**	MB	0.069	0.086	4.1479
TOTAL:				14.24	110.91	1962.40



Peak Integration Report

Sample Name:	**L2467837-05 MS F**	*Inj. Vol.:*	**5000.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**IC 3 method 23 mM**	*Operator:*	**Wetchem25**
Inj. Date / Time:	**22-Nov-2024 / 22:50**	*Run Time:*	**10.00**

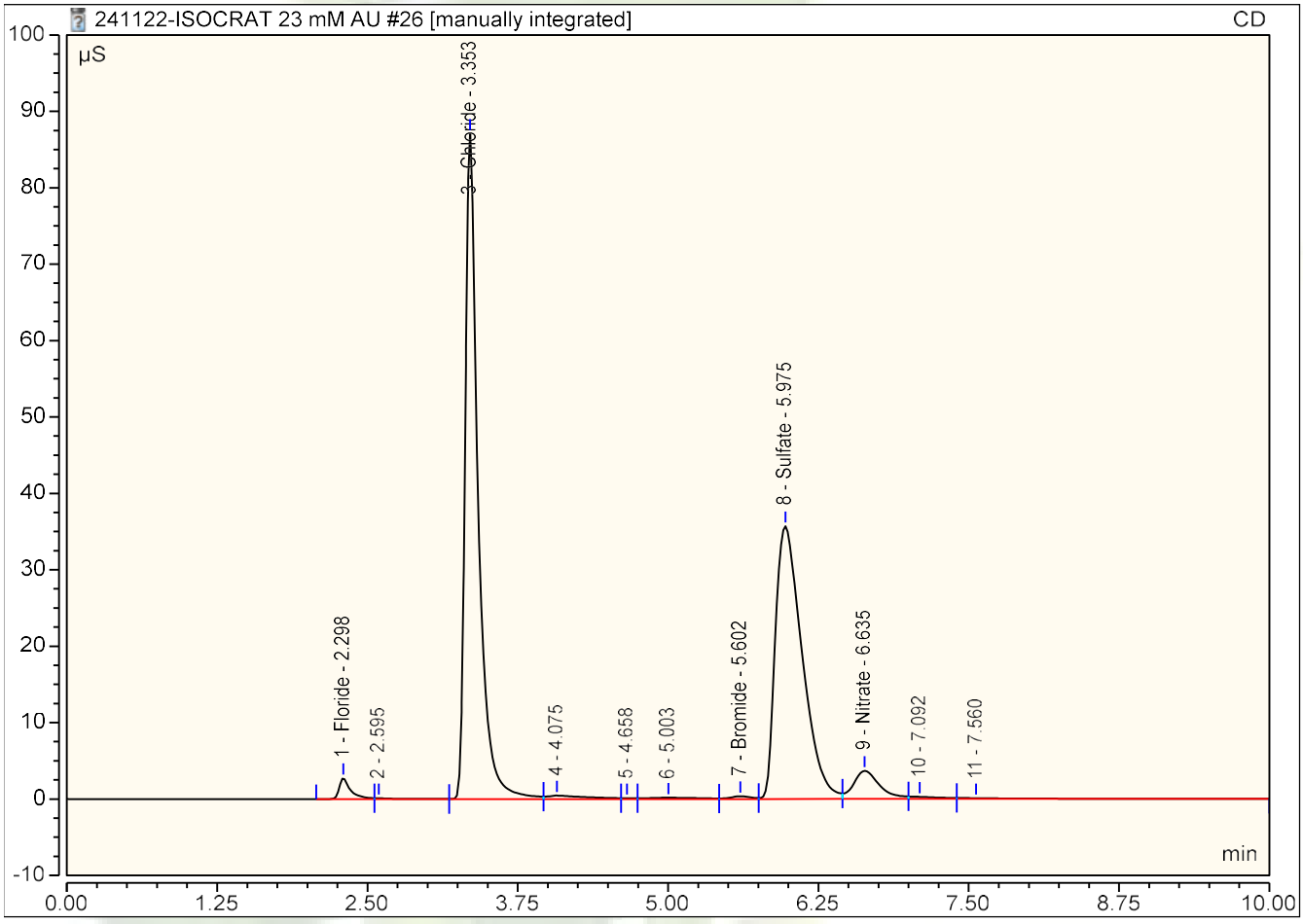
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	2.29	**Floride**	BM	0.297	2.729	0.5250
3	3.35	**Chloride**	M	10.878	86.872	29.2095
8	5.60	**Bromide**	M	0.074	0.367	0.6198
9	5.99	**Sulfate**	M	9.170	35.499	33.5551
10	6.64	**Nitrate**	M	0.899	3.633	0.7966
TOTAL:				21.32	129.10	64.71



Peak Integration Report

Sample Name:	**L2467837-05 MSD**	*Inj. Vol.:*	**5000.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**IC 3 method 23 mM**	*Operator:*	**Wetchem25**
Inj. Date / Time:	**22-Nov-2024 / 23:00**	*Run Time:*	**10.00**

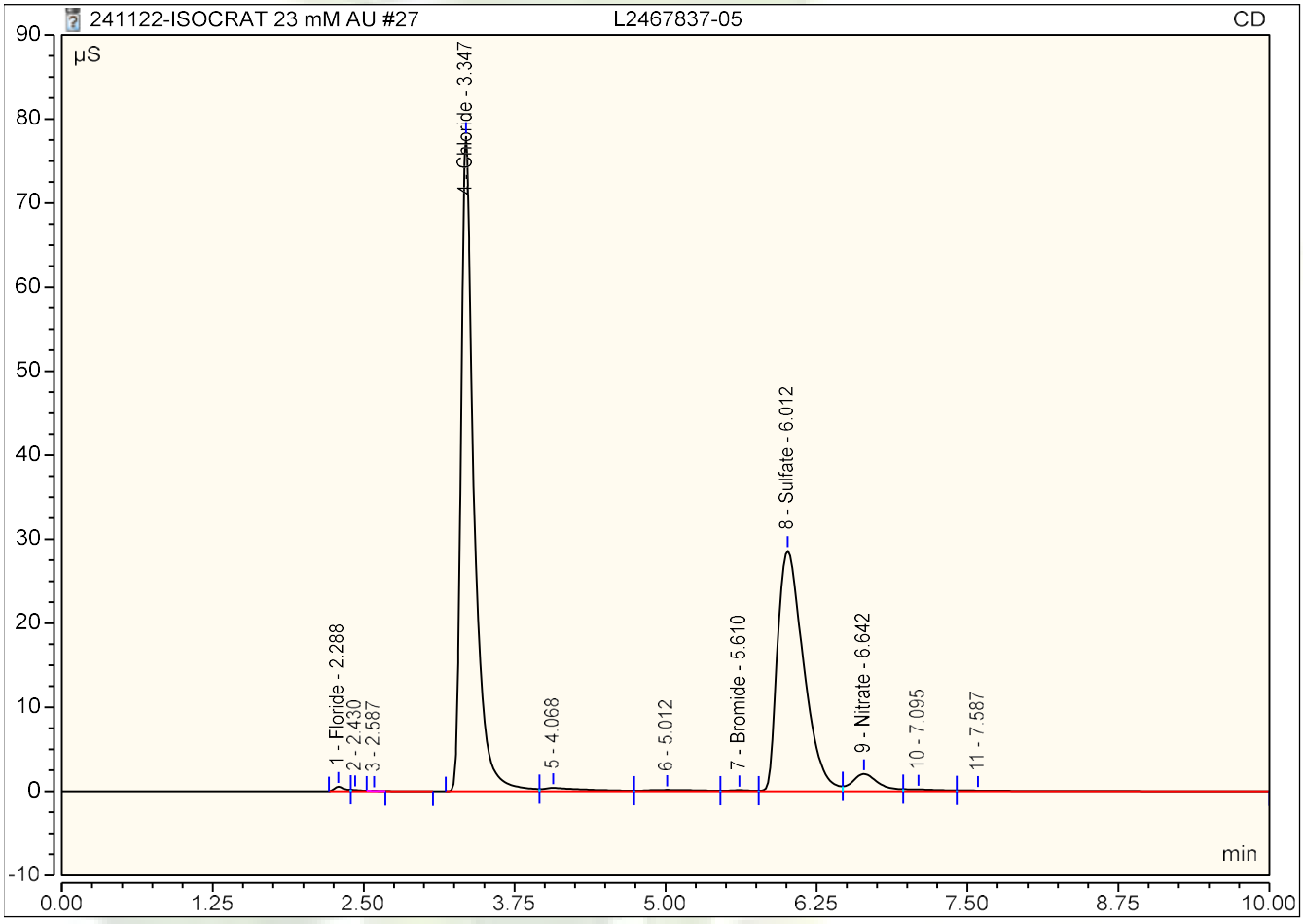
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	2.30	**Floride**	BM	0.300	2.737	0.5291
3	3.35	**Chloride**	M	10.908	87.088	29.2905
7	5.60	**Bromide**	M	0.071	0.368	0.5998
8	5.98	**Sulfate**	M *	9.233	35.721	33.7835
9	6.64	**Nitrate**	M	0.922	3.684	0.8160
TOTAL:				21.43	129.60	65.02



Peak Integration Report

Sample Name:	**L2467837-05**	*Inj. Vol.:*	**5000.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**IC 3 method 23 mM**	*Operator:*	**Wetchem25**
Inj. Date / Time:	**22-Nov-2024 / 23:11**	*Run Time:*	**10.00**

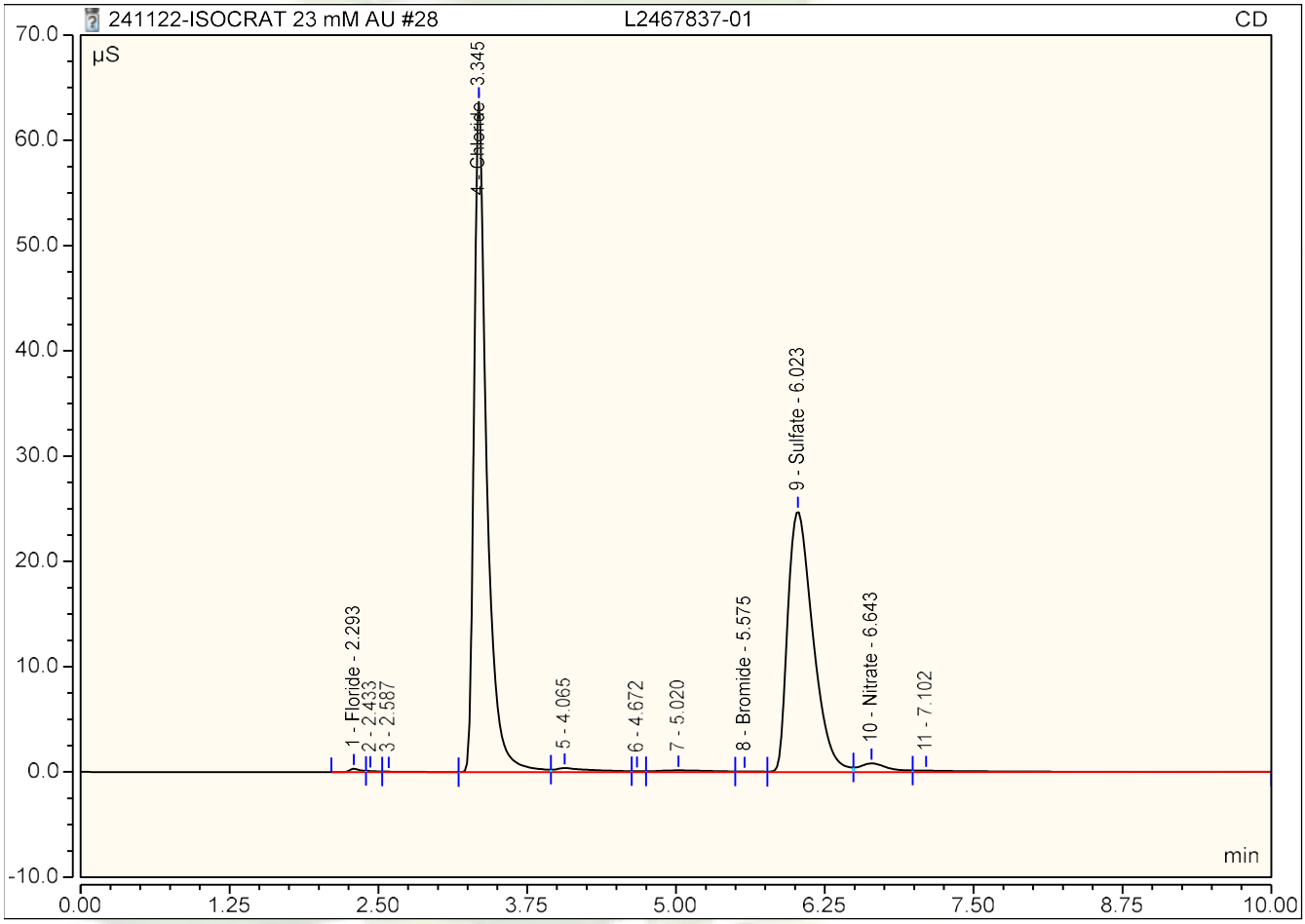
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	2.29	**Floride**	BM	0.053	0.559	0.1071
4	3.35	**Chloride**	BM	9.749	77.870	26.1925
7	5.61	**Bromide**	M	0.031	0.131	0.2703
8	6.01	**Sulfate**	M	7.187	28.637	26.3549
9	6.64	**Nitrate**	M	0.519	2.075	0.4699
TOTAL:				17.54	109.27	53.39



Peak Integration Report

Sample Name:	**L2467837-01**	*Inj. Vol.:*	**5000.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**IC 3 method 23 mM**	*Operator:*	**Wetchem25**
Inj. Date / Time:	**22-Nov-2024 / 23:22**	*Run Time:*	**10.00**

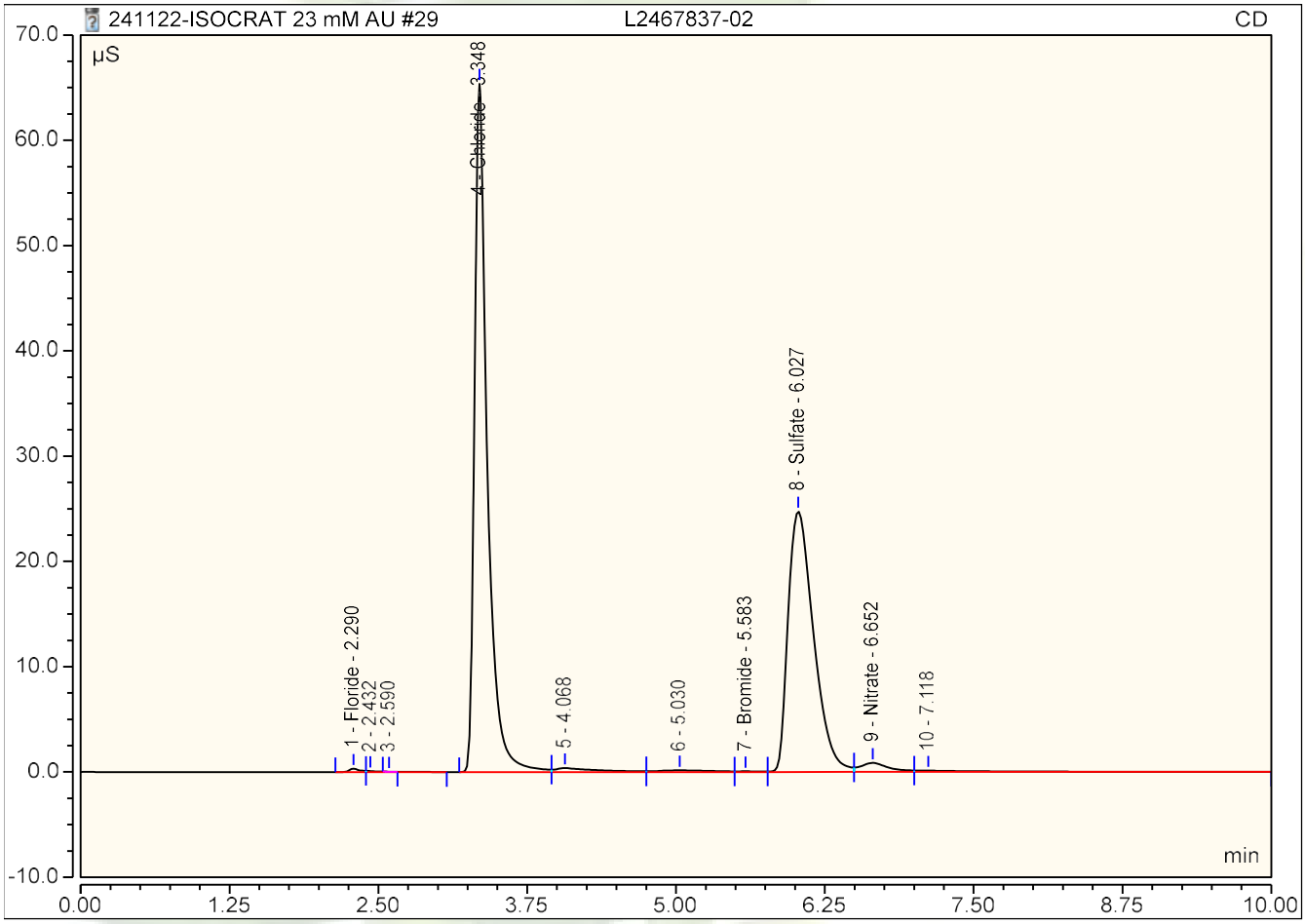
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	2.29	**Floride**	BM	0.034	0.336	0.0737
4	3.35	**Chloride**	M	7.909	63.676	21.2745
8	5.58	**Bromide**	M	0.015	0.065	0.1409
9	6.02	**Sulfate**	M	6.061	24.764	22.2707
10	6.64	**Nitrate**	M	0.231	0.834	0.2217
TOTAL:				14.25	89.68	43.98



Peak Integration Report

Sample Name:	**L2467837-02**	*Inj. Vol.:*	**5000.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**IC 3 method 23 mM**	*Operator:*	**Wetchem25**
Inj. Date / Time:	**22-Nov-2024 / 23:33**	*Run Time:*	**10.00**

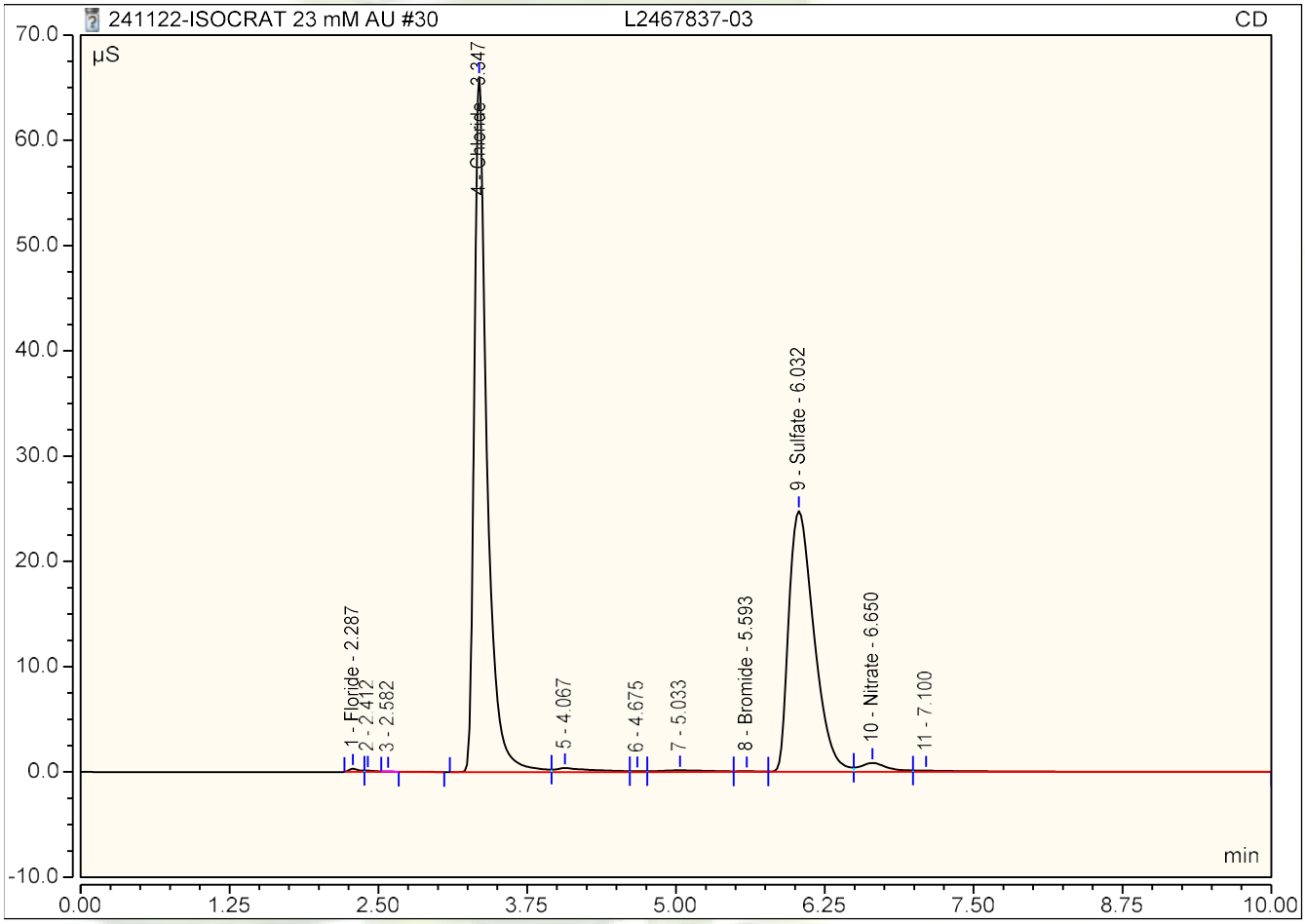
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	2.29	**Floride**	BM	0.033	0.328	0.0720
4	3.35	**Chloride**	BM	8.112	65.386	21.8172
7	5.58	**Bromide**	M	0.014	0.062	0.1374
8	6.03	**Sulfate**	M	6.136	24.759	22.5420
9	6.65	**Nitrate**	M	0.236	0.861	0.2262
TOTAL:				14.53	91.40	44.79



Peak Integration Report

Sample Name:	**L2467837-03**	*Inj. Vol.:*	**5000.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**IC 3 method 23 mM**	*Operator:*	**Wetchem25**
Inj. Date / Time:	**22-Nov-2024 / 23:44**	*Run Time:*	**10.00**

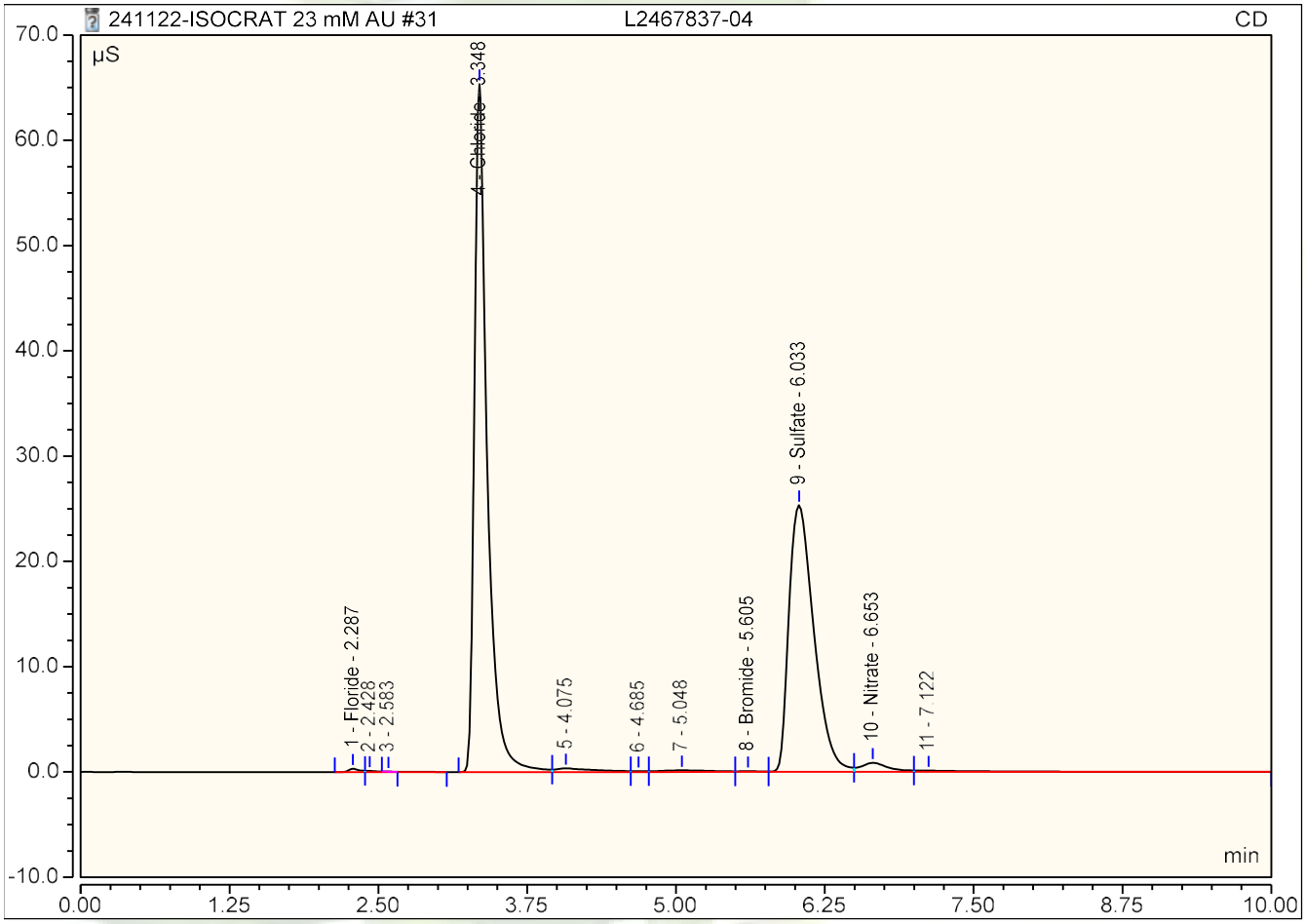
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	2.29	**Floride**	BM	0.030	0.317	0.0667
4	3.35	**Chloride**	BM	8.206	66.018	22.0691
8	5.59	**Bromide**	M	0.016	0.068	0.1529
9	6.03	**Sulfate**	M	6.093	24.783	22.3843
10	6.65	**Nitrate**	M	0.232	0.856	0.2230
TOTAL:				14.58	92.04	44.90



Peak Integration Report

Sample Name:	**L2467837-04**	*Inj. Vol.:*	**5000.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**IC 3 method 23 mM**	*Operator:*	**Wetchem25**
Inj. Date / Time:	**22-Nov-2024 / 23:55**	*Run Time:*	**10.00**

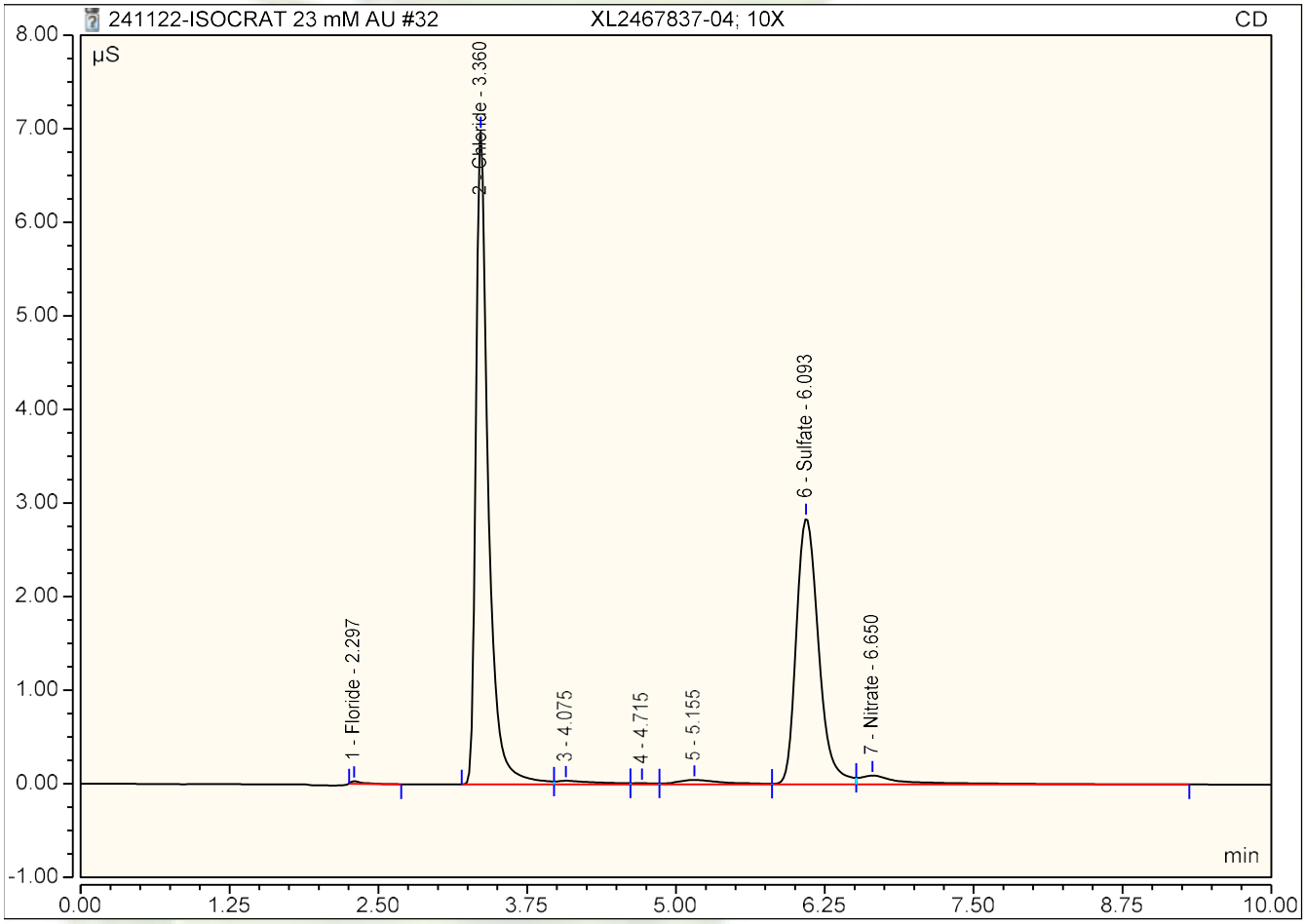
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	2.29	**Floride**	BM	0.033	0.331	0.0723
4	3.35	**Chloride**	BM	8.152	65.353	21.9243
8	5.61	**Bromide**	M	0.016	0.068	0.1518
9	6.03	**Sulfate**	M	6.148	25.335	22.5847
10	6.65	**Nitrate**	M	0.235	0.865	0.2251
TOTAL:				14.58	91.95	44.96



Peak Integration Report

Sample Name:	**XL2467837-04; 10X**	*Inj. Vol.:*	**5000.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**10.0000**
Instrument Method:	**IC 3 method 23 mM**	*Operator:*	**Wetchem25**
Inj. Date / Time:	**23-Nov-2024 / 00:06**	*Run Time:*	**10.00**

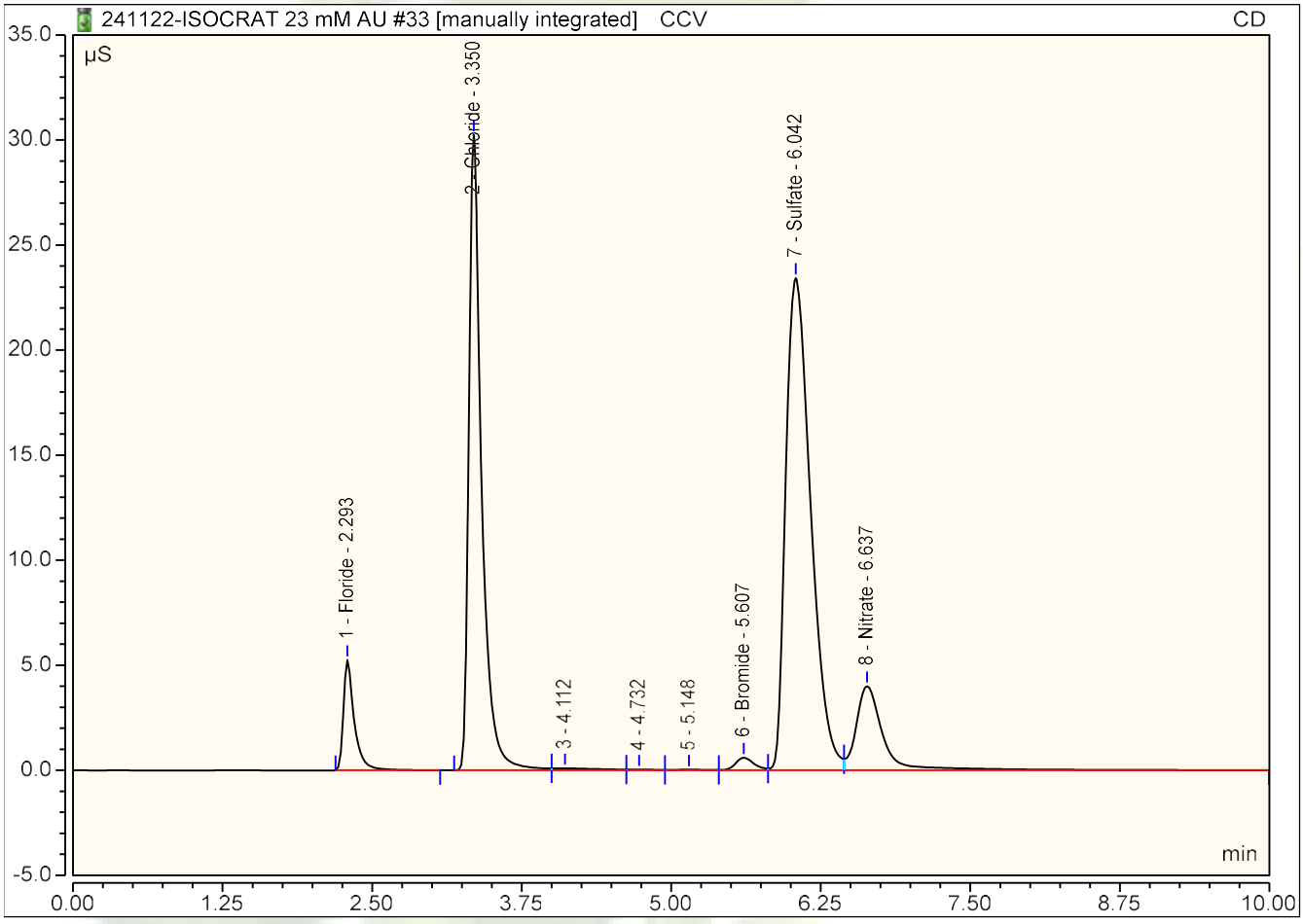
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	2.30	**Floride**	BMB	0.003	0.028	0.2115
2	3.36	**Chloride**	BM	0.847	6.978	23.9571
6	6.09	**Sulfate**	M	0.618	2.844	25.1047
7	6.65	**Nitrate**	MB	0.046	0.095	0.6301
TOTAL:				1.51	9.94	49.90



Peak Integration Report

Sample Name:	**CCV**	*Inj. Vol.:*	**5000.00**
Injection Type:	**Check Standard**	*Dilution Factor:*	**1.0000**
Instrument Method:	**IC 3 method 23 mM**	*Operator:*	**Wetchem25**
Inj. Date / Time:	**23-Nov-2024 / 00:17**	*Run Time:*	**10.00**

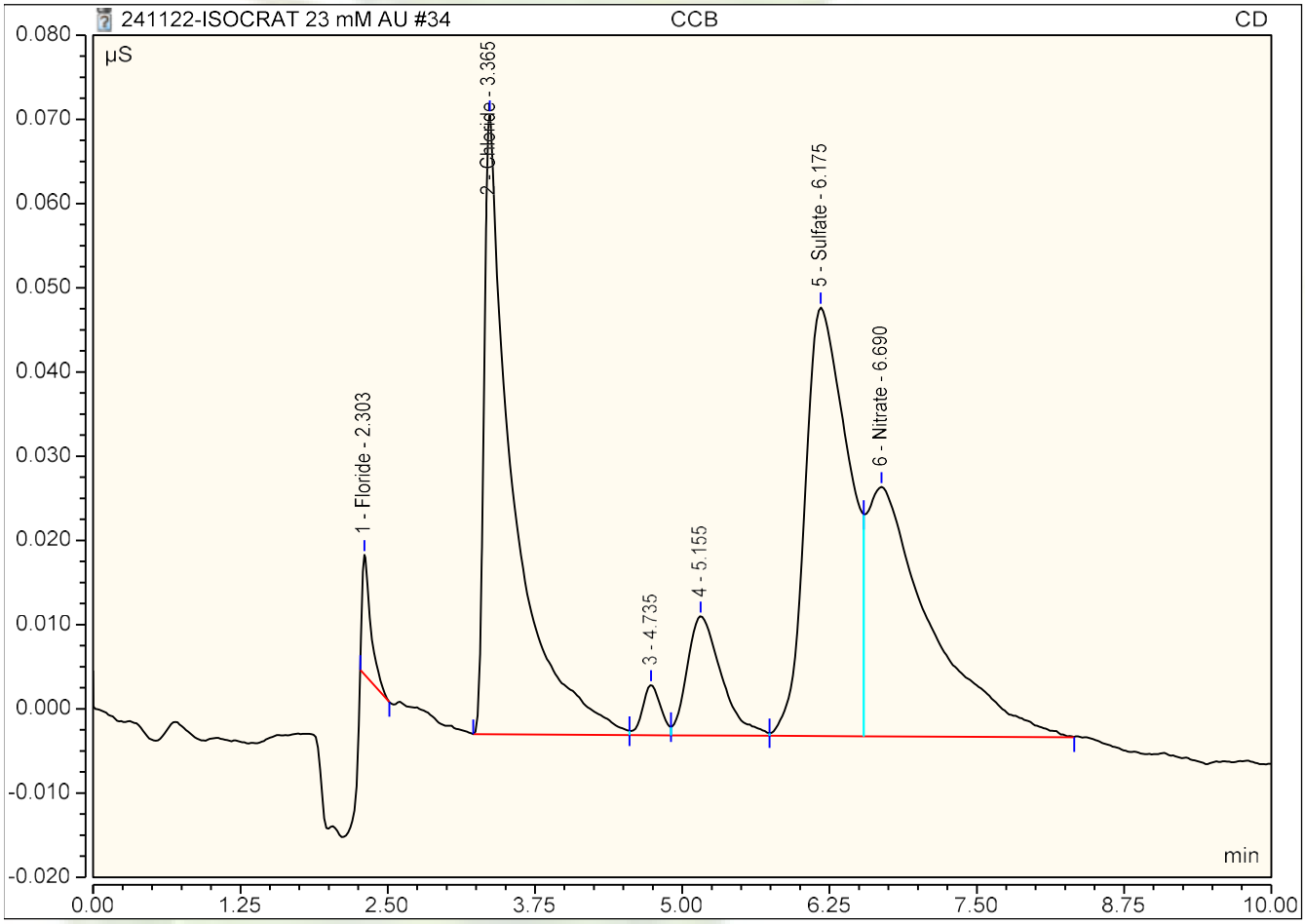
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	2.29	**Floride**	BMB	0.555	5.255	0.9651
2	3.35	**Chloride**	BM	3.737	30.240	10.1216
6	5.61	**Bromide**	M	0.105	0.598	0.8718
7	6.04	**Sulfate**	M *	5.631	23.425	20.7087
8	6.64	**Nitrate**	MB*	1.055	4.005	0.9302
TOTAL:				11.08	63.52	33.60



Peak Integration Report

Sample Name:	**CCB**	*Inj. Vol.:*	**5000.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**IC 3 method 23 mM**	*Operator:*	**Wetchem25**
Inj. Date / Time:	**23-Nov-2024 / 00:28**	*Run Time:*	**10.00**

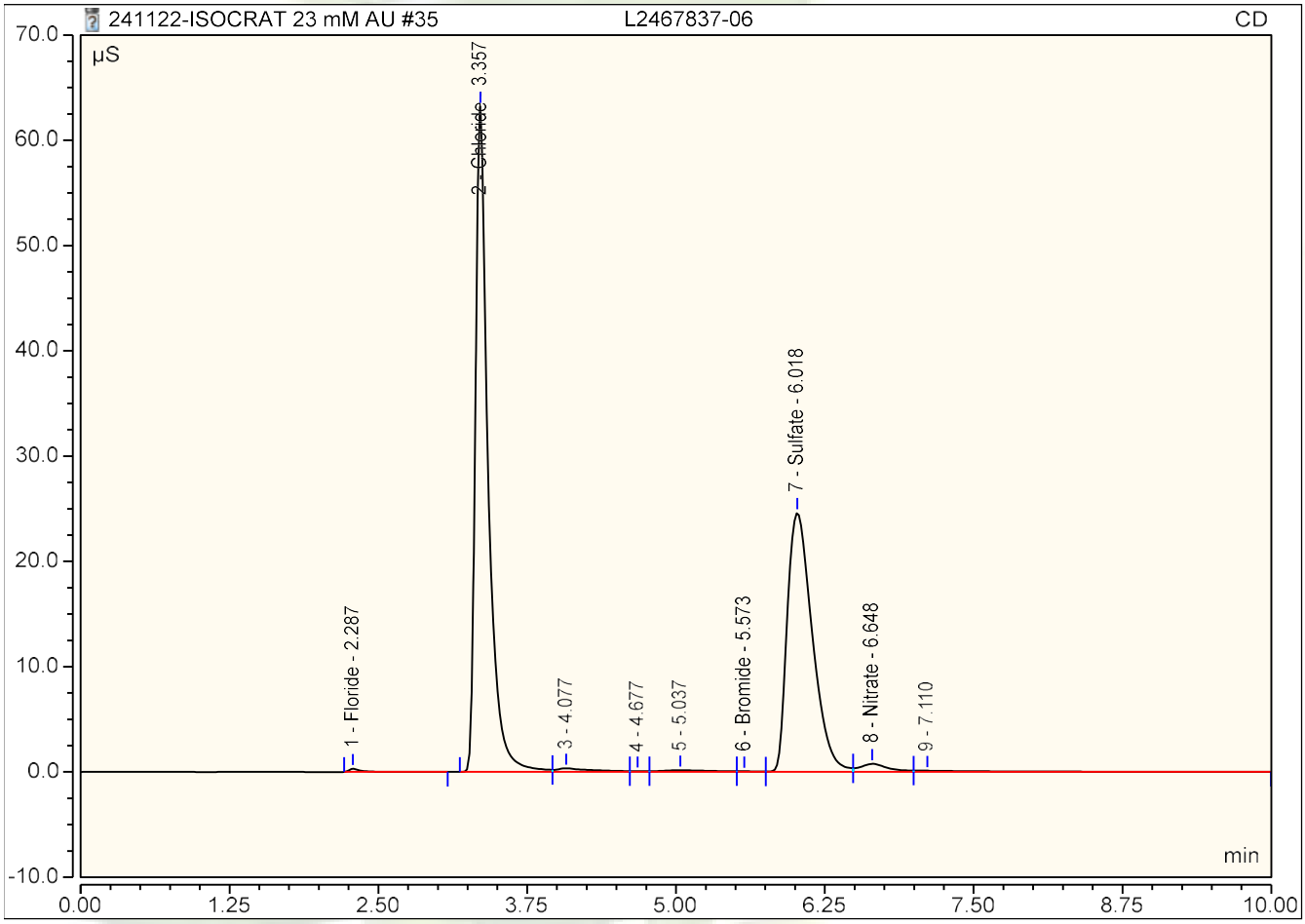
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	2.30	**Floride**	BMB	0.001	0.014	0.0182
2	3.37	**Chloride**	BM	0.021	0.074	0.1874
5	6.18	**Sulfate**	M	0.022	0.051	0.3452
6	6.69	**Nitrate**	MB	0.019	0.030	0.0392
TOTAL:				0.06	0.17	0.59



Peak Integration Report

Sample Name:	**L2467837-06**	*Inj. Vol.:*	**5000.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**IC 3 method 23 mM**	*Operator:*	**Wetchem25**
Inj. Date / Time:	**23-Nov-2024 / 00:39**	*Run Time:*	**10.00**

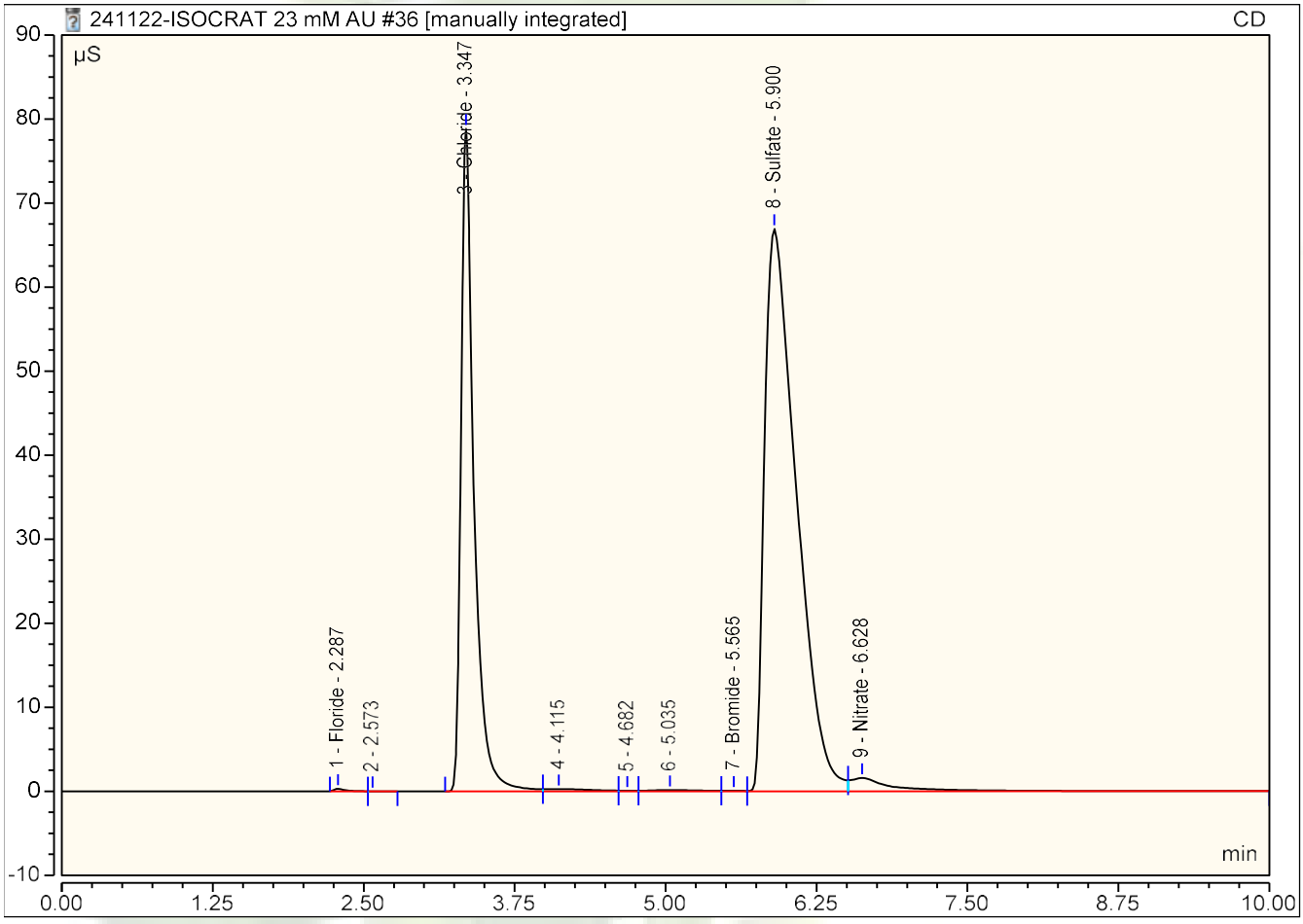
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	2.29	**Floride**	BMB	0.036	0.309	0.0781
2	3.36	**Chloride**	BM	7.855	63.207	21.1288
6	5.57	**Bromide**	M	0.012	0.056	0.1170
7	6.02	**Sulfate**	M	6.007	24.613	22.0730
8	6.65	**Nitrate**	M	0.208	0.767	0.2020
TOTAL:				14.12	88.95	43.60



Peak Integration Report

Sample Name:	**L2467837-07**	*Inj. Vol.:*	**5000.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**IC 3 method 23 mM**	*Operator:*	**Wetchem25**
Inj. Date / Time:	**23-Nov-2024 / 00:50**	*Run Time:*	**10.00**

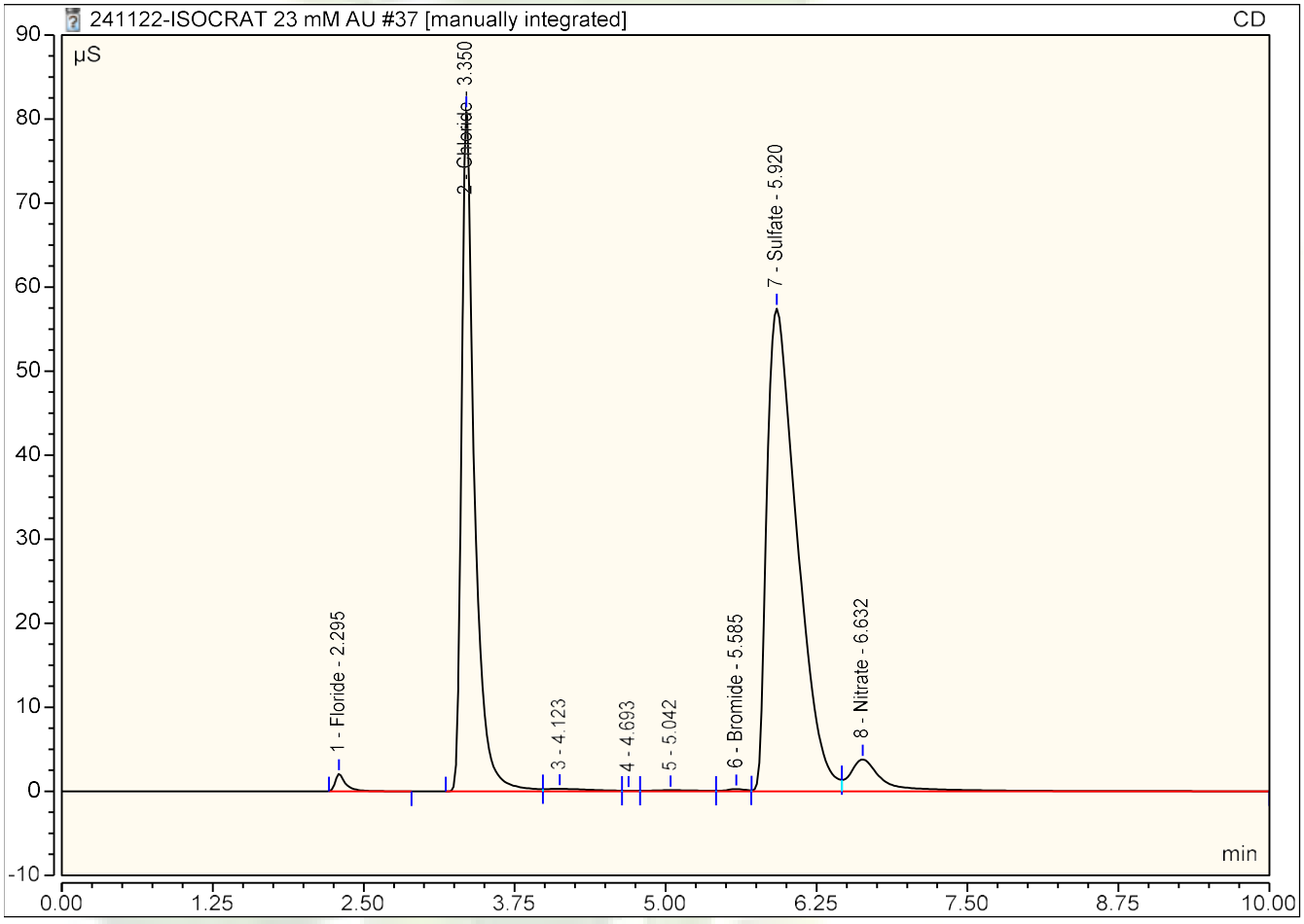
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	2.29	**Floride**	BM	0.031	0.297	0.0699
3	3.35	**Chloride**	BM	9.828	78.844	26.4047
7	5.57	**Bromide**	M	0.013	0.070	0.1294
8	5.90	**Sulfate**	M *	20.441	66.914	74.4734
9	6.63	**Nitrate**	MB	0.696	1.581	0.6213
TOTAL:				31.01	147.71	101.70



Peak Integration Report

Sample Name:	**L2468194-01 MS F**	*Inj. Vol.:*	**5000.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**IC 3 method 23 mM**	*Operator:*	**Wetchem25**
Inj. Date / Time:	**23-Nov-2024 / 01:01**	*Run Time:*	**10.00**

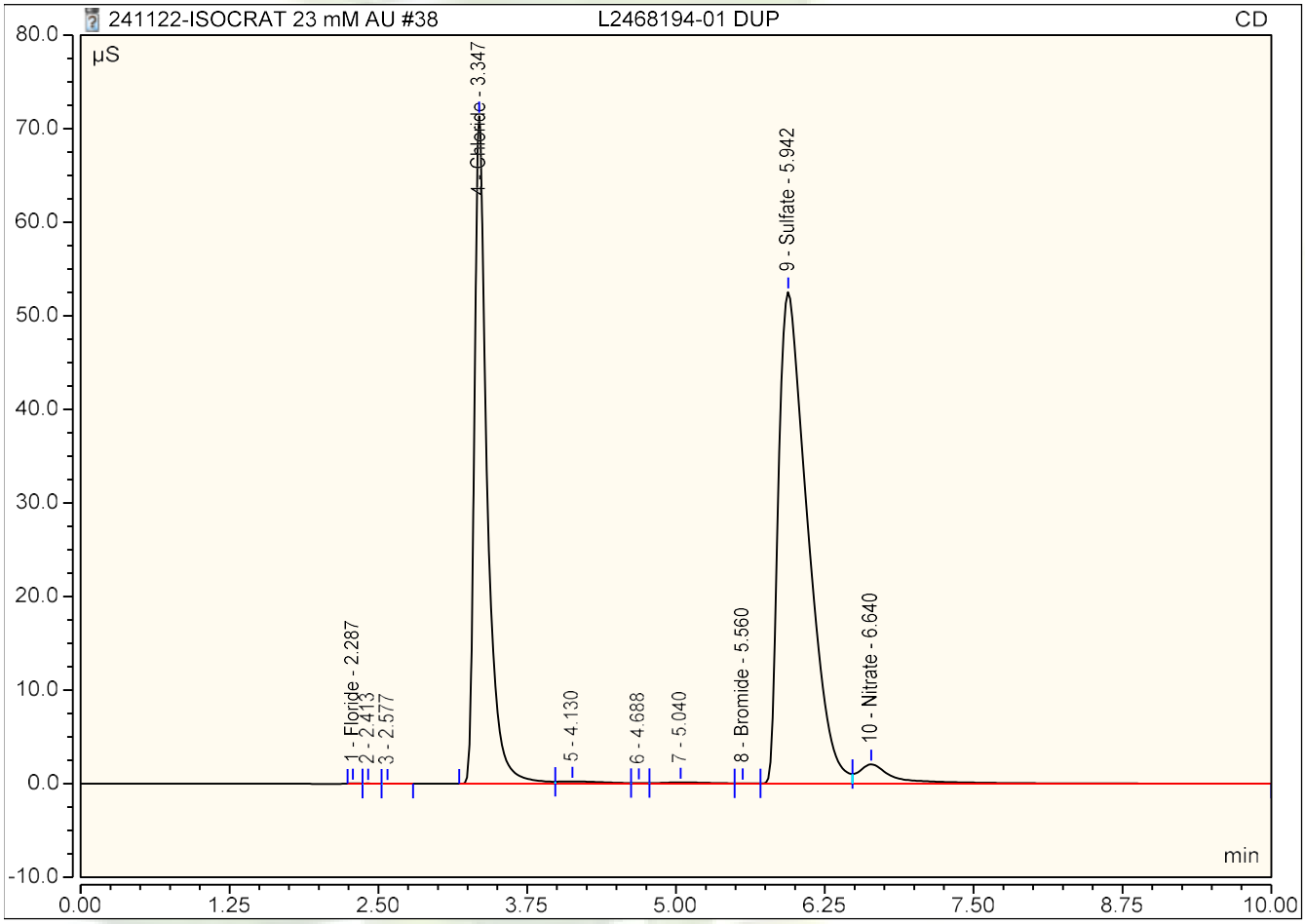
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	2.30	**Floride**	BMB	0.212	2.061	0.3788
2	3.35	**Chloride**	BM	10.110	80.951	27.1568
6	5.59	**Bromide**	M	0.049	0.272	0.4186
7	5.92	**Sulfate**	M *	16.635	57.461	60.6536
8	6.63	**Nitrate**	MB	1.253	3.798	1.1011
TOTAL:				28.26	144.54	89.71



Peak Integration Report

Sample Name:	**L2468194-01 DUP**	*Inj. Vol.:*	**5000.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**IC 3 method 23 mM**	*Operator:*	**Wetchem25**
Inj. Date / Time:	**23-Nov-2024 / 01:12**	*Run Time:*	**10.00**

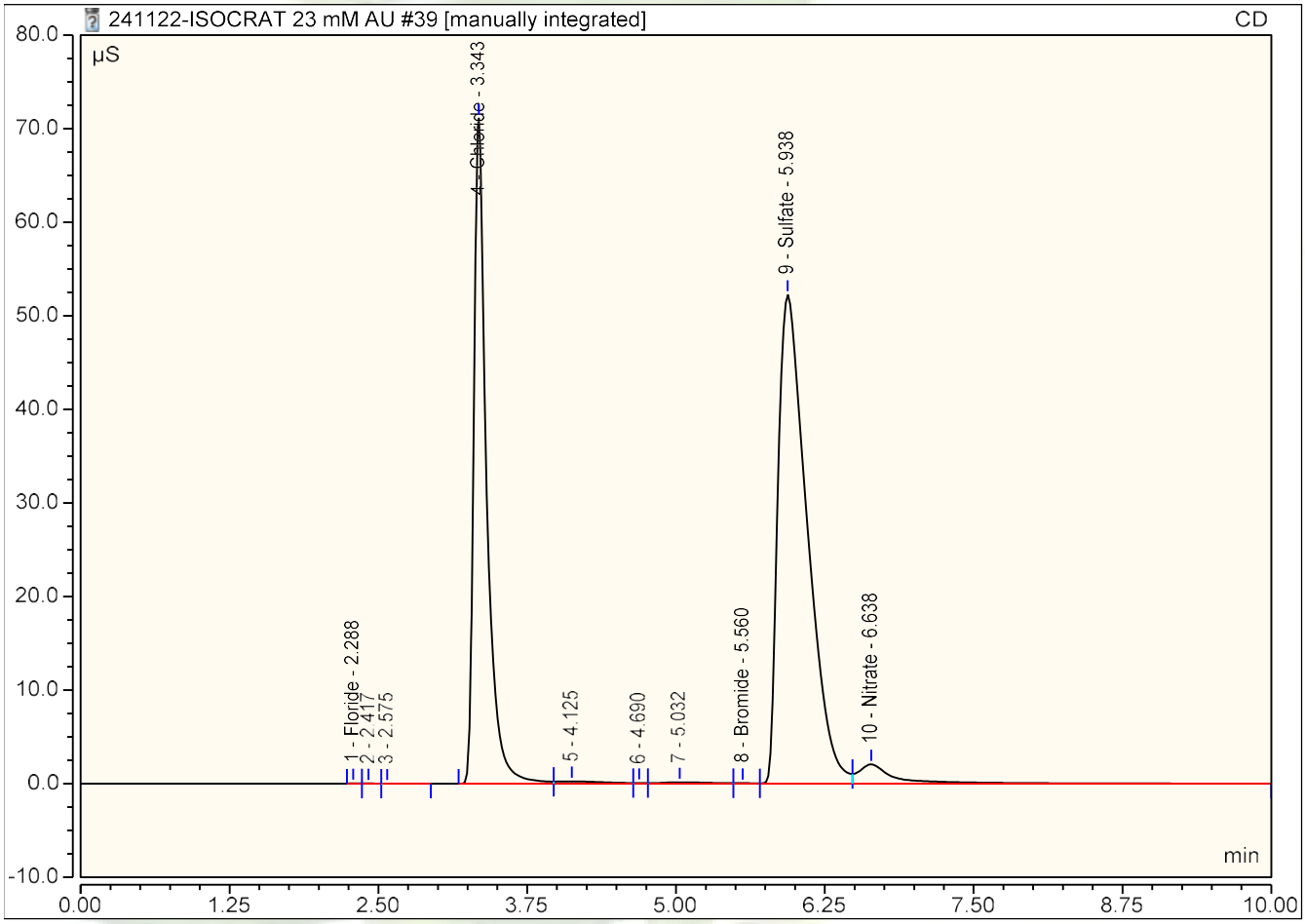
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	2.29	**Floride**	BM	0.003	0.039	0.0213
4	3.35	**Chloride**	BM	8.890	71.321	23.8968
8	5.56	**Bromide**	M	0.010	0.055	0.1053
9	5.94	**Sulfate**	M	14.822	52.538	54.0739
10	6.64	**Nitrate**	MB	0.773	2.068	0.6880
TOTAL:				24.50	126.02	78.79



Peak Integration Report

Sample Name:	**L2468194-01**	*Inj. Vol.:*	**5000.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**IC 3 method 23 mM**	*Operator:*	**Wetchem25**
Inj. Date / Time:	**23-Nov-2024 / 01:22**	*Run Time:*	**10.00**

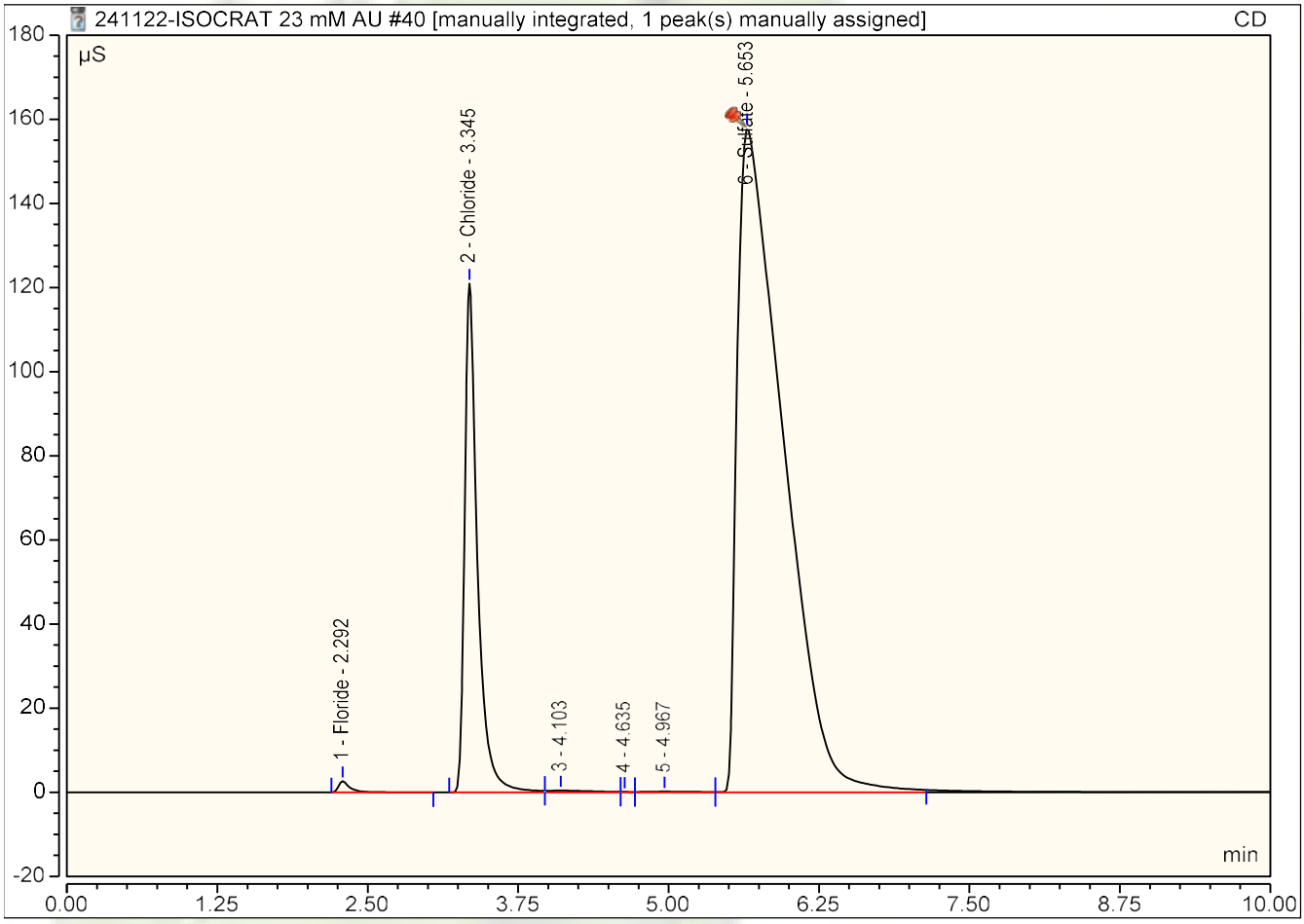
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	2.29	**Floride**	BM	0.003	0.036	0.0212
4	3.34	**Chloride**	BM	8.856	71.082	23.8043
8	5.56	**Bromide**	M	0.011	0.055	0.1089
9	5.94	**Sulfate**	M *	14.807	52.230	54.0201
10	6.64	**Nitrate**	MB	0.766	2.053	0.6816
TOTAL:				24.44	125.46	78.64



Peak Integration Report

Sample Name:	**L2468194-02**	*Inj. Vol.:*	**5000.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**IC 3 method 23 mM**	*Operator:*	**Wetchem25**
Inj. Date / Time:	**23-Nov-2024 / 01:33**	*Run Time:*	**10.00**

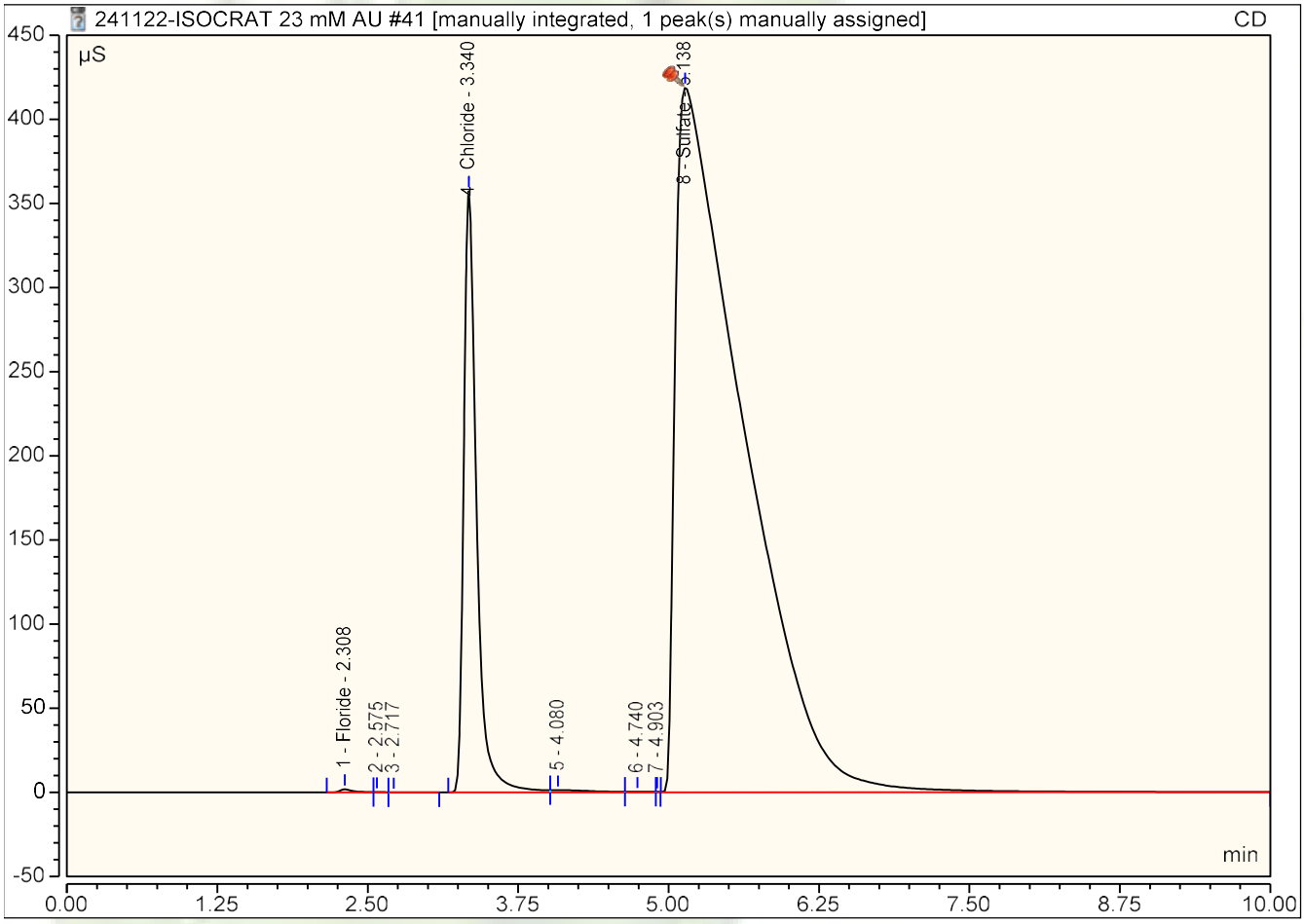
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	2.29	**Floride**	BMB	0.295	2.680	0.5203
2	3.35	**Chloride**	BM	14.970	120.968	40.1480
6	5.65	**Sulfate**	M *^	69.380	157.894	252.1343
TOTAL:				84.64	281.54	292.80



Peak Integration Report

Sample Name:	**L2468194-03**	*Inj. Vol.:*	**5000.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**IC 3 method 23 mM**	*Operator:*	**Wetchem25**
Inj. Date / Time:	**23-Nov-2024 / 01:44**	*Run Time:*	**10.00**

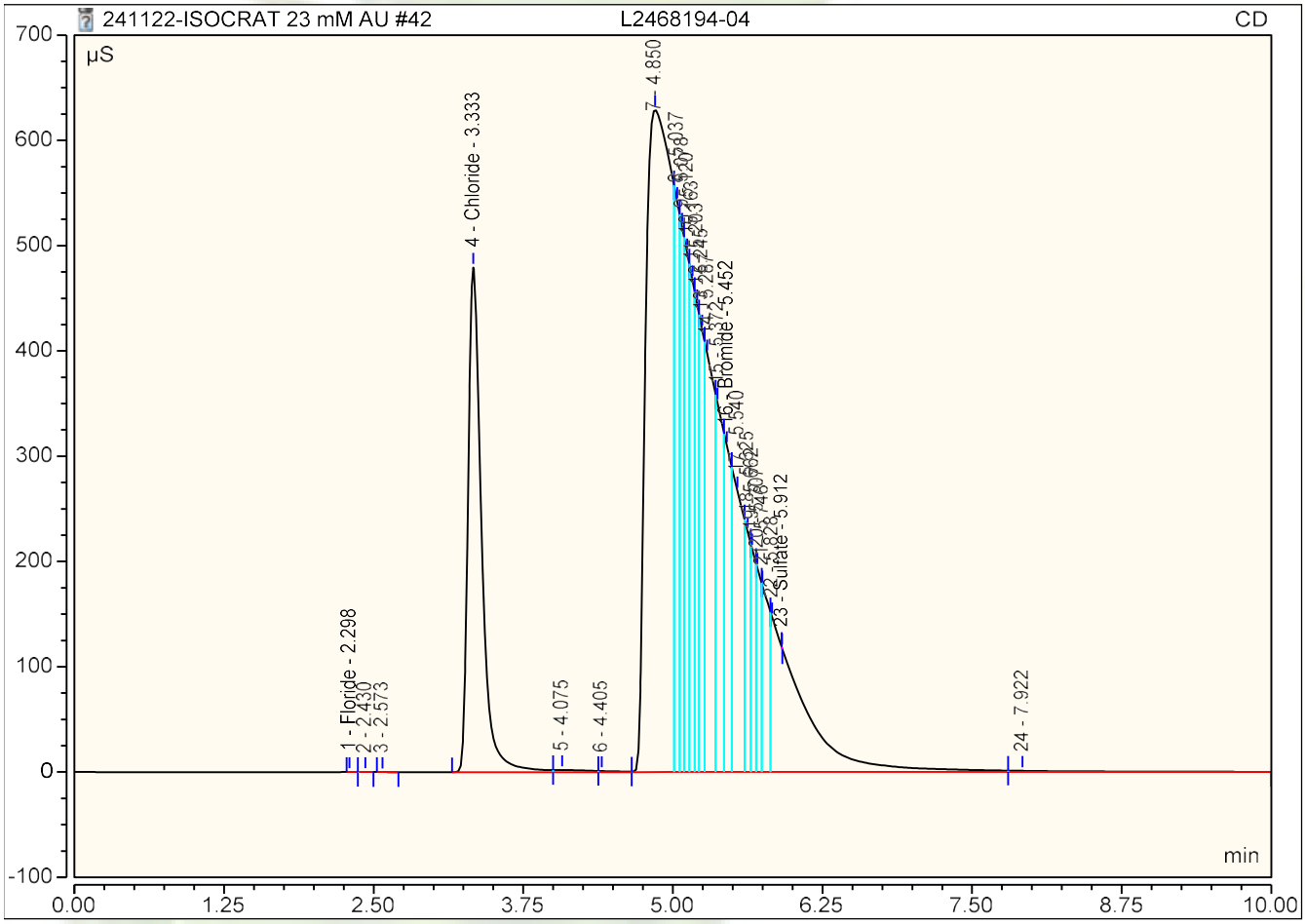
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	2.31	**Floride**	BM	0.242	1.954	0.4301
4	3.34	**Chloride**	BM	44.464	357.312	118.9930
8	5.14	**Sulfate**	MB*^	273.435	418.938	992.9077
TOTAL:				318.14	778.20	1112.33



Peak Integration Report

Sample Name:	**L2468194-04**	*Inj. Vol.:*	**5000.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**IC 3 method 23 mM**	*Operator:*	**Wetchem25**
Inj. Date / Time:	**23-Nov-2024 / 01:55**	*Run Time:*	**10.00**

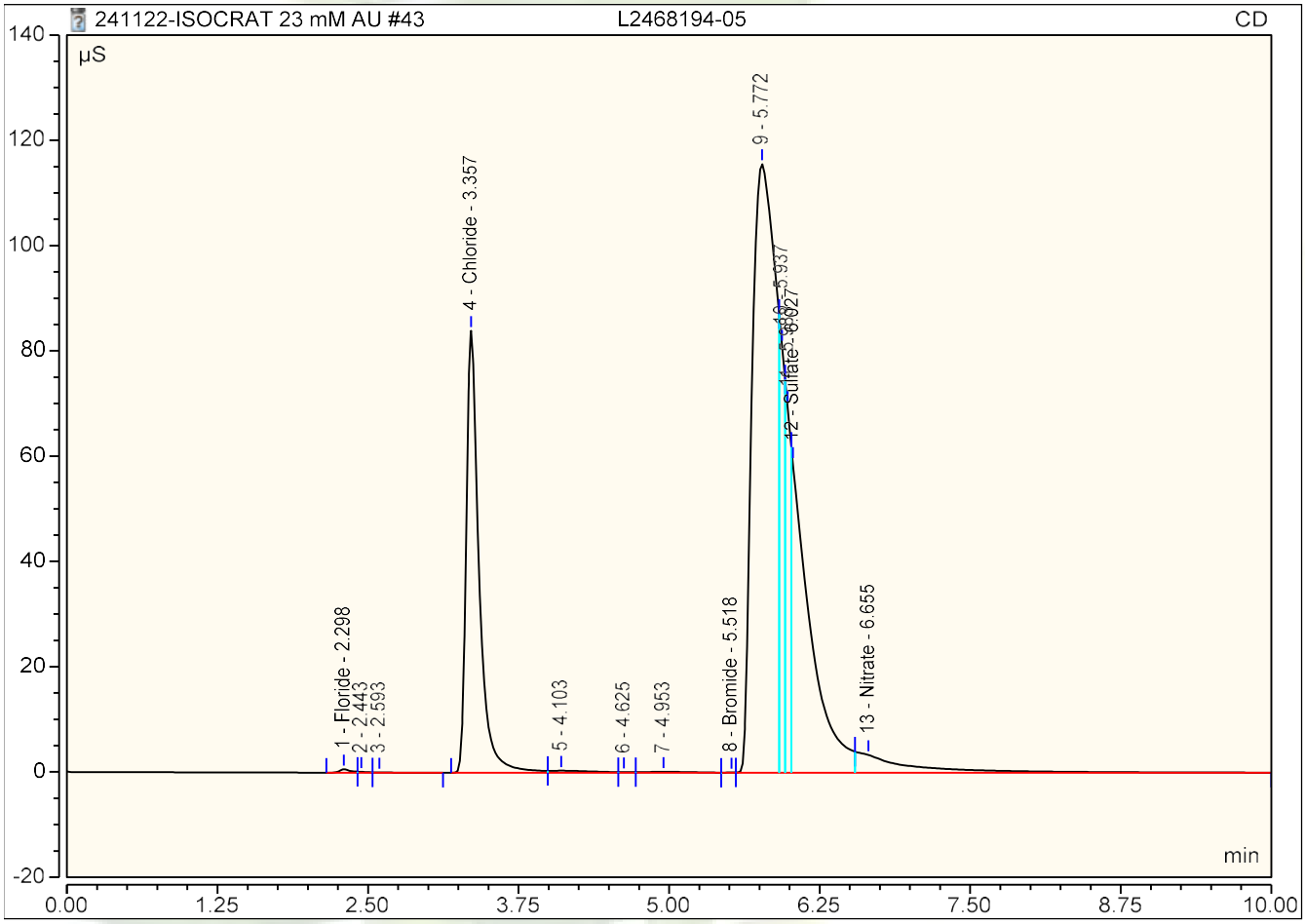
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	2.30	**Floride**	BM	0.002	0.044	0.0203
4	3.33	**Chloride**	BM	62.706	479.197	167.7560
16	5.45	**Bromide**	M	19.351	309.729	156.5538
23	5.91	**Sulfate**	Rd	0.000	0.002	0.2659
TOTAL:				82.06	788.97	324.60



Peak Integration Report

Sample Name:	**L2468194-05**	*Inj. Vol.:*	**5000.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**IC 3 method 23 mM**	*Operator:*	**Wetchem25**
Inj. Date / Time:	**23-Nov-2024 / 02:06**	*Run Time:*	**10.00**

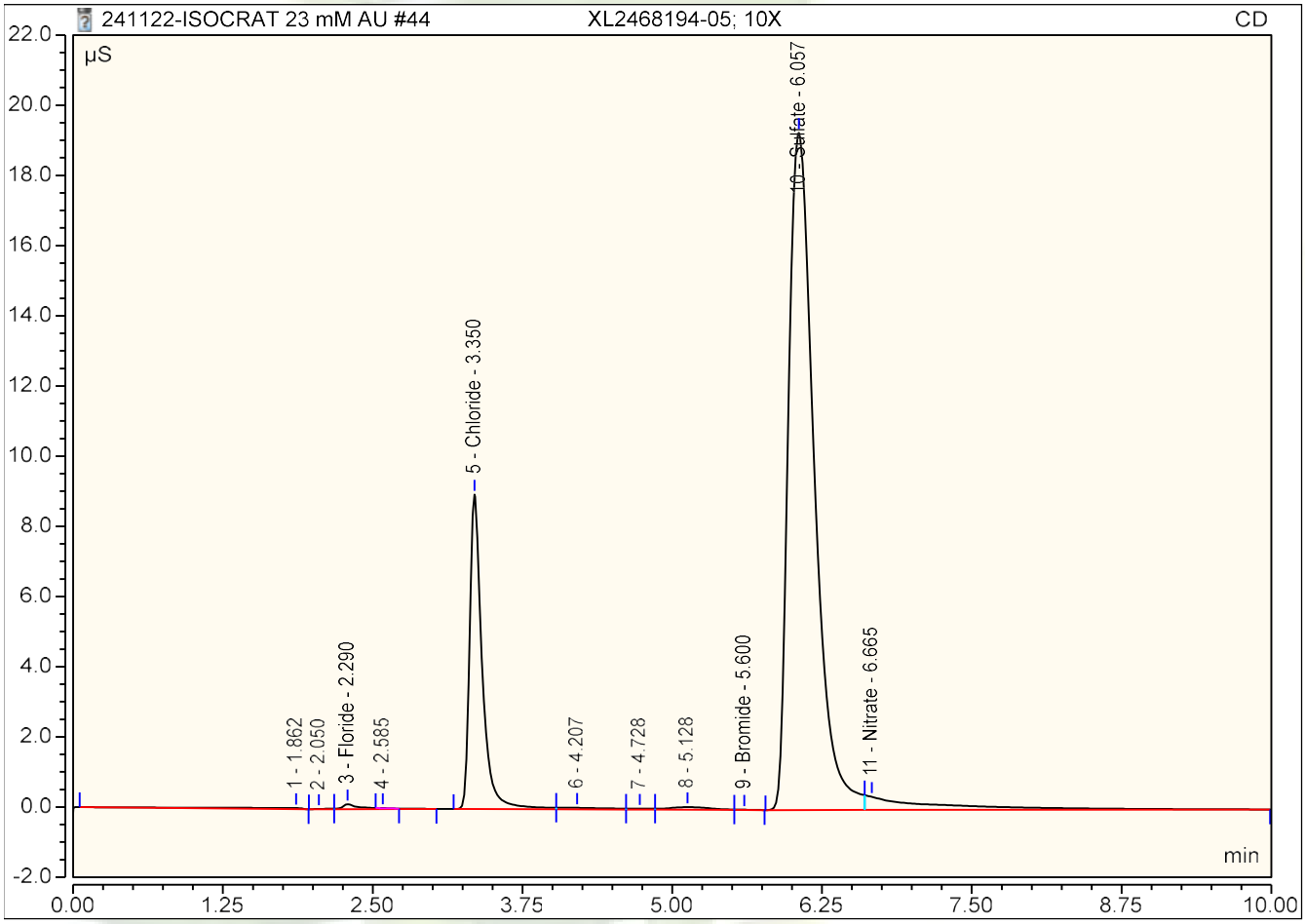
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	2.30	**Floride**	BM	0.067	0.644	0.1304
4	3.36	**Chloride**	BM	10.423	83.966	27.9950
8	5.52	**Bromide**	M	0.004	0.046	0.0569
12	6.03	**Sulfate**	M	10.793	59.083	39.4484
13	6.66	**Nitrate**	MB	1.902	3.383	1.6587
TOTAL:				23.19	147.12	69.29



Peak Integration Report

Sample Name:	**XL2468194-05; 10X**	*Inj. Vol.:*	**5000.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**10.0000**
Instrument Method:	**IC 3 method 23 mM**	*Operator:*	**Wetchem25**
Inj. Date / Time:	**23-Nov-2024 / 02:17**	*Run Time:*	**10.00**

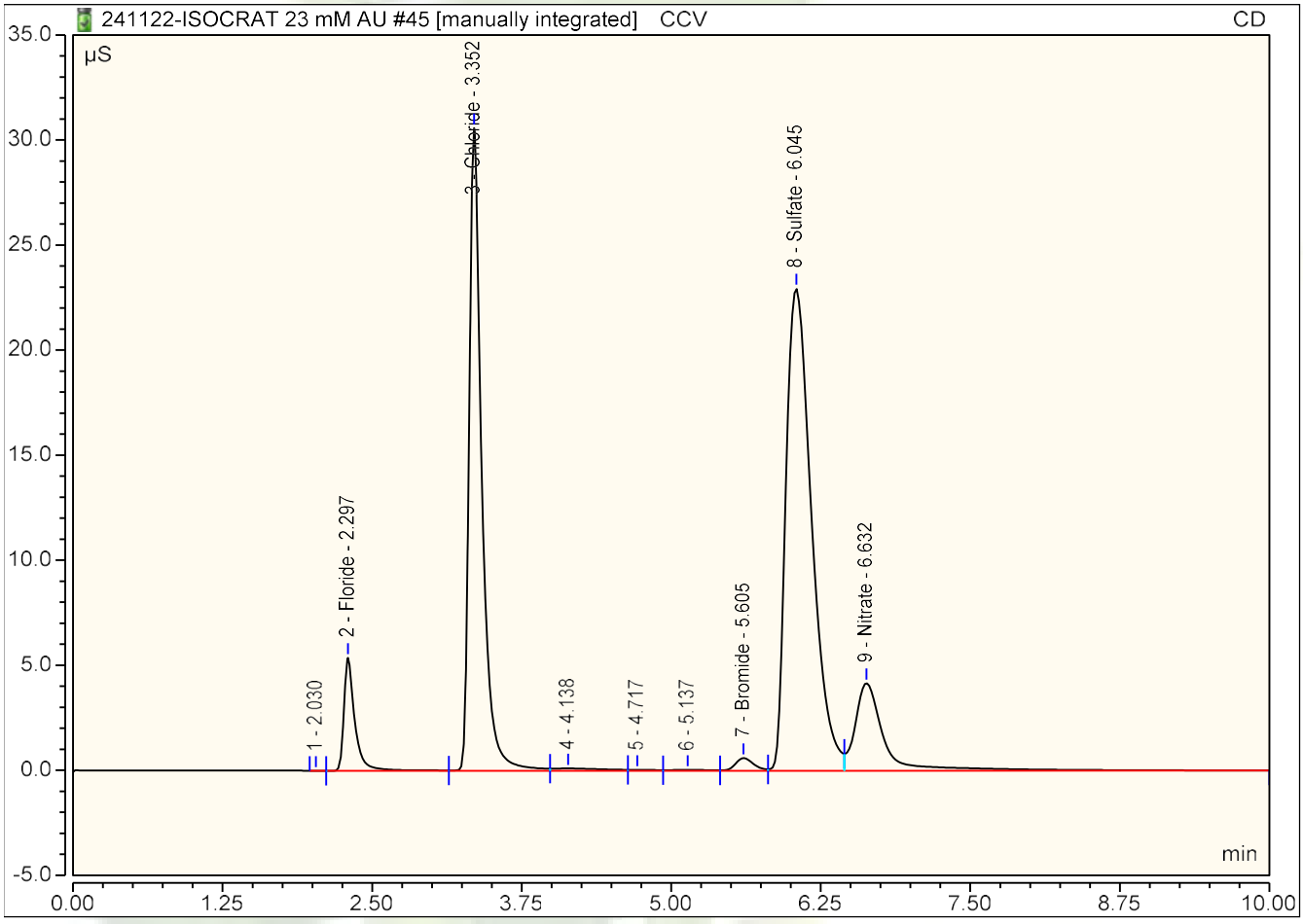
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
3	2.29	**Floride**	MB	0.027	0.144	0.6209
5	3.35	**Chloride**	BM	1.087	8.961	30.3800
9	5.60	**Bromide**	MB	0.001	0.009	0.3382
10	6.06	**Sulfate**	BM	4.798	19.301	176.8248
11	6.67	**Nitrate**	MB	0.265	0.373	2.5071
TOTAL:				6.18	28.79	210.67



Peak Integration Report

Sample Name:	**CCV**	*Inj. Vol.:*	**5000.00**
Injection Type:	**Check Standard**	*Dilution Factor:*	**1.0000**
Instrument Method:	**IC 3 method 23 mM**	*Operator:*	**Wetchem25**
Inj. Date / Time:	**23-Nov-2024 / 02:28**	*Run Time:*	**10.00**

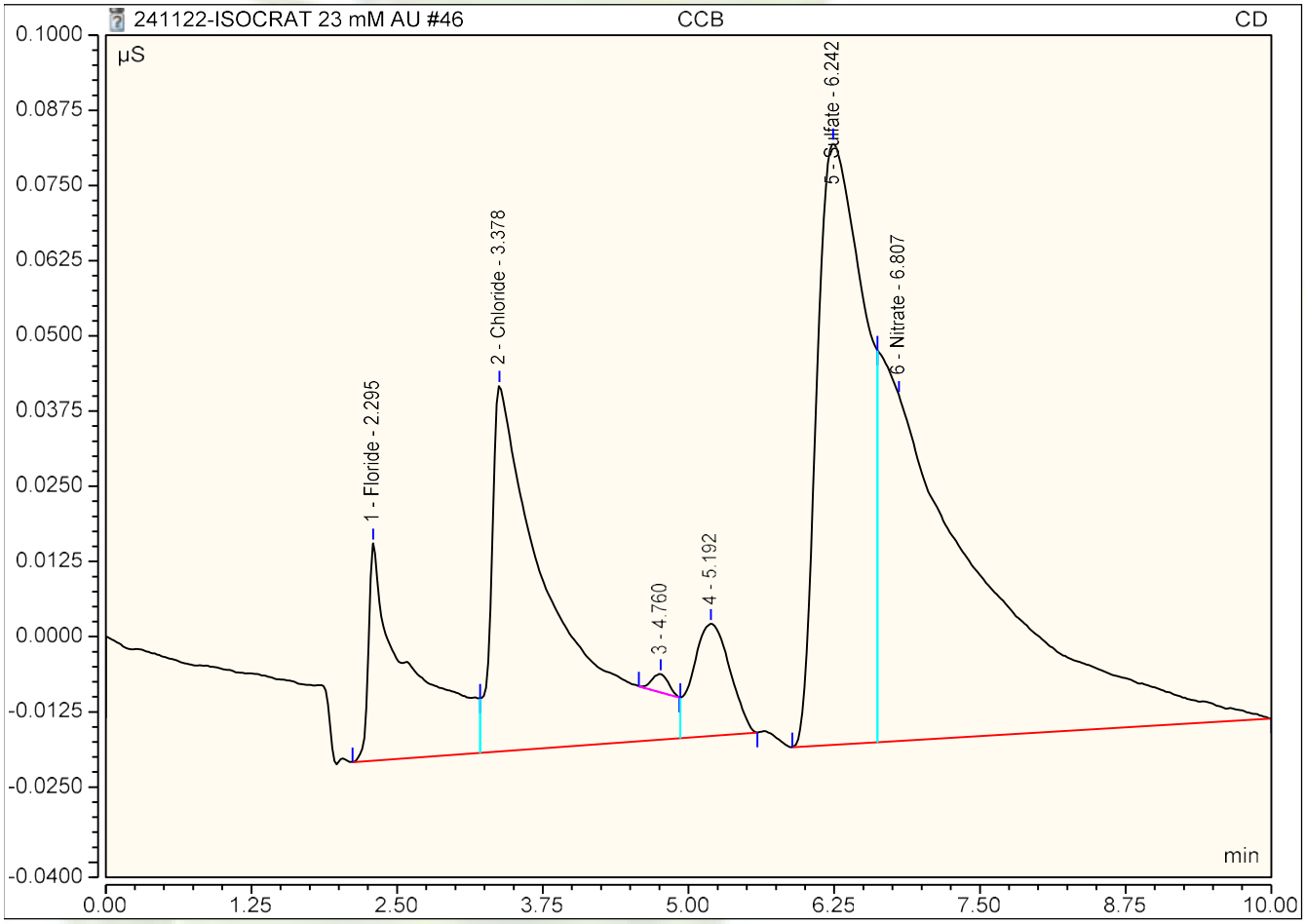
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.30	**Floride**	M *	0.575	5.381	1.0000
3	3.35	**Chloride**	M *	3.739	30.590	10.1273
7	5.61	**Bromide**	M	0.105	0.605	0.8737
8	6.05	**Sulfate**	M *	5.660	22.952	20.8136
9	6.63	**Nitrate**	MB*	1.177	4.166	1.0353
TOTAL:				11.26	63.69	33.85



Peak Integration Report

Sample Name:	**CCB**	*Inj. Vol.:*	**5000.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**IC 3 method 23 mM**	*Operator:*	**Wetchem25**
Inj. Date / Time:	**23-Nov-2024 / 02:39**	*Run Time:*	**10.00**

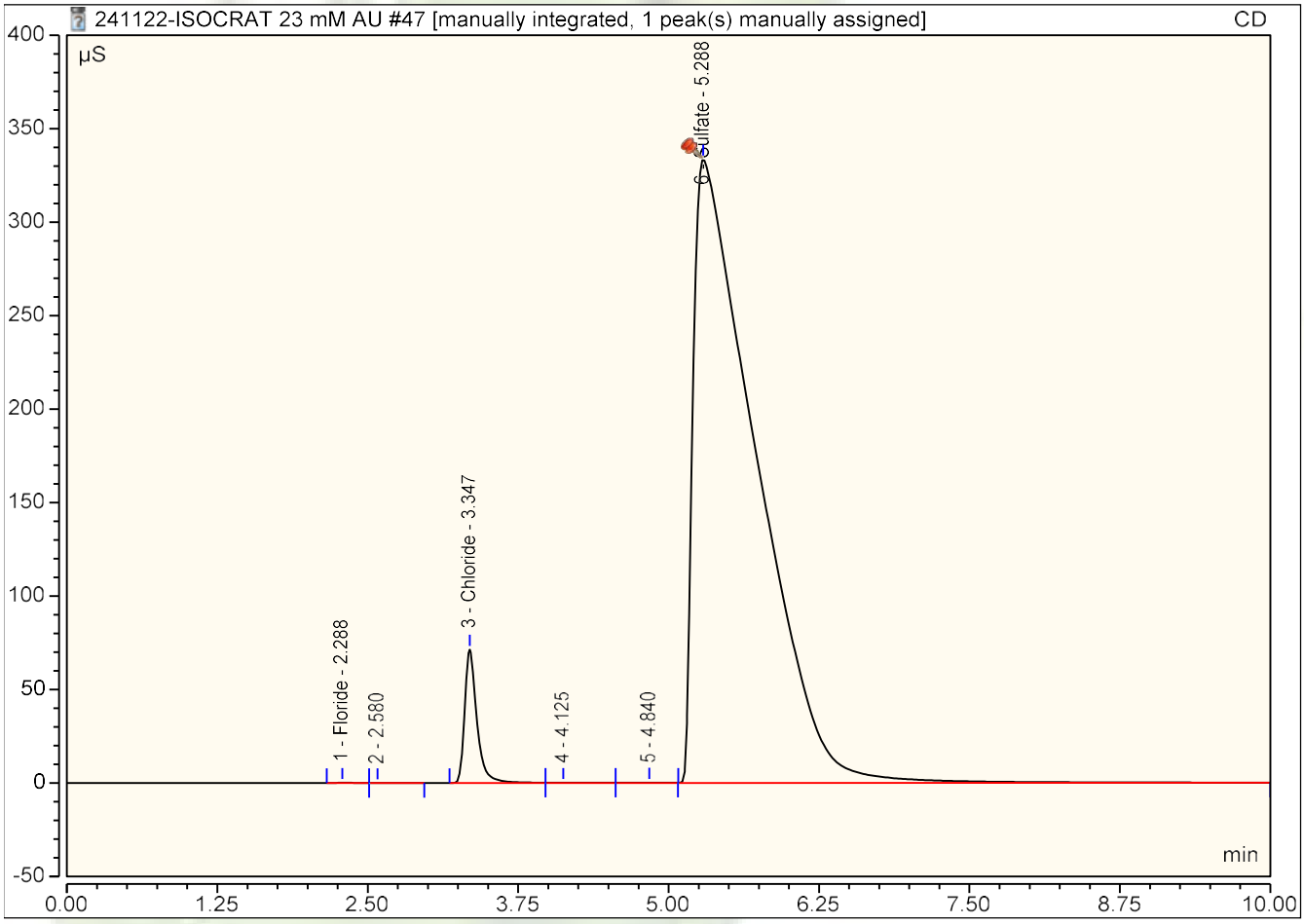
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	2.30	**Floride**	BM	0.015	0.036	0.0418
2	3.38	**Chloride**	M	0.036	0.061	0.2293
5	6.24	**Sulfate**	BM	0.047	0.100	0.4373
6	6.81	**Nitrate**	MB	0.062	0.057	0.0769
TOTAL:				0.16	0.25	0.79



Peak Integration Report

Sample Name:	**L2468194-06**	*Inj. Vol.:*	**5000.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**IC 3 method 23 mM**	*Operator:*	**Wetchem25**
Inj. Date / Time:	**23-Nov-2024 / 02:50**	*Run Time:*	**10.00**

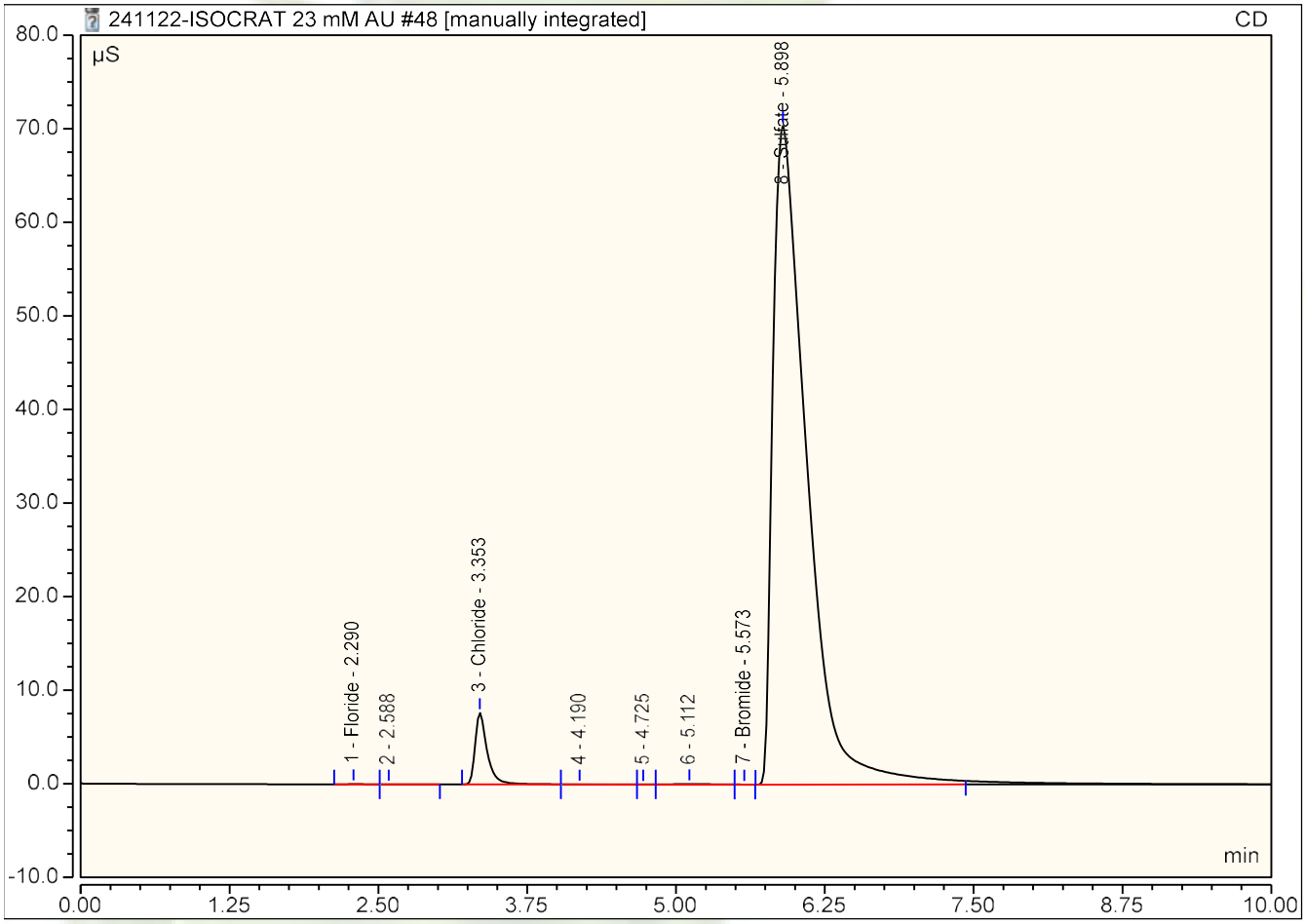
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	2.29	**Floride**	BM	0.029	0.217	0.0654
3	3.35	**Chloride**	BM	8.488	71.396	22.8208
6	5.29	**Sulfate**	MB*^	200.503	333.620	728.1428
TOTAL:				209.02	405.23	751.03



Peak Integration Report

Sample Name:	**XL2468194-06; 10X**	*Inj. Vol.:*	**5000.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**10.0000**
Instrument Method:	**IC 3 method 23 mM**	*Operator:*	**Wetchem25**
Inj. Date / Time:	**23-Nov-2024 / 03:01**	*Run Time:*	**10.00**

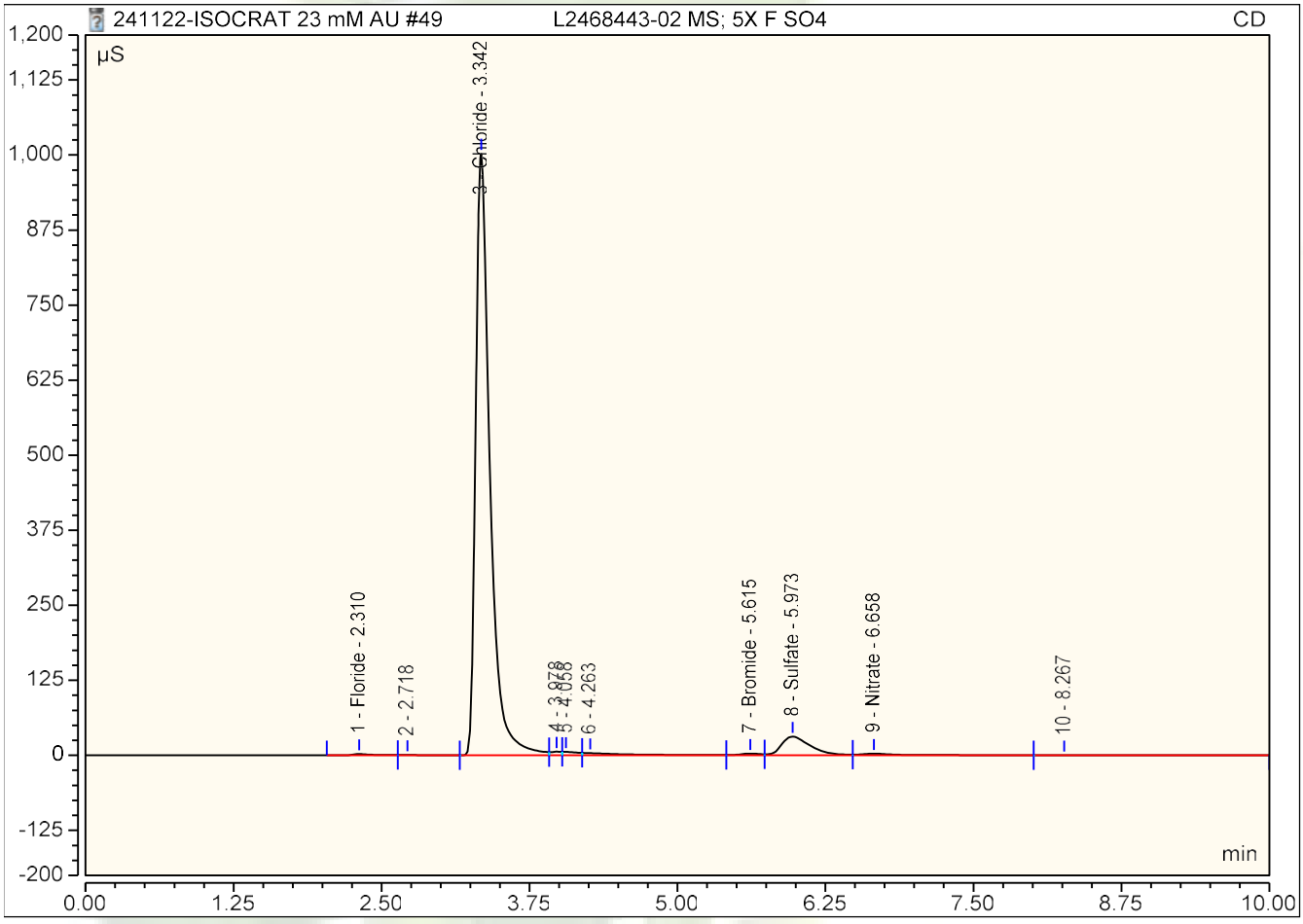
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	2.29	**Floride**	BM	0.008	0.054	0.3001
3	3.35	**Chloride**	BM	0.913	7.653	25.7143
7	5.57	**Bromide**	MB	0.001	0.008	0.3109
8	5.90	**Sulfate**	BM *	23.208	70.394	845.1589
TOTAL:				24.13	78.11	871.48



Peak Integration Report

Sample Name:	**L2468443-02 MS; 5X F SO4**	*Inj. Vol.:*	**5000.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**5.0000**
Instrument Method:	**IC 3 method 23 mM**	*Operator:*	**Wetchem25**
Inj. Date / Time:	**23-Nov-2024 / 03:12**	*Run Time:*	**10.00**

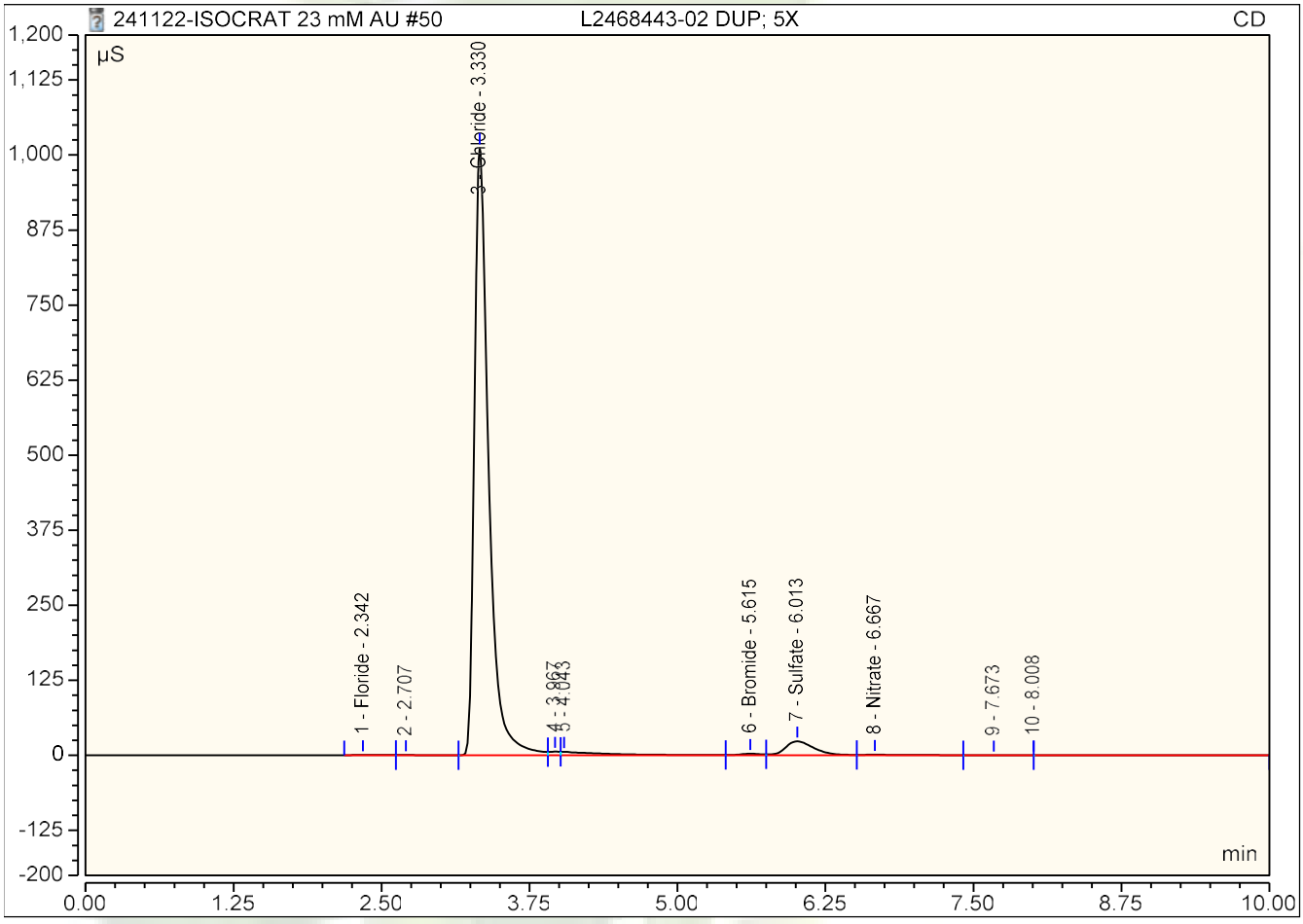
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	2.31	**Floride**	BM	0.441	2.144	3.8541
3	3.34	**Chloride**	M	139.077	1002.531	1859.5474
7	5.62	**Bromide**	M	0.569	2.921	23.1096
8	5.97	**Sulfate**	M	8.903	31.125	162.9391
9	6.66	**Nitrate**	M	1.156	2.873	5.0851
TOTAL:				150.15	1041.59	2054.54



Peak Integration Report

Sample Name:	**L2468443-02 DUP; 5X**	*Inj. Vol.:*	**5000.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**5.0000**
Instrument Method:	**IC 3 method 23 mM**	*Operator:*	**Wetchem25**
Inj. Date / Time:	**23-Nov-2024 / 03:22**	*Run Time:*	**10.00**

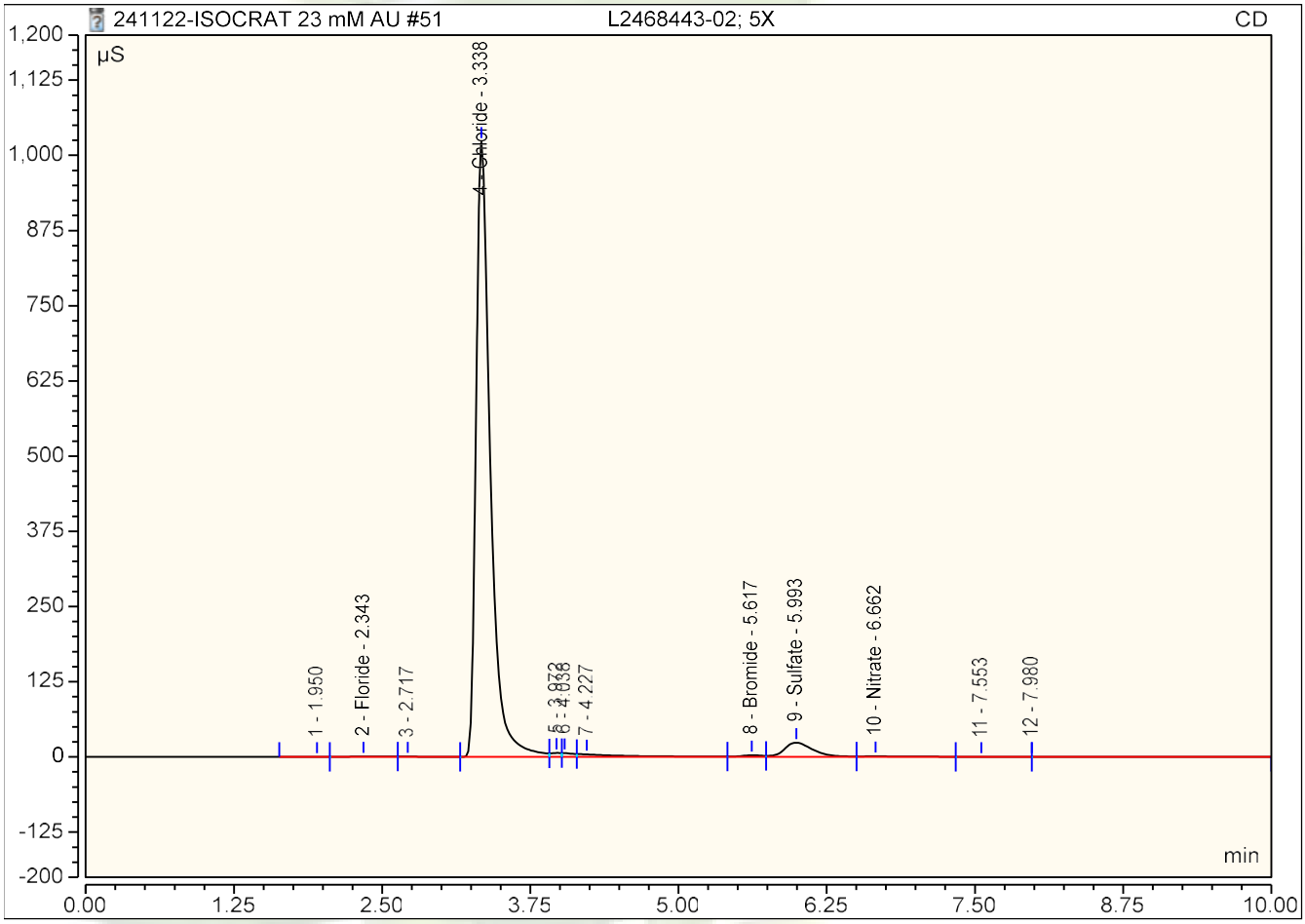
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	2.34	**Floride**	BM	0.199	0.651	1.7808
3	3.33	**Chloride**	M	140.893	1011.818	1883.8112
6	5.62	**Bromide**	M	0.558	2.689	22.6878
7	6.01	**Sulfate**	M	6.623	23.374	121.5486
8	6.67	**Nitrate**	M	0.485	1.033	2.2018
TOTAL:				148.76	1039.56	2032.03



Peak Integration Report

Sample Name:	**L2468443-02; 5X**	*Inj. Vol.:*	**5000.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**5.0000**
Instrument Method:	**IC 3 method 23 mM**	*Operator:*	**Wetchem25**
Inj. Date / Time:	**23-Nov-2024 / 03:33**	*Run Time:*	**10.00**

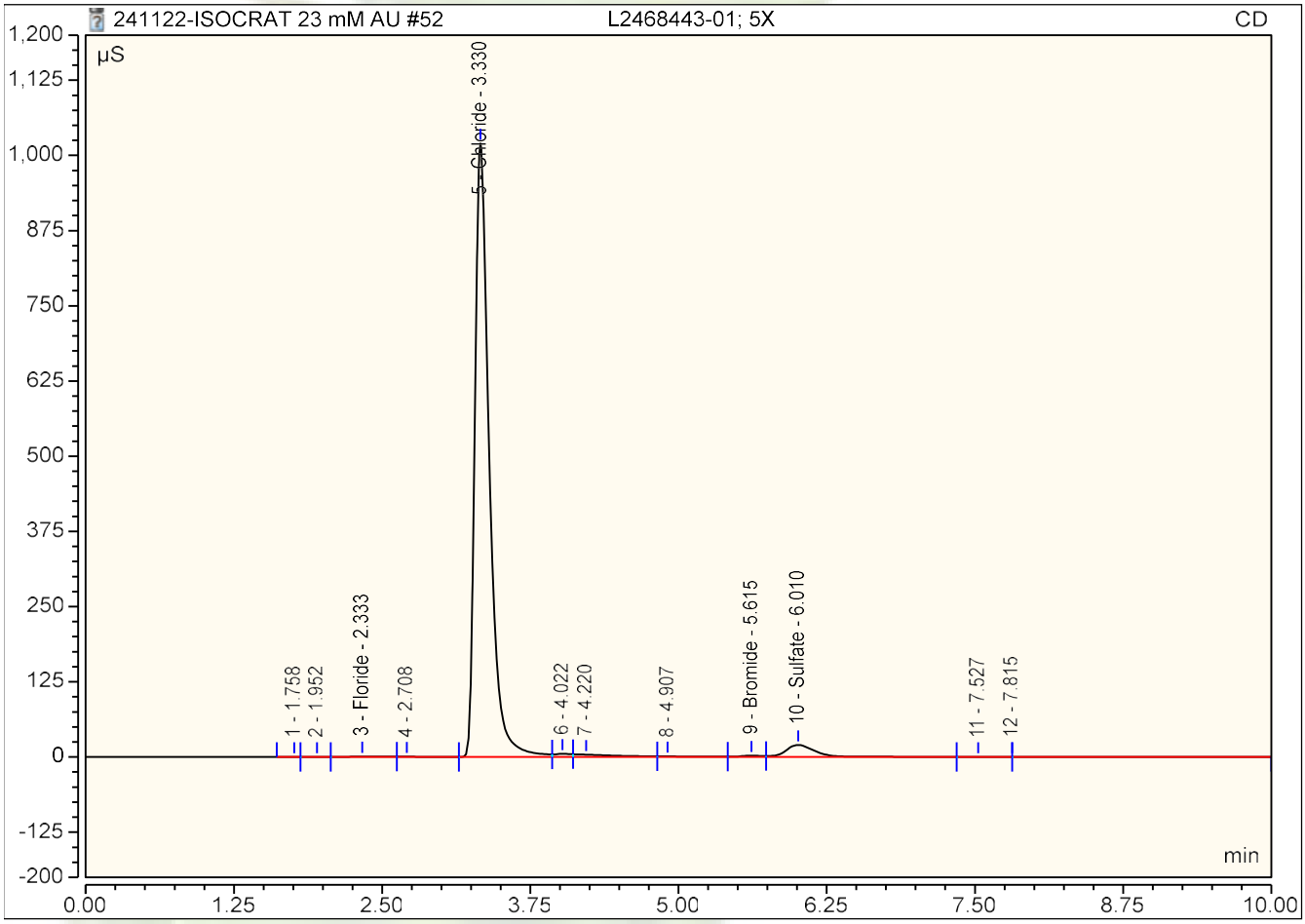
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.34	**Floride**	M	0.274	0.811	2.4256
4	3.34	**Chloride**	M	142.271	1022.363	1902.2346
8	5.62	**Bromide**	M	0.578	2.820	23.4856
9	5.99	**Sulfate**	M	6.685	23.629	122.6775
10	6.66	**Nitrate**	M	0.511	1.105	2.3137
TOTAL:				150.32	1050.73	2053.14



Peak Integration Report

Sample Name:	**L2468443-01; 5X**	*Inj. Vol.:*	**5000.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**5.0000**
Instrument Method:	**IC 3 method 23 mM**	*Operator:*	**Wetchem25**
Inj. Date / Time:	**23-Nov-2024 / 03:44**	*Run Time:*	**10.00**

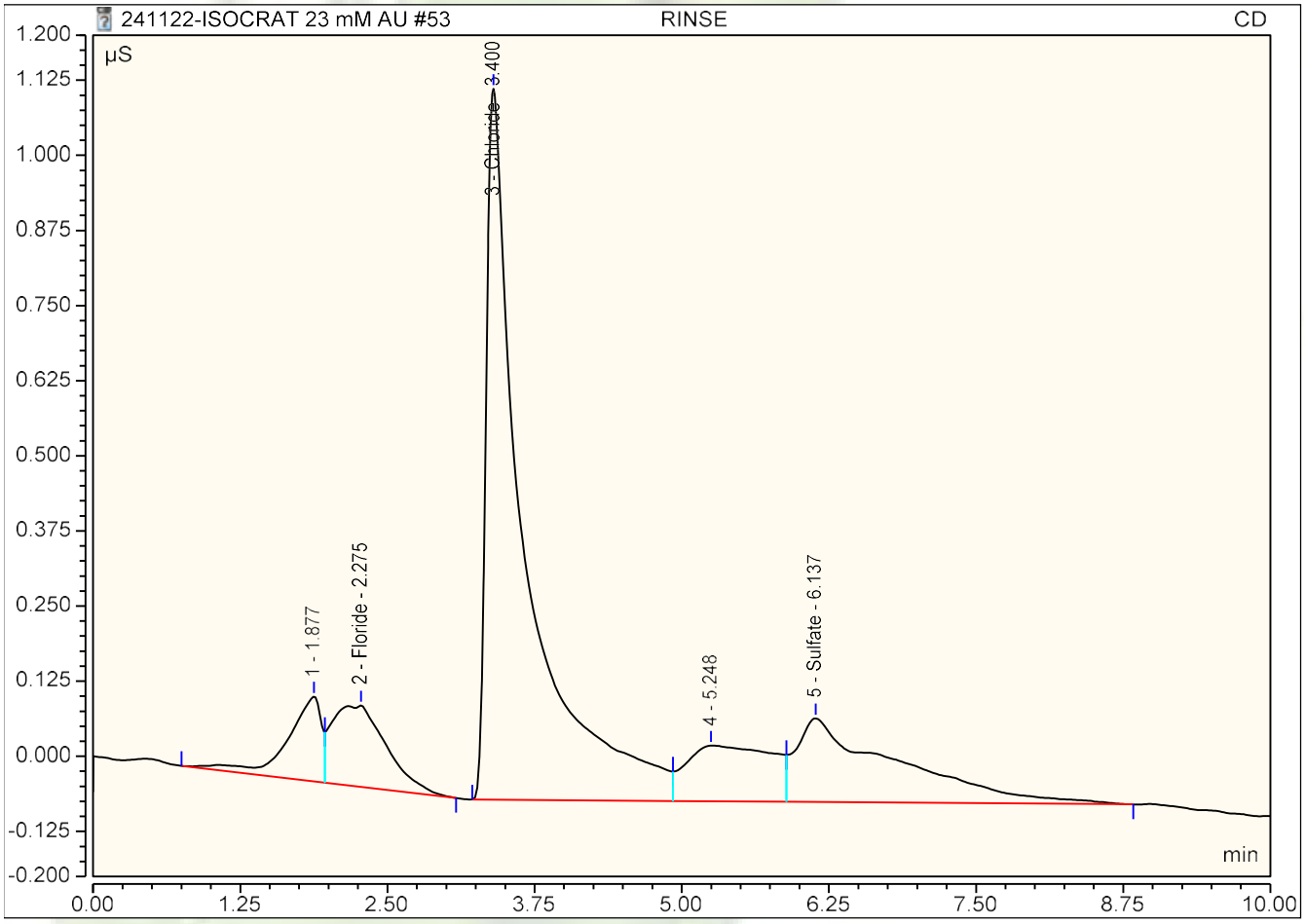
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
3	2.33	**Floride**	M	0.293	0.886	2.5856
5	3.33	**Chloride**	M	143.102	1019.962	1913.3419
9	5.62	**Bromide**	M	0.508	2.411	20.6676
10	6.01	**Sulfate**	M	5.946	20.018	109.2575
TOTAL:				149.85	1043.28	2045.85



Peak Integration Report

Sample Name:	**RINSE**	*Inj. Vol.:*	**5000.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**IC 3 method 23 mM**	*Operator:*	**Wetchem25**
Inj. Date / Time:	**23-Nov-2024 / 03:55**	*Run Time:*	**10.00**

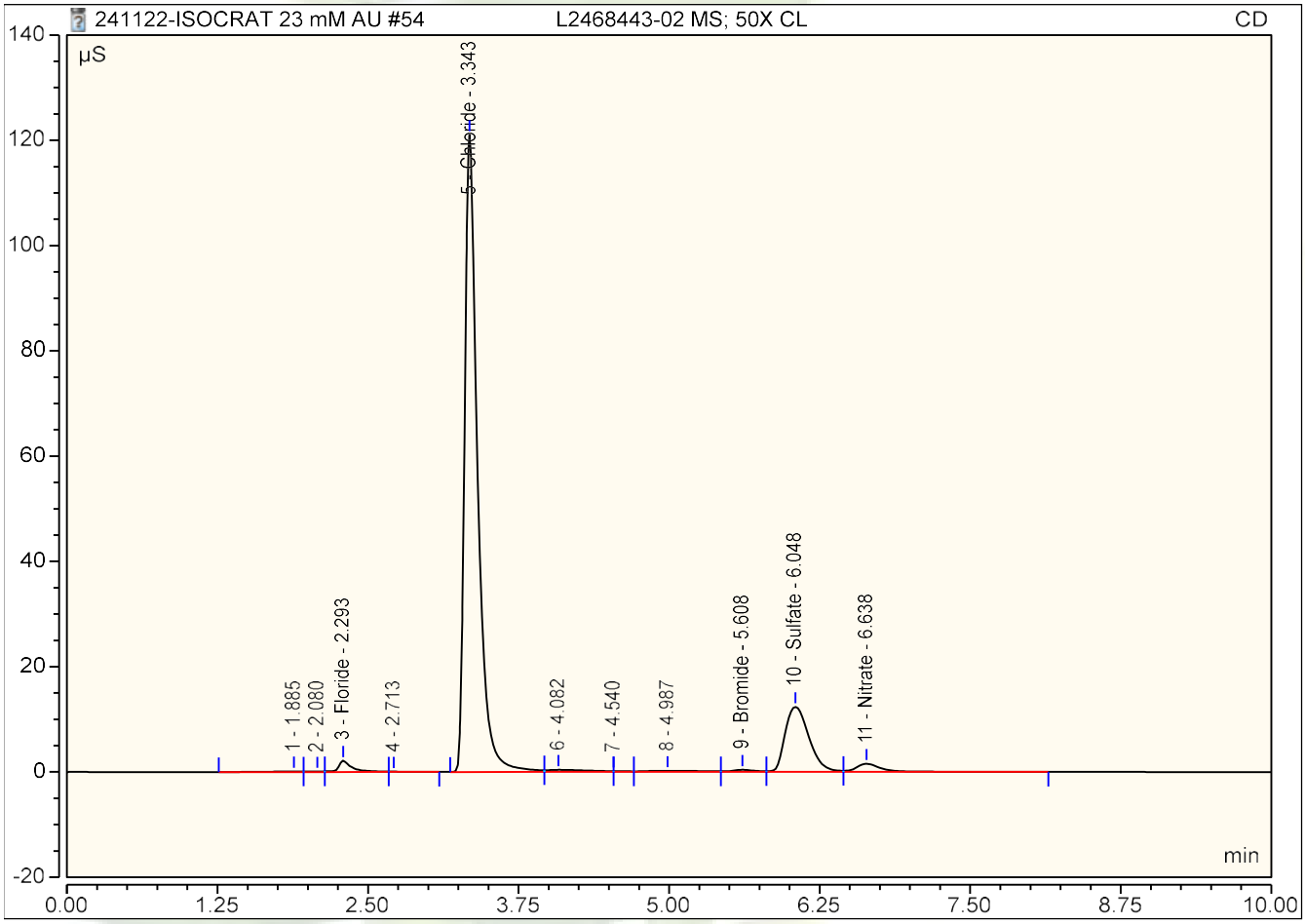
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.28	**Floride**	MB	0.072	0.136	0.1392
3	3.40	**Chloride**	BM	0.447	1.183	1.3274
5	6.14	**Sulfate**	MB	0.137	0.139	0.7645
TOTAL:				0.66	1.46	2.23



Peak Integration Report

Sample Name:	**L2468443-02 MS; 50X CL**	*Inj. Vol.:*	**5000.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**50.0000**
Instrument Method:	**IC 3 method 23 mM**	*Operator:*	**Wetchem25**
Inj. Date / Time:	**23-Nov-2024 / 04:06**	*Run Time:*	**10.00**

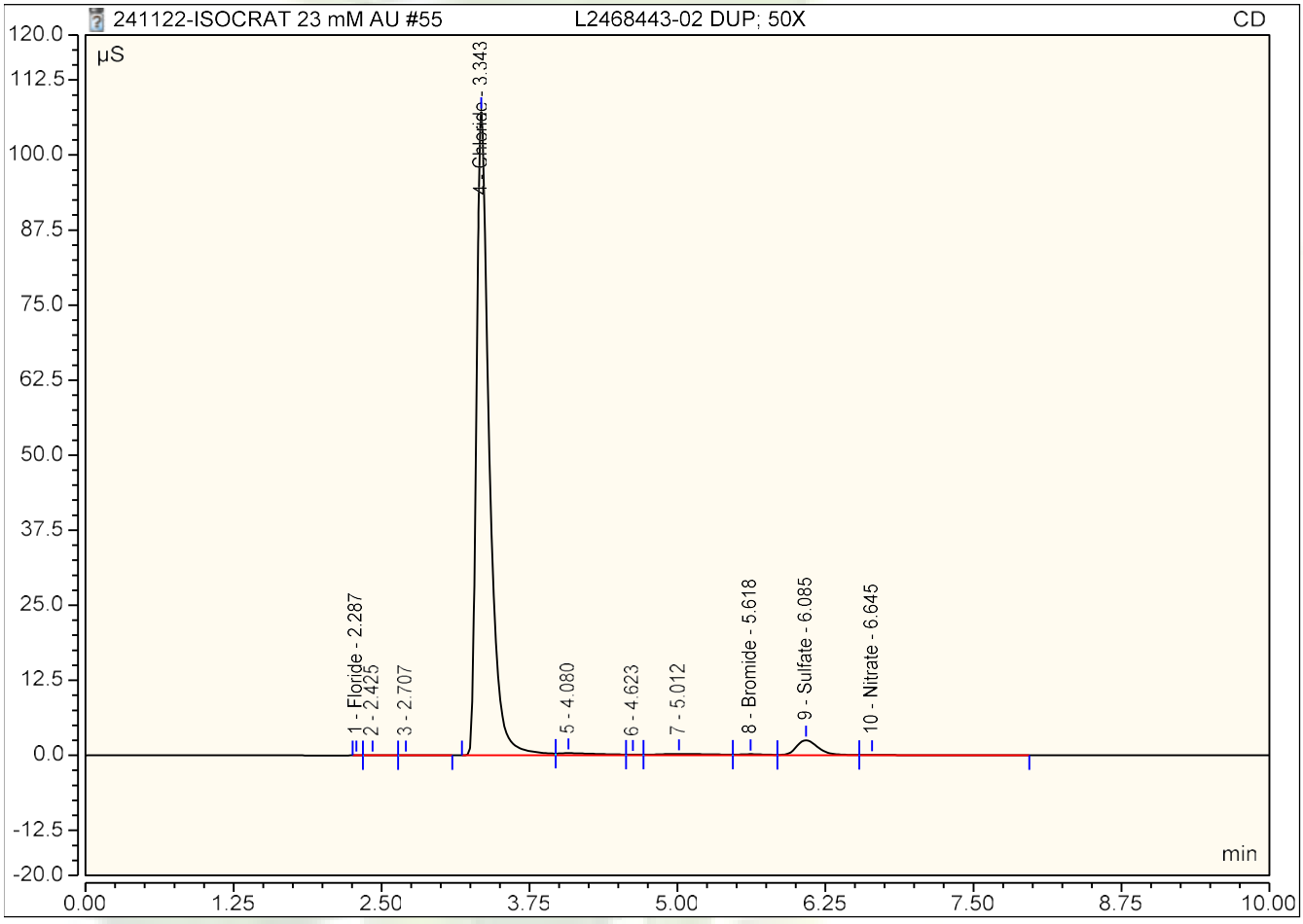
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
3	2.29	**Floride**	M	0.279	2.146	24.6402
5	3.34	**Chloride**	BM	15.038	121.021	2016.6177
9	5.61	**Bromide**	M	0.094	0.422	38.9876
10	6.05	**Sulfate**	M	2.833	12.345	527.4461
11	6.64	**Nitrate**	MB	0.394	1.567	18.1044
TOTAL:				18.64	137.50	2625.80



Peak Integration Report

Sample Name:	**L2468443-02 DUP; 50X**	*Inj. Vol.:*	**5000.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**50.0000**
Instrument Method:	**IC 3 method 23 mM**	*Operator:*	**Wetchem25**
Inj. Date / Time:	**23-Nov-2024 / 04:17**	*Run Time:*	**10.00**

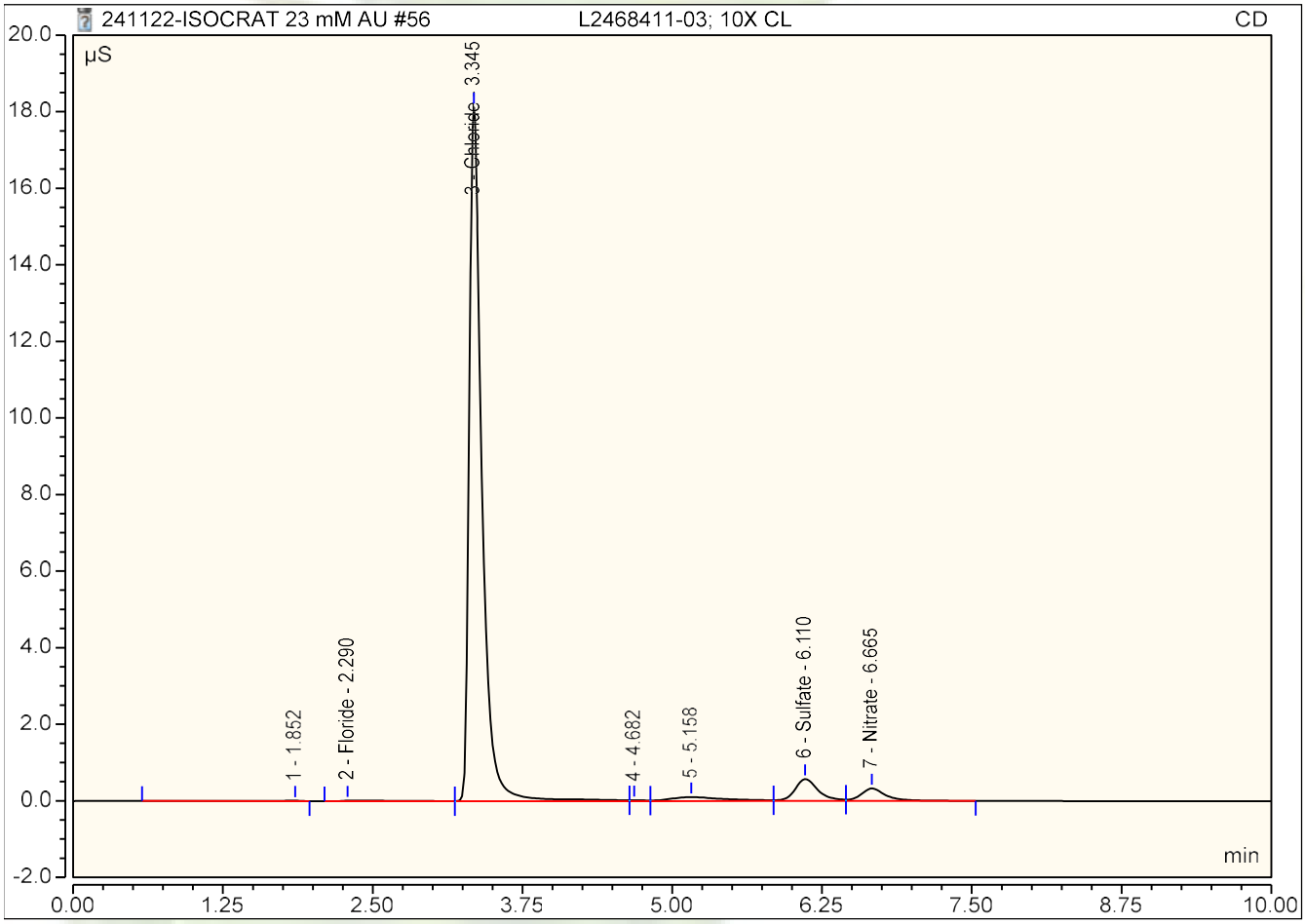
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	2.29	**Floride**	BM	0.001	0.015	0.9179
4	3.34	**Chloride**	BM	13.434	107.165	1802.1551
8	5.62	**Bromide**	M	0.054	0.200	22.8979
9	6.09	**Sulfate**	M	0.549	2.491	112.9325
10	6.65	**Nitrate**	MB	0.032	0.070	2.5434
TOTAL:				14.07	109.94	1941.45



Peak Integration Report

Sample Name:	**L2468411-03; 10X CL**	*Inj. Vol.:*	**5000.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**10.0000**
Instrument Method:	**IC 3 method 23 mM**	*Operator:*	**Wetchem25**
Inj. Date / Time:	**23-Nov-2024 / 04:28**	*Run Time:*	**10.00**

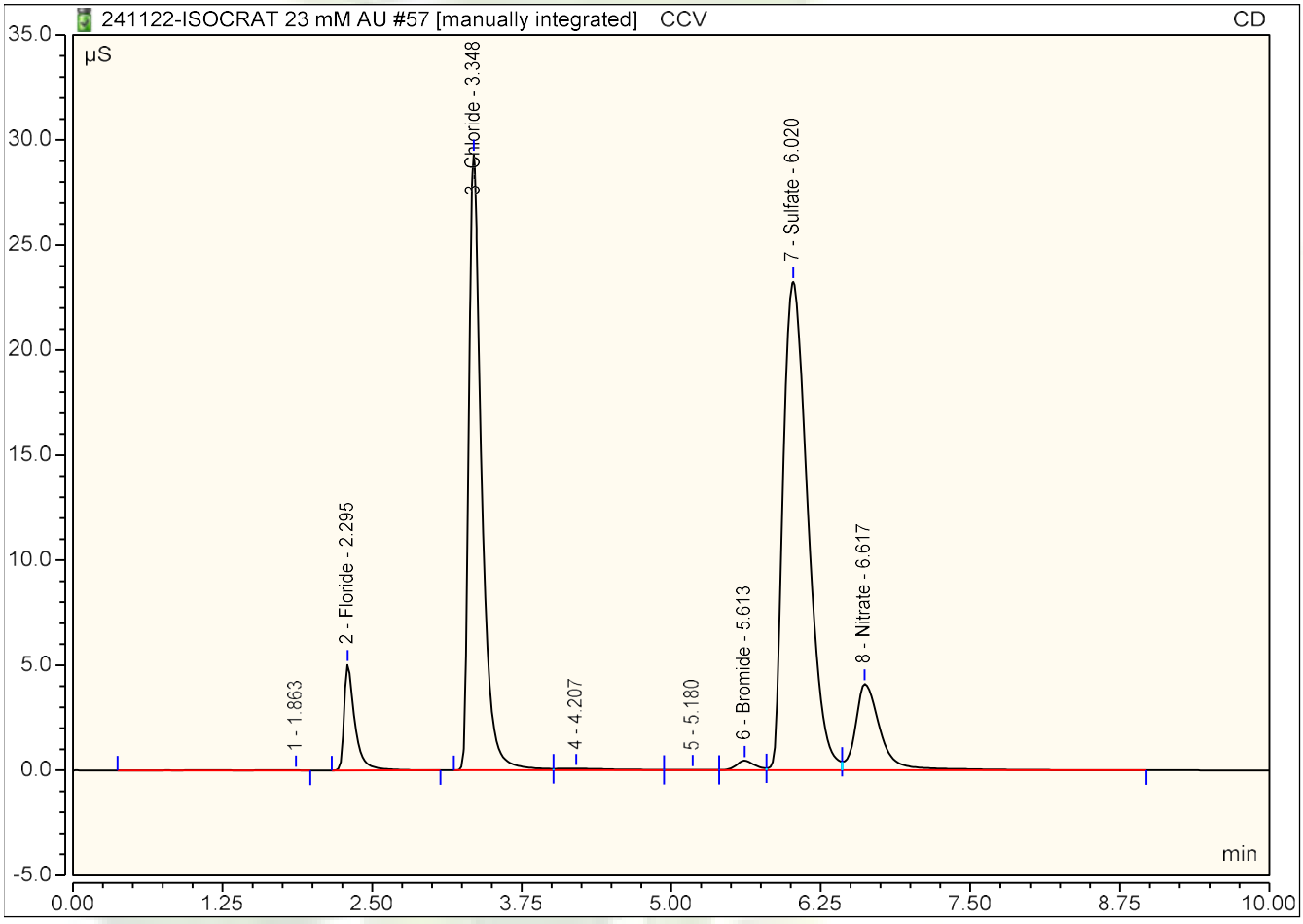
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.29	**Floride**	BM	0.009	0.020	0.3208
3	3.35	**Chloride**	M	2.234	18.129	61.0347
6	6.11	**Sulfate**	M	0.129	0.576	7.3445
7	6.67	**Nitrate**	MB	0.081	0.328	0.9291
TOTAL:				2.45	19.05	69.63



Peak Integration Report

Sample Name:	**CCV**	*Inj. Vol.:*	**5000.00**
Injection Type:	**Check Standard**	*Dilution Factor:*	**1.0000**
Instrument Method:	**IC 3 method 23 mM**	*Operator:*	**Wetchem25**
Inj. Date / Time:	**23-Nov-2024 / 04:39**	*Run Time:*	**10.00**

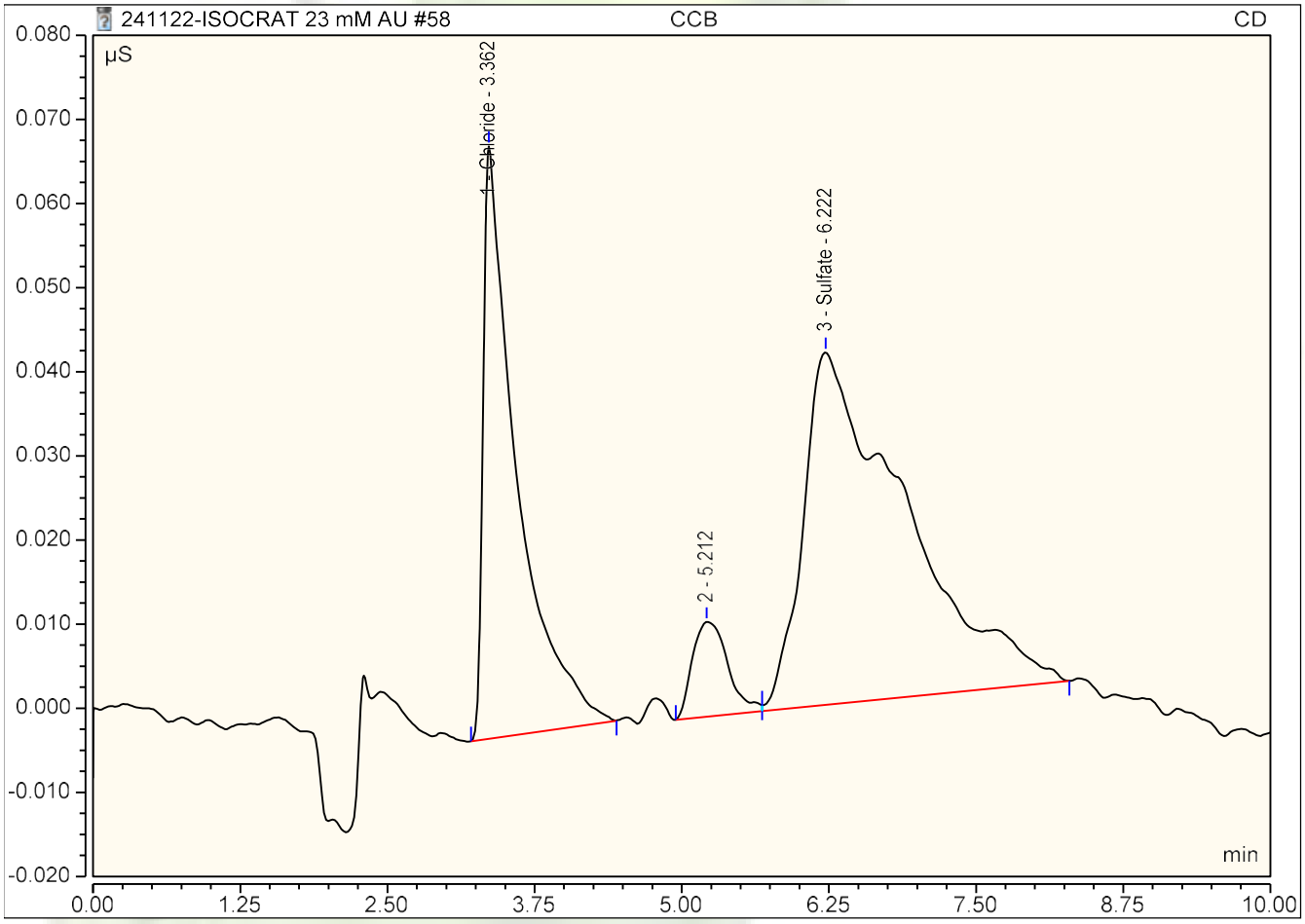
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.30	**Floride**	BMB	0.534	5.038	0.9288
3	3.35	**Chloride**	BM	3.670	29.315	9.9434
6	5.61	**Bromide**	M	0.083	0.459	0.6950
7	6.02	**Sulfate**	M *	5.503	23.252	20.2434
8	6.62	**Nitrate**	MB*	1.014	4.107	0.8948
TOTAL:				10.80	62.17	32.71



Peak Integration Report

Sample Name:	**CCB**	*Inj. Vol.:*	**5000.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**IC 3 method 23 mM**	*Operator:*	**Wetchem25**
Inj. Date / Time:	**23-Nov-2024 / 04:50**	*Run Time:*	**10.00**

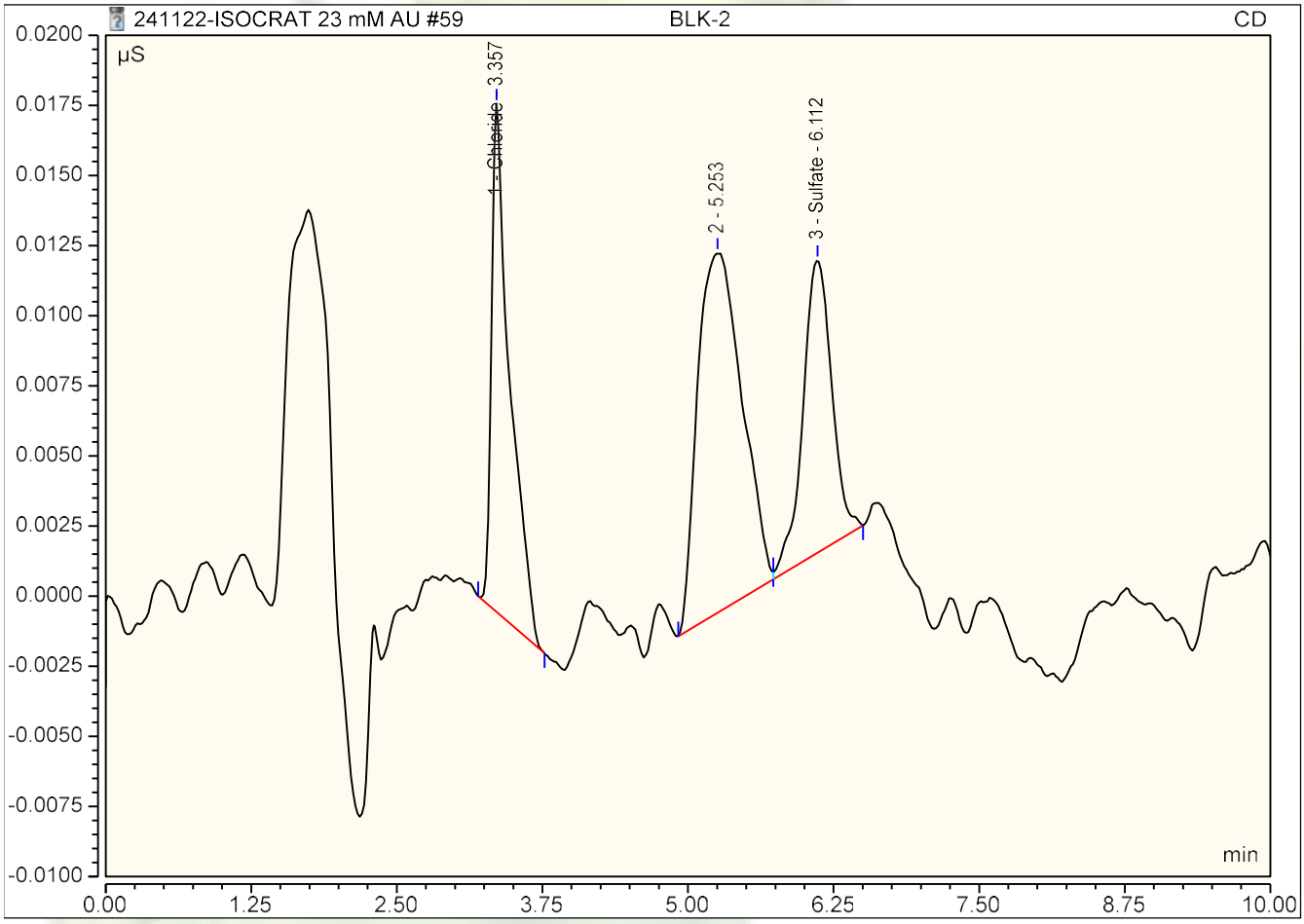
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	3.36	**Chloride**	BMB	0.023	0.070	0.1941
3	6.22	**Sulfate**	MB	0.042	0.042	0.4186
TOTAL:				0.07	0.11	0.61



Peak Integration Report

Sample Name:	**BLK-2**	*Inj. Vol.:*	**5000.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**IC 3 method 23 mM**	*Operator:*	**Wetchem25**
Inj. Date / Time:	**23-Nov-2024 / 05:01**	*Run Time:*	**10.00**

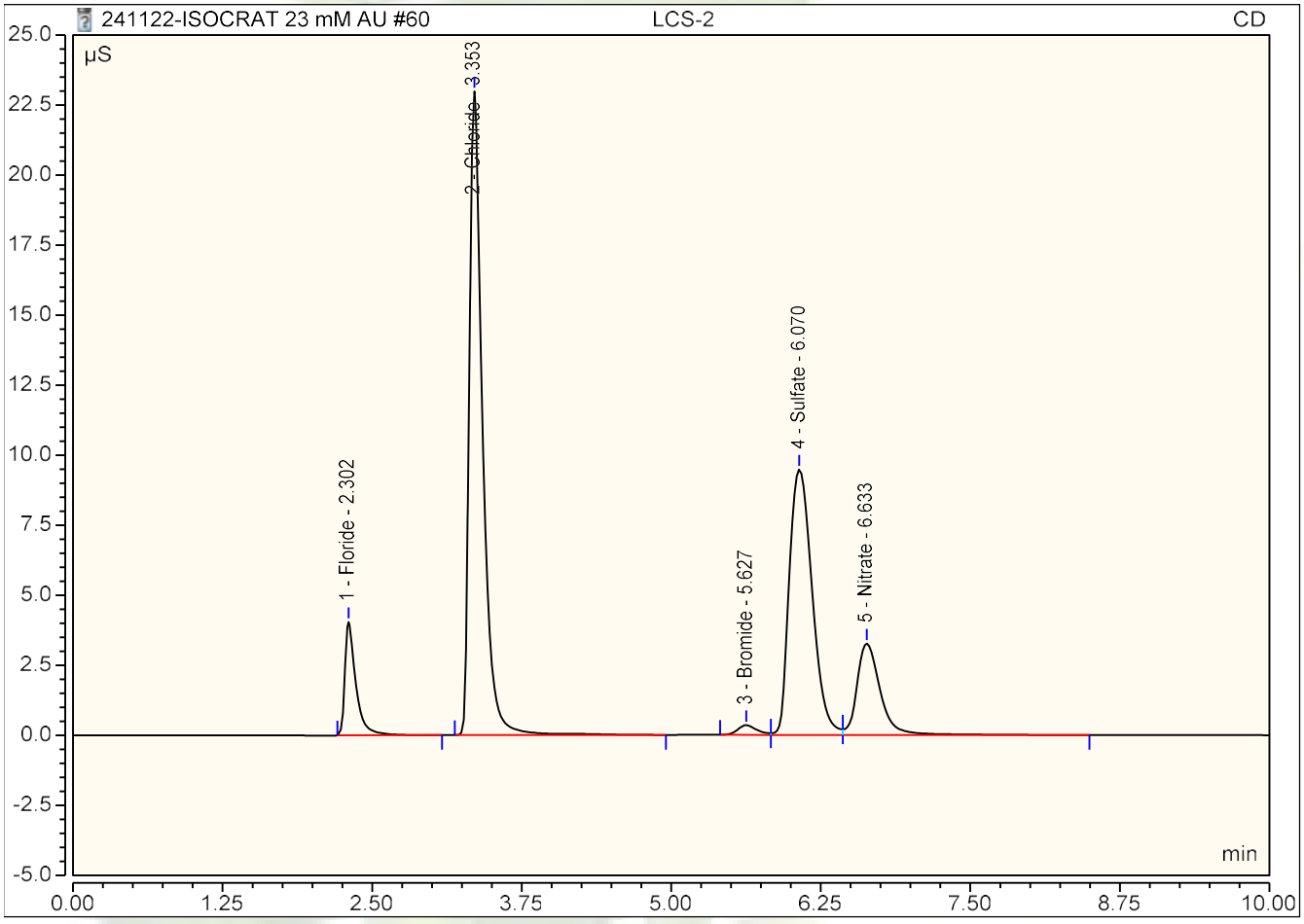
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	3.36	**Chloride**	BMB	0.003	0.018	0.1407
3	6.11	**Sulfate**	MB	0.003	0.010	0.2767
TOTAL:				0.01	0.03	0.42



Peak Integration Report

Sample Name:	**LCS-2**	*Inj. Vol.:*	**5000.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**IC 3 method 23 mM**	*Operator:*	**Wetchem25**
Inj. Date / Time:	**23-Nov-2024 / 05:12**	*Run Time:*	**10.00**

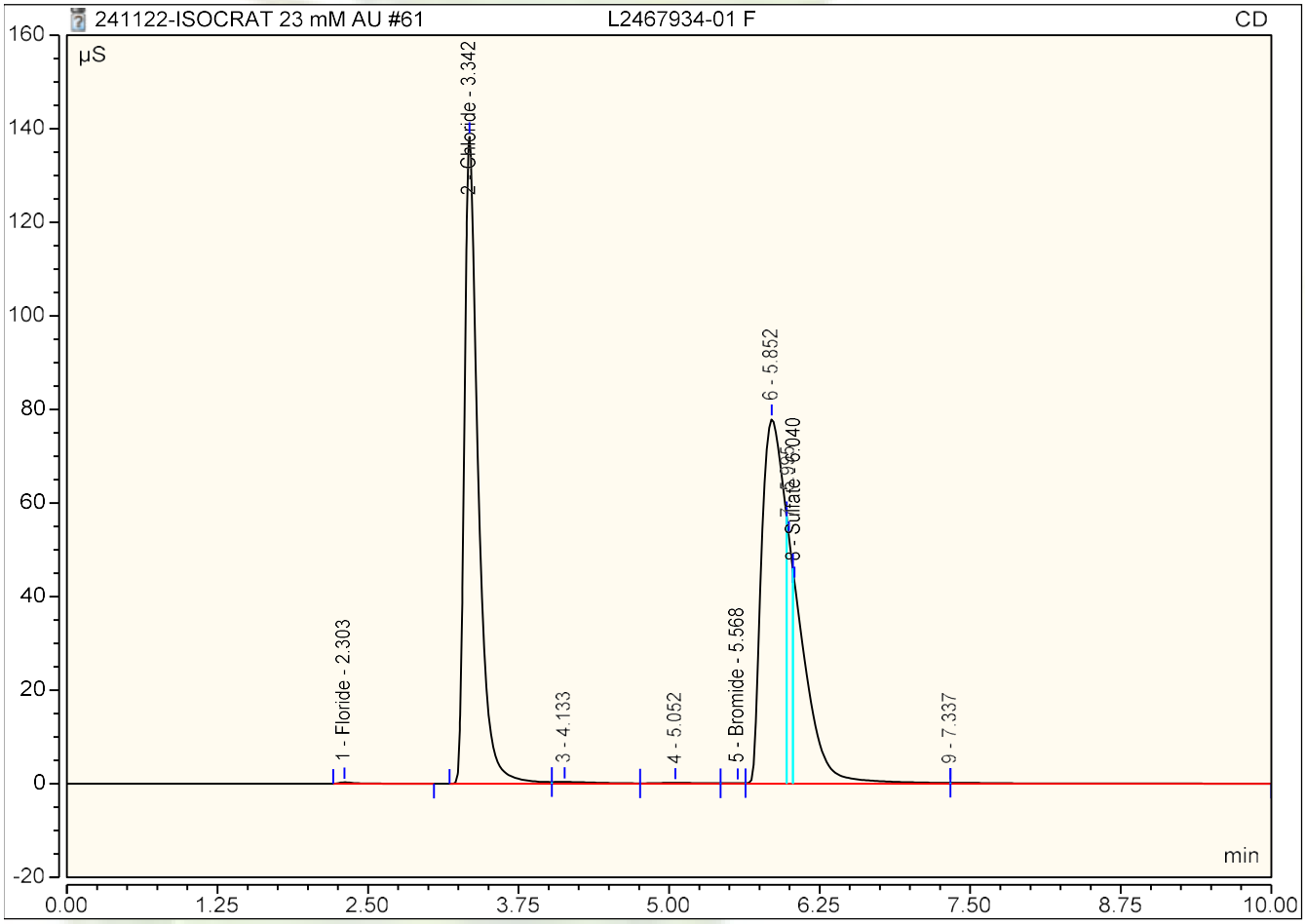
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	2.30	**Floride**	BMB	0.432	4.040	0.7543
2	3.35	**Chloride**	BMB	2.958	22.977	8.0404
3	5.63	**Bromide**	BM	0.064	0.347	0.5379
4	6.07	**Sulfate**	M	2.085	9.471	7.8341
5	6.63	**Nitrate**	MB	0.742	3.260	0.6613
TOTAL:				6.28	40.09	17.83



Peak Integration Report

Sample Name:	**L2467934-01 F**	*Inj. Vol.:*	**5000.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**IC 3 method 23 mM**	*Operator:*	**Wetchem25**
Inj. Date / Time:	**23-Nov-2024 / 05:23**	*Run Time:*	**10.00**

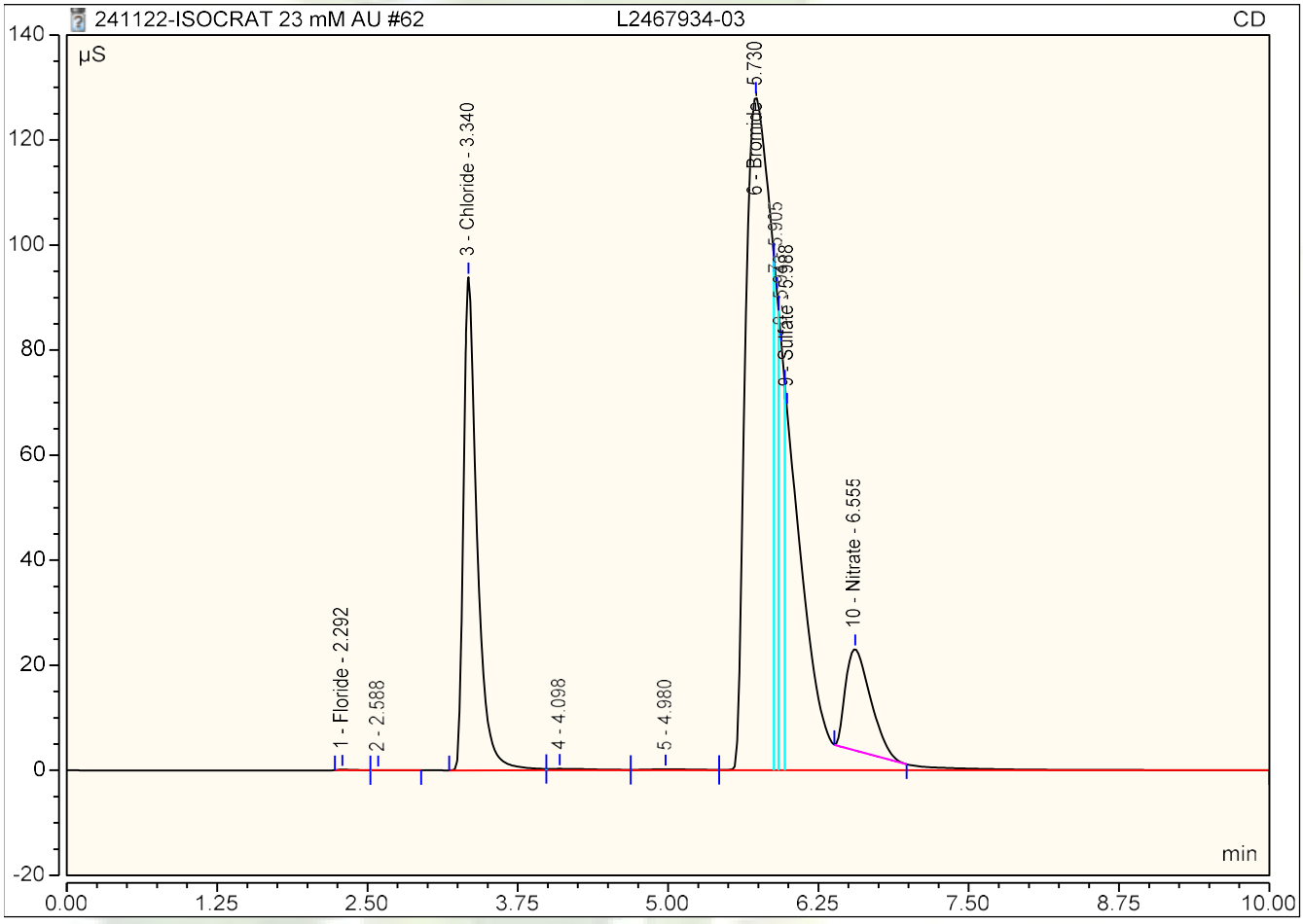
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	2.30	**Floride**	BMB	0.053	0.302	0.1071
2	3.34	**Chloride**	BM	18.512	138.259	49.6180
5	5.57	**Bromide**	M	0.024	0.135	0.2142
8	6.04	**Sulfate**	M	6.775	43.233	24.8623
TOTAL:				25.36	181.93	74.80



Peak Integration Report

Sample Name:	**L2467934-03**	*Inj. Vol.:*	**5000.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**IC 3 method 23 mM**	*Operator:*	**Wetchem25**
Inj. Date / Time:	**23-Nov-2024 / 05:34**	*Run Time:*	**10.00**

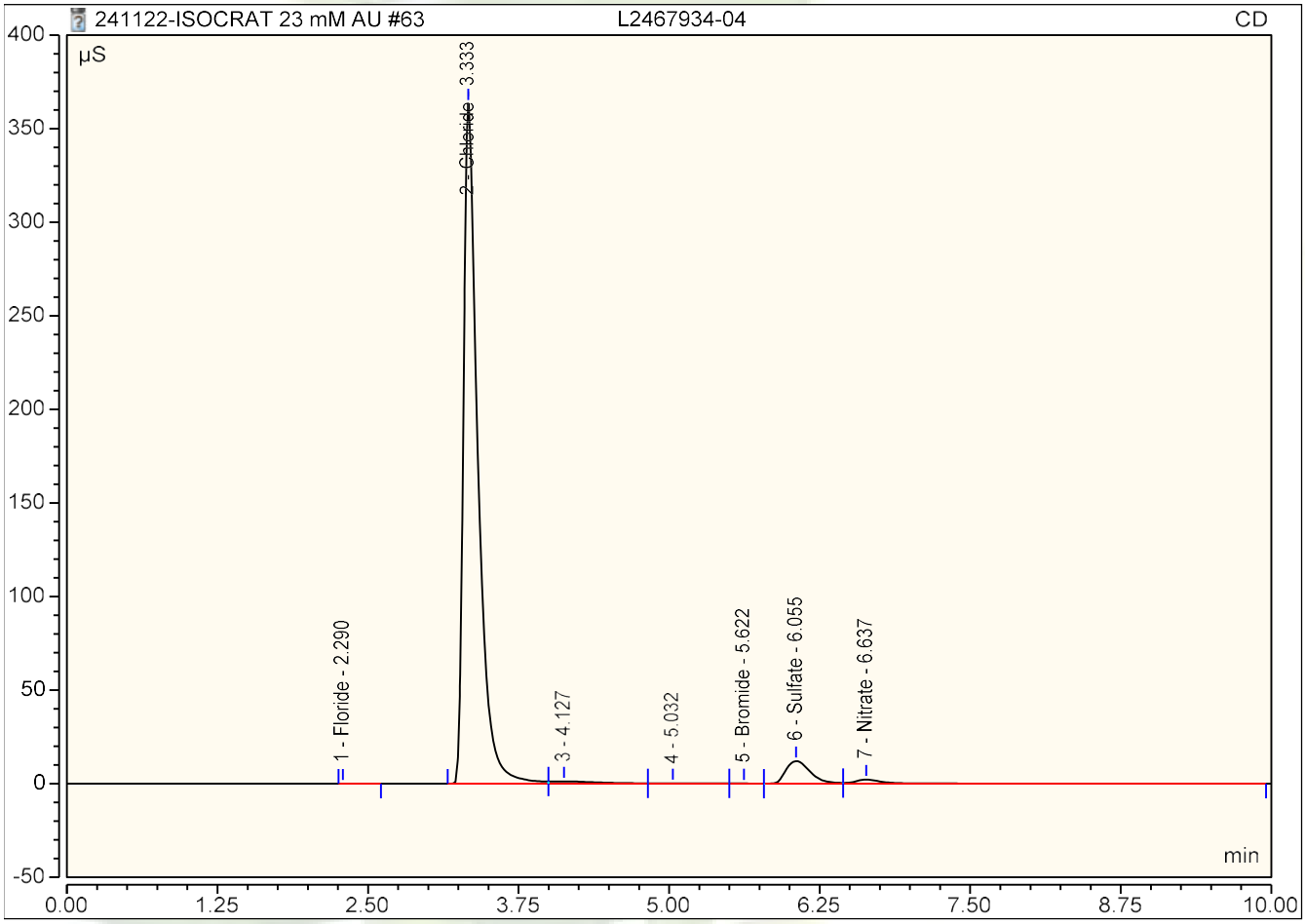
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	2.29	**Floride**	BM	0.020	0.139	0.0504
3	3.34	**Chloride**	BM	12.387	93.857	33.2446
6	5.73	**Bromide**	M	30.088	128.217	243.4109
9	5.99	**Sulfate**	MB	14.570	69.048	53.1602
10	6.56	**Nitrate**	Rd	4.674	19.298	4.0429
TOTAL:				61.74	310.56	333.91



Peak Integration Report

Sample Name:	**L2467934-04**	*Inj. Vol.:*	**5000.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**IC 3 method 23 mM**	*Operator:*	**Wetchem25**
Inj. Date / Time:	**23-Nov-2024 / 05:44**	*Run Time:*	**10.00**

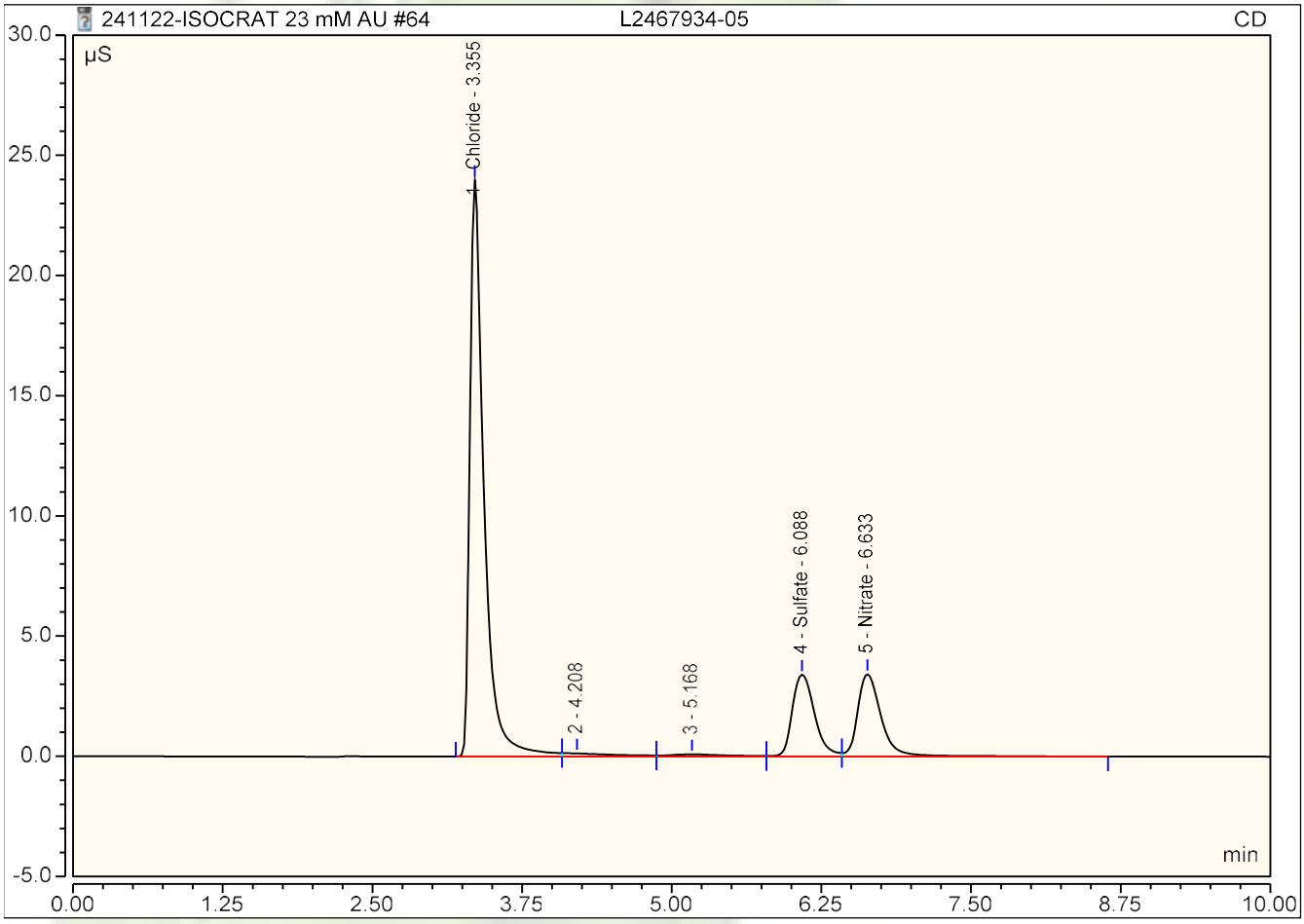
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	2.29	**Floride**	BMB	0.002	0.018	0.0204
2	3.33	**Chloride**	BM	50.705	363.392	135.6756
5	5.62	**Bromide**	M	0.024	0.089	0.2157
6	6.06	**Sulfate**	M	2.834	12.050	10.5542
7	6.64	**Nitrate**	MB	0.658	2.225	0.5891
TOTAL:				54.22	377.77	147.06



Peak Integration Report

Sample Name:	**L2467934-05**	*Inj. Vol.:*	**5000.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**IC 3 method 23 mM**	*Operator:*	**Wetchem25**
Inj. Date / Time:	**23-Nov-2024 / 05:55**	*Run Time:*	**10.00**

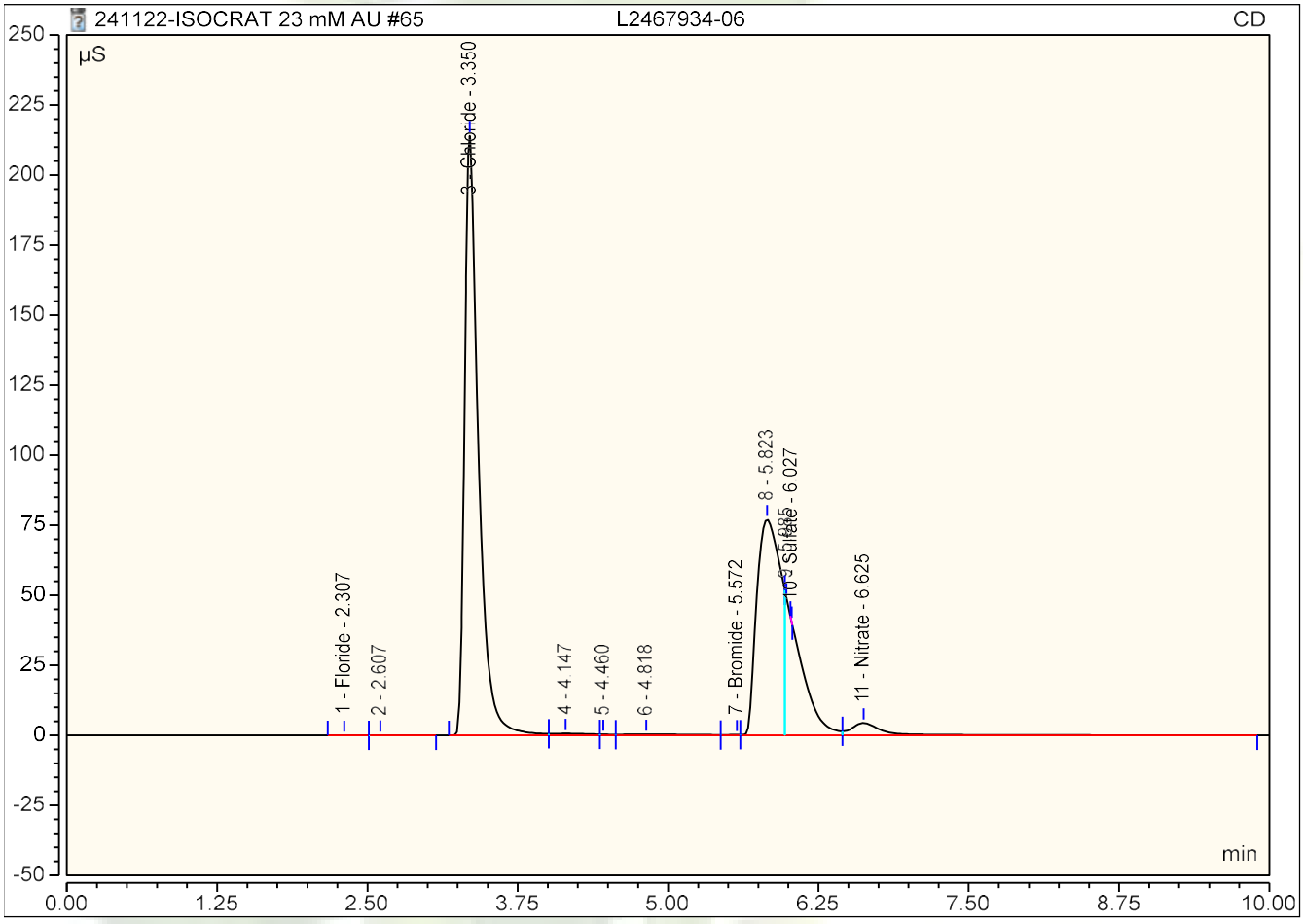
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	3.36	**Chloride**	BM	3.303	23.991	8.9607
4	6.09	**Sulfate**	M	0.730	3.406	2.9143
5	6.63	**Nitrate**	MB	0.792	3.431	0.7041
TOTAL:				4.82	30.83	12.58



Peak Integration Report

Sample Name:	**L2467934-06**	*Inj. Vol.:*	**5000.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**IC 3 method 23 mM**	*Operator:*	**Wetchem25**
Inj. Date / Time:	**23-Nov-2024 / 06:06**	*Run Time:*	**10.00**

No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	2.31	**Floride**	BM	0.008	0.033	0.0293
3	3.35	**Chloride**	BM	28.747	214.014	76.9763
7	5.57	**Bromide**	M	0.026	0.179	0.2305
10	6.03	**Sulfate**	Rd	0.000	0.009	0.2661
11	6.63	**Nitrate**	MB	1.367	4.386	1.1985
TOTAL:				30.15	218.62	78.70

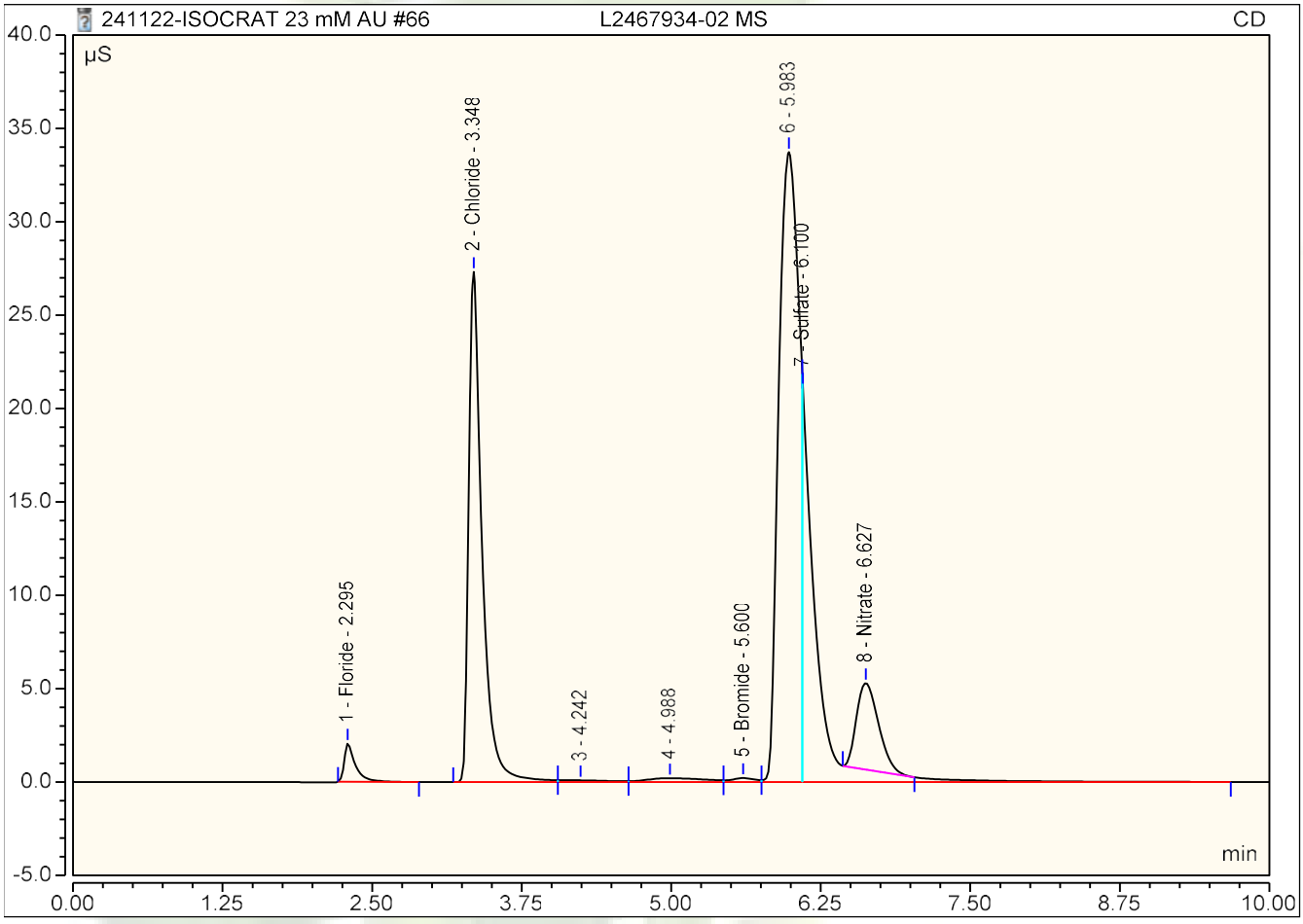


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Peak Integration Report

Sample Name:	**L2467934-02 MS**	*Inj. Vol.:*	**5000.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**IC 3 method 23 mM**	*Operator:*	**Wetchem25**
Inj. Date / Time:	**23-Nov-2024 / 06:17**	*Run Time:*	**10.00**

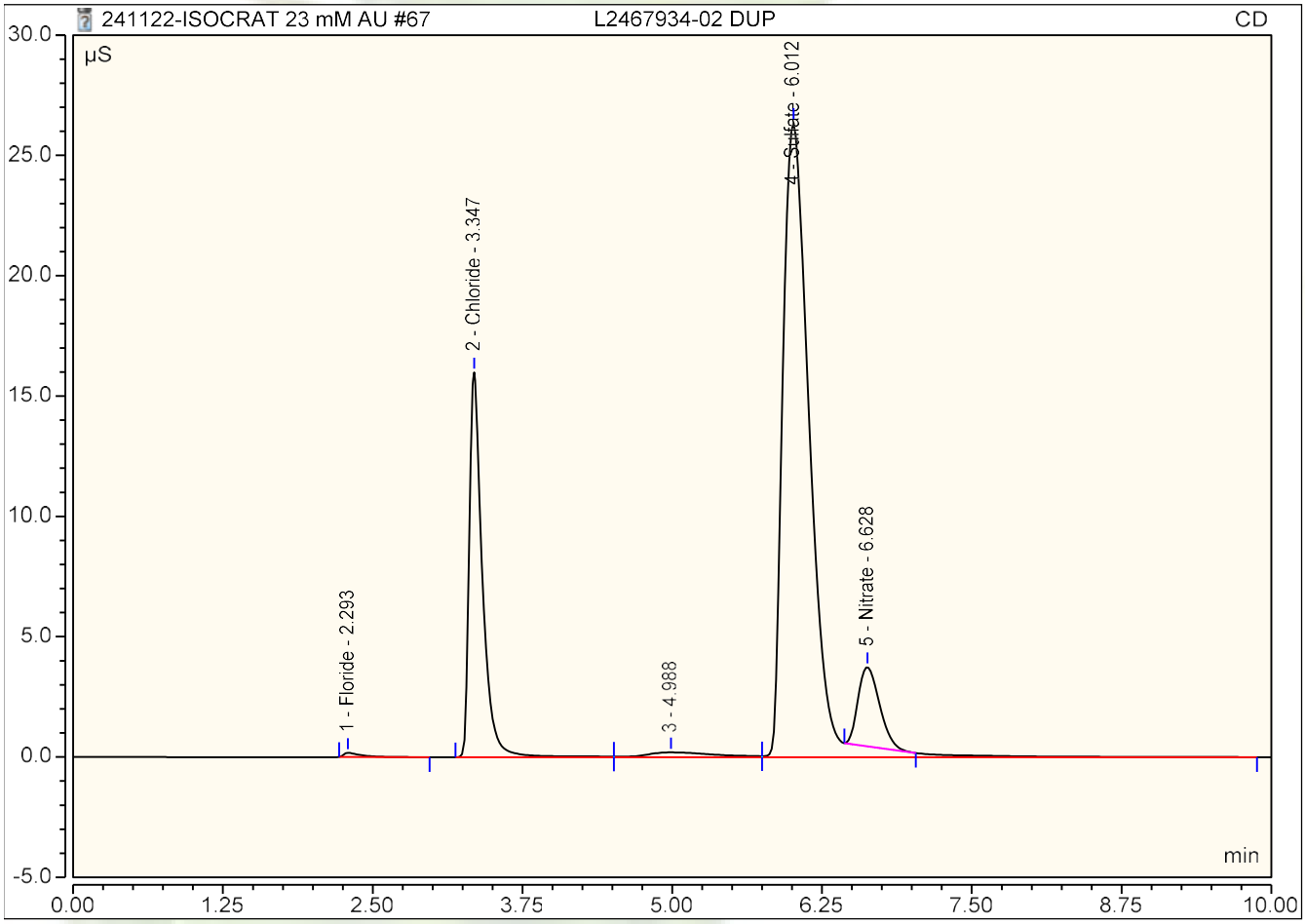
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	2.30	**Floride**	BMB	0.222	2.045	0.3967
2	3.35	**Chloride**	BM	3.567	27.316	9.6668
5	5.60	**Bromide**	M	0.049	0.217	0.4186
7	6.10	**Sulfate**	MB	2.788	21.133	10.3854
8	6.63	**Nitrate**	Rd	1.000	4.629	0.8832
TOTAL:				7.63	55.34	21.75



Peak Integration Report

Sample Name:	**L2467934-02 DUP**	*Inj. Vol.:*	**5000.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**IC 3 method 23 mM**	*Operator:*	**Wetchem25**
Inj. Date / Time:	**23-Nov-2024 / 06:28**	*Run Time:*	**10.00**

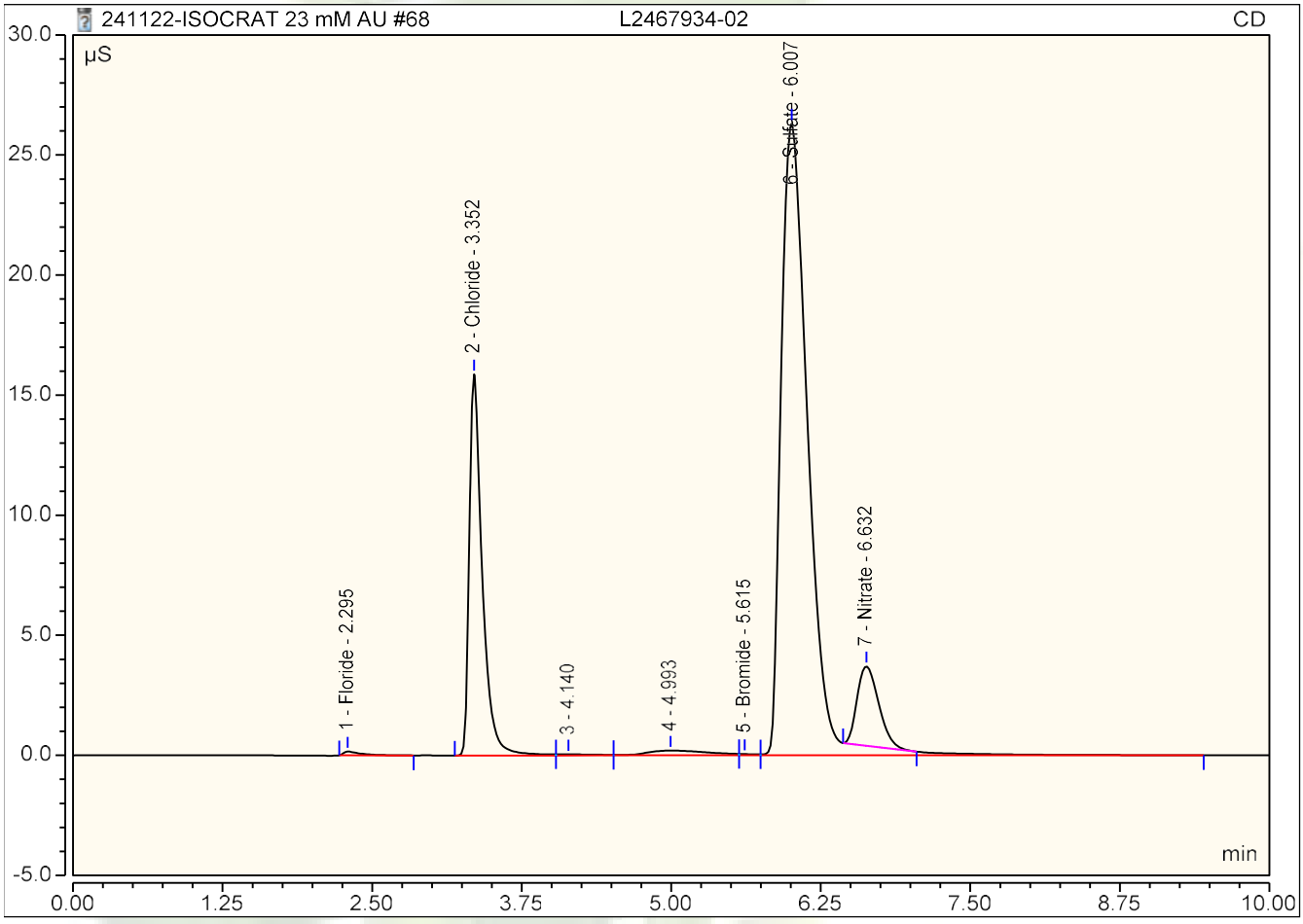
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	2.29	**Floride**	BMB	0.029	0.177	0.0665
2	3.35	**Chloride**	BM	2.054	15.993	5.6221
4	6.01	**Sulfate**	MB	6.955	26.362	25.5153
5	6.63	**Nitrate**	Rd	0.691	3.290	0.6174
TOTAL:				9.73	45.82	31.82



Peak Integration Report

Sample Name:	**L2467934-02**	*Inj. Vol.:*	**5000.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**IC 3 method 23 mM**	*Operator:*	**Wetchem25**
Inj. Date / Time:	**23-Nov-2024 / 06:39**	*Run Time:*	**10.00**

No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	2.30	**Floride**	BMB	0.026	0.161	0.0611
2	3.35	**Chloride**	BM	2.008	15.875	5.4988
5	5.62	**Bromide**	M	0.009	0.055	0.0929
6	6.01	**Sulfate**	MB	6.882	26.311	25.2501
7	6.63	**Nitrate**	Rd	0.698	3.310	0.6232
TOTAL:				9.62	45.71	31.53

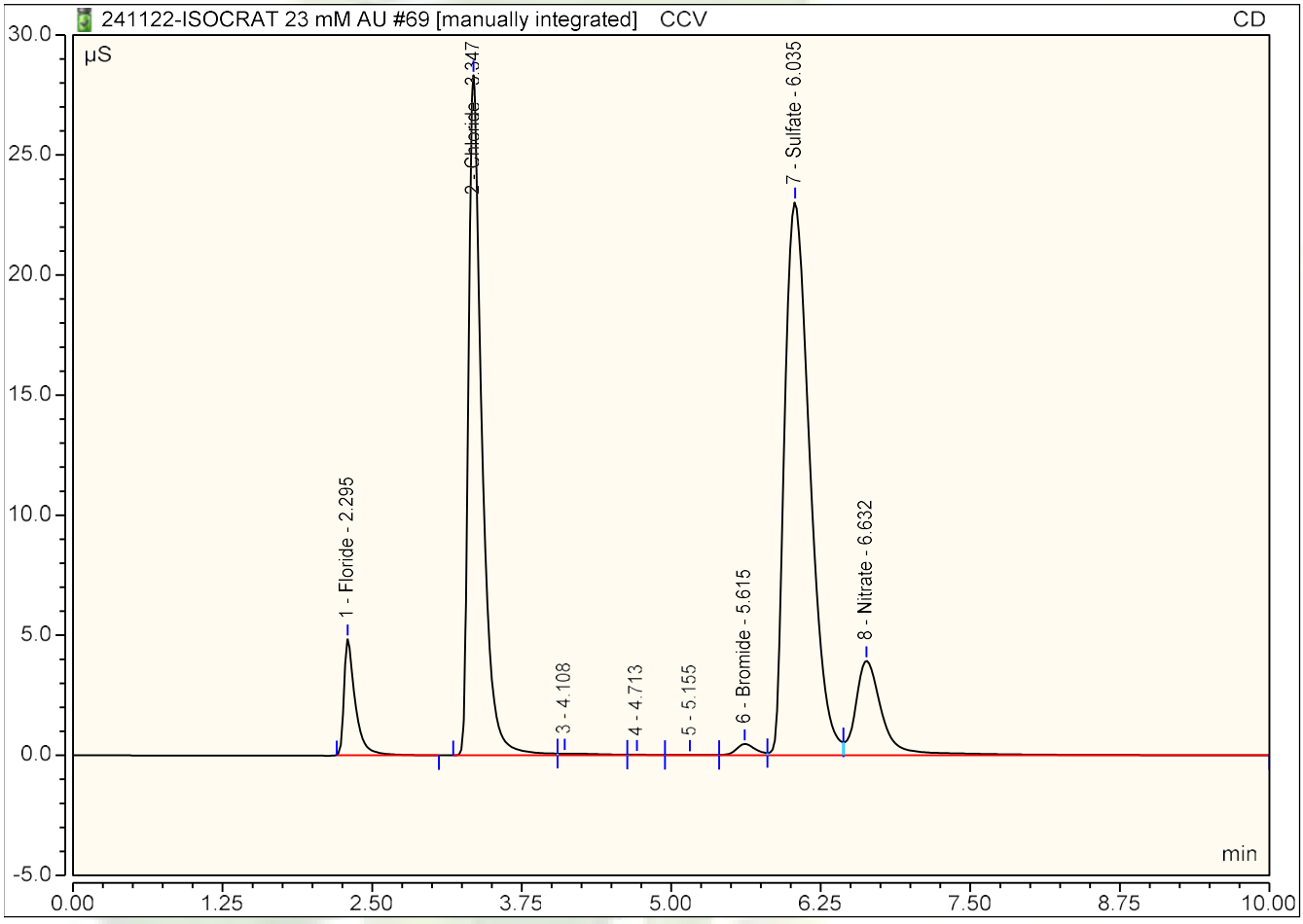


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Peak Integration Report

Sample Name:	**CCV**	*Inj. Vol.:*	**5000.00**
Injection Type:	**Check Standard**	*Dilution Factor:*	**1.0000**
Instrument Method:	**IC 3 method 23 mM**	*Operator:*	**Wetchem25**
Inj. Date / Time:	**23-Nov-2024 / 06:50**	*Run Time:*	**10.00**

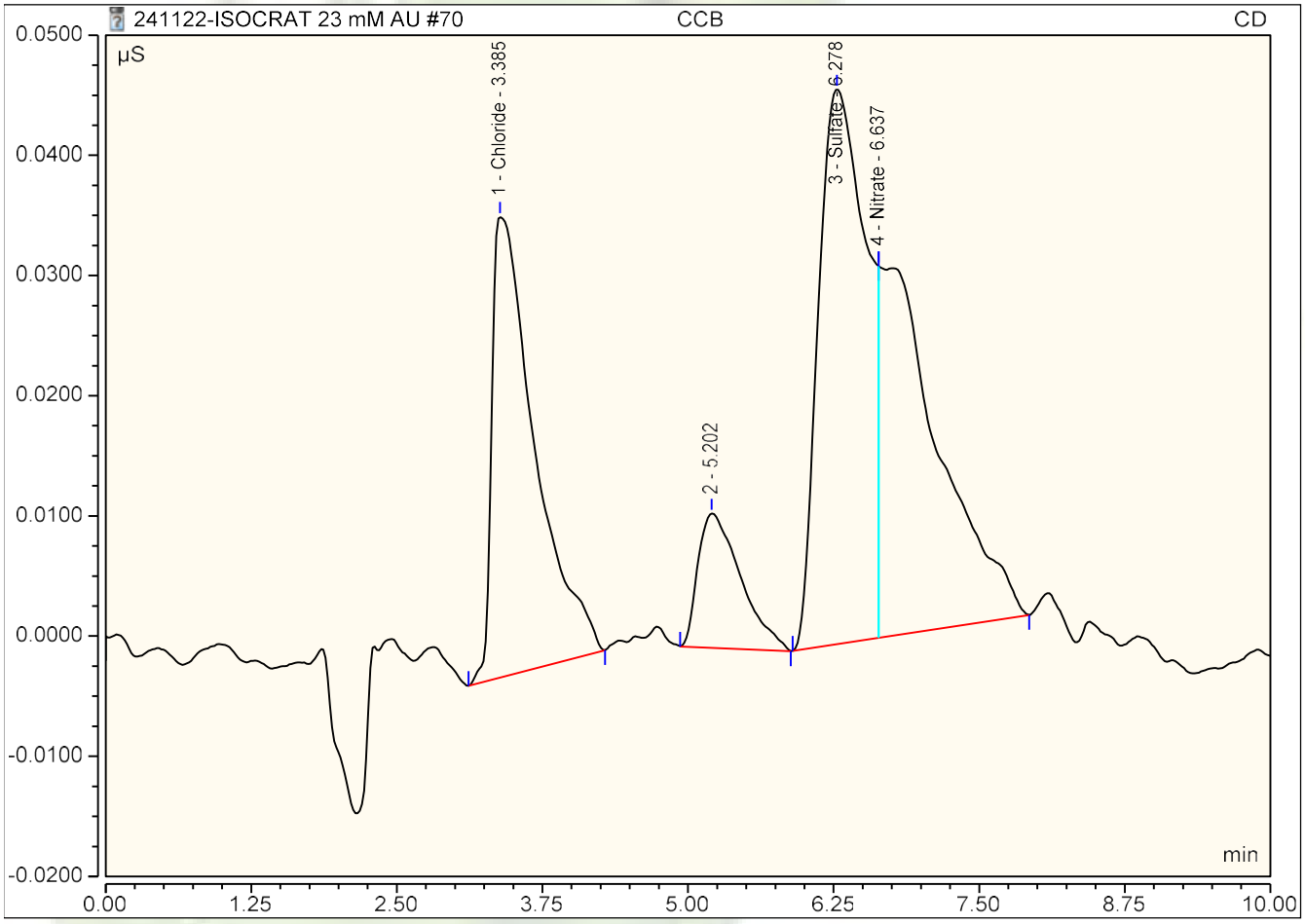
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	2.30	**Floride**	BMB	0.528	4.833	0.9194
2	3.35	**Chloride**	BM	3.701	28.317	10.0252
6	5.62	**Bromide**	M	0.087	0.472	0.7267
7	6.04	**Sulfate**	M *	5.587	23.031	20.5495
8	6.63	**Nitrate**	MB*	1.037	3.932	0.9146
TOTAL:				10.94	60.58	33.14



Peak Integration Report

Sample Name:	**CCB**	*Inj. Vol.:*	**5000.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**IC 3 method 23 mM**	*Operator:*	**Wetchem25**
Inj. Date / Time:	**23-Nov-2024 / 07:01**	*Run Time:*	**10.00**

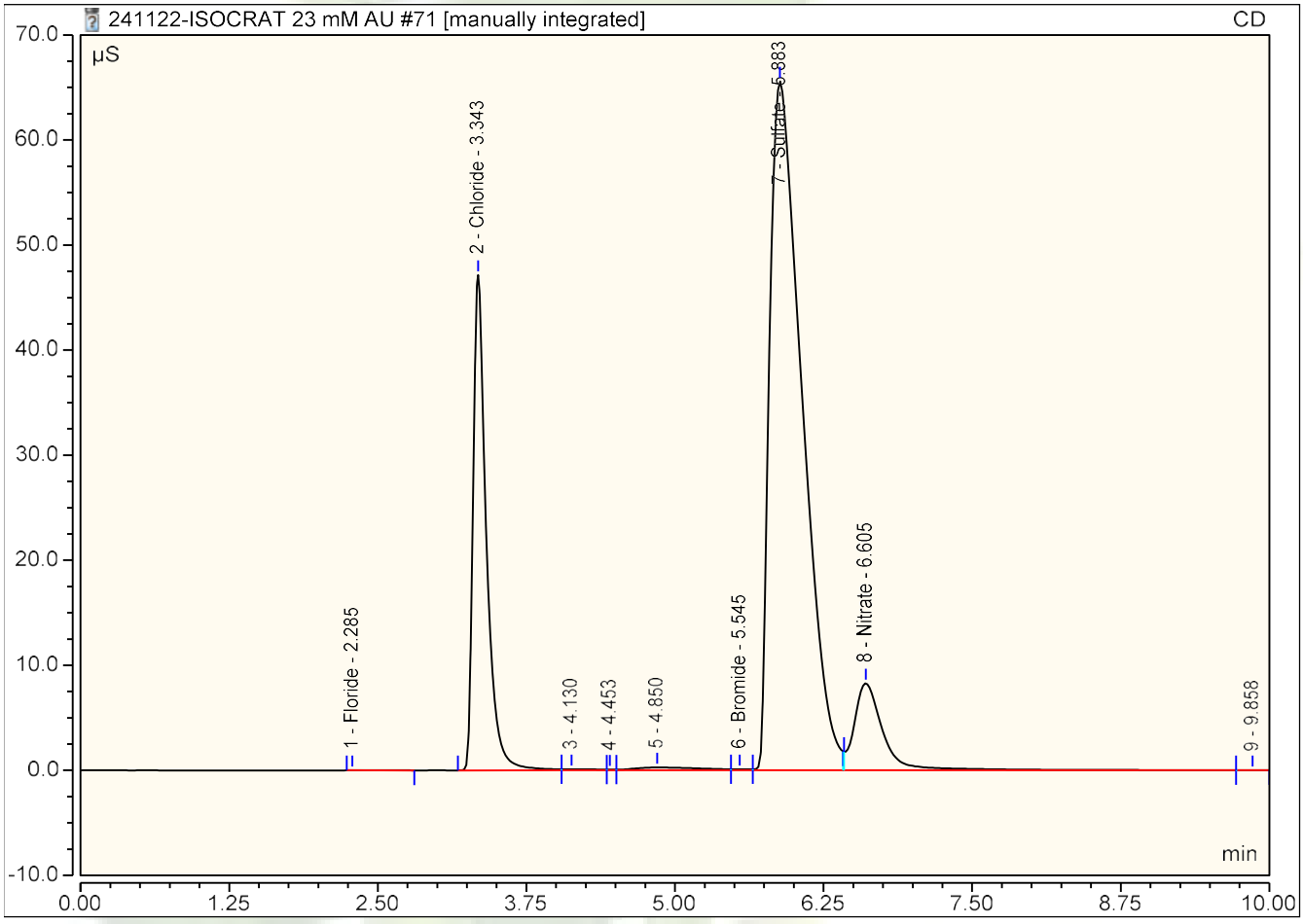
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	3.39	**Chloride**	BMB	0.016	0.038	0.1754
3	6.28	**Sulfate**	BM	0.022	0.046	0.3454
4	6.64	**Nitrate**	MB	0.018	0.031	0.0388
TOTAL:				0.06	0.12	0.56



Peak Integration Report

Sample Name:	**L2467934-07**	*Inj. Vol.:*	**5000.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**IC 3 method 23 mM**	*Operator:*	**Wetchem25**
Inj. Date / Time:	**23-Nov-2024 / 07:12**	*Run Time:*	**10.00**

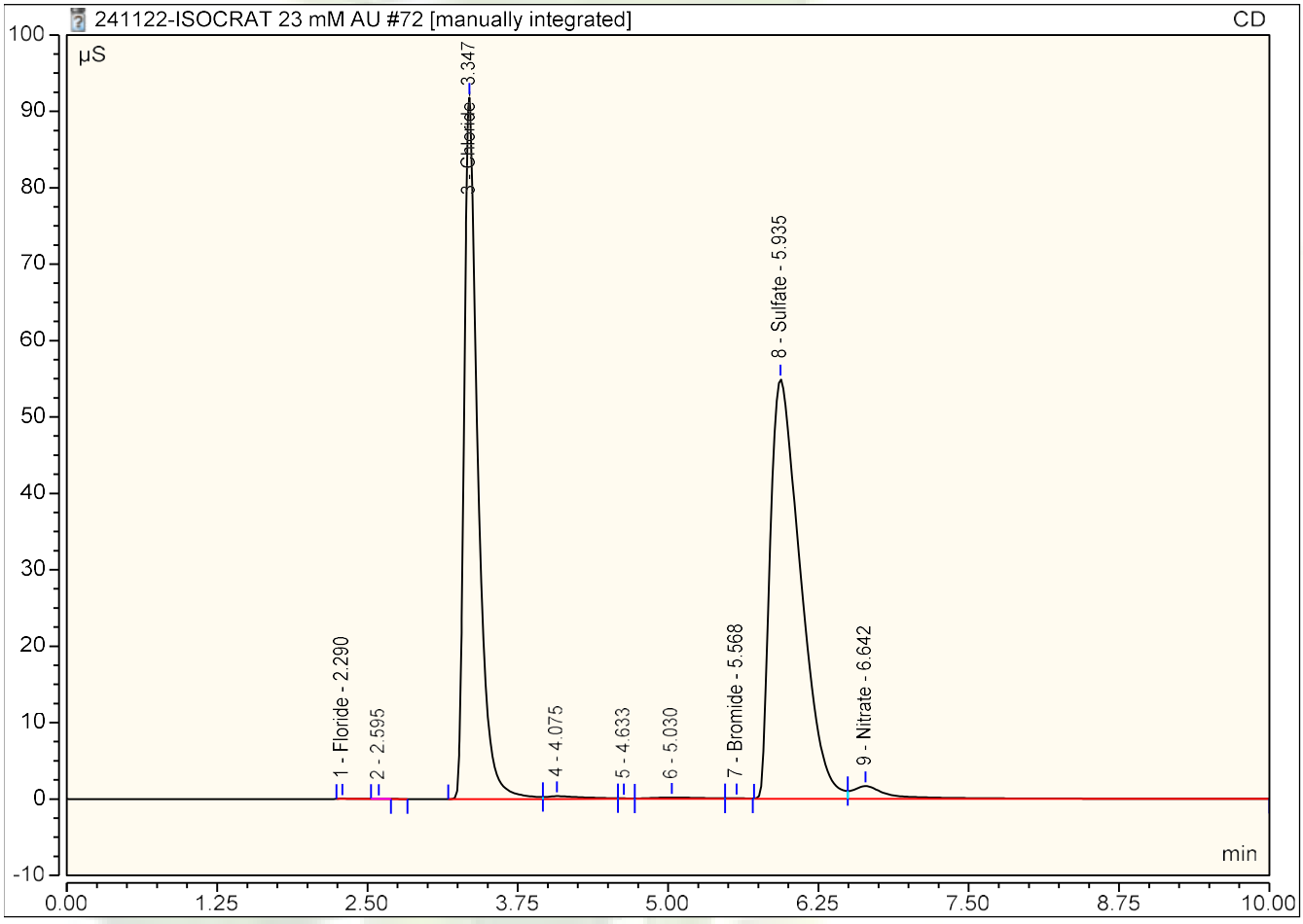
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	2.29	**Floride**	BMB	0.003	0.018	0.0220
2	3.34	**Chloride**	BM	6.091	47.146	16.4145
6	5.55	**Bromide**	M	0.018	0.106	0.1699
7	5.88	**Sulfate**	M *	20.702	65.569	75.4192
8	6.61	**Nitrate**	M *	2.321	8.267	2.0191
TOTAL:				29.14	121.11	94.04



Peak Integration Report

Sample Name:	**L2467934-08**	*Inj. Vol.:*	**5000.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**IC 3 method 23 mM**	*Operator:*	**Wetchem25**
Inj. Date / Time:	**23-Nov-2024 / 07:23**	*Run Time:*	**10.00**

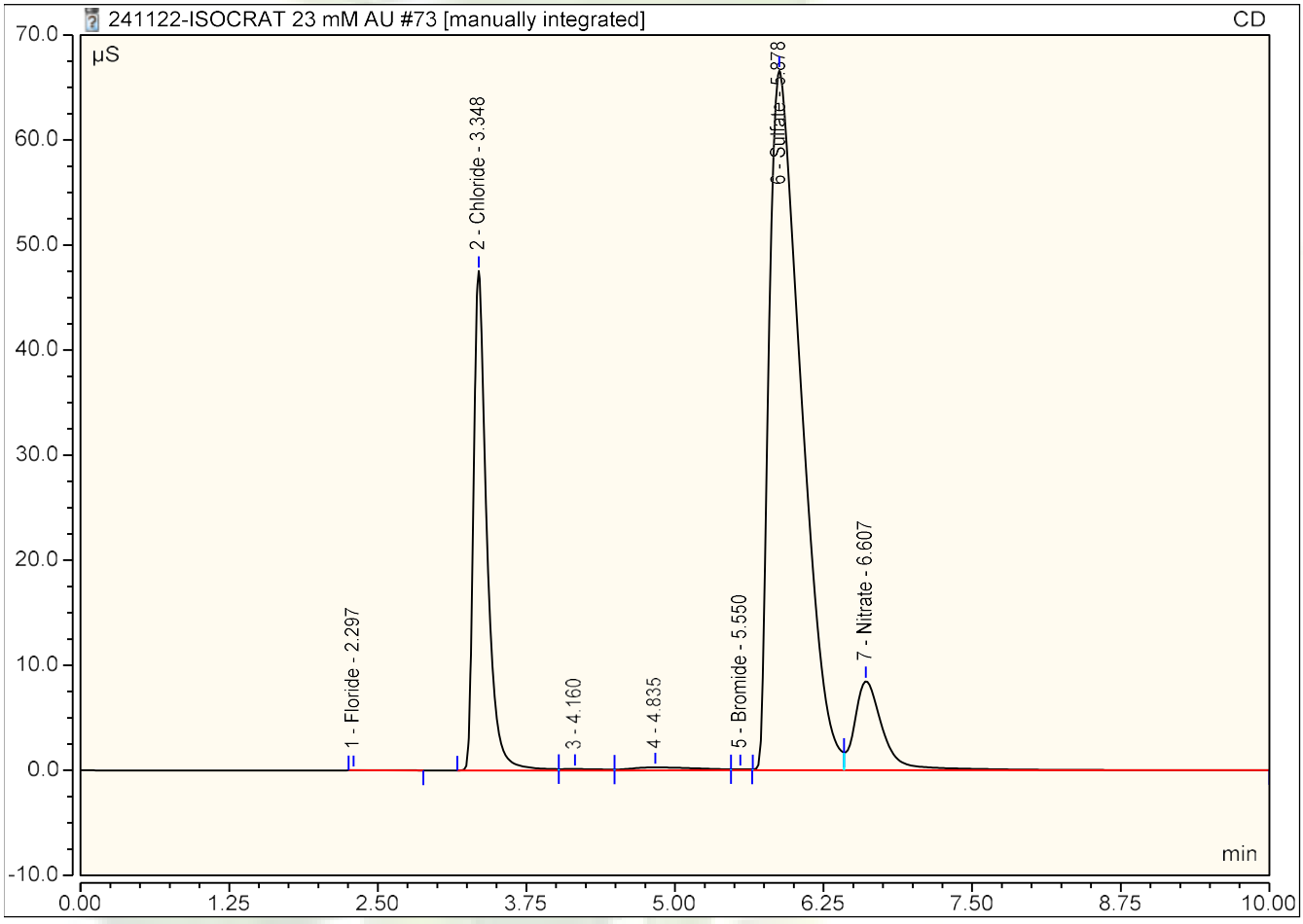
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	2.29	**Floride**	BMB	0.005	0.037	0.0252
3	3.35	**Chloride**	BM	12.288	91.781	32.9792
7	5.57	**Bromide**	M	0.018	0.089	0.1717
8	5.94	**Sulfate**	M *	16.042	54.924	58.5015
9	6.64	**Nitrate**	MB	0.659	1.681	0.5897
TOTAL:				29.01	148.51	92.27



Peak Integration Report

Sample Name:	**L2467934-09**	*Inj. Vol.:*	**5000.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**IC 3 method 23 mM**	*Operator:*	**Wetchem25**
Inj. Date / Time:	**23-Nov-2024 / 07:34**	*Run Time:*	**10.00**

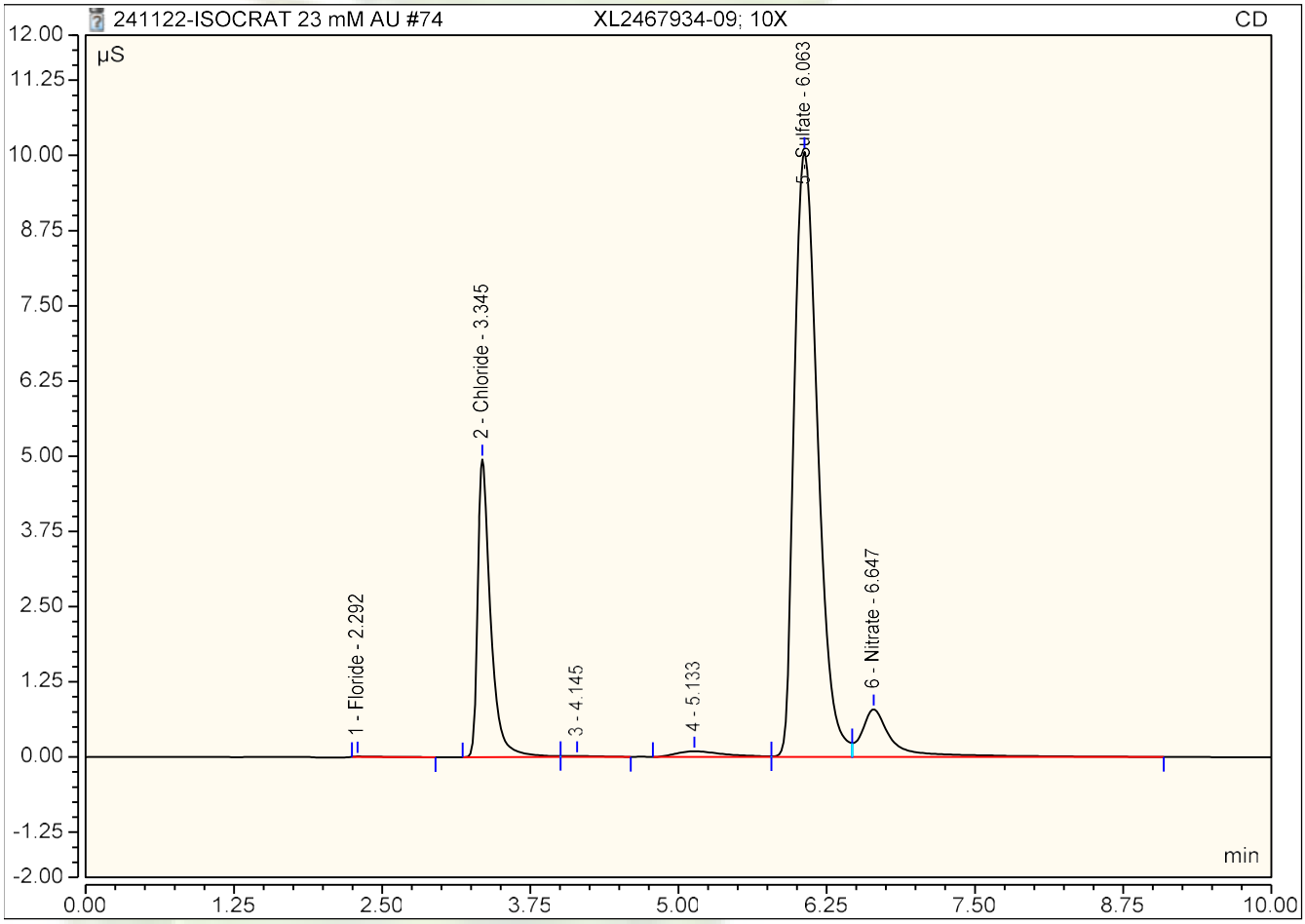
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	2.30	**Floride**	BMB	0.004	0.016	0.0223
2	3.35	**Chloride**	BM	6.178	47.527	16.6467
5	5.55	**Bromide**	M	0.018	0.107	0.1706
6	5.88	**Sulfate**	M *	20.796	66.590	75.7603
7	6.61	**Nitrate**	MB*	2.396	8.477	2.0839
TOTAL:				29.39	122.72	94.68



Peak Integration Report

Sample Name:	**XL2467934-09; 10X**	*Inj. Vol.:*	**5000.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**10.0000**
Instrument Method:	**IC 3 method 23 mM**	*Operator:*	**Wetchem25**
Inj. Date / Time:	**23-Nov-2024 / 07:45**	*Run Time:*	**10.00**

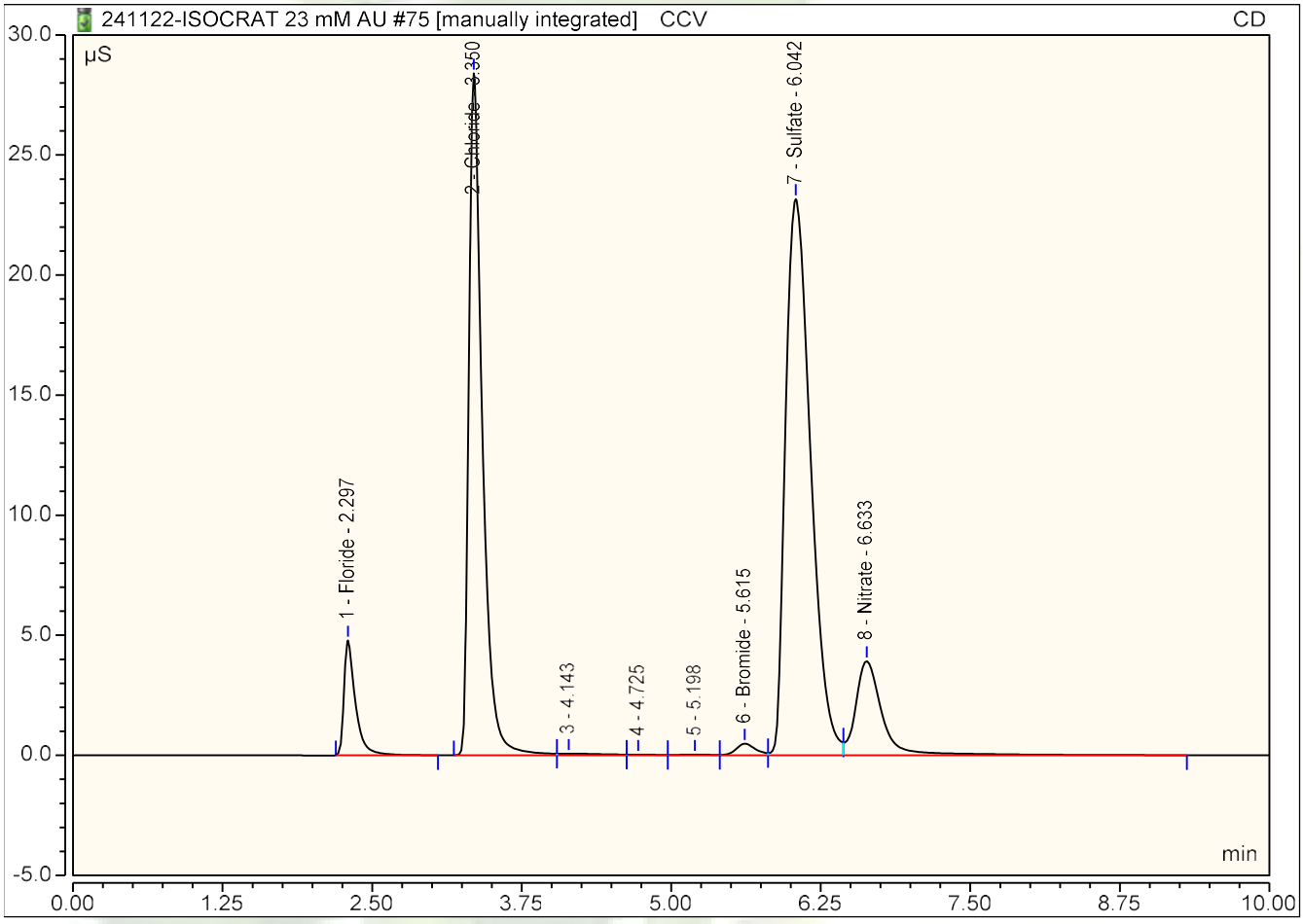
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	2.29	**Floride**	BMB	0.002	0.009	0.1992
2	3.35	**Chloride**	BM	0.623	4.951	17.9839
5	6.06	**Sulfate**	M	2.303	10.057	86.2717
6	6.65	**Nitrate**	MB	0.244	0.793	2.3306
TOTAL:				3.17	15.81	106.79



Peak Integration Report

Sample Name:	**CCV**	*Inj. Vol.:*	**5000.00**
Injection Type:	**Check Standard**	*Dilution Factor:*	**1.0000**
Instrument Method:	**IC 3 method 23 mM**	*Operator:*	**Wetchem25**
Inj. Date / Time:	**23-Nov-2024 / 07:56**	*Run Time:*	**10.00**

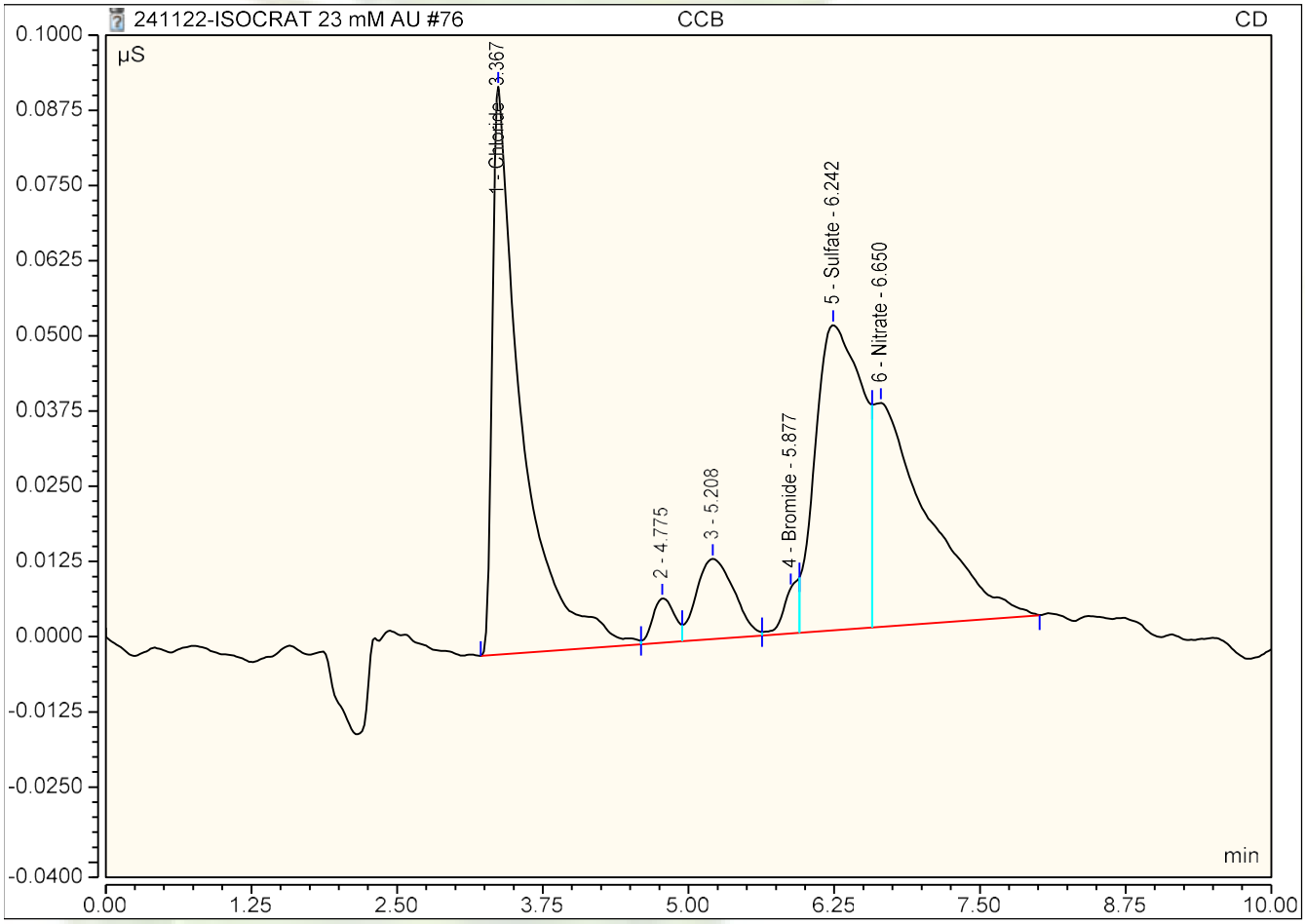
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	2.30	**Floride**	BMB	0.532	4.785	0.9265
2	3.35	**Chloride**	BM	3.726	28.394	10.0925
6	5.62	**Bromide**	M	0.088	0.482	0.7376
7	6.04	**Sulfate**	M *	5.588	23.164	20.5502
8	6.63	**Nitrate**	MB*	1.009	3.919	0.8910
TOTAL:				10.94	60.74	33.20



Peak Integration Report

Sample Name:	**CCB**	*Inj. Vol.:*	**5000.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**IC 3 method 23 mM**	*Operator:*	**Wetchem25**
Inj. Date / Time:	**23-Nov-2024 / 08:07**	*Run Time:*	**10.00**

No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	3.37	**Chloride**	BM	0.028	0.094	0.2057
4	5.88	**Bromide**	M	0.001	0.008	0.0322
5	6.24	**Sulfate**	M	0.024	0.051	0.3526
6	6.65	**Nitrate**	MB	0.020	0.037	0.0406
TOTAL:				0.07	0.19	0.63



Anion Summary Report

No.	Name	Dilution	Amount CD Floride	Amount CD Chloride	Amount CD Nitrate	Amount CD Sulfate	Amount CD Bromide	Inject Time	Comment
1	BLK	1.0	n.a.	0.1574	n.a.	0.3319	n.a.	19/Nov/2024 14:54	AU
2	STD 0.5	1.0	0.0393	0.3799	0.0442	0.6890	0.0622	19/Nov/2024 15:05	LOT#241014-0.5
3	STD 1.0	1.0	0.0416	0.3715	0.0466	0.7109	0.0659	19/Nov/2024 15:16	LOT#241004-1.0
4	STD 2.0	1.0	0.1737	1.9708	0.1779	3.9818	0.1747	19/Nov/2024 15:26	LOT#241014-2.0
5	STD 3.0	1.0	0.4761	4.9509	0.4774	9.9766	0.4314	19/Nov/2024 15:37	LOT#241014-3.0
6	STD 4.0	1.0	2.0412	19.8973	2.0041	39.7848	2.0188	19/Nov/2024 15:48	LOT#241014-4.0
7	STD 5.0	1.0	4.9870	50.0478	5.0014	100.0911	4.7244	19/Nov/2024 15:59	LOT#241014-5.0
8	RINSE	1.0	n.a.	0.1387	n.a.	0.3101	n.a.	22/Nov/2024 19:44	WG2001295-7-300-1
9	CCV	1.0	0.9772	10.3527	0.9131	20.8562	0.8632	22/Nov/2024 19:55	LOT#241120-C
10	CCB	1.0	n.a.	0.1914	0.0249	0.5642	n.a.	22/Nov/2024 20:06	AU
11	ICV	1.0	0.8239	8.2466	0.7353	8.2081	0.7413	22/Nov/2024 20:17	LOT#241120-I
12	ICB	1.0	0.0165	0.2110	0.0266	0.4400	n.a.	22/Nov/2024 20:28	AU
13	BLK	1.0	0.0164	0.1473	0.0234	0.3140	n.a.	22/Nov/2024 20:38	AU
14	LCS	1.0	0.8128	8.1836	0.7362	8.1636	0.7442	22/Nov/2024 20:49	LOT#241120-I
15	L2467953-01 CL	1.0	0.0376	26.4466	0.6268	8.8275	0.1650	22/Nov/2024 21:00	AU
16	L2468411-01 CL SO4	1.0	0.0334	2.8161	0.2636	7.6010	n.a.	22/Nov/2024 21:11	AU
17	L2468411-02	1.0	0.0270	14.0577	0.0491	0.6780	0.2786	22/Nov/2024 21:22	AU
18	L2468411-03	1.0	0.0396	58.2126	1.0304	6.3074	0.2442	22/Nov/2024 21:33	AU
19	L2468411-04	1.0	0.0644	13.9633	0.0948	4.8775	0.1225	22/Nov/2024 21:44	AU
20	XL2468411-04; 10X	10.0	0.2120	15.3195	0.3112	6.9477	n.a.	22/Nov/2024 21:55	AU
21	CCV	1.0	0.9725	10.2305	0.9283	20.8462	0.8915	22/Nov/2024 22:06	LOT#241120-C
22	CCB	1.0	n.a.	0.1861	0.0235	0.5190	n.a.	22/Nov/2024 22:17	AU
23	L2468443-01; 50X CL	50.0	1.3151	1870.6272	n.a.	108.7068	21.2717	22/Nov/2024 22:28	AU
24	L2468443-02; 50X	50.0	1.7514	1813.9901	4.1479	118.1676	24.3411	22/Nov/2024 22:39	AU
25	L2467837-05 MS F	1.0	0.5250	29.2095	0.7966	33.5551	0.6198	22/Nov/2024 22:50	AU
26	L2467837-05 MSD	1.0	0.5291	29.2905	0.8160	33.7835	0.5998	22/Nov/2024 23:00	AU
27	L2467837-05	1.0	0.1071	26.1925	0.4699	26.3549	0.2703	22/Nov/2024 23:11	AU
28	L2467837-01	1.0	0.0737	21.2745	0.2217	22.2707	0.1409	22/Nov/2024 23:22	AU
29	L2467837-02	1.0	0.0720	21.8172	0.2262	22.5420	0.1374	22/Nov/2024 23:33	AU
30	L2467837-03	1.0	0.0667	22.0691	0.2230	22.3843	0.1529	22/Nov/2024 23:44	AU
31	L2467837-04	1.0	0.0723	21.9243	0.2251	22.5847	0.1518	22/Nov/2024 23:55	AU
32	XL2467837-04; 10X	10.0	0.2115	23.9571	0.6301	25.1047	n.a.	23/Nov/2024 00:06	AU
33	CCV	1.0	0.9651	10.1216	0.9302	20.7087	0.8718	23/Nov/2024 00:17	LOT#241120-C
34	CCB	1.0	0.0182	0.1874	0.0392	0.3452	n.a.	23/Nov/2024 00:28	AU
35	L2467837-06	1.0	0.0781	21.1288	0.2020	22.0730	0.1170	23/Nov/2024 00:39	AU

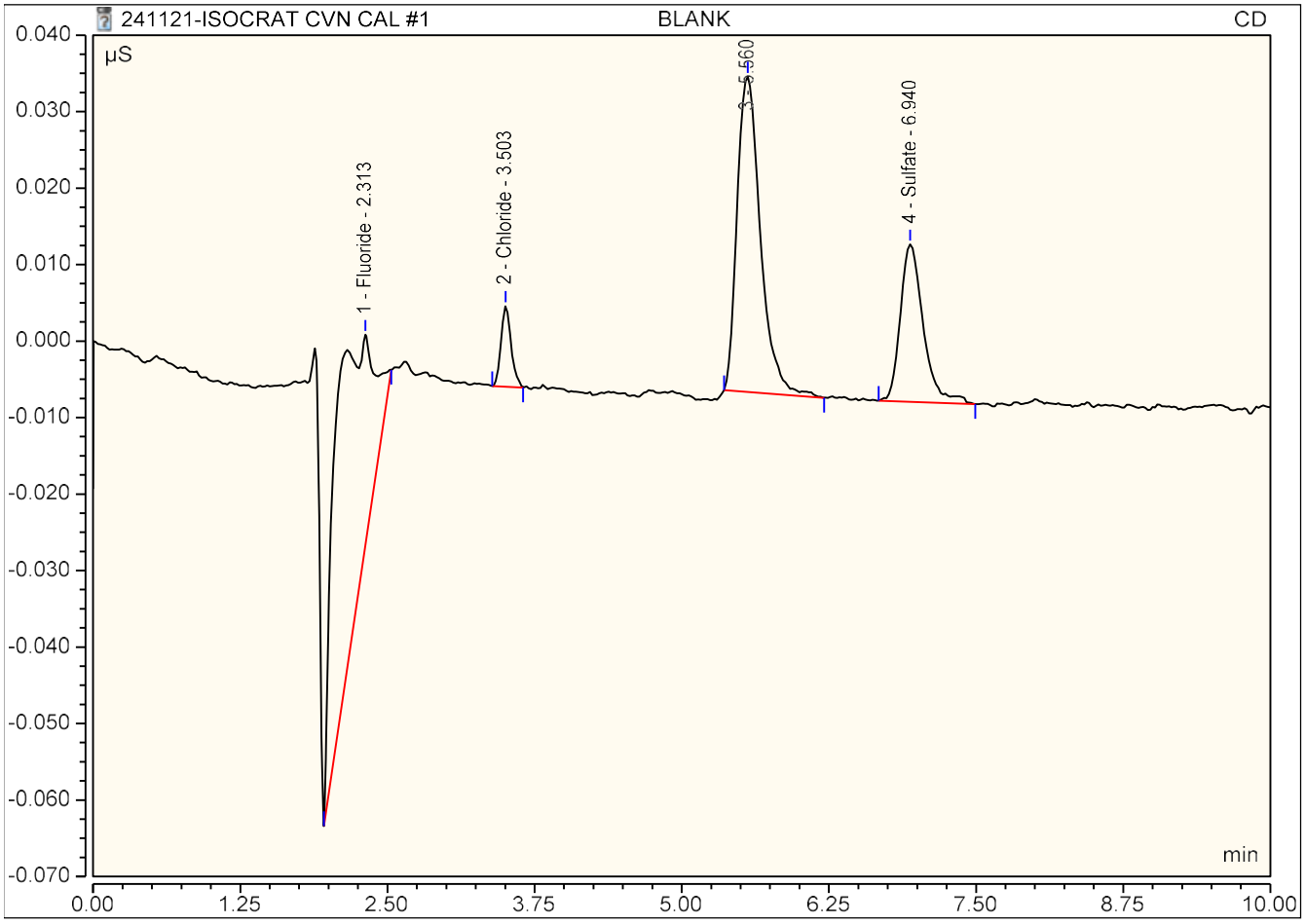
36	L2467837-07	1.0	0.0699	26.4047	0.6213	74.4734	0.1294	23/Nov/2024 00:50	AU
37	L2468194-01 MS F	1.0	0.3788	27.1568	1.1011	60.6536	0.4186	23/Nov/2024 01:01	AU
38	L2468194-01 DUP	1.0	0.0213	23.8968	0.6880	54.0739	0.1053	23/Nov/2024 01:12	AU
39	L2468194-01	1.0	0.0212	23.8043	0.6816	54.0201	0.1089	23/Nov/2024 01:22	AU
40	L2468194-02	1.0	0.5203	40.1480	n.a.	252.1343	n.a.	23/Nov/2024 01:33	AU
41	L2468194-03	1.0	0.4301	118.9930	n.a.	992.9077	n.a.	23/Nov/2024 01:44	AU
42	L2468194-04	1.0	0.0203	167.7560	n.a.	0.2659	156.5538	23/Nov/2024 01:55	AU
43	L2468194-05	1.0	0.1304	27.9950	1.6587	39.4484	0.0569	23/Nov/2024 02:06	AU
44	XL2468194-05; 10X	10.0	0.6209	30.3800	2.5071	176.8248	0.3382	23/Nov/2024 02:17	AU
45	CCV	1.0	1.0000	10.1273	1.0353	20.8136	0.8737	23/Nov/2024 02:28	LOT#241120-C
46	CCB	1.0	0.0418	0.2293	0.0769	0.4373	n.a.	23/Nov/2024 02:39	AU
47	L2468194-06	1.0	0.0654	22.8208	n.a.	728.1428	n.a.	23/Nov/2024 02:50	AU
48	XL2468194-06; 10X	10.0	0.3001	25.7143	n.a.	845.1589	0.3109	23/Nov/2024 03:01	AU
49	L2468443-02 MS; 5X F SO4	5.0	3.8541	1859.5474	5.0851	162.9391	23.1096	23/Nov/2024 03:12	AU
50	L2468443-02 DUP; 5X	5.0	1.7808	1883.8112	2.2018	121.5486	22.6878	23/Nov/2024 03:22	AU
51	L2468443-02; 5X	5.0	2.4256	1902.2346	2.3137	122.6775	23.4856	23/Nov/2024 03:33	AU
52	L2468443-01; 5X	5.0	2.5856	1913.3419	n.a.	109.2575	20.6676	23/Nov/2024 03:44	AU
53	RINSE	1.0	0.1392	1.3274	n.a.	0.7645	n.a.	23/Nov/2024 03:55	AU
54	L2468443-02 MS; 50X CL	50.0	24.6402	2016.6177	18.1044	527.4461	38.9876	23/Nov/2024 04:06	AU
55	L2468443-02 DUP; 50X	50.0	0.9179	1802.1551	2.5434	112.9325	22.8979	23/Nov/2024 04:17	AU
56	L2468411-03; 10X CL	10.0	0.3208	61.0347	0.9291	7.3445	n.a.	23/Nov/2024 04:28	AU
57	CCV	1.0	0.9288	9.9434	0.8948	20.2434	0.6950	23/Nov/2024 04:39	LOT#241120-C
58	CCB	1.0	n.a.	0.1941	n.a.	0.4186	n.a.	23/Nov/2024 04:50	AU
59	BLK-2	1.0	n.a.	0.1407	n.a.	0.2767	n.a.	23/Nov/2024 05:01	AU
60	LCS-2	1.0	0.7543	8.0404	0.6613	7.8341	0.5379	23/Nov/2024 05:12	LOT#241120-I
61	L2467934-01 F	1.0	0.1071	49.6180	n.a.	24.8623	0.2142	23/Nov/2024 05:23	AU
62	L2467934-03	1.0	0.0504	33.2446	4.0429	53.1602	243.4109	23/Nov/2024 05:34	AU
63	L2467934-04	1.0	0.0204	135.6756	0.5891	10.5542	0.2157	23/Nov/2024 05:44	AU
64	L2467934-05	1.0	n.a.	8.9607	0.7041	2.9143	n.a.	23/Nov/2024 05:55	AU
65	L2467934-06	1.0	0.0293	76.9763	1.1985	0.2661	0.2305	23/Nov/2024 06:06	AU
66	L2467934-02 MS	1.0	0.3967	9.6668	0.8832	10.3854	0.4186	23/Nov/2024 06:17	AU
67	L2467934-02 DUP	1.0	0.0665	5.6221	0.6174	25.5153	n.a.	23/Nov/2024 06:28	AU
68	L2467934-02	1.0	0.0611	5.4988	0.6232	25.2501	0.0929	23/Nov/2024 06:39	AU
69	CCV	1.0	0.9194	10.0252	0.9146	20.5495	0.7267	23/Nov/2024 06:50	LOT#241120-C
70	CCB	1.0	n.a.	0.1754	0.0388	0.3454	n.a.	23/Nov/2024 07:01	AU
71	L2467934-07	1.0	0.0220	16.4145	2.0191	75.4192	0.1699	23/Nov/2024 07:12	AU
72	L2467934-08	1.0	0.0252	32.9792	0.5897	58.5015	0.1717	23/Nov/2024 07:23	AU
73	L2467934-09	1.0	0.0223	16.6467	2.0839	75.7603	0.1706	23/Nov/2024 07:34	AU
74	XL2467934-09; 10X	10.0	0.1992	17.9839	2.3306	86.2717	n.a.	23/Nov/2024 07:45	AU
75	CCV	1.0	0.9265	10.0925	0.8910	20.5502	0.7376	23/Nov/2024 07:56	LOT#241120-C
76	CCB	1.0	n.a.	0.2057	0.0406	0.3526	0.0322	23/Nov/2024 08:07	AU

	Sum:			16591.870	81.138	5713.303			0.000
	Average:			218.314	1.288	75.175			#DIV/0!
	Rel.Std.Dev:			263.745 %	189.809 %	235.262 %			#DIV/0!

Peak Integration Report

Sample Name:	**BLANK**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**21-Nov-2024 / 18:55**	*Run Time:*	**10.00**

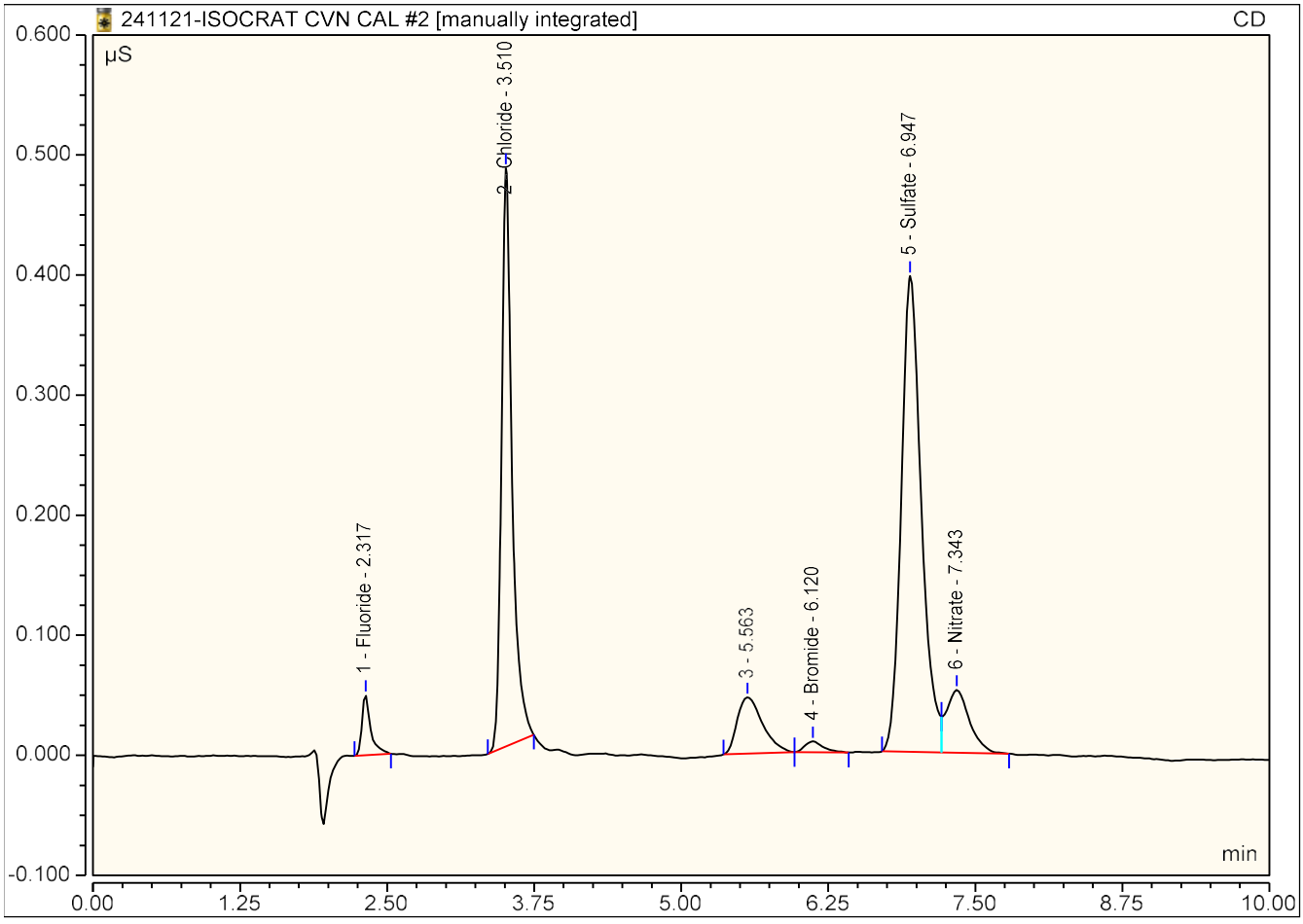
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	2.31	**Fluoride**	BMB	0.014	0.027	0.0727
2	3.50	**Chloride**	BMB	0.001	0.011	0.1832
4	6.94	**Sulfate**	BMB	0.005	0.021	0.3400
TOTAL:				0.02	0.06	0.60



Peak Integration Report

Sample Name:	**STD 0.5**	*Inj. Vol.:*	**25.00**
Injection Type:	**Calibration Standard**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**21-Nov-2024 / 19:07**	*Run Time:*	**10.00**

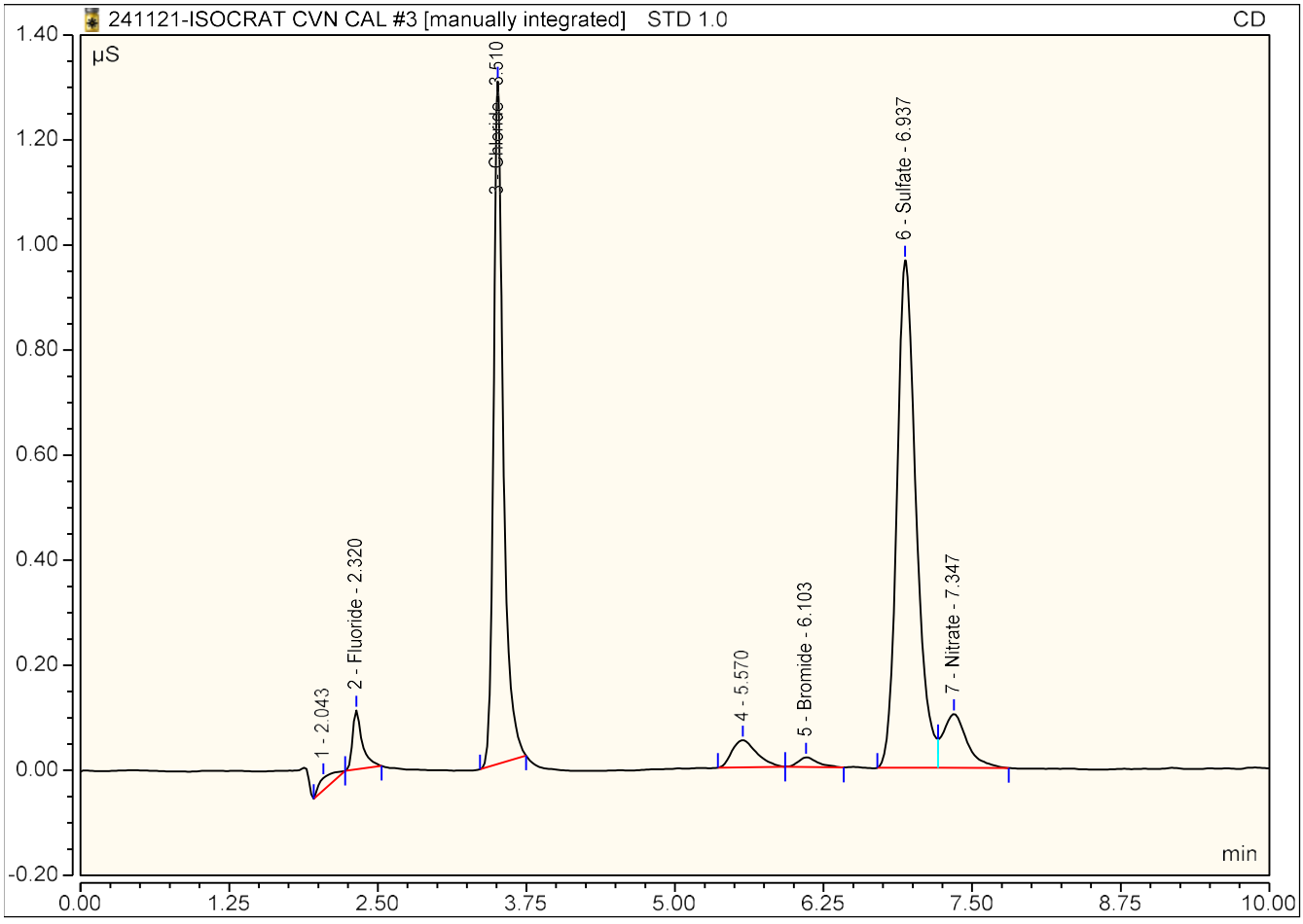
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	2.32	**Fluoride**	BMB	0.004	0.050	0.0532
2	3.51	**Chloride**	BMB	0.050	0.482	0.3078
4	6.12	**Bromide**	BMB	0.002	0.009	0.0685
5	6.95	**Sulfate**	BM *	0.078	0.396	0.5897
6	7.34	**Nitrate**	MB*	0.012	0.052	0.0644
TOTAL:				0.15	0.99	1.08



Peak Integration Report

Sample Name:	**STD 1.0**	*Inj. Vol.:*	**25.00**
Injection Type:	**Calibration Standard**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**21-Nov-2024 / 19:19**	*Run Time:*	**10.00**

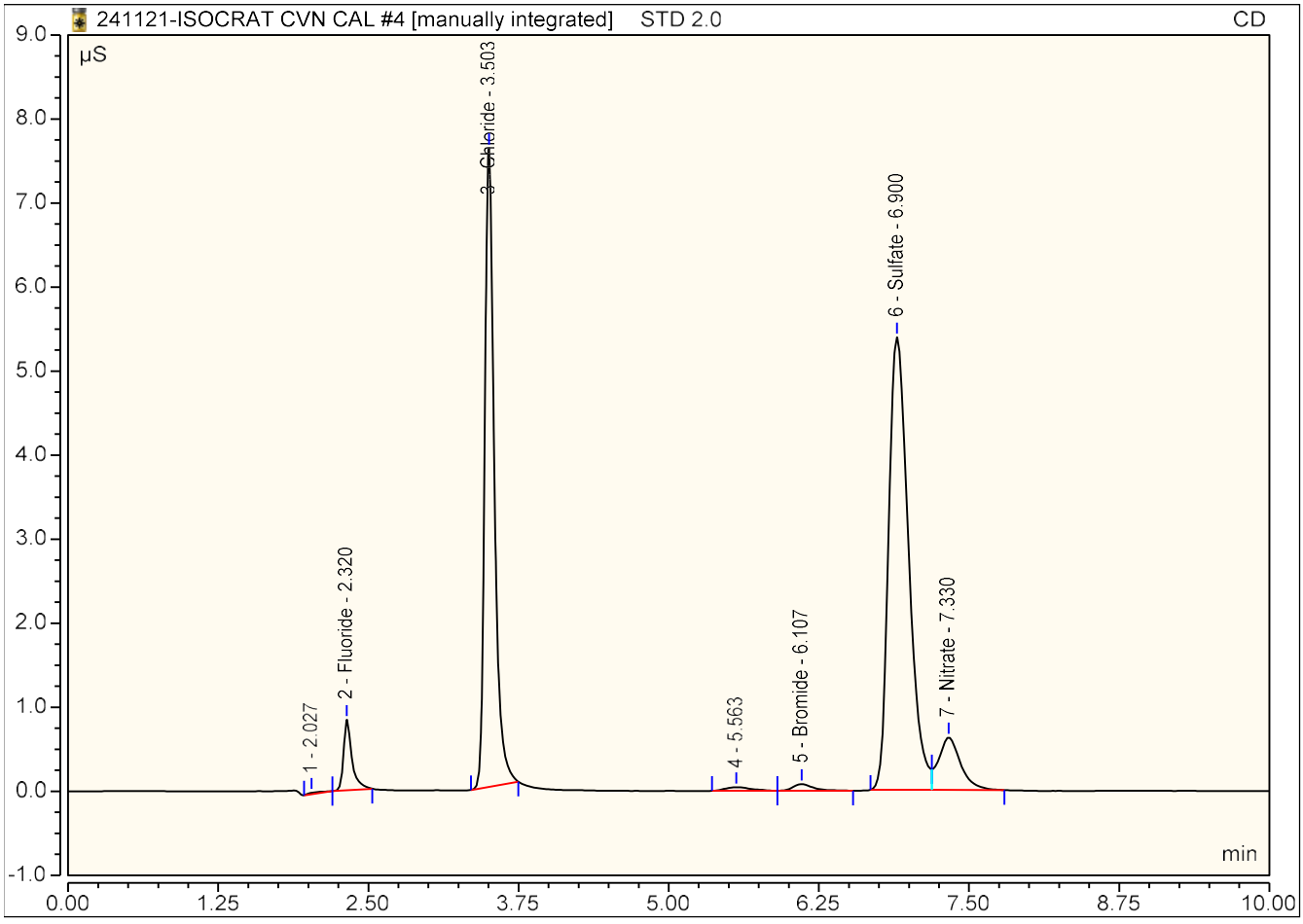
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.32	**Fluoride**	BMB	0.011	0.112	0.0653
3	3.51	**Chloride**	BMB	0.124	1.299	0.4943
5	6.10	**Bromide**	BMB	0.003	0.018	0.0847
6	6.94	**Sulfate**	BM *	0.181	0.966	0.9373
7	7.35	**Nitrate**	MB*	0.024	0.103	0.0753
TOTAL:				0.34	2.50	1.66



Peak Integration Report

Sample Name:	**STD 2.0**	*Inj. Vol.:*	**25.00**
Injection Type:	**Calibration Standard**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**21-Nov-2024 / 19:31**	*Run Time:*	**10.00**

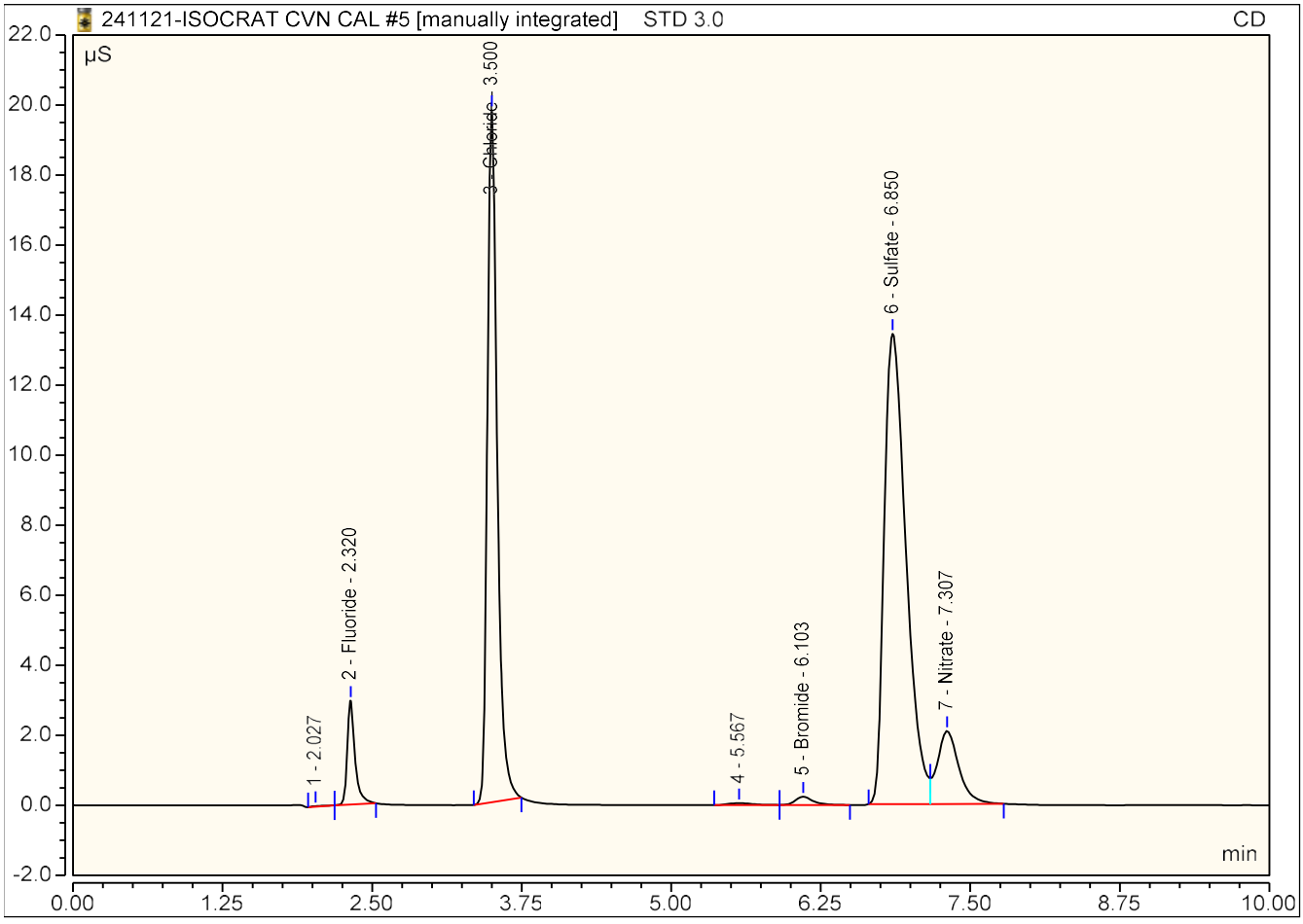
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.32	**Fluoride**	BMB	0.068	0.838	0.1753
3	3.50	**Chloride**	BMB	0.704	7.599	1.9633
5	6.11	**Bromide**	BMB	0.015	0.079	0.1863
6	6.90	**Sulfate**	BM *	1.036	5.386	3.8299
7	7.33	**Nitrate**	MB*	0.133	0.626	0.1738
TOTAL:				1.96	14.53	6.33



Peak Integration Report

Sample Name:	**STD 3.0**	*Inj. Vol.:*	**25.00**
Injection Type:	**Calibration Standard**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**21-Nov-2024 / 19:43**	*Run Time:*	**10.00**

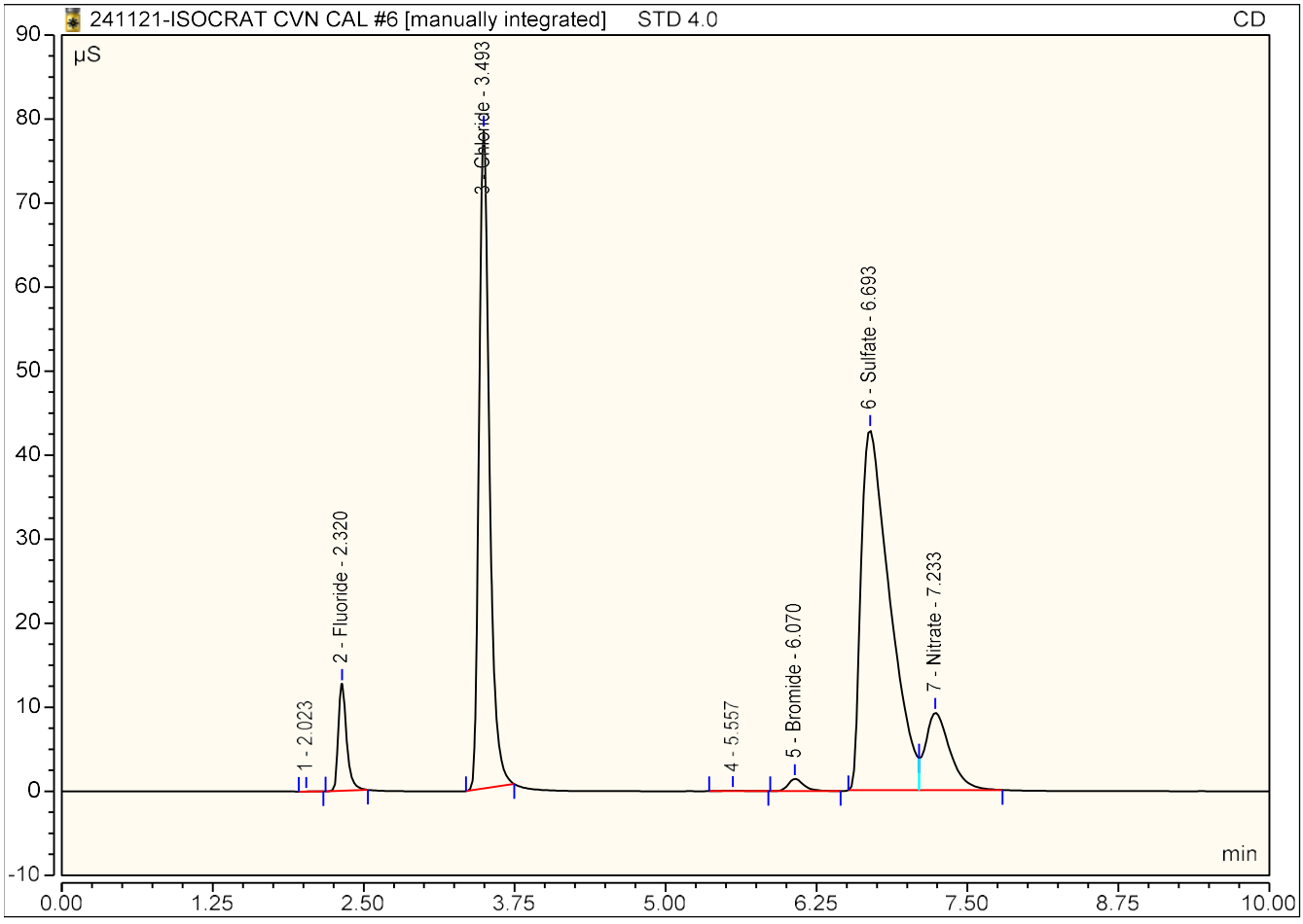
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.32	**Fluoride**	BMB	0.221	2.964	0.4709
3	3.50	**Chloride**	BMB	1.892	19.763	4.9693
5	6.10	**Bromide**	BMB	0.041	0.236	0.4141
6	6.85	**Sulfate**	BM *	2.852	13.428	9.9718
7	7.31	**Nitrate**	MB*	0.437	2.086	0.4468
TOTAL:				5.44	38.48	16.27



Peak Integration Report

Sample Name:	**STD 4.0**	*Inj. Vol.:*	**25.00**
Injection Type:	**Calibration Standard**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**21-Nov-2024 / 19:55**	*Run Time:*	**10.00**

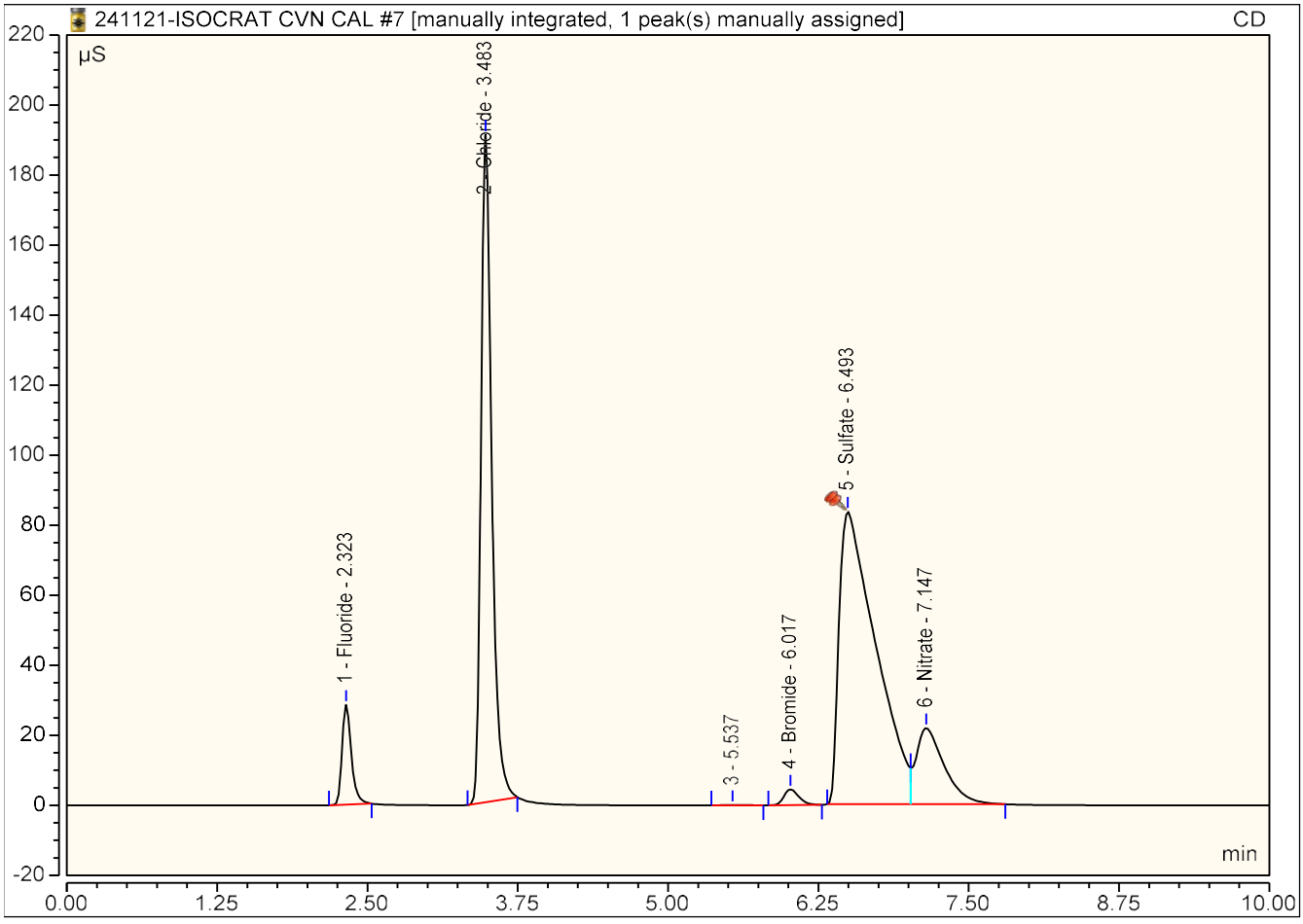
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.32	**Fluoride**	BMB	1.018	12.726	2.0112
3	3.49	**Chloride**	BMB	7.839	78.315	20.0184
5	6.07	**Bromide**	BMB	0.222	1.465	2.0214
6	6.69	**Sulfate**	BM *	11.807	42.893	40.2692
7	7.23	**Nitrate**	MB*	2.180	9.210	2.0148
TOTAL:				23.07	144.61	66.33



Peak Integration Report

Sample Name:	**STD 5.0**	*Inj. Vol.:*	**25.00**
Injection Type:	**Calibration Standard**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**21-Nov-2024 / 20:07**	*Run Time:*	**10.00**

No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	2.32	**Fluoride**	BMB	2.565	28.482	4.9991
2	3.48	**Chloride**	BMB	19.685	190.606	49.9970
4	6.02	**Bromide**	BMB	0.641	4.470	5.7249
5	6.49	**Sulfate**	BM *^	29.433	83.525	99.9021
6	7.15	**Nitrate**	MB*	5.922	21.720	5.3804
TOTAL:				58.25	328.80	166.00



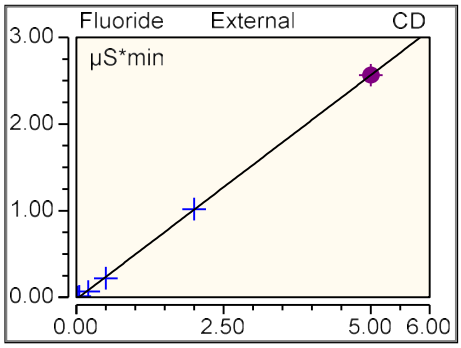
Calibration Batch Report

Sequence:	**241121-ISOCRAT CVN CAL**	*Injection Volume:*	**25.00**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**21-Nov-2024 / 20:07**	*Run Time:*	**10**

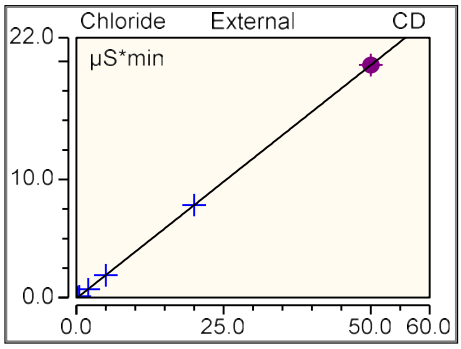
Calibration Summary

Peak Name	Eval.Type	Cal.Type	Points	Offset (C0)	Slope (C1)	Curve (C2)	Coeff.Det. %
Fluoride	Area	in, WithOffse	6.000	-0.023	0.518	0.000	99.9864
Chloride	Area	in, WithOffse	6.000	-0.071	0.395	0.000	99.9997
Bromide	Area	in, WithOffse	5.000	-0.006	0.113	0.000	99.5977
Sulfate	Area	in, WithOffse	6.000	-0.096	0.296	0.000	99.9984
Nitrate	Area	in, WithOffse	5.000	-0.060	1.112	0.000	99.7848
		AVERAGE:		-0.0512	0.4866	0.0000	99.8734

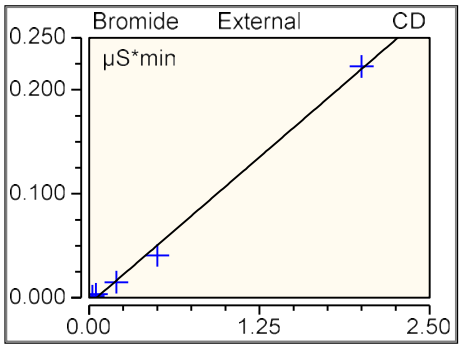
Injection Name	Ret.Time min CD	Area µS*min CD	Height µS CD	Amount CD
	Fluoride	Fluoride	Fluoride	Fluoride
STD 0.5	2.317	0.0043	0.050	0.053
STD 1.0	2.320	0.0106	0.112	0.065
STD 2.0	2.320	0.0676	0.838	0.175
STD 3.0	2.320	0.2206	2.964	0.471
STD 4.0	2.320	1.0179	12.726	2.011
STD 5.0	2.323	2.5645	28.482	4.999
Average	2.320			
Rel. Std. Dev.	0.091 %			



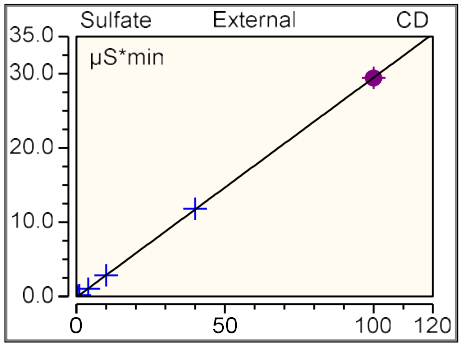
Injection Name	Ret.Time min CD	Area µS*min CD	Height µS CD	Amount CD
	Chloride	Chloride	Chloride	Chloride
STD 0.5	3.510	0.0503	0.482	0.308
STD 1.0	3.510	0.1240	1.299	0.494
STD 2.0	3.503	0.7045	7.599	1.963
STD 3.0	3.500	1.8923	19.763	4.969
STD 4.0	3.493	7.8390	78.315	20.018
STD 5.0	3.483	19.6851	190.606	49.997
Average	3.500			
Rel. Std. Dev.	0.295 %			



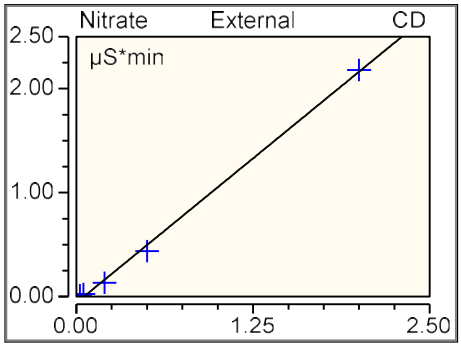
Injection Name	Ret.Time min CD	Area µS*min CD	Height µS CD	Amount CD
	Bromide	Bromide	Bromide	Bromide
STD 0.5	6.120	0.0017	0.009	0.069
STD 1.0	6.103	0.0035	0.018	0.085
STD 2.0	6.107	0.0150	0.079	0.186
STD 3.0	6.103	0.0407	0.236	0.414
STD 4.0	6.070	0.2225	1.465	2.021
STD 5.0	6.017	0.6412	4.470	5.725
Average	6.087			
Rel. Std. Dev.	0.625 %			



Injection Name	Ret.Time min CD	Area µS*min CD	Height µS CD	Amount CD
	Sulfate	Sulfate	Sulfate	Sulfate
STD 0.5	6.947	0.0785	0.396	0.590
STD 1.0	6.937	0.1812	0.966	0.937
STD 2.0	6.900	1.0362	5.386	3.830
STD 3.0	6.850	2.8516	13.428	9.972
STD 4.0	6.693	11.8069	42.893	40.269
STD 5.0	6.493	29.4332	83.525	99.902
Average	6.803			
Rel. Std. Dev.	2.613 %			



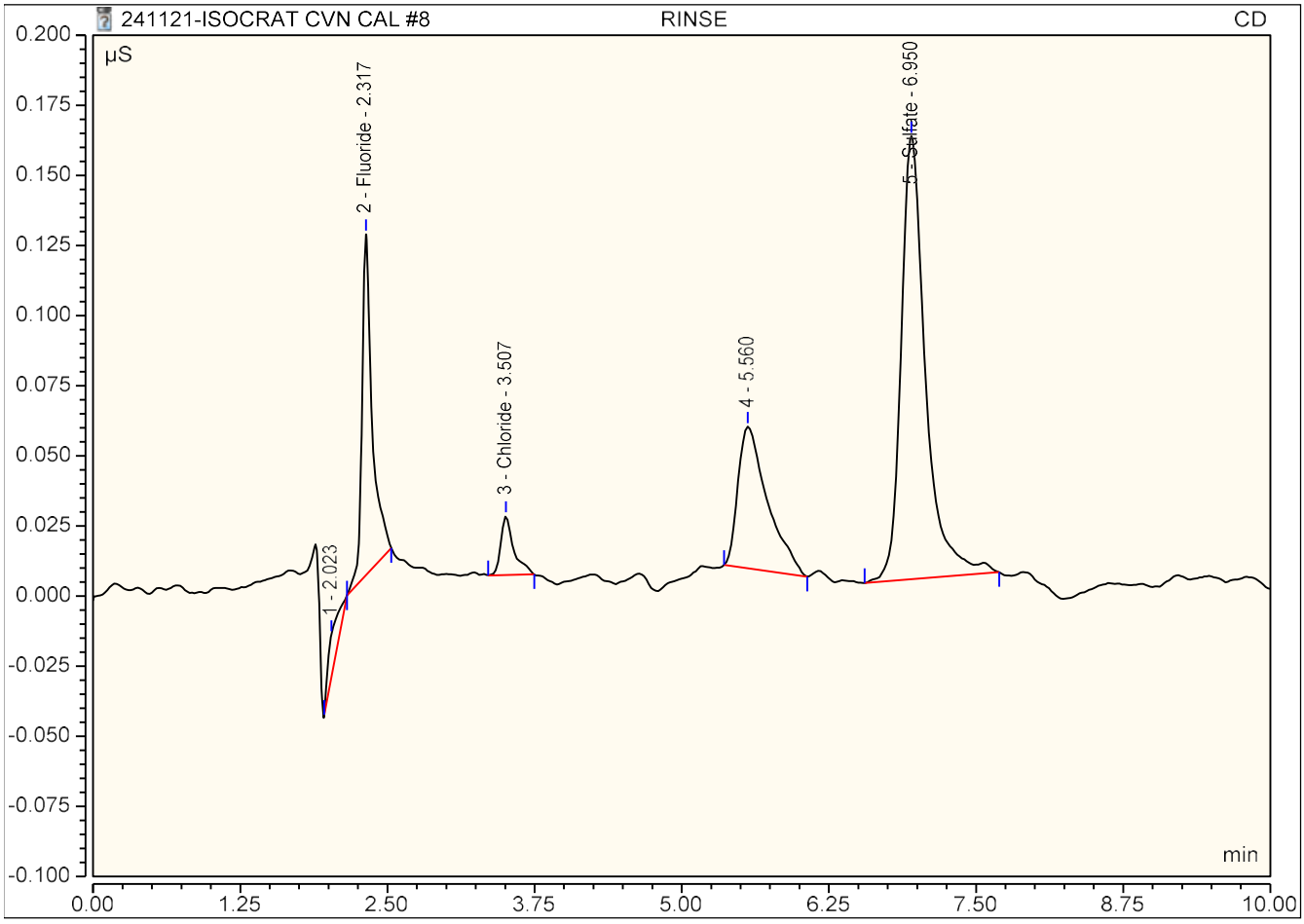
Injection Name	Ret.Time min CD	Area µS*min CD	Height µS CD	Amount CD
	Nitrate	Nitrate	Nitrate	Nitrate
STD 0.5	7.343	0.0119	0.052	0.064
STD 1.0	7.347	0.0240	0.103	0.075
STD 2.0	7.330	0.1335	0.626	0.174
STD 3.0	7.307	0.4370	2.086	0.447
STD 4.0	7.233	2.1802	9.210	2.015
STD 5.0	7.147	5.9217	21.720	5.380
Average	7.284			
Rel. Std. Dev.	1.090 %			



Peak Integration Report

Sample Name:	**RINSE**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**21-Nov-2024 / 20:19**	*Run Time:*	**10.00**

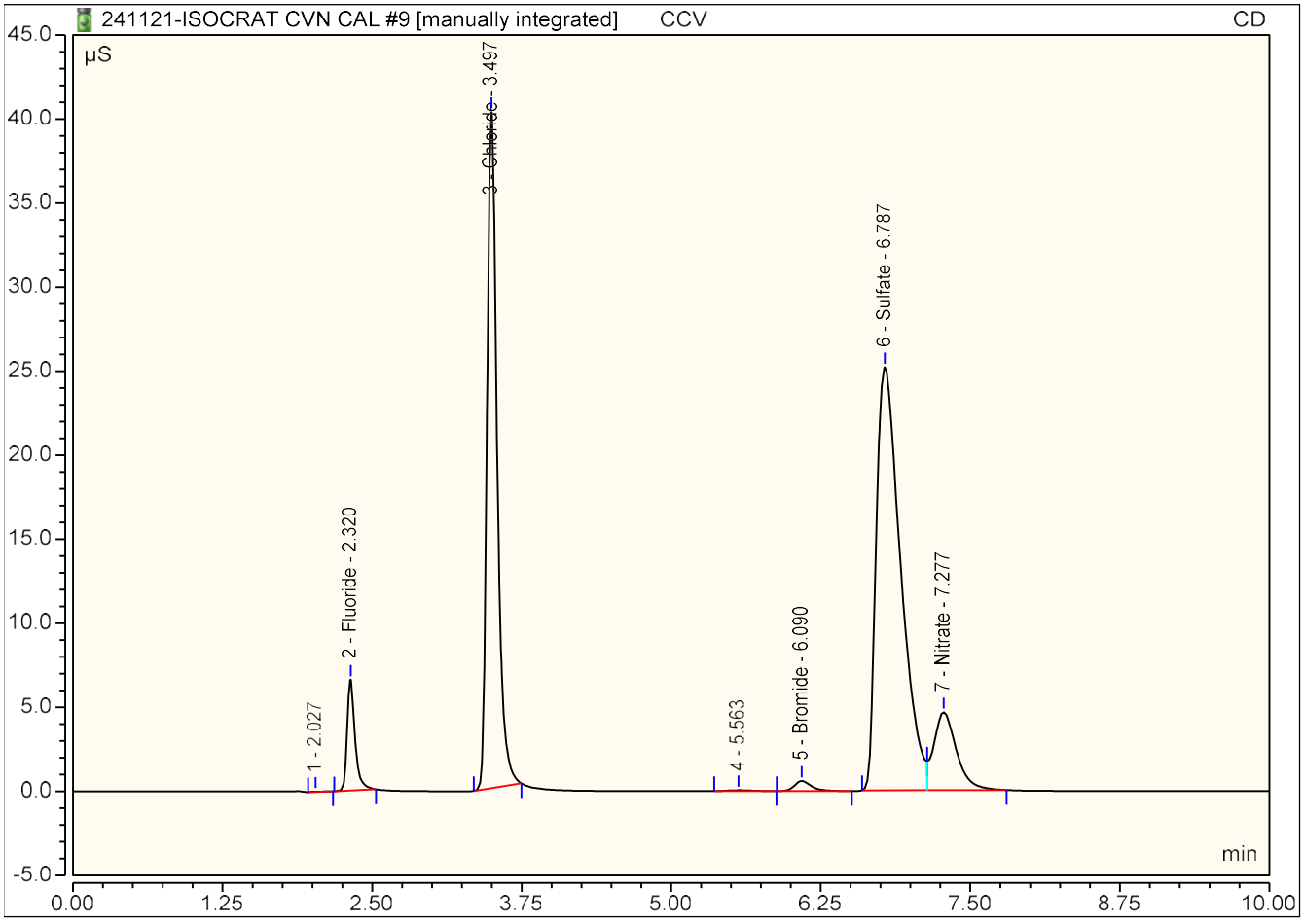
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.32	**Fluoride**	BMB	0.012	0.122	0.0684
3	3.51	**Chloride**	BMB	0.003	0.021	0.1873
5	6.95	**Sulfate**	BMB	0.038	0.158	0.4533
TOTAL:				0.05	0.30	0.71



Peak Integration Report

Sample Name:	**CCV**	*Inj. Vol.:*	**25.00**
Injection Type:	**Check Standard**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**21-Nov-2024 / 20:32**	*Run Time:*	**10.00**

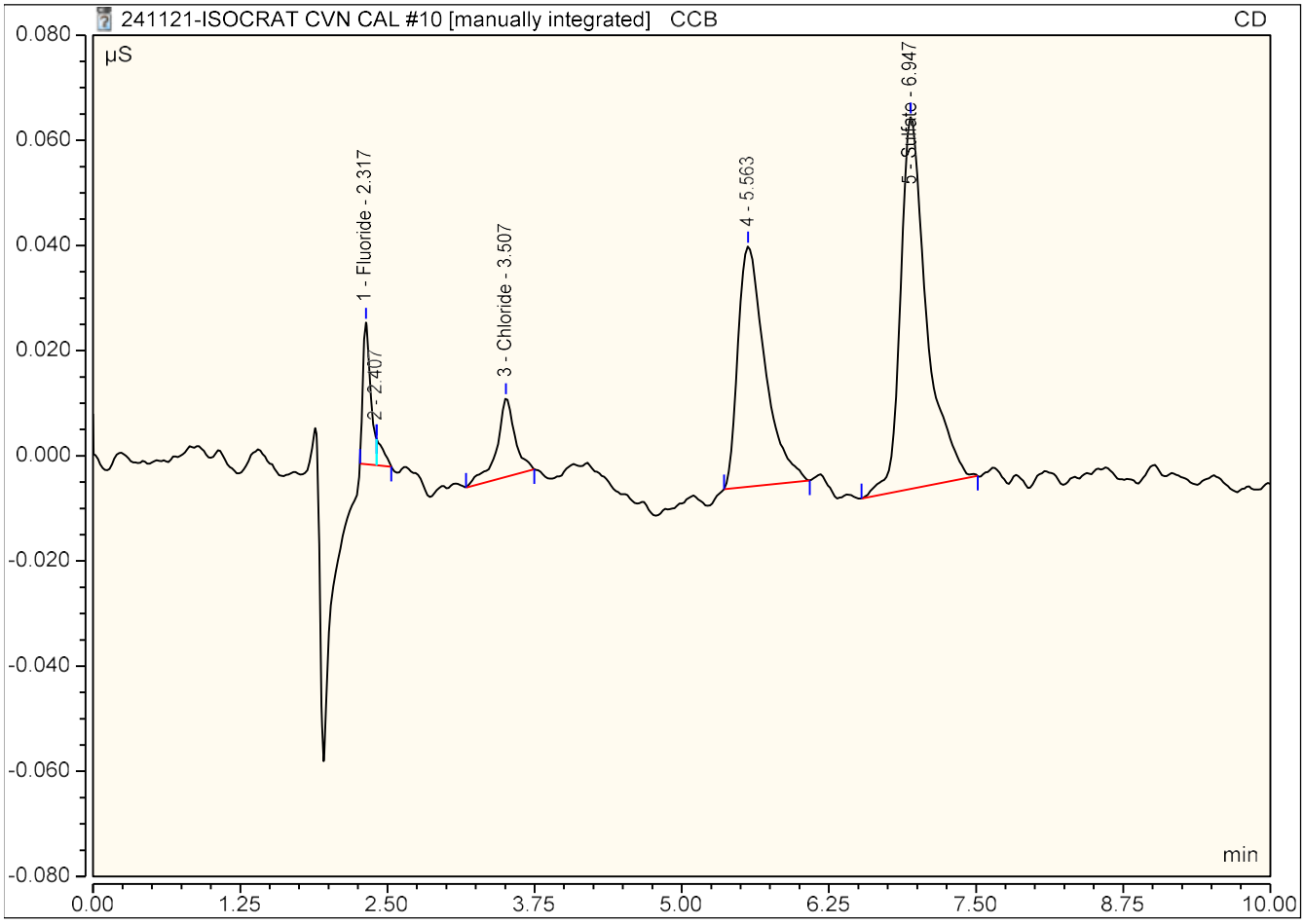
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.32	**Fluoride**	BMB	0.504	6.592	1.0178
3	3.50	**Chloride**	BMB	3.943	40.231	10.1595
5	6.09	**Bromide**	BMB	0.100	0.606	0.9368
6	6.79	**Sulfate**	BM *	5.967	25.165	20.5120
7	7.28	**Nitrate**	MB*	1.023	4.633	0.9735
TOTAL:				11.54	77.23	33.60



Peak Integration Report

Sample Name:	**CCB**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**21-Nov-2024 / 20:44**	*Run Time:*	**10.00**

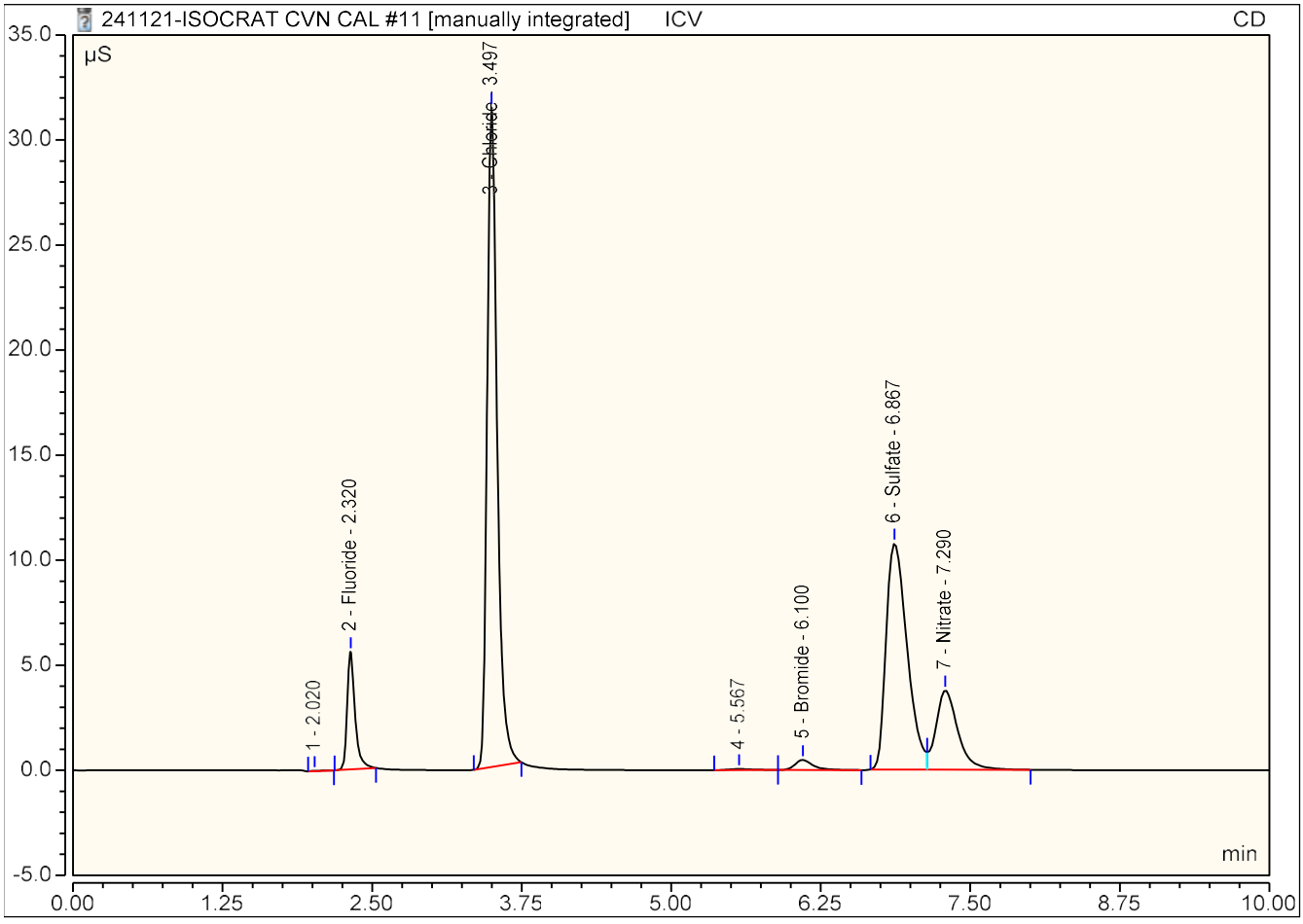
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	2.32	**Fluoride**	BM *	0.002	0.027	0.0487
3	3.51	**Chloride**	BMB	0.003	0.015	0.1874
5	6.95	**Sulfate**	BMB	0.018	0.071	0.3860
TOTAL:				0.02	0.11	0.62



Peak Integration Report

Sample Name:	**ICV**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**21-Nov-2024 / 20:56**	*Run Time:*	**10.00**

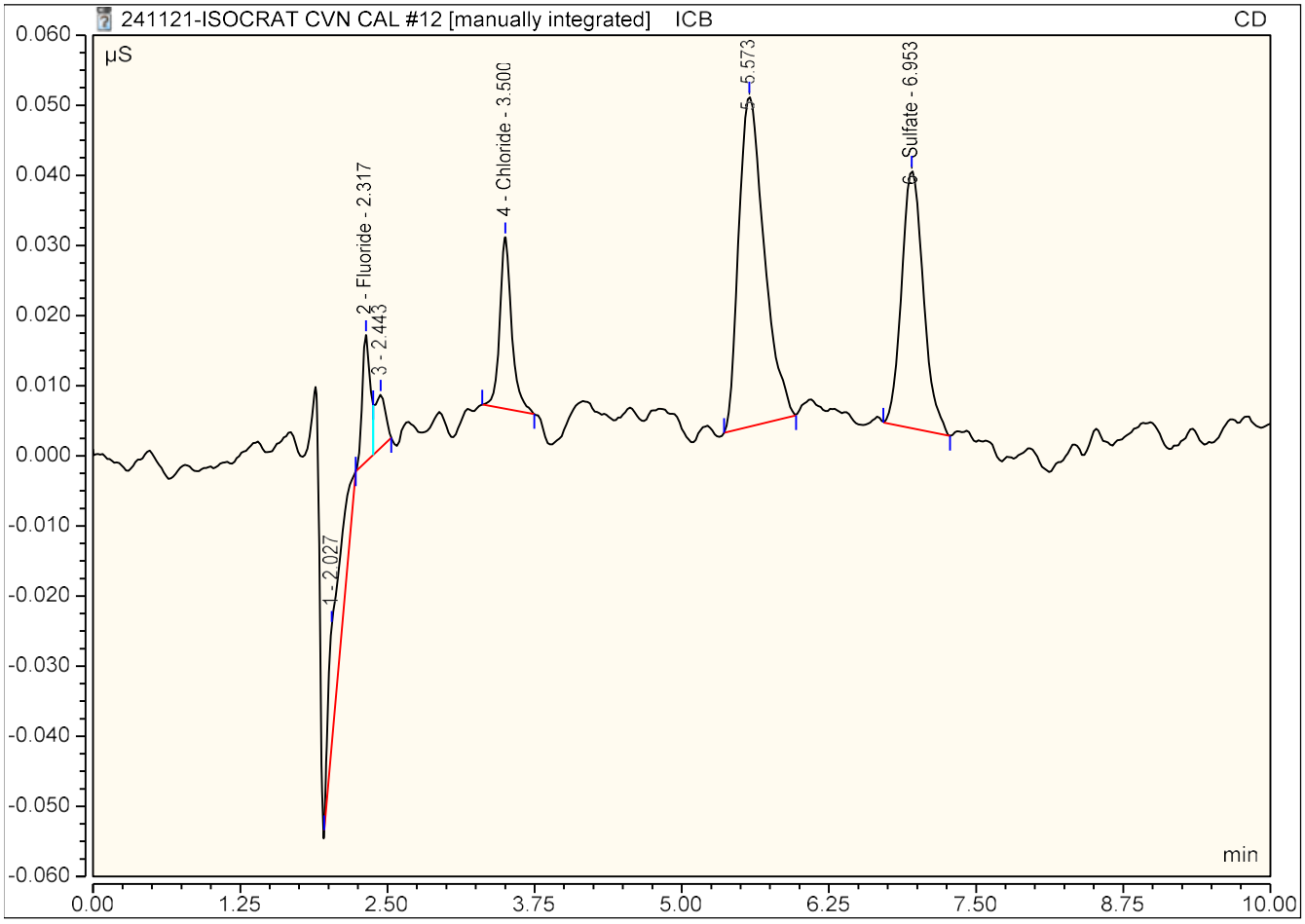
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.32	**Fluoride**	BMB	0.426	5.597	0.8677
3	3.50	**Chloride**	BMB	3.064	31.380	7.9356
5	6.10	**Bromide**	BMB	0.083	0.483	0.7897
6	6.87	**Sulfate**	BM *	2.200	10.763	7.7657
7	7.29	**Nitrate**	MB*	0.800	3.771	0.7729
TOTAL:				6.57	51.99	18.13



Peak Integration Report

Sample Name:	**ICB**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**21-Nov-2024 / 21:08**	*Run Time:*	**10.00**

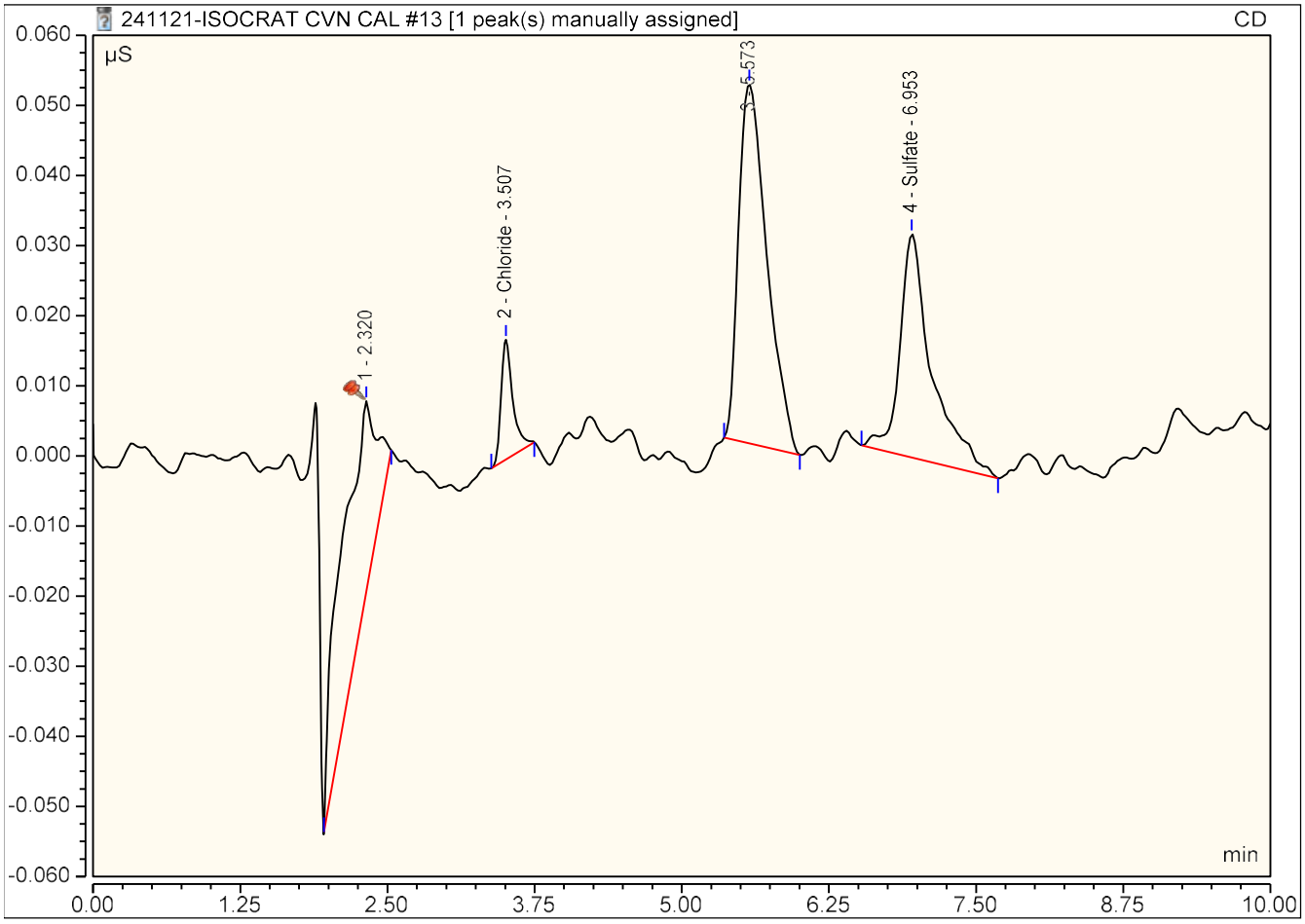
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.32	**Fluoride**	BM *	0.001	0.018	0.0475
4	3.50	**Chloride**	BMB	0.003	0.024	0.1878
6	6.95	**Sulfate**	BMB	0.008	0.037	0.3509
TOTAL:				0.01	0.08	0.59



Peak Integration Report

Sample Name:	**BLK**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**21-Nov-2024 / 21:20**	*Run Time:*	**10.00**

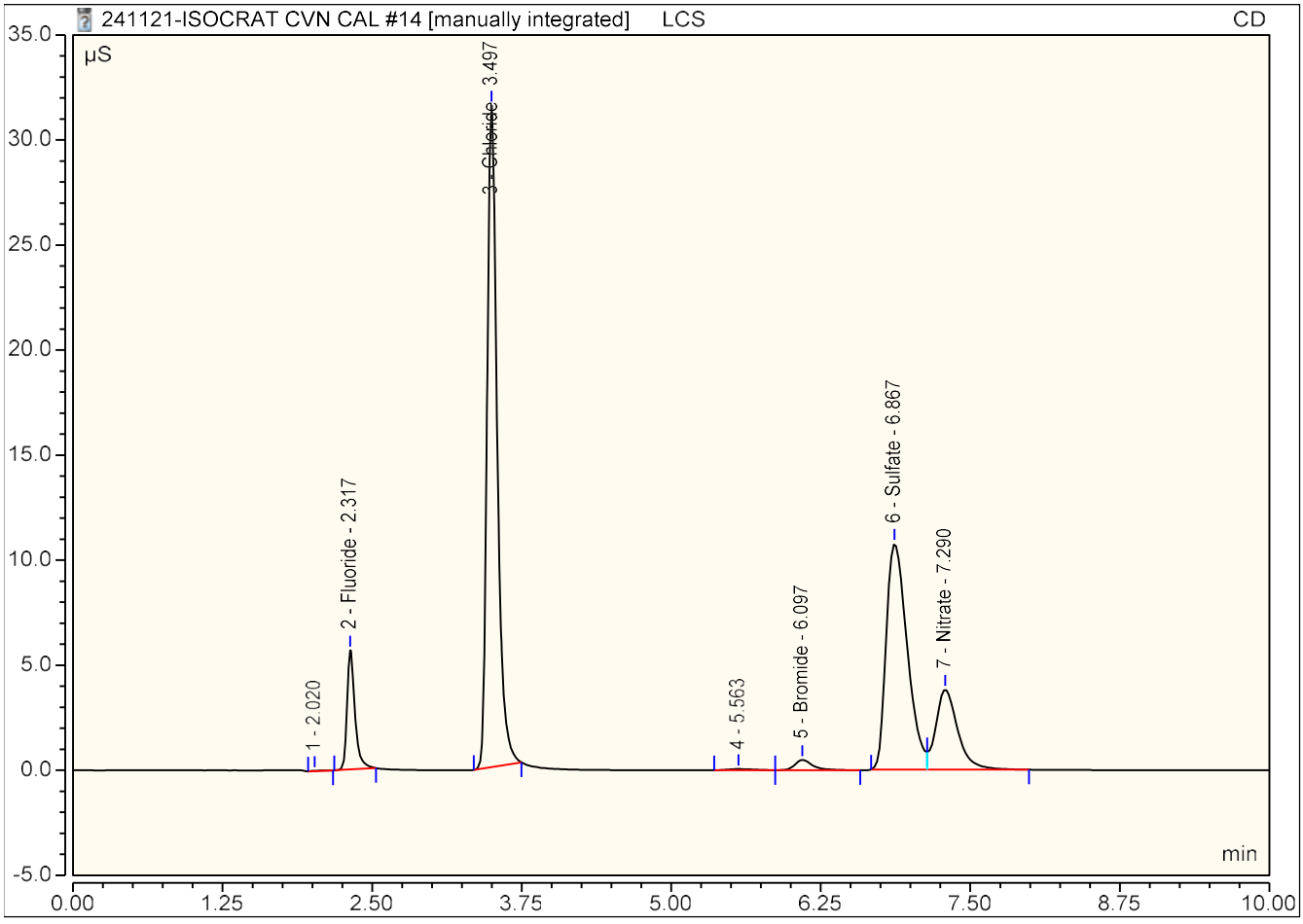
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	3.51	**Chloride**	BMB	0.002	0.017	0.1855
4	6.95	**Sulfate**	BMB	0.010	0.032	0.3579
TOTAL:				0.01	0.05	0.54



Peak Integration Report

Sample Name:	**LCS**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**21-Nov-2024 / 21:32**	*Run Time:*	**10.00**

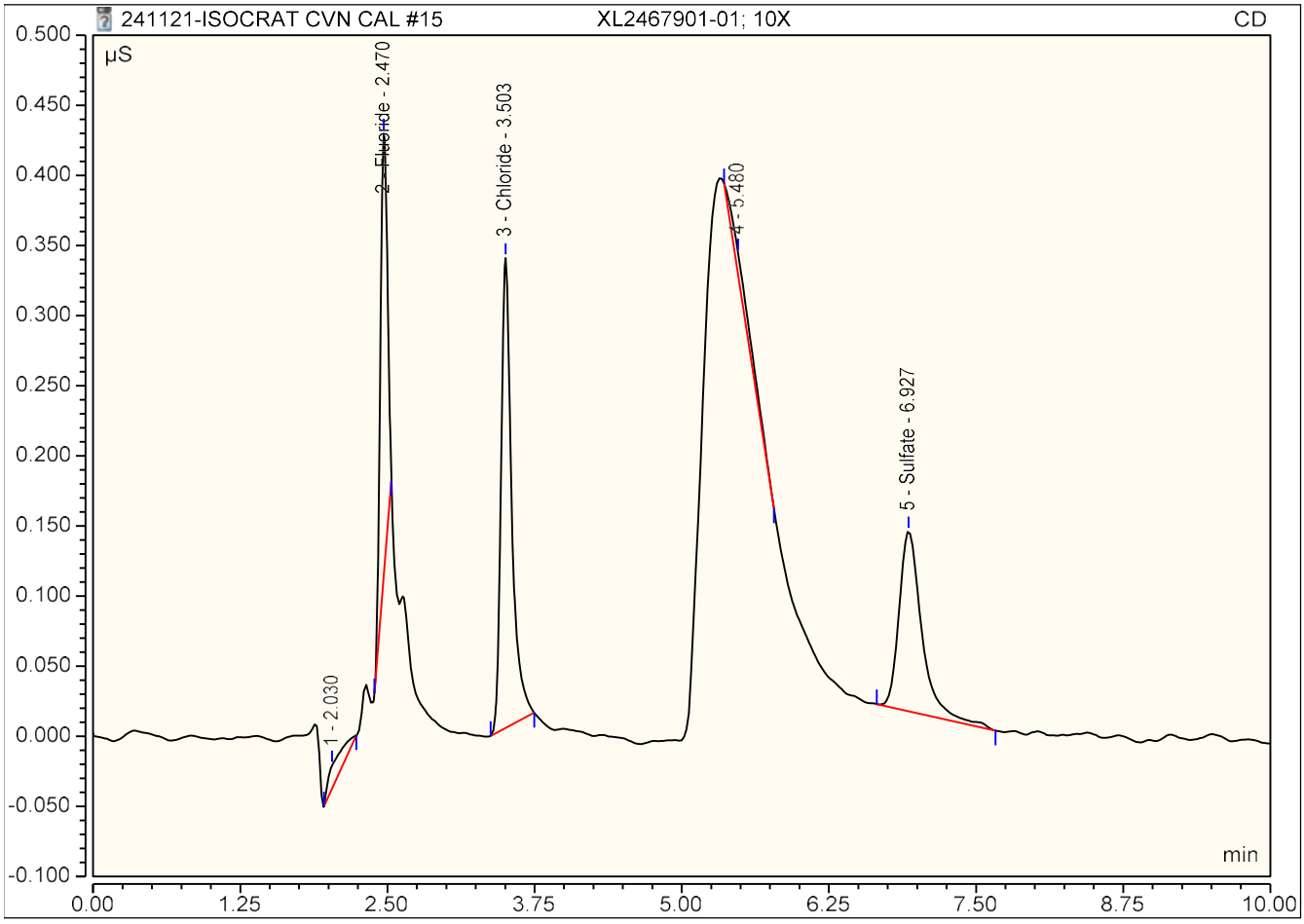
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.32	**Fluoride**	BMB	0.433	5.670	0.8808
3	3.50	**Chloride**	BMB	3.081	31.498	7.9779
5	6.10	**Bromide**	BMB	0.084	0.491	0.7929
6	6.87	**Sulfate**	BM *	2.202	10.749	7.7745
7	7.29	**Nitrate**	MB*	0.809	3.810	0.7811
TOTAL:				6.61	52.22	18.21



Peak Integration Report

Sample Name:	**XL2467901-01; 10X**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**10.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**21-Nov-2024 / 21:44**	*Run Time:*	**10.00**

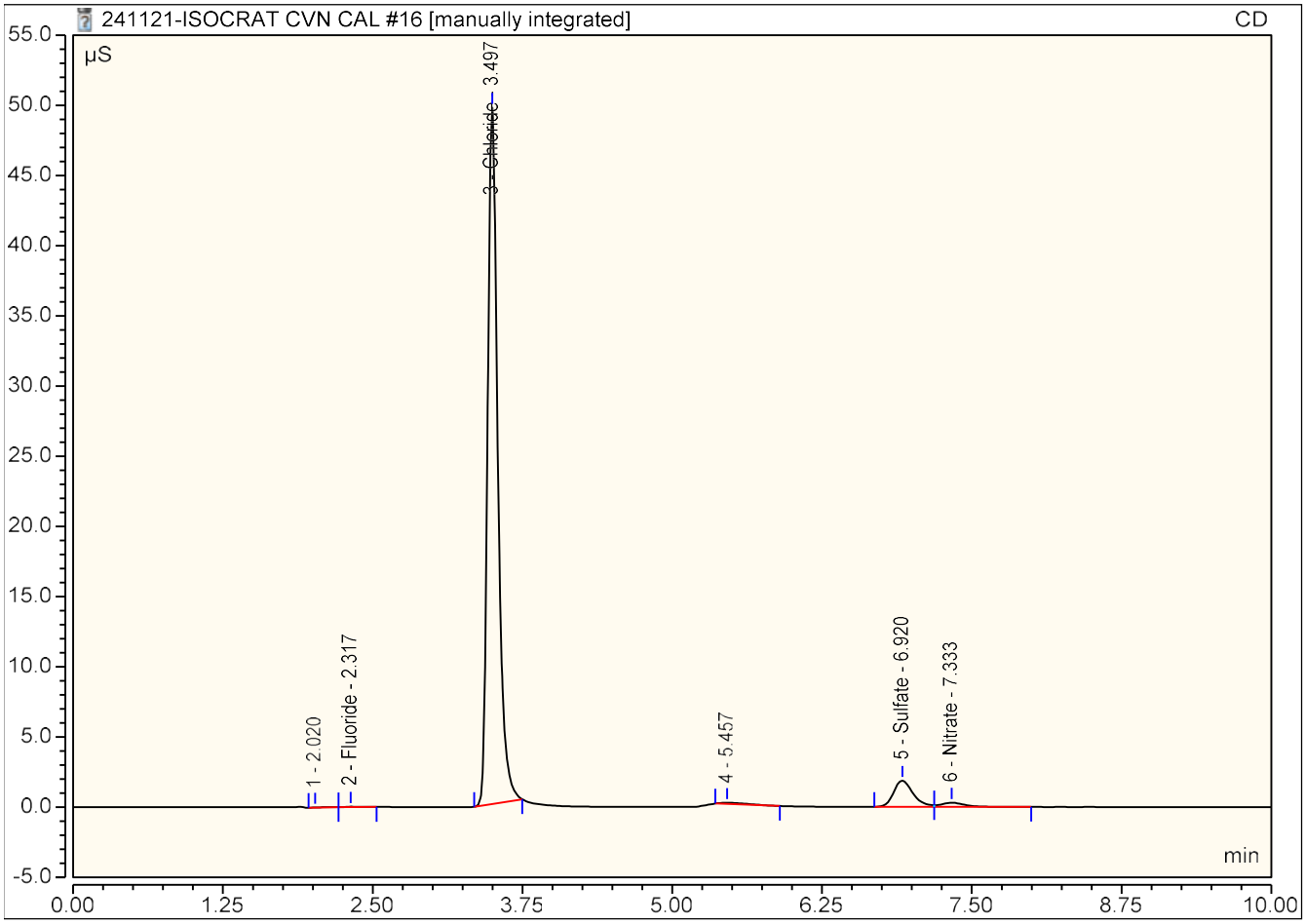
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.47	**Fluoride**	BMB	0.022	0.315	0.8698
3	3.50	**Chloride**	BMB	0.035	0.335	2.6989
5	6.93	**Sulfate**	BMB	0.029	0.128	4.2169
TOTAL:				0.09	0.78	7.79



Peak Integration Report

Sample Name:	**L2467901-02; 10X CL**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**10.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**21-Nov-2024 / 21:56**	*Run Time:*	**10.00**

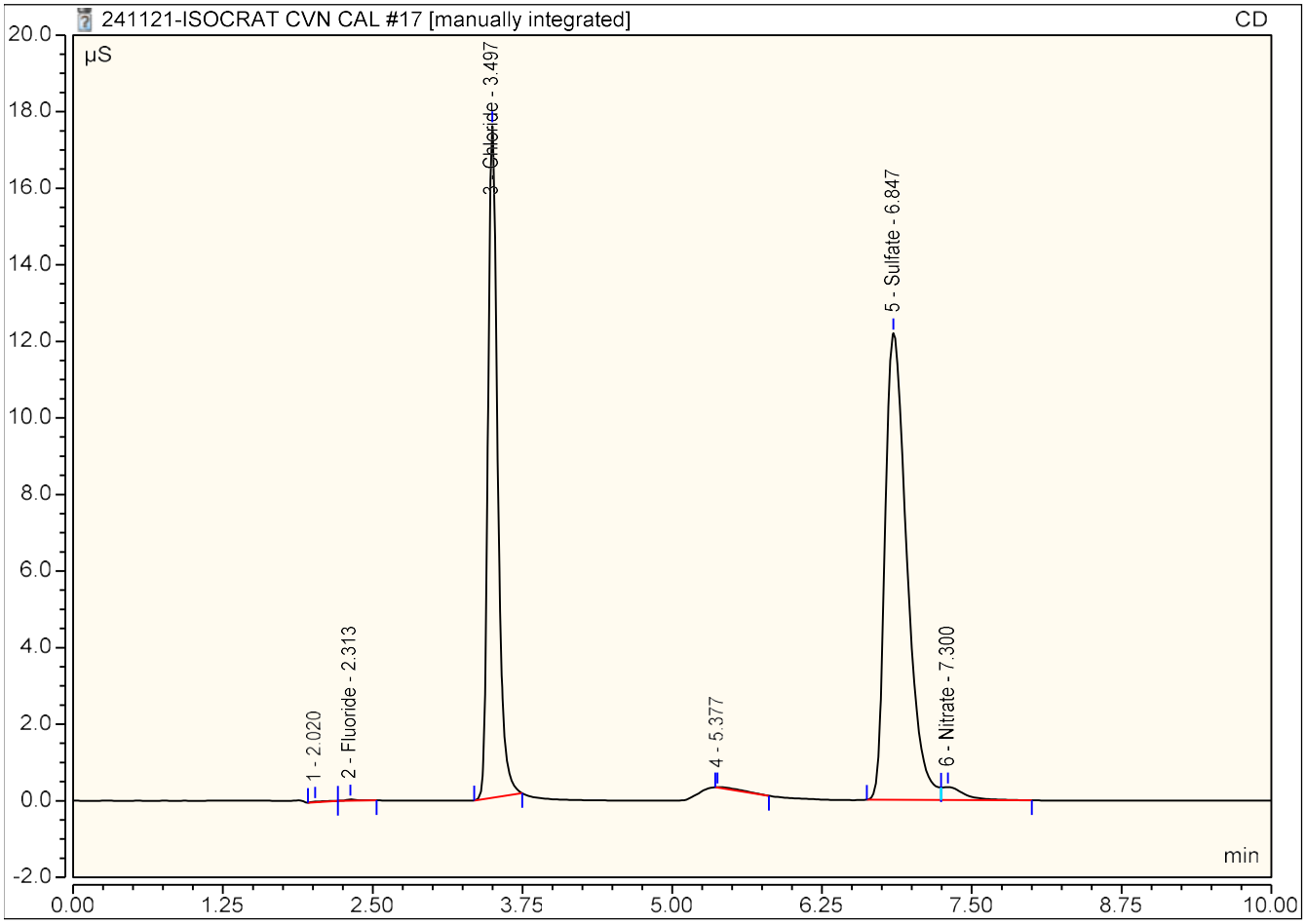
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.32	**Fluoride**	BMB	0.003	0.031	0.5046
3	3.50	**Chloride**	BMB	4.886	49.618	125.4642
5	6.92	**Sulfate**	BM *	0.354	1.877	15.2330
6	7.33	**Nitrate**	MB*	0.070	0.304	1.1662
TOTAL:				5.31	51.83	142.37



Peak Integration Report

Sample Name:	**XL2467901-03; 10X**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**10.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**21-Nov-2024 / 22:08**	*Run Time:*	**10.00**

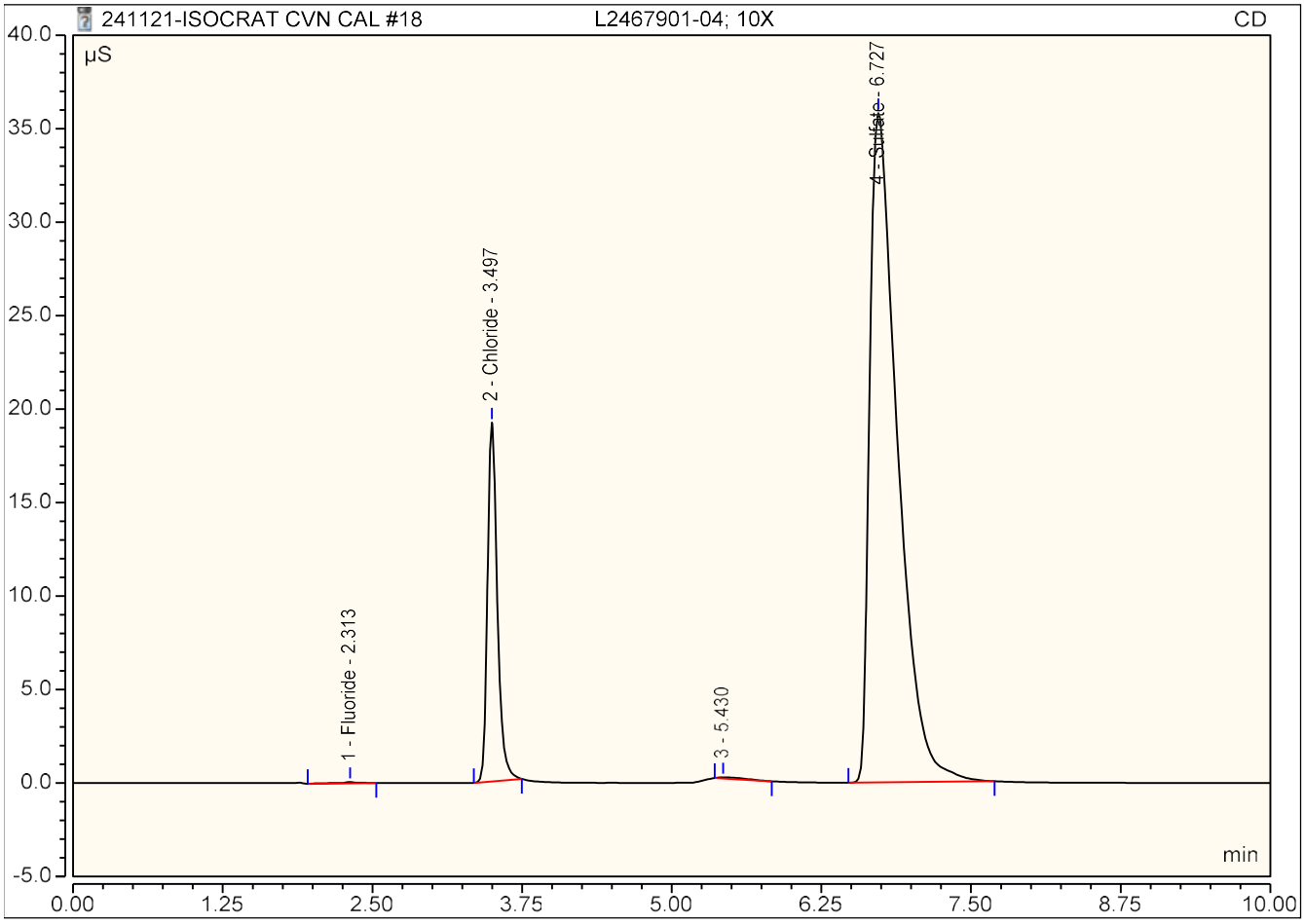
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.31	**Fluoride**	BMB	0.003	0.033	0.5144
3	3.50	**Chloride**	BMB	1.655	17.546	43.6972
5	6.85	**Sulfate**	BM *	2.575	12.188	90.3615
6	7.30	**Nitrate**	MB*	0.075	0.339	1.2079
TOTAL:				4.31	30.11	135.78



Peak Integration Report

Sample Name:	**L2467901-04; 10X**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**10.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**21-Nov-2024 / 22:20**	*Run Time:*	**10.00**

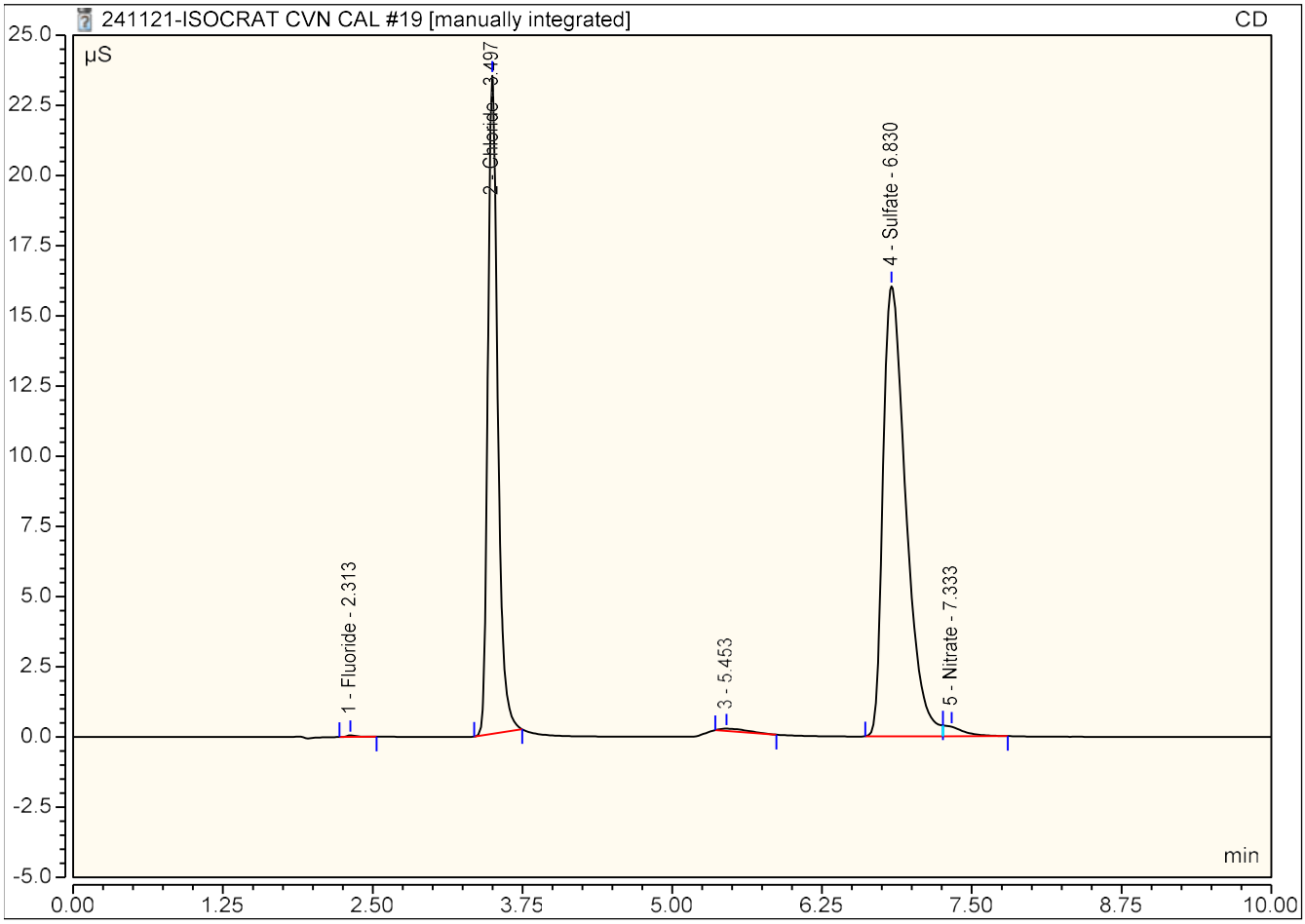
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	2.31	**Fluoride**	BMB	0.014	0.070	0.7274
2	3.50	**Chloride**	BMB	1.824	19.189	47.9768
4	6.73	**Sulfate**	BMB	9.658	35.799	329.9793
TOTAL:				11.50	55.06	378.68



Peak Integration Report

Sample Name:	**XL2467901-05; 10X**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**10.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**21-Nov-2024 / 22:32**	*Run Time:*	**10.00**

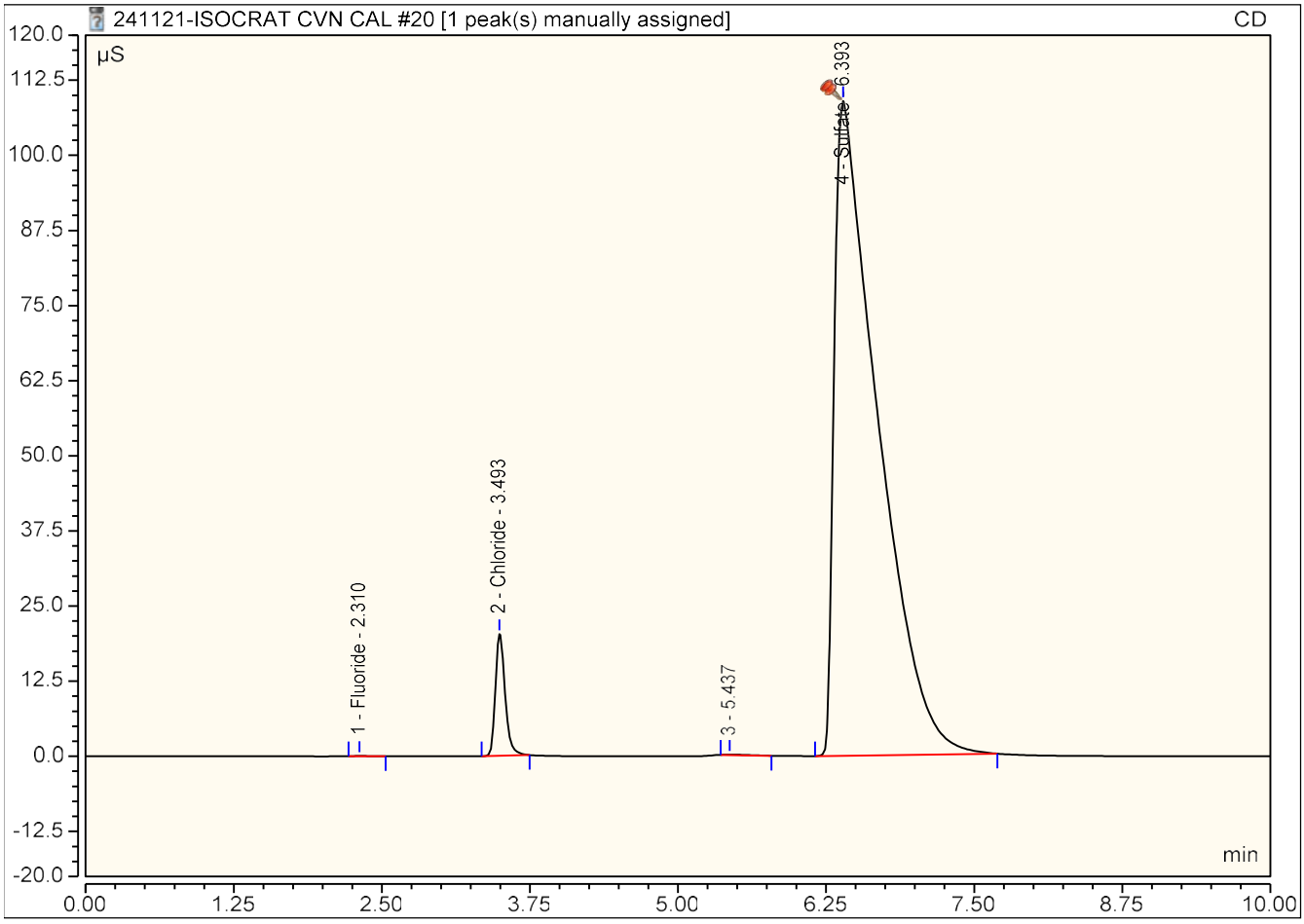
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	2.31	**Fluoride**	BMB	0.006	0.062	0.5565
2	3.50	**Chloride**	BMB	2.256	23.446	58.8985
4	6.83	**Sulfate**	BM *	3.544	16.033	123.1458
5	7.33	**Nitrate**	MB*	0.068	0.335	1.1510
TOTAL:				5.87	39.88	183.75



Peak Integration Report

Sample Name:	**L2467901-06; 10X CL**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**10.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**21-Nov-2024 / 22:45**	*Run Time:*	**10.00**

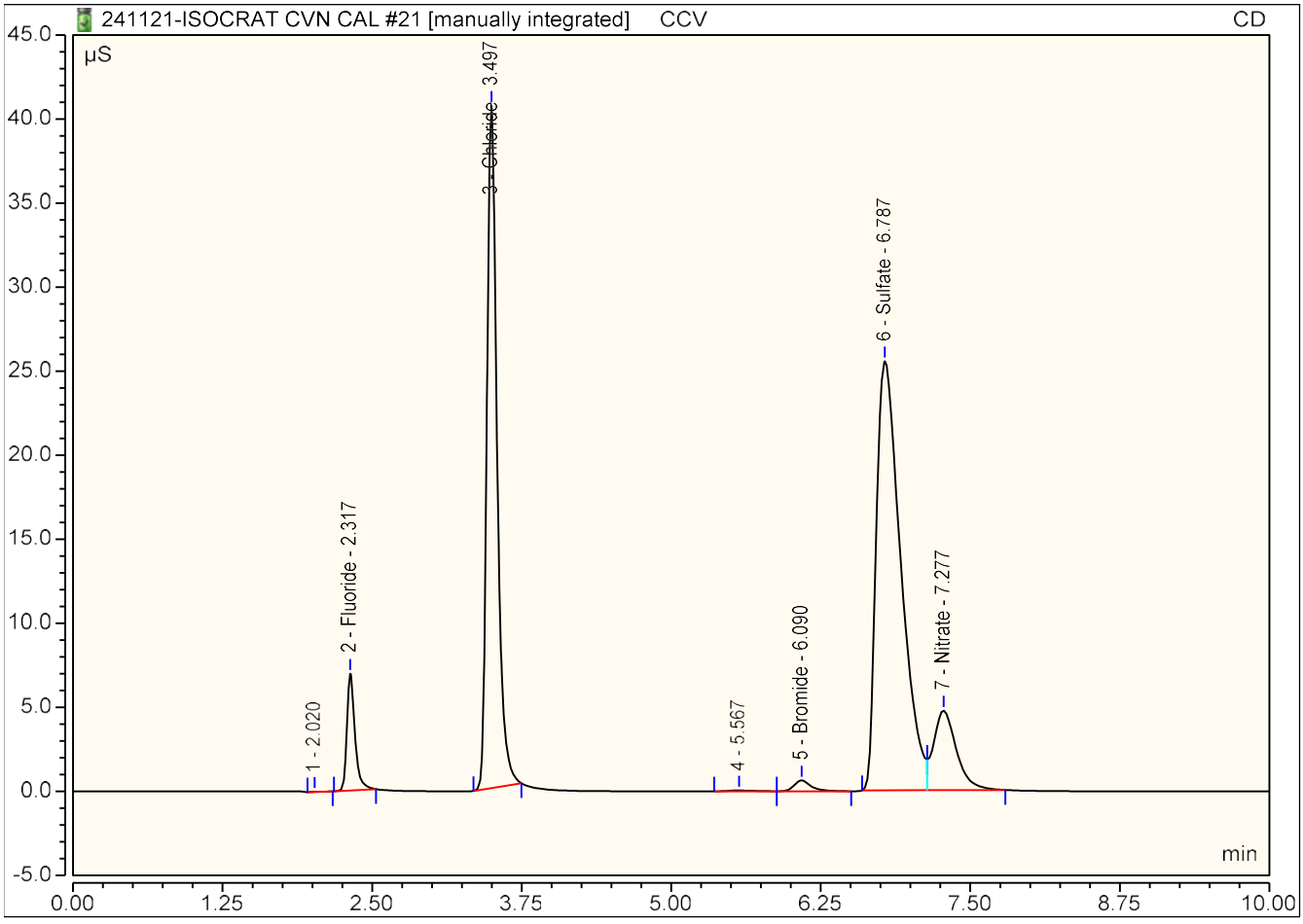
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	2.31	**Fluoride**	BMB	0.008	0.083	0.5967
2	3.49	**Chloride**	BMB	1.923	20.267	50.4803
4	6.39	**Sulfate**	BMB^	46.301	108.944	1569.6761
TOTAL:				48.23	129.29	1620.75



Peak Integration Report

Sample Name:	**CCV**	*Inj. Vol.:*	**25.00**
Injection Type:	**Check Standard**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**21-Nov-2024 / 22:57**	*Run Time:*	**10.00**

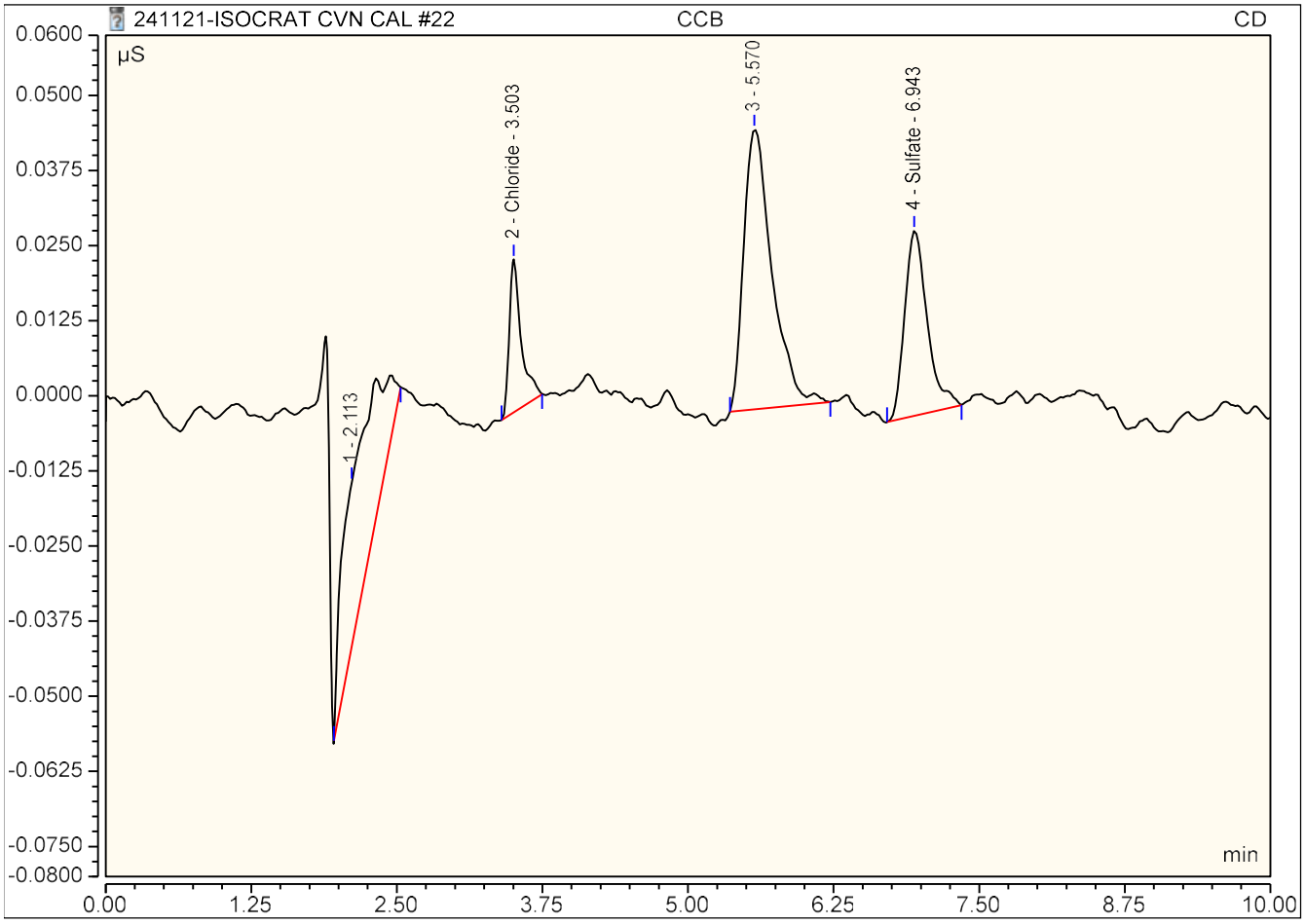
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.32	**Fluoride**	BMB	0.539	6.955	1.0863
3	3.50	**Chloride**	BMB	3.996	40.592	10.2924
5	6.09	**Bromide**	BMB	0.106	0.645	0.9935
6	6.79	**Sulfate**	BM *	6.086	25.519	20.9159
7	7.28	**Nitrate**	MB*	1.049	4.735	0.9973
TOTAL:				11.78	78.45	34.29



Peak Integration Report

Sample Name:	**CCB**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**21-Nov-2024 / 23:09**	*Run Time:*	**10.00**

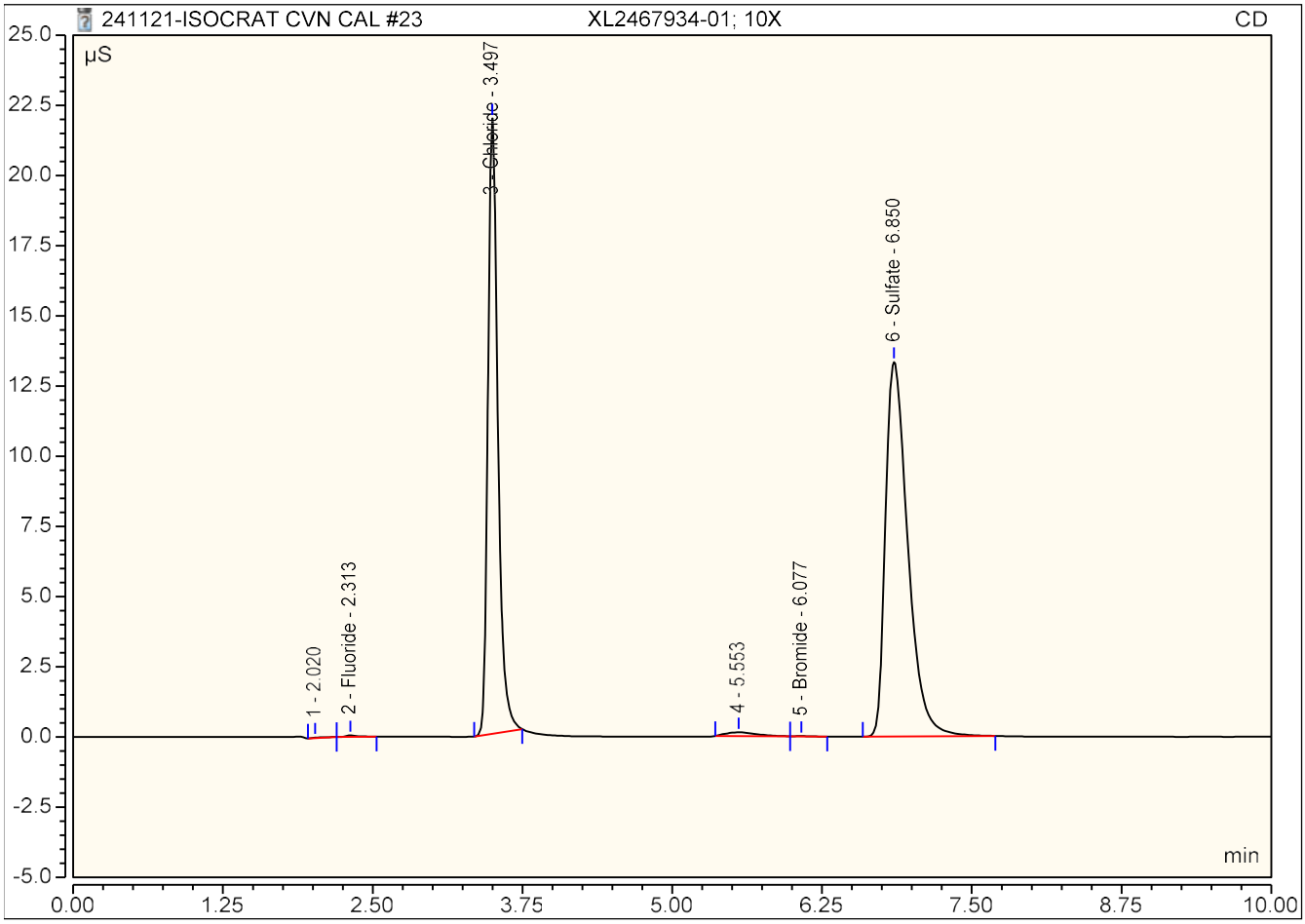
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	3.50	**Chloride**	BMB	0.003	0.025	0.1881
4	6.94	**Sulfate**	BMB	0.007	0.031	0.3476
TOTAL:				0.01	0.06	0.54



Peak Integration Report

Sample Name:	**XL2467934-01; 10X**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**10.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**21-Nov-2024 / 23:21**	*Run Time:*	**10.00**

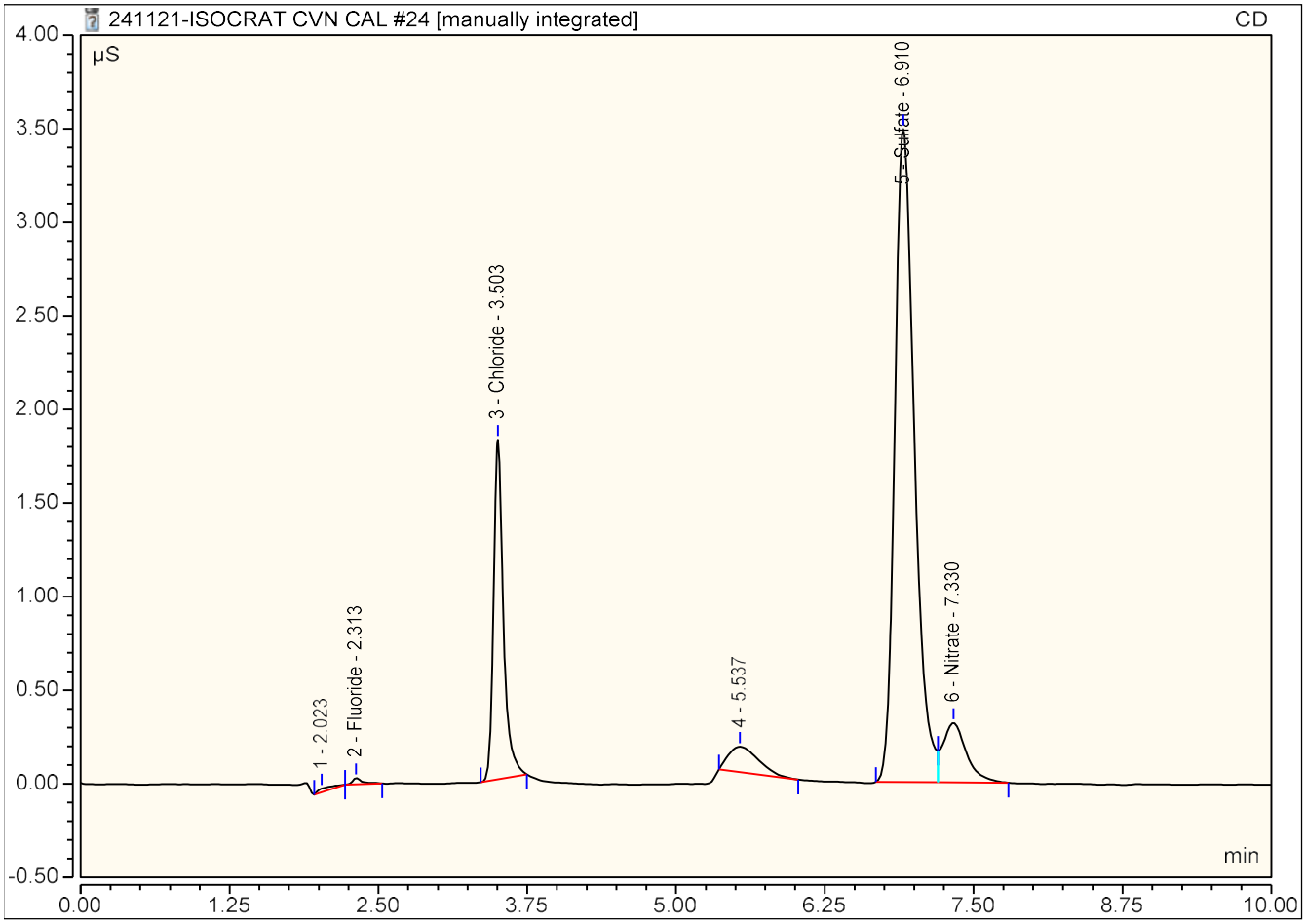
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.31	**Fluoride**	BMB	0.005	0.055	0.5530
3	3.50	**Chloride**	BMB	2.117	21.912	55.3783
5	6.08	**Bromide**	BMB	0.001	0.009	0.6511
6	6.85	**Sulfate**	BMB	2.897	13.344	101.2580
TOTAL:				5.02	35.32	157.84



Peak Integration Report

Sample Name:	**XL2467934-02; 10X**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**10.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**21-Nov-2024 / 23:33**	*Run Time:*	**10.00**

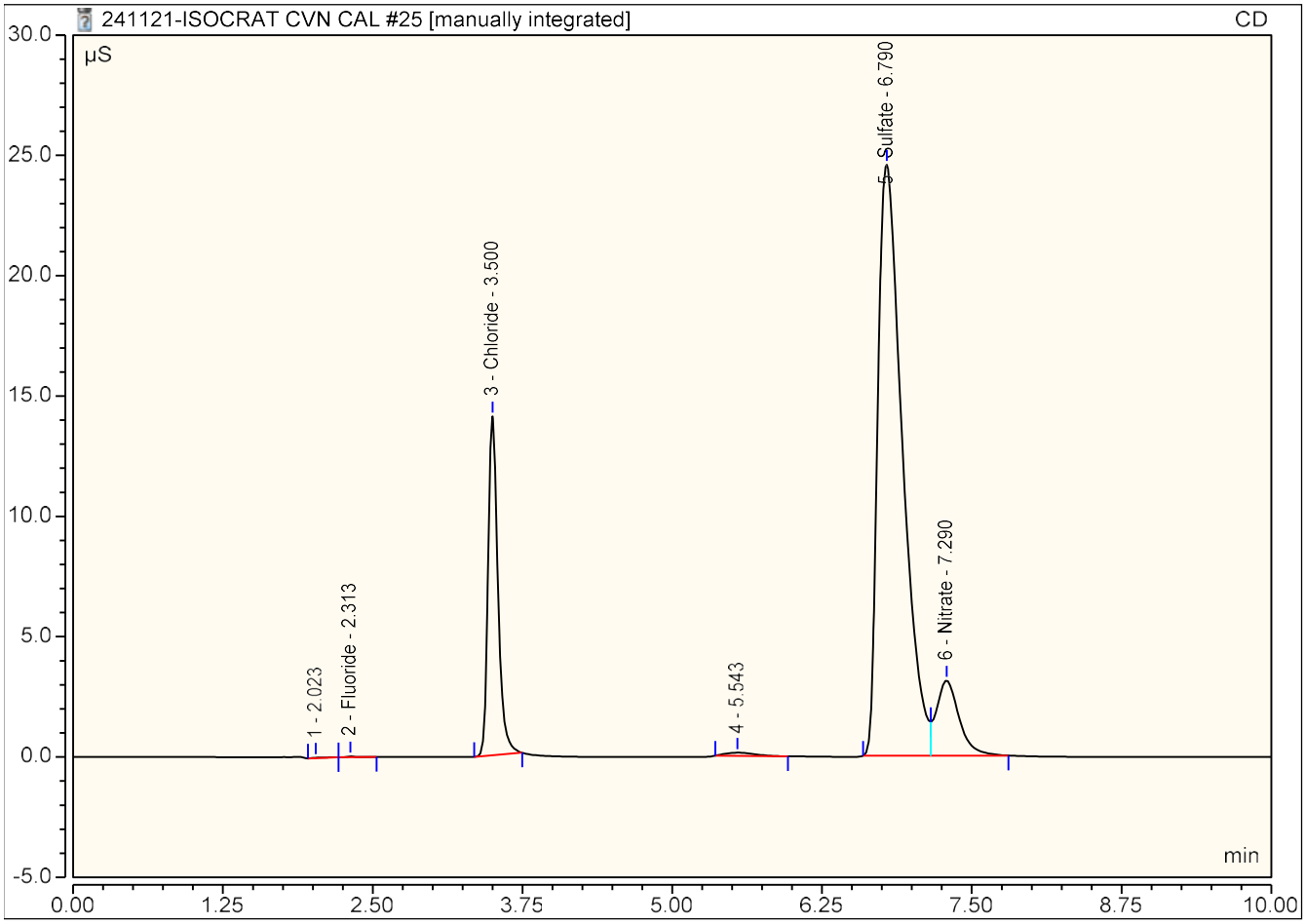
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.31	**Fluoride**	BMB	0.003	0.034	0.5125
3	3.50	**Chloride**	BMB	0.174	1.815	6.2007
5	6.91	**Sulfate**	BM *	0.668	3.489	25.8368
6	7.33	**Nitrate**	MB*	0.073	0.318	1.1917
TOTAL:				0.92	5.66	33.74



Peak Integration Report

Sample Name:	**L2467934-03; 10X**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**10.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**21-Nov-2024 / 23:45**	*Run Time:*	**10.00**

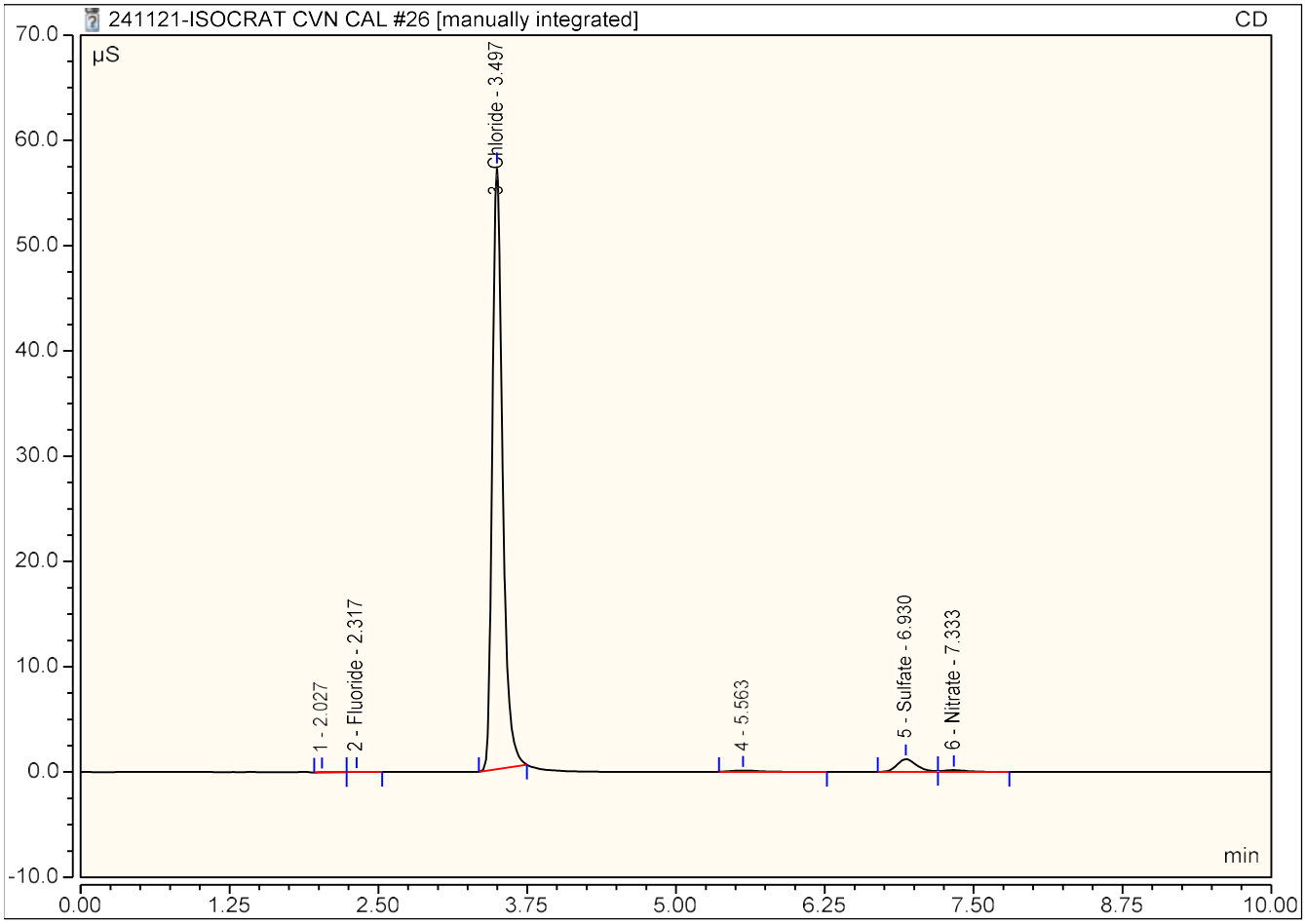
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.31	**Fluoride**	BMB	0.003	0.034	0.5138
3	3.50	**Chloride**	BMB	1.337	14.086	35.6325
5	6.79	**Sulfate**	BM *	5.829	24.567	200.4319
6	7.29	**Nitrate**	MB*	0.690	3.125	6.7457
TOTAL:				7.86	41.81	243.32



Peak Integration Report

Sample Name:	**L2467934-04; 10X**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**10.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**21-Nov-2024 / 23:57**	*Run Time:*	**10.00**

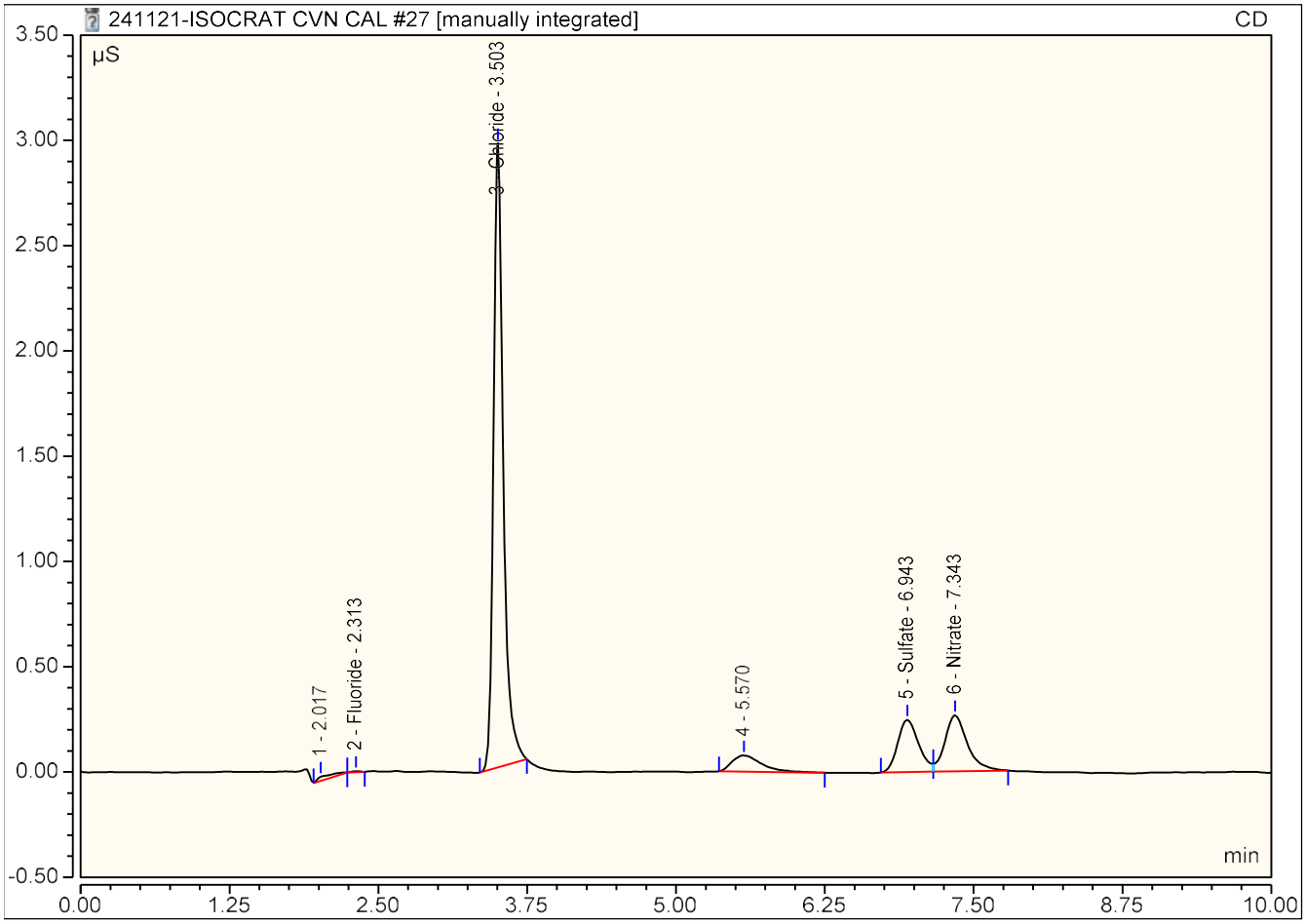
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.32	**Fluoride**	BMB	0.001	0.010	0.4736
3	3.50	**Chloride**	BMB	5.713	57.190	146.3891
5	6.93	**Sulfate**	BM *	0.236	1.217	11.2399
6	7.33	**Nitrate**	MB*	0.041	0.172	0.9039
TOTAL:				5.99	58.59	159.01



Peak Integration Report

Sample Name:	**XL2467934-05; 10X**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**10.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**22-Nov-2024 / 00:09**	*Run Time:*	**10.00**

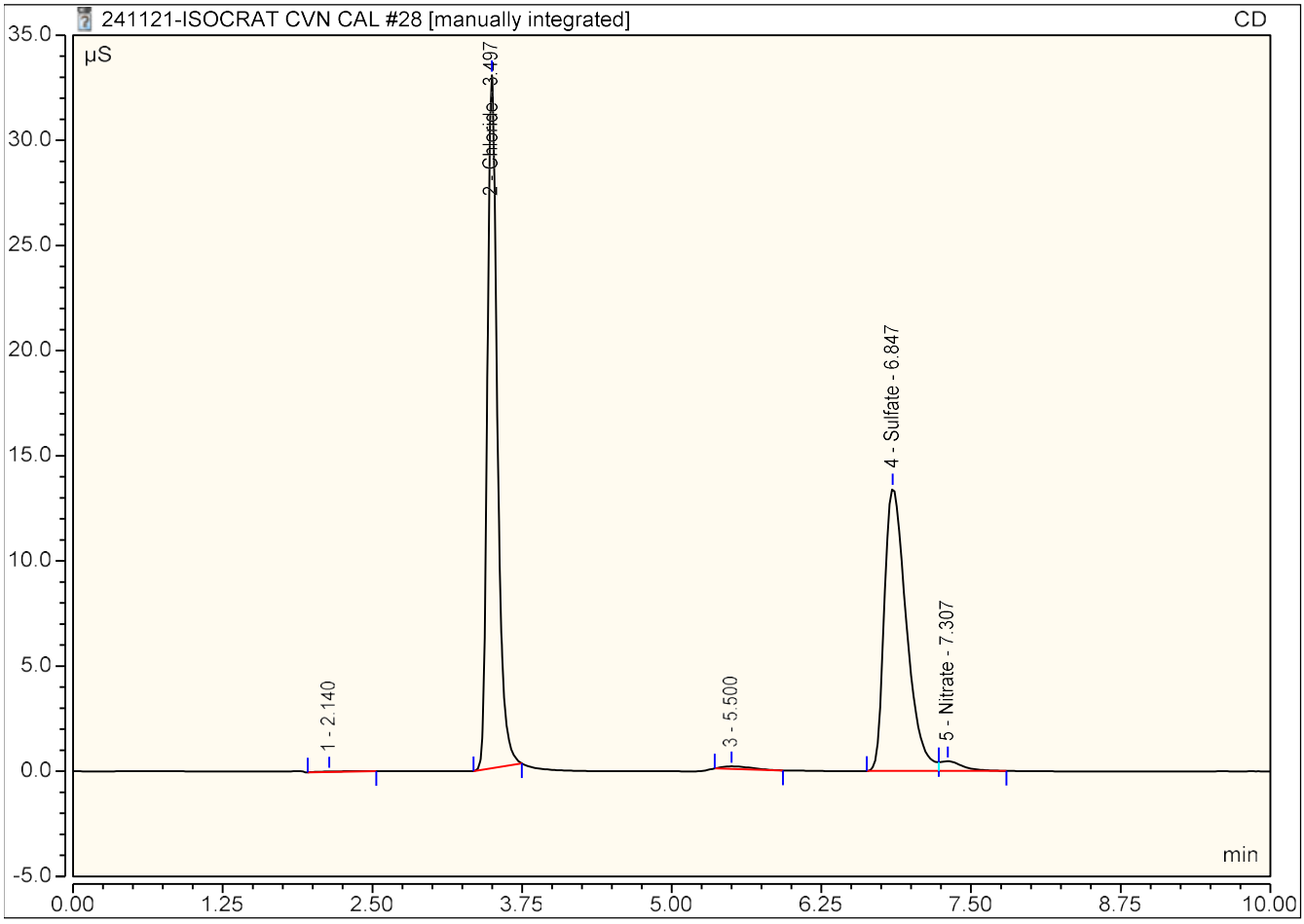
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.31	**Fluoride**	BMB	0.000	0.005	0.4537
3	3.50	**Chloride**	BMB	0.280	2.965	8.9018
5	6.94	**Sulfate**	BM *	0.051	0.249	4.9512
6	7.34	**Nitrate**	MB*	0.058	0.267	1.0610
TOTAL:				0.39	3.49	15.37



Peak Integration Report

Sample Name:	**L2467934-06; 10X**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**10.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**22-Nov-2024 / 00:21**	*Run Time:*	**10.00**

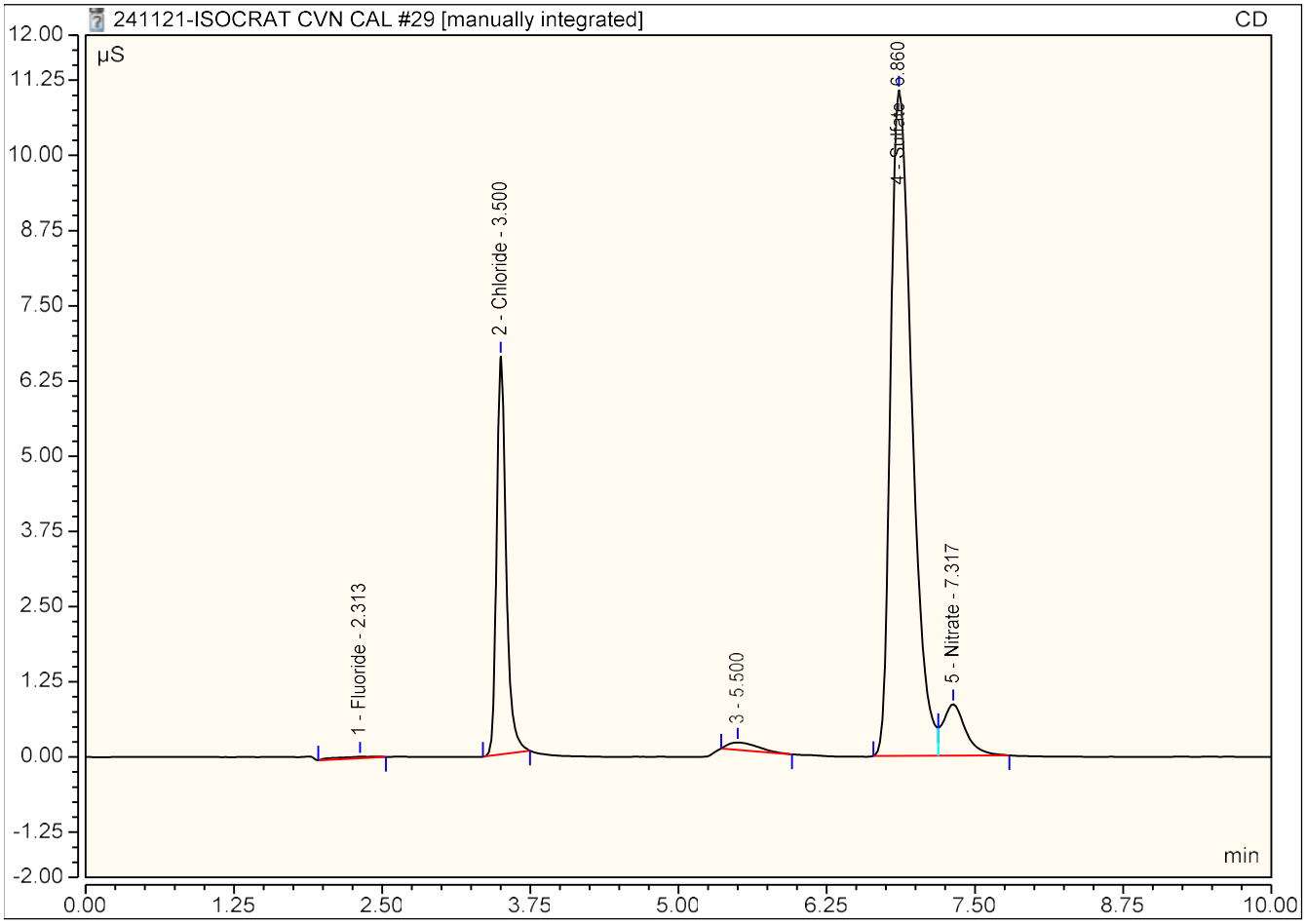
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	3.50	**Chloride**	BMB	3.216	32.944	83.2033
4	6.85	**Sulfate**	BM *	2.884	13.430	100.8029
5	7.31	**Nitrate**	MB*	0.100	0.461	1.4332
TOTAL:				6.20	46.84	185.44



Peak Integration Report

Sample Name:	**XL2467934-07; 10X**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**10.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**22-Nov-2024 / 00:33**	*Run Time:*	**10.00**

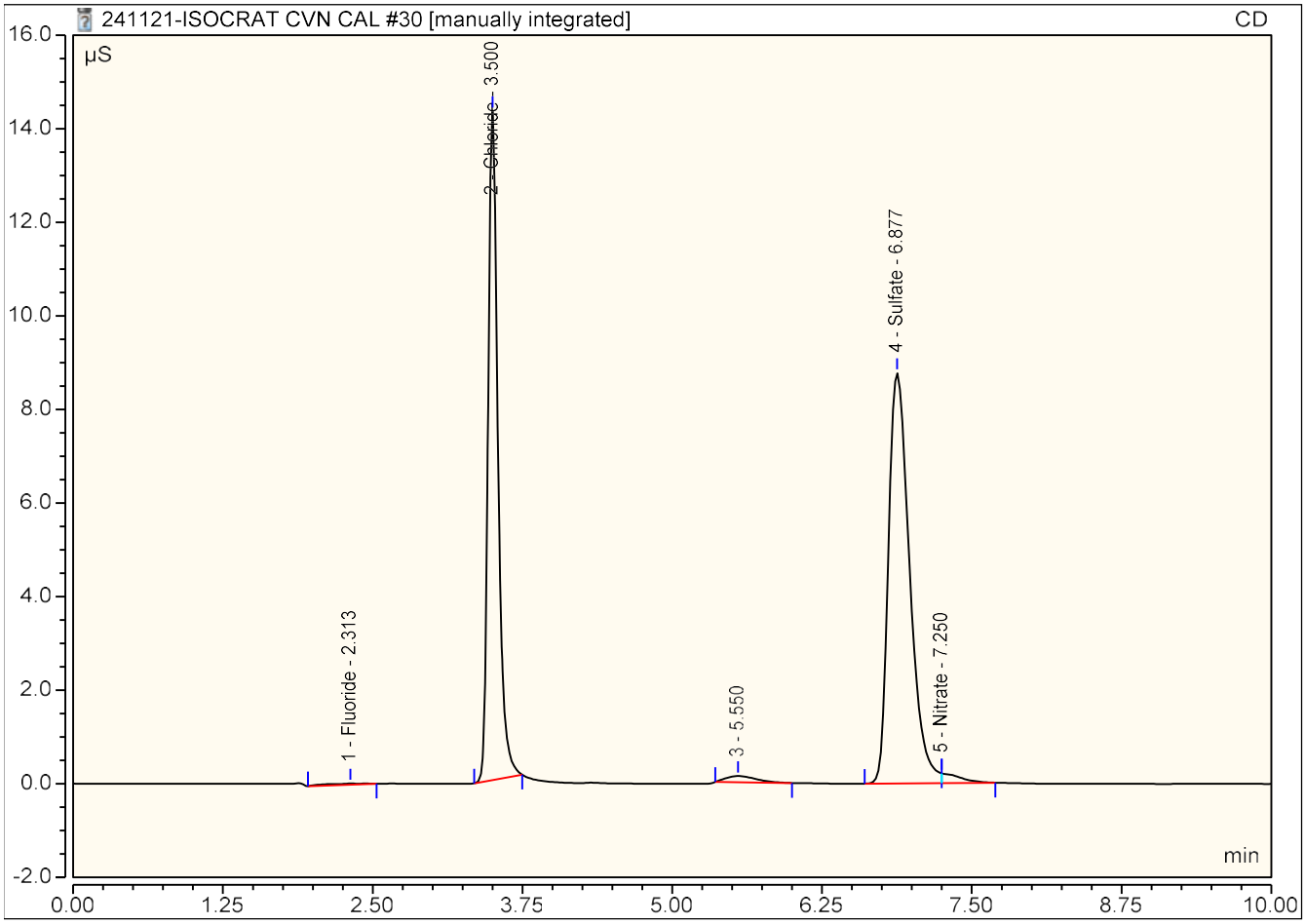
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	2.31	**Fluoride**	BMB	0.012	0.027	0.6700
2	3.50	**Chloride**	BMB	0.618	6.614	17.4411
4	6.86	**Sulfate**	BM *	2.304	11.062	81.2034
5	7.32	**Nitrate**	MB*	0.189	0.854	2.2409
TOTAL:				3.12	18.56	101.56



Peak Integration Report

Sample Name:	**XL2467934-08; 10X**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**10.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**22-Nov-2024 / 00:45**	*Run Time:*	**10.00**

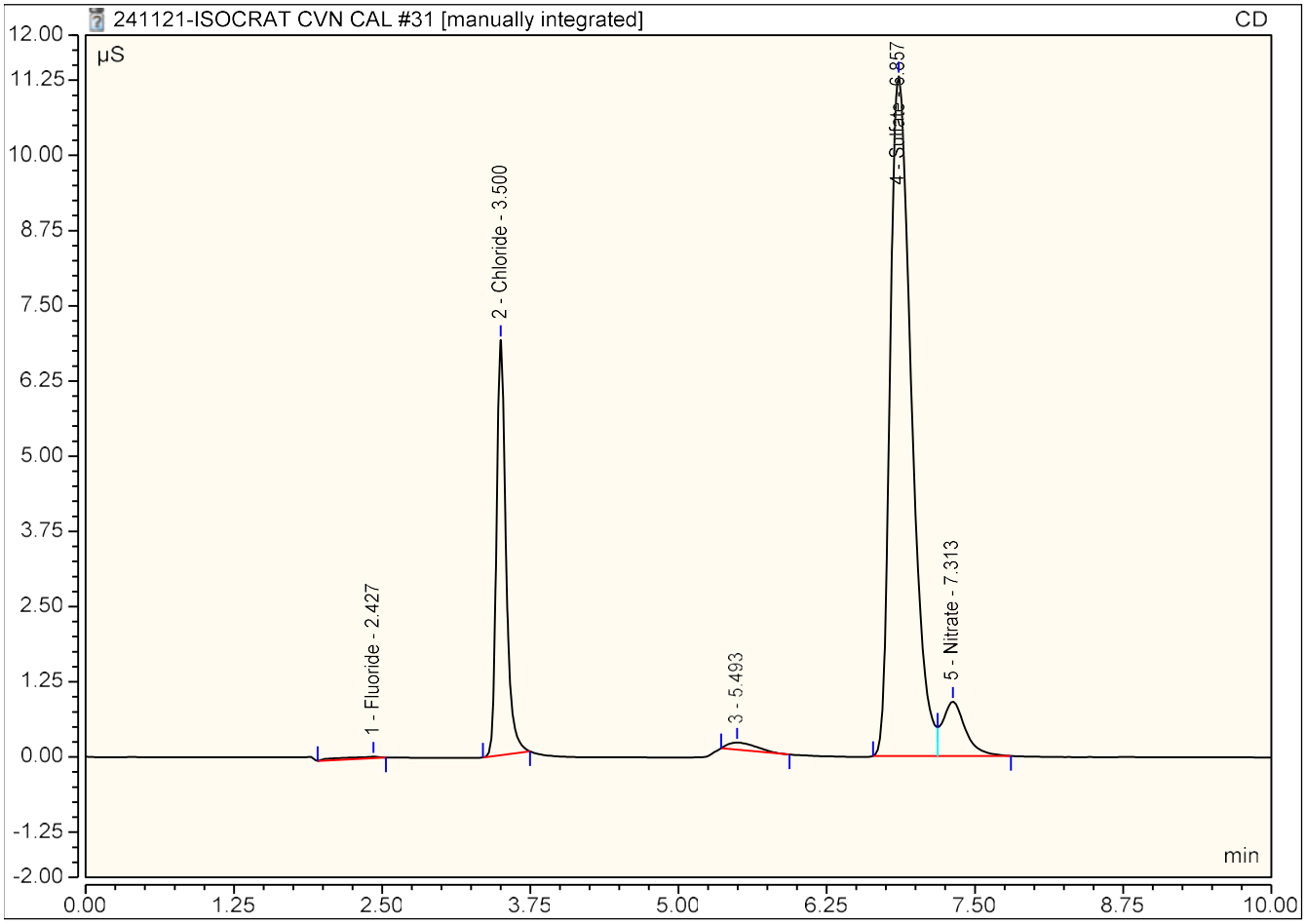
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	2.31	**Fluoride**	BMB	0.012	0.029	0.6780
2	3.50	**Chloride**	BMB	1.365	14.296	36.3586
4	6.88	**Sulfate**	BM *	1.801	8.772	64.1878
5	7.25	**Nitrate**	MB*	0.037	0.208	0.8709
TOTAL:				3.22	23.31	102.10



Peak Integration Report

Sample Name:	**XL2467934-09; 10X**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**10.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**22-Nov-2024 / 01:01**	*Run Time:*	**10.00**

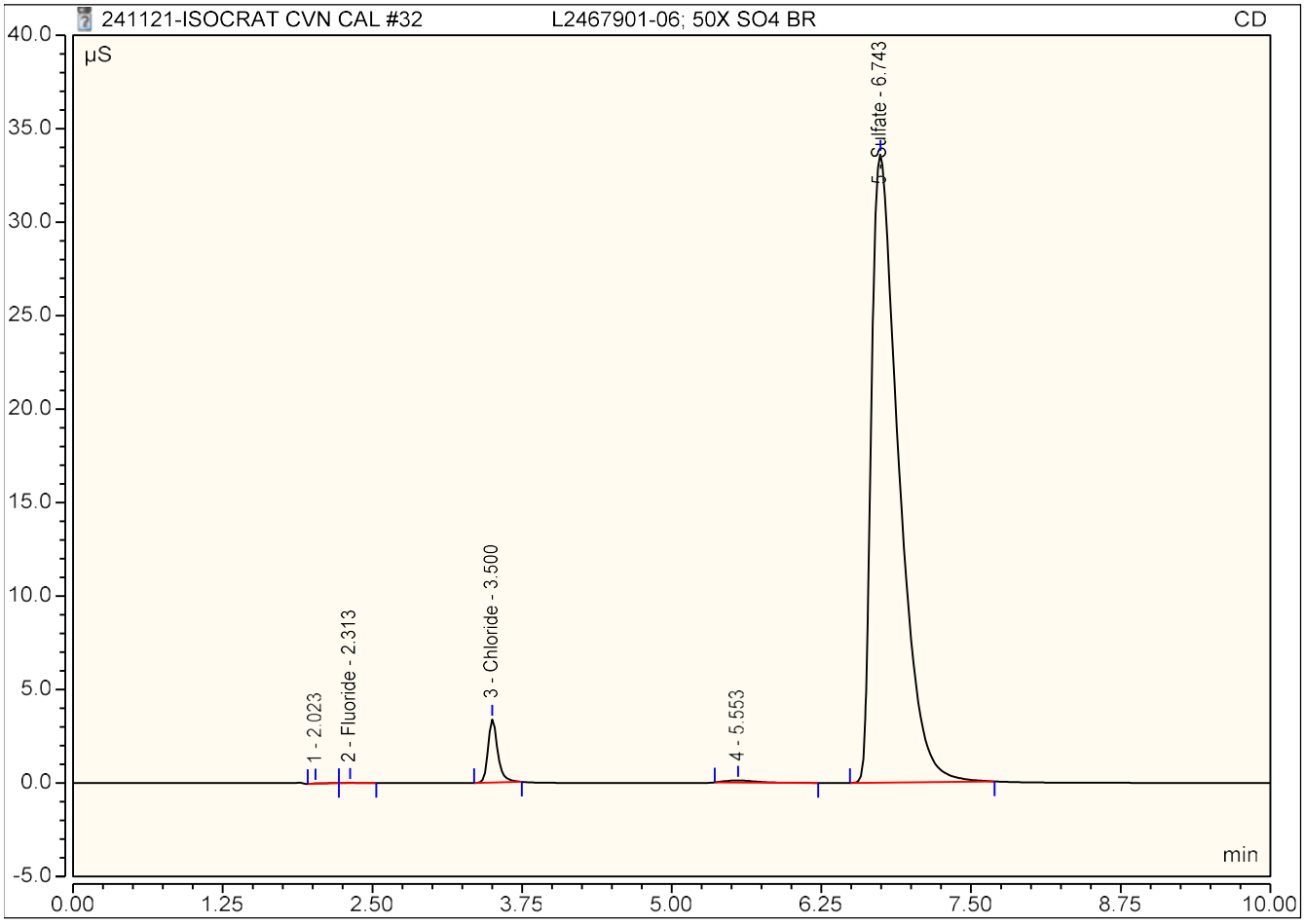
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	2.43	**Fluoride**	BMB	0.013	0.025	0.7045
2	3.50	**Chloride**	BMB	0.644	6.901	18.1067
4	6.86	**Sulfate**	BM *	2.362	11.299	83.1380
5	7.31	**Nitrate**	MB*	0.201	0.904	2.3441
TOTAL:				3.22	19.13	104.29



Peak Integration Report

Sample Name:	**L2467901-06; 50X SO4 BR**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**50.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**22-Nov-2024 / 01:13**	*Run Time:*	**10.00**

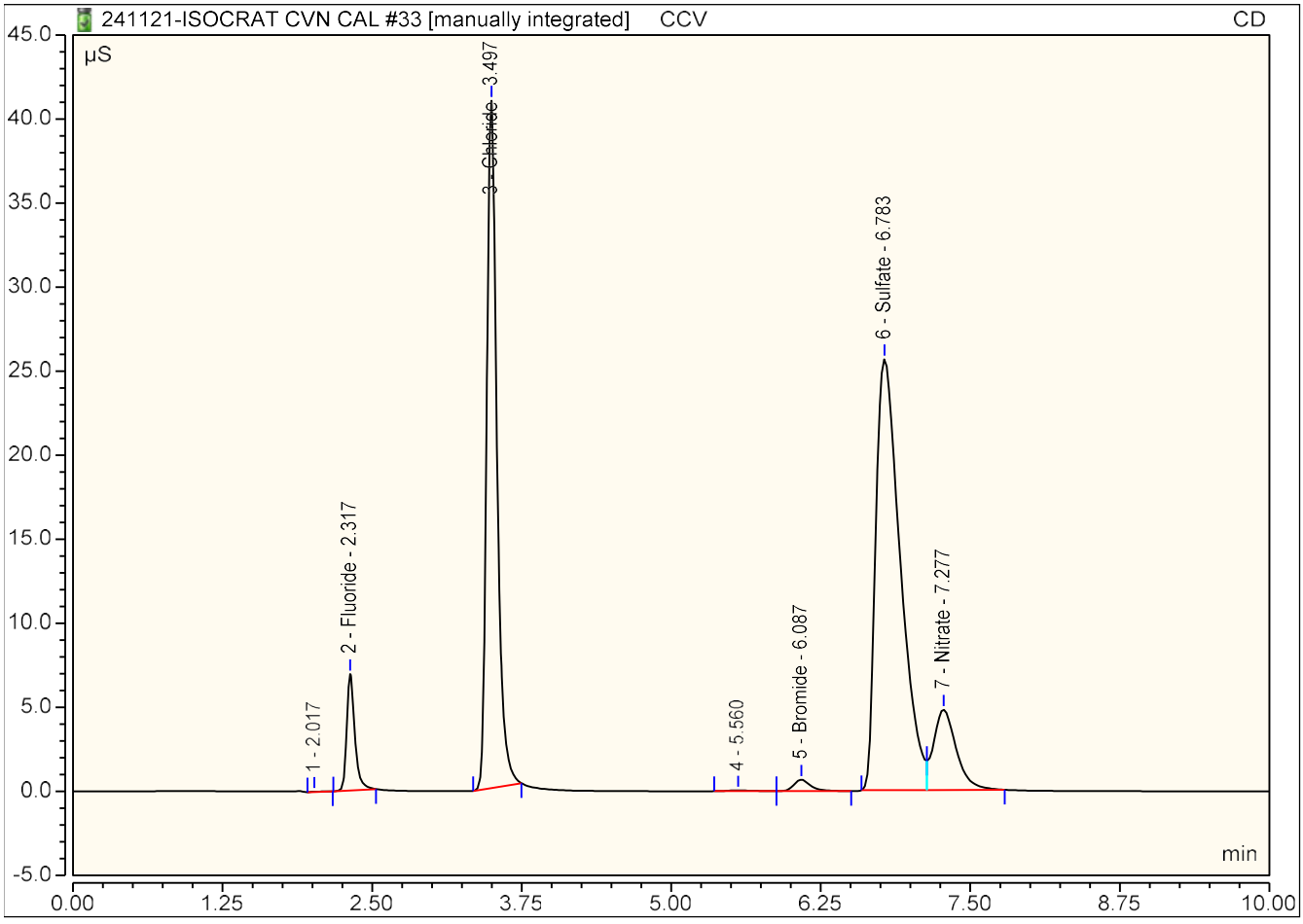
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.31	**Fluoride**	BMB	0.002	0.017	2.4276
3	3.50	**Chloride**	BMB	0.316	3.372	49.0333
5	6.74	**Sulfate**	BMB	8.893	33.588	1520.6179
TOTAL:				9.21	36.98	1572.08



Peak Integration Report

Sample Name:	**CCV**	*Inj. Vol.:*	**25.00**
Injection Type:	**Check Standard**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**22-Nov-2024 / 01:25**	*Run Time:*	**10.00**

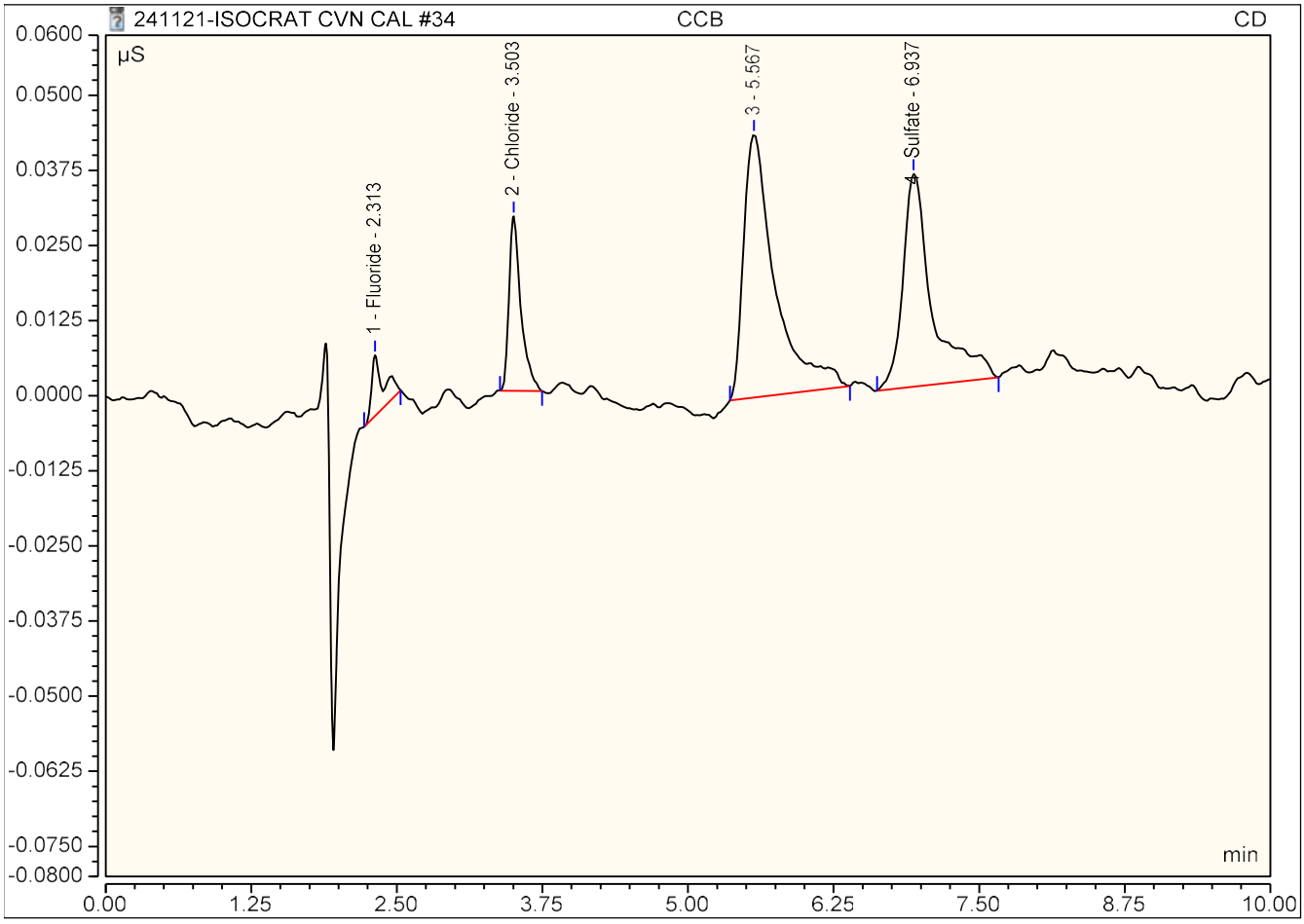
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.32	**Fluoride**	BMB	0.540	6.921	1.0873
3	3.50	**Chloride**	BMB	4.041	40.894	10.4073
5	6.09	**Bromide**	BMB	0.111	0.680	1.0391
6	6.78	**Sulfate**	BM *	6.119	25.637	21.0268
7	7.28	**Nitrate**	MB*	1.057	4.779	1.0048
TOTAL:				11.87	78.91	34.57



Peak Integration Report

Sample Name:	**CCB**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**22-Nov-2024 / 01:37**	*Run Time:*	**10.00**

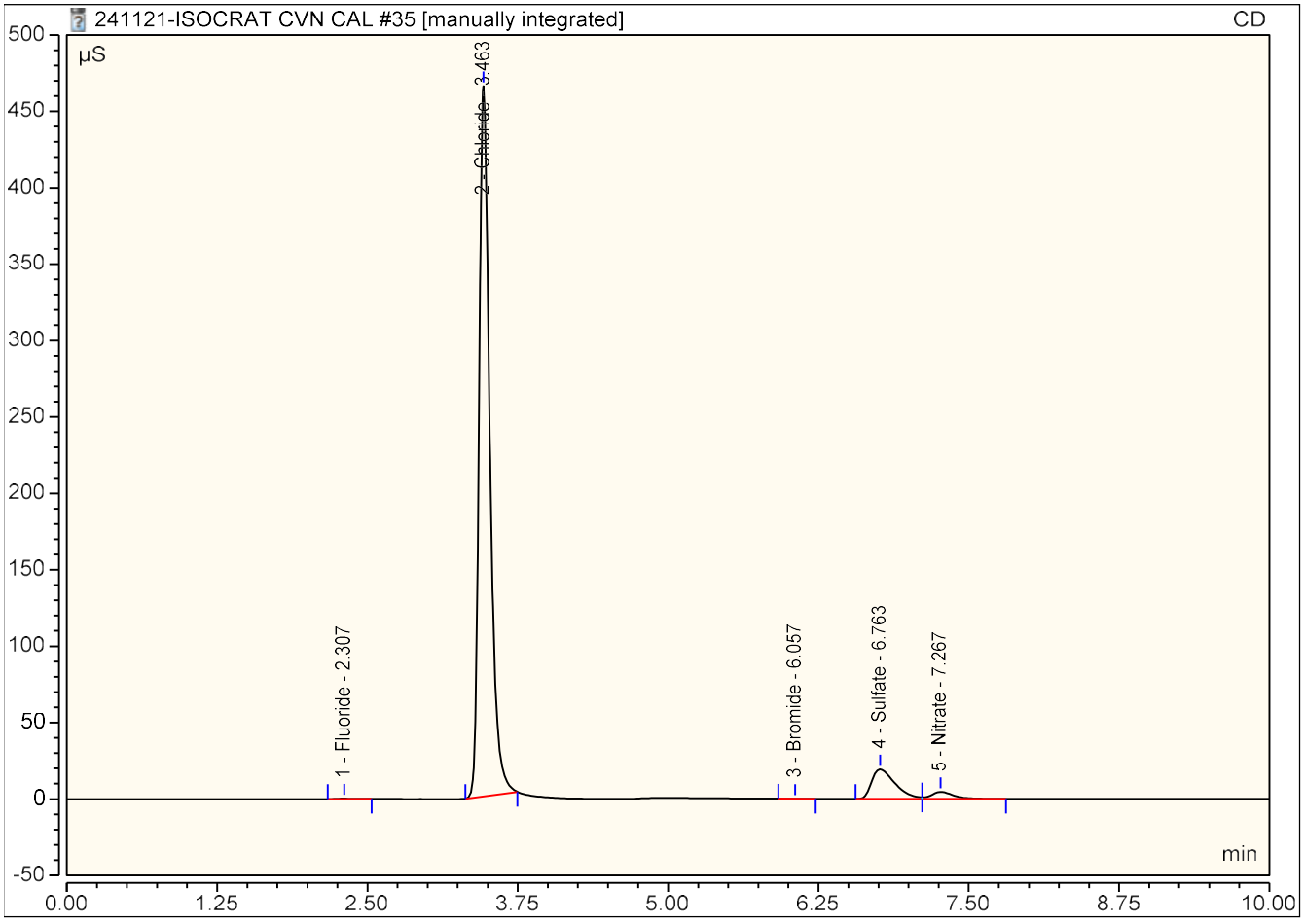
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	2.31	**Fluoride**	BMB	0.001	0.010	0.0470
2	3.50	**Chloride**	BMB	0.003	0.029	0.1892
4	6.94	**Sulfate**	BMB	0.010	0.035	0.3595
TOTAL:				0.02	0.07	0.60



Peak Integration Report

Sample Name:	**L2467901-02 SO4 BR**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**22-Nov-2024 / 01:49**	*Run Time:*	**10.00**

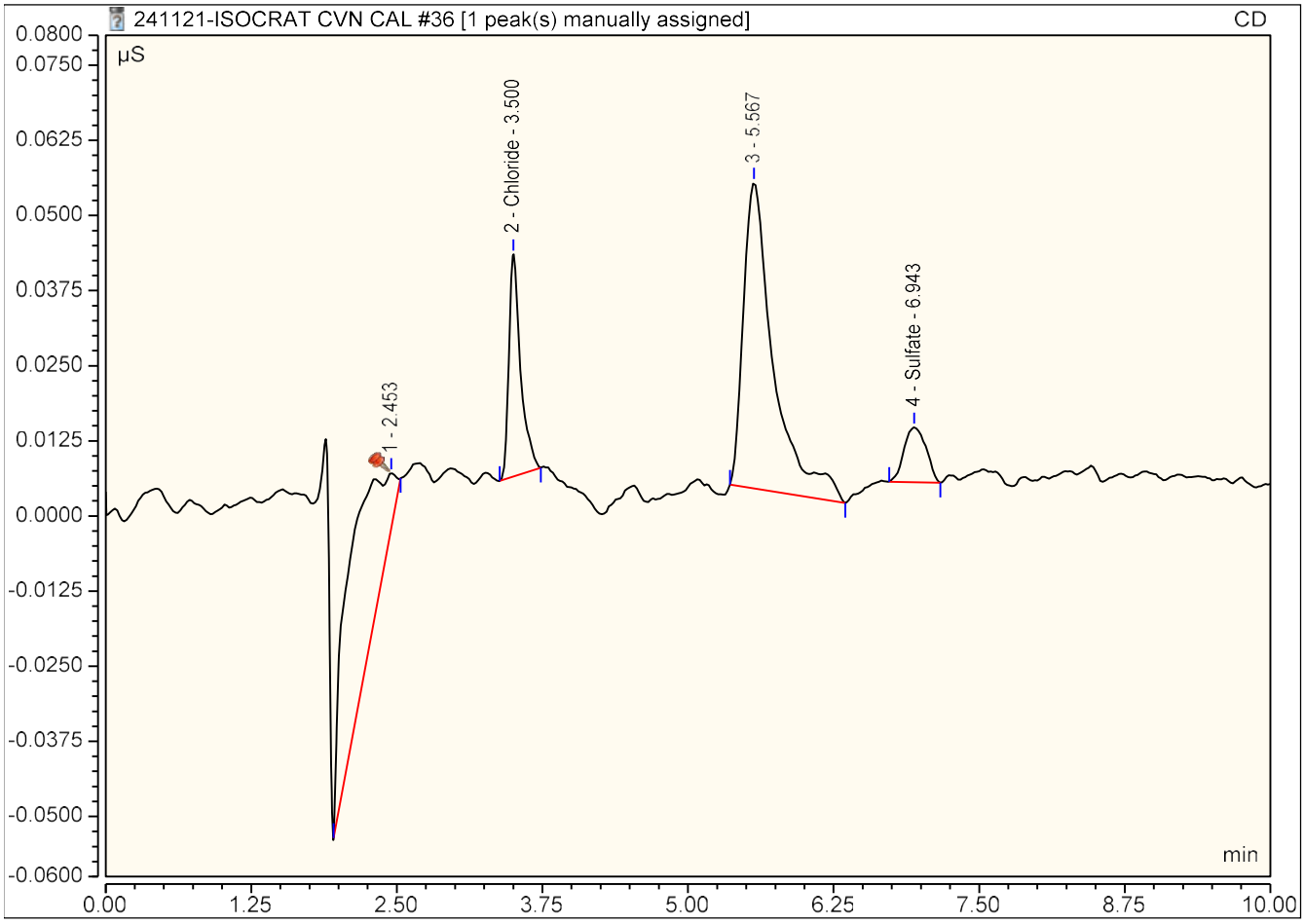
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	2.31	**Fluoride**	BMB	0.029	0.332	0.1014
2	3.46	**Chloride**	BMB	48.172	464.910	122.0872
3	6.06	**Bromide**	BMB	0.002	0.015	0.0735
4	6.76	**Sulfate**	BM *	4.347	19.270	15.0293
5	7.27	**Nitrate**	MB*	0.963	4.531	0.9203
TOTAL:				53.51	489.06	138.21



Peak Integration Report

Sample Name:	**RINSE**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**10.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**22-Nov-2024 / 02:01**	*Run Time:*	**10.00**

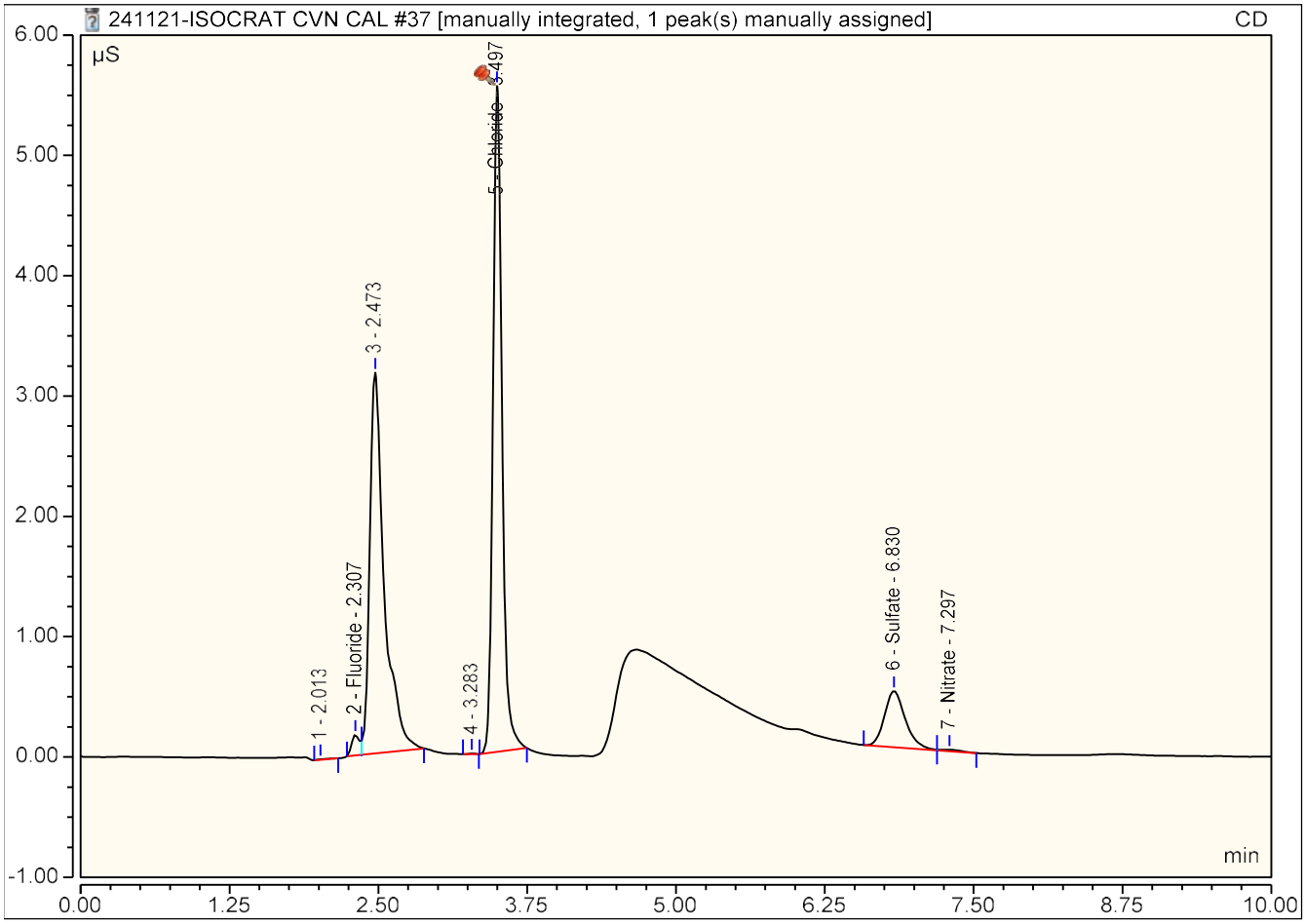
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	3.50	**Chloride**	BMB	0.004	0.037	1.9140
4	6.94	**Sulfate**	BMB	0.002	0.009	3.3097
TOTAL:				0.01	0.05	5.22



Peak Integration Report

Sample Name:	**L2467901-01**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**22-Nov-2024 / 02:13**	*Run Time:*	**10.00**

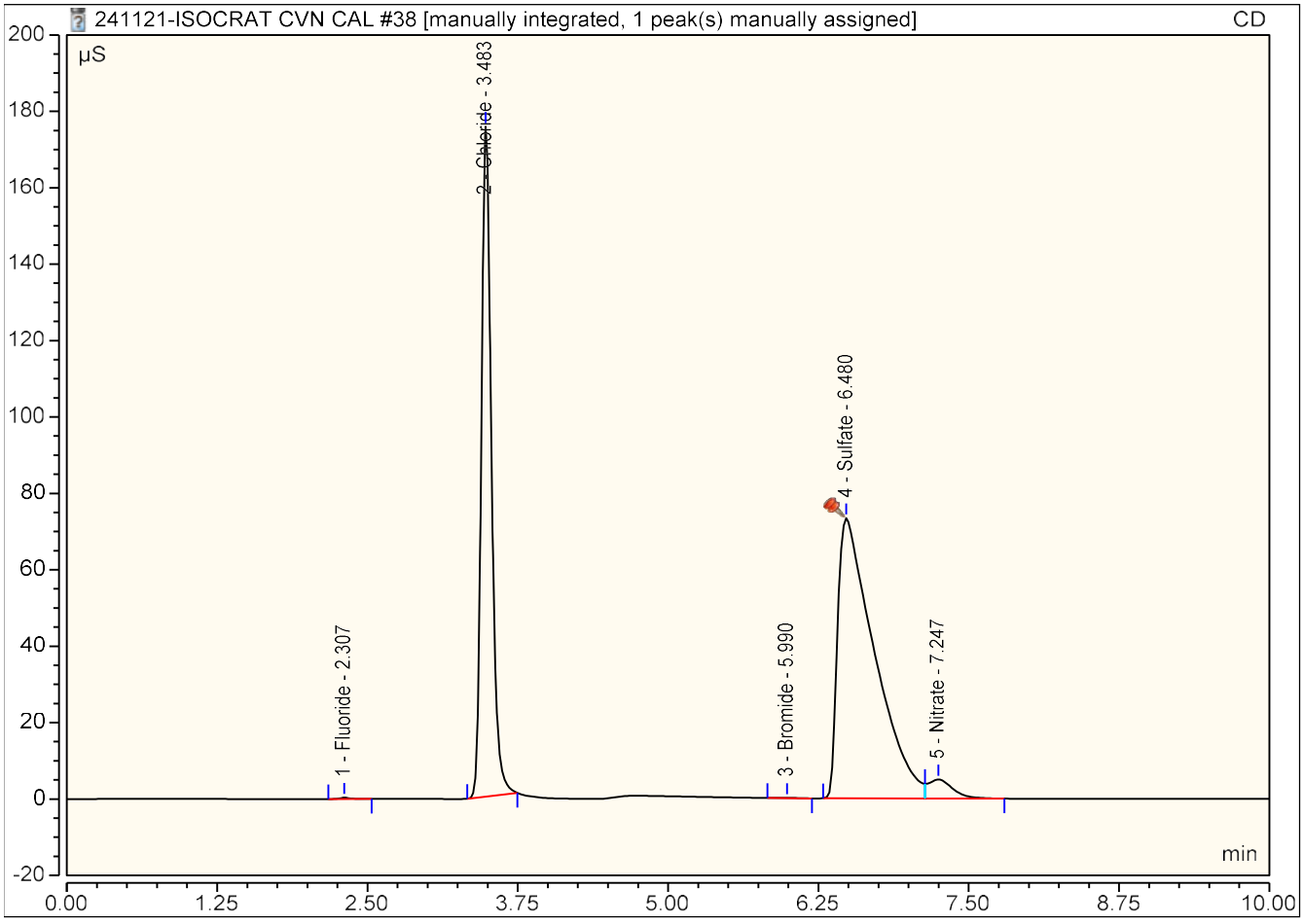
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.31	**Fluoride**	BM *	0.013	0.171	0.0704
5	3.50	**Chloride**	BMB^	0.488	5.534	1.4165
6	6.83	**Sulfate**	BM *	0.095	0.467	0.6455
7	7.30	**Nitrate**	MB*	0.002	0.012	0.0557
TOTAL:				0.60	6.18	2.19



Peak Integration Report

Sample Name:	**L2467901-03**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**22-Nov-2024 / 02:25**	*Run Time:*	**10.00**

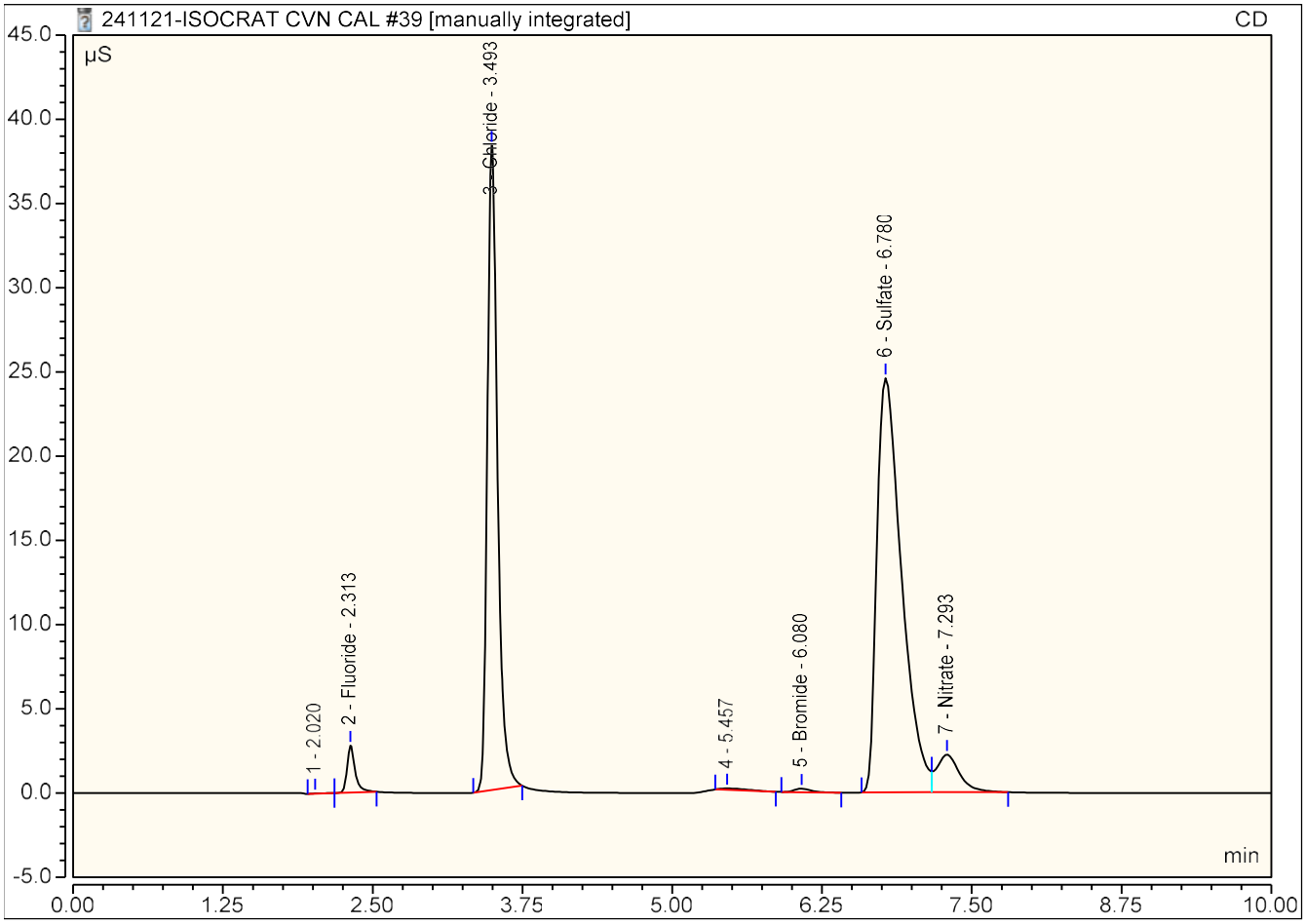
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	2.31	**Fluoride**	BMB	0.032	0.359	0.1072
2	3.48	**Chloride**	BMB	16.988	175.371	43.1724
3	5.99	**Bromide**	BMB	0.015	0.095	0.1841
4	6.48	**Sulfate**	BM *^	25.957	73.321	88.1429
5	7.25	**Nitrate**	MB*	1.193	5.005	1.1268
TOTAL:				44.19	254.15	132.73



Peak Integration Report

Sample Name:	**L2467901-05 MS; 10X**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**10.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**22-Nov-2024 / 02:37**	*Run Time:*	**10.00**

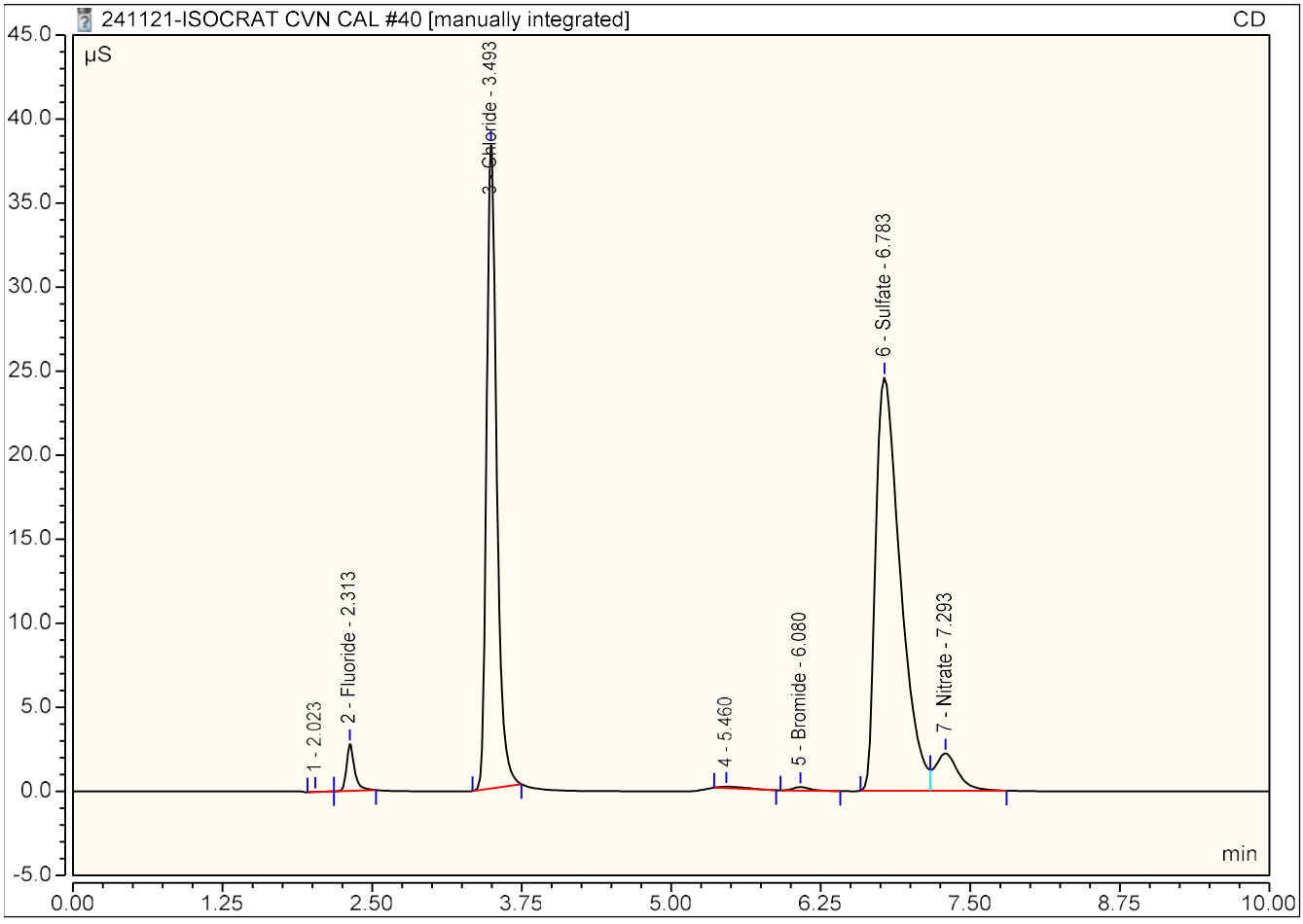
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.31	**Fluoride**	BMB	0.214	2.787	4.5864
3	3.49	**Chloride**	BMB	3.771	38.264	97.2343
5	6.08	**Bromide**	BMB	0.034	0.213	3.5147
6	6.78	**Sulfate**	BM *	5.875	24.581	202.0170
7	7.29	**Nitrate**	MB*	0.498	2.229	5.0142
TOTAL:				10.39	68.07	312.37



Peak Integration Report

Sample Name:	**L2467901-05 MSD; 10X**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**10.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**22-Nov-2024 / 02:49**	*Run Time:*	**10.00**

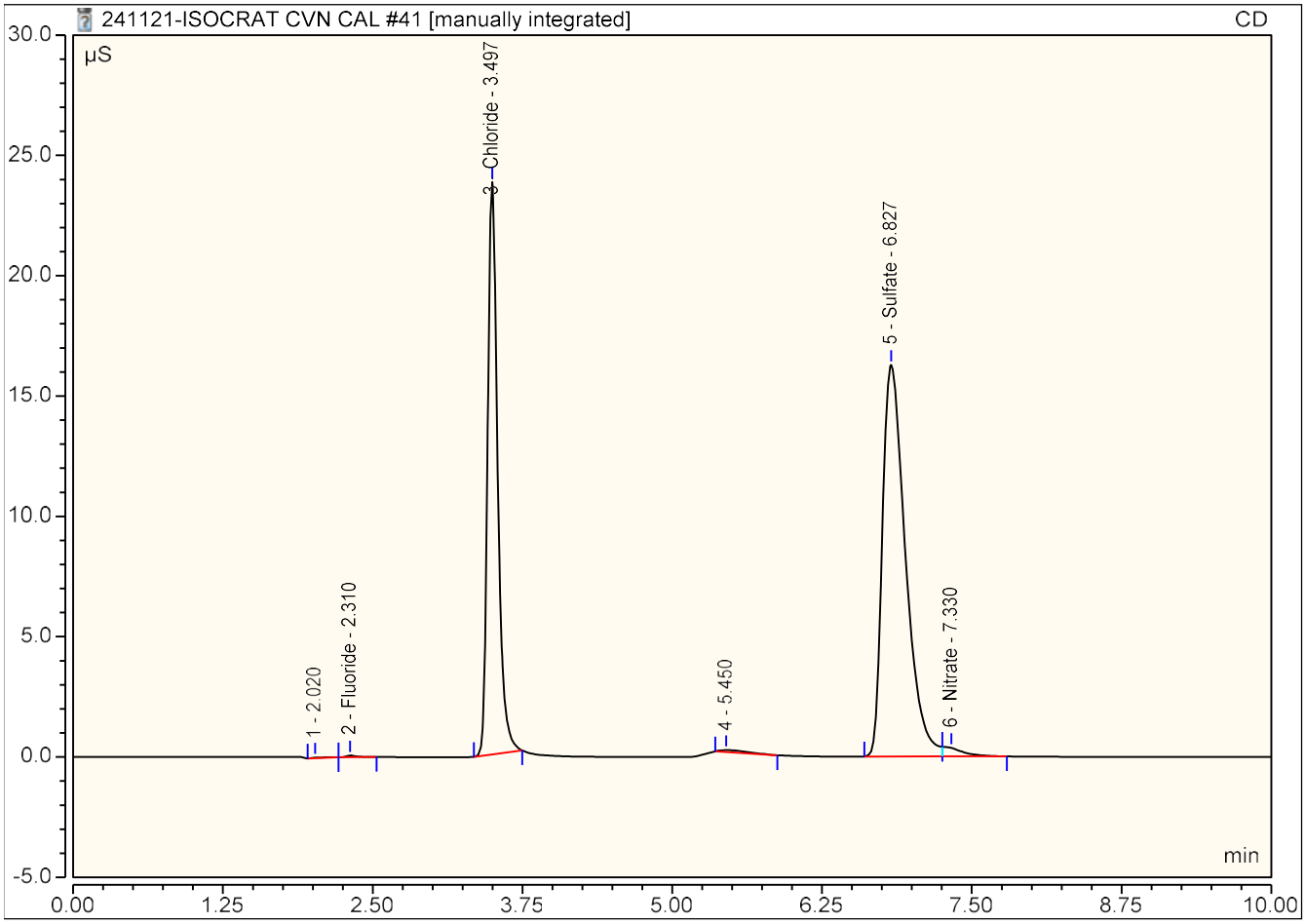
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.31	**Fluoride**	BMB	0.214	2.791	4.5914
3	3.49	**Chloride**	BMB	3.775	38.289	97.3326
5	6.08	**Bromide**	BMB	0.034	0.213	3.5671
6	6.78	**Sulfate**	BM *	5.871	24.577	201.8671
7	7.29	**Nitrate**	MB*	0.496	2.222	4.9965
TOTAL:				10.39	68.09	312.35



Peak Integration Report

Sample Name:	**L2467901-05 DUP; 10X**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**10.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**22-Nov-2024 / 03:02**	*Run Time:*	**10.00**

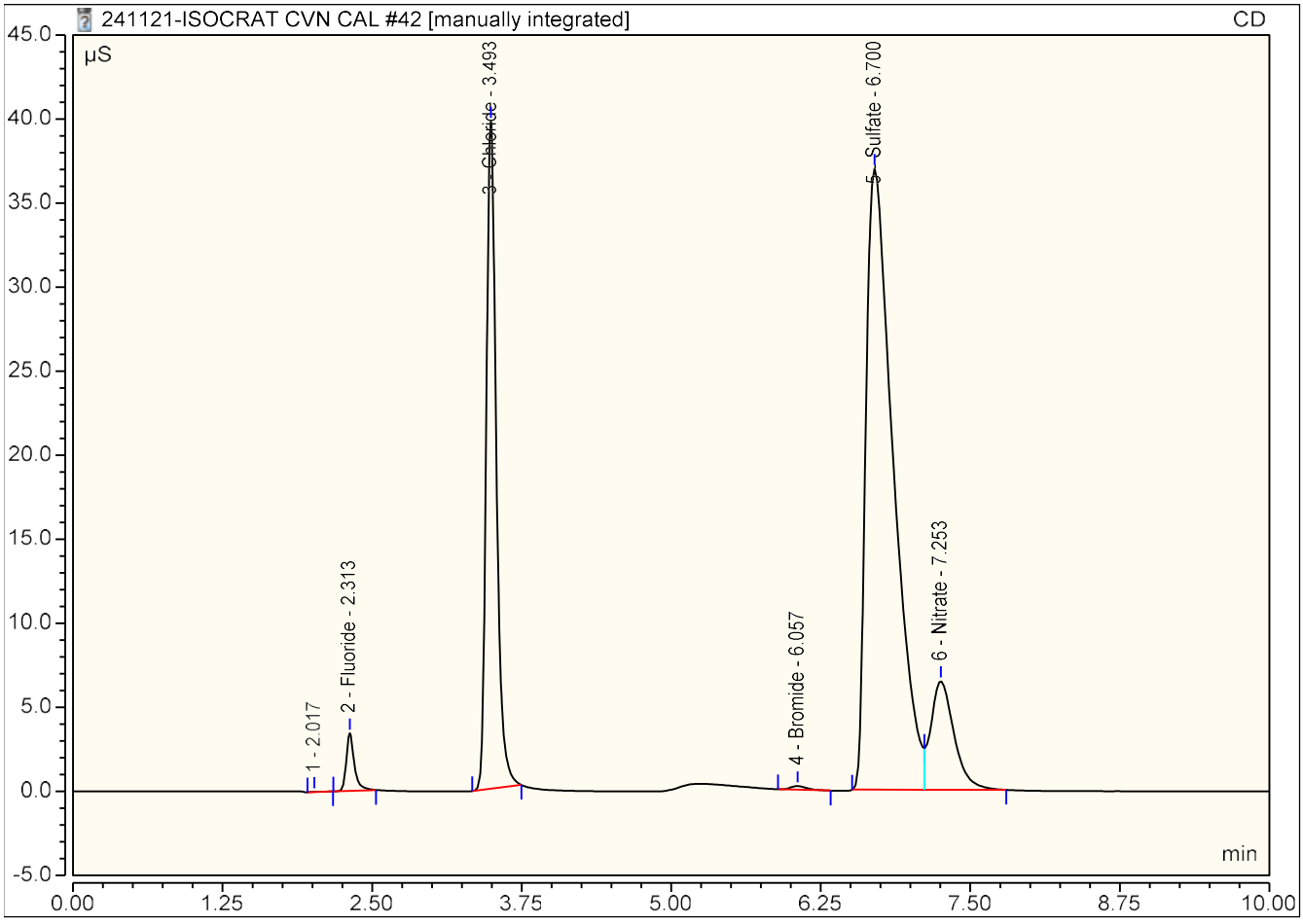
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.31	**Fluoride**	BMB	0.007	0.070	0.5756
3	3.50	**Chloride**	BMB	2.307	23.788	60.1922
5	6.83	**Sulfate**	BM *	3.628	16.266	125.9998
6	7.33	**Nitrate**	MB*	0.074	0.352	1.2018
TOTAL:				6.02	40.48	187.97



Peak Integration Report

Sample Name:	**L2467934-02 MS**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**22-Nov-2024 / 03:14**	*Run Time:*	**10.00**

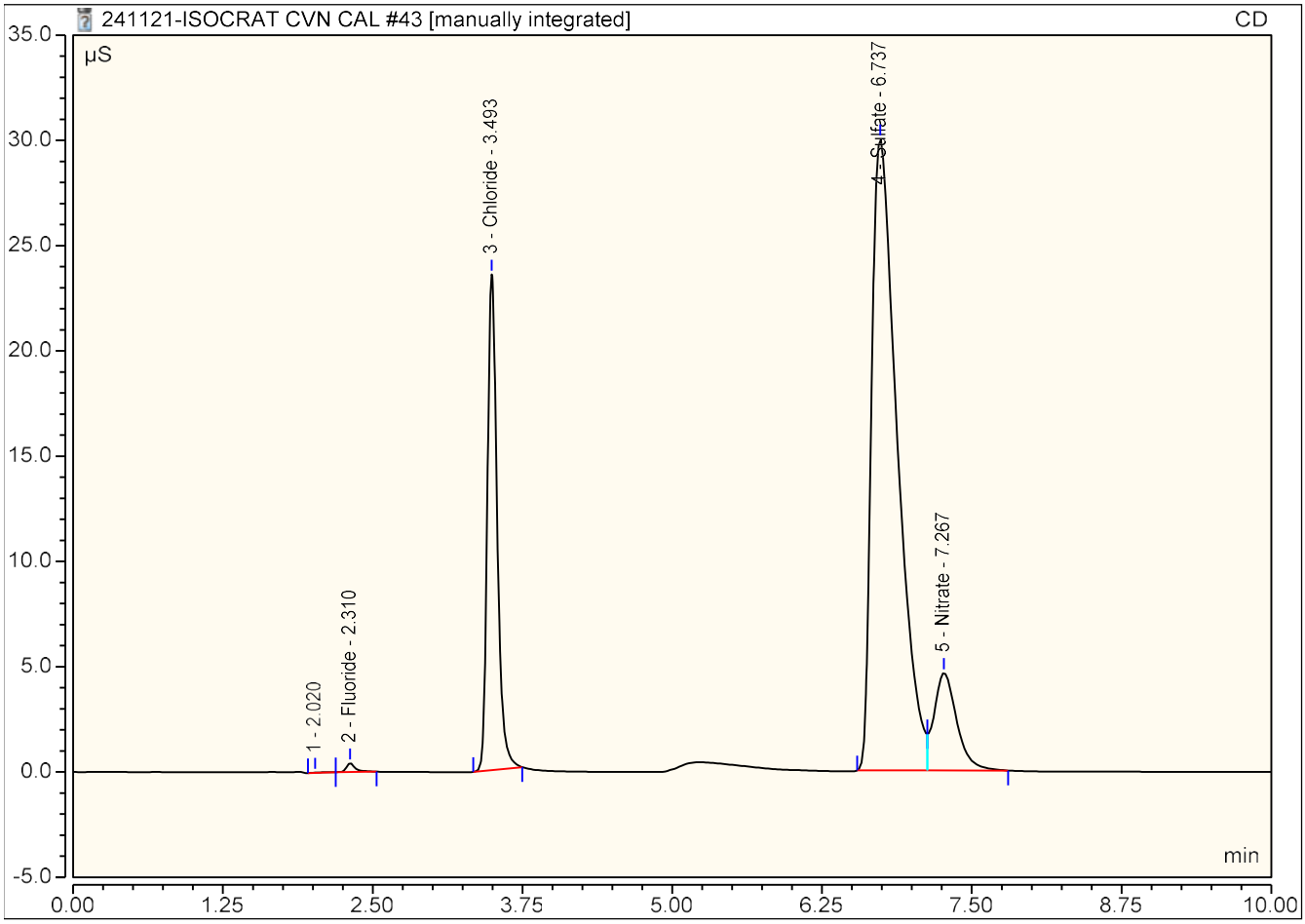
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.31	**Fluoride**	BMB	0.264	3.426	0.5551
3	3.49	**Chloride**	BMB	3.844	39.698	9.9079
4	6.06	**Bromide**	BMB	0.035	0.228	0.3631
5	6.70	**Sulfate**	BM *	9.763	36.947	33.3540
6	7.25	**Nitrate**	MB*	1.461	6.473	1.3679
TOTAL:				15.37	86.77	45.55



Peak Integration Report

Sample Name:	**L2467934-02 DUP**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**22-Nov-2024 / 03:26**	*Run Time:*	**10.00**

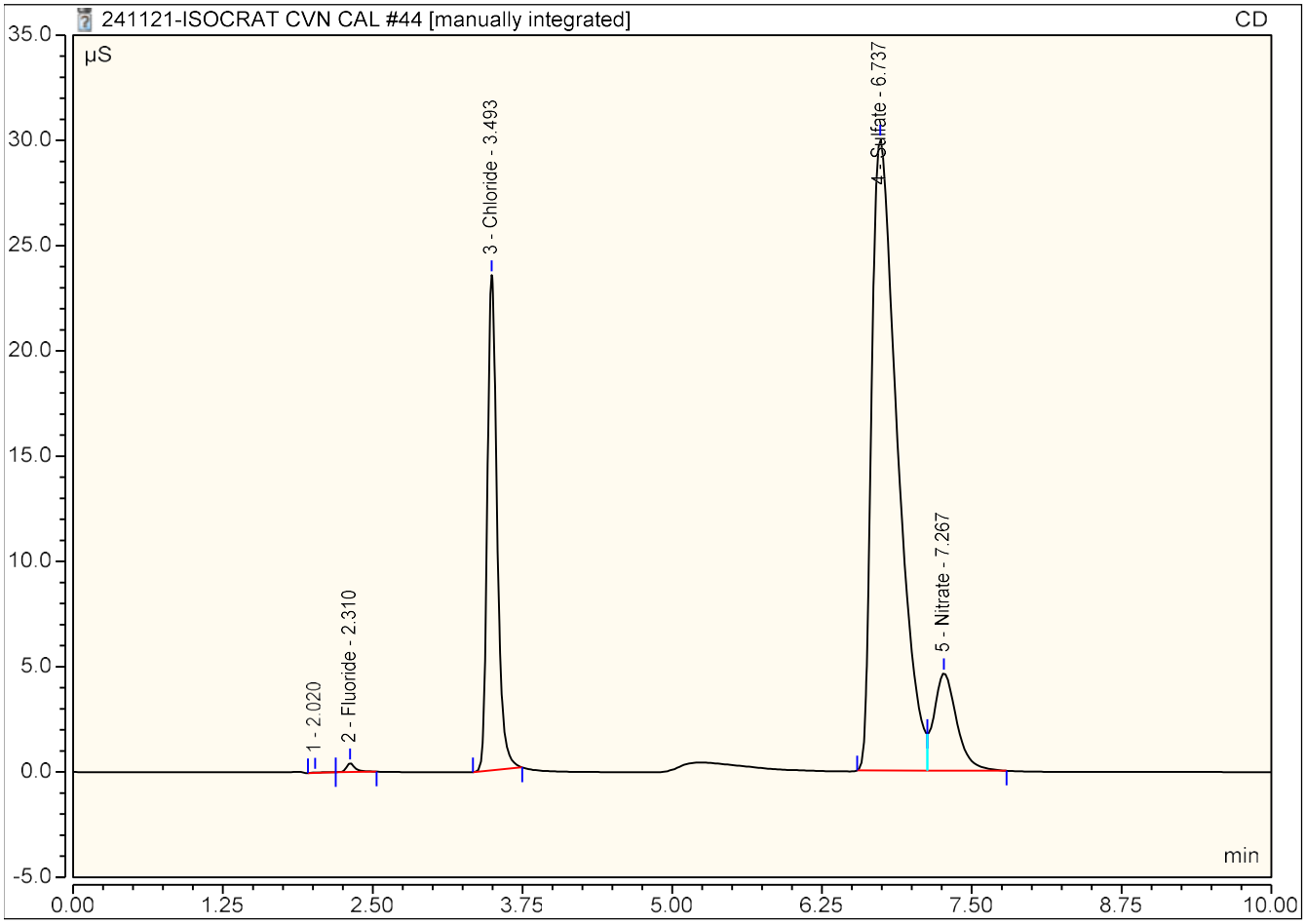
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.31	**Fluoride**	BMB	0.035	0.418	0.1132
3	3.49	**Chloride**	BMB	2.228	23.546	5.8194
4	6.74	**Sulfate**	BM *	7.455	29.979	25.5450
5	7.27	**Nitrate**	MB*	1.023	4.637	0.9741
TOTAL:				10.74	58.58	32.45



Peak Integration Report

Sample Name:	**L2467934-02**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**22-Nov-2024 / 03:38**	*Run Time:*	**10.00**

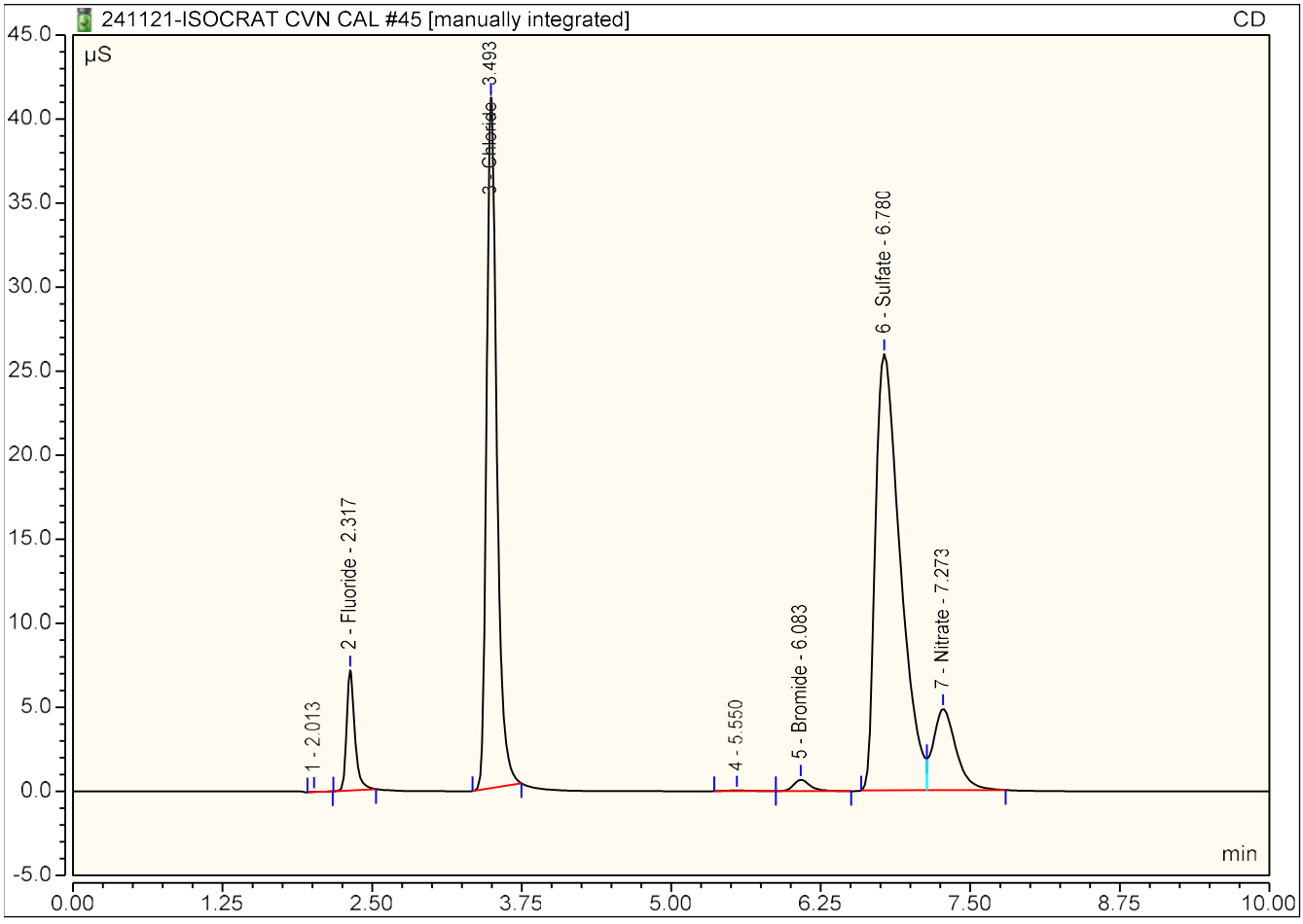
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.31	**Fluoride**	BMB	0.035	0.420	0.1128
3	3.49	**Chloride**	BMB	2.228	23.524	5.8196
4	6.74	**Sulfate**	BM *	7.466	29.976	25.5821
5	7.27	**Nitrate**	MB*	1.019	4.627	0.9705
TOTAL:				10.75	58.55	32.49



Peak Integration Report

Sample Name:	**CCV FAIL F**	*Inj. Vol.:*	**25.00**
Injection Type:	**Check Standard**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**22-Nov-2024 / 03:50**	*Run Time:*	**10.00**

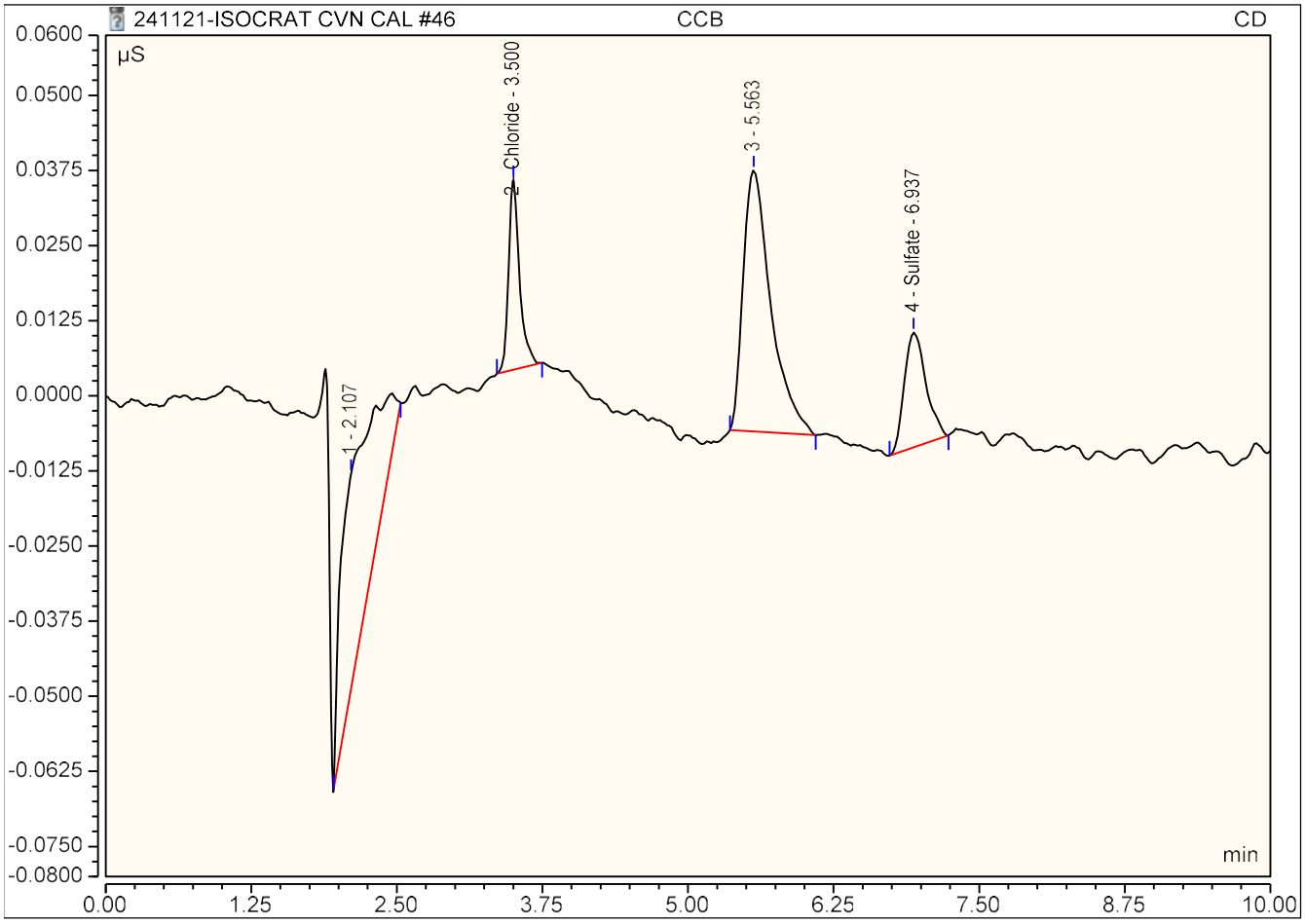
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.32	**Fluoride**	BMB	0.562	7.148	1.1304
3	3.49	**Chloride**	BMB	4.072	41.072	10.4848
5	6.08	**Bromide**	BMB	0.111	0.683	1.0395
6	6.78	**Sulfate**	BM *	6.239	25.950	21.4307
7	7.27	**Nitrate**	MB*	1.075	4.837	1.0207
TOTAL:				12.06	79.69	35.11



Peak Integration Report

Sample Name:	**CCB**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**22-Nov-2024 / 04:02**	*Run Time:*	**10.00**

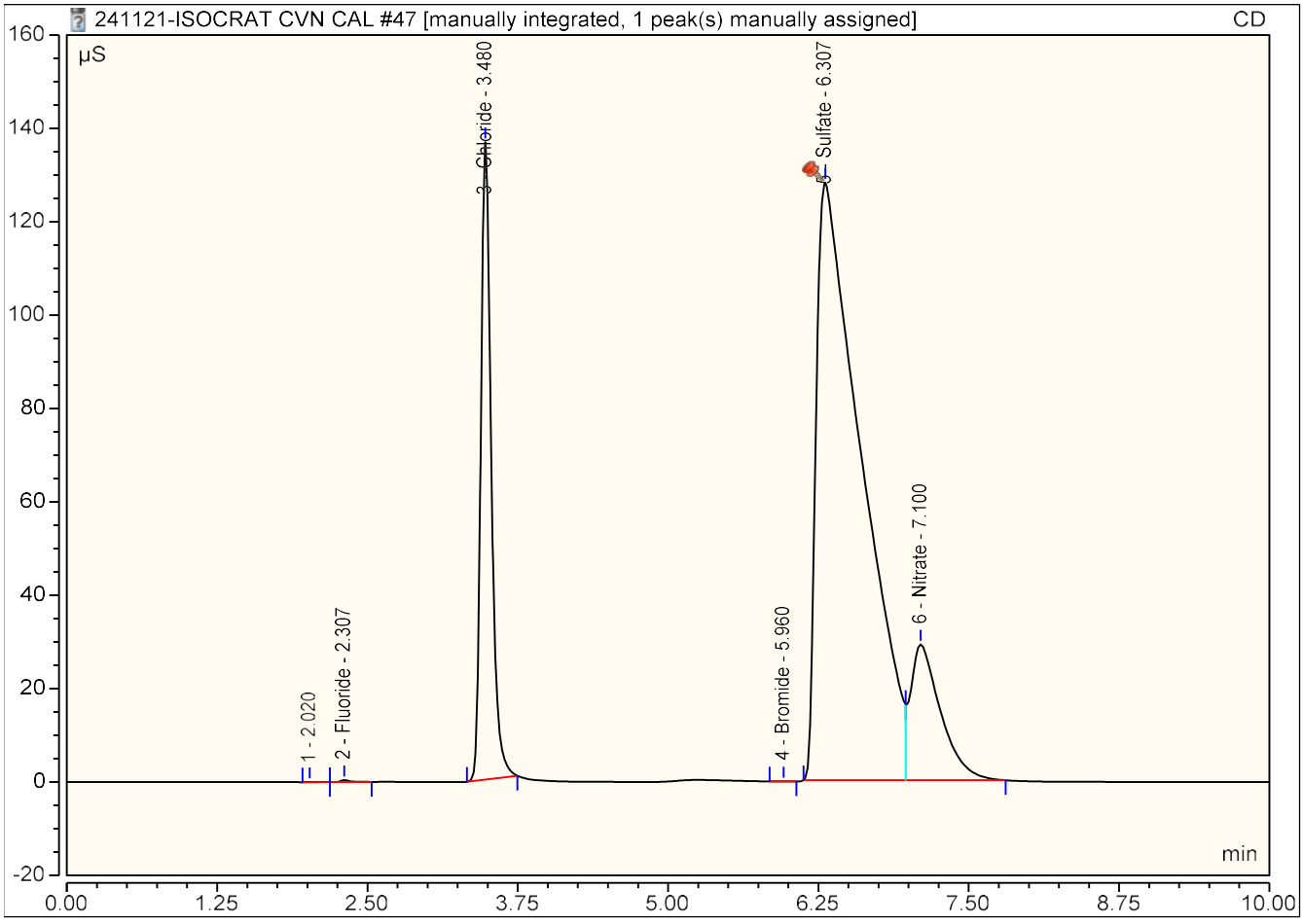
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	3.50	**Chloride**	BMB	0.003	0.032	0.1892
4	6.94	**Sulfate**	BMB	0.004	0.019	0.3381
TOTAL:				0.01	0.05	0.53



Peak Integration Report

Sample Name:	**L2467934-03 CL**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**22-Nov-2024 / 04:14**	*Run Time:*	**10.00**

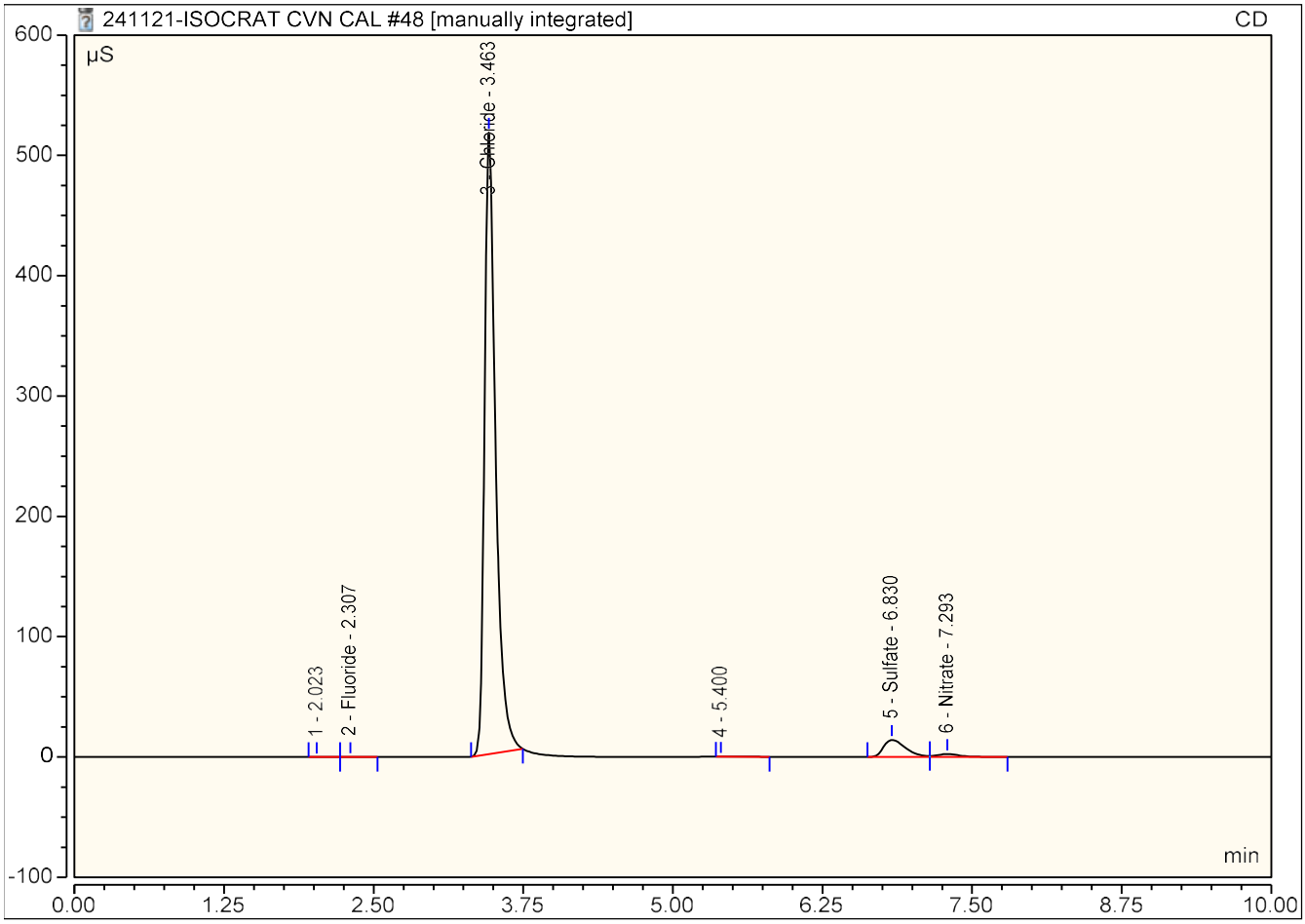
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.31	**Fluoride**	BMB	0.036	0.409	0.1135
3	3.48	**Chloride**	BMB	13.654	136.547	34.7333
4	5.96	**Bromide**	BMB	0.005	0.042	0.0947
5	6.31	**Sulfate**	BM *^	55.284	127.995	187.3614
6	7.10	**Nitrate**	MB*	8.445	29.056	7.6505
TOTAL:				77.42	294.05	229.95



Peak Integration Report

Sample Name:	**L2467934-04 SO4 BR**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**22-Nov-2024 / 04:26**	*Run Time:*	**10.00**

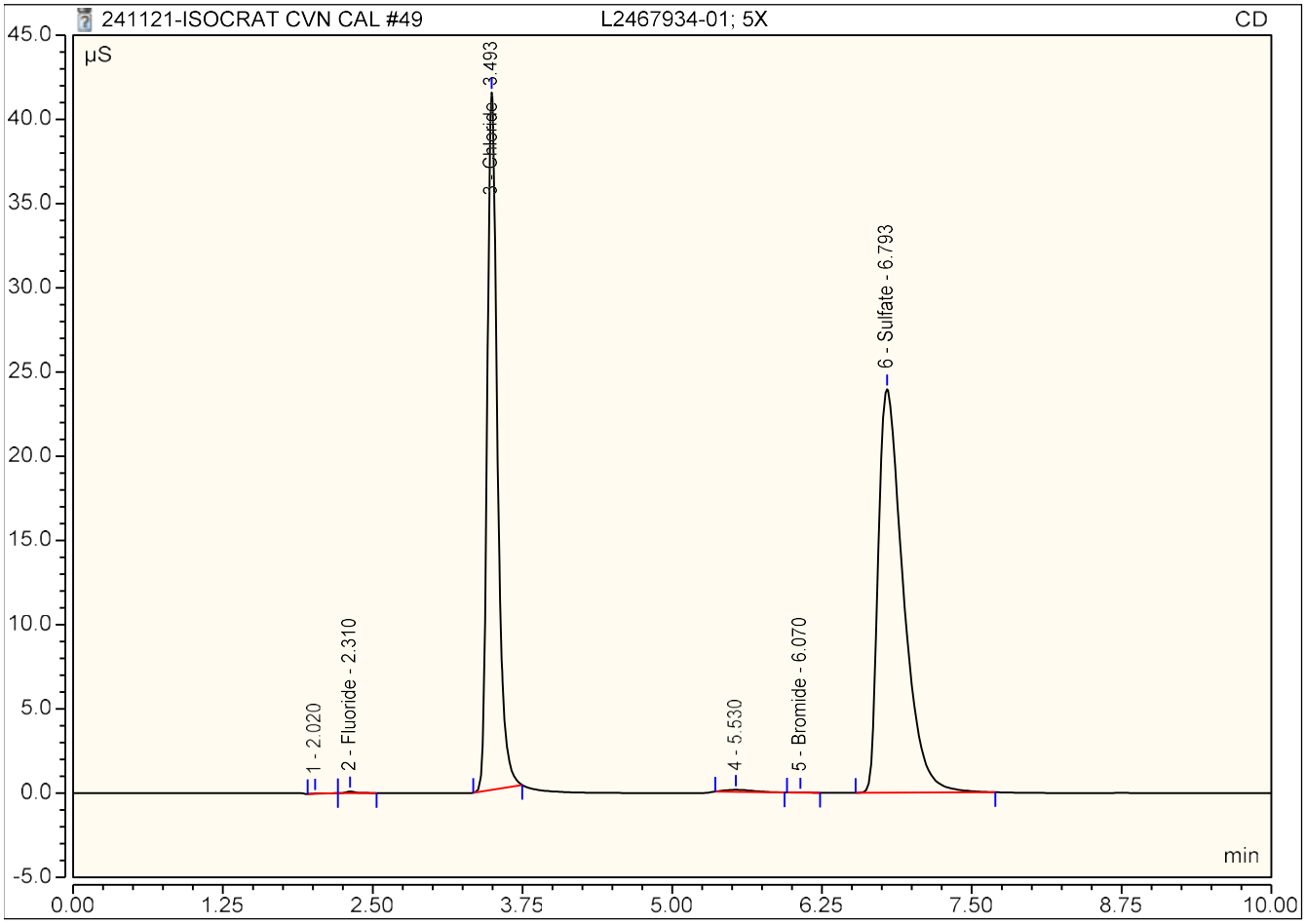
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.31	**Fluoride**	BMB	0.007	0.075	0.0580
3	3.46	**Chloride**	BMB	55.763	516.613	141.2968
5	6.83	**Sulfate**	BM *	3.018	14.199	10.5331
6	7.29	**Nitrate**	MB*	0.527	2.475	0.5277
TOTAL:				59.31	533.36	152.42



Peak Integration Report

Sample Name:	**L2467934-01; 5X**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**5.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**22-Nov-2024 / 04:38**	*Run Time:*	**10.00**

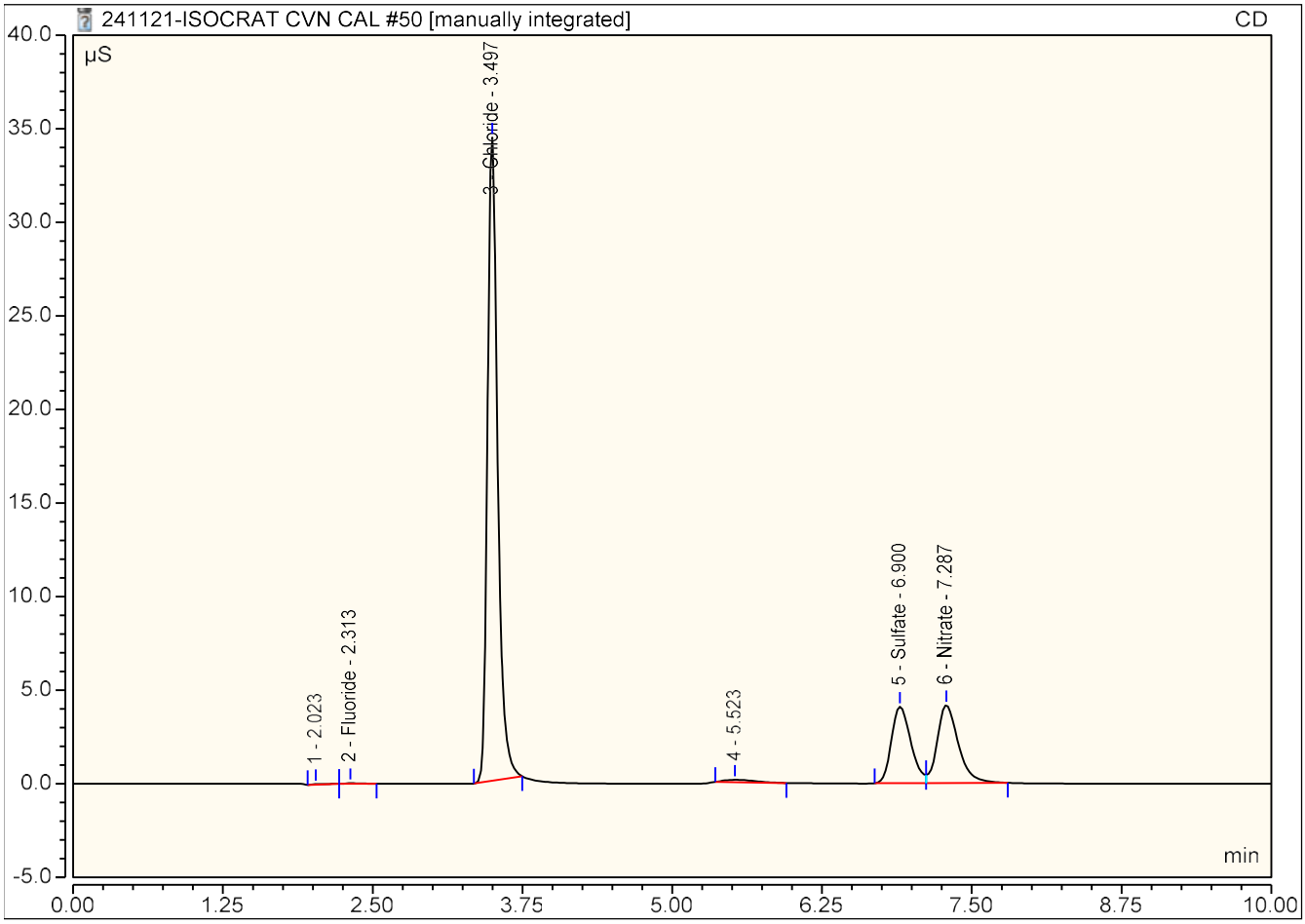
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.31	**Fluoride**	BMB	0.010	0.110	0.3174
3	3.49	**Chloride**	BMB	4.098	41.394	52.7542
5	6.07	**Bromide**	BMB	0.002	0.015	0.3532
6	6.79	**Sulfate**	BMB	5.799	23.960	99.7207
TOTAL:				9.91	65.48	153.15



Peak Integration Report

Sample Name:	**L2467934-05**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**22-Nov-2024 / 04:50**	*Run Time:*	**10.00**

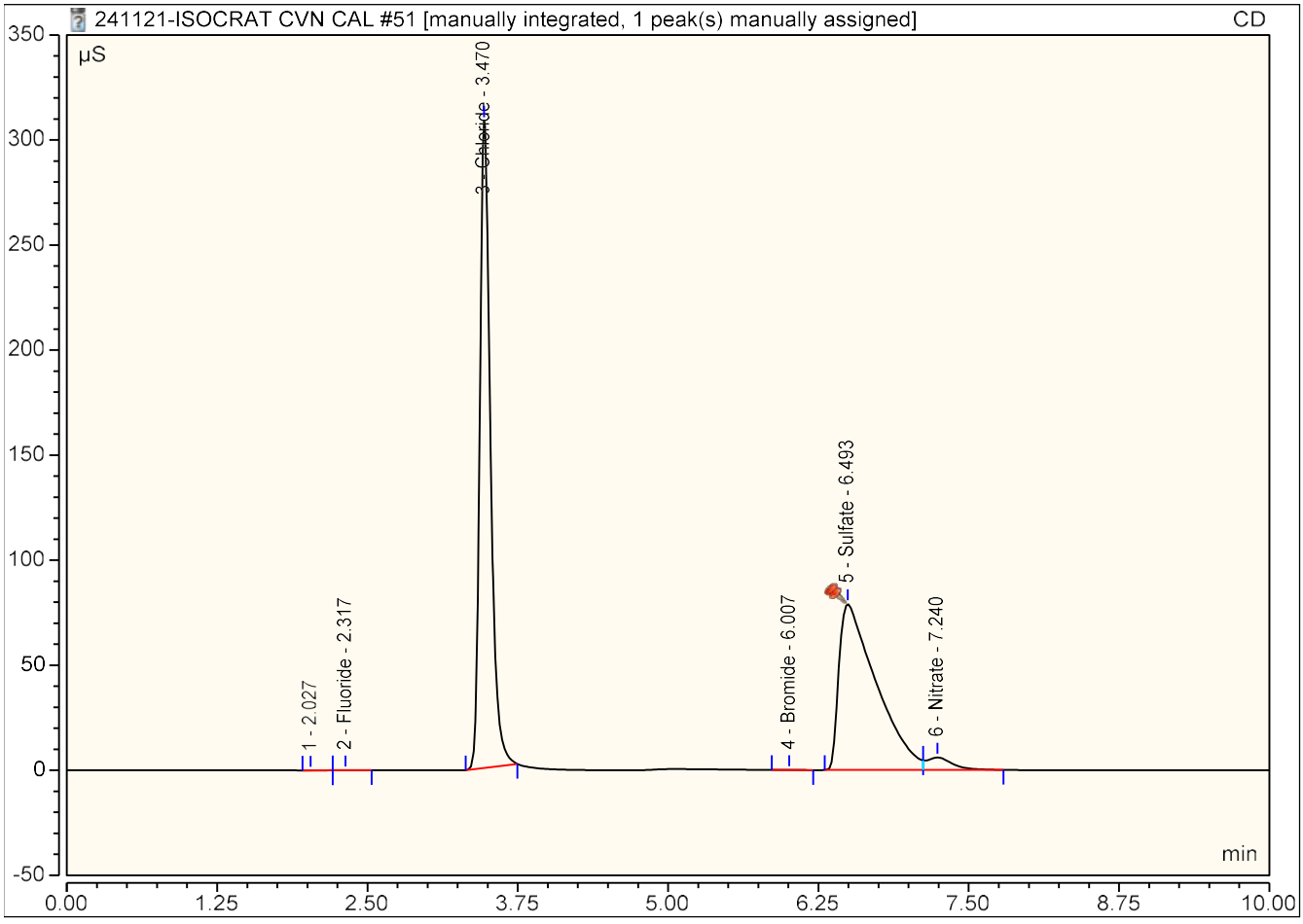
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.31	**Fluoride**	BMB	0.004	0.040	0.0522
3	3.50	**Chloride**	BMB	3.385	34.377	8.7459
5	6.90	**Sulfate**	BM *	0.768	4.077	2.9212
6	7.29	**Nitrate**	MB*	0.849	4.152	0.8172
TOTAL:				5.00	42.65	12.54



Peak Integration Report

Sample Name:	**L2467934-06**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**22-Nov-2024 / 05:02**	*Run Time:*	**10.00**

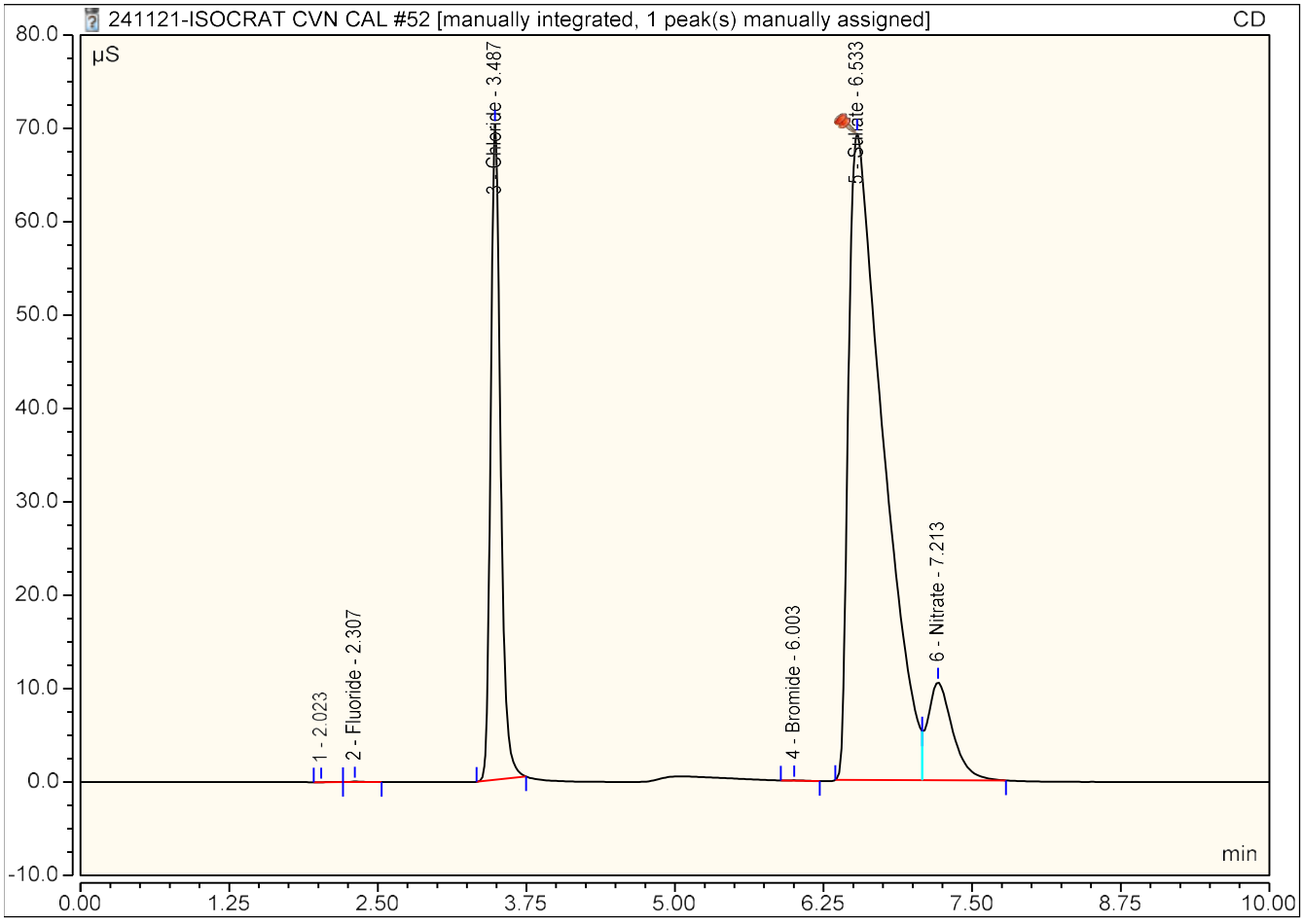
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.32	**Fluoride**	BMB	0.009	0.066	0.0623
3	3.47	**Chloride**	BMB	31.514	308.008	79.9311
4	6.01	**Bromide**	BMB	0.015	0.105	0.1899
5	6.49	**Sulfate**	BM *^	28.273	79.004	95.9781
6	7.24	**Nitrate**	MB*	1.478	5.933	1.3836
TOTAL:				61.29	393.12	177.54



Peak Integration Report

Sample Name:	**L2467934-07**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**22-Nov-2024 / 05:14**	*Run Time:*	**10.00**

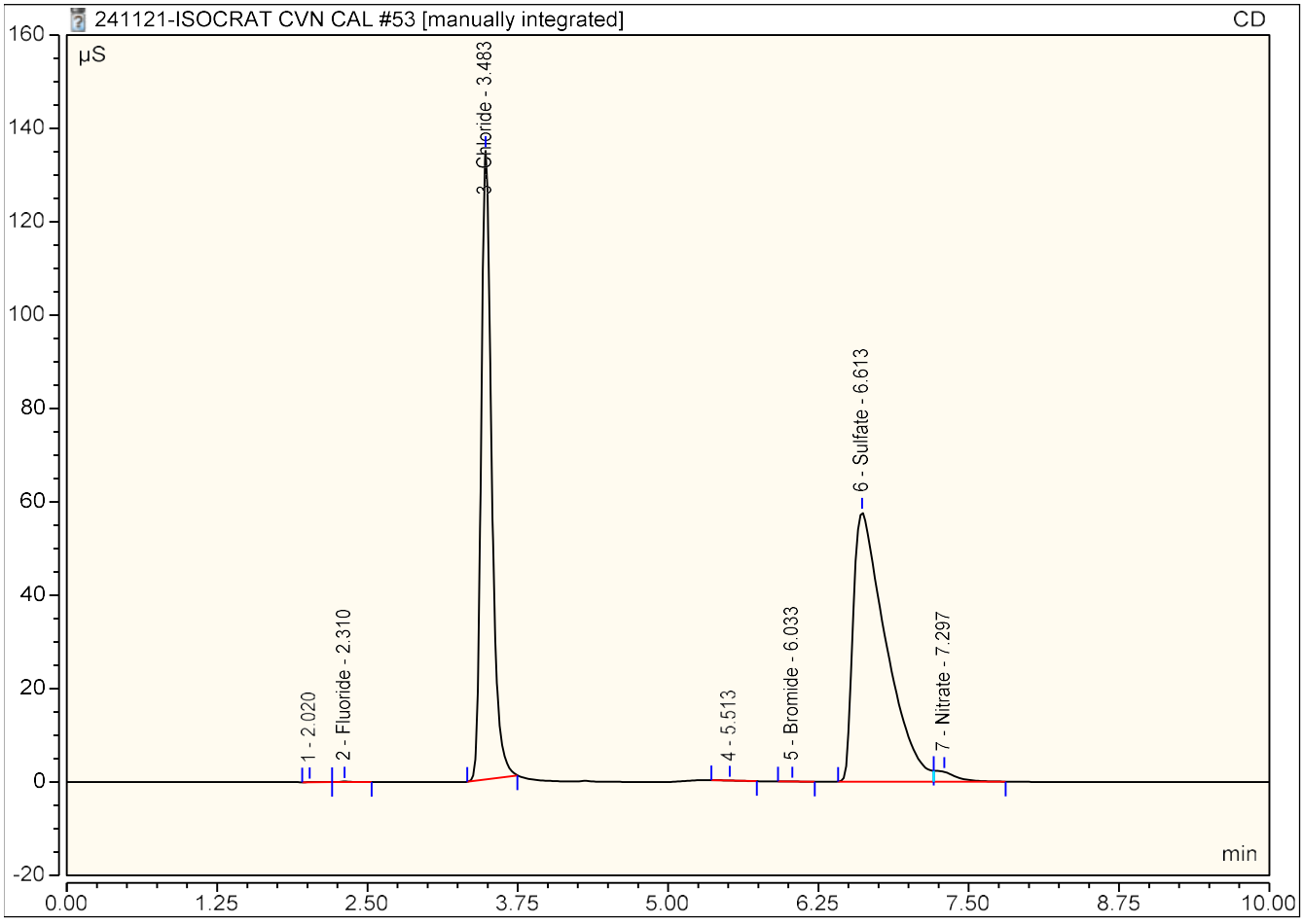
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.31	**Fluoride**	BMB	0.006	0.061	0.0557
3	3.49	**Chloride**	BMB	6.782	70.161	17.3437
4	6.00	**Bromide**	BMB	0.005	0.037	0.1021
5	6.53	**Sulfate**	BM *^	23.202	69.200	78.8203
6	7.21	**Nitrate**	MB*	2.563	10.474	2.3594
TOTAL:				32.56	149.93	98.68



Peak Integration Report

Sample Name:	**L2467934-08**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**22-Nov-2024 / 05:27**	*Run Time:*	**10.00**

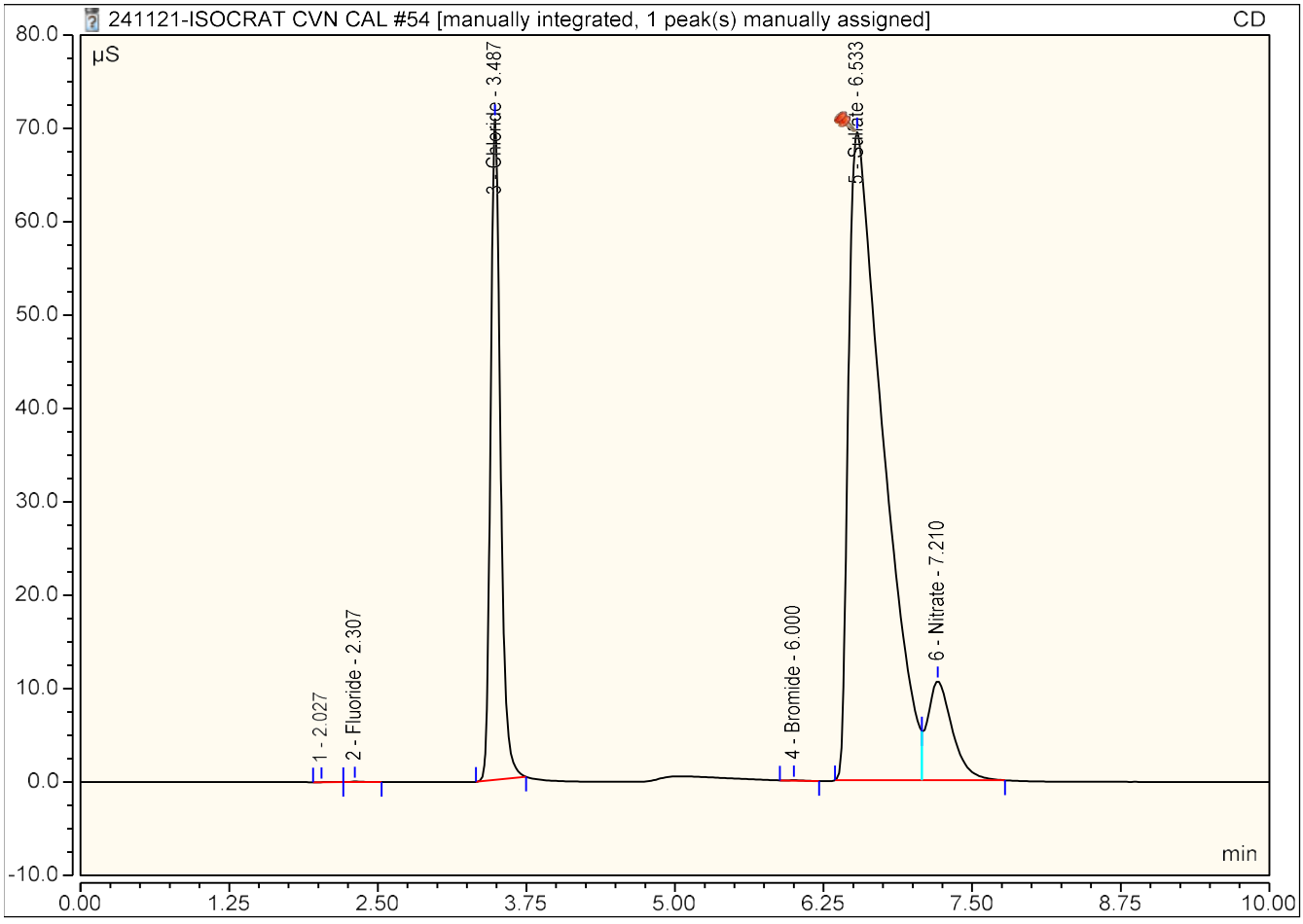
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.31	**Fluoride**	BMB	0.010	0.114	0.0647
3	3.48	**Chloride**	BMB	13.647	134.636	34.7177
5	6.03	**Bromide**	BMB	0.005	0.039	0.1025
6	6.61	**Sulfate**	BM *	18.196	57.648	61.8833
7	7.30	**Nitrate**	MB*	0.452	2.104	0.4603
TOTAL:				32.31	194.54	97.23



Peak Integration Report

Sample Name:	**L2467934-09**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**22-Nov-2024 / 05:39**	*Run Time:*	**10.00**

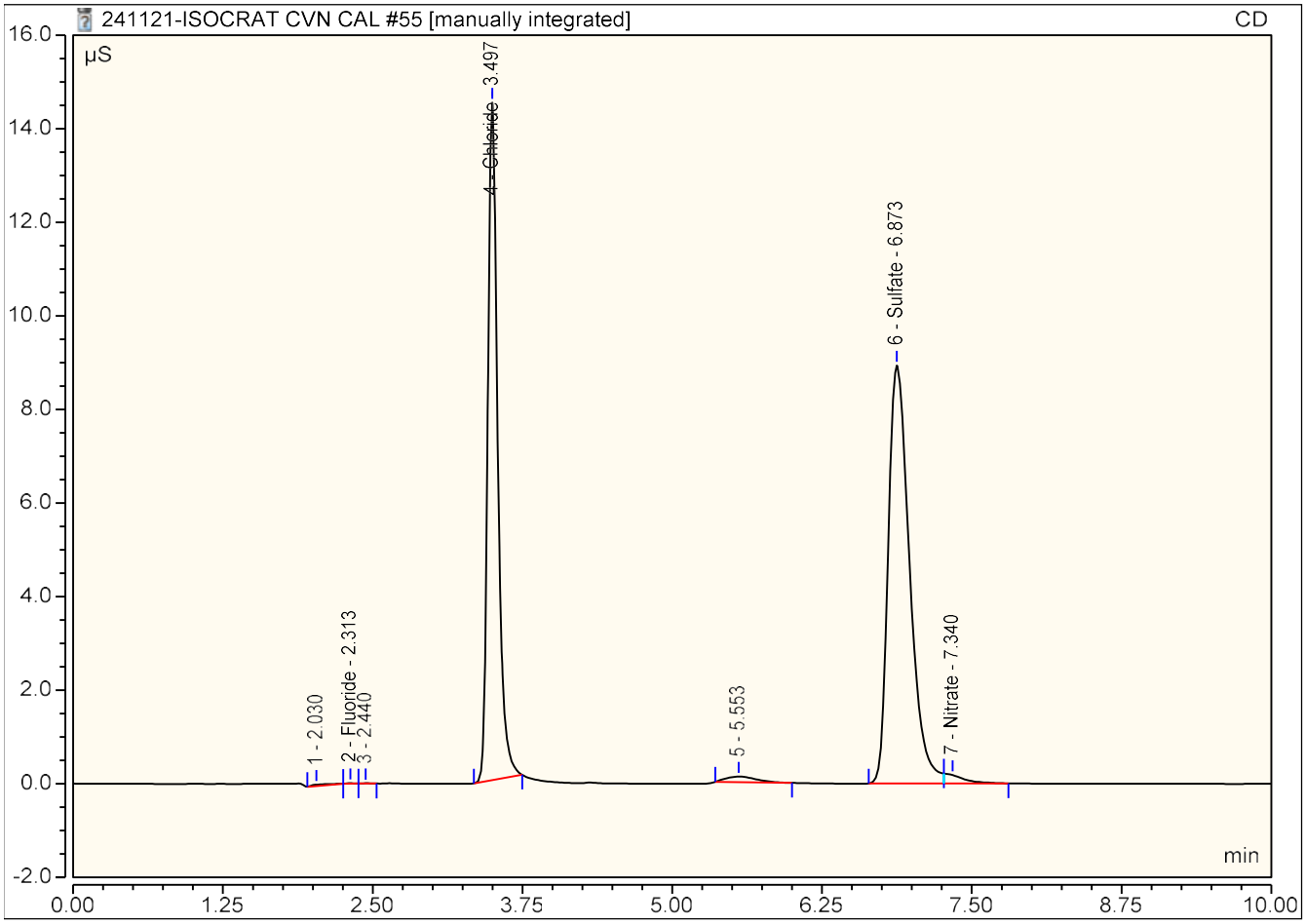
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.31	**Fluoride**	BMB	0.006	0.062	0.0559
3	3.49	**Chloride**	BMB	6.835	70.761	17.4764
4	6.00	**Bromide**	BMB	0.005	0.037	0.1010
5	6.53	**Sulfate**	BM *^	23.227	69.378	78.9051
6	7.21	**Nitrate**	MB*	2.589	10.601	2.3826
TOTAL:				32.66	150.84	98.92



Peak Integration Report

Sample Name:	**XL2467934-08; 10X**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**10.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**22-Nov-2024 / 05:51**	*Run Time:*	**10.00**

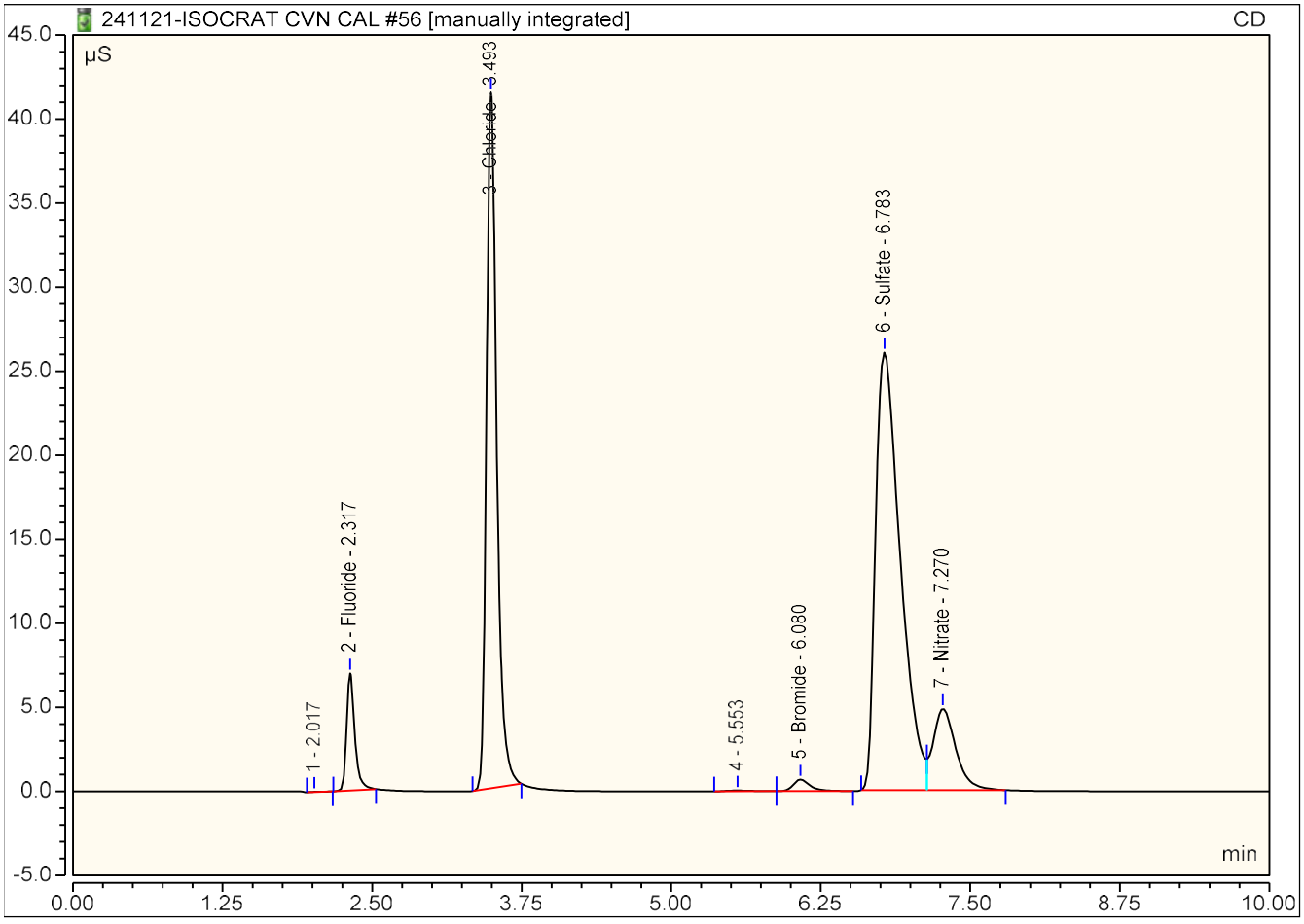
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.31	**Fluoride**	BMB	0.001	0.010	0.4594
4	3.50	**Chloride**	BMB	1.393	14.483	37.0480
6	6.87	**Sulfate**	BM *	1.850	8.934	65.8203
7	7.34	**Nitrate**	MB*	0.037	0.178	0.8688
TOTAL:				3.28	23.61	104.20



Peak Integration Report

Sample Name:	**CCV FAIL F**	*Inj. Vol.:*	**25.00**
Injection Type:	**Check Standard**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**22-Nov-2024 / 06:03**	*Run Time:*	**10.00**

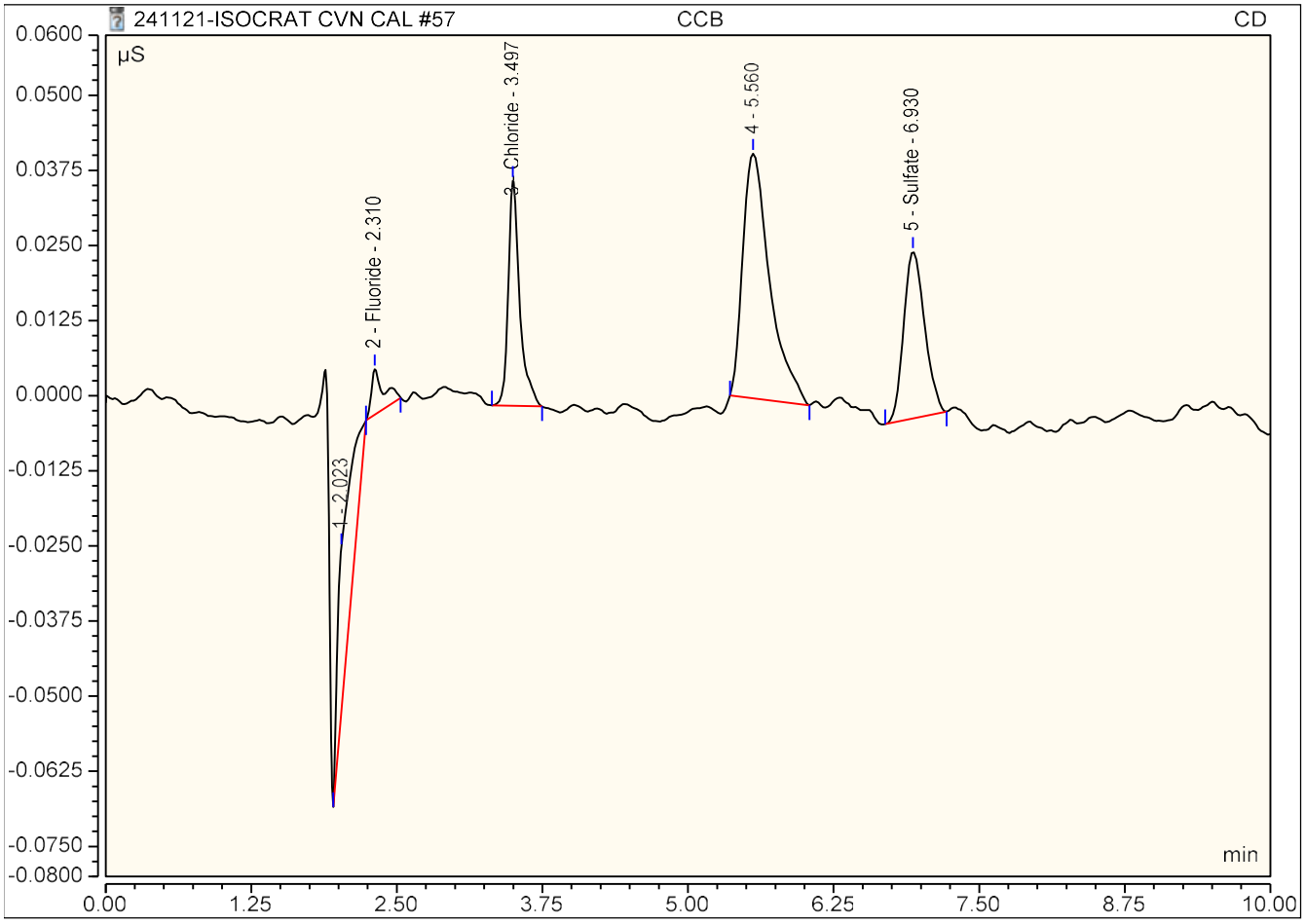
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.32	**Fluoride**	BMB	0.550	6.963	1.1076
3	3.49	**Chloride**	BMB	4.102	41.369	10.5626
5	6.08	**Bromide**	BMB	0.114	0.692	1.0603
6	6.78	**Sulfate**	BM *	6.240	26.048	21.4344
7	7.27	**Nitrate**	MB*	1.070	4.841	1.0166
TOTAL:				12.08	79.91	35.18



Peak Integration Report

Sample Name:	**CCB**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**22-Nov-2024 / 06:15**	*Run Time:*	**10.00**

No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.31	**Fluoride**	BMB	0.001	0.008	0.0465
3	3.50	**Chloride**	BMB	0.004	0.037	0.1913
5	6.93	**Sulfate**	BMB	0.006	0.028	0.3438
TOTAL:				0.01	0.07	0.58



Anion Summary Report

No.	Name	Dilution	Amount CD Fluoride	Amount CD Chloride	Amount CD Nitrate	Amount CD Sulfate	Amount CD Bromide
1	BLANK	1.0	0.0727	0.1832	n.a.	0.3400	n.a.
2	STD 0.5	1.0	0.0532	0.3078	0.0644	0.5897	0.0685
3	STD 1.0	1.0	0.0653	0.4943	0.0753	0.9373	0.0847
4	STD 2.0	1.0	0.1753	1.9633	0.1738	3.8299	0.1863
5	STD 3.0	1.0	0.4709	4.9693	0.4468	9.9718	0.4141
6	STD 4.0	1.0	2.0112	20.0184	2.0148	40.2692	2.0214
7	STD 5.0	1.0	4.9991	49.9970	5.3804	99.9021	5.7249
8	RINSE	1.0	0.0684	0.1873	n.a.	0.4533	n.a.
9	CCV	1.0	1.0178	10.1595	0.9735	20.5120	0.9368
10	CCB	1.0	0.0487	0.1874	n.a.	0.3860	n.a.
11	ICV	1.0	0.8677	7.9356	0.7729	7.7657	0.7897
12	ICB	1.0	0.0475	0.1878	n.a.	0.3509	n.a.
13	BLK	1.0	n.a.	0.1855	n.a.	0.3579	n.a.
14	LCS	1.0	0.8808	7.9779	0.7811	7.7745	0.7929
15	XL2467901-01; 10X	10.0	0.8698	2.6989	n.a.	4.2169	n.a.
16	L2467901-02; 10X CL	10.0	0.5046	125.4642	1.1662	15.2330	n.a.
17	XL2467901-03; 10X	10.0	0.5144	43.6972	1.2079	90.3615	n.a.
18	L2467901-04; 10X	10.0	0.7274	47.9768	n.a.	329.9793	n.a.
19	XL2467901-05; 10X	10.0	0.5565	58.8985	1.1510	123.1458	n.a.
20	L2467901-06; 10X CL	10.0	0.5967	50.4803	n.a.	1569.6761	n.a.
21	CCV	1.0	1.0863	10.2924	0.9973	20.9159	0.9935
22	CCB	1.0	n.a.	0.1881	n.a.	0.3476	n.a.
23	XL2467934-01; 10X	10.0	0.5530	55.3783	n.a.	101.2580	0.6511
24	XL2467934-02; 10X	10.0	0.5125	6.2007	1.1917	25.8368	n.a.
25	L2467934-03; 10X	10.0	0.5138	35.6325	6.7457	200.4319	n.a.
26	L2467934-04; 10X	10.0	0.4736	146.3891	0.9039	11.2399	n.a.
27	XL2467934-05; 10X	10.0	0.4537	8.9018	1.0610	4.9512	n.a.
28	L2467934-06; 10X	10.0	n.a.	83.2033	1.4332	100.8029	n.a.
29	XL2467934-07; 10X	10.0	0.6700	17.4411	2.2409	81.2034	n.a.
30	XL2467934-08; 10X	10.0	0.6780	36.3586	0.8709	64.1878	n.a.
31	XL2467934-09; 10X	10.0	0.7045	18.1067	2.3441	83.1380	n.a.
32	L2467901-06; 50X SO4 BR	50.0	2.4276	49.0333	n.a.	1520.6179	n.a.
33	CCV	1.0	1.0873	10.4073	1.0048	21.0268	1.0391
34	CCB	1.0	0.0470	0.1892	n.a.	0.3595	n.a.
35	L2467901-02 SO4 BR	1.0	0.1014	122.0872	0.9203	15.0293	0.0735
36	RINSE	10.0	n.a.	1.9140	n.a.	3.3097	n.a.
37	L2467901-01	1.0	0.0704	1.4165	0.0557	0.6455	n.a.
38	L2467901-03	1.0	0.1072	43.1724	1.1268	88.1429	0.1841
39	L2467901-05 MS; 10X	10.0	4.5864	97.2343	5.0142	202.0170	3.5147
40	L2467901-05 MSD; 10X	10.0	4.5914	97.3326	4.9965	201.8671	3.5671
41	L2467901-05 DUP; 10X	10.0	0.5756	60.1922	1.2018	125.9998	n.a.
42	L2467934-02 MS	1.0	0.5551	9.9079	1.3679	33.3540	0.3631

43	L2467934-02 DUP	1.0	0.1132	5.8194	0.9741	25.5450	n.a.
44	L2467934-02	1.0	0.1128	5.8196	0.9705	25.5821	n.a.
45	CCV FAIL F	1.0	1.1304	10.4848	1.0207	21.4307	1.0395
46	CCB	1.0	n.a.	0.1892	n.a.	0.3381	n.a.
47	L2467934-03 CL	1.0	0.1135	34.7333	7.6505	187.3614	0.0947
48	L2467934-04 SO4 BR	1.0	0.0580	141.2968	0.5277	10.5331	n.a.
49	L2467934-01; 5X	5.0	0.3174	52.7542	n.a.	99.7207	0.3532
50	L2467934-05	1.0	0.0522	8.7459	0.8172	2.9212	n.a.
51	L2467934-06	1.0	0.0623	79.9311	1.3836	95.9781	0.1899
52	L2467934-07	1.0	0.0557	17.3437	2.3594	78.8203	0.1021
53	L2467934-08	1.0	0.0647	34.7177	0.4603	61.8833	0.1025
54	L2467934-09	1.0	0.0559	17.4764	2.3826	78.9051	0.1010
55	XL2467934-08; 10X	10.0	0.4594	37.0480	0.8688	65.8203	n.a.
56	CCV FAIL F	1.0	1.1076	10.5626	1.0166	21.4344	1.0603
57	CCB	1.0	0.0465	0.1913	n.a.	0.3438	n.a.
	Sum:	290.000	38.0926		68.1167	6009.3532	24.4484
	Average:	5.088	0.7326		1.6614	105.4272	0.9779
	Rel.Std.Dev:	145.875 %	1.5175		1.0584	2.7040	1.4071

Inject Time	Comment
21/Nov/2024 18:55	AU
21/Nov/2024 19:07	LOT#241120-0.5
21/Nov/2024 19:19	LOT#241120-1.0
21/Nov/2024 19:31	LOT#241120-2.0
21/Nov/2024 19:43	LOT#241120-3.0
21/Nov/2024 19:55	LOT#241120-4.0
21/Nov/2024 20:07	LOT#241120-5.0
21/Nov/2024 20:19	WG2000807-808
21/Nov/2024 20:32	LOT#241120-C
21/Nov/2024 20:44	CVN
21/Nov/2024 20:56	LOT#241120-I
21/Nov/2024 21:08	CVN
21/Nov/2024 21:20	CVN
21/Nov/2024 21:32	LOT#241120-I
21/Nov/2024 21:44	CVN
21/Nov/2024 21:56	CVN
21/Nov/2024 22:08	CVN
21/Nov/2024 22:20	CVN
21/Nov/2024 22:32	CVN
21/Nov/2024 22:45	CVN
21/Nov/2024 22:57	LOT#241120-C
21/Nov/2024 23:09	CVN
21/Nov/2024 23:21	CVN
21/Nov/2024 23:33	CVN
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22/Nov/2024 00:33	CVN
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22/Nov/2024 01:01	CVN
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22/Nov/2024 01:25	LOT#241120-C
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22/Nov/2024 03:02	CVN
22/Nov/2024 03:14	CVN

22/Nov/2024 03:26	CVN
22/Nov/2024 03:38	CVN
22/Nov/2024 03:50	LOT#241120-C
22/Nov/2024 04:02	CVN
22/Nov/2024 04:14	CVN
22/Nov/2024 04:26	CVN
22/Nov/2024 04:38	CVN
22/Nov/2024 04:50	CVN
22/Nov/2024 05:02	CVN
22/Nov/2024 05:14	CVN
22/Nov/2024 05:27	CVN
22/Nov/2024 05:39	CVN
22/Nov/2024 05:51	CVN
22/Nov/2024 06:03	LOT#241120-C
22/Nov/2024 06:15	CVN
	0.000
	#DIV/0!
	#DIV/0!

Quality Control

Form 5a
Matrix Spike

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Client Sample ID	: MW-2S	**Matrix**	: WATER
Lab Sample ID	: L2467934-02		
Matrix Spike	: WG2000808-7	**MS Analysis Date**	: 11/22/24 03:14
Matrix Spike Dup	:	**MSD Analysis Date**	:

		Matrix Spike Sample			Matrix Spike Duplicate					
Parameter	Sample Conc. (mg/l)	Spike Added (mg/l)	Spike Conc. (mg/l)	%R	Spike Added (mg/l)	Spike Conc. (mg/l)	%R	RPD	Recovery Limits	RPD Limit
Bromide	ND	0.4	0.363	90					90-110	20
Chloride	5.82	4	9.91	102					90-110	18
Sulfate	25.6	8	33.4	98					90-110	20

Form 5a
Matrix Spike

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Client Sample ID	: MW-2S	**Matrix**	: WATER
Lab Sample ID	: L2467934-02		
Matrix Spike	: WG2001300-3	**MS Analysis Date**	: 11/23/24 06:17
Matrix Spike Dup	:	**MSD Analysis Date**	:

		Matrix Spike Sample				Matrix Spike Duplicate					
Parameter	Sample Conc. (mg/l)	Spike Added (mg/l)	Spike Conc. (mg/l)	%R		Spike Added (mg/l)	Spike Conc. (mg/l)	%R	RPD	Recovery Limits	RPD Limit
Fluoride	0.061	0.4	0.397	84	Q					90-110	15

Form 6
Lab Duplicates

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Client Sample ID	: MW-2S	**Matrix**	: WATER
Lab Sample ID	: L2467934-02	**Analysis Date**	: 11/22/24 03:38
Dup Sample ID	: WG2000808-8	**DUP Analysis Date**	: 11/22/24 03:26

Parameter	Sample Concentration (mg/l)	Duplicate Concentration (mg/l)	RPD	RPD Limit
Bromide	ND	ND	NC	20
Chloride	5.82	5.82	0	18
Sulfate	25.6	25.5	0	20

Form 6
Lab Duplicates

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Client Sample ID	: MW-2S	**Matrix**	: WATER
Lab Sample ID	: L2467934-02	**Analysis Date**	: 11/23/24 06:39
Dup Sample ID	: WG2001300-4	**DUP Analysis Date**	: 11/23/24 06:28

Parameter	Sample Concentration (mg/l)	Duplicate Concentration (mg/l)	RPD	RPD Limit
Fluoride	0.061	0.066	8	15

Form 7
Laboratory Control Sample

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Client Sample ID	: NA	**Matrix**	: WATER
Lab Sample ID	: WG2000808-6	**LCS Analysis Date**	: 11/21/24 21:32
Dup Sample ID	:	**LCSD Analysis Date**	:

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	**True (mg/l)**	**Found (mg/l)**	**%R**	**True (mg/l)**	**Found (mg/l)**	**%R**	**RPD**	**Recovery Limits**	**RPD Limit**
Bromide	0.800	0.793	99.					90-110	20
Chloride	8.00	7.98	100.					90-110	18
Sulfate	8.00	7.77	97.					90-110	20

Form 7
Laboratory Control Sample

Client	: Alpha Geoscience	**Lab Number**	: L2467934
Project Name	: HUNTINGTON READY MIXED	**Project Number**	: 20116
Client Sample ID	: NA	**Matrix**	: WATER
Lab Sample ID	: WG2001300-2	**LCS Analysis Date**	: 11/23/24 05:12
Dup Sample ID	:	**LCSD Analysis Date**	:

	Laboratory Control Sample			Laboratory Control Duplicate					
	True	Found	%R	True	Found	%R	RPD	Recovery	RPD
Parameter	(mg/l)	(mg/l)		(mg/l)	(mg/l)			Limits	Limit
Fluoride	0.800	0.754	94.					90-110	15

Date Created: 11/11/21
Created By: Jason Hebert
File: PM11467-1
Page: 1

WETCHEM (WATER)

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Method	Holding Time	Container/Sample Preservation
Bromide	24959-67-9	0.05	0.0132	mg/l	90-110		90-110	20	20	300.0	28 days	1 - Plastic 250ml unpreserved
Chloride	16887-00-6	0.5	0.0839	mg/l	90-110		64-148	18	18	9056	28 days	1 - Plastic 250ml unpreserved
Chloride	16887-00-6	0.5	0.0839	mg/l	90-110		90-110	18	18	300.0	28 days	1 - Plastic 250ml unpreserved
Fluoride	16984-48-8	0.05	0.037	mg/l	90-110		81-124	15	15	9056	28 days	1 - Plastic 500ml unpreserved
Fluoride	16984-48-8	0.05	0.037	mg/l	90-110		90-110	15	15	300.0	28 days	1 - Plastic 500ml unpreserved
Nitrogen, Nitrate	14797-55-8	0.05	0.0128	mg/l	90-110		90-110	15	15	300.0	48 hours	1 - Plastic 250ml unpreserved
Nitrogen, Nitrate	14797-55-8	0.05	0.0128	mg/l	90-110		80-120	15	15	9056	48 hours	1 - Plastic 250ml unpreserved
Sulfate	14808-79-8	1	0.454	mg/l	90-110		72-124	20	20	9056	28 days	1 - Plastic 500ml unpreserved
Sulfate	14808-79-8	1	0.454	mg/l	90-110		90-110	20	20	300.0	28 days	1 - Plastic 500ml unpreserved

Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)
Please Note that the information provided in this table is subject to change at anytime at the discretion of Alpha Analytical, Inc.

Calculations of Anions by Ion Chromatography

Aqueous samples:

The Dionex calculates the area of the peaks produced by the instrument, compares them to the peak area of the calibration standard stored in its memory, and calculates result in mg/L.

If the sample was manually diluted prior to analysis, the calculated mean must be manually multiplied by the dilution factor. The Reported Detection Limit is also multiplied by the same dilution factor.

$$\text{Result, mg/L} = \frac{\text{area - y-intercept}}{\text{slope}} \times \text{Dilution Factor}$$

Subcontracted Data

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

December 2, 2024

Melissa Deyo
Alpha Analytical Laboratory
8 Walkup Drive
Westborough, MA 01581

Project Location: L2467934
Client Job Number:
Project Number: L2467934
Laboratory Work Order Number: 24K1826

Enclosed are results of analyses for samples as received by the laboratory on November 21, 2024. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Rebecca Faust
Project Manager

Table of Contents

Sample Summary 3

Case Narrative 4

Sample Results 5

24K1826-01 5

24K1826-02 6

24K1826-03 7

24K1826-04 8

24K1826-05 9

24K1826-06 10

24K1826-07 11

24K1826-08 12

24K1826-09 13

Sample Preparation Information 14

QC Data 15

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total) 15

B393206 15

Flag/Qualifier Summary 16

Certifications 17

Chain of Custody/Sample Receipt 18

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Alpha Analytical Laboratory
8 Walkup Drive
Westborough, MA 01581
ATTN: Melissa Deyo

REPORT DATE: 12/2/2024

PURCHASE ORDER NUMBER:

PROJECT NUMBER: L2467934

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 24K1826

The results of analyses performed on the following samples submitted to CON-TEST, a Pace Analytical Laboratory, are found in this report.

PROJECT LOCATION: L2467934

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
MW-1S	24K1826-01	Water		SM21-23 4500S-F	
MW-2S	24K1826-02	Water		SM21-23 4500S-F	
MW-3S	24K1826-03	Water		SM21-23 4500S-F	
MW-4D	24K1826-04	Water		SM21-23 4500S-F	
MW-5S	24K1826-05	Water		SM21-23 4500S-F	
MW-6D	24K1826-06	Water		SM21-23 4500S-F	
MW-7S	24K1826-07	Water		SM21-23 4500S-F	
MW-8S	24K1826-08	Water		SM21-23 4500S-F	
DUP	24K1826-09	Water		SM21-23 4500S-F	

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CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

SM21-23 4500S-F

Qualifications:

H-01

Recommended sample holding time was exceeded, but analysis was performed before 2X the allowable holding time.

Analyte & Samples(s) Qualified:

Sulfide

24K1826-01[MW-1S], 24K1826-02[MW-2S], 24K1826-03[MW-3S], 24K1826-04[MW-4D], 24K1826-05[MW-5S], 24K1826-06[MW-6D], 24K1826-07[MW-7S], 24K1826-08[MW-8S], 24K1826-09[DUP]

The results of analyses reported only relate to samples submitted to Con-Test, a Pace Analytical Laboratory, for testing.
I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.



Lisa A. Worthington
Technical Representative

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: L2467934 Sample Description: Work Order: 24K1826

Date Received: 11/21/2024

Field Sample #: MW-1S Sampled: 11/18/2024 15:46

Sample ID: 24K1826-01

Sample Matrix: Water

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Sulfide	ND	2.0	1.8	mg/L	1	H-01	SM21-23 4500S-F	11/27/24	11/27/24 13:00	DET

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: L2467934 Sample Description: Work Order: 24K1826

Date Received: 11/21/2024

Field Sample #: MW-2S Sampled: 11/18/2024 14:33

Sample ID: 24K1826-02

Sample Matrix: Water

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Sulfide	ND	2.0	1.8	mg/L	1	H-01	SM21-23 4500S-F	11/27/24	11/27/24 13:00	DET

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: L2467934 Sample Description: Work Order: 24K1826

Date Received: 11/21/2024

Field Sample #: MW-3S Sampled: 11/18/2024 13:31

Sample ID: 24K1826-03

Sample Matrix: Water

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Sulfide	ND	2.0	1.8	mg/L	1	H-01	SM21-23 4500S-F	11/27/24	11/27/24 13:00	DET

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: L2467934 Sample Description: Work Order: 24K1826

Date Received: 11/21/2024

Field Sample #: MW-4D Sampled: 11/19/2024 09:35

Sample ID: 24K1826-04

Sample Matrix: Water

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Sulfide	ND	2.0	1.8	mg/L	1	H-01	SM21-23 4500S-F	11/27/24	11/27/24 13:00	DET

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: L2467934 Sample Description: Work Order: 24K1826

Date Received: 11/21/2024

Field Sample #: MW-5S Sampled: 11/19/2024 08:10

Sample ID: 24K1826-05

Sample Matrix: Water

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Sulfide	ND	2.0	1.8	mg/L	1	H-01	SM21-23 4500S-F	11/27/24	11/27/24 13:00	DET

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: L2467934 Sample Description: Work Order: 24K1826

Date Received: 11/21/2024

Field Sample #: MW-6D Sampled: 11/18/2024 15:40

Sample ID: 24K1826-06

Sample Matrix: Water

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Sulfide	ND	2.0	1.8	mg/L	1	H-01	SM21-23 4500S-F	11/27/24	11/27/24 13:00	DET

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: L2467934 Sample Description: Work Order: 24K1826

Date Received: 11/21/2024

Field Sample #: MW-7S Sampled: 11/18/2024 14:15

Sample ID: 24K1826-07

Sample Matrix: Water

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Sulfide	ND	2.0	1.8	mg/L	1	H-01	SM21-23 4500S-F	11/27/24	11/27/24 13:00	DET

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: L2467934 Sample Description: Work Order: 24K1826

Date Received: 11/21/2024

Field Sample #: MW-8S Sampled: 11/18/2024 16:45

Sample ID: 24K1826-08

Sample Matrix: Water

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Sulfide	ND	2.0	1.8	mg/L	1	H-01	SM21-23 4500S-F	11/27/24	11/27/24 13:00	DET

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: L2467934 Sample Description: Work Order: 24K1826

Date Received: 11/21/2024

Field Sample #: DUP Sampled: 11/18/2024 00:00

Sample ID: 24K1826-09

Sample Matrix: Water

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Sulfide	ND	2.0	1.8	mg/L	1	H-01	SM21-23 4500S-F	11/27/24	11/27/24 13:00	DET

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Sample Extraction Data

SM21-23 4500S-F

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
24K1826-01 [MW-1S]	B393206	200	200	11/27/24
24K1826-02 [MW-2S]	B393206	200	200	11/27/24
24K1826-03 [MW-3S]	B393206	200	200	11/27/24
24K1826-04 [MW-4D]	B393206	200	200	11/27/24
24K1826-05 [MW-5S]	B393206	200	200	11/27/24
24K1826-06 [MW-6D]	B393206	200	200	11/27/24
24K1826-07 [MW-7S]	B393206	200	200	11/27/24
24K1826-08 [MW-8S]	B393206	200	200	11/27/24
24K1826-09 [DUP]	B393206	200	200	11/27/24

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QUALITY CONTROL

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B393206 - SM21-23 4500S-F										
Blank (B393206-BLK1)				Prepared & Analyzed: 11/27/24						
Sulfide	ND	2.0	mg/L							
LCS (B393206-BS1)				Prepared & Analyzed: 11/27/24						
Sulfide	8.2	2.0	mg/L	10.05		81.6	79.7-122			
LCS Dup (B393206-BSD1)				Prepared & Analyzed: 11/27/24						
Sulfide	8.2	2.0	mg/L	10.05		81.6	79.7-122	0.00	20	

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FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
ND	Not Detected
RL	Reporting Limit is at the level of quantitation (LOQ)
DL	Detection Limit is the lower limit of detection determined by the MDL study
MCL	Maximum Contaminant Level
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
	No results have been blank subtracted unless specified in the case narrative section.
H-01	Recommended sample holding time was exceeded, but analysis was performed before 2X the allowable holding time.

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
SM21-23 4500S-F in Water	
Sulfide	NY,NH,RI,NC,ME,CT

Con-Test, a Pace Environmental Laboratory, operates under the following certifications and accreditations:

Code	Description	Number	Expires
CT	Connecticut Department of Public Health	PH-0821	12/31/2024
NY	New York State Department of Health	10899 NELAP	04/1/2025
NH	New Hampshire Environmental Lab	2516 NELAP	02/5/2025
RI	Rhode Island Department of Health	LAO00373	12/30/2024
NC	North Carolina Div. of Water Quality	652	12/31/2024
ME	State of Maine	MA00100	06/9/2025

2411826

ALPHA ANALYTICAL
World Class Chemistry

Subcontract Chain of Custody

Pace New England
39 Spruce St
East Longmeadow, MA 01028

Alpha Job Number
L2467934

Page 1

Client Information

Client: Alpha Analytical Labs
Address: Eight Walkup Drive
Westborough, MA 01581-1019

Report To:west.subreports@pacelabs.com
Bill To:invoices@pacelabs.coupahost.com

Phone: 716.427.5229
Email: Melissa.Deyo@pacelabs.com

Project Information

Project Location: NY
Project Manager: Melissa Deyo

Turnaround & Deliverables Information

Due Date:
Deliverables: ASP Category B Deliverables

Regulatory Requirements/Report Limits

State/Federal Program:
Regulatory Criteria:

Report to MDL

Project Specific Requirements and/or Report Requirements

Reference following Alpha Job Number on final report/deliverables: L2467934 Report to include Method and/or Regulatory required batch QC

Additional Comments: ; ASP-B (level 4) report & NYSDEC EQuiS EDD needed.

Lab ID	Alpha ID	Client ID	Collection Date/Time	Sample Matrix	Analysis	Sample Level Comments	Sample Specific QC	Container Count
1	L2467934-01	MW-1S	11-18-24 15:46	WATER	Sulfide			2
2	L2467934-02	MW-2S	11-18-24 14:33	WATER	Sulfide			2
3	L2467934-03	MW-3S	11-18-24 13:31	WATER	Sulfide			2
4	L2467934-04	MW-4D	11-19-24 09:35	WATER	Sulfide			2
5	L2467934-05	MW-5S	11-19-24 08:10	WATER	Sulfide			2
6	L2467934-06	MW-6D	11-18-24 15:40	WATER	Sulfide			2
7	L2467934-07	MW-7S	11-18-24 14:15	WATER	Sulfide			2
8	L2467934-08	MW-8S	11-18-24 16:45	WATER	Sulfide			2
9	L2467934-09	DUP	11-18-24 00:00	WATER	Sulfide			2

	Relinquished By:	Date/Time:	Received By:	Date/Time:
	[signature]	11/21 5:55	VE Nam PACE	11/21/24 5:55
	VE Nam PACE	11/21/24 7:25	[signature] O.H	11/21/24 7:25
Form No: AL_subcoc				

Pace ANALYTICAL SERVICES	DC#_Title: ENV-FRM-ELON-0001 v08_Sample Receiving Checklist
	Effective Date: 06/11/2024

Log In Back-Sheet

Login Sample Receipt Checklist – (Rejection Criteria Listing – Using Acceptance Policy) Any False statement will be brought to the attention of the Client – True or False

Client Alpha

Project L2467434

MCP/RCP Required NA

Deliverable Package Requirement NA

Location NJ

PWSID# (When Applicable) NA

Arrival Method:

Courier ☑ Fed Ex ☐ Walk In ☐ Other ☐

Received By / Date / Time RLyon 11/12/24 725

Back-Sheet By / Date / Time LA 11/22/24 1356

Temperature Method Gun # 6

WV samples: Yes (see note*) (No) (follow normal procedure)

Temp ☑ 6° C Actual Temperature 0.4

Rush Samples: Yes (No) Notify

Short Hold: Yes (No) Notify

	True	False
Received on Ice	☑	☐
Received in Cooler	☑	☐
Custody Seal: DATE TIME	☐	☑
COC Relinquished	☑	☐
COC/Samples Labels Agree	☑	☐
All Samples in Good Condition	☑	☐
Samples Received within Holding Time	☑	☐
Is there enough Volume	☑	☐
Proper Media/Container Used	☑	☐
Splitting Samples Required	☐	☑
MS/MSD	☐	☑
Trip Blanks	☐	☑
Lab to Filters	☐	☑
COC Legible	☑	☐

COC Included: (Check all included)

Client	☑	Analysis	☑	Sampler Name	☐
Project	☑	IDs	☑	Collection Date/Time	☑

All Samples Proper pH: (N/A) ☐ ☐

Notes regarding Samples/COC outside of SOP:

Additional Container Notes

Note: West Virginia requires all samples to have their temperature taken. Note any outliers.

Qualtrax ID: 120836

Pace ANALYTICAL SERVICES	DC#_Title: ENV-FRM-ELON-0001 v08_Sample Receiving Checklist
	Effective Date: 06/11/2024

Sample		
16oz Amb/Clear	(Circle Amb/Clear)	Soils Jars
8oz Amb/Clear		
4oz Amb/Clear		
2oz Amb/Clear		
Unpreserved	1 Liter	Ambers
HCL		
Sulfuric		
Sulfuric	250mL	
Phosphoric		
HCl		
Unpreserved	100mL	
Unpreserved	1 Liter	Plastics
Sulfuric		
Unpreserved	500mL	
Sulfuric		
Unpreserved	250mL	
Trizma		
Sulfuric		
Nitric		
NaOH		
Ammonium Acetate		
NaOH/Zinc		
Unpreserved		VOA Vials
HCl		
MeOH		
D.I. Water		
BiSulfate		
Col/Bact		Other/Fill in

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

December 07, 2024

Pace MA
Pace MA
Eight Walkup Drive
Westborough, MA 01581

RE: Project: L2467934
Pace Project No.: 50388689

Dear Pace MA:

Enclosed are the analytical results for sample(s) received by the laboratory on November 22, 2024. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Indianapolis

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

Sincerely,

Tina Sayer

Tina Sayer
tina.sayer@pacelabs.com
(317)228-3127
Project Manager

Enclosures

cc: Melissa Deyo, Pace MA

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Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

CERTIFICATIONS

Project: L2467934
Pace Project No.: 50388689

Pace Analytical Services Indianapolis
7726 Moller Road, Indianapolis, IN 46268
Illinois Accreditation #: 200074
Indiana Drinking Water Laboratory #: C-49-06
Kansas/TNI Certification #: E-10177
Kentucky UST Agency Interest #: 80226
Kentucky WW Laboratory ID #: 98019
Michigan Drinking Water Laboratory #9050
Oklahoma Laboratory #: 9204
Texas Certification #: T104704355
Washington Dept of Ecology #: C1081
Wisconsin Laboratory #: 999788130
USDA Foreign Soil Permit #: 525-23-13-23119
USDA Compliance Agreement #: IN-SL-22-001

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

SAMPLE SUMMARY

Project: L2467934
Pace Project No.: 50388689

Lab ID	Sample ID	Matrix	Date Collected	Date Received
50388689001	**MW-1S**	Water	11/18/24 15:46	11/22/24 08:50
50388689002	**MW-2S**	Water	11/18/24 14:33	11/22/24 08:50
50388689003	**MW-3S**	Water	11/18/24 13:31	11/22/24 08:50
50388689004	**MW-4D**	Water	11/19/24 09:35	11/22/24 08:50
50388689005	**MW-5S**	Water	11/19/24 08:10	11/22/24 08:50
50388689006	**MW-6D**	Water	11/18/24 15:40	11/22/24 08:50
50388689007	**MW-7S**	Water	11/18/24 14:15	11/22/24 08:50
50388689008	**MW-8S**	Water	11/18/24 16:45	11/22/24 08:50
50388689009	**DUP**	Water	11/18/24 00:00	11/22/24 08:50

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

SAMPLE ANALYTE COUNT

Project: L2467934
Pace Project No.: 50388689

Lab ID	Sample ID	Method	Analysts	Analytes Reported
50388689001	**MW-1S**	EPA 9056	DMP1	1
50388689002	**MW-2S**	EPA 9056	DMP1	1
50388689003	**MW-3S**	EPA 9056	DMP1	1
50388689004	**MW-4D**	EPA 9056	DMP1	1
50388689005	**MW-5S**	EPA 9056	DMP1	1
50388689006	**MW-6D**	EPA 9056	DMP1	1
50388689007	**MW-7S**	EPA 9056	DMP1	1
50388689008	**MW-8S**	EPA 9056	DMP1	1
50388689009	**DUP**	EPA 9056	DMP1	1

PASI-I = Pace Analytical Services - Indianapolis

REPORT OF LABORATORY ANALYSIS

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7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: L2467934
Pace Project No.: 50388689

Sample: MW-1S **Lab ID: 50388689001** Collected: 11/18/24 15:46 Received: 11/22/24 08:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
9056 Iodide by IC	Analytical Method: EPA 9056 Pace Analytical Services - Indianapolis							
Iodide	ND	mg/L	0.50	1		12/04/24 14:31		

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ANALYTICAL RESULTS

Project: L2467934
Pace Project No.: 50388689

Sample: MW-2S **Lab ID: 50388689002** Collected: 11/18/24 14:33 Received: 11/22/24 08:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
9056 Iodide by IC	Analytical Method: EPA 9056 Pace Analytical Services - Indianapolis							
Iodide	ND	mg/L	0.50	1		12/04/24 14:52		

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ANALYTICAL RESULTS

Project: L2467934
Pace Project No.: 50388689

Sample: MW-3S **Lab ID: 50388689003** Collected: 11/18/24 13:31 Received: 11/22/24 08:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
9056 Iodide by IC	Analytical Method: EPA 9056 Pace Analytical Services - Indianapolis							
Iodide	ND	mg/L	0.50	1		12/04/24 15:14		

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ANALYTICAL RESULTS

Project: L2467934
Pace Project No.: 50388689

Sample: MW-4D **Lab ID: 50388689004** Collected: 11/19/24 09:35 Received: 11/22/24 08:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
9056 Iodide by IC	Analytical Method: EPA 9056 Pace Analytical Services - Indianapolis							
Iodide	ND	mg/L	0.50	1		12/04/24 15:35		

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ANALYTICAL RESULTS

Project: L2467934
Pace Project No.: 50388689

Sample: MW-5S **Lab ID: 50388689005** Collected: 11/19/24 08:10 Received: 11/22/24 08:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
9056 Iodide by IC	Analytical Method: EPA 9056 Pace Analytical Services - Indianapolis							
Iodide	ND	mg/L	0.50	1		12/04/24 15:56		

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ANALYTICAL RESULTS

Project: L2467934
Pace Project No.: 50388689

Sample: MW-6D **Lab ID: 50388689006** Collected: 11/18/24 15:40 Received: 11/22/24 08:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
9056 Iodide by IC	Analytical Method: EPA 9056 Pace Analytical Services - Indianapolis							
Iodide	ND	mg/L	0.50	1		12/04/24 16:18		

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ANALYTICAL RESULTS

Project: L2467934
Pace Project No.: 50388689

Sample: MW-7S **Lab ID: 50388689007** Collected: 11/18/24 14:15 Received: 11/22/24 08:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
9056 Iodide by IC	Analytical Method: EPA 9056 Pace Analytical Services - Indianapolis							
Iodide	ND	mg/L	0.50	1		12/04/24 18:04		

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ANALYTICAL RESULTS

Project: L2467934
Pace Project No.: 50388689

Sample: MW-8S **Lab ID: 50388689008** Collected: 11/18/24 16:45 Received: 11/22/24 08:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
9056 Iodide by IC	Analytical Method: EPA 9056 Pace Analytical Services - Indianapolis							
Iodide	ND	mg/L	0.50	1		12/04/24 18:25		

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ANALYTICAL RESULTS

Project: L2467934
Pace Project No.: 50388689

Sample: DUP **Lab ID: 50388689009** Collected: 11/18/24 00:00 Received: 11/22/24 08:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
9056 Iodide by IC	Analytical Method: EPA 9056 Pace Analytical Services - Indianapolis							
Iodide	ND	mg/L	0.50	1		12/06/24 11:19		

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(317)228-3100

QUALITY CONTROL DATA

Project: L2467934
Pace Project No.: 50388689

QC Batch: 821871
QC Batch Method: EPA 9056
Analysis Method: EPA 9056
Analysis Description: 9056 Iodide by IC
Laboratory: Pace Analytical Services - Indianapolis
Associated Lab Samples: 50388689001, 50388689002, 50388689003, 50388689004, 50388689005, 50388689006, 50388689007, 50388689008, 50388689009

METHOD BLANK: 3761072 Matrix: Water
Associated Lab Samples: 50388689001, 50388689002, 50388689003, 50388689004, 50388689005, 50388689006, 50388689007, 50388689008, 50388689009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Iodide	mg/L	ND	0.50	12/04/24 13:48	

LABORATORY CONTROL SAMPLE: 3761073

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Iodide	mg/L	5	5.3	105	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3761074 3761075

Parameter	Units	50388689006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Iodide	mg/L	ND	5	5	5.0	5.0	98	97	80-120	0	15	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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QUALIFIERS

Project: L2467934
Pace Project No.: 50388689

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

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Indianapolis, IN 46268
(317)228-3100

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: L2467934
Pace Project No.: 50388689

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
50388689001	**MW-1S**	EPA 9056	821871		
50388689002	**MW-2S**	EPA 9056	821871		
50388689003	**MW-3S**	EPA 9056	821871		
50388689004	**MW-4D**	EPA 9056	821871		
50388689005	**MW-5S**	EPA 9056	821871		
50388689006	**MW-6D**	EPA 9056	821871		
50388689007	**MW-7S**	EPA 9056	821871		
50388689008	**MW-8S**	EPA 9056	821871		
50388689009	**DUP**	EPA 9056	821871		

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Subcontract Chain of Custody

Pace Analytical (Indianapolis, IN)
7726 Moller Road
Indianapolis, IN 46268

WO# : 50388689

50388689

Client Information

Client: Alpha Analytical Labs
Address: Eight Walkup Drive
Westborough, MA 01581-1019

Report To:west.subreports@pacelabs.com
Bill To:invoices@pacelabs.coupahost.com

Phone: 716.427.5229
Email: Melissa.Deyo@pacelabs.com

Project Information

Project Location: NY
Project Manager: Melissa Deyo

State/Federal Program:
Regulatory Criteria:

Turnaround & Deliverables Information

Due Date:
Deliverables: ASP Category B Deliverables

Report to MDL

Project Specific Requirements and/or Report Requirements

Reference following Alpha Job Number on final report/deliverables: L2467934

Report to include Method and/or Regulatory required batch QC

Additional Comments: ; ASP-B (level 4) report & NYSDEC EQuiS EDD needed.

Lab ID	Alpha ID	Client ID	Collection Date/Time	Sample Matrix	Analysis	Sample Level Comments	Sample Specific QC	Container Count
	L2467934-01	MW-1S	11-18-24 15:46	WATER	Iodide			1
	L2467934-02	MW-2S	11-18-24 14:33	WATER	Iodide			1
	L2467934-03	MW-3S	11-18-24 13:31	WATER	Iodide			1
	L2467934-04	MW-4D	11-19-24 09:35	WATER	Iodide			1
	L2467934-05	MW-5S	11-19-24 08:10	WATER	Iodide			1
	L2467934-06	MW-6D	11-18-24 15:40	WATER	Iodide			1
	L2467934-07	MW-7S	11-18-24 14:15	WATER	Iodide			1
	L2467934-08	MW-8S	11-18-24 16:45	WATER	Iodide			1
	L2467934-09	DUP	11-18-24 00:00	WATER	Iodide			1

	Relinquished By:	Date/Time:	Received By:	Date/Time:
	C Telvegan Fed Ex		Fed Ex	
			[signature]	11/22/24 0850
Form No: AL_subcoc				

100 25 26 27 28 29 30 31 32 33 34 35

SAMPLE CONDITION UPON RECEIPT FORM

Date/Time and Initials of person examining contents: 11/22/24 1555 JA

1. **Thermometer:** 1 2 3 4 5 6 7 8 9 A B (C) D E F G H I

2. **Cooler Temperature(s):** 1.7 | 1.7 (Initial/Corrected)
RECORD TEMPS OF ALL COOLERS RECEIVED (use Comments below to add more)

3. **Courier:** *Circle One* (Fed Ex) UPS Client Pace Now/Jett Other

4. **Custody Seal on Cooler/Box Present:** ☑ Yes ☐ No

(If yes)**Seals Intact:** ☑ Yes ☐ No (leave blank if no seals were present)

5. **Packing Material:** ☐ Bubble Wrap ☐ Bubble Bags ☑ None ☐ Other _____

6. **Ice Type:** ☑ Wet ☐ Blue ☐ None

7. **Was the PM notified of out of temp cooler?** ☐ Yes ☐ No
Cooler temp should be above freezing to 6°C
If the PM was contacted in the comments below please write how they instructed the project to proceed

All discrepancies will be written out in the comments section below.

	Yes	No		Yes	No	N/A
USDA Regulated Soils? (HI, ID, NY, WA, OR,CA, NM, TX, OK, AR, LA, TN, AL, MS, NC, SC, GA, FL, or Puerto Rico)		✓	All containers needing acid/base preservation have been pH CHECKED?: **Exceptions: VOA, coliform, LLHg, O&G, RAD CHEM, and any container with a septum cap or preserved with HCl.** **Circle: HNO3 (<2) H2SO4 (<2) NaOH (>10) NaOH/ZnAc (>9)** Any non-conformance to pH recommendations will be noted on the container count form			✓
Short Hold Time Analysis (48 hours or less)? Analysis:		✓				
Time 5035A TC placed in Freezer or Short Holds To Lab	Time:		Residual Chlorine Check (SVOC 625 Pest/PCB 608)	Present	Absent	N/A ✓
Rush TAT Requested (4 days or less):			Residual Chlorine Check (Total/Amenable/Free Cyanide)			✓
Custody Signatures Present?	✓		Headspace in **VOA Vials** (>6mm): See Containter Count form for details	Present	Absent	No VOA Vials Sent ✓
Containers Intact?:	✓		Trip Blank Present?		✓	
Sample Label (IDs/Dates/Times) Match COC?: Except TCs, which only require sample ID	✓		Trip Blank Custody Seals?:			✓
Extra labels on Terracore Vials? (soils only)		✓	Out Of Temp Instructions if applicable:			

COMMENTS:

COC PAGE 1 of 1

Sample Container Count

** Place a PINK dot on containers that are out of conformance **

									AMBER GLASS							PLASTIC								OTHER						
			MeOH (only)																										
			SBS																										
			DI																										
COC Line Item	WGFU	WGKU BG1U	R	DG9H VG9H	VOA VIAL HS (>6mm)	VG9U DG9U	VG9T	AG0U	AG1H	AG1U	AG3U	AG3S	AG3SF	AG3B	BP1U	BP1N	BP2U	BP3U	BP3N	BP3F	BP3S	BP3B	BP3Z	CG3H	CG3F	Syringe Kit			Matrix	Nitric Red HNO3 <2	Sulfuric Yellow H2SO4 <2	Sodium Hydroxide Green NaOH >10	Sodium Hydroxide/ ZnAc Black NaOH/Zn Ac >9
1																		1										WT				
2																																
3																																
4																																
5																																
6																																
7																																
8																																
9																																
10																																
11																																
12																																

Container Codes

Glass

DG9H	40mL HCl amber voa vial	BG1T	1L Na Thiosulfate clear glass
DG9P	40mL TSP amber vial	BG1U	1L unpreserved glass
DG9S	40mL H2SO4 amber vial	CG3H	250mL HCl Clear Glass
DG9T	40mL Na Thio amber vial	CG3U	250mL Unpres Clear Glass
DG9U	40mL unpreserved amber vial	AG0U	100mL unpres amber glass
VG9H	40mL HCl clear vial	AG1H	1L HCl amber glass
VG9T	40mL Na Thio. clear vial	AG1S	1L H2SO4 amber glass
VG9U	40mL unpreserved clear vial	AG1T	1L Na Thiosulfate amber glass
I	40mL w/hexane wipe vial	AG1U	1liter unpres amber glass
WGKU	8oz unpreserved clear jar	AG2N	500mL HNO3 amber glass
WGFU	4oz clear soil jar	AG2S	500mL H2SO4 amber glass
JGFU	4oz unpreserved amber wide	AG2U	500mL unpres amber glass
CG3H	250mL clear glass HCl	AG3S	250mL H2SO4 amber glass
CG3F	250mL clear glass HCl, Field Filter	AG3SF	250mL H2SO4 amb glass -field filtered
BG1H	1L HCl clear glass	AG3U	250mL unpres amber glass
BG1S	1L H2SO4 clear glass	AG3B	250mL NaOH amber glass

Plastic

BP1B	1L NaOH plastic
BP1N	1L HNO3 plastic
BP1S	1L H2SO4 plastic
BP1U	1L unpreserved plastic
BP1Z	1L NaOH, Zn, Ac
BP2N	500mL HNO3 plastic
BP2C	500mL NaOH plastic
BP2S	500mL H2SO4 plastic
BP2U	500mL unpreserved plastic
BP2Z	500mL NaOH, Zn Ac
BP3B	250mL NaOH plastic
BP3N	250mL HNO3 plastic
BP3F	250mL HNO3 plastic-field filtered
BP3U	250mL unpreserved plastic
BP3S	250mL H2SO4 plastic
BP3Z	250mL NaOH, ZnAc plastic

NT3U	Non Teflon 250mL unpreserved plastic
BP4U	125mL unpreserved plastic
BP4N	125mL HNO3 plastic
BP4S	125mL H2SO4 plastic

Miscellaneous

Syringe Kit	LL Cr+6 sampling kit
ZPLC	Ziploc Bag
R	Terracore Kit
SP5T	120mL Coliform Sodium Thiosulfate
GN	General Container
U	Summa Can (air sample)
WT	Water
SL	Solid
OL	Oil
NAL	Non-aqueous liquid
WP	Wipe

ANALYTICAL REPORT

December 09, 2024

Pace Analytical (Alpha) - Westborough,MA

Sample Delivery Group:	L1803002
Samples Received:	11/22/2024
Project Number:	L2467934
Description:	
Site:	001
Report To:	Melissa Deyo 8 Walkup Drive Westborough, MA 01581

Entire Report Reviewed By:

Haley Torrence

Haley Torrence
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.



Pace Analytical National
12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 mydata.pacelabs.com

TABLE OF CONTENTS

Cp: Cover Page 1

Tc: Table of Contents 2

Ss: Sample Summary 3

Cn: Case Narrative 4

Sr: Sample Results 5

MW-1S L1803002-01 5

MW-5S L1803002-02 6

MW-7S L1803002-03 7

MW-8S L1803002-04 8

DUP L1803002-05 9

FIELD BLANK L1803002-06 10

Qc: Quality Control Summary 11

Metals (ICPMS) by Method 200.8 11

Gl: Glossary of Terms 13

Al: Accreditations & Locations 14

Sc: Sample Chain of Custody 15

MW-1S L1803002-01 WW

Collected by	Collected date/time	Received date/time
	11/18/24 15:46	11/22/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICPMS) by Method 200.8	WG2409778	1	12/02/24 17:44	12/04/24 02:51	JPD	Mt. Juliet, TN

MW-5S L1803002-02 WW

Collected by	Collected date/time	Received date/time
	11/19/24 08:10	11/22/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICPMS) by Method 200.8	WG2409778	1	12/02/24 17:44	12/04/24 01:47	JPD	Mt. Juliet, TN

MW-7S L1803002-03 WW

Collected by	Collected date/time	Received date/time
	11/18/24 14:15	11/22/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICPMS) by Method 200.8	WG2409778	1	12/02/24 17:44	12/04/24 02:55	JPD	Mt. Juliet, TN

MW-8S L1803002-04 WW

Collected by	Collected date/time	Received date/time
	11/18/24 16:45	11/22/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICPMS) by Method 200.8	WG2409778	1	12/02/24 17:44	12/04/24 02:58	JPD	Mt. Juliet, TN

DUP L1803002-05 WW

Collected by	Collected date/time	Received date/time
	11/18/24 00:00	11/22/24 09:00

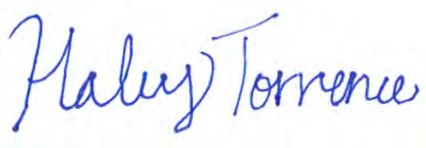
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICPMS) by Method 200.8	WG2409778	1	12/02/24 17:44	12/04/24 03:01	JPD	Mt. Juliet, TN

FIELD BLANK L1803002-06 WW

Collected by	Collected date/time	Received date/time
	11/18/24 16:30	11/22/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICPMS) by Method 200.8	WG2409782	1	12/02/24 18:10	12/06/24 18:14	UNP	Mt. Juliet, TN

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.



Haley Torrence
Project Manager

ACCOUNT:	PROJECT:	SDG:	DATE/TIME:	PAGE:
Pace Analytical (Alpha) - Westborough,MA	L2467934	L1803002	12/09/24 09:25	4 of 15

Metals (ICPMS) by Method 200.8

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Uranium	U		0.0850	1.00	1	12/04/2024 02:51	WG2409778

Metals (ICPMS) by Method 200.8

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Uranium	U		0.0850	1.00	1	12/04/2024 01:47	WG2409778

Metals (ICPMS) by Method 200.8

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Uranium	0.369	J	0.0850	1.00	1	12/04/2024 02:55	WG2409778

Metals (ICPMS) by Method 200.8

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Uranium	U		0.0850	1.00	1	12/04/2024 02:58	WG2409778

Metals (ICPMS) by Method 200.8

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Uranium	0.328	J	0.0850	1.00	1	12/04/2024 03:01	WG2409778

Metals (ICPMS) by Method 200.8

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Uranium	U		0.0850	1.00	1	12/06/2024 18:14	WG2409782

Method Blank (MB)

(MB) R4153301-1 12/04/24 01:28

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Uranium	U		0.0850	1.00

Laboratory Control Sample (LCS)

(LCS) R4153301-2 12/04/24 01:31

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Uranium	50.0	45.0	90.0	85.0-115	

L1801770-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1801770-01 12/04/24 01:35 • (MS) R4153301-4 12/04/24 01:41 • (MSD) R4153301-5 12/04/24 01:44

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Uranium	50.0	U	47.0	44.9	94.1	89.8	1	70.0-130			4.65	20

L1803002-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1803002-02 12/04/24 01:47 • (MS) R4153301-6 12/04/24 01:51 • (MSD) R4153301-7 12/04/24 01:54

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Uranium	50.0	U	43.8	44.4	87.6	88.7	1	70.0-130			1.32	20

Method Blank (MB)

(MB) R4154826-1 12/06/24 18:07

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Uranium	U		0.0850	1.00

Laboratory Control Sample (LCS)

(LCS) R4154826-2 12/06/24 18:10

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Uranium	50.0	48.8	97.5	85.0-115	

L1803002-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1803002-06 12/06/24 18:14 • (MS) R4154826-4 12/06/24 18:20 • (MSD) R4154826-5 12/06/24 18:23

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Uranium	50.0	U	48.5	47.7	97.0	95.4	1	70.0-130			1.63	20

L1803856-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1803856-02 12/06/24 18:27 • (MS) R4154826-7 12/06/24 18:33 • (MSD) R4154826-8 12/06/24 18:36

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Uranium	50.0	2.42	46.9	55.0	88.9	105	10	70.0-130			16.0	20

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
J	The identification of the analyte is acceptable; the reported value is an estimate.

ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO000356
Kentucky [1 6]	KY90010	South Carolina	84004002
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas [5]	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

H154

Subcontract Chain of Custody

Pace Analytical National
12065 Lebanon Road
Mt. Juliet, TN 37122

Alpha Job Number
L2467934

Page 1

Client Information

Client: Alpha Analytical Labs
Address: Eight Walkup Drive
Westborough, MA 01581-1019

Report To:west.subreports@pacelabs.com
Bill To:invoices@pacelabs.coupahost.com

Phone: 716.427.5229
Email: Melissa.Deyo@pacelabs.com

Project Information

Project Location: NY
Project Manager: Melissa Deyo

Turnaround & Deliverables Information

Due Date:
Deliverables: ASP Category B Deliverables

Regulatory Requirements/Report Limits

State/Federal Program:
Regulatory Criteria:

Report to MDL

U803002

Project Specific Requirements and/or Report Requirements

Reference following Alpha Job Number on final report/deliverables: L2467934

Report to include Method and/or Regulatory required batch QC

Additional Comments: ; ASP-B (level 4) report & NYSDEC EQuiS EDD needed.

Lab ID	Alpha ID	Client ID	Collection Date/Time	Sample Matrix	Analysis	Sample Level Comments	Sample Specific QC	Container Count
-01	L2467934-01	MW-1S	11-18-24 15:46	WATER	Uranium by EPA 200.8			1
-02	L2467934-05	MW-5S	11-19-24 08:10	WATER	Uranium by EPA 200.8		MS;MSD	3
-03	L2467934-07	MW-7S	11-18-24 14:15	WATER	Uranium by EPA 200.8			1
-04	L2467934-08	MW-8S	11-18-24 16:45	WATER	Uranium by EPA 200.8			1
-05	L2467934-09	DUP	11-18-24 00:00	WATER	Uranium by EPA 200.8			1
-06	L2467934-10	FIELD BLANK	11-18-24 16:30	WATER	Uranium by EPA 200.8			1

Sample Receipt Checklist

COC Seal Present/Intact:	Y/N	If Applicable	
COC Signed/Accurate:	Y/N	VOA Zero Headspace:	Y/N
Bottles arrive intact:	Y/N	Pres. Correct/Check:	Y/N
Correct bottles used:	Y/N		
Sufficient volume sent:	Y/N		
RA Screen <0.5 mR/hr:	Y/N		

	Relinquished By:	Date/Time:	Received By:	Date/Time:
	C Sebeau		Mark Buckfield	11/20/24 9:10
Form No: AL_subcoc				

7701 2620 9251
2.740: 2.78

PH – 10BDH0941
TRC – 2144141

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

December 17, 2024

Melissa Gulli
Alpha Analytical
8 Walkup Drive
Westborough, MA 01581

RE: Project: L2467934
Pace Project No.: 30737539

Dear Melissa Gulli:

Enclosed are the analytical results for sample(s) received by the laboratory on November 25, 2024. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Greensburg

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

Sincerely,



Skyler C. Richmond
skyler.richmond@pacelabs.com
(724)850-5600
Project Manager

Enclosures

cc: Customer Service, Alpha Analytical

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Greensburg, PA 15601
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CERTIFICATIONS

Project: L2467934
Pace Project No.: 30737539

Pace Analytical Services Pennsylvania
1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
ANABISO/IEC 17025:2017 Rad Cert#: L24170
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 2950
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA010
Louisiana DEQ/TNI Certification #: 04086
Maine Certification #: 2023021
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991
Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572023-03
New Hampshire/TNI Certification #: 297622
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-015
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: TN02867
Texas/TNI Certification #: T104704188-22-18
Utah/TNI Certification #: PA014572223-14
USDA Soil Permit #: 525-23-67-77263
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad

REPORT OF LABORATORY ANALYSIS

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Greensburg, PA 15601
(724)850-5600

SAMPLE SUMMARY

Project: L2467934
Pace Project No.: 30737539

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30737539001	**L2467934-01 MW-1S**	Water	11/18/24 15:46	11/25/24 12:00
30737539002	**L2467934-05 MW-5S**	Water	11/19/24 08:10	11/25/24 12:00
30737539003	**L2467934-05 MW-5S MS**	Water	11/19/24 08:10	11/25/24 12:00
30737539004	**L2467934-05 MW-5S MSD**	Water	11/19/24 08:10	11/25/24 12:00
30737539005	**L2467934-07 MW-7S**	Water	11/18/24 14:15	11/25/24 12:00
30737539006	**L2467934-08 MW-8S**	Water	11/18/24 16:45	11/25/24 12:00
30737539007	**L2467934-09 DUP**	Water	11/18/24 00:00	11/25/24 12:00
30737539008	**L2467934-10 FIELD BLANK**	Water	11/18/24 16:30	11/25/24 12:00

REPORT OF LABORATORY ANALYSIS

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(724)850-5600

SAMPLE ANALYTE COUNT

Project: L2467934
Pace Project No.: 30737539

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30737539001	**L2467934-01 MW-1S**	EPA 903.1	REH1	1	PASI-PA
		EPA 904.0	ZPC	1	PASI-PA
		HSL-300	JJY	3	PASI-PA
30737539002	**L2467934-05 MW-5S**	EPA 903.1	REH1	1	PASI-PA
		EPA 904.0	ZPC	1	PASI-PA
		HSL-300	JJY	3	PASI-PA
30737539003	**L2467934-05 MW-5S MS**	EPA 903.1	REH1	1	PASI-PA
		EPA 904.0	ZPC	1	PASI-PA
		HSL-300	JJY	3	PASI-PA
30737539004	**L2467934-05 MW-5S MSD**	EPA 903.1	REH1	1	PASI-PA
		EPA 904.0	ZPC	1	PASI-PA
		HSL-300	JJY	3	PASI-PA
30737539005	**L2467934-07 MW-7S**	EPA 903.1	REH1	1	PASI-PA
		EPA 904.0	ZPC	1	PASI-PA
		HSL-300	JJY	3	PASI-PA
30737539006	**L2467934-08 MW-8S**	EPA 903.1	REH1	1	PASI-PA
		EPA 904.0	ZPC	1	PASI-PA
		HSL-300	JJY	3	PASI-PA
30737539007	**L2467934-09 DUP**	EPA 903.1	REH1	1	PASI-PA
		EPA 904.0	ZPC	1	PASI-PA
		HSL-300	JJY	3	PASI-PA
30737539008	**L2467934-10 FIELD BLANK**	EPA 903.1	REH1	1	PASI-PA
		EPA 904.0	ZPC	1	PASI-PA
		HSL-300	JJY	3	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

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Greensburg, PA 15601
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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: L2467934
Pace Project No.: 30737539

Sample: L2467934-01 MW-1S **Lab ID: 30737539001** Collected: 11/18/24 15:46 Received: 11/25/24 12:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 903.1	**0.127 ± 0.705 (1.32) C:NA T:86%**	pCi/L	12/17/24 13:40	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 904.0	**0.171 ± 0.405 (0.899) C:79% T:81%**	pCi/L	12/17/24 12:22	15262-20-1	
	Pace Analytical Services - Greensburg					
Thorium-228	HSL-300	**0.104 ± 0.102 (0.171) C:NA T:92%**	pCi/L	12/12/24 14:28	14274-82-9	
Thorium-230	HSL-300	**0.034 ± 0.043 (0.066) C:NA T:92%**	pCi/L	12/12/24 14:28	14269-63-7	
Thorium-232	HSL-300	**0.000 ± 0.042 (0.028) C:NA T:92%**	pCi/L	12/12/24 14:28	7440-29-1	

Sample: L2467934-05 MW-5S **Lab ID: 30737539002** Collected: 11/19/24 08:10 Received: 11/25/24 12:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 903.1	**0.338 ± 0.562 (0.972) C:NA T:86%**	pCi/L	12/17/24 13:28	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 904.0	**0.818 ± 0.420 (0.749) C:79% T:89%**	pCi/L	12/17/24 12:22	15262-20-1	
	Pace Analytical Services - Greensburg					
Thorium-228	HSL-300	**0.118 ± 0.115 (0.193) C:NA T:82%**	pCi/L	12/12/24 14:28	14274-82-9	
Thorium-230	HSL-300	**0.004 ± 0.046 (0.071) C:NA T:82%**	pCi/L	12/12/24 14:28	14269-63-7	
Thorium-232	HSL-300	**-0.007 ± 0.046 (0.071) C:NA T:82%**	pCi/L	12/12/24 14:28	7440-29-1	

Sample: L2467934-05 MW-5S MS **Lab ID: 30737539003** Collected: 11/19/24 08:10 Received: 11/25/24 12:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 903.1	**104.37 %REC ± NA (NA) C:NA T:NA**	pCi/L	12/17/24 13:28	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 904.0	**78.31 %REC ± NA (NA) C:NA T:NA**	pCi/L	12/17/24 12:23	15262-20-1	
	Pace Analytical Services - Greensburg					
Thorium-228	HSL-300	**0.045 ± 0.120 (0.236) C:NA T:83%**	pCi/L	12/12/24 14:28	14274-82-9	

REPORT OF LABORATORY ANALYSIS

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Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: L2467934
Pace Project No.: 30737539

Sample: L2467934-05 MW-5S MS **Lab ID: 30737539003** Collected: 11/19/24 08:10 Received: 11/25/24 12:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
		Pace Analytical Services - Greensburg				
Thorium-230	HSL-300	**0.000 ± 0.049 (0.032) C:NA T:83%**	pCi/L	12/12/24 14:28	14269-63-7	
Thorium-232	HSL-300	**0.023 ± 0.049 (0.032) C:NA T:83%**	pCi/L	12/12/24 14:28	7440-29-1	

Sample: L2467934-05 MW-5S MSD **Lab ID: 30737539004** Collected: 11/19/24 08:10 Received: 11/25/24 12:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
		Pace Analytical Services - Greensburg				
Radium-226	EPA 903.1	**104.79 %REC 0.40RPD ± NA (NA) C:NA T:NA**	pCi/L	12/17/24 13:40	13982-63-3	
		Pace Analytical Services - Greensburg				
Radium-228	EPA 904.0	**105.53 %REC 29.61RPD ± NA (NA) C:NA T:NA**	pCi/L	12/17/24 12:23	15262-20-1	
		Pace Analytical Services - Greensburg				
Thorium-228	HSL-300	**-0.004 ± 0.114 (0.242) C:NA T:87%**	pCi/L	12/12/24 14:28	14274-82-9	
Thorium-230	HSL-300	**0.004 ± 0.047 (0.073) C:NA T:87%**	pCi/L	12/12/24 14:28	14269-63-7	
Thorium-232	HSL-300	**-0.007 ± 0.047 (0.073) C:NA T:87%**	pCi/L	12/12/24 14:28	7440-29-1	

Sample: L2467934-07 MW-7S **Lab ID: 30737539005** Collected: 11/18/24 14:15 Received: 11/25/24 12:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
		Pace Analytical Services - Greensburg				
Radium-226	EPA 903.1	**0.119 ± 0.370 (0.717) C:NA T:90%**	pCi/L	12/17/24 13:40	13982-63-3	
		Pace Analytical Services - Greensburg				
Radium-228	EPA 904.0	**1.93 ± 0.599 (0.771) C:79% T:81%**	pCi/L	12/17/24 12:23	15262-20-1	
		Pace Analytical Services - Greensburg				
Thorium-228	HSL-300	**-0.064 ± 0.070 (0.189) C:NA T:86%**	pCi/L	12/12/24 14:28	14274-82-9	
Thorium-230	HSL-300	**-0.003 ± 0.044 (0.086) C:NA T:86%**	pCi/L	12/12/24 14:28	14269-63-7	
Thorium-232	HSL-300	**-0.008 ± 0.044 (0.071) C:NA T:86%**	pCi/L	12/12/24 14:28	7440-29-1	

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: L2467934
Pace Project No.: 30737539

Sample: L2467934-08 MW-8S **Lab ID: 30737539006** Collected: 11/18/24 16:45 Received: 11/25/24 12:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 903.1	**0.383 ± 0.398 (0.593) C:NA T:88%**	pCi/L	12/17/24 13:40	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 904.0	**1.25 ± 0.501 (0.785) C:80% T:79%**	pCi/L	12/17/24 12:23	15262-20-1	
	Pace Analytical Services - Greensburg					
Thorium-228	HSL-300	**0.097 ± 0.112 (0.196) C:NA T:87%**	pCi/L	12/12/24 14:28	14274-82-9	
Thorium-230	HSL-300	**0.000 ± 0.047 (0.030) C:NA T:87%**	pCi/L	12/12/24 14:28	14269-63-7	
Thorium-232	HSL-300	**-0.007 ± 0.047 (0.073) C:NA T:87%**	pCi/L	12/12/24 14:28	7440-29-1	

Sample: L2467934-09 DUP **Lab ID: 30737539007** Collected: 11/18/24 00:00 Received: 11/25/24 12:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 903.1	**0.398 ± 0.337 (0.418) C:NA T:97%**	pCi/L	12/17/24 13:40	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 904.0	**1.18 ± 0.463 (0.709) C:79% T:85%**	pCi/L	12/17/24 12:23	15262-20-1	
	Pace Analytical Services - Greensburg					
Thorium-228	HSL-300	**0.110 ± 0.101 (0.161) C:NA T:84%**	pCi/L	12/12/24 14:28	14274-82-9	
Thorium-230	HSL-300	**-0.007 ± 0.047 (0.073) C:NA T:84%**	pCi/L	12/12/24 14:28	14269-63-7	
Thorium-232	HSL-300	**-0.015 ± 0.047 (0.090) C:NA T:84%**	pCi/L	12/12/24 14:28	7440-29-1	

Sample: L2467934-10 FIELD BLANK **Lab ID: 30737539008** Collected: 11/18/24 16:30 Received: 11/25/24 12:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 903.1	**0.543 ± 0.342 (0.147) C:NA T:96%**	pCi/L	12/17/24 13:40	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 904.0	**0.268 ± 0.342 (0.726) C:74% T:88%**	pCi/L	12/17/24 12:23	15262-20-1	
	Pace Analytical Services - Greensburg					
Thorium-228	HSL-300	**0.025 ± 0.084 (0.168) C:NA T:106%**	pCi/L	12/12/24 14:28	14274-82-9	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: L2467934
Pace Project No.: 30737539

Sample: L2467934-10 FIELD BLANK **Lab ID: 30737539008** Collected: 11/18/24 16:30 Received: 11/25/24 12:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
		Pace Analytical Services - Greensburg				
Thorium-230	HSL-300	**0.020 ± 0.035 (0.055) C:NA T:106%**	pCi/L	12/12/24 14:28	14269-63-7	
Thorium-232	HSL-300	**-0.006 ± 0.035 (0.055) C:NA T:106%**	pCi/L	12/12/24 14:28	7440-29-1	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: L2467934
Pace Project No.: 30737539

QC Batch: 712365
QC Batch Method: EPA 904.0
Analysis Method: EPA 904.0
Analysis Description: 904.0 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30737539001, 30737539002, 30737539003, 30737539004, 30737539005, 30737539006, 30737539007, 30737539008

METHOD BLANK: 3469033 Matrix: Water
Associated Lab Samples: 30737539001, 30737539002, 30737539003, 30737539004, 30737539005, 30737539006, 30737539007, 30737539008

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.535 ± 0.367 (0.693) C:74% T:80%	pCi/L	12/17/24 12:21	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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QUALITY CONTROL - RADIOCHEMISTRY

Project: L2467934
Pace Project No.: 30737539

QC Batch: 711599
QC Batch Method: HSL-300
Analysis Method: HSL-300
Analysis Description: HSL300(AS) Actinides
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30737539001, 30737539002, 30737539003, 30737539004, 30737539005, 30737539006, 30737539007, 30737539008

METHOD BLANK: 3465860 Matrix: Water
Associated Lab Samples: 30737539001, 30737539002, 30737539003, 30737539004, 30737539005, 30737539006, 30737539007, 30737539008

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Thorium-228	0.039 ± 0.135 (0.268) C:NA T:83%	pCi/L	12/12/24 14:28	
Thorium-230	0.001 ± 0.048 (0.092) C:NA T:83%	pCi/L	12/12/24 14:28	
Thorium-232	0.000 ± 0.048 (0.031) C:NA T:83%	pCi/L	12/12/24 14:28	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: L2467934
Pace Project No.: 30737539

QC Batch: 712364 Analysis Method: EPA 903.1
QC Batch Method: EPA 903.1 Analysis Description: 903.1 Radium-226
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30737539001, 30737539002, 30737539003, 30737539004, 30737539005, 30737539006, 30737539007, 30737539008

METHOD BLANK: 3469031 Matrix: Water
Associated Lab Samples: 30737539001, 30737539002, 30737539003, 30737539004, 30737539005, 30737539006, 30737539007, 30737539008

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	-0.0930 ± 0.258 (0.609) C:NA T:88%	pCi/L	12/17/24 12:59	

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Greensburg, PA 15601
(724)850-5600

QUALIFIERS

Project: L2467934
Pace Project No.: 30737539

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Act - Activity

Unc - Uncertainty: For Safe Drinking Water Act (SDWA) analyses, the reported Unc. Is the calculated Count Uncertainty (95% confidence interval) using a coverage factor of 1.96. For all other matrices (non-SDWA), the reported Unc. is the calculated Expanded Uncertainty (aka Combined Standard Uncertainty, CSU), reported at the 95% confidence interval using a coverage factor of 1.96.

Gamma Spec: The Unc. reported for all gamma-spectroscopy analyses (EPA 901.1), is the calculated Expanded Uncertainty (CSU) at the 95.4% confidence interval, using a coverage factor of 2.0.

(MDC) - Minimum Detectable Concentration

Trac - Tracer Recovery (%)

Carr - Carrier Recovery (%)

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

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Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: L2467934
Pace Project No.: 30737539

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30737539001	**L2467934-01 MW-1S**	EPA 903.1	712364		
30737539002	**L2467934-05 MW-5S**	EPA 903.1	712364		
30737539003	**L2467934-05 MW-5S MS**	EPA 903.1	712364		
30737539004	**L2467934-05 MW-5S MSD**	EPA 903.1	712364		
30737539005	**L2467934-07 MW-7S**	EPA 903.1	712364		
30737539006	**L2467934-08 MW-8S**	EPA 903.1	712364		
30737539007	**L2467934-09 DUP**	EPA 903.1	712364		
30737539008	**L2467934-10 FIELD BLANK**	EPA 903.1	712364		
30737539001	**L2467934-01 MW-1S**	EPA 904.0	712365		
30737539002	**L2467934-05 MW-5S**	EPA 904.0	712365		
30737539003	**L2467934-05 MW-5S MS**	EPA 904.0	712365		
30737539004	**L2467934-05 MW-5S MSD**	EPA 904.0	712365		
30737539005	**L2467934-07 MW-7S**	EPA 904.0	712365		
30737539006	**L2467934-08 MW-8S**	EPA 904.0	712365		
30737539007	**L2467934-09 DUP**	EPA 904.0	712365		
30737539008	**L2467934-10 FIELD BLANK**	EPA 904.0	712365		
30737539001	**L2467934-01 MW-1S**	HSL-300	711599		
30737539002	**L2467934-05 MW-5S**	HSL-300	711599		
30737539003	**L2467934-05 MW-5S MS**	HSL-300	711599		
30737539004	**L2467934-05 MW-5S MSD**	HSL-300	711599		
30737539005	**L2467934-07 MW-7S**	HSL-300	711599		
30737539006	**L2467934-08 MW-8S**	HSL-300	711599		
30737539007	**L2467934-09 DUP**	HSL-300	711599		
30737539008	**L2467934-10 FIELD BLANK**	HSL-300	711599		

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WO# : 30737539

30737539

ALPHA ANALYTICAL
World Class Chemistry

Subcontract Chain of Custody

Pace Analytical (Greensburg, PA)
1638 Roseytown Rd, Suite 2
Greensburg, PA 15601

Alpha Job Number
L2467934

Page 1

Client Information

Client: Alpha Analytical Labs
Address: Eight Walkup Drive
Westborough, MA 01581-1019

Report To:west.subreports@pacelabs.com
Bill To:invoices@pacelabs.coupahost.com

Phone: 716.427.5229
Email: Melissa.Deyo@pacelabs.com

Project Information

Project Location: NY
Project Manager: Melissa Deyo

Turnaround & Deliverables Information

Due Date:
Deliverables: ASP Category B Deliverables

Regulatory Requirements/Report Limits

State/Federal Program:
Regulatory Criteria:

Report to MDL

Received by Pace Greensburg
Therm ID 17 Corr Factor +/- -0.4
Receipt Temp 2.6
Corrected Temp 2.2
Correct Preservation Y/N

Project Specific Requirements and/or Report Requirements

Reference following Alpha Job Number on final report/deliverables: L2467934 Report to include Method and/or Regulatory required batch QC

Additional Comments: ; ASP-B (level 4) report & NYSDEC EQuiS EDD needed.

Lab ID	Alpha ID	Client ID	Collection Date/Time	Sample Matrix	Analysis	Sample Level Comments	Sample Specific QC	Container Count	
	L2467934-01	MW-1S	11-18-24 15:46	WATER	Radium 226			2	001
				WATER	Radium 228			2	
				WATER	Thorium			1	
	L2467934-05	MW-5S	11-19-24 08:10	WATER	Radium 226		MS;MSD	6	002
				WATER	Radium 228		MS;MSD	6	003
				WATER	Thorium		MS;MSD	3	004
	L2467934-07	MW-7S	11-18-24 14:15	WATER	Radium 226			2	
				WATER	Radium 228			2	
				WATER	Thorium			1	005
	L2467934-08	MW-8S	11-18-24 16:45	WATER	Radium 226			2	006
				WATER	Radium 228			2	
				WATER	Thorium			1	
	L2467934-09	DUP	11-18-24 00:00	WATER	Radium 226			2	007
				WATER	Radium 228			2	
				WATER	Thorium			1	
	L2467934-10	FIELD BLANK	11-18-24 16:30	WATER	Radium 226			2	008
				WATER	Radium 228			2	
				WATER	Thorium			1	

	Relinquished By:	Date/Time:	Received By:	Date/Time:
		11/21/24 1755		11/21/24 1758
		11/21/24 2245		11/22 12:30
Form No: AL_subcoc		11/22 16:40		11/25/24 12:00

DC#_Title: ENV-FRM-GBUR-0088 v07_Sample Condition Upon Receipt-Greensburg

Effective Date: 01/04/2024

WO# : 30737539

PM: SCR Due Date: 12/18/24

CLIENT: ALPHA ANALYT

Client Name: Alpha

Proj

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace ☐ Other

Tracking Number:

Initial / Date

Examined By: JMH 11/26/24

Labeled By: JMH 11/26/24

Temped By: PS 11/25/24

Custody Seal on Cooler/Box Present: ☐ Yes ☒ No **Seals Intact:** ☐ Yes ☒ No

Thermometer Used: 17 **Type of Ice:** (Wet) Blue None

Cooler Temperature: Observed Temp 2.6 °C Correction Factor: 0.4 °C Final Temp: 2.2 °C

Temp should be above freezing to 6°C

1.8 1.4 2.4

2.8

Comments:	Yes	No	NA	pH paper Lot# 10D3241 / D.P.D. Residual Chlorine Lot #
Chain of Custody Present	✓			1.
Chain of Custody Filled Out:	✓			2.
-Were client corrections present on COC		✓		
Chain of Custody Relinquished	✓			3.
Sampler Name & Signature on COC:	✓			4.
Sample Labels match COC:	✓			5.
-Includes date/time/ID	YES			
Matrix: WT				
Samples Arrived within Hold Time:	✓			6.
Short Hold Time Analysis (<72hr remaining):		✓		7.
Rush Turn Around Time Requested:		✓		8.
Sufficient Volume:	✓			9.
Correct Containers Used: JMH 11/26/24	✓	✓		10.
-Pace Containers Used	✓			
Containers Intact:	✓			11.
Orthophosphate field filtered:			✓	12.
Hex Cr Aqueous samples field filtered:			✓	13.
Organic Samples checked for dichlorination			✓	14:
Filtered volume received for dissolved tests:			✓	15:
All containers checked for preservation:	✓			16. pH <2
exceptions: VOA, coliform, TOC, O&G, Phenolics, Radon, non-aqueous matrix				
All containers meet method preservation requirements:	✓			Initial when completed JMH / Date/Time of Preservation / Lot# of added Preservative
8260C/D: Headspace in VOA Vials (> 6mm)			✓	17.
624.1: Headspace in VOA Vials (0mm)			✓	18.
Radon: Headspace in RAD Vials (0mm)			✓	19.
Trip Blank Present:			✓	Trip blank custody seal present? YES or NO
Rad Samples Screened <.05 mrem/hr.	✓			Initial when completed PS / Date: 11/25/24 / Survey Meter SN: 2501380

Comments:

Note: For NC compliance samples with discrepancies, a copy of this form must be sent to the DEHNR Certification office.
PM Review is documented electronically in LIMS through the SRF Review schedule in the Workorder Edit Screen.

Page 1 of 1

Qualtrax ID: 55680

DC#_Title: ENV-FRM-GBUR-0072 v04_Sample Container Count Offshore Projects
Effective Date: 04/18/2024

Client Alpha Analytical Labs
Site L2467934

Page 1 of 1

Profile/EZ Login Number 7088

Notes

Sample Line Item	Matrix	Amber Glass					Plastic								Vials					Other									
		AG1H	AG3S	AG3U	AG5U	AG5T	BP1N	BP1U	BP2S	BP2U	BP3B	BP3N	BP3S	BP3U	DG9S	VG9H	VG9T	VG9U	VOAK	WGFU	WGKU	ZPLC	GCUB	GJN	12GN	AG1U	BG1U	BP2N	
001							4																					1	
002							4																					1	
003							4																					1	
004							4																					1	
005							4																					1	
006							4																					1	
007							4																					1	
008							4																					1	
009																												1	

Container Codes

Glass

GJN	1 Gallon Jug with HNO3	DG9S	40mL amber VOA vial H2SO4
AG5U	100mL amber glass unpreserved	VG9U	40mL clear VOA vial
AG5T	100mL amber glass Na Thiosulfate	VG9T	40mL clear VOA vial Na Thiosulfate
GJN	1 Gallon Jug	VG9H	40mL clear VOA vial HCl
AG1S	1L amber glass H2SO4	JGFU	4oz amber wide jar
AG1H	1L amber glass HCl	WGFU	4oz wide jar unpreserved
AG1T	1L amber glass NA Thiosulfate	BG2U	500mL clear glass unpreserved
BG1U	1L clear glass unpre		reserved
AG3S	250mL amber glass		d
AG3U	250mL amber glass		

WO#:30737539
PM: SCR Due Date: 12/18/24
CLIENT: ALPHA ANALYT

Qualtrax ID: 556

Plastic/Misc.

GCUB	1 gallon cubitainer
12GN	1/2 gallon cubitainer
SP5T	120mL coliform Na Thiosulfate
BP1N	1L plastic HNO3
BP1U	1L plastic unpreserved
BP3S	250mL plastic H2SO4
BP3N	250mL plastic HNO3
BP3U	250mL plastic unpreserved
BP3B	250mL plastic NAOH
BP2S	500mL plastic H2SO4
BP2U	500mL plastic unpreserved

EZI	5g Encore
VOAK	Kit Volatile Solid
I	Wipe/Swab
ZPLC	Siploc Bag

WT	Water
SL	Solid
OL	Non-Aq Liquid
WP	Wipe

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