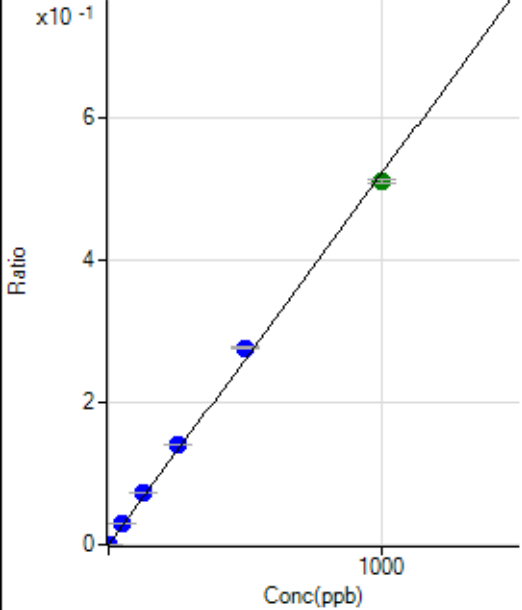


Calibration for 010CALS.d

Batch Folder: D:\Agilent\ICPMH\1\DATA\P7092624-MS4.b\
 Analysis File: P7092624-MS4.batch.bin
 DA Date-Time: 2024-09-28 13:45:17
 Calibration Title:
 Calibration Method: External Calibration
 VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	004CALB.d	S00	2024-09-26 16:51:32
2	005CALS.d	S02	2024-09-26 16:54:50
3	006CALS.d	S03	2024-09-26 16:58:09
4	007CALS.d	S04	2024-09-26 17:01:15
5	008CALS.d	S05	2024-09-26 17:04:13
6	009CALS.d	S06	2024-09-26 17:07:03
7	010CALS.d	S07	2024-09-26 17:09:51
8	011CALS.d	S08	2024-09-26 17:12:37

9 Be [No Gas] ISTD:6 Li [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	86.66	0.0000	P	25.4
2	☐	1.000	1.138	1451.19	0.0006	P	0.8
3	☐	50.000	56.345	67770.13	0.0295	P	2.2
4	☐	125.000	140.464	173193.83	0.0734	P	1.5
5	☐	250.000	268.144	334746.50	0.1401	P	0.6
6	☐	500.000	529.550	658179.99	0.2766	P	1.2
7	☐	1000.000	978.439	1195916.95	0.5110	A	1.1
8	☐			230.00	0.0001	P	14.6

$y = 5.2223\text{E-}004 * x + 3.7264\text{E-}005$

$R = 0.9991$

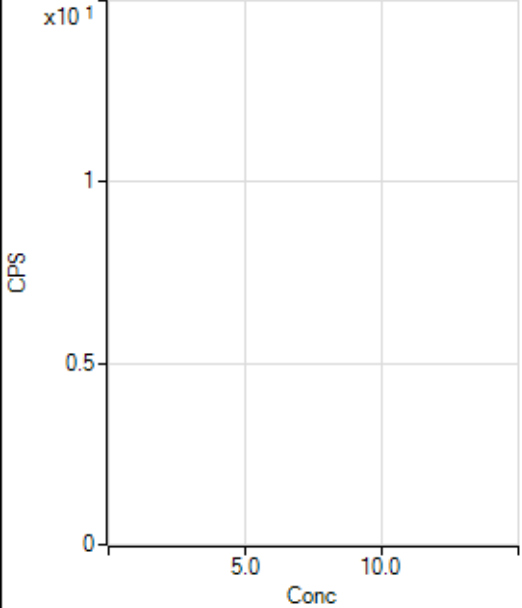
$DL = 0.05428$

$BEC = 0.07136$

Weight: <None>

Min Conc: 0

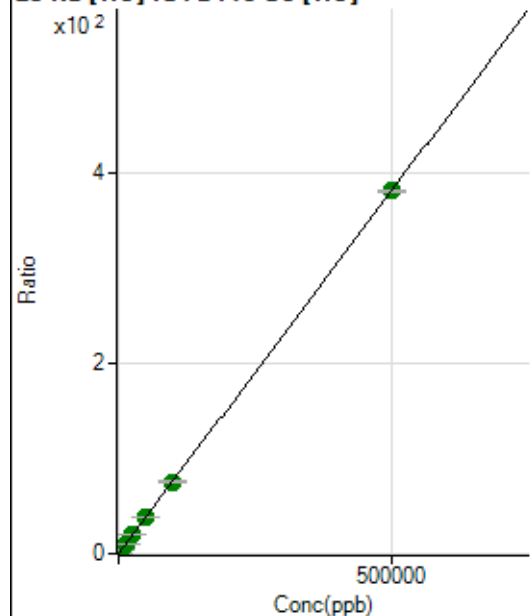
12 C [No Gas] No available calibration points



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐						
2	☐						
3	☐						
4	☐						
5	☐						
6	☐						
7	☐						
8	☐						

12 C [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐						
2	☐						
3	☐						
4	☐						
5	☐						
6	☐						
7	☐						
8	☐						

23 Na [He] ISTD:45 Sc [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	7339.58	0.0140	P	2.0
2	☐	500.000	510.719	212118.80	0.4038	P	0.8
3	☐	5000.000	5219.241	2030494.47	3.9971	A	4.1
4	☐	12500.000	13068.890	5073279.34	9.9875	A	1.0
5	☐	25000.000	25578.194	9673811.87	19.5340	A	2.1
6	☐	50000.000	51444.834	19220042.07	39.2741	A	0.3
7	☐	100000.00	99137.952	37097244.17	75.6711	A	0.9
8	☐	500000.00	499982.59	182563421.7	381.5754	A	0.6

$$y = 7.6315E-004 * x + 0.0140$$

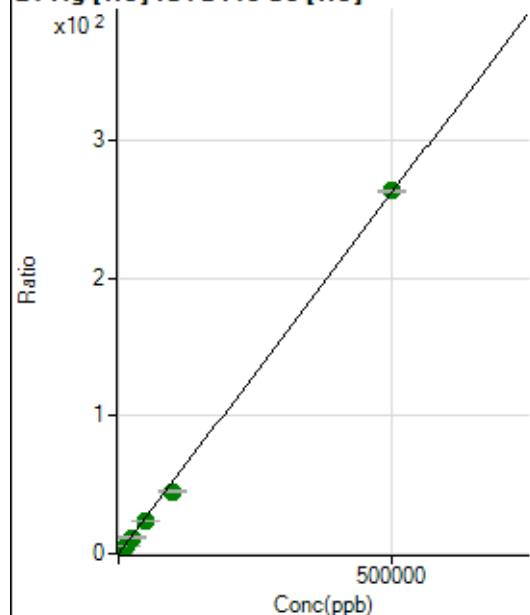
$$R = 1.0000$$

$$DL = 1.102$$

$$BEC = 18.37$$

Weight: <None>

Min Conc: 0

24 Mg [He] ISTD:45 Sc [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	462.23	0.0009	P	6.7
2	☐	500.000	476.900	131660.72	0.2506	P	1.1
3	☐	5000.000	4605.849	1225789.49	2.4128	A	3.8
4	☐	12500.000	11569.293	3077548.43	6.0592	A	2.4
5	☐	25000.000	22466.360	5826037.20	11.7655	A	2.7
6	☐	50000.000	45148.933	11570369.97	23.6434	A	0.7
7	☐	100000.00	86544.959	22217683.56	45.3208	A	1.2
8	☐	500000.00	503330.02	126105330.3	263.5732	A	0.8

$$y = 5.2366\text{E-}004 * x + 8.8270\text{E-}004$$

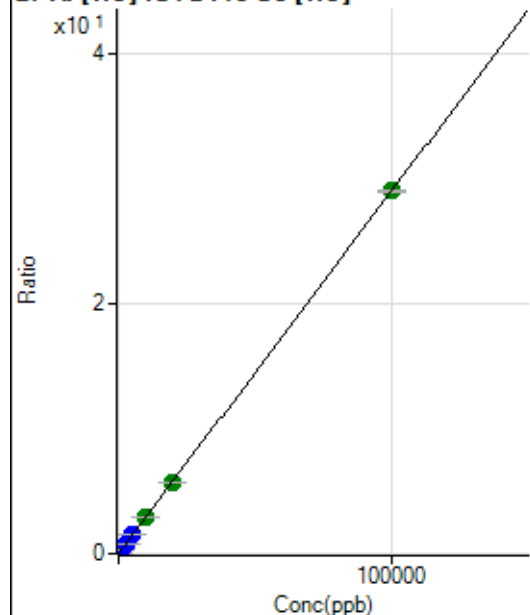
$$R = 0.9996$$

$$DL = 0.3364$$

$$BEC = 1.686$$

Weight: <None>

Min Conc: 0

27 Al [He] ISTD:45 Sc [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	98.89	0.0002	P	18.3
2	☐	20.000	18.910	2985.87	0.0057	P	2.7
3	☐	1000.000	1066.379	157534.09	0.3100	P	3.4
4	☐	2500.000	2661.254	392888.77	0.7735	P	1.3
5	☐	5000.000	5168.377	743826.76	1.5020	P	2.1
6	☐	10000.000	10155.891	1444182.83	2.9512	A	1.7
7	☐	20000.000	19580.029	2789252.32	5.6896	A	1.3
8	☐	100000.00	100055.29	13910210.35	29.0735	A	0.2

$$y = 2.9057\text{E-}004 * x + 1.8858\text{E-}004$$

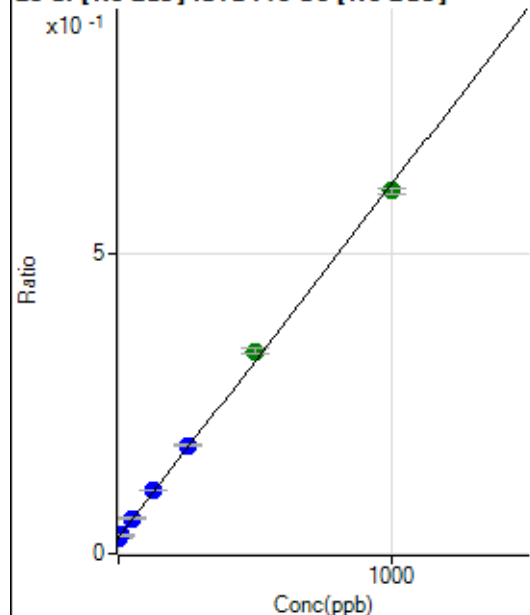
$$R = 1.0000$$

$$DL = 0.3558$$

$$BEC = 0.649$$

Weight: <None>

Min Conc: 0

28 Si [No Gas] ISTD : 45 Sc [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	167245.40	0.0271	P	1.6
2	☐	10.000	5.967	189617.48	0.0307	P	2.3
3	☐	50.000	53.653	364386.63	0.0588	P	2.3
4	☐	125.000	133.684	652630.04	0.1060	P	0.7
5	☐	250.000	261.716	1090344.88	0.1815	P	1.6
6	☐	500.000	528.373	2010905.51	0.3388	A	3.4
7	☐	1000.000	981.657	3568229.81	0.6062	A	1.9
8	☐			201049.70	0.0354	P	0.4

$$y = 5.8989\text{E-}004 * x + 0.0271$$

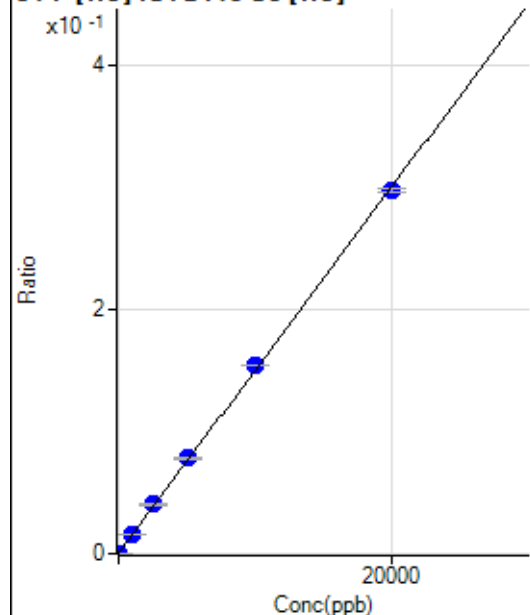
$$R = 0.9993$$

$$DL = 2.192$$

$$BEC = 46$$

Weight: <None>

Min Conc: 0

31 P [He] ISTD : 45 Sc [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	-16.864	81.11	0.0002	P	18.1
2	☐	0.000	16.864	346.67	0.0007	P	6.8
3	☐	1000.000	1056.080	8254.53	0.0162	P	0.6
4	☐	2500.000	2670.270	20528.32	0.0404	P	1.6
5	☐	5000.000	5176.584	38604.14	0.0780	P	3.3
6	☐	10000.000	10267.546	75481.36	0.1542	P	0.7
7	☐	20000.000	19797.993	145621.28	0.2970	P	1.0
8	☐			144.45	0.0003	P	22.8

$$y = 1.4983\text{E-}005 * x + 4.0736\text{E-}004$$

$$R = 0.9998$$

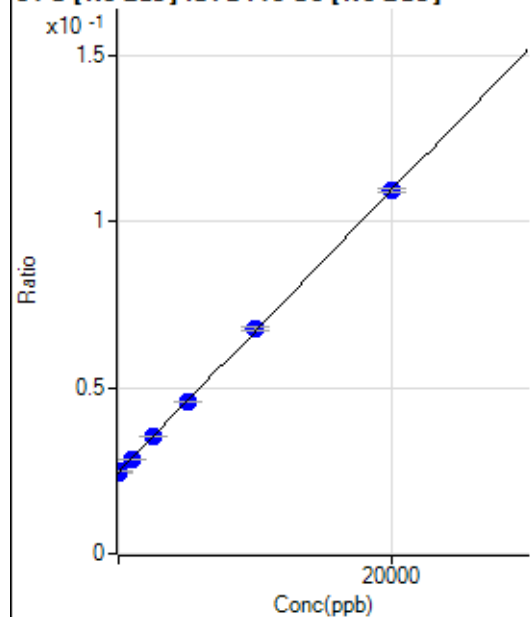
$$DL = 7.287$$

$$BEC = 27.19$$

Weight: <None>

Min Conc: 0

34 S [No Gas] ISTD:45 Sc [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	-64.030	149842.30	0.0243	P	1.5
2	☐	0.000	64.030	153760.57	0.0249	P	1.1
3	☐	1000.000	942.065	177236.80	0.0286	P	0.5
4	☐	2500.000	2532.141	217608.84	0.0353	P	1.5
5	☐	5000.000	5000.795	275355.12	0.0458	P	0.6
6	☐	10000.000	10135.530	401629.81	0.0677	P	1.8
7	☐	20000.000	19930.915	643320.23	0.1093	P	1.2
8	☐			125891.62	0.0222	P	2.7

$$y = 4.2499\text{E-}006 * x + 0.0246$$

R = 0.9999

DL = 230.5

BEC = 5785

Weight: <None>

Min Conc: 0

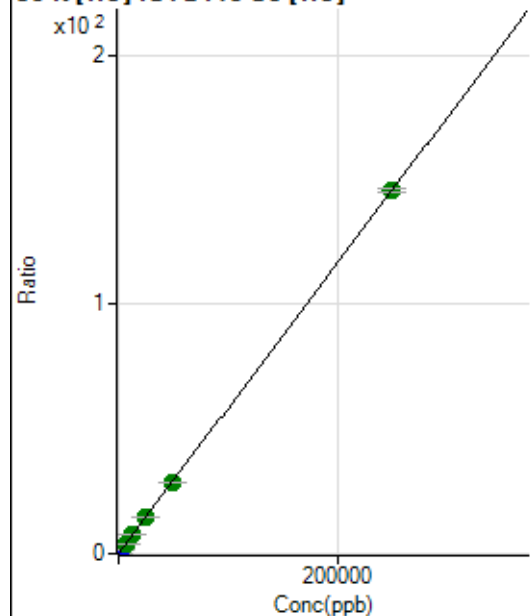
35 Cl [No Gas] No available calibration points



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐						
2	☐						
3	☐						
4	☐						
5	☐						
6	☐						
7	☐						
8	☐						

35 Cl [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐						
2	☐						
3	☐						
4	☐						
5	☐						
6	☐						
7	☐						
8	☐						

39 K [He] ISTD:45 Sc [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	38680.40	0.0739	P	1.9
2	☐	500.000	530.488	201047.12	0.3827	P	0.3
3	☐	2500.000	2832.266	875178.37	1.7225	P	3.5
4	☐	6250.000	6701.180	2018989.21	3.9746	A	0.6
5	☐	12500.000	12930.234	3763260.46	7.6004	A	3.2
6	☐	25000.000	25592.780	7326445.93	14.9711	A	0.4
7	☐	50000.000	49075.232	14040281.18	28.6399	A	1.1
8	☐	250000.00	250089.50	69684765.63	145.6474	A	0.9

$$y = 5.8209\text{E-}004 * x + 0.0739$$

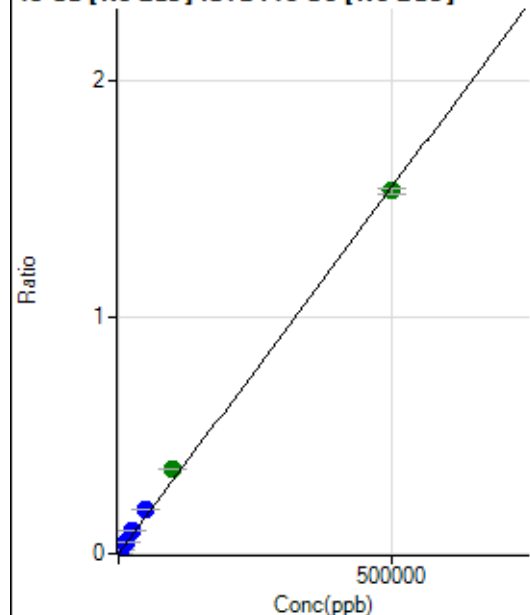
$$R = 1.0000$$

$$DL = 7.087$$

$$BEC = 127$$

Weight: <None>

Min Conc: 0

43 Ca [No Gas] ISTD:45 Sc [No Gas]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	263.34	0.0000	P	3.5
2	☐	500.000	522.570	10275.78	0.0017	P	1.7
3	☐	5000.000	6133.471	118008.24	0.0190	P	1.7
4	☐	12500.000	15663.286	298896.45	0.0485	P	1.6
5	☐	25000.000	30525.620	568125.48	0.0946	P	0.9
6	☐	50000.000	60910.036	1119995.94	0.1887	P	1.6
7	☐	100000.00	115617.87	2107905.37	0.3581	A	1.2
8	☐	500000.00	495418.70	8716752.79	1.5343	A	1.4

$$y = 3.0968\text{E-}006 * x + 4.2727\text{E-}005$$

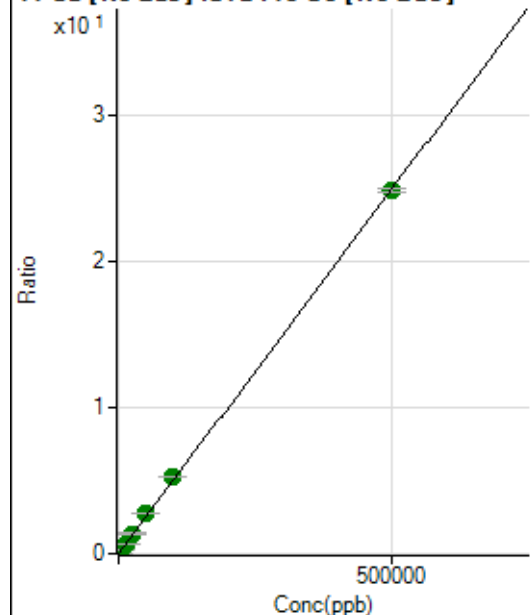
$$R = 0.9993$$

$$DL = 1.465$$

$$BEC = 13.8$$

Weight: <None>

Min Conc: 0

44 Ca [No Gas] ISTD:45 Sc [No Gas]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	7313.67	0.0012	P	1.5
2	☐	500.000	528.545	170079.55	0.0275	P	1.5
3	☐	5000.000	5515.355	1709251.95	0.2757	A	1.1
4	☐	12500.000	13949.529	4282180.04	0.6956	A	1.6
5	☐	25000.000	27610.672	8263302.66	1.3756	A	1.0
6	☐	50000.000	54765.922	16190913.65	2.7273	A	1.0
7	☐	100000.00	106159.61	31113003.15	5.2855	A	1.2
8	☐	500000.00	498119.53	140878973.4	24.7962	A	0.9

$$y = 4.9777\text{E-}005 * x + 0.0012$$

$$R = 0.9999$$

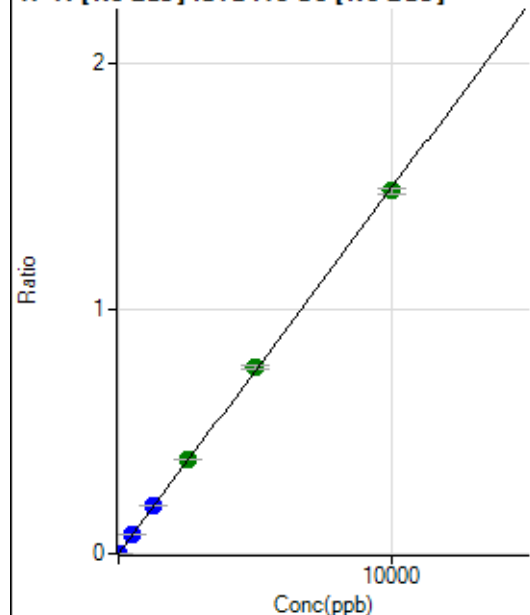
$$DL = 1.078$$

$$BEC = 23.83$$

Weight: <None>

Min Conc: 0

47 Ti [No Gas] ISTD:45 Sc [No Gas]



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	153.34	0.0000	P	7.0
2	☐	5.000	4.863	4644.08	0.0008	P	2.5
3	☐	500.000	528.804	489560.06	0.0790	P	1.3
4	☐	1250.000	1328.716	1221493.41	0.1984	P	1.0
5	☐	2500.000	2573.868	2308453.61	0.3843	A	0.5
6	☐	5000.000	5100.886	4520791.46	0.7616	A	1.7
7	☐	10000.000	9919.810	8717707.23	1.4810	A	1.3
8	☐			1642.33	0.0003	P	5.4

$$y = 1.4929\text{E-}004 * x + 2.4890\text{E-}005$$

$$R = 0.9999$$

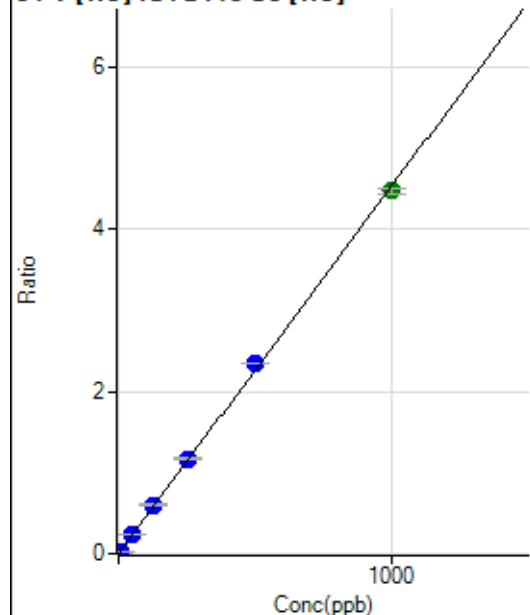
$$DL = 0.03486$$

$$BEC = 0.1667$$

Weight: <None>

Min Conc: 0

51 V [He] ISTD:45 Sc [He]



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	28.89	0.0001	P	28.7
2	☐	5.000	5.169	12345.12	0.0235	P	1.7
3	☐	50.000	53.422	123124.76	0.2424	P	3.9
4	☐	125.000	133.346	307222.50	0.6049	P	2.0
5	☐	250.000	258.698	581112.70	1.1734	P	2.0
6	☐	500.000	518.489	1150860.96	2.3517	P	0.5
7	☐	1000.000	987.366	2195353.08	4.4783	A	1.7
8	☐			696.69	0.0015	P	7.4

$$y = 0.0045 * x + 5.5444\text{E-}005$$

$$R = 0.9997$$

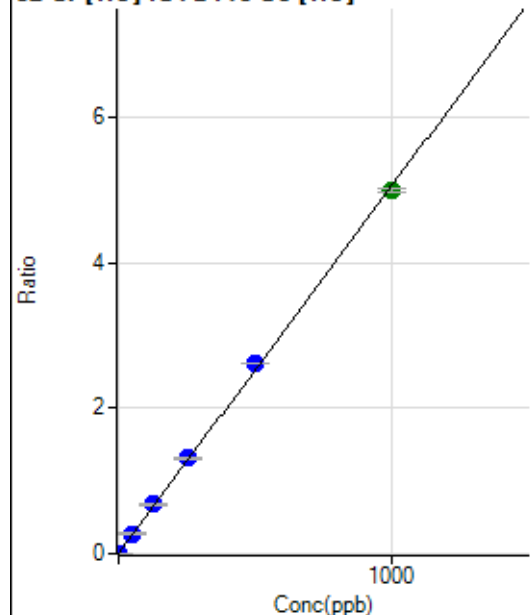
$$DL = 0.01051$$

$$BEC = 0.01222$$

Weight: <None>

Min Conc: 0

52 Cr [He] ISTD:45 Sc [He]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	1689.00	0.0032	P	4.1
2	☐	2.000	1.615	5982.35	0.0114	P	3.7
3	☐	50.000	53.876	139922.84	0.2754	P	3.8
4	☐	125.000	134.002	345513.47	0.6802	P	1.9
5	☐	250.000	259.636	651166.16	1.3150	P	2.5
6	☐	500.000	517.807	1281811.12	2.6193	P	0.3
7	☐	1000.000	987.369	2447062.34	4.9916	A	1.1
8	☐			9725.51	0.0203	P	2.6

$$y = 0.0051 * x + 0.0032$$

$$R = 0.9997$$

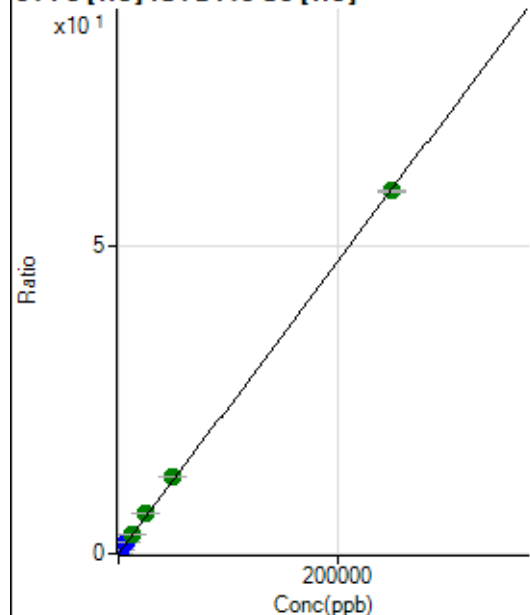
$$DL = 0.07851$$

$$BEC = 0.639$$

Weight: <None>

Min Conc: 0

54 Fe [He] ISTD:45 Sc [He]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	1747.90	0.0033	P	6.4
2	☐	50.000	54.407	8532.48	0.0162	P	2.0
3	☐	2500.000	2992.751	362167.33	0.7130	P	4.4
4	☐	6250.000	7411.922	894410.35	1.7608	P	1.4
5	☐	12500.000	13631.702	1602555.36	3.2356	A	1.5
6	☐	25000.000	27409.036	3182158.95	6.5025	A	0.6
7	☐	50000.000	52505.876	6105134.01	12.4533	A	1.1
8	☐	250000.00	249167.36	28268968.75	59.0849	A	0.6

$$y = 2.3712E-004 * x + 0.0033$$

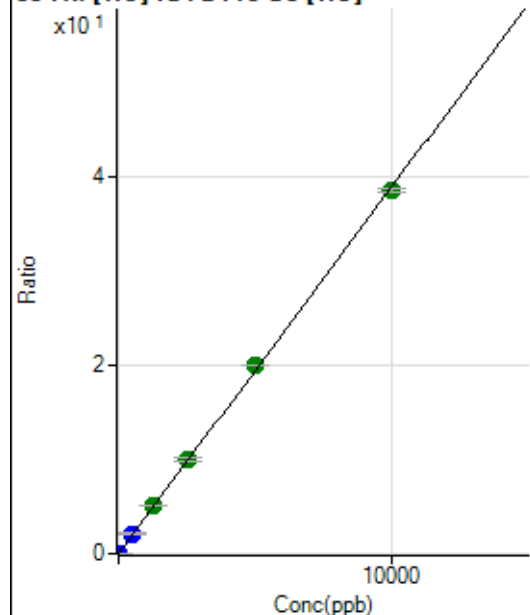
$$R = 0.9999$$

$$DL = 2.722$$

$$BEC = 14.09$$

Weight: <None>

Min Conc: 0

55 Mn [He] ISTD:45 Sc [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	707.80	0.0014	P	5.0
2	☐	1.000	0.966	2681.38	0.0051	P	2.4
3	☐	500.000	545.999	1078925.86	2.1237	P	3.9
4	☐	1250.000	1325.844	2618455.57	5.1551	A	1.7
5	☐	2500.000	2569.679	4947238.47	9.9900	A	2.2
6	☐	5000.000	5140.930	9780148.39	19.9848	A	0.7
7	☐	10000.000	9900.335	18867025.14	38.4852	A	0.9
8	☐			11094.18	0.0232	P	1.5

$$y = 0.0039 * x + 0.0014$$

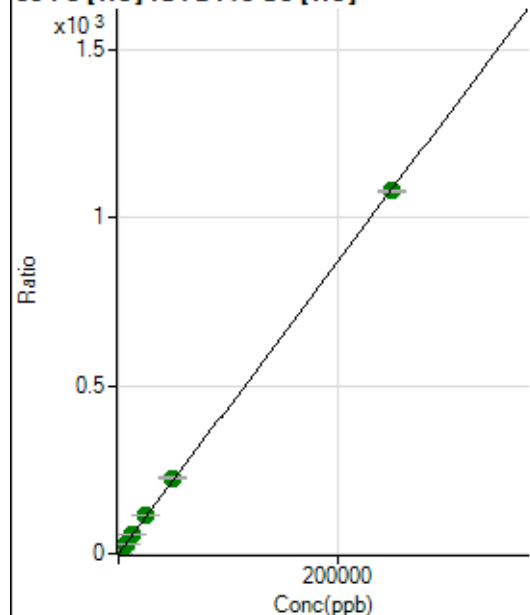
$$R = 0.9998$$

$$DL = 0.05192$$

$$BEC = 0.3475$$

Weight: <None>

Min Conc: 0

56 Fe [He] ISTD:45 Sc [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	14581.61	0.0279	P	2.3
2	☐	50.000	54.086	137717.97	0.2621	P	1.4
3	☐	2500.000	2790.300	6154587.06	12.1146	A	4.0
4	☐	6250.000	6961.051	15330237.83	30.1811	A	1.6
5	☐	12500.000	13510.000	28993658.46	58.5492	A	2.5
6	☐	25000.000	27013.803	57278735.26	117.0438	A	0.3
7	☐	50000.000	51906.868	110240470.5	224.8733	A	1.1
8	☐	250000.00	249346.06	516782245.6	1,080.122	A	0.4

$$y = 0.0043 * x + 0.0279$$

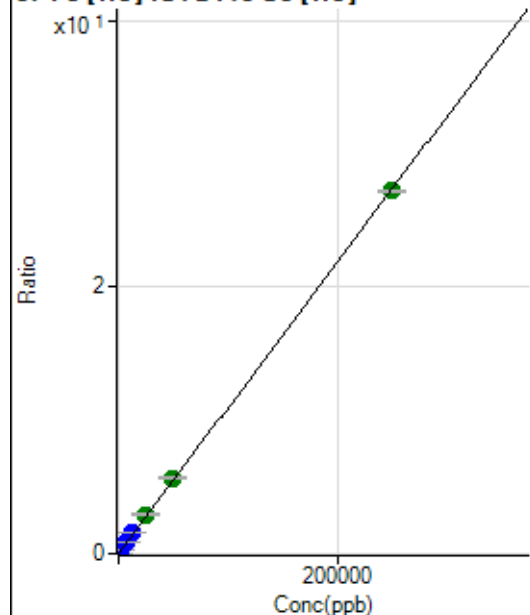
$$R = 0.9999$$

$$DL = 0.4437$$

$$BEC = 6.432$$

Weight: <None>

Min Conc: 0

57 Fe [He] ISTD:45 Sc [He]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1180.06	0.0023	P	5.2
2	☐	50.000	54.851	4328.44	0.0082	P	1.7
3	☐	2500.000	2955.925	165017.80	0.3248	P	3.5
4	☐	6250.000	7373.661	409817.37	0.8068	P	1.5
5	☐	12500.000	14221.283	769495.13	1.5540	P	2.7
6	☐	25000.000	27007.608	1443195.60	2.9491	A	1.2
7	☐	50000.000	52001.503	2782630.27	5.6763	A	1.5
8	☐	250000.00	249280.22	13014691.47	27.2019	A	0.3

$$y = 1.0911\text{E-}004 * x + 0.0023$$

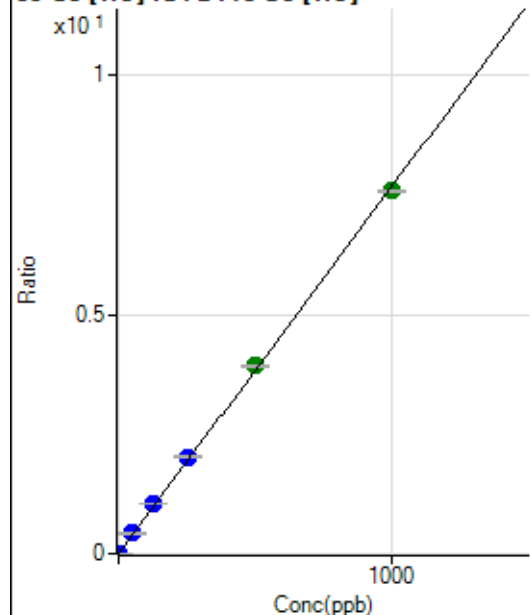
$$R = 0.9999$$

$$DL = 3.231$$

$$BEC = 20.66$$

Weight: <None>

Min Conc: 0

59 Co [He] ISTD:45 Sc [He]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	366.68	0.0007	P	13.2
2	☐	1.000	1.105	4819.71	0.0092	P	0.9
3	☐	50.000	55.214	215469.22	0.4242	P	4.6
4	☐	125.000	136.739	533103.31	1.0495	P	1.2
5	☐	250.000	262.703	998176.82	2.0157	P	2.3
6	☐	500.000	511.443	1920068.08	3.9235	A	0.2
7	☐	1000.000	989.375	3720707.03	7.5893	A	0.5
8	☐			9724.36	0.0203	P	3.5

$$y = 0.0077 * x + 7.0064\text{E-}004$$

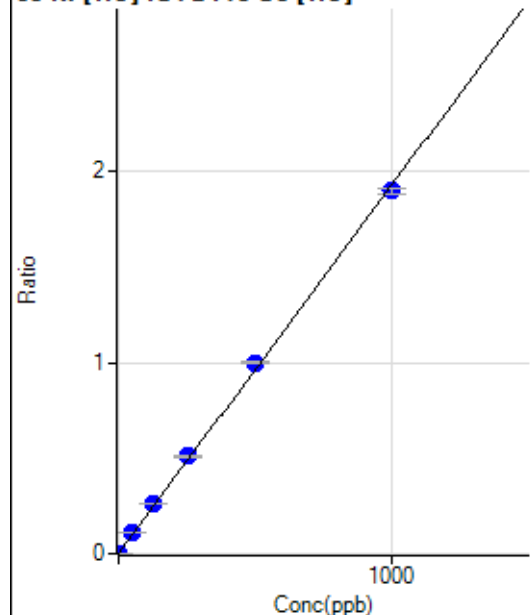
$$R = 0.9998$$

$$DL = 0.03628$$

$$BEC = 0.09135$$

Weight: <None>

Min Conc: 0

60 Ni [He] ISTD:45 Sc [He]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	350.01	0.0007	P	14.7
2	☐	1.000	0.820	1181.17	0.0022	P	4.7
3	☐	50.000	55.823	54944.65	0.1081	P	3.6
4	☐	125.000	136.705	134027.88	0.2639	P	1.1
5	☐	250.000	264.585	252569.79	0.5101	P	2.6
6	☐	500.000	518.526	488853.49	0.9989	P	0.6
7	☐	1000.000	985.336	930279.74	1.8976	P	1.4
8	☐			4051.70	0.0085	P	1.6

$$y = 0.0019 * x + 6.7019E-004$$

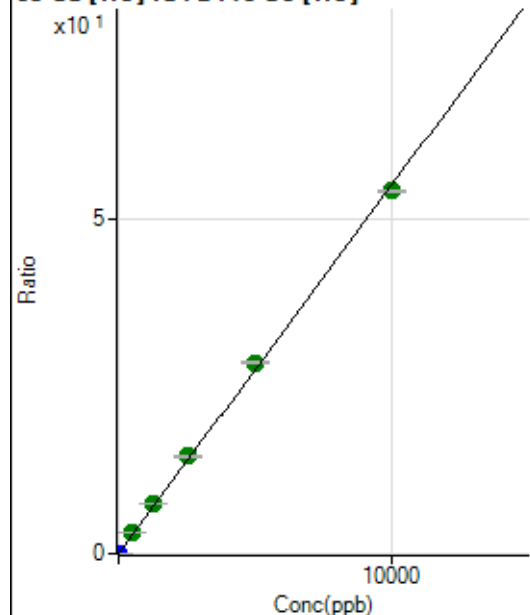
$$R = 0.9996$$

$$DL = 0.1537$$

$$BEC = 0.3481$$

Weight: <None>

Min Conc: 0

63 Cu [He] ISTD:45 Sc [He]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	550.02	0.0010	P	6.8
2	☐	2.000	2.049	6459.23	0.0123	P	1.6
3	☐	500.000	561.089	1565282.22	3.0806	A	3.8
4	☐	1250.000	1363.006	3800418.35	7.4819	A	1.3
5	☐	2500.000	2648.359	7198952.05	14.5365	A	2.1
6	☐	5000.000	5192.480	13946849.10	28.4999	A	1.1
7	☐	10000.000	9849.490	26502792.10	54.0598	A	0.7
8	☐			5197.61	0.0109	P	2.7

$$y = 0.0055 * x + 0.0010$$

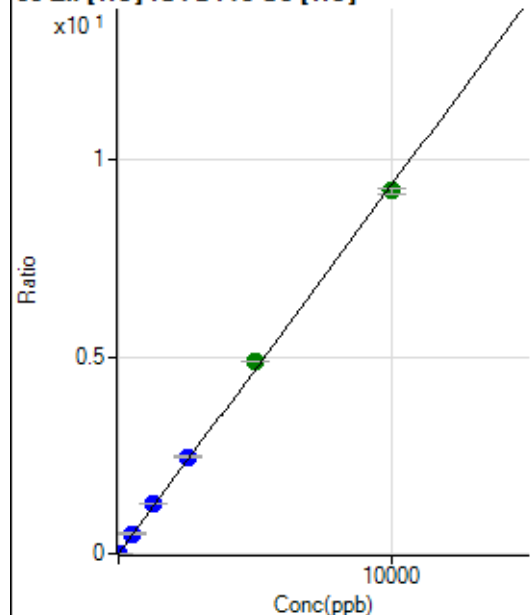
$$R = 0.9996$$

$$DL = 0.03927$$

$$BEC = 0.1912$$

Weight: <None>

Min Conc: 0

66 Zn [He] ISTD:45 Sc [He]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	382.23	0.0007	P	12.6
2	☐	5.000	5.206	2942.55	0.0056	P	1.0
3	☐	500.000	542.238	258070.94	0.5080	P	4.0
4	☐	1250.000	1353.070	643335.36	1.2665	P	1.5
5	☐	2500.000	2621.977	1215044.91	2.4536	P	2.4
6	☐	5000.000	5216.549	2388586.13	4.8809	A	0.9
7	☐	10000.000	9846.236	4515940.94	9.2120	A	1.4
8	☐			1910.14	0.0040	P	2.3

$$y = 9.3551\text{E-}004 * x + 7.3114\text{E-}004$$

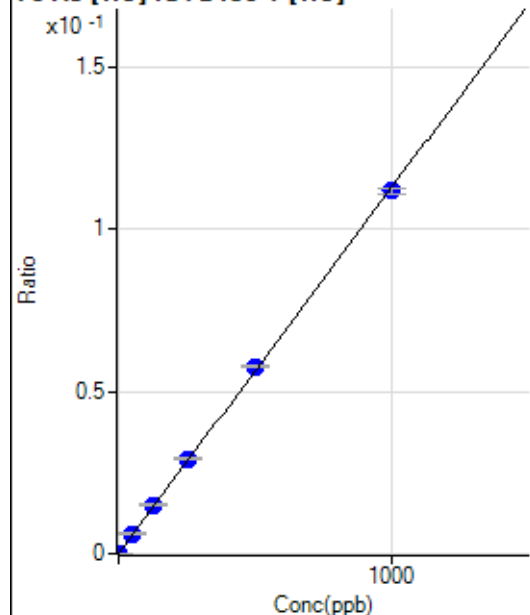
$$R = 0.9995$$

$$DL = 0.2959$$

$$BEC = 0.7815$$

Weight: <None>

Min Conc: 0

75 As [He] ISTD:89 Y [He]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	18.89	0.0000	P	46.2
2	☐	1.000	1.023	387.79	0.0001	P	7.4
3	☐	50.000	54.462	18769.74	0.0061	P	4.5
4	☐	125.000	132.241	46192.77	0.0149	P	2.8
5	☐	250.000	258.482	88376.62	0.0292	P	2.6
6	☐	500.000	510.628	174703.40	0.0576	P	0.8
7	☐	1000.000	991.437	337270.08	0.1118	P	1.5
8	☐			204.45	0.0001	P	6.0

$$y = 1.1281\text{E-}004 * x + 6.0256\text{E-}006$$

$$R = 0.9999$$

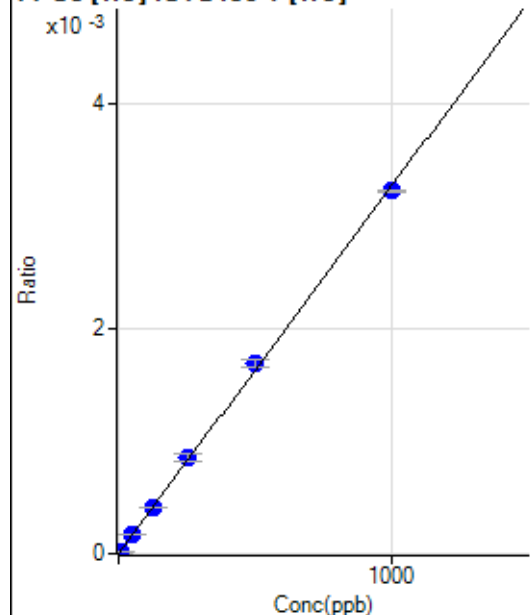
$$DL = 0.07404$$

$$BEC = 0.05342$$

Weight: <None>

Min Conc: 0

77 Se [He] ISTD:89 Y [He]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	2.22	0.0000	P	173.
2	☐	5.000	4.999	54.44	0.0000	P	22.3
3	☐	50.000	53.161	533.35	0.0002	P	5.4
4	☐	125.000	126.039	1278.96	0.0004	P	2.4
5	☐	250.000	260.221	2579.14	0.0009	P	7.3
6	☐	500.000	519.876	5158.71	0.0017	P	4.1
7	☐	1000.000	987.219	9739.93	0.0032	P	0.7
8	☐			4.44	0.0000	P	114.

$$y = 3.2709\text{E-}006 * x + 7.1472\text{E-}007$$

$$R = 0.9996$$

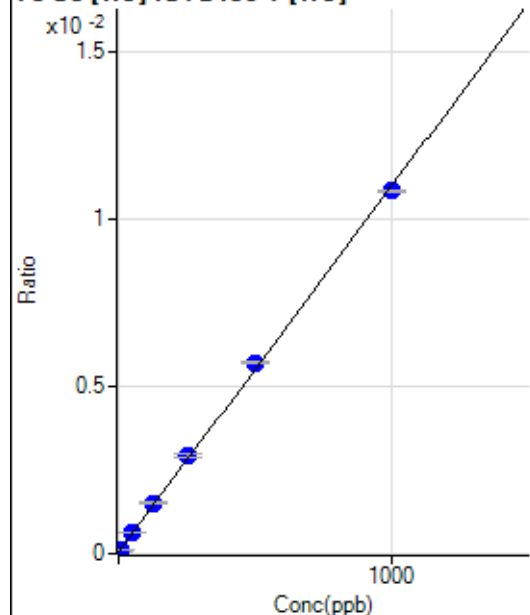
$$DL = 1.135$$

$$BEC = 0.2185$$

Weight: <None>

Min Conc: 0

78 Se [He] ISTD:89 Y [He]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	157.78	0.0000	P	4.5
2	☐	5.000	4.705	323.34	0.0001	P	7.9
3	☐	50.000	52.566	1904.59	0.0006	P	4.8
4	☐	125.000	133.808	4676.34	0.0015	P	3.1
5	☐	250.000	263.864	8876.06	0.0029	P	4.2
6	☐	500.000	516.393	17244.58	0.0057	P	0.9
7	☐	1000.000	987.109	32642.61	0.0108	P	0.7
8	☐			155.56	0.0001	P	16.9

$$y = 1.0915\text{E-}005 * x + 4.9929\text{E-}005$$

$$R = 0.9997$$

$$DL = 0.6215$$

$$BEC = 4.574$$

Weight: <None>

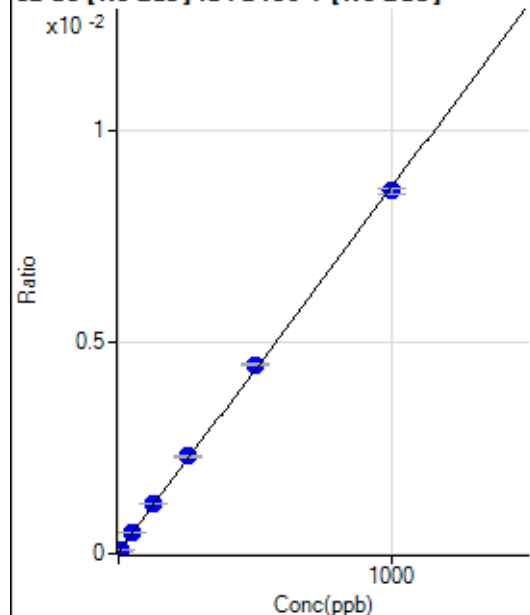
Min Conc: 0

81 Br [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			7514.20		P	2.5
2	☐			7219.60		P	2.4
3	☐			7242.96		P	5.0
4	☐			7176.26		P	3.0
5	☐			6886.13		P	4.6
6	☐			6844.99		P	3.2
7	☐			6800.51		P	1.4
8	☐			7261.86		P	2.4

81 Br [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			62.22		P	11.1
2	☐			47.78		P	47.5
3	☐			43.33		P	13.3
4	☐			33.33		P	20.0
5	☐			43.33		P	27.7
6	☐			51.11		P	33.5
7	☐			33.33		P	34.6
8	☐			81.11		P	13.2

82 Se [No Gas] ISTD:89 Y [No Gas]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	535.78	0.0000	P	13.9
2	☐	5.000	5.096	1070.75	0.0001	P	4.1
3	☐	50.000	53.434	6294.59	0.0005	P	2.3
4	☐	125.000	133.609	15019.82	0.0012	P	1.0
5	☐	250.000	261.298	28262.63	0.0023	P	1.5
6	☐	500.000	512.755	55553.55	0.0045	P	0.6
7	☐	1000.000	989.550	106747.46	0.0086	P	1.3
8	☐			546.40	0.0000	P	7.2

$$y = 8.6186E-006 * x + 4.2639E-005$$

$$R = 0.9998$$

$$DL = 2.066$$

$$BEC = 4.947$$

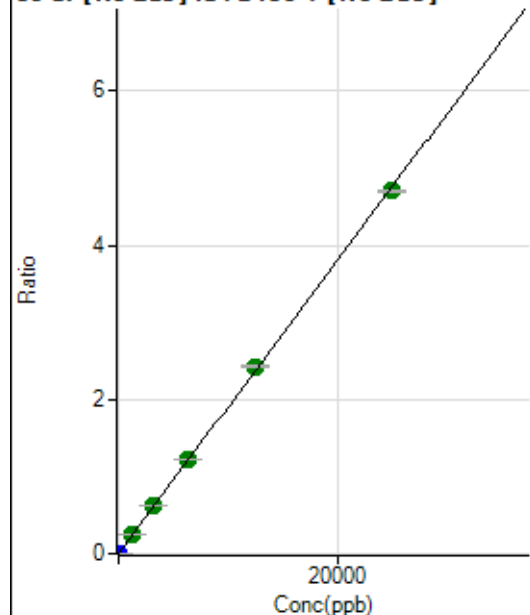
Weight: <None>

Min Conc: 0

83 Kr [No Gas] No available calibration points

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			136.67		P	19.0
2	☐			140.00		P	28.9
3	☐			142.22		P	9.5
4	☐			145.56		P	8.0
5	☐			148.89		P	14.6
6	☐			145.56		P	6.6
7	☐			152.23		P	22.5
8	☐			165.56		P	11.4

86 Sr [No Gas] ISTD:89 Y [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	237.78	0.0000	P	14.3
2	☐	1.000	1.016	2618.04	0.0002	P	2.1
3	☐	1250.000	1295.974	3076753.05	0.2459	A	1.2
4	☐	3125.000	3268.116	7800307.87	0.6202	A	1.1
5	☐	6250.000	6447.255	15068434.22	1.2235	A	1.3
6	☐	12500.000	12795.351	30230854.55	2.4281	A	0.8
7	☐	25000.000	24782.822	58571851.91	4.7028	A	0.6
8	☐			8920.57	0.0008	P	2.6

$$y = 1.8976E-004 * x + 1.8923E-005$$

$$R = 0.9999$$

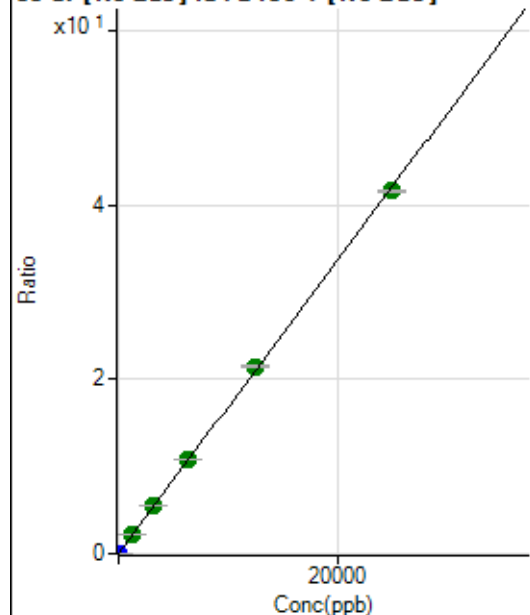
$$DL = 0.04264$$

$$BEC = 0.09972$$

Weight: <None>

Min Conc: 0

88 Sr [No Gas] ISTD:89 Y [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	211.11	0.0000	P	17.7
2	☐	1.000	0.994	20852.62	0.0017	P	1.2
3	☐	1250.000	1279.060	26857814.88	2.1468	A	0.5
4	☐	3125.000	3275.811	69152705.08	5.4981	A	1.1
5	☐	6250.000	6460.424	133550205.7	10.8432	A	1.2
6	☐	12500.000	12787.691	267225424.9	21.4628	A	0.8
7	☐	25000.000	24783.244	518075854.5	41.5962	A	0.3
8	☐			75861.01	0.0066	P	0.9

$$y = 0.0017 * x + 1.6806E-005$$

$$R = 0.9999$$

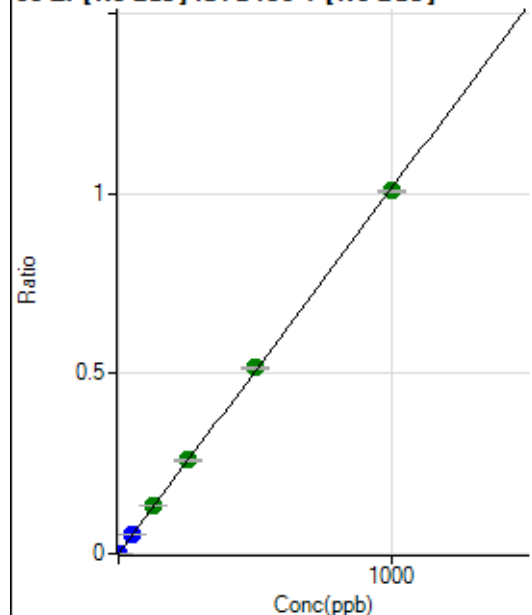
$$DL = 0.005303$$

$$BEC = 0.01001$$

Weight: <None>

Min Conc: 0

90 Zr [No Gas] ISTD: 89 Y [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	830.04	0.0001	P	1.0
2	☐	1.000	1.025	13678.67	0.0011	P	3.4
3	☐	50.000	52.467	666654.75	0.0533	P	0.4
4	☐	125.000	130.207	1662020.12	0.1321	A	1.0
5	☐	250.000	256.203	3201343.11	0.2599	A	2.0
6	☐	500.000	509.152	6430885.67	0.5165	A	1.2
7	☐	1000.000	993.099	12546806.20	1.0074	A	0.8
8	☐			8512.55	0.0007	P	1.8

$$y = 0.0010 * x + 6.6134E-005$$

$$R = 0.9999$$

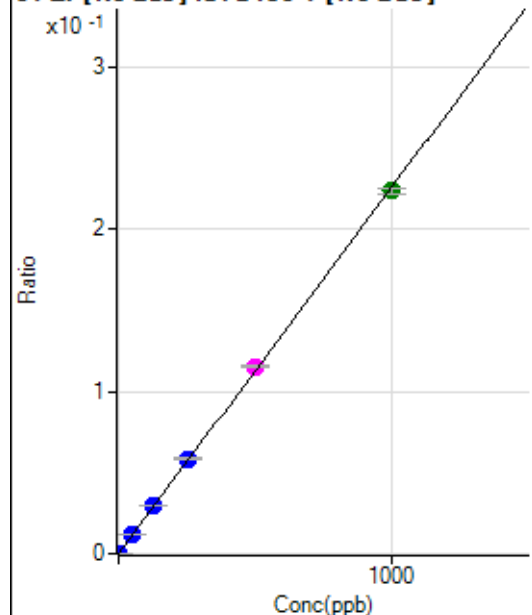
$$DL = 0.001951$$

$$BEC = 0.0652$$

Weight: <None>

Min Conc: 0

91 Zr [No Gas] ISTD: 89 Y [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	162.23	0.0000	P	15.8
2	☐	1.000	0.985	2910.32	0.0002	P	3.9
3	☐	50.000	51.910	146762.94	0.0117	P	2.5
4	☐	125.000	130.934	371933.69	0.0296	P	1.8
5	☐	250.000	258.586	719185.66	0.0584	P	1.3
6	☐	500.000	511.814	1438868.10	0.1156	M	0.5
7	☐	1000.000	991.109	2786823.88	0.2238	A	1.9
8	☐			1909.03	0.0002	P	4.3

$$y = 2.2577E-004 * x + 1.2921E-005$$

$$R = 0.9998$$

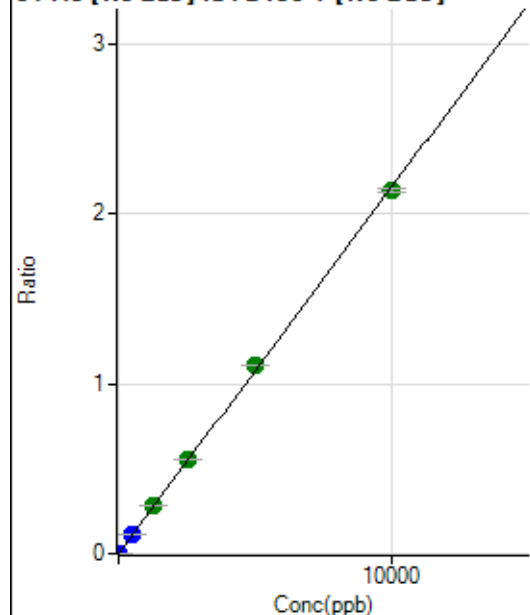
$$DL = 0.02709$$

$$BEC = 0.05723$$

Weight: <None>

Min Conc: 0

94 Mo [No Gas] ISTD:89 Y [No Gas]



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	451.12	0.0000	P	3.8
2	☐	5.000	5.664	15535.02	0.0013	P	2.8
3	☐	500.000	519.214	1399509.02	0.1119	P	0.8
4	☐	1250.000	1309.382	3547509.88	0.2821	A	1.2
5	☐	2500.000	2571.760	6822398.02	0.5540	A	1.7
6	☐	5000.000	5139.078	13781922.99	1.1069	A	0.1
7	☐	10000.000	9904.137	26567749.33	2.1332	A	1.2
8	☐			8340.23	0.0007	P	1.6

$$y = 2.1538\text{E-}004 * x + 3.5943\text{E-}005$$

$$R = 0.9998$$

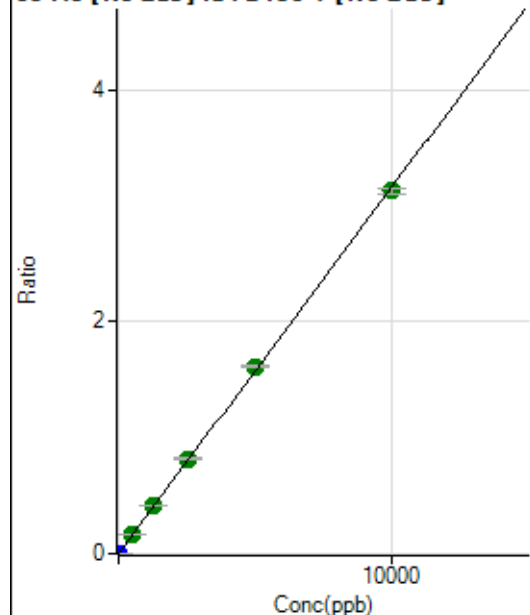
$$DL = 0.0192$$

$$BEC = 0.1669$$

Weight: <None>

Min Conc: 0

95 Mo [No Gas] ISTD:89 Y [No Gas]



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	358.90	0.0000	P	9.8
2	☐	5.000	4.623	18408.30	0.0015	P	1.2
3	☐	500.000	522.030	2062067.92	0.1648	A	0.2
4	☐	1250.000	1303.810	5176863.43	0.4116	A	1.3
5	☐	2500.000	2583.864	10045747.63	0.8157	A	1.8
6	☐	5000.000	5119.513	20121614.84	1.6161	A	0.6
7	☐	10000.000	9911.450	38965702.20	3.1288	A	1.7
8	☐			8535.88	0.0007	P	1.2

$$y = 3.1567\text{E-}004 * x + 2.8585\text{E-}005$$

$$R = 0.9998$$

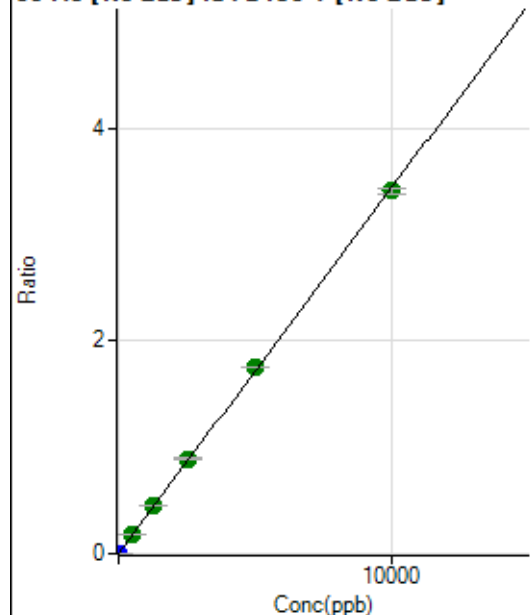
$$DL = 0.02664$$

$$BEC = 0.09055$$

Weight: <None>

Min Conc: 0

96 Mo [No Gas] ISTD:89 Y [No Gas]



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	413.34	0.0000	P	7.6
2	☐	5.000	4.764	20688.03	0.0017	P	2.2
3	☐	500.000	523.793	2255632.43	0.1803	A	1.5
4	☐	1250.000	1302.521	5637532.90	0.4483	A	1.8
5	☐	2500.000	2584.726	10954473.86	0.8895	A	2.2
6	☐	5000.000	5101.143	21856724.40	1.7554	A	0.4
7	☐	10000.000	9920.492	42517009.37	3.4139	A	1.4
8	☐			16013.30	0.0014	P	1.3

$$y = 3.4412\text{E-}004 * x + 3.2953\text{E-}005$$

$$R = 0.9999$$

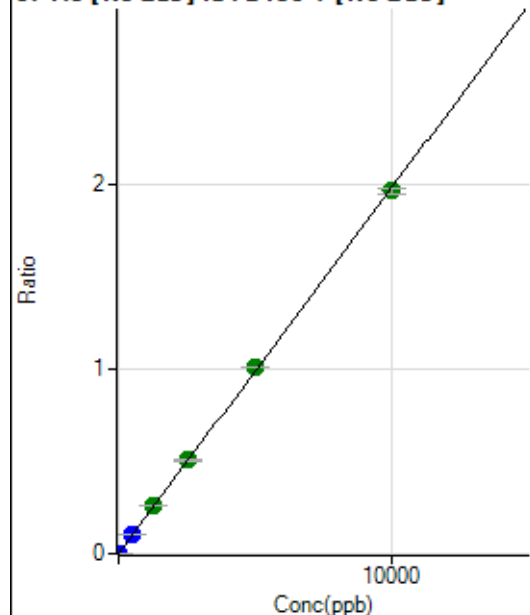
$$DL = 0.02173$$

$$BEC = 0.09576$$

Weight: <None>

Min Conc: 0

97 Mo [No Gas] ISTD:89 Y [No Gas]



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	185.56	0.0000	P	14.6
2	☐	5.000	4.725	11751.47	0.0009	P	0.8
3	☐	500.000	524.422	1298570.91	0.1038	P	1.7
4	☐	1250.000	1305.493	3249461.10	0.2584	A	2.4
5	☐	2500.000	2574.782	6276030.74	0.5096	A	1.9
6	☐	5000.000	5095.983	12557455.79	1.0086	A	0.4
7	☐	10000.000	9925.155	24463836.58	1.9643	A	1.4
8	☐			5172.07	0.0004	P	4.2

$$y = 1.9791\text{E-}004 * x + 1.4800\text{E-}005$$

$$R = 0.9999$$

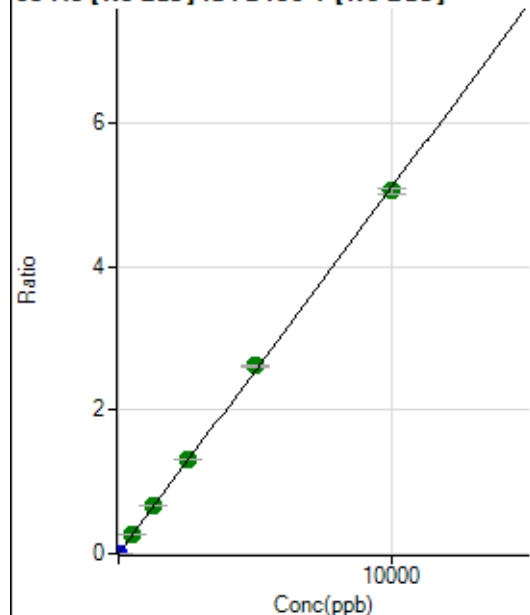
$$DL = 0.03272$$

$$BEC = 0.07478$$

Weight: <None>

Min Conc: 0

98 Mo [No Gas] ISTD:89 Y [No Gas]



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	521.13	0.0000	P	16.8
2	☐	5.000	4.677	29990.81	0.0024	P	1.0
3	☐	500.000	519.759	3312754.71	0.2648	A	2.7
4	☐	1250.000	1309.069	8387831.33	0.6670	A	2.2
5	☐	2500.000	2572.951	16144356.01	1.3109	A	1.8
6	☐	5000.000	5126.477	32518967.85	2.6118	A	0.7
7	☐	10000.000	9910.153	62879885.73	5.0489	A	1.3
8	☐			13118.21	0.0011	P	2.1

$$y = 5.0946\text{E-}004 * x + 4.1521\text{E-}005$$

$$R = 0.9998$$

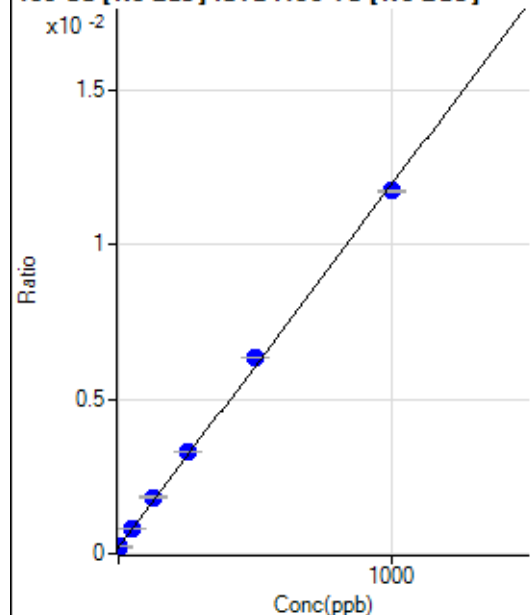
$$DL = 0.04103$$

$$BEC = 0.0815$$

Weight: <None>

Min Conc: 0

106 Cd [No Gas] ISTD:159 Tb [No Gas]



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	3253.74	0.0002	P	5.7
2	☐	1.000	1.713	3578.25	0.0002	P	0.2
3	☐	50.000	53.899	13632.05	0.0008	P	1.2
4	☐	125.000	139.346	30220.33	0.0018	P	1.3
5	☐	250.000	264.456	54803.87	0.0033	P	0.7
6	☐	500.000	522.569	106685.48	0.0063	P	0.5
7	☐	1000.000	983.113	199883.14	0.0118	P	0.8
8	☐			3118.14	0.0002	P	3.0

$$y = 1.1752\text{E-}005 * x + 1.9906\text{E-}004$$

$$R = 0.9994$$

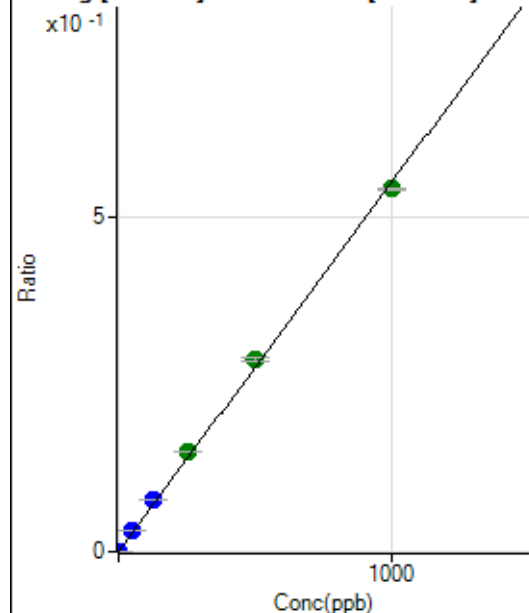
$$DL = 2.876$$

$$BEC = 16.94$$

Weight: <None>

Min Conc: 0

107 Ag [No Gas] ISTD :159 Tb [No Gas]



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	93.33	0.0000	P	27.8
2	☐	1.000	1.018	9263.01	0.0006	P	2.8
3	☐	50.000	56.565	511093.80	0.0312	P	1.6
4	☐	125.000	140.011	1271009.83	0.0772	P	0.9
5	☐	250.000	269.161	2460857.46	0.1485	A	0.6
6	☐	500.000	520.264	4829032.77	0.2870	A	2.0
7	☐	1000.000	982.873	9222062.43	0.5422	A	0.9
8	☐			1185.62	0.0001	P	10.6

$$y = 5.5168\text{E-}004 * x + 5.7048\text{E-}006$$

$$R = 0.9994$$

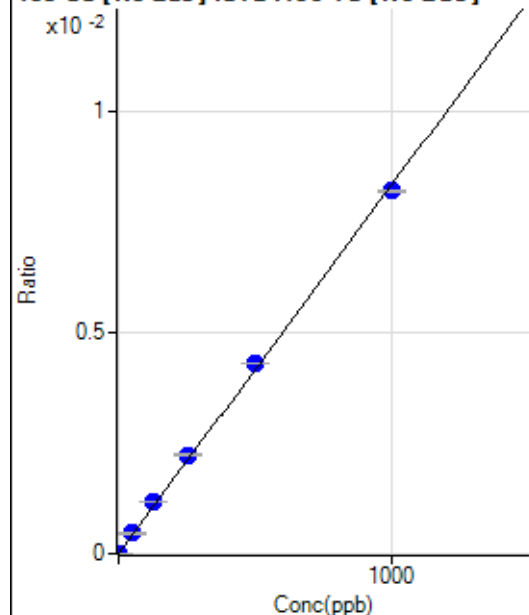
$$DL = 0.008621$$

$$BEC = 0.01034$$

Weight: <None>

Min Conc: 0

108 Cd [No Gas] ISTD :159 Tb [No Gas]



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	4.44	0.0000	P	114.
2	☐	1.000	1.175	164.45	0.0000	P	11.7
3	☐	50.000	55.376	7570.93	0.0005	P	2.2
4	☐	125.000	140.191	19247.27	0.0012	P	2.0
5	☐	250.000	268.208	37087.33	0.0022	P	0.8
6	☐	500.000	517.245	72614.86	0.0043	P	0.6
7	☐	1000.000	984.658	139722.93	0.0082	P	0.4
8	☐			64.45	0.0000	P	35.7

$$y = 8.3429\text{E-}006 * x + 2.7196\text{E-}007$$

$$R = 0.9995$$

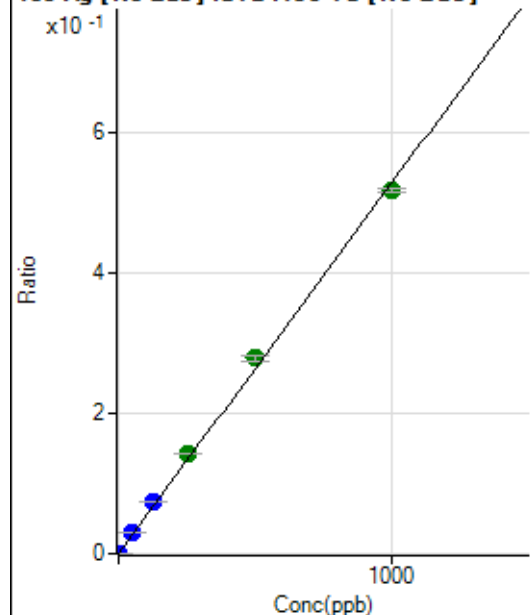
$$DL = 0.1124$$

$$BEC = 0.0326$$

Weight: <None>

Min Conc: 0

109 Ag [No Gas] ISTD :159 Tb [No Gas]



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	48.89	0.0000	P	39.2
2	☐	1.000	1.024	8860.55	0.0005	P	3.0
3	☐	50.000	54.925	474330.45	0.0290	P	0.2
4	☐	125.000	138.609	1202722.45	0.0731	P	0.6
5	☐	250.000	270.067	2360097.74	0.1424	A	0.7
6	☐	500.000	527.235	4677645.17	0.2780	A	2.2
7	☐	1000.000	979.418	8783740.98	0.5165	A	1.0
8	☐			1075.61	0.0001	P	9.2

$$y = 5.2732\text{E-}004 * x + 2.9895\text{E-}006$$

$$R = 0.9992$$

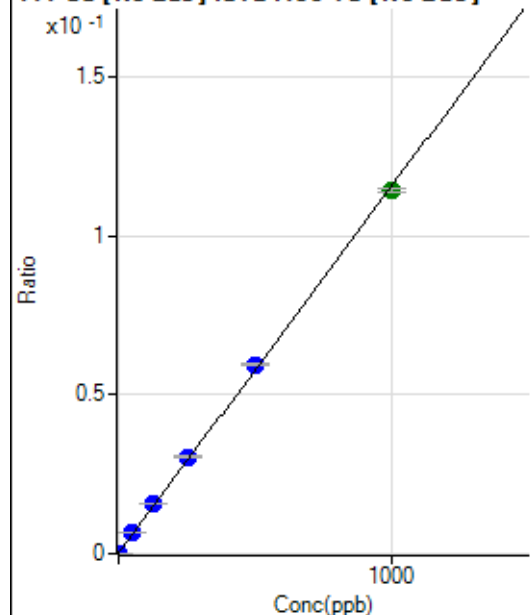
$$DL = 0.00667$$

$$BEC = 0.005669$$

Weight: <None>

Min Conc: 0

111 Cd [No Gas] ISTD :159 Tb [No Gas]



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	2294.50	0.0001	P	5.0
2	☐	1.000	1.074	4317.59	0.0003	P	0.6
3	☐	50.000	55.225	106840.83	0.0065	P	1.1
4	☐	125.000	136.922	262746.14	0.0160	P	1.1
5	☐	250.000	262.516	505246.77	0.0305	P	1.0
6	☐	500.000	514.677	1003480.74	0.0596	P	0.6
7	☐	1000.000	987.781	1944485.61	0.1143	A	1.1
8	☐			2520.93	0.0002	P	4.0

$$y = 1.1560\text{E-}004 * x + 1.4038\text{E-}004$$

$$R = 0.9997$$

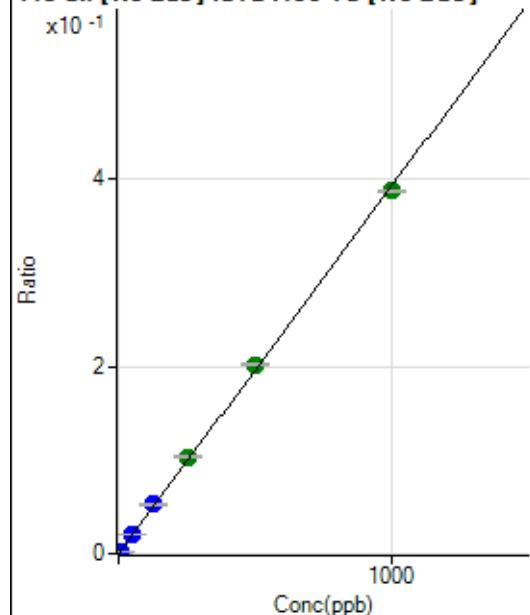
$$DL = 0.1832$$

$$BEC = 1.214$$

Weight: <None>

Min Conc: 0

118 Sn [No Gas] ISTD : 159 Tb [No Gas]



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	862.26	0.0001	P	6.5
2	☐	5.000	4.964	32658.12	0.0020	P	2.0
3	☐	50.000	52.939	341078.47	0.0208	P	0.4
4	☐	125.000	133.713	864291.98	0.0525	P	1.0
5	☐	250.000	263.951	1717556.78	0.1036	A	0.3
6	☐	500.000	515.490	3404905.57	0.2024	A	0.6
7	☐	1000.000	987.531	6592468.65	0.3876	A	0.4
8	☐			7768.83	0.0005	P	1.6

$$y = 3.9245\text{E-}004 * x + 5.2750\text{E-}005$$

$$R = 0.9997$$

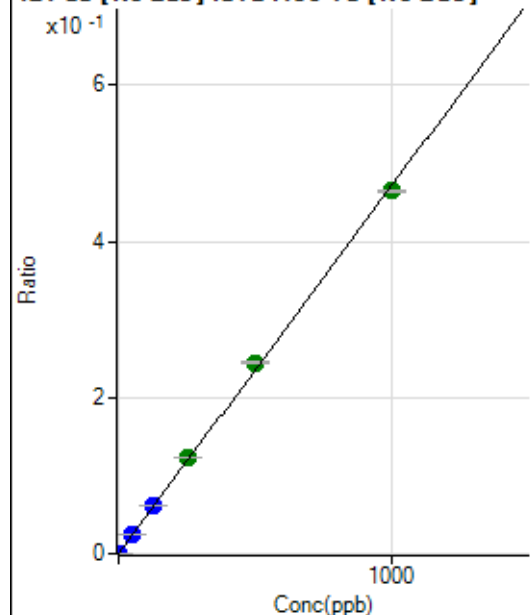
$$DL = 0.02639$$

$$BEC = 0.1344$$

Weight: <None>

Min Conc: 0

121 Sb [No Gas] ISTD : 159 Tb [No Gas]



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	183.34	0.0000	P	10.6
2	☐	2.000	2.026	15767.62	0.0010	P	1.0
3	☐	50.000	52.110	402198.10	0.0246	P	0.3
4	☐	125.000	132.224	1025169.76	0.0623	P	0.7
5	☐	250.000	262.179	2047142.00	0.1235	A	0.7
6	☐	500.000	518.604	4111181.12	0.2443	A	0.7
7	☐	1000.000	986.645	7905871.41	0.4648	A	0.6
8	☐			6331.45	0.0004	P	3.7

$$y = 4.7112\text{E-}004 * x + 1.1221\text{E-}005$$

$$R = 0.9996$$

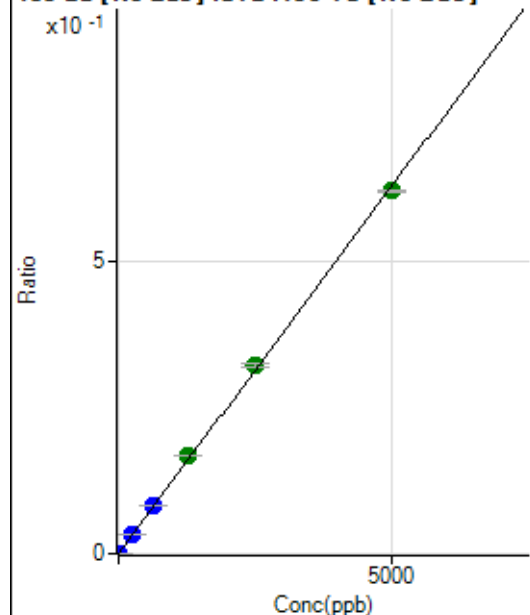
$$DL = 0.00758$$

$$BEC = 0.02382$$

Weight: <None>

Min Conc: 0

135 Ba [No Gas] ISTD :159 Tb [No Gas]



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	95.56	0.0000	P	21.7
2	☐	10.000	9.501	19643.66	0.0012	P	1.4
3	☐	250.000	258.127	532879.67	0.0325	P	0.4
4	☐	625.000	648.304	1344620.92	0.0817	P	0.6
5	☐	1250.000	1331.030	2780307.87	0.1678	A	0.6
6	☐	2500.000	2573.645	5458006.86	0.3244	A	1.8
7	☐	5000.000	4939.602	10588773.59	0.6226	A	0.9
8	☐			3752.76	0.0002	P	4.8

$$y = 1.2604\text{E-}004 * x + 5.8504\text{E-}006$$

$$R = 0.9997$$

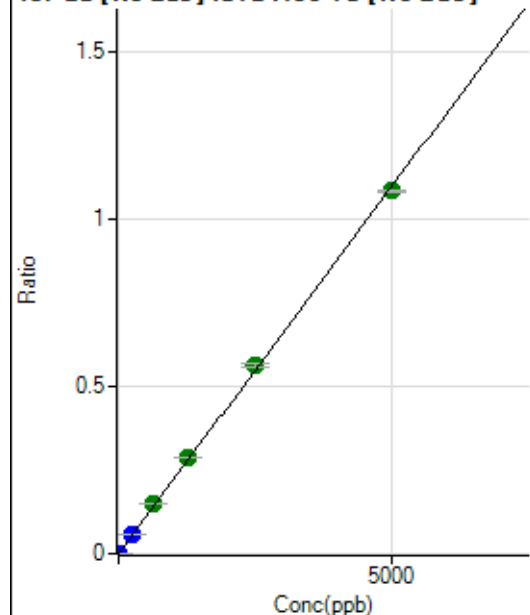
$$DL = 0.03026$$

$$BEC = 0.04642$$

Weight: <None>

Min Conc: 0

137 Ba [No Gas] ISTD :159 Tb [No Gas]



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	156.67	0.0000	P	8.6
2	☐	10.000	9.544	34295.76	0.0021	P	1.5
3	☐	250.000	252.848	907529.97	0.0554	P	0.3
4	☐	625.000	677.045	2441287.90	0.1484	A	1.9
5	☐	1250.000	1306.307	4744339.16	0.2863	A	0.9
6	☐	2500.000	2569.390	9473883.05	0.5631	A	1.8
7	☐	5000.000	4944.581	18429532.22	1.0836	A	0.2
8	☐			6521.55	0.0004	P	1.5

$$y = 2.1915\text{E-}004 * x + 9.5856\text{E-}006$$

$$R = 0.9997$$

$$DL = 0.01129$$

$$BEC = 0.04374$$

Weight: <None>

Min Conc: 0

150 Nd [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			6.67		P	100.
2	☐			8.89		P	78.1
3	☐			40.00		P	16.7
4	☐			98.89		P	24.4
5	☐			170.01		P	17.0
6	☐			332.23		P	13.3
7	☐			584.46		P	3.4
8	☐			187.78		P	23.6

150 Nd [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			5.55		P	69.3
2	☐			6.67		P	132.
3	☐			7.78		P	24.7
4	☐			30.00		P	11.1
5	☐			44.45		P	62.9
6	☐			61.11		P	22.0
7	☐			116.67		P	17.8
8	☐			95.55		P	7.3

156 Dy [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			67.78		P	28.4
2	☐			62.22		P	8.2
3	☐			68.89		P	17.0
4	☐			81.11		P	12.6
5	☐			102.22		P	21.0
6	☐			140.00		P	30.4
7	☐			242.23		P	13.1
8	☐			330.01		P	12.4

156 Dy [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			22.22		P	45.8
2	☐			16.67		P	111.
3	☐			26.67		P	12.5
4	☐			83.33		P	24.0
5	☐			155.56		P	8.9
6	☐			248.89		P	6.3
7	☐			454.46		P	3.5
8	☐			262.23		P	12.0

160 Gd [No Gas] Noavailable calibration poin...

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			67.78		P	15.0
2	☐			62.22		P	30.9
3	☐			65.56		P	26.1
4	☐			54.44		P	67.2
5	☐			56.67		P	41.2
6	☐			92.22		P	12.7
7	☐			142.23		P	16.6
8	☐			313.34		P	21.8

160 Gd [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			604.46		P	3.7
2	☐			595.57		P	6.7
3	☐			583.35		P	5.5
4	☐			600.02		P	7.3
5	☐			558.91		P	5.5
6	☐			591.13		P	5.3
7	☐			627.80		P	6.3
8	☐			690.03		P	4.4

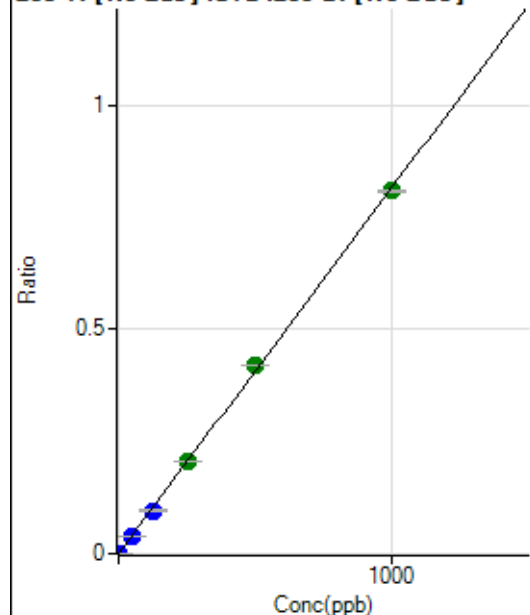
164 Er [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			140.00		P	14.3
2	☐			107.78		P	25.0
3	☐			121.11		P	6.9
4	☐			113.33		P	12.8
5	☐			132.22		P	11.9
6	☐			157.78		P	18.0
7	☐			173.34		P	17.3
8	☐			383.34		P	10.0

164 Er [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			75.56		P	19.9
2	☐			71.11		P	7.2
3	☐			70.00		P	4.8
4	☐			83.34		P	40.6
5	☐			101.11		P	15.2
6	☐			94.45		P	16.7
7	☐			110.00		P	18.9
8	☐			221.12		P	8.8

203 Tl [No Gas] ISTD:209 Bi [No Gas]



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	286.67	0.0000	P	6.5
2	☐	1.000	0.886	7287.58	0.0008	P	2.5
3	☐	50.000	46.641	370588.61	0.0380	P	1.3
4	☐	125.000	117.817	955949.13	0.0960	P	1.2
5	☐	250.000	252.923	2057573.60	0.2060	A	0.3
6	☐	500.000	515.314	4221585.53	0.4197	A	0.6
7	☐	1000.000	992.678	8144610.92	0.8084	A	0.3
8	☐			860.04	0.0001	P	2.2

$$y = 8.1432\text{E-}004 * x + 2.8871\text{E-}005$$

$$R = 0.9998$$

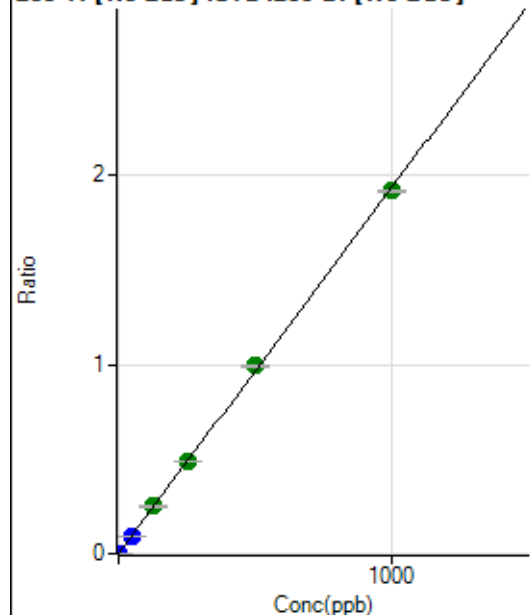
$$DL = 0.006964$$

$$BEC = 0.03545$$

Weight: <None>

Min Conc: 0

205 Tl [No Gas] ISTD:209 Bi [No Gas]



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	675.58	0.0001	P	2.8
2	☐	1.000	0.880	17199.87	0.0018	P	2.4
3	☐	50.000	46.622	880471.20	0.0903	P	1.3
4	☐	125.000	129.478	2496451.85	0.2507	A	2.3
5	☐	250.000	253.185	4895150.80	0.4901	A	0.6
6	☐	500.000	513.429	9996212.42	0.9937	A	0.8
7	☐	1000.000	992.099	19345585.96	1.9201	A	0.7
8	☐			2096.86	0.0002	P	9.7

$$y = 0.0019 * x + 6.7993\text{E-}005$$

$$R = 0.9998$$

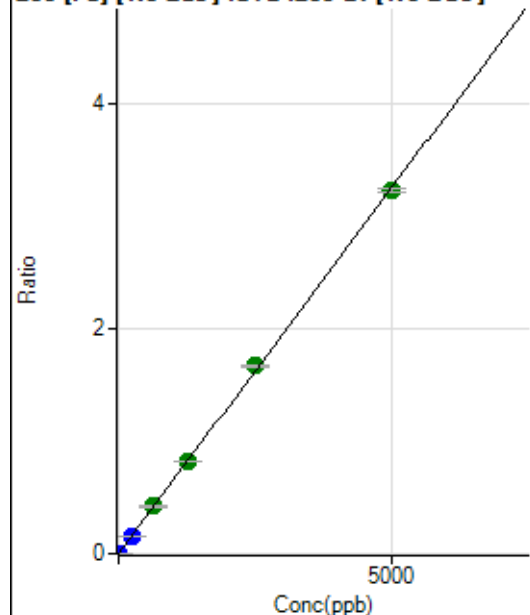
$$DL = 0.002992$$

$$BEC = 0.03513$$

Weight: <None>

Min Conc: 0

206 [Pb] [No Gas] ISTD :209 Bi [No Gas]



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	558.91	0.0001	P	9.6
2	☐	1.000	0.904	6253.73	0.0006	P	0.8
3	☐	250.000	239.062	1514950.71	0.1554	P	1.3
4	☐	625.000	645.548	4178175.87	0.4195	A	1.2
5	☐	1250.000	1267.458	8225823.49	0.8235	A	0.2
6	☐	2500.000	2564.656	16761486.42	1.6663	A	1.0
7	☐	5000.000	4961.286	32475277.85	3.2233	A	0.9
8	☐			8809.60	0.0010	P	8.5

$$y = 6.4969\text{E-}004 * x + 5.6282\text{E-}005$$

$$R = 0.9999$$

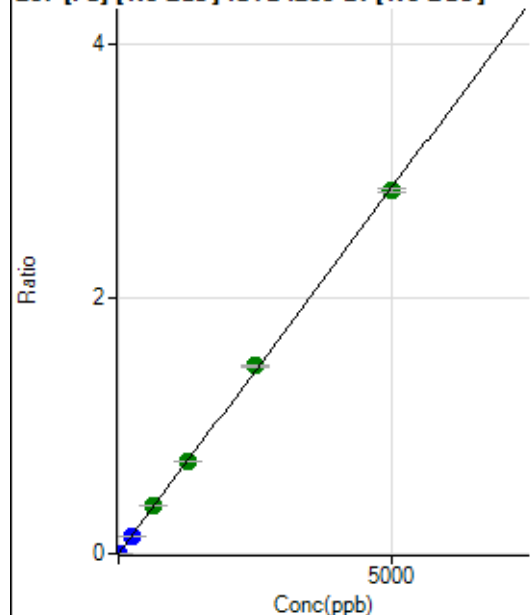
$$DL = 0.02497$$

$$BEC = 0.08663$$

Weight: <None>

Min Conc: 0

207 [Pb] [No Gas] ISTD :209 Bi [No Gas]



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	502.24	0.0001	P	6.6
2	☐	1.000	0.864	5302.20	0.0005	P	2.7
3	☐	250.000	233.526	1305930.35	0.1339	P	1.1
4	☐	625.000	651.029	3718632.79	0.3733	A	0.8
5	☐	1250.000	1264.265	7240726.97	0.7249	A	0.5
6	☐	2500.000	2568.370	14813407.00	1.4726	A	0.8
7	☐	5000.000	4959.819	28650172.63	2.8437	A	1.0
8	☐			7591.07	0.0009	P	4.8

$$y = 5.7333\text{E-}004 * x + 5.0552\text{E-}005$$

$$R = 0.9998$$

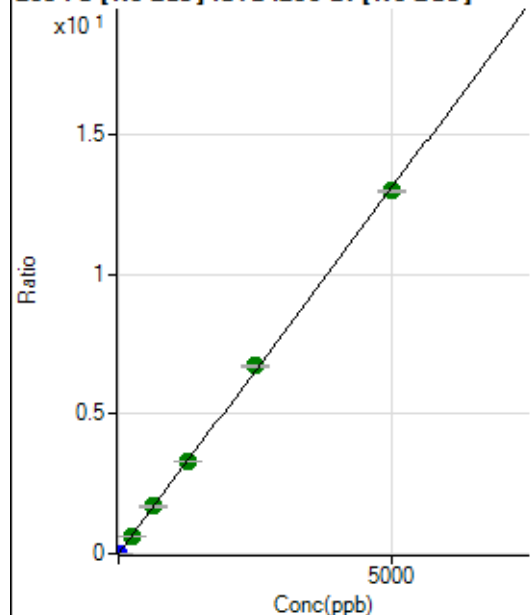
$$DL = 0.01752$$

$$BEC = 0.08817$$

Weight: <None>

Min Conc: 0

208 Pb [No Gas] ISTD :209 Bi [No Gas]



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	2310.11	0.0002	P	3.3
2	☐	1.000	0.887	24774.68	0.0026	P	2.1
3	☐	250.000	246.767	6294874.92	0.6456	A	1.1
4	☐	625.000	647.326	16865340.54	1.6932	A	1.4
5	☐	1250.000	1269.897	33177219.36	3.3214	A	0.2
6	☐	2500.000	2564.442	67469457.33	6.7071	A	0.6
7	☐	5000.000	4960.176	130702020.5	12.9728	A	0.6
8	☐			35618.86	0.0041	P	6.0

$$y = 0.0026 * x + 2.3254E-004$$

$$R = 0.9999$$

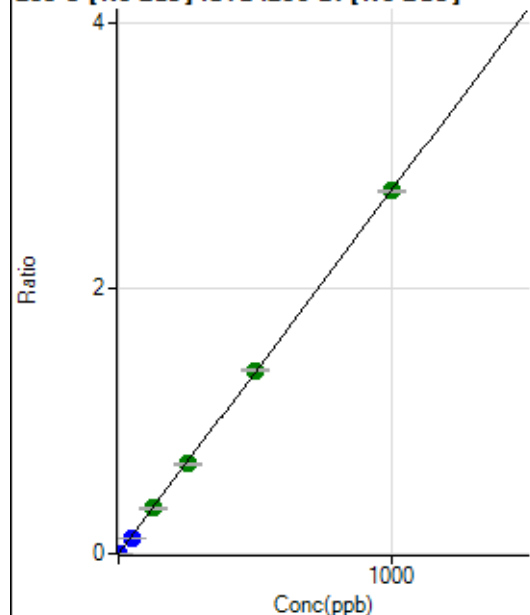
$$DL = 0.008826$$

$$BEC = 0.08892$$

Weight: <None>

Min Conc: 0

238 U [No Gas] ISTD :209 Bi [No Gas]



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	383.34	0.0000	P	5.3
2	☐	1.000	0.805	21796.78	0.0022	P	1.3
3	☐	50.000	44.358	1185351.41	0.1216	P	2.4
4	☐	125.000	125.521	3425773.53	0.3440	A	2.2
5	☐	250.000	246.285	6740946.43	0.6748	A	0.8
6	☐	500.000	504.733	13911925.76	1.3830	A	0.5
7	☐	1000.000	998.779	27571270.42	2.7366	A	0.8
8	☐			1081.17	0.0001	P	12.3

$$y = 0.0027 * x + 3.8578E-005$$

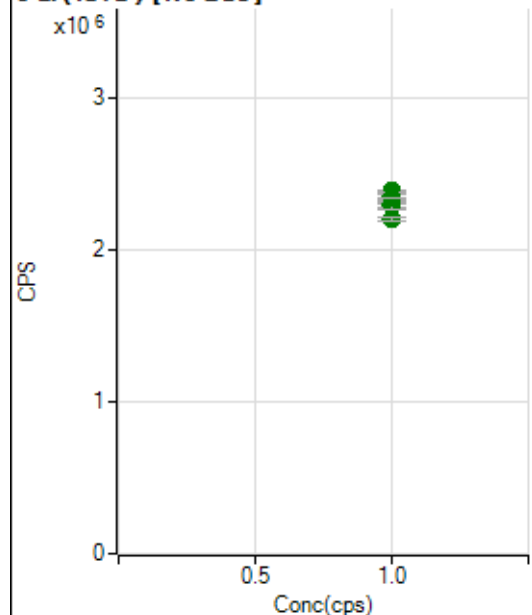
$$R = 1.0000$$

$$DL = 0.002251$$

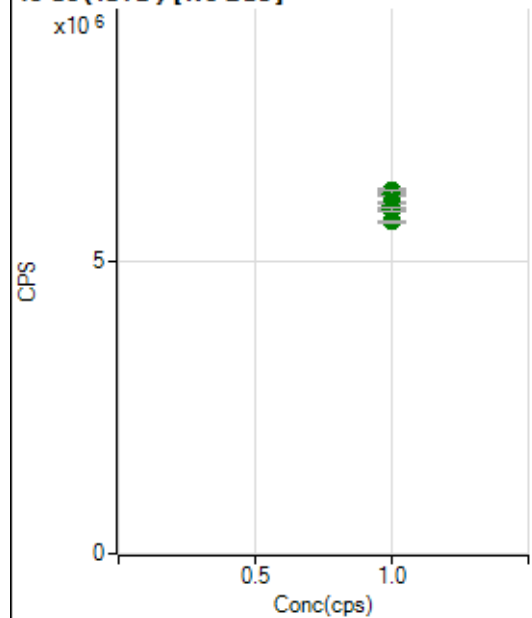
$$BEC = 0.01408$$

Weight: <None>

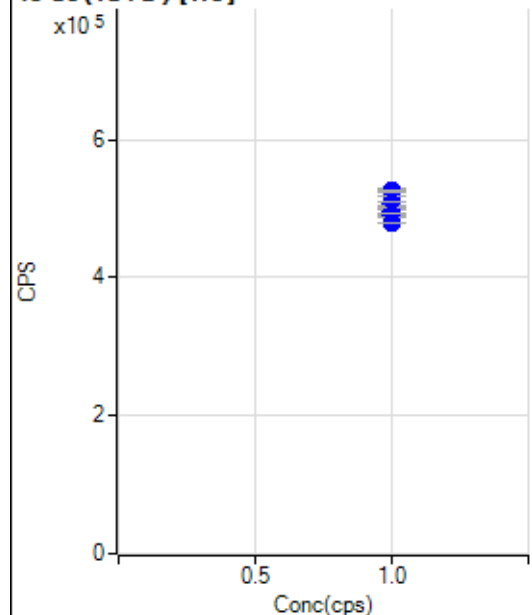
Min Conc: 0

6 Li (ISTD) [No Gas]

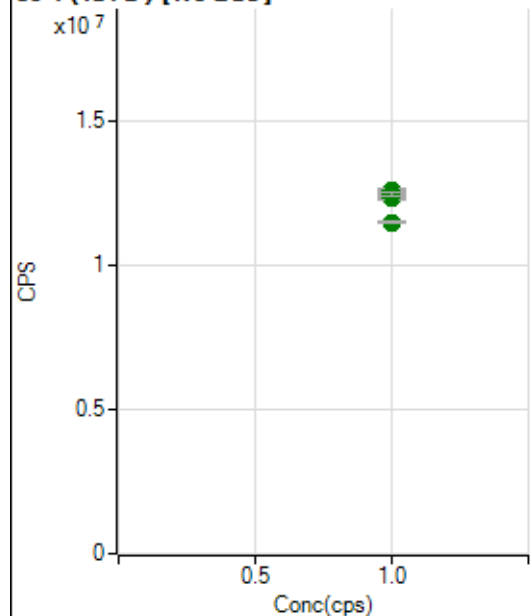
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2321027.36		A	1.2
2	☐	1.000		2297988.66		A	1.2
3	☐	1.000		2301056.46		A	2.6
4	☐	1.000		2360219.18		A	1.5
5	☐	1.000		2389857.67		A	0.3
6	☐	1.000		2379793.63		A	0.6
7	☐	1.000		2340326.86		A	0.3
8	☐	1.000		2206141.15		A	0.9

45 Sc (ISTD) [No Gas]

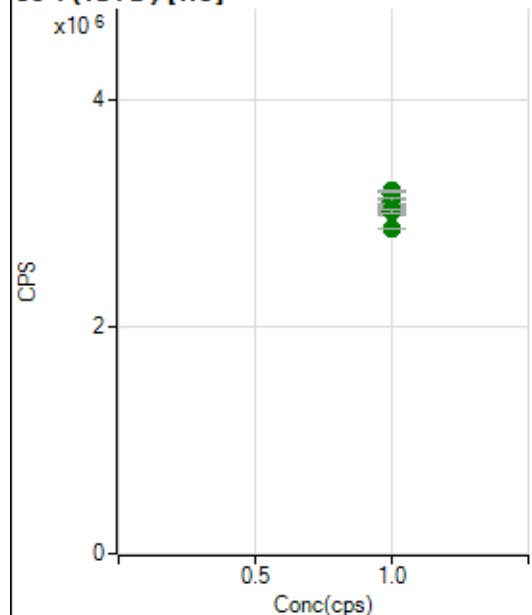
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		6164025.12		A	1.3
2	☐	1.000		6186386.78		A	1.2
3	☐	1.000		6199620.67		A	1.2
4	☐	1.000		6157419.91		A	1.4
5	☐	1.000		6007259.84		A	0.7
6	☐	1.000		5937194.57		A	1.6
7	☐	1.000		5886842.13		A	0.9
8	☐	1.000		5681630.54		A	0.5

45 Sc (ISTD) [He]

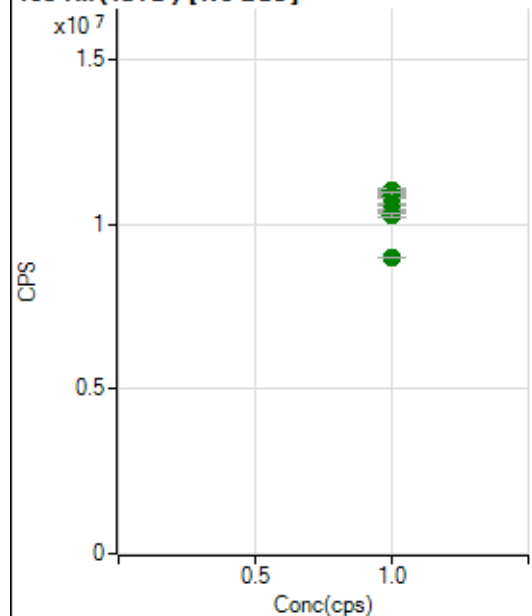
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		523576.77		P	2.6
2	☐	1.000		525356.53		P	0.5
3	☐	1.000		508535.81		P	3.9
4	☐	1.000		507997.12		P	1.1
5	☐	1.000		495407.38		P	2.6
6	☐	1.000		489377.73		P	0.5
7	☐	1.000		490273.55		P	1.1
8	☐	1.000		478450.59		P	0.2

89 Y (ISTD) [No Gas]

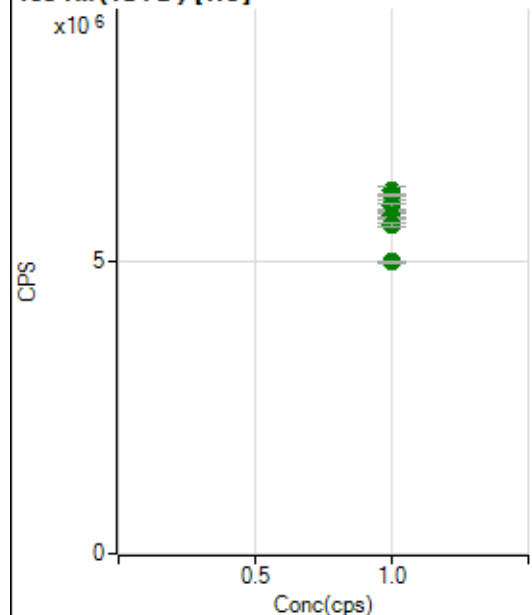
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		12551953.01		A	1.3
2	☐	1.000		12371794.12		A	0.5
3	☐	1.000		12511013.15		A	1.1
4	☐	1.000		12578905.78		A	1.5
5	☐	1.000		12317720.37		A	1.3
6	☐	1.000		12450869.67		A	0.5
7	☐	1.000		12455048.29		A	0.8
8	☐	1.000		11493649.00		A	0.3

89 Y (ISTD) [He]

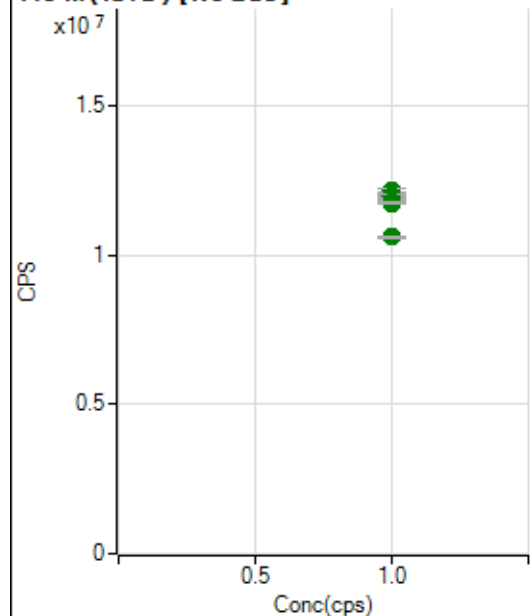
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3161039.29		A	2.9
2	☐	1.000		3193746.59		A	0.9
3	☐	1.000		3055896.76		A	4.2
4	☐	1.000		3096391.03		A	2.0
5	☐	1.000		3031807.84		A	3.0
6	☐	1.000		3032731.69		A	0.7
7	☐	1.000		3015815.65		A	1.2
8	☐	1.000		2863772.25		A	0.4

103 Rh (ISTD) [No Gas]

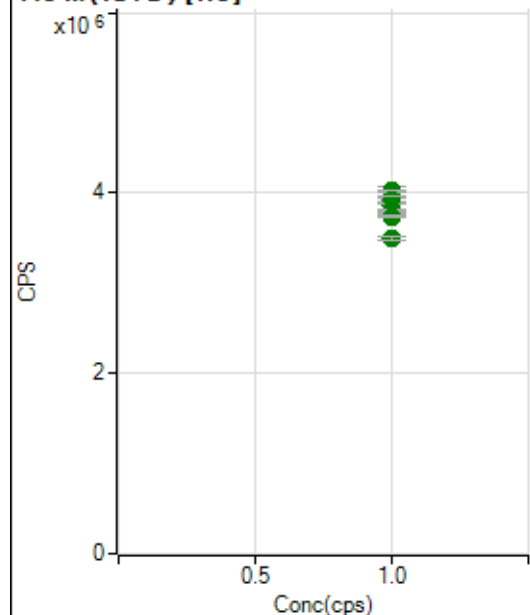
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		10957963.45		A	1.5
2	☐	1.000		10913790.95		A	0.4
3	☐	1.000		11006411.22		A	1.1
4	☐	1.000		10857699.70		A	1.6
5	☐	1.000		10593349.36		A	1.0
6	☐	1.000		10414103.59		A	0.7
7	☐	1.000		10251835.82		A	1.0
8	☐	1.000		8993063.96		A	0.4

103 Rh (ISTD) [He]

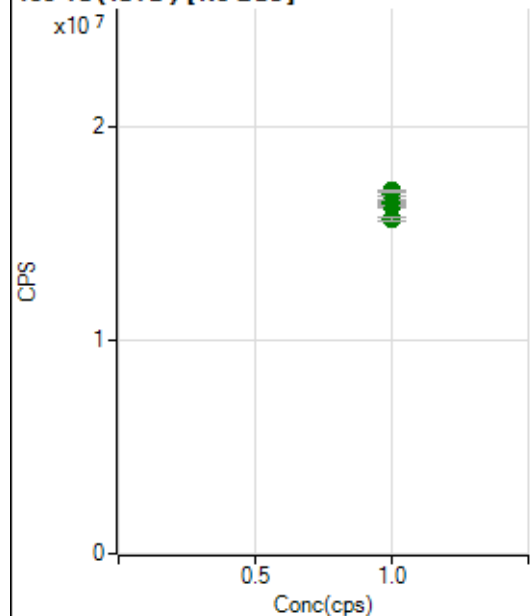
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		6194028.17		A	3.0
2	☐	1.000		6125848.24		A	0.5
3	☐	1.000		5932964.50		A	3.8
4	☐	1.000		5931461.37		A	1.8
5	☐	1.000		5792943.59		A	2.0
6	☐	1.000		5737706.16		A	0.8
7	☐	1.000		5620610.89		A	1.2
8	☐	1.000		4980937.70		A	0.3

115 In (ISTD) [No Gas]

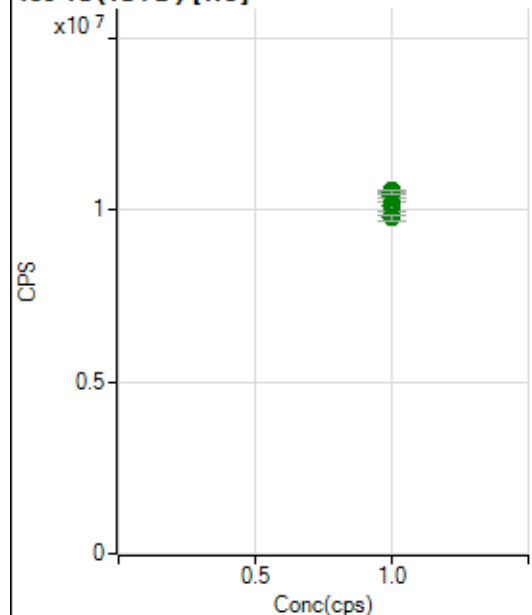
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		12056367.99		A	1.1
2	☐	1.000		11876542.24		A	1.0
3	☐	1.000		12165311.43		A	1.2
4	☐	1.000		12008819.86		A	1.0
5	☐	1.000		11798188.51		A	1.0
6	☐	1.000		11726603.67		A	0.2
7	☐	1.000		11762655.88		A	0.8
8	☐	1.000		10611959.87		A	0.5

115 In (ISTD) [He]

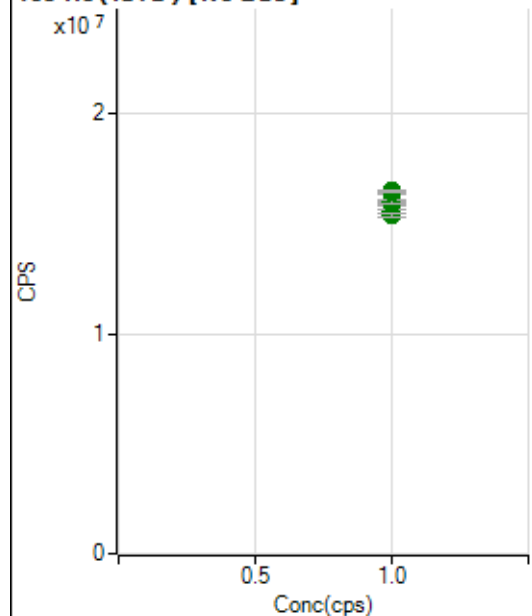
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		4017856.91		A	2.3
2	☐	1.000		4021892.35		A	0.4
3	☐	1.000		3862125.71		A	4.3
4	☐	1.000		3932201.07		A	1.6
5	☐	1.000		3848371.06		A	1.9
6	☐	1.000		3807403.44		A	0.6
7	☐	1.000		3737097.55		A	0.8
8	☐	1.000		3493941.37		A	1.1

159 Tb (ISTD) [No Gas]

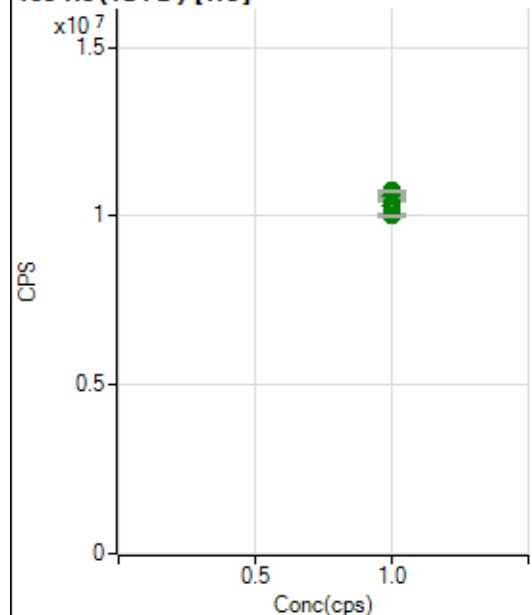
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		16345002.95		A	0.5
2	☐	1.000		16324110.17		A	1.0
3	☐	1.000		16375546.70		A	1.0
4	☐	1.000		16455079.76		A	1.3
5	☐	1.000		16572079.06		A	0.3
6	☐	1.000		16826739.33		A	1.0
7	☐	1.000		17007730.72		A	0.5
8	☐	1.000		15683802.13		A	1.0

159 Tb (ISTD) [He]

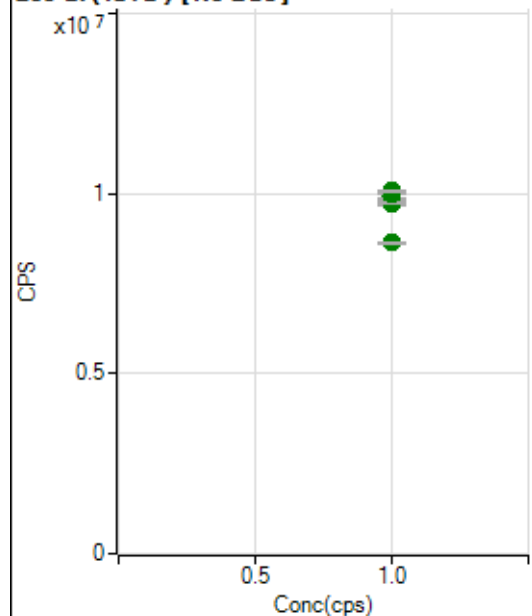
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		10416459.22		A	3.0
2	☐	1.000		10419876.65		A	0.8
3	☐	1.000		10154144.50		A	3.9
4	☐	1.000		10362550.33		A	0.3
5	☐	1.000		10453274.57		A	1.8
6	☐	1.000		10560484.98		A	0.5
7	☐	1.000		10511871.37		A	0.9
8	☐	1.000		9781759.09		A	1.5

165 Ho (ISTD) [No Gas]

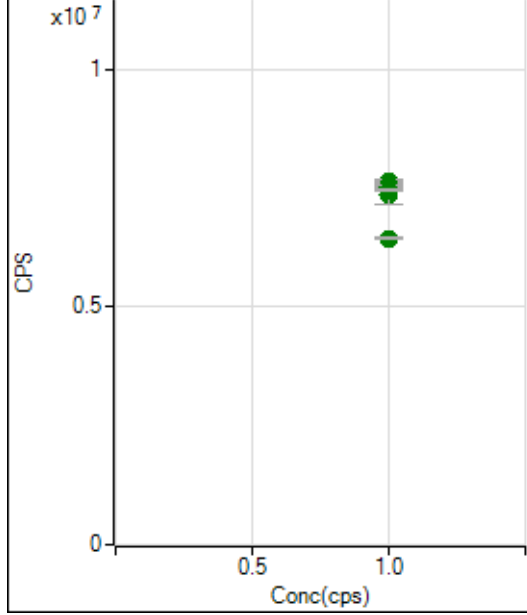
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		15872609.77		A	1.0
2	☐	1.000		15602626.85		A	0.9
3	☐	1.000		15989205.46		A	1.7
4	☐	1.000		15918418.23		A	1.3
5	☐	1.000		16026492.54		A	0.8
6	☐	1.000		16407250.59		A	0.3
7	☐	1.000		16506422.81		A	0.4
8	☐	1.000		15379831.30		A	1.0

165 Ho (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		10536367.90		A	2.6
2	☐	1.000		10495858.80		A	0.8
3	☐	1.000		10337312.07		A	4.8
4	☐	1.000		10572746.37		A	2.1
5	☐	1.000		10608642.21		A	1.7
6	☐	1.000		10747808.31		A	0.7
7	☐	1.000		10733530.12		A	0.6
8	☐	1.000		10012745.27		A	0.8

209 Bi (ISTD) [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		9936411.80		A	1.8
2	☐	1.000		9712689.72		A	1.3
3	☐	1.000		9750186.04		A	0.6
4	☐	1.000		9962079.92		A	1.6
5	☐	1.000		9988844.16		A	0.6
6	☐	1.000		10059403.74		A	0.6
7	☐	1.000		10075207.00		A	0.3
8	☐	1.000		8625817.72		A	1.1

209 Bi (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		7577940.58		A	3.3
2	☐	1.000		7629429.33		A	1.0
3	☐	1.000		7359872.32		A	4.9
4	☐	1.000		7576761.14		A	2.0
5	☐	1.000		7542164.68		A	1.7
6	☐	1.000		7508053.78		A	1.0
7	☐	1.000		7459423.08		A	0.5
8	☐	1.000		6441036.36		A	0.5

US EPA Tune Check Report

Operator Name Jaswal

Acq/Data Batch D:\Agilent\ICPMH\1\DATA\IP7092624-MS4.b

Acq. Date-Time 2024-09-26 16:38:29

Report Comment ---

Instrument Name G8403A JP14410463

[No Gas]

Sensitivity

Mass	Conc. [ug/l]	Count	CPS	Resp (Required) [cps/ug/l]	Resp (Flag)	RSD%	RSD% (Required)
9		8880	88799.58			0.233	5.000
24		122895	1228951.24			0.437	5.000
25		15721	157208.29			0.772	5.000
26		18142	181420.89			0.810	5.000
59		69101	691013.74			0.256	5.000
113		11021	110210.40			0.554	5.000
115		130192	1301918.15			0.661	5.000
206		28485	284846.71			0.233	5.000
207		25547	255473.61			0.222	5.000
208		60232	602319.20			0.302	5.000
220		1	5.00			30.822	

Mass	RSD% (Flag)
9	
24	
25	
26	
59	
113	
115	
206	
207	
208	
220	

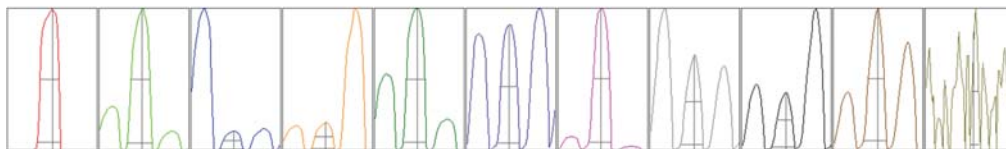
Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
9	8907	8892	8883	8861	8858
24	121977	122960	122995	123345	123199
25	15566	15691	15721	15721	15905
26	17965	18038	18152	18217	18338
59	68992	69120	68873	69192	69330
113	11069	11039	11076	10993	10929
115	131081	129795	130656	130532	128895
206	28399	28512	28550	28430	28532
207	25571	25561	25536	25458	25610
208	60215	60146	60483	59999	60316

US EPA Tune Check Report

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
220	0	0	1	1	1

Integration Time [sec] 0.1

Resolution/Axis



Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)
9	14428.78	9.05	8.90 - 9.10	
24	206506.94	23.95	23.90 - 24.10	
25	26976.29	24.95	24.90 - 25.10	
26	30729.00	25.95	25.90 - 26.10	
59	114931.15	58.95	58.90 - 59.10	
113	20337.63	112.95	112.90 - 113.10	
115	242085.47	114.95	114.90 - 115.10	
206	56164.99	206.00	205.90 - 206.10	
207	49829.08	207.00	206.90 - 207.10	
208	120619.34	208.00	207.90 - 208.10	
220	0.75	220.15	-	

Mass	W-50%	W-5%	W-5% (Required)	W-5% (Flag)
9	0.64	0.776	0.900	
24	0.64	0.831	0.900	
25	0.61	0.757	0.900	
26	0.61	0.764	0.900	
59	0.63	0.779	0.900	
113	0.55	0.758	0.900	
115	0.54	0.765	0.900	
206	0.53	0.762	0.900	
207	0.52	0.769	0.900	
208	0.52	0.775	0.900	
220	0.21	0.334		

Integration Time [sec] 0.1

Acquisition Time [sec] 256.770000000002

Y Axis Linear

Tune Parameters

Plasma Parameters

Plasma Mode ---

Nebulizer Gas 0.82 L/min

Dilution Gas 0.40 L/min

US EPA Tune Check Report

RF Power	1600 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.80 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	9.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	8.2 V	Deflect	16.8 V
Extract 2	-120.0 V	Cell Entrance	-30 V	Plate Bias	-35 V
Omega Bias	-65 V	Cell Exit	-50 V		

Cell Parameters

Use Gas	No	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	0.0 mL/min	OctP Bias	-8.0 V		
H2 Flow	---	OctP RF	190 V		

QP Parameters

Mass Gain	135	Axis Gain	0.9976	QP Bias	-3.0 V
Mass Offset	129	Axis Offset	0.10		

Hardware Settings

Torch

Torch H	-0.5 mm	Torch V	0.7 mm
---------	---------	---------	--------

EM

Discriminator	4.6 mV	Analog HV	2369 V	Pulse HV	1602 V
---------------	--------	-----------	--------	----------	--------

[He]

Sensitivity

Mass	Conc. [ug/l]	Count	CPS	Resp (Required) [cps/ug/l]	Resp (Flag)	RSD%	RSD% (Required)
59		22121	221209.38			0.732	
89		24514	245137.19			0.567	
205		29383	293825.96			0.993	

Mass	RSD% (Flag)
59	
89	
205	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
59	22374	22126	22138	22019	21947
89	24721	24551	24523	24402	24371
205	29780	29540	29357	29026	29210

Integration Time [sec] 0.1

Tune Parameters

Plasma Parameters

Plasma Mode	---	Nebulizer Gas	0.82 L/min	Dilution Gas	0.40 L/min
RF Power	1600 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.80 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	9.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	8.7 V	Deflect	3.4 V
-----------	-------	------------	-------	---------	-------

US EPA Tune Check Report

Extract 2	-125.0 V	Cell Entrance	-40 V	Plate Bias	-60 V
Omega Bias	-65 V	Cell Exit	-60 V		
Cell Parameters					
Use Gas	Yes	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	3.9 mL/min	OctP Bias	-18.0 V		
H2 Flow	---	OctP RF	200 V		
QP Parameters					
Mass Gain	135	Axis Gain	0.9976	QP Bias	-13.0 V
Mass Offset	129	Axis Offset	0.10		
Hardware Settings					
Torch					
Torch H	-0.5 mm	Torch V	0.7 mm		
EM					
Discriminator	4.6 mV	Analog HV	2369 V	Pulse HV	1602 V