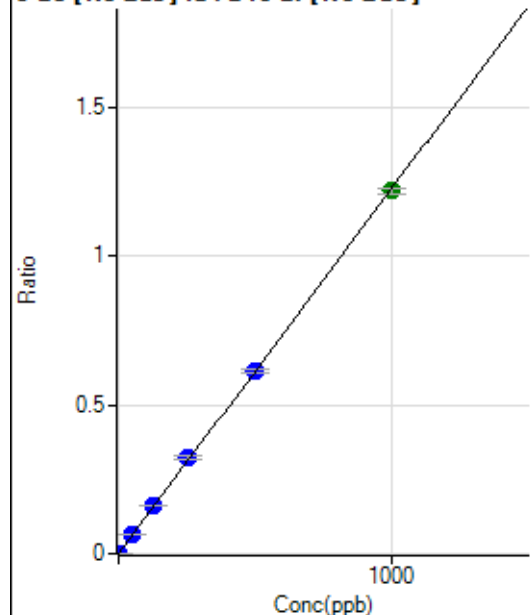


Batch Folder: D:\P8100918ICPMS.b\
Analysis File: P8100918ICPMS.batch.bin
DA Date-Time: 2018-10-09 18:42:02
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	003CALB.d	S00	2018-10-09 14:08:13
2			
3	005CALS.d	S02	2018-10-09 14:15:50
4	006CALS.d	S03	2018-10-09 14:19:35
5	007CALS.d	S04	2018-10-09 14:23:20
6	008CALS.d	S05	2018-10-09 14:26:57
7	009CALS.d	S06	2018-10-09 14:30:28
8	010CALS.d	S07	2018-10-09 14:33:57
9	011CALS.d	S08	2018-10-09 14:37:21

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	211.12	0.0002	P	13.9
2	☐	0.100					
3	☐	1.000	0.965	1433.44	0.0014	P	4.6
4	☐	50.000	53.934	68070.12	0.0662	P	1.4
5	☐	125.000	131.648	168004.12	0.1614	P	0.6
6	☐	250.000	263.702	329690.25	0.3230	P	4.4
7	☐	500.000	502.426	624417.30	0.6152	P	2.3
8	☐	1000.000	994.334	1199161.06	1.2174	A	1.8
9	☐			822.27	0.0009	P	10.9

$$y = 0.0012 * x + 2.0690E-004$$

$$R = 0.9999$$

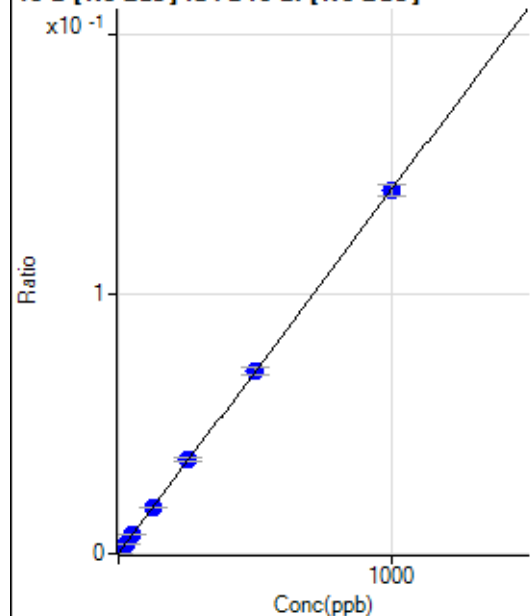
$$DL = 0.07033$$

$$BEC = 0.169$$

Weight: <None>

Min Conc: 0

10 B [No Gas] ISTD:6 Li [No Gas]



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	116.67	0.0001	P	12.6
2	☐	2.500					
3	☐	25.000	24.239	3620.07	0.0035	P	1.0
4	☐	50.000	52.396	7655.13	0.0074	P	3.6
5	☐	125.000	126.636	18565.45	0.0178	P	3.2
6	☐	250.000	257.879	36954.08	0.0362	P	3.3
7	☐	500.000	501.623	71321.90	0.0703	P	4.4
8	☐	1000.000	996.913	137474.95	0.1396	P	3.3
9	☐			6143.23	0.0064	P	3.2

$$y = 1.3991E-004 * x + 1.1437E-004$$

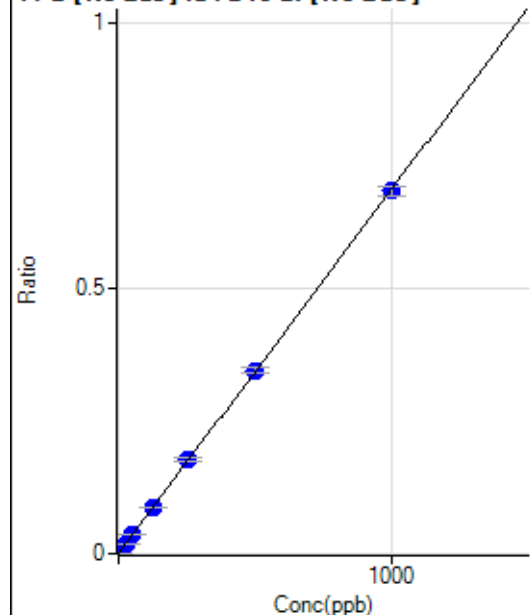
$$R = 1.0000$$

$$DL = 0.3078$$

$$BEC = 0.8174$$

Weight: <None>

Min Conc: 0

11 B [No Gas] ISTD:6 Li [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	511.14	0.0005	P	7.8
2	☐	2.500					
3	☐	25.000	24.663	17964.71	0.0174	P	2.7
4	☐	50.000	51.947	37087.70	0.0361	P	3.3
5	☐	125.000	126.841	90999.63	0.0874	P	1.1
6	☐	250.000	258.416	181303.90	0.1775	P	2.6
7	☐	500.000	502.712	349970.46	0.3449	P	3.7
8	☐	1000.000	996.221	672735.01	0.6830	P	2.6
9	☐			28582.14	0.0296	P	8.0

$$y = 6.8510E-004 * x + 5.0092E-004$$

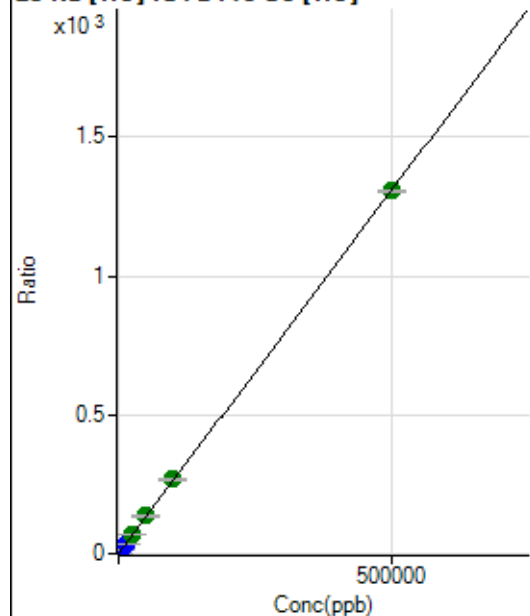
$$R = 1.0000$$

$$DL = 0.1721$$

$$BEC = 0.7312$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	9058.79	0.3390	P	5.8
2	☐	50.000					
3	☐	500.000	496.467	42996.85	1.6374	P	2.3
4	☐	5000.000	4962.385	350297.52	13.3167	P	1.0
5	☐	12500.000	12760.179	851396.25	33.7095	P	1.4
6	☐	25000.000	25922.410	1608962.47	68.1315	A	0.8
7	☐	50000.000	51906.304	2919620.72	136.0847	A	2.5
8	☐	100000.00	101825.73	5424585.62	266.6343	A	1.0
9	☐	500000.00	499391.97	29108550.30	1,306.352	A	0.6

$$y = 0.0026 * x + 0.3390$$

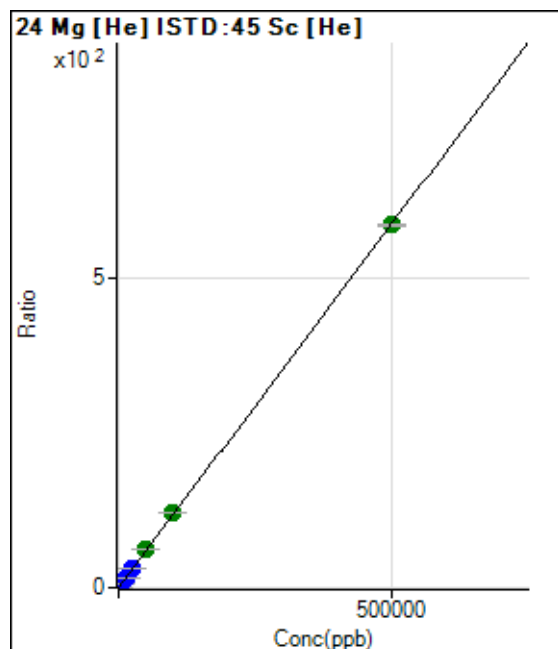
$$R = 1.0000$$

$$DL = 22.44$$

$$BEC = 129.6$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	358.35	0.0134	P	5.3
2	☐	50.000					
3	☐	500.000	498.216	15750.98	0.5997	P	1.3
4	☐	5000.000	5114.495	158664.00	6.0316	P	1.4
5	☐	12500.000	12902.567	383818.01	15.1959	P	1.1
6	☐	25000.000	25940.922	721159.34	30.5382	P	1.1
7	☐	50000.000	52831.173	1334012.51	62.1800	A	2.4
8	☐	100000.00	103813.48	2485522.04	122.1710	A	1.0
9	☐	500000.00	498895.93	13081265.74	587.0655	A	0.3

$$y = 0.0012 * x + 0.0134$$

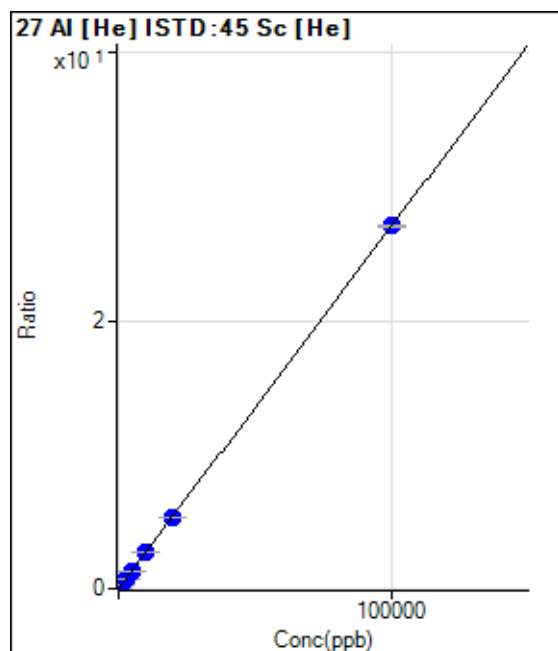
$$R = 1.0000$$

$$DL = 1.814$$

$$BEC = 11.4$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	23.34	0.0009	P	37.5
2	☐	2.000					
3	☐	20.000	19.781	163.38	0.0062	P	7.1
4	☐	1000.000	978.281	6983.53	0.2655	P	2.2
5	☐	2500.000	2481.918	16978.66	0.6722	P	2.1
6	☐	5000.000	4975.360	31804.27	1.3467	P	0.2
7	☐	10000.000	9987.441	57978.34	2.7024	P	2.5
8	☐	20000.000	19755.498	108733.89	5.3446	P	0.7
9	☐	100000.00	100052.05	603058.93	27.0642	P	0.3

$$y = 2.7049E-004 * x + 8.7349E-004$$

$$R = 1.0000$$

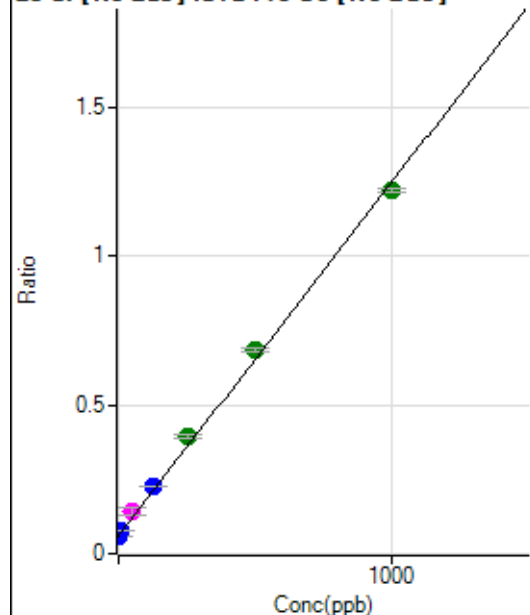
$$DL = 3.636$$

$$BEC = 3.229$$

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	207679.24	0.0604	P	1.1
2	☐	1.000					
3	☐	10.000	15.508	274193.20	0.0788	P	0.4
4	☐	50.000	69.911	491502.60	0.1433	M	16.9
5	☐	125.000	140.145	773328.25	0.2267	P	1.1
6	☐	250.000	281.807	1280382.93	0.3948	A	3.8
7	☐	500.000	525.600	2135333.18	0.6841	A	1.8
8	☐	1000.000	976.305	3656745.87	1.2190	A	1.1
9	☐			279563.68	0.0918	P	4.7

$$y = 0.0012 * x + 0.0604$$

$$R = 0.9990$$

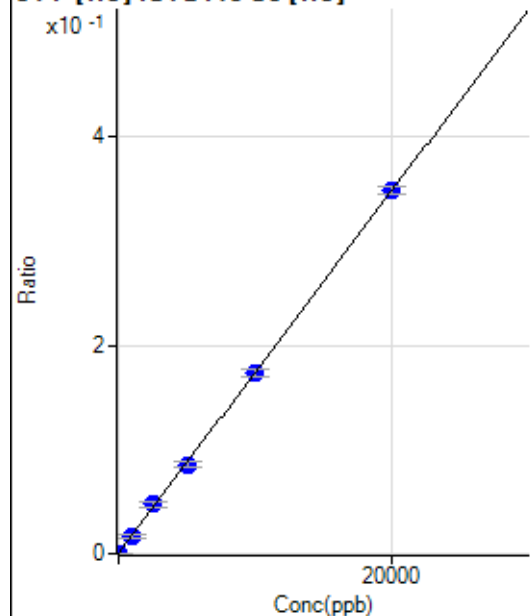
$$DL = 1.655$$

$$BEC = 50.86$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	2.767	8.33	0.0003	P	1.3
2	☐	0.000					
3	☐	0.000	-2.767	5.56	0.0002	P	173.
4	☐	1000.000	950.701	441.69	0.0168	P	13.7
5	☐	2500.000	2719.022	1200.11	0.0476	P	12.1
6	☐	5000.000	4900.418	2019.69	0.0855	P	6.0
7	☐	10000.000	9979.734	3728.44	0.1738	P	3.8
8	☐	20000.000	20010.116	7085.42	0.3483	P	2.3
9	☐			2.78	0.0001	P	173.

$$y = 1.7392E-005 * x + 2.6351E-004$$

$$R = 0.9999$$

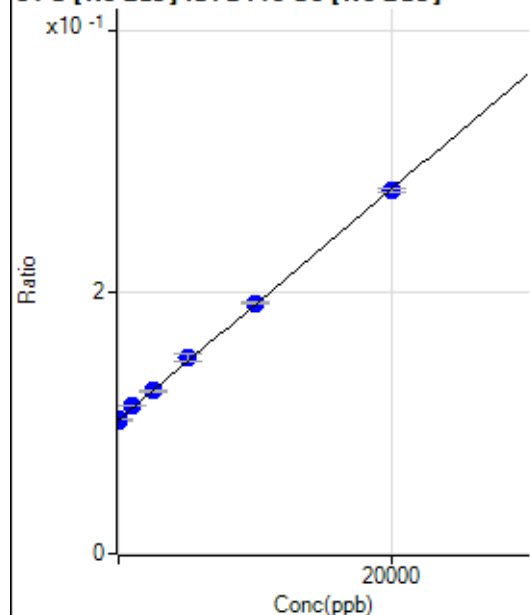
$$DL = 32.52$$

$$BEC = 15.15$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	-27.188	351129.04	0.1021	P	1.5
2	☐	0.000					
3	☐	0.000	27.188	356935.46	0.1025	P	0.7
4	☐	1000.000	1167.349	386412.14	0.1126	P	0.2
5	☐	2500.000	2490.159	423968.49	0.1243	P	0.7
6	☐	5000.000	5416.695	486766.24	0.1501	P	3.7
7	☐	10000.000	10119.137	598005.70	0.1916	P	0.9
8	☐	20000.000	19829.120	831664.14	0.2772	P	0.9
9	☐			300134.44	0.0985	P	0.8

$$y = 8.8223\text{E-}006 * x + 0.1023$$

$$R = 0.9997$$

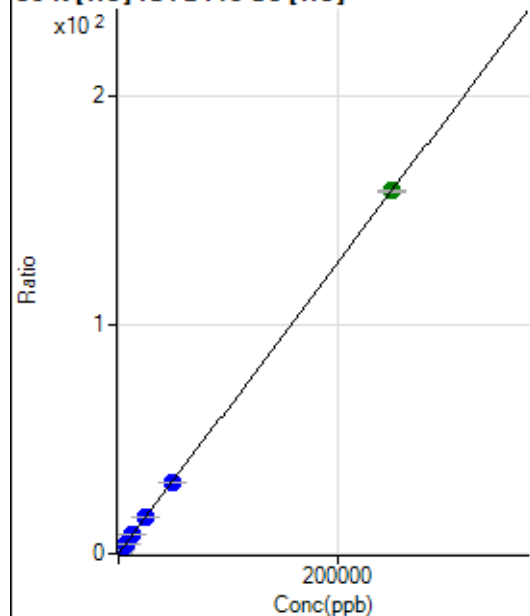
$$DL = 385.3$$

$$BEC = 1.16\text{E}+04$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	2561.47	0.0958	P	3.5
2	☐	50.000					
3	☐	500.000	501.336	10835.17	0.4127	P	5.3
4	☐	2500.000	2563.536	45148.43	1.7163	P	2.0
5	☐	6250.000	6403.935	104664.30	4.1438	P	1.5
6	☐	12500.000	12620.256	190651.30	8.0733	P	1.0
7	☐	25000.000	24890.098	339576.65	15.8292	P	2.8
8	☐	50000.000	48898.828	630791.37	31.0054	P	1.0
9	☐	250000.00	250220.72	3526547.91	158.2636	A	0.8

$$y = 6.3211\text{E-}004 * x + 0.0958$$

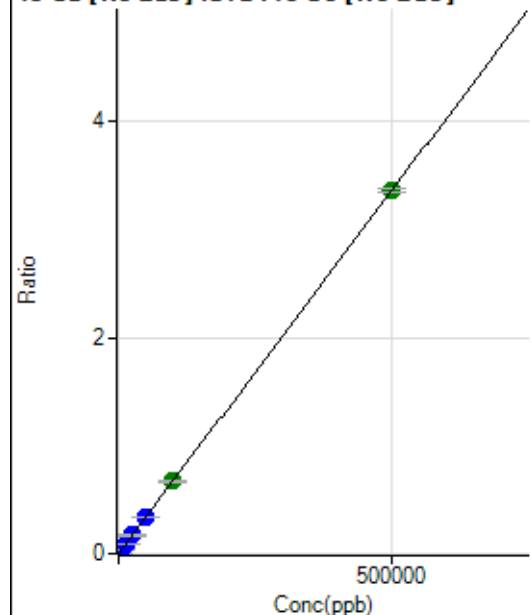
$$R = 1.0000$$

$$DL = 15.8$$

$$BEC = 151.6$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	408.36	0.0001	P	4.3
2	☐	50.000					
3	☐	500.000	465.243	11293.97	0.0032	P	1.3
4	☐	5000.000	4998.702	115651.34	0.0337	P	1.1
5	☐	12500.000	12435.175	285424.91	0.0837	P	0.7
6	☐	25000.000	25605.470	558274.37	0.1721	P	3.9
7	☐	50000.000	50012.781	1049133.56	0.3361	P	1.5
8	☐	100000.00	99653.137	2008728.41	0.6696	A	0.9
9	☐	500000.00	500039.48	10231693.20	3.3595	A	0.9

$$y = 6.7183\text{E-}006 * x + 1.1870\text{E-}004$$

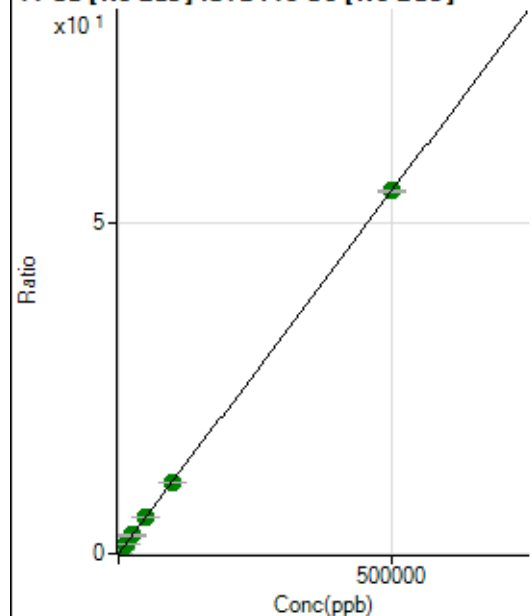
R = 1.0000

DL = 2.303

BEC = 17.67

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	11838.89	0.0034	P	2.2
2	☐	50.000					
3	☐	500.000	472.434	192091.82	0.0552	P	0.8
4	☐	5000.000	5081.348	1921614.95	0.5600	A	0.6
5	☐	12500.000	12368.098	4632990.51	1.3580	A	1.0
6	☐	25000.000	25371.711	9022834.58	2.7822	A	3.9
7	☐	50000.000	49655.463	16986285.45	5.4418	A	1.3
8	☐	100000.00	97730.936	32119397.25	10.7070	A	0.9
9	☐	500000.00	500472.19	166947624.5	54.8156	A	0.8

$$y = 1.0952\text{E-}004 * x + 0.0034$$

R = 1.0000

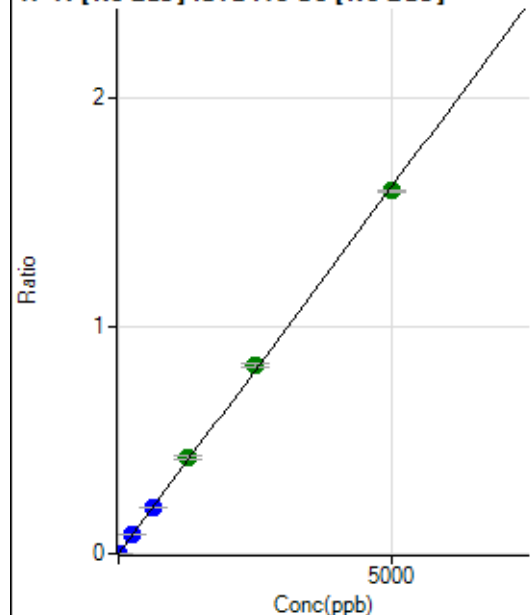
DL = 2.074

BEC = 31.41

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	86.12	0.0000	P	15.5
2	☐	0.500					
3	☐	5.000	4.790	5459.64	0.0016	P	3.4
4	☐	250.000	254.158	281076.38	0.0819	P	0.6
5	☐	625.000	627.908	690210.88	0.2023	P	0.9
6	☐	1250.000	1320.977	1380063.83	0.4256	A	4.4
7	☐	2500.000	2569.406	2583672.82	0.8278	A	2.2
8	☐	5000.000	4946.982	4781087.61	1.5938	A	0.7
9	☐			1722.41	0.0006	P	10.2

$$y = 3.2216E-004 * x + 2.5048E-005$$

$$R = 0.9997$$

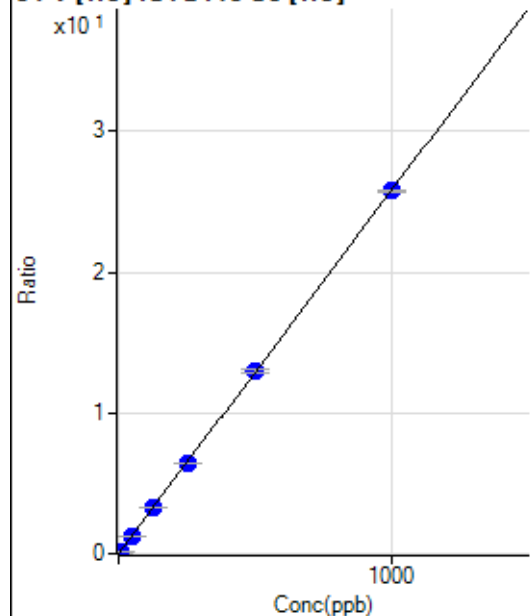
$$DL = 0.03623$$

$$BEC = 0.07775$$

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	35.56	0.0013	P	14.7
2	☐	0.500					
3	☐	5.000	4.976	3407.14	0.1298	P	4.8
4	☐	50.000	48.449	32934.39	1.2520	P	1.4
5	☐	125.000	126.033	82201.71	3.2548	P	1.9
6	☐	250.000	249.631	152213.80	6.4455	P	0.6
7	☐	500.000	502.592	278362.07	12.9755	P	2.8
8	☐	1000.000	998.745	524557.81	25.7835	P	0.6
9	☐			320.01	0.0144	P	11.2

$$y = 0.0258 * x + 0.0013$$

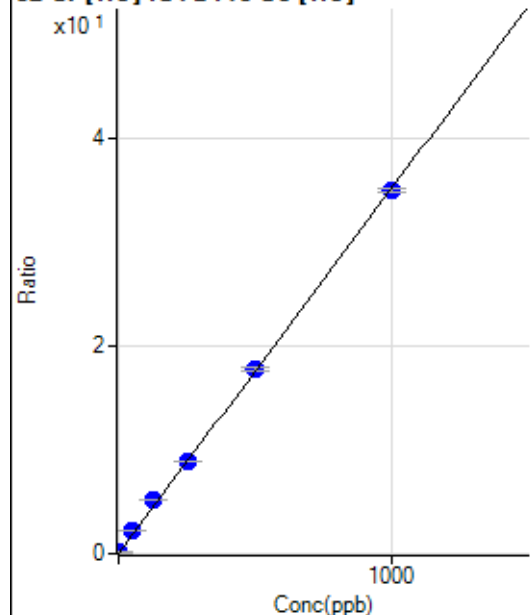
$$R = 1.0000$$

$$DL = 0.0228$$

$$BEC = 0.05155$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	463.35	0.0173	P	13.8
2	☐	0.200					
3	☐	2.000	2.172	2456.93	0.0936	P	4.6
4	☐	50.000	64.115	59637.48	2.2671	P	0.4
5	☐	125.000	147.018	130723.54	5.1762	P	2.3
6	☐	250.000	252.701	209805.43	8.8845	P	1.1
7	☐	500.000	504.488	380135.76	17.7196	P	2.7
8	☐	1000.000	993.622	709682.68	34.8831	P	1.0
9	☐			42124.51	1.8905	P	0.8

$$y = 0.0351 * x + 0.0173$$

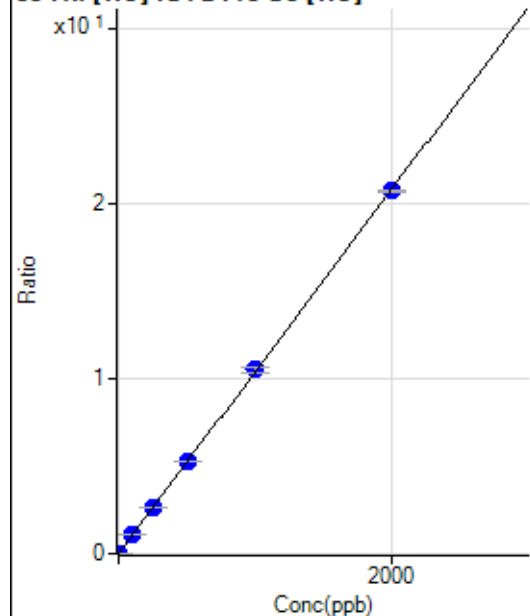
$$R = 0.9997$$

$$DL = 0.2053$$

$$BEC = 0.4943$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	53.33	0.0020	P	1.3
2	☐	0.100					
3	☐	1.000	0.974	317.79	0.0121	P	11.7
4	☐	100.000	101.287	27716.68	1.0537	P	1.7
5	☐	250.000	253.765	66595.55	2.6369	P	2.0
6	☐	500.000	507.894	124582.34	5.2756	P	1.1
7	☐	1000.000	1009.111	224834.82	10.4799	P	2.3
8	☐	2000.000	1992.936	421038.00	20.6952	P	0.5
9	☐			3660.55	0.1643	P	5.3

$$y = 0.0104 * x + 0.0020$$

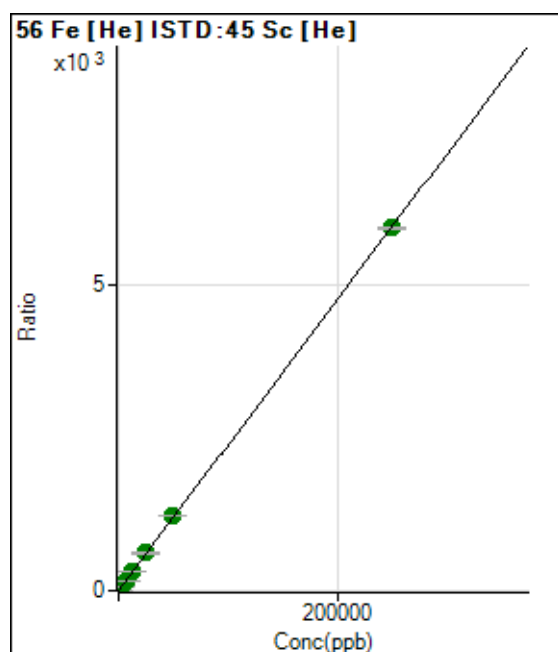
$$R = 1.0000$$

$$DL = 0.007326$$

$$BEC = 0.1921$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1300.10	0.0486	P	5.8
2	☐	5.000					
3	☐	50.000	51.452	33370.04	1.2706	P	2.6
4	☐	2500.000	2635.705	1647967.17	62.6490	A	1.4
5	☐	6250.000	6568.401	3941343.72	156.0541	A	1.6
6	☐	12500.000	12911.733	7243442.99	306.7140	A	0.9
7	☐	25000.000	25954.973	13226557.24	616.5027	A	2.4
8	☐	50000.000	51113.677	24699368.38	1,214.044	A	0.6
9	☐	250000.00	249651.86	132123385.3	5,929.506	A	0.6

$$y = 0.0238 * x + 0.0486$$

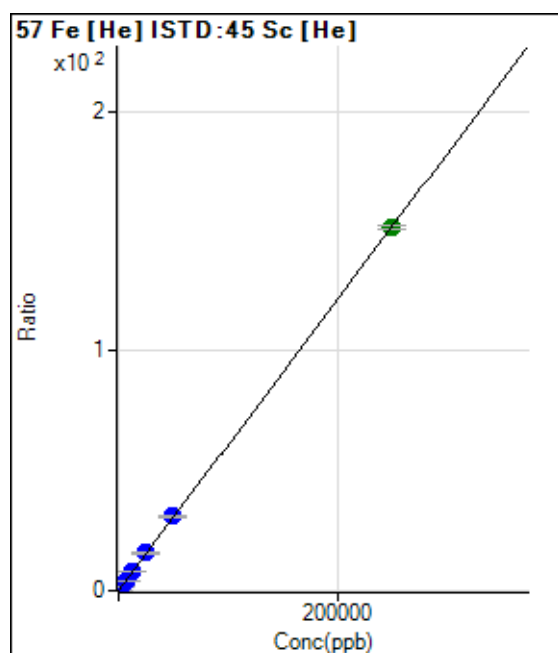
$$R = 1.0000$$

$$DL = 0.3544$$

$$BEC = 2.047$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	29.63	0.0011	P	12.1
2	☐	5.000					
3	☐	50.000	51.422	846.35	0.0323	P	12.8
4	☐	2500.000	2559.515	40815.80	1.5516	P	1.2
5	☐	6250.000	6553.827	100291.92	3.9714	P	2.6
6	☐	12500.000	12822.717	183478.19	7.7690	P	0.4
7	☐	25000.000	25872.633	336278.76	15.6745	P	2.5
8	☐	50000.000	51069.413	629431.88	30.9385	P	0.9
9	☐	250000.00	249674.52	3370227.53	151.2516	A	0.9

$$y = 6.0579E-004 * x + 0.0011$$

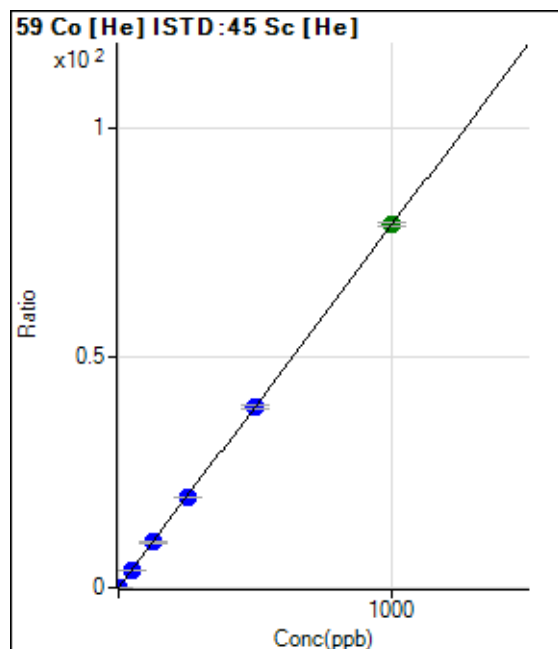
$$R = 1.0000$$

$$DL = 0.6664$$

$$BEC = 1.831$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	204.45	0.0076	P	7.3
2	☐	0.100					
3	☐	1.000	0.948	2162.43	0.0824	P	7.9
4	☐	50.000	48.984	101739.83	3.8676	P	0.4
5	☐	125.000	124.840	248660.00	9.8449	P	1.1
6	☐	250.000	248.385	462401.44	19.5802	P	0.7
7	☐	500.000	498.587	843079.39	39.2958	P	2.2
8	☐	1000.000	1001.181	1605184.59	78.8998	A	0.9
9	☐			21551.32	0.9672	P	0.8

$$y = 0.0788 * x + 0.0076$$

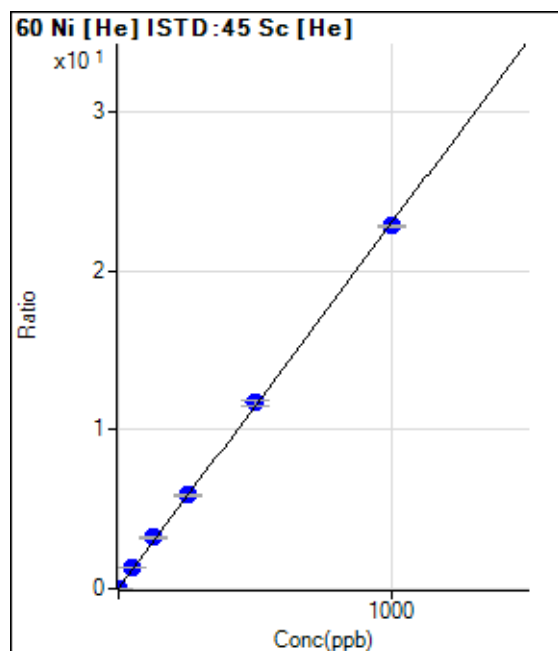
$$R = 1.0000$$

$$DL = 0.02133$$

$$BEC = 0.09703$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	402.24	0.0150	P	2.3
2	☐	0.100					
3	☐	1.000	1.034	1018.94	0.0388	P	7.1
4	☐	50.000	58.684	35884.09	1.3641	P	1.0
5	☐	125.000	139.710	81502.17	3.2269	P	1.6
6	☐	250.000	255.334	138974.99	5.8850	P	1.1
7	☐	500.000	508.018	250856.07	11.6941	P	3.1
8	☐	1000.000	992.384	464459.26	22.8293	P	0.2
9	☐			21766.13	0.9768	P	0.4

$$y = 0.0230 * x + 0.0150$$

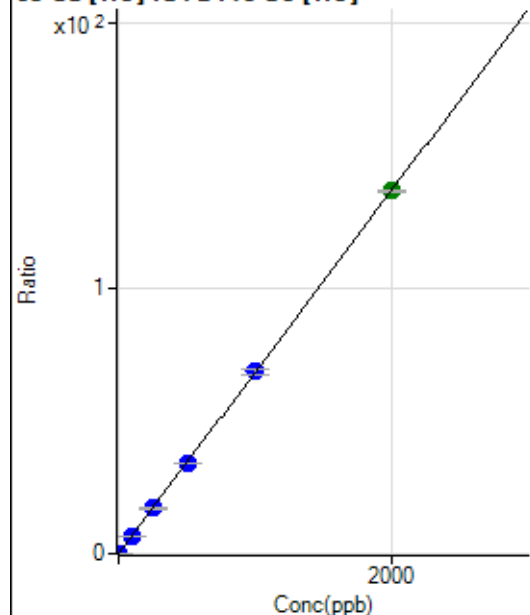
$$R = 0.9998$$

$$DL = 0.04595$$

$$BEC = 0.6545$$

Weight: <None>

Min Conc: 0

⁶³Cu [He] ISTD:45 Sc [He]

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	402.24	0.0151	P	6.5
2	☐	0.200					
3	☐	2.000	1.931	3866.17	0.1472	P	3.6
4	☐	100.000	98.297	177359.35	6.7424	P	0.9
5	☐	250.000	249.180	431104.79	17.0685	P	1.3
6	☐	500.000	499.026	806881.86	34.1676	P	0.9
7	☐	1000.000	1003.659	1473848.10	68.7038	P	2.9
8	☐	2000.000	1998.601	2783079.51	136.7959	A	0.7
9	☐			7388.75	0.3316	P	2.5

$$y = 0.0684 * x + 0.0151$$

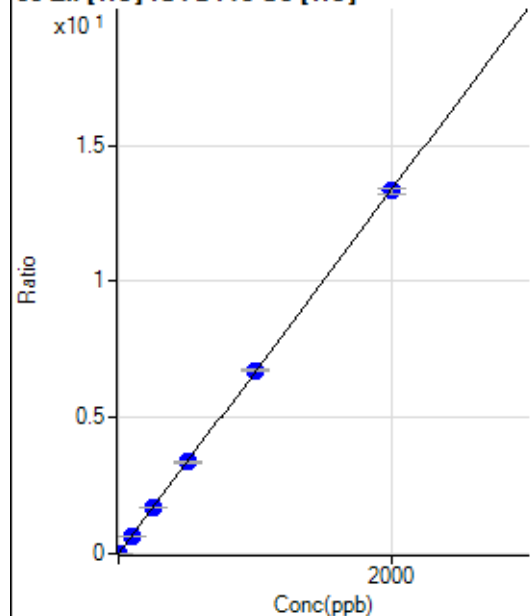
$$R = 1.0000$$

$$DL = 0.04269$$

$$BEC = 0.2199$$

Weight: <None>

Min Conc: 0

⁶⁶Zn [He] ISTD:45 Sc [He]

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	71.11	0.0027	P	15.2
2	☐	0.200					
3	☐	2.000	2.144	445.57	0.0170	P	11.6
4	☐	100.000	98.243	17332.16	0.6589	P	1.2
5	☐	250.000	253.442	42829.45	1.6956	P	1.5
6	☐	500.000	503.153	79427.90	3.3636	P	1.7
7	☐	1000.000	1008.738	144628.96	6.7407	P	1.9
8	☐	2000.000	1994.500	271095.86	13.3252	P	1.4
9	☐			2261.34	0.1015	P	1.0

$$y = 0.0067 * x + 0.0027$$

$$R = 1.0000$$

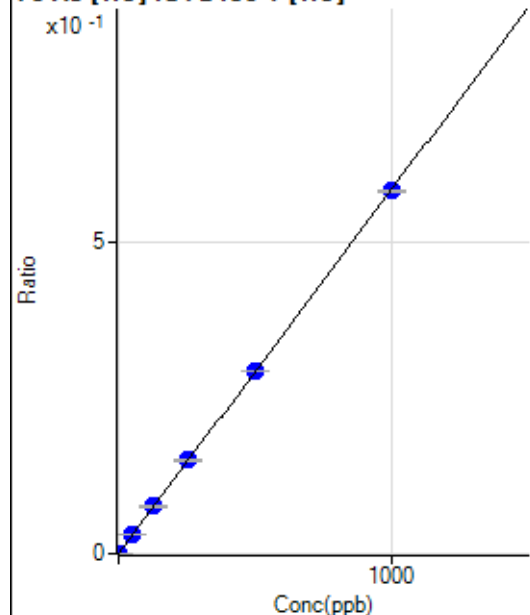
$$DL = 0.1813$$

$$BEC = 0.3986$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	45.06	0.0002	P	64.9
2	☐	0.100					
3	☐	1.000	1.105	173.71	0.0009	P	8.2
4	☐	50.000	52.279	5999.47	0.0307	P	2.1
5	☐	125.000	129.579	14700.92	0.0758	P	1.4
6	☐	250.000	257.004	27565.35	0.1502	P	1.4
7	☐	500.000	502.109	49973.58	0.2933	P	0.7
8	☐	1000.000	996.508	94565.88	0.5818	P	0.8
9	☐			189.39	0.0011	P	24.2

$$y = 5.8359\text{E-}004 * x + 2.2667\text{E-}004$$

$$R = 1.0000$$

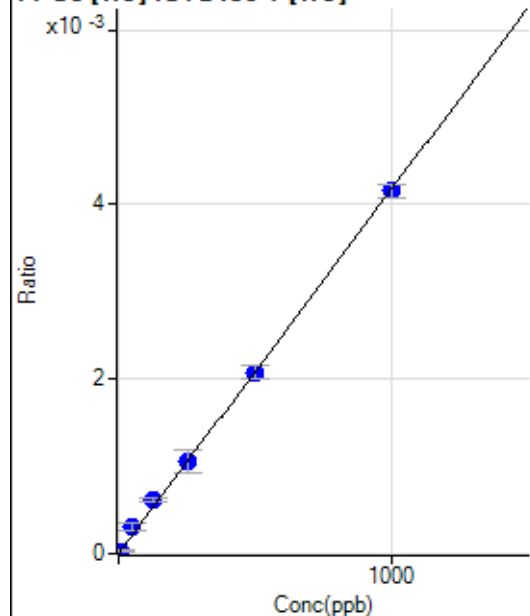
$$DL = 0.7561$$

$$BEC = 0.3884$$

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	0.00	0.0000	P	
2	☐	0.500					
3	☐	5.000	6.688	5.55	0.0000	P	69.7
4	☐	50.000	73.643	60.00	0.0003	P	33.8
5	☐	125.000	146.951	118.89	0.0006	P	5.9
6	☐	250.000	255.023	195.56	0.0011	P	24.1
7	☐	500.000	498.233	354.46	0.0021	P	6.8
8	☐	1000.000	995.693	675.58	0.0042	P	3.6
9	☐			1.11	0.0000	P	173.

$$y = 4.1748\text{E-}006 * x + 0.0000\text{E+}000$$

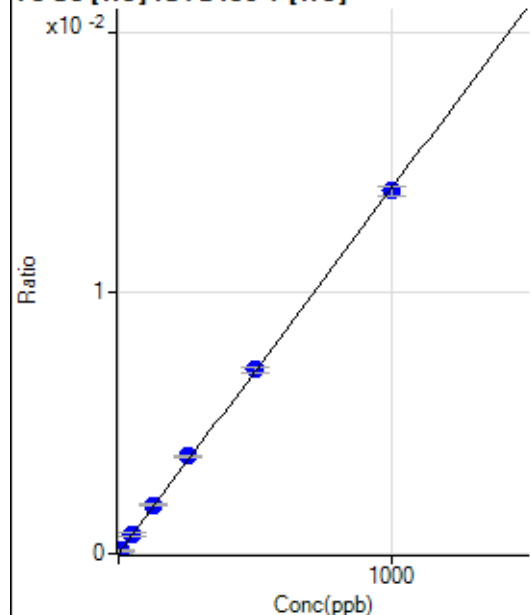
$$R = 0.9996$$

$$DL = 0$$

$$BEC = 0$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1.23	0.0000	P	86.6
2	☐	0.500					
3	☐	5.000	7.744	22.84	0.0001	P	9.4
4	☐	50.000	51.061	140.75	0.0007	P	16.6
5	☐	125.000	132.850	361.74	0.0019	P	1.7
6	☐	250.000	265.983	684.59	0.0037	P	3.4
7	☐	500.000	503.016	1201.30	0.0070	P	3.4
8	☐	1000.000	993.448	2261.93	0.0139	P	2.5
9	☐			3.70	0.0000	P	49.2

$$y = 1.4002\text{E-}005 * x + 6.2001\text{E-}006$$

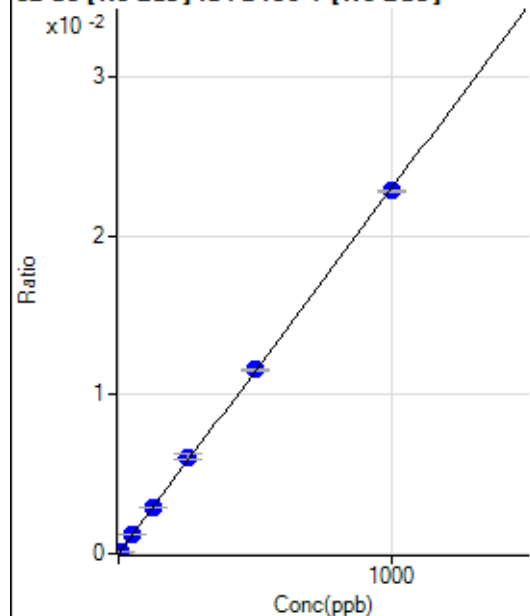
$$R = 0.9998$$

$$DL = 1.15$$

$$BEC = 0.4428$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	7.24	0.0000	P	498.
2	☐	0.500					
3	☐	5.000	4.665	666.58	0.0001	P	9.1
4	☐	50.000	51.192	7288.79	0.0012	P	2.3
5	☐	125.000	127.275	17925.41	0.0029	P	1.2
6	☐	250.000	265.435	36287.16	0.0061	P	4.8
7	☐	500.000	504.706	68697.70	0.0116	P	1.0
8	☐	1000.000	993.446	131180.16	0.0228	P	0.6
9	☐			141.36	0.0000	P	43.4

$$y = 2.2989\text{E-}005 * x + 1.1501\text{E-}006$$

$$R = 0.9998$$

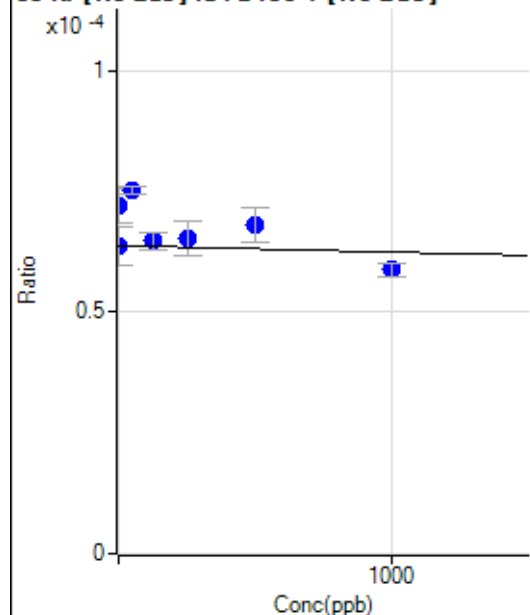
$$DL = 0.7476$$

$$BEC = 0.05003$$

Weight: <None>

Min Conc: 0

83 Kr [No Gas] ISTD:89 Y [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	391.12	0.0001	P	12.7
2	☐	0.100					
3	☐	1.000	-6208.186	443.35	0.0001	P	10.0
4	☐	50.000	-8443.340	464.46	0.0001	P	2.1
5	☐	125.000	-768.947	396.68	0.0001	P	5.5
6	☐	250.000	-1172.125	387.79	0.0001	P	11.1
7	☐	500.000	-3082.036	402.23	0.0001	P	10.6
8	☐	1000.000	3689.169	337.79	0.0001	P	4.7
9	☐			361.12	0.0001	P	16.0

$$y = -1.3402\text{E-}009 * x + 6.3754\text{E-}005$$

$$R = -0.6454$$

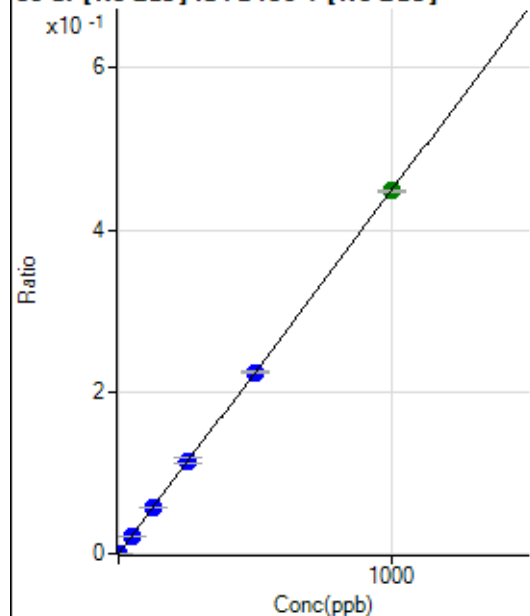
$$DL = -1.814\text{E+}04$$

$$BEC = -4.757\text{E+}04$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	602.82	0.0001	P	4.8
2	☐	0.100					
3	☐	1.000	1.037	3461.73	0.0006	P	1.7
4	☐	50.000	49.701	138462.40	0.0224	P	0.4
5	☐	125.000	124.753	343068.44	0.0560	P	0.1
6	☐	250.000	256.640	684692.33	0.1151	P	4.3
7	☐	500.000	498.647	1323894.28	0.2236	P	1.4
8	☐	1000.000	999.062	2572858.04	0.4480	A	0.6
9	☐			12862.17	0.0022	P	5.2

$$y = 4.4828\text{E-}004 * x + 9.8147\text{E-}005$$

$$R = 1.0000$$

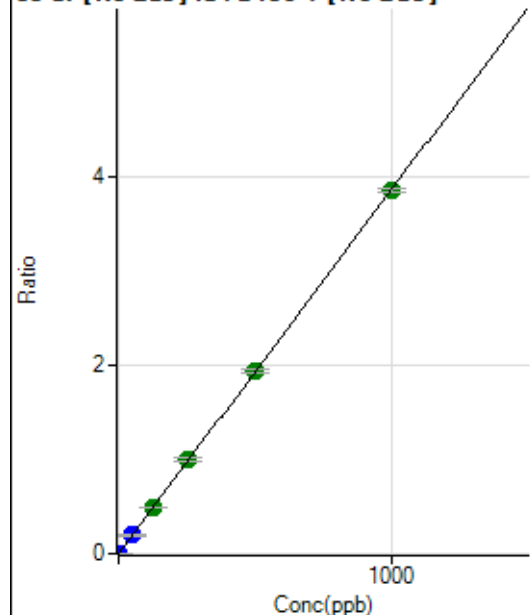
$$DL = 0.03137$$

$$BEC = 0.2189$$

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	122.23	0.0000	P	36.6
2	☐	0.100					
3	☐	1.000	1.001	23877.26	0.0039	P	1.7
4	☐	50.000	50.268	1199525.56	0.1939	P	0.7
5	☐	125.000	127.711	3016102.20	0.4925	A	0.2
6	☐	250.000	259.081	5941564.37	0.9991	A	4.1
7	☐	500.000	501.652	11452834.28	1.9346	A	1.4
8	☐	1000.000	996.551	22072592.34	3.8431	A	0.9
9	☐			106472.21	0.0185	P	1.6

$$y = 0.0039 * x + 1.9852E-005$$

$$R = 1.0000$$

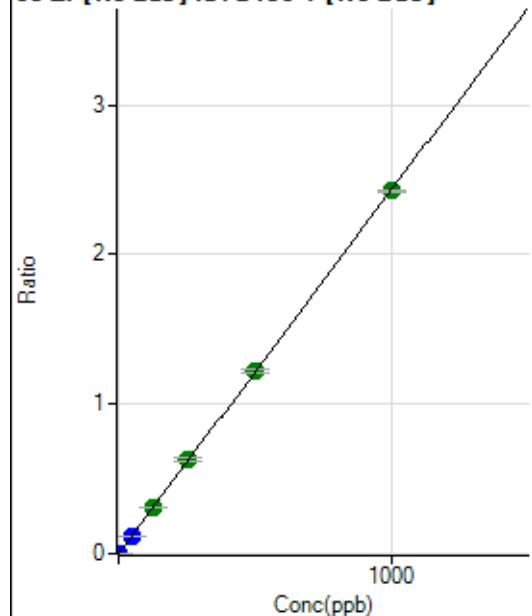
$$DL = 0.005658$$

$$BEC = 0.005148$$

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	563.93	0.0001	P	24.0
2	☐	0.100					
3	☐	1.000	0.898	14005.02	0.0023	P	2.7
4	☐	50.000	49.455	744847.14	0.1204	P	0.9
5	☐	125.000	127.091	1893636.94	0.3092	A	0.3
6	☐	250.000	259.812	3758597.78	0.6321	A	4.2
7	☐	500.000	500.637	7209516.65	1.2178	A	1.6
8	☐	1000.000	996.994	13928957.78	2.4252	A	0.8
9	☐			5804.30	0.0010	P	10.6

$$y = 0.0024 * x + 9.1710E-005$$

$$R = 0.9999$$

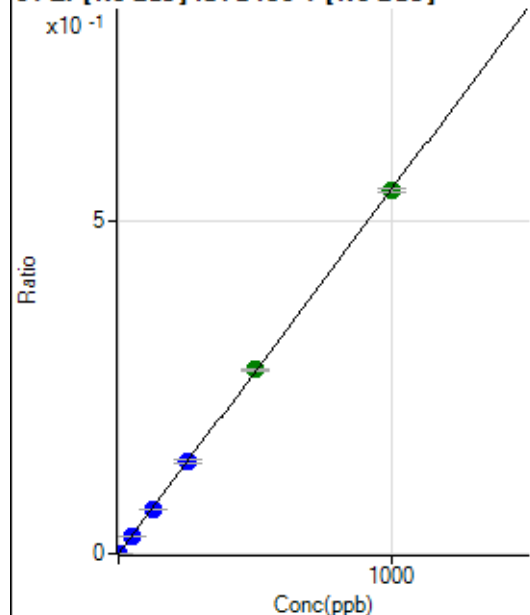
$$DL = 0.02713$$

$$BEC = 0.0377$$

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	133.34	0.0000	P	5.2
2	☐	0.100					
3	☐	1.000	0.927	3253.33	0.0005	P	4.4
4	☐	50.000	48.698	165027.42	0.0267	P	1.4
5	☐	125.000	123.711	414731.22	0.0677	P	0.5
6	☐	250.000	255.030	830038.23	0.1396	P	4.4
7	☐	500.000	505.529	1638013.25	0.2767	A	1.2
8	☐	1000.000	996.204	3131430.75	0.5452	A	1.0
9	☐			1211.22	0.0002	P	20.2

$$y = 5.4727\text{E-}004 * x + 2.1707\text{E-}005$$

$$R = 1.0000$$

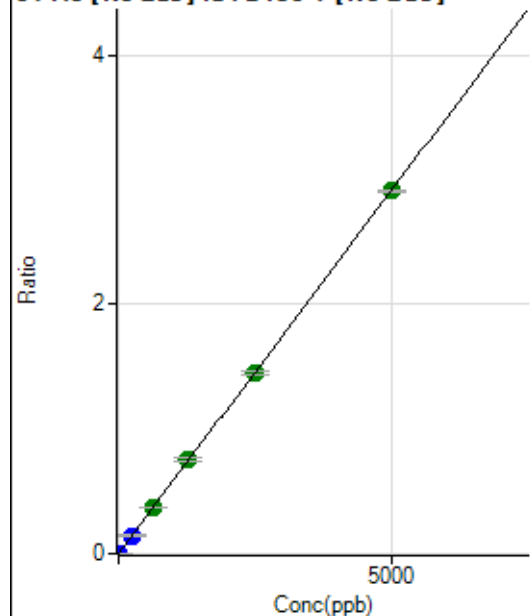
$$DL = 0.006165$$

$$BEC = 0.03966$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	408.36	0.0001	P	5.6
2	☐	0.500					
3	☐	5.000	4.699	17275.54	0.0028	P	2.8
4	☐	250.000	250.464	904585.35	0.1462	P	0.8
5	☐	625.000	641.234	2291516.61	0.3742	A	0.6
6	☐	1250.000	1300.608	4513189.03	0.7589	A	4.0
7	☐	2500.000	2484.450	8582345.76	1.4496	A	1.4
8	☐	5000.000	4993.071	16732807.14	2.9133	A	0.6
9	☐			24709.41	0.0043	P	2.9

$$y = 5.8346\text{E-}004 * x + 6.6510\text{E-}005$$

$$R = 0.9999$$

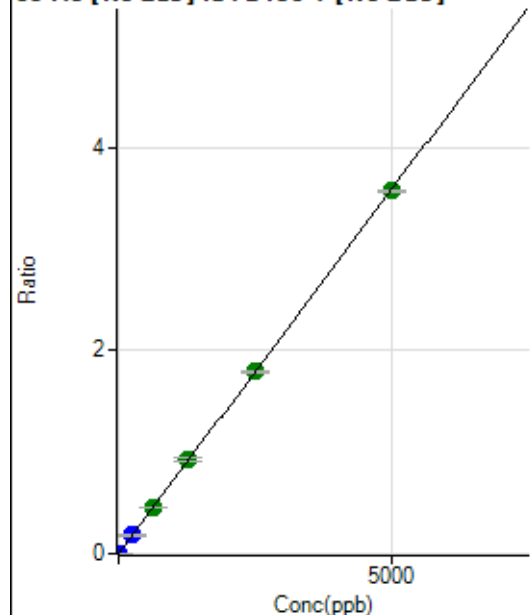
$$DL = 0.01904$$

$$BEC = 0.114$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	277.79	0.0000	P	14.6
2	☐	0.500					
3	☐	5.000	4.788	21417.73	0.0035	P	2.9
4	☐	250.000	251.363	1116554.53	0.1805	P	0.9
5	☐	625.000	637.518	2802407.75	0.4576	A	0.3
6	☐	1250.000	1301.508	5555722.52	0.9342	A	3.9
7	☐	2500.000	2505.612	10647013.70	1.7985	A	1.3
8	☐	5000.000	4982.684	20541060.70	3.5764	A	0.7
9	☐			39631.15	0.0069	P	1.7

$$y = 7.1775\text{E-}004 * x + 4.5236\text{E-}005$$

$$R = 0.9999$$

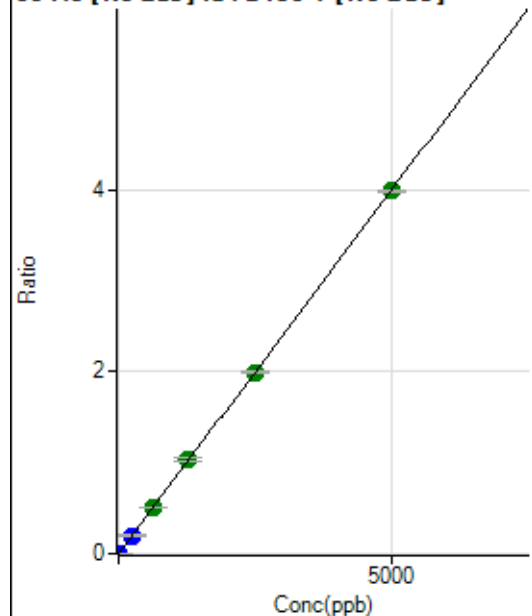
$$DL = 0.02766$$

$$BEC = 0.06302$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	341.69	0.0001	P	17.4
2	☐	0.500					
3	☐	5.000	4.794	23885.91	0.0039	P	3.0
4	☐	250.000	250.862	1239645.96	0.2004	P	0.4
5	☐	625.000	632.758	3094174.22	0.5053	A	0.5
6	☐	1250.000	1290.277	6125865.63	1.0303	A	4.6
7	☐	2500.000	2497.300	11804726.91	1.9940	A	1.2
8	☐	5000.000	4990.268	22885455.37	3.9845	A	0.3
9	☐			45170.44	0.0079	P	0.5

$$y = 7.9844\text{E-}004 * x + 5.5578\text{E-}005$$

$$R = 1.0000$$

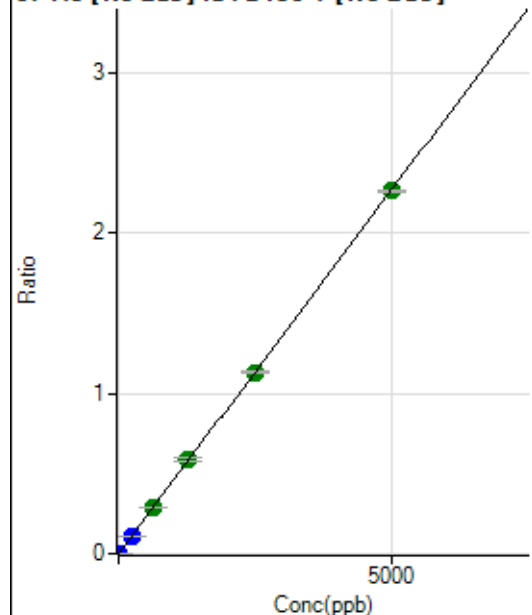
$$DL = 0.03632$$

$$BEC = 0.06961$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	238.90	0.0000	P	17.7
2	☐	0.500					
3	☐	5.000	5.107	14472.22	0.0024	P	1.7
4	☐	250.000	248.683	697441.07	0.1127	P	1.1
5	☐	625.000	634.390	1760553.23	0.2875	A	1.0
6	☐	1250.000	1301.000	3505465.75	0.5896	A	4.6
7	☐	2500.000	2497.389	6699635.22	1.1317	A	1.6
8	☐	5000.000	4987.448	12980215.05	2.2600	A	0.7
9	☐			24523.12	0.0043	P	3.7

$$y = 4.5313\text{E-}004 * x + 3.8957\text{E-}005$$

$$R = 0.9999$$

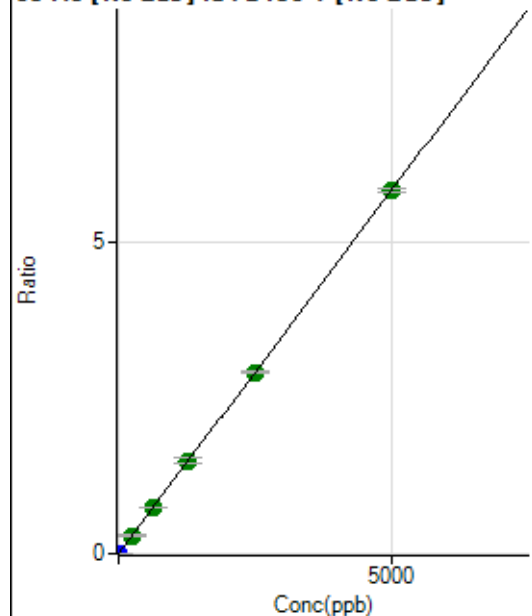
$$DL = 0.04557$$

$$BEC = 0.08597$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	525.04	0.0001	P	18.2
2	☐	0.500					
3	☐	5.000	4.784	34929.32	0.0057	P	2.1
4	☐	250.000	251.213	1817815.71	0.2938	A	0.5
5	☐	625.000	627.075	4490083.30	0.7332	A	1.2
6	☐	1250.000	1282.410	8915617.48	1.4994	A	4.5
7	☐	2500.000	2496.170	17278100.56	2.9185	A	1.1
8	☐	5000.000	4993.493	33531604.22	5.8383	A	1.1
9	☐			63546.91	0.0111	P	5.6

$$y = 0.0012 * x + 8.5604\text{E-}005$$

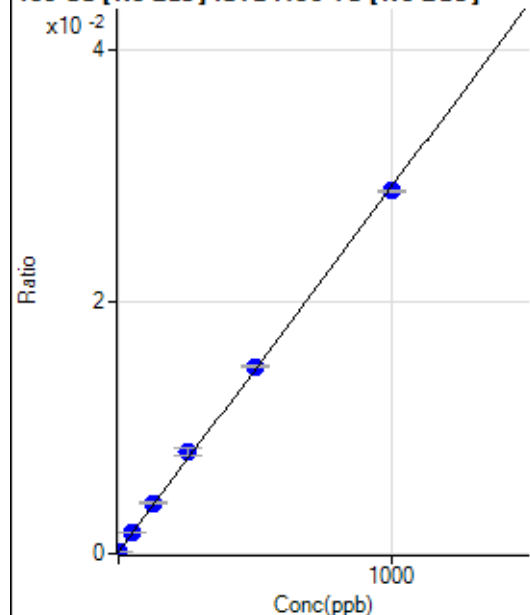
$$R = 1.0000$$

$$DL = 0.04003$$

$$BEC = 0.07322$$

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	1239.01	0.0002	P	6.7
2	☐	0.100					
3	☐	1.000	1.602	1627.96	0.0002	P	8.5
4	☐	50.000	53.732	13724.26	0.0017	P	2.9
5	☐	125.000	133.192	32526.26	0.0040	P	1.6
6	☐	250.000	273.837	64351.63	0.0081	P	5.8
7	☐	500.000	507.503	122597.36	0.0149	P	1.0
8	☐	1000.000	989.078	237862.86	0.0288	P	0.7
9	☐			1314.02	0.0002	P	10.9

$$y = 2.9006\text{E-}005 * x + 1.5783\text{E-}004$$

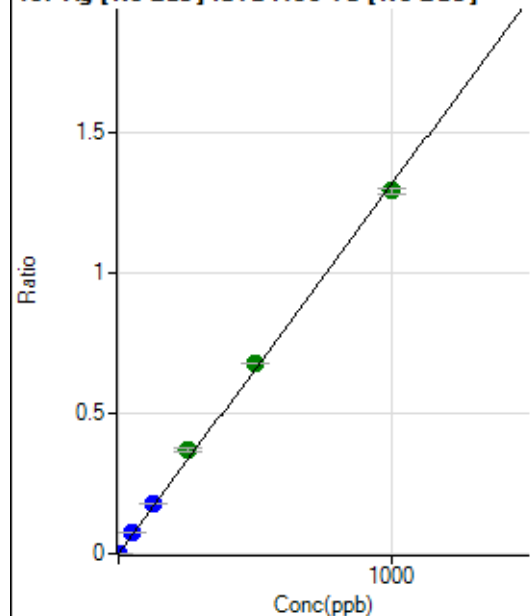
$$R = 0.9996$$

$$DL = 1.1$$

$$BEC = 5.441$$

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	58.34	0.0000	P	29.4
2	☐	0.100					
3	☐	1.000	1.097	11558.22	0.0015	P	3.6
4	☐	50.000	55.071	579519.37	0.0725	P	0.2
5	☐	125.000	136.389	1451705.87	0.1795	P	0.8
6	☐	250.000	280.293	2930921.55	0.3688	A	4.5
7	☐	500.000	515.800	5592560.72	0.6787	A	0.2
8	☐	1000.000	982.849	10662878.10	1.2932	A	1.6
9	☐			1597.39	0.0002	P	5.1

$$y = 0.0013 * x + 7.4442\text{E-}006$$

$$R = 0.9993$$

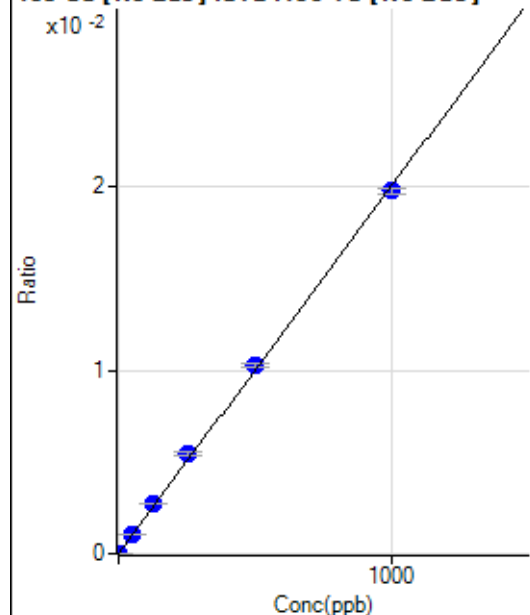
$$DL = 0.004991$$

$$BEC = 0.005658$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	19.45	0.0000	P	24.2
2	☐	0.100					
3	☐	1.000	1.302	227.78	0.0000	P	2.8
4	☐	50.000	53.418	8583.48	0.0011	P	1.0
5	☐	125.000	136.038	22080.94	0.0027	P	3.4
6	☐	250.000	270.759	43170.51	0.0054	P	3.4
7	☐	500.000	512.732	84720.98	0.0103	P	1.5
8	☐	1000.000	986.893	163152.16	0.0198	P	1.6
9	☐			62.50	0.0000	P	20.8

$$y = 2.0048E-005 * x + 2.4756E-006$$

$$R = 0.9996$$

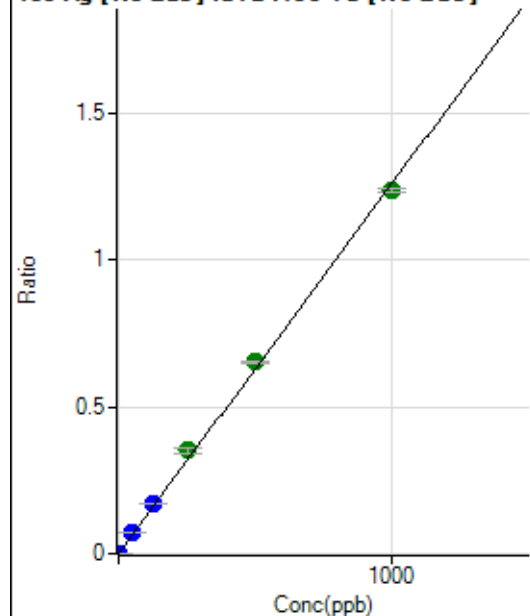
$$DL = 0.08957$$

$$BEC = 0.1235$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	33.33	0.0000	P	42.9
2	☐	0.100					
3	☐	1.000	1.078	10835.41	0.0014	P	2.0
4	☐	50.000	55.203	555163.55	0.0694	P	0.5
5	☐	125.000	135.713	1380565.72	0.1707	P	0.4
6	☐	250.000	279.408	2792173.70	0.3514	A	4.7
7	☐	500.000	518.528	5373212.58	0.6521	A	0.7
8	☐	1000.000	981.785	10180378.53	1.2347	A	1.0
9	☐			1525.17	0.0002	P	18.7

$$y = 0.0013 * x + 4.2421E-006$$

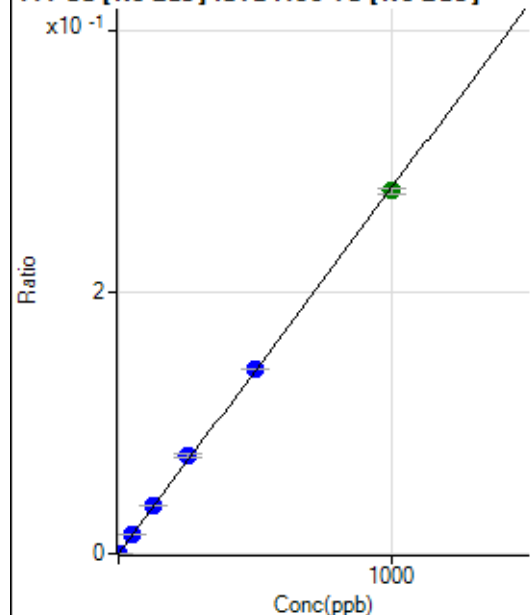
$$R = 0.9992$$

$$DL = 0.004337$$

$$BEC = 0.003373$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	214.09	0.0000	P	14.4
2	☐	0.100					
3	☐	1.000	1.067	2592.49	0.0003	P	9.1
4	☐	50.000	53.315	119370.16	0.0149	P	1.0
5	☐	125.000	131.610	297757.69	0.0368	P	0.4
6	☐	250.000	269.252	598187.64	0.0753	P	4.7
7	☐	500.000	504.746	1162618.44	0.1411	P	0.8
8	☐	1000.000	991.822	2285745.23	0.2772	A	1.5
9	☐			611.66	0.0001	P	4.7

$$y = 2.7948\text{E-}004 * x + 2.7260\text{E-}005$$

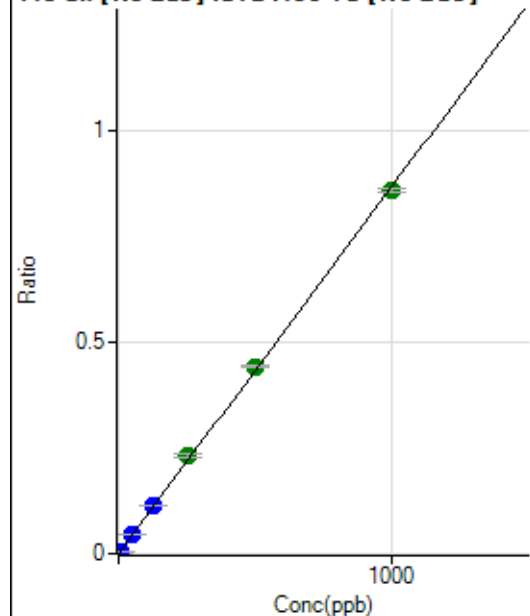
$$R = 0.9998$$

$$DL = 0.04223$$

$$BEC = 0.09754$$

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	544.48	0.0001	P	4.9
2	☐	0.500					
3	☐	5.000	5.110	35835.09	0.0045	P	0.9
4	☐	50.000	52.234	362478.10	0.0453	P	0.3
5	☐	125.000	129.739	909888.63	0.1125	P	0.4
6	☐	250.000	268.804	1851917.16	0.2330	A	3.7
7	☐	500.000	510.043	3642172.61	0.4420	A	0.6
8	☐	1000.000	989.573	7070542.95	0.8575	A	1.1
9	☐			17442.67	0.0022	P	3.4

$$y = 8.6648\text{E-}004 * x + 6.9374\text{E-}005$$

$$R = 0.9997$$

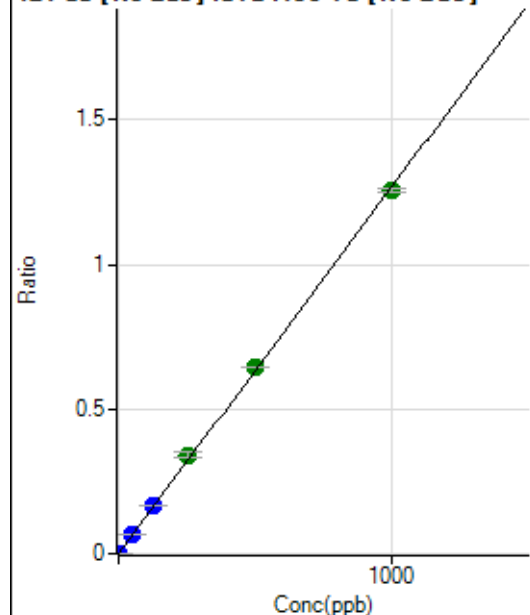
$$DL = 0.01165$$

$$BEC = 0.08006$$

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	86.12	0.0000	P	33.8
2	☐	0.200					
3	☐	2.000	2.020	20472.00	0.0026	P	1.2
4	☐	50.000	51.407	520565.15	0.0651	P	0.9
5	☐	125.000	129.372	1325069.30	0.1638	P	0.6
6	☐	250.000	269.882	2714999.93	0.3417	A	5.2
7	☐	500.000	508.415	5304395.09	0.6437	A	0.2
8	☐	1000.000	990.205	10337555.18	1.2537	A	1.0
9	☐			28447.90	0.0035	P	2.3

$$y = 0.0013 * x + 1.0972E-005$$

$$R = 0.9997$$

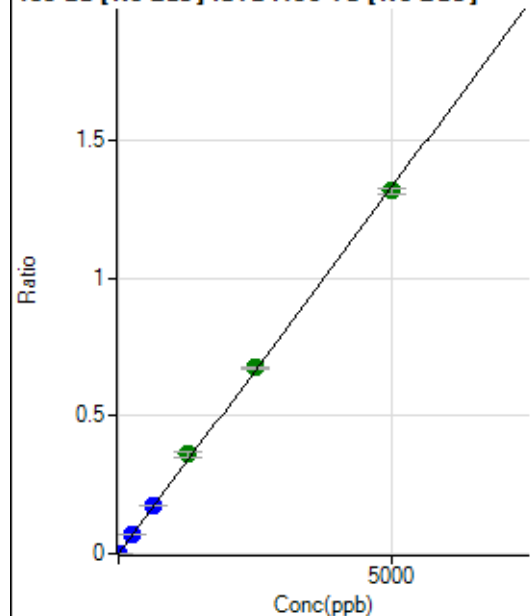
$$DL = 0.008789$$

$$BEC = 0.008666$$

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	222.23	0.0000	P	13.9
2	☐	1.000					
3	☐	10.000	10.054	21549.01	0.0027	P	3.5
4	☐	250.000	263.247	560517.61	0.0701	P	0.8
5	☐	625.000	652.524	1405115.43	0.1737	P	0.7
6	☐	1250.000	1353.969	2863538.74	0.3604	A	5.2
7	☐	2500.000	2536.386	5563225.21	0.6751	A	0.4
8	☐	5000.000	4951.712	10867380.10	1.3180	A	1.3
9	☐			3181.08	0.0004	P	9.9

$$y = 2.6617E-004 * x + 2.8332E-005$$

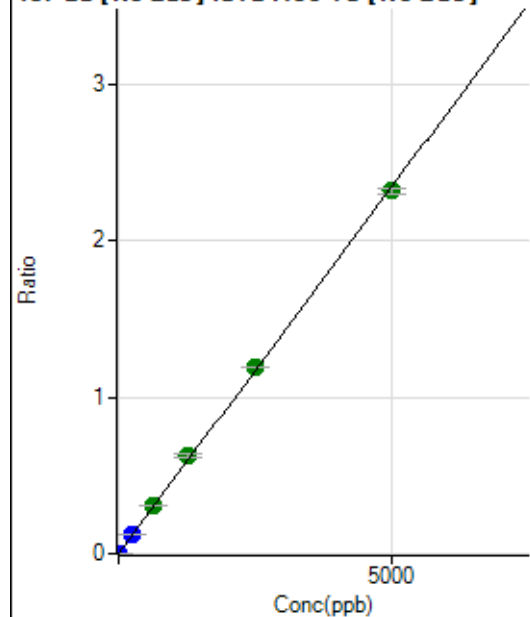
$$R = 0.9997$$

$$DL = 0.04442$$

$$BEC = 0.1064$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	369.47	0.0000	P	6.8
2	☐	1.000					
3	☐	10.000	10.224	38540.65	0.0048	P	0.6
4	☐	250.000	263.463	987353.17	0.1235	P	0.5
5	☐	625.000	662.199	2509722.47	0.3103	A	1.7
6	☐	1250.000	1342.743	4999293.99	0.6291	A	4.5
7	☐	2500.000	2542.758	9816251.52	1.1913	A	0.3
8	☐	5000.000	4950.112	19120839.32	2.3191	A	1.7
9	☐			5543.11	0.0007	P	5.2

$$y = 4.6848E-004 * x + 4.7062E-005$$

$$R = 0.9997$$

$$DL = 0.02038$$

$$BEC = 0.1005$$

Weight: <None>

Min Conc: 0

150 Nd [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			4.45		P	86.6
2	☐						
3	☐			6.67		P	0.0
4	☐			48.89		P	56.8
5	☐			77.78		P	26.2
6	☐			126.67		P	13.9
7	☐			288.90		P	12.7
8	☐			428.91		P	12.7
9	☐			122.23		P	41.3

150 Nd [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			1.11		P	173.
2	☐						
3	☐			0.00		P	
4	☐			4.44		P	43.4
5	☐			1.11		P	173.
6	☐			1.11		P	173.
7	☐			3.33		P	100.
8	☐			14.44		P	58.1
9	☐			10.00		P	66.7

156 Dy [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			11.11		P	43.3
2	☐						
3	☐			8.33		P	100.
4	☐			30.56		P	63.0
5	☐			61.12		P	34.3
6	☐			30.56		P	128.
7	☐			97.23		P	55.8
8	☐			122.23		P	3.9
9	☐			113.90		P	40.3

156 Dy [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			1.11		P	173.
2	☐						
3	☐			1.11		P	173.
4	☐			1.11		P	173.
5	☐			4.44		P	43.4
6	☐			3.33		P	100.
7	☐			10.00		P	57.7
8	☐			14.44		P	35.3
9	☐			26.66		P	43.3

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			36.11		P	58.1
2	☐						
3	☐			52.78		P	9.1
4	☐			58.34		P	24.7
5	☐			55.56		P	8.7
6	☐			38.89		P	32.7
7	☐			63.89		P	15.1
8	☐			91.67		P	59.6
9	☐			91.67		P	31.5

160 Gd [He] No available calibration points

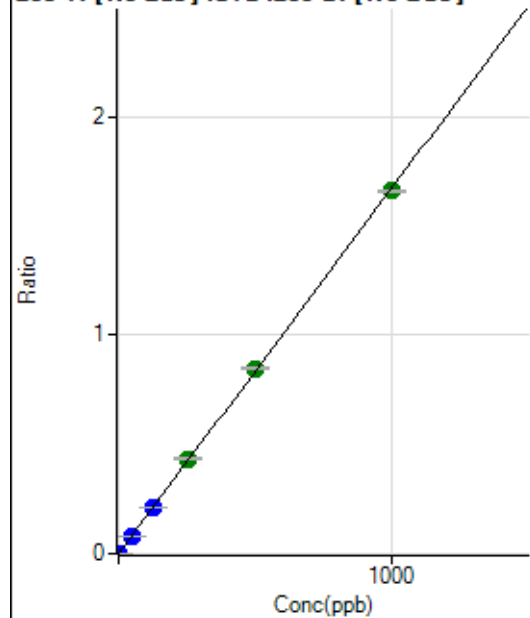
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			4.44		P	114.
2	☐						
3	☐			5.55		P	124.
4	☐			4.44		P	43.4
5	☐			11.11		P	96.4
6	☐			8.89		P	21.6
7	☐			11.11		P	62.5
8	☐			16.67		P	20.0
9	☐			15.55		P	24.8

164 Er [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			27.78		P	62.5
2	☐						
3	☐			44.45		P	21.6
4	☐			33.33		P	43.3
5	☐			30.56		P	41.7
6	☐			19.44		P	65.5
7	☐			41.67		P	34.6
8	☐			41.67		P	60.0
9	☐			38.89		P	65.5

164 Er [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			3.33		P	100.
2	☐						
3	☐			11.11		P	45.8
4	☐			3.33		P	100.
5	☐			3.33		P	0.0
6	☐			8.89		P	21.6
7	☐			11.11		P	62.5
8	☐			6.67		P	50.0
9	☐			18.89		P	27.0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	402.81	0.0001	P	12.8
2	☐	0.100					
3	☐	1.000	0.989	9348.32	0.0017	P	5.1
4	☐	50.000	49.218	446659.13	0.0824	P	0.9
5	☐	125.000	124.278	1140840.99	0.2079	P	0.1
6	☐	250.000	260.351	2391211.90	0.4355	A	2.7
7	☐	500.000	507.723	4772532.62	0.8492	A	1.5
8	☐	1000.000	993.680	9367443.27	1.6620	A	0.3
9	☐			4951.20	0.0010	P	7.4

$$y = 0.0017 * x + 7.5544E-005$$

$$R = 0.9999$$

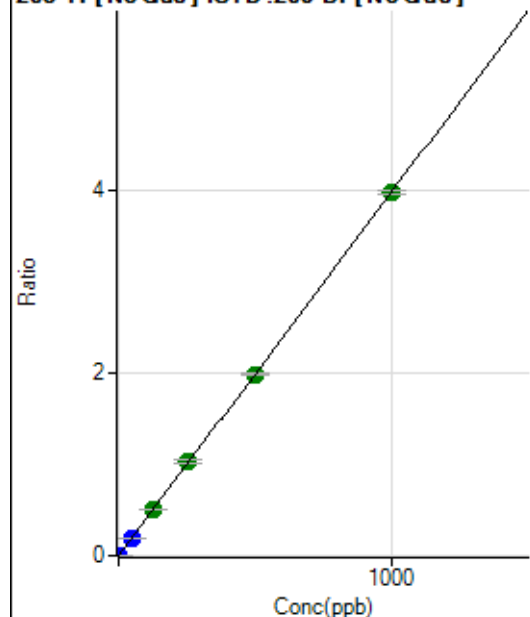
$$DL = 0.01737$$

$$BEC = 0.04517$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	938.97	0.0002	P	1.2
2	☐	0.100					
3	☐	1.000	0.966	21747.19	0.0040	P	1.4
4	☐	50.000	49.995	1079599.20	0.1991	P	0.6
5	☐	125.000	127.750	2790356.83	0.5086	A	0.7
6	☐	250.000	257.232	5620490.79	1.0239	A	3.8
7	☐	500.000	499.484	11172284.54	1.9880	A	1.0
8	☐	1000.000	998.107	22388745.47	3.9724	A	1.0
9	☐			12300.96	0.0024	P	9.5

$$y = 0.0040 * x + 1.7628E-004$$

$$R = 1.0000$$

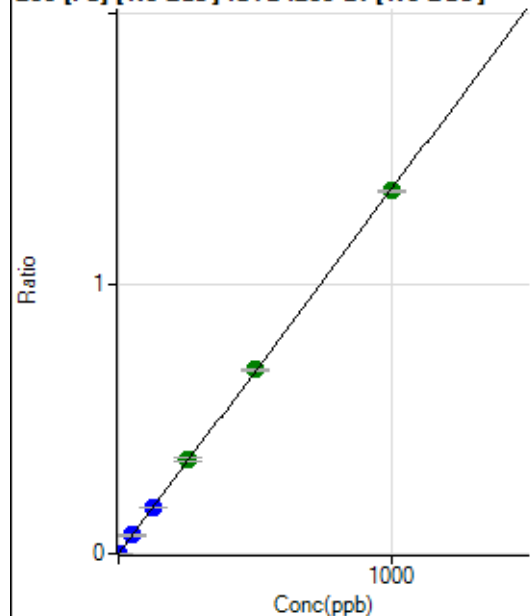
$$DL = 0.001544$$

$$BEC = 0.04429$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	768.57	0.0001	P	7.6
2	☐	0.100					
3	☐	1.000	0.981	7937.91	0.0015	P	1.7
4	☐	50.000	50.088	367222.46	0.0677	P	0.6
5	☐	125.000	125.286	928418.46	0.1692	P	0.6
6	☐	250.000	259.775	1925292.38	0.3507	A	3.5
7	☐	500.000	504.292	3825489.47	0.6807	A	0.7
8	☐	1000.000	995.370	7571759.25	1.3434	A	0.6
9	☐			7967.56	0.0015	P	4.7

$$y = 0.0013 * x + 1.4424E-004$$

$$R = 0.9999$$

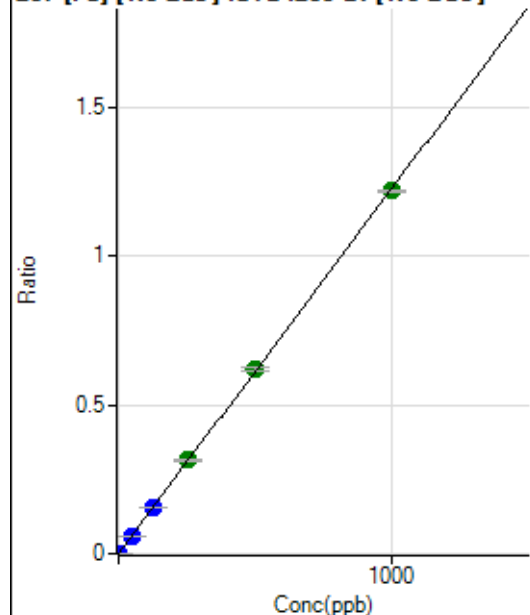
$$DL = 0.02422$$

$$BEC = 0.1069$$

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	698.19	0.0001	P	4.6
2	☐	0.100					
3	☐	1.000	0.964	7105.92	0.0013	P	3.4
4	☐	50.000	49.718	331360.66	0.0611	P	0.9
5	☐	125.000	125.051	842374.52	0.1535	P	0.8
6	☐	250.000	257.288	1733708.04	0.3158	A	2.7
7	☐	500.000	506.505	3492493.02	0.6215	A	1.7
8	☐	1000.000	994.933	6879821.80	1.2207	A	0.7
9	☐			7055.90	0.0014	P	2.0

$$y = 0.0012 * x + 1.3107E-004$$

$$R = 0.9999$$

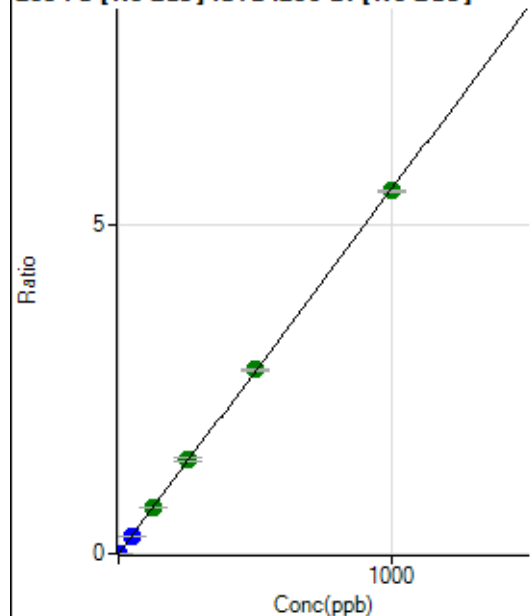
$$DL = 0.01477$$

$$BEC = 0.1068$$

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	3028.01	0.0006	P	4.0
2	☐	0.100					
3	☐	1.000	0.974	32287.45	0.0060	P	2.0
4	☐	50.000	49.856	1501749.90	0.2770	P	0.4
5	☐	125.000	126.571	3853422.11	0.7024	A	1.5
6	☐	250.000	258.697	7877882.11	1.4350	A	3.4
7	☐	500.000	504.263	15716274.80	2.7967	A	1.4
8	☐	1000.000	995.505	31114683.16	5.5206	A	0.5
9	☐			32066.83	0.0062	P	2.1

$$y = 0.0055 * x + 5.6864E-004$$

$$R = 0.9999$$

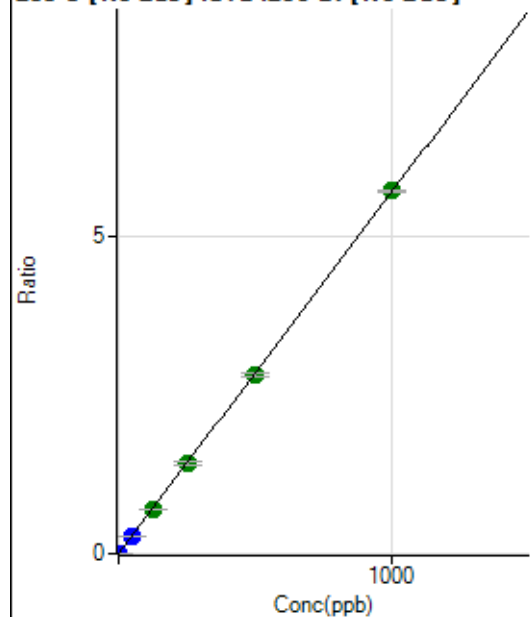
$$DL = 0.01238$$

$$BEC = 0.1026$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	2394.80	0.0005	P	12.4
2	☐	0.100					
3	☐	1.000	0.918	30755.76	0.0057	P	2.1
4	☐	50.000	48.008	1487744.24	0.2744	P	0.9
5	☐	125.000	121.089	3793932.68	0.6915	A	0.6
6	☐	250.000	249.065	7805224.57	1.4219	A	3.6
7	☐	500.000	494.248	15853858.86	2.8211	A	1.3
8	☐	1000.000	1003.698	32286498.98	5.7285	A	0.9
9	☐			7191.35	0.0014	P	5.6

$$y = 0.0057 * x + 4.5023E-004$$

$$R = 1.0000$$

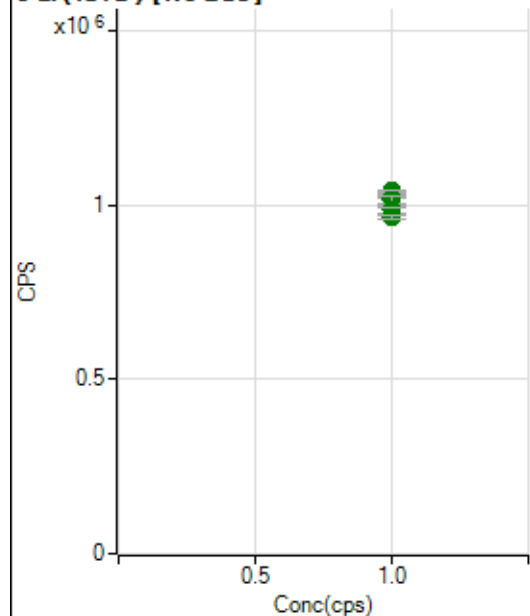
$$DL = 0.02943$$

$$BEC = 0.07889$$

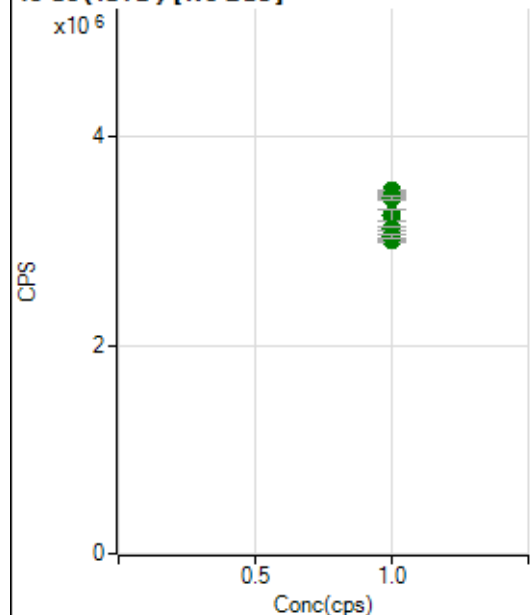
Weight: <None>

Min Conc: 0

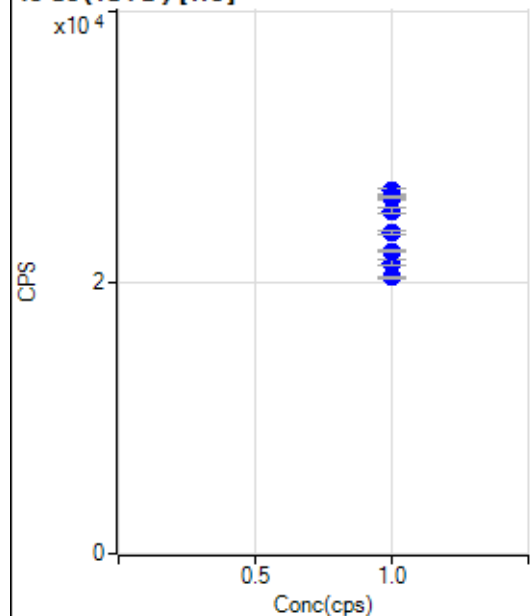
6 Li (ISTD) [No Gas]



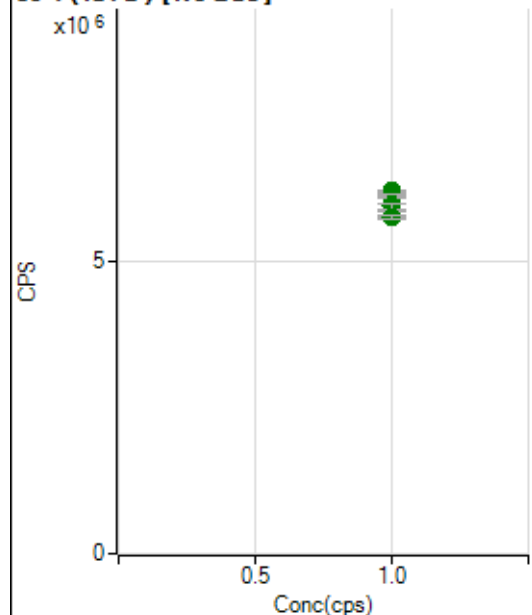
	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		1020306.64		A	0.2
2	☐	1.000					
3	☐	1.000		1032686.56		A	0.8
4	☐	1.000		1027882.79		A	1.3
5	☐	1.000		1041164.36		A	0.5
6	☐	1.000		1021921.22		A	4.2
7	☐	1.000		1015284.78		A	2.5
8	☐	1.000		985212.58		A	1.8
9	☐	1.000		965638.16		A	1.0

45 Sc (ISTD) [No Gas]

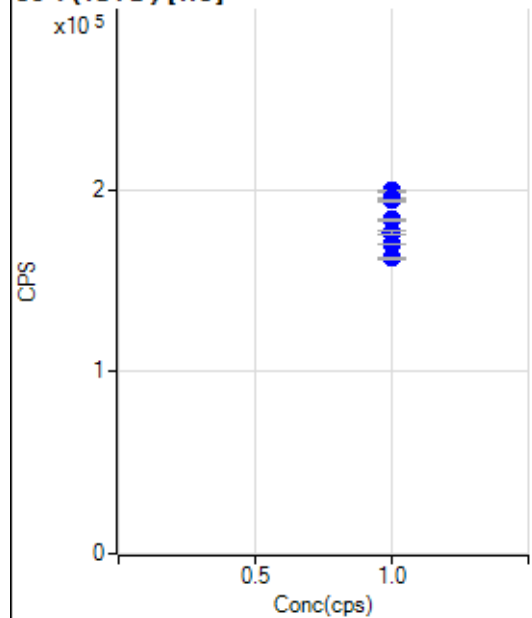
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3440693.57		A	0.7
2	☐	1.000					
3	☐	1.000		3481086.67		A	0.7
4	☐	1.000		3431829.05		A	0.7
5	☐	1.000		3411823.97		A	1.1
6	☐	1.000		3246003.35		A	3.5
7	☐	1.000		3121755.21		A	1.3
8	☐	1.000		3000023.61		A	1.0
9	☐	1.000		3045883.38		A	1.7

45 Sc (ISTD) [He]

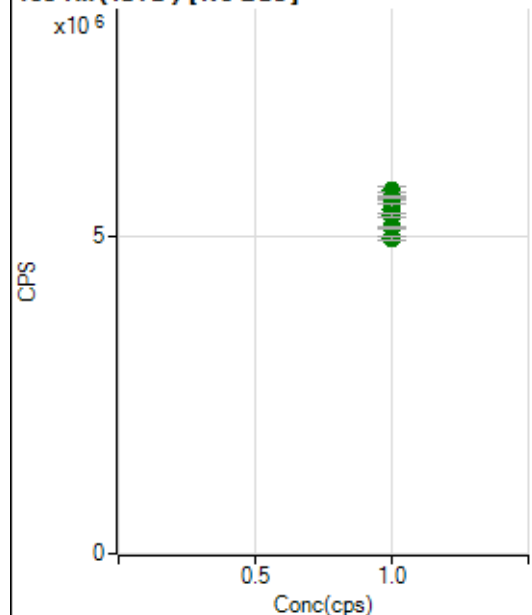
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		26733.42		P	1.3
2	☐	1.000					
3	☐	1.000		26265.84		P	1.6
4	☐	1.000		26305.97		P	0.5
5	☐	1.000		25260.69		P	1.7
6	☐	1.000		23616.74		P	1.1
7	☐	1.000		21462.19		P	2.4
8	☐	1.000		20344.92		P	0.3
9	☐	1.000		22282.34		P	0.4

89 Y (ISTD) [No Gas]

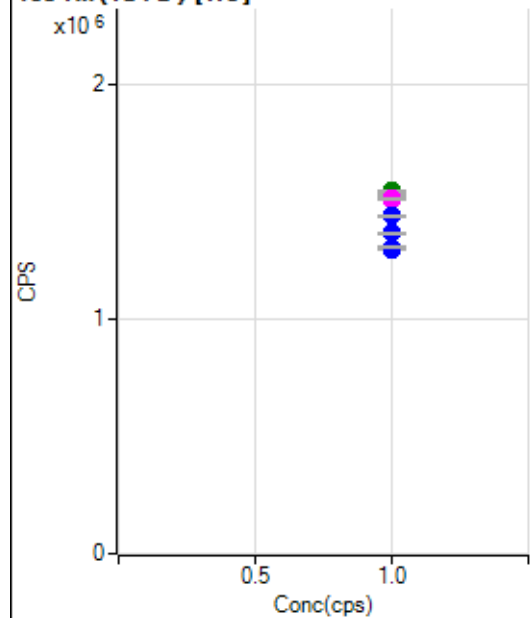
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		6140506.43		A	1.1
2	☐	1.000					
3	☐	1.000		6150729.42		A	0.4
4	☐	1.000		6187343.45		A	0.4
5	☐	1.000		6123821.37		A	0.3
6	☐	1.000		5953263.52		A	4.0
7	☐	1.000		5920693.80		A	1.2
8	☐	1.000		5743683.60		A	0.7
9	☐	1.000		5745524.36		A	1.1

89 Y (ISTD) [He]

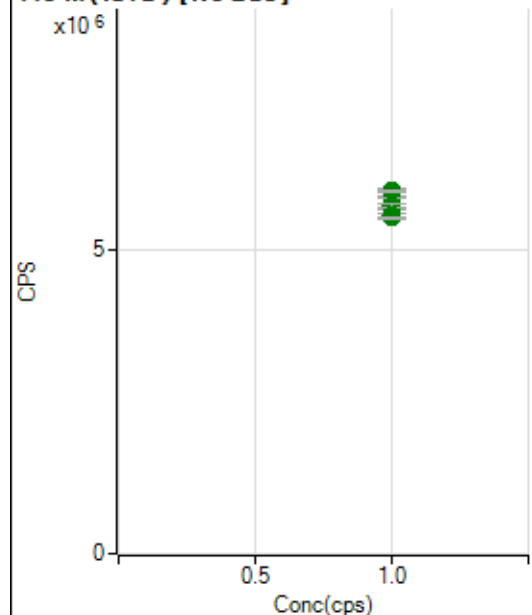
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		198838.18		P	0.3
2	☐	1.000					
3	☐	1.000		199217.64		P	0.4
4	☐	1.000		195187.57		P	0.1
5	☐	1.000		193803.95		P	0.9
6	☐	1.000		183503.55		P	0.7
7	☐	1.000		170409.39		P	0.1
8	☐	1.000		162544.25		P	0.6
9	☐	1.000		176301.49		P	1.1

103 Rh (ISTD) [No Gas]

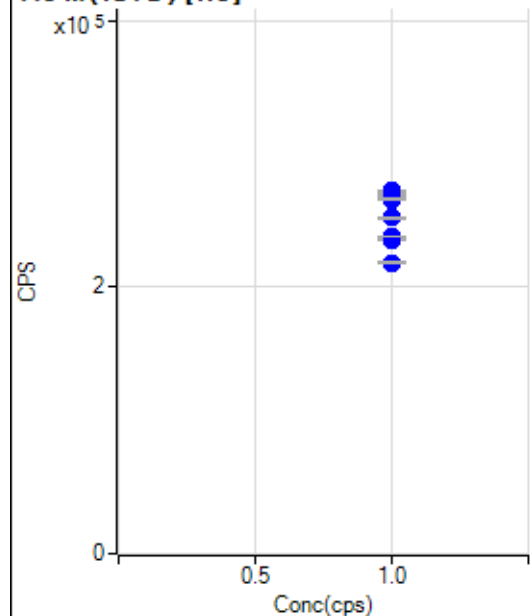
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		5699985.15		A	2.4
2	☐	1.000					
3	☐	1.000		5676558.94		A	0.2
4	☐	1.000		5582688.27		A	0.8
5	☐	1.000		5604089.49		A	0.9
6	☐	1.000		5402234.37		A	3.7
7	☐	1.000		5317359.45		A	1.0
8	☐	1.000		5123525.42		A	0.3
9	☐	1.000		4953248.72		A	1.1

103 Rh (ISTD) [He]

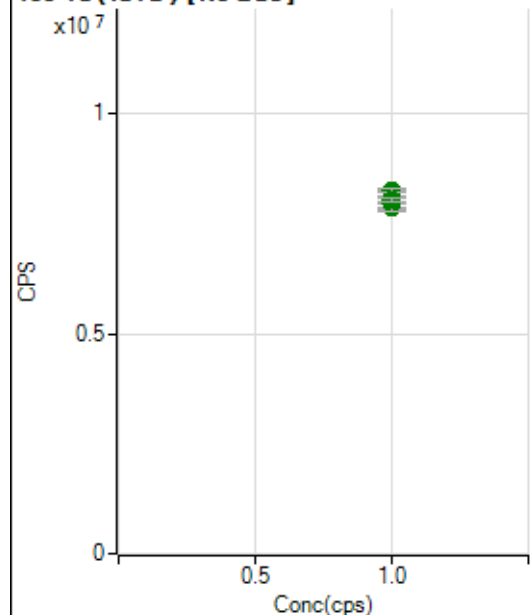
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1545790.55		A	1.3
2	☐	1.000					
3	☐	1.000		1549018.41		A	0.2
4	☐	1.000		1522428.14		M	0.5
5	☐	1.000		1511610.86		M	0.5
6	☐	1.000		1442972.10		P	0.8
7	☐	1.000		1367925.67		P	0.2
8	☐	1.000		1297615.74		P	0.5
9	☐	1.000		1308218.81		P	0.6

115 In (ISTD) [No Gas]

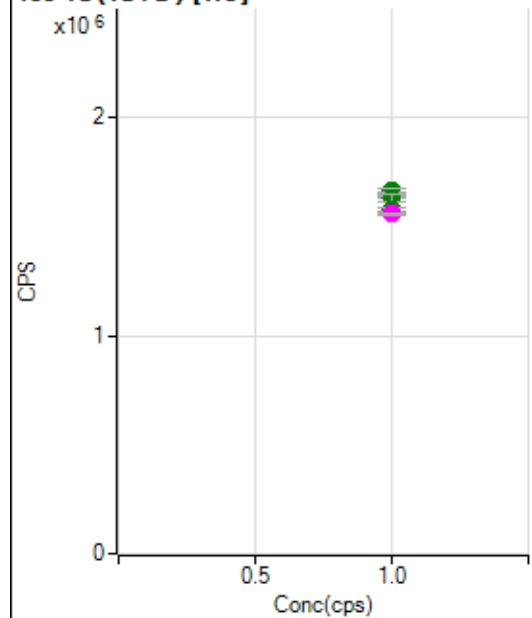
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		5983319.38		A	0.9
2	☐	1.000					
3	☐	1.000		5974446.79		A	0.6
4	☐	1.000		5899983.22		A	0.1
5	☐	1.000		5966040.71		A	0.5
6	☐	1.000		5776110.63		A	3.3
7	☐	1.000		5743694.52		A	1.2
8	☐	1.000		5584911.87		A	1.0
9	☐	1.000		5547994.99		A	0.5

115 In (ISTD) [He]

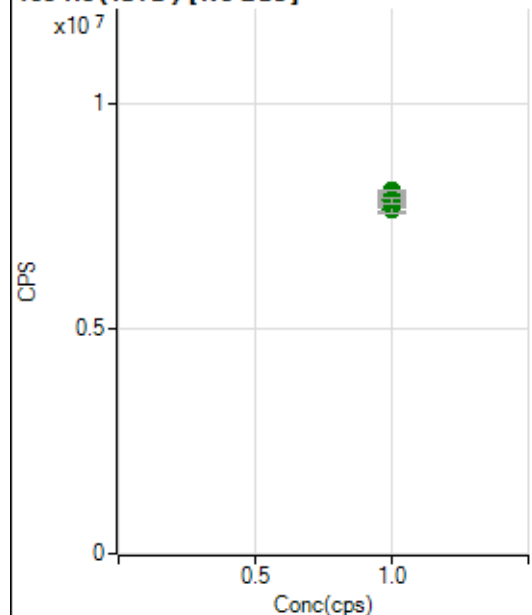
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		272088.23		P	0.2
2	☐	1.000					
3	☐	1.000		270413.00		P	0.5
4	☐	1.000		267834.72		P	0.5
5	☐	1.000		265959.10		P	0.9
6	☐	1.000		252061.41		P	0.7
7	☐	1.000		235532.96		P	0.5
8	☐	1.000		218127.80		P	0.6
9	☐	1.000		237874.38		P	0.5

159 Tb (ISTD) [No Gas]

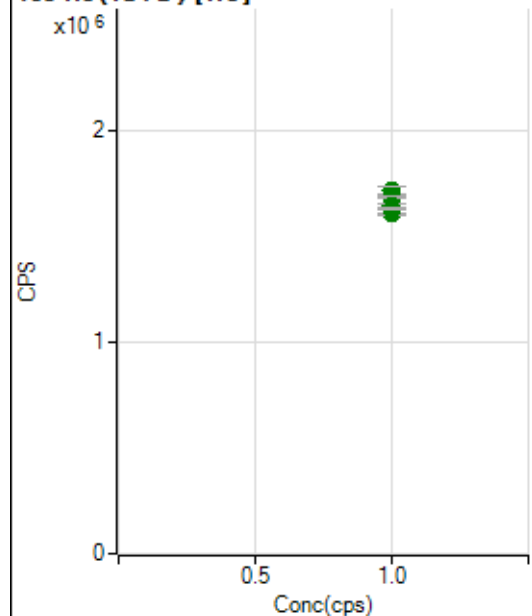
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		7849188.36		A	0.9
2	☐	1.000					
3	☐	1.000		7968569.05		A	0.2
4	☐	1.000		7996617.45		A	0.4
5	☐	1.000		8089061.75		A	0.4
6	☐	1.000		7957285.99		A	4.4
7	☐	1.000		8240172.58		A	0.4
8	☐	1.000		8246119.95		A	1.2
9	☐	1.000		8055953.14		A	1.1

159 Tb (ISTD) [He]

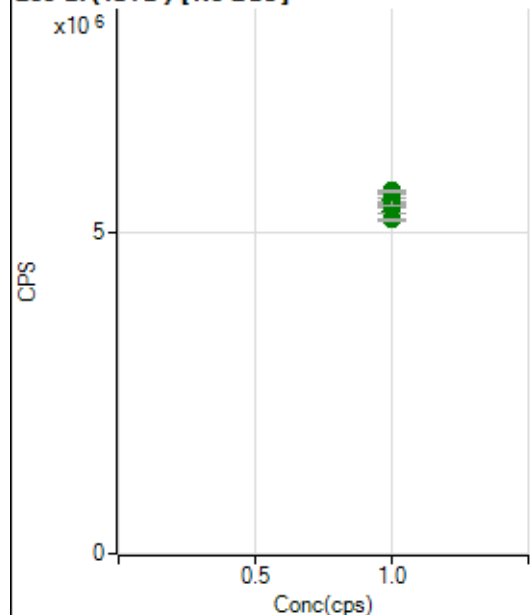
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1638824.37		A	1.1
2	☐	1.000					
3	☐	1.000		1647183.54		A	1.3
4	☐	1.000		1651535.08		A	0.2
5	☐	1.000		1662760.43		A	1.0
6	☐	1.000		1631566.67		A	1.9
7	☐	1.000		1578455.41		A	1.3
8	☐	1.000		1556529.47		M	0.6
9	☐	1.000		1557369.19		M	0.3

165 Ho (ISTD) [No Gas]

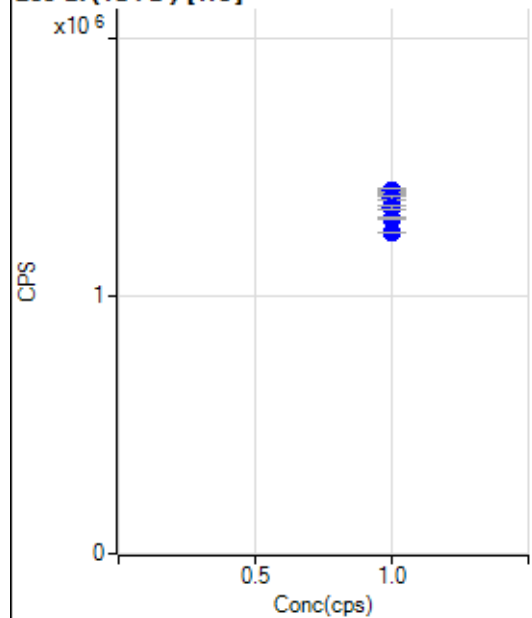
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		7644955.73		A	1.4
2	☐	1.000					
3	☐	1.000		7830667.10		A	0.3
4	☐	1.000		7751356.51		A	0.3
5	☐	1.000		7792804.34		A	1.2
6	☐	1.000		7764621.09		A	4.8
7	☐	1.000		8025926.92		A	1.1
8	☐	1.000		8057482.12		A	0.3
9	☐	1.000		7838815.80		A	1.6

165 Ho (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1685389.24		A	0.2
2	☐	1.000					
3	☐	1.000		1697112.79		A	0.7
4	☐	1.000		1688246.05		A	0.7
5	☐	1.000		1714557.13		A	2.2
6	☐	1.000		1686913.07		A	0.6
7	☐	1.000		1645115.08		A	1.2
8	☐	1.000		1604134.65		A	0.7
9	☐	1.000		1631180.45		A	0.2

209 Bi (ISTD) [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		5327495.23		A	2.0
2	☐	1.000					
3	☐	1.000		5407958.67		A	0.4
4	☐	1.000		5421200.89		A	0.4
5	☐	1.000		5486695.82		A	1.0
6	☐	1.000		5493928.98		A	3.4
7	☐	1.000		5620305.61		A	1.3
8	☐	1.000		5636291.51		A	0.7
9	☐	1.000		5190220.89		A	0.8

209 Bi (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1401604.25		P	0.7
2	☐	1.000					
3	☐	1.000		1407026.02		P	0.9
4	☐	1.000		1398392.86		P	0.2
5	☐	1.000		1407631.75		P	1.1
6	☐	1.000		1380729.03		P	1.1
7	☐	1.000		1343984.19		P	1.1
8	☐	1.000		1301910.73		P	0.5
9	☐	1.000		1245767.05		P	0.3

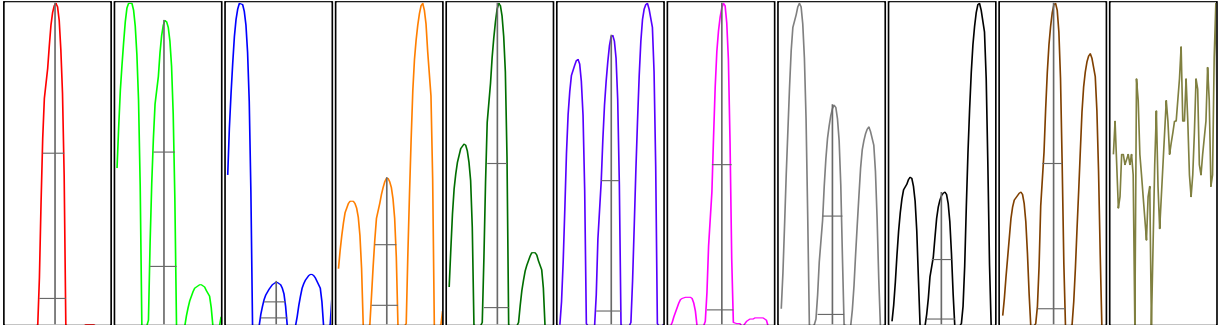
US EPA Tune Check Sample Report

Batch Folder D:\P8100918\CPMS.b
Report Comment
Instrument Name G8403A JP17141814

[No Gas]				
Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
9	5996	0.79	5.00	
24	57141	0.90	5.00	
25	7907	1.17	5.00	
26	9550	0.81	5.00	
59	66803	1.09	5.00	
113	9617	0.97	5.00	
115	119046	1.39	5.00	
206	30785	1.06	5.00	
207	27951	1.07	5.00	
208	66247	0.97	5.00	
220	1	9.14		

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
9	6012	6060	5971	6005	5934
24	57218	57313	56330	57748	57098
25	7958	7901	7774	8022	7882
26	9599	9565	9415	9597	9572
59	66591	66890	65790	67823	66919
113	9681	9641	9491	9717	9553
115	120029	119699	116633	120732	118135
206	30716	30773	30313	31217	30904
207	27885	27918	27547	28377	28026
208	65931	66550	65387	67104	66262
220	1	1	1	1	1

Integration Time [sec] = 0.1



Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	Width-X% (Actual)	Width-X% (Required)	Width- X% (Flag)
9	10480	8.95	8.9 - 9.1		0.763	0.900	
24	99308	23.90	23.9 - 24.1		0.742	0.900	
25	13330	24.95	24.9 - 25.1		0.745	0.900	
26	15788	25.95	25.9 - 26.1		0.752	0.900	
59	120681	58.95	58.9 - 59.1		0.734	0.900	
113	18629	113.05	112.9 - 113.1		0.722	0.900	
115	228555	115.05	114.9 - 115.1		0.769	0.900	
206	56778	206.05	205.9 - 206.1		0.782	0.900	
207	50635	207.00	206.9 - 207.1		0.809	0.900	
208	122918	208.05	207.9 - 208.1		0.793	0.900	
220			-				

X% = 5 Integration Time [sec] = 0.1 Acquisition Time [sec] = 268 Y Axis = Linear

Tune Parameters

Plasma Paramters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Plasma Mode		HMI	Aerosol Dilution		HMI-8			

Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	11.3	V	Deflect	14.2	V
Extract 2	-250.0	V	Cell Entrance	-30	V	Plate Bias	-35	V
Omega Bias	-95	V	Cell Exit	-50	V			

Cell Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Use Gas	No		OctP Bias	-8.0	V	Energy Discrimination	5.0	V
He Flow	0.0	mL/min	OctP RF	190	V			

[He]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)
59	8303	0.98	
89	2481	1.26	
205	14098	0.43	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
59	8356	8377	8342	8182	8261
89	2518	2480	2501	2437	2469
205	14183	14110	14117	14058	14023

Integration Time [sec] = 0.1

Tune Parameters

Plasma Paramters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Plasma Mode		HMI	Aerosol Dilution		HMI-8			

Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	11.3	V	Deflect	2.0	V
Extract 2	-250.0	V	Cell Entrance	-40	V	Plate Bias	-60	V
Omega Bias	-95	V	Cell Exit	-60	V			

Cell Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Use Gas	Yes		OctP Bias	-18.0	V	Energy Discrimination	5.0	V
He Flow	5.0	mL/min	OctP RF	200	V			