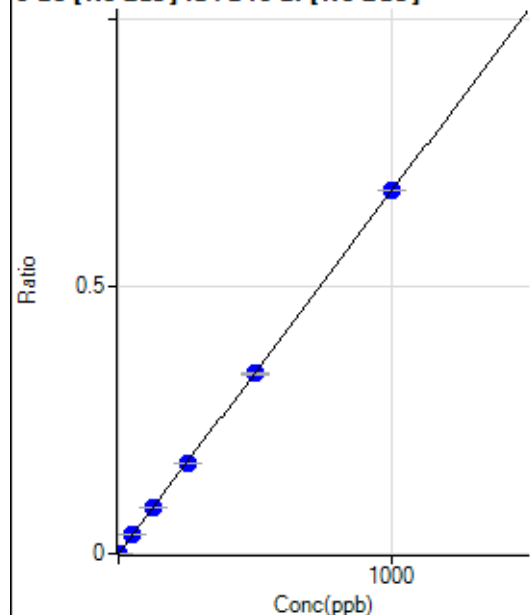


Batch Folder: D:\ICP-MS Data\P7050218- MS.b\
Analysis File: P7050218- MS.batch.bin
DA Date-Time: 2018-05-03 12:44:06
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	003CALB.d	S00	2018-05-02 12:46:58
2			
3	005CAL.S.d	S02	2018-05-02 12:55:09
4	006CAL.S.d	S03	2018-05-02 12:59:01
5	007CAL.S.d	S04	2018-05-02 13:03:11
6	008CAL.S.d	S05	2018-05-02 13:06:59
7	009CAL.S.d	S06	2018-05-02 13:10:45
8	010CAL.S.d	S07	2018-05-02 13:14:29
9	011CAL.S.d	S08	2018-05-02 13:18:11

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	77.78	0.0000	P	26.0
2	☐	0.100					
3	☐	1.000	0.980	1939.07	0.0007	P	3.1
4	☐	50.000	52.418	101311.81	0.0356	P	1.1
5	☐	125.000	129.132	252087.24	0.0876	P	0.4
6	☐	250.000	250.899	474072.30	0.1702	P	0.1
7	☐	500.000	496.771	865104.09	0.3370	P	0.4
8	☐	1000.000	1000.753	1707104.28	0.6788	P	0.2
9	☐			546.32	0.0002	P	15.4

$$y = 6.7825E-004 * x + 2.7258E-005$$

$$R = 1.0000$$

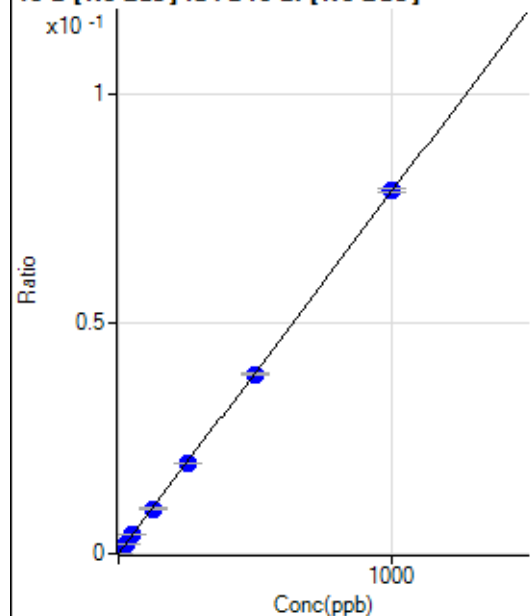
$$DL = 0.03134$$

$$BEC = 0.04019$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	155.56	0.0001	P	27.3
2	☐	2.500					
3	☐	25.000	24.160	5478.98	0.0020	P	4.4
4	☐	50.000	51.135	11610.43	0.0041	P	3.5
5	☐	125.000	124.222	28277.24	0.0098	P	1.4
6	☐	250.000	247.453	54381.91	0.0195	P	0.6
7	☐	500.000	496.221	100370.40	0.0391	P	1.1
8	☐	1000.000	1002.588	198520.28	0.0789	P	1.1
9	☐			4606.50	0.0018	P	6.0

$$y = 7.8677E-005 * x + 5.4518E-005$$

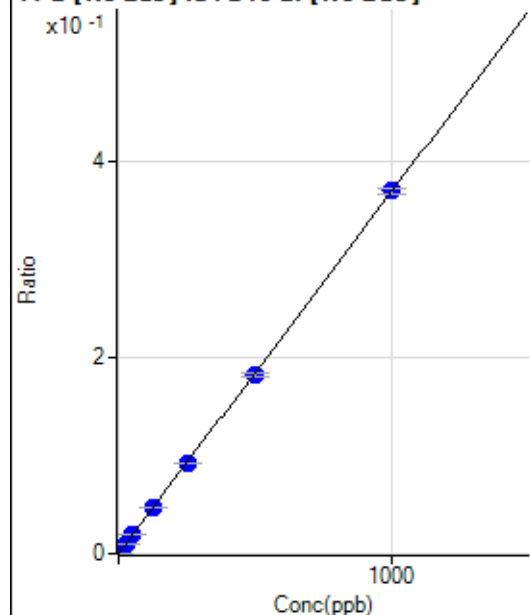
$$R = 1.0000$$

$$DL = 0.5666$$

$$BEC = 0.6929$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	516.70	0.0002	P	15.0
2	☐	2.500					
3	☐	25.000	24.278	25625.24	0.0091	P	1.5
4	☐	50.000	50.985	54122.54	0.0190	P	1.3
5	☐	125.000	127.313	135777.14	0.0472	P	1.8
6	☐	250.000	248.847	256421.56	0.0921	P	1.2
7	☐	500.000	493.917	468626.52	0.1826	P	1.9
8	☐	1000.000	1003.009	931871.50	0.3705	P	1.3
9	☐			22161.36	0.0087	P	6.0

$$y = 3.6924\text{E-}004 * x + 1.8104\text{E-}004$$

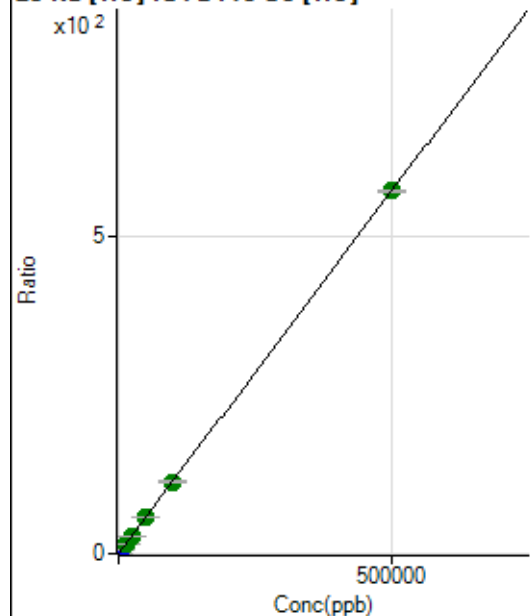
$$R = 1.0000$$

$$DL = 0.2213$$

$$BEC = 0.4903$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	21911.08	0.0520	P	1.6
2	☐	50.000					
3	☐	500.000	469.848	248168.58	0.5904	P	1.0
4	☐	5000.000	5024.458	2403780.72	5.8093	P	0.7
5	☐	12500.000	12344.907	5878679.12	14.1974	A	0.6
6	☐	25000.000	24482.321	10826437.14	28.1051	A	1.3
7	☐	50000.000	50028.015	20518205.15	57.3767	A	0.2
8	☐	100000.00	98944.328	41400948.49	113.4275	A	1.1
9	☐	500000.00	500237.88	224119446.6	573.2505	A	0.2

$$y = 0.0011 * x + 0.0520$$

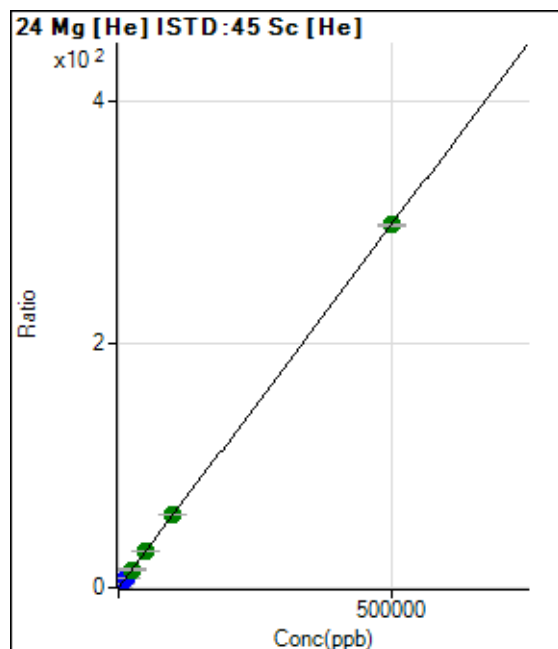
$$R = 1.0000$$

$$DL = 2.147$$

$$BEC = 45.37$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	472.25	0.0011	P	10.3
2	☐	50.000					
3	☐	500.000	470.212	118355.75	0.2816	P	1.1
4	☐	5000.000	5160.170	1273896.45	3.0786	P	0.2
5	☐	12500.000	12760.751	3151709.55	7.6116	P	0.5
6	☐	25000.000	25155.396	5779562.37	15.0037	A	0.9
7	☐	50000.000	51056.695	10889468.39	30.4512	A	0.1
8	☐	100000.00	100758.01	21933581.57	60.0930	A	1.3
9	☐	500000.00	499726.86	116523178.9	298.0372	A	0.5

$$y = 5.9640\text{E-}004 * x + 0.0011$$

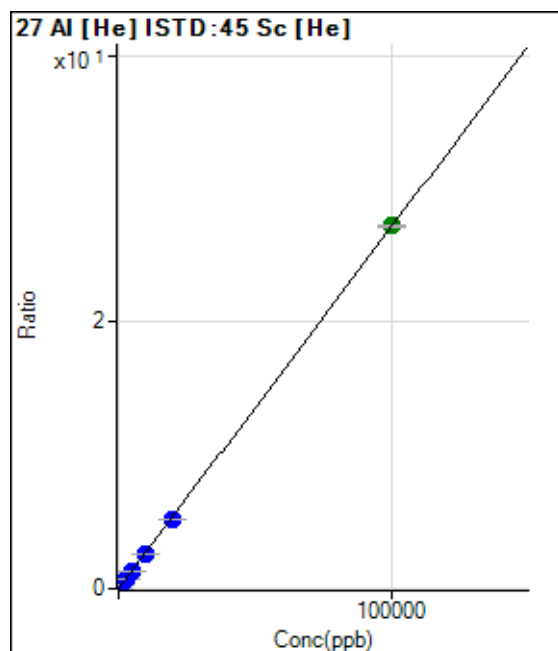
$$R = 1.0000$$

$$DL = 0.5809$$

$$BEC = 1.88$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	72.22	0.0002	P	29.7
2	☐	2.000					
3	☐	20.000	17.535	2075.25	0.0049	P	9.1
4	☐	1000.000	979.657	110222.07	0.2664	P	1.4
5	☐	2500.000	2392.731	269289.73	0.6504	P	0.2
6	☐	5000.000	4744.729	496714.85	1.2895	P	0.8
7	☐	10000.000	9596.890	932621.13	2.6080	P	0.6
8	☐	20000.000	19106.518	1895105.01	5.1920	P	1.0
9	☐	100000.00	100234.65	10648741.47	27.2371	A	0.2

$$y = 2.7173\text{E-}004 * x + 1.7165\text{E-}004$$

$$R = 1.0000$$

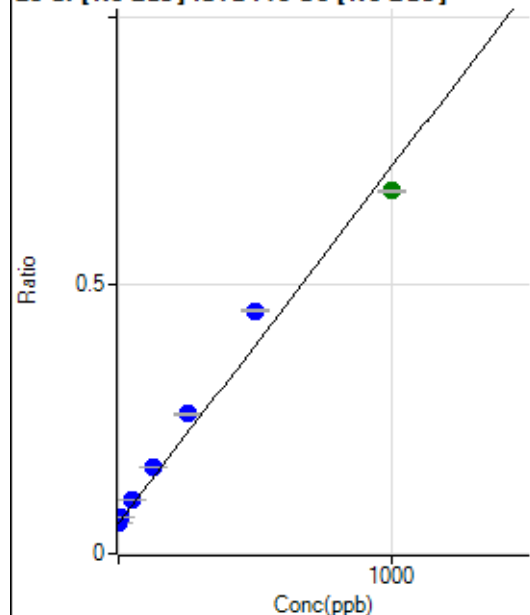
$$DL = 0.5632$$

$$BEC = 0.6317$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	424075.94	0.0564	P	1.1
2	☐	1.000					
3	☐	10.000	18.292	510577.78	0.0686	P	0.5
4	☐	50.000	65.235	744157.42	0.0997	P	1.9
5	☐	125.000	158.592	1217202.53	0.1616	P	0.5
6	☐	250.000	306.552	1884338.13	0.2598	P	0.5
7	☐	500.000	595.927	3015158.03	0.4518	P	0.5
8	☐	1000.000	932.855	4450392.59	0.6753	A	0.3
9	☐			591694.54	0.0860	P	0.7

$$y = 6.6341\text{E-}004 * x + 0.0564$$

$$R = 0.9907$$

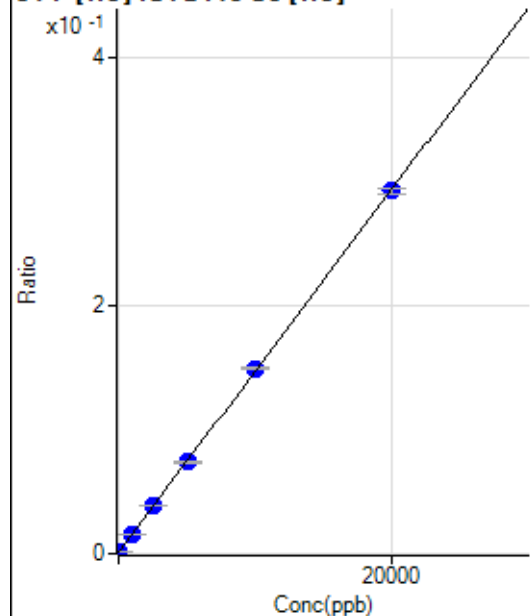
$$DL = 2.873$$

$$BEC = 85.04$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	-6.158	380.58	0.0009	P	20.2
2	☐	0.000					
3	☐	0.000	6.158	455.58	0.0011	P	21.6
4	☐	1000.000	1029.487	6646.21	0.0161	P	1.7
5	☐	2500.000	2586.932	16089.84	0.0389	P	1.9
6	☐	5000.000	4978.510	28452.97	0.0739	P	1.6
7	☐	10000.000	10123.906	53346.52	0.1492	P	0.8
8	☐	20000.000	19931.079	106839.25	0.2927	P	1.8
9	☐			391.69	0.0010	P	16.2

$$y = 1.4637\text{E-}005 * x + 9.9390\text{E-}004$$

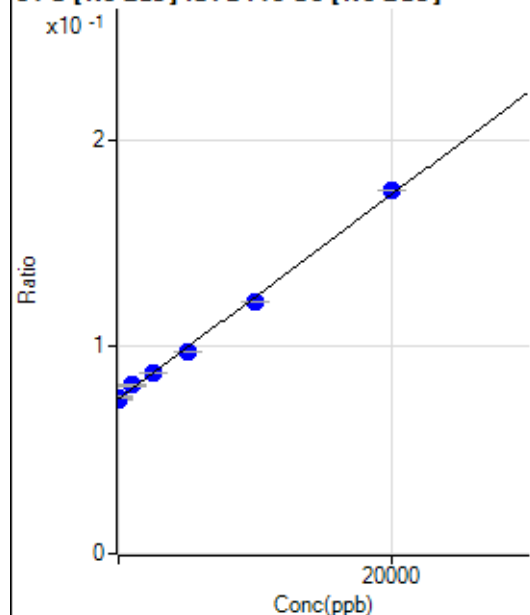
$$R = 1.0000$$

$$DL = 42.68$$

$$BEC = 67.9$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	-125.584	557853.28	0.0742	P	0.1
2	☐	0.000					
3	☐	0.000	125.584	561957.45	0.0755	P	0.9
4	☐	1000.000	1325.502	607476.86	0.0814	P	2.0
5	☐	2500.000	2592.915	660075.86	0.0876	P	0.3
6	☐	5000.000	4580.554	707057.53	0.0975	P	0.4
7	☐	10000.000	9476.185	812122.28	0.1217	P	0.2
8	☐	20000.000	20338.880	1155816.77	0.1754	P	0.0
9	☐			456908.22	0.0664	P	0.6

$$y = 4.9437\text{E-}006 * x + 0.0748$$

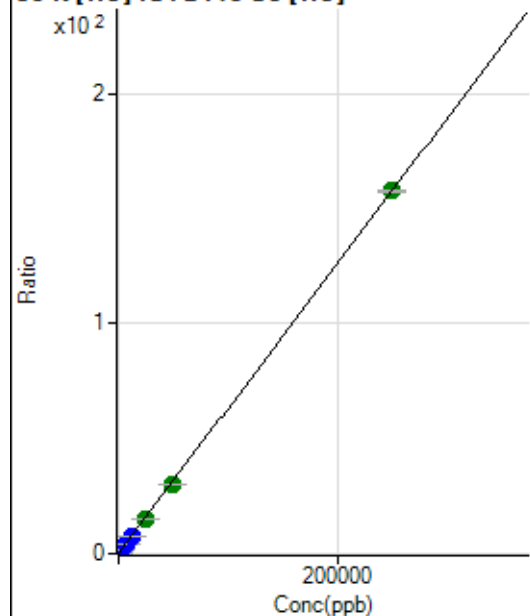
$$R = 0.9989$$

$$DL = 238.1$$

$$BEC = 1.514\text{E}+04$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	54958.43	0.1304	P	0.9
2	☐	50.000					
3	☐	500.000	478.962	181468.77	0.4317	P	1.6
4	☐	2500.000	2502.680	705421.78	1.7048	P	0.7
5	☐	6250.000	6143.176	1654186.14	3.9950	P	0.6
6	☐	12500.000	12237.056	3015632.01	7.8285	P	0.8
7	☐	25000.000	24043.797	5455562.58	15.2559	A	0.1
8	☐	50000.000	48100.240	11092601.29	30.3894	A	0.5
9	☐	250000.00	250491.40	61659293.04	157.7100	A	0.4

$$y = 6.2908\text{E-}004 * x + 0.1304$$

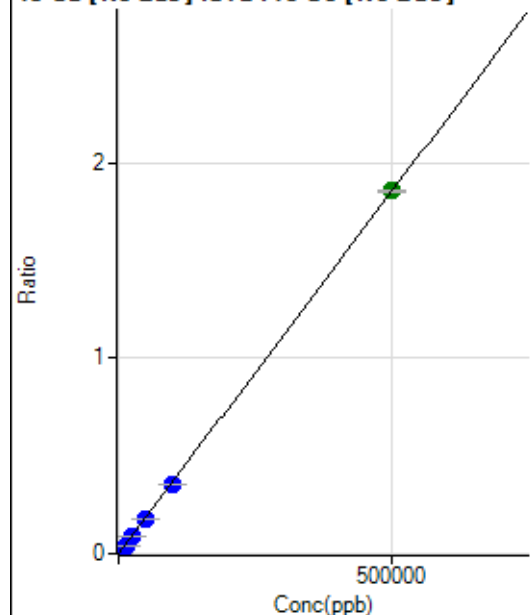
$$R = 1.0000$$

$$DL = 5.494$$

$$BEC = 207.3$$

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	244.46	0.0000	P	29.5
2	☐	50.000					
3	☐	500.000	448.217	12608.65	0.0017	P	3.5
4	☐	5000.000	4697.874	130150.81	0.0174	P	1.8
5	☐	12500.000	11829.284	330244.33	0.0439	P	0.3
6	☐	25000.000	23373.722	628282.82	0.0866	P	0.5
7	☐	50000.000	47050.793	1163465.83	0.1743	P	0.3
8	☐	100000.00	95333.479	2327553.92	0.3532	P	0.6
9	☐	500000.00	501329.38	12774263.39	1.8571	A	0.5

$$y = 3.7043\text{E-}006 * x + 3.2532\text{E-}005$$

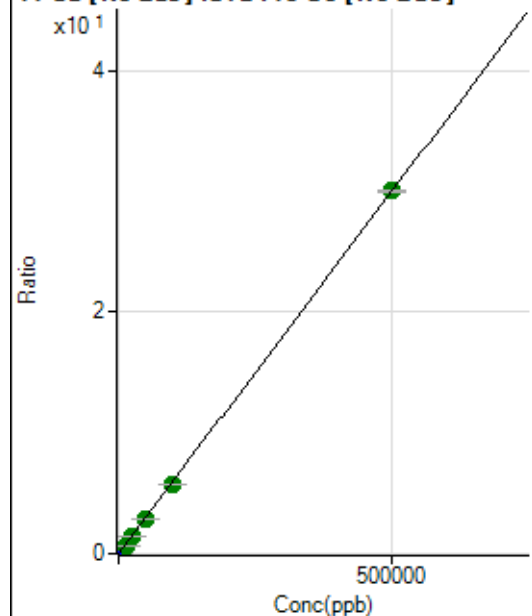
$$R = 0.9999$$

$$DL = 7.77$$

$$BEC = 8.782$$

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	11813.65	0.0016	P	1.4
2	☐	50.000					
3	☐	500.000	442.107	208879.40	0.0280	P	0.1
4	☐	5000.000	4755.347	2137330.13	0.2863	P	1.4
5	☐	12500.000	11908.291	5381802.24	0.7146	A	0.2
6	☐	25000.000	23502.994	10219464.55	1.4089	A	0.1
7	☐	50000.000	47298.377	18913195.04	2.8337	A	0.3
8	☐	100000.00	95755.593	37798350.84	5.7353	A	0.5
9	☐	500000.00	501211.19	206453265.7	30.0136	A	0.4

$$y = 5.9879\text{E-}005 * x + 0.0016$$

$$R = 1.0000$$

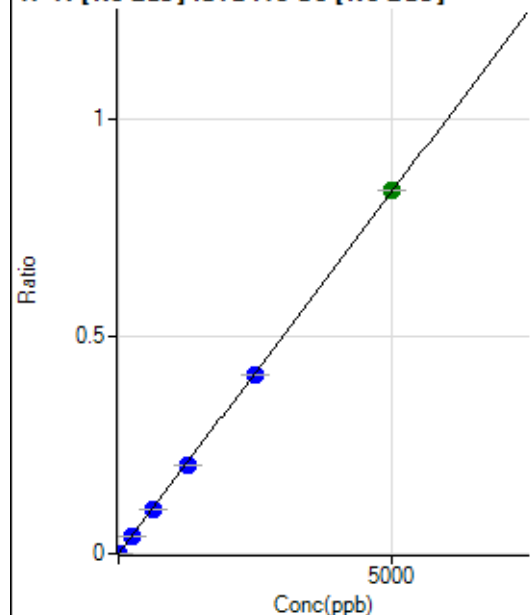
$$DL = 1.076$$

$$BEC = 26.25$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	102.78	0.0000	P	12.2
2	☐	0.500					
3	☐	5.000	4.708	5945.90	0.0008	P	4.6
4	☐	250.000	247.078	307516.24	0.0412	P	2.1
5	☐	625.000	620.714	779300.11	0.1035	P	0.5
6	☐	1250.000	1229.855	1487000.73	0.2050	P	0.8
7	☐	2500.000	2477.173	2755978.69	0.4129	P	0.4
8	☐	5000.000	5017.132	5511580.29	0.8363	A	0.1
9	☐			1841.86	0.0003	P	11.4

$$y = 1.6669\text{E-}004 * x + 1.3670\text{E-}005$$

$$R = 1.0000$$

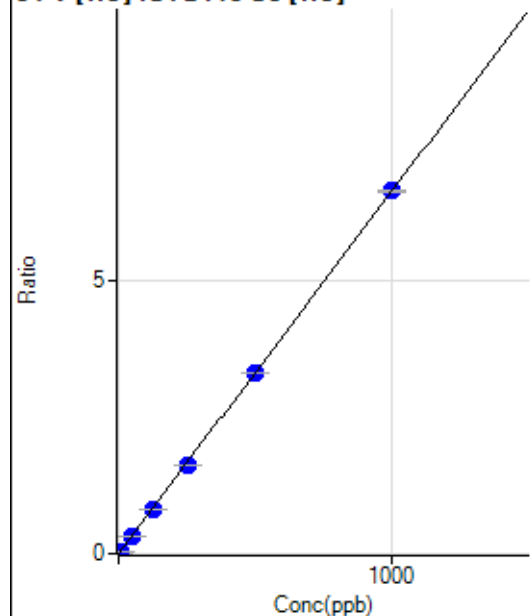
$$DL = 0.0299$$

$$BEC = 0.08201$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	10.00	0.0000	P	32.7
2	☐	0.500					
3	☐	5.000	4.491	12507.73	0.0298	P	1.4
4	☐	50.000	49.419	135390.87	0.3272	P	1.0
5	☐	125.000	121.878	334117.57	0.8069	P	0.5
6	☐	250.000	244.599	623802.12	1.6194	P	0.6
7	☐	500.000	499.317	1182148.09	3.3058	P	0.2
8	☐	1000.000	1002.114	2421695.80	6.6346	P	0.6
9	☐			1416.76	0.0036	P	9.0

$$y = 0.0066 * x + 2.3700\text{E-}005$$

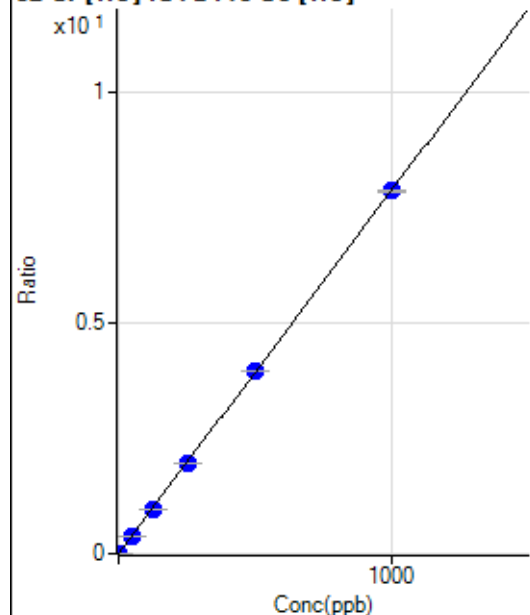
$$R = 1.0000$$

$$DL = 0.003508$$

$$BEC = 0.00358$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	434.46	0.0010	P	1.0
2	☐	0.200					
3	☐	2.000	2.029	7139.63	0.0170	P	4.0
4	☐	50.000	49.649	161968.27	0.3914	P	0.4
5	☐	125.000	123.523	402607.62	0.9723	P	0.3
6	☐	250.000	247.063	748749.13	1.9438	P	0.6
7	☐	500.000	503.817	1417076.49	3.9627	P	0.3
8	☐	1000.000	999.028	2867748.46	7.8567	P	0.7
9	☐			123897.22	0.3169	P	1.3

$$y = 0.0079 * x + 0.0010$$

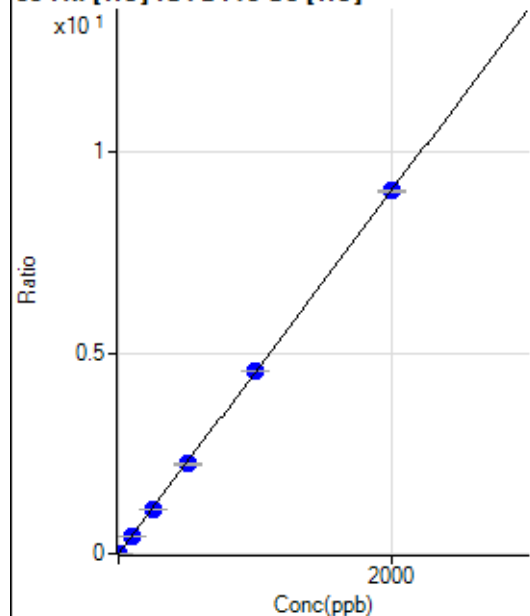
$$R = 1.0000$$

$$DL = 0.004004$$

$$BEC = 0.1311$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	183.34	0.0004	P	14.1
2	☐	0.100					
3	☐	1.000	0.994	2072.40	0.0049	P	5.9
4	☐	100.000	99.520	186461.61	0.4506	P	0.6
5	☐	250.000	245.904	460776.09	1.1128	P	0.4
6	☐	500.000	494.686	862178.16	2.2382	P	0.9
7	☐	1000.000	1005.592	1626864.68	4.5493	P	0.3
8	☐	2000.000	1999.068	3300913.35	9.0434	P	0.8
9	☐			15046.78	0.0385	P	1.7

$$y = 0.0045 * x + 4.3492E-004$$

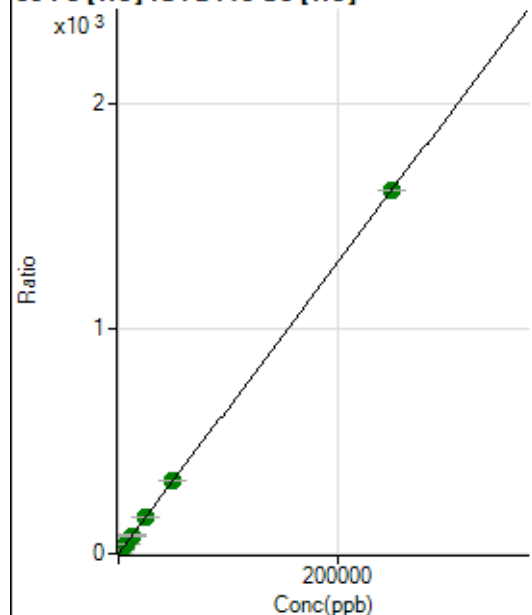
$$R = 1.0000$$

$$DL = 0.04062$$

$$BEC = 0.09614$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	4762.03	0.0113	P	0.3
2	☐	5.000					
3	☐	50.000	47.794	134433.14	0.3198	P	0.5
4	☐	2500.000	2518.865	6732400.09	16.2704	A	0.8
5	☐	6250.000	6239.963	16682640.07	40.2898	A	0.6
6	☐	12500.000	12579.028	31281856.03	81.2080	A	0.5
7	☐	25000.000	25535.909	58949044.38	164.8436	A	0.4
8	☐	50000.000	50424.821	118809298.9	325.4996	A	0.9
9	☐	250000.00	249857.55	630554006.6	1,612.822	A	0.1

$$y = 0.0065 * x + 0.0113$$

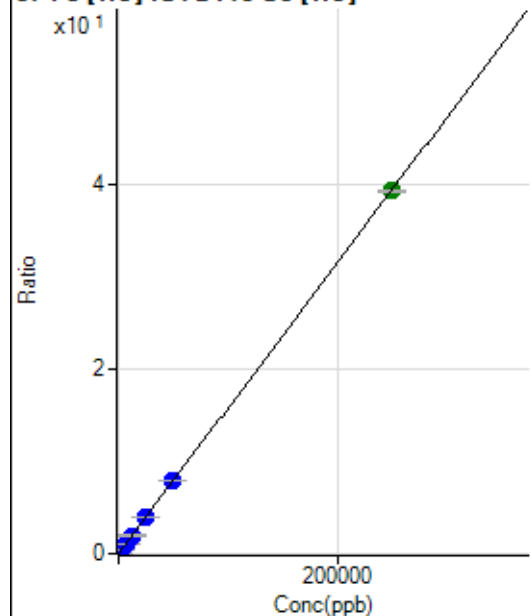
$$R = 1.0000$$

$$DL = 0.01726$$

$$BEC = 1.751$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	574.10	0.0014	P	10.5
2	☐	5.000					
3	☐	50.000	47.132	3685.75	0.0088	P	1.5
4	☐	2500.000	2509.821	163746.95	0.3957	P	0.4
5	☐	6250.000	6207.562	404440.15	0.9768	P	0.6
6	☐	12500.000	12548.388	760052.20	1.9731	P	0.9
7	☐	25000.000	25643.214	1441387.14	4.0307	P	0.7
8	☐	50000.000	50710.679	2908947.08	7.9695	P	0.7
9	☐	250000.00	249792.08	15345735.99	39.2510	A	0.3

$$y = 1.5713E-004 * x + 0.0014$$

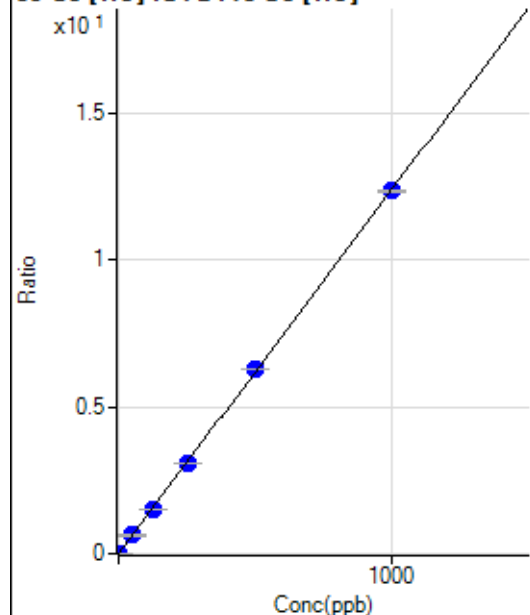
$$R = 1.0000$$

$$DL = 2.733$$

$$BEC = 8.669$$

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	90.00	0.0002	P	13.4
2	☐	0.100					
3	☐	1.000	0.957	5072.07	0.0121	P	5.3
4	☐	50.000	50.306	257941.71	0.6234	P	0.7
5	☐	125.000	123.339	632713.21	1.5280	P	0.4
6	☐	250.000	247.602	1181565.56	3.0673	P	0.8
7	☐	500.000	506.029	2241662.62	6.2685	P	0.3
8	☐	1000.000	997.777	4511485.42	12.3599	P	0.8
9	☐			7992.29	0.0204	P	1.6

$$y = 0.0124 * x + 2.1358E-004$$

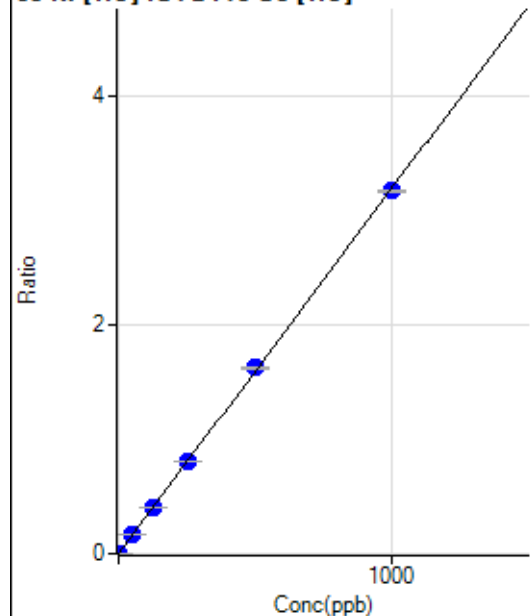
$$R = 1.0000$$

$$DL = 0.006943$$

$$BEC = 0.01724$$

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	104.45	0.0002	P	3.6
2	☐	0.100					
3	☐	1.000	1.085	1559.00	0.0037	P	5.8
4	☐	50.000	51.651	68278.28	0.1650	P	0.0
5	☐	125.000	126.039	166576.70	0.4023	P	0.4
6	☐	250.000	252.615	310499.56	0.8061	P	1.2
7	☐	500.000	509.718	581533.43	1.6262	P	0.6
8	☐	1000.000	994.275	1157772.43	3.1718	P	0.6
9	☐			31751.23	0.0812	P	2.1

$$y = 0.0032 * x + 2.4784E-004$$

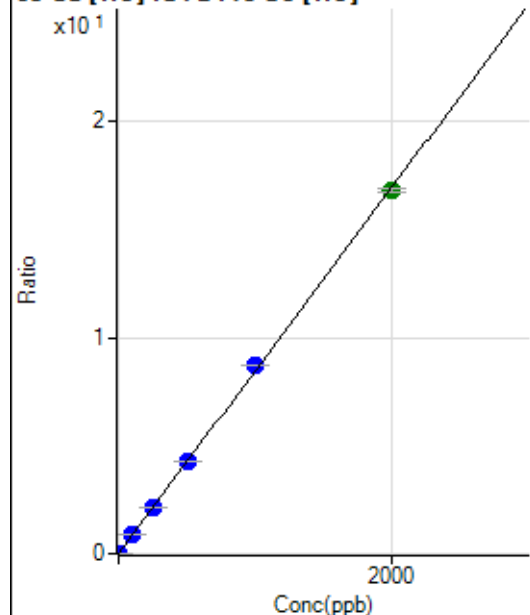
$$R = 0.9999$$

$$DL = 0.008285$$

$$BEC = 0.0777$$

Weight: <None>

Min Conc: 0

⁶³Cu [He] ISTD:45 Sc [He]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1478.99	0.0035	P	2.3
2	☐	0.200					
3	☐	2.000	1.881	8166.83	0.0194	P	0.9
4	☐	100.000	102.074	358936.40	0.8675	P	1.0
5	☐	250.000	251.763	883784.50	2.1344	P	0.5
6	☐	500.000	507.769	1656867.44	4.3012	P	0.7
7	☐	1000.000	1028.305	3113689.50	8.7070	P	0.4
8	☐	2000.000	1983.581	6129259.21	16.7924	A	0.9
9	☐			10099.20	0.0258	P	2.0

$$y = 0.0085 * x + 0.0035$$

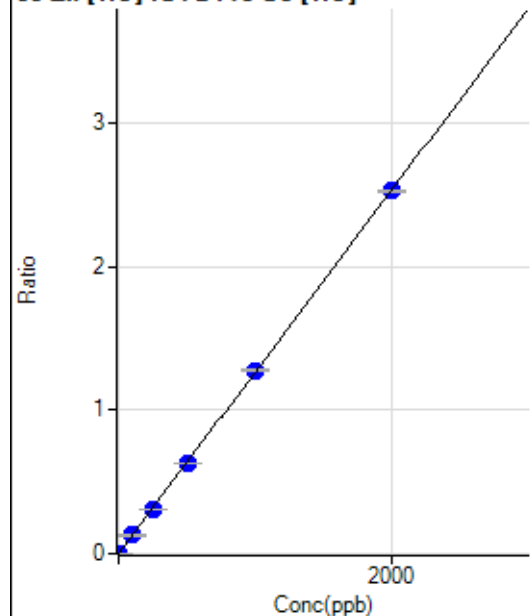
$$R = 0.9998$$

$$DL = 0.02828$$

$$BEC = 0.4147$$

Weight: <None>

Min Conc: 0

⁶⁶Zn [He] ISTD:45 Sc [He]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	127.78	0.0003	P	1.9
2	☐	0.200					
3	☐	2.000	2.134	1262.30	0.0030	P	8.7
4	☐	100.000	100.340	52679.34	0.1273	P	1.2
5	☐	250.000	244.228	128130.30	0.3094	P	0.7
6	☐	500.000	495.371	241656.31	0.6273	P	0.8
7	☐	1000.000	1009.531	457082.23	1.2782	P	0.8
8	☐	2000.000	1997.096	922810.46	2.5282	P	0.8
9	☐			8852.82	0.0226	P	2.3

$$y = 0.0013 * x + 3.0324E-004$$

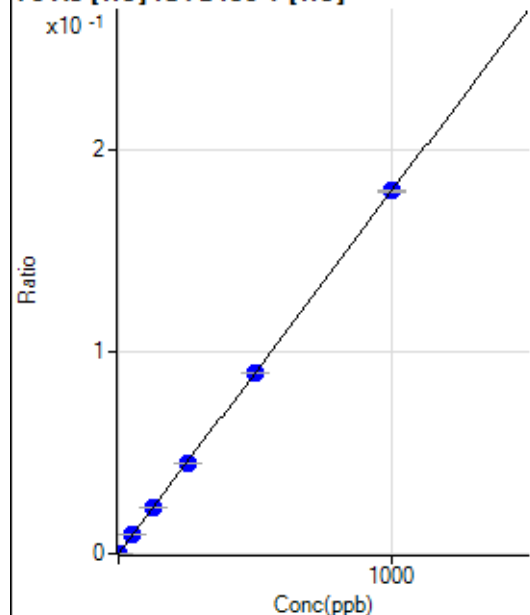
$$R = 1.0000$$

$$DL = 0.0136$$

$$BEC = 0.2396$$

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	8.03	0.0000	P	35.0
2	☐	0.100					
3	☐	1.000	1.055	409.88	0.0002	P	4.7
4	☐	50.000	51.514	19414.90	0.0093	P	1.3
5	☐	125.000	126.103	47668.51	0.0227	P	0.4
6	☐	250.000	249.309	89815.66	0.0448	P	0.7
7	☐	500.000	497.703	169236.55	0.0895	P	0.2
8	☐	1000.000	1001.108	344019.61	0.1800	P	0.3
9	☐			169.14	0.0001	P	9.9

$$y = 1.7982\text{E-}004 * x + 3.7916\text{E-}006$$

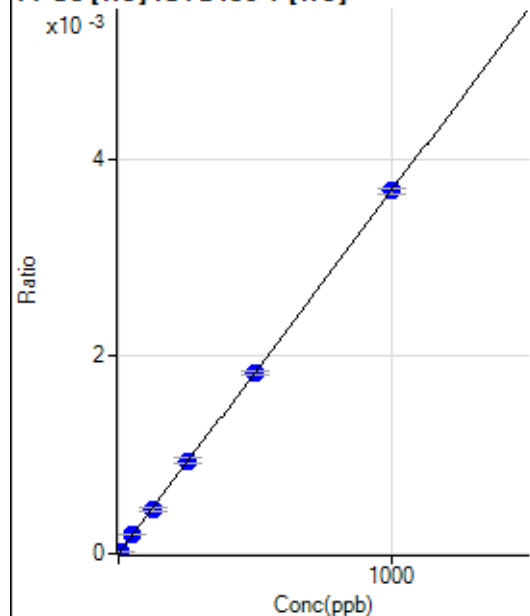
$$R = 1.0000$$

$$DL = 0.02214$$

$$BEC = 0.02109$$

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	5.982	46.67	0.0000	P	24.0
4	☐	50.000	53.030	408.90	0.0002	P	6.3
5	☐	125.000	122.376	946.71	0.0005	P	5.3
6	☐	250.000	255.909	1886.82	0.0009	P	6.6
7	☐	500.000	498.196	3467.13	0.0018	P	2.2
8	☐	1000.000	999.597	7030.70	0.0037	P	1.3
9	☐			2.22	0.0000	P	86.6

$$y = 3.6805\text{E-}006 * x + 0.0000\text{E+}000$$

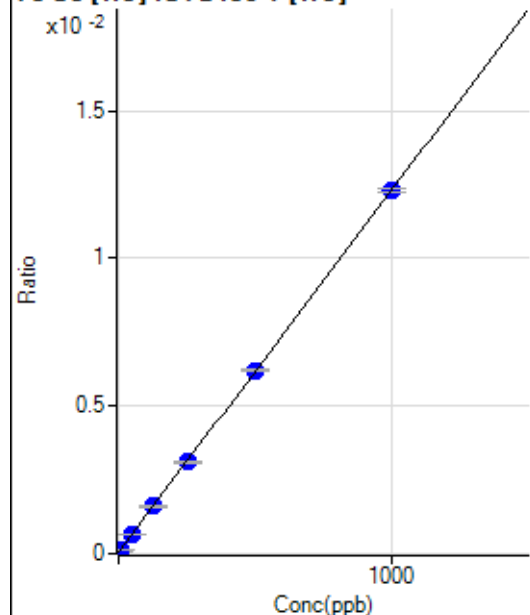
$$R = 1.0000$$

$$DL = 0$$

$$BEC = 0$$

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	107.41	0.0001	P	22.3
2	☐	0.500					
3	☐	5.000	4.496	224.08	0.0001	P	5.9
4	☐	50.000	50.996	1415.51	0.0007	P	1.9
5	☐	125.000	127.153	3381.91	0.0016	P	2.4
6	☐	250.000	250.052	6240.28	0.0031	P	2.6
7	☐	500.000	502.710	11743.70	0.0062	P	1.0
8	☐	1000.000	998.316	23475.84	0.0123	P	1.1
9	☐			107.41	0.0001	P	8.3

$$y = 1.2254\text{E-}005 * x + 5.0743\text{E-}005$$

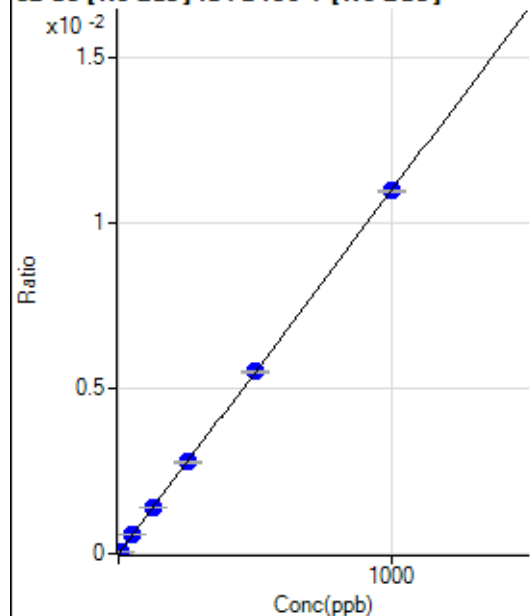
$$R = 1.0000$$

$$DL = 2.772$$

$$BEC = 4.141$$

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	15.68	0.0000	P	391.
2	☐	0.500					
3	☐	5.000	4.934	667.49	0.0001	P	2.3
4	☐	50.000	51.498	6863.05	0.0006	P	1.8
5	☐	125.000	129.076	17555.58	0.0014	P	0.7
6	☐	250.000	251.766	33460.61	0.0028	P	0.5
7	☐	500.000	500.576	62771.02	0.0055	P	0.7
8	☐	1000.000	998.686	124374.56	0.0110	P	0.4
9	☐			161.36	0.0000	P	43.0

$$y = 1.0979\text{E-}005 * x + 1.2605\text{E-}006$$

$$R = 1.0000$$

$$DL = 1.35$$

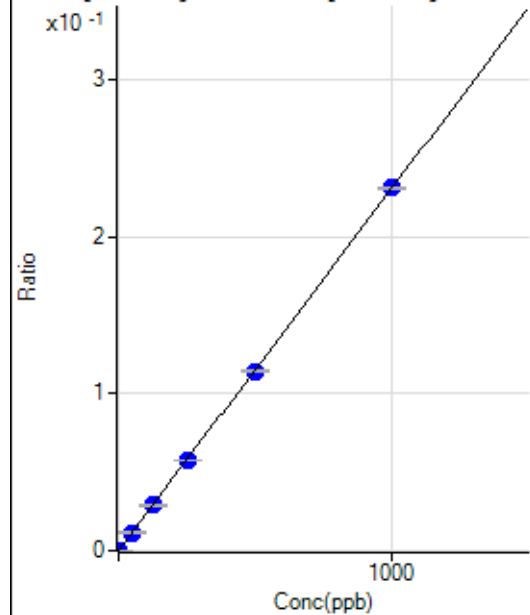
$$BEC = 0.1148$$

Weight: <None>

Min Conc: 0

83 Kr [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			496.68		P	10.5
2	☐						
3	☐			536.68		P	1.6
4	☐			524.46		P	2.0
5	☐			524.46		P	4.2
6	☐			514.46		P	4.3
7	☐			486.69		P	6.3
8	☐			491.13		P	10.3
9	☐			507.80		P	14.9

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	861.17	0.0001	P	8.8
2	☐	0.100					
3	☐	1.000	1.008	3633.96	0.0003	P	3.4
4	☐	50.000	50.003	140299.39	0.0116	P	2.1
5	☐	125.000	124.729	356357.12	0.0288	P	0.6
6	☐	250.000	247.325	689949.56	0.0570	P	0.3
7	☐	500.000	496.196	1305509.37	0.1143	P	0.6
8	☐	1000.000	1002.604	2619269.22	0.2309	P	0.6
9	☐			90726.94	0.0079	P	0.2

$$y = 2.3026E-004 * x + 6.9570E-005$$

$$R = 1.0000$$

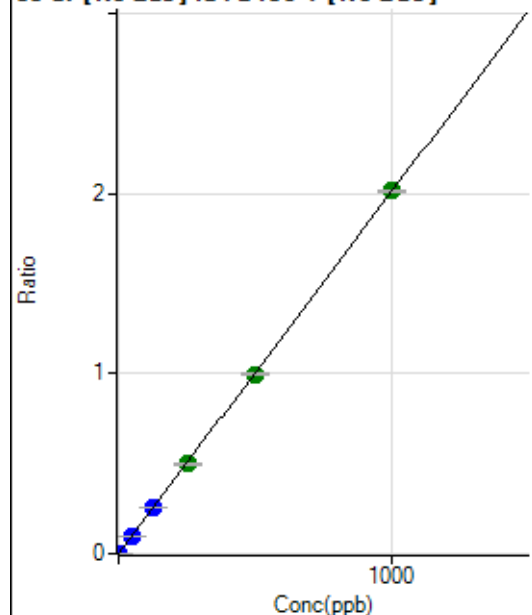
$$DL = 0.08004$$

$$BEC = 0.3021$$

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	105.56	0.0000	P	16.4
2	☐	0.100					
3	☐	1.000	0.948	23033.16	0.0019	P	1.4
4	☐	50.000	49.924	1214927.69	0.1003	P	1.7
5	☐	125.000	125.731	3126574.40	0.2526	P	0.2
6	☐	250.000	247.645	6020168.88	0.4975	A	0.5
7	☐	500.000	495.261	11361796.35	0.9950	A	0.8
8	☐	1000.000	1002.871	22852253.81	2.0148	A	0.2
9	☐			790481.49	0.0688	P	0.2

$$y = 0.0020 * x + 8.5277E-006$$

$$R = 1.0000$$

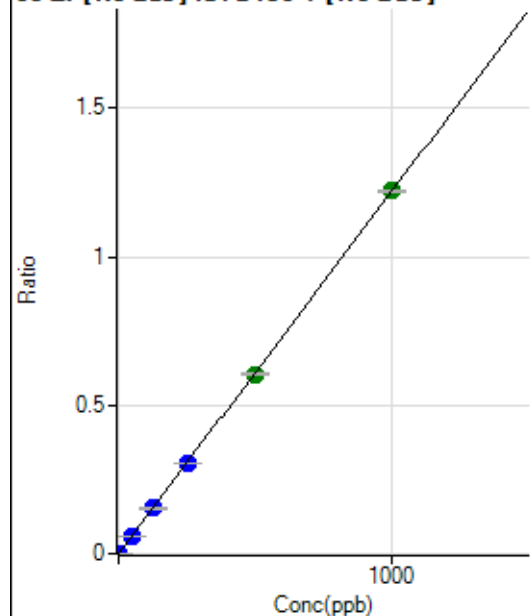
$$DL = 0.002091$$

$$BEC = 0.004245$$

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	850.06	0.0001	P	3.6
2	☐	0.100					
3	☐	1.000	0.951	14791.55	0.0012	P	2.8
4	☐	50.000	49.750	735341.90	0.0607	P	1.3
5	☐	125.000	124.808	1883786.22	0.1522	P	0.5
6	☐	250.000	248.997	3672957.50	0.3036	P	0.6
7	☐	500.000	496.147	6906516.30	0.6048	A	0.3
8	☐	1000.000	1002.214	13856183.99	1.2216	A	0.3
9	☐			4398.09	0.0004	P	8.5

$$y = 0.0012 * x + 6.8664E-005$$

$$R = 1.0000$$

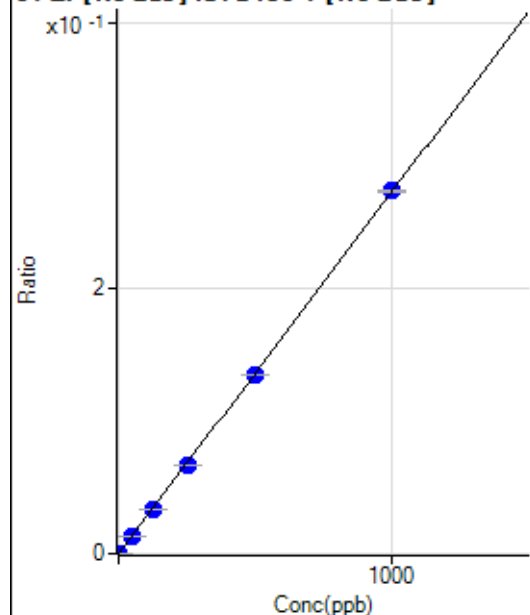
$$DL = 0.006015$$

$$BEC = 0.05633$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	169.45	0.0000	P	15.8
2	☐	0.100					
3	☐	1.000	0.964	3322.76	0.0003	P	5.0
4	☐	50.000	49.582	163603.41	0.0135	P	2.7
5	☐	125.000	123.269	415443.36	0.0336	P	0.4
6	☐	250.000	244.326	804764.94	0.0665	P	0.8
7	☐	500.000	494.852	1538222.01	0.1347	P	0.8
8	☐	1000.000	1004.230	3100303.61	0.2733	P	0.6
9	☐			966.74	0.0001	P	10.8

$$y = 2.7217\text{E-}004 * x + 1.3688\text{E-}005$$

$$R = 1.0000$$

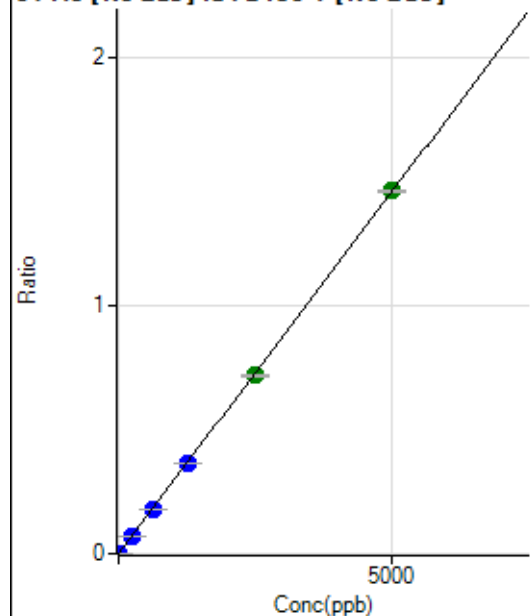
$$DL = 0.02379$$

$$BEC = 0.05029$$

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	291.68	0.0000	P	20.3
2	☐	0.500					
3	☐	5.000	4.631	16526.92	0.0014	P	1.3
4	☐	250.000	247.073	871851.14	0.0720	P	2.0
5	☐	625.000	621.607	2241190.91	0.1811	P	0.3
6	☐	1250.000	1247.403	4396289.16	0.3633	P	0.3
7	☐	2500.000	2465.854	8201548.27	0.7182	A	0.7
8	☐	5000.000	5018.293	16578012.69	1.4616	A	0.5
9	☐			18690.77	0.0016	P	3.4

$$y = 2.9125\text{E-}004 * x + 2.3571\text{E-}005$$

$$R = 1.0000$$

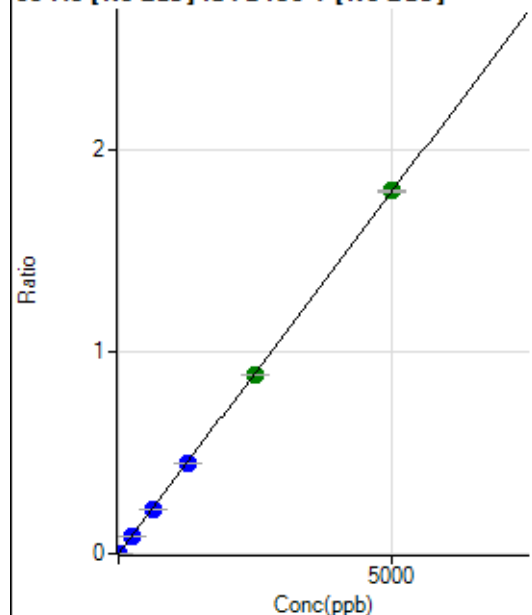
$$DL = 0.04925$$

$$BEC = 0.08093$$

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	41.67	0.0000	P	35.1
2	☐	0.500					
3	☐	5.000	4.750	20573.87	0.0017	P	1.2
4	☐	250.000	247.084	1074315.68	0.0887	P	1.9
5	☐	625.000	622.555	2766173.89	0.2235	P	0.1
6	☐	1250.000	1247.672	5419236.71	0.4479	P	0.5
7	☐	2500.000	2468.855	10120646.84	0.8863	A	0.2
8	☐	5000.000	5016.606	20425324.07	1.8008	A	0.5
9	☐			29005.31	0.0025	P	4.7

$$y = 3.5897\text{E-}004 * x + 3.3687\text{E-}006$$

$$R = 1.0000$$

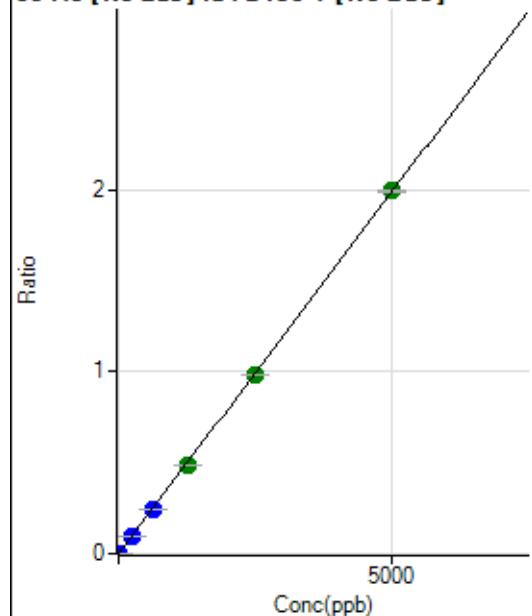
$$DL = 0.00987$$

$$BEC = 0.009384$$

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	125.00	0.0000	P	30.9
2	☐	0.500					
3	☐	5.000	4.558	21920.46	0.0018	P	1.6
4	☐	250.000	246.180	1184180.41	0.0978	P	1.7
5	☐	625.000	622.515	3059877.70	0.2472	P	0.3
6	☐	1250.000	1223.373	5878222.74	0.4858	A	0.4
7	☐	2500.000	2475.587	11225951.46	0.9831	A	0.6
8	☐	5000.000	5019.365	22607435.23	1.9932	A	0.3
9	☐			35511.90	0.0031	P	3.3

$$y = 3.9710\text{E-}004 * x + 1.0106\text{E-}005$$

$$R = 1.0000$$

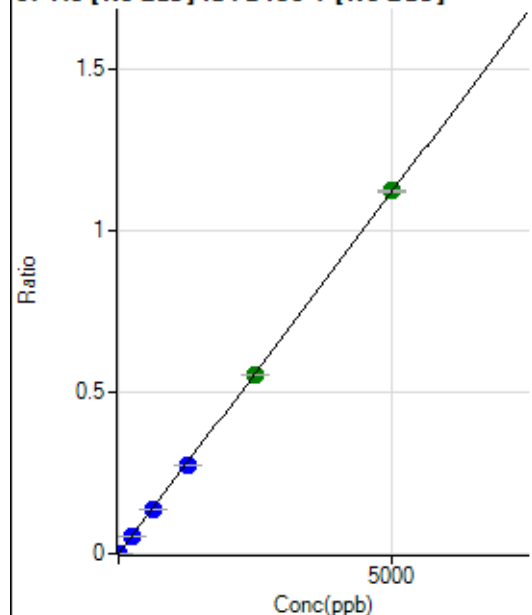
$$DL = 0.02362$$

$$BEC = 0.02545$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	52.78	0.0000	P	48.1
2	☐	0.500					
3	☐	5.000	4.532	12283.56	0.0010	P	1.9
4	☐	250.000	244.727	664378.45	0.0549	P	1.6
5	☐	625.000	619.078	1717350.49	0.1387	P	0.3
6	☐	1250.000	1231.386	3339154.94	0.2760	P	0.5
7	☐	2500.000	2470.661	6322928.05	0.5537	A	0.5
8	☐	5000.000	5020.328	12761295.34	1.1251	A	0.3
9	☐			18220.69	0.0016	P	3.1

$$y = 2.2411\text{E-}004 * x + 4.2595\text{E-}006$$

$$R = 1.0000$$

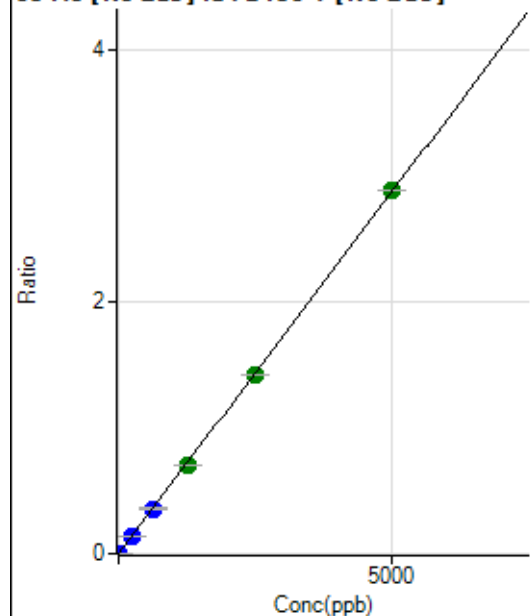
$$DL = 0.02741$$

$$BEC = 0.01901$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	83.34	0.0000	P	10.1
2	☐	0.500					
3	☐	5.000	4.655	32276.36	0.0027	P	1.5
4	☐	250.000	246.893	1717458.00	0.1418	P	1.8
5	☐	625.000	623.849	4434692.98	0.3583	P	0.5
6	☐	1250.000	1227.164	8527469.90	0.7048	A	0.6
7	☐	2500.000	2473.810	16223840.12	1.4207	A	0.4
8	☐	5000.000	5019.104	32694331.63	2.8825	A	0.2
9	☐			46145.08	0.0040	P	1.3

$$y = 5.7431\text{E-}004 * x + 6.7326\text{E-}006$$

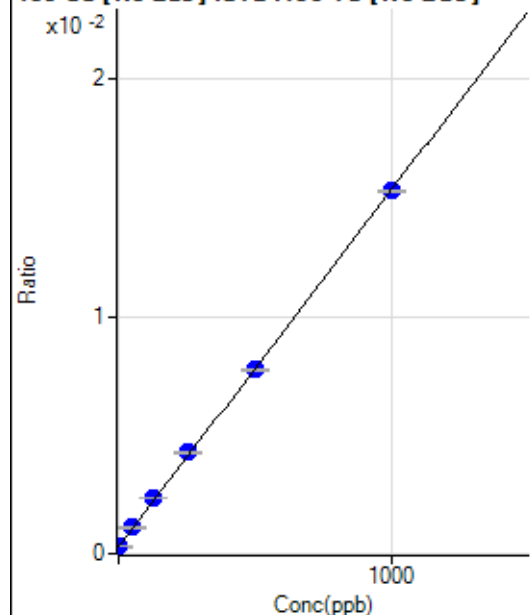
$$R = 1.0000$$

$$DL = 0.00355$$

$$BEC = 0.01172$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	4070.22	0.0003	P	4.0
2	☐	0.100					
3	☐	1.000	1.310	4217.48	0.0003	P	4.1
4	☐	50.000	54.730	15620.40	0.0011	P	3.5
5	☐	125.000	136.348	34019.62	0.0023	P	1.6
6	☐	250.000	263.873	62418.70	0.0043	P	1.2
7	☐	500.000	496.079	113084.45	0.0078	P	1.6
8	☐	1000.000	996.837	223342.00	0.0153	P	0.6
9	☐			3722.90	0.0003	P	3.9

$$y = 1.5064\text{E-}005 * x + 2.8583\text{E-}004$$

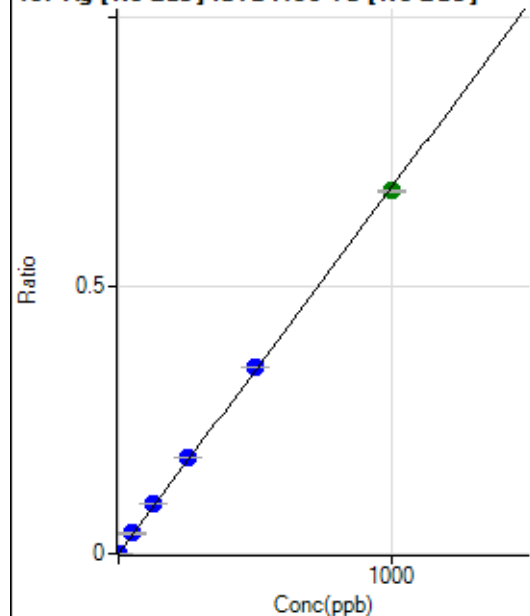
$$R = 0.9998$$

$$DL = 2.252$$

$$BEC = 18.97$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	105.56	0.0000	P	20.4
2	☐	0.100					
3	☐	1.000	1.058	10084.59	0.0007	P	1.7
4	☐	50.000	55.359	532416.55	0.0378	P	0.9
5	☐	125.000	136.272	1354052.26	0.0931	P	1.3
6	☐	250.000	263.081	2633630.09	0.1798	P	0.4
7	☐	500.000	508.274	5062254.63	0.3473	P	0.5
8	☐	1000.000	990.916	9883473.92	0.6772	A	0.2
9	☐			1011.19	0.0001	P	12.6

$$y = 6.8335\text{E-}004 * x + 7.4204\text{E-}006$$

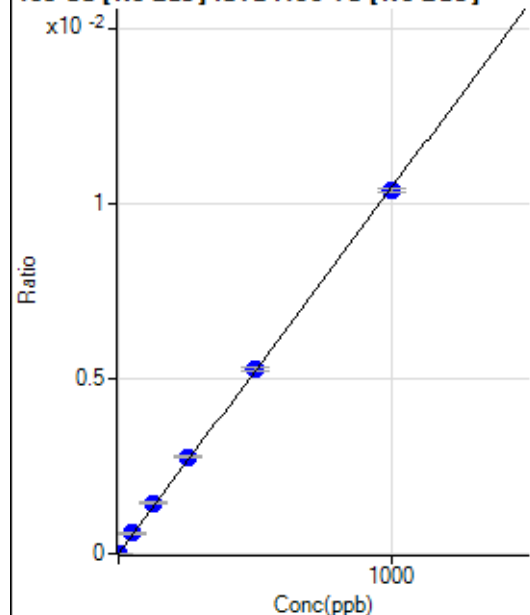
$$R = 0.9998$$

$$DL = 0.006643$$

$$BEC = 0.01086$$

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	11.11	0.0000	P	78.5
2	☐	0.100					
3	☐	1.000	1.024	158.34	0.0000	P	6.7
4	☐	50.000	55.851	8220.59	0.0006	P	2.7
5	☐	125.000	138.745	21078.52	0.0014	P	1.1
6	☐	250.000	264.668	40501.12	0.0028	P	1.1
7	☐	500.000	505.390	76934.06	0.0053	P	1.5
8	☐	1000.000	991.627	151154.67	0.0104	P	0.9
9	☐			37.50	0.0000	P	44.2

$$y = 1.0443\text{E-}005 * x + 7.8154\text{E-}007$$

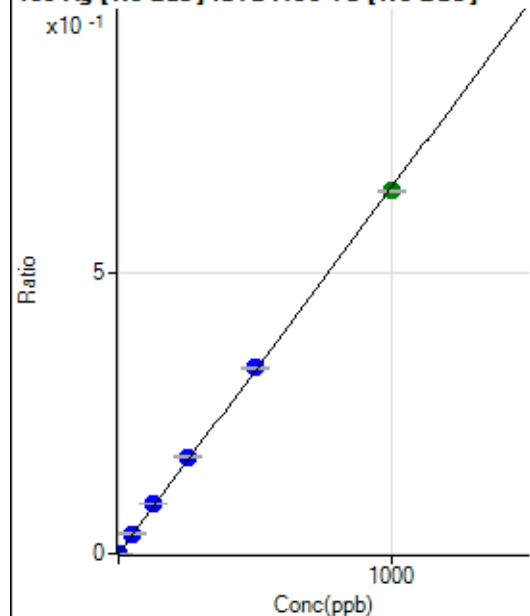
$$R = 0.9998$$

$$DL = 0.1763$$

$$BEC = 0.07484$$

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	83.34	0.0000	P	19.4
2	☐	0.100					
3	☐	1.000	1.061	9623.08	0.0007	P	1.2
4	☐	50.000	55.111	505230.51	0.0359	P	1.7
5	☐	125.000	136.567	1293699.06	0.0890	P	0.7
6	☐	250.000	264.277	2522262.45	0.1722	P	0.8
7	☐	500.000	507.796	4821476.97	0.3308	P	0.4
8	☐	1000.000	990.831	9421415.49	0.6455	A	0.5
9	☐			966.75	0.0001	P	8.0

$$y = 6.5148\text{E-}004 * x + 5.8493\text{E-}006$$

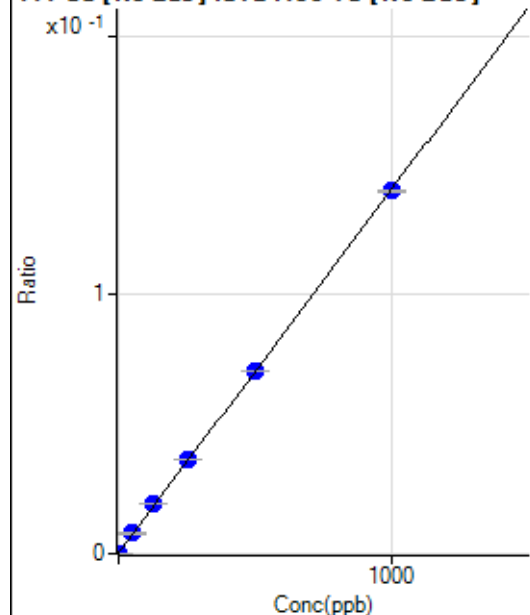
$$R = 0.9998$$

$$DL = 0.00523$$

$$BEC = 0.008979$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	2849.71	0.0002	P	4.4
2	☐	0.100					
3	☐	1.000	1.011	4723.51	0.0003	P	0.7
4	☐	50.000	54.270	110098.58	0.0078	P	1.2
5	☐	125.000	134.319	277289.90	0.0191	P	1.1
6	☐	250.000	259.555	537118.97	0.0367	P	0.2
7	☐	500.000	500.103	1026918.47	0.0705	P	0.4
8	☐	1000.000	996.181	2045665.77	0.1402	P	0.6
9	☐			2850.62	0.0002	P	2.0

$$y = 1.4049\text{E-}004 * x + 2.0012\text{E-}004$$

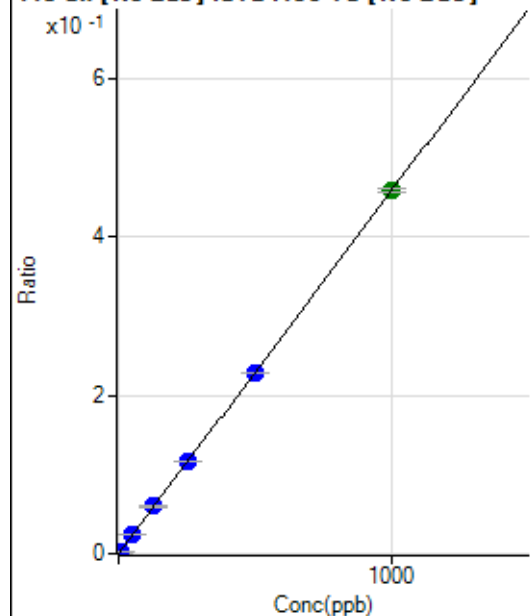
$$R = 0.9999$$

$$DL = 0.1871$$

$$BEC = 1.424$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	558.37	0.0000	P	6.7
2	☐	0.500					
3	☐	5.000	4.896	31469.38	0.0023	P	2.0
4	☐	50.000	52.279	337203.76	0.0240	P	1.2
5	☐	125.000	129.861	864702.73	0.0595	P	0.6
6	☐	250.000	253.194	1698028.95	0.1159	P	0.5
7	☐	500.000	497.438	3318509.90	0.2277	P	0.8
8	☐	1000.000	999.762	6678496.59	0.4576	A	1.0
9	☐			10679.48	0.0008	P	2.6

$$y = 4.5766\text{E-}004 * x + 3.9214\text{E-}005$$

$$R = 1.0000$$

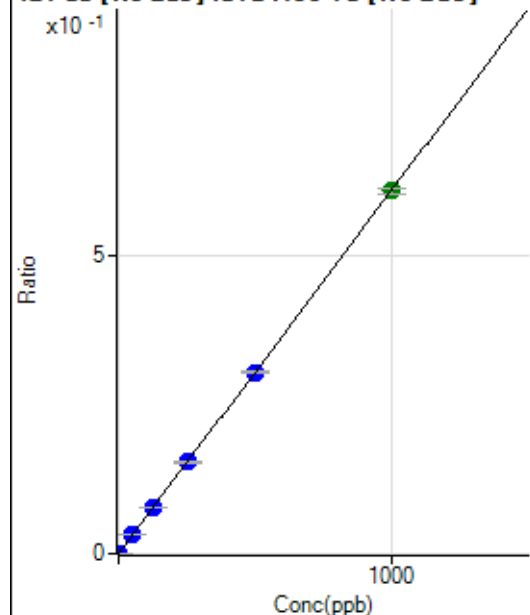
$$DL = 0.01714$$

$$BEC = 0.08569$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	38.89	0.0000	P	33.3
2	☐	0.200					
3	☐	2.000	1.909	16073.66	0.0012	P	3.1
4	☐	50.000	51.510	441179.78	0.0314	P	2.1
5	☐	125.000	128.832	1140293.80	0.0784	P	0.5
6	☐	250.000	252.144	2248430.26	0.1535	P	0.6
7	☐	500.000	499.999	4435865.25	0.3044	P	0.5
8	☐	1000.000	998.910	8874407.32	0.6081	A	1.3
9	☐			16980.38	0.0012	P	5.5

$$y = 6.0871\text{E-}004 * x + 2.7357\text{E-}006$$

$$R = 1.0000$$

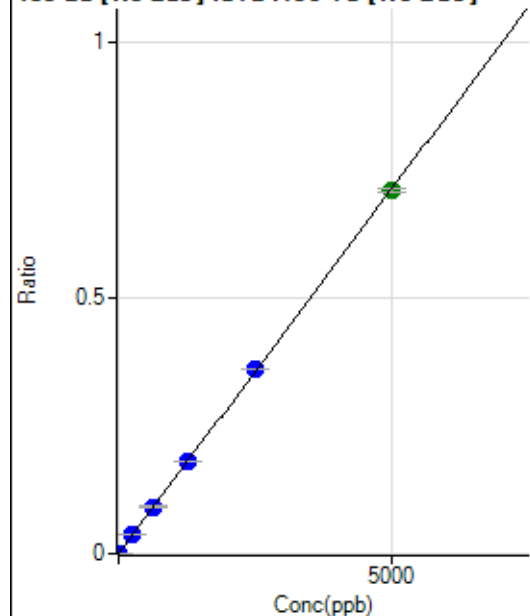
$$DL = 0.004488$$

$$BEC = 0.004494$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	75.00	0.0000	P	30.0
2	☐	1.000					
3	☐	10.000	9.769	19297.49	0.0014	P	0.9
4	☐	250.000	257.800	517264.78	0.0368	P	1.5
5	☐	625.000	645.641	1338568.27	0.0921	P	1.1
6	☐	1250.000	1267.725	2647939.38	0.1808	P	0.4
7	☐	2500.000	2529.836	5257267.00	0.3607	P	0.3
8	☐	5000.000	4977.681	10358798.49	0.7097	A	0.9
9	☐			3306.10	0.0002	P	4.2

$$y = 1.4258\text{E-}004 * x + 5.2754\text{E-}006$$

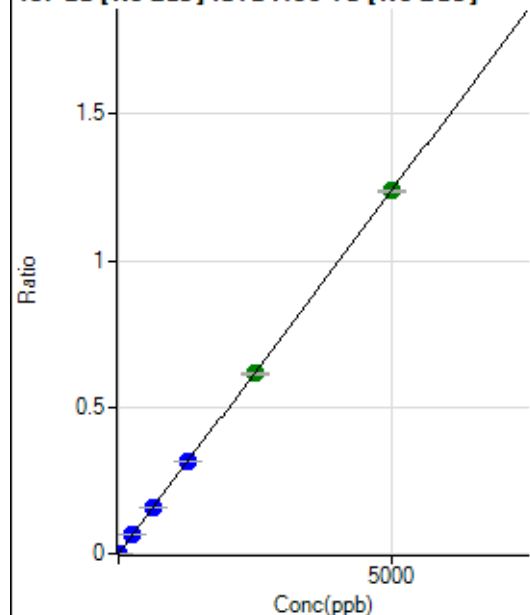
$$R = 1.0000$$

$$DL = 0.03326$$

$$BEC = 0.037$$

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	116.67	0.0000	P	22.0
2	☐	1.000					
3	☐	10.000	9.657	33132.12	0.0024	P	1.3
4	☐	250.000	257.672	898233.66	0.0638	P	1.7
5	☐	625.000	645.644	2325738.94	0.1600	P	0.6
6	☐	1250.000	1277.737	4636976.14	0.3165	P	0.4
7	☐	2500.000	2481.836	8960864.43	0.6148	A	0.5
8	☐	5000.000	4999.184	18075795.02	1.2385	A	0.7
9	☐			5693.08	0.0004	P	4.0

$$y = 2.4773E-004 * x + 8.2023E-006$$

$$R = 1.0000$$

$$DL = 0.02189$$

$$BEC = 0.03311$$

Weight: <None>

Min Conc: 0

150 Nd [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			4.44		P	173.
2	☐						
3	☐			2.22		P	173.
4	☐			37.78		P	20.4
5	☐			97.78		P	15.7
6	☐			162.23		P	42.0
7	☐			382.24		P	5.3
8	☐			697.82		P	15.2
9	☐			100.01		P	41.6

150 Nd [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			0.00		P	
2	☐						
3	☐			1.11		P	173.
4	☐			7.78		P	99.0
5	☐			20.00		P	57.7
6	☐			12.22		P	56.8
7	☐			38.89		P	13.1
8	☐			134.45		P	15.1
9	☐			38.89		P	57.1

156 Dy [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			5.55		P	86.6
2	☐						
3	☐			13.89		P	173.
4	☐			22.22		P	21.6
5	☐			36.11		P	58.1
6	☐			50.00		P	60.1
7	☐			83.34		P	17.3
8	☐			213.90		P	21.5
9	☐			102.78		P	18.7

156 Dy [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			6.67		P	100.
2	☐						
3	☐			1.11		P	173.
4	☐			14.45		P	48.0
5	☐			18.89		P	27.0
6	☐			45.56		P	18.4
7	☐			77.78		P	2.5
8	☐			151.11		P	14.2
9	☐			31.11		P	16.4

160 Gd [No Gas] Noavailable calibration poin_

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			102.78		P	9.4
2	☐						
3	☐			91.67		P	41.7
4	☐			100.00		P	14.4
5	☐			122.23		P	33.6
6	☐			91.67		P	41.7
7	☐			108.34		P	33.5
8	☐			141.68		P	17.6
9	☐			202.79		P	16.6

160 Gd [He] No available calibration points

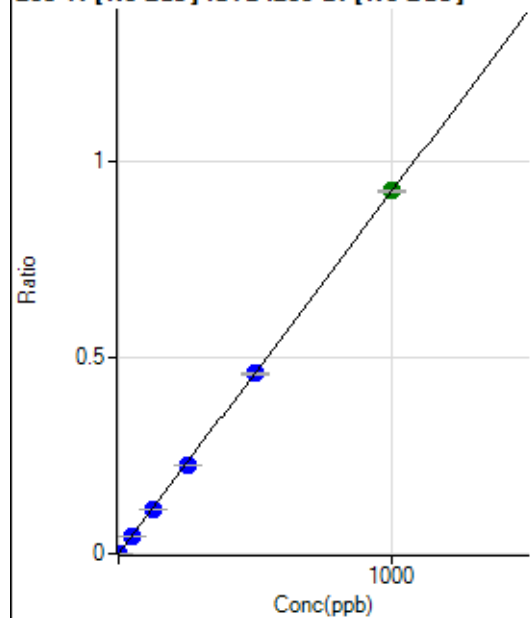
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			150.00		P	3.8
2	☐						
3	☐			151.11		P	9.2
4	☐			167.78		P	19.3
5	☐			153.34		P	2.2
6	☐			175.56		P	4.4
7	☐			172.23		P	7.3
8	☐			218.90		P	11.4
9	☐			197.78		P	10.2

164 Er [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			33.33		P	50.0
2	☐						
3	☐			58.34		P	62.3
4	☐			52.78		P	9.1
5	☐			55.56		P	45.8
6	☐			52.78		P	45.6
7	☐			61.11		P	67.3
8	☐			122.23		P	33.6
9	☐			58.34		P	37.8

164 Er [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			20.00		P	28.9
2	☐						
3	☐			36.67		P	18.2
4	☐			25.56		P	49.4
5	☐			41.11		P	12.4
6	☐			20.00		P	0.0
7	☐			30.00		P	19.2
8	☐			38.89		P	34.6
9	☐			32.22		P	39.2

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	66.67	0.0000	P	32.5
2	☐	0.100					
3	☐	1.000	0.946	7641.46	0.0009	P	3.5
4	☐	50.000	48.295	392508.73	0.0445	P	1.7
5	☐	125.000	122.486	1026097.93	0.1130	P	0.3
6	☐	250.000	244.965	2062493.79	0.2259	P	1.0
7	☐	500.000	497.479	4166546.79	0.4587	P	1.0
8	☐	1000.000	1002.919	8310892.11	0.9248	A	0.3
9	☐			2919.89	0.0004	P	4.4

$$y = 9.2211\text{E-}004 * x + 7.3461\text{E-}006$$

$$R = 1.0000$$

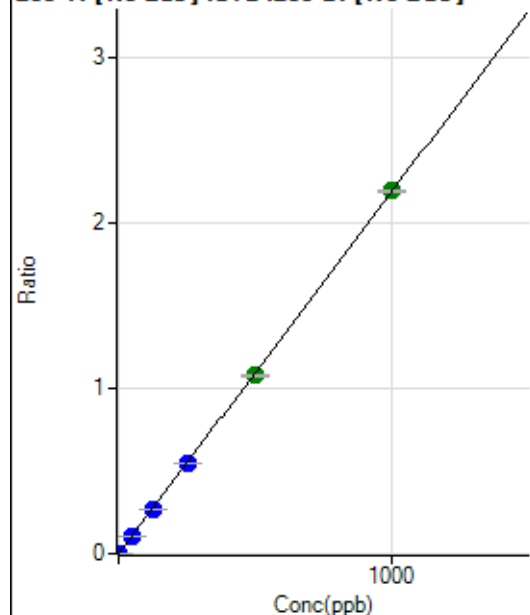
$$DL = 0.007775$$

$$BEC = 0.007967$$

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	205.57	0.0000	P	18.6
2	☐	0.100					
3	☐	1.000	0.916	17590.07	0.0020	P	0.8
4	☐	50.000	48.722	939066.18	0.1066	P	1.7
5	☐	125.000	123.877	2460939.94	0.2709	P	0.7
6	☐	250.000	249.183	4975326.11	0.5449	P	0.5
7	☐	500.000	494.192	9815185.46	1.0807	A	1.2
8	☐	1000.000	1003.312	19716220.06	2.1940	A	0.2
9	☐			6932.67	0.0008	P	2.6

$$y = 0.0022 * x + 2.2661E-005$$

$$R = 1.0000$$

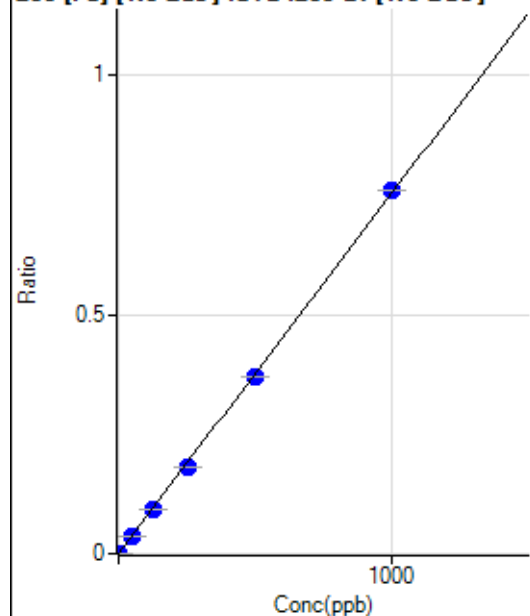
$$DL = 0.005798$$

$$BEC = 0.01036$$

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	316.68	0.0000	P	19.8
2	☐	0.100					
3	☐	1.000	0.913	6275.73	0.0007	P	0.5
4	☐	50.000	48.154	319904.75	0.0363	P	1.1
5	☐	125.000	120.951	827774.14	0.0911	P	0.1
6	☐	250.000	241.303	1659486.47	0.1818	P	1.2
7	☐	500.000	491.126	3359583.79	0.3699	P	1.0
8	☐	1000.000	1007.210	6816697.66	0.7585	P	0.1
9	☐			14267.25	0.0017	P	0.6

$$y = 7.5308E-004 * x + 3.4955E-005$$

$$R = 0.9999$$

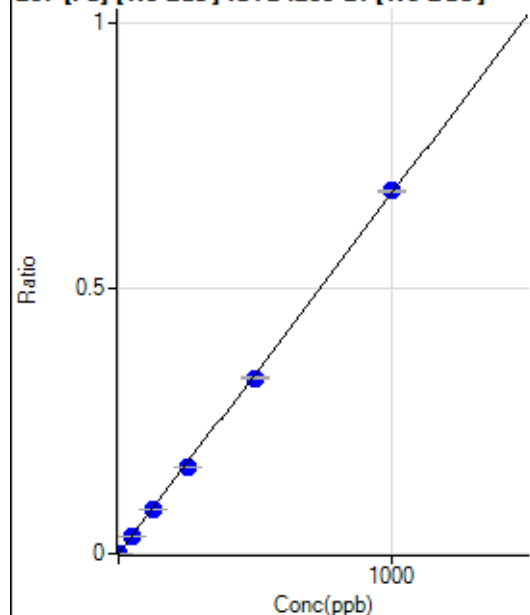
$$DL = 0.02764$$

$$BEC = 0.04642$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	235.20	0.0000	P	24.7
2	☐	0.100					
3	☐	1.000	0.915	5614.31	0.0006	P	4.6
4	☐	50.000	47.997	286900.74	0.0326	P	1.3
5	☐	125.000	120.458	741864.61	0.0817	P	0.1
6	☐	250.000	241.664	1495654.56	0.1638	P	0.6
7	☐	500.000	488.702	3008531.03	0.3312	P	0.9
8	☐	1000.000	1008.401	6141806.73	0.6834	P	0.7
9	☐			11924.15	0.0015	P	2.5

$$y = 6.7773\text{E-}004 * x + 2.5950\text{E-}005$$

$$R = 0.9999$$

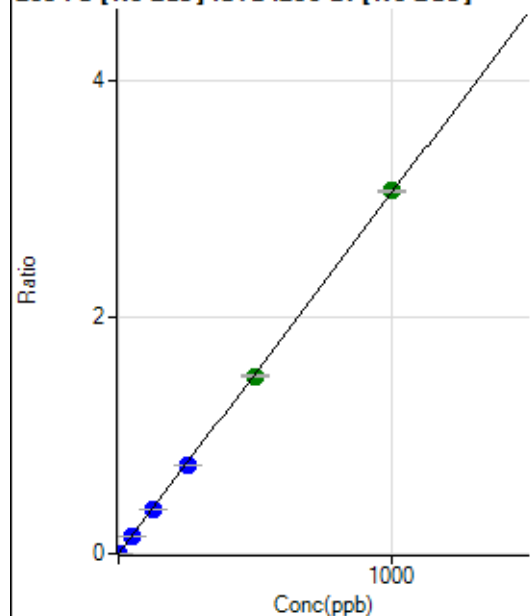
$$DL = 0.02842$$

$$BEC = 0.03829$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1233.40	0.0001	P	6.9
2	☐	0.100					
3	☐	1.000	0.916	25447.31	0.0029	P	1.2
4	☐	50.000	48.348	1300474.23	0.1476	P	1.3
5	☐	125.000	121.598	3369678.02	0.3709	P	0.3
6	☐	250.000	243.878	6791370.86	0.7438	P	0.6
7	☐	500.000	491.685	13619430.83	1.4995	A	0.7
8	☐	1000.000	1006.196	27574276.48	3.0684	A	0.6
9	☐			55993.86	0.0069	P	0.7

$$y = 0.0030 * x + 1.3608\text{E-}004$$

$$R = 0.9999$$

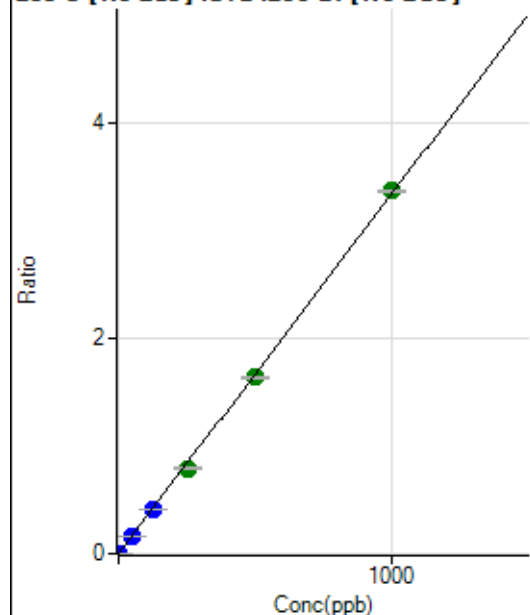
$$DL = 0.009263$$

$$BEC = 0.04462$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	63.89	0.0000	P	32.3
2	☐	0.100					
3	☐	1.000	0.884	25767.96	0.0030	P	0.9
4	☐	50.000	47.367	1396656.67	0.1585	P	1.4
5	☐	125.000	121.549	3694263.32	0.4067	P	0.4
6	☐	250.000	237.428	7252887.66	0.7944	A	0.5
7	☐	500.000	489.467	14874249.12	1.6376	A	0.4
8	☐	1000.000	1008.972	30335728.45	3.3757	A	0.2
9	☐			2347.55	0.0003	P	11.9

$$y = 0.0033 * x + 7.0387E-006$$

$$R = 0.9998$$

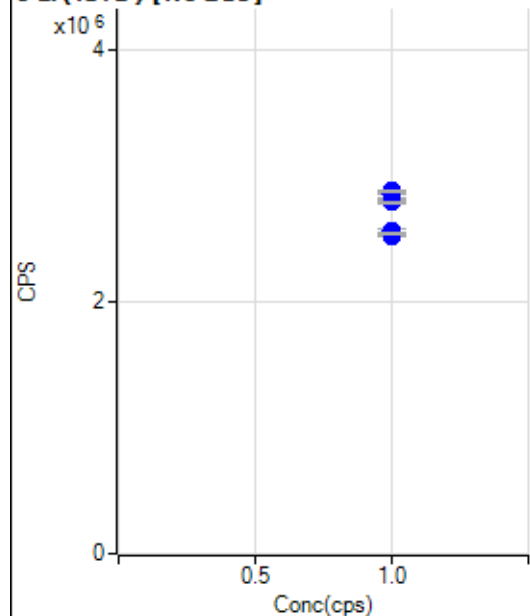
$$DL = 0.00204$$

$$BEC = 0.002104$$

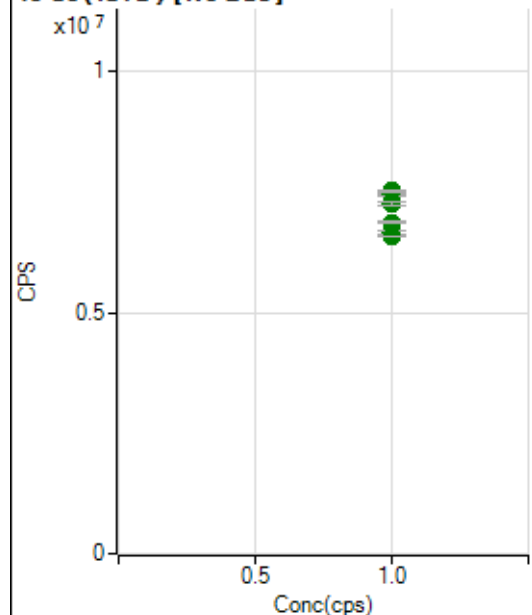
Weight: <None>

Min Conc: 0

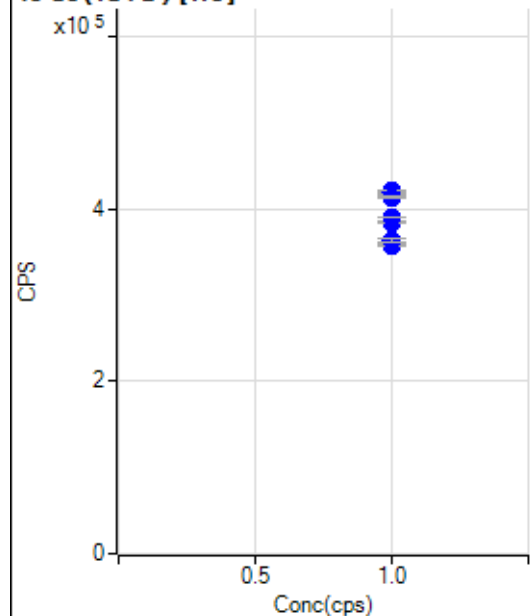
6 Li (ISTD) [No Gas]



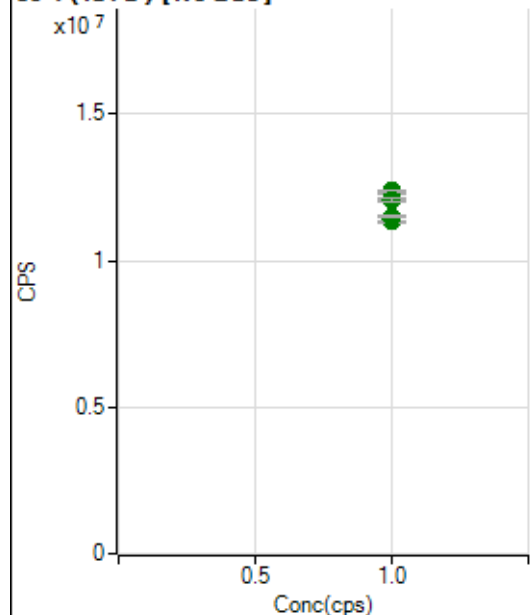
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2854817.46		P	0.3
2	☐	1.000					
3	☐	1.000		2801877.46		P	0.4
4	☐	1.000		2847810.65		P	1.8
5	☐	1.000		2877393.08		P	0.7
6	☐	1.000		2785373.64		P	0.7
7	☐	1.000		2567413.35		P	1.1
8	☐	1.000		2514925.80		P	0.3
9	☐	1.000		2541068.99		P	0.7

45 Sc (ISTD) [No Gas]

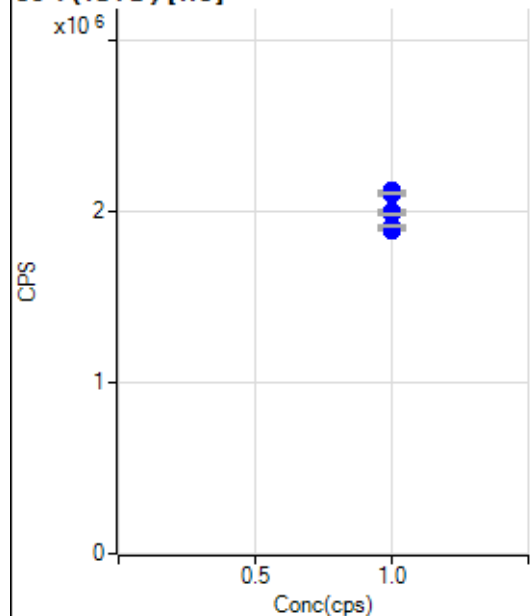
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		7517300.17		A	0.5
2	☐	1.000					
3	☐	1.000		7448173.69		A	0.5
4	☐	1.000		7465911.19		A	1.6
5	☐	1.000		7530944.53		A	0.4
6	☐	1.000		7253535.40		A	1.0
7	☐	1.000		6674389.34		A	1.0
8	☐	1.000		6590396.55		A	0.4
9	☐	1.000		6878583.75		A	0.4

45 Sc (ISTD) [He]

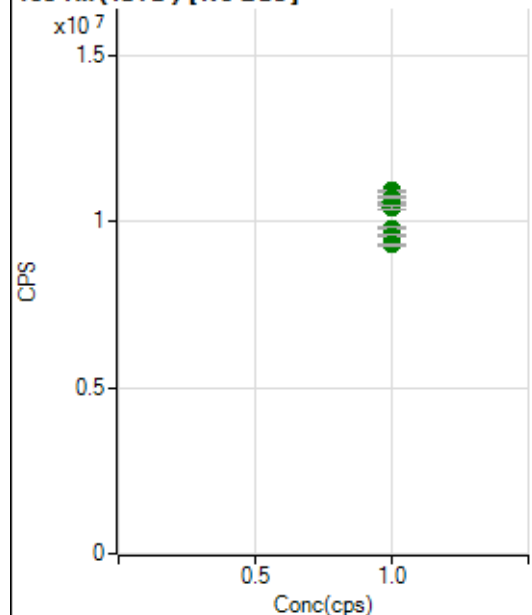
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		421416.27		P	0.8
2	☐	1.000					
3	☐	1.000		420371.64		P	0.8
4	☐	1.000		413786.83		P	0.2
5	☐	1.000		414066.51		P	0.1
6	☐	1.000		385202.12		P	0.4
7	☐	1.000		357602.72		P	0.5
8	☐	1.000		365028.67		P	1.1
9	☐	1.000		390963.63		P	0.4

89 Y (ISTD) [No Gas]

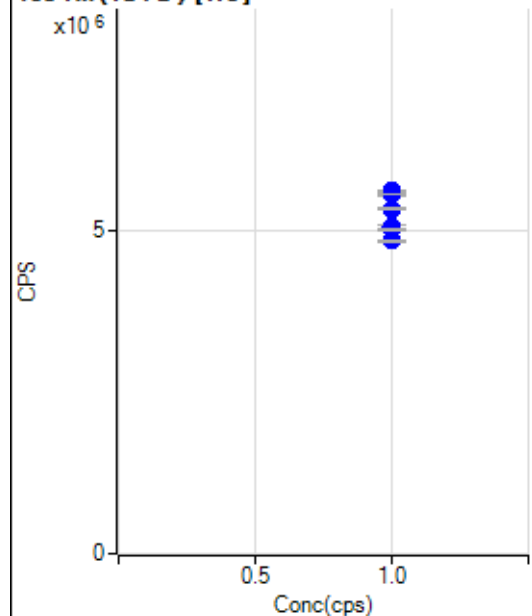
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		12379062.18		A	0.4
2	☐	1.000					
3	☐	1.000		12043599.68		A	0.6
4	☐	1.000		12115014.27		A	2.1
5	☐	1.000		12377548.57		A	0.3
6	☐	1.000		12100010.10		A	1.0
7	☐	1.000		11419578.30		A	0.8
8	☐	1.000		11342333.30		A	0.6
9	☐	1.000		11487299.83		A	0.5

89 Y (ISTD) [He]

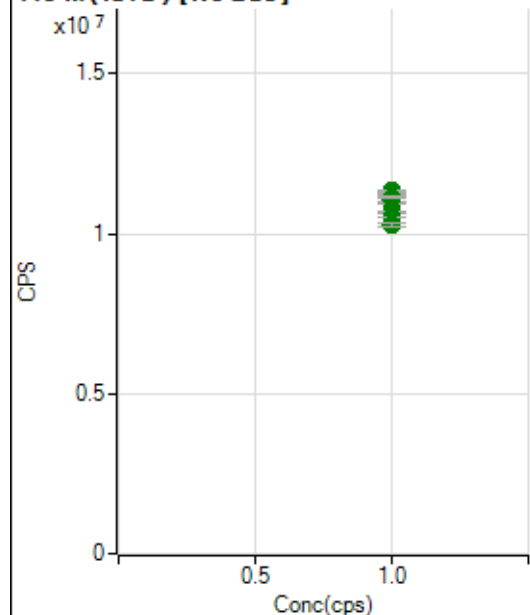
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2116085.40		P	0.2
2	☐	1.000					
3	☐	1.000		2117427.71		P	0.8
4	☐	1.000		2095016.29		P	0.2
5	☐	1.000		2101829.66		P	0.8
6	☐	1.000		2003263.88		P	0.5
7	☐	1.000		1890920.88		P	0.9
8	☐	1.000		1911007.71		P	0.9
9	☐	1.000		1984074.69		P	0.7

103 Rh (ISTD) [No Gas]

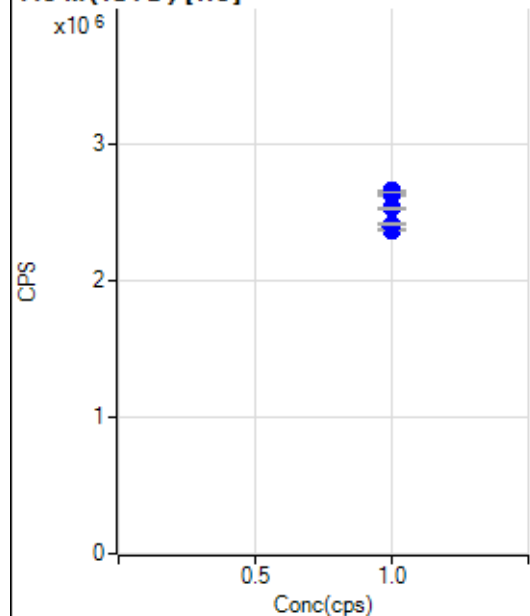
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		10909560.92		A	0.4
2	☐	1.000					
3	☐	1.000		10556434.44		A	0.5
4	☐	1.000		10610774.11		A	2.2
5	☐	1.000		10716649.46		A	0.6
6	☐	1.000		10409433.83		A	0.9
7	☐	1.000		9791892.84		A	0.7
8	☐	1.000		9564504.38		A	0.3
9	☐	1.000		9288315.74		A	0.6

103 Rh (ISTD) [He]

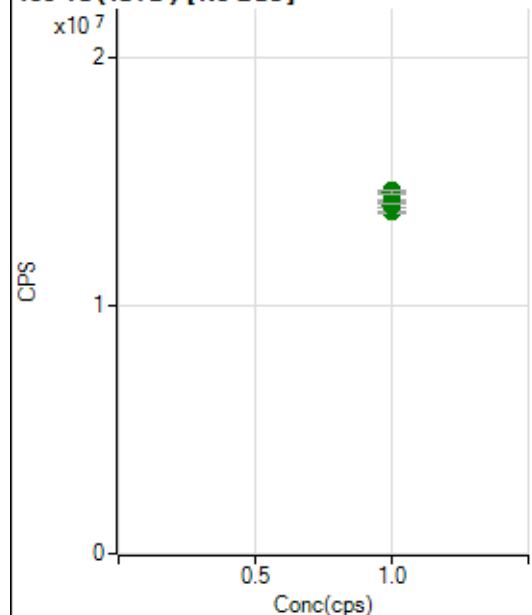
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		5623873.94		P	0.5
2	☐	1.000					
3	☐	1.000		5611957.69		P	0.7
4	☐	1.000		5564121.23		P	0.2
5	☐	1.000		5571794.36		P	0.4
6	☐	1.000		5339125.16		P	0.4
7	☐	1.000		5074295.44		P	0.9
8	☐	1.000		5030263.99		P	0.9
9	☐	1.000		4849367.18		P	0.5

115 In (ISTD) [No Gas]

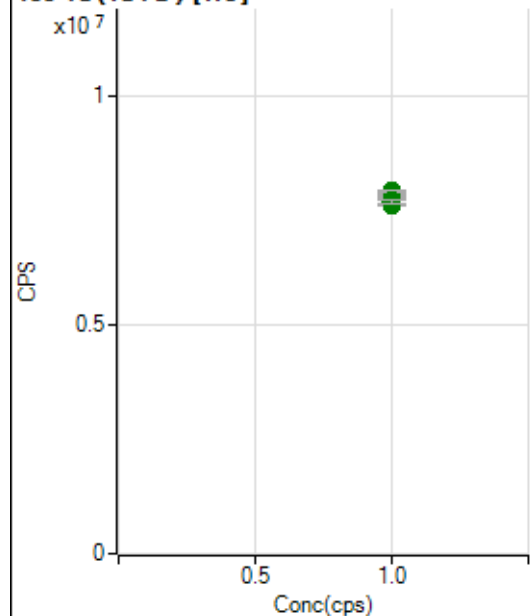
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		11325274.46		A	0.3
2	☐	1.000					
3	☐	1.000		10967279.04		A	1.0
4	☐	1.000		11075727.41		A	2.4
5	☐	1.000		11338592.57		A	0.4
6	☐	1.000		11145693.24		A	0.6
7	☐	1.000		10653741.20		A	0.6
8	☐	1.000		10516177.62		A	0.5
9	☐	1.000		10276457.71		A	0.9

115 In (ISTD) [He]

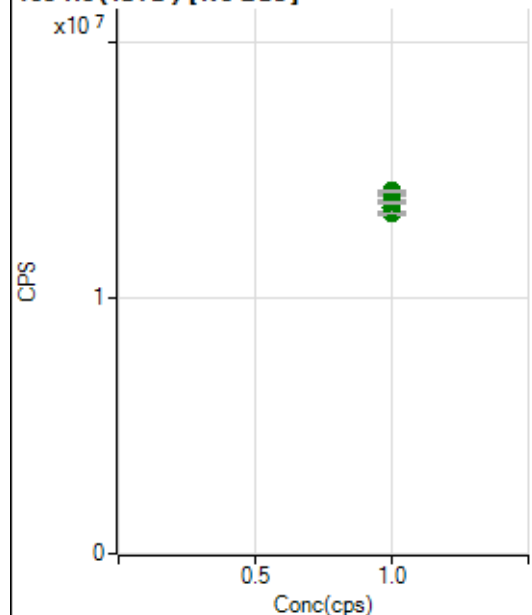
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2651065.52		P	0.9
2	☐	1.000					
3	☐	1.000		2653481.94		P	0.4
4	☐	1.000		2627537.21		P	0.4
5	☐	1.000		2640749.86		P	0.1
6	☐	1.000		2528610.26		P	0.6
7	☐	1.000		2387026.81		P	1.1
8	☐	1.000		2368887.28		P	0.8
9	☐	1.000		2407852.19		P	0.6

159 Tb (ISTD) [No Gas]

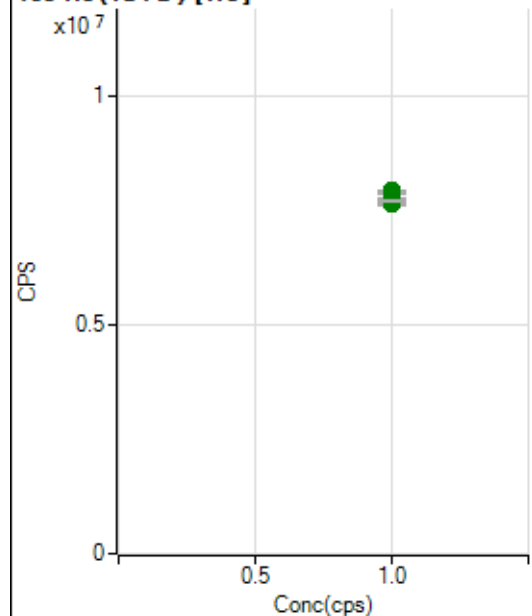
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		14237843.12		A	0.7
2	☐	1.000					
3	☐	1.000		13802159.10		A	0.3
4	☐	1.000		14072619.09		A	1.8
5	☐	1.000		14540313.26		A	0.7
6	☐	1.000		14648901.59		A	0.6
7	☐	1.000		14574338.81		A	0.4
8	☐	1.000		14595788.12		A	0.9
9	☐	1.000		14125658.26		A	0.4

159 Tb (ISTD) [He]

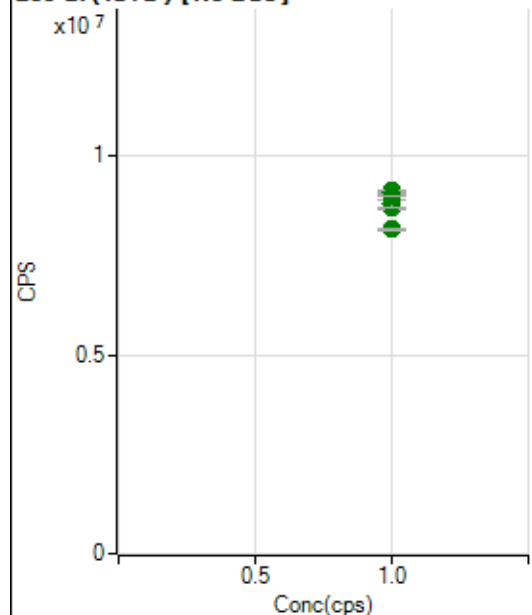
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		7876390.58		A	0.3
2	☐	1.000					
3	☐	1.000		7771779.74		A	0.8
4	☐	1.000		7740696.13		A	0.2
5	☐	1.000		7922913.56		A	0.3
6	☐	1.000		7738854.33		A	0.8
7	☐	1.000		7613755.02		A	0.6
8	☐	1.000		7629420.58		A	0.9
9	☐	1.000		7687549.75		A	0.8

165 Ho (ISTD) [No Gas]

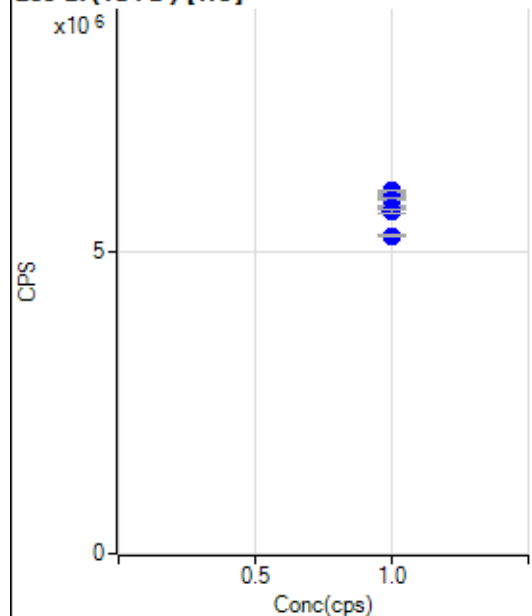
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		13819130.69		A	0.6
2	☐	1.000					
3	☐	1.000		13321681.90		A	0.9
4	☐	1.000		13509365.15		A	2.3
5	☐	1.000		14040446.67		A	0.7
6	☐	1.000		14181552.23		A	0.2
7	☐	1.000		14077467.33		A	0.6
8	☐	1.000		14191558.30		A	0.6
9	☐	1.000		13729482.25		A	0.4

165 Ho (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		7920918.63		A	0.2
2	☐	1.000					
3	☐	1.000		7698526.07		A	0.4
4	☐	1.000		7705182.46		A	0.3
5	☐	1.000		7857767.66		A	0.3
6	☐	1.000		7758420.30		A	0.7
7	☐	1.000		7624927.11		A	1.0
8	☐	1.000		7676775.23		A	0.5
9	☐	1.000		7703194.33		A	0.4

209 Bi (ISTD) [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		9066469.17		A	0.6
2	☐	1.000					
3	☐	1.000		8687335.42		A	0.7
4	☐	1.000		8814333.55		A	2.0
5	☐	1.000		9084390.91		A	0.7
6	☐	1.000		9130676.39		A	0.5
7	☐	1.000		9083066.11		A	1.0
8	☐	1.000		8986559.52		A	0.2
9	☐	1.000		8169360.37		A	0.5

209 Bi (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		5928708.32		P	0.7
2	☐	1.000					
3	☐	1.000		5899860.81		P	1.0
4	☐	1.000		5898050.67		P	0.8
5	☐	1.000		6000582.90		P	0.2
6	☐	1.000		5858126.16		P	0.7
7	☐	1.000		5740793.11		P	1.0
8	☐	1.000		5658346.51		P	1.0
9	☐	1.000		5262535.55		P	0.3

US EPA Tune Check Sample Report

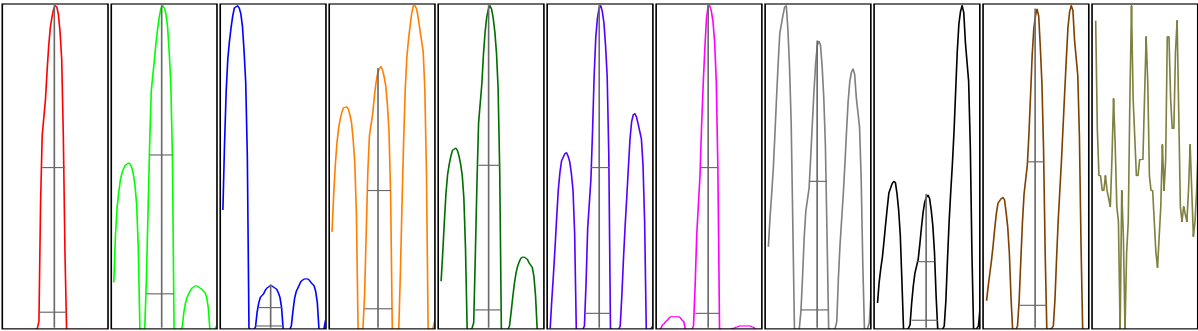
Batch Folder D:\ICP-MS Data\P7050218- MS.b
Report Comment
Instrument Name G8403A JP14410463

[No Gas]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
9	8026	1.14	5.00	
24	104237	0.95	5.00	
25	14075	0.76	5.00	
26	16603	0.90	5.00	
59	69255	0.75	5.00	
113	9836	1.15	5.00	
115	164044	0.94	5.00	
206	22322	0.94	5.00	
207	20475	0.75	5.00	
208	48499	0.66	5.00	
220	1	37.01		

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
9	7933	7936	8063	8148	8048
24	103525	102975	104302	105210	105173
25	13978	13951	14105	14139	14203
26	16477	16453	16578	16701	16805
59	68988	68694	69145	69377	70070
113	9745	9735	9783	9950	9967
115	163970	162261	162816	165367	165806
206	22266	22208	22069	22481	22587
207	20453	20244	20448	20631	20600
208	48430	48273	48160	48677	48954
220	0	0	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	13406	9.00	8.9 - 9.1		0.785	0.900	
24	165616	23.95	23.9 - 24.1		0.805	0.900	
25	22162	24.95	24.9 - 25.1		0.790	0.900	
26	25848	25.90	25.9 - 26.1		0.812	0.900	
59	115799	58.95	58.9 - 59.1		0.785	0.900	
113	18723	113.00	112.9 - 113.1		0.730	0.900	
115	315474	115.00	114.9 - 115.1		0.729	0.900	
206	43560	206.00	205.9 - 206.1		0.789	0.900	
207	39408	207.00	206.9 - 207.1		0.777	0.900	
208	95171	208.00	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
RF Power	1600	W	Carrier Gas	0.80	L/min	S/C Temp		2 °C
RF Matching	1.80	V	Option Gas	0.0	%	Gas Switch		Dilution Gas
Smpl Depth	9.0	mm	Nebulizer Pump	0.10	rpm	Makeup/Dilution Gas		0.37 L/min

Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	9.4	V	Deflect	15.0	V
Extract 2	-205.0	V	Cell Entrance	-30	V	Plate Bias	-35	V
Omega Bias	-100	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	200	V			

[He]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)
59	20318	0.70	
89	52048	0.55	
205	15966	0.48	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
59	20275	20494	20435	20154	20229
89	52106	52254	52379	51746	51753
205	15964	16073	15944	15861	15987

Integration Time [sec] = 0.1

Tune Parameters

Plasma Paramters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
RF Power	1600	W	Carrier Gas	0.80	L/min	S/C Temp		2 °C
RF Matching	1.80	V	Option Gas	0.0	%	Gas Switch		Dilution Gas
Smpl Depth	9.0	mm	Nebulizer Pump	0.10	rpm	Makeup/Dilution Gas		0.37 L/min

Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	8.8	V	Deflect	3.0	V
Extract 2	-205.0	V	Cell Entrance	-40	V	Plate Bias	-60	V
Omega Bias	-105	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	4.1	mL/min	OctP RF	200	V			