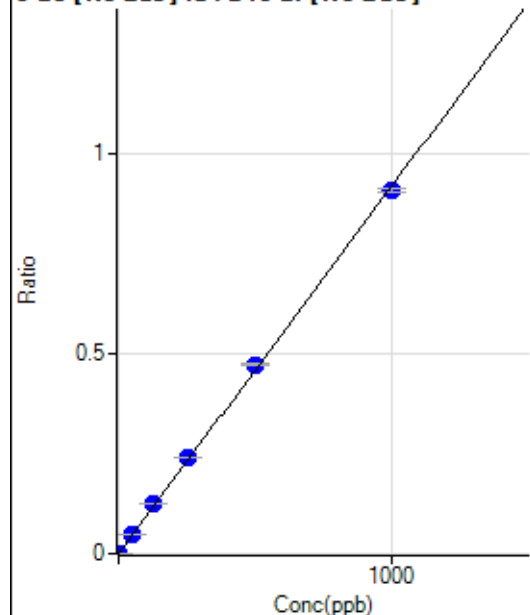


Calibration for 005CALB.d

Batch Folder: D:\Agilent\ICPMH\1\DATA\P8030320MS.b\
 Analysis File: P8030320MS.batch.bin
 DA Date-Time: 2020-03-03 13:34:16
 Calibration Title:
 Calibration Method: External Calibration
 VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	005CALB.d	S00	2020-03-03 12:20:41
2	006CALS.d	S02	2020-03-03 12:23:49
3	007CALS.d	S03	2020-03-03 12:26:55
4	008CALS.d	S04	2020-03-03 12:30:02
5	009CALS.d	S05	2020-03-03 12:33:04
6	010CALS.d	S06	2020-03-03 12:36:05
7	011CALS.d	S07	2020-03-03 12:39:03
8	012CALS.d	S08	2020-03-03 12:42:03

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	9.33	0.0000	P	65.2
2	☐	1.000	1.004	668.55	0.0009	P	4.1
3	☐	50.000	51.727	33710.29	0.0475	P	2.8
4	☐	125.000	135.015	89412.36	0.1240	P	2.1
5	☐	250.000	261.784	177229.73	0.2403	P	0.5
6	☐	500.000	515.403	361103.38	0.4731	P	0.4
7	☐	1000.000	988.014	657760.32	0.9070	P	1.1
8	☐			99.31	0.0001	P	19.4

$$y = 9.1797\text{E-}004 * x + 1.3051\text{E-}005$$

$$R = 0.9997$$

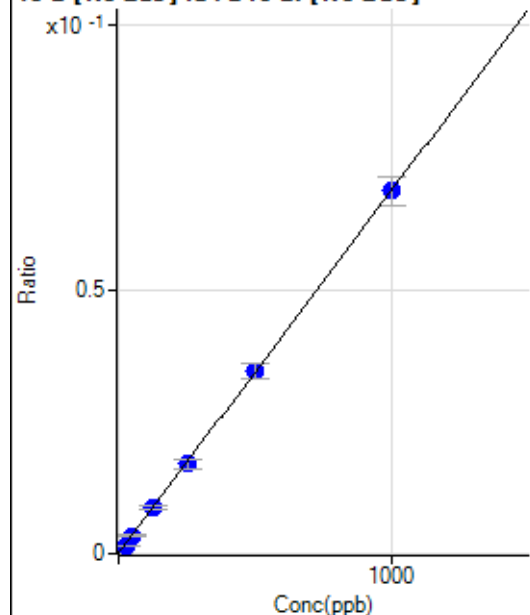
$$DL = 0.02783$$

$$BEC = 0.01422$$

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	46.66	0.0001	P	21.7
2	☐	25.000	21.246	1089.83	0.0015	P	13.7
3	☐	50.000	48.271	2397.07	0.0034	P	12.3
4	☐	125.000	124.889	6231.44	0.0086	P	9.7
5	☐	250.000	246.484	12520.21	0.0170	P	11.4
6	☐	500.000	503.991	26394.37	0.0347	P	8.8
7	☐	1000.000	999.078	49793.97	0.0687	P	7.8
8	☐			8409.44	0.0115	P	11.9

$$y = 6.8648\text{E-}005 * x + 6.5305\text{E-}005$$

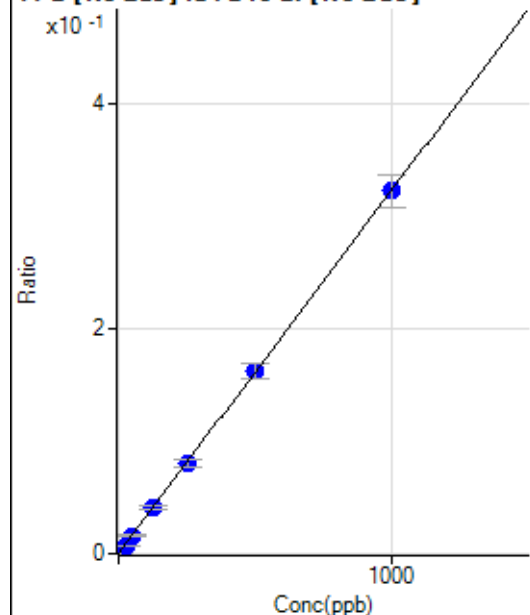
$$R = 1.0000$$

$$DL = 0.6189$$

$$BEC = 0.9513$$

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	184.63	0.0003	P	9.6
2	☐	25.000	21.570	5150.56	0.0072	P	9.8
3	☐	50.000	48.271	11206.09	0.0158	P	10.5
4	☐	125.000	126.294	29509.04	0.0409	P	10.4
5	☐	250.000	248.396	59126.64	0.0802	P	10.0
6	☐	500.000	502.717	123413.55	0.1621	P	8.5
7	☐	1000.000	999.053	233439.46	0.3218	P	8.9
8	☐			38912.59	0.0532	P	13.0

$$y = 3.2188\text{E-}004 * x + 2.5860\text{E-}004$$

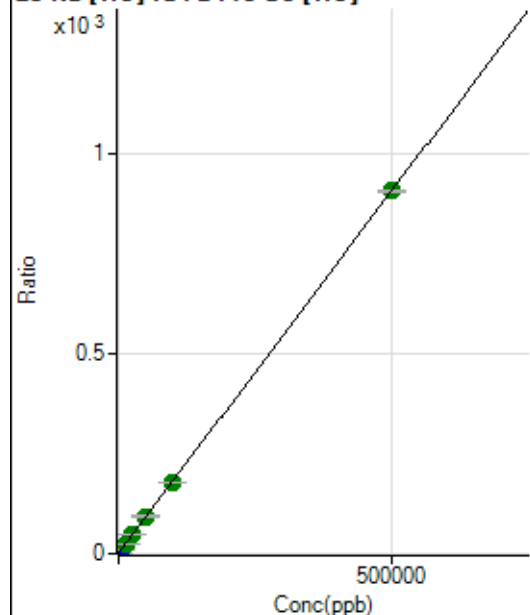
$$R = 1.0000$$

$$DL = 0.2324$$

$$BEC = 0.8034$$

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	55143.23	1.0435	P	0.9
2	☐	500.000	534.617	103874.01	2.0122	P	2.1
3	☐	5000.000	5113.709	537553.33	10.3099	P	2.1
4	☐	12500.000	12915.752	1312953.88	24.4478	A	1.9
5	☐	25000.000	26537.002	2546222.58	49.1306	A	3.2
6	☐	50000.000	50940.610	4772708.40	93.3519	A	1.9
7	☐	100000.00	97021.952	9215076.34	176.8550	A	0.9
8	☐	500000.00	500413.13	47949999.68	907.8321	A	0.9

$$y = 0.0018 * x + 1.0435$$

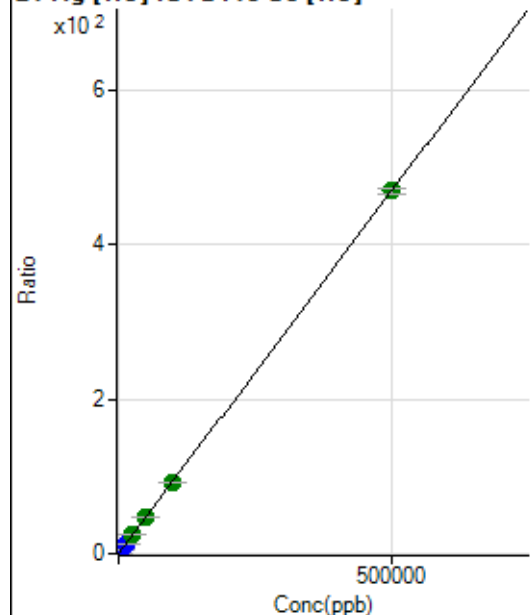
$$R = 1.0000$$

$$DL = 15.72$$

$$BEC = 575.8$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	150.00	0.0028	P	27.6
2	☐	500.000	527.818	25725.96	0.4983	P	1.8
3	☐	5000.000	5229.040	256089.47	4.9118	P	2.4
4	☐	12500.000	13165.982	663960.53	12.3629	P	1.5
5	☐	25000.000	26818.198	1305171.10	25.1795	A	2.3
6	☐	50000.000	51312.398	2463058.82	48.1744	A	1.1
7	☐	100000.00	97850.302	4786705.58	91.8637	A	0.4
8	☐	500000.00	500188.82	24801711.49	469.5750	A	1.3

$$y = 9.3879\text{E-}004 * x + 0.0028$$

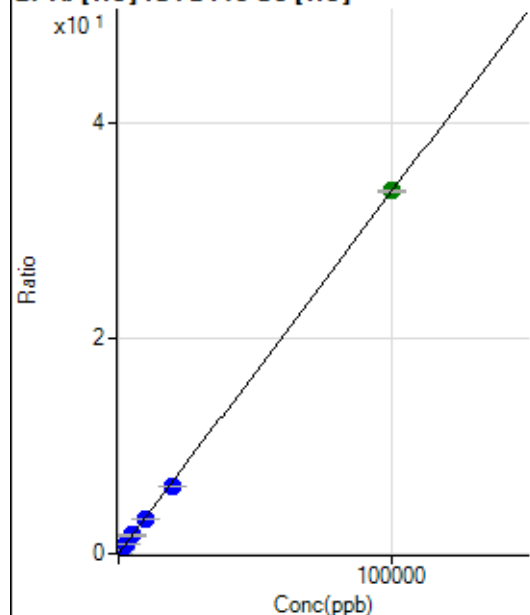
$$R = 1.0000$$

$$DL = 2.502$$

$$BEC = 3.023$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	317.78	0.0060	P	6.9
2	☐	20.000	19.853	655.58	0.0127	P	4.9
3	☐	1000.000	970.200	17332.60	0.3325	P	3.8
4	☐	2500.000	2462.396	44827.76	0.8346	P	0.7
5	☐	5000.000	5069.921	88744.03	1.7121	P	2.3
6	☐	10000.000	9785.378	168662.98	3.2989	P	0.5
7	☐	20000.000	18694.993	328108.12	6.2970	P	1.1
8	☐	100000.00	100280.20	1782717.23	33.7512	A	0.4

$$y = 3.3651\text{E-}004 * x + 0.0060$$

$$R = 0.9999$$

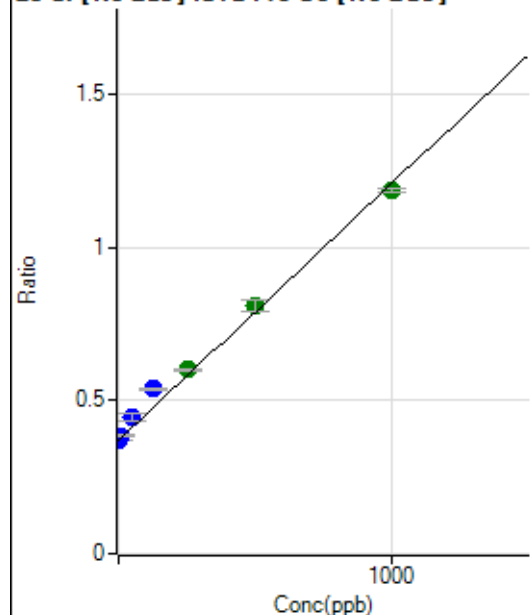
$$DL = 3.699$$

$$BEC = 17.87$$

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	570460.21	0.3702	P	0.9
2	☐	10.000	16.767	592019.57	0.3842	P	1.0
3	☐	50.000	90.545	678650.69	0.4461	P	4.7
4	☐	125.000	201.796	839088.48	0.5393	P	1.3
5	☐	250.000	273.660	944748.11	0.5996	A	0.7
6	☐	500.000	523.688	1314796.00	0.8092	A	4.9
7	☐	1000.000	970.547	1825836.15	1.1837	A	1.1
8	☐			688263.02	0.4291	P	1.4

$$y = 8.3825E-004 * x + 0.3702$$

$$R = 0.9967$$

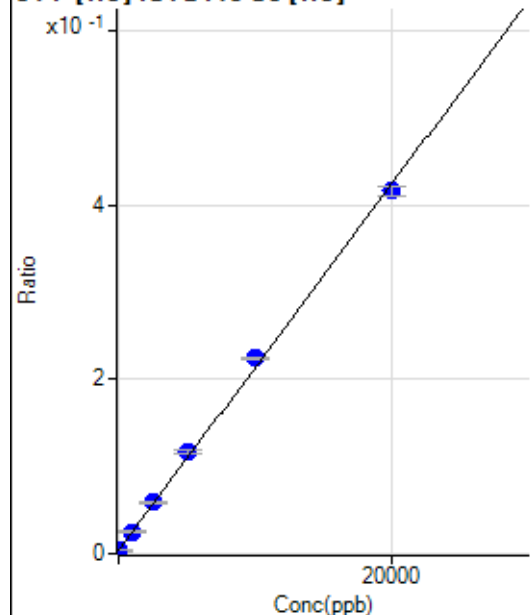
$$DL = 11.66$$

$$BEC = 441.6$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	-17.188	169.45	0.0032	P	13.0
2	☐	0.000	17.188	202.78	0.0039	P	7.2
3	☐	1000.000	1025.977	1308.43	0.0251	P	9.6
4	☐	2500.000	2617.910	3144.87	0.0585	P	6.3
5	☐	5000.000	5358.697	6015.28	0.1161	P	4.2
6	☐	10000.000	10511.450	11465.95	0.2242	P	1.4
7	☐	20000.000	19638.563	21666.59	0.4159	P	2.6
8	☐			161.12	0.0030	P	2.0

$$y = 2.0994E-005 * x + 0.0036$$

$$R = 0.9993$$

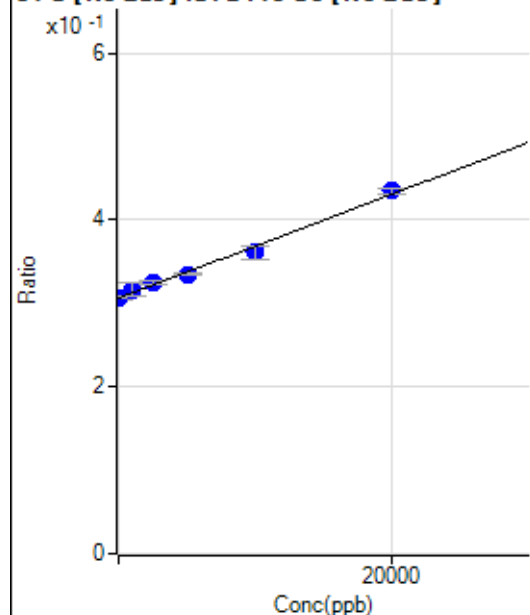
$$DL = 49.99$$

$$BEC = 170$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	-174.910	470750.48	0.3055	P	0.6
2	☐	0.000	174.910	474014.86	0.3077	P	1.3
3	☐	1000.000	1660.171	482129.08	0.3169	P	4.6
4	☐	2500.000	2799.581	504042.13	0.3240	P	1.4
5	☐	5000.000	4548.116	527639.68	0.3349	P	0.9
6	☐	10000.000	8811.964	587324.25	0.3614	P	4.3
7	☐	20000.000	20636.533	670854.53	0.4350	P	1.4
8	☐			459012.92	0.2861	P	1.1

$$y = 6.2215\text{E-}006 * x + 0.3066$$

$$R = 0.9960$$

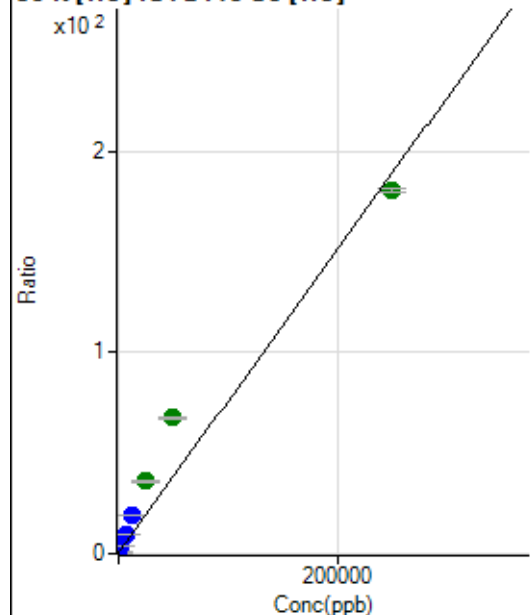
$$DL = 1376$$

$$BEC = 4.928\text{E}+04$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	19193.75	0.3631	P	2.1
2	☐	500.000	506.310	38440.76	0.7446	P	1.6
3	☐	2500.000	4745.910	205370.20	3.9387	P	1.8
4	☐	6250.000	11916.560	501672.36	9.3411	P	1.5
5	☐	12500.000	24681.193	982651.90	18.9579	P	2.3
6	☐	25000.000	47349.885	1842394.35	36.0365	A	1.4
7	☐	50000.000	89614.076	3536789.36	67.8782	A	1.4
8	☐	250000.00	239069.00	9532314.45	180.4773	A	0.9

$$y = 7.5340\text{E-}004 * x + 0.3631$$

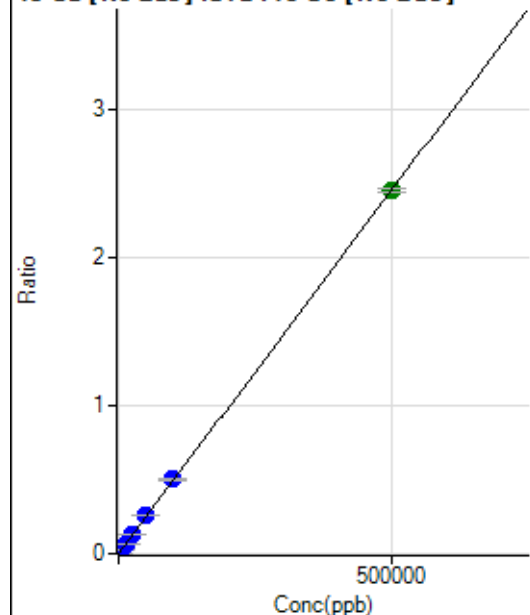
$$R = 0.9831$$

$$DL = 30.15$$

$$BEC = 482$$

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	333.35	0.0002	P	5.1
2	☐	500.000	535.977	4389.67	0.0028	P	5.3
3	☐	5000.000	5232.168	39454.51	0.0259	P	3.3
4	☐	12500.000	13226.499	101437.13	0.0652	P	1.4
5	☐	25000.000	26208.514	203240.32	0.1290	P	1.2
6	☐	50000.000	52580.129	420692.44	0.2586	P	1.5
7	☐	100000.00	102099.67	774018.95	0.5019	P	1.4
8	☐	500000.00	499241.10	3935053.26	2.4531	A	1.1

$$y = 4.9132\text{E-}006 * x + 2.1637\text{E-}004$$

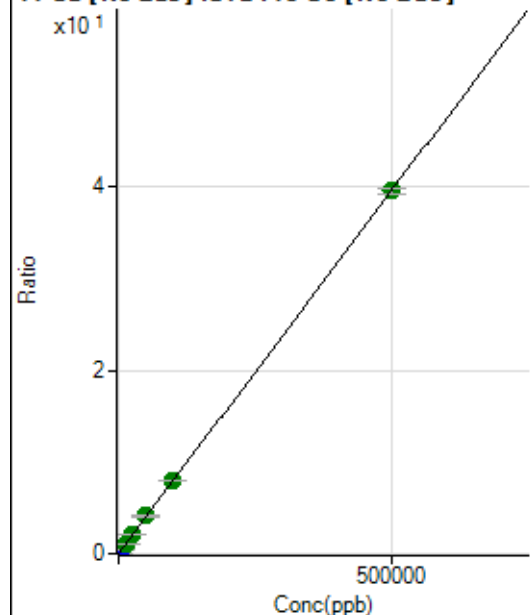
$$R = 1.0000$$

$$DL = 6.75$$

$$BEC = 44.04$$

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	28587.21	0.0186	P	1.2
2	☐	500.000	511.690	90909.13	0.0590	P	1.1
3	☐	5000.000	5282.744	663560.53	0.4362	P	4.8
4	☐	12500.000	13171.083	1648768.77	1.0598	A	1.6
5	☐	25000.000	25825.800	3246309.84	2.0602	A	0.5
6	☐	50000.000	51516.593	6655415.42	4.0912	A	2.1
7	☐	100000.00	99805.660	12198290.47	7.9088	A	1.1
8	☐	500000.00	499826.30	63416813.92	39.5328	A	1.3

$$y = 7.9056\text{E-}005 * x + 0.0186$$

$$R = 1.0000$$

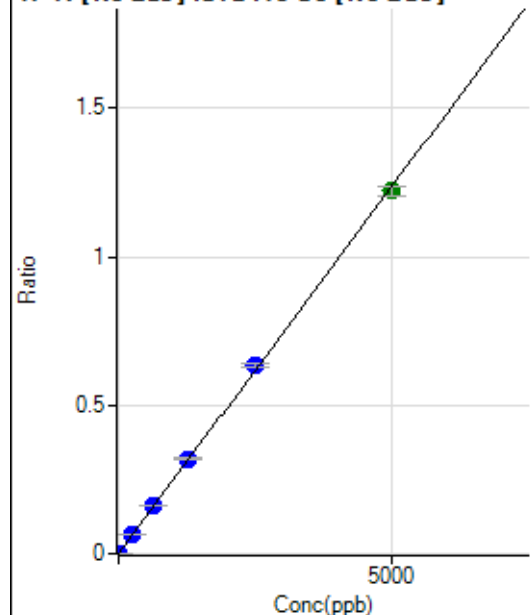
$$DL = 8.238$$

$$BEC = 234.7$$

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	436.13	0.0003	P	6.3
2	☐	5.000	5.226	2425.27	0.0016	P	6.8
3	☐	250.000	257.626	97292.94	0.0639	P	3.8
4	☐	625.000	658.053	253394.56	0.1629	P	0.8
5	☐	1250.000	1292.146	503476.40	0.3195	P	1.4
6	☐	2500.000	2577.053	1036450.47	0.6370	P	1.7
7	☐	5000.000	4946.424	1885176.60	1.2224	A	2.4
8	☐			736.15	0.0005	P	4.0

$$y = 2.4707\text{E-}004 * x + 2.8289\text{E-}004$$

R = 0.9998

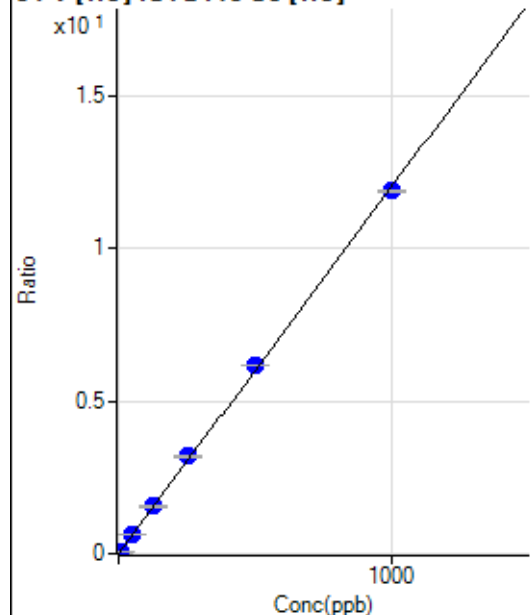
DL = 0.2169

BEC = 1.145

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	10.00	0.0002	P	66.4
2	☐	5.000	5.589	3476.01	0.0673	P	4.0
3	☐	50.000	50.940	31924.42	0.6122	P	1.4
4	☐	125.000	128.859	83166.50	1.5485	P	1.3
5	☐	250.000	265.802	165558.81	3.1939	P	1.9
6	☐	500.000	512.623	314929.36	6.1595	P	0.4
7	☐	1000.000	989.206	619314.56	11.8858	P	0.7
8	☐			265.56	0.0050	P	10.5

$$y = 0.0120 * x + 1.8870\text{E-}004$$

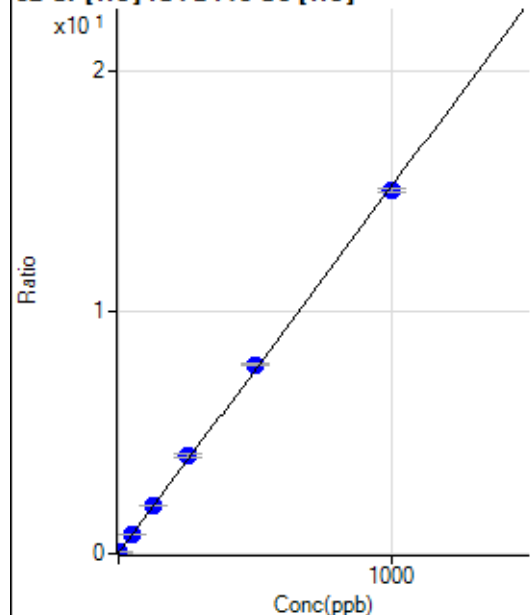
R = 0.9997

DL = 0.03127

BEC = 0.01571

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	1136.72	0.0215	P	3.7
2	☐	2.000	2.157	2800.30	0.0542	P	4.5
3	☐	50.000	50.616	41176.81	0.7898	P	2.9
4	☐	125.000	128.823	106171.17	1.9769	P	1.8
5	☐	250.000	266.470	210765.97	4.0663	P	2.4
6	☐	500.000	514.924	400713.74	7.8377	P	0.8
7	☐	1000.000	987.911	782487.72	15.0173	P	1.1
8	☐			22922.86	0.4340	P	1.8

$$y = 0.0152 * x + 0.0215$$

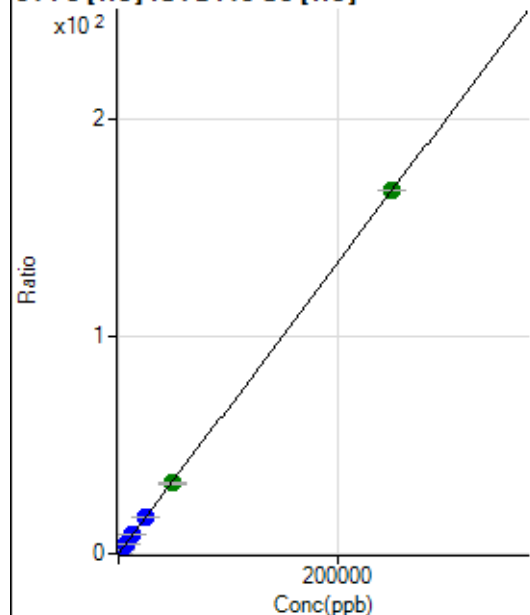
$$R = 0.9997$$

$$DL = 0.1563$$

$$BEC = 1.417$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	405.57	0.0077	P	0.7
2	☐	50.000	56.374	2335.41	0.0452	P	11.1
3	☐	2500.000	2495.252	87109.87	1.6708	P	2.8
4	☐	6250.000	6369.406	228428.83	4.2530	P	0.6
5	☐	12500.000	13183.607	455857.02	8.7948	P	2.4
6	☐	25000.000	25425.536	866824.66	16.9543	P	0.7
7	☐	50000.000	48712.894	1692091.08	32.4758	A	1.6
8	☐	250000.00	250177.74	8807833.18	166.7562	A	0.1

$$y = 6.6652E-004 * x + 0.0077$$

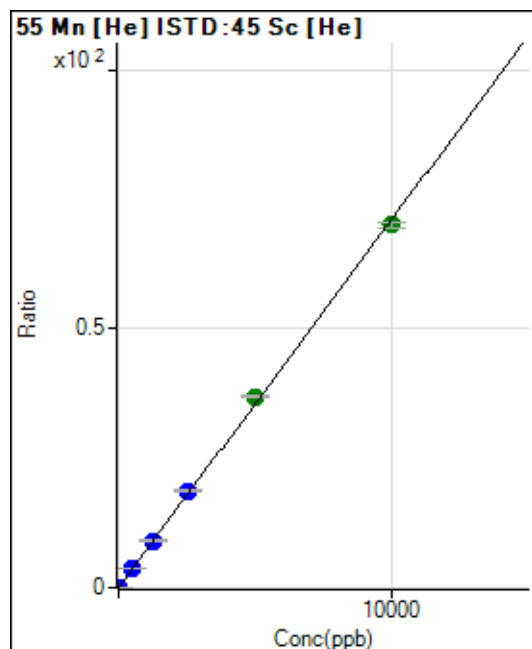
$$R = 1.0000$$

$$DL = 0.2299$$

$$BEC = 11.51$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	86.67	0.0016	P	20.9
2	☐	1.000	1.065	475.57	0.0092	P	12.6
3	☐	500.000	505.389	187414.26	3.5942	P	1.3
4	☐	1250.000	1279.711	488680.86	9.0985	P	0.5
5	☐	2500.000	2638.662	972286.18	18.7586	P	2.5
6	☐	5000.000	5198.552	1889439.10	36.9556	A	0.6
7	☐	10000.000	9862.075	3652818.49	70.1064	A	1.7
8	☐			3653.84	0.0692	P	3.1

$$y = 0.0071 * x + 0.0016$$

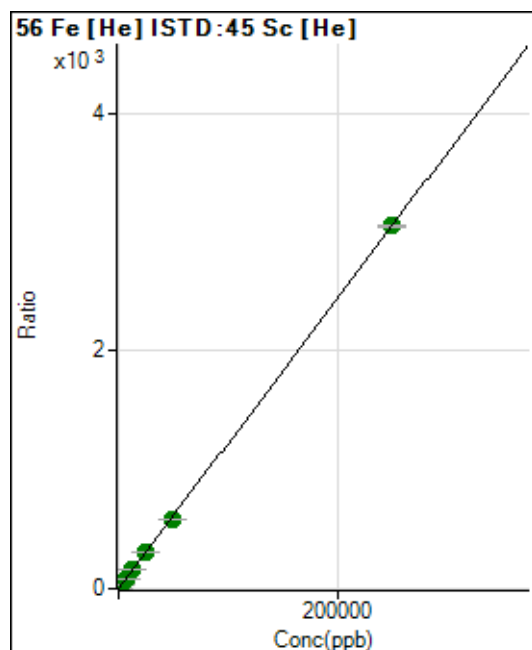
$$R = 0.9996$$

$$DL = 0.1443$$

$$BEC = 0.2305$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	2446.55	0.0463	P	7.2
2	☐	50.000	54.465	36684.37	0.7106	P	1.8
3	☐	2500.000	2492.951	1587968.57	30.4526	A	1.3
4	☐	6250.000	6217.525	4075358.66	75.8809	A	1.3
5	☐	12500.000	12872.936	8141299.83	157.0563	A	2.9
6	☐	25000.000	24960.628	15567457.18	304.4888	A	1.1
7	☐	50000.000	47810.594	30387960.17	583.1878	A	1.0
8	☐	250000.00	250424.05	161326457.3	3,054.446	A	0.8

$$y = 0.0122 * x + 0.0463$$

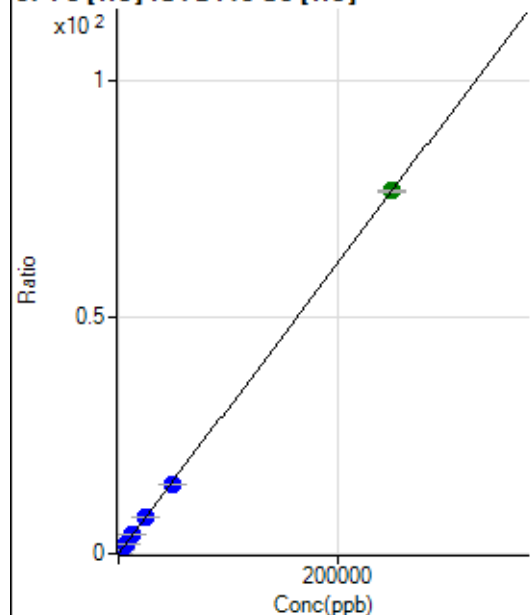
$$R = 1.0000$$

$$DL = 0.8176$$

$$BEC = 3.794$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	94.45	0.0018	P	26.5
2	☐	50.000	57.936	1009.31	0.0195	P	10.7
3	☐	2500.000	2442.228	39124.12	0.7503	P	0.5
4	☐	6250.000	6195.126	102078.79	1.9004	P	0.8
5	☐	12500.000	12881.131	204733.20	3.9495	P	1.6
6	☐	25000.000	24954.339	391102.05	7.6495	P	0.5
7	☐	50000.000	47727.719	762229.70	14.6288	P	1.1
8	☐	250000.00	250441.91	4053921.04	76.7544	A	0.5

$$y = 3.0647\text{E-}004 * x + 0.0018$$

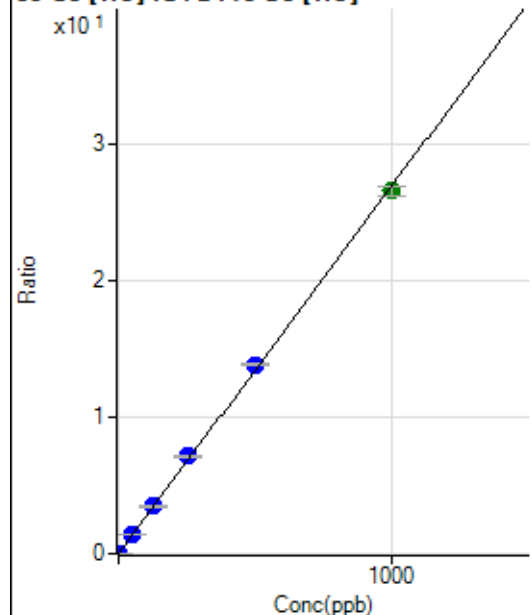
R = 0.9999

DL = 4.628

BEC = 5.825

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	35.56	0.0007	P	51.4
2	☐	1.000	1.070	1520.10	0.0295	P	4.5
3	☐	50.000	51.657	72461.88	1.3897	P	1.5
4	☐	125.000	128.958	186271.79	3.4683	P	1.2
5	☐	250.000	266.174	371025.25	7.1579	P	2.3
6	☐	500.000	515.534	708764.83	13.8630	P	1.0
7	☐	1000.000	987.612	1383692.99	26.5569	A	2.7
8	☐			2738.06	0.0518	P	2.4

$$y = 0.0269 * x + 6.7267\text{E-}004$$

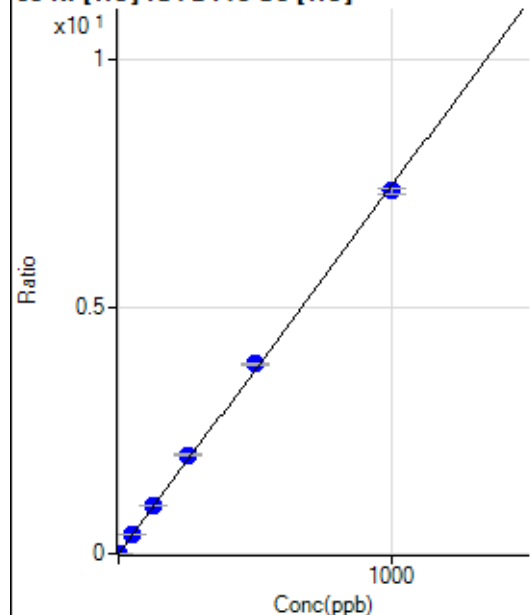
R = 0.9997

DL = 0.03856

BEC = 0.02502

Weight: <None>

Min Conc: 0

⁶⁰Ni [He] ISTD:45 Sc [He]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	41.11	0.0008	P	13.1
2	☐	1.000	1.200	502.24	0.0097	P	6.4
3	☐	50.000	51.736	20144.32	0.3863	P	2.5
4	☐	125.000	129.883	52026.91	0.9687	P	1.4
5	☐	250.000	268.376	103715.45	2.0009	P	2.0
6	☐	500.000	516.077	196682.28	3.8469	P	0.6
7	☐	1000.000	986.670	383169.00	7.3540	P	1.5
8	☐			7261.91	0.1375	P	2.7

$$y = 0.0075 * x + 7.7838E-004$$

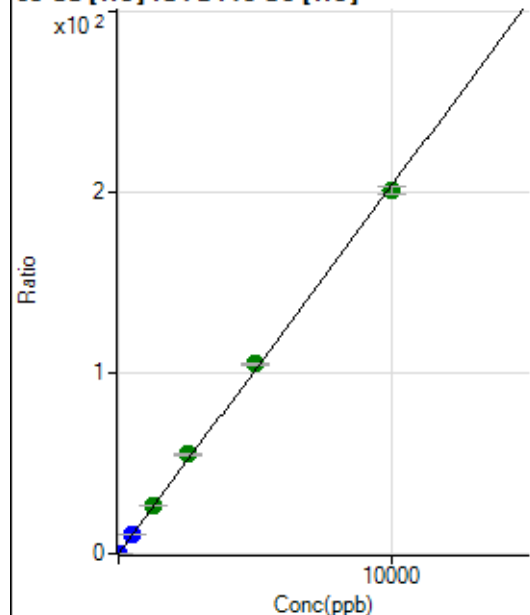
$$R = 0.9996$$

$$DL = 0.04094$$

$$BEC = 0.1044$$

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	298.89	0.0057	P	7.8
2	☐	2.000	2.221	2623.60	0.0508	P	4.4
3	☐	500.000	516.365	547874.75	10.5072	P	1.5
4	☐	1250.000	1310.576	1431755.73	26.6593	A	1.6
5	☐	2500.000	2699.416	2845903.78	54.9046	A	2.2
6	☐	5000.000	5155.485	5360922.14	104.8545	A	0.5
7	☐	10000.000	9864.013	10452485.54	200.6135	A	2.1
8	☐			4757.51	0.0901	P	0.7

$$y = 0.0203 * x + 0.0057$$

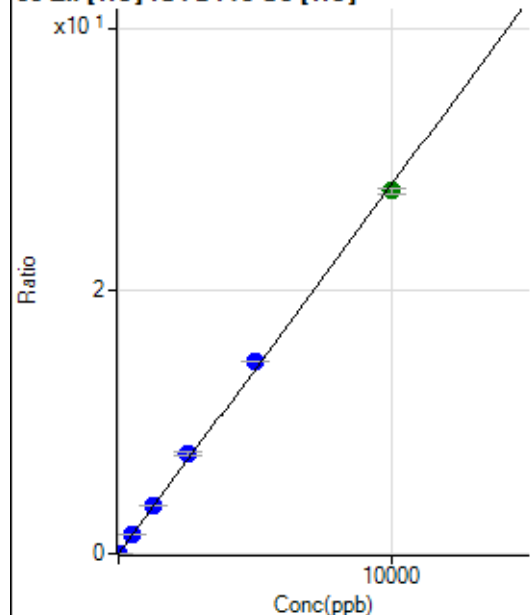
$$R = 0.9996$$

$$DL = 0.06482$$

$$BEC = 0.2782$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	117.78	0.0022	P	9.4
2	☐	2.000	2.351	455.57	0.0088	P	12.0
3	☐	500.000	521.197	76400.89	1.4652	P	1.8
4	☐	1250.000	1308.898	197443.90	3.6763	P	1.3
5	☐	2500.000	2709.138	394283.16	7.6068	P	2.3
6	☐	5000.000	5210.418	747898.59	14.6280	P	0.2
7	☐	10000.000	9834.084	1438427.53	27.6067	A	1.3
8	☐			5019.82	0.0950	P	1.4

$$y = 0.0028 * x + 0.0022$$

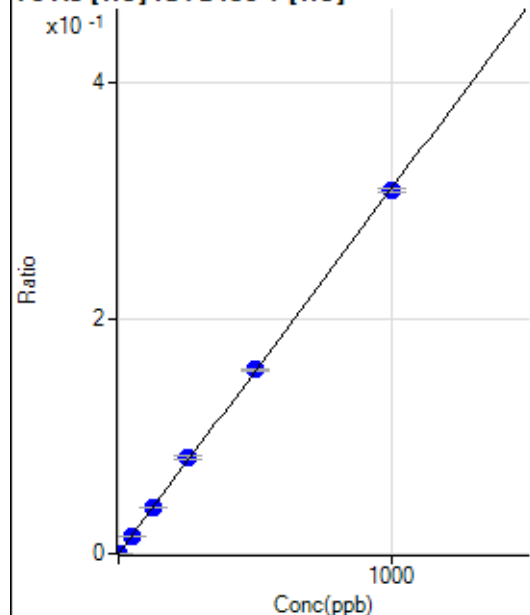
$$R = 0.9994$$

$$DL = 0.2228$$

$$BEC = 0.7937$$

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	1.33	0.0000	P	86.6
2	☐	1.000	1.081	119.68	0.0003	P	4.4
3	☐	50.000	49.571	5519.64	0.0154	P	0.9
4	☐	125.000	128.108	14504.89	0.0398	P	1.0
5	☐	250.000	265.201	29178.55	0.0823	P	4.1
6	☐	500.000	504.956	55490.01	0.1567	P	1.1
7	☐	1000.000	993.355	109664.40	0.3082	P	1.1
8	☐			61.34	0.0002	P	2.3

$$y = 3.1027E-004 * x + 3.6930E-006$$

$$R = 0.9998$$

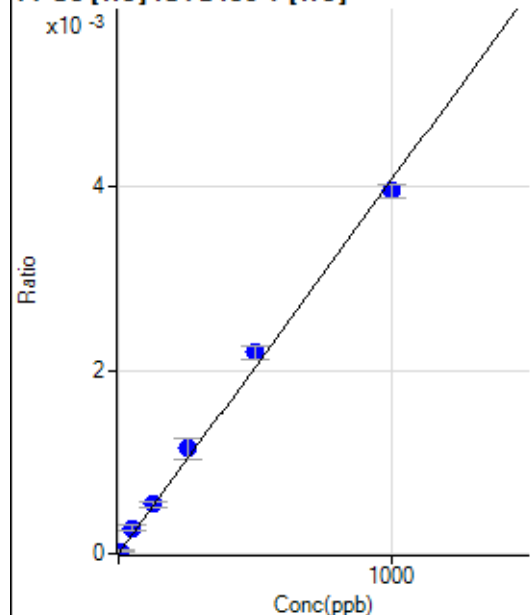
$$DL = 0.03092$$

$$BEC = 0.0119$$

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	☐	5.000	6.207	8.89	0.0000	P	58.1
3	☐	50.000	67.484	98.89	0.0003	P	23.9
4	☐	125.000	131.451	195.56	0.0005	P	10.8
5	☐	250.000	280.960	405.56	0.0011	P	18.7
6	☐	500.000	539.060	778.92	0.0022	P	6.3
7	☐	1000.000	971.043	1408.97	0.0040	P	3.8
8	☐			1.11	0.0000	P	173.

$$y = 4.0782\text{E-}006 * x + 0.0000\text{E+}000$$

$$R = 0.9983$$

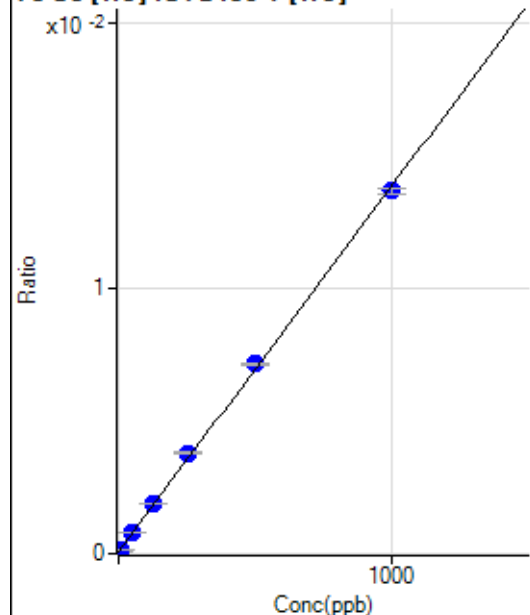
$$DL = 0$$

$$BEC = 0$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	27.00	0.0001	P	10.0
2	☐	5.000	5.952	55.34	0.0002	P	8.4
3	☐	50.000	53.598	291.70	0.0008	P	4.8
4	☐	125.000	131.053	685.75	0.0019	P	2.5
5	☐	250.000	268.786	1339.53	0.0038	P	2.1
6	☐	500.000	513.565	2531.15	0.0071	P	1.1
7	☐	1000.000	987.580	4865.34	0.0137	P	1.4
8	☐			27.33	0.0001	P	11.2

$$y = 1.3769\text{E-}005 * x + 7.4783\text{E-}005$$

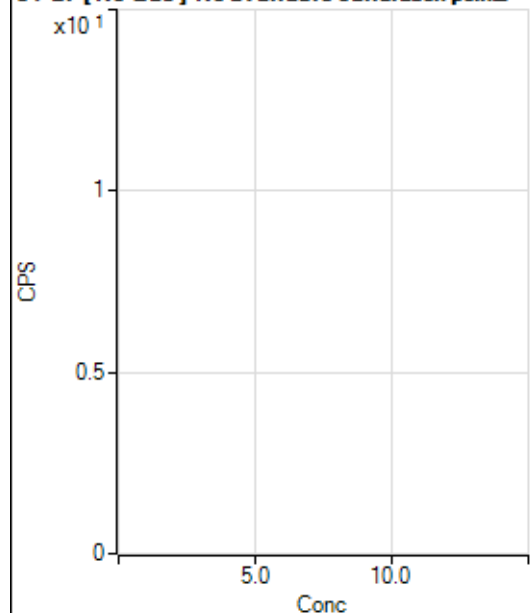
$$R = 0.9997$$

$$DL = 1.63$$

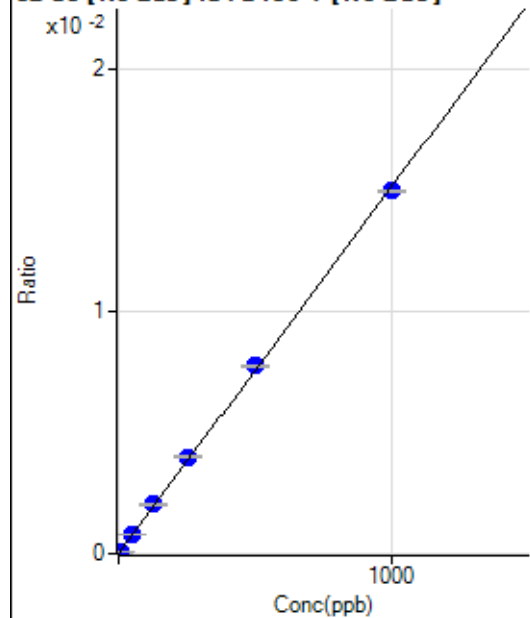
$$BEC = 5.431$$

Weight: <None>

Min Conc: 0

81 Br [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			1424.88		P	14.1
2	☐			1294.74		P	7.0
3	☐			1338.11		P	5.1
4	☐			1388.18		P	14.7
5	☐			1344.79		P	10.6
6	☐			1241.34		P	2.8
7	☐			1431.55		P	10.3
8	☐			1501.63		P	4.7

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	18.81	0.0000	P	232.
2	☐	5.000	4.296	205.57	0.0001	P	14.9
3	☐	50.000	50.974	2208.73	0.0008	P	0.6
4	☐	125.000	133.594	5866.49	0.0020	P	3.0
5	☐	250.000	263.676	11649.26	0.0040	P	1.4
6	☐	500.000	512.366	23754.09	0.0077	P	0.9
7	☐	1000.000	989.279	43642.34	0.0150	P	0.6
8	☐			21.81	0.0000	P	222.

$$y = 1.5107E-005 * x + 6.4753E-006$$

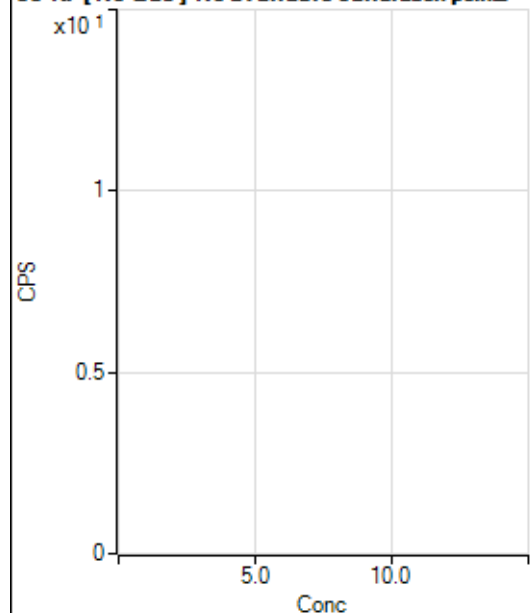
$$R = 0.9998$$

$$DL = 2.985$$

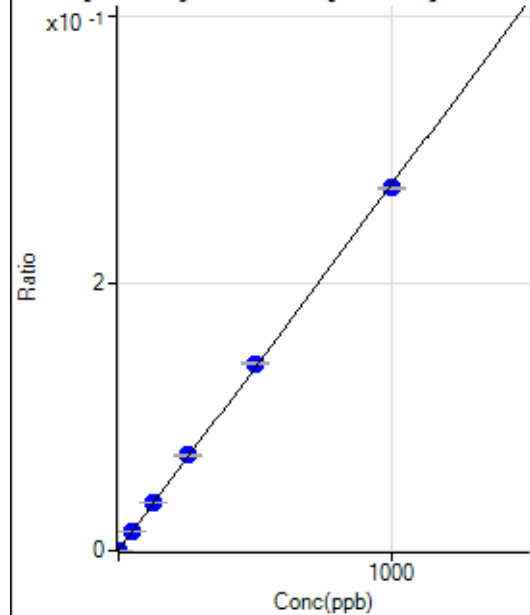
$$BEC = 0.4286$$

Weight: <None>

Min Conc: 0

83 Kr [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			465.57		P	7.2
2	☐			461.12		P	6.1
3	☐			468.90		P	9.9
4	☐			463.34		P	15.6
5	☐			393.34		P	7.2
6	☐			495.57		P	7.1
7	☐			437.79		P	15.5
8	☐			466.68		P	9.3

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	800.05	0.0003	P	13.2
2	☐	1.000	0.967	1564.02	0.0005	P	5.6
3	☐	50.000	50.302	39904.75	0.0140	P	1.4
4	☐	125.000	130.180	103955.00	0.0359	P	3.1
5	☐	250.000	259.891	208287.13	0.0713	P	1.1
6	☐	500.000	511.647	429750.08	0.1402	P	0.7
7	☐	1000.000	991.041	791753.71	0.2712	P	0.7
8	☐			2430.84	0.0008	P	5.7

$$y = 2.7341\text{E-}004 * x + 2.7868\text{E-}004$$

$$R = 0.9998$$

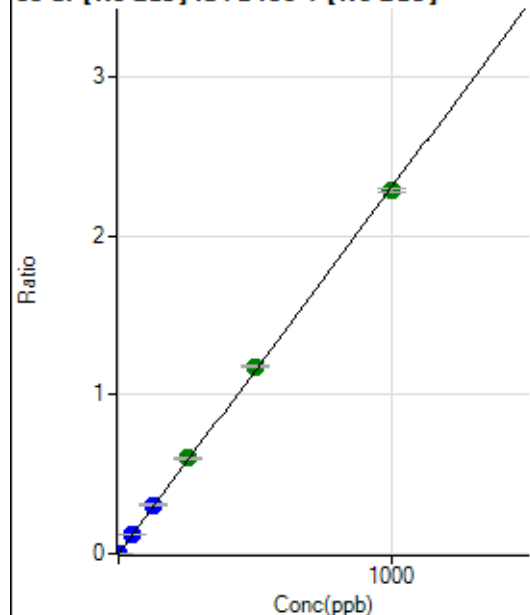
$$DL = 0.4024$$

$$BEC = 1.019$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	80.56	0.0000	P	49.6
2	☐	1.000	1.059	7104.79	0.0025	P	2.5
3	☐	50.000	52.607	344503.25	0.1212	P	2.9
4	☐	125.000	133.846	893228.84	0.3083	P	2.8
5	☐	250.000	261.159	1756106.79	0.6014	A	1.3
6	☐	500.000	510.334	3603575.25	1.1753	A	0.8
7	☐	1000.000	990.807	6660452.23	2.2817	A	0.9
8	☐			15456.13	0.0050	P	1.9

$$y = 0.0023 * x + 2.8108E-005$$

$$R = 0.9998$$

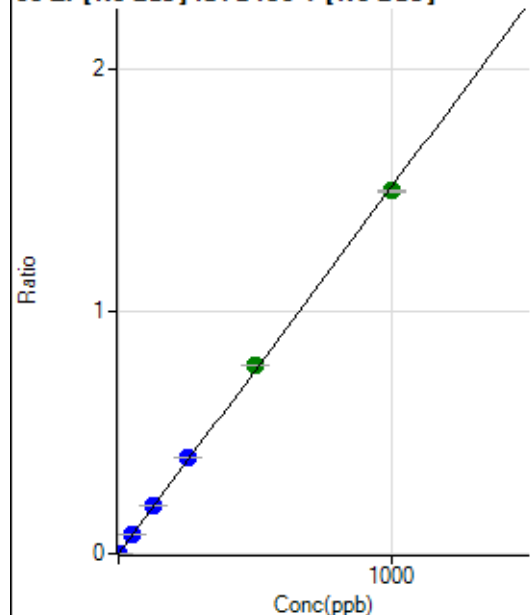
$$DL = 0.01815$$

$$BEC = 0.01221$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	150.00	0.0001	P	18.5
2	☐	1.000	0.888	4017.39	0.0014	P	7.2
3	☐	50.000	51.060	219603.50	0.0772	P	2.8
4	☐	125.000	131.381	575713.01	0.1987	P	2.3
5	☐	250.000	260.765	1151179.50	0.3943	P	0.4
6	☐	500.000	514.043	2382586.14	0.7772	A	0.1
7	☐	1000.000	989.437	4366294.76	1.4958	A	0.5
8	☐			1327.88	0.0004	P	6.6

$$y = 0.0015 * x + 5.2099E-005$$

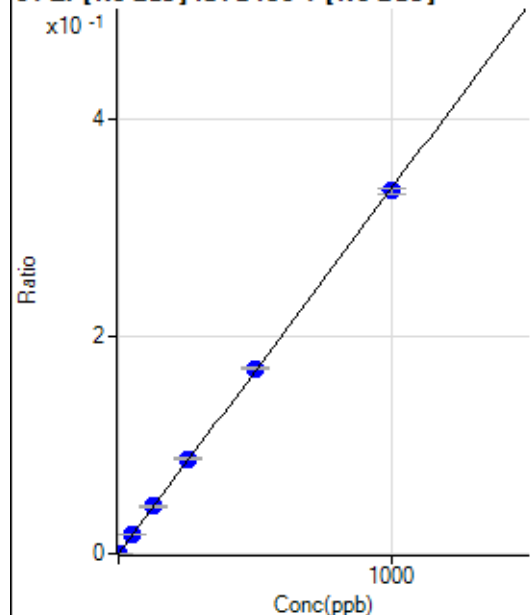
$$R = 0.9998$$

$$DL = 0.01913$$

$$BEC = 0.03446$$

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	38.89	0.0000	P	74.3
2	☐	1.000	0.972	980.62	0.0003	P	13.3
3	☐	50.000	50.946	48710.76	0.0171	P	3.6
4	☐	125.000	130.288	126913.49	0.0438	P	3.1
5	☐	250.000	259.622	254780.97	0.0873	P	1.8
6	☐	500.000	507.637	523091.66	0.1706	P	0.7
7	☐	1000.000	993.068	974234.74	0.3338	P	1.3
8	☐			338.90	0.0001	P	28.4

$$y = 3.3607\text{E-}004 * x + 1.3460\text{E-}005$$

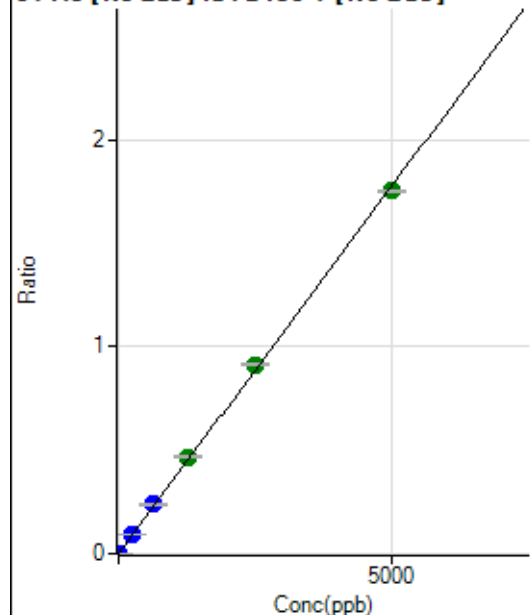
$$R = 0.9999$$

$$DL = 0.08928$$

$$BEC = 0.04005$$

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	83.34	0.0000	P	36.5
2	☐	5.000	5.226	5426.18	0.0019	P	2.6
3	☐	250.000	260.724	263236.53	0.0926	P	2.5
4	☐	625.000	669.416	688683.75	0.2377	P	2.8
5	☐	1250.000	1318.774	1367031.54	0.4682	A	0.8
6	☐	2500.000	2571.779	2799752.62	0.9130	A	1.0
7	☐	5000.000	4940.828	5119929.11	1.7540	A	0.5
8	☐			3678.36	0.0012	P	5.1

$$y = 3.5500\text{E-}004 * x + 2.9011\text{E-}005$$

$$R = 0.9997$$

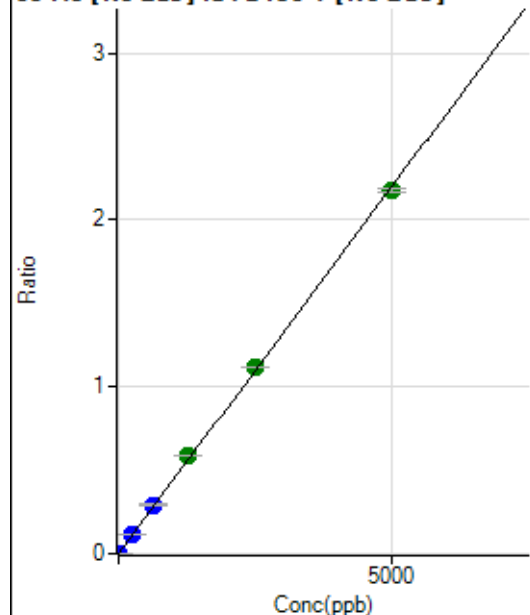
$$DL = 0.0894$$

$$BEC = 0.08172$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	30.56	0.0000	P	40.7
2	☐	5.000	5.504	6988.03	0.0024	P	3.9
3	☐	250.000	260.537	325251.70	0.1144	P	3.0
4	☐	625.000	665.877	847293.12	0.2924	P	2.3
5	☐	1250.000	1331.370	1706930.01	0.5846	A	0.5
6	☐	2500.000	2550.093	3432835.25	1.1197	A	0.2
7	☐	5000.000	4948.974	6342830.40	2.1730	A	1.0
8	☐			5401.18	0.0018	P	5.1

$$y = 4.3908\text{E-}004 * x + 1.0605\text{E-}005$$

$$R = 0.9998$$

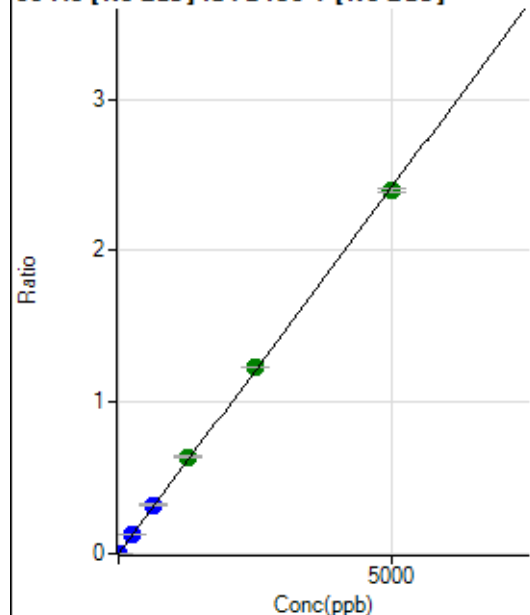
$$DL = 0.02951$$

$$BEC = 0.02415$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	47.22	0.0000	P	27.1
2	☐	5.000	5.395	7555.04	0.0026	P	1.1
3	☐	250.000	259.795	356914.83	0.1256	P	3.6
4	☐	625.000	669.010	936773.52	0.3233	P	3.0
5	☐	1250.000	1319.306	1861494.68	0.6375	A	1.1
6	☐	2500.000	2547.462	3773980.08	1.2310	A	0.4
7	☐	5000.000	4952.951	6986256.67	2.3934	A	0.9
8	☐			5529.02	0.0018	P	1.3

$$y = 4.8323\text{E-}004 * x + 1.6431\text{E-}005$$

$$R = 0.9998$$

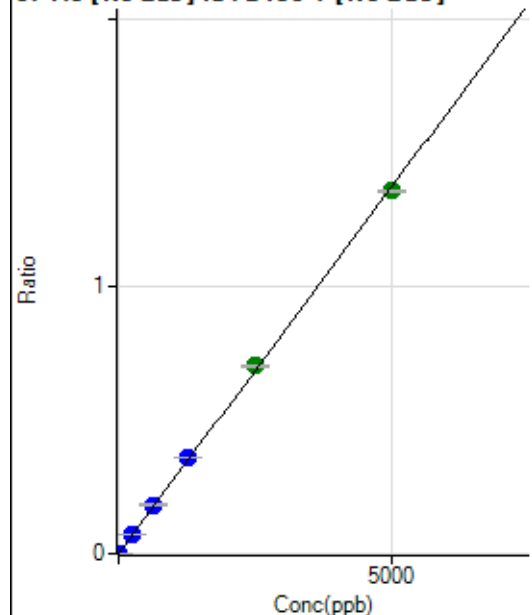
$$DL = 0.02767$$

$$BEC = 0.034$$

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	8.33	0.0000	P	100.
2	☐	5.000	5.224	4131.27	0.0014	P	5.4
3	☐	250.000	257.181	200447.96	0.0705	P	3.2
4	☐	625.000	658.293	522861.21	0.1805	P	3.6
5	☐	1250.000	1306.314	1045628.67	0.3581	P	0.3
6	☐	2500.000	2563.393	2154227.00	0.7027	A	1.1
7	☐	5000.000	4949.704	3960741.50	1.3569	A	0.8
8	☐			3361.60	0.0011	P	5.7

$$y = 2.7414\text{E-}004 * x + 2.9036\text{E-}006$$

$$R = 0.9998$$

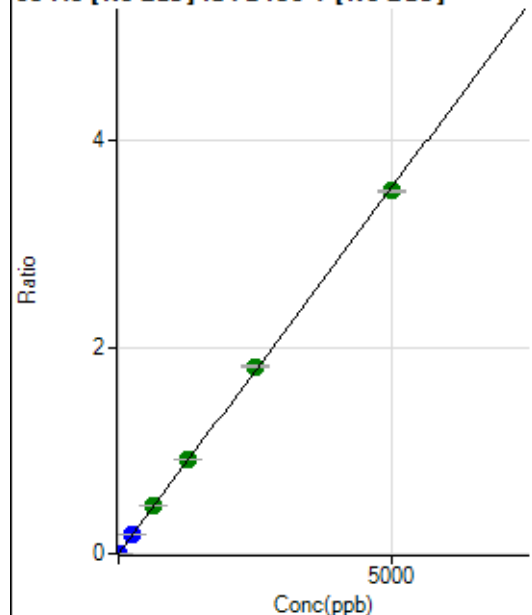
$$DL = 0.03207$$

$$BEC = 0.01059$$

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	13.89	0.0000	P	34.1
2	☐	5.000	5.218	10654.34	0.0037	P	2.2
3	☐	250.000	257.202	517818.47	0.1821	P	1.7
4	☐	625.000	656.136	1346408.44	0.4646	A	1.5
5	☐	1250.000	1294.580	2676172.96	0.9166	A	0.8
6	☐	2500.000	2552.921	5540988.19	1.8075	A	0.8
7	☐	5000.000	4958.142	10246839.12	3.5104	A	0.2
8	☐			8511.15	0.0028	P	1.4

$$y = 7.0801\text{E-}004 * x + 4.8237\text{E-}006$$

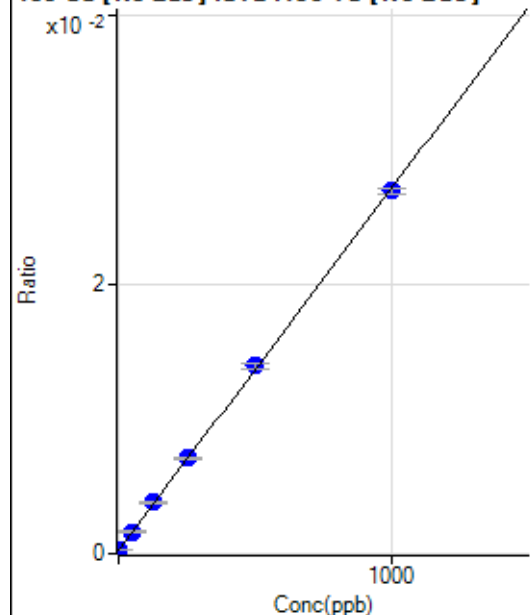
$$R = 0.9999$$

$$DL = 0.006961$$

$$BEC = 0.006813$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	583.36	0.0002	P	12.7
2	☐	1.000	2.292	725.04	0.0003	P	11.7
3	☐	50.000	51.317	3839.53	0.0016	P	3.0
4	☐	125.000	132.272	9103.21	0.0038	P	3.6
5	☐	250.000	255.608	17617.16	0.0071	P	2.0
6	☐	500.000	509.197	36100.83	0.0139	P	3.6
7	☐	1000.000	993.023	66108.56	0.0270	P	1.3
8	☐			763.93	0.0003	P	9.9

$$y = 2.6909\text{E-}005 * x + 2.4436\text{E-}004$$

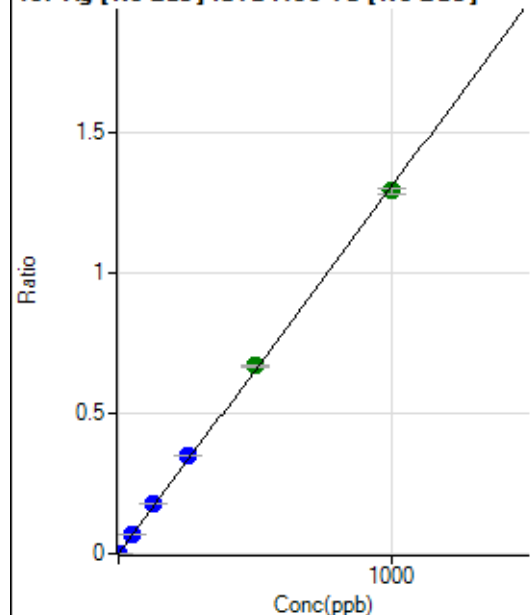
$$R = 0.9999$$

$$DL = 3.46$$

$$BEC = 9.081$$

Weight: <None>

Min Conc: 0

107 Ag [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	107.
2	☐	1.000	0.835	2600.32	0.0011	P	4.1
3	☐	50.000	53.220	164028.65	0.0694	P	2.2
4	☐	125.000	135.454	423022.76	0.1767	P	2.1
5	☐	250.000	265.709	857521.74	0.3467	P	0.1
6	☐	500.000	512.645	1732199.97	0.6689	A	0.8
7	☐	1000.000	988.283	3161068.30	1.2894	A	1.5
8	☐			911.17	0.0004	P	4.0

$$y = 0.0013 * x + 8.1128\text{E-}006$$

$$R = 0.9997$$

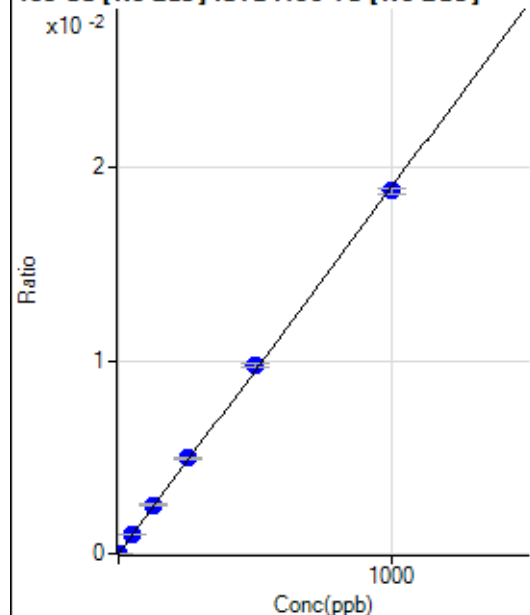
$$DL = 0.02008$$

$$BEC = 0.006218$$

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	1.39	0.0000	P	173.
2	☐	1.000	1.450	66.67	0.0000	P	30.9
3	☐	50.000	51.361	2303.00	0.0010	P	4.5
4	☐	125.000	132.283	6008.32	0.0025	P	3.6
5	☐	250.000	259.729	12192.98	0.0049	P	2.2
6	☐	500.000	513.356	25221.80	0.0097	P	2.3
7	☐	1000.000	989.911	46053.15	0.0188	P	1.3
8	☐			18.05	0.0000	P	47.8

$$y = 1.8976E-005 * x + 5.8485E-007$$

R = 0.9998

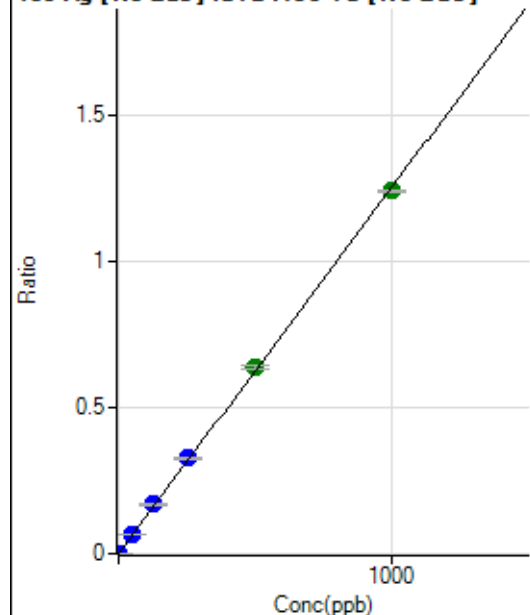
DL = 0.1601

BEC = 0.03082

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	25.00	0.0000	P	88.3
2	☐	1.000	0.867	2594.76	0.0011	P	6.3
3	☐	50.000	52.265	154391.87	0.0654	P	2.0
4	☐	125.000	135.297	404897.23	0.1692	P	3.1
5	☐	250.000	260.369	805299.38	0.3256	P	1.4
6	☐	500.000	508.715	1646791.06	0.6361	A	1.7
7	☐	1000.000	991.650	3040093.99	1.2400	A	0.8
8	☐			852.83	0.0003	P	8.9

$$y = 0.0013 * x + 1.0498E-005$$

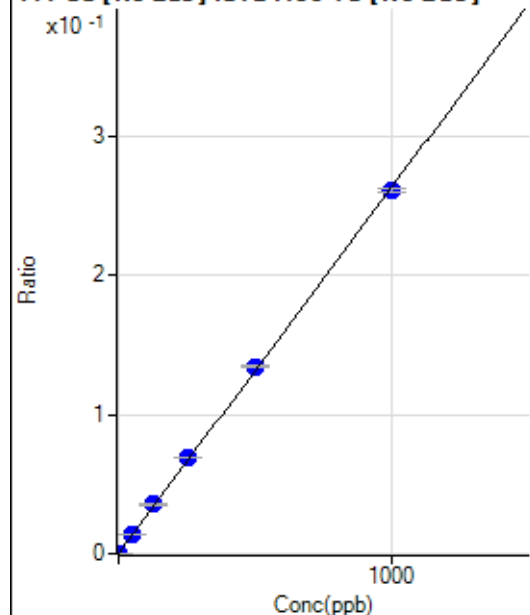
R = 0.9998

DL = 0.02223

BEC = 0.008396

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	417.10	0.0002	P	11.0
2	☐	1.000	0.987	1030.33	0.0004	P	1.9
3	☐	50.000	52.975	33364.81	0.0141	P	2.2
4	☐	125.000	134.306	85075.10	0.0355	P	1.9
5	☐	250.000	260.723	170262.65	0.0688	P	0.7
6	☐	500.000	510.614	348679.59	0.1346	P	0.7
7	☐	1000.000	990.700	640048.73	0.2611	P	1.0
8	☐			629.06	0.0003	P	11.7

$$y = 2.6335E-004 * x + 1.7471E-004$$

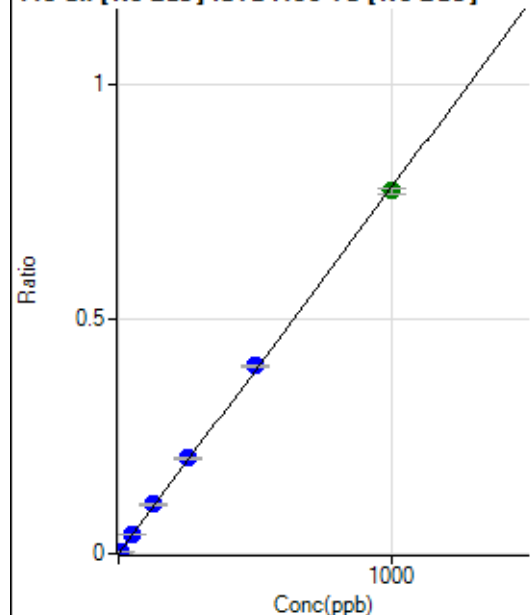
$$R = 0.9998$$

$$DL = 0.2198$$

$$BEC = 0.6634$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	333.35	0.0001	P	37.4
2	☐	5.000	5.333	10217.98	0.0043	P	5.0
3	☐	50.000	51.707	95862.78	0.0406	P	1.3
4	☐	125.000	133.788	250776.19	0.1048	P	2.9
5	☐	250.000	259.950	503239.73	0.2035	P	1.3
6	☐	500.000	511.785	1036878.73	0.4004	P	0.7
7	☐	1000.000	990.435	1899417.10	0.7748	A	1.4
8	☐			1516.80	0.0006	P	7.4

$$y = 7.8214E-004 * x + 1.3962E-004$$

$$R = 0.9998$$

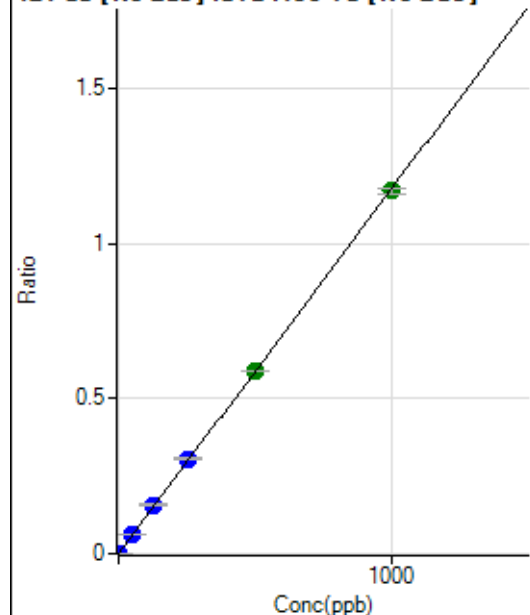
$$DL = 0.2004$$

$$BEC = 0.1785$$

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	11.11	0.0000	P	114.
2	☐	2.000	2.034	5681.89	0.0024	P	0.7
3	☐	50.000	51.913	144210.43	0.0611	P	1.6
4	☐	125.000	133.796	376584.61	0.1573	P	2.2
5	☐	250.000	260.450	757547.69	0.3063	P	1.2
6	☐	500.000	502.937	1531710.13	0.5914	A	0.1
7	☐	1000.000	994.724	2867559.40	1.1697	A	1.5
8	☐			2266.92	0.0009	P	8.1

$$y = 0.0012 * x + 4.6391E-006$$

$$R = 0.9999$$

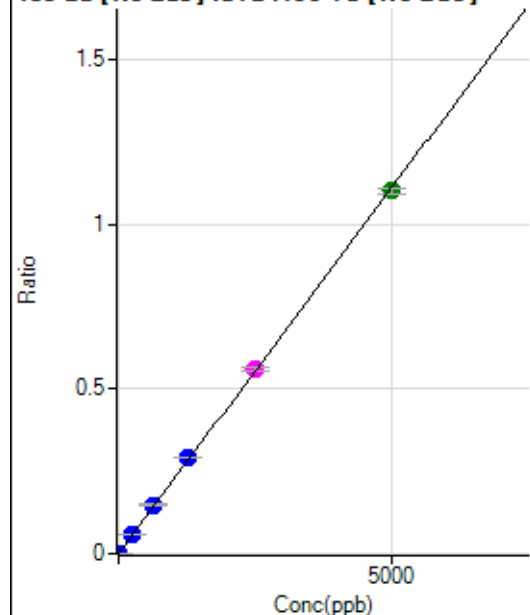
$$DL = 0.01352$$

$$BEC = 0.003945$$

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	50.00	0.0000	P	43.9
2	☐	10.000	10.684	5673.55	0.0024	P	6.3
3	☐	250.000	264.425	138685.54	0.0587	P	3.5
4	☐	625.000	668.148	355033.98	0.1483	P	2.6
5	☐	1250.000	1312.095	720512.63	0.2913	P	1.1
6	☐	2500.000	2533.733	1455957.96	0.5625	M	2.0
7	☐	5000.000	4961.494	2700200.04	1.1014	A	1.8
8	☐			5606.86	0.0022	P	1.9

$$y = 2.2199E-004 * x + 2.0928E-005$$

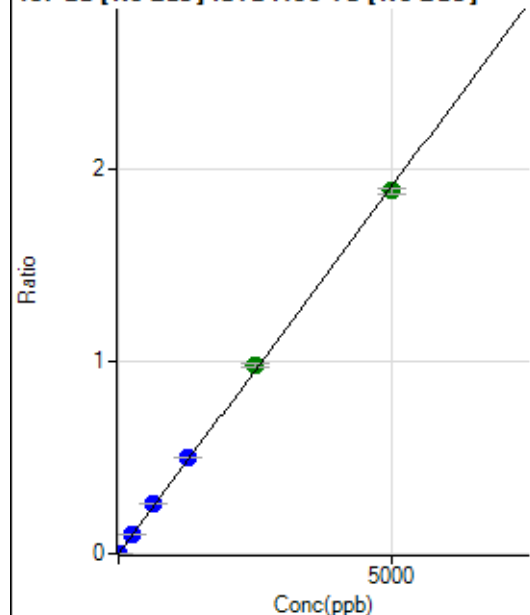
$$R = 0.9999$$

$$DL = 0.1243$$

$$BEC = 0.09427$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	69.44	0.0000	P	38.7
2	☐	10.000	10.558	9625.89	0.0041	P	2.5
3	☐	250.000	259.849	234438.94	0.0993	P	2.7
4	☐	625.000	677.676	619429.03	0.2588	P	2.4
5	☐	1250.000	1308.599	1236096.45	0.4997	P	1.7
6	☐	2500.000	2567.665	2538810.73	0.9805	A	1.5
7	☐	5000.000	4944.440	4628899.54	1.8882	A	1.4
8	☐			9848.27	0.0039	P	3.1

$$y = 3.8187E-004 * x + 2.9085E-005$$

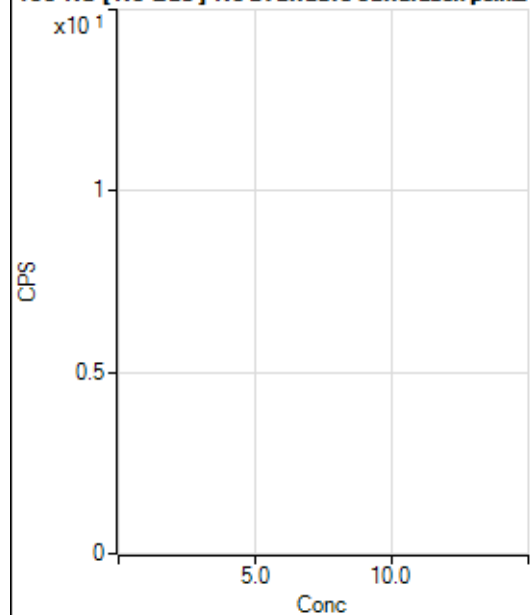
$$R = 0.9998$$

$$DL = 0.08832$$

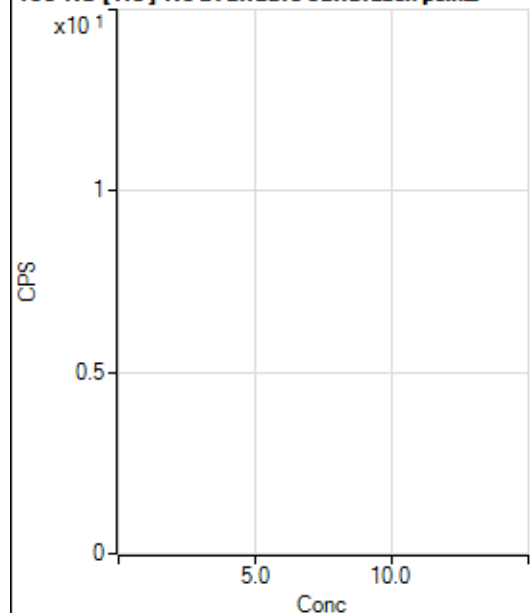
$$BEC = 0.07617$$

Weight: <None>

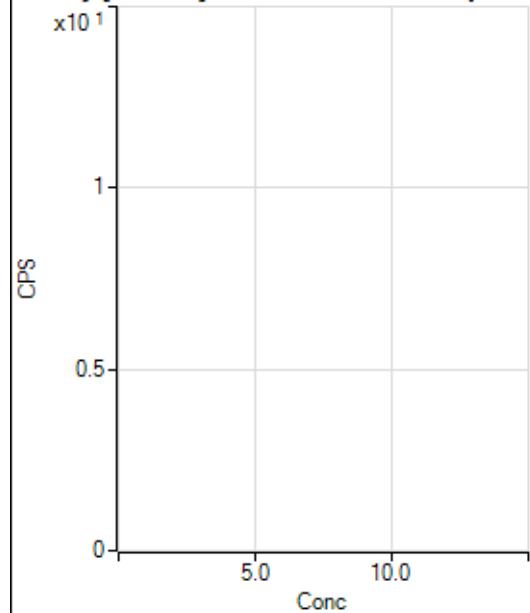
Min Conc: 0

150 Nd [No Gas] No available calibration points

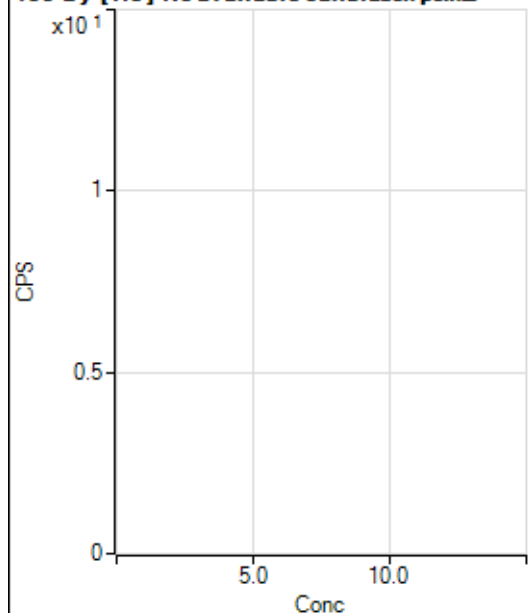
	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			6.67		P	100.
2	☐			0.00		P	
3	☐			2.22		P	173.
4	☐			13.33		P	50.0
5	☐			26.67		P	25.0
6	☐			66.67		P	43.6
7	☐			104.45		P	9.7
8	☐			15.56		P	98.9

150 Nd [He] No available calibration points

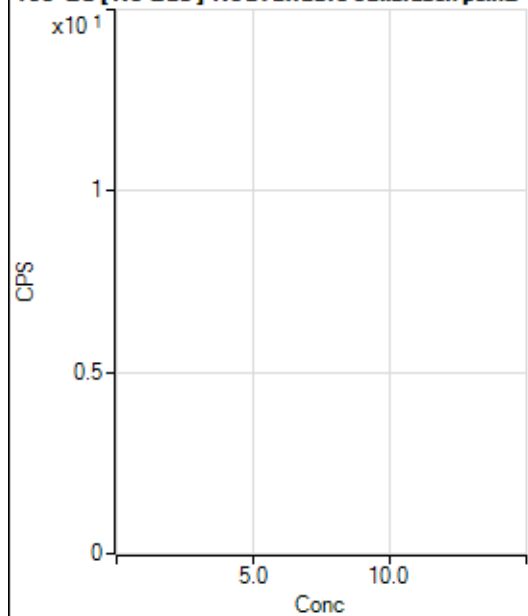
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			0.00		P	
2	☐			1.11		P	173.
3	☐			0.00		P	
4	☐			0.00		P	
5	☐			3.33		P	173.
6	☐			4.44		P	43.4
7	☐			5.55		P	124.
8	☐			14.44		P	58.1

156 Dy [No Gas] No available calibration points

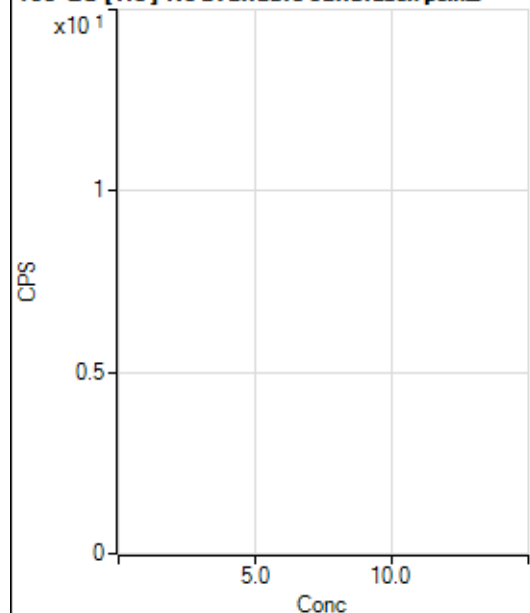
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			8.33		P	173.
2	☐			8.33		P	100.
3	☐			5.55		P	86.6
4	☐			11.11		P	86.6
5	☐			16.66		P	86.6
6	☐			25.00		P	66.7
7	☐			38.89		P	32.7
8	☐			130.56		P	20.5

156 Dy [He] No available calibration points

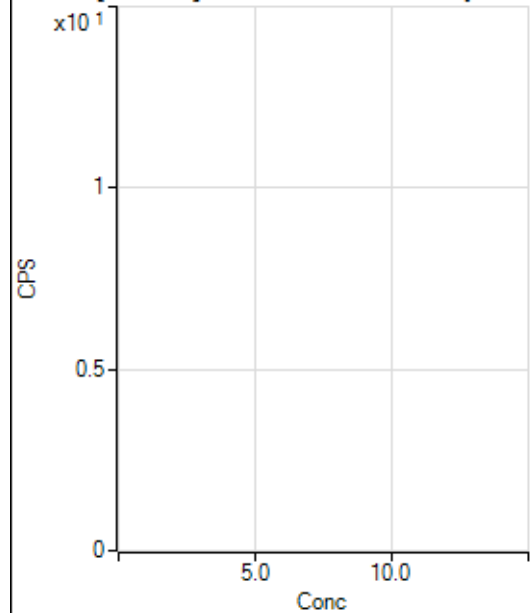
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			1.11		P	173.
2	☐			3.33		P	100.
3	☐			0.00		P	
4	☐			4.44		P	173.
5	☐			5.56		P	34.7
6	☐			10.00		P	33.3
7	☐			25.56		P	19.9
8	☐			101.11		P	25.2

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

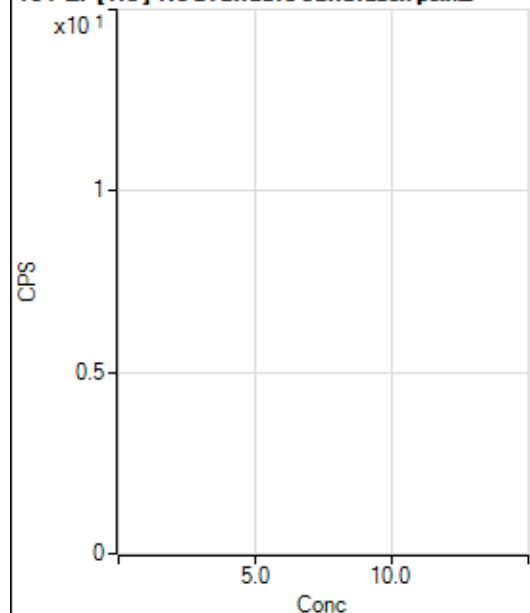
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			27.78		P	62.5
2	☐			5.55		P	86.6
3	☐			22.22		P	57.3
4	☐			25.00		P	57.7
5	☐			33.33		P	66.1
6	☐			27.78		P	86.6
7	☐			58.33		P	14.3
8	☐			186.12		P	13.7

160 Gd [He] No available calibration points

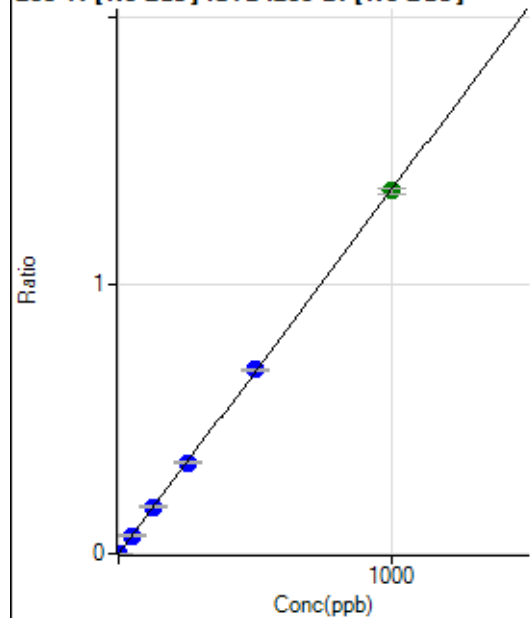
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			6.67		P	50.0
2	☐			4.44		P	114.
3	☐			2.22		P	173.
4	☐			15.55		P	44.6
5	☐			13.33		P	90.2
6	☐			16.67		P	52.9
7	☐			34.45		P	39.1
8	☐			127.78		P	9.9

164 Er [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			27.78		P	34.6
2	☐			16.66		P	86.6
3	☐			5.56		P	173.
4	☐			5.55		P	86.6
5	☐			11.11		P	43.3
6	☐			25.00		P	57.7
7	☐			36.11		P	58.1
8	☐			41.67		P	40.0

164 Er [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			3.33		P	0.0
2	☐			6.67		P	0.0
3	☐			6.67		P	0.0
4	☐			11.11		P	69.3
5	☐			2.22		P	86.6
6	☐			8.89		P	21.6
7	☐			6.67		P	50.0
8	☐			12.22		P	41.7

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	13.89	0.0000	P	125.
2	☐	1.000	0.875	1622.38	0.0012	P	6.3
3	☐	50.000	49.672	91261.67	0.0674	P	3.3
4	☐	125.000	128.770	240442.80	0.1746	P	2.3
5	☐	250.000	250.709	479063.47	0.3400	P	0.9
6	☐	500.000	504.999	1004617.32	0.6848	P	0.5
7	☐	1000.000	996.868	1870346.59	1.3517	A	1.5
8	☐			852.83	0.0006	P	21.0

$$y = 0.0014 * x + 1.0153E-005$$

$$R = 1.0000$$

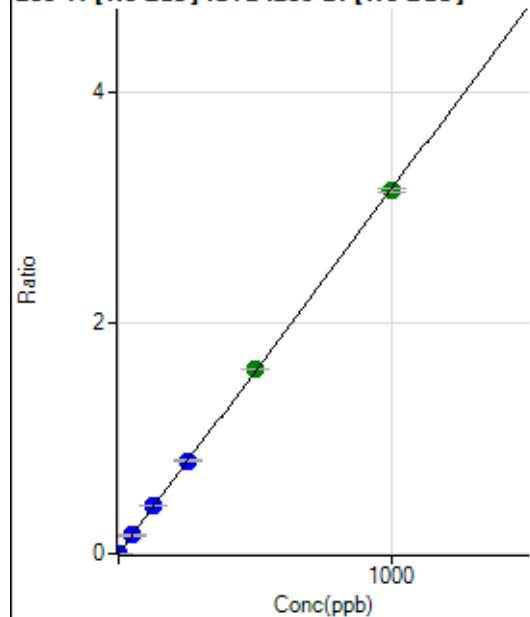
$$DL = 0.02808$$

$$BEC = 0.007487$$

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	22.22	0.0000	P	77.5
2	☐	1.000	1.067	4581.51	0.0034	P	6.6
3	☐	50.000	50.382	215348.29	0.1589	P	1.8
4	☐	125.000	130.326	566109.31	0.4111	P	1.6
5	☐	250.000	255.316	1134818.62	0.8053	P	0.7
6	☐	500.000	506.259	2342667.39	1.5968	A	0.9
7	☐	1000.000	994.857	4341898.32	3.1380	A	1.2
8	☐			2186.37	0.0016	P	6.5

$$y = 0.0032 * x + 1.6134E-005$$

$$R = 0.9999$$

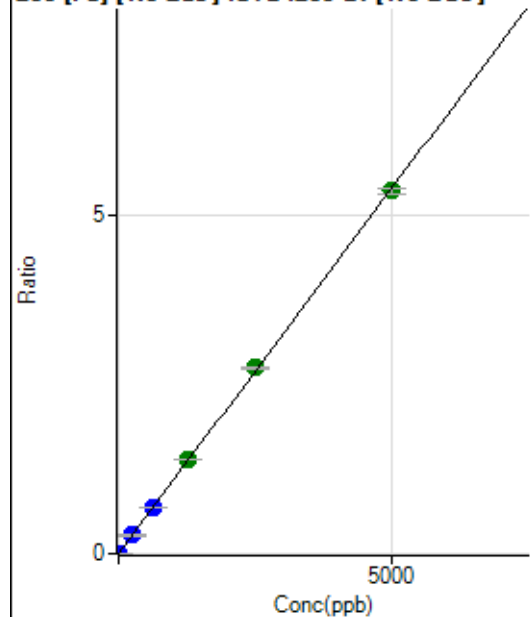
$$DL = 0.0119$$

$$BEC = 0.005115$$

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	490.76	0.0004	P	18.5
2	☐	1.000	1.036	2000.19	0.0015	P	4.1
3	☐	250.000	250.197	366438.01	0.2704	P	1.8
4	☐	625.000	636.339	946323.91	0.6872	P	2.2
5	☐	1250.000	1281.140	1949253.89	1.3833	A	0.5
6	☐	2500.000	2542.815	4028328.59	2.7452	A	0.5
7	☐	5000.000	4969.380	7422499.70	5.3645	A	1.8
8	☐			9294.20	0.0068	P	2.4

$$y = 0.0011 * x + 3.5741E-004$$

$$R = 0.9999$$

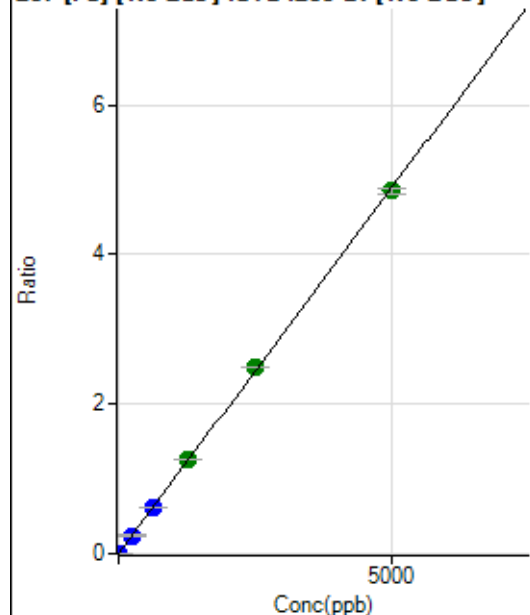
$$DL = 0.1834$$

$$BEC = 0.3311$$

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	412.98	0.0003	P	7.2
2	☐	1.000	0.873	1564.94	0.0012	P	3.3
3	☐	250.000	248.743	329997.14	0.2435	P	1.7
4	☐	625.000	633.370	853298.35	0.6196	P	1.8
5	☐	1250.000	1293.517	1782839.04	1.2652	A	0.5
6	☐	2500.000	2551.289	3661075.95	2.4951	A	0.2
7	☐	5000.000	4962.493	6714710.86	4.8529	A	1.7
8	☐			8267.61	0.0060	P	1.1

$$y = 9.7786\text{E-}004 * x + 3.0062\text{E-}004$$

$$R = 0.9999$$

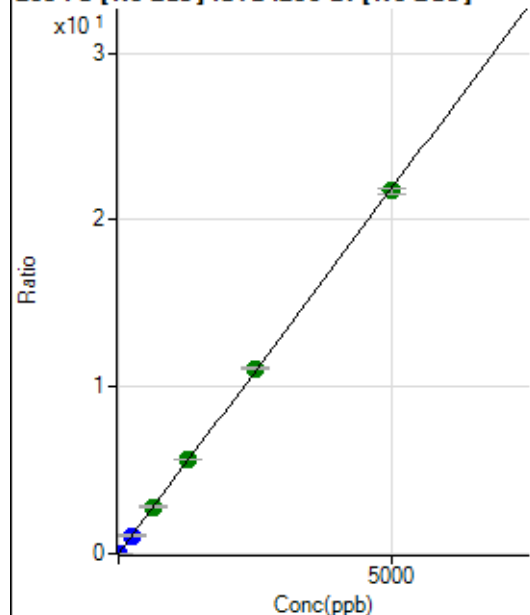
$$DL = 0.06637$$

$$BEC = 0.3074$$

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	1903.80	0.0014	P	0.7
2	☐	1.000	0.966	7606.57	0.0056	P	3.0
3	☐	250.000	249.394	1480415.77	1.0926	P	1.8
4	☐	625.000	644.106	3882396.95	2.8196	A	2.3
5	☐	1250.000	1286.227	7932102.28	5.6290	A	0.8
6	☐	2500.000	2540.356	16311664.80	11.1162	A	0.5
7	☐	5000.000	4968.407	30080158.83	21.7397	A	1.4
8	☐			37369.68	0.0273	P	2.7

$$y = 0.0044 * x + 0.0014$$

$$R = 0.9999$$

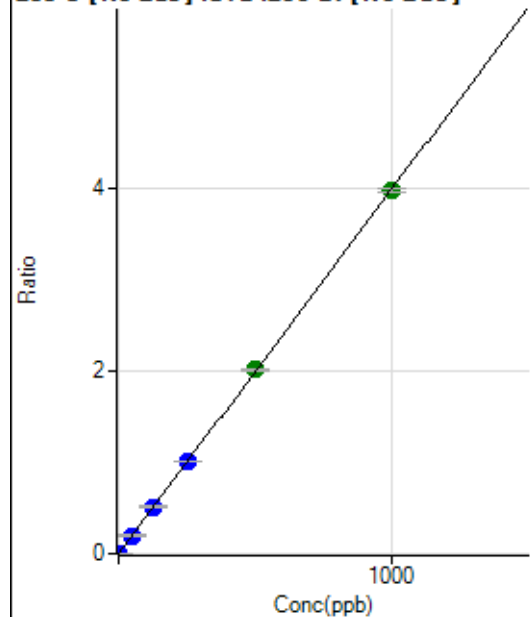
$$DL = 0.00708$$

$$BEC = 0.3168$$

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	2.78	0.0000	P	173.
2	☐	1.000	1.007	5443.00	0.0040	P	1.2
3	☐	50.000	49.600	267948.09	0.1978	P	3.1
4	☐	125.000	128.177	703766.15	0.5111	P	2.4
5	☐	250.000	253.773	1425988.31	1.0119	P	0.3
6	☐	500.000	505.282	2956646.27	2.0148	A	0.6
7	☐	1000.000	996.039	5495568.61	3.9717	A	1.0
8	☐			630.59	0.0005	P	7.7

$$y = 0.0040 * x + 2.0090E-006$$

$$R = 1.0000$$

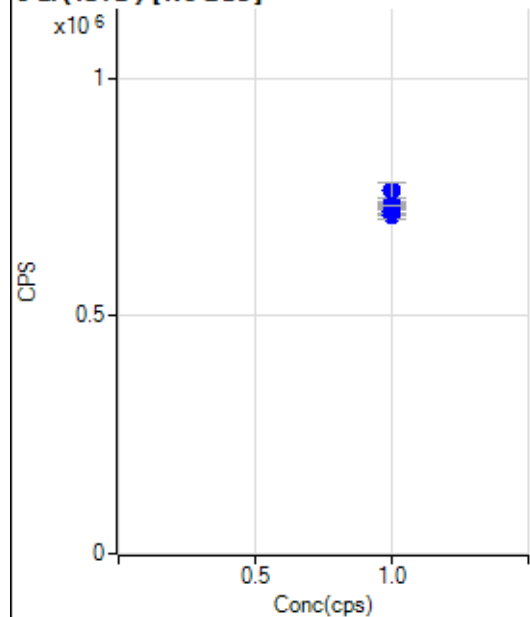
$$DL = 0.002618$$

$$BEC = 0.0005038$$

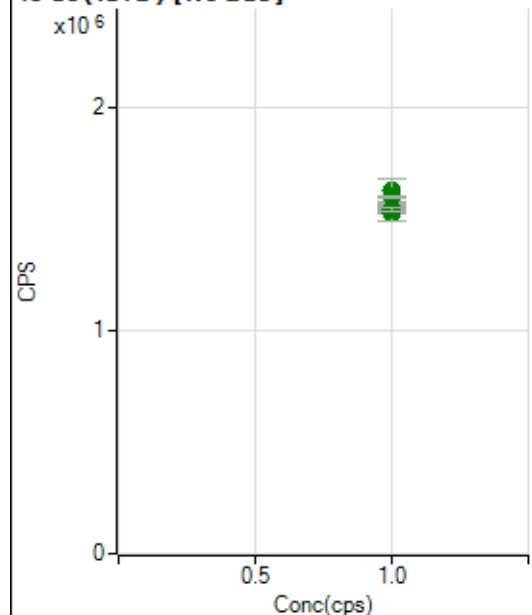
Weight: <None>

Min Conc: 0

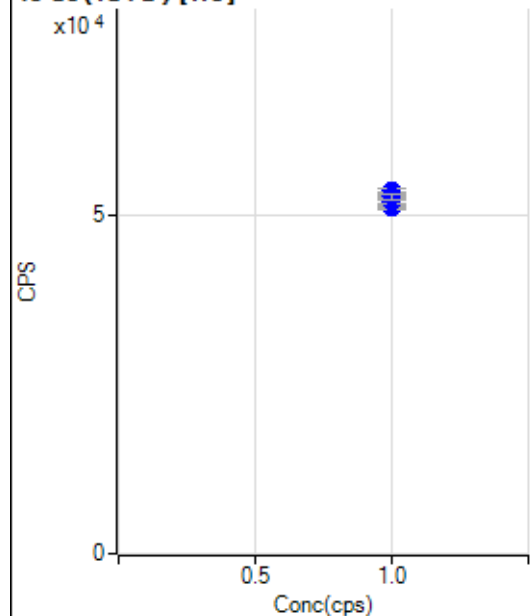
6 Li (ISTD) [No Gas]



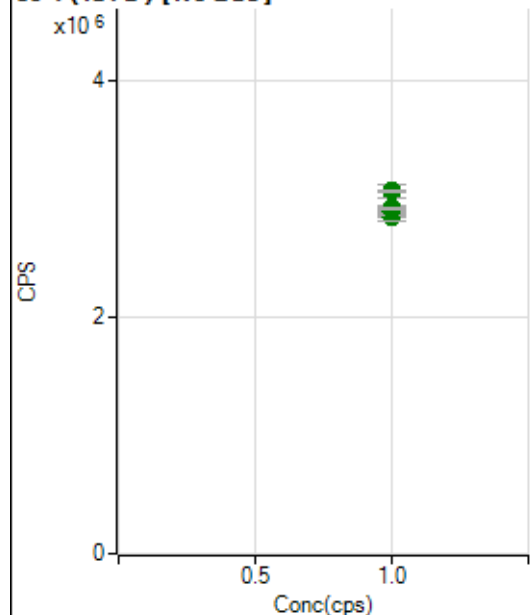
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		714111.15		P	0.4
2	☐	1.000		715088.27		P	0.3
3	☐	1.000		709994.51		P	1.9
4	☐	1.000		721504.57		P	1.7
5	☐	1.000		737484.99		P	0.7
6	☐	1.000		763139.33		P	4.3
7	☐	1.000		725233.26		P	0.3
8	☐	1.000		731845.27		P	0.2

45 Sc (ISTD) [No Gas]

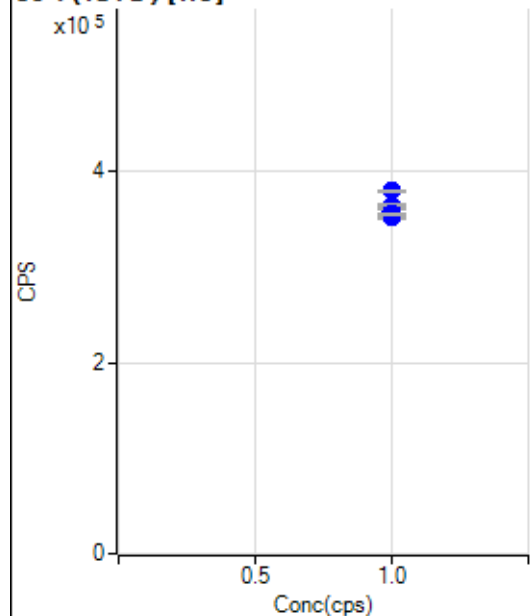
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1541063.92		A	1.1
2	☐	1.000		1540865.60		A	1.2
3	☐	1.000		1523482.49		A	4.5
4	☐	1.000		1555901.24		A	1.1
5	☐	1.000		1575710.55		A	0.6
6	☐	1.000		1628159.30		A	6.4
7	☐	1.000		1542493.10		A	1.4
8	☐	1.000		1604180.24		A	0.6

45 Sc (ISTD) [He]

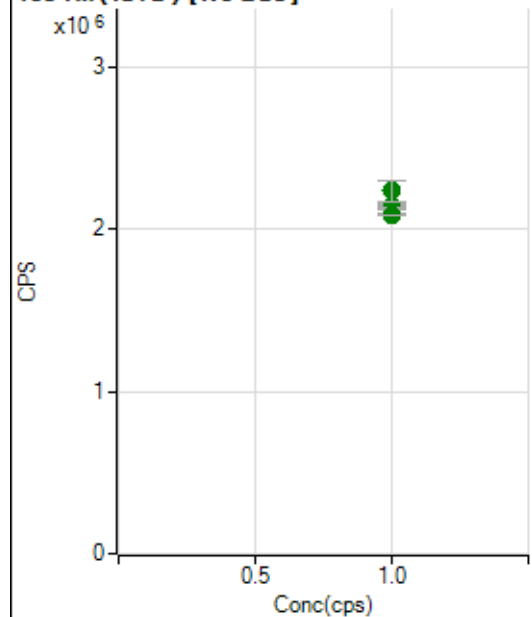
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		52848.92		P	0.7
2	☐	1.000		51628.03		P	0.9
3	☐	1.000		52150.94		P	1.6
4	☐	1.000		53712.12		P	1.2
5	☐	1.000		51851.06		P	2.3
6	☐	1.000		51128.27		P	0.6
7	☐	1.000		52107.38		P	0.8
8	☐	1.000		52818.80		P	1.1

89 Y (ISTD) [No Gas]

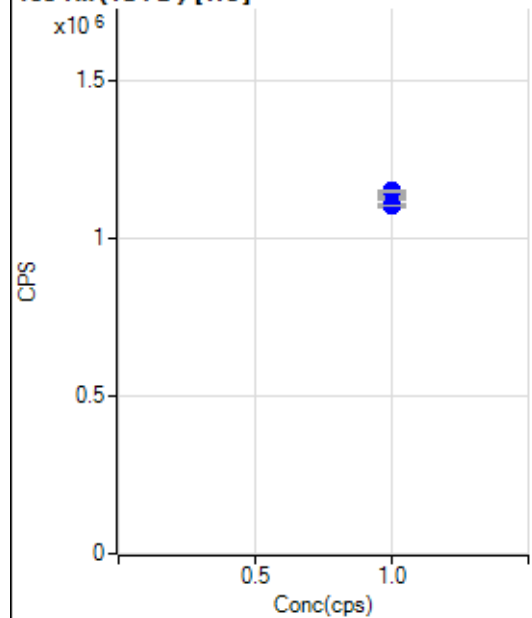
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2874064.96		A	1.5
2	☐	1.000		2879936.10		A	1.1
3	☐	1.000		2844181.73		A	2.2
4	☐	1.000		2899012.39		A	2.6
5	☐	1.000		2919840.13		A	0.7
6	☐	1.000		3065723.67		A	4.0
7	☐	1.000		2918984.40		A	0.3
8	☐	1.000		3068947.87		A	0.4

89 Y (ISTD) [He]

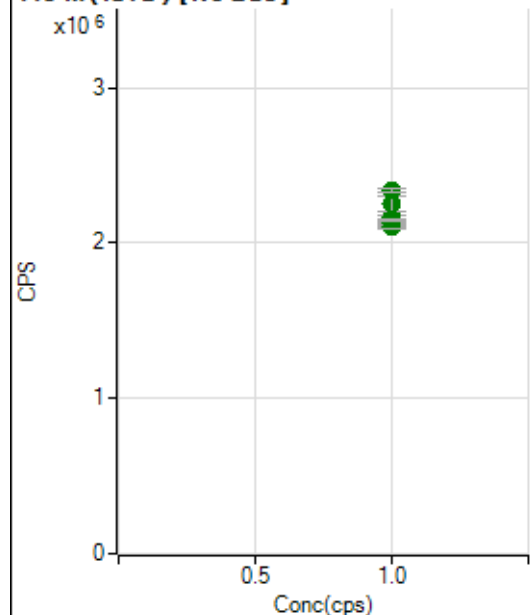
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		361092.03		P	0.2
2	☐	1.000		352977.83		P	1.4
3	☐	1.000		358808.52		P	0.9
4	☐	1.000		364898.24		P	0.5
5	☐	1.000		354834.83		P	2.5
6	☐	1.000		354188.11		P	0.9
7	☐	1.000		355821.35		P	0.7
8	☐	1.000		379682.97		P	0.9

103 Rh (ISTD) [No Gas]

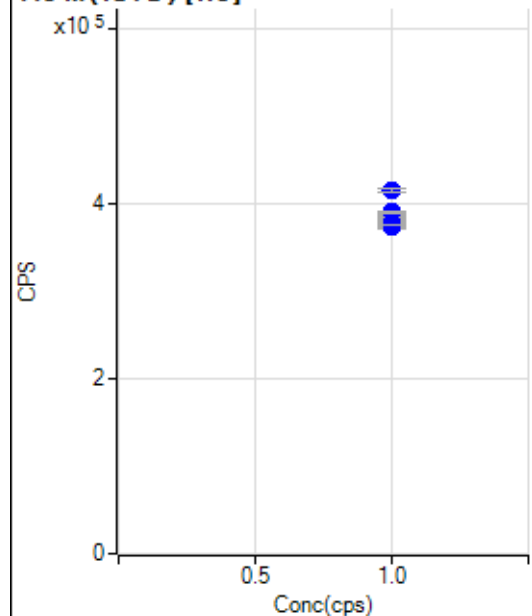
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2151157.25		A	0.9
2	☐	1.000		2132867.17		A	0.9
3	☐	1.000		2103355.80		A	2.0
4	☐	1.000		2127885.27		A	3.1
5	☐	1.000		2128285.55		A	0.9
6	☐	1.000		2236741.83		A	5.5
7	☐	1.000		2091589.81		A	1.0
8	☐	1.000		2091651.74		A	0.1

103 Rh (ISTD) [He]

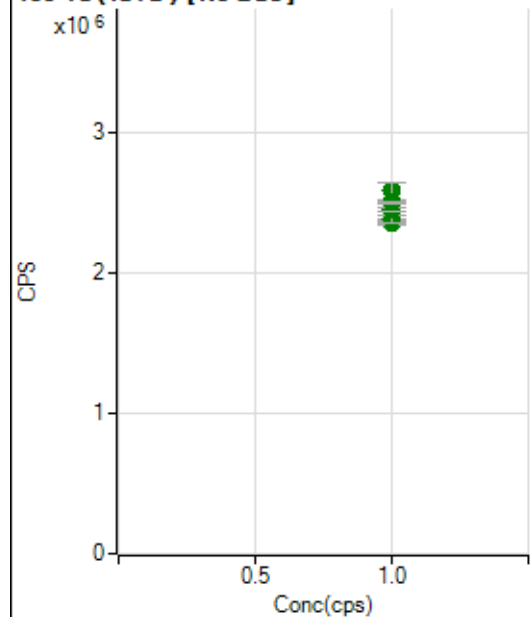
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1137978.08		P	0.3
2	☐	1.000		1110090.52		P	2.4
3	☐	1.000		1133342.49		P	1.0
4	☐	1.000		1152441.98		P	0.5
5	☐	1.000		1111231.16		P	2.3
6	☐	1.000		1106207.80		P	0.6
7	☐	1.000		1106052.91		P	0.8
8	☐	1.000		1103486.01		P	0.1

115 In (ISTD) [No Gas]

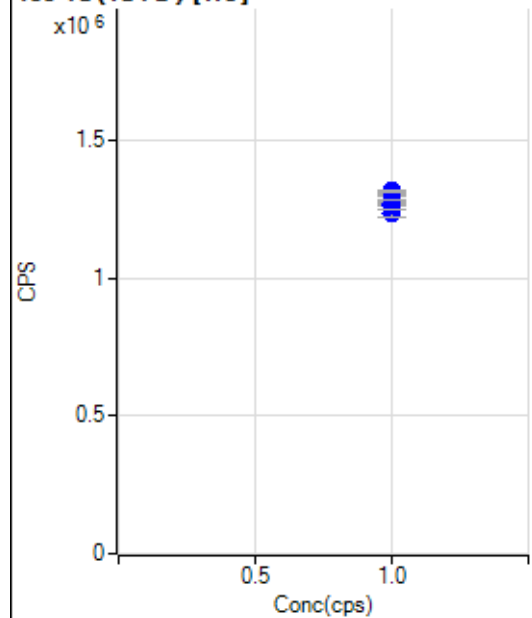
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2119274.50		A	0.6
2	☐	1.000		2114826.44		A	1.0
3	☐	1.000		2105103.60		A	1.0
4	☐	1.000		2123736.01		A	3.3
5	☐	1.000		2166265.79		A	1.2
6	☐	1.000		2252051.54		A	4.3
7	☐	1.000		2149014.07		A	0.4
8	☐	1.000		2334908.93		A	1.1

115 In (ISTD) [He]

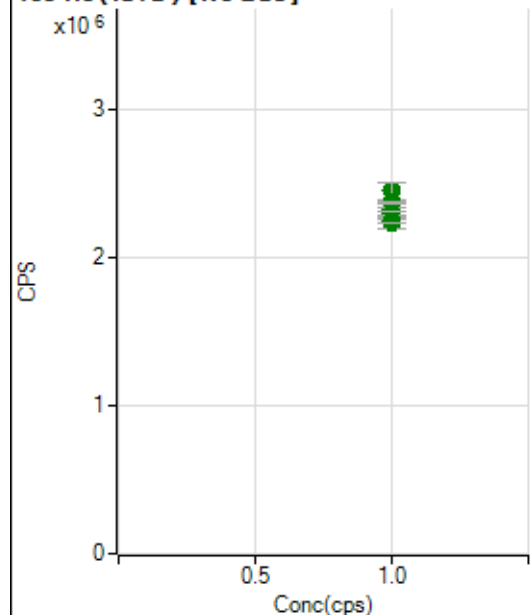
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		387641.63		P	0.2
2	☐	1.000		375151.43		P	2.0
3	☐	1.000		383169.37		P	1.5
4	☐	1.000		391131.44		P	0.7
5	☐	1.000		377616.86		P	2.4
6	☐	1.000		377803.90		P	0.4
7	☐	1.000		375916.53		P	0.3
8	☐	1.000		415217.24		P	1.1

159 Tb (ISTD) [No Gas]

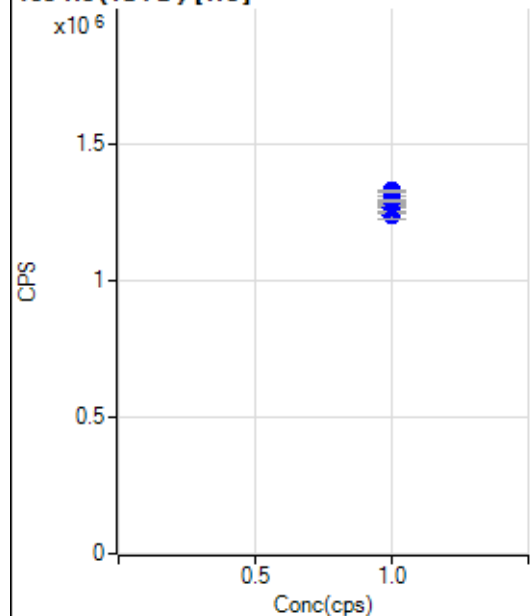
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2388308.07		A	0.5
2	☐	1.000		2370424.67		A	0.8
3	☐	1.000		2362520.62		A	1.5
4	☐	1.000		2394240.21		A	2.4
5	☐	1.000		2473498.19		A	0.3
6	☐	1.000		2590004.81		A	4.8
7	☐	1.000		2451741.75		A	1.1
8	☐	1.000		2507886.93		A	0.7

159 Tb (ISTD) [He]

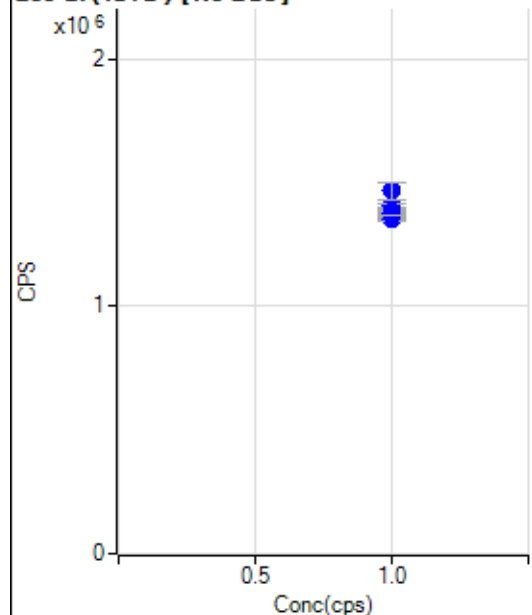
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1267505.41		P	0.7
2	☐	1.000		1235479.07		P	1.8
3	☐	1.000		1268497.31		P	0.9
4	☐	1.000		1299087.45		P	0.6
5	☐	1.000		1264605.87		P	2.8
6	☐	1.000		1281498.23		P	0.6
7	☐	1.000		1283649.87		P	0.2
8	☐	1.000		1316417.19		P	0.6

165 Ho (ISTD) [No Gas]

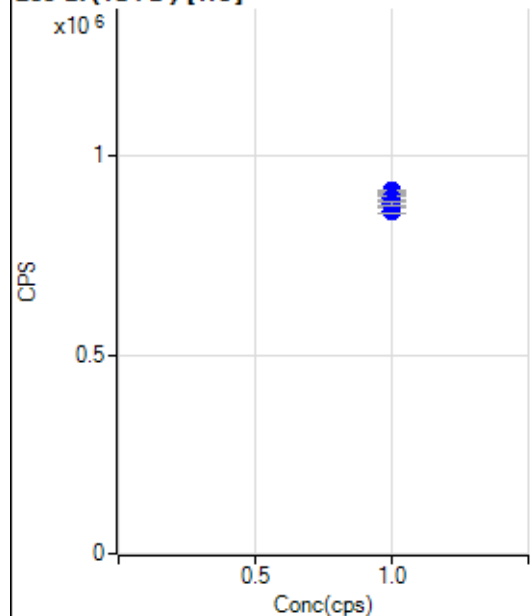
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2245652.05		A	1.2
2	☐	1.000		2277254.00		A	1.4
3	☐	1.000		2236600.50		A	3.4
4	☐	1.000		2255815.22		A	1.6
5	☐	1.000		2306037.12		A	1.3
6	☐	1.000		2454275.64		A	4.9
7	☐	1.000		2331649.79		A	1.2
8	☐	1.000		2374386.23		A	0.3

165 Ho (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1276964.96		P	0.8
2	☐	1.000		1236758.97		P	2.0
3	☐	1.000		1275304.70		P	0.8
4	☐	1.000		1310874.17		P	0.2
5	☐	1.000		1269925.40		P	3.2
6	☐	1.000		1279642.92		P	0.8
7	☐	1.000		1295009.22		P	0.6
8	☐	1.000		1328190.67		P	0.8

209 Bi (ISTD) [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1373380.76		P	0.6
2	☐	1.000		1355126.44		P	0.3
3	☐	1.000		1355316.02		P	2.0
4	☐	1.000		1377401.30		P	2.1
5	☐	1.000		1409205.27		P	1.0
6	☐	1.000		1467268.59		P	4.5
7	☐	1.000		1383700.41		P	0.4
8	☐	1.000		1368166.25		P	0.2

209 Bi (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		886557.25		P	0.7
2	☐	1.000		860931.71		P	1.7
3	☐	1.000		895004.60		P	0.7
4	☐	1.000		912212.88		P	0.6
5	☐	1.000		886698.05		P	3.5
6	☐	1.000		888373.21		P	0.7
7	☐	1.000		893758.25		P	0.8
8	☐	1.000		881299.01		P	1.1

US EPA Tune Check Report

Operator Name Jaswal
Acq/Data Batch D:\Agilent\ICPMH\1\DATA\P8030320MS.b
Acq. Date-Time 2020-03-03 11:36:08
Report Comment ---
Instrument Name G8403A SG19224459

[No Gas]

Sensitivity

Mass	Conc. [ug/l]	Count	CPS	Resp (Required) [cps/ug/l]	Resp (Flag)	RSD%	RSD% (Required)
9		2957	29567.99			0.814	5.000
24		28813	288126.57			0.633	5.000
25		4010	40099.47			1.165	5.000
26		4613	46125.59			0.879	5.000
59		22986	229857.29			0.825	5.000
113		1224	12235.65			0.879	5.000
115		28082	280820.61			1.018	5.000
206		5227	52271.78			1.065	5.000
207		4703	47030.61			0.999	5.000
208		11130	111296.55			0.597	5.000
220		1	5.80			20.761	

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

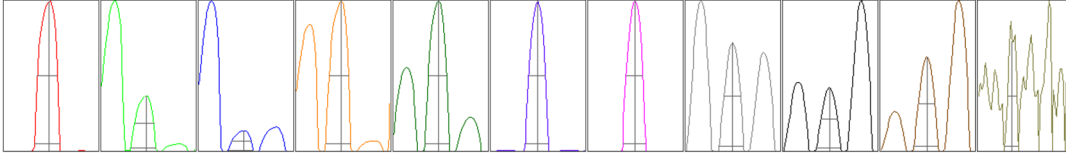
Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
9	2973	2923	2965	2941	2981
24	28717	28770	28811	28646	29120
25	3951	4043	4032	3969	4054
26	4596	4666	4644	4570	4587
59	22816	22984	23069	22802	23258
113	1205	1228	1229	1223	1232
115	27885	28163	28239	27704	28419
206	5167	5226	5271	5178	5294
207	4651	4697	4702	4686	4779
208	11035	11177	11114	11116	11207

US EPA Tune Check Report

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

Integration Time [sec] 0.1

Resolution/Axis



Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)
9	4874.38	8.95	8.90 - 9.10	
24	50689.73	23.95	23.90 - 24.10	
25	6717.51	24.95	24.90 - 25.10	
26	8002.25	25.95	25.90 - 26.10	
59	41337.97	58.95	58.90 - 59.10	
113	2437.11	113.00	112.90 - 113.10	
115	55866.23	115.00	114.90 - 115.10	
206	10225.79	206.00	205.90 - 206.10	
207	9280.30	207.00	206.90 - 207.10	
208	22134.29	208.00	207.90 - 208.10	
220	0.80	219.60	-	

Mass	W-50%	W-5%	W-5% (Required)	W-5% (Flag)
9	0.64	0.790	0.900	
24	0.61	0.789	0.900	
25	0.62	0.784	0.900	
26	0.62	0.789	0.900	
59	0.58	0.781	0.900	
113	0.52	0.733	0.900	
115	0.52	0.728	0.900	
206	0.52	0.772	0.900	
207	0.52	0.776	0.900	
208	0.52	0.772	0.900	
220	0.31	0.433		

Integration Time [sec] 0.1

Acquisition Time [sec] 256.770000000002

Y Axis Linear

Tune Parameters

Plasma Parameters

Plasma Mode HMI Nebulizer Gas 0.50 L/min Dilution Gas 0.45 L/min

US EPA Tune Check Report

RF Power	1600 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.80 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	10.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	-6.0 V	Omega Lens	11.5 V	Deflect	14.8 V
Extract 2	-250.0 V	Cell Entrance	-30 V	Plate Bias	-50 V
Omega Bias	-120 V	Cell Exit	-50 V		

Cell Parameters

Use Gas	No	3rd Gas Flow	---	Energy Discrimination	4.0 V
He Flow	0.0 mL/min	OctP Bias	-8.0 V		
H2 Flow	---	OctP RF	150 V		

QP Parameters

Mass Gain	123	Axis Gain	0.9993	QP Bias	-4.0 V
Mass Offset	123	Axis Offset	-0.05		

Hardware Settings

Torch

Torch H	0.4 mm	Torch V	0.1 mm
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EM

Discriminator	3.9 mV	Analog HV	2168 V	Pulse HV	1119 V
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[He]

Sensitivity

Mass	Conc. [ug/l]	Count	CPS	Resp (Required) [cps/ug/l]	Resp (Flag)	RSD%	RSD% (Required)
59		5827	58271.02			0.716	
89		9103	91031.86			0.886	
205		5047	50467.56			2.000	

Mass	RSD% (Flag)
59	
89	
205	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
59	5792	5792	5876	5868	5807
89	9038	9006	9167	9194	9111
205	4921	4961	5154	5081	5117

Integration Time [sec] 0.1

Tune Parameters

Plasma Parameters

Plasma Mode	HMI	Nebulizer Gas	0.50 L/min	Dilution Gas	0.45 L/min
RF Power	1600 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.80 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	10.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	-6.0 V	Omega Lens	11.5 V	Deflect	4.0 V
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US EPA Tune Check Report

Extract 2	-250.0 V	Cell Entrance	-50 V	Plate Bias	-60 V
Omega Bias	-120 V	Cell Exit	-70 V		
Cell Parameters					
Use Gas	Yes	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	4.5 mL/min	OctP Bias	-18.0 V		
H2 Flow	---	OctP RF	200 V		
QP Parameters					
Mass Gain	123	Axis Gain	0.9993	QP Bias	-13.0 V
Mass Offset	123	Axis Offset	-0.05		
Hardware Settings					
Torch					
Torch H	0.4 mm	Torch V	0.1 mm		
EM					
Discriminator	3.9 mV	Analog HV	2168 V	Pulse HV	1119 V