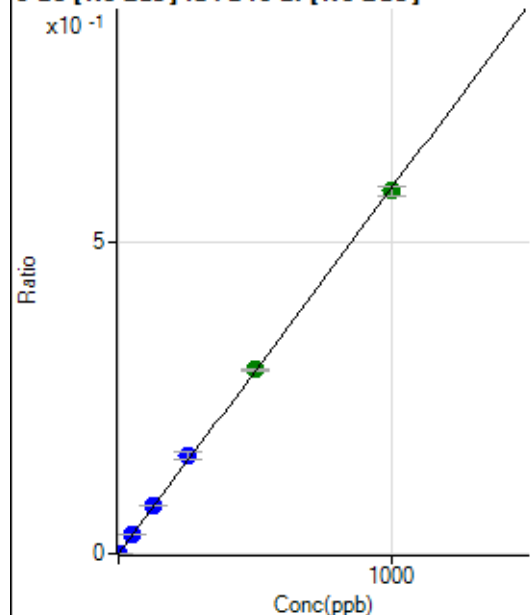


Batch Folder: D:\Agilent\ICPMH\1\DATA\P8121422 MS.b\
Analysis File: P8121422 MS.batch.bin
DA Date-Time: 2022-12-14 17:37:25
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	004CALB.d	S00	2022-12-14 13:11:37
2	005CALS.d	S02	2022-12-14 13:14:47
3	006CALS.d	S03	2022-12-14 13:17:58
4	007CALS.d	S04	2022-12-14 13:21:05
5	008CALS.d	S05	2022-12-14 13:24:13
6	009CALS.d	S06	2022-12-14 13:27:20
7	010CALS.d	S07	2022-12-14 13:30:28
8	011CALS.d	S08	2022-12-14 13:33:35

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	14.58	0.0000	P	10.5
2	☐	1.000	1.054	2751.17	0.0006	P	2.5
3	☐	50.000	53.396	139211.97	0.0314	P	2.0
4	☐	125.000	131.997	344406.66	0.0777	P	0.9
5	☐	250.000	268.178	673030.95	0.1578	P	7.0
6	☐	500.000	503.132	1247184.56	0.2960	A	1.2
7	☐	1000.000	992.845	2402905.22	0.5841	A	2.4
8	☐			479.12	0.0001	P	4.6

$$y = 5.8826\text{E-}004 * x + 3.3101\text{E-}006$$

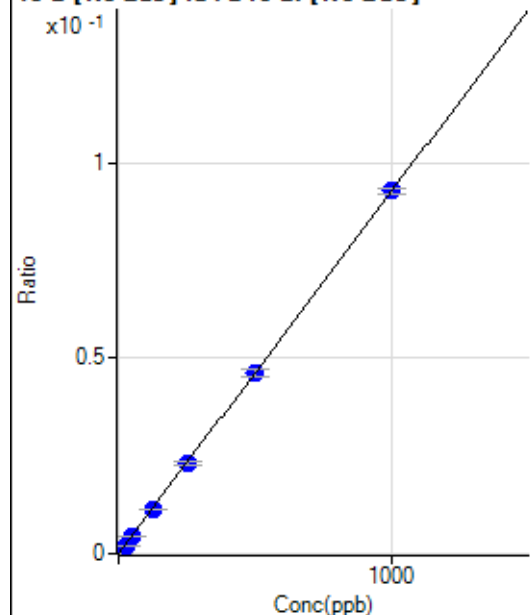
$$R = 0.9998$$

$$DL = 0.001773$$

$$BEC = 0.005627$$

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	123.98	0.0000	P	24.1
2	☐	25.000	21.311	8838.96	0.0020	P	4.1
3	☐	50.000	48.350	19967.74	0.0045	P	6.3
4	☐	125.000	120.682	49700.85	0.0112	P	1.8
5	☐	250.000	250.158	99037.05	0.0232	P	4.7
6	☐	500.000	498.286	194559.27	0.0462	P	3.8
7	☐	1000.000	1001.532	381825.90	0.0928	P	1.2
8	☐			19620.64	0.0047	P	12.4

$$y = 9.2623\text{E-}005 * x + 2.8133\text{E-}005$$

$$R = 1.0000$$

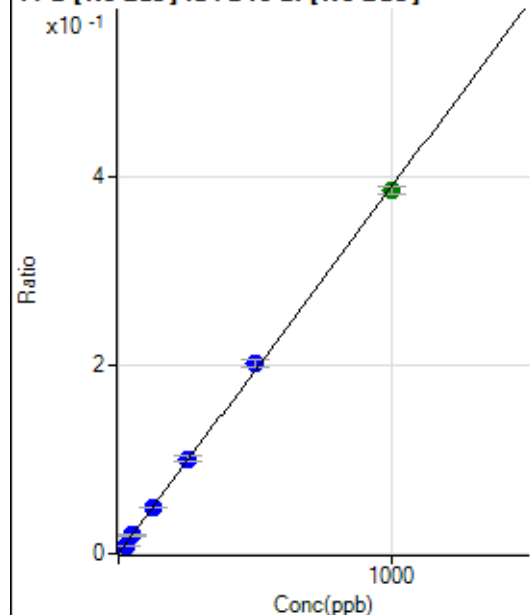
$$DL = 0.2193$$

$$BEC = 0.3037$$

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	613.89	0.0001	P	5.5
2	☐	25.000	21.770	38115.34	0.0086	P	3.3
3	☐	50.000	50.112	87234.34	0.0197	P	5.6
4	☐	125.000	124.735	216444.75	0.0488	P	1.2
5	☐	250.000	258.933	431881.76	0.1012	P	4.6
6	☐	500.000	518.202	852204.69	0.2023	P	3.7
7	☐	1000.000	988.774	1587750.52	0.3859	A	2.2
8	☐			86633.15	0.0210	P	12.8

$$y = 3.9012\text{E-}004 * x + 1.3928\text{E-}004$$

$$R = 0.9997$$

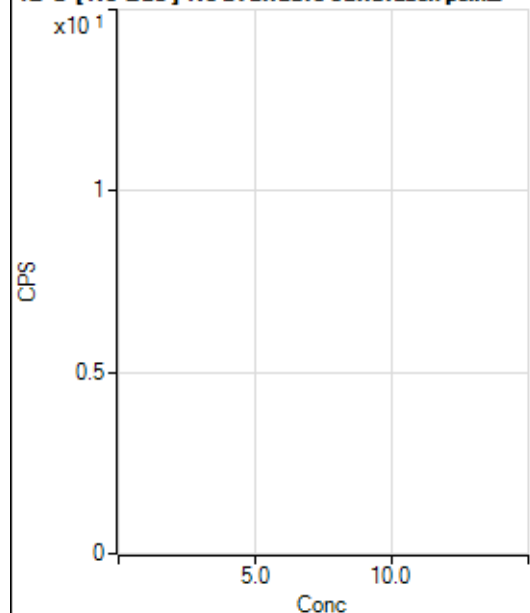
$$DL = 0.05857$$

$$BEC = 0.357$$

Weight: <None>

Min Conc: 0

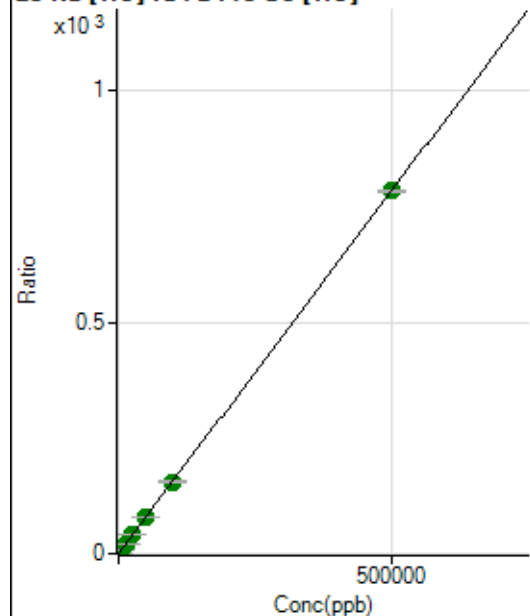
12 C [No Gas] No available calibration points



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			8648370.42		A	2.2
2	☐			8815071.55		A	0.3
3	☐			9405007.41		A	1.1
4	☐			9288050.21		A	1.2
5	☐			9335399.69		A	0.9
6	☐			9223575.21		A	0.6
7	☐			9385249.51		A	0.5
8	☐			8969587.79		A	0.2

12 C [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			96944.28		P	1.5
2	☐			99407.81		P	0.8
3	☐			109187.66		P	0.9
4	☐			104121.12		P	1.9
5	☐			107525.74		P	2.2
6	☐			105116.96		P	1.8
7	☐			111830.58		P	1.5
8	☐			108308.91		P	0.4

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	15808.94	0.1016	P	3.7
2	☐	500.000	469.577	129756.88	0.8369	P	2.0
3	☐	5000.000	5201.741	1279317.26	8.2470	A	1.6
4	☐	12500.000	12683.729	3042185.18	19.9632	A	1.1
5	☐	25000.000	26193.431	6249105.83	41.1182	A	2.0
6	☐	50000.000	51154.395	12005277.26	80.2048	A	1.1
7	☐	100000.00	99061.526	24472724.16	155.2232	A	1.6
8	☐	500000.00	500006.00	127632365.3	783.0671	A	0.7

$$y = 0.0016 * x + 0.1016$$

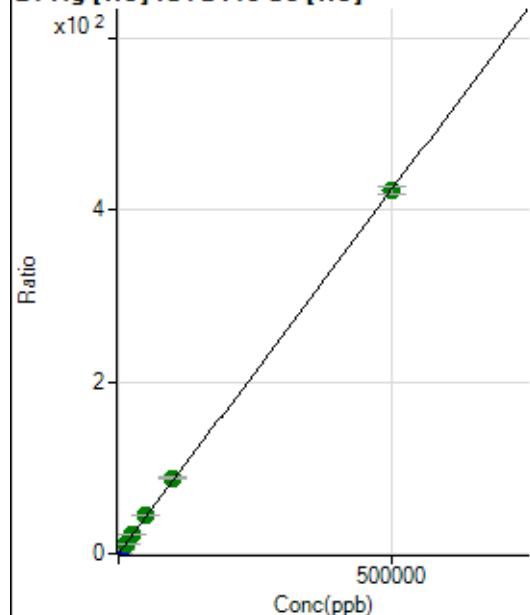
$$R = 1.0000$$

$$DL = 7.119$$

$$BEC = 64.85$$

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	161.12	0.0010	P	29.3
2	☐	500.000	483.393	63522.99	0.4097	P	2.7
3	☐	5000.000	5422.591	711261.82	4.5856	P	1.0
4	☐	12500.000	13501.553	1739947.15	11.4160	A	2.0
5	☐	25000.000	26902.310	3458514.18	22.7458	A	1.8
6	☐	50000.000	52831.035	6685795.29	44.6674	A	0.9
7	☐	100000.00	103801.88	13836039.89	87.7610	A	1.8
8	☐	500000.00	498832.15	68739575.84	421.7419	A	2.0

$$y = 8.4546\text{E-}004 * x + 0.0010$$

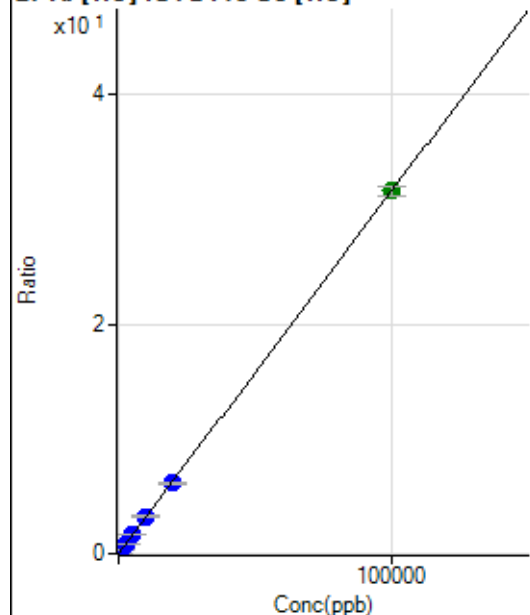
$$R = 1.0000$$

$$DL = 1.077$$

$$BEC = 1.224$$

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	62.07	0.0004	P	14.8
2	☐	20.000	20.484	1064.91	0.0069	P	1.6
3	☐	1000.000	1044.204	51206.04	0.3301	P	1.7
4	☐	2500.000	2590.348	124718.43	0.8183	P	1.3
5	☐	5000.000	5185.213	248900.64	1.6377	P	2.0
6	☐	10000.000	10312.230	487463.82	3.2566	P	1.2
7	☐	20000.000	19487.187	970194.01	6.1538	P	1.6
8	☐	100000.00	100059.37	5150098.48	31.5956	A	2.6

$$y = 3.1576\text{E-}004 * x + 3.9853\text{E-}004$$

$$R = 1.0000$$

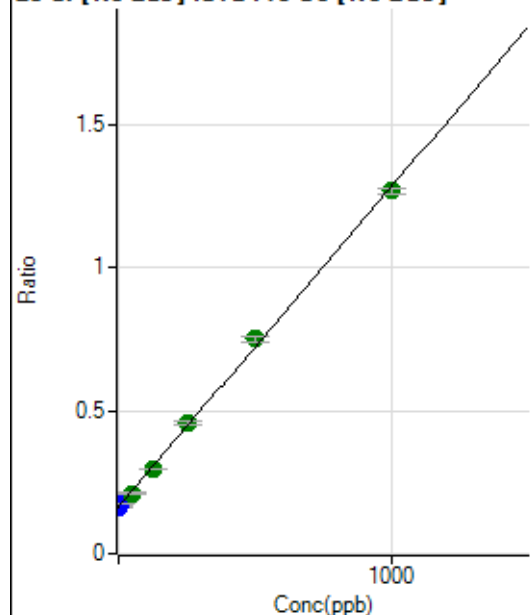
$$DL = 0.559$$

$$BEC = 1.262$$

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	824350.90	0.1643	P	1.1
2	☐	10.000	8.128	875753.98	0.1734	P	1.0
3	☐	50.000	40.066	1092204.39	0.2092	A	3.4
4	☐	125.000	117.940	1521474.66	0.2965	A	0.6
5	☐	250.000	260.252	2232994.30	0.4559	A	2.9
6	☐	500.000	524.773	3779240.93	0.7522	A	2.5
7	☐	1000.000	986.449	6545291.51	1.2694	A	1.7
8	☐			995569.03	0.1934	A	5.7

$$y = 0.0011 * x + 0.1643$$

R = 0.9993

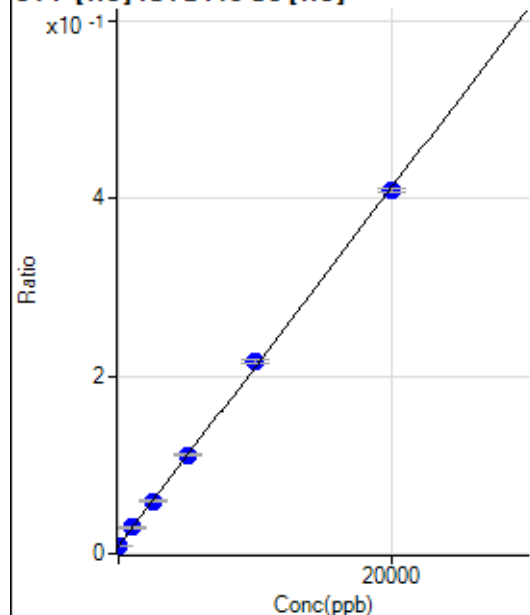
DL = 4.929

BEC = 146.7

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	-11.125	1319.54	0.0085	P	9.1
2	☐	0.000	11.125	1383.44	0.0089	P	1.2
3	☐	1000.000	1052.645	4642.53	0.0299	P	5.5
4	☐	2500.000	2508.514	9030.80	0.0593	P	4.0
5	☐	5000.000	5092.757	16926.90	0.1114	P	1.9
6	☐	10000.000	10303.640	32400.87	0.2165	P	2.0
7	☐	20000.000	19821.294	64382.43	0.4084	P	1.1
8	☐			1350.10	0.0083	P	1.3

$$y = 2.0164E-005 * x + 0.0087$$

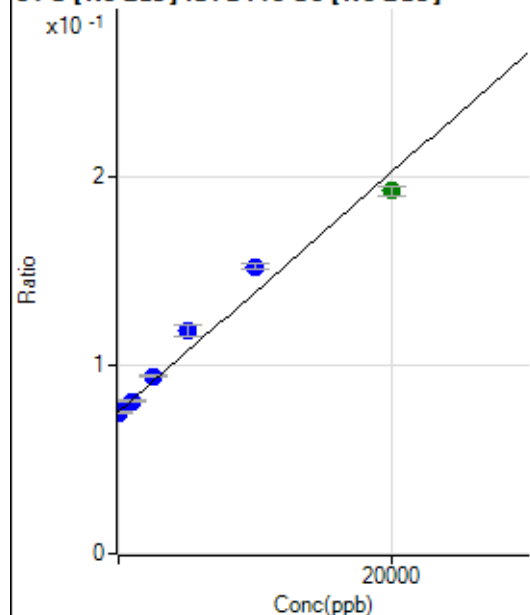
R = 0.9998

DL = 65.49

BEC = 431.3

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	56.225	379933.46	0.0758	P	3.2
2	☐	0.000	-56.225	378949.37	0.0750	P	0.5
3	☐	1000.000	898.207	423596.33	0.0811	P	2.0
4	☐	2500.000	2935.664	482971.39	0.0941	P	1.2
5	☐	5000.000	6799.018	581067.51	0.1187	P	5.6
6	☐	10000.000	12142.242	767412.96	0.1528	P	2.3
7	☐	20000.000	18429.756	994057.41	0.1928	A	2.4
8	☐			307663.25	0.0597	P	2.5

$$y = 6.3714\text{E-}006 * x + 0.0754$$

$$R = 0.9853$$

$$DL = 651$$

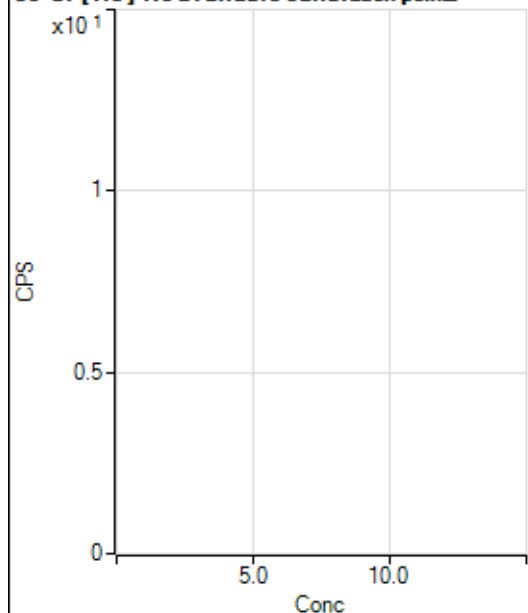
$$BEC = 1.183\text{E}+04$$

Weight: <None>

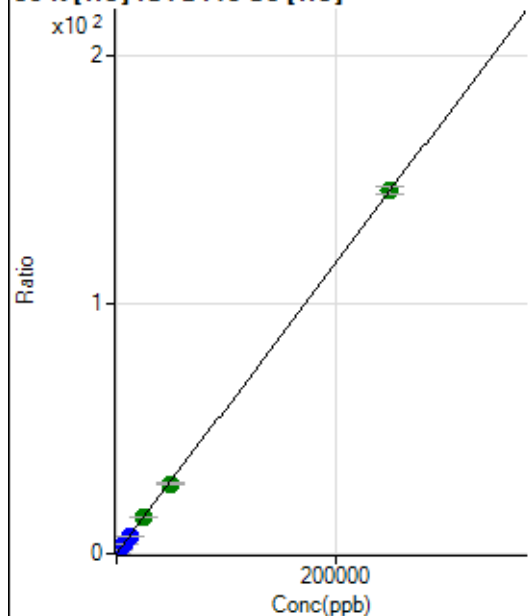
Min Conc: 0

35 Cl [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			84884.88		P	3.0
2	☐			89948.40		P	0.3
3	☐			100469.51		P	0.8
4	☐			108637.49		P	1.1
5	☐			111438.45		P	0.4
6	☐			125194.19		P	0.9
7	☐			141290.59		P	0.6
8	☐			113720.70		P	1.4

35 Cl [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			569.47		P	9.4
2	☐			563.92		P	19.2
3	☐			700.04		P	10.2
4	☐			786.15		P	4.4
5	☐			730.59		P	6.3
6	☐			875.05		P	10.3
7	☐			1052.85		P	9.1
8	☐			755.60		P	5.7

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	15664.41	0.1006	P	4.5
2	☐	500.000	438.310	55069.62	0.3552	P	2.5
3	☐	2500.000	2489.596	239895.38	1.5465	P	1.6
4	☐	6250.000	6118.392	556818.02	3.6541	P	0.9
5	☐	12500.000	12346.024	1105158.84	7.2710	P	1.5
6	☐	25000.000	25046.687	2192634.08	14.6474	A	3.1
7	☐	50000.000	48163.543	4425757.00	28.0733	A	2.9
8	☐	250000.00	250373.83	23716697.58	145.5139	A	2.0

$$y = 5.8078\text{E-}004 * x + 0.1006$$

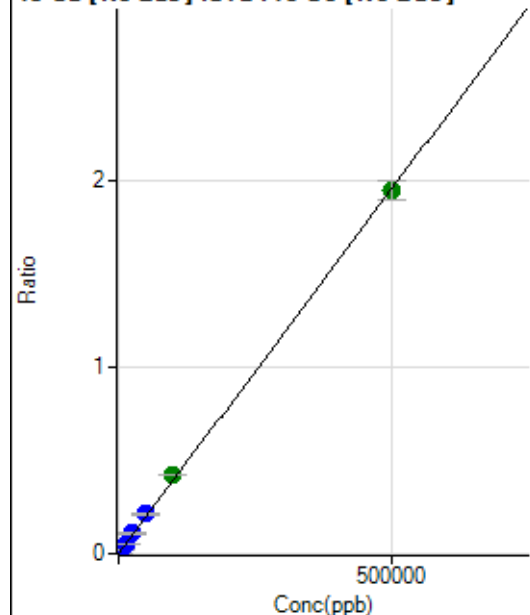
$$R = 1.0000$$

$$DL = 23.23$$

$$BEC = 173.3$$

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	168.73	0.0000	P	1.2
2	☐	500.000	457.132	9198.06	0.0018	P	4.1
3	☐	5000.000	5414.308	110771.39	0.0212	P	2.3
4	☐	12500.000	13615.843	273545.83	0.0533	P	1.2
5	☐	25000.000	28227.820	540476.58	0.1105	P	6.7
6	☐	50000.000	54166.478	1064756.26	0.2119	P	1.3
7	☐	100000.00	108564.11	2190120.67	0.4248	A	1.2
8	☐	500000.00	497677.14	10024045.45	1.9471	A	5.2

$$y = 3.9122\text{E-}006 * x + 3.3631\text{E-}005$$

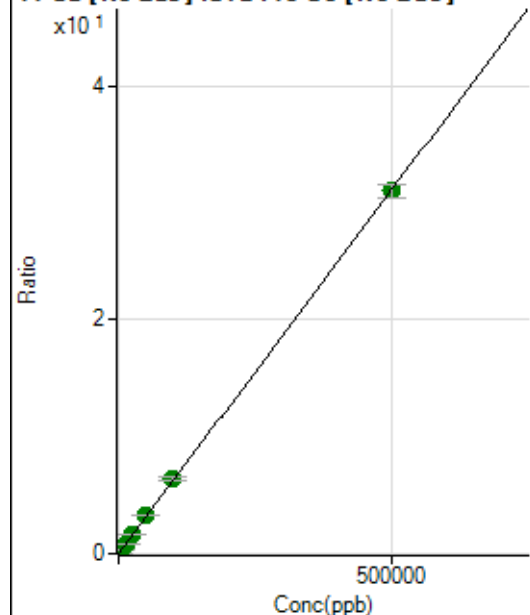
$$R = 0.9998$$

$$DL = 0.314$$

$$BEC = 8.596$$

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	8674.05	0.0017	P	2.9
2	☐	500.000	469.154	155943.25	0.0309	P	3.0
3	☐	5000.000	5257.845	1715434.26	0.3285	A	1.9
4	☐	12500.000	13088.822	4184178.55	0.8152	A	2.3
5	☐	25000.000	26946.675	8205381.74	1.6765	A	5.6
6	☐	50000.000	52563.410	16420954.70	3.2687	A	1.6
7	☐	100000.00	103447.56	33149870.48	6.4312	A	3.3
8	☐	500000.00	498939.54	159695911.6	31.0119	A	3.4

$$y = 6.2152\text{E-}005 * x + 0.0017$$

$$R = 1.0000$$

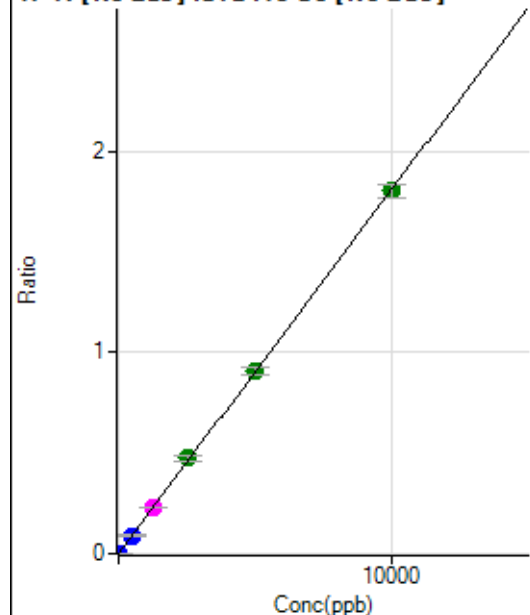
$$DL = 2.453$$

$$BEC = 27.83$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	200.01	0.0000	P	18.1
2	☐	5.000	4.852	4631.43	0.0009	P	0.5
3	☐	500.000	500.494	472756.74	0.0905	P	1.5
4	☐	1250.000	1258.390	1167881.48	0.2276	M	2.3
5	☐	2500.000	2615.517	2313787.94	0.4730	A	7.0
6	☐	5000.000	5005.312	4546597.41	0.9051	A	4.0
7	☐	10000.000	9967.391	9289060.10	1.8023	A	4.0
8	☐			2494.75	0.0005	P	10.1

$$y = 1.8081E-004 * x + 3.9930E-005$$

$$R = 0.9999$$

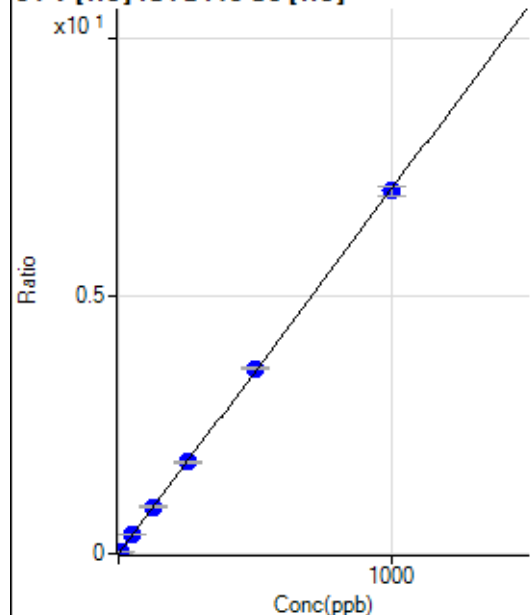
$$DL = 0.1199$$

$$BEC = 0.2208$$

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	2.22	0.0000	P	173.
2	☐	5.000	4.561	4999.81	0.0322	P	4.6
3	☐	50.000	50.603	55474.24	0.3576	P	1.9
4	☐	125.000	128.404	138282.53	0.9074	P	1.5
5	☐	250.000	250.940	269489.10	1.7733	P	2.2
6	☐	500.000	508.632	538014.76	3.5943	P	1.5
7	☐	1000.000	994.995	1108512.14	7.0313	P	2.7
8	☐			273.34	0.0017	P	4.0

$$y = 0.0071 * x + 1.4349E-005$$

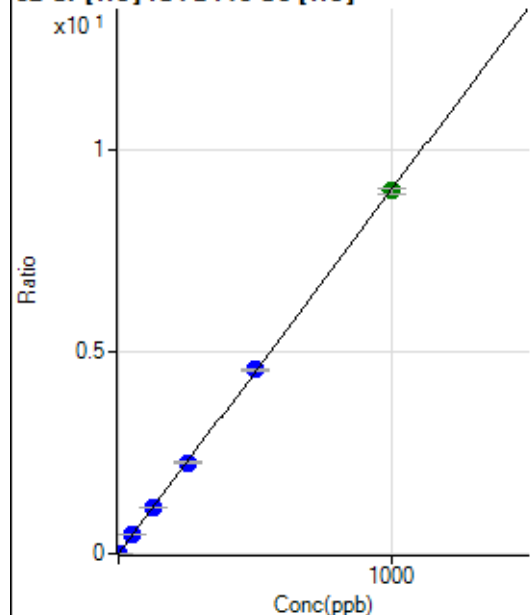
$$R = 0.9999$$

$$DL = 0.01055$$

$$BEC = 0.002031$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	420.01	0.0027	P	8.8
2	☐	2.000	1.733	2843.65	0.0183	P	3.3
3	☐	50.000	51.170	72048.50	0.4645	P	1.5
4	☐	125.000	126.769	174759.76	1.1468	P	0.4
5	☐	250.000	249.384	342464.58	2.2533	P	1.6
6	☐	500.000	505.426	683139.37	4.5640	P	0.5
7	☐	1000.000	997.162	1419194.30	9.0018	A	1.7
8	☐			9915.75	0.0608	P	0.8

$$y = 0.0090 * x + 0.0027$$

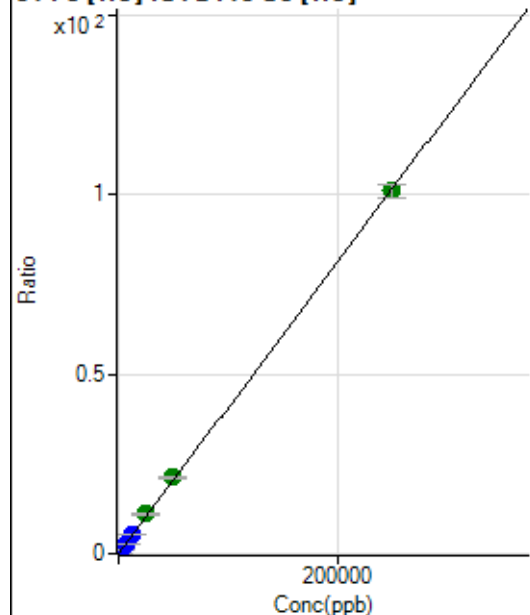
$$R = 1.0000$$

$$DL = 0.07901$$

$$BEC = 0.2989$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	535.21	0.0034	P	20.4
2	☐	50.000	48.921	3607.93	0.0233	P	2.8
3	☐	2500.000	2679.220	168914.28	1.0890	P	1.2
4	☐	6250.000	6714.131	415125.82	2.7239	P	1.0
5	☐	12500.000	12980.951	799978.81	5.2631	P	1.6
6	☐	25000.000	27295.052	1655984.32	11.0630	A	1.9
7	☐	50000.000	52330.257	3343495.10	21.2069	A	2.0
8	☐	250000.00	249267.00	16463082.31	101.0029	A	3.6

$$y = 4.0519E-004 * x + 0.0034$$

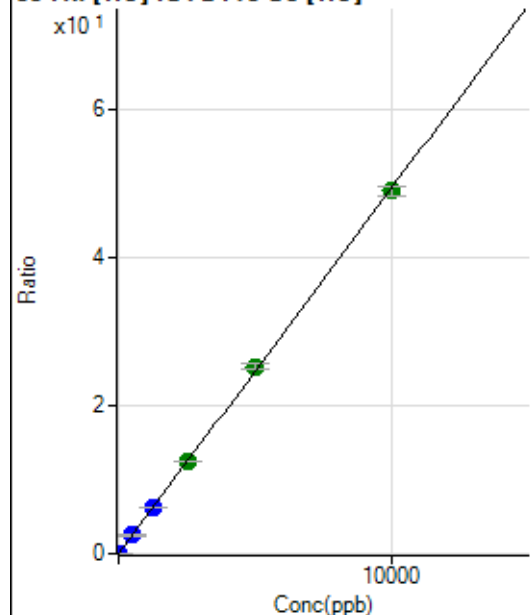
$$R = 0.9999$$

$$DL = 5.187$$

$$BEC = 8.49$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	41.11	0.0003	P	25.4
2	☐	1.000	0.948	766.70	0.0049	P	6.3
3	☐	500.000	500.728	383328.87	2.4713	P	0.9
4	☐	1250.000	1260.931	948303.40	6.2228	P	0.9
5	☐	2500.000	2536.202	1902728.97	12.5160	A	1.1
6	☐	5000.000	5119.686	3781912.27	25.2651	A	2.7
7	☐	10000.000	9929.704	7725129.75	49.0017	A	3.0
8	☐			7998.98	0.0491	P	1.4

$$y = 0.0049 * x + 2.6439E-004$$

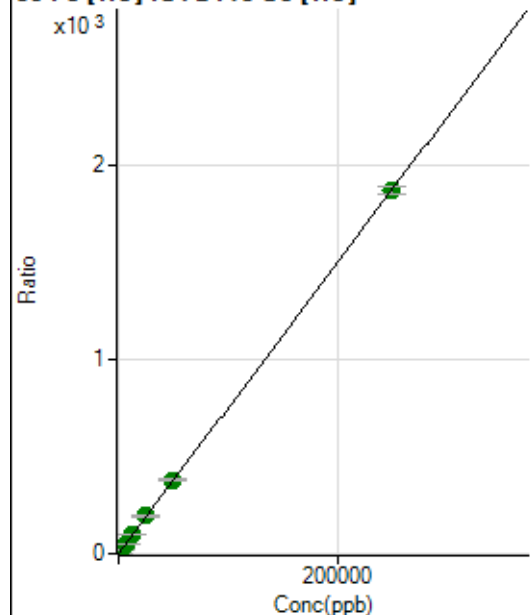
$$R = 0.9999$$

$$DL = 0.04088$$

$$BEC = 0.05358$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	2841.08	0.0183	P	5.0
2	☐	50.000	46.913	57306.29	0.3696	P	3.7
3	☐	2500.000	2702.848	3142769.78	20.2630	A	1.8
4	☐	6250.000	6527.481	7453908.67	48.9101	A	1.0
5	☐	12500.000	12974.553	14773943.73	97.1996	A	0.9
6	☐	25000.000	25887.968	29028153.19	193.9230	A	2.2
7	☐	50000.000	50616.911	59777025.87	379.1465	A	2.2
8	☐	250000.00	249755.12	304903095.7	1,870.721	A	2.1

$$y = 0.0075 * x + 0.0183$$

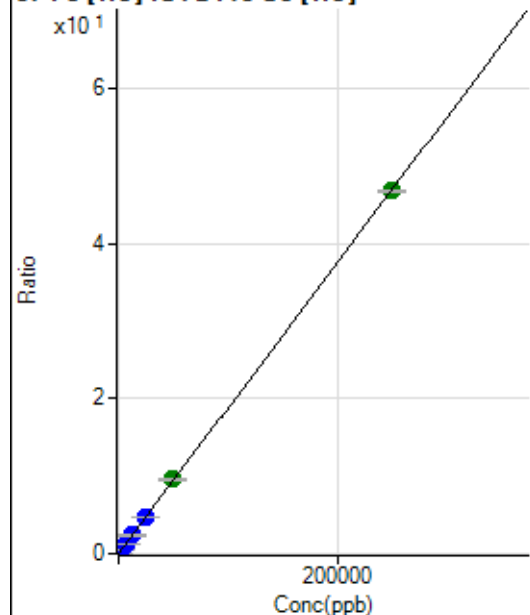
$$R = 1.0000$$

$$DL = 0.3664$$

$$BEC = 2.437$$

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	157.41	0.0010	P	25.8
2	☐	50.000	47.463	1535.29	0.0099	P	4.7
3	☐	2500.000	2596.319	75626.08	0.4876	P	2.2
4	☐	6250.000	6423.668	183605.31	1.2048	P	1.4
5	☐	12500.000	12658.477	360704.99	2.3732	P	1.9
6	☐	25000.000	25314.190	710216.15	4.7449	P	1.0
7	☐	50000.000	51237.826	1514037.56	9.6030	A	3.3
8	☐	250000.00	249707.78	7627668.28	46.7962	A	0.8

$$y = 1.8740\text{E-}004 * x + 0.0010$$

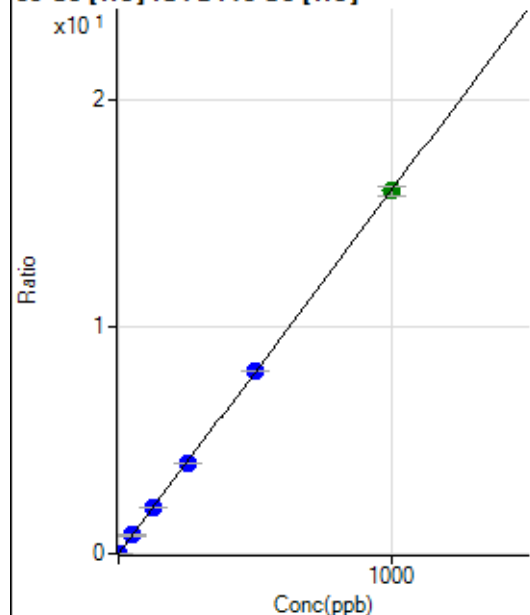
R = 1.0000

DL = 4.172

BEC = 5.387

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	42.22	0.0003	P	47.7
2	☐	1.000	0.954	2404.68	0.0155	P	4.0
3	☐	50.000	50.312	124745.23	0.8043	P	0.8
4	☐	125.000	127.113	309593.01	2.0316	P	0.0
5	☐	250.000	249.382	605778.22	3.9855	P	0.7
6	☐	500.000	502.937	1202996.30	8.0373	P	0.1
7	☐	1000.000	998.406	2515357.34	15.9550	A	2.7
8	☐			2216.86	0.0136	P	3.5

$$y = 0.0160 * x + 2.7065\text{E-}004$$

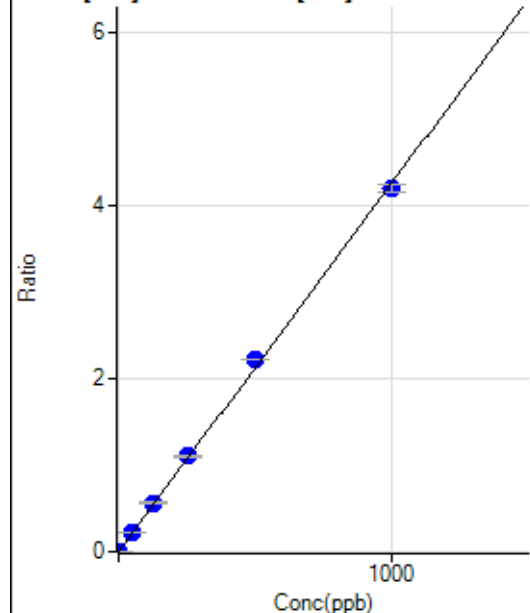
R = 1.0000

DL = 0.02423

BEC = 0.01694

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	52.22	0.0003	P	32.7
2	☐	1.000	0.894	642.24	0.0041	P	4.1
3	☐	50.000	53.899	35651.49	0.2298	P	1.3
4	☐	125.000	132.975	86335.94	0.5666	P	0.9
5	☐	250.000	260.163	168405.46	1.1081	P	1.7
6	☐	500.000	521.523	332436.18	2.2210	P	0.3
7	☐	1000.000	985.506	661647.33	4.1967	P	2.2
8	☐			2159.07	0.0132	P	1.7

$$y = 0.0043 * x + 3.3591E-004$$

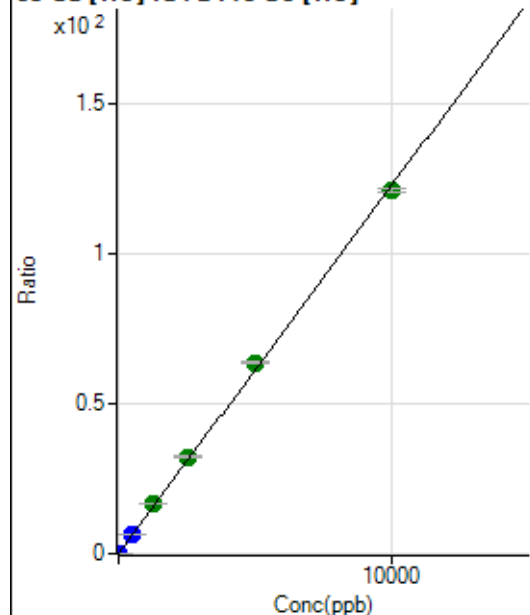
$$R = 0.9996$$

$$DL = 0.0774$$

$$BEC = 0.07889$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	585.57	0.0038	P	6.0
2	☐	2.000	1.930	4249.58	0.0274	P	3.3
3	☐	500.000	521.424	991383.28	6.3915	P	0.4
4	☐	1250.000	1351.583	2523747.91	16.5614	A	0.5
5	☐	2500.000	2629.552	4896893.68	32.2173	A	1.0
6	☐	5000.000	5188.566	9514359.09	63.5667	A	1.0
7	☐	10000.000	9859.560	19044761.94	120.7891	A	1.1
8	☐			4986.48	0.0306	P	3.1

$$y = 0.0123 * x + 0.0038$$

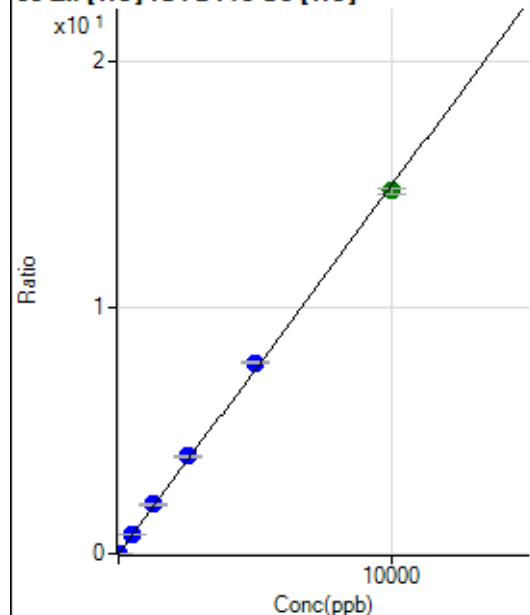
$$R = 0.9996$$

$$DL = 0.05542$$

$$BEC = 0.307$$

Weight: <None>

Min Conc: 0

⁶⁶Zn [He] ISTD: ⁴⁵Sc [He]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	144.45	0.0009	P	19.8
2	☐	2.000	2.058	621.13	0.0040	P	8.7
3	☐	500.000	541.412	125834.46	0.8113	P	0.5
4	☐	1250.000	1332.647	304111.87	1.9955	P	1.3
5	☐	2500.000	2655.771	604287.30	3.9758	P	2.0
6	☐	5000.000	5182.411	1161135.82	7.7575	P	0.6
7	☐	10000.000	9857.450	2326306.61	14.7547	A	1.6
8	☐			1691.23	0.0104	P	4.5

$$y = 0.0015 * x + 9.2833E-004$$

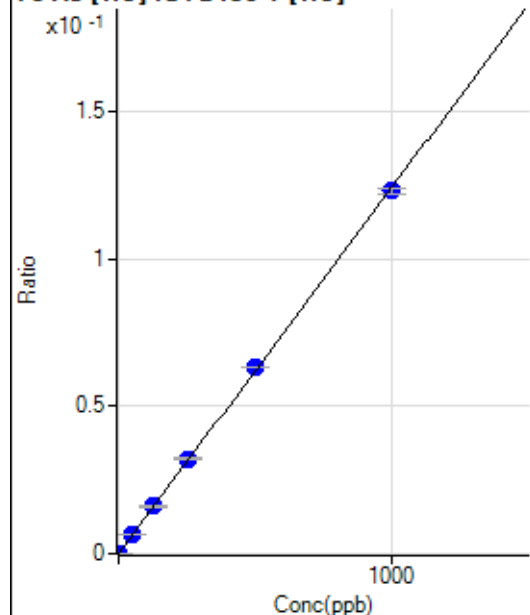
$$R = 0.9996$$

$$DL = 0.3693$$

$$BEC = 0.6202$$

Weight: <None>

Min Conc: 0

⁷⁵As [He] ISTD: ⁸⁹Y [He]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	3.33	0.0000	P	34.7
2	☐	1.000	1.019	139.35	0.0001	P	3.1
3	☐	50.000	51.626	6892.38	0.0064	P	2.6
4	☐	125.000	129.259	17049.67	0.0160	P	1.2
5	☐	250.000	260.199	33976.42	0.0323	P	1.3
6	☐	500.000	509.983	66701.42	0.0632	P	0.8
7	☐	1000.000	991.845	135222.92	0.1230	P	1.7
8	☐			41.33	0.0000	P	12.2

$$y = 1.2399E-004 * x + 3.0729E-006$$

$$R = 0.9999$$

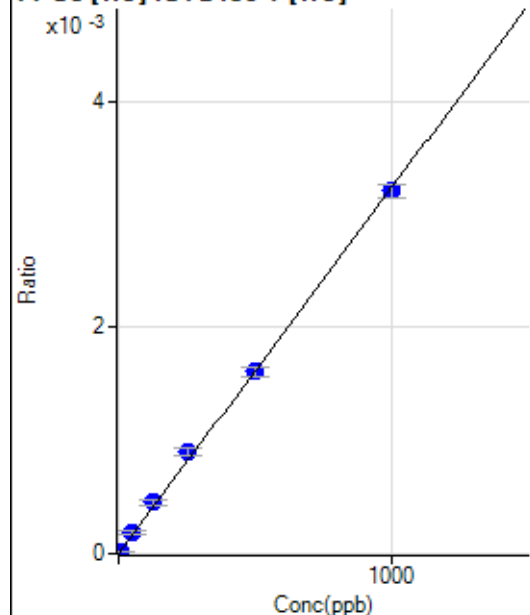
$$DL = 0.02577$$

$$BEC = 0.02478$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	0.00	0.0000	P	
2	☐	5.000	4.786	16.67	0.0000	P	20.7
3	☐	50.000	56.749	197.78	0.0002	P	21.8
4	☐	125.000	140.335	483.35	0.0005	P	9.3
5	☐	250.000	278.911	951.15	0.0009	P	6.0
6	☐	500.000	497.246	1697.90	0.0016	P	5.6
7	☐	1000.000	991.896	3530.48	0.0032	P	3.9
8	☐			5.56	0.0000	P	34.6

$$y = 3.2375\text{E-}006 * x + 0.0000\text{E+}000$$

$$R = 0.9995$$

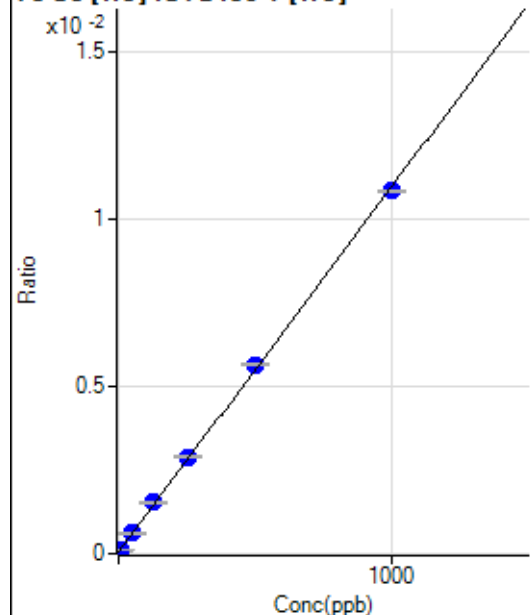
$$DL = 0$$

$$BEC = 0$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	51.01	0.0000	P	10.6
2	☐	5.000	5.440	114.34	0.0001	P	16.4
3	☐	50.000	51.442	654.42	0.0006	P	6.8
4	☐	125.000	136.596	1634.26	0.0015	P	4.3
5	☐	250.000	261.405	3051.65	0.0029	P	2.4
6	☐	500.000	512.494	5944.19	0.0056	P	1.1
7	☐	1000.000	989.378	11915.57	0.0108	P	0.4
8	☐			62.34	0.0001	P	9.7

$$y = 1.0905\text{E-}005 * x + 4.7025\text{E-}005$$

$$R = 0.9998$$

$$DL = 1.369$$

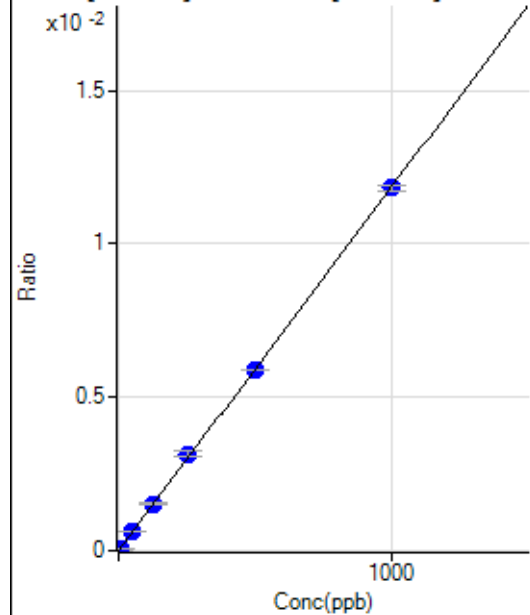
$$BEC = 4.312$$

Weight: <None>

Min Conc: 0

81 Br [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			35415.36		P	3.7
2	☐			35127.38		P	3.7
3	☐			34642.28		P	4.6
4	☐			33555.02		P	3.2
5	☐			32920.23		P	2.6
6	☐			30481.36		P	1.5
7	☐			32755.86		P	5.5
8	☐			34247.07		P	0.6

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	31.24	0.0000	P	14.3
2	☐	5.000	4.767	654.12	0.0001	P	10.2
3	☐	50.000	53.170	6864.79	0.0006	P	2.7
4	☐	125.000	128.623	16853.51	0.0015	P	2.1
5	☐	250.000	264.955	32951.13	0.0031	P	6.5
6	☐	500.000	495.695	64057.27	0.0059	P	0.1
7	☐	1000.000	997.803	128725.67	0.0118	P	1.9
8	☐			249.56	0.0000	P	9.5

$$y = 1.1851E-005 * x + 2.9005E-006$$

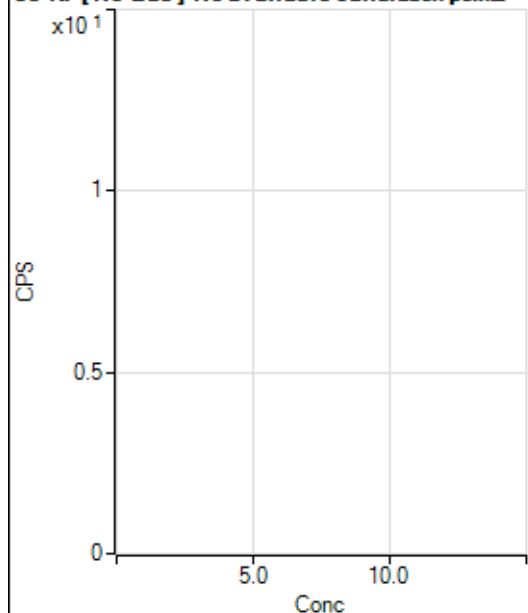
$$R = 0.9999$$

$$DL = 0.1051$$

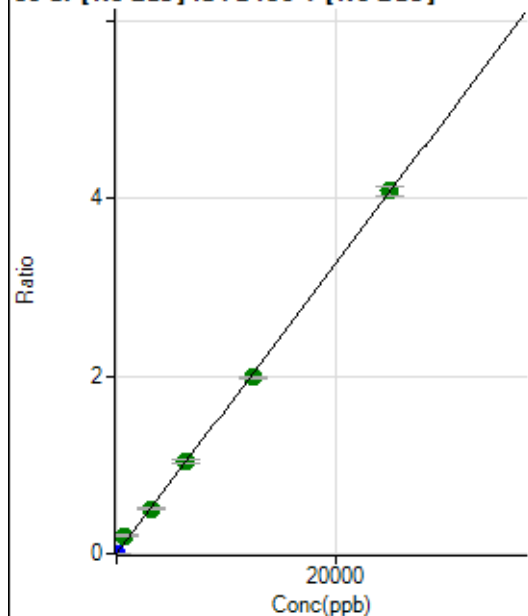
$$BEC = 0.2447$$

Weight: <None>

Min Conc: 0

83 Kr [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			420.37		P	0.9
2	☐			427.04		P	8.1
3	☐			418.29		P	1.8
4	☐			415.79		P	7.8
5	☐			401.21		P	7.2
6	☐			427.87		P	6.2
7	☐			430.79		P	4.9
8	☐			436.62		P	3.7

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	672.26	0.0001	P	5.1
2	☐	1.000	0.889	2280.80	0.0002	P	6.8
3	☐	625.000	1259.928	2224099.36	0.2051	A	3.7
4	☐	3125.000	3120.364	5604556.99	0.5079	A	0.4
5	☐	6250.000	6419.319	10960381.67	1.0447	A	4.9
6	☐	12500.000	12196.287	21632220.10	1.9849	A	1.7
7	☐	25000.000	25094.233	44448282.25	4.0839	A	2.4
8	☐			17214.91	0.0016	P	2.8

$$y = 1.6274E-004 * x + 6.2336E-005$$

$$R = 0.9995$$

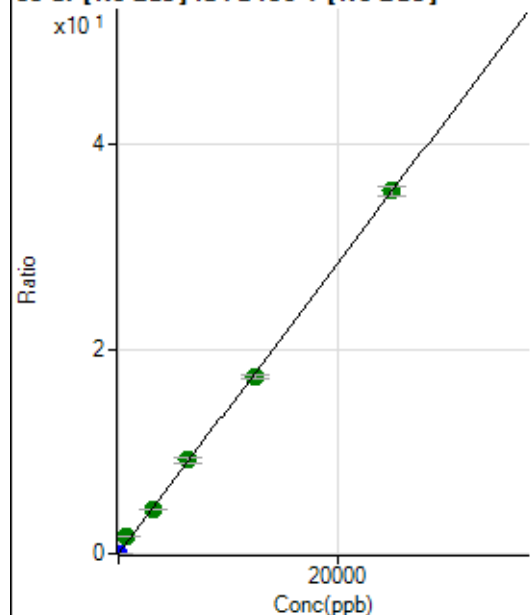
$$DL = 0.05818$$

$$BEC = 0.383$$

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	122.23	0.0000	P	42.8
2	☐	1.000	0.940	14786.01	0.0013	P	5.5
3	☐	625.000	1221.591	18735479.76	1.7273	A	1.2
4	☐	3125.000	3053.351	47638641.69	4.3174	A	2.5
5	☐	6250.000	6481.822	96140080.62	9.1651	A	5.6
6	☐	12500.000	12217.561	188279980.6	17.2752	A	1.6
7	☐	25000.000	25077.305	385891572.5	35.4585	A	2.4
8	☐			145159.52	0.0131	P	6.2

$$y = 0.0014 * x + 1.1307E-005$$

$$R = 0.9996$$

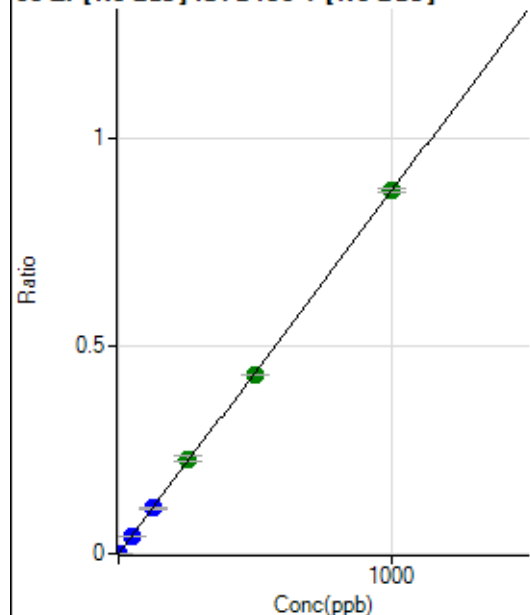
$$DL = 0.01026$$

$$BEC = 0.007997$$

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	325.01	0.0000	P	14.7
2	☐	1.000	0.932	9297.82	0.0008	P	2.8
3	☐	50.000	49.704	470187.48	0.0433	P	0.9
4	☐	125.000	125.070	1203078.74	0.1090	P	2.1
5	☐	250.000	261.914	2392120.93	0.2283	A	7.7
6	☐	500.000	493.755	4689824.06	0.4303	A	0.6
7	☐	1000.000	1000.150	9487200.56	0.8716	A	1.1
8	☐			3550.60	0.0003	P	5.2

$$y = 8.7145E-004 * x + 3.0143E-005$$

$$R = 0.9999$$

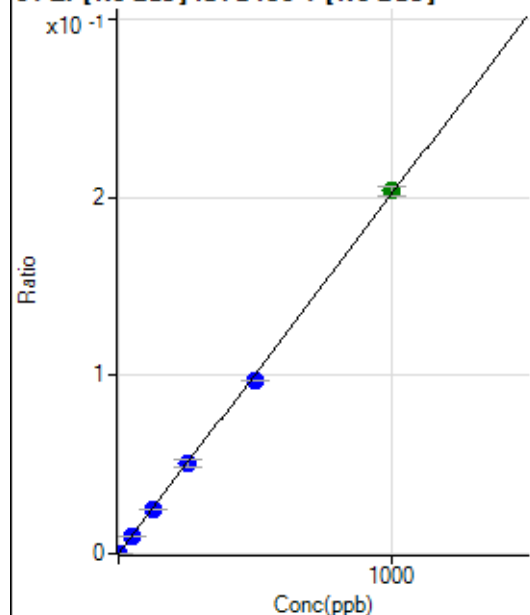
$$DL = 0.01521$$

$$BEC = 0.03459$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	69.45	0.0000	P	40.9
2	☐	1.000	0.856	1975.19	0.0002	P	5.6
3	☐	50.000	49.468	108274.30	0.0100	P	1.4
4	☐	125.000	121.523	270520.48	0.0245	P	1.1
5	☐	250.000	252.932	534629.20	0.0510	P	7.7
6	☐	500.000	480.606	1056378.92	0.0969	P	0.4
7	☐	1000.000	1009.425	2215382.43	0.2036	A	2.6
8	☐			713.93	0.0001	P	16.6

$$y = 2.0166\text{E-}004 * x + 6.4145\text{E-}006$$

$$R = 0.9997$$

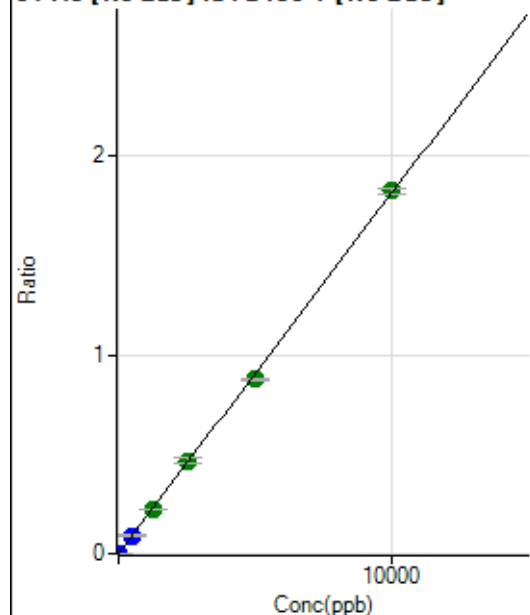
$$DL = 0.03898$$

$$BEC = 0.03181$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	130.56	0.0000	P	35.5
2	☐	5.000	5.544	11204.85	0.0010	P	2.1
3	☐	500.000	500.736	983428.26	0.0907	P	2.6
4	☐	1250.000	1240.974	2479929.68	0.2247	A	1.0
5	☐	2500.000	2564.189	4868668.73	0.4643	A	6.1
6	☐	5000.000	4833.093	9537836.67	0.8751	A	1.5
7	☐	10000.000	10068.497	19841487.60	1.8231	A	1.4
8	☐			7680.27	0.0007	P	8.1

$$y = 1.8107\text{E-}004 * x + 1.2042\text{E-}005$$

$$R = 0.9998$$

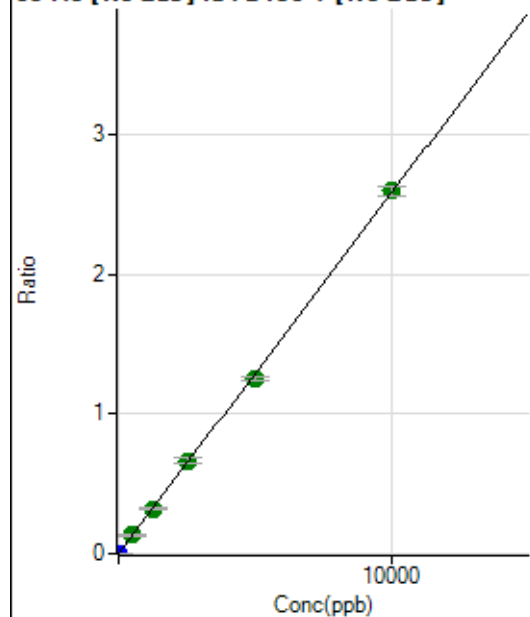
$$DL = 0.07082$$

$$BEC = 0.06651$$

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	11.11	0.0000	P	42.4
2	☐	5.000	4.760	13587.60	0.0012	P	4.9
3	☐	500.000	507.963	1425366.70	0.1314	A	2.7
4	☐	1250.000	1249.687	3567693.31	0.3233	A	2.9
5	☐	2500.000	2578.168	6992571.60	0.6670	A	6.9
6	☐	5000.000	4850.964	13678552.39	1.2551	A	1.2
7	☐	10000.000	10054.617	28307051.33	2.6014	A	2.9
8	☐			10041.05	0.0009	P	11.5

$$y = 2.5873\text{E-}004 * x + 1.0289\text{E-}006$$

$$R = 0.9998$$

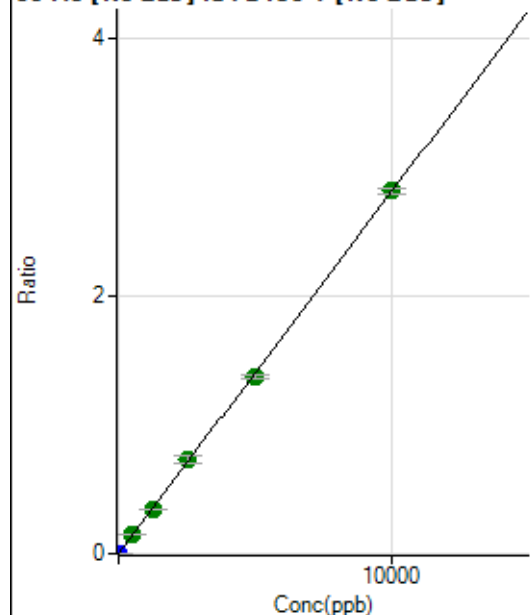
$$DL = 0.005058$$

$$BEC = 0.003977$$

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	119.45	0.0000	P	23.1
2	☐	5.000	4.724	14730.44	0.0013	P	3.9
3	☐	500.000	513.357	1561438.54	0.1440	A	2.4
4	☐	1250.000	1233.097	3816389.80	0.3458	A	1.7
5	☐	2500.000	2612.025	7678540.02	0.7326	A	7.3
6	☐	5000.000	4889.377	14944907.80	1.3713	A	1.5
7	☐	10000.000	10028.751	30611261.10	2.8127	A	1.4
8	☐			21882.07	0.0020	P	5.5

$$y = 2.8046\text{E-}004 * x + 1.1116\text{E-}005$$

$$R = 0.9998$$

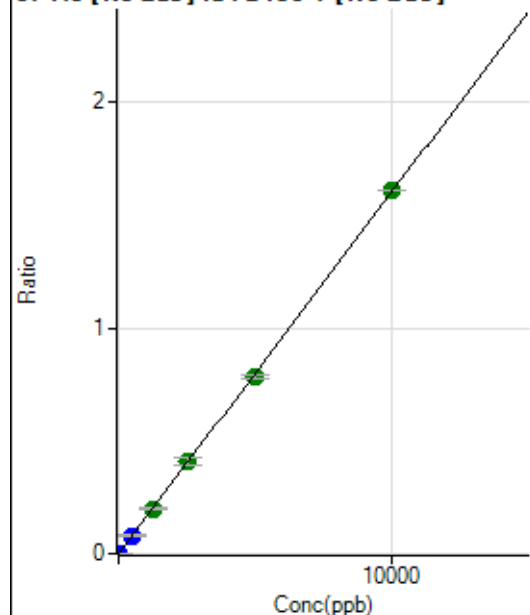
$$DL = 0.0275$$

$$BEC = 0.03964$$

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	101.
2	☐	5.000	4.655	8233.19	0.0007	P	5.4
3	☐	500.000	502.343	872460.92	0.0805	P	2.8
4	☐	1250.000	1236.057	2184773.64	0.1980	A	3.2
5	☐	2500.000	2556.125	4291097.75	0.4094	A	7.1
6	☐	5000.000	4890.028	8535143.85	0.7832	A	2.1
7	☐	10000.000	10042.581	17506518.97	1.6083	A	0.1
8	☐			6051.55	0.0005	P	3.9

$$y = 1.6015E-004 * x + 7.8655E-007$$

$$R = 0.9999$$

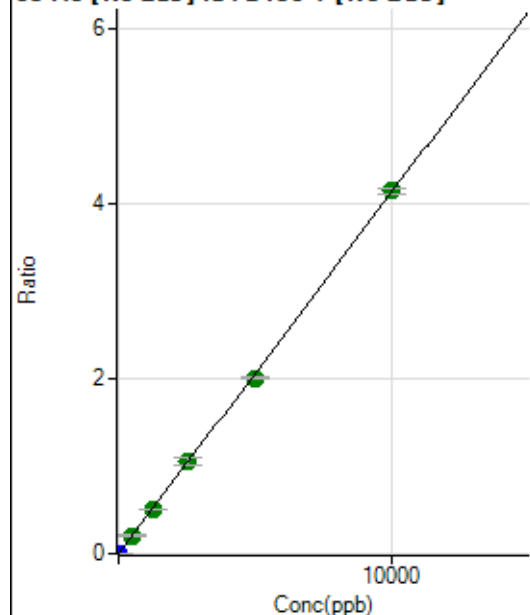
$$DL = 0.01493$$

$$BEC = 0.004911$$

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	19.44	0.0000	P	97.4
2	☐	5.000	4.597	20941.34	0.0019	P	1.8
3	☐	500.000	502.417	2248127.65	0.2073	A	2.6
4	☐	1250.000	1238.167	5637579.90	0.5109	A	1.0
5	☐	2500.000	2570.816	11114402.77	1.0607	A	7.9
6	☐	5000.000	4871.676	21906674.10	2.0101	A	0.9
7	☐	10000.000	10047.817	45117765.25	4.1457	A	1.7
8	☐			14863.14	0.0013	P	7.1

$$y = 4.1260E-004 * x + 1.7849E-006$$

$$R = 0.9999$$

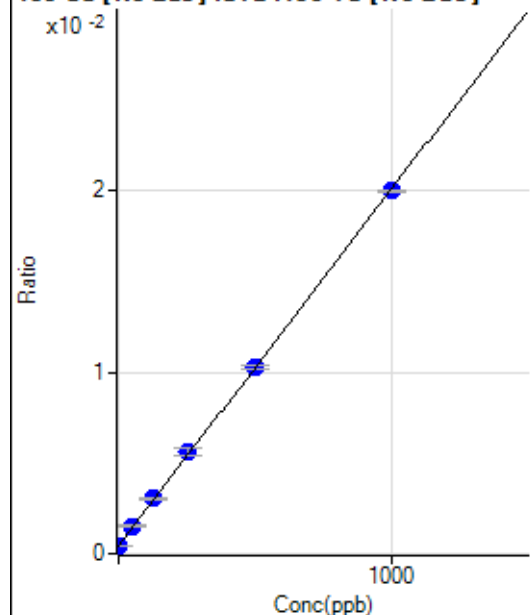
$$DL = 0.01264$$

$$BEC = 0.004326$$

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	3344.94	0.0004	P	2.6
2	☐	1.000	1.802	3725.61	0.0005	P	4.0
3	☐	50.000	55.070	12116.77	0.0015	P	3.3
4	☐	125.000	131.857	24188.45	0.0030	P	2.7
5	☐	250.000	265.453	44826.52	0.0056	P	8.1
6	☐	500.000	500.503	81791.28	0.0103	P	2.6
7	☐	1000.000	994.773	163041.96	0.0200	P	0.7
8	☐			3153.22	0.0004	P	3.2

$$y = 1.9641\text{E-}005 * x + 4.2956\text{E-}004$$

$$R = 0.9999$$

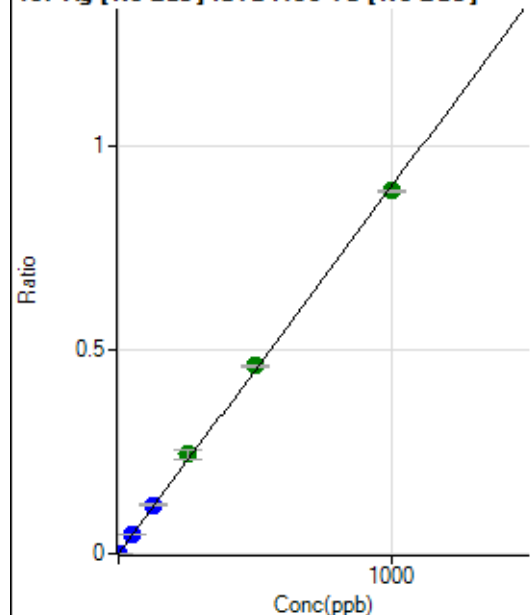
$$DL = 1.682$$

$$BEC = 21.87$$

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	97.23	0.0000	P	27.3
2	☐	1.000	0.975	7132.56	0.0009	P	3.3
3	☐	50.000	53.279	384604.84	0.0479	P	2.1
4	☐	125.000	133.397	961672.20	0.1200	P	0.8
5	☐	250.000	269.914	1928788.76	0.2429	A	8.7
6	☐	500.000	511.559	3669646.57	0.4603	A	1.1
7	☐	1000.000	988.028	7258798.34	0.8889	A	0.8
8	☐			3603.35	0.0004	P	4.0

$$y = 8.9970\text{E-}004 * x + 1.2480\text{E-}005$$

$$R = 0.9997$$

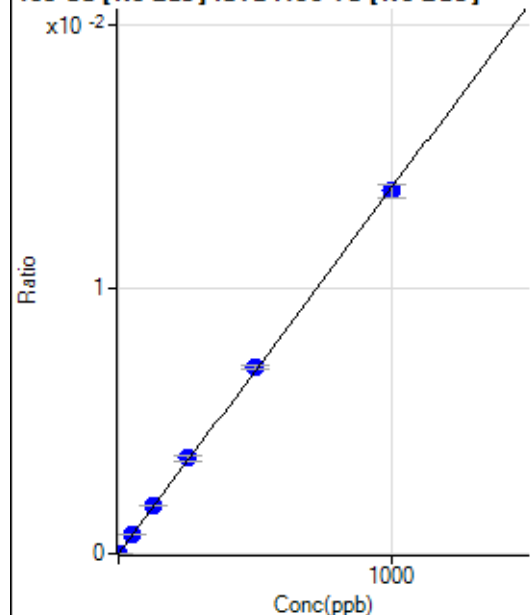
$$DL = 0.01136$$

$$BEC = 0.01387$$

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	18.05	0.0000	P	47.9
2	☐	1.000	1.023	131.95	0.0000	P	3.5
3	☐	50.000	54.445	6055.56	0.0008	P	1.7
4	☐	125.000	129.987	14414.60	0.0018	P	0.4
5	☐	250.000	260.844	28682.68	0.0036	P	5.6
6	☐	500.000	508.443	56052.54	0.0070	P	2.2
7	☐	1000.000	992.222	111967.99	0.0137	P	3.8
8	☐			86.11	0.0000	P	24.0

$$y = 1.3824\text{E-}005 * x + 2.3158\text{E-}006$$

$$R = 0.9999$$

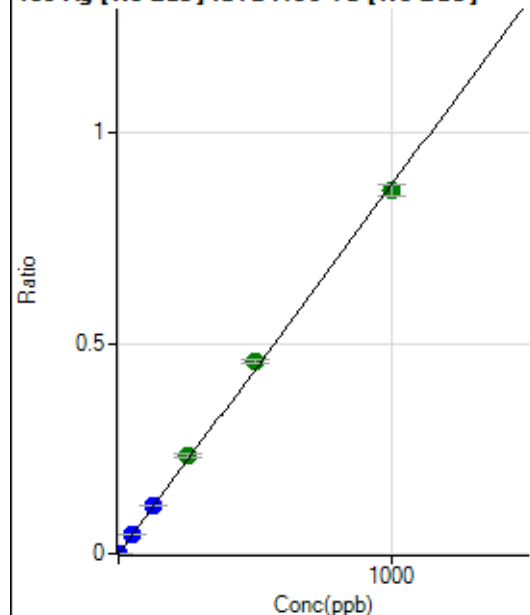
$$DL = 0.2409$$

$$BEC = 0.1675$$

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	41.67	0.0000	P	53.3
2	☐	1.000	0.986	6960.28	0.0009	P	3.7
3	☐	50.000	53.239	373831.98	0.0466	P	2.1
4	☐	125.000	130.265	913732.63	0.1141	P	0.3
5	☐	250.000	265.016	1845602.12	0.2320	A	4.0
6	☐	500.000	522.591	3648279.55	0.4575	A	1.7
7	☐	1000.000	984.131	7032717.17	0.8616	A	3.2
8	☐			3575.60	0.0004	P	6.3

$$y = 8.7549\text{E-}004 * x + 5.3650\text{E-}006$$

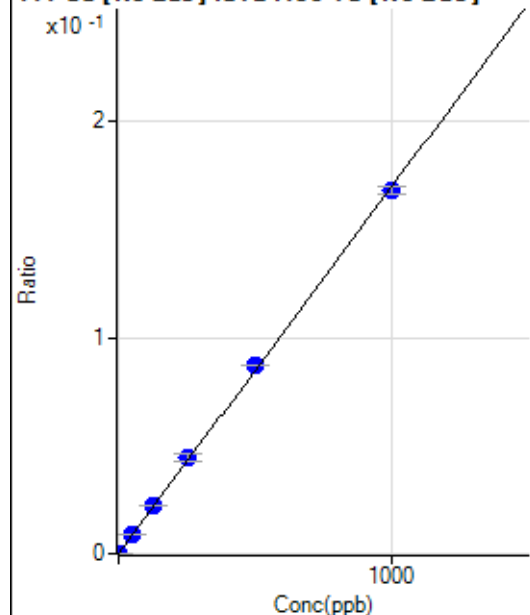
$$R = 0.9995$$

$$DL = 0.009802$$

$$BEC = 0.006128$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	330.19	0.0000	P	2.2
2	☐	1.000	1.051	1767.80	0.0002	P	0.2
3	☐	50.000	53.223	72674.28	0.0091	P	2.8
4	☐	125.000	131.295	178629.14	0.0223	P	0.4
5	☐	250.000	260.844	351623.59	0.0443	P	7.0
6	☐	500.000	513.870	694753.82	0.0871	P	1.0
7	☐	1000.000	989.406	1369370.71	0.1677	P	2.1
8	☐			885.62	0.0001	P	3.4

$$y = 1.6949\text{E-}004 * x + 4.2407\text{E-}005$$

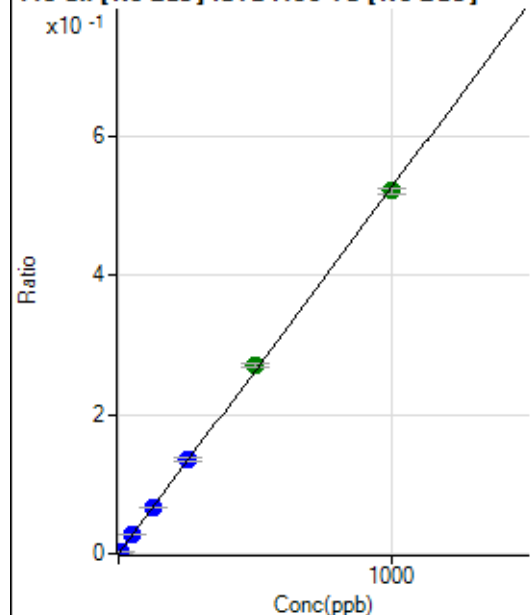
$$R = 0.9998$$

$$DL = 0.01679$$

$$BEC = 0.2502$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	588.93	0.0001	P	15.9
2	☐	5.000	4.735	20563.31	0.0026	P	4.8
3	☐	50.000	51.398	217398.84	0.0271	P	1.7
4	☐	125.000	126.794	534939.53	0.0668	P	1.7
5	☐	250.000	257.804	1078625.64	0.1357	P	5.5
6	☐	500.000	513.216	2152569.32	0.2700	A	1.6
7	☐	1000.000	991.148	4256658.51	0.5214	A	1.3
8	☐			5810.08	0.0007	P	6.3

$$y = 5.2594\text{E-}004 * x + 7.5632\text{E-}005$$

$$R = 0.9998$$

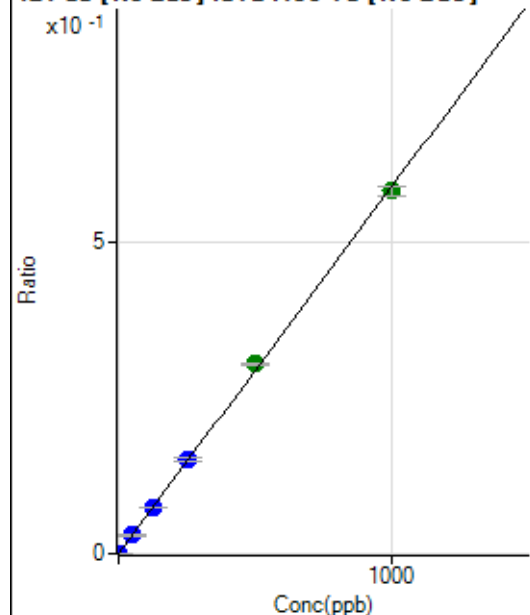
$$DL = 0.06871$$

$$BEC = 0.1438$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	22.22	0.0000	P	21.2
2	☐	2.000	1.854	8769.73	0.0011	P	2.1
3	☐	50.000	50.014	236140.88	0.0294	P	2.6
4	☐	125.000	125.965	594203.45	0.0742	P	1.2
5	☐	250.000	257.994	1208150.53	0.1519	P	4.1
6	☐	500.000	516.791	2426133.28	0.3043	A	1.0
7	☐	1000.000	989.485	4756017.47	0.5826	A	2.4
8	☐			2864.33	0.0004	P	12.9

$$y = 5.8875\text{E-}004 * x + 2.8520\text{E-}006$$

$$R = 0.9997$$

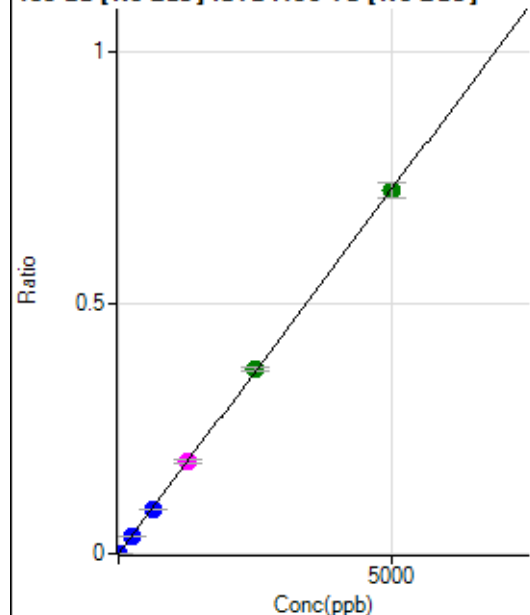
$$DL = 0.003084$$

$$BEC = 0.004844$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	5.55	0.0000	P	86.6
2	☐	10.000	9.209	10729.57	0.0013	P	1.2
3	☐	250.000	243.078	283238.47	0.0353	P	2.4
4	☐	625.000	614.474	715396.06	0.0893	P	1.2
5	☐	1250.000	1277.254	1476843.52	0.1856	M	3.7
6	☐	2500.000	2529.684	2931415.67	0.3676	A	1.8
7	☐	5000.000	4980.008	5908164.24	0.7236	A	4.2
8	☐			3631.16	0.0004	P	2.6

$$y = 1.4531\text{E-}004 * x + 7.1247\text{E-}007$$

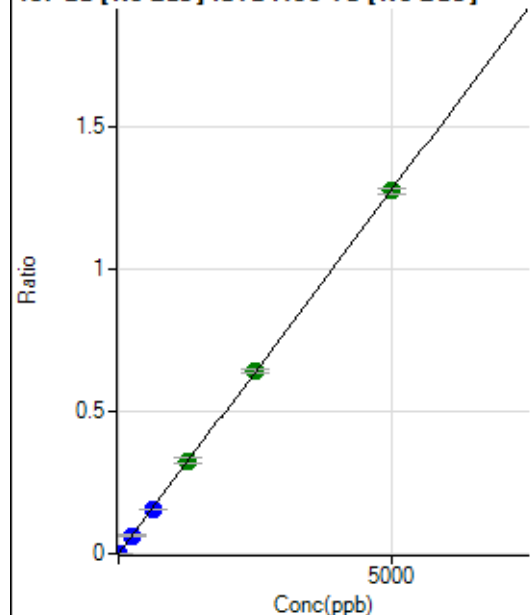
$$R = 0.9999$$

$$DL = 0.01274$$

$$BEC = 0.004903$$

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	11.11	0.0000	P	42.6
2	☐	10.000	9.043	18488.25	0.0023	P	2.0
3	☐	250.000	250.026	511140.62	0.0638	P	3.4
4	☐	625.000	611.703	1249553.72	0.1560	P	1.9
5	☐	1250.000	1280.816	2595946.82	0.3266	A	5.7
6	☐	2500.000	2508.007	5097906.71	0.6395	A	2.4
7	☐	5000.000	4989.955	10386965.25	1.2723	A	1.9
8	☐			6824.18	0.0008	P	2.3

$$y = 2.5497E-004 * x + 1.4240E-006$$

$$R = 1.0000$$

$$DL = 0.007132$$

$$BEC = 0.005585$$

Weight: <None>

Min Conc: 0

150 Nd [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			8.89		P	43.3
2	☐			6.67		P	100.
3	☐			22.22		P	75.5
4	☐			62.22		P	12.4
5	☐			88.89		P	41.3
6	☐			195.56		P	15.7
7	☐			406.68		P	12.4
8	☐			75.56		P	39.8

150 Nd [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			4.44		P	43.4
2	☐			1.11		P	173.
3	☐			2.22		P	173.
4	☐			3.33		P	100.
5	☐			5.56		P	34.7
6	☐			6.67		P	0.0
7	☐			17.78		P	43.3
8	☐			17.78		P	28.6

156 Dy [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			2.78		P	173.
2	☐			8.33		P	0.0
3	☐			22.22		P	86.6
4	☐			38.89		P	24.7
5	☐			94.45		P	31.0
6	☐			116.67		P	12.4
7	☐			333.35		P	5.0
8	☐			1058.40		P	5.9

156 Dy [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			1.11		P	173.
2	☐			2.22		P	173.
3	☐			5.55		P	69.3
4	☐			11.11		P	96.4
5	☐			24.45		P	28.4
6	☐			72.22		P	17.5
7	☐			136.67		P	12.2
8	☐			500.01		P	9.4

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			80.56		P	15.8
2	☐			55.56		P	31.2
3	☐			50.00		P	33.3
4	☐			125.00		P	24.0
5	☐			113.89		P	15.2
6	☐			172.23		P	10.1
7	☐			280.57		P	22.7
8	☐			1225.09		P	13.4

160 Gd [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			85.55		P	4.5
2	☐			87.78		P	11.6
3	☐			93.33		P	30.5
4	☐			108.89		P	22.1
5	☐			115.56		P	14.2
6	☐			161.11		P	11.8
7	☐			197.78		P	21.9
8	☐			595.58		P	9.9

164 Er [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			33.33		P	90.1
2	☐			55.56		P	45.8
3	☐			44.45		P	28.7
4	☐			33.33		P	86.6
5	☐			30.56		P	56.8
6	☐			47.22		P	27.0
7	☐			55.56		P	45.8
8	☐			83.34		P	43.6

164 Er [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			10.00		P	0.0
2	☐			11.11		P	34.6
3	☐			6.67		P	50.0
4	☐			17.78		P	39.0
5	☐			11.11		P	91.7
6	☐			21.11		P	32.9
7	☐			22.22		P	45.8
8	☐			30.00		P	19.2

172 Yb [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			33.33		P	43.3
2	☐			30.56		P	31.5
3	☐			41.67		P	20.0
4	☐			75.00		P	19.3
5	☐			77.78		P	16.4
6	☐			77.78		P	16.4
7	☐			127.78		P	24.7
8	☐			383.35		P	2.2

172 Yb [He] No available calibration points

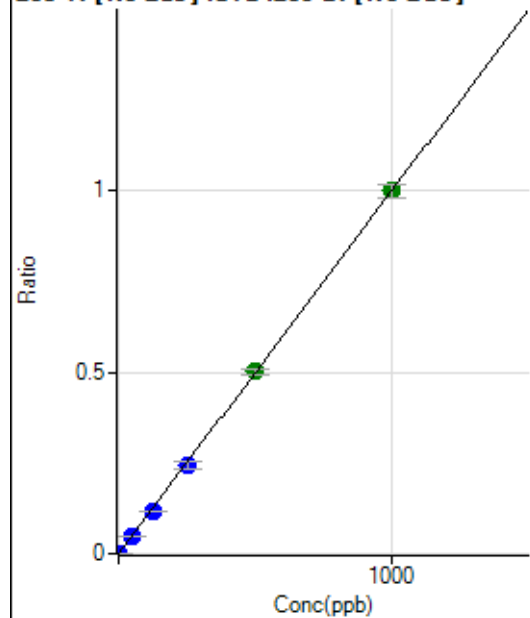
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			20.37		P	78.7
2	☐			22.22		P	43.3
3	☐			16.67		P	33.3
4	☐			9.26		P	34.6
5	☐			18.52		P	45.8
6	☐			25.93		P	75.2
7	☐			55.56		P	45.8
8	☐			177.78		P	22.5

176 Yb [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			1263.98		P	9.0
2	☐			1336.21		P	12.8
3	☐			2125.23		P	5.2
4	☐			3770.09		P	2.8
5	☐			6073.79		P	3.6
6	☐			10443.26		P	1.6
7	☐			20138.16		P	5.1
8	☐			1391.78		P	3.9

176 Yb [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			7493.01		P	4.1
2	☐			7585.65		P	4.7
3	☐			7587.53		P	6.5
4	☐			8117.47		P	3.1
5	☐			9318.26		P	3.0
6	☐			11295.78		P	2.0
7	☐			15179.33		P	1.3
8	☐			8063.74		P	2.3

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	38.89	0.0000	P	25.6
2	☐	1.000	0.827	3981.29	0.0008	P	6.4
3	☐	50.000	47.857	222618.30	0.0478	P	1.5
4	☐	125.000	116.015	558608.31	0.1158	P	2.6
5	☐	250.000	244.150	1133243.97	0.2438	P	7.8
6	☐	500.000	503.224	2376117.33	0.5024	A	3.2
7	☐	1000.000	1001.081	4736061.91	0.9994	A	3.4
8	☐			1347.36	0.0003	P	18.9

$$y = 9.9834E-004 * x + 8.2761E-006$$

$$R = 0.9999$$

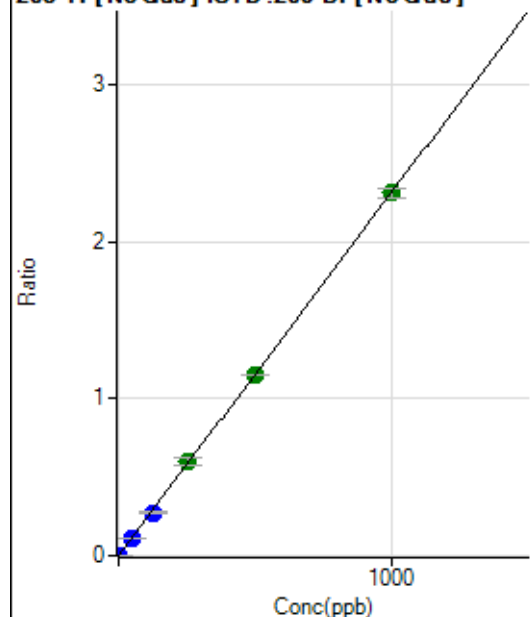
$$DL = 0.006371$$

$$BEC = 0.00829$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	105.56	0.0000	P	16.3
2	☐	1.000	0.891	9965.24	0.0021	P	7.5
3	☐	50.000	49.360	532627.99	0.1143	P	1.5
4	☐	125.000	119.110	1330587.10	0.2759	P	2.6
5	☐	250.000	260.374	2803158.98	0.6031	A	8.3
6	☐	500.000	498.033	5457981.68	1.1536	A	0.8
7	☐	1000.000	999.158	10967418.47	2.3143	A	3.0
8	☐			3089.39	0.0007	P	7.0

$$y = 0.0023 * x + 2.2431E-005$$

$$R = 0.9999$$

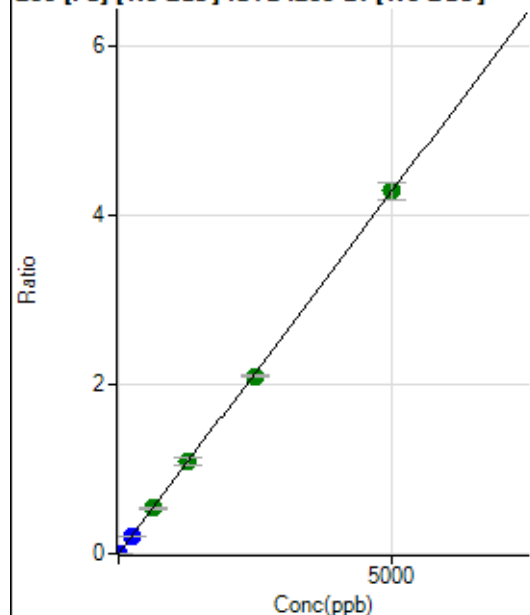
$$DL = 0.004734$$

$$BEC = 0.009684$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	666.70	0.0001	P	9.0
2	☐	1.000	0.812	3989.57	0.0008	P	4.8
3	☐	250.000	237.714	946460.86	0.2032	P	0.4
4	☐	625.000	625.174	2575584.52	0.5341	A	4.3
5	☐	1250.000	1276.303	5067355.73	1.0903	A	8.4
6	☐	2500.000	2458.024	9932738.07	2.0996	A	2.0
7	☐	5000.000	5015.005	20296905.55	4.2837	A	4.5
8	☐			6196.19	0.0015	P	14.8

$$y = 8.5414E-004 * x + 1.4165E-004$$

$$R = 0.9999$$

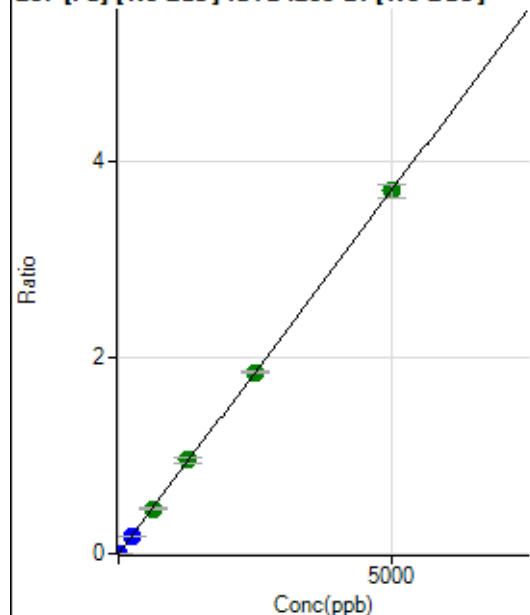
$$DL = 0.04488$$

$$BEC = 0.1658$$

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	574.10	0.0001	P	17.4
2	☐	1.000	0.804	3428.31	0.0007	P	1.6
3	☐	250.000	240.685	831450.81	0.1785	P	1.3
4	☐	625.000	614.388	2196545.36	0.4555	A	3.3
5	☐	1250.000	1287.212	4436869.40	0.9542	A	7.4
6	☐	2500.000	2491.490	8737393.71	1.8467	A	1.0
7	☐	5000.000	4996.745	17550511.16	3.7035	A	3.5
8	☐			5169.70	0.0012	P	4.8

$$y = 7.4117E-004 * x + 1.2191E-004$$

R = 1.0000

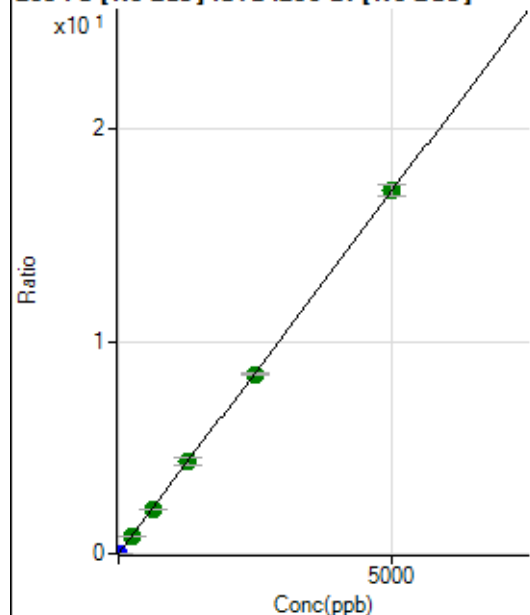
DL = 0.08579

BEC = 0.1645

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	2653.86	0.0006	P	3.8
2	☐	1.000	0.831	16243.27	0.0034	P	0.8
3	☐	250.000	246.211	3918468.52	0.8412	A	1.5
4	☐	625.000	612.173	10082390.24	2.0908	A	3.6
5	☐	1250.000	1270.029	20170394.93	4.3370	A	6.9
6	☐	2500.000	2478.380	40038074.39	8.4629	A	1.3
7	☐	5000.000	5007.596	81030973.22	17.0988	A	3.1
8	☐			23852.15	0.0057	P	8.1

$$y = 0.0034 * x + 5.6392E-004$$

R = 1.0000

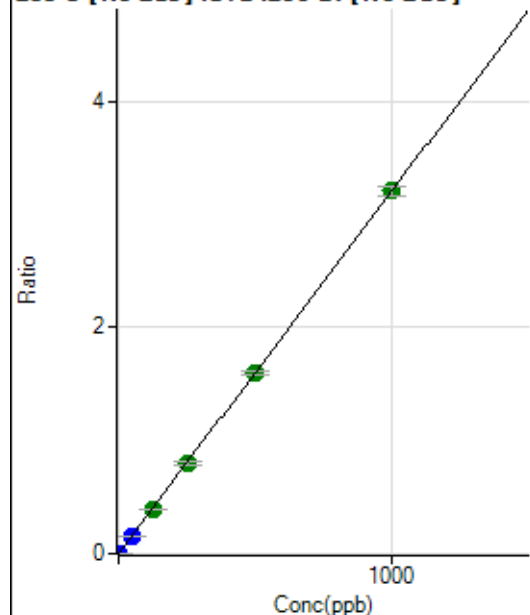
DL = 0.01903

BEC = 0.1652

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	8.33	0.0000	P	0.9
2	☐	1.000	0.840	12870.84	0.0027	P	1.3
3	☐	50.000	47.337	706774.31	0.1517	P	0.4
4	☐	125.000	121.781	1882380.53	0.3903	A	2.7
5	☐	250.000	249.558	3721075.73	0.7999	A	6.2
6	☐	500.000	497.918	7550228.38	1.5959	A	2.5
7	☐	1000.000	1001.687	15217220.30	3.2105	A	2.6
8	☐			2028.33	0.0005	P	8.3

$$y = 0.0032 * x + 1.7706E-006$$

$$R = 1.0000$$

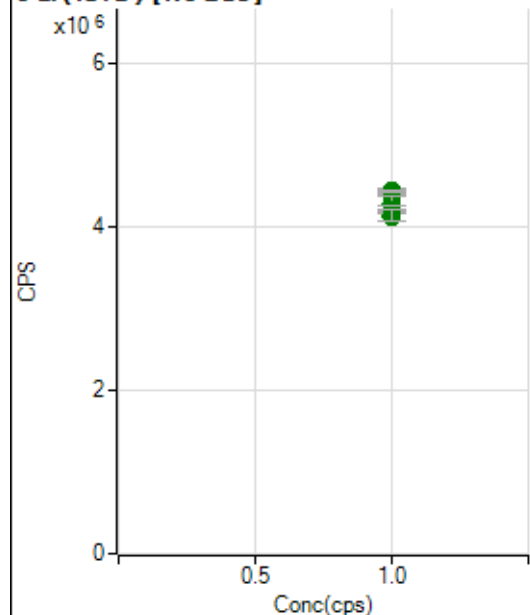
$$DL = 1.521E-05$$

$$BEC = 0.0005524$$

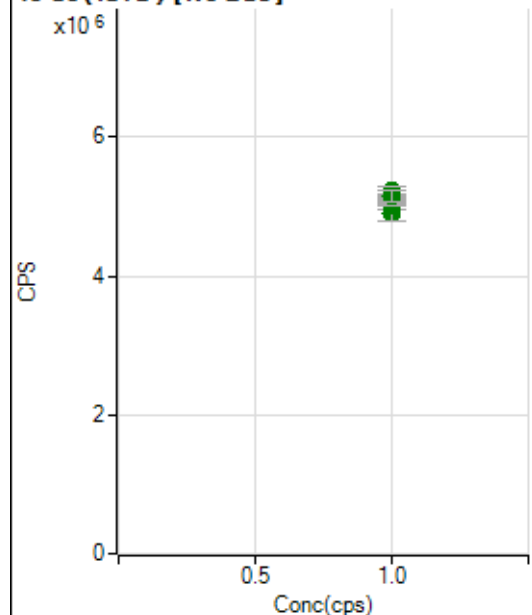
Weight: <None>

Min Conc: 0

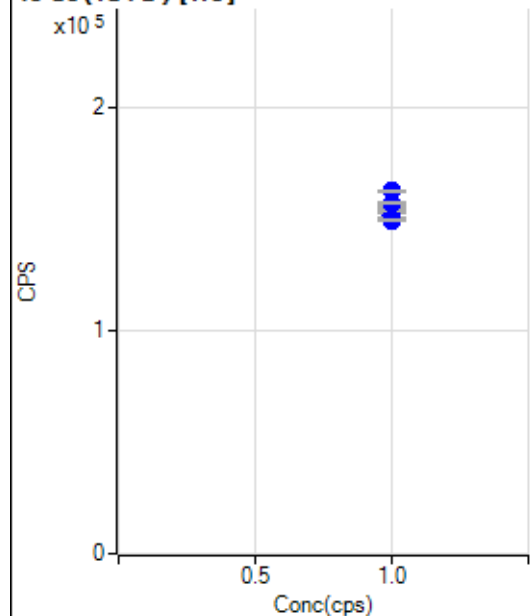
6 Li (ISTD) [No Gas]



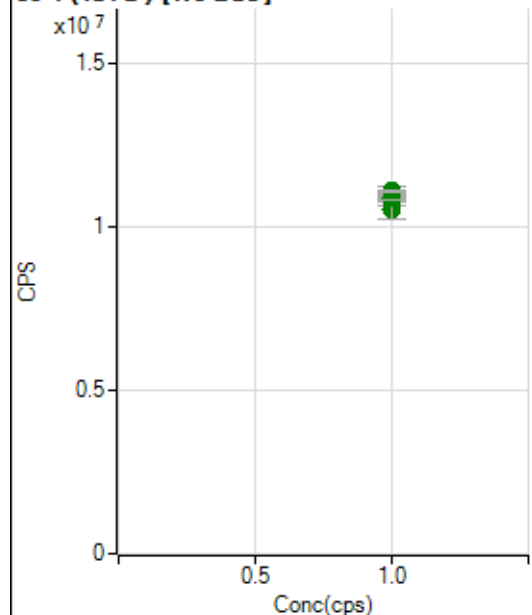
	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		4407926.05		A	1.6
2	☐	1.000		4415681.48		A	1.2
3	☐	1.000		4432294.93		A	1.4
4	☐	1.000		4435463.34		A	0.8
5	☐	1.000		4275066.40		A	4.5
6	☐	1.000		4213964.62		A	1.5
7	☐	1.000		4115323.25		A	1.8
8	☐	1.000		4146157.54		A	3.6

45 Sc (ISTD) [No Gas]

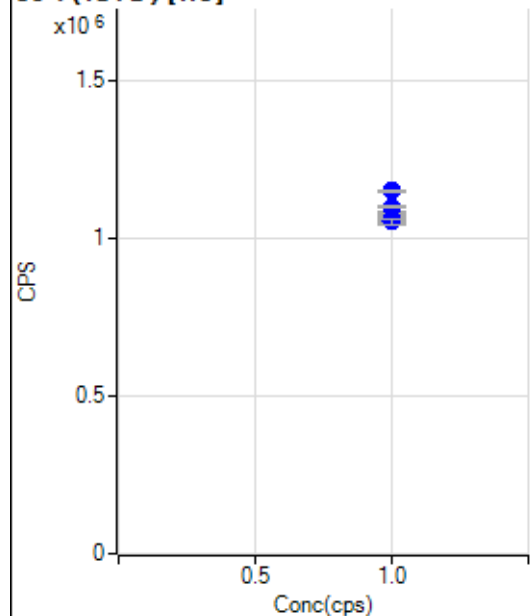
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		5017081.62		A	2.2
2	☐	1.000		5049632.84		A	1.1
3	☐	1.000		5222830.51		A	2.2
4	☐	1.000		5132208.32		A	0.4
5	☐	1.000		4902394.65		A	4.5
6	☐	1.000		5024136.42		A	1.0
7	☐	1.000		5157148.05		A	2.4
8	☐	1.000		5152371.56		A	3.2

45 Sc (ISTD) [He]

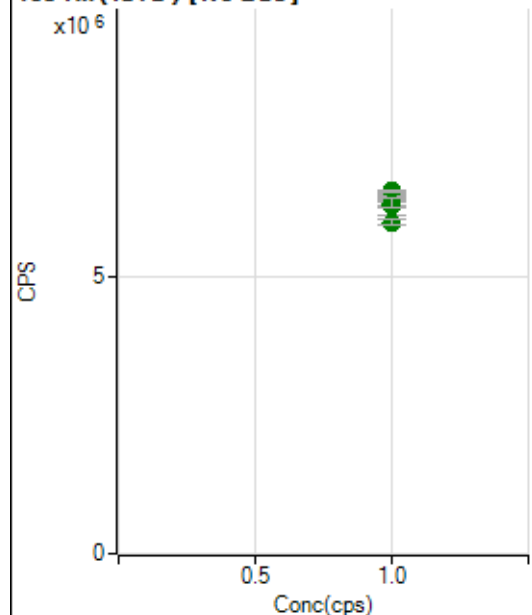
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		155696.85		P	0.8
2	☐	1.000		155071.76		P	1.2
3	☐	1.000		155109.38		P	1.0
4	☐	1.000		152390.42		P	1.1
5	☐	1.000		152010.86		P	2.3
6	☐	1.000		149675.57		P	0.7
7	☐	1.000		157664.25		P	0.5
8	☐	1.000		162994.38		P	0.5

89 Y (ISTD) [No Gas]

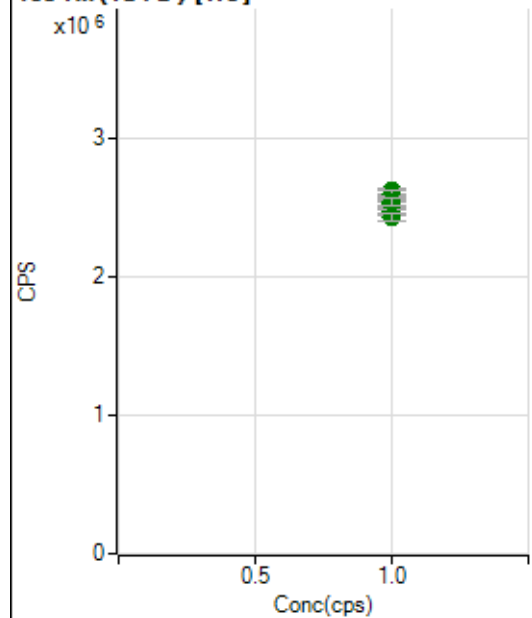
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		10775097.97		A	2.6
2	☐	1.000		11034549.84		A	3.1
3	☐	1.000		10847602.06		A	2.0
4	☐	1.000		11035476.23		A	0.8
5	☐	1.000		10510454.71		A	5.9
6	☐	1.000		10898637.20		A	0.2
7	☐	1.000		10884832.54		A	1.7
8	☐	1.000		11083243.73		A	0.7

89 Y (ISTD) [He]

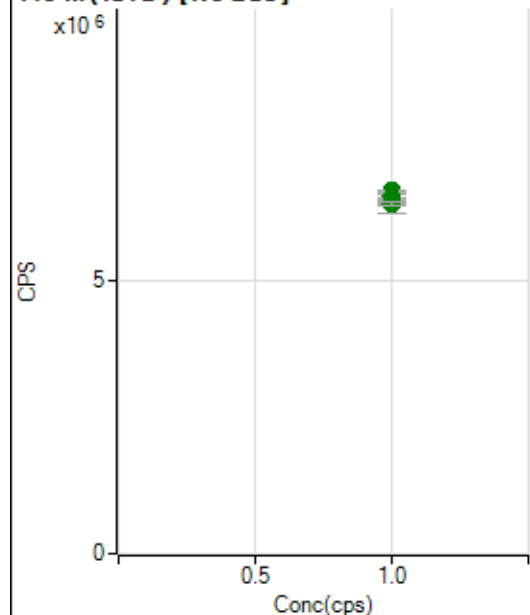
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1084811.09		P	0.2
2	☐	1.000		1076645.23		P	1.2
3	☐	1.000		1076289.78		P	0.6
4	☐	1.000		1063605.34		P	0.6
5	☐	1.000		1053032.68		P	1.0
6	☐	1.000		1054790.57		P	1.5
7	☐	1.000		1099582.54		P	0.7
8	☐	1.000		1151657.86		P	0.8

103 Rh (ISTD) [No Gas]

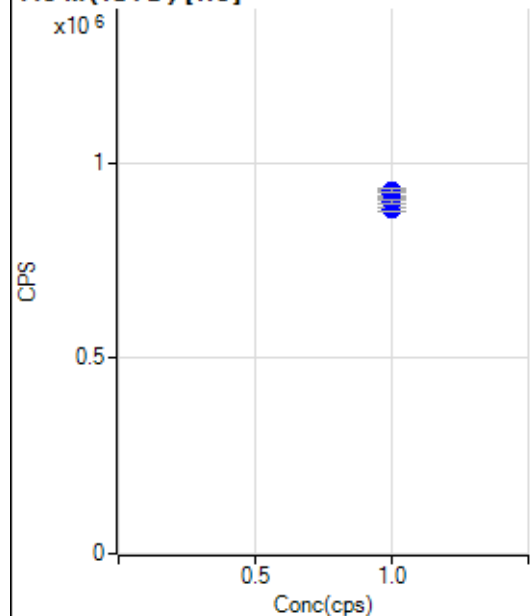
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		6364470.54		A	2.5
2	☐	1.000		6482957.00		A	2.5
3	☐	1.000		6541629.84		A	0.9
4	☐	1.000		6556064.17		A	0.6
5	☐	1.000		6297211.43		A	5.8
6	☐	1.000		6304399.92		A	1.4
7	☐	1.000		6340474.23		A	2.3
8	☐	1.000		5979189.55		A	1.7

103 Rh (ISTD) [He]

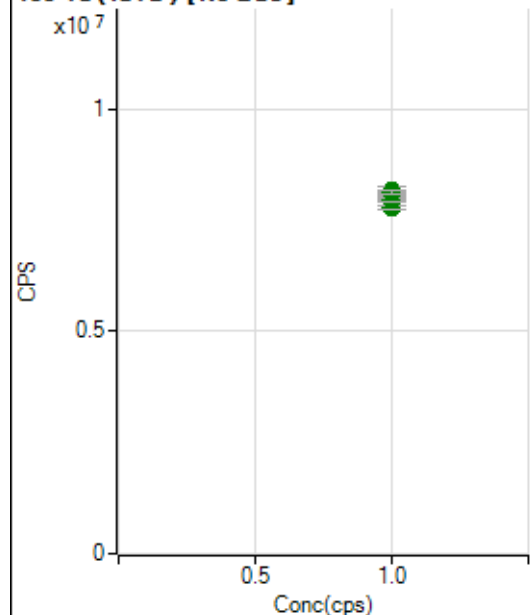
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2620519.92		A	1.4
2	☐	1.000		2531792.41		A	1.0
3	☐	1.000		2599930.86		A	1.6
4	☐	1.000		2505946.59		A	0.3
5	☐	1.000		2533507.67		A	1.6
6	☐	1.000		2466238.57		A	1.3
7	☐	1.000		2541242.13		A	2.4
8	☐	1.000		2430594.01		A	1.8

115 In (ISTD) [No Gas]

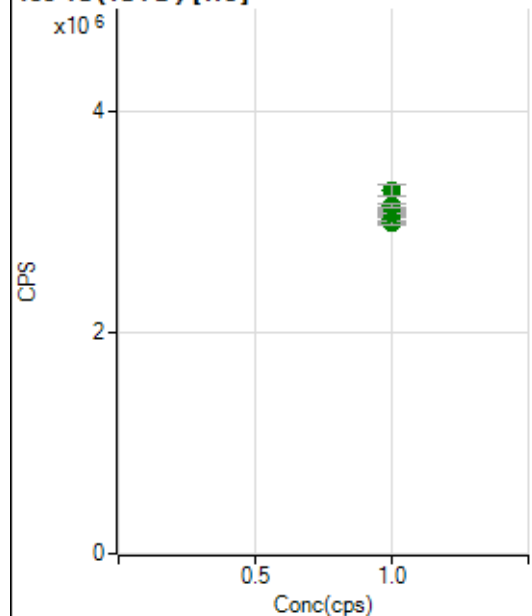
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		6471387.27		A	3.2
2	☐	1.000		6443616.77		A	1.7
3	☐	1.000		6621296.32		A	0.9
4	☐	1.000		6518608.22		A	2.9
5	☐	1.000		6413804.42		A	5.9
6	☐	1.000		6476370.64		A	0.9
7	☐	1.000		6416434.41		A	1.8
8	☐	1.000		6386927.24		A	1.5

115 In (ISTD) [He]

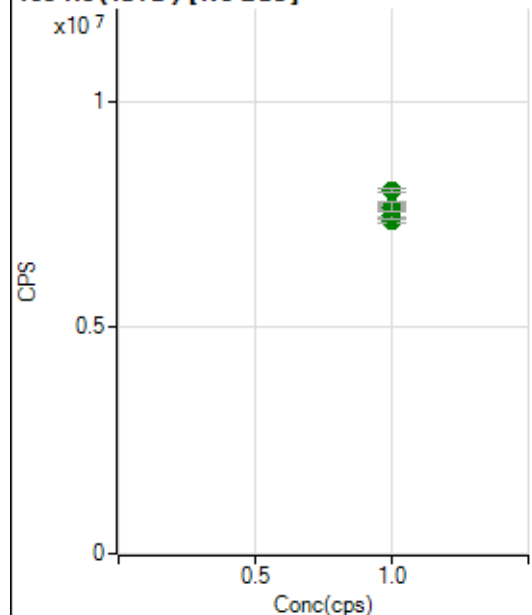
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		923020.07		P	1.3
2	☐	1.000		914523.57		P	0.4
3	☐	1.000		911740.04		P	0.2
4	☐	1.000		886457.06		P	0.5
5	☐	1.000		896058.62		P	1.8
6	☐	1.000		883388.13		P	1.2
7	☐	1.000		901574.97		P	1.0
8	☐	1.000		929058.12		P	0.9

159 Tb (ISTD) [No Gas]

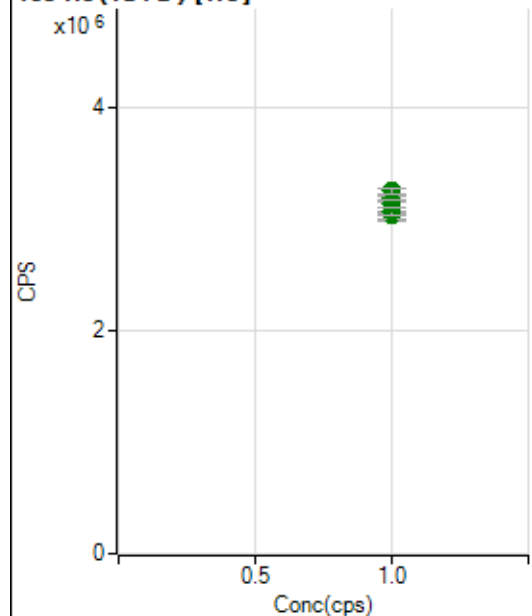
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		7786721.97		A	0.7
2	☐	1.000		8014580.57		A	0.8
3	☐	1.000		8021827.38		A	2.4
4	☐	1.000		8011697.45		A	1.1
5	☐	1.000		7964371.62		A	5.1
6	☐	1.000		7973583.01		A	1.3
7	☐	1.000		8165883.77		A	2.0
8	☐	1.000		8125436.41		A	0.9

159 Tb (ISTD) [He]

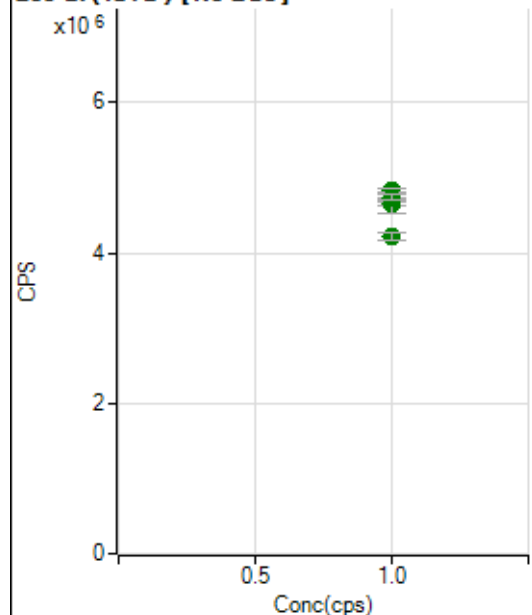
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3028890.37		A	1.0
2	☐	1.000		3021968.11		A	1.3
3	☐	1.000		3074438.77		A	1.3
4	☐	1.000		2996055.16		A	1.0
5	☐	1.000		3080679.85		A	1.9
6	☐	1.000		3078599.47		A	0.4
7	☐	1.000		3151782.28		A	0.9
8	☐	1.000		3283999.26		A	3.0

165 Ho (ISTD) [No Gas]

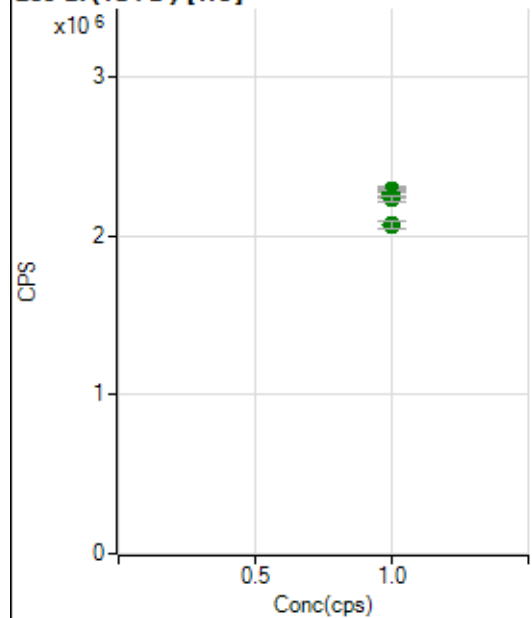
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		7366816.05		A	2.2
2	☐	1.000		7486044.96		A	2.5
3	☐	1.000		7601511.45		A	0.8
4	☐	1.000		7653302.86		A	1.4
5	☐	1.000		7555453.90		A	4.7
6	☐	1.000		7643336.54		A	2.1
7	☐	1.000		8015601.74		A	1.2
8	☐	1.000		7660489.67		A	2.6

165 Ho (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3041639.71		A	3.3
2	☐	1.000		3040186.66		A	3.8
3	☐	1.000		3032951.90		A	2.6
4	☐	1.000		3071459.09		A	1.5
5	☐	1.000		3061780.02		A	2.0
6	☐	1.000		3125470.09		A	1.3
7	☐	1.000		3190028.36		A	1.1
8	☐	1.000		3248035.37		A	1.4

209 Bi (ISTD) [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		4705013.19		A	0.9
2	☐	1.000		4777158.89		A	1.7
3	☐	1.000		4658203.89		A	1.1
4	☐	1.000		4823466.52		A	1.1
5	☐	1.000		4664190.97		A	6.3
6	☐	1.000		4732036.87		A	2.4
7	☐	1.000		4740734.24		A	1.8
8	☐	1.000		4225733.69		A	2.4

209 Bi (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2258487.95		A	1.1
2	☐	1.000		2277188.71		A	2.4
3	☐	1.000		2259481.89		A	2.1
4	☐	1.000		2280007.22		A	2.8
5	☐	1.000		2270131.86		A	2.1
6	☐	1.000		2265429.55		A	1.4
7	☐	1.000		2231571.37		A	1.8
8	☐	1.000		2069251.48		A	2.6

US EPA Tune Check Report

Operator Name Jaswal

Acq/Data Batch D:\Agilent\ICPMH\1\DATA\IP8121422 MS.b

Acq. Date-Time 2022-12-14 08:35:43

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		14647	146466.77			0.387	5.000
24		346486	3464861.25			1.439	5.000
25		47645	476445.86			1.004	5.000
26		54377	543770.79			0.411	5.000
59		64715	647151.16			0.594	5.000
113		6448	64483.86			1.167	5.000
115		80353	803528.59			1.655	5.000
206		16641	166405.38			1.205	5.000
207		14855	148552.98			0.921	5.000
208		35565	355648.84			1.026	5.000
220		0	4.90			22.122	

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

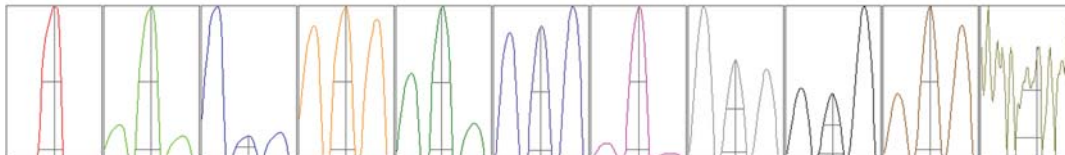
Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
9	14672	14594	14614	14734	14620
24	345779	347523	338302	350555	350272
25	47376	47043	47943	47593	48268
26	54121	54715	54443	54350	54256
59	65389	64439	64533	64561	64654
113	6541	6454	6374	6372	6500
115	81501	81889	80080	79603	78691
206	16789	16791	16347	16761	16515
207	14957	14667	14753	14967	14934
208	35900	35370	35088	35955	35512

US EPA Tune Check Report

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

Integration Time [sec] 0.1

Resolution/Axis



Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)
9	25464.58	9.05	8.90 - 9.10	
24	609876.16	24.00	23.90 - 24.10	
25	85258.26	25.00	24.90 - 25.10	
26	97858.67	26.00	25.90 - 26.10	
59	119868.34	58.95	58.90 - 59.10	
113	12685.22	113.00	112.90 - 113.10	
115	158421.95	115.05	114.90 - 115.10	
206	31998.51	206.00	205.90 - 206.10	
207	28905.14	207.00	206.90 - 207.10	
208	69197.07	208.00	207.90 - 208.10	
220	0.80	220.30	-	

Mass	W-50%	W-5%	W-5% (Required)	W-5% (Flag)
9	0.61	0.774	0.900	
24	0.60	0.782	0.900	
25	0.59	0.783	0.900	
26	0.60	0.778	0.900	
59	0.57	0.735	0.900	
113	0.53	0.729	0.900	
115	0.52	0.735	0.900	
206	0.54	0.788	0.900	
207	0.54	0.789	0.900	
208	0.53	0.804	0.900	
220	0.59	0.813		

Integration Time [sec] 0.1

Acquisition Time [sec] 256.770000000002

Y Axis Linear

Tune Parameters

Plasma Parameters

Plasma Mode --- Nebulizer Gas 0.87 L/min Dilution Gas 0.40 L/min

US EPA Tune Check Report

RF Power	1600 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.40 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	10.3 V	Deflect	16.2 V
Extract 2	-175.0 V	Cell Entrance	-30 V	Plate Bias	-50 V
Omega Bias	-90 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	180 V		

QP Parameters

Mass Gain	123	Axis Gain	0.9993	QP Bias	-4.0 V
Mass Offset	125	Axis Offset	-0.02		

Hardware Settings

Torch

Torch H	1.1 mm	Torch V	-0.9 mm
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EM

Discriminator	4.5 mV	Analog HV	2296 V	Pulse HV	1606 V
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[He]

Sensitivity

Mass	Conc. [ug/l]	Count	CPS	Resp (Required) [cps/ug/l]	Resp (Flag)	RSD%	RSD% (Required)
59		12243	122433.08			0.845	
89		22433	224331.41			1.156	
205		12109	121094.44			1.094	

Mass	RSD% (Flag)
59	
89	
205	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
59	12131	12403	12252	12177	12254
89	22232	22088	22667	22644	22535
205	11966	12204	12236	12175	11967

Integration Time [sec] 0.1

Tune Parameters

Plasma Parameters

Plasma Mode	---	Nebulizer Gas	0.87 L/min	Dilution Gas	0.40 L/min
RF Power	1600 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.40 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	10.3 V	Deflect	4.8 V
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US EPA Tune Check Report

Extract 2	-175.0 V	Cell Entrance	-50 V	Plate Bias	-60 V
Omega Bias	-90 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	125	Axis Offset	-0.02		

Hardware Settings

Torch

Torch H	1.1 mm	Torch V	-0.9 mm
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EM

Discriminator	4.5 mV	Analog HV	2296 V	Pulse HV	1606 V
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