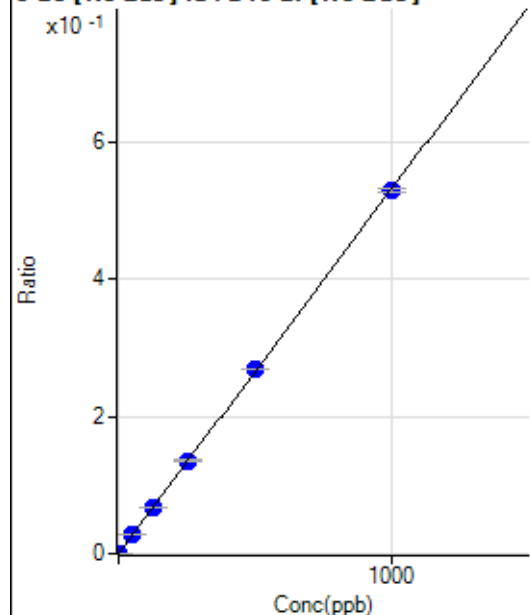


Batch Folder: D:\Agilent\ICPMH\1\DATA\P8122820IMS.b\
Analysis File: P8122820IMS.batch.bin
DA Date-Time: 2020-12-30 00:26:27
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	003CALB.d	S00	2020-12-28 12:26:20
2	004CALS.d	S02	2020-12-28 12:29:32
3	005CALS.d	S03	2020-12-28 12:32:42
4	006CALS.d	S04	2020-12-28 12:35:52
5	007CALS.d	S05	2020-12-28 12:38:56
6	008CALS.d	S06	2020-12-28 12:41:57
7	009CALS.d	S07	2020-12-28 12:44:55
8	010CALS.d	S08	2020-12-28 12:47:56

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	79.32	0.0001	P	14.2
2	☐	1.000	0.984	850.53	0.0006	P	6.2
3	☐	50.000	50.994	41159.55	0.0272	P	0.6
4	☐	125.000	126.308	102177.89	0.0672	P	2.8
5	☐	250.000	255.460	204511.73	0.1358	P	0.8
6	☐	500.000	506.410	405336.11	0.2692	P	0.4
7	☐	1000.000	995.217	803194.68	0.5291	P	1.0
8	☐			963.84	0.0006	P	18.1

$$y = 5.3156\text{E-}004 * x + 5.2854\text{E-}005$$

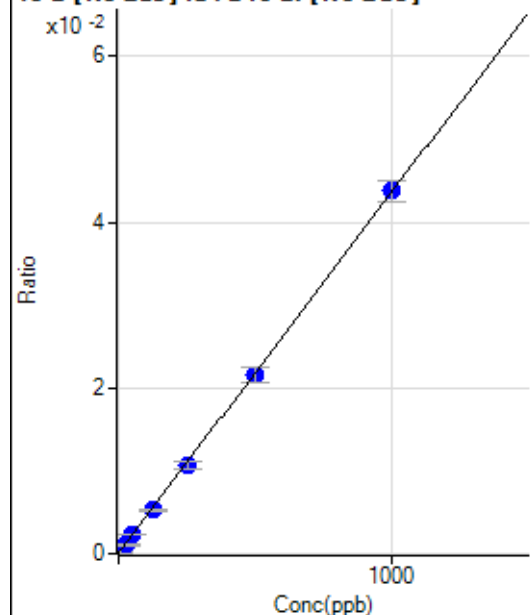
$$R = 1.0000$$

$$DL = 0.04229$$

$$BEC = 0.09943$$

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	163.30	0.0001	P	16.5
2	☐	25.000	21.641	1549.78	0.0010	P	8.8
3	☐	50.000	50.154	3467.73	0.0023	P	6.3
4	☐	125.000	119.798	8086.64	0.0053	P	4.2
5	☐	250.000	245.272	16208.43	0.0108	P	8.9
6	☐	500.000	494.405	32514.11	0.0216	P	7.8
7	☐	1000.000	1004.706	66457.93	0.0438	P	5.7
8	☐			9750.66	0.0066	P	7.5

$$y = 4.3449\text{E-}005 * x + 1.0876\text{E-}004$$

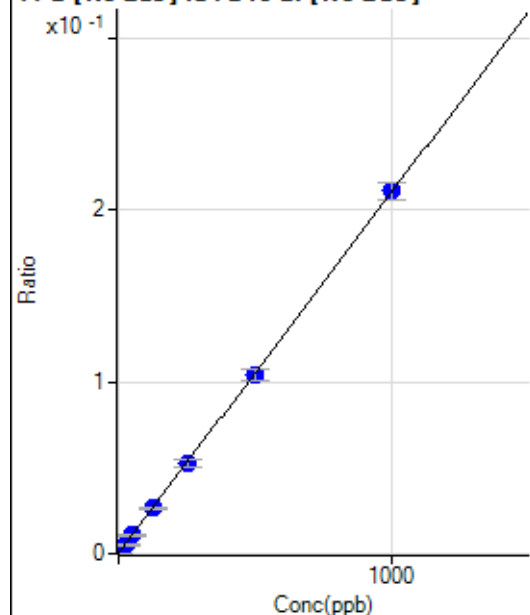
$$R = 1.0000$$

$$DL = 1.242$$

$$BEC = 2.503$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	699.88	0.0005	P	3.6
2	☐	25.000	22.026	7513.12	0.0051	P	8.4
3	☐	50.000	49.480	16435.28	0.0108	P	6.9
4	☐	125.000	123.603	40161.94	0.0264	P	5.8
5	☐	250.000	248.136	79048.82	0.0525	P	8.0
6	☐	500.000	494.225	156797.80	0.1041	P	7.0
7	☐	1000.000	1003.629	320349.22	0.2110	P	5.0
8	☐			46595.00	0.0314	P	8.6

$$y = 2.0972\text{E-}004 * x + 4.6627\text{E-}004$$

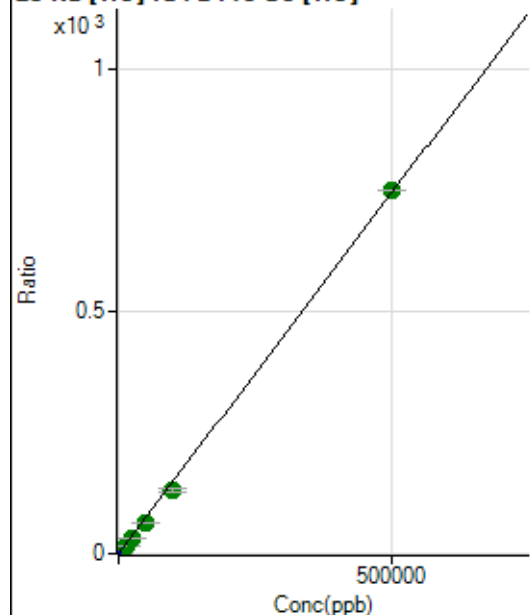
$$R = 1.0000$$

$$DL = 0.2409$$

$$BEC = 2.223$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	40720.86	0.4616	P	0.8
2	☐	500.000	473.167	96094.27	1.1652	P	8.5
3	☐	5000.000	4484.061	645036.07	7.1296	P	0.4
4	☐	12500.000	11115.463	1536536.19	16.9909	A	0.4
5	☐	25000.000	21974.745	3017763.15	33.1392	A	0.9
6	☐	50000.000	43163.318	6010559.20	64.6477	A	1.4
7	☐	100000.00	88170.308	12054122.75	131.5755	A	7.7
8	☐	500000.00	503240.66	67591629.09	748.8072	A	0.1

$$y = 0.0015 * x + 0.4616$$

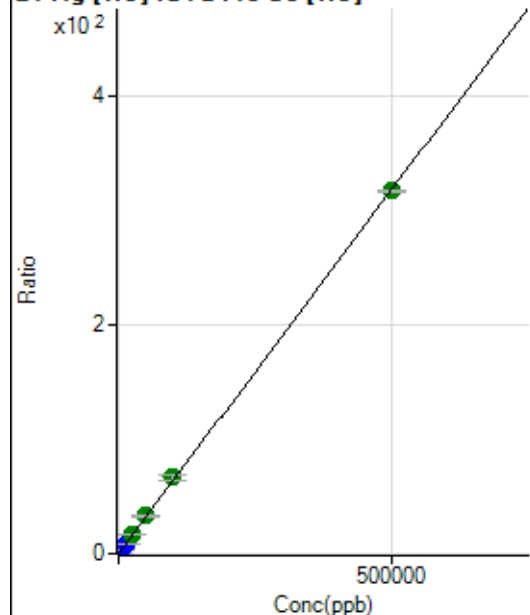
$$R = 0.9997$$

$$DL = 7.735$$

$$BEC = 310.4$$

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	769.49	0.0087	P	13.6
2	☐	500.000	535.678	28784.62	0.3492	P	9.4
3	☐	5000.000	5345.742	308173.19	3.4064	P	0.6
4	☐	12500.000	13457.432	774279.55	8.5620	P	0.4
5	☐	25000.000	26626.997	1541817.44	16.9324	A	2.7
6	☐	50000.000	51850.453	3064825.48	32.9639	A	1.4
7	☐	100000.00	105060.23	6117968.15	66.7831	A	7.8
8	☐	500000.00	498694.12	28611241.26	316.9698	A	0.3

$$y = 6.3558\text{E-}004 * x + 0.0087$$

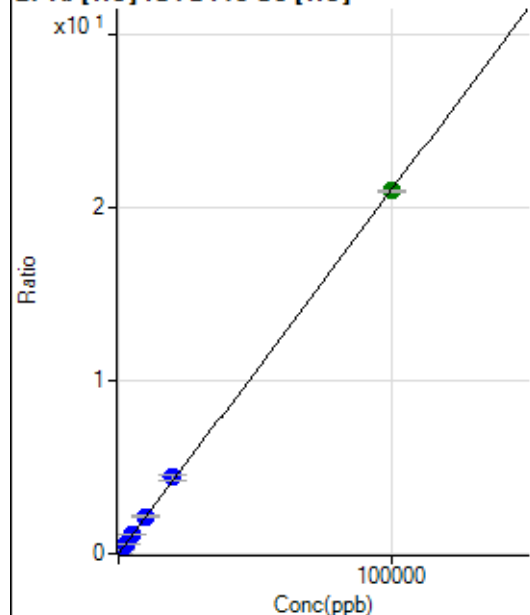
$$R = 0.9999$$

$$DL = 5.613$$

$$BEC = 13.72$$

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	396.62	0.0045	P	7.6
2	☐	20.000	23.101	769.93	0.0093	P	10.5
3	☐	1000.000	1029.863	19947.79	0.2205	P	1.4
4	☐	2500.000	2620.549	50110.90	0.5541	P	0.2
5	☐	5000.000	5179.367	99332.46	1.0908	P	0.5
6	☐	10000.000	10261.592	200529.88	2.1567	P	1.2
7	☐	20000.000	20923.246	402589.28	4.3929	P	6.8
8	☐	100000.00	99776.910	1889473.69	20.9315	A	0.6

$$y = 2.0974\text{E-}004 * x + 0.0045$$

$$R = 1.0000$$

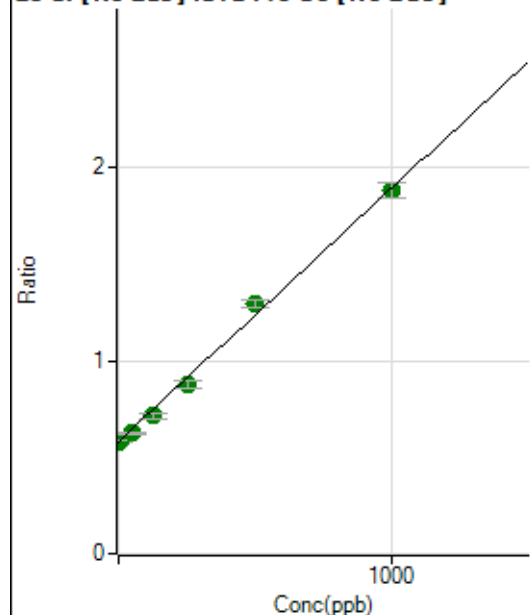
$$DL = 4.857$$

$$BEC = 21.43$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	1415084.48	0.5827	A	2.4
2	☐	10.000	6.370	1445426.03	0.5910	A	0.5
3	☐	50.000	31.122	1588726.69	0.6235	A	1.2
4	☐	125.000	100.999	1817798.83	0.7153	A	3.7
5	☐	250.000	224.706	2265646.23	0.8777	A	4.7
6	☐	500.000	543.573	3289973.34	1.2963	A	3.7
7	☐	1000.000	988.517	4855880.75	1.8805	A	4.4
8	☐			1747567.44	0.6914	A	3.9

$$y = 0.0013 * x + 0.5827$$

R = 0.9980

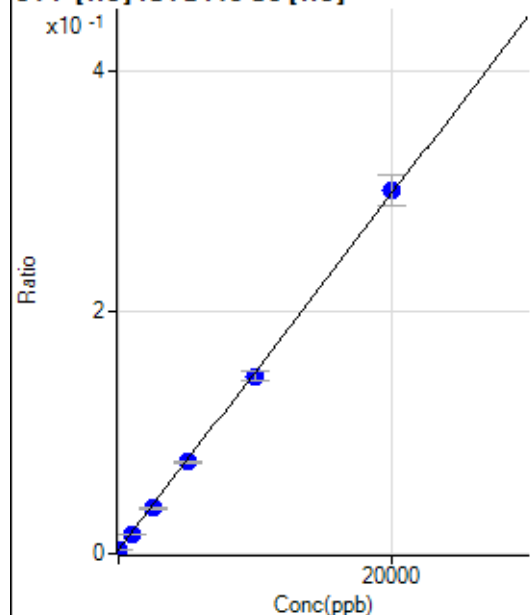
DL = 31.89

BEC = 443.8

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	15.460	311.12	0.0035	P	7.6
2	☐	0.000	-15.460	252.79	0.0031	P	22.0
3	☐	1000.000	872.112	1461.23	0.0161	P	6.1
4	☐	2500.000	2344.924	3422.71	0.0378	P	5.4
5	☐	5000.000	4916.748	6896.27	0.0757	P	2.4
6	☐	10000.000	9760.524	13673.44	0.1471	P	4.6
7	☐	20000.000	20166.330	27509.87	0.3004	P	8.5
8	☐			302.79	0.0034	P	12.0

$$y = 1.4732E-005 * x + 0.0033$$

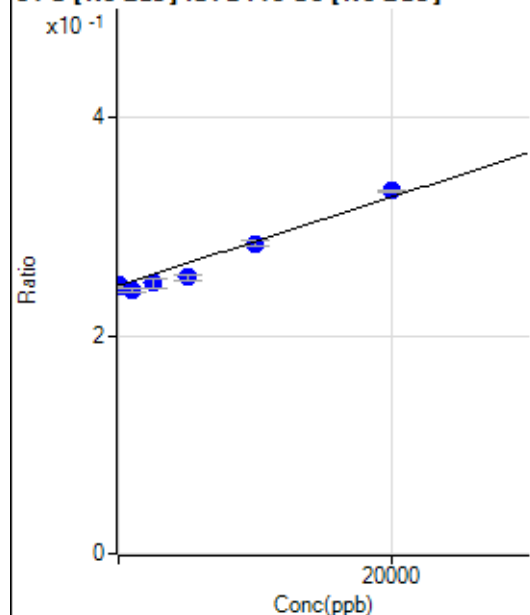
R = 0.9999

DL = 95.97

BEC = 223.9

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	107.754	598211.57	0.2463	P	1.3
2	☐	0.000	-107.754	600197.86	0.2454	P	0.7
3	☐	1000.000	-1078.949	615276.11	0.2415	P	1.4
4	☐	2500.000	585.852	630810.95	0.2482	P	3.7
5	☐	5000.000	1777.099	653207.88	0.2531	P	2.0
6	☐	10000.000	9540.235	721696.55	0.2845	P	1.8
7	☐	20000.000	21378.824	858669.31	0.3325	P	0.3
8	☐			562543.68	0.2225	P	0.7

$$y = 4.0530\text{E-}006 * x + 0.2459$$

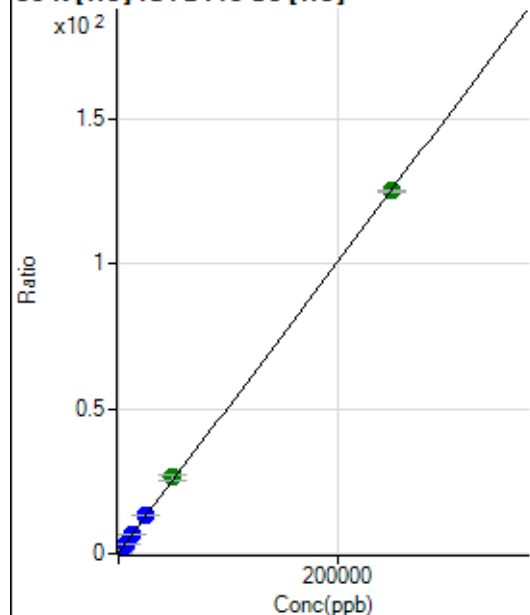
$$R = 0.9862$$

$$DL = 1807$$

$$BEC = 6.066\text{E}+04$$

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	26784.95	0.3036	P	1.6
2	☐	500.000	551.575	47770.33	0.5793	P	8.5
3	☐	2500.000	2584.171	144303.36	1.5951	P	0.7
4	☐	6250.000	6506.647	321514.14	3.5553	P	0.6
5	☐	12500.000	13011.840	619793.36	6.8063	P	1.1
6	☐	25000.000	25776.910	1226009.55	13.1857	P	0.3
7	☐	50000.000	51954.618	2407706.05	26.2682	A	6.6
8	☐	250000.00	249498.43	11281947.26	124.9917	A	0.7

$$y = 4.9976\text{E-}004 * x + 0.3036$$

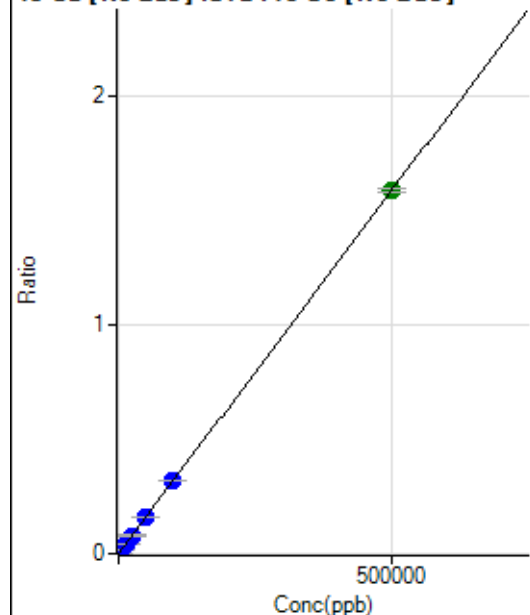
$$R = 1.0000$$

$$DL = 28.59$$

$$BEC = 607.5$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	457.04	0.0002	P	11.2
2	☐	500.000	472.492	4121.34	0.0017	P	2.9
3	☐	5000.000	5004.199	40874.77	0.0160	P	2.1
4	☐	12500.000	12544.167	101488.75	0.0399	P	3.3
5	☐	25000.000	24887.980	204027.62	0.0790	P	2.0
6	☐	50000.000	50872.877	409390.00	0.1614	P	0.9
7	☐	100000.00	100466.56	822509.33	0.3185	P	0.5
8	☐	500000.00	499823.88	4003675.88	1.5838	A	1.2

$$y = 3.1684\text{E-}006 * x + 1.8826\text{E-}004$$

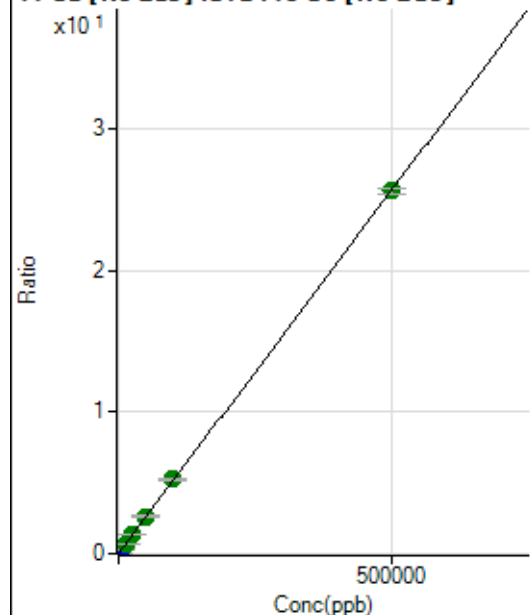
$$R = 1.0000$$

$$DL = 20.01$$

$$BEC = 59.42$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	29986.07	0.0123	P	0.5
2	☐	500.000	494.524	92292.98	0.0377	P	0.9
3	☐	5000.000	5186.718	710042.76	0.2787	P	1.8
4	☐	12500.000	12942.734	1720947.07	0.6770	A	2.6
5	☐	25000.000	25545.637	3418384.04	1.3242	A	0.8
6	☐	50000.000	51201.080	6701303.70	2.6416	A	2.0
7	☐	100000.00	101938.51	13549709.85	5.2471	A	1.4
8	☐	500000.00	499451.97	64863647.98	25.6601	A	1.3

$$y = 5.1352\text{E-}005 * x + 0.0123$$

$$R = 1.0000$$

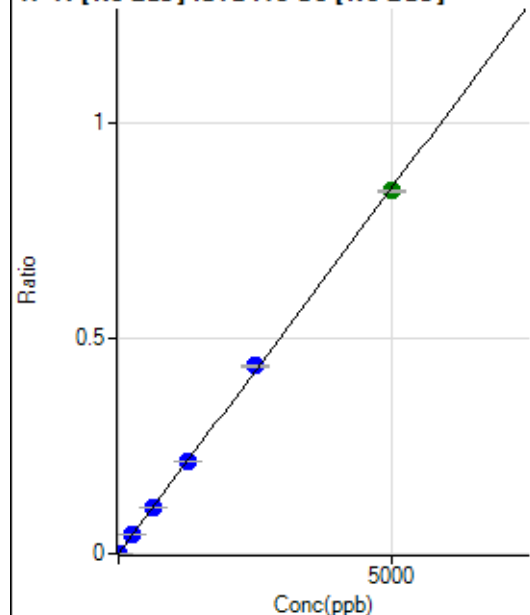
$$DL = 3.855$$

$$BEC = 240.4$$

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	558.36	0.0002	P	12.3
2	☐	5.000	5.250	2736.45	0.0011	P	6.0
3	☐	250.000	255.075	110633.19	0.0434	P	0.6
4	☐	625.000	631.926	272567.32	0.1072	P	2.6
5	☐	1250.000	1258.134	550518.55	0.2133	P	0.9
6	☐	2500.000	2565.074	1102402.63	0.4345	P	0.9
7	☐	5000.000	4964.310	2171216.19	0.8408	A	0.6
8	☐			1925.18	0.0008	P	7.5

$$y = 1.6932\text{E-}004 * x + 2.3004\text{E-}004$$

R = 0.9999

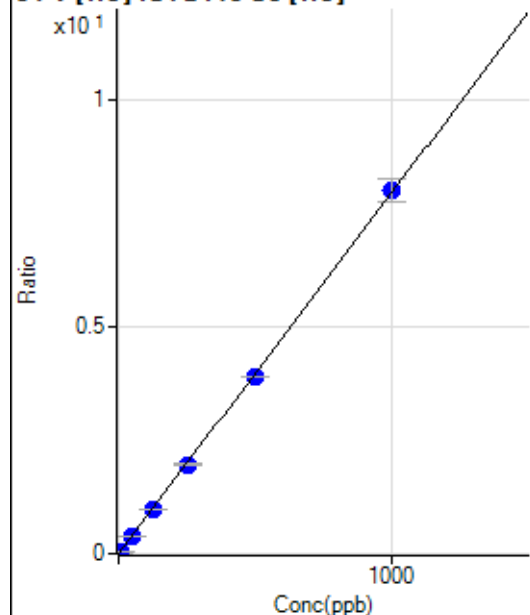
DL = 0.4994

BEC = 1.359

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	16.67	0.0002	P	19.8
2	☐	5.000	4.962	3279.30	0.0397	P	6.2
3	☐	50.000	49.032	35332.42	0.3906	P	1.4
4	☐	125.000	123.595	89000.99	0.9842	P	0.7
5	☐	250.000	247.257	179276.43	1.9687	P	0.9
6	☐	500.000	491.456	363818.75	3.9129	P	0.4
7	☐	1000.000	1005.182	733582.34	8.0030	P	6.3
8	☐			182.23	0.0020	P	12.0

$$y = 0.0080 * x + 1.8886\text{E-}004$$

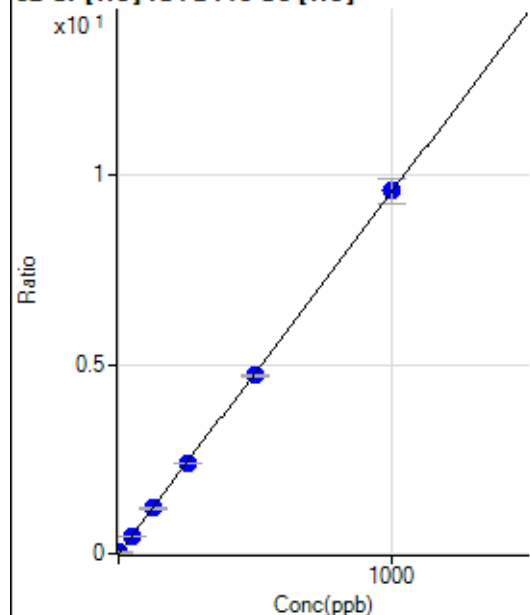
R = 0.9999

DL = 0.01406

BEC = 0.02372

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	526.68	0.0060	P	5.4
2	☐	2.000	2.099	2146.85	0.0260	P	8.0
3	☐	50.000	49.550	43346.55	0.4791	P	0.6
4	☐	125.000	124.814	108318.25	1.1978	P	1.0
5	☐	250.000	249.724	217695.59	2.3906	P	0.4
6	☐	500.000	492.238	437579.50	4.7064	P	1.2
7	☐	1000.000	1003.995	879143.46	9.5932	P	6.9
8	☐			3303.75	0.0366	P	2.3

$$y = 0.0095 * x + 0.0060$$

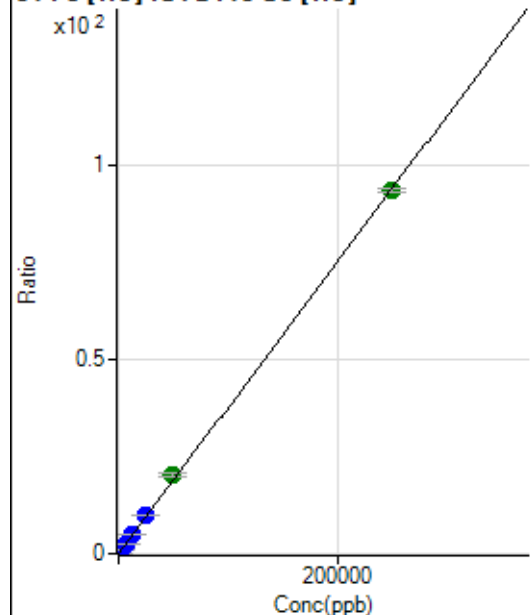
$$R = 1.0000$$

$$DL = 0.1014$$

$$BEC = 0.6252$$

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	450.01	0.0051	P	14.2
2	☐	50.000	58.658	2237.25	0.0271	P	7.1
3	☐	2500.000	2631.908	89787.59	0.9925	P	1.5
4	☐	6250.000	6652.205	226143.47	2.5008	P	0.5
5	☐	12500.000	13244.981	452945.90	4.9741	P	1.6
6	☐	25000.000	26425.245	922235.50	9.9189	P	0.6
7	☐	50000.000	53983.392	1856522.23	20.2577	A	6.8
8	☐	250000.00	249012.17	8432521.08	93.4253	A	1.1

$$y = 3.7516E-004 * x + 0.0051$$

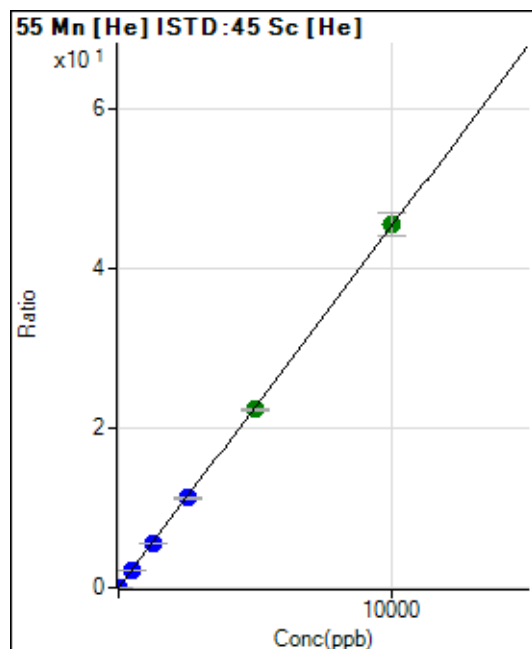
$$R = 0.9999$$

$$DL = 5.805$$

$$BEC = 13.6$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	205.84	0.0023	P	11.8
2	☐	1.000	1.180	632.50	0.0077	P	12.0
3	☐	500.000	495.099	203265.34	2.2468	P	0.9
4	☐	1250.000	1247.260	511537.39	5.6566	P	0.2
5	☐	2500.000	2478.644	1023448.13	11.2390	P	0.9
6	☐	5000.000	4936.646	2080972.56	22.3821	A	1.1
7	☐	10000.000	10037.603	4171113.21	45.5067	A	6.4
8	☐			2821.14	0.0312	P	11.7

$$y = 0.0045 * x + 0.0023$$

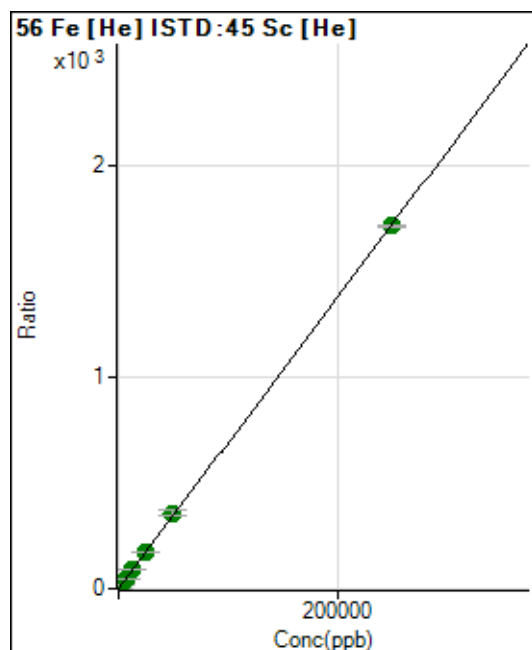
$$R = 1.0000$$

$$DL = 0.1816$$

$$BEC = 0.5147$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	3937.65	0.0446	P	1.9
2	☐	50.000	53.491	34005.51	0.4123	P	8.1
3	☐	2500.000	2600.721	1620984.04	17.9181	A	1.3
4	☐	6250.000	6518.935	4055404.03	44.8460	A	0.9
5	☐	12500.000	12873.578	8060574.72	88.5182	A	1.2
6	☐	25000.000	25482.219	16287250.83	175.1709	A	0.9
7	☐	50000.000	52075.331	32805127.82	357.9318	A	6.6
8	☐	250000.00	249510.30	154781738.6	1,714.801	A	0.5

$$y = 0.0069 * x + 0.0446$$

$$R = 1.0000$$

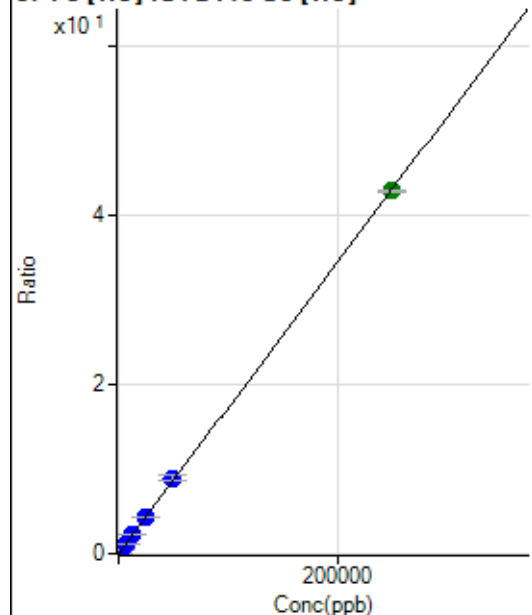
$$DL = 0.3676$$

$$BEC = 6.495$$

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	131.49	0.0015	P	59.8
2	☐	50.000	51.635	855.60	0.0104	P	9.4
3	☐	2500.000	2561.236	40032.20	0.4425	P	1.6
4	☐	6250.000	6489.808	101181.83	1.1189	P	0.1
5	☐	12500.000	12956.439	203272.87	2.2323	P	1.7
6	☐	25000.000	25623.623	410340.92	4.4132	P	1.0
7	☐	50000.000	52218.653	824308.28	8.9923	P	6.2
8	☐	250000.00	249464.47	3877071.35	42.9532	A	0.6

$$y = 1.7218\text{E-}004 * x + 0.0015$$

$$R = 1.0000$$

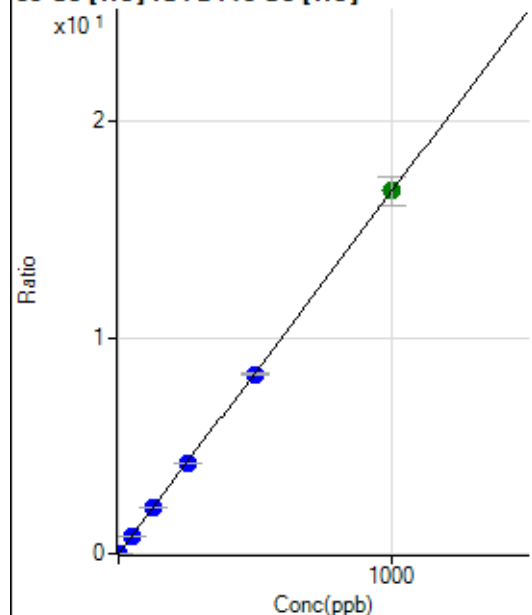
$$DL = 15.51$$

$$BEC = 8.647$$

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	83.33	0.0009	P	22.4
2	☐	1.000	0.994	1453.42	0.0176	P	6.1
3	☐	50.000	49.882	75718.74	0.8370	P	1.6
4	☐	125.000	125.885	190879.31	2.1108	P	0.5
5	☐	250.000	250.102	381788.52	4.1926	P	1.4
6	☐	500.000	495.807	772691.16	8.3106	P	0.9
7	☐	1000.000	1001.966	1538425.10	16.7938	A	7.8
8	☐			2250.20	0.0249	P	6.0

$$y = 0.0168 * x + 9.4469\text{E-}004$$

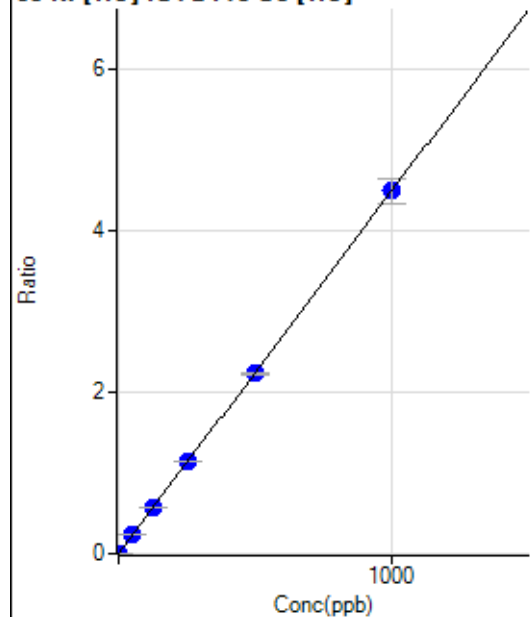
$$R = 1.0000$$

$$DL = 0.03781$$

$$BEC = 0.05637$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	192.23	0.0022	P	19.7
2	☐	1.000	1.048	564.46	0.0069	P	16.2
3	☐	50.000	50.899	20813.05	0.2301	P	1.4
4	☐	125.000	125.862	51157.09	0.5657	P	0.3
5	☐	250.000	252.872	103296.03	1.1343	P	0.8
6	☐	500.000	496.037	206693.62	2.2230	P	0.6
7	☐	1000.000	1001.111	410968.78	4.4844	P	6.8
8	☐			1217.84	0.0135	P	5.9

$$y = 0.0045 * x + 0.0022$$

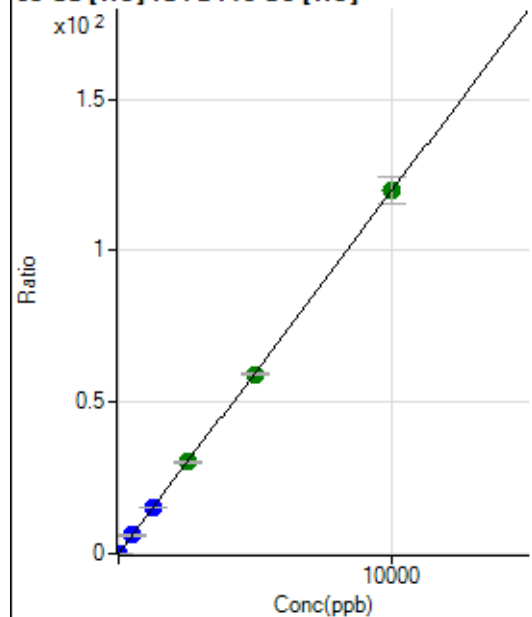
$$R = 1.0000$$

$$DL = 0.2874$$

$$BEC = 0.4865$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	743.36	0.0084	P	6.4
2	☐	2.000	2.512	3172.61	0.0385	P	8.8
3	☐	500.000	506.177	548343.20	6.0612	P	1.1
4	☐	1250.000	1285.387	1390671.99	15.3787	P	0.9
5	☐	2500.000	2523.597	2748756.55	30.1849	A	0.6
6	☐	5000.000	4957.902	5512843.11	59.2936	A	1.2
7	☐	10000.000	10010.418	10968400.95	119.7101	A	7.3
8	☐			6454.86	0.0715	P	5.2

$$y = 0.0120 * x + 0.0084$$

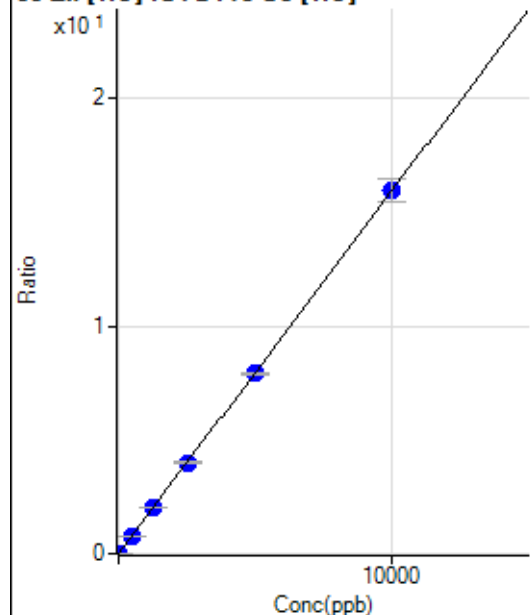
$$R = 1.0000$$

$$DL = 0.1359$$

$$BEC = 0.7047$$

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	143.34	0.0016	P	10.3
2	☐	2.000	2.013	397.79	0.0048	P	13.2
3	☐	500.000	500.078	72192.53	0.7980	P	1.1
4	☐	1250.000	1264.232	182207.44	2.0149	P	0.8
5	☐	2500.000	2504.366	363311.77	3.9898	P	1.5
6	☐	5000.000	4969.042	735884.66	7.9147	P	0.7
7	☐	10000.000	10012.604	1461582.15	15.9465	P	6.5
8	☐			1382.31	0.0153	P	8.6

$$y = 0.0016 * x + 0.0016$$

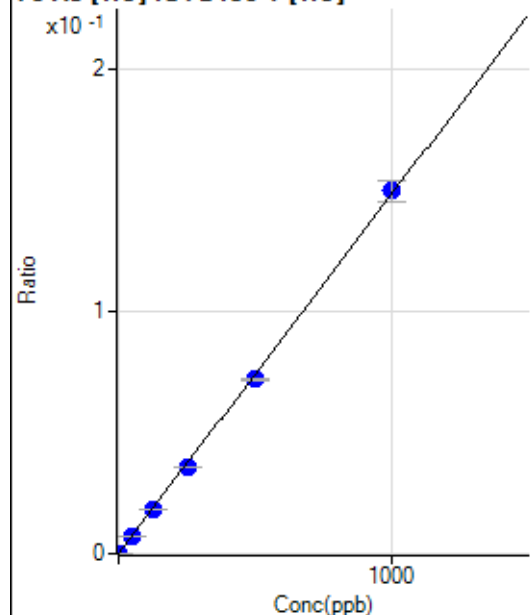
$$R = 1.0000$$

$$DL = 0.3159$$

$$BEC = 1.02$$

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	6.33	0.0000	P	78.3
2	☐	1.000	1.169	124.68	0.0002	P	5.5
3	☐	50.000	48.281	5322.21	0.0072	P	0.2
4	☐	125.000	121.749	13425.38	0.0181	P	0.9
5	☐	250.000	241.432	26950.94	0.0359	P	0.8
6	☐	500.000	485.275	55259.11	0.0721	P	1.1
7	☐	1000.000	1009.997	111163.66	0.1500	P	6.1
8	☐			61.68	0.0001	P	6.4

$$y = 1.4848E-004 * x + 8.7302E-006$$

$$R = 0.9998$$

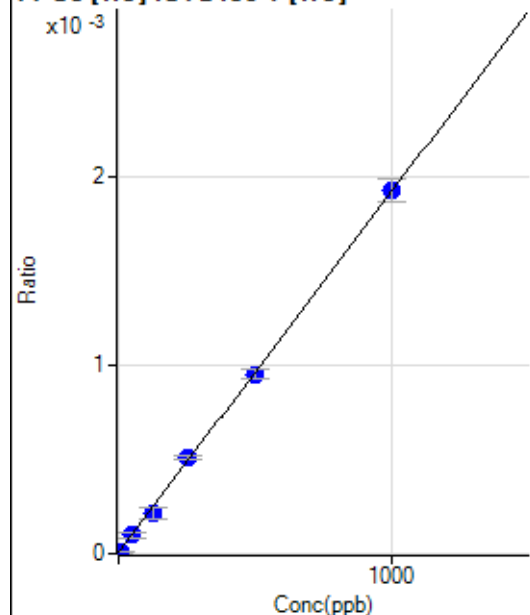
$$DL = 0.1381$$

$$BEC = 0.0588$$

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	4.44	0.0000	P	42.4
2	☐	5.000	3.475	8.89	0.0000	P	35.2
3	☐	50.000	48.342	73.33	0.0001	P	26.8
4	☐	125.000	109.283	160.00	0.0002	P	26.7
5	☐	250.000	262.112	382.23	0.0005	P	5.1
6	☐	500.000	493.591	730.03	0.0010	P	5.6
7	☐	1000.000	1002.232	1428.98	0.0019	P	6.3
8	☐			6.67	0.0000	P	0.2

$$y = 1.9167\text{E-}006 * x + 6.1013\text{E-}006$$

$$R = 0.9997$$

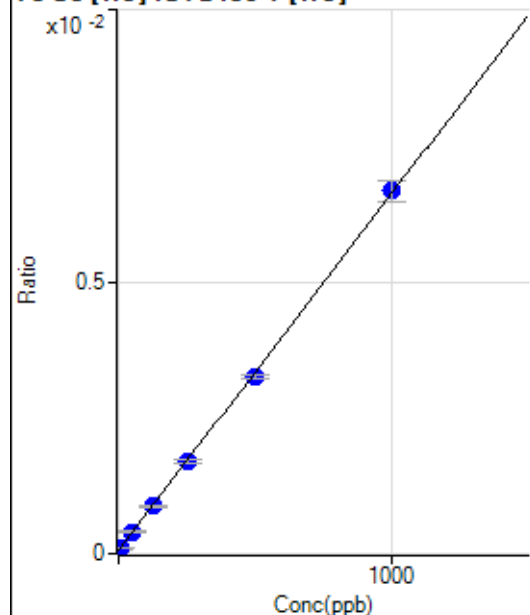
$$\text{DL} = 4.05$$

$$\text{BEC} = 3.183$$

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	46.34	0.0001	P	19.5
2	☐	5.000	4.915	65.68	0.0001	P	8.9
3	☐	50.000	51.337	297.03	0.0004	P	6.5
4	☐	125.000	122.851	645.41	0.0009	P	1.8
5	☐	250.000	247.937	1270.19	0.0017	P	4.5
6	☐	500.000	485.481	2490.81	0.0032	P	1.7
7	☐	1000.000	1007.977	4947.37	0.0067	P	6.1
8	☐			39.00	0.0001	P	38.9

$$y = 6.5583\text{E-}006 * x + 6.3746\text{E-}005$$

$$R = 0.9998$$

$$\text{DL} = 5.696$$

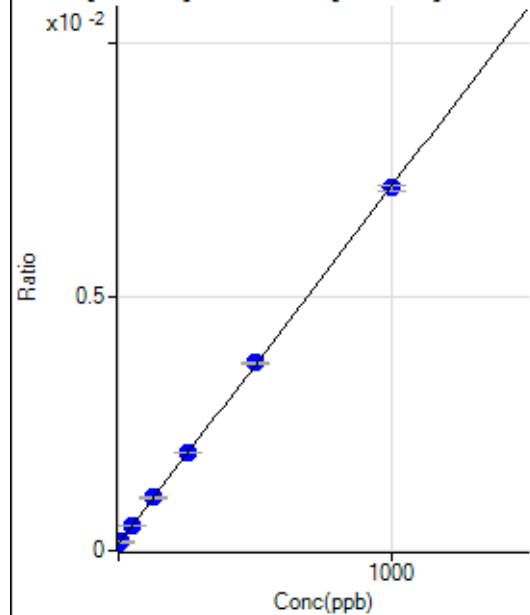
$$\text{BEC} = 9.72$$

Weight: <None>

Min Conc: 0

81 Br [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			3090.21		P	2.9
2	☐			3156.94		P	10.0
3	☐			3170.30		P	6.3
4	☐			3096.87		P	2.1
5	☐			3166.97		P	4.0
6	☐			3193.65		P	5.7
7	☐			3223.71		P	0.6
8	☐			3664.26		P	4.3

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	880.88	0.0001	P	2.7
2	☐	5.000	5.258	1100.31	0.0002	P	9.1
3	☐	50.000	51.246	3277.36	0.0005	P	2.3
4	☐	125.000	128.554	6817.03	0.0010	P	4.3
5	☐	250.000	253.838	12707.33	0.0019	P	0.5
6	☐	500.000	506.006	24356.18	0.0037	P	1.5
7	☐	1000.000	995.529	48169.06	0.0071	P	1.2
8	☐			901.33	0.0001	P	14.0

$$y = 7.0405E-006 * x + 1.3721E-004$$

$$R = 1.0000$$

$$DL = 1.592$$

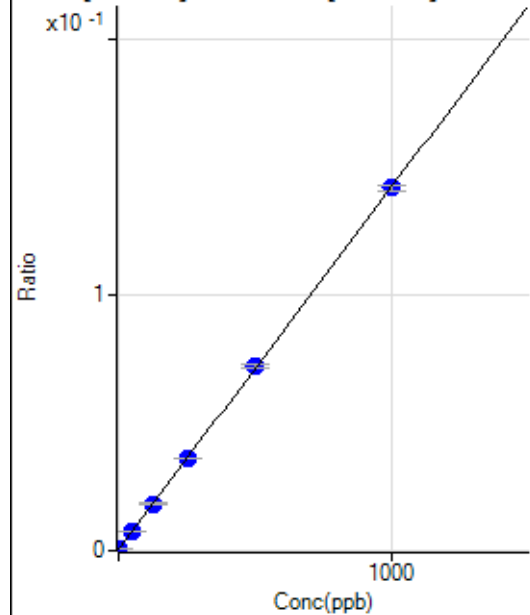
$$BEC = 19.49$$

Weight: <None>

Min Conc: 0

83 Kr [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			1862.36		P	4.4
2	☐			1741.24		P	7.2
3	☐			1804.58		P	2.9
4	☐			1843.47		P	1.4
5	☐			1803.47		P	2.5
6	☐			1842.36		P	2.6
7	☐			1789.03		P	2.3
8	☐			1837.92		P	6.4

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	2883.72	0.0004	P	4.6
2	☐	1.000	0.987	3720.03	0.0006	P	4.4
3	☐	50.000	49.613	49181.55	0.0075	P	1.1
4	☐	125.000	124.689	118407.76	0.0181	P	4.0
5	☐	250.000	251.299	237929.11	0.0360	P	1.5
6	☐	500.000	503.937	472712.06	0.0718	P	2.2
7	☐	1000.000	997.765	955344.03	0.1417	P	1.4
8	☐			8336.04	0.0013	P	2.9

$$y = 1.4160E-004 * x + 4.4897E-004$$

$$R = 1.0000$$

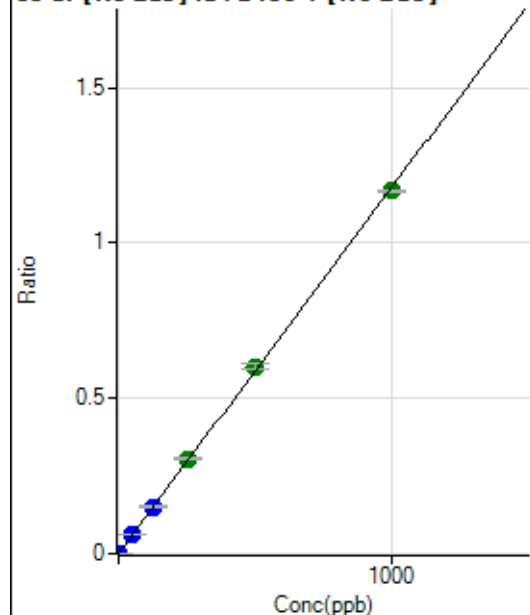
$$DL = 0.4361$$

$$BEC = 3.171$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	241.67	0.0000	P	16.8
2	☐	1.000	1.006	7727.34	0.0012	P	4.6
3	☐	50.000	51.572	399993.60	0.0608	P	0.7
4	☐	125.000	128.630	991435.68	0.1515	P	2.6
5	☐	250.000	258.912	2014000.28	0.3050	A	1.6
6	☐	500.000	511.362	3965417.93	0.6024	A	2.6
7	☐	1000.000	991.559	7872961.29	1.1680	A	0.5
8	☐			46979.53	0.0073	P	1.7

$$y = 0.0012 * x + 3.7684E-005$$

$$R = 0.9999$$

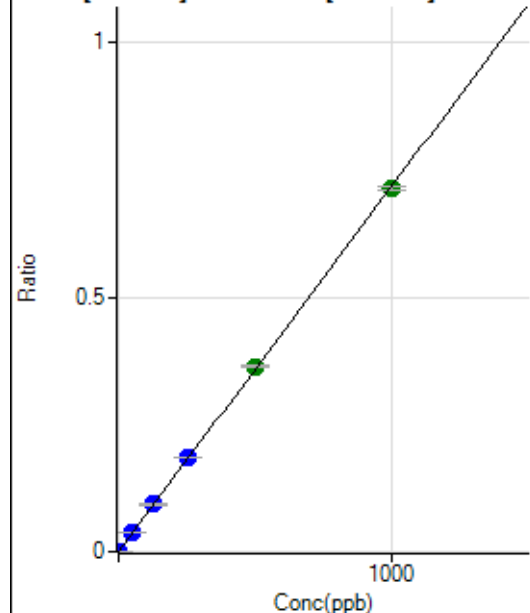
$$DL = 0.01609$$

$$BEC = 0.03199$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	252.79	0.0000	P	17.9
2	☐	1.000	0.976	4673.13	0.0007	P	4.1
3	☐	50.000	51.435	243135.08	0.0369	P	1.0
4	☐	125.000	129.144	606454.60	0.0927	P	3.0
5	☐	250.000	258.085	1223149.82	0.1852	P	0.5
6	☐	500.000	507.651	2398377.66	0.3643	A	1.8
7	☐	1000.000	993.564	4805925.71	0.7130	A	1.0
8	☐			4084.05	0.0006	P	15.7

$$y = 7.1757E-004 * x + 3.9310E-005$$

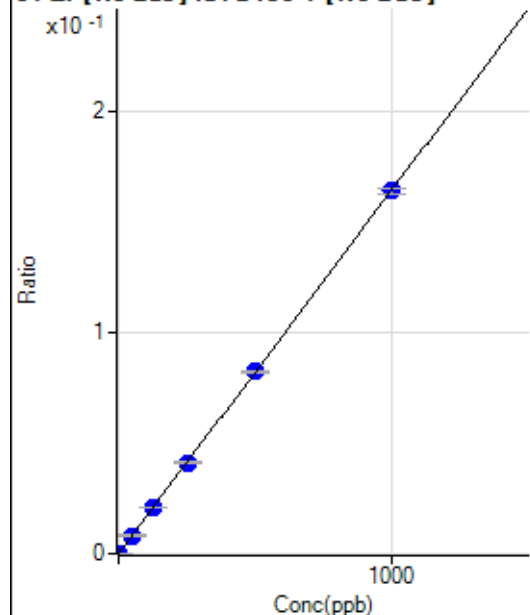
$$R = 0.9999$$

$$DL = 0.02941$$

$$BEC = 0.05478$$

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	63.89	0.0000	P	42.8
2	☐	1.000	1.035	1136.20	0.0002	P	15.2
3	☐	50.000	50.026	54077.68	0.0082	P	1.5
4	☐	125.000	126.141	135461.55	0.0207	P	2.8
5	☐	250.000	250.466	271434.54	0.0411	P	1.0
6	☐	500.000	501.701	542021.13	0.0823	P	1.4
7	☐	1000.000	998.889	1104758.50	0.1639	P	1.7
8	☐			986.17	0.0002	P	20.0

$$y = 1.6407\text{E-}004 * x + 9.9886\text{E-}006$$

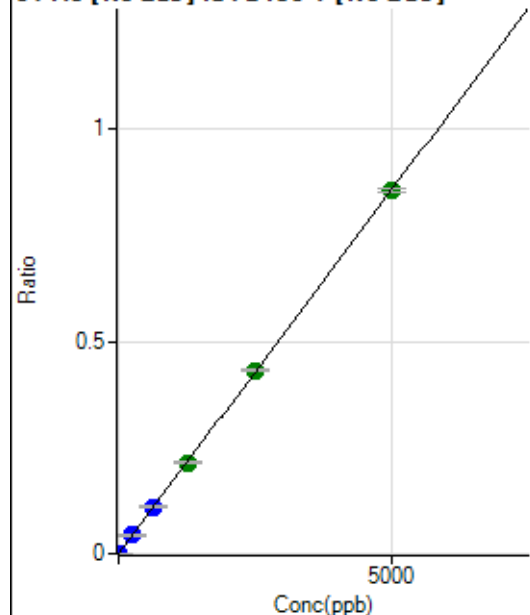
$$R = 1.0000$$

$$DL = 0.07813$$

$$BEC = 0.06088$$

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	77.78	0.0000	P	4.8
2	☐	5.000	5.151	5645.75	0.0009	P	2.4
3	☐	250.000	251.811	283668.98	0.0431	P	0.8
4	☐	625.000	641.908	718643.86	0.1099	P	3.3
5	☐	1250.000	1250.399	1413063.09	0.2140	A	1.7
6	☐	2500.000	2517.613	2836444.33	0.4309	A	1.5
7	☐	5000.000	4988.890	5754814.50	0.8538	A	1.2
8	☐			4662.05	0.0007	P	14.6

$$y = 1.7113\text{E-}004 * x + 1.2109\text{E-}005$$

$$R = 1.0000$$

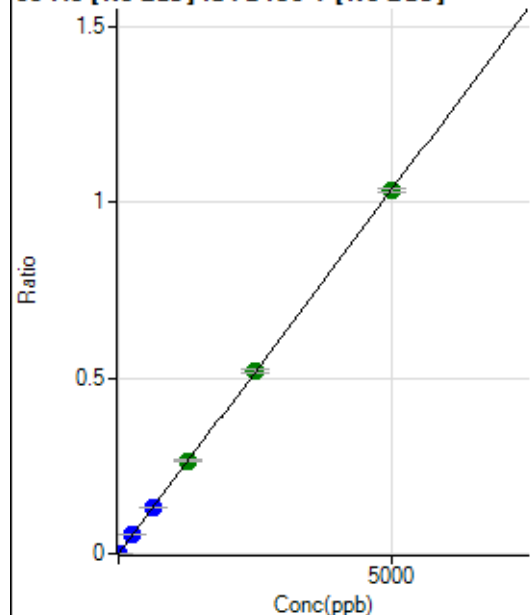
$$DL = 0.01022$$

$$BEC = 0.07076$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	16.67	0.0000	P	86.6
2	☐	5.000	5.116	6704.57	0.0011	P	1.3
3	☐	250.000	254.504	346480.22	0.0527	P	2.2
4	☐	625.000	636.127	860946.83	0.1316	P	3.2
5	☐	1250.000	1277.450	1745371.41	0.2643	A	1.6
6	☐	2500.000	2505.340	3412316.76	0.5184	A	1.8
7	☐	5000.000	4988.851	6957469.08	1.0322	A	1.2
8	☐			5401.25	0.0008	P	15.0

$$y = 2.0690E-004 * x + 2.5867E-006$$

R = 1.0000

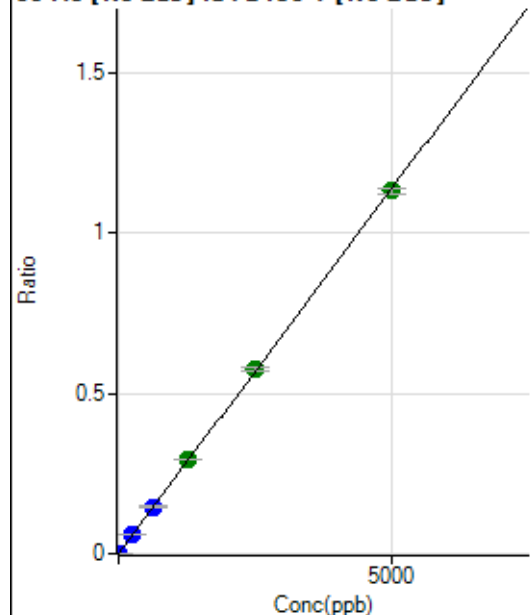
DL = 0.03249

BEC = 0.0125

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	41.67	0.0000	P	20.2
2	☐	5.000	4.961	7165.92	0.0011	P	6.4
3	☐	250.000	255.488	382178.11	0.0581	P	1.3
4	☐	625.000	639.740	951244.27	0.1454	P	3.1
5	☐	1250.000	1284.303	1927690.99	0.2919	A	0.5
6	☐	2500.000	2532.452	3789523.13	0.5756	A	1.7
7	☐	5000.000	4973.081	7619242.62	1.1304	A	1.3
8	☐			6429.45	0.0010	P	13.2

$$y = 2.2730E-004 * x + 6.4907E-006$$

R = 0.9999

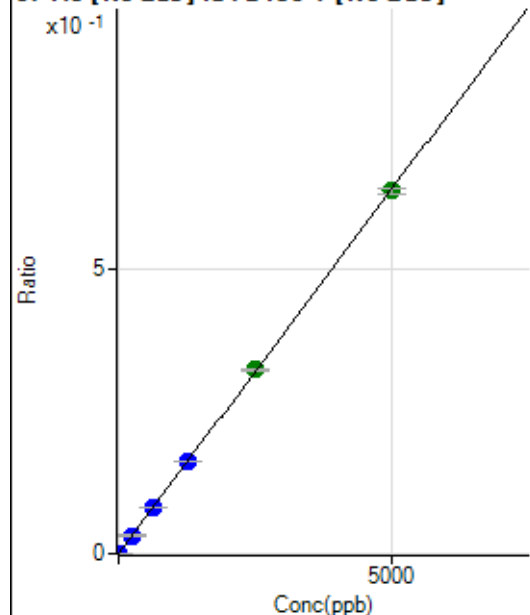
DL = 0.01734

BEC = 0.02856

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	25.00	0.0000	P	58.3
2	☐	5.000	5.221	4248.01	0.0007	P	5.1
3	☐	250.000	250.164	210790.37	0.0320	P	1.1
4	☐	625.000	633.817	530883.27	0.0811	P	2.4
5	☐	1250.000	1270.075	1073703.21	0.1626	P	0.2
6	☐	2500.000	2527.546	2130288.22	0.3236	A	1.4
7	☐	5000.000	4980.098	4297419.80	0.6376	A	1.4
8	☐			3125.44	0.0005	P	17.1

$$y = 1.2802\text{E-}004 * x + 3.9137\text{E-}006$$

$$R = 1.0000$$

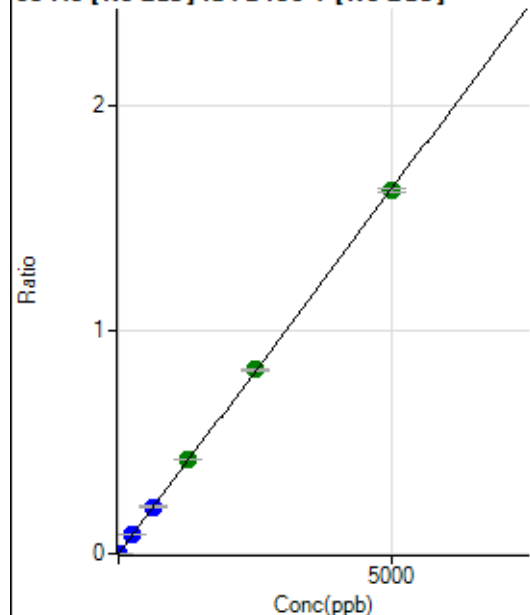
$$DL = 0.0535$$

$$BEC = 0.03057$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	19.44	0.0000	P	66.2
2	☐	5.000	5.112	10557.07	0.0017	P	2.3
3	☐	250.000	255.896	549307.26	0.0835	P	0.7
4	☐	625.000	645.392	1377344.92	0.2105	P	2.3
5	☐	1250.000	1283.621	2764837.71	0.4187	A	0.1
6	☐	2500.000	2527.837	5428640.83	0.8245	A	1.0
7	☐	5000.000	4974.832	10937942.35	1.6227	A	1.1
8	☐			8475.08	0.0013	P	17.0

$$y = 3.2618\text{E-}004 * x + 3.0325\text{E-}006$$

$$R = 0.9999$$

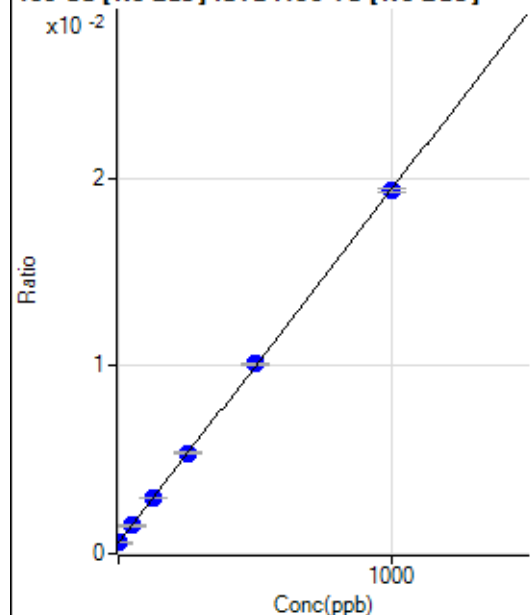
$$DL = 0.01845$$

$$BEC = 0.009297$$

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	2008.54	0.0006	P	6.0
2	☐	1.000	0.535	2030.77	0.0006	P	0.3
3	☐	50.000	48.533	5390.08	0.0015	P	4.3
4	☐	125.000	127.167	10807.26	0.0030	P	1.8
5	☐	250.000	254.137	19405.76	0.0054	P	1.8
6	☐	500.000	505.839	36323.54	0.0101	P	1.1
7	☐	1000.000	995.849	71535.95	0.0193	P	1.2
8	☐			1814.06	0.0005	P	3.4

$$y = 1.8849\text{E-}005 * x + 5.7265\text{E-}004$$

$$R = 1.0000$$

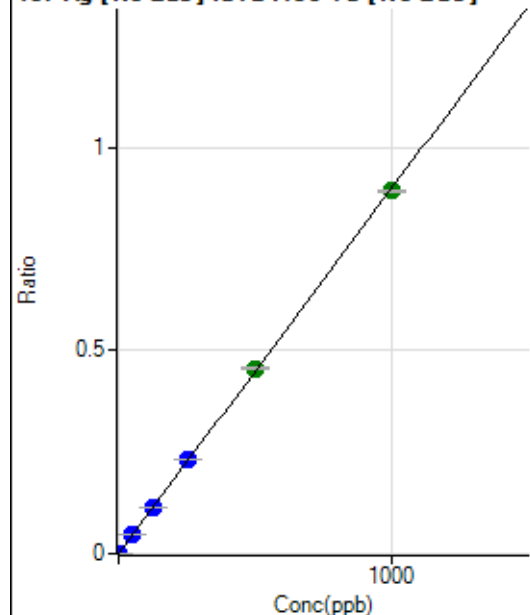
$$DL = 5.447$$

$$BEC = 30.38$$

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	38.89	0.0000	P	86.5
2	☐	1.000	0.958	3036.55	0.0009	P	5.8
3	☐	50.000	51.246	166823.34	0.0460	P	2.2
4	☐	125.000	126.539	413560.88	0.1137	P	2.5
5	☐	250.000	258.611	840605.30	0.2323	P	1.3
6	☐	500.000	507.637	1638753.34	0.4560	A	1.6
7	☐	1000.000	993.774	3301654.37	0.8927	A	0.5
8	☐			2753.13	0.0008	P	8.8

$$y = 8.9832\text{E-}004 * x + 1.1082\text{E-}005$$

$$R = 0.9999$$

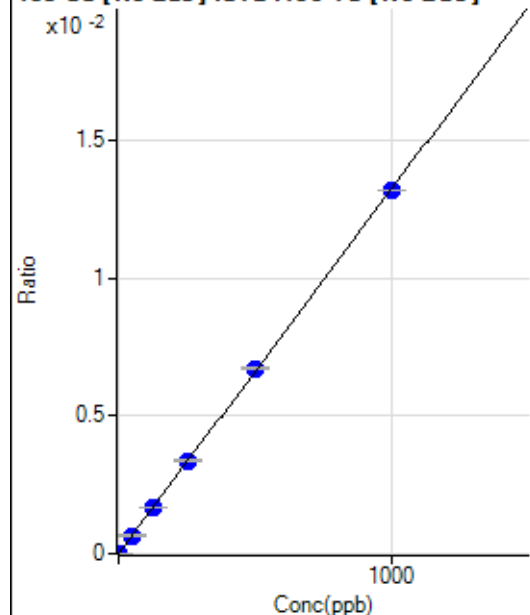
$$DL = 0.03201$$

$$BEC = 0.01234$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	13.89	0.0000	P	105.
2	☐	1.000	1.207	69.45	0.0000	P	11.5
3	☐	50.000	48.773	2348.85	0.0006	P	6.6
4	☐	125.000	126.325	6086.14	0.0017	P	4.0
5	☐	250.000	253.936	12156.85	0.0034	P	2.1
6	☐	500.000	507.818	24133.69	0.0067	P	1.0
7	☐	1000.000	995.003	48650.81	0.0132	P	0.1
8	☐			83.34	0.0000	P	18.1

$$y = 1.3216\text{E-}005 * x + 3.9644\text{E-}006$$

$$R = 0.9999$$

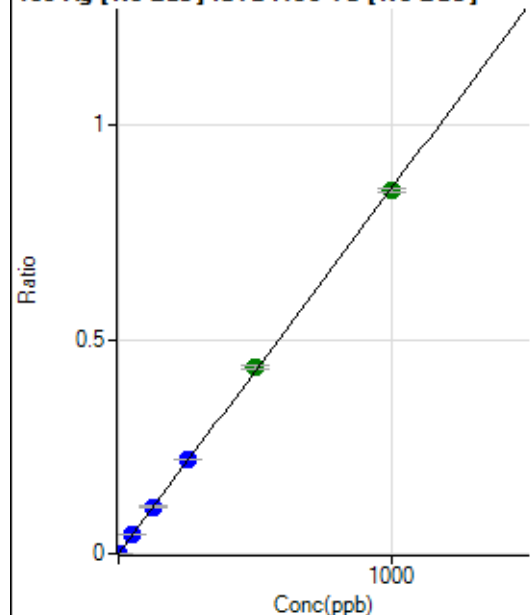
$$DL = 0.9488$$

$$BEC = 0.3$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	36.11	0.0000	P	53.5
2	☐	1.000	0.971	2922.61	0.0008	P	4.8
3	☐	50.000	50.988	157737.19	0.0435	P	1.0
4	☐	125.000	127.841	397023.35	0.1092	P	3.3
5	☐	250.000	257.524	795554.53	0.2199	P	0.7
6	☐	500.000	509.090	1561887.22	0.4346	A	2.1
7	☐	1000.000	993.169	3135784.84	0.8479	A	1.2
8	☐			2525.31	0.0007	P	7.8

$$y = 8.5375\text{E-}004 * x + 1.0301\text{E-}005$$

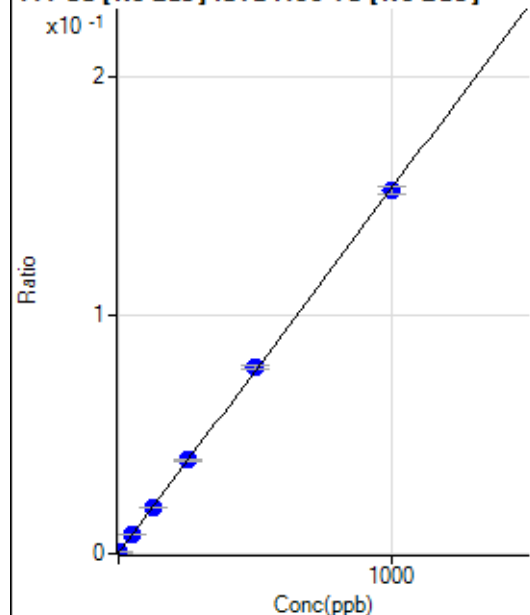
$$R = 0.9999$$

$$DL = 0.01936$$

$$BEC = 0.01207$$

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	794.85	0.0002	P	3.7
2	☐	1.000	1.284	1472.88	0.0004	P	1.2
3	☐	50.000	50.425	28712.57	0.0079	P	0.3
4	☐	125.000	125.134	70315.97	0.0193	P	3.6
5	☐	250.000	255.182	141780.16	0.0392	P	0.8
6	☐	500.000	510.704	281003.13	0.0782	P	1.5
7	☐	1000.000	993.314	561626.03	0.1519	P	2.1
8	☐			1098.96	0.0003	P	5.0

$$y = 1.5267\text{E-}004 * x + 2.2661\text{E-}004$$

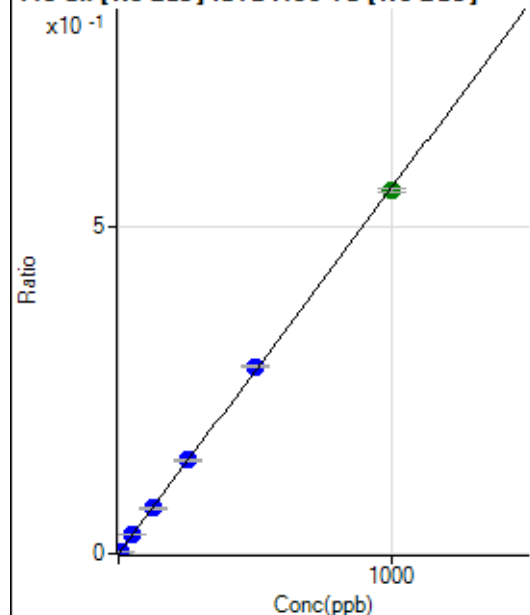
$$R = 0.9999$$

$$DL = 0.1652$$

$$BEC = 1.484$$

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	241.68	0.0001	P	28.3
2	☐	5.000	4.873	9756.54	0.0028	P	1.8
3	☐	50.000	50.340	102423.88	0.0283	P	1.2
4	☐	125.000	125.038	255042.08	0.0701	P	3.5
5	☐	250.000	256.286	519756.55	0.1437	P	1.3
6	☐	500.000	512.523	1032151.87	0.2872	P	1.5
7	☐	1000.000	992.146	2055937.03	0.5559	A	1.0
8	☐			1614.03	0.0005	P	21.6

$$y = 5.6025\text{E-}004 * x + 6.8910\text{E-}005$$

$$R = 0.9999$$

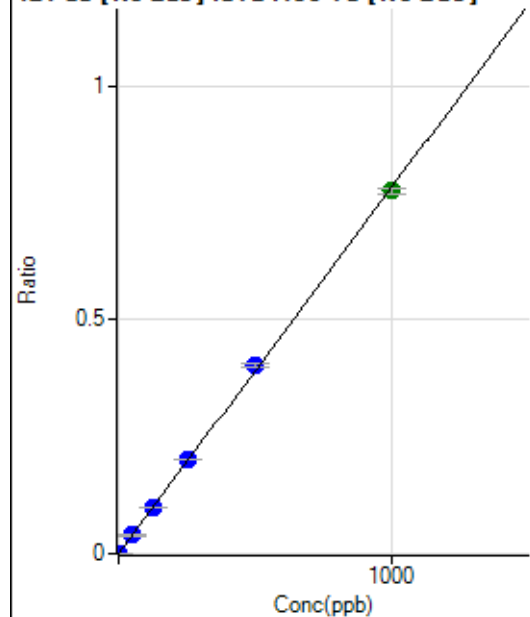
$$DL = 0.1045$$

$$BEC = 0.123$$

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	2.017	5515.14	0.0016	P	3.3
3	☐	50.000	50.233	142535.48	0.0393	P	1.8
4	☐	125.000	125.766	358327.78	0.0985	P	2.4
5	☐	250.000	256.512	726881.59	0.2009	P	0.7
6	☐	500.000	514.172	1447129.76	0.4027	P	1.7
7	☐	1000.000	991.179	2870557.38	0.7762	A	1.6
8	☐			3417.18	0.0010	P	3.3

$$y = 7.8314\text{E-}004 * x + 3.1654\text{E-}006$$

$$R = 0.9998$$

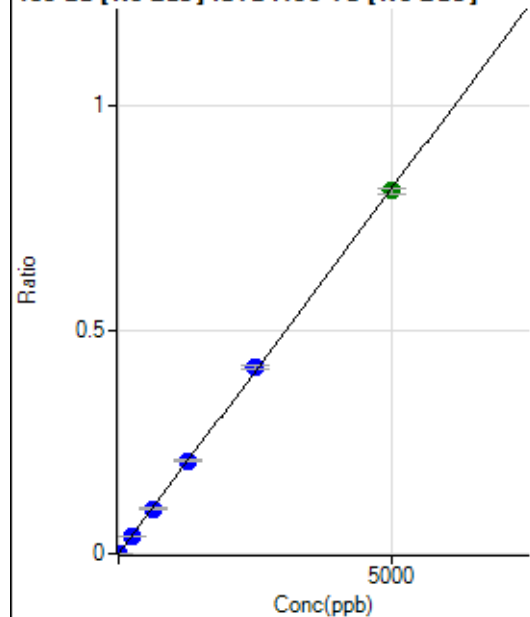
$$DL = 0.01388$$

$$BEC = 0.004042$$

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	41.67	0.0000	P	34.8
2	☐	10.000	10.243	5859.78	0.0017	P	5.6
3	☐	250.000	248.035	146581.95	0.0405	P	0.2
4	☐	625.000	616.761	365915.22	0.1006	P	2.5
5	☐	1250.000	1273.123	751177.84	0.2076	P	1.8
6	☐	2500.000	2547.335	1492920.53	0.4154	P	2.1
7	☐	5000.000	4971.679	2998186.48	0.8107	A	1.4
8	☐			2269.70	0.0006	P	21.1

$$y = 1.6307\text{E-}004 * x + 1.1883\text{E-}005$$

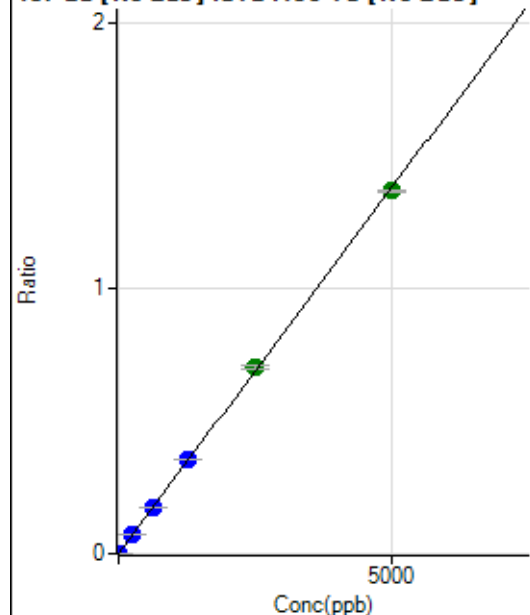
$$R = 0.9999$$

$$DL = 0.07614$$

$$BEC = 0.07287$$

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	38.89	0.0000	P	44.6
2	☐	10.000	9.946	9600.90	0.0028	P	4.4
3	☐	250.000	253.488	253539.59	0.0700	P	1.2
4	☐	625.000	629.689	632268.44	0.1738	P	3.6
5	☐	1250.000	1286.187	1284747.58	0.3551	P	0.3
6	☐	2500.000	2560.171	2539869.05	0.7068	A	2.0
7	☐	5000.000	4960.107	5064057.49	1.3693	A	0.5
8	☐			3928.47	0.0011	P	16.4

$$y = 2.7605E-004 * x + 1.1087E-005$$

$$R = 0.9999$$

$$DL = 0.05373$$

$$BEC = 0.04016$$

Weight: <None>

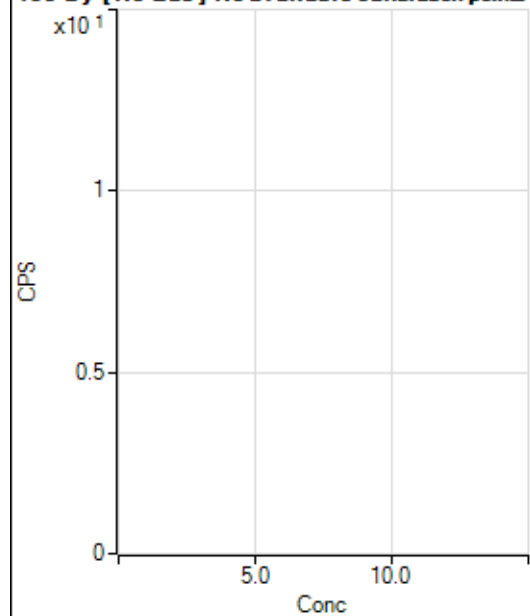
Min Conc: 0

150 Nd [No Gas] No available calibration points

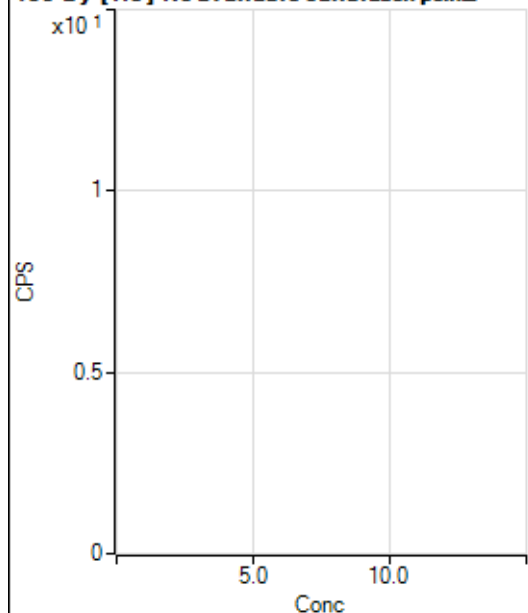
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐			8.89		P	43.3
2	☐			2.22		P	173.
3	☐			15.56		P	65.5
4	☐			15.56		P	49.5
5	☐			31.11		P	86.6
6	☐			60.00		P	22.2
7	☐			135.56		P	10.2
8	☐			26.67		P	50.0

150 Nd [He] No available calibration points

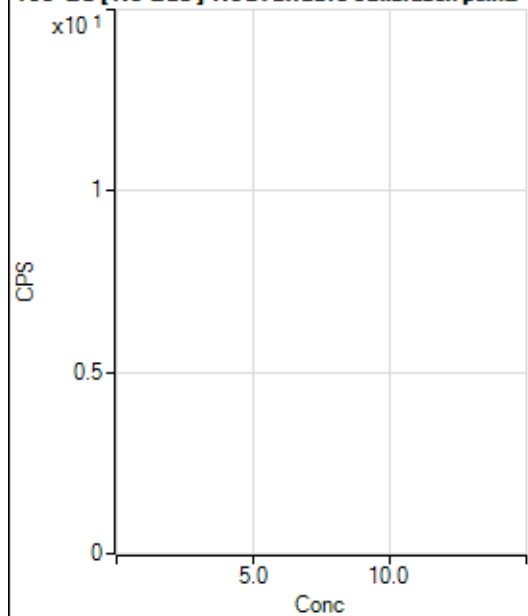
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			3.33		P	100.
2	☐			3.33		P	100.
3	☐			2.22		P	173.
4	☐			2.22		P	173.
5	☐			3.33		P	100.
6	☐			5.56		P	34.7
7	☐			12.22		P	41.7
8	☐			4.45		P	86.6

156 Dy [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			30.56		P	41.7
2	☐			30.55		P	15.7
3	☐			30.56		P	41.7
4	☐			50.00		P	33.3
5	☐			63.89		P	39.8
6	☐			61.11		P	20.8
7	☐			102.78		P	20.4
8	☐			597.25		P	11.9

156 Dy [He] No available calibration points

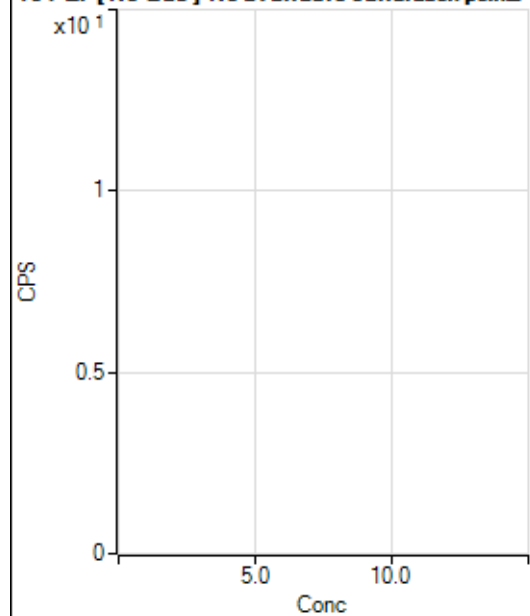
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			5.55		P	124.
2	☐			2.22		P	86.6
3	☐			2.22		P	173.
4	☐			6.67		P	50.0
5	☐			5.55		P	69.3
6	☐			18.89		P	27.0
7	☐			27.78		P	27.7
8	☐			327.79		P	15.3

160 Gd [No Gas] Noavailable calibration poin_

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			33.33		P	43.3
2	☐			52.78		P	39.7
3	☐			58.34		P	51.5
4	☐			47.22		P	40.8
5	☐			50.00		P	76.4
6	☐			69.45		P	30.2
7	☐			75.00		P	50.9
8	☐			647.26		P	7.4

160 Gd [He] No available calibration points

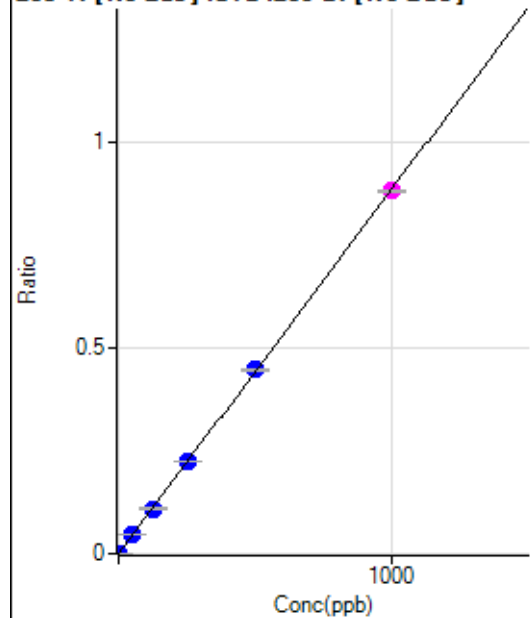
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			14.44		P	13.4
2	☐			13.33		P	43.3
3	☐			12.22		P	56.8
4	☐			23.33		P	86.9
5	☐			21.11		P	36.5
6	☐			26.67		P	33.1
7	☐			46.67		P	25.8
8	☐			424.45		P	3.5

164 Er [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			22.22		P	21.6
2	☐			16.67		P	86.6
3	☐			22.22		P	43.3
4	☐			36.11		P	93.3
5	☐			41.67		P	20.0
6	☐			33.33		P	75.0
7	☐			36.11		P	35.3
8	☐			144.45		P	16.7

164 Er [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			4.45		P	86.6
2	☐			4.45		P	86.6
3	☐			11.11		P	75.5
4	☐			3.33		P	100.
5	☐			3.33		P	100.
6	☐			13.33		P	25.0
7	☐			11.11		P	75.5
8	☐			50.00		P	35.3

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	63.89	0.0000	P	20.2
2	☐	1.000	0.952	1616.82	0.0009	P	7.3
3	☐	50.000	50.748	86191.43	0.0450	P	2.0
4	☐	125.000	123.011	208763.44	0.1091	P	2.1
5	☐	250.000	253.250	430211.03	0.2245	P	1.3
6	☐	500.000	506.264	851567.56	0.4487	P	0.8
7	☐	1000.000	996.267	1704336.93	0.8830	M	0.7
8	☐			2014.09	0.0011	P	13.5

$$y = 8.8630E-004 * x + 3.4574E-005$$

$$R = 1.0000$$

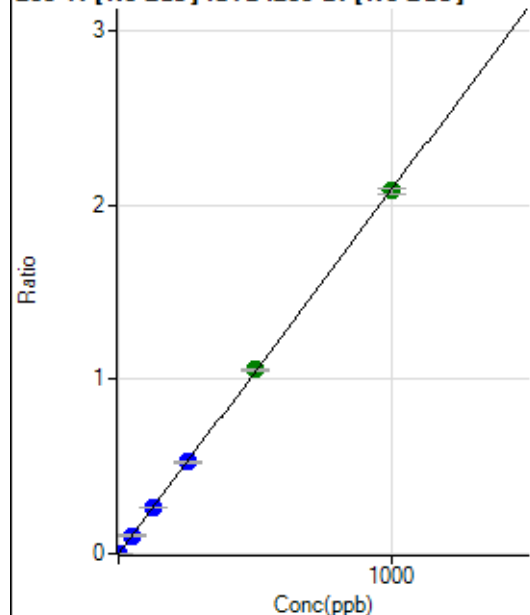
$$DL = 0.02369$$

$$BEC = 0.03901$$

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	83.34	0.0000	P	29.8
2	☐	1.000	0.965	3795.11	0.0021	P	7.6
3	☐	50.000	50.101	200547.11	0.1047	P	1.0
4	☐	125.000	125.346	501482.57	0.2620	P	1.7
5	☐	250.000	251.728	1008104.98	0.5260	P	0.7
6	☐	500.000	505.812	2005612.98	1.0569	A	1.1
7	☐	1000.000	996.614	4019002.35	2.0824	A	1.2
8	☐			4837.16	0.0027	P	20.4

$$y = 0.0021 * x + 4.5068E-005$$

$$R = 1.0000$$

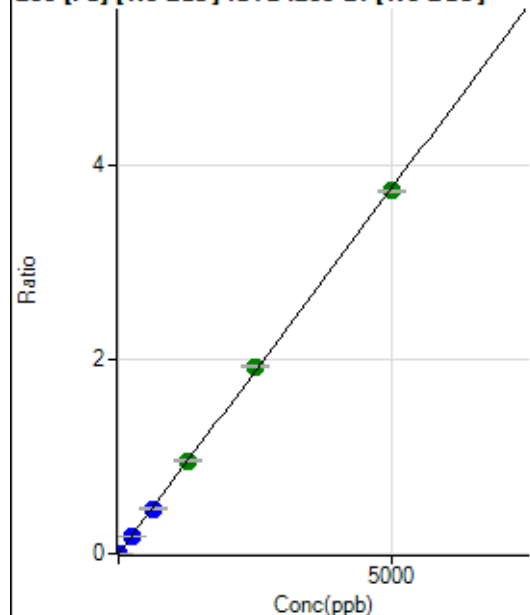
$$DL = 0.0193$$

$$BEC = 0.02157$$

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	90.74	0.0000	P	15.5
2	☐	1.000	0.926	1372.32	0.0007	P	5.5
3	☐	250.000	248.273	357795.37	0.1868	P	0.1
4	☐	625.000	617.718	889750.14	0.4648	P	1.8
5	☐	1250.000	1268.893	1829489.81	0.9547	A	1.3
6	☐	2500.000	2562.207	3658019.59	1.9277	A	1.0
7	☐	5000.000	4965.170	7209681.93	3.7355	A	0.6
8	☐			10632.34	0.0060	P	10.5

$$y = 7.5233E-004 * x + 4.9089E-005$$

$$R = 0.9999$$

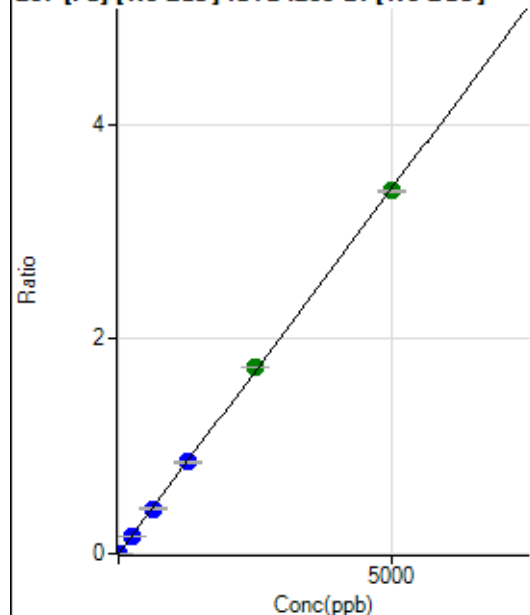
$$DL = 0.03028$$

$$BEC = 0.06525$$

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	103.71	0.0001	P	46.7
2	☐	1.000	0.788	1088.96	0.0006	P	9.7
3	☐	250.000	246.870	321573.66	0.1679	P	1.1
4	☐	625.000	615.485	801314.41	0.4186	P	1.9
5	☐	1250.000	1255.004	1635522.30	0.8535	P	1.5
6	☐	2500.000	2558.032	3301096.63	1.7395	A	0.8
7	☐	5000.000	4971.079	6524306.74	3.3804	A	0.8
8	☐			9390.57	0.0053	P	8.0

$$y = 6.8001\text{E-}004 * x + 5.6089\text{E-}005$$

$$R = 0.9999$$

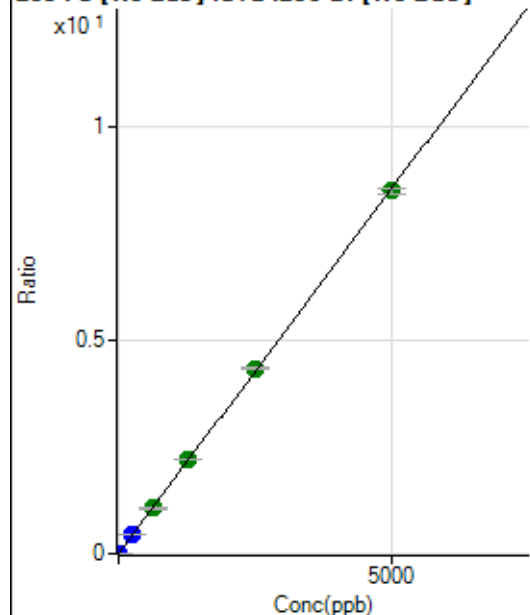
$$DL = 0.1156$$

$$BEC = 0.08248$$

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	220.62	0.0001	P	45.3
2	☐	1.000	1.009	3392.44	0.0018	P	1.9
3	☐	250.000	252.316	825597.26	0.4311	P	0.4
4	☐	625.000	620.297	2028857.17	1.0597	A	1.2
5	☐	1250.000	1293.967	4235914.51	2.2104	A	1.4
6	☐	2500.000	2534.934	8217118.51	4.3302	A	1.2
7	☐	5000.000	4972.013	16391262.66	8.4932	A	1.3
8	☐			24106.38	0.0137	P	8.7

$$y = 0.0017 * x + 1.1933\text{E-}004$$

$$R = 0.9999$$

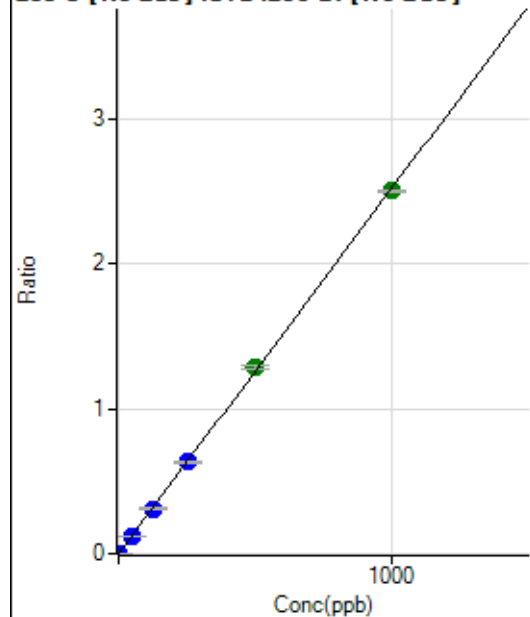
$$DL = 0.09485$$

$$BEC = 0.06986$$

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	25.00	0.0000	P	57.6
2	☐	1.000	0.996	4637.07	0.0025	P	1.8
3	☐	50.000	48.955	235809.27	0.1231	P	0.7
4	☐	125.000	123.532	594742.92	0.3107	P	2.4
5	☐	250.000	250.997	1209820.10	0.6313	P	0.7
6	☐	500.000	511.973	2443488.47	1.2877	A	1.6
7	☐	1000.000	994.000	4825423.81	2.5000	A	0.5
8	☐			2894.87	0.0016	P	21.8

$$y = 0.0025 * x + 1.3503E-005$$

$$R = 0.9999$$

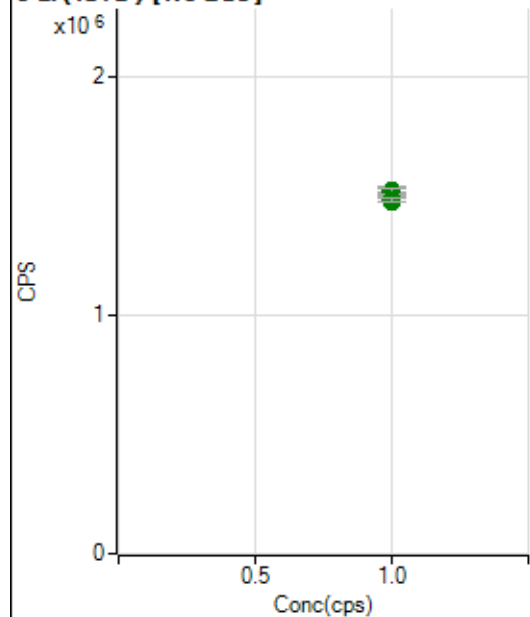
$$DL = 0.009276$$

$$BEC = 0.005369$$

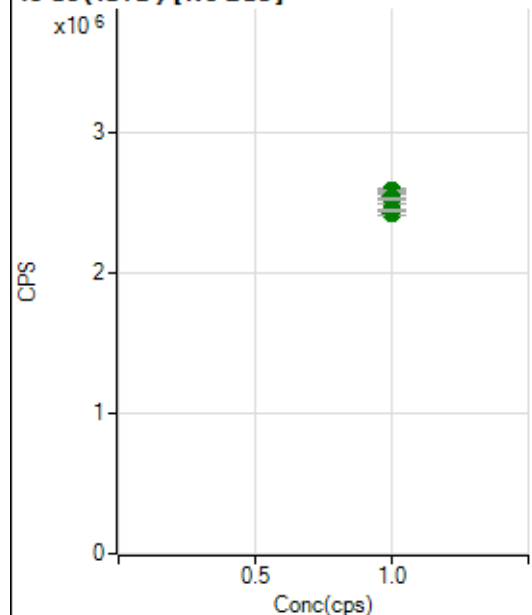
Weight: <None>

Min Conc: 0

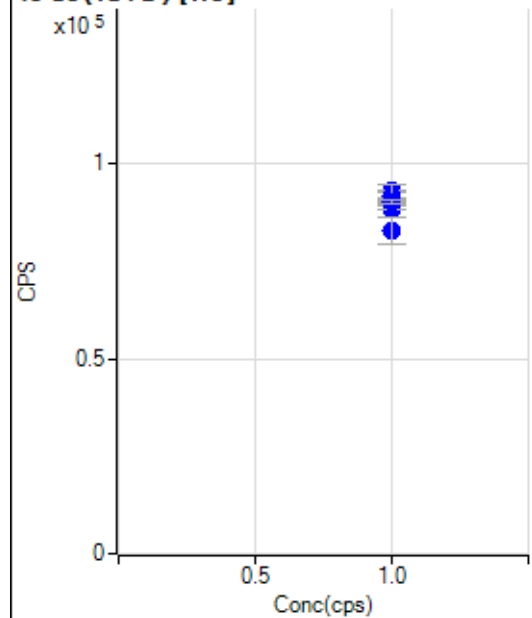
6 Li (ISTD) [No Gas]



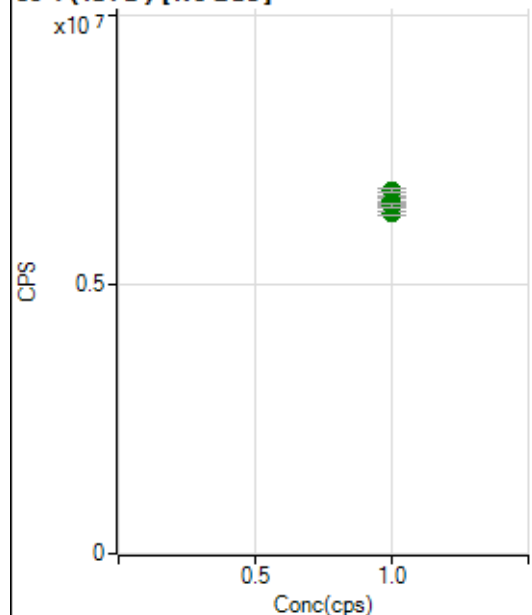
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1501117.88		A	0.3
2	☐	1.000		1477046.17		A	0.4
3	☐	1.000		1515470.61		A	0.3
4	☐	1.000		1521357.27		A	2.5
5	☐	1.000		1505552.13		A	1.0
6	☐	1.000		1505454.34		A	0.9
7	☐	1.000		1518218.52		A	1.3
8	☐	1.000		1484003.79		A	1.3

45 Sc (ISTD) [No Gas]

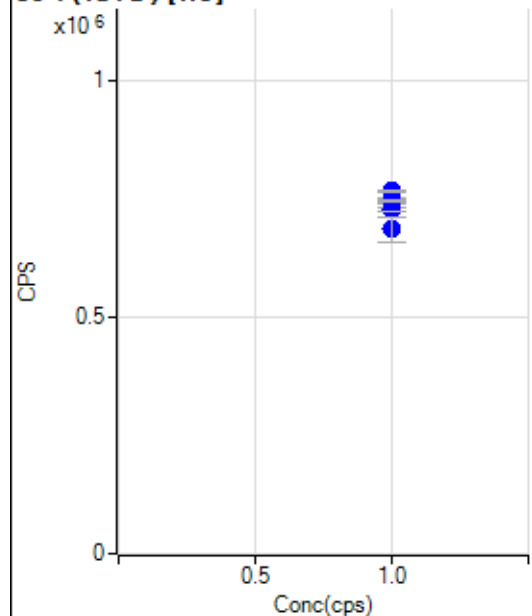
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2429153.99		A	1.7
2	☐	1.000		2445593.54		A	0.6
3	☐	1.000		2548097.88		A	1.1
4	☐	1.000		2543714.63		A	4.1
5	☐	1.000		2581802.98		A	1.9
6	☐	1.000		2537074.06		A	2.0
7	☐	1.000		2582394.27		A	0.3
8	☐	1.000		2527828.87		A	0.3

45 Sc (ISTD) [He]

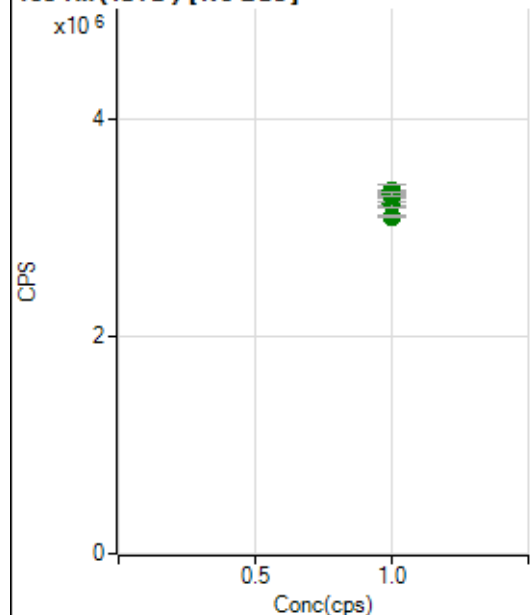
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		88220.63		P	0.3
2	☐	1.000		82837.91		P	7.9
3	☐	1.000		90472.25		P	0.7
4	☐	1.000		90431.95		P	0.7
5	☐	1.000		91063.81		P	0.4
6	☐	1.000		92980.33		P	0.8
7	☐	1.000		91905.06		P	6.2
8	☐	1.000		90265.57		P	1.0

89 Y (ISTD) [No Gas]

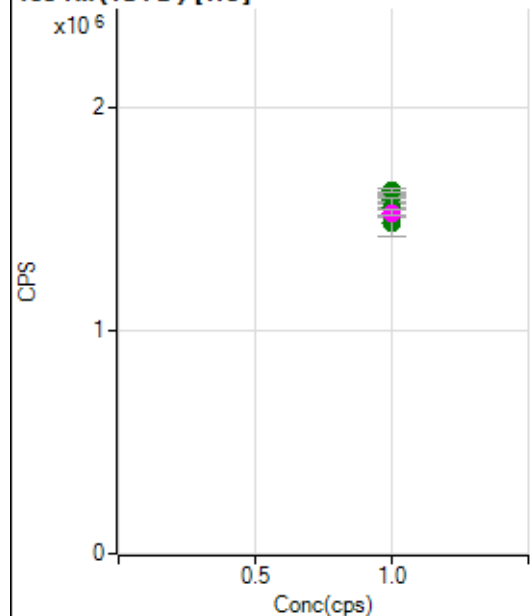
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		6420504.42		A	1.3
2	☐	1.000		6319222.75		A	1.0
3	☐	1.000		6580957.26		A	1.5
4	☐	1.000		6545628.03		A	3.1
5	☐	1.000		6603360.66		A	0.3
6	☐	1.000		6584757.06		A	2.3
7	☐	1.000		6740981.91		A	1.0
8	☐	1.000		6468929.63		A	1.0

89 Y (ISTD) [He]

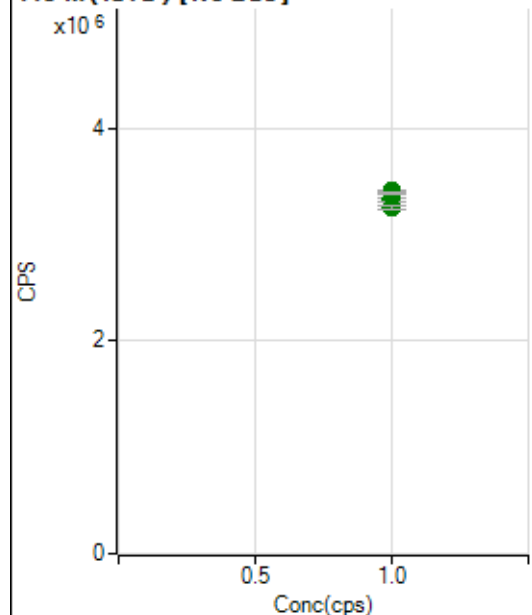
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		726453.53		P	0.9
2	☐	1.000		685279.33		P	8.0
3	☐	1.000		741544.53		P	0.9
4	☐	1.000		742325.22		P	0.1
5	☐	1.000		751646.49		P	0.2
6	☐	1.000		766880.01		P	0.8
7	☐	1.000		742891.97		P	5.5
8	☐	1.000		745177.64		P	0.2

103 Rh (ISTD) [No Gas]

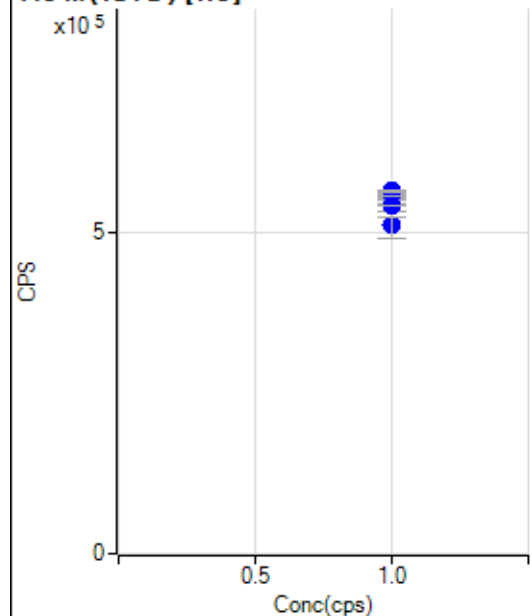
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3219014.01		A	1.1
2	☐	1.000		3219036.66		A	1.4
3	☐	1.000		3329661.21		A	0.8
4	☐	1.000		3343381.59		A	3.2
5	☐	1.000		3318203.01		A	0.6
6	☐	1.000		3301574.20		A	1.8
7	☐	1.000		3317091.85		A	1.3
8	☐	1.000		3106546.86		A	0.4

103 Rh (ISTD) [He]

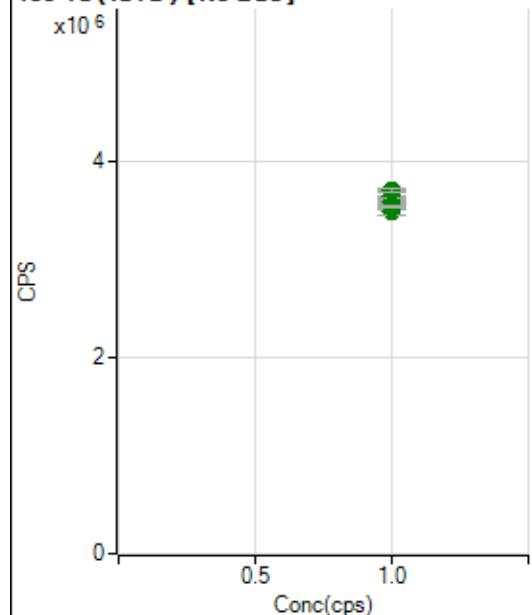
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1576134.18		A	0.7
2	☐	1.000		1489492.55		A	8.9
3	☐	1.000		1589872.15		A	0.9
4	☐	1.000		1610050.32		A	1.1
5	☐	1.000		1622969.59		A	2.4
6	☐	1.000		1629572.76		A	1.2
7	☐	1.000		1551654.70		A	5.5
8	☐	1.000		1531344.44		M	1.4

115 In (ISTD) [No Gas]

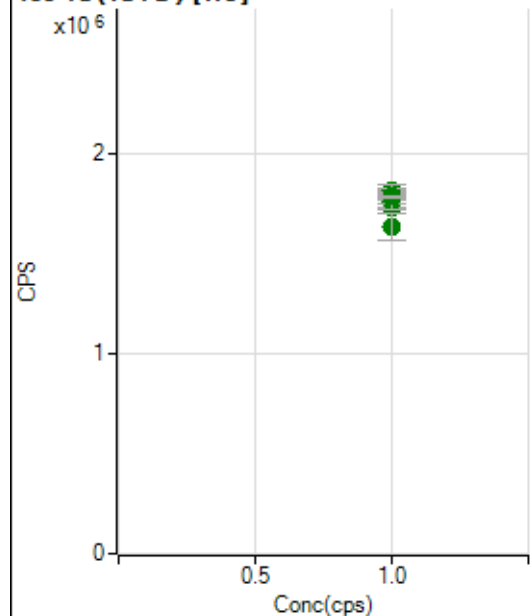
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3319911.38		A	1.1
2	☐	1.000		3254208.76		A	1.3
3	☐	1.000		3411719.45		A	0.4
4	☐	1.000		3380012.05		A	2.5
5	☐	1.000		3405513.90		A	0.5
6	☐	1.000		3344223.83		A	2.0
7	☐	1.000		3393930.04		A	0.8
8	☐	1.000		3251329.41		A	1.4

115 In (ISTD) [He]

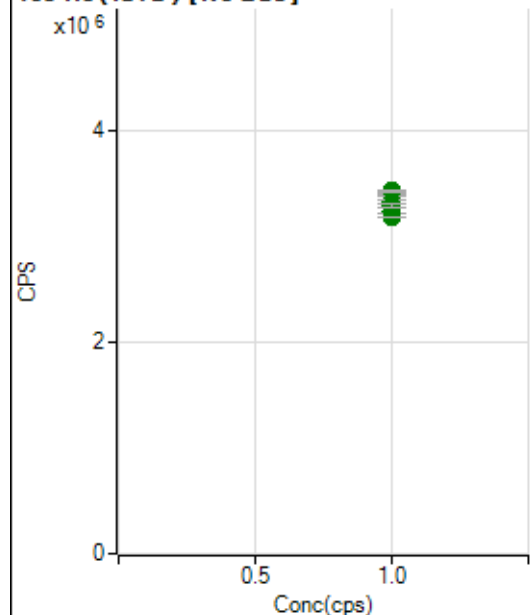
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		544020.84		P	0.5
2	☐	1.000		514390.12		P	8.2
3	☐	1.000		556388.53		P	0.8
4	☐	1.000		554489.75		P	0.7
5	☐	1.000		561070.36		P	0.4
6	☐	1.000		566385.81		P	0.6
7	☐	1.000		541925.18		P	5.9
8	☐	1.000		544428.59		P	0.1

159 Tb (ISTD) [No Gas]

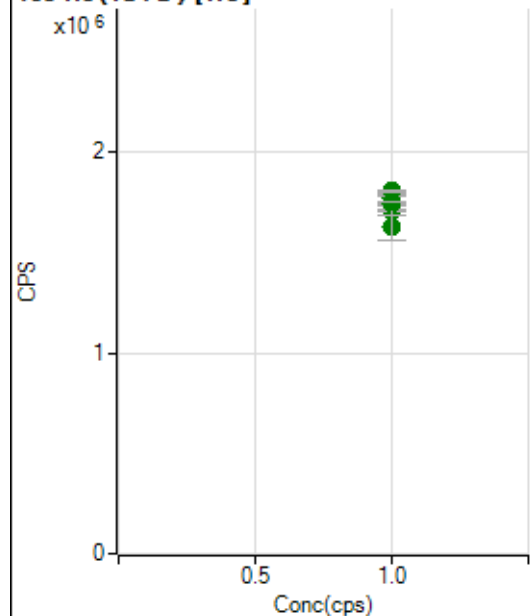
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3507683.42		A	0.2
2	☐	1.000		3484760.75		A	1.9
3	☐	1.000		3622991.61		A	1.4
4	☐	1.000		3639755.99		A	3.2
5	☐	1.000		3618380.47		A	1.0
6	☐	1.000		3594073.84		A	1.5
7	☐	1.000		3698479.73		A	1.1
8	☐	1.000		3536570.88		A	0.3

159 Tb (ISTD) [He]

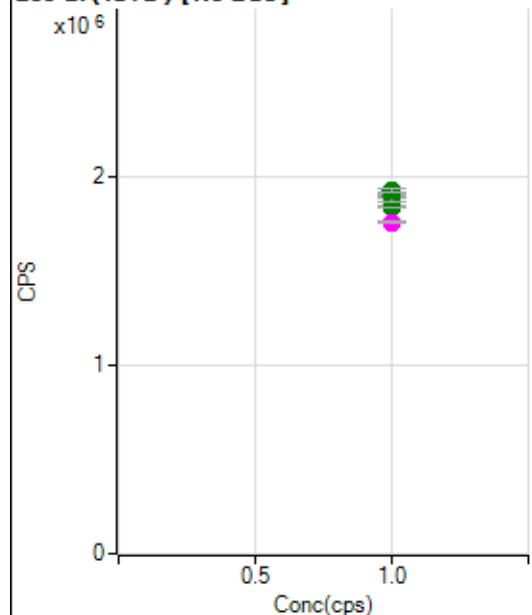
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1726659.47		A	0.7
2	☐	1.000		1632943.10		A	8.3
3	☐	1.000		1760478.39		A	1.1
4	☐	1.000		1772973.26		A	0.5
5	☐	1.000		1805022.32		A	1.3
6	☐	1.000		1811667.61		A	1.1
7	☐	1.000		1779636.76		A	7.0
8	☐	1.000		1782828.65		A	0.6

165 Ho (ISTD) [No Gas]

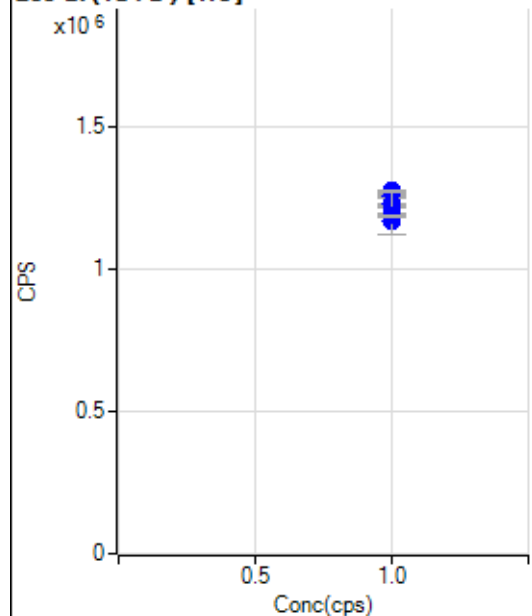
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3239380.08		A	1.8
2	☐	1.000		3178828.46		A	0.2
3	☐	1.000		3321263.27		A	0.8
4	☐	1.000		3326162.79		A	3.8
5	☐	1.000		3389061.75		A	0.6
6	☐	1.000		3306582.71		A	2.0
7	☐	1.000		3427686.10		A	0.6
8	☐	1.000		3287267.61		A	1.3

165 Ho (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1711932.16		A	1.1
2	☐	1.000		1625873.33		A	8.2
3	☐	1.000		1771699.44		A	1.9
4	☐	1.000		1741627.04		A	0.9
5	☐	1.000		1799249.49		A	1.5
6	☐	1.000		1809453.81		A	0.6
7	☐	1.000		1747991.24		A	6.5
8	☐	1.000		1755957.77		A	0.3

209 Bi (ISTD) [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1848742.51		A	0.4
2	☐	1.000		1840889.02		A	0.4
3	☐	1.000		1915075.18		A	1.3
4	☐	1.000		1914982.09		A	2.8
5	☐	1.000		1916456.69		A	0.7
6	☐	1.000		1897901.64		A	2.3
7	☐	1.000		1930083.72		A	1.0
8	☐	1.000		1762784.94		M	0.8

209 Bi (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1225407.88		P	0.4
2	☐	1.000		1171420.69		P	8.0
3	☐	1.000		1262571.30		P	1.2
4	☐	1.000		1257989.60		P	0.8
5	☐	1.000		1272080.34		P	1.3
6	☐	1.000		1275799.61		P	0.5
7	☐	1.000		1232838.76		P	5.7
8	☐	1.000		1188767.30		P	0.5

US EPA Tune Check Report

Operator Name Jaswal
Acq/Data Batch D:\Agilent\ICPMH\1\DATA\P8122820IMS.b
Acq. Date-Time 2020-12-28 11:15:17
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		2588	25875.26			1.106	5.000
24		30525	305252.98			1.268	5.000
25		4110	41104.41			1.117	5.000
26		4777	47774.64			1.447	5.000
59		5195	51952.72			1.455	5.000
113		2252	22518.74			1.790	5.000
115		8230	82296.07			1.119	5.000
206		2266	22660.15			2.438	5.000
207		1903	19026.22			2.478	5.000
208		4626	46258.47			2.289	5.000
220		1	8.10			17.129	

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

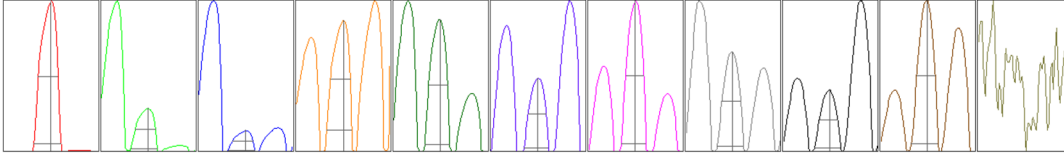
Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
9	2557	2560	2622	2609	2590
24	30226	30089	30906	30938	30467
25	4082	4048	4135	4165	4123
26	4726	4684	4827	4845	4805
59	5143	5114	5241	5301	5177
113	2229	2199	2280	2301	2250
115	8252	8107	8327	8297	8164
206	2236	2194	2295	2339	2266
207	1857	1854	1942	1956	1904
208	4556	4493	4690	4761	4629

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	1

Integration Time [sec] 0.1

Resolution/Axis



Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)
9	4402.31	9.00	8.90 - 9.10	
24	50367.88	24.00	23.90 - 24.10	
25	6730.55	25.00	24.90 - 25.10	
26	7745.03	26.05	25.90 - 26.10	
59	9082.06	59.00	58.90 - 59.10	
113	4125.34	113.00	112.90 - 113.10	
115	15006.17	115.00	114.90 - 115.10	
206	3990.58	206.00	205.90 - 206.10	
207	3355.50	207.00	206.90 - 207.10	
208	8242.38	208.00	207.90 - 208.10	
220			-	

Mass	W-50%	W-5%	W-5% (Required)	W-5% (Flag)
9	0.63	0.856	0.900	
24	0.65	0.833	0.900	
25	0.65	0.834	0.900	
26	0.63	0.798	0.900	
59	0.60	0.787	0.900	
113	0.57	0.774	0.900	
115	0.56	0.784	0.900	
206	0.59	0.830	0.900	
207	0.58	0.833	0.900	
208	0.58	0.849	0.900	
220				

Integration Time [sec] 0.1

Acquisition Time [sec] 256.770000000002

Y Axis Linear

Tune Parameters

Plasma Parameters

Plasma Mode HMI Nebulizer Gas 0.52 L/min Dilution Gas 0.46 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	10.7 V	Deflect	14.8 V
Extract 2	-215.0 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	160 V		

QP Parameters

Mass Gain	122	Axis Gain	0.9990	QP Bias	-4.0 V
Mass Offset	123	Axis Offset	0.00		

Hardware Settings

Torch

Torch H	0.6 mm	Torch V	-0.3 mm
---------	--------	---------	---------

EM

Discriminator	3.9 mV	Analog HV	2183 V	Pulse HV	1350 V
---------------	--------	-----------	--------	----------	--------

[He]

Sensitivity

Mass	Conc. [ug/l]	Count	CPS	Resp (Required) [cps/ug/l]	Resp (Flag)	RSD%	RSD% (Required)
59		1222	12224.24			1.042	
89		38450	384503.32			0.539	
205		2374	23743.42			1.679	

Mass	RSD% (Flag)
59	
89	
205	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
59	1206	1230	1235	1212	1230
89	38184	38418	38390	38503	38756
205	2323	2405	2350	2372	2421

Integration Time [sec] 0.1

Tune Parameters

Plasma Parameters

Plasma Mode	HMI	Nebulizer Gas	0.52 L/min	Dilution Gas	0.46 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	10.7 V	Deflect	4.8 V
-----------	--------	------------	--------	---------	-------

US EPA Tune Check Report

Extract 2	-215.0 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	122	Axis Gain	0.9990	QP Bias	-13.0 V
Mass Offset	123	Axis Offset	0.00		
Hardware Settings					
Torch					
Torch H	0.6 mm	Torch V	-0.3 mm		
EM					
Discriminator	3.9 mV	Analog HV	2183 V	Pulse HV	1350 V