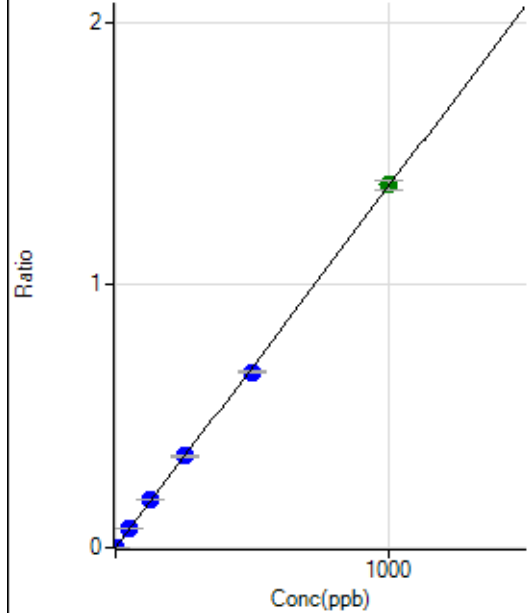


Batch Folder: D:\P8080217 .b\
Analysis File: P8080217 .batch.bin
DA Date-Time: 2017-08-03 11:14:43
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	003CALB P8080217.D	S00	2017-08-02 15:38:17
2			
3	005CALS P8080217.D	S02	2017-08-02 15:45:21
4	006CALS P8080217.D	S03	2017-08-02 15:48:49
5	007CALS P8080217.D	S04	2017-08-02 15:52:17
6	008CALS P8080217.D	S05	2017-08-02 15:55:40
7	009CALS P8080217.D	S06	2017-08-02 15:58:55
8	010CALS P8080217.D	S07	2017-08-02 16:02:10
9	011CALS P8080217.D	S08	2017-08-02 16:05:15

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	107.41	0.0001	P	24.6
2	☐	0.100					
3	☐	1.000	0.850	1150.08	0.0013	P	3.7
4	☐	50.000	53.117	66164.77	0.0731	P	1.5
5	☐	125.000	133.128	169463.22	0.1831	P	0.7
6	☐	250.000	253.775	335549.52	0.3489	P	0.8
7	☐	500.000	486.664	669804.73	0.6690	P	1.5
8	☐	1000.000	1004.552	1372288.34	1.3809	A	2.3
9	☐			494.47	0.0005	P	6.6

$$y = 0.0014 * x + 1.2920E-004$$

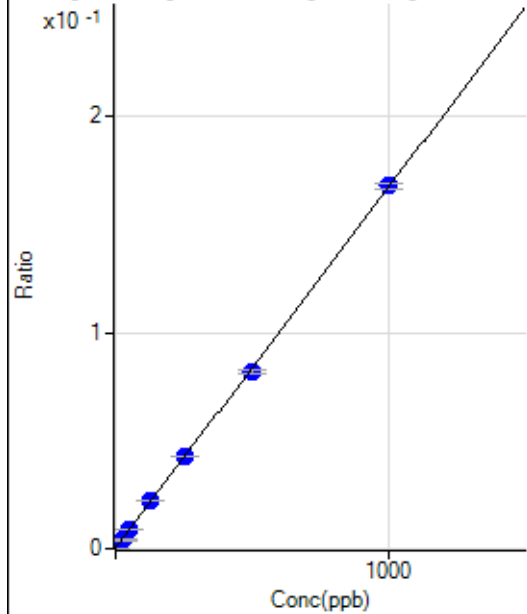
$$R = 0.9998$$

$$DL = 0.06931$$

$$BEC = 0.094$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	255.57	0.0003	P	10.3
2	☐	2.500					
3	☐	25.000	22.160	3550.59	0.0040	P	1.8
4	☐	50.000	51.259	8013.70	0.0089	P	3.2
5	☐	125.000	131.911	20654.56	0.0223	P	2.6
6	☐	250.000	253.773	41012.32	0.0426	P	1.0
7	☐	500.000	488.251	81861.32	0.0818	P	2.1
8	☐	1000.000	1004.076	166806.18	0.1678	P	1.3
9	☐			5454.05	0.0054	P	5.4

$$y = 1.6685E-004 * x + 3.0716E-004$$

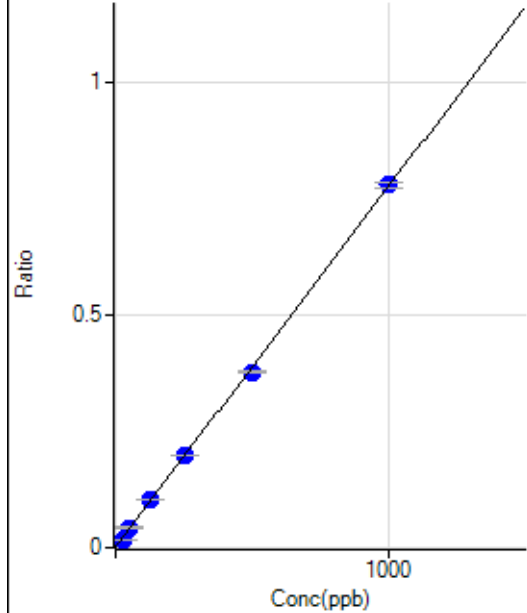
$$R = 0.9999$$

$$DL = 0.5697$$

$$BEC = 1.841$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1033.41	0.0012	P	7.6
2	☐	2.500					
3	☐	25.000	21.483	15856.60	0.0179	P	3.7
4	☐	50.000	53.996	38967.80	0.0431	P	1.5
5	☐	125.000	131.742	95593.02	0.1033	P	1.3
6	☐	250.000	254.417	190709.82	0.1983	P	0.7
7	☐	500.000	485.945	378118.94	0.3777	P	0.8
8	☐	1000.000	1004.968	774899.48	0.7797	P	1.3
9	☐			25954.97	0.0256	P	5.4

$$y = 7.7461E-004 * x + 0.0012$$

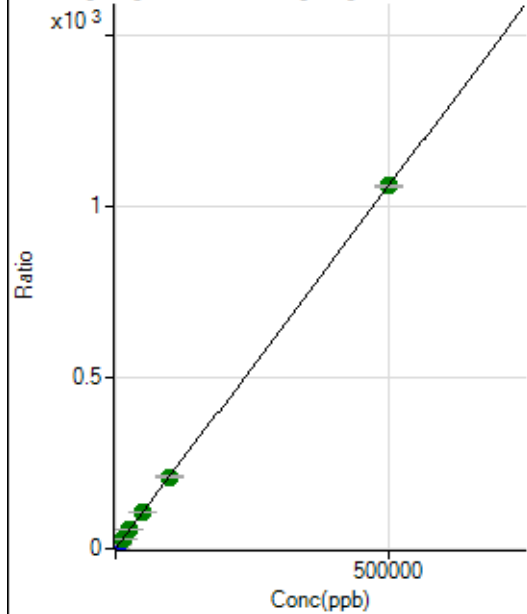
$$R = 0.9998$$

$$DL = 0.364$$

$$BEC = 1.603$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	7699.66	0.1555	P	5.7
2	☐	50.000					
3	☐	500.000	448.273	54932.35	1.1043	P	1.8
4	☐	5000.000	5076.148	545612.18	10.8987	P	1.0
5	☐	12500.000	13191.963	1392124.41	28.0750	A	1.7
6	☐	25000.000	25583.804	2656525.28	54.3012	A	1.6
7	☐	50000.000	49554.716	5073729.80	105.0333	A	0.5
8	☐	100000.00	99131.772	10149628.61	209.9583	A	1.2
9	☐	500000.00	500170.97	51444292.12	1,058.718	A	0.8

$$y = 0.0021 * x + 0.1555$$

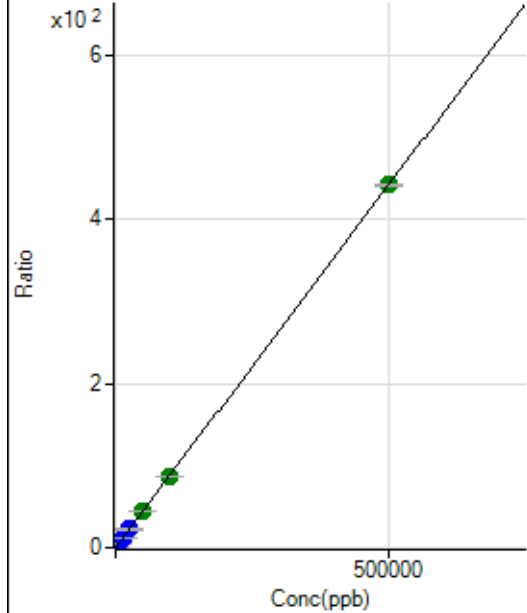
$$R = 1.0000$$

$$DL = 12.5$$

$$BEC = 73.49$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	122.23	0.0025	P	25.8
2	☐	50.000					
3	☐	500.000	435.659	19291.60	0.3878	P	1.6
4	☐	5000.000	5063.620	224368.49	4.4813	P	0.3
5	☐	12500.000	12783.702	560794.25	11.3098	P	1.7
6	☐	25000.000	25251.571	1092847.79	22.3378	P	0.6
7	☐	50000.000	49984.071	2135627.61	44.2139	A	1.4
8	☐	100000.00	98165.353	4197617.89	86.8308	A	0.9
9	☐	500000.00	500348.27	21505027.91	442.5659	A	0.4

$$y = 8.8451\text{E-}004 * x + 0.0025$$

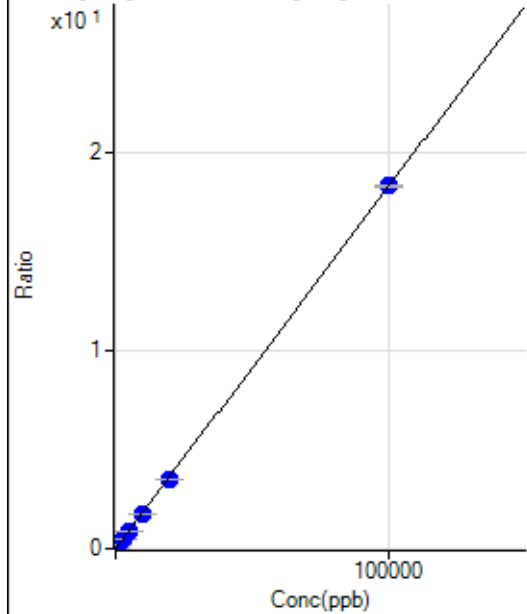
R = 1.0000

DL = 2.152

BEC = 2.783

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	11.11	0.0002	P	44.8
2	☐	2.000					
3	☐	20.000	16.817	163.90	0.0033	P	6.3
4	☐	1000.000	982.119	8986.56	0.1795	P	2.0
5	☐	2500.000	2520.997	22833.08	0.4605	P	0.7
6	☐	5000.000	4929.756	44039.17	0.9002	P	1.9
7	☐	10000.000	9610.320	84760.97	1.7547	P	1.4
8	☐	20000.000	19262.672	170018.12	3.5168	P	0.5
9	☐	100000.00	100189.60	888777.01	18.2908	P	0.5

$$y = 1.8256\text{E-}004 * x + 2.2527\text{E-}004$$

R = 1.0000

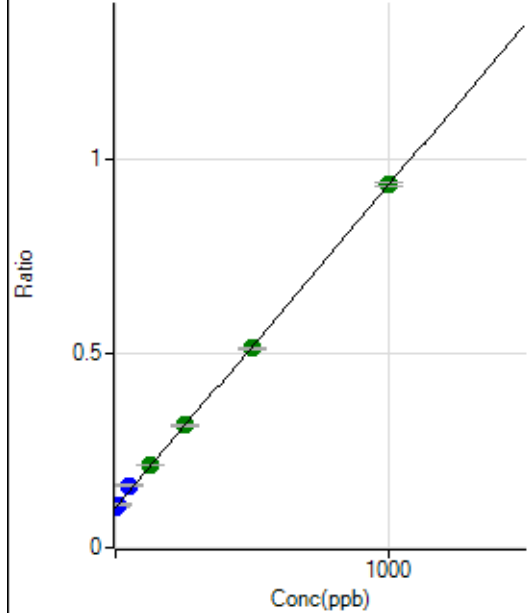
DL = 1.658

BEC = 1.234

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	474482.31	0.1034	P	0.5
2	☐	1.000					
3	☐	10.000	9.407	511240.70	0.1112	P	0.8
4	☐	50.000	68.970	743713.95	0.1605	P	1.1
5	☐	125.000	130.583	994997.76	0.2116	A	1.1
6	☐	250.000	255.283	1482024.04	0.3149	A	1.6
7	☐	500.000	492.988	2403906.72	0.5119	A	0.8
8	☐	1000.000	1000.545	4359931.43	0.9325	A	1.0
9	☐			647886.49	0.1398	P	0.4

$$y = 8.2870\text{E-}004 * x + 0.1034$$

$$R = 0.9998$$

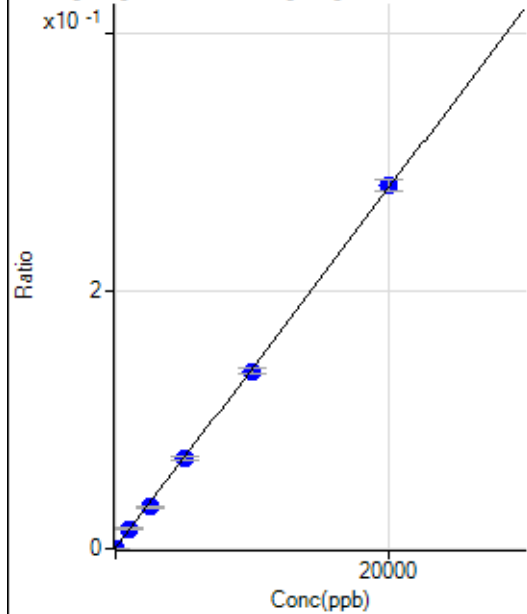
$$DL = 1.859$$

$$BEC = 124.7$$

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	-2.022	11.11	0.0002	P	86.6
2	☐	0.000					
3	☐	0.000	2.022	13.89	0.0003	P	34.8
4	☐	1000.000	1094.052	777.84	0.0155	P	7.5
5	☐	2500.000	2314.105	1616.84	0.0326	P	3.6
6	☐	5000.000	4994.922	3428.35	0.0701	P	2.4
7	☐	10000.000	9836.559	6654.65	0.1378	P	2.5
8	☐	20000.000	20101.524	13601.47	0.2813	P	3.2
9	☐			19.44	0.0004	P	99.5

$$y = 1.3979\text{E-}005 * x + 2.5110\text{E-}004$$

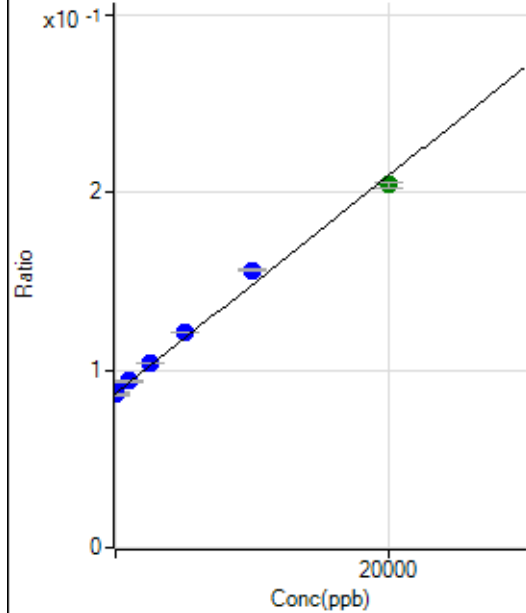
$$R = 0.9999$$

$$DL = 31.15$$

$$BEC = 17.96$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	65.175	400738.34	0.0873	P	1.0
2	☐	0.000					
3	☐	0.000	-65.175	397823.85	0.0865	P	1.4
4	☐	1000.000	1151.336	435353.52	0.0940	P	0.7
5	☐	2500.000	2781.481	488911.99	0.1040	P	1.0
6	☐	5000.000	5653.310	572188.86	0.1216	P	0.3
7	☐	10000.000	11317.469	734092.36	0.1563	P	0.7
8	☐	20000.000	19135.186	955054.93	0.2043	A	1.4
9	☐			394119.21	0.0851	P	1.4

$$y = 6.1341E-006 * x + 0.0869$$

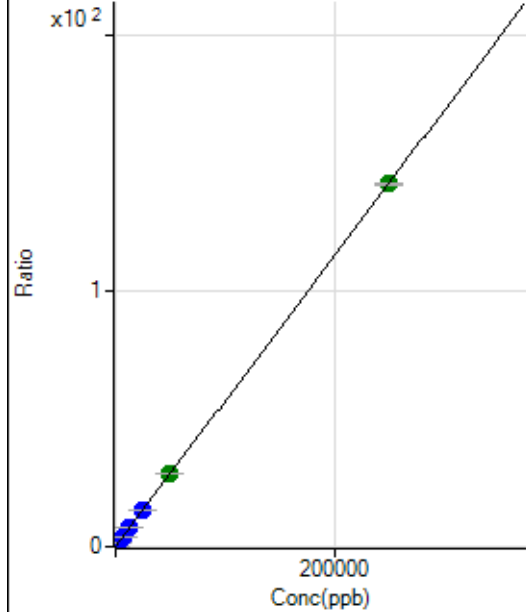
R = 0.9960

DL = 500.7

BEC = 1.417E+04

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	3989.66	0.0805	P	6.6
2	☐	50.000					
3	☐	500.000	441.883	16476.87	0.3312	P	1.0
4	☐	2500.000	2580.328	77321.08	1.5444	P	0.3
5	☐	6250.000	6475.346	186147.72	3.7541	P	1.7
6	☐	12500.000	12721.688	357035.56	7.2978	P	0.5
7	☐	25000.000	24704.948	680883.27	14.0960	P	0.9
8	☐	50000.000	50026.240	1375826.87	28.4612	A	1.3
9	☐	250000.00	250006.85	6895998.85	141.9133	A	0.5

$$y = 5.6732E-004 * x + 0.0805$$

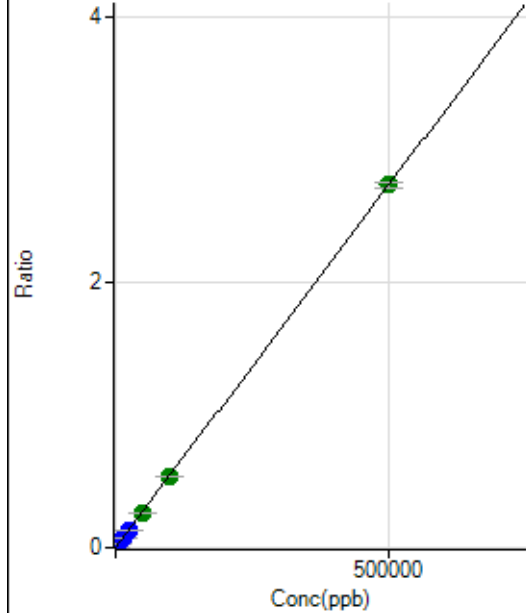
R = 1.0000

DL = 27.9

BEC = 142

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	3356.12	0.0007	P	1.3
2	☐	50.000					
3	☐	500.000	421.866	13938.02	0.0030	P	3.1
4	☐	5000.000	4955.788	128545.60	0.0277	P	1.8
5	☐	12500.000	12304.914	318868.78	0.0678	P	1.8
6	☐	25000.000	24510.685	632268.37	0.1343	P	0.6
7	☐	50000.000	48453.230	1243765.12	0.2648	A	0.4
8	☐	100000.00	97883.368	2498073.15	0.5343	A	0.5
9	☐	500000.00	500607.86	12645490.39	2.7295	A	1.6

$$y = 5.4510E-006 * x + 7.3112E-004$$

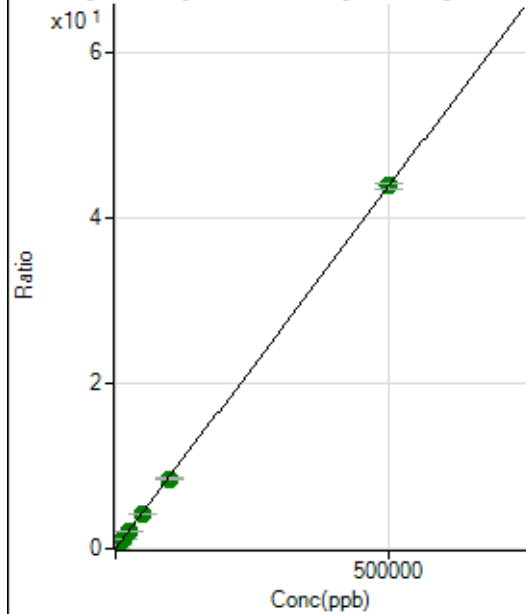
R = 1.0000

DL = 5.347

BEC = 134.1

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	51947.17	0.0113	P	2.2
2	☐	50.000					
3	☐	500.000	420.935	221851.90	0.0482	P	0.6
4	☐	5000.000	5114.931	2131035.01	0.4599	A	0.4
5	☐	12500.000	12357.012	5150070.90	1.0951	A	1.2
6	☐	25000.000	24505.787	10168771.67	2.1606	A	0.7
7	☐	50000.000	48121.237	19873265.38	4.2319	A	0.5
8	☐	100000.00	96680.540	39698918.94	8.4908	A	0.5
9	☐	500000.00	500878.98	203576798.9	43.9416	A	1.4

$$y = 8.7706E-005 * x + 0.0113$$

R = 1.0000

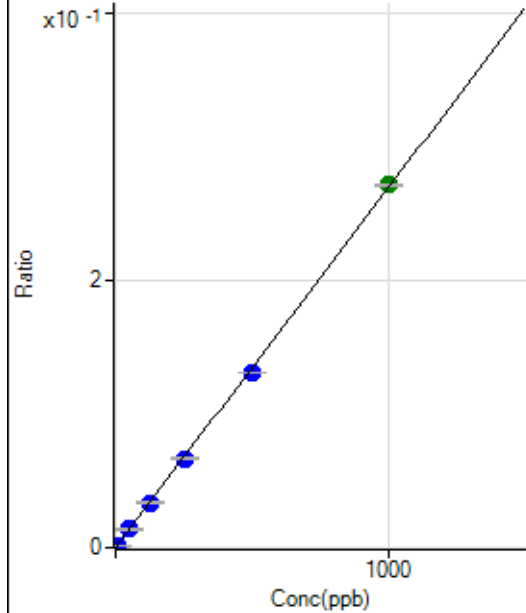
DL = 8.351

BEC = 129

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	202.79	0.0000	P	35.8
2	☐	0.500					
3	☐	5.000	4.143	5329.04	0.0012	P	4.3
4	☐	50.000	50.816	63553.70	0.0137	P	1.0
5	☐	125.000	125.168	158574.11	0.0337	P	1.5
6	☐	250.000	248.071	314306.21	0.0668	P	1.1
7	☐	500.000	486.042	614295.28	0.1308	P	0.5
8	☐	1000.000	1007.403	1267419.29	0.2711	A	0.6
9	☐			2414.52	0.0005	P	43.4

$$y = 2.6904E-004 * x + 4.4226E-005$$

$$R = 0.9999$$

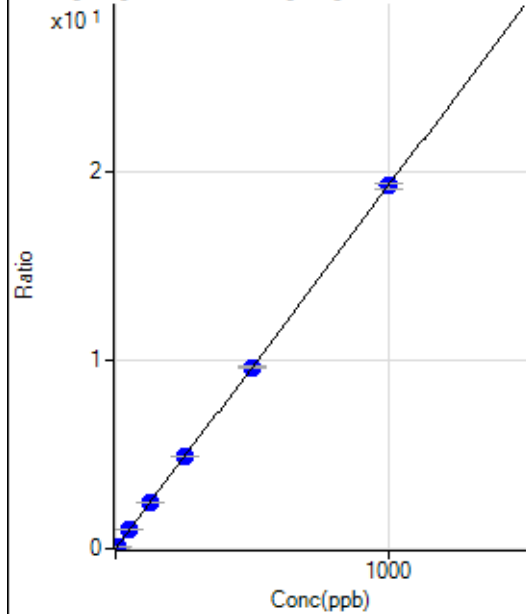
$$DL = 0.1764$$

$$BEC = 0.1644$$

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	17.78	0.0004	P	20.6
2	☐	0.500					
3	☐	5.000	4.501	4328.53	0.0870	P	2.1
4	☐	50.000	50.537	48727.82	0.9733	P	0.5
5	☐	125.000	128.591	122773.32	2.4760	P	1.7
6	☐	250.000	253.069	238380.02	4.8725	P	0.6
7	☐	500.000	498.808	463886.10	9.6035	P	0.8
8	☐	1000.000	999.355	930057.23	19.2401	P	1.5
9	☐			564.47	0.0116	P	4.8

$$y = 0.0193 * x + 3.5844E-004$$

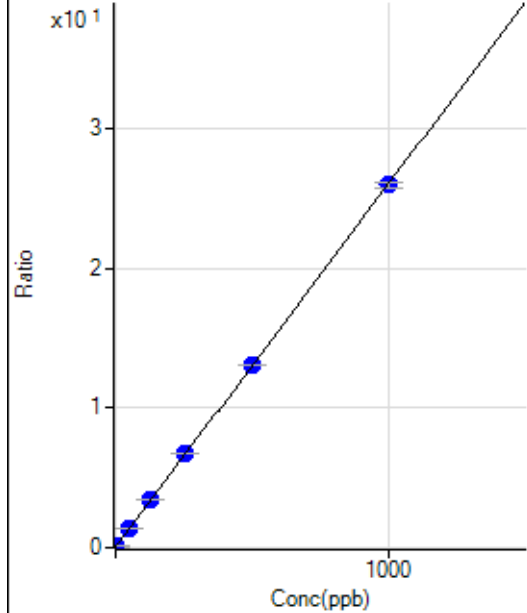
$$R = 1.0000$$

$$DL = 0.01152$$

$$BEC = 0.01862$$

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	1206.74	0.0244	P	5.6
2	☐	0.200					
3	☐	2.000	1.919	3697.22	0.0743	P	3.9
4	☐	50.000	51.328	68133.86	1.3609	P	0.6
5	☐	125.000	130.033	169105.27	3.4104	P	1.6
6	☐	250.000	256.827	328381.28	6.7121	P	0.4
7	☐	500.000	500.672	630936.46	13.0617	P	0.4
8	☐	1000.000	997.262	1256484.36	25.9927	P	1.5
9	☐			39487.98	0.8127	P	1.1

$$y = 0.0260 * x + 0.0244$$

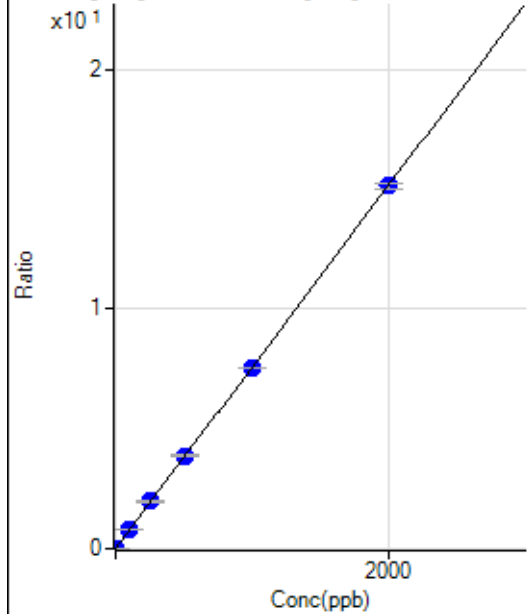
$$R = 1.0000$$

$$DL = 0.156$$

$$BEC = 0.9354$$

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	78.89	0.0016	P	17.9
2	☐	0.100					
3	☐	1.000	0.945	435.57	0.0088	P	1.4
4	☐	100.000	102.685	39037.94	0.7798	P	1.0
5	☐	250.000	260.628	98018.52	1.9767	P	1.3
6	☐	500.000	512.655	190146.93	3.8867	P	1.2
7	☐	1000.000	995.491	364499.32	7.5458	P	0.3
8	☐	2000.000	1997.628	731889.34	15.1404	P	1.4
9	☐			4131.79	0.0850	P	2.7

$$y = 0.0076 * x + 0.0016$$

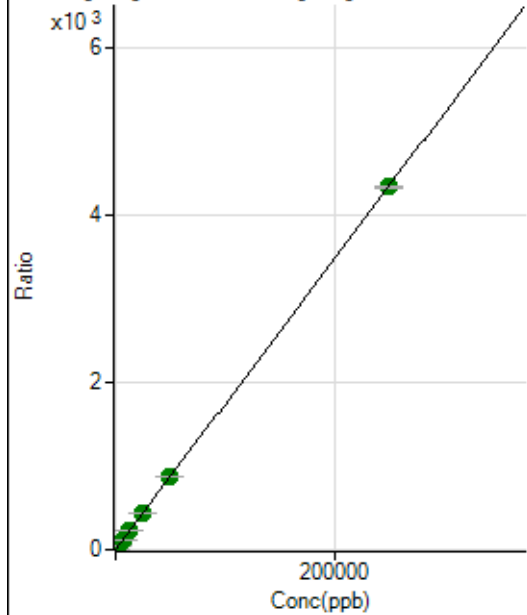
$$R = 1.0000$$

$$DL = 0.1127$$

$$BEC = 0.2103$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	3028.21	0.0611	P	4.6
2	☐	5.000					
3	☐	50.000	45.117	42058.30	0.8455	P	1.2
4	☐	2500.000	2649.384	2308664.87	46.1212	A	2.3
5	☐	6250.000	6614.668	5705417.89	115.0585	A	1.1
6	☐	12500.000	12918.731	10990803.95	224.6560	A	1.1
7	☐	25000.000	25167.621	21138088.67	437.6055	A	0.7
8	☐	50000.000	50369.177	42333557.42	875.7399	A	1.5
9	☐	250000.00	249877.85	211096151.0	4,344.240	A	0.2

$$y = 0.0174 * x + 0.0611$$

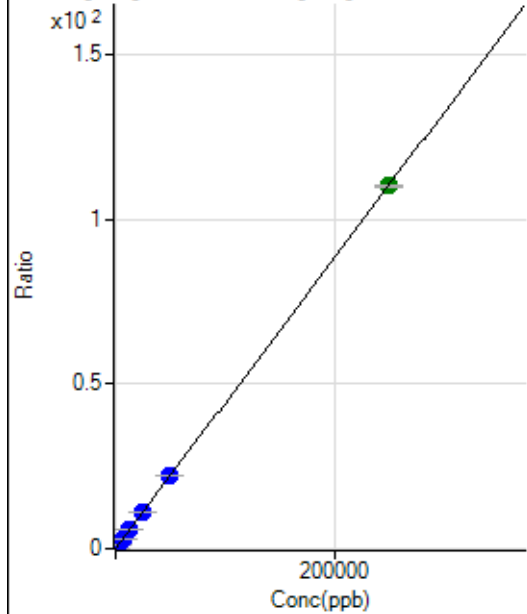
$$R = 1.0000$$

$$DL = 0.4874$$

$$BEC = 3.516$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	79.63	0.0016	P	41.2
2	☐	5.000					
3	☐	50.000	46.639	1101.93	0.0222	P	9.1
4	☐	2500.000	2573.542	56838.34	1.1354	P	1.7
5	☐	6250.000	6564.422	143482.47	2.8937	P	1.9
6	☐	12500.000	12881.631	277723.19	5.6768	P	1.3
7	☐	25000.000	24990.695	531897.40	11.0117	P	1.0
8	☐	50000.000	50362.948	1072685.20	22.1898	P	1.2
9	☐	250000.00	249900.66	5349945.60	110.0993	A	0.4

$$y = 4.4057E-004 * x + 0.0016$$

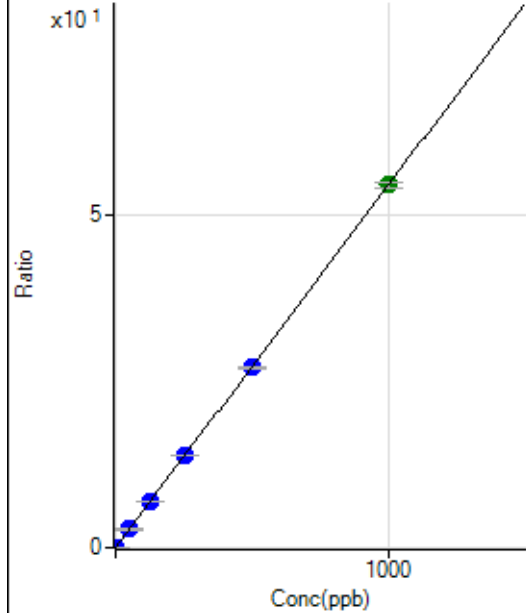
$$R = 1.0000$$

$$DL = 4.512$$

$$BEC = 3.652$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	76.67	0.0016	P	13.1
2	☐	0.100					
3	☐	1.000	0.879	2456.92	0.0494	P	2.7
4	☐	50.000	50.540	137799.99	2.7525	P	0.9
5	☐	125.000	129.111	348559.23	7.0293	P	1.1
6	☐	250.000	254.811	678634.88	13.8714	P	0.8
7	☐	500.000	496.355	1305127.00	27.0190	P	0.5
8	☐	1000.000	1000.079	2631448.50	54.4376	A	1.7
9	☐			4410.76	0.0908	P	1.2

$$y = 0.0544 * x + 0.0016$$

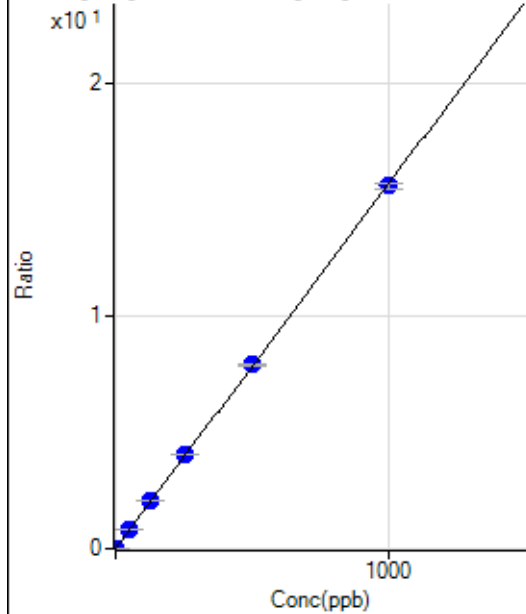
$$R = 1.0000$$

$$DL = 0.01115$$

$$BEC = 0.02849$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	61.11	0.0012	P	29.2
2	☐	0.100					
3	☐	1.000	1.004	843.37	0.0170	P	4.3
4	☐	50.000	51.548	40466.61	0.8084	P	2.3
5	☐	125.000	131.777	102383.92	2.0647	P	0.8
6	☐	250.000	258.011	197720.19	4.0414	P	1.0
7	☐	500.000	504.323	381526.38	7.8984	P	0.4
8	☐	1000.000	994.911	753158.66	15.5805	P	1.5
9	☐			13056.29	0.2687	P	1.3

$$y = 0.0157 * x + 0.0012$$

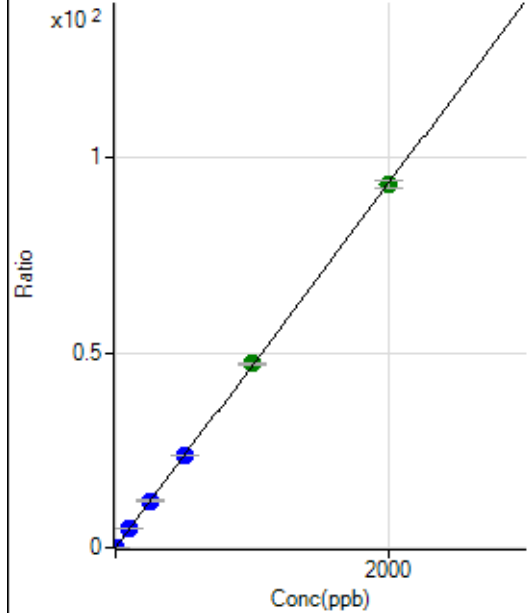
$$R = 0.9999$$

$$DL = 0.06896$$

$$BEC = 0.07865$$

Weight: <None>

Min Conc: 0

⁶³Cu [He] ISTD:45 Sc [He]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	252.23	0.0051	P	12.3
2	☐	0.200					
3	☐	2.000	1.944	4769.79	0.0959	P	1.3
4	☐	100.000	102.204	239204.09	4.7783	P	1.4
5	☐	250.000	258.542	599001.61	12.0797	P	0.9
6	☐	500.000	508.986	1163220.43	23.7761	P	0.6
7	☐	1000.000	1008.994	2276454.01	47.1278	A	0.6
8	☐	2000.000	1992.079	4497350.07	93.0404	A	2.0
9	☐			10083.80	0.2075	P	3.1

$$y = 0.0467 * x + 0.0051$$

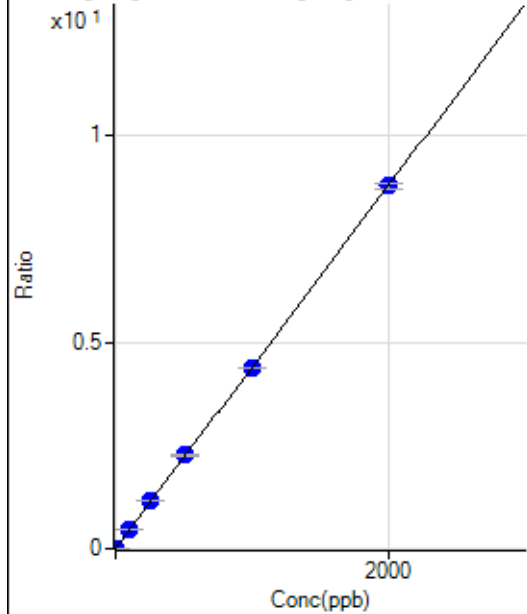
$$R = 1.0000$$

$$DL = 0.04015$$

$$BEC = 0.1092$$

Weight: <None>

Min Conc: 0

⁶⁶Zn [He] ISTD:45 Sc [He]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	26.66	0.0005	P	19.8
2	☐	0.200					
3	☐	2.000	1.936	450.02	0.0090	P	4.9
4	☐	100.000	104.234	22955.90	0.4586	P	1.6
5	☐	250.000	262.942	57324.71	1.1560	P	0.4
6	☐	500.000	513.378	110395.82	2.2565	P	0.7
7	☐	1000.000	995.596	211355.29	4.3755	P	0.4
8	☐	2000.000	1997.028	424228.21	8.7761	P	1.7
9	☐			4846.48	0.0997	P	3.3

$$y = 0.0044 * x + 5.3734E-004$$

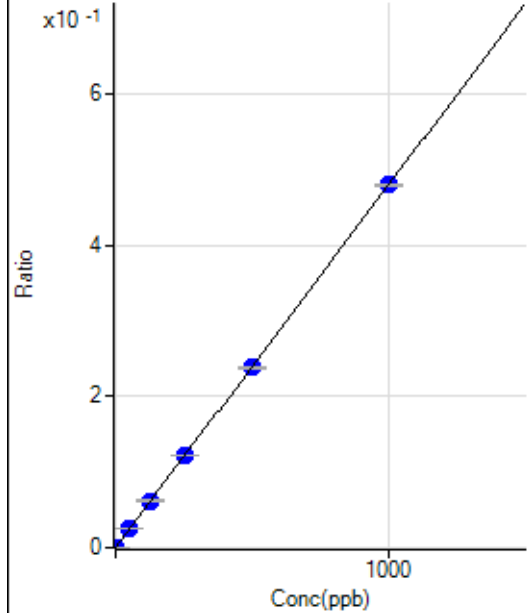
$$R = 1.0000$$

$$DL = 0.0728$$

$$BEC = 0.1223$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	8.64	0.0000	P	32.4
2	☐	0.100					
3	☐	1.000	0.860	146.30	0.0004	P	18.6
4	☐	50.000	50.878	8213.62	0.0245	P	2.2
5	☐	125.000	128.911	20786.08	0.0619	P	1.6
6	☐	250.000	252.923	40450.95	0.1215	P	0.4
7	☐	500.000	496.727	78583.28	0.2386	P	0.7
8	☐	1000.000	1000.373	156874.56	0.4804	P	0.6
9	☐			103.71	0.0003	P	14.7

$$y = 4.8023\text{E-}004 * x + 2.6025\text{E-}005$$

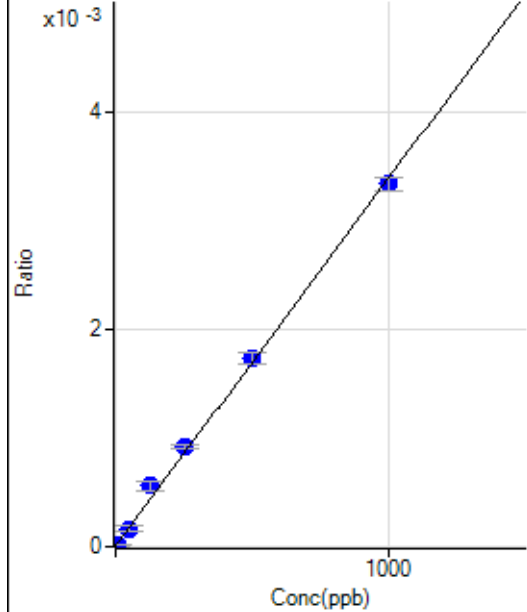
$$R = 1.0000$$

$$DL = 0.05266$$

$$BEC = 0.05419$$

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	1.11	0.0000	P	173.
2	☐	0.500					
3	☐	5.000	3.918	5.56	0.0000	P	91.5
4	☐	50.000	46.882	54.45	0.0002	P	30.8
5	☐	125.000	164.266	187.78	0.0006	P	14.5
6	☐	250.000	269.942	305.56	0.0009	P	3.7
7	☐	500.000	510.957	571.13	0.0017	P	6.8
8	☐	1000.000	984.789	1090.06	0.0033	P	3.9
9	☐			0.00	0.0000	P	

$$y = 3.3867\text{E-}006 * x + 3.3535\text{E-}006$$

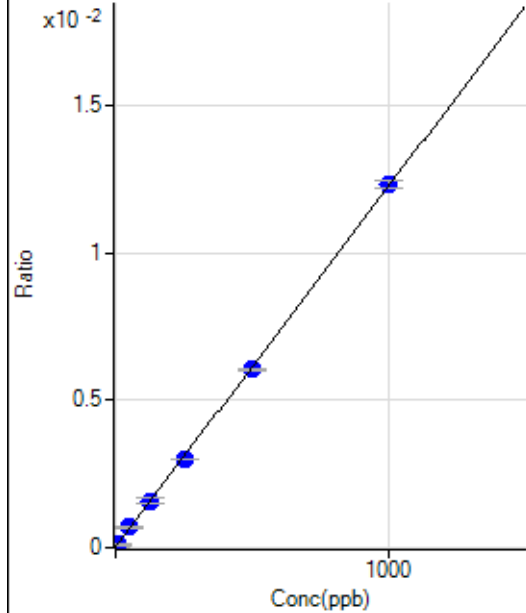
$$R = 0.9989$$

$$DL = 5.145$$

$$BEC = 0.9902$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	4.32	0.0000	P	24.4
2	☐	0.500					
3	☐	5.000	7.233	33.95	0.0001	P	43.4
4	☐	50.000	56.211	235.81	0.0007	P	9.4
5	☐	125.000	126.899	526.56	0.0016	P	12.6
6	☐	250.000	243.485	998.20	0.0030	P	1.3
7	☐	500.000	493.774	1998.31	0.0061	P	1.1
8	☐	1000.000	1004.183	4024.08	0.0123	P	2.2
9	☐			3.09	0.0000	P	125.

$$y = 1.2260\text{E-}005 * x + 1.3008\text{E-}005$$

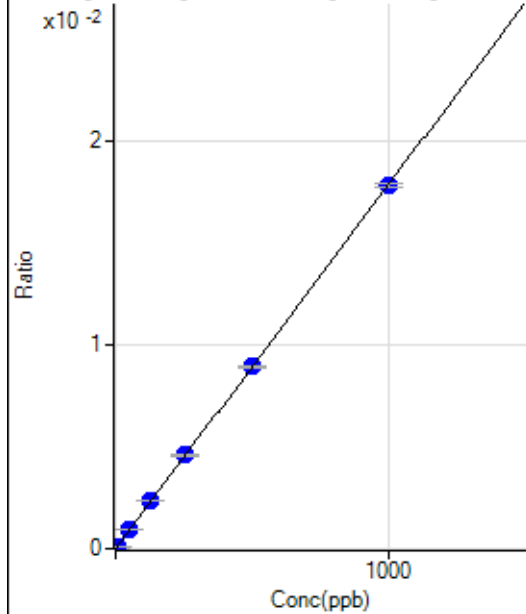
$$R = 0.9999$$

$$DL = 0.7772$$

$$BEC = 1.061$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	-86.40	0.0000	P	-76.
2	☐	0.500					
3	☐	5.000	5.124	582.39	0.0001	P	17.4
4	☐	50.000	52.702	6900.35	0.0009	P	0.5
5	☐	125.000	130.081	17288.07	0.0023	P	0.6
6	☐	250.000	257.306	34690.23	0.0046	P	1.3
7	☐	500.000	501.111	69099.10	0.0090	P	1.2
8	☐	1000.000	996.847	138363.47	0.0178	P	0.9
9	☐			88.96	0.0000	P	78.0

$$y = 1.7904\text{E-}005 * x - 1.2081\text{E-}005$$

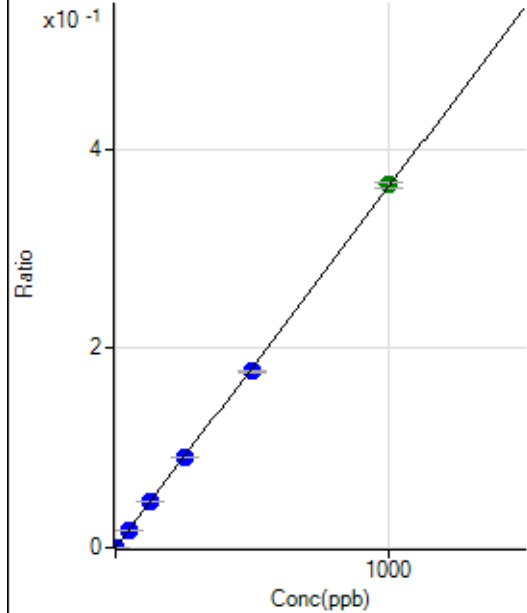
$$R = 1.0000$$

$$DL = 1.554$$

$$BEC = -0.6748$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	1450.15	0.0002	P	6.5
2	☐	0.100					
3	☐	1.000	0.820	3647.90	0.0005	P	4.3
4	☐	50.000	49.582	134401.18	0.0181	P	0.7
5	☐	125.000	125.829	341238.53	0.0457	P	0.7
6	☐	250.000	249.228	682400.44	0.0904	P	0.9
7	☐	500.000	489.337	1367067.60	0.1773	P	1.0
8	☐	1000.000	1005.442	2823767.49	0.3640	A	1.9
9	☐			95796.12	0.0123	P	0.5

$$y = 3.6183\text{E-}004 * x + 2.0261\text{E-}004$$

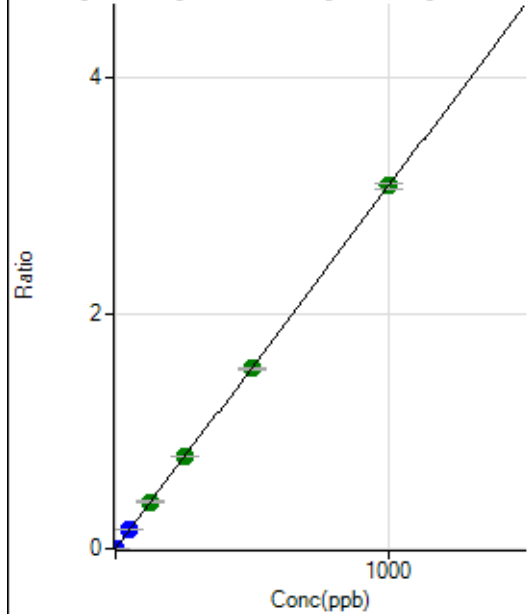
$$R = 0.9999$$

$$DL = 0.1087$$

$$BEC = 0.5599$$

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	150.01	0.0000	P	29.1
2	☐	0.100					
3	☐	1.000	0.927	21022.47	0.0029	P	2.9
4	☐	50.000	50.760	1158343.48	0.1564	P	0.9
5	☐	125.000	129.538	2977338.39	0.3990	A	0.8
6	☐	250.000	253.478	5895208.86	0.7808	A	0.1
7	☐	500.000	496.593	11796919.79	1.5296	A	0.6
8	☐	1000.000	1000.229	23900521.37	3.0809	A	1.3
9	☐			829154.64	0.1068	P	1.3

$$y = 0.0031 * x + 2.0969\text{E-}005$$

$$R = 1.0000$$

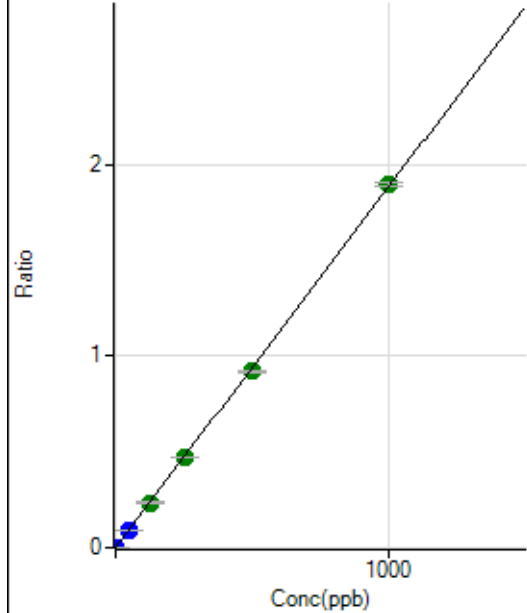
$$DL = 0.005952$$

$$BEC = 0.006808$$

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	450.03	0.0001	P	6.9
2	☐	0.100					
3	☐	1.000	0.890	12714.79	0.0017	P	2.2
4	☐	50.000	48.893	683097.96	0.0922	P	0.5
5	☐	125.000	124.880	1756626.64	0.2354	A	1.3
6	☐	250.000	251.336	3577092.05	0.4738	A	0.1
7	☐	500.000	488.428	7099954.33	0.9206	A	0.8
8	☐	1000.000	1005.522	14702131.40	1.8952	A	1.1
9	☐			4428.72	0.0006	P	4.8

$$y = 0.0019 * x + 6.2883E-005$$

$$R = 0.9999$$

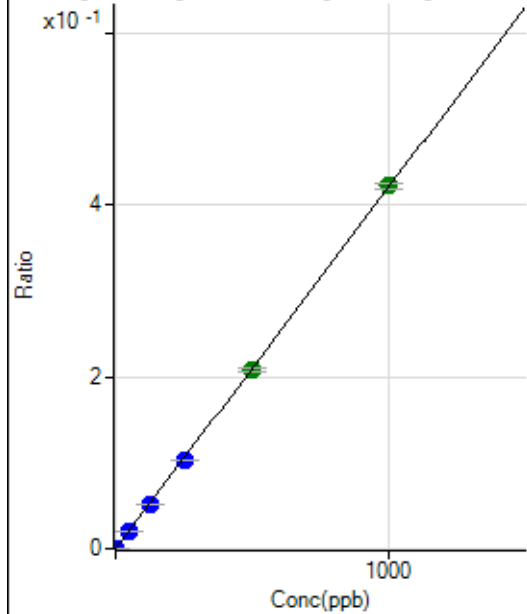
$$DL = 0.006904$$

$$BEC = 0.03337$$

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	119.45	0.0000	P	10.3
2	☐	0.100					
3	☐	1.000	0.878	2817.08	0.0004	P	0.4
4	☐	50.000	48.683	151631.38	0.0205	P	1.1
5	☐	125.000	122.245	383321.94	0.0514	P	0.5
6	☐	250.000	243.945	773898.99	0.1025	P	0.5
7	☐	500.000	495.019	1603942.80	0.2080	A	1.6
8	☐	1000.000	1004.414	3273340.57	0.4220	A	1.9
9	☐			958.42	0.0001	P	5.8

$$y = 4.2009E-004 * x + 1.6685E-005$$

$$R = 1.0000$$

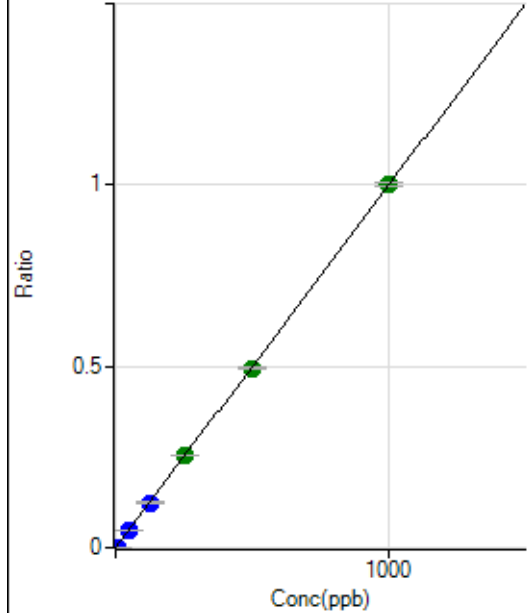
$$DL = 0.01233$$

$$BEC = 0.03972$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	202.79	0.0000	P	18.3
2	☐	0.500					
3	☐	5.000	1.945	14405.52	0.0020	P	2.7
4	☐	50.000	49.242	364641.80	0.0492	P	0.1
5	☐	125.000	124.639	929329.20	0.1245	P	0.7
6	☐	250.000	252.919	1907991.06	0.2527	A	0.5
7	☐	500.000	495.482	3817879.73	0.4950	A	1.2
8	☐	1000.000	1001.627	7763336.37	1.0007	A	1.0
9	☐			13763.06	0.0018	P	2.4

$$y = 9.9903E-004 * x + 2.8326E-005$$

$$R = 1.0000$$

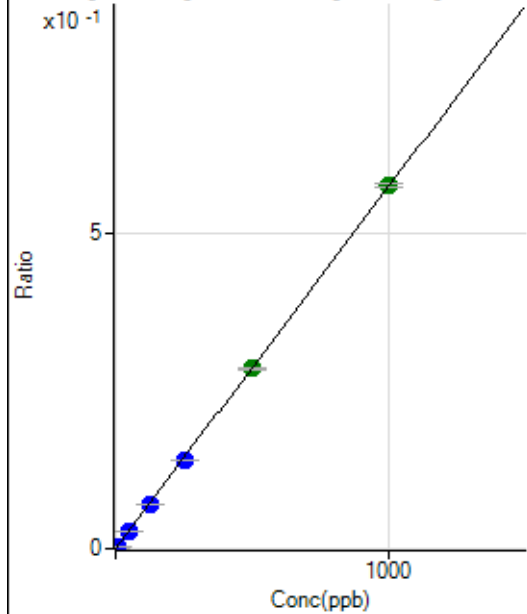
$$DL = 0.01558$$

$$BEC = 0.02835$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	44.45	0.0000	P	47.3
2	☐	0.500					
3	☐	5.000	4.220	17776.21	0.0024	P	1.7
4	☐	50.000	49.059	208999.44	0.0282	P	0.6
5	☐	125.000	124.111	532502.86	0.0714	P	0.9
6	☐	250.000	246.094	1068397.37	0.1415	P	0.6
7	☐	500.000	497.801	2207471.14	0.2862	A	0.7
8	☐	1000.000	1002.238	4470514.73	0.5763	A	1.0
9	☐			21270.14	0.0027	P	2.2

$$y = 5.7496E-004 * x + 6.2127E-006$$

$$R = 1.0000$$

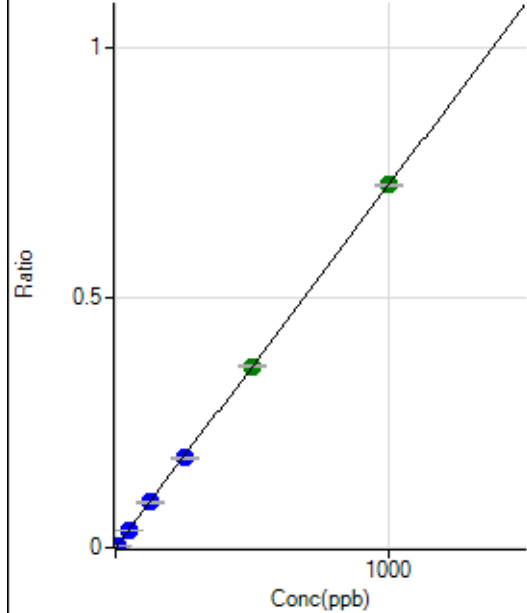
$$DL = 0.01532$$

$$BEC = 0.01081$$

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	94.45	0.0000	P	10.4
2	☐	0.500					
3	☐	5.000	3.628	19320.12	0.0026	P	0.4
4	☐	50.000	49.136	264019.49	0.0356	P	1.7
5	☐	125.000	124.729	674930.70	0.0905	P	0.7
6	☐	250.000	247.545	1355281.15	0.1795	P	0.9
7	☐	500.000	499.753	2794719.38	0.3624	A	1.0
8	☐	1000.000	1000.821	5629931.03	0.7257	A	0.6
9	☐			25043.54	0.0032	P	2.0

$$y = 7.2508\text{E-}004 * x + 1.3199\text{E-}005$$

$$R = 1.0000$$

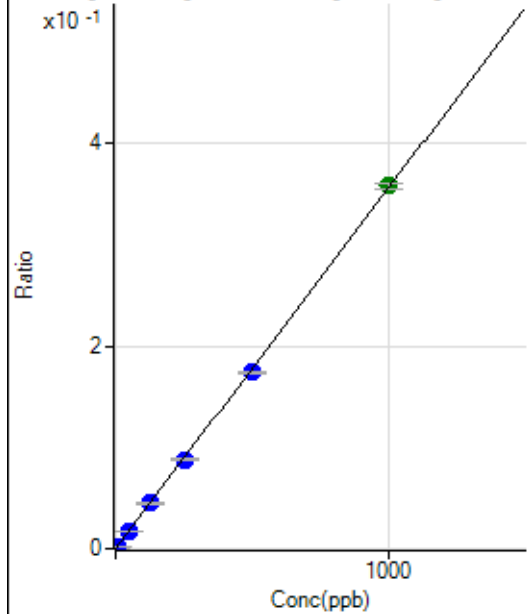
$$DL = 0.005705$$

$$BEC = 0.0182$$

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	77.78	0.0000	P	37.9
2	☐	0.500					
3	☐	5.000	4.160	10896.50	0.0015	P	3.1
4	☐	50.000	49.019	129292.96	0.0175	P	0.3
5	☐	125.000	125.585	333516.77	0.0447	P	1.4
6	☐	250.000	247.852	665971.52	0.0882	P	0.6
7	☐	500.000	489.168	1342462.41	0.1741	P	1.3
8	☐	1000.000	1005.933	2776831.46	0.3580	A	1.9
9	☐			13512.83	0.0017	P	2.3

$$y = 3.5583\text{E-}004 * x + 1.0875\text{E-}005$$

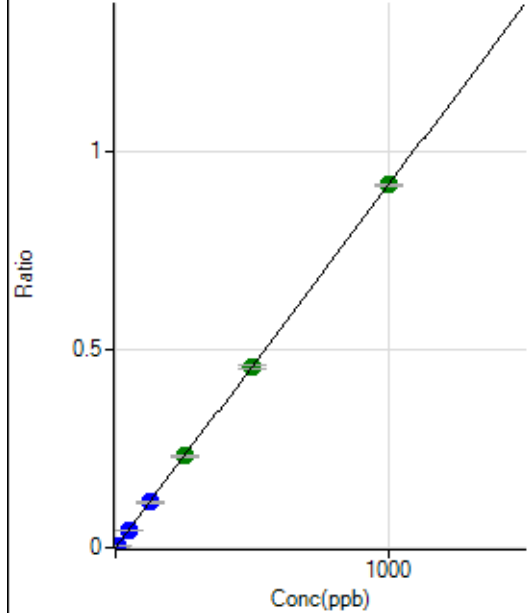
$$R = 0.9999$$

$$DL = 0.03476$$

$$BEC = 0.03056$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	38.89	0.0000	P	75.3
2	☐	0.500					
3	☐	5.000	4.154	27807.45	0.0038	P	2.1
4	☐	50.000	49.372	334655.28	0.0452	P	1.0
5	☐	125.000	124.796	851984.30	0.1142	P	1.2
6	☐	250.000	252.855	1746828.62	0.2313	A	1.1
7	☐	500.000	498.439	3516924.34	0.4560	A	1.3
8	☐	1000.000	1000.127	7098909.10	0.9150	A	0.2
9	☐			33684.69	0.0043	P	2.1

$$y = 9.1490\text{E-}004 * x + 5.4293\text{E-}006$$

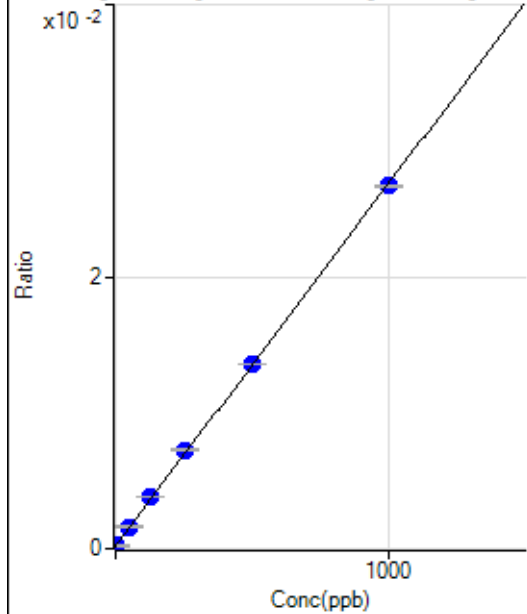
$$R = 1.0000$$

$$DL = 0.0134$$

$$BEC = 0.005934$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1430.70	0.0002	P	7.0
2	☐	0.100					
3	☐	1.000	0.649	1572.38	0.0002	P	7.1
4	☐	50.000	53.042	11953.05	0.0016	P	4.3
5	☐	125.000	135.124	28528.35	0.0038	P	1.4
6	☐	250.000	265.006	56034.16	0.0073	P	2.5
7	☐	500.000	501.857	110391.55	0.0136	P	0.4
8	☐	1000.000	993.903	220788.00	0.0267	P	0.8
9	☐			1572.39	0.0002	P	3.6

$$y = 2.6656\text{E-}005 * x + 1.9920\text{E-}004$$

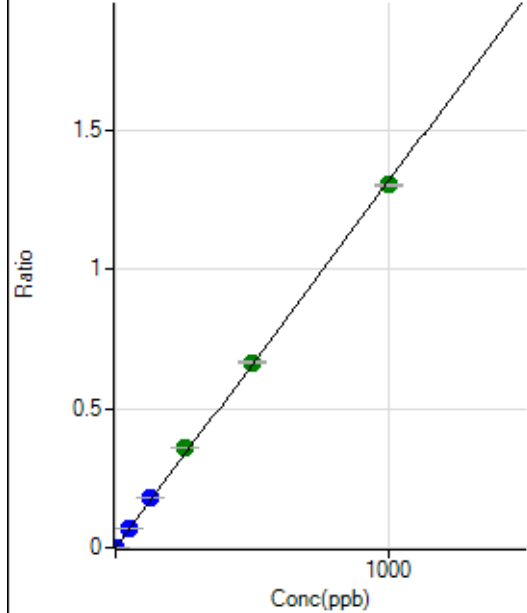
$$R = 0.9998$$

$$DL = 1.577$$

$$BEC = 7.473$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	83.34	0.0000	P	10.4
2	☐	0.100					
3	☐	1.000	1.208	11613.79	0.0016	P	3.4
4	☐	50.000	54.042	526470.15	0.0710	P	1.4
5	☐	125.000	135.947	1341069.01	0.1787	P	0.8
6	☐	250.000	271.316	2751126.49	0.3566	A	0.3
7	☐	500.000	505.383	5400067.09	0.6642	A	1.6
8	☐	1000.000	990.409	10766538.87	1.3017	A	0.5
9	☐			2400.34	0.0003	P	4.1

$$y = 0.0013 * x + 1.1604E-005$$

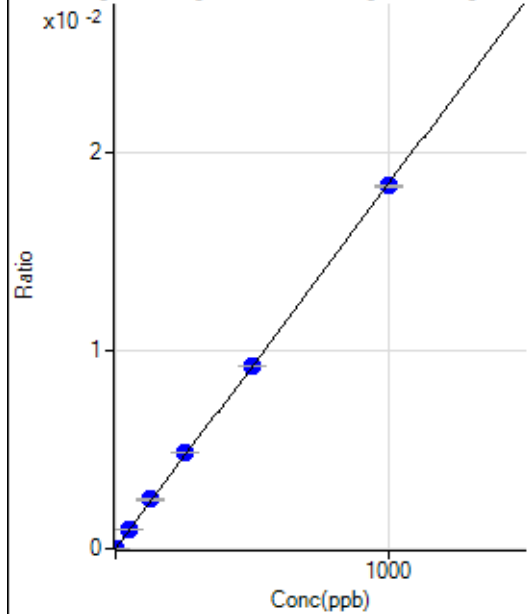
$$R = 0.9997$$

$$DL = 0.002744$$

$$BEC = 0.008829$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	8.33	0.0000	P	50.3
2	☐	0.100					
3	☐	1.000	0.882	126.39	0.0000	P	11.6
4	☐	50.000	54.166	7399.43	0.0010	P	3.1
5	☐	125.000	134.904	18653.49	0.0025	P	1.5
6	☐	250.000	265.646	37746.13	0.0049	P	0.2
7	☐	500.000	500.038	74871.96	0.0092	P	0.4
8	☐	1000.000	994.623	151489.53	0.0183	P	0.4
9	☐			56.95	0.0000	P	14.2

$$y = 1.8413E-005 * x + 1.1614E-006$$

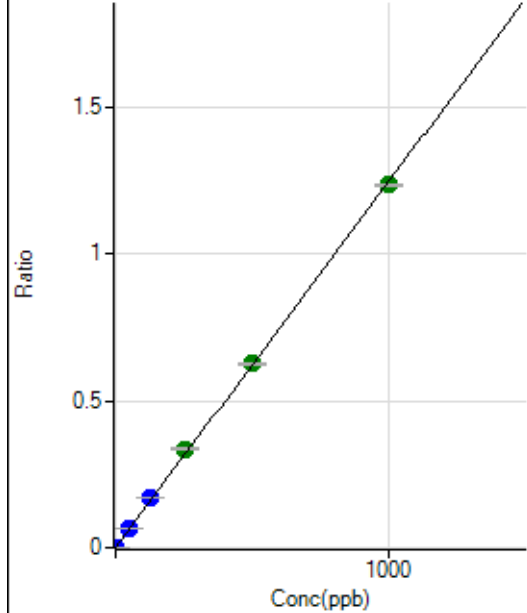
$$R = 0.9998$$

$$DL = 0.09522$$

$$BEC = 0.06308$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	80.56	0.0000	P	51.8
2	☐	0.100					
3	☐	1.000	1.192	10877.10	0.0015	P	3.0
4	☐	50.000	54.245	501489.28	0.0677	P	0.3
5	☐	125.000	135.746	1270687.57	0.1693	P	0.8
6	☐	250.000	270.082	2598690.77	0.3368	A	0.9
7	☐	500.000	503.082	5100922.64	0.6274	A	1.5
8	☐	1000.000	991.883	10231832.09	1.2370	A	0.4
9	☐			2336.40	0.0003	P	2.8

$$y = 0.0012 * x + 1.1202E-005$$

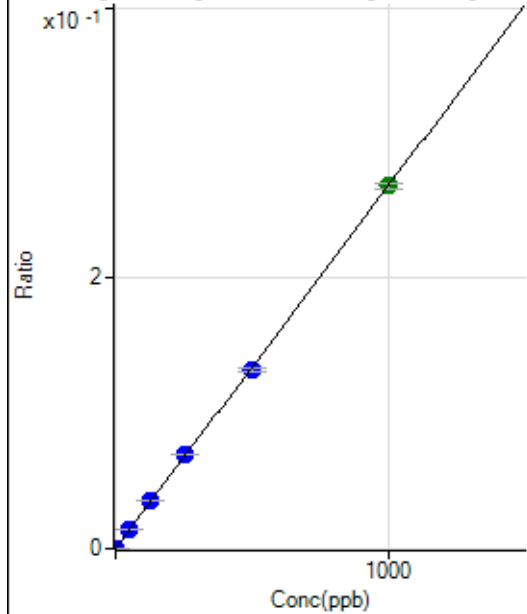
$$R = 0.9997$$

$$DL = 0.01397$$

$$BEC = 0.008982$$

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	1003.99	0.0001	P	7.7
2	☐	0.100					
3	☐	1.000	0.873	2716.52	0.0004	P	1.7
4	☐	50.000	52.622	105725.90	0.0143	P	1.2
5	☐	125.000	133.785	270588.67	0.0361	P	1.0
6	☐	250.000	259.600	538699.23	0.0698	P	1.0
7	☐	500.000	494.133	1079485.97	0.1328	P	2.0
8	☐	1000.000	999.304	2219883.89	0.2684	A	1.6
9	☐			1578.89	0.0002	P	3.3

$$y = 2.6844E-004 * x + 1.3979E-004$$

$$R = 0.9999$$

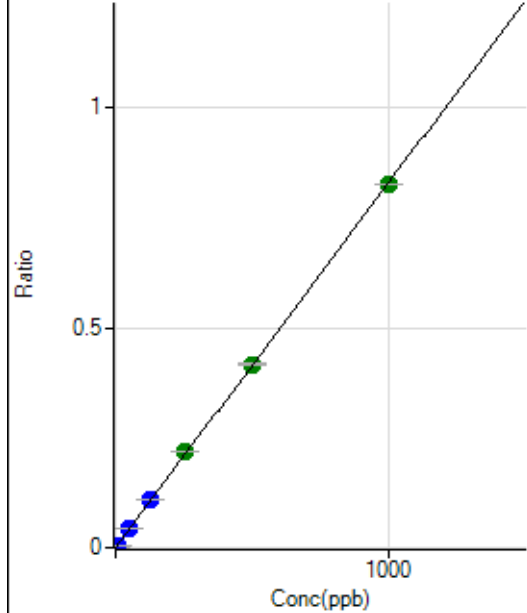
$$DL = 0.1206$$

$$BEC = 0.5207$$

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	497.25	0.0001	P	6.7
2	☐	0.500					
3	☐	5.000	4.436	27189.73	0.0037	P	1.3
4	☐	50.000	52.671	323883.13	0.0437	P	1.1
5	☐	125.000	132.084	821741.99	0.1095	P	0.6
6	☐	250.000	263.647	1685468.17	0.2185	A	1.3
7	☐	500.000	501.793	3380037.62	0.4157	A	1.4
8	☐	1000.000	994.676	6815929.93	0.8240	A	0.2
9	☐			9195.20	0.0011	P	4.5

$$y = 8.2838E-004 * x + 6.9234E-005$$

$$R = 0.9999$$

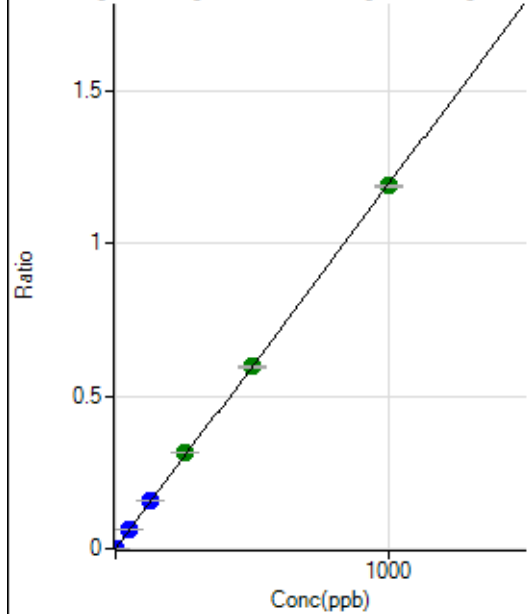
$$DL = 0.01692$$

$$BEC = 0.08358$$

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	97.23	0.0000	P	27.3
2	☐	0.200					
3	☐	2.000	1.805	15715.55	0.0022	P	1.4
4	☐	50.000	52.255	461578.97	0.0623	P	1.1
5	☐	125.000	131.921	1179960.57	0.1572	P	0.1
6	☐	250.000	262.946	2417461.88	0.3133	A	0.5
7	☐	500.000	499.722	4841266.34	0.5955	A	1.5
8	☐	1000.000	995.925	9816250.31	1.1868	A	0.5
9	☐			24097.66	0.0030	P	1.1

$$y = 0.0012 * x + 1.3525E-005$$

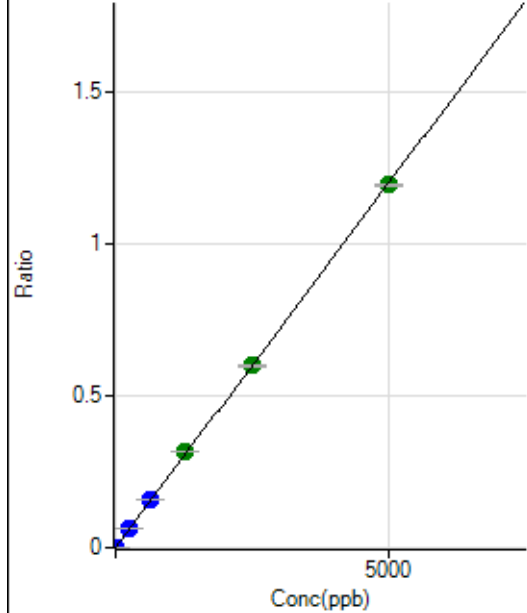
$$R = 0.9999$$

$$DL = 0.009279$$

$$BEC = 0.01135$$

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	27.78	0.0000	P	17.7
2	☐	1.000					
3	☐	10.000	9.082	15854.62	0.0022	P	1.1
4	☐	250.000	260.950	464082.45	0.0626	P	0.9
5	☐	625.000	655.775	1181004.86	0.1574	P	0.7
6	☐	1250.000	1318.098	2440104.24	0.3163	A	0.6
7	☐	2500.000	2499.161	4875417.56	0.5997	A	1.2
8	☐	5000.000	4979.003	9881895.45	1.1947	A	0.5
9	☐			5201.27	0.0006	P	4.8

$$y = 2.3995E-004 * x + 3.8685E-006$$

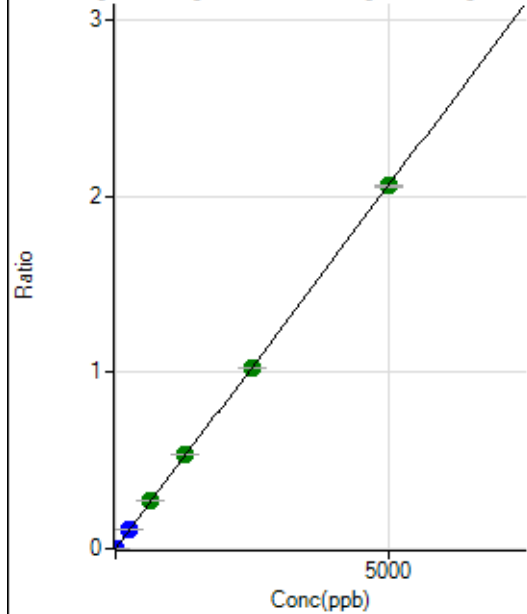
$$R = 0.9999$$

$$DL = 0.008578$$

$$BEC = 0.01612$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	66.67	0.0000	P	24.7
2	☐	1.000					
3	☐	10.000	8.940	26883.76	0.0037	P	2.1
4	☐	250.000	261.798	801443.62	0.1081	P	1.2
5	☐	625.000	662.731	2054479.71	0.2737	A	0.9
6	☐	1250.000	1291.230	4114619.84	0.5333	A	0.9
7	☐	2500.000	2485.556	8347113.12	1.0266	A	0.6
8	☐	5000.000	4991.611	17053222.60	2.0617	A	0.8
9	☐			8742.18	0.0011	P	5.2

$$y = 4.1303E-004 * x + 9.2758E-006$$

$$R = 0.9999$$

$$DL = 0.01664$$

$$BEC = 0.02246$$

Weight: <None>

Min Conc: 0

150 Nd [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			13.33		P	100.
2	☐						
3	☐			8.89		P	173.
4	☐			37.78		P	66.8
5	☐			64.45		P	26.0
6	☐			95.56		P	10.7
7	☐			168.90		P	32.2
8	☐			317.79		P	5.3
9	☐			133.34		P	18.0

150 Nd [He] No available calibration points

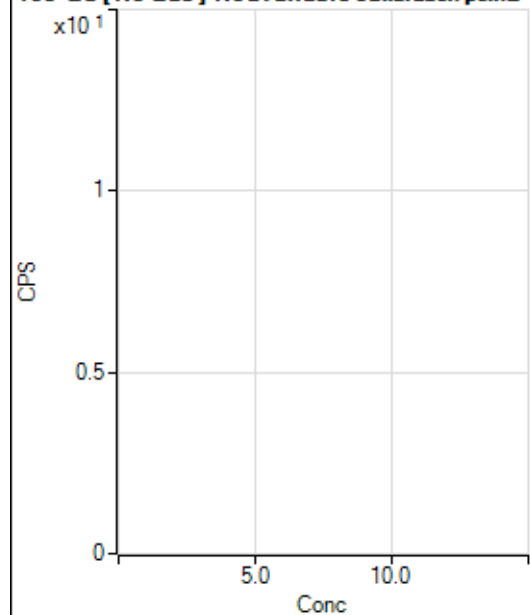
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			1.11		P	173.
2	☐						
3	☐			0.00		P	
4	☐			1.11		P	173.
5	☐			4.44		P	43.4
6	☐			3.33		P	100.
7	☐			8.89		P	114.
8	☐			12.22		P	41.7
9	☐			21.11		P	18.2

156 Dy [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			19.44		P	49.5
2	☐						
3	☐			13.89		P	34.7
4	☐			19.44		P	65.5
5	☐			22.22		P	108.
6	☐			50.00		P	44.1
7	☐			91.67		P	9.1
8	☐			150.01		P	19.2
9	☐			177.79		P	21.1

156 Dy [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			0.00		P	
2	☐						
3	☐			3.33		P	173.
4	☐			1.11		P	173.
5	☐			2.22		P	86.6
6	☐			5.56		P	34.7
7	☐			8.89		P	21.6
8	☐			30.00		P	33.3
9	☐			23.33		P	NaN

160 Gd [No Gas] Noavailable calibration poin_

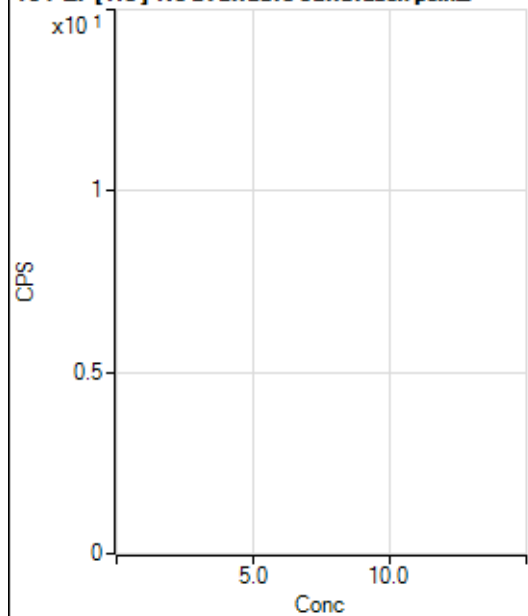
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			58.34		P	42.9
2	☐						
3	☐			44.45		P	28.7
4	☐			52.78		P	39.7
5	☐			69.45		P	13.9
6	☐			72.23		P	43.7
7	☐			86.12		P	31.1
8	☐			111.12		P	21.7
9	☐			169.46		P	22.7

160 Gd [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			10.00		P	100.
2	☐						
3	☐			8.89		P	78.1
4	☐			16.67		P	40.0
5	☐			6.67		P	132.
6	☐			16.67		P	20.0
7	☐			17.78		P	39.0
8	☐			31.11		P	27.0
9	☐			41.11		P	9.4

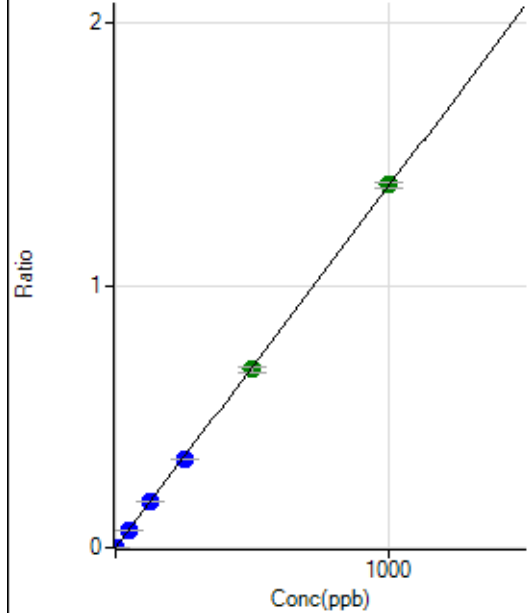
164 Er [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			38.89		P	12.4
2	☐						
3	☐			33.34		P	66.1
4	☐			27.78		P	17.3
5	☐			44.45		P	28.7
6	☐			52.78		P	24.1
7	☐			55.56		P	31.2
8	☐			80.56		P	29.9
9	☐			83.34		P	20.0

164 Er [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			1.11		P	173.
2	☐						
3	☐			14.44		P	13.4
4	☐			2.22		P	86.6
5	☐			7.78		P	49.5
6	☐			3.33		P	100.
7	☐			10.00		P	33.3
8	☐			14.44		P	13.4
9	☐			28.89		P	63.5

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	30.56	0.0000	P	40.8
2	☐	0.100					
3	☐	1.000	0.884	4979.03	0.0012	P	2.4
4	☐	50.000	49.995	283587.69	0.0689	P	1.1
5	☐	125.000	127.163	736192.85	0.1753	P	0.5
6	☐	250.000	245.744	1485421.24	0.3387	P	0.6
7	☐	500.000	493.943	3176597.36	0.6807	A	2.9
8	☐	1000.000	1003.822	6452518.98	1.3834	A	1.3
9	☐			4034.20	0.0009	P	5.0

$$y = 0.0014 * x + 7.5185E-006$$

$$R = 1.0000$$

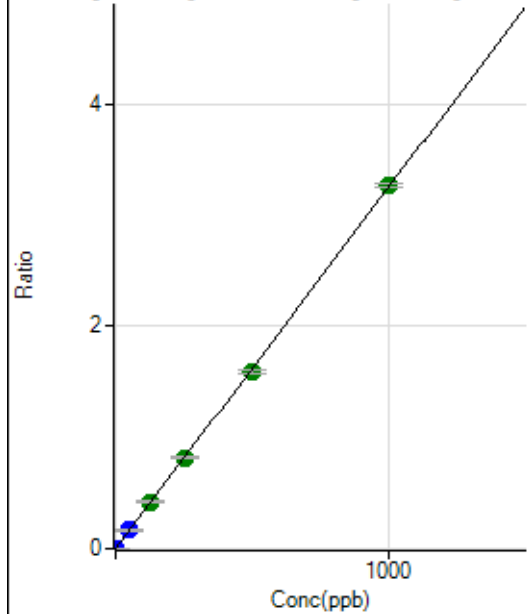
$$DL = 0.006684$$

$$BEC = 0.005455$$

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	125.01	0.0000	P	25.3
2	☐	0.100					
3	☐	1.000	0.895	11933.98	0.0029	P	2.7
4	☐	50.000	50.665	677389.14	0.1646	P	1.3
5	☐	125.000	129.968	1773411.43	0.4222	A	0.9
6	☐	250.000	252.770	3601179.68	0.8211	A	0.5
7	☐	500.000	488.202	7400688.71	1.5858	A	1.9
8	☐	1000.000	1004.552	15219122.39	3.2630	A	1.1
9	☐			9985.01	0.0023	P	3.1

$$y = 0.0032 * x + 3.0915E-005$$

$$R = 0.9999$$

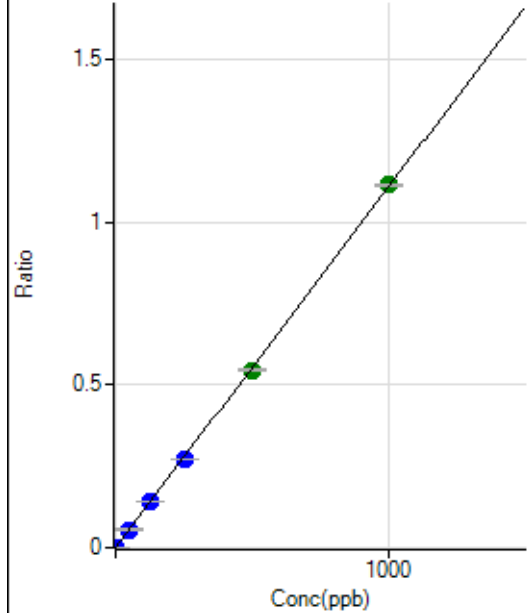
$$DL = 0.007221$$

$$BEC = 0.009518$$

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	403.72	0.0001	P	8.7
2	☐	0.100					
3	☐	1.000	1.070	5219.75	0.0013	P	3.9
4	☐	50.000	50.312	229876.05	0.0559	P	1.4
5	☐	125.000	127.024	591755.35	0.1409	P	0.4
6	☐	250.000	246.659	1199378.96	0.2735	P	0.4
7	☐	500.000	490.534	2537745.95	0.5437	A	1.0
8	☐	1000.000	1005.300	5197018.17	1.1142	A	0.7
9	☐			11273.87	0.0026	P	1.3

$$y = 0.0011 * x + 9.9581E-005$$

$$R = 0.9999$$

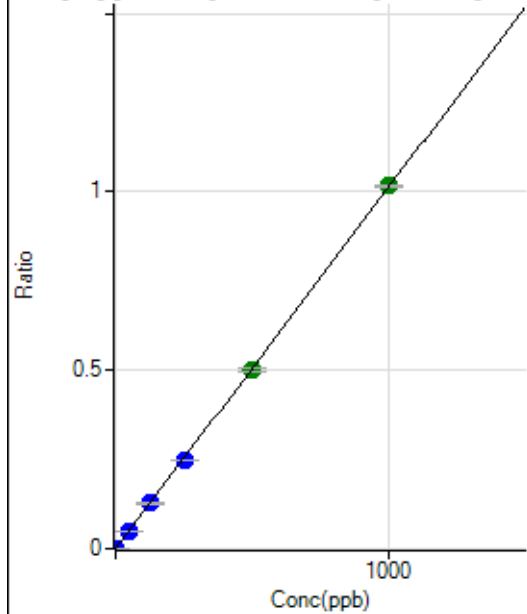
$$DL = 0.02338$$

$$BEC = 0.08985$$

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	362.98	0.0001	P	8.6
2	☐	0.100					
3	☐	1.000	1.083	4817.72	0.0012	P	1.8
4	☐	50.000	50.140	209268.52	0.0508	P	1.0
5	☐	125.000	125.212	532832.57	0.1268	P	1.0
6	☐	250.000	243.869	1083268.72	0.2470	P	0.3
7	☐	500.000	494.259	2335742.73	0.5005	A	1.9
8	☐	1000.000	1004.370	4743025.86	1.0169	A	0.7
9	☐			9563.17	0.0022	P	1.6

$$y = 0.0010 * x + 8.9552E-005$$

$$R = 1.0000$$

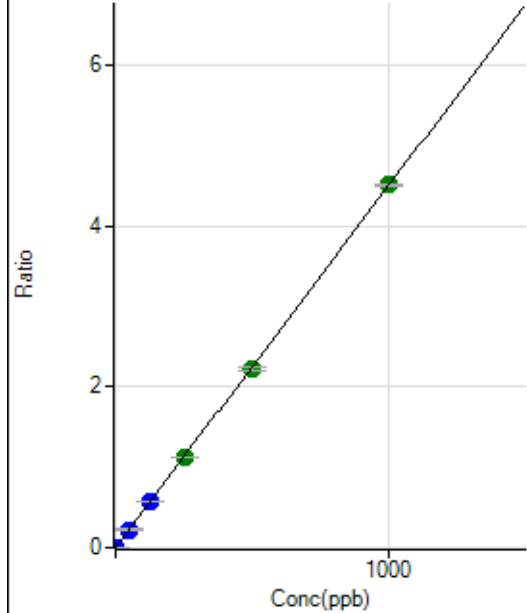
$$DL = 0.02276$$

$$BEC = 0.08846$$

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	1616.76	0.0004	P	0.6
2	☐	0.100					
3	☐	1.000	1.084	21442.96	0.0053	P	2.1
4	☐	50.000	50.396	935081.33	0.2272	P	0.9
5	☐	125.000	126.822	2399262.72	0.5712	P	0.7
6	☐	250.000	250.458	4945870.51	1.1276	A	0.2
7	☐	500.000	493.828	10374864.09	2.2229	A	1.3
8	☐	1000.000	1002.724	21051621.02	4.5133	A	0.2
9	☐			44695.22	0.0103	P	0.6

$$y = 0.0045 * x + 3.9904E-004$$

$$R = 1.0000$$

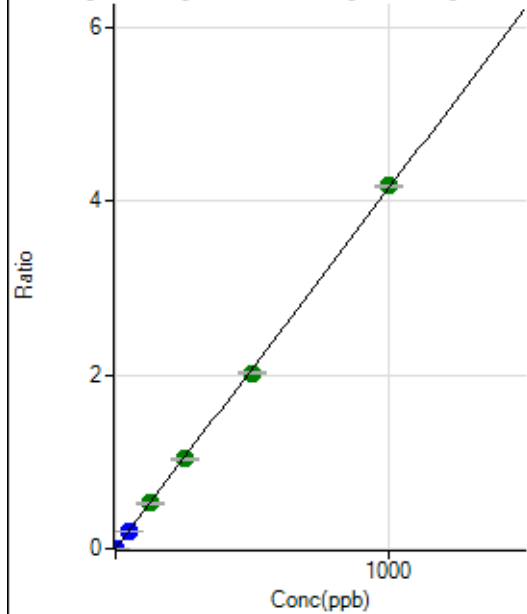
$$DL = 0.001549$$

$$BEC = 0.08866$$

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	86.11	0.0000	P	14.0
2	☐	0.100					
3	☐	1.000	0.841	14242.13	0.0035	P	0.6
4	☐	50.000	48.833	832538.67	0.2023	P	1.9
5	☐	125.000	125.635	2186247.47	0.5205	A	0.5
6	☐	250.000	248.526	4515337.99	1.0295	A	0.9
7	☐	500.000	485.960	9395653.07	2.0131	A	1.1
8	☐	1000.000	1007.368	19464442.10	4.1730	A	0.2
9	☐			5126.30	0.0012	P	2.0

$$y = 0.0041 * x + 2.1239E-005$$

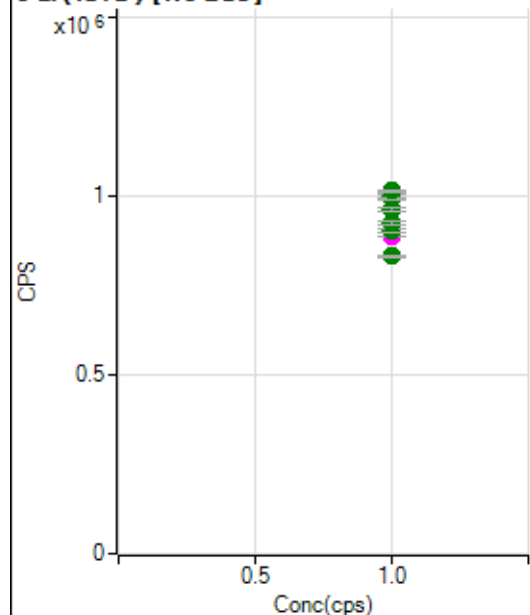
$$R = 0.9999$$

$$DL = 0.002154$$

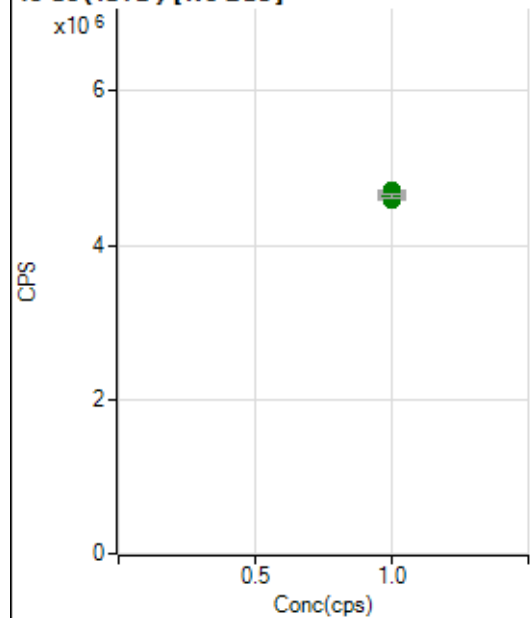
$$BEC = 0.005127$$

Weight: <None>

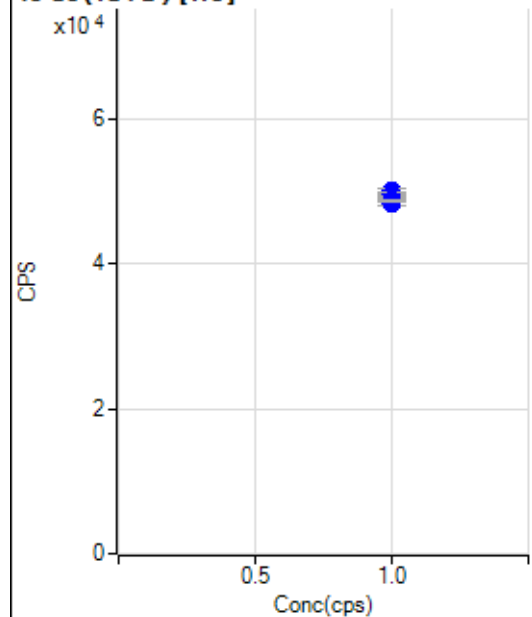
Min Conc: 0

6 Li (ISTD) [No Gas]

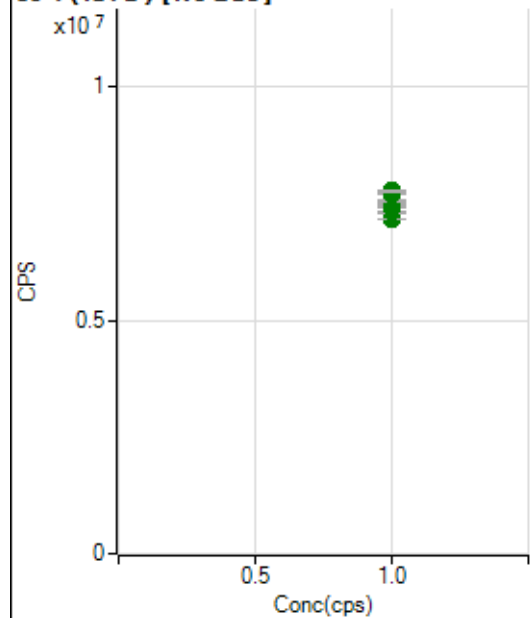
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		832540.85		A	1.0
2	☐	1.000					
3	☐	1.000		886639.71		M	0.2
4	☐	1.000		904708.19		A	1.0
5	☐	1.000		925505.99		A	0.9
6	☐	1.000		961682.88		A	1.0
7	☐	1.000		1001287.75		A	1.4
8	☐	1.000		993907.15		A	0.8
9	☐	1.000		1015456.91		A	0.5

45 Sc (ISTD) [No Gas]

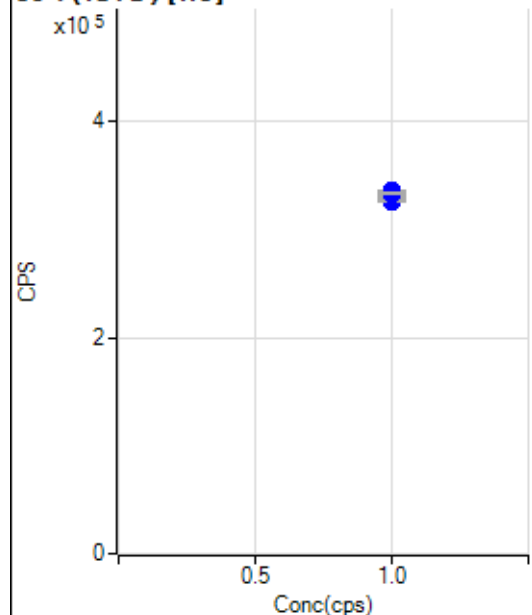
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		4590596.41		A	0.6
2	☐	1.000					
3	☐	1.000		4599416.77		A	0.6
4	☐	1.000		4633447.37		A	0.6
5	☐	1.000		4702946.29		A	0.4
6	☐	1.000		4706440.21		A	0.6
7	☐	1.000		4696167.68		A	0.5
8	☐	1.000		4675568.25		A	0.5
9	☐	1.000		4633364.25		A	1.1

45 Sc (ISTD) [He]

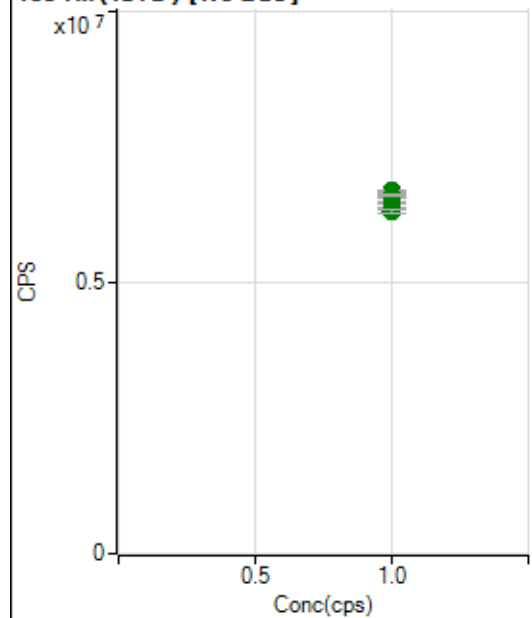
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		49512.51		P	1.7
2	☐	1.000					
3	☐	1.000		49744.46		P	0.4
4	☐	1.000		50066.73		P	1.4
5	☐	1.000		49589.55		P	0.8
6	☐	1.000		48924.90		P	0.6
7	☐	1.000		48304.99		P	0.7
8	☐	1.000		48346.24		P	1.4
9	☐	1.000		48592.55		P	0.6

89 Y (ISTD) [No Gas]

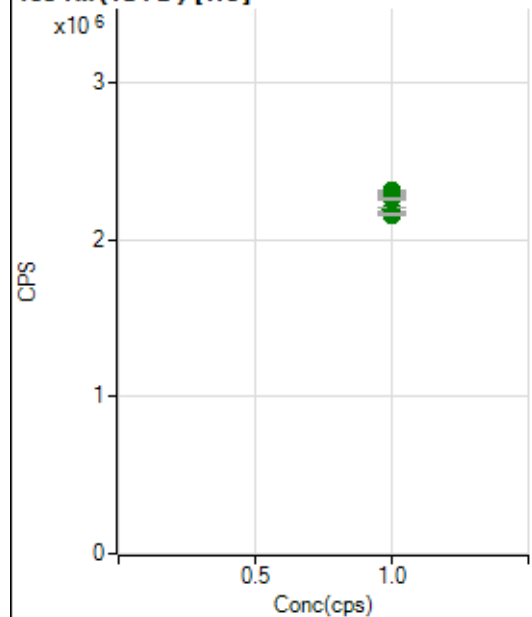
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		7157504.75		A	0.3
2	☐	1.000					
3	☐	1.000		7307095.93		A	0.5
4	☐	1.000		7408003.02		A	0.4
5	☐	1.000		7462010.17		A	0.7
6	☐	1.000		7550569.95		A	0.8
7	☐	1.000		7712710.58		A	0.9
8	☐	1.000		7758253.43		A	0.9
9	☐	1.000		7766711.13		A	0.4

89 Y (ISTD) [He]

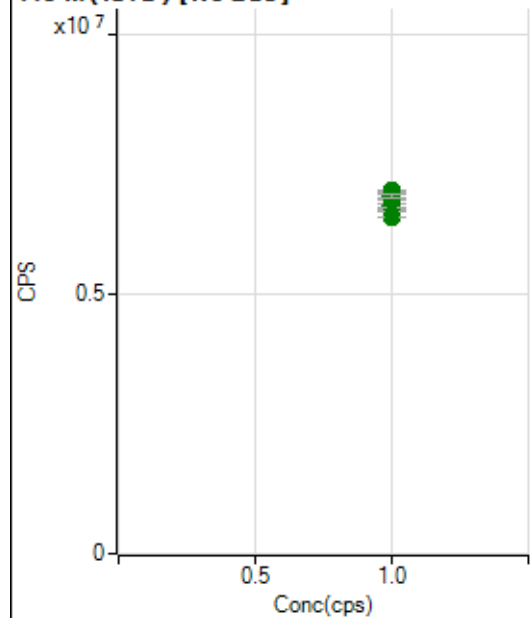
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		331878.60		P	0.4
2	☐	1.000					
3	☐	1.000		333547.38		P	0.5
4	☐	1.000		335815.05		P	0.2
5	☐	1.000		335608.88		P	0.3
6	☐	1.000		332958.12		P	0.7
7	☐	1.000		329393.00		P	0.1
8	☐	1.000		326525.20		P	0.4
9	☐	1.000		333335.94		P	0.3

103 Rh (ISTD) [No Gas]

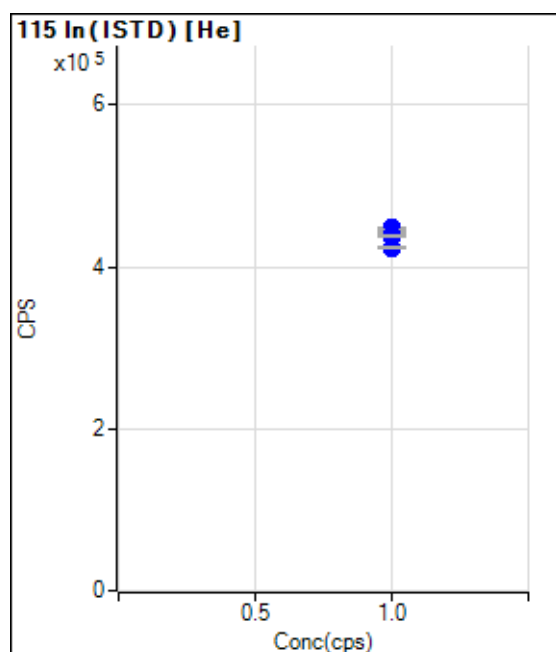
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		6366053.61		A	0.8
2	☐	1.000					
3	☐	1.000		6459129.09		A	0.3
4	☐	1.000		6473715.99		A	0.7
5	☐	1.000		6495491.20		A	0.3
6	☐	1.000		6578679.62		A	0.5
7	☐	1.000		6699476.19		A	0.8
8	☐	1.000		6614646.33		A	0.8
9	☐	1.000		6316903.79		A	0.8

103 Rh (ISTD) [He]

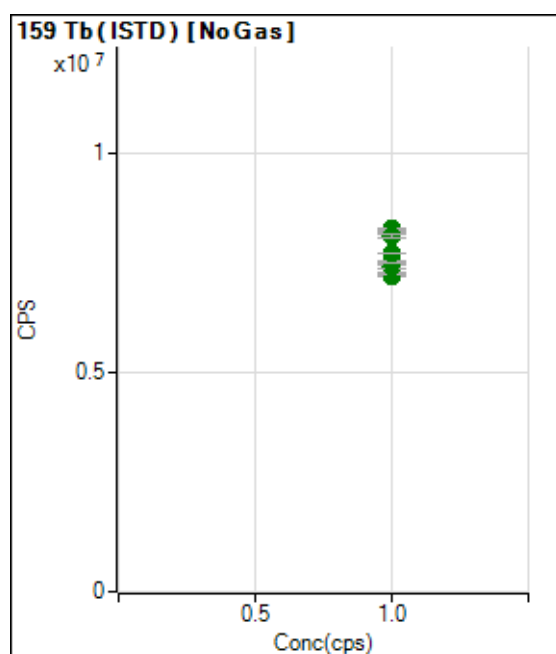
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2263322.52		A	1.0
2	☐	1.000					
3	☐	1.000		2312105.14		A	0.6
4	☐	1.000		2289805.02		A	0.4
5	☐	1.000		2288339.29		A	0.5
6	☐	1.000		2280689.76		A	0.1
7	☐	1.000		2263778.39		A	0.7
8	☐	1.000		2191912.54		A	1.1
9	☐	1.000		2162296.01		A	0.8

115 In (ISTD) [No Gas]

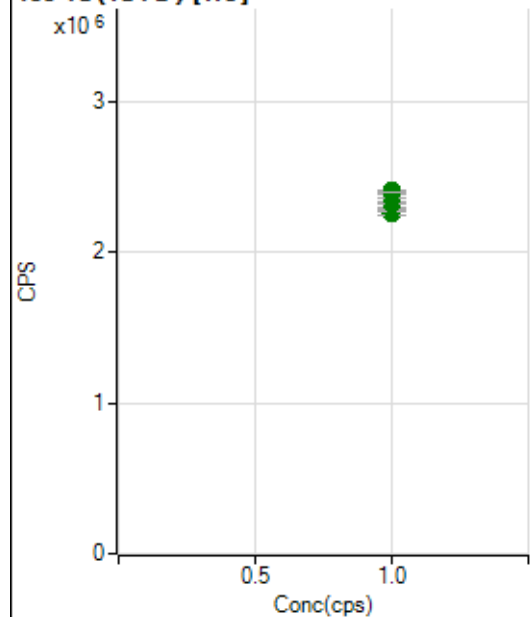
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		6481735.29		A	0.4
2	☐	1.000					
3	☐	1.000		6611707.05		A	0.2
4	☐	1.000		6592001.97		A	0.4
5	☐	1.000		6714309.56		A	1.1
6	☐	1.000		6819608.77		A	0.4
7	☐	1.000		6983436.12		A	0.7
8	☐	1.000		6931537.93		A	0.7
9	☐	1.000		6881951.15		A	0.7



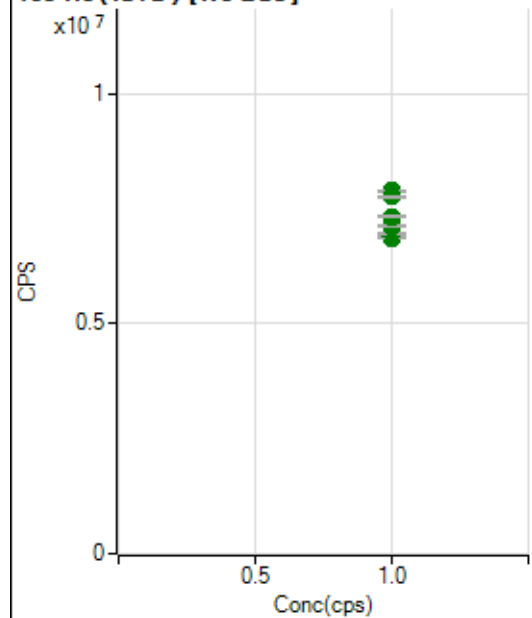
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		443077.68		P	0.7
2	☐	1.000					
3	☐	1.000		442552.26		P	0.4
4	☐	1.000		447968.71		P	0.3
5	☐	1.000		447482.16		P	0.2
6	☐	1.000		445084.34		P	0.5
7	☐	1.000		437768.03		P	0.5
8	☐	1.000		423722.14		P	0.5
9	☐	1.000		438461.12		P	0.7



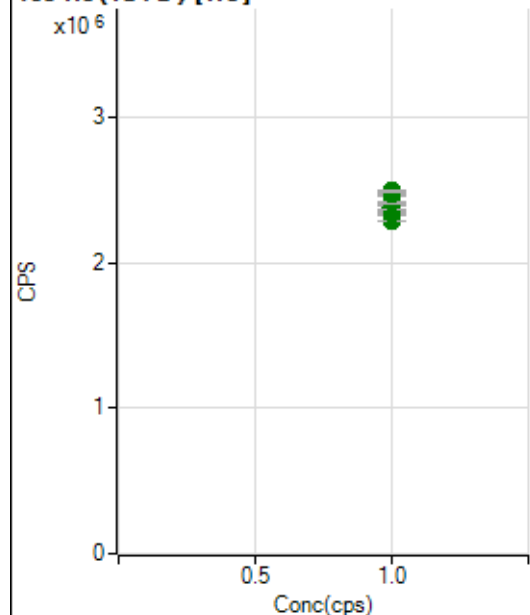
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		7183459.48		A	0.4
2	☐	1.000					
3	☐	1.000		7262294.27		A	0.3
4	☐	1.000		7411711.42		A	0.8
5	☐	1.000		7505627.60		A	0.7
6	☐	1.000		7715061.55		A	0.4
7	☐	1.000		8131132.24		A	1.4
8	☐	1.000		8271368.69		A	0.5
9	☐	1.000		8101045.71		A	1.1

159 Tb (ISTD) [He]

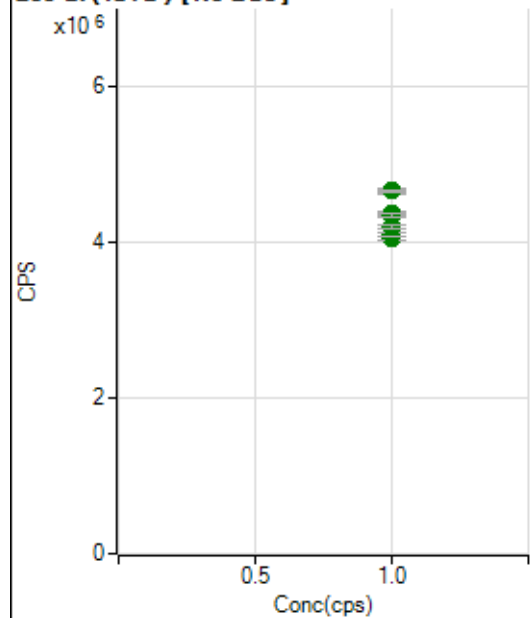
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2257353.63		A	1.5
2	☐	1.000					
3	☐	1.000		2281481.65		A	0.4
4	☐	1.000		2317555.07		A	1.5
5	☐	1.000		2323580.90		A	0.6
6	☐	1.000		2362311.09		A	0.4
7	☐	1.000		2394632.38		A	0.2
8	☐	1.000		2407326.21		A	0.6
9	☐	1.000		2398135.82		A	0.4

165 Ho (ISTD) [No Gas]

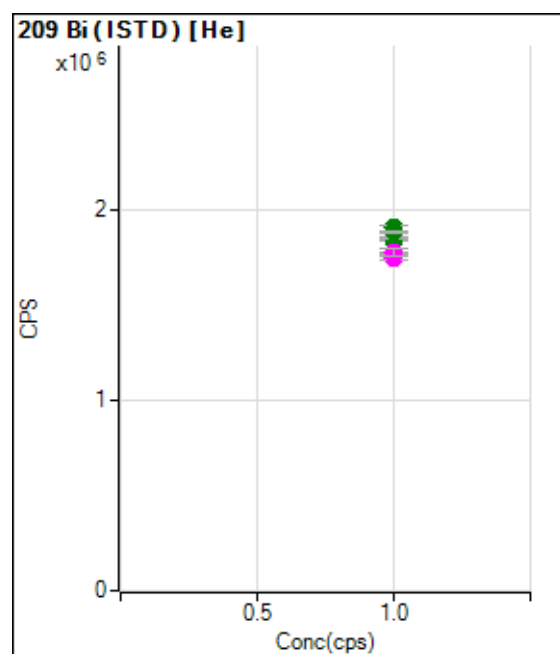
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		6849225.06		A	0.6
2	☐	1.000					
3	☐	1.000		6893213.70		A	1.0
4	☐	1.000		6960183.92		A	0.6
5	☐	1.000		7107066.13		A	0.4
6	☐	1.000		7318876.99		A	0.8
7	☐	1.000		7767590.62		A	0.4
8	☐	1.000		7877629.69		A	0.3
9	☐	1.000		7746781.34		A	0.2

165 Ho (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2291154.39		A	0.1
2	☐	1.000					
3	☐	1.000		2337688.31		A	0.7
4	☐	1.000		2353565.55		A	0.3
5	☐	1.000		2378959.51		A	0.9
6	☐	1.000		2413615.43		A	0.3
7	☐	1.000		2469156.11		A	1.0
8	☐	1.000		2471238.92		A	0.3
9	☐	1.000		2494601.47		A	0.7

209 Bi (ISTD) [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		4051568.83		A	1.2
2	☐	1.000					
3	☐	1.000		4062377.06		A	1.4
4	☐	1.000		4115728.13		A	1.1
5	☐	1.000		4200725.04		A	0.9
6	☐	1.000		4386077.88		A	1.0
7	☐	1.000		4667774.97		A	1.5
8	☐	1.000		4664425.91		A	0.7
9	☐	1.000		4354996.29		A	1.2



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1750130.46		M	1.9
2	☐	1.000					
3	☐	1.000		1758340.17		M	2.3
4	☐	1.000		1768944.54		M	0.6
5	☐	1.000		1839681.28		A	0.3
6	☐	1.000		1846958.43		A	0.5
7	☐	1.000		1904100.68		A	1.4
8	☐	1.000		1882796.05		A	0.9
9	☐	1.000		1776881.24		M	1.9

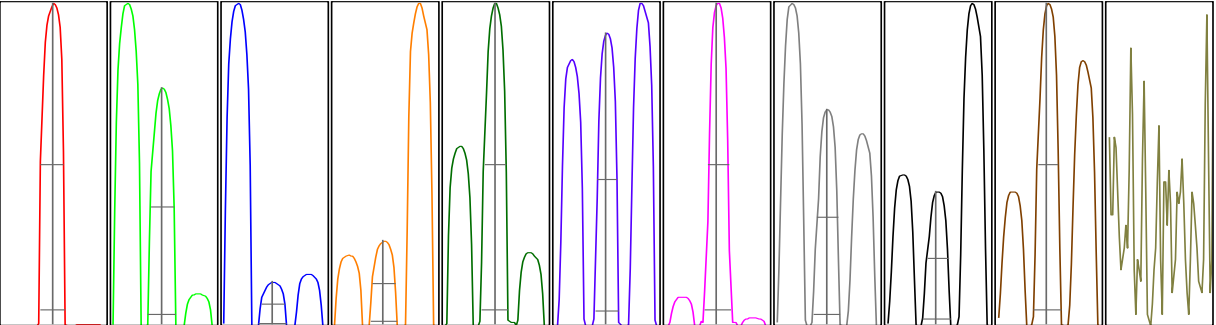
US EPA Tune Check Sample Report

Batch Folder D:\P8080217.b
Report Comment
Instrument Name G8403A JP17141814

[No Gas]				
Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
9	7192	0.77	5.00	
24	46515	0.63	5.00	
25	6329	0.73	5.00	
26	7283	0.62	5.00	
59	87290	1.37	5.00	
113	10483	0.78	5.00	
115	129529	1.30	5.00	
206	23289	0.96	5.00	
207	21021	0.38	5.00	
208	50308	0.66	5.00	
220	1	19.00		

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
9	7259	7243	7177	7138	7145
24	46958	46650	46417	46289	46262
25	6399	6310	6351	6288	6297
26	7326	7321	7300	7234	7235
59	86261	88215	88783	87147	86045
113	10414	10589	10481	10535	10394
115	128307	129921	127372	131529	130514
206	23131	23242	23217	23175	23680
207	20946	21060	21109	20925	21063
208	50634	50637	49985	50331	49952
220	1	1	1	2	1

Integration Time [sec] = 0.1



Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	Width-X% (Actual)	Width-X% (Required)	Width- X% (Flag)
9	11426	9.00	8.9 - 9.1		0.741	0.900	
24	72826	23.95	23.9 - 24.1		0.789	0.900	
25	9824	24.95	24.9 - 25.1		0.789	0.900	
26	11709	25.95	25.9 - 26.1		0.785	0.900	
59	142121	59.00	58.9 - 59.1		0.786	0.900	
113	18650	113.00	112.9 - 113.1		0.693	0.900	
115	230166	115.00	114.9 - 115.1		0.770	0.900	
206	40548	206.00	205.9 - 206.1		0.781	0.900	
207	36022	206.95	206.9 - 207.1		0.798	0.900	
208	86531	207.95	207.9 - 208.1		0.784	0.900	
220			-				

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

Tune Parameters

Plasma Paramters

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

Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	10.3	V	Deflect	13.8	V
Extract 2	-250.0	V	Cell Entrance	-30	V	Plate Bias	-35	V
Omega Bias	-110	V	Cell Exit	-50	V			

Cell Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Use Gas	No		OctP Bias	-8.0	V	Energy Discrimination	5.0	V
He Flow	0.0	mL/min	OctP RF	200	V			

[He]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)
59	13360	0.67	
89	3714	0.21	
205	17484	0.66	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
59	13475	13411	13363	13314	13240
89	3720	3704	3716	3710	3723
205	17646	17514	17429	17497	17334

Integration Time [sec] = 0.1

Tune Parameters

Plasma Paramters

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

Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	10.3	V	Deflect	2.0	V
Extract 2	-250.0	V	Cell Entrance	-40	V	Plate Bias	-60	V
Omega Bias	-110	V	Cell Exit	-60	V			

Cell Parameters

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