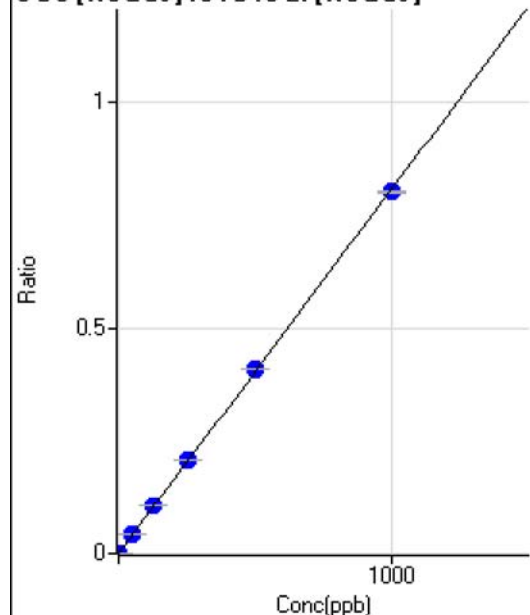


Batch Folder: D:\ICP-MS Data\P7072618MS.b\
Analysis File: P7072618MS.batch.bin
DA Date-Time: 2018-07-26 23:56:58
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	003CALB.d	S00	2018-07-26 12:23:40
2			
3	005CALS.d	S02	2018-07-26 12:31:56
4	006CALS.d	S03	2018-07-26 12:35:48
5	007CALS.d	S04	2018-07-26 12:39:53
6	008CALS.d	S05	2018-07-26 12:43:40
7	009CALS.d	S06	2018-07-26 12:47:25
8	010CALS.d	S07	2018-07-26 12:51:09
9	011CALS.d	S08	2018-07-26 12:54:52

9 Be [NoGas] ISTD:6 Li [NoGas]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	38.89	0.0000	P	28.3
2	☐	0.100					
3	☐	1.000	1.033	2722.53	0.0008	P	3.6
4	☐	50.000	51.896	135426.27	0.0419	P	1.2
5	☐	125.000	130.500	335048.02	0.1055	P	0.4
6	☐	250.000	259.576	650901.01	0.2098	P	0.7
7	☐	500.000	505.777	1253629.81	0.4087	P	0.6
8	☐	1000.000	993.935	2407702.31	0.8031	P	0.7
9	☐			631.51	0.0002	P	8.3

$$y = 8.0801\text{E-}004 * x + 1.1384\text{E-}005$$

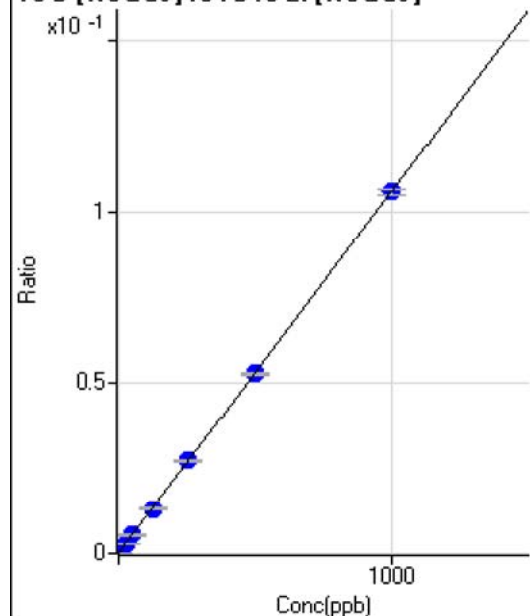
$$R = 0.9999$$

$$DL = 0.01194$$

$$BEC = 0.01409$$

Weight: <None>

Min Conc: 0

10 B [NoGas] ISTD:6 Li [NoGas]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	286.13	0.0001	P	19.2
2	☐	2.500					
3	☐	25.000	24.042	8469.36	0.0026	P	5.4
4	☐	50.000	49.625	17249.46	0.0053	P	3.6
5	☐	125.000	123.430	41817.25	0.0132	P	1.8
6	☐	250.000	256.656	84648.75	0.0273	P	1.2
7	☐	500.000	496.416	161614.12	0.0527	P	0.9
8	☐	1000.000	1000.367	318027.85	0.1061	P	1.7
9	☐			12811.51	0.0045	P	12.9

$$y = 1.0596\text{E-}004 * x + 8.3794\text{E-}005$$

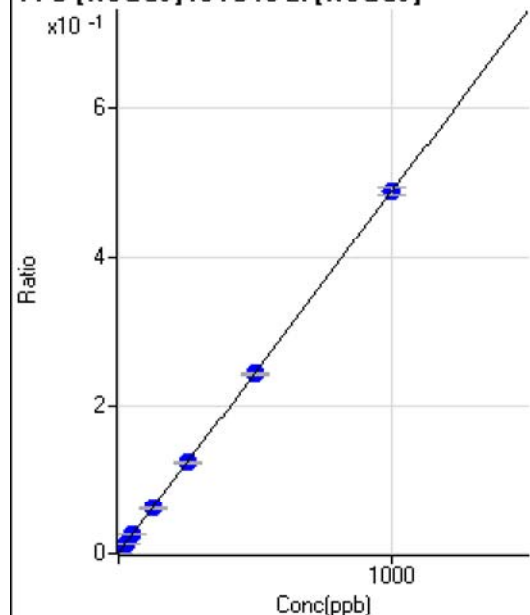
$$R = 1.0000$$

$$DL = 0.4552$$

$$BEC = 0.7908$$

Weight: <None>

Min Conc: 0

11 B [NoGas] ISTD: 6 Li [NoGas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	1316.78	0.0004	P	5.7
2	☐	2.500					
3	☐	25.000	24.526	39769.81	0.0124	P	2.3
4	☐	50.000	50.241	80422.58	0.0249	P	1.9
5	☐	125.000	124.306	193995.20	0.0611	P	1.0
6	☐	250.000	251.989	382865.60	0.1234	P	1.3
7	☐	500.000	497.635	746274.79	0.2433	P	1.3
8	☐	1000.000	1000.772	1465542.51	0.4889	P	2.2
9	☐			58335.89	0.0205	P	9.8

$$y = 4.8810\text{E-}004 * x + 3.8566\text{E-}004$$

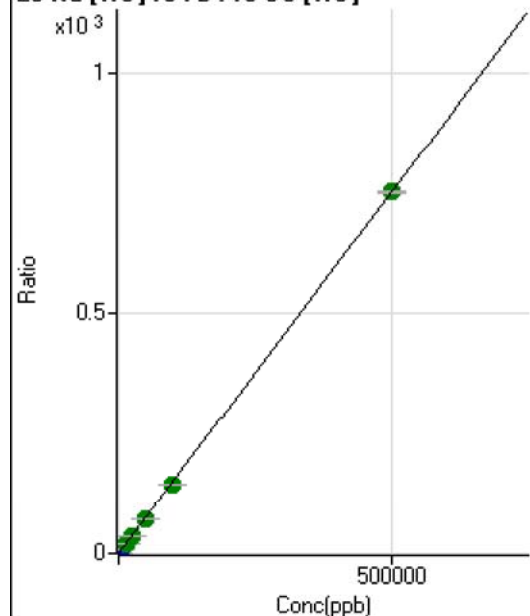
$$R = 1.0000$$

$$DL = 0.1351$$

$$BEC = 0.7901$$

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	11307.51	0.0331	P	3.4
2	☐	50.000					
3	☐	500.000	494.100	266563.04	0.7758	P	0.7
4	☐	5000.000	4907.502	2544403.48	7.4099	P	1.1
5	☐	12500.000	12191.238	6189209.25	18.3587	A	0.3
6	☐	25000.000	24323.321	12158136.21	36.5953	A	0.6
7	☐	50000.000	48274.999	24441918.95	72.5989	A	0.7
8	☐	100000.00	95212.357	48274947.26	143.1539	A	0.3
9	☐	500000.00	501172.51	257271558.5	753.3831	A	0.9

$$y = 0.0015 * x + 0.0331$$

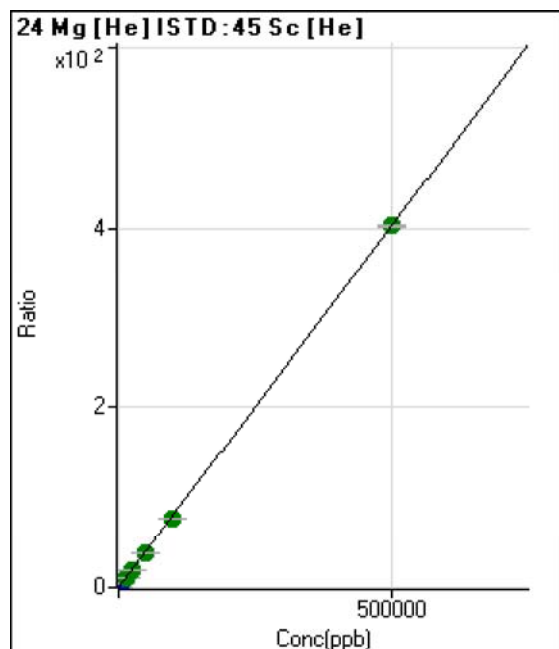
$$R = 0.9999$$

$$DL = 2.222$$

$$BEC = 22.01$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	150.01	0.0004	P	20.4
2	☐	50.000					
3	☐	500.000	491.927	136354.15	0.3968	P	0.8
4	☐	5000.000	5018.188	1388745.79	4.0442	P	0.3
5	☐	12500.000	12495.551	3394740.31	10.0696	A	0.4
6	☐	25000.000	24816.330	6644143.25	19.9980	A	0.2
7	☐	50000.000	48899.296	13266364.79	39.4046	A	0.7
8	☐	100000.00	96559.178	26239459.26	77.8101	A	0.2
9	☐	500000.00	500807.35	137811805.8	403.5628	A	0.9

$$y = 8.0582\text{E-}004 * x + 4.3922\text{E-}004$$

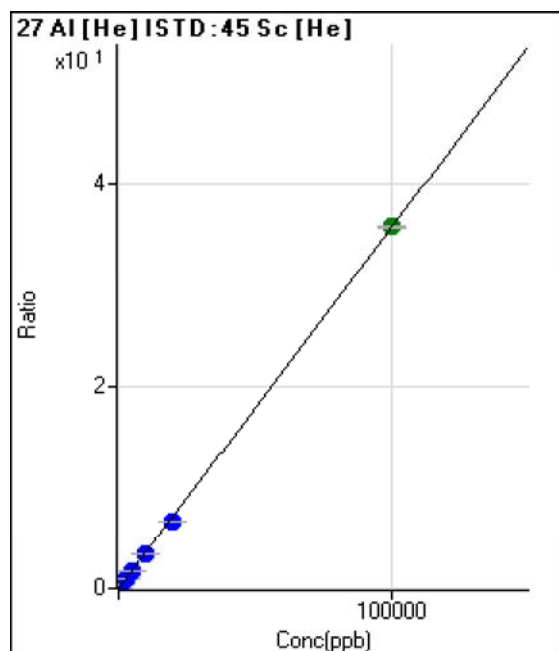
$$R = 1.0000$$

$$DL = 0.3333$$

$$BEC = 0.5451$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	66.67	0.0002	P	33.4
2	☐	2.000					
3	☐	20.000	20.382	2564.22	0.0075	P	3.2
4	☐	1000.000	987.056	120932.87	0.3522	P	0.4
5	☐	2500.000	2435.606	292854.81	0.8687	P	0.7
6	☐	5000.000	4844.655	573995.56	1.7277	P	0.7
7	☐	10000.000	9559.343	1147670.75	3.4089	P	0.3
8	☐	20000.000	18660.476	2243905.93	6.6542	P	0.5
9	☐	100000.00	100321.47	12216027.01	35.7729	A	0.9

$$y = 3.5658\text{E-}004 * x + 1.9526\text{E-}004$$

$$R = 0.9999$$

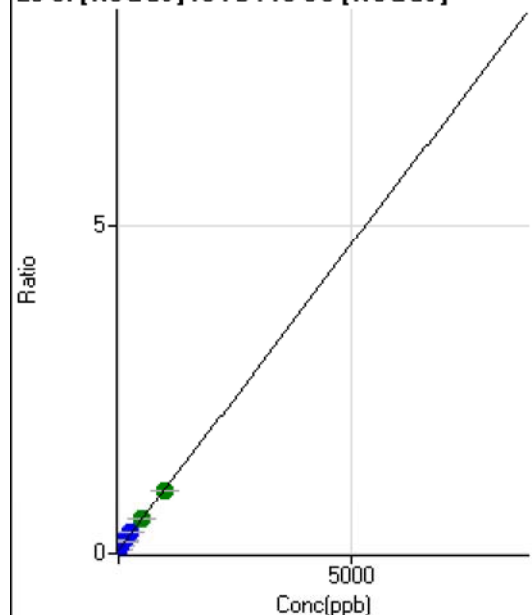
$$DL = 0.5492$$

$$BEC = 0.5476$$

Weight: <None>

Min Conc: 0

28 Si [NoGas] ISTD:45 Sc [NoGas]



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	371063.90	0.0479	P	0.3
2	☐	1.000					
3	☐	10.000	20.213	491323.21	0.0668	P	1.3
4	☐	50.000	63.330	793315.86	0.1071	P	0.5
5	☐	125.000	153.936	1399025.02	0.1917	P	1.2
6	☐	250.000	295.543	2335865.22	0.3241	P	0.2
7	☐	500.000	512.226	3816679.69	0.5267	A	0.8
8	☐	1000.000	978.116	6978842.26	0.9622	A	1.1
9	☐			815092.37	0.1157	P	1.9

$$y = 9.3475\text{E-}004 * x + 0.0479$$

$$R = 0.9987$$

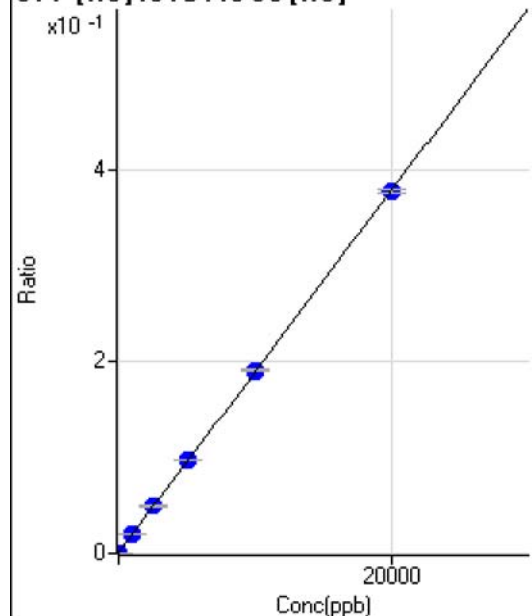
$$DL = 0.4255$$

$$BEC = 51.2$$

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	-2.663	225.01	0.0007	P	13.4
2	☐	0.000					
3	☐	0.000	2.663	261.13	0.0008	P	30.5
4	☐	1000.000	1015.125	6846.28	0.0199	P	3.7
5	☐	2500.000	2592.883	16796.11	0.0498	P	3.3
6	☐	5000.000	5146.621	32625.61	0.0982	P	0.5
7	☐	10000.000	10039.764	64266.58	0.1909	P	1.1
8	☐	20000.000	19931.096	127550.05	0.3783	P	1.1
9	☐			338.91	0.0010	P	9.8

$$y = 1.8942\text{E-}005 * x + 7.0891\text{E-}004$$

$$R = 1.0000$$

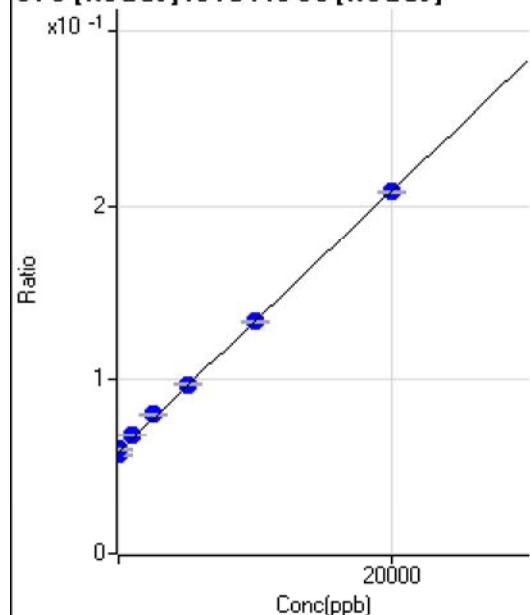
$$DL = 25.33$$

$$BEC = 37.42$$

Weight: <None>

Min Conc: 0

34 S [NoGas] ISTD:45 Sc [NoGas]



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	-217.688	441958.28	0.0570	P	0.6
2	☐	0.000					
3	☐	0.000	217.688	443651.46	0.0603	P	0.4
4	☐	1000.000	1306.678	507240.47	0.0685	P	1.0
5	☐	2500.000	2858.753	584540.78	0.0801	P	0.3
6	☐	5000.000	5191.829	703668.14	0.0976	P	0.9
7	☐	10000.000	9912.718	964632.93	0.1331	P	0.4
8	☐	20000.000	19935.506	1511627.72	0.2084	P	0.5
9	☐			379935.47	0.0539	P	1.9

$$y = 7.5126E-006 * x + 0.0586$$

$$R = 0.9996$$

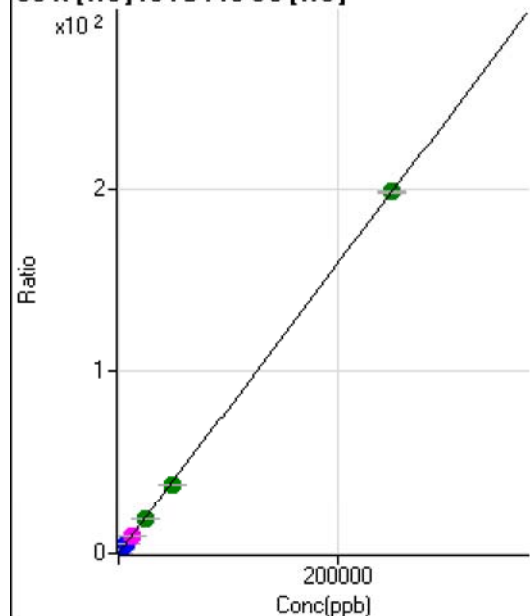
$$DL = 114.9$$

$$BEC = 7805$$

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	29471.97	0.0862	P	1.4
2	☐	50.000					
3	☐	500.000	485.220	161716.57	0.4707	P	0.3
4	☐	2500.000	2420.559	688124.66	2.0040	P	0.8
5	☐	6250.000	6055.687	1646517.75	4.8839	P	0.1
6	☐	12500.000	11944.789	3172679.02	9.5496	M	0.6
7	☐	25000.000	23815.678	6381446.24	18.9545	A	0.1
8	☐	50000.000	47354.416	12680491.26	37.6033	A	0.5
9	☐	250000.00	250680.99	67850516.80	198.6909	A	0.7

$$y = 7.9226E-004 * x + 0.0862$$

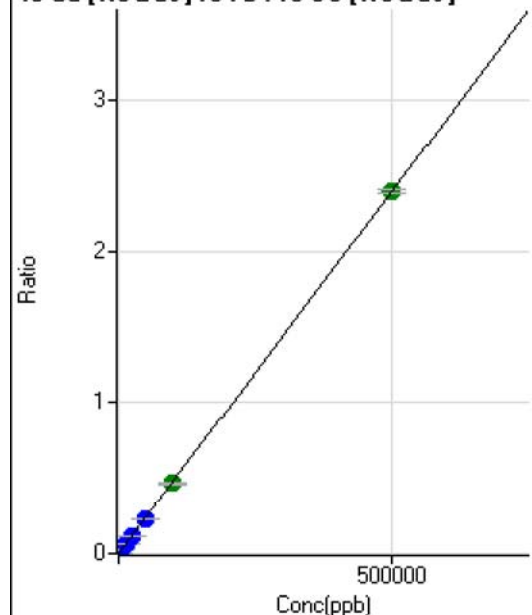
$$R = 0.9999$$

$$DL = 4.714$$

$$BEC = 108.9$$

Weight: <None>

Min Conc: 0

43 Ca [NoGas] ISTD:45 Sc [NoGas]

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	383.36	0.0000	P	16.7
2	☐	50.000					
3	☐	500.000	476.688	17168.92	0.0023	P	1.2
4	☐	5000.000	4894.141	174046.50	0.0235	P	1.3
5	☐	12500.000	12386.109	433141.86	0.0594	P	1.1
6	☐	25000.000	24694.417	852626.11	0.1183	P	0.6
7	☐	50000.000	48573.258	1686079.08	0.2327	P	0.9
8	☐	100000.00	96958.354	3368271.21	0.4644	A	0.4
9	☐	500000.00	500770.21	16894797.08	2.3982	A	0.9

$$y = 4.7889\text{E-}006 * x + 4.9458\text{E-}005$$

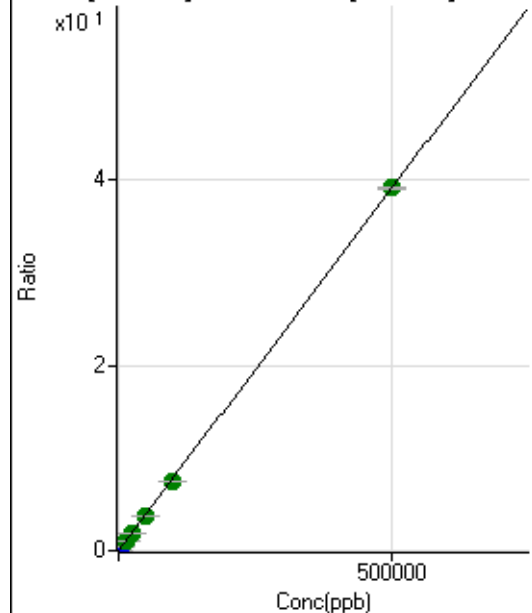
$$R = 1.0000$$

$$DL = 5.169$$

$$BEC = 10.33$$

Weight: <None>

Min Conc: 0

44 Ca [NoGas] ISTD:45 Sc [NoGas]

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	12400.49	0.0016	P	2.3
2	☐	50.000					
3	☐	500.000	472.799	283668.97	0.0385	P	0.4
4	☐	5000.000	4816.016	2799967.92	0.3778	P	0.4
5	☐	12500.000	12203.229	6967718.99	0.9550	A	0.6
6	☐	25000.000	24367.044	13730656.56	1.9052	A	0.4
7	☐	50000.000	48311.882	27364029.78	3.7759	A	0.5
8	☐	100000.00	96447.011	54663831.08	7.5363	A	0.1
9	☐	500000.00	500920.34	275705608.9	39.1351	A	0.3

$$y = 7.8123\text{E-}005 * x + 0.0016$$

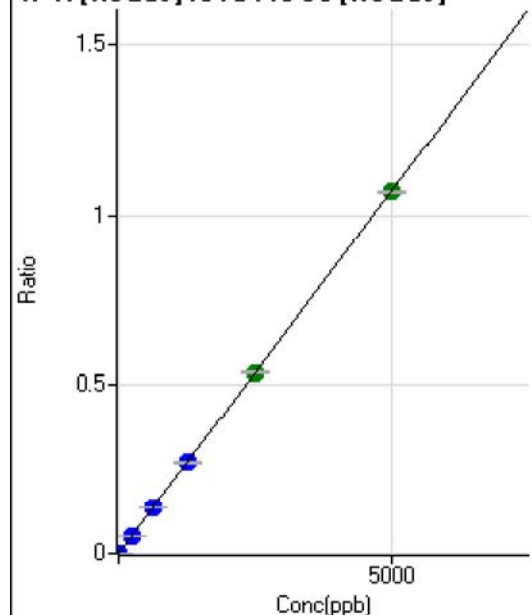
$$R = 1.0000$$

$$DL = 1.407$$

$$BEC = 20.47$$

Weight: <None>

Min Conc: 0

47 Ti [NoGas] ISTD : 45 Sc [NoGas]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	113.89	0.0000	P	36.3
2	☐	0.500					
3	☐	5.000	5.320	8491.67	0.0012	P	3.8
4	☐	250.000	250.187	396947.50	0.0536	P	0.4
5	☐	625.000	633.413	989299.43	0.1356	P	0.9
6	☐	1250.000	1258.463	1941345.96	0.2694	P	0.4
7	☐	2500.000	2500.926	3879386.37	0.5353	A	0.4
8	☐	5000.000	4996.360	7756949.57	1.0694	A	0.6
9	☐			4687.03	0.0007	P	6.4

$$y = 2.1404\text{E-}004 * x + 1.4700\text{E-}005$$

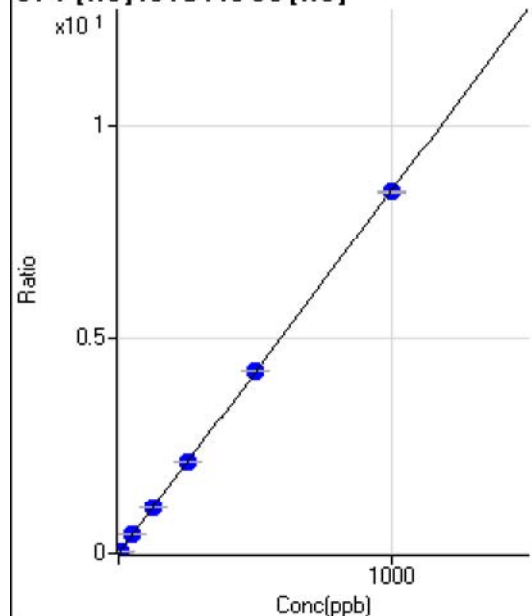
$$R = 1.0000$$

$$DL = 0.07482$$

$$BEC = 0.06868$$

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	4.44	0.0000	P	42.9
2	☐	0.500					
3	☐	5.000	4.964	14462.81	0.0421	P	1.6
4	☐	50.000	50.351	146585.41	0.4269	P	0.4
5	☐	125.000	126.002	360117.82	1.0682	P	0.6
6	☐	250.000	253.503	714005.18	2.1491	P	0.4
7	☐	500.000	502.819	1435133.26	4.2627	P	0.3
8	☐	1000.000	997.572	2851883.74	8.4570	P	0.4
9	☐			1205.63	0.0035	P	6.2

$$y = 0.0085 * x + 1.2986\text{E-}005$$

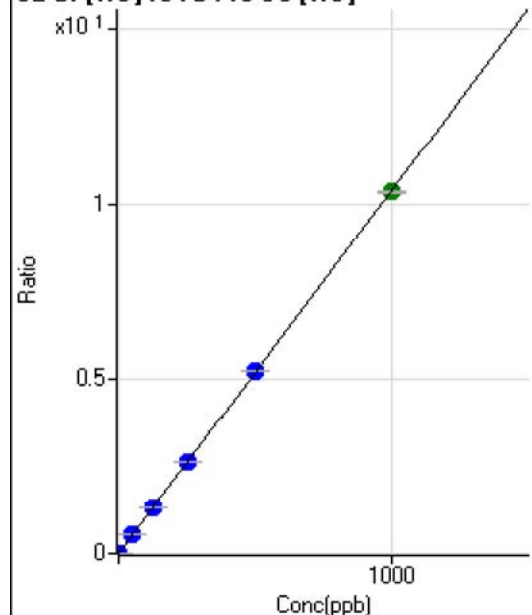
$$R = 1.0000$$

$$DL = 0.001971$$

$$BEC = 0.001532$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	638.91	0.0019	P	3.9
2	☐	0.200					
3	☐	2.000	2.154	8320.27	0.0242	P	3.6
4	☐	50.000	51.200	183042.00	0.5330	P	0.3
5	☐	125.000	127.437	446327.45	1.3239	P	0.6
6	☐	250.000	254.100	876427.34	2.6379	P	0.3
7	☐	500.000	501.306	1751541.17	5.2025	P	0.4
8	☐	1000.000	997.957	3491888.32	10.3549	A	0.4
9	☐			128644.04	0.3767	P	0.3

$$y = 0.0104 * x + 0.0019$$

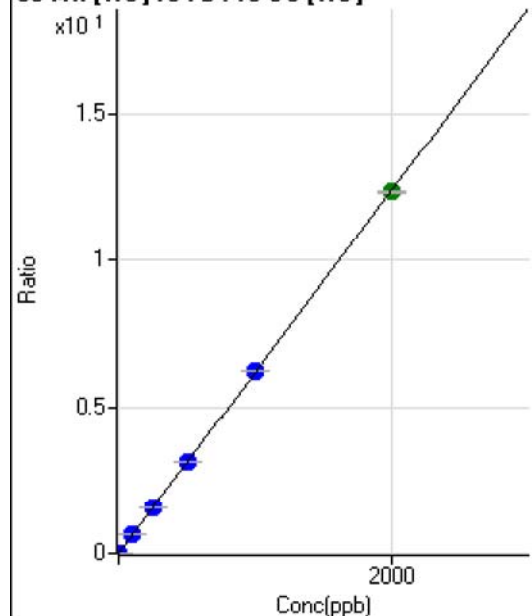
$$R = 1.0000$$

$$DL = 0.02123$$

$$BEC = 0.1802$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	80.00	0.0002	P	15.3
2	☐	0.100					
3	☐	1.000	1.103	2422.46	0.0071	P	0.7
4	☐	100.000	102.021	216618.11	0.6308	P	0.5
5	☐	250.000	256.208	533947.87	1.5838	P	0.2
6	☐	500.000	508.420	1044102.03	3.1427	P	0.5
7	☐	1000.000	1003.711	2088698.93	6.2040	P	0.8
8	☐	2000.000	1995.162	4158588.27	12.3320	A	0.4
9	☐			21230.00	0.0622	P	0.9

$$y = 0.0062 * x + 2.3417E-004$$

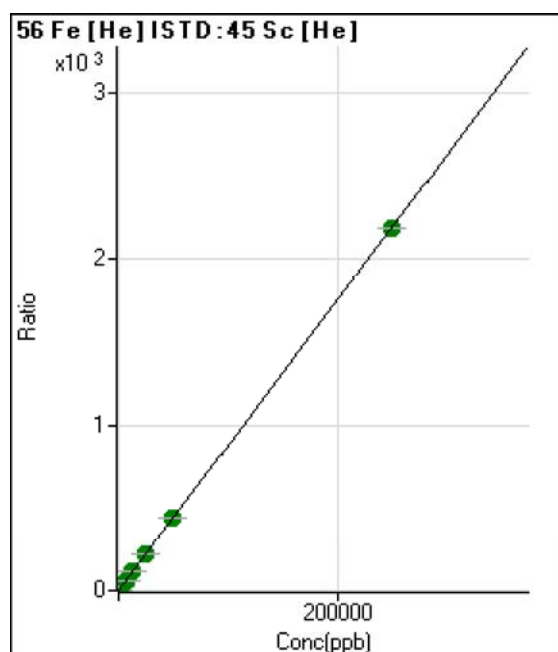
$$R = 1.0000$$

$$DL = 0.01734$$

$$BEC = 0.03789$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	4863.93	0.0142	P	7.3
2	☐	5.000					
3	☐	50.000	52.378	162458.77	0.4728	P	0.1
4	☐	2500.000	2580.486	7763224.19	22.6076	A	0.3
5	☐	6250.000	6499.903	19190531.21	56.9239	A	0.5
6	☐	12500.000	12883.988	37482453.62	112.8196	A	0.4
7	☐	25000.000	25614.093	75507899.83	224.2776	A	0.4
8	☐	50000.000	50822.953	150059870.0	444.9929	A	0.4
9	☐	250000.00	249747.74	746714809.2	2,186.672	A	0.2

$$y = 0.0088 * x + 0.0142$$

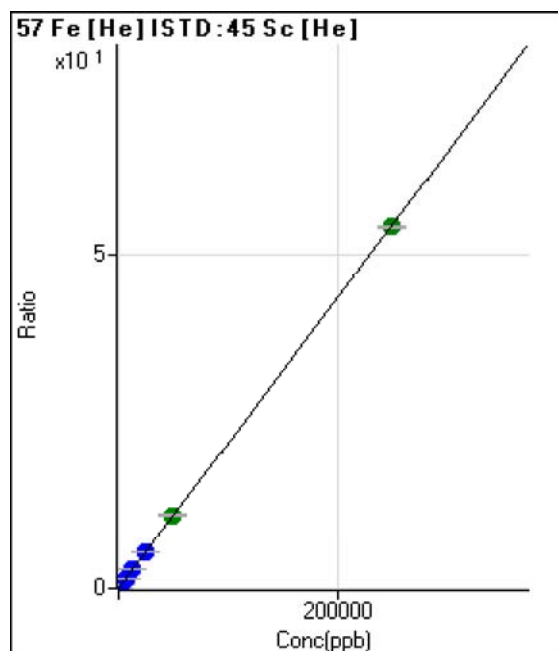
$$R = 1.0000$$

$$DL = 0.3583$$

$$BEC = 1.625$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	272.23	0.0008	P	11.1
2	☐	5.000					
3	☐	50.000	54.391	4322.99	0.0126	P	8.0
4	☐	2500.000	2598.820	193654.05	0.5639	P	0.1
5	☐	6250.000	6483.223	473887.70	1.4057	P	0.3
6	☐	12500.000	12926.883	930894.88	2.8020	P	0.7
7	☐	25000.000	25493.165	1860102.24	5.5250	P	0.4
8	☐	50000.000	50906.563	3720180.70	11.0319	A	0.3
9	☐	250000.00	249741.20	18480502.73	54.1179	A	0.4

$$y = 2.1669E-004 * x + 7.9649E-004$$

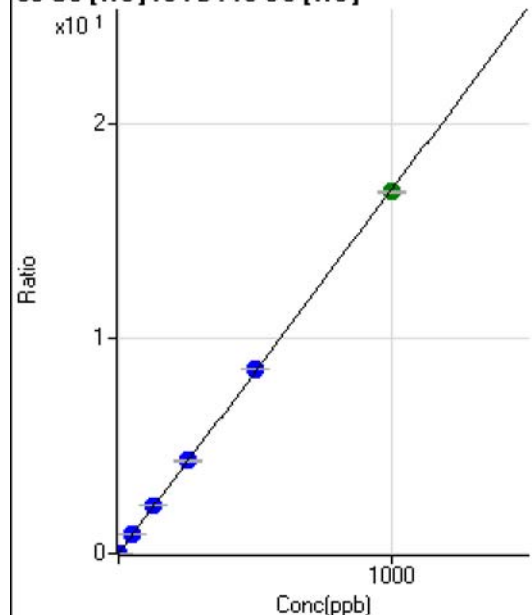
$$R = 1.0000$$

$$DL = 1.22$$

$$BEC = 3.676$$

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	51.11	0.0001	P	30.5
2	☐	0.100					
3	☐	1.000	1.052	6168.06	0.0180	P	1.1
4	☐	50.000	52.126	302959.07	0.8822	P	0.1
5	☐	125.000	129.518	738954.22	2.1919	P	0.1
6	☐	250.000	256.595	1442639.70	4.3423	P	0.9
7	☐	500.000	504.750	2875742.28	8.5417	P	0.3
8	☐	1000.000	995.305	5679883.39	16.8430	A	0.2
9	☐			70068.65	0.2052	P	0.6

$$y = 0.0169 * x + 1.4970E-004$$

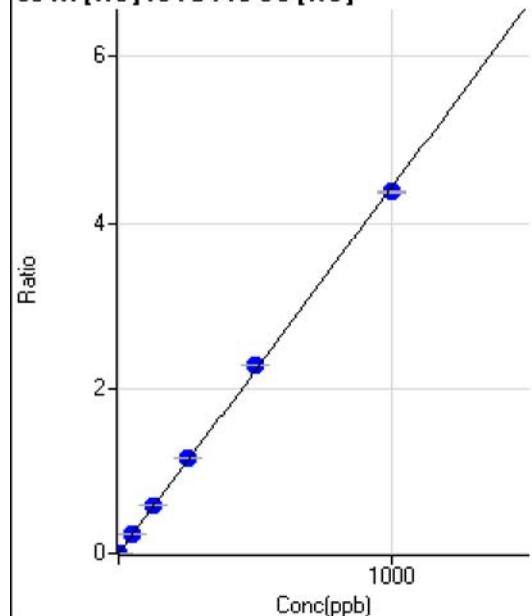
$$R = 1.0000$$

$$DL = 0.008087$$

$$BEC = 0.008847$$

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	43.34	0.0001	P	35.3
2	☐	0.100					
3	☐	1.000	1.129	1761.25	0.0051	P	5.4
4	☐	50.000	52.930	80502.95	0.2344	P	0.4
5	☐	125.000	132.421	197666.15	0.5863	P	0.4
6	☐	250.000	261.269	384293.46	1.1567	P	0.7
7	☐	500.000	513.875	765906.34	2.2749	P	0.7
8	☐	1000.000	989.171	1476654.25	4.3790	P	0.9
9	☐			45714.47	0.1339	P	1.0

$$y = 0.0044 * x + 1.2682E-004$$

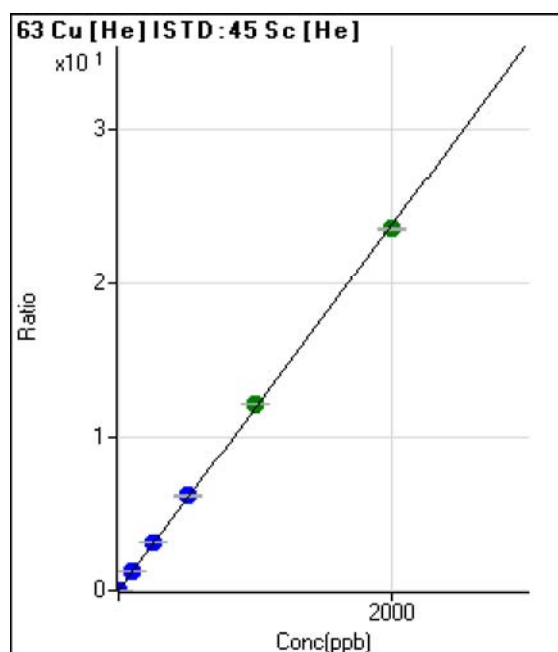
$$R = 0.9998$$

$$DL = 0.03036$$

$$BEC = 0.02865$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1526.77	0.0045	P	5.8
2	☐	0.200					
3	☐	2.000	2.149	10329.82	0.0301	P	2.3
4	☐	100.000	105.493	432918.24	1.2607	P	0.2
5	☐	250.000	263.592	1059733.79	3.1434	P	0.5
6	☐	500.000	520.216	2059611.48	6.1994	P	0.9
7	☐	1000.000	1019.153	4087526.68	12.1410	A	0.2
8	☐	2000.000	1983.396	7966304.74	23.6235	A	0.4
9	☐			19328.47	0.0566	P	1.9

$$y = 0.0119 * x + 0.0045$$

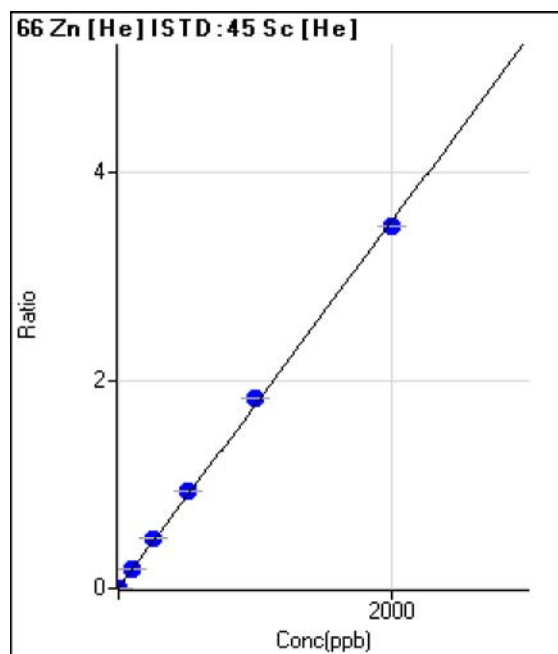
$$R = 0.9999$$

$$DL = 0.06503$$

$$BEC = 0.3753$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	812.26	0.0024	P	7.6
2	☐	0.200					
3	☐	2.000	1.711	1854.60	0.0054	P	1.3
4	☐	100.000	106.909	65622.25	0.1911	P	0.4
5	☐	250.000	269.719	161315.45	0.4785	P	1.1
6	☐	500.000	529.776	311494.64	0.9376	P	0.8
7	☐	1000.000	1033.992	615330.12	1.8277	P	0.4
8	☐	2000.000	1972.750	1175176.49	3.4849	P	0.0
9	☐			8015.66	0.0235	P	1.1

$$y = 0.0018 * x + 0.0024$$

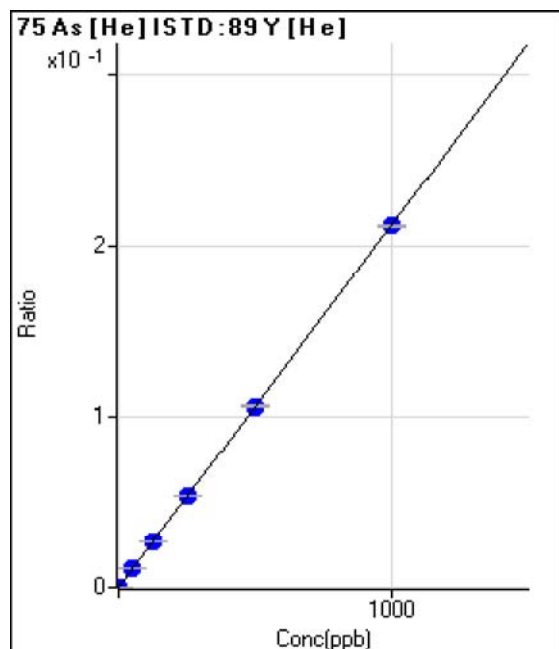
$$R = 0.9996$$

$$DL = 0.3061$$

$$BEC = 1.347$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	3.70	0.0000	P	86.9
2	☐	0.100					
3	☐	1.000	1.025	430.26	0.0002	P	13.9
4	☐	50.000	51.180	21422.02	0.0109	P	0.8
5	☐	125.000	127.822	52457.71	0.0271	P	0.9
6	☐	250.000	252.720	103436.55	0.0536	P	0.7
7	☐	500.000	499.360	207656.36	0.1059	P	0.5
8	☐	1000.000	999.228	409775.05	0.2118	P	0.4
9	☐			686.44	0.0004	P	5.2

$$y = 2.1199\text{E-}004 * x + 1.9067\text{E-}006$$

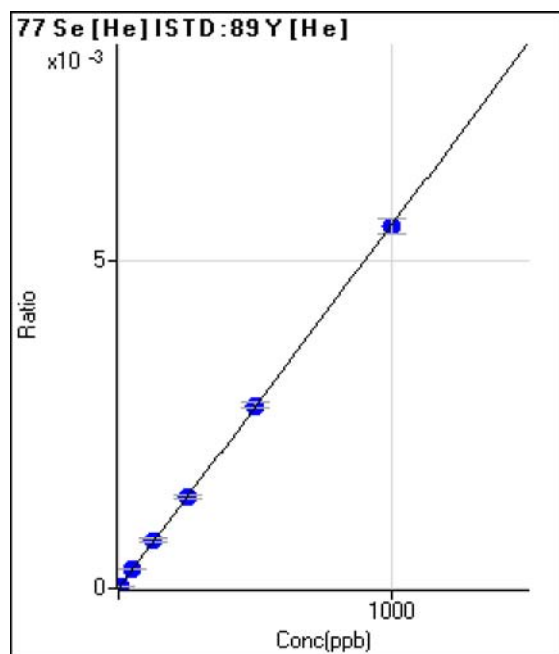
$$R = 1.0000$$

$$DL = 0.02344$$

$$BEC = 0.008994$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	0.00	0.0000	P	
2	☐	0.500					
3	☐	5.000	5.220	56.67	0.0000	P	15.7
4	☐	50.000	52.752	575.58	0.0003	P	9.7
5	☐	125.000	131.760	1410.09	0.0007	P	7.2
6	☐	250.000	252.943	2699.18	0.0014	P	3.8
7	☐	500.000	504.110	5466.67	0.0028	P	3.1
8	☐	1000.000	996.225	10651.84	0.0055	P	4.3
9	☐			5.56	0.0000	P	34.4

$$y = 5.5276\text{E-}006 * x + 0.0000\text{E+}000$$

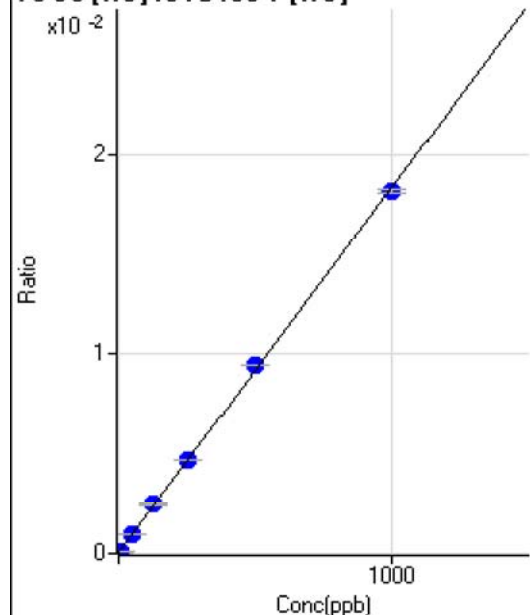
$$R = 1.0000$$

$$DL = 0$$

$$BEC = 0$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	92.59	0.0000	P	29.6
2	☐	0.500					
3	☐	5.000	4.705	262.35	0.0001	P	4.0
4	☐	50.000	51.906	1965.58	0.0010	P	1.8
5	☐	125.000	133.926	4828.01	0.0025	P	3.5
6	☐	250.000	255.912	9116.52	0.0047	P	0.2
7	☐	500.000	513.991	18508.77	0.0094	P	0.5
8	☐	1000.000	990.317	35081.88	0.0181	P	1.2
9	☐			99.38	0.0001	P	21.7

$$y = 1.8265E-005 * x + 4.7629E-005$$

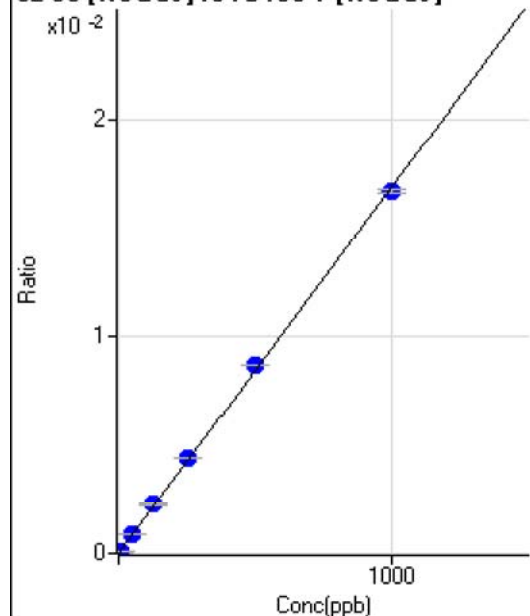
$$R = 0.9998$$

$$DL = 2.312$$

$$BEC = 2.608$$

Weight: <None>

Min Conc: 0

82 Se [NoGas] ISTD:89 Y [NoGas]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	103.91	0.0000	P	50.4
2	☐	0.500					
3	☐	5.000	5.060	1155.11	0.0001	P	5.1
4	☐	50.000	52.408	11125.13	0.0009	P	0.6
5	☐	125.000	133.597	28116.43	0.0023	P	0.5
6	☐	250.000	262.819	54822.41	0.0044	P	0.3
7	☐	500.000	512.476	107881.36	0.0087	P	0.5
8	☐	1000.000	989.362	209425.03	0.0167	P	1.2
9	☐			299.31	0.0000	P	15.3

$$y = 1.6891E-005 * x + 7.9978E-006$$

$$R = 0.9998$$

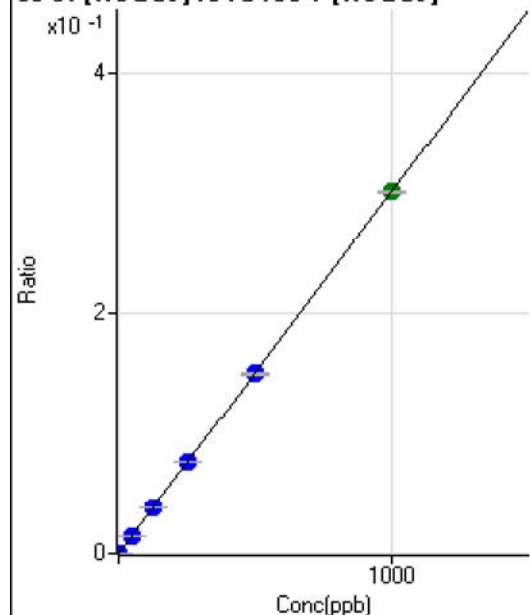
$$DL = 0.7153$$

$$BEC = 0.4735$$

Weight: <None>

Min Conc: 0

86 Sr [NoGas] ISTD:89 Y [NoGas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	630.60	0.0000	P	3.6
2	☐	0.100					
3	☐	1.000	1.108	4734.30	0.0004	P	4.8
4	☐	50.000	50.008	188531.72	0.0151	P	0.7
5	☐	125.000	125.977	472514.66	0.0381	P	1.3
6	☐	250.000	252.653	940302.28	0.0763	P	0.6
7	☐	500.000	496.875	1867275.56	0.1500	P	0.6
8	☐	1000.000	1000.777	3782951.91	0.3020	A	0.3
9	☐			18732.34	0.0016	P	0.7

$$y = 3.0173\text{E-}004 * x + 4.8604\text{E-}005$$

$$R = 1.0000$$

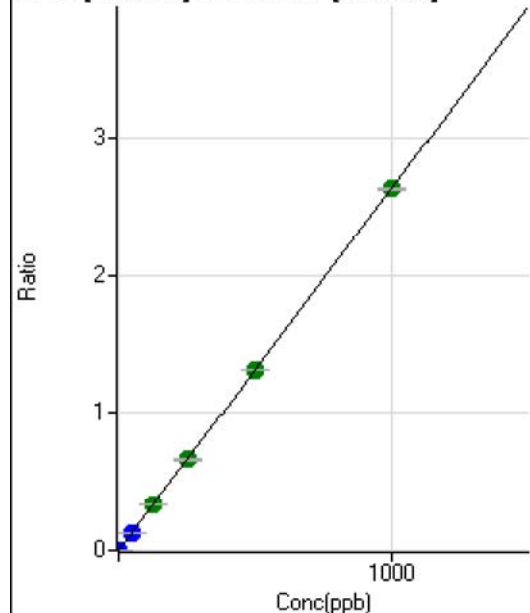
$$DL = 0.01718$$

$$BEC = 0.1611$$

Weight: <None>

Min Conc: 0

88 Sr [NoGas] ISTD:89 Y [NoGas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	163.90	0.0000	P	27.5
2	☐	0.100					
3	☐	1.000	1.005	32830.32	0.0027	P	1.1
4	☐	50.000	49.821	1633090.68	0.1311	P	0.1
5	☐	125.000	124.871	4080112.98	0.3286	A	0.4
6	☐	250.000	251.847	8170118.50	0.6628	A	0.3
7	☐	500.000	499.032	16352058.35	1.3133	A	0.4
8	☐	1000.000	1000.047	32965767.40	2.6318	A	0.2
9	☐			159277.98	0.0133	P	1.9

$$y = 0.0026 * x + 1.2623\text{E-}005$$

$$R = 1.0000$$

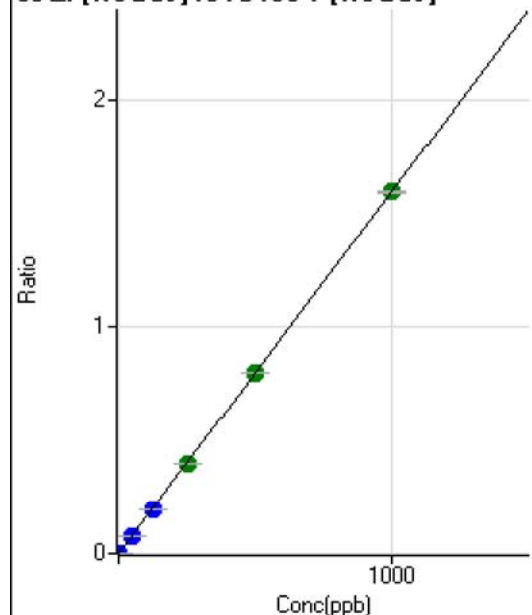
$$DL = 0.003956$$

$$BEC = 0.004797$$

Weight: <None>

Min Conc: 0

90 Zr [NoGas] ISTD:89 Y [NoGas]



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	944.52	0.0001	P	5.0
2	☐	0.100					
3	☐	1.000	1.039	21361.15	0.0017	P	3.0
4	☐	50.000	49.401	981149.03	0.0788	P	0.1
5	☐	125.000	124.030	2454262.08	0.1977	P	0.1
6	☐	250.000	249.539	4901580.14	0.3976	A	0.3
7	☐	500.000	497.621	9872102.74	0.7929	A	0.2
8	☐	1000.000	1001.456	19985859.65	1.5956	A	0.4
9	☐			5965.39	0.0005	P	10.8

$$y = 0.0016 * x + 7.2818E-005$$

$$R = 1.0000$$

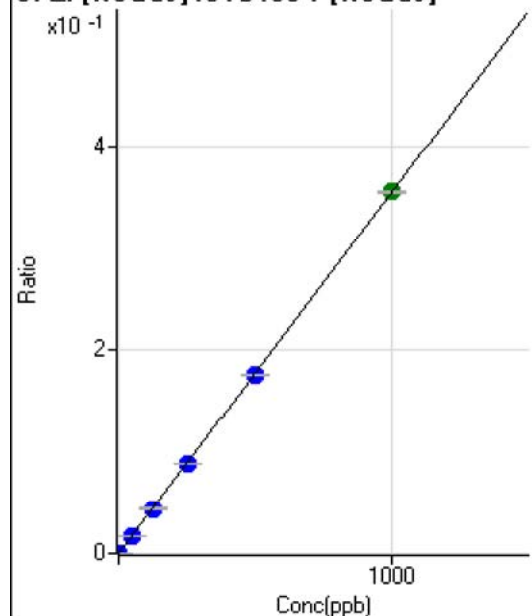
$$DL = 0.006808$$

$$BEC = 0.04571$$

Weight: <None>

Min Conc: 0

91 Zr [NoGas] ISTD:89 Y [NoGas]



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	225.01	0.0000	P	28.6
2	☐	0.100					
3	☐	1.000	0.985	4525.88	0.0004	P	2.4
4	☐	50.000	49.889	220192.51	0.0177	P	0.6
5	☐	125.000	124.900	549212.93	0.0442	P	0.5
6	☐	250.000	249.549	1089282.13	0.0884	P	0.3
7	☐	500.000	493.448	2175397.36	0.1747	P	0.2
8	☐	1000.000	1003.407	4449879.70	0.3553	A	0.7
9	☐			1366.78	0.0001	P	6.9

$$y = 3.5404E-004 * x + 1.7333E-005$$

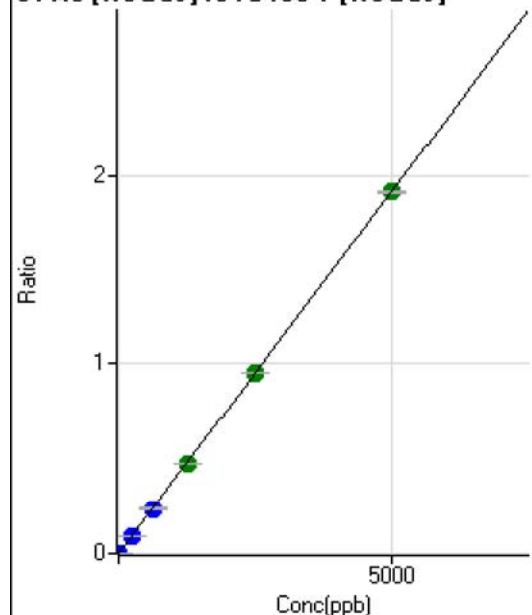
$$R = 1.0000$$

$$DL = 0.04205$$

$$BEC = 0.04896$$

Weight: <None>

Min Conc: 0

94 Mo [NoGas] ISTD : 89 Y [NoGas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	372.24	0.0000	P	5.2
2	☐	0.500					
3	☐	5.000	5.078	24343.83	0.0020	P	1.2
4	☐	250.000	248.230	1182109.83	0.0949	P	0.5
5	☐	625.000	623.230	2958040.95	0.2383	P	0.4
6	☐	1250.000	1256.321	5919986.11	0.4803	A	0.2
7	☐	2500.000	2486.713	11835490.11	0.9506	A	0.0
8	☐	5000.000	5005.373	23965853.83	1.9133	A	0.7
9	☐			27761.03	0.0023	P	2.6

$$y = 3.8224\text{E-}004 * x + 2.8690\text{E-}005$$

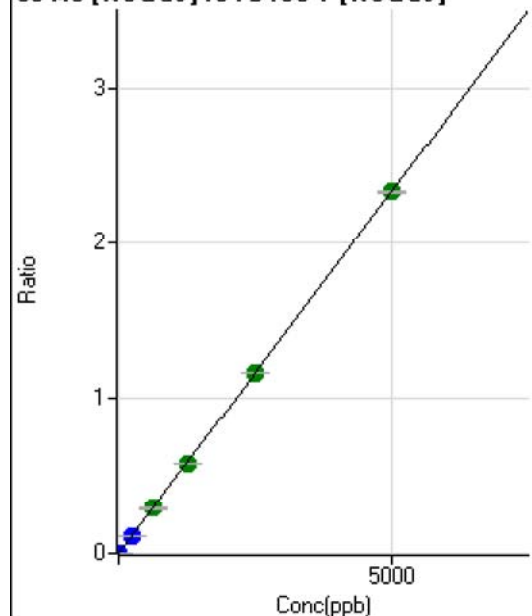
$$R = 1.0000$$

$$DL = 0.01168$$

$$BEC = 0.07506$$

Weight: <None>

Min Conc: 0

95 Mo [NoGas] ISTD : 89 Y [NoGas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	50.00	0.0000	P	33.8
2	☐	0.500					
3	☐	5.000	4.969	28713.06	0.0023	P	2.1
4	☐	250.000	248.592	1445364.42	0.1161	P	1.0
5	☐	625.000	624.248	3618092.75	0.2914	A	0.7
6	☐	1250.000	1256.361	7229822.99	0.5865	A	0.2
7	☐	2500.000	2490.436	14475745.12	1.1626	A	0.5
8	☐	5000.000	5003.356	29256897.88	2.3357	A	0.4
9	☐			44473.15	0.0037	P	3.8

$$y = 4.6683\text{E-}004 * x + 3.8583\text{E-}006$$

$$R = 1.0000$$

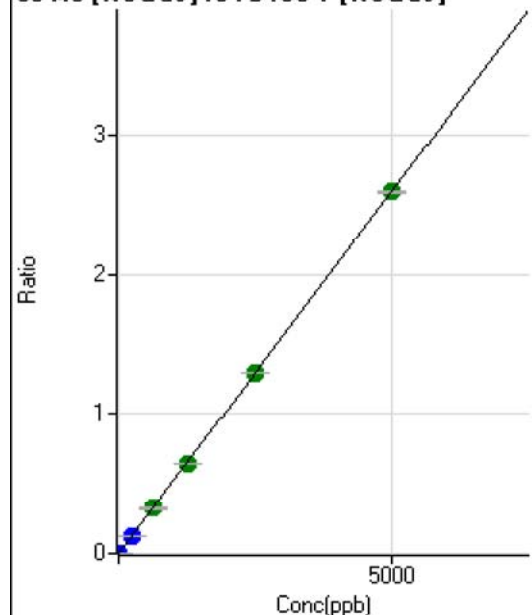
$$DL = 0.008369$$

$$BEC = 0.008265$$

Weight: <None>

Min Conc: 0

96 Mo [NoGas] ISTD : 89 Y [NoGas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	138.90	0.0000	P	28.5
2	☐	0.500					
3	☐	5.000	5.071	32674.48	0.0026	P	1.4
4	☐	250.000	248.885	1609797.80	0.1293	P	0.4
5	☐	625.000	624.261	4024905.17	0.3242	A	0.4
6	☐	1250.000	1251.641	8012199.23	0.6500	A	0.4
7	☐	2500.000	2492.296	16114781.61	1.2942	A	0.5
8	☐	5000.000	5003.590	32546360.80	2.5983	A	0.6
9	☐			57207.26	0.0048	P	1.5

$$y = 5.1929\text{E-}004 * x + 1.0711\text{E-}005$$

$$R = 1.0000$$

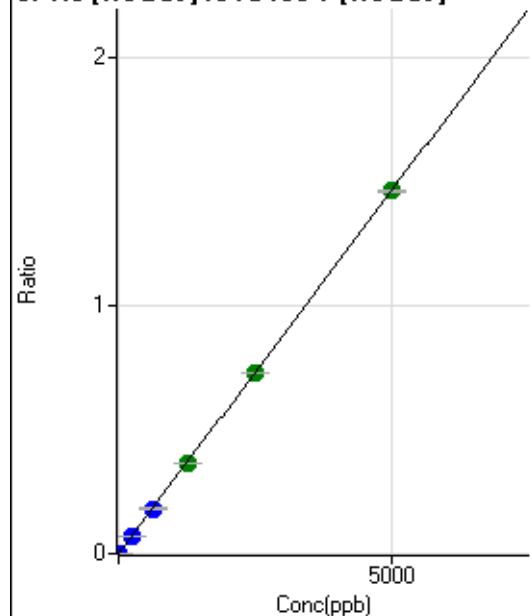
$$DL = 0.01765$$

$$BEC = 0.02063$$

Weight: <None>

Min Conc: 0

97 Mo [NoGas] ISTD : 89 Y [NoGas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	27.78	0.0000	P	17.7
2	☐	0.500					
3	☐	5.000	5.021	18159.36	0.0015	P	0.4
4	☐	250.000	249.481	907854.22	0.0729	P	0.4
5	☐	625.000	622.620	2258552.22	0.1819	P	0.6
6	☐	1250.000	1253.765	4515565.60	0.3663	A	0.3
7	☐	2500.000	2500.794	9097587.01	0.7307	A	0.1
8	☐	5000.000	4998.985	18294751.45	1.4606	A	0.5
9	☐			27263.02	0.0023	P	4.6

$$y = 2.9217\text{E-}004 * x + 2.1420\text{E-}006$$

$$R = 1.0000$$

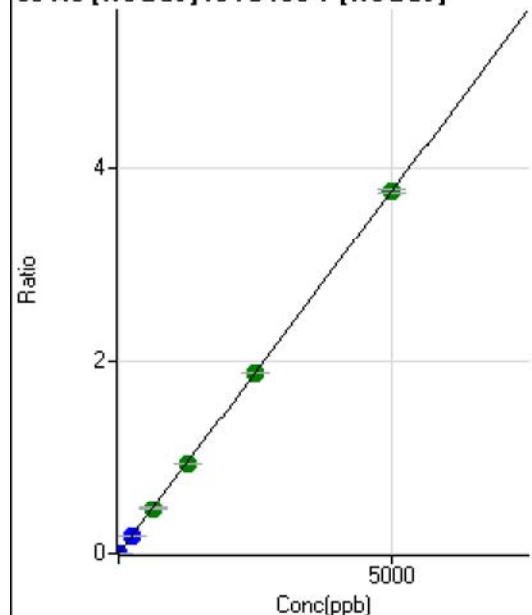
$$DL = 0.003892$$

$$BEC = 0.007331$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	66.67	0.0000	P	54.7
2	☐	0.500					
3	☐	5.000	5.058	47064.94	0.0038	P	2.2
4	☐	250.000	249.569	2337139.74	0.1877	P	0.5
5	☐	625.000	622.199	5808280.34	0.4678	A	0.9
6	☐	1250.000	1254.338	11626002.52	0.9431	A	0.3
7	☐	2500.000	2499.651	23401573.79	1.8795	A	0.3
8	☐	5000.000	4999.462	47084982.30	3.7591	A	0.9
9	☐			70608.42	0.0059	P	2.3

$$y = 7.5190\text{E-}004 * x + 5.1480\text{E-}006$$

$$R = 1.0000$$

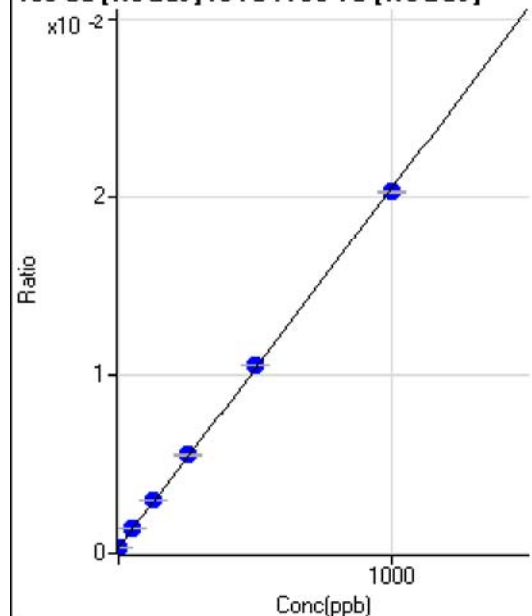
$$DL = 0.01124$$

$$BEC = 0.006847$$

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	5153.95	0.0003	P	2.1
2	☐	0.100					
3	☐	1.000	1.444	5420.70	0.0003	P	3.1
4	☐	50.000	52.830	22259.96	0.0014	P	1.7
5	☐	125.000	133.952	49038.74	0.0030	P	0.8
6	☐	250.000	260.533	90857.05	0.0056	P	0.7
7	☐	500.000	508.737	174556.69	0.0106	P	0.4
8	☐	1000.000	991.737	337559.05	0.0203	P	0.6
9	☐			5095.62	0.0003	P	4.9

$$y = 2.0191\text{E-}005 * x + 3.0694\text{E-}004$$

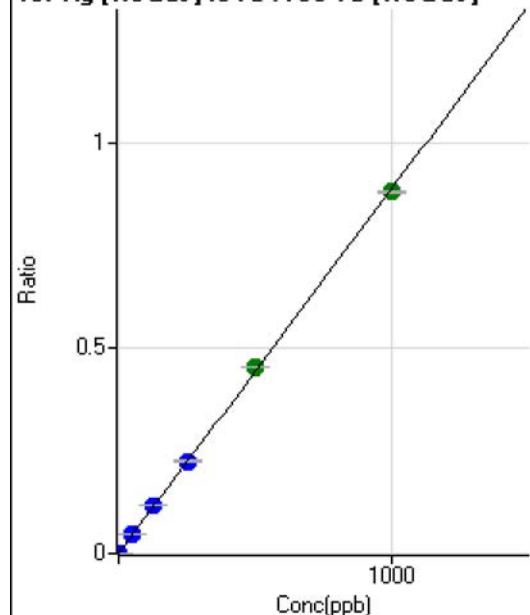
$$R = 0.9999$$

$$DL = 0.9373$$

$$BEC = 15.2$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	125.01	0.0000	P	17.6
2	☐	0.100					
3	☐	1.000	1.093	15795.53	0.0010	P	1.5
4	☐	50.000	53.045	764853.84	0.0472	P	1.1
5	☐	125.000	131.217	1901058.94	0.1167	P	0.1
6	☐	250.000	255.031	3702923.26	0.2269	P	0.4
7	☐	500.000	509.954	7485947.30	0.4537	A	0.4
8	☐	1000.000	992.836	14665385.57	0.8833	A	0.8
9	☐			2586.45	0.0002	P	11.5

$$y = 8.8965\text{E-}004 * x + 7.4442\text{E-}006$$

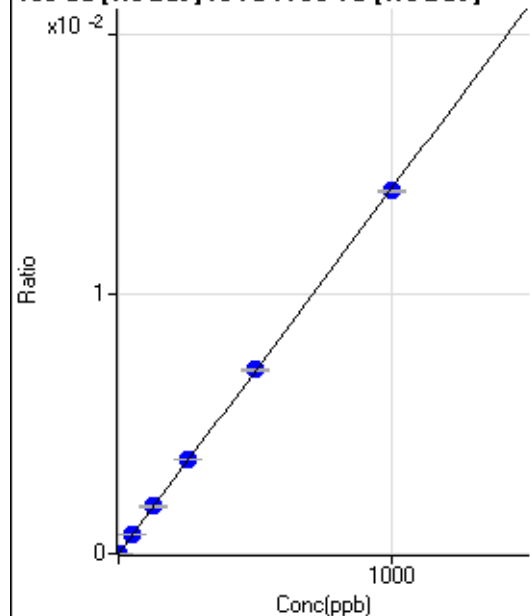
$$R = 0.9999$$

$$DL = 0.004408$$

$$BEC = 0.008367$$

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	9.72	0.0000	P	65.6
2	☐	0.100					
3	☐	1.000	1.268	297.23	0.0000	P	8.4
4	☐	50.000	53.636	12238.86	0.0008	P	0.8
5	☐	125.000	129.221	29617.43	0.0018	P	2.9
6	☐	250.000	260.109	59737.86	0.0037	P	0.3
7	☐	500.000	505.312	117322.17	0.0071	P	1.0
8	☐	1000.000	994.107	232246.59	0.0140	P	0.6
9	☐			105.56	0.0000	P	4.8

$$y = 1.4070\text{E-}005 * x + 5.7948\text{E-}007$$

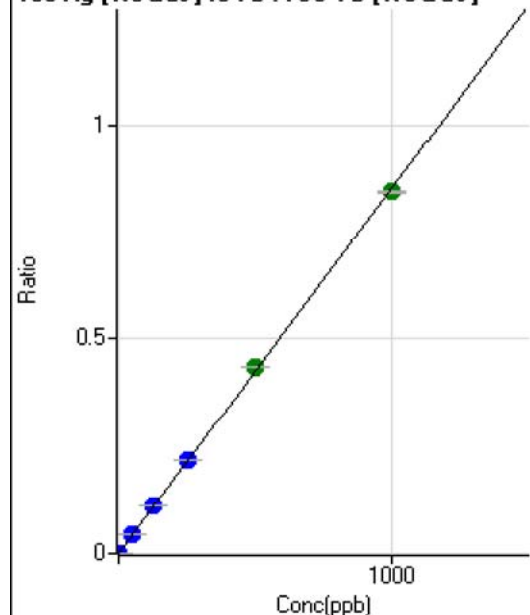
$$R = 0.9999$$

$$DL = 0.08108$$

$$BEC = 0.04118$$

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	613.22	0.0000	P	156.
2	☐	0.100					
3	☐	1.000	1.066	15219.93	0.0009	P	1.0
4	☐	50.000	53.394	736680.27	0.0455	P	0.3
5	☐	125.000	132.339	1833836.33	0.1126	P	0.4
6	☐	250.000	258.005	3582524.25	0.2195	P	0.3
7	☐	500.000	508.858	7143404.41	0.4329	A	0.2
8	☐	1000.000	992.483	14018664.55	0.8443	A	0.8
9	☐			2341.96	0.0001	P	9.2

$$y = 8.5069\text{E-}004 * x + 3.6583\text{E-}005$$

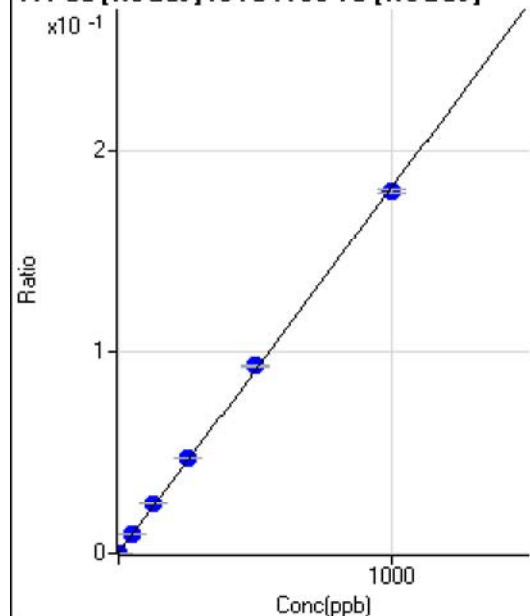
$$R = 0.9999$$

$$DL = 0.2023$$

$$BEC = 0.043$$

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	2585.45	0.0002	P	1.5
2	☐	0.100					
3	☐	1.000	1.066	5597.14	0.0003	P	1.7
4	☐	50.000	54.143	161483.43	0.0100	P	0.2
5	☐	125.000	134.822	400329.08	0.0246	P	0.7
6	☐	250.000	263.006	780281.53	0.0478	P	0.7
7	☐	500.000	511.335	1531422.67	0.0928	P	0.3
8	☐	1000.000	989.646	2979993.07	0.1795	P	1.0
9	☐			3393.41	0.0002	P	4.4

$$y = 1.8121\text{E-}004 * x + 1.5397\text{E-}004$$

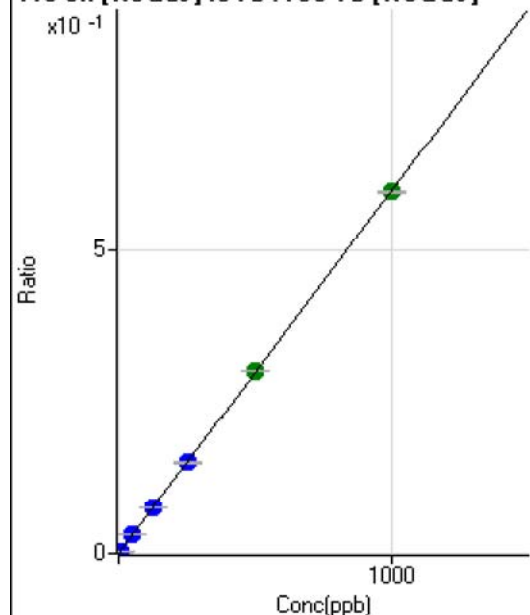
$$R = 0.9998$$

$$DL = 0.03698$$

$$BEC = 0.8497$$

Weight: <None>

Min Conc: 0

118 Sn [NoGas] ISTD :159 Tb [NoGas]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	2533.68	0.0002	P	4.6
2	☐	0.500					
3	☐	5.000	5.041	51035.06	0.0032	P	0.4
4	☐	50.000	50.918	495735.57	0.0306	P	0.7
5	☐	125.000	127.184	1240590.39	0.0762	P	0.4
6	☐	250.000	251.340	2454640.81	0.1504	P	0.7
7	☐	500.000	501.809	4952479.93	0.3001	A	0.4
8	☐	1000.000	998.441	9912900.39	0.5970	A	0.8
9	☐			22193.24	0.0014	P	1.4

$$y = 5.9783E-004 * x + 1.5089E-004$$

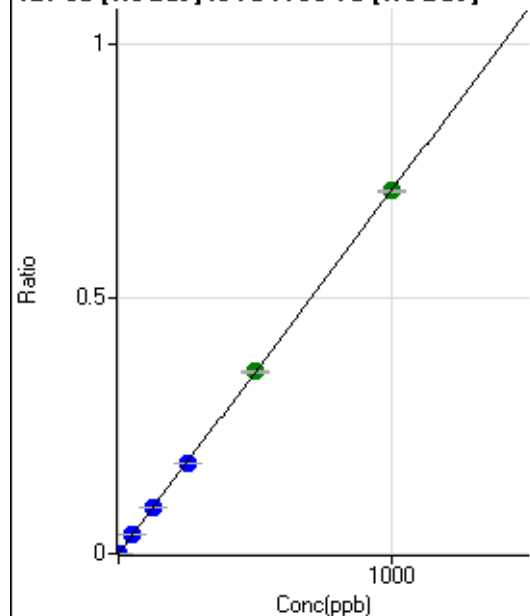
$$R = 1.0000$$

$$DL = 0.03509$$

$$BEC = 0.2524$$

Weight: <None>

Min Conc: 0

121 Sb [NoGas] ISTD :159 Tb [NoGas]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	77.78	0.0000	P	40.6
2	☐	0.200					
3	☐	2.000	2.036	23453.69	0.0015	P	0.9
4	☐	50.000	50.726	585311.52	0.0361	P	0.8
5	☐	125.000	126.954	1471896.39	0.0904	P	0.5
6	☐	250.000	250.346	2908813.60	0.1782	P	0.6
7	☐	500.000	500.891	5884164.93	0.3566	A	0.6
8	☐	1000.000	999.187	11811132.55	0.7114	A	0.3
9	☐			19778.62	0.0013	P	1.9

$$y = 7.1195E-004 * x + 4.6333E-006$$

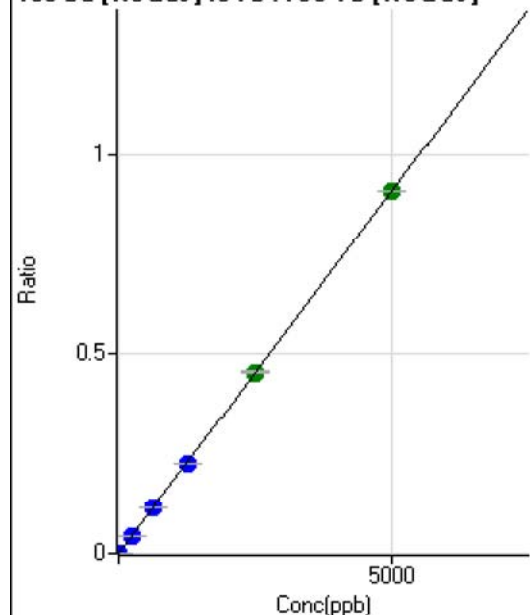
$$R = 1.0000$$

$$DL = 0.007933$$

$$BEC = 0.006508$$

Weight: <None>

Min Conc: 0

135 Ba [NoGas] ISTD : 159 Tb [NoGas]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	47.23	0.0000	P	56.8
2	☐	1.000					
3	☐	10.000	9.984	29206.61	0.0018	P	1.5
4	☐	250.000	250.797	736161.51	0.0454	P	0.2
5	☐	625.000	630.021	1858199.80	0.1141	P	0.6
6	☐	1250.000	1245.273	3680919.53	0.2255	P	0.4
7	☐	2500.000	2501.652	7476464.40	0.4531	A	0.3
8	☐	5000.000	4999.688	15035177.59	0.9056	A	0.2
9	☐			3839.59	0.0002	P	6.9

$$y = 1.8112\text{E-}004 * x + 2.8138\text{E-}006$$

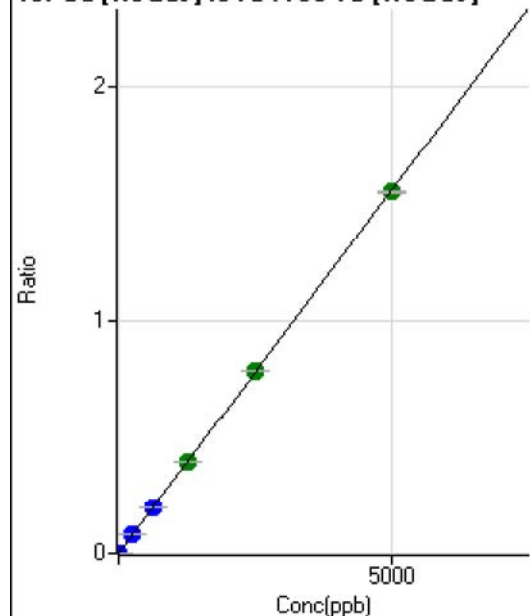
$$R = 1.0000$$

$$DL = 0.02647$$

$$BEC = 0.01554$$

Weight: <None>

Min Conc: 0

137 Ba [NoGas] ISTD : 159 Tb [NoGas]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	97.23	0.0000	P	24.7
2	☐	1.000					
3	☐	10.000	10.150	51142.28	0.0032	P	1.2
4	☐	250.000	253.635	1282023.05	0.0791	P	0.9
5	☐	625.000	633.583	3217955.02	0.1976	P	0.1
6	☐	1250.000	1267.939	6453938.99	0.3955	A	0.8
7	☐	2500.000	2514.835	12942454.02	0.7844	A	0.4
8	☐	5000.000	4986.843	25824215.68	1.5554	A	0.3
9	☐			6988.15	0.0004	P	8.4

$$y = 3.1189\text{E-}004 * x + 5.7898\text{E-}006$$

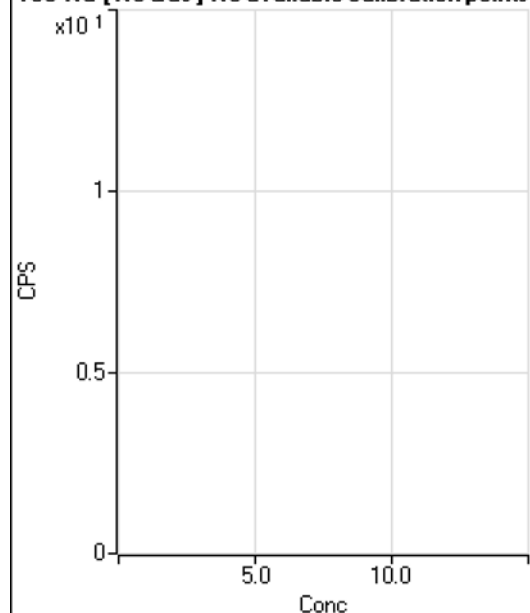
$$R = 1.0000$$

$$DL = 0.01374$$

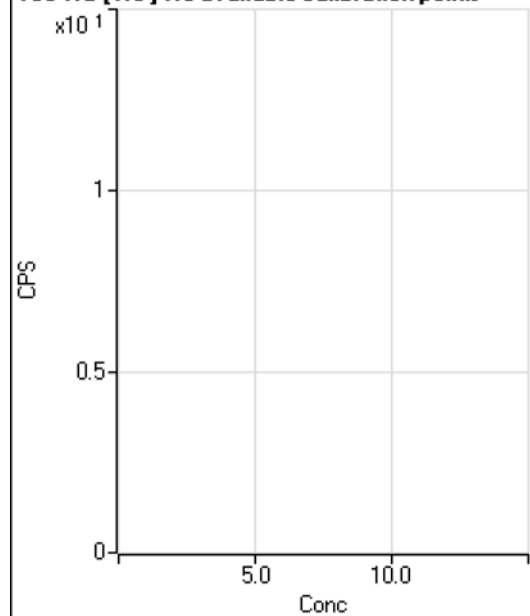
$$BEC = 0.01856$$

Weight: <None>

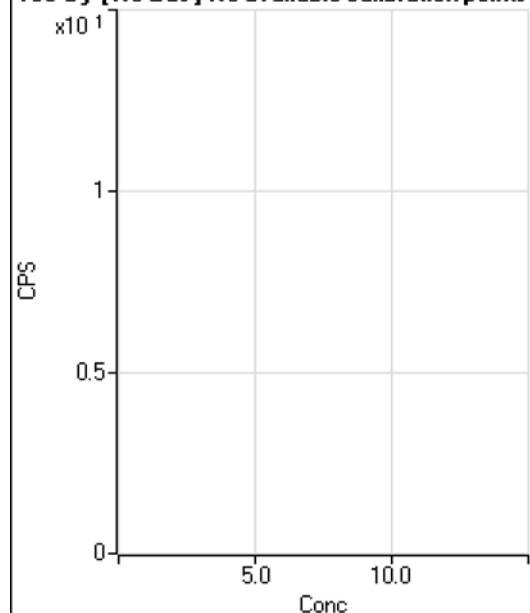
Min Conc: 0

150 Nd [No Gas] No available calibration points

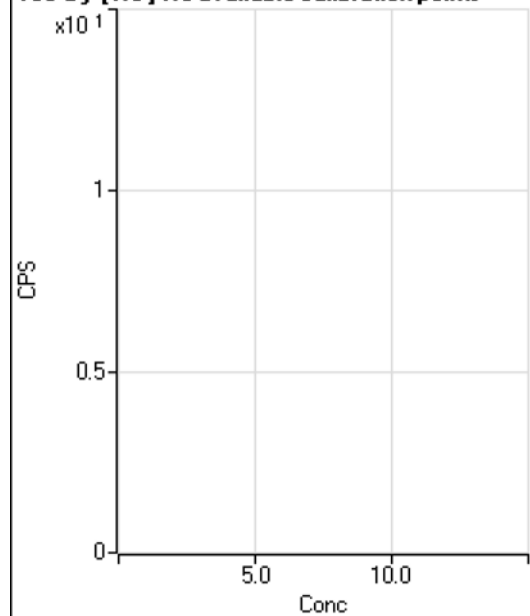
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			8.89		P	43.3
2	☐						
3	☐			0.00		P	
4	☐			51.11		P	19.9
5	☐			122.23		P	20.7
6	☐			262.24		P	5.3
7	☐			522.25		P	13.4
8	☐			948.96		P	9.0
9	☐			177.79		P	8.7

150 Nd [He] No available calibration points

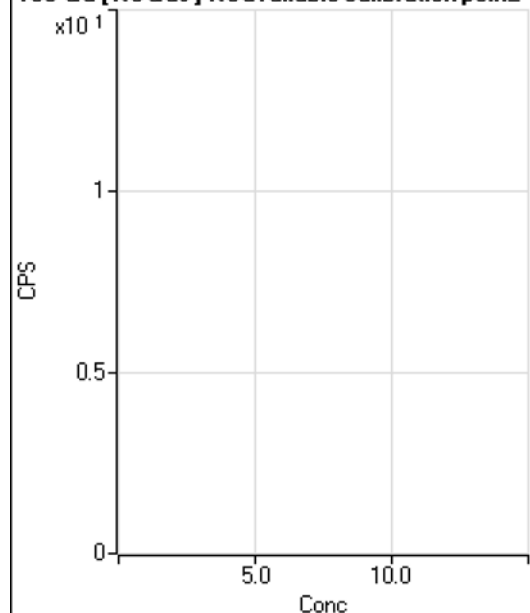
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			2.22		P	86.6
2	☐						
3	☐			1.11		P	173.
4	☐			11.11		P	45.8
5	☐			15.56		P	12.4
6	☐			28.89		P	48.0
7	☐			82.22		P	4.7
8	☐			137.78		P	3.7
9	☐			81.12		P	13.2

156 Dy [No Gas] No available calibration points

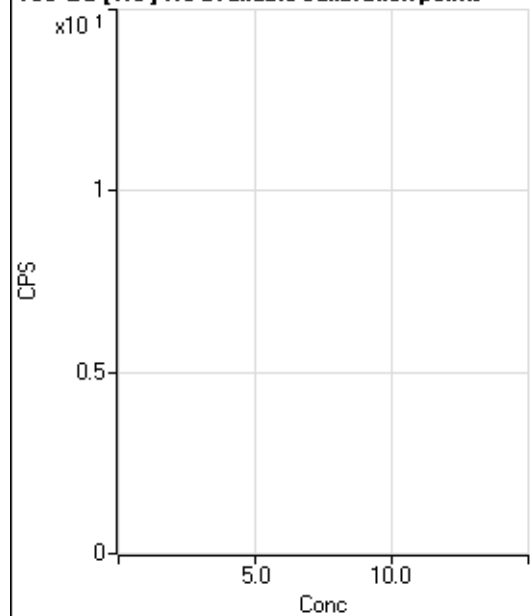
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			5.55		P	86.6
2	☐						
3	☐			11.11		P	173.
4	☐			16.67		P	50.0
5	☐			33.34		P	43.3
6	☐			30.56		P	31.5
7	☐			127.79		P	30.1
8	☐			252.79		P	8.3
9	☐			122.23		P	40.0

156 Dy [He] No available calibration points

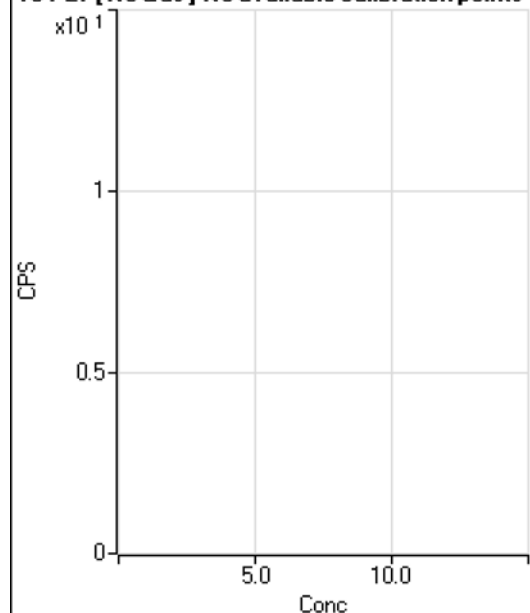
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			3.33		P	100.
2	☐						
3	☐			5.56		P	34.7
4	☐			25.55		P	27.1
5	☐			36.67		P	27.3
6	☐			66.67		P	26.0
7	☐			115.56		P	3.3
8	☐			221.12		P	3.1
9	☐			77.78		P	5.0

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

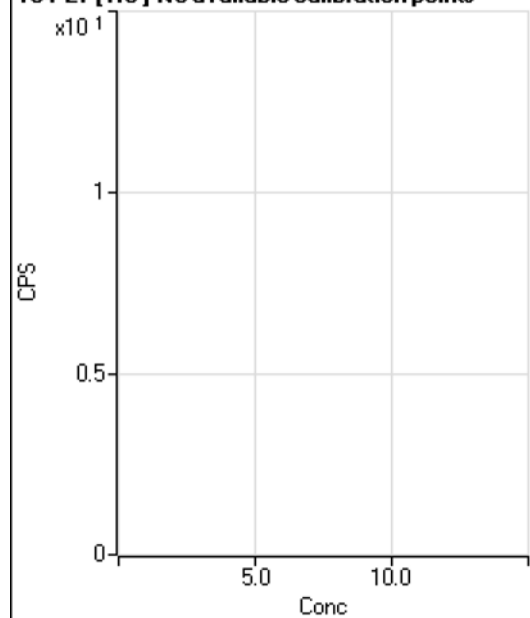
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			130.56		P	53.1
2	☐						
3	☐			136.12		P	21.5
4	☐			111.12		P	21.7
5	☐			141.67		P	30.6
6	☐			122.23		P	28.4
7	☐			136.12		P	39.8
8	☐			144.45		P	3.3
9	☐			152.79		P	12.6

160 Gd [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			245.56		P	17.2
2	☐						
3	☐			262.23		P	13.2
4	☐			247.78		P	6.1
5	☐			265.56		P	3.2
6	☐			266.67		P	6.6
7	☐			222.23		P	8.7
8	☐			272.23		P	17.8
9	☐			322.23		P	10.4

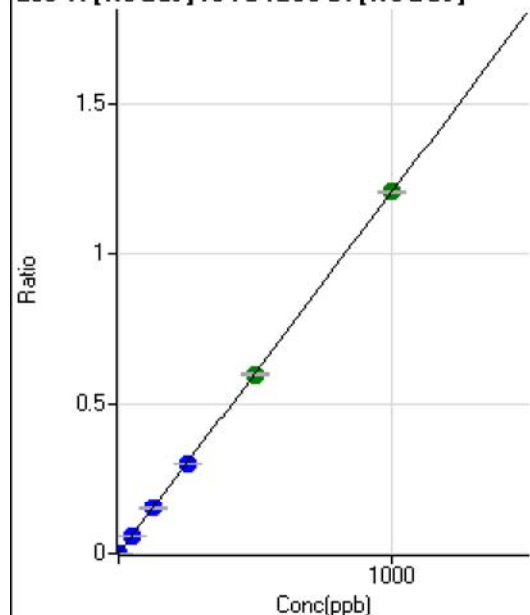
164 Er [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			58.34		P	28.6
2	☐						
3	☐			69.45		P	48.5
4	☐			63.89		P	19.9
5	☐			50.00		P	16.7
6	☐			55.56		P	31.2
7	☐			77.78		P	37.6
8	☐			86.12		P	20.1
9	☐			97.23		P	44.0

164 Er [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			22.22		P	31.2
2	☐						
3	☐			46.67		P	21.4
4	☐			30.00		P	44.4
5	☐			32.22		P	12.0
6	☐			23.33		P	37.8
7	☐			30.00		P	50.9
8	☐			42.22		P	29.9
9	☐			34.45		P	20.1

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	63.89	0.0000	P	52.4
2	☐	0.100					
3	☐	1.000	0.986	12370.11	0.0012	P	3.0
4	☐	50.000	48.905	614740.01	0.0591	P	0.4
5	☐	125.000	124.998	1549265.05	0.1510	P	0.8
6	☐	250.000	247.419	3076687.55	0.2989	P	0.1
7	☐	500.000	496.349	6194443.11	0.5997	A	0.7
8	☐	1000.000	1002.526	12213493.33	1.2113	A	0.3
9	☐			6854.85	0.0008	P	3.8

$$y = 0.0012 * x + 5.8671E-006$$

$$R = 1.0000$$

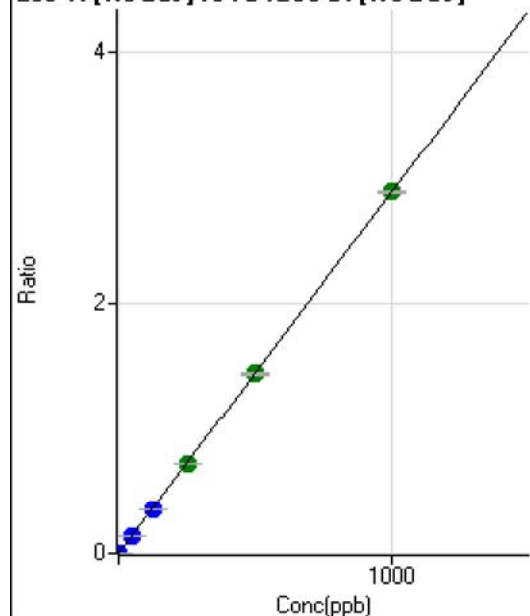
$$DL = 0.007634$$

$$BEC = 0.004856$$

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	155.56	0.0000	P	11.8
2	☐	0.100					
3	☐	1.000	0.997	29859.28	0.0029	P	1.2
4	☐	50.000	48.783	1464134.43	0.1407	P	0.6
5	☐	125.000	123.384	3651467.18	0.3560	P	0.3
6	☐	250.000	247.823	7358166.92	0.7149	A	0.4
7	☐	500.000	496.893	14806682.62	1.4335	A	0.1
8	☐	1000.000	1002.360	29157355.17	2.8916	A	0.4
9	☐			16118.77	0.0018	P	7.0

$$y = 0.0029 * x + 1.4322E-005$$

$$R = 1.0000$$

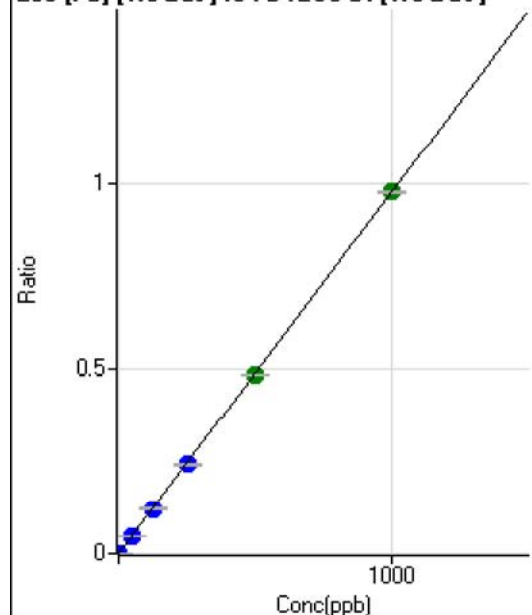
$$DL = 0.001762$$

$$BEC = 0.004965$$

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	0.0000	P	13.3
2	☐	0.100					
3	☐	1.000	1.019	10669.35	0.0010	P	3.4
4	☐	50.000	49.115	499687.76	0.0480	P	0.1
5	☐	125.000	124.841	1251869.85	0.1220	P	0.3
6	☐	250.000	247.560	2490233.83	0.2420	P	0.4
7	☐	500.000	496.008	5007112.73	0.4847	A	0.1
8	☐	1000.000	1002.670	9880215.96	0.9799	A	0.5
9	☐			58577.25	0.0067	P	2.0

$$y = 9.7722\text{E-}004 * x + 3.7137\text{E-}005$$

$$R = 1.0000$$

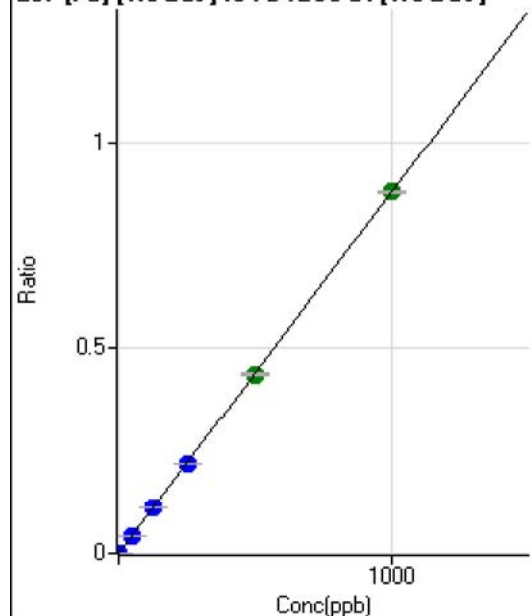
$$DL = 0.01518$$

$$BEC = 0.038$$

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	346.31	0.0000	P	20.8
2	☐	0.100					
3	☐	1.000	0.999	9399.87	0.0009	P	0.8
4	☐	50.000	49.201	450219.59	0.0433	P	0.6
5	☐	125.000	125.772	1134401.27	0.1106	P	0.1
6	☐	250.000	250.313	2264807.60	0.2201	P	0.6
7	☐	500.000	495.464	4498819.72	0.4355	A	0.6
8	☐	1000.000	1002.133	8882314.78	0.8809	A	0.6
9	☐			49111.54	0.0056	P	0.8

$$y = 8.7899\text{E-}004 * x + 3.1840\text{E-}005$$

$$R = 1.0000$$

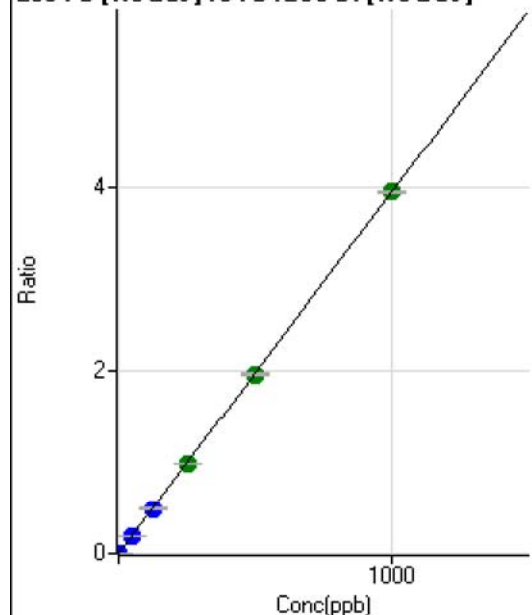
$$DL = 0.02263$$

$$BEC = 0.03622$$

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	1629.72	0.0001	P	4.5
2	☐	0.100					
3	☐	1.000	1.010	42744.59	0.0041	P	0.6
4	☐	50.000	49.150	2020993.26	0.1943	P	0.4
5	☐	125.000	124.666	5052438.51	0.4925	P	0.3
6	☐	250.000	249.398	10139319.39	0.9852	A	0.2
7	☐	500.000	496.196	20244501.44	1.9599	A	0.2
8	☐	1000.000	1002.137	39911102.74	3.9582	A	0.3
9	☐			229127.68	0.0262	P	1.1

$$y = 0.0039 * x + 1.4994E-004$$

$$R = 1.0000$$

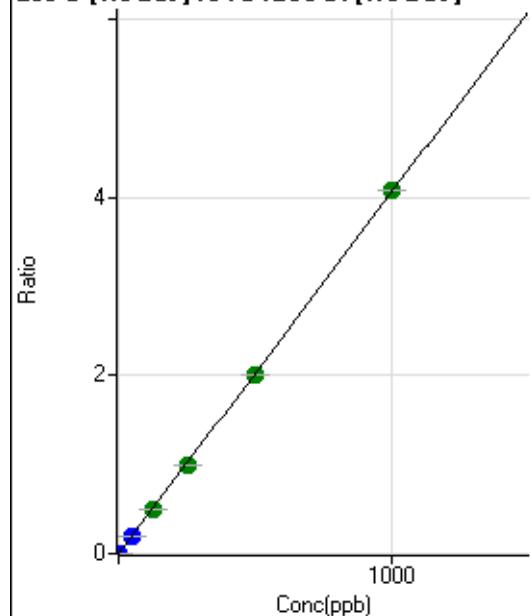
$$DL = 0.005162$$

$$BEC = 0.03796$$

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	55.56	0.0000	P	9.2
2	☐	0.100					
3	☐	1.000	0.959	40160.18	0.0039	P	1.1
4	☐	50.000	47.427	1998567.36	0.1921	P	1.1
5	☐	125.000	121.429	5045867.08	0.4919	A	0.6
6	☐	250.000	246.453	10274875.05	0.9983	A	0.3
7	☐	500.000	493.854	20663823.20	2.0005	A	0.3
8	☐	1000.000	1004.535	41030370.71	4.0692	A	0.2
9	☐			6818.79	0.0008	P	5.7

$$y = 0.0041 * x + 5.1144E-006$$

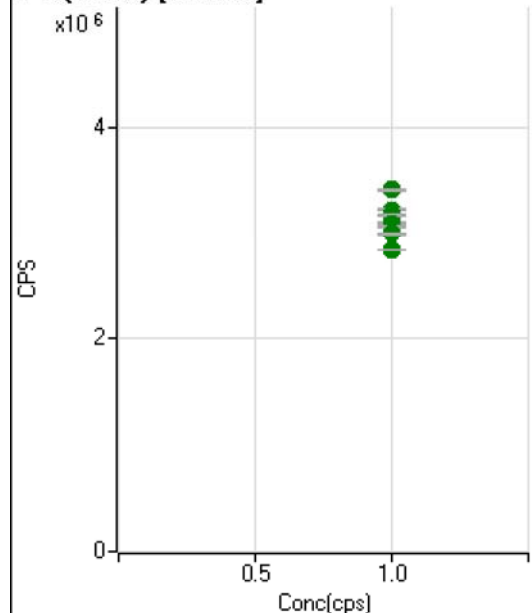
$$R = 1.0000$$

$$DL = 0.0003473$$

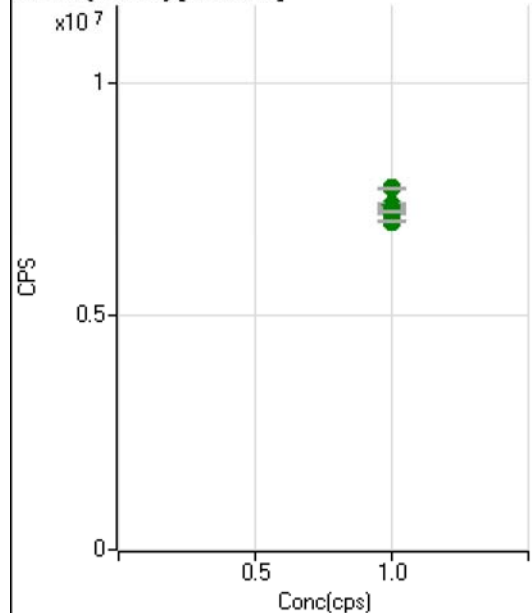
$$BEC = 0.001263$$

Weight: <None>

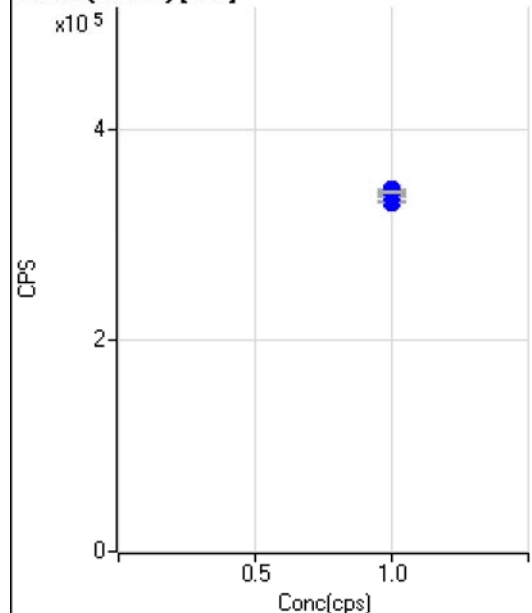
Min Conc: 0

6 Li(ISTD) [No Gas]

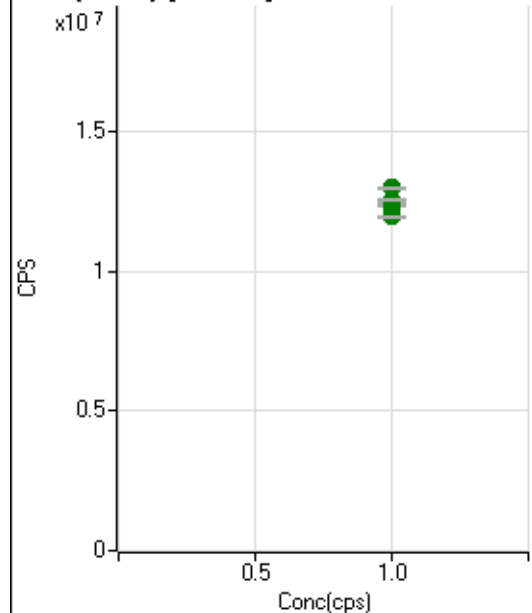
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3413870.47		A	0.4
2	☐	1.000					
3	☐	1.000		3218431.86		A	0.4
4	☐	1.000		3228838.36		A	0.5
5	☐	1.000		3177150.47		A	0.5
6	☐	1.000		3103138.81		A	0.5
7	☐	1.000		3067510.02		A	0.4
8	☐	1.000		2997963.01		A	0.3
9	☐	1.000		2839750.34		A	0.4

45 Sc(ISTD) [No Gas]

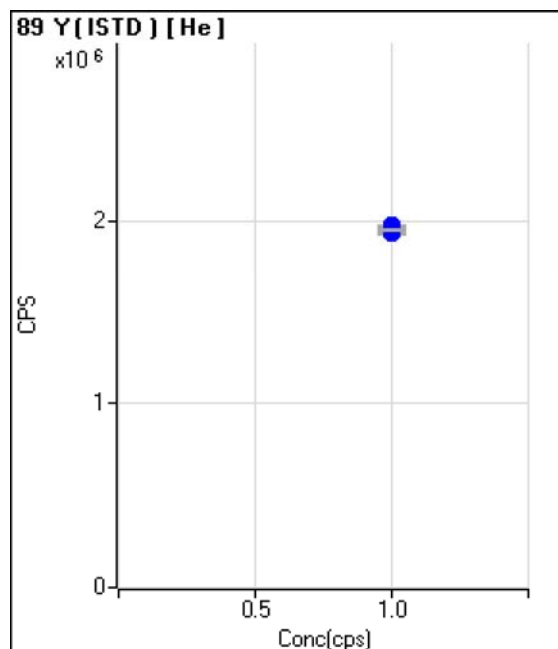
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		7753732.29		A	0.3
2	☐	1.000					
3	☐	1.000		7361092.09		A	0.8
4	☐	1.000		7410599.12		A	0.9
5	☐	1.000		7296608.41		A	0.7
6	☐	1.000		7206867.95		A	0.2
7	☐	1.000		7247125.94		A	0.5
8	☐	1.000		7253361.71		A	0.1
9	☐	1.000		7045040.26		A	0.6

45 Sc(ISTD) [He]

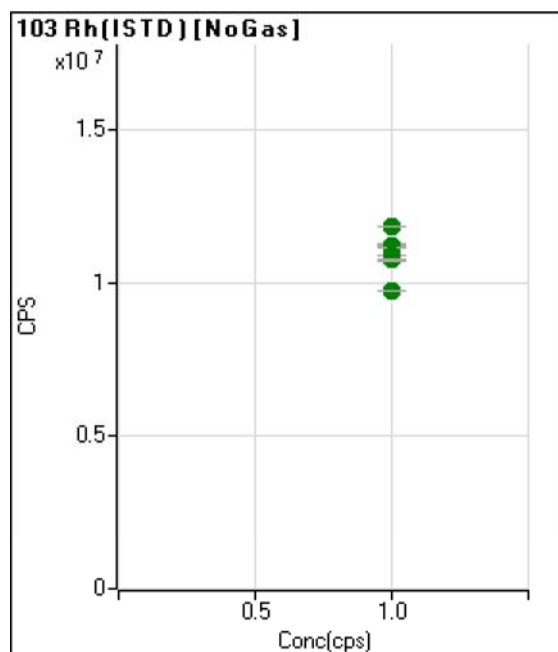
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		341718.64		P	0.5
2	☐	1.000					
3	☐	1.000		343594.39		P	0.5
4	☐	1.000		343394.53		P	0.8
5	☐	1.000		337129.65		P	0.4
6	☐	1.000		332239.05		P	0.6
7	☐	1.000		336672.66		P	0.2
8	☐	1.000		337222.74		P	0.5
9	☐	1.000		341484.11		P	0.2

89 Y(ISTD) [No Gas]

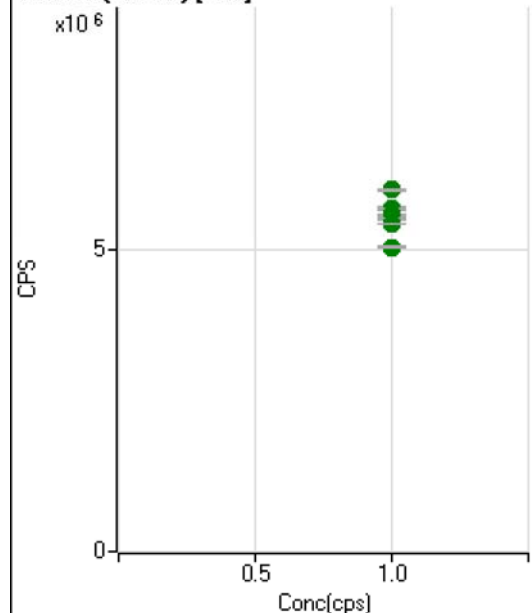
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		12972814.53		A	0.5
2	☐	1.000					
3	☐	1.000		12359418.01		A	0.5
4	☐	1.000		12454534.82		A	0.4
5	☐	1.000		12415604.68		A	0.6
6	☐	1.000		12326873.71		A	0.1
7	☐	1.000		12451045.09		A	0.2
8	☐	1.000		12525853.98		A	0.4
9	☐	1.000		11947096.77		A	0.3



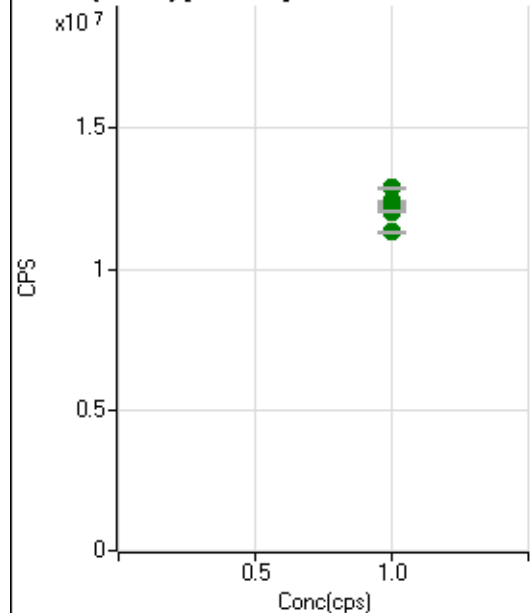
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1944512.75		P	0.2
2	☐	1.000					
3	☐	1.000		1964211.62		P	0.3
4	☐	1.000		1974100.20		P	0.1
5	☐	1.000		1935799.90		P	0.5
6	☐	1.000		1930694.92		P	0.9
7	☐	1.000		1961614.54		P	0.8
8	☐	1.000		1934436.78		P	0.3
9	☐	1.000		1949152.73		P	0.4



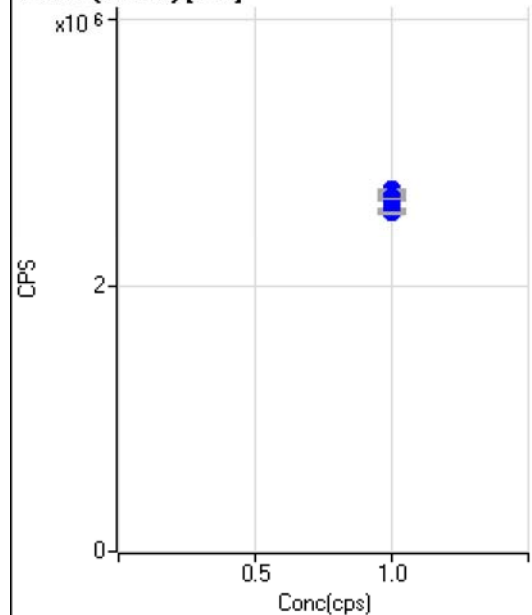
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		11860081.86		A	0.2
2	☐	1.000					
3	☐	1.000		11235097.04		A	0.3
4	☐	1.000		11271655.90		A	0.4
5	☐	1.000		11172237.75		A	0.2
6	☐	1.000		10941685.23		A	0.5
7	☐	1.000		10933529.93		A	0.4
8	☐	1.000		10798651.54		A	0.4
9	☐	1.000		9745373.74		A	0.5

103Rh(ISTD) [He]

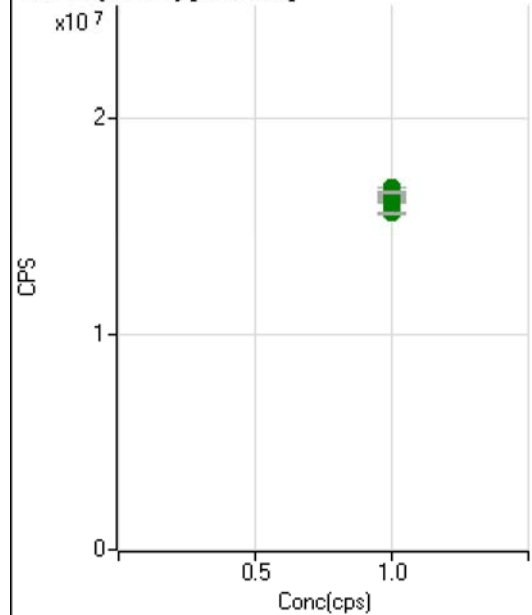
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		6022753.59		A	0.3
2	☐	1.000					
3	☐	1.000		5708357.69		A	0.8
4	☐	1.000		5715497.90		A	0.2
5	☐	1.000		5605227.00		A	0.3
6	☐	1.000		5525200.26		A	0.4
7	☐	1.000		5555579.64		A	0.5
8	☐	1.000		5454203.11		A	0.1
9	☐	1.000		5054165.90		A	0.3

115In(ISTD) [NoGas]

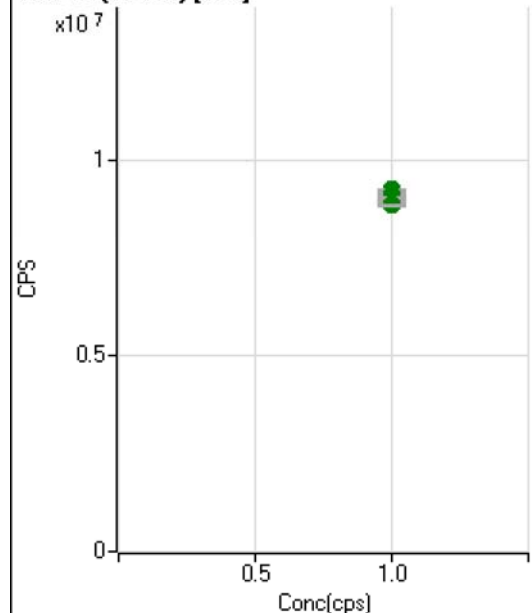
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		12891870.60		A	0.2
2	☐	1.000					
3	☐	1.000		12302608.09		A	0.3
4	☐	1.000		12415538.97		A	0.5
5	☐	1.000		12313372.94		A	0.2
6	☐	1.000		12187396.33		A	0.2
7	☐	1.000		12163224.94		A	0.4
8	☐	1.000		12054224.67		A	0.5
9	☐	1.000		11338015.54		A	0.6

115 In(ISTD) [He]

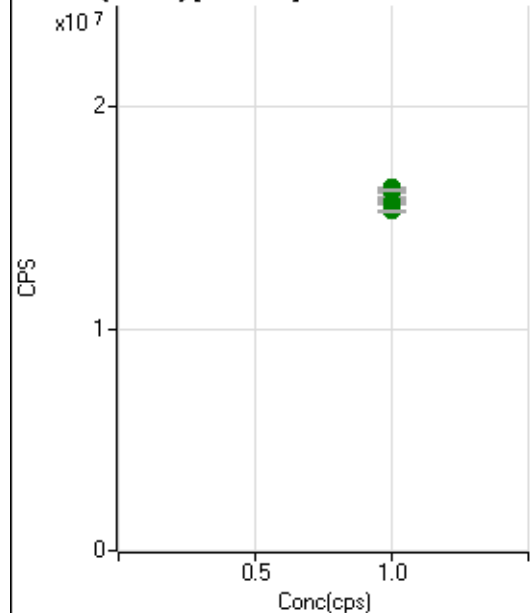
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2679635.55		P	0.5
2	☐	1.000					
3	☐	1.000		2711947.89		P	0.6
4	☐	1.000		2725006.29		P	0.4
5	☐	1.000		2672183.88		P	0.3
6	☐	1.000		2647033.24		P	0.6
7	☐	1.000		2658700.50		P	0.4
8	☐	1.000		2583920.39		P	0.5
9	☐	1.000		2554188.38		P	0.5

159 Tb(ISTD) [NoGas]

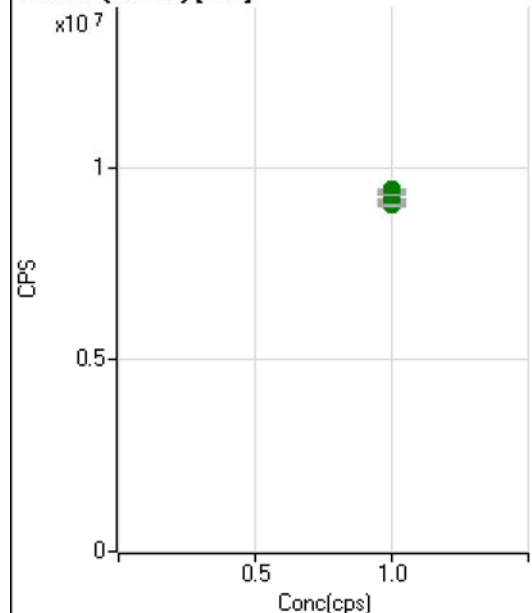
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		16791276.14		A	0.2
2	☐	1.000					
3	☐	1.000		16126786.56		A	0.7
4	☐	1.000		16205253.09		A	0.4
5	☐	1.000		16283789.62		A	0.3
6	☐	1.000		16319885.45		A	0.2
7	☐	1.000		16500420.31		A	0.6
8	☐	1.000		16603238.23		A	0.1
9	☐	1.000		15638160.32		A	0.5

159 Tb(ISTD) [He]

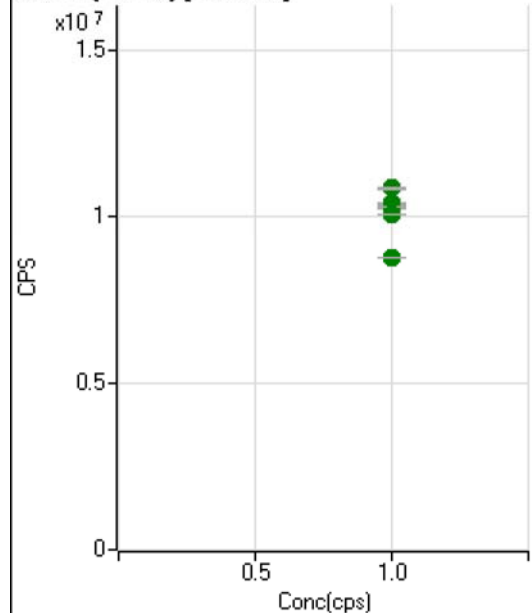
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		9234370.14		A	0.3
2	☐	1.000					
3	☐	1.000		8873346.95		A	0.6
4	☐	1.000		8966149.94		A	0.3
5	☐	1.000		8894749.59		A	0.2
6	☐	1.000		8947933.61		A	0.5
7	☐	1.000		9107971.53		A	0.6
8	☐	1.000		9031110.77		A	0.5
9	☐	1.000		8835726.95		A	0.4

165 Ho(ISTD) [NoGas]

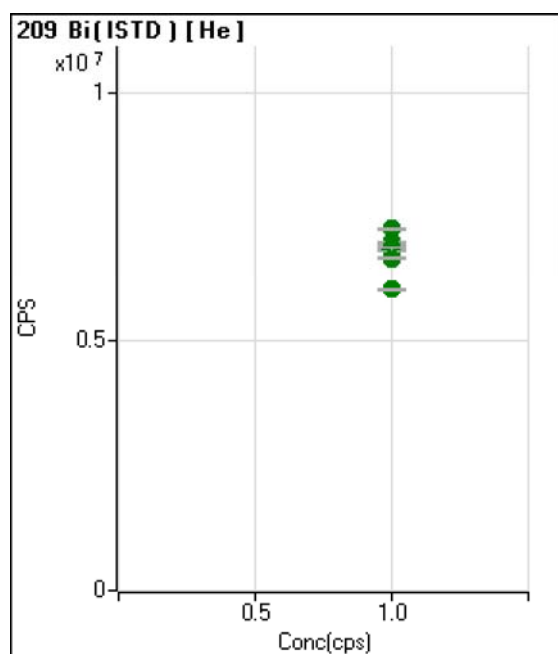
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		16353423.98		A	0.6
2	☐	1.000					
3	☐	1.000		15650915.45		A	0.4
4	☐	1.000		15814415.11		A	0.1
5	☐	1.000		15894672.40		A	0.4
6	☐	1.000		15936552.09		A	0.2
7	☐	1.000		16173546.54		A	0.6
8	☐	1.000		16271602.45		A	0.7
9	☐	1.000		15318910.41		A	0.3

165 Ho(ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		9411084.65		A	0.7
2	☐	1.000					
3	☐	1.000		9064576.04		A	0.1
4	☐	1.000		9161154.10		A	0.2
5	☐	1.000		9122398.06		A	0.2
6	☐	1.000		9148987.43		A	0.1
7	☐	1.000		9309159.93		A	0.3
8	☐	1.000		9266871.11		A	0.0
9	☐	1.000		9022338.68		A	0.6

209 Bi(ISTD) [NoGas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		10867067.89		A	0.7
2	☐	1.000					
3	☐	1.000		10329069.36		A	0.5
4	☐	1.000		10402944.91		A	0.5
5	☐	1.000		10258294.85		A	0.5
6	☐	1.000		10292022.97		A	0.1
7	☐	1.000		10329310.96		A	0.1
8	☐	1.000		10083255.89		A	0.2
9	☐	1.000		8753971.05		A	0.5



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		7277276.49		A	0.4
2	☐	1.000					
3	☐	1.000		6958130.04		A	0.1
4	☐	1.000		7009232.40		A	0.3
5	☐	1.000		6908515.45		A	0.1
6	☐	1.000		6856950.87		A	0.7
7	☐	1.000		6870143.44		A	1.2
8	☐	1.000		6678470.46		A	0.6
9	☐	1.000		6044740.26		A	0.3

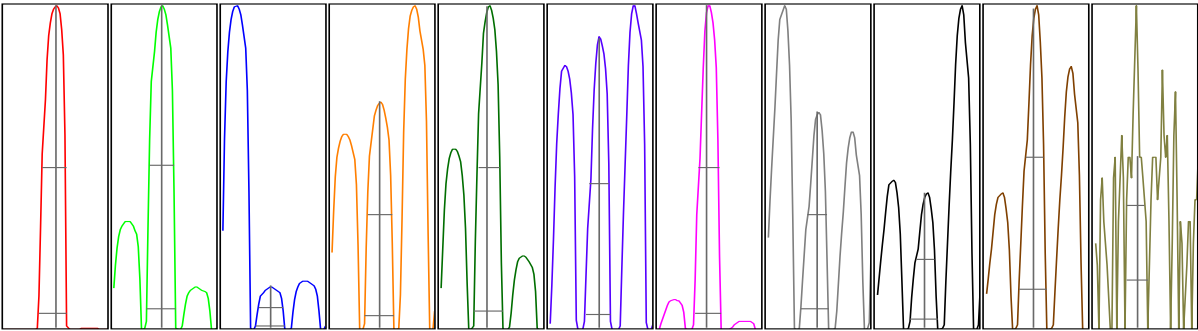
US EPA Tune Check Sample Report

Batch Folder D:\ICP-MS Data\P7072618MS.b
Report Comment
Instrument Name G8403A JP14410463

[No Gas]				
Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
9	13778	2.06	5.00	
24	208416	2.50	5.00	
25	27382	2.30	5.00	
26	31492	2.34	5.00	
59	110715	2.35	5.00	
113	14474	2.47	5.00	
115	174439	2.53	5.00	
206	42471	2.01	5.00	
207	39954	2.32	5.00	
208	91990	2.38	5.00	
220	0	37.82		

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
9	13881	13738	13964	14003	13304
24	210667	209534	210119	212473	199289
25	27665	27618	27518	27833	26273
26	31664	31818	31817	31970	30190
59	111554	111637	111819	112469	106096
113	14589	14550	14656	14727	13846
115	176359	175333	176353	177490	166658
206	42878	42602	42621	43237	41016
207	40358	40215	40219	40649	38327
208	92776	92559	92690	93761	88163
220	0	0	0	0	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	21407	9.05	8.9 - 9.1		0.822	0.900	
24	310836	23.95	23.9 - 24.1		0.836	0.900	
25	40314	24.95	24.9 - 25.1		0.838	0.900	
26	46826	25.95	25.9 - 26.1		0.836	0.900	
59	177615	58.90	58.9 - 59.1		0.828	0.900	
113	26455	113.00	112.9 - 113.1		0.741	0.900	
115	319771	114.95	114.9 - 115.1		0.776	0.900	
206	78989	206.00	205.9 - 206.1		0.791	0.900	
207	71872	206.95	206.9 - 207.1		0.779	0.900	
208	169691	207.95	207.9 - 208.1		0.782	0.900	
220	0	219.80	-		0.608		

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

Tune Parameters

Plasma Paramters

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

Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	7.8	V	Deflect	14.4	V
Extract 2	-120.0	V	Cell Entrance	-30	V	Plate Bias	-35	V
Omega Bias	-60	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	29887	1.13	
89	70398	0.99	
205	43536	0.99	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
59	29304	29922	30138	30106	29964
89	69218	70355	70684	70775	70958
205	42831	43418	43769	43769	43891

Integration Time [sec] = 0.1

Tune Parameters

Plasma Paramters

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

Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	9.4	V	Deflect	2.4	V
Extract 2	-150.0	V	Cell Entrance	-40	V	Plate Bias	-60	V
Omega Bias	-75	V	Cell Exit	-60	V			

Cell Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Use Gas	Yes		OctP Bias	-18.0	V	Energy Discrimination		5.0 V
He Flow	4.1	mL/min	OctP RF	200	V			