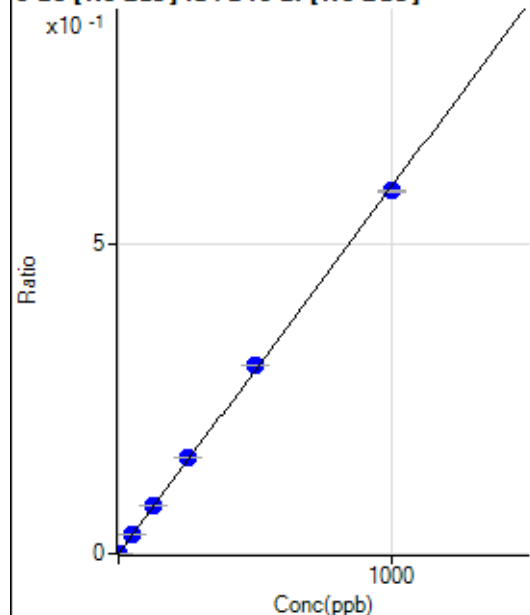


Batch Folder: D:\ICP-MS Data\P7062419-MS.b\
Analysis File: P7062419-MS.batch.bin
DA Date-Time: 2019-06-24 23:55:33
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	003CALB.d	S00	2019-06-24 14:15:42
2	004CALS.d	S01	2019-06-24 14:19:17
3	005CALS.d	S02	2019-06-24 14:23:17
4	006CALS.d	S03	2019-06-24 14:27:14
5	007CALS.d	S04	2019-06-24 14:31:10
6	008CALS.d	S05	2019-06-24 14:35:05
7	009CALS.d	S06	2019-06-24 14:38:59
8	010CALS.d	S07	2019-06-24 14:42:49
9	011CALS.d	S08	2019-06-24 14:46:39

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	31.11	0.0000	P	24.6
2	☐	0.100	0.078	100.00	0.0001	P	0.7
3	☐	1.000	1.015	936.71	0.0006	P	0.5
4	☐	50.000	53.730	46762.91	0.0318	P	0.7
5	☐	125.000	132.800	110529.39	0.0786	P	0.3
6	☐	250.000	263.994	203046.64	0.1562	P	0.3
7	☐	500.000	513.116	385502.53	0.3035	P	0.1
8	☐	1000.000	988.782	701379.26	0.5849	P	0.3
9	☐			180.00	0.0002	P	15.5

$$y = 5.9152\text{E-}004 * x + 2.0996\text{E-}005$$

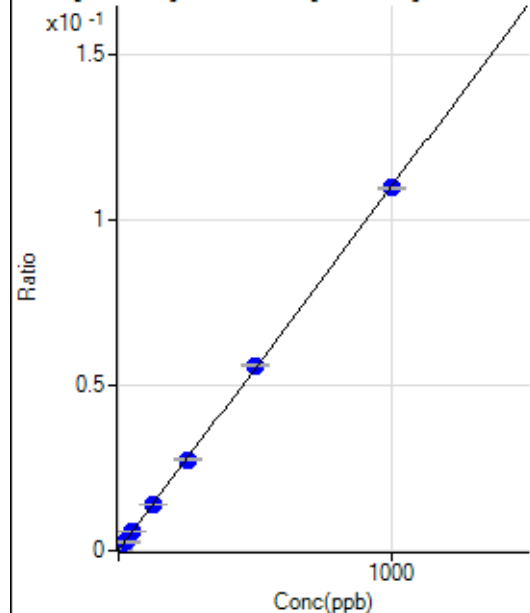
$$R = 0.9998$$

$$DL = 0.02624$$

$$BEC = 0.0355$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	258.35	0.0002	P	14.8
2	☐	2.500	2.156	613.93	0.0004	P	2.5
3	☐	25.000	22.479	3992.36	0.0026	P	4.7
4	☐	50.000	50.857	8480.48	0.0058	P	3.4
5	☐	125.000	125.187	19616.13	0.0139	P	2.3
6	☐	250.000	248.396	35748.78	0.0275	P	1.1
7	☐	500.000	508.164	71209.95	0.0561	P	1.0
8	☐	1000.000	996.317	131619.32	0.1098	P	0.4
9	☐			6935.21	0.0063	P	9.8

$$y = 1.1000\text{E-}004 * x + 1.7437\text{E-}004$$

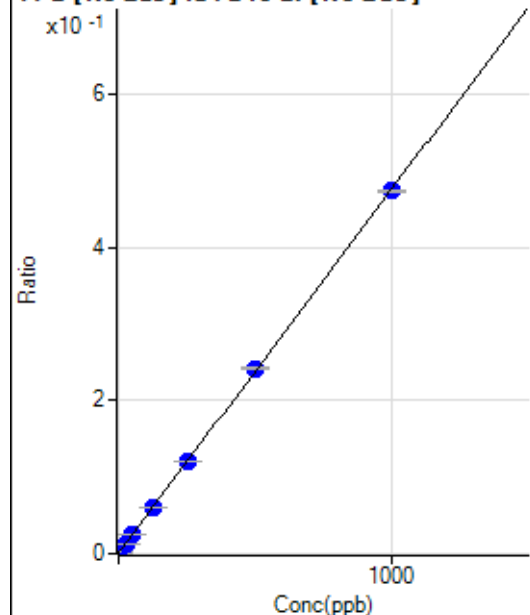
$$R = 0.9999$$

$$DL = 0.7036$$

$$BEC = 1.585$$

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	1238.99	0.0008	P	2.1
2	☐	2.500	2.144	2767.04	0.0019	P	4.1
3	☐	25.000	22.961	17724.80	0.0118	P	2.4
4	☐	50.000	49.892	36102.37	0.0246	P	2.4
5	☐	125.000	124.324	84316.15	0.0599	P	0.3
6	☐	250.000	251.448	156499.88	0.1204	P	1.4
7	☐	500.000	507.354	307387.88	0.2420	P	0.9
8	☐	1000.000	996.103	568827.06	0.4744	P	0.5
9	☐			30064.25	0.0273	P	8.6

$$y = 4.7541\text{E-}004 * x + 8.3624\text{E-}004$$

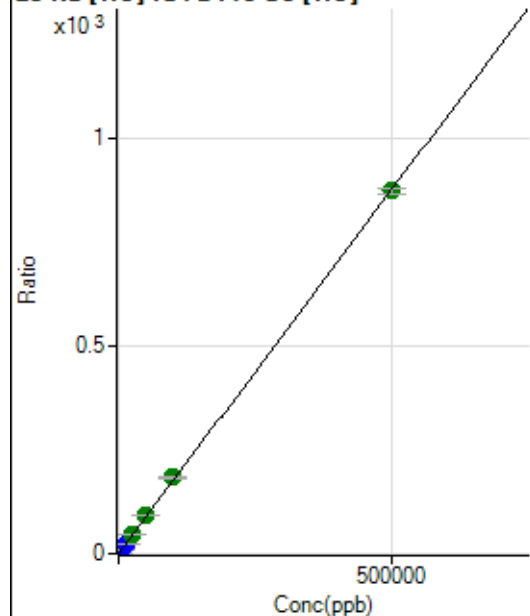
$$R = 1.0000$$

$$DL = 0.1096$$

$$BEC = 1.759$$

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	1919.64	0.0202	P	5.8
2	☐	50.000	48.514	9914.74	0.1052	P	1.8
3	☐	500.000	492.794	84239.12	0.8830	P	0.4
4	☐	5000.000	5285.187	854373.13	9.2739	P	1.6
5	☐	12500.000	13222.719	1962242.45	23.1715	P	0.7
6	☐	25000.000	26333.218	3679964.14	46.1262	A	0.5
7	☐	50000.000	52191.474	7193909.88	91.4006	A	0.6
8	☐	100000.00	105051.28	13482624.95	183.9511	A	1.6
9	☐	500000.00	498683.02	62401108.34	873.1481	A	1.3

$$y = 0.0018 * x + 0.0202$$

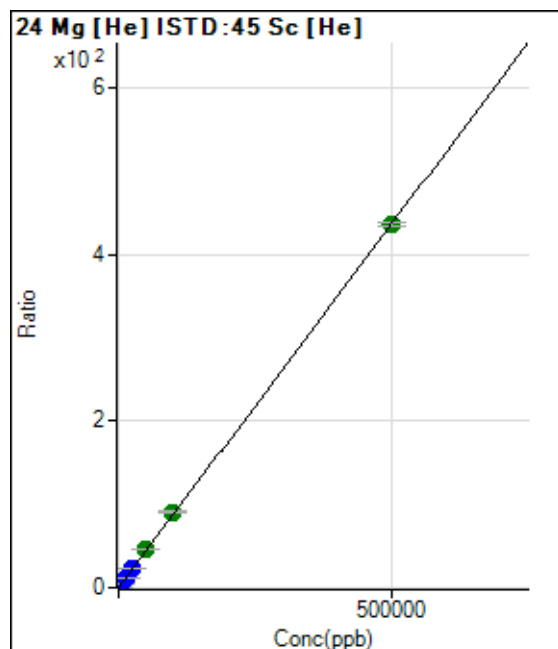
$$R = 0.9999$$

$$DL = 2.022$$

$$BEC = 11.55$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	113.90	0.0012	P	37.8
2	☐	50.000	50.854	4300.81	0.0456	P	2.8
3	☐	500.000	524.442	43806.75	0.4592	P	1.7
4	☐	5000.000	5430.907	437069.51	4.7441	P	1.2
5	☐	12500.000	13558.005	1002821.54	11.8416	P	0.5
6	☐	25000.000	26480.775	1845065.78	23.1272	P	0.5
7	☐	50000.000	51818.851	3561900.95	45.2552	A	0.8
8	☐	100000.00	103916.07	6651729.96	90.7523	A	1.6
9	☐	500000.00	498930.07	31140373.96	435.7226	A	1.1

$$y = 8.7331E-004 * x + 0.0012$$

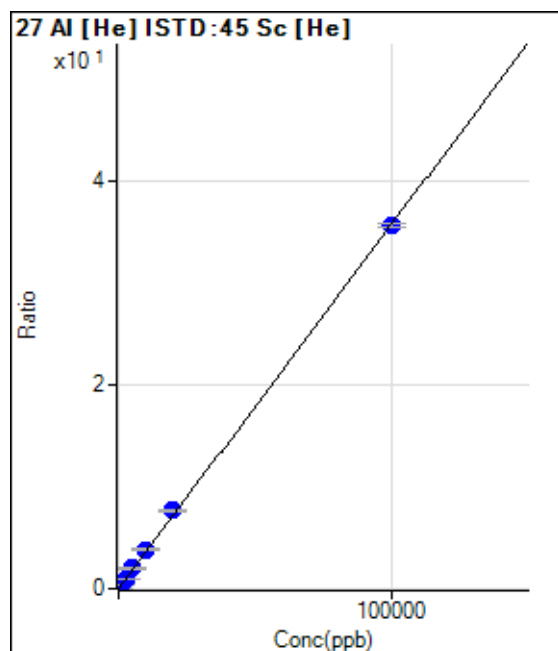
R = 1.0000

DL = 1.56

BEC = 1.376

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	16.67	0.0002	P	132.
2	☐	2.000	1.735	75.00	0.0008	P	30.4
3	☐	20.000	19.044	666.71	0.0070	P	7.3
4	☐	1000.000	1101.645	36319.87	0.3942	P	0.9
5	☐	2500.000	2774.798	84066.51	0.9926	P	0.3
6	☐	5000.000	5544.297	158219.96	1.9832	P	0.4
7	☐	10000.000	10797.172	303974.38	3.8620	P	1.1
8	☐	20000.000	21456.928	562542.62	7.6748	P	1.1
9	☐	100000.00	99593.796	2545840.64	35.6223	P	1.2

$$y = 3.5767E-004 * x + 1.7619E-004$$

R = 0.9999

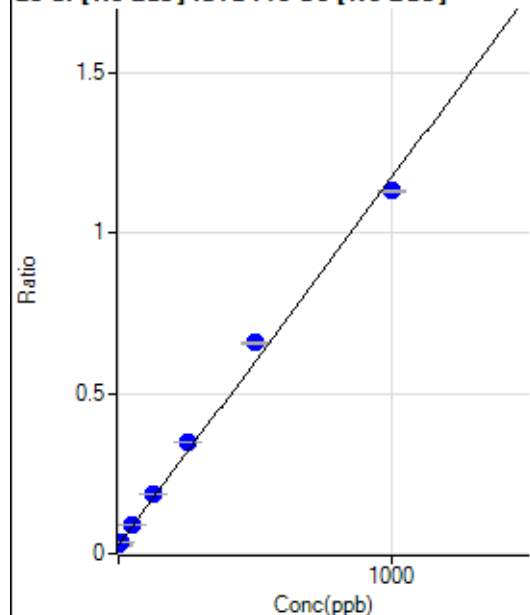
DL = 1.957

BEC = 0.4926

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	54912.50	0.0270	P	1.6
2	☐	1.000	0.269	55682.11	0.0273	P	0.5
3	☐	10.000	8.323	74486.25	0.0365	P	0.8
4	☐	50.000	55.818	180281.04	0.0909	P	1.9
5	☐	125.000	139.753	355677.60	0.1869	P	1.4
6	☐	250.000	281.395	600579.81	0.3490	P	0.6
7	☐	500.000	551.017	1111926.33	0.6576	P	0.8
8	☐	1000.000	964.526	1805605.49	1.1308	P	0.8
9	☐			125811.79	0.0844	P	1.5

$$y = 0.0011 * x + 0.0270$$

$$R = 0.9974$$

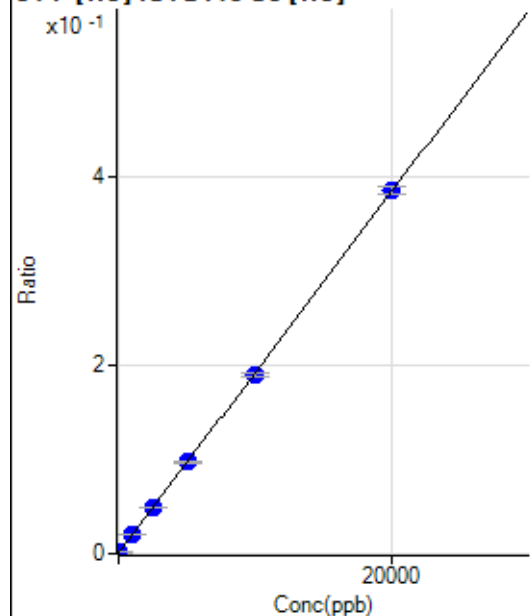
$$DL = 1.159$$

$$BEC = 23.59$$

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	-20.332	36.11	0.0004	P	35.1
2	☐	0.000	-6.330	61.12	0.0006	P	8.9
3	☐	0.000	26.663	122.23	0.0013	P	31.9
4	☐	1000.000	1018.689	1869.64	0.0203	P	6.9
5	☐	2500.000	2530.281	4170.18	0.0492	P	2.5
6	☐	5000.000	5020.655	7732.85	0.0969	P	1.0
7	☐	10000.000	9872.690	14944.15	0.1899	P	1.3
8	☐	20000.000	20053.772	28205.20	0.3849	P	2.1
9	☐			58.33	0.0008	P	37.7

$$y = 1.9153E-005 * x + 7.6988E-004$$

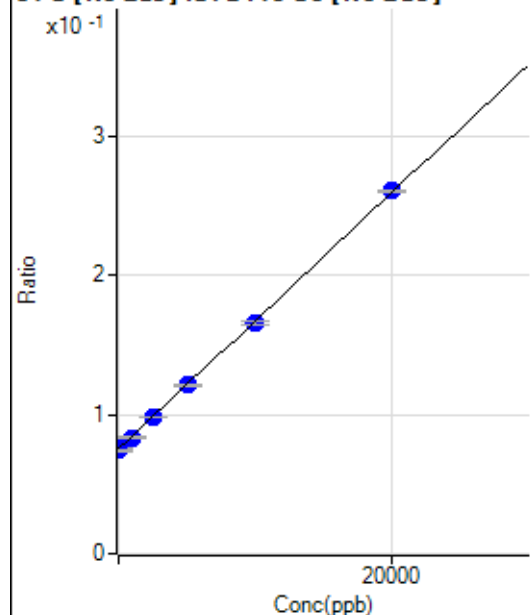
$$R = 1.0000$$

$$DL = 31.34$$

$$BEC = 40.2$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	-12.254	153487.91	0.0754	P	0.7
2	☐	0.000	182.933	157543.38	0.0772	P	1.3
3	☐	0.000	-170.679	150909.75	0.0740	P	0.9
4	☐	1000.000	863.951	165694.97	0.0835	P	0.7
5	☐	2500.000	2411.287	186032.91	0.0978	P	0.4
6	☐	5000.000	4950.553	208442.92	0.1211	P	0.5
7	☐	10000.000	9798.802	280287.90	0.1658	P	1.2
8	☐	20000.000	20130.852	416575.67	0.2609	P	0.6
9	☐			113530.53	0.0762	P	1.9

$$y = 9.2054\text{E-}006 * x + 0.0756$$

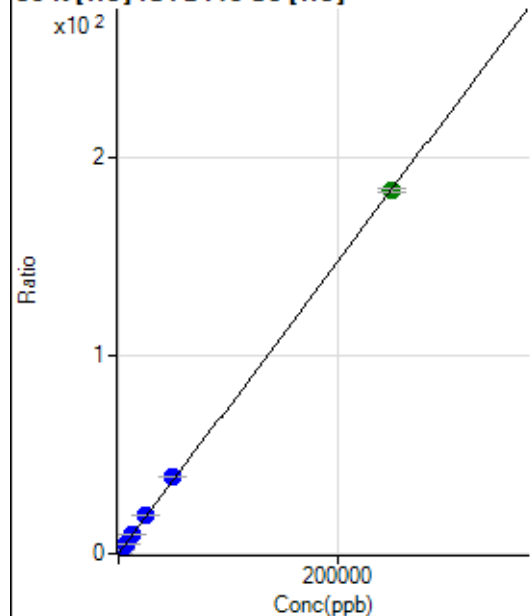
R = 0.9998

DL = 238.9

BEC = 8208

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	5195.58	0.0548	P	3.1
2	☐	50.000	49.014	8555.58	0.0908	P	4.3
3	☐	500.000	509.512	40929.61	0.4290	P	1.8
4	☐	2500.000	2764.008	192114.35	2.0852	P	0.8
5	☐	6250.000	6968.453	438121.47	5.1737	P	0.9
6	☐	12500.000	13650.725	804371.82	10.0825	P	0.4
7	☐	25000.000	26628.812	1543960.83	19.6161	P	0.4
8	☐	50000.000	52588.586	2835512.04	38.6860	P	1.3
9	☐	250000.00	249241.24	13089096.13	183.1456	A	1.1

$$y = 7.3459\text{E-}004 * x + 0.0548$$

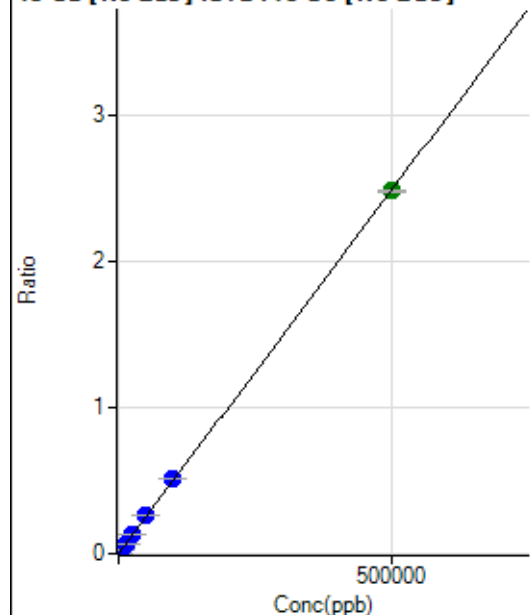
R = 0.9999

DL = 7.027

BEC = 74.55

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	72.23	0.0000	P	17.5
2	☐	50.000	49.733	577.81	0.0003	P	18.7
3	☐	500.000	471.011	4859.33	0.0024	P	3.3
4	☐	5000.000	5152.492	51013.80	0.0257	P	2.3
5	☐	12500.000	12964.979	123024.47	0.0646	P	0.7
6	☐	25000.000	26087.595	223770.28	0.1300	P	0.2
7	☐	50000.000	51817.363	436715.02	0.2583	P	0.7
8	☐	100000.00	102701.62	817329.02	0.5118	P	0.4
9	☐	500000.00	499210.43	3707330.21	2.4878	A	0.8

$$y = 4.9834\text{E-}006 * x + 3.5499\text{E-}005$$

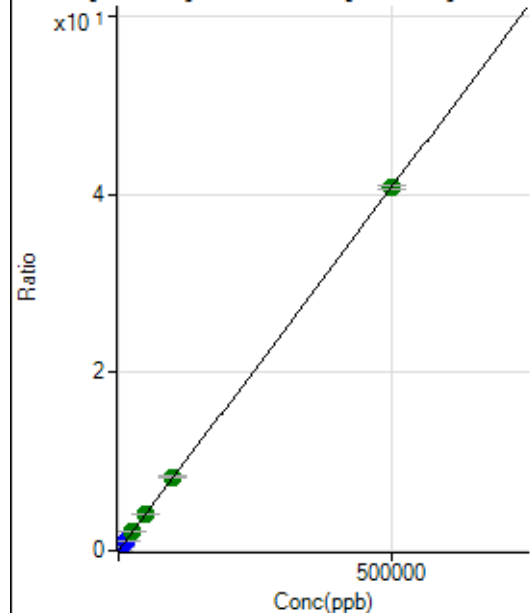
$$R = 1.0000$$

$$DL = 3.744$$

$$BEC = 7.124$$

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	1733.51	0.0009	P	8.0
2	☐	50.000	47.578	9653.53	0.0047	P	3.4
3	☐	500.000	479.931	81594.23	0.0400	P	0.7
4	☐	5000.000	5110.856	828872.07	0.4178	P	0.6
5	☐	12500.000	12528.364	1946483.77	1.0229	P	0.4
6	☐	25000.000	25807.311	3624196.44	2.1061	A	0.1
7	☐	50000.000	50967.959	7032003.89	4.1586	A	0.9
8	☐	100000.00	101801.08	13262539.62	8.3054	A	0.5
9	☐	500000.00	499500.82	60723218.72	40.7484	A	0.9

$$y = 8.1577\text{E-}005 * x + 8.5212\text{E-}004$$

$$R = 1.0000$$

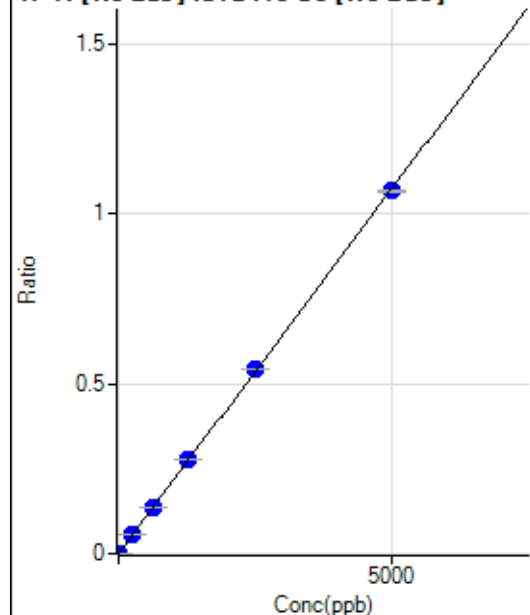
$$DL = 2.514$$

$$BEC = 10.45$$

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	19.45	0.0000	P	24.6
2	☐	0.500	0.464	222.23	0.0001	P	7.6
3	☐	5.000	4.996	2203.03	0.0011	P	6.0
4	☐	250.000	256.841	109235.53	0.0551	P	1.3
5	☐	625.000	636.208	259493.09	0.1364	P	0.4
6	☐	1250.000	1289.426	475559.54	0.2764	P	0.4
7	☐	2500.000	2521.255	913746.68	0.5404	P	0.1
8	☐	5000.000	4977.773	1703751.27	1.0669	P	0.2
9	☐			505.59	0.0003	P	17.5

$$y = 2.1432E-004 * x + 9.5574E-006$$

$$R = 1.0000$$

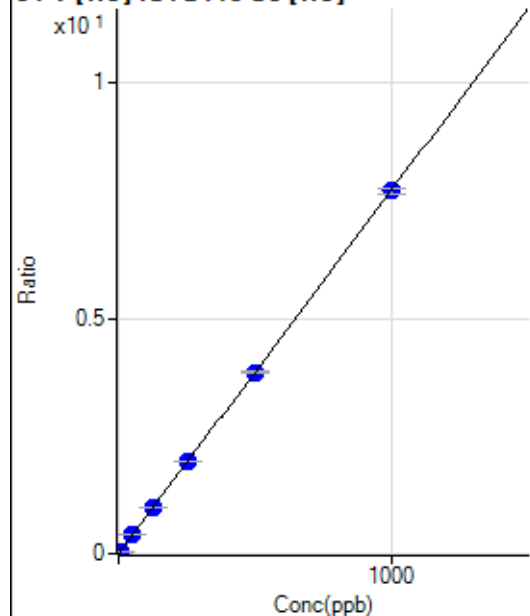
$$DL = 0.03292$$

$$BEC = 0.04459$$

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	0.00	0.0000	P	
2	☐	0.500	0.518	376.68	0.0040	P	10.2
3	☐	5.000	5.103	3756.09	0.0394	P	2.9
4	☐	50.000	51.659	36728.03	0.3986	P	0.4
5	☐	125.000	129.132	84385.40	0.9964	P	0.5
6	☐	250.000	255.437	157252.97	1.9711	P	0.5
7	☐	500.000	499.905	303614.54	3.8575	P	0.4
8	☐	1000.000	998.088	564495.25	7.7017	P	1.5
9	☐			62.22	0.0009	P	4.9

$$y = 0.0077 * x + 0.0000E+000$$

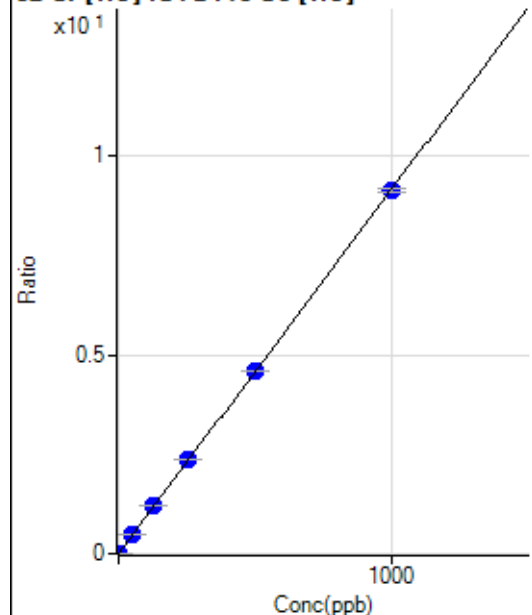
$$R = 1.0000$$

$$DL = 0$$

$$BEC = 0$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	245.56	0.0026	P	7.0
2	☐	0.200	0.159	381.12	0.0040	P	6.9
3	☐	2.000	1.856	1867.92	0.0196	P	4.2
4	☐	50.000	52.037	44139.31	0.4790	P	0.2
5	☐	125.000	130.119	101112.71	1.1940	P	0.7
6	☐	250.000	258.540	189061.24	2.3698	P	0.5
7	☐	500.000	502.078	362030.50	4.5997	P	0.7
8	☐	1000.000	996.085	668696.57	9.1229	P	1.0
9	☐			2664.73	0.0373	P	3.6

$$y = 0.0092 * x + 0.0026$$

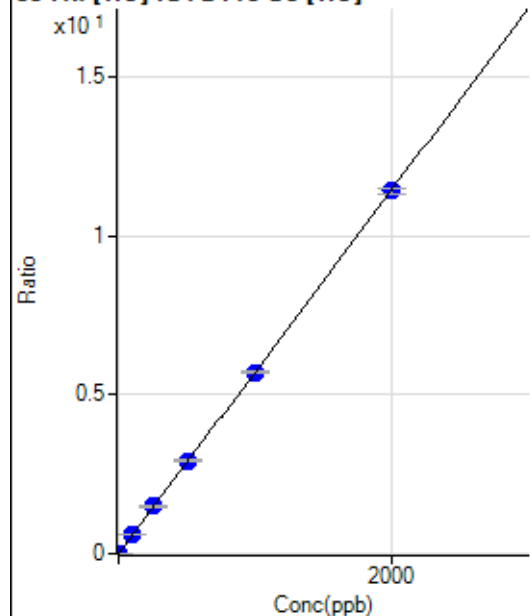
$$R = 0.9999$$

$$DL = 0.05904$$

$$BEC = 0.2827$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	14.45	0.0002	P	48.2
2	☐	0.100	0.264	156.67	0.0017	P	14.5
3	☐	1.000	1.054	590.02	0.0062	P	2.3
4	☐	100.000	102.687	54138.10	0.5876	P	1.6
5	☐	250.000	259.892	125944.31	1.4870	P	0.9
6	☐	500.000	511.155	233315.52	2.9246	P	1.0
7	☐	1000.000	999.533	450105.86	5.7187	P	0.7
8	☐	2000.000	1996.074	837038.72	11.4201	P	1.3
9	☐			2866.99	0.0401	P	2.7

$$y = 0.0057 * x + 1.5242E-004$$

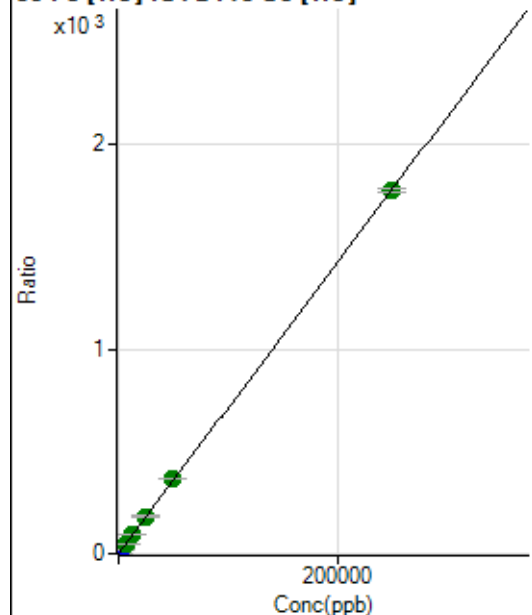
$$R = 1.0000$$

$$DL = 0.03856$$

$$BEC = 0.02664$$

Weight: <None>

Min Conc: 0

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

$$y = 0.0071 * x + 0.0107$$

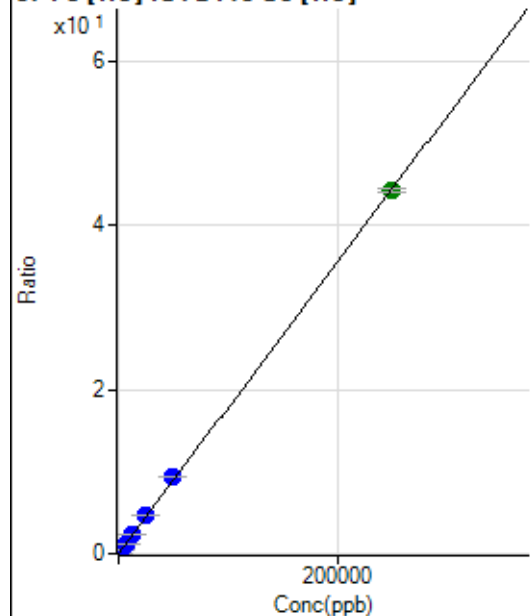
$$R = 1.0000$$

$$DL = 0.2651$$

$$BEC = 1.501$$

Weight: <None>

Min Conc: 0

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

$$y = 1.7720E-004 * x + 4.1022E-004$$

$$R = 0.9999$$

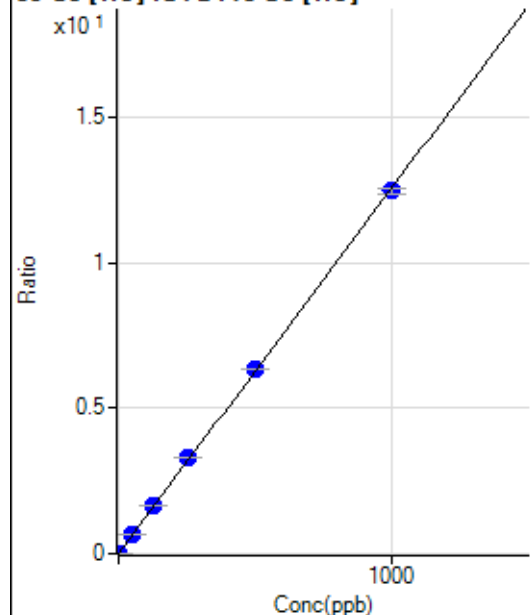
$$DL = 2.649$$

$$BEC = 2.315$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	13.33	0.0001	P	24.8
2	☐	0.100	0.088	117.78	0.0012	P	11.8
3	☐	1.000	1.030	1246.74	0.0131	P	5.4
4	☐	50.000	52.896	61174.72	0.6640	P	1.2
5	☐	125.000	132.626	140966.85	1.6646	P	0.8
6	☐	250.000	261.224	261562.53	3.2786	P	0.5
7	☐	500.000	505.467	499317.81	6.3439	P	0.5
8	☐	1000.000	993.362	913807.56	12.4672	P	1.2
9	☐			10123.64	0.1416	P	0.8

$$y = 0.0126 * x + 1.4049E-004$$

$$R = 0.9999$$

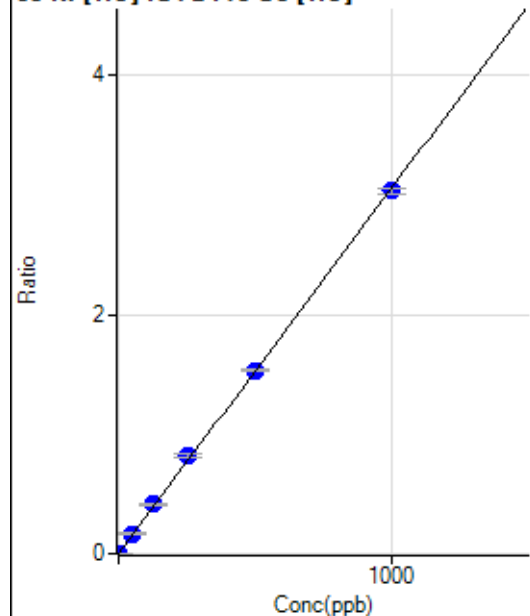
$$DL = 0.008339$$

$$BEC = 0.01119$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	27.78	0.0003	P	27.5
2	☐	0.100	0.101	56.67	0.0006	P	15.1
3	☐	1.000	0.960	307.79	0.0032	P	3.8
4	☐	50.000	54.916	15489.46	0.1681	P	1.8
5	☐	125.000	135.614	35113.28	0.4147	P	2.2
6	☐	250.000	267.397	65207.49	0.8174	P	2.8
7	☐	500.000	502.125	120794.79	1.5347	P	0.9
8	☐	1000.000	993.016	222428.89	3.0347	P	1.4
9	☐			3772.77	0.0528	P	6.0

$$y = 0.0031 * x + 2.9264E-004$$

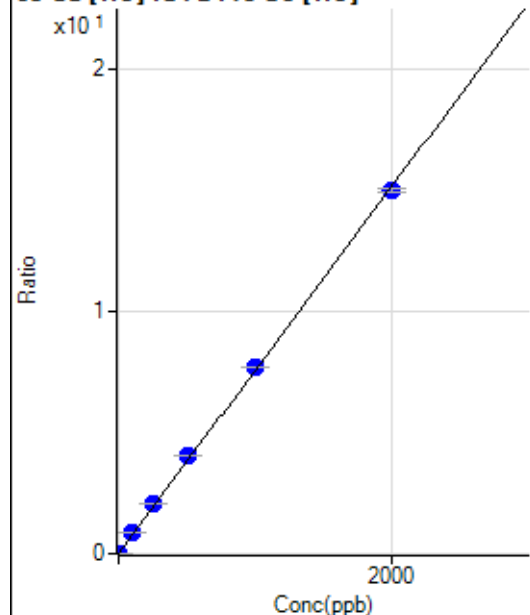
$$R = 0.9998$$

$$DL = 0.07887$$

$$BEC = 0.09577$$

Weight: <None>

Min Conc: 0

⁶³Cu [He] ISTD:45 Sc [He]

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	148.88	0.0016	P	16.5
2	☐	0.200	0.208	296.25	0.0031	P	6.1
3	☐	2.000	2.172	1715.75	0.0180	P	3.3
4	☐	100.000	110.498	77104.03	0.8369	P	0.7
5	☐	250.000	273.016	174910.76	2.0654	P	0.7
6	☐	500.000	535.400	323000.37	4.0488	P	1.1
7	☐	1000.000	1019.465	606684.61	7.7079	P	0.3
8	☐	2000.000	1978.016	1096076.28	14.9538	P	1.1
9	☐			13689.16	0.1916	P	2.2

$$y = 0.0076 * x + 0.0016$$

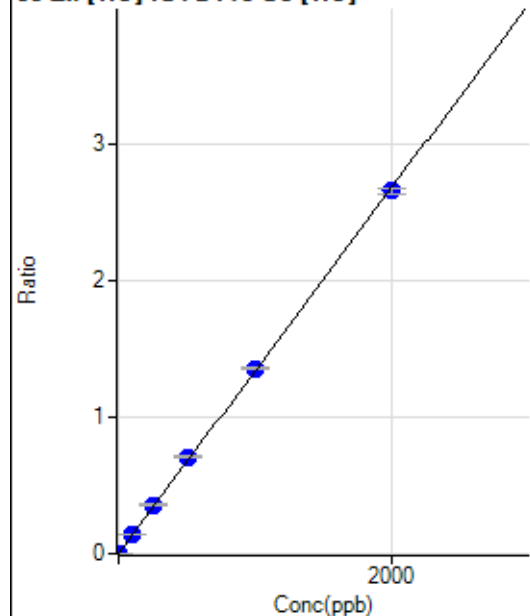
$$R = 0.9997$$

$$DL = 0.103$$

$$BEC = 0.2077$$

Weight: <None>

Min Conc: 0

⁶⁶Zn [He] ISTD:45 Sc [He]

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	56.67	0.0006	P	6.2
2	☐	0.200	0.319	96.67	0.0010	P	4.7
3	☐	2.000	1.945	305.56	0.0032	P	4.7
4	☐	100.000	107.555	13328.44	0.1447	P	0.9
5	☐	250.000	266.500	30278.24	0.3576	P	1.3
6	☐	500.000	530.320	56717.53	0.7109	P	1.0
7	☐	1000.000	1013.049	106849.40	1.3575	P	0.5
8	☐	2000.000	1983.455	194762.90	2.6574	P	1.7
9	☐			1441.21	0.0202	P	4.3

$$y = 0.0013 * x + 5.9737E-004$$

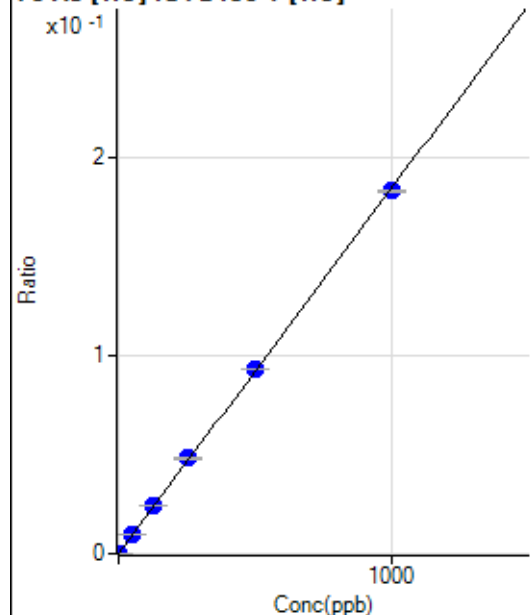
$$R = 0.9998$$

$$DL = 0.08317$$

$$BEC = 0.446$$

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	2.47	0.0000	P	42.7
2	☐	0.100	0.063	7.41	0.0000	P	66.7
3	☐	1.000	0.825	67.90	0.0002	P	4.0
4	☐	50.000	53.705	4141.98	0.0099	P	3.3
5	☐	125.000	133.470	9564.93	0.0246	P	0.9
6	☐	250.000	260.905	17843.71	0.0481	P	1.5
7	☐	500.000	505.972	33879.51	0.0932	P	0.3
8	☐	1000.000	993.044	63462.85	0.1830	P	0.4
9	☐			74.69	0.0002	P	17.2

$$y = 1.8426E-004 * x + 5.7573E-006$$

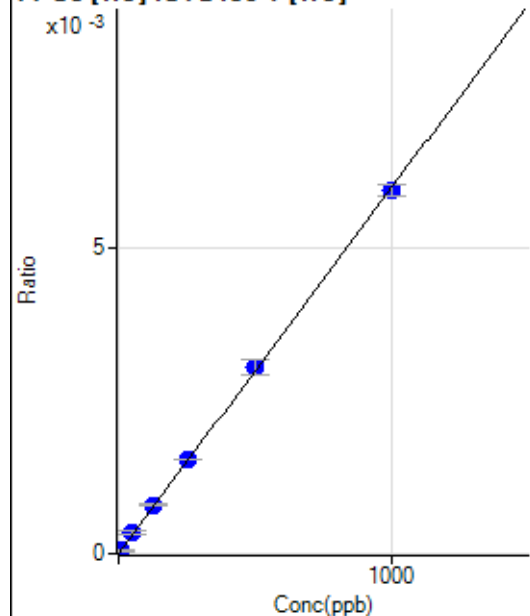
$$R = 0.9999$$

$$DL = 0.04004$$

$$BEC = 0.03124$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	0.00	0.0000	P	
2	☐	0.500	0.000	0.00	0.0000	P	
3	☐	5.000	8.195	21.11	0.0000	P	9.3
4	☐	50.000	57.707	144.45	0.0003	P	10.1
5	☐	125.000	132.718	308.90	0.0008	P	3.1
6	☐	250.000	256.591	570.02	0.0015	P	1.3
7	☐	500.000	510.773	1111.17	0.0031	P	8.8
8	☐	1000.000	991.600	2059.07	0.0059	P	3.1
9	☐			0.00	0.0000	P	

$$y = 5.9857E-006 * x + 0.0000E+000$$

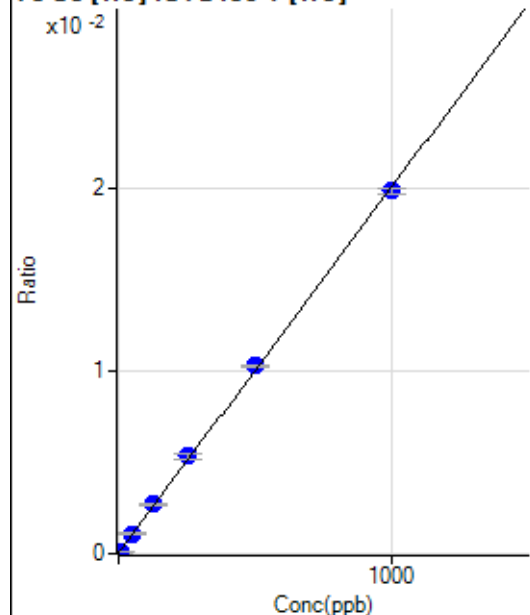
$$R = 0.9999$$

$$DL = 0$$

$$BEC = 0$$

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	16.05	0.0000	P	36.9
2	☐	0.500	0.287	18.52	0.0000	P	10.7
3	☐	5.000	5.210	61.11	0.0001	P	17.0
4	☐	50.000	52.729	458.04	0.0011	P	5.2
5	☐	125.000	133.001	1051.90	0.0027	P	1.2
6	☐	250.000	263.676	1976.70	0.0053	P	4.5
7	☐	500.000	510.925	3737.55	0.0103	P	1.1
8	☐	1000.000	989.981	6900.46	0.0199	P	1.8
9	☐			13.58	0.0000	P	44.7

$$y = 2.0059\text{E-}005 * x + 3.7503\text{E-}005$$

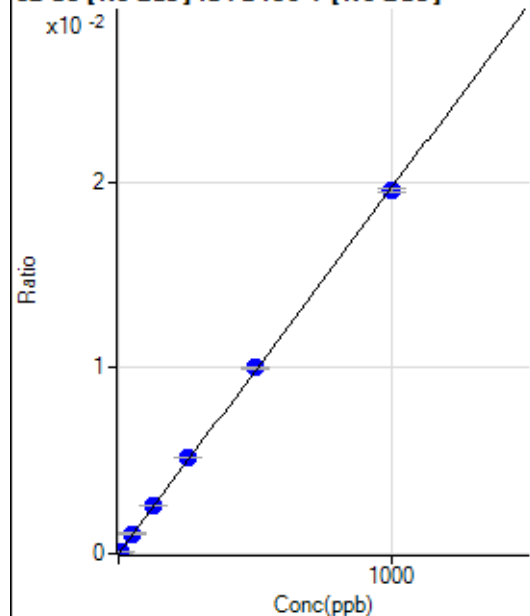
$$R = 0.9998$$

$$DL = 2.071$$

$$BEC = 1.87$$

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	6.83	0.0000	P	144.
2	☐	0.500	0.954	57.95	0.0000	P	29.5
3	☐	5.000	4.952	273.63	0.0001	P	6.3
4	☐	50.000	54.352	2850.68	0.0011	P	3.7
5	☐	125.000	130.950	6671.76	0.0026	P	0.9
6	☐	250.000	260.825	12447.03	0.0051	P	0.1
7	☐	500.000	508.542	23730.77	0.0100	P	1.3
8	☐	1000.000	992.062	44312.54	0.0195	P	1.0
9	☐			14.56	0.0000	P	138.

$$y = 1.9693\text{E-}005 * x + 2.5102\text{E-}006$$

$$R = 0.9999$$

$$DL = 0.5531$$

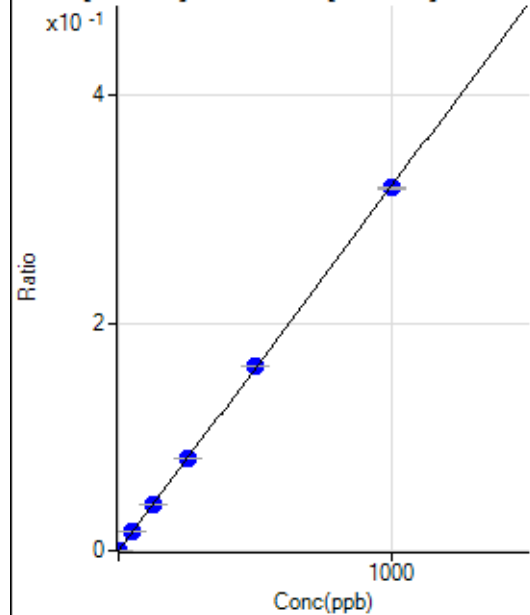
$$BEC = 0.1275$$

Weight: <None>

Min Conc: 0

83 Kr [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			80.00		P	14.4
2	☐			62.22		P	13.5
3	☐			81.11		P	15.6
4	☐			64.45		P	26.0
5	☐			72.22		P	9.6
6	☐			52.22		P	13.3
7	☐			67.78		P	10.2
8	☐			60.00		P	14.7
9	☐			75.56		P	34.3

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	105.56	0.0000	P	39.1
2	☐	0.100	0.147	233.34	0.0001	P	12.5
3	☐	1.000	1.028	1005.64	0.0004	P	13.1
4	☐	50.000	51.345	43750.89	0.0165	P	0.7
5	☐	125.000	126.521	104729.75	0.0405	P	0.3
6	☐	250.000	253.374	196452.37	0.0811	P	1.3
7	☐	500.000	507.463	384742.11	0.1624	P	0.4
8	☐	1000.000	995.168	722185.92	0.3185	P	0.3
9	☐			2739.27	0.0013	P	11.0

$$y = 3.1997E-004 * x + 3.8856E-005$$

$$R = 1.0000$$

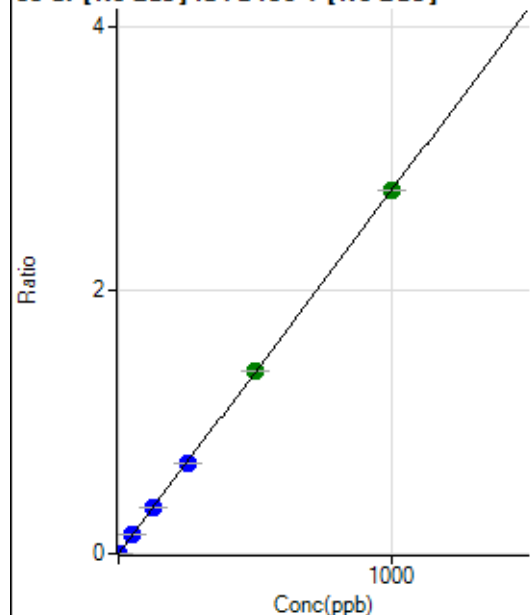
$$DL = 0.1425$$

$$BEC = 0.1214$$

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	52.78	0.0000	P	59.9
2	☐	0.100	0.090	725.04	0.0003	P	18.4
3	☐	1.000	0.927	7052.03	0.0026	P	3.5
4	☐	50.000	51.052	374630.61	0.1410	P	0.2
5	☐	125.000	126.123	900318.87	0.3483	P	0.4
6	☐	250.000	249.987	1672233.86	0.6904	P	0.5
7	☐	500.000	501.453	3280761.32	1.3849	A	0.2
8	☐	1000.000	999.084	6257388.12	2.7592	A	0.1
9	☐			22924.62	0.0109	P	0.7

$$y = 0.0028 * x + 1.9430E-005$$

$$R = 1.0000$$

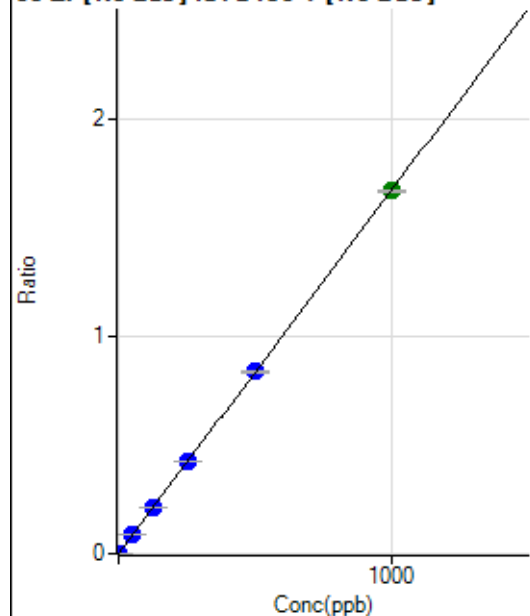
$$DL = 0.01264$$

$$BEC = 0.007035$$

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	213.90	0.0001	P	16.1
2	☐	0.100	0.094	644.49	0.0002	P	18.4
3	☐	1.000	0.922	4437.00	0.0016	P	6.3
4	☐	50.000	51.511	229270.09	0.0863	P	0.7
5	☐	125.000	126.865	549025.60	0.2124	P	0.6
6	☐	250.000	254.586	1032266.39	0.4262	P	0.5
7	☐	500.000	500.314	1983955.02	0.8375	P	0.5
8	☐	1000.000	998.388	3789826.73	1.6711	A	0.3
9	☐			1000.08	0.0005	P	13.2

$$y = 0.0017 * x + 7.8714E-005$$

$$R = 1.0000$$

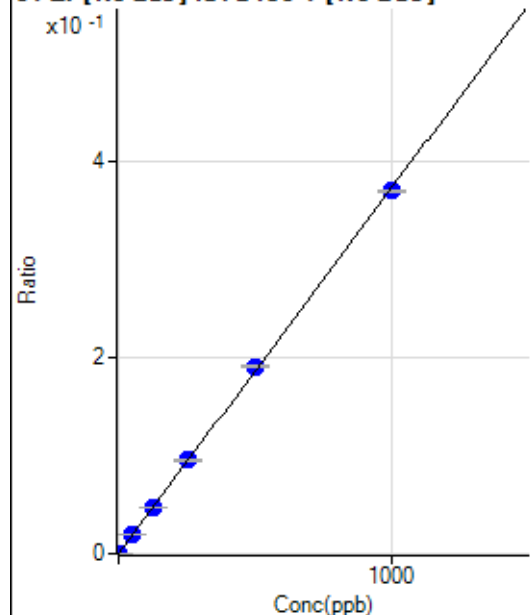
$$DL = 0.02266$$

$$BEC = 0.04703$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	38.89	0.0000	P	32.7
2	☐	0.100	0.129	169.45	0.0001	P	9.5
3	☐	1.000	0.974	1030.64	0.0004	P	14.4
4	☐	50.000	50.846	50322.87	0.0189	P	1.2
5	☐	125.000	127.643	122854.31	0.0475	P	1.2
6	☐	250.000	255.571	230469.08	0.0952	P	0.8
7	☐	500.000	511.832	451403.73	0.1905	P	0.5
8	☐	1000.000	992.319	837804.10	0.3694	P	0.7
9	☐			141.67	0.0001	P	14.5

$$y = 3.7226\text{E-}004 * x + 1.4308\text{E-}005$$

$$R = 0.9999$$

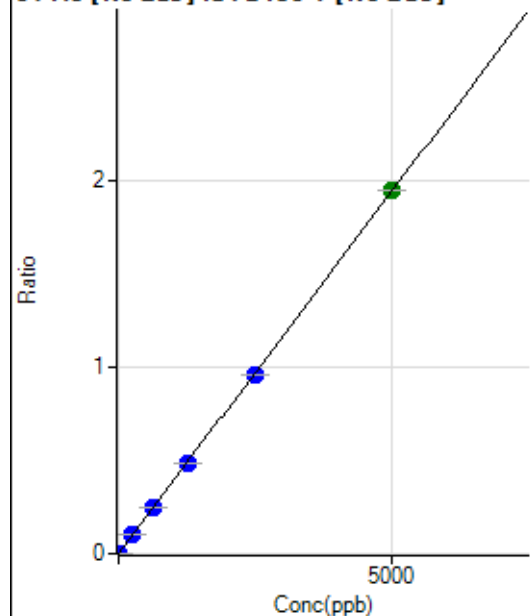
$$DL = 0.03771$$

$$BEC = 0.03844$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	75.00	0.0000	P	19.0
2	☐	0.500	0.439	538.93	0.0002	P	22.1
3	☐	5.000	4.890	5262.33	0.0019	P	6.0
4	☐	250.000	254.632	262491.46	0.0988	P	0.6
5	☐	625.000	628.391	630109.27	0.2438	P	0.5
6	☐	1250.000	1250.843	1175297.13	0.4852	P	0.9
7	☐	2500.000	2472.966	2272598.81	0.9593	P	0.3
8	☐	5000.000	5012.651	4409720.80	1.9445	A	0.1
9	☐			1325.13	0.0006	P	7.8

$$y = 3.8791\text{E-}004 * x + 2.7586\text{E-}005$$

$$R = 1.0000$$

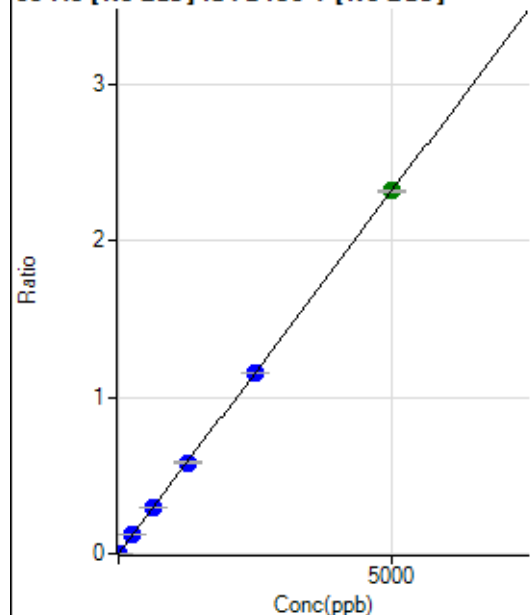
$$DL = 0.04063$$

$$BEC = 0.07111$$

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	30.55	0.0000	P	15.5
2	☐	0.500	0.488	647.26	0.0002	P	9.8
3	☐	5.000	5.118	6521.20	0.0024	P	1.4
4	☐	250.000	259.027	319191.78	0.1201	P	0.3
5	☐	625.000	635.619	761962.46	0.2948	P	0.8
6	☐	1250.000	1258.349	1413542.34	0.5836	P	0.3
7	☐	2500.000	2482.424	2727401.73	1.1513	P	0.1
8	☐	5000.000	5004.922	5263900.34	2.3212	A	0.5
9	☐			1827.96	0.0009	P	4.8

$$y = 4.6378E-004 * x + 1.1236E-005$$

$$R = 1.0000$$

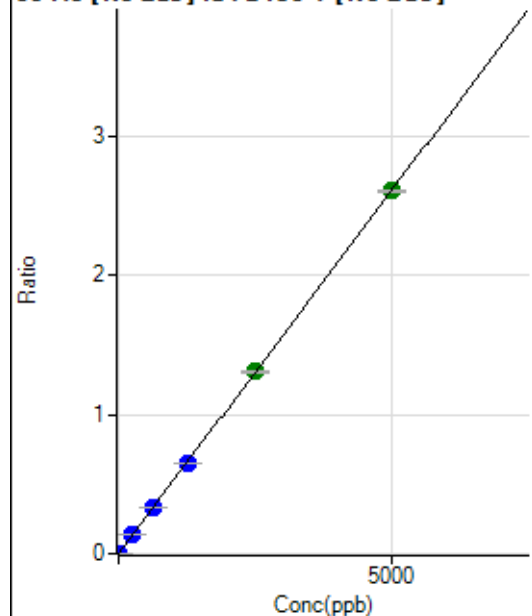
$$DL = 0.01124$$

$$BEC = 0.02423$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	47.22	0.0000	P	54.2
2	☐	0.500	0.417	638.93	0.0002	P	5.5
3	☐	5.000	4.801	6893.61	0.0025	P	4.6
4	☐	250.000	255.630	354135.96	0.1333	P	0.7
5	☐	625.000	630.373	849500.72	0.3287	P	0.6
6	☐	1250.000	1244.628	1571764.61	0.6489	P	0.9
7	☐	2500.000	2505.774	3094969.99	1.3065	A	0.2
8	☐	5000.000	4997.503	5908865.54	2.6056	A	0.4
9	☐			2341.96	0.0011	P	5.7

$$y = 5.2138E-004 * x + 1.7392E-005$$

$$R = 1.0000$$

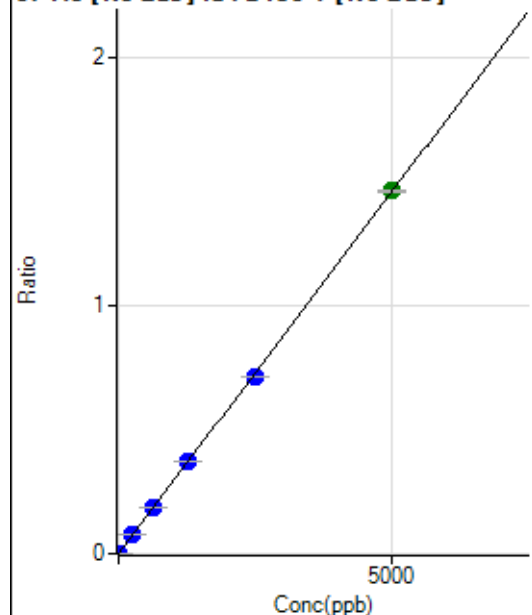
$$DL = 0.05427$$

$$BEC = 0.03336$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	11.11	0.0000	P	114.
2	☐	0.500	0.455	372.24	0.0001	P	4.6
3	☐	5.000	5.296	4239.69	0.0016	P	6.8
4	☐	250.000	257.594	199817.56	0.0752	P	0.7
5	☐	625.000	631.230	476350.08	0.1843	P	0.6
6	☐	1250.000	1265.478	894895.27	0.3695	P	0.3
7	☐	2500.000	2454.010	1697309.95	0.7165	P	0.3
8	☐	5000.000	5017.966	3322554.74	1.4651	A	0.7
9	☐			988.97	0.0005	P	10.2

$$y = 2.9196\text{E-}004 * x + 4.0792\text{E-}006$$

$$R = 0.9999$$

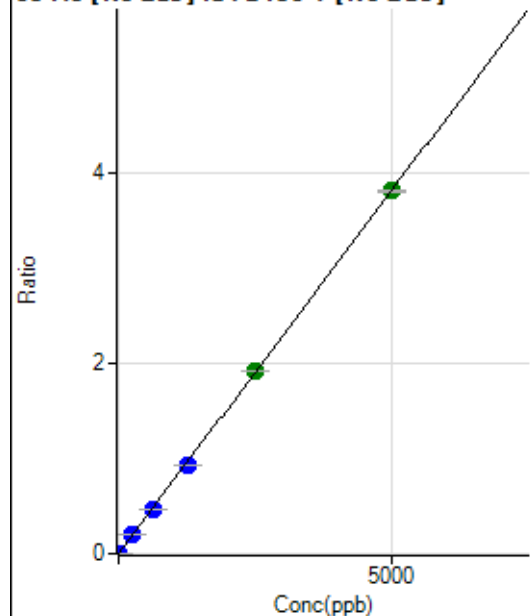
$$DL = 0.04802$$

$$BEC = 0.01397$$

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	27.78	0.0000	P	34.7
2	☐	0.500	0.446	950.07	0.0003	P	8.3
3	☐	5.000	4.921	10270.76	0.0038	P	3.1
4	☐	250.000	252.316	510229.44	0.1920	P	0.4
5	☐	625.000	621.264	1222146.03	0.4729	P	0.2
6	☐	1250.000	1226.882	2261700.44	0.9338	P	0.8
7	☐	2500.000	2513.956	4532718.16	1.9134	A	0.1
8	☐	5000.000	4999.153	8629026.41	3.8049	A	0.6
9	☐			2639.24	0.0013	P	8.0

$$y = 7.6110\text{E-}004 * x + 1.0223\text{E-}005$$

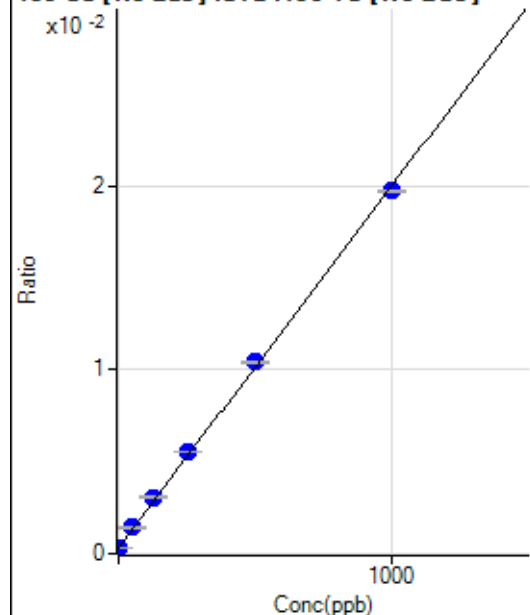
$$R = 1.0000$$

$$DL = 0.01399$$

$$BEC = 0.01343$$

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	1130.65	0.0003	P	7.5
2	☐	0.100	-0.079	1113.98	0.0003	P	5.2
3	☐	1.000	-0.146	1113.98	0.0003	P	4.2
4	☐	50.000	56.552	4953.82	0.0014	P	4.5
5	☐	125.000	139.474	10470.95	0.0031	P	4.7
6	☐	250.000	265.474	18384.82	0.0055	P	1.4
7	☐	500.000	513.518	34651.60	0.0104	P	1.6
8	☐	1000.000	987.237	64327.56	0.0197	P	0.8
9	☐			822.28	0.0003	P	9.9

$$y = 1.9661E-005 * x + 3.2155E-004$$

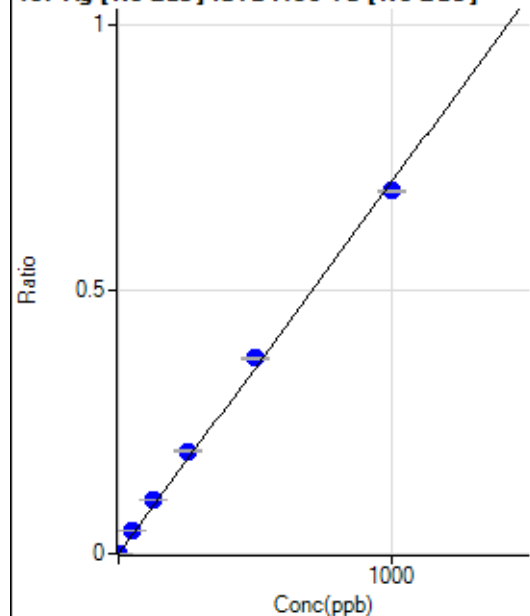
$$R = 0.9997$$

$$DL = 3.67$$

$$BEC = 16.35$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	27.78	0.0000	P	62.1
2	☐	0.100	0.109	294.46	0.0001	P	2.5
3	☐	1.000	1.083	2689.26	0.0008	P	9.5
4	☐	50.000	60.500	147131.57	0.0426	P	1.0
5	☐	125.000	144.959	348579.49	0.1020	P	1.1
6	☐	250.000	275.299	642638.00	0.1937	P	1.3
7	☐	500.000	527.583	1234601.65	0.3712	P	1.1
8	☐	1000.000	976.864	2240666.41	0.6873	P	0.3
9	☐			158.34	0.0001	P	40.2

$$y = 7.0352E-004 * x + 7.8746E-006$$

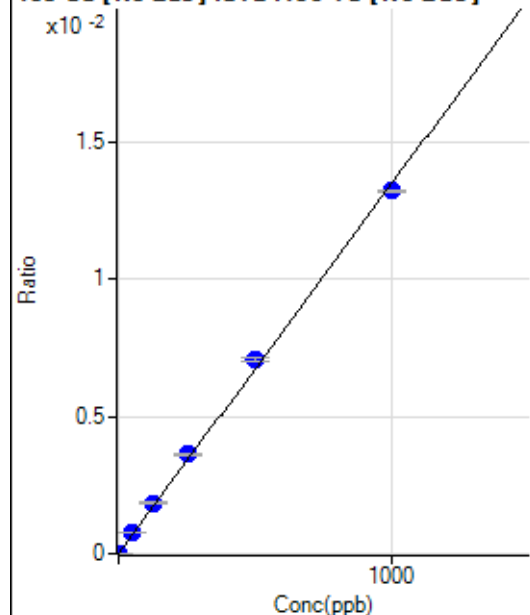
$$R = 0.9990$$

$$DL = 0.02086$$

$$BEC = 0.01119$$

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	4.17	0.0000	P	0.8
2	☐	0.100	0.119	9.72	0.0000	P	25.2
3	☐	1.000	0.706	37.50	0.0000	P	32.4
4	☐	50.000	57.719	2691.98	0.0008	P	5.3
5	☐	125.000	137.612	6341.84	0.0019	P	1.4
6	☐	250.000	268.048	11990.01	0.0036	P	0.9
7	☐	500.000	524.423	23510.06	0.0071	P	2.3
8	☐	1000.000	981.314	43118.29	0.0132	P	0.3
9	☐			11.11	0.0000	P	21.0

$$y = 1.3475\text{E-}005 * x + 1.1862\text{E-}006$$

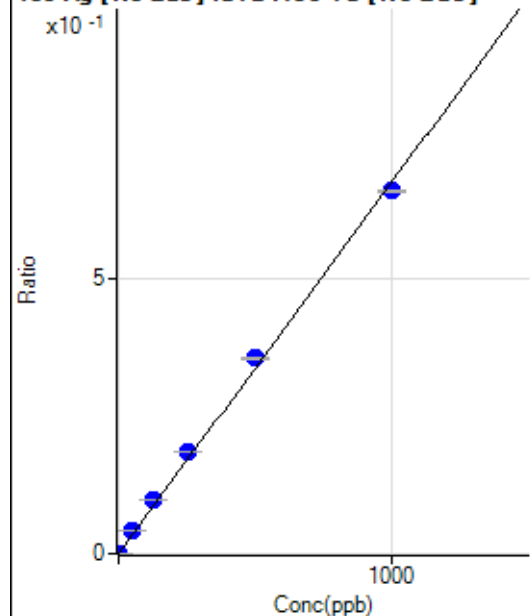
$$R = 0.9993$$

$$DL = 0.002221$$

$$BEC = 0.08803$$

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	11.11	0.0000	P	42.9
2	☐	0.100	0.087	216.68	0.0001	P	25.8
3	☐	1.000	1.117	2650.36	0.0008	P	4.2
4	☐	50.000	59.774	139661.70	0.0404	P	0.6
5	☐	125.000	143.875	332403.48	0.0973	P	1.4
6	☐	250.000	275.132	617073.97	0.1860	P	1.4
7	☐	500.000	526.483	1183750.14	0.3559	P	0.2
8	☐	1000.000	977.627	2154607.71	0.6608	P	0.3
9	☐			105.56	0.0000	P	19.0

$$y = 6.7596\text{E-}004 * x + 3.1569\text{E-}006$$

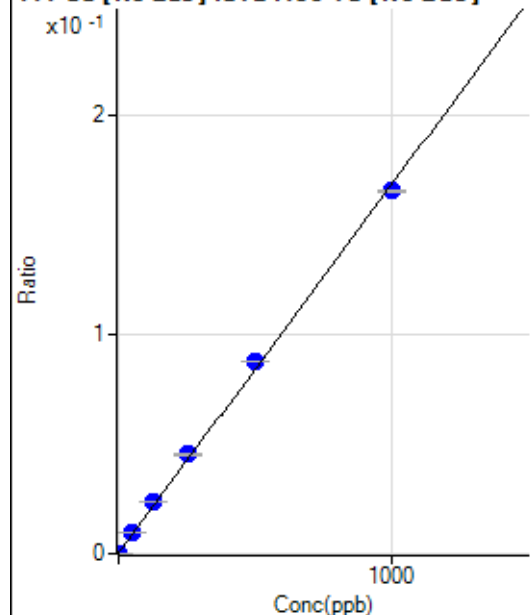
$$R = 0.9990$$

$$DL = 0.006011$$

$$BEC = 0.00467$$

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	788.54	0.0002	P	7.5
2	☐	0.100	0.101	839.65	0.0002	P	5.8
3	☐	1.000	1.102	1431.35	0.0004	P	2.4
4	☐	50.000	56.116	33377.60	0.0097	P	1.6
5	☐	125.000	139.218	80751.89	0.0236	P	1.7
6	☐	250.000	268.219	150342.40	0.0453	P	0.8
7	☐	500.000	519.472	291195.24	0.0875	P	0.2
8	☐	1000.000	983.626	539816.06	0.1656	P	0.2
9	☐			608.10	0.0002	P	10.6

$$y = 1.6810E-004 * x + 2.2426E-004$$

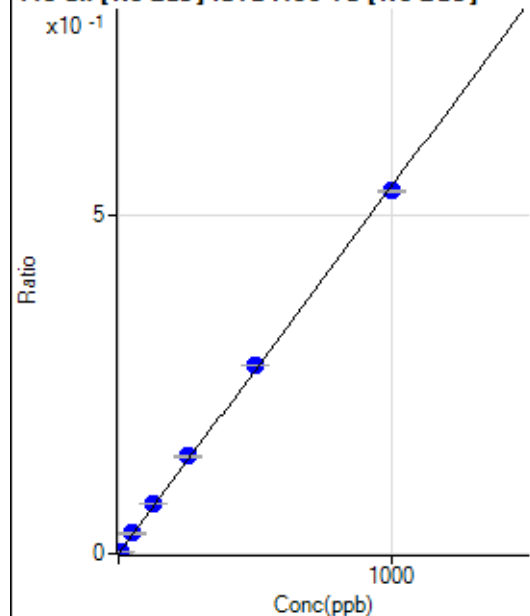
$$R = 0.9995$$

$$DL = 0.3006$$

$$BEC = 1.334$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	219.46	0.0001	P	29.3
2	☐	0.500	0.500	1163.99	0.0003	P	9.3
3	☐	5.000	5.274	10223.52	0.0029	P	2.3
4	☐	50.000	54.940	103306.42	0.0299	P	1.1
5	☐	125.000	135.180	251043.38	0.0735	P	1.1
6	☐	250.000	264.634	476904.05	0.1437	P	1.3
7	☐	500.000	513.432	927366.49	0.2788	P	0.2
8	☐	1000.000	988.105	1749207.48	0.5365	P	0.3
9	☐			633.38	0.0002	P	21.1

$$y = 5.4290E-004 * x + 6.2519E-005$$

$$R = 0.9997$$

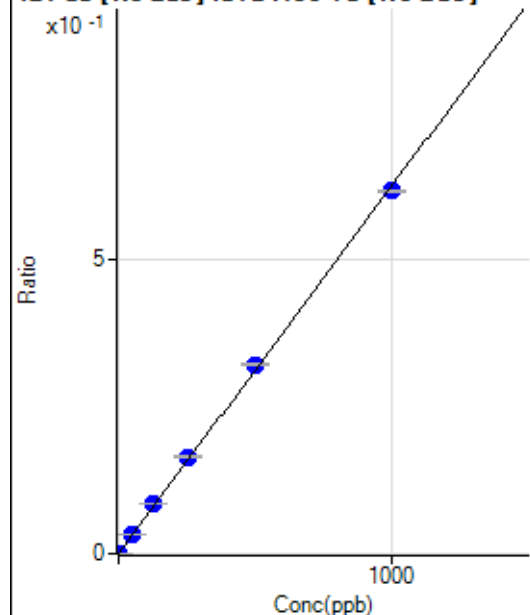
$$DL = 0.1012$$

$$BEC = 0.1152$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	25.00	0.0000	P	57.4
2	☐	0.200	0.188	433.36	0.0001	P	4.7
3	☐	2.000	2.030	4459.25	0.0013	P	4.5
4	☐	50.000	54.311	117362.37	0.0340	P	0.4
5	☐	125.000	134.493	287358.40	0.0841	P	1.1
6	☐	250.000	263.985	547543.80	0.1650	P	1.2
7	☐	500.000	514.624	1070042.56	0.3217	P	0.6
8	☐	1000.000	987.789	2013174.81	0.6175	P	0.5
9	☐			2486.45	0.0008	P	5.9

$$y = 6.2510E-004 * x + 7.0878E-006$$

$$R = 0.9997$$

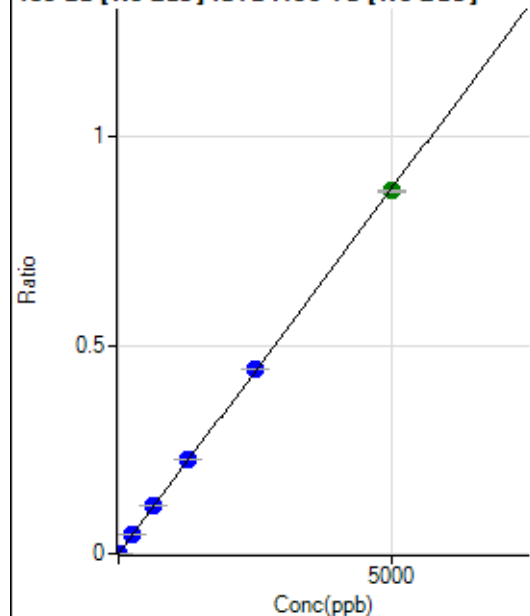
$$DL = 0.01951$$

$$BEC = 0.01134$$

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	11.11	0.0000	P	114.
2	☐	1.000	0.925	575.03	0.0002	P	9.1
3	☐	10.000	10.114	6198.87	0.0018	P	1.9
4	☐	250.000	267.760	162022.36	0.0469	P	0.6
5	☐	625.000	655.549	392249.04	0.1148	P	1.0
6	☐	1250.000	1293.866	751556.01	0.2265	P	1.2
7	☐	2500.000	2525.085	1470372.43	0.4421	P	0.7
8	☐	5000.000	4971.784	2837683.27	0.8704	A	0.6
9	☐			208.34	0.0001	P	16.6

$$y = 1.7506E-004 * x + 3.1456E-006$$

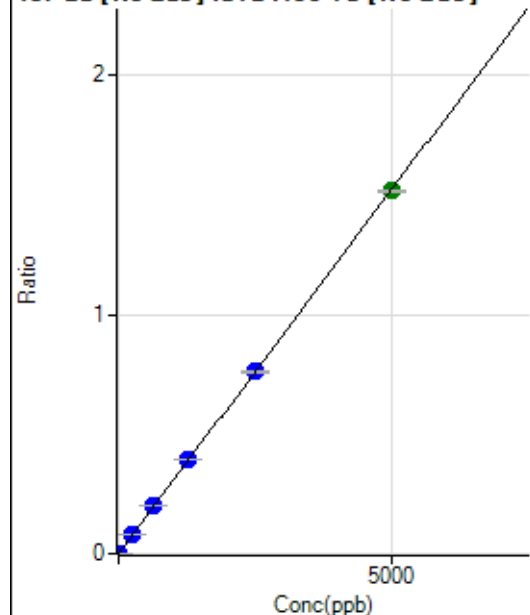
$$R = 0.9999$$

$$DL = 0.06178$$

$$BEC = 0.01797$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	25.00	0.0000	P	34.1
2	☐	1.000	1.075	1163.99	0.0003	P	7.3
3	☐	10.000	10.166	10851.91	0.0031	P	4.5
4	☐	250.000	269.610	283926.98	0.0821	P	0.7
5	☐	625.000	660.546	687853.01	0.2013	P	0.5
6	☐	1250.000	1288.968	1303006.78	0.3927	P	1.2
7	☐	2500.000	2502.208	2535730.31	0.7623	P	0.6
8	☐	5000.000	4983.730	4950158.92	1.5184	A	0.7
9	☐			375.02	0.0001	P	13.6

$$y = 3.0467\text{E-}004 * x + 7.1230\text{E-}006$$

$$R = 0.9999$$

$$DL = 0.0239$$

$$BEC = 0.02338$$

Weight: <None>

Min Conc: 0

150 Nd [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			2.22		P	173.
2	☐			8.89		P	86.6
3	☐			0.00		P	
4	☐			13.33		P	100.
5	☐			33.33		P	20.0
6	☐			64.45		P	26.0
7	☐			137.78		P	60.1
8	☐			282.23		P	3.6
9	☐			37.78		P	27.0

150 Nd [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			0.00		P	
2	☐			0.00		P	
3	☐			0.00		P	
4	☐			2.22		P	86.6
5	☐			3.33		P	100.
6	☐			6.67		P	0.0
7	☐			11.11		P	45.8
8	☐			21.11		P	24.1
9	☐			18.89		P	27.0

156 Dy [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			0.00		P	
2	☐			2.78		P	173.
3	☐			0.00		P	
4	☐			5.55		P	86.6
5	☐			8.33		P	100.
6	☐			8.33		P	100.
7	☐			25.00		P	33.3
8	☐			52.78		P	50.8
9	☐			13.89		P	124.

156 Dy [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			2.22		P	173.
2	☐			0.00		P	
3	☐			1.11		P	173.
4	☐			5.55		P	124.
5	☐			10.00		P	33.3
6	☐			15.56		P	12.4
7	☐			38.89		P	4.9
8	☐			54.44		P	31.4
9	☐			12.22		P	15.7

160 Gd [No Gas] Noavailable calibration poin_

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			11.11		P	43.3
2	☐			5.55		P	86.6
3	☐			13.89		P	69.3
4	☐			5.55		P	86.6
5	☐			16.67		P	86.6
6	☐			0.00		P	
7	☐			25.00		P	57.7
8	☐			13.89		P	34.7
9	☐			33.33		P	43.3

160 Gd [He] No available calibration points

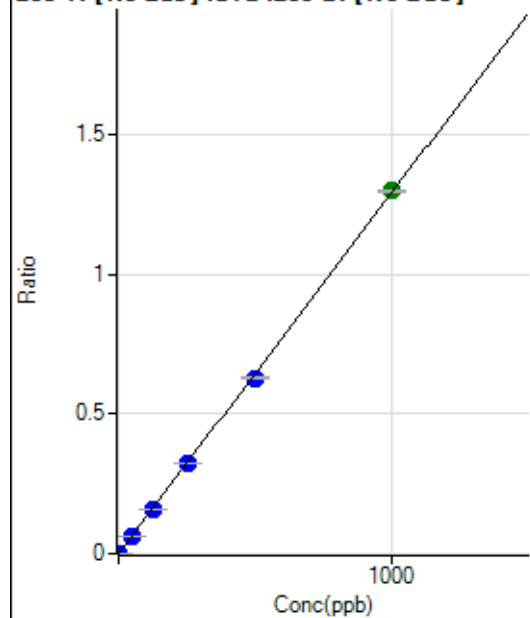
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			56.67		P	32.8
2	☐			54.44		P	28.3
3	☐			43.33		P	15.4
4	☐			54.44		P	9.4
5	☐			53.33		P	18.8
6	☐			38.89		P	26.2
7	☐			37.78		P	22.2
8	☐			43.33		P	7.7
9	☐			47.78		P	22.4

164 Er [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			5.55		P	86.6
2	☐			16.67		P	50.0
3	☐			8.33		P	100.
4	☐			13.89		P	69.3
5	☐			11.11		P	114.
6	☐			11.11		P	43.3
7	☐			22.22		P	21.6
8	☐			16.66		P	86.6
9	☐			22.22		P	43.3

164 Er [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			3.33		P	100.
2	☐			2.22		P	173.
3	☐			3.33		P	100.
4	☐			8.89		P	108.
5	☐			6.67		P	0.0
6	☐			6.67		P	50.0
7	☐			3.33		P	173.
8	☐			4.44		P	114.
9	☐			11.11		P	62.5

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	22.22	0.0000	P	43.5
2	☐	0.100	0.076	241.68	0.0001	P	9.6
3	☐	1.000	0.895	2617.04	0.0012	P	1.7
4	☐	50.000	49.738	142578.80	0.0641	P	0.9
5	☐	125.000	123.300	352521.81	0.1590	P	0.7
6	☐	250.000	249.555	690952.19	0.3218	P	0.2
7	☐	500.000	487.569	1352967.30	0.6286	P	0.8
8	☐	1000.000	1006.553	2665568.92	1.2978	A	0.2
9	☐			361.13	0.0002	P	24.9

$$y = 0.0013 * x + 9.8238E-006$$

$$R = 0.9999$$

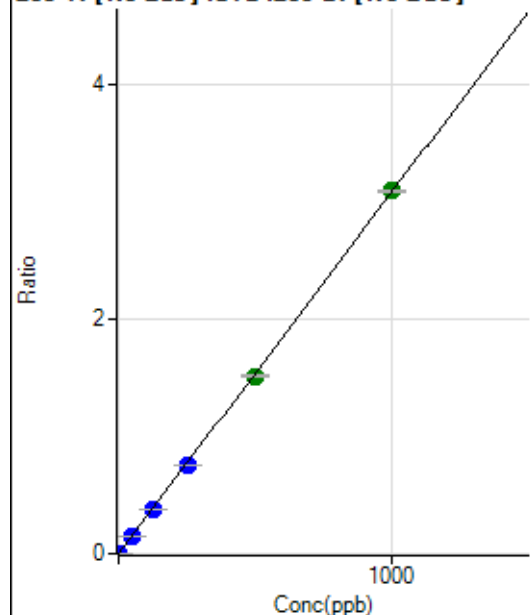
$$DL = 0.009936$$

$$BEC = 0.007619$$

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	69.45	0.0000	P	60.6
2	☐	0.100	0.098	744.50	0.0003	P	13.3
3	☐	1.000	0.911	6376.84	0.0028	P	1.8
4	☐	50.000	49.773	340883.73	0.1533	P	0.6
5	☐	125.000	123.563	844035.24	0.3807	P	0.6
6	☐	250.000	246.866	1633022.86	0.7605	P	0.3
7	☐	500.000	492.122	3262640.74	1.5160	A	0.8
8	☐	1000.000	1004.913	6357790.24	3.0955	A	0.7
9	☐			883.40	0.0005	P	21.5

$$y = 0.0031 * x + 3.0740E-005$$

$$R = 1.0000$$

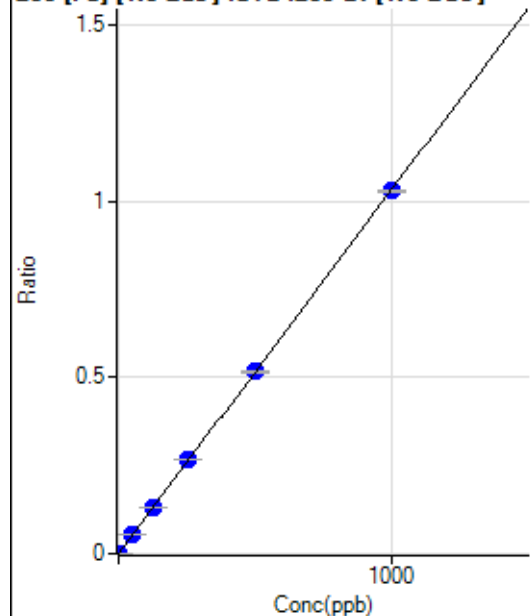
$$DL = 0.01814$$

$$BEC = 0.009979$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	166.67	0.0001	P	46.3
2	☐	0.100	0.122	448.17	0.0002	P	13.5
3	☐	1.000	0.985	2454.00	0.0011	P	2.8
4	☐	50.000	51.804	119188.87	0.0536	P	1.5
5	☐	125.000	128.014	293555.97	0.1324	P	0.6
6	☐	250.000	257.628	571961.85	0.2664	P	0.4
7	☐	500.000	500.720	1114045.98	0.5176	P	0.9
8	☐	1000.000	997.266	2117271.38	1.0309	P	0.3
9	☐			1566.81	0.0009	P	1.1

$$y = 0.0010 * x + 7.3753E-005$$

$$R = 1.0000$$

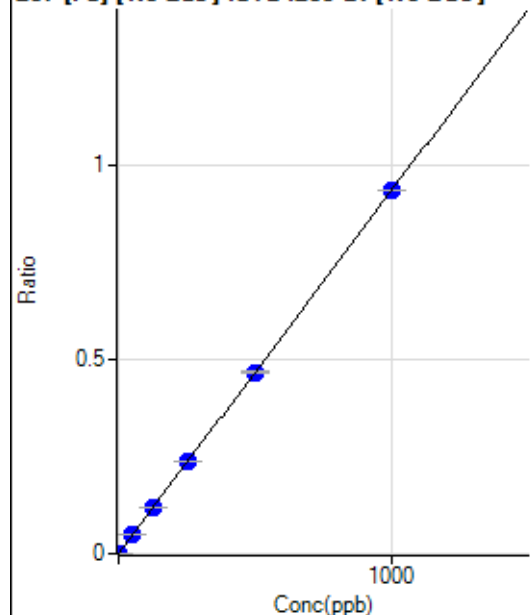
$$DL = 0.09902$$

$$BEC = 0.07135$$

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	153.71	0.0001	P	23.5
2	☐	0.100	0.088	337.05	0.0002	P	5.7
3	☐	1.000	0.875	1992.81	0.0009	P	8.3
4	☐	50.000	50.760	105684.77	0.0475	P	0.8
5	☐	125.000	126.069	261607.18	0.1180	P	0.2
6	☐	250.000	253.062	508401.00	0.2368	P	0.4
7	☐	500.000	499.270	1005132.29	0.4670	P	0.6
8	☐	1000.000	999.428	1920047.97	0.9348	P	0.2
9	☐			1435.30	0.0008	P	2.8

$$y = 9.3529\text{E-}004 * x + 6.7939\text{E-}005$$

$$R = 1.0000$$

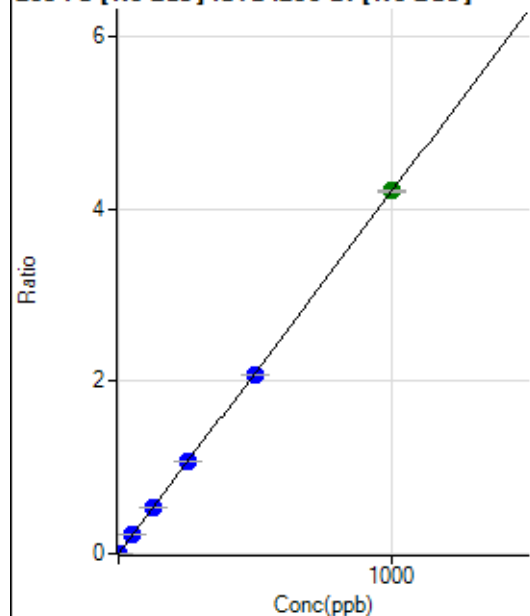
$$DL = 0.05116$$

$$BEC = 0.07264$$

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	681.51	0.0003	P	9.7
2	☐	0.100	0.095	1574.15	0.0007	P	8.7
3	☐	1.000	0.910	9273.75	0.0041	P	1.5
4	☐	50.000	50.820	475648.74	0.2140	P	0.7
5	☐	125.000	125.625	1171861.17	0.5285	P	0.5
6	☐	250.000	252.570	2281021.80	1.0622	P	0.3
7	☐	500.000	494.225	4472894.74	2.0783	P	0.3
8	☐	1000.000	1002.126	8654700.48	4.2138	A	0.2
9	☐			6284.10	0.0036	P	2.5

$$y = 0.0042 * x + 3.0121\text{E-}004$$

$$R = 1.0000$$

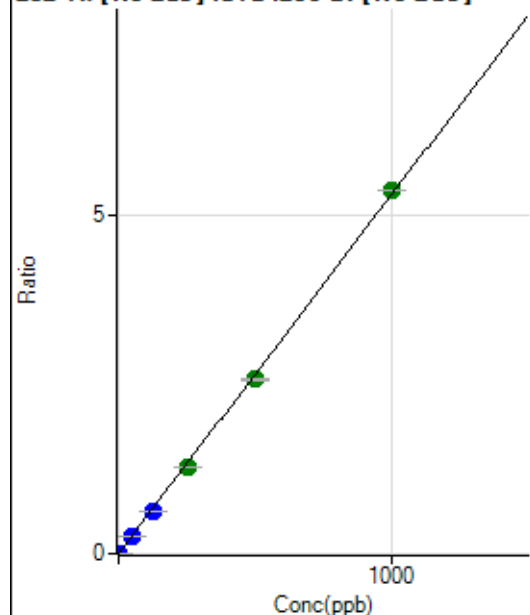
$$DL = 0.02092$$

$$BEC = 0.07164$$

Weight: <None>

Min Conc: 0

232 Th [No Gas] ISTD :209 Bi [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	68.52	0.0000	P	46.2
2	☐	0.100	0.074	946.36	0.0004	P	3.1
3	☐	1.000	0.853	10252.47	0.0046	P	1.5
4	☐	50.000	47.240	558038.08	0.2510	P	0.0
5	☐	125.000	117.011	1378675.58	0.6218	P	0.5
6	☐	250.000	240.775	2747296.47	1.2794	A	0.4
7	☐	500.000	485.590	5553017.37	2.5802	A	0.6
8	☐	1000.000	1010.648	11029561.47	5.3701	A	0.1
9	☐			1216.76	0.0007	P	8.7

$$y = 0.0053 * x + 3.0224E-005$$

$$R = 0.9998$$

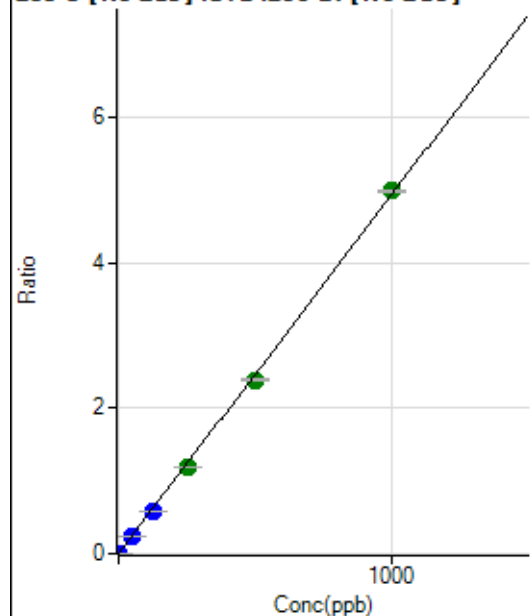
$$DL = 0.007885$$

$$BEC = 0.005688$$

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	13.89	0.0000	P	124.
2	☐	0.100	0.082	927.85	0.0004	P	3.6
3	☐	1.000	0.913	10132.20	0.0045	P	1.6
4	☐	50.000	47.097	516409.73	0.2323	P	0.2
5	☐	125.000	116.188	1270751.04	0.5731	P	0.5
6	☐	250.000	241.099	2553662.51	1.1892	A	0.1
7	☐	500.000	484.870	5147157.58	2.3916	A	0.4
8	☐	1000.000	1011.037	10242221.15	4.9869	A	0.5
9	☐			350.02	0.0002	P	5.7

$$y = 0.0049 * x + 6.1073E-006$$

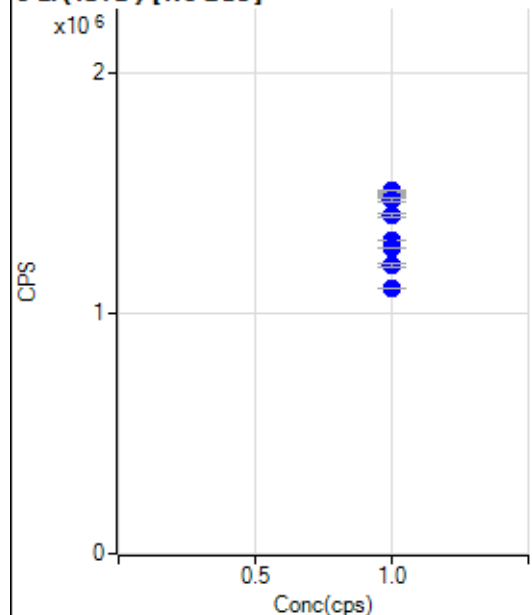
$$R = 0.9998$$

$$DL = 0.004629$$

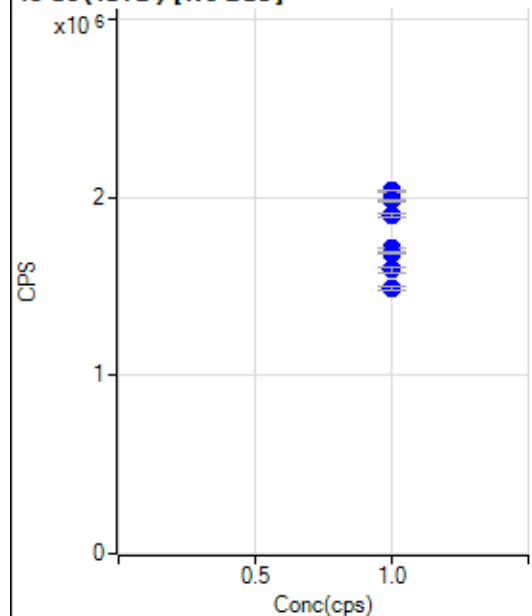
$$BEC = 0.001238$$

Weight: <None>

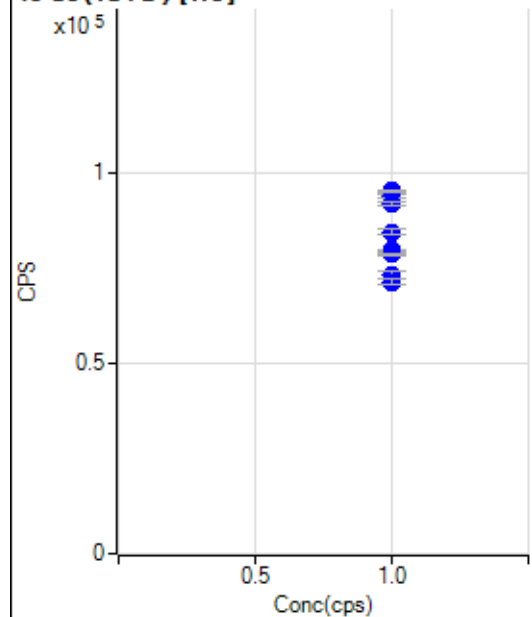
Min Conc: 0

6 Li (ISTD) [No Gas]

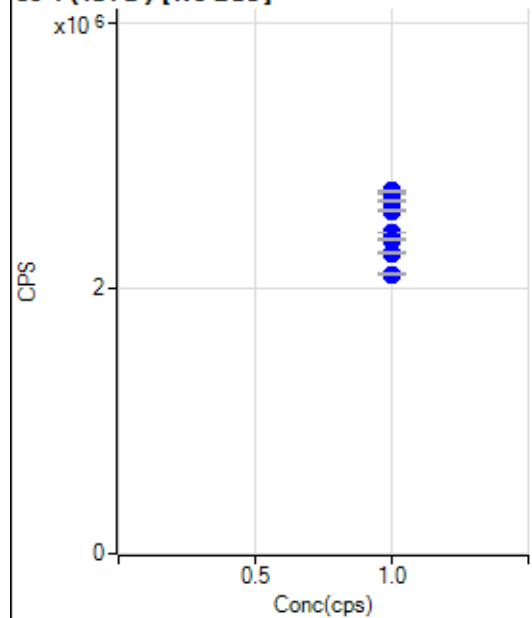
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1481630.46		P	0.1
2	☐	1.000		1491524.10		P	0.7
3	☐	1.000		1508128.32		P	0.4
4	☐	1.000		1470403.01		P	0.8
5	☐	1.000		1406653.11		P	0.7
6	☐	1.000		1300084.76		P	0.1
7	☐	1.000		1270021.01		P	0.4
8	☐	1.000		1199111.69		P	1.2
9	☐	1.000		1101568.10		P	0.3

45 Sc (ISTD) [No Gas]

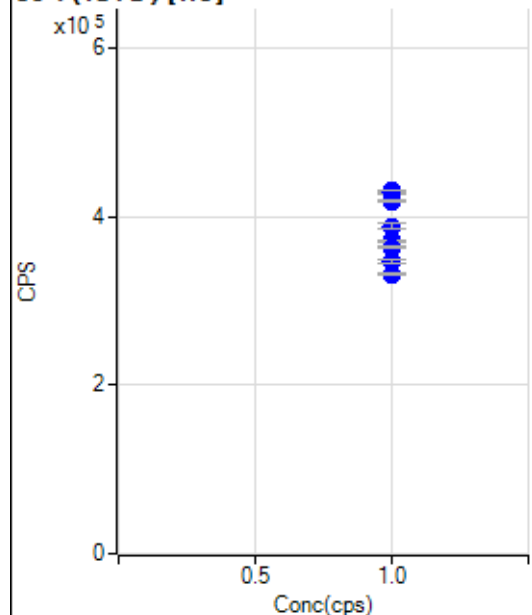
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2034334.66		P	0.1
2	☐	1.000		2039556.60		P	0.2
3	☐	1.000		2039623.09		P	0.6
4	☐	1.000		1984010.57		P	0.3
5	☐	1.000		1903016.82		P	1.2
6	☐	1.000		1720791.38		P	0.3
7	☐	1.000		1690954.16		P	0.5
8	☐	1.000		1596935.85		P	1.7
9	☐	1.000		1490258.21		P	1.2

45 Sc (ISTD) [He]

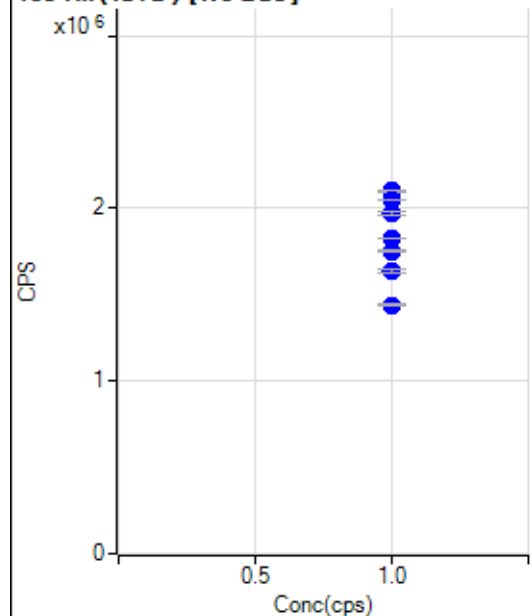
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		94873.16		P	0.3
2	☐	1.000		94283.11		P	1.3
3	☐	1.000		95396.68		P	0.3
4	☐	1.000		92138.58		P	1.3
5	☐	1.000		84689.16		P	1.5
6	☐	1.000		79779.75		P	0.4
7	☐	1.000		78709.65		P	0.7
8	☐	1.000		73309.13		P	2.1
9	☐	1.000		71478.25		P	1.9

89 Y (ISTD) [No Gas]

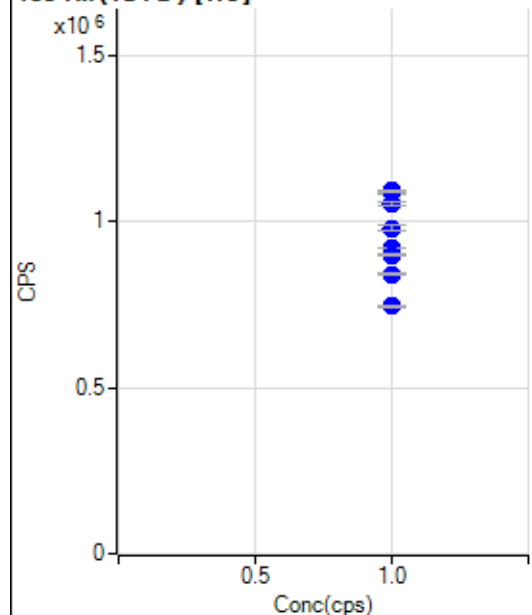
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2718270.55		P	0.3
2	☐	1.000		2720850.14		P	0.8
3	☐	1.000		2734667.77		P	0.7
4	☐	1.000		2656765.32		P	0.5
5	☐	1.000		2584600.47		P	0.7
6	☐	1.000		2422077.55		P	0.2
7	☐	1.000		2368952.14		P	0.1
8	☐	1.000		2267807.19		P	1.1
9	☐	1.000		2108562.42		P	1.2

89 Y(ISTD) [He]

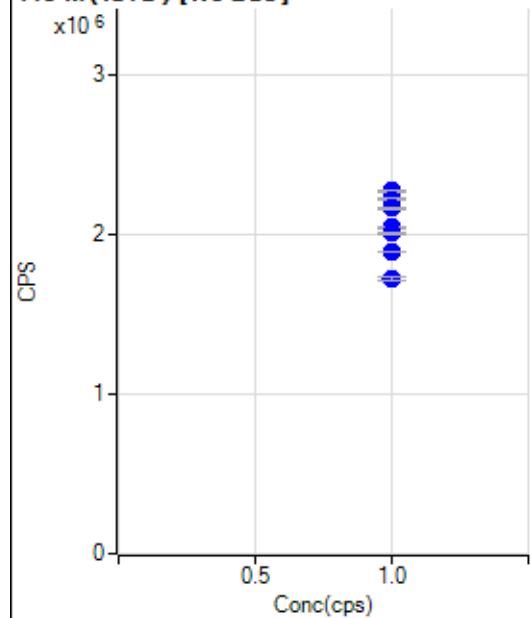
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		427801.43		P	0.6
2	☐	1.000		428238.48		P	1.2
3	☐	1.000		430373.84		P	0.1
4	☐	1.000		418339.78		P	1.0
5	☐	1.000		388848.33		P	1.3
6	☐	1.000		371130.86		P	0.5
7	☐	1.000		363357.85		P	0.8
8	☐	1.000		346823.78		P	1.3
9	☐	1.000		330939.45		P	0.8

103 Rh(ISTD) [No Gas]

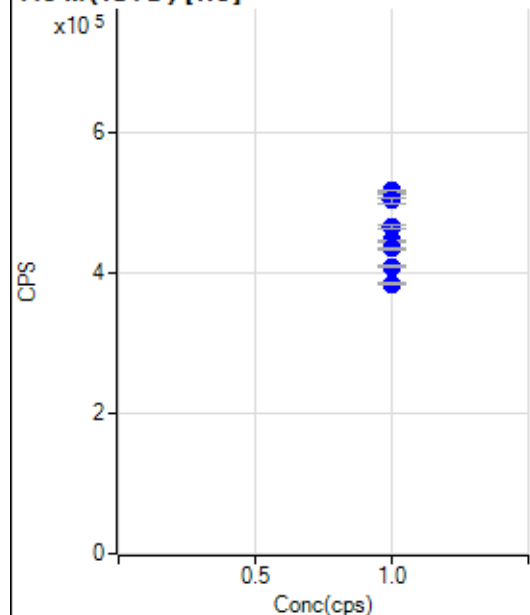
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2100677.07		P	0.5
2	☐	1.000		2097429.58		P	0.8
3	☐	1.000		2099177.39		P	0.9
4	☐	1.000		2051759.96		P	0.1
5	☐	1.000		1973270.66		P	0.8
6	☐	1.000		1823876.67		P	0.2
7	☐	1.000		1751122.56		P	0.3
8	☐	1.000		1633934.90		P	1.3
9	☐	1.000		1440640.03		P	1.2

103 Rh (ISTD) [He]

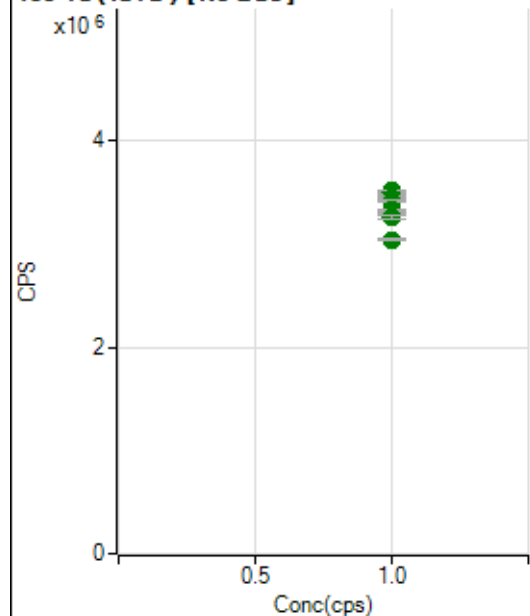
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1089099.84		P	0.4
2	☐	1.000		1086062.84		P	0.5
3	☐	1.000		1091775.92		P	0.2
4	☐	1.000		1052453.82		P	0.7
5	☐	1.000		980466.48		P	1.4
6	☐	1.000		922419.89		P	0.1
7	☐	1.000		899112.57		P	0.5
8	☐	1.000		841824.75		P	0.8
9	☐	1.000		745574.45		P	0.9

115 In (ISTD) [No Gas]

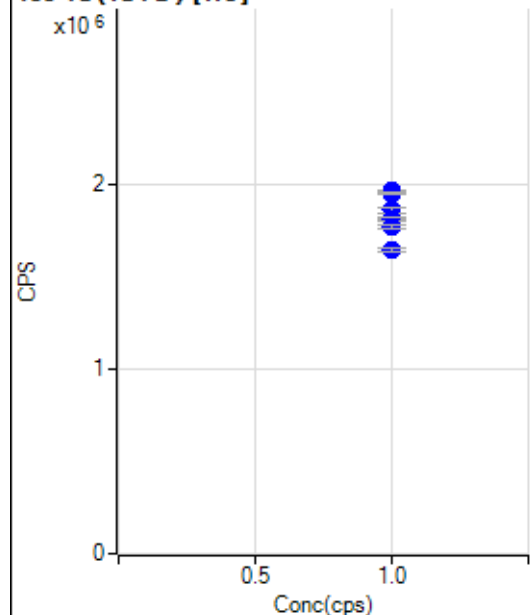
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2274127.99		P	0.6
2	☐	1.000		2268769.70		P	0.7
3	☐	1.000		2271153.43		P	0.7
4	☐	1.000		2220035.08		P	0.6
5	☐	1.000		2166113.94		P	0.4
6	☐	1.000		2043833.18		P	0.9
7	☐	1.000		2007246.35		P	0.7
8	☐	1.000		1892567.33		P	0.6
9	☐	1.000		1722162.89		P	1.0

115 In (ISTD) [He]

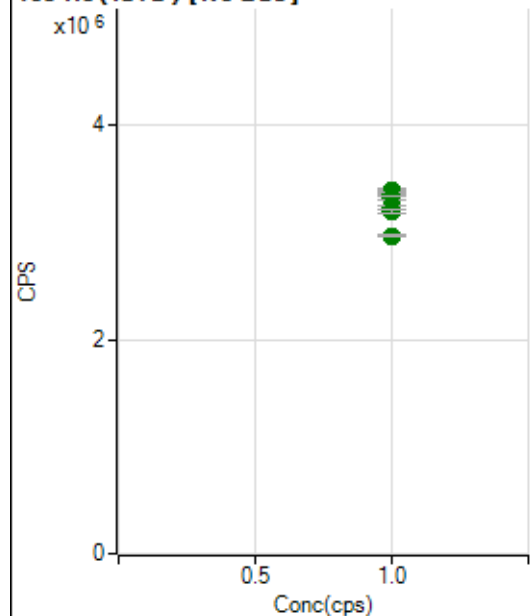
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		513950.81		P	0.6
2	☐	1.000		512503.99		P	0.4
3	☐	1.000		517079.75		P	0.5
4	☐	1.000		503122.80		P	1.4
5	☐	1.000		465688.78		P	1.2
6	☐	1.000		445710.23		P	0.4
7	☐	1.000		434808.06		P	0.7
8	☐	1.000		409299.78		P	1.0
9	☐	1.000		384684.68		P	0.8

159 Tb (ISTD) [No Gas]

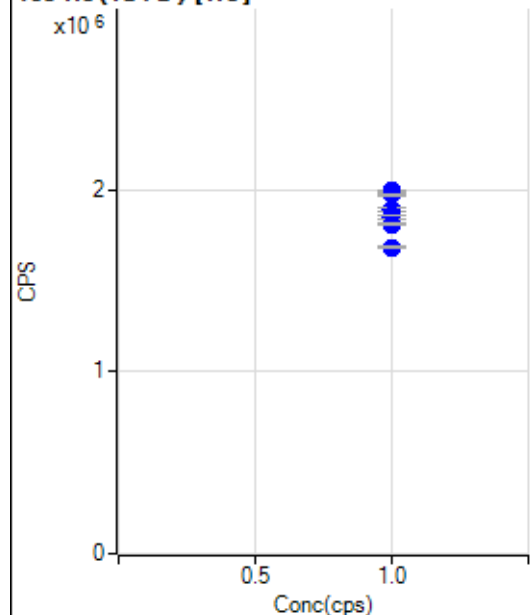
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3515461.27		A	0.8
2	☐	1.000		3481645.29		A	1.2
3	☐	1.000		3494735.68		A	1.1
4	☐	1.000		3456238.42		A	0.4
5	☐	1.000		3417836.34		A	0.4
6	☐	1.000		3318191.20		A	0.9
7	☐	1.000		3326210.79		A	0.2
8	☐	1.000		3260349.33		A	1.3
9	☐	1.000		3043971.86		A	0.9

159 Tb (ISTD) [He]

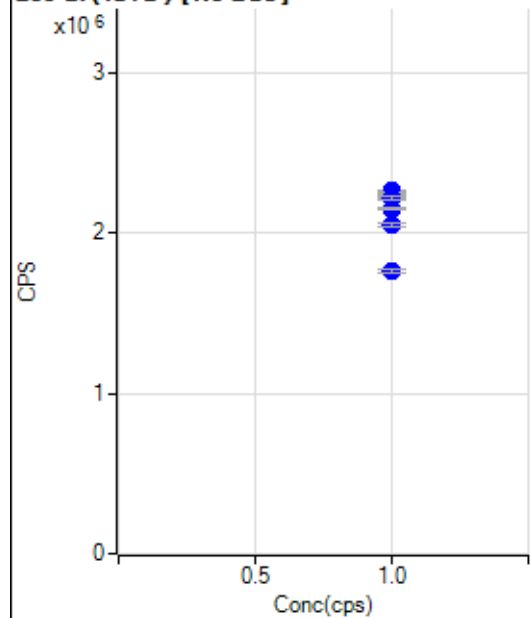
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1970068.70		P	0.5
2	☐	1.000		1967955.23		P	0.2
3	☐	1.000		1968160.61		P	0.2
4	☐	1.000		1953167.63		P	0.5
5	☐	1.000		1865549.95		P	1.4
6	☐	1.000		1819427.75		P	0.6
7	☐	1.000		1817387.18		P	1.2
8	☐	1.000		1772378.95		P	1.1
9	☐	1.000		1649659.14		P	1.1

165 Ho (ISTD) [No Gas]

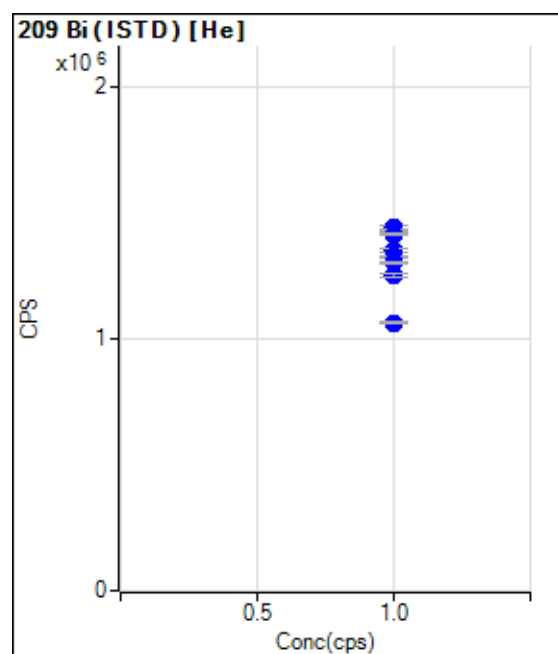
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3391585.41		A	0.9
2	☐	1.000		3373022.60		A	1.5
3	☐	1.000		3384897.60		A	1.1
4	☐	1.000		3364592.68		A	0.8
5	☐	1.000		3325287.53		A	0.7
6	☐	1.000		3234387.12		A	0.6
7	☐	1.000		3252952.27		A	0.5
8	☐	1.000		3200806.95		A	1.2
9	☐	1.000		2970159.23		A	0.5

165 Ho (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1991348.23		P	0.2
2	☐	1.000		1983651.18		P	0.5
3	☐	1.000		1990243.04		P	0.2
4	☐	1.000		1969660.44		P	0.6
5	☐	1.000		1889317.05		P	1.1
6	☐	1.000		1858522.84		P	0.2
7	☐	1.000		1851980.08		P	1.1
8	☐	1.000		1808989.97		P	0.9
9	☐	1.000		1682072.63		P	1.1

209 Bi (ISTD) [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2263316.84		P	0.6
2	☐	1.000		2246694.53		P	0.8
3	☐	1.000		2247457.24		P	0.7
4	☐	1.000		2222935.16		P	0.4
5	☐	1.000		2217400.59		P	0.9
6	☐	1.000		2147355.77		P	0.5
7	☐	1.000		2152207.94		P	0.5
8	☐	1.000		2053908.82		P	1.1
9	☐	1.000		1763708.88		P	1.5



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1438480.36		P	0.9
2	☐	1.000		1425671.46		P	1.1
3	☐	1.000		1432743.81		P	0.5
4	☐	1.000		1413123.05		P	0.6
5	☐	1.000		1348632.97		P	1.2
6	☐	1.000		1324171.97		P	0.5
7	☐	1.000		1302534.29		P	0.8
8	☐	1.000		1248976.53		P	1.3
9	☐	1.000		1063536.03		P	1.1

US EPA Tune Check Sample Report

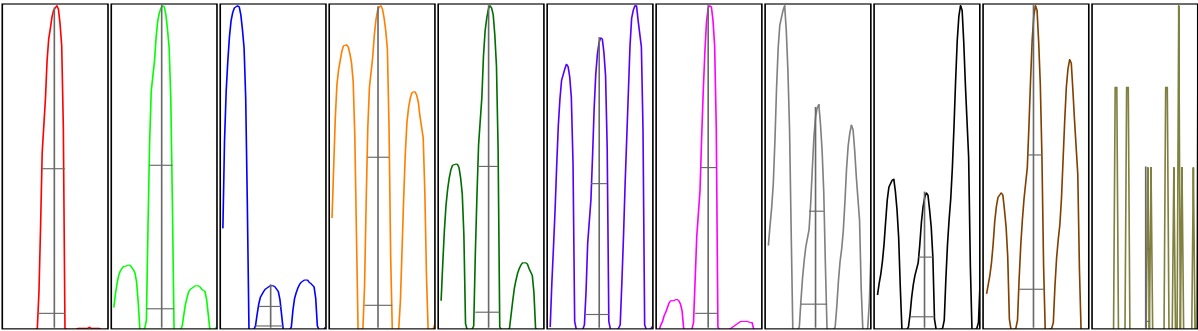
Batch Folder D:\ICP-MS Data\P7062419-MS.b
Report Comment
Instrument Name G8403A JP14410463

[No Gas]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
9	4676	0.71	5.00	
24	109281	0.56	5.00	
25	14701	0.46	5.00	
26	16522	0.31	5.00	
59	21841	0.51	5.00	
113	2769	0.51	5.00	
115	33556	0.60	5.00	
206	9766	0.50	5.00	
207	9238	0.41	5.00	
208	21328	0.19	5.00	
220	0	136.93		

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
9	4702	4722	4652	4647	4659
24	109954	109640	109432	108979	108398
25	14785	14739	14715	14640	14627
26	16565	16492	16542	16564	16448
59	21933	21922	21901	21773	21677
113	2783	2773	2752	2756	2780
115	33721	33819	33438	33368	33434
206	9813	9805	9691	9767	9753
207	9288	9268	9220	9204	9211
208	21275	21351	21381	21323	21311
220	0	0	0	0	0

Integration Time [sec] = 0.1



Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	Width-X% (Actual)	Width-X% (Required)	Width- X% (Flag)
9	7782	9.00	8.9 - 9.1		0.774	0.900	
24	177263	23.95	23.9 - 24.1		0.786	0.900	
25	23829	24.95	24.9 - 25.1		0.786	0.900	
26	27001	25.90	25.9 - 26.1		0.807	0.900	
59	39212	58.95	58.9 - 59.1		0.736	0.900	
113	5692	113.00	112.9 - 113.1		0.683	0.900	
115	69150	115.00	114.9 - 115.1		0.685	0.900	
206	21016	205.95	205.9 - 206.1		0.736	0.900	
207	19326	206.95	206.9 - 207.1		0.708	0.900	
208	45668	207.95	207.9 - 208.1		0.730	0.900	
220	0	220.05	-		0.095		

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	7.0	V	Deflect	13.8	V
Extract 2	-80.0	V	Cell Entrance	-30	V	Plate Bias	-35	V
Omega Bias	-45	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	170	V			

[He]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)
59	5510	0.46	
89	10851	0.28	
205	8928	0.49	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
59	5539	5502	5526	5474	5506
89	10860	10850	10842	10894	10811
205	8989	8913	8940	8928	8868

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	7.3	V	Deflect	1.8	V
Extract 2	-85.0	V	Cell Entrance	-40	V	Plate Bias	-60	V
Omega Bias	-45	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			