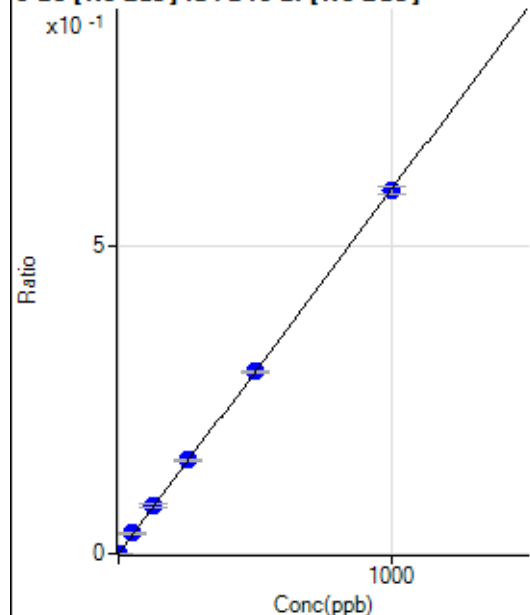


Calibration for 006CALS.d

Batch Folder: D:\Agilent\ICPMH\1\DATA\P7112023-MS.b\
 Analysis File: P7112023-MS.batch.bin
 DA Date-Time: 2023-11-20 10:50:32
 Calibration Title:
 Calibration Method: External Calibration
 VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	004CALB.d	S00	2023-11-20 09:59:17
2	005CALS.d	S01	2023-11-20 10:02:37
3	006CALS.d	S02	2023-11-20 10:05:56
4	008CALS.d	S03	2023-11-20 10:12:37
5	009CALS.d	S04	2023-11-20 10:15:51
6	010CALS.d	S05	2023-11-20 10:18:59
7	011CALS.d	S06	2023-11-20 10:21:57
8	012CALS.d	S07	2023-11-20 10:24:51
9	013CALS.d	S08	2023-11-20 10:27:40

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	67.78	0.0001	P	15.6
2	☐	0.100	0.106	154.45	0.0001	P	5.9
3	☐	1.000	0.989	870.04	0.0006	P	5.8
4	☐	50.000	55.711	43304.49	0.0329	P	8.9
5	☐	125.000	132.763	103527.15	0.0784	P	5.2
6	☐	250.000	256.716	200543.84	0.1515	P	1.3
7	☐	500.000	501.237	380244.29	0.2958	P	1.0
8	☐	1000.000	996.447	723753.15	0.5880	P	2.3
9	☐			442.23	0.0004	P	19.7

$$y = 5.9000\text{E-}004 * x + 5.0052\text{E-}005$$

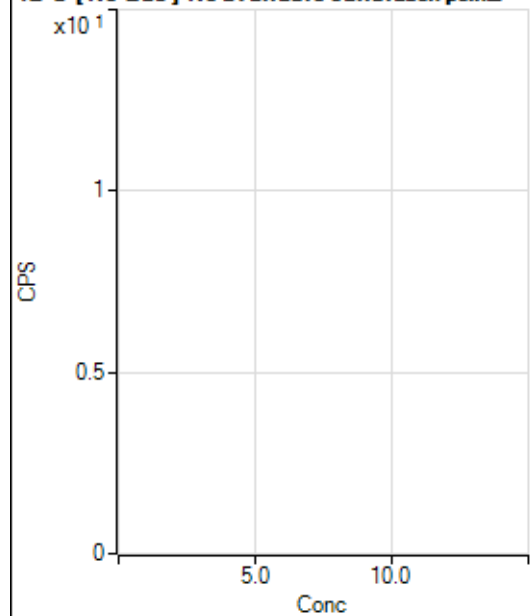
$$R = 0.9999$$

$$DL = 0.0398$$

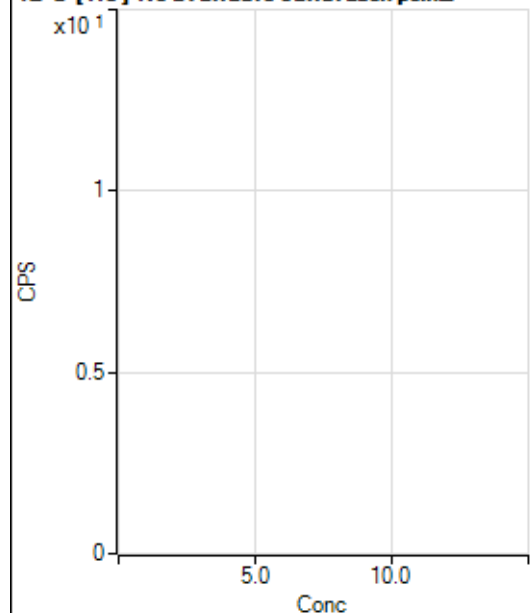
$$BEC = 0.08483$$

Weight: <None>

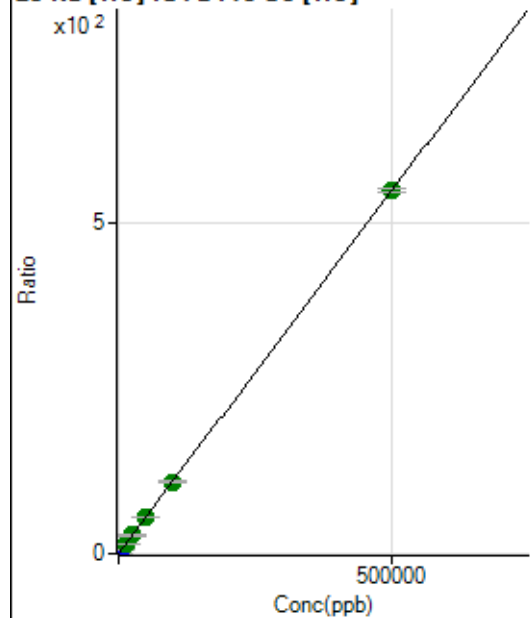
Min Conc: 0

12 C [No Gas] No available calibration points

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐						
2	☐						
3	☐						
4	☐						
5	☐						
6	☐						
7	☐						
8	☐						
9	☐						

12 C [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐						
2	☐						
3	☐						
4	☐						
5	☐						
6	☐						
7	☐						
8	☐						
9	☐						

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	6682.61	0.0354	P	4.5
2	☐	50.000	45.643	16163.04	0.0855	P	1.5
3	☐	500.000	471.215	102125.59	0.5528	P	7.0
4	☐	5000.000	5160.584	1078408.34	5.7025	P	0.8
5	☐	12500.000	12724.789	2495280.33	14.0091	A	0.8
6	☐	25000.000	25204.662	4821187.64	27.7139	A	0.9
7	☐	50000.000	50238.521	9335769.86	55.2049	A	0.2
8	☐	100000.00	99364.057	18154214.45	109.1523	A	2.3
9	☐	500000.00	500085.90	85914584.27	549.2060	A	1.0

$$y = 0.0011 * x + 0.0354$$

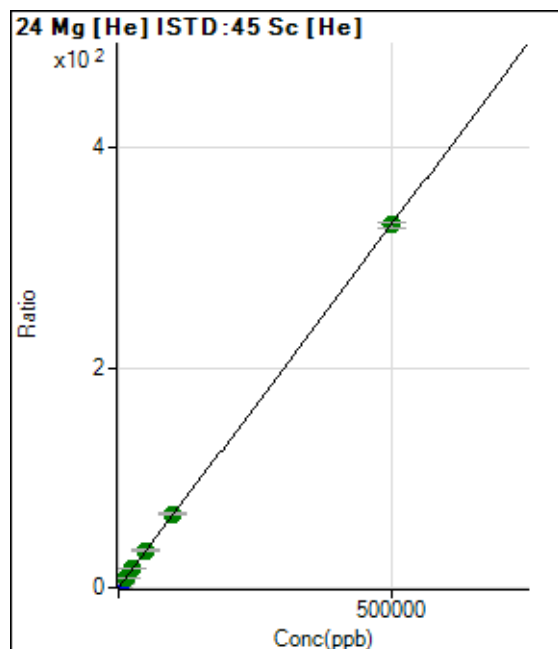
$$R = 1.0000$$

$$DL = 4.311$$

$$BEC = 32.21$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	524.46	0.0028	P	8.8
2	☐	50.000	47.714	6475.87	0.0343	P	4.3
3	☐	500.000	494.900	60847.28	0.3294	P	6.9
4	☐	5000.000	5305.123	662625.75	3.5040	P	1.0
5	☐	12500.000	13214.583	1553849.04	8.7239	A	1.0
6	☐	25000.000	26052.543	2991549.85	17.1965	A	0.7
7	☐	50000.000	51489.347	5746900.75	33.9838	A	0.9
8	☐	100000.00	101132.25	11101563.72	66.7463	A	2.1
9	☐	500000.00	499551.07	51573410.90	329.6879	A	1.5

$$y = 6.5996E-004 * x + 0.0028$$

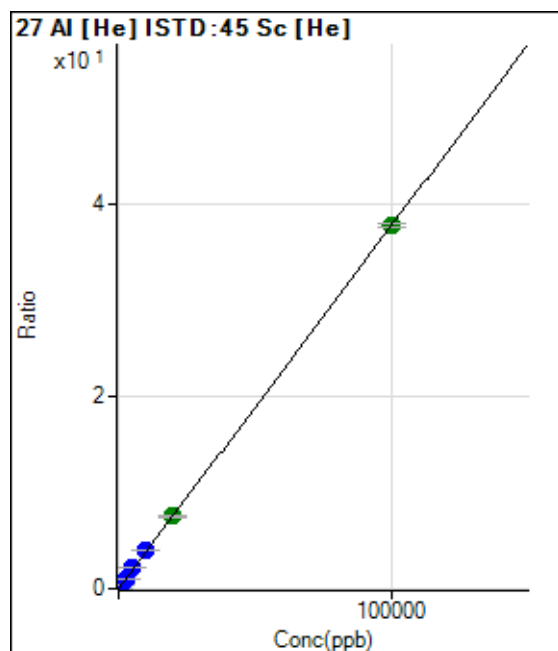
$$R = 1.0000$$

$$DL = 1.115$$

$$BEC = 4.201$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	90.00	0.0005	P	30.9
2	☐	2.000	1.932	227.78	0.0012	P	9.3
3	☐	20.000	19.478	1444.52	0.0078	P	8.7
4	☐	1000.000	1049.277	74892.39	0.3960	P	1.5
5	☐	2500.000	2742.859	184257.38	1.0345	P	1.4
6	☐	5000.000	5698.338	373791.70	2.1487	P	0.2
7	☐	10000.000	10742.355	684937.57	4.0503	P	0.3
8	☐	20000.000	19892.763	1247295.16	7.4999	A	2.9
9	☐	100000.00	99905.731	5891854.91	37.6643	A	1.2

$$y = 3.7699E-004 * x + 4.7559E-004$$

$$R = 1.0000$$

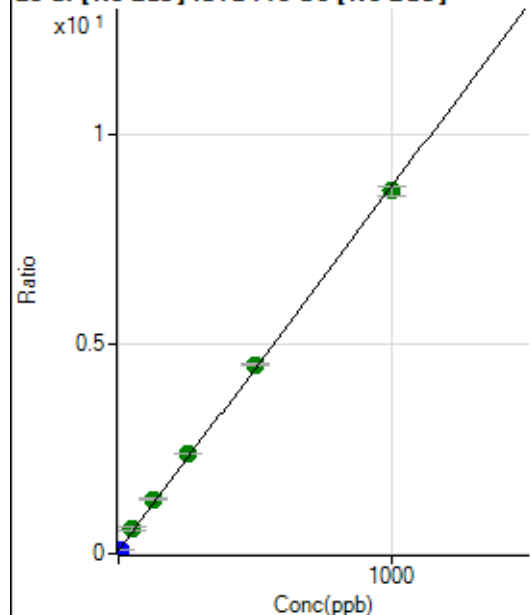
$$DL = 1.169$$

$$BEC = 1.262$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	213483.86	0.0789	P	4.8
2	☐	1.000	-0.076	213950.08	0.0782	P	0.5
3	☐	10.000	0.248	223062.77	0.0810	P	0.9
4	☐	50.000	60.372	1570772.42	0.6024	A	11.5
5	☐	125.000	139.323	3346256.41	1.2870	A	4.1
6	☐	250.000	267.023	6139163.80	2.3943	A	0.9
7	☐	500.000	510.942	11316126.08	4.5093	A	1.2
8	☐	1000.000	988.063	21175259.55	8.6466	A	2.9
9	☐			282500.75	0.1203	P	2.7

$$y = 0.0087 * x + 0.0789$$

$$R = 0.9995$$

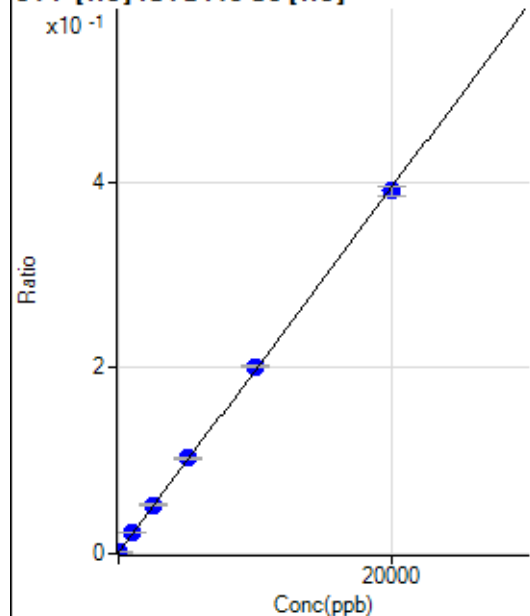
$$DL = 1.308$$

$$BEC = 9.094$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	-16.129	125.56	0.0007	P	17.3
2	☐	0.000	-10.497	146.67	0.0008	P	18.1
3	☐	0.000	26.626	277.78	0.0015	P	12.6
4	☐	1000.000	1065.554	4150.60	0.0219	P	1.1
5	☐	2500.000	2630.685	9394.07	0.0527	P	1.2
6	☐	5000.000	5195.355	17952.85	0.1032	P	1.7
7	☐	10000.000	10219.076	34169.26	0.2020	P	1.6
8	☐	20000.000	19822.010	65022.78	0.3910	P	3.0
9	☐			165.56	0.0011	P	8.8

$$y = 1.9675E-005 * x + 9.8184E-004$$

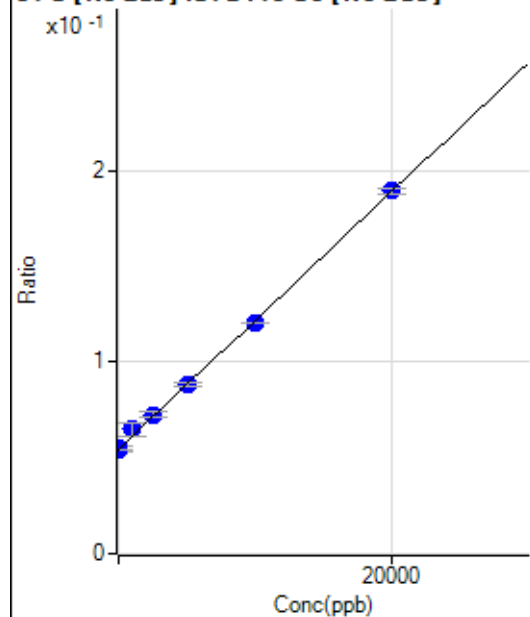
$$R = 0.9998$$

$$DL = 22.59$$

$$BEC = 49.9$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	37.715	148554.60	0.0549	P	4.8
2	☐	0.000	-32.505	148839.88	0.0544	P	0.3
3	☐	0.000	-5.211	150306.08	0.0546	P	0.3
4	☐	1000.000	1530.139	169262.36	0.0649	P	11.4
5	☐	2500.000	2691.853	189028.27	0.0727	P	4.3
6	☐	5000.000	5043.444	226914.25	0.0885	P	1.9
7	☐	10000.000	9801.160	302325.06	0.1205	P	0.3
8	☐	20000.000	20038.071	463499.96	0.1893	P	1.7
9	☐			122939.46	0.0524	P	3.6

$$y = 6.7189\text{E-}006 * x + 0.0546$$

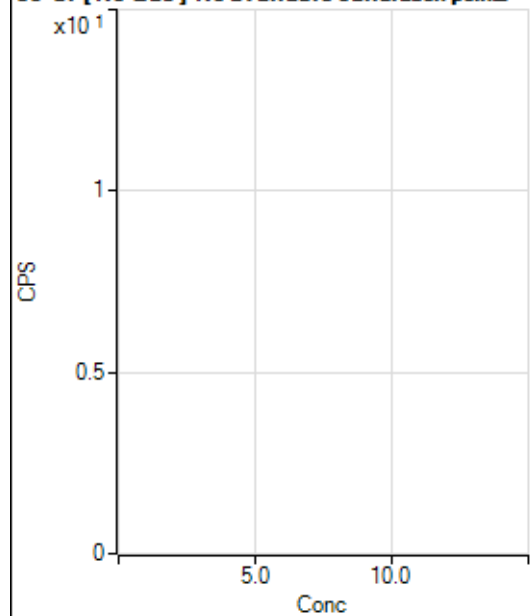
R = 0.9996

DL = 437.6

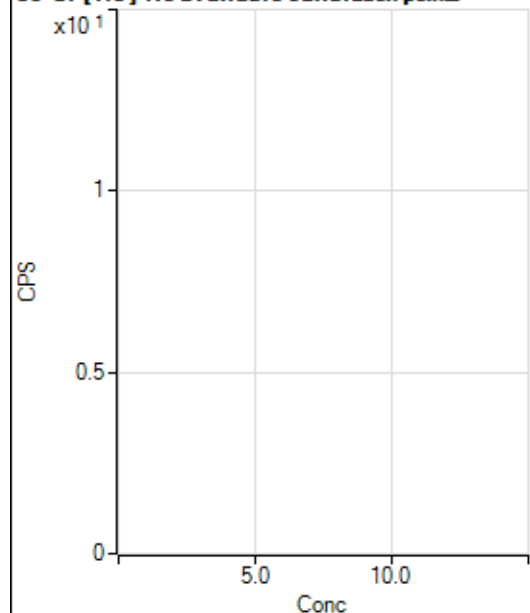
BEC = 8129

Weight: <None>

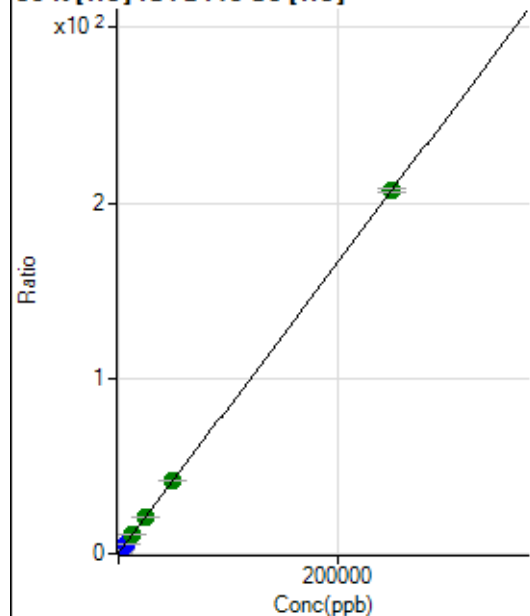
Min Conc: 0

35 Cl [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐						
2	☐						
3	☐						
4	☐						
5	☐						
6	☐						
7	☐						
8	☐						
9	☐						

35 Cl [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐						
2	☐						
3	☐						
4	☐						
5	☐						
6	☐						
7	☐						
8	☐						
9	☐						

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	36443.55	0.1928	P	1.8
2	☐	50.000	47.775	43916.52	0.2323	P	2.1
3	☐	500.000	498.230	111728.47	0.6048	P	6.5
4	☐	2500.000	2657.676	451980.34	2.3902	P	1.4
5	☐	6250.000	6733.949	1026017.17	5.7604	P	0.9
6	☐	12500.000	12786.414	1872611.52	10.7645	A	1.2
7	☐	25000.000	25174.309	3552401.37	21.0067	A	0.4
8	☐	50000.000	50042.932	6914144.06	41.5678	A	1.7
9	☐	250000.00	249945.99	32359469.79	206.8455	A	1.2

$$y = 8.2679E-004 * x + 0.1928$$

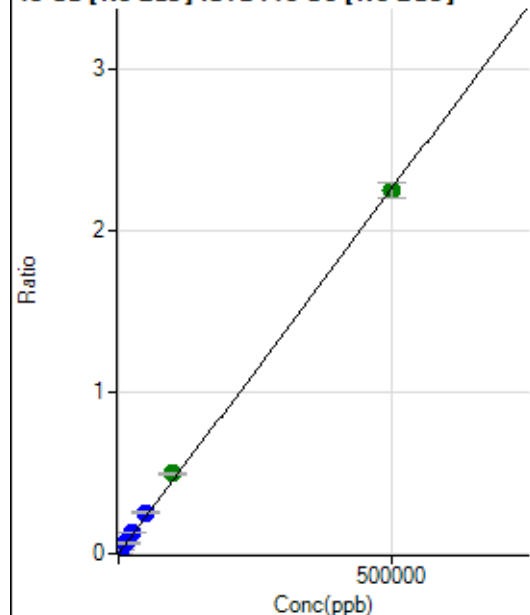
$$R = 1.0000$$

$$DL = 12.67$$

$$BEC = 233.2$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	373.34	0.0001	P	0.7
2	☐	50.000	48.041	970.04	0.0004	P	1.0
3	☐	500.000	443.766	5894.54	0.0021	P	1.7
4	☐	5000.000	5971.083	70663.35	0.0271	P	10.9
5	☐	12500.000	14467.292	170068.73	0.0654	P	5.1
6	☐	25000.000	28394.563	328923.97	0.1283	P	1.5
7	☐	50000.000	56339.532	638411.73	0.2544	P	1.2
8	☐	100000.00	109501.70	1210737.58	0.4943	A	1.3
9	☐	500000.00	497237.14	5266084.68	2.2443	A	4.2

$$y = 4.5133\text{E-}006 * x + 1.3772\text{E-}004$$

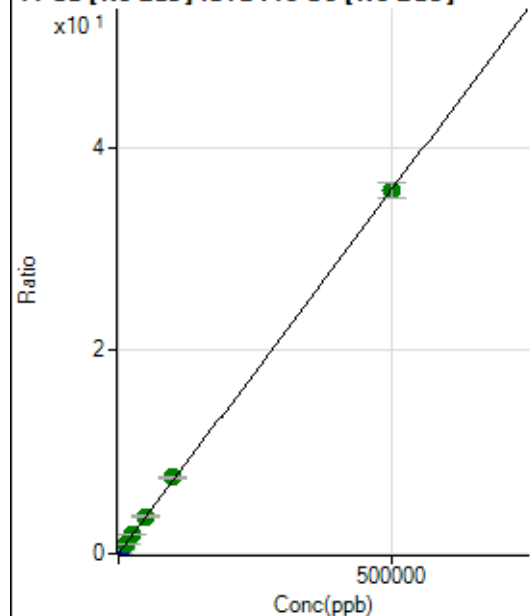
$$R = 0.9998$$

$$DL = 0.6566$$

$$BEC = 30.52$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	10283.66	0.0038	P	4.5
2	☐	50.000	43.381	18888.59	0.0069	P	1.5
3	☐	500.000	457.698	100694.53	0.0366	P	0.8
4	☐	5000.000	5776.988	1088753.87	0.4174	P	11.2
5	☐	12500.000	13260.643	2478056.07	0.9532	A	4.6
6	☐	25000.000	26230.718	4824593.82	1.8819	A	2.1
7	☐	50000.000	51429.701	9249616.39	3.6860	A	1.3
8	☐	100000.00	104658.47	18361770.70	7.4971	A	1.4
9	☐	500000.00	498837.05	83815880.42	35.7194	A	4.1

$$y = 7.1598\text{E-}005 * x + 0.0038$$

$$R = 1.0000$$

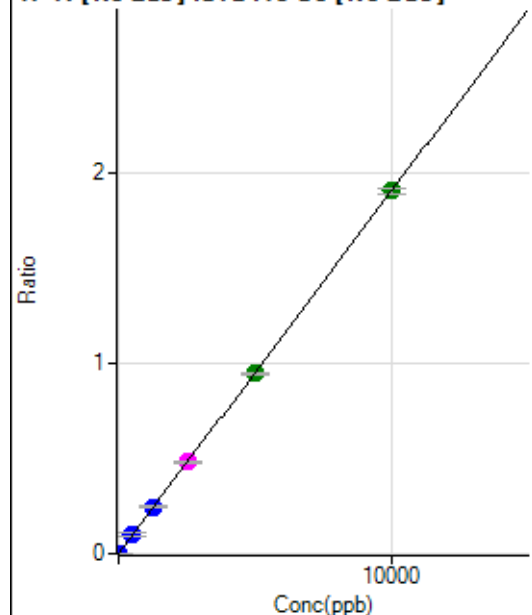
$$DL = 7.201$$

$$BEC = 53.04$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	93.33	0.0000	P	8.2
2	☐	0.500	0.492	351.12	0.0001	P	7.0
3	☐	5.000	4.520	2470.23	0.0009	P	3.3
4	☐	500.000	531.016	264414.45	0.1014	P	11.1
5	☐	1250.000	1288.163	638966.51	0.2459	P	5.3
6	☐	2500.000	2526.875	1236373.52	0.4822	M	1.7
7	☐	5000.000	4968.394	2379317.22	0.9482	A	0.8
8	☐	10000.000	10002.763	4675128.23	1.9089	A	1.3
9	☐			848.92	0.0004	P	17.4

$$y = 1.9083\text{E-}004 * x + 3.4510\text{E-}005$$

$$R = 1.0000$$

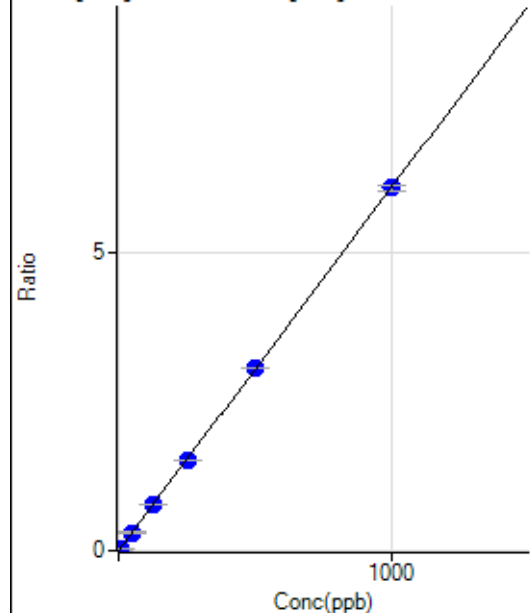
$$DL = 0.04434$$

$$BEC = 0.1808$$

Weight: <None>

Min Conc: 0

51 V [He] ISTD :45 Sc [He]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	18.89	0.0001	P	27.7
2	☐	0.500	0.424	507.79	0.0027	P	2.7
3	☐	5.000	4.739	5347.67	0.0290	P	9.4
4	☐	50.000	49.967	57599.36	0.3046	P	1.2
5	☐	125.000	127.020	137874.00	0.7741	P	2.2
6	☐	250.000	250.056	265094.45	1.5239	P	1.1
7	☐	500.000	502.003	517327.77	3.0592	P	0.7
8	☐	1000.000	998.735	1012335.08	6.0861	P	1.5
9	☐			245.56	0.0016	P	1.3

$$y = 0.0061 * x + 1.0003\text{E-}004$$

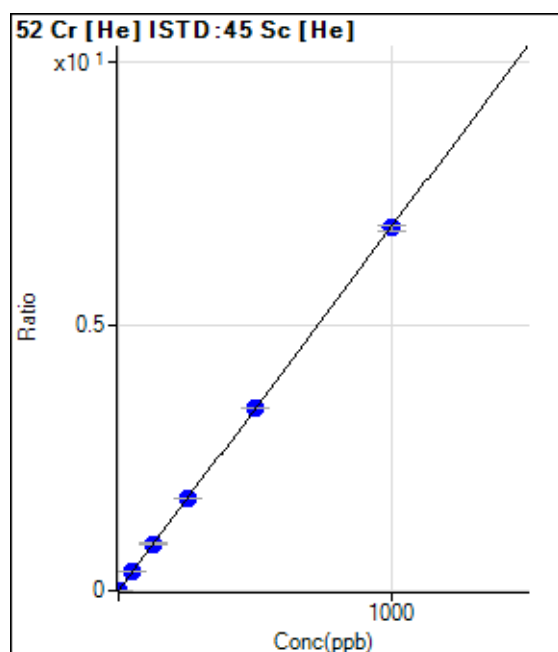
$$R = 1.0000$$

$$DL = 0.01364$$

$$BEC = 0.01642$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	561.13	0.0030	P	3.6
2	☐	0.200	0.154	762.25	0.0040	P	5.3
3	☐	2.000	1.881	2936.98	0.0159	P	7.1
4	☐	50.000	50.909	66754.55	0.3530	P	1.3
5	☐	125.000	128.882	158361.59	0.8891	P	1.6
6	☐	250.000	253.535	303772.04	1.7462	P	0.9
7	☐	500.000	502.851	585189.79	3.4604	P	0.5
8	☐	1000.000	997.160	1140883.96	6.8592	P	1.8
9	☐			3290.39	0.0210	P	2.3

$$y = 0.0069 * x + 0.0030$$

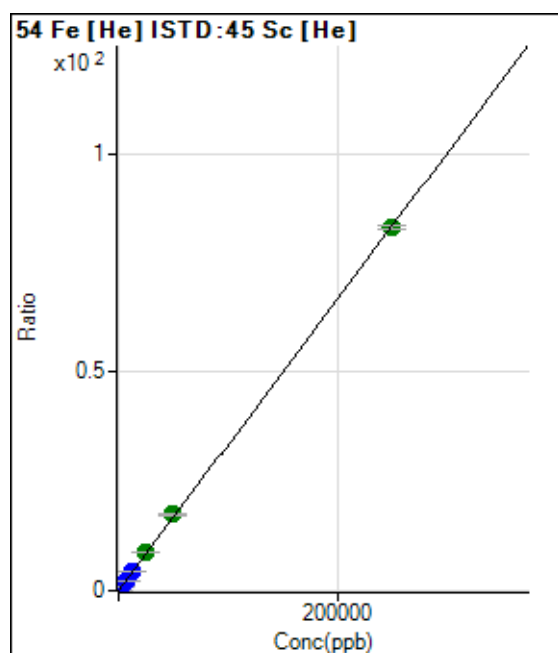
$$R = 1.0000$$

$$DL = 0.04695$$

$$BEC = 0.4319$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	855.59	0.0045	P	5.5
2	☐	5.000	5.267	1186.73	0.0063	P	7.9
3	☐	50.000	54.254	4171.73	0.0226	P	8.5
4	☐	2500.000	2761.434	174758.66	0.9241	P	1.2
5	☐	6250.000	7033.518	417987.26	2.3468	P	1.7
6	☐	12500.000	13776.335	798884.86	4.5923	P	0.3
7	☐	25000.000	26491.064	1492639.75	8.8266	A	1.1
8	☐	50000.000	52192.760	2891859.40	17.3858	A	1.6
9	☐	250000.00	249326.32	12989797.44	83.0355	A	0.9

$$y = 3.3302E-004 * x + 0.0045$$

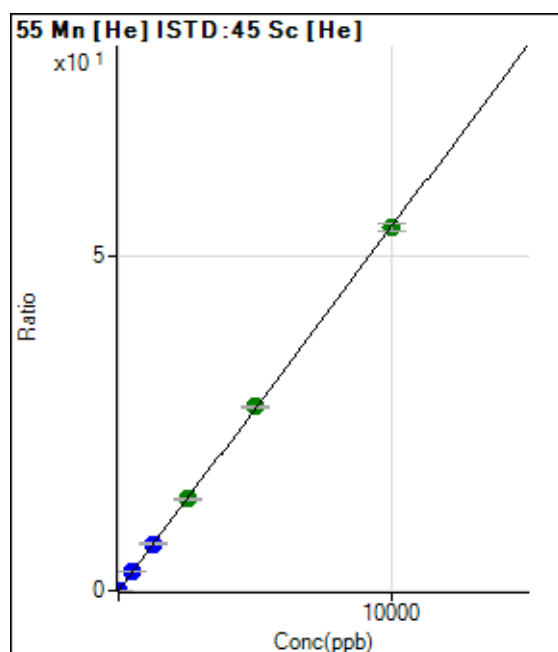
$$R = 0.9999$$

$$DL = 2.225$$

$$BEC = 13.59$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	92.22	0.0005	P	45.2
2	☐	0.100	0.106	201.11	0.0011	P	6.8
3	☐	1.000	0.965	1061.16	0.0057	P	7.0
4	☐	500.000	503.424	518671.63	2.7426	P	0.6
5	☐	1250.000	1289.637	1251257.07	7.0251	P	1.3
6	☐	2500.000	2518.408	2386439.88	13.7183	A	0.9
7	☐	5000.000	5047.972	4649873.72	27.4968	A	1.2
8	☐	10000.000	9966.286	9029446.81	54.2868	A	2.0
9	☐			4217.31	0.0270	P	3.9

$$y = 0.0054 * x + 4.8696E-004$$

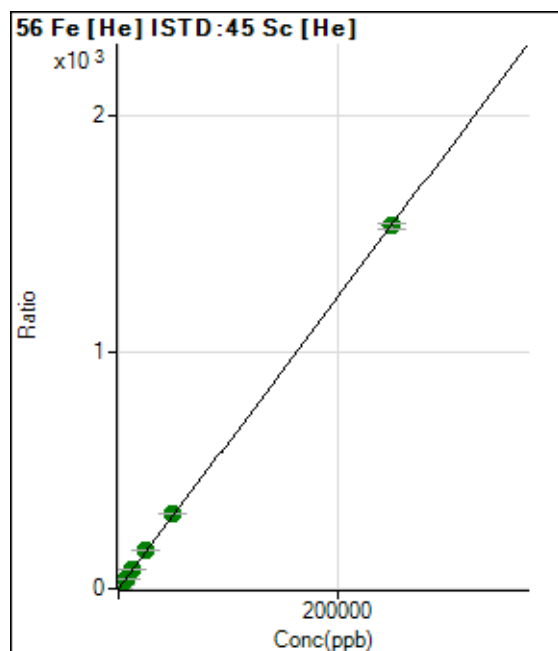
$$R = 1.0000$$

$$DL = 0.1213$$

$$BEC = 0.0894$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	6498.12	0.0344	P	1.1
2	☐	5.000	4.621	11873.68	0.0628	P	2.0
3	☐	50.000	50.514	63788.97	0.3452	P	5.8
4	☐	2500.000	2582.799	3011495.34	15.9242	A	0.7
5	☐	6250.000	6582.457	7218986.49	40.5307	A	1.5
6	☐	12500.000	13063.801	13987423.96	80.4050	A	0.5
7	☐	25000.000	25855.015	26905026.27	159.0986	A	0.2
8	☐	50000.000	51518.409	52727269.21	316.9840	A	1.3
9	☐	250000.00	249573.48	240184154.2	1,535.451	A	1.7

$$y = 0.0062 * x + 0.0344$$

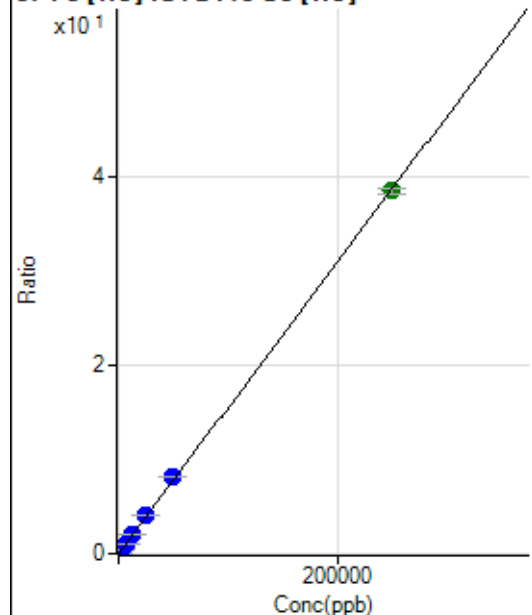
$$R = 1.0000$$

$$DL = 0.1838$$

$$BEC = 5.588$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	373.34	0.0020	P	8.6
2	☐	5.000	4.302	498.90	0.0026	P	3.0
3	☐	50.000	51.569	1833.46	0.0099	P	11.9
4	☐	2500.000	2689.052	78942.44	0.4174	P	0.7
5	☐	6250.000	6817.837	187965.15	1.0553	P	1.3
6	☐	12500.000	13508.016	363393.31	2.0889	P	0.6
7	☐	25000.000	26839.208	701564.24	4.1486	P	0.4
8	☐	50000.000	52807.952	1357382.46	8.1607	P	1.7
9	☐	250000.00	249188.00	6022602.27	38.5012	A	1.5

$$y = 1.5450\text{E-}004 * x + 0.0020$$

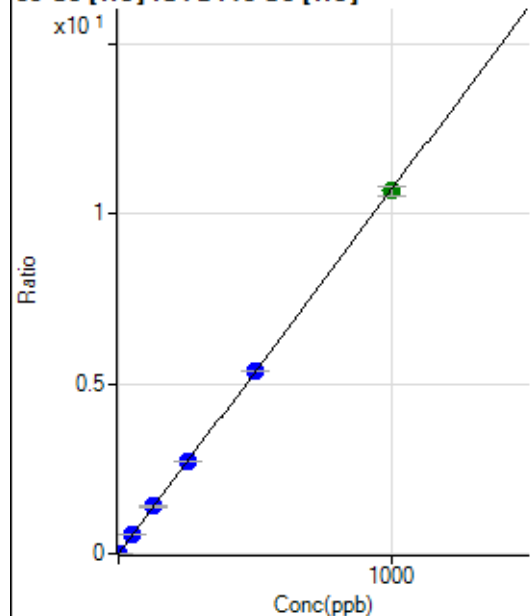
$$R = 0.9999$$

$$DL = 3.312$$

$$BEC = 12.78$$

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	37.78	0.0002	P	8.9
2	☐	0.100	0.099	237.78	0.0013	P	7.4
3	☐	1.000	1.027	2071.28	0.0112	P	5.1
4	☐	50.000	51.920	105224.28	0.5564	P	1.3
5	☐	125.000	130.021	248142.35	1.3932	P	1.2
6	☐	250.000	254.450	474262.31	2.7262	P	0.7
7	☐	500.000	502.904	911167.90	5.3881	P	0.3
8	☐	1000.000	996.712	1775894.92	10.6784	A	2.9
9	☐			4776.36	0.0305	P	3.5

$$y = 0.0107 * x + 1.9969\text{E-}004$$

$$R = 1.0000$$

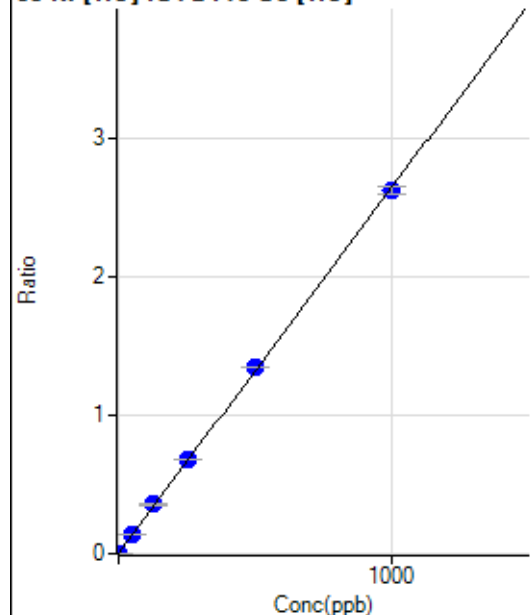
$$DL = 0.004983$$

$$BEC = 0.01864$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	372.23	0.0020	P	16.3
2	☐	0.100	0.088	415.56	0.0022	P	4.9
3	☐	1.000	1.069	883.37	0.0048	P	10.9
4	☐	50.000	53.643	27145.71	0.1436	P	2.0
5	☐	125.000	133.460	63087.43	0.3542	P	2.3
6	☐	250.000	257.661	118647.79	0.6820	P	1.3
7	☐	500.000	510.084	228011.14	1.3483	P	0.3
8	☐	1000.000	991.803	435731.07	2.6197	P	2.0
9	☐			1566.77	0.0100	P	1.5

$$y = 0.0026 * x + 0.0020$$

$$R = 0.9999$$

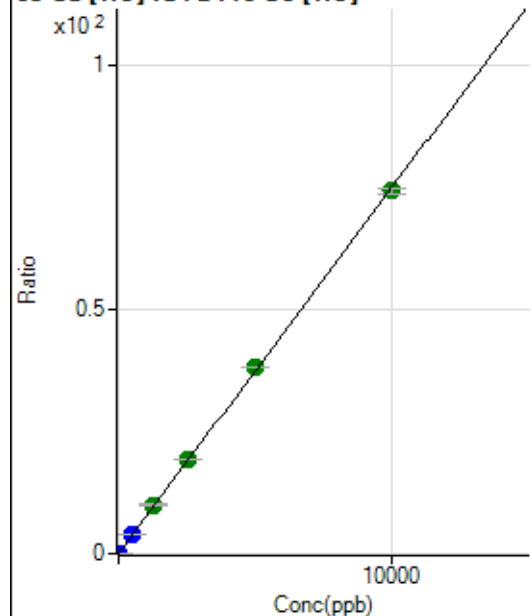
$$DL = 0.3637$$

$$BEC = 0.7453$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	1213.40	0.0064	P	1.2
2	☒	0.200		1344.52	0.0071	P	5.9
3	☐	2.000	1.893	3799.40	0.0206	P	7.9
4	☐	500.000	519.523	735668.82	3.8903	P	1.2
5	☐	1250.000	1337.012	1781330.65	10.0016	A	2.2
6	☐	2500.000	2594.386	3375104.25	19.4015	A	0.2
7	☐	5000.000	5082.904	6427028.10	38.0051	A	0.2
8	☐	10000.000	9923.099	12339810.37	74.1894	A	1.9
9	☐			3711.61	0.0237	P	1.3

$$y = 0.0075 * x + 0.0064$$

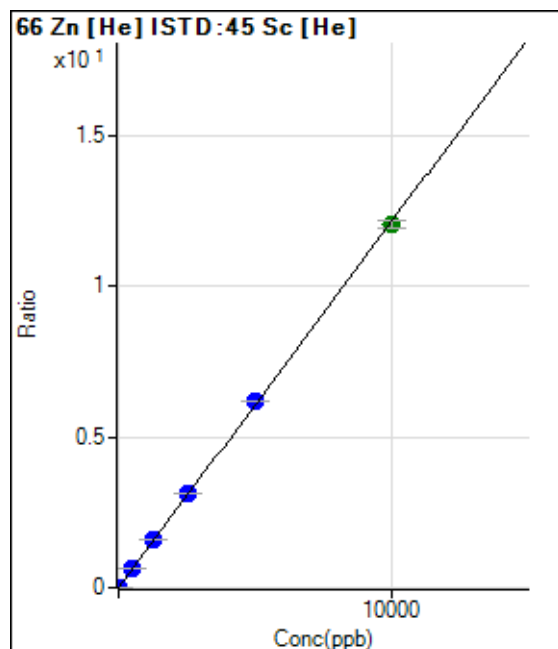
$$R = 0.9999$$

$$DL = 0.03097$$

$$BEC = 0.8588$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	144.45	0.0008	P	11.6
2	☐	0.200	0.247	201.11	0.0011	P	6.7
3	☐	2.000	1.984	586.69	0.0032	P	5.2
4	☐	500.000	522.277	120076.64	0.6349	P	0.6
5	☐	1250.000	1324.464	286585.16	1.6090	P	1.2
6	☐	2500.000	2583.996	545966.58	3.1384	P	0.4
7	☐	5000.000	5110.134	1049456.89	6.2058	P	0.4
8	☐	10000.000	9913.512	2002218.86	12.0384	A	2.3
9	☐			1884.58	0.0120	P	1.5

$$y = 0.0012 * x + 7.6437E-004$$

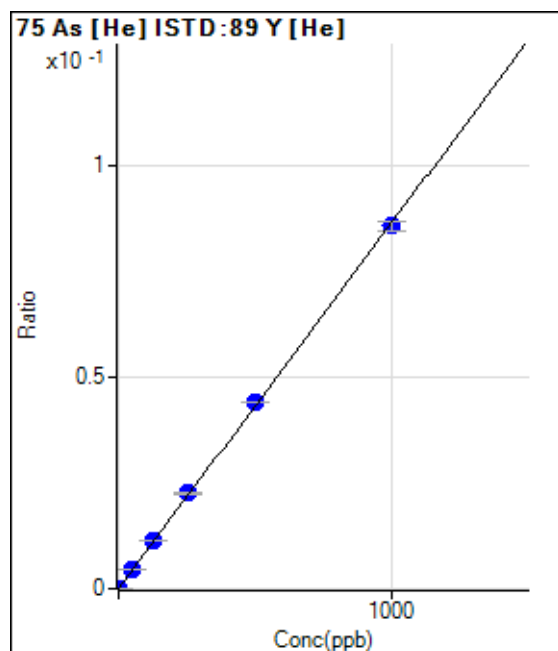
$$R = 0.9999$$

$$DL = 0.2185$$

$$BEC = 0.6295$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	3.33	0.0000	P	173.
2	☐	0.100	0.086	16.67	0.0000	P	103.
3	☐	1.000	1.086	168.89	0.0001	P	7.6
4	☐	50.000	52.790	8315.74	0.0046	P	1.7
5	☐	125.000	132.222	19730.95	0.0114	P	0.4
6	☐	250.000	260.489	38340.54	0.0225	P	1.6
7	☐	500.000	508.555	74186.33	0.0439	P	0.4
8	☐	1000.000	992.058	142879.58	0.0856	P	2.8
9	☐			56.67	0.0000	P	30.6

$$y = 8.6302E-005 * x + 1.7852E-006$$

$$R = 0.9999$$

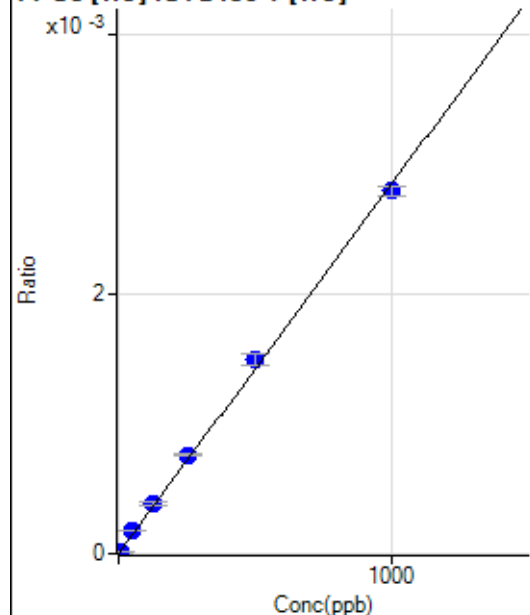
$$DL = 0.1075$$

$$BEC = 0.02068$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	2.22	0.0000	P	86.6
2	☐	0.500	0.010	2.22	0.0000	P	86.6
3	☐	5.000	6.446	34.44	0.0000	P	19.4
4	☐	50.000	61.990	324.45	0.0002	P	2.1
5	☐	125.000	135.412	668.91	0.0004	P	8.9
6	☐	250.000	265.988	1294.52	0.0008	P	1.3
7	☐	500.000	525.010	2530.24	0.0015	P	6.0
8	☐	1000.000	981.590	4669.67	0.0028	P	3.0
9	☐			31.11	0.0000	P	60.4

$$y = 2.8491\text{E-}006 * x + 1.1970\text{E-}006$$

$$R = 0.9994$$

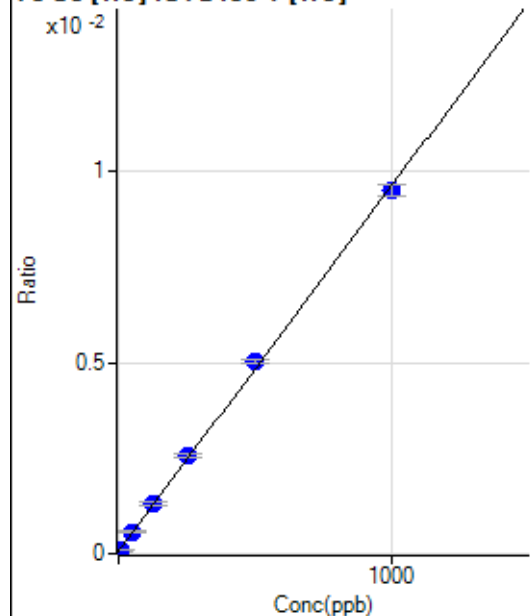
$$DL = 1.092$$

$$BEC = 0.4201$$

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	110.00	0.0001	P	12.7
2	☐	0.500	0.011	107.78	0.0001	P	4.2
3	☐	5.000	4.533	181.12	0.0001	P	20.4
4	☐	50.000	53.710	1044.49	0.0006	P	5.7
5	☐	125.000	128.557	2225.74	0.0013	P	8.1
6	☐	250.000	264.016	4401.81	0.0026	P	3.7
7	☐	500.000	519.001	8480.28	0.0050	P	2.5
8	☐	1000.000	986.368	15821.89	0.0095	P	3.3
9	☐			191.12	0.0001	P	4.1

$$y = 9.5522\text{E-}006 * x + 5.9620\text{E-}005$$

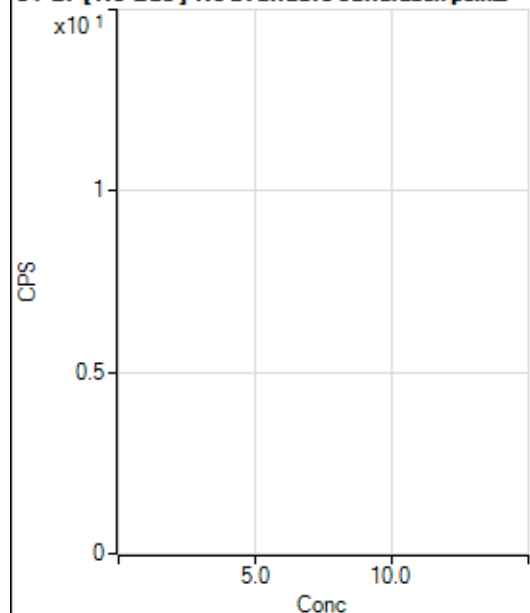
$$R = 0.9996$$

$$DL = 2.376$$

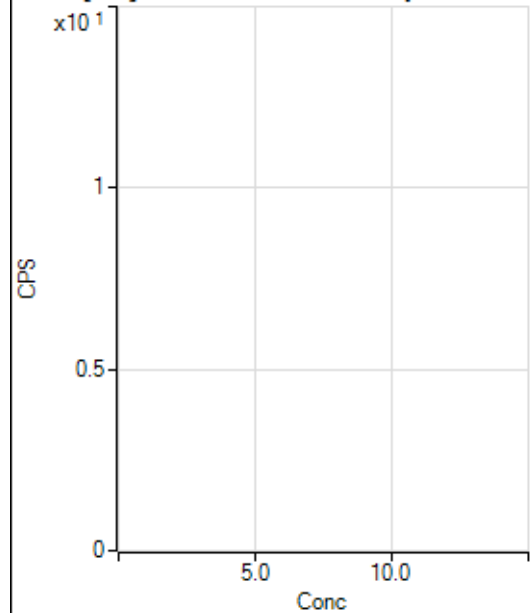
$$BEC = 6.241$$

Weight: <None>

Min Conc: 0

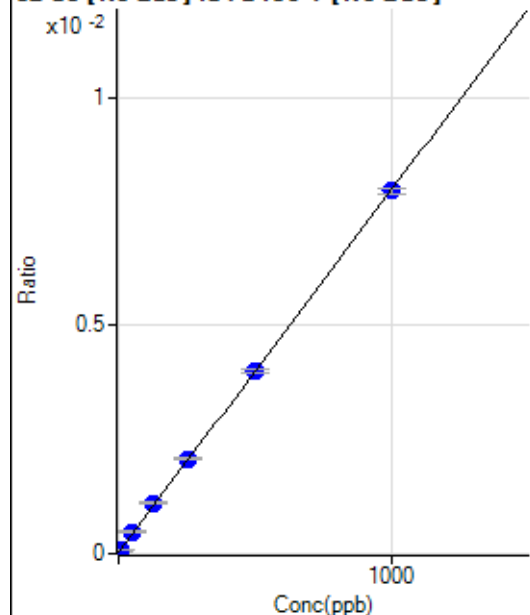
81 Br [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			23374.16		P	1.5
2	☐			23729.17		P	1.0
3	☐			24127.59		P	0.8
4	☐			23370.82		P	0.5
5	☐			21622.62		P	2.5
6	☐			20634.50		P	0.4
7	☐			20164.95		P	1.3
8	☐			20201.72		P	0.8
9	☐			20497.67		P	0.7

81 Br [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			75.56		P	22.6
2	☐			75.55		P	31.9
3	☐			74.44		P	24.7
4	☐			57.78		P	21.8
5	☐			67.78		P	12.4
6	☐			66.67		P	34.6
7	☐			74.45		P	21.2
8	☐			70.00		P	17.2
9	☐			187.78		P	8.2

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	239.59	0.0000	P	10.6
2	☒	0.500		252.31	0.0000	P	5.8
3	☐	5.000	4.701	539.52	0.0001	P	6.8
4	☐	50.000	55.047	3567.00	0.0005	P	9.6
5	☐	125.000	134.926	8369.79	0.0011	P	5.0
6	☐	250.000	258.284	15933.85	0.0021	P	0.9
7	☐	500.000	498.874	30481.56	0.0040	P	2.0
8	☐	1000.000	997.001	58471.27	0.0080	P	1.3
9	☐			556.39	0.0001	P	4.5

$$y = 7.9500\text{E-}006 * x + 3.0533\text{E-}005$$

$$R = 0.9999$$

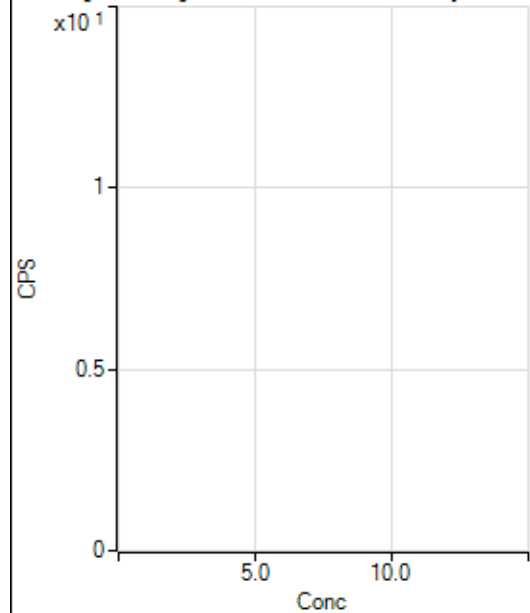
$$DL = 1.223$$

$$BEC = 3.841$$

Weight: <None>

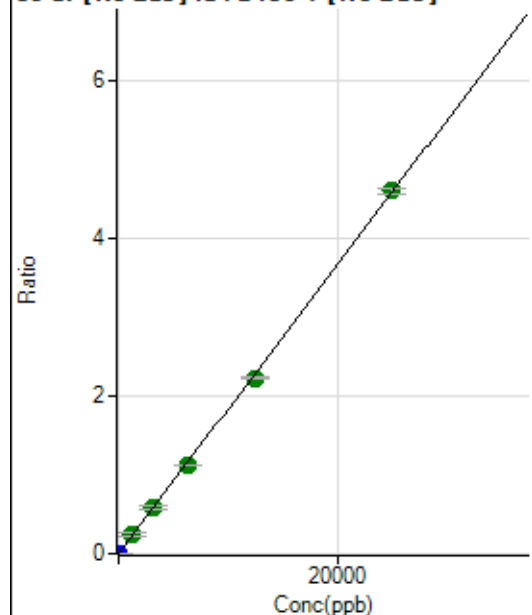
Min Conc: 0

83 Kr [No Gas] No available calibration points



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			60.00		P	33.8
2	☐			63.33		P	26.3
3	☐			55.56		P	18.3
4	☐			87.78		P	13.3
5	☐			76.67		P	18.9
6	☐			82.22		P	16.9
7	☐			70.00		P	16.5
8	☐			92.22		P	11.6
9	☐			111.11		P	1.7

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	121.11	0.0000	P	42.4
2	☐	0.100	0.107	280.01	0.0000	P	2.7
3	☐	1.000	0.861	1373.41	0.0002	P	2.5
4	☐	1250.000	1333.264	1856297.75	0.2438	A	10.5
5	☐	3125.000	3195.880	4433179.55	0.5843	A	5.2
6	☐	6250.000	6189.314	8652304.46	1.1316	A	0.3
7	☐	12500.000	12191.436	16999465.86	2.2289	A	1.7
8	☐	25000.000	25156.430	33796724.77	4.5992	A	1.9
9	☐			4990.92	0.0007	P	19.6

$$y = 1.8282E-004 * x + 1.5535E-005$$

R = 0.9999

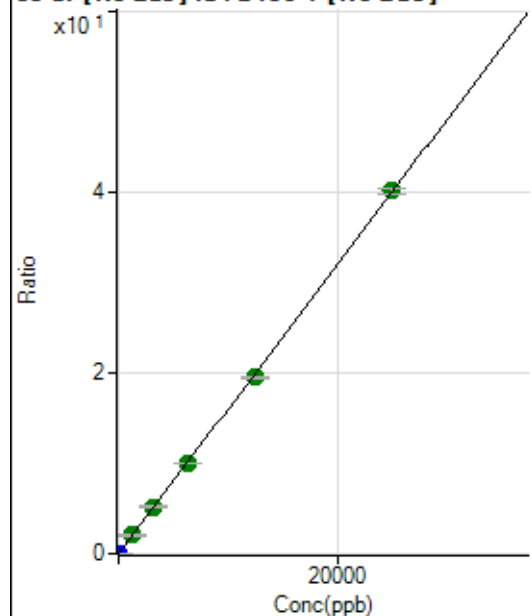
DL = 0.108

BEC = 0.08498

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	152.23	0.0000	P	16.1
2	☐	0.100	0.086	1252.29	0.0002	P	4.1
3	☐	1.000	0.855	10994.19	0.0014	P	1.9
4	☐	1250.000	1318.735	16030765.60	2.1046	A	10.1
5	☐	3125.000	3213.257	38906838.03	5.1281	A	5.0
6	☐	6250.000	6281.790	76658213.30	10.0252	A	0.8
7	☐	12500.000	12200.195	148506018.9	19.4705	A	0.9
8	☐	25000.000	25127.486	294692953.3	40.1014	A	1.4
9	☐			43605.55	0.0062	P	20.1

$$y = 0.0016 * x + 1.9512E-005$$

R = 0.9999

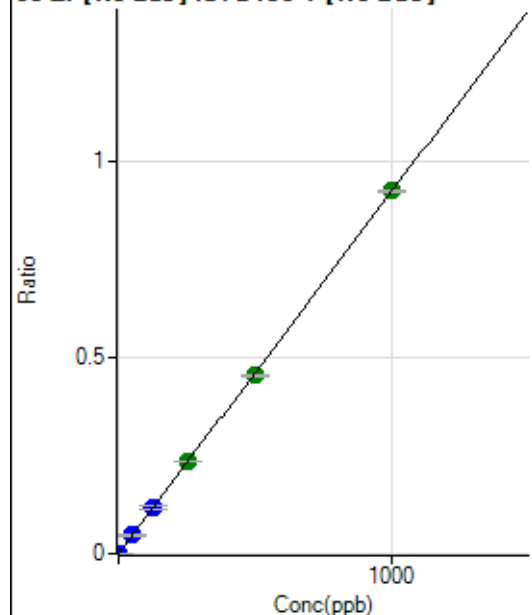
DL = 0.0059

BEC = 0.01223

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	305.56	0.0000	P	8.7
2	☐	0.100	0.080	897.82	0.0001	P	6.4
3	☐	1.000	0.833	6422.58	0.0008	P	3.1
4	☐	50.000	52.400	369080.45	0.0485	P	10.1
5	☐	125.000	127.596	894601.53	0.1179	P	5.4
6	☐	250.000	254.469	1798180.42	0.2352	A	1.2
7	☐	500.000	492.627	3472091.27	0.4552	A	0.7
8	☐	1000.000	1002.125	6805066.63	0.9260	A	0.7
9	☐			3278.18	0.0005	P	12.4

$$y = 9.2398\text{E-}004 * x + 3.8952\text{E-}005$$

$$R = 0.9999$$

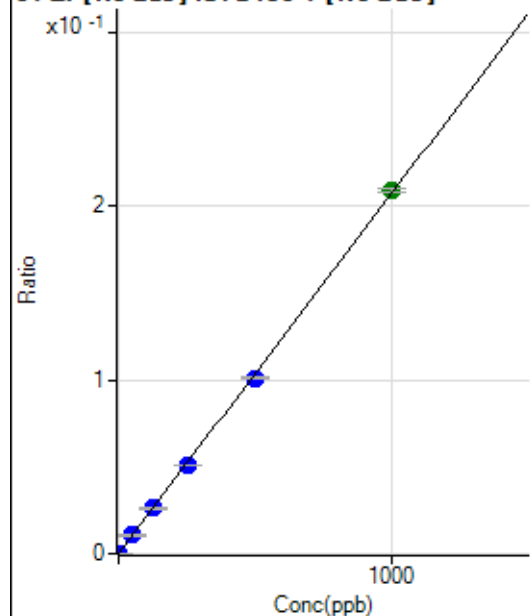
$$DL = 0.01095$$

$$BEC = 0.04216$$

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	58.89	0.0000	P	24.5
2	☐	0.100	0.074	182.23	0.0000	P	14.1
3	☐	1.000	0.874	1497.87	0.0002	P	9.6
4	☐	50.000	52.138	82315.70	0.0108	P	10.4
5	☐	125.000	127.395	200285.94	0.0264	P	5.1
6	☐	250.000	247.297	391800.38	0.0512	P	0.2
7	☐	500.000	486.440	768699.94	0.1008	P	1.1
8	☐	1000.000	1007.050	1533272.39	0.2086	A	1.0
9	☐			734.47	0.0001	P	15.0

$$y = 2.0717\text{E-}004 * x + 7.5439\text{E-}006$$

$$R = 0.9999$$

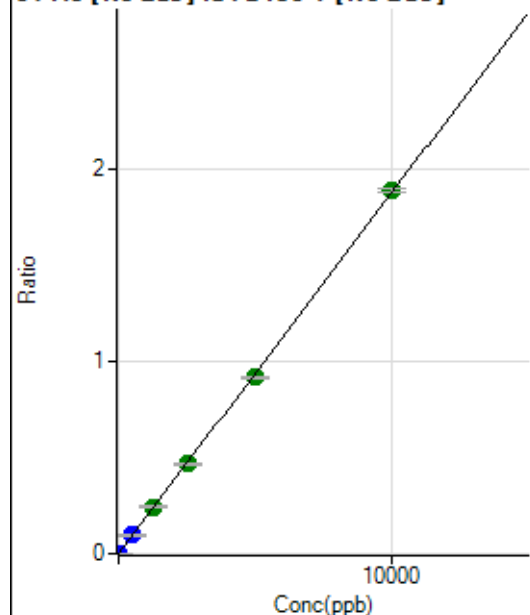
$$DL = 0.0268$$

$$BEC = 0.03641$$

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	167.78	0.0000	P	3.3
2	☐	0.500	0.518	946.71	0.0001	P	5.8
3	☐	5.000	5.058	7725.44	0.0010	P	1.8
4	☐	500.000	524.320	750934.07	0.0986	P	10.1
5	☐	1250.000	1288.888	1838132.66	0.2423	A	5.4
6	☐	2500.000	2482.779	3569030.30	0.4668	A	1.7
7	☐	5000.000	4885.813	7005335.73	0.9185	A	1.7
8	☐	10000.000	10055.322	13891381.04	1.8903	A	1.1
9	☐			3708.29	0.0005	P	14.3

$$y = 1.8799\text{E-}004 * x + 2.1437\text{E-}005$$

$$R = 0.9999$$

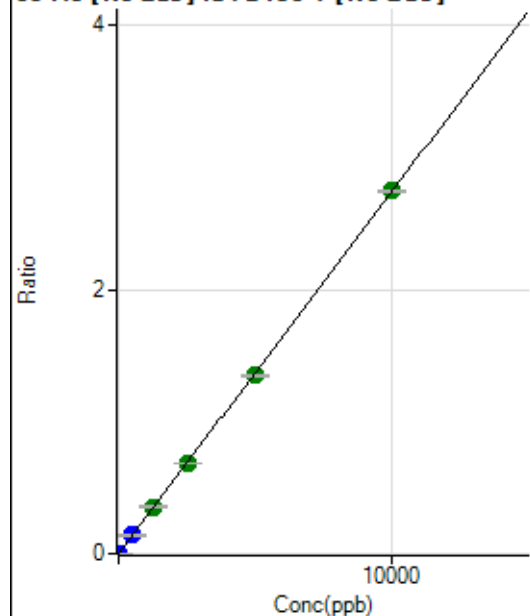
$$DL = 0.01133$$

$$BEC = 0.114$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	515.57	0.0001	P	11.4
2	☐	0.500	0.358	1305.63	0.0002	P	3.7
3	☐	5.000	4.219	9689.95	0.0012	P	4.6
4	☐	500.000	519.338	1082437.23	0.1421	P	10.0
5	☐	1250.000	1287.604	2672362.17	0.3522	A	4.9
6	☐	2500.000	2492.505	5212904.99	0.6818	A	0.4
7	☐	5000.000	4923.546	10271372.56	1.3467	A	0.5
8	☐	10000.000	10034.434	20169014.56	2.7445	A	0.8
9	☐			4442.95	0.0006	P	17.1

$$y = 2.7350\text{E-}004 * x + 6.5940\text{E-}005$$

$$R = 0.9999$$

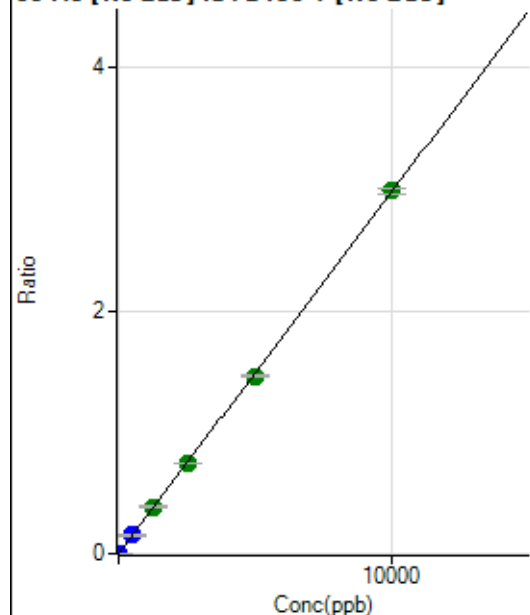
$$DL = 0.08255$$

$$BEC = 0.2411$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	68.89	0.0000	P	16.2
2	☐	0.500	0.425	1076.72	0.0001	P	11.4
3	☐	5.000	4.209	10012.39	0.0013	P	1.4
4	☐	500.000	519.889	1177711.02	0.1546	P	9.9
5	☐	1250.000	1297.569	2926418.22	0.3858	A	5.8
6	☐	2500.000	2504.038	5693328.18	0.7446	A	0.7
7	☐	5000.000	4914.173	11145542.33	1.4612	A	0.4
8	☐	10000.000	10034.964	21928236.61	2.9839	A	1.5
9	☐			10432.71	0.0015	P	6.6

$$y = 2.9735E-004 * x + 8.7593E-006$$

$$R = 0.9999$$

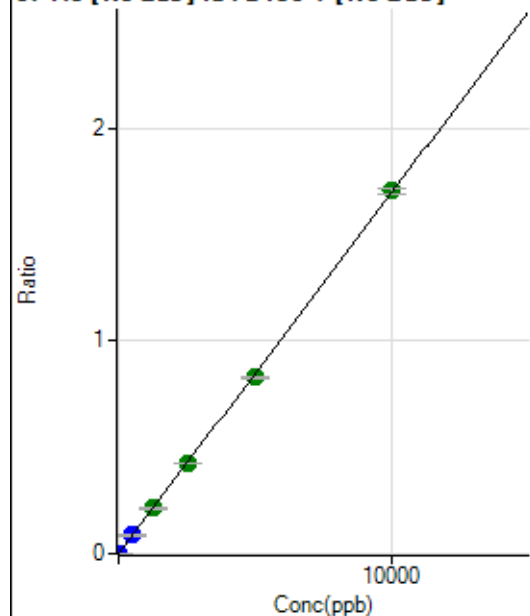
$$DL = 0.01435$$

$$BEC = 0.02946$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	74.45	0.0000	P	13.6
2	☐	0.500	0.458	694.47	0.0001	P	0.4
3	☐	5.000	4.217	5763.42	0.0007	P	2.2
4	☐	500.000	521.381	674351.99	0.0885	P	10.1
5	☐	1250.000	1275.023	1642720.01	0.2165	A	4.7
6	☐	2500.000	2511.021	3260107.00	0.4264	A	0.5
7	☐	5000.000	4884.259	6325573.24	0.8293	A	0.5
8	☐	10000.000	10050.919	12541661.76	1.7066	A	1.5
9	☐			2583.59	0.0004	P	20.2

$$y = 1.6979E-004 * x + 9.5040E-006$$

$$R = 0.9999$$

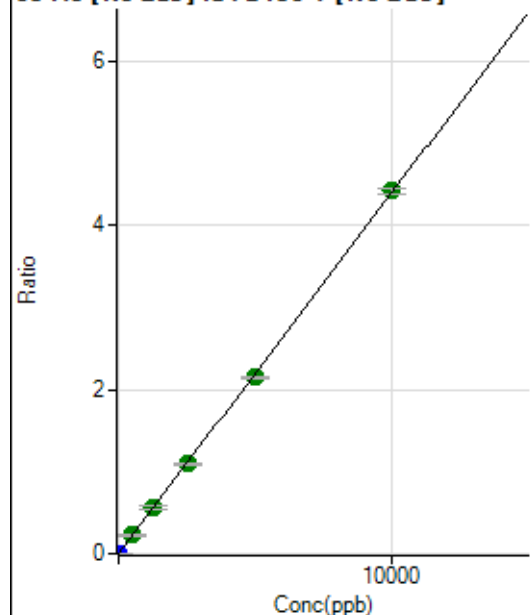
$$DL = 0.02285$$

$$BEC = 0.05597$$

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	36.67	0.0000	P	21.6
2	☐	0.500	0.411	1476.76	0.0002	P	8.4
3	☐	5.000	4.161	14564.00	0.0018	P	2.5
4	☐	500.000	529.446	1772690.72	0.2327	A	9.7
5	☐	1250.000	1285.393	4285724.24	0.5649	A	5.1
6	☐	2500.000	2482.235	8340802.72	1.0908	A	0.8
7	☐	5000.000	4880.437	16358008.92	2.1448	A	1.5
8	☐	10000.000	10058.327	32482781.74	4.4202	A	1.4
9	☐			5903.51	0.0008	P	22.2

$$y = 4.3946\text{E-}004 * x + 4.7034\text{E-}006$$

$$R = 0.9999$$

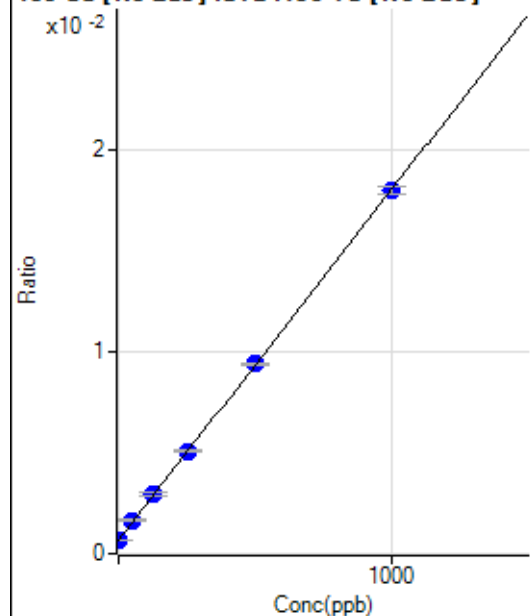
$$DL = 0.006943$$

$$BEC = 0.0107$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	4241.77	0.0007	P	4.2
2	☐	0.100	0.399	4309.57	0.0007	P	4.2
3	☐	1.000	0.874	4318.46	0.0007	P	1.0
4	☐	50.000	55.997	10079.14	0.0016	P	4.6
5	☐	125.000	130.227	18326.14	0.0029	P	5.1
6	☐	250.000	254.811	32452.90	0.0051	P	1.4
7	☐	500.000	502.399	59639.45	0.0094	P	1.3
8	☐	1000.000	996.644	111317.76	0.0180	P	2.1
9	☐			3556.02	0.0006	P	2.5

$$y = 1.7398\text{E-}005 * x + 6.6895\text{E-}004$$

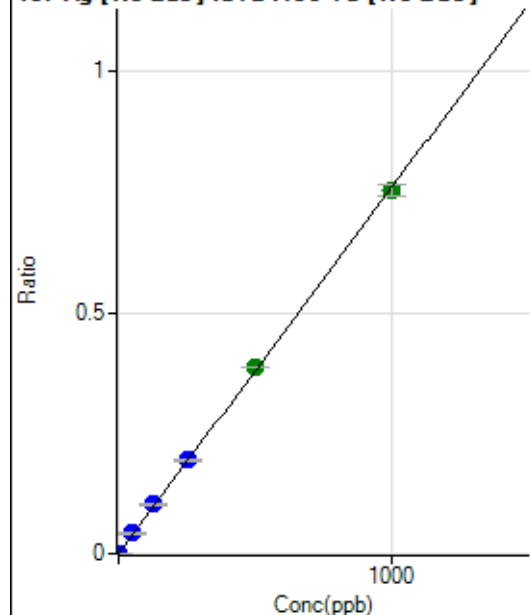
$$R = 1.0000$$

$$DL = 4.796$$

$$BEC = 38.45$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	60.00	0.0000	P	14.1
2	☐	0.100	0.080	446.68	0.0001	P	10.2
3	☐	1.000	0.916	4447.39	0.0007	P	5.0
4	☐	50.000	57.111	264851.09	0.0433	P	10.6
5	☐	125.000	135.105	640018.47	0.1025	P	5.3
6	☐	250.000	255.223	1231591.43	0.1936	P	1.5
7	☐	500.000	511.032	2457385.22	0.3877	A	0.4
8	☐	1000.000	991.559	4648977.54	0.7522	A	3.3
9	☐			1136.73	0.0002	P	30.5

$$y = 7.5862\text{E-}004 * x + 9.5111\text{E-}006$$

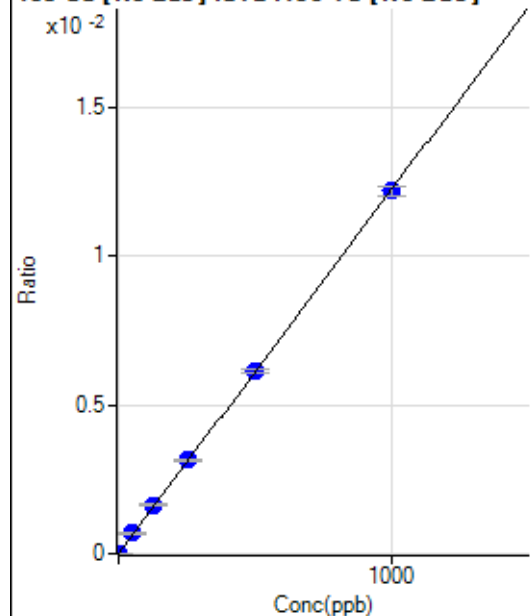
$$R = 0.9999$$

$$DL = 0.005311$$

$$BEC = 0.01254$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	11.11	0.0000	P	74.1
2	☐	0.100	0.116	20.00	0.0000	P	45.1
3	☐	1.000	0.809	73.33	0.0000	P	27.1
4	☐	50.000	56.490	4230.66	0.0007	P	9.0
5	☐	125.000	134.402	10253.69	0.0016	P	7.1
6	☐	250.000	256.536	19934.86	0.0031	P	3.0
7	☐	500.000	500.398	38740.50	0.0061	P	1.7
8	☐	1000.000	996.668	75235.88	0.0122	P	2.8
9	☐			61.11	0.0000	P	12.0

$$y = 1.2212\text{E-}005 * x + 1.7270\text{E-}006$$

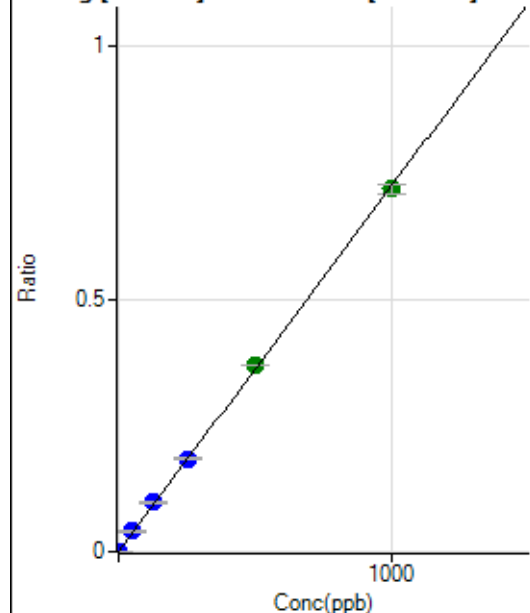
$$R = 0.9999$$

$$DL = 0.3144$$

$$BEC = 0.1414$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	25.56	0.0000	P	26.8
2	☐	0.100	0.088	432.23	0.0001	P	5.2
3	☐	1.000	0.906	4163.97	0.0007	P	3.2
4	☐	50.000	56.805	251443.23	0.0411	P	9.9
5	☐	125.000	134.554	608226.26	0.0974	P	5.1
6	☐	250.000	254.881	1173601.87	0.1845	P	1.6
7	☐	500.000	509.926	2339730.73	0.3691	A	0.9
8	☐	1000.000	992.282	4439690.59	0.7183	A	2.9
9	☐			1005.60	0.0002	P	33.8

$$y = 7.2390\text{E-}004 * x + 4.0050\text{E-}006$$

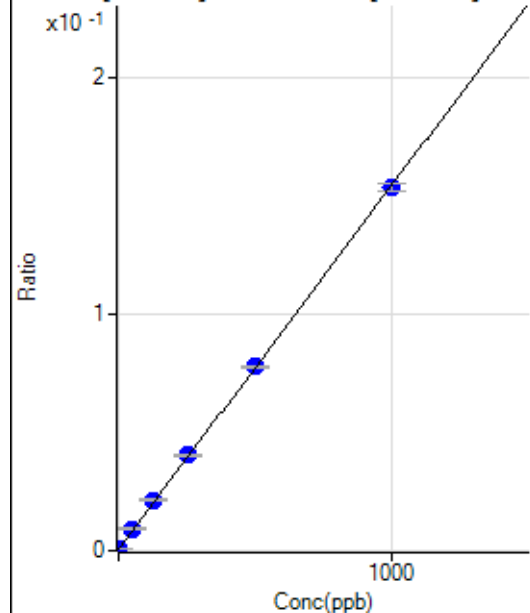
$$R = 0.9999$$

$$DL = 0.004448$$

$$BEC = 0.005533$$

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	2967.02	0.0005	P	4.1
2	☐	0.100	0.125	3106.04	0.0005	P	3.9
3	☐	1.000	0.991	3914.96	0.0006	P	2.2
4	☐	50.000	57.535	56944.33	0.0093	P	9.7
5	☐	125.000	136.010	133424.19	0.0214	P	6.1
6	☐	250.000	260.917	258075.94	0.0406	P	2.0
7	☐	500.000	503.344	493373.65	0.0778	P	1.1
8	☐	1000.000	993.846	947248.39	0.1532	P	2.1
9	☐			2972.01	0.0005	P	2.3

$$y = 1.5372\text{E-}004 * x + 4.6793\text{E-}004$$

$$R = 0.9999$$

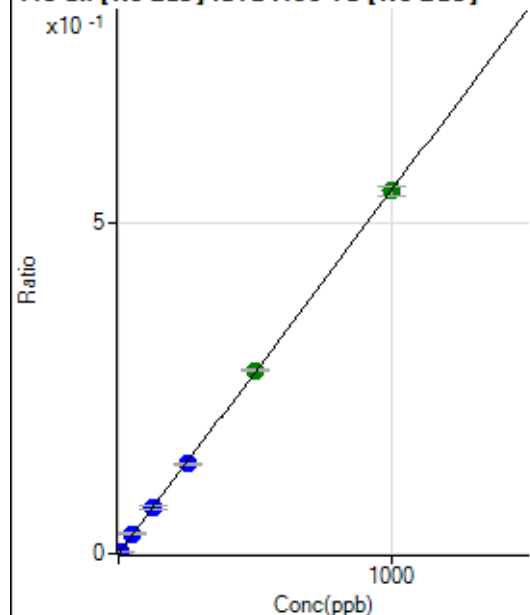
$$DL = 0.372$$

$$BEC = 3.044$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	203.34	0.0000	P	32.3
2	☐	0.500	0.453	1794.57	0.0003	P	3.9
3	☐	5.000	4.579	16112.42	0.0026	P	2.6
4	☐	50.000	53.424	179914.56	0.0294	P	10.4
5	☐	125.000	127.674	438899.44	0.0703	P	5.5
6	☐	250.000	246.208	862057.19	0.1355	P	1.8
7	☐	500.000	504.135	1758764.99	0.2775	A	1.1
8	☐	1000.000	998.377	3396244.29	0.5495	A	2.9
9	☐			1747.90	0.0003	P	7.1

$$y = 5.5035\text{E-}004 * x + 3.2383\text{E-}005$$

$$R = 1.0000$$

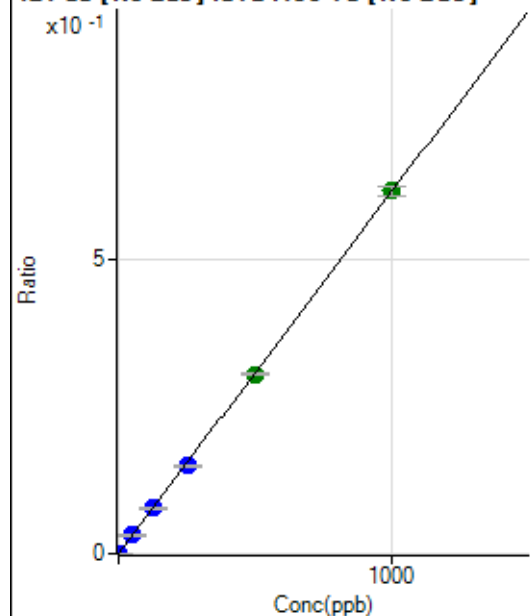
$$DL = 0.057$$

$$BEC = 0.05884$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	10.00	0.0000	P	30.1
2	☐	0.200	0.174	693.36	0.0001	P	5.9
3	☐	2.000	1.753	6818.34	0.0011	P	2.2
4	☐	50.000	52.573	197679.06	0.0323	P	10.8
5	☐	125.000	126.156	484598.16	0.0776	P	5.7
6	☐	250.000	243.603	953348.11	0.1499	P	1.6
7	☐	500.000	496.668	1936857.02	0.3056	A	1.7
8	☐	1000.000	1002.993	3814284.66	0.6171	A	2.7
9	☐			2459.12	0.0004	P	7.9

$$y = 6.1527\text{E-}004 * x + 1.5673\text{E-}006$$

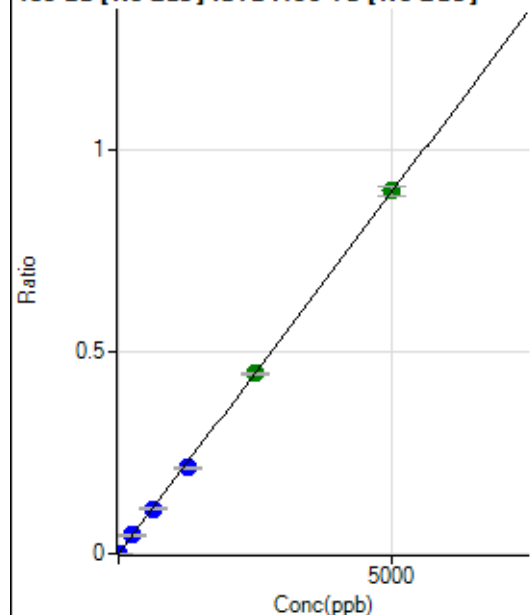
$$R = 1.0000$$

$$DL = 0.002301$$

$$BEC = 0.002547$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	14.45	0.0000	P	71.8
2	☐	1.000	0.838	968.93	0.0002	P	8.8
3	☐	10.000	8.821	9970.23	0.0016	P	1.9
4	☐	250.000	256.190	280019.47	0.0458	P	10.4
5	☐	625.000	618.682	690732.32	0.1106	P	5.4
6	☐	1250.000	1192.895	1356733.03	0.2133	P	1.7
7	☐	2500.000	2490.601	2822783.61	0.4453	A	1.1
8	☐	5000.000	5019.459	5547687.63	0.8975	A	2.6
9	☐			3009.24	0.0005	P	5.1

$$y = 1.7881E-004 * x + 2.2510E-006$$

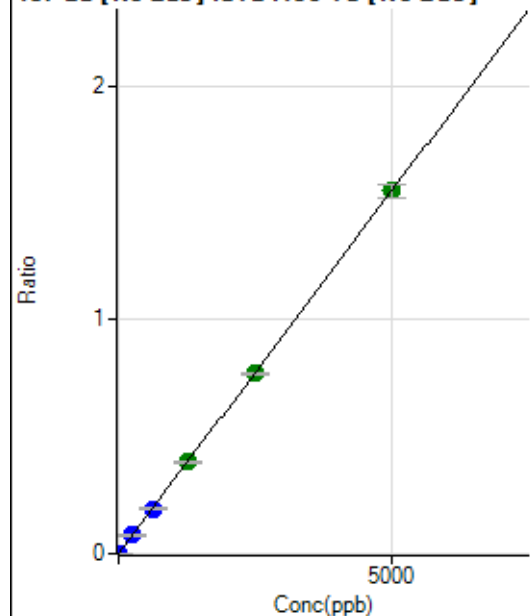
$$R = 0.9999$$

$$DL = 0.02713$$

$$BEC = 0.01259$$

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	25.56	0.0000	P	29.8
2	☐	1.000	0.853	1712.34	0.0003	P	12.3
3	☐	10.000	8.710	17071.43	0.0027	P	1.2
4	☐	250.000	255.664	484398.56	0.0793	P	11.0
5	☐	625.000	615.781	1192264.00	0.1909	P	5.0
6	☐	1250.000	1263.759	2492282.15	0.3918	A	2.2
7	☐	2500.000	2486.511	4886696.87	0.7710	A	1.3
8	☐	5000.000	5004.176	9588959.37	1.5516	A	3.6
9	☐			5246.58	0.0009	P	7.3

$$y = 3.1006E-004 * x + 4.0058E-006$$

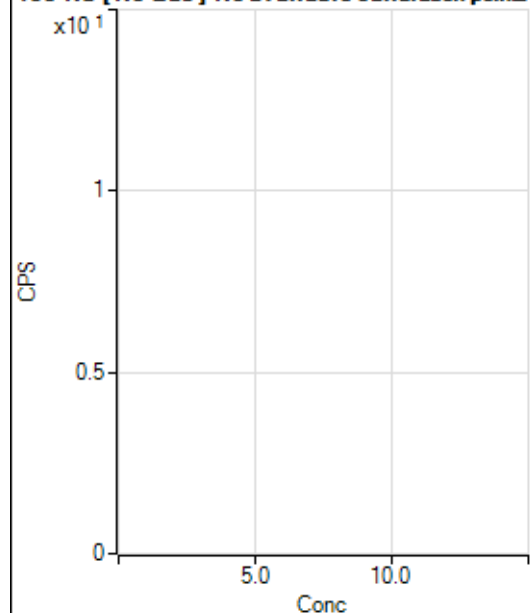
$$R = 1.0000$$

$$DL = 0.01156$$

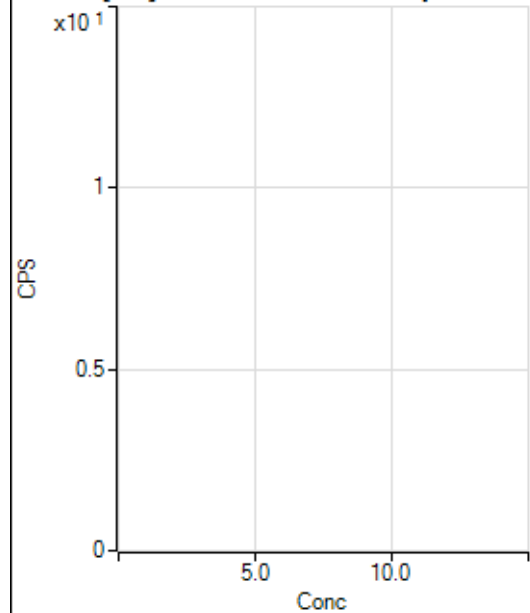
$$BEC = 0.01292$$

Weight: <None>

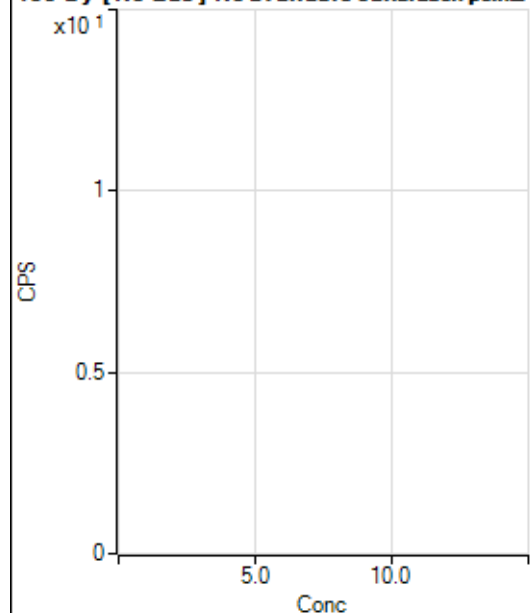
Min Conc: 0

150 Nd [No Gas] No available calibration points

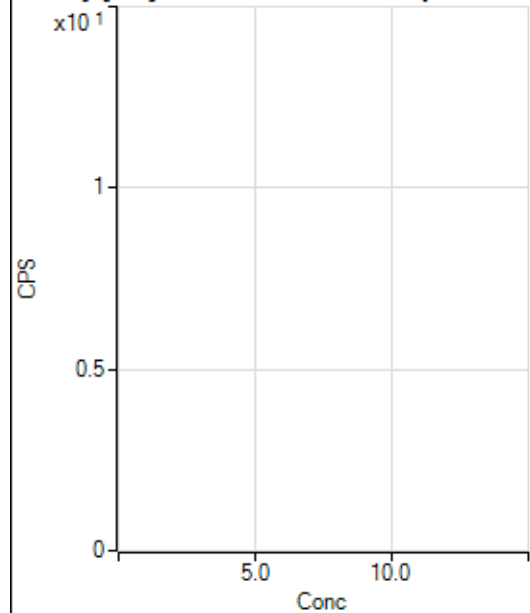
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			5.56		P	34.7
2	☐			6.67		P	50.0
3	☐			6.67		P	50.0
4	☐			52.22		P	31.5
5	☐			124.44		P	19.0
6	☐			222.22		P	4.8
7	☐			433.34		P	7.0
8	☐			872.26		P	8.9
9	☐			177.78		P	16.8

150 Nd [He] No available calibration points

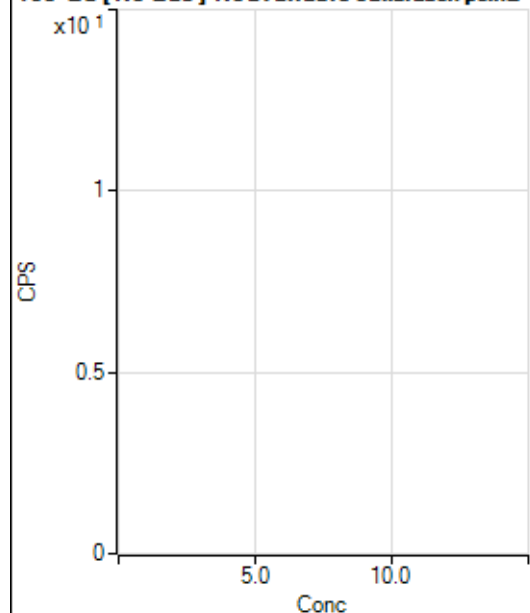
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			1.11		P	173.
2	☐			0.00		P	
3	☐			3.33		P	0.0
4	☐			15.56		P	61.9
5	☐			26.67		P	33.1
6	☐			47.78		P	31.5
7	☐			86.67		P	16.8
8	☐			184.45		P	10.0
9	☐			82.22		P	39.8

156 Dy [No Gas] No available calibration points

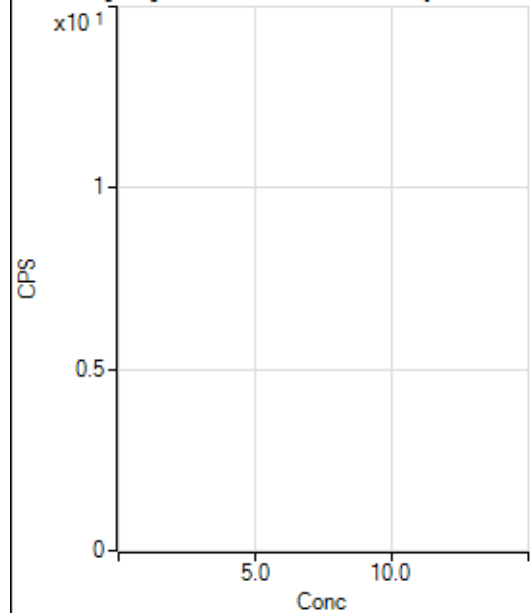
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			6.67		P	50.0
2	☐			7.78		P	89.2
3	☐			15.56		P	65.5
4	☐			33.33		P	40.0
5	☐			48.89		P	20.8
6	☐			100.00		P	20.0
7	☐			181.11		P	20.2
8	☐			391.12		P	2.0
9	☐			894.48		P	1.9

156 Dy [He] No available calibration points

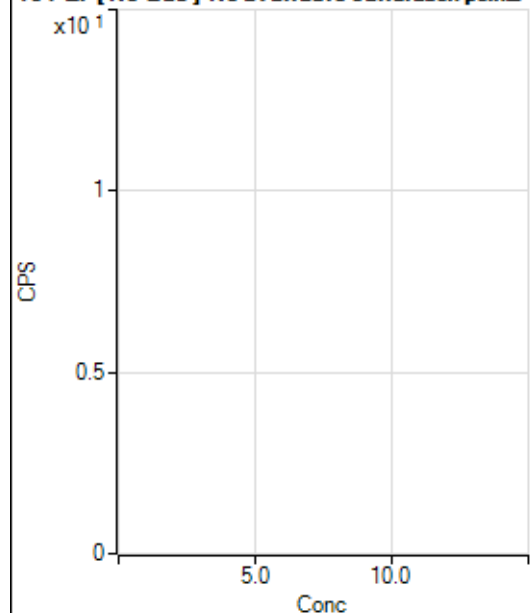
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			5.55		P	69.3
2	☐			0.00		P	
3	☐			2.22		P	173.
4	☐			22.22		P	34.7
5	☐			57.78		P	6.7
6	☐			98.89		P	37.9
7	☐			181.11		P	15.0
8	☐			365.56		P	4.6
9	☐			650.02		P	7.0

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

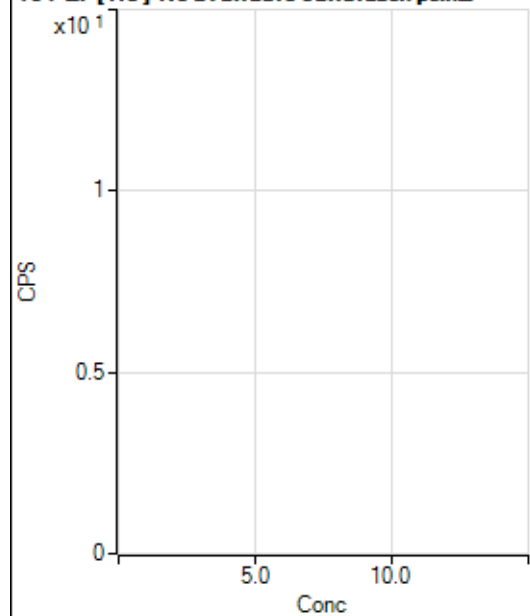
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			43.33		P	13.3
2	☐			35.56		P	14.3
3	☐			33.33		P	36.1
4	☐			63.33		P	21.1
5	☐			61.11		P	11.4
6	☐			92.22		P	23.2
7	☐			151.11		P	41.4
8	☐			267.78		P	13.2
9	☐			976.71		P	9.2

160 Gd [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			210.01		P	14.5
2	☐			205.56		P	8.0
3	☐			176.67		P	13.6
4	☐			176.67		P	14.2
5	☐			224.45		P	16.9
6	☐			198.89		P	12.8
7	☐			266.67		P	4.5
8	☐			390.01		P	6.0
9	☐			881.15		P	7.6

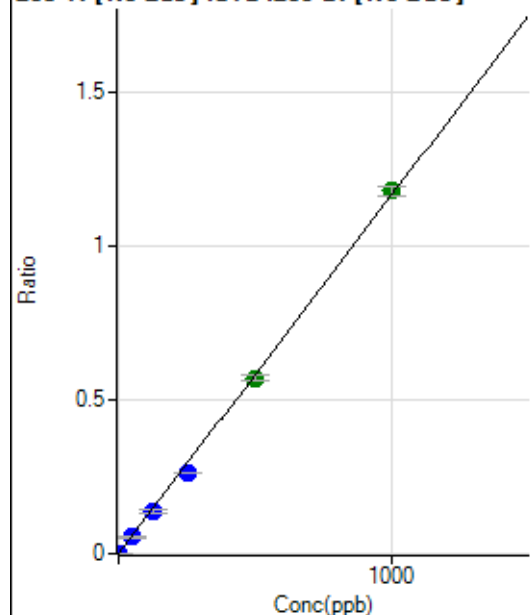
164 Er [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			45.56		P	33.0
2	☐			44.45		P	35.4
3	☐			40.00		P	36.3
4	☐			60.00		P	56.4
5	☐			56.66		P	27.0
6	☐			62.22		P	8.2
7	☐			76.67		P	8.7
8	☐			98.89		P	28.1
9	☐			172.23		P	9.5

164 Er [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			40.00		P	30.0
2	☐			30.00		P	38.5
3	☐			38.89		P	21.6
4	☐			28.89		P	35.2
5	☐			42.22		P	18.2
6	☐			37.78		P	28.4
7	☐			61.11		P	25.2
8	☐			73.33		P	16.4
9	☐			117.78		P	19.3

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	60.00	0.0000	P	12.2
2	☐	0.100	0.077	371.12	0.0001	P	9.3
3	☐	1.000	0.777	3157.07	0.0009	P	1.1
4	☐	50.000	47.139	178752.54	0.0549	P	10.5
5	☐	125.000	117.258	448850.21	0.1365	P	6.4
6	☐	250.000	224.938	896296.67	0.2617	P	1.8
7	☐	500.000	490.763	1942949.10	0.5711	A	2.3
8	☐	1000.000	1011.995	3830807.27	1.1775	A	2.9
9	☐			648.91	0.0002	P	22.5

$$y = 0.0012 * x + 1.7462E-005$$

$$R = 0.9996$$

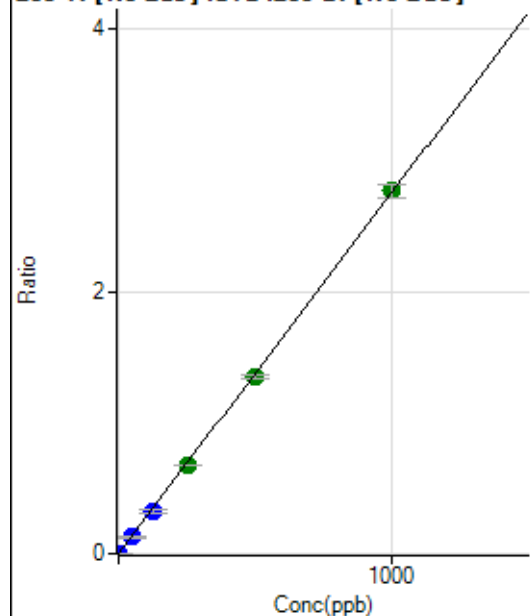
$$DL = 0.00549$$

$$BEC = 0.01501$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	110.00	0.0000	P	7.3
2	☐	0.100	0.077	845.59	0.0002	P	8.4
3	☐	1.000	0.785	7502.15	0.0022	P	2.3
4	☐	50.000	47.204	423222.76	0.1299	P	10.4
5	☐	125.000	116.864	1057710.89	0.3216	P	6.3
6	☐	250.000	245.231	2310397.94	0.6747	A	1.8
7	☐	500.000	492.281	4608395.66	1.3544	A	1.8
8	☐	1000.000	1006.209	9004621.74	2.7683	A	3.5
9	☐			1649.01	0.0006	P	15.9

$$y = 0.0028 * x + 3.1973E-005$$

$$R = 0.9999$$

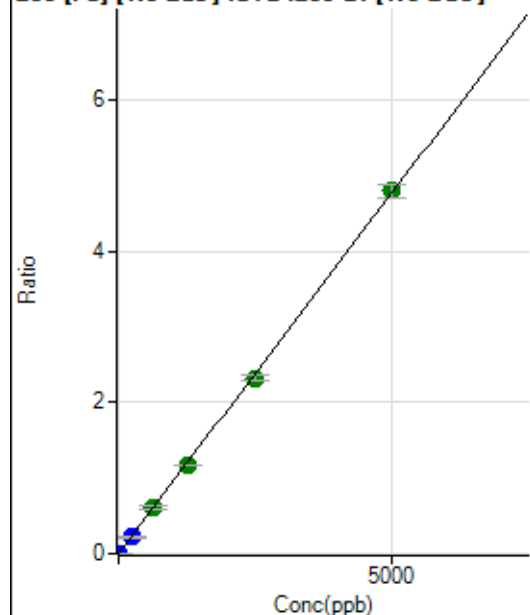
$$DL = 0.002553$$

$$BEC = 0.01162$$

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	108.89	0.0000	P	17.9
2	☐	0.100	0.077	363.34	0.0001	P	7.4
3	☐	1.000	0.791	2691.40	0.0008	P	3.4
4	☐	250.000	237.616	738630.37	0.2268	P	10.9
5	☐	625.000	641.131	2012680.87	0.6118	A	6.2
6	☐	1250.000	1231.479	4024579.11	1.1752	A	1.0
7	☐	2500.000	2437.636	7914563.49	2.3261	A	2.6
8	☐	5000.000	5034.415	15626628.93	4.8041	A	3.5
9	☐			6245.94	0.0022	P	3.5

$$y = 9.5425\text{E-}004 * x + 3.1527\text{E-}005$$

$$R = 0.9999$$

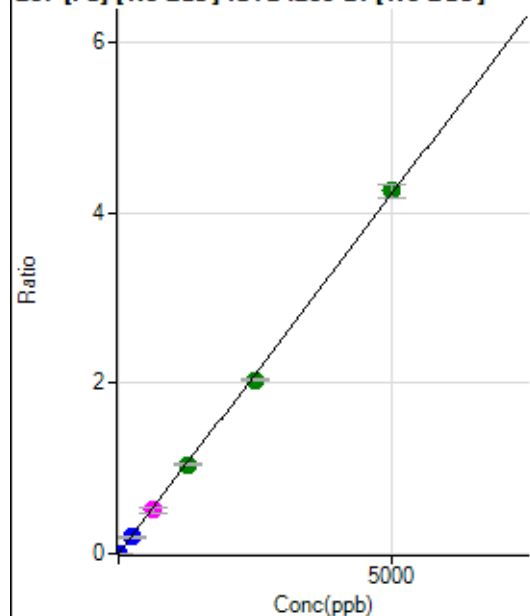
$$DL = 0.01773$$

$$BEC = 0.03304$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	93.34	0.0000	P	26.2
2	☐	0.100	0.077	317.78	0.0001	P	8.8
3	☐	1.000	0.779	2341.34	0.0007	P	5.1
4	☐	250.000	236.172	648881.79	0.1992	P	10.7
5	☐	625.000	602.002	1667261.12	0.5077	M	10.8
6	☐	1250.000	1237.279	3573213.98	1.0435	A	1.8
7	☐	2500.000	2419.406	6942508.44	2.0404	A	1.8
8	☐	5000.000	5047.044	13843992.43	4.2564	A	3.8
9	☐			5445.59	0.0019	P	2.9

$$y = 8.4334\text{E-}004 * x + 2.7048\text{E-}005$$

$$R = 0.9998$$

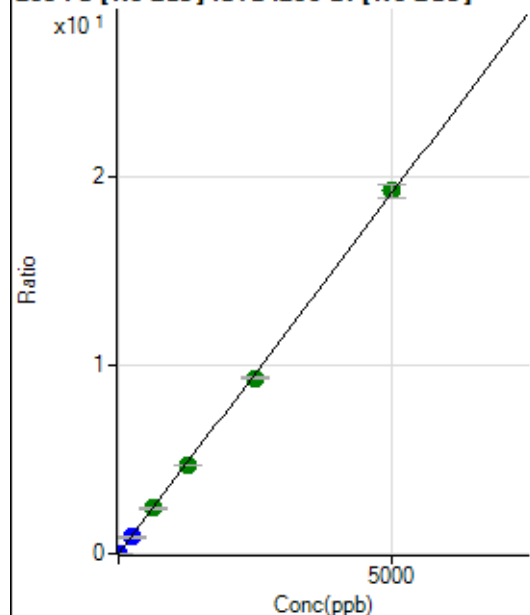
$$DL = 0.02523$$

$$BEC = 0.03207$$

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	474.45	0.0001	P	9.3
2	☐	0.100	0.076	1481.16	0.0004	P	6.1
3	☐	1.000	0.771	10560.58	0.0031	P	2.8
4	☐	250.000	236.274	2940526.69	0.9027	P	10.7
5	☐	625.000	627.472	7883282.28	2.3970	A	6.8
6	☐	1250.000	1232.623	16125406.91	4.7087	A	1.1
7	☐	2500.000	2437.372	31680828.62	9.3107	A	1.4
8	☐	5000.000	5036.035	62574672.26	19.2374	A	3.5
9	☐			24801.29	0.0086	P	3.6

$$y = 0.0038 * x + 1.3745E-004$$

$$R = 0.9999$$

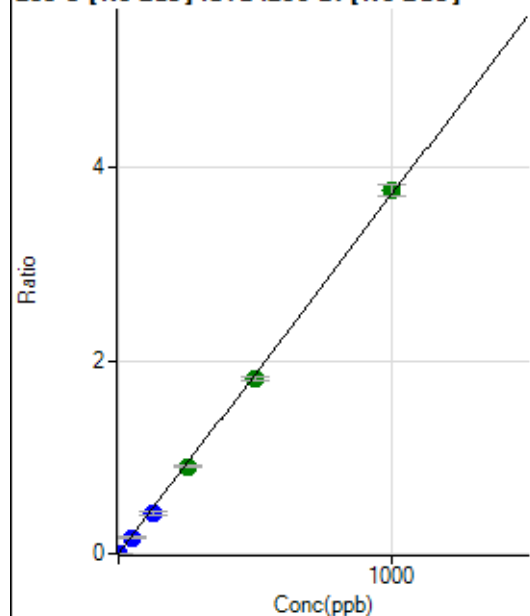
$$DL = 0.01005$$

$$BEC = 0.03598$$

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	6.67	0.0000	P	4.0
2	☐	0.100	0.075	977.83	0.0003	P	10.0
3	☐	1.000	0.740	9446.75	0.0028	P	1.2
4	☐	50.000	44.972	545686.90	0.1675	P	10.8
5	☐	125.000	112.164	1374366.65	0.4178	P	6.4
6	☐	250.000	242.470	3092820.54	0.9032	A	2.1
7	☐	500.000	486.666	6168673.03	1.8129	A	1.6
8	☐	1000.000	1010.406	12243603.85	3.7639	A	3.3
9	☐			1977.95	0.0007	P	18.2

$$y = 0.0037 * x + 1.9386E-006$$

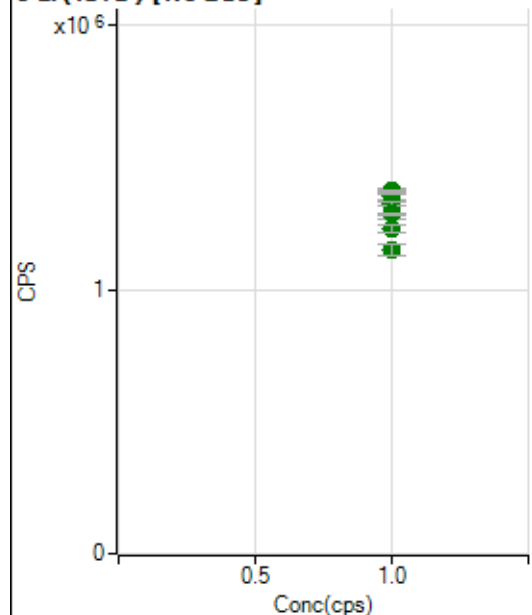
$$R = 0.9998$$

$$DL = 6.247E-05$$

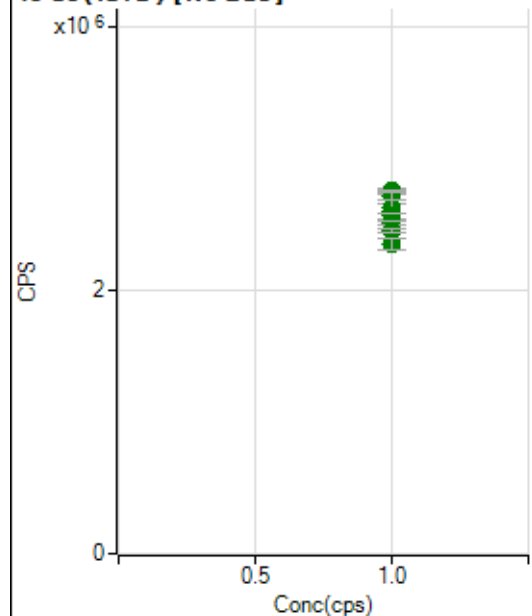
$$BEC = 0.0005204$$

Weight: <None>

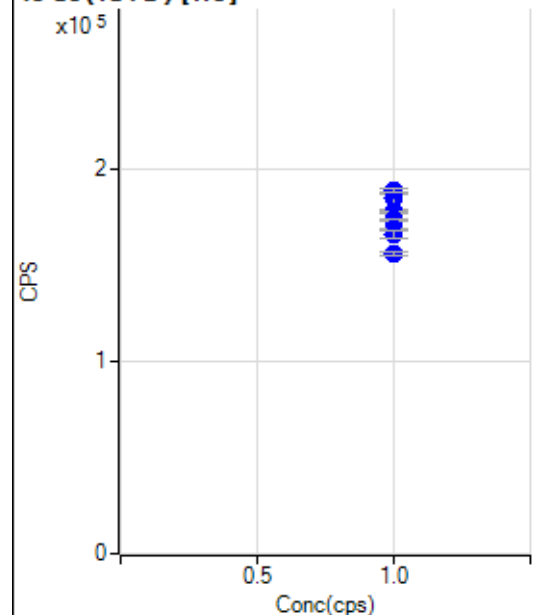
Min Conc: 0

6 Li (ISTD) [No Gas]

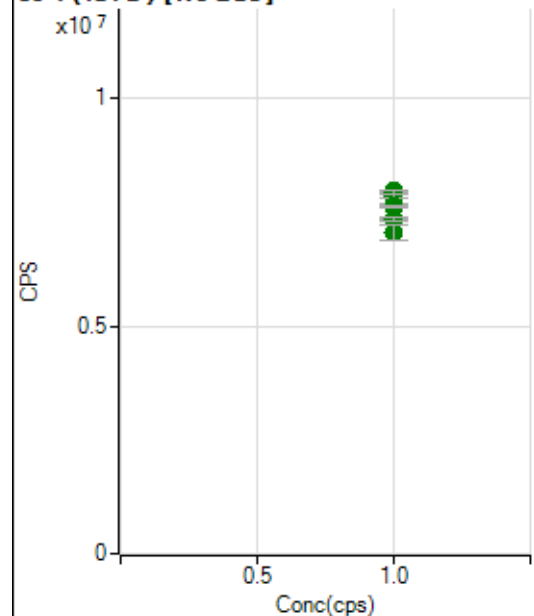
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1356553.07		A	2.7
2	☐	1.000		1373227.65		A	1.5
3	☐	1.000		1372559.83		A	0.8
4	☐	1.000		1321811.15		A	8.2
5	☐	1.000		1323596.94		A	6.1
6	☐	1.000		1323703.88		A	0.7
7	☐	1.000		1285615.70		A	0.7
8	☐	1.000		1231347.98		A	2.0
9	☐	1.000		1147947.83		A	3.6

45 Sc (ISTD) [No Gas]

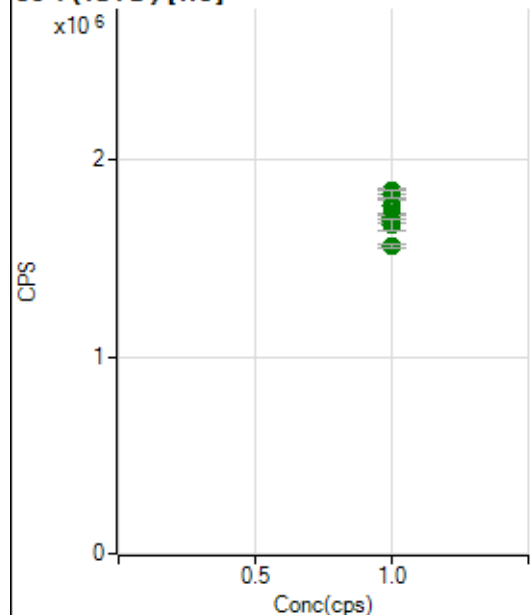
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2711227.81		A	4.6
2	☐	1.000		2735990.59		A	0.7
3	☐	1.000		2753643.53		A	0.3
4	☐	1.000		2627559.58		A	9.8
5	☐	1.000		2604230.95		A	5.7
6	☐	1.000		2564323.71		A	1.7
7	☐	1.000		2509505.59		A	0.7
8	☐	1.000		2449413.61		A	1.1
9	☐	1.000		2349143.42		A	4.2

45 Sc (ISTD) [He]

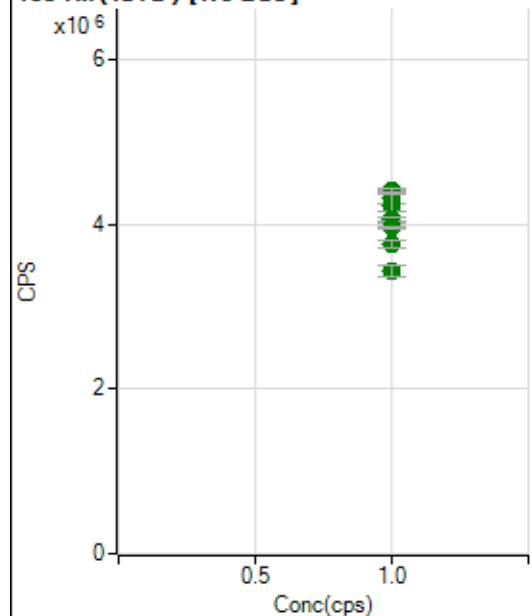
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		189026.76		P	1.6
2	☐	1.000		189061.96		P	1.0
3	☐	1.000		185213.48		P	5.8
4	☐	1.000		189122.06		P	1.2
5	☐	1.000		178124.53		P	0.9
6	☐	1.000		173961.14		P	0.3
7	☐	1.000		169110.28		P	0.4
8	☐	1.000		166367.86		P	1.9
9	☐	1.000		156445.38		P	1.3

89 Y (ISTD) [No Gas]

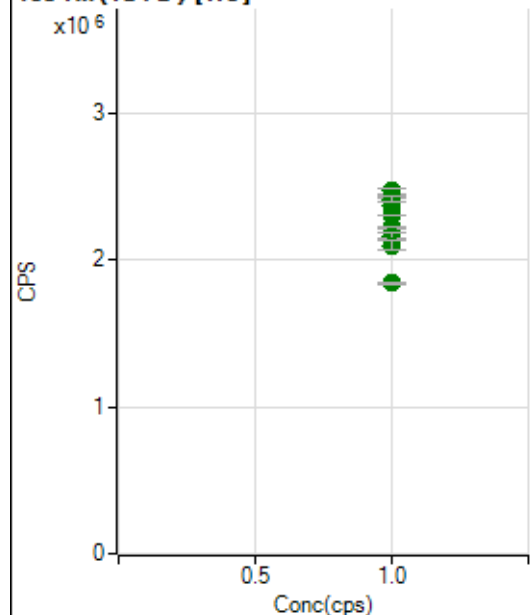
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		7832969.74		A	3.8
2	☐	1.000		7963575.71		A	0.3
3	☐	1.000		7944926.27		A	0.8
4	☐	1.000		7661228.01		A	8.6
5	☐	1.000		7600780.23		A	5.6
6	☐	1.000		7646311.76		A	0.6
7	☐	1.000		7627531.83		A	0.7
8	☐	1.000		7349300.10		A	0.9
9	☐	1.000		7035720.38		A	5.0

89 Y (ISTD) [He]

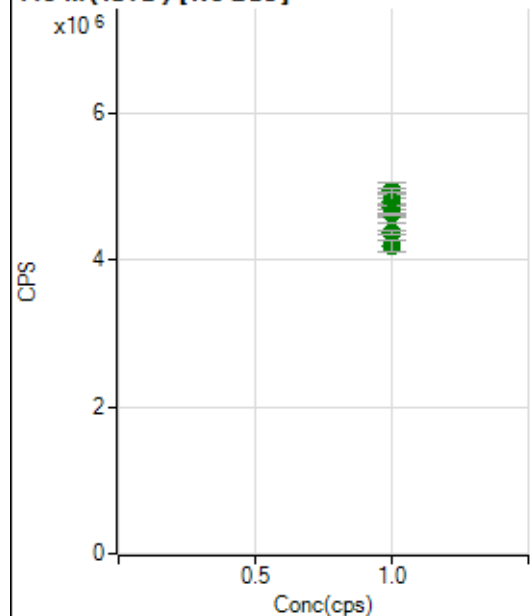
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1843124.37		A	1.3
2	☐	1.000		1804932.72		A	0.8
3	☐	1.000		1770621.62		A	4.6
4	☐	1.000		1824125.74		A	2.0
5	☐	1.000		1728861.52		A	0.4
6	☐	1.000		1705542.73		A	1.1
7	☐	1.000		1690226.73		A	0.8
8	☐	1.000		1669738.60		A	3.0
9	☐	1.000		1565636.33		A	1.2

103 Rh (ISTD) [No Gas]

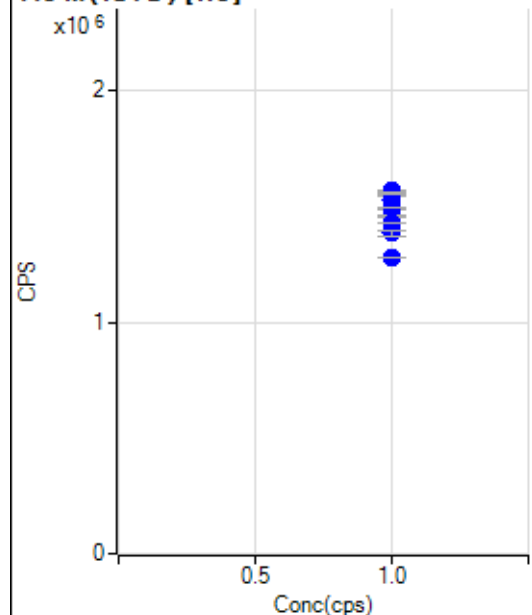
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		4323187.37		A	3.8
2	☐	1.000		4402303.58		A	0.6
3	☐	1.000		4377886.81		A	0.4
4	☐	1.000		4216449.45		A	10.0
5	☐	1.000		4060556.22		A	4.5
6	☐	1.000		4054971.08		A	0.9
7	☐	1.000		3955941.26		A	0.6
8	☐	1.000		3756004.32		A	2.1
9	☐	1.000		3428918.77		A	4.2

103 Rh (ISTD) [He]

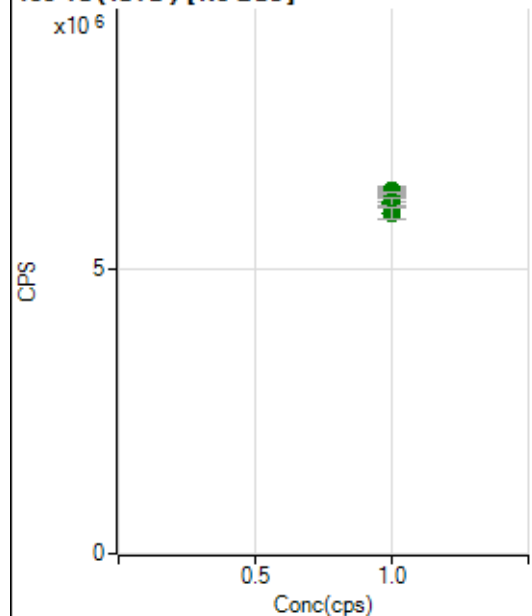
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2469833.00		A	1.8
2	☐	1.000		2425246.20		A	0.7
3	☐	1.000		2368855.68		A	5.2
4	☐	1.000		2414615.17		A	1.3
5	☐	1.000		2304811.30		A	0.5
6	☐	1.000		2222738.96		A	0.4
7	☐	1.000		2163804.45		A	2.0
8	☐	1.000		2099100.94		A	2.8
9	☐	1.000		1840400.63		A	0.6

115 In (ISTD) [No Gas]

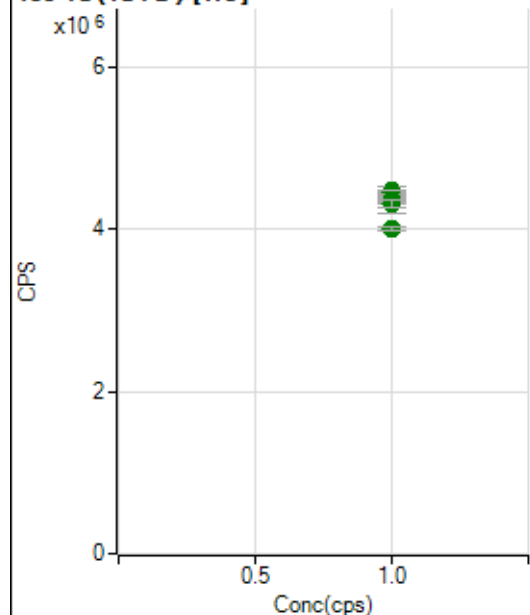
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		4934458.55		A	4.1
2	☐	1.000		4914547.19		A	0.2
3	☐	1.000		4908168.96		A	0.5
4	☐	1.000		4784618.10		A	8.2
5	☐	1.000		4636399.03		A	5.7
6	☐	1.000		4707502.00		A	1.1
7	☐	1.000		4617813.42		A	0.6
8	☐	1.000		4369161.13		A	1.4
9	☐	1.000		4182752.66		A	4.0

115 In (ISTD) [He]

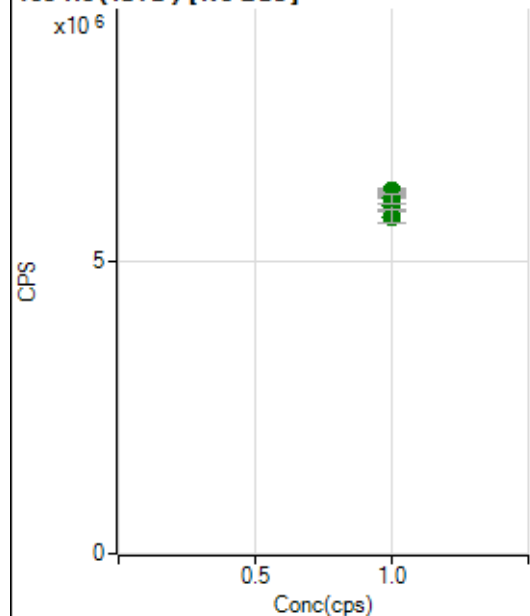
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1568011.10		P	0.5
2	☐	1.000		1550598.11		P	0.6
3	☐	1.000		1529369.05		P	5.5
4	☐	1.000		1561205.68		P	0.7
5	☐	1.000		1494402.63		P	0.2
6	☐	1.000		1456781.67		P	0.4
7	☐	1.000		1428439.39		P	0.4
8	☐	1.000		1386102.83		P	2.0
9	☐	1.000		1279316.35		P	0.5

159 Tb (ISTD) [No Gas]

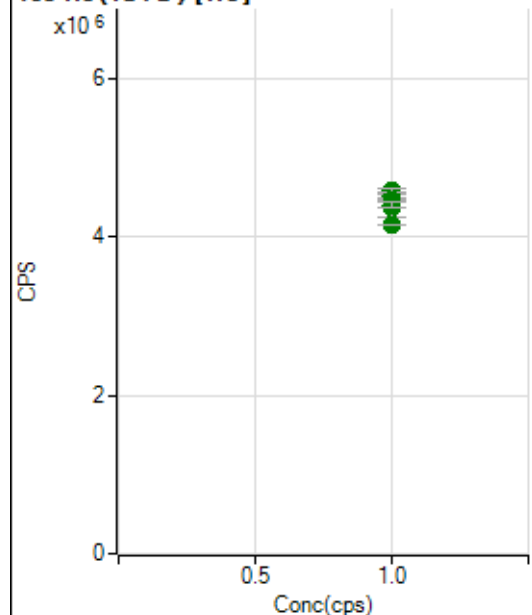
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		6333788.66		A	4.2
2	☐	1.000		6375705.25		A	0.9
3	☐	1.000		6311976.16		A	0.5
4	☐	1.000		6150756.85		A	9.0
5	☐	1.000		6255826.57		A	5.4
6	☐	1.000		6361228.17		A	1.0
7	☐	1.000		6338608.10		A	0.7
8	☐	1.000		6183685.32		A	2.5
9	☐	1.000		5980680.95		A	3.7

159 Tb (ISTD) [He]

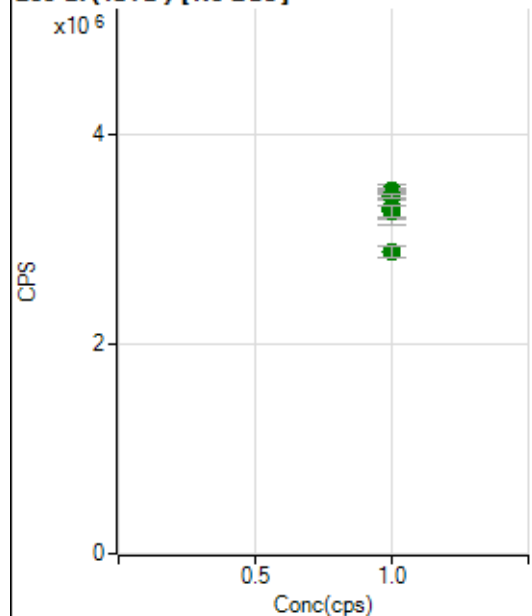
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		4474095.80		A	2.2
2	☐	1.000		4406755.32		A	0.3
3	☐	1.000		4328480.25		A	5.8
4	☐	1.000		4461853.30		A	1.3
5	☐	1.000		4373933.06		A	0.8
6	☐	1.000		4314979.52		A	0.1
7	☐	1.000		4350092.57		A	0.2
8	☐	1.000		4317977.58		A	1.8
9	☐	1.000		4014040.57		A	1.1

165 Ho (ISTD) [No Gas]

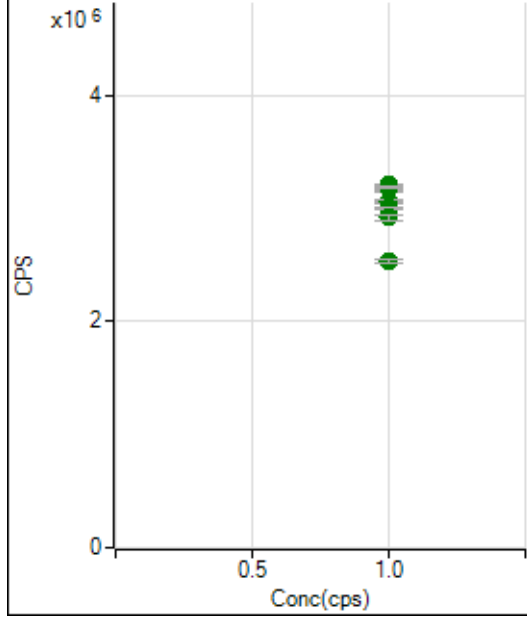
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		6121637.48		A	4.1
2	☐	1.000		6214817.41		A	0.9
3	☐	1.000		6138654.56		A	1.0
4	☐	1.000		5954512.20		A	9.2
5	☐	1.000		5995269.01		A	4.2
6	☐	1.000		6150556.16		A	1.3
7	☐	1.000		6188211.92		A	0.6
8	☐	1.000		6078339.14		A	2.6
9	☐	1.000		5781089.78		A	4.0

165 Ho (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		4560161.81		A	1.5
2	☐	1.000		4506302.50		A	0.8
3	☐	1.000		4367975.04		A	5.2
4	☐	1.000		4573785.49		A	1.0
5	☐	1.000		4463239.20		A	1.1
6	☐	1.000		4469733.27		A	0.8
7	☐	1.000		4432706.64		A	0.3
8	☐	1.000		4395705.35		A	2.0
9	☐	1.000		4145370.04		A	0.2

209 Bi (ISTD) [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3444302.72		A	3.9
2	☐	1.000		3457303.28		A	1.0
3	☐	1.000		3424316.20		A	0.2
4	☐	1.000		3279249.68		A	9.3
5	☐	1.000		3297883.35		A	6.1
6	☐	1.000		3424982.24		A	1.9
7	☐	1.000		3402935.43		A	1.3
8	☐	1.000		3255426.83		A	3.5
9	☐	1.000		2874895.62		A	3.7

209 Bi (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3209099.36		A	0.5
2	☐	1.000		3181329.15		A	0.9
3	☐	1.000		3043408.08		A	6.9
4	☐	1.000		3183230.02		A	0.7
5	☐	1.000		3063630.37		A	0.5
6	☐	1.000		3058364.95		A	0.8
7	☐	1.000		3006126.86		A	0.8
8	☐	1.000		2923940.31		A	1.7
9	☐	1.000		2529935.67		A	1.4

US EPA Tune Check Report

Operator Name Jaswal
Acq/Data Batch D:\Agilent\ICPMH\1\DATA\IP7112023-MS.b
Acq. Date-Time 2023-11-20 09:17:00
Report Comment ---
Instrument Name G8403A JP14410463

[No Gas]

Sensitivity

Mass	Conc. [ug/l]	Count	CPS	Resp (Required) [cps/ug/l]	Resp (Flag)	RSD%	RSD% (Required)
9		6692	66916.11			2.372	5.000
24		36240	362395.65			2.173	5.000
25		4623	46230.87			2.314	5.000
26		5269	52693.31			2.575	5.000
59		41970	419701.30			2.330	5.000
113		6303	63026.76			2.519	5.000
115		77039	770394.82			2.393	5.000
206		15581	155807.75			2.009	5.000
207		13914	139143.40			2.383	5.000
208		33135	331350.70			2.109	5.000
220		0	1.30			58.330	

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

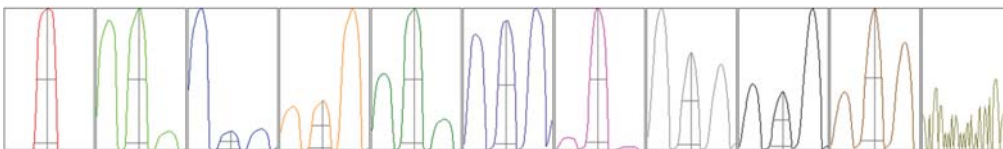
Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
9	6741	6788	6739	6410	6779
24	36293	36530	36565	34889	36921
25	4617	4640	4680	4448	4730
26	5276	5342	5324	5034	5369
59	42260	42446	42404	40229	42512
113	6358	6379	6358	6020	6398
115	77727	78034	77687	73753	77996
206	15701	15712	15701	15023	15766
207	14030	14084	14009	13327	14122
208	33328	33587	33287	31909	33565

US EPA Tune Check Report

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

Integration Time [sec] 0.1

Resolution/Axis



Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)
9	10597.63	8.95	8.90 - 9.10	
24	60519.28	23.95	23.90 - 24.10	
25	7789.86	24.95	24.90 - 25.10	
26	8843.13	25.95	25.90 - 26.10	
59	69447.02	58.95	58.90 - 59.10	
113	11425.97	112.95	112.90 - 113.10	
115	141064.03	114.95	114.90 - 115.10	
206	29819.23	206.00	205.90 - 206.10	
207	26347.08	207.00	206.90 - 207.10	
208	63369.71	208.00	207.90 - 208.10	
220			-	

Mass	W-50%	W-5%	W-5% (Required)	W-5% (Flag)
9	0.65	0.782	0.900	
24	0.63	0.744	0.900	
25	0.62	0.764	0.900	
26	0.62	0.755	0.900	
59	0.62	0.763	0.900	
113	0.56	0.748	0.900	
115	0.56	0.762	0.900	
206	0.54	0.752	0.900	
207	0.54	0.757	0.900	
208	0.53	0.776	0.900	
220				

Integration Time [sec] 0.1

Acquisition Time [sec] 256.770000000002

Y Axis Linear

Tune Parameters

Plasma Parameters

Plasma Mode ---

Nebulizer Gas 0.82 L/min

Dilution Gas 0.40 L/min

US EPA Tune Check Report

RF Power	1600 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.80 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	9.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	7.6 V	Deflect	15.4 V
Extract 2	-95.0 V	Cell Entrance	-30 V	Plate Bias	-35 V
Omega Bias	-55 V	Cell Exit	-50 V		

Cell Parameters

Use Gas	No	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	0.0 mL/min	OctP Bias	-8.0 V		
H2 Flow	---	OctP RF	160 V		

QP Parameters

Mass Gain	132	Axis Gain	0.9973	QP Bias	-3.0 V
Mass Offset	130	Axis Offset	0.11		

Hardware Settings

Torch

Torch H	-1.0 mm	Torch V	0.8 mm
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EM

Discriminator	4.6 mV	Analog HV	2296 V	Pulse HV	1351 V
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[He]

Sensitivity

Mass	Conc. [ug/l]	Count	CPS	Resp (Required) [cps/ug/l]	Resp (Flag)	RSD%	RSD% (Required)
59		12145	121450.80			0.296	
89		18995	189950.07			0.541	
205		20891	208906.32			0.536	

Mass	RSD% (Flag)
59	
89	
205	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
59	12170	12195	12120	12130	12111
89	19084	19054	19009	19008	18820
205	21006	20960	20946	20762	20780

Integration Time [sec] 0.1

Tune Parameters

Plasma Parameters

Plasma Mode	---	Nebulizer Gas	0.82 L/min	Dilution Gas	0.40 L/min
RF Power	1600 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.80 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	9.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	9.1 V	Deflect	2.4 V
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US EPA Tune Check Report

Extract 2	-105.0 V	Cell Entrance	-40 V	Plate Bias	-60 V
Omega Bias	-60 V	Cell Exit	-60 V		

Cell Parameters

Use Gas	Yes	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	3.9 mL/min	OctP Bias	-18.0 V		
H2 Flow	---	OctP RF	200 V		

QP Parameters

Mass Gain	132	Axis Gain	0.9973	QP Bias	-13.0 V
Mass Offset	130	Axis Offset	0.11		

Hardware Settings

Torch

Torch H	-1.0 mm	Torch V	0.8 mm
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EM

Discriminator	4.6 mV	Analog HV	2296 V	Pulse HV	1351 V
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