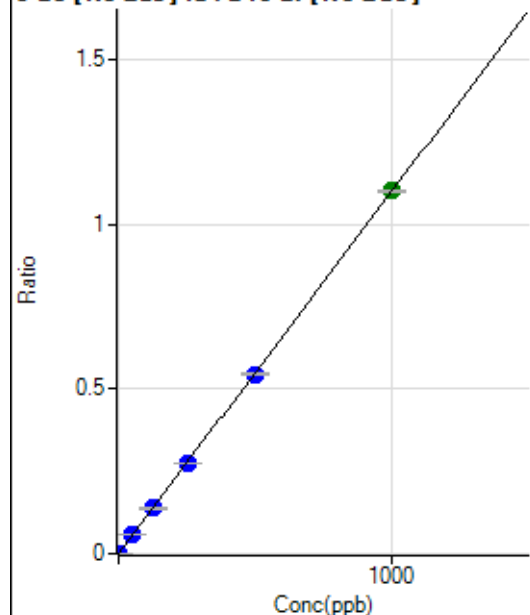


Batch Folder: D:\P8100618-MS.b\
Analysis File: P8100618-MS.batch.bin
DA Date-Time: 2018-10-06 17:26:09
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	003CALB.d	S00	2018-10-06 15:07:42
2			
3	005CALS.d	S02	2018-10-06 15:15:08
4	006CALS.d	S03	2018-10-06 15:18:56
5	007CALS.d	S04	2018-10-06 15:22:43
6	008CALS.d	S05	2018-10-06 15:26:22
7	009CALS.d	S06	2018-10-06 15:29:56
8	010CALS.d	S07	2018-10-06 15:33:27
9	011CALS.d	S08	2018-10-06 15:36:53

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	161.12	0.0001	P	17.8
2	☐	0.100					
3	☐	1.000	0.874	1481.60	0.0011	P	4.0
4	☐	50.000	52.293	77564.14	0.0577	P	5.5
5	☐	125.000	125.488	189990.52	0.1382	P	1.4
6	☐	250.000	248.742	370015.36	0.2739	P	1.2
7	☐	500.000	495.726	721841.36	0.5457	P	1.1
8	☐	1000.000	1002.276	1438199.15	1.1032	A	0.7
9	☐			831.53	0.0007	P	8.6

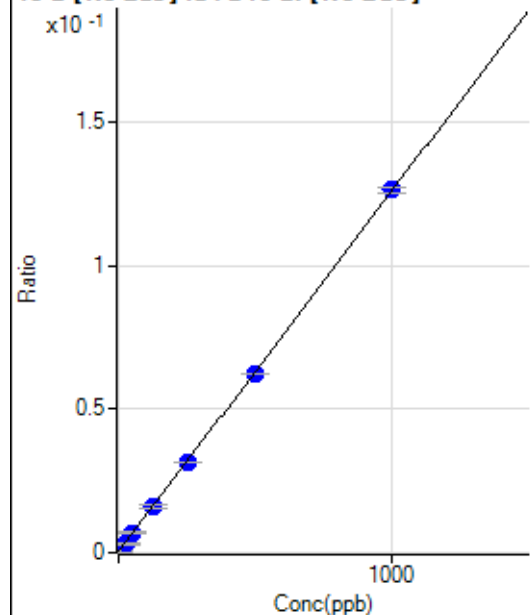
$$y = 0.0011 * x + 1.1773E-004$$

$$R = 1.0000$$

$$DL = 0.05699$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	472.25	0.0003	P	6.0
2	☐	2.500					
3	☐	25.000	21.342	4156.33	0.0030	P	4.6
4	☐	50.000	52.369	9320.07	0.0069	P	6.1
5	☐	125.000	124.936	22062.24	0.0161	P	5.7
6	☐	250.000	248.023	42605.96	0.0315	P	1.8
7	☐	500.000	493.417	82537.31	0.0624	P	0.8
8	☐	1000.000	1003.767	164996.66	0.1266	P	1.6
9	☐			7277.17	0.0058	P	12.1

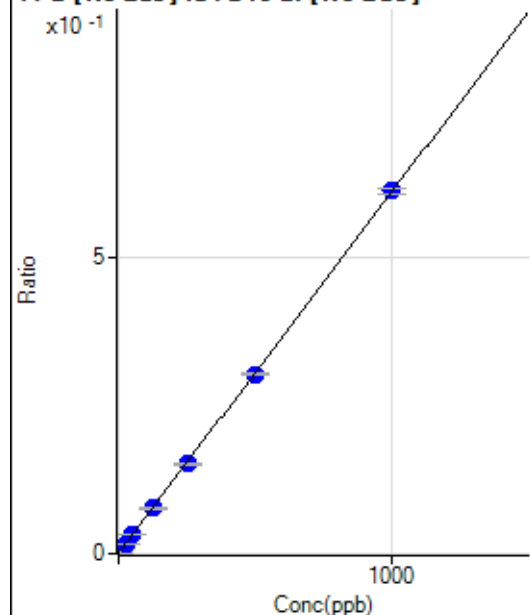
$$y = 1.2575E-004 * x + 3.4538E-004$$

$$R = 1.0000$$

$$DL = 0.4903$$

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	2203.04	0.0016	P	8.0
2	☐	2.500					
3	☐	25.000	21.961	20554.34	0.0150	P	2.7
4	☐	50.000	51.557	44377.96	0.0330	P	4.7
5	☐	125.000	123.540	105564.52	0.0768	P	2.2
6	☐	250.000	245.520	204043.12	0.1510	P	2.6
7	☐	500.000	494.942	400606.07	0.3028	P	1.1
8	☐	1000.000	1003.830	798521.25	0.6126	P	1.8
9	☐			34960.57	0.0280	P	13.3

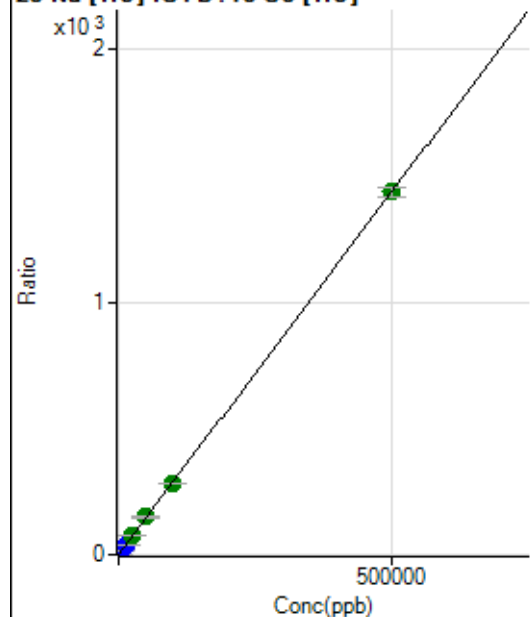
$$y = 6.0861\text{E-}004 * x + 0.0016$$

$$R = 1.0000$$

$$DL = 0.6324$$

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	6757.42	0.2884	P	4.6
2	☐	50.000					
3	☐	500.000	472.222	38274.55	1.6433	P	7.5
4	☐	5000.000	5018.867	346854.16	14.6890	P	0.5
5	☐	12500.000	13346.874	838617.65	38.5846	P	2.2
6	☐	25000.000	25886.434	1662102.77	74.5644	A	1.1
7	☐	50000.000	51992.258	3186016.37	149.4700	A	3.2
8	☐	100000.00	97582.531	6214725.97	280.2823	A	1.5
9	☐	500000.00	500218.61	33157121.57	1,435.567	A	2.5

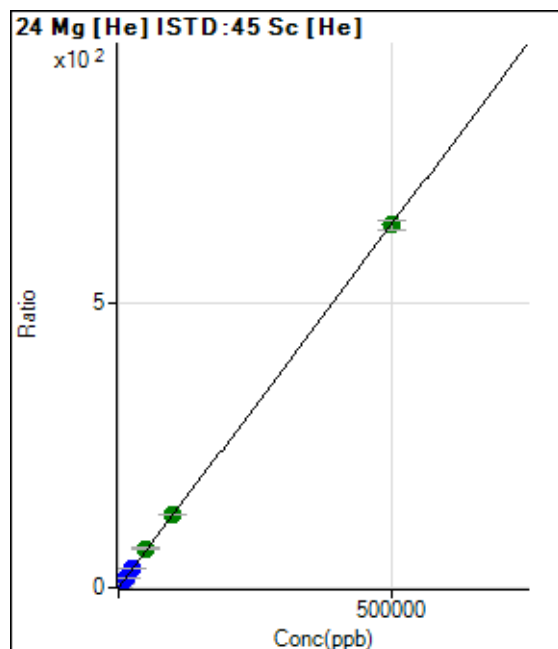
$$y = 0.0029 * x + 0.2884$$

$$R = 1.0000$$

$$DL = 13.87$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	169.45	0.0072	P	13.1
2	☐	50.000					
3	☐	500.000	476.459	14335.57	0.6152	P	5.7
4	☐	5000.000	5158.426	155589.35	6.5891	P	0.3
5	☐	12500.000	13594.397	377130.37	17.3529	P	2.7
6	☐	25000.000	25625.046	728973.69	32.7033	P	1.4
7	☐	50000.000	53935.292	1466875.48	68.8256	A	3.6
8	☐	100000.00	100194.67	2834735.26	127.8499	A	1.8
9	☐	500000.00	499507.36	14720846.86	637.3501	A	2.5

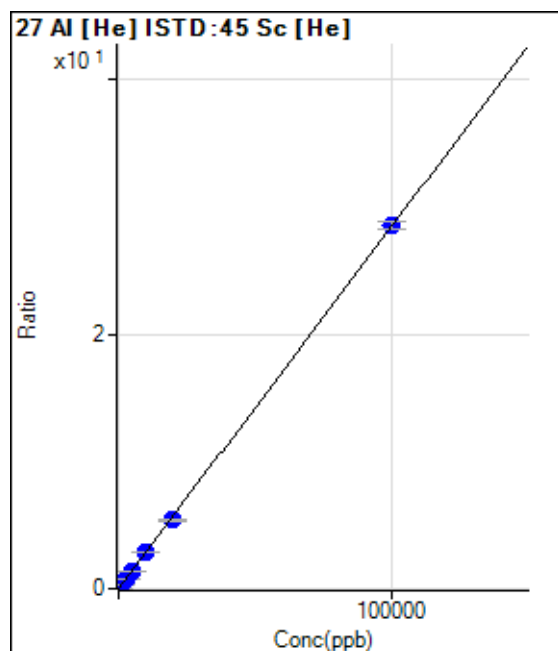
$$y = 0.0013 * x + 0.0072$$

$$R = 1.0000$$

$$DL = 2.222$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	15.84	0.0007	P	39.0
2	☐	2.000					
3	☐	20.000	18.754	140.04	0.0060	P	9.4
4	☐	1000.000	980.699	6603.27	0.2796	P	1.7
5	☐	2500.000	2614.188	16180.02	0.7443	P	1.2
6	☐	5000.000	4915.568	31182.75	1.3990	P	1.7
7	☐	10000.000	10053.251	60952.13	2.8604	P	4.3
8	☐	20000.000	18982.154	119743.49	5.4003	P	1.4
9	☐	100000.00	100199.80	658385.89	28.5035	P	2.2

$$y = 2.8446E-004 * x + 6.7369E-004$$

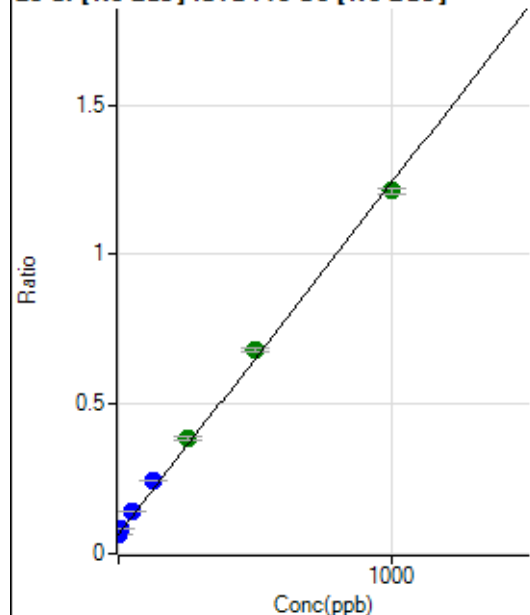
$$R = 0.9999$$

$$DL = 2.774$$

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	204337.16	0.0648	P	0.6
2	☐	1.000					
3	☐	10.000	15.401	260755.26	0.0829	P	2.2
4	☐	50.000	65.380	433038.57	0.1416	P	4.0
5	☐	125.000	152.665	758182.78	0.2441	P	0.9
6	☐	250.000	273.038	1168162.21	0.3854	A	1.7
7	☐	500.000	525.582	2076329.99	0.6820	A	2.0
8	☐	1000.000	977.168	3637007.76	1.2122	A	1.7
9	☐			265414.39	0.0888	P	2.1

$$y = 0.0012 * x + 0.0648$$

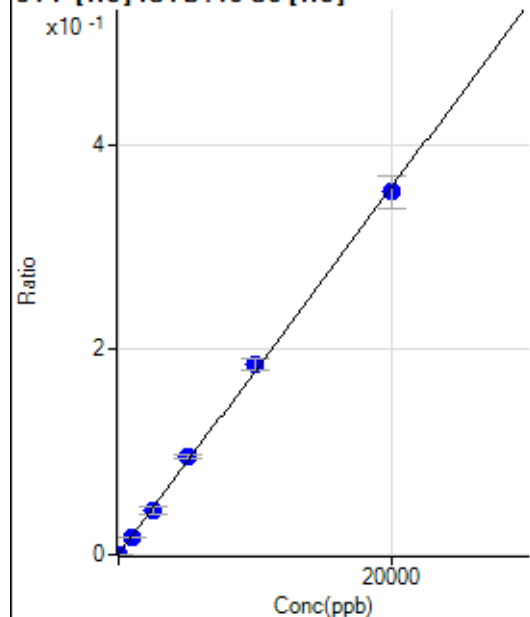
$$R = 0.9991$$

$$DL = 1.072$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	-0.113	5.55	0.0002	P	86.6
2	☐	0.000					
3	☐	0.000	0.113	5.56	0.0002	P	173.2
4	☐	1000.000	926.236	397.25	0.0168	P	9.9
5	☐	2500.000	2409.770	941.75	0.0434	P	14.2
6	☐	5000.000	5297.337	2119.70	0.0951	P	4.0
7	☐	10000.000	10380.054	3964.64	0.1861	P	5.8
8	☐	20000.000	19750.606	7841.42	0.3539	P	8.7
9	☐			2.78	0.0001	P	173.2

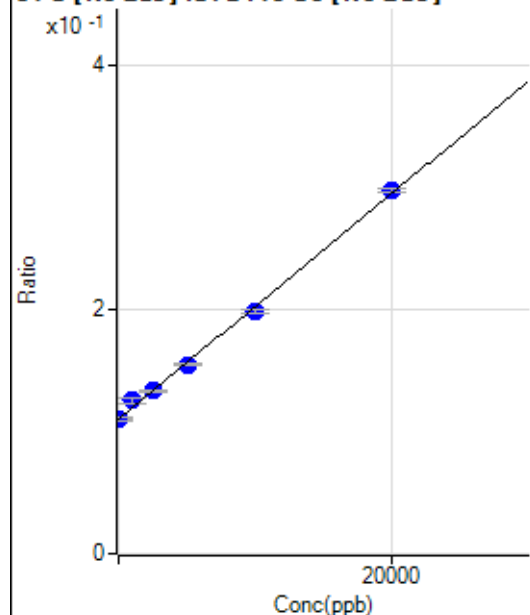
$$y = 1.7908E-005 * x + 2.3633E-004$$

$$R = 0.9995$$

$$DL = 51.58$$

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	18.750	348086.98	0.1104	P	0.4
2	☐	0.000					
3	☐	0.000	-18.750	346246.06	0.1101	P	1.6
4	☐	1000.000	1623.769	382957.48	0.1252	P	3.9
5	☐	2500.000	2481.387	413468.69	0.1331	P	1.3
6	☐	5000.000	4803.821	468298.21	0.1545	P	0.9
7	☐	10000.000	9554.079	603636.44	0.1982	P	1.4
8	☐	20000.000	20243.143	890149.85	0.2967	P	1.1
9	☐			318779.07	0.1067	P	2.3

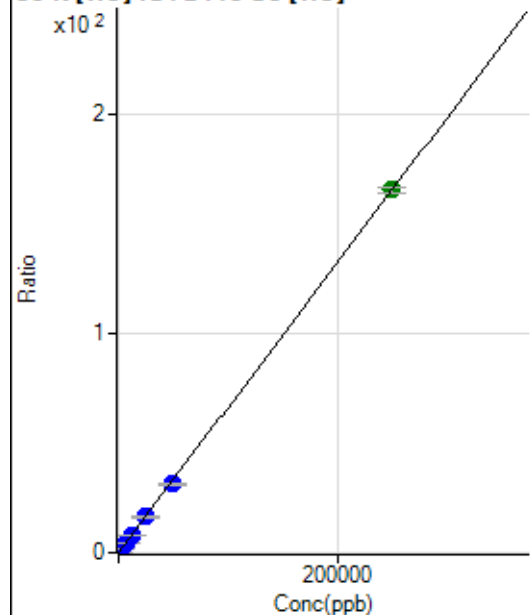
$$y = 9.2085\text{E-}006 * x + 0.1103$$

$$R = 0.9989$$

$$DL = 353.5$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	2169.73	0.0925	P	1.7
2	☐	50.000					
3	☐	500.000	483.407	9584.22	0.4113	P	7.6
4	☐	2500.000	2458.959	40478.66	1.7142	P	1.5
5	☐	6250.000	6531.310	95629.69	4.3999	P	2.5
6	☐	12500.000	12274.969	182518.41	8.1878	P	0.6
7	☐	25000.000	24887.121	351741.74	16.5054	P	4.0
8	☐	50000.000	47208.282	692338.11	31.2259	P	1.9
9	☐	250000.00	250574.29	3819380.55	165.3439	A	1.9

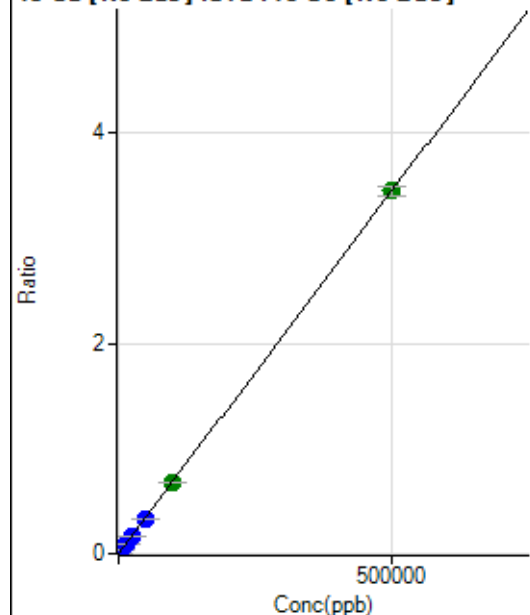
$$y = 6.5949\text{E-}004 * x + 0.0925$$

$$R = 0.9999$$

$$DL = 7.019$$

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	347.24	0.0001	P	8.9
2	☐	50.000					
3	☐	500.000	440.670	9881.65	0.0031	P	7.4
4	☐	5000.000	5023.852	106102.23	0.0347	P	4.5
5	☐	12500.000	12216.590	261596.07	0.0842	P	1.1
6	☐	25000.000	24657.286	514863.63	0.1699	P	1.2
7	☐	50000.000	48047.222	1007560.75	0.3309	P	1.5
8	☐	100000.00	98229.314	2029510.94	0.6764	A	1.1
9	☐	500000.00	500573.45	10298087.47	3.4464	A	3.0

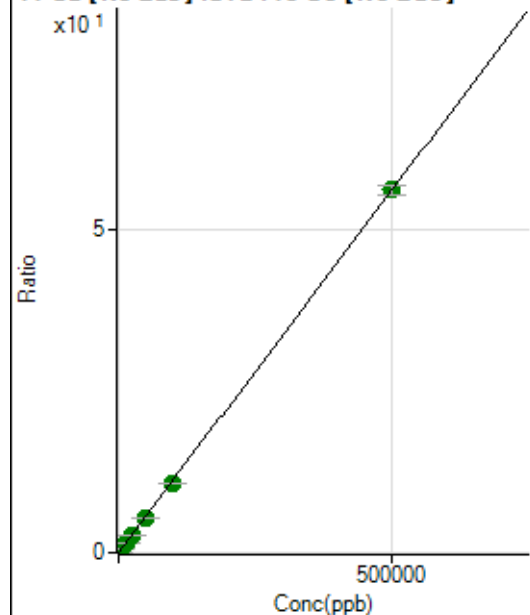
$$y = 6.8848\text{E-}006 * x + 1.1016\text{E-}004$$

$$R = 1.0000$$

$$DL = 4.272$$

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	10918.62	0.0035	P	1.2
2	☐	50.000					
3	☐	500.000	439.917	165506.19	0.0526	P	1.6
4	☐	5000.000	5062.828	1740745.98	0.5692	A	4.1
5	☐	12500.000	12108.946	4213839.07	1.3566	A	1.0
6	☐	25000.000	24326.624	8250112.25	2.7219	A	0.7
7	☐	50000.000	47730.260	16250612.52	5.3371	A	1.6
8	☐	100000.00	96158.541	32251129.89	10.7488	A	1.2
9	☐	500000.00	501038.14	167323021.8	55.9927	A	2.5

$$y = 1.1175\text{E-}004 * x + 0.0035$$

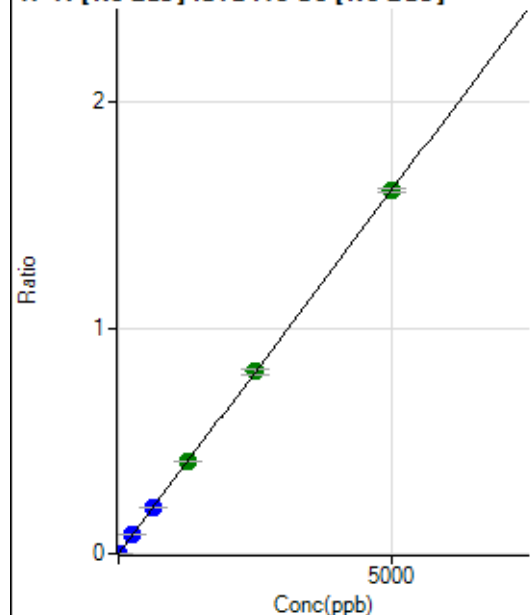
$$R = 1.0000$$

$$DL = 1.093$$

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	125.01	0.0000	P	26.8
2	☐	0.500					
3	☐	5.000	4.659	4842.74	0.0015	P	7.4
4	☐	250.000	259.190	255473.11	0.0835	P	4.6
5	☐	625.000	629.977	630590.93	0.2030	P	1.1
6	☐	1250.000	1272.533	1242819.92	0.4100	A	0.9
7	☐	2500.000	2501.512	2453867.35	0.8060	A	2.7
8	☐	5000.000	4992.530	4826494.21	1.6086	A	1.0
9	☐			1898.96	0.0006	P	41.8

$$y = 3.2219\text{E-}004 * x + 3.9671\text{E-}005$$

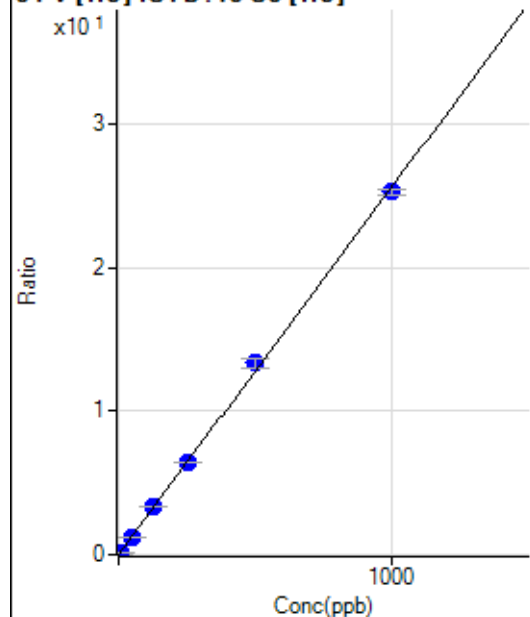
$$R = 1.0000$$

$$DL = 0.09893$$

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	7.78	0.0003	P	49.8
2	☐	0.500					
3	☐	5.000	4.860	2907.01	0.1248	P	7.2
4	☐	50.000	49.138	29721.75	1.2587	P	0.7
5	☐	125.000	132.330	73670.41	3.3891	P	1.3
6	☐	250.000	252.391	144083.75	6.4637	P	0.9
7	☐	500.000	521.111	284387.62	13.3453	P	4.1
8	☐	1000.000	987.974	560992.03	25.3011	P	1.6
9	☐			324.45	0.0140	P	11.8

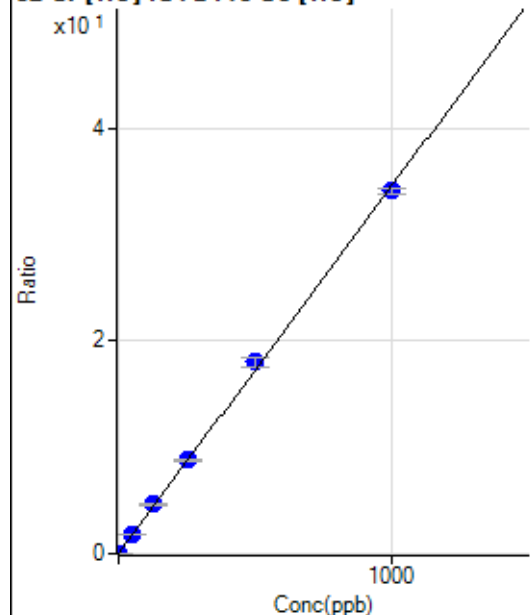
$$y = 0.0256 * x + 3.3222\text{E-}004$$

$$R = 0.9996$$

$$DL = 0.01938$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	356.68	0.0152	P	11.1
2	☐	0.200					
3	☐	2.000	2.098	2042.41	0.0876	P	3.9
4	☐	50.000	50.245	41294.29	1.7488	P	0.2
5	☐	125.000	133.880	100722.33	4.6344	P	2.5
6	☐	250.000	253.874	195594.97	8.7745	P	1.0
7	☐	500.000	520.761	383175.74	17.9827	P	4.4
8	☐	1000.000	987.528	755783.63	34.0873	P	1.8
9	☐			43604.46	1.8880	P	3.0

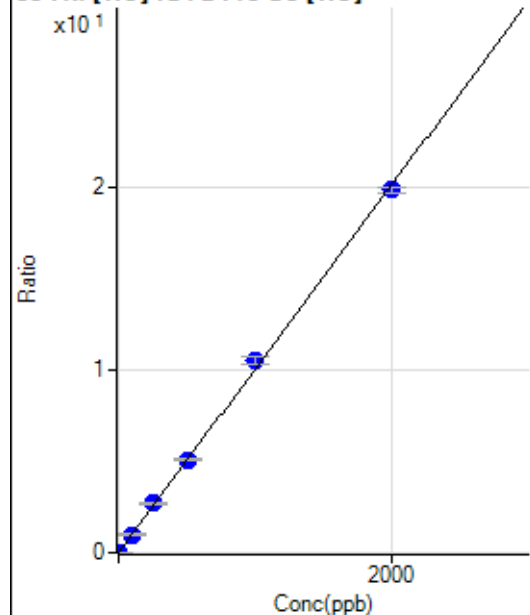
$$y = 0.0345 * x + 0.0152$$

$$R = 0.9996$$

$$DL = 0.1462$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	30.00	0.0013	P	19.7
2	☐	0.100					
3	☐	1.000	1.117	292.23	0.0125	P	10.3
4	☐	100.000	99.270	23647.93	1.0015	P	0.9
5	☐	250.000	268.683	58866.80	2.7083	P	1.8
6	☐	500.000	506.835	113854.84	5.1078	P	1.4
7	☐	1000.000	1043.722	224116.92	10.5171	P	4.1
8	☐	2000.000	1974.131	441042.19	19.8912	P	1.6
9	☐			3728.34	0.1615	P	7.3

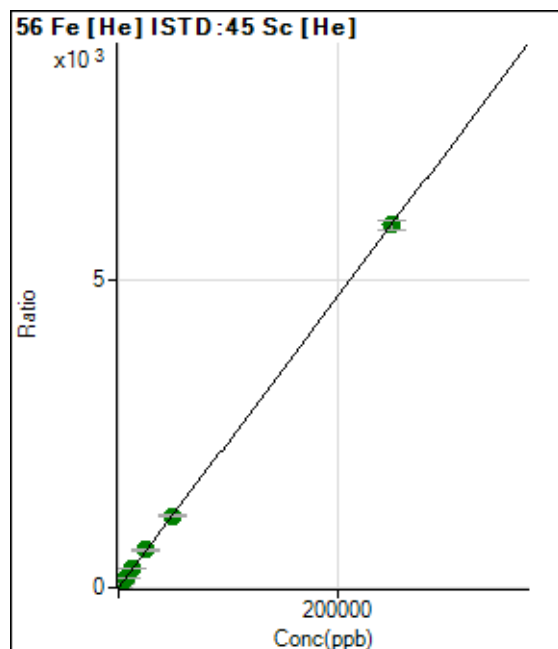
$$y = 0.0101 * x + 0.0013$$

$$R = 0.9996$$

$$DL = 0.07509$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	935.25	0.0399	P	9.5
2	☐	5.000					
3	☐	50.000	48.936	27898.72	1.1971	P	5.7
4	☐	2500.000	2586.593	1445284.45	61.2068	A	0.7
5	☐	6250.000	6812.397	3502269.67	161.1372	A	2.1
6	☐	12500.000	12831.292	6764466.99	303.4699	A	1.4
7	☐	25000.000	26323.381	13265211.06	622.5263	A	4.3
8	☐	50000.000	49641.979	26029111.93	1,173.956	A	1.8
9	☐	250000.00	249907.77	136500471.5	5,909.774	A	2.4

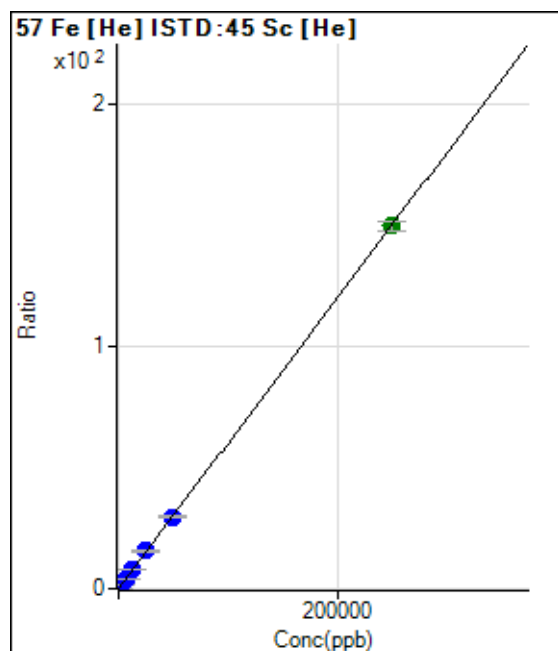
$$y = 0.0236 * x + 0.0399$$

$$R = 1.0000$$

$$DL = 0.4814$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	16.67	0.0007	P	2.0
2	☐	5.000					
3	☐	50.000	47.906	687.08	0.0294	P	9.3
4	☐	2500.000	2491.404	35267.31	1.4935	P	0.7
5	☐	6250.000	6791.689	88470.06	4.0702	P	1.6
6	☐	12500.000	12880.692	172048.18	7.7187	P	1.8
7	☐	25000.000	26278.944	335548.14	15.7468	P	4.2
8	☐	50000.000	49659.509	659706.94	29.7562	P	2.3
9	☐	250000.00	249907.71	3458550.37	149.7429	A	2.6

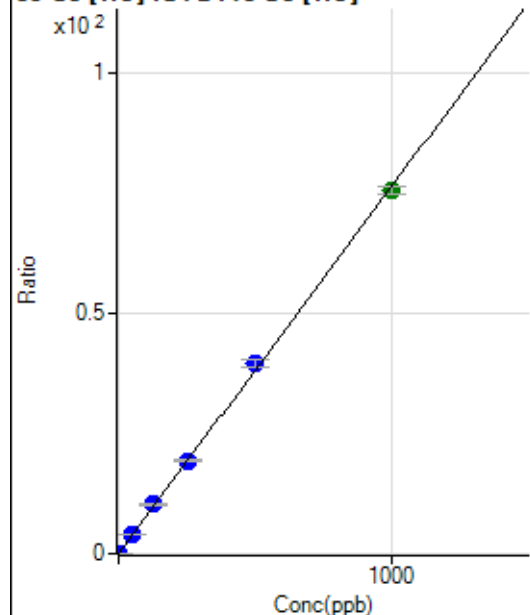
$$y = 5.9919E-004 * x + 7.1128E-004$$

$$R = 1.0000$$

$$DL = 0.073$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	48.89	0.0021	P	43.6
2	☐	0.100					
3	☐	1.000	0.976	1782.37	0.0766	P	10.4
4	☐	50.000	50.369	90804.45	3.8455	P	0.4
5	☐	125.000	134.118	222491.73	10.2361	P	1.6
6	☐	250.000	253.095	430549.09	19.3147	P	0.8
7	☐	500.000	519.508	844798.77	39.6434	P	4.1
8	☐	1000.000	988.314	1672088.86	75.4159	A	2.0
9	☐			22267.98	0.9642	P	3.3

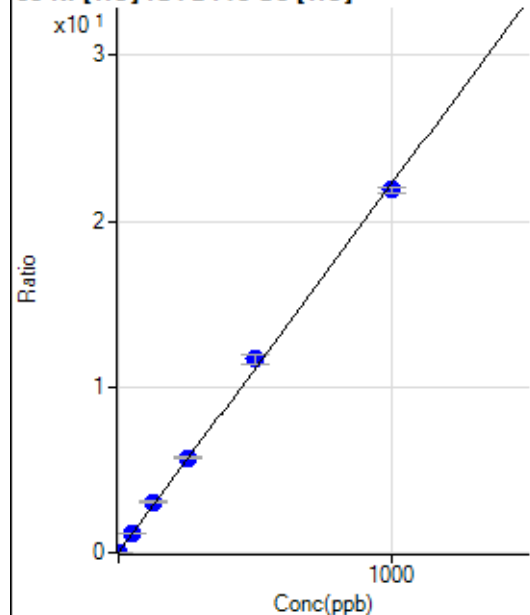
$$y = 0.0763 * x + 0.0021$$

$$R = 0.9997$$

$$DL = 0.03574$$

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	187.78	0.0080	P	16.9
2	☐	0.100					
3	☐	1.000	1.063	736.70	0.0316	P	8.3
4	☐	50.000	51.381	27157.79	1.1501	P	1.9
5	☐	125.000	137.409	66562.62	3.0624	P	2.3
6	☐	250.000	257.907	127966.46	5.7409	P	1.4
7	☐	500.000	524.377	248529.07	11.6641	P	4.6
8	☐	1000.000	984.215	485244.09	21.8857	P	1.9
9	☐			22398.24	0.9702	P	5.0

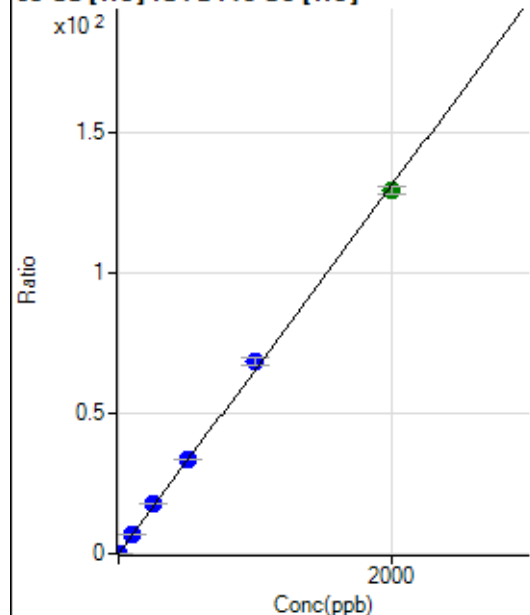
$$y = 0.0222 * x + 0.0080$$

$$R = 0.9995$$

$$DL = 0.1823$$

Weight: <None>

Min Conc: 0

⁶³Cu [He] ISTD:45 Sc [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	230.01	0.0098	P	15.1
2	☐	0.200					
3	☐	2.000	1.917	3161.52	0.1355	P	2.1
4	☐	100.000	102.269	158470.17	6.7111	P	0.2
5	☐	250.000	270.446	385405.31	17.7311	P	1.7
6	☐	500.000	511.797	747752.78	33.5458	P	1.4
7	☐	1000.000	1044.404	1458755.17	68.4453	P	3.6
8	☐	2000.000	1972.180	2865308.01	129.2388	A	2.3
9	☐			7212.00	0.3123	P	4.4

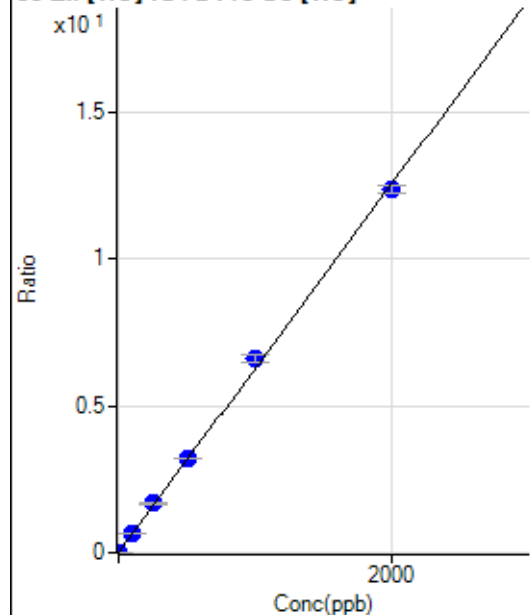
$$y = 0.0655 * x + 0.0098$$

$$R = 0.9996$$

$$DL = 0.0678$$

Weight: <None>

Min Conc: 0

⁶⁶Zn [He] ISTD:45 Sc [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	87.78	0.0037	P	11.4
2	☐	0.200					
3	☐	2.000	2.198	407.79	0.0175	P	8.8
4	☐	100.000	100.170	14903.75	0.6312	P	2.1
5	☐	250.000	268.053	36572.75	1.6827	P	2.3
6	☐	500.000	513.364	71766.54	3.2193	P	0.6
7	☐	1000.000	1050.215	140263.62	6.5819	P	4.0
8	☐	2000.000	1969.286	273567.67	12.3387	P	2.0
9	☐			2294.68	0.0993	P	2.2

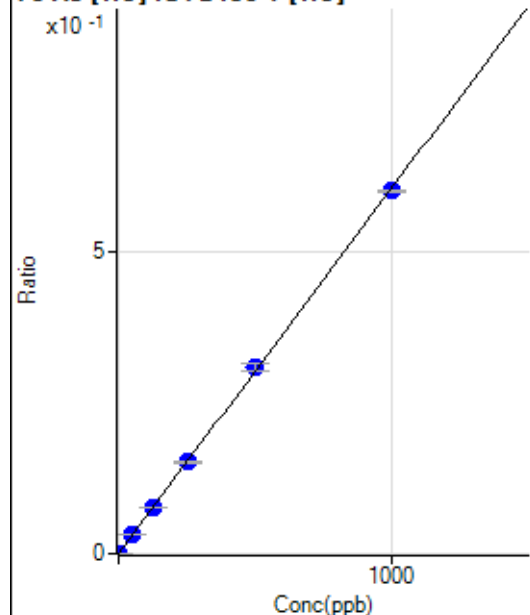
$$y = 0.0063 * x + 0.0037$$

$$R = 0.9995$$

$$DL = 0.2042$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	5.56	0.0000	P	57.0
2	☐	0.100					
3	☐	1.000	0.848	89.51	0.0005	P	22.3
4	☐	50.000	51.402	5201.64	0.0311	P	2.9
5	☐	125.000	127.493	12403.18	0.0772	P	1.7
6	☐	250.000	251.622	24479.10	0.1523	P	1.4
7	☐	500.000	511.429	48221.96	0.3095	P	3.7
8	☐	1000.000	993.498	95422.03	0.6012	P	0.4
9	☐			162.97	0.0010	P	8.7

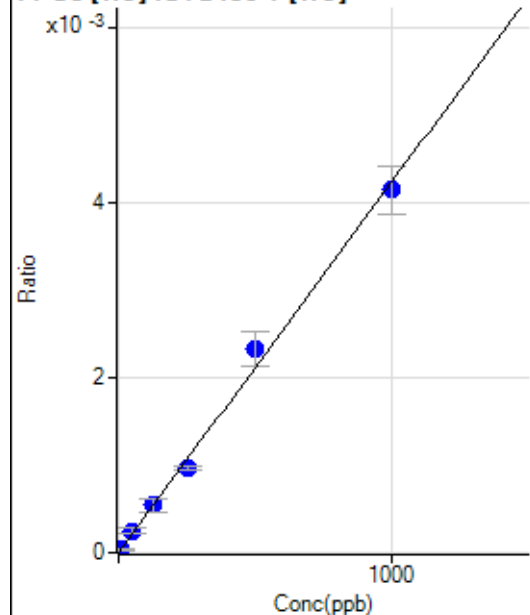
$$y = 6.0505\text{E-}004 * x + 3.3072\text{E-}005$$

$$R = 0.9999$$

$$DL = 0.09352$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	0.00	0.0000	P	
2	☐	0.500					
3	☐	5.000	7.922	5.55	0.0000	P	123.2
4	☐	50.000	59.639	42.22	0.0003	P	31.4
5	☐	125.000	127.868	86.67	0.0005	P	29.4
6	☐	250.000	228.734	155.56	0.0010	P	4.0
7	☐	500.000	549.730	362.24	0.0023	P	16.7
8	☐	1000.000	979.596	657.81	0.0041	P	13.5
9	☐			1.11	0.0000	P	173.2

$$y = 4.2314\text{E-}006 * x + 0.0000\text{E+}000$$

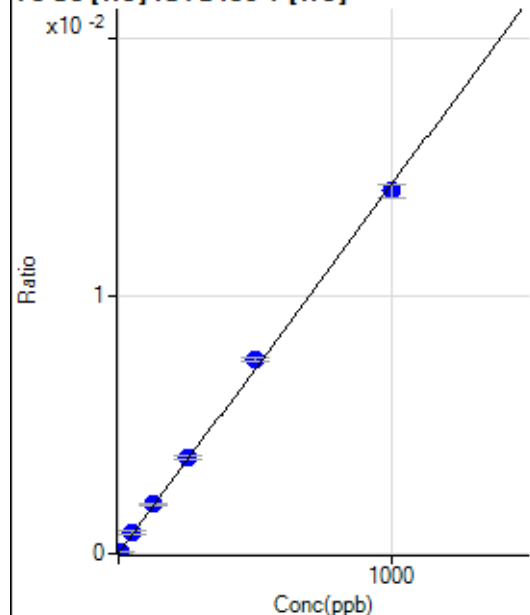
$$R = 0.9979$$

$$DL = 0$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	2.47	0.0000	P	45.2
2	☐	0.500					
3	☐	5.000	3.698	11.11	0.0001	P	19.4
4	☐	50.000	55.277	134.57	0.0008	P	18.1
5	☐	125.000	132.312	306.80	0.0019	P	4.0
6	☐	250.000	261.110	603.11	0.0038	P	4.9
7	☐	500.000	525.779	1175.99	0.0075	P	2.9
8	☐	1000.000	983.162	2236.01	0.0141	P	3.4
9	☐			3.70	0.0000	P	85.1

$$y = 1.4313\text{E-}005 * x + 1.4846\text{E-}005$$

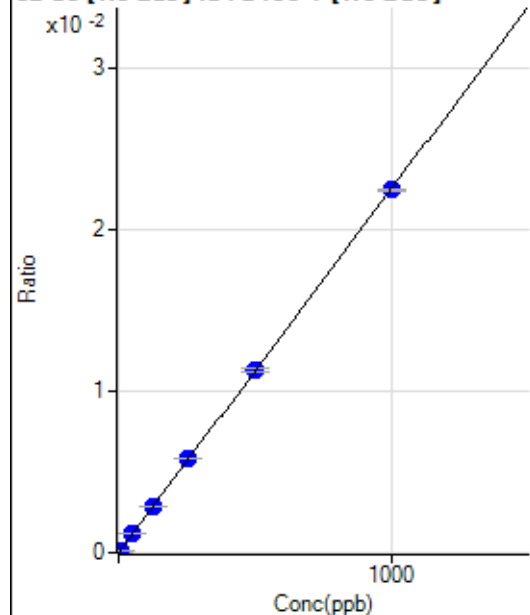
$$R = 0.9994$$

$$DL = 1.405$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	-8.11	0.0000	P	-729.
2	☐	0.500					
3	☐	5.000	5.156	639.29	0.0001	P	5.9
4	☐	50.000	53.591	6531.14	0.0012	P	3.9
5	☐	125.000	127.145	15886.25	0.0029	P	2.6
6	☐	250.000	258.417	31807.73	0.0058	P	0.5
7	☐	500.000	501.711	62364.56	0.0113	P	2.2
8	☐	1000.000	996.592	123216.90	0.0225	P	0.9
9	☐			151.57	0.0000	P	51.8

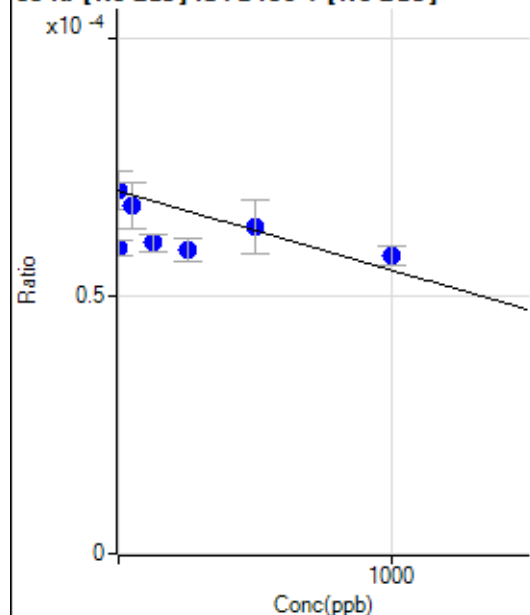
$$y = 2.2570\text{E-}005 * x - 1.4227\text{E-}006$$

$$R = 1.0000$$

$$DL = 1.38$$

Weight: <None>

Min Conc: 0

83 Kr [No Gas] ISTD:89 Y [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	390.01	0.0001	P	10.6
2	☐	0.100					
3	☐	1.000	714.619	331.12	0.0001	P	4.9
4	☐	50.000	189.501	364.45	0.0001	P	12.9
5	☐	125.000	658.648	334.46	0.0001	P	5.6
6	☐	250.000	743.335	322.23	0.0001	P	7.1
7	☐	500.000	451.086	350.01	0.0001	P	16.2
8	☐	1000.000	826.729	316.68	0.0001	P	6.5
9	☐			356.68	0.0001	P	14.1

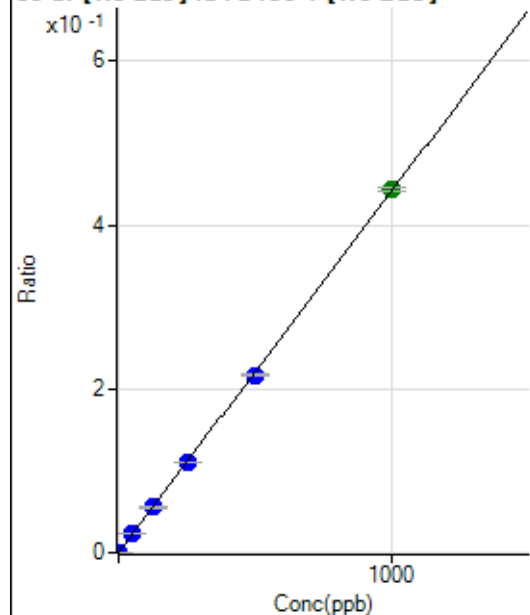
$$y = -1.5395\text{E-}008 * x + 7.0511\text{E-}005$$

$$R = -0.5034$$

$$DL = -1462$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	627.83	0.0001	P	7.3
2	☐	0.100					
3	☐	1.000	0.931	2914.34	0.0005	P	1.3
4	☐	50.000	51.312	122942.36	0.0227	P	2.3
5	☐	125.000	125.393	306835.84	0.0554	P	1.8
6	☐	250.000	250.994	604221.88	0.1108	P	0.7
7	☐	500.000	491.821	1194979.11	0.2169	P	2.0
8	☐	1000.000	1003.726	2424830.83	0.4426	A	1.0
9	☐			11333.01	0.0021	P	3.2

$$y = 4.4088\text{E-}004 * x + 1.1341\text{E-}004$$

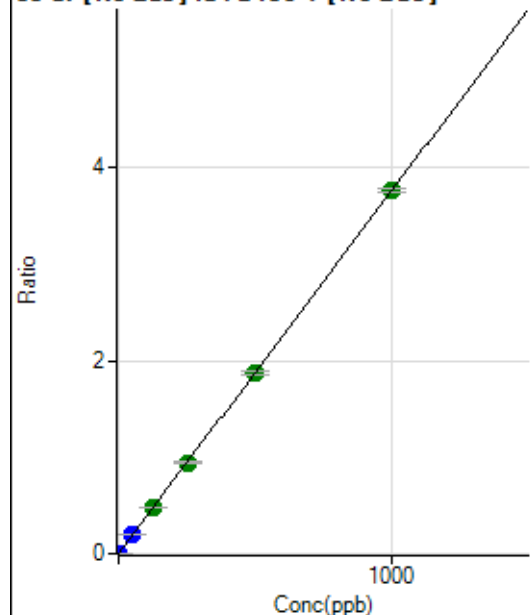
$$R = 0.9999$$

$$DL = 0.0562$$

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	127.79	0.0000	P	15.7
2	☐	0.100					
3	☐	1.000	0.940	19770.76	0.0036	P	1.8
4	☐	50.000	52.439	1064390.91	0.1969	P	4.2
5	☐	125.000	128.089	2664405.68	0.4810	A	1.5
6	☐	250.000	251.805	5157812.05	0.9456	A	0.8
7	☐	500.000	497.482	10290285.04	1.8681	A	1.8
8	☐	1000.000	1000.300	20577527.89	3.7563	A	1.0
9	☐			98001.18	0.0186	P	3.3

$$y = 0.0038 * x + 2.3080E-005$$

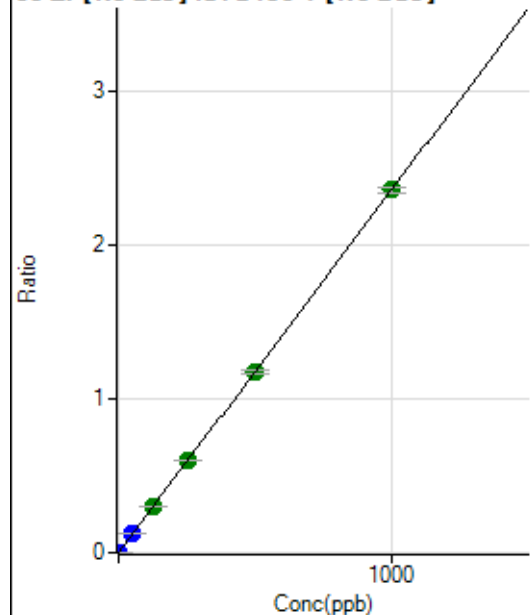
$$R = 1.0000$$

$$DL = 0.002903$$

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	461.14	0.0001	P	14.5
2	☐	0.100					
3	☐	1.000	0.829	11319.12	0.0020	P	1.9
4	☐	50.000	51.588	656871.34	0.1216	P	4.7
5	☐	125.000	127.257	1660265.42	0.2997	A	1.3
6	☐	250.000	254.231	3265821.10	0.5987	A	0.9
7	☐	500.000	496.769	6443273.80	1.1698	A	2.4
8	☐	1000.000	1000.197	12901761.92	2.3552	A	1.5
9	☐			5190.13	0.0010	P	8.6

$$y = 0.0024 * x + 8.3293E-005$$

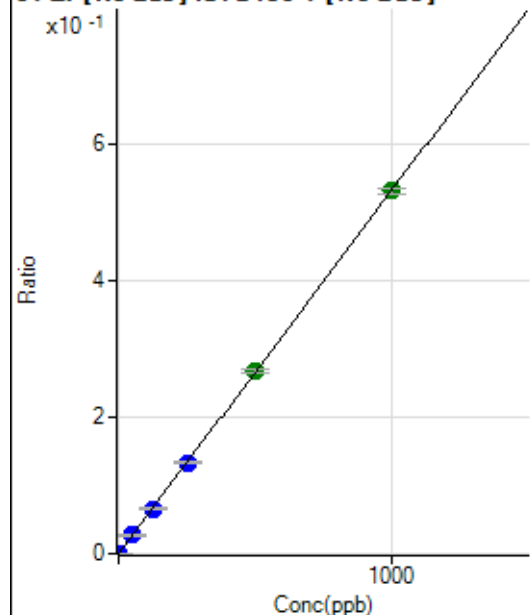
$$R = 1.0000$$

$$DL = 0.01539$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	72.23	0.0000	P	18.8
2	☐	0.100					
3	☐	1.000	0.814	2475.34	0.0004	P	3.2
4	☐	50.000	50.891	146015.10	0.0270	P	4.0
5	☐	125.000	124.062	364680.81	0.0658	P	1.7
6	☐	250.000	250.606	725378.53	0.1330	P	0.8
7	☐	500.000	500.998	1464259.72	0.2658	A	2.1
8	☐	1000.000	999.422	2904911.63	0.5303	A	1.7
9	☐			1172.33	0.0002	P	7.8

$$y = 5.3059\text{E-}004 * x + 1.3075\text{E-}005$$

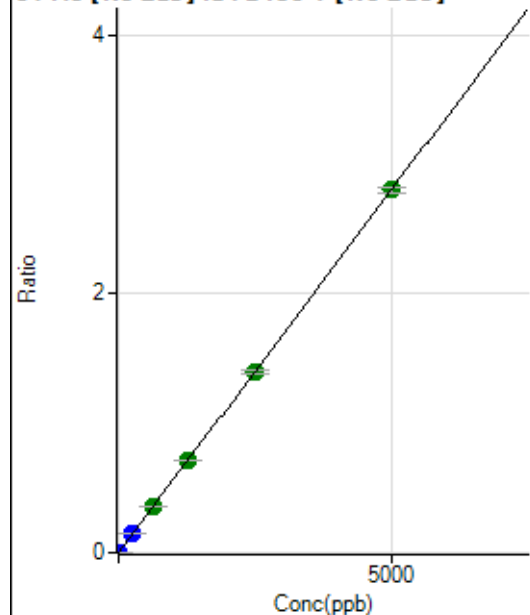
$$R = 1.0000$$

$$DL = 0.0139$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	261.12	0.0000	P	10.4
2	☐	0.500					
3	☐	5.000	4.596	14588.98	0.0026	P	3.4
4	☐	250.000	258.164	781836.95	0.1447	P	5.0
5	☐	625.000	641.684	1991687.37	0.3596	A	1.6
6	☐	1250.000	1271.147	3885119.79	0.7122	A	1.0
7	☐	2500.000	2485.926	7672242.71	1.3929	A	2.0
8	☐	5000.000	4999.257	15344245.31	2.8010	A	1.4
9	☐			22202.34	0.0042	P	6.3

$$y = 5.6028\text{E-}004 * x + 4.7223\text{E-}005$$

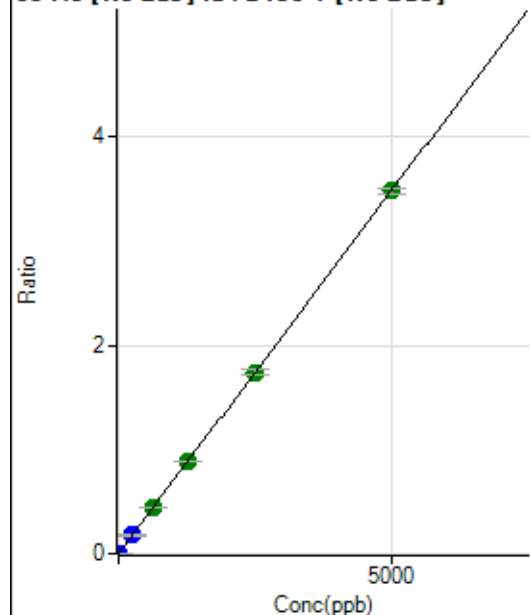
$$R = 1.0000$$

$$DL = 0.02622$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	197.23	0.0000	P	18.7
2	☐	0.500					
3	☐	5.000	4.508	17656.71	0.0032	P	3.2
4	☐	250.000	255.660	962092.71	0.1780	P	4.5
5	☐	625.000	632.363	2438978.81	0.4403	A	0.8
6	☐	1250.000	1270.000	4823069.77	0.8842	A	1.0
7	☐	2500.000	2492.974	9559121.83	1.7357	A	3.0
8	☐	5000.000	4997.310	19059341.57	3.4792	A	1.3
9	☐			35358.08	0.0067	P	3.0

$$y = 6.9621\text{E-}004 * x + 3.5640\text{E-}005$$

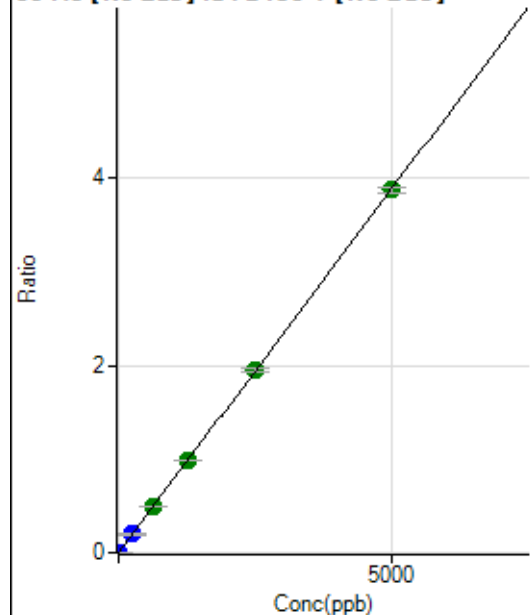
$$R = 1.0000$$

$$DL = 0.02866$$

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	222.23	0.0000	P	4.8
2	☐	0.500					
3	☐	5.000	4.514	19742.99	0.0035	P	2.3
4	☐	250.000	256.443	1077433.89	0.1994	P	4.8
5	☐	625.000	636.486	2740835.02	0.4948	A	1.6
6	☐	1250.000	1274.070	5402833.02	0.9904	A	0.2
7	☐	2500.000	2505.786	10729615.43	1.9479	A	2.0
8	☐	5000.000	4989.332	21246966.28	3.8785	A	1.3
9	☐			40152.10	0.0076	P	6.4

$$y = 7.7736\text{E-}004 * x + 4.0157\text{E-}005$$

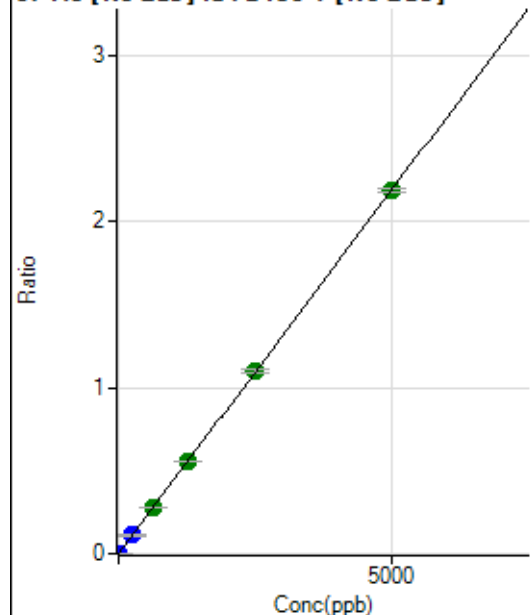
$$R = 1.0000$$

$$DL = 0.007389$$

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	122.23	0.0000	P	11.6
2	☐	0.500					
3	☐	5.000	4.525	11143.93	0.0020	P	6.4
4	☐	250.000	255.389	604475.50	0.1119	P	4.9
5	☐	625.000	633.061	1535808.67	0.2773	A	1.2
6	☐	1250.000	1268.938	3031351.52	0.5557	A	0.4
7	☐	2500.000	2506.032	6044918.76	1.0975	A	2.3
8	☐	5000.000	4990.973	11973579.61	2.1857	A	1.2
9	☐			21935.30	0.0042	P	4.6

$$y = 4.3793\text{E-}004 * x + 2.2114\text{E-}005$$

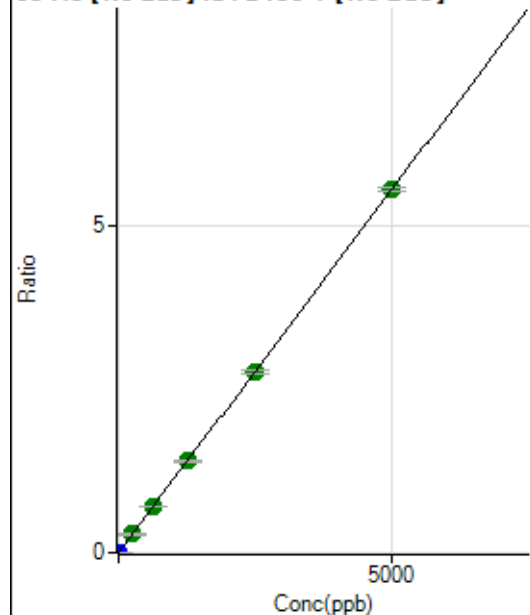
$$R = 1.0000$$

$$DL = 0.01761$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	269.46	0.0000	P	12.9
2	☐	0.500					
3	☐	5.000	4.492	27988.11	0.0050	P	1.3
4	☐	250.000	257.747	1545290.67	0.2860	A	4.7
5	☐	625.000	636.134	3909028.78	0.7057	A	1.2
6	☐	1250.000	1259.078	7618712.15	1.3967	A	0.6
7	☐	2500.000	2491.407	15222858.15	2.7636	A	1.9
8	☐	5000.000	5000.248	30384928.80	5.5466	A	1.2
9	☐			55325.10	0.0105	P	5.4

$$y = 0.0011 * x + 4.8712\text{E-}005$$

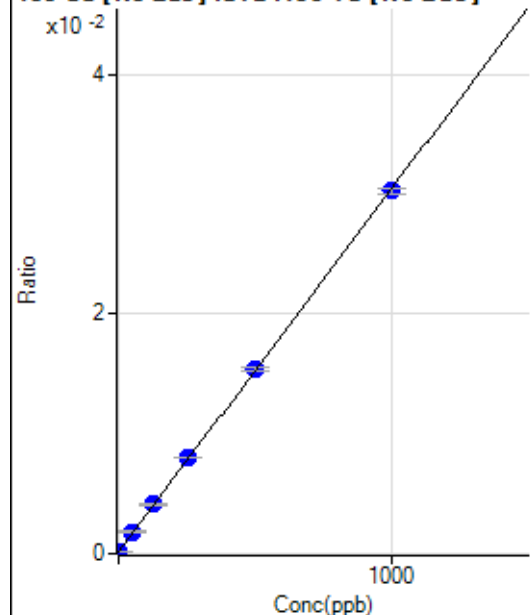
$$R = 1.0000$$

$$DL = 0.017$$

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	1047.31	0.0002	P	7.1
2	☐	0.100					
3	☐	1.000	0.769	1200.11	0.0002	P	9.0
4	☐	50.000	54.936	12144.85	0.0018	P	4.6
5	☐	125.000	130.971	28589.61	0.0041	P	2.1
6	☐	250.000	258.850	55258.38	0.0080	P	1.0
7	☐	500.000	504.643	108200.34	0.0154	P	2.1
8	☐	1000.000	994.473	212451.41	0.0303	P	1.9
9	☐			1088.98	0.0002	P	4.0

$$y = 3.0268\text{E-}005 * x + 1.5271\text{E-}004$$

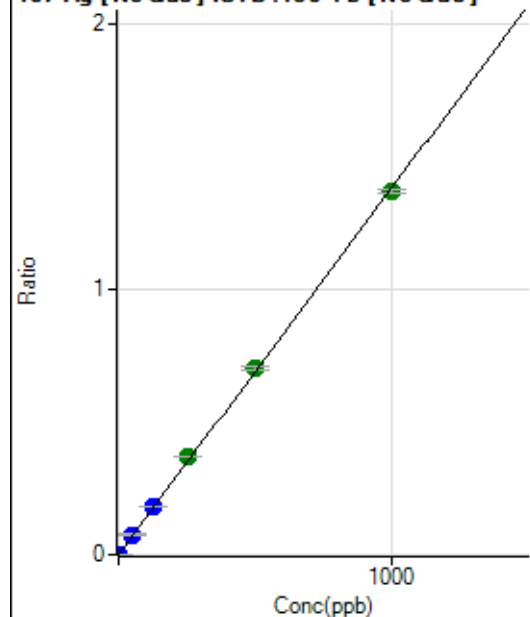
$$R = 0.9999$$

$$DL = 1.074$$

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	69.45	0.0000	P	58.8
2	☐	0.100					
3	☐	1.000	1.005	9553.78	0.0014	P	1.5
4	☐	50.000	54.775	506716.16	0.0757	P	3.4
5	☐	125.000	131.334	1260898.35	0.1816	P	1.2
6	☐	250.000	266.549	2549316.42	0.3685	A	0.5
7	☐	500.000	509.266	4937554.58	0.7041	A	2.5
8	☐	1000.000	990.199	9614390.49	1.3690	A	1.1
9	☐			1455.70	0.0002	P	7.9

$$y = 0.0014 * x + 1.0109\text{E-}005$$

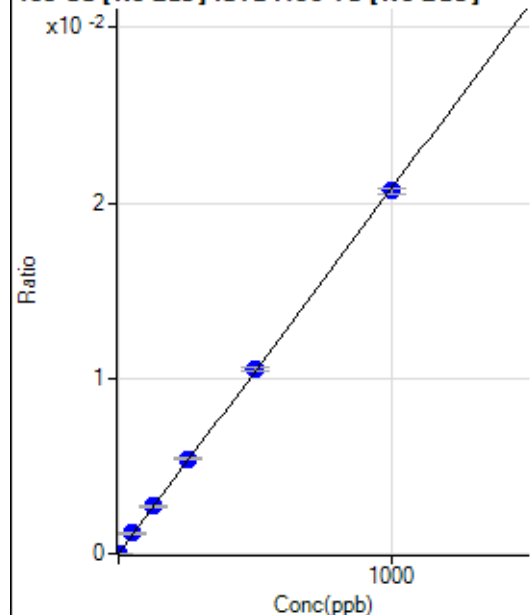
$$R = 0.9998$$

$$DL = 0.01289$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	6.95	0.0000	P	124.7
2	☐	0.100					
3	☐	1.000	0.911	136.11	0.0000	P	9.8
4	☐	50.000	55.862	7784.35	0.0012	P	4.6
5	☐	125.000	130.197	18820.36	0.0027	P	3.2
6	☐	250.000	260.280	37477.28	0.0054	P	1.1
7	☐	500.000	505.580	73795.23	0.0105	P	2.2
8	☐	1000.000	993.697	145230.04	0.0207	P	1.8
9	☐			33.33	0.0000	P	47.3

$$y = 2.0811\text{E-}005 * x + 1.0094\text{E-}006$$

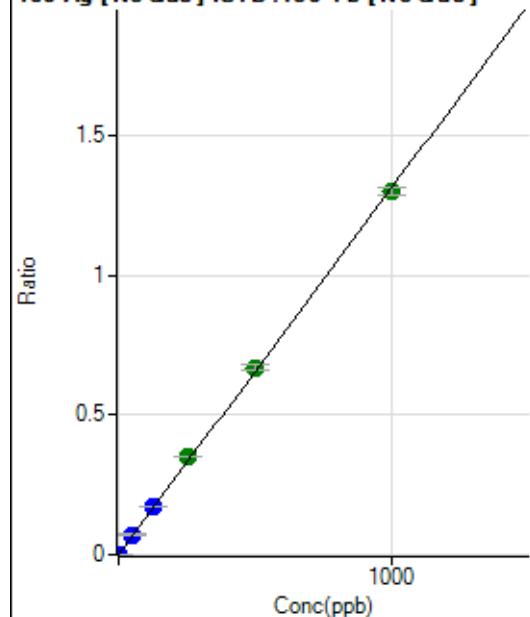
$$R = 0.9999$$

$$DL = 0.1814$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	50.00	0.0000	P	16.3
2	☐	0.100					
3	☐	1.000	0.996	8964.51	0.0013	P	2.9
4	☐	50.000	54.789	480683.36	0.0719	P	4.0
5	☐	125.000	131.372	1196301.01	0.1723	P	1.3
6	☐	250.000	266.973	2421937.30	0.3501	A	0.3
7	☐	500.000	510.373	4693563.08	0.6693	A	2.6
8	☐	1000.000	989.534	9112364.44	1.2977	A	2.2
9	☐			1258.45	0.0002	P	9.5

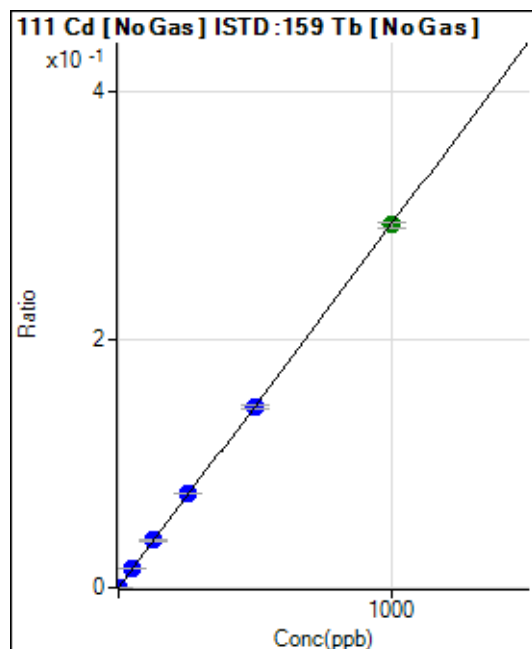
$$y = 0.0013 * x + 7.2871\text{E-}006$$

$$R = 0.9998$$

$$DL = 0.002722$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	733.81	0.0001	P	8.2
2	☐	0.100					
3	☐	1.000	0.924	2581.08	0.0004	P	5.3
4	☐	50.000	53.991	106732.60	0.0160	P	4.1
5	☐	125.000	129.812	265334.35	0.0382	P	1.4
6	☐	250.000	257.171	522965.79	0.0756	P	0.1
7	☐	500.000	499.263	1028539.30	0.1467	P	2.2
8	☐	1000.000	997.775	2057578.27	0.2930	A	1.6
9	☐			1143.14	0.0002	P	1.5

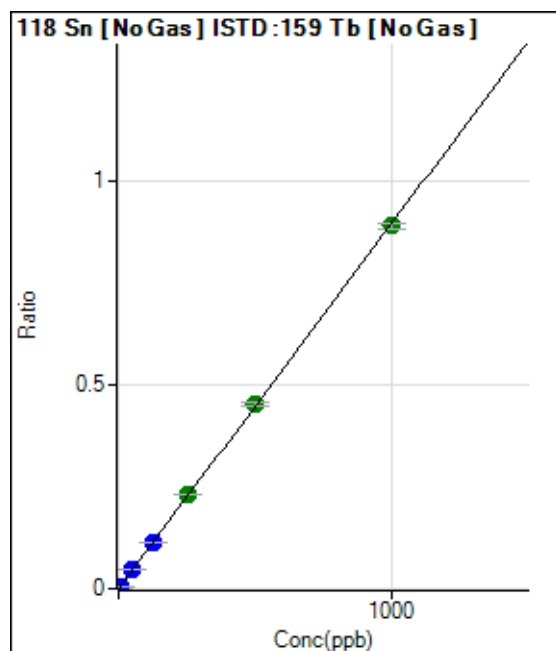
$$y = 2.9355\text{E-}004 * x + 1.0700\text{E-}004$$

$$R = 1.0000$$

$$DL = 0.08923$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	927.86	0.0001	P	6.5
2	☐	0.500					
3	☐	5.000	4.751	29956.88	0.0044	P	2.0
4	☐	50.000	52.587	315971.40	0.0472	P	4.1
5	☐	125.000	127.517	794032.73	0.1144	P	1.1
6	☐	250.000	258.872	1604887.22	0.2320	A	0.8
7	☐	500.000	506.944	3185207.69	0.4542	A	2.4
8	☐	1000.000	993.867	6252254.17	0.8903	A	1.8
9	☐			15028.54	0.0023	P	4.0

$$y = 8.9569\text{E-}004 * x + 1.3526\text{E-}004$$

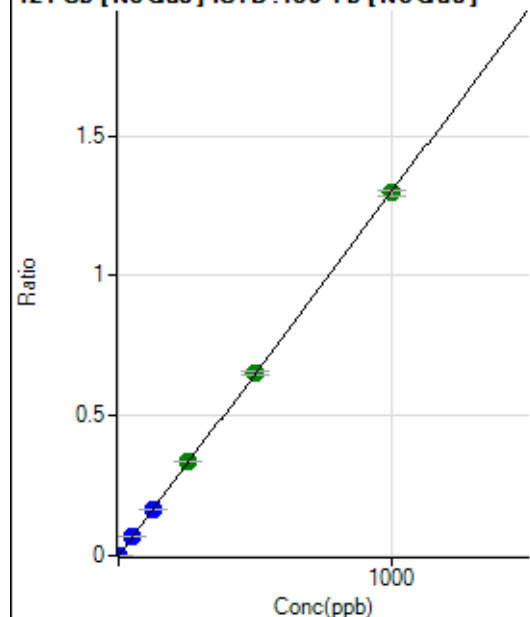
$$R = 0.9999$$

$$DL = 0.02942$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	450.03	0.0001	P	15.2
2	☐	0.200					
3	☐	2.000	1.852	16880.87	0.0025	P	1.3
4	☐	50.000	52.008	452656.85	0.0677	P	4.4
5	☐	125.000	127.516	1151451.69	0.1658	P	2.0
6	☐	250.000	258.194	2322333.82	0.3357	A	0.8
7	☐	500.000	501.257	4570245.07	0.6517	A	2.4
8	☐	1000.000	996.909	9101702.55	1.2961	A	1.5
9	☐			24275.76	0.0036	P	7.0

$$y = 0.0013 * x + 6.5630E-005$$

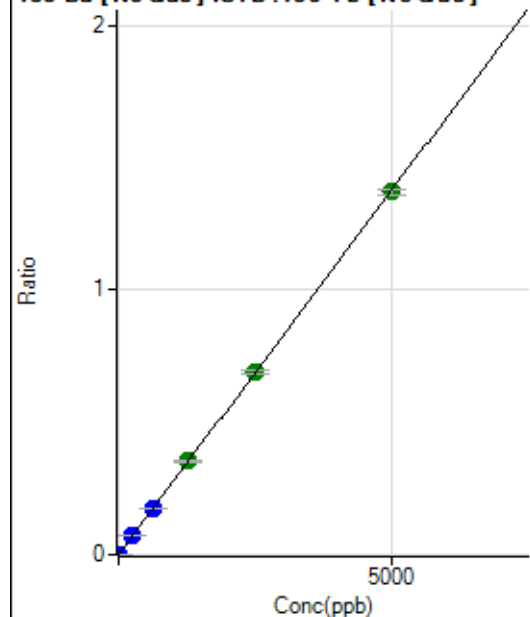
$$R = 1.0000$$

$$DL = 0.02295$$

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	33.33	0.0000	P	75.2
2	☐	1.000					
3	☐	10.000	9.594	18049.22	0.0026	P	2.4
4	☐	250.000	265.570	489069.91	0.0731	P	3.2
5	☐	625.000	642.618	1228140.84	0.1769	P	1.3
6	☐	1250.000	1290.146	2456241.31	0.3551	A	1.7
7	☐	2500.000	2511.170	4846691.65	0.6912	A	2.7
8	☐	5000.000	4981.399	9628171.57	1.3710	A	1.5
9	☐			2444.79	0.0004	P	12.5

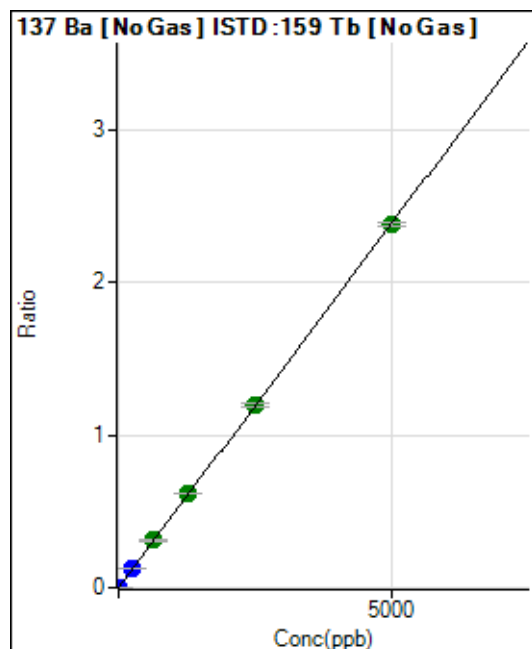
$$y = 2.7523E-004 * x + 4.8682E-006$$

$$R = 1.0000$$

$$DL = 0.03988$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	36.11	0.0000	P	57.7
2	☐	1.000					
3	☐	10.000	9.416	30669.95	0.0045	P	0.8
4	☐	250.000	265.002	845223.24	0.1263	P	3.7
5	☐	625.000	647.538	2143733.03	0.3087	A	1.0
6	☐	1250.000	1293.453	4265707.56	0.6167	A	0.9
7	☐	2500.000	2507.246	8383602.79	1.1953	A	1.7
8	☐	5000.000	4981.947	16680182.66	2.3752	A	1.2
9	☐			4623.24	0.0007	P	8.9

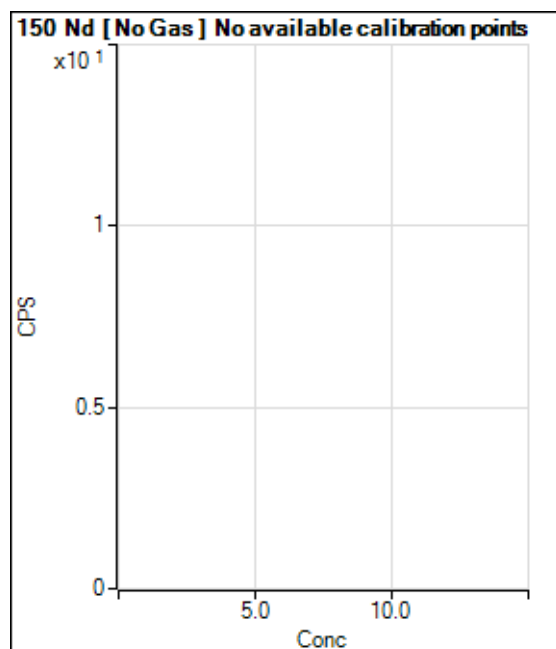
$$y = 4.7675E-004 * x + 5.2572E-006$$

$$R = 1.0000$$

$$DL = 0.01909$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			8.89		P	86.6
2	☐						
3	☐			11.11		P	91.7
4	☐			26.67		P	25.0
5	☐			66.67		P	17.3
6	☐			95.56		P	26.4
7	☐			197.79		P	17.3
8	☐			355.57		P	15.9
9	☐			80.00		P	22.1

150 Nd [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			0.00		P	
2	☐						
3	☐			0.00		P	
4	☐			0.00		P	
5	☐			1.11		P	173.2
6	☐			0.00		P	
7	☐			10.00		P	33.3
8	☐			12.22		P	63.0
9	☐			10.00		P	66.7

156 Dy [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			5.55		P	86.6
2	☐						
3	☐			8.33		P	173.2
4	☐			13.89		P	124.9
5	☐			19.45		P	24.7
6	☐			38.89		P	44.6
7	☐			75.00		P	29.4
8	☐			113.89		P	29.6
9	☐			94.45		P	13.5

156 Dy [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			0.00		P	
2	☐						
3	☐			0.00		P	
4	☐			2.22		P	173.2
5	☐			2.22		P	86.6
6	☐			2.22		P	173.2
7	☐			10.00		P	33.3
8	☐			4.44		P	43.4
9	☐			20.00		P	50.0

160 Gd [No Gas] Noavailable calibration poin_

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			33.33		P	66.2
2	☐						
3	☐			52.78		P	24.1
4	☐			33.33		P	43.3
5	☐			41.67		P	20.0
6	☐			55.56		P	48.2
7	☐			77.78		P	34.4
8	☐			66.67		P	33.1
9	☐			116.67		P	21.4

160 Gd [He] No available calibration points

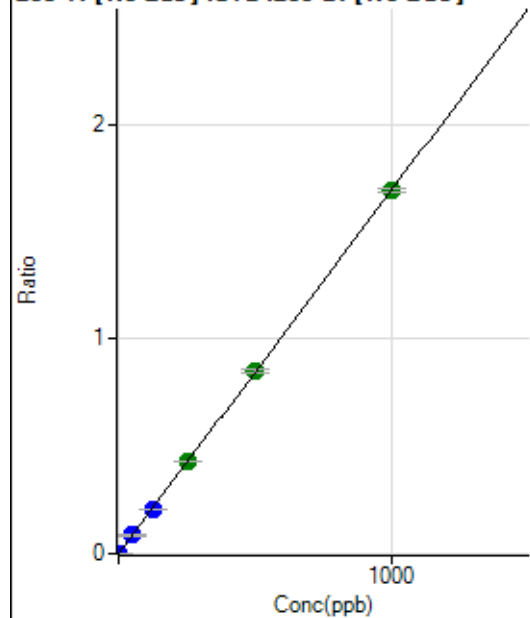
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			4.44		P	114.6
2	☐						
3	☐			4.45		P	86.6
4	☐			5.55		P	69.3
5	☐			11.11		P	62.5
6	☐			7.78		P	49.5
7	☐			6.67		P	86.6
8	☐			23.33		P	37.8
9	☐			31.11		P	22.3

164 Er [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			22.22		P	86.6
2	☐						
3	☐			33.33		P	50.0
4	☐			36.11		P	58.1
5	☐			25.00		P	33.3
6	☐			41.67		P	34.7
7	☐			47.22		P	62.0
8	☐			38.89		P	75.3
9	☐			41.67		P	20.0

164 Er [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			4.44		P	43.4
2	☐						
3	☐			6.67		P	50.0
4	☐			5.56		P	91.6
5	☐			2.22		P	86.6
6	☐			4.44		P	43.4
7	☐			5.56		P	34.7
8	☐			8.89		P	78.1
9	☐			2.22		P	173.2

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	211.12	0.0000	P	5.1
2	☐	0.100					
3	☐	1.000	0.902	7307.99	0.0016	P	3.4
4	☐	50.000	50.473	387314.50	0.0855	P	5.0
5	☐	125.000	123.513	993738.25	0.2092	P	1.2
6	☐	250.000	253.325	2009970.01	0.4290	A	1.0
7	☐	500.000	502.301	4012000.44	0.8506	A	2.2
8	☐	1000.000	998.181	7874570.14	1.6903	A	0.9
9	☐			4161.99	0.0010	P	13.2

$$y = 0.0017 * x + 4.5044E-005$$

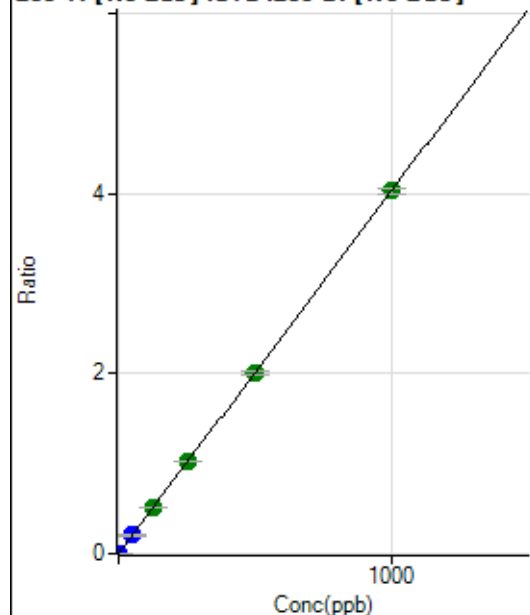
$$R = 1.0000$$

$$DL = 0.004047$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	358.36	0.0001	P	24.2
2	☐	0.100					
3	☐	1.000	0.929	17763.16	0.0038	P	0.6
4	☐	50.000	51.184	934542.25	0.2064	P	5.5
5	☐	125.000	125.842	2409623.38	0.5072	A	1.1
6	☐	250.000	253.546	4787833.66	1.0219	A	1.2
7	☐	500.000	498.014	9467501.60	2.0072	A	2.0
8	☐	1000.000	999.942	18773256.15	4.0300	A	1.9
9	☐			10251.85	0.0025	P	9.1

$$y = 0.0040 * x + 7.6448E-005$$

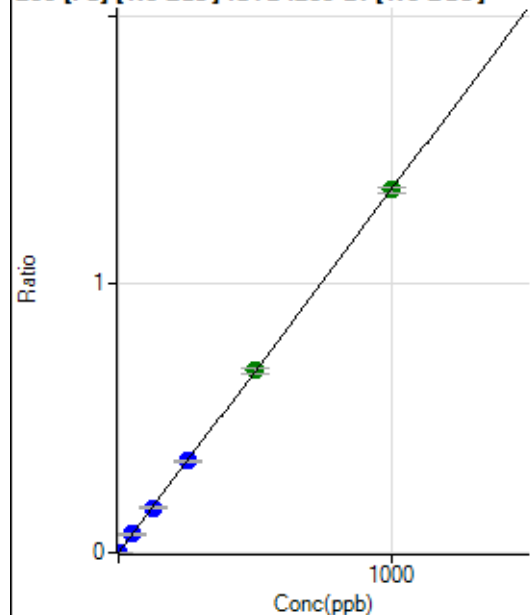
$$R = 1.0000$$

$$DL = 0.01377$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	288.90	0.0001	P	19.8
2	☐	0.100					
3	☐	1.000	0.927	6120.18	0.0013	P	3.9
4	☐	50.000	51.389	315375.48	0.0696	P	4.7
5	☐	125.000	123.818	796429.60	0.1677	P	1.9
6	☐	250.000	251.721	1596723.08	0.3408	P	0.4
7	☐	500.000	501.369	3200851.75	0.6787	A	3.1
8	☐	1000.000	998.963	6299436.25	1.3523	A	1.7
9	☐			6648.25	0.0016	P	3.0

$$y = 0.0014 * x + 6.1579E-005$$

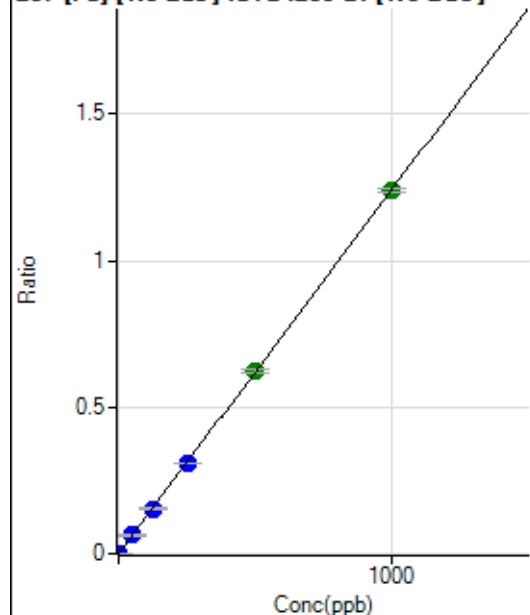
$$R = 1.0000$$

$$DL = 0.02707$$

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	255.57	0.0001	P	39.3
2	☐	0.100					
3	☐	1.000	0.913	5518.05	0.0012	P	3.6
4	☐	50.000	50.422	283556.37	0.0626	P	5.2
5	☐	125.000	123.404	727450.84	0.1531	P	2.3
6	☐	250.000	250.603	1456895.52	0.3109	P	0.4
7	☐	500.000	504.057	2949769.28	0.6254	A	2.1
8	☐	1000.000	997.999	5768193.30	1.2381	A	0.9
9	☐			5714.42	0.0014	P	5.5

$$y = 0.0012 * x + 5.4601E-005$$

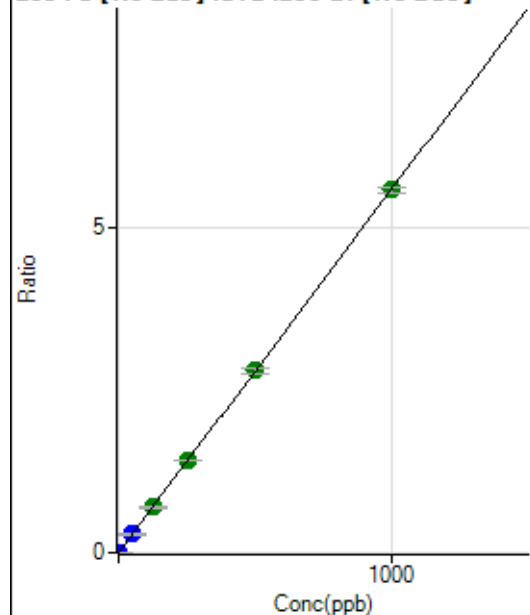
$$R = 1.0000$$

$$DL = 0.05183$$

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	1153.76	0.0002	P	7.5
2	☐	0.100					
3	☐	1.000	0.916	24904.77	0.0054	P	1.4
4	☐	50.000	50.577	1279492.58	0.2825	P	5.1
5	☐	125.000	125.045	3316029.37	0.6981	A	1.7
6	☐	250.000	253.790	6636998.63	1.4166	A	0.6
7	☐	500.000	500.374	13171816.38	2.7926	A	2.3
8	☐	1000.000	998.831	25968466.67	5.5743	A	1.3
9	☐			26292.93	0.0063	P	3.3

$$y = 0.0056 * x + 2.4619E-004$$

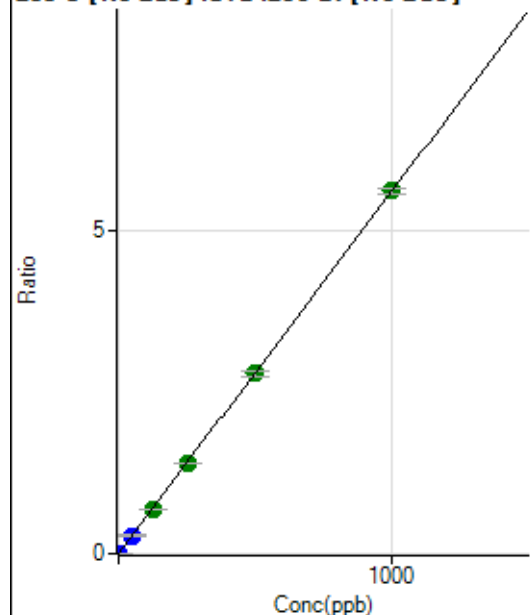
$$R = 1.0000$$

$$DL = 0.009881$$

Weight: <None>

Min Conc: 0

238 U [No Gas] ISTD :209 Bi [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	55.56	0.0000	P	52.3
2	☐	0.100					
3	☐	1.000	0.883	23088.99	0.0050	P	2.9
4	☐	50.000	49.299	1253115.21	0.2766	P	4.9
5	☐	125.000	123.017	3279140.12	0.6903	A	1.5
6	☐	250.000	248.530	6534246.11	1.3946	A	0.4
7	☐	500.000	496.855	13148956.02	2.7880	A	2.8
8	☐	1000.000	1002.223	26198701.80	5.6238	A	1.4
9	☐			5384.76	0.0013	P	7.6

$$y = 0.0056 * x + 1.1842E-005$$

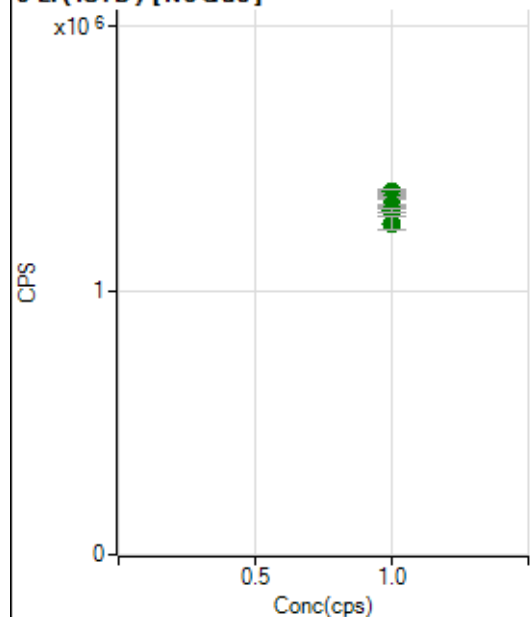
$$R = 1.0000$$

$$DL = 0.003314$$

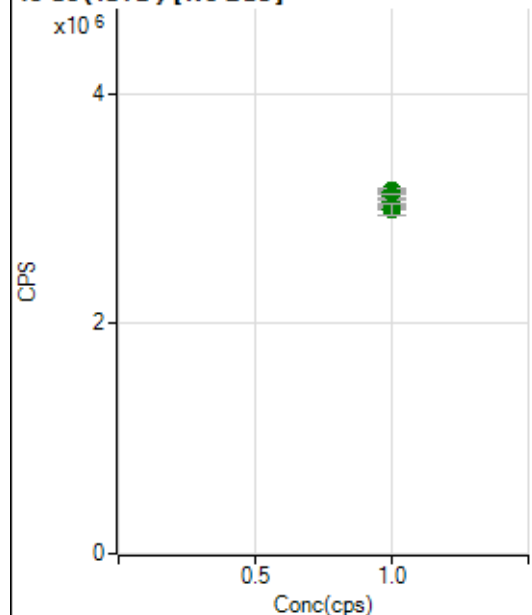
Weight: <None>

Min Conc: 0

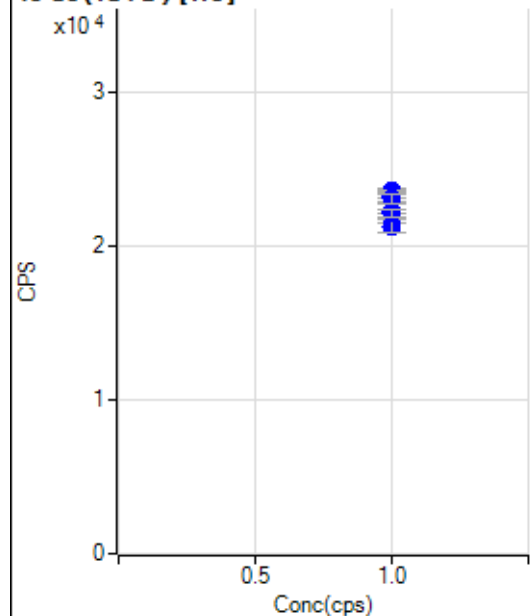
6 Li (ISTD) [No Gas]



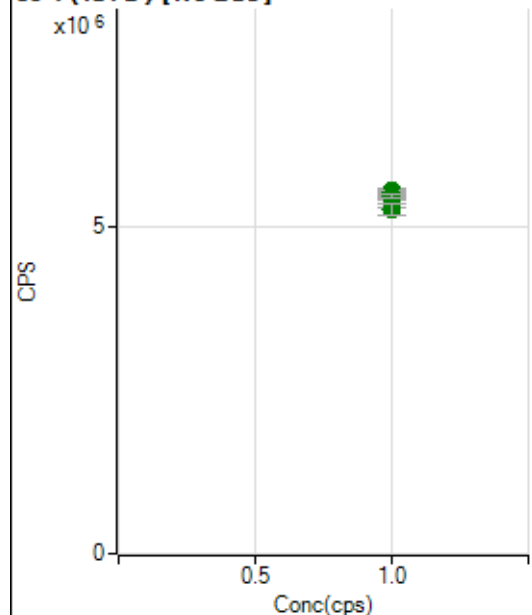
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1367625.64		A	0.6
2	☐	1.000					
3	☐	1.000		1372250.62		A	0.7
4	☐	1.000		1346931.78		A	4.1
5	☐	1.000		1374595.09		A	1.2
6	☐	1.000		1351078.56		A	0.9
7	☐	1.000		1322811.02		A	0.8
8	☐	1.000		1303674.82		A	1.0
9	☐	1.000		1255134.20		A	4.3

45 Sc (ISTD) [No Gas]

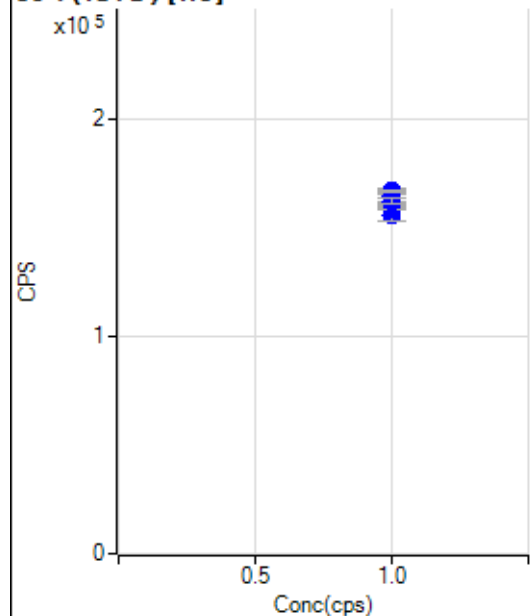
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3151908.73		A	0.2
2	☐	1.000					
3	☐	1.000		3145682.39		A	1.8
4	☐	1.000		3061630.06		A	4.1
5	☐	1.000		3106372.27		A	1.0
6	☐	1.000		3031126.41		A	0.8
7	☐	1.000		3045447.70		A	1.9
8	☐	1.000		3000654.17		A	1.0
9	☐	1.000		2989875.46		A	3.1

45 Sc (ISTD) [He]

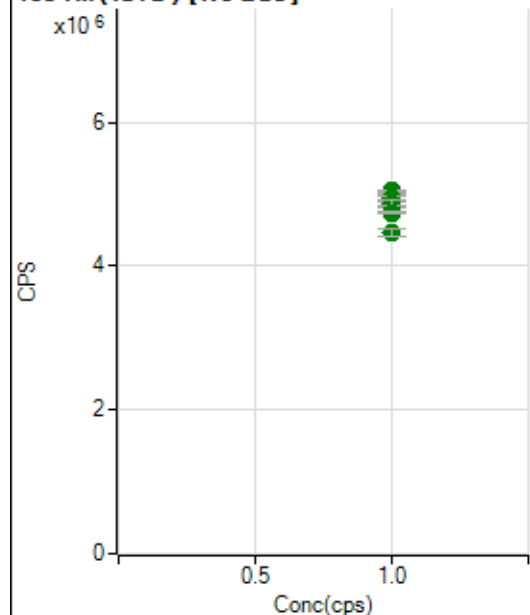
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		23443.10		P	2.0
2	☐	1.000					
3	☐	1.000		23339.63		P	4.2
4	☐	1.000		23613.34		P	0.2
5	☐	1.000		21740.35		P	1.9
6	☐	1.000		22292.38		P	1.0
7	☐	1.000		21334.26		P	4.2
8	☐	1.000		22177.68		P	2.1
9	☐	1.000		23108.14		P	2.9

89 Y (ISTD) [No Gas]

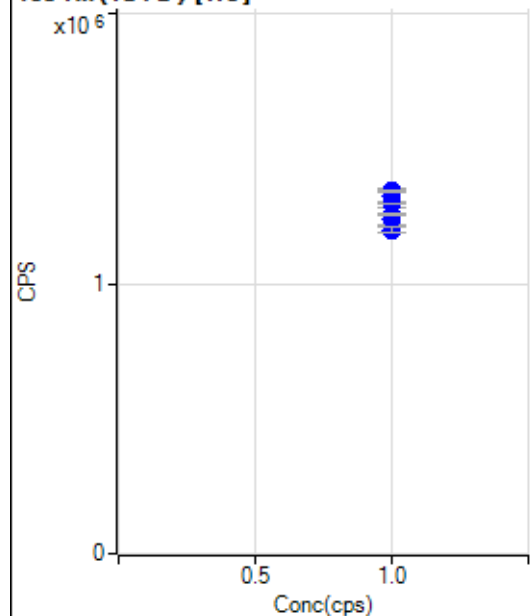
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		5532515.27		A	1.3
2	☐	1.000					
3	☐	1.000		5563005.89		A	0.9
4	☐	1.000		5410928.46		A	4.1
5	☐	1.000		5539904.85		A	1.4
6	☐	1.000		5454867.00		A	0.7
7	☐	1.000		5509573.81		A	1.9
8	☐	1.000		5478493.95		A	0.9
9	☐	1.000		5282674.50		A	3.3

89 Y (ISTD) [He]

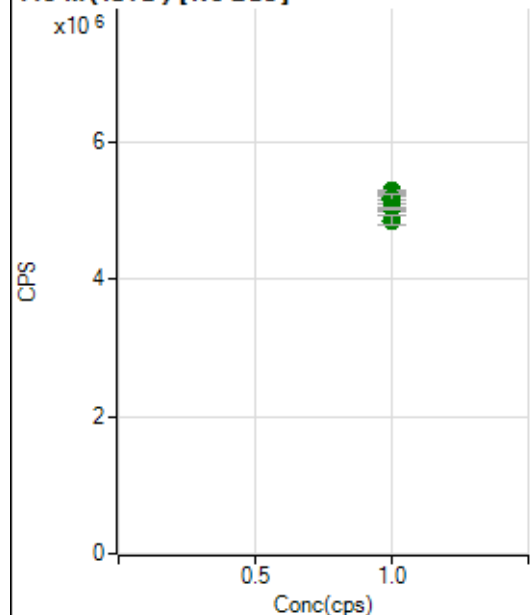
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		166980.05		P	1.7
2	☐	1.000					
3	☐	1.000		164484.92		P	2.8
4	☐	1.000		167094.60		P	0.7
5	☐	1.000		160755.57		P	2.0
6	☐	1.000		160753.46		P	0.9
7	☐	1.000		155957.35		P	3.6
8	☐	1.000		158732.27		P	0.3
9	☐	1.000		162420.92		P	1.9

103 Rh (ISTD) [No Gas]

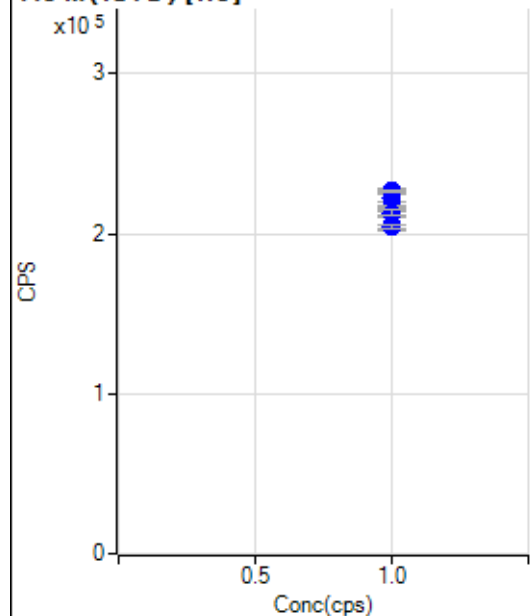
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		5013538.13		A	0.5
2	☐	1.000					
3	☐	1.000		5044425.89		A	0.9
4	☐	1.000		4854806.36		A	4.9
5	☐	1.000		4950406.71		A	1.4
6	☐	1.000		4856941.38		A	1.5
7	☐	1.000		4875889.69		A	1.9
8	☐	1.000		4741898.46		A	0.7
9	☐	1.000		4462056.35		A	2.2

103 Rh (ISTD) [He]

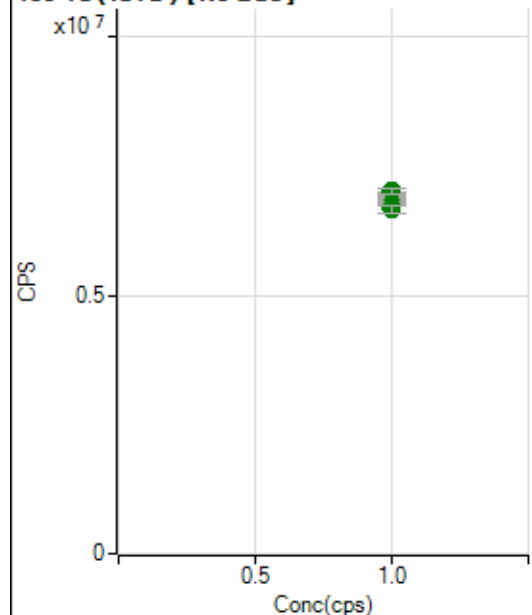
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1342958.60		P	1.0
2	☐	1.000					
3	☐	1.000		1323654.52		P	3.1
4	☐	1.000		1342735.10		P	0.7
5	☐	1.000		1292134.17		P	2.1
6	☐	1.000		1294297.78		P	0.3
7	☐	1.000		1239049.61		P	3.4
8	☐	1.000		1256164.03		P	0.4
9	☐	1.000		1199357.12		P	1.3

115 In (ISTD) [No Gas]

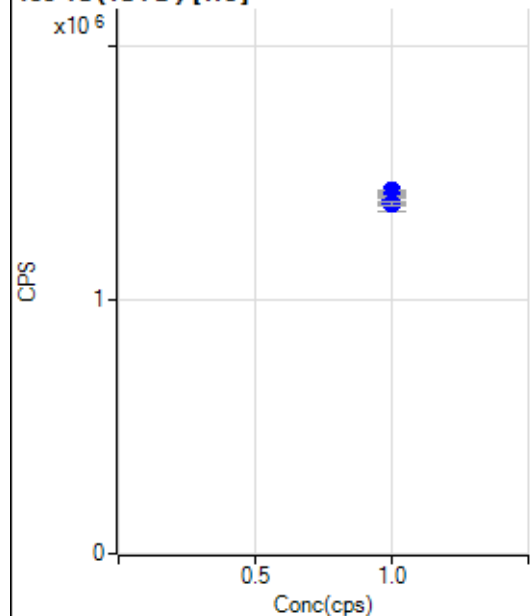
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		5288402.23		A	0.4
2	☐	1.000					
3	☐	1.000		5264230.17		A	1.9
4	☐	1.000		5108600.09		A	4.0
5	☐	1.000		5294905.31		A	0.8
6	☐	1.000		5183677.79		A	1.0
7	☐	1.000		5175660.43		A	2.3
8	☐	1.000		5038895.16		A	0.6
9	☐	1.000		4867271.60		A	2.8

115 In (ISTD) [He]

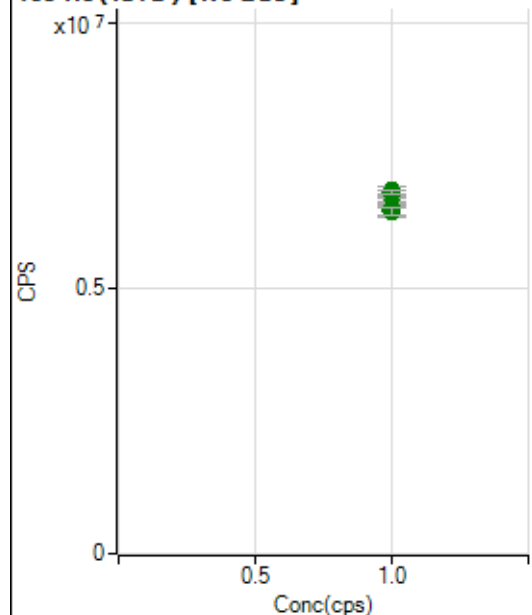
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		226513.90		P	1.4
2	☐	1.000					
3	☐	1.000		222523.11		P	2.9
4	☐	1.000		226661.77		P	0.9
5	☐	1.000		217281.28		P	2.7
6	☐	1.000		217284.52		P	0.5
7	☐	1.000		205485.17		P	4.1
8	☐	1.000		204204.67		P	0.9
9	☐	1.000		212756.95		P	1.7

159 Tb (ISTD) [No Gas]

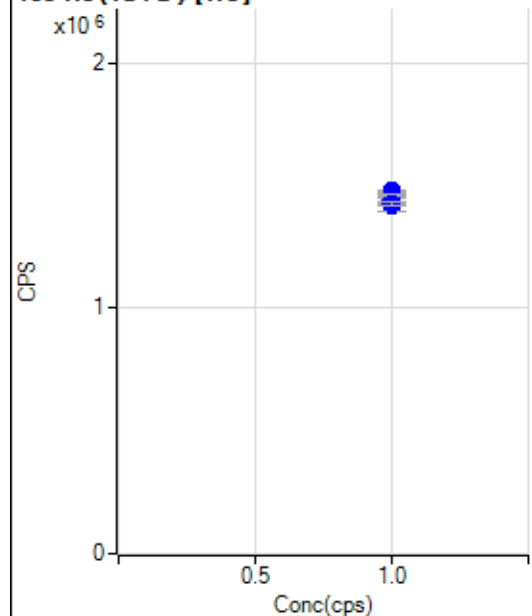
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		6859455.46		A	0.4
2	☐	1.000					
3	☐	1.000		6823706.08		A	0.9
4	☐	1.000		6695896.92		A	3.7
5	☐	1.000		6944399.55		A	1.3
6	☐	1.000		6917659.41		A	0.6
7	☐	1.000		7015113.78		A	2.1
8	☐	1.000		7023572.53		A	1.5
9	☐	1.000		6662243.86		A	2.2

159 Tb (ISTD) [He]

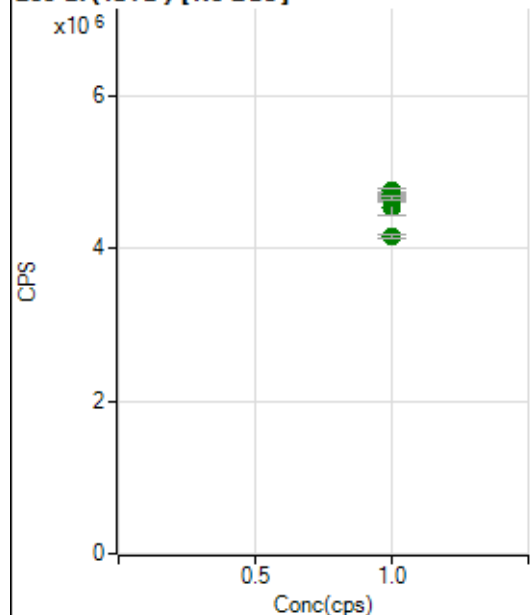
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1407785.41		P	1.3
2	☐	1.000					
3	☐	1.000		1392545.82		P	3.3
4	☐	1.000		1427067.67		P	0.8
5	☐	1.000		1391080.07		P	2.0
6	☐	1.000		1407515.91		P	0.6
7	☐	1.000		1374795.22		P	3.7
8	☐	1.000		1406532.69		P	0.5
9	☐	1.000		1375106.63		P	1.1

165 Ho (ISTD) [No Gas]

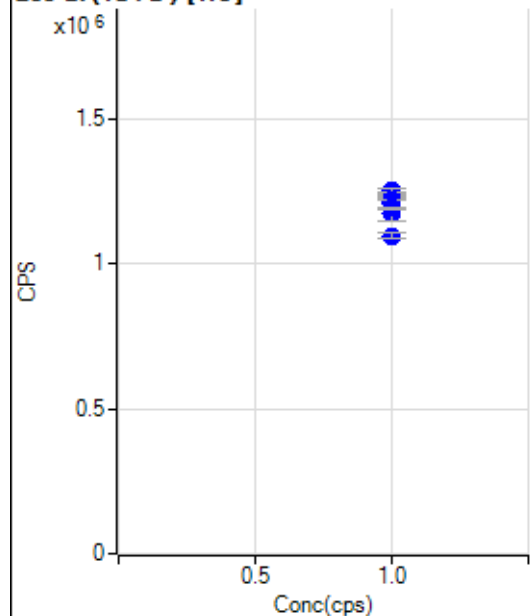
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		6599027.71		A	0.4
2	☐	1.000					
3	☐	1.000		6576273.97		A	0.9
4	☐	1.000		6469978.27		A	4.5
5	☐	1.000		6742040.34		A	1.1
6	☐	1.000		6717291.64		A	0.8
7	☐	1.000		6831480.71		A	2.0
8	☐	1.000		6797033.40		A	1.3
9	☐	1.000		6440763.03		A	1.9

165 Ho (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1457941.35		P	1.6
2	☐	1.000					
3	☐	1.000		1438895.86		P	3.3
4	☐	1.000		1477811.84		P	0.9
5	☐	1.000		1441282.27		P	2.5
6	☐	1.000		1463918.62		P	0.4
7	☐	1.000		1421515.64		P	3.8
8	☐	1.000		1458161.92		P	0.6
9	☐	1.000		1425841.05		P	1.6

209 Bi (ISTD) [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		4687913.85		A	0.6
2	☐	1.000					
3	☐	1.000		4648318.44		A	1.2
4	☐	1.000		4536594.86		A	4.7
5	☐	1.000		4750753.54		A	1.0
6	☐	1.000		4685426.60		A	0.7
7	☐	1.000		4718429.20		A	2.5
8	☐	1.000		4659119.06		A	1.3
9	☐	1.000		4158322.37		A	1.6

209 Bi (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1239607.14		P	1.2
2	☐	1.000					
3	☐	1.000		1216132.30		P	3.4
4	☐	1.000		1250494.33		P	1.0
5	☐	1.000		1209275.48		P	2.3
6	☐	1.000		1218506.44		P	0.0
7	☐	1.000		1171019.61		P	4.3
8	☐	1.000		1190671.50		P	0.8
9	☐	1.000		1095885.74		P	1.4

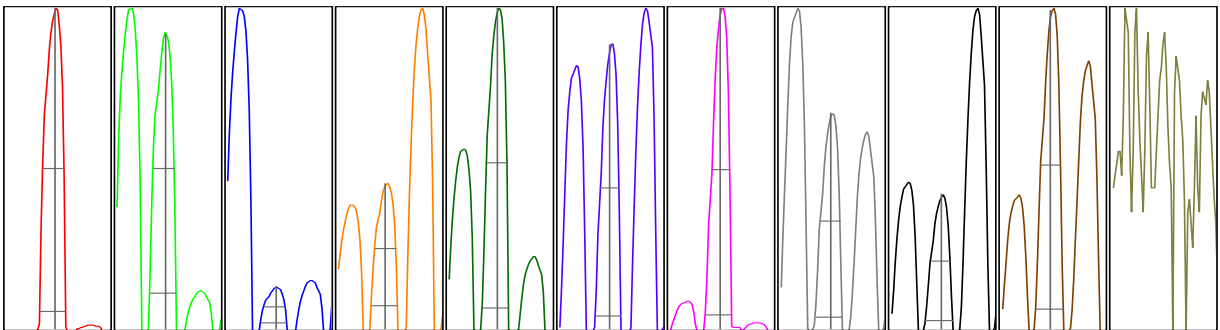
US EPA Tune Check Sample Report

Batch Folder D:\P8100618-MS.b
Report Comment
Instrument Name G8403A JP17141814

[No Gas]				
Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
9	6644	0.98	5.00	
24	55211	0.83	5.00	
25	7655	0.76	5.00	
26	9091	0.70	5.00	
59	58064	0.87	5.00	
113	8395	0.71	5.00	
115	103911	0.90	5.00	
206	26788	0.65	5.00	
207	24545	0.92	5.00	
208	58207	0.88	5.00	
220	1	15.49		

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
9	6585	6732	6694	6597	6610
24	54826	55896	55404	54797	55134
25	7634	7738	7691	7598	7616
26	9028	9189	9118	9066	9054
59	57458	58597	58387	57597	58281
113	8316	8476	8404	8363	8416
115	102520	104812	104651	103525	104045
206	26589	26944	26855	26612	26941
207	24221	24693	24770	24409	24631
208	57854	58726	58408	57503	58542
220	1	1	1	1	1

Integration Time [sec] = 0.1



Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	Width-X% (Actual)	Width-X% (Required)	Width- X% (Flag)
9	11730	8.95	8.9 - 9.1		0.738	0.900	
24	96321	23.95	23.9 - 24.1		0.753	0.900	
25	12890	24.95	24.9 - 25.1		0.746	0.900	
26	15054	25.90	25.9 - 26.1		0.746	0.900	
59	104429	58.95	58.9 - 59.1		0.750	0.900	
113	16044	113.00	112.9 - 113.1		0.729	0.900	
115	198633	115.00	114.9 - 115.1		0.750	0.900	
206	49504	206.00	205.9 - 206.1		0.772	0.900	
207	45212	207.00	206.9 - 207.1		0.777	0.900	
208	106780	207.95	207.9 - 208.1		0.790	0.900	
220			-				

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

Tune Parameters

Plasma Paramters

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

Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	9.9	V	Deflect	14.6	V
Extract 2	-225.0	V	Cell Entrance	-30	V	Plate Bias	-35	V
Omega Bias	-95	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
He Flow	0.0	mL/min	OctP RF	160	V			

[He]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)
59	7166	1.87	
89	1996	1.84	
205	11930	1.66	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
59	7199	7222	6945	7164	7301
89	2029	2008	1936	1990	2019
205	12057	12000	11585	11948	12060

Integration Time [sec] = 0.1

Tune Parameters

Plasma Paramters

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

Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	9.9	V	Deflect	2.2	V
Extract 2	-225.0	V	Cell Entrance	-40	V	Plate Bias	-60	V
Omega Bias	-95	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
He Flow	5.0	mL/min	OctP RF	190	V			