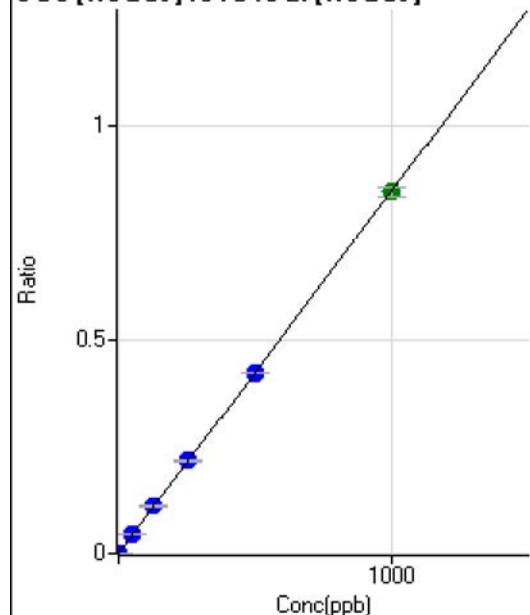


Batch Folder: D:\P8092618 MS.b\
Analysis File: P8092618 MS.batch.bin
DA Date-Time: 2018-09-26 15:42:53
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	003CALB.d	S00	2018-09-26 15:01:43
2	004CALS.d	S01	2018-09-26 15:05:05
3	005CALS.d	S02	2018-09-26 15:09:24
4	006CALS.d	S03	2018-09-26 15:13:08
5	007CALS.d	S04	2018-09-26 15:16:53
6	008CALS.d	S05	2018-09-26 15:20:29
7	009CALS.d	S06	2018-09-26 15:24:01
8	010CALS.d	S07	2018-09-26 15:27:29
9	011CALS.d	S08	2018-09-26 15:30:53

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	157.41	0.0001	P	21.7
2	☐	0.100	0.095	250.01	0.0002	P	3.6
3	☐	1.000	1.115	1496.42	0.0011	P	6.1
4	☐	50.000	52.662	65208.64	0.0447	P	0.6
5	☐	125.000	131.173	161856.42	0.1112	P	3.0
6	☐	250.000	257.544	317444.80	0.2183	P	1.3
7	☐	500.000	496.704	615949.11	0.4209	P	0.3
8	☐	1000.000	998.857	1210275.52	0.8464	A	2.6
9	☐			757.45	0.0005	P	4.6

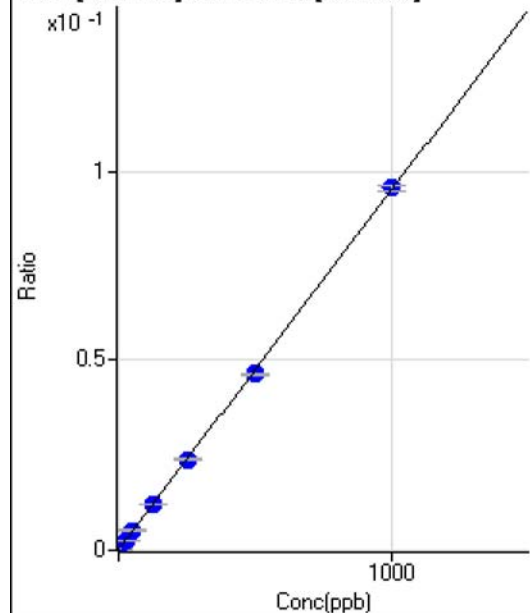
$$y = 8.4724\text{E-}004 * x + 1.0863\text{E-}004$$

$$R = 0.9999$$

$$DL = 0.0833$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	316.68	0.0002	P	21.2
2	☐	2.500	3.167	686.16	0.0005	P	4.0
3	☐	25.000	25.553	3756.21	0.0026	P	3.6
4	☐	50.000	53.206	7671.80	0.0053	P	5.1
5	☐	125.000	125.366	17614.24	0.0121	P	1.7
6	☐	250.000	250.946	34904.39	0.0240	P	0.6
7	☐	500.000	487.933	67994.98	0.0465	P	1.5
8	☐	1000.000	1005.576	136649.83	0.0955	P	1.4
9	☐			7933.06	0.0056	P	9.9

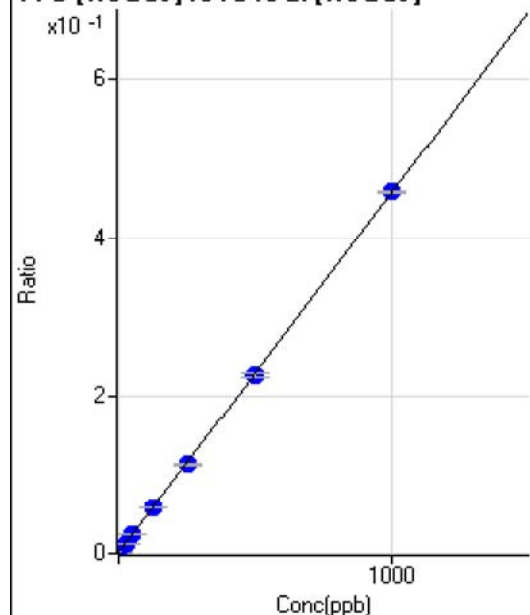
$$y = 9.4782\text{E-}005 * x + 2.1859\text{E-}004$$

$$R = 0.9999$$

$$DL = 1.465$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1386.24	0.0010	P	8.2
2	☐	2.500	3.134	3156.04	0.0024	P	7.3
3	☐	25.000	24.770	17425.12	0.0123	P	5.3
4	☐	50.000	50.294	34865.46	0.0239	P	2.4
5	☐	125.000	125.092	84493.01	0.0580	P	0.8
6	☐	250.000	246.875	165246.23	0.1136	P	1.6
7	☐	500.000	493.605	331065.51	0.2262	P	2.6
8	☐	1000.000	1003.957	656832.21	0.4592	P	0.7
9	☐			37811.92	0.0268	P	8.1

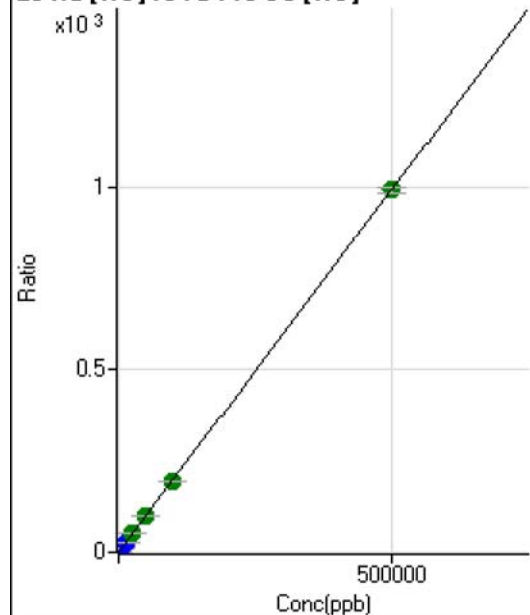
$$y = 4.5642\text{E-}004 * x + 9.5527\text{E-}004$$

$$R = 1.0000$$

$$DL = 0.5162$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	6568.48	0.2353	P	2.6
2	☐	50.000	57.463	8900.40	0.3491	P	3.9
3	☐	500.000	493.558	33576.43	1.2132	P	2.2
4	☐	5000.000	4992.795	277575.22	10.1280	P	0.3
5	☐	12500.000	12888.060	662653.50	25.7717	P	2.2
6	☐	25000.000	25548.112	1290741.65	50.8563	A	1.6
7	☐	50000.000	50141.649	2435573.56	99.5860	A	2.5
8	☐	100000.00	98546.170	4633509.48	195.4948	A	1.2
9	☐	500000.00	500239.57	26293882.70	991.4108	A	1.7

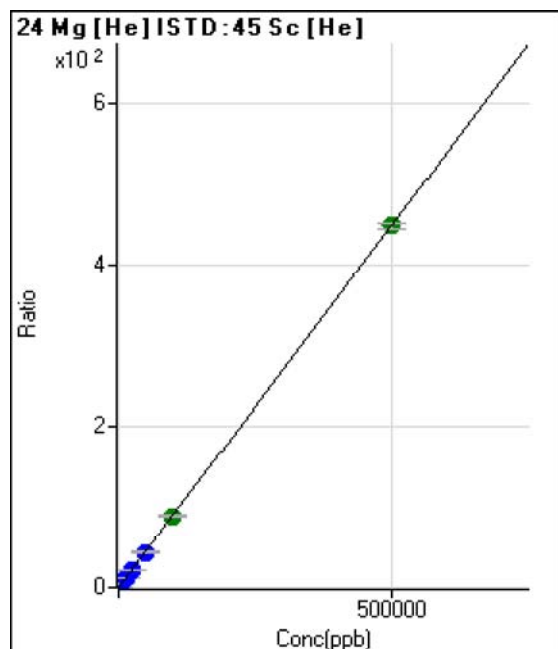
$$y = 0.0020 * x + 0.2353$$

$$R = 1.0000$$

$$DL = 9.102$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	183.34	0.0066	P	20.8
2	☐	50.000	55.393	1433.47	0.0562	P	6.7
3	☐	500.000	484.393	12197.42	0.4407	P	3.9
4	☐	5000.000	4968.421	122215.27	4.4593	P	0.5
5	☐	12500.000	12803.534	295227.49	11.4812	P	1.6
6	☐	25000.000	24821.363	564746.42	22.2517	P	1.6
7	☐	50000.000	48952.577	1073177.40	43.8782	P	2.2
8	☐	100000.00	99105.445	2105188.26	88.8256	A	2.1
9	☐	500000.00	500285.32	11891894.97	448.3659	A	1.4

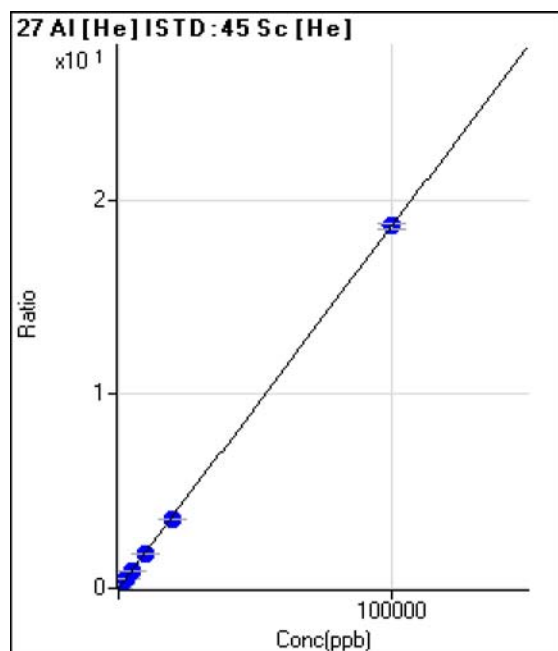
$$y = 8.9621\text{E-}004 * x + 0.0066$$

$$R = 1.0000$$

$$DL = 4.567$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	15.84	0.0006	P	35.0
2	☐	2.000	2.574	26.68	0.0010	P	14.0
3	☐	20.000	17.549	106.70	0.0038	P	29.1
4	☐	1000.000	995.253	5107.25	0.1864	P	4.5
5	☐	2500.000	2544.891	12232.59	0.4757	P	2.2
6	☐	5000.000	4922.166	23335.00	0.9195	P	1.9
7	☐	10000.000	9705.237	44333.20	1.8124	P	1.7
8	☐	20000.000	19256.127	85228.88	3.5955	P	0.8
9	☐	100000.00	100181.06	496043.63	18.7033	P	1.6

$$y = 1.8669\text{E-}004 * x + 5.6530\text{E-}004$$

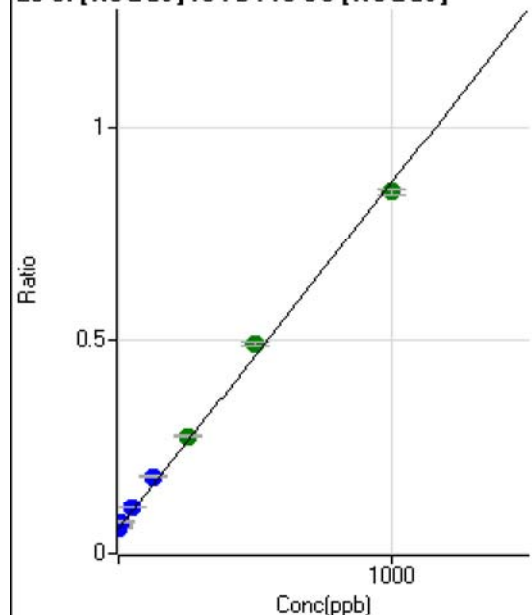
$$R = 1.0000$$

$$DL = 3.177$$

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	259228.28	0.0581	P	0.6
2	☐	1.000	8.938	264261.17	0.0654	P	0.5
3	☐	10.000	19.699	325045.20	0.0741	P	2.9
4	☐	50.000	63.325	483775.67	0.1096	P	1.3
5	☐	125.000	151.878	792615.77	0.1815	P	2.9
6	☐	250.000	268.320	1181185.24	0.2761	A	2.1
7	☐	500.000	533.163	2087319.12	0.4913	A	1.5
8	☐	1000.000	974.708	3605631.15	0.8501	A	1.3
9	☐			905275.29	0.2092	P	0.8

$$y = 8.1255E-004 * x + 0.0581$$

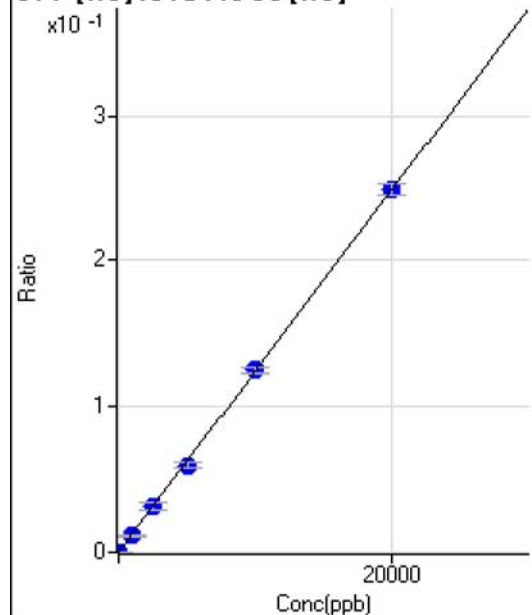
$$R = 0.9989$$

$$DL = 1.336$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	-5.829	2.78	0.0001	P	173.
2	☐	0.000	-4.963	2.78	0.0001	P	173.
3	☐	0.000	10.792	8.33	0.0003	P	100.
4	☐	1000.000	916.852	316.68	0.0116	P	16.2
5	☐	2500.000	2565.544	822.29	0.0320	P	17.8
6	☐	5000.000	4811.257	1522.38	0.0599	P	6.9
7	☐	10000.000	10039.887	3056.03	0.1249	P	3.3
8	☐	20000.000	20023.207	5904.29	0.2488	P	3.0
9	☐			2.78	0.0001	P	173.

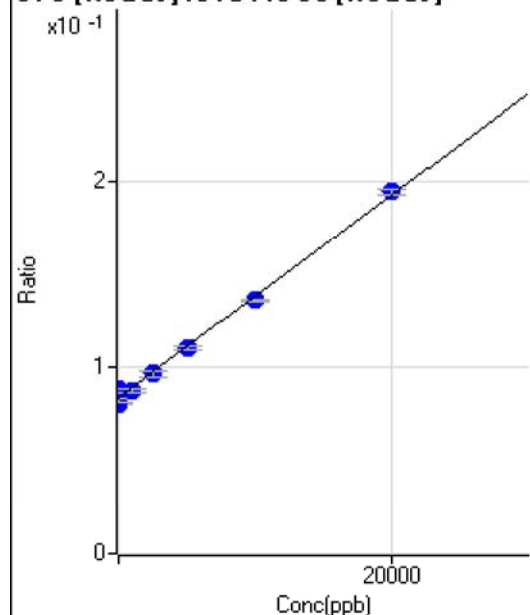
$$y = 1.2419E-005 * x + 1.7028E-004$$

$$R = 0.9999$$

$$DL = 53.34$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	-616.160	359595.57	0.0806	P	1.4
2	☐	0.000	829.997	357626.46	0.0885	P	0.7
3	☐	0.000	-213.836	363141.90	0.0828	P	2.5
4	☐	1000.000	704.403	387597.11	0.0878	P	1.8
5	☐	2500.000	2310.806	421432.77	0.0965	P	3.0
6	☐	5000.000	4810.433	471015.23	0.1101	P	1.6
7	☐	10000.000	9507.165	576204.65	0.1356	P	0.6
8	☐	20000.000	20332.238	824737.45	0.1945	P	1.8
9	☐			318496.26	0.0736	P	1.6

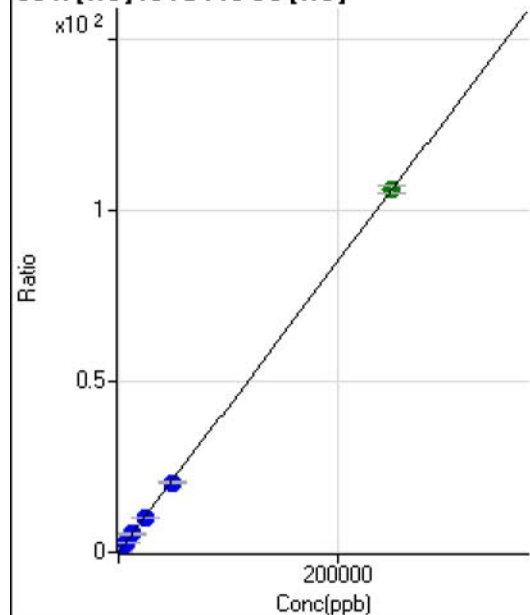
$$y = 5.4353\text{E-}006 * x + 0.0840$$

$$R = 0.9979$$

$$DL = 704.3$$

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	1961.34	0.0702	P	6.3
2	☐	50.000	73.107	2578.14	0.1011	P	4.2
3	☐	500.000	503.909	7841.43	0.2833	P	3.2
4	☐	2500.000	2490.123	30776.06	1.1229	P	0.8
5	☐	6250.000	6502.574	72478.97	2.8192	P	4.4
6	☐	12500.000	12478.055	135667.53	5.3454	P	1.6
7	☐	25000.000	24164.336	251591.81	10.2858	P	1.6
8	☐	50000.000	48203.041	484704.57	20.4482	P	0.8
9	☐	250000.00	250437.82	2809731.86	105.9438	A	2.2

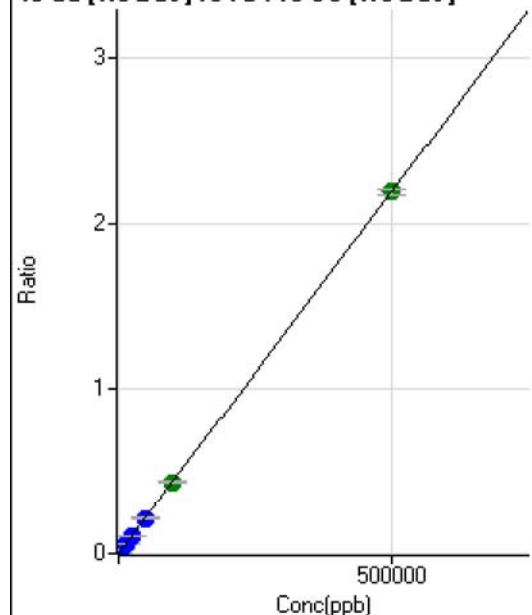
$$y = 4.2275\text{E-}004 * x + 0.0702$$

$$R = 1.0000$$

$$DL = 31.57$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	455.59	0.0001	P	22.8
2	☐	50.000	50.852	1314.02	0.0003	P	14.1
3	☐	500.000	476.420	9614.83	0.0022	P	1.3
4	☐	5000.000	4973.586	96768.50	0.0219	P	0.9
5	☐	12500.000	12424.111	238354.77	0.0546	P	3.0
6	☐	25000.000	24765.313	465027.42	0.1087	P	1.7
7	☐	50000.000	49046.287	914201.43	0.2152	P	0.5
8	☐	100000.00	98209.596	1826711.52	0.4308	A	2.7
9	☐	500000.00	500467.37	9496424.95	2.1948	A	1.7

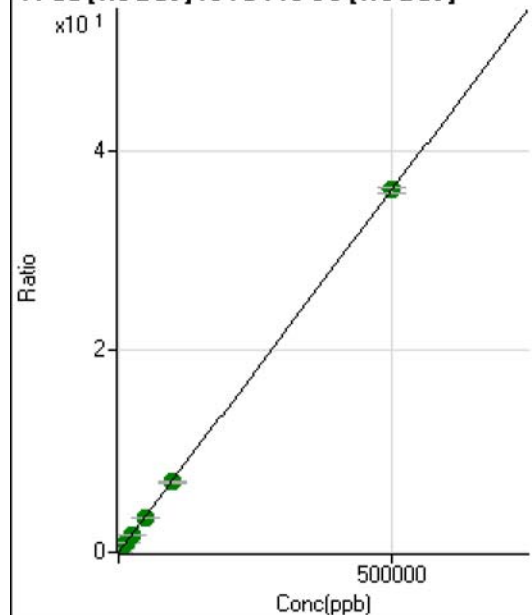
$$y = 4.3852E-006 * x + 1.0209E-004$$

$$R = 1.0000$$

$$DL = 15.95$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	12253.12	0.0027	P	1.7
2	☐	50.000	52.553	26397.84	0.0065	P	2.2
3	☐	500.000	482.429	164354.42	0.0375	P	4.1
4	☐	5000.000	5017.787	1607414.75	0.3640	A	1.4
5	☐	12500.000	12487.086	3937039.19	0.9018	A	4.0
6	☐	25000.000	24571.366	7580166.84	1.7719	A	1.4
7	☐	50000.000	48785.902	14934608.84	3.5153	A	0.8
8	☐	100000.00	96908.165	29601940.59	6.9801	A	2.1
9	☐	500000.00	500761.37	156023446.5	36.0573	A	1.3

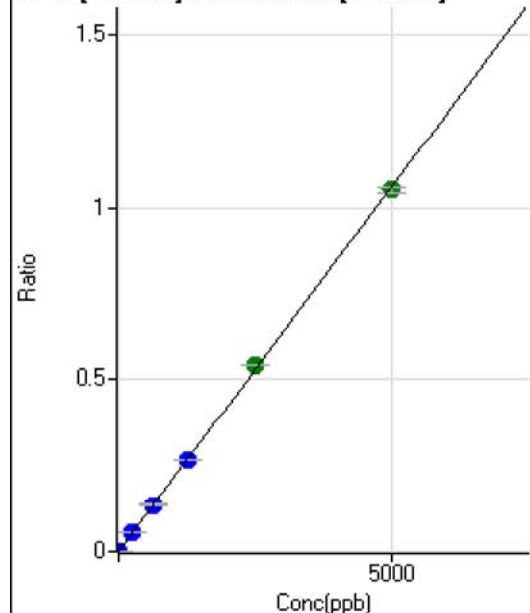
$$y = 7.2000E-005 * x + 0.0027$$

$$R = 1.0000$$

$$DL = 1.916$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	97.23	0.0000	P	5.6
2	☐	0.500	0.523	536.14	0.0001	P	14.5
3	☐	5.000	5.255	4978.89	0.0011	P	3.3
4	☐	250.000	252.903	236662.52	0.0536	P	1.6
5	☐	625.000	635.819	588174.02	0.1347	P	3.6
6	☐	1250.000	1261.274	1143144.87	0.2672	P	1.3
7	☐	2500.000	2557.393	2301781.06	0.5418	A	0.3
8	☐	5000.000	4966.988	4462586.91	1.0522	A	1.9
9	☐			2633.70	0.0006	P	3.9

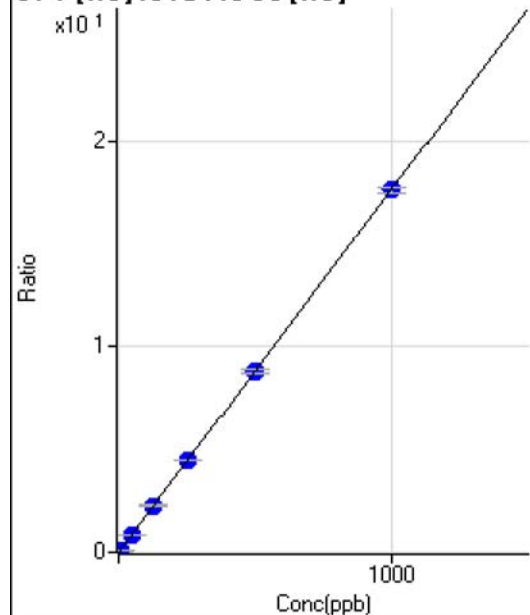
$$y = 2.1184\text{E-}004 * x + 2.1797\text{E-}005$$

$$R = 0.9999$$

$$DL = 0.01723$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	6.67	0.0002	P	48.9
2	☐	0.500	0.535	246.67	0.0097	P	15.2
3	☐	5.000	4.786	2344.68	0.0847	P	1.9
4	☐	50.000	49.686	24038.62	0.8771	P	0.8
5	☐	125.000	128.618	58368.92	2.2701	P	2.6
6	☐	250.000	253.684	113640.48	4.4774	P	1.0
7	☐	500.000	498.040	214993.39	8.7899	P	2.0
8	☐	1000.000	999.624	418122.66	17.6421	P	1.4
9	☐			260.01	0.0098	P	24.5

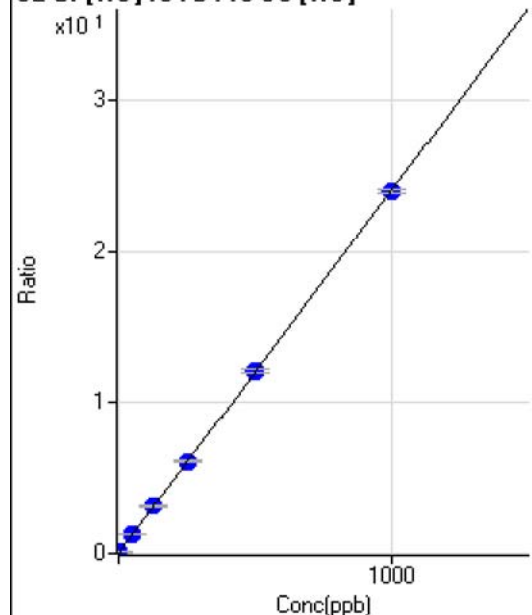
$$y = 0.0176 * x + 2.3795\text{E-}004$$

$$R = 1.0000$$

$$DL = 0.01978$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	481.13	0.0172	P	10.0
2	☐	0.200	0.239	586.69	0.0230	P	7.2
3	☐	2.000	2.156	1911.28	0.0691	P	5.8
4	☐	50.000	51.159	34178.50	1.2471	P	1.0
5	☐	125.000	130.016	80807.02	3.1428	P	2.5
6	☐	250.000	254.422	155664.91	6.1335	P	1.7
7	☐	500.000	502.261	295706.19	12.0915	P	2.9
8	☐	1000.000	997.079	568547.33	23.9868	P	1.0
9	☐			28952.33	1.0915	P	1.3

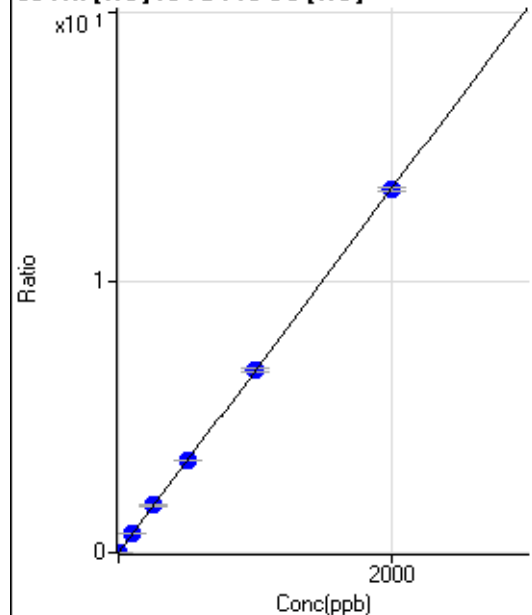
$$y = 0.0240 * x + 0.0172$$

$$R = 1.0000$$

$$DL = 0.2156$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	71.11	0.0026	P	15.6
2	☐	0.100	0.166	93.34	0.0037	P	20.4
3	☐	1.000	1.075	271.12	0.0098	P	9.5
4	☐	100.000	102.045	18890.75	0.6893	P	0.4
5	☐	250.000	262.359	45459.44	1.7681	P	3.0
6	☐	500.000	509.255	87051.12	3.4297	P	0.8
7	☐	1000.000	1002.856	165136.81	6.7514	P	1.9
8	☐	2000.000	1994.611	318221.03	13.4256	P	1.0
9	☐			1774.60	0.0669	P	5.4

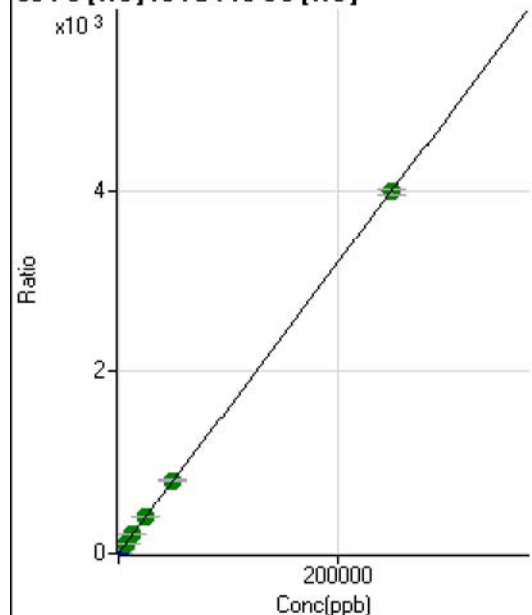
$$y = 0.0067 * x + 0.0026$$

$$R = 1.0000$$

$$DL = 0.1774$$

Weight: <None>

Min Conc: 0

⁵⁶Fe [He] ISTD: ⁴⁵Sc [He]

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1057.48	0.0379	P	7.6
2	☐	5.000	5.516	3213.44	0.1260	P	3.5
3	☐	50.000	51.259	23718.88	0.8567	P	3.1
4	☐	2500.000	2568.402	1125514.20	41.0672	P	0.3
5	☐	6250.000	6697.943	2752276.07	107.0350	A	1.8
6	☐	12500.000	12989.583	5267713.26	207.5417	A	0.9
7	☐	25000.000	25371.446	9913910.98	405.3373	A	2.1
8	☐	50000.000	50577.775	19148378.44	807.9991	A	1.6
9	☐	250000.00	249810.93	105838242.1	3,990.674	A	1.8

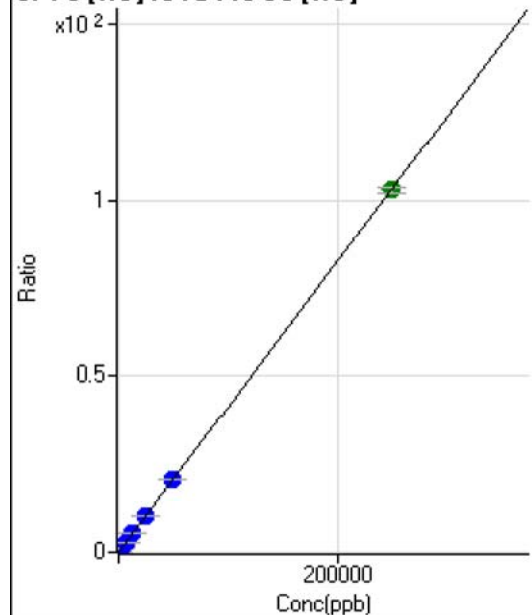
$$y = 0.0160 * x + 0.0379$$

$$R = 1.0000$$

$$DL = 0.5419$$

Weight: <None>

Min Conc: 0

⁵⁷Fe [He] ISTD: ⁴⁵Sc [He]

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	16.67	0.0006	P	67.0
2	☐	5.000	7.168	90.75	0.0036	P	17.4
3	☐	50.000	54.907	642.62	0.0232	P	2.1
4	☐	2500.000	2542.725	28724.71	1.0481	P	1.1
5	☐	6250.000	6437.388	68201.86	2.6524	P	2.1
6	☐	12500.000	12749.338	133310.70	5.2526	P	1.4
7	☐	25000.000	24954.098	251452.87	10.2803	P	1.8
8	☐	50000.000	50100.983	489199.29	20.6394	P	1.1
9	☐	250000.00	249966.81	2730956.43	102.9729	A	1.9

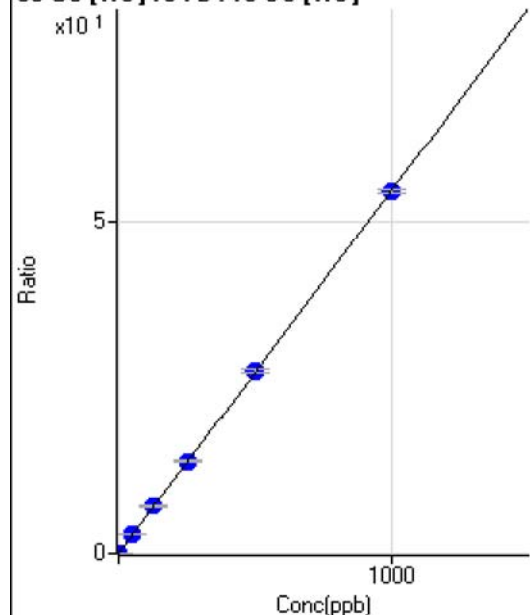
$$y = 4.1194E-004 * x + 5.9973E-004$$

$$R = 1.0000$$

$$DL = 2.927$$

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	81.11	0.0029	P	19.8
2	☐	0.100	0.114	232.23	0.0091	P	4.8
3	☐	1.000	0.966	1539.00	0.0556	P	2.9
4	☐	50.000	50.884	76104.00	2.7768	P	0.8
5	☐	125.000	129.869	182109.17	7.0825	P	2.2
6	☐	250.000	254.899	352733.41	13.8983	P	1.5
7	☐	500.000	500.633	667563.51	27.2941	P	2.2
8	☐	1000.000	997.806	1289306.91	54.3968	P	1.1
9	☐			17793.84	0.6710	P	2.9

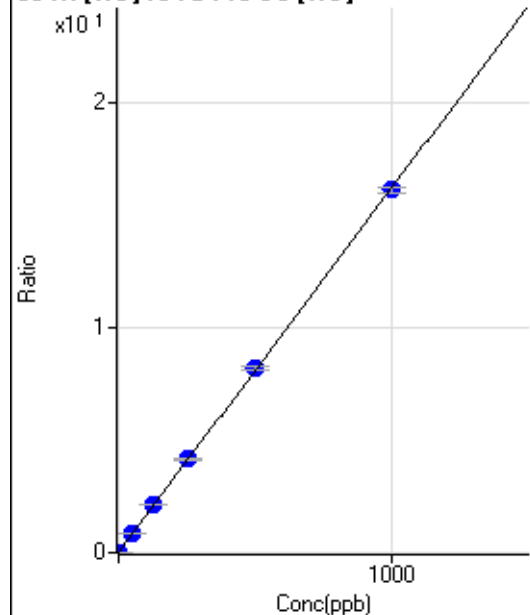
$$y = 0.0545 * x + 0.0029$$

$$R = 1.0000$$

$$DL = 0.03155$$

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	330.01	0.0118	P	5.5
2	☐	0.100	0.174	373.34	0.0146	P	2.6
3	☐	1.000	1.031	788.93	0.0285	P	1.2
4	☐	50.000	52.194	23465.48	0.8562	P	1.7
5	☐	125.000	131.489	54992.62	2.1389	P	2.9
6	☐	250.000	257.261	105919.78	4.1735	P	1.6
7	☐	500.000	503.730	199594.73	8.1606	P	2.1
8	☐	1000.000	995.399	381905.74	16.1142	P	1.4
9	☐			15623.44	0.5891	P	3.0

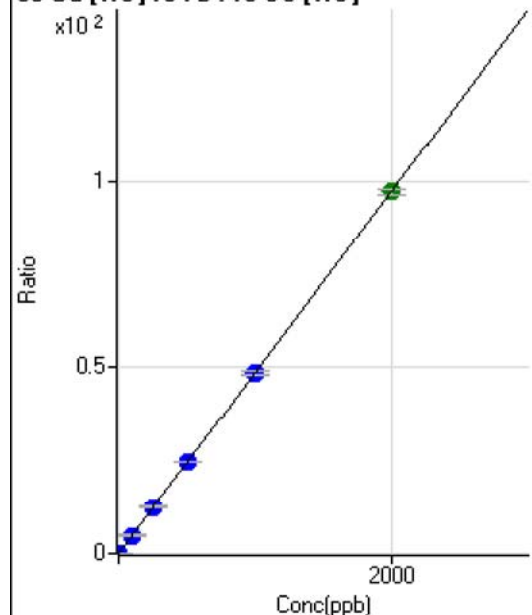
$$y = 0.0162 * x + 0.0118$$

$$R = 0.9999$$

$$DL = 0.1214$$

Weight: <None>

Min Conc: 0

⁶³Cu [He] ISTD: ⁴⁵Sc [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	587.80	0.0211	P	1.8
2	☐	0.200	0.214	803.37	0.0315	P	10.3
3	☐	2.000	1.994	3273.78	0.1182	P	3.3
4	☐	100.000	100.239	134450.16	4.9058	P	0.6
5	☐	250.000	258.272	324168.78	12.6069	P	1.7
6	☐	500.000	507.465	628156.08	24.7503	P	1.4
7	☐	1000.000	994.682	1186081.15	48.4928	P	2.0
8	☐	2000.000	1999.747	2310090.52	97.4705	A	1.4
9	☐			5574.55	0.2102	P	4.0

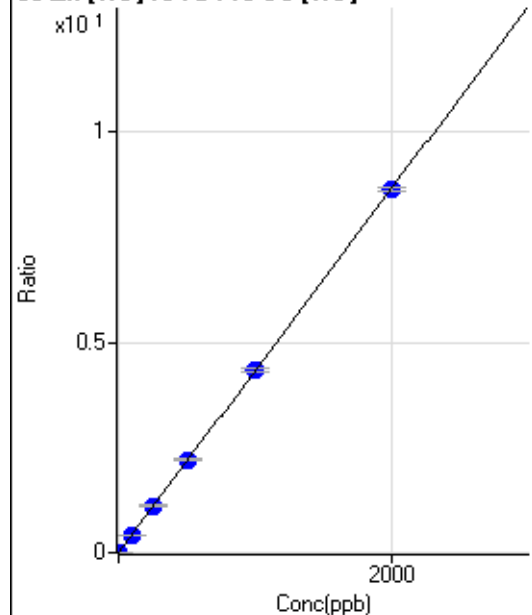
$$y = 0.0487 * x + 0.0211$$

$$R = 1.0000$$

$$DL = 0.02268$$

Weight: <None>

Min Conc: 0

⁶⁶Zn [He] ISTD: ⁴⁵Sc [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	76.67	0.0028	P	31.2
2	☐	0.200	0.170	88.89	0.0035	P	12.9
3	☐	2.000	2.278	348.90	0.0126	P	1.3
4	☐	100.000	99.318	11843.00	0.4321	P	0.3
5	☐	250.000	257.686	28719.94	1.1168	P	0.6
6	☐	500.000	510.780	56111.96	2.2109	P	1.6
7	☐	1000.000	1006.772	106524.77	4.3551	P	1.8
8	☐	2000.000	1992.992	204273.90	8.6187	P	1.2
9	☐			1976.84	0.0745	P	3.8

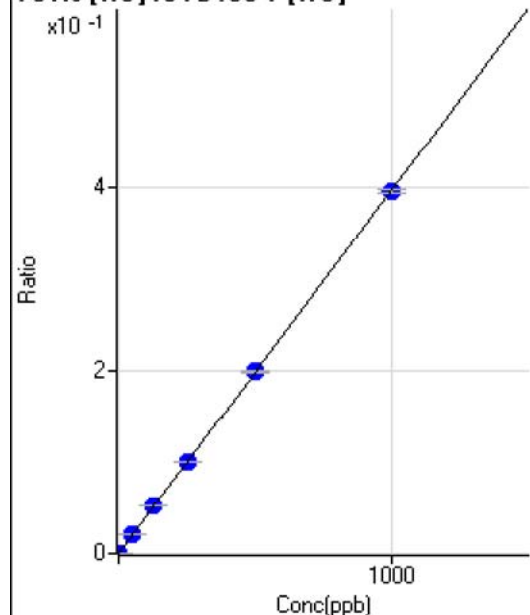
$$y = 0.0043 * x + 0.0028$$

$$R = 1.0000$$

$$DL = 0.5953$$

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	4.94	0.0000	P	44.0
2	☐	0.100	0.096	11.73	0.0001	P	23.3
3	☐	1.000	1.010	83.95	0.0004	P	8.7
4	☐	50.000	52.754	4137.69	0.0209	P	0.3
5	☐	125.000	131.692	9953.66	0.0522	P	2.8
6	☐	250.000	255.338	19264.73	0.1012	P	0.3
7	☐	500.000	500.860	36465.25	0.1985	P	1.3
8	☐	1000.000	997.261	70470.66	0.3952	P	1.2
9	☐			138.27	0.0007	P	10.9

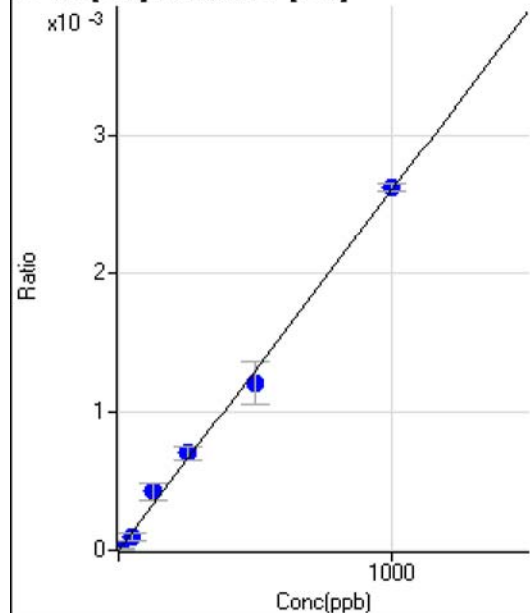
$$y = 3.9626\text{E-}004 * x + 2.4838\text{E-}005$$

$$R = 1.0000$$

$$DL = 0.08282$$

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	2.286	1.11	0.0000	P	173.
3	☐	5.000	4.336	2.22	0.0000	P	86.6
4	☐	50.000	38.872	20.00	0.0001	P	49.5
5	☐	125.000	164.537	81.11	0.0004	P	29.1
6	☐	250.000	269.784	133.34	0.0007	P	13.1
7	☐	500.000	465.727	222.23	0.0012	P	25.2
8	☐	1000.000	1007.807	466.68	0.0026	P	2.1
9	☐			1.11	0.0000	P	173.

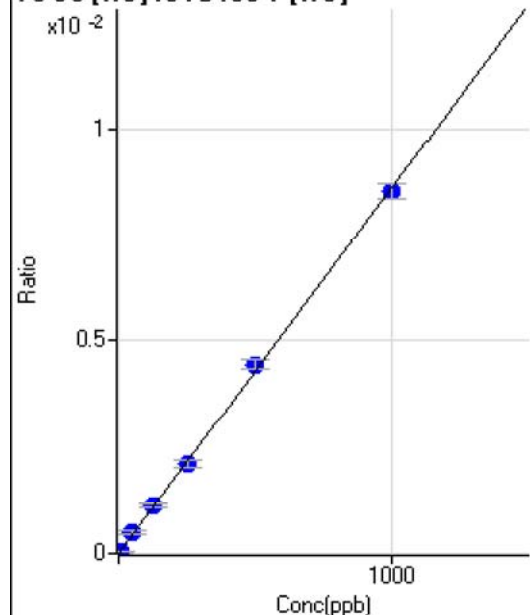
$$y = 2.5963\text{E-}006 * x + 0.0000\text{E+}000$$

$$R = 0.9981$$

$$DL = 0$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	0.00	0.0000	P	
2	☐	0.500	0.772	1.23	0.0000	P	86.6
3	☐	5.000	5.087	8.64	0.0000	P	24.5
4	☐	50.000	56.620	96.30	0.0005	P	18.3
5	☐	125.000	131.966	216.67	0.0011	P	6.1
6	☐	250.000	246.966	404.33	0.0021	P	7.7
7	☐	500.000	516.607	816.70	0.0044	P	5.6
8	☐	1000.000	991.252	1519.24	0.0085	P	4.3
9	☐			1.23	0.0000	P	86.6

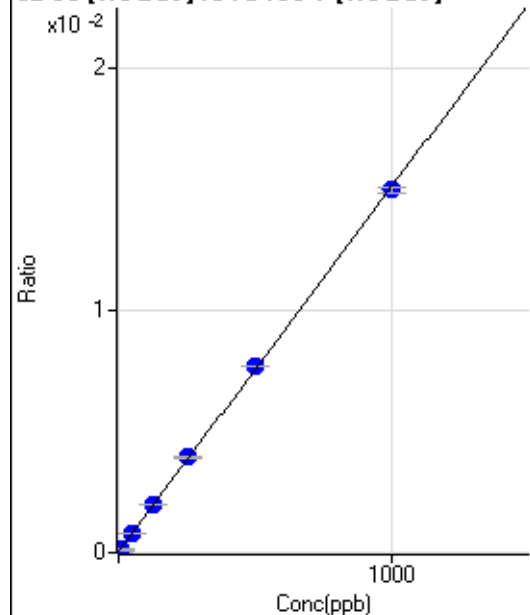
$$y = 8.6036\text{E-}006 * x + 0.0000\text{E+}000$$

$$R = 0.9998$$

$$DL = 0$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	312.55	0.0000	P	9.2
2	☐	0.500	0.499	336.37	0.0000	P	9.8
3	☐	5.000	5.288	922.95	0.0001	P	3.5
4	☐	50.000	51.653	6375.23	0.0008	P	1.1
5	☐	125.000	130.041	15675.36	0.0020	P	2.0
6	☐	250.000	259.634	30452.94	0.0039	P	1.7
7	☐	500.000	509.775	60074.69	0.0077	P	0.4
8	☐	1000.000	991.990	118055.59	0.0150	P	1.9
9	☐			409.47	0.0001	P	6.2

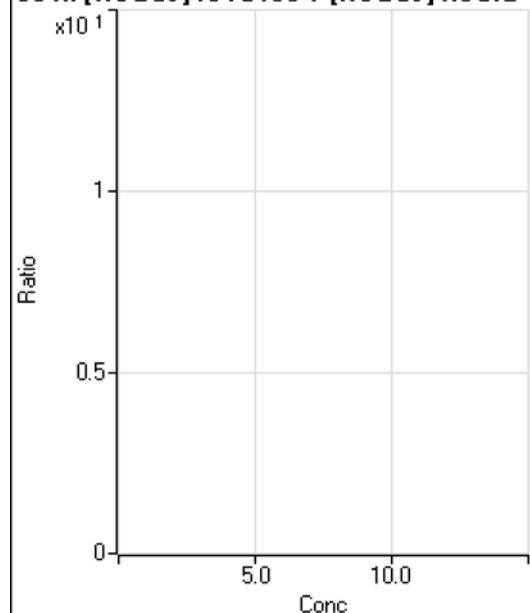
$$y = 1.5042\text{E-}005 * x + 3.9950\text{E-}005$$

$$R = 0.9999$$

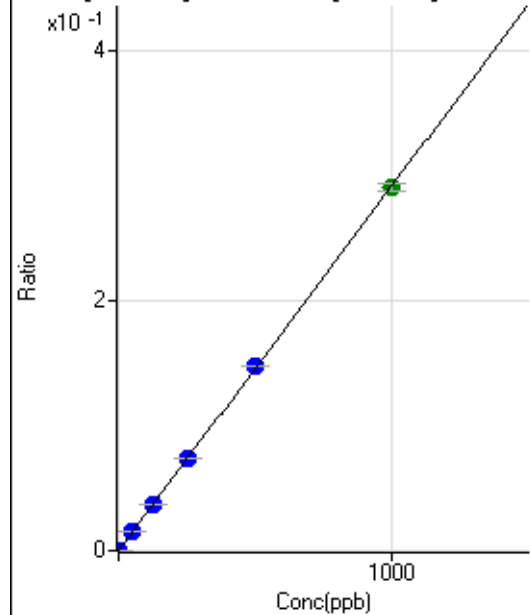
$$DL = 0.7306$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			361.12	0.0000	P	9.2
2	☐			406.68	0.0001	P	3.6
3	☐			356.68	0.0000	P	14.1
4	☐			401.12	0.0001	P	13.8
5	☐			384.46	0.0000	P	8.6
6	☐			385.57	0.0000	P	1.5
7	☐			356.68	0.0000	P	19.5
8	☐			353.34	0.0000	P	8.6
9	☐			388.90	0.0000	P	3.4

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	552.82	0.0001	P	14.7
2	☐	0.100	0.155	819.51	0.0001	P	10.1
3	☐	1.000	1.047	2897.67	0.0004	P	6.4
4	☐	50.000	51.300	117023.70	0.0150	P	1.2
5	☐	125.000	126.774	290193.78	0.0370	P	1.8
6	☐	250.000	253.743	570368.27	0.0739	P	1.4
7	☐	500.000	505.779	1147367.92	0.1472	P	0.4
8	☐	1000.000	995.888	2286644.11	0.2898	A	2.1
9	☐			11505.36	0.0015	P	2.6

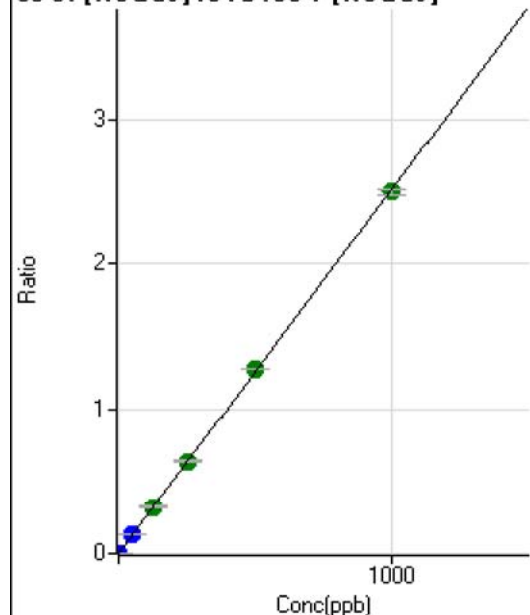
$$y = 2.9092\text{E-}004 * x + 7.0651\text{E-}005$$

$$R = 1.0000$$

$$DL = 0.1072$$

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	227.79	0.0000	P	4.1
2	☐	0.100	0.099	1978.02	0.0003	P	7.9
3	☐	1.000	1.004	19703.93	0.0026	P	5.6
4	☐	50.000	51.445	1009257.89	0.1293	P	0.4
5	☐	125.000	128.405	2534535.84	0.3227	A	2.2
6	☐	250.000	255.774	4962171.85	0.6429	A	1.6
7	☐	500.000	505.646	9905094.84	1.2709	A	0.1
8	☐	1000.000	995.236	19738080.65	2.5013	A	1.7
9	☐			93178.68	0.0119	P	1.8

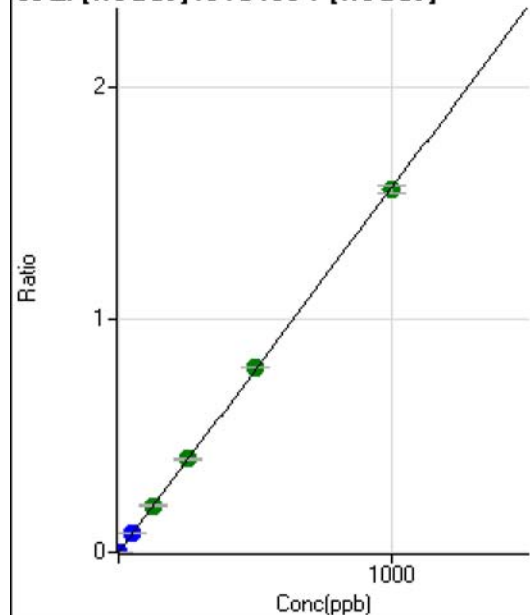
$$y = 0.0025 * x + 2.9117E-005$$

$$R = 1.0000$$

$$DL = 0.001428$$

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	619.49	0.0001	P	5.5
2	☐	0.100	0.090	1566.84	0.0002	P	4.4
3	☐	1.000	0.933	11914.03	0.0015	P	0.5
4	☐	50.000	50.545	619171.69	0.0793	P	0.5
5	☐	125.000	128.804	1586820.00	0.2021	A	2.2
6	☐	250.000	256.877	3110068.54	0.4029	A	1.4
7	☐	500.000	505.181	6175064.59	0.7923	A	0.2
8	☐	1000.000	995.187	12314644.89	1.5607	A	2.3
9	☐			4048.01	0.0005	P	5.4

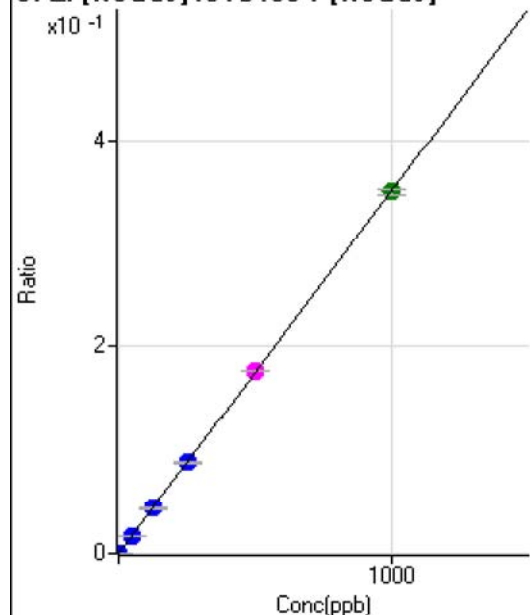
$$y = 0.0016 * x + 7.9187E-005$$

$$R = 0.9999$$

$$DL = 0.008266$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	130.56	0.0000	P	51.7
2	☐	0.100	0.090	341.69	0.0000	P	6.5
3	☐	1.000	0.925	2639.27	0.0003	P	8.2
4	☐	50.000	49.692	136435.66	0.0175	P	0.8
5	☐	125.000	125.237	345807.88	0.0440	P	2.8
6	☐	250.000	252.323	684727.54	0.0887	P	1.5
7	☐	500.000	501.711	1374588.64	0.1764	M	0.1
8	☐	1000.000	998.549	2769731.75	0.3510	A	1.8
9	☐			861.18	0.0001	P	5.0

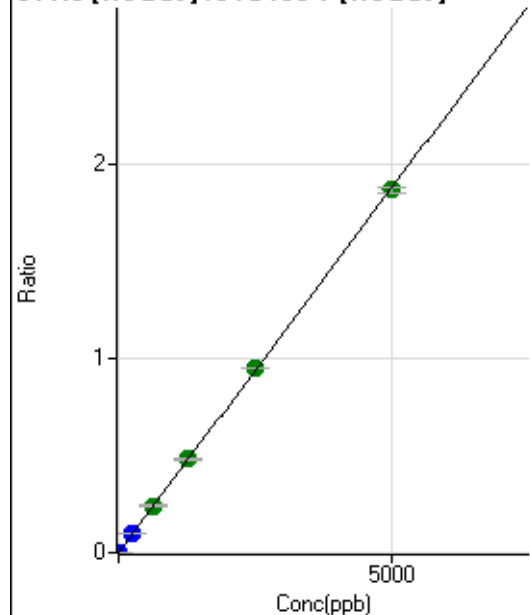
$$y = 3.5149\text{E-}004 * x + 1.6696\text{E-}005$$

$$R = 1.0000$$

$$DL = 0.07373$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	338.91	0.0000	P	7.8
2	☐	0.500	0.461	1533.50	0.0002	P	5.9
3	☐	5.000	4.803	14244.15	0.0018	P	4.3
4	☐	250.000	253.280	741609.08	0.0950	P	0.6
5	☐	625.000	639.469	1883611.74	0.2399	A	2.4
6	☐	1250.000	1281.994	3711486.28	0.4808	A	1.6
7	☐	2500.000	2527.080	7386933.24	0.9478	A	0.3
8	☐	5000.000	4976.489	14727473.42	1.8664	A	1.8
9	☐			21732.10	0.0028	P	3.6

$$y = 3.7503\text{E-}004 * x + 4.3320\text{E-}005$$

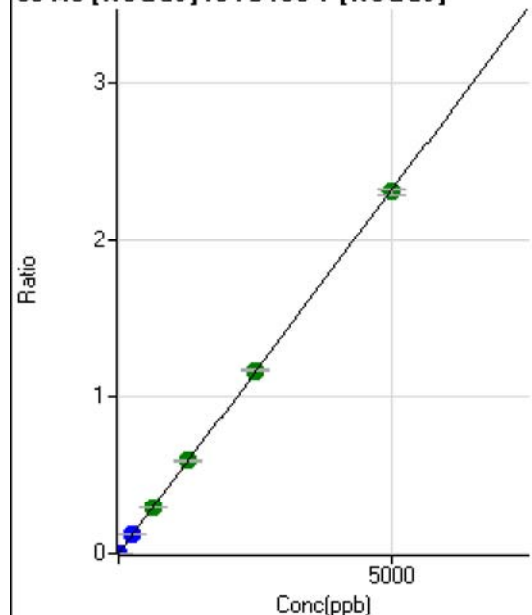
$$R = 1.0000$$

$$DL = 0.02718$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	177.79	0.0000	P	60.0
2	☐	0.500	0.463	1683.52	0.0002	P	4.5
3	☐	5.000	5.076	18340.90	0.0024	P	4.7
4	☐	250.000	252.908	914861.92	0.1172	P	0.3
5	☐	625.000	638.892	2325455.26	0.2961	A	1.8
6	☐	1250.000	1280.759	4581932.87	0.5936	A	1.4
7	☐	2500.000	2517.260	9092619.82	1.1666	A	0.8
8	☐	5000.000	4981.798	18218174.02	2.3088	A	1.9
9	☐			35706.36	0.0046	P	4.5

$$y = 4.6344\text{E-}004 * x + 2.2744\text{E-}005$$

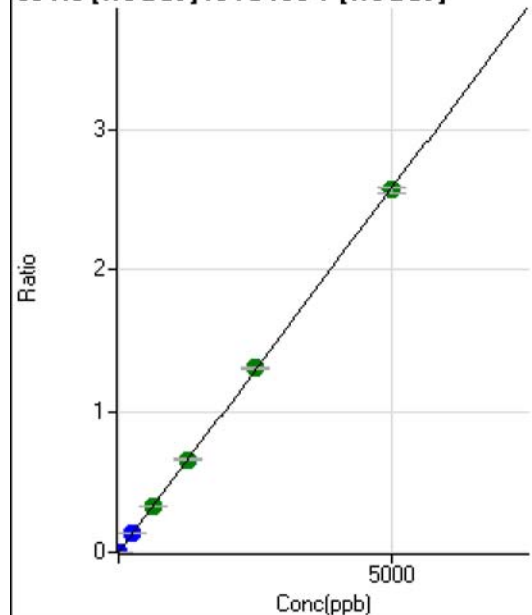
$$R = 1.0000$$

$$DL = 0.08828$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	247.24	0.0000	P	10.0
2	☐	0.500	0.500	2053.04	0.0003	P	3.3
3	☐	5.000	4.974	20074.01	0.0026	P	3.5
4	☐	250.000	252.984	1019187.72	0.1306	P	0.9
5	☐	625.000	639.758	2593330.31	0.3302	A	1.9
6	☐	1250.000	1276.225	5084547.38	0.6587	A	1.6
7	☐	2500.000	2522.449	10147070.28	1.3019	A	0.4
8	☐	5000.000	4980.225	20282684.13	2.5704	A	1.8
9	☐			41024.48	0.0052	P	3.8

$$y = 5.1611\text{E-}004 * x + 3.1596\text{E-}005$$

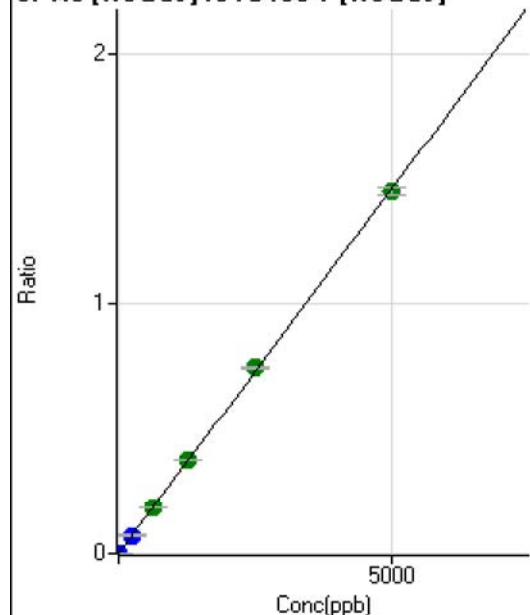
$$R = 1.0000$$

$$DL = 0.01831$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	152.79	0.0000	P	15.6
2	☐	0.500	0.525	1225.12	0.0002	P	4.0
3	☐	5.000	5.000	11424.74	0.0015	P	3.6
4	☐	250.000	249.898	569424.46	0.0730	P	0.9
5	☐	625.000	636.165	1458535.91	0.1857	A	1.9
6	☐	1250.000	1293.858	2915667.04	0.3777	A	1.0
7	☐	2500.000	2541.813	5783142.92	0.7420	A	0.2
8	☐	5000.000	4966.739	11440070.05	1.4499	A	2.3
9	☐			22065.93	0.0028	P	3.0

$$y = 2.9191\text{E-}004 * x + 1.9527\text{E-}005$$

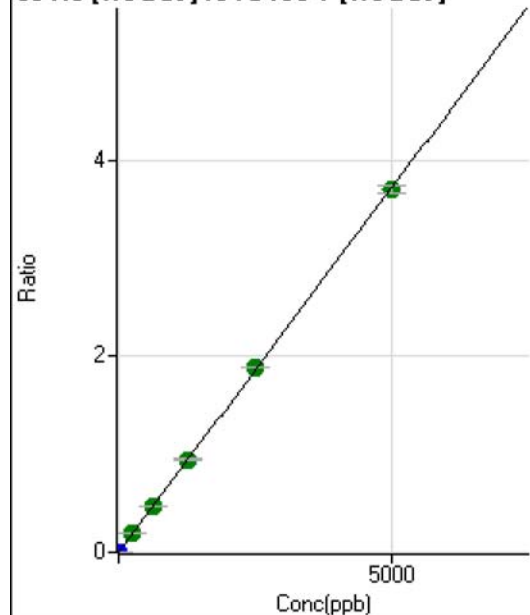
$$R = 0.9999$$

$$DL = 0.03137$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	291.68	0.0000	P	18.8
2	☐	0.500	0.469	2728.17	0.0004	P	2.4
3	☐	5.000	5.001	28948.49	0.0037	P	3.2
4	☐	250.000	252.547	1462377.25	0.1874	A	1.2
5	☐	625.000	636.261	3707237.54	0.4721	A	2.0
6	☐	1250.000	1274.234	7297215.09	0.9453	A	1.5
7	☐	2500.000	2534.813	14656850.15	1.8805	A	0.2
8	☐	5000.000	4975.000	29123141.97	3.6908	A	2.0
9	☐			57788.19	0.0074	P	1.8

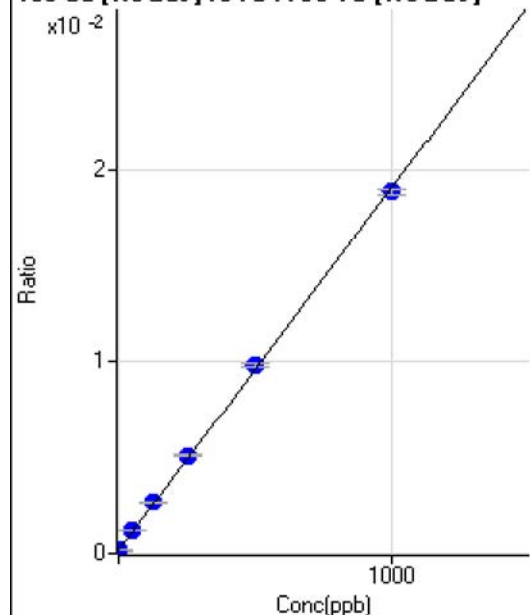
$$y = 7.4187\text{E-}004 * x + 3.7285\text{E-}005$$

$$R = 1.0000$$

$$DL = 0.02831$$

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	1602.95	0.0002	P	12.4
2	☐	0.100	0.971	1614.07	0.0002	P	6.6
3	☐	1.000	2.156	1972.47	0.0002	P	6.5
4	☐	50.000	53.683	11986.42	0.0012	P	2.7
5	☐	125.000	133.474	27632.17	0.0027	P	3.2
6	☐	250.000	263.993	53830.51	0.0052	P	0.2
7	☐	500.000	510.213	105023.77	0.0098	P	2.0
8	☐	1000.000	990.151	205076.15	0.0189	P	1.7
9	☐			1858.54	0.0002	P	3.9

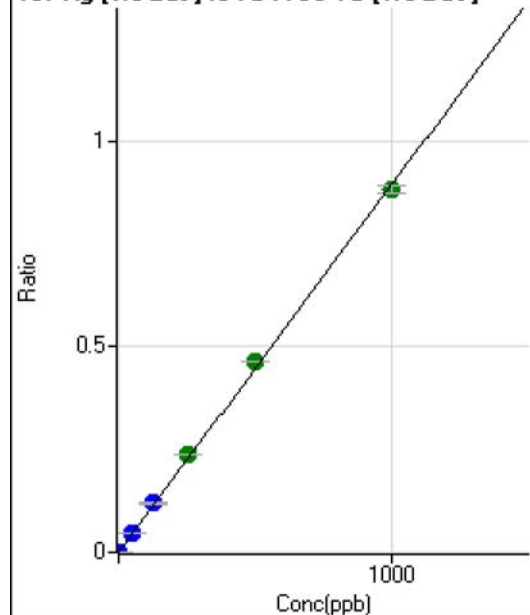
$$y = 1.8929\text{E-}005 * x + 1.5759\text{E-}004$$

$$R = 0.9998$$

$$DL = 3.109$$

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	94.45	0.0000	P	40.1
2	☐	0.100	0.101	913.97	0.0001	P	14.6
3	☐	1.000	1.070	9595.43	0.0010	P	1.7
4	☐	50.000	54.001	493115.04	0.0483	P	0.1
5	☐	125.000	134.109	1234602.05	0.1199	P	2.2
6	☐	250.000	266.447	2487433.28	0.2382	A	1.1
7	☐	500.000	516.062	4936717.43	0.4614	A	0.3
8	☐	1000.000	986.519	9568962.54	0.8820	A	2.2
9	☐			1450.15	0.0001	P	16.2

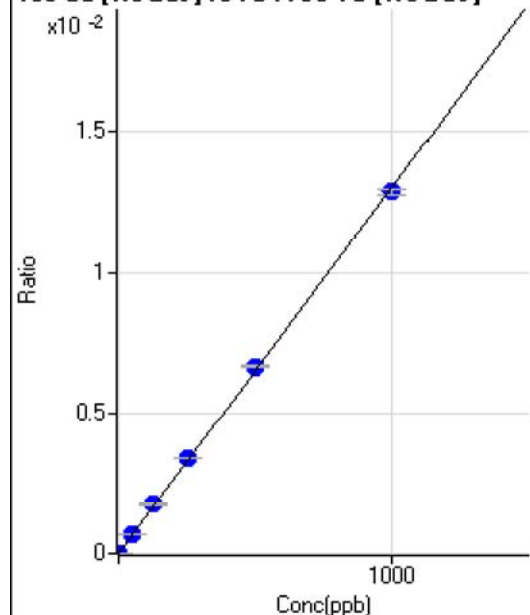
$$y = 8.9400\text{E-}004 * x + 9.2934\text{E-}006$$

$$R = 0.9996$$

$$DL = 0.0125$$

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	8.33	0.0000	P	173.
2	☐	0.100	0.123	22.22	0.0000	P	76.3
3	☐	1.000	1.016	138.89	0.0000	P	28.1
4	☐	50.000	53.254	7081.16	0.0007	P	2.6
5	☐	125.000	134.248	17978.91	0.0017	P	3.9
6	☐	250.000	262.069	35598.55	0.0034	P	1.5
7	☐	500.000	510.872	71096.06	0.0066	P	1.3
8	☐	1000.000	990.228	139736.84	0.0129	P	1.6
9	☐			66.67	0.0000	P	18.0

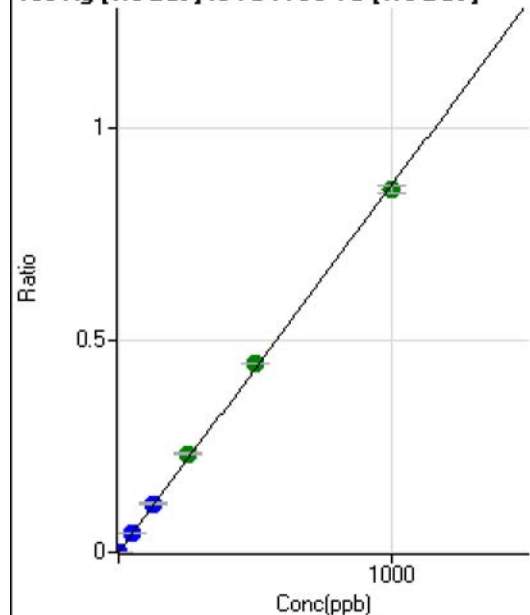
$$y = 1.3005\text{E-}005 * x + 8.2258\text{E-}007$$

$$R = 0.9998$$

$$DL = 0.3287$$

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	52.78	0.0000	P	24.4
2	☐	0.100	0.115	963.97	0.0001	P	9.8
3	☐	1.000	1.035	8958.91	0.0009	P	1.2
4	☐	50.000	53.351	471760.91	0.0462	P	1.1
5	☐	125.000	132.602	1182050.09	0.1148	P	2.6
6	☐	250.000	267.643	2419629.87	0.2317	A	1.6
7	☐	500.000	513.154	4753860.30	0.4443	A	0.3
8	☐	1000.000	987.895	9279889.96	0.8553	A	2.1
9	☐			1341.80	0.0001	P	9.6

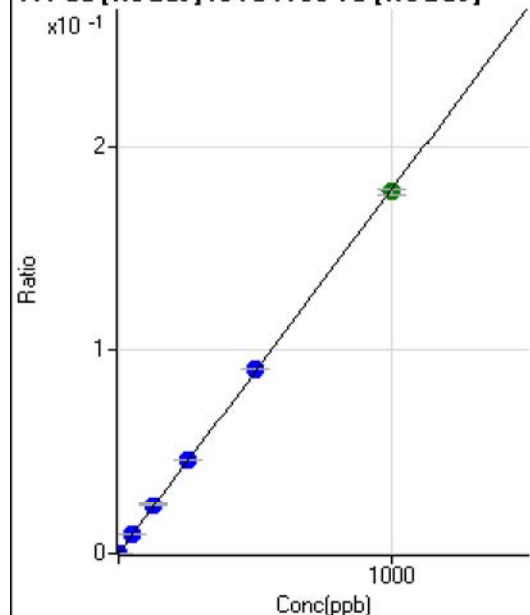
$$y = 8.6577\text{E-}004 * x + 5.1920\text{E-}006$$

$$R = 0.9997$$

$$DL = 0.004398$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	650.63	0.0001	P	13.1
2	☐	0.100	0.120	782.86	0.0001	P	6.1
3	☐	1.000	1.084	2561.39	0.0003	P	1.0
4	☐	50.000	52.568	96653.63	0.0095	P	0.6
5	☐	125.000	131.876	243415.38	0.0236	P	3.6
6	☐	250.000	258.444	483258.81	0.0463	P	1.1
7	☐	500.000	504.643	966289.15	0.0903	P	0.5
8	☐	1000.000	994.580	1930438.57	0.1779	A	1.9
9	☐			1239.83	0.0001	P	7.3

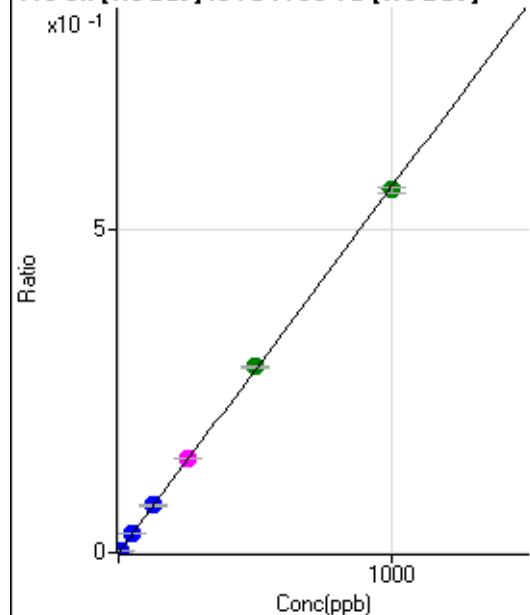
$$y = 1.7882\text{E-}004 * x + 6.3966\text{E-}005$$

$$R = 0.9999$$

$$DL = 0.1411$$

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	941.75	0.0001	P	9.5
2	☐	0.500	0.541	3650.66	0.0004	P	2.9
3	☐	5.000	5.292	30571.99	0.0031	P	1.4
4	☐	50.000	52.146	301253.22	0.0295	P	0.4
5	☐	125.000	130.121	756380.27	0.0735	P	3.0
6	☐	250.000	258.255	1521737.33	0.1457	M	1.0
7	☐	500.000	509.070	3072703.28	0.2872	A	0.6
8	☐	1000.000	992.652	6074571.19	0.5599	A	1.9
9	☐			16483.12	0.0016	P	3.2

$$y = 5.6391\text{E-}004 * x + 9.2607\text{E-}005$$

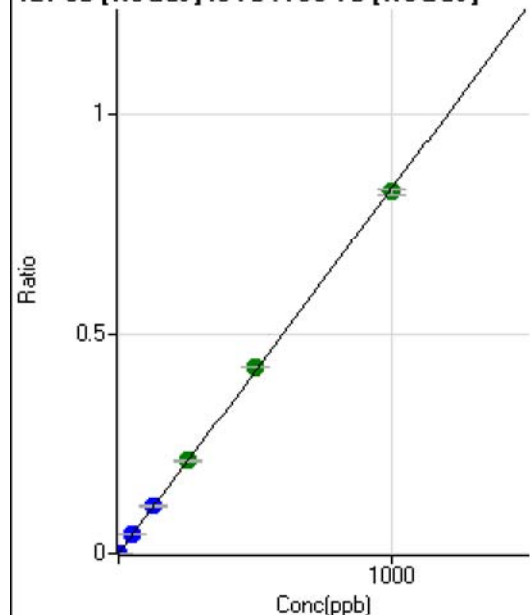
$$R = 0.9999$$

$$DL = 0.04697$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	238.90	0.0000	P	14.8
2	☐	0.200	0.219	1880.78	0.0002	P	3.3
3	☐	2.000	2.077	17353.67	0.0017	P	4.1
4	☐	50.000	51.043	433045.19	0.0424	P	1.0
5	☐	125.000	129.553	1107560.22	0.1076	P	3.3
6	☐	250.000	257.528	2232799.42	0.2138	A	1.9
7	☐	500.000	509.911	4530281.40	0.4234	A	0.3
8	☐	1000.000	992.541	8941634.23	0.8241	A	1.8
9	☐			25074.26	0.0024	P	5.4

$$y = 8.3027\text{E-}004 * x + 2.3497\text{E-}005$$

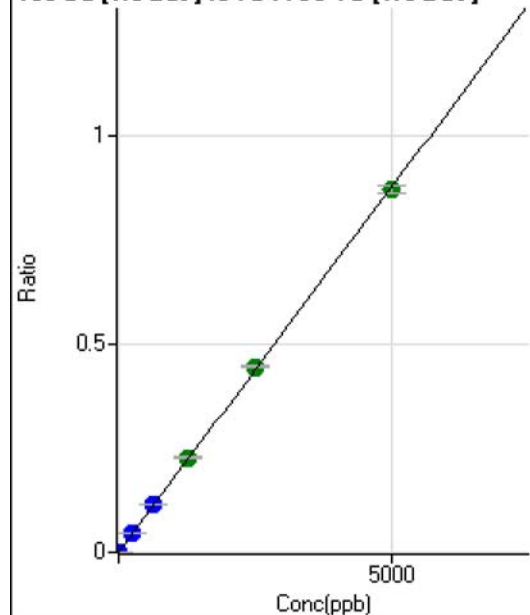
$$R = 0.9999$$

$$DL = 0.01257$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	36.11	0.0000	P	13.7
2	☐	1.000	0.955	1566.84	0.0002	P	6.8
3	☐	10.000	10.459	18221.68	0.0018	P	4.8
4	☐	250.000	260.955	466752.22	0.0457	P	0.6
5	☐	625.000	656.334	1183473.33	0.1149	P	2.6
6	☐	1250.000	1295.687	2369435.27	0.2269	A	1.3
7	☐	2500.000	2537.959	4755895.12	0.4445	A	0.6
8	☐	5000.000	4965.133	9434532.94	0.8695	A	2.0
9	☐			2586.50	0.0002	P	6.8

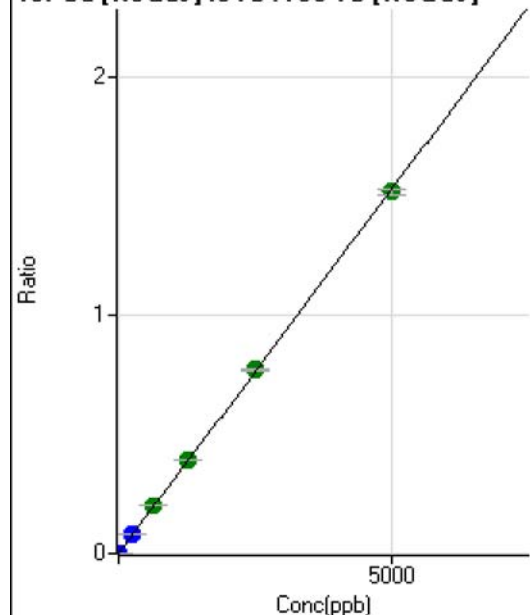
$$y = 1.7513\text{E-}004 * x + 3.5516\text{E-}006$$

$$R = 0.9999$$

$$DL = 0.008332$$

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	66.67	0.0000	P	45.4
2	☐	1.000	1.016	2917.13	0.0003	P	5.7
3	☐	10.000	10.307	31452.25	0.0032	P	3.0
4	☐	250.000	260.933	817134.47	0.0800	P	0.3
5	☐	625.000	661.530	2088487.35	0.2028	A	2.5
6	☐	1250.000	1292.810	4139519.67	0.3964	A	0.9
7	☐	2500.000	2525.233	8285035.08	0.7743	A	0.9
8	☐	5000.000	4971.567	16539682.14	1.5244	A	1.9
9	☐			4367.62	0.0004	P	10.9

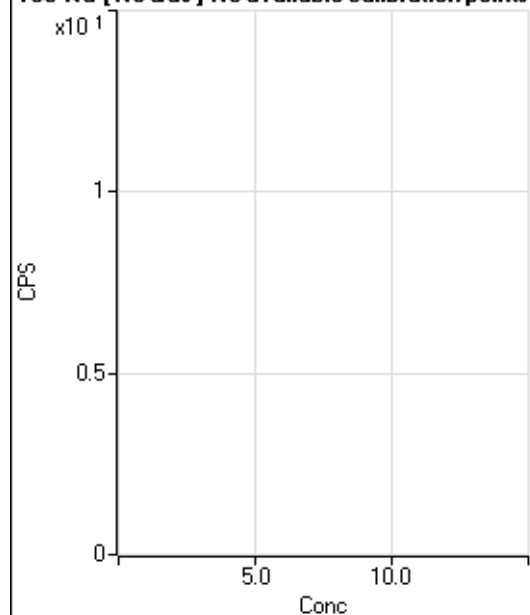
$$y = 3.0662\text{E-}004 * x + 6.5613\text{E-}006$$

$$R = 0.9999$$

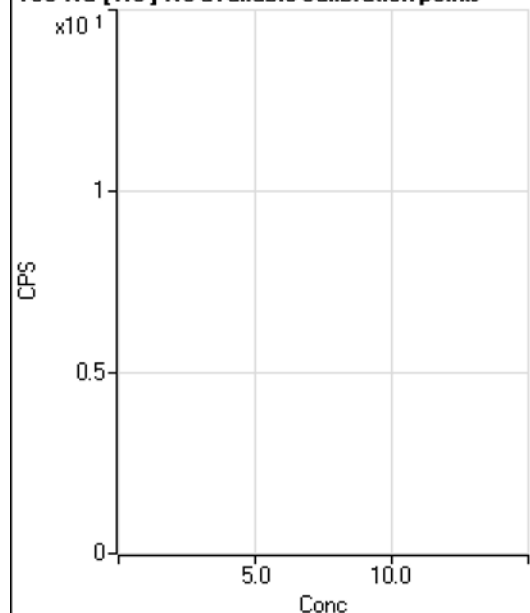
$$DL = 0.02915$$

Weight: <None>

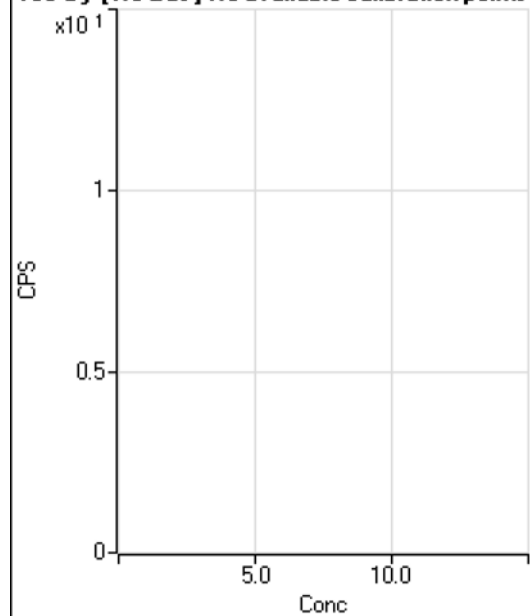
Min Conc: 0

150 Nd [No Gas] No available calibration points

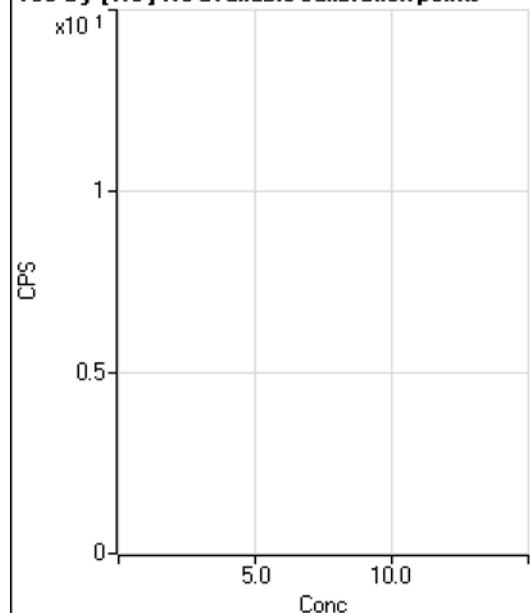
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			17.78		P	57.3
2	☐			11.11		P	69.3
3	☐			11.11		P	69.3
4	☐			37.78		P	27.0
5	☐			62.22		P	27.0
6	☐			102.22		P	22.9
7	☐			195.57		P	16.1
8	☐			415.58		P	18.7
9	☐			122.23		P	15.7

150 Nd [He] No available calibration points

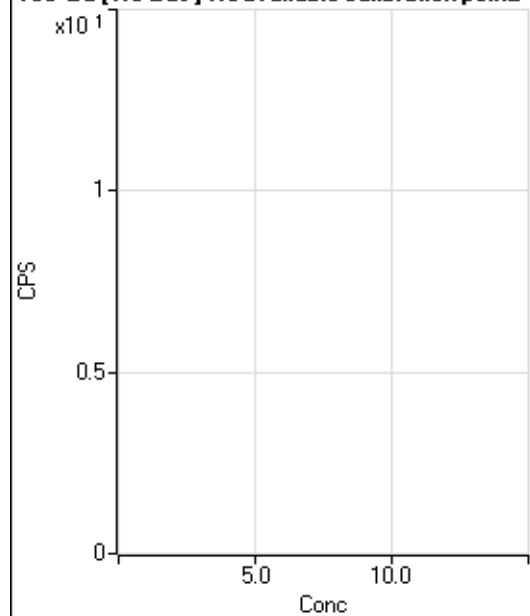
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			1.11		P	173.
2	☐			0.00		P	
3	☐			0.00		P	
4	☐			0.00		P	
5	☐			1.11		P	173.
6	☐			4.45		P	86.6
7	☐			4.44		P	43.4
8	☐			5.55		P	124.
9	☐			10.00		P	33.3

156 Dy [No Gas] No available calibration points

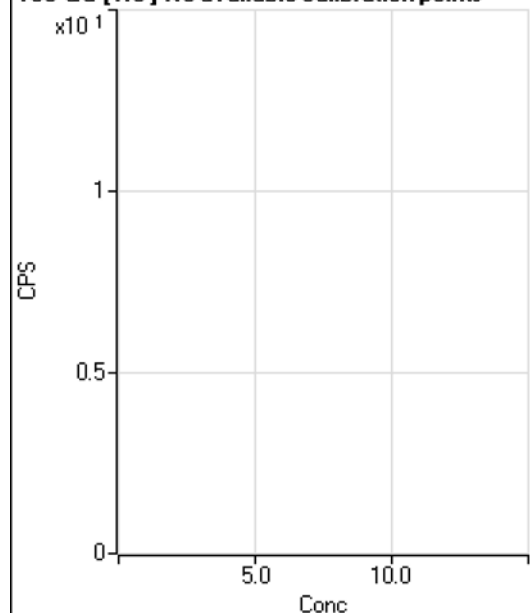
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			25.00		P	33.3
2	☐			8.33		P	100.
3	☐			27.78		P	96.4
4	☐			30.56		P	41.7
5	☐			27.78		P	45.8
6	☐			52.78		P	63.8
7	☐			69.45		P	30.2
8	☐			108.34		P	15.4
9	☐			125.01		P	13.3

156 Dy [He] No available calibration points

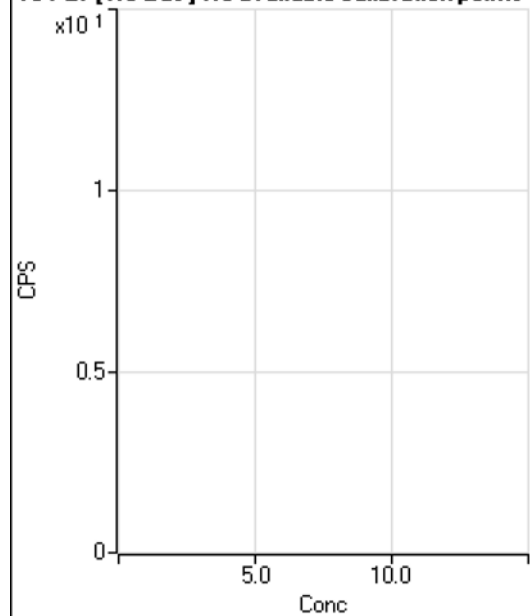
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			0.00		P	
2	☐			0.00		P	
3	☐			1.11		P	173.
4	☐			2.22		P	86.6
5	☐			1.11		P	173.
6	☐			5.56		P	34.7
7	☐			7.78		P	49.5
8	☐			7.78		P	24.7
9	☐			17.78		P	39.0

160 Gd [No Gas] No available calibration poin_

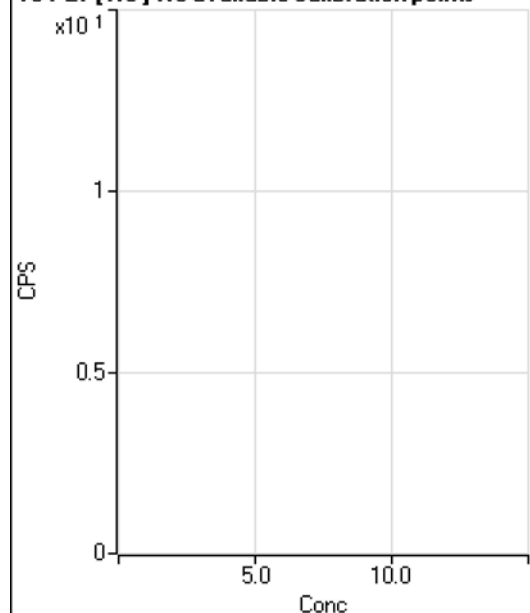
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			75.01		P	40.1
2	☐			83.34		P	60.8
3	☐			52.78		P	39.7
4	☐			61.12		P	34.3
5	☐			75.00		P	0.0
6	☐			80.56		P	39.2
7	☐			97.23		P	4.9
8	☐			119.45		P	4.0
9	☐			147.23		P	47.1

160 Gd [He] No available calibration points

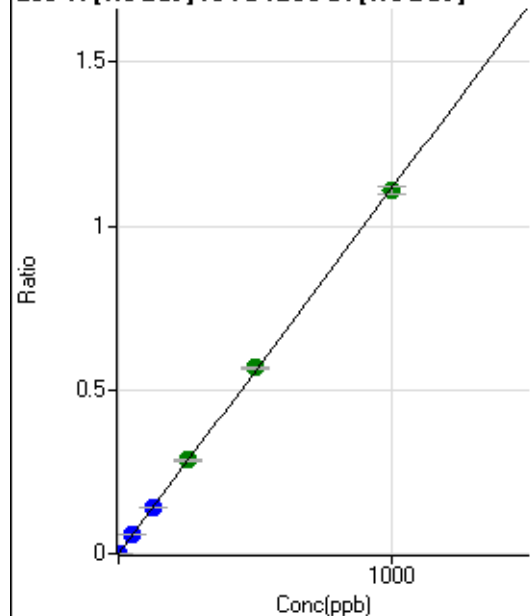
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			8.89		P	57.3
2	☐			5.56		P	34.7
3	☐			1.11		P	173.
4	☐			3.33		P	100.
5	☐			7.78		P	65.5
6	☐			10.00		P	33.3
7	☐			8.89		P	78.1
8	☐			15.56		P	12.4
9	☐			28.89		P	17.6

164 Er [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			47.23		P	20.4
2	☐			27.78		P	69.3
3	☐			50.00		P	28.9
4	☐			27.78		P	45.8
5	☐			33.33		P	25.0
6	☐			69.45		P	38.6
7	☐			47.23		P	27.0
8	☐			58.34		P	14.3
9	☐			66.67		P	21.6

164 Er [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			5.55		P	69.3
2	☐			4.45		P	86.6
3	☐			11.11		P	17.3
4	☐			3.33		P	173.
5	☐			4.44		P	43.4
6	☐			7.78		P	24.7
7	☐			6.67		P	50.0
8	☐			12.22		P	41.7
9	☐			12.22		P	56.8

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	147.23	0.0000	P	14.3
2	☐	0.100	0.092	750.06	0.0001	P	19.7
3	☐	1.000	1.002	7447.01	0.0011	P	2.3
4	☐	50.000	50.439	371788.44	0.0562	P	0.1
5	☐	125.000	126.715	955431.27	0.1412	P	3.4
6	☐	250.000	255.910	1952169.12	0.2851	A	1.4
7	☐	500.000	508.562	3992027.39	0.5666	A	1.3
8	☐	1000.000	994.005	7856505.56	1.1074	A	2.3
9	☐			5495.86	0.0008	P	5.6

$$y = 0.0011 * x + 2.1700E-005$$

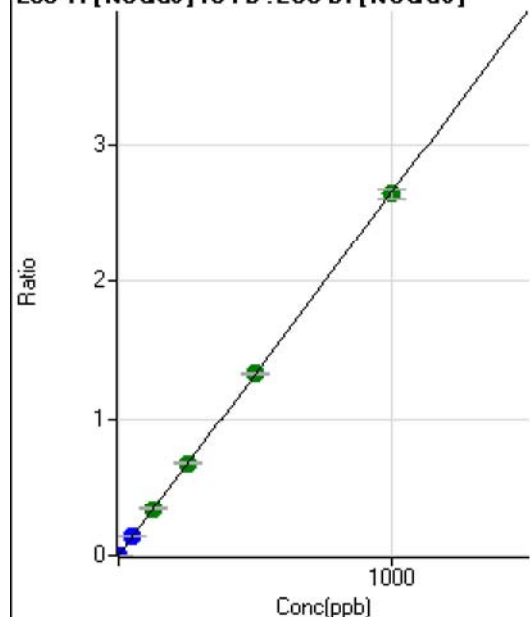
$$R = 0.9999$$

$$DL = 0.008356$$

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	272.24	0.0000	P	9.4
2	☐	0.100	0.105	1925.24	0.0003	P	7.1
3	☐	1.000	1.011	17802.13	0.0027	P	4.7
4	☐	50.000	50.648	888954.13	0.1344	P	0.5
5	☐	125.000	128.722	2310942.50	0.3416	A	3.9
6	☐	250.000	254.567	4624283.00	0.6754	A	1.5
7	☐	500.000	501.435	9373139.96	1.3304	A	1.4
8	☐	1000.000	997.643	18777222.99	2.6469	A	2.4
9	☐			13007.22	0.0020	P	4.8

$$y = 0.0027 * x + 4.0123E-005$$

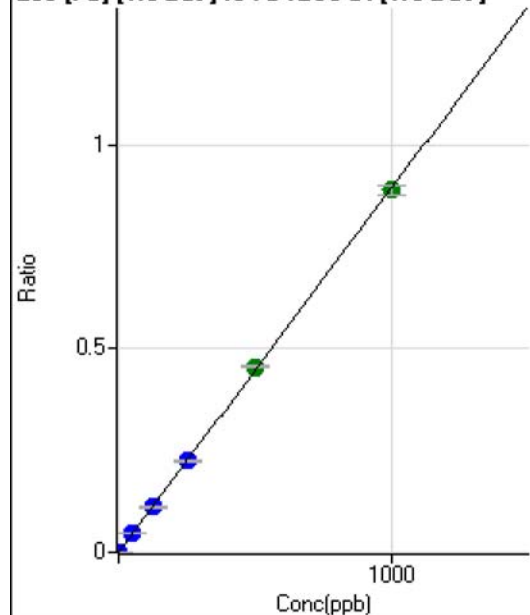
$$R = 1.0000$$

$$DL = 0.004267$$

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	388.91	0.0001	P	13.8
2	☐	0.100	0.138	1090.82	0.0002	P	7.6
3	☐	1.000	1.031	6405.51	0.0010	P	4.5
4	☐	50.000	50.776	300814.18	0.0455	P	0.5
5	☐	125.000	125.985	763116.59	0.1128	P	3.3
6	☐	250.000	252.237	1545377.52	0.2257	P	1.6
7	☐	500.000	508.212	3203721.22	0.4547	A	1.6
8	☐	1000.000	995.173	6316322.19	0.8904	A	2.6
9	☐			35958.68	0.0056	P	1.4

$$y = 8.9466E-004 * x + 5.7316E-005$$

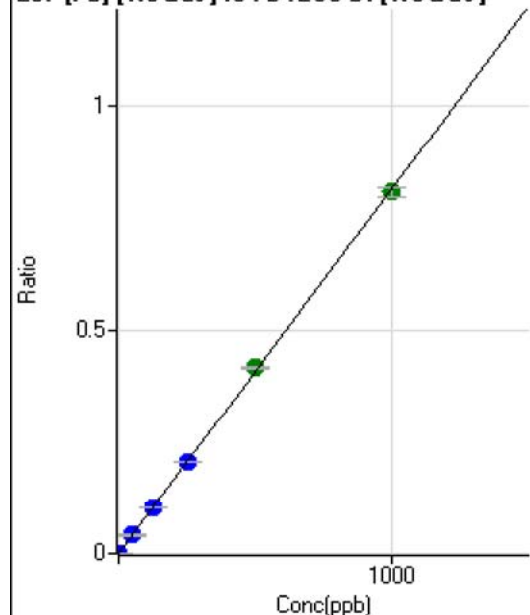
$$R = 0.9999$$

$$DL = 0.02651$$

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	344.46	0.0001	P	19.6
2	☐	0.100	0.122	905.62	0.0002	P	12.6
3	☐	1.000	1.032	5827.44	0.0009	P	6.6
4	☐	50.000	50.119	270505.96	0.0409	P	0.7
5	☐	125.000	125.893	694748.87	0.1027	P	3.2
6	☐	250.000	252.890	1411511.35	0.2062	P	2.0
7	☐	500.000	509.962	2928955.85	0.4157	A	0.9
8	☐	1000.000	994.179	5749073.28	0.8104	A	2.4
9	☐			30583.70	0.0047	P	2.6

$$y = 8.1509\text{E-}004 * x + 5.0765\text{E-}005$$

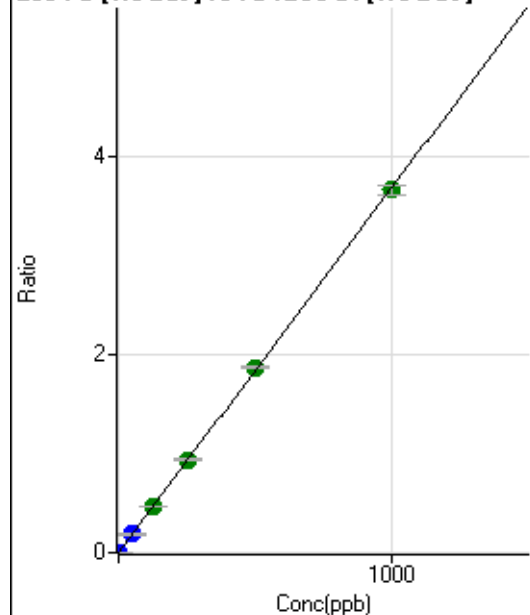
$$R = 0.9999$$

$$DL = 0.03669$$

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	1501.93	0.0002	P	7.3
2	☐	0.100	0.127	4150.40	0.0007	P	7.9
3	☐	1.000	1.028	26140.92	0.0040	P	5.0
4	☐	50.000	50.135	1220027.27	0.1845	P	0.5
5	☐	125.000	126.622	3150080.96	0.4656	A	3.9
6	☐	250.000	254.871	6414089.09	0.9369	A	2.1
7	☐	500.000	506.683	13121061.96	1.8623	A	1.2
8	☐	1000.000	995.231	25949136.05	3.6578	A	2.4
9	☐			141511.29	0.0219	P	2.3

$$y = 0.0037 * x + 2.2135\text{E-}004$$

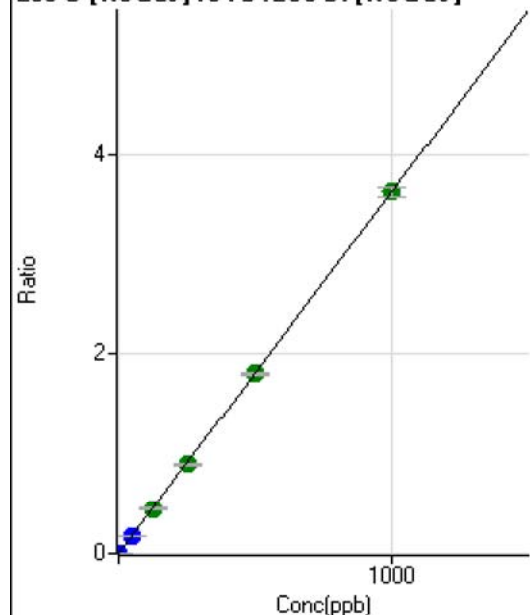
$$R = 1.0000$$

$$DL = 0.01312$$

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	125.01	0.0000	P	24.1
2	☐	0.100	0.101	2322.57	0.0004	P	4.1
3	☐	1.000	1.002	23809.85	0.0036	P	4.4
4	☐	50.000	48.806	1167230.96	0.1765	P	0.5
5	☐	125.000	124.709	3051523.25	0.4509	A	3.3
6	☐	250.000	248.851	6160181.04	0.8998	A	1.9
7	☐	500.000	497.543	12675490.13	1.7990	A	0.6
8	☐	1000.000	1001.612	25691923.32	3.6217	A	2.5
9	☐			4048.07	0.0006	P	5.7

$$y = 0.0036 * x + 1.8424E-005$$

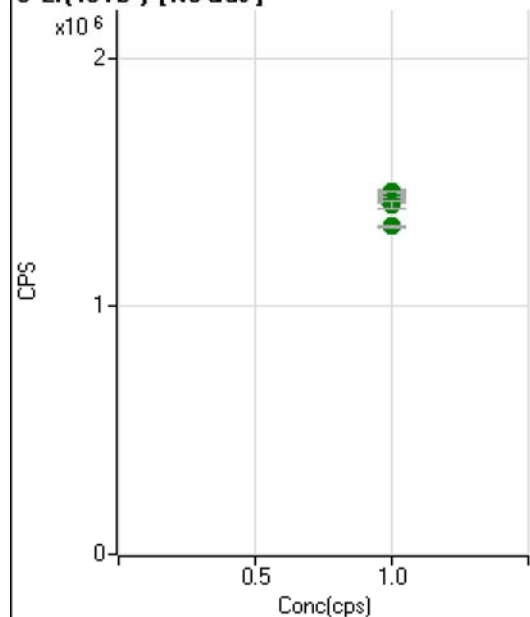
$$R = 1.0000$$

$$DL = 0.003682$$

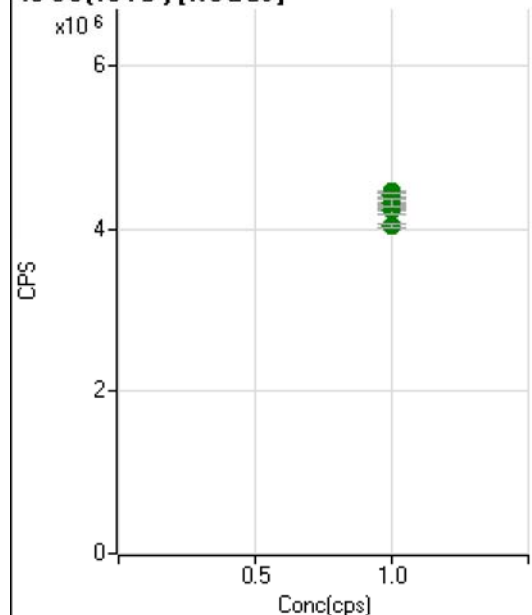
Weight: <None>

Min Conc: 0

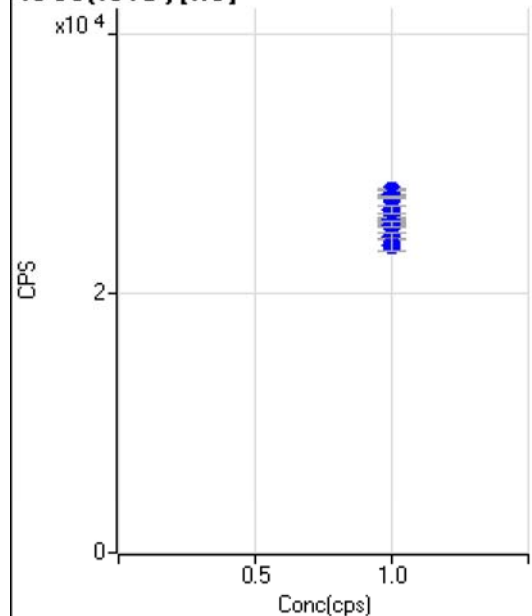
6 Li(ISTD) [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1451570.83		A	1.4
2	☐	1.000		1322660.28		A	0.4
3	☐	1.000		1422836.20		A	3.2
4	☐	1.000		1457999.04		A	0.9
5	☐	1.000		1455716.59		A	2.6
6	☐	1.000		1454139.32		A	0.3
7	☐	1.000		1463285.43		A	0.3
8	☐	1.000		1430347.63		A	1.8
9	☐	1.000		1411071.94		A	1.9

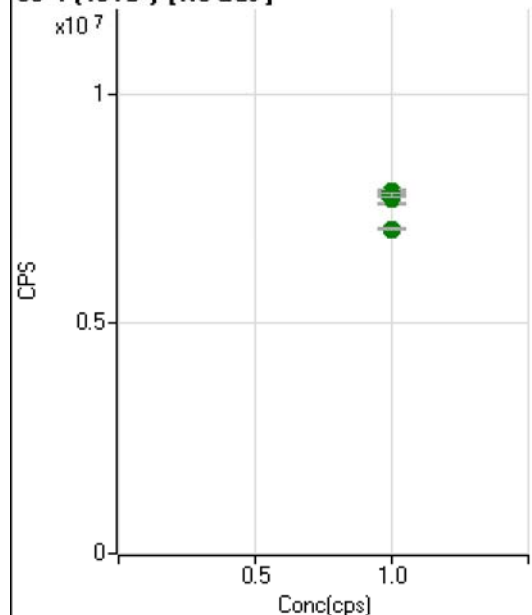
45 Sc(ISTD) [NoGas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		4461601.14		A	0.7
2	☐	1.000		4042773.14		A	0.7
3	☐	1.000		4388274.27		A	2.7
4	☐	1.000		4416175.23		A	1.3
5	☐	1.000		4369431.65		A	3.2
6	☐	1.000		4278694.54		A	1.7
7	☐	1.000		4248601.18		A	0.7
8	☐	1.000		4242192.54		A	2.1
9	☐	1.000		4327884.78		A	2.1

45 Sc(ISTD) [He]

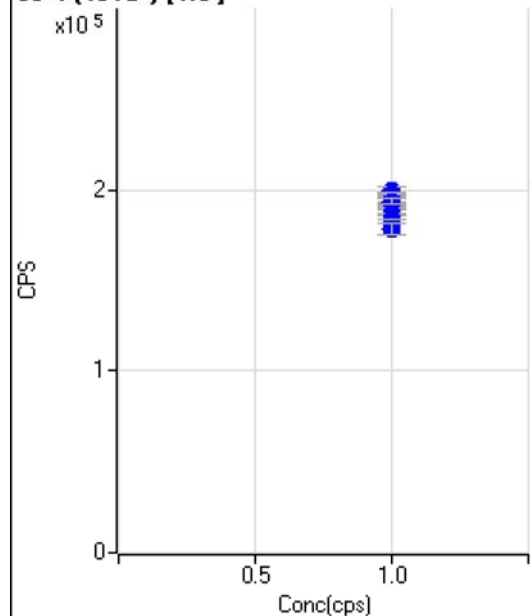
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		27925.71		P	1.4
2	☐	1.000		25502.25		P	1.4
3	☐	1.000		27683.01		P	1.8
4	☐	1.000		27406.90		P	0.4
5	☐	1.000		25718.20		P	1.6
6	☐	1.000		25384.26		P	1.9
7	☐	1.000		24465.91		P	2.2
8	☐	1.000		23709.13		P	4.2
9	☐	1.000		26527.46		P	2.0

89 Y (ISTD) [No Gas]

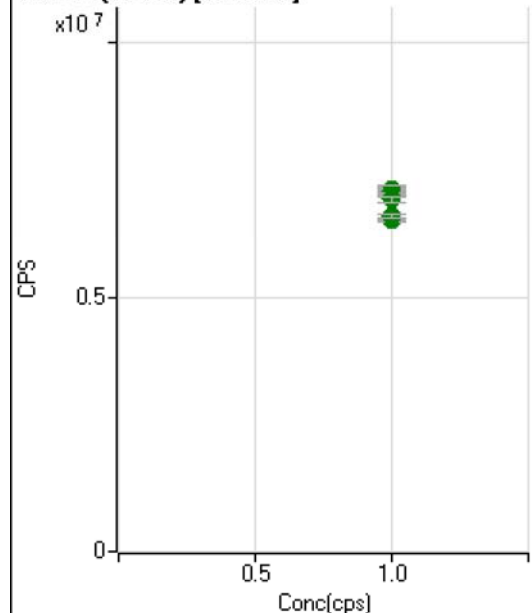


	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		7823254.12		A	0.4
2	☐	1.000		7087613.43		A	0.1
3	☐	1.000		7728340.23		A	2.6
4	☐	1.000		7804027.87		A	0.4
5	☐	1.000		7854927.80		A	1.7
6	☐	1.000		7720172.38		A	1.6
7	☐	1.000		7794017.11		A	0.1
8	☐	1.000		7892554.95		A	1.7
9	☐	1.000		7820725.23		A	1.3

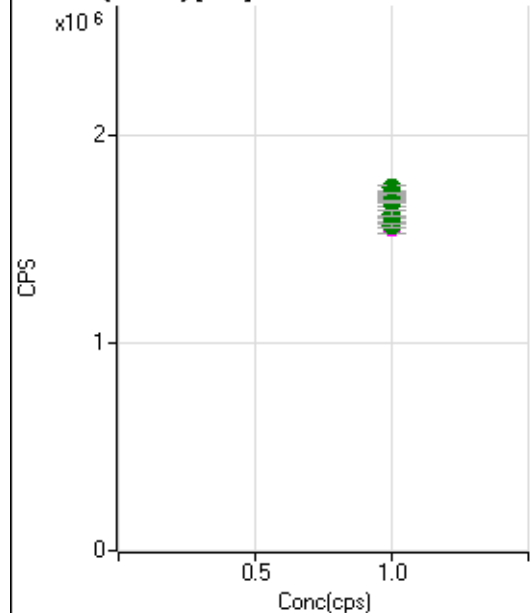
89 Y (ISTD) [He]



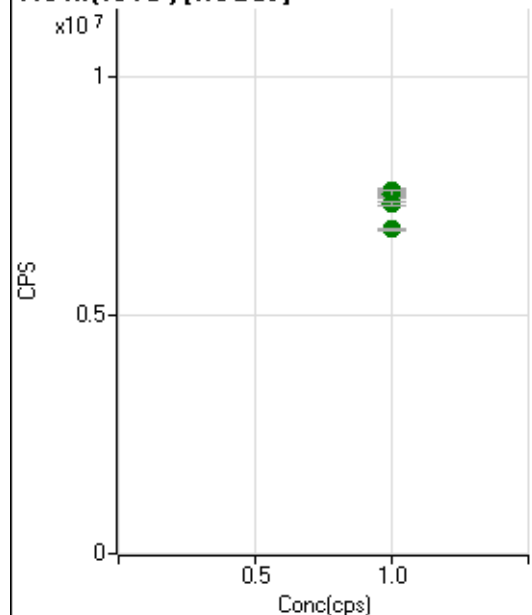
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		199129.17		P	1.9
2	☐	1.000		186213.35		P	1.0
3	☐	1.000		197441.63		P	1.2
4	☐	1.000		197698.23		P	0.8
5	☐	1.000		190728.48		P	2.4
6	☐	1.000		190352.64		P	0.7
7	☐	1.000		183714.69		P	0.5
8	☐	1.000		178292.30		P	3.2
9	☐	1.000		193606.99		P	1.6

103Rh(ISTD) [NoGas]

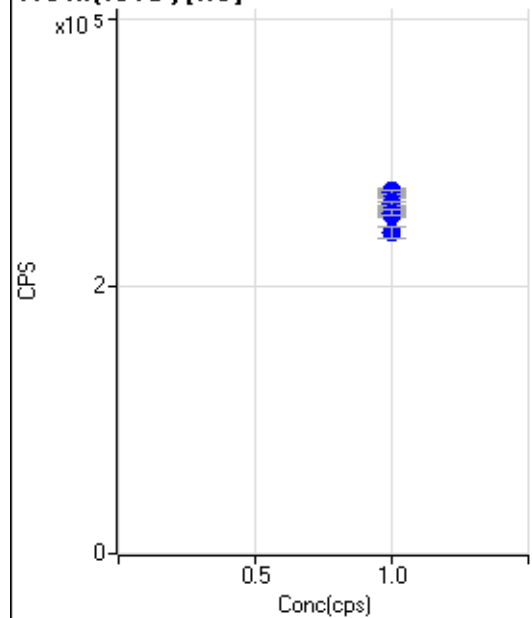
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		7123417.18		A	0.6
2	☐	1.000		6525096.20		A	0.8
3	☐	1.000		7096913.01		A	2.6
4	☐	1.000		7128629.15		A	0.6
5	☐	1.000		7115706.76		A	3.1
6	☐	1.000		7035683.32		A	1.3
7	☐	1.000		7041714.22		A	0.8
8	☐	1.000		6942446.33		A	1.7
9	☐	1.000		6616186.35		A	1.4

103Rh(ISTD) [He]

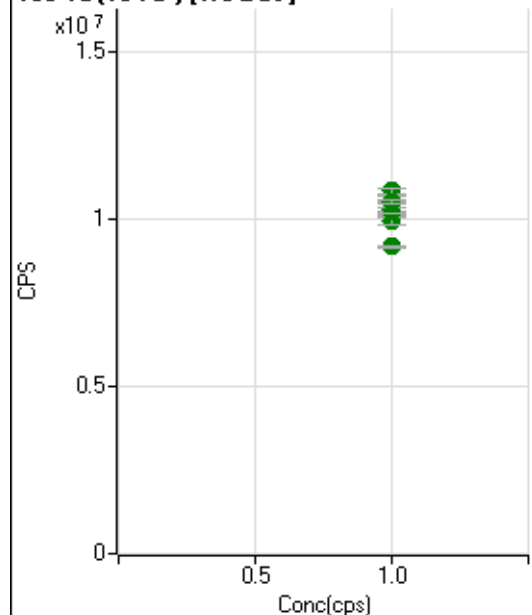
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1747152.82		A	1.3
2	☐	1.000		1608739.00		A	0.5
3	☐	1.000		1719610.20		A	1.9
4	☐	1.000		1715442.82		A	0.4
5	☐	1.000		1674875.69		A	2.6
6	☐	1.000		1676733.73		A	0.6
7	☐	1.000		1624195.57		A	2.0
8	☐	1.000		1554299.89		M	3.4
9	☐	1.000		1563532.37		A	1.0

115 In(ISTD) [NoGas]

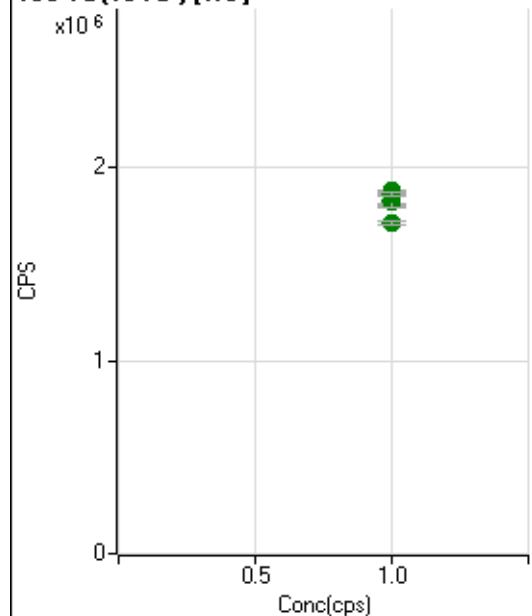
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		7613162.59		A	0.9
2	☐	1.000		6814047.65		A	0.6
3	☐	1.000		7486331.20		A	2.4
4	☐	1.000		7530967.83		A	0.8
5	☐	1.000		7573521.50		A	2.7
6	☐	1.000		7536111.93		A	2.3
7	☐	1.000		7609027.97		A	0.4
8	☐	1.000		7557520.58		A	2.0
9	☐	1.000		7339348.21		A	1.5

115 In(ISTD) [He]

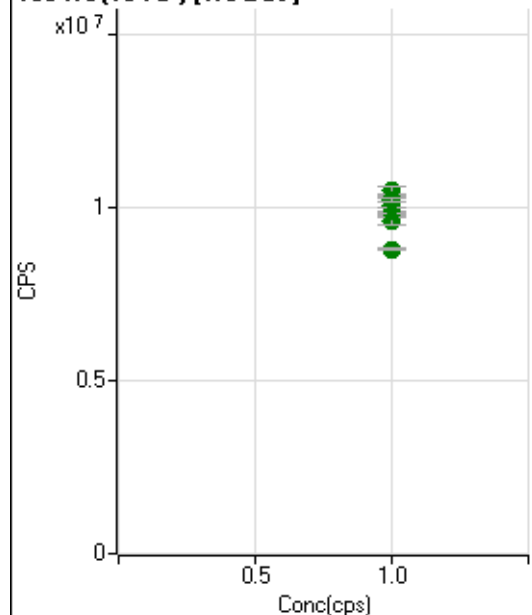
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		271197.51		P	1.1
2	☐	1.000		254122.81		P	1.5
3	☐	1.000		269295.62		P	1.4
4	☐	1.000		270571.83		P	0.8
5	☐	1.000		262446.47		P	2.6
6	☐	1.000		261599.92		P	1.0
7	☐	1.000		252560.15		P	1.0
8	☐	1.000		239480.60		P	3.7
9	☐	1.000		255001.12		P	1.6

159 Tb(ISTD) [NoGas]

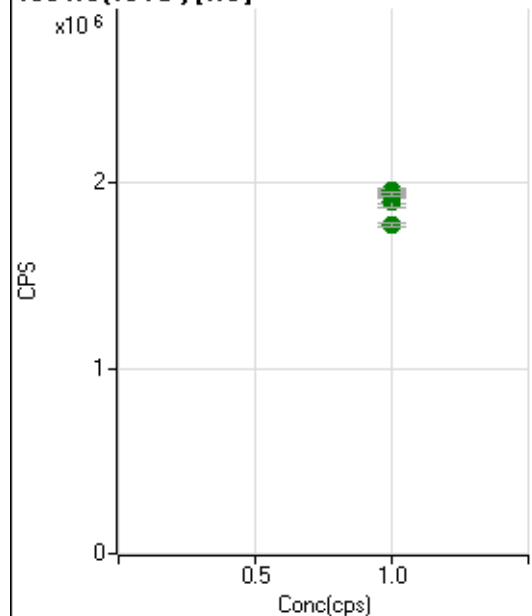
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		10170433.32		A	0.3
2	☐	1.000		9175931.88		A	0.8
3	☐	1.000		9936240.82		A	2.4
4	☐	1.000		10212458.46		A	0.2
5	☐	1.000		10300853.18		A	2.8
6	☐	1.000		10443015.40		A	1.2
7	☐	1.000		10700208.45		A	0.3
8	☐	1.000		10852632.20		A	1.8
9	☐	1.000		10537952.41		A	1.2

159 Tb(ISTD) [He]

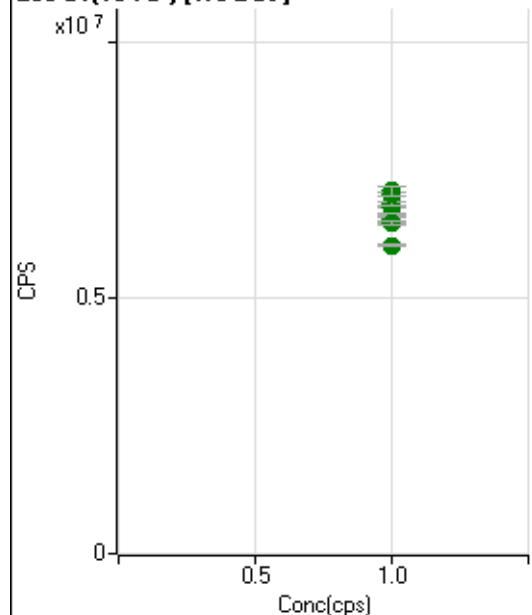
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1860793.83		A	0.8
2	☐	1.000		1717772.60		A	1.0
3	☐	1.000		1837345.48		A	2.4
4	☐	1.000		1872377.09		A	0.7
5	☐	1.000		1829923.45		A	3.2
6	☐	1.000		1879972.63		A	0.6
7	☐	1.000		1867865.15		A	1.8
8	☐	1.000		1822819.02		A	3.5
9	☐	1.000		1861617.25		A	0.8

¹⁶⁵Ho(ISTD) [NoGas]

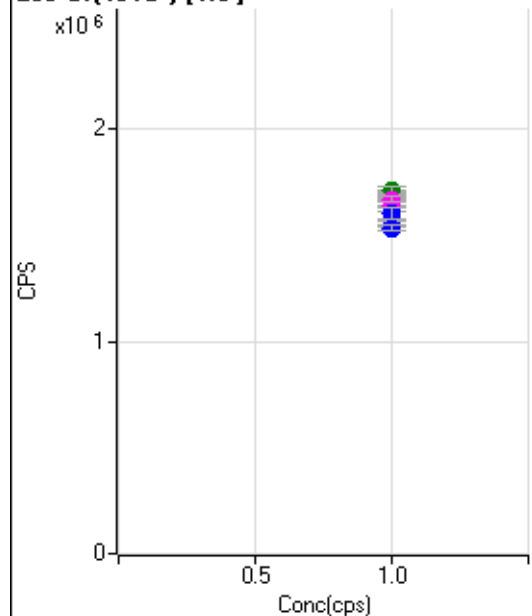
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		9739022.44		A	0.1
2	☐	1.000		8790749.50		A	0.3
3	☐	1.000		9603374.52		A	2.2
4	☐	1.000		9857242.67		A	0.3
5	☐	1.000		10007774.09		A	3.2
6	☐	1.000		10061524.27		A	1.6
7	☐	1.000		10326927.92		A	0.4
8	☐	1.000		10475760.56		A	2.0
9	☐	1.000		10205634.43		A	1.4

¹⁶⁵Ho(ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1947242.59		A	1.3
2	☐	1.000		1772913.60		A	0.7
3	☐	1.000		1900613.37		A	1.3
4	☐	1.000		1921707.80		A	0.3
5	☐	1.000		1892158.03		A	2.4
6	☐	1.000		1955810.69		A	1.4
7	☐	1.000		1940109.45		A	0.5
8	☐	1.000		1892243.98		A	3.2
9	☐	1.000		1937880.84		A	1.0

209 Bi(ISTD) [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		6785388.44		A	0.1
2	☐	1.000		6025866.92		A	0.7
3	☐	1.000		6543384.07		A	2.5
4	☐	1.000		6613585.60		A	0.4
5	☐	1.000		6772627.95		A	3.8
6	☐	1.000		6847303.44		A	1.4
7	☐	1.000		7045960.52		A	1.0
8	☐	1.000		7097039.68		A	2.6
9	☐	1.000		6471985.18		A	1.3

209 Bi(ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1680131.00		M	4.1
2	☐	1.000		1551661.85		P	1.7
3	☐	1.000		1655832.62		M	2.6
4	☐	1.000		1692720.15		A	0.9
5	☐	1.000		1642205.86		M	3.0
6	☐	1.000		1711069.16		A	2.3
7	☐	1.000		1672630.20		M	1.4
8	☐	1.000		1604519.61		P	3.3
9	☐	1.000		1536062.20		P	2.1

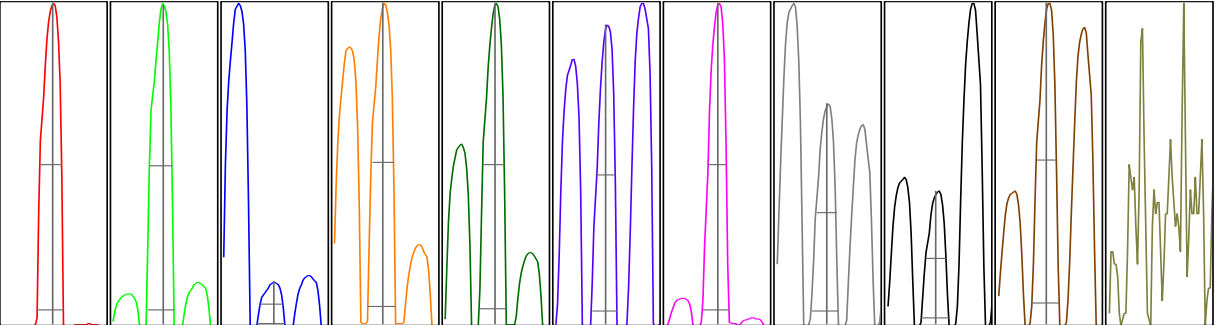
US EPA Tune Check Sample Report

Batch Folder D:\P8092618 MS.b
Report Comment
Instrument Name G8403A JP17141814

[No Gas]				
Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
9	7764	0.99	5.00	
24	731227	0.96	5.00	
25	101449	0.92	5.00	
26	115584	1.08	5.00	
59	77948	1.27	5.00	
113	11136	0.77	5.00	
115	141117	1.36	5.00	
206	34397	0.82	5.00	
207	31645	0.68	5.00	
208	74625	0.87	5.00	
220	1	12.41		

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
9	7695	7801	7852	7800	7672
24	732518	732755	735379	736431	719052
25	102230	101324	102309	101400	99982
26	116749	115308	116629	115584	113651
59	79393	77317	78030	78211	76790
113	11209	11171	11190	11111	10998
115	143992	140545	141830	140321	138897
206	34121	34160	34757	34617	34330
207	31472	31562	31871	31879	31438
208	74138	74387	75323	75316	73965
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	13434	9.00	8.9 - 9.1		0.741	0.900	
24	1234333	24.00	23.9 - 24.1		0.783	0.900	
25	168261	25.00	24.9 - 25.1		0.785	0.900	
26	194946	25.95	25.9 - 26.1		0.784	0.900	
59	137228	59.00	58.9 - 59.1		0.771	0.900	
113	21029	113.00	112.9 - 113.1		0.728	0.900	
115	265834	115.05	114.9 - 115.1		0.761	0.900	
206	62849	206.00	205.9 - 206.1		0.775	0.900	
207	56632	206.95	206.9 - 207.1		0.777	0.900	
208	136723	207.95	207.9 - 208.1		0.778	0.900	
220			-				

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

Tune Parameters

Plasma Paramters

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

Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	10.9	V	Deflect	14.2	V
Extract 2	-250.0	V	Cell Entrance	-30	V	Plate Bias	-35	V
Omega Bias	-100	V	Cell Exit	-50	V			

Cell Parameters

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

[He]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)
59	8336	0.55	
89	87870	1.20	
205	14740	0.65	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
59	8312	8389	8282	8320	8378
89	86367	88984	87351	87968	88678
205	14780	14836	14618	14658	14808

Integration Time [sec] = 0.1

Tune Parameters

Plasma Paramters

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

Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	10.9	V	Deflect	3.4	V
Extract 2	-250.0	V	Cell Entrance	-40	V	Plate Bias	-60	V
Omega Bias	-100	V	Cell Exit	-60	V			

Cell Parameters

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