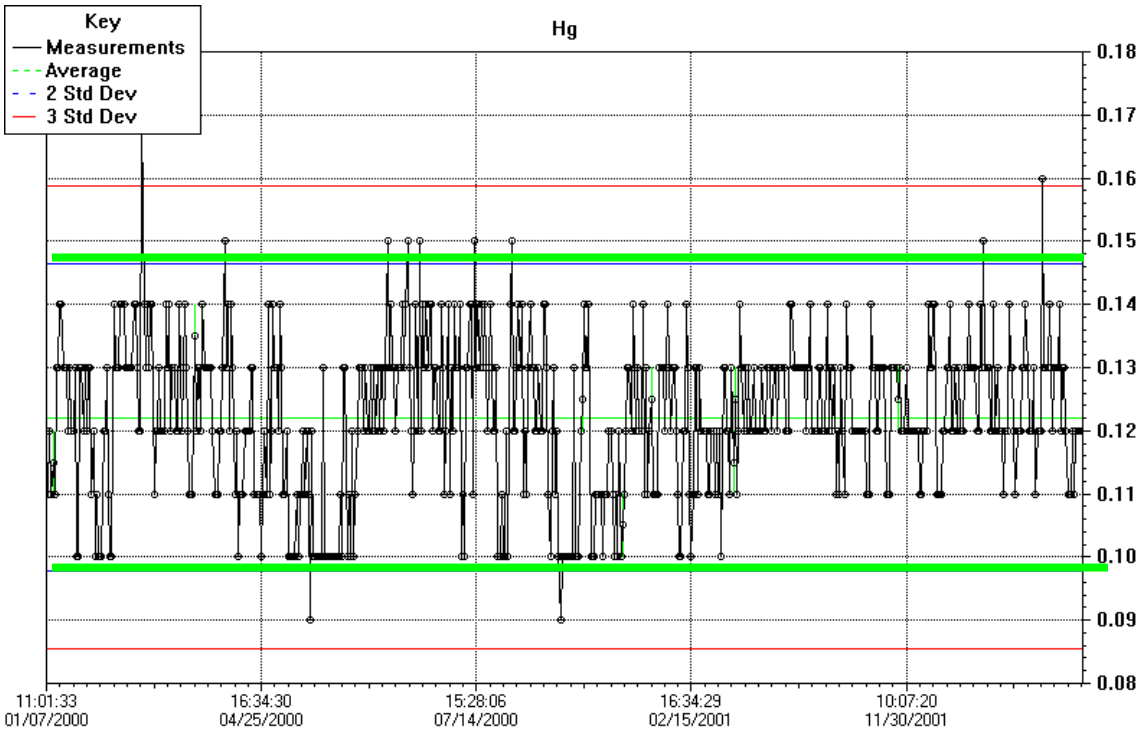
Table 3. Statistical summary and data plots for SAR-M.1

SAR-M.1 Analyzed by XRAL (1/1/00-2/26/02) except C_ICPAES_40 (1/1/00-3/26/01)

Method	Element Species	Units	LLD	Target Value	n=	Mean	Sdev	% RSD	% R	Mean -15% Mean -20%	Mean +15% Mean +20%	Pg.
C_CVAAS_HG	Hg	ppm	0.02	0.117	631	0.122	0.012	9.99	104	0.098	0.147	M3
C_HGAAS_AS	As	ppm	0.6	37.0	667	39.0	2.32	5.96	105	31.2	46.8	M4
C_HGAAS_SB	Sb	ppm	0.6	5.6	130	5.95	0.468	7.86	106	4.76	7.14	M4
C_HGAAS_SE	Se	ppm	0.2	0.330	609	0.379	0.067	17.8	115	0.303	0.45	M5
C_FA_DCP_AU	Au	ppm	0.01	0.345	83	0.367	0.176	48.1	106	0.293	0.44	M5
C_HGAAS_TL	Tl	ppm	0.1	2.8	62	2.49	0.254	10.2	89	1.99	2.99	M6
C_HGAAS_TE	Te	ppm	0.1	0.69	32	0.914	0.091	9.90	132	0.731	1.10	M6
C_ISE_F	F	ppm	20	nd	6	954	25.9	2.71	--	810	1097	M7
C_INAA_W	W	ppm	0.5	14	29	12.5	2.10	16.9	89	9.97	15.0	M7
C_TOTAL_C	C	%	0.05	0.3	90	0.32	0.026	8.14	106	0.269	0.36	M8
C_CO2_CARB	CO2	%	0.01	0.07	92	0.080	0.007	8.81	114	0.068	0.091	M8
C_CO2_CARB	CRBNT_C	%	0	0.02	92	0.020	0.000	0.000	100	0.017	0.023	M9
C_Organic_C	Organic_C	%		0.28	23	0.314	0.022	6.90	112	0.27	0.36	M9
C_TOTAL_H2O	Total_H2O	%	0.05	2.5	11	2.37	0.079	3.31	95	2.02	2.73	M10
C_TOTAL_H2O	H2O_Minus	%	0.05	0.3	11	0.336	0.051	15.0	112	0.286	0.387	M10
C_TOTAL_H2O	H2O_Plus	%	0.05	2.2	11	2.04	0.067	3.31	93	1.73	2.34	M11
C_TITR_FEO	FeO	%	0.01	0.7	23	0.79	0.042	5.31	113	0.670	0.91	M11
C_TOTAL_S	S	%	0.05	0.13	135	0.119	0.010	8.26	91	0.101	0.136	M12
C_ICPAES_10	Ag	ppm	0.08	3.1	101	3.30	0.326	9.89	106	2.64	3.96	M12
C_ICPAES_10	As	ppm	1	37	101	35.8	2.97	8.29	97	28.6	42.9	M13
C_ICPAES_10	Au	ppm	0.1	0.345	101	0.526	0.303	57.6	153	0.421	0.632	M13
C_ICPAES_10	Bi	ppm	1	1.33	101	2.35	0.583	24.8	177	1.88	2.82	M14
C_ICPAES_10	Cd	ppm	0.05	4.76	101	5.30	0.317	5.98	111	4.24	6.36	M14
C_ICPAES_10	Cu	ppm	0.05	320	101	327	21.5	6.57	102	262	393	M15
C_ICPAES_10	Mo	ppm	0.1	12	101	12.8	0.883	6.88	107	10.3	15.4	M15
C_ICPAES_10	Pb	ppm	1	960	101	1010	48.0	4.75	105	808	1212	M16
C_ICPAES_10	Sb	ppm	1	5.6	101	5.26	0.693	13.2	94	4.20	6.31	M16
C_ICPAES_10	Zn	ppm	0.05	888	101	>500	--	--	--	--	--	M17
C_ICPAES_16	Al	%	0.01	6.09	105	6.21	0.255	4.11	102	5.28	7.14	M17
C_ICPAES_16	Ba	ppm	10	764	105	798	47.0	5.89	104	678	918	M18
C_ICPAES_16	Ca	%	0.01	0.58	105	0.57	0.031	5.53	98	0.483	0.65	M18
C_ICPAES_16	Cr	ppm	10	101	105	98.9	11.7	11.8	98	84.1	114	M19
C_ICPAES_16	Fe	%	0.01	3.22	105	3.19	0.146	4.57	99	2.72	3.67	M19
C_ICPAES_16	K	%	0.01	2.92	105	2.98	0.158	5.30	102	2.53	3.43	M20
C_ICPAES_16	Mg	%	0.01	0.5	105	0.48	0.024	4.99	96	0.409	0.553	M20

C_ICPAES_16	Mn	ppm	10	**5200**	105	**5172**	250.0	4.83	99	**4396**	**5948**	M21
C_ICPAES_16	Na	%	0.01	**1.19**	105	**1.18**	0.067	5.65	99	**1.00**	**1.36**	M21
C_ICPAES_16	Nb	ppm	10	**31**	105	**35.2**	5.08	14.4	114	**29.9**	**40.5**	M22
C_ICPAES_16	P	%	0.01	**.08**	105	**0.076**	0.009	11.9	95	**0.064**	**0.087**	M22
C_ICPAES_16	Si	%	0.01	**33.53**	105	**33.1**	1.84	5.56	99	**28.1**	**38.1**	M23
C_ICPAES_16	Sr	ppm	10	**156**	105	**149**	7.40	4.97	96	**127**	**171**	M23
C_ICPAES_16	Ti	%	0.01	**.35**	105	**0.364**	0.028	7.69	104	**0.309**	**0.419**	M24
C_ICPAES_16	Y	ppm	10	**33**	105	**37.1**	4.34	11.7	112	**31.5**	**42.7**	M24
C_ICPAES_16	Zr	ppm	10	**370**	105	**366**	30.0	8.19	99	**311**	**421**	M25
C_ICPAES_40	Ag	ppm	2	**3.1**	239	**3.76**	0.704	18.7	121	**3.19**	**4.32**	M25
C_ICPAES_40	Al	%	0.01	**6.09**	239	**6.16**	0.233	3.78	101	**5.24**	**7.08**	M26
C_ICPAES_40	As	ppm	10	**37**	239	**36.2**	3.76	10.4	98	**30.8**	**41.6**	M26
C_ICPAES_40	Au	ppm	8	**0.345**	239	**<8**	--	--	--	--	--	M27
C_ICPAES_40	Ba	ppm	1	**764**	239	**801**	37.0	4.62	105	**681**	**921**	M27
C_ICPAES_40	Be	ppm	1	**2.4**	239	**2.11**	0.311	14.7	88	**1.79**	**2.43**	M28
C_ICPAES_40	Bi	ppm	50	**1.33**	239	**<50**	--	--	--	--	--	M28
C_ICPAES_40	Ca	%	0.01	**0.58**	239	**0.58**	0.019	3.18	100	**0.49**	**0.67**	M29
C_ICPAES_40	Cd	ppm	2	**4.76**	239	**4.85**	0.721	14.9	102	**4.12**	**5.58**	M29
C_ICPAES_40	Ce	ppm	5	**120**	239	**119**	7.57	6.34	99	**101**	**137**	M30
C_ICPAES_40	Co	ppm	2	**11**	239	**10.9**	0.964	8.87	99	**9.23**	**12.5**	M30
C_ICPAES_40	Cr	ppm	2	**101**	239	**70.7**	25.3	35.8	70	**60.1**	**81.3**	M31
C_ICPAES_40	Cu	ppm	2	**320**	239	**310**	14.2	4.57	97	**263**	**356**	M31
C_ICPAES_40	Eu	ppm	2	**0.67**	239	**<2**	--	--	--	--	--	M32
C_ICPAES_40	Fe	%	0.02	**3.22**	239	**3.14**	0.095	3.01	98	**2.67**	**3.62**	M32
C_ICPAES_40	Ga	ppm	4	**20**	239	**18.2**	2.63	14.5	91	**15.5**	**20.9**	M33
C_ICPAES_40	Ho	ppm	4	**1.72**	239	**<4**	--	--	--	--	--	M33
C_ICPAES_40	K	%	0.01	**2.92**	239	**2.89**	0.120	4.13	99	**2.46**	**3.33**	M34
C_ICPAES_40	La	ppm	2	**61**	239	**59.8**	3.42	5.71	98	**50.8**	**68.8**	M34
C_ICPAES_40	Li	ppm	2	**30**	239	**27.5**	1.99	7.24	92	**23.4**	**31.7**	M35
C_ICPAES_40	Mg	%	0.01	**0.50**	239	**0.47**	0.018	3.76	94	**0.400**	**0.541**	M35
C_ICPAES_40	Mn	ppm	4	**5200**	239	**5033**	174.4	3.46	97	**4278**	**5788**	M36
C_ICPAES_40	Mo	ppm	2	**12**	239	**13.3**	1.00	7.50	111	**11.3**	**15.3**	M36
C_ICPAES_40	Na	%	0.01	**1.19**	239	**1.14**	0.045	3.99	96	**0.97**	**1.31**	M37
C_ICPAES_40	Nb	ppm	4	**31**	239	**32.2**	2.79	8.64	104	**27.4**	**37.1**	M37
C_ICPAES_40	Nd	ppm	9	**51**	239	**49.2**	3.95	8.03	96	**41.8**	**56.6**	M38
C_ICPAES_40	Ni	ppm	3	**41**	239	**40.8**	2.91	7.12	100	**34.7**	**46.9**	M38
C_ICPAES_40	P	%	0.01	**0.08**	239	**0.071**	0.004	5.80	88	**0.060**	**0.081**	M39
C_ICPAES_40	Pb	ppm	4	**960**	239	**937**	50.4	5.37	98	**797**	**1078**	M39
C_ICPAES_40	Sc	ppm	2	**8.3**	239	**8.14**	0.584	7.17	98	**6.92**	**9.36**	M40
C_ICPAES_40	Sn	ppm	50	**9.4**	239	**<50**	--	--	--	--	--	M40

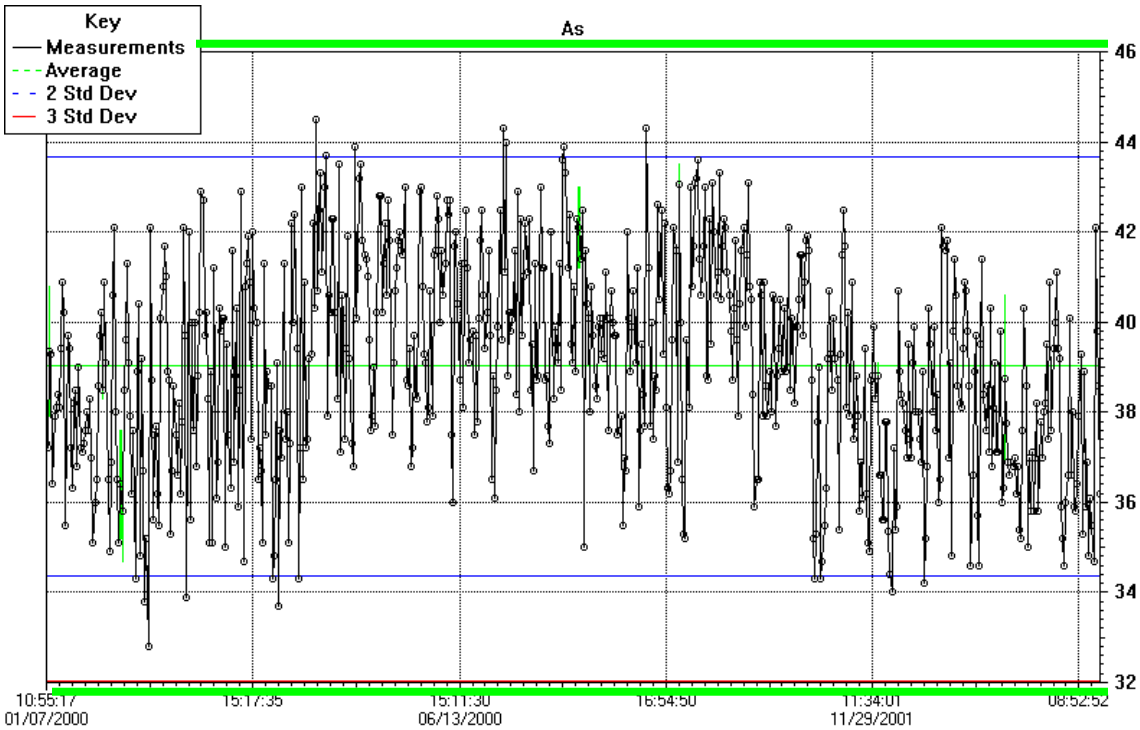
C_ICPAES_40	Sr	ppm	2	156	239	145	5.47	3.77	93	123	167	M41
C_ICPAES_40	Ta	ppm	40	1.3	239	<40	--	--	--	--	--	M41
C_ICPAES_40	Th	ppm	6	18	239	19.7	2.17	11.0	109	16.7	22.7	M42
C_ICPAES_40	Ti	%	0.01	0.35	239	0.328	0.019	5.91	94	0.279	0.377	M42
C_ICPAES_40	U	ppm	100	2.6	239	<100	--	--	--	--	--	M43
C_ICPAES_40	V	ppm	2	66	239	68.9	2.84	4.12	104	58.6	79.2	M43
C_ICPAES_40	Y	ppm	2	33	239	29.3	2.27	7.74	89	24.9	33.7	M44
C_ICPAES_40	Yb	ppm	1	3.2	239	3.12	0.329	10.5	98	2.65	3.59	M44
C_ICPAES_40	Zn	ppm	2	888	239	925	44.8	4.84	104	786	1064	M45



Mean = 0.1221 Std.Dev. = 0.0122

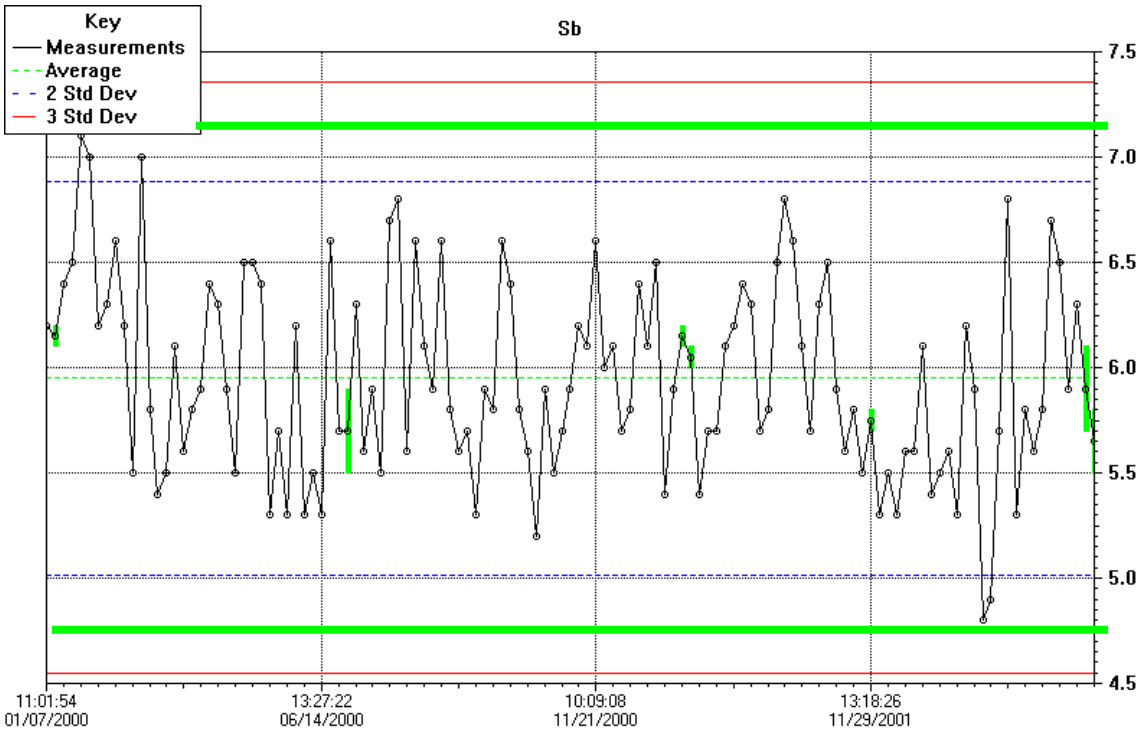
Method	Element	Units	LLD	Target Value	n=	Mean	Sdev	% RSD	% R	Mean -20%	Mean +20%
C_CVAAS_HG	Hg	ppm	0.02	0.117	631	0.122	0.012	9.99	104	0.098	0.147

SAR-M.1



Mean = 39.0190 Std.Dev. = 2.3237

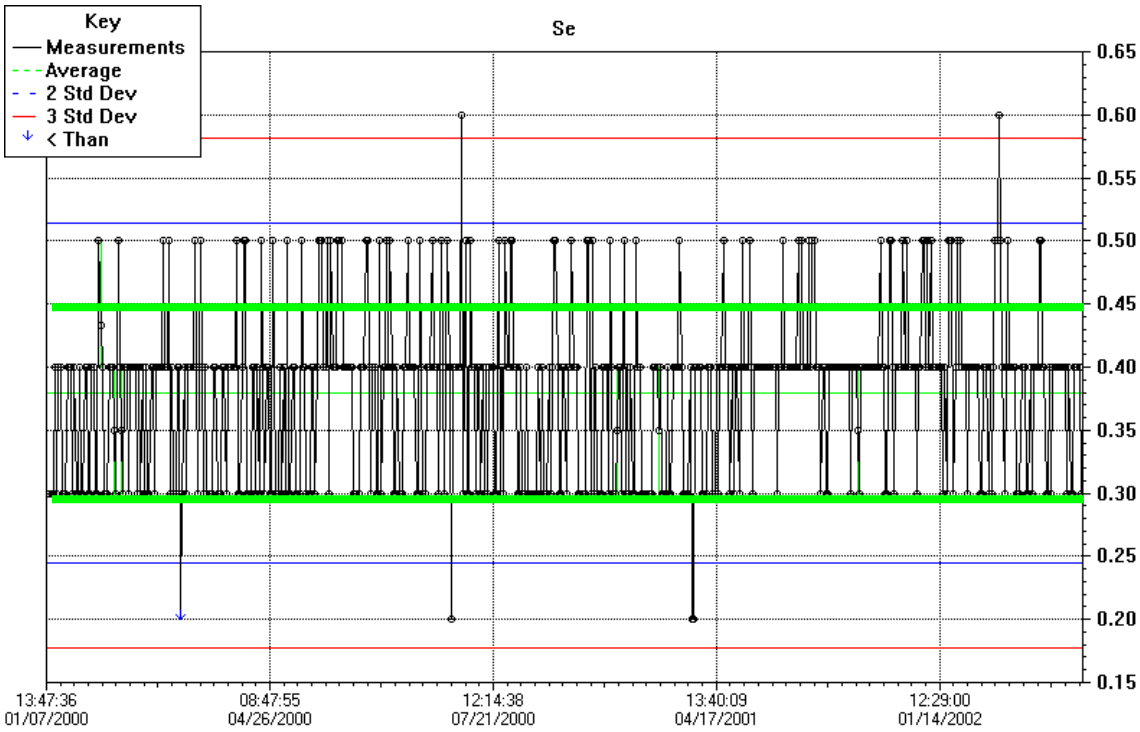
Method	Element	Units	LLD	Target Value	n=	Mean	Sdev	% RSD	% R	Mean -20%	Mean +20%
C_HGAAS_AS	As	ppm	0.6	37.0	667	39.0	2.32	5.96	105	31.2	46.8



Mean = 5.9508 Std.Dev. = 0.4676

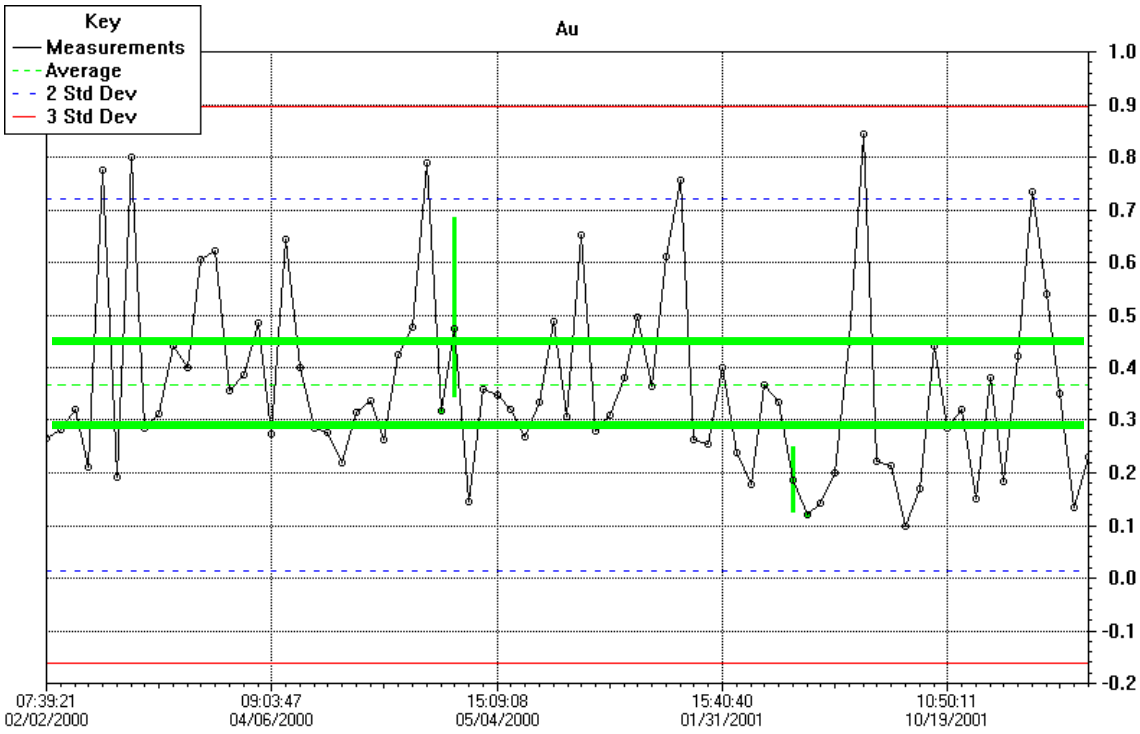
Method	Element	Units	LLD	Target Value	n=	Mean	Sdev	% RSD	% R	Mean -20%	Mean +20%
C_HGAAS_SB	Sb	ppm	0.6	5.6	130	5.95	0.468	7.86	106	4.76	7.14

SAR-M.1



Mean = 0.3791 Std.Dev. = 0.0674

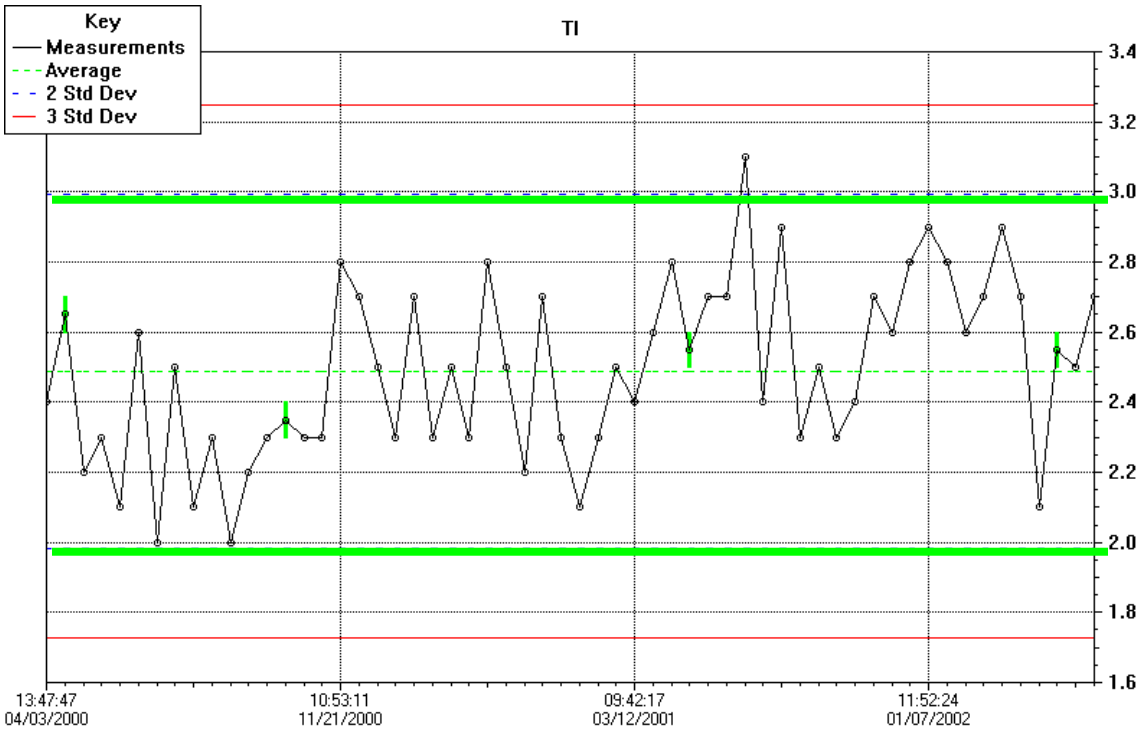
Method	Element	Units	LLD	Target Value	n=	Mean	Sdev	% RSD	% R	Mean -20%	Mean +20%
C_HGAAS_SE	Se	ppm	0.2	0.330	609	0.379	0.067	17.8	115	0.303	0.45



Mean = 0.3667 Std.Dev. = 0.1763

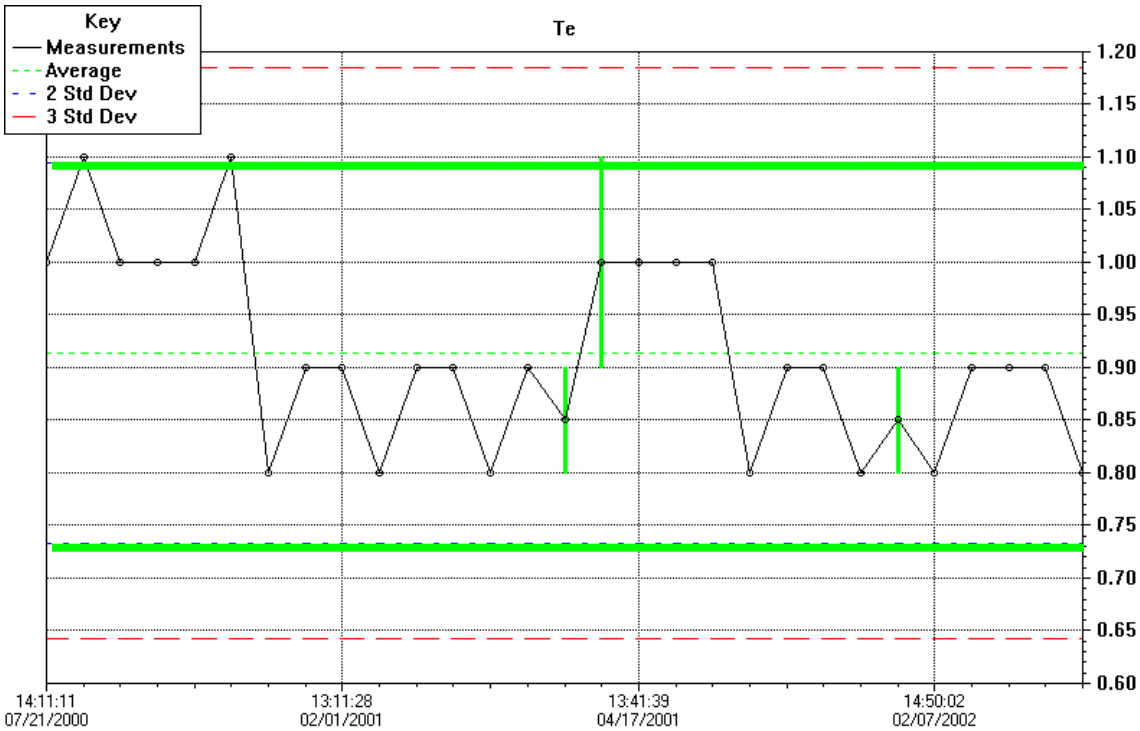
Method	Element	Units	LLD	Target Value	n=	Mean	Sdev	% RSD	% R	Mean -20%	Mean +20%
C_FA_DCP_AU	Au	ppm	0.01	0.345	83	0.367	0.176	48.1	106	0.293	0.44

SAR-M.1



Mean = 2.4879 Std.Dev. = 0.2535

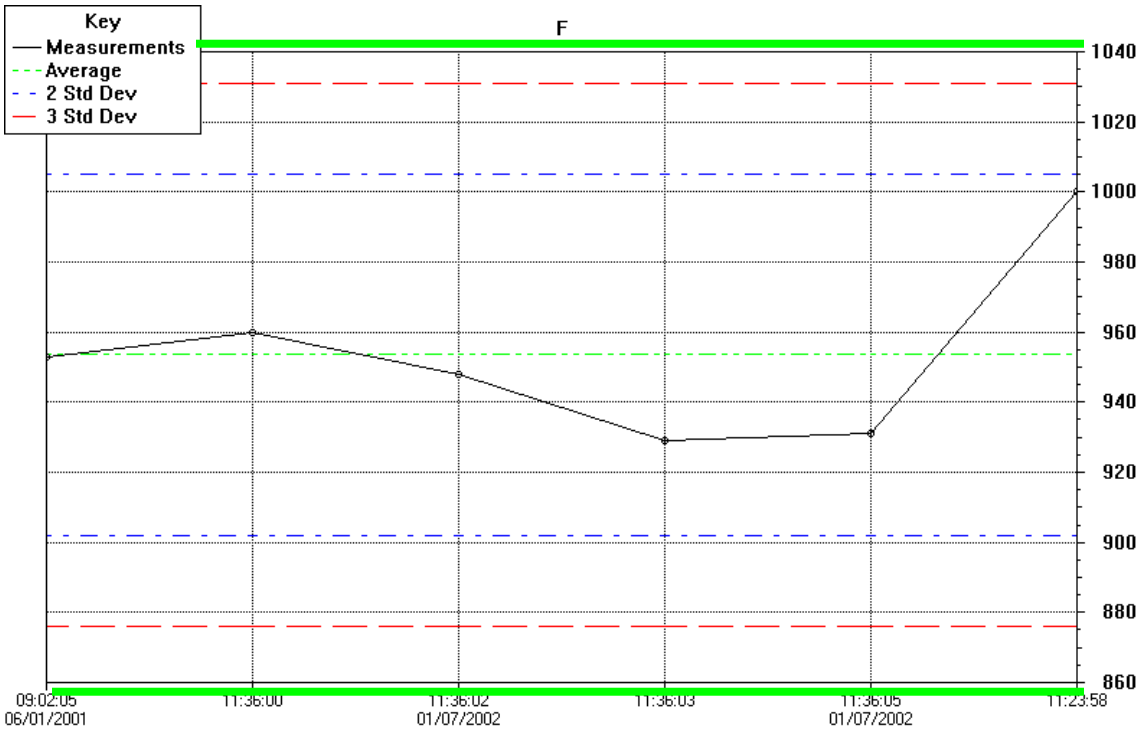
Method	Element	Units	LLD	Target Value	n=	Mean	Sdev	% RSD	% R	Mean -20%	Mean +20%
C_HGAAS_TL	Tl	ppm	0.1	2.8	62	2.49	0.254	10.2	89	1.990	2.99



Mean = 0.9138 Std.Dev. = 0.0905

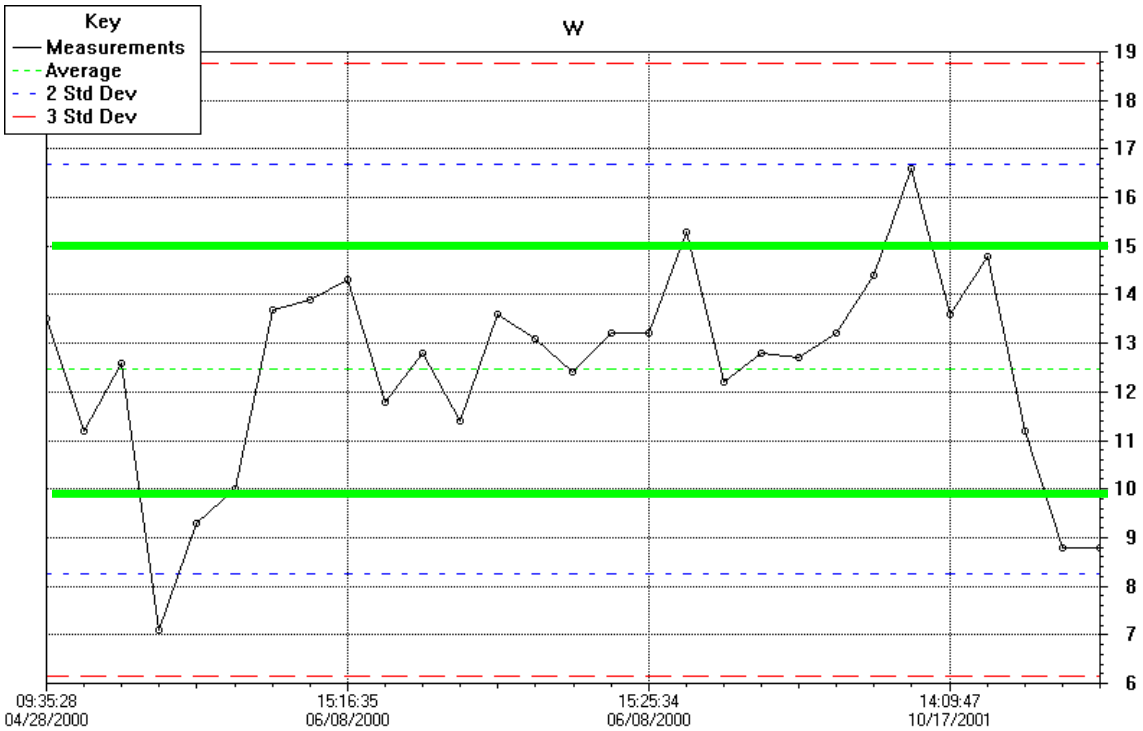
Method	Element	Units	LLD	Target Value	n=	Mean	Sdev	% RSD	% R	Mean -20%	Mean +20%
C_HGAAS_TE	Te	ppm	0.1	0.69	32	0.914	0.091	9.90	132	0.731	1.097

SAR-M.1



Mean = 953.5000 Std.Dev. = 25.8515

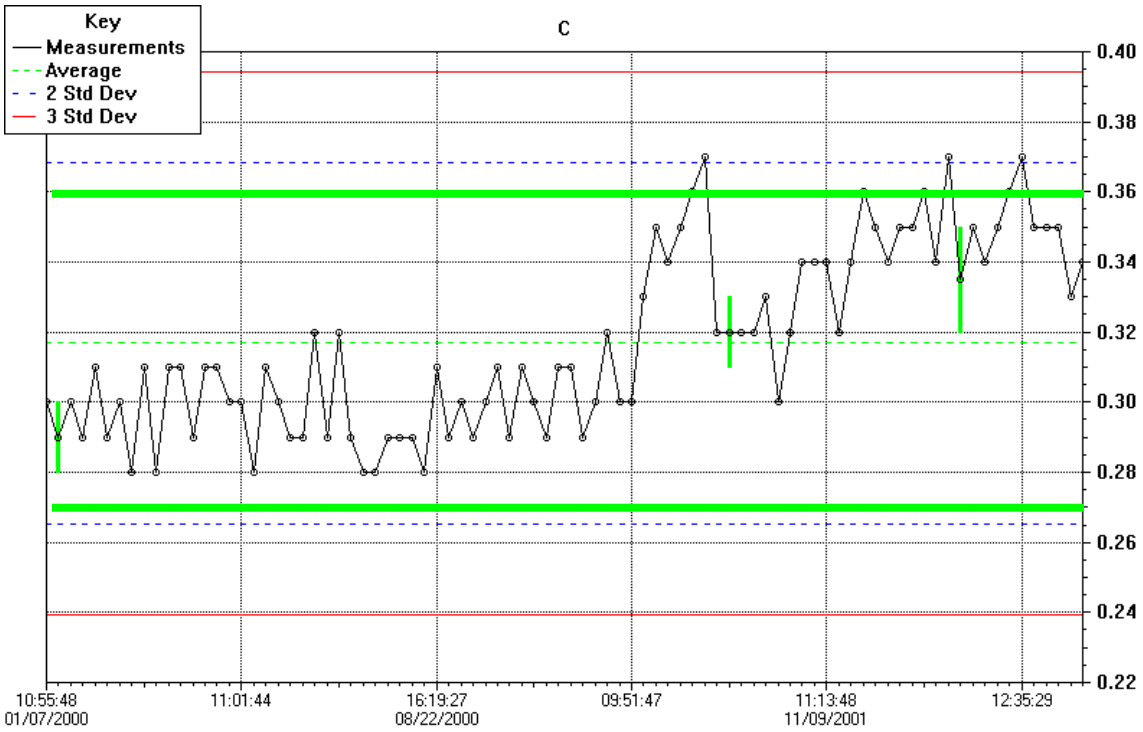
Method	Element	Units	LLD	Target Value	n=	Mean	Sdev	% RSD	% R	Mean -15%	Mean +15%
C_ISE_F	F	ppm	20	nd	6	954	25.9	2.71		810	1097



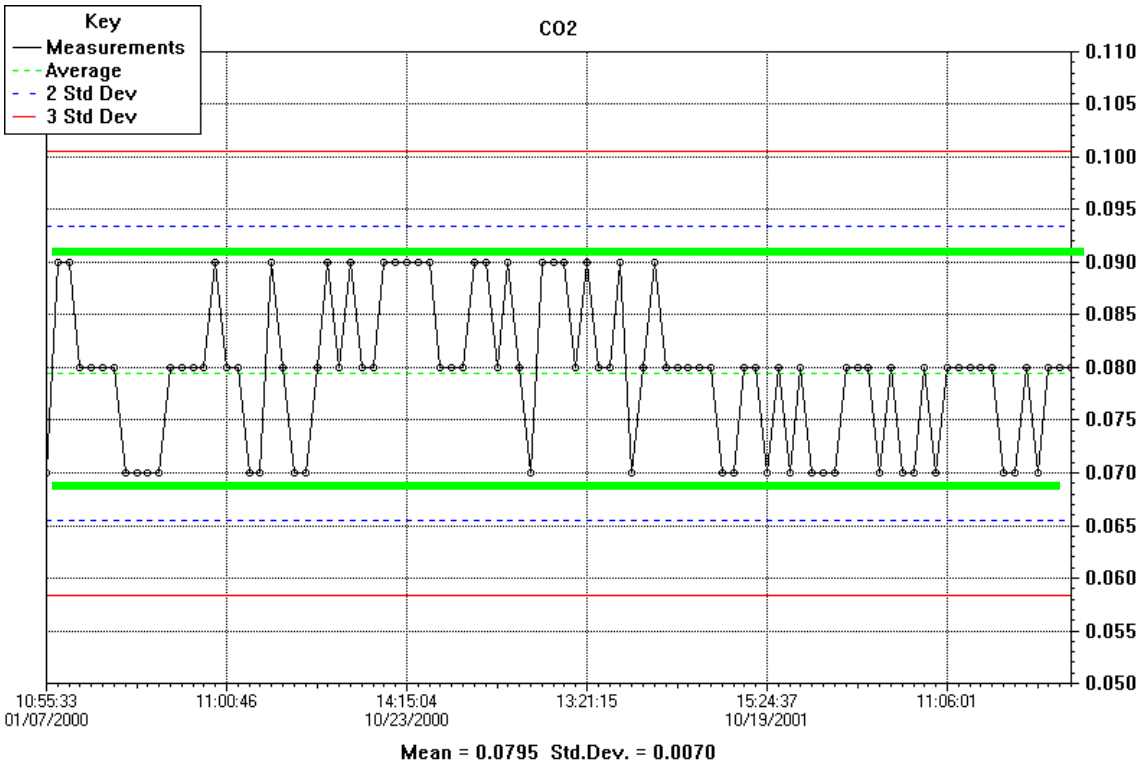
Mean = 12.4655 Std.Dev. = 2.1031

Method	Element	Units	LLD	Target Value	n=	Mean	Sdev	% RSD	% R	Mean -20%	Mean +20%
C_INAA_W	W	ppm	0.5	14	29	12.5	2.10	16.9	89	9.97	15.0

SAR-M.1

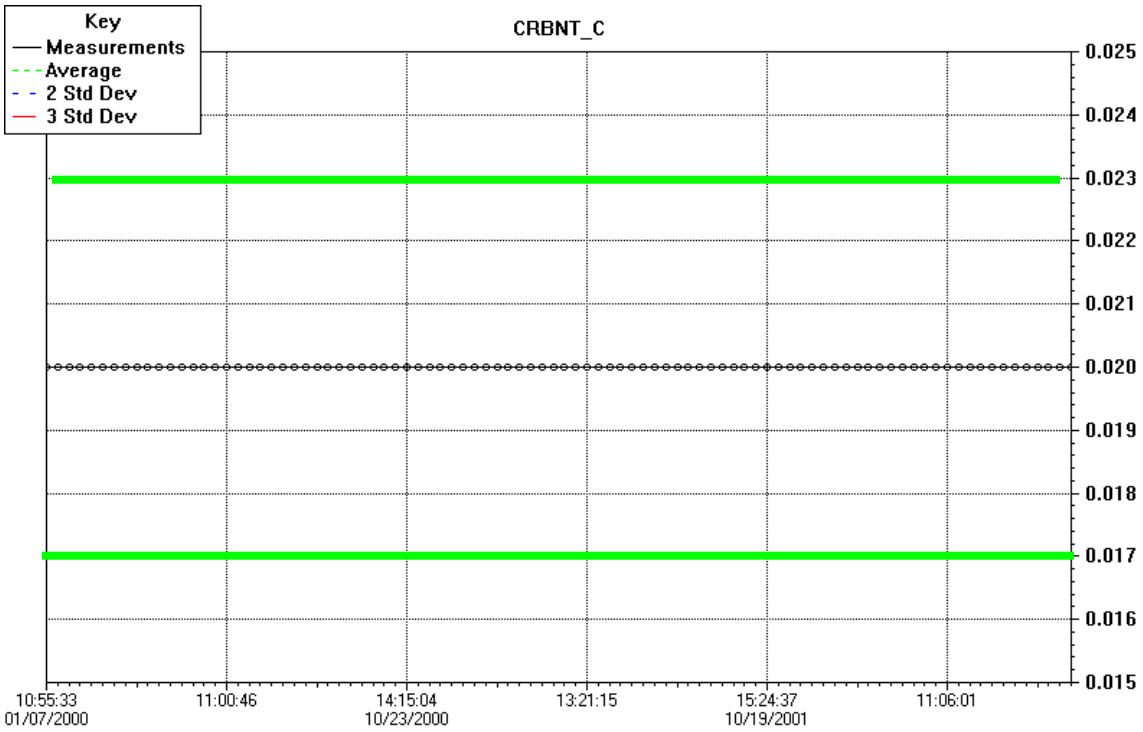


Method	Element	Units	LLD	Target Value	n=	Mean	Sdev	% RSD	% R	Mean -15%	Mean +15%
C_TOTAL_C	C	%	0.05	0.3	90	0.32	0.026	8.14	106	0.269	0.36

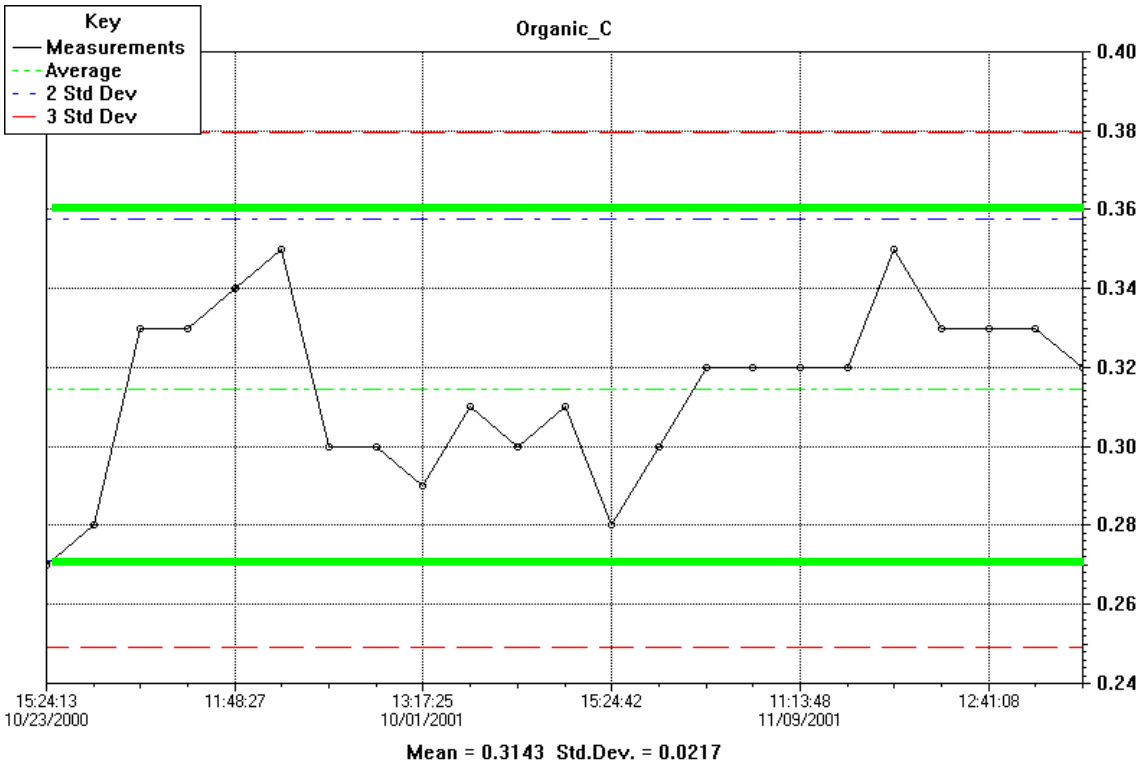


Method	Element	Units	LLD	Target Value	n=	Mean	Sdev	% RSD	% R	Mean -15%	Mean +15%
C_CO2_CARB	CO2	%	0.01	0.07	92	0.080	0.007	8.81	114	0.068	0.091

SAR-M.1

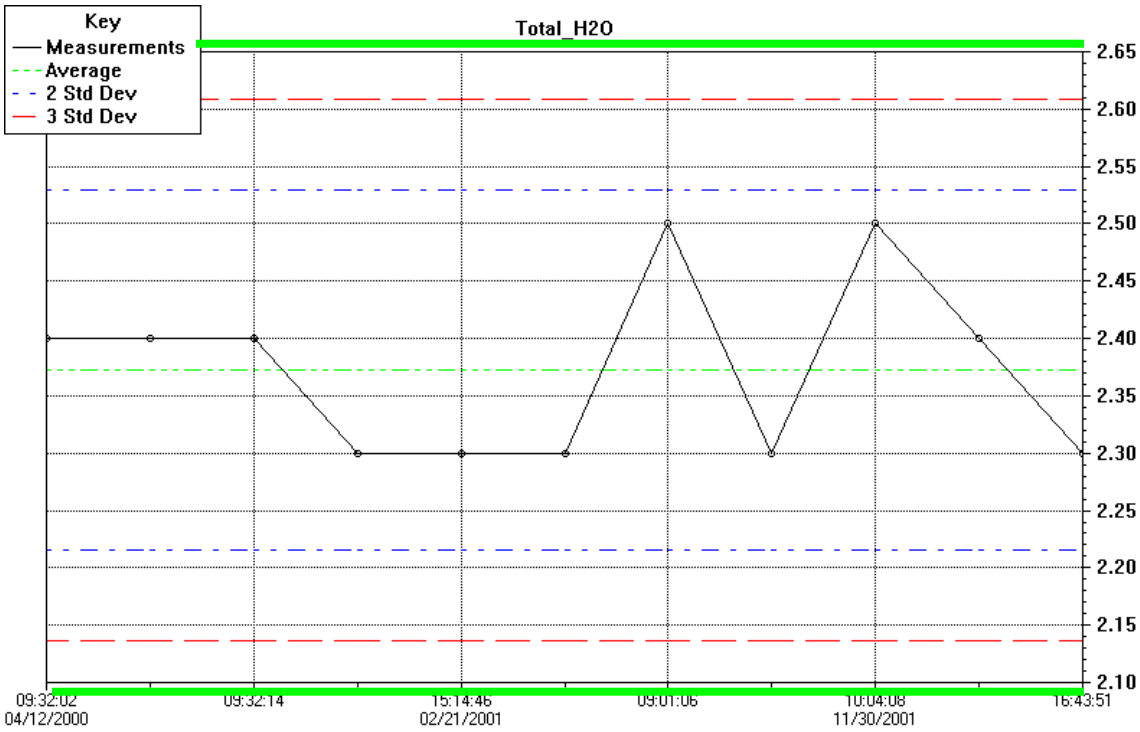


Method	Element	Units	LLD	Target Value	n=	Mean	Sdev	% RSD	% R	Mean -15%	Mean +15%
C_CO2_CARB	CRBNT_C	%	0	0.02	92	0.020	0.000	0.000	100	0.017	0.023



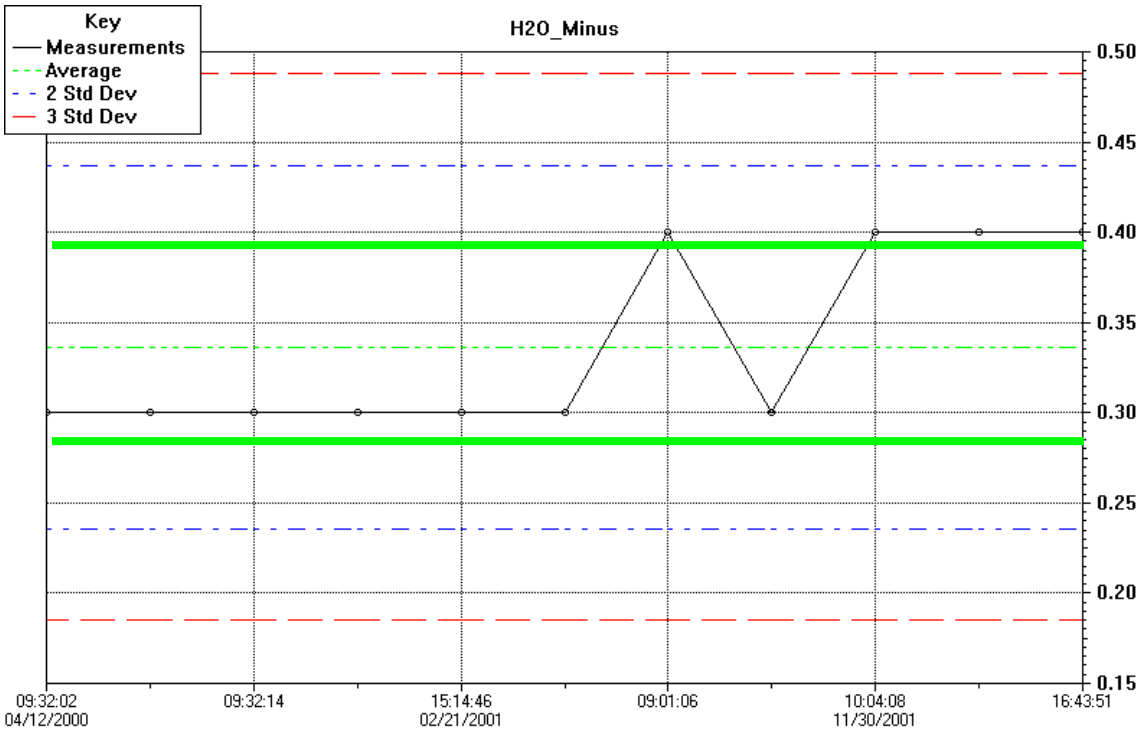
Method	Element	Units	LLD	Target Value	n=	Mean	Sdev	% RSD	% R	Mean -15%	Mean +15%
C_Organic_C	Organic_C	%		0.28	23	0.314	0.022	6.90	112	0.27	0.36

SAR-M.1



Mean = 2.3727 Std.Dev. = 0.0786

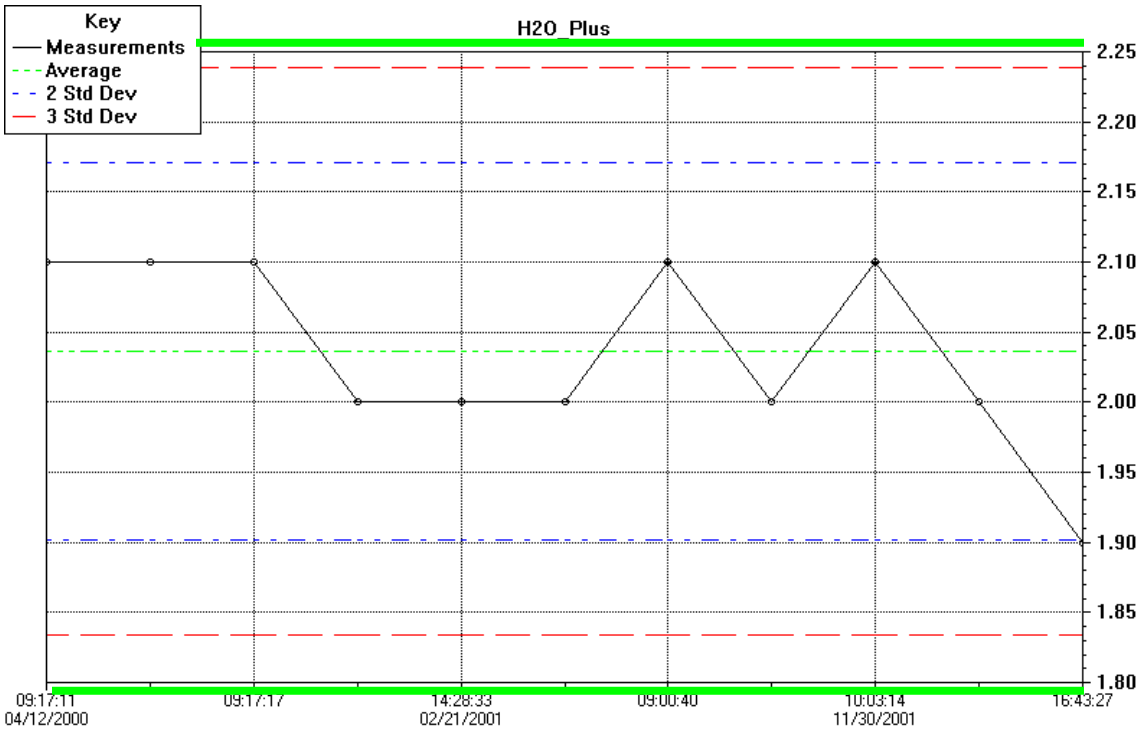
Method	Element	Units	LLD	Target Value	n=	Mean	Sdev	% RSD	% R	Mean -15%	Mean +15%
C_TOTAL_H2O	Total_H2O	%	0.05	2.5	11	2.37	0.079	3.31	95	2.02	2.73



Mean = 0.3364 Std.Dev. = 0.0505

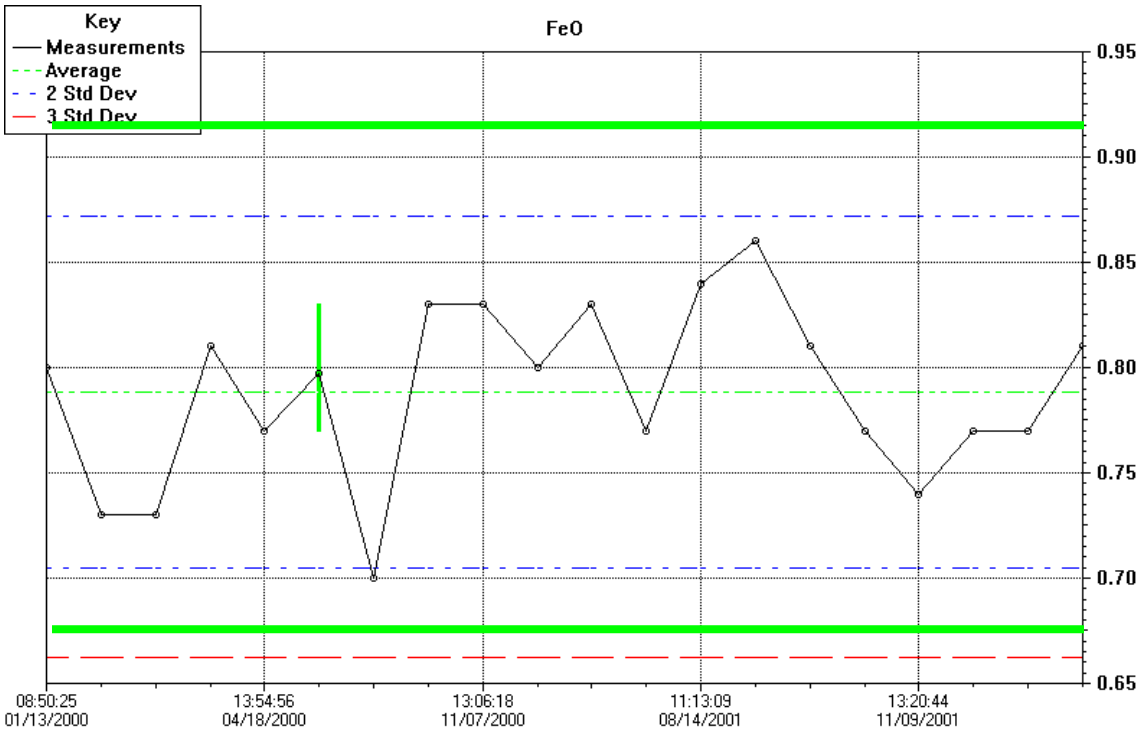
Method	Element	Units	LLD	Target Value	n=	Mean	Sdev	% RSD	% R	Mean -15%	Mean +15%
C_TOTAL_H2O	H2O_Minus	%	0.05	0.3	11	0.336	0.051	15.0	112	0.286	0.387

SAR-M.1



Mean = 2.0364 Std.Dev. = 0.0674

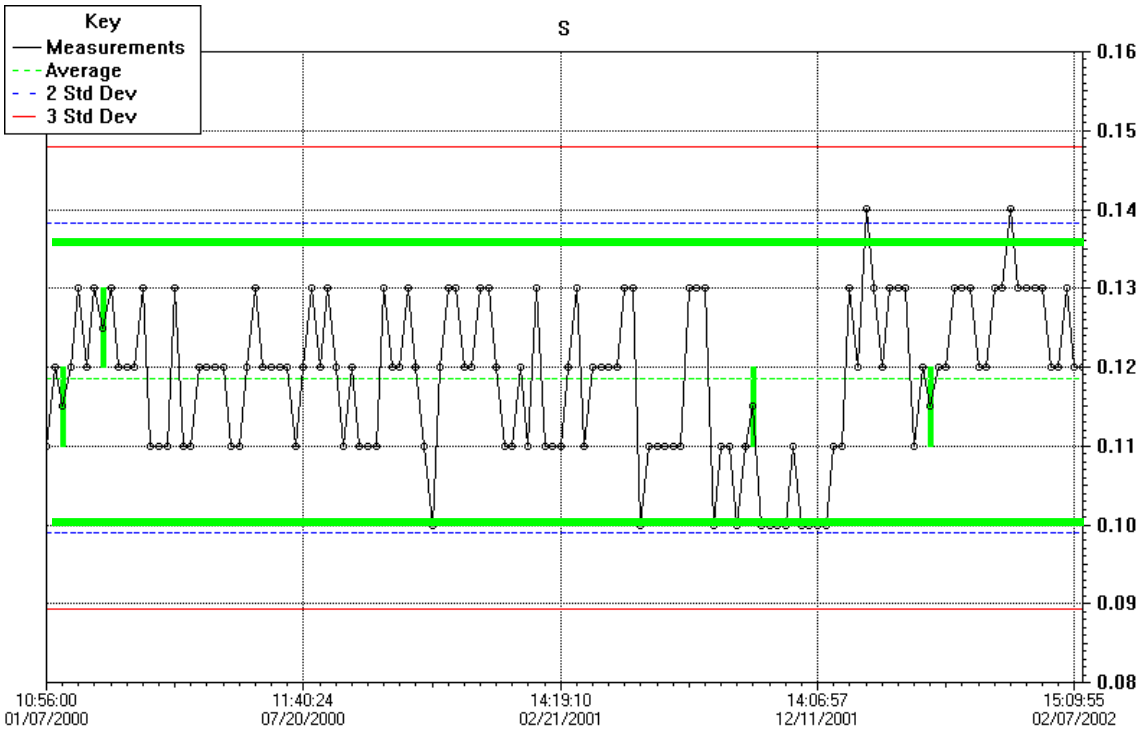
Method	Element	Units	LLD	Target Value	n=	Mean	Sdev	% RSD	% R	Mean -15%	Mean +15%
C_TOTAL_H2O	H2O_Plus	%	0.05	2.2	11	2.04	0.067	3.31	93	1.73	2.34



Mean = 0.7884 Std.Dev. = 0.0419

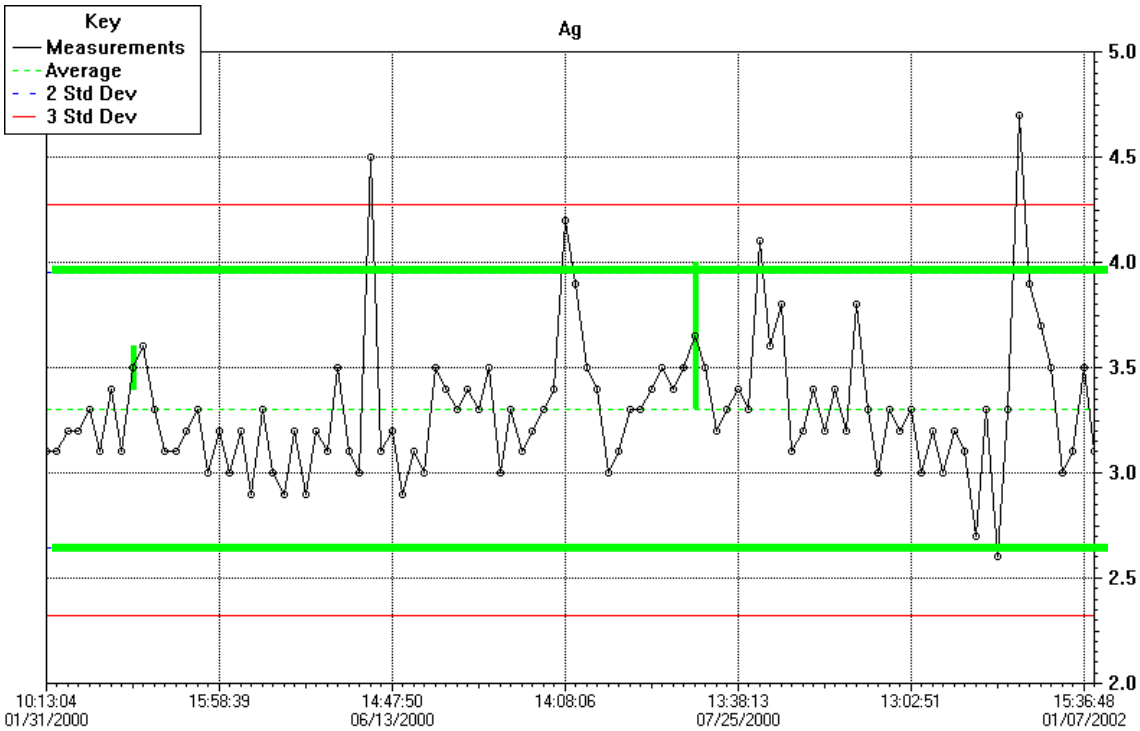
Method	Element	Units	LLD	Target Value	n=	Mean	Sdev	% RSD	% R	Mean -15%	Mean +15%
C_TITR_FEO	FeO	%	0.01	0.7	23	0.79	0.042	5.31	113	0.670	0.91

SAR-M.1



Mean = 0.1186 Std.Dev. = 0.0098

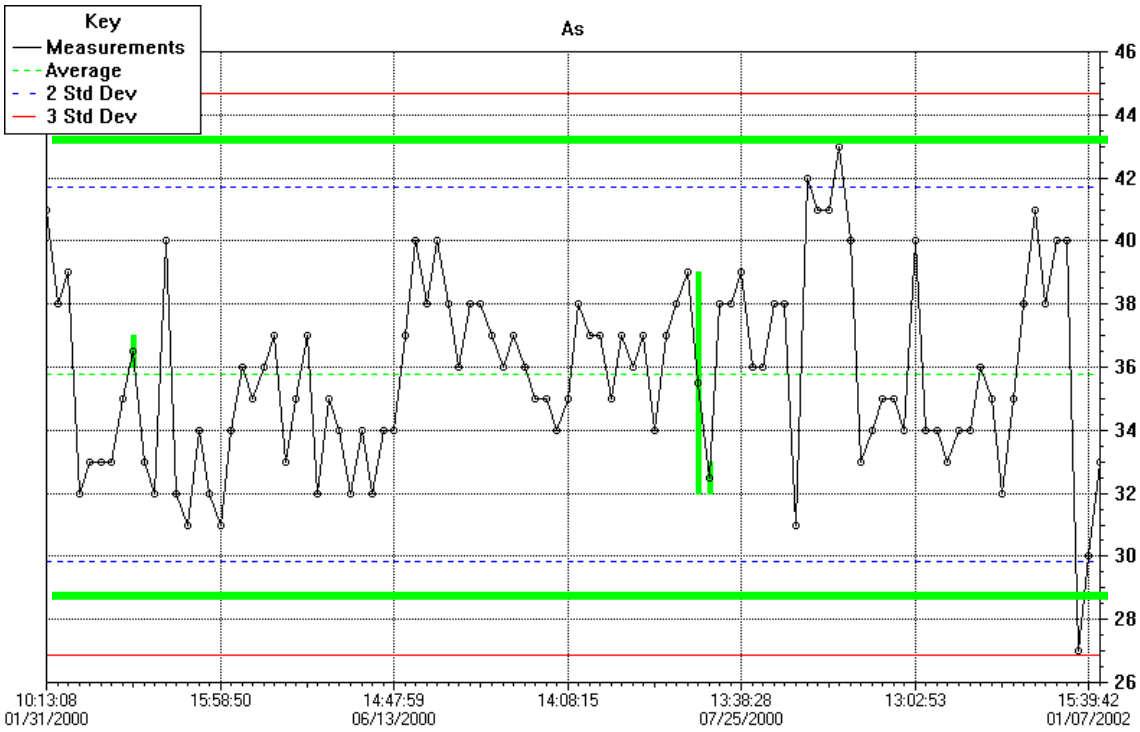
Method	Element	Units	LLD	Target Value	n=	Mean	Sdev	% RSD	% R	Mean -15%	Mean +15%
C_TOTAL_S	S	%	0.05	0.13	135	0.119	0.010	8.26	91	0.101	0.136



Mean = 3.2985 Std.Dev. = 0.3261

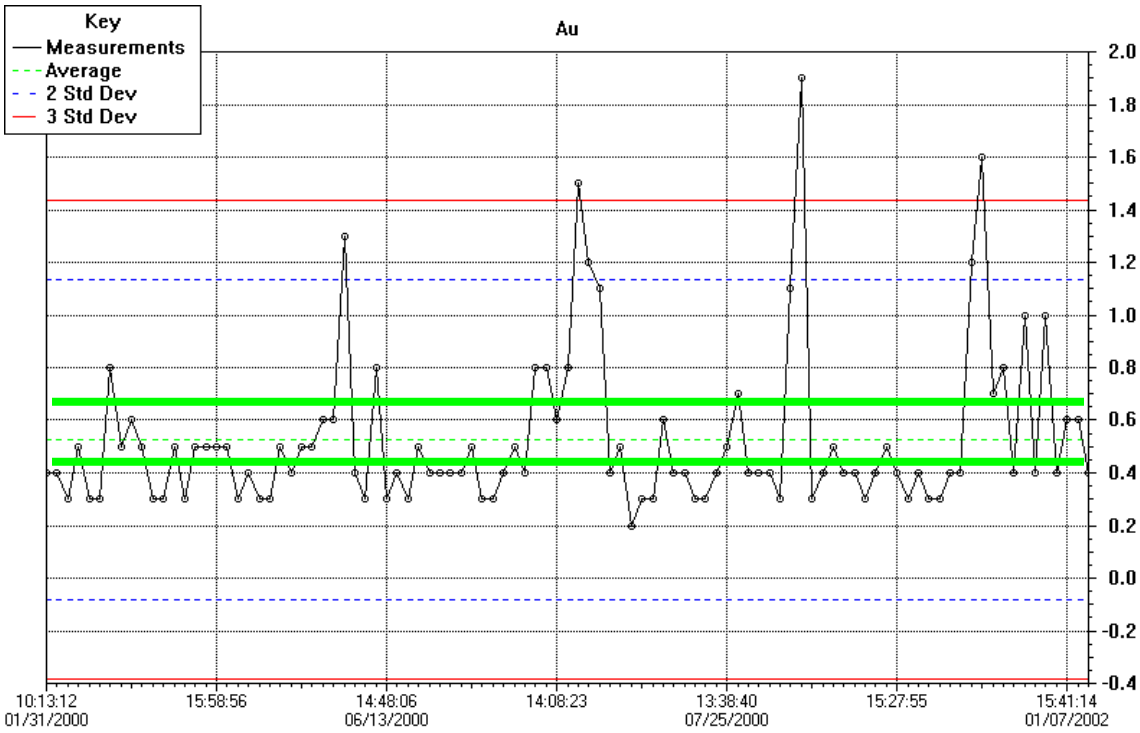
Method	Element	Units	LLD	Target Value	n=	Mean	Sdev	% RSD	% R	Mean -20%	Mean +20%
C_ICPAES_10	Ag	ppm	0.08	3.1	101	3.30	0.326	9.89	106	2.64	3.96

SAR-M.1



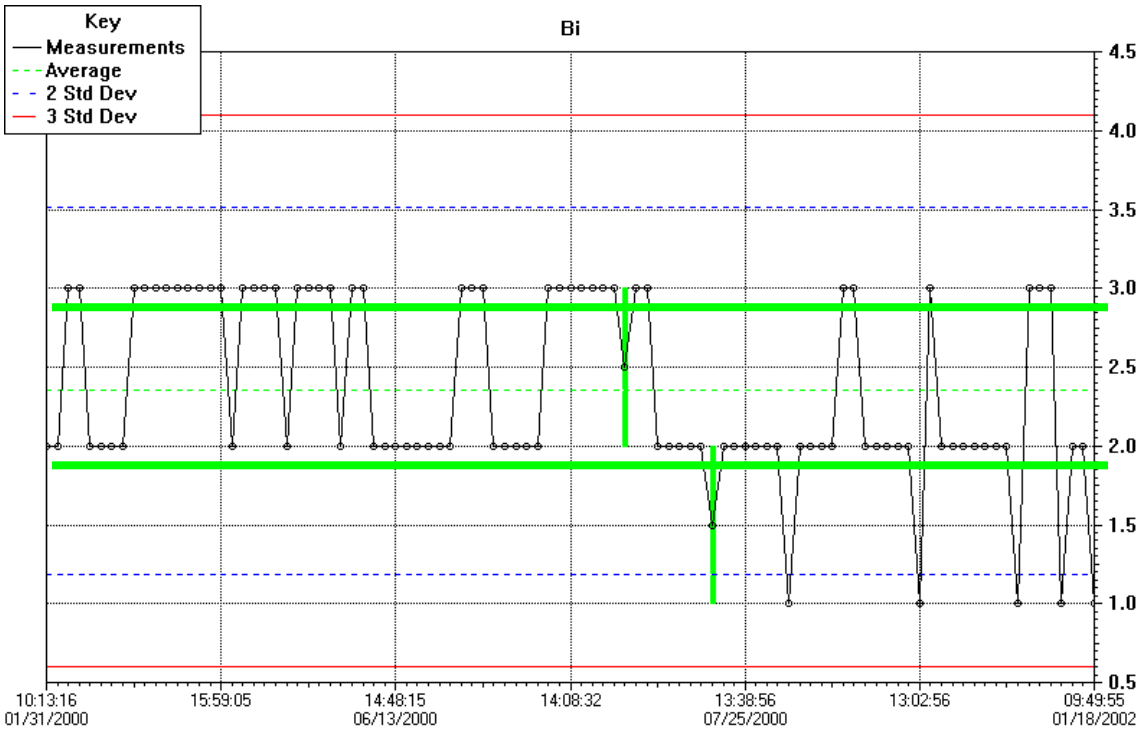
Mean = 35.7602 Std.Dev. = 2.9656

Method	Element	Units	LLD	Target Value	n=	Mean	Sdev	% RSD	% R	Mean -20%	Mean +20%
C_ICPAES_10	As	ppm	1	37	101	35.8	2.97	8.29	97	28.6	42.9

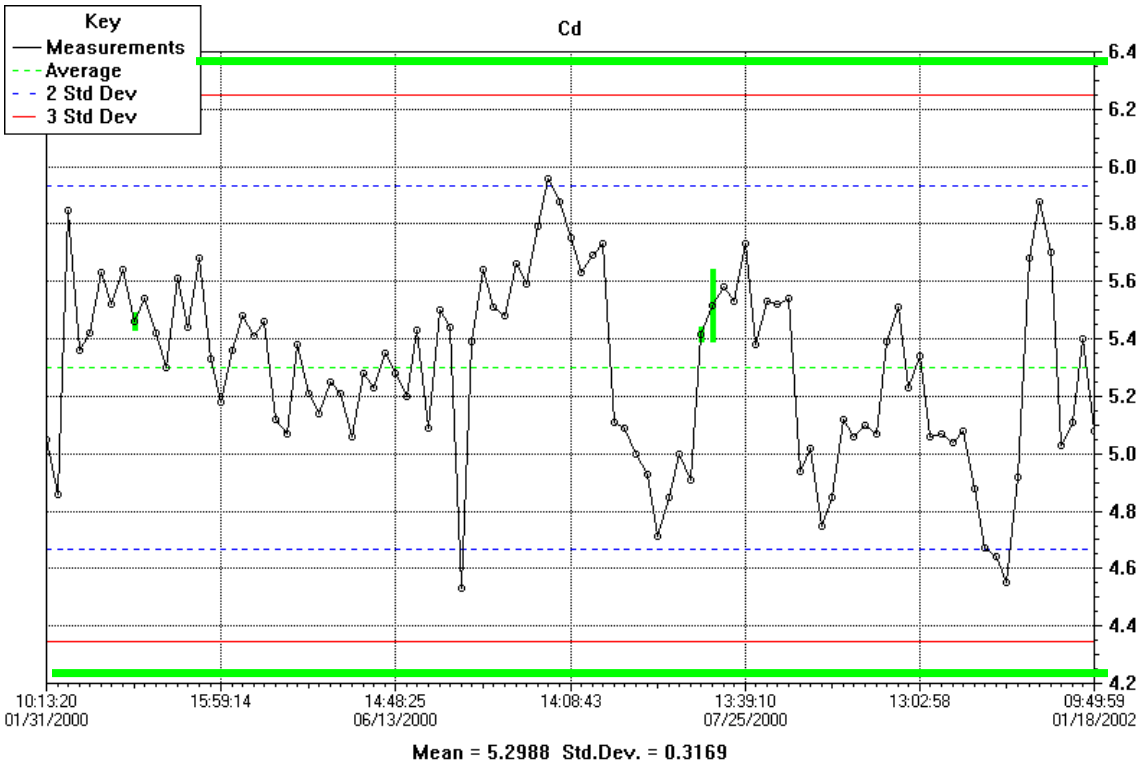


Mean = 0.5263 Std.Dev. = 0.3029

Method	Element	Units	LLD	Target Value	n=	Mean	Sdev	% RSD	% R	Mean -20%	Mean +20%
C_ICPAES_10	Au	ppm	0.1	0.345	101	0.526	0.303	57.6	153	0.421	0.632

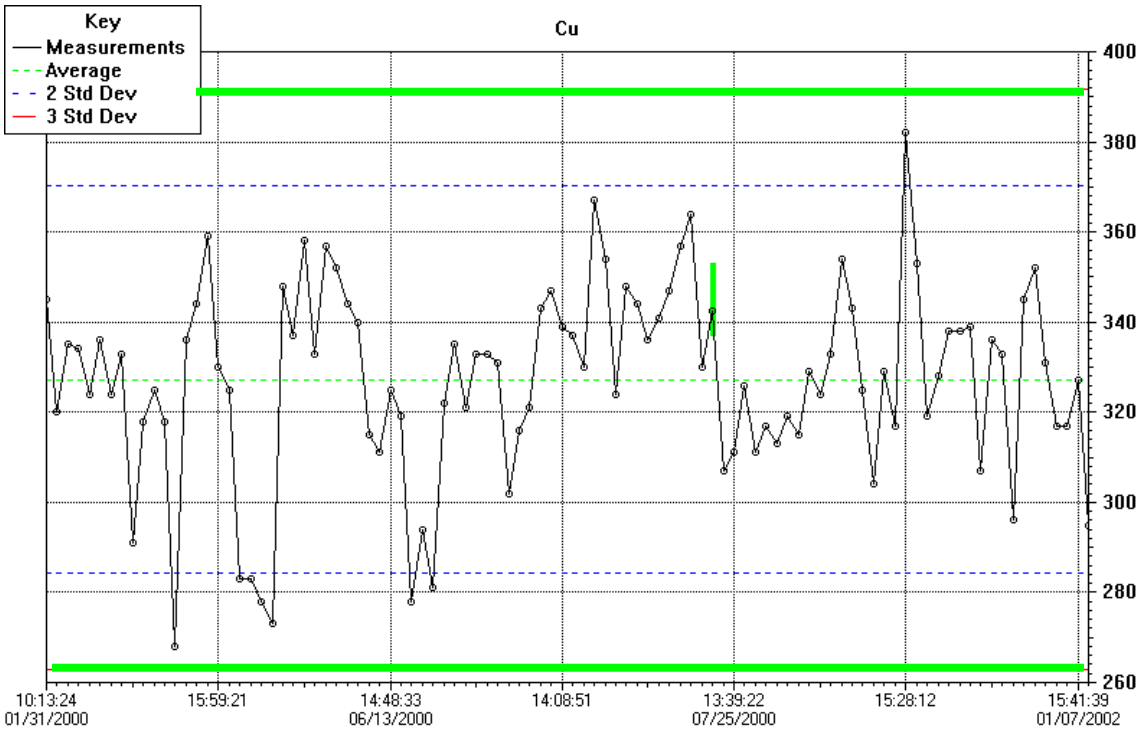


Method	Element	Units	LLD	Target Value	n=	Mean	Sdev	% RSD	% R	Mean -20%	Mean +20%
C_ICPAES_10	Bi	ppm	1	1.33	101	2.35	0.583	24.8	177	1.88	2.82



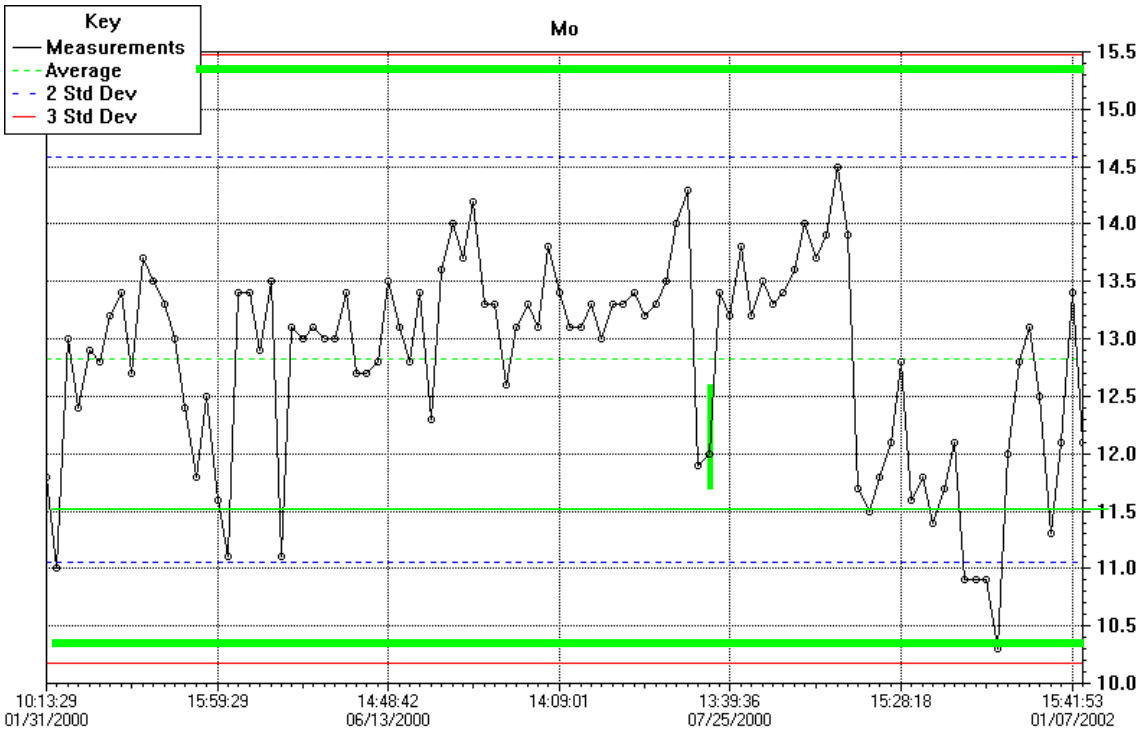
Method	Element	Units	LLD	Target Value	n=	Mean	Sdev	% RSD	% R	Mean -20%	Mean +20%
C_ICPAES_10	Cd	ppm	0.05	4.76	101	5.30	0.317	5.98	111	4.24	6.36

SAR-M.1



Mean = 327.2279 Std.Dev. = 21.4954

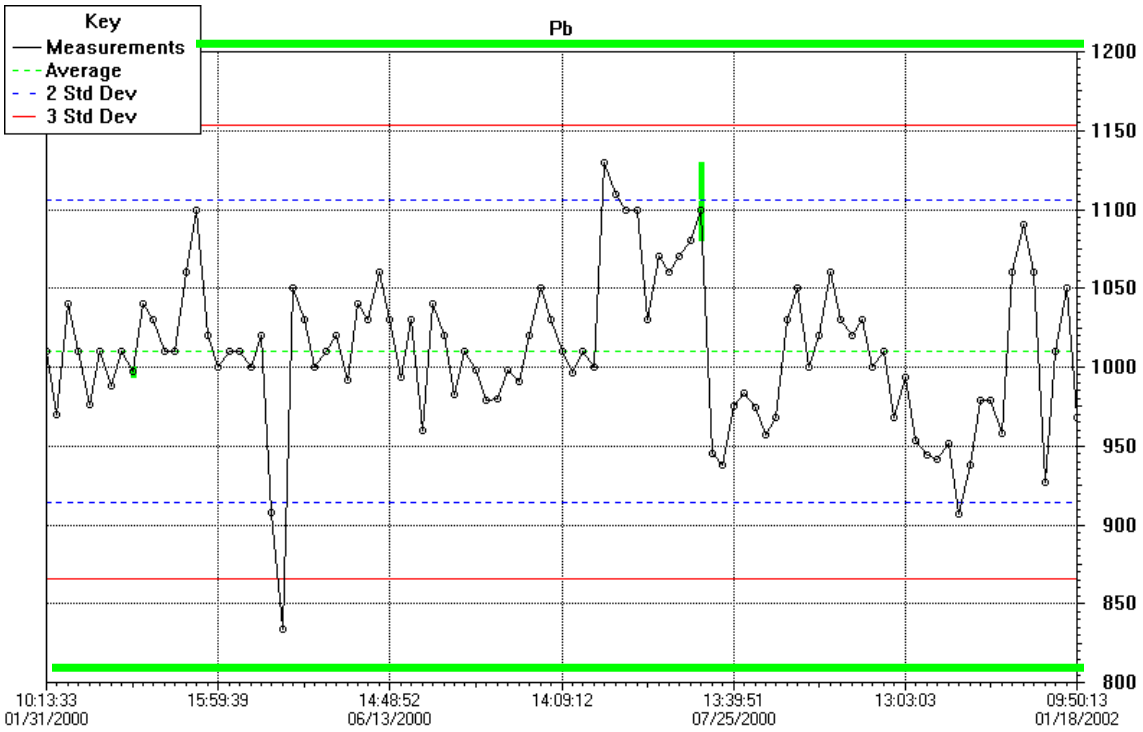
Method	Element	Units	LLD	Target Value	n=	Mean	Sdev	% RSD	% R	Mean -20%	Mean +20%
C_ICPAES_10	Cu	ppm	0.05	320	101	327	21.5	6.57	102	262	393



Mean = 12.8224 Std.Dev. = 0.8828

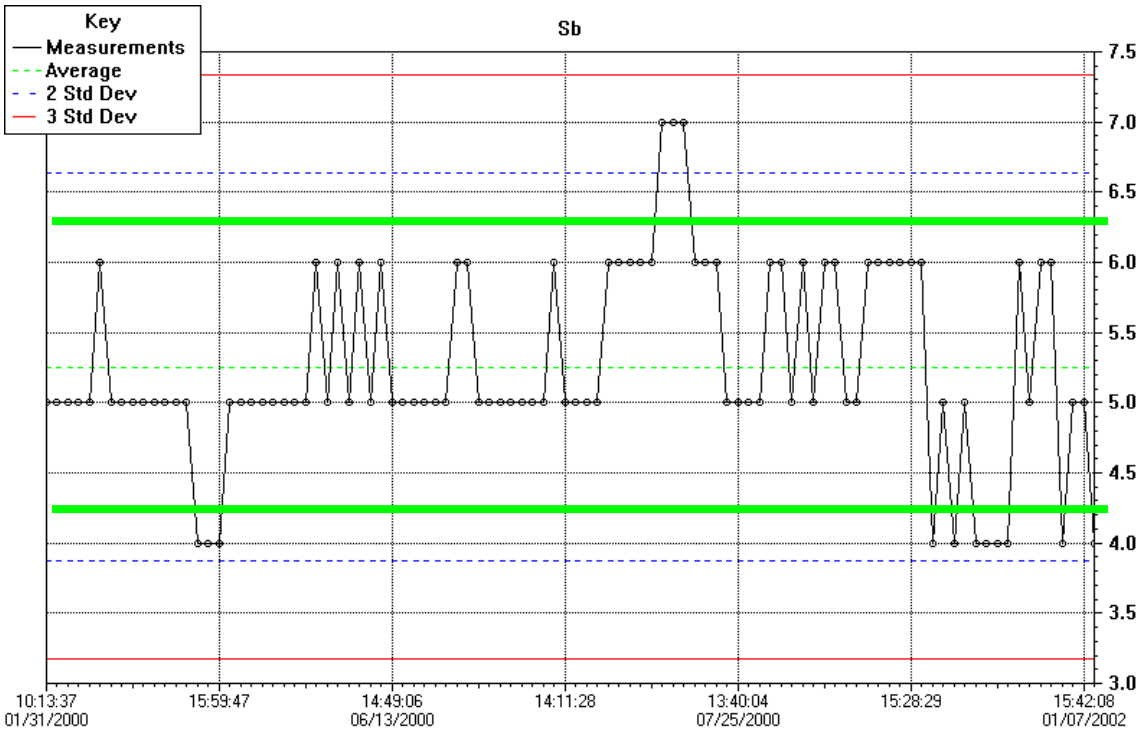
Method	Element	Units	LLD	Target Value	n=	Mean	Sdev	% RSD	% R	Mean -20%	Mean +20%
C_ICPAES_10	Mo	ppm	0.1	12	101	12.8	0.883	6.88	107	10.3	15.4

SAR-M.1



Mean = 1009.7320 Std.Dev. = 47.9541

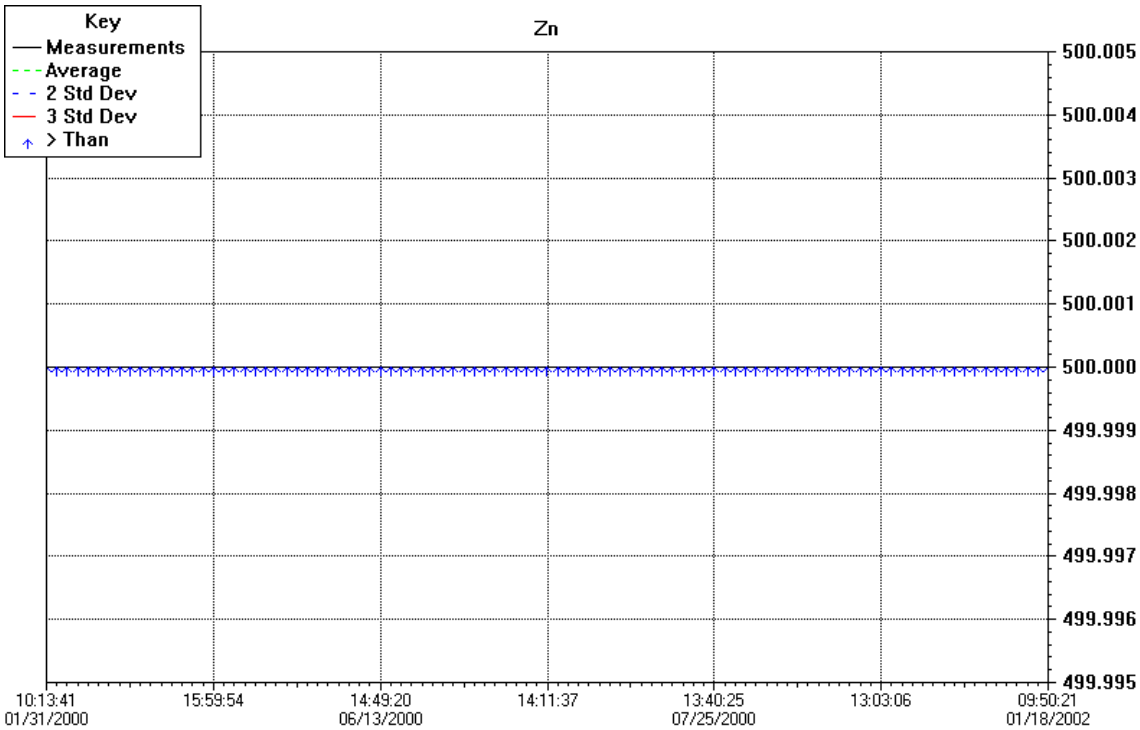
Method	Element	Units	LLD	Target Value	n=	Mean	Sdev	% RSD	% R	Mean -20%	Mean +20%
C_ICPAES_10	Pb	ppm	1	960	101	1010	48.0	4.75	105	808	1212



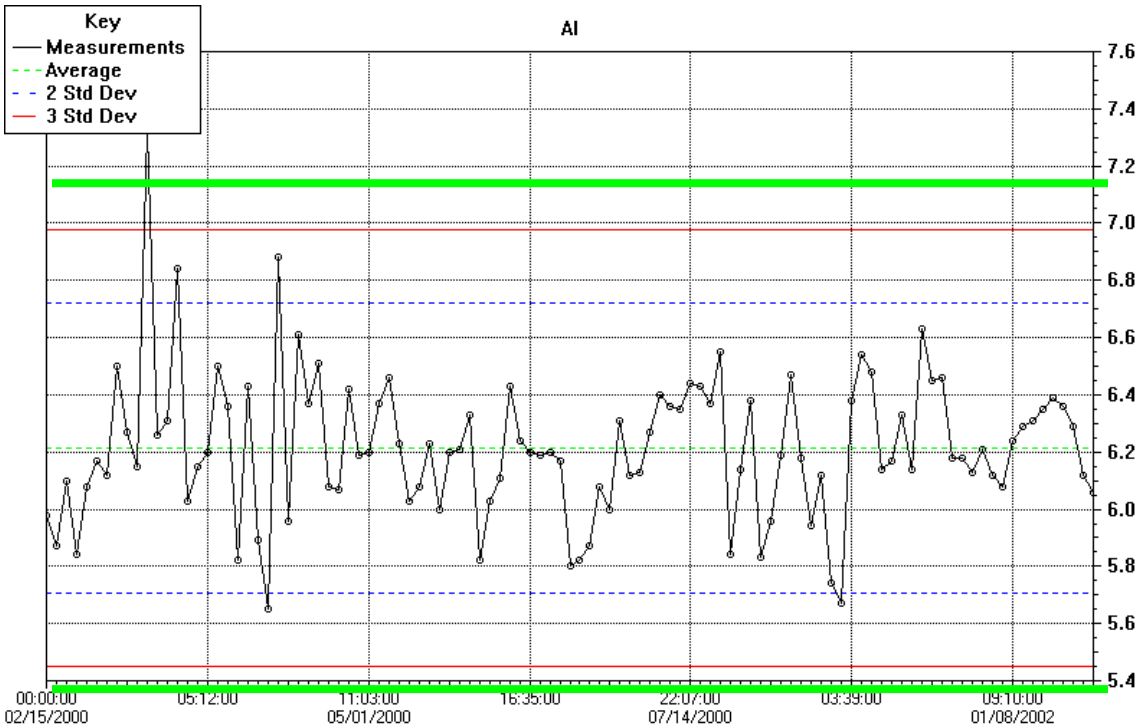
Mean = 5.2551 Std.Dev. = 0.6933

Method	Element	Units	LLD	Target Value	n=	Mean	Sdev	% RSD	% R	Mean -20%	Mean +20%
C_ICPAES_10	Sb	ppm	1	5.6	101	5.26	0.693	13.2	94	4.20	6.31

SAR-M.1

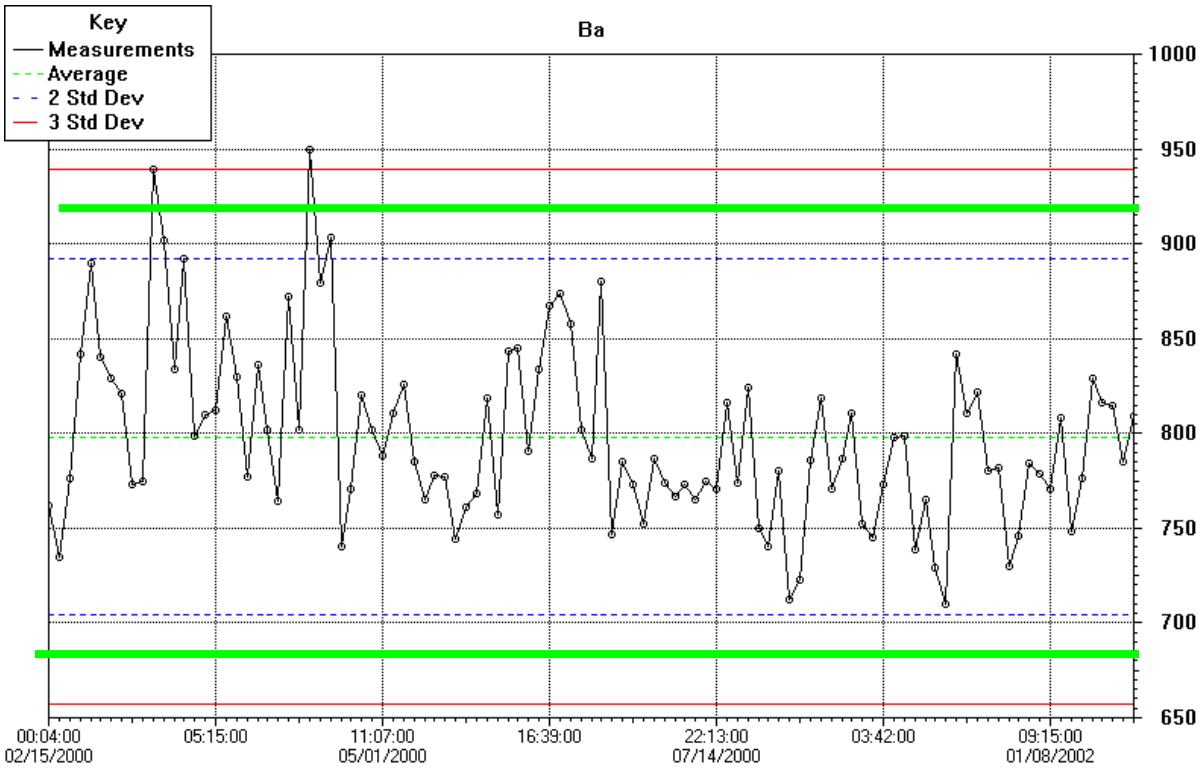


Method	Element	Units	LLD	Target Value	n=	Mean	Sdev	% RSD	% R	Mean -20%	Mean +20%
C_ICPAES_10	Zn	ppm	0.05	888	101	>500					



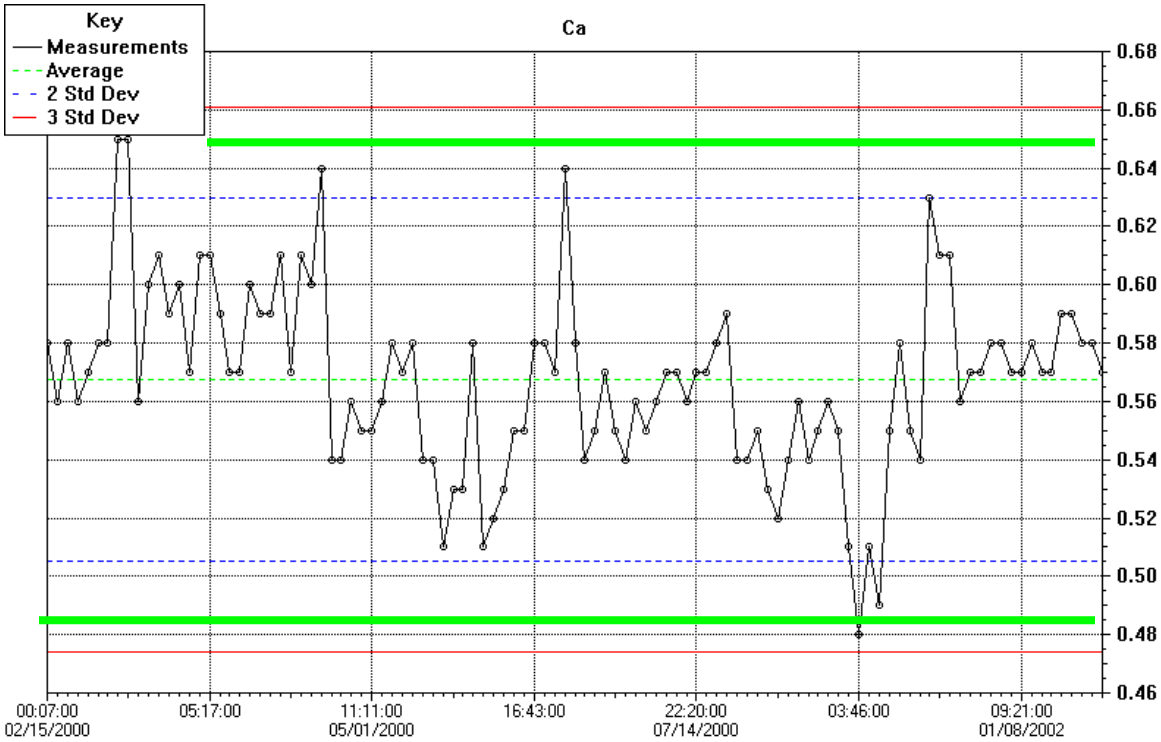
Method	Element	Units	LLD	Target Value	n=	Mean	Sdev	% RSD	% R	Mean -15%	Mean +15%
C_ICPAES_16	Al	%	0.01	6.09	105	6.21	0.255	4.11	102	5.28	7.14

SAR-M.1



Mean = 798.1524 Std.Dev. = 46.9754

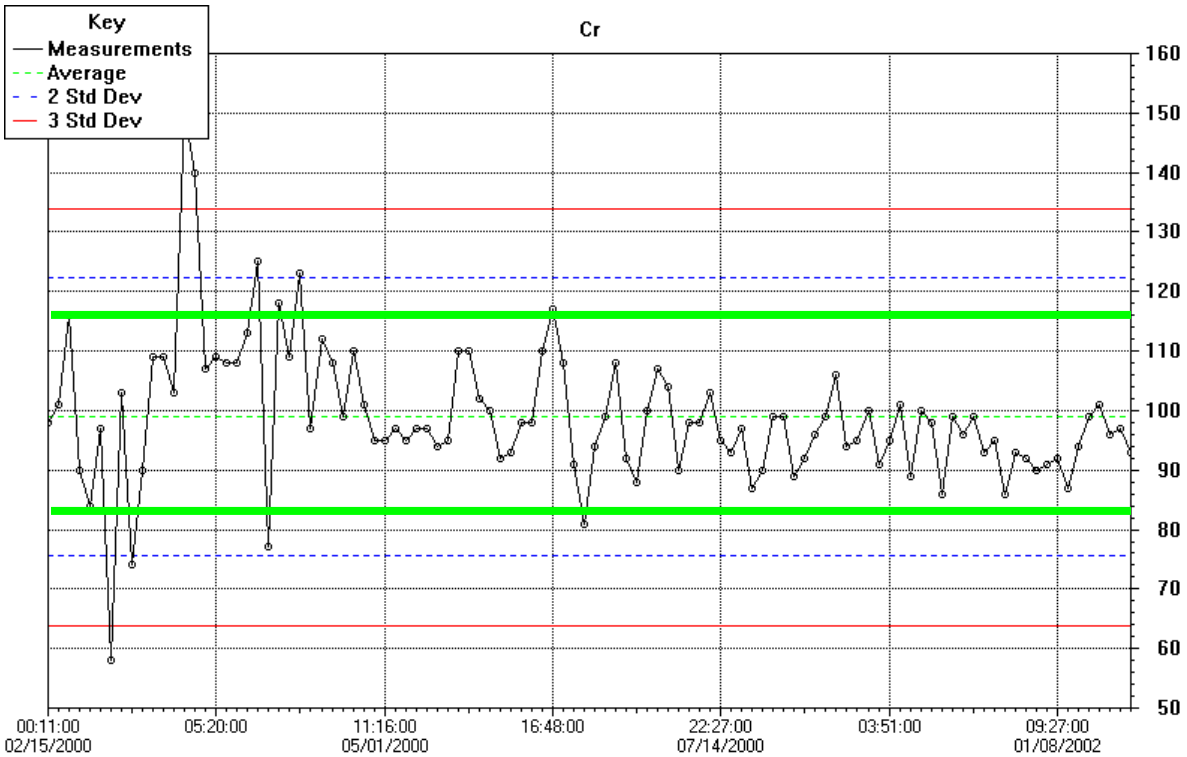
Method	Element	Units	LLD	Target Value	n=	Mean	Sdev	% RSD	% R	Mean -15%	Mean +15%
C_ICPAES_16	Ba	ppm	10	764	105	798	47.0	5.89	104	678	918



Mean = 0.5673 Std.Dev. = 0.0311

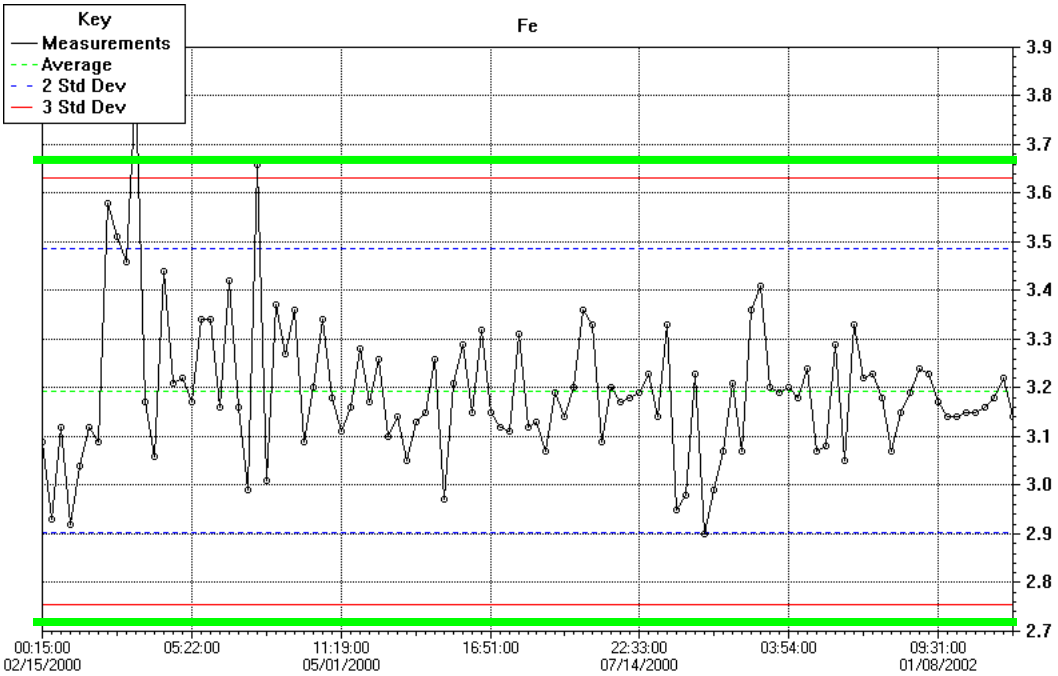
Method	Element	Units	LLD	Target Value	n=	Mean	Sdev	% RSD	% R	Mean -15%	Mean +15%
C_ICPAES_16	Ca	%	0.01	0.58	105	0.57	0.031	5.53	98	0.483	0.65

SAR-M.1



Mean = 98.9038 Std.Dev. = 11.6740

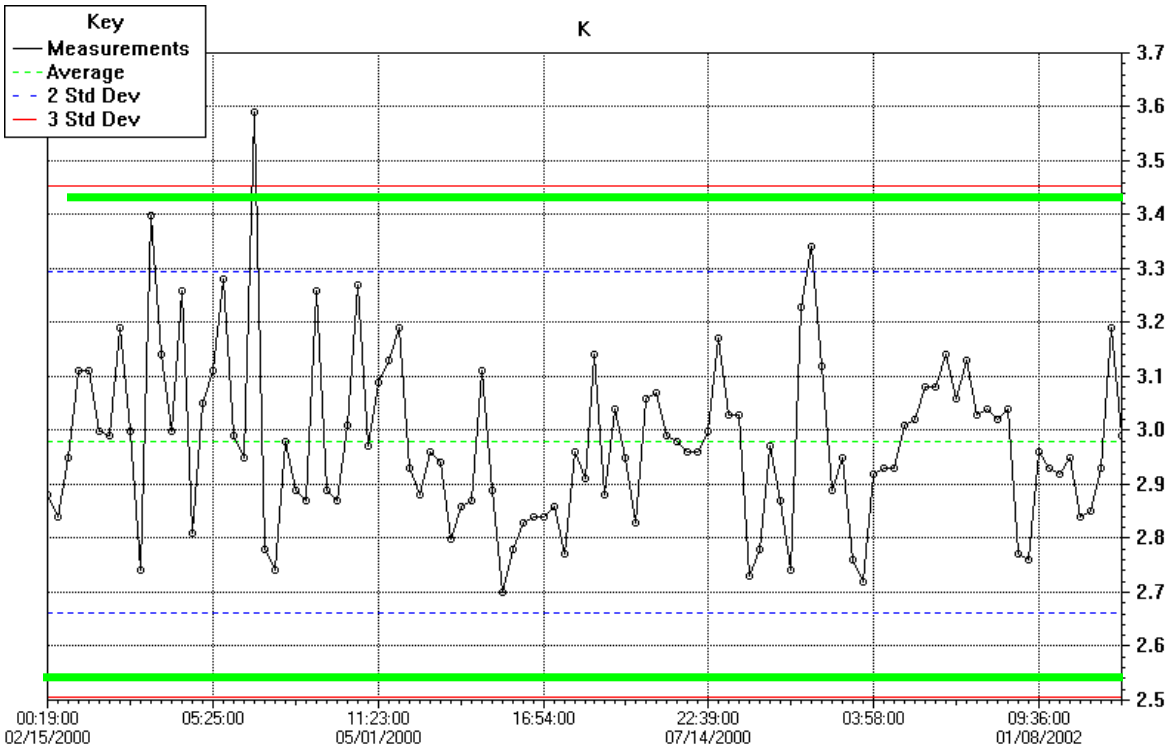
Method	Element	Units	LLD	Target Value	n=	Mean	Sdev	% RSD	% R	Mean -15%	Mean +15%
C_ICPAES_16	Cr	ppm	10	101	105	98.9	11.7	11.8	98	84.1	114



Mean = 3.1934 Std.Dev. = 0.1459

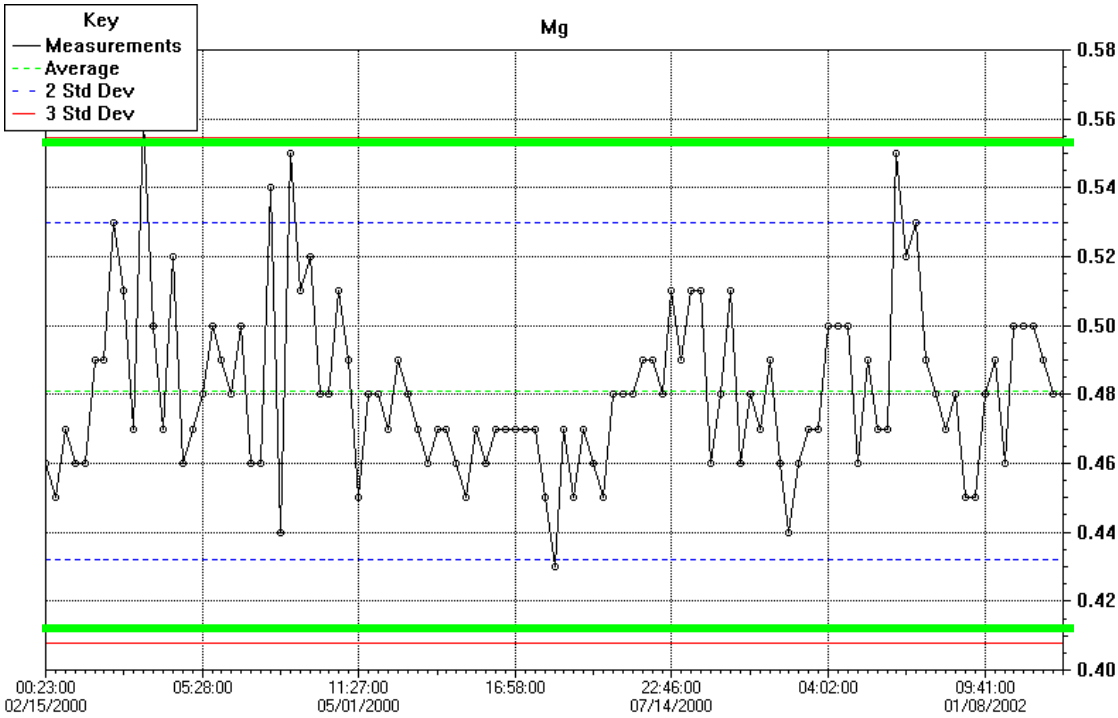
Method	Element	Units	LLD	Target Value	n=	Mean	Sdev	% RSD	% R	Mean -15%	Mean +15%
C_ICPAES_16	Fe	%	0.01	3.22	105	3.19	0.146	4.57	99	2.72	3.67

SAR-M.1



Mean = 2.9788 Std.Dev. = 0.1579

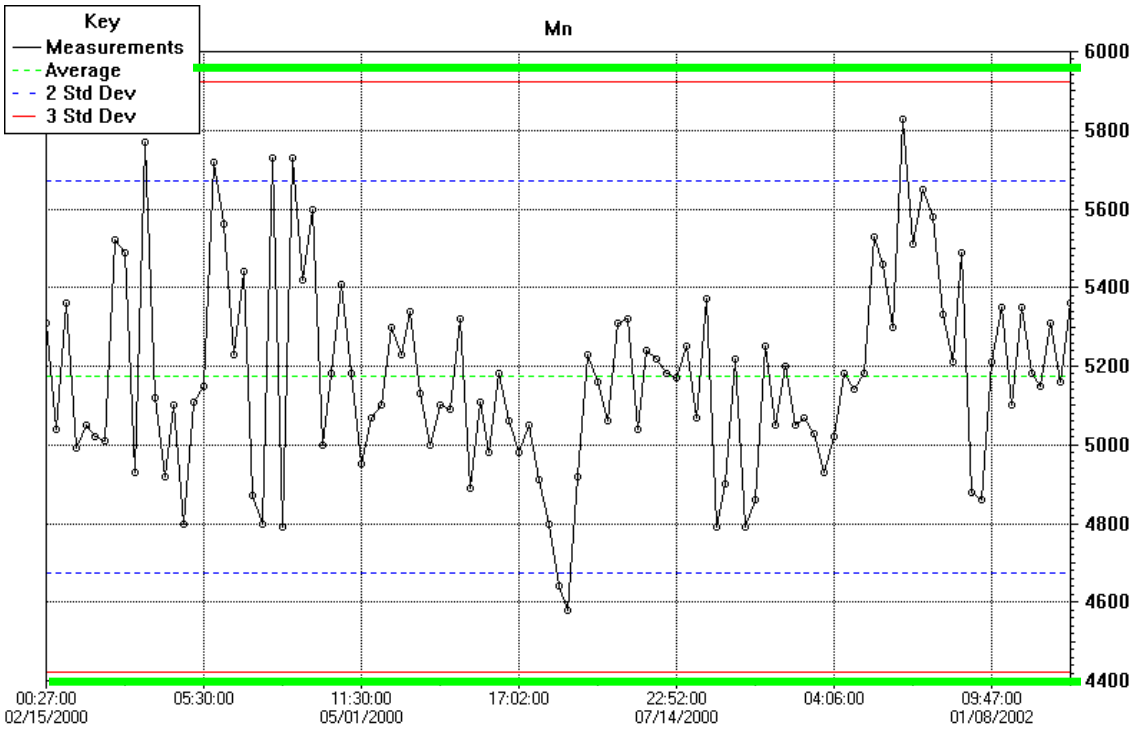
Method	Element	Units	LLD	Target Value	n=	Mean	Sdev	% RSD	% R	Mean -15%	Mean +15%
C_ICPAES_16	K	%	0.01	2.92	105	2.98	0.158	5.30	102	2.53	3.43



Mean = 0.4810 Std.Dev. = 0.0245

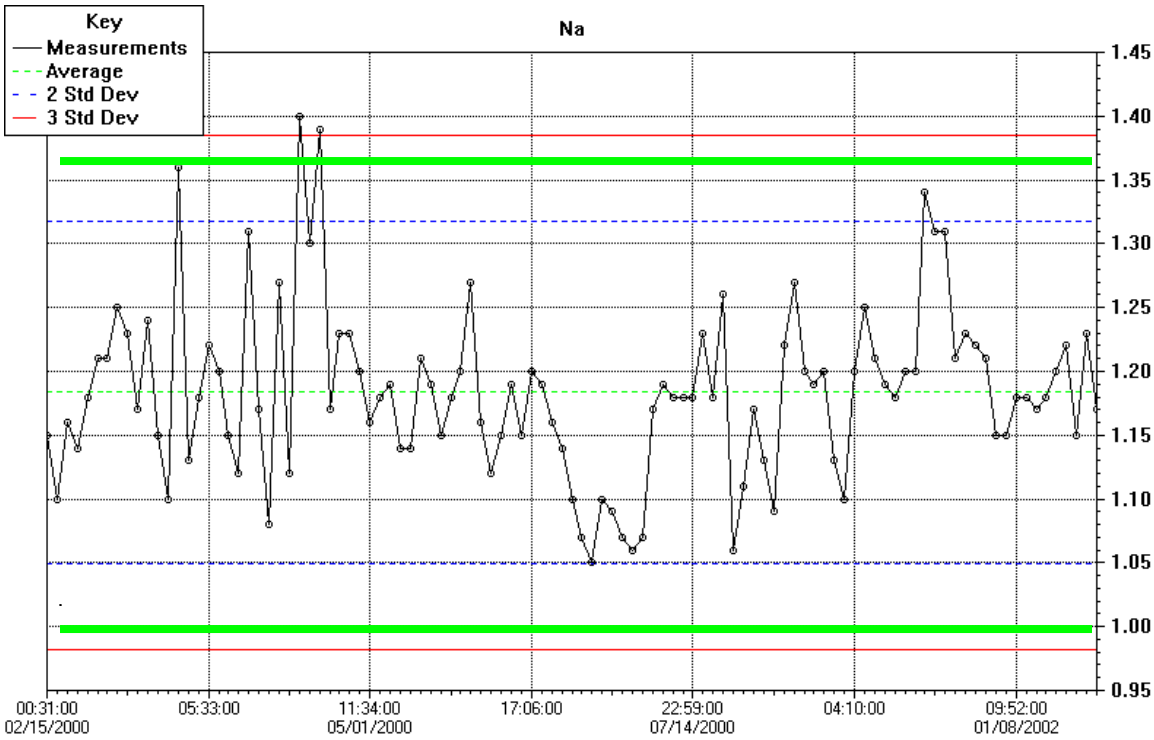
Method	Element	Units	LLD	Target Value	n=	Mean	Sdev	% RSD	% R	Mean -15%	Mean +15%
C_ICPAES_16	Mg	%	0.01	0.5	105	0.48	0.024	4.99	96	0.409	0.553

SAR-M.1



Mean = 5172.9524 Std.Dev. = 250.0189

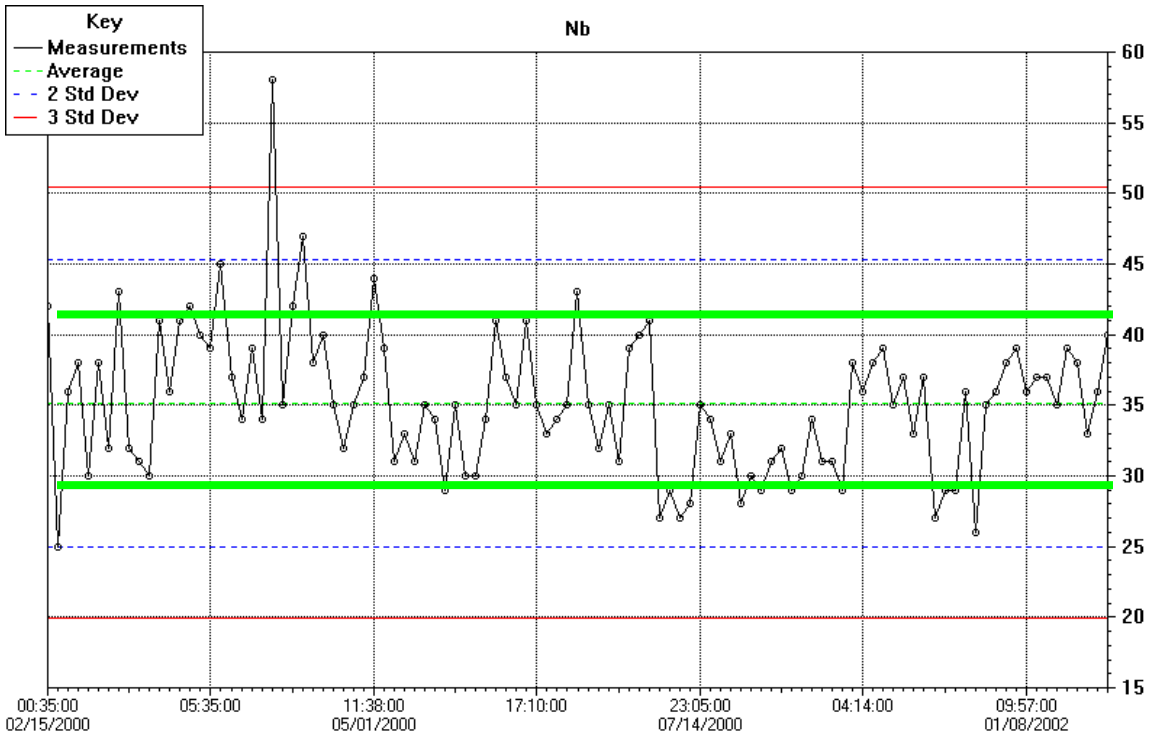
Method	Element	Units	LLD	Target Value	n=	Mean	Sdev	% RSD	% R	Mean -15%	Mean +15%
C_ICPAES_16	Mn	ppm	10	5200	105	5172	250	4.83	99	4396	5959



Mean = 1.1836 Std.Dev. = 0.0672

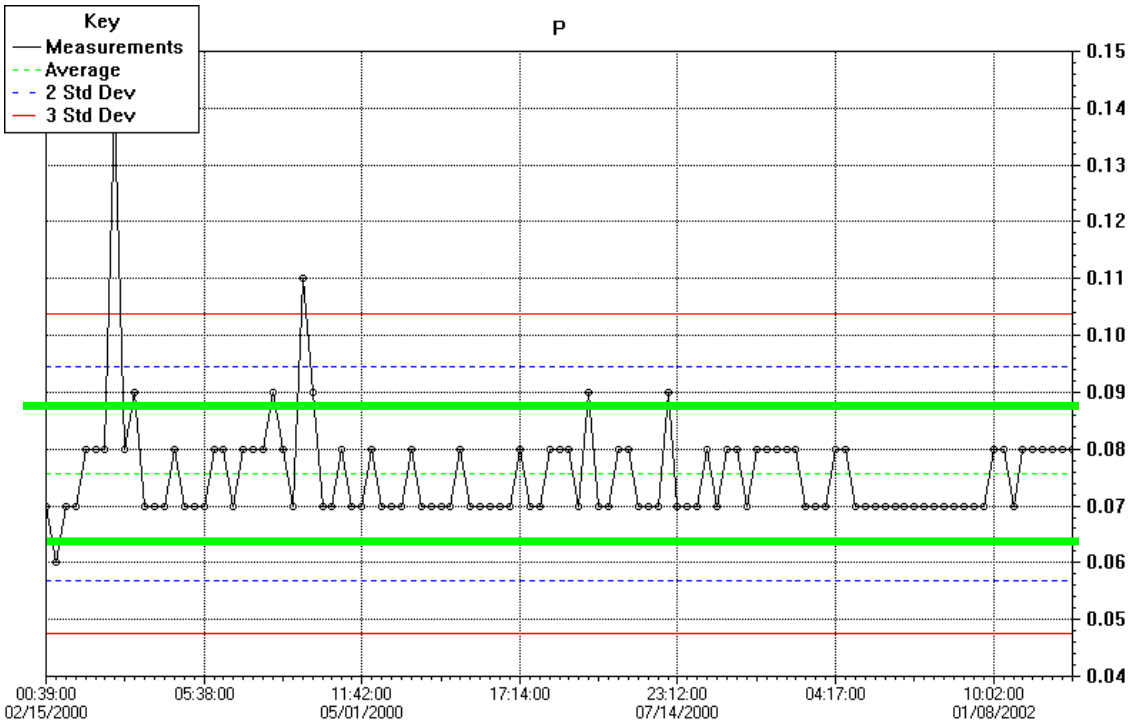
Method	Element	Units	LLD	Target Value	n=	Mean	Sdev	% RSD	% R	Mean -15%	Mean +15%
C_ICPAES_16	Na	%	0.01	1.19	105	1.18	0.067	5.65	99	1.00	1.36

SAR-M.1



Mean = 35.1714 Std.Dev. = 5.0848

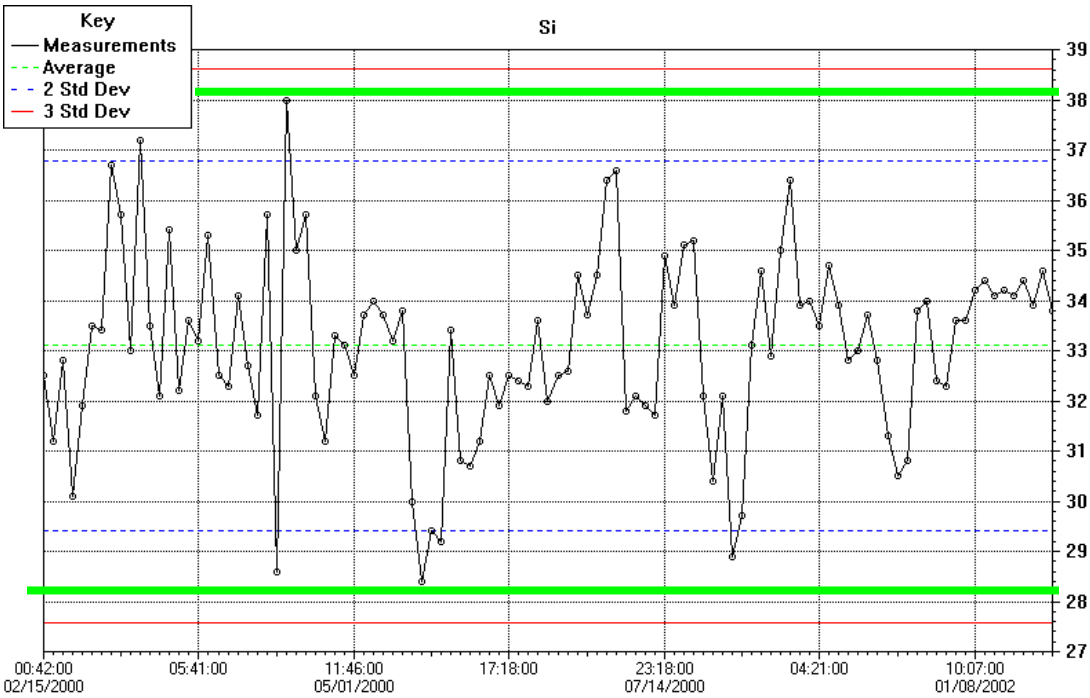
Method	Element	Units	LLD	Target Value	n=	Mean	Sdev	% RSD	% R	Mean -15%	Mean +15%
C_ICPAES_16	Nb	ppm	10	31	105	35.2	5.08	14.4	114	29.9	41.2



Mean = 0.0756 Std.Dev. = 0.0094

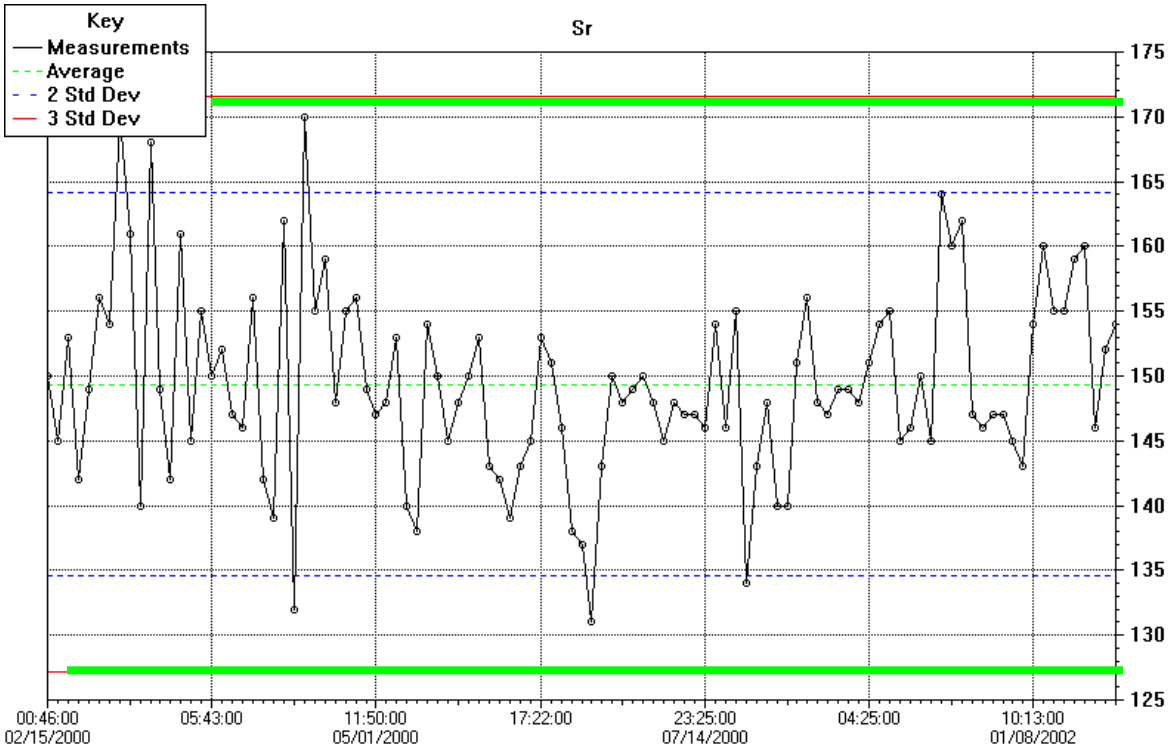
Method	Element	Units	LLD	Target Value	n=	Mean	Sdev	% RSD	% R	Mean -15%	Mean +15%
C_ICPAES_16	P	%	0.01	.08	105	0.076	0.009	11.9	95	0.064	0.087

SAR-M.1



Mean = 33.0990 Std.Dev. = 1.8417

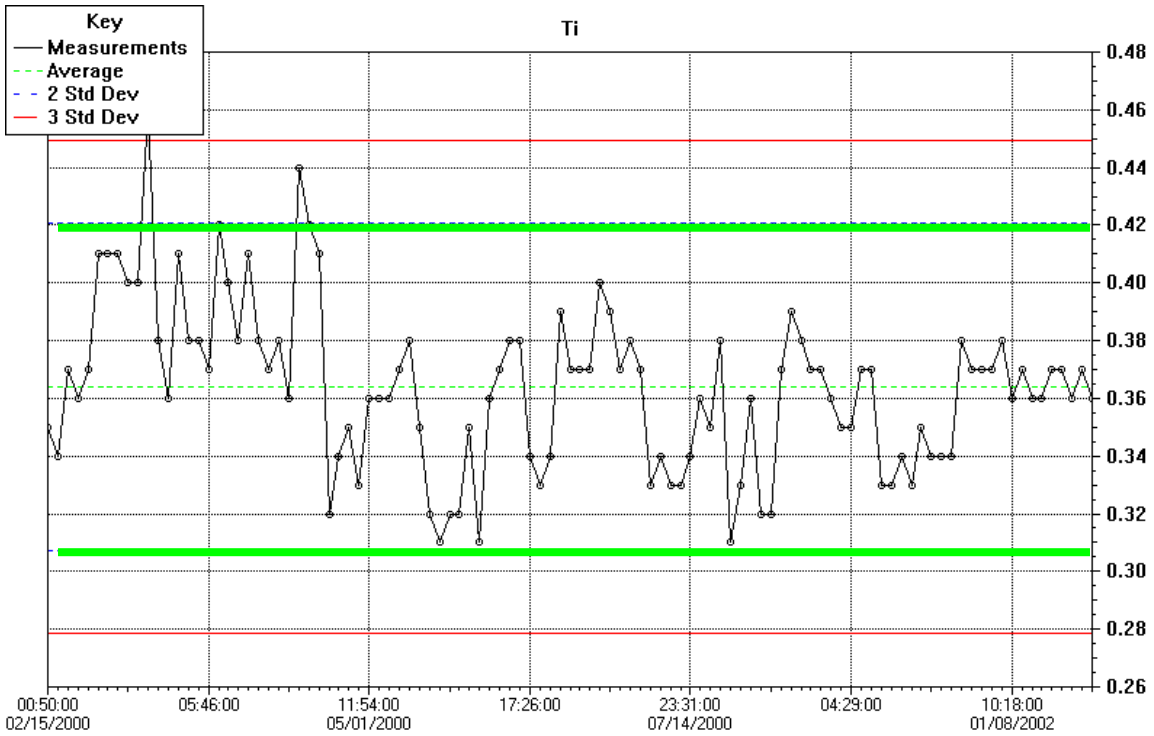
Method	Element	Units	LLD	Target Value	n=	Mean	Sdev	% RSD	% R	Mean -15%	Mean +15%
C_ICPAES_16	Si	%	0.01	33.53	105	33.1	1.84	5.56	99	28.1	38.1



Mean = 149.3619 Std.Dev. = 7.4021

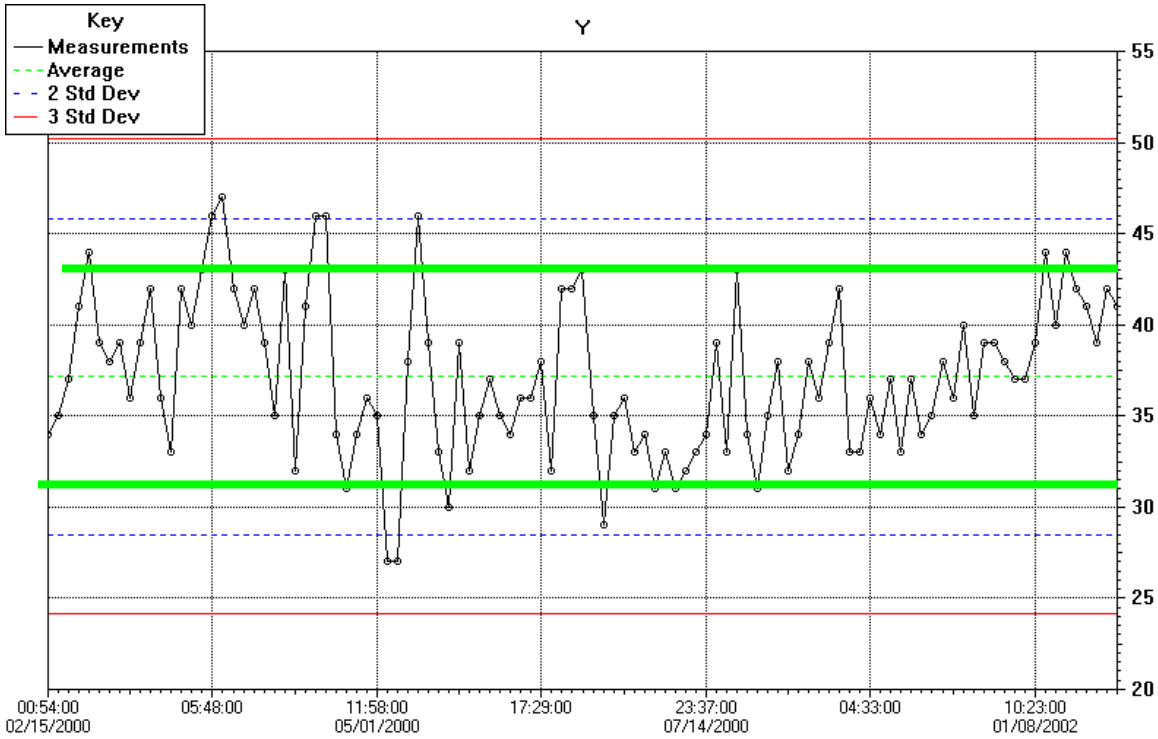
Method	Element	Units	LLD	Target Value	n=	Mean	Sdev	% RSD	% R	Mean -15%	Mean +15%
C_ICPAES_16	Sr	ppm	10	156	105	149	7.40	4.97	96	127	171

SAR-M.1



Mean = 0.3640 Std.Dev. = 0.0284

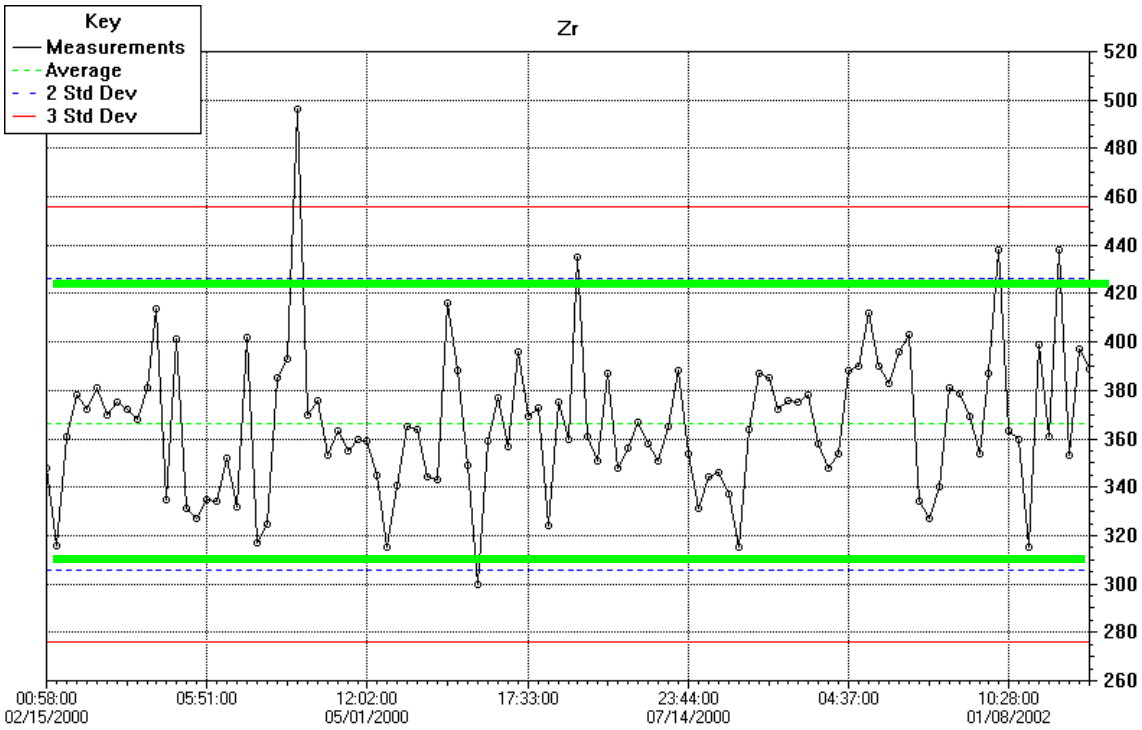
Method	Element	Units	LLD	Target Value	n=	Mean	Sdev	% RSD	% R	Mean -15%	Mean +15%
C_ICPAES_16	Ti	%	0.01	.35	105	0.364	0.028	7.69	104	0.309	0.419



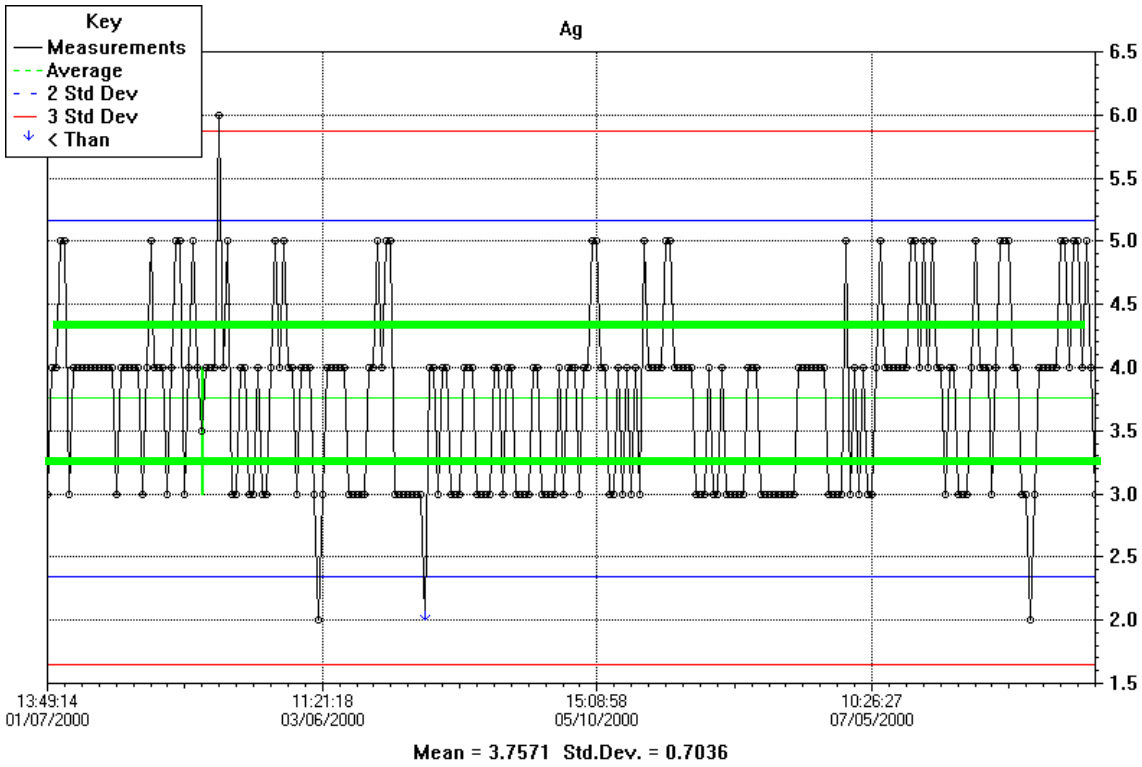
Mean = 37.1524 Std.Dev. = 4.3385

Method	Element	Units	LLD	Target Value	n=	Mean	Sdev	% RSD	% R	Mean -15%	Mean +15%
C_ICPAES_16	Y	ppm	10	33	105	37.1	4.34	11.7	112	31.5	42.7

SAR-M.1

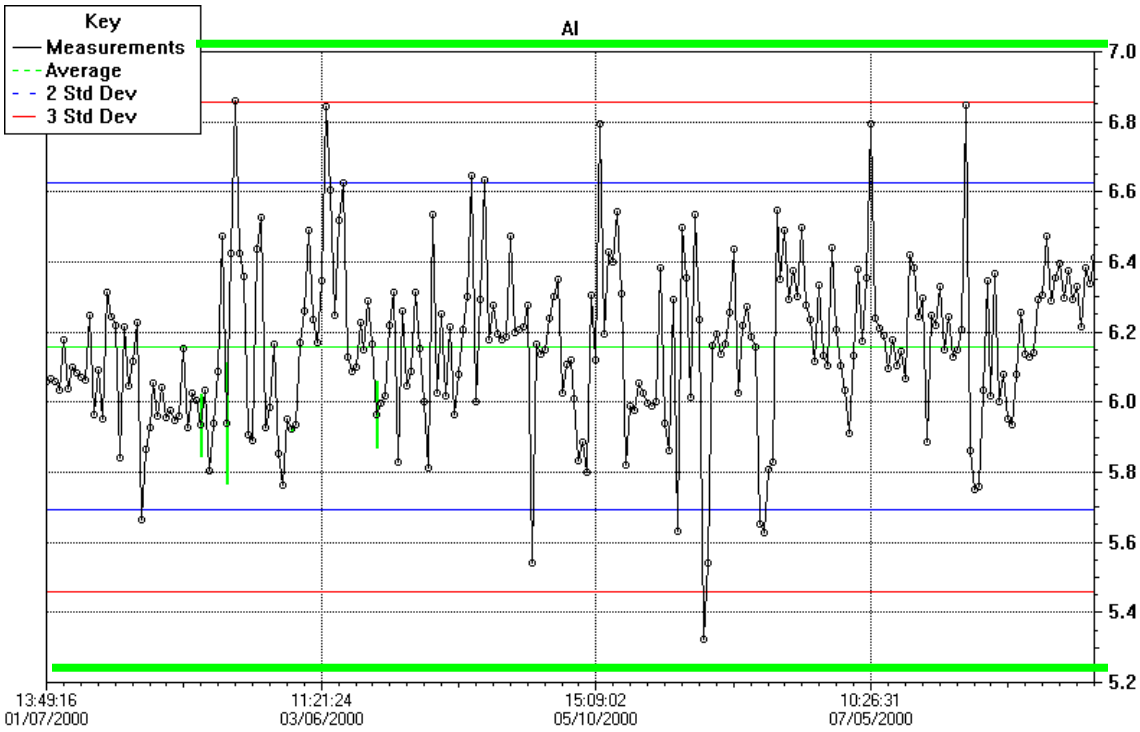


Method	Element	Units	LLD	Target Value	n=	Mean	Sdev	% RSD	% R	Mean -15%	Mean +15%
C_ICPAES_16	Zr	ppm	10	370	105	366	30.7	8.19	99	311	421



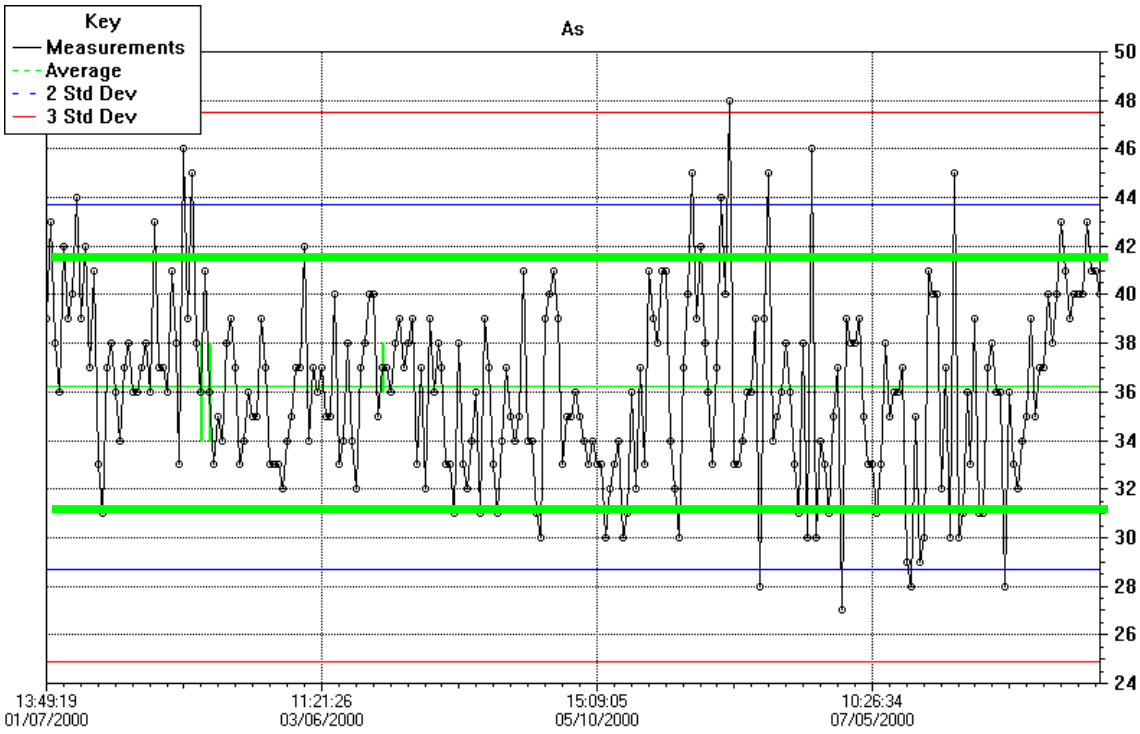
Method	Element	Units	LLD	Target Value	n=	Mean	Sdev	% RSD	% R	Mean -15%	Mean +15%
C_ICPAES_40	Ag	ppm	2	3.1	239	3.76	0.704	18.7	121	3.19	4.32

SAR-M.1



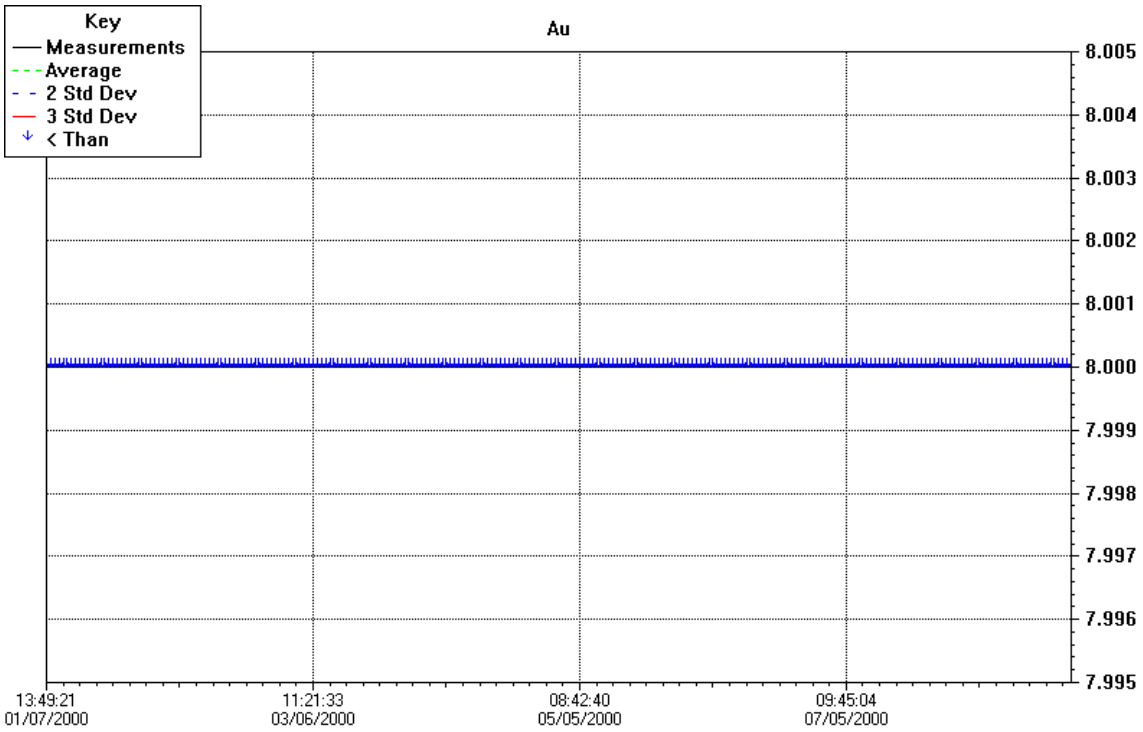
Mean = 6.1594 Std.Dev. = 0.2329

Method	Element	Units	LLD	Target Value	n=	Mean	Sdev	% RSD	% R	Mean -15%	Mean +15%
C_ICPAES_40	Al	%	0.01	6.09	239	6.16	0.233	3.78	101	5.24	7.08

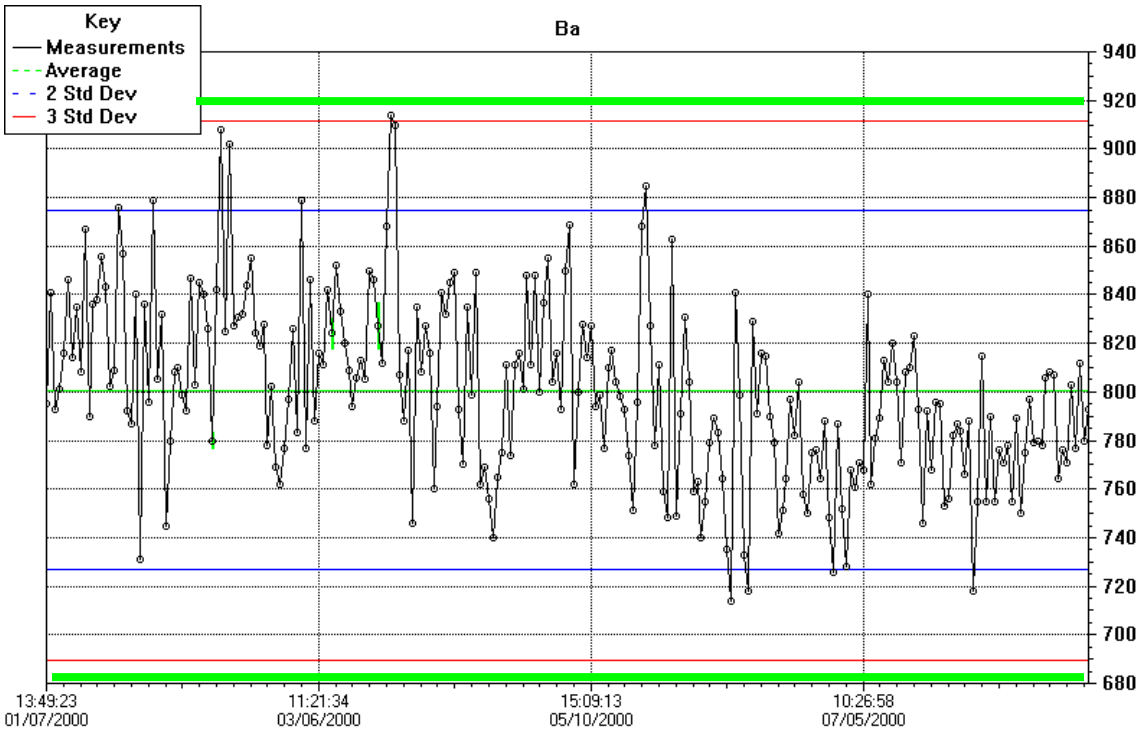


Mean = 36.1992 Std.Dev. = 3.7641

Method	Element	Units	LLD	Target Value	n=	Mean	Sdev	% RSD	% R	Mean -15%	Mean +15%
C_ICPAES_40	As	ppm	10	37	239	36.2	3.76	10.4	98	30.8	41.6

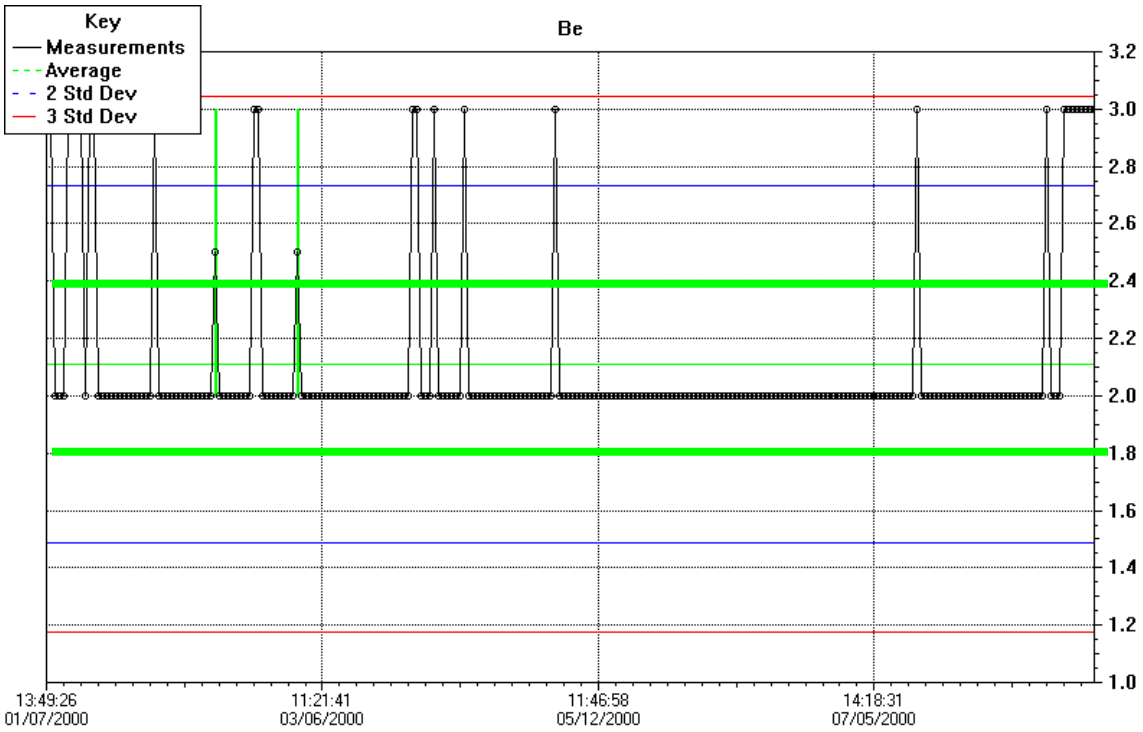


Method	Element	Units	LLD	Target Value	n=	Mean	Sdev	% RSD	% R	Mean -15%	Mean +15%
C_ICPAES_40	Au	ppm	8	0.345	239	<8					

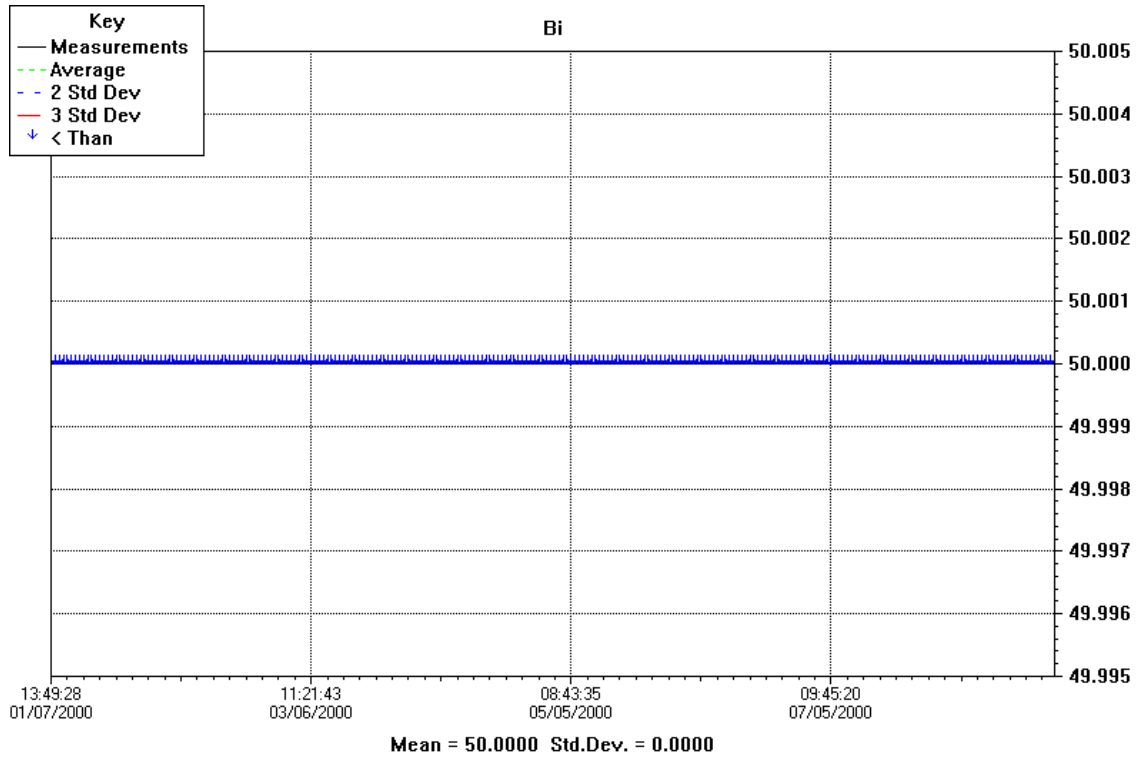


Method	Element	Units	LLD	Target Value	n=	Mean	Sdev	% RSD	% R	Mean -15%	Mean +15%
C_ICPAES_40	Ba	ppm	1	764	239	801	37.0	4.62	105	681	921

SAR-M.1

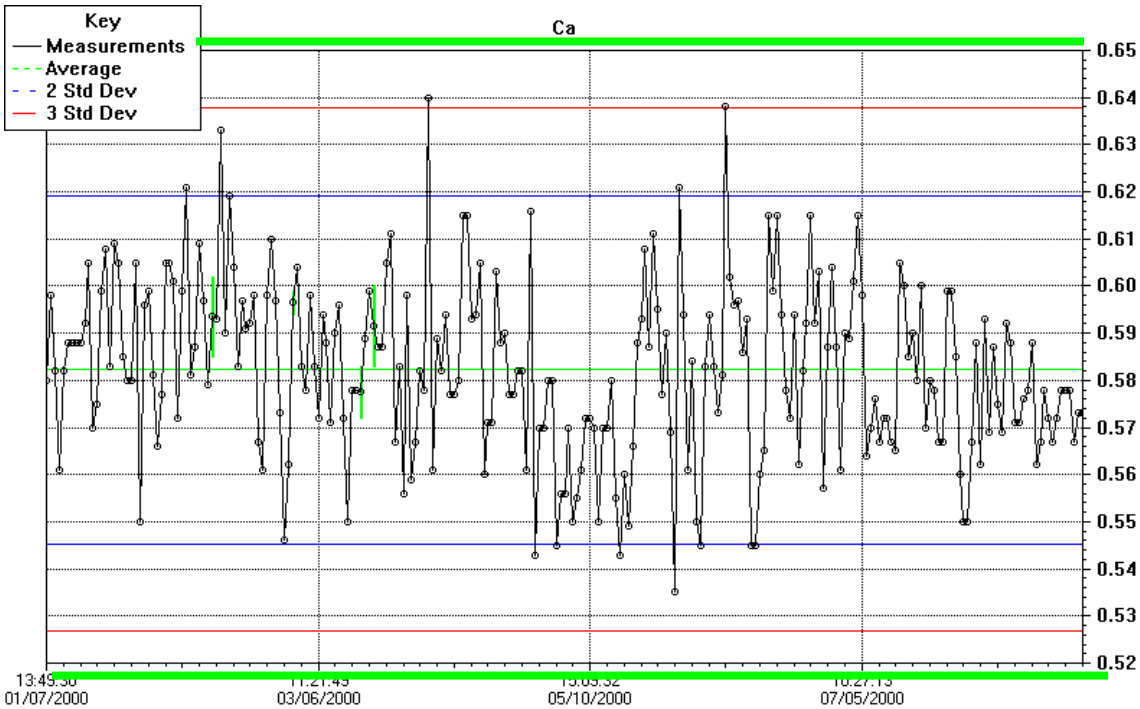


Method	Element	Units	LLD	Target Value	n=	Mean	Sdev	% RSD	% R	Mean -15%	Mean +15%
C_ICPAES_40	Be	ppm	1	2.4	239	2.11	0.311	14.7	88	1.79	2.43

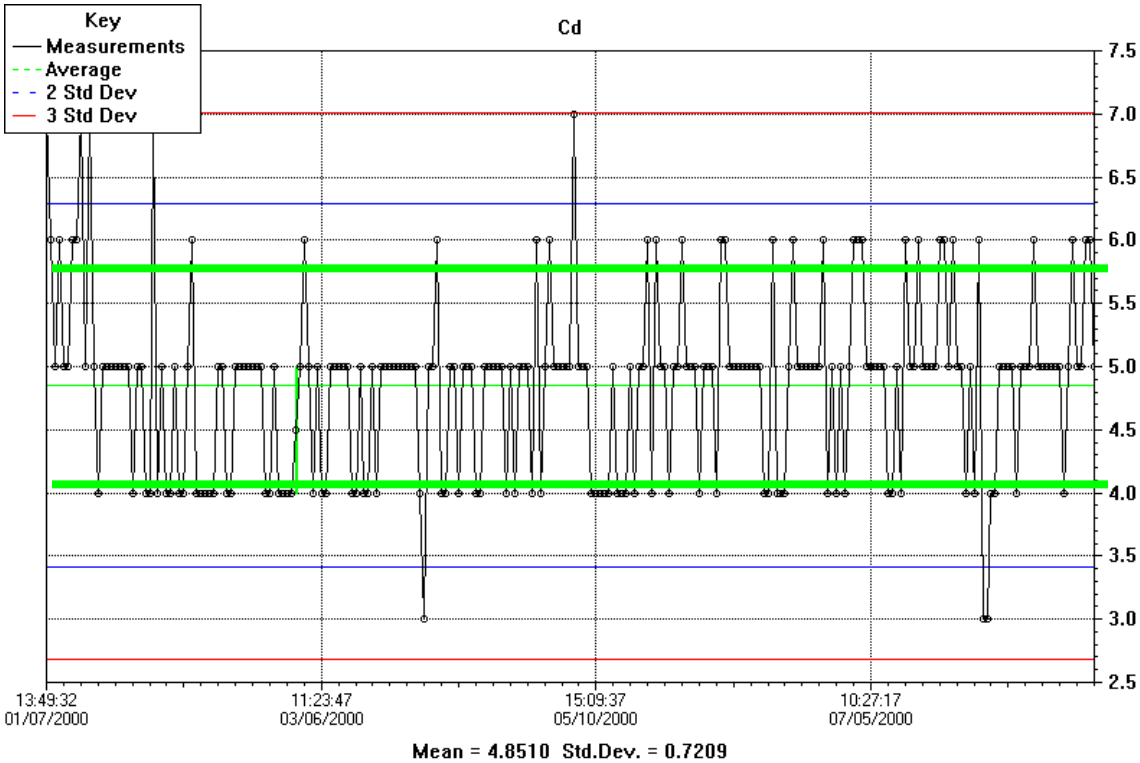


Method	Element	Units	LLD	Target Value	n=	Mean	Sdev	% RSD	% R	Mean -15%	Mean +15%
C_ICPAES_40	Bi	ppm	50	1.33	239	<50					

SAR-M.1

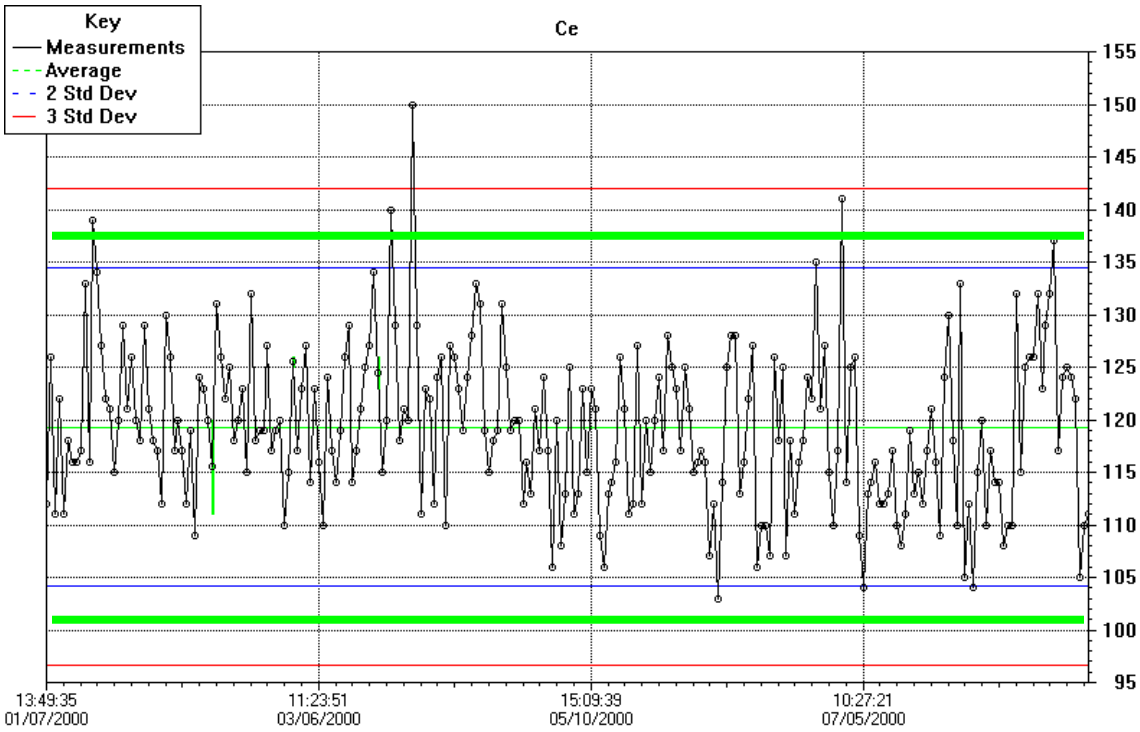


Method	Element	Units	LLD	Target Value	n=	Mean	Sdev	% RSD	% R	Mean -15%	Mean +15%
C_ICPAES_40	Ca	%	0.01	0.58	239	0.58	0.019	3.18	100	0.49	0.67



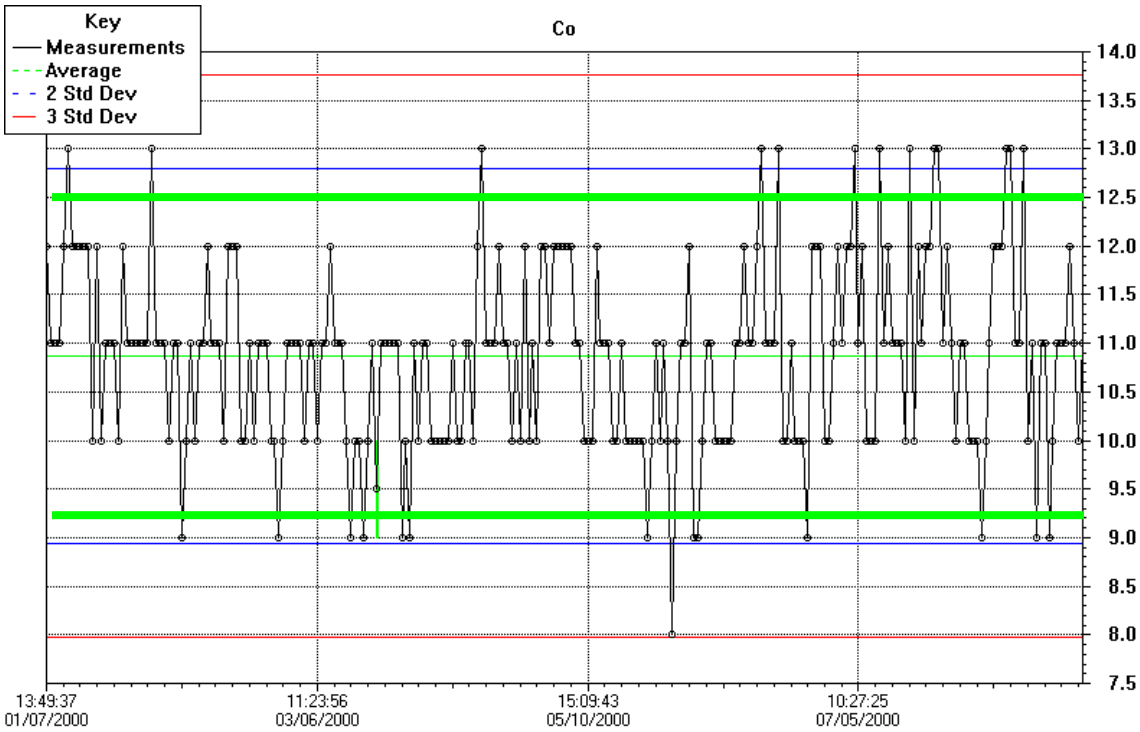
Method	Element	Units	LLD	Target Value	n=	Mean	Sdev	% RSD	% R	Mean -15%	Mean +15%
C_ICPAES_40	Cd	ppm	2	4.76	239	4.85	0.721	14.9	102	4.12	5.58

SAR-M.1



Mean = 119.2988 Std.Dev. = 7.5689

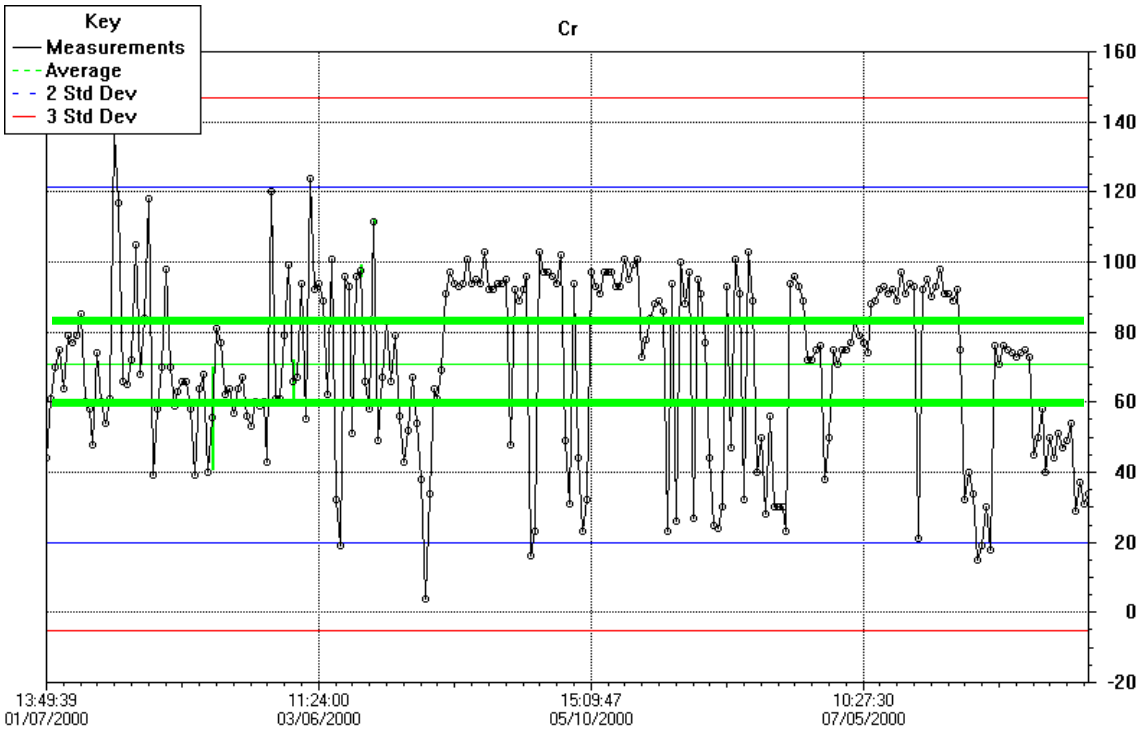
Method	Element	Units	LLD	Target Value	n=	Mean	Sdev	% RSD	% R	Mean -15%	Mean +15%
C_ICPAES_40	Ce	ppm	5	120	239	119	7.57	6.34	99	101	137



Mean = 10.8638 Std.Dev. = 0.9640

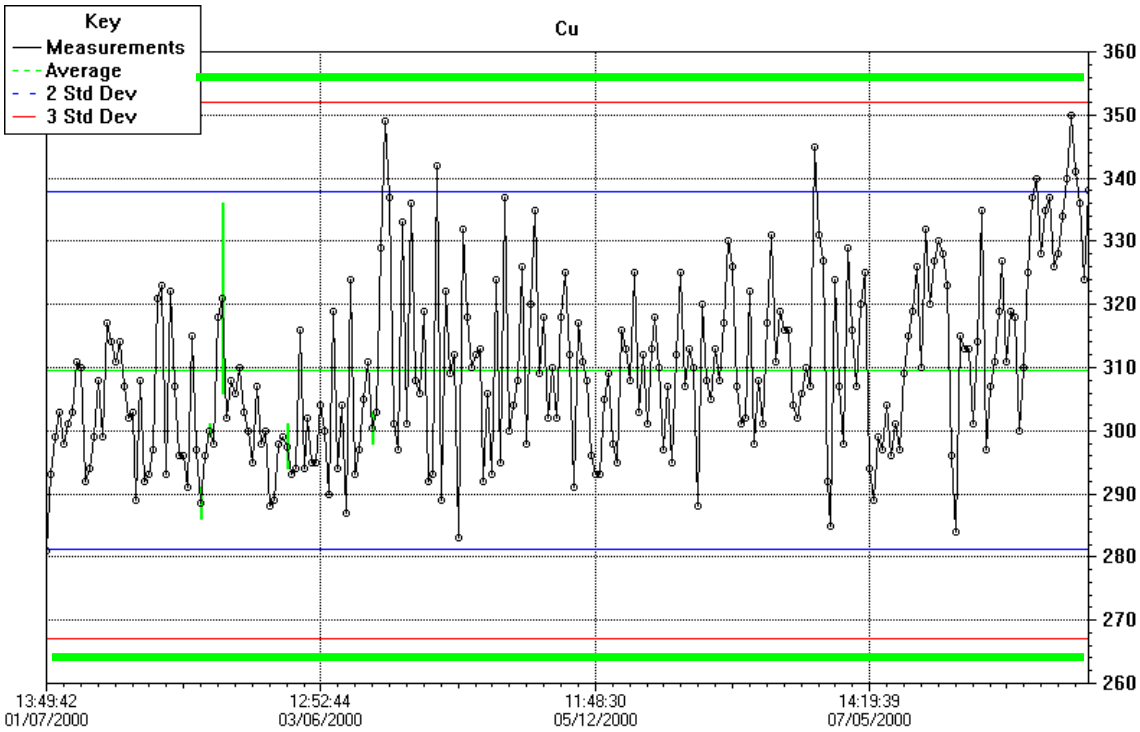
Method	Element	Units	LLD	Target Value	n=	Mean	Sdev	% RSD	% R	Mean -15%	Mean +15%
C_ICPAES_40	Co	ppm	2	11	239	10.9	0.964	8.87	99	9.23	12.5

SAR-M.1



Mean = 70.7134 Std.Dev. = 25.3294

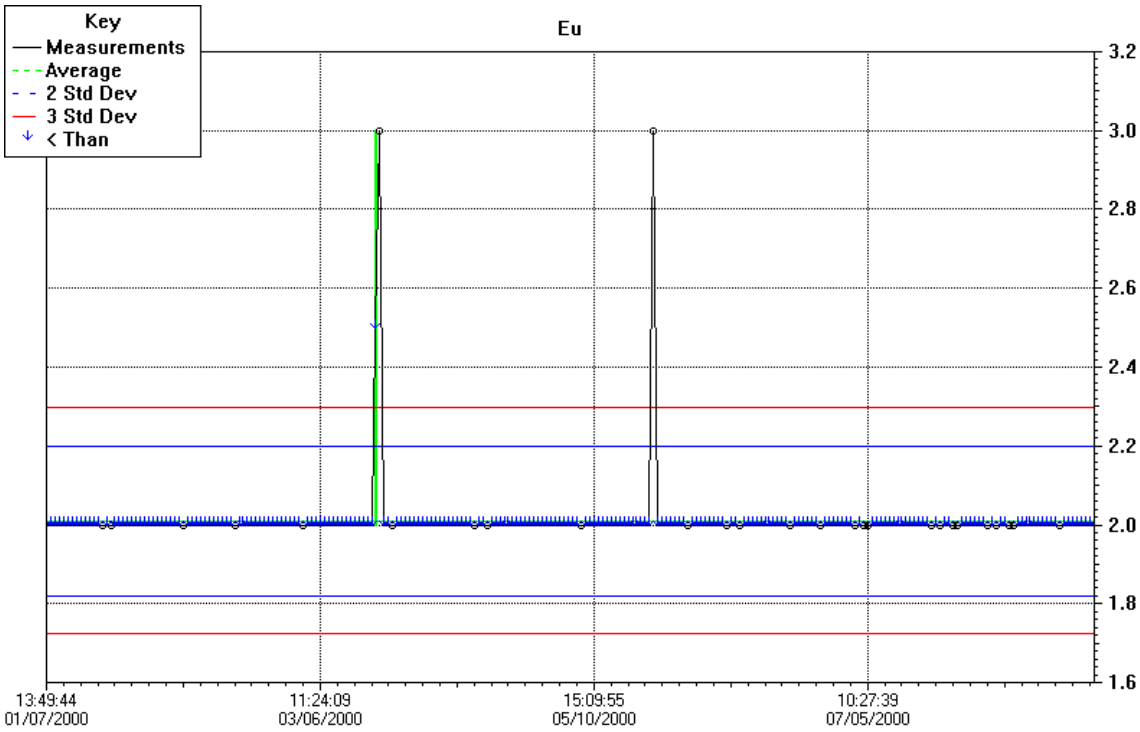
Method	Element	Units	LLD	Target Value	n=	Mean	Sdev	% RSD	% R	Mean -15%	Mean +15%
C_ICPAES_40	Cr	ppm	2	101	239	70.7	25.329	35.8	70	60.1	81.3



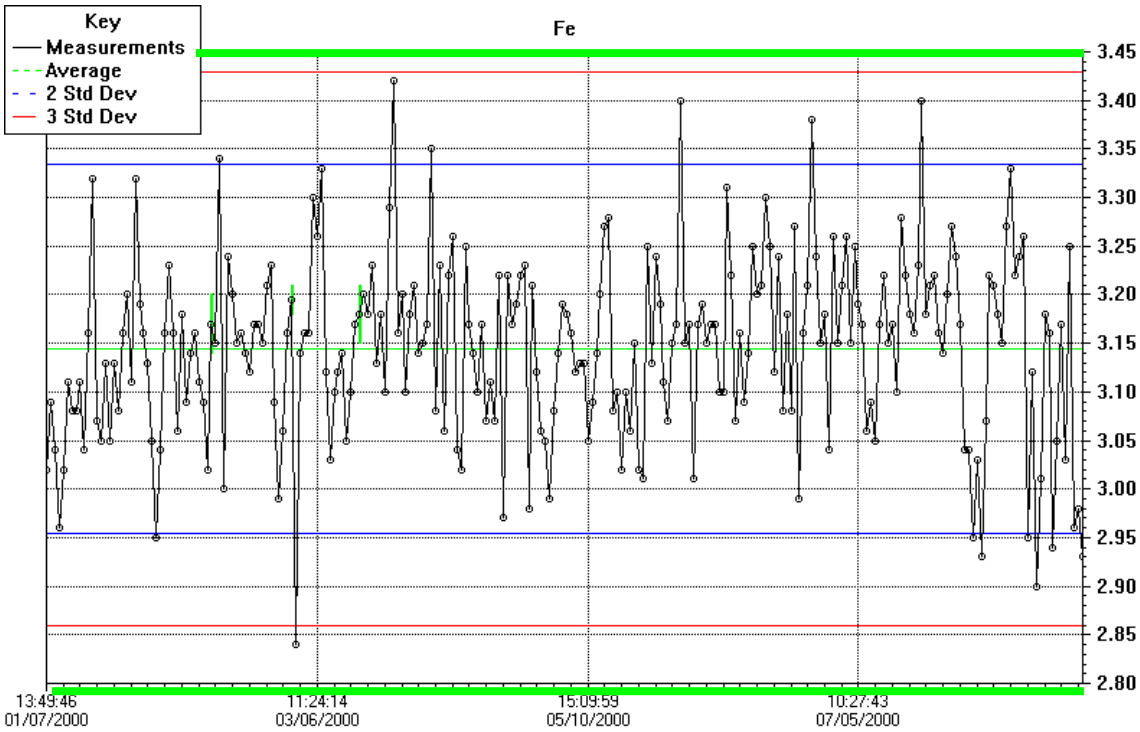
Mean = 309.6045 Std.Dev. = 14.1540

Method	Element	Units	LLD	Target Value	n=	Mean	Sdev	% RSD	% R	Mean -15%	Mean +15%
C_ICPAES_40	Cu	ppm	2	320	239	310	14.2	4.57	97	263	356

SAR-M.1



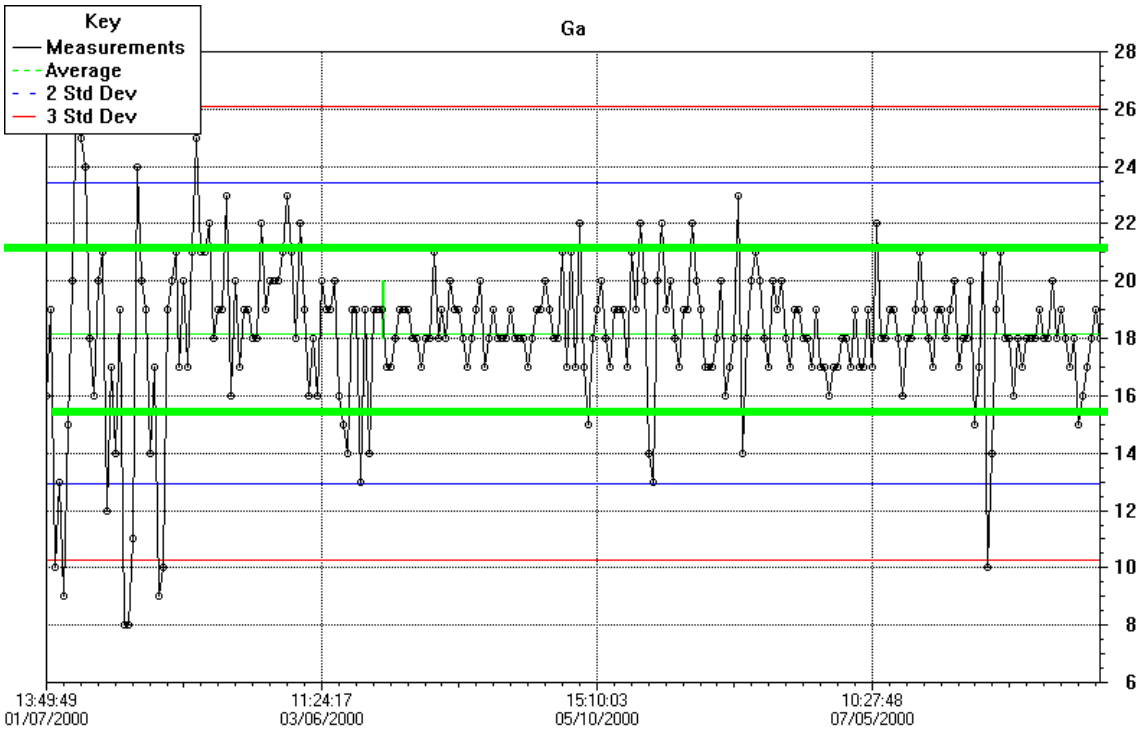
Method	Element	Units	LLD	Target Value	n=	Mean	Sdev	% RSD	% R	Mean -15%	Mean +15%
C_ICPAES_40	Eu	ppm	2	0.67	239	<2					



Mean = 3.1445 Std.Dev. = 0.0948

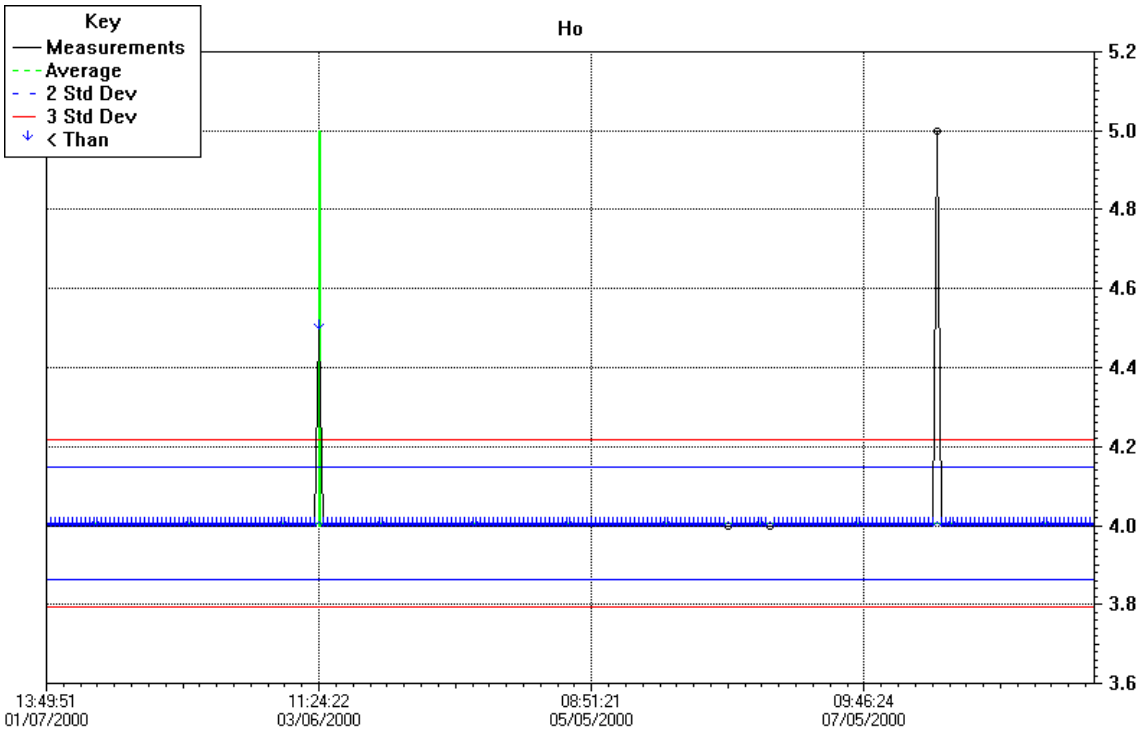
Method	Element	Units	LLD	Target Value	n=	Mean	Sdev	% RSD	% R	Mean -15%	Mean +15%
C_ICPAES_40	Fe	%	0.02	3.22	239	3.14	0.095	3.01	98	2.67	3.62

SAR-M.1



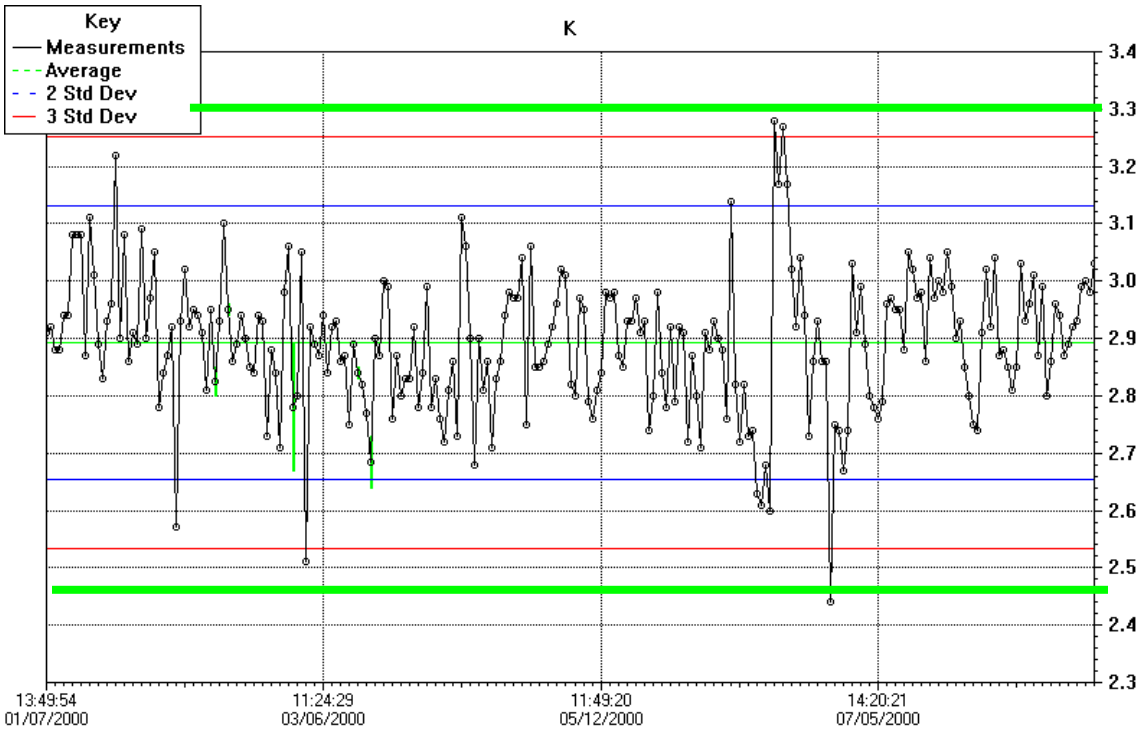
Mean = 18.1789 Std.Dev. = 2.6327

Method	Element	Units	LLD	Target Value	n=	Mean	Sdev	% RSD	% R	Mean -15%	Mean +15%
C_ICPAES_40	Ga	ppm	4	20	239	18.2	2.63	14.5	91	15.5	20.9



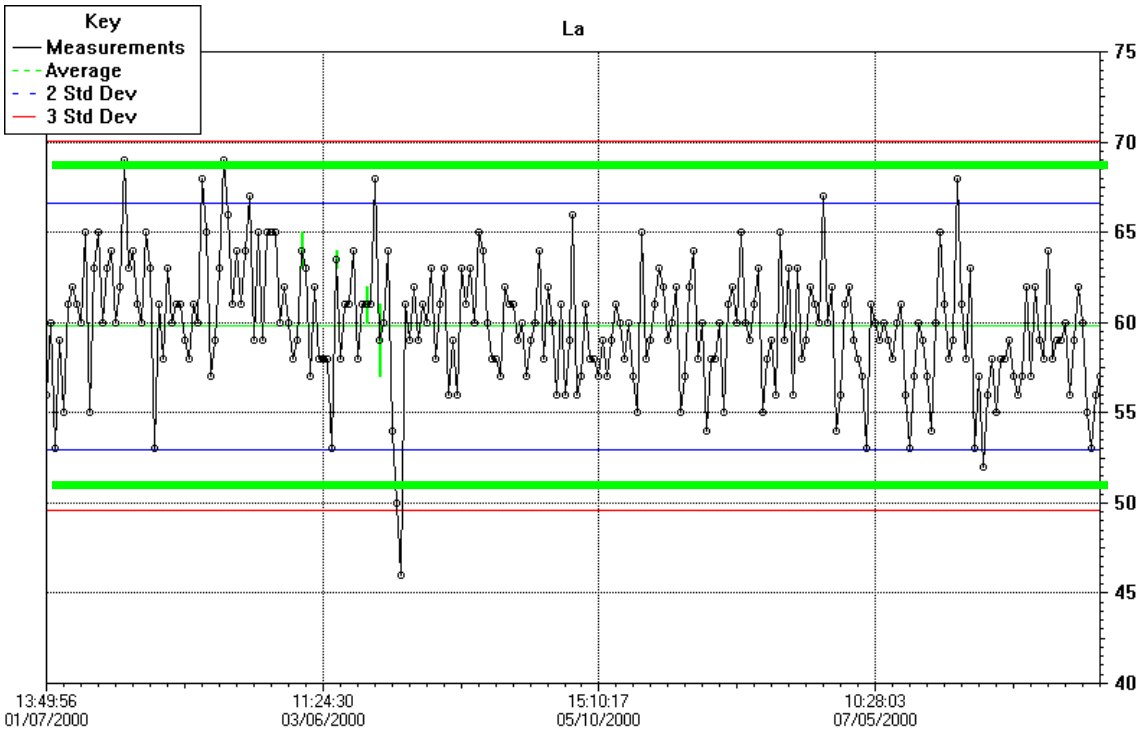
Method	Element	Units	LLD	Target Value	n=	Mean	Sdev	% RSD	% R	Mean -15%	Mean +15%
C_ICPAES_40	Ho	ppm	4	1.72	239	<4					

SAR-M.1



Mean = 2.8929 Std.Dev. = 0.1196

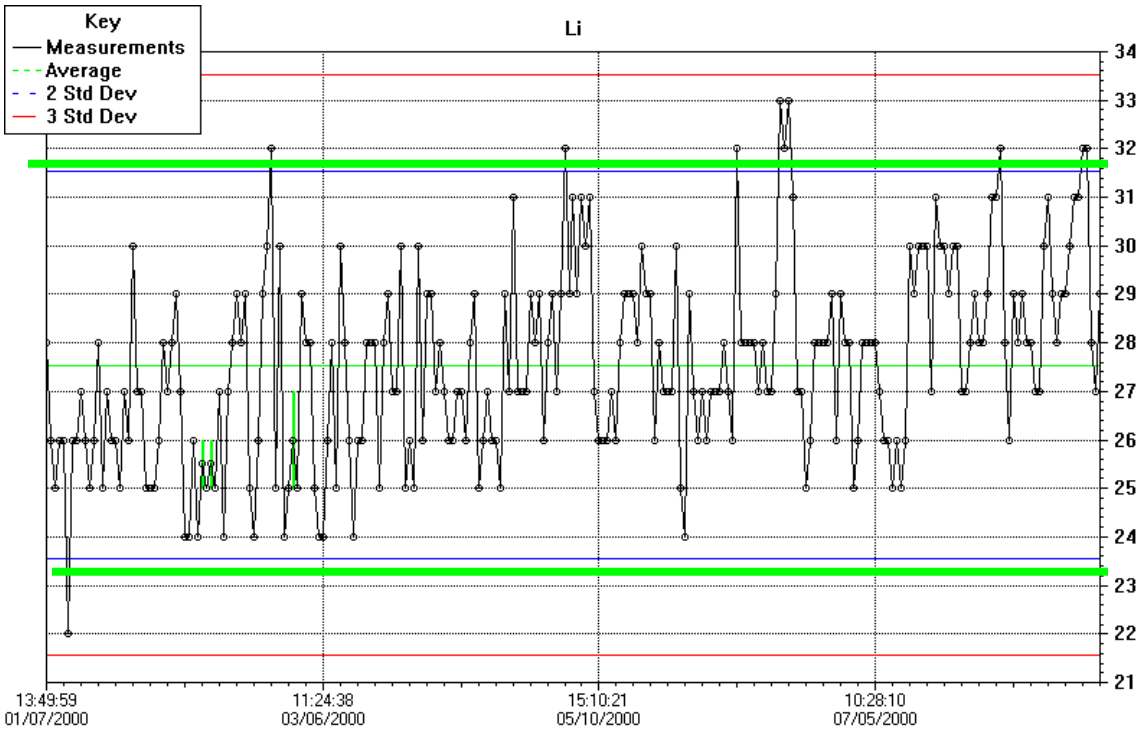
Method	Element	Units	LLD	Target Value	n=	Mean	Sdev	% RSD	% R	Mean -15%	Mean +15%
C_ICPAES_40	K	%	0.01	2.92	239	2.89	0.120	4.13	99	2.46	3.33



Mean = 59.8020 Std.Dev. = 3.4156

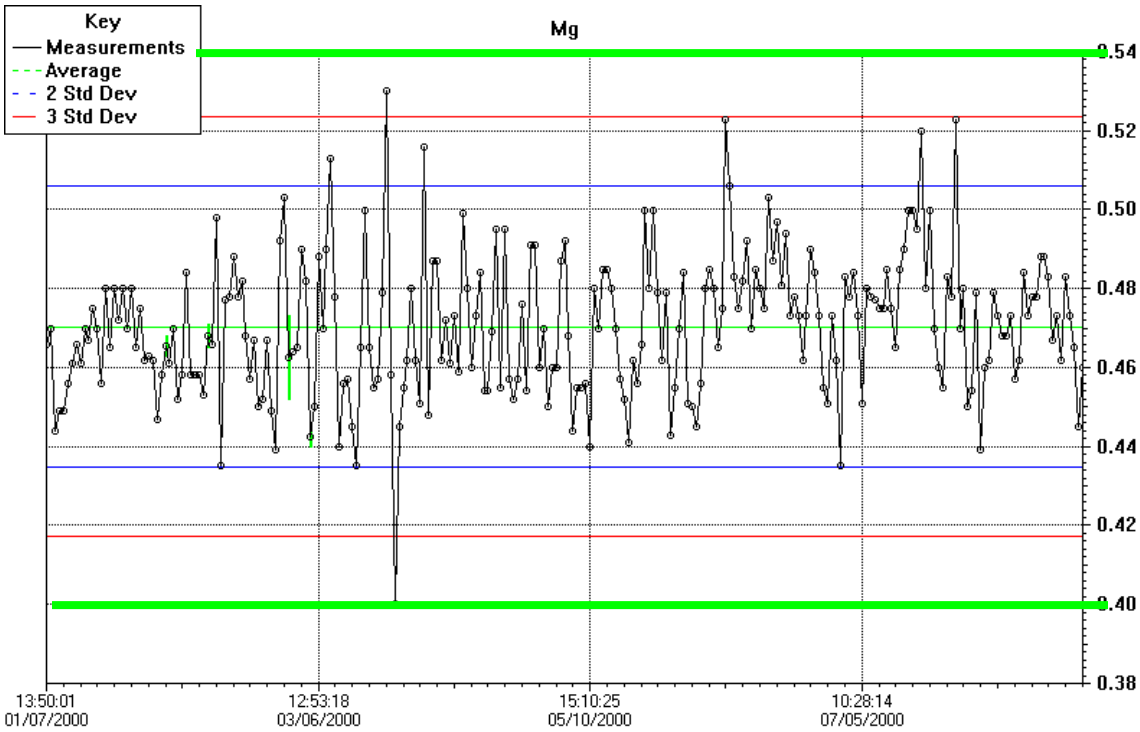
Method	Element	Units	LLD	Target Value	n=	Mean	Sdev	% RSD	% R	Mean -15%	Mean +15%
C_ICPAES_40	La	ppm	2	61	239	59.8	3.42	5.71	98	50.8	68.8

SAR-M.1



Mean = 27.5429 Std.Dev. = 1.9942

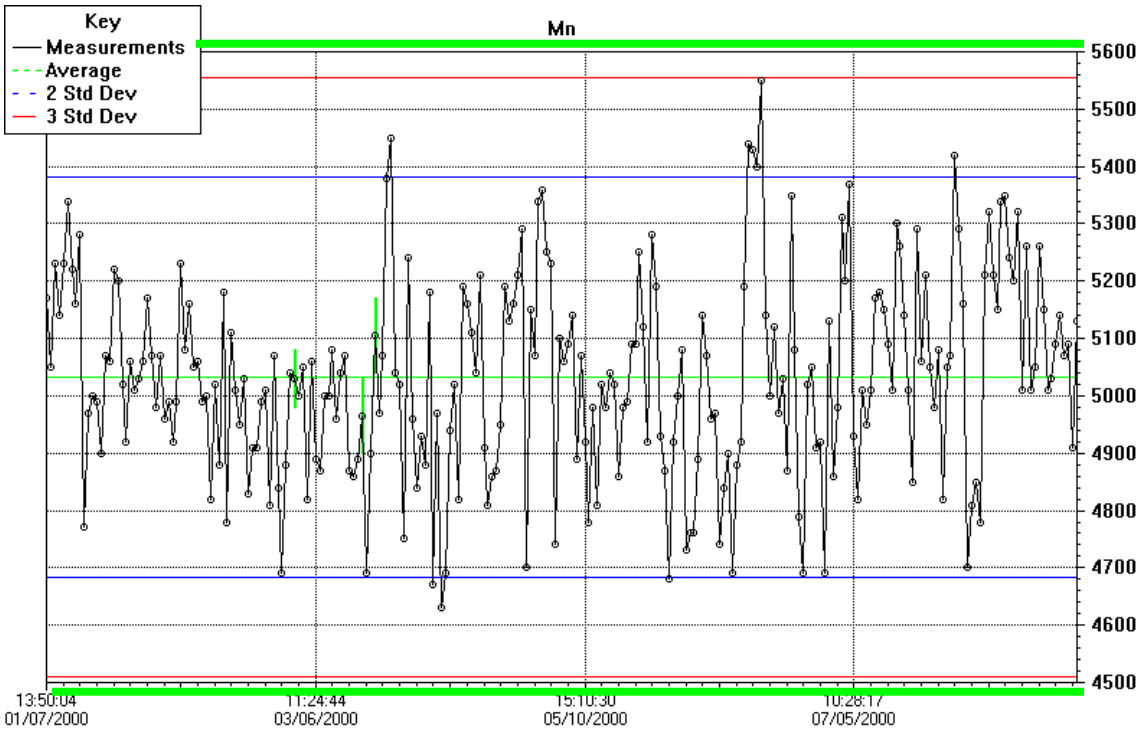
Method	Element	Units	LLD	Target Value	n=	Mean	Sdev	% RSD	% R	Mean -15%	Mean +15%
C_ICPAES_40	Li	ppm	2	30	239	27.5	1.99	7.24	92	23.4	31.7



Mean = 0.4704 Std.Dev. = 0.0177

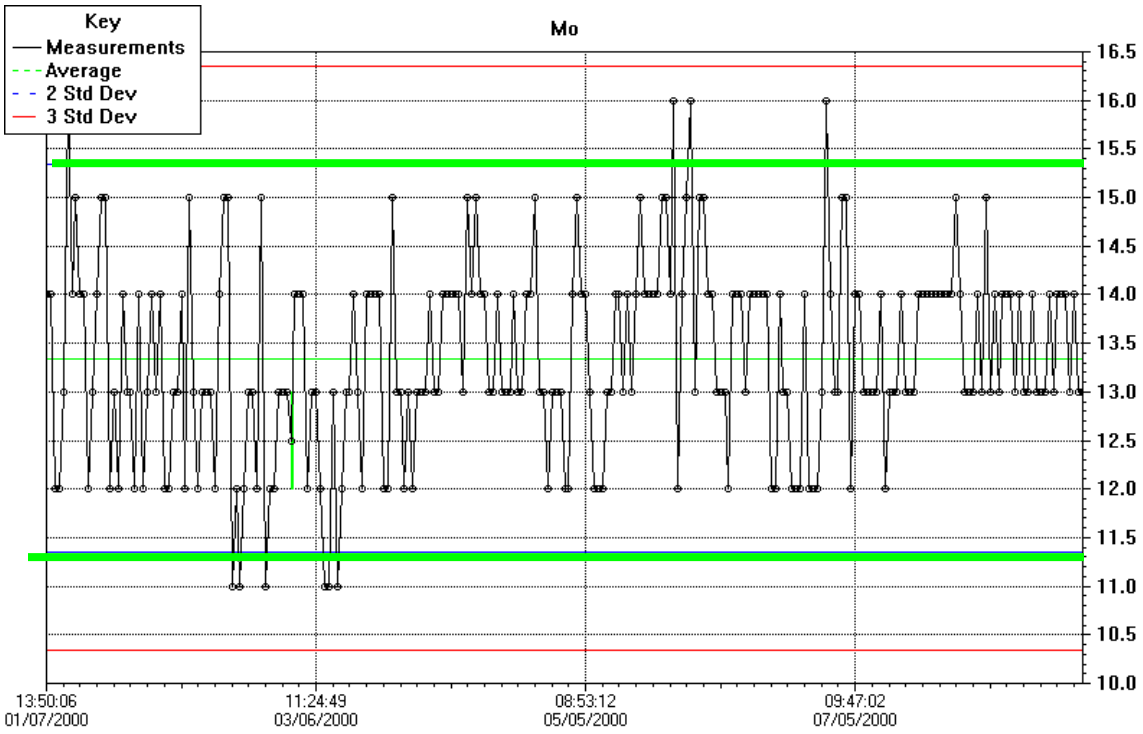
Method	Element	Units	LLD	Target Value	n=	Mean	Sdev	% RSD	% R	Mean -15%	Mean +15%
C_ICPAES_40	Mg	%	0.01	0.50	239	0.47	0.018	3.76	94	0.400	0.541

SAR-M.1



Mean = 5032.7236 Std.Dev. = 174.3586

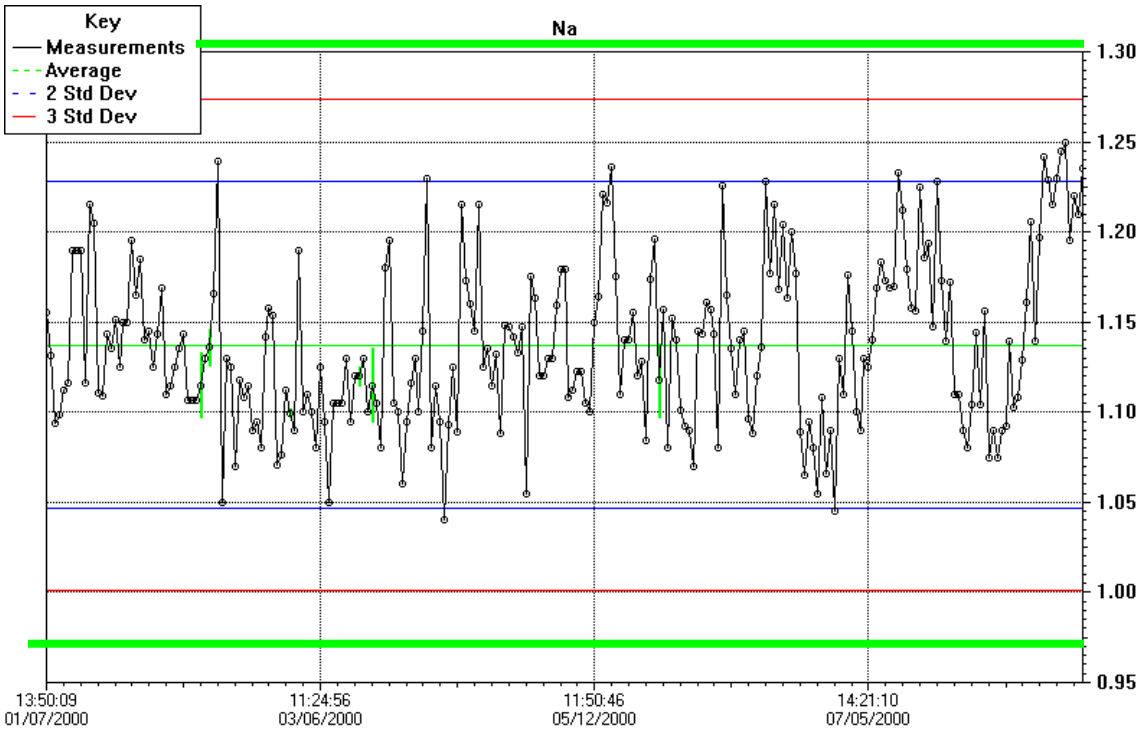
Method	Element	Units	LLD	Target Value	n=	Mean	Sdev	% RSD	% R	Mean -15%	Mean +15%
C_ICPAES_40	Mn	ppm	4	5200	239	5033	174.4	3.46	97	4278	5788



Mean = 13.3462 Std.Dev. = 1.0013

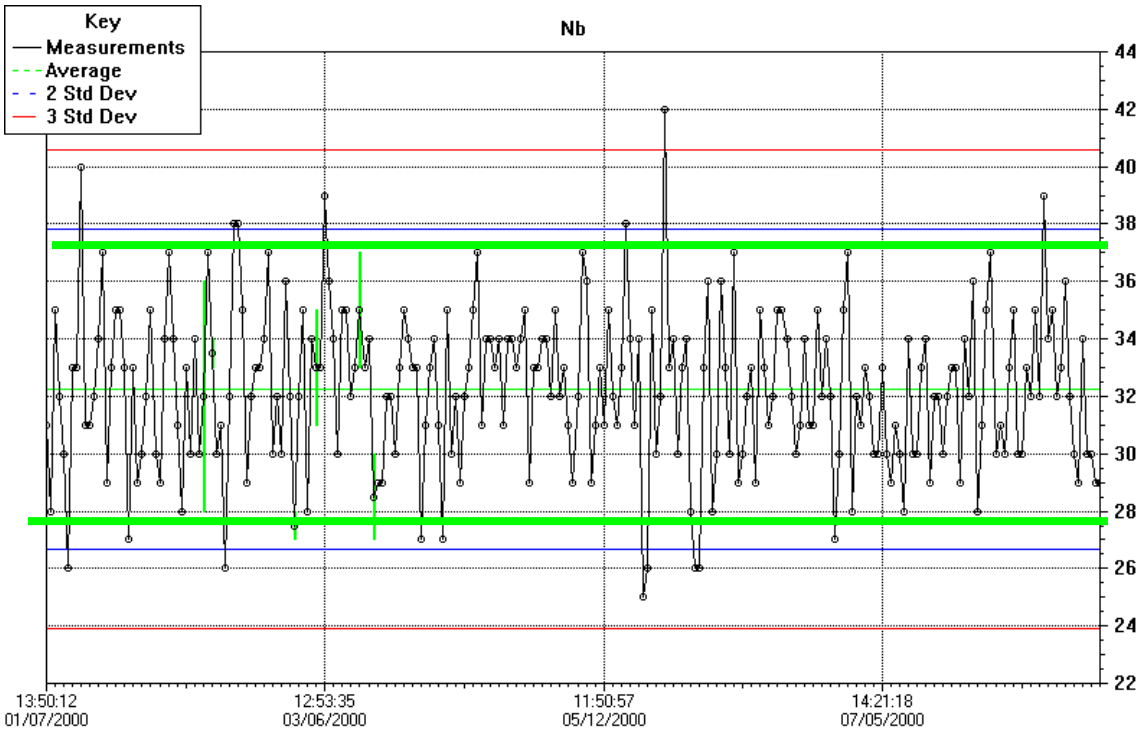
Method	Element	Units	LLD	Target Value	n=	Mean	Sdev	% RSD	% R	Mean -15%	Mean +15%
C_ICPAES_40	Mo	ppm	2	12	239	13.3	1.00	7.50	111	11.3	15.3

SAR-M.1



Mean = 1.1372 Std.Dev. = 0.0454

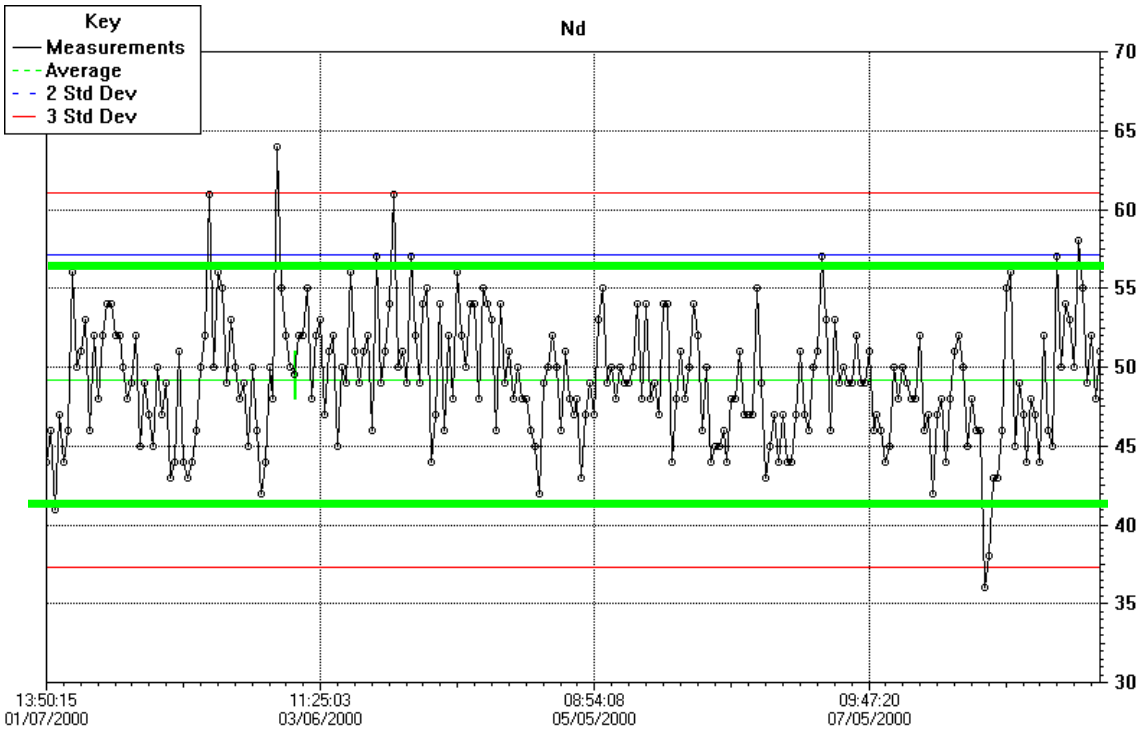
Method	Element	Units	LLD	Target Value	n=	Mean	Sdev	% RSD	% R	Mean -15%	Mean +15%
C_ICPAES_40	Na	%	0.01	1.19	239	1.14	0.045	3.99	96	0.97	1.31



Mean = 32.2490 Std.Dev. = 2.7862

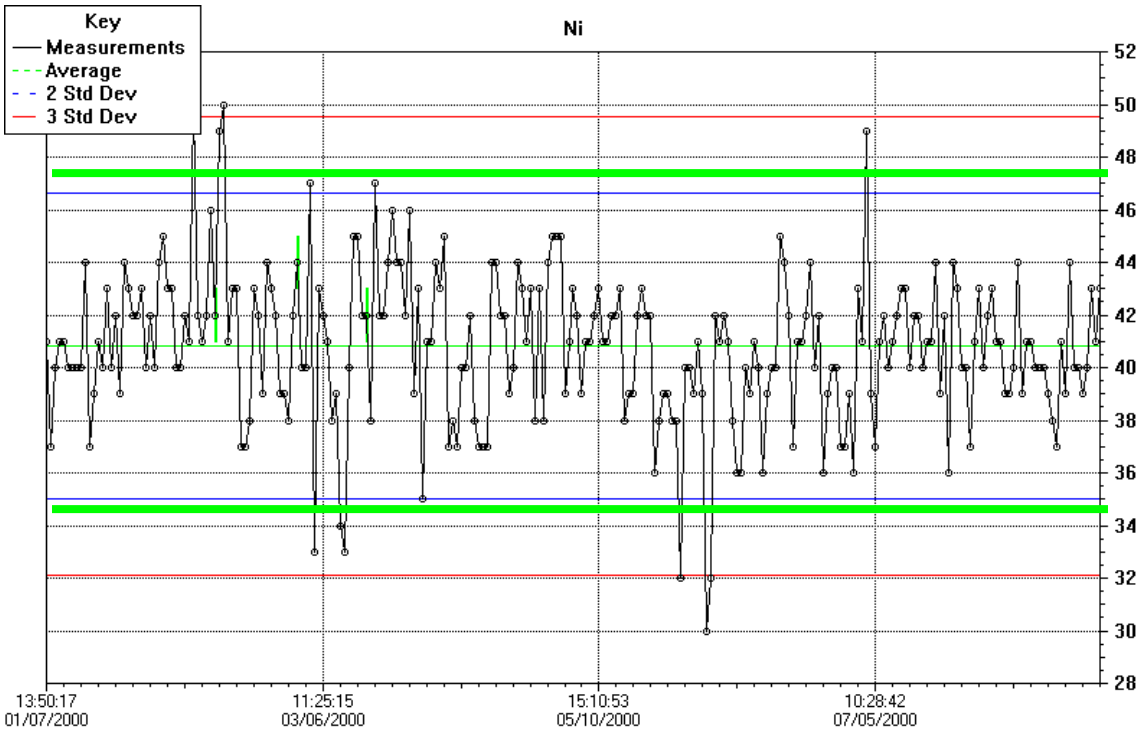
Method	Element	Units	LLD	Target Value	n=	Mean	Sdev	% RSD	% R	Mean -15%	Mean +15%
C_ICPAES_40	Nb	ppm	4	31	239	32.2	2.79	8.64	104	27.4	37.1

SAR-M.1



Mean = 49.1923 Std.Dev. = 3.9489

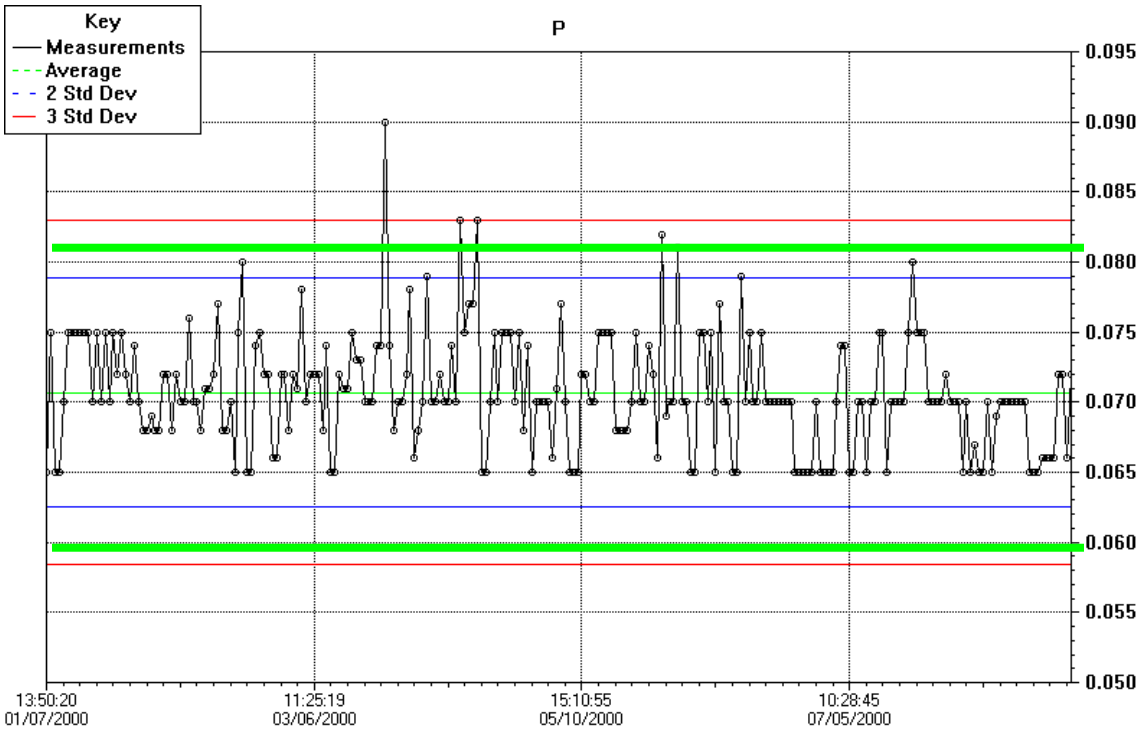
Method	Element	Units	LLD	Target Value	n=	Mean	Sdev	% RSD	% R	Mean -15%	Mean +15%
C_ICPAES_40	Nd	ppm	9	51	239	49.2	3.95	8.03	96	41.8	56.6



Mean = 40.8041 Std.Dev. = 2.9060

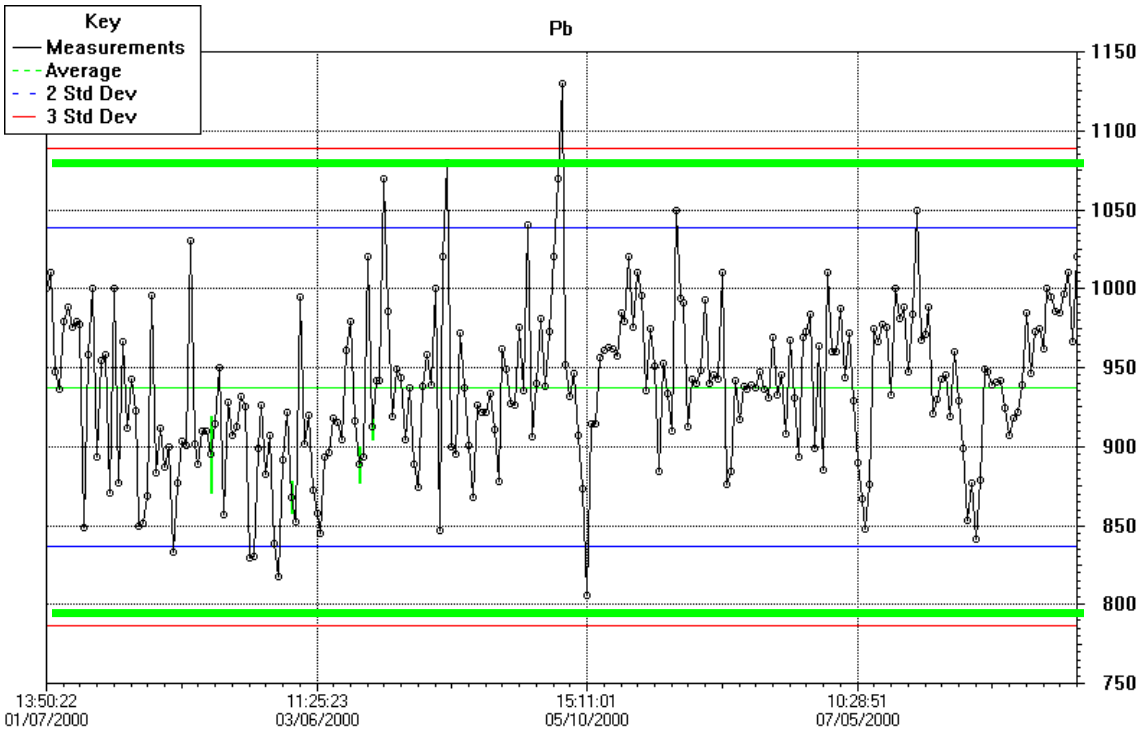
Method	Element	Units	LLD	Target Value	n=	Mean	Sdev	% RSD	% R	Mean -15%	Mean +15%
C_ICPAES_40	Ni	ppm	3	41	239	40.8	2.91	7.12	100	34.7	46.9

SAR-M.1



Mean = 0.0707 Std.Dev. = 0.0041

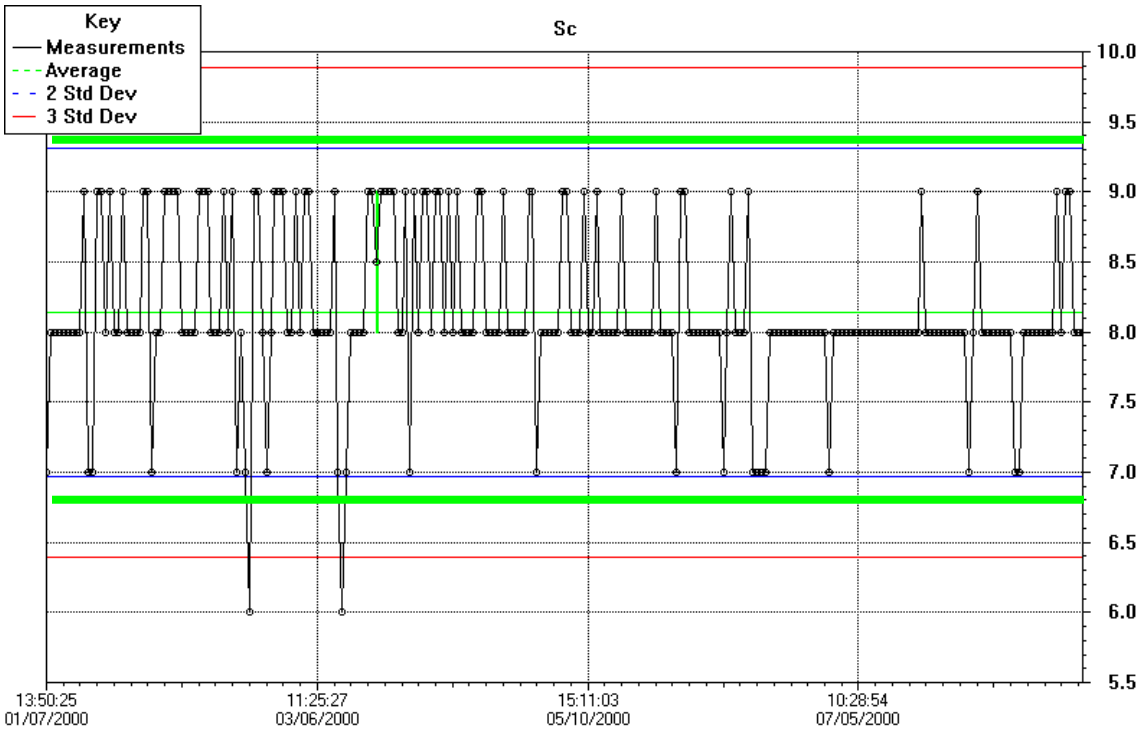
Method	Element	Units	LLD	Target Value	n=	Mean	Sdev	% RSD	% R	Mean -15%	Mean +15%
C_ICPAES_40	P	%	0.01	0.08	239	0.071	0.004	5.80	88	0.060	0.081



Mean = 937.4857 Std.Dev. = 50.3621

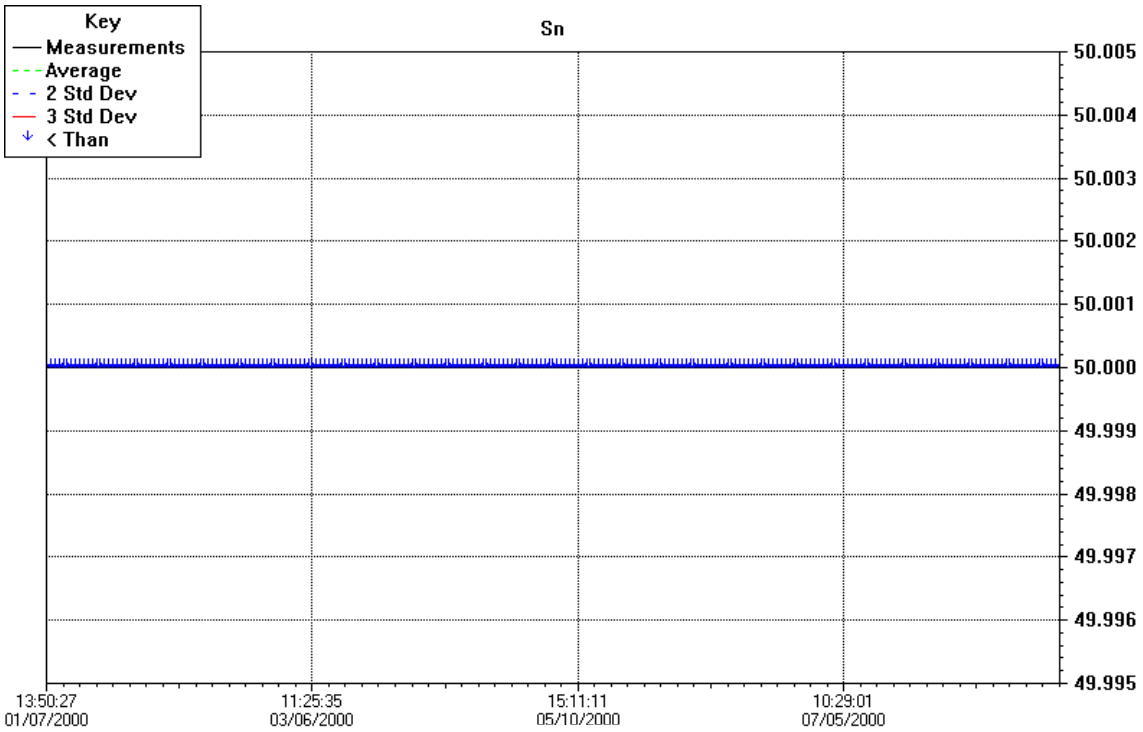
Method	Element	Units	LLD	Target Value	n=	Mean	Sdev	% RSD	% R	Mean -15%	Mean +15%
C_ICPAES_40	Pb	ppm	4	960	239	937	50.4	5.37	98	797	1078

SAR-M.1



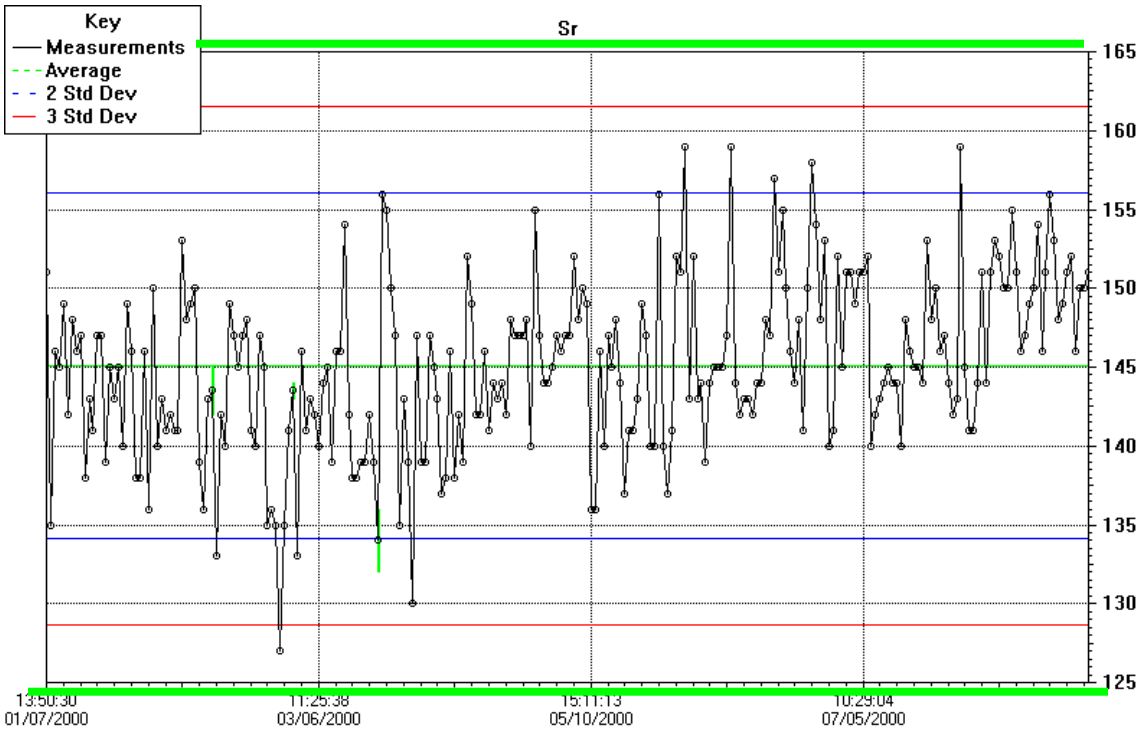
Mean = 8.1402 Std.Dev. = 0.5835

Method	Element	Units	LLD	Target Value	n=	Mean	Sdev	% RSD	% R	Mean -15%	Mean +15%
C_ICPAES_40	Sc	ppm	2	8.3	239	8.14	0.584	7.17	98	6.92	9.36



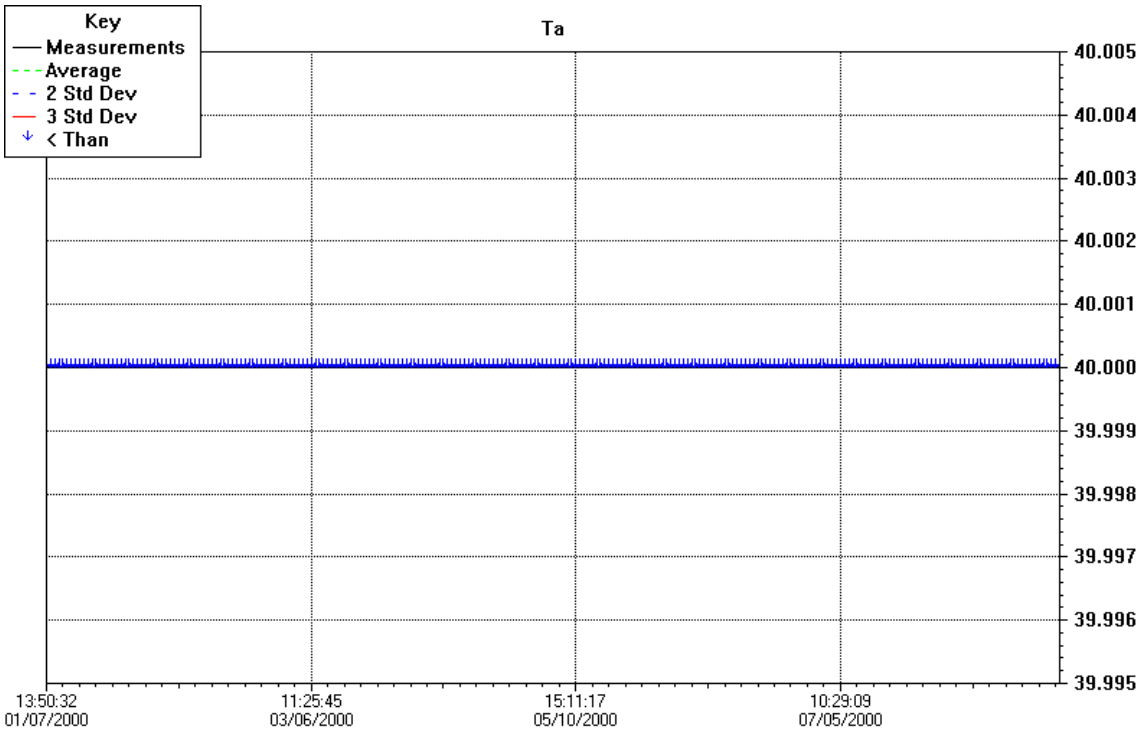
Method	Element	Units	LLD	Target Value	n=	Mean	Sdev	% RSD	% R	Mean -15%	Mean +15%
C_ICPAES_40	Sn	ppm	5	9.4	239	<50					

SAR-M.1



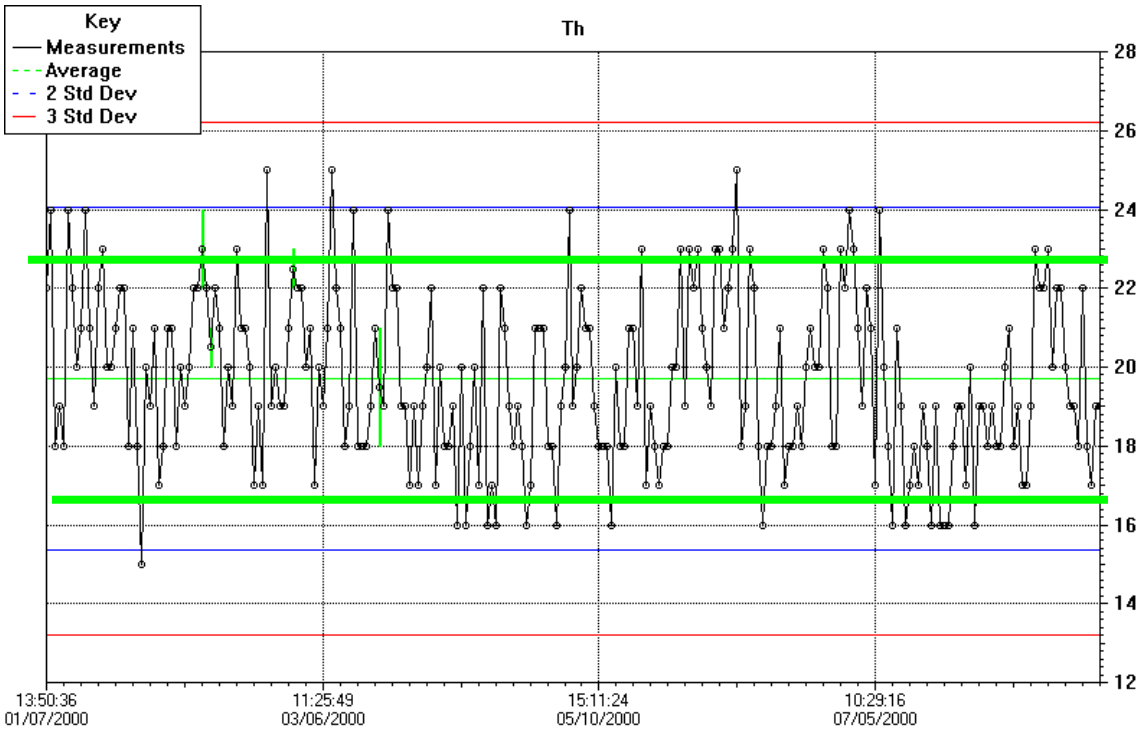
Mean = 145.0813 Std.Dev. = 5.4720

Method	Element	Units	LLD	Target Value	n=	Mean	Sdev	% RSD	% R	Mean -15%	Mean +15%
C_ICPAES_40	Sr	ppm	2	156	239	145	5.47	3.77	93	123	167



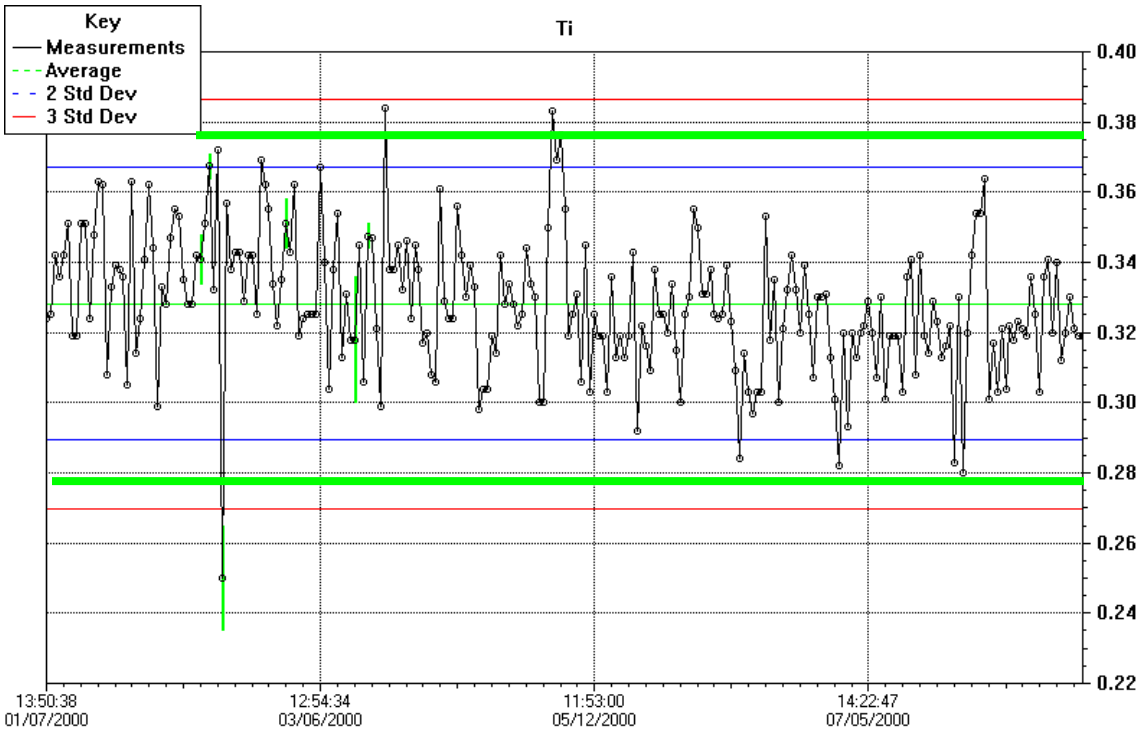
Method	Element	Units	LLD	Target Value	n=	Mean	Sdev	% RSD	% R	Mean -15%	Mean +15%
C_ICPAES_40	Ta	ppm	40	1.3	239	<40					

SAR-M.1



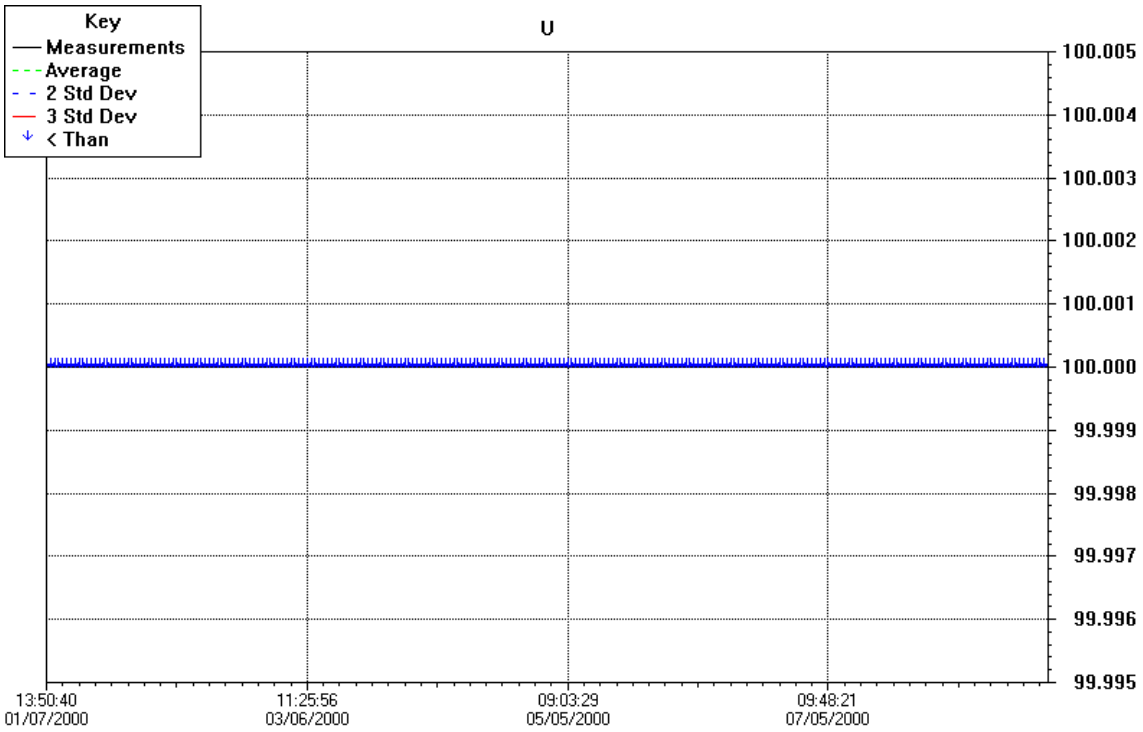
Mean = 19.7000 Std.Dev. = 2.1697

Method	Element	Units	LLD	Target Value	n=	Mean	Sdev	% RSD	% R	Mean -15%	Mean +15%
C_ICPAES_40	Th	ppm	6	18	239	19.7	2.17	11.0	109	16.7	22.7

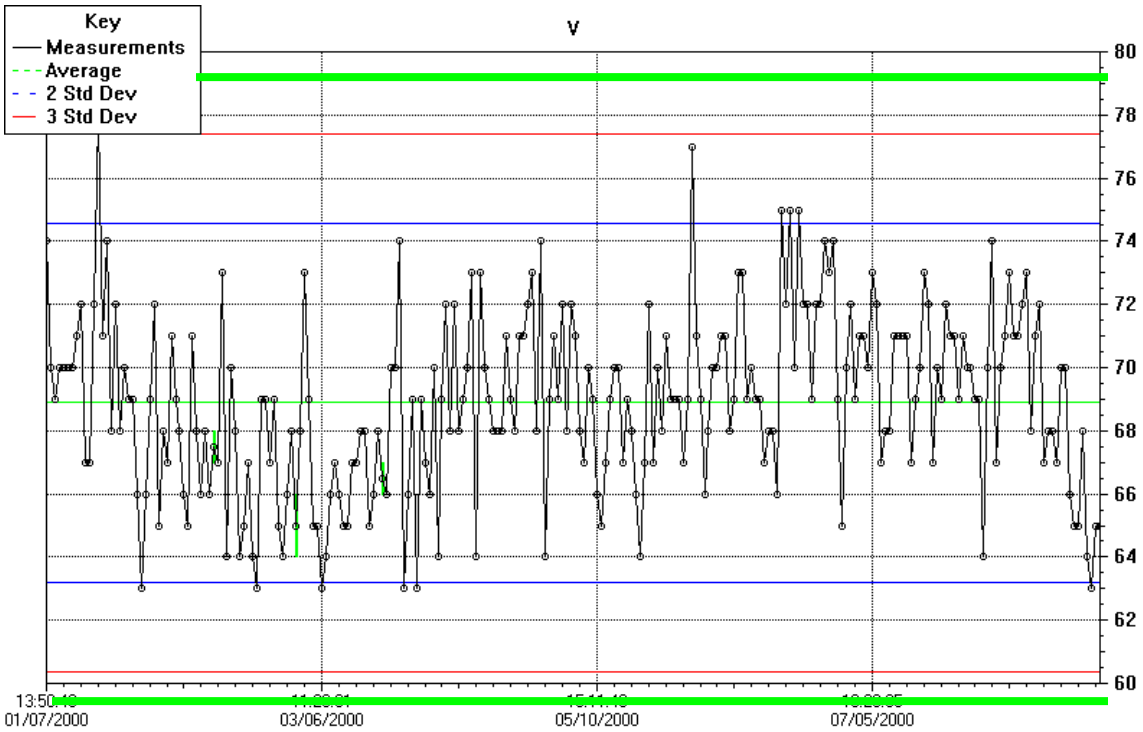


Mean = 0.3281 Std.Dev. = 0.0194

Method	Element	Units	LLD	Target Value	n=	Mean	Sdev	% RSD	% R	Mean -15%	Mean +15%
C_ICPAES_40	Ti	%	0.01	0.35	239	0.328	0.019	5.91	94	0.279	0.377



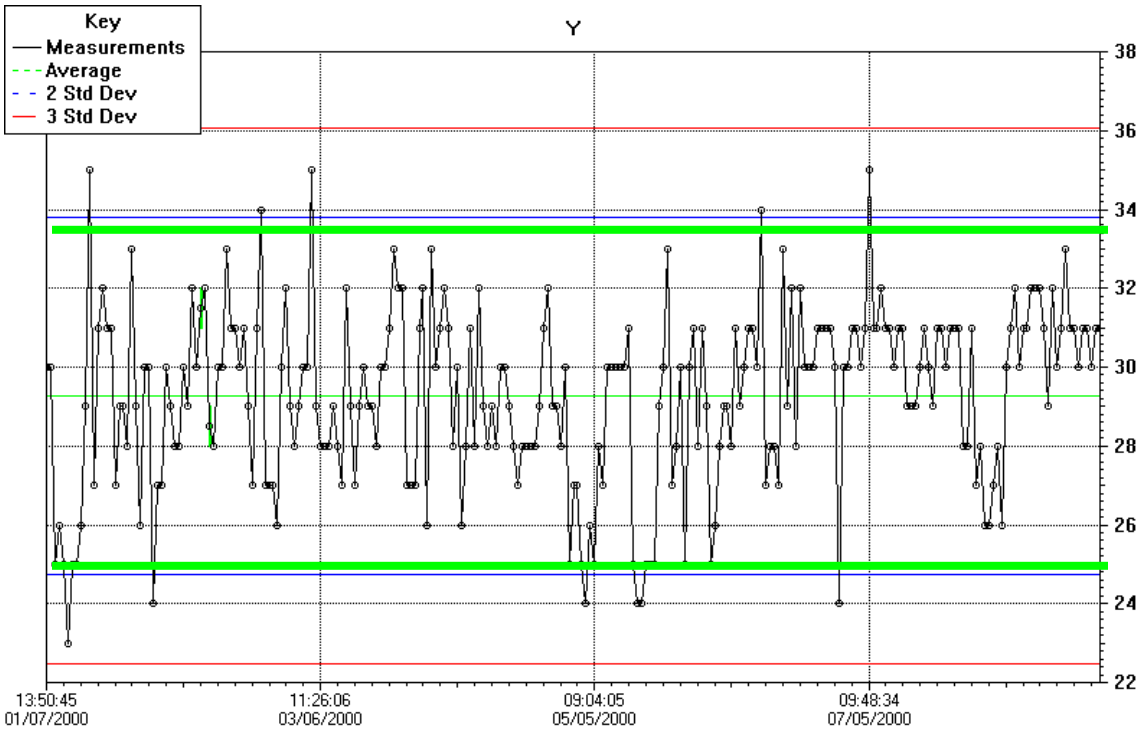
Method	Element	Units	LLD	Target Value	n=	Mean	Sdev	% RSD	% R	Mean -15%	Mean +15%
C_ICPAES_40	U	ppm	100	2.6	239	<100					



Mean = 68.8943 Std.Dev. = 2.8383

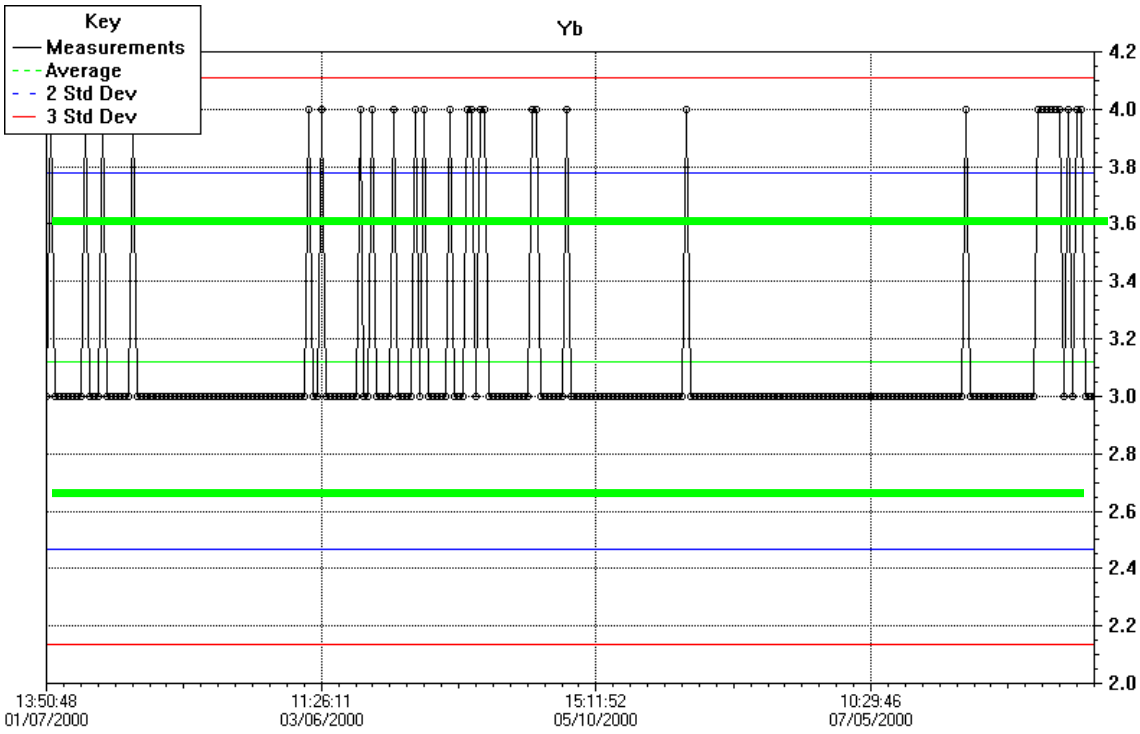
Method	Element	Units	LLD	Target Value	n=	Mean	Sdev	% RSD	% R	Mean -15%	Mean +15%
C_ICPAES_40	V	ppm	2	66	239	68.9	2.84	4.12	104	58.6	79.2

SAR-M.1



Mean = 29.2794 Std.Dev. = 2.2670

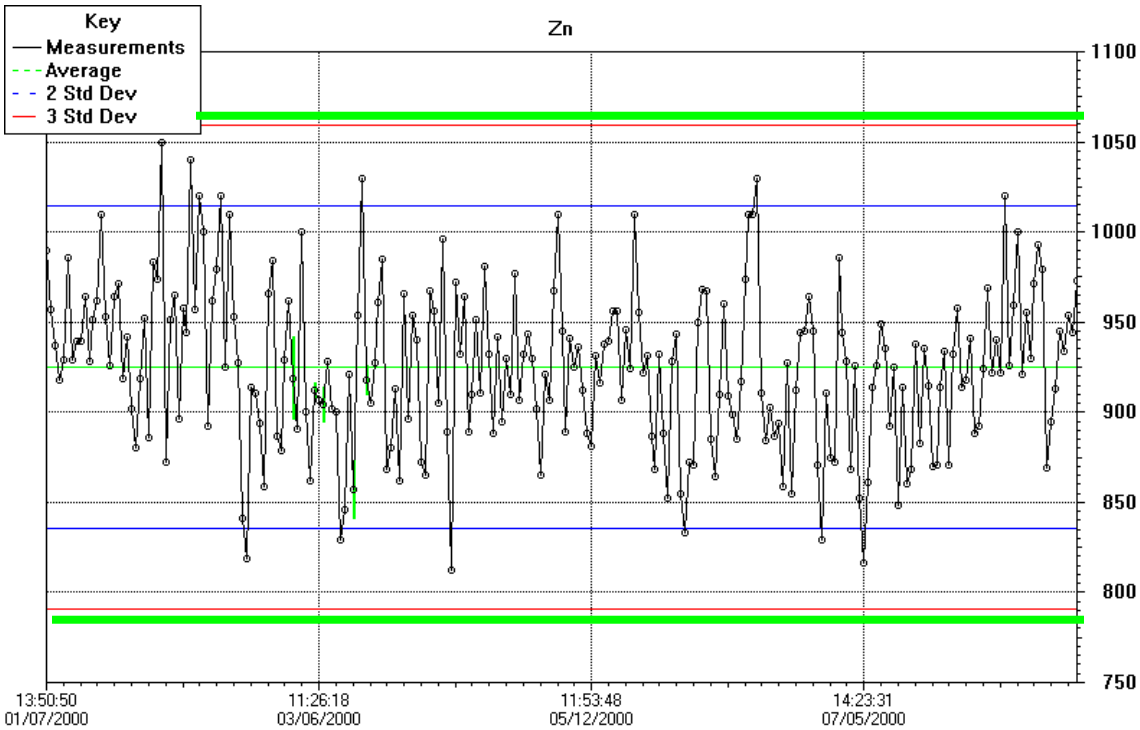
Method	Element	Units	LLD	Target Value	n=	Mean	Sdev	% RSD	% R	Mean -15%	Mean +15%
C_ICPAES_40	Y	ppm	2	33	239	29.3	2.27	7.74	89	24.9	33.7



Mean = 3.1224 Std.Dev. = 0.3285

Method	Element	Units	LLD	Target Value	n=	Mean	Sdev	% RSD	% R	Mean -15%	Mean +15%
C_ICPAES_40	Yb	ppm	1	3.2	239	3.12	0.329	10.5	98	2.65	3.59

SAR-M.1



M Method											
C_ICPAES_40	Zn	ppm	2	888	239	925	44.8	4.84	104	786	1064