

Proteus Laboratories

- ① All acceptable - ?? AST.
- ② Amylase -> no return awaiting reagent

MONTHLY CLINICAL CHEMISTRY

CYCLE 17 SAMPLE 9

Explanation of codes used in this report

- R - Results removed due to reconstitution error
- N - No result returned
- C - Result corrected



Authorised by: Stephen Doherty, RIQAS Manager

Issue No: 1

Issue Date: 01/10/2020

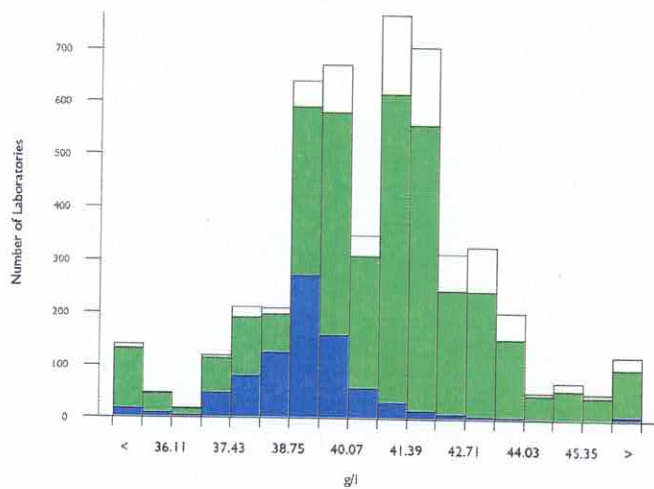
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Albumin, g/l

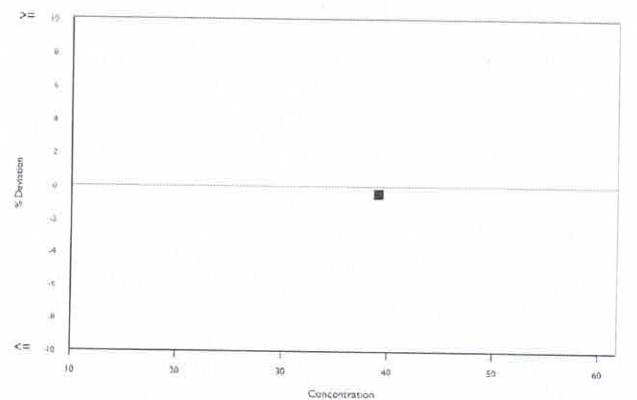
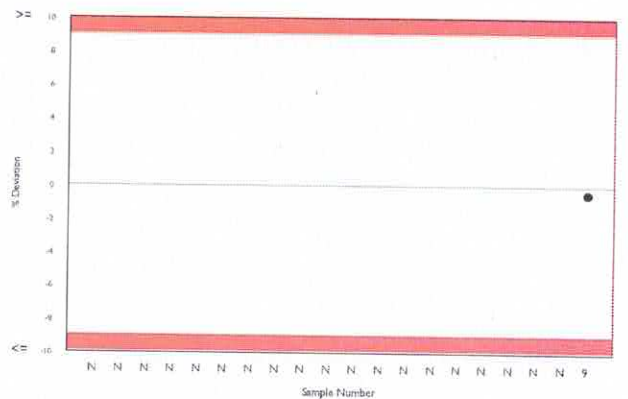
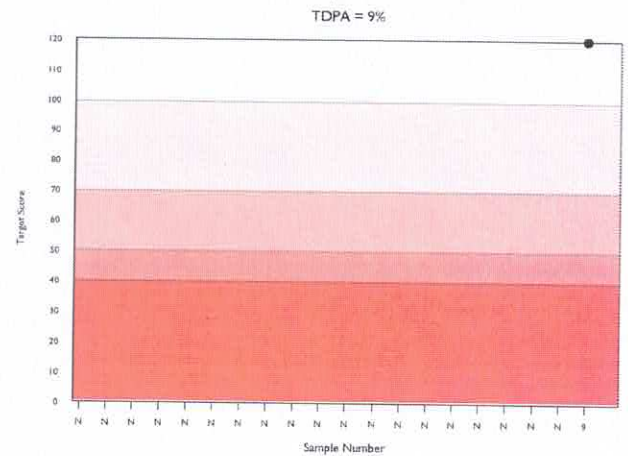
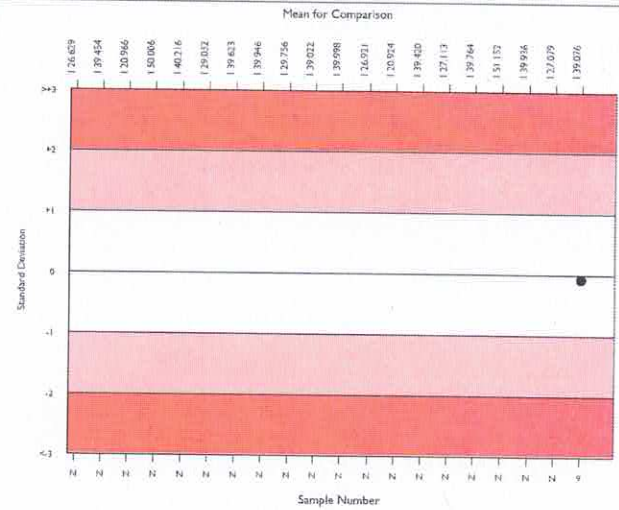
	N	Mean	CV%	U _m	SDPA	Exc.
All Methods	4644	40.734	4.3	0.03	2.23	357
Bromocresol Green	3938	40.565	4.5	0.04	2.22	282
Beckman AU instruments	780	39.076	2.5	0.04	2.14	65

▲ Your Result	38.900	SDI	-0.08
		RMSDI	Too Few
■ Mean for Comparison	39.076	TS	120
		RMTS	Too Few
		%DEV	-0.4
		RM%DEV	Too Few

Acceptable limits derived from Biological Variation	N/A
Acceptable limits of performance for RIQAS	9.00%



Method	N	Mean	CV%	U _m
Bromocresol Green	3938	40.565	4.5	0.04
Bromocresol Purple	484	41.764	3.0	0.07
Ortho Vitros MicroSlide Systems	138	40.624	2.4	0.11
Agappe - Bromocresol Green	33	41.017	4.2	0.38
Turbidimetric Assays	31	40.184	4.1	0.37
Other Dry Chemistry	19	45.737	7.7	1.01
Nephelometric Assays	5	40.940	7.5	1.72
Vitros DT60/DT60 II/DTSC II	2	40.900	0.3	0.12
Electrophoresis	2	39.100	2.2	0.75

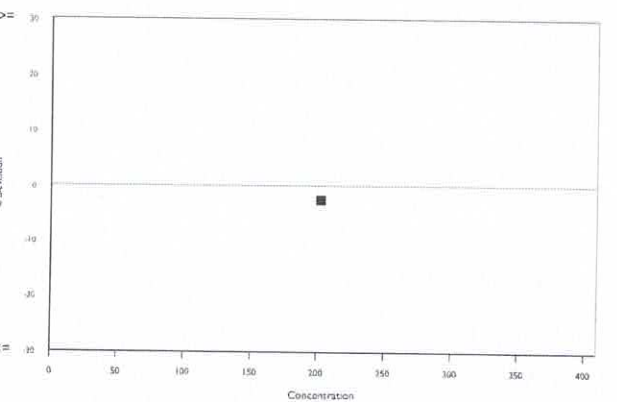
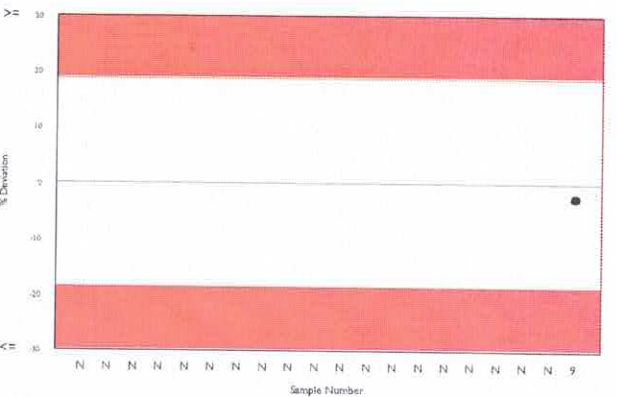
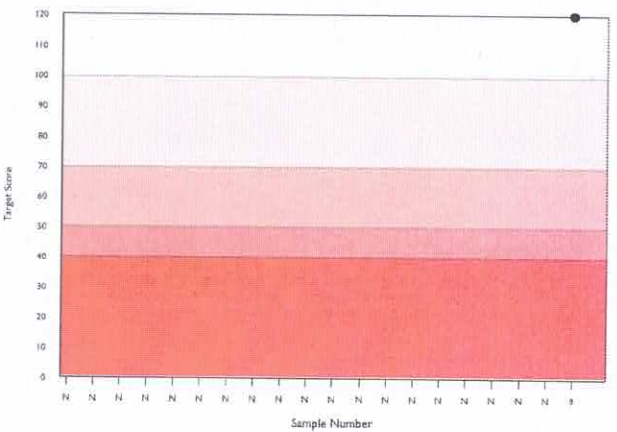
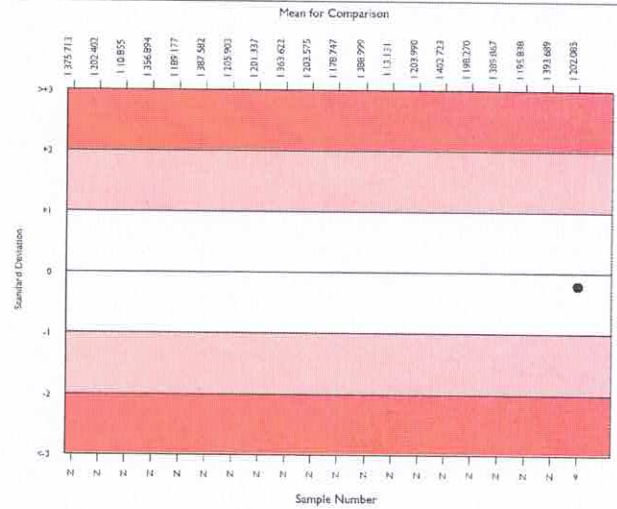
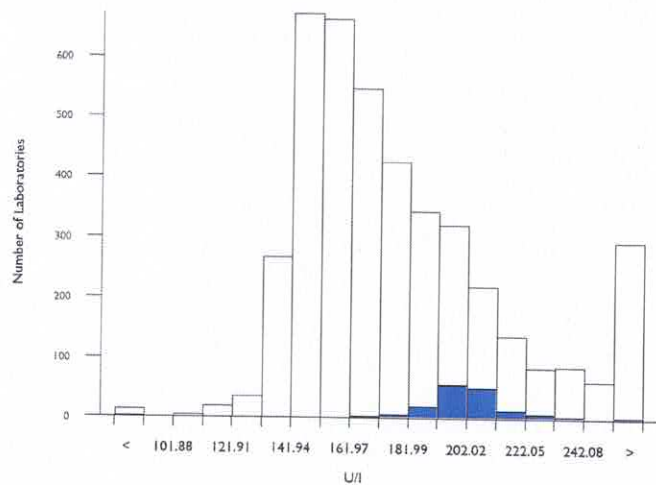


Alkaline Phosphatase, U/I @ 37°C

	N	Mean	CV%	U _m	SDPA	Exc.
All Methods	3853	171.985	15.5	0.54	19.55	335
Beckman AMP (Calibrator)	149	202.031	4.9	1.00	22.97	17
Beckman AU instruments	148	202.085	4.9	1.01	22.97	16

▲ Your Result	197.000	SDI	-0.22
		RMSDI	Too Few
■ Mean for Comparison	202.085	TS	120
		RMTS	Too Few
		%DEV	-2.5
		RM%DEV	Too Few

Acceptable limits derived from Biological Variation	N/A
Acceptable limits of performance for RIQAS	18.70%



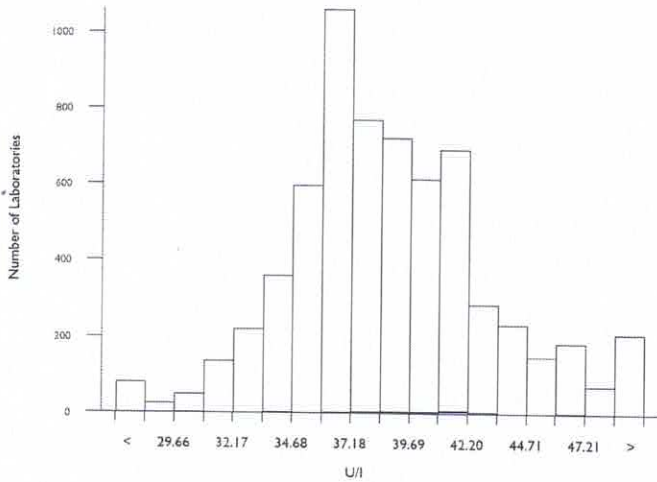
Method	N	Mean	CV%	U _m
AMP optimised to IFCC	1515	180.060	10.5	0.61
Roche AMP buffer IFCC	1012	147.568	4.6	0.27
Diethanolamine buffer, DEA	443	251.146	15.0	2.23
Siemens/Dade Dimension AMP buffer	204	160.878	3.6	0.51
AMP non-optimised	170	179.957	9.0	1.56
Ortho Vitros MicroSlide Systems	165	154.770	6.7	1.02
Beckman AMP (Calibrator)	149	202.031	4.9	1.00
Colorimetric	80	158.956	10.4	2.32
Other AMP kits	57	170.169	4.6	1.29
Agappe - DGKC-SCE	21	246.030	8.9	5.96
Other Dry Chemistry	18	202.665	13.7	8.18
Beckman AMP (Extinction Coeff)	8	188.976	8.2	6.83
Fuji Dri-Chem JSCC	5	387.400	54.0	116.87
AMP optimised to NVKC/SFBC	4	183.000	17.3	19.78
Tris/carbonate buffer	4	167.250	12.8	13.43
Vitros DT60/DT60 II/DTSC II	2	155.000	1.8	2.50
AMPD optimised to JSCC	2	169.000	2.5	3.75

ALT (GPT), U/I @ 37°C

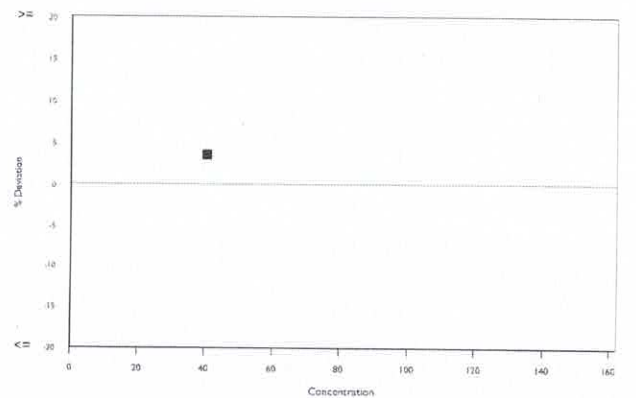
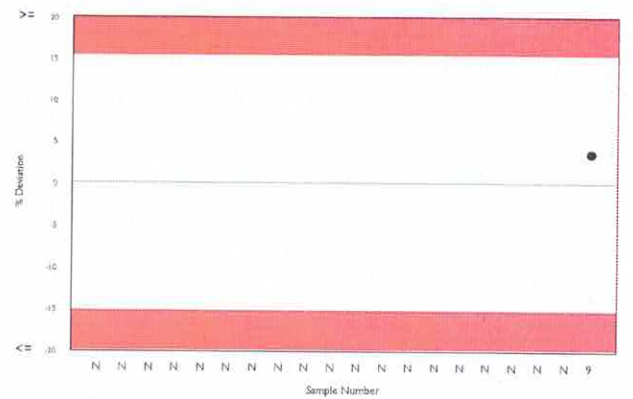
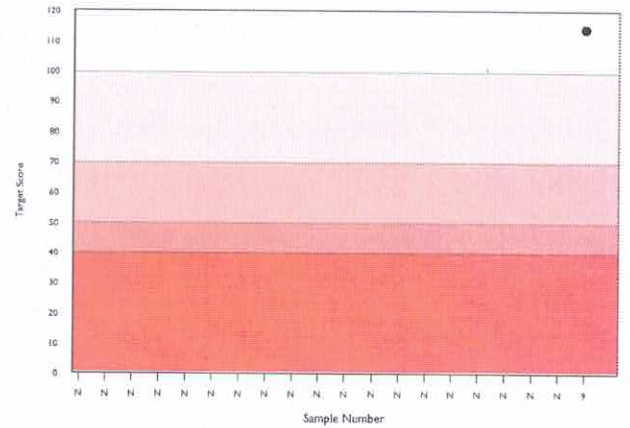
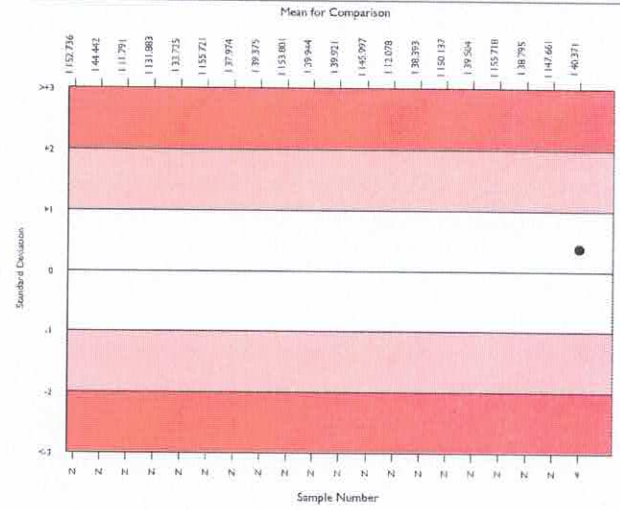
	N	Mean	CV%	U _m	SDPA	Exc.
All Methods	5954	38.442	8.7	0.05	3.58	494
Beckman IFCC Ref. with P5P	28	40.158	4.8	0.45	3.74	5
Beckman AU instruments	24	40.371	4.6	0.47	3.76	3

▲ Your Result	41.800	SDI	0.38
		RMSDI	Too Few
■ Mean for Comparison	40.371	TS	114
		RMTS	Too Few
		%DEV	3.5
		RM%DEV	Too Few

Acceptable limits derived from Biological Variation	N/A
Acceptable limits of performance for RIQAS	15.30%



Method	N	Mean	CV%	U _m
Tris buffer without P5P	4475	37.776	8.0	0.06
Tris buffer with P5P	493	40.910	11.0	0.25
Beckman Mod. IFCC Ref. without P5P	446	39.976	4.6	0.11
Siemens/Dade standard nonIFCC correlated	170	44.861	6.5	0.28
Ortho Vitros MicroSlide Systems	113	41.143	6.1	0.30
Ortho Vitros MicroSlide visible	52	41.062	4.3	0.31
Agappe - IFCC	46	40.411	9.3	0.69
Colorimetric	36	37.373	9.2	0.72
Beckman IFCC Ref. with P5P	28	40.158	4.8	0.45
Phosphate buffer, DGKC	28	37.957	8.5	0.76
Other Dry Chemistry	25	38.164	5.2	0.49
Tris buffer, SCE	19	38.932	6.2	0.70
Tris buffer with P5P, NVKC	13	38.000	10.7	1.40
Beckman (Extinction Coefficient)	2	38.750	2.7	0.94
Vitros DT60/DT60 II/DTSC II	2	42.500	1.7	0.62

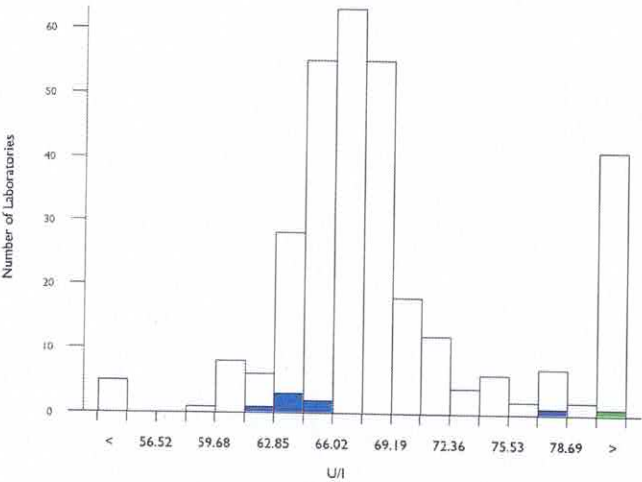


Amylase, Pancreatic, U/I @ 37°C

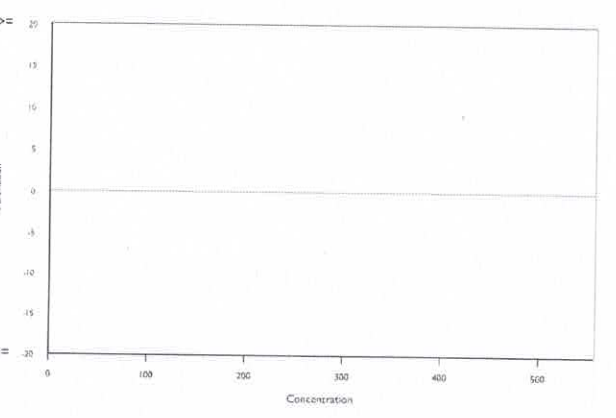
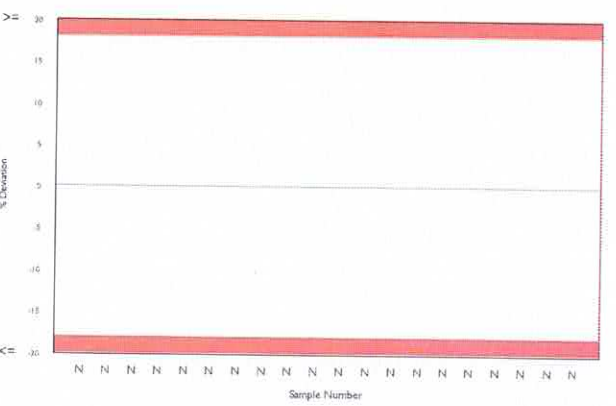
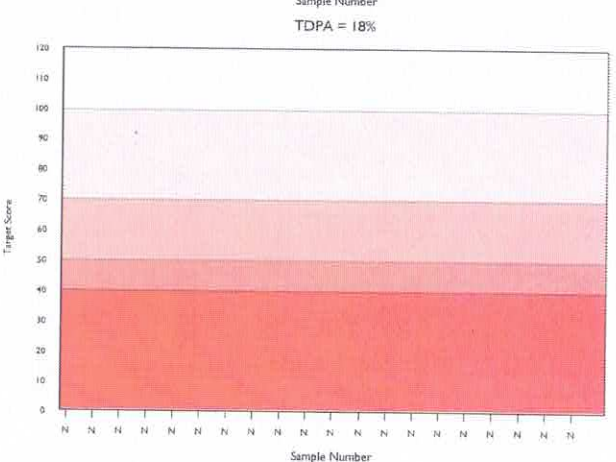
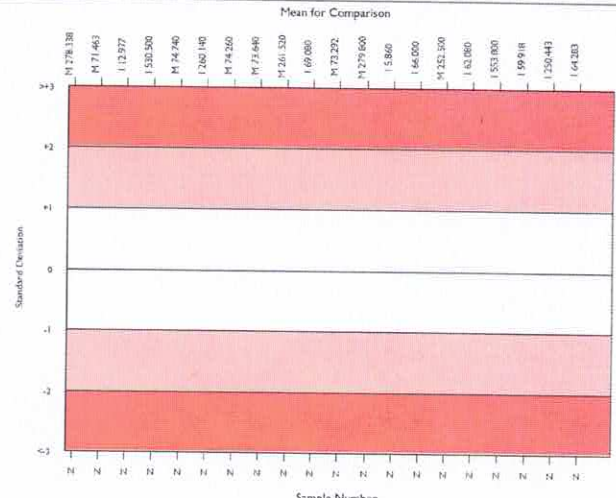
	N	Mean	CV%	U _m	SDPA	Exc.
All Methods	273	67.610	6.2	0.32	7.40	40
Beckman Synchron/CX/LXi/DxC	6	64.283	1.5	0.48	7.03	2
Beckman AU instruments	6	64.283	1.5	0.48	7.03	1

▲ Your Result	No Result	SDI	RMSDI	Too Few
■ Mean for Comparison	64.283	TS	RMTS	Too Few
		%DEV	RM%DEV	Too Few

Acceptable limits derived from Biological Variation	N/A
Acceptable limits of performance for RIQAS	18.00%



Method	N	Mean	CV%	U _m
Immunoinhibition, EPS substrate	137	68.752	10.4	0.77
Roche Liquid Stable pNPG7	112	66.994	2.8	0.22
Amylolytic Methods	7	67.531	3.2	1.01
Other Dry Chemistry	8	73.638	9.4	3.05
Beckman Synchron/CX/LXi/DxC	6	64.283	1.5	0.48
Randox Liquid Stable pNPG7	7	80.614	10.3	3.94

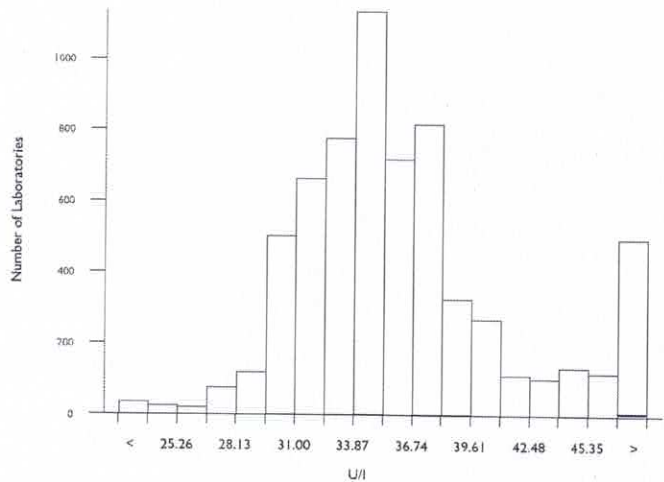


AST (GOT), U/I @ 37°C

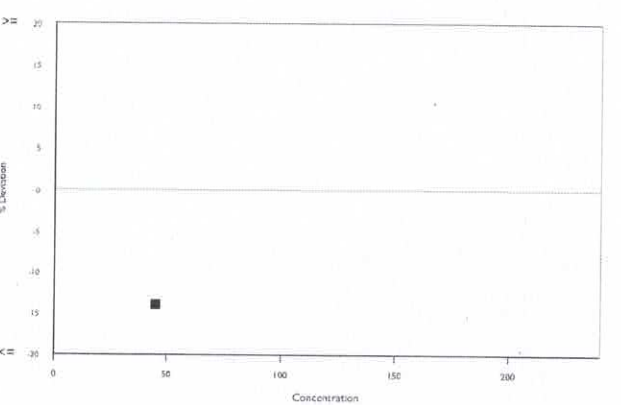
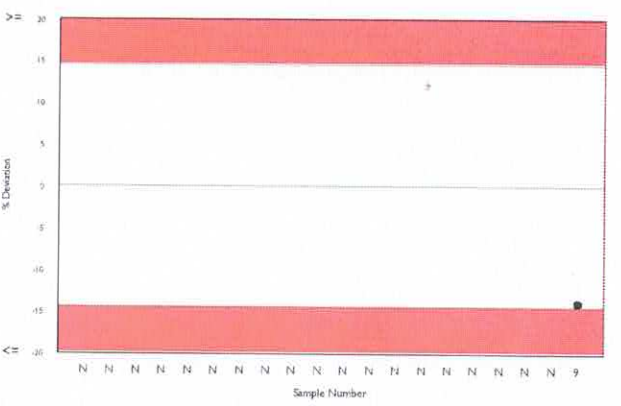
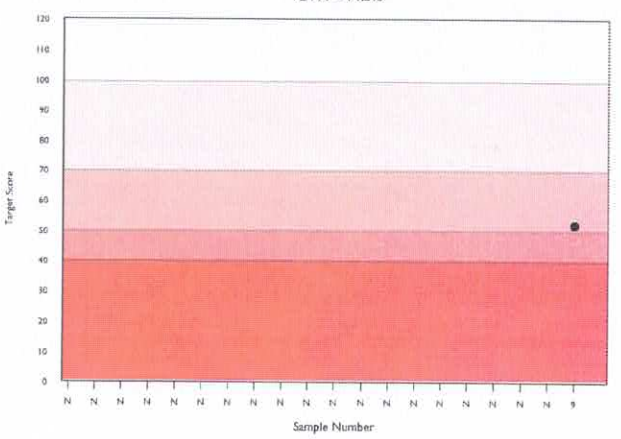
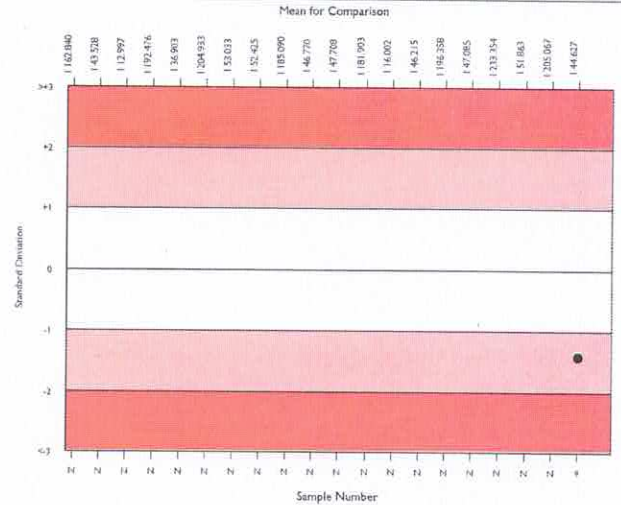
	N	Mean	CV%	U _m	SDPA	Exc.
All Methods	5869	35.311	10.8	0.06	3.11	558
Beckman IFCC Ref. with P5P	21	42.486	16.4	1.90	4.20a	0
Beckman AU instruments	15	44.627	13.9	2.00	4.41a	0

▲ Your Result	38.400	SDI RMSDI	-1.41 Too Few
■ Mean for Comparison	44.627	TS RMTS	52 Too Few
		%DEV RM%DEV	-14.0 Too Few

Acceptable limits derived from Biological Variation	N/A
Acceptable limits of performance for RIQAS	14.50%



Method	N	Mean	CV%	U _m
Tris buffer without P5P	4566	34.403	8.4	0.05
Beckman Mod. IFCC Ref. without P5P	447	36.887	4.8	0.10
Tris buffer with P5P	397	43.706	13.5	0.37
Siemens/Dade standard non IFCC corr.	182	45.363	7.7	0.32
Ortho Vitros MicroSlide visible	163	47.916	4.6	0.22
Agappe - IFCC	44	36.853	9.2	0.64
Colorimetric	37	34.525	8.7	0.62
Phosphate buffer, DGKC	29	35.388	9.9	0.81
Other Dry Chemistry	26	35.246	13.7	1.18
Tris buffer, SCE	21	34.595	5.9	0.55
Beckman IFCC Ref. with P5P	21	42.486	16.4	1.90
Tris buffer with P5P, NVKC	8	34.844	7.2	1.11
Beckman (Extinction Coefficient)	5	37.800	21.3	4.50
Vitros DT60/DT60 II/DTSC II	2	43.000	23.0	8.75

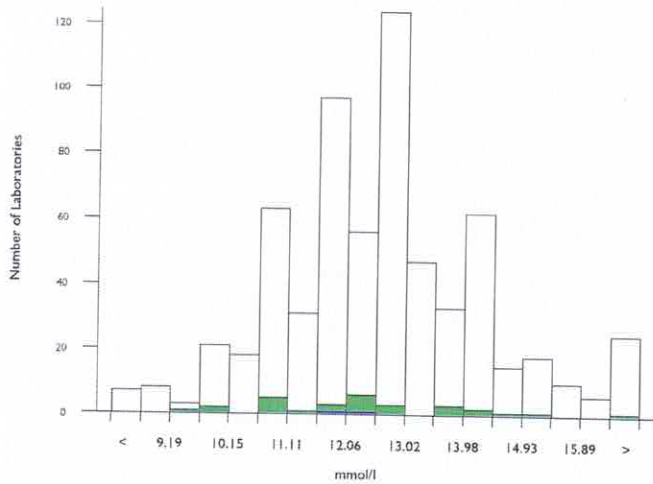


Bicarbonate, mmol/l

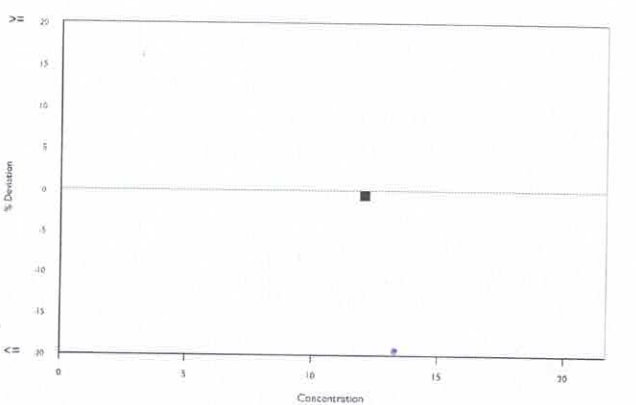
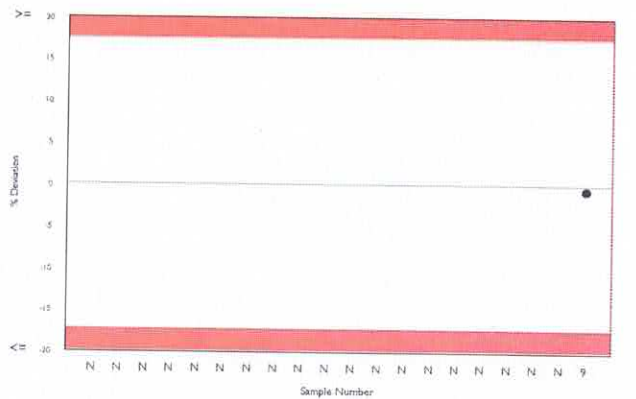
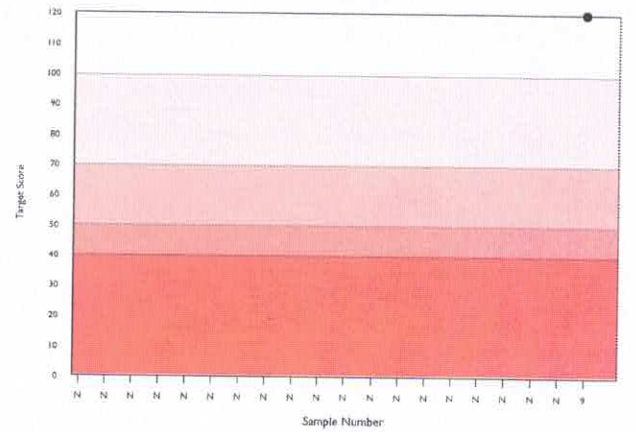
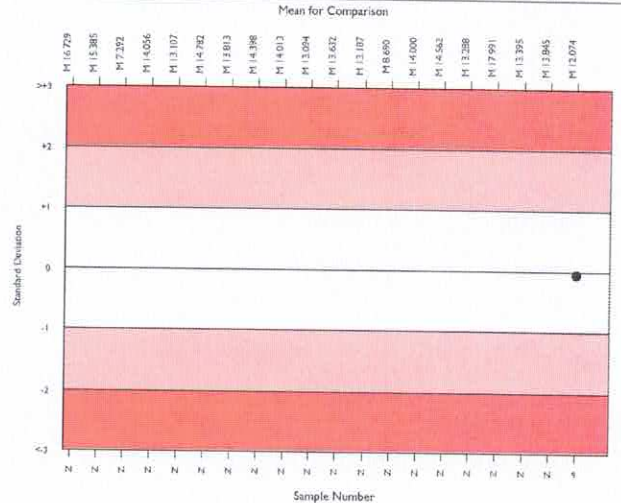
	N	Mean	CV%	U _m	SDPA	Exc.
All Methods	592	12.546	10.2	0.07	1.33	52
Colorimetric	27	12.074	11.2	0.32	1.28	2
Beckman AU instruments	2	12.145	1.7	0.18	1.28	0

▲ Your Result	12.000	SDI	-0.06
		RMSDI	Too Few
■ Mean for Comparison	12.074	TS	120
		RMTS	Too Few
		%DEV	-0.6
		RM%DEV	Too Few

Acceptable limits derived from Biological Variation	N/A
Acceptable limits of performance for RIQAS	17.40%



Method	N	Mean	CV%	U _m
Enzymatic	407	12.496	9.5	0.07
PEP Carboxylase	82	12.685	12.6	0.22
Ortho Vitros MicroSlide Systems	34	13.115	11.6	0.33
Ion selective electrode	28	13.204	13.1	0.41
Colorimetric	27	12.074	11.2	0.32
Other Dry Chemistry	10	13.000	10.3	0.53
Manometric	6	12.683	14.4	0.93
Differential rate pH change	4	11.275	9.6	0.68

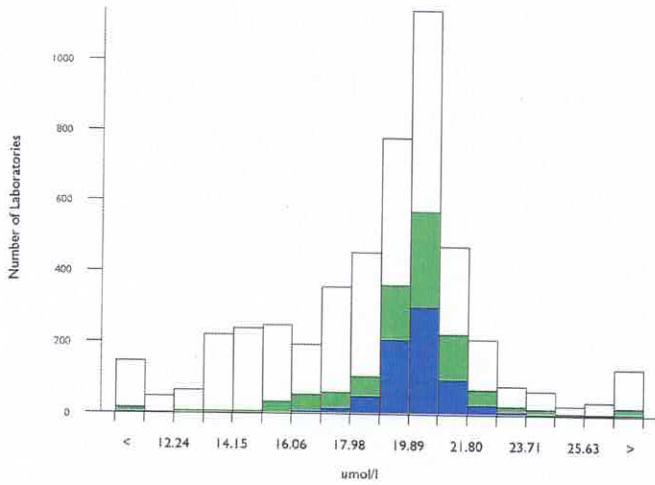


Bilirubin, Direct, umol/l

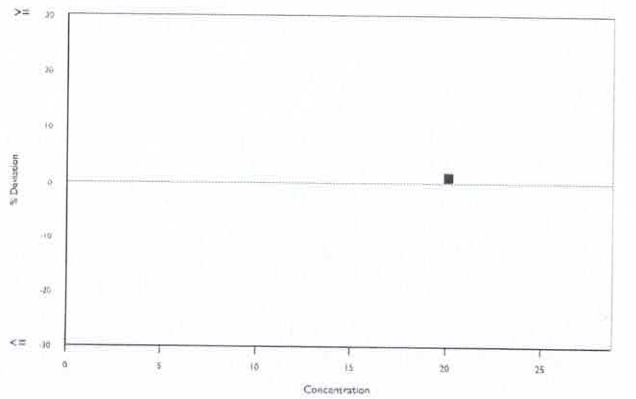
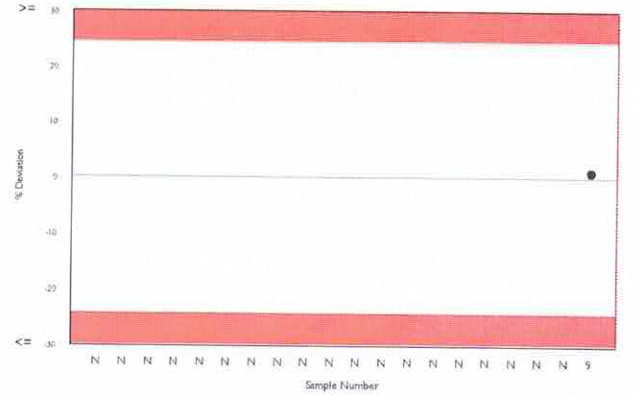
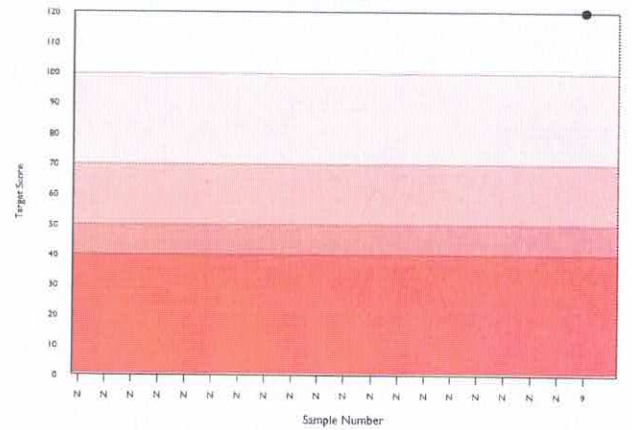
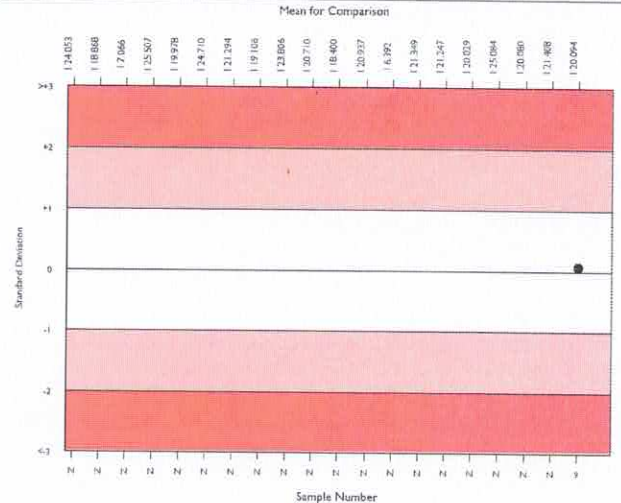
	N	Mean	CV%	U _m	SDPA	Exc.
All Methods	4546	18.938	13.5	0.05	2.81	370
Dichlorophenyl Diazonium	1407	20.122	5.4	0.04	2.99	188
Beckman AU instruments	662	20.094	3.8	0.04	2.98	76

▲ Your Result	20.300	SDI	0.07
		RMSDI	Too Few
■ Mean for Comparison	20.094	TS	120
		RMTS	Too Few
		%DEV	1.0
		RM%DEV	Too Few

Acceptable limits derived from Biological Variation	N/A
Acceptable limits of performance for RIQAS	24.40%



Method	N	Mean	CV%	U _m
Diazo with Sulphanilic Acid	1763	18.679	16.7	0.09
Dichlorophenyl Diazonium	1407	20.122	5.4	0.04
Diazo with Dichloroaniline	402	19.847	8.2	0.10
Diazo/ Sulphanilic Siemens Dimension	267	14.202	5.2	0.06
Oxidation to Biliverdin/Vanadate	215	18.188	9.4	0.15
Roche DPD JG standardised	132	20.098	3.5	0.08
Roche DPD Doumas standardised	141	18.879	11.0	0.22
Diazo/Sulphanilic Beckman DxC	77	16.224	14.4	0.33
Agappe - DIAZO	24	12.767	36.2	1.18
Other Dry Chemistry	20	15.236	7.4	0.31

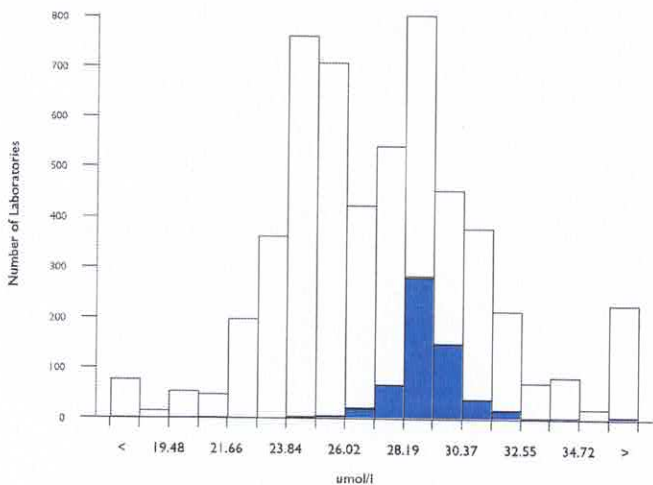


Bilirubin, Total, umol/l

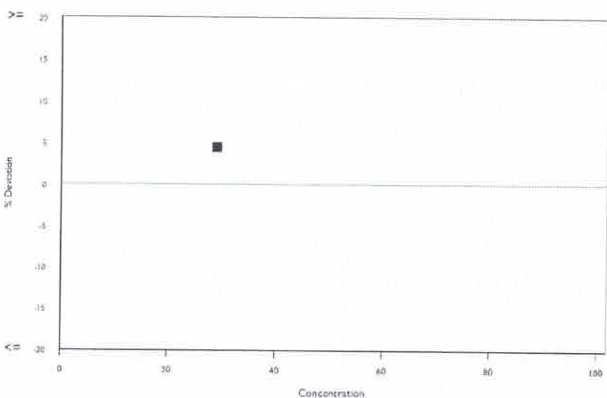
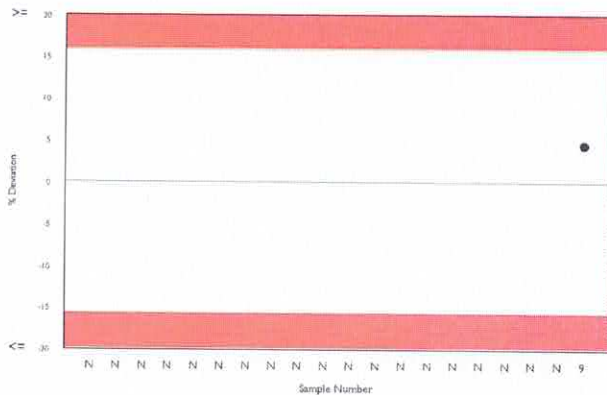
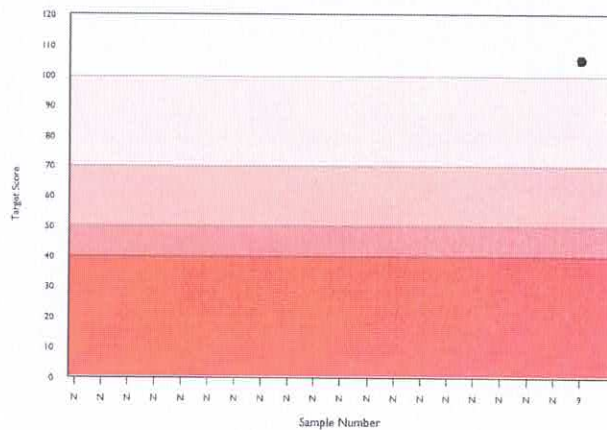
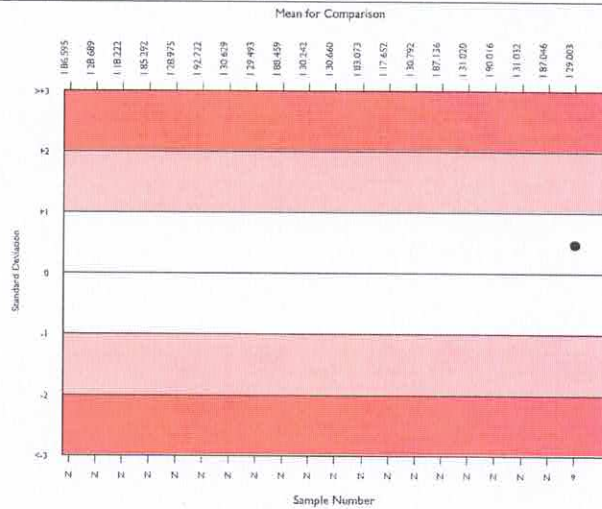
	N	Mean	CV%	U _m	SDPA	Exc.
All Methods	5042	27.109	10.7	0.05	2.60	391
DPD (Beckman AU)	551	28.981	3.0	0.05	2.78	59
Beckman AU instruments	542	29.003	2.9	0.04	2.79	58

▲ Your Result	30.300	SDI	0.47
		RMSDI	Too Few
■ Mean for Comparison	29.003	TS	105
		RMTS	Too Few
		%DEV	4.5
		RM%DEV	Too Few

Acceptable limits derived from Biological Variation	N/A
Acceptable limits of performance for RIQAS	15.80%



Method	N	Mean	CV%	U _m
Diazo with Sulphanilic Acid	1994	28.019	11.8	0.09
Dichlorophenyl Diazonium	1104	25.792	8.2	0.08
DPD (Beckman AU)	551	28.981	3.0	0.05
Diazonium ion	436	24.779	5.6	0.08
Diazo with Dichloroaniline	416	26.301	10.9	0.18
Oxidation to Biliverdin/Vanadate	228	29.992	5.0	0.12
Ortho Vitros MicroSlide System Total Bil	150	23.867	7.8	0.19
Other Dry Chemistry	25	24.872	7.5	0.46
Nitrobenzenediazonium Salt	22	24.479	6.0	0.39
Agappe - TAB	16	25.212	6.7	0.53
Agappe - DMSO	6	26.944	8.8	1.21
Vitros DT60/DT60 II Total Bil	3	23.484	4.7	0.79
Direct Spectrophotometry	3	30.233	20.5	4.48

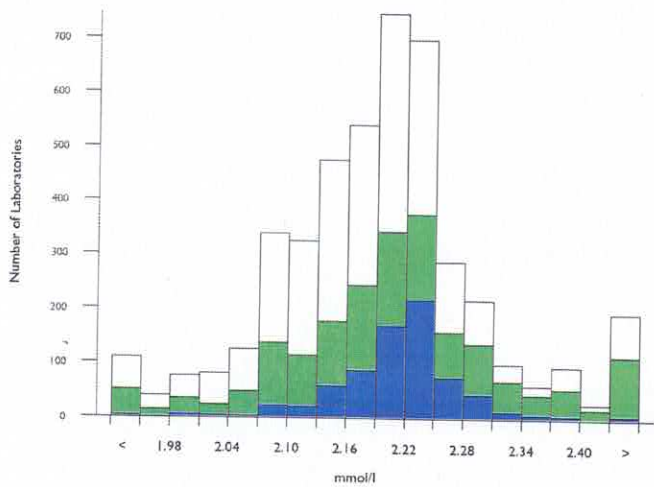
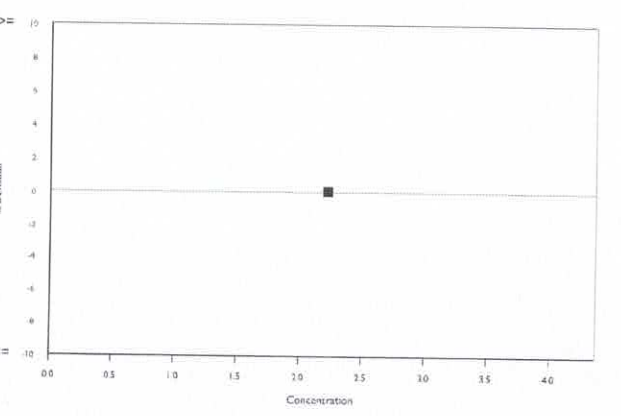
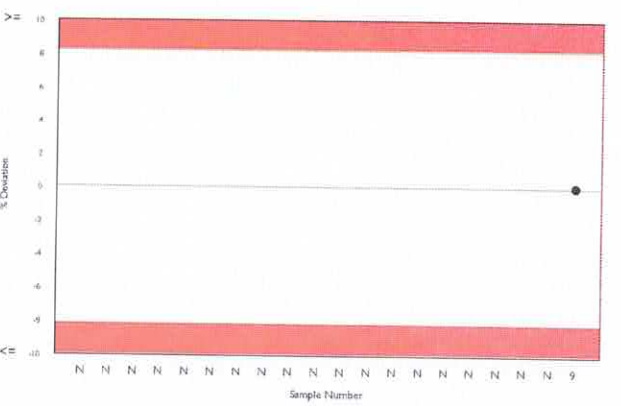
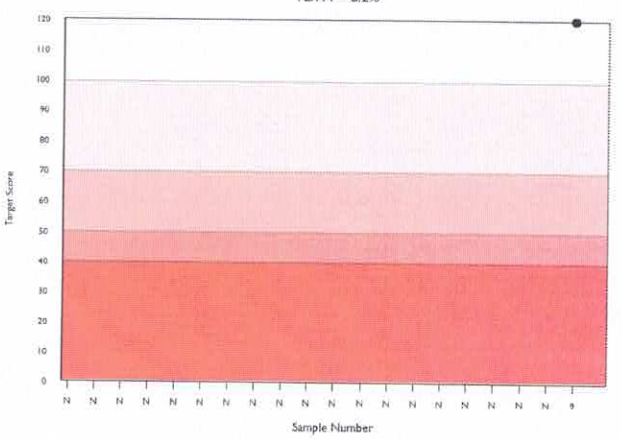
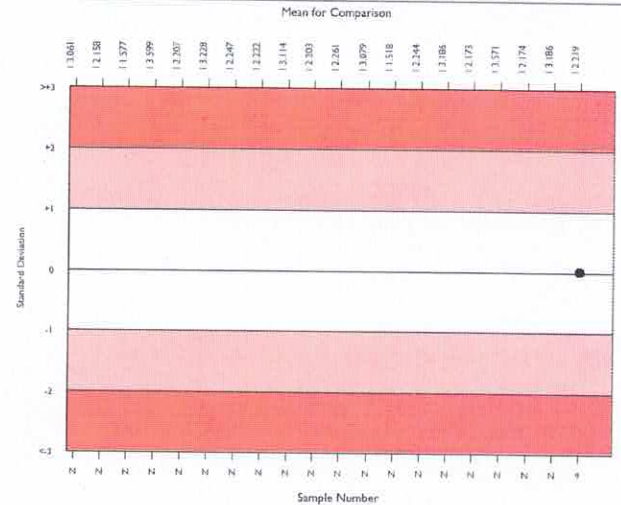


Calcium, mmol/l

	N	Mean	CV%	U _m	SDPA	Exc.
All Methods	4162	2.192	3.7	0.00	0.11	369
Arsenazo	1969	2.208	3.7	0.00	0.11	186
Beckman AU instruments	699	2.219	2.1	0.00	0.11	54

▲ Your Result	2.220	SDI	0.01
		RMSDI	Too Few
■ Mean for Comparison	2.219	TS	120
		RMTS	Too Few
		%DEV	0.1
		RM%DEV	Too Few

Acceptable limits derived from Biological Variation	N/A
Acceptable limits of performance for RIQAS	8.20%



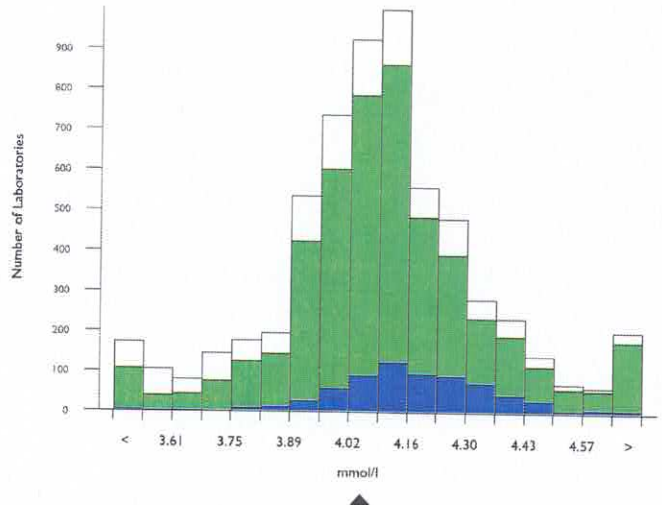
Method	N	Mean	CV%	U _m
Arsenazo	1969	2.208	3.7	0.00
Cresolphthalein complexone	1143	2.160	3.9	0.00
NM-BAPTA	697	2.195	2.2	0.00
Ortho Vitros MicroSlide Systems	158	2.201	2.1	0.00
Ion selective electrode	102	2.169	4.7	0.01
Other Dry Chemistry	21	2.141	3.4	0.02
Phosphonazo	18	2.198	5.1	0.03
Agappe - ARSENAZO	17	2.237	5.3	0.04
Methylthymol blue	14	2.181	5.3	0.04
Agappe - OCPC	3	2.129	7.8	0.12
Vitros DT60/DT60 II/DTSC II	2	2.225	1.6	0.03

Cholesterol, mmol/l

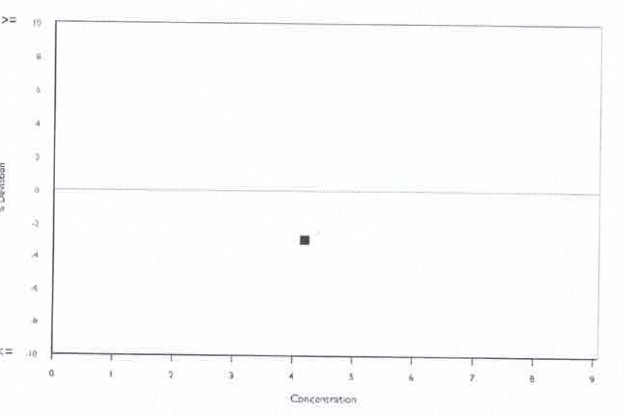
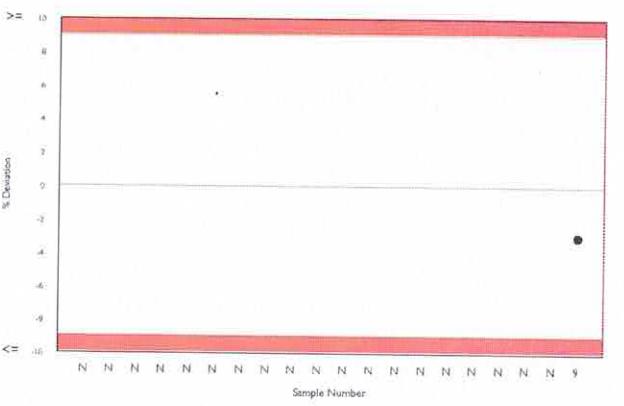
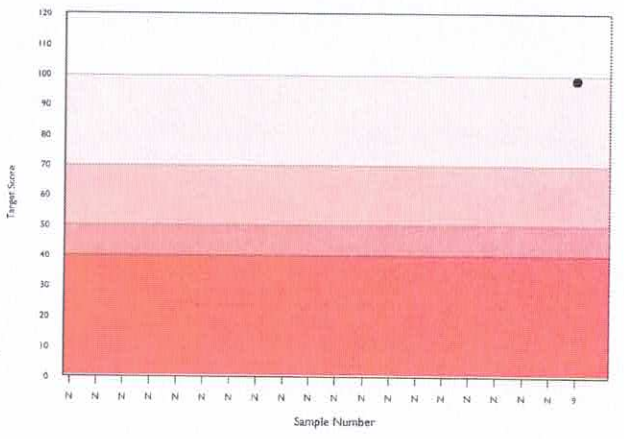
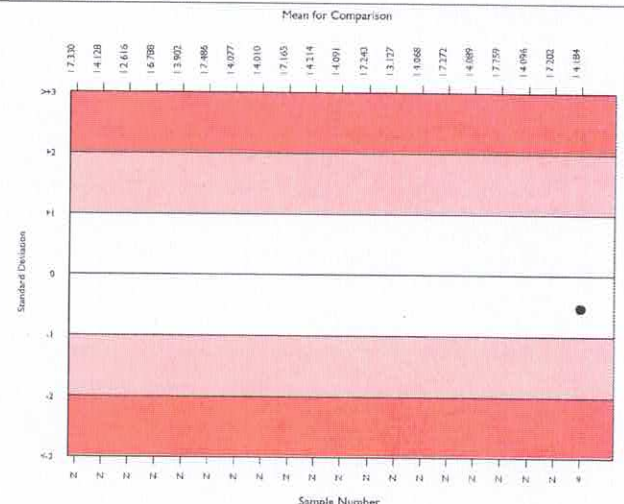
	N	Mean	CV%	U _m	SDPA	Exc.
All Methods	5554	4.097	4.5	0.00	0.22	547
Cholesterol Oxidase - Abell Kendall	4491	4.110	4.1	0.00	0.22	424
Beckman AU instruments	647	4.184	3.6	0.01	0.23	42

▲ Your Result	4.060	SDI	-0.54
		RMSDI	Too Few
■ Mean for Comparison	4.184	TS	98
		RMTS	Too Few
		%DEV	-3.0
		RM%DEV	Too Few

Acceptable limits derived from Biological Variation	N/A
Acceptable limits of performance for RIQAS	9.00%



Method	N	Mean	CV%	U _m
Cholesterol Oxidase - Abell Kendall	4491	4.110	4.1	0.00
Cholesterol Oxidase - IDMS	566	4.130	4.2	0.01
Siemens Dimension	225	3.646	3.2	0.01
Ortho Vitros MicroSlide Systems	162	4.002	3.5	0.01
Cholesterol Dehydrogenase	61	4.135	4.4	0.03
Agappe - CHOD-PAP	43	3.998	3.9	0.03
Other Dry Chemistry	29	4.147	5.5	0.05
Vitros DT60/DT60 II/DTSC II	2	3.965	2.3	0.08

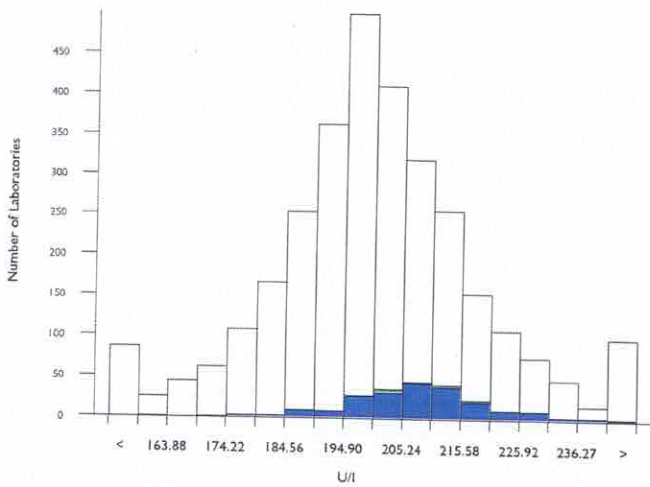


CK, Total, U/I @ 37°C

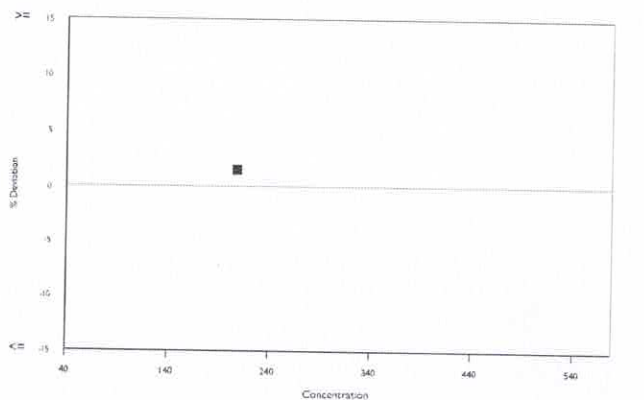
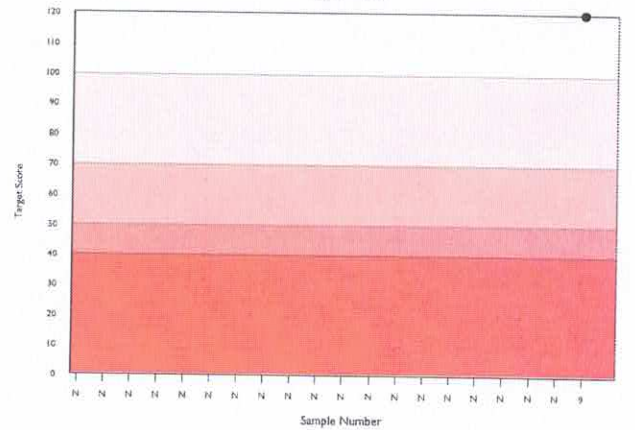
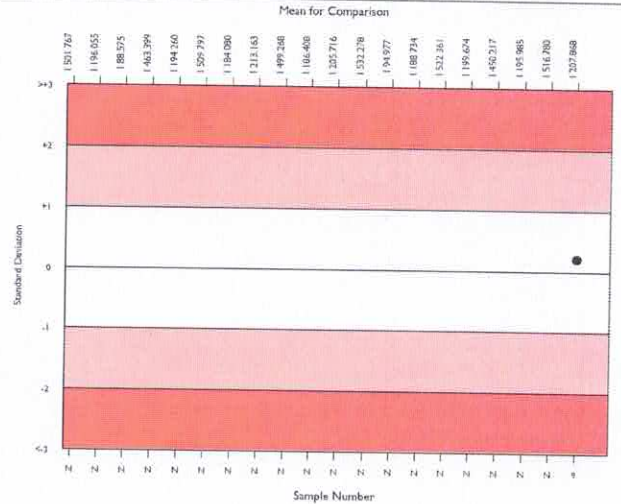
	N	Mean	CV%	U _m	SDPA	Exc.
All Methods	2850	200.078	6.9	0.32	14.60	250
Beckman CK-NAC (IFCC)	218	207.952	4.8	0.85	15.17	18
Beckman AU instruments	209	207.868	4.9	0.88	15.17	17

▲ Your Result	211.000	SDI	0.21
		RMSDI	Too Few
■ Mean for Comparison	207.868	TS	120
		RMTS	Too Few
		%DEV	1.5
		RM%DEV	Too Few

Acceptable limits derived from Biological Variation: N/A
 Acceptable limits of performance for RIQAS: 12.00%



Method	N	Mean	CV%	U _m
CK-NAC (IFCC)	1913	199.578	6.6	0.38
Beckman CK-NAC (IFCC)	218	207.952	4.8	0.85
Abbott CK-NAC (IFCC)	205	202.337	5.9	1.05
CK-NAC substrate start (DGKC)	115	195.686	7.5	1.72
Ortho Vitros MicroSlide Systems	114	190.290	8.0	1.79
Creatine phosphate substrate start	102	195.841	6.2	1.50
CK-NAC serum start (DGKC)	74	202.752	11.1	3.26
Monothioglycerol	49	200.442	6.3	2.24
Agappe - IFCC/KINETIC	14	192.964	8.2	5.28
Other Dry Chemistry	12	237.068	8.0	6.80
Beckman CK-NAC (Extinction Coeff)	9	212.823	2.7	2.36
Dithioerythritol (DTE), IFCC correlated	5	192.960	4.9	5.28

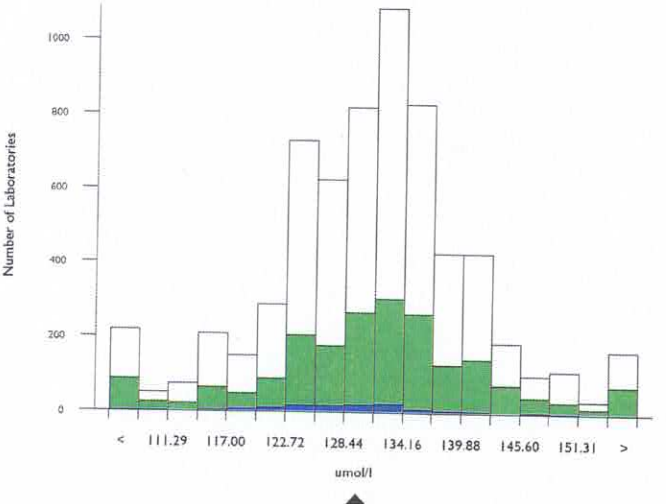


Creatinine, umol/l

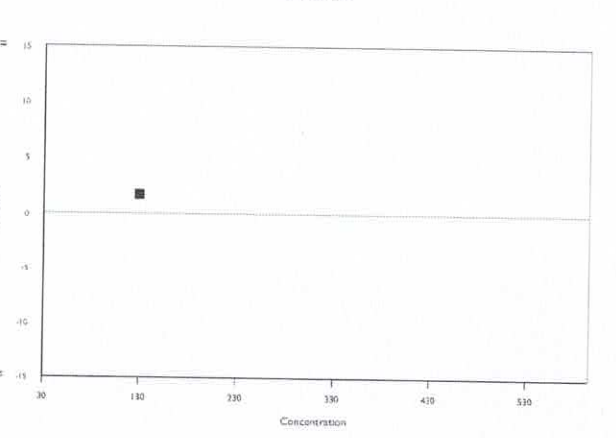
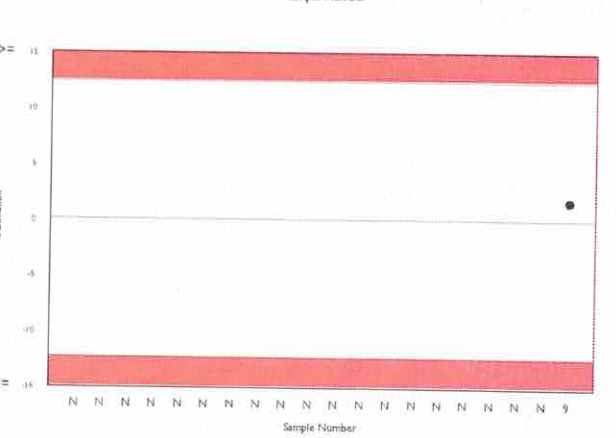
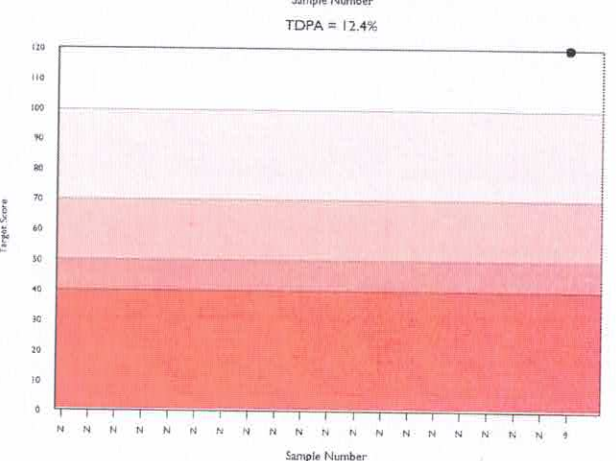
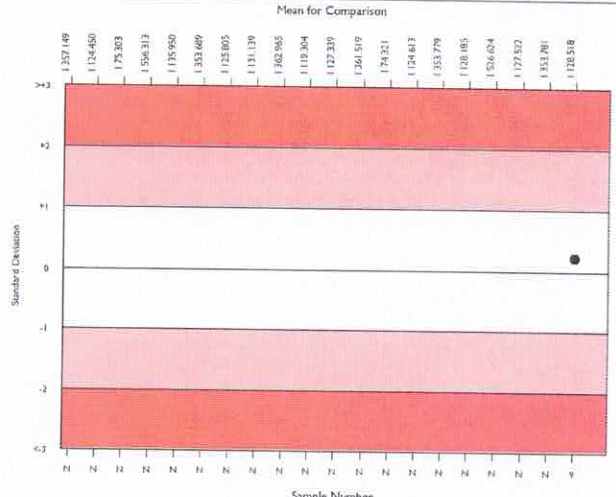
	N	Mean	CV%	U _m	SDPA	Exc.
All Methods	6030	131.305	5.8	0.12	9.90	493
Alkaline picrate no deproteinisation	1880	131.591	6.2	0.23	9.92	179
Beckman AU instruments	134	128.518	4.9	0.68	9.69	12

▲ Your Result	130.700	SDI	0.23
		RMSDI	Too Few
■ Mean for Comparison	128.518	TS	120
		RMTS	Too Few
		%DEV	1.7
		RM%DEV	Too Few

Acceptable limits derived from Biological Variation	N/A
Acceptable limits of performance for RIQAS	12.40%



Method	N	Mean	CV%	U _m
Alkaline picrate no deproteinisation	1880	131.591	6.2	0.23
Jaffe rate blanked	1404	131.185	6.0	0.26
Jaffe rate blanked comp. (-26umol/l)	617	131.893	4.2	0.28
Jaffe rate comp. (-18umol/l)	483	126.499	5.3	0.38
Roche Creatinine Plus	270	135.053	3.9	0.40
Creatinine PAP method	261	132.483	5.0	0.51
Enzymatic UV method (340nm)	254	132.066	4.6	0.48
IDMS traceable	186	133.016	4.5	0.55
Other enzymatic methods	165	132.207	4.7	0.60
Alkaline picrate with deproteinisation	156	131.576	6.6	0.87
Vitros, IDMS traceable	134	128.823	3.6	0.50
Jaffe rate blanked comp. (-33umol/l)	63	131.243	9.3	1.92
Other Dry Chemistry	37	126.852	7.5	1.97
Agappe - JAFFE'S KINETIC	27	131.567	5.4	1.72
Agappe - ENZYMATIC	18	130.740	9.3	3.57
Vitros DT60/DT60 II/DTSC II	14	125.756	4.9	2.07

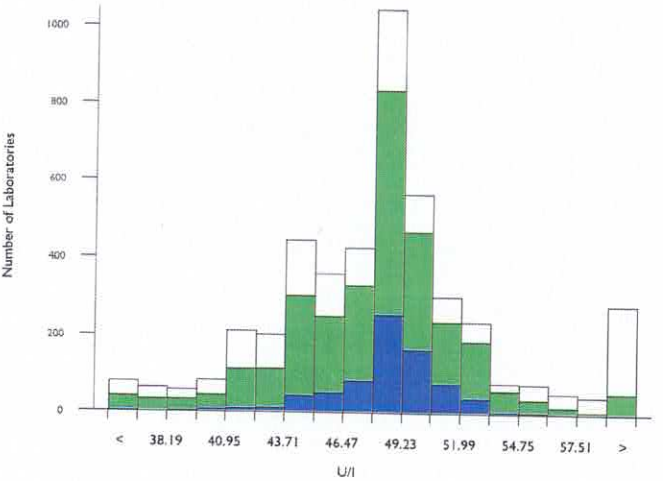


GGT, U/I @ 37°C

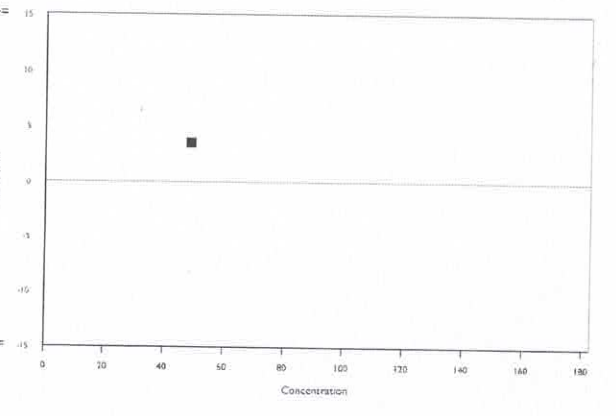
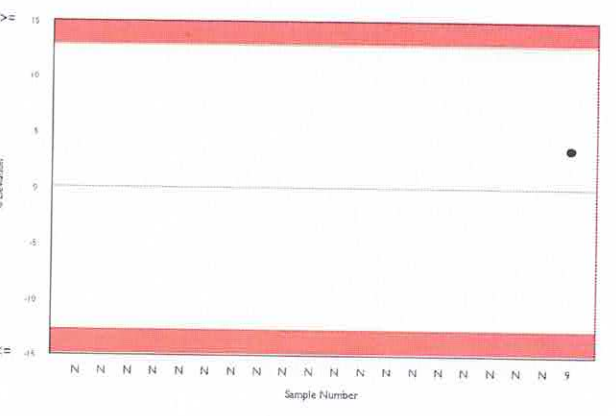
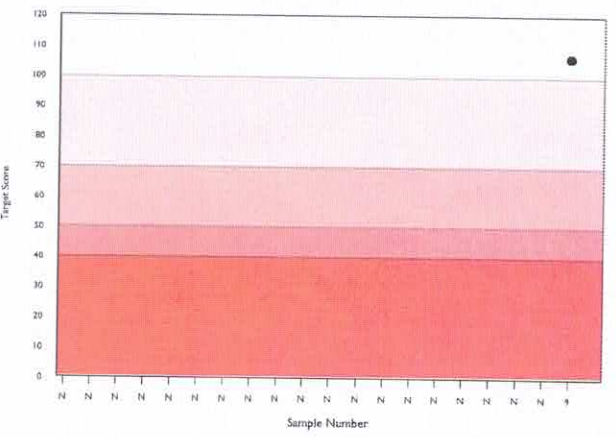
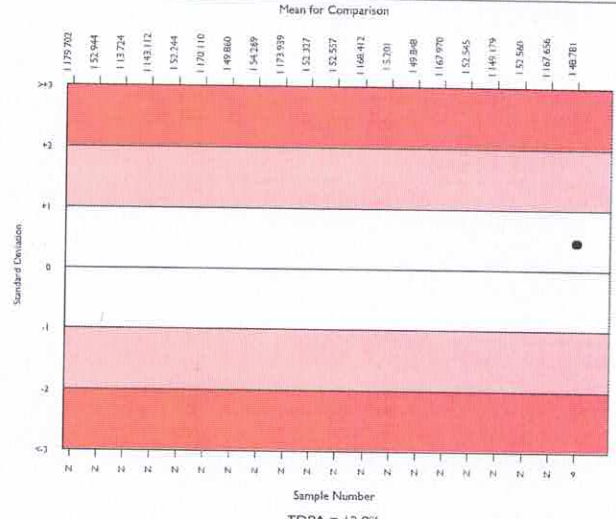
	N	Mean	CV%	U _m	SDPA	Exc.
All Methods	4177	47.855	7.7	0.07	3.72	427
Gamma glut'3-carb'4-nitro(IFCC)	2916	48.096	6.0	0.07	3.74	240
Beckman AU instruments	710	48.781	4.0	0.09	3.80	48

▲ Your Result	50.500	SDI	0.45
		RMSDI	Too Few
■ Mean for Comparison	48.781	TS	106
		RMTS	Too Few
		%DEV	3.5
		RM%DEV	Too Few

Acceptable limits derived from Biological Variation	N/A
Acceptable limits of performance for RIQAS	12.80%



Method	N	Mean	CV%	U _m
Gamma glut'3-carb'4-nitro(IFCC)	2916	48.096	6.0	0.07
Gamma glut.-3-carb.-4-nitro.	793	46.192	7.7	0.16
Siemens Dimension	183	60.467	6.0	0.33
Ortho Vitros MicroSlide Systems	126	58.419	3.4	0.22
DCL, gamma glut.-3-carb.-4-nitro.	71	47.277	5.2	0.36
Gamma glutamyl-4-nitroanilide	76	42.580	11.0	0.67
Beckman Szasz (Extinction Coeff.)	33	49.215	3.5	0.38
Agappe - SZASZ KINETIC	28	49.000	9.9	1.14
Other Dry Chemistry	17	43.112	11.1	1.46
Vitros, DT60/DT60 II/DTSC II	2	60.000	0.0	0.00

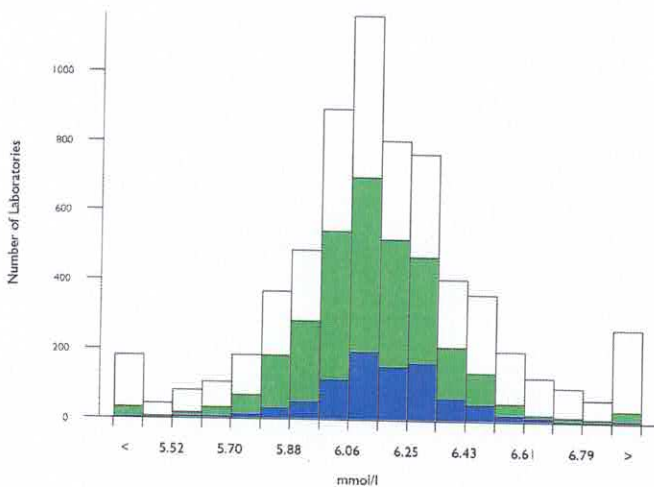
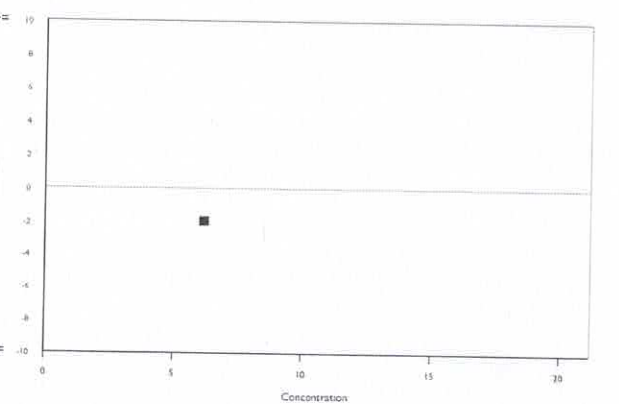
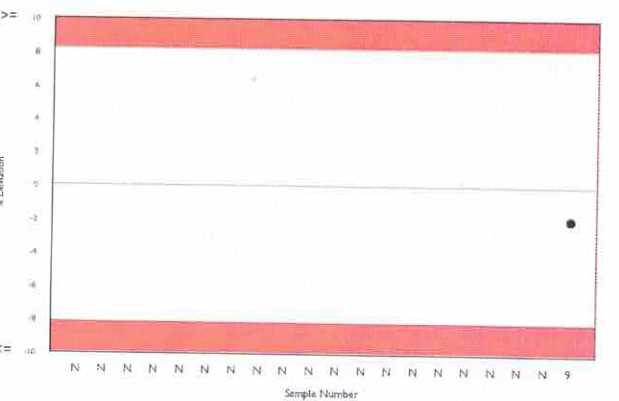
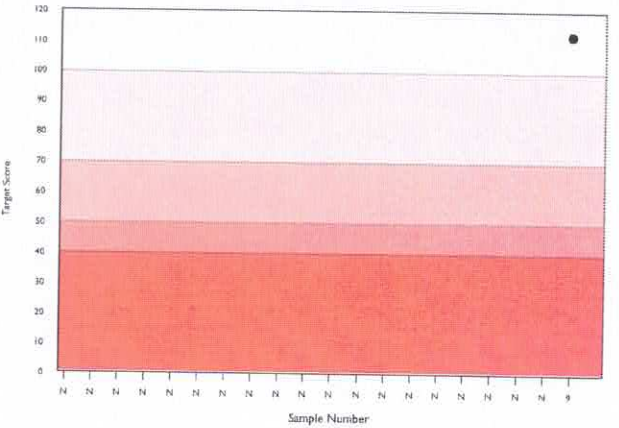
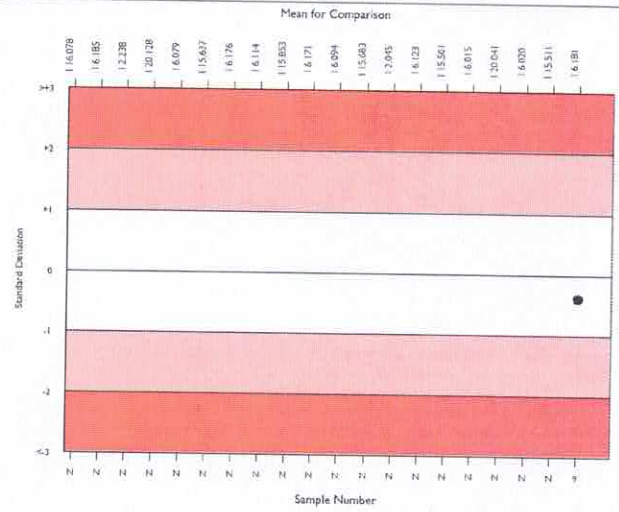


Glucose, mmol/l

	N	Mean	CV%	U _m	SDPA	Exc.
All Methods	6059	6.161	3.9	0.00	0.31	525
Hexokinase	3081	6.140	2.7	0.00	0.31	239
Beckman AU instruments	831	6.181	2.6	0.01	0.31	68

▲ Your Result	6.060	SDI RMSDI	-0.39 Too Few
■ Mean for Comparison	6.181	TS RMTS	112 Too Few
		%DEV RM%DEV	-2.0 Too Few

Acceptable limits derived from Biological Variation	N/A
Acceptable limits of performance for RIQAS	8.20%



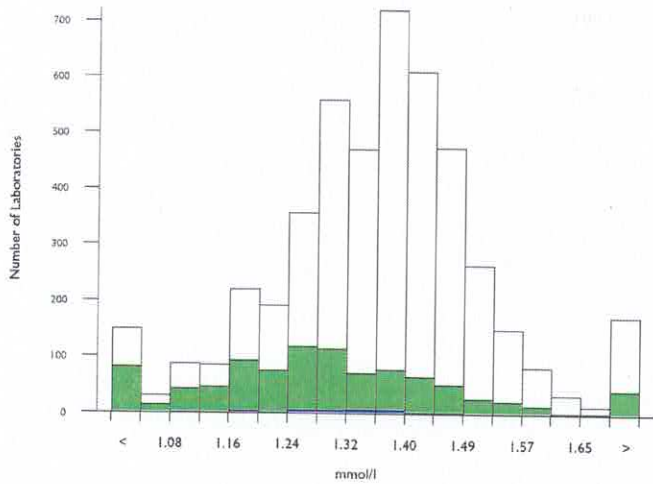
Method	N	Mean	CV%	U _m
Hexokinase	3081	6.140	2.7	0.00
Glucose oxidase	2652	6.201	5.5	0.01
Ortho Vitros MicroSlide Systems	167	6.029	2.9	0.02
Glucose dehydrogenase	66	6.238	4.6	0.04
Agappe - GOD-PAP	44	6.340	6.0	0.07
Other Dry Chemistry	25	6.124	3.6	0.06
GOD/02-Beckman method	25	6.219	4.3	0.07
Oxygen electrode	23	6.067	2.6	0.04
Vitros, DT60/DT60 II	2	6.080	1.9	0.10

HDL-Cholesterol, mmol/l

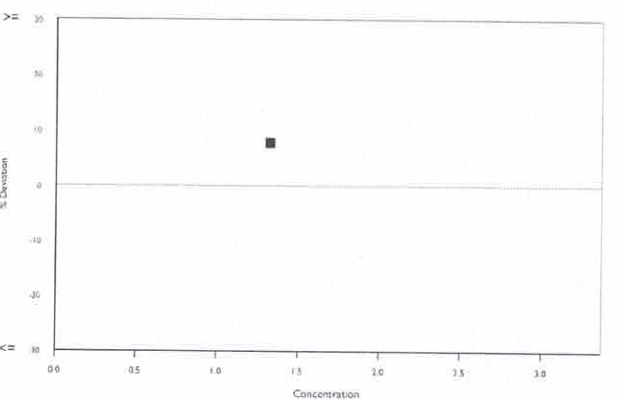
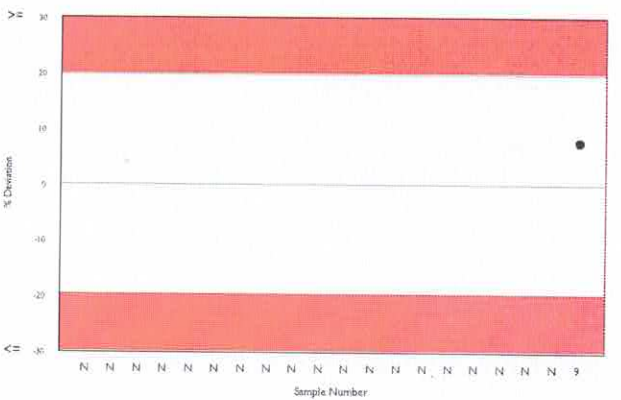
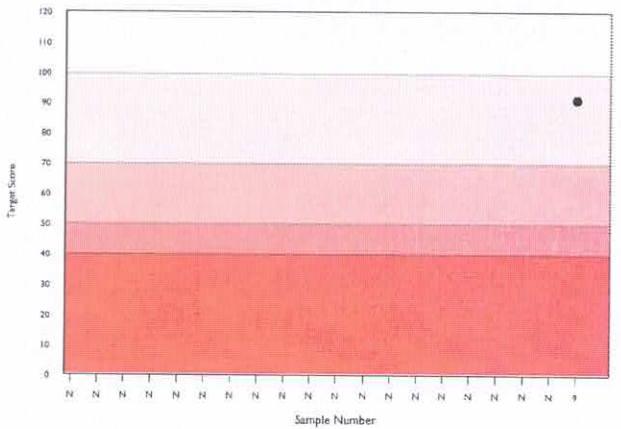
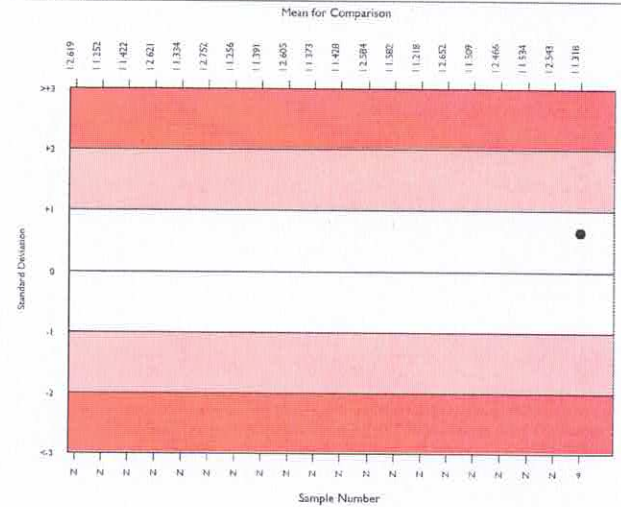
	N	Mean	CV%	U _m	SDPA	Exc.
All Methods	4285	1.369	8.0	0.00	0.16	378
Direct HDL, Clearance method	880	1.290	10.7	0.01	0.16	80
Beckman AU instruments	41	1.318	7.3	0.02	0.16	4

▲ Your Result	1.420	SDI	0.65
		RMSDI	Too Few
■ Mean for Comparison	1.318	TS	91
		RMTS	Too Few
		%DEV	7.8
		RM%DEV	Too Few

Acceptable limits derived from Biological Variation	N/A
Acceptable limits of performance for RIQAS	19.80%



Method	N	Mean	CV%	U _m
Direct HDL, Roche 4th gen.	1077	1.421	3.8	0.00
Direct HDL, Immunoseparation	918	1.322	6.3	0.00
Direct HDL, Clearance method	880	1.290	10.7	0.01
Direct HDL, PEGME	438	1.353	9.3	0.01
HDL Ultra/Accel Selective Detergent	404	1.448	6.0	0.01
Direct HDL, PPD	297	1.403	7.4	0.01
Vitros dHDL, PTA/MgCl2 direct precip.	135	1.354	6.3	0.01
Other Dry Chemistry	34	1.404	9.2	0.03
Agappe - SELECTIVE INHIBITION	30	1.455	10.0	0.03
Vitros, Magnetic HDL	17	1.339	4.4	0.02
Vitros 5.1 F5 Microtip assay	12	1.375	7.7	0.04

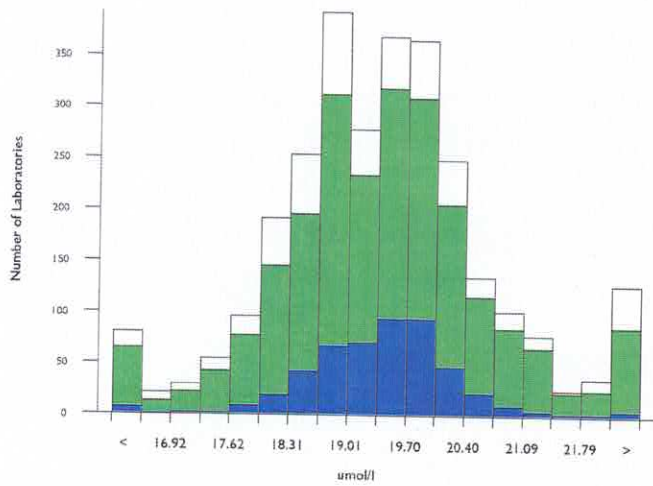


Iron, umol/l

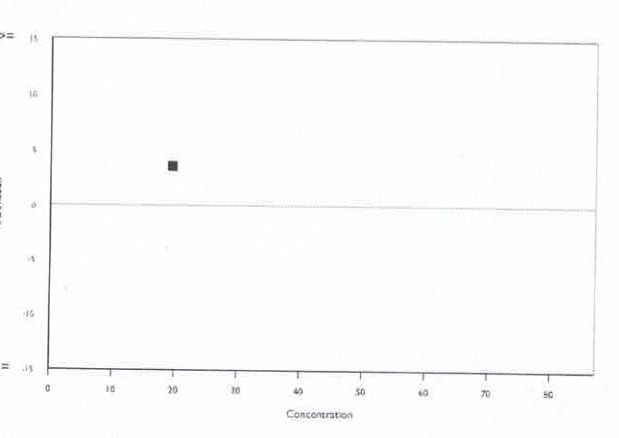
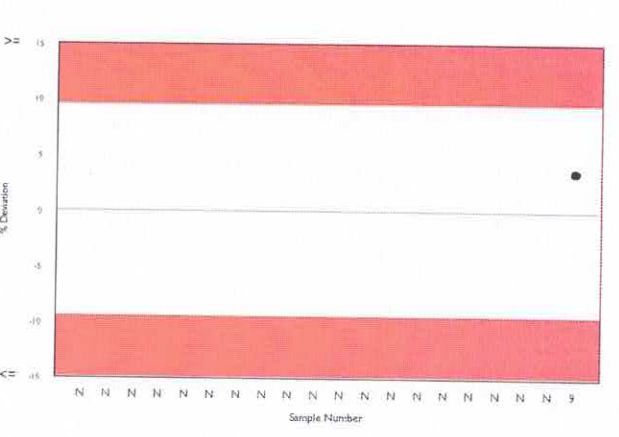
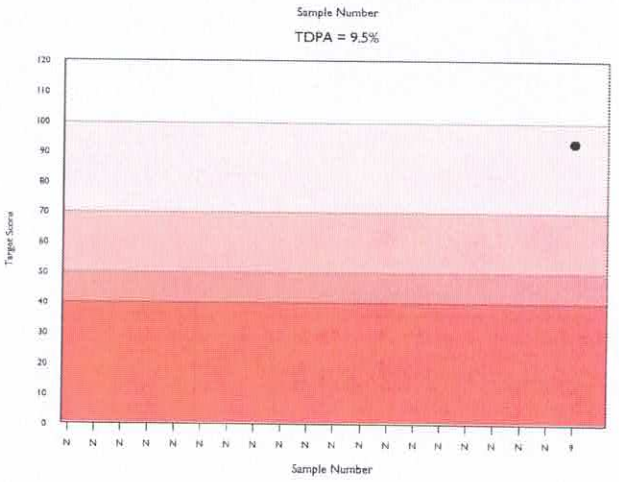
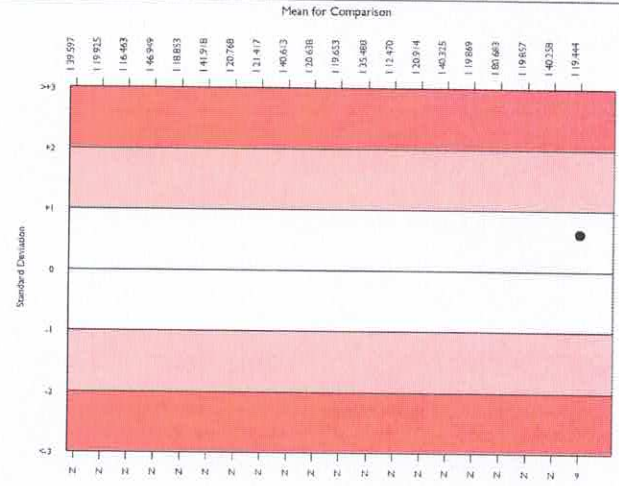
	N	Mean	CV%	U _m	SDPA	Exc.
All Methods	2620	19.358	4.8	0.02	1.12	258
Colorimetric without ppt.	2136	19.390	4.7	0.02	1.12	198
Beckman AU instruments	460	19.444	3.2	0.04	1.12	43

▲ Your Result	20.130	SDI	0.61
		RMSDI	Too Few
■ Mean for Comparison	19.444	TS	93
		RMTS	Too Few
		%DEV	3.5
		RM%DEV	Too Few

Acceptable limits derived from Biological Variation	N/A
Acceptable limits of performance for RIQAS	9.50%



Method	N	Mean	CV%	U _m
Colorimetric without ppt.	2136	19.390	4.7	0.02
Colorimetric with ppt.	329	19.188	5.3	0.07
Ortho Vitros MicroSlide Systems	106	19.184	5.2	0.12
Other method with blank	31	19.288	5.8	0.25
Other method without blank	10	20.631	5.9	0.48
Other Dry Chemistry	8	18.449	8.6	0.70
Agappe - CHROMAZUROL	3	18.525	6.0	0.80

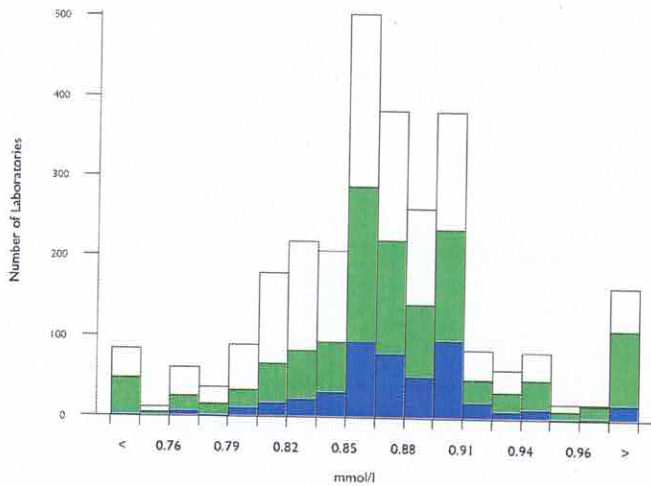


Magnesium, mmol/l

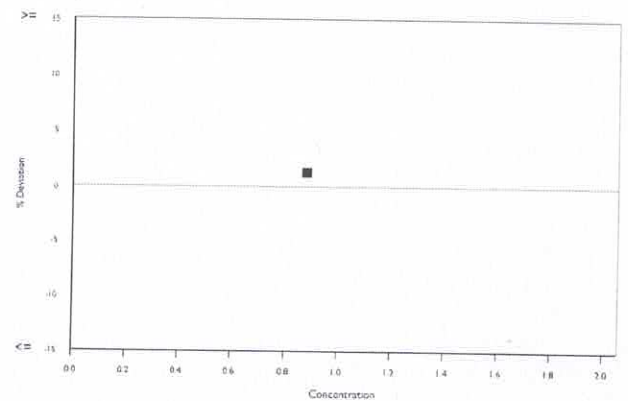
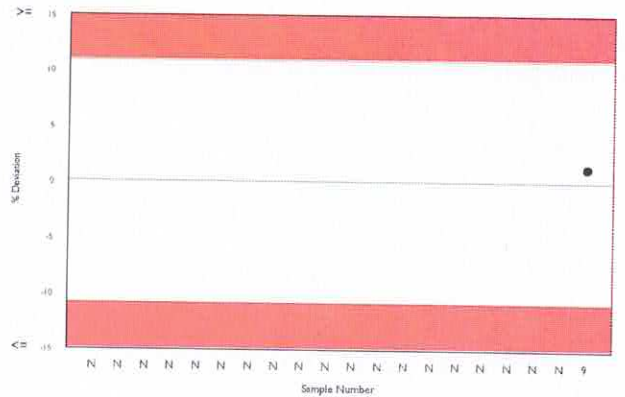
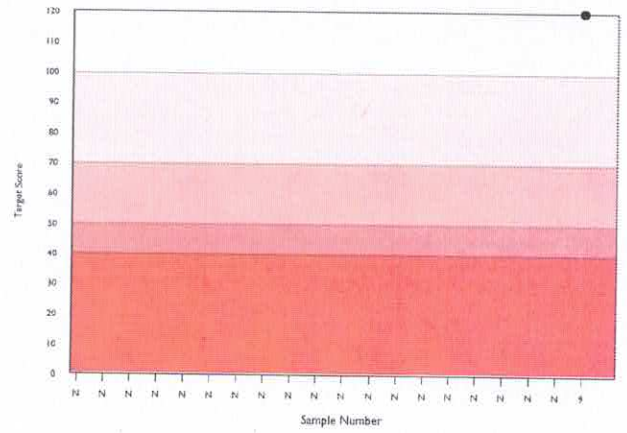
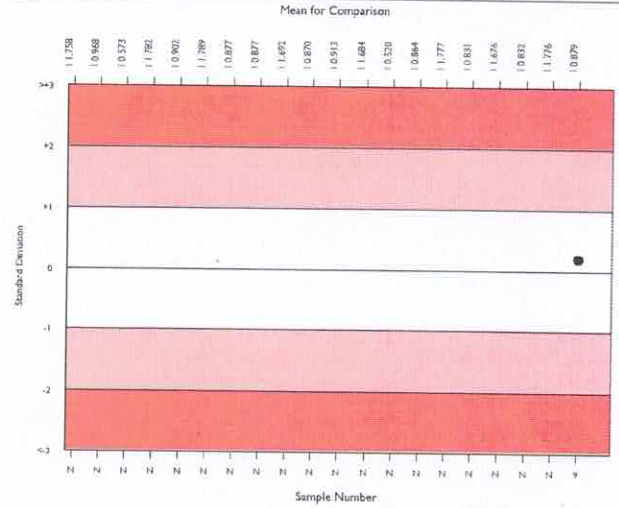
	N	Mean	CV%	U _m	SDPA	Exc.
All Methods	2576	0.869	4.4	0.00	0.06	269
Xylidyl Blue	1371	0.876	4.5	0.00	0.06	149
Beckman AU instruments	432	0.879	3.2	0.00	0.06	40

▲ Your Result	0.890	SDI	0.20
		RMSDI	Too Few
■ Mean for Comparison	0.879	TS	120
		RMTS	Too Few
		%DEV	1.3
		RM%DEV	Too Few

Acceptable limits derived from Biological Variation: N/A
 Acceptable limits of performance for RIQAS: 10.90%



Method	N	Mean	CV%	U _m
Xylidyl Blue	1371	0.876	4.5	0.00
Chlorphosphonazo III	327	0.878	3.0	0.00
Methylthymol blue	244	0.846	4.4	0.00
Enzymatic	223	0.848	3.4	0.00
Calmagite	127	0.875	5.5	0.01
Ortho Vitros MicroSlide Systems	129	0.871	4.1	0.00
Arsenazo	82	0.845	3.8	0.00
Atomic absorption	31	0.864	5.2	0.01
Other Dry Chemistry	24	0.919	3.7	0.01
Agappe - XYLIDYL BLUE	12	1.106	19.4	0.08
Other magnesium dyes	6	0.863	8.5	0.04

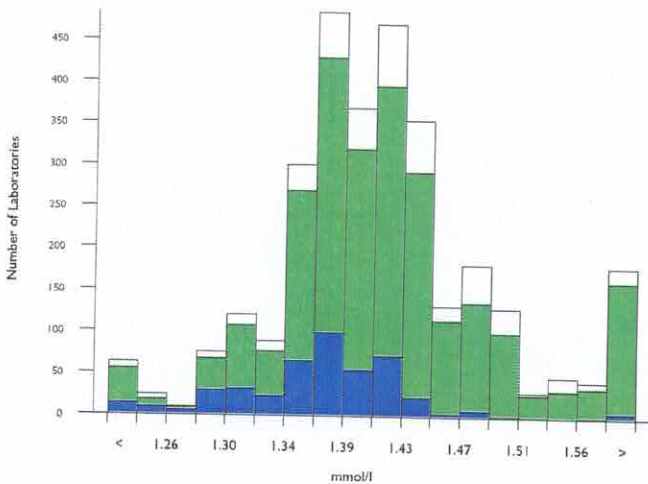
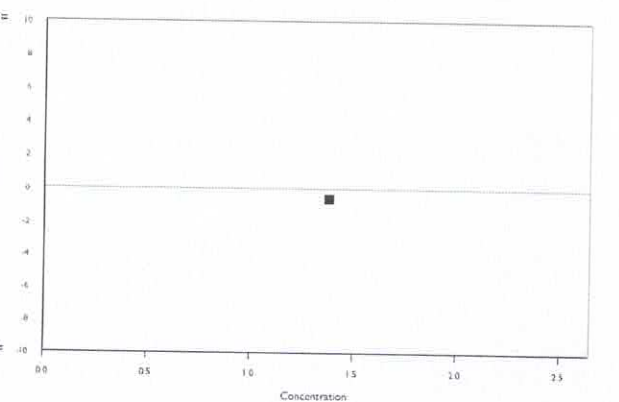
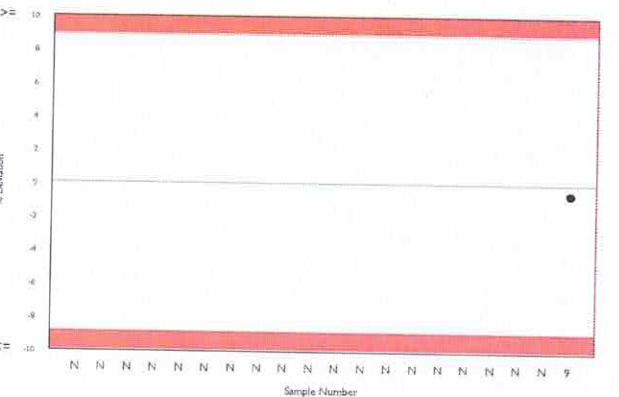
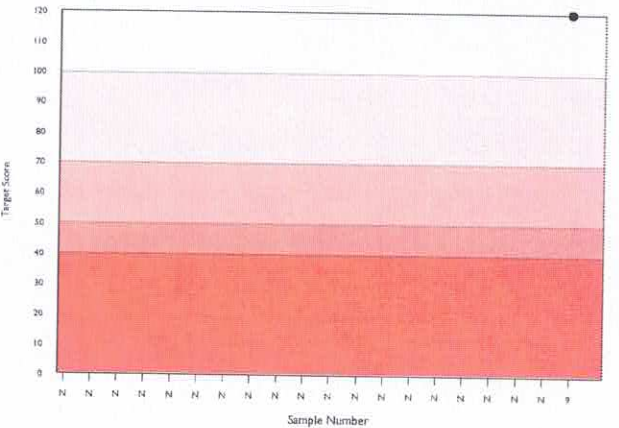
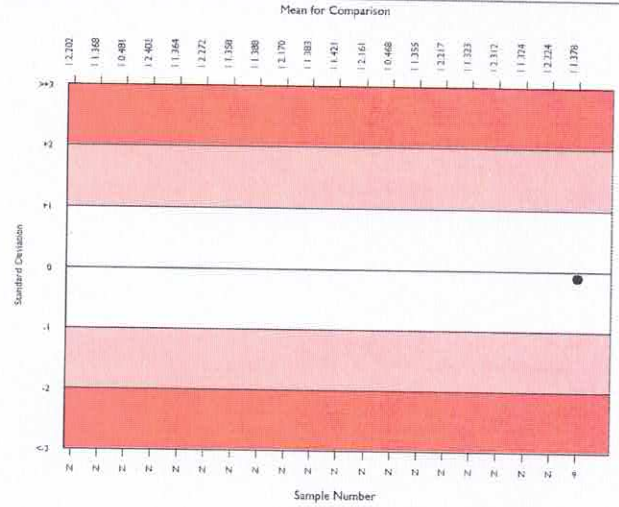


Phosphate, Inorganic, mmol/l

	N	Mean	CV%	U _m	SDPA	Exc.
All Methods	2818	1.412	4.1	0.00	0.08	277
Phosphomolybdate UV	2397	1.409	4.0	0.00	0.08	245
Beckman AU instruments	410	1.378	3.2	0.00	0.07	42

▲ Your Result	1.370	SDI RMSDI	-0.11 Too Few
■ Mean for Comparison	1.378	TS RMTS	120 Too Few
		%DEV RM%DEV	-0.6 Too Few

Acceptable limits derived from Biological Variation	N/A
Acceptable limits of performance for RIQAS	8.90%



Method	N	Mean	CV%	U _m
Phosphomolybdate UV	2397	1.409	4.0	0.00
Phosphomolybdate enzymatic	206	1.405	4.3	0.01
Ortho Vitros MicroSlide Systems	136	1.453	3.2	0.01
Beckman PHOSm kit (365nm)	32	1.398	2.3	0.01
Other Dry Chemistry	16	1.490	3.6	0.02
Agappe - PHOSPHOLYBDATE	12	1.494	6.0	0.03
Other methods, no protein ppt	9	1.446	4.2	0.03
Vitros, DT60/DT60 II/DTSC II	4	1.453	2.8	0.03
Other methods, with protein ppt	3	1.432	3.6	0.04

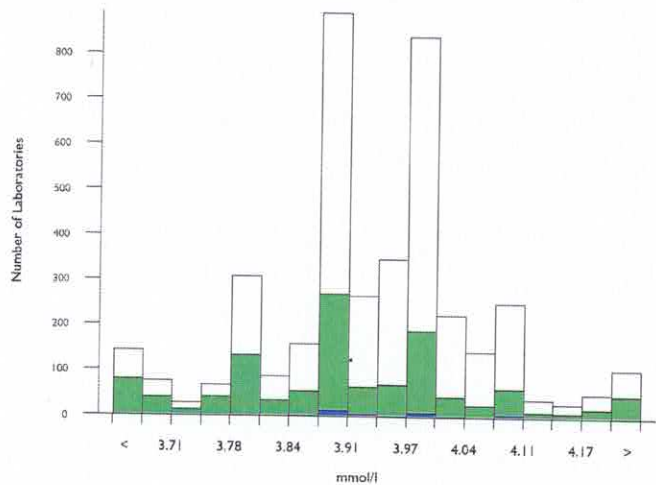


Potassium, mmol/l

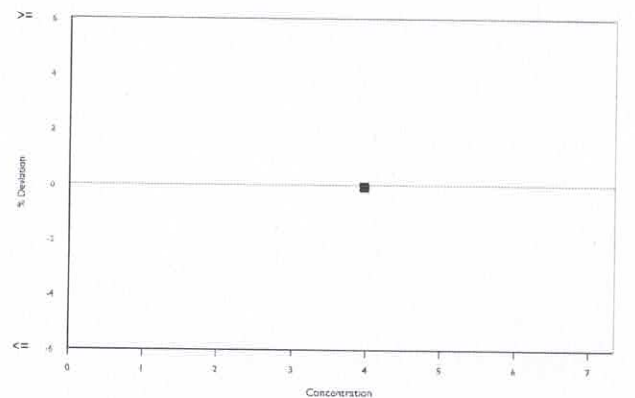
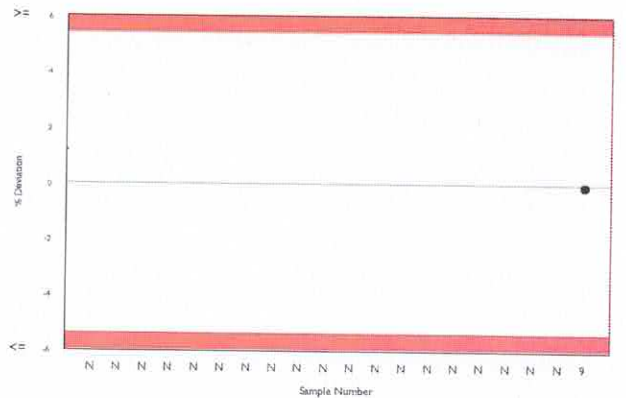
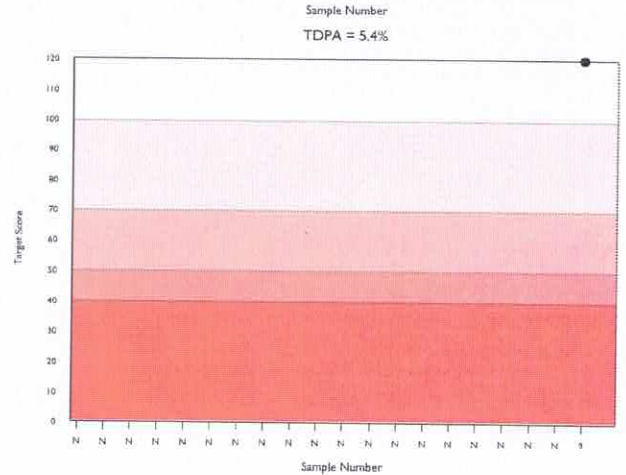
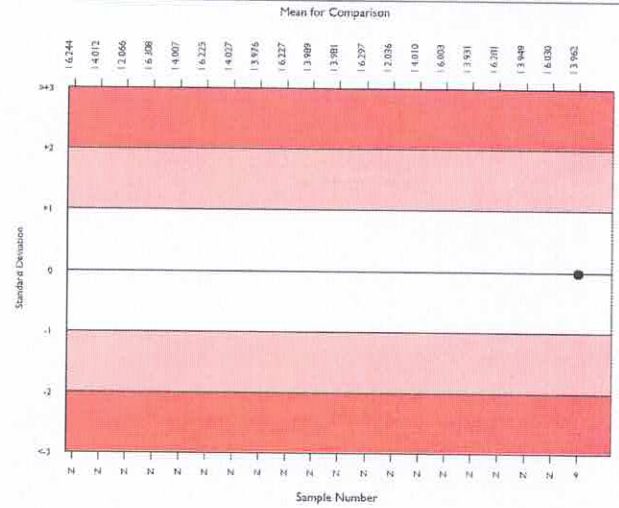
	N	Mean	CV%	U _m	SDPA	Exc.
All Methods	3674	3.946	2.2	0.00	0.13	373
ISE method - direct	1097	3.913	2.8	0.00	0.13	115
Beckman AU instruments	45	3.962	2.1	0.02	0.13	3

▲ Your Result	3.960	SDI	-0.02
		RMSDI	Too Few
■ Mean for Comparison	3.962	TS	120
		RMTS	Too Few
		%DEV	-0.1
		RM%DEV	Too Few

Acceptable limits derived from Biological Variation	N/A
Acceptable limits of performance for RIQAS	5.40%



Method	N	Mean	CV%	U _m
ISE method - indirect	2372	3.954	2.0	0.00
ISE method - direct	1097	3.913	2.8	0.00
Ortho Vitros MicroSlide Systems	133	3.981	2.1	0.01
Colorimetric	51	3.855	4.1	0.03
Other Dry Chemistry	26	3.824	4.2	0.04
Flame photometry	20	3.940	3.7	0.04
Enzymatic	10	3.818	13.8	0.21
Optical Fluorescence	7	4.063	2.3	0.04
Turbidimetric	7	3.933	3.4	0.06
Vitros, DT60/DT60 II/DTE II	4	3.948	1.4	0.03
Agappe - ISE DIRECT	3	4.167	5.5	0.17

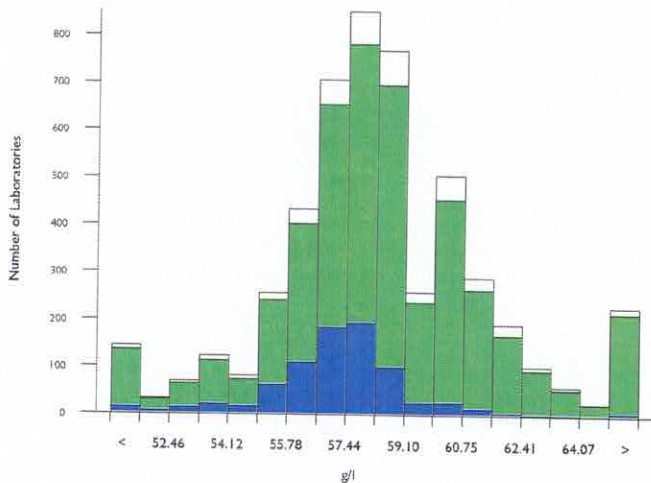


Protein, Total, g/l

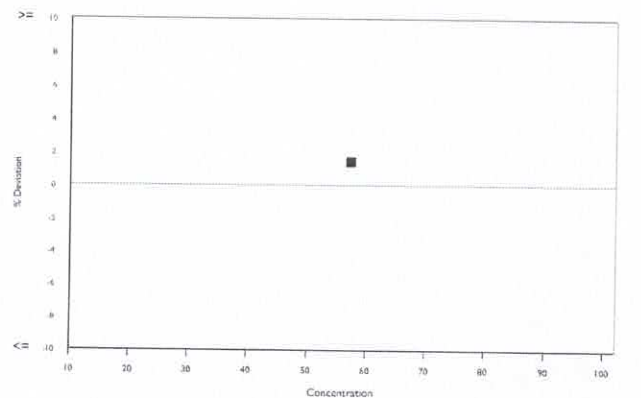
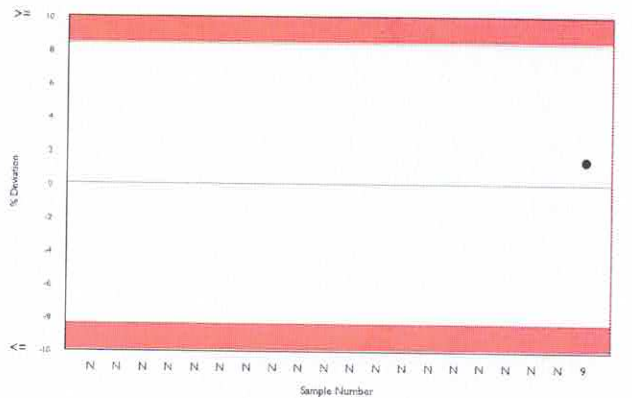
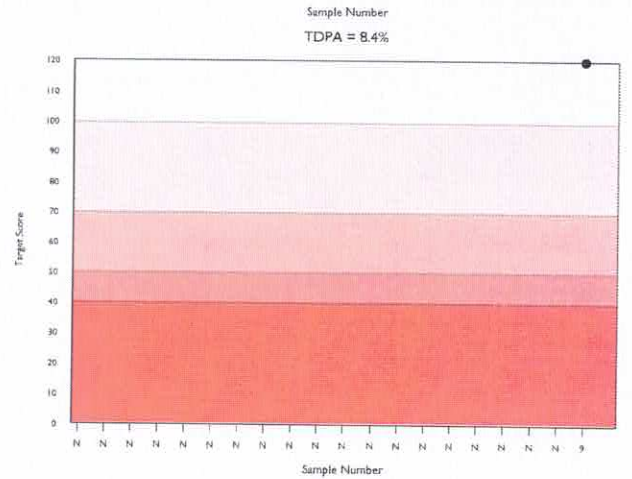
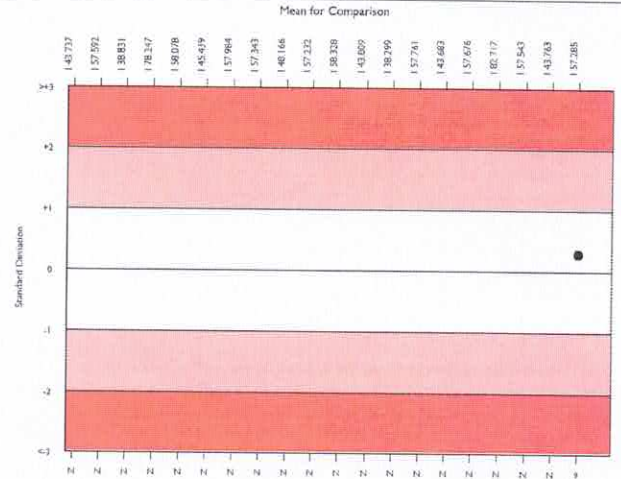
	N	Mean	CV%	U _m	SDPA	Exc.
All Methods	4709	58.272	3.8	0.04	2.98	417
Biuret reaction, end point	4318	58.252	3.8	0.04	2.97	386
Beckman AU instruments	736	57.285	2.4	0.06	2.93	71

▲ Your Result	58.100	SDI RMSDI	0.28 Too Few
■ Mean for Comparison	57.285	TS RMTS	120 Too Few
		%DEV RM%DEV	1.4 Too Few

Acceptable limits derived from Biological Variation	N/A
Acceptable limits of performance for RIQAS	8.40%



Method	N	Mean	CV%	U _m
Biuret reaction, end point	4318	58.252	3.8	0.04
Ortho Vitros MicroSlide Systems	147	58.790	2.8	0.17
Biuret reaction, kinetic	132	57.913	3.2	0.20
Biuret reaction, CX4/5/7	44	58.185	3.1	0.34
Agappe - BIURET	36	59.302	4.6	0.57
Other Dry Chemistry	19	60.211	2.4	0.42
Vitros, DT60/DT60 II	2	60.300	4.0	2.12

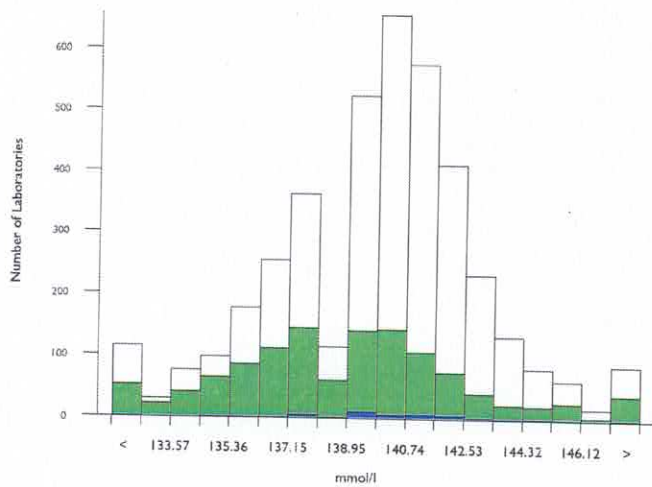


Sodium, mmol/l

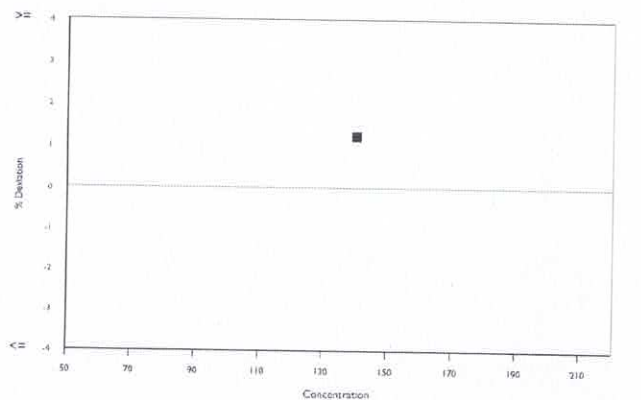
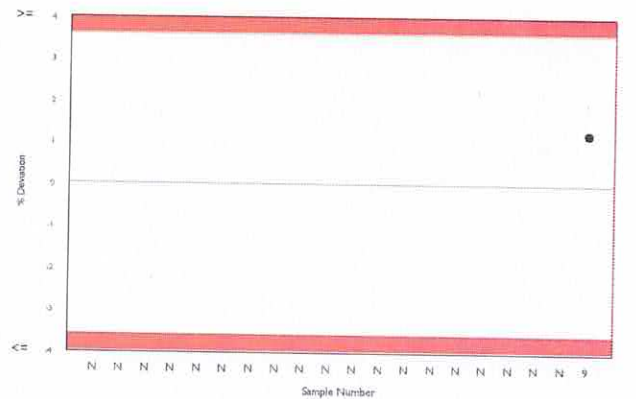
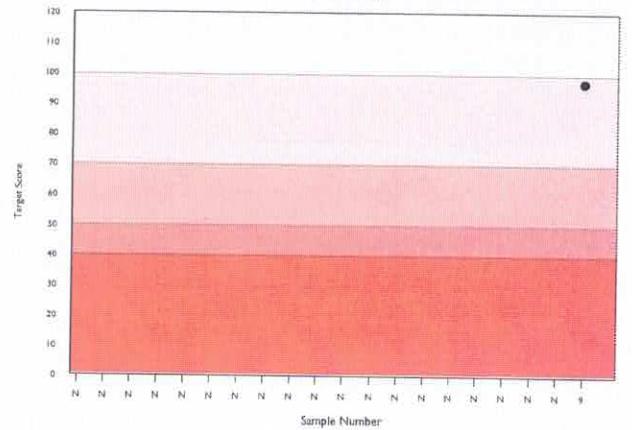
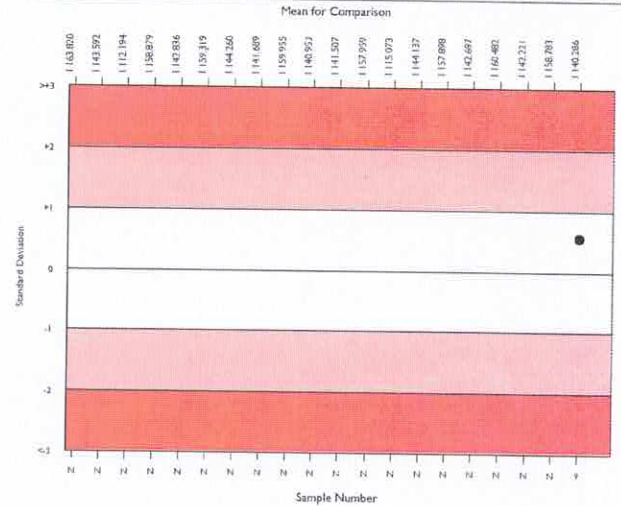
	N	Mean	CV%	U _m	SDPA	Exc.
All Methods	3697	139.848	1.7	0.05	3.06	321
ISE method - direct	1097	138.787	2.0	0.10	3.04	116
Beckman AU instruments	49	140.286	1.4	0.36	3.07	5

▲ Your Result	142.000	SDI RMSDI	0.56 Too Few
■ Mean for Comparison	140.286	TS RMTS	97 Too Few
		%DEV RM%DEV	1.2 Too Few

Acceptable limits derived from Biological Variation	N/A
Acceptable limits of performance for RIQAS	3.60%



Method	N	Mean	CV%	U _m
ISE method - indirect	2363	140.422	1.4	0.05
ISE method - direct	1097	138.787	2.0	0.10
Ortho Vitros MicroSlide Systems	126	138.443	1.5	0.23
Colorimetric	45	139.065	3.7	0.97
Other Dry Chemistry	24	138.533	2.6	0.91
Flame photometry	19	139.363	1.6	0.63
Enzymatic	9	142.644	5.9	3.53
Optical Fluorescence	7	134.786	1.2	0.74
Vitros, DT60/DT60 II/DTE II	4	138.750	2.0	1.72

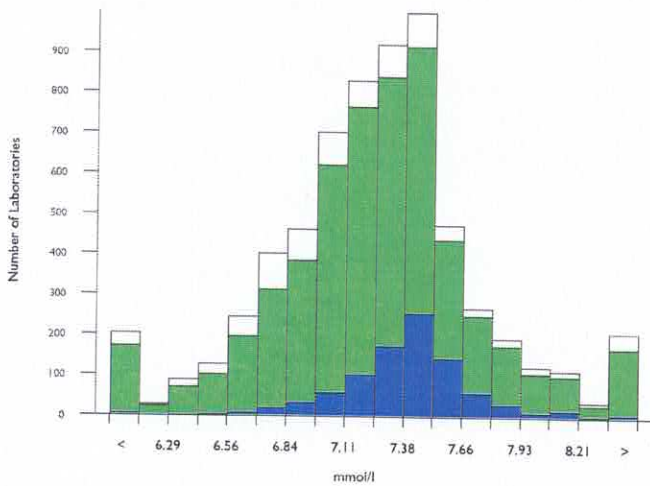


Urea, mmol/l

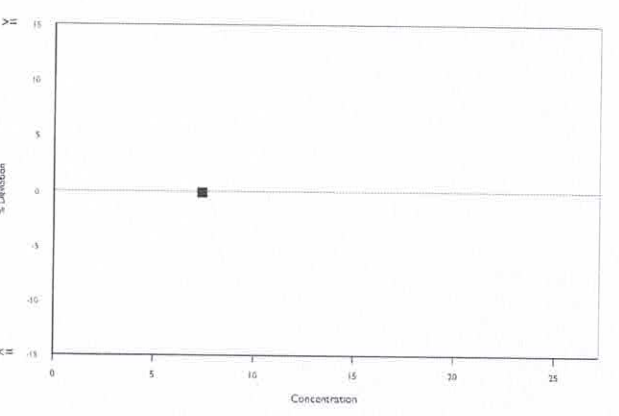
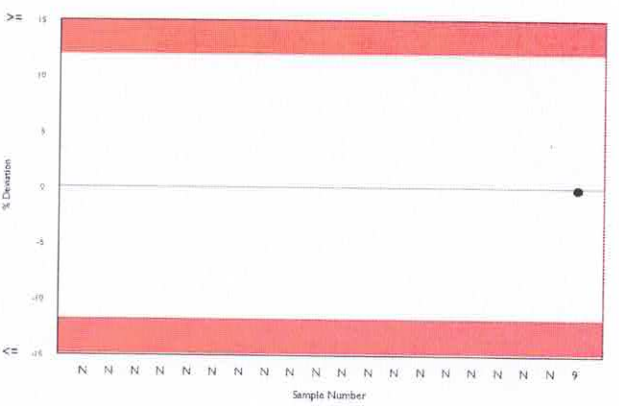
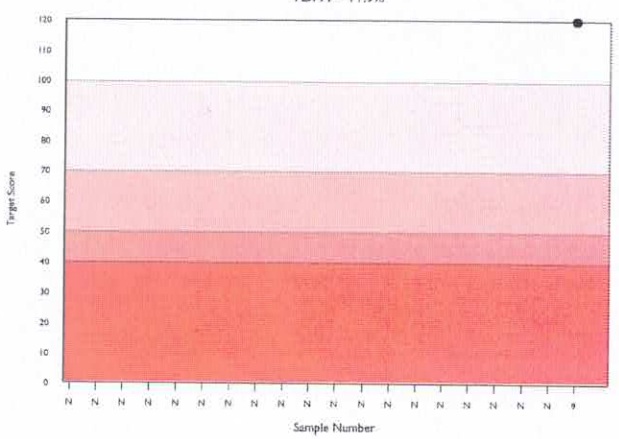
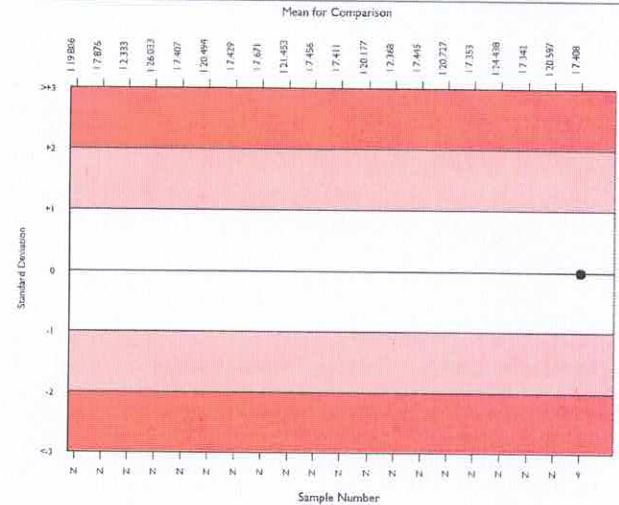
	N	Mean	CV%	U _m	SDPA	Exc.
All Methods	5925	7.252	5.0	0.01	0.52	478
Urease, kinetic	5199	7.268	4.8	0.01	0.53	448
Beckman AU instruments	859	7.408	3.0	0.01	0.54	71

▲ Your Result	7.400	SDI	-0.02
		RMSDI	Too Few
■ Mean for Comparison	7.408	TS	120
		RMTS	Too Few
		%DEV	-0.1
		RM%DEV	Too Few

Acceptable limits derived from Biological Variation	N/A
Acceptable limits of performance for RIQAS	11.90%



Method	N	Mean	CV%	U _m
Urease, kinetic	5199	7.268	4.8	0.01
Urease, end point	310	7.246	6.7	0.03
Ortho Vitros MicroSlide Systems	165	6.844	2.8	0.02
Urease, hypochlorite	106	7.232	7.6	0.07
Agappe - UREASE GLDH	40	7.353	4.8	0.07
Beckman - Conductivity	29	7.404	3.9	0.07
Other Dry Chemistry	22	7.247	5.0	0.10
Agappe - BERTHELOT	4	7.288	1.7	0.08
O-Phthalaldehyde	4	7.675	8.2	0.39
Diacetyl monoxime	2	6.900	4.1	0.25
Vitros DT60/DT60 II	2	7.202	0.0	0.00

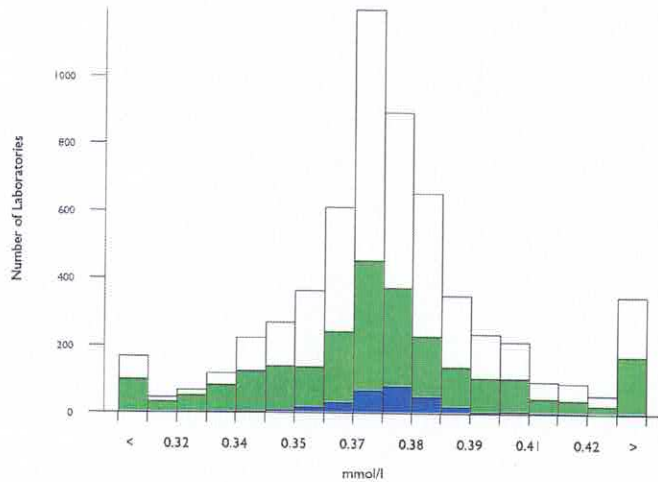


Uric Acid (Urate), mmol/l

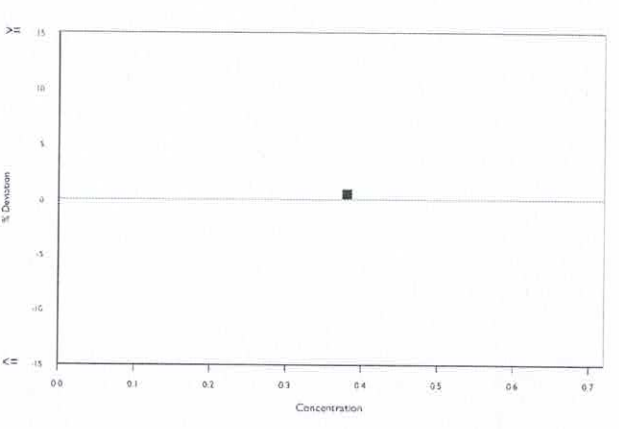
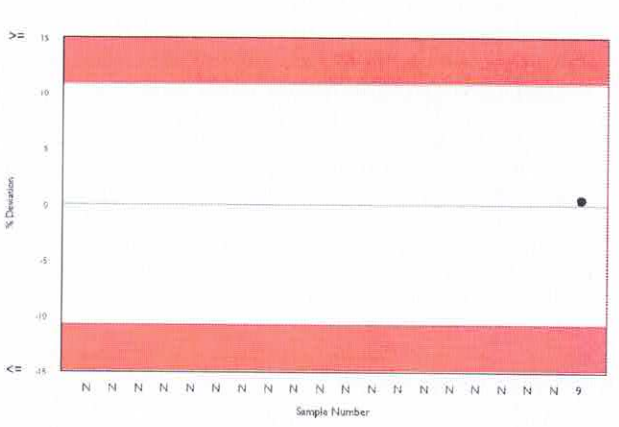
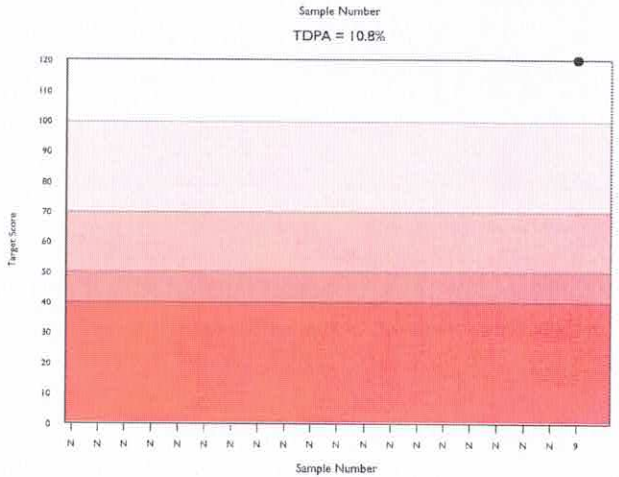
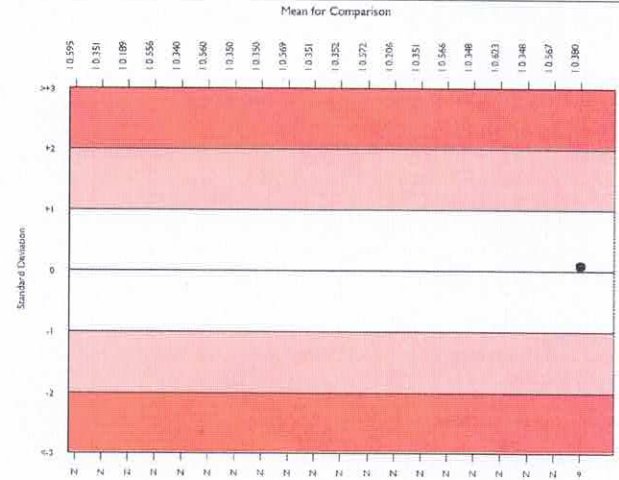
	N	Mean	CV%	U _m	SDPA	Exc.
All Methods	5418	0.378	5.1	0.00	0.02	567
Uricase perox. no ascorb. ox.	2340	0.377	6.1	0.00	0.02	227
Beckman AU instruments	266	0.380	2.6	0.00	0.02	29

▲ Your Result	0.382	SDI	0.08
		RMSDI	Too Few
■ Mean for Comparison	0.380	TS	120
		RMTS	Too Few
		%DEV	0.5
		RM%DEV	Too Few

Acceptable limits derived from Biological Variation	N/A
Acceptable limits of performance for RIQAS	10.80%



Method	N	Mean	CV%	U _m
Uricase perox. no ascorb. ox.	2340	0.377	6.1	0.00
Uricase Perox. with ascorb. ox	1587	0.382	4.2	0.00
Uricase Perox. with ascorb. ox @ 546nm	941	0.377	4.0	0.00
Ortho Vitros MicroSlide Systems	160	0.363	2.8	0.00
Uricase @ 293 nm	154	0.377	2.1	0.00
Uricase, catalase 340nm.	132	0.377	3.1	0.00
Agappe - URICASE - TOPS	19	0.396	11.2	0.01
Other Dry Chemistry	18	0.409	4.7	0.01
Agappe - URICASE - PAP	18	0.397	11.2	0.01
Reduction methods	18	0.402	6.6	0.01
Vitros DT60/DT60 II	4	0.355	5.0	0.01



Analyte	Mean for Comparison	Your Result	SDI	RMSDI	%DEV	RM%DEV	TS	RMTS	Performance
Albumin	39.076	38.900	-0.08	Too Few	-0.4	Too Few	120	Too Few	
Alkaline Phosphatase	202.085	197.000	-0.22	Too Few	-2.5	Too Few	120	Too Few	
ALT (GPT)	40.371	41.800	0.38	Too Few	3.5	Too Few	114	Too Few	
Amylase, Pancreatic	64.283	No Result		Too Few		Too Few		Too Few	
AST (GOT)	44.627	38.400	-1.41	Too Few	-14.0	Too Few	52	Too Few	
Bicarbonate	12.074	12.000	-0.06	Too Few	-0.6	Too Few	120	Too Few	
Bilirubin, Direct	20.094	20.300	0.07	Too Few	1.0	Too Few	120	Too Few	
Bilirubin, Total	29.003	30.300	0.47	Too Few	4.5	Too Few	105	Too Few	
Calcium	2.219	2.220	0.01	Too Few	0.1	Too Few	120	Too Few	
Chloride	96.283	96.000	-0.11	Too Few	-0.3	Too Few	120	Too Few	
Cholesterol	4.184	4.060	-0.54	Too Few	-3.0	Too Few	98	Too Few	
CK, Total	207.868	211.000	0.21	Too Few	1.5	Too Few	120	Too Few	
Creatinine	128.518	130.700	0.23	Too Few	1.7	Too Few	120	Too Few	
EGFR (Pilot)	44.556	No Result		Too Few		Too Few	N/A	N/A	
GGT	48.781	50.500	0.45	Too Few	3.5	Too Few	106	Too Few	
Glucose	6.181	6.060	-0.39	Too Few	-2.0	Too Few	112	Too Few	
HDL-Cholesterol	1.318	1.420	0.65	Too Few	7.8	Too Few	91	Too Few	
Iron	19.444	20.130	0.61	Too Few	3.5	Too Few	93	Too Few	
Magnesium	0.879	0.890	0.20	Too Few	1.3	Too Few	120	Too Few	
Phosphate, Inorganic	1.378	1.370	-0.11	Too Few	-0.6	Too Few	120	Too Few	
Potassium	3.962	3.960	-0.02	Too Few	-0.1	Too Few	120	Too Few	
Protein, Total	57.285	58.100	0.28	Too Few	1.4	Too Few	120	Too Few	
Sodium	140.286	142.000	0.56	Too Few	1.2	Too Few	97	Too Few	
Free T3	6.697	No Result		Too Few		Too Few		Too Few	
Free T4	17.773	No Result		Too Few		Too Few		Too Few	
TSH	1.315	No Result		Too Few		Too Few		Too Few	
Urea	7.408	7.400	-0.02	Too Few	-0.1	Too Few	120	Too Few	
Uric Acid (Urate)	0.380	0.382	0.08	Too Few	0.5	Too Few	120	Too Few	

ORMSDI N/A

ORM%DEV N/A

ORMTS N/A

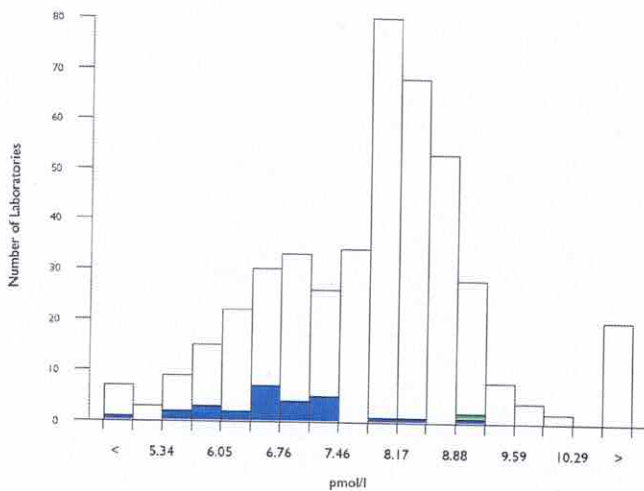
END OF REPORT

Free T3, pmol/l

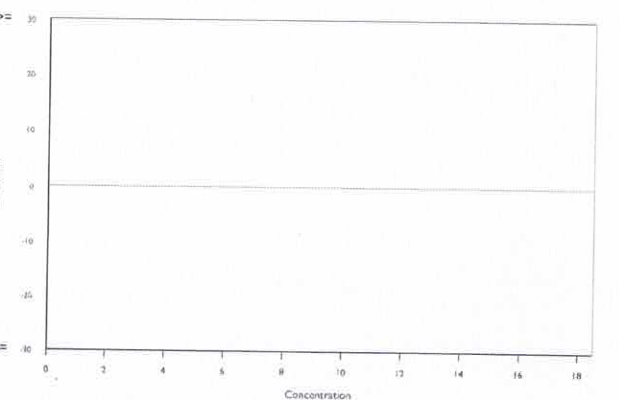
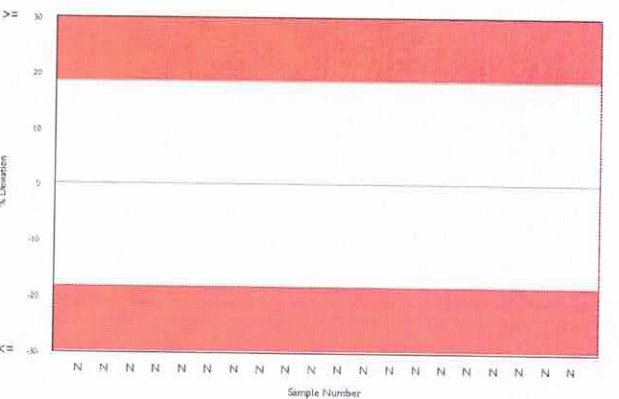
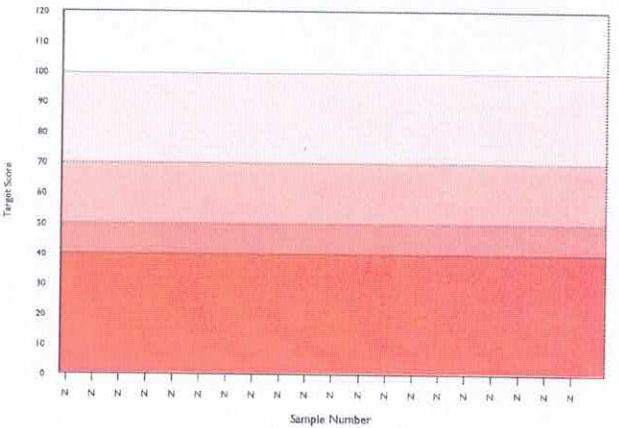
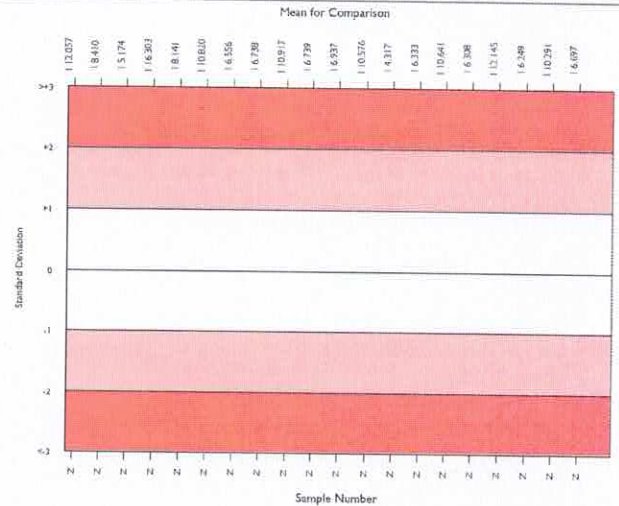
	N	Mean	CV%	U _m	SDPA	Exc.
All Methods	407	7.823	12.1	0.06	0.88	35
Beckman Access/LXi725	24	6.641	9.2	0.16	0.75	4
Beckman Access Series	23	6.697	8.3	0.14	0.75	4

▲ Your Result	No Result	SDI	RMMSDI	Too Few
■ Mean for Comparison	6.697	TS	RMTS	Too Few
		%DEV	RM%DEV	Too Few

Acceptable limits derived from Biological Variation	N/A
Acceptable limits of performance for RIQAS	18.50%



Method	N	Mean	CV%	U _m
Roche Cobas 4000/e411	84	8.288	6.3	0.07
Roche Cobas e601/602	57	8.436	4.5	0.06
Abbott Architect/ Alinity, 2 point cal	46	6.771	6.9	0.09
BioMerieux VIDAS	43	8.086	6.0	0.09
Beckman Access/LXi725	24	6.641	9.2	0.16
Siemens Centaur XP/XPT/Classic	21	7.899	6.7	0.14
Tosoh AIA Series	17	8.139	10.1	0.25
Abbott Architect/ Alinity, 6 point cal	16	6.826	5.3	0.11
Siemens Dimension ExL LOCI	11	8.355	3.0	0.09
Ortho Vitros 3600/5600/ECI/XT 7600	12	12.347	5.9	0.26
Roche Elecsys	8	8.921	4.9	0.19
Siemens Centaur CP	8	7.758	3.4	0.12
Beckman Dxl 600/800	9	6.195	5.0	0.13
SNIBE Maglumi analysers	9	8.502	11.5	0.41
Siemens/DPC Immulite 2000/2500	7	6.049	17.9	0.51
ELISA	6	6.815	25.2	0.88
Roche Cobas e801	5	8.218	4.1	0.19
Mindray CL-Series	5	8.065	8.2	0.37
Siemens/DPC Immulite 1000	4	5.391	15.1	0.51
DiaSorin, Liaison	3	7.991	6.8	0.39
Siemens Atellica IM	2	8.043	2.6	0.18



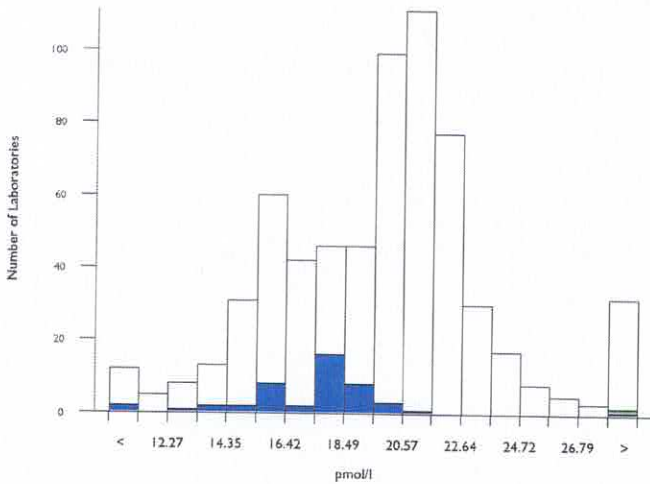
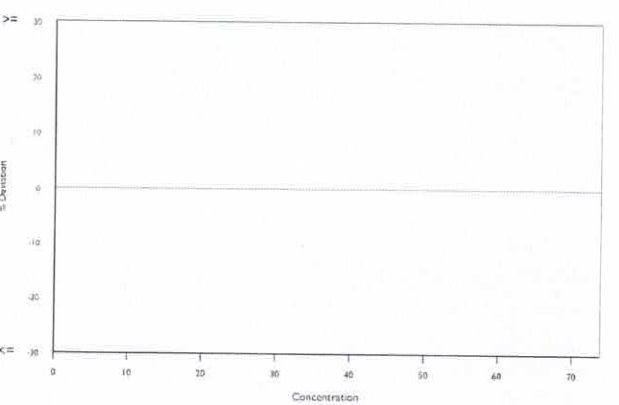
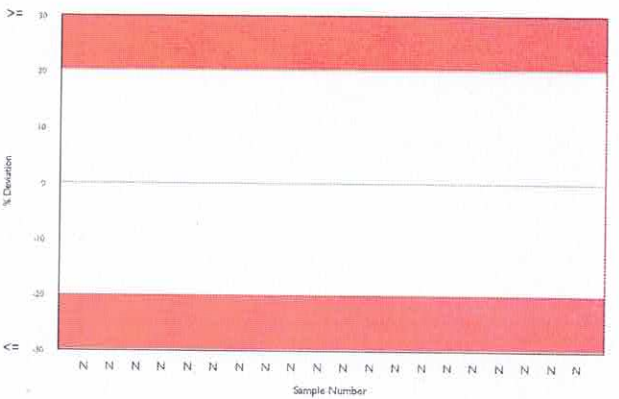
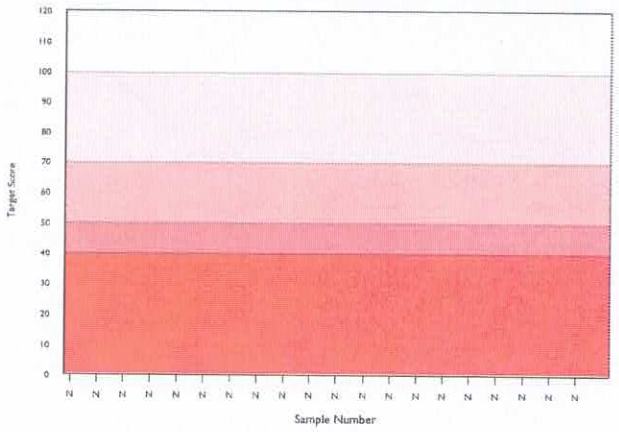
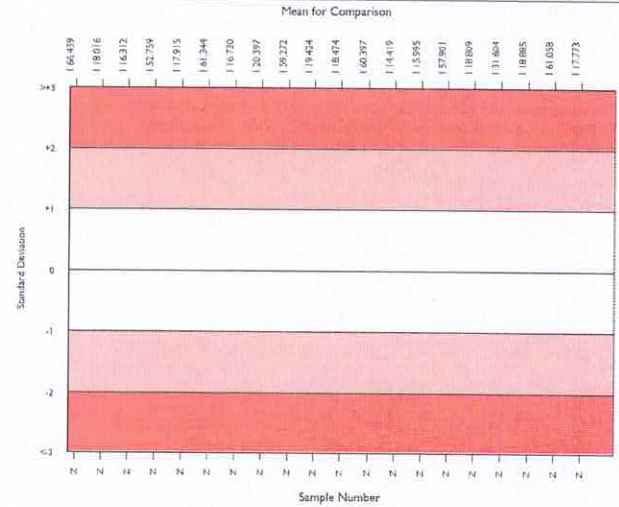
Free T4, pmol/l

- All Methods
- Beckman Access/LXi725
- Beckman Access Series

	N	Mean	CV%	U _m	SDPA	Exc.
All Methods	592	19.537	14.2	0.14	2.40	53
Beckman Access/LXi725	40	17.773	8.1	0.28	2.18	7
Beckman Access Series	40	17.773	8.1	0.28	2.18	6

▲ Your Result	No Result	SDI	RMSDI	Too Few
■ Mean for Comparison	17.773	TS	RMTS	Too Few
		%DEV	RM%DEV	Too Few

Acceptable limits derived from Biological Variation	N/A
Acceptable limits of performance for RIQAS	20.20%



Method	N	Mean	CV%	U _m
Roche Cobas 4000/e411	112	21.280	6.1	0.15
Abbott Architect/ Alinity	74	16.103	4.4	0.10
Roche Cobas e601/ 602	77	21.095	4.9	0.15
bioMérieux, VIDAS-FT4N Kit	49	20.576	6.6	0.24
Beckman Access/LXi725	40	17.773	8.1	0.28
Monobind Inc ELISA / CLIA	31	14.045	16.4	0.52
ELISA	24	15.211	18.3	0.71
Tosoh AIA Series	22	23.131	12.1	0.74
Siemens Centaur XP/XT/Classic	22	19.290	5.0	0.26
SNIBE Maglumi analysers	16	22.705	6.4	0.45
Ortho Vitros 3600/5600/ECi/XT/7600	15	33.929	3.8	0.41
Siemens/DPC Immulite 1000	14	21.189	4.6	0.32
Roche Elecsys	12	21.566	5.5	0.43
Siemens Dimension Exl LOCI	12	20.421	2.6	0.19
Beckman Dxl 600/800	13	18.060	7.8	0.49
Siemens/DPC Immulite 2000/2500	11	19.982	6.6	0.50
Siemens Centaur CP	9	19.338	8.2	0.66
Mindray CL-Series	7	17.025	7.3	0.59
Roche Cobas e801	5	20.845	4.6	0.53
DiaSorin, Liaison	3	18.939	5.6	0.76
Siemens Atellica IM	3	16.962	15.5	1.90

Proteus Laboratories

Patient Name

Age Month Serum

Doctor/ward

S.ID 17/9

Test	Result	Reference Range	Units	Flags	Test	Result	Reference Range	Units	Flags
Na	142	136	mmol/L		K	3.96	3.50	mmol/L	
Cl	96	97	mmol/L		CO2	12	22	mmol/L	
UREA	7.4	2.5	mmol/L		TP	58.1	60.0	g/L	
TBIL	30.3	2.0	mmol/L		DBIL	20.3	0.0	umol/L	
ALP	197	40	IU/L		GGT	50.5	5.0	IU/L	
AST	38.4	10.0	IU/L		ALT	41.8	10.0	IU/L	
CHOL	4.06	3.00	mmol/L		TG	1.03	0.00	mmol/L	
HDL	1.42	1.00	mmol/L		LDL	2.50	0.00	mmol/L	
GLUC	6.06	3.50	mmol/L		URIC	0.382	0.140	mmol/L	
CA	2.22	2.10	mmol/L		MG	0.89	0.70	mmol/L	
PHOS	1.37	0.80	mmol/L		CRP	1.46	0.00	mg/L	
CK	211	-9999999	IU/L		LIP	+			
ICT	N				HEM	N			
ALB	38.9	-999999.9	g/L		FE	20.13	5.00	umol/L	
TRF	23.94	22.61	umol/L		RF		-99999.99	IU/mL	
Crea-E	130.7	-999999.9	umol/L		Amy		-99999999	U/L	
Anion	34	5	15						