Proteus Laboratories

MONTHLY CLINICAL CHEMISTRY END OF CYCLE REPORT

CYCLE 17

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RIQAS

UKAS PROFICIENCY TESTING

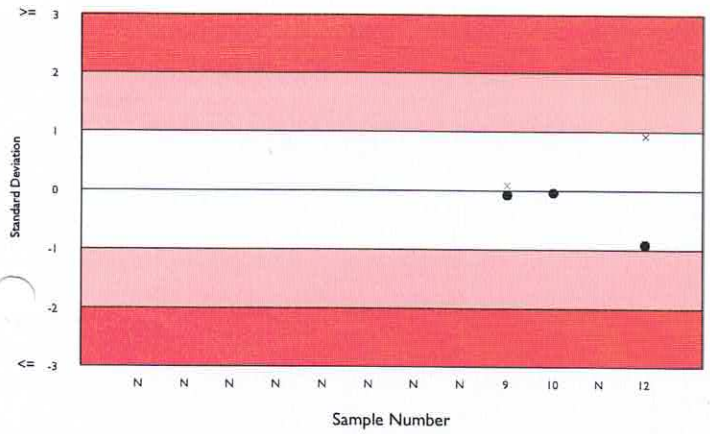
Albumin, g/l

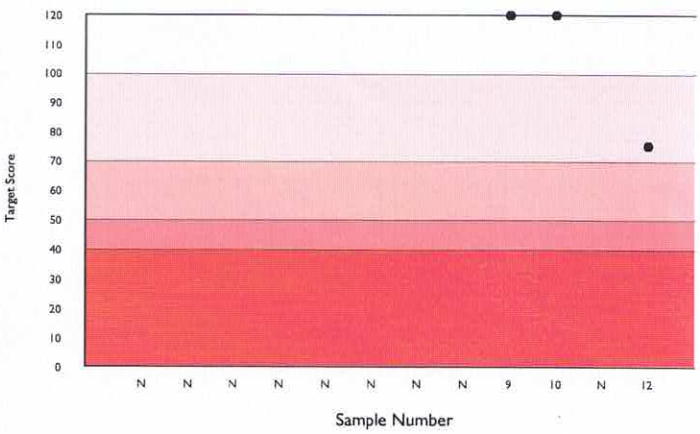
Method: Bromocresol Green
Instrument: Beckman AU instruments
Reagent: Beckman Coulter

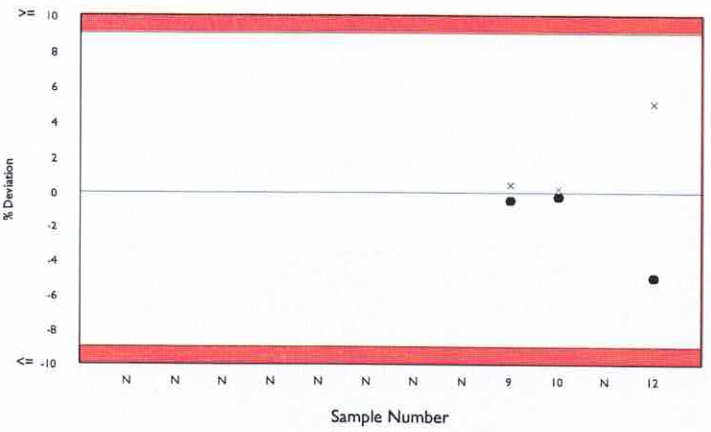
RIQAS TDPA: 9% **Biological Variation:** N/A

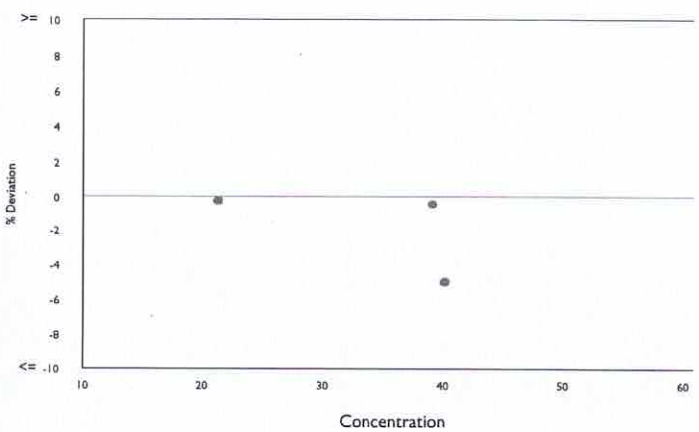
Sample	Result	Unit	N	Mean for Comparison	CV%	Um	SDPA	SDI	TS	%Deviation
1	N/A	g/l	719	1 26.921	3.3	0.04	1.47			
2	N/A	g/l	747	1 20.924	3.2	0.03	1.14			
3	N/A	g/l	747	1 39.420	2.6	0.05	2.16			
4	N/A	g/l	716	1 27.113	2.9	0.04	1.48			
5	N/A	g/l	734	1 39.764	2.8	0.05	2.18			
6	N/A	g/l	764	1 51.152	2.7	0.06	2.80			
7	N/A	g/l	744	1 39.936	2.6	0.05	2.19			
8	No Result	g/l	770	1 27.079	3.1	0.04	1.48			
9	38.900	g/l	780	1 39.076	2.5	0.04	2.14	-0.08	120	-0.45
10	21.200	g/l	751	1 21.250	3.1	0.03	1.16	-0.04	120	-0.24
11	No Result	g/l	737	1 27.327	3.2	0.04	1.50			
12	38.100	g/l	685	1 40.114	2.6	0.05	2.19	-0.92	75	-5.02

	Cycle 16	Cycle 17
Cycle Average SDI	N/A	-0.35
Cycle Average TS	N/A	105
Cycle Average %DEV	N/A	-1.90
Cycle Average Absolute SDI	N/A	0.35
Cycle Average Absolute %DEV	N/A	1.90









RIQAS

UKAS PROFICIENCY TESTING

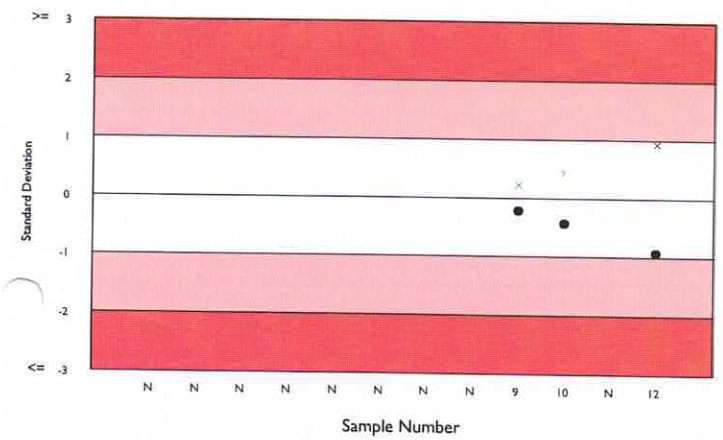
Alkaline Phosphatase, U/l @ 37°C

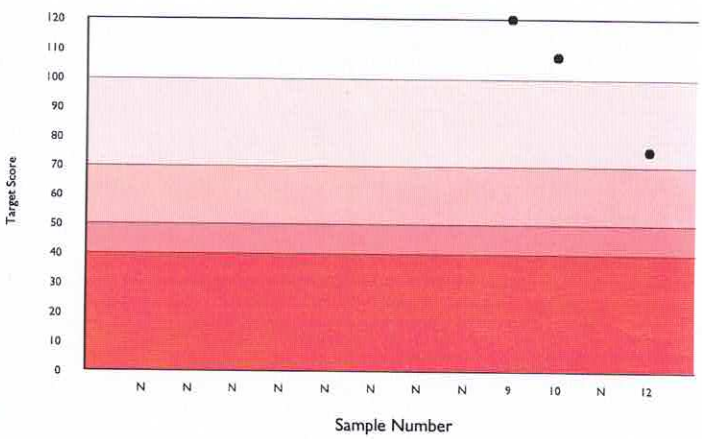
Method: Beckman AMP (Calibrator)
Instrument: Beckman AU instruments
Reagent: Beckman Coulter

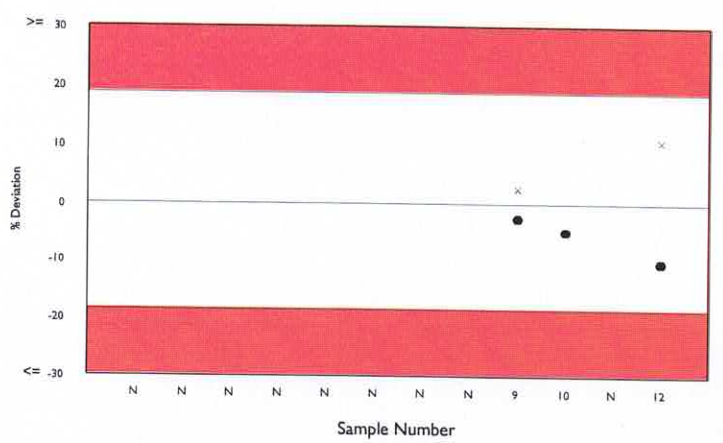
RIQAS TDPA: 18.7% **Biological Variation:** N/A

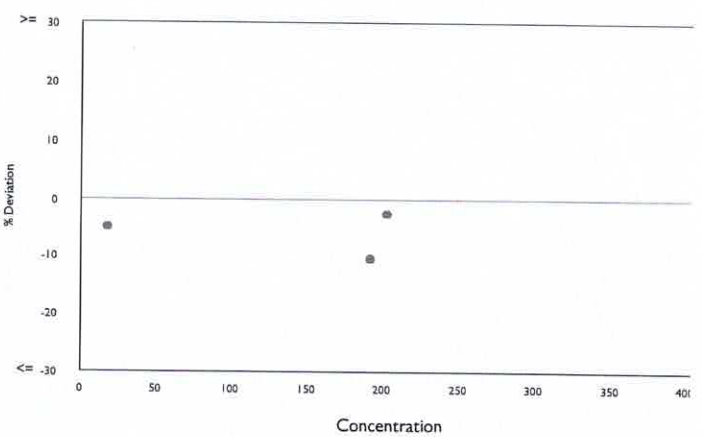
Sample	Result	Unit	N	Mean for Comparison	CV%	Um	SDPA	SDI	TS	%Deviation
1	N/A	U/l	134	388.999	5.0	2.09	44.22			
2	N/A	U/l	142	13.131	11.4	0.16	1.49			
3	N/A	U/l	146	203.990	4.0	0.84	23.19			
4	N/A	U/l	148	402.723	5.0	2.08	45.78			
5	N/A	U/l	151	198.270	5.3	1.07	22.54			
6	N/A	U/l	154	389.867	5.0	1.97	44.32			
7	N/A	U/l	149	195.838	5.2	1.03	22.26			
8	No Result	U/l	144	393.689	5.0	2.07	44.76			
9	197.000	U/l	148	202.085	4.9	1.01	22.97	-0.22	120	-2.52
10	17.000	U/l	155	17.891	10.0	0.18	2.03	-0.44	107	-4.98
11	No Result	U/l	153	362.425	6.2	2.27	41.20			
12	171.000	U/l	146	191.154	5.4	1.07	21.73	-0.93	75	-10.54

	Cycle 16	Cycle 17
Cycle Average SDI	N/A	-0.53
Cycle Average TS	N/A	101
Cycle Average %DEV	N/A	-6.01
Cycle Average Absolute SDI	N/A	0.53
Cycle Average Absolute %DEV	N/A	6.01









RIOAS

UKAS PROFICIENCY TESTING

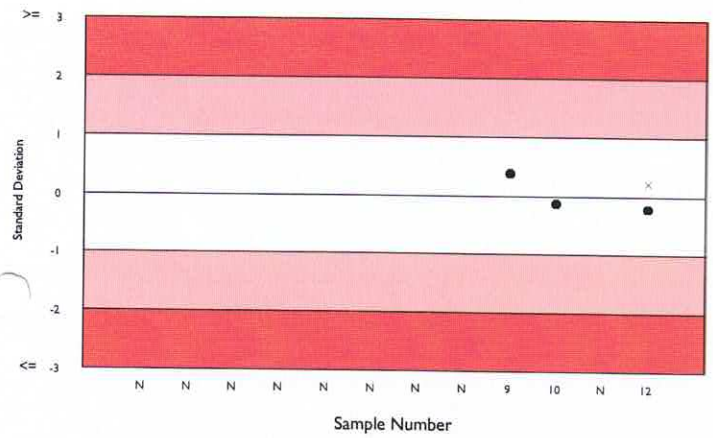
ALT (GPT), U/l @ 37°C

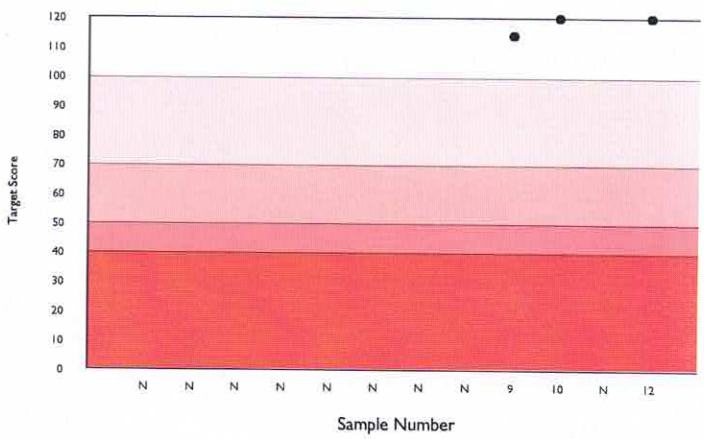
Method: Beckman IFCC Ref. with P5P
Instrument: Beckman AU instruments
Reagent: Beckman Coulter

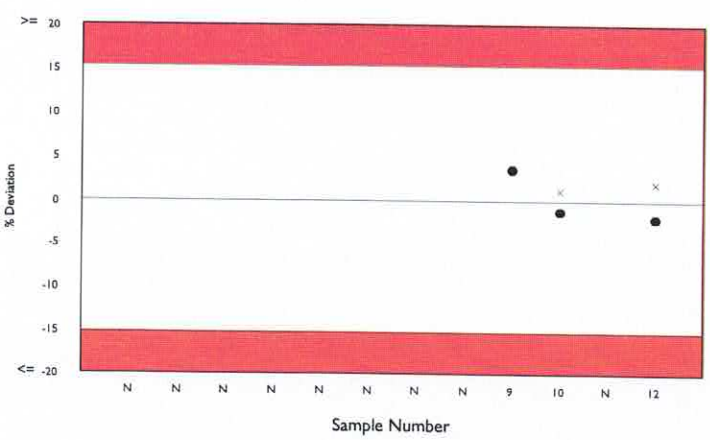
RIQAS TDPA: 15.3% **Biological Variation:** N/A

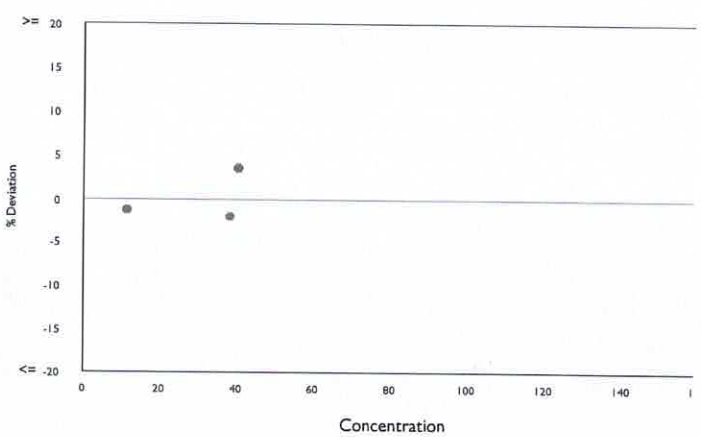
Sample	Result	Unit	N	Mean for Comparison	CV%	Um	SDPA	SDI	TS	%Deviation
1	N/A	U/l	29	145.997	3.7	1.24	13.58			
2	N/A	U/l	36	12.078	5.0	0.13	1.12			
3	N/A	U/l	30	38.393	6.4	0.56	3.57			
4	N/A	U/l	19	150.137	5.0	2.16	13.97			
5	N/A	U/l	20	39.504	3.7	0.41	3.67			
6	N/A	U/l	25	155.718	4.9	1.89	14.48			
7	N/A	U/l	19	38.795	2.6	0.29	3.61			
8	No Result	U/l	21	147.661	4.6	1.86	13.74			
9	41.800	U/l	24	40.371	4.6	0.47	3.76	0.38	114	3.54
10	11.200	U/l	24	11.333	6.9	0.20	1.05	-0.13	120	-1.18
11	No Result	U/l	23	131.801	3.9	1.34	12.26			
12	37.400	U/l	23	38.160	4.3	0.42	3.55	-0.21	120	-1.99

	Cycle 16	Cycle 17
Cycle Average SDI	N/A	0.01
Cycle Average TS	N/A	118
Cycle Average %DEV	N/A	0.12
Cycle Average Absolute SDI	N/A	0.24
Cycle Average Absolute %DEV	N/A	2.24









RIQAS

UKAS PROFICIENCY TESTING

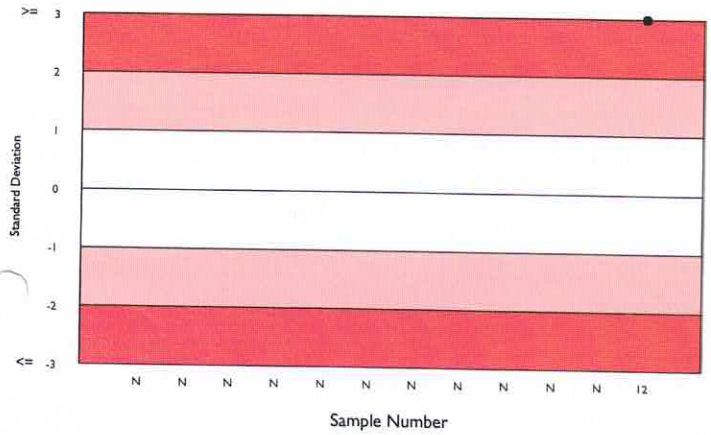
Amylase, Pancreatic, U/l @ 37°C

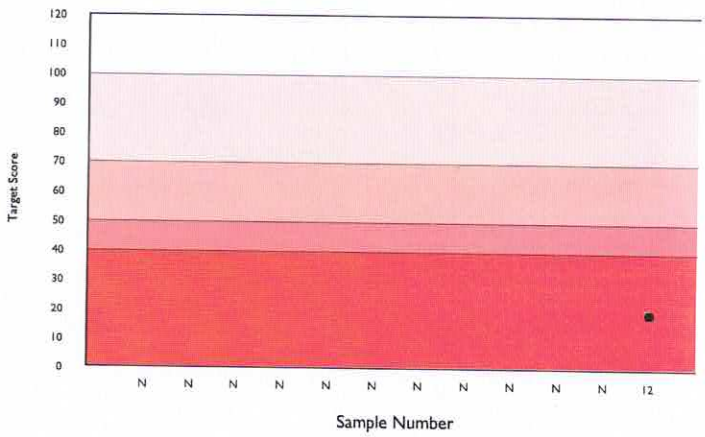
Method: Beckman Synchron/CX/LXi/DxC
Instrument: Beckman AU instruments
Reagent: Beckman Coulter

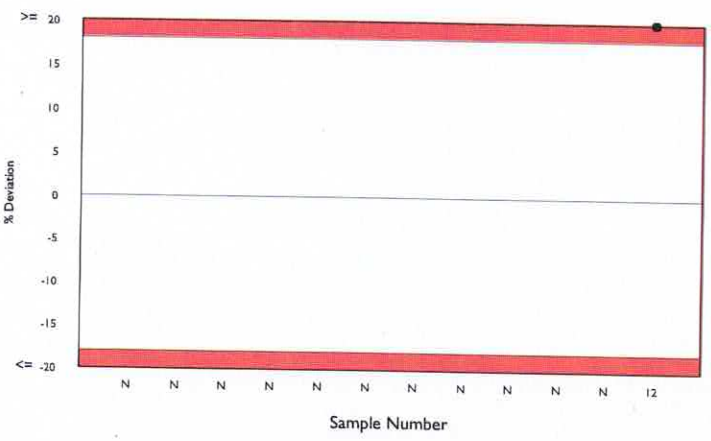
RIQAS TDPA: 18% **Biological Variation:** N/A

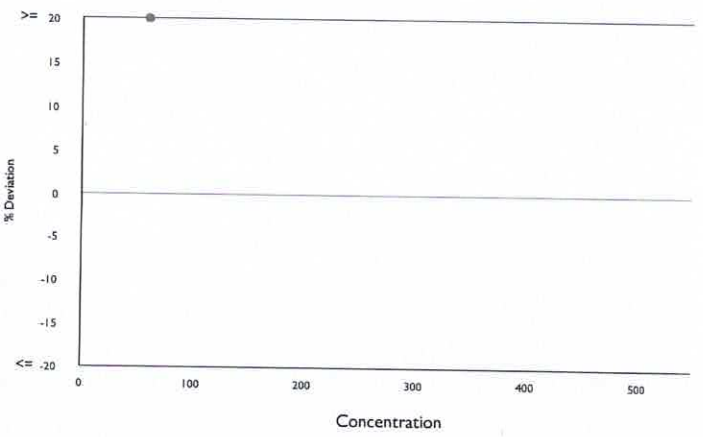
Sample	Result	Unit	N	Mean for Comparison	CV%	Um	SDPA	SDI	TS	%Deviation
1	N/A	U/l	3	M 279.800	13.1	26.48	40.48a			
2	N/A	U/l	5	I 5.860	14.2	0.46	0.79a			
3	N/A	U/l	5	I 66.000	2.2	0.79	7.22			
4	N/A	U/l	4	M 252.500	0.9	1.49	27.63			
5	N/A	U/l	5	I 62.080	2.2	0.76	6.79			
6	N/A	U/l	6	I 553.800	5.8	16.40	60.60			
7	N/A	U/l	5	I 59.918	22.5	7.54	9.99a			
8	No Result	U/l	7	I 250.443	3.2	3.84	27.41			
9	No Result	U/l	6	I 64.283	1.5	0.48	7.03			
10	No Result	U/l	5	I 6.500	7.2	0.26	0.76a			
11	No Result	U/l	6	I 208.914	1.2	1.26	22.86			
12	82.000	U/l	7	I 60.082	2.9	0.83	6.57	3.33	19	36.48

	Cycle 16	Cycle 17
Cycle Average SDI	N/A	3.33
Cycle Average TS	N/A	19
Cycle Average %DEV	N/A	36.48
Cycle Average Absolute SDI	N/A	3.33
Cycle Average Absolute %DEV	N/A	36.48









RIQAS

UKAS PROFICIENCY TESTING

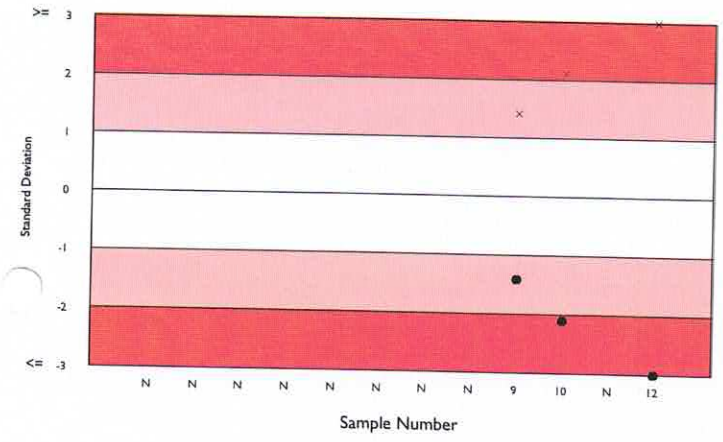
AST (GOT), U/l @ 37°C

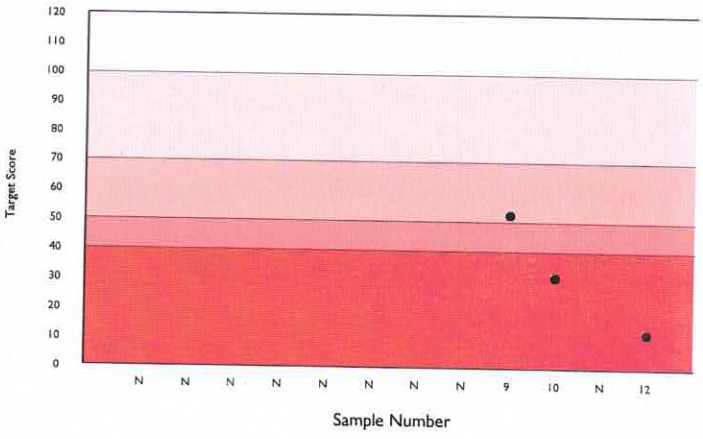
Method: Beckman IFCC Ref. with P5P
Instrument: Beckman AU instruments
Reagent: Beckman Coulter

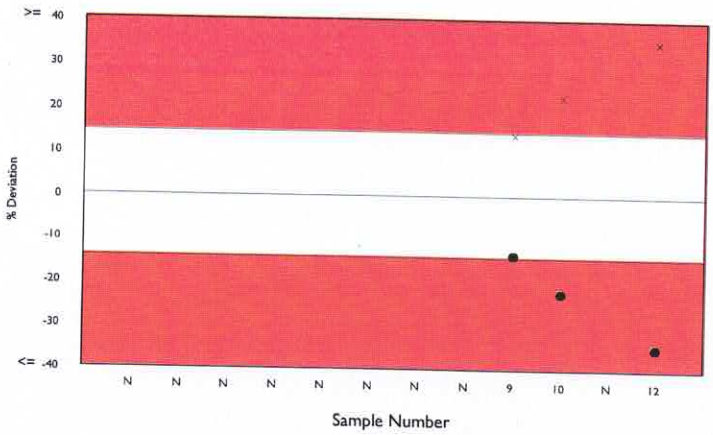
RIQAS TDPA: 14.5% **Biological Variation:** N/A

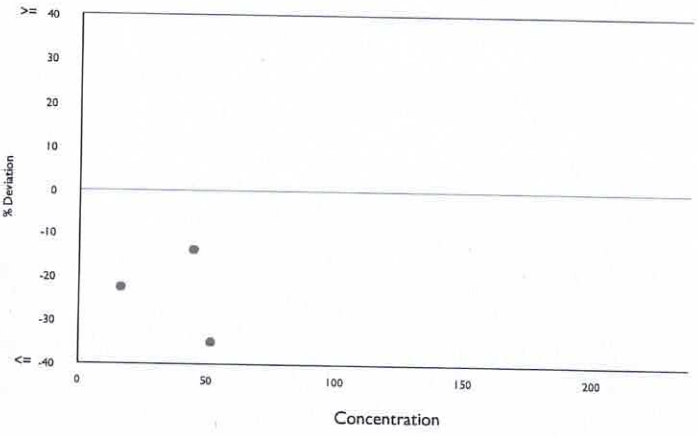
Sample	Result	Unit	N	Mean for Comparison	CV%	Um	SDPA	SDI	TS	%Deviation
1	N/A	U/l	27	181.903	12.6	5.52	16.96a			
2	N/A	U/l	34	16.073	17.8	0.61	1.54a			
3	N/A	U/l	20	46.215	15.3	1.97	4.53a			
4	N/A	U/l	12	196.358	7.8	5.56	18.18a			
5	N/A	U/l	13	47.085	16.7	2.72	4.96a			
6	N/A	U/l	14	233.354	11.2	8.75	22.35a			
7	N/A	U/l	8	51.863	2.4	0.55	4.57			
8	No Result	U/l	9	205.067	1.6	1.37	18.08			
9	38.400	U/l	15	44.627	13.9	2.00	4.41a	-1.41	52	-13.95
10	12.800	U/l	15	16.535	18.9	1.01	1.77a	-2.11	31	-22.59
11	No Result	U/l	14	166.579	11.1	6.20	15.94a			
12	33.600	U/l	11	51.682	3.1	0.60	4.56	-3.97	12	-34.99

	Cycle 16	Cycle 17
Cycle Average SDI	N/A	-2.50
Cycle Average TS	N/A	32
Cycle Average %DEV	N/A	-23.84
Cycle Average Absolute SDI	N/A	2.50
Cycle Average Absolute %DEV	N/A	23.84









RIQAS

UKAS PROFICIENCY TESTING

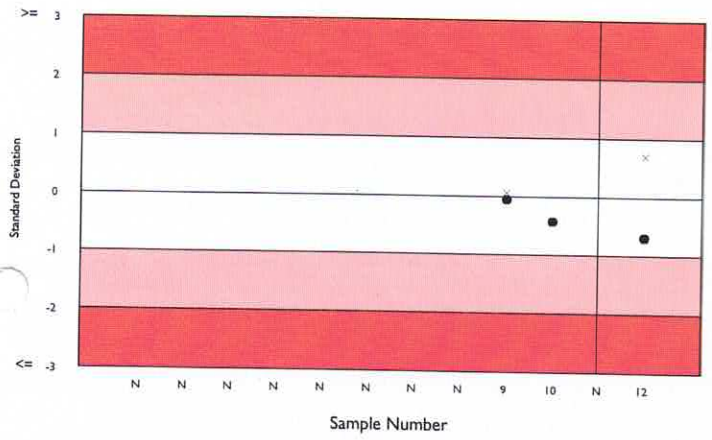
Bicarbonate, mmol/l

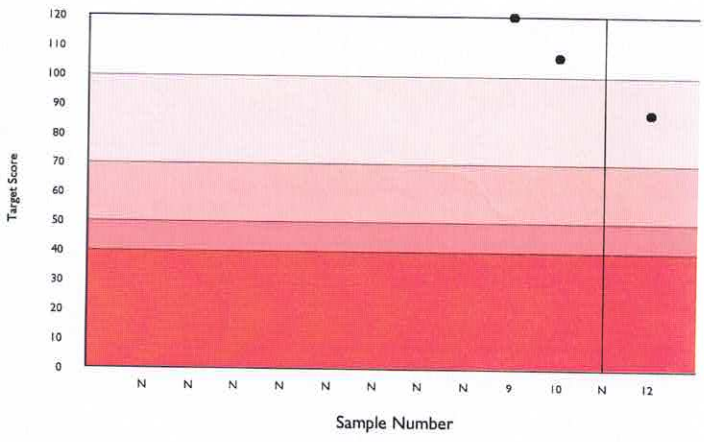
Method: PEP Carboxylase
Instrument: Beckman AU instruments
Reagent: Beckman Coulter

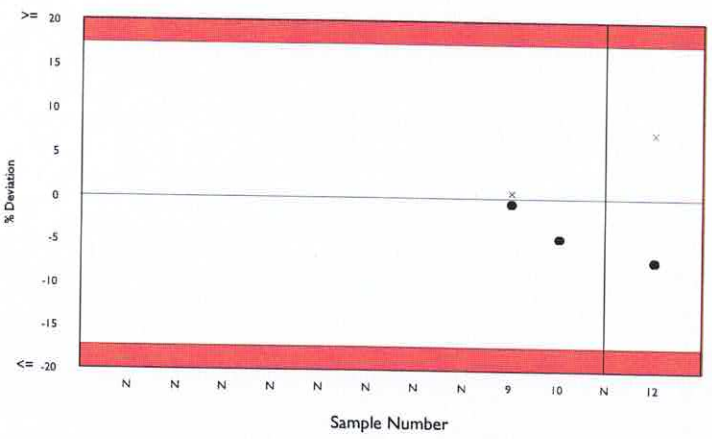
RIQAS TDPA: 17.4% **Biological Variation:** N/A

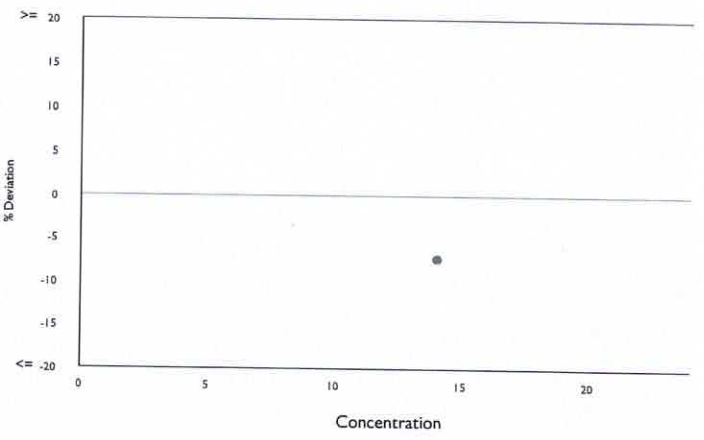
Sample	Result	Unit	N	Mean for Comparison	CV%	Um	SDPA	SDI	TS	%Deviation
1	N/A	mmol/l	20	M 13.187	9.1	0.34	1.39			
2	N/A	mmol/l	23	M 8.690	13.7	0.31	0.97a			
3	N/A	mmol/l	24	M 14.000	7.8	0.28	1.48			
4	N/A	mmol/l	22	M 14.562	6.0	0.23	1.54			
5	N/A	mmol/l	22	M 13.288	8.6	0.30	1.41			
6	N/A	mmol/l	21	M 17.991	6.6	0.33	1.90			
7	N/A	mmol/l	24	M 13.395	8.7	0.30	1.42			
8	N/A	mmol/l	25	M 13.845	7.6	0.26	1.46			
9	12.000	mmol/l	27	M 12.074	11.2	0.32	1.28	-0.06	120	-0.61
10	8.000	mmol/l	26	M 8.401	13.2	0.27	0.93a	-0.43	106	-4.77
11	No Result	mmol/l	128	I 17.386	6.0	0.11	1.84			
12	13.000	mmol/l	123	I 14.031	5.1	0.08	1.48	-0.69	87	-7.35

	Cycle 16	Cycle 17
Cycle Average SDI	N/A	-0.39
Cycle Average TS	N/A	104
Cycle Average %DEV	N/A	-4.24
Cycle Average Absolute SDI	N/A	0.39
Cycle Average Absolute %DEV	N/A	4.24









RIQAS

UKAS PROFICIENCY TESTING

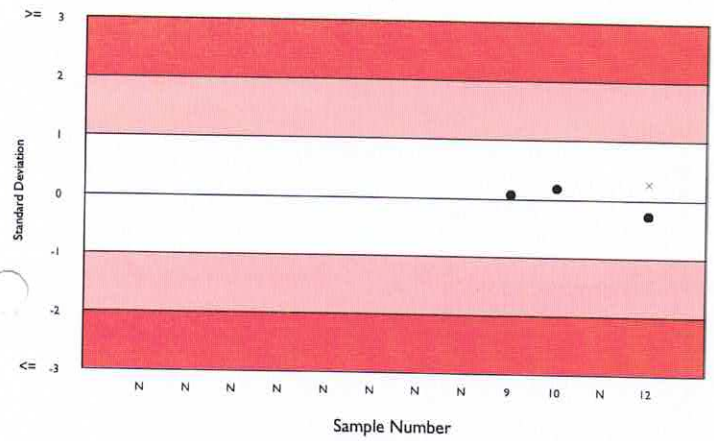
Bilirubin, Direct, umol/l

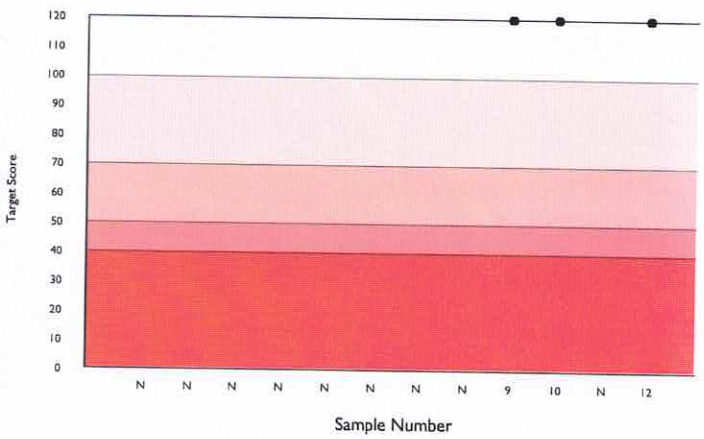
Method: Dichlorophenyl Diazonium
Instrument: Beckman AU instruments
Reagent: Beckman Coulter

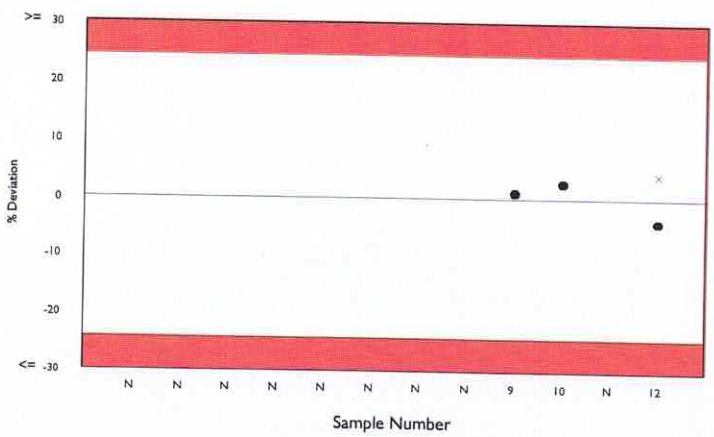
RIQAS TDPA: 24.4% **Biological Variation:** N/A

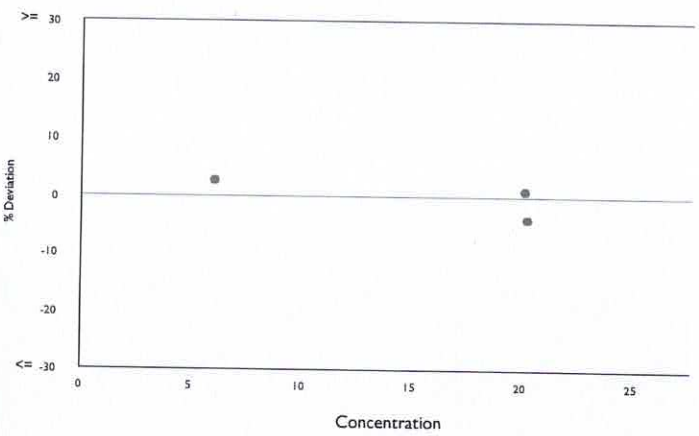
Sample	Result	Unit	N	Mean for Comparison	CV%	Um	SDPA	SDI	TS	%Deviation
1	N/A	umol/l	632	20.937	9.4	0.10	3.11			
2	N/A	umol/l	641	6.392	9.5	0.03	0.95			
3	N/A	umol/l	627	21.349	4.0	0.04	3.17			
4	N/A	umol/l	624	21.247	8.1	0.09	3.15			
5	N/A	umol/l	622	20.029	4.5	0.04	2.97			
6	N/A	umol/l	660	25.084	6.1	0.07	3.72			
7	N/A	umol/l	647	20.080	4.3	0.04	2.98			
8	No Result	umol/l	666	21.408	6.8	0.07	3.18			
9	20.300	umol/l	662	20.094	3.8	0.04	2.98	0.07	120	1.02
10	6.200	umol/l	665	6.038	8.9	0.03	0.90	0.18	120	2.69
11	No Result	umol/l	634	22.602	6.9	0.08	3.35			
12	19.400	umol/l	595	20.219	4.4	0.05	3.00	-0.27	120	-4.05

	Cycle 16	Cycle 17
Cycle Average SDI	N/A	-0.01
Cycle Average TS	N/A	120
Cycle Average %DEV	N/A	-0.11
Cycle Average Absolute SDI	N/A	0.17
Cycle Average Absolute %DEV	N/A	2.59









RIOAS

UKAS PROFICIENCY TESTING

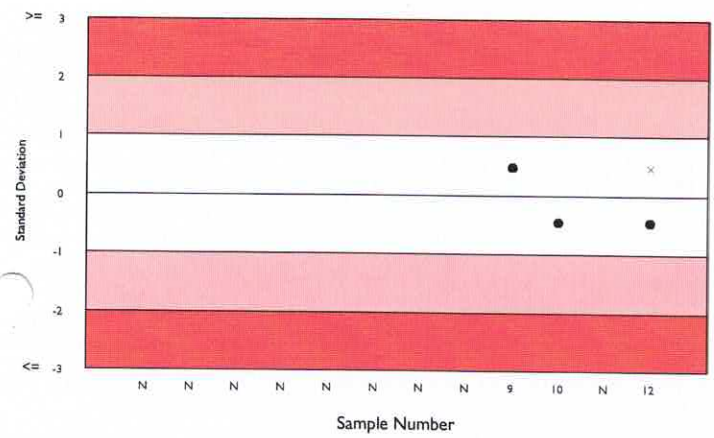
Bilirubin, Total, umol/l

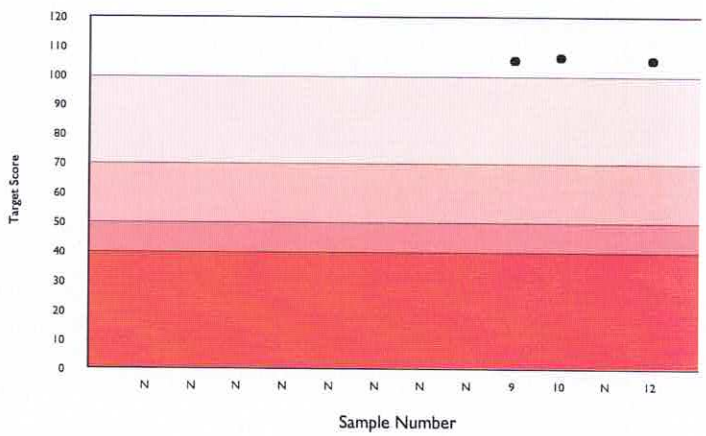
Method: DPD (Beckman AU)
Instrument: Beckman AU instruments
Reagent: Beckman Coulter

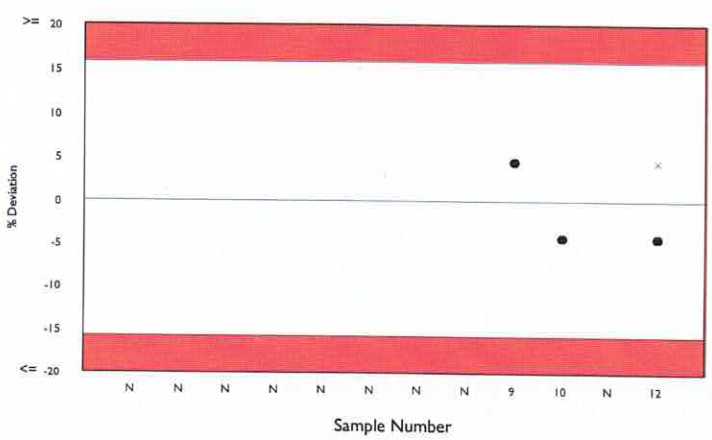
RIQAS TDPA: 15.8% **Biological Variation:** N/A

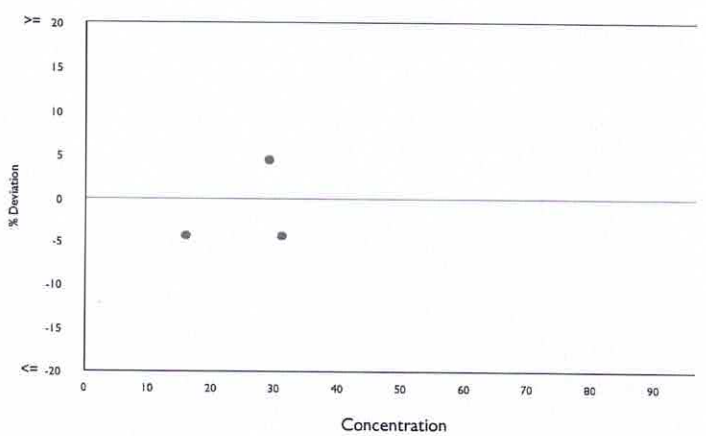
Sample	Result	Unit	N	Mean for Comparison	CV%	Um	SDPA	SDI	TS	%Deviation
1	N/A	umol/l	493	83.073	2.9	0.13	7.98			
2	N/A	umol/l	532	17.652	3.6	0.03	1.70			
3	N/A	umol/l	524	30.792	2.9	0.05	2.96			
4	N/A	umol/l	502	87.136	3.4	0.17	8.37			
5	N/A	umol/l	502	31.020	3.0	0.05	2.98			
6	N/A	umol/l	544	90.016	3.4	0.17	8.65			
7	N/A	umol/l	538	31.032	3.1	0.05	2.98			
8	No Result	umol/l	548	87.046	3.9	0.18	8.36			
9	30.300	umol/l	542	29.003	2.9	0.04	2.79	0.47	105	4.47
10	15.200	umol/l	534	15.897	3.5	0.03	1.53	-0.46	106	-4.38
11	No Result	umol/l	511	86.283	3.0	0.15	8.29			
12	29.700	umol/l	484	31.074	3.2	0.06	2.98	-0.46	105	-4.42

	Cycle 16	Cycle 17
Cycle Average SDI	N/A	-0.15
Cycle Average TS	N/A	105
Cycle Average %DEV	N/A	-1.44
Cycle Average Absolute SDI	N/A	0.46
Cycle Average Absolute %DEV	N/A	4.43









RIOAS

UKAS PROFICIENCY TESTING

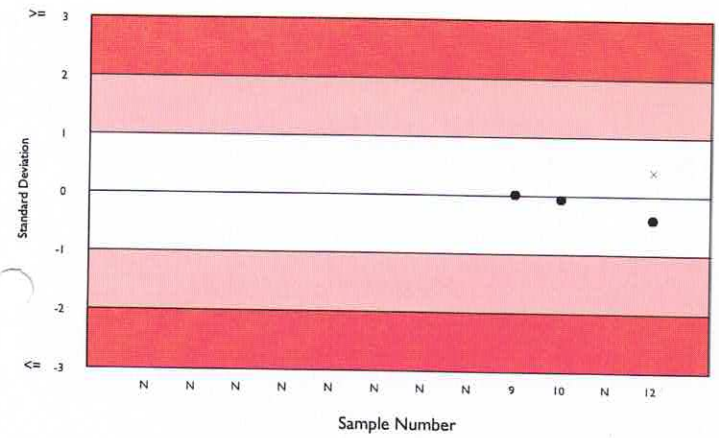
Calcium, mmol/l

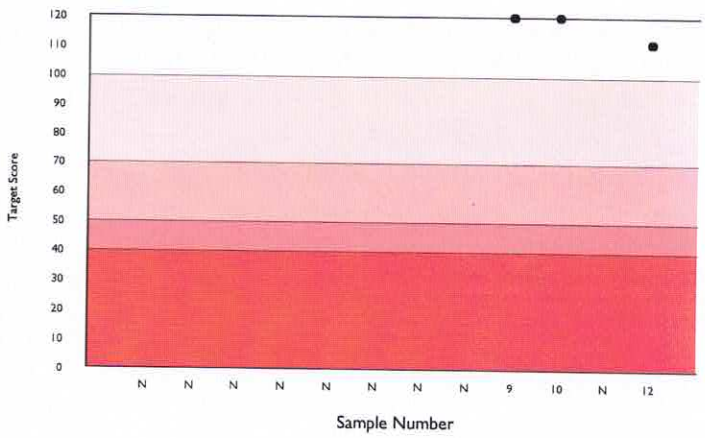
Method: Arsenazo
Instrument: Beckman AU instruments
Reagent: Beckman Coulter

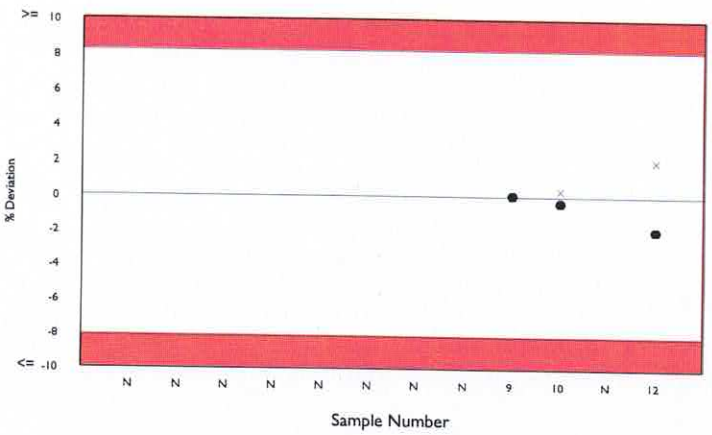
RIQAS TDPA: 8.2% **Biological Variation:** N/A

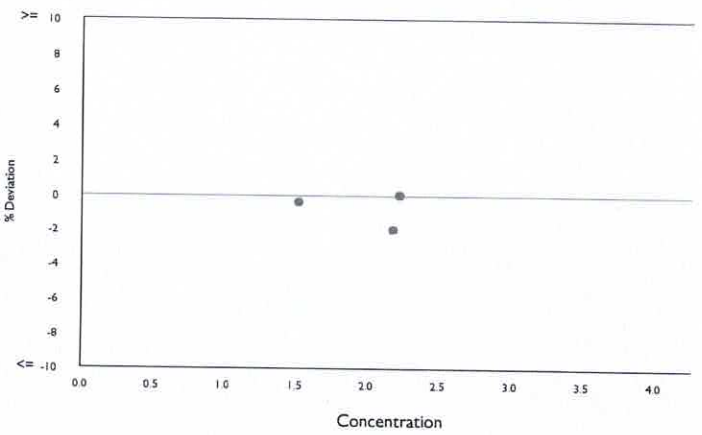
Sample	Result	Unit	N	Mean for Comparison	CV%	Um	SDPA	SDI	TS	%Deviation
1	N/A	mmol/l	602	1 3.079	2.1	0.00	0.15			
2	N/A	mmol/l	646	1 1.518	2.4	0.00	0.08			
3	N/A	mmol/l	639	1 2.244	2.0	0.00	0.11			
4	N/A	mmol/l	627	1 3.186	2.0	0.00	0.16			
5	N/A	mmol/l	637	1 2.173	2.3	0.00	0.11			
6	N/A	mmol/l	676	1 3.571	2.3	0.00	0.18			
7	N/A	mmol/l	663	1 2.174	2.2	0.00	0.11			
8	No Result	mmol/l	681	1 3.186	2.2	0.00	0.16			
9	2.220	mmol/l	699	1 2.219	2.1	0.00	0.11	0.01	120	0.06
10	1.510	mmol/l	666	1 1.515	2.4	0.00	0.08	-0.07	120	-0.35
11	No Result	mmol/l	646	1 3.226	2.2	0.00	0.16			
12	2.130	mmol/l	608	1 2.173	2.3	0.00	0.11	-0.40	111	-2.00

	Cycle 16	Cycle 17
Cycle Average SDI	N/A	-0.15
Cycle Average TS	N/A	117
Cycle Average %DEV	N/A	-0.76
Cycle Average Absolute SDI	N/A	0.16
Cycle Average Absolute %DEV	N/A	0.80









RIQAS

UKAS PROFICIENCY TESTING

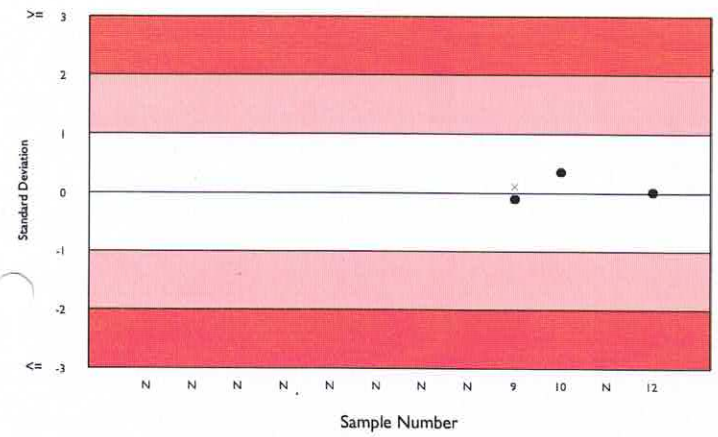
Chloride, mmol/l

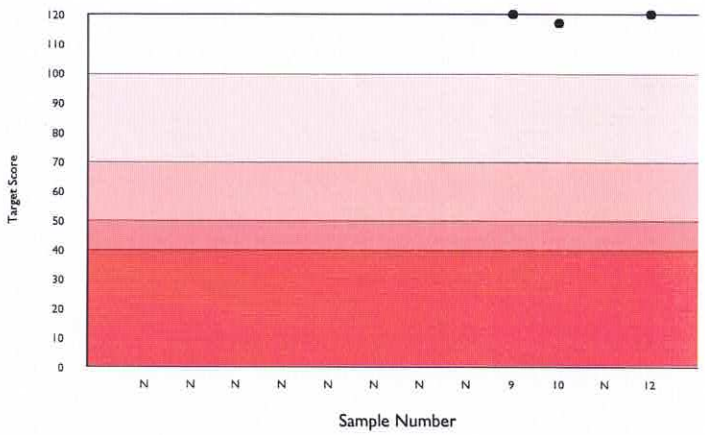
Method: ISE, direct
Instrument: Beckman AU instruments
Reagent: Beckman Coulter

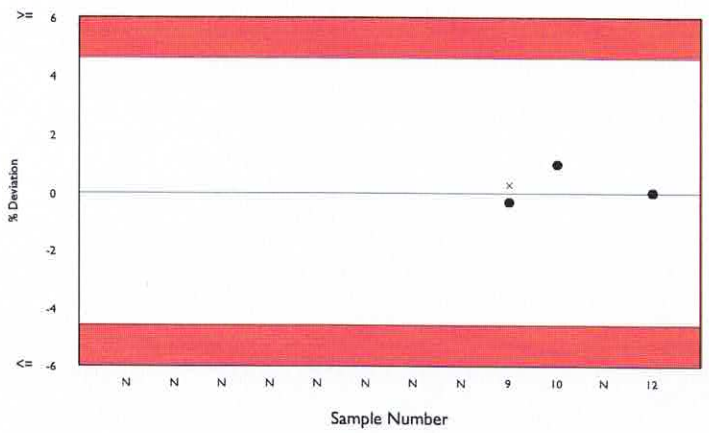
RIQAS TDPA: 4.6% **Biological Variation:** N/A

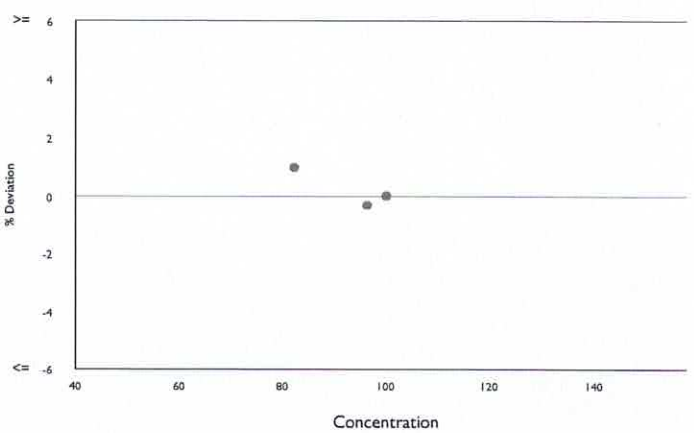
Sample	Result	Unit	N	Mean for Comparison	CV%	Um	SDPA	SDI	TS	%Deviation
1	N/A	mmol/l	23	118.660	1.3	0.40	3.32			
2	N/A	mmol/l	31	83.252	1.8	0.34	2.33			
3	N/A	mmol/l	29	100.267	1.5	0.35	2.80			
4	N/A	mmol/l	29	118.380	1.2	0.34	3.31			
5	N/A	mmol/l	33	100.033	1.0	0.22	2.80			
6	N/A	mmol/l	29	114.162	0.9	0.23	3.19			
7	N/A	mmol/l	26	99.845	1.7	0.41	2.79			
8	No Result	mmol/l	25	118.066	1.1	0.33	3.30			
9	96.000	mmol/l	32	96.283	1.9	0.40	2.69	-0.11	120	-0.29
10	83.000	mmol/l	32	82.189	1.7	0.31	2.30	0.35	117	0.99
11	No Result	mmol/l	32	113.003	1.2	0.29	3.16			
12	100.000	mmol/l	33	99.971	1.9	0.41	2.80	0.01	120	0.03

	Cycle 16	Cycle 17
Cycle Average SDI	N/A	0.09
Cycle Average TS	N/A	119
Cycle Average %DEV	N/A	0.24
Cycle Average Absolute SDI	N/A	0.16
Cycle Average Absolute %DEV	N/A	0.44









RIOAS

UKAS PROFICIENCY TESTING

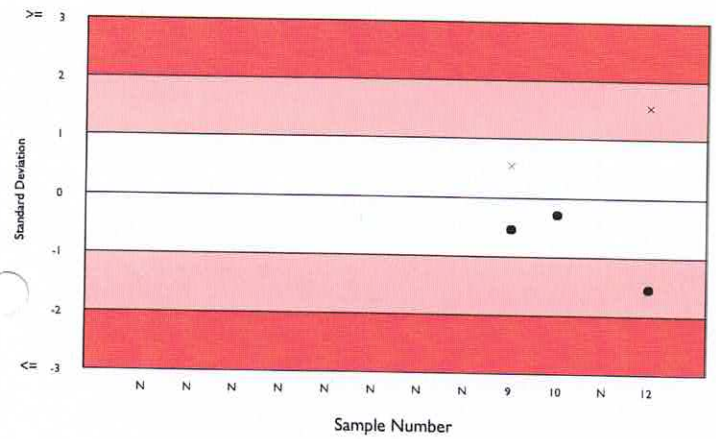
Cholesterol, mmol/l

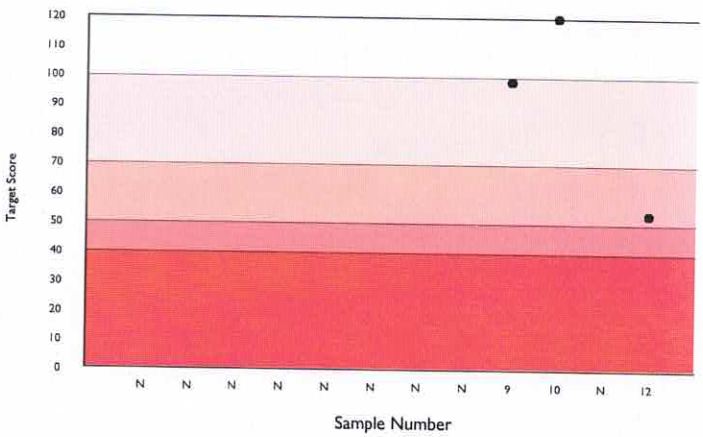
Method: Cholesterol Oxidase - Abell Kendall
Instrument: Beckman AU instruments
Reagent: Beckman Coulter

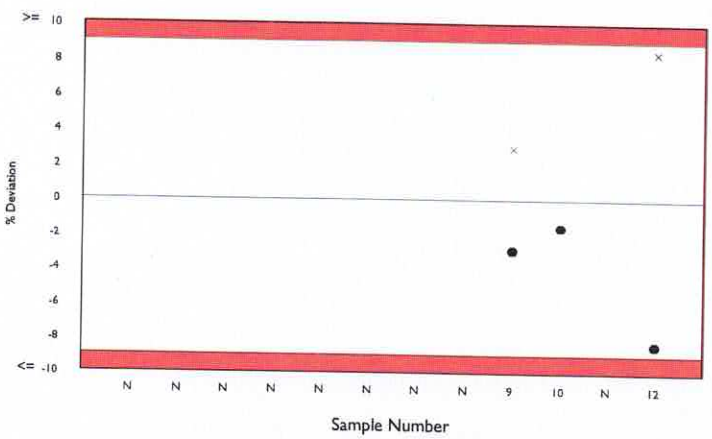
RIQAS TDPA: 9% **Biological Variation:** N/A

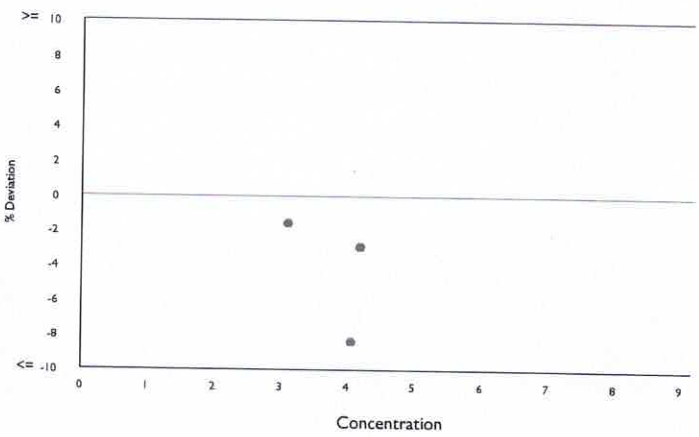
Sample	Result	Unit	N	Mean for Comparison	CV%	Um	SDPA	SDI	TS	%Deviation
1	N/A	mmol/l	573	7.243	3.7	0.01	0.40			
2	N/A	mmol/l	624	3.127	3.8	0.01	0.17			
3	N/A	mmol/l	639	4.068	3.8	0.01	0.22			
4	N/A	mmol/l	625	7.272	3.7	0.01	0.40			
5	N/A	mmol/l	644	4.089	3.7	0.01	0.22			
6	N/A	mmol/l	652	7.759	4.0	0.02	0.42			
7	N/A	mmol/l	636	4.096	3.6	0.01	0.22			
8	N/A	mmol/l	639	7.202	4.3	0.02	0.39			
9	4.060	mmol/l	647	4.184	3.6	0.01	0.23	-0.54	98	-2.96
10	3.050	mmol/l	635	3.099	3.5	0.01	0.17	-0.29	120	-1.59
11	No Result	mmol/l	645	7.127	3.8	0.01	0.39			
12	3.720	mmol/l	610	4.061	3.7	0.01	0.22	-1.53	53	-8.39

	Cycle 16	Cycle 17
Cycle Average SDI	N/A	-0.79
Cycle Average TS	N/A	90
Cycle Average %DEV	N/A	-4.31
Cycle Average Absolute SDI	N/A	0.79
Cycle Average Absolute %DEV	N/A	4.31









RIQAS

UKAS PROFICIENCY TESTING

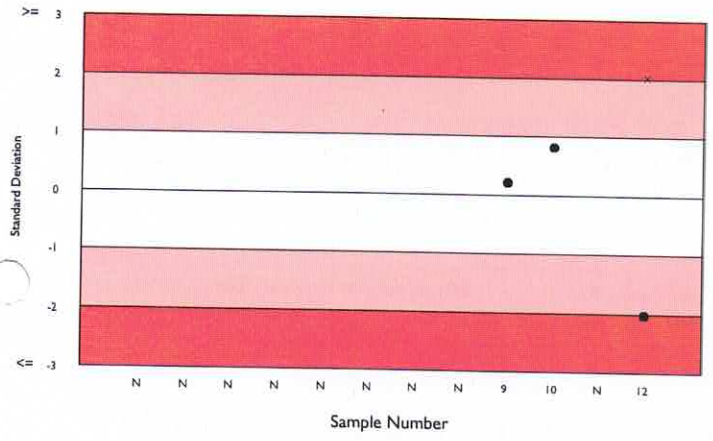
CK, Total, U/l @ 37°C

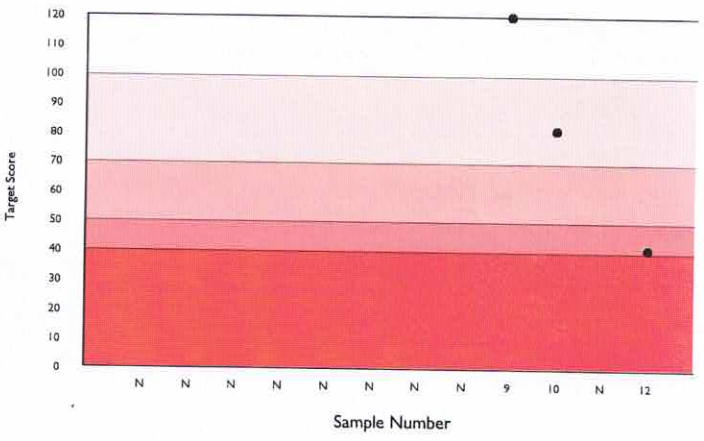
Method: Beckman CK-NAC (IFCC)
Instrument: Beckman AU instruments
Reagent: Beckman Coulter

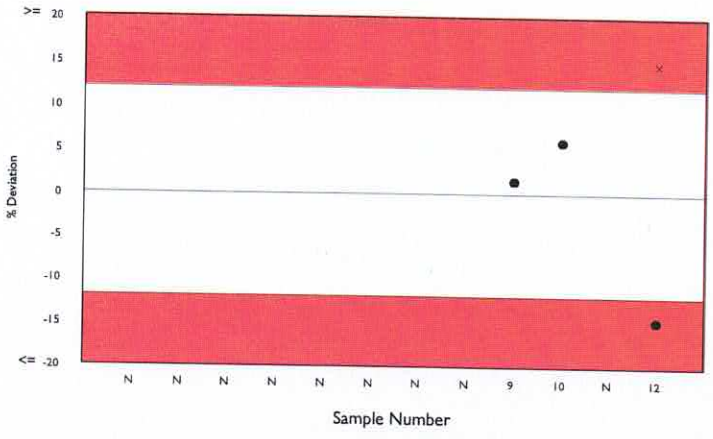
RIQAS TDPA: 12% **Biological Variation:** N/A

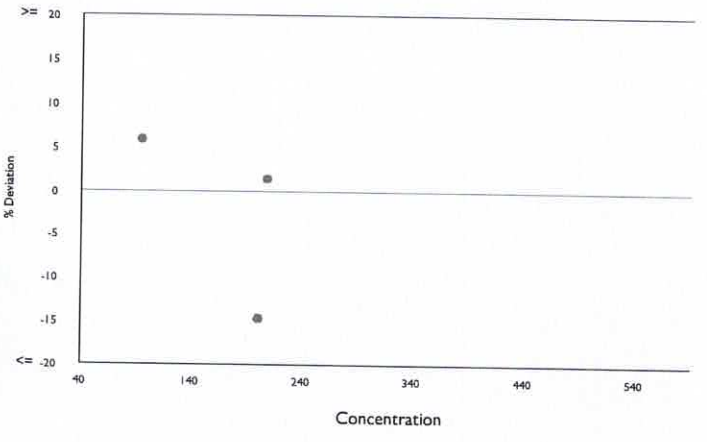
Sample	Result	Unit	N	Mean for Comparison	CV%	Um	SDPA	SDI	TS	%Deviation
1	N/A	U/l	166	532.278	3.9	2.04	38.83			
2	N/A	U/l	185	94.977	4.8	0.42	6.93			
3	N/A	U/l	186	188.734	4.6	0.79	13.77			
4	N/A	U/l	192	522.361	3.7	1.74	38.11			
5	N/A	U/l	195	199.674	5.6	1.01	14.57			
6	N/A	U/l	203	450.217	4.5	1.79	32.85			
7	N/A	U/l	204	195.985	4.7	0.81	14.30			
8	No Result	U/l	205	516.780	4.1	1.86	37.70			
9	211.000	U/l	209	207.868	4.9	0.88	15.17	0.21	120	1.51
10	100.000	U/l	189	94.415	3.9	0.33	6.89	0.81	81	5.91
11	No Result	U/l	469	551.951	4.0	1.29	40.27			
12	171.000	U/l	441	200.555	5.7	0.68	14.63	-2.02	41	-14.74

	Cycle 16	Cycle 17
Cycle Average SDI	N/A	-0.33
Cycle Average TS	N/A	81
Cycle Average %DEV	N/A	-2.44
Cycle Average Absolute SDI	N/A	1.01
Cycle Average Absolute %DEV	N/A	7.39









RIQAS

UKAS