

Biolab SRL

SPECIFIC PROTEINS END OF CYCLE REPORT

CYCLE 60

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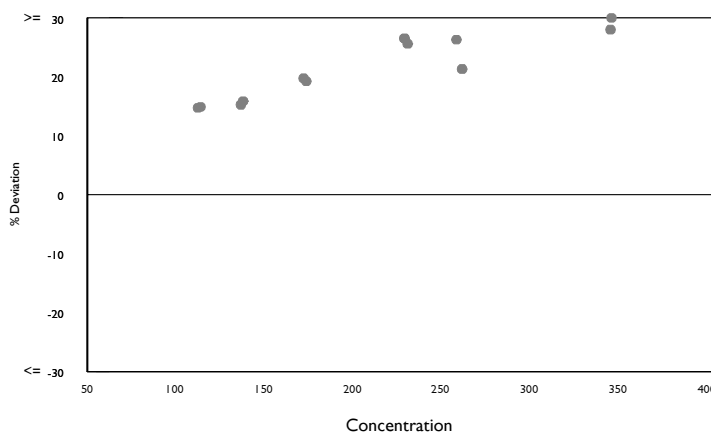
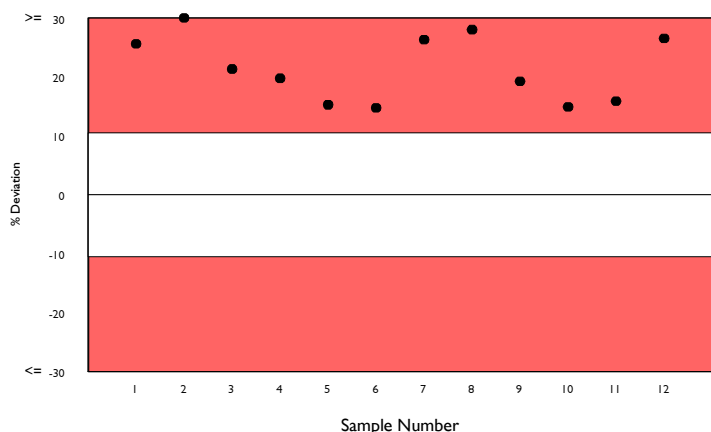
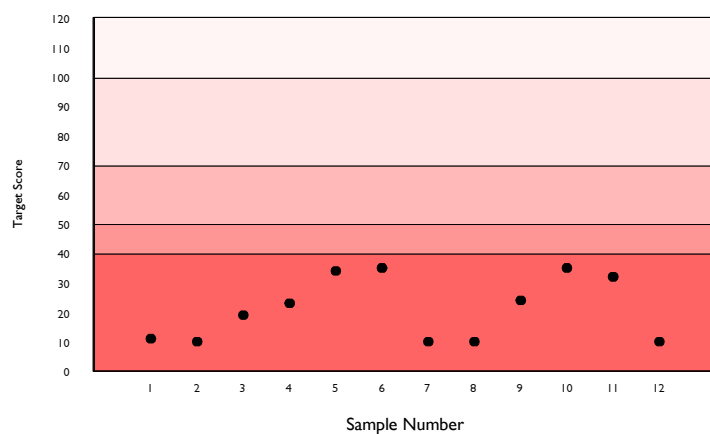
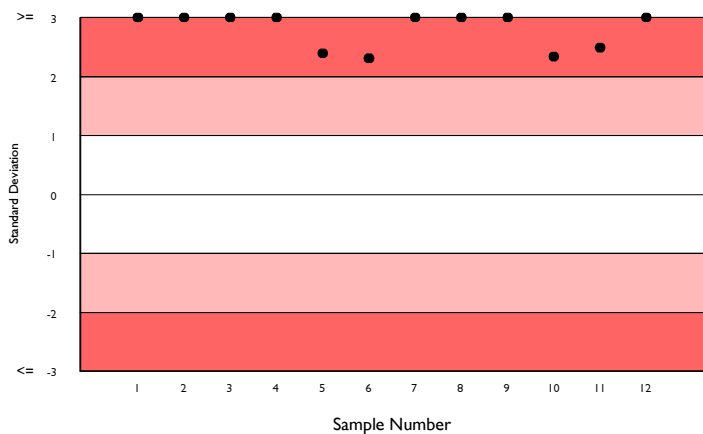
Anti Streptolysin O, IU/ml

Method: Turbidimetric (IFCC Cal.)
Instrument: Siemens Atellica Solution
Reagent: Siemens

RIQAS TDPA: 10.5% **Biological Variation:** N/A

Sample	Result	Unit	N	Mean for Comparison	CV%	Um	SDPA	SDI	TS	%Deviation
1	290.000	IU/ml	124	M 230.921	18.8	4.88	15.53a	3.81	11	25.58
2	451.000	IU/ml	115	M 345.917	19.7	7.93	23.46a	4.48	10	30.38
3	317.400	IU/ml	137	M 261.625	18.0	5.03	17.44a	3.20	19	21.32
4	206.200	IU/ml	129	M 172.183	16.9	3.19	10.99	3.09	23	19.76
5	157.700	IU/ml	129	M 136.815	15.7	2.37	8.73	2.39	34	15.27
6	129.100	IU/ml	132	M 112.527	15.7	1.92	7.18	2.31	35	14.73
7	326.400	IU/ml	125	M 258.409	19.7	5.69	17.45a	3.90	10	26.31
8	442.000	IU/ml	124	M 345.305	19.3	7.47	23.28a	4.15	10	28.00
9	207.100	IU/ml	131	M 173.678	17.0	3.22	11.09	3.01	24	19.24
10	131.000	IU/ml	129	M 114.002	15.1	1.89	7.28	2.34	35	14.91
11	160.000	IU/ml	128	M 138.074	17.1	2.61	8.81	2.49	32	15.88
12	289.900	IU/ml	124	M 229.125	20.0	5.13	15.50a	3.92	10	26.52

	Cycle 59	Cycle 60
Cycle Average SDI	0.04	3.26
Cycle Average TS	96	21
Cycle Average %DEV	0.32	21.49
Cycle Average Absolute SDI	0.68	3.26
Cycle Average Absolute %DEV	5.30	21.49



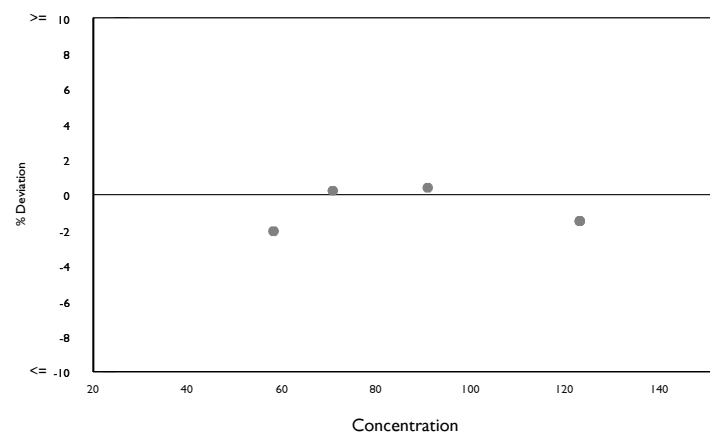
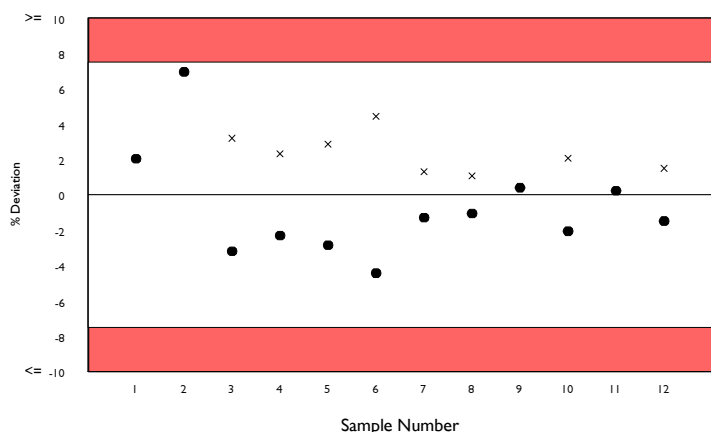
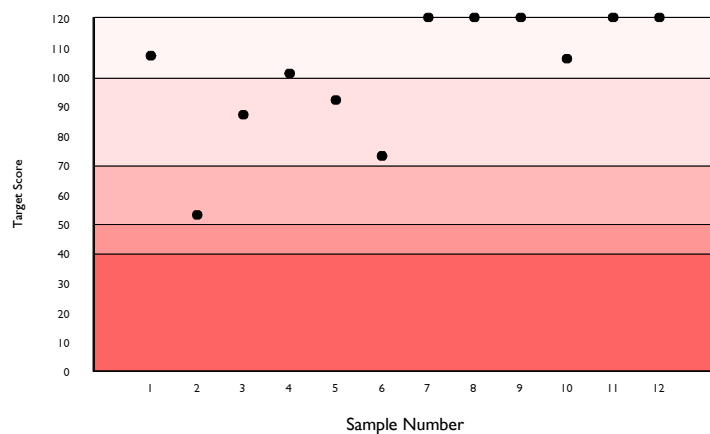
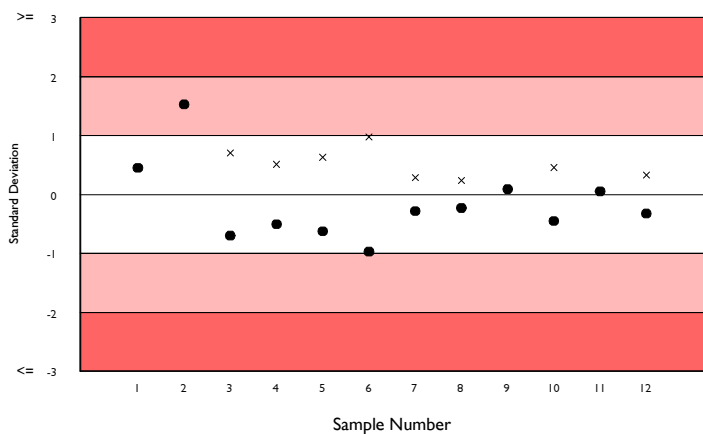
Complement, C3, mg/dl

Method: Turbidimetric (IFCC Cal.)
Instrument: Siemens Atellica Solution
Reagent: Siemens

RIQAS TDPA: 7.5% **Biological Variation:** 8.4%

Sample	Result	Unit	N	Mean for Comparison	CV%	Um	SDPA	SDI	TS	%Deviation
1	126.400	mg/dl	163	M 123.878	5.0	0.60	5.64	0.45	107	2.04
2	198.600	mg/dl	146	M 185.701	4.7	0.89	8.46	1.52	53	6.95
3	134.700	mg/dl	167	M 139.146	4.3	0.57	6.34	-0.70	87	-3.19
4	90.100	mg/dl	167	M 92.231	4.7	0.41	4.20	-0.51	101	-2.31
5	71.100	mg/dl	162	M 73.189	4.1	0.29	3.33	-0.63	92	-2.85
6	57.900	mg/dl	165	M 60.586	3.9	0.23	2.76	-0.97	73	-4.43
7	137.400	mg/dl	164	M 139.206	5.2	0.70	6.34	-0.28	120	-1.30
8	182.700	mg/dl	167	M 184.656	5.0	0.89	8.41	-0.23	120	-1.06
9	91.200	mg/dl	5	I 90.840	2.0	1.00	4.14	0.09	120	0.40
10	57.000	mg/dl	5	I 58.200	1.4	0.46	2.65	-0.45	106	-2.06
11	70.900	mg/dl	5	I 70.740	1.8	0.69	3.22	0.05	120	0.23
12	121.200	mg/dl	6	I 123.033	1.3	0.82	5.60	-0.33	120	-1.49

	Cycle 59	Cycle 60
Cycle Average SDI	-0.14	-0.17
Cycle Average TS	90	102
Cycle Average %DEV	-0.71	-0.76
Cycle Average Absolute SDI	0.78	0.52
Cycle Average Absolute %DEV	3.80	2.36



Complement, C4, mg/dl

Method: Turbidimetric (IFCC Cal.)
Instrument: Siemens Atellica Solution
Reagent: Siemens

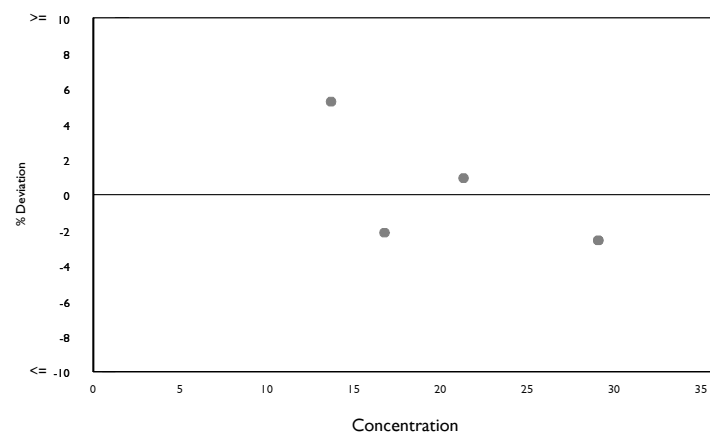
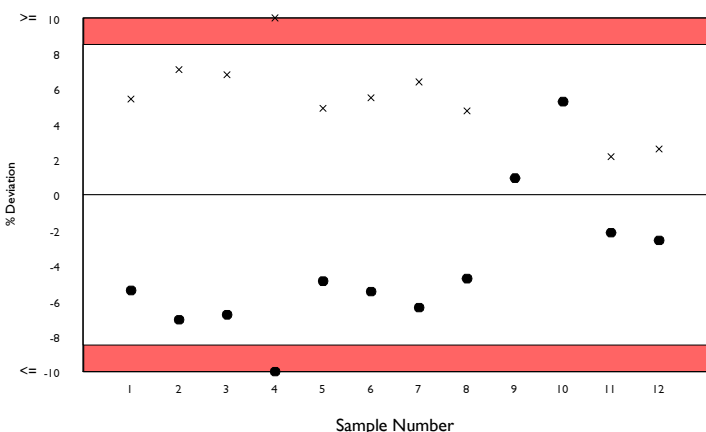
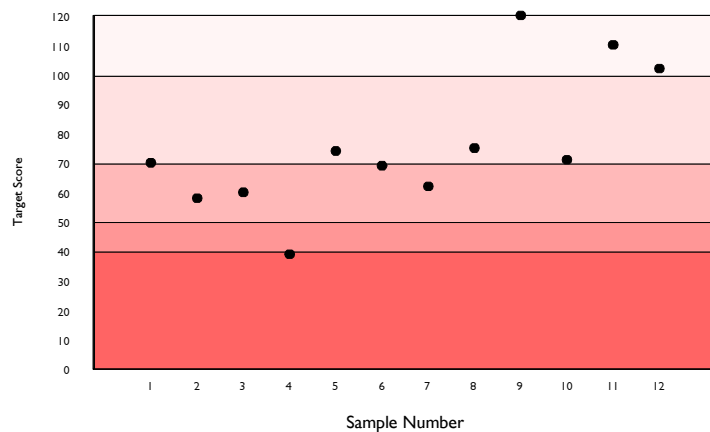
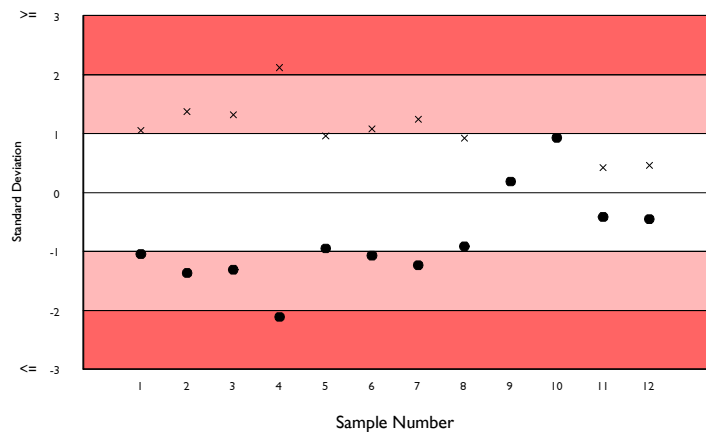
RIQAS TDPA: 8.5% **Biological Variation:** 16%

Sample	Result	Unit	N	Mean for Comparison	CV%	Um	SDPA	SDI	TS	%Deviation
1	28.200	mg/dl	169	M 29.813	8.1	0.23	1.54	-1.05	70	-5.41
2	41.600	mg/dl	148	M 44.765	6.8	0.31	2.31	-1.37	58	-7.07
3	31.400	mg/dl	171	M 33.686	7.3	0.23	1.74	-1.31	60	-6.79
4	20.100	mg/dl	181	M 22.553	8.3	0.17	1.16	-2.11	39	-10.88
5	16.900	mg/dl	177	M 17.768	8.9	0.14	0.91	-0.95	74	-4.89
6	13.900	mg/dl	182	M 14.706	9.0	0.12	0.75	-1.08	69	-5.48
7	31.400	mg/dl	173	M 33.540	7.4	0.23	1.73	-1.24	62	-6.38
8	42.800	mg/dl	180	M 44.930	7.0	0.29	2.32	-0.92	75	-4.74
9	21.500	mg/dl	5	I 21.300	2.1	0.24	1.10	0.18	120	0.94
10	14.400	mg/dl	5	I 13.680	4.7	0.35	0.78a	0.92	71	5.26
11	16.400	mg/dl	5	I 16.760	1.7	0.15	0.86	-0.42	110	-2.15
12	28.300	mg/dl	6	I 29.050	4.7	0.69	1.65a	-0.45	102	-2.58

Cycle 59 Cycle 60

Cycle Average SDI 0.26 -0.82
Cycle Average TS 89 76
Cycle Average %DEV 1.35 -4.18

Cycle Average Absolute SDI 0.84 1.00
Cycle Average Absolute %DEV 4.36 5.21



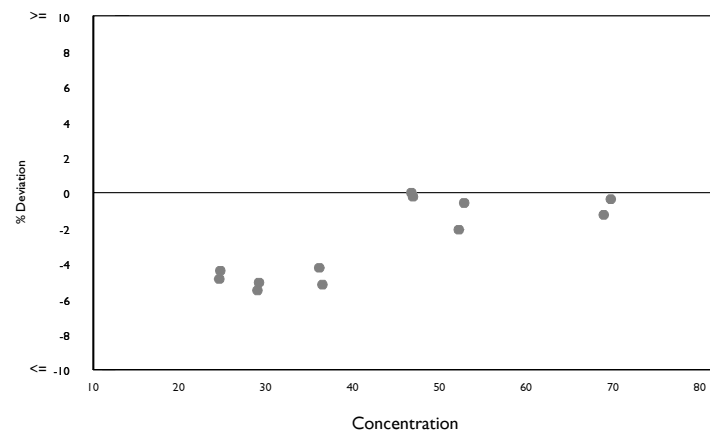
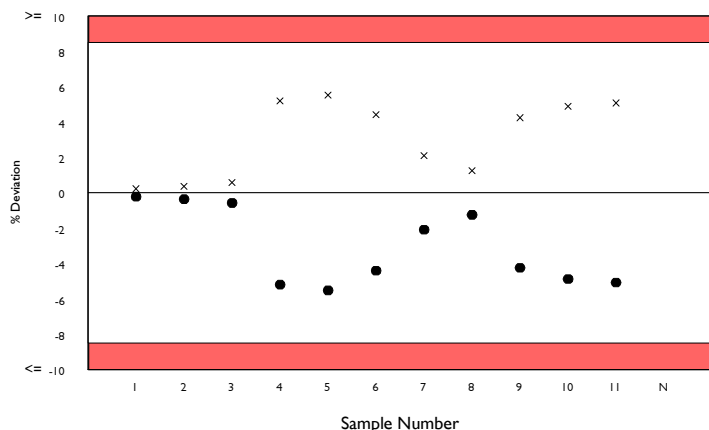
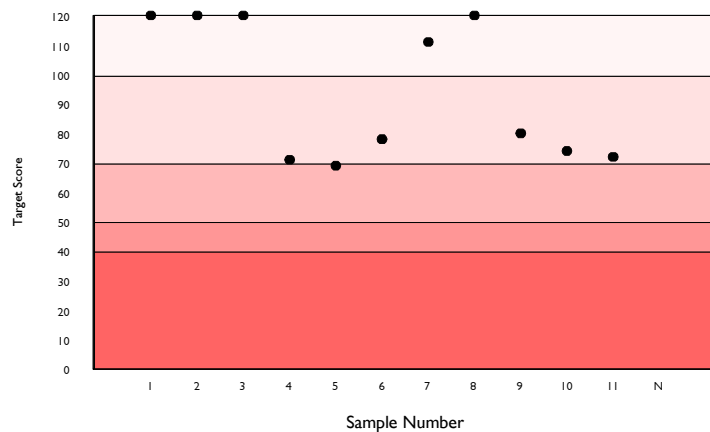
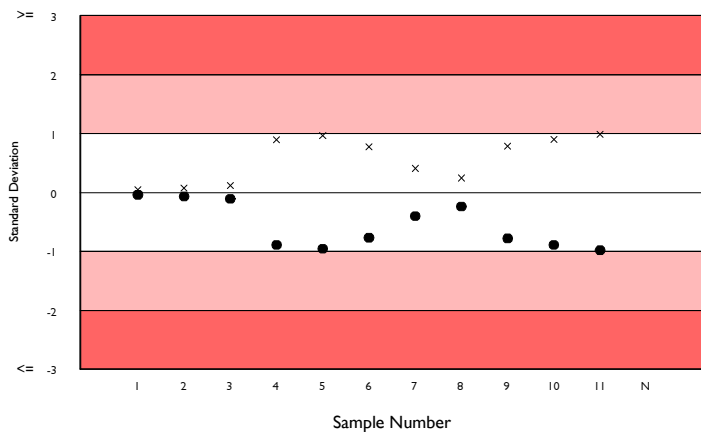
CRP, mg/l

Method: Turbidimetric (IFCC Cal.)
Instrument: Siemens Atellica Solution
Reagent: Siemens

RIQAS TDPA: 8.5% **Biological Variation:** 56.6%

Sample	Result	Unit	N	Mean for Comparison	CV%	Um	SDPA	SDI	TS	%Deviation
1	46.749	mg/l	6	46.853	1.4	0.32	2.42	-0.04	120	-0.22
2	69.390	mg/l	6	69.642	2.1	0.76	3.60	-0.07	120	-0.36
3	52.440	mg/l	6	52.745	2.3	0.61	2.73	-0.11	120	-0.58
4	34.535	mg/l	7	36.428	5.7	0.98	2.12a	-0.89	71	-5.20
5	27.339	mg/l	7	28.937	5.4	0.73	1.66a	-0.96	69	-5.52
6	23.572	mg/l	7	24.660	5.2	0.61	1.41a	-0.77	78	-4.41
7	51.045	mg/l	9	52.136	1.5	0.32	2.69	-0.40	111	-2.09
8	67.970	mg/l	10	68.830	1.6	0.43	3.56	-0.24	120	-1.25
9	34.529	mg/l	10	36.060	4.1	0.59	1.95a	-0.78	80	-4.25
10	23.330	mg/l	12	24.527	4.9	0.43	1.34a	-0.89	74	-4.88
11	27.630	mg/l	12	29.108	3.8	0.40	1.50	-0.98	72	-5.08
12	No Result	mg/l	10	46.676	2.1	0.39	2.41			

	Cycle 59	Cycle 60
Cycle Average SDI	-0.14	-0.56
Cycle Average TS	107	94
Cycle Average %DEV	-0.75	-3.08
Cycle Average Absolute SDI	0.42	0.56
Cycle Average Absolute %DEV	2.42	3.08



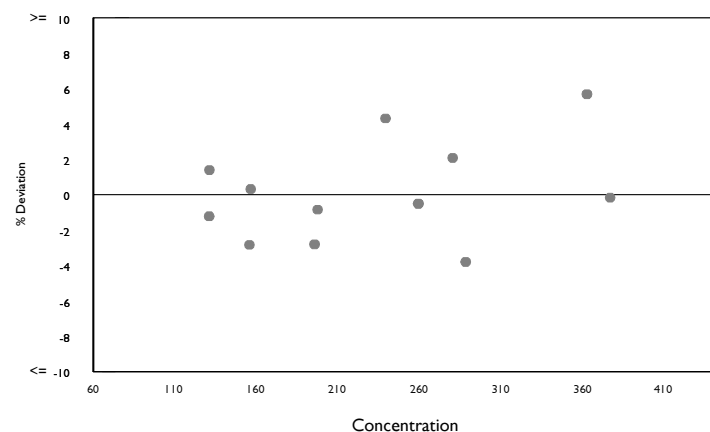
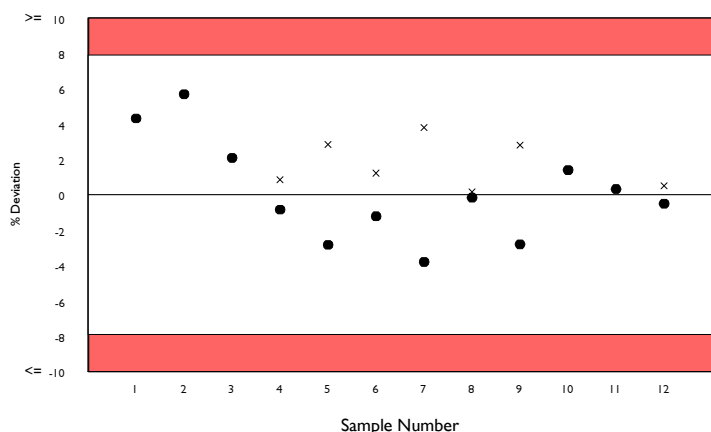
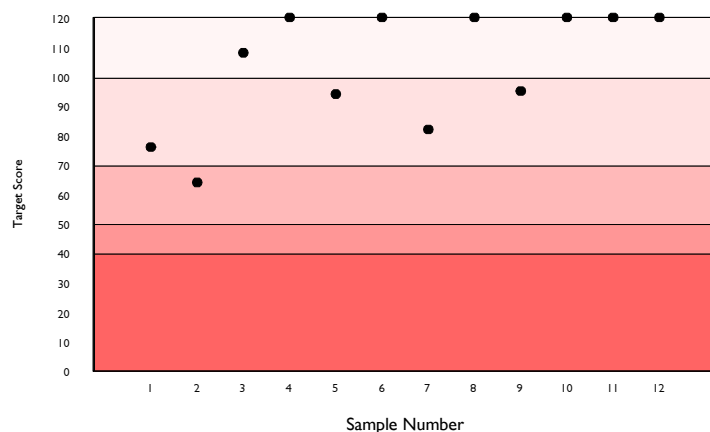
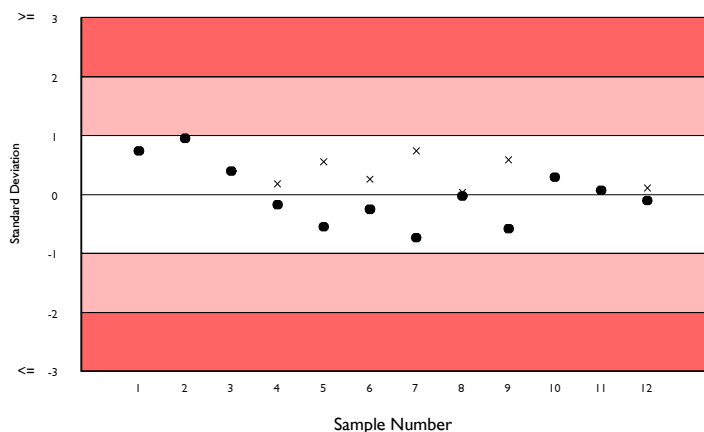
IgA, mg/dl

Method: Turbidimetric (IFCC Cal.)
Instrument: Siemens Atellica Solution
Reagent: Siemens

RIQAS TDPA: 7.9% **Biological Variation:** 13.5%

Sample	Result	Unit	N	Mean for Comparison	CV%	Um	SDPA	SDI	TS	%Deviation
1	249.400	mg/dl	5	239.080	6.0	8.06	14.02a	0.74	76	4.32
2	383.000	mg/dl	5	362.400	6.4	12.99	21.71a	0.95	64	5.68
3	286.000	mg/dl	6	280.167	4.3	6.21	14.81a	0.39	108	2.08
4	195.800	mg/dl	6	197.467	1.2	1.16	9.48	-0.18	120	-0.84
5	151.300	mg/dl	6	155.717	3.7	2.94	8.02a	-0.55	94	-2.84
6	129.500	mg/dl	5	131.100	1.3	0.97	6.29	-0.25	120	-1.22
7	277.200	mg/dl	8	288.150	4.3	5.52	14.89a	-0.74	82	-3.80
8	376.000	mg/dl	8	376.625	5.1	8.48	19.96a	-0.03	120	-0.17
9	190.100	mg/dl	7	195.586	2.4	2.25	9.39	-0.58	95	-2.80
10	133.000	mg/dl	6	131.167	1.1	0.75	6.29	0.29	120	1.40
11	157.000	mg/dl	8	156.500	1.6	1.13	7.51	0.07	120	0.32
12	257.800	mg/dl	7	259.114	0.5	0.64	12.44	-0.11	120	-0.51

	Cycle 59	Cycle 60
Cycle Average SDI	0.33	-0.00
Cycle Average TS	101	103
Cycle Average %DEV	1.56	0.14
Cycle Average Absolute SDI	0.52	0.41
Cycle Average Absolute %DEV	2.48	2.16



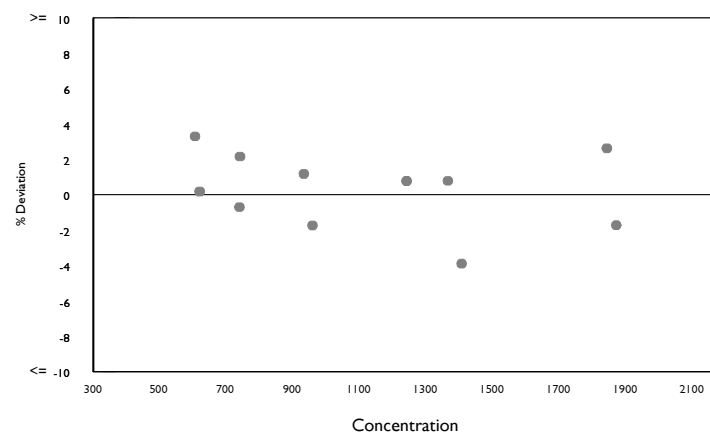
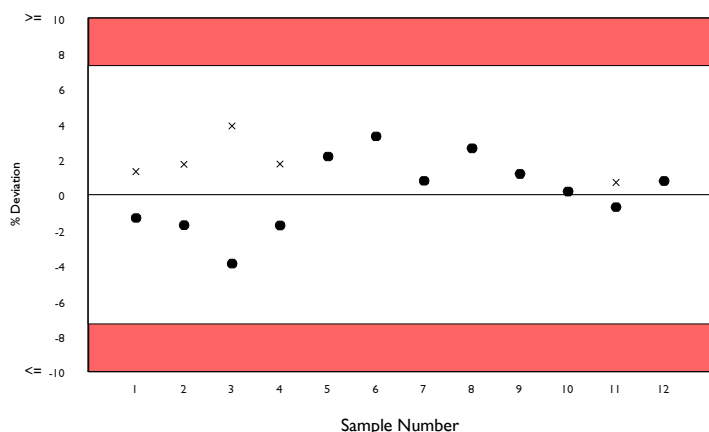
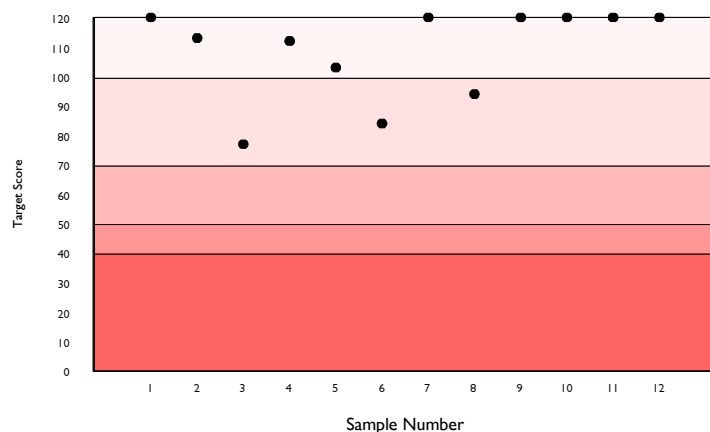
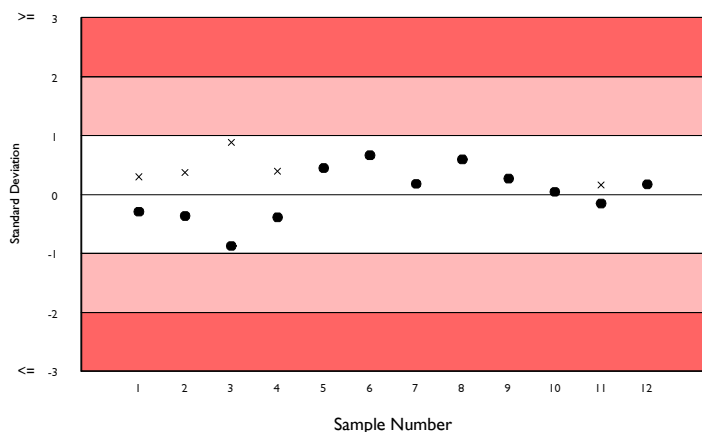
IgG, mg/dl

Method: Turbidimetric (IFCC Cal.)
Instrument: Siemens Atellica Solution
Reagent: Siemens

RIQAS TDPA: 7.3% **Biological Variation:** 8%

Sample	Result	Unit	N	Mean for Comparison	CV%	Um	SDPA	SDI	TS	%Deviation
1	1224.000	mg/dl	225	M 1240.280	3.8	3.89	55.04	-0.30	120	-1.31
2	1839.000	mg/dl	5	I 1871.200	2.6	27.25	87.39a	-0.37	113	-1.72
3	1352.000	mg/dl	6	I 1406.833	2.3	16.75	62.43	-0.88	77	-3.90
4	942.000	mg/dl	6	I 958.667	1.0	4.69	42.54	-0.39	112	-1.74
5	757.000	mg/dl	6	I 741.000	3.8	14.52	35.94a	0.45	103	2.16
6	626.000	mg/dl	6	I 606.000	4.5	13.83	30.23a	0.66	84	3.30
7	1376.000	mg/dl	8	I 1365.250	2.8	17.09	60.59	0.18	120	0.79
8	1891.000	mg/dl	8	I 1842.625	1.6	13.30	81.77	0.59	94	2.63
9	944.000	mg/dl	8	I 933.000	2.2	8.89	41.40	0.27	120	1.18
10	621.000	mg/dl	7	I 619.857	1.2	3.52	27.50	0.04	120	0.18
11	734.000	mg/dl	7	I 739.143	1.7	6.02	32.80	-0.16	120	-0.70
12	1251.000	mg/dl	9	I 1241.333	3.2	16.57	57.52a	0.17	120	0.78

	Cycle 59	Cycle 60
Cycle Average SDI	0.06	0.02
Cycle Average TS	104	109
Cycle Average %DEV	0.27	0.14
Cycle Average Absolute SDI	0.47	0.37
Cycle Average Absolute %DEV	2.22	1.70



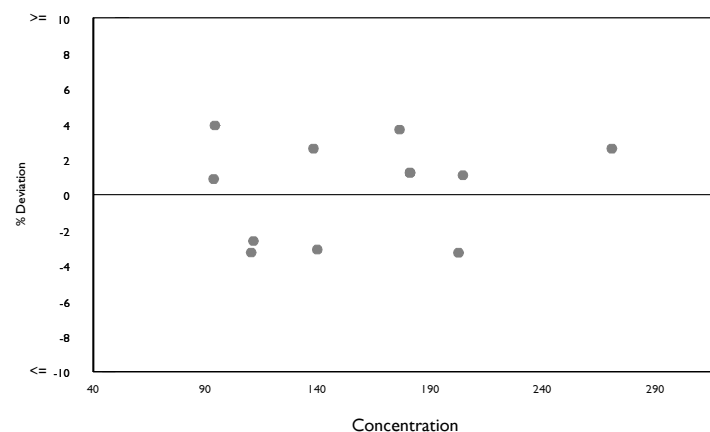
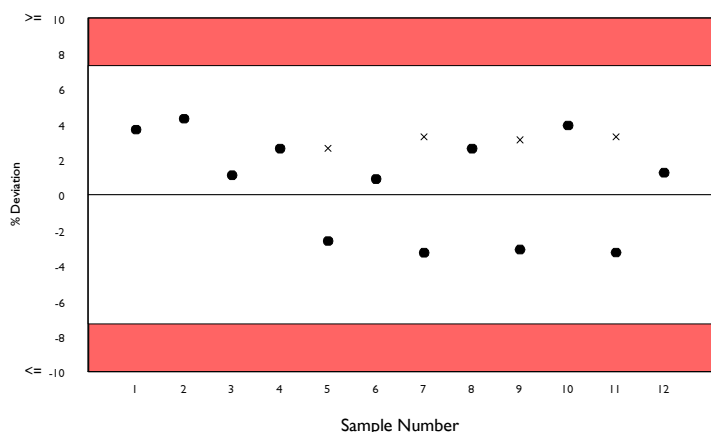
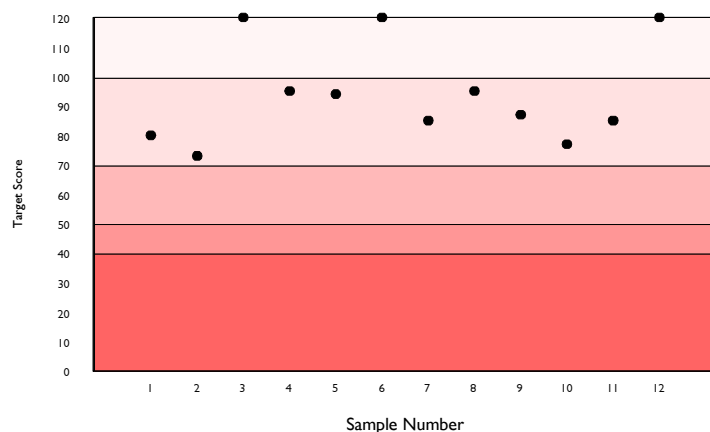
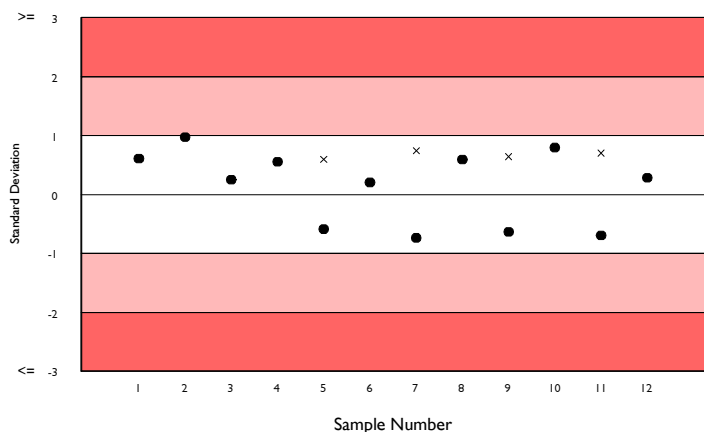
IgM, mg/dl

Method: Turbidimetric (IFCC Cal.)
Instrument: Siemens Atellica Solution
Reagent: Siemens

RIQAS TDPA: 7.3% **Biological Variation:** 16.8%

Sample	Result	Unit	N	Mean for Comparison	CV%	Um	SDPA	SDI	TS	%Deviation
1	182.600	mg/dl	5	I 176.120	7.4	7.33	10.71a	0.61	80	3.68
2	275.900	mg/dl	183	M 264.524	3.4	0.82	11.73	0.97	73	4.30
3	206.500	mg/dl	6	I 204.250	2.0	2.07	9.06	0.25	120	1.10
4	141.500	mg/dl	5	I 137.900	3.0	2.33	6.54a	0.55	95	2.61
5	108.300	mg/dl	6	I 111.217	1.9	1.09	4.93	-0.59	94	-2.62
6	94.400	mg/dl	6	I 93.567	2.2	1.06	4.15	0.20	120	0.89
7	195.700	mg/dl	8	I 202.338	2.0	1.75	8.97	-0.74	85	-3.28
8	277.500	mg/dl	8	I 270.438	2.0	2.38	12.00	0.59	95	2.61
9	135.200	mg/dl	8	I 139.525	4.5	2.77	6.78a	-0.64	87	-3.10
10	97.800	mg/dl	7	I 94.114	4.7	2.08	4.65a	0.79	77	3.92
11	106.600	mg/dl	8	I 110.200	3.4	1.65	5.16a	-0.70	85	-3.27
12	183.000	mg/dl	8	I 180.750	2.2	1.74	8.02	0.28	120	1.24

	Cycle 59	Cycle 60
Cycle Average SDI	0.32	0.13
Cycle Average TS	104	94
Cycle Average %DEV	1.72	0.67
Cycle Average Absolute SDI	0.47	0.58
Cycle Average Absolute %DEV	2.54	2.72



Rheumatoid Factor, U/ml

Method: Turbidimetric (Non IFCC Cal.)
Instrument: Siemens Atellica Solution
Reagent: Siemens

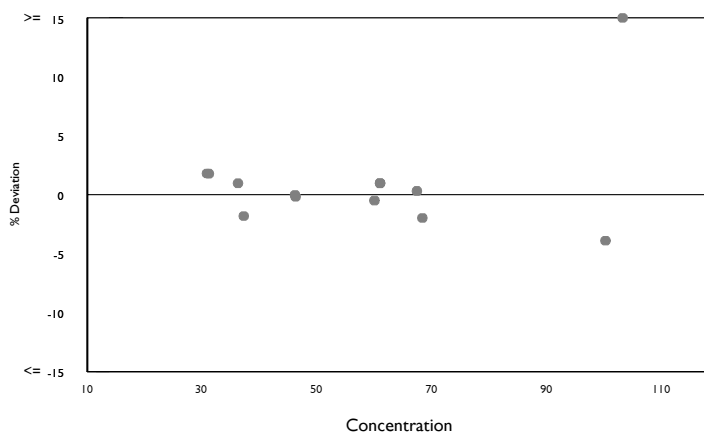
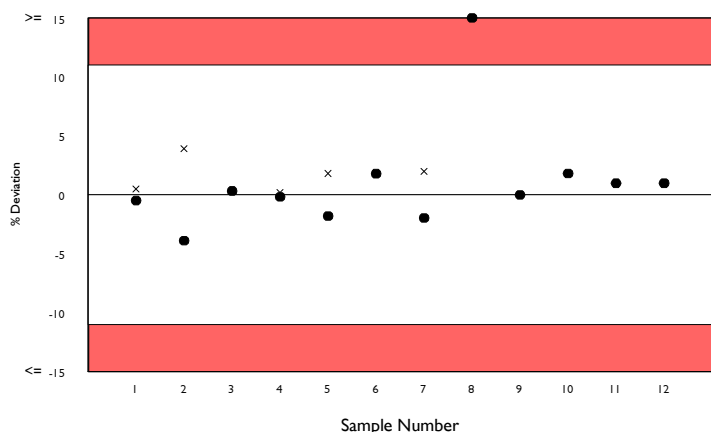
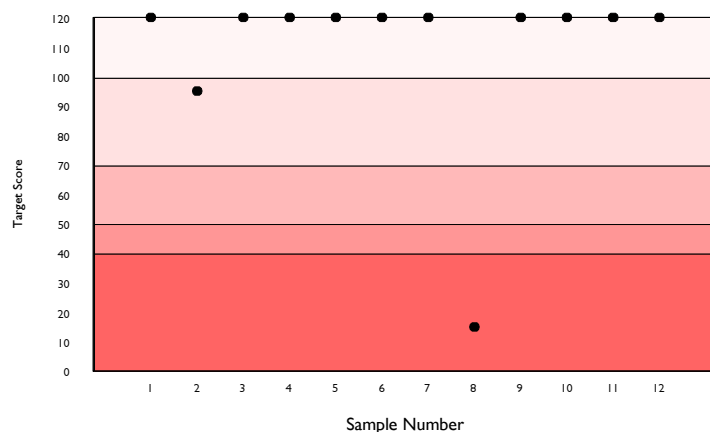
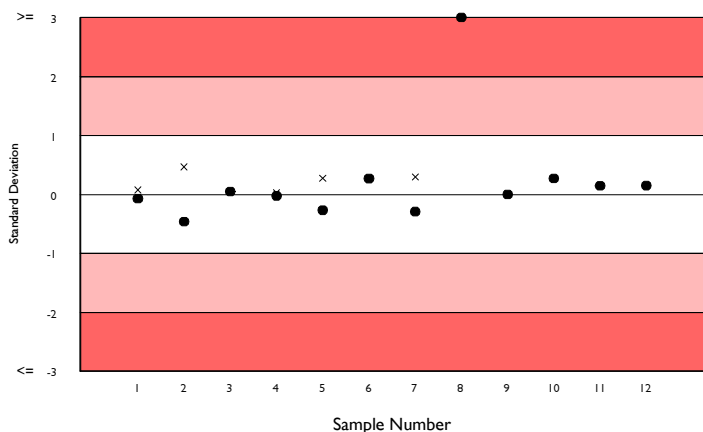
RIQAS TDPA: 11% **Biological Variation:** 13.5%

Sample	Result	Unit	N	Mean for Comparison	CV%	Um	SDPA	SDI	TS	%Deviation
1	59.710	U/ml	8	60.004	1.9	0.51	4.01	-0.07	120	-0.49
2	96.300	U/ml	9	100.209	12.2	5.08	8.41a	-0.46	95	-3.90
3	67.600	U/ml	10	67.388	2.3	0.61	4.51	0.05	120	0.31
4	46.180	U/ml	7	46.264	0.8	0.17	3.09	-0.03	120	-0.18
5	36.580	U/ml	9	37.252	1.8	0.28	2.49	-0.27	120	-1.80
6	31.750	U/ml	10	31.193	3.8	0.47	2.09	0.27	120	1.79
7	66.990	U/ml	13	68.338	1.9	0.46	4.57	-0.29	120	-1.97
8	128.500	U/ml	10	103.174	8.4	3.44	7.71a	3.28	15	24.55
9	46.170	U/ml	12	46.180	1.1	0.18	3.09	-0.00	120	-0.02
10	31.400	U/ml	13	30.845	3.3	0.35	2.06	0.27	120	1.80
11	36.600	U/ml	14	36.248	3.3	0.40	2.42	0.15	120	0.97
12	61.560	U/ml	11	60.963	1.1	0.26	4.08	0.15	120	0.98

Cycle 59 Cycle 60

Cycle Average SDI 0.29 0.25
Cycle Average TS 106 109
Cycle Average %DEV 2.24 1.84

Cycle Average Absolute SDI 0.44 0.44
Cycle Average Absolute %DEV 3.43 3.23



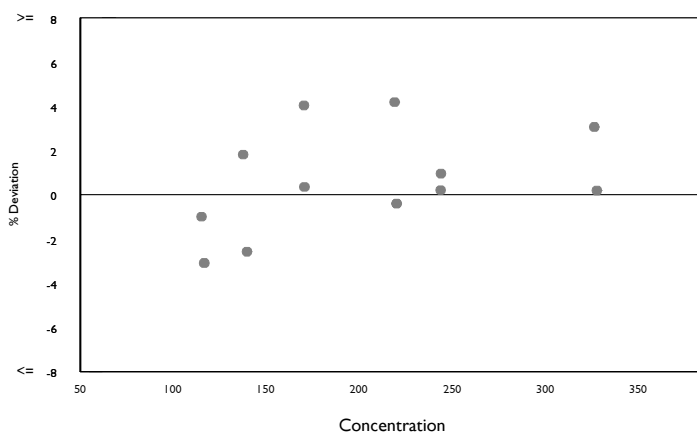
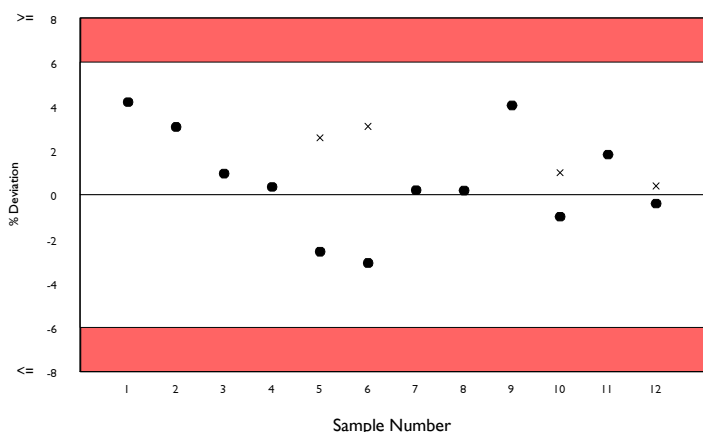
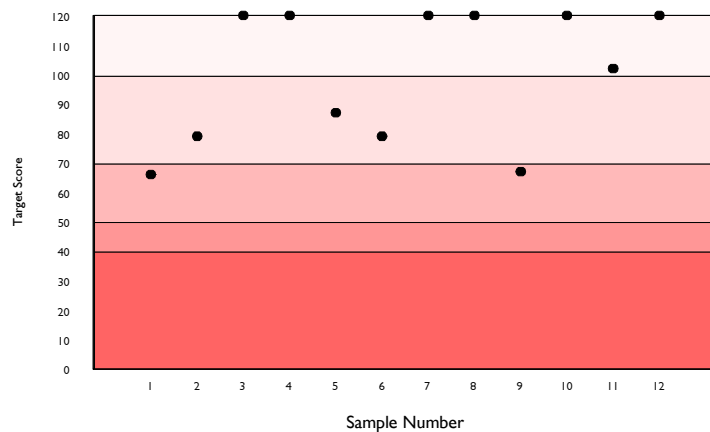
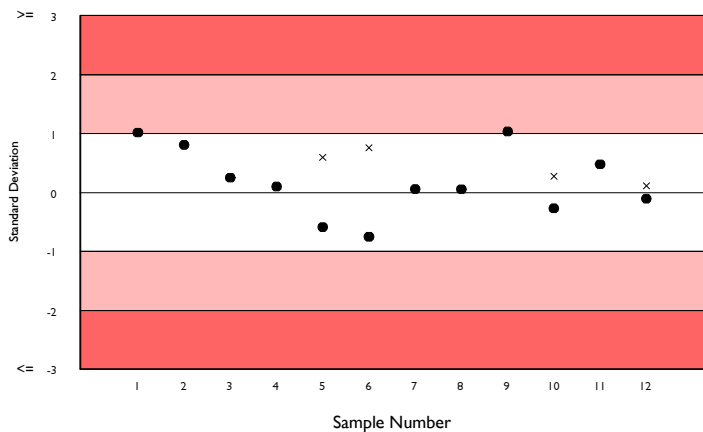
Transferrin, mg/dl

Method: Turbidimetric (IFCC Cal.)
Instrument: Siemens Atellica Solution
Reagent: Siemens

RIQAS TDPA: 6% **Biological Variation:** 3.8%

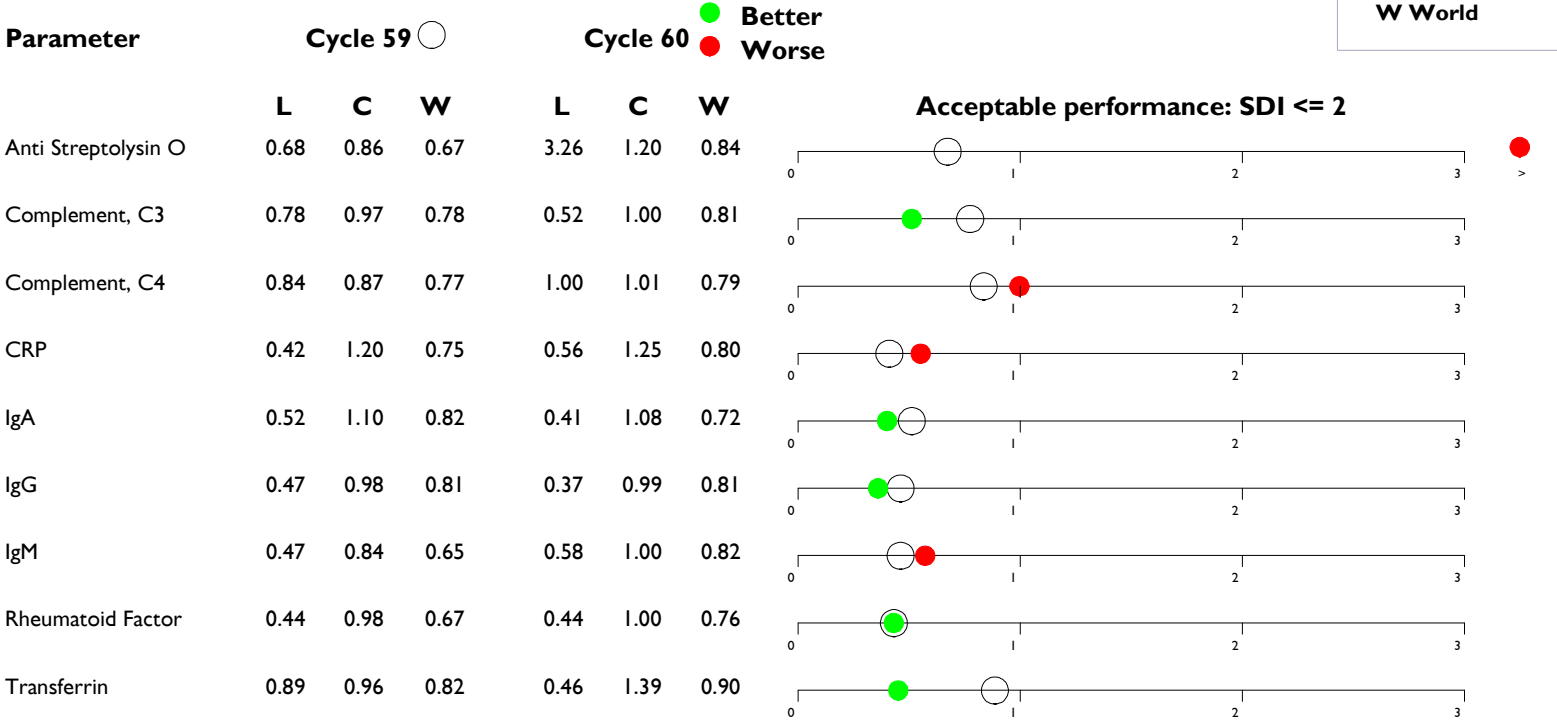
Sample	Result	Unit	N	Mean for Comparison	CV%	Um	SDPA	SDI	TS	%Deviation
1	228.000	mg/dl	6	218.833	3.8	4.27	9.05a	1.01	66	4.19
2	336.000	mg/dl	5	326.000	2.0	3.68	12.44a	0.80	79	3.07
3	246.000	mg/dl	6	243.667	2.5	3.08	9.39a	0.25	120	0.96
4	171.000	mg/dl	5	170.400	1.6	1.50	6.21	0.10	120	0.35
5	136.000	mg/dl	5	139.600	4.3	3.36	6.09a	-0.59	87	-2.58
6	113.000	mg/dl	5	116.600	3.4	2.18	4.77a	-0.75	79	-3.09
7	244.000	mg/dl	8	243.500	2.7	2.86	9.32a	0.05	120	0.21
8	328.000	mg/dl	8	327.375	1.3	1.88	11.94	0.05	120	0.19
9	177.000	mg/dl	8	170.125	3.3	2.47	6.67a	1.03	67	4.04
10	114.000	mg/dl	7	115.143	2.3	1.22	4.20	-0.27	120	-0.99
11	140.000	mg/dl	8	137.500	2.7	1.63	5.26a	0.48	102	1.82
12	219.000	mg/dl	8	219.875	0.9	0.89	8.02	-0.11	120	-0.40

	Cycle 59	Cycle 60
Cycle Average SDI	-0.00	0.17
Cycle Average TS	82	100
Cycle Average %DEV	-0.00	0.65
Cycle Average Absolute SDI	0.89	0.46
Cycle Average Absolute %DEV	3.47	1.82



Cycle Average Absolute SDI

L Laboratory
 C Country
 W World



END OF REPORT



CERTIFICATE OF ACCEPTABLE PERFORMANCE

Biolab SRL
Via Igea 12C
ROMA
00135
ITALY

LABORATORY REF. NO. 260037/C

SPECIFIC PROTEINS - CYCLE 60

19/08/2019

This is to certify that the above participant took part in a cycle of external quality assessment and achieved an acceptable level of performance (Cycle Average Absolute SDI ≤ 2) for the following parameters:

	Cycle Average Absolute SDI
Complement, C3 - Turbidimetric (IFCC Cal.) - Siemens Atellica Solution	0.52
Complement, C4 - Turbidimetric (IFCC Cal.) - Siemens Atellica Solution	1.00
CRP - Turbidimetric (IFCC Cal.) - Siemens Atellica Solution	0.56
IgA - Turbidimetric (IFCC Cal.) - Siemens Atellica Solution	0.41
IgG - Turbidimetric (IFCC Cal.) - Siemens Atellica Solution	0.37
IgM - Turbidimetric (IFCC Cal.) - Siemens Atellica Solution	0.58
Rheumatoid Factor - Turbidimetric (Non IFCC Cal.) - Siemens Atellica Solution	0.44
Transferrin - Turbidimetric (IFCC Cal.) - Siemens Atellica Solution	0.46

This certificate is valid until 22/03/2020

Authorised by:
Stephen Doherty, RIQAS Manager

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NOTIFICATION OF UNACCEPTABLE PERFORMANCE

Biolab SRL
Via Igea 12C
ROMA
00135
ITALY

LABORATORY REF. NO. 260037/C

SPECIFIC PROTEINS - CYCLE 60

19/08/2019

This is to certify that the above participant took part in a cycle of external quality assessment and failed to achieve an acceptable level of performance (Cycle Average Absolute SDI ≤ 2) for the following parameters:

Cycle Average Absolute SDI

Anti Streptolysin O - Turbidimetric (IFCC Cal.) - Siemens Atellica Solution

3.26

This notification is valid until 22/03/2020

Authorised by:
Stephen Doherty, RIQAS Manager

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