

Biolab SRL

MONTHLY HAEMATOLOGY END OF CYCLE REPORT

CYCLE 12

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Haemoglobin, g/dl

Method: Siemens/Bayer Advia 120/2120

Instrument: Siemens Advia 120/2120

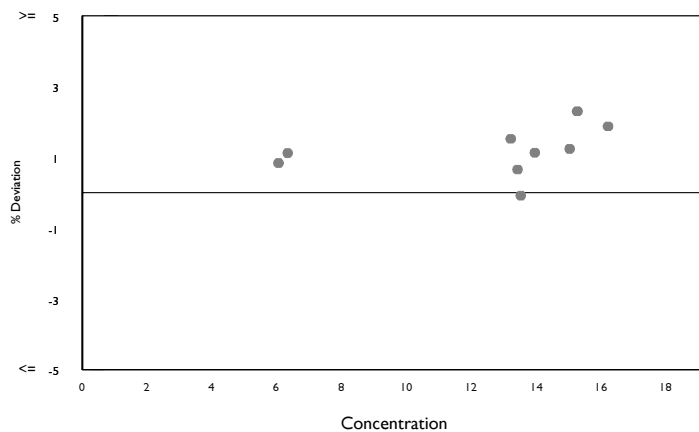
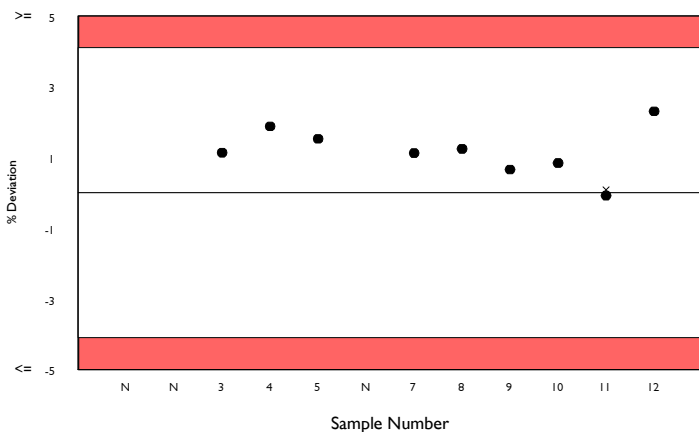
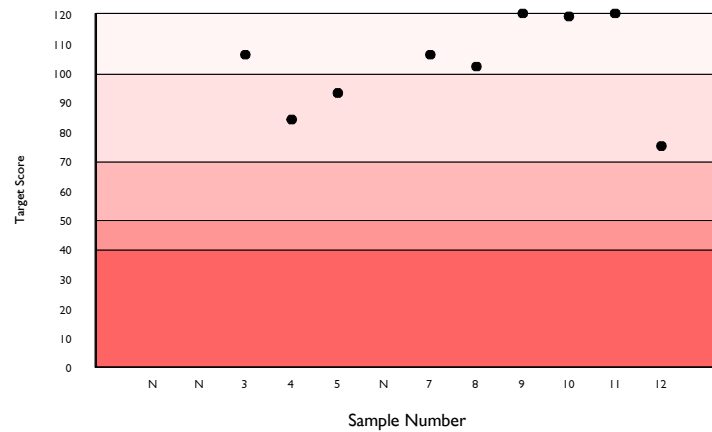
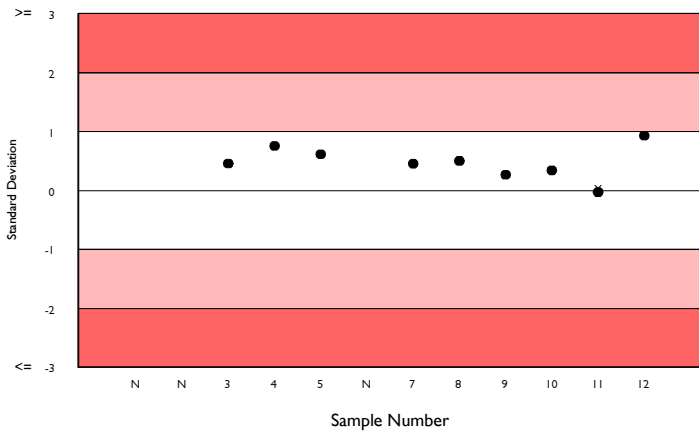
Reagent: Siemens

RIQAS TDPA: 4.1%

Biological Variation: 4.19%

Sample	Result	Unit	N	Mean for Comparison	CV%	Um	SDPA	SDI	TS	%Deviation
1	No Result	g/dl	237	M 6.489	1.7	0.01	0.16			
2	No Result	g/dl	271	M 12.500	1.6	0.02	0.31			
3	14.100	g/dl	282	M 13.942	1.5	0.02	0.35	0.45	106	1.13
4	16.500	g/dl	263	M 16.196	1.4	0.02	0.40	0.75	84	1.88
5	13.400	g/dl	268	M 13.199	1.6	0.02	0.33	0.61	93	1.52
6	No Result	g/dl	290	M 6.154	2.0	0.01	0.15			
7	6.400	g/dl	279	M 6.329	1.7	0.01	0.16	0.45	106	1.12
8	15.200	g/dl	281	M 15.014	1.3	0.01	0.37	0.50	102	1.24
9	13.500	g/dl	304	M 13.412	1.8	0.02	0.33	0.26	120	0.66
10	6.100	g/dl	200	M 6.049	2.0	0.01	0.15	0.34	119	0.84
11	13.500	g/dl	289	M 13.511	1.4	0.01	0.34	-0.03	120	-0.08
12	15.600	g/dl	296	M 15.249	1.4	0.02	0.38	0.92	75	2.30

	Cycle 11	Cycle 12
Cycle Average SDI	0.66	0.47
Cycle Average TS	89	103
Cycle Average %DEV	1.74	1.18
Cycle Average Absolute SDI	0.71	0.48
Cycle Average Absolute %DEV	1.84	1.20



Haematocrit (HCT), %

Method: Siemens/Bayer Advia 120/2120

Instrument: Siemens Advia 120/2120

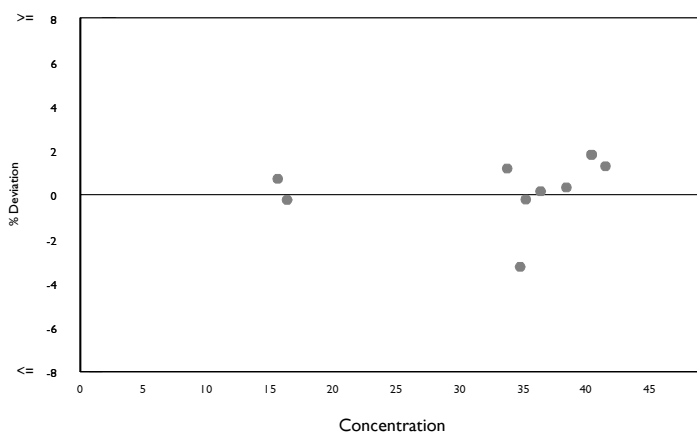
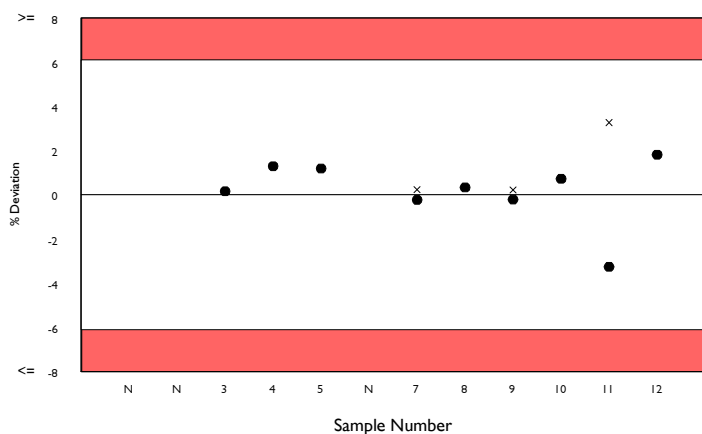
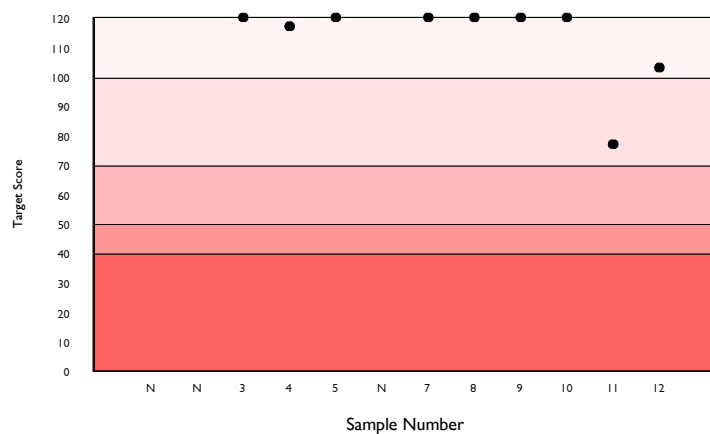
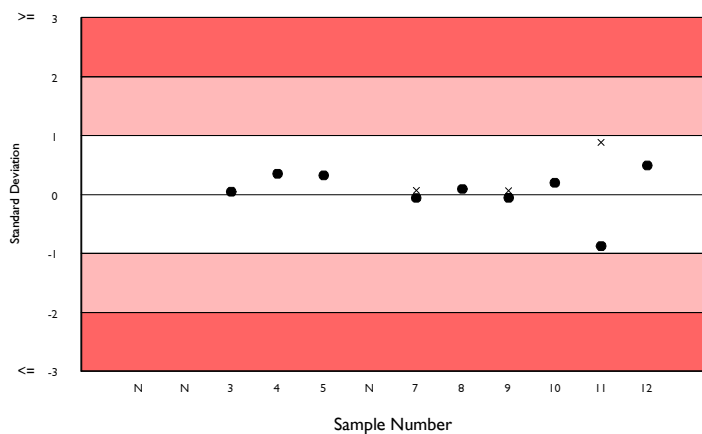
Reagent: Siemens

RIQAS TDPA: 6.1%

Biological Variation: 3.97%

Sample	Result	Unit	N	Mean for Comparison	CV%	Um	SDPA	SDI	TS	%Deviation
1	No Result	%	241	M 16.771	2.9	0.04	0.62			
2	No Result	%	270	M 32.173	2.9	0.07	1.19			
3	36.400	%	288	M 36.343	2.7	0.07	1.35	0.04	120	0.16
4	42.000	%	268	M 41.464	2.8	0.09	1.54	0.35	117	1.29
5	34.100	%	272	M 33.700	2.8	0.07	1.25	0.32	120	1.19
6	No Result	%	280	M 16.566	3.0	0.04	0.61			
7	16.300	%	272	M 16.338	2.7	0.03	0.61	-0.06	120	-0.23
8	38.500	%	286	M 38.373	2.5	0.07	1.42	0.09	120	0.33
9	35.100	%	294	M 35.176	2.9	0.07	1.30	-0.06	120	-0.22
10	15.700	%	191	M 15.588	2.5	0.04	0.58	0.19	120	0.72
11	33.600	%	292	M 34.733	2.7	0.07	1.29	-0.88	77	-3.26
12	41.100	%	289	M 40.368	2.6	0.08	1.50	0.49	103	1.81

	Cycle 11	Cycle 12
Cycle Average SDI	0.62	0.05
Cycle Average TS	92	113
Cycle Average %DEV	2.30	0.20
Cycle Average Absolute SDI	0.64	0.28
Cycle Average Absolute %DEV	2.36	1.02



MCH, pg

Method: Siemens/Bayer Advia 120/2120

Instrument: Siemens Advia 120/2120

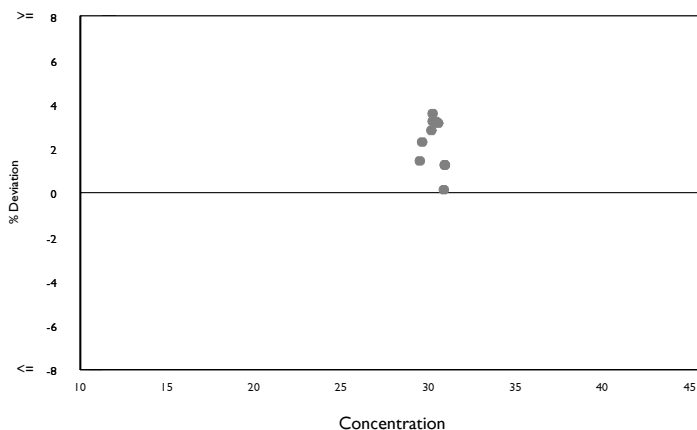
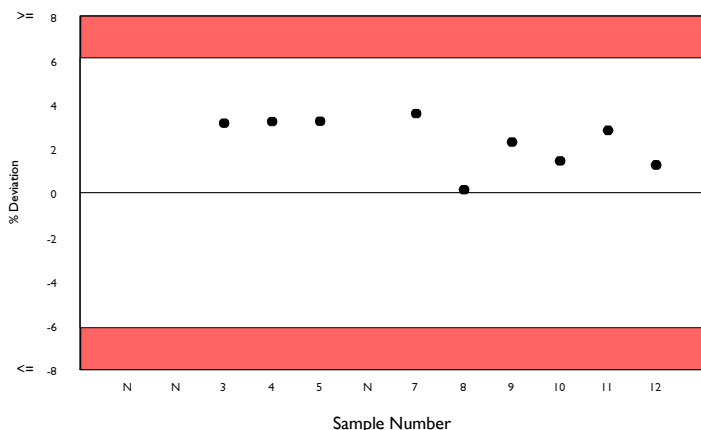
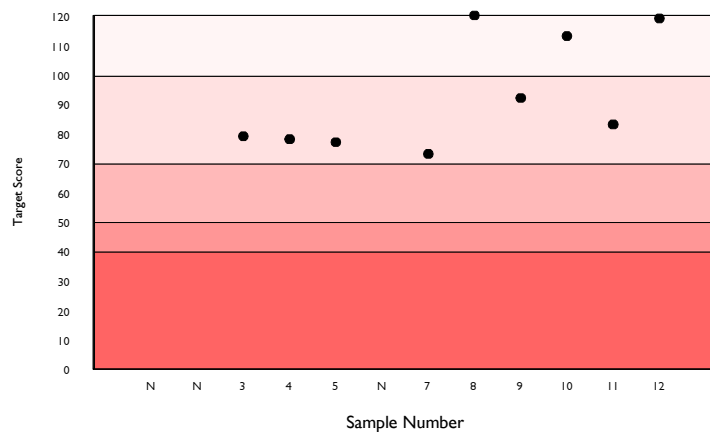
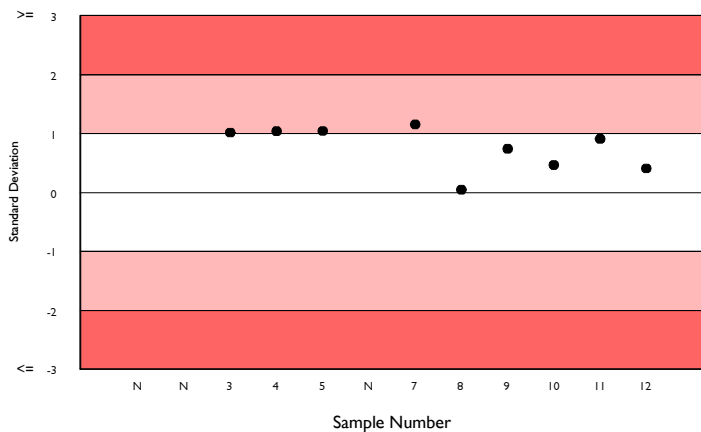
Reagent: Siemens

RIQAS TDPA: 6.1%

Biological Variation: 2.5%

Sample	Result	Unit	N	Mean for Comparison	CV%	Um	SDPA	SDI	TS	%Deviation
1	No Result	pg	236	M 30.307	2.0	0.05	0.94			
2	No Result	pg	269	M 31.056	1.9	0.05	0.97			
3	31.500	pg	287	M 30.539	2.0	0.04	0.95	1.01	79	3.15
4	31.400	pg	265	M 30.419	1.8	0.04	0.95	1.04	78	3.22
5	31.200	pg	274	M 30.222	2.0	0.04	0.94	1.04	77	3.24
6	No Result	pg	278	M 30.664	3.2	0.07	0.95			
7	31.300	pg	271	M 30.217	2.1	0.05	0.94	1.15	73	3.58
8	30.900	pg	291	M 30.858	2.0	0.05	0.96	0.04	120	0.14
9	30.300	pg	289	M 29.620	2.1	0.05	0.92	0.74	92	2.29
10	29.900	pg	189	M 29.476	2.0	0.05	0.92	0.46	113	1.44
11	31.000	pg	288	M 30.149	1.9	0.04	0.94	0.91	83	2.82
12	31.300	pg	294	M 30.912	2.1	0.05	0.96	0.40	119	1.26

	Cycle 11	Cycle 12
Cycle Average SDI	0.50	0.75
Cycle Average TS	99	93
Cycle Average %DEV	1.57	2.35
Cycle Average Absolute SDI	0.62	0.75
Cycle Average Absolute %DEV	1.94	2.35



MCHC, g/dl

Method: Siemens/Bayer Advia 120/2120

Instrument: Siemens Advia 120/2120

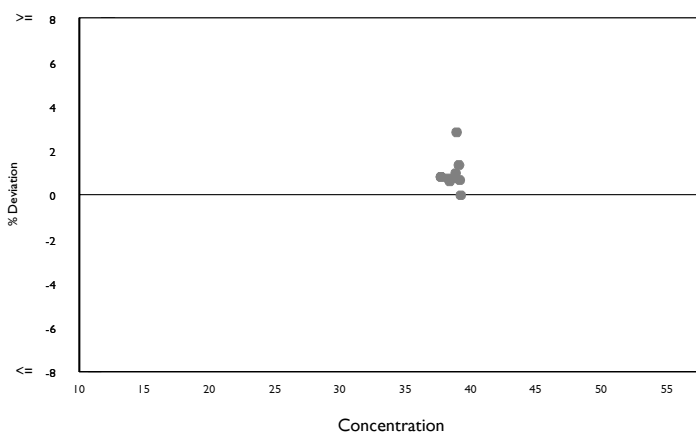
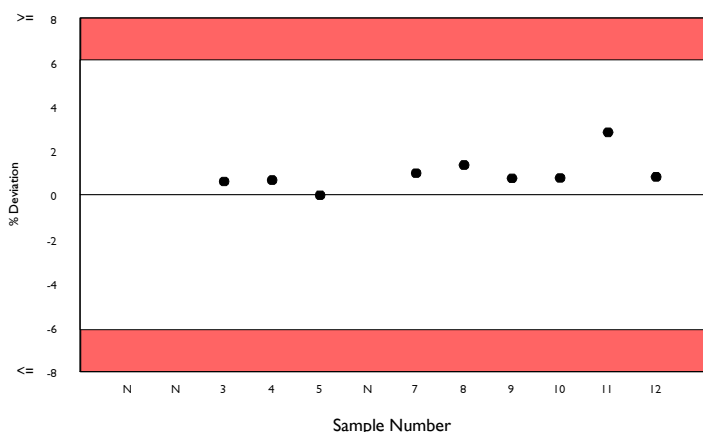
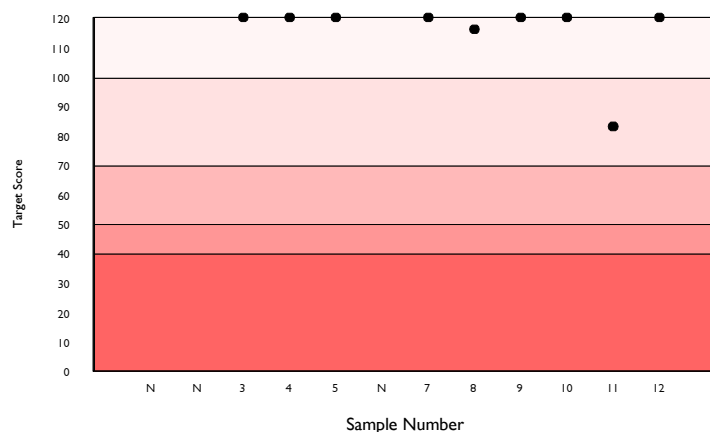
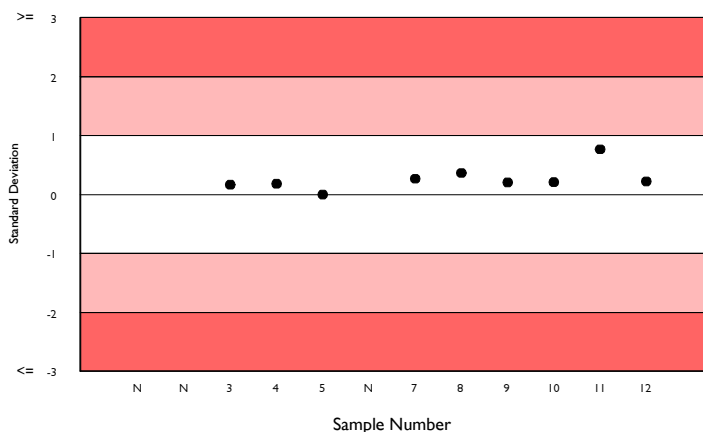
Reagent: Siemens

RIQAS TDPA: 6.1%

Biological Variation: 1.27%

Sample	Result	Unit	N	Mean for Comparison	CV%	Um	SDPA	SDI	TS	%Deviation
1	No Result	g/dl	230	M 38.747	2.6	0.08	1.44			
2	No Result	g/dl	269	M 38.835	2.5	0.07	1.44			
3	38.600	g/dl	281	M 38.370	2.6	0.07	1.42	0.16	120	0.60
4	39.400	g/dl	264	M 39.141	2.7	0.08	1.45	0.18	120	0.66
5	39.200	g/dl	271	M 39.208	2.6	0.08	1.45	-0.01	120	-0.02
6	No Result	g/dl	280	M 37.127	3.5	0.10	1.38			
7	39.200	g/dl	272	M 38.821	2.8	0.08	1.44	0.26	120	0.98
8	39.600	g/dl	285	M 39.075	2.6	0.08	1.45	0.36	116	1.34
9	38.500	g/dl	287	M 38.216	2.7	0.08	1.42	0.20	120	0.74
10	39.100	g/dl	190	M 38.804	2.8	0.10	1.44	0.21	120	0.76
11	40.000	g/dl	282	M 38.901	2.6	0.08	1.44	0.76	83	2.82
12	38.000	g/dl	291	M 37.696	2.7	0.07	1.40	0.22	120	0.81

	Cycle 11	Cycle 12
Cycle Average SDI	-0.14	0.26
Cycle Average TS	105	115
Cycle Average %DEV	-0.51	0.97
Cycle Average Absolute SDI	0.44	0.26
Cycle Average Absolute %DEV	1.62	0.97



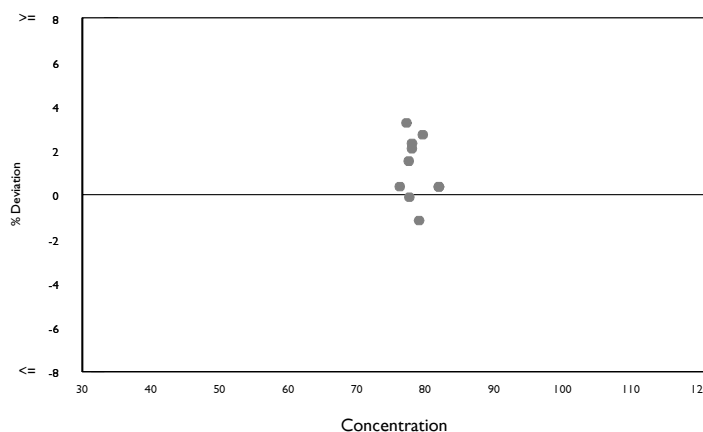
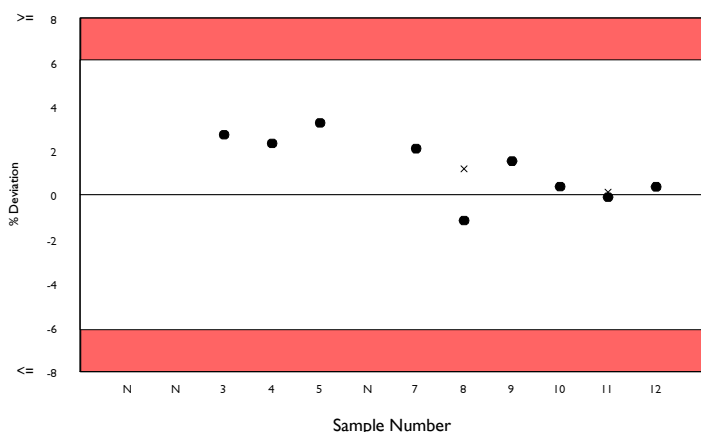
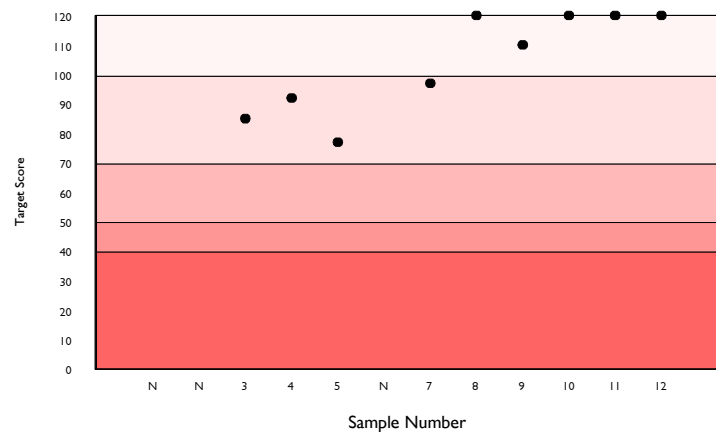
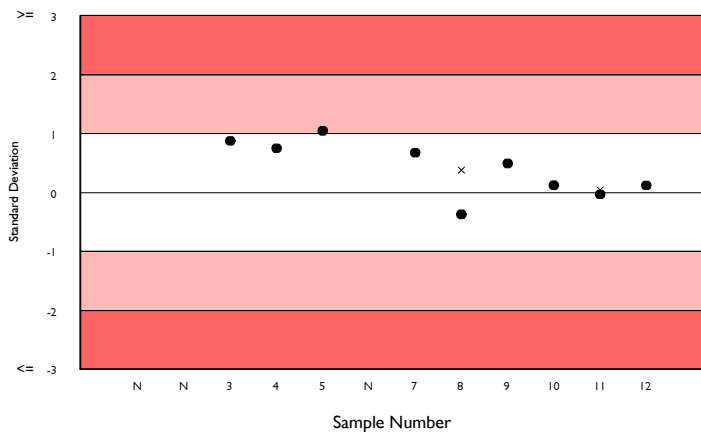
MCV, fL

Method: Siemens/Bayer Advia 120/2120
Instrument: Siemens Advia 120/2120
Reagent: Siemens

RIQAS TDPA: 6.1% **Biological Variation:** 2.42%

Sample	Result	Unit	N	Mean for Comparison	CV%	Um	SDPA	SDI	TS	%Deviation
1	No Result	fL	236	M 78.283	2.4	0.15	2.44			
2	No Result	fL	269	M 79.973	2.0	0.12	2.49			
3	81.700	fL	282	M 79.542	2.2	0.13	2.48	0.87	85	2.71
4	79.800	fL	264	M 77.989	2.2	0.13	2.43	0.75	92	2.32
5	79.700	fL	277	M 77.193	2.3	0.14	2.40	1.04	77	3.25
6	No Result	fL	284	M 82.677	4.4	0.27	2.57			
7	79.600	fL	269	M 77.972	2.3	0.13	2.43	0.67	97	2.09
8	78.100	fL	286	M 79.023	2.2	0.13	2.46	-0.38	120	-1.17
9	78.700	fL	290	M 77.521	2.6	0.15	2.41	0.49	110	1.52
10	76.500	fL	190	M 76.217	2.1	0.14	2.37	0.12	120	0.37
11	77.500	fL	286	M 77.588	2.1	0.12	2.41	-0.04	120	-0.11
12	82.200	fL	291	M 81.906	2.2	0.13	2.55	0.12	120	0.36

	Cycle 11	Cycle 12
Cycle Average SDI	0.68	0.40
Cycle Average TS	96	105
Cycle Average %DEV	2.12	1.26
Cycle Average Absolute SDI	0.68	0.50
Cycle Average Absolute %DEV	2.12	1.54



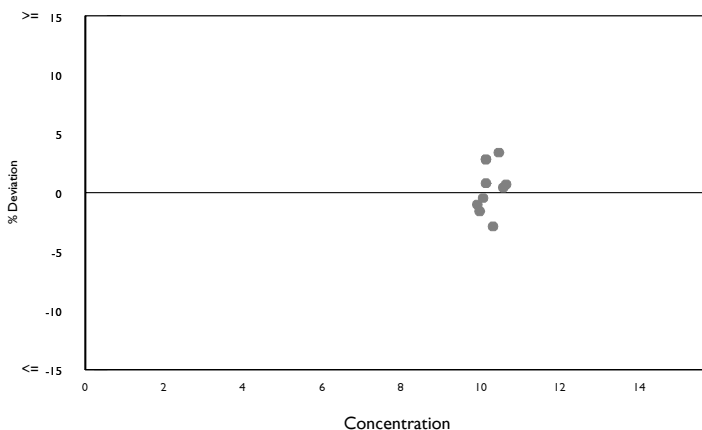
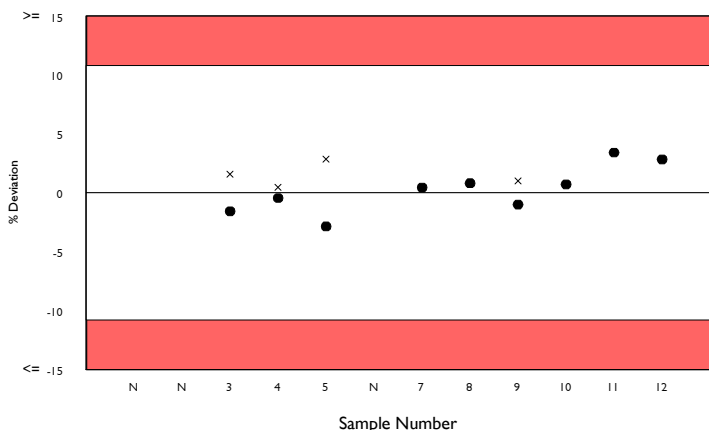
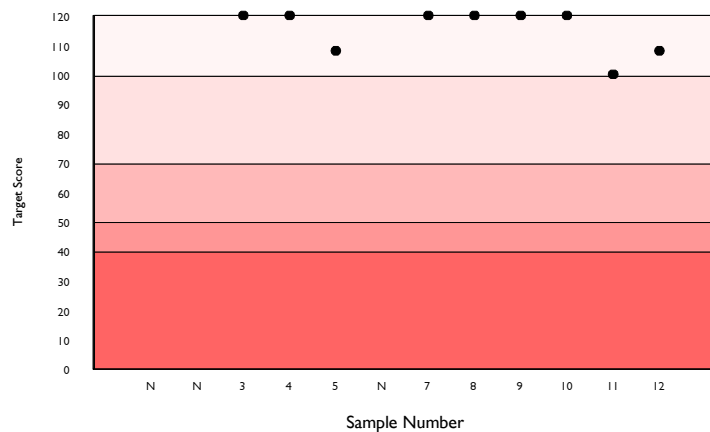
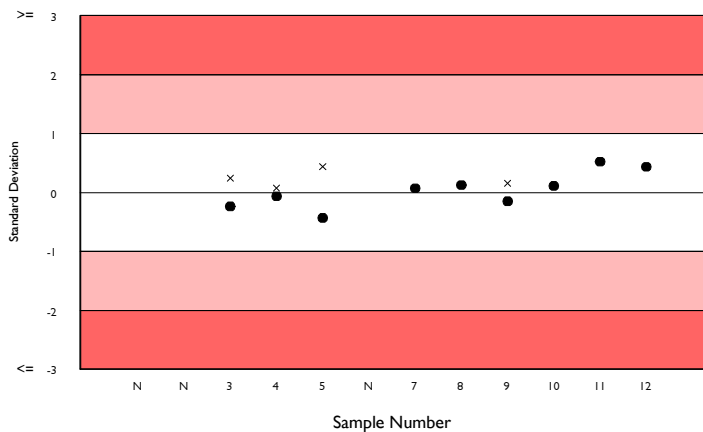
Mean Platelet Volume, fL

Method: Siemens/Bayer Advia 120/2120
Instrument: Siemens Advia 120/2120
Reagent: Siemens

RIQAS TDPA: 10.8% **Biological Variation:** 5.8%

Sample	Result	Unit	N	Mean for Comparison	CV%	Um	SDPA	SDI	TS	%Deviation
1	No Result	fL	162	M 10.374	6.5	0.07	0.68			
2	No Result	fL	191	M 10.343	5.7	0.05	0.68			
3	9.800	fL	205	M 9.957	5.2	0.05	0.65	-0.24	120	-1.57
4	10.000	fL	191	M 10.046	5.5	0.05	0.66	-0.07	120	-0.45
5	10.000	fL	196	M 10.294	5.6	0.05	0.68	-0.44	108	-2.86
6	No Result	fL	200	M 10.801	7.5	0.07	0.71			
7	10.600	fL	193	M 10.554	6.5	0.06	0.69	0.07	120	0.44
8	10.200	fL	198	M 10.118	4.8	0.04	0.66	0.12	120	0.81
9	9.800	fL	207	M 9.899	5.5	0.05	0.65	-0.15	120	-1.00
10	10.700	fL	148	M 10.625	6.8	0.07	0.70	0.11	120	0.71
11	10.800	fL	203	M 10.444	5.5	0.05	0.69	0.52	100	3.41
12	10.400	fL	202	M 10.114	5.9	0.05	0.66	0.43	108	2.83

	Cycle 11	Cycle 12
Cycle Average SDI	-0.16	0.04
Cycle Average TS	113	115
Cycle Average %DEV	-1.10	0.26
Cycle Average Absolute SDI	0.28	0.24
Cycle Average Absolute %DEV	1.94	1.56



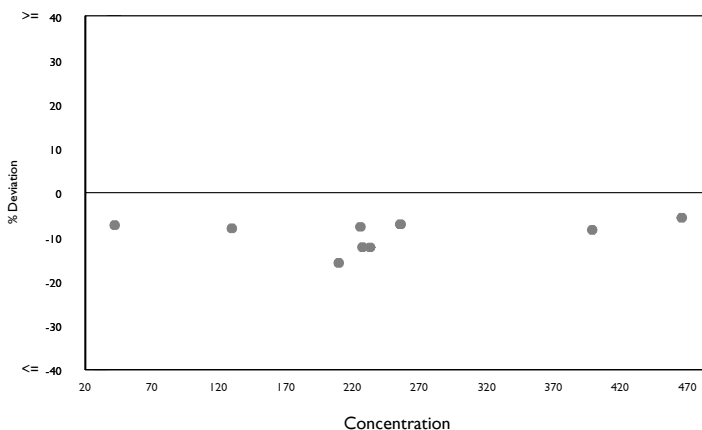
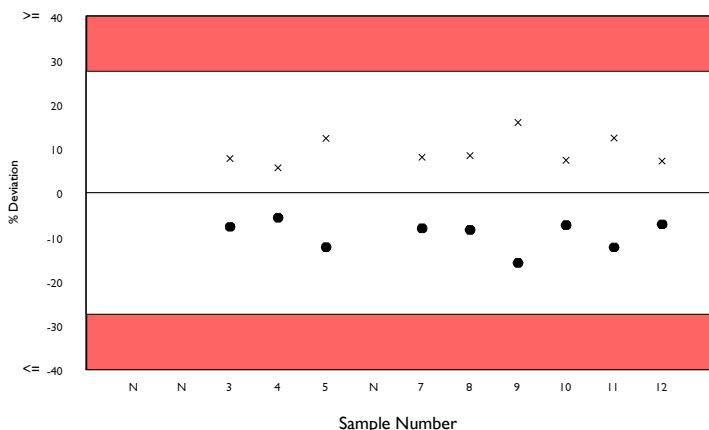
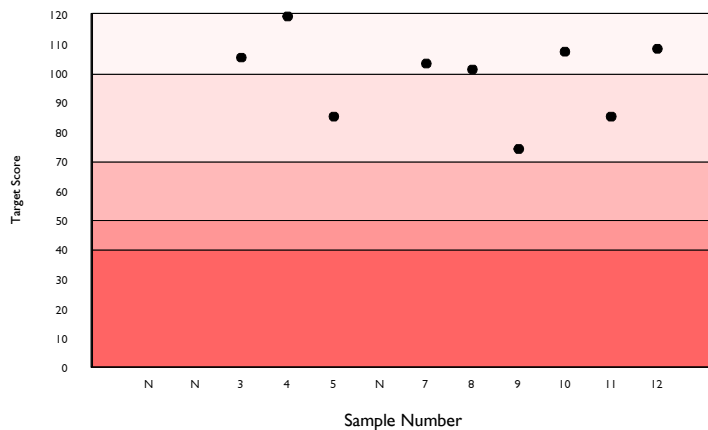
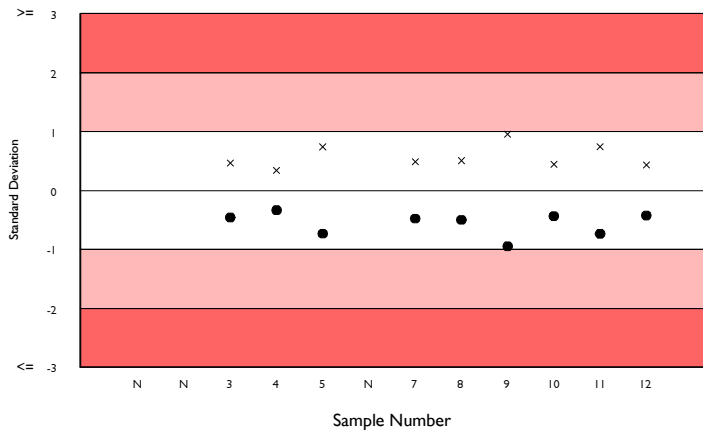
Platelets (Optical Count), x10³/ul

Method: Siemens/Bayer Advia 120/2120
Instrument: Siemens Advia 120/2120
Reagent: Siemens

RIQAS TDPA: 27.5% **Biological Variation:** 13.4%

Sample	Result	Unit	N	Mean for Comparison	CV%	Um	SDPA	SDI	TS	%Deviation
1	No Result	x10 ³ /ul	231	M 45.781	8.4	0.32	7.65			
2	No Result	x10 ³ /ul	266	M 223.141	6.4	1.10	37.31			
3	208.000	x10 ³ /ul	283	M 225.428	6.1	1.02	37.69	-0.46	105	-7.73
4	439.000	x10 ³ /ul	264	M 465.286	5.8	2.07	77.79	-0.34	119	-5.65
5	199.000	x10 ³ /ul	265	M 226.961	6.5	1.14	37.95	-0.74	85	-12.32
6	No Result	x10 ³ /ul	270	M 40.984	10.2	0.32	6.85			
7	119.000	x10 ³ /ul	272	M 129.419	7.9	0.77	21.64	-0.48	103	-8.05
8	365.000	x10 ³ /ul	284	M 398.511	5.5	1.63	66.63	-0.50	101	-8.41
9	176.000	x10 ³ /ul	288	M 209.222	7.4	1.15	34.98	-0.95	74	-15.88
10	39.000	x10 ³ /ul	186	M 42.092	9.1	0.35	7.04	-0.44	107	-7.35
11	204.000	x10 ³ /ul	284	M 232.754	5.6	0.96	38.91	-0.74	85	-12.35
12	237.000	x10 ³ /ul	288	M 255.273	6.1	1.16	42.68	-0.43	108	-7.16

	Cycle 11	Cycle 12
Cycle Average SDI	-0.50	-0.56
Cycle Average TS	100	99
Cycle Average %DEV	-6.18	-9.43
Cycle Average Absolute SDI	0.50	0.56
Cycle Average Absolute %DEV	6.18	9.43



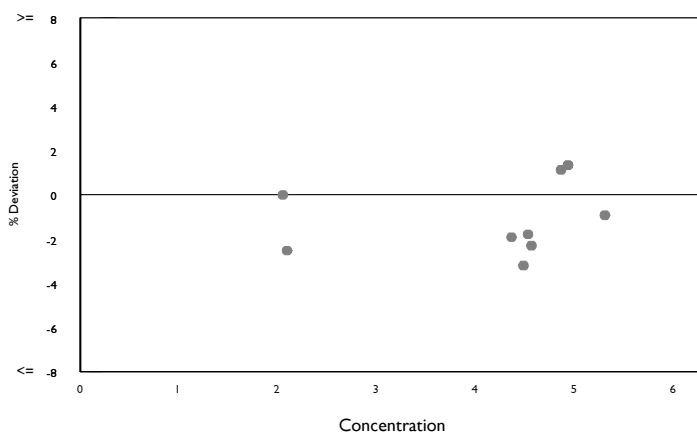
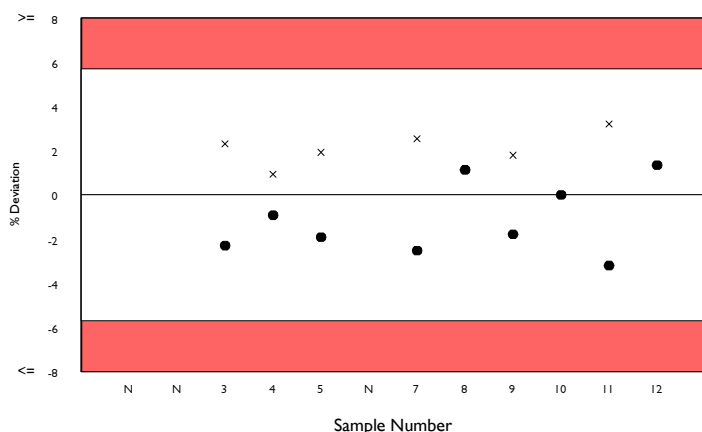
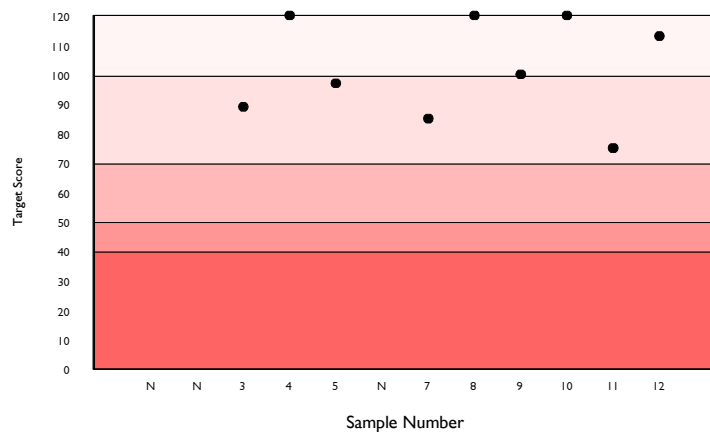
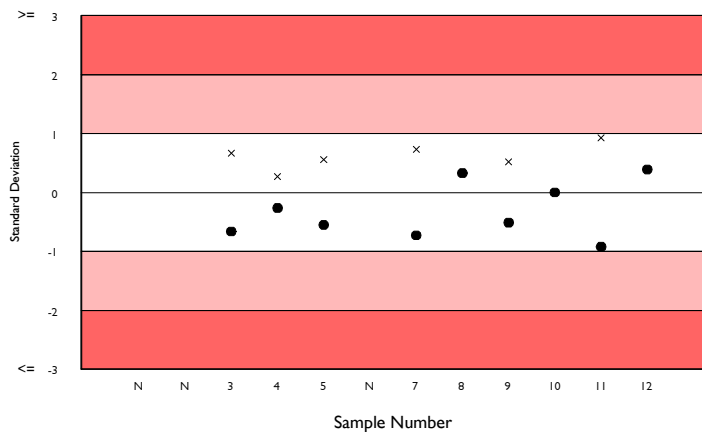
RBC (Optical Count), x10⁶/ul

Method: Siemens/Bayer Advia 120/2120
Instrument: Siemens Advia 120/2120
Reagent: Siemens

RIQAS TDPA: 5.7% **Biological Variation:** 4.4%

Sample	Result	Unit	N	Mean for Comparison	CV%	Um	SDPA	SDI	TS	%Deviation
1	No Result	x10 ⁶ /ul	235	M 2.141	1.8	0.00	0.07			
2	No Result	x10 ⁶ /ul	263	M 4.029	2.1	0.01	0.14			
3	4.460	x10 ⁶ /ul	280	M 4.565	1.8	0.01	0.16	-0.66	89	-2.30
4	5.260	x10 ⁶ /ul	265	M 5.309	1.9	0.01	0.18	-0.27	120	-0.93
5	4.280	x10 ⁶ /ul	268	M 4.364	2.1	0.01	0.15	-0.55	97	-1.92
6	No Result	x10 ⁶ /ul	280	M 2.007	2.9	0.00	0.07			
7	2.040	x10 ⁶ /ul	273	M 2.093	1.8	0.00	0.07	-0.73	85	-2.53
8	4.920	x10 ⁶ /ul	285	M 4.865	1.8	0.01	0.17	0.33	120	1.13
9	4.450	x10 ⁶ /ul	290	M 4.531	2.1	0.01	0.16	-0.52	100	-1.79
10	2.050	x10 ⁶ /ul	187	M 2.050	1.6	0.00	0.07	-0.00	120	-0.01
11	4.340	x10 ⁶ /ul	289	M 4.484	1.8	0.01	0.16	-0.93	75	-3.20
12	5.000	x10 ⁶ /ul	283	M 4.934	1.8	0.01	0.17	0.39	113	1.34

	Cycle 11	Cycle 12
Cycle Average SDI	0.02	-0.33
Cycle Average TS	113	102
Cycle Average %DEV	0.06	-1.13
Cycle Average Absolute SDI	0.29	0.49
Cycle Average Absolute %DEV	1.16	1.68



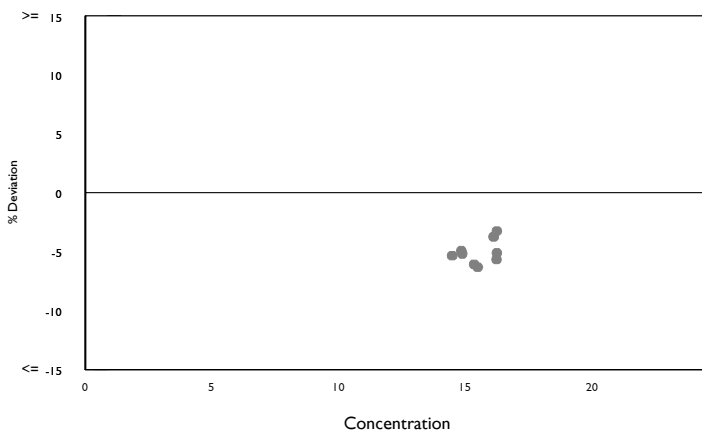
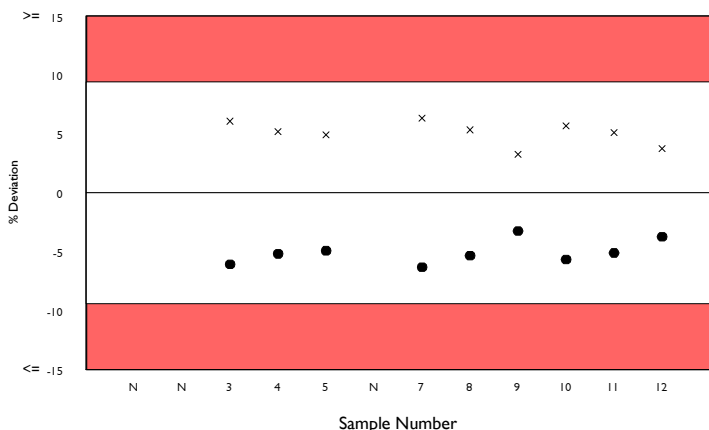
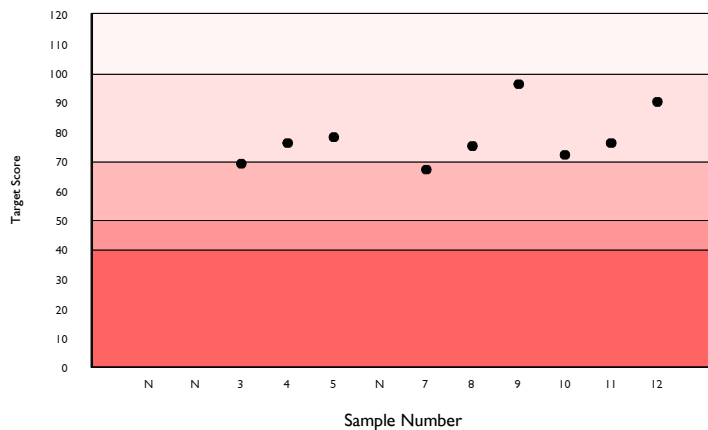
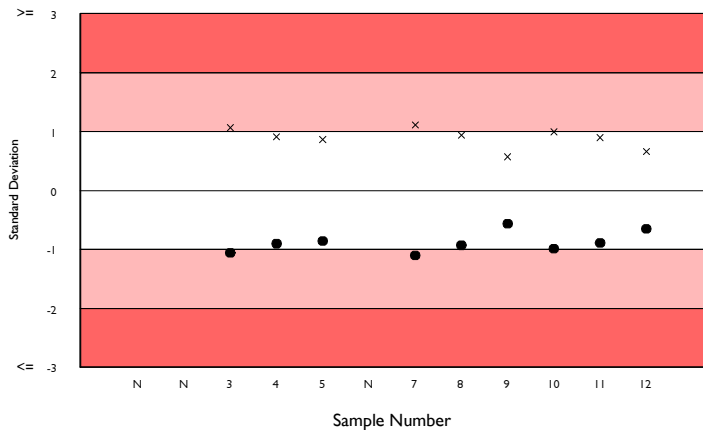
Red Cell Dist. Width CV, %

Method: Siemens/Bayer Advia 120/2120
Instrument: Siemens Advia 120/2120
Reagent: Siemens

RIQAS TDPA: 9.4% **Biological Variation:** 4.6%

Sample	Result	Unit	N	Mean for Comparison	CV%	Um	SDPA	SDI	TS	%Deviation
1	No Result	%	180	M 15.585	3.3	0.05	0.89			
2	No Result	%	203	M 15.813	2.9	0.04	0.90			
3	14.400	%	215	M 15.330	3.3	0.04	0.88	-1.06	69	-6.07
4	14.100	%	199	M 14.870	3.3	0.04	0.85	-0.91	76	-5.18
5	14.100	%	209	M 14.830	3.5	0.05	0.85	-0.86	78	-4.92
6	No Result	%	208	M 17.366	1.9	0.03	0.99			
7	14.500	%	208	M 15.478	3.0	0.04	0.88	-1.11	67	-6.32
8	13.700	%	215	M 14.471	3.9	0.05	0.83	-0.93	75	-5.33
9	15.700	%	221	M 16.227	3.7	0.05	0.93	-0.57	96	-3.25
10	15.300	%	159	M 16.219	2.8	0.05	0.93	-0.99	72	-5.66
11	15.400	%	219	M 16.228	3.2	0.04	0.93	-0.89	76	-5.10
12	15.500	%	215	M 16.102	3.2	0.04	0.92	-0.65	90	-3.74

	Cycle 11	Cycle 12
Cycle Average SDI	-0.87	-0.89
Cycle Average TS	80	78
Cycle Average %DEV	-5.05	-5.06
Cycle Average Absolute SDI	0.87	0.89
Cycle Average Absolute %DEV	5.05	5.06



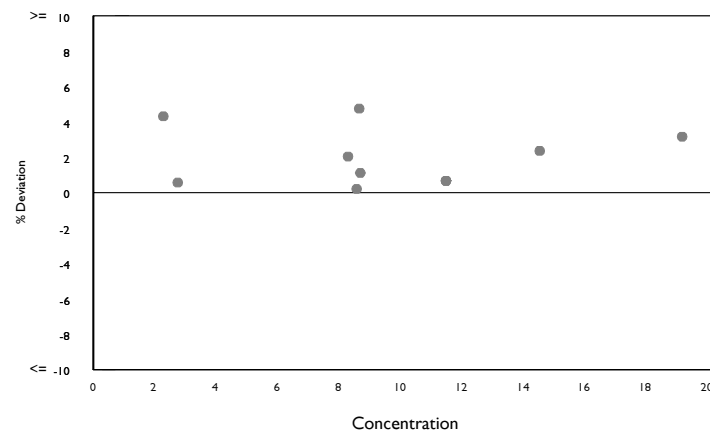
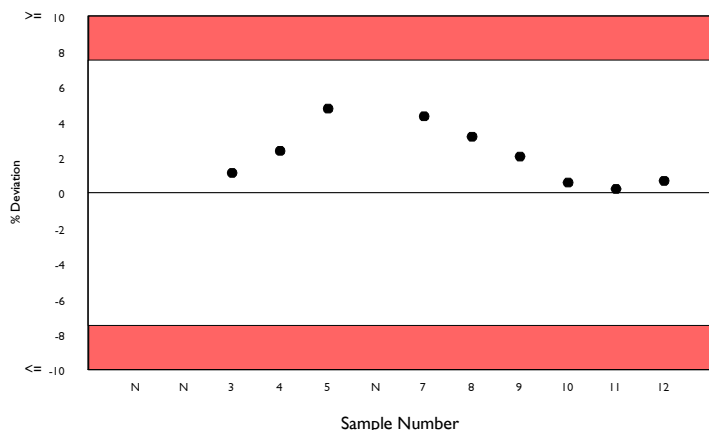
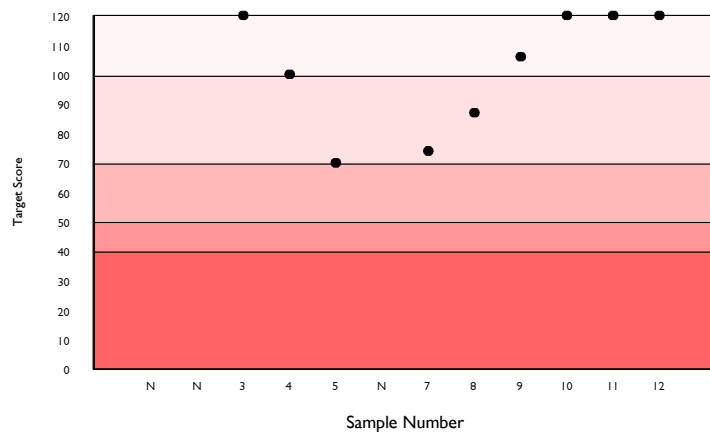
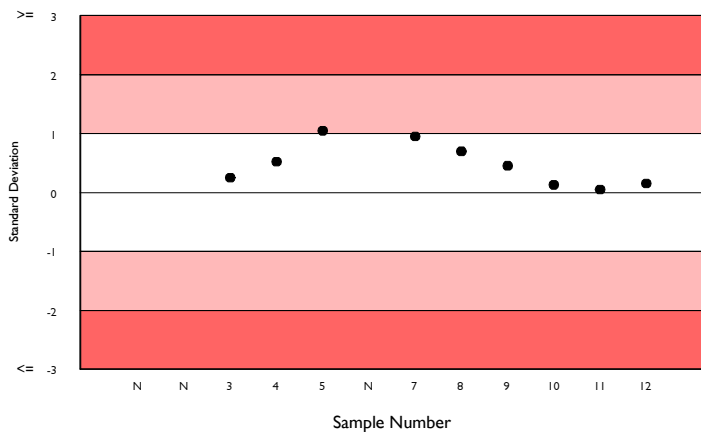
WBC (Optical Count), x10³/ul

Method: Siemens/Bayer Advia 120/2120
Instrument: Siemens Advia 120/2120
Reagent: Siemens

RIQAS TDPA: 7.5% **Biological Variation:** 15.49%

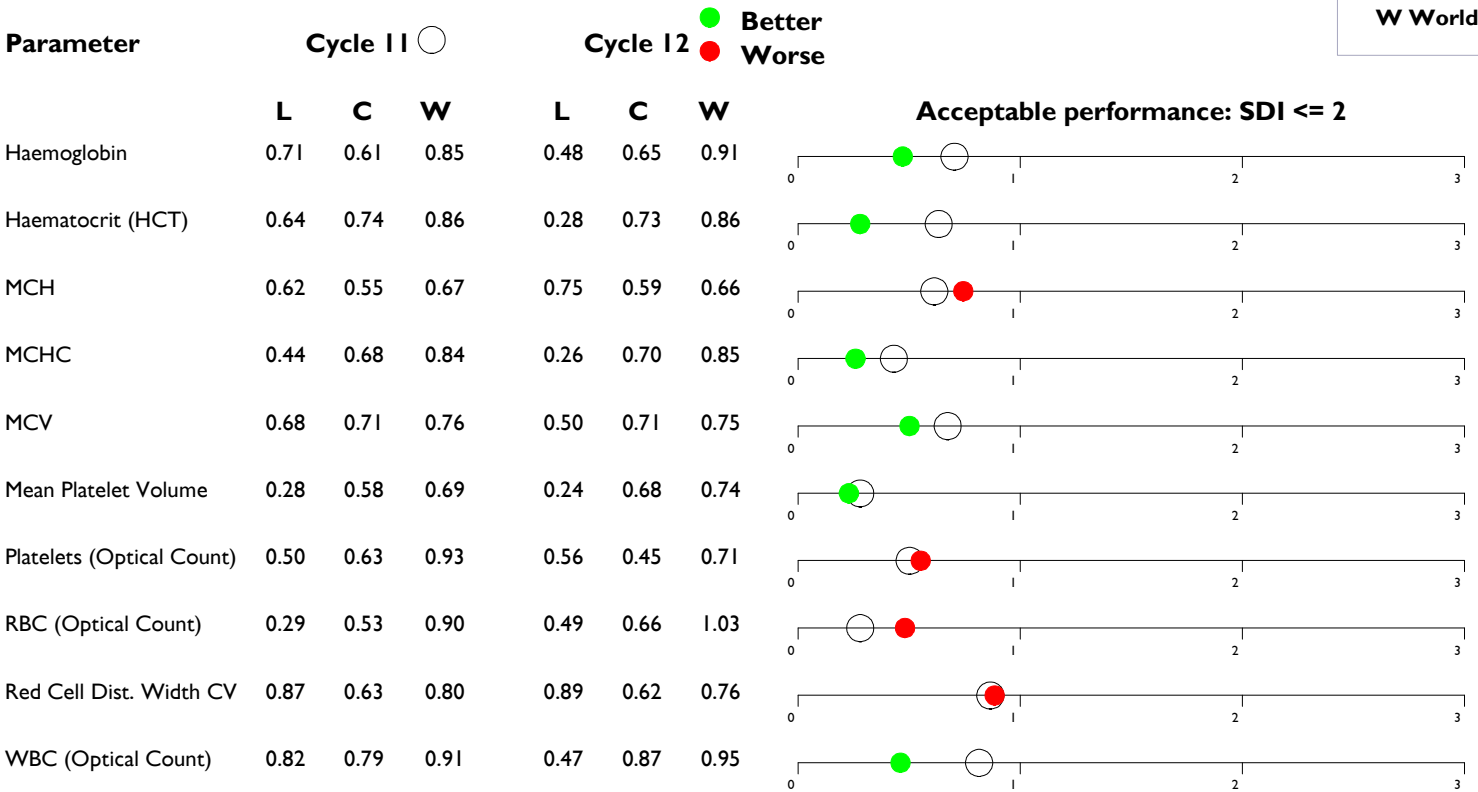
Sample	Result	Unit	N	Mean for Comparison	CV%	Um	SDPA	SDI	TS	%Deviation
1	No Result	x10 ³ /ul	232	M 2.720	3.8	0.01	0.12			
2	No Result	x10 ³ /ul	262	M 15.175	3.2	0.04	0.69			
3	8.790	x10 ³ /ul	278	M 8.692	3.3	0.02	0.40	0.25	120	1.12
4	14.870	x10 ³ /ul	262	M 14.526	4.1	0.05	0.66	0.52	100	2.37
5	9.070	x10 ³ /ul	271	M 8.658	3.9	0.03	0.39	1.04	70	4.76
6	No Result	x10 ³ /ul	281	M 2.710	4.0	0.01	0.12			
7	2.380	x10 ³ /ul	271	M 2.281	3.9	0.01	0.10	0.95	74	4.32
8	19.770	x10 ³ /ul	278	M 19.163	3.5	0.05	0.87	0.70	87	3.17
9	8.460	x10 ³ /ul	290	M 8.290	3.6	0.02	0.38	0.45	106	2.05
10	2.770	x10 ³ /ul	185	M 2.754	3.9	0.01	0.13	0.13	120	0.58
11	8.590	x10 ³ /ul	282	M 8.571	3.3	0.02	0.39	0.05	120	0.22
12	11.560	x10 ³ /ul	288	M 11.483	3.6	0.03	0.52	0.15	120	0.67

	Cycle 11	Cycle 12
Cycle Average SDI	0.71	0.47
Cycle Average TS	86	102
Cycle Average %DEV	3.61	2.14
Cycle Average Absolute SDI	0.82	0.47
Cycle Average Absolute %DEV	4.19	2.14



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/D

MONTHLY HAEMATOLOGY - CYCLE 12

09/12/2019

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
Haemoglobin - Siemens/Bayer Advia 120/2120	0.48
Haematocrit (HCT) - Siemens/Bayer Advia 120/2120	0.28
MCH - Siemens/Bayer Advia 120/2120	0.75
MCHC - Siemens/Bayer Advia 120/2120	0.26
MCV - Siemens/Bayer Advia 120/2120	0.50
Mean Platelet Volume - Siemens/Bayer Advia 120/2120	0.24
Platelets (Optical Count) - Siemens/Bayer Advia 120/2120	0.56
RBC (Optical Count) - Siemens/Bayer Advia 120/2120	0.49
Red Cell Dist. Width CV - Siemens/Bayer Advia 120/2120	0.89
WBC (Optical Count) - Siemens/Bayer Advia 120/2120	0.47

This certificate is valid until 10/01/2021

Authorised by:
Stephen Doherty, RIQAS Manager

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