Sysmex CS 5100
Flag Interpretations

By

Parveen Bahel

What do I do with a sample error

- Evaluate Sample Integrity
  - Tube Fill
  - Check for Lipemia, Hemolysis
- Look at Reaction Curve, Evaluation Data and Error code
- Do you see Typical Clot Progression?
- Does the 50% value fit the reaction curve?

A. EVALUATION ALGORITHM
3 evaluation algorithms –

- The Percentage Detection Method for Coagulation Assays
- The Rate Method for Chromogenic Assays
- Immunoassays and the VLin Integral Method for Immunoassays.

Each evaluation algorithm is specified in the preset configuration of the test protocol. Criteria are established to determine either the point of specific clotting time or optical density for the kinetic reaction under measurement.

Evaluation Method	Description
Percentage Detection Method	This method is used for the evaluation of Clotting Assays. The clotting time is measured.
Rate Method	This method is used for the evaluation of Chromogenic Assays and Immunoassays. The change in light absorbance is calculated.
VLin Integral Method	This method is used for the evaluation of Immunoassays. The change in light absorbance is calculated.

Percentage Detection Method

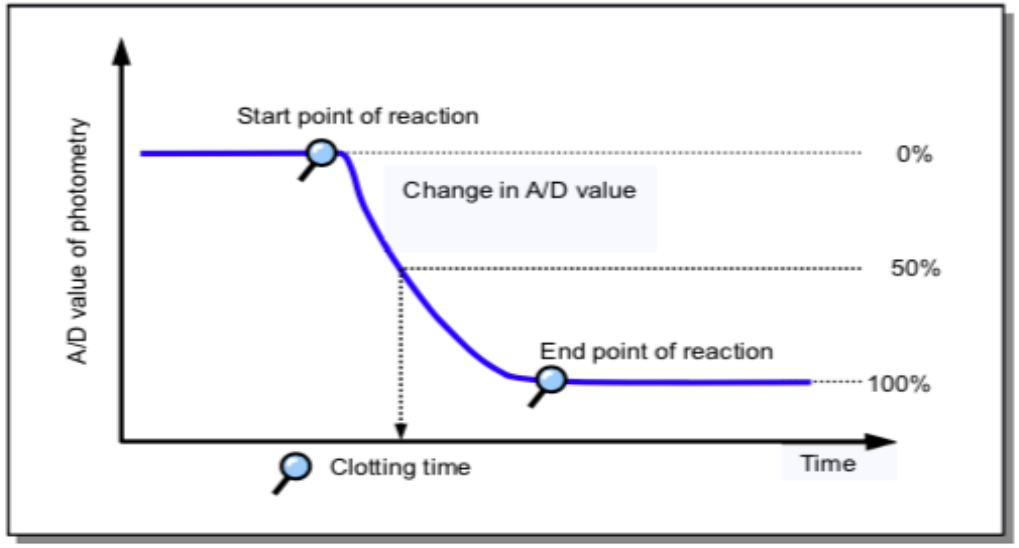
1. **Baseline (0%):** After a pre-defined “Mask Time” a search for the reaction start point begins, this is the baseline.
The transmitted light at the baseline (bH) is defined as 0%.

2. **Clotting Phase:** The time of the reaction between the baseline and the endpoint; when transmitted light is changing due to active clot formation.

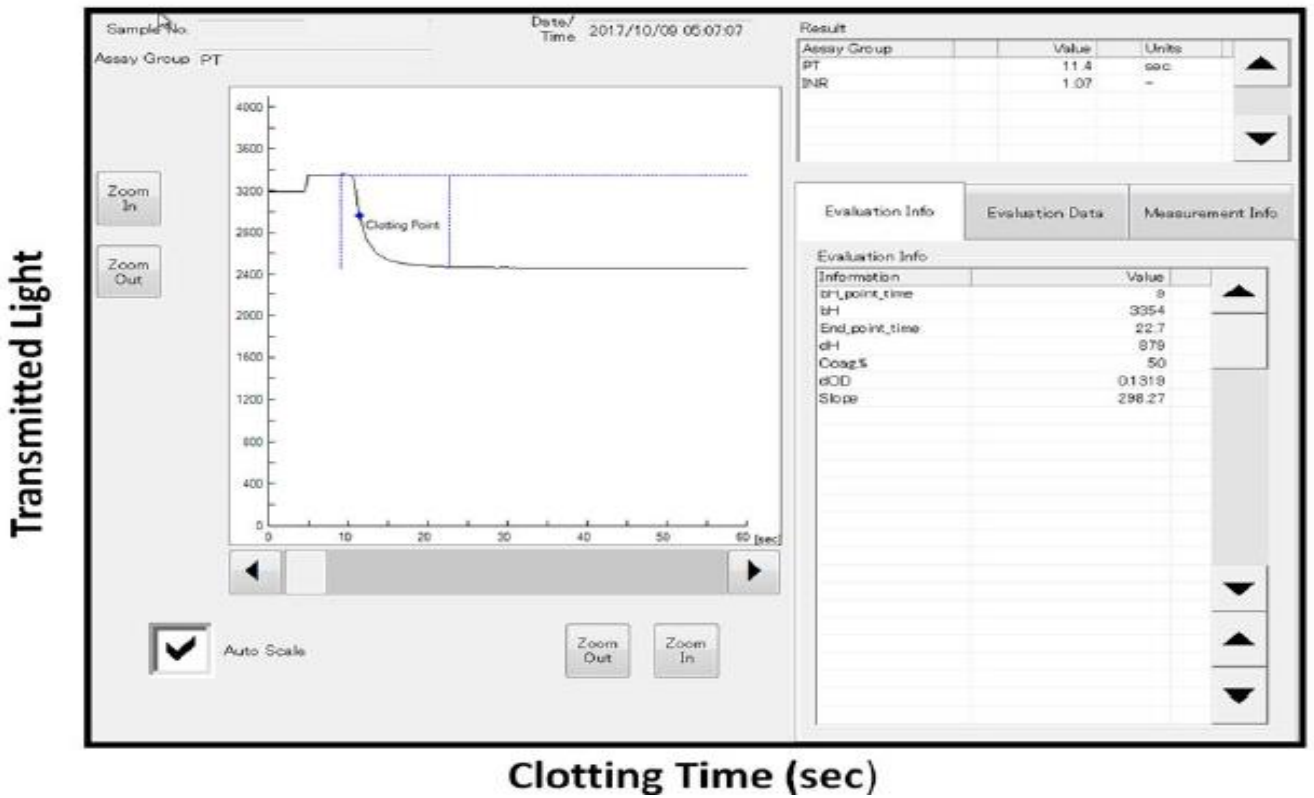
3. **Endpoint (100%):** The CS software identifies the coagulation end point [when maximum measurement time is met[.
• The transmitted light at the endpoint is defined as 100%

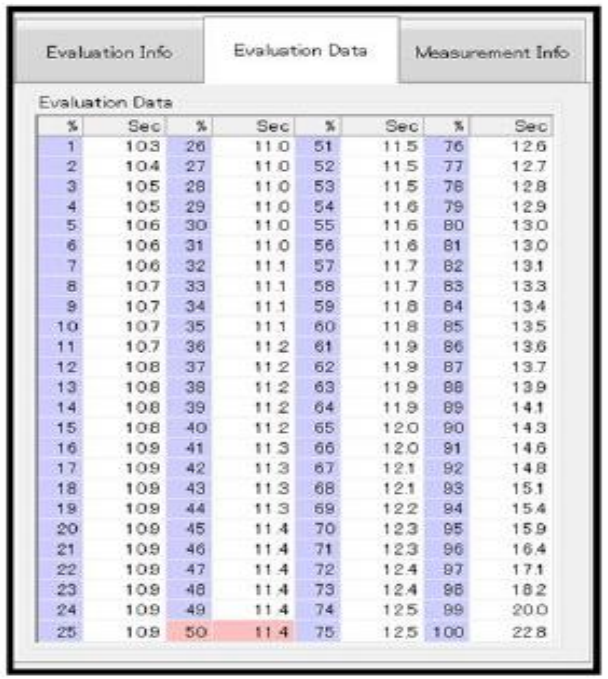
4. **Clotting Point (50%):** The point at which the clotting time (result) is determined. This can be set between 0% and 100%; most assays use 50%.

- dH is the change in transmitted light value between the baseline and the end point
- submitted light is changing due to active clot formation



Example 1: Typical PT





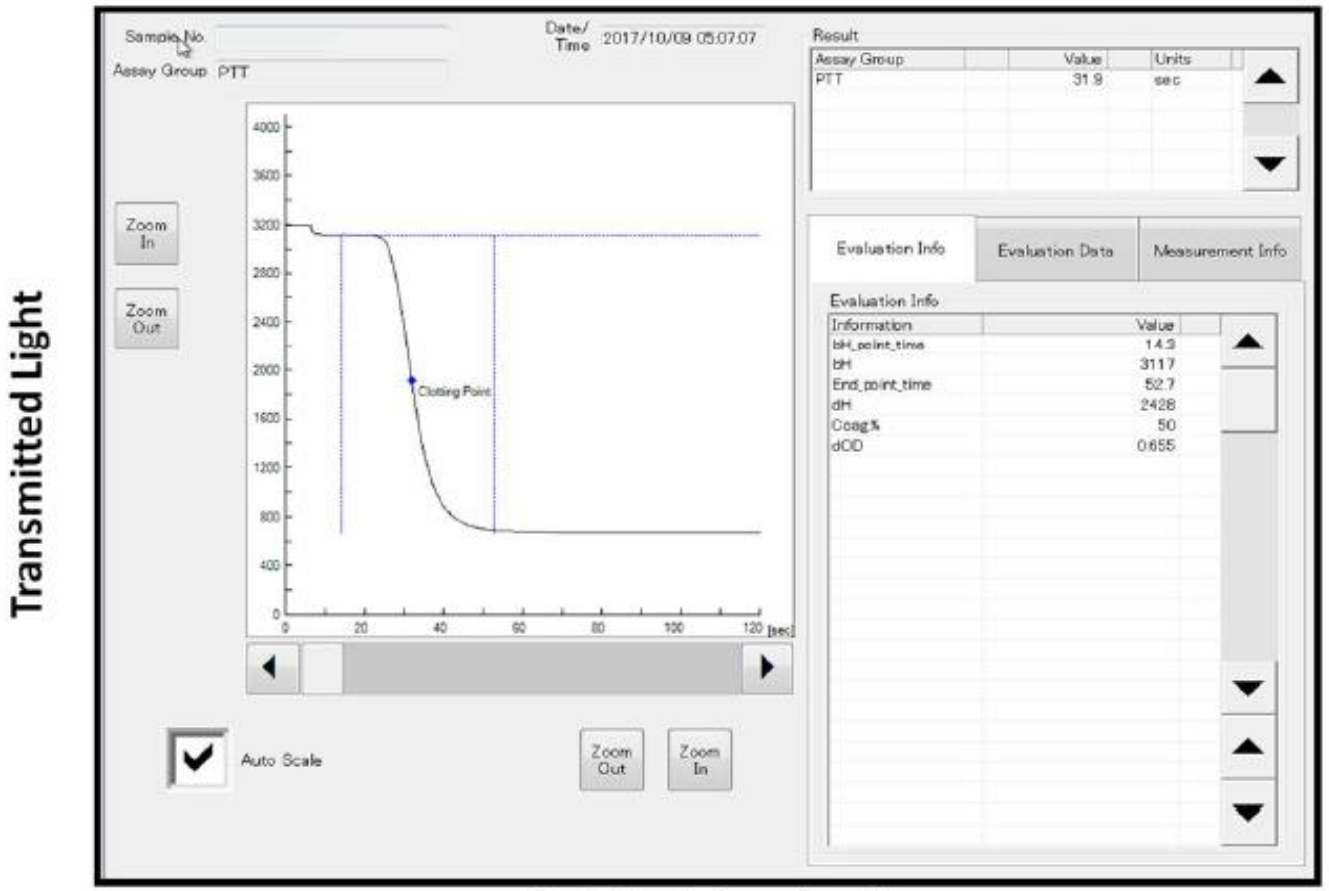
%	Sec	%	Sec	%	Sec	%	Sec
1	10.3	26	11.0	51	11.5	76	12.6
2	10.4	27	11.0	52	11.5	77	12.7
3	10.5	28	11.0	53	11.5	78	12.8
4	10.5	29	11.0	54	11.6	79	12.9
5	10.6	30	11.0	55	11.6	80	13.0
6	10.6	31	11.0	56	11.6	81	13.0
7	10.6	32	11.1	57	11.7	82	13.1
8	10.7	33	11.1	58	11.7	83	13.3
9	10.7	34	11.1	59	11.8	84	13.4
10	10.7	35	11.1	60	11.8	85	13.5
11	10.7	36	11.2	61	11.9	86	13.6
12	10.8	37	11.2	62	11.9	87	13.7
13	10.8	38	11.2	63	11.9	88	13.9
14	10.8	39	11.2	64	11.9	89	14.1
15	10.8	40	11.2	65	12.0	90	14.3
16	10.9	41	11.3	66	12.0	91	14.6
17	10.9	42	11.3	67	12.1	92	14.8
18	10.9	43	11.3	68	12.1	93	15.1
19	10.9	44	11.3	69	12.2	94	15.4
20	10.9	45	11.4	70	12.3	95	15.9
21	10.9	46	11.4	71	12.3	96	16.4
22	10.9	47	11.4	72	12.4	97	17.1
23	10.9	48	11.4	73	12.4	98	18.2
24	10.9	49	11.4	74	12.5	99	20.0
25	10.9	50	11.4	75	12.5	100	22.8

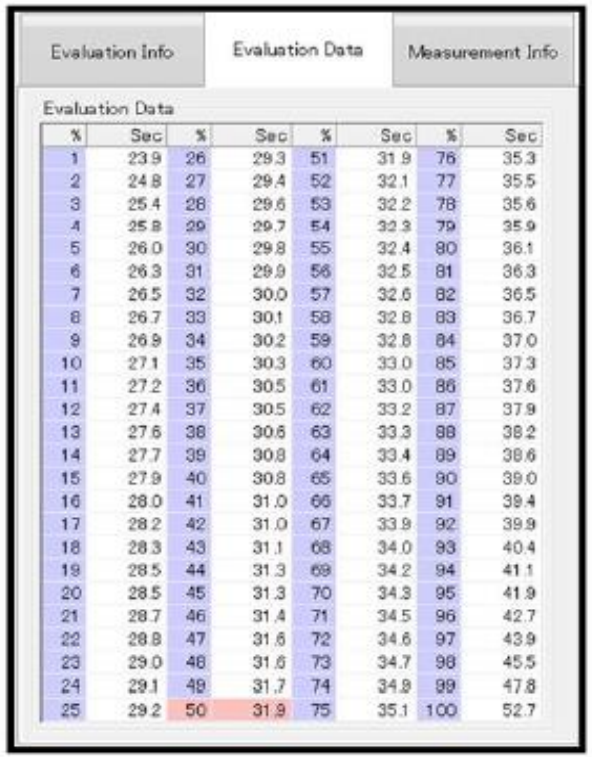
Normal PT: Influence of Fibrinogen

PT from sample with Normal Fibrinogen Level
dH =879

PT from sample with Low Fibrinogen Level
dH=330

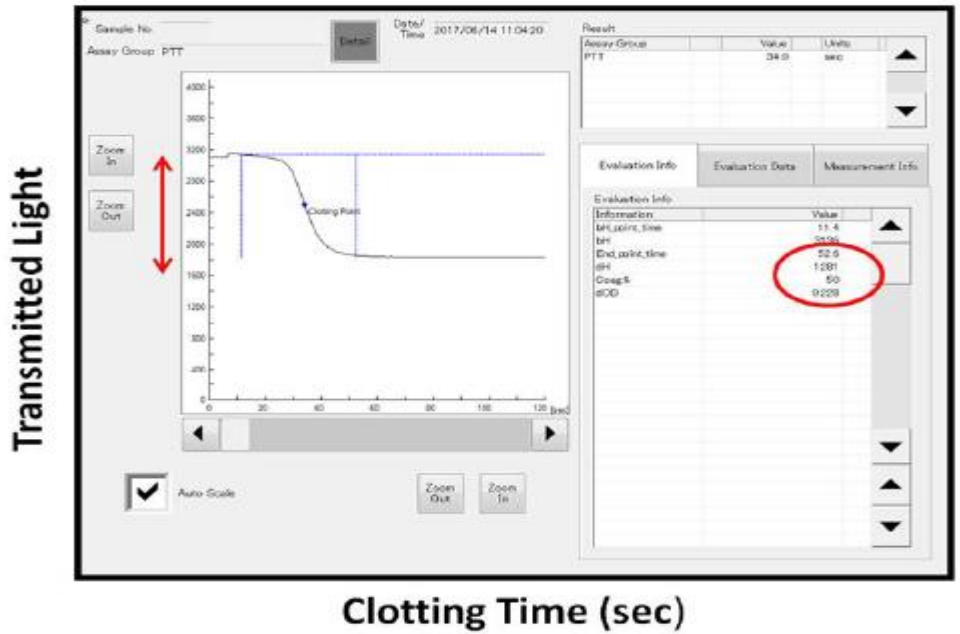
Example 3: Typical PTT





%	Sec	%	Sec	%	Sec	%	Sec
1	23.9	26	29.3	51	31.9	76	35.3
2	24.8	27	29.4	52	32.1	77	35.5
3	25.4	28	29.6	53	32.2	78	35.6
4	25.8	29	29.7	54	32.3	79	35.9
5	26.0	30	29.8	55	32.4	80	36.1
6	26.3	31	29.9	56	32.5	81	36.3
7	26.5	32	30.0	57	32.6	82	36.5
8	26.7	33	30.1	58	32.8	83	36.7
9	26.9	34	30.2	59	32.8	84	37.0
10	27.1	35	30.3	60	33.0	85	37.3
11	27.2	36	30.5	61	33.0	86	37.6
12	27.4	37	30.5	62	33.2	87	37.9
13	27.6	38	30.6	63	33.3	88	38.2
14	27.7	39	30.8	64	33.4	89	38.6
15	27.9	40	30.8	65	33.6	90	39.0
16	28.0	41	31.0	66	33.7	91	39.4
17	28.2	42	31.0	67	33.9	92	39.9
18	28.3	43	31.1	68	34.0	93	40.4
19	28.5	44	31.3	69	34.2	94	41.1
20	28.5	45	31.3	70	34.3	95	41.9
21	28.7	46	31.4	71	34.5	96	42.7
22	28.8	47	31.6	72	34.6	97	43.9
23	29.0	48	31.6	73	34.7	98	45.5
24	29.1	49	31.7	74	34.9	99	47.8
25	29.2	50	31.9	75	35.1	100	52.7

PTT from sample with Normal Fibrinogen Level
dH=2428



PTT from sample with Low Fibrinogen Level
dH= 1281

A. ERROR MESSAGES:

HL Check for All assays

1. **Hemolytic Sample Error**
2. **Lipemic Sample Error**

for Clotting assays

1. **Slight Coagulation Error**
2. **Analysis Time Over Error**
3. **Coagulation Curve Error**
4. **Early Reaction Error**
5. **Noise Error**
6. **Turbidity Level Over**
7. **No Coagulation**
8. **Flat Curve**
9. **Range Over**
10. **Trans Light High Error**

for Chromogenic assays and Immunoassays

1. **Trans Light Low Error**
2. **Trans Light High Error**
3. **No Linearity Error**
4. **Reaction Curve Error**
5. **Range Over (Antigen Excess) Error**
6. **No polynomial adjustment Error**
7. **Range is non-linear Error**

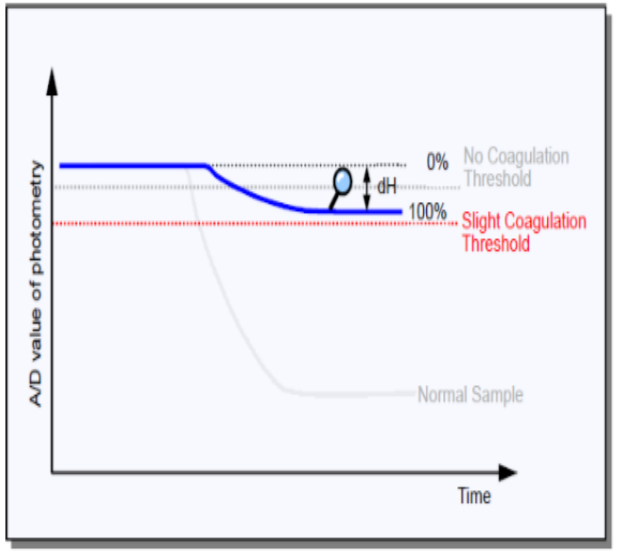
IMPORTANT NOTES;

- **Before Re-analysis, ALWAYS**
  - **Check the sample** for possible anticoagulant [e.g. heparin] contamination, hemolysis, lipemia, and clot.
  - **Microfuge if lipemic or hemolyzed,**

- **if a sample is ordered in micro analysis mode,**
  - **re-analysis rules will not be applied, and the longer Measurement Time (Sub)/ dilutions will need to be requested manually.**

1. Slight Coagulation (SC) Error

Joblist	Flagged numeric result
Cause	A very weak coagulation reaction. This may be due to a low fibrinogen concentration, factor deficiency, or inhibitor. Possible problem with the reagent.
Kinetic Evaluation	• Baseline established • Clotting phase generally is not as pronounced as typical • An endpoint is observed • dH will be decreased. The dH limit to trigger this flag is assay dependent.

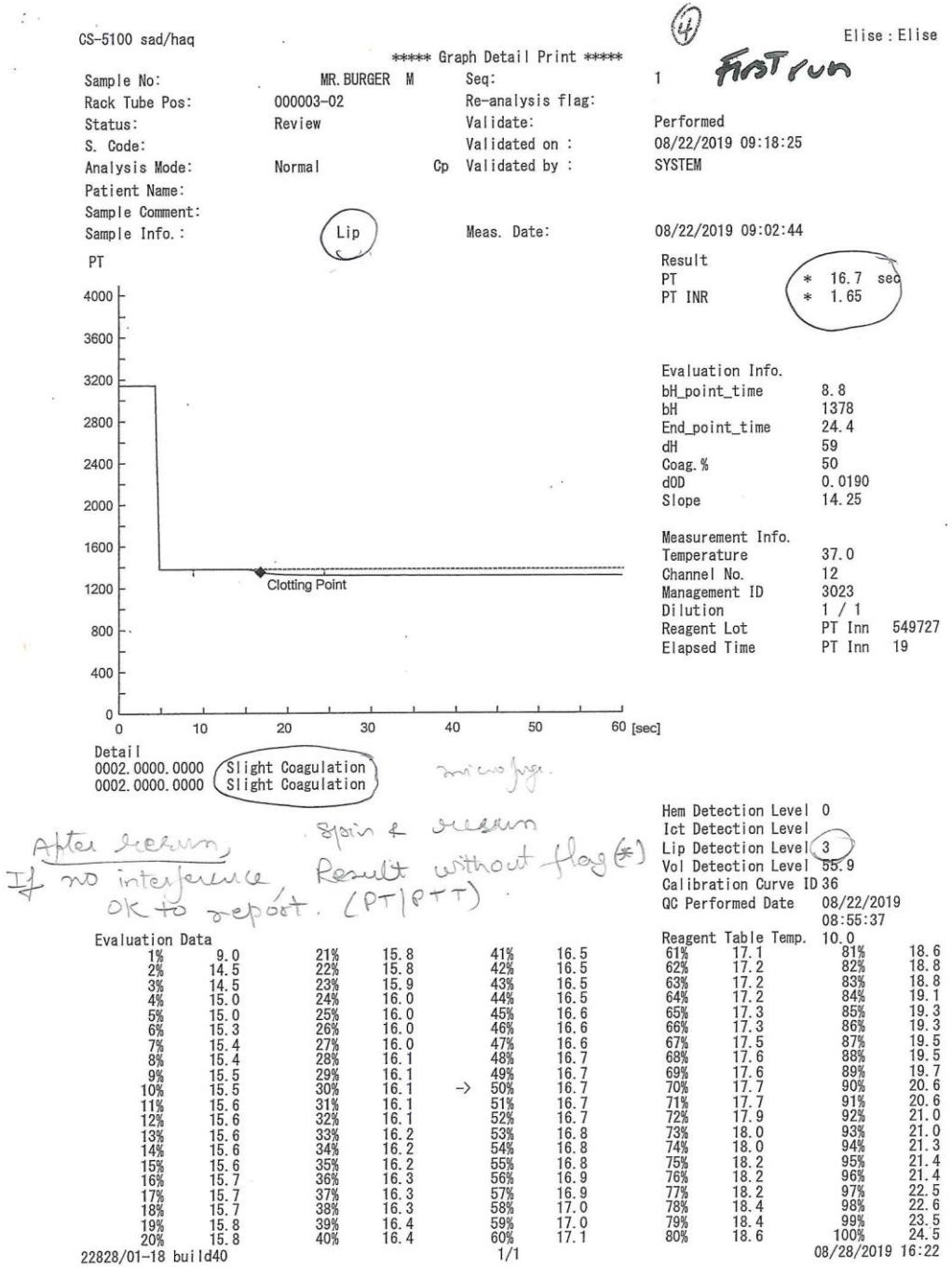


Action Steps for "Slight Coagulation"

1. **Reanalyze** the sample, if ran in micro.
   --Results **without an asterisk (*),** REPORT the result,
   --if "slight coagulation" occurs again for PT/PTT, - DO NOT REPORT
   ---For **Fibrinogen,** change the dilution ratio and reanalyze, if repeat comes out with the same flag, along with other flags like 'Lower report Limit over and dilution ratio was changed'—REPORT the result.

Example 1

<u>First Run</u>
<u>Status</u>: Review
Joblist Result: *16.7 (PT)
Flag: Slight Coag
Lipemia
Action: re-analyze after spin



CS-5100 sad/haq

Elise : Elise

(4) FIRST RUN

***** Graph Detail Print *****

Sample No:	MR. BURGER M	Seq:	1
Rack Tube Pos:	000003-02	Re-analysis flag:	
Status:	Review	Validate:	Performed
S. Code:		Validated on :	08/22/2019 09:18:25
Analysis Mode:	Normal Cp	Validated by :	SYSTEM
Patient Name:			
Sample Comment:			
Sample Info. :	Lip	Meas. Date:	08/22/2019 09:02:44

PT

Result

PT	* 16.7	sec
PT INR	* 1.65	

Evaluation Info.

bH_point_time	8.8
bH	1378
End_point_time	24.4
dH	59
Coag.%	50
dOD	0.0190
Slope	14.25

Measurement Info.

Temperature	37.0	
Channel No.	12	
Management ID	3023	
Dilution	1 / 1	
Reagent Lot	PT Inn	549727
Elapsed Time	PT Inn	19

Detail
0002.0000.0000 Slight Coagulation
0002.0000.0000 Slight Coagulation

micro frg.

Spin & rerun
After rerun, Result without flag (*)
If no interference
OK to report. (PT/PTT)

Hem Detection Level 0
Ict Detection Level
Lip Detection Level 3
Vol Detection Level 55.9
Calibration Curve ID 36
QC Performed Date 08/22/2019 08:55:37
Reagent Table Temp. 10.0

Evaluation Data

1%	9.0	21%	15.8		41%	16.5	61%	17.1	81%	18.6
2%	14.5	22%	15.8		42%	16.5	62%	17.2	82%	18.8
3%	14.5	23%	15.9		43%	16.5	63%	17.2	83%	18.8
4%	15.0	24%	16.0		44%	16.5	64%	17.2	84%	19.1
5%	15.0	25%	16.0		45%	16.6	65%	17.3	85%	19.3
6%	15.3	26%	16.0		46%	16.6	66%	17.3	86%	19.3
7%	15.4	27%	16.0		47%	16.6	67%	17.5	87%	19.5
8%	15.4	28%	16.1		48%	16.7	68%	17.6	88%	19.5
9%	15.5	29%	16.1		49%	16.7	69%	17.6	89%	19.7
10%	15.5	30%	16.1	→	50%	16.7	70%	17.7	90%	20.6
11%	15.6	31%	16.1		51%	16.7	71%	17.7	91%	20.6
12%	15.6	32%	16.1		52%	16.7	72%	17.9	92%	21.0
13%	15.6	33%	16.2		53%	16.8	73%	18.0	93%	21.0
14%	15.6	34%	16.2		54%	16.8	74%	18.0	94%	21.3
15%	15.6	35%	16.2		55%	16.8	75%	18.2	95%	21.4
16%	15.7	36%	16.3		56%	16.9	76%	18.2	96%	21.4
17%	15.7	37%	16.3		57%	16.9	77%	18.2	97%	22.5
18%	15.7	38%	16.3		58%	17.0	78%	18.4	98%	22.6
19%	15.8	39%	16.4		59%	17.0	79%	18.4	99%	23.5
20%	15.8	40%	16.4		60%	17.1	80%	18.6	100%	24.5

Example 1

<u>After Spin</u>
Result = *16.7 (PT)
Flag = Slight Coag again
Curve = weak clot
Action = Do Not Report

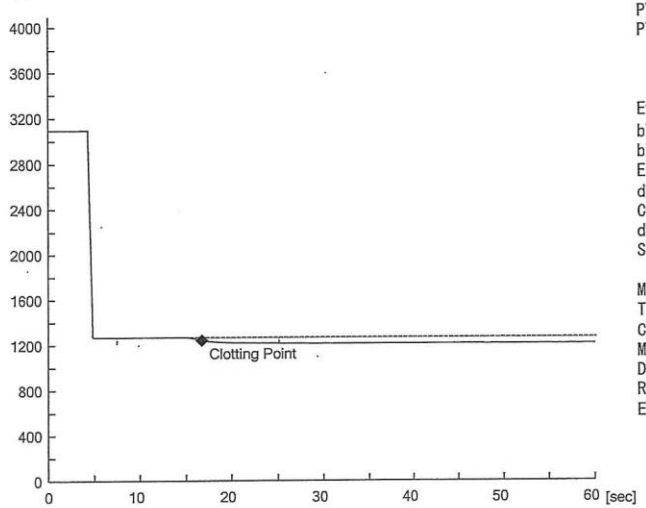
CS-5100 sad/haq

Elise : Elise

***** Graph Detail Print *****

Sample No:	MR. BURGER M	Seq:	1
Rack Tube Pos:	000003-02	Re-analysis flag:	Re-analysis
Status:	Review	Validate:	Performed
S. Code:		Validated on :	08/22/2019 09:18:25
Analysis Mode:	Normal Cp	Validated by :	SYSTEM
Patient Name:			
Sample Comment:			
Sample Info. :	Lip	Meas. Date:	08/22/2019 09:02:44

PT



Result

PT	*	16.7	sec
PT INR	*	1.65	

Evaluation Info.

bH_point_time	7.5
bH	1269
End_point_time	25.1
dH	53
Coag.%	50
dOD	0.0185
Slope	13.09

Measurement Info.

Temperature	37.0
Channel No.	3
Management ID	3023
Dilution	1 / 1
Reagent Lot	PT Inn 549727
Elapsed Time	PT Inn 19

Detail
0002.0000.0000 Slight Coagulation
0002.0000.0000 Slight Coagulation

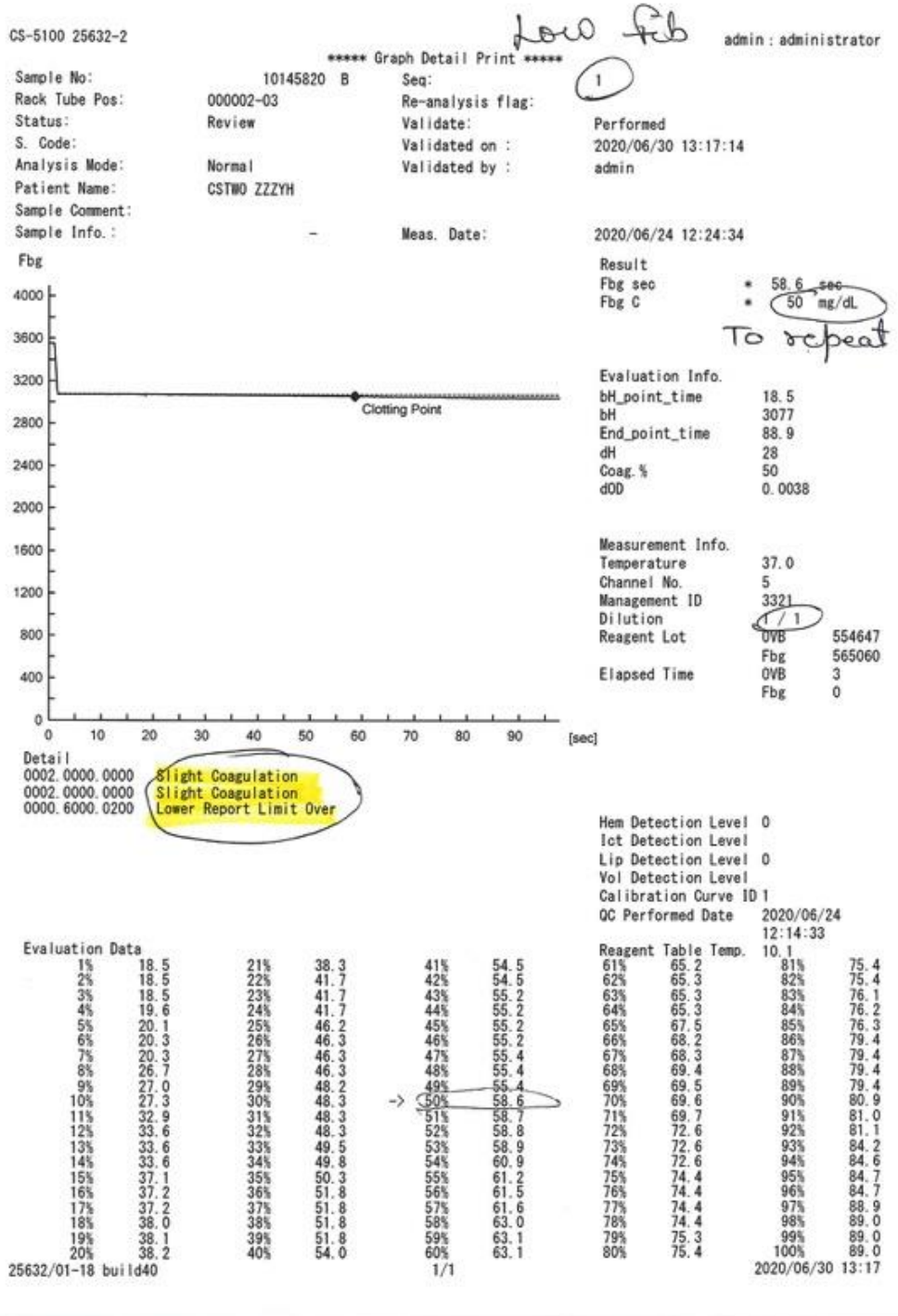
Hem Detection Level 0
Ict Detection Level
Lip Detection Level 3
Vol Detection Level 55.9
Calibration Curve ID 36
QC Performed Date 08/22/2019 08:55:37
Reagent Table Temp. 10.0

Evaluation Data

1%	14.5	21%	15.8	41%	16.4	61%	17.1	81%	18.6
2%	14.9	22%	15.8	42%	16.4	62%	17.1	82%	18.8
3%	14.9	23%	15.9	43%	16.4	63%	17.2	83%	18.8
4%	15.2	24%	15.9	44%	16.5	64%	17.2	84%	19.1
5%	15.2	25%	16.0	45%	16.5	65%	17.3	85%	19.3
6%	15.4	26%	16.0	46%	16.6	66%	17.3	86%	19.3
7%	15.4	27%	16.0	47%	16.6	67%	17.5	87%	19.5
8%	15.5	28%	16.0	48%	16.6	68%	17.6	88%	19.5
9%	15.5	29%	16.1	49%	16.6	69%	17.6	89%	19.9
10%	15.6	30%	16.1	→ 50%	16.7	70%	17.7	90%	19.9
11%	15.6	31%	16.1	51%	16.7	71%	17.7	91%	20.3
12%	15.6	32%	16.1	52%	16.7	72%	17.8	92%	20.3
13%	15.6	33%	16.1	53%	16.8	73%	17.8	93%	21.4
14%	15.6	34%	16.2	54%	16.8	74%	18.0	94%	21.4
15%	15.6	35%	16.2	55%	16.8	75%	18.0	95%	21.5
16%	15.7	36%	16.2	56%	16.8	76%	18.2	96%	21.5
17%	15.7	37%	16.2	57%	16.9	77%	18.2	97%	22.6
18%	15.7	38%	16.3	58%	16.9	78%	18.4	98%	22.6
19%	15.8	39%	16.3	59%	17.0	79%	18.4	99%	23.0
20%	15.8	40%	16.4	60%	17.0	80%	18.6	100%	25.1

Example 2

Status = Review
Mode= Normal
Fib Result = *50
Flag = slight coag+Lower report
Dilution = 1:1
Fib<80, always reflexed to 4/1 dil
in normal mode
Action = Review 4/1 dil



CS-5100 25632-2 Low Fib admin : administrator

***** Graph Detail Print *****

Sample No:	10145820 B	Seq:	1
Rack Tube Pos:	000002-03	Re-analysis flag:	
Status:	Review	Validate:	Performed
S. Code:		Validated on :	2020/06/30 13:17:14
Analysis Mode:	Normal	Validated by :	admin
Patient Name:	CSTWO ZZZYH		
Sample Comment:			
Sample Info.:	-	Meas. Date:	2020/06/24 12:24:34

Fbg

Result

Fbg sec	*	58.6 sec
Fbg C	*	50 mg/dL

To repeat

Evaluation Info.

bH_point_time	18.5
bH	3077
End_point_time	88.9
dH	28
Coag.%	50
dOD	0.0038

Measurement Info.

Temperature	37.0	
Channel No.	5	
Management ID	3321	
Dilution	1 / 1	
Reagent Lot	OVB	554647
	Fbg	565060
Elapsed Time	OVB	3
	Fbg	0

Detail

0002.0000.0000 Slight Coagulation
0002.0000.0000 Slight Coagulation
0000.6000.0200 Lower Report Limit Over

Hem Detection Level	0
Ict Detection Level	
Lip Detection Level	0
Vol Detection Level	
Calibration Curve ID	1
QC Performed Date	2020/06/24 12:14:33
Reagent Table Temp.	10.1

Evaluation Data

1%	18.5	21%	38.3	41%	54.5	61%	65.2	81%	75.4
2%	18.5	22%	41.7	42%	54.5	62%	65.3	82%	75.4
3%	18.5	23%	41.7	43%	55.2	63%	65.3	83%	76.1
4%	19.6	24%	41.7	44%	55.2	64%	65.3	84%	76.2
5%	20.1	25%	46.2	45%	55.2	65%	67.5	85%	76.3
6%	20.3	26%	46.3	46%	55.2	66%	68.2	86%	79.4
7%	20.3	27%	46.3	47%	55.4	67%	68.3	87%	79.4
8%	26.7	28%	46.3	48%	55.4	68%	69.4	88%	79.4
9%	27.0	29%	48.2	49%	55.4	69%	69.5	89%	79.4
10%	27.3	30%	48.3	-> 50%	58.6	70%	69.6	90%	80.9
11%	32.9	31%	48.3	51%	58.7	71%	69.7	91%	81.0
12%	33.6	32%	48.3	52%	58.8	72%	72.6	92%	81.1
13%	33.6	33%	49.5	53%	58.9	73%	72.6	93%	84.2
14%	33.6	34%	49.8	54%	60.9	74%	72.6	94%	84.6
15%	37.1	35%	50.3	55%	61.2	75%	74.4	95%	84.7
16%	37.2	36%	51.8	56%	61.5	76%	74.4	96%	84.7
17%	37.2	37%	51.8	57%	61.6	77%	74.4	97%	88.9
18%	38.0	38%	51.8	58%	63.0	78%	74.4	98%	89.0
19%	38.1	39%	51.8	59%	63.1	79%	75.3	99%	89.0
20%	38.2	40%	54.0	60%	63.1	80%	75.4	100%	89.0

Example 2

<u>After Re-analysis</u>

Dilution = 4/1

Fib Result <50

Flagged changed to dil and lower report

Action = REPORT the result <50

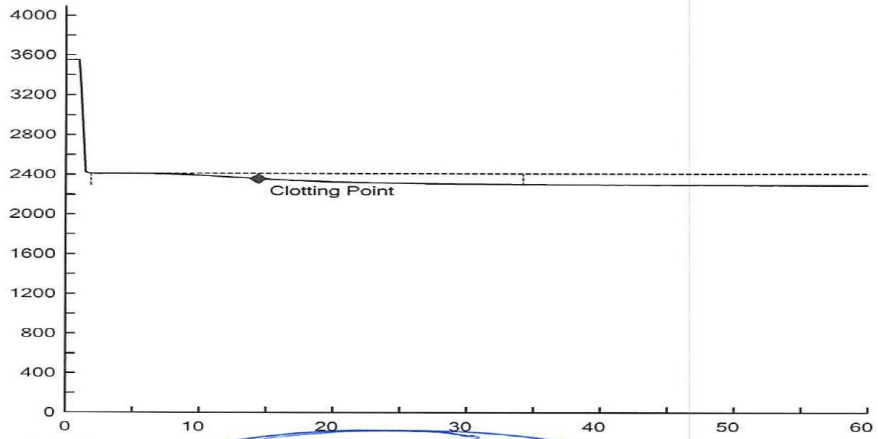
CS-5100 25632-2

admin : administrator

***** Graph Detail Print *****

Sample No:	10145820 B	Seq:	F
Rack Tube Pos:	000002-03	Re-analysis flag:	
Status:	Review	Validate:	Performed
S. Code:		Validated on :	2020/06/30 13:17:14
Analysis Mode:	Normal	Validated by :	admin
Patient Name:	CSTWO ZZZYH		
Sample Comment:			
Sample Info. :	-	Meas. Date:	2020/06/24 12:24:34

Fbg



Result

Fbg sec	d	14.4	sec
Fbg C	<	50	mg/dL

Evaluation Info.

bH_point_time	1.9
bH	2411
End_point_time	34.2
dH	106
Coag.%	50
dOD	0.0195

Measurement Info.

Temperature	37.0	
Channel No.	5	
Management ID	3321	
Dilution	4 / 1	
Reagent Lot	OVB	554647
	Fbg	565060
Elapsed Time	OVB	3
	Fbg	0

Detail

0000.0000.0000 Dilution Ratio was Changed.

0000.6000.0200 Lower Report Limit Over

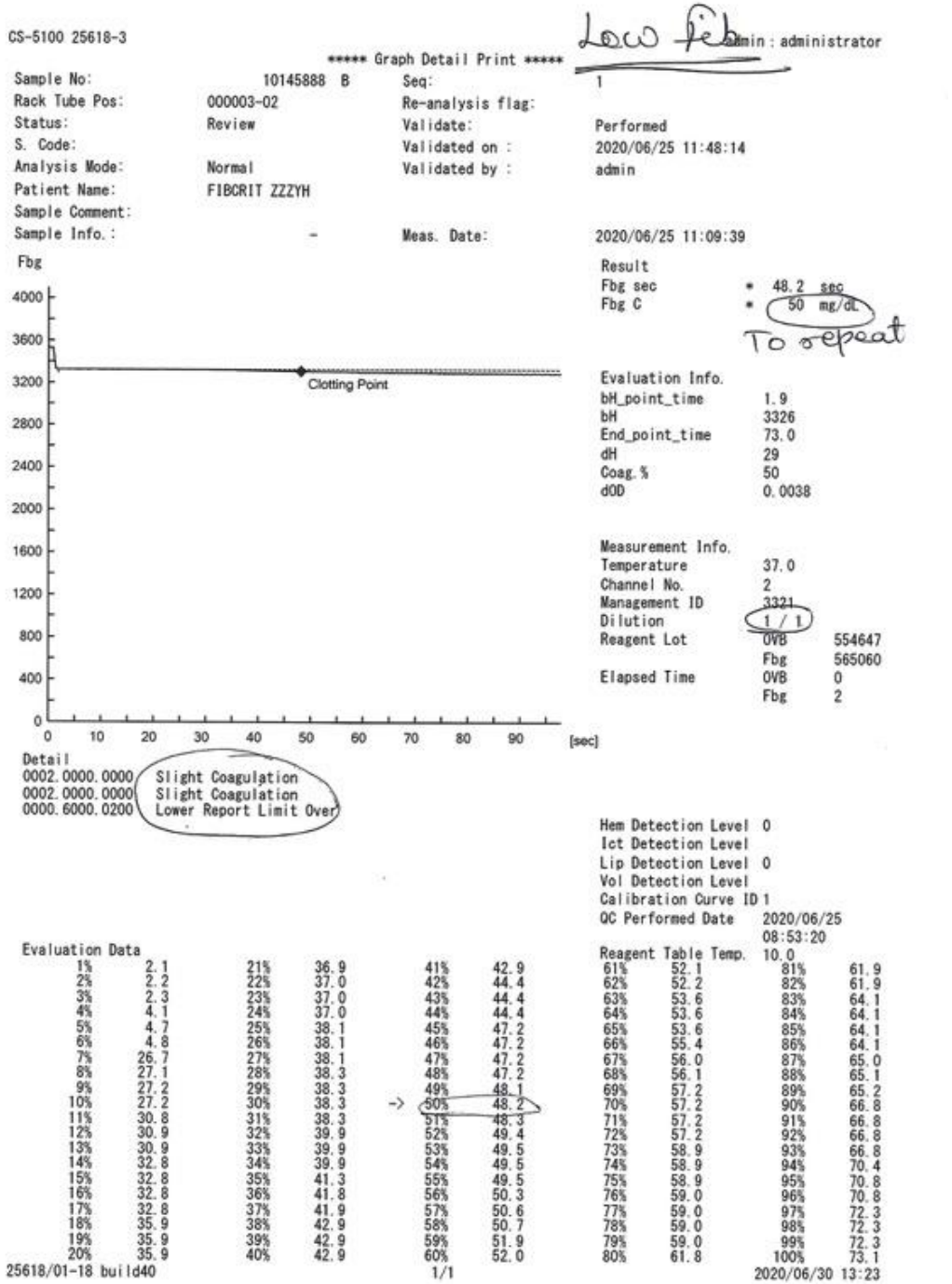
Hem Detection Level	0		
Ict Detection Level			
Lip Detection Level	0		
Vol Detection Level			
Calibration Curve ID	1		
QC Performed Date	2020/06/24 12:14:33		
Reagent Table Temp.	10.1		

Evaluation Data

1%	6.2	21%	10.7		41%	13.2	61%	16.3	81%	20.8
2%	6.6	22%	10.8		42%	13.4	62%	16.4	82%	21.2
3%	6.9	23%	10.9		43%	13.5	63%	16.5	83%	21.5
4%	7.5	24%	11.1		44%	13.6	64%	16.6	84%	22.3
5%	7.7	25%	11.1		45%	13.7	65%	16.7	85%	22.6
6%	7.9	26%	11.2		46%	13.9	66%	16.9	86%	22.9
7%	8.4	27%	11.4		47%	14.0	67%	17.6	87%	23.9
8%	8.5	28%	11.5		48%	14.1	68%	17.8	88%	24.1
9%	8.7	29%	11.6		49%	14.2	69%	18.0	89%	25.0
10%	8.8	30%	11.7	->	50%	14.4	70%	18.1	90%	25.9
11%	9.0	31%	11.9		51%	14.7	71%	18.2	91%	26.3
12%	9.2	32%	12.0		52%	14.9	72%	18.5	92%	26.8
13%	9.4	33%	12.1		53%	15.1	73%	18.7	93%	27.0
14%	9.7	34%	12.4		54%	15.2	74%	19.0	94%	27.7
15%	9.8	35%	12.6		55%	15.4	75%	19.4	95%	28.7
16%	9.9	36%	12.7		56%	15.5	76%	19.6	96%	29.0
17%	10.1	37%	12.8		57%	15.6	77%	19.7	97%	30.3
18%	10.2	38%	12.9		58%	15.8	78%	19.8	98%	31.3
19%	10.4	39%	13.0		59%	16.0	79%	20.3	99%	31.5
20%	10.5	40%	13.1		60%	16.2	80%	20.6	100%	34.3

Example 3

Status = Review
Mode= Normal
Fib Result = *50
Flag = slight coag+Lower report
Dilution = 1:1
Fib<80, always reflexed to 4/1 dil
in normal mode
Action = Review 4/1 dil



CS-5100 25618-3

Low fib

admin : administrator

***** Graph Detail Print *****

Sample No:	10145888 B	Seq:	1
Rack Tube Pos:	000003-02	Re-analysis flag:	
Status:	Review	Validate:	Performed
S. Code:		Validated on :	2020/06/25 11:48:14
Analysis Mode:	Normal	Validated by :	admin
Patient Name:	FIBCRIT ZZZYH		
Sample Comment:			
Sample Info.:	-	Meas. Date:	2020/06/25 11:09:39

Fbg

Result

Fbg sec	*	48.2 sec
Fbg C	*	50 mg/dL

To repeat

Evaluation Info.

bH_point_time	1.9
bH	3326
End_point_time	73.0
dH	29
Coag.%	50
dOD	0.0038

Measurement Info.

Temperature	37.0	
Channel No.	2	
Management ID	3321	
Dilution	1 / 1	
Reagent Lot	OVB	554647
	Fbg	565060
Elapsed Time	OVB	0
	Fbg	2

Detail

0002.0000.0000 Slight Coagulation
0002.0000.0000 Slight Coagulation
0000.6000.0200 Lower Report Limit Over

Hem Detection Level 0
Ict Detection Level
Lip Detection Level 0
Vol Detection Level
Calibration Curve ID 1
QC Performed Date 2020/06/25 08:53:20
Reagent Table Temp. 10.0

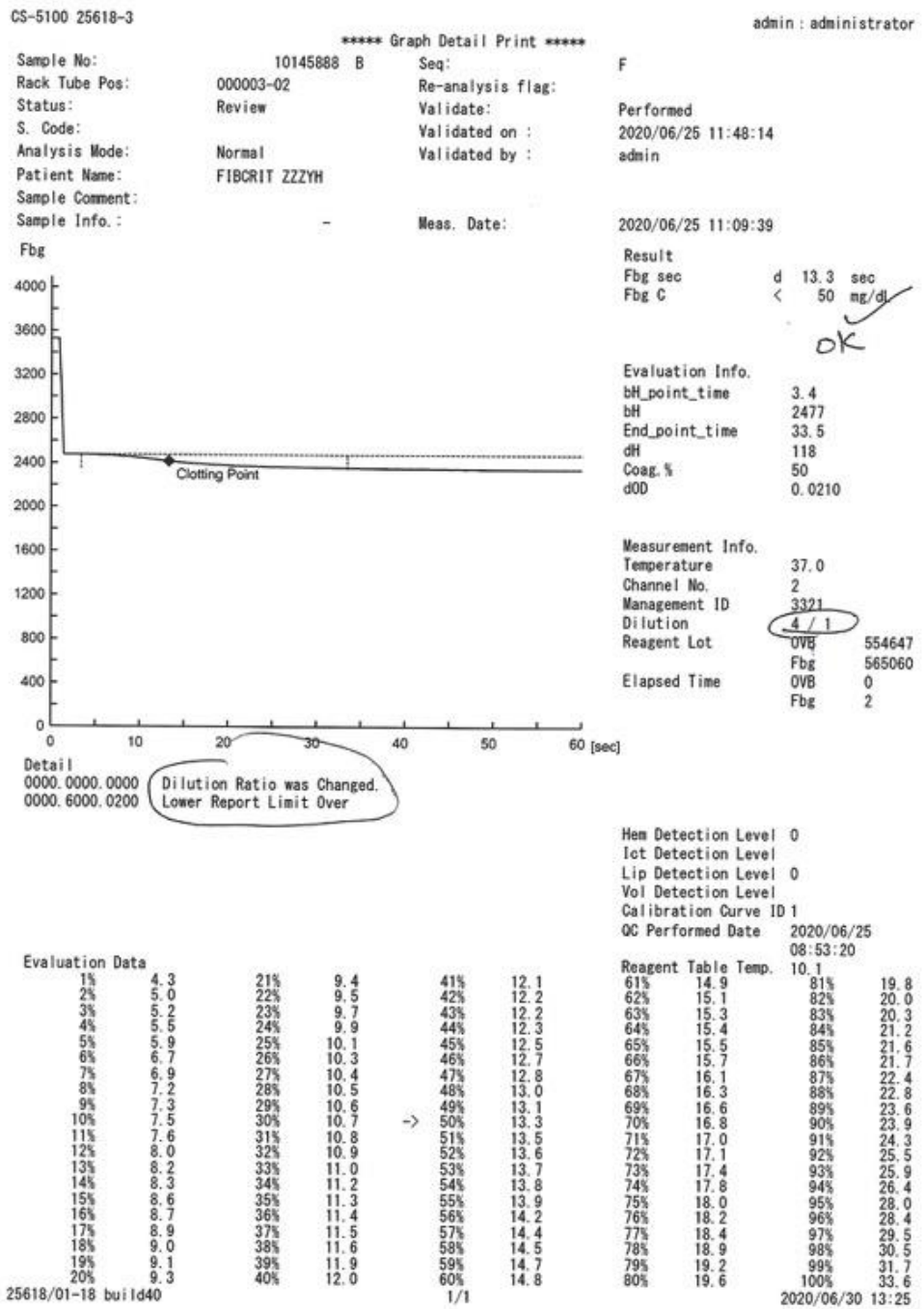
Evaluation Data

1%	2.1	21%	36.9	41%	42.9	61%	52.1	81%	61.9
2%	2.2	22%	37.0	42%	44.4	62%	52.2	82%	61.9
3%	2.3	23%	37.0	43%	44.4	63%	53.6	83%	64.1
4%	4.1	24%	37.0	44%	44.4	64%	53.6	84%	64.1
5%	4.7	25%	38.1	45%	47.2	65%	53.6	85%	64.1
6%	4.8	26%	38.1	46%	47.2	66%	55.4	86%	64.1
7%	26.7	27%	38.1	47%	47.2	67%	56.0	87%	65.0
8%	27.1	28%	38.3	48%	47.2	68%	56.1	88%	65.1
9%	27.2	29%	38.3	49%	48.1	69%	57.2	89%	65.2
10%	27.2	30%	38.3	-> 50%	48.2	70%	57.2	90%	66.8
11%	30.8	31%	38.3	51%	48.3	71%	57.2	91%	66.8
12%	30.9	32%	39.9	52%	49.4	72%	57.2	92%	66.8
13%	30.9	33%	39.9	53%	49.5	73%	58.9	93%	66.8
14%	32.8	34%	39.9	54%	49.5	74%	58.9	94%	70.4
15%	32.8	35%	41.3	55%	49.5	75%	58.9	95%	70.8
16%	32.8	36%	41.8	56%	50.3	76%	59.0	96%	70.8
17%	32.8	37%	41.9	57%	50.6	77%	59.0	97%	72.3
18%	35.9	38%	42.9	58%	50.7	78%	59.0	98%	72.3
19%	35.9	39%	42.9	59%	51.9	79%	59.0	99%	72.3
20%	35.9	40%	42.9	60%	52.0	80%	61.8	100%	73.1

Example 3

<u>After Re-analysis</u>
Dilution = 4/1
Fib Result <50
Flag changed to dil and
lower report flag

Action = REPORT the result <50



CS-5100 25618-3 admin : administrator

***** Graph Detail Print *****

Sample No:	10145888 B	Seq:	F
Rack Tube Pos:	000003-02	Re-analysis flag:	
Status:	Review	Validate:	Performed
S. Code:		Validated on :	2020/06/25 11:48:14
Analysis Mode:	Normal	Validated by :	admin
Patient Name:	FIBCRIT ZZZYH		
Sample Comment:			
Sample Info.:	-	Meas. Date:	2020/06/25 11:09:39

Fbg

Result

Fbg sec	d	13.3	sec
Fbg C	<	50	mg/dl

OK

Evaluation Info.

bH_point_time	3.4
bH	2477
End_point_time	33.5
dH	118
Coag.%	50
dOD	0.0210

Measurement Info.

Temperature	37.0	
Channel No.	2	
Management ID	3321	
Dilution	4 / 1	
Reagent Lot	OVB	554647
	Fbg	565060
Elapsed Time	OVB	0
	Fbg	2

Detail
0000.0000.0000 Dilution Ratio was Changed.
0000.6000.0200 Lower Report Limit Over

Hem Detection Level 0
Ict Detection Level
Lip Detection Level 0
Vol Detection Level
Calibration Curve ID 1
QC Performed Date 2020/06/25 08:53:20
Reagent Table Temp. 10.1

Evaluation Data

1%	4.3	21%	9.4		41%	12.1	61%	14.9	81%	19.8
2%	5.0	22%	9.5		42%	12.2	62%	15.1	82%	20.0
3%	5.2	23%	9.7		43%	12.2	63%	15.3	83%	20.3
4%	5.5	24%	9.9		44%	12.3	64%	15.4	84%	21.2
5%	5.9	25%	10.1		45%	12.5	65%	15.5	85%	21.6
6%	6.7	26%	10.3		46%	12.7	66%	15.7	86%	21.7
7%	6.9	27%	10.4		47%	12.8	67%	16.1	87%	22.4
8%	7.2	28%	10.5		48%	13.0	68%	16.3	88%	22.8
9%	7.3	29%	10.6		49%	13.1	69%	16.6	89%	23.6
10%	7.5	30%	10.7	->	50%	13.3	70%	16.8	90%	23.9
11%	7.6	31%	10.8		51%	13.5	71%	17.0	91%	24.3
12%	8.0	32%	10.9		52%	13.6	72%	17.1	92%	25.5
13%	8.2	33%	11.0		53%	13.7	73%	17.4	93%	25.9
14%	8.3	34%	11.2		54%	13.8	74%	17.8	94%	26.4
15%	8.6	35%	11.3		55%	13.9	75%	18.0	95%	28.0
16%	8.7	36%	11.4		56%	14.2	76%	18.2	96%	28.4
17%	8.9	37%	11.5		57%	14.4	77%	18.4	97%	29.5
18%	9.0	38%	11.6		58%	14.5	78%	18.9	98%	30.5
19%	9.1	39%	11.9		59%	14.7	79%	19.2	99%	31.7
20%	9.3	40%	12.0		60%	14.8	80%	19.6	100%	33.6

Example 4

<u>After Re-analysis</u>
Dilution = 4/1
Fib Result = *80
Flag = slight coag +
Dilution ratio

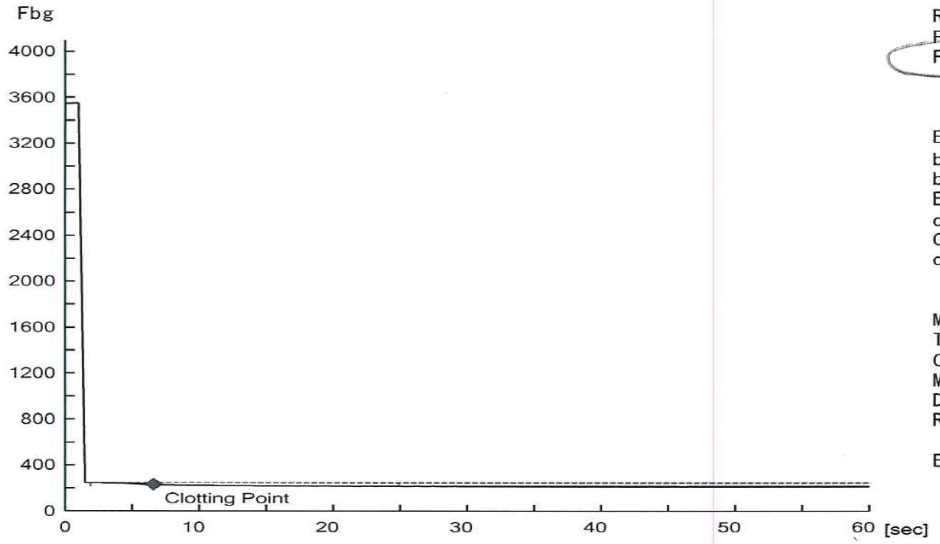
Action = REPORT
Fib=80

CS-5100 25632-2 admin : administrator

***** Graph Detail Print *****

After changing dilution

Sample No:	[redacted]-B	Seq:	F
Rack Tube Pos:	000001-03	Re-analysis flag:	
Status:	Review	Validate:	Performed
S. Code:		Validated on :	2020/06/30 09:41:34
Analysis Mode:	Micro	Validated by :	SYSTEM
Patient Name:			
Sample Comment:			
Sample Info. :	-	Meas. Date:	2020/06/30 09:36:32



Result

Fbg sec	*	6.6	sec
Fbg C	*	80	mg/dL

OK to report

Evaluation Info.

bH_point_time	1.9
bH	246
End_point_time	24.9
dH	29
Coag.%	50
dOD	0.0525

Measurement Info.

Temperature	37.0	
Channel No.	5	
Management ID	3321	
Dilution	4 / 1	
Reagent Lot	OVB	554672
	Fbg	565060
Elapsed Time	OVB	1
	Fbg	1

Detail
0002.0000.0000 Slight Coagulation
0000.0000.0000 Dilution Ratio was Changed.
0002.0000.0000 Slight Coagulation

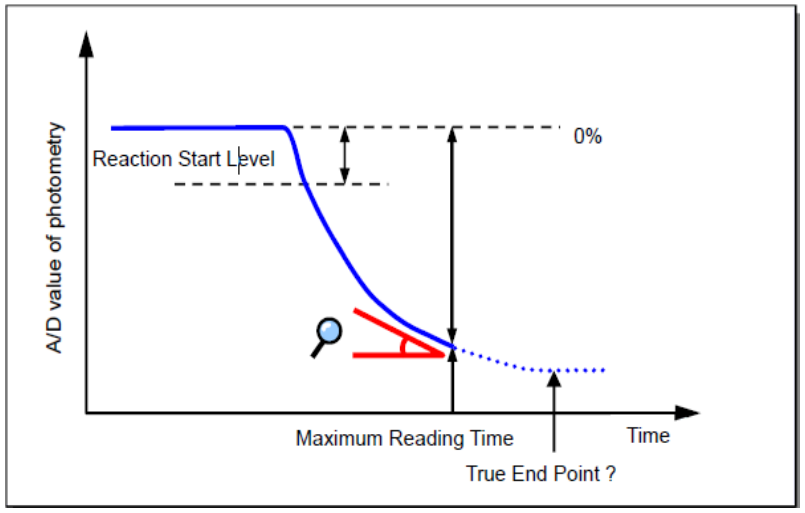
Hem Detection Level
Ict Detection Level
Lip Detection Level
Vol Detection Level
Calibration Curve ID 1
QC Performed Date 2020/06/30 08:34:28
Reagent Table Temp. 10.1

Evaluation Data

1%	2.4	21%	4.6	41%	5.8	61%	7.6	81%	12.2
2%	2.4	22%	4.6	42%	6.0	62%	7.6	82%	12.2
3%	2.4	23%	4.6	43%	6.0	63%	8.0	83%	13.9
4%	2.7	24%	4.6	44%	6.0	64%	8.0	84%	13.9
5%	2.7	25%	4.8	45%	6.2	65%	8.0	85%	13.9
6%	2.7	26%	4.8	46%	6.2	66%	8.7	86%	13.9
7%	3.0	27%	4.8	47%	6.2	67%	8.7	87%	16.9
8%	3.0	28%	4.9	48%	6.2	68%	8.7	88%	17.0
9%	3.0	29%	4.9	49%	6.6	69%	9.0	89%	17.1
10%	3.0	30%	4.9	-> 50%	6.6	70%	9.0	90%	19.6
11%	3.7	31%	4.9	51%	6.6	71%	9.0	91%	19.7
12%	3.7	32%	5.1	52%	6.9	72%	9.0	92%	19.7
13%	3.7	33%	5.1	53%	6.9	73%	10.1	93%	19.7
14%	4.1	34%	5.1	54%	6.9	74%	10.1	94%	21.5
15%	4.1	35%	5.5	55%	6.9	75%	10.1	95%	21.8
16%	4.1	36%	5.5	56%	7.2	76%	11.0	96%	22.1
17%	4.1	37%	5.5	57%	7.2	77%	11.0	97%	24.9
18%	4.4	38%	5.8	58%	7.2	78%	11.0	98%	25.0
19%	4.4	39%	5.8	59%	7.6	79%	11.0	99%	25.0
20%	4.4	40%	5.8	60%	7.6	80%	12.2	100%	25.0

1. Analysis Time Over Error (ATO)

Joblist	Flagged numeric result
Cause	The reaction curve did not achieve an end point before the measurement time was reached. *Prolonged clotting time may be due to low coagulation activity, low fibrinogen concentration, anticoagulation therapy, interfering substance, etc.*
Kinetic Evaluation	• Has a defined baseline • Has a clotting phase • Does not have end point • The result determined at the 50% coagulation time may be inaccurate. • This requires manual evaluation. • Look for typical progression of the curve.



Action Steps for "Analysis Time Over"

1. Set the "Measurement Time" to a longer time (within the range of 100 to 1800 seconds) or set the “Measurement Time (Sub)” in the [Detailed Settings] on the operation panel and reanalyze the sample. This step is effective to confirm whether the coagulation curve becomes a plateau in the longer time.

- Review reaction curve and Evaluation Data after reanalysis.
- **R**esults in a numerical value **without an asterisk (*), - Report the result**.
- **Result with same ATO flag,** but the result is **without the asterisk (*) - Report the result**.
- **If reanalysis gives a different flag than the ATO flag, result is (*****),** Review reaction curve and Evaluation Data. If the evaluation data is greater than laboratory reportable range, **Report the highest point of linearity.**
- **If the result is less than the reportable range and the ATO flag remains,** the 50% value is not accurate. The true result is potentially longer. **DO NOT report the result. v**

Example 5

Status = Review
Result PTT = *114
Flag = ATO
Curve – no end point
Action = run at Longer wavelength

CS-2500 ed

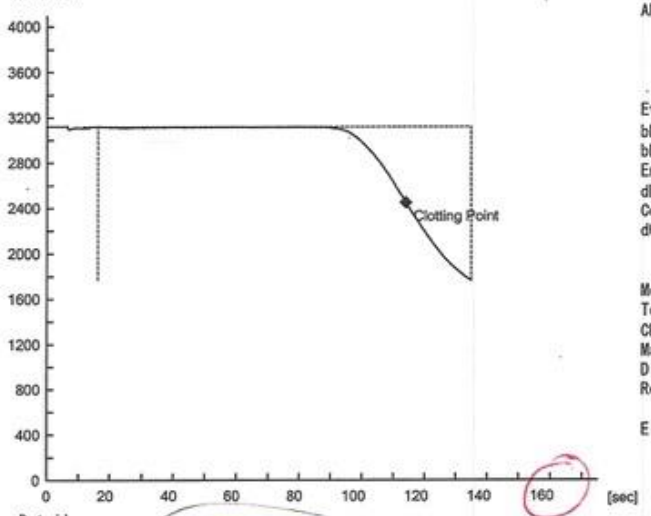
edn : edn

***** Graph Detail Print *****

First run

Sample No:	6080 M	Seq:	1
Rack Tube Pos:	000016-05	Re-analysis flag:	
Status:	Review	Validate:	Performed
S. Code:		Validated on :	11/21/2019 10:24:44
Analysis Mode:	Normal Cp	Validated by :	SYSTEM
Patient Name:			
Sample Comment:			
Sample Info.:	-	Meas. Date:	11/21/2019 10:06:37

APTT-FSL



Detail
0004.0000.0000 Analysis Time Over

Result
APTT * 114.1 sec

Evaluation Info.

bH_point_time	16.2
bH	3118
End_point_time	134.9
dH	1346
Coag.%	50
dOD	0.2478

Measurement Info.

Temperature	37.1
Channel No.	3
Management ID	1251
Dilution Ratio	1 / 1
Reagent Lot	APTT FSL 556962
	CaCl2 563866
Elapsed Time	APTT FSL 45
	CaCl2 64

Hem Detection Level	0
Ict Detection Level	
Lip Detection Level	0
Vol Detection Level	
Calibration Curve ID	
QC Performed Date	11/21/2019 10:08:24
Reagent Table Temp.	10.2

Evaluation Data

1%	91.3	21%	104.6		41%	111.4	61%	117.4	81%	124.4
2%	93.7	22%	105.0		42%	111.7	62%	117.7	82%	124.7
3%	95.0	23%	105.5		43%	112.0	63%	118.0	83%	125.2
4%	95.9	24%	105.8		44%	112.3	64%	118.4	84%	125.6
5%	96.9	25%	106.1		45%	112.6	65%	118.6	85%	126.1
6%	97.6	26%	106.5		46%	112.9	66%	119.0	86%	126.5
7%	98.2	27%	106.9		47%	113.2	67%	119.3	87%	127.0
8%	98.8	28%	107.2		48%	113.5	68%	119.6	88%	127.4
9%	99.4	29%	107.6		49%	113.8	69%	119.9	89%	127.8
10%	99.9	30%	107.9	->	50%	114.1	70%	120.3	90%	128.3
11%	100.4	31%	108.2		51%	114.4	71%	120.7	91%	128.9
12%	100.9	32%	108.6		52%	114.7	72%	121.0	92%	129.4
13%	101.3	33%	108.9		53%	115.0	73%	121.4	93%	129.8
14%	101.8	34%	109.2		54%	115.3	74%	121.7	94%	130.5
15%	102.2	35%	109.6		55%	115.6	75%	122.1	95%	131.1
16%	102.7	36%	109.9		56%	115.9	76%	122.4	96%	131.6
17%	103.1	37%	110.2		57%	116.1	77%	122.8	97%	132.3
18%	103.5	38%	110.5		58%	116.4	78%	123.2	98%	132.9
19%	103.9	39%	110.7		59%	116.8	79%	123.5	99%	133.6
20%	104.3	40%	111.1		60%	117.0	80%	123.9	100%	134.4

Example 5

Re-analysis
No Flag
Result without star
Ok to report result.

CS-2500 ed

edn : edn

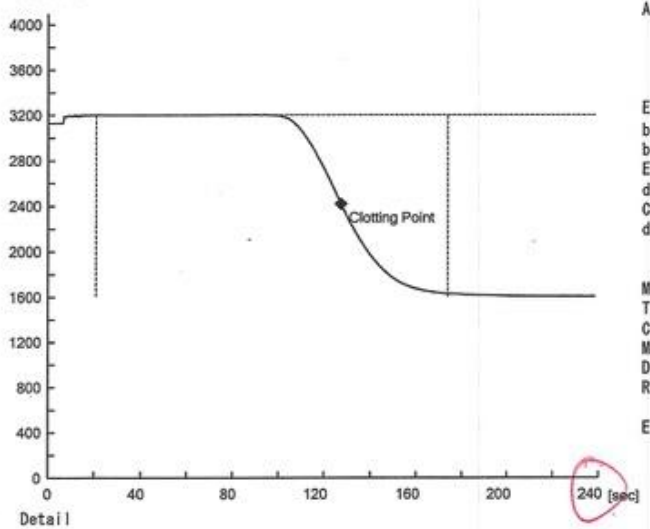
6a

***** Graph Detail Print *****

Sample No:	6080 M	Seq:	1
Rack Tube Pos:	000016-05	Re-analysis flag:	Re-analysis
Status:	Review	Validate:	Performed
S. Code:		Validated on :	11/21/2019 10:24:44
Analysis Mode:	Normal Cp	Validated by :	SYSTEM
Patient Name:			
Sample Comment:			
Sample Info.:	-	Meas. Date:	11/21/2019 10:06:37

2nd Run

APTT-FSL



Detail

Result

APTT	127.4 sec

Evaluation Info.

bH_point_time	20.8
bH	3204
End_point_time	174.0
dH	1572
Coag.%	50
d0D	0.2930

Measurement Info.

Temperature	37.1
Channel No.	2
Management ID	1251
Dilution Ratio	1 / 1
Reagent Lot	APTT FSL 556962
	CaCl2 563866
Elapsed Time	APTT FSL 45
	CaCl2 65

Hem Detection Level	0
Ict Detection Level	
Lip Detection Level	0
Vol Detection Level	
Calibration Curve ID	
QC Performed Date	11/21/2019 10:08:24
Reagent Table Temp.	10.1

Evaluation Data

1%	101.8	21%	116.3		41%	124.1	61%	131.5	81%	141.5
2%	104.0	22%	116.7		42%	124.5	62%	132.0	82%	142.1
3%	105.5	23%	117.1		43%	124.8	63%	132.4	83%	142.8
4%	106.5	24%	117.6		44%	125.2	64%	132.8	84%	143.5
5%	107.3	25%	118.0		45%	125.5	65%	133.2	85%	144.2
6%	108.2	26%	118.4		46%	125.9	66%	133.7	86%	144.9
7%	108.9	27%	118.8		47%	126.3	67%	134.1	87%	145.7
8%	109.6	28%	119.3		48%	126.7	68%	134.5	88%	146.7
9%	110.2	29%	119.6		49%	127.0	69%	135.0	89%	147.6
10%	110.8	30%	120.0	->	50%	127.4	70%	135.5	90%	148.6
11%	111.4	31%	120.4		51%	127.8	71%	136.0	91%	149.6
12%	111.9	32%	120.8		52%	128.1	72%	136.4	92%	150.8
13%	112.5	33%	121.2		53%	128.5	73%	136.9	93%	152.0
14%	113.0	34%	121.6		54%	128.8	74%	137.5	94%	153.4
15%	113.5	35%	121.9		55%	129.2	75%	138.0	95%	155.1
16%	113.9	36%	122.3		56%	129.6	76%	138.6	96%	157.1
17%	114.5	37%	122.7		57%	130.0	77%	139.1	97%	159.4
18%	115.0	38%	123.0		58%	130.4	78%	139.7	98%	162.5
19%	115.3	39%	123.4		59%	130.7	79%	140.2	99%	166.7
20%	115.9	40%	123.8		60%	131.2	80%	140.8	100%	174.1

Example 6

Status = Review
Mode = Normal
Result = *PTT
Flag = ATO and Vol
Action: Check vol, if ok, Review the Re-analysis result

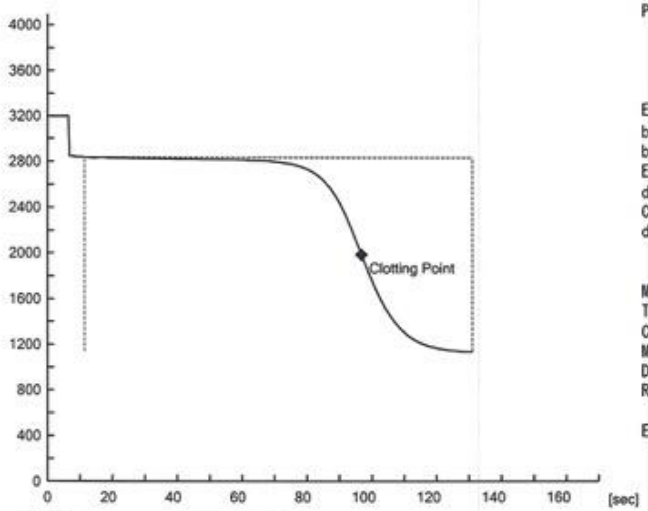
As mode is normal, instrument will run On longer measurement by itself

CS-5100 25632-2 admin : administrator

***** Graph Detail Print *****

Sample No:	10146125 B	Seq:	1
Rack Tube Pos:	000008-01	Re-analysis flag:	
Status:	Review	Validate:	Performed
S. Code:		Validated on :	2020/06/28 15:09:34
Analysis Mode:	Normal	Validated by :	SYSTEM
Patient Name:	ADULT ZZZYH		
Sample Comment:			
Sample Info.:	Vol	Meas. Date:	2020/06/28 14:47:17

PTT



Result
PTT * 96.8 sec

Evaluation Info.

bH_point_time	11.4
bH	2836
End_point_time	131.0
dH	1700
Coag.%	50
d0D	0.3977

Measurement Info.

Temperature	37.0
Channel No.	6
Management ID	3290
Dilution	1 / 1
Reagent Lot	APTT FSL 556997
	CaCl2 563872
Elapsed Time	APTT FSL 4
	CaCl2 4

Detail
0004.0000.0000 Analysis Time Over
1100.4000.0000 Defective Sample Volume

Hem Detection Level	0
Ict Detection Level	
Lip Detection Level	0
Vol Detection Level	56.0
Calibration Curve ID	
QC Performed Date	2020/06/28 10:52:00
Reagent Table Temp.	10.1

Evaluation Data

1%	55.5	21%	89.2		41%	94.7	61%	99.4	81%	105.4
2%	69.9	22%	89.6		42%	94.9	62%	99.6	82%	105.8
3%	74.5	23%	89.9		43%	95.1	63%	99.9	83%	106.2
4%	77.0	24%	90.2		44%	95.4	64%	100.2	84%	106.7
5%	78.8	25%	90.5		45%	95.6	65%	100.4	85%	107.1
6%	80.2	26%	90.8		46%	95.8	66%	100.7	86%	107.6
7%	81.4	27%	91.1		47%	96.1	67%	100.9	87%	108.2
8%	82.4	28%	91.4		48%	96.3	68%	101.2	88%	108.7
9%	83.2	29%	91.7		49%	96.5	69%	101.5	89%	109.3
10%	84.0	30%	92.0	->	50%	96.8	70%	101.8	90%	110.0
11%	84.6	31%	92.2		51%	97.0	71%	102.1	91%	110.7
12%	85.3	32%	92.5		52%	97.2	72%	102.4	92%	111.4
13%	85.8	33%	92.8		53%	97.4	73%	102.7	93%	112.3
14%	86.3	34%	93.0		54%	97.7	74%	103.0	94%	113.3
15%	86.8	35%	93.2		55%	97.9	75%	103.3	95%	114.4
16%	87.3	36%	93.5		56%	98.2	76%	103.6	96%	115.8
17%	87.7	37%	93.7		57%	98.4	77%	103.9	97%	117.6
18%	88.1	38%	93.9		58%	98.6	78%	104.3	98%	119.8
19%	88.5	39%	94.2		59%	98.9	79%	104.7	99%	123.4
20%	88.8	40%	94.5		60%	99.1	80%	105.0	100%	131.0

Example 6

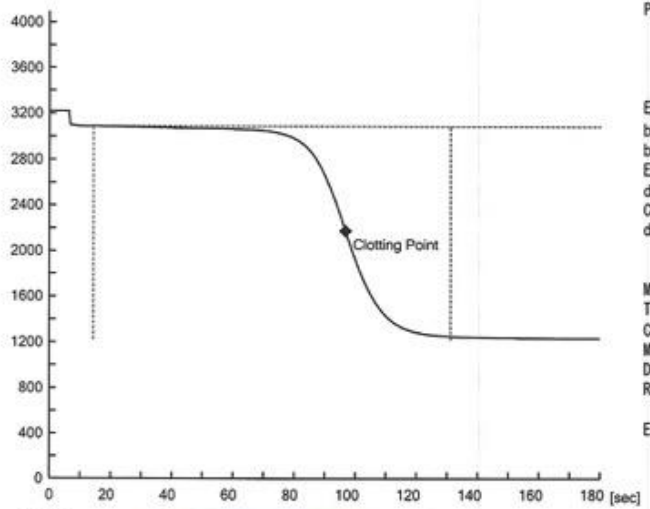
<u>After Re-analysis</u>
Result without *
-ok to report

CS-5100 25632-2 admin : administrator

***** Graph Detail Print *****

Sample No:	10146125 B	Seq:	F
Rack Tube Pos:	000008-01	Re-analysis flag:	
Status:	Review	Validate:	Performed
S. Code:		Validated on :	2020/06/28 15:09:34
Analysis Mode:	Normal	Validated by :	SYSTEM
Patient Name:	ADULT ZZZYH		
Sample Comment:			
Sample Info.:	Vol	Meas. Date:	2020/06/28 14:47:17

PTT



Result
PTT 96.8 sec

Evaluation Info.

bH_point_time	14.4
bH	3090
End_point_time	131.2
dH	1838
Coag.%	50
dOD	0.3921

Measurement Info.

Temperature	37.0
Channel No.	3
Management ID	3290
Dilution	1 / 1
Reagent Lot	APTT FSL 556997
	CaCl2 563872
Elapsed Time	APTT FSL 4
	CaCl2 4

Detail
1100.4000.0000 Defective Sample Volume

Hem Detection Level	0
Ict Detection Level	
Lip Detection Level	0
Vol Detection Level	56.0
Calibration Curve ID	
QC Performed Date	2020/06/28 10:52:00
Reagent Table Temp.	10.1

Evaluation Data

1%	52.2	21%	89.3	41%	94.8	61%	99.4	81%	105.2
2%	70.0	22%	89.7	42%	95.0	62%	99.6	82%	105.6
3%	74.4	23%	90.0	43%	95.2	63%	99.8	83%	106.0
4%	77.1	24%	90.3	44%	95.4	64%	100.1	84%	106.5
5%	78.9	25%	90.6	45%	95.7	65%	100.3	85%	106.9
6%	80.4	26%	90.9	46%	95.9	66%	100.6	86%	107.4
7%	81.6	27%	91.2	47%	96.1	67%	100.8	87%	107.9
8%	82.6	28%	91.4	48%	96.3	68%	101.1	88%	108.5
9%	83.4	29%	91.7	49%	96.5	69%	101.3	89%	109.0
10%	84.2	30%	92.0	50%	96.8	70%	101.6	90%	109.7
11%	84.8	31%	92.2	51%	97.1	71%	101.9	91%	110.4
12%	85.4	32%	92.5	52%	97.2	72%	102.2	92%	111.1
13%	86.0	33%	92.8	53%	97.5	73%	102.5	93%	112.0
14%	86.5	34%	93.1	54%	97.7	74%	102.8	94%	113.0
15%	86.9	35%	93.3	55%	97.9	75%	103.1	95%	114.2
16%	87.4	36%	93.6	56%	98.2	76%	103.4	96%	115.5
17%	87.8	37%	93.8	57%	98.4	77%	103.8	97%	117.3
18%	88.2	38%	94.0	58%	98.6	78%	104.1	98%	119.6
19%	88.6	39%	94.2	59%	98.8	79%	104.5	99%	123.2
20%	89.0	40%	94.5	60%	99.1	80%	104.8	100%	131.3

Example 7

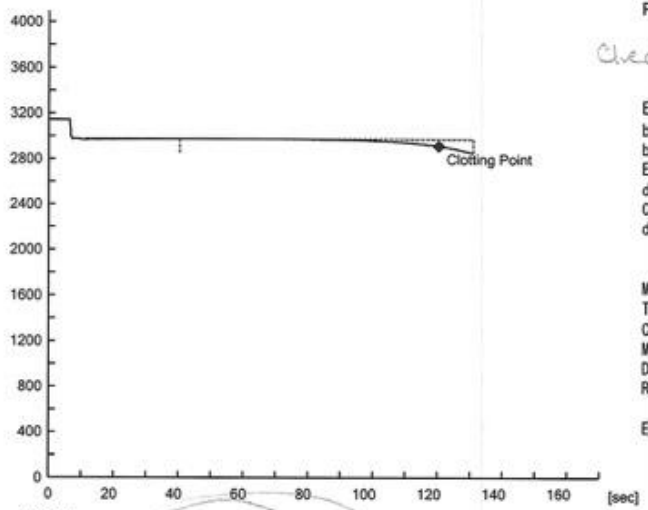
Status = Review
Mode = normal
Result PTT = *120.4
Flag = ATO and vol
Curve – no end point
Action = Review at Longer wavelength

CS-5100 25631-1 admin : administrator

54948927 ***** Graph Detail Print *****

Sample No:	(10146180) B	Seq:	1
Rack Tube Pos:	000008-01	Re-analysis flag:	
Status:	Review	Validate:	Performed
S. Code:		Validated on :	2020/06/29 12:29:36
Analysis Mode:	Normal	Validated by :	SYSTEM
Patient Name:	HIGH ZZZYH		
Sample Comment:			
Sample Info.:	Vol	Meas. Date:	2020/06/29 11:59:31

PTT



Result
PTT * 120.4 sec

Check vol, To Repeat

Detail
0004.0000.0000 Analysis Time Over
1100.4000.0000 Defective Sample Volume

Evaluation Info.

bH_point_time	40.4
bH	2980
End_point_time	131.0
dH	122
Coag.%	50
d0D	0.0189

Measurement Info.

Temperature	37.0
Channel No.	2
Management ID	3290
Dilution	1 / 1
Reagent Lot	APTT FSL 556997
	CaCl2 563872
Elapsed Time	APTT FSL 1
	CaCl2 0

Hem Detection Level	0
Ict Detection Level	
Lip Detection Level	0
Vol Detection Level	50.8
Calibration Curve ID	
QC Performed Date	2020/06/29 11:59:00
Reagent Table Temp.	10.0

Evaluation Data

1%	75.1	21%	108.2		41%	117.6	61%	123.2	81%	127.1
2%	79.1	22%	108.9		42%	117.9	62%	123.3	82%	127.5
3%	83.9	23%	109.7		43%	118.2	63%	123.4	83%	127.5
4%	86.4	24%	109.9		44%	118.4	64%	123.8	84%	127.7
5%	90.5	25%	110.5		45%	118.6	65%	124.1	85%	127.8
6%	92.5	26%	111.0		46%	119.4	66%	124.3	86%	128.1
7%	93.5	27%	111.3		47%	119.6	67%	124.4	87%	128.4
8%	95.1	28%	112.3		48%	119.7	68%	124.6	88%	128.5
9%	95.9	29%	112.8		49%	119.8	69%	125.0	89%	128.6
10%	98.5	30%	113.0	->	50%	120.4	70%	125.1	90%	128.7
11%	99.7	31%	113.6		51%	120.5	71%	125.3	91%	129.0
12%	100.5	32%	114.1		52%	120.7	72%	125.4	92%	129.2
13%	101.3	33%	114.4		53%	121.0	73%	125.8	93%	129.4
14%	103.0	34%	114.7		54%	121.3	74%	125.9	94%	129.5
15%	104.0	35%	115.0		55%	121.6	75%	126.1	95%	129.7
16%	104.6	36%	115.6		56%	121.9	76%	126.3	96%	130.0
17%	105.0	37%	116.2		57%	122.1	77%	126.4	97%	130.1
18%	106.2	38%	116.4		58%	122.2	78%	126.7	98%	130.1
19%	106.8	39%	116.5		59%	122.4	79%	126.8	99%	130.3
20%	107.6	40%	116.9		60%	123.0	80%	127.0	100%	130.6

Example 7

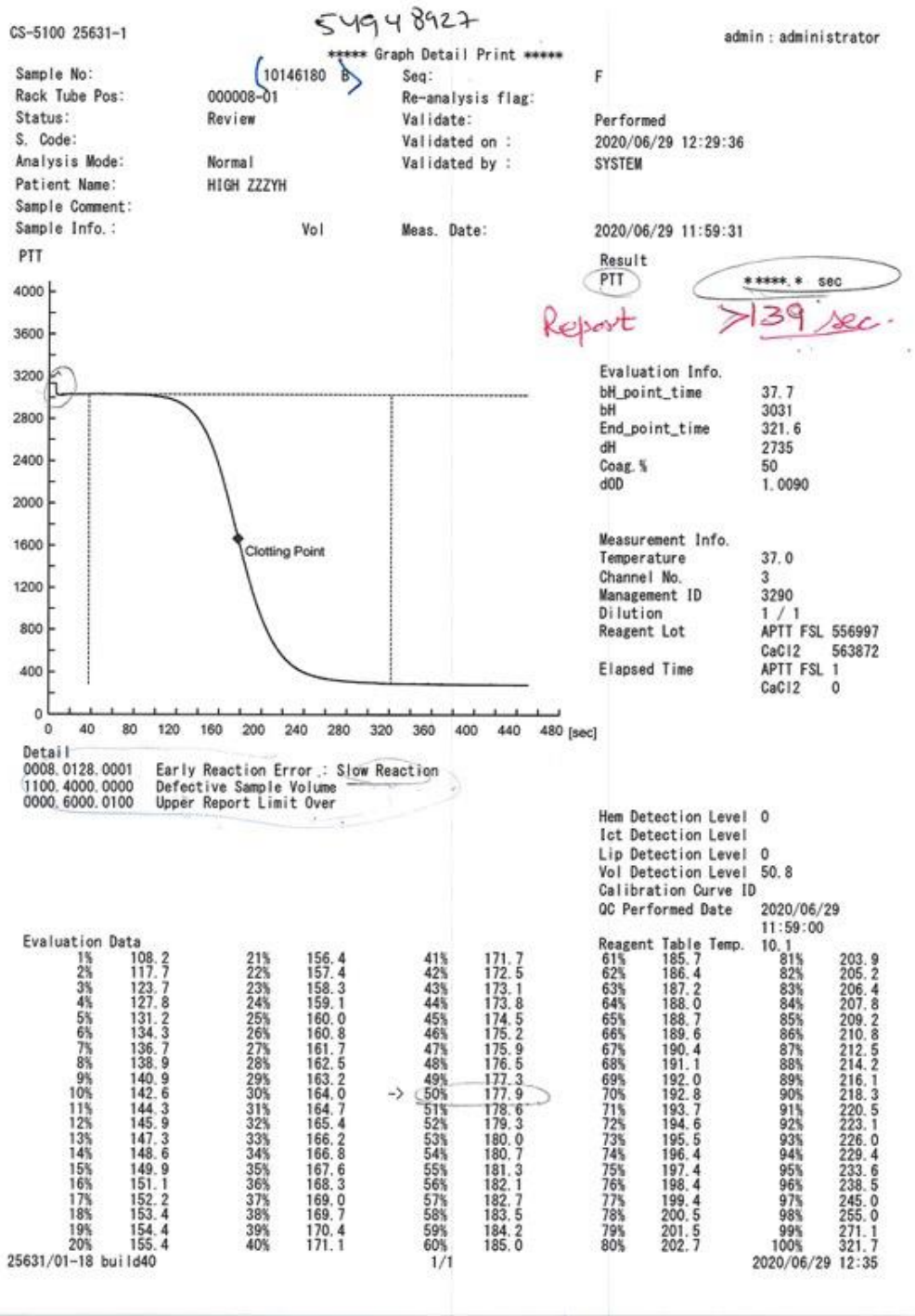
<u>After Re-analysis</u>

Result ****

Flag: Changed to ERE-Slow reaction and Upper report limit

Evaluation data value = 177.9

Report PTT>139



CS-5100 25631-1

54948927

admin : administrator

***** Graph Detail Print *****

Sample No:	10146180 B	Seq:	F
Rack Tube Pos:	000008-01	Re-analysis flag:	
Status:	Review	Validate:	Performed
S. Code:		Validated on :	2020/06/29 12:29:36
Analysis Mode:	Normal	Validated by :	SYSTEM
Patient Name:	HIGH ZZZYH		
Sample Comment:			
Sample Info. :	Vol	Meas. Date:	2020/06/29 11:59:31

PTT

Result

PTT *****.* sec

Report >139 sec.

Evaluation Info.

bH_point_time	37.7
bH	3031
End_point_time	321.6
dH	2735
Coag.%	50
dOD	1.0090

Measurement Info.

Temperature	37.0
Channel No.	3
Management ID	3290
Dilution	1 / 1
Reagent Lot	APTT FSL 556997
	CaCl2 563872
Elapsed Time	APTT FSL 1
	CaCl2 0

Detail

0008.0128.0001 Early Reaction Error : Slow Reaction

1100.4000.0000 Defective Sample Volume

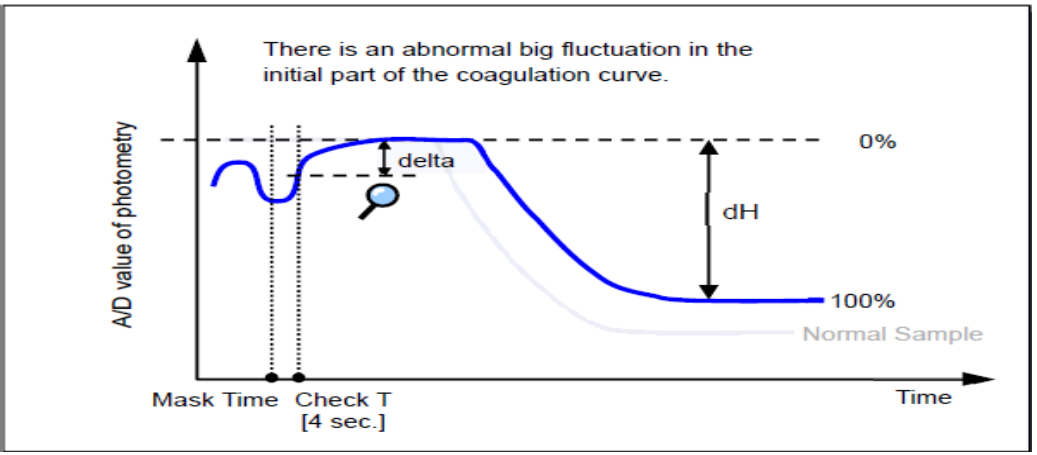
0000.6000.0100 Upper Report Limit Over

Hem Detection Level	0
Ict Detection Level	
Lip Detection Level	0
Vol Detection Level	50.8
Calibration Curve ID	
QC Performed Date	2020/06/29 11:59:00
Reagent Table Temp.	10.1

Evaluation Data

1%	108.2	21%	156.4	41%	171.7	61%	185.7	81%	203.9
2%	117.7	22%	157.4	42%	172.5	62%	186.4	82%	205.2
3%	123.7	23%	158.3	43%	173.1	63%	187.2	83%	206.4
4%	127.8	24%	159.1	44%	173.8	64%	188.0	84%	207.8
5%	131.2	25%	160.0	45%	174.5	65%	188.7	85%	209.2
6%	134.3	26%	160.8	46%	175.2	66%	189.6	86%	210.8
7%	136.7	27%	161.7	47%	175.9	67%	190.4	87%	212.5
8%	138.9	28%	162.5	48%	176.5	68%	191.1	88%	214.2
9%	140.9	29%	163.2	49%	177.3	69%	192.0	89%	216.1
10%	142.6	30%	164.0	-> 50%	177.9	70%	192.8	90%	218.3
11%	144.3	31%	164.7	51%	178.6	71%	193.7	91%	220.5
12%	145.9	32%	165.4	52%	179.3	72%	194.6	92%	223.1
13%	147.3	33%	166.2	53%	180.0	73%	195.5	93%	226.0
14%	148.6	34%	166.8	54%	180.7	74%	196.4	94%	229.4
15%	149.9	35%	167.6	55%	181.3	75%	197.4	95%	233.6
16%	151.1	36%	168.3	56%	182.1	76%	198.4	96%	238.5
17%	152.2	37%	169.0	57%	182.7	77%	199.4	97%	245.0
18%	153.4	38%	169.7	58%	183.5	78%	200.5	98%	255.0
19%	154.4	39%	170.4	59%	184.2	79%	201.5	99%	271.1
20%	155.4	40%	171.1	60%	185.0	80%	202.7	100%	321.7

Coagulation Curve error



Joblist	Flagged numeric result
Cause	Occurs when there is unexpected curve fluctuation. Common cause is an air bubble in the reaction cuvette.

This check can detect such an abnormal fluctuation. When this situation occurs, no numerical results will be given; instead ***.* will print along with the "Coag. Curve Error" message.

Action Steps for "Coagulation Curve Error"

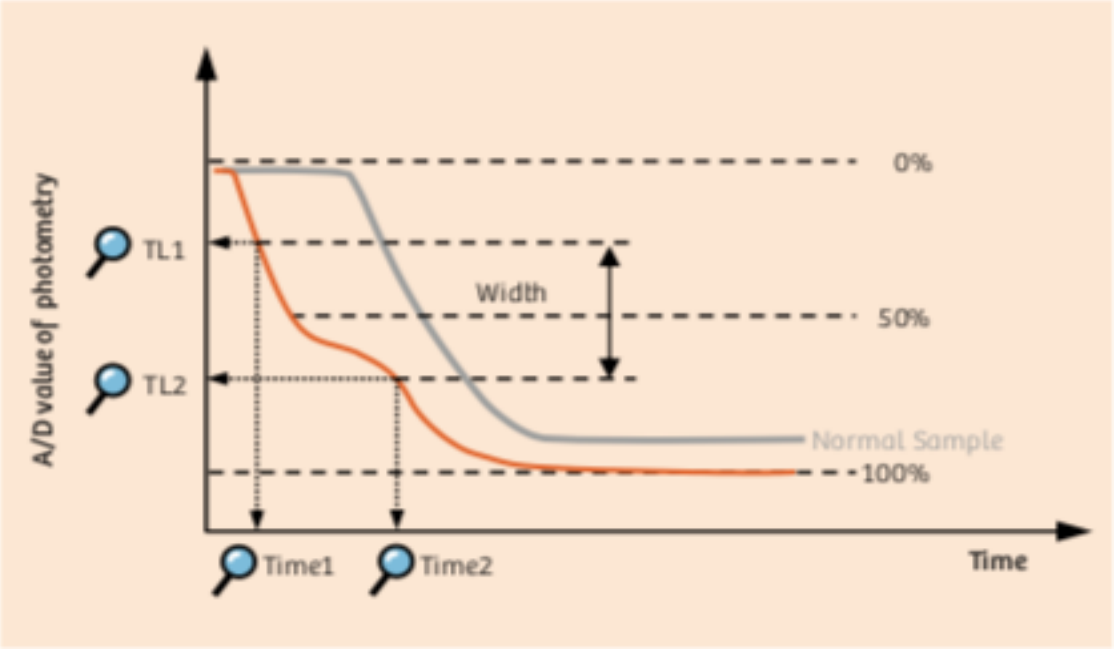
1. After Re-analysis,
   --Results Without an asterisk (*) --- REPORT Result
   -- Same flag and asterisk--**DO NOT Report the result.**

4. Early Reaction Error (ERE)

This message occurs when abnormally short **PTT p**atient results may be caused by an early reaction. Patient results with an early reaction can be identified in the Evaluation Data and additional information (an Early Reaction Error code) will be shown. When this situation occurs, no numerical results will be given; instead ***.* will print along with the "Early Reaction Error" message.

If the reaction time (Time2 - Time1) within the range of Width% is longer than the Slow Reaction Time Limit, the result will be flagged with an "Early Reaction Error" error.

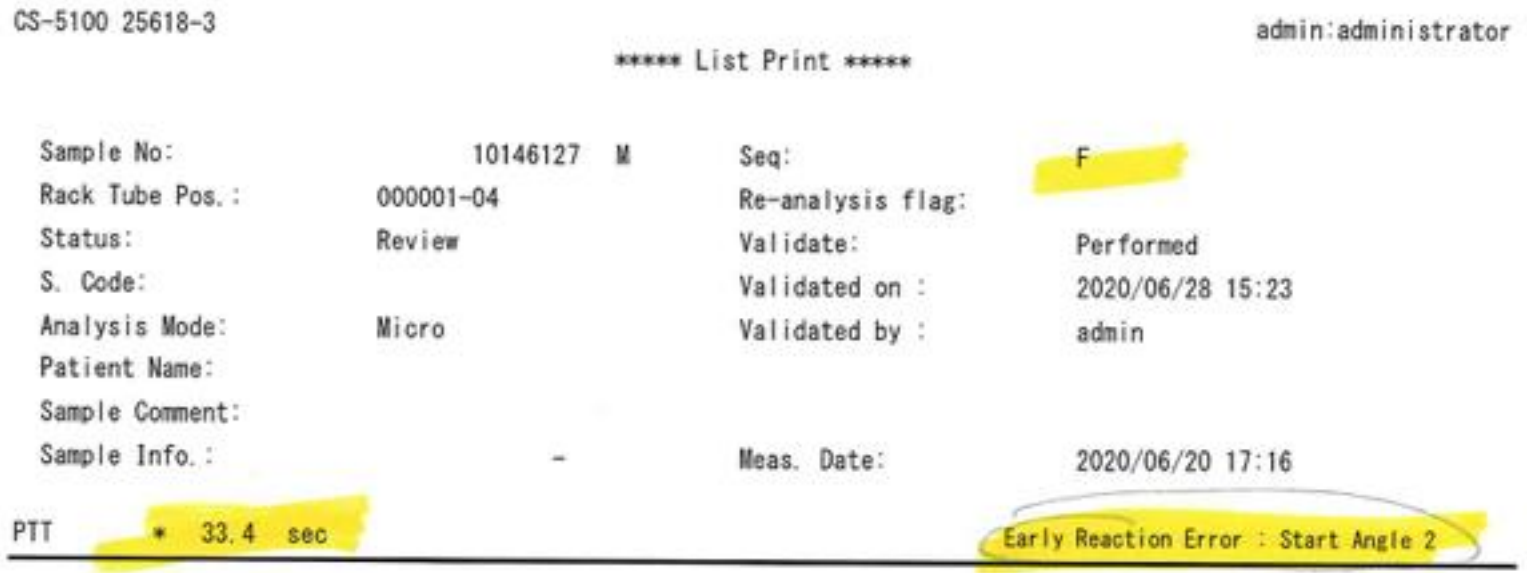
All ERE will have non numerical result. (.*) except Start Angle 2***



<u>ERE - Start Angle 2,</u> respin if lipemic or hemolyzed and rerun, check to see if the result **matches what is listed at the 50%.** If it does, **report the result**.

- If the result does not match the 50% point, it may be greater than the upper report limit. **DO NOT** report.

Example 1



CS-5100 25618-3 admin:administrator

***** List Print *****

Sample No:	10146127 M	Seq:	F
Rack Tube Pos.:	000001-04	Re-analysis flag:	
Status:	Review	Validate:	Performed
S. Code:		Validated on :	2020/06/28 15:23
Analysis Mode:	Micro	Validated by :	admin
Patient Name:			
Sample Comment:			
Sample Info.:	-	Meas. Date:	2020/06/20 17:16

PTT * 33.4 sec Early Reaction Error : Start Angle 2

<u>Example 1 at longer measurement</u>

Status = Review

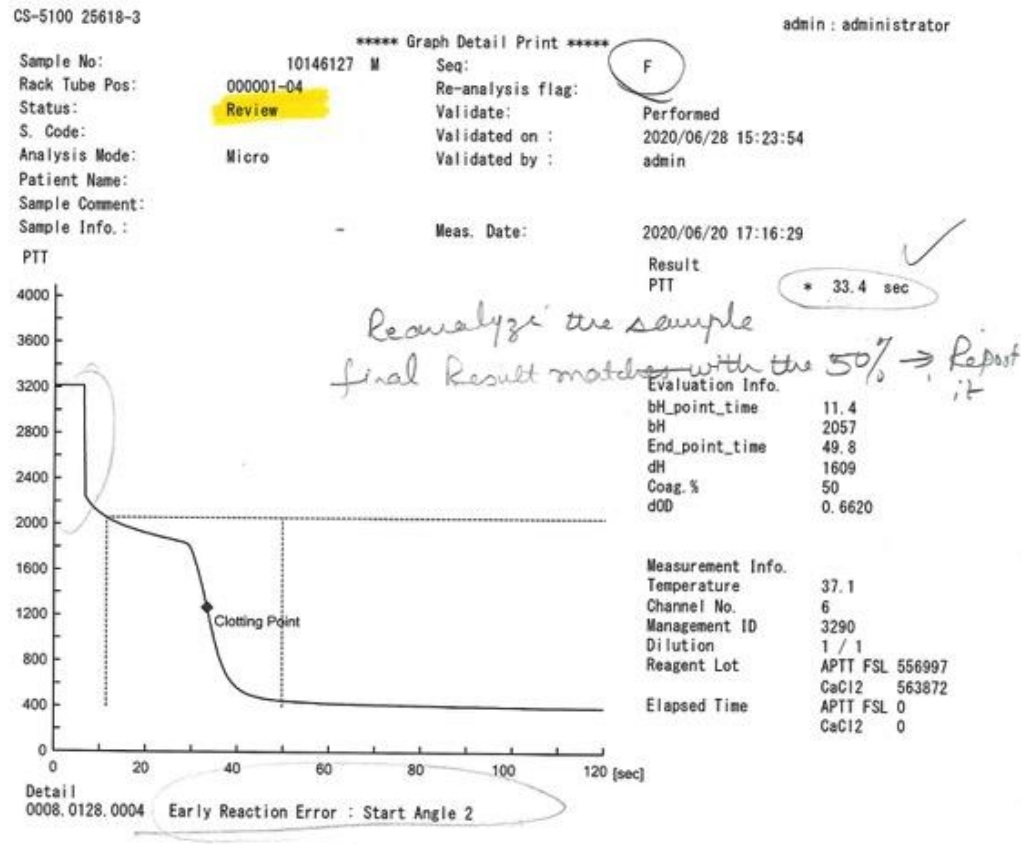
Mode = Micro

Result PTT = *33.4

Flag = ERE; Start Angle2

Action = Report the result

(Only ERE flag where the ** result can be reported is if it **matches the 50% point**)



CS-5100 25618-3

admin : administrator

***** Graph Detail Print *****

Sample No:	10146127 M	Seq:	F
Rack Tube Pos:	000001-04	Re-analysis flag:	
Status:	Review	Validate:	Performed
S. Code:		Validated on :	2020/06/28 15:23:54
Analysis Mode:	Micro	Validated by :	admin
Patient Name:			
Sample Comment:			
Sample Info.:	-	Meas. Date:	2020/06/20 17:16:29

PTT

Result

PTT * 33.4 sec

Reanalyze the sample

final Result matches with the 50% → Report it

Evaluation Info.

bH_point_time	11.4
bH	2057
End_point_time	49.8
dH	1609
Coag.%	50
dOD	0.6620

Measurement Info.

Temperature	37.1
Channel No.	6
Management ID	3290
Dilution	1 / 1
Reagent Lot	APTT FSL 556997
	CaCl2 563872
Elapsed Time	APTT FSL 0
	CaCl2 0

Detail

0008.0128.0004 Early Reaction Error : Start Angle 2

Hem Detection Level

Ict Detection Level

Lip Detection Level

Vol Detection Level

Calibration Curve ID

QC Performed Date 2020/06/20 13:07:35

Reagent Table Temp. 10.1

Evaluation Data

1%	12.0	21%	30.4	41%	32.6	61%	34.4	81%	36.7
2%	12.8	22%	30.5	42%	32.7	62%	34.5	82%	36.9
3%	13.7	23%	30.7	43%	32.8	63%	34.5	83%	37.0
4%	14.6	24%	30.8	44%	32.8	64%	34.6	84%	37.3
5%	15.7	25%	30.9	45%	33.0	65%	34.7	85%	37.4
6%	16.8	26%	31.0	46%	33.0	66%	34.8	86%	37.6
7%	18.0	27%	31.1	47%	33.1	67%	34.9	87%	37.9
8%	19.2	28%	31.3	48%	33.2	68%	35.0	88%	38.2
9%	20.7	29%	31.3	49%	33.3	69%	35.1	89%	38.4
10%	22.2	30%	31.5	50%	33.4	70%	35.3	90%	38.7
11%	23.9	31%	31.6	51%	33.5	71%	35.3	91%	39.1
12%	25.6	32%	31.6	52%	33.6	72%	35.5	92%	39.5
13%	27.4	33%	31.8	53%	33.6	73%	35.6	93%	39.9
14%	28.8	34%	31.9	54%	33.7	74%	35.7	94%	40.4
15%	29.3	35%	32.0	55%	33.8	75%	35.8	95%	41.1
16%	29.6	36%	32.1	56%	33.9	76%	35.9	96%	41.9
17%	29.8	37%	32.2	57%	34.0	77%	36.1	97%	42.8
18%	29.9	38%	32.3	58%	34.1	78%	36.2	98%	44.2
19%	30.1	39%	32.4	59%	34.2	79%	36.4	99%	46.2
20%	30.2	40%	32.5	60%	34.2	80%	36.5	100%	49.9

25618/01-18 build40

1/1

2020/06/28 15:24

Example 2 at longer measurement

Status = Review

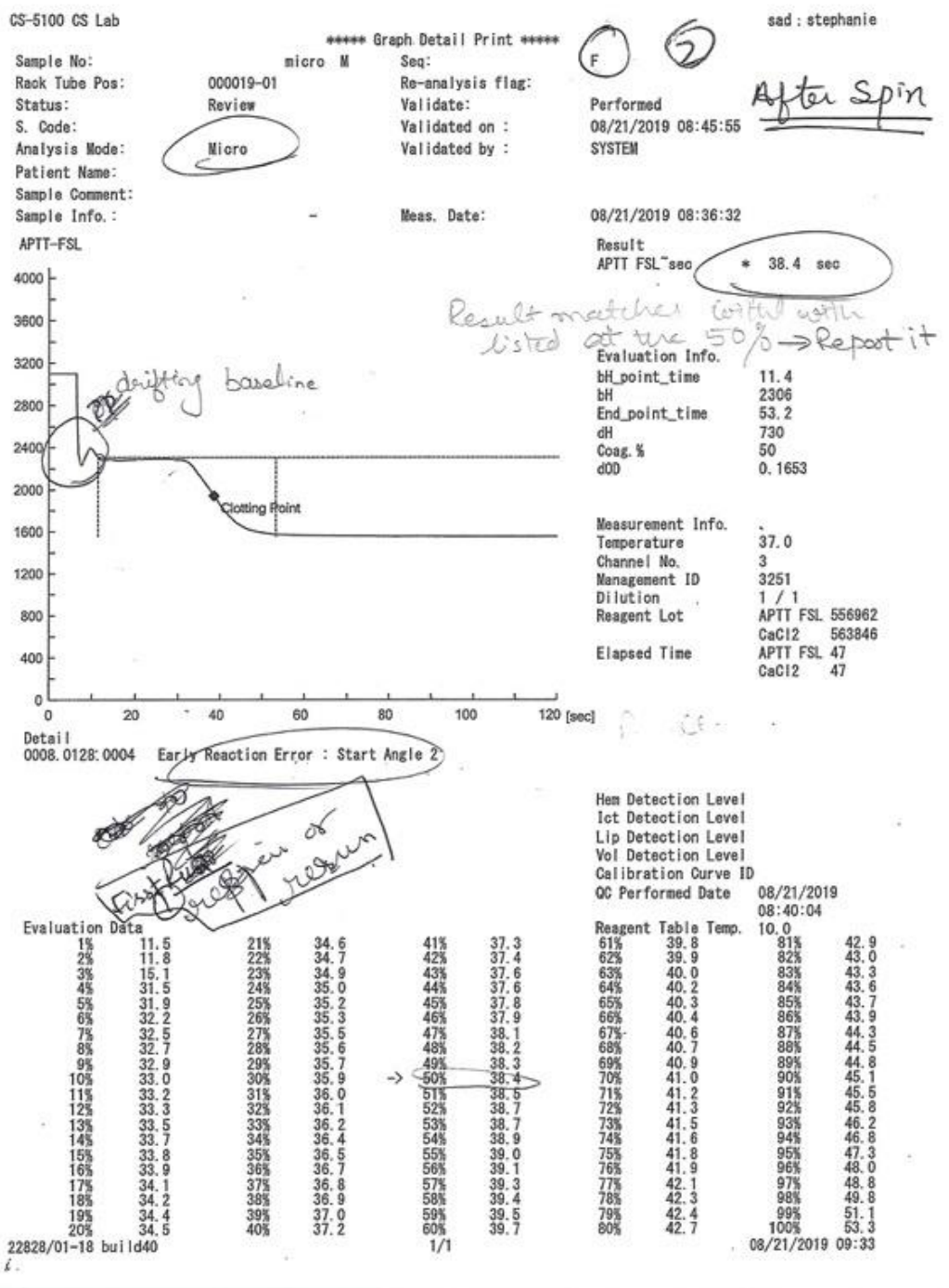
Mode = Micro

Result PTT = *38.4

Flag = ERE; Start Angle2

Action = Report the result

(Only ERE flag where the *numeric result can be reported is if it **matches the 50% point**)



CS-5100 CS Lab

***** Graph Detail Print *****

sad : stephanie

F 2

After Spin

Sample No:	micro M	Seq:	
Rack Tube Pos:	000019-01	Re-analysis flag:	
Status:	Review	Validate:	Performed
S. Code:		Validated on :	08/21/2019 08:45:55
Analysis Mode:	Micro	Validated by :	SYSTEM
Patient Name:			
Sample Comment:			
Sample Info. :	-	Meas. Date:	08/21/2019 08:36:32

APTT-FSL

Result

APTT FSL sec * 38.4 sec

Result matches (with) with listed at the 50% → Repeat it

Evaluation Info.

bH_point_time	11.4
bH	2306
End_point_time	53.2
dH	730
Coag.%	50
dOD	0.1653

Measurement Info.

Temperature	37.0
Channel No.	3
Management ID	3251
Dilution	1 / 1
Reagent Lot	APTT FSL 556962
	CaCl2 563846
Elapsed Time	APTT FSL 47
	CaCl2 47

Detail

0008.0128.0004 Early Reaction Error : Start Angle 2

First Derivation of Fibrin

Hem Detection Level	
Ict Detection Level	
Lip Detection Level	
Vol Detection Level	
Calibration Curve ID	
QC Performed Date	08/21/2019 08:40:04
Reagent Table Temp.	10.0

Evaluation Data

1%	11.5	21%	34.6	41%	37.3	61%	39.8	81%	42.9
2%	11.8	22%	34.7	42%	37.4	62%	39.9	82%	43.0
3%	15.1	23%	34.9	43%	37.6	63%	40.0	83%	43.3
4%	31.5	24%	35.0	44%	37.6	64%	40.2	84%	43.6
5%	31.9	25%	35.2	45%	37.8	65%	40.3	85%	43.7
6%	32.2	26%	35.3	46%	37.9	66%	40.4	86%	43.9
7%	32.5	27%	35.5	47%	38.1	67%	40.6	87%	44.3
8%	32.7	28%	35.6	48%	38.2	68%	40.7	88%	44.5
9%	32.9	29%	35.7	49%	38.3	69%	40.9	89%	44.8
10%	33.0	30%	35.9	→ 50%	38.4	70%	41.0	90%	45.1
11%	33.2	31%	36.0	51%	38.6	71%	41.2	91%	45.5
12%	33.3	32%	36.1	52%	38.7	72%	41.3	92%	45.8
13%	33.5	33%	36.2	53%	38.7	73%	41.5	93%	46.2
14%	33.7	34%	36.4	54%	38.9	74%	41.6	94%	46.8
15%	33.8	35%	36.5	55%	39.0	75%	41.8	95%	47.3
16%	33.9	36%	36.7	56%	39.1	76%	41.9	96%	48.0
17%	34.1	37%	36.8	57%	39.3	77%	42.1	97%	48.8
18%	34.2	38%	36.9	58%	39.4	78%	42.3	98%	49.8
19%	34.4	39%	37.0	59%	39.5	79%	42.4	99%	51.1
20%	34.5	40%	37.2	60%	39.7	80%	42.7	100%	53.3

ERE: Early %

Check sample for clot, lipemia and hemolysis.

If not clotted, microfuge if lipemic or hemolyzed,

- **After reanalysis,** numerical result **without an asterisk (*), --Report the result**.

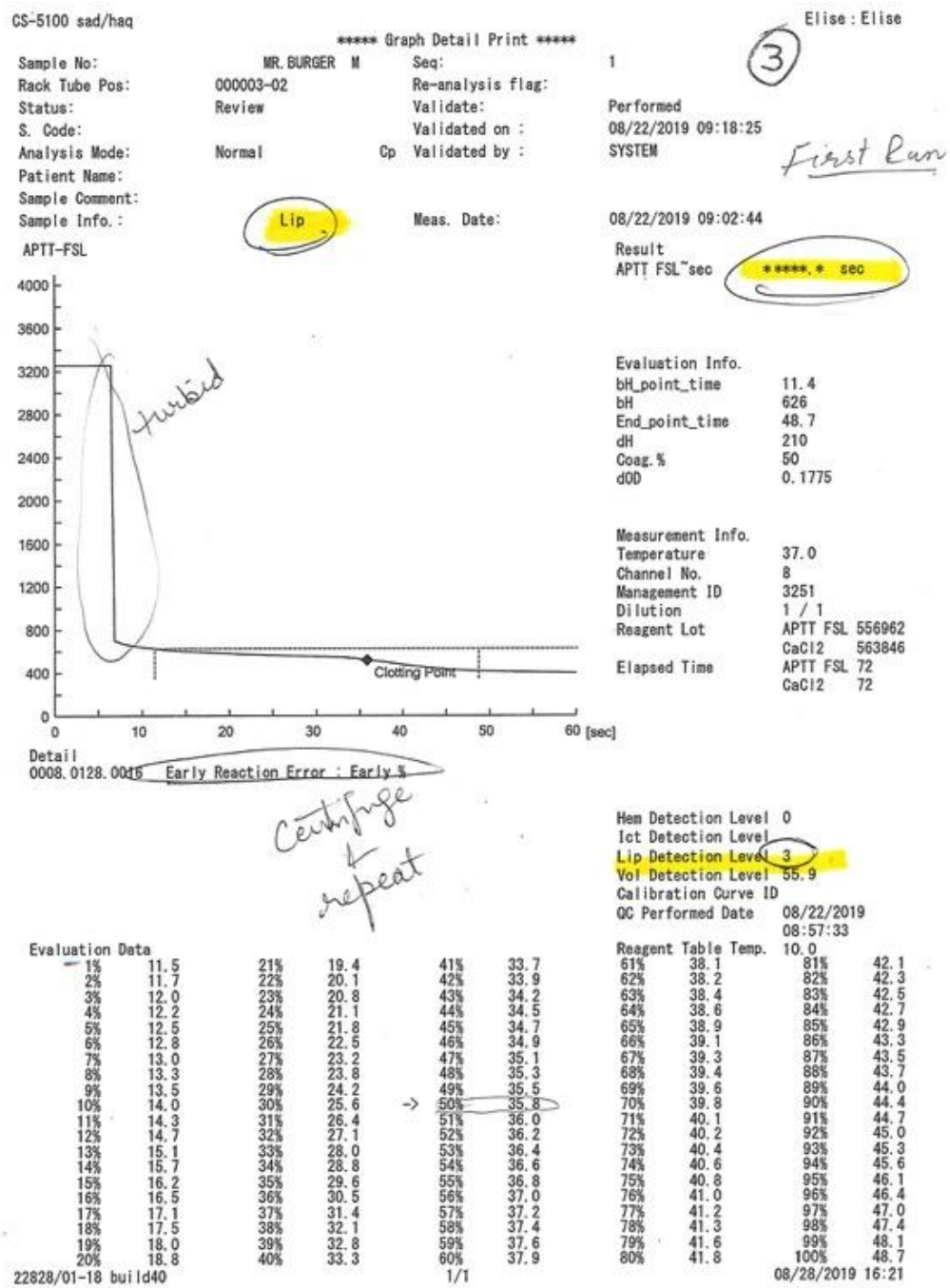
- If result with the **50 % value is <20 seconds,** the sample is clotting too quickly possibly due to pre-analytical variables. Recollect sample. **DO NOT REPORT.**

- **If reanalysis of** the sample results has a different flag **(Lower report Limit Over) along with ERE – Early %,** and the 50% value is <20 seconds PTT, Report <20 seconds.

Example 8

Status = Review
Mode = Normal
Result PTT = ****
Flag = ERE; Early%
Lipemia
Drifting baseline

Action: Check for clot
Microfuge and re-analyze



CS-5100 sad/haq

***** Graph Detail Print *****

Elise : Elise

3

Sample No:	MR. BURGER M	Seq:	1
Rack Tube Pos:	000003-02	Re-analysis flag:	
Status:	Review	Validate:	Performed
S. Code:		Validated on :	08/22/2019 09:18:25
Analysis Mode:	Normal Cp	Validated by :	SYSTEM
Patient Name:			
Sample Comment:			
Sample Info. :	Lip	Meas. Date:	08/22/2019 09:02:44

First Run

APTT-FSL

Result
APTT FSL~sec *****.* sec

Evaluation Info.

bH_point_time	11.4
bH	626
End_point_time	48.7
dH	210
Coag.%	50
dOD	0.1775

Measurement Info.

Temperature	37.0
Channel No.	8
Management ID	3251
Dilution	1 / 1
Reagent Lot	APTT FSL 556962
	CaCl2 563846
Elapsed Time	APTT FSL 72
	CaCl2 72

Detail
0008.0128.0016 Early Reaction Error : Early %

Centrifuge & repeat

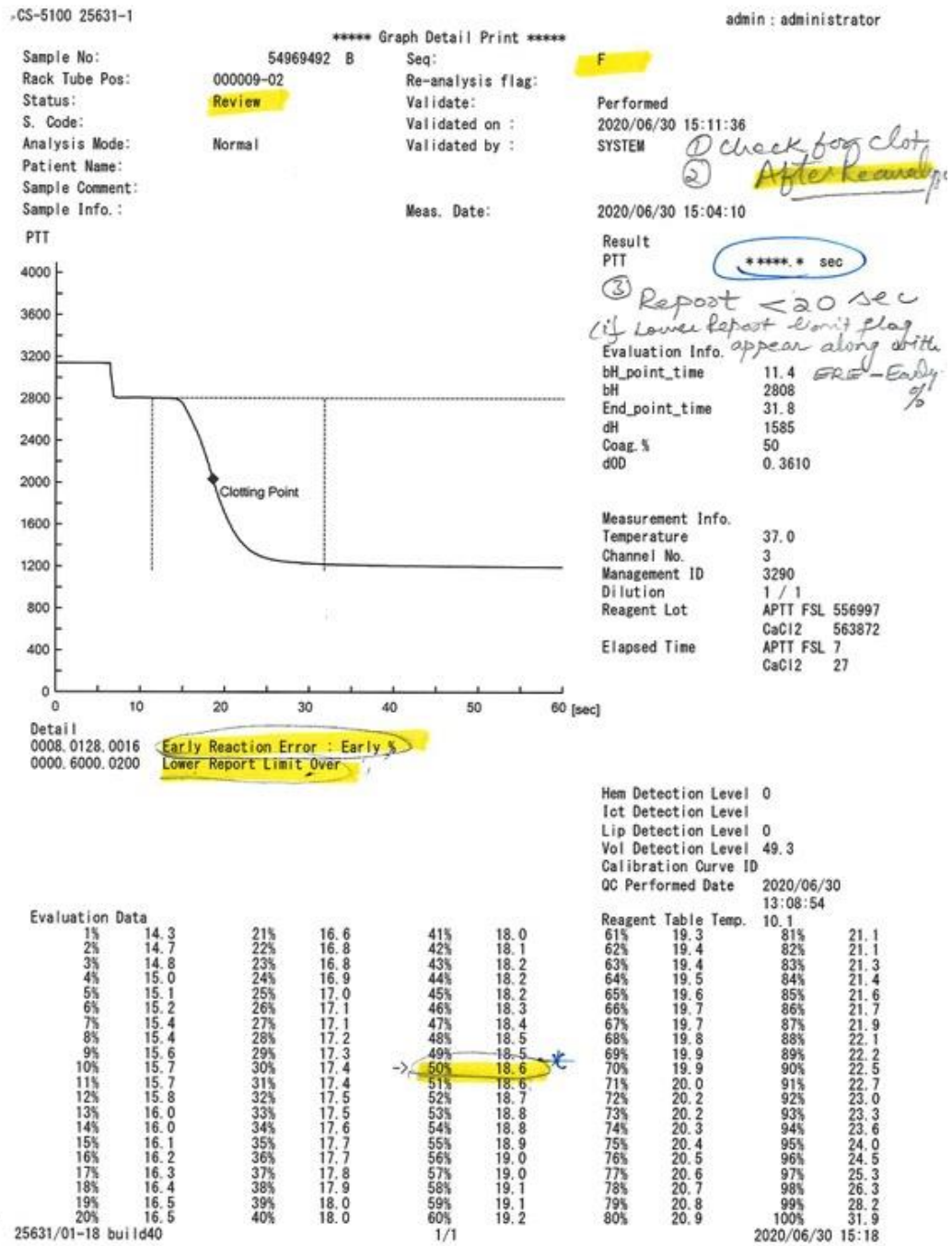
Hem Detection Level 0
Ict Detection Level
Lip Detection Level 3
Vol Detection Level 55.9
Calibration Curve ID
QC Performed Date 08/22/2019 08:57:33
Reagent Table Temp. 10.0

Evaluation Data

1%	11.5	21%	19.4		41%	33.7	61%	38.1	81%	42.1
2%	11.7	22%	20.1		42%	33.9	62%	38.2	82%	42.3
3%	12.0	23%	20.8		43%	34.2	63%	38.4	83%	42.5
4%	12.2	24%	21.1		44%	34.5	64%	38.6	84%	42.7
5%	12.5	25%	21.8		45%	34.7	65%	38.9	85%	42.9
6%	12.8	26%	22.5		46%	34.9	66%	39.1	86%	43.3
7%	13.0	27%	23.2		47%	35.1	67%	39.3	87%	43.5
8%	13.3	28%	23.8		48%	35.3	68%	39.4	88%	43.7
9%	13.5	29%	24.2		49%	35.5	69%	39.6	89%	44.0
10%	14.0	30%	25.6	→	50%	35.8	70%	39.8	90%	44.4
11%	14.3	31%	26.4		51%	36.0	71%	40.1	91%	44.7
12%	14.7	32%	27.1		52%	36.2	72%	40.2	92%	45.0
13%	15.1	33%	28.0		53%	36.4	73%	40.4	93%	45.3
14%	15.7	34%	28.8		54%	36.6	74%	40.6	94%	45.6
15%	16.2	35%	29.6		55%	36.8	75%	40.8	95%	46.1
16%	16.5	36%	30.5		56%	37.0	76%	41.0	96%	46.4
17%	17.1	37%	31.4		57%	37.2	77%	41.2	97%	47.0
18%	17.5	38%	32.1		58%	37.4	78%	41.3	98%	47.4
19%	18.0	39%	32.8		59%	37.6	79%	41.6	99%	48.1
20%	18.8	40%	33.3		60%	37.9	80%	41.8	100%	48.7

Example 9

After re-analysis,
Result=***
Flag= ERE ; early% with Lower report limit error
Action: check eval data,
PTT 50% value =18.6
Report = <20 sec



CS-5100 25631-1 admin : administrator

***** Graph Detail Print *****

Sample No: 54969492 B
Rack Tube Pos: 000009-02
Status: Review
S. Code:
Analysis Mode: Normal
Patient Name:
Sample Comment:
Sample Info. :

Seq: F
Re-analysis flag:
Validate: Performed
Validated on : 2020/06/30 15:11:36
Validated by : SYSTEM

① check for clot
② After Reanalysis

Meas. Date: 2020/06/30 15:04:10

PTT

Result
PTT *****.* sec

③ Report <20 sec
if Lower Report limit flag appear along with ERE-Early %

Evaluation Info.

bH_point_time	11.4
bH	2808
End_point_time	31.8
dH	1585
Coag.%	50
d0D	0.3610

Measurement Info.

Temperature	37.0
Channel No.	3
Management ID	3290
Dilution	1 / 1
Reagent Lot	APTT FSL 556997
	CaCl2 563872
Elapsed Time	APTT FSL 7
	CaCl2 27

Detail
0008.0128.0016 Early Reaction Error : Early %
0000.6000.0200 Lower Report Limit Over

Hem Detection Level 0
Ict Detection Level
Lip Detection Level 0
Vol Detection Level 49.3
Calibration Curve ID
QC Performed Date 2020/06/30 13:08:54
Reagent Table Temp. 10.1

Evaluation Data

1%	14.3	21%	16.6	41%	18.0	61%	19.3	81%	21.1
2%	14.7	22%	16.8	42%	18.1	62%	19.4	82%	21.1
3%	14.8	23%	16.8	43%	18.2	63%	19.4	83%	21.3
4%	15.0	24%	16.9	44%	18.2	64%	19.5	84%	21.4
5%	15.1	25%	17.0	45%	18.2	65%	19.6	85%	21.6
6%	15.2	26%	17.1	46%	18.3	66%	19.7	86%	21.7
7%	15.4	27%	17.1	47%	18.4	67%	19.7	87%	21.9
8%	15.4	28%	17.2	48%	18.5	68%	19.8	88%	22.1
9%	15.6	29%	17.3	49%	18.5	69%	19.9	89%	22.2
10%	15.7	30%	17.4	-> 50%	18.6	70%	19.9	90%	22.5
11%	15.7	31%	17.4	51%	18.6	71%	20.0	91%	22.7
12%	15.8	32%	17.5	52%	18.7	72%	20.2	92%	23.0
13%	16.0	33%	17.5	53%	18.8	73%	20.2	93%	23.3
14%	16.0	34%	17.6	54%	18.8	74%	20.3	94%	23.6
15%	16.1	35%	17.7	55%	18.9	75%	20.4	95%	24.0
16%	16.2	36%	17.7	56%	19.0	76%	20.5	96%	24.5
17%	16.3	37%	17.8	57%	19.0	77%	20.6	97%	25.3
18%	16.4	38%	17.9	58%	19.1	78%	20.7	98%	26.3
19%	16.5	39%	18.0	59%	19.1	79%	20.8	99%	28.2
20%	16.5	40%	18.0	60%	19.2	80%	20.9	100%	31.9

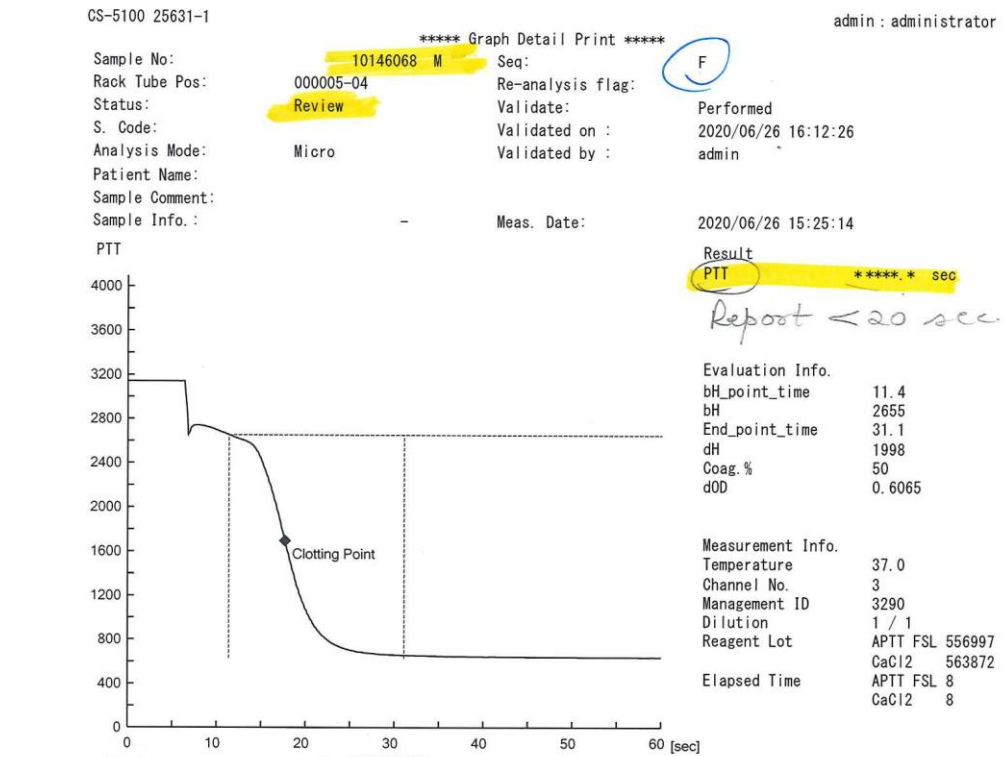
25631/01-18 build40 1/1 2020/06/30 15:18

Example 10

This is after re-analysis

Already check the clot
Result = ***(PTT)
Flag = ERE-early% with lower report limit
Evaluation data = PTT 17.7

Report = PTT<20 sec



CS-5100 25631-1 admin : administrator

***** Graph Detail Print *****

Sample No:	10146068 M	Seq:	F
Rack Tube Pos:	000005-04	Re-analysis flag:	
Status:	Review	Validate:	Performed
S. Code:		Validated on :	2020/06/26 16:12:26
Analysis Mode:	Micro	Validated by :	admin
Patient Name:			
Sample Comment:			
Sample Info.:	-	Meas. Date:	2020/06/26 15:25:14

PTT

Result
PTT *****.* sec
Report <20 sec

Evaluation Info.

bH_point_time	11.4
bH	2655
End_point_time	31.1
dH	1998
Coag.%	50
dOD	0.6065

Measurement Info.

Temperature	37.0
Channel No.	3
Management ID	3290
Dilution	1 / 1
Reagent Lot	APTT FSL 556997
	CaCl2 563872
Elapsed Time	APTT FSL 8
	CaCl2 8

Detail
0008.0128.0016 Early Reaction Error : Early %
0000.6000.0200 Lower Report Limit Over

⇒ Check for clot, if clotted → cancel
⇒ Reanalyze
⇒ If ERE-early % along with lower limit flag → Report <20 sec

Hem Detection Level	
Ict Detection Level	
Lip Detection Level	
Vol Detection Level	
Calibration Curve ID	
QC Performed Date	2020/06/26 14:45:02
Reagent Table Temp.	10.1

Evaluation Data

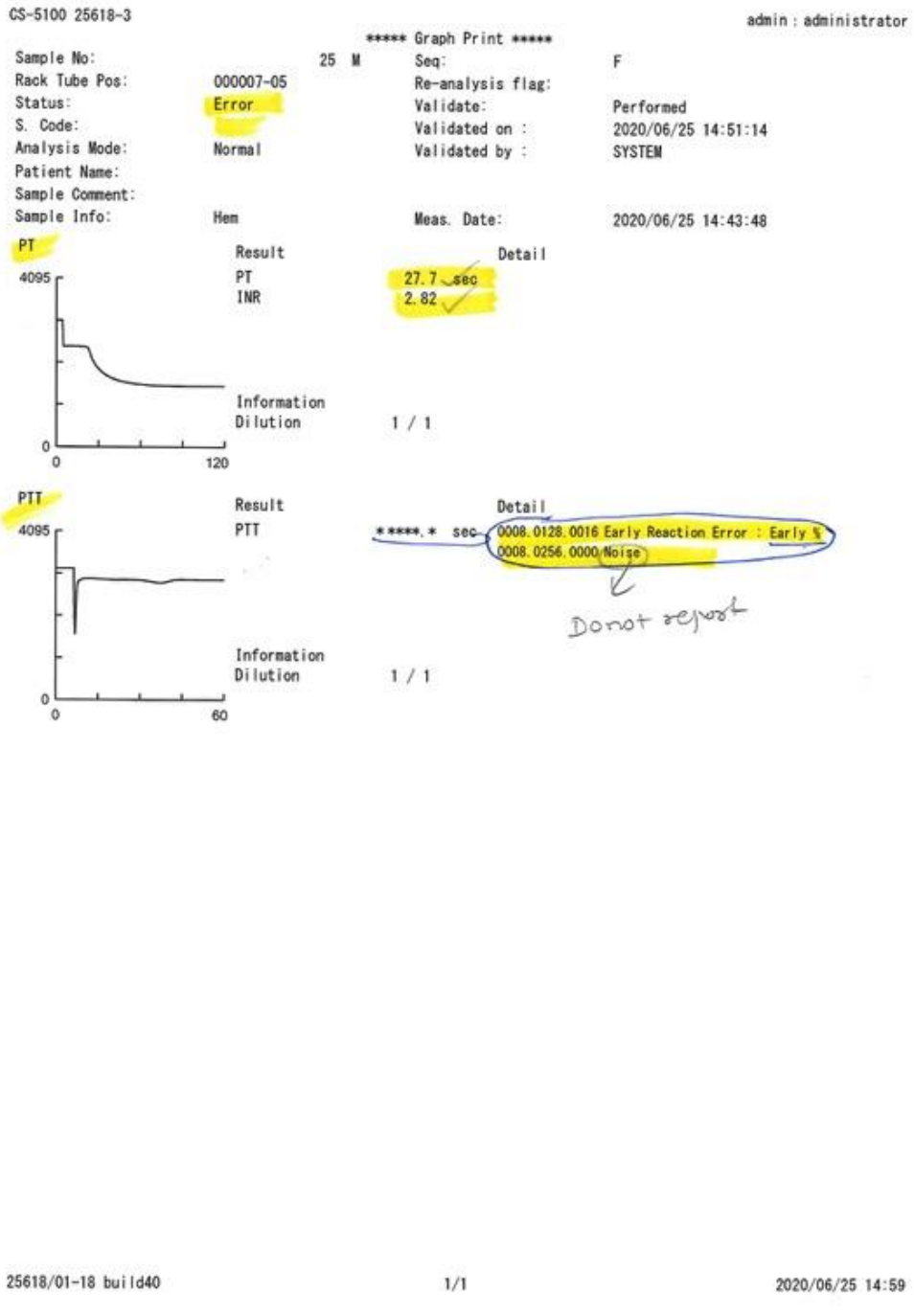
1%	11.9	21%	15.8	41%	17.2	61%	18.4	81%	20.1
2%	12.6	22%	15.9	42%	17.3	62%	18.5	82%	20.2
3%	13.3	23%	16.0	43%	17.3	63%	18.5	83%	20.4
4%	13.7	24%	16.0	44%	17.4	64%	18.6	84%	20.5
5%	14.0	25%	16.1	45%	17.4	65%	18.7	85%	20.7
6%	14.3	26%	16.2	46%	17.5	66%	18.8	86%	20.8
7%	14.4	27%	16.2	47%	17.6	67%	18.8	87%	21.0
8%	14.5	28%	16.3	48%	17.6	68%	18.9	88%	21.1
9%	14.7	29%	16.4	49%	17.7	69%	19.0	89%	21.4
10%	14.8	30%	16.5	-> 50%	17.7	70%	19.1	90%	21.6
11%	14.9	31%	16.5	51%	17.8	71%	19.1	91%	21.8
12%	15.0	32%	16.6	52%	17.9	72%	19.2	92%	22.0
13%	15.1	33%	16.7	53%	18.0	73%	19.4	93%	22.3
14%	15.2	34%	16.8	54%	18.0	74%	19.4	94%	22.7
15%	15.3	35%	16.8	55%	18.0	75%	19.5	95%	23.1
16%	15.4	36%	16.9	56%	18.1	76%	19.6	96%	23.6
17%	15.5	37%	16.9	57%	18.2	77%	19.7	97%	24.2
18%	15.6	38%	17.0	58%	18.2	78%	19.8	98%	25.2
19%	15.7	39%	17.1	59%	18.3	79%	19.9	99%	26.8
20%	15.7	40%	17.1	60%	18.4	80%	20.0	100%	31.2

<20

25631/01-18 build40 1/1 2020/06/26 16:12

Example 11

Status = Error
Mode = Normal
Result PTT =***(but normal PTINR)
Flag = ERE; Early%
Noise
Action: re-analyze sample
If re-analysis results with the **same NOISE flag**, DO NOT report the result


CS-5100 25618-3

admin : administrator

***** Graph Print *****

Sample No:	25 M	Seq:	F
Rack Tube Pos:	000007-05	Re-analysis flag:	
Status:	Error	Validate:	Performed
S. Code:		Validated on :	2020/06/25 14:51:14
Analysis Mode:	Normal	Validated by :	SYSTEM
Patient Name:			
Sample Comment:			
Sample Info:	Hem	Meas. Date:	2020/06/25 14:43:48

PT

Result	Detail
PT	27.7 sec
INR	2.82
Information	
Dilution	1 / 1

PTT

Result	Detail
PTT	*****.* sec
	0008.0128.0016 Early Reaction Error : Early %
	0008.0256.0000 Noise
Information	
Dilution	1 / 1

Donot report

25618/01-18 build40 1/1 2020/06/25 14:59

Example 12

Ok to report

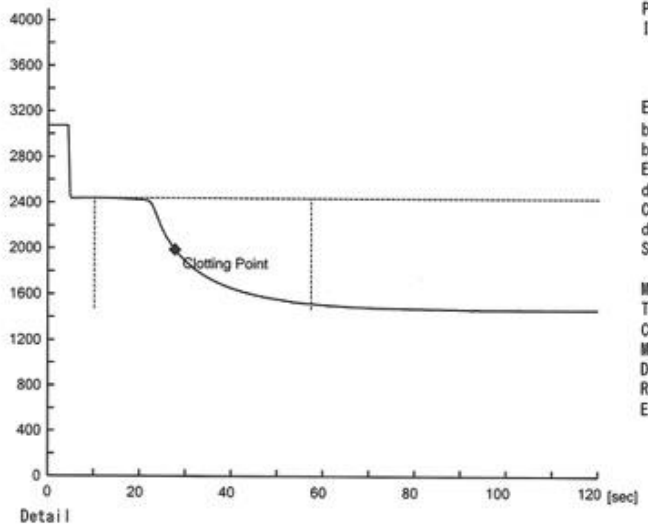
CS-5100 25618-3

admin : administrator

***** Graph Detail Print *****

Sample No:	25 M	Seq:	F
Rack Tube Pos:	000007-05	Re-analysis flag:	
Status:	Error	Validate:	Performed
S. Code:		Validated on :	2020/06/25 14:51:14
Analysis Mode:	Normal	Validated by :	SYSTEM
Patient Name:			
Sample Comment:			
Sample Info. :	Hem	Meas. Date:	2020/06/25 14:43:48

PT



Detail

Result

PT	27.7	sec
INR	2.82	

OK

Evaluation Info.

bH_point_time	10.1
bH	2443
End_point_time	57.4
dH	925
Coag.%	50
d0D	0.2065
Slope	42.23

Measurement Info.

Temperature	37.0	
Channel No.	2	
Management ID	3023	
Dilution	1 / 1	
Reagent Lot	PT Inn	549759
Elapsed Time	PT Inn	6

Hem Detection Level	3
Ict Detection Level	
Lip Detection Level	0
Vol Detection Level	49.6
Calibration Curve ID	5
QC Performed Date	2020/06/25 08:53:47
Reagent Table Temp.	10.1

Evaluation Data

1%	17.1	21%	24.0		41%	26.3	61%	30.2	81%	37.3
2%	20.9	22%	24.0		42%	26.4	62%	30.4	82%	37.8
3%	21.8	23%	24.1		43%	26.6	63%	30.7	83%	38.4
4%	22.1	24%	24.3		44%	26.7	64%	30.9	84%	39.0
5%	22.3	25%	24.4		45%	26.9	65%	31.2	85%	39.6
6%	22.5	26%	24.5		46%	27.1	66%	31.5	86%	40.3
7%	22.6	27%	24.5		47%	27.2	67%	31.8	87%	40.9
8%	22.8	28%	24.6		48%	27.4	68%	32.1	88%	41.7
9%	22.9	29%	24.7		49%	27.6	69%	32.4	89%	42.5
10%	23.0	30%	24.9	->	50%	27.7	70%	32.8	90%	43.4
11%	23.1	31%	25.0		51%	27.9	71%	33.0	91%	44.2
12%	23.2	32%	25.1		52%	28.2	72%	33.5	92%	45.2
13%	23.3	33%	25.2		53%	28.3	73%	33.8	93%	46.2
14%	23.4	34%	25.3		54%	28.5	74%	34.2	94%	47.4
15%	23.5	35%	25.5		55%	28.7	75%	34.5	95%	48.7
16%	23.5	36%	25.6		56%	29.0	76%	35.0	96%	50.0
17%	23.6	37%	25.7		57%	29.2	77%	35.4	97%	51.5
18%	23.7	38%	25.8		58%	29.4	78%	35.8	98%	52.9
19%	23.8	39%	26.0		59%	29.7	79%	36.3	99%	54.9
20%	23.9	40%	26.1		60%	29.9	80%	36.8	100%	57.5

Example 13

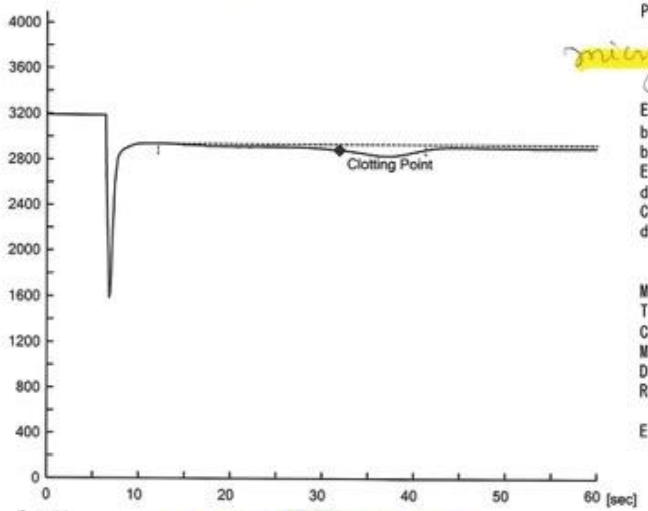
Re-analysis
Same Noise flag—DO NOT Report

CS-5100 25618-3 admin : administrator

***** Graph Detail Print *****

Sample No:	25 M	Seq:	F
Rack Tube Pos:	000007-05	Re-analysis flag:	
Status:	Error	Validate:	Performed
S. Code:		Validated on :	2020/06/25 14:51:14
Analysis Mode:	Normal	Validated by :	SYSTEM
Patient Name:			
Sample Comment:			
Sample Info. :	Hem	Meas. Date:	2020/06/25 14:43:48

PTT



Result
PTT *****.* sec

centrifuge and repeat.

Evaluation Info.

bH_point_time	12.1
bH	2940
End_point_time	41.3
dH	102
Coag.%	50
dOD	0.0068

Measurement Info.

Temperature	37.0
Channel No.	6
Management ID	3290
Dilution	1 / 1
Reagent Lot	APTT FSL 556997
	CaCl2 563872
Elapsed Time	APTT FSL 6
	CaCl2 6

Detail
0008.0128.0016 Early Reaction Error : Early %
0008.0256.0000 Noise

If repeat came out with ** with same flag → Do not report ??

Hem Detection Level 3
Ict Detection Level
Lip Detection Level 0
Vol Detection Level 49.6
Calibration Curve ID
QC Performed Date 2020/06/25 09:46:13
Reagent Table Temp. 10.1

Evaluation Data

1%	12.8	21%	18.4	41%	30.5	61%	33.0	81%	34.7
2%	13.3	22%	18.6	42%	30.7	62%	33.2	82%	34.7
3%	13.8	23%	18.8	43%	30.8	63%	33.3	83%	34.8
4%	14.0	24%	19.5	44%	30.9	64%	33.3	84%	34.9
5%	14.2	25%	26.2	45%	31.0	65%	33.4	85%	35.0
6%	14.3	26%	26.6	46%	31.3	66%	33.5	86%	35.0
7%	14.5	27%	27.4	47%	31.3	67%	33.6	87%	35.1
8%	14.6	28%	27.6	48%	31.5	68%	33.6	88%	35.2
9%	15.0	29%	27.8	49%	31.6	69%	33.8	89%	35.3
10%	15.2	30%	28.1	-> 50%	31.9	70%	33.9	90%	35.3
11%	15.4	31%	28.4	51%	32.0	71%	33.9	91%	35.4
12%	15.7	32%	28.5	52%	32.2	72%	34.0	92%	35.5
13%	16.0	33%	29.0	53%	32.2	73%	34.1	93%	35.6
14%	16.3	34%	29.2	54%	32.4	74%	34.2	94%	35.7
15%	16.6	35%	29.3	55%	32.5	75%	34.2	95%	35.8
16%	17.0	36%	29.5	56%	32.6	76%	34.4	96%	35.9
17%	17.1	37%	29.7	57%	32.7	77%	34.5	97%	36.0
18%	17.2	38%	29.9	58%	32.8	78%	34.5	98%	36.3
19%	17.5	39%	30.1	59%	32.9	79%	34.5	99%	41.3
20%	17.7	40%	30.3	60%	33.0	80%	34.6	100%	41.3

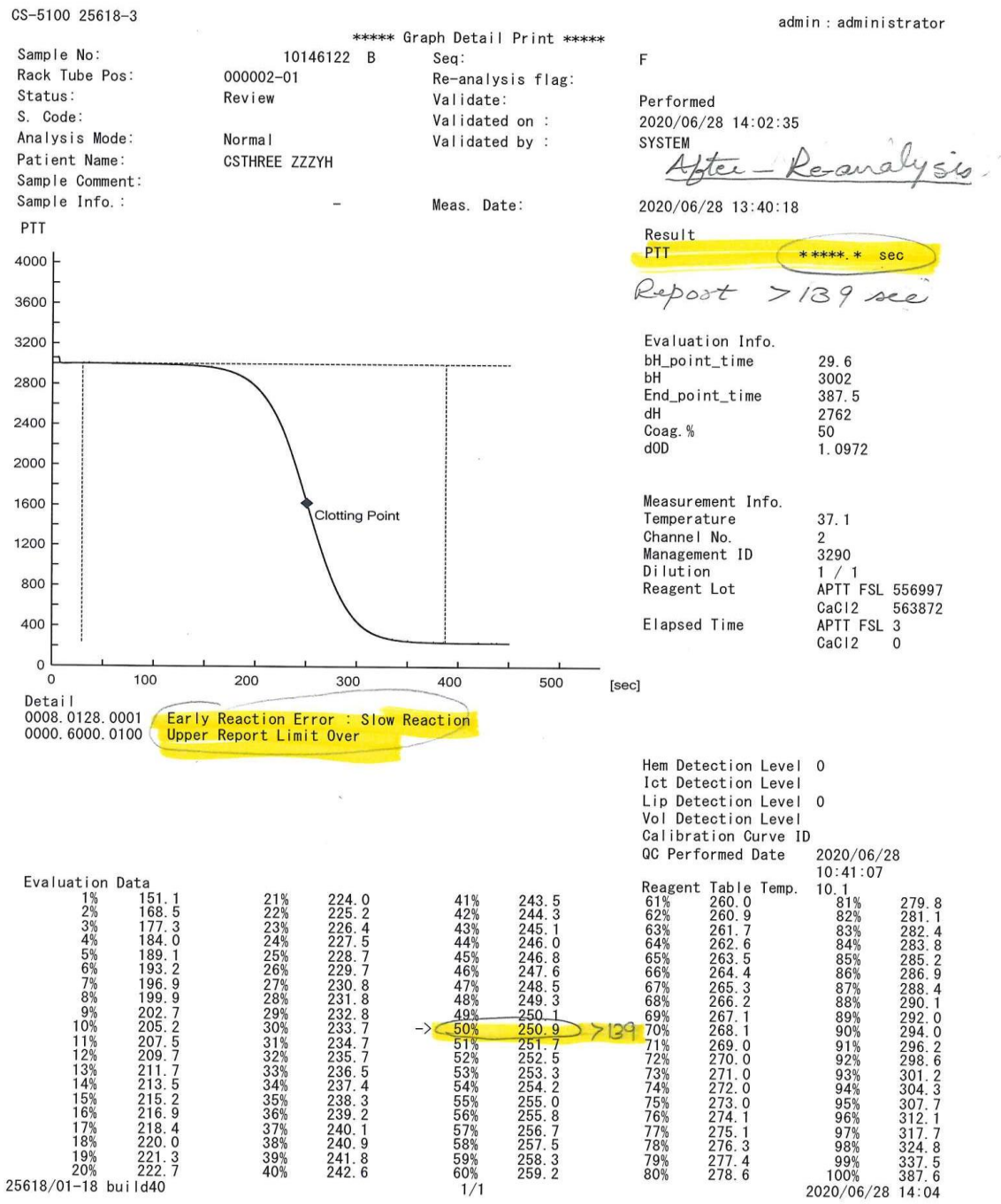
ERE – Slow Reaction

- Joblist result shows (***)
- Check the analysis data. Respin if interference or repeat the sample on sub wavelength.
- **After reanalysis,**
    - **R**esults in a numerical value **without an asterisk (*),** -Report the result.
    - **Same flag and result shows (***)**—**Do Not report** the result.
    - **Same flag along with Upper Report limit flag - check** PTT with data 50% - above the linearity, Reanalyze the curve **-----Report PTT Upper limit, >139 sec.**

Example 14

<u>This example is after re-analysis</u>

Status = Review
Mode = Normal
Result = **** (PTT)
Flag = ERE-Slow reaction and
upper report limit
(combination of both flag)
Evaluation data = PTT=250.9
Report > 139 sec



CS-5100 25618-3

admin : administrator

***** Graph Detail Print *****

Sample No:	10146122 B	Seq:	F
Rack Tube Pos:	000002-01	Re-analysis flag:	
Status:	Review	Validate:	Performed
S. Code:		Validated on :	2020/06/28 14:02:35
Analysis Mode:	Normal	Validated by :	SYSTEM
Patient Name:	CSTHREE ZZZYH		After – Re-analysis
Sample Comment:			
Sample Info. :	-	Meas. Date:	2020/06/28 13:40:18

PTT

Result

PTT	*****.* sec

Report > 139 sec

Evaluation Info.

bH_point_time	29.6
bH	3002
End_point_time	387.5
dH	2762
Coag.%	50
dOD	1.0972

Measurement Info.

Temperature	37.1
Channel No.	2
Management ID	3290
Dilution	1 / 1
Reagent Lot	APTT FSL 556997
	CaCl2 563872
Elapsed Time	APTT FSL 3
	CaCl2 0

Detail
0008.0128.0001 Early Reaction Error : Slow Reaction
0000.6000.0100 Upper Report Limit Over

Hem Detection Level	0
Ict Detection Level	
Lip Detection Level	0
Vol Detection Level	
Calibration Curve ID	
QC Performed Date	2020/06/28 10:41:07
Reagent Table Temp.	10.1

Evaluation Data

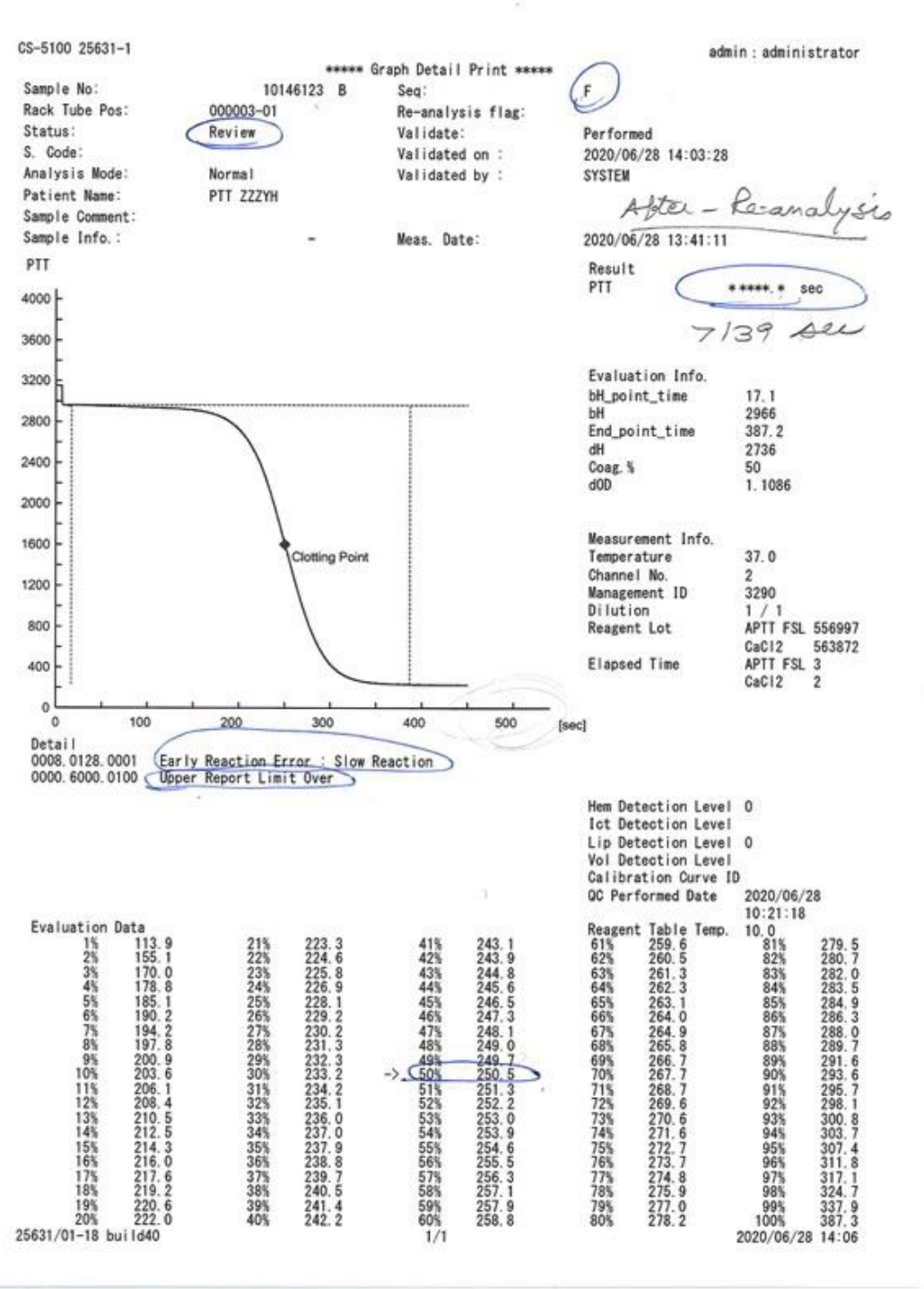
1%	151.1	21%	224.0	41%	243.5	61%	260.0	81%	279.8
2%	168.5	22%	225.2	42%	244.3	62%	260.9	82%	281.1
3%	177.3	23%	226.4	43%	245.1	63%	261.7	83%	282.4
4%	184.0	24%	227.5	44%	246.0	64%	262.6	84%	283.8
5%	189.1	25%	228.7	45%	246.8	65%	263.5	85%	285.2
6%	193.2	26%	229.7	46%	247.6	66%	264.4	86%	286.9
7%	196.9	27%	230.8	47%	248.5	67%	265.3	87%	288.4
8%	199.9	28%	231.8	48%	249.3	68%	266.2	88%	290.1
9%	202.7	29%	232.8	49%	250.1	69%	267.1	89%	292.0
10%	205.2	30%	233.7	-> 50%	250.9	70%	268.1	90%	294.0
11%	207.5	31%	234.7	51%	251.7	71%	269.0	91%	296.2
12%	209.7	32%	235.7	52%	252.5	72%	270.0	92%	298.6
13%	211.7	33%	236.5	53%	253.3	73%	271.0	93%	301.2
14%	213.5	34%	237.4	54%	254.2	74%	272.0	94%	304.3
15%	215.2	35%	238.3	55%	255.0	75%	273.0	95%	307.7
16%	216.9	36%	239.2	56%	255.8	76%	274.1	96%	312.1
17%	218.4	37%	240.1	57%	256.7	77%	275.1	97%	317.7
18%	220.0	38%	240.9	58%	257.5	78%	276.3	98%	324.8
19%	221.3	39%	241.8	59%	258.3	79%	277.4	99%	337.5
20%	222.7	40%	242.6	60%	259.2	80%	278.6	100%	387.6

> 139

Example 15

<u>This example is after re-analysis</u>

Status = Review
Mode = Normal
Result = **** (PTT)
Flag = ERE-Slow reaction and
upper report limit
(combination of both flag)
Evaluation data = PTT=250.5
Report > 139 sec



CS-5100 25631-1 admin : administrator

***** Graph Detail Print *****

Sample No: 10146123 B
Rack Tube Pos: 000003-01
Status: Review
S. Code:
Analysis Mode: Normal
Patient Name: PTT ZZZYH
Sample Comment:
Sample Info. : -

Seq: F
Re-analysis flag:
Validate: Performed
Validated on : 2020/06/28 14:03:28
Validated by : SYSTEM
After - Re-analysis
Meas. Date: 2020/06/28 13:41:11

PTT

Result
PTT ****.* sec
7/139 sec

Detail
0008.0128.0001 Early Reaction Error : Slow Reaction
0000.6000.0100 Upper Report Limit Over

Evaluation Info.

bH_point_time	17.1
bH	2966
End_point_time	387.2
dH	2736
Coag.%	50
dOD	1.1086

Measurement Info.

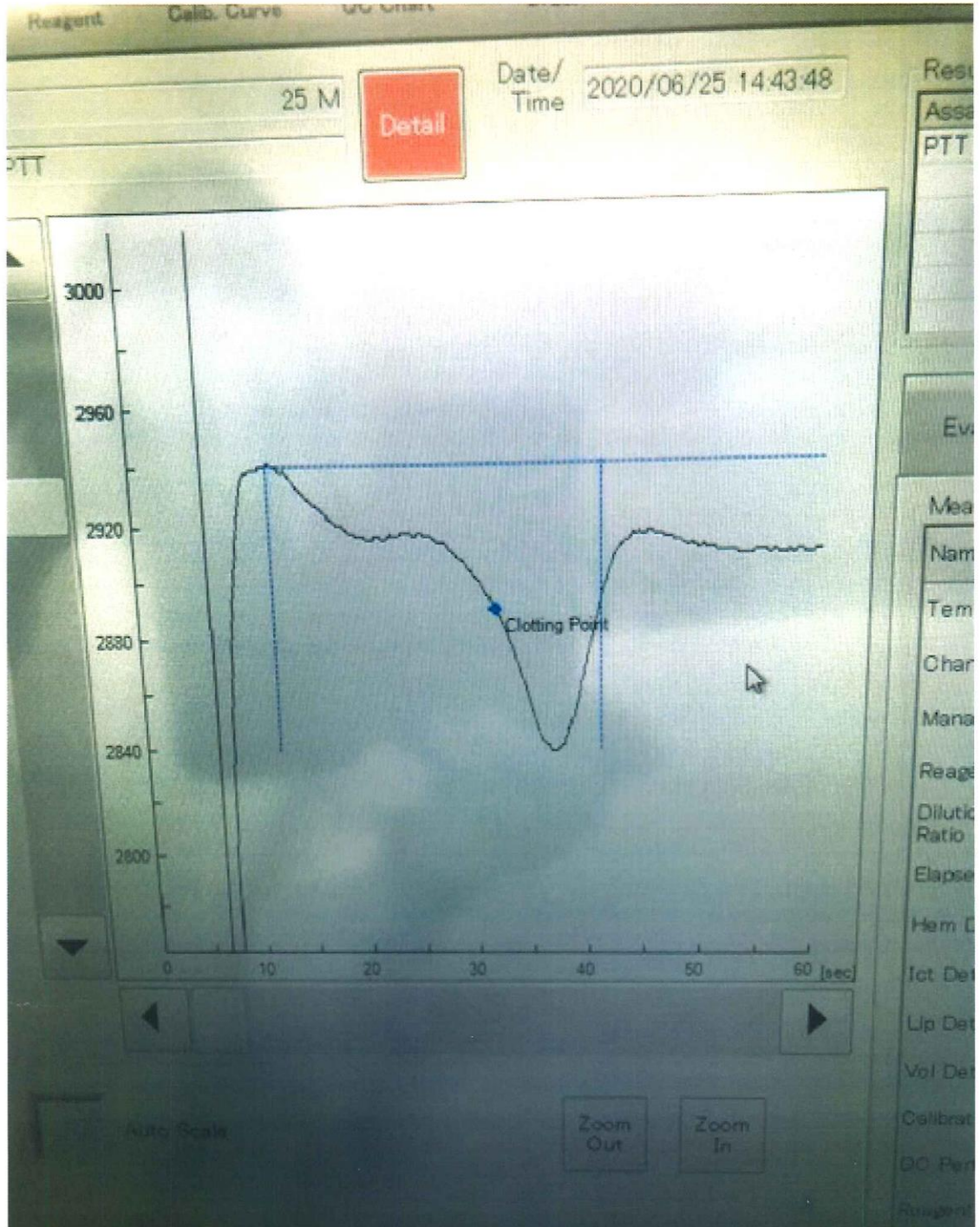
Temperature	37.0
Channel No.	2
Management ID	3290
Dilution	1 / 1
Reagent Lot	APTT FSL 556997
	CaCl2 563872
Elapsed Time	APTT FSL 3
	CaCl2 2

Hem Detection Level 0
Ict Detection Level
Lip Detection Level 0
Vol Detection Level
Calibration Curve ID
QC Performed Date 2020/06/28 10:21:18
Reagent Table Temp. 10.0

Evaluation Data

1%	113.9	21%	223.3	41%	243.1	61%	259.6	81%	279.5
2%	155.1	22%	224.6	42%	243.9	62%	260.5	82%	280.7
3%	170.0	23%	225.8	43%	244.8	63%	261.3	83%	282.0
4%	178.8	24%	226.9	44%	245.6	64%	262.3	84%	283.5
5%	185.1	25%	228.1	45%	246.5	65%	263.1	85%	284.9
6%	190.2	26%	229.2	46%	247.3	66%	264.0	86%	286.3
7%	194.2	27%	230.2	47%	248.1	67%	264.9	87%	288.0
8%	197.8	28%	231.3	48%	249.0	68%	265.8	88%	289.7
9%	200.9	29%	232.3	49%	249.7	69%	266.7	89%	291.6
10%	203.6	30%	233.2	-> 50%	250.5	70%	267.7	90%	293.6
11%	206.1	31%	234.2	51%	251.3	71%	268.7	91%	295.7
12%	208.4	32%	235.1	52%	252.2	72%	269.6	92%	298.1
13%	210.5	33%	236.0	53%	253.0	73%	270.6	93%	300.8
14%	212.5	34%	237.0	54%	253.9	74%	271.6	94%	303.7
15%	214.3	35%	237.9	55%	254.6	75%	272.7	95%	307.4
16%	216.0	36%	238.8	56%	255.5	76%	273.7	96%	311.8
17%	217.6	37%	239.7	57%	256.3	77%	274.8	97%	317.1
18%	219.2	38%	240.5	58%	257.1	78%	275.9	98%	324.7
19%	220.6	39%	241.4	59%	257.9	79%	277.0	99%	337.9
20%	222.0	40%	242.2	60%	258.8	80%	278.2	100%	387.3

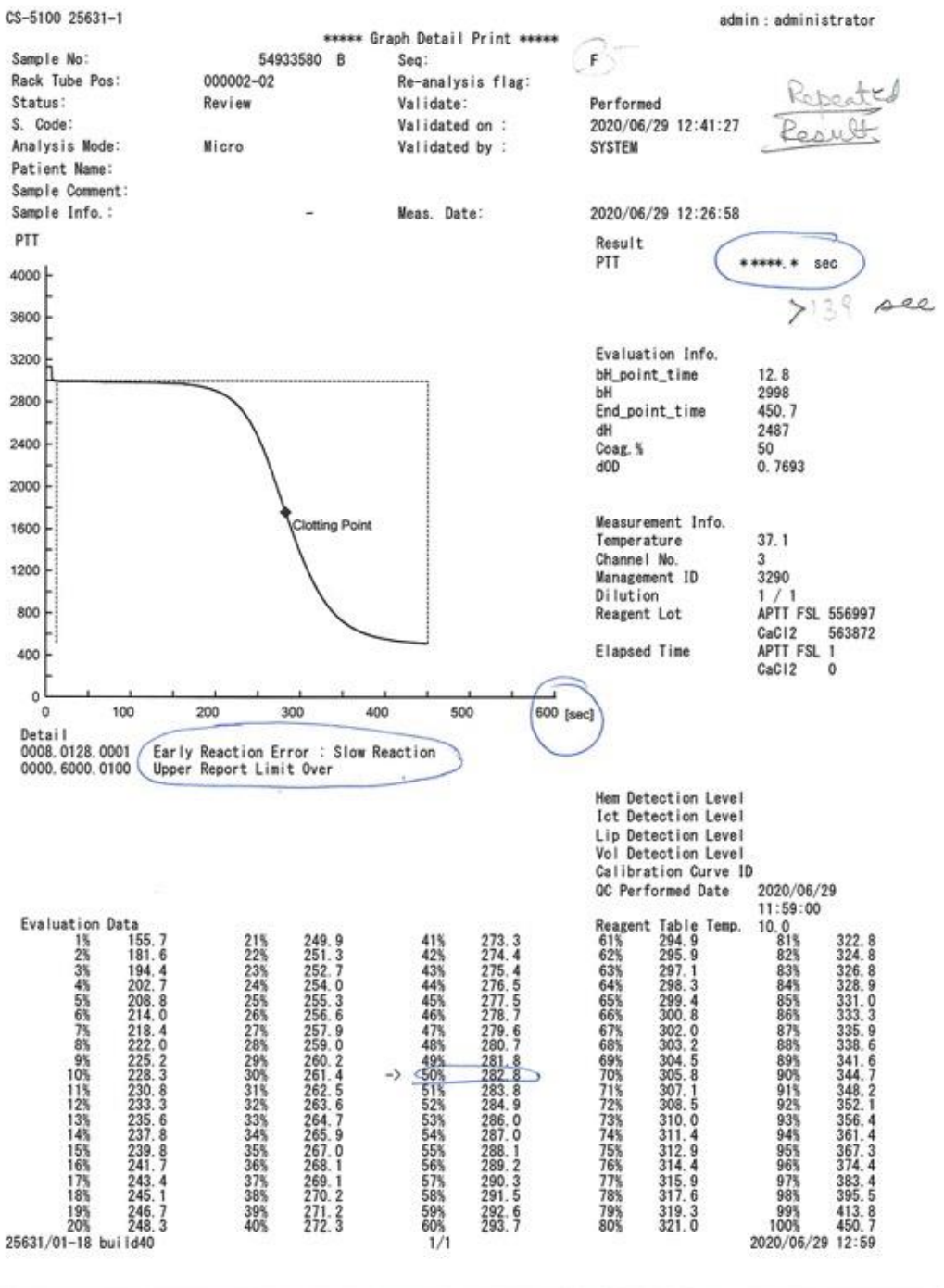
25631/01-18 build40 1/1 2020/06/28 14:06


Reagent
Calib. Curve
25 M
Detail
Date/
Time
2020/06/25 14:43:48
PTT
3000
2960
2920
2880
2840
2800
Clotting Point
0
10
20
30
40
50
60
[sec]
Auto Scale
Zoom
Out
Zoom
In

Example 16

<u>This example is after re-analysis</u>
<u>Ran on longer measurement</u>

Status = Review
Mode = micro
Result = **** (PTT)
Flag = ERE-Slow reaction and
upper report limit
(combination of both flag)
Evaluation data = PTT=282.8 sec
Report > 139 sec



CS-5100 25631-1 admin : administrator

***** Graph Detail Print *****

Sample No:	54933580 B	Seq:	F
Rack Tube Pos:	000002-02	Re-analysis flag:	
Status:	Review	Validate:	Performed
S. Code:		Validated on :	2020/06/29 12:41:27
Analysis Mode:	Micro	Validated by :	SYSTEM
Patient Name:			
Sample Comment:			
Sample Info. :	-	Meas. Date:	2020/06/29 12:26:58

Repeated Result

PTT

Result
PTT ****.* sec

>139 sec

Evaluation Info.

bH_point_time	12.8
bH	2998
End_point_time	450.7
dH	2487
Coag.%	50
dOD	0.7693

Measurement Info.

Temperature	37.1
Channel No.	3
Management ID	3290
Dilution	1 / 1
Reagent Lot	APTT FSL 556997
	CaCl2 563872
Elapsed Time	APTT FSL 1
	CaCl2 0

Detail
0008.0128.0001 Early Reaction Error : Slow Reaction
0000.6000.0100 Upper Report Limit Over

Hem Detection Level
Ict Detection Level
Lip Detection Level
Vol Detection Level
Calibration Curve ID
QC Performed Date 2020/06/29 11:59:00
Reagent Table Temp. 10.0

Evaluation Data

1%	155.7	21%	249.9	41%	273.3	61%	294.9	81%	322.8
2%	181.6	22%	251.3	42%	274.4	62%	295.9	82%	324.8
3%	194.4	23%	252.7	43%	275.4	63%	297.1	83%	326.8
4%	202.7	24%	254.0	44%	276.5	64%	298.3	84%	328.9
5%	208.8	25%	255.3	45%	277.5	65%	299.4	85%	331.0
6%	214.0	26%	256.6	46%	278.7	66%	300.8	86%	333.3
7%	218.4	27%	257.9	47%	279.6	67%	302.0	87%	335.9
8%	222.0	28%	259.0	48%	280.7	68%	303.2	88%	338.6
9%	225.2	29%	260.2	49%	281.8	69%	304.5	89%	341.6
10%	228.3	30%	261.4	-> 50%	282.8	70%	305.8	90%	344.7
11%	230.8	31%	262.5	51%	283.8	71%	307.1	91%	348.2
12%	233.3	32%	263.6	52%	284.9	72%	308.5	92%	352.1
13%	235.6	33%	264.7	53%	286.0	73%	310.0	93%	356.4
14%	237.8	34%	265.9	54%	287.0	74%	311.4	94%	361.4
15%	239.8	35%	267.0	55%	288.1	75%	312.9	95%	367.3
16%	241.7	36%	268.1	56%	289.2	76%	314.4	96%	374.4
17%	243.4	37%	269.1	57%	290.3	77%	315.9	97%	383.4
18%	245.1	38%	270.2	58%	291.5	78%	317.6	98%	395.5
19%	246.7	39%	271.2	59%	292.6	79%	319.3	99%	413.8
20%	248.3	40%	272.3	60%	293.7	80%	321.0	100%	450.7

ERE angle 1 and drift flag:

- Joblist result shows (***)

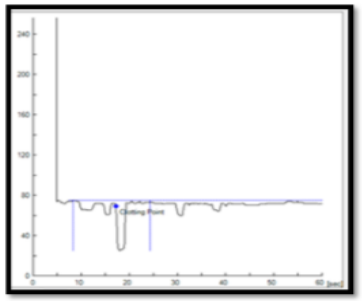
- Check the analysis data. Respin if interference or repeat the sample on sub wavelength

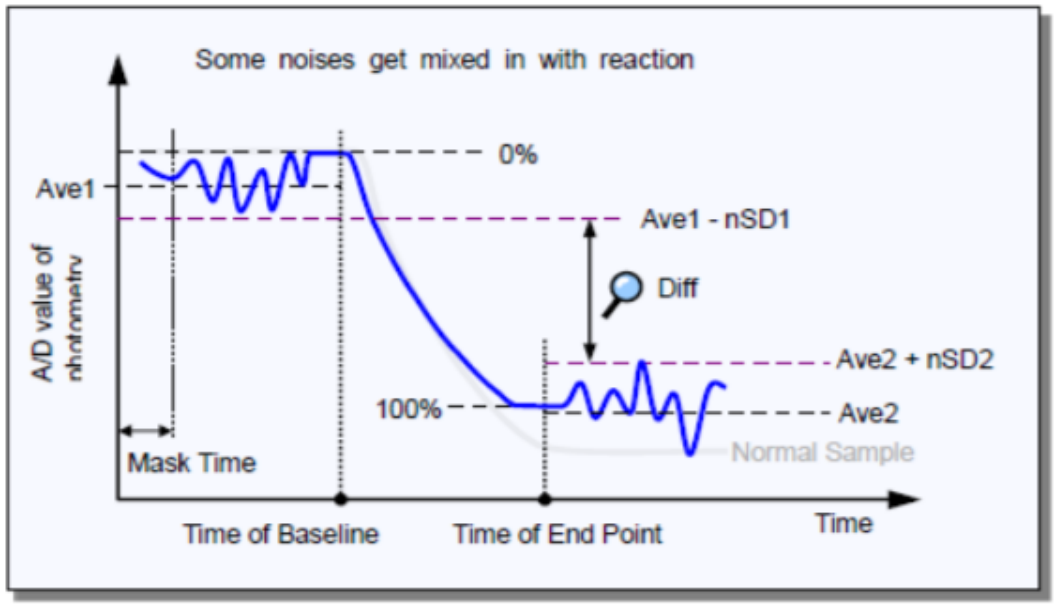
- **If reanalysis** of the sample results in a numerical value **without an asterisk (*),** - Report the result.

- If reanalysis of the sample result with same flag—**Do Not report the result.**

Noise Check Error

Joblist	Masked ****.* result
Cause	This occurs typically when the reaction may have some unusual artifacts or “noise”. Related to hardware failure (i.e. lamp).
Kinetic Evaluation	Unusual waviness is observed in the beginning and/or end of the reaction



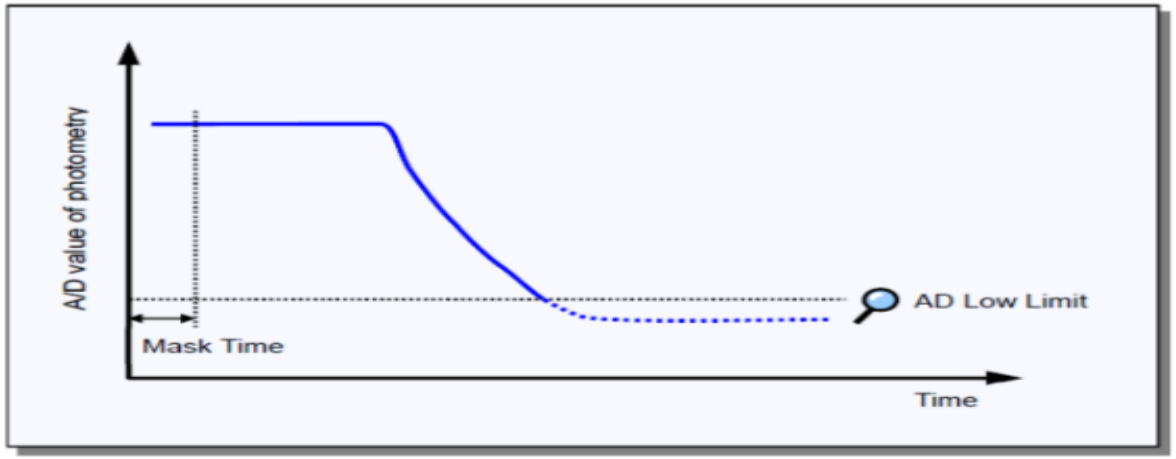


Action Steps

- When this condition is detected – **DO NOT** Report.
- **Recalibrate the lamp or replace it with a new lamp**. **perform calibration** or **QC analysis**, then check the analysis data.
- If changing the lamp, rerun on the other instrument
- If recalibrating the lamp, **Reanalyze the sample –**
  - Results without an asterisk (*) – Report
  - If same flag – **Do Not Report and rerun on the other instrument**

Turbidity Level Over Error

Joblist	Masked ****.* result
Cause	This occurs typically when a sample is turbid or lipemic.
Kinetic Evaluation	• Reaction is occurring beyond the optical ability of the system



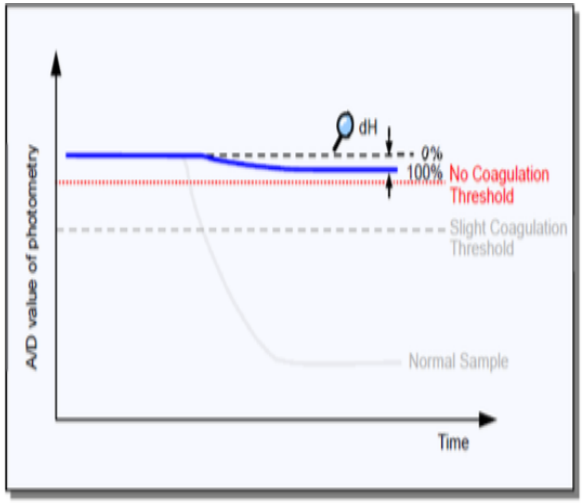
Action Steps for "Turbidity Level Over Error"

1. Reanalyze the sample after microfuge or ultracentrifuge.
   - -Numeric result without an asterisk (*), - Report the result
   - -Same flag again – **DO NOT** Report

DO NOT REPORT RESULTS WITHOUT NUMERICAL VALUES

No Coagulation Error

Joblist	Masked ****.* result
Cause	No coagulation or a weak coagulation was detected. Due to possible low fibrinogen concentration, presence of anticoagulant, or a reagent issue.
Kinetic Evaluation	• Reaction curve has no change or possible a very weak reaction if the view is zoomed in. • Requires manual evaluation and further consideration to determine how to report. • dH will be decreased. The dH limit to trigger this flag is assay dependent.



Action Steps for "No Coagulation Error"

- **For PT/PTT,** Reanalyze the sample with an extended measurement time (within the range of 100 to 1800 seconds) or set the "Measurement Time (Sub)" in the test protocol.

- **For fibrinogen**, if auto-redilution is not set, change the dilution ratio and reanalyze.

- **After reanalysis ,**
  -Numerical result without an asterisk (*), --- Report the result
  "**No Coagulation" again -** Report '**No Clot' result.**

- **If reanalysis gives a (***) result with different flag, follow the rules for those flags.**

Example 17

Status = Review
Mode = Micro
Result = ****(PTINR)
Flag = No Coagulation

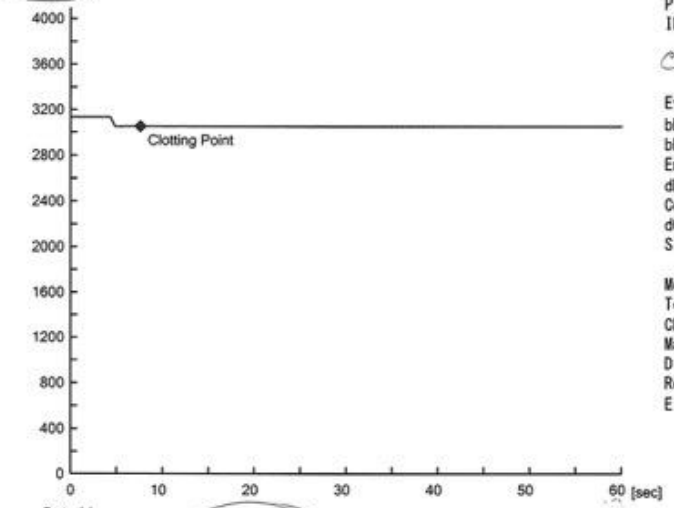
Action = check for clot, Re-analyse, Run @ longer measurement

CS-5100 25631-1 admin : administrator

***** Graph Detail Print *****

Sample No:	54945327 B	Seq:	F
Rack Tube Pos:	000003-01	Re-analysis flag:	
Status:	Review	Validate:	Performed
S. Code:		Validated on :	2020/06/29 13:28:41
Analysis Mode:	Micro	Validated by :	SYSTEM
Patient Name:			
Sample Comment:			
Sample Info. :	-	Meas. Date:	2020/06/29 13:19:54

PT



Result
PT *****.* sec
INR ****.**

check clot, Repeat

Evaluation Info.

bH_point_time	7.5
bH	3050
End_point_time	7.5
dH	0
Coag.%	50
dOD	0.0000
Slope	0.00

Measurement Info.

Temperature	37.0
Channel No.	3
Management ID	3023
Dilution	1 / 1
Reagent Lot	PT Inn 549759
Elapsed Time	PT Inn 4

Detail
0032.0000.0000 No Coagulation
0032.0000.0000 No Coagulation

Hem Detection Level
Ict Detection Level
Lip Detection Level
Vol Detection Level
Calibration Curve ID
QC Performed Date 2020/06/29 10:28:29
Reagent Table Temp. 10.1

Evaluation Data

1%	7.6	21%	7.6		41%	7.6	61%	7.6	81%	7.6
2%	7.6	22%	7.6		42%	7.6	62%	7.6	82%	7.6
3%	7.6	23%	7.6		43%	7.6	63%	7.6	83%	7.6
4%	7.6	24%	7.6		44%	7.6	64%	7.6	84%	7.6
5%	7.6	25%	7.6		45%	7.6	65%	7.6	85%	7.6
6%	7.6	26%	7.6		46%	7.6	66%	7.6	86%	7.6
7%	7.6	27%	7.6		47%	7.6	67%	7.6	87%	7.6
8%	7.6	28%	7.6		48%	7.6	68%	7.6	88%	7.6
9%	7.6	29%	7.6		49%	7.6	69%	7.6	89%	7.6
10%	7.6	30%	7.6	->	50%	7.6	70%	7.6	90%	7.6
11%	7.6	31%	7.6		51%	7.6	71%	7.6	91%	7.6
12%	7.6	32%	7.6		52%	7.6	72%	7.6	92%	7.6
13%	7.6	33%	7.6		53%	7.6	73%	7.6	93%	7.6
14%	7.6	34%	7.6		54%	7.6	74%	7.6	94%	7.6
15%	7.6	35%	7.6		55%	7.6	75%	7.6	95%	7.6
16%	7.6	36%	7.6		56%	7.6	76%	7.6	96%	7.6
17%	7.6	37%	7.6		57%	7.6	77%	7.6	97%	7.6
18%	7.6	38%	7.6		58%	7.6	78%	7.6	98%	7.6
19%	7.6	39%	7.6		59%	7.6	79%	7.6	99%	7.6
20%	7.6	40%	7.6		60%	7.6	80%	7.6	100%	7.6

Example 17

<u>After re-analysis,</u>

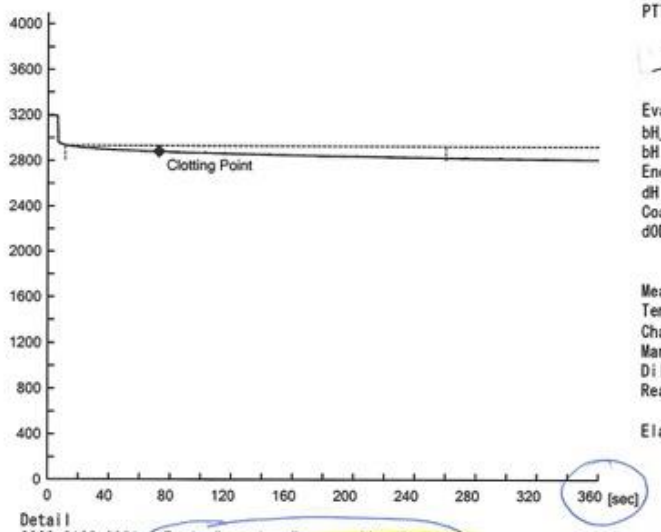
Result **** (PTT)
Flag **changed to ERE –Slow** reaction
DO NOT Report the result

CS-5100 25631-1 admin : administrator

***** Graph Detail Print *****

Sample No:	54945327 B	Seq:	F
Rack Tube Pos:	000002-04	Re-analysis flag:	
Status:	Review	Validate:	Performed
S. Code:		Validated on :	2020/06/29 12:41:45
Analysis Mode:	Micro	Validated by :	SYSTEM
Patient Name:			After Repeat
Sample Comment:			
Sample Info. :	-	Meas. Date:	2020/06/29 12:27:16

PTT



Result
PTT *****.* sec
Do not Report

Evaluation Info.

bH_point_time	11.4
bH	2933
End_point_time	260.2
dH	100
Coag.%	50
d0D	0.0151

Measurement Info.

Temperature	37.1
Channel No.	6
Management ID	3290
Dilution	1 / 1
Reagent Lot	APTT FSL 556997
	CaCl2 563872
Elapsed Time	APTT FSL 1
	CaCl2 0

Detail
0008.0128.0001 Early Reaction Error : Slow Reaction

Hem Detection Level
Ict Detection Level
Lip Detection Level
Vol Detection Level
Calibration Curve ID
QC Performed Date 2020/06/29 11:59:00
Reagent Table Temp. 10.0

Evaluation Data

1%	13.0	21%	27.6	41%	53.0	61%	102.2	81%	171.0
2%	13.4	22%	27.8	42%	55.2	62%	104.6	82%	176.0
3%	13.7	23%	29.0	43%	57.4	63%	108.8	83%	179.6
4%	15.6	24%	29.9	44%	60.0	64%	110.5	84%	184.2
5%	15.9	25%	30.8	45%	61.5	65%	114.2	85%	186.2
6%	16.6	26%	31.8	46%	64.0	66%	119.0	86%	192.4
7%	17.2	27%	33.0	47%	67.0	67%	121.0	87%	197.2
8%	17.4	28%	34.4	48%	68.6	68%	124.3	88%	201.3
9%	18.0	29%	35.0	49%	71.2	69%	126.7	89%	207.2
10%	18.3	30%	36.7	-> 50%	72.7	70%	130.1	90%	213.9
11%	19.4	31%	37.0	51%	74.6	71%	134.7	91%	216.7
12%	20.2	32%	39.4	52%	77.4	72%	136.6	92%	222.7
13%	20.7	33%	40.2	53%	79.5	73%	141.1	93%	228.7
14%	21.9	34%	41.0	54%	81.4	74%	143.8	94%	231.2
15%	22.2	35%	43.3	55%	85.3	75%	148.1	95%	239.1
16%	22.7	36%	44.6	56%	87.0	76%	151.7	96%	244.4
17%	23.6	37%	46.1	57%	88.8	77%	156.3	97%	250.7
18%	24.8	38%	48.7	58%	93.9	78%	158.6	98%	256.5
19%	25.1	39%	49.9	59%	95.7	79%	163.6	99%	260.1
20%	26.2	40%	51.8	60%	98.3	80%	167.7	100%	260.2

Example 17

<u>After re-analysis @ longer measurement,</u>

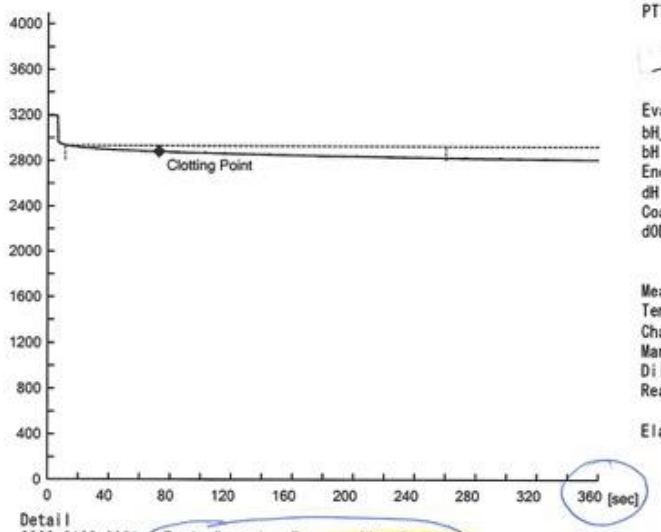
Result **** (PTT)
Flag = **ERE –Slow** reaction
DO NOT Report the result

CS-5100 25631-1 admin : administrator

***** Graph Detail Print *****

Sample No:	54945327 B	Seq:	F
Rack Tube Pos:	000002-04	Re-analysis flag:	
Status:	Review	Validate:	Performed
S. Code:		Validated on :	2020/06/29 12:41:45
Analysis Mode:	Micro	Validated by :	SYSTEM
Patient Name:			After Repeat
Sample Comment:			
Sample Info. :	-	Meas. Date:	2020/06/29 12:27:16

PTT



Result
PTT *****.* sec
Do not Report

Evaluation Info.

bH_point_time	11.4
bH	2933
End_point_time	260.2
dH	100
Coag.%	50
d0D	0.0151

Measurement Info.

Temperature	37.1
Channel No.	6
Management ID	3290
Dilution	1 / 1
Reagent Lot	APTT FSL 556997
	CaCl2 563872
Elapsed Time	APTT FSL 1
	CaCl2 0

Detail
0008.0128.0001 Early Reaction Error : Slow Reaction

Hem Detection Level
Ict Detection Level
Lip Detection Level
Vol Detection Level
Calibration Curve ID
QC Performed Date 2020/06/29 11:59:00
Reagent Table Temp. 10.0

Evaluation Data

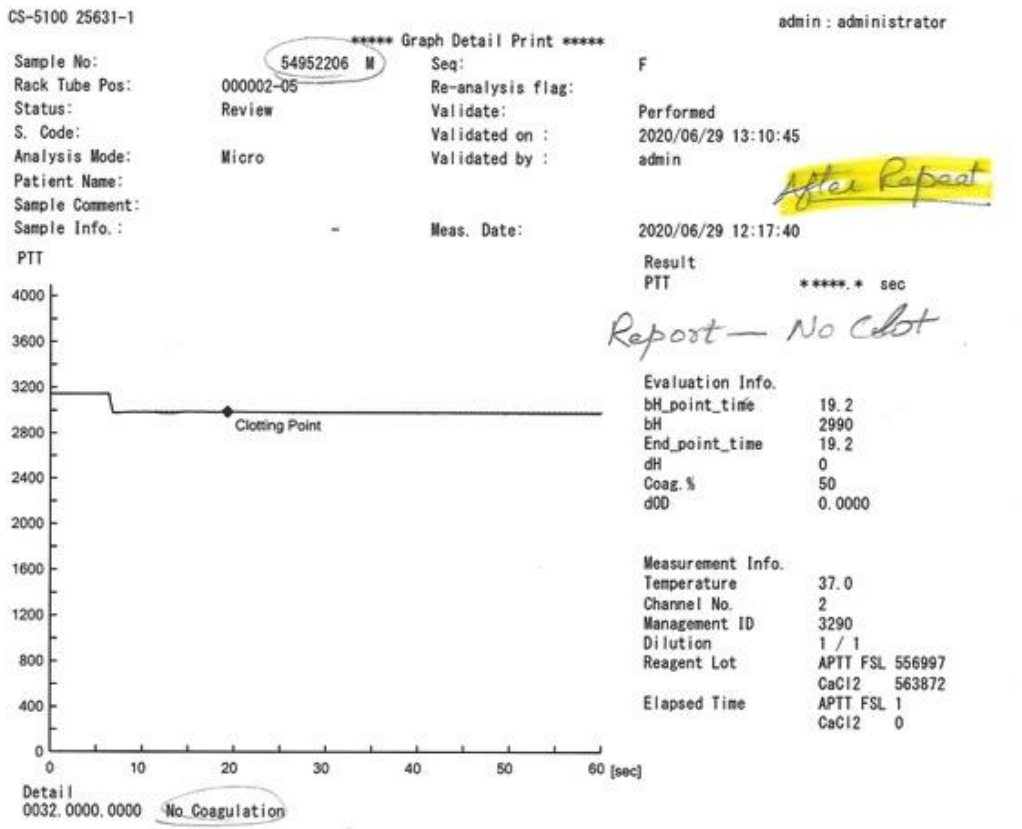
1%	13.0	21%	27.6	41%	53.0	61%	102.2	81%	171.0
2%	13.4	22%	27.8	42%	55.2	62%	104.6	82%	176.0
3%	13.7	23%	29.0	43%	57.4	63%	108.8	83%	179.6
4%	15.6	24%	29.9	44%	60.0	64%	110.5	84%	184.2
5%	15.9	25%	30.8	45%	61.5	65%	114.2	85%	186.2
6%	16.6	26%	31.8	46%	64.0	66%	119.0	86%	192.4
7%	17.2	27%	33.0	47%	67.0	67%	121.0	87%	197.2
8%	17.4	28%	34.4	48%	68.6	68%	124.3	88%	201.3
9%	18.0	29%	35.0	49%	71.2	69%	126.7	89%	207.2
10%	18.3	30%	36.7	-> 50%	72.7	70%	130.1	90%	213.9
11%	19.4	31%	37.0	51%	74.6	71%	134.7	91%	216.7
12%	20.2	32%	39.4	52%	77.4	72%	136.6	92%	222.7
13%	20.7	33%	40.2	53%	79.5	73%	141.1	93%	228.7
14%	21.9	34%	41.0	54%	81.4	74%	143.8	94%	231.2
15%	22.2	35%	43.3	55%	85.3	75%	148.1	95%	239.1
16%	22.7	36%	44.6	56%	87.0	76%	151.7	96%	244.4
17%	23.6	37%	46.1	57%	88.8	77%	156.3	97%	250.7
18%	24.8	38%	48.7	58%	93.9	78%	158.6	98%	256.5
19%	25.1	39%	49.9	59%	95.7	79%	163.6	99%	260.1
20%	26.2	40%	51.8	60%	98.3	80%	167.7	100%	260.2

Example 17

After re-analysis

Mode = micro
Result = ***
Flag = No Coag again
Curve = Staright line
Evaluation data = no progression, same number

Report = No Clot



CS-5100 25631-1 admin : administrator

***** Graph Detail Print *****

Sample No:	54952206 M	Seq:	F
Rack Tube Pos:	000002-05	Re-analysis flag:	
Status:	Review	Validate:	Performed
S. Code:		Validated on :	2020/06/29 13:10:45
Analysis Mode:	Micro	Validated by :	admin
Patient Name:			
Sample Comment:			
Sample Info.:	-	Meas. Date:	2020/06/29 12:17:40

After Repeat

PTT

Result
PTT *****.* sec

Report — No Clot

Evaluation Info.

bH_point_time	19.2
bH	2990
End_point_time	19.2
dH	0
Coag.%	50
d0D	0.0000

Measurement Info.

Temperature	37.0
Channel No.	2
Management ID	3290
Dilution	1 / 1
Reagent Lot	APTT FSL 556997
	CaCl2 563872
Elapsed Time	APTT FSL 1
	CaCl2 0

Detail
0032.0000.0000 No Coagulation

Hem Detection Level	
Ict Detection Level	
Lip Detection Level	
Vol Detection Level	
Calibration Curve ID	
QC Performed Date	2020/06/29 11:59:00
Reagent Table Temp.	10.1

Evaluation Data

1%	19.3	21%	19.3	41%	19.3	61%	19.3	81%	19.3
2%	19.3	22%	19.3	42%	19.3	62%	19.3	82%	19.3
3%	19.3	23%	19.3	43%	19.3	63%	19.3	83%	19.3
4%	19.3	24%	19.3	44%	19.3	64%	19.3	84%	19.3
5%	19.3	25%	19.3	45%	19.3	65%	19.3	85%	19.3
6%	19.3	26%	19.3	46%	19.3	66%	19.3	86%	19.3
7%	19.3	27%	19.3	47%	19.3	67%	19.3	87%	19.3
8%	19.3	28%	19.3	48%	19.3	68%	19.3	88%	19.3
9%	19.3	29%	19.3	49%	19.3	69%	19.3	89%	19.3
10%	19.3	30%	19.3	->	50%	19.3	70%	19.3	90%	19.3
11%	19.3	31%	19.3	51%	19.3	71%	19.3	91%	19.3
12%	19.3	32%	19.3	52%	19.3	72%	19.3	92%	19.3
13%	19.3	33%	19.3	53%	19.3	73%	19.3	93%	19.3
14%	19.3	34%	19.3	54%	19.3	74%	19.3	94%	19.3
15%	19.3	35%	19.3	55%	19.3	75%	19.3	95%	19.3
16%	19.3	36%	19.3	56%	19.3	76%	19.3	96%	19.3
17%	19.3	37%	19.3	57%	19.3	77%	19.3	97%	19.3
18%	19.3	38%	19.3	58%	19.3	78%	19.3	98%	19.3
19%	19.3	39%	19.3	59%	19.3	79%	19.3	99%	19.3
20%	19.3	40%	19.3	60%	19.3	80%	19.3	100%	19.3

Example 17

After re-analysis

Mode = micro
Result = ***
Flag = No Coag again
Curve = Straight line
Evaluation data = no progression, same number
Report = No Clot

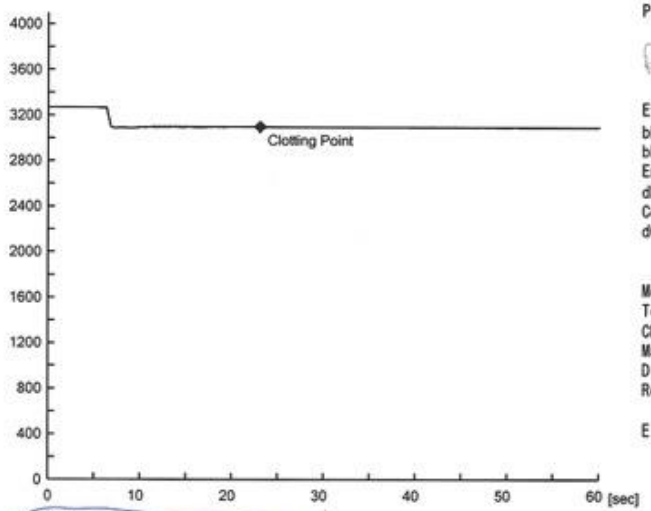
CS-5100 25631-1 admin : administrator

***** Graph Detail Print *****

Sample No:	54952206 B	Seq:	F
Rack Tube Pos:	000002-05	Re-analysis flag:	
Status:	Review	Validate:	Performed
S. Code:		Validated on :	2020/06/29 12:41:54
Analysis Mode:	Micro	Validated by :	SYSTEM
Patient Name:			
Sample Comment:			
Sample Info.:	-	Meas. Date:	2020/06/29 12:27:25

After Repeat

PTT



Result
PTT *****.* sec

Report – No clot

Detail
0032.0000.0000 No Coagulation

Evaluation Info.

bH_point_time	23.0
bH	3102
End_point_time	23.0
dH	0
Coag.%	50
d0D	0.0000

Measurement Info.

Temperature	37.0
Channel No.	8
Management ID	3290
Dilution	1 / 1
Reagent Lot	APTT FSL 556997
	CaCl2 563872
Elapsed Time	APTT FSL 1
	CaCl2 0

Hem Detection Level	
Ict Detection Level	
Lip Detection Level	
Vol Detection Level	
Calibration Curve ID	
QC Performed Date	2020/06/29 11:59:00
Reagent Table Temp.	10.0

Evaluation Data

1%	23.1	21%	23.1	41%	23.1	61%	23.1	81%	23.1
2%	23.1	22%	23.1	42%	23.1	62%	23.1	82%	23.1
3%	23.1	23%	23.1	43%	23.1	63%	23.1	83%	23.1
4%	23.1	24%	23.1	44%	23.1	64%	23.1	84%	23.1
5%	23.1	25%	23.1	45%	23.1	65%	23.1	85%	23.1
6%	23.1	26%	23.1	46%	23.1	66%	23.1	86%	23.1
7%	23.1	27%	23.1	47%	23.1	67%	23.1	87%	23.1
8%	23.1	28%	23.1	48%	23.1	68%	23.1	88%	23.1
9%	23.1	29%	23.1	49%	23.1	69%	23.1	89%	23.1
10%	23.1	30%	23.1	-> 50%	23.1	70%	23.1	90%	23.1
11%	23.1	31%	23.1	51%	23.1	71%	23.1	91%	23.1
12%	23.1	32%	23.1	52%	23.1	72%	23.1	92%	23.1
13%	23.1	33%	23.1	53%	23.1	73%	23.1	93%	23.1
14%	23.1	34%	23.1	54%	23.1	74%	23.1	94%	23.1
15%	23.1	35%	23.1	55%	23.1	75%	23.1	95%	23.1
16%	23.1	36%	23.1	56%	23.1	76%	23.1	96%	23.1
17%	23.1	37%	23.1	57%	23.1	77%	23.1	97%	23.1
18%	23.1	38%	23.1	58%	23.1	78%	23.1	98%	23.1
19%	23.1	39%	23.1	59%	23.1	79%	23.1	99%	23.1
20%	23.1	40%	23.1	60%	23.1	80%	23.1	100%	23.1

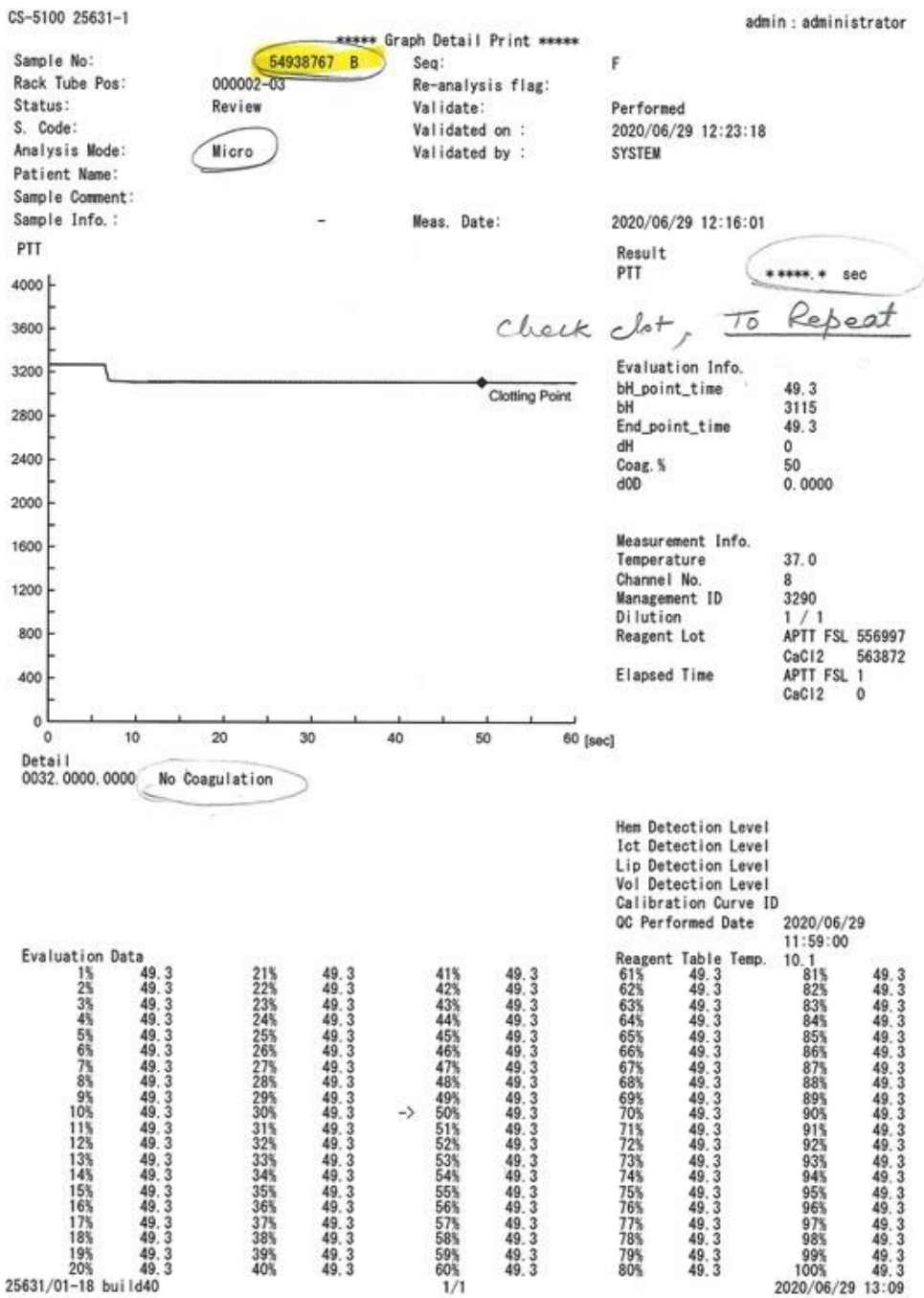
Example 18

Status = Review
Mode = Micro
Result = ***(PTT)
Flag = No Coagulation

Evaluation data = shows no progression, single value

Curve = st line

Action = check clot, re-analyze at longer wavelength



CS-5100 25631-1 admin : administrator

***** Graph Detail Print *****

Sample No:	54938767 B	Seq:	F
Rack Tube Pos:	000002-03	Re-analysis flag:	
Status:	Review	Validate:	Performed
S. Code:		Validated on :	2020/06/29 12:23:18
Analysis Mode:	Micro	Validated by :	SYSTEM
Patient Name:			
Sample Comment:			
Sample Info. :	-	Meas. Date:	2020/06/29 12:16:01

PTT

Result
PTT *****.* sec

check clot, To Repeat

Evaluation Info.

bH_point_time	49.3
bH	3115
End_point_time	49.3
dH	0
Coag.%	50
d0D	0.0000

Measurement Info.

Temperature	37.0
Channel No.	8
Management ID	3290
Dilution	1 / 1
Reagent Lot	APTT FSL 556997
	CaCl2 563872
Elapsed Time	APTT FSL 1
	CaCl2 0

Detail
0032.0000.0000 No Coagulation

Hem Detection Level	
Ict Detection Level	
Lip Detection Level	
Vol Detection Level	
Calibration Curve ID	
QC Performed Date	2020/06/29 11:59:00
Reagent Table Temp.	10.1

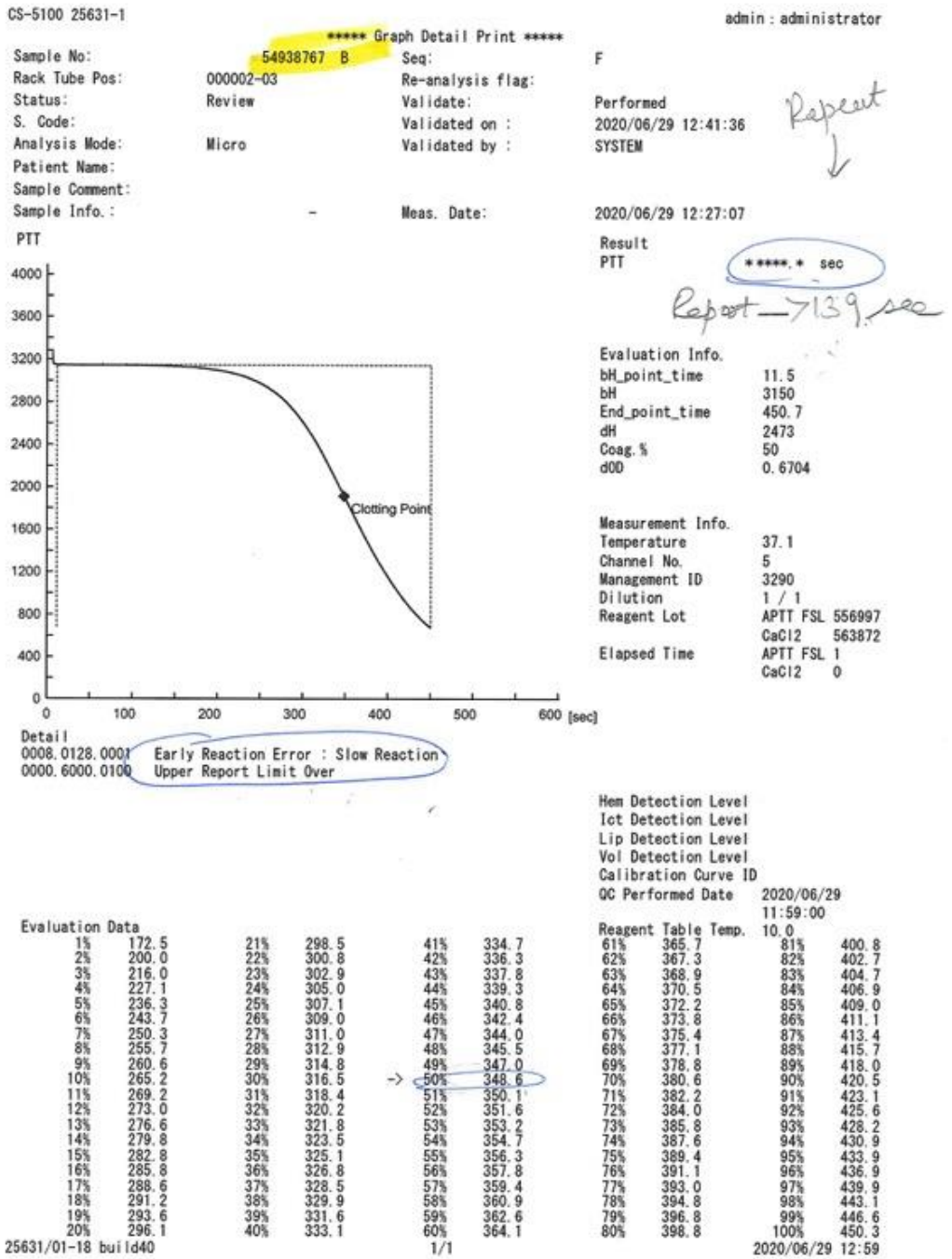
Evaluation Data

1%	49.3	21%	49.3	41%	49.3	61%	49.3	81%	49.3
2%	49.3	22%	49.3	42%	49.3	62%	49.3	82%	49.3
3%	49.3	23%	49.3	43%	49.3	63%	49.3	83%	49.3
4%	49.3	24%	49.3	44%	49.3	64%	49.3	84%	49.3
5%	49.3	25%	49.3	45%	49.3	65%	49.3	85%	49.3
6%	49.3	26%	49.3	46%	49.3	66%	49.3	86%	49.3
7%	49.3	27%	49.3	47%	49.3	67%	49.3	87%	49.3
8%	49.3	28%	49.3	48%	49.3	68%	49.3	88%	49.3
9%	49.3	29%	49.3	49%	49.3	69%	49.3	89%	49.3
10%	49.3	30%	49.3	->	50%	49.3	70%	49.3	90%	49.3
11%	49.3	31%	49.3	51%	49.3	71%	49.3	91%	49.3
12%	49.3	32%	49.3	52%	49.3	72%	49.3	92%	49.3
13%	49.3	33%	49.3	53%	49.3	73%	49.3	93%	49.3
14%	49.3	34%	49.3	54%	49.3	74%	49.3	94%	49.3
15%	49.3	35%	49.3	55%	49.3	75%	49.3	95%	49.3
16%	49.3	36%	49.3	56%	49.3	76%	49.3	96%	49.3
17%	49.3	37%	49.3	57%	49.3	77%	49.3	97%	49.3
18%	49.3	38%	49.3	58%	49.3	78%	49.3	98%	49.3
19%	49.3	39%	49.3	59%	49.3	79%	49.3	99%	49.3
20%	49.3	40%	49.3	60%	49.3	80%	49.3	100%	49.3

Example 18

After re-analysis,

Result = ***(PTT)
Flag = Changed to ERE – slow reaction and Upper report
Evaluation data = PTT at 50% 348.6 sec
Report = >139 sec



CS-5100 25631-1 admin : administrator

***** Graph Detail Print *****

Sample No:	54938767 B	Seq:	F
Rack Tube Pos:	000002-03	Re-analysis flag:	
Status:	Review	Validate:	Performed
S. Code:		Validated on :	2020/06/29 12:41:36
Analysis Mode:	Micro	Validated by :	SYSTEM
Patient Name:			
Sample Comment:			
Sample Info.:	-	Meas. Date:	2020/06/29 12:27:07

Repeat

PTT

Result
PTT *****.* sec

Report—>139 sec

Evaluation Info.

bH_point_time	11.5
bH	3150
End_point_time	450.7
dH	2473
Coag.%	50
d0D	0.6704

Measurement Info.

Temperature	37.1
Channel No.	5
Management ID	3290
Dilution	1 / 1
Reagent Lot	APTT FSL 556997
	CaCl2 563872
Elapsed Time	APTT FSL 1
	CaCl2 0

Detail
0008.0128.0001 Early Reaction Error : Slow Reaction
0000.6000.0100 Upper Report Limit Over

Hem Detection Level	
Ict Detection Level	
Lip Detection Level	
Vol Detection Level	
Calibration Curve ID	
QC Performed Date	2020/06/29 11:59:00
Reagent Table Temp.	10.0

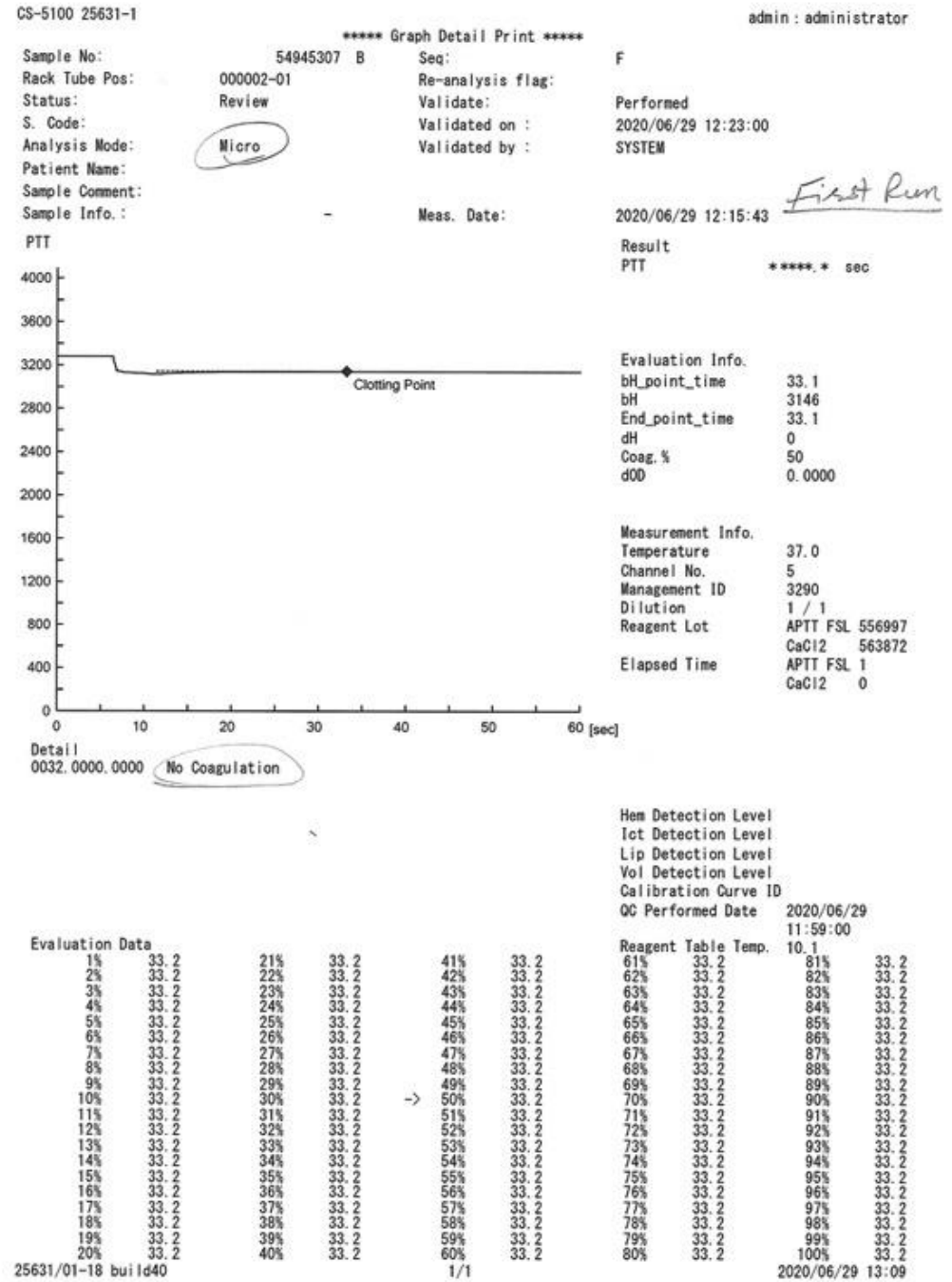
Evaluation Data

1%	172.5	21%	298.5	41%	334.7	61%	365.7	81%	400.8
2%	200.0	22%	300.8	42%	336.3	62%	367.3	82%	402.7
3%	216.0	23%	302.9	43%	337.8	63%	368.9	83%	404.7
4%	227.1	24%	305.0	44%	339.3	64%	370.5	84%	406.9
5%	236.3	25%	307.1	45%	340.8	65%	372.2	85%	409.0
6%	243.7	26%	309.0	46%	342.4	66%	373.8	86%	411.1
7%	250.3	27%	311.0	47%	344.0	67%	375.4	87%	413.4
8%	255.7	28%	312.9	48%	345.5	68%	377.1	88%	415.7
9%	260.6	29%	314.8	49%	347.0	69%	378.8	89%	418.0
10%	265.2	30%	316.5	-> 50%	348.6	70%	380.6	90%	420.5
11%	269.2	31%	318.4	51%	350.1	71%	382.2	91%	423.1
12%	273.0	32%	320.2	52%	351.6	72%	384.0	92%	425.6
13%	276.6	33%	321.8	53%	353.2	73%	385.8	93%	428.2
14%	279.8	34%	323.5	54%	354.7	74%	387.6	94%	430.9
15%	282.8	35%	325.1	55%	356.3	75%	389.4	95%	433.9
16%	285.8	36%	326.8	56%	357.8	76%	391.1	96%	436.9
17%	288.6	37%	328.5	57%	359.4	77%	393.0	97%	439.9
18%	291.2	38%	329.9	58%	360.9	78%	394.8	98%	443.1
19%	293.6	39%	331.6	59%	362.6	79%	396.8	99%	446.6
20%	296.1	40%	333.1	60%	364.1	80%	398.8	100%	450.3

Example 19

Status = Review
Mode = Micro
Result = ****(PTT)
Flag = No Coagulation
Eval data = single value
Curve = straight line

Action = check for clot, Re-analyse, Run @ longer measurement



CS-5100 25631-1 admin : administrator

***** Graph Detail Print *****

Sample No:	54945307 B	Seq:	F
Rack Tube Pos:	000002-01	Re-analysis flag:	
Status:	Review	Validate:	Performed
S. Code:		Validated on :	2020/06/29 12:23:00
Analysis Mode:	Micro	Validated by :	SYSTEM
Patient Name:			
Sample Comment:			
Sample Info.:	-	Meas. Date:	2020/06/29 12:15:43

First Run

PTT

Result
PTT *****.* sec

Evaluation Info.

bH_point_time	33.1
bH	3146
End_point_time	33.1
dH	0
Coag.%	50
d0D	0.0000

Measurement Info.

Temperature	37.0
Channel No.	5
Management ID	3290
Dilution	1 / 1
Reagent Lot	APTT FSL 556997
	CaCl2 563872
Elapsed Time	APTT FSL 1
	CaCl2 0

Detail
0032.0000.0000 No Coagulation

Hem Detection Level
Ict Detection Level
Lip Detection Level
Vol Detection Level
Calibration Curve ID
QC Performed Date 2020/06/29 11:59:00
Reagent Table Temp. 10.1

Evaluation Data

1%	33.2	21%	33.2		41%	33.2	61%	33.2	81%	33.2
2%	33.2	22%	33.2		42%	33.2	62%	33.2	82%	33.2
3%	33.2	23%	33.2		43%	33.2	63%	33.2	83%	33.2
4%	33.2	24%	33.2		44%	33.2	64%	33.2	84%	33.2
5%	33.2	25%	33.2		45%	33.2	65%	33.2	85%	33.2
6%	33.2	26%	33.2		46%	33.2	66%	33.2	86%	33.2
7%	33.2	27%	33.2		47%	33.2	67%	33.2	87%	33.2
8%	33.2	28%	33.2		48%	33.2	68%	33.2	88%	33.2
9%	33.2	29%	33.2		49%	33.2	69%	33.2	89%	33.2
10%	33.2	30%	33.2	->	50%	33.2	70%	33.2	90%	33.2
11%	33.2	31%	33.2		51%	33.2	71%	33.2	91%	33.2
12%	33.2	32%	33.2		52%	33.2	72%	33.2	92%	33.2
13%	33.2	33%	33.2		53%	33.2	73%	33.2	93%	33.2
14%	33.2	34%	33.2		54%	33.2	74%	33.2	94%	33.2
15%	33.2	35%	33.2		55%	33.2	75%	33.2	95%	33.2
16%	33.2	36%	33.2		56%	33.2	76%	33.2	96%	33.2
17%	33.2	37%	33.2		57%	33.2	77%	33.2	97%	33.2
18%	33.2	38%	33.2		58%	33.2	78%	33.2	98%	33.2
19%	33.2	39%	33.2		59%	33.2	79%	33.2	99%	33.2
20%	33.2	40%	33.2		60%	33.2	80%	33.2	100%	33.2

Example 19

After re-analysis:

Result = ****
Flag changed to ERE-slow with Upper report

Evaluation data = 393.5 at 50%
Report = PTT>139 sec

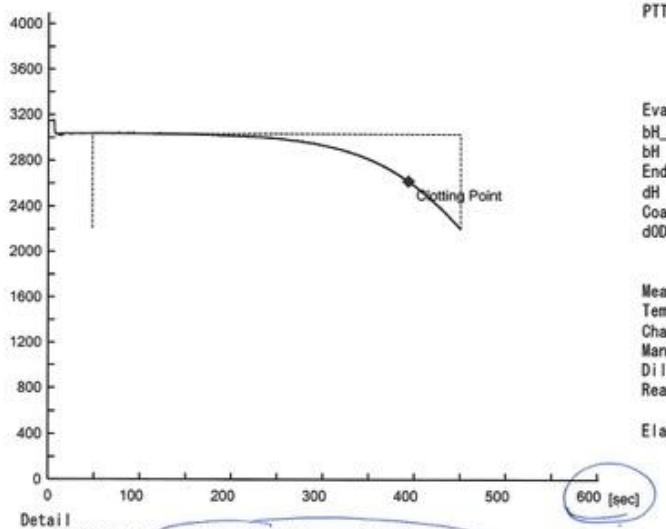
CS-5100 25631-1 admin : administrator

***** Graph Detail Print *****

Sample No:	54945307 B	Seq:	F
Rack Tube Pos:	000002-01	Re-analysis flag:	
Status:	Review	Validate:	Performed
S. Code:		Validated on :	2020/06/29 12:41:18
Analysis Mode:	Micro	Validated by :	SYSTEM
Patient Name:			
Sample Comment:			
Sample Info.:	-	Meas. Date:	2020/06/29 12:26:49

After Repeat

PTT



Result
PTT *****.* sec

>139 sec

Evaluation Info.

bH_point_time	48.1
bH	3037
End_point_time	450.7
dH	826
Coag.%	50
d0D	0.1388

Measurement Info.

Temperature	37.0
Channel No.	2
Management ID	3290
Dilution	1 / 1
Reagent Lot	APTT FSL 556997
	CaCl2 563872
Elapsed Time	APTT FSL 1
	CaCl2 0

Detail
0008.0128.0001 Early Reaction Error : Slow Reaction
0000.6000.0100 Upper Report Limit Over

Hem Detection Level
Ict Detection Level
Lip Detection Level
Vol Detection Level
Calibration Curve ID
QC Performed Date 2020/06/29 11:59:00
Reagent Table Temp. 10.0

Evaluation Data

1%	171.2	21%	334.4	41%	378.9	61%	408.2	81%	431.5
2%	204.1	22%	337.4	42%	380.7	62%	409.6	82%	432.4
3%	225.5	23%	340.1	43%	382.5	63%	410.9	83%	433.5
4%	241.0	24%	343.3	44%	384.0	64%	412.1	84%	434.6
5%	252.5	25%	345.7	45%	385.5	65%	413.3	85%	435.5
6%	261.3	26%	348.4	46%	387.1	66%	414.6	86%	436.6
7%	269.4	27%	350.7	47%	388.7	67%	415.8	87%	437.5
8%	277.9	28%	353.2	48%	390.2	68%	416.8	88%	438.6
9%	284.1	29%	355.3	49%	391.6	69%	418.1	89%	439.6
10%	289.6	30%	357.5	-> 50%	393.5	70%	419.3	90%	440.6
11%	295.0	31%	359.8	51%	394.8	71%	420.4	91%	441.5
12%	300.6	32%	361.8	52%	396.2	72%	421.5	92%	442.5
13%	305.1	33%	364.1	53%	397.4	73%	422.6	93%	443.5
14%	309.4	34%	366.0	54%	399.0	74%	423.8	94%	444.4
15%	313.3	35%	368.1	55%	400.5	75%	425.0	95%	445.3
16%	317.9	36%	370.0	56%	401.8	76%	426.1	96%	446.3
17%	321.4	37%	371.7	57%	403.0	77%	427.2	97%	447.2
18%	324.5	38%	373.4	58%	404.5	78%	428.3	98%	448.3
19%	328.1	39%	375.4	59%	405.8	79%	429.3	99%	449.1
20%	331.3	40%	377.3	60%	407.0	80%	430.4	100%	450.2

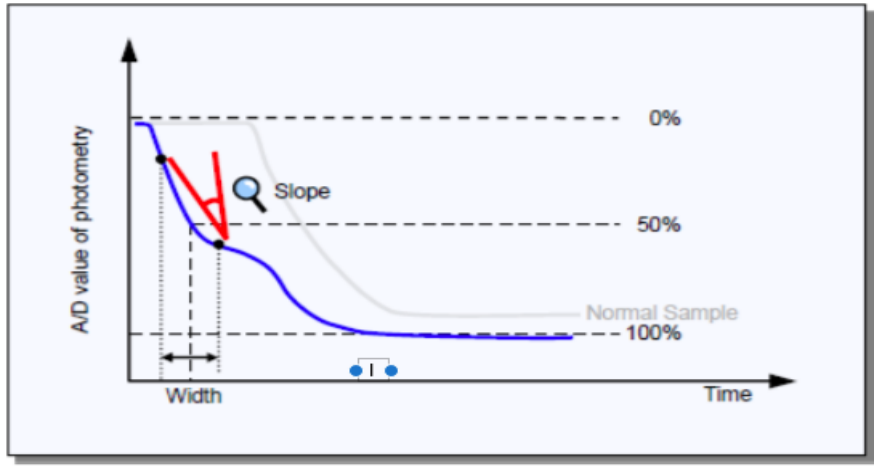
25631/01-18 build40 1/1 2020/06/29 12:58

1. Flat curve

This method checks the slope of the coagulation curve around the detection point (50%). When this condition is detected results will be flagged with a "Flat Curve" error. This check is effective for PT assay only.

This message appears when the analyzer detected a weak clot although it is not a true coagulation reaction. If the slope of reaction is bigger than “Limit slope” in time width. the result will be flagged with a "Flat curve" error. When this condition is detected the result will not be reported.

Joblist	Masked ****.* result
Cause	No coagulation or a weak coagulation was detected. Due to possible low fibrinogen concentration, presence of anticoagulant, or a reagent issue.
Kinetic Evaluation	• Reaction curve has no change or possible a very weak reaction if the view is zoomed in. • Requires manual evaluation and further consideration to determine how to report. • dH will be decreased. The dH limit to trigger this flag is assay dependent.



Note: Zoom in to view the reaction of the curve to better determine if baseline, clotting phase and endpoint are visible. This makes comparison with the evaluation data 50% value easier.

Action Steps for Flat Curve

Re-analyze sample after setting the "Measurement Time" to a longer time,

-Numeric results without an asterisk (*) –Report the result

- Same **"Flat curve"** message again – Do Not Report

Example 20

Status = review
Mode = Normal
Result = *** (PTINR)
Flag = Flat curve
Action = check for clot and re-analyze

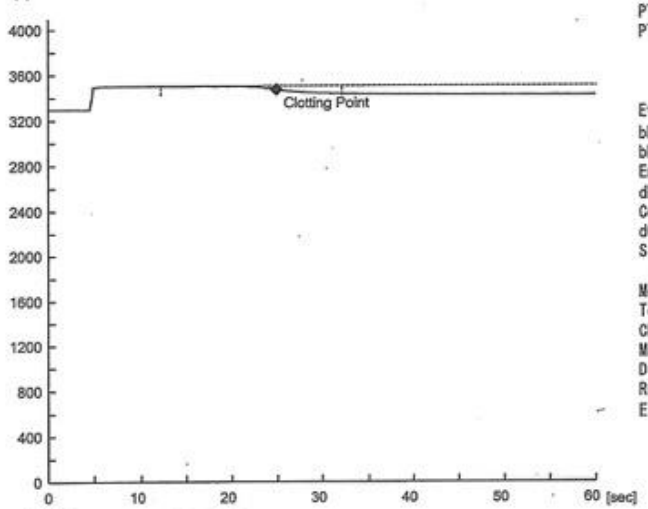
CS-2500 Chiko & Mark

admin : administrator

***** Graph Detail Print *****

Sample No:	MR SICK M	Seq:	1
Rack Tube Pos:	000003-02	Re-analysis flag:	
Status:	Review	Validate:	Performed
S. Code:		Validated on :	08/01/2019 08:51:08
Analysis Mode:	Normal Cp	Validated by :	SYSTEM
Patient Name:			
Sample Comment:			
Sample Info. :		Meas. Date:	08/01/2019 08:35:20

PT



Result

PT	*****.* sec
PT INR	***.**

To Repeat

Evaluation Info.

bH_point_time	12.2
bH	3500
End_point_time	32.1
dH	69
Coag.%	50
dOD	0.0086
Slope	10.27

Measurement Info.

Temperature	37.0	
Channel No.	5	
Management ID	1023	
Dilution Ratio	1 / 1	
Reagent Lot	PT Inn	549727
Elapsed Time	PT Inn	19

Detail
0032.0002.0000 Flat Curve
0032.0002.0000 Flat Curve

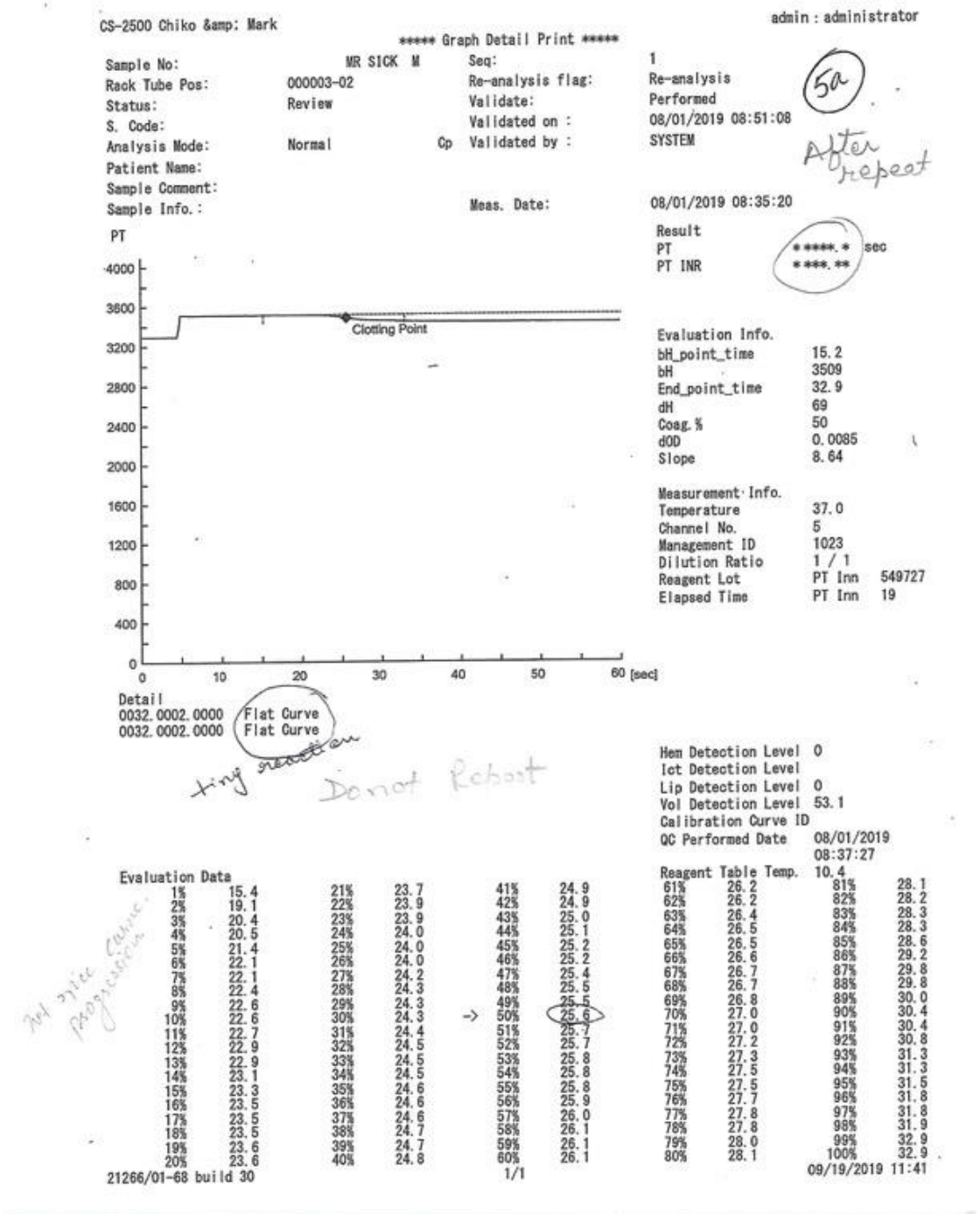
Hem Detection Level	0
Ict Detection Level	
Lip Detection Level	0
Vol Detection Level	53.1
Calibration Curve ID	
QC Performed Date	08/01/2019 08:37:27
Reagent Table Temp.	10.3

Evaluation Data

1%	12.3	21%	23.3	41%	24.4	61%	25.5	81%	27.7
2%	12.4	22%	23.3	42%	24.4	62%	25.5	82%	27.8
3%	19.1	23%	23.3	43%	24.5	63%	25.6	83%	28.0
4%	19.3	24%	23.4	44%	24.5	64%	25.9	84%	28.0
5%	19.8	25%	23.5	45%	24.6	65%	25.9	85%	28.2
6%	21.4	26%	23.5	46%	24.6	66%	26.0	86%	28.6
7%	21.4	27%	23.5	47%	24.7	67%	26.1	87%	28.7
8%	21.5	28%	23.5	48%	24.8	68%	26.1	88%	28.7
9%	21.7	29%	23.6	49%	24.8	69%	26.1	89%	28.9
10%	21.7	30%	23.6	→ 50%	24.9	70%	26.2	90%	29.1
11%	22.4	31%	23.7	51%	25.0	71%	26.2	91%	29.1
12%	22.6	32%	23.9	52%	25.0	72%	26.4	92%	29.3
13%	22.6	33%	23.9	53%	25.1	73%	26.6	93%	30.0
14%	22.7	34%	24.0	54%	25.1	74%	26.7	94%	30.0
15%	22.8	35%	24.0	55%	25.1	75%	26.7	95%	30.5
16%	23.0	36%	24.0	56%	25.2	76%	27.0	96%	30.7
17%	23.0	37%	24.1	57%	25.3	77%	27.2	97%	30.7
18%	23.1	38%	24.2	58%	25.3	78%	27.2	98%	31.4
19%	23.2	39%	24.2	59%	25.3	79%	27.4	99%	31.9
20%	23.2	40%	24.3	60%	25.4	80%	27.7	100%	32.2

Example 20

After re-analysis
If flat curve again = **Do Not** report the result
even though you see some PT value at 50%



CS-2500 Chiko & Mark

admin : administrator

***** Graph Detail Print *****

Sample No:	MR SICK M	Seq:	1
Rack Tube Pos:	000003-02	Re-analysis flag:	Re-analysis Performed
Status:	Review	Validate:	08/01/2019 08:51:08
S. Code:		Validated on :	SYSTEM
Analysis Mode:	Normal Cp	Validated by :	
Patient Name:			
Sample Comment:			
Sample Info.:		Meas. Date:	08/01/2019 08:35:20

5a

After repeat

PT

Result		
PT	*****.*	sec
PT INR	***.**	

Evaluation Info.

bH_point_time	15.2
bH	3509
End_point_time	32.9
dH	69
Coag.%	50
dOD	0.0085
Slope	8.64

Measurement Info.

Temperature	37.0	
Channel No.	5	
Management ID	1023	
Dilution Ratio	1 / 1	
Reagent Lot	PT Inn	549727
Elapsed Time	PT Inn	19

Detail
0032.0002.0000 Flat Curve
0032.0002.0000 Flat Curve

ting reaction

Do not Report

Hem Detection Level	0	
Ict Detection Level		
Lip Detection Level	0	
Vol Detection Level	53.1	
Calibration Curve ID		
QC Performed Date	08/01/2019 08:37:27	
Reagent Table Temp.	10.4	

Evaluation Data

1%	15.4	21%	23.7	41%	24.9
2%	19.1	22%	23.9	42%	24.9
3%	20.4	23%	23.9	43%	25.0
4%	20.5	24%	24.0	44%	25.1
5%	21.4	25%	24.0	45%	25.2
6%	22.1	26%	24.0	46%	25.2
7%	22.1	27%	24.2	47%	25.4
8%	22.4	28%	24.3	48%	25.5
9%	22.6	29%	24.3	49%	25.5
10%	22.6	30%	24.3	-> 50%	25.6
11%	22.7	31%	24.4	51%	25.7
12%	22.9	32%	24.5	52%	25.7
13%	22.9	33%	24.5	53%	25.8
14%	23.1	34%	24.5	54%	25.8
15%	23.3	35%	24.6	55%	25.8
16%	23.5	36%	24.6	56%	25.9
17%	23.5	37%	24.6	57%	26.0
18%	23.5	38%	24.7	58%	26.1
19%	23.6	39%	24.7	59%	26.1
20%	23.6	40%	24.8	60%	26.1

2nd spike Cubic progression

61%	26.2	81%	28.1
62%	26.2	82%	28.2
63%	26.4	83%	28.3
64%	26.5	84%	28.3
65%	26.5	85%	28.6
66%	26.6	86%	29.2
67%	26.7	87%	29.8
68%	26.7	88%	29.8
69%	26.8	89%	30.0
70%	27.0	90%	30.4
71%	27.0	91%	30.4
72%	27.2	92%	30.8
73%	27.3	93%	31.3
74%	27.5	94%	31.3
75%	27.5	95%	31.5
76%	27.7	96%	31.8
77%	27.8	97%	31.8
78%	27.8	98%	31.9
79%	28.0	99%	32.9
80%	28.1	100%	32.9

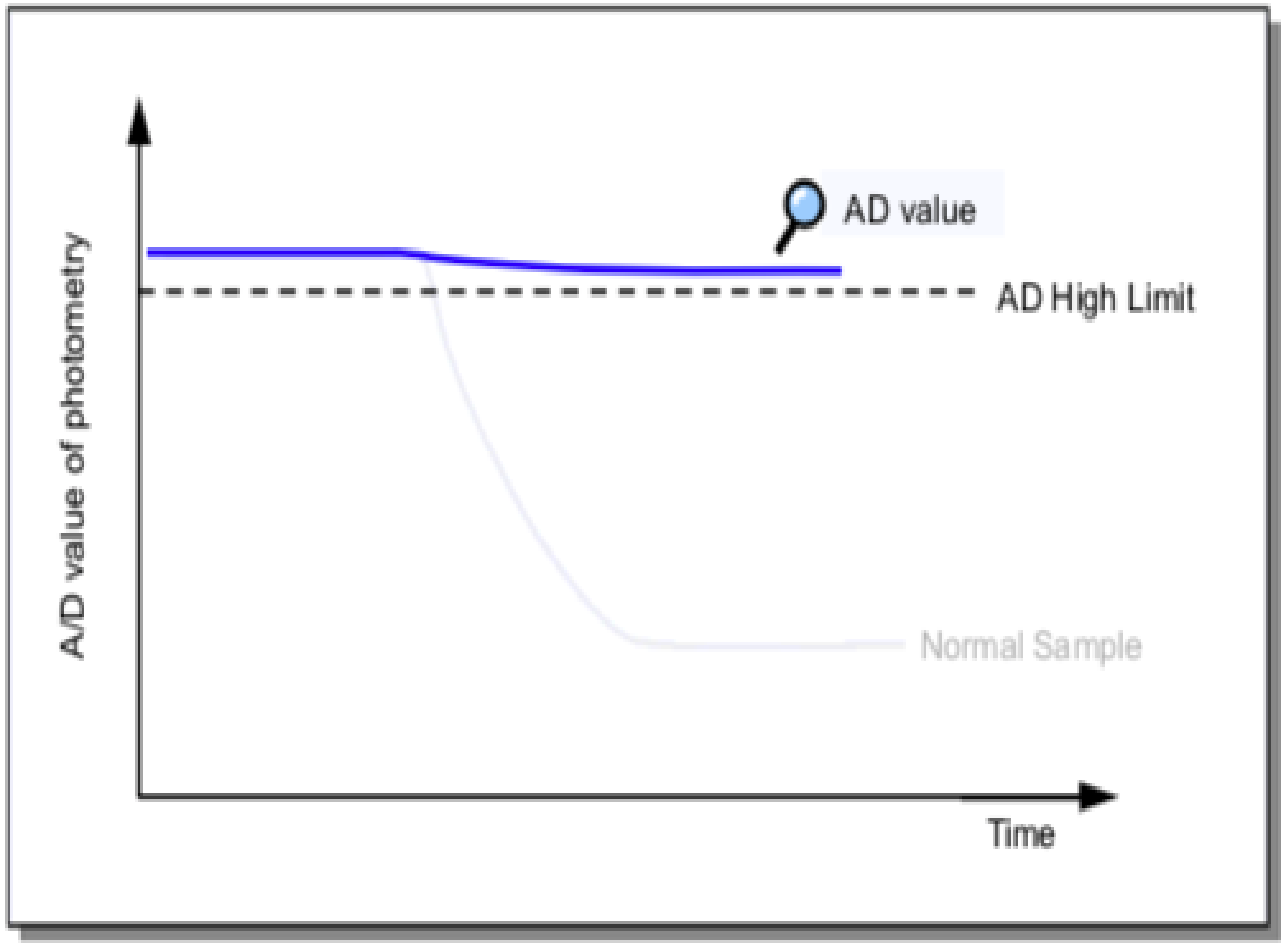
21266/01-68 build 30

1/1

09/19/2019 11:41

Trans Light High Check

If the A/D value of the measurement data is at threshold value or above, the result will be flagged with a "**Trans Light High" error. When this condition is detected the result will not be reported.**



Action Steps for "Trans Light High"

1. **Recalibrate the lamp or replace – depending upon the condition. Follow lamp replacement procedure.**
2. Run sample on the alternate instrument.

1. **Miscellaneous Flags:**

Test	Flag	Action
D-Dimer assays	Antigen Excess	Report >35.2 mg/L FEU
Any Test	Upper Reportable Limit Over	Report >highest point of linearity PT>90sec, INR>10.3, PTT>139sec, FIB>860 mg/dL DDI>35.2 mg/LFEU,
Heparin Assay	Extrapolation Boundary over (upper)	Report >1.5 IU/mL
Arixtra	Extrapolation Boundary over (upper)	Report >1.0 mg/L
Any Test	Lower Report limit over	Check for clot, if ok, report PTT <20 sec, Fib <50 mg/dL,, DDI<0.19 mg/L FEU PT <8.7 sec

Example 21

Heparin assay

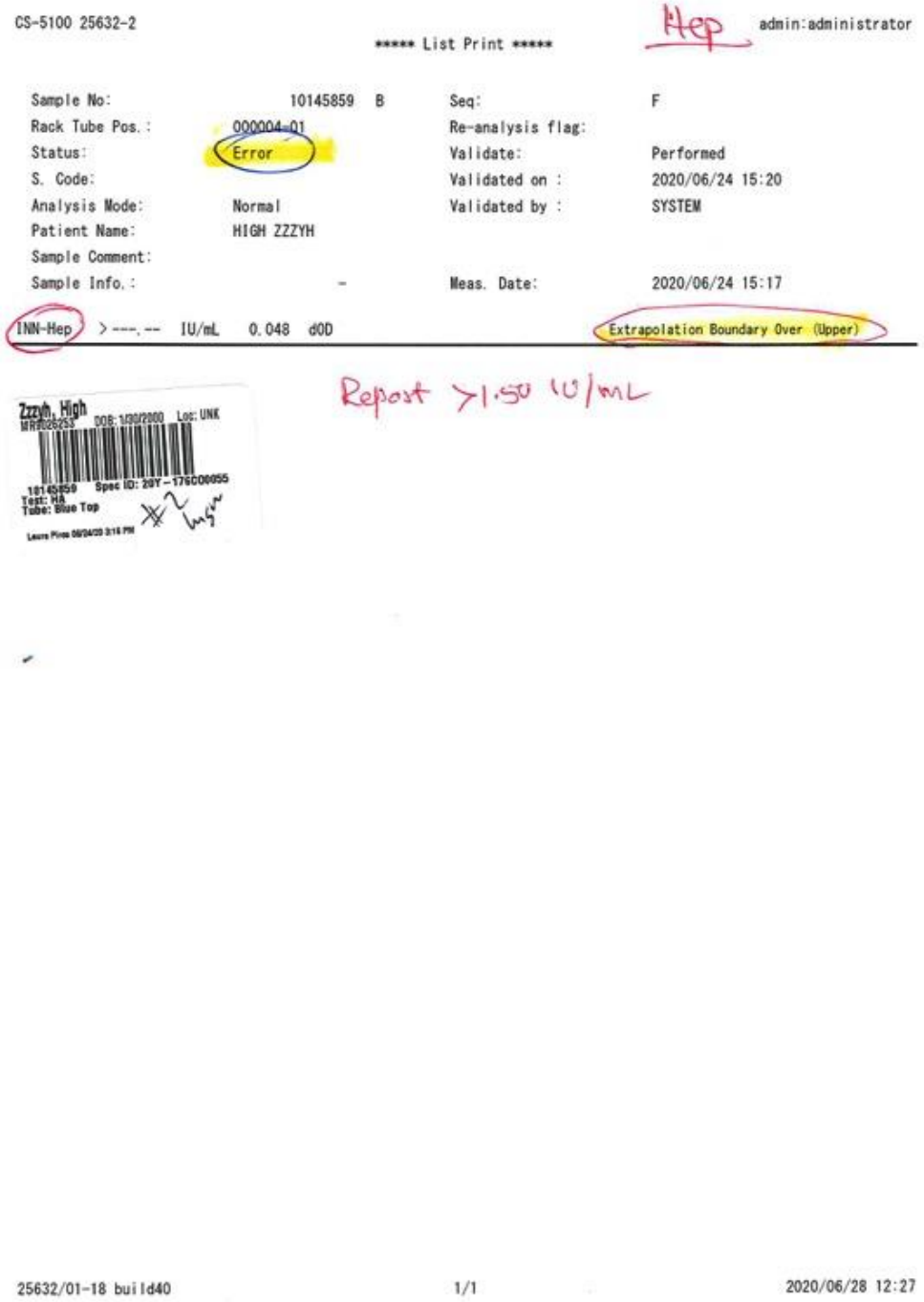
Status = Error

Code = extrapolation boundary over

Result = >----

Check sample integrity

- Validate if ok
- It will auto verify as >1.5 IU/mL



CS-5100 25632-2

Hep

admin:administrator

***** List Print *****

Sample No:	10145859 B	Seq:	F
Rack Tube Pos.:	000004-01	Re-analysis flag:	
Status:	Error	Validate:	Performed
S. Code:		Validated on :	2020/06/24 15:20
Analysis Mode:	Normal	Validated by :	SYSTEM
Patient Name:	HIGH ZZZYH		
Sample Comment:			
Sample Info.:	-	Meas. Date:	2020/06/24 15:17

INN-Hep	>---.--	IU/mL	0.048 d0D	Extrapolation Boundary Over (Upper)

Report >1.50 IU/mL

Zzzyh, High
MRN:26253 DOB: 1/30/2000 Loc: UNK
10145859 Spec ID: 20Y-176C00055
Test: HA
Tube: Blue Top

Laura Pires 06/24/20 3:16 PM

25632/01-18 build40 1/1 2020/06/28 12:27

Example 22

Test = Heparin

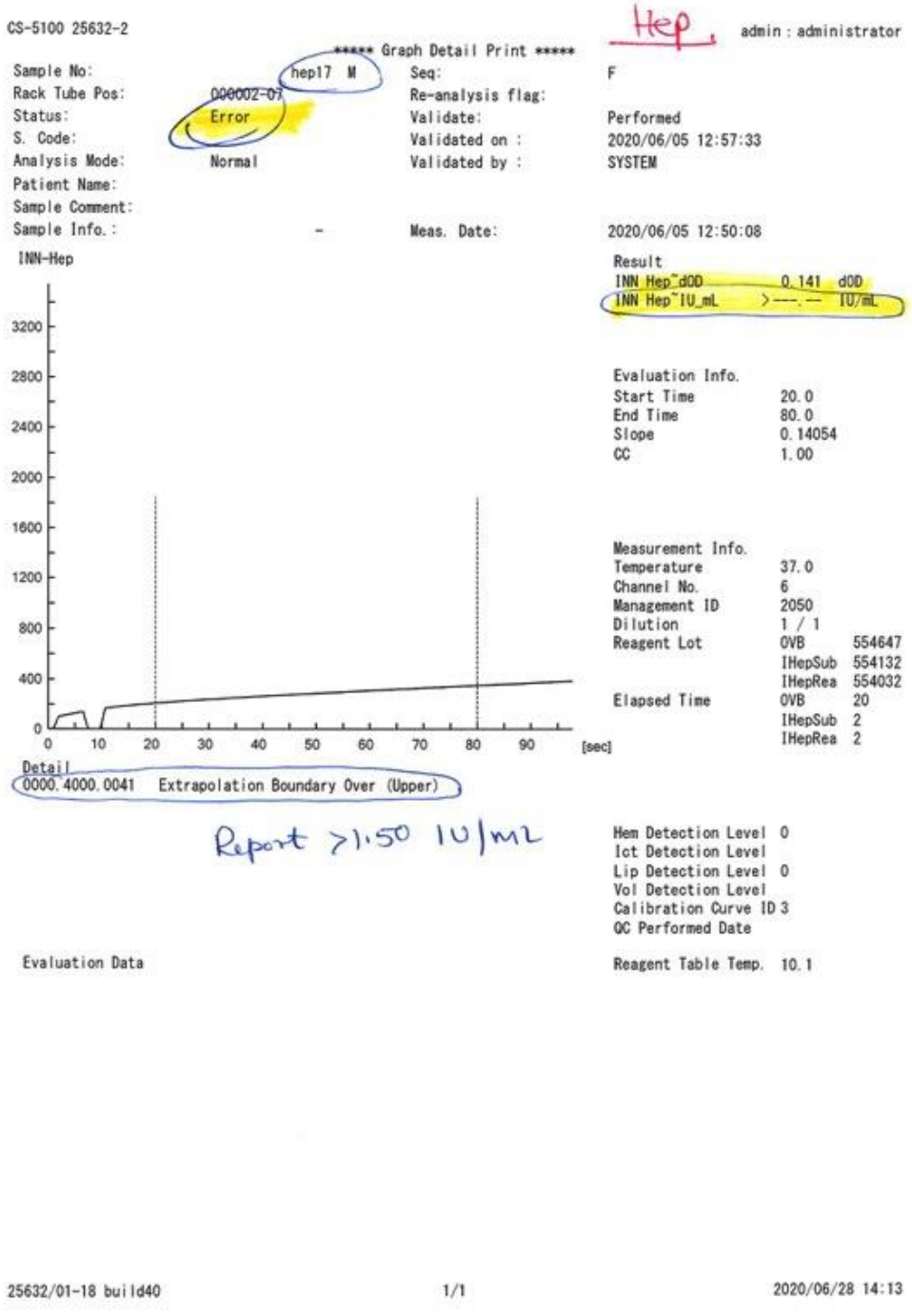
Status = Error

Code = extrapolation boundary over

Result = >----

Check sample integrity

- Validate if ok
- It will auto verify as >1.5 IU/mL



CS-5100 25632-2

Hep.

admin : administrator

***** Graph Detail Print *****

Sample No:	hep17 M	Seq:	F
Rack Tube Pos:	006002-07	Re-analysis flag:	
Status:	Error	Validate:	Performed
S. Code:		Validated on :	2020/06/05 12:57:33
Analysis Mode:	Normal	Validated by :	SYSTEM
Patient Name:			
Sample Comment:			
Sample Info.:	-	Meas. Date:	2020/06/05 12:50:08

INN-Hep

Result

INN Hep~dOD	0.141	dOD
INN Hep~IU_mL	>---.--	IU/mL

Evaluation Info.

Start Time	20.0
End Time	80.0
Slope	0.14054
CC	1.00

Measurement Info.

Temperature	37.0	
Channel No.	6	
Management ID	2050	
Dilution	1 / 1	
Reagent Lot	OVB	554647
	IHepSub	554132
	IHepRea	554032
Elapsed Time	OVB	20
	IHepSub	2
	IHepRea	2

Detail

0000.4000.0041 Extrapolation Boundary Over (Upper)

Report >1.50 IU/ml

Hem Detection Level	0
Ict Detection Level	
Lip Detection Level	0
Vol Detection Level	
Calibration Curve ID	3
QC Performed Date	

Evaluation Data

Reagent Table Temp. 10.1

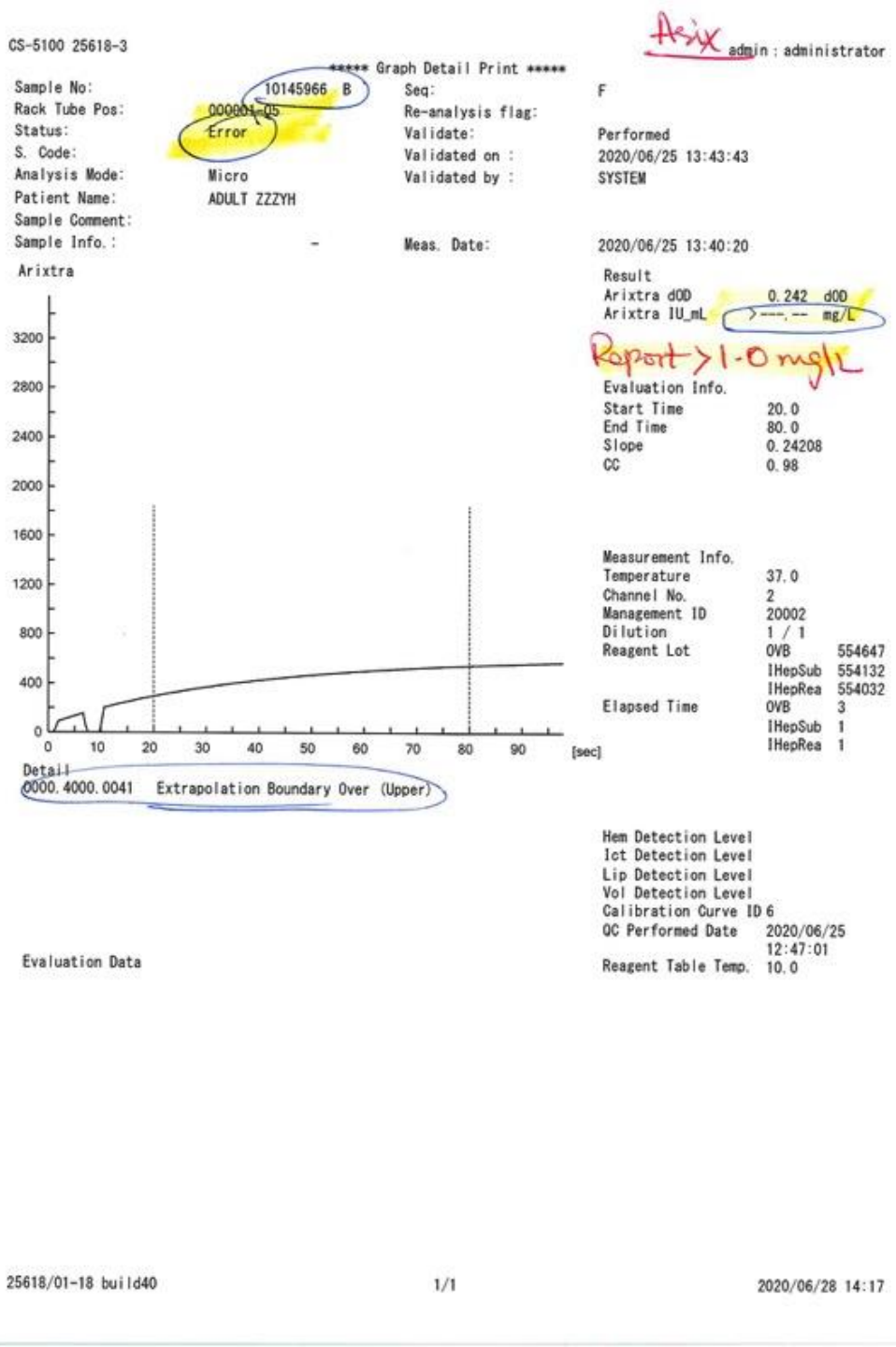
25632/01-18 build40 1/1 2020/06/28 14:13

Example 23

Arixtra

Status = Error
Code = extrapolation boundary over
Result = >----
Check sample integrity

- Validate if ok
- It will auto verify as >1.0 mg/mL



CS-5100 25618-3

Arix admin : administrator

***** Graph Detail Print *****

Sample No:	10145966 B	Seq:	F
Rack Tube Pos:	000001-05	Re-analysis flag:	
Status:	Error	Validate:	Performed
S. Code:		Validated on :	2020/06/25 13:43:43
Analysis Mode:	Micro	Validated by :	SYSTEM
Patient Name:	ADULT ZZZYH		
Sample Comment:			
Sample Info.:	-	Meas. Date:	2020/06/25 13:40:20

Arixtra

Detail
0000.4000.0041 Extrapolation Boundary Over (Upper)

Result

Arixtra dOD	0.242 dOD
Arixtra IU_mL	>---.-- mg/L

Report >1.0 mg/L

Evaluation Info.

Start Time	20.0
End Time	80.0
Slope	0.24208
CC	0.98

Measurement Info.

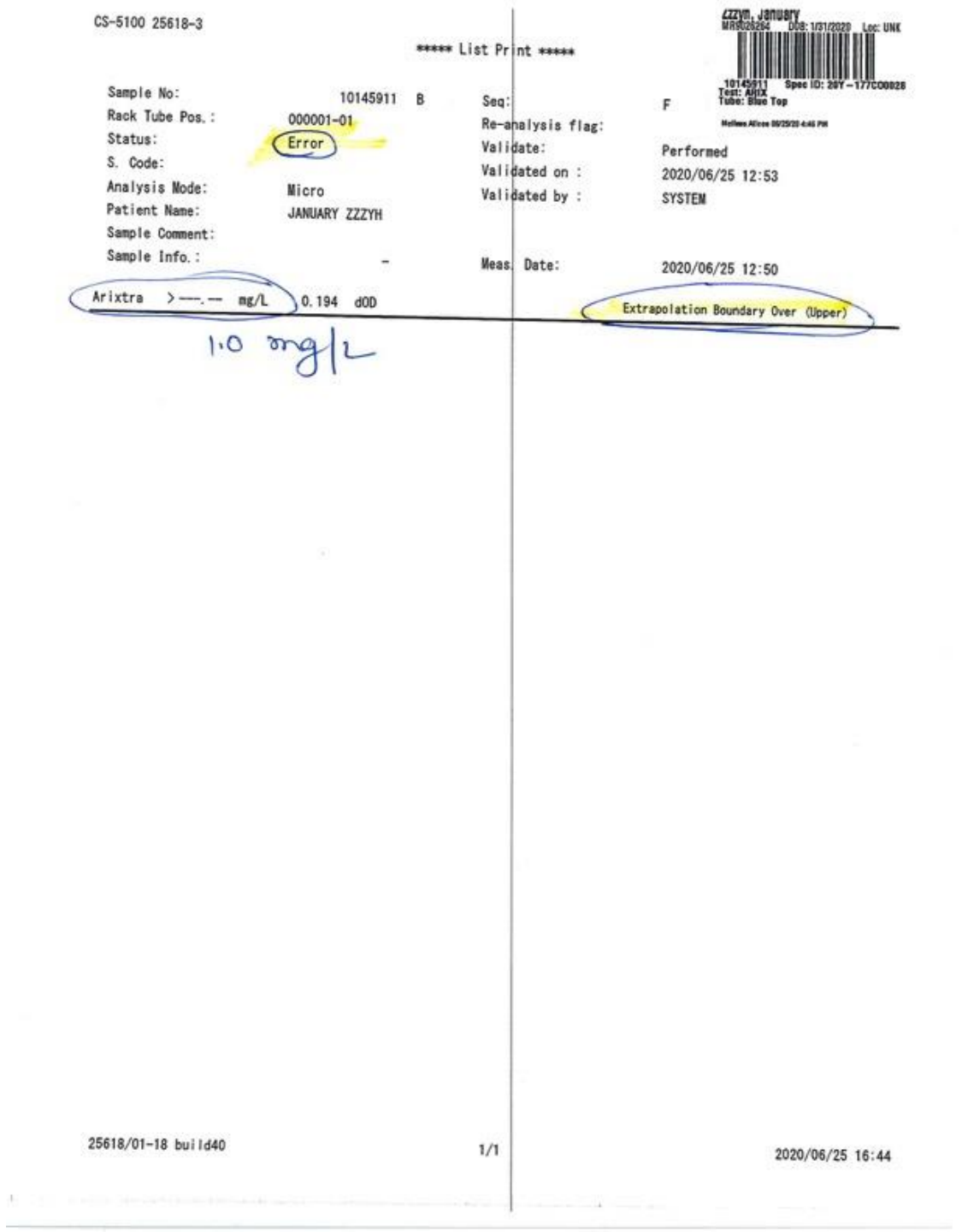
Temperature	37.0	
Channel No.	2	
Management ID	20002	
Dilution	1 / 1	
Reagent Lot	OVB	554647
	IHepSub	554132
	IHepRea	554032
Elapsed Time	OVB	3
	IHepSub	1
	IHepRea	1

Hem Detection Level	
Ict Detection Level	
Lip Detection Level	
Vol Detection Level	
Calibration Curve ID	6
QC Performed Date	2020/06/25 12:47:01
Reagent Table Temp.	10.0

Evaluation Data

25618/01-18 build40 1/1 2020/06/28 14:17

Example 23



CS-5100 25618-3

***** List Print *****

ZZZYH, JANUARY
MRN:0028264 DOB: 1/31/2020 Loc: UNK
10145911 Spec ID: 20Y-177C00028
Test: ARIX
Tube: Blue Top

Sample No:	10145911 B	Seq:	F
Rack Tube Pos.:	000001-01	Re-analysis flag:	
Status:	Error	Validate:	Performed
S. Code:		Validated on :	2020/06/25 12:53
Analysis Mode:	Micro	Validated by :	SYSTEM
Patient Name:	JANUARY ZZZYH		
Sample Comment:			
Sample Info.:	-	Meas. Date:	2020/06/25 12:50

Arixtra	>---.-- mg/L	0.194 dOD	Extrapolation Boundary Over (Upper)

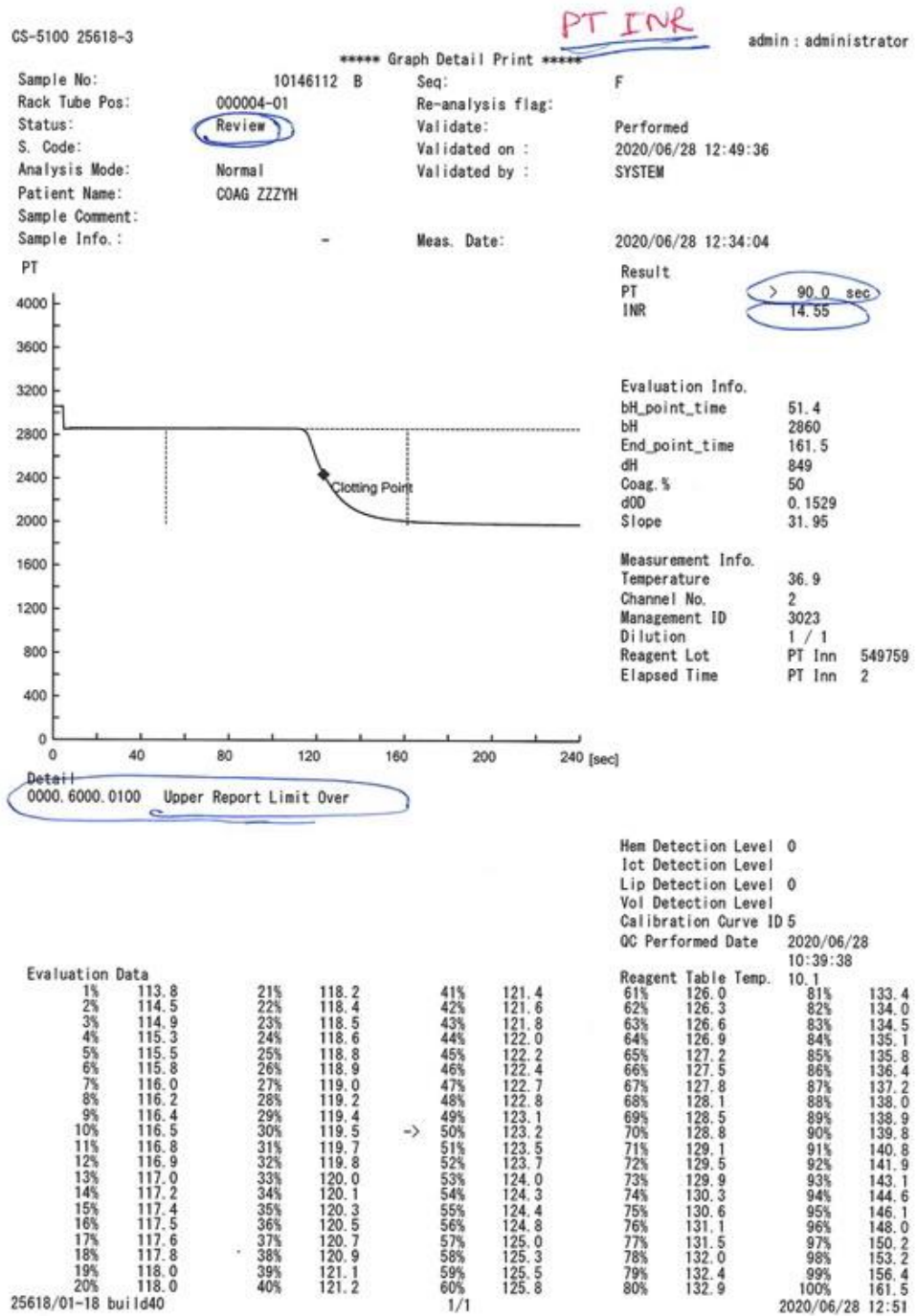
1.0 mg/L

25618/01-18 build40 1/1 2020/06/25 16:44

Example 24

PTINR

Status = Review
Flag = Upper report Limit error
Action = check the integrity of the sample, clot
Action = send to host



CS-5100 25618-3

PT INR

admin : administrator

***** Graph Detail Print *****

Sample No:	10146112 B	Seq:	F
Rack Tube Pos:	000004-01	Re-analysis flag:	
Status:	Review	Validate:	Performed
S. Code:		Validated on :	2020/06/28 12:49:36
Analysis Mode:	Normal	Validated by :	SYSTEM
Patient Name:	COAG ZZZYH		
Sample Comment:			
Sample Info. :	-	Meas. Date:	2020/06/28 12:34:04

PT

Result

PT	> 90.0 sec
INR	14.55

Evaluation Info.

bH_point_time	51.4
bH	2860
End_point_time	161.5
dH	849
Coag.%	50
d0D	0.1529
Slope	31.95

Measurement Info.

Temperature	36.9	
Channel No.	2	
Management ID	3023	
Dilution	1 / 1	
Reagent Lot	PT Inn	549759
Elapsed Time	PT Inn	2

Detail

0000.6000.0100 Upper Report Limit Over

Hem Detection Level 0
Ict Detection Level
Lip Detection Level 0
Vol Detection Level
Calibration Curve ID 5
QC Performed Date 2020/06/28 10:39:38
Reagent Table Temp. 10.1

Evaluation Data

1%	113.8	21%	118.2		41%	121.4	61%	126.0	81%	133.4
2%	114.5	22%	118.4		42%	121.6	62%	126.3	82%	134.0
3%	114.9	23%	118.5		43%	121.8	63%	126.6	83%	134.5
4%	115.3	24%	118.6		44%	122.0	64%	126.9	84%	135.1
5%	115.5	25%	118.8		45%	122.2	65%	127.2	85%	135.8
6%	115.8	26%	118.9		46%	122.4	66%	127.5	86%	136.4
7%	116.0	27%	119.0		47%	122.7	67%	127.8	87%	137.2
8%	116.2	28%	119.2		48%	122.8	68%	128.1	88%	138.0
9%	116.4	29%	119.4		49%	123.1	69%	128.5	89%	138.9
10%	116.5	30%	119.5	->	50%	123.2	70%	128.8	90%	139.8
11%	116.8	31%	119.7		51%	123.5	71%	129.1	91%	140.8
12%	116.9	32%	119.8		52%	123.7	72%	129.5	92%	141.9
13%	117.0	33%	120.0		53%	124.0	73%	129.9	93%	143.1
14%	117.2	34%	120.1		54%	124.3	74%	130.3	94%	144.6
15%	117.4	35%	120.3		55%	124.4	75%	130.6	95%	146.1
16%	117.5	36%	120.5		56%	124.8	76%	131.1	96%	148.0
17%	117.6	37%	120.7		57%	125.0	77%	131.5	97%	150.2
18%	117.8	38%	120.9		58%	125.3	78%	132.0	98%	153.2
19%	118.0	39%	121.1		59%	125.5	79%	132.4	99%	156.4
20%	118.0	40%	121.2		60%	125.8	80%	132.9	100%	161.5

Example 25

DDI

Status-Review

Flag = Upper report limit and dilution changed

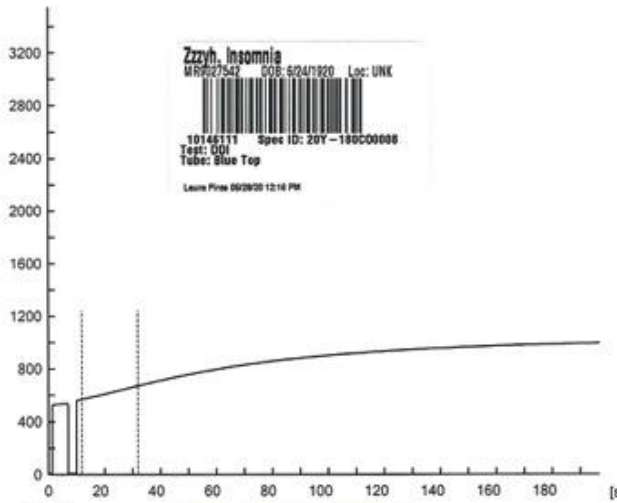
Validate = send to host

CS-5100 25632-2 DDI admin : administrator

***** Graph Detail Print *****

Sample No:	10146111 B	Seq:	F
Rack Tube Pos:	000003-01	Re-analysis flag:	
Status:	Review	Validate:	Performed
S. Code:		Validated on :	2020/06/28 12:47:59
Analysis Mode:	Normal	Validated by :	SYSTEM
Patient Name:	INSOMNIA ZZZYH		
Sample Comment:			
Sample Info. :	-	Meas. Date:	2020/06/28 12:33:58

DDi



Detail

0000.0000.0000 Dilution Ratio was Changed.

0000.6000.0100 Upper Report Limit Over

Result

DDi d0D	d 0.311	d0D
DDi	> 35.20	mg/L

Evaluation Info.

Start Time	12.0
End Time	32.0
Slope	0.31047
CC	1.00
proA_slope	0.29498
proB_slope	0.09785

Measurement Info.

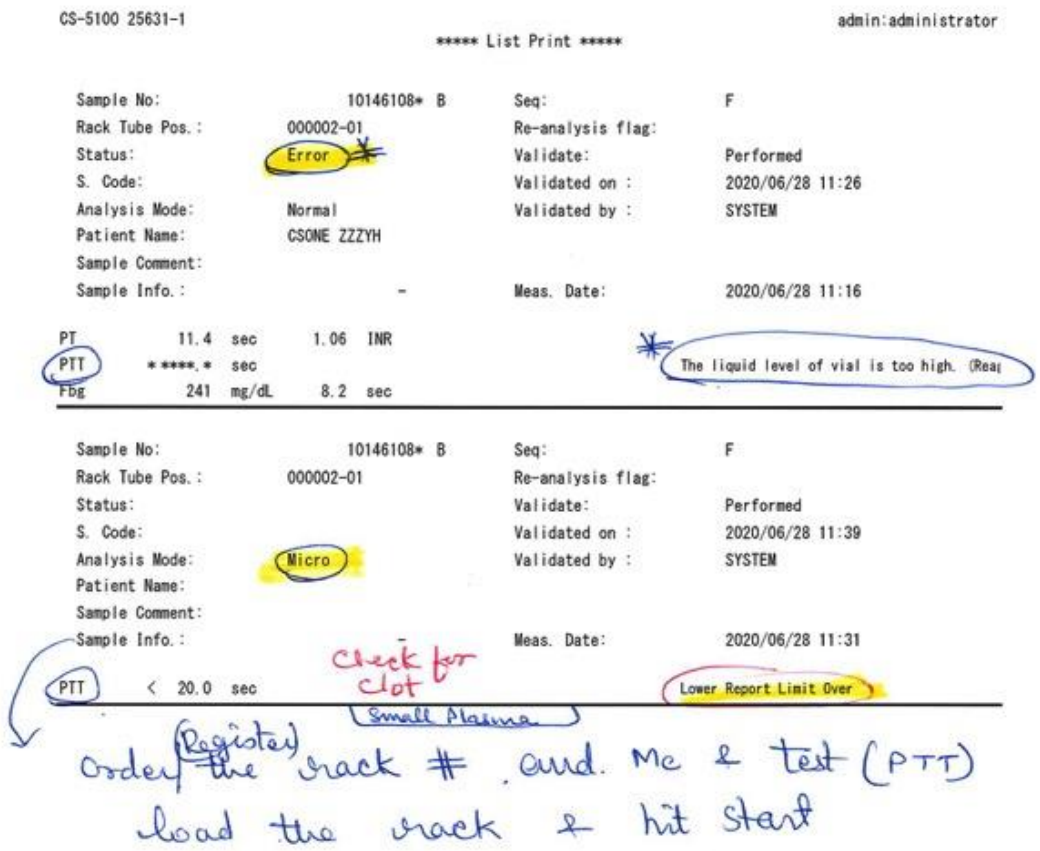
Temperature	37.0	
Channel No.	2	
Management ID	2321	
Dilution	1 / 10	
Reagent Lot	DDiDil	561684
	DDiSup	561884
	DDiBuf	561784
	DDiReag	561584
Elapsed Time	DDiDil	1
	DDiSup	1
	DDiBuf	1
	DDiReag	47

Hem Detection Level	0
Ict Detection Level	
Lip Detection Level	0
Vol Detection Level	
Calibration Curve ID	2
QC Performed Date	2020/06/26 08:23:45
Reagent Table Temp.	10.2

Evaluation Data

Example 26

Status = Error
Mode = Normal
Flag = The liquid level high risk
Result = *** for PTT
Action = re-analyze



CS-5100 25631-1 admin:administrator

***** List Print *****

Sample No:	10146108* B	Seq:	F
Rack Tube Pos.:	000002-01	Re-analysis flag:	
Status:	Error	Validate:	Performed
S. Code:		Validated on :	2020/06/28 11:26
Analysis Mode:	Normal	Validated by :	SYSTEM
Patient Name:	CSONE ZZZYH		
Sample Comment:			
Sample Info.:	-	Meas. Date:	2020/06/28 11:16

PT	11.4	sec	1.06	INR
PTT	*****.*	sec		
Fbg	241	mg/dL	8.2	sec

The liquid level of vial is too high. (Rea

Sample No:	10146108* B	Seq:	F
Rack Tube Pos.:	000002-01	Re-analysis flag:	
Status:		Validate:	Performed
S. Code:		Validated on :	2020/06/28 11:39
Analysis Mode:	Micro	Validated by :	SYSTEM
Patient Name:			
Sample Comment:			
Sample Info.:	-	Meas. Date:	2020/06/28 11:31

PTT < 20.0 sec

Check for clot

Small Plasma

Lower Report Limit Over

Order (Register) the rack # and Mc & test (PTT)
load the rack & hit start

25631/01-18 build40 1/1 2020/06/28 11:45

Example 27

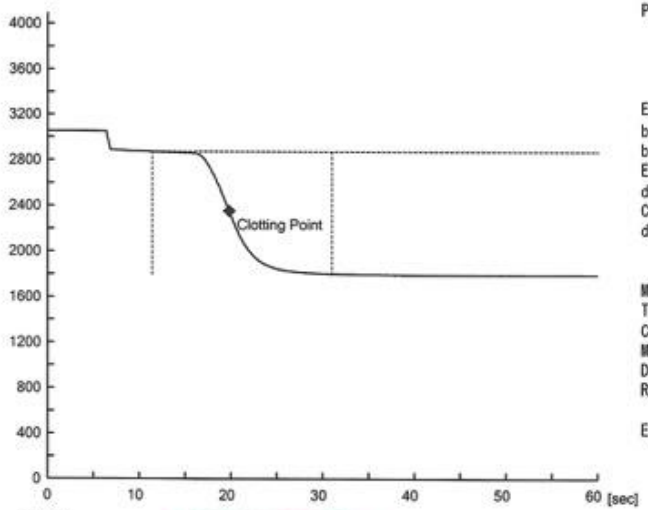
Action = Check for clot

CS-5100 25618-3 admin : administrator

***** Graph Detail Print *****

Sample No:	10146104 B	Seq:	F
Rack Tube Pos:	000002-01	Re-analysis flag:	
Status:		Validate:	Performed
S. Code:		Validated on :	2020/06/28 11:07:24
Analysis Mode:	Normal	Validated by :	SYSTEM
Patient Name:	LOWPTT ZZZYH		
Sample Comment:			
Sample Info.:	-	Meas. Date:	2020/06/28 10:59:58

PTT



Result
PTT < 20.0 sec

Evaluation Info.

bH_point_time	11.4
bH	2872
End_point_time	31.0
dH	1069
Coag.%	50
d0D	0.2022

Measurement Info.

Temperature	37.0
Channel No.	2
Management ID	3290
Dilution	1 / 1
Reagent Lot	APTT FSL 556997
	CaCl2 563872
Elapsed Time	APTT FSL 0
	CaCl2 0

Detail
0000.6000.0200 Lower Report Limit Over

Check for clot

Hem Detection Level	0
Ict Detection Level	
Lip Detection Level	0
Vol Detection Level	
Calibration Curve ID	
QC Performed Date	2020/06/28 10:41:07
Reagent Table Temp.	10.1

Evaluation Data

1%	14.9	21%	18.2		41%	19.3	61%	20.4	81%	21.8
2%	16.2	22%	18.2		42%	19.4	62%	20.4	82%	21.9
3%	16.5	23%	18.2		43%	19.4	63%	20.5	83%	22.0
4%	16.7	24%	18.3		44%	19.4	64%	20.5	84%	22.2
5%	16.8	25%	18.4		45%	19.5	65%	20.6	85%	22.3
6%	17.0	26%	18.5		46%	19.6	66%	20.7	86%	22.4
7%	17.1	27%	18.5		47%	19.6	67%	20.7	87%	22.6
8%	17.2	28%	18.6		48%	19.7	68%	20.8	88%	22.7
9%	17.3	29%	18.6		49%	19.7	69%	20.8	89%	22.9
10%	17.4	30%	18.7	->	50%	19.8	70%	20.9	90%	23.1
11%	17.4	31%	18.8		51%	19.8	71%	21.0	91%	23.3
12%	17.5	32%	18.8		52%	19.9	72%	21.1	92%	23.5
13%	17.6	33%	18.8		53%	19.9	73%	21.1	93%	23.8
14%	17.7	34%	18.9		54%	19.9	74%	21.2	94%	24.1
15%	17.7	35%	19.0		55%	20.0	75%	21.3	95%	24.5
16%	17.8	36%	19.1		56%	20.1	76%	21.4	96%	25.0
17%	17.9	37%	19.1		57%	20.2	77%	21.4	97%	25.6
18%	18.0	38%	19.1		58%	20.2	78%	21.6	98%	26.5
19%	18.0	39%	19.2		59%	20.2	79%	21.7	99%	27.9
20%	18.1	40%	19.2		60%	20.3	80%	21.7	100%	31.0

Example 28

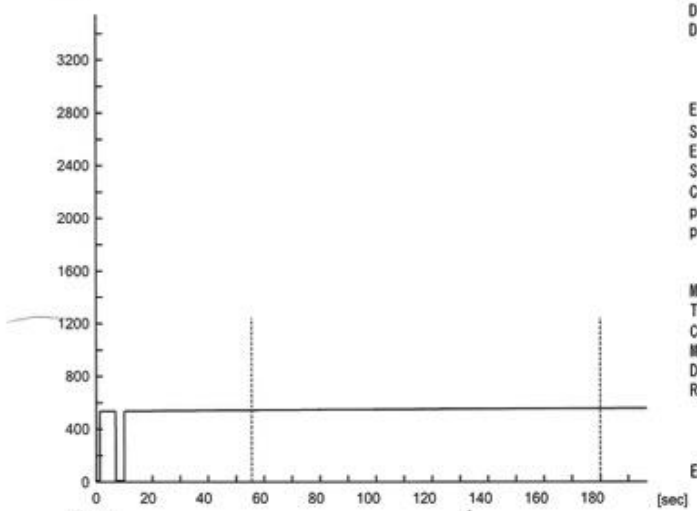
Verify

CS-5100 25632-2 Low — DDI admin : administrator

***** Graph Detail Print *****

Sample No:	10146115 B	Seq:	F
Rack Tube Pos:	000001-01	Re-analysis flag:	
Status:		Validate:	Performed
S. Code:		Validated on :	2020/06/28 13:21:23
Analysis Mode:	Normal	Validated by :	SYSTEM
Patient Name:	DDILOW ZZZYH		
Sample Comment:			
Sample Info.:	-	Meas. Date:	2020/06/28 13:14:33

DDi



Detail
0000.6000.0200 Lower Report Limit Over

Result

DDi dOD	0.006	dOD
DDi	< 0.19	mg/L

Evaluation Info.

Start Time	55.6
End Time	180.0
Slope	0.00624
CC	0.99
proA_slope	0.01142
proB_slope	0.00654

Measurement Info.

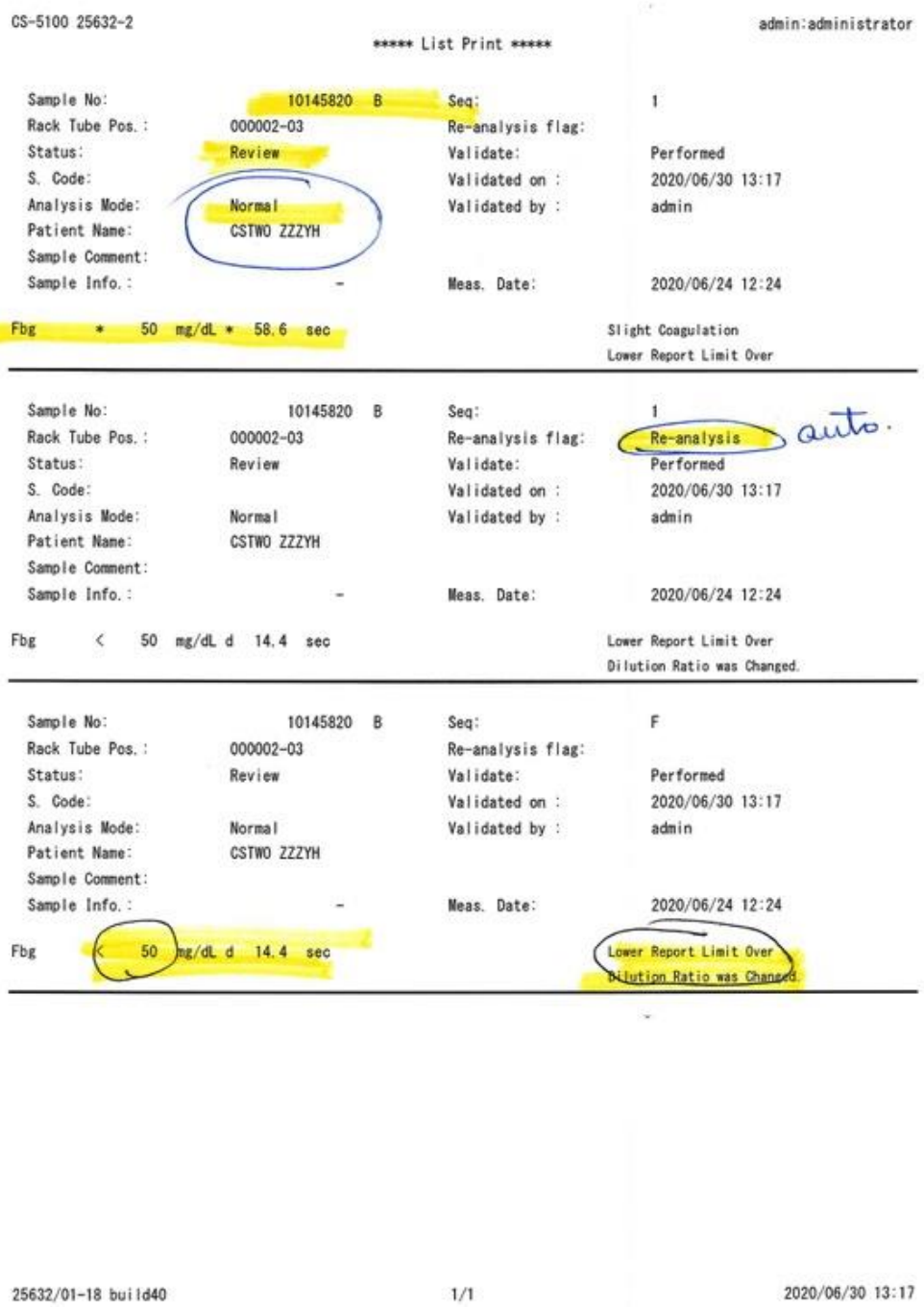
Temperature	37.0	
Channel No.	2	
Management ID	2321	
Dilution	1 / 1	
Reagent Lot	DDiDil	561684
	DDiSup	561884
	DDiBuf	561784
	DDiReag	561584
Elapsed Time	DDiDil	1
	DDiSup	1
	DDiBuf	1
	DDiReag	47

Hem Detection Level	0
Ict Detection Level	
Lip Detection Level	0
Vol Detection Level	
Calibration Curve ID	2
QC Performed Date	2020/06/26 08:23:45
Reagent Table Temp.	10.2

Evaluation Data

Example 29

Normal vs. Micro sample



CS-5100 25632-2 admin:administrator

***** List Print *****

Sample No:	10145820 B	Seq:	1
Rack Tube Pos.:	000002-03	Re-analysis flag:	
Status:	Review	Validate:	Performed
S. Code:		Validated on :	2020/06/30 13:17
Analysis Mode:	Normal	Validated by :	admin
Patient Name:	CSTWO ZZZYH		
Sample Comment:			
Sample Info.:	-	Meas. Date:	2020/06/24 12:24

Fbg * 50 mg/dL * 58.6 sec — Slight Coagulation; Lower Report Limit Over

Sample No:	10145820 B	Seq:	1
Rack Tube Pos.:	000002-03	Re-analysis flag:	Re-analysis auto.
Status:	Review	Validate:	Performed
S. Code:		Validated on :	2020/06/30 13:17
Analysis Mode:	Normal	Validated by :	admin
Patient Name:	CSTWO ZZZYH		
Sample Comment:			
Sample Info.:	-	Meas. Date:	2020/06/24 12:24

Fbg < 50 mg/dL d 14.4 sec — Lower Report Limit Over; Dilution Ratio was Changed.

Sample No:	10145820 B	Seq:	F
Rack Tube Pos.:	000002-03	Re-analysis flag:	
Status:	Review	Validate:	Performed
S. Code:		Validated on :	2020/06/30 13:17
Analysis Mode:	Normal	Validated by :	admin
Patient Name:	CSTWO ZZZYH		
Sample Comment:			
Sample Info.:	-	Meas. Date:	2020/06/24 12:24

Fbg < 50 mg/dL d 14.4 sec — Lower Report Limit Over; Dilution Ratio was Changed.

25632/01-18 build40 1/1 2020/06/30 13:17

Example 29

<u>After Re-analysis</u>

Status = Review
Result = Fib<50
Check Dilution = 4/1

Action = send to host

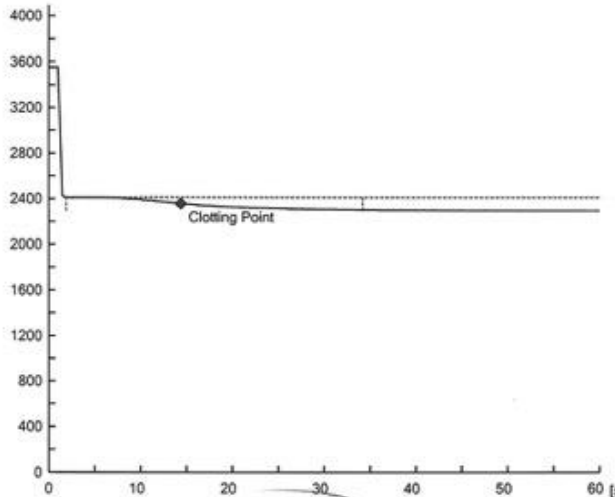
CS-5100 25632-2 admin : administrator

***** Graph Detail Print *****

Sample No:	10145820 B	Seq:	F
Rack Tube Pos:	000002-03	Re-analysis flag:	
Status:	Review	Validate:	Performed
S. Code:		Validated on :	2020/06/30 13:17:14
Analysis Mode:	Normal	Validated by :	admin
Patient Name:	CSTWO ZZZYH		
Sample Comment:			
Sample Info. :	-	Meas. Date:	2020/06/24 12:24:34

After reanalysis

Fbg



Result

Fbg sec	d	14.4	sec
Fbg C	<	50	mg/dL

Evaluation Info.

bH_point_time	1.9
bH	2411
End_point_time	34.2
dH	106
Coag.%	50
d0D	0.0195

Measurement Info.

Temperature		37.0
Channel No.		5
Management ID		3321
Dilution		4 / 1
Reagent Lot	OVB	554647
	Fbg	565060
Elapsed Time	OVB	3
	Fbg	0

Detail
0000.0000.0000 Dilution Ratio was Changed.
0000.6000.0200 Lower Report Limit Over

Hem Detection Level	0
Ict Detection Level	
Lip Detection Level	0
Vol Detection Level	
Calibration Curve ID	1
QC Performed Date	2020/06/24 12:14:33
Reagent Table Temp.	10.1

Evaluation Data

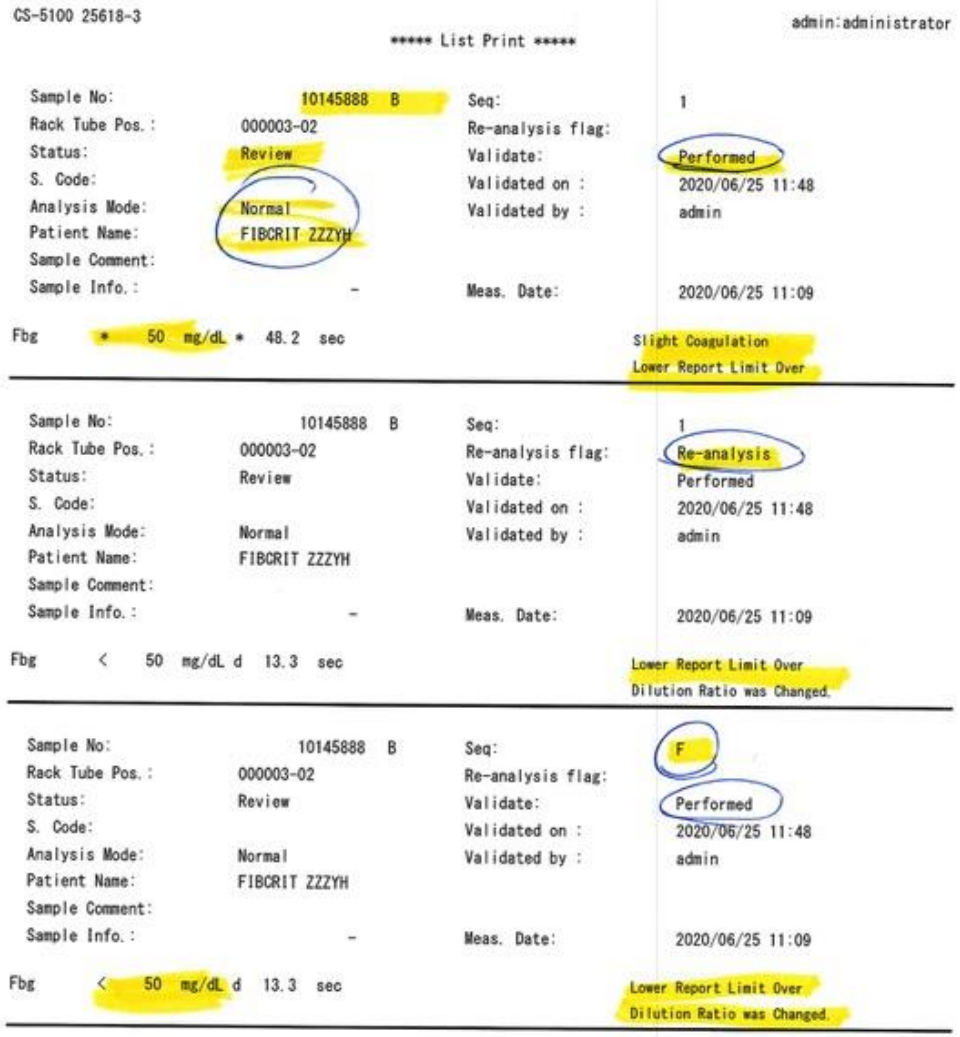
1%	6.2	21%	10.7	41%	13.2	61%	16.3	81%	20.8
2%	6.6	22%	10.8	42%	13.4	62%	16.4	82%	21.2
3%	6.9	23%	10.9	43%	13.5	63%	16.5	83%	21.5
4%	7.5	24%	11.1	44%	13.6	64%	16.6	84%	22.3
5%	7.7	25%	11.1	45%	13.7	65%	16.7	85%	22.6
6%	7.9	26%	11.2	46%	13.9	66%	16.9	86%	22.9
7%	8.4	27%	11.4	47%	14.0	67%	17.6	87%	23.9
8%	8.5	28%	11.5	48%	14.1	68%	17.8	88%	24.1
9%	8.7	29%	11.6	49%	14.2	69%	18.0	89%	25.0
10%	8.8	30%	11.7	-> 50%	14.4	70%	18.1	90%	25.9
11%	9.0	31%	11.9	51%	14.7	71%	18.2	91%	26.3
12%	9.2	32%	12.0	52%	14.9	72%	18.5	92%	26.8
13%	9.4	33%	12.1	53%	15.1	73%	18.7	93%	27.0
14%	9.7	34%	12.4	54%	15.2	74%	19.0	94%	27.7
15%	9.8	35%	12.6	55%	15.4	75%	19.4	95%	28.7
16%	9.9	36%	12.7	56%	15.5	76%	19.6	96%	29.0
17%	10.1	37%	12.8	57%	15.6	77%	19.7	97%	30.3
18%	10.2	38%	12.9	58%	15.8	78%	19.8	98%	31.3
19%	10.4	39%	13.0	59%	16.0	79%	20.3	99%	31.5
20%	10.5	40%	13.1	60%	16.2	80%	20.6	100%	34.3

Example 29

Status = review
Mode = Normal
Result = Fib ***50
Flag = Slight coag and lower report

Action = as sample is in normal mode, will re-analyse 4/1 dil

Results <50, report



CS-5100 25618-3 admin:administrator

***** List Print *****

Sample No:	10145888 B	Seq:	1
Rack Tube Pos.:	000003-02	Re-analysis flag:	
Status:	Review	Validate:	Performed
S. Code:		Validated on :	2020/06/25 11:48
Analysis Mode:	Normal	Validated by :	admin
Patient Name:	FIBCRIT ZZZYH		
Sample Comment:			
Sample Info.:	-	Meas. Date:	2020/06/25 11:09

Fbg * 50 mg/dL * 48.2 sec — Slight Coagulation; Lower Report Limit Over

Sample No:	10145888 B	Seq:	1
Rack Tube Pos.:	000003-02	Re-analysis flag:	Re-analysis
Status:	Review	Validate:	Performed
S. Code:		Validated on :	2020/06/25 11:48
Analysis Mode:	Normal	Validated by :	admin
Patient Name:	FIBCRIT ZZZYH		
Sample Comment:			
Sample Info.:	-	Meas. Date:	2020/06/25 11:09

Fbg < 50 mg/dL d 13.3 sec — Lower Report Limit Over; Dilution Ratio was Changed.

Sample No:	10145888 B	Seq:	F
Rack Tube Pos.:	000003-02	Re-analysis flag:	
Status:	Review	Validate:	Performed
S. Code:		Validated on :	2020/06/25 11:48
Analysis Mode:	Normal	Validated by :	admin
Patient Name:	FIBCRIT ZZZYH		
Sample Comment:			
Sample Info.:	-	Meas. Date:	2020/06/25 11:09

Fbg < 50 mg/dL d 13.3 sec — Lower Report Limit Over; Dilution Ratio was Changed.

25618/01-18 build40 1/1 2020/06/30 13:23

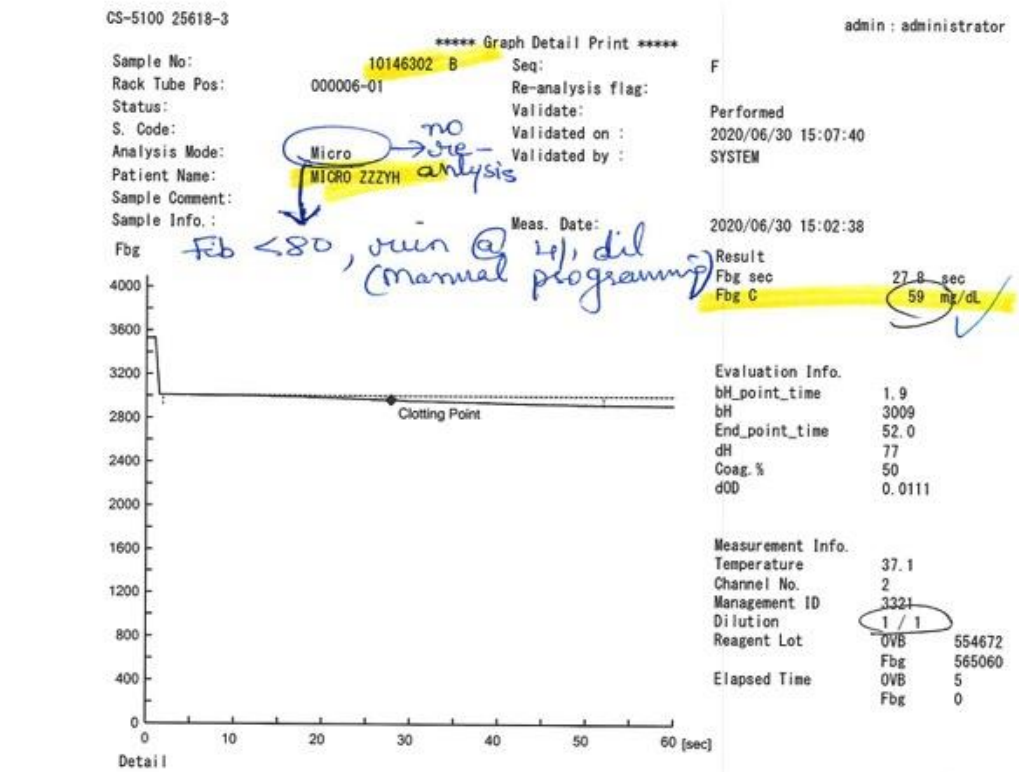
Example 30

Mode = Micro
Fib 59
Dil = 1/1

Alert** there is no flag and no status but sample in micro mode

DO NOT REPORT

Action =RUN at 4/1 dil



CS-5100 25618-3

admin : administrator

***** Graph Detail Print *****

Sample No:	10146302 B	Seq:	F
Rack Tube Pos:	000006-01	Re-analysis flag:	
Status:		Validate:	Performed
S. Code:		Validated on :	2020/06/30 15:07:40
Analysis Mode:	Micro	Validated by :	SYSTEM
Patient Name:	MICRO ZZZYH		
Sample Comment:			
Sample Info. :		Meas. Date:	2020/06/30 15:02:38

no re-analysis

Fib <80, run @ 4/1 dil (Manual programming)

Fbg

Result

Fbg sec	27.8	sec
Fbg C	59	mg/dL

Detail

Evaluation Info.

bH_point_time	1.9
bH	3009
End_point_time	52.0
dH	77
Coag.%	50
d0D	0.0111

Measurement Info.

Temperature	37.1	
Channel No.	2	
Management ID	3321	
Dilution	1 / 1	
Reagent Lot	OVB	554672
	Fbg	565060
Elapsed Time	OVB	5
	Fbg	0

Hem Detection Level
Ict Detection Level
Lip Detection Level
Vol Detection Level
Calibration Curve ID 1
QC Performed Date 2020/06/29 12:24:09
Reagent Table Temp. 10.1

Evaluation Data

1%	2.1	21%	19.3	41%	25.0	61%	31.4	81%	40.2
2%	3.6	22%	19.3	42%	25.3	62%	31.8	82%	40.6
3%	6.4	23%	19.5	43%	25.9	63%	32.4	83%	40.6
4%	10.9	24%	19.7	44%	25.9	64%	32.8	84%	41.7
5%	11.0	25%	20.0	45%	26.1	65%	33.7	85%	42.6
6%	11.9	26%	20.5	46%	26.3	66%	33.7	86%	43.2
7%	12.6	27%	20.5	47%	26.9	67%	34.0	87%	43.2
8%	13.5	28%	20.8	48%	26.9	68%	34.6	88%	44.0
9%	13.5	29%	21.5	49%	27.6	69%	34.9	89%	44.2
10%	14.0	30%	21.9	-> 50%	27.8	70%	34.9	90%	44.8
11%	15.3	31%	21.9	51%	28.4	71%	35.4	91%	45.7
12%	15.5	32%	22.2	52%	28.7	72%	36.0	92%	45.8
13%	16.2	33%	23.1	53%	28.7	73%	36.6	93%	46.5
14%	16.2	34%	23.3	54%	28.9	74%	36.7	94%	47.9
15%	17.3	35%	23.3	55%	29.3	75%	37.3	95%	48.6
16%	17.4	36%	23.5	56%	29.6	76%	38.5	96%	48.6
17%	17.9	37%	23.6	57%	29.6	77%	38.9	97%	49.2
18%	17.9	38%	24.4	58%	30.9	78%	39.1	98%	50.2
19%	18.0	39%	24.6	59%	31.2	79%	39.1	99%	51.6
20%	18.2	40%	24.6	60%	31.4	80%	39.5	100%	52.1

25618/01-18 build40

1/1

2020/06/30 15:21

Example 30

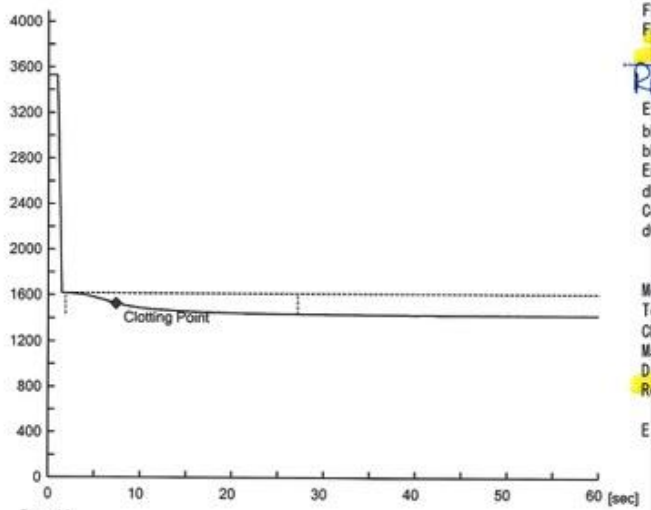
Dilution = 4/1
No other flag other than dilution changed
Report Fib = 68

CS-5100 25618-3 admin : administrator

***** Graph Detail Print *****

Sample No:	10146302 B	Seq:	F
Rack Tube Pos:	000006-01	Re-analysis flag:	
Status:		Validate:	Performed
S. Code:		Validated on :	2020/06/30 15:20:24
Analysis Mode:	Micro	Validated by :	SYSTEM
Patient Name:			
Sample Comment:			
Sample Info.:	-	Meas. Date:	2020/06/30 15:15:23

Fbg



Result

Fbg sec	d	7.4	sec
Fbg C		68	mg/dL

Evaluation Info.

bH_point_time	1.9
bH	1616
End_point_time	27.2
dH	174
Coag.%	50
dOD	0.0495

Measurement Info.

Temperature	37.1	
Channel No.	2	
Management ID	3321	
Dilution	4 / 1	
Reagent Lot	OVB	554672
	Fbg	565060
Elapsed Time	OVB	6
	Fbg	0

Detail
0000.0000.0000 Dilution Ratio was Changed.

Evaluation Data

1%	2.3	21%	5.1		41%	6.6	61%	8.5	81%	11.9
2%	2.7	22%	5.2		42%	6.7	62%	8.5	82%	12.3
3%	2.9	23%	5.3		43%	6.7	63%	8.7	83%	12.6
4%	3.1	24%	5.3		44%	6.8	64%	8.8	84%	13.2
5%	3.4	25%	5.4		45%	6.9	65%	9.0	85%	13.4
6%	3.6	26%	5.5		46%	7.0	66%	9.1	86%	13.8
7%	3.8	27%	5.5		47%	7.1	67%	9.2	87%	14.2
8%	3.8	28%	5.6		48%	7.2	68%	9.4	88%	14.7
9%	4.0	29%	5.7		49%	7.3	69%	9.6	89%	14.9
10%	4.1	30%	5.8	->	50%	7.4	70%	9.7	90%	15.7
11%	4.2	31%	5.8		51%	7.4	71%	9.9	91%	16.2
12%	4.3	32%	5.9		52%	7.5	72%	10.1	92%	17.3
13%	4.4	33%	6.0		53%	7.7	73%	10.3	93%	17.6
14%	4.5	34%	6.1		54%	7.7	74%	10.4	94%	19.0
15%	4.6	35%	6.1		55%	7.8	75%	10.6	95%	19.4
16%	4.6	36%	6.2		56%	7.9	76%	10.8	96%	20.7
17%	4.7	37%	6.3		57%	8.1	77%	10.9	97%	21.2
18%	4.8	38%	6.4		58%	8.1	78%	11.2	98%	23.5
19%	4.9	39%	6.4		59%	8.2	79%	11.5	99%	24.9
20%	5.0	40%	6.5		60%	8.3	80%	11.8	100%	27.3

Hem Detection Level	
Ict Detection Level	
Lip Detection Level	
Vol Detection Level	
Calibration Curve ID	1
QC Performed Date	2020/06/29 12:24:09
Reagent Table Temp.	10.1