

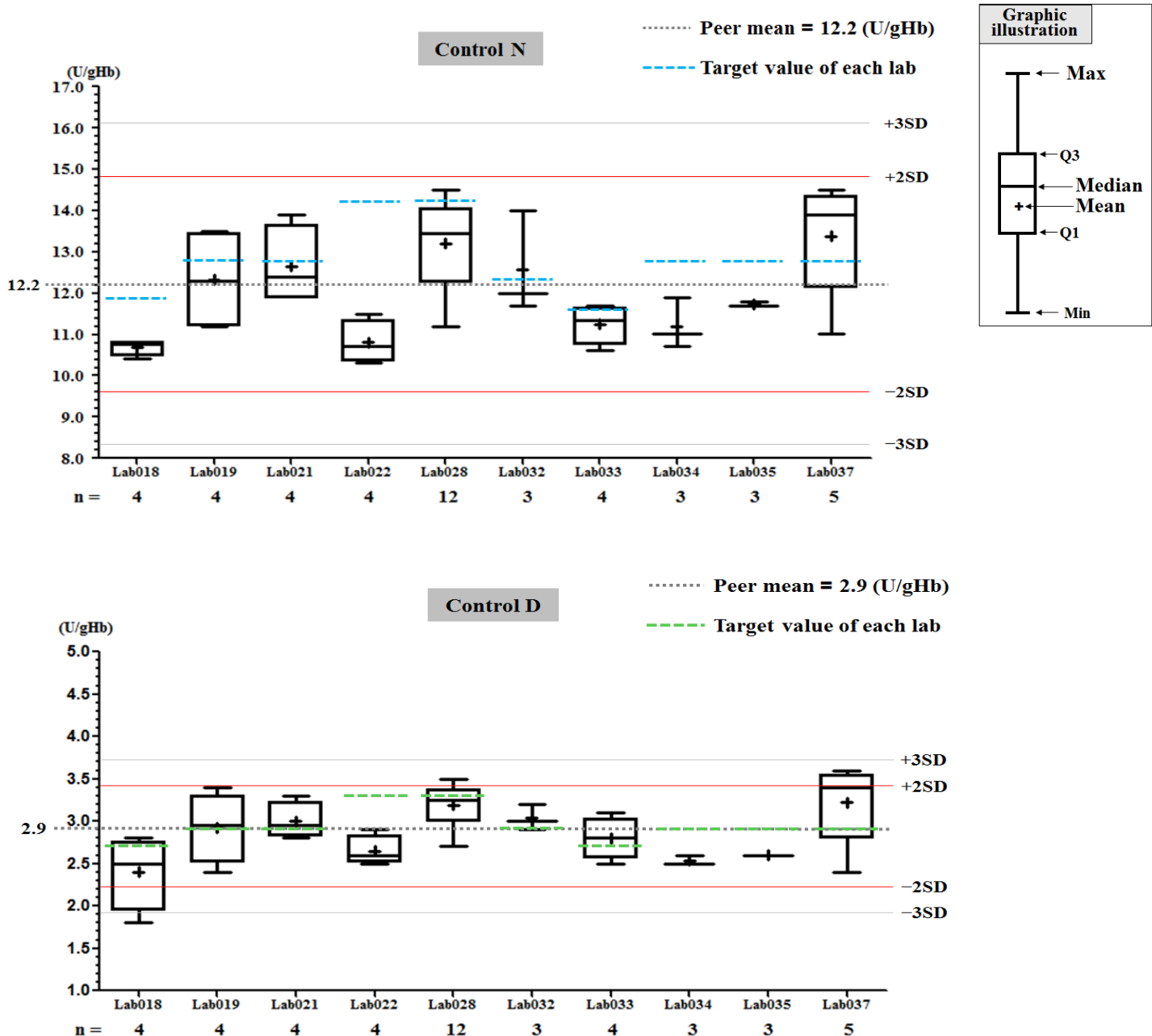
# Summary Report of IQC program for G6PD Quantitative Test - AMP Group - July 2016 -

## I. The statistic results of all laboratories in this month

G6PD	Control N (Lot No.:AC1203N)	Control D (Lot No.:AC1203D)
Labs	10	10
Received results number (n)	46	46
Median	1.9 (U/gHb)	2.9 (U/gHb)
Mean	12.2 (U/gHb)	2.9 (U/gHb)
SD	1.3	0.4
CV	10.7%	13.8%
Range of G6PD	10.3 ~ 14.5 (U/gHb)	1.8 ~ 3.6 (U/gHb)
Range of Hb	2.0 ~ 2.8 (g/dL)	2.3 ~ 3.2 (g/dL)

\*The statistic results are calculated from all labs reported in this month

## II. The distribution of G6PD reported for each lab in this survey



# QC Chart of Internal Quality Control (IQC)for G6PD Quantitative Test

Select LotNo : AC1203N (2014-01-01 ~ 2100-12-31) Change

[Print Table](#)

## Lab033

	Control N		Control D	
QC Control Lot No.	AC1203N		AC1203D	
Duration of the Analyzing	Month (2016/07)	CUM (2015/12/17~2016/07/31)	Month (2016/07)	CUM (2015/12/17~2016/07/31)
Runs (N)	4	26	4	26
Mean (U/gHb)	11.3	11.6	2.8	2.7
SD	0.5	0.8	0.2	0.3
CV (%)	4.4	6.9	7.1	11.1
Target Value (U/gHb)	11.6	11.6	2.7	2.7
Total Error (%)	11.4	13.8	18.0	22.2
TEa (%)	20	20	20	20
$\sigma$	4.0	2.9	2.3	1.8

Bias (%) = [ ( | Mean - Target | ) / Target ] x 100%

TE : Total Error(%) = Bias (%) + 2 x CV (%)

$\sigma$  (Sigma) = [TEa% - Bias (%) ] / CV (%)

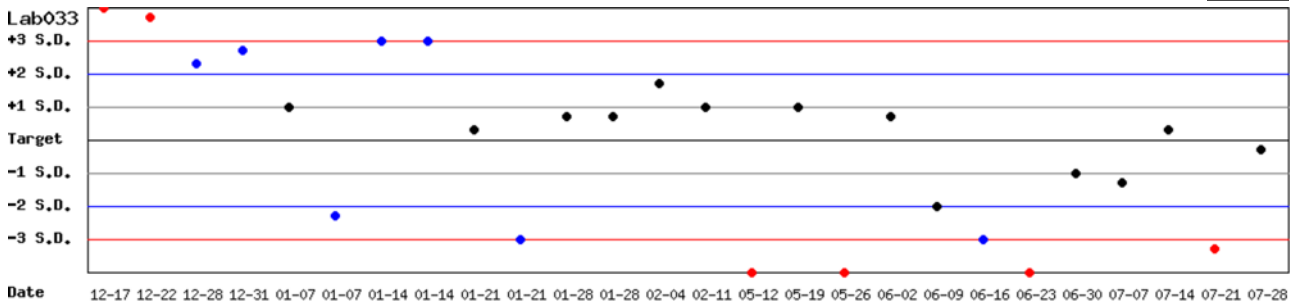
Month : 2016 07 Change ; Cumulative : from 2015 12 17 to 2016 07 31 Change

[TOP](#)

## Control N SDI QC Chart

Lot No.: AC1203N ; Duration : 2015-12-17 to 2016-07-31 ; Target : 11.6 ; SD : 0.30

Lab033



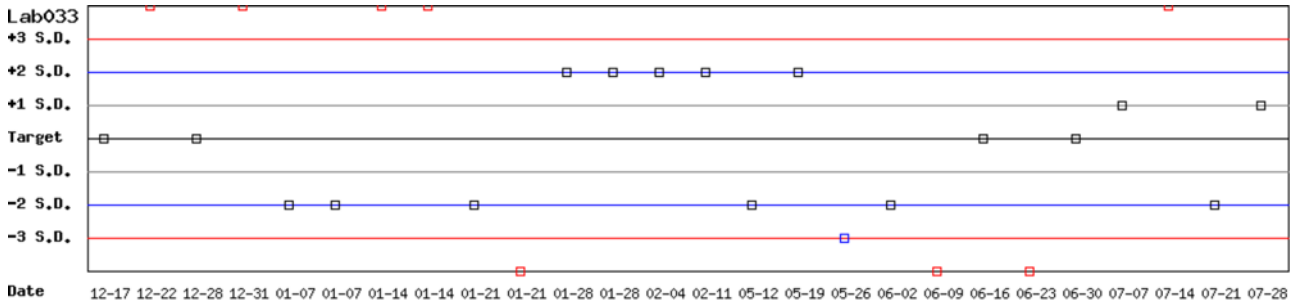
Month : 2016 07 Change ; Cumulative : from 2015 12 17 to 2016 07 31 Change

[TOP](#)

## Control D SDI QC Chart

Lot No.: AC1203D ; Duration : 2015-12-17 to 2016-07-31 ; Target : 2.7 ; SD : 0.10

Lab033



Month : 2016 07 Change ; Cumulative : from 2015 12 17 to 2016 07 31 Change

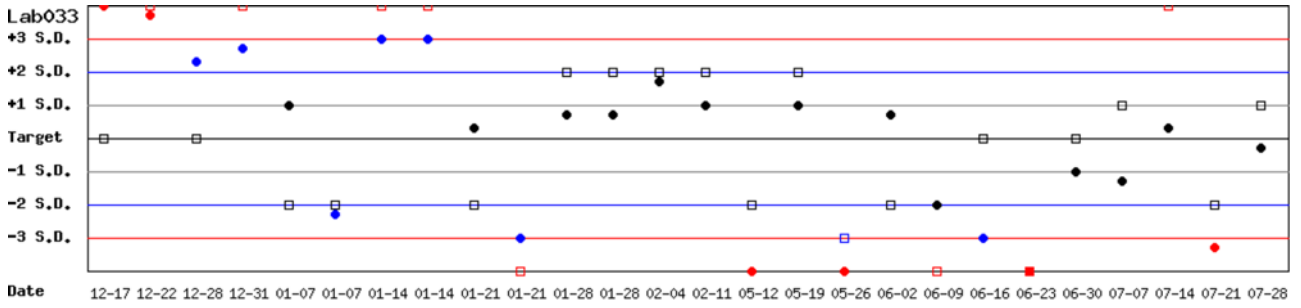
[TOP](#)

## Control N and Control D SDI QC Chart

Lot No.: AC1203N ; Duration : 2015-12-17 to 2016-07-31 ; Target : 11.6 ; SD : 0.30 ( ● )

Lot No.: AC1203D ; Duration : 2015-12-17 to 2016-07-31 ; Target : 2.7 ; SD : 0.10 ( □ )

Lab033



Month : 2016 | 07 |  ; Cumulative : from 2015 | 12 | 17 | to 2016 | 07 | 31 |

[TOP](#)

## Peer Group Statistics (Table 1)

Select LotNo : AC1203N (2014-01-01 ~ 2100-12-31) Change

Select Reagent Kit : 2 - AMP Change

[Print Table 1](#)

### Monthly

Month : 2016 07 Change

UnitID <sup>†</sup>	Reagent Kit (Code) <sup>†</sup>	Control N (Lot No.: AC1203N)								Control D (Lot No.: AC1203D)							
		Target (U/gHb)	Mean (U/gHb)	n for Mean	SD	CV (%)	TE (%)	TEa (%)	σ	Target (U/gHb)	Mean (U/gHb)	n for Mean	SD	CV (%)	TE (%)	TEa (%)	σ
<a href="#">Lab018</a>	2	11.9	10.7	4	0.2	1.9	13.8	20	5.2	2.7	2.4	4	0.4	16.7	44.4	20	0.5
<a href="#">Lab019</a>	2	12.8	12.3	4	1.2	9.8	23.4	20	1.6	2.9	2.9	4	0.4	13.8	27.6	20	1.4
<a href="#">Lab021</a>	2	12.8	12.7	4	1.0	7.9	16.5	20	2.4	2.9	3.0	4	0.2	6.7	16.8	20	2.5
<a href="#">Lab022</a>	2	14.2	10.8	4	0.5	4.6	33.2	20	-0.9	3.3	2.7	4	0.2	7.4	33.0	20	0.2
<a href="#">Lab028</a>	2	14.2	13.2	12	1.0	7.6	22.2	20	1.7	3.3	3.2	12	0.2	6.3	15.5	20	2.7
<a href="#">Lab032</a>	2	12.3	12.6	3	1.3	10.3	23.1	20	1.7	2.9	3.0	3	0.2	6.7	16.8	20	2.5
<a href="#">Lab033</a>	2	11.6	11.3	4	0.5	4.4	11.4	20	4.0	2.7	2.8	4	0.2	7.1	18.0	20	2.3
<a href="#">Lab034</a>	2	12.8	11.2	3	0.6	5.4	23.2	20	1.4	2.9	2.5	3	0.1	4.0	21.8	20	1.6
<a href="#">Lab035</a>	2	12.8	11.7	3	0.1	0.9	10.3	20	>6	2.9	2.6	3	0.0	0.0	10.3	20	>6
<a href="#">Lab037</a>	2	12.8	13.4	5	1.4	10.4	25.6	20	1.5	2.9	3.2	5	0.5	15.6	41.6	20	0.6
<b>Total</b>	-	-	12.2	46	1.3	10.7	-	-	-	-	2.9	46	0.4	13.8	-	-	-

Bias (%) = [ ( | Mean - Target | ) / Target ] x 100%

TE : Total Error(%) = Bias (%) + 2 × CV (%)

σ (Sigma) = [TEa% - Bias (%)] / CV (%)

[TOP](#)

### Cumulative

Cumulative : from 2014 02 01 to 2016 07 31 Change

UnitID <sup>†</sup>	Reagent Kit (Code) <sup>†</sup>	Control N (Lot No.: AC1203N)								Control D (Lot No.: AC1203D)							
		Target (U/gHb)	Mean (U/gHb)	n for Mean	SD	CV (%)	TE (%)	TEa (%)	σ	Target (U/gHb)	Mean (U/gHb)	n for Mean	SD	CV (%)	TE (%)	TEa (%)	σ
<a href="#">Lab017</a>	2	14.2	13.8	36	1.6	11.6	26.0	20	1.5	3.3	3.9	36	1.4	35.9	90.0	20	0.1
<a href="#">Lab018</a>	2	11.9	10.9	97	1.4	12.8	34.1	20	0.9	2.7	2.6	97	1.0	38.5	80.6	20	0.4
<a href="#">Lab019</a>	2	12.8	12.2	127	1.2	9.8	24.4	20	1.6	2.9	2.8	127	0.4	14.3	32.0	20	1.2
<a href="#">Lab021</a>	2	12.8	13.9	67	0.7	5.0	18.7	20	2.3	2.9	3.4	67	0.2	5.9	29.0	20	0.5
<a href="#">Lab022</a>	2	14.2	11.6	49	1.2	10.3	39.0	20	0.2	3.3	2.9	49	0.4	13.8	39.7	20	0.6
<a href="#">Lab024</a>	2	11.6	11.1	58	1.2	10.8	25.9	20	1.5	2.7	2.7	58	0.3	11.1	22.2	20	1.8
<a href="#">Lab026</a>	2	11.6	11.5	212	1.6	13.9	28.7	36	2.5	2.7	2.8	212	0.5	17.9	39.4	36	1.8
<a href="#">Lab027</a>	2	12.3	11.8	147	1.6	13.6	31.2	20	1.2	2.9	2.7	147	0.5	18.5	43.9	20	0.7
<a href="#">Lab028</a>	2	14.2	13.7	270	1.2	8.8	21.0	20	1.9	3.3	3.3	270	0.5	15.2	30.3	20	1.3
<a href="#">Lab031</a>	2	12.8	10.4	89	1.5	14.4	47.6	20	0.1	2.9	2.5	89	0.5	20.0	53.8	20	0.3
<a href="#">Lab032</a>	2	12.3	11.5	222	1.9	16.5	39.5	20	0.8	2.9	2.7	222	0.5	18.5	43.9	20	0.7
<a href="#">Lab033</a>	2	11.6	12.0	116	1.0	8.3	20.1	20	2.0	2.7	2.9	116	0.3	10.3	28.1	20	1.2
<a href="#">Lab034</a>	2	12.8	12.4	65	0.7	5.6	14.4	20	3.0	2.9	3.0	65	0.2	6.7	16.8	20	2.5
<a href="#">Lab035</a>	2	12.8	12.4	55	0.7	5.6	14.4	20	3.0	2.9	2.8	55	0.3	10.7	24.9	20	1.5
<a href="#">Lab037</a>	2	12.8	12.5	31	1.2	9.6	21.5	20	1.8	2.9	3.0	31	0.4	13.3	30.1	20	1.2
<a href="#">Lab038</a>	2	12.8	12.7	55	1.0	7.9	16.5	20	2.4	2.9	3.1	55	0.5	16.1	39.2	20	0.8
<a href="#">Lab040</a>	2	12.8	11.7	5	0.5	4.3	17.1	20	2.7	2.9	2.5	5	0.1	4.0	21.8	20	1.6
<b>Total</b>	-	-	12.1	1701	1.7	14.0	-	-	-	-	2.9	1701	0.6	20.7	-	-	-

Bias (%) = [ ( | Mean - Target | ) / Target ] x 100%

TE : Total Error(%) = Bias (%) + 2 × CV (%)

σ (Sigma) = [TEa% - Bias (%)] / CV (%)

[TOP](#)

Reagent Kit	Reagent Code
AMP	2

## Peer Group Statistics (Table 2)

Select LotNo : AC1203N (2014-01-01 ~ 2100-12-31) Change

Select Reagent Kit : 2 - AMP Change

Print Table 2

### Control N Month vs. Cumulative

		Control N (Lot No.: AC1203N)															
		Month (2016/07)								CUM (2014/02/01~2016/07/31)							
UnitID <sup>†</sup>	Reagent Kit (Code) <sup>†</sup>	Target (U/gHb)	Mean (U/gHb)	n for Mean	SD	CV (%)	TE (%)	TEa (%)	σ	Target (U/gHb)	Mean (U/gHb)	n for Mean	SD	CV (%)	TE (%)	TEa (%)	σ
<a href="#">Lab017</a>	2	14.2	-	0	-	-	-	20	-	14.2	13.8	36	1.6	11.6	26.0	20	1.5
<a href="#">Lab018</a>	2	11.9	10.7	4	0.2	1.9	13.8	20	5.2	11.9	10.9	97	1.4	12.8	34.1	20	0.9
<a href="#">Lab019</a>	2	12.8	12.3	4	1.2	9.8	23.4	20	1.6	12.8	12.2	127	1.2	9.8	24.4	20	1.6
<a href="#">Lab021</a>	2	12.8	12.7	4	1.0	7.9	16.5	20	2.4	12.8	13.9	67	0.7	5.0	18.7	20	2.3
<a href="#">Lab022</a>	2	14.2	10.8	4	0.5	4.6	33.2	20	-0.9	14.2	11.6	49	1.2	10.3	39.0	20	0.2
<a href="#">Lab024</a>	2	11.6	-	0	-	-	-	20	-	11.6	11.1	58	1.2	10.8	25.9	20	1.5
<a href="#">Lab026</a>	2	11.6	-	0	-	-	-	36	-	11.6	11.5	212	1.6	13.9	28.7	36	2.5
<a href="#">Lab027</a>	2	12.3	-	0	-	-	-	20	-	12.3	11.8	147	1.6	13.6	31.2	20	1.2
<a href="#">Lab028</a>	2	14.2	13.2	12	1.0	7.6	22.2	20	1.7	14.2	13.7	270	1.2	8.8	21.0	20	1.9
<a href="#">Lab031</a>	2	12.8	-	0	-	-	-	20	-	12.8	10.4	89	1.5	14.4	47.6	20	0.1
<a href="#">Lab032</a>	2	12.3	12.6	3	1.3	10.3	23.1	20	1.7	12.3	11.5	222	1.9	16.5	39.5	20	0.8
<a href="#">Lab033</a>	2	11.6	11.3	4	0.5	4.4	11.4	20	4.0	11.6	12.0	116	1.0	8.3	20.1	20	2.0
<a href="#">Lab034</a>	2	12.8	11.2	3	0.6	5.4	23.2	20	1.4	12.8	12.4	65	0.7	5.6	14.4	20	3.0
<a href="#">Lab035</a>	2	12.8	11.7	3	0.1	0.9	10.3	20	>6	12.8	12.4	55	0.7	5.6	14.4	20	3.0
<a href="#">Lab037</a>	2	12.8	13.4	5	1.4	10.4	25.6	20	1.5	12.8	12.5	31	1.2	9.6	21.5	20	1.8
<a href="#">Lab038</a>	2	12.8	-	0	-	-	-	20	-	12.8	12.7	55	1.0	7.9	16.5	20	2.4
<a href="#">Lab040</a>	2	12.8	-	0	-	-	-	20	-	12.8	11.7	5	0.5	4.3	17.1	20	2.7
Total	-	-	12.2	46	1.3	10.7	-	-	-	-	12.1	1701	1.7	14.0	-	-	-

Bias (%) = [ ( | Mean - Target | ) / Target ] x 100%

TE : Total Error(%) = Bias (%) + 2 x CV (%)

σ (Sigma) = [TEa% - Bias (%) ] / CV (%)

Month : 2016 07 Change

Cumulative : from 2014 02 01 to 2016 07 31 Change

[TOP](#)

### Control D Month vs. Cumulative

		Control D (Lot No.: AC1203D)															
		Month (2016/07)								CUM (2014/02/01~2016/07/31)							
UnitID <sup>†</sup>	Reagent Kit (Code) <sup>†</sup>	Target (U/gHb)	Mean (U/gHb)	n for Mean	SD	CV (%)	TE (%)	TEa (%)	σ	Target (U/gHb)	Mean (U/gHb)	n for Mean	SD	CV (%)	TE (%)	TEa (%)	σ
<a href="#">Lab017</a>	2	3.3	-	0	-	-	-	20	-	3.3	3.9	36	1.4	35.9	90.0	20	0.1
<a href="#">Lab018</a>	2	2.7	2.4	4	0.4	16.7	44.4	20	0.5	2.7	2.6	97	1.0	38.5	80.6	20	0.4
<a href="#">Lab019</a>	2	2.9	2.9	4	0.4	13.8	27.6	20	1.4	2.9	2.8	127	0.4	14.3	32.0	20	1.2
<a href="#">Lab021</a>	2	2.9	3.0	4	0.2	6.7	16.8	20	2.5	2.9	3.4	67	0.2	5.9	29.0	20	0.5
<a href="#">Lab022</a>	2	3.3	2.7	4	0.2	7.4	33.0	20	0.2	3.3	2.9	49	0.4	13.8	39.7	20	0.6
<a href="#">Lab024</a>	2	2.7	-	0	-	-	-	20	-	2.7	2.7	58	0.3	11.1	22.2	20	1.8
<a href="#">Lab026</a>	2	2.7	-	0	-	-	-	36	-	2.7	2.8	212	0.5	17.9	39.4	36	1.8
<a href="#">Lab027</a>	2	2.9	-	0	-	-	-	20	-	2.9	2.7	147	0.5	18.5	43.9	20	0.7
<a href="#">Lab028</a>	2	3.3	3.2	12	0.2	6.3	15.5	20	2.7	3.3	3.3	270	0.5	15.2	30.3	20	1.3
<a href="#">Lab031</a>	2	2.9	-	0	-	-	-	20	-	2.9	2.5	89	0.5	20.0	53.8	20	0.3
<a href="#">Lab032</a>	2	2.9	3.0	3	0.2	6.7	16.8	20	2.5	2.9	2.7	222	0.5	18.5	43.9	20	0.7
<a href="#">Lab033</a>	2	2.7	2.8	4	0.2	7.1	18.0	20	2.3	2.7	2.9	116	0.3	10.3	28.1	20	1.2
<a href="#">Lab034</a>	2	2.9	2.5	3	0.1	4.0	21.8	20	1.6	2.9	3.0	65	0.2	6.7	16.8	20	2.5
<a href="#">Lab035</a>	2	2.9	2.6	3	0.0	0.0	10.3	20	>6	2.9	2.8	55	0.3	10.7	24.9	20	1.5
<a href="#">Lab037</a>	2	2.9	3.2	5	0.5	15.6	41.6	20	0.6	2.9	3.0	31	0.4	13.3	30.1	20	1.2
<a href="#">Lab038</a>	2	2.9	-	0	-	-	-	20	-	2.9	3.1	55	0.5	16.1	39.2	20	0.8
<a href="#">Lab040</a>	2	2.9	-	0	-	-	-	20	-	2.9	2.5	5	0.1	4.0	21.8	20	1.6
Total	-	-	2.9	46	0.4	13.8	-	-	-	-	2.9	1701	0.6	20.7	-	-	-

Bias (%) = [ ( | Mean - Target | ) / Target ] x 100%

TE : Total Error(%) = Bias (%) + 2 x CV (%)

σ (Sigma) = [TEa% - Bias (%) ] / CV (%)

Month : 2016 07 Change

Cumulative : from 2014 02 01 to 2016 07 31 Change

[TOP](#)

Reagent Kit	Reagent Code
AMP	2