

# 2020 年 11 月 G6PD 定量檢驗 實驗室內部品管計畫報告

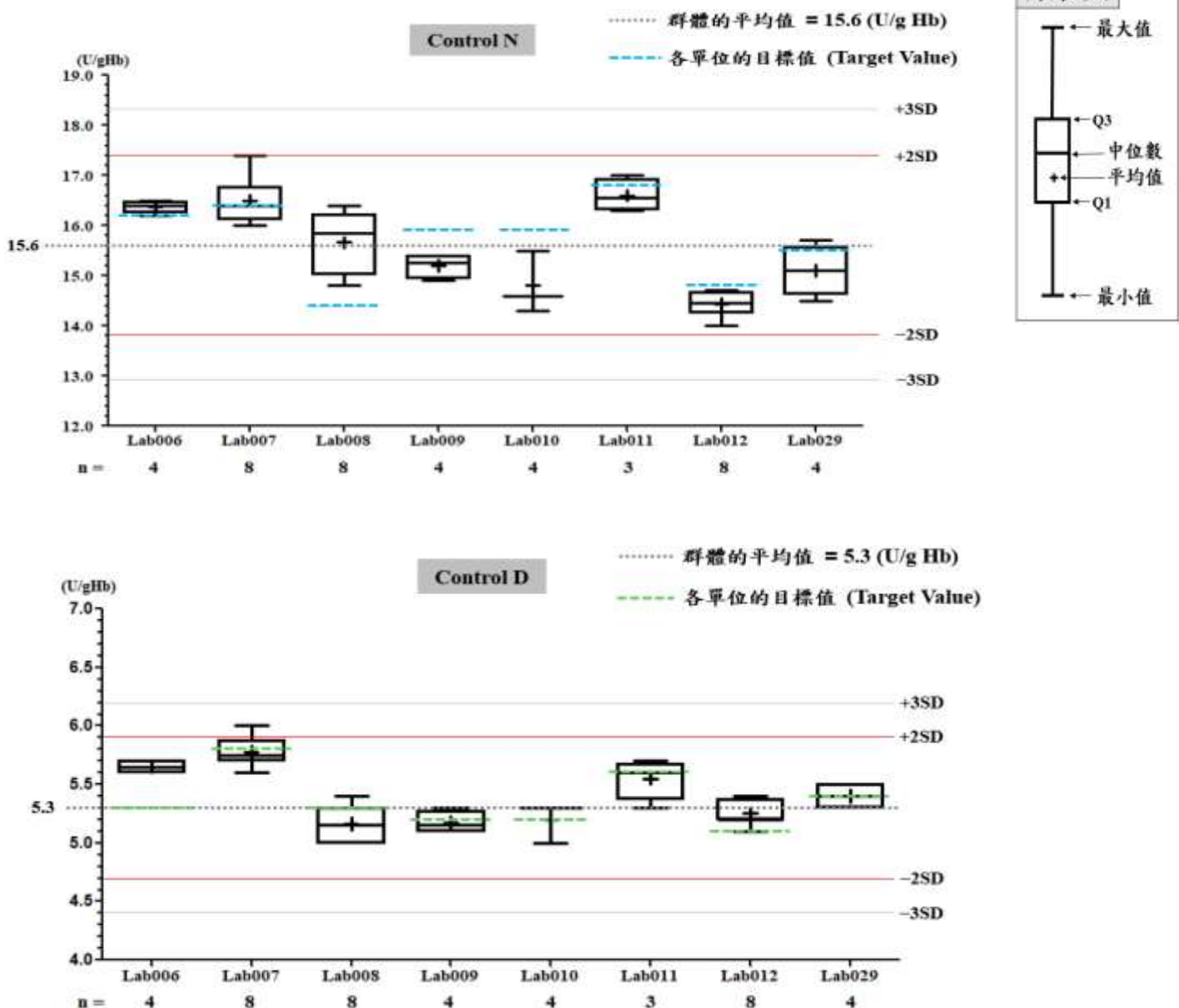
## 一、所有參加單位本月實驗室內部品管結果之彙整

| G6PD         | Control N<br>(Lot No.:AH1220N) | Control D<br>(Lot No.:AH1220D) |
|--------------|--------------------------------|--------------------------------|
| 參加單位         | 8                              | 8                              |
| 總回報數 (n)     | 43                             | 43                             |
| 中位數 (Median) | 15.7 (U/g Hb)                  | 5.3 (U/g Hb)                   |
| 平均值 (Mean)   | 15.6 (U/g Hb)                  | 5.4 (U/g Hb)                   |
| 標準差 (SD)     | 0.9                            | 0.3                            |
| 變異係數 (CV)    | 5.8%                           | 5.6%                           |
| G6PD 檢驗值範圍   | 14.0 ~ 17.4 (U/g Hb)           | 5.0 ~ 6.0 (U/g Hb)             |
| Hb 檢驗值範圍     | 1.9 ~ 2.4 (g/dL)               | 1.9 ~ 2.4 (g/dL)               |

\*統計值為該月全體單位回報的所有數據總合計算所得

\*\* G6PD Method = Lanner kit, 37°C

## 二、各檢驗單位本月實驗室內部品管結果分佈圖



# G6PD 定量檢驗內部品管統計結果及 SDI 分佈圖

選擇 LotNo : AH1220N (2019-01-28 ~ 2100-12-31) Change

列印圖表

檢驗單位 : Lab008

| QC Control Lot No. | Control N       |                             | Control D       |                             |
|--------------------|-----------------|-----------------------------|-----------------|-----------------------------|
|                    | AH1220N         |                             | AH1220D         |                             |
| 檢驗期間               | Month (2020/11) | CUM (2020/09/05~2020/11/30) | Month (2020/11) | CUM (2020/09/05~2020/11/30) |
| 累計點數 (N)           | 8               | 26                          | 8               | 26                          |
| 累計平均值 (Mean) U/gHb | 15.7            | 15.1                        | 5.2             | 5.2                         |
| 累計標準差 (SD)         | 0.6             | 0.6                         | 0.2             | 0.1                         |
| 累計變異係數 (CV) %      | 3.8             | 4.0                         | 3.8             | 1.9                         |
| 目標值 (Target) U/gHb | 14.4            | 14.4                        | 5.3             | 5.3                         |
| 總誤差 (TE) %         | 16.7            | 12.8                        | 9.6             | 5.7                         |
| 可容許總誤差 (TEa) %     | 20              | 20                          | 20              | 20                          |
| $\sigma$           | 2.9             | 3.8                         | 4.8             | >6                          |

誤差 (Bias)% =  $\frac{|\text{累計平均值 (Mean)} - \text{目標值 (Target)}|}{\text{目標值 (Target)}} \times 100\%$   
 總誤差 (TE, Total Error)% = 誤差 (Bias)% + 2 × 累計變異係數 (CV)  
 $\sigma$  (Sigma) = (TEa% - 誤差 (Bias)% ) / 累計變異係數 (CV)

月統計 : 2020 11 Change ; 累計期間 (CUM) : 自 2020 09 05 至 2020 11 30 Change

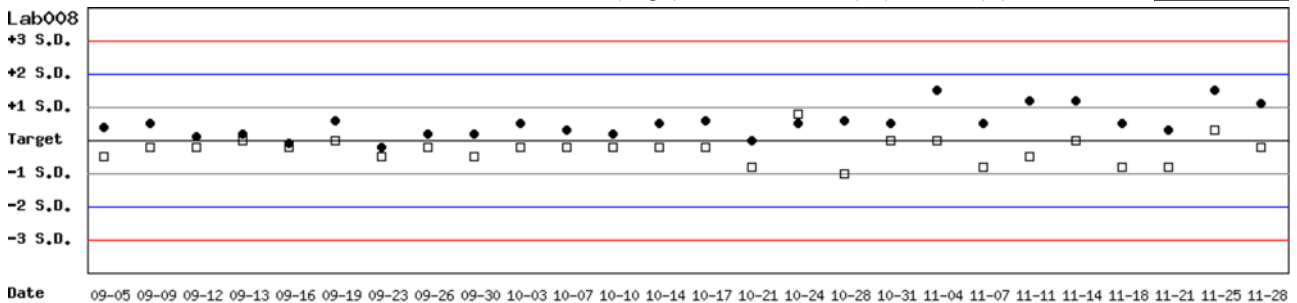
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## Control N 及 Control D SDI 分佈圖

Lot No.: AH1220N ; 檢驗期間 : 2020-09-05 至 2020-11-30 ; 目標值 (Target) : 14.4 ; 參考標準差 (SD) : 1.30 (●)

Lot No.: AH1220D ; 檢驗期間 : 2020-09-05 至 2020-11-30 ; 目標值 (Target) : 5.3 ; 參考標準差 (SD) : 0.40 (□)

單位 : Lab008



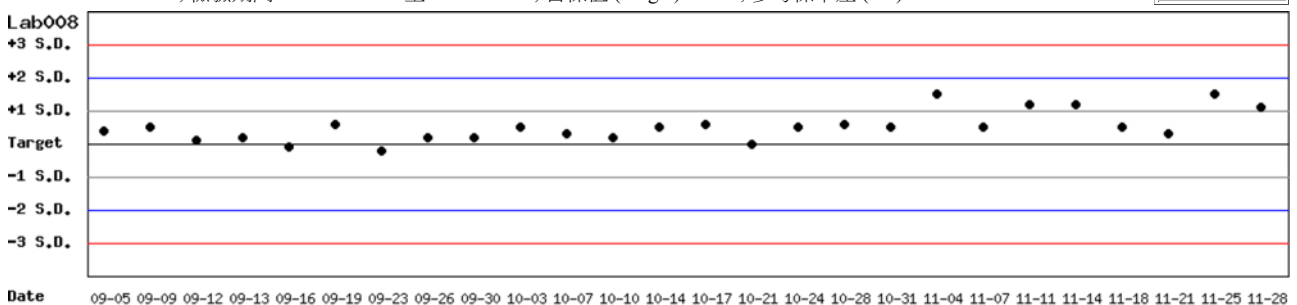
月統計 : 2020 11 Change ; 累計期間 (CUM) : 自 2020 09 05 至 2020 11 30 Change

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## Control N SDI 分佈圖

Lot No.: AH1220N ; 檢驗期間 : 2020-09-05 至 2020-11-30 ; 目標值 (Target) : 14.4 ; 參考標準差 (SD) : 1.30

單位 : Lab008



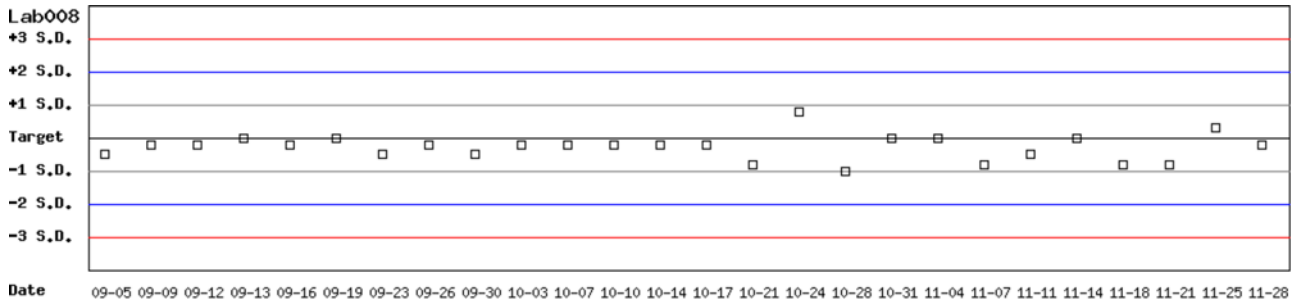
月統計 : 2020 11 Change ; 累計期間 (CUM) : 自 2020 09 05 至 2020 11 30 Change

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### Control D SDI 分佈圖

Lot No.: AH1220D ; 檢驗期間 : 2020-09-05 至 2020-11-30 ; 目標值 (Target) : 5.3 ; 參考標準差 (SD) : 0.40

單位 : Lab008



月統計 : 2020 ▾ 11 ▾ Change ; 累計期間 (CUM) : 自 2020 ▾ 09 ▾ 05 ▾ 至 2020 ▾ 11 ▾ 30 ▾ Change

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# 各檢驗單位 G6PD 定量檢驗 內部品管統計結果 (總表一)

選擇 LotNo : AH1220N (2019-01-28 ~ 2100-12-31)

選擇 Reagent Kit : 4 - Lanner

[列印總表一](#)

## 月統計表

統計月份 : 2020  11

| UnitID <input type="button" value="↑"/> | Reagent Kit (Code) <input type="button" value="↑"/> | Control N (Lot No.: AH1220N) |              |            |     |        |        |         |     |                | Control D (Lot No.: AH1220D) |            |     |        |        |         |     |
|---|---|------------------------------|--------------|------------|-----|--------|--------|---------|-----|----------------|------------------------------|------------|-----|--------|--------|---------|-----|
|   |   | 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="#">Lab006</a>                  | 4   | 16.2                         | 16.4         | 4          | 0.1 | 0.6    | 2.5    | 20      | >6  | 5.3            | 5.7                          | 4          | 0.1 | 1.8    | 11.1   | 20      | >6  |
| <a href="#">Lab007</a>                  | 4   | 16.4                         | 16.5         | 8          | 0.5 | 3.0    | 6.7    | 20      | >6  | 5.8            | 5.8                          | 8          | 0.1 | 1.7    | 3.4    | 20      | >6  |
| <a href="#">Lab008</a>                  | 4   | 14.4                         | 15.7         | 8          | 0.6 | 3.8    | 16.7   | 20      | 2.9 | 5.3            | 5.2                          | 8          | 0.2 | 3.8    | 9.6    | 20      | 4.8 |
| <a href="#">Lab009</a>                  | 4   | 15.9                         | 15.2         | 4          | 0.2 | 1.3    | 7.0    | 20      | >6  | 5.2            | 5.2                          | 4          | 0.1 | 1.9    | 3.8    | 20      | >6  |
| <a href="#">Lab010</a>                  | 4   | 15.9                         | 14.8         | 3          | 0.6 | 4.1    | 15.0   | 20      | 3.2 | 5.2            | 5.2                          | 3          | 0.2 | 3.8    | 7.7    | 20      | 5.3 |
| <a href="#">Lab011</a>                  | 4   | 16.8                         | 16.6         | 4          | 0.3 | 1.8    | 4.8    | 20      | >6  | 5.6            | 5.6                          | 4          | 0.2 | 3.6    | 7.1    | 20      | 5.6 |
| <a href="#">Lab012</a>                  | 4   | 14.8                         | 14.4         | 8          | 0.2 | 1.4    | 5.5    | 20      | >6  | 5.1            | 5.3                          | 8          | 0.1 | 1.9    | 7.7    | 20      | >6  |
| <a href="#">Lab029</a>                  | 4   | 15.5                         | 15.1         | 4          | 0.5 | 3.3    | 9.2    | 20      | 5.3 | 5.4            | 5.4                          | 4          | 0.1 | 1.9    | 3.7    | 20      | >6  |
| Total                                   | -   | -                            | 15.6         | 43         | 0.9 | 5.8    | -      | -       | -   | -              | 5.4                          | 43         | 0.3 | 5.6    | -      | -       | -   |

誤差 (Bias)% = { [ | 累計平均值 (Mean) - 目標值 (Target) | ] / 目標值 (Target) } x 100%

總誤差 (TE, Total Error)% = 誤差 (Bias)% + 2 × 累計變異係數 (CV)

σ (Sigma) = (TEa% - 誤差 (Bias)% ) / 累計變異係數 (CV)

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## 累計統計表

累計期間 : 自 2019  02  01  至 2020  11  30

| UnitID <input type="button" value="↑"/> | Reagent Kit (Code) <input type="button" value="↑"/> | Control N (Lot No.: AH1220N) |              |            |     |        |        |         |     |                | Control D (Lot No.: AH1220D) |            |     |        |        |         |     |
|---|---|------------------------------|--------------|------------|-----|--------|--------|---------|-----|----------------|------------------------------|------------|-----|--------|--------|---------|-----|
|   |   | 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="#">Lab006</a>                  | 4   | 16.2                         | 16.0         | 72         | 0.8 | 5.0    | 11.2   | 20      | 3.8 | 5.3            | 5.4                          | 72         | 0.2 | 3.7    | 9.3    | 20      | 4.9 |
| <a href="#">Lab007</a>                  | 4   | 16.4                         | 16.6         | 71         | 0.6 | 3.6    | 8.4    | 20      | 5.2 | 5.8            | 5.8                          | 71         | 0.1 | 1.7    | 3.4    | 20      | >6  |
| <a href="#">Lab008</a>                  | 4   | 14.4                         | 14.8         | 191        | 0.8 | 5.4    | 13.6   | 20      | 3.2 | 5.3            | 5.1                          | 191        | 0.2 | 3.9    | 11.6   | 20      | 4.2 |
| <a href="#">Lab009</a>                  | 4   | 15.9                         | 16.3         | 64         | 0.6 | 3.7    | 9.9    | 20      | 4.7 | 5.2            | 5.5                          | 64         | 0.2 | 3.6    | 13.0   | 20      | 4.0 |
| <a href="#">Lab010</a>                  | 4   | 15.9                         | 16.4         | 48         | 0.9 | 5.5    | 14.1   | 20      | 3.1 | 5.2            | 5.5                          | 48         | 0.3 | 5.5    | 16.7   | 20      | 2.6 |
| <a href="#">Lab011</a>                  | 4   | 16.8                         | 16.5         | 56         | 0.6 | 3.6    | 9.1    | 20      | 5.1 | 5.6            | 5.6                          | 56         | 0.2 | 3.6    | 7.1    | 20      | 5.6 |
| <a href="#">Lab012</a>                  | 4   | 14.8                         | 15.1         | 109        | 0.5 | 3.3    | 8.6    | 20      | 5.4 | 5.1            | 5.3                          | 109        | 0.2 | 3.8    | 11.5   | 20      | 4.2 |
| <a href="#">Lab029</a>                  | 4   | 15.5                         | 15.2         | 83         | 0.8 | 5.3    | 12.5   | 20      | 3.4 | 5.4            | 5.2                          | 83         | 0.2 | 3.8    | 11.4   | 20      | 4.3 |
| Total                                   | -   | -                            | 15.6         | 695        | 1.0 | 6.4    | -      | -       | -   | -              | 5.3                          | 695        | 0.3 | 5.7    | -      | -       | -   |

誤差 (Bias)% = { [ | 累計平均值 (Mean) - 目標值 (Target) | ] / 目標值 (Target) } x 100%

總誤差 (TE, Total Error)% = 誤差 (Bias)% + 2 × 累計變異係數 (CV)

σ (Sigma) = (TEa% - 誤差 (Bias)% ) / 累計變異係數 (CV)

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| Reagent Kit | Reagent Code |
|-------------|--------------|
| Lanner      | 4            |

## 各檢驗單位 G6PD 定量檢驗 內部品管統計結果 (總表二)

選擇 LotNo : AH1220N (2019-01-28 ~ 2100-12-31) Change

選擇 Reagent Kit : 4 - Lanner Change

列印總表二

### Control N 月統計與累計統計之比較表

| Control N (Lot No.: AH1220N) |                    |                 |              |            |     |        |        |         |     |                             |              |            |     |        |        |         |     |
|------------------------------|--------------------|-----------------|--------------|------------|-----|--------|--------|---------|-----|-----------------------------|--------------|------------|-----|--------|--------|---------|-----|
|                              |                    | Month (2020/11) |              |            |     |        |        |         |     | CUM (2019/02/01~2020/11/30) |              |            |     |        |        |         |     |
| UnitID                       | Reagent Kit (Code) | 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="#">Lab006</a>       | 4                  | 16.2            | 16.4         | 4          | 0.1 | 0.6    | 2.5    | 20      | >6  | 16.2                        | 16.0         | 72         | 0.8 | 5.0    | 11.2   | 20      | 3.8 |
| <a href="#">Lab007</a>       | 4                  | 16.4            | 16.5         | 8          | 0.5 | 3.0    | 6.7    | 20      | >6  | 16.4                        | 16.6         | 71         | 0.6 | 3.6    | 8.4    | 20      | 5.2 |
| <a href="#">Lab008</a>       | 4                  | 14.4            | 15.7         | 8          | 0.6 | 3.8    | 16.7   | 20      | 2.9 | 14.4                        | 14.8         | 191        | 0.8 | 5.4    | 13.6   | 20      | 3.2 |
| <a href="#">Lab009</a>       | 4                  | 15.9            | 15.2         | 4          | 0.2 | 1.3    | 7.0    | 20      | >6  | 15.9                        | 16.3         | 64         | 0.6 | 3.7    | 9.9    | 20      | 4.7 |
| <a href="#">Lab010</a>       | 4                  | 15.9            | 14.8         | 3          | 0.6 | 4.1    | 15.0   | 20      | 3.2 | 15.9                        | 16.4         | 48         | 0.9 | 5.5    | 14.1   | 20      | 3.1 |
| <a href="#">Lab011</a>       | 4                  | 16.8            | 16.6         | 4          | 0.3 | 1.8    | 4.8    | 20      | >6  | 16.8                        | 16.5         | 56         | 0.6 | 3.6    | 9.1    | 20      | 5.1 |
| <a href="#">Lab012</a>       | 4                  | 14.8            | 14.4         | 8          | 0.2 | 1.4    | 5.5    | 20      | >6  | 14.8                        | 15.1         | 109        | 0.5 | 3.3    | 8.6    | 20      | 5.4 |
| <a href="#">Lab029</a>       | 4                  | 15.5            | 15.1         | 4          | 0.5 | 3.3    | 9.2    | 20      | 5.3 | 15.5                        | 15.2         | 83         | 0.8 | 5.3    | 12.5   | 20      | 3.4 |
| Total                        | -                  | -               | 15.6         | 43         | 0.9 | 5.8    | -      | -       | -   | -                           | 15.6         | 695        | 1.0 | 6.4    | -      | -       | -   |

誤差 (Bias)% = { [ | 累計平均值 (Mean) - 目標值 (Target) | ] / 目標值 (Target) } x 100%

總誤差 (TE, Total Error)% = 誤差 (Bias)% + 2 × 累計變異係數 (CV)

σ (Sigma) = (TEa% - 誤差 (Bias)% ) / 累計變異係數 (CV)

月統計 : 2020 11 Change

累計期間 (CUM) : 自 2019 02 01 至 2020 11 30 Change

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### Control D 月統計與累計統計之比較表

| Control D (Lot No.: AH1220D) |                    |                 |              |            |     |        |        |         |     |                             |              |            |     |        |        |         |     |
|------------------------------|--------------------|-----------------|--------------|------------|-----|--------|--------|---------|-----|-----------------------------|--------------|------------|-----|--------|--------|---------|-----|
|                              |                    | Month (2020/11) |              |            |     |        |        |         |     | CUM (2019/02/01~2020/11/30) |              |            |     |        |        |         |     |
| UnitID                       | Reagent Kit (Code) | 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="#">Lab006</a>       | 4                  | 5.3             | 5.7          | 4          | 0.1 | 1.8    | 11.1   | 20      | >6  | 5.3                         | 5.4          | 72         | 0.2 | 3.7    | 9.3    | 20      | 4.9 |
| <a href="#">Lab007</a>       | 4                  | 5.8             | 5.8          | 8          | 0.1 | 1.7    | 3.4    | 20      | >6  | 5.8                         | 5.8          | 71         | 0.1 | 1.7    | 3.4    | 20      | >6  |
| <a href="#">Lab008</a>       | 4                  | 5.3             | 5.2          | 8          | 0.2 | 3.8    | 9.6    | 20      | 4.8 | 5.3                         | 5.1          | 191        | 0.2 | 3.9    | 11.6   | 20      | 4.2 |
| <a href="#">Lab009</a>       | 4                  | 5.2             | 5.2          | 4          | 0.1 | 1.9    | 3.8    | 20      | >6  | 5.2                         | 5.5          | 64         | 0.2 | 3.6    | 13.0   | 20      | 4.0 |
| <a href="#">Lab010</a>       | 4                  | 5.2             | 5.2          | 3          | 0.2 | 3.8    | 7.7    | 20      | 5.3 | 5.2                         | 5.5          | 48         | 0.3 | 5.5    | 16.7   | 20      | 2.6 |
| <a href="#">Lab011</a>       | 4                  | 5.6             | 5.6          | 4          | 0.2 | 3.6    | 7.1    | 20      | 5.6 | 5.6                         | 5.6          | 56         | 0.2 | 3.6    | 7.1    | 20      | 5.6 |
| <a href="#">Lab012</a>       | 4                  | 5.1             | 5.3          | 8          | 0.1 | 1.9    | 7.7    | 20      | >6  | 5.1                         | 5.3          | 109        | 0.2 | 3.8    | 11.5   | 20      | 4.2 |
| <a href="#">Lab029</a>       | 4                  | 5.4             | 5.4          | 4          | 0.1 | 1.9    | 3.7    | 20      | >6  | 5.4                         | 5.2          | 83         | 0.2 | 3.8    | 11.4   | 20      | 4.3 |
| Total                        | -                  | -               | 5.4          | 43         | 0.3 | 5.6    | -      | -       | -   | -                           | 5.3          | 695        | 0.3 | 5.7    | -      | -       | -   |

誤差 (Bias)% = { [ | 累計平均值 (Mean) - 目標值 (Target) | ] / 目標值 (Target) } x 100%

總誤差 (TE, Total Error)% = 誤差 (Bias)% + 2 × 累計變異係數 (CV)

σ (Sigma) = (TEa% - 誤差 (Bias)% ) / 累計變異係數 (CV)

月統計 : 2020 11 Change

累計期間 (CUM) : 自 2019 02 01 至 2020 11 30 Change

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| Reagent Kit | Reagent Code |
|-------------|--------------|
| Lanner      | 4            |