

### Background Check

Sample No

BACKGROUNDCHECK0000001

| Parameters | Blank | Limit | Unit |
|------------|-------|-------|------|
| RBC        | 0.0   | 1.0   | /ul  |
| WBC        | 0.0   | 1.0   | /ul  |
| WBC Clumps | 0.0   | 1.0   | /ul  |
| EC         | 0.0   | 1.0   | /ul  |
| Squid EC   | 0.0   | 1.0   | /ul  |
| Non-EC     | 0.0   | 1.0   | /ul  |
| Trans-EC   | 0.0   | 1.0   | /ul  |
| RTEC       | 0.0   | 1.0   | /ul  |
| CAST       | 0.00  | 1.00  | /ul  |
| Hy-CAST    | 0.00  | 1.00  | /ul  |
| Path-CAST  | 0.00  | 1.00  | /ul  |
| BACT       | 0.0   | 5.0   | /ul  |
| X-TAL      | 0.0   | 1.0   | /ul  |
| YLC        | 0.1   | 1.0   | /ul  |

| Parameters | Blank | Limit | Unit |
|------------|-------|-------|------|
| SPERM      | 0.0   | 1.0   | /ul  |
| TRICUS     | 0.00  | 1.00  | /ul  |

| Parameters | Blank | Limit | Unit  |
|------------|-------|-------|-------|
| SP TC      | 123   | 3000  | COUNT |
| CM TC      | 43    | 3000  | COUNT |
| CB TC      | 103   | 3000  | COUNT |

Close

Processing

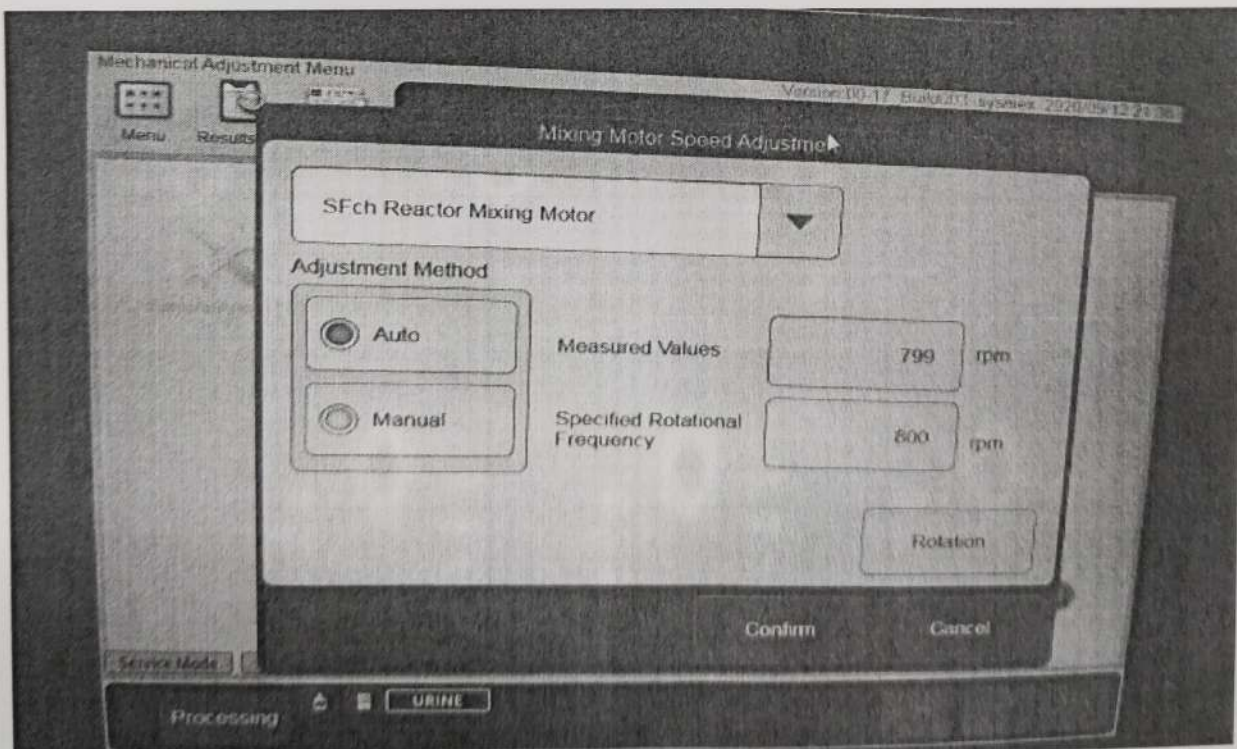
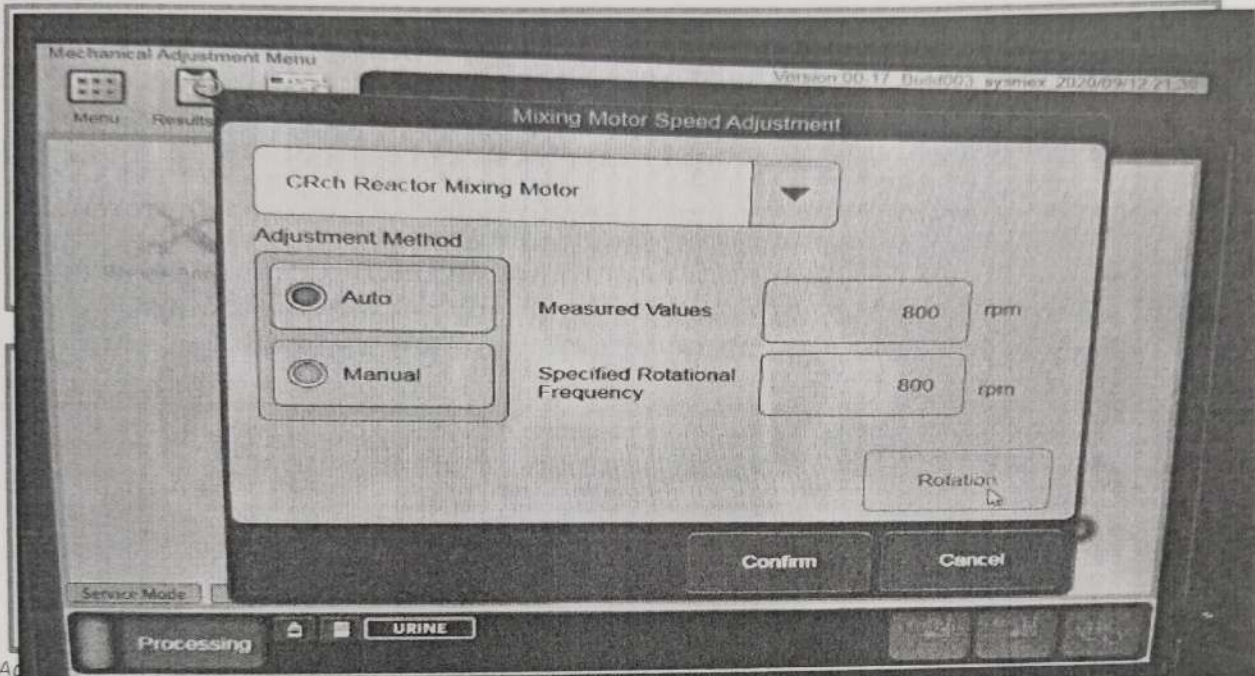
URINE

## 2 MIXING MOTOR VERIFICATION

2.1 Mixing Motor speed needs to be confirmed before executing the adjustment. Execute [Mixing Motor] adjustment and result is shown here:

Table 2 - Mixing motor speed adjustment result

| Mixing motor type         | Reading | Acceptable range | Status |
|---------------------------|---------|------------------|--------|
| SFch Reactor Mixing Motor | 799     | 750-850          | Pass   |
| CRch Reactor Mixing Motor | 800     | 750-850          | Pass   |



### 3 OPTICAL AXIS VERIFICATION

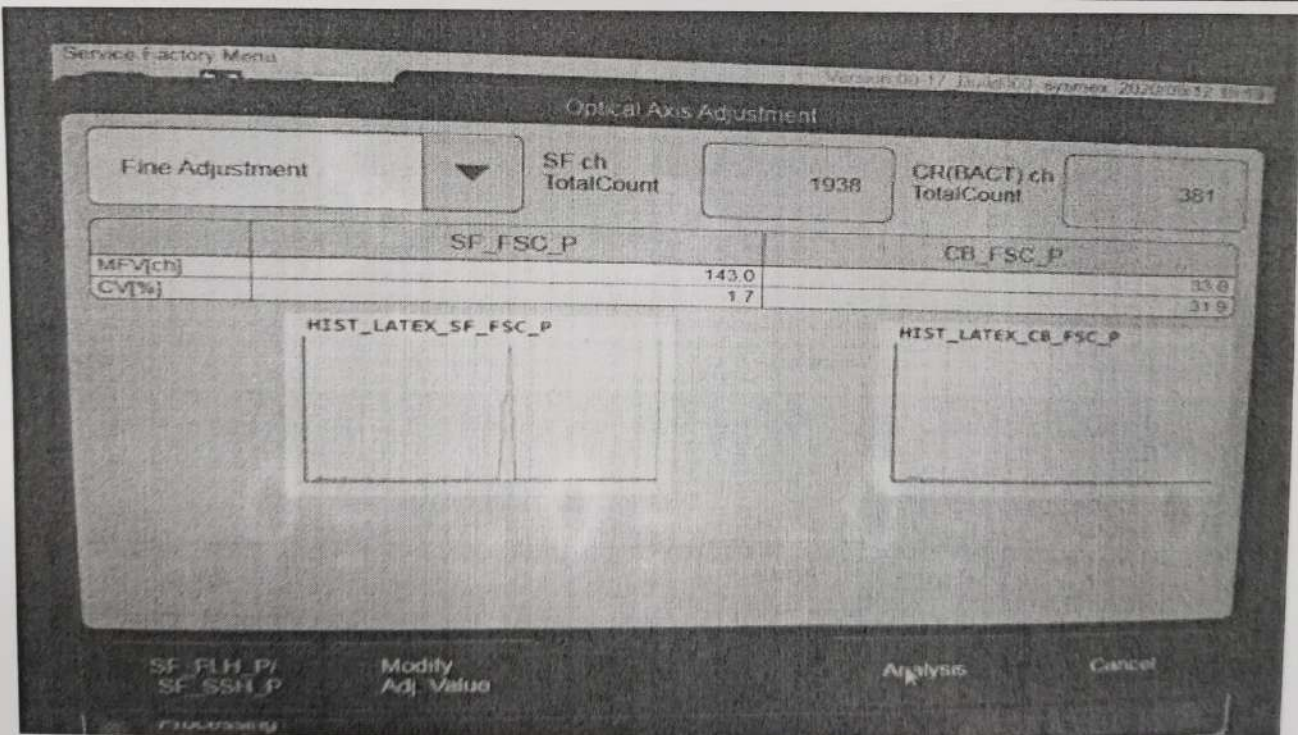
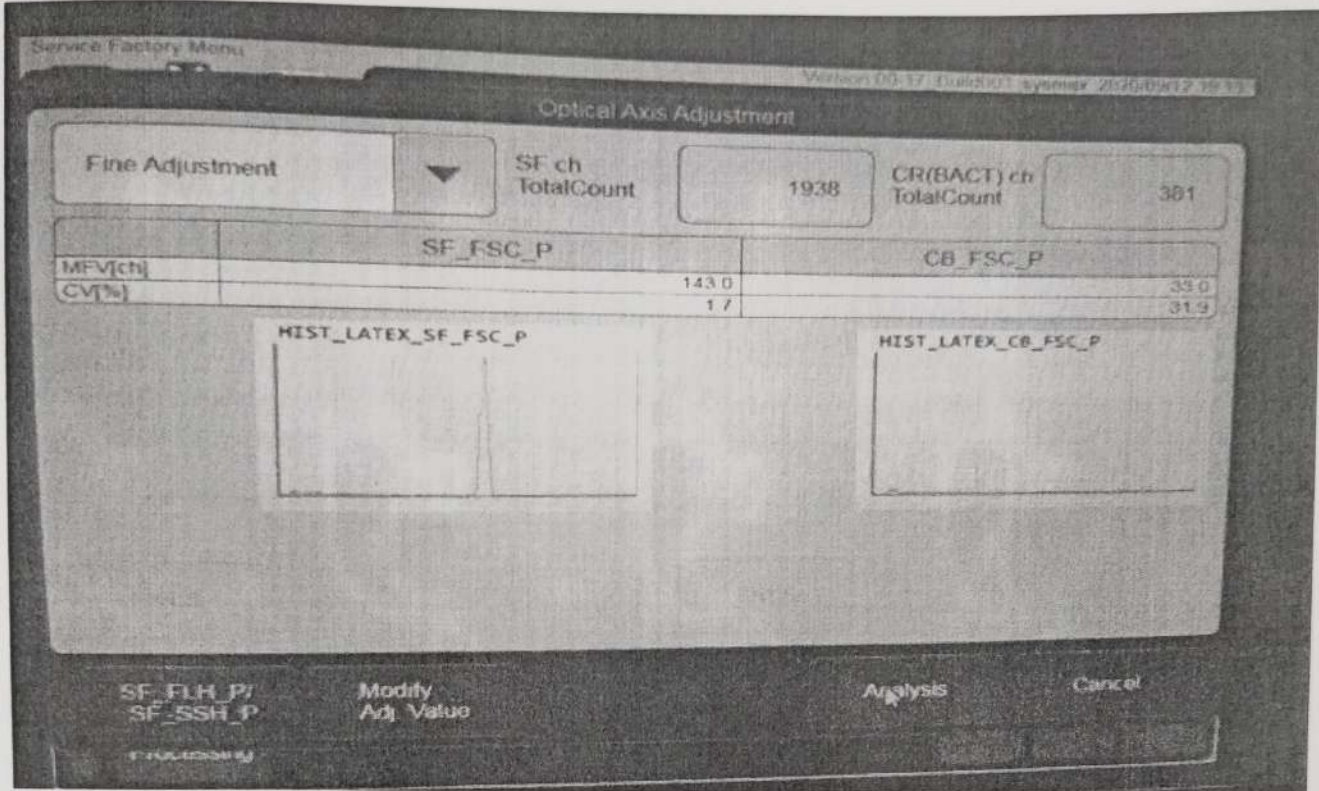
Material Used : Latex DUKE 4207A (7um) (P/N: CX472678)  
 Latex DUKE 4010A (1um) (P/N: 52123572)  
 Latex Fluorescent C47410(Marketing name: A-16500) (P/N: BP783854)

3.1 Optical Axis adjustment result must be done by executing FINE [Optical Axis Adjustment]. The results are shown here:

Table 3 - Laser Latex run results

| Parameter         | Latex Count Result |         |       |        | CV Result |                          |        |      |
|-------------------|--------------------|---------|-------|--------|-----------|--------------------------|--------|------|
|                   | Target             | Results | Limit | Status | Results   | Limit                    | Status |      |
| 7µm<br>SF_FSC_P   | 1st                | 143     | ± 50  | Pass   | 1.7       | < 2.8 %                  | Pass   |      |
|                   | 2nd                | 143     |       | Pass   |           |                          | Pass   |      |
|                   | 3rd                | 143     |       | Pass   |           |                          | Pass   |      |
| 1µm<br>CB_FSC_P   | 1st                |         |       |        | Yes       | Check for<br>single peak | Pass   |      |
|                   | 2nd                |         |       |        | Yes       |                          | Pass   |      |
|                   | 3rd                |         |       |        | Yes       |                          | Pass   |      |
| 2.5µm<br>SF_FLH_P | 1st                | 108     | + 60  | Pass   | 3.1       | < 7.5 %                  | Pass   |      |
|                   | 2nd                | 108     |       | Pass   |           |                          | Pass   |      |
|                   | 3rd                | 107     |       | Pass   |           |                          | Pass   |      |
| 2.5µm<br>SF_SSH_P | 1st                | 102     | ± 60  | Pass   | 4.8       | < 7.5 %                  | Pass   |      |
|                   | 2nd                | 102     |       | Pass   |           |                          | 4.5    | Pass |
|                   | 3rd                | 102     |       | Pass   |           |                          | 4.5    | Pass |
| 2.5µm<br>SF_DSS_P | 1st                | 128     | ± 60  | Pass   | Yes       | Check for<br>single peak | Pass   |      |
|                   | 2nd                | 127     |       | Pass   |           |                          | Yes    | Pass |
|                   | 3rd                | 128     |       | Pass   |           |                          | Yes    | Pass |

- All laser adjustments result must be attached here:



Optical Axis Adjustment

Fine Adjustment



SF ch  
TotalCount

1938

CR(BACT) ch  
TotalCount

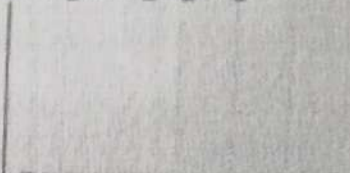
381

|         | SF_FSC_P | CB_FSC_P |
|---------|----------|----------|
| MFV[ch] | 143.0    | 33.0     |
| CV[%]   | 17       | 31.9     |

HIST\_LATEX\_SF\_FSC\_P



HIST\_LATEX\_CB\_FSC\_P



F100-4000000

Optical Axis Adjustment

Fine Adjustment



SF ch  
TotalCount

258

CR(BACT) ch  
TotalCount

1794

|         | SF_FSC_P | CB_FSC_P |
|---------|----------|----------|
| MFV[ch] | 26.0     | 142.0    |
| CV[%]   | 35.8     | 2.2      |

HIST\_LATEX\_SF\_FSC\_P



HIST\_LATEX\_CB\_FSC\_P



SF\_FLH\_P/  
SF\_SSH\_P

Modify  
Adj. Value

Analysis

Cancel

F100-4000000

#### SENSITIVITY ADJUSTMENT

4.1 Material Used : UF-Calibrator (P/N: CN383000)  
 Lot No. : UA0077  
 Expiry date : 16 October, 2020

#### 4.2 UF Calibrator Assay Sheet UF Calibrator Assay Sheet

Table for UF Calibrator Assay value

| Parameter                | Target      | Lower Range | Upper Range |
|--------------------------|-------------|-------------|-------------|
| Calibration Particle /uL | 843.6       | 801.4       | 885.8       |
| Conductivity ms/cm       | 34.9        | 32.8        | 37.0        |
| Parameter                | Lower Range | Upper Range | Target      |
| SF_FSC_P                 | 150.3       | 153.3       | 151.8       |
| SF_FSC_W                 | 43.2        | 44.2        | 43.7        |
| CW_FSC_P                 | 102.7       | 105.7       | 104.2       |
| CB_FSC_P                 | 163.2       | 166.2       | 164.7       |
| SF_FLL_P                 | 109.2       | 115.2       | 112.2       |
| SF_FLH_P                 | 109.2       | 115.2       | 112.2       |
| SF_DSS_P                 | 169.7       | 179.7       | 174.7       |
| CW_SSH_P                 | 108.1       | 114.1       | 111.1       |
| CW_FLH_P                 | 61.0        | 65.0        | 63          |
| CW_DSS_P                 | 21.2        | 23.2        | 22.2        |
| CB_SSH_P                 | 201.4       | 217.4       | 209.4       |
| CB_FLL_P                 | 105.5       | 125.5       | 115.5       |
| SF_SSH_P                 | 189.7       | 199.7       | 194.7       |
| SF_SSL_P                 | 189.7       | 199.7       | 194.7       |
| CW_SSL_P                 | 21.4        | 23.4        | 22.4        |
| CW_FLL_P                 | 61.0        | 65.0        | 63.0        |
| CB_FLH_P                 | 105.5       | 125.5       | 115.5       |

4.3 Sensitivity adjustment is done by executing [Sensitivity adjustment]. The results are shown here:

4.4 Go to sensitivity adjustment

Table 6 - result of sensitivity

| Parameter SED [Ch] | Target | Results | Acceptable Range(±) | Status |
|--------------------|--------|---------|---------------------|--------|
| SF_FSC_P           | 151.8  | 151.9   | 1.5                 | Pass   |
| SF_FSC_W           | 43.7   | 44.0    | 0.5                 | Pass   |
| CW_FSC_P           | 104.2  | 104.5   | 1.5                 | Pass   |
| CB_FSC_P           | 164.7  | 164.8   | 1.5                 | Pass   |
| SF_FLL_P           | 112.2  | 112.2   | 5.0                 | Pass   |
| SF_FLH_P           | 112.2  | 111.9   | 3.0                 | Pass   |
| SF_DSS_P           | 174.7  | 172.8   | 5.0                 | Pass   |
| CW_SSH_P           | 111.1  | 110.4   | 3.0                 | Pass   |
| CW_FLH_P           | 63.0   | 61.5    | 2.0                 | Pass   |
| CW_DSS_P           | 22.2   | 21.8    | 1.0                 | Pass   |
| CB_SSH_P           | 209.4  | 210.6   | 3.0                 | Pass   |
| CB_FLL_P           | 115.5  | 114.0   | 10.0                | Pass   |
| SF_SSH_P           | 194.7  | 190.8   | 5.0                 | Pass   |
| SF_SSL_P           | 194.7  | 192.0   | 3.0                 | Pass   |
| CW_SSL_P           | 22.4   | 22.3    | 1.0                 | Pass   |
| CW_FLL_P           | 63.0   | 61.8    | 2.0                 | Pass   |

\* Due to average of the UF Calibrator target value was been round-up to one decimal point, adjustment final result will be base on the status result.

### Sensitivity Adjustment

|          |           |                   |           |        |
|----------|-----------|-------------------|-----------|--------|
| SFch     | CR(WBC)ch | CR(BACT)ch        |           |        |
| SF FSC P | Target    | Gain              |           |        |
| 151.9    | 151.8     | 1.375             |           |        |
| SF SSH P | Target    | Gain              | 2.800     | high ▼ |
| 190.8    | 194.7     | 0.800             | Auto Calc |        |
| SF FLH P | Target    | Impressed Voltage |           |        |
| 111.9    | 112.2     | 2675              | high ▼    |        |
| SF DSS P | Target    | Impressed Voltage |           |        |
| 172.8    | 174.7     | 2840              |           |        |
| SF FSC W | Target    | Sheath Pressure   |           |        |
| 44.0     | 43.7      | 0.107             |           |        |

Analysis

Scattergram  
Histogram

Confirm

Cancel

### Sensitivity Adjustment

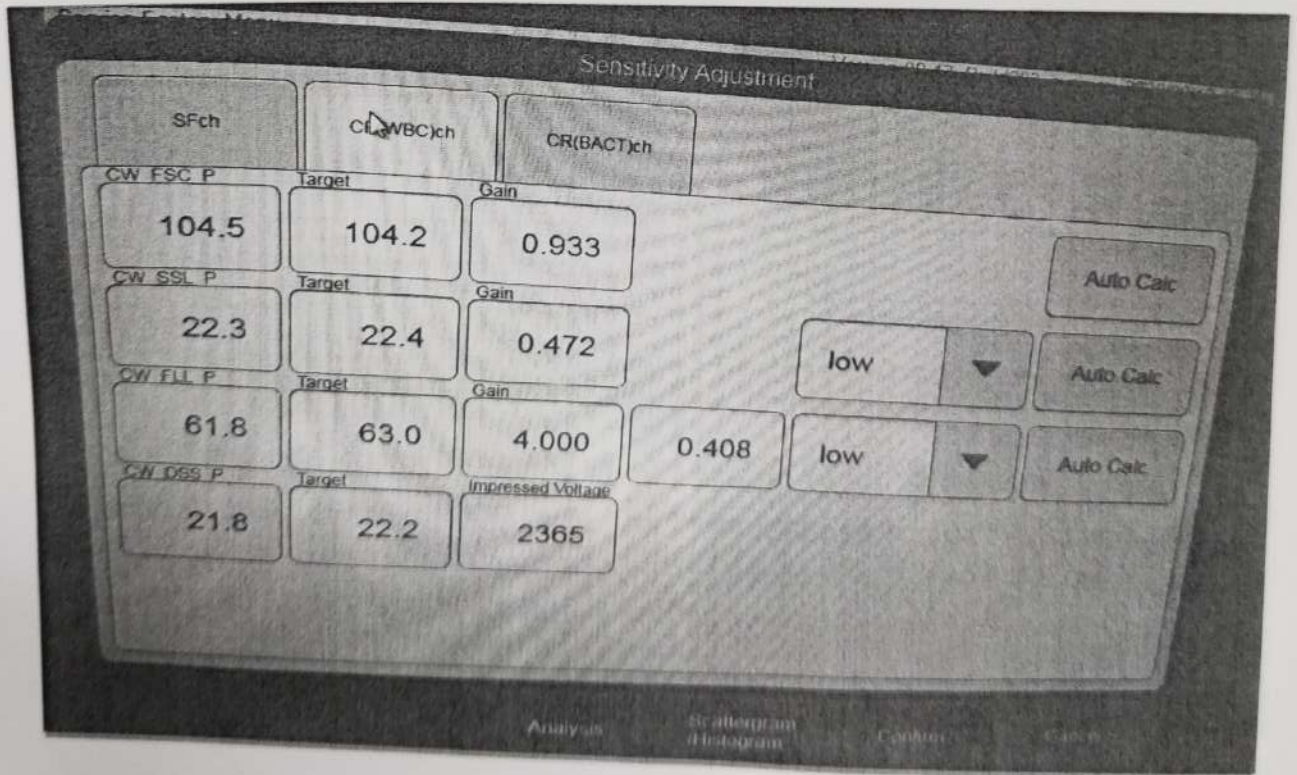
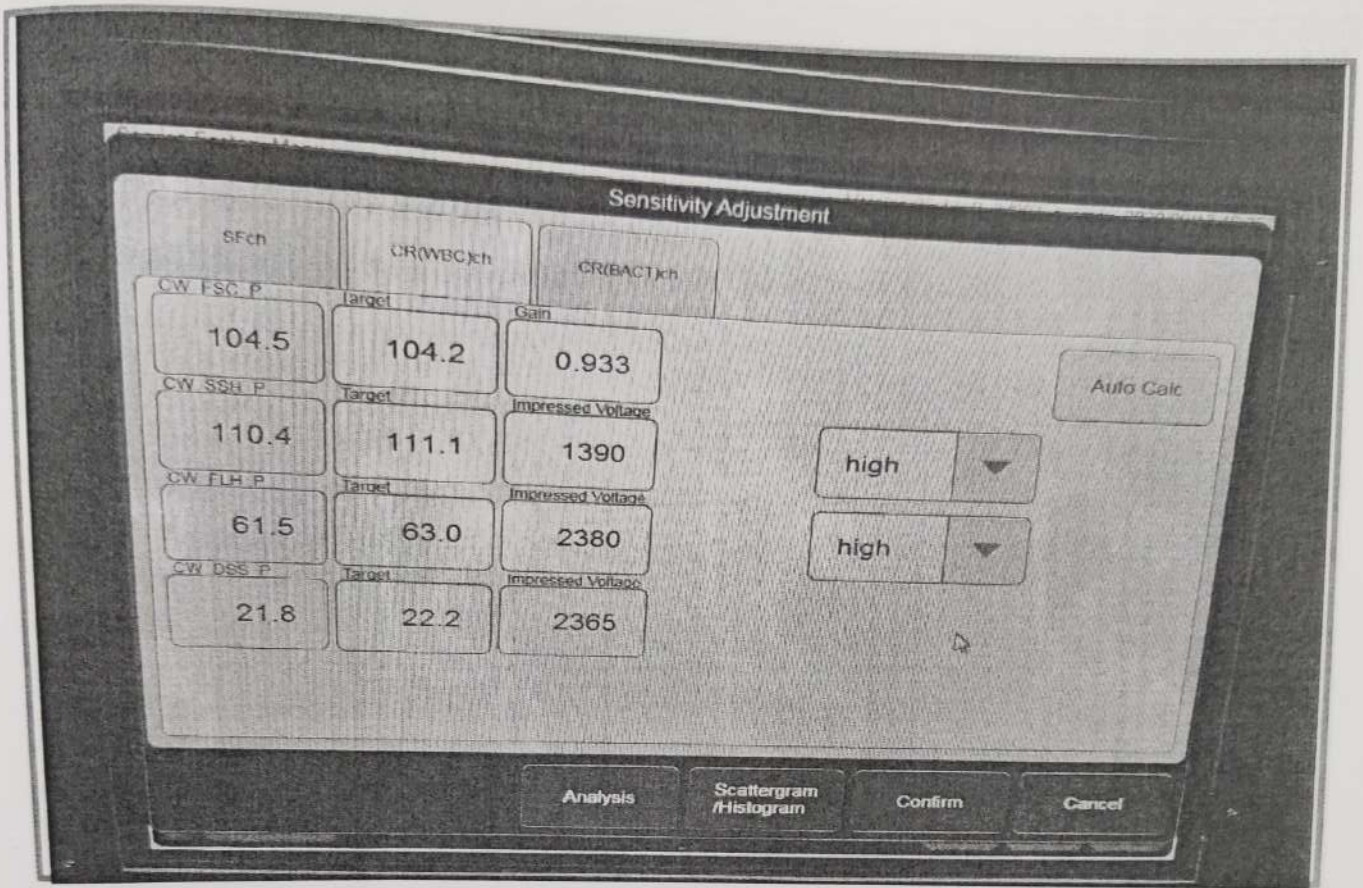
|          |           |                   |           |       |
|----------|-----------|-------------------|-----------|-------|
| SFch     | CR(WBC)ch | CR(BACT)ch        |           |       |
| SF FSC P | Target    | Gain              |           |       |
| 151.9    | 151.8     | 1.375             | Auto Calc |       |
| SF SSH P | Target    | Impressed Voltage |           |       |
| 192.0    | 194.7     | 1795              | low ▼     |       |
| SF FLH P | Target    | Gain              | 0.387     | low ▼ |
| 112.2    | 112.2     | 4.800             | Auto Calc |       |
| SF DSS P | Target    | Impressed Voltage |           |       |
| 172.8    | 174.7     | 2840              |           |       |
| SF FSC W | Target    | Sheath Pressure   |           |       |
| 44.0     | 43.7      | 0.107             |           |       |

Analysis

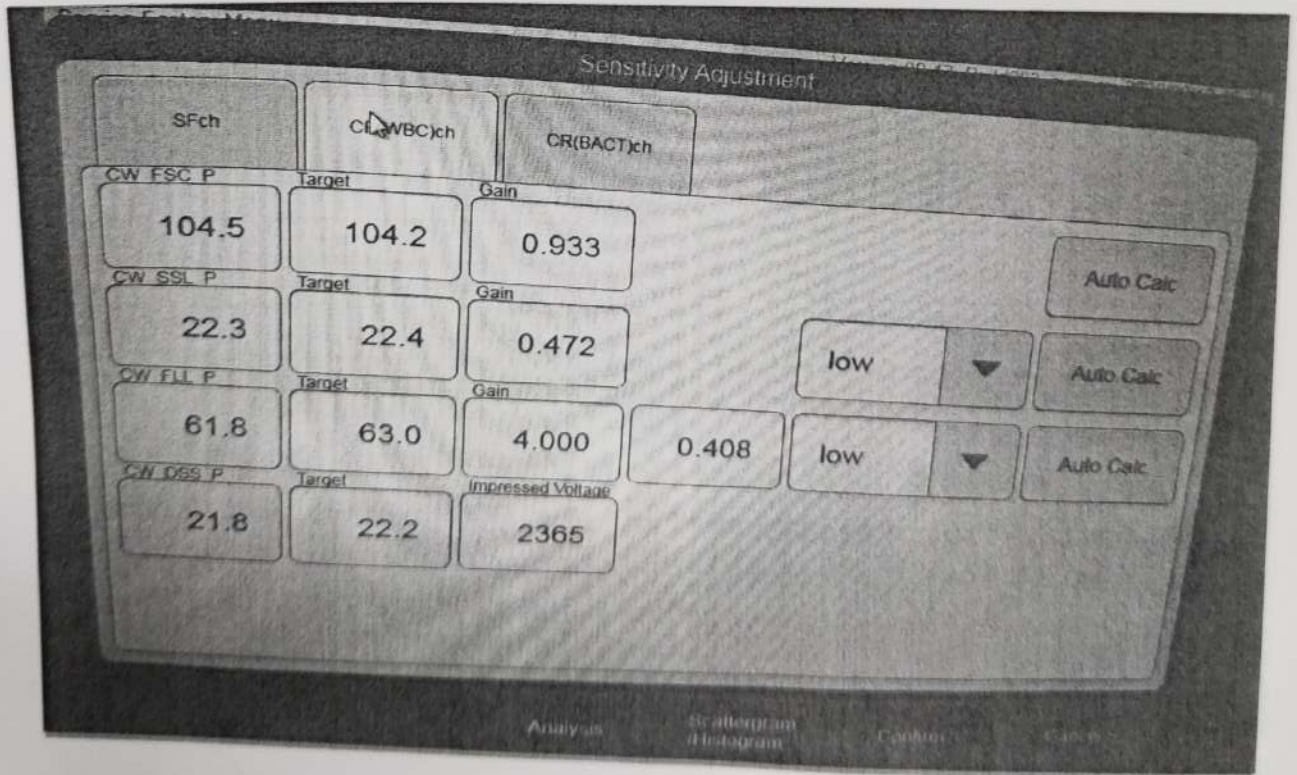
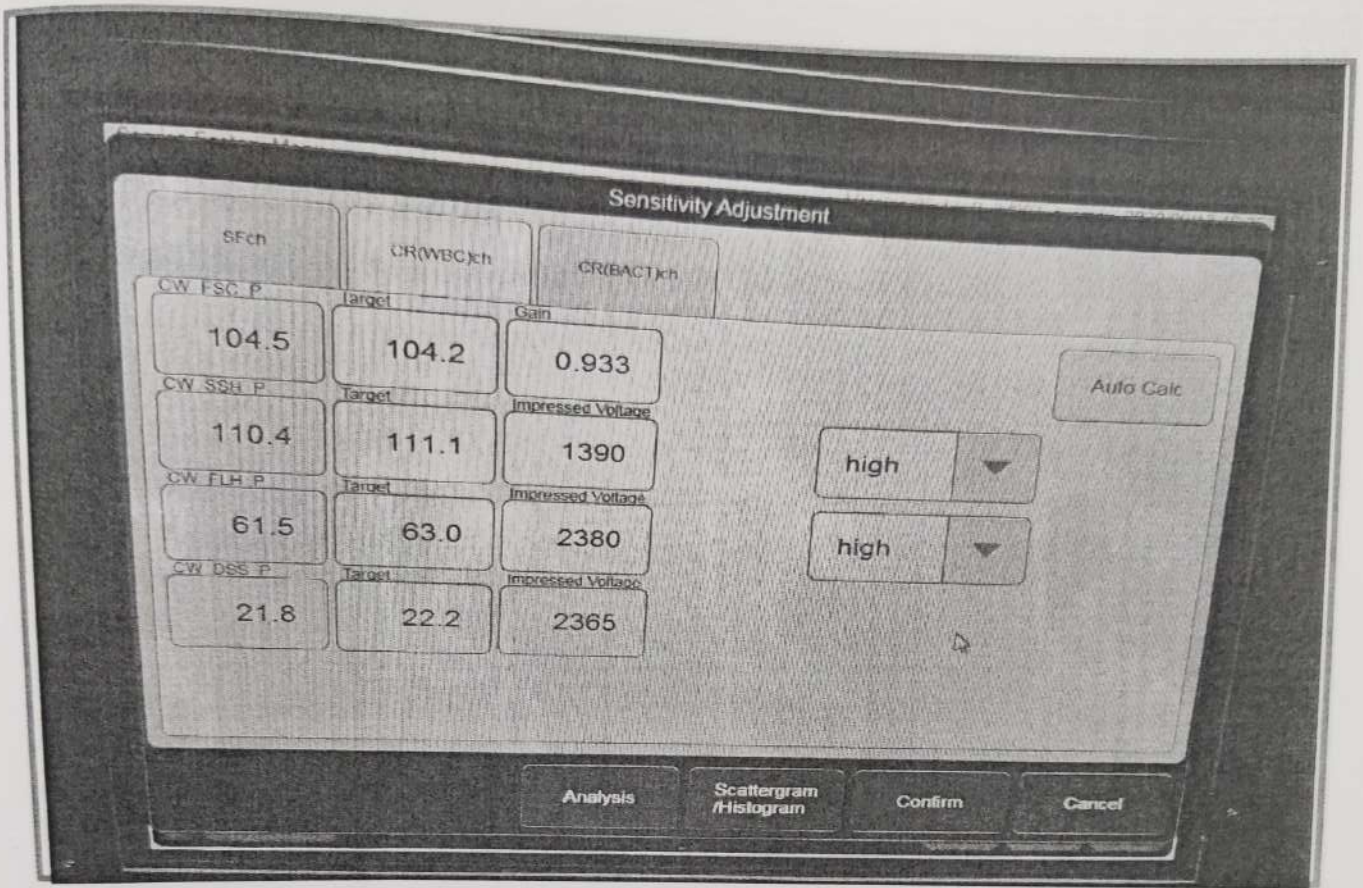
Scattergram  
Histogram

Confirm

Cancel







Analyzer UF 4000  
 File No 1  
 Lot No UK0083

QC Data  
 Material UF-CONTROL-L  
 Exp Date 2020/10/12

SYSTEM

| Date Time           | BACT  | Cond |
|---------------------|-------|------|
| 2020/09/12 20 18 00 | 218.5 | 6.4  |
| 2020/09/12 20 21 15 | 223.5 | 7.6  |
| 2020/09/12 20 23 28 | 230.5 | 7.9  |

|        |       |       |
|--------|-------|-------|
| MEAN   | 224.1 | 7.3   |
| SD     | 6.02  | 0.79  |
| CV (%) | 2.6   | 10.8  |
| UL     | 260.1 | 11.8  |
| TARGET | 204.7 | 8.4   |
| LL     | 143.3 | 5.0   |
| Unit   | /uL   | mS/cm |

A3636

00-14\_Bulldog09

2020/09/12 21 44 20

1/1

Table 11 - Result for Control QC - H

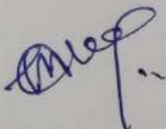
| UF CONTROL  |        | UF Control -H Assay Value |       |       |        | Status |
|-------------|--------|---------------------------|-------|-------|--------|--------|
| Parameter   | Result | Target                    | Limit | Min   | Max    |        |
| RBC uL      | 188.0  | 206.2                     | 41.2  | 165.0 | 247.4  | Pass   |
| WBC uL      | 835.3  | 842.2                     | 168.4 | 673.8 | 1010.6 | Pass   |
| EC uL       | 77.5   | 76.6                      | 38.3  | 38.3  | 114.9  | Pass   |
| CAST uL     | 15.58  | 18.79                     | 9.40  | 9.39  | 28.19  | Pass   |
| BACT uL     | 801.8  | 808.9                     | 202.2 | 606.7 | 1011.1 | Pass   |
| COND mS/cm  | 35.0   | 34.8                      | 3.5   | 31.3  | 38.3   | Pass   |
| SF_FSC_P CH | 152.3  |                           |       | 136.5 | 166.9  | Pass   |
| SF_FSC_W CH | 44.0   |                           |       | 41.8  | 46.2   | Pass   |
| SF_FLH_P CH | 111.7  |                           |       | 80.1  | 148.7  | Pass   |
| SF_SSL_P CH | 189.1  |                           |       | 80.1  | 235.8  | Pass   |
| SF_DSS_P CH | 170.0  |                           |       | 141.5 | 212.3  | Pass   |
| CW_FSC_P CH | 104.6  |                           |       | 93.7  | 114.6  | Pass   |
| CW_FLH_P CH | 93.9   |                           |       | 64.6  | 124.2  | Pass   |
| CW_SSH_P CH | 108.4  |                           |       | 89.2  | 131.8  | Pass   |
| CW_SSL_P CH | 23.7   |                           |       | 19.5  | 29.3   | Pass   |
| CW_DSS_P CH | 27.2   |                           |       | 22.5  | 31.8   | Pass   |
| CB_FSC_P CH | 164.5  |                           |       | 147.5 | 180.3  | Pass   |
| CB_FLL_P CH | 174.7  |                           |       | 116.2 | 223.5  | Pass   |
| CB_SSH_P CH | 205.5  |                           |       | 178.2 | 241.1  | Pass   |

**CERTIFICATION**

9.1 We certify that the UF Automated Urine Particle Analyzer S/N : **11929** has been successfully calibrated in accordance with the manufacturer's recommendations.

**Report and Calibration Performed By :**

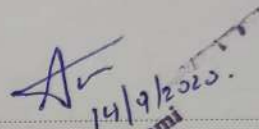
**Report Reviewed and Accepted By :**



Signature (Engineer 1)

Name: Jakir Hussain Mondal

Date: 12 September, 2020



Signature (Customer)

Name: \_\_\_\_\_

Date: 14/9/2020

**Dr. Nito Yepthomi**  
MBBS Pathology  
Reg. No. NMCP-18/01006  
Christian Institute of Health Sciences & Research  
Dimapur, Nagaland

Signature (Engineer 1)

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Company Stamp : (Vendor)

Company Stamp : (Customer)



## UF Commissioning Report

|               |   |               |                      |
|---------------|---|---------------|----------------------|
| Customer:     | CHRISTIAN INSTITUTE OF HEALTH SCIENCES & RESEARCH | Date:         | 12 September, 2029   |
| Model:        | UF-4000   | Engineer:     | JAKIR HUSSAIN MONDAL |
| Serial No :   | 11929   | A.Specialist: | Jayant Kumar Samal   |
| Date Install: | 12-Sep-20   | BL Date:      |                      |

### 1 BACKGROUND VERIFICATION

- 1.1 Before performing adjustments to the Urinalysis analyzer, ensure there is no background error appeared to the analyzer.

Table 1 - result of background check

| Parameters | Results | Acceptable Range          | Status |
|------------|---------|---------------------------|--------|
| RBC        | 0.0     | $\leq 1.0 / \mu\text{L}$  | Pass   |
| NL RBC     | 0.0     | $\leq 1.0 / \mu\text{L}$  | Pass   |
| WBC        | 0.0     | $\leq 1.0 / \mu\text{L}$  | Pass   |
| WBC Clumps | 0.00    | $\leq 1.0 / \mu\text{L}$  | Pass   |
| EC         | 0.0     | $\leq 1.0 / \mu\text{L}$  | Pass   |
| Squa.EC    | 0       | $\leq 1.0 / \mu\text{L}$  | Pass   |
| Non SEC    | 0       | $\leq 1.0 / \mu\text{L}$  | Pass   |
| Tran EC    | 0       | $\leq 1.0 / \mu\text{L}$  | Pass   |
| RTEC       | 0       | $\leq 1.0 / \mu\text{L}$  | Pass   |
| CAST       | 0       | $\leq 1.0 / \mu\text{L}$  | Pass   |
| Hy. CAST   | 0       | $\leq 1.0 / \mu\text{L}$  | Pass   |
| Path.CAST  | 0       | $\leq 1.0 / \mu\text{L}$  | Pass   |
| BACT       | 0       | $\leq 5.0 / \mu\text{L}$  | Pass   |
| X'TAL      | 0       | $\leq 1.0 / \mu\text{L}$  | Pass   |
| YLC        | 0       | $\leq 1.0 / \mu\text{L}$  | Pass   |
| SPERM      | 0       | $\leq 1.0 / \mu\text{L}$  | Pass   |
| MUCUS      | 0       | $\leq 1.0 / \mu\text{L}$  | Pass   |
| SF_TC      | 123     | $\leq 3000 \text{ Count}$ | Pass   |
| CW_TC      | 43      | $\leq 300 \text{ Count}$  | Pass   |
| CB_TC      | 103     | $\leq 3000 \text{ Count}$ | Pass   |

Paste the Result of Background result screen