|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Specimen ID | 1253 | | Batch # | 89 | | | | Date of analysis | | | 01/02/20 |
| Technician name | | Bob Geldorf | | | | Technician signature | | | B. Geldorf | | |
| Type of analysis (circle) | | | WBC | | RBC | | Yeast | | | Other: | |

**RESULTS**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Reb blood cell density:** | | *N x 5 x DF x 10000* | = *# cells per mL sample* | |
| Working: | 115 x 5 x 1001 x 10000 | | | = *# cells per mL sample* |

|  |  |
| --- | --- |
| **Number of cells/mL of blood:** | 5.75575 x 109 |

|  |  |  |  |
| --- | --- | --- | --- |
| **Total number of cells:** | | *Cell density x Volume original specimen* | *=*  *total number of cells* |
| Working: | 5.75575 x 109 x 5 | | *= total number of cells* |

|  |  |
| --- | --- |
| **Number of cells in original specimen:** | 2.877875 x 1010 |

|  |  |  |
| --- | --- | --- |
| **Volume of original specimen:** | 5 | mL |
|  |  |  |
| **Volume sample taken:** | 0.01 | mL |
|  |  |  |
| **Average number of cells counted (N):** | 23 |  |
|  |  |  |
| **Dilution factor (DF):** | 1001 |  |
|  |  |  |

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Average cell count (N)** | | | | | Equation 4: | *N =* | | *Total number of cells (1)* | | | | |
| *Number of squares counted (2)* | | | | |
|  | | | | | | | | | | | | |
| **Units: L** | | **First count** | | | | | **Second count** | | **Third count** | | | |
| Number of squares counted (2) | | 5 | | | | |  | |  | | | |
| Square 1 | | 22 | | | | |  | |  | | | |
| Square 2 | | 18 | | | | |  | |  | | | |
| Square 3 | | 23 | | | | |  | |  | | | |
| Square 4 | | 29 | | | | |  | |  | | | |
| Square 5 (RBC) | | 22 | | | | |  | |  | | | |
| Total number of cells (1) | | 115 | | | | |  | |  | | | |
|  | | | | | | | | | | | | |
| **Working:** | (1) |  | | 115 | | |  |  | |  | |  |
| (2) |  | | 5 | | |  |  | |  | |  |
|  | | | **1** | | | | **2** | | | **3** | | |
| **Average cell count (N) =** | |  | | 23 | | |  |  |  | |  | |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Dilution Factor (DF)** | | *DF =* | | *Specimen volume (1) + dilution volume (2)* | | | | |
| *Specimen volume (1)* | | | | |
|  | | | | | | | | |
| **Units: mL** | | **First count** | | | **Second count** | | **Third count** | |
| Specimen volume (1) | | 0.01 | | |  | |  | |
| Dilution 1 | | 2.5 | | |  | |  | |
| Dilution 2 | | 5 | | |  | |  | |
| Dilution 3 | | 2.5 | | |  | |  | |
| Dilution 4 | |  | | |  | |  | |
| Dilution 5 | |  | | |  | |  | |
| Total dilution volume (2) | |  | | |  | |  | |
|  | | | | | | | | |
| **Working:** | (1) + (2) |  | 10.01 | |  |  |  |  | |
| (2) |  | 0.01 | |  |  |  |  | |
|  | | | | | | | | |
|  | | **1** | | | **2** | | **3** | |
| **Dilution factor (DF) =** | |  | 1001 | |  |  |  |  | |