



CALIBRATION CERTIFICATE

Customer : Alpha care speciality lab dj complex , Devarshola Road, Gudalur nilgiris-643212	Date Of Calibration : 12/07/2022 Due Date : 11/07/2023 Serial No : YX-23005223 Calibrated by : Mr.Baskar
Instrument : Fully Auto Chemistry Analyzer Model : BS240 Manufacturer : SHENZHEN MINDRAY BIO-MEDICAL ELECTRONICS CO., LTD	

Golden Harvest Industries is an organization dealing in MINDRAY Auto Biochemistry Analyzers. It has a Technically Qualified Technical Team to ensure trouble free operation. The Described instrument has been checked and calibrated under the ambient conditions stated above.

Power Supply			
UPS Supply	Expected reading	Measured reading	Remarks
Earth to Phase	230 ± 10 VAC	226 VAC	With in Limits
Neutral to Phase	230 ± 10 VAC	226 VAC	
Earth to Neutral	0 - 5 VAC	0 VAC	

Power Supply Unit	Expected reading	Measured reading	Remarks
5V Output	5VDC ± 0.25V	5.02	Values are with in Limits
12V Output	12 VDC ± 1.2V	12.04	
12V Reagent Refrig.	12 VDC ± 1.2V	12.08	
24V Output	24 VDC ± 2.4V	24.10	

Software Communication	Status	Remarks
Operation Software Initialization Check	Normal	Nil
Communication between PC and Analyzer	Normal	Nil
Shutdown Check	Normal	Nil

Optical System Check	AD value	AD value range	Remarks
340 nm	50709	48000 to 54000	AD values are with in limit
405 nm	50770		
450 nm	50765		
510 nm	50750		
546 nm	50745		
578 nm	50755		
630 nm	50841		
670 nm	50785		

Temperature Check	Range	Measured Value	Remarks
Reaction Carousel Temperature	36.7 ° – 37.3 ° C	37.0 ° C	Values are within Range
Cuvette cleaning Fluid Temperature	39.0 ° – 49.0 ° C	43.9 ° C	
Cuvette wash solution Temperature	39.0 ° – 49.0 ° C	44.1 ° C	
Reagent Preheating Temperature	40.0 ° – 50.0 ° C	45.0 ° C	

Fluidic Check	Status	Remarks
Wash Unit Detergent & Water Dispense	Normal	Nil
Wash Unit Sample & Water Aspiration	Normal	Nil
Interior Washing Probe	Normal	Nil
Exterior Washing Probe	Normal	Nil
Exterior Washing Mixer	Normal	Nil
Liquid Level Detection	Normal	Nil
Distilled Water filter	OK	Nil
Sample / Reagent Probe Check	Normal	Nil
Sample / Reagent Syringe Check	Normal	Nil
Wash Unit Movement	Normal	Nil
Mixer Unit Check	Normal	Nil
Interior Washing Probe	Normal	Nil
Exterior Washing Probe	Normal	Nil
Exterior Washing Mixer	Normal	Nil
Reagent Unit	Normal	Nil
Reaction Unit	Normal	Nil
Reagent Preheater	Normal	Nil
Dust Filters	Cleaned	Nil

The Calibration includes:

Adjustments: Checked the alignments for Sample/Reagent probe, Washing Unit, Mixer, Reaction Disk, Reagent/Sample Disk and their respective home positions.

Pneumatics: Checked the functions of Sample/Reagent Syringe and Distilled Water Supply Unit Pump and Solenoid Valves.

Temperature: Checked the temperature monitor for Pre-Heater, Reagent disk and Reaction Disk.

The above mentioned values are found to be with in the standard specified by SHENZHEN MINDRAY BIO-MEDICAL ELECTRONICS CO., LTD - CHINA.

REMARKS/DEVIATIONS IF ANY:

1. The recalibration interval should be determined based on the user's requirements.
2. The user should determine the stability of the instrument for its intended use.
3. The results stated in this certificate relate only to the instrument calibrated.

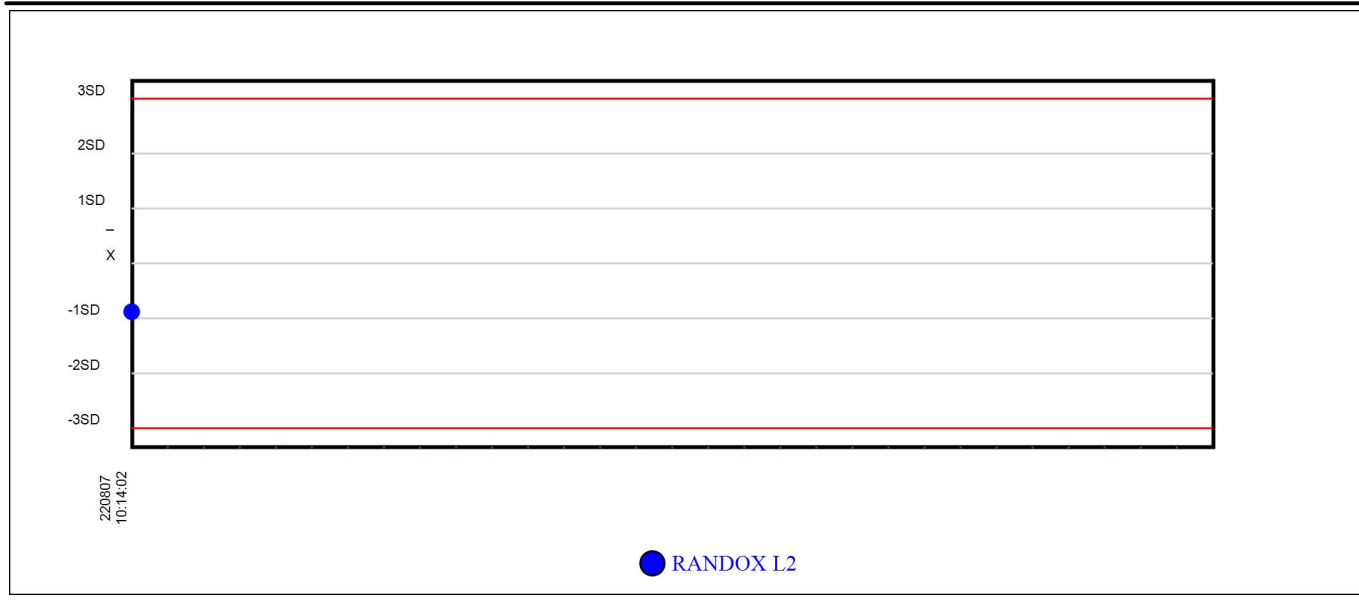


Authorized By
Mr.N.Ganesan
Zonal Manager –Technical Support

Levey-Jennings Chart

Chemistry: Glu-G	Date Range: 07-08-2022 - 07-08-2022
Full Name: Glucose (GOD-POD Method)	Unit: mg/dL Test Equipment:
	Set Measured

Control	Lot No.	Mean	SD	CV	Mean	SD	CV	N
RANDOX L2	1502UN	108	8.15	7.55%	100.84	0.0000	0.00%	1

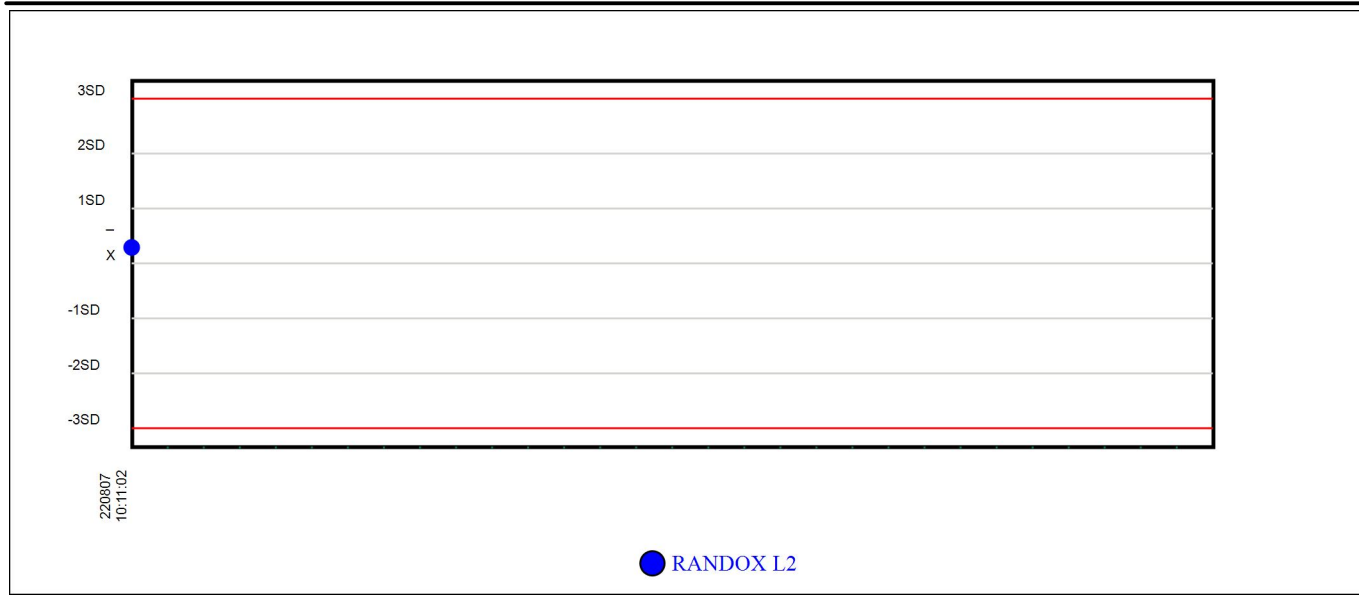


Control	RANDOX L2	Lot No.	1502UN
Date	Result	Operator	Date
07-08-2022	100.8		

Conclusion:

Levey-Jennings Chart

Chemistry:	UREA	Date Range:	07-08-2022 - 07-08-2022					
Full Name:	Urea	Unit:	mg/dL	Test Equipment:				
		Set		Measured				
Control	Lot No.	Mean	SD	CV	Mean	SD	CV	N
RANDOX L2	1502UN	42.9	3.2	7.46%	43.832	0.000	0.00%	1



Control	RANDOX L2		Lot No. 1502UN		Date		Result		Operator	
Date	Result	Operator	Date	Result	Operator	Date	Result	Operator		
07-08-2022	43.83									

Conclusion:

Levey-Jennings Chart

Chemistry: TP

Date Range: 07-08-2022 - 07-08-2022

Full Name:

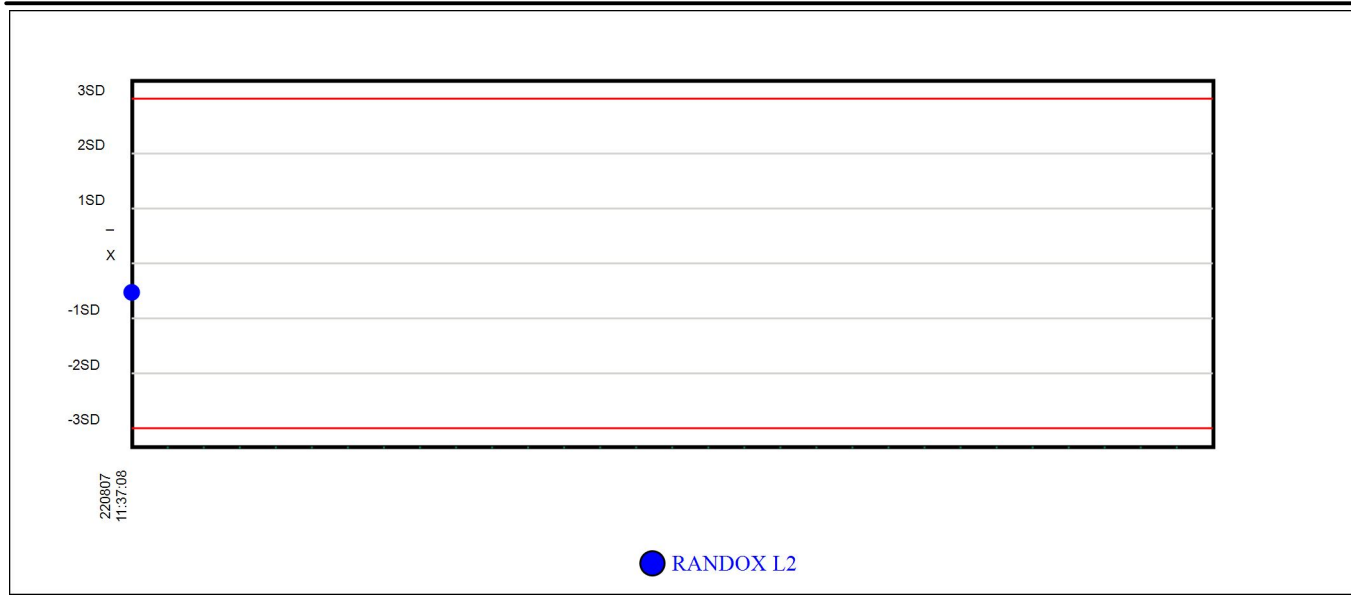
Unit: g/dL

Test Equipment:

Set

Measured

Control	Lot No.	Mean	SD	CV	Mean	SD	CV	N
RANDOX L2	1502UN	5.85	0.59	10.09%	5.5396	0.0000	0.00%	1

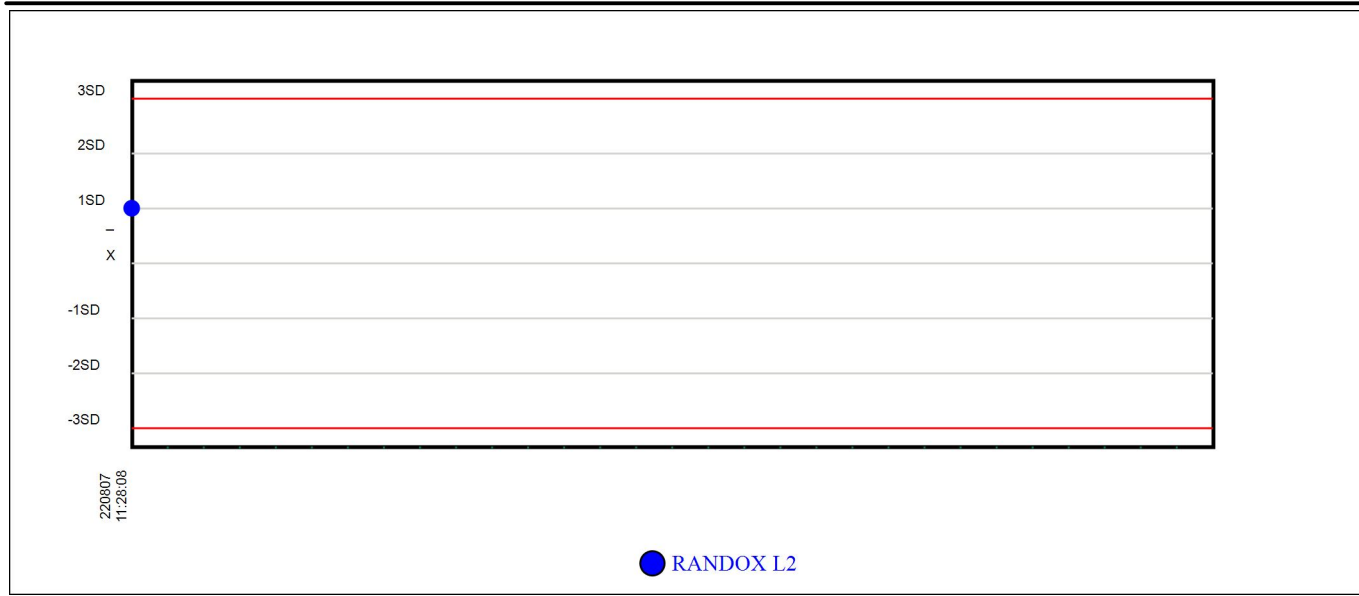


Control	RANDOX L2		Lot No. 1502UN		Date	Result	Operator	
Date	Result	Operator	Date	Result	Operator	Date	Result	Operator
07-08-2022	5.5							

Conclusion:

Levey-Jennings Chart

Chemistry:	Ca	Date Range:	07-08-2022 - 07-08-2022					
Full Name:	Calcium	Unit:	mg/dL	Test Equipment:				
		Set		Measured				
Control	Lot No.	Mean	SD	CV	Mean	SD	CV	N
RANDOX L2	1502UN	8.74	0.44	5.03%	9.1823	0.0000	0.00%	1



Control	RANDOX L2		Lot No. 1502UN		Date		Result		Operator	
Date	Result	Operator	Date	Result	Operator	Date	Result	Operator		
07-08-2022	9.18									

Conclusion:

Levey-Jennings Chart

Chemistry: PHO

Date Range: 07-08-2022 - 07-08-2022

Full Name:

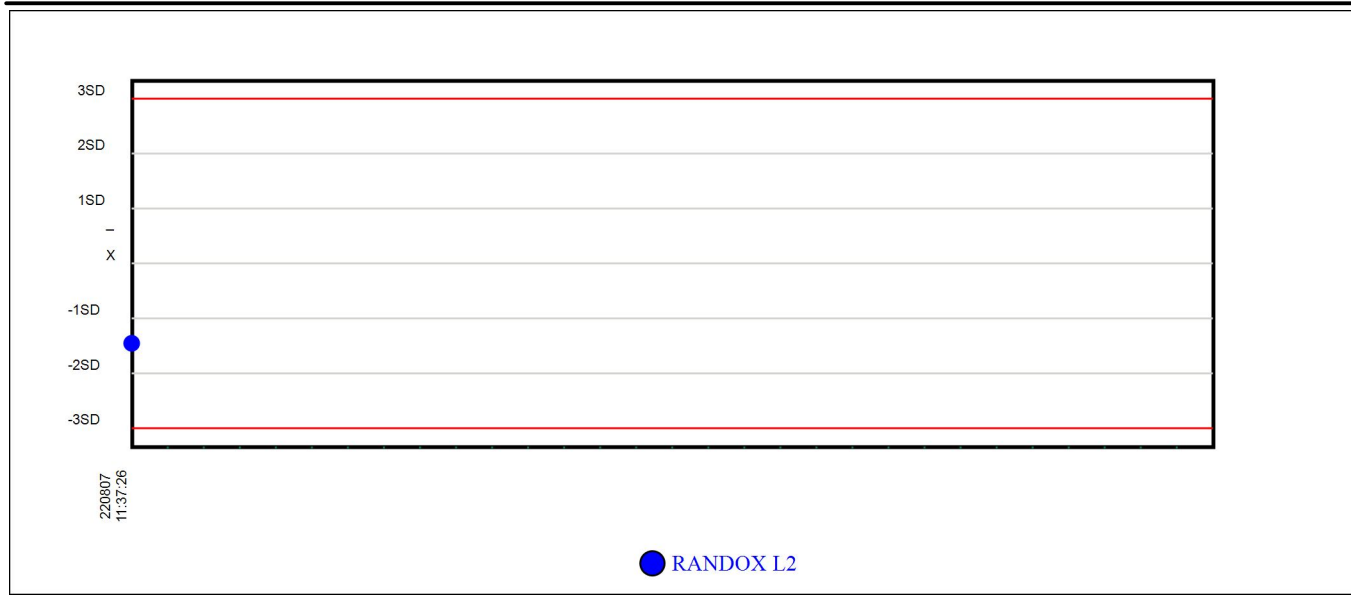
Unit: mg/dL

Test Equipment:

Set

Measured

Control	Lot No.	Mean	SD	CV	Mean	SD	CV	N
RANDOX L2	1502UN	4.34	0.33	7.60%	3.8605	0.0000	0.00%	1

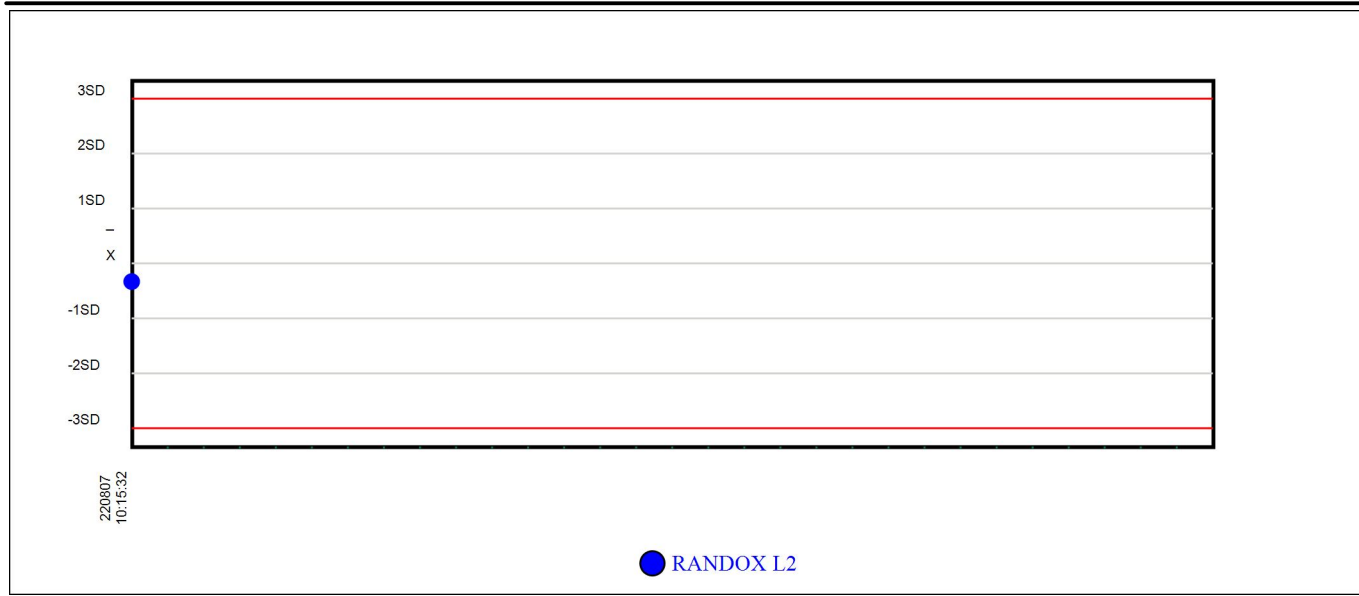


Control	RANDOX L2		Lot No. 1502UN		Date		Result	Operator
Date	Result	Operator	Date	Result	Operator	Date	Result	Operator
07-08-2022	3.9							

Conclusion:

Levey-Jennings Chart

Chemistry:	UA	Date Range:	07-08-2022 - 07-08-2022					
Full Name:	Uric Acid	Unit:	mg/dL	Test Equipment:				
		Set		Measured				
Control	Lot No.	Mean	SD	CV	Mean	SD	CV	N
RANDOX L2	1502UN	5.81	0.38	6.54%	5.6844	0.0000	0.00%	1

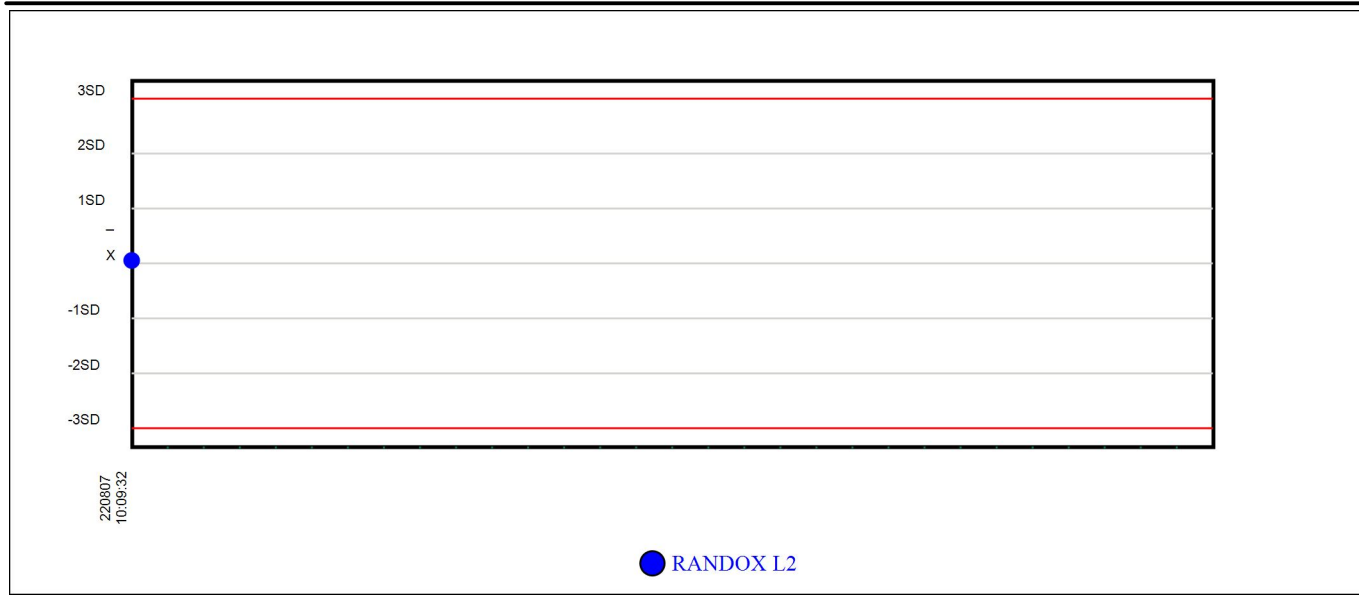


Control	RANDOX L2		Lot No. 1502UN					
Date	Result	Operator	Date	Result	Operator	Date	Result	Operator
07-08-2022	5.68							

Conclusion:

Levey-Jennings Chart

Chemistry:	TC	Date Range:	07-08-2022 - 07-08-2022					
Full Name:	Total Cholesterol	Unit:	mg/dL	Test Equipment:				
		Set		Measured				
Control	Lot No.	Mean	SD	CV	Mean	SD	CV	N
RANDOX L2	1502UN	158	10	6.33%	158.54	0.00	0.00%	1

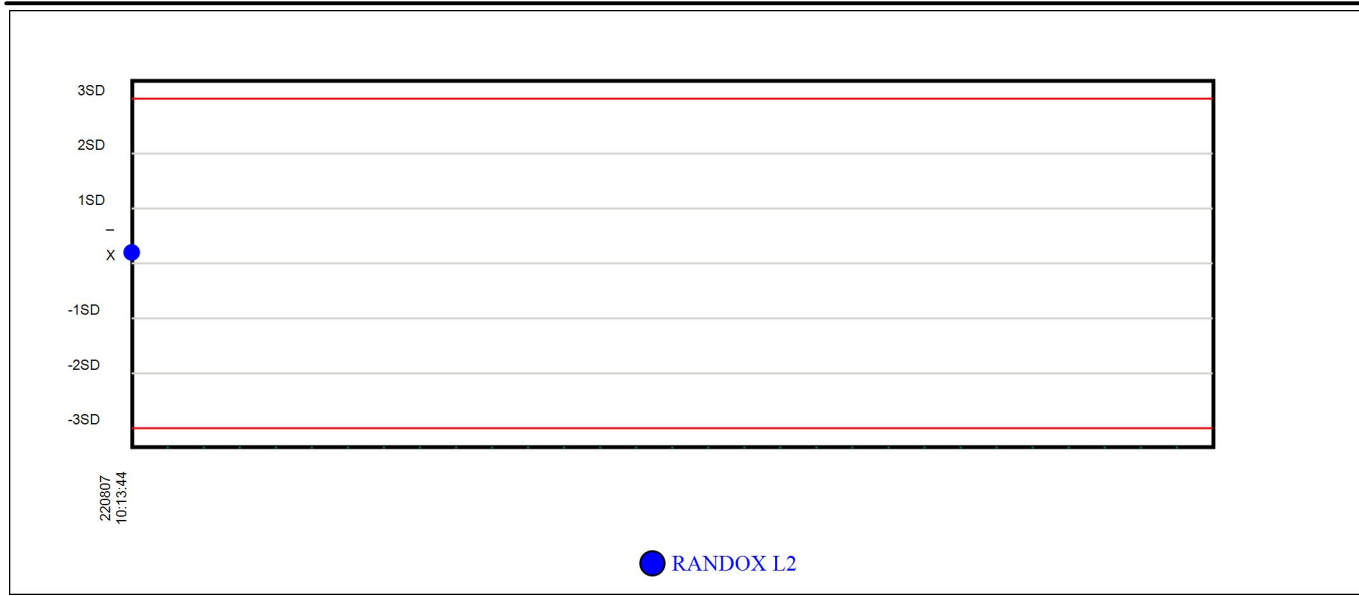


Control	RANDOX L2		Lot No. 1502UN					
Date	Result	Operator	Date	Result	Operator	Date	Result	Operator
07-08-2022	158.5							

Conclusion:

Levey-Jennings Chart

Chemistry:	TG	Date Range:	07-08-2022 - 07-08-2022					
Full Name:	Triglycerides	Unit:	mg/dL	Test Equipment:				
		Set		Measured				
Control	Lot No.	Mean	SD	CV	Mean	SD	CV	N
RANDOX L2	1502UN	92.9	7.25	7.80%	94.360	0.0000	0.00%	1

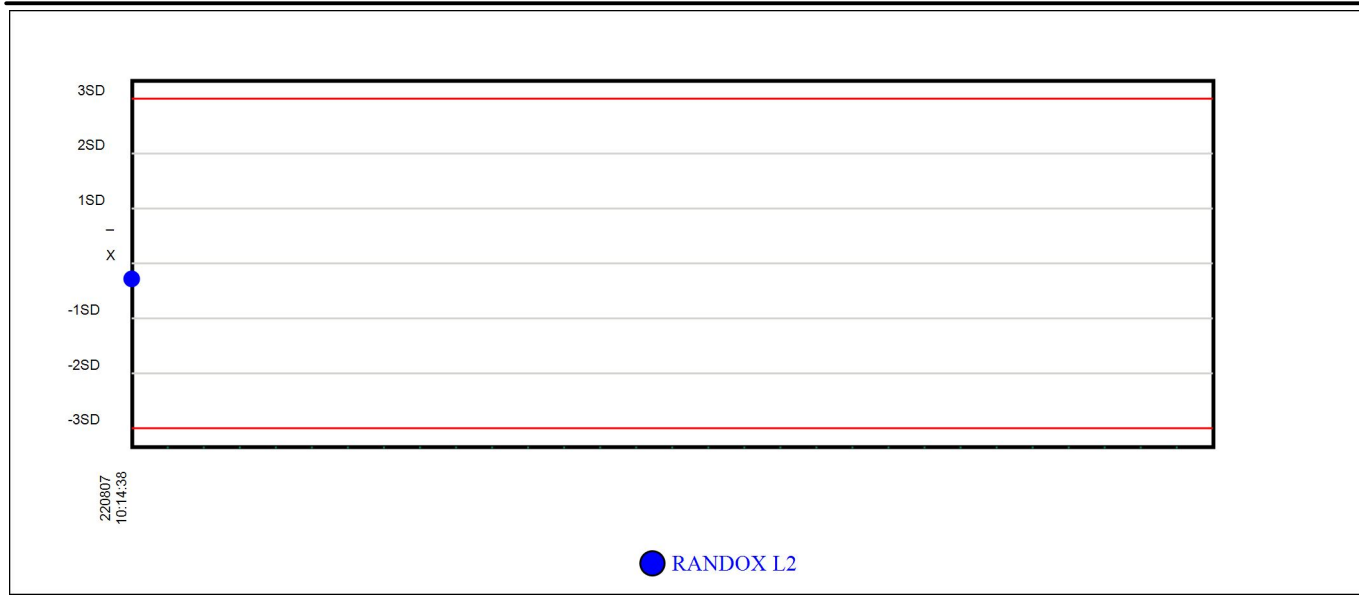


Control	RANDOX L2		Lot No. 1502UN					
Date	Result	Operator	Date	Result	Operator	Date	Result	Operator
07-08-2022	94.4							

Conclusion:

Levey-Jennings Chart

Chemistry:	HDL-C	Date Range:	07-08-2022 - 07-08-2022					
Full Name:	HDL-Cholesterol	Unit:	mg/dL	Test Equipment:				
		Set		Measured				
Control	Lot No.	Mean	SD	CV	Mean	SD	CV	N
RANDOX L2	1502UN	62.9	4.6	7.31%	61.610	0.000	0.00%	1



Control	RANDOX L2		Lot No. 1502UN		Date		Result		Operator	
Date	Result	Operator	Date	Result	Operator	Date	Result	Operator		
07-08-2022	61.6									

Conclusion:

SE-1520 V2.03 2022-02-04 05:25
No.0001 ID:QC
Sample:B. Serum Lot:A2C23

Na	127	mmol/l
K	3.7	mmol/l
Cl	98	mmol/l

Use before 31/07/2020

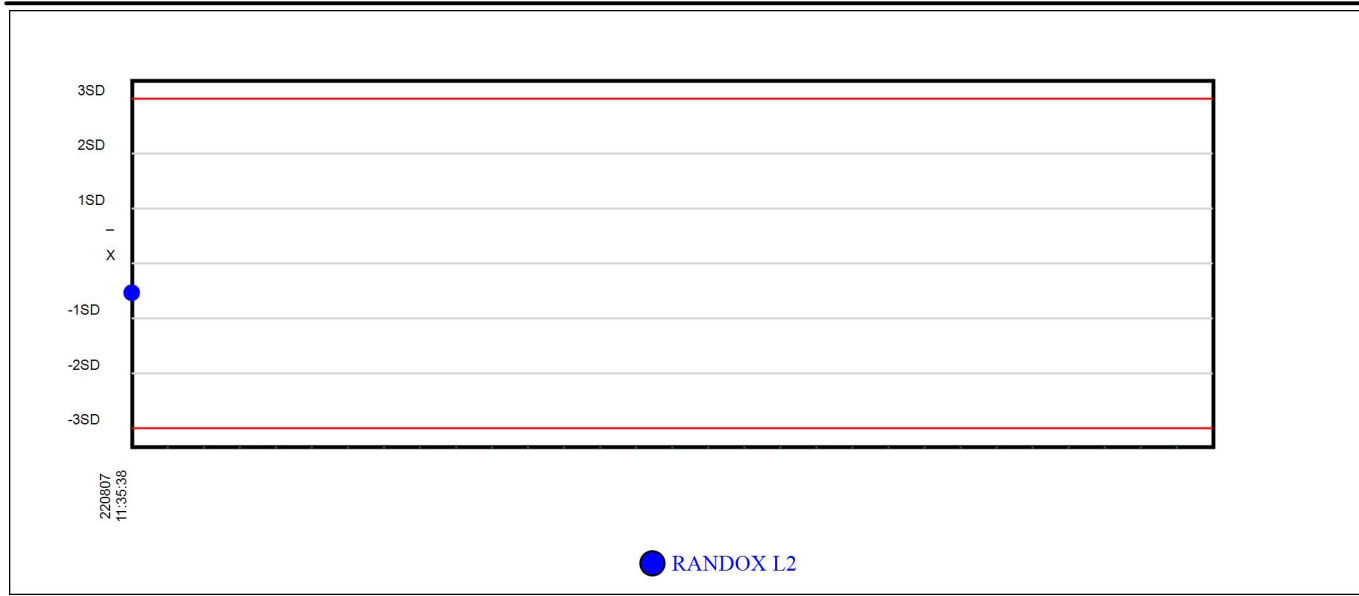
Disclaimer

All laboratory test result must be interest within the context of overall health of the patient and should be used along with other tests and clinical findings. Laboratory test results may vary depending upon age, sex, time of sample collection, diet, medication and physiological variations.

Levey-Jennings Chart

Chemistry: AST Date Range: 07-08-2022 - 07-08-2022
 Full Name: Aspartate Aminotransferase Unit: U/L Test Equipment:
 Set Measured

Control	Lot No.	Mean	SD	CV	Mean	SD	CV	N
RANDOX L2	1502UN	33	3.5	10.61%	31.14	0.000	0.00%	1



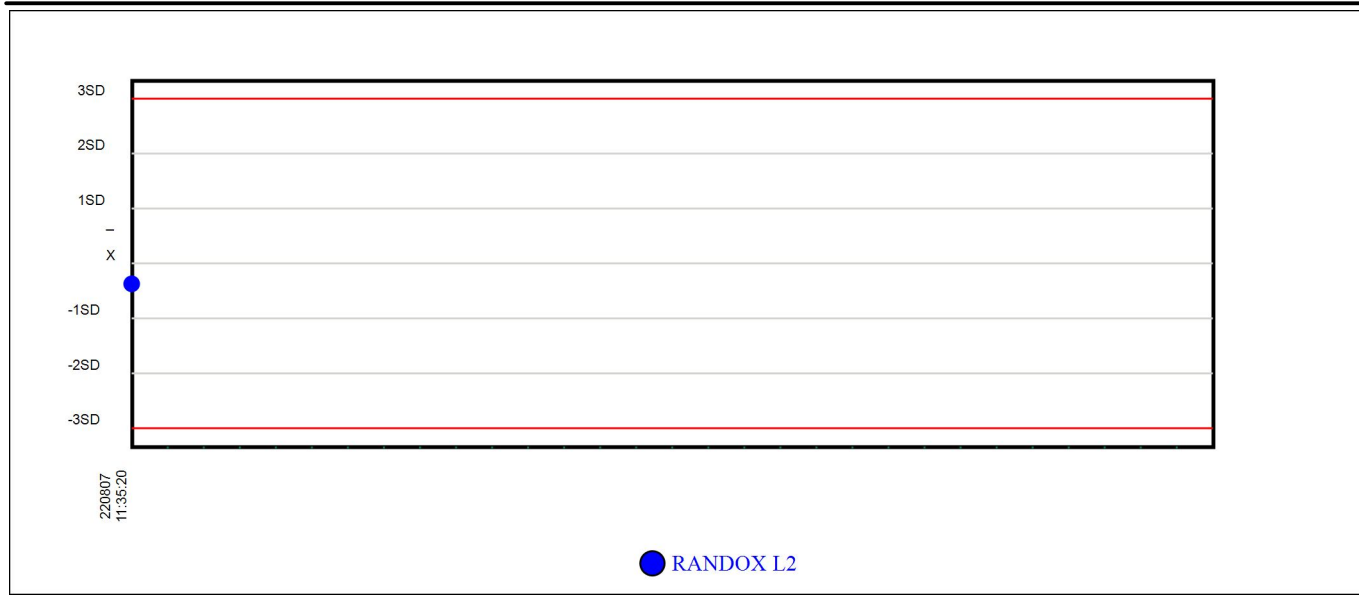
Control	RANDOX L2		Lot No. 1502UN		Date	Date	Date	Date	Result	Operator
Date	Result	Operator	Date	Result	Operator	Date	Result	Operator		
07-08-2022	31.1									

Conclusion:

Levey-Jennings Chart

Chemistry: ALT Date Range: 07-08-2022 - 07-08-2022
 Full Name: Alanine Aminotransferase Unit: U/L Test Equipment: Set Measured

Control	Lot No.	Mean	SD	CV	Mean	SD	CV	N
RANDOX L2	1502UN	39	4	10.26%	37.52	0.00	0.00%	1

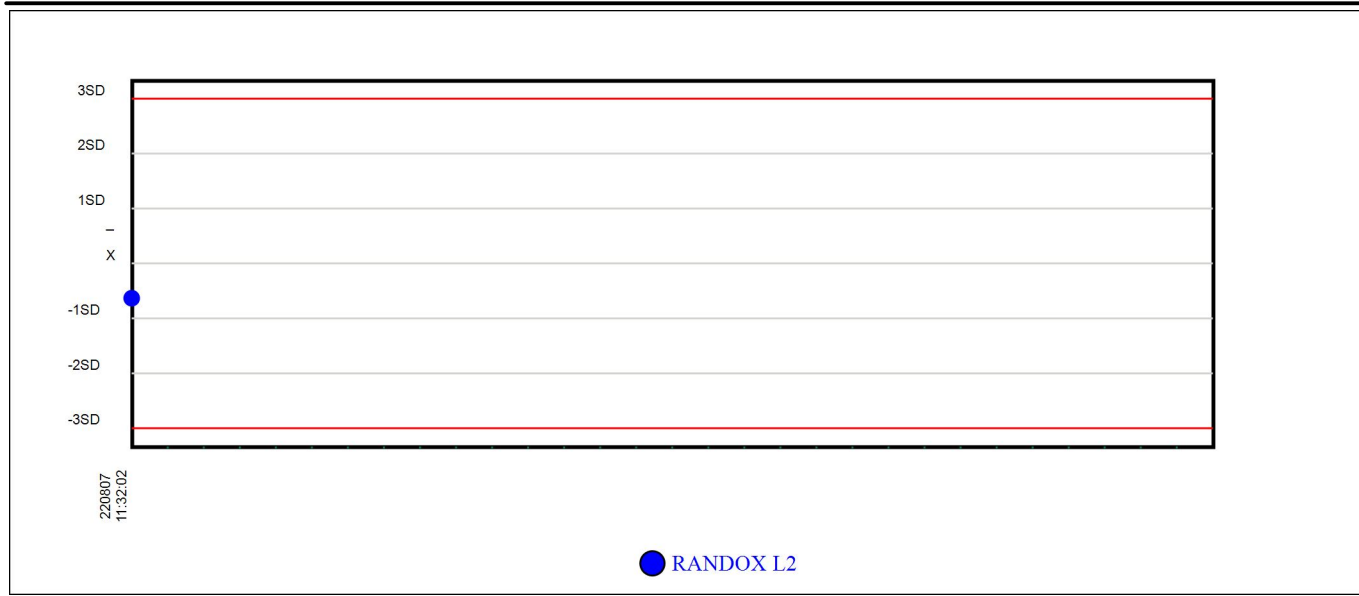


Control	RANDOX L2		Lot No. 1502UN		Date	Result	Operator	
Date	Result	Operator	Date	Result	Operator	Date	Result	Operator
07-08-2022	37.5							

Conclusion:

Levey-Jennings Chart

Chemistry:	ALP	Date Range:	07-08-2022 - 07-08-2022					
Full Name:	Alkaline phosphatase	Unit:	U/L	Test Equipment:				
		Set		Measured				
Control	Lot No.	Mean	SD	CV	Mean	SD	CV	N
RANDOX L2	1502UN	185	14	7.57%	176.15	0.00	0.00%	1



Control	RANDOX L2		Lot No. 1502UN					
Date	Result	Operator	Date	Result	Operator	Date	Result	Operator
07-08-2022	176.1							

Conclusion: