

# ISE urine dilution Case Study

Alejandra Duran CAS SA1



# CONTENTS

01. Case Background



02. Case Analysis



03. Case Solution



04. Case Summary



# Case Background

Background

Analysis

Solution

Summary



Analyzer BS-600M

This customer is working with ISE Module

They run approximately more than 600 samples for chem and ise

# Case Analysis

Background

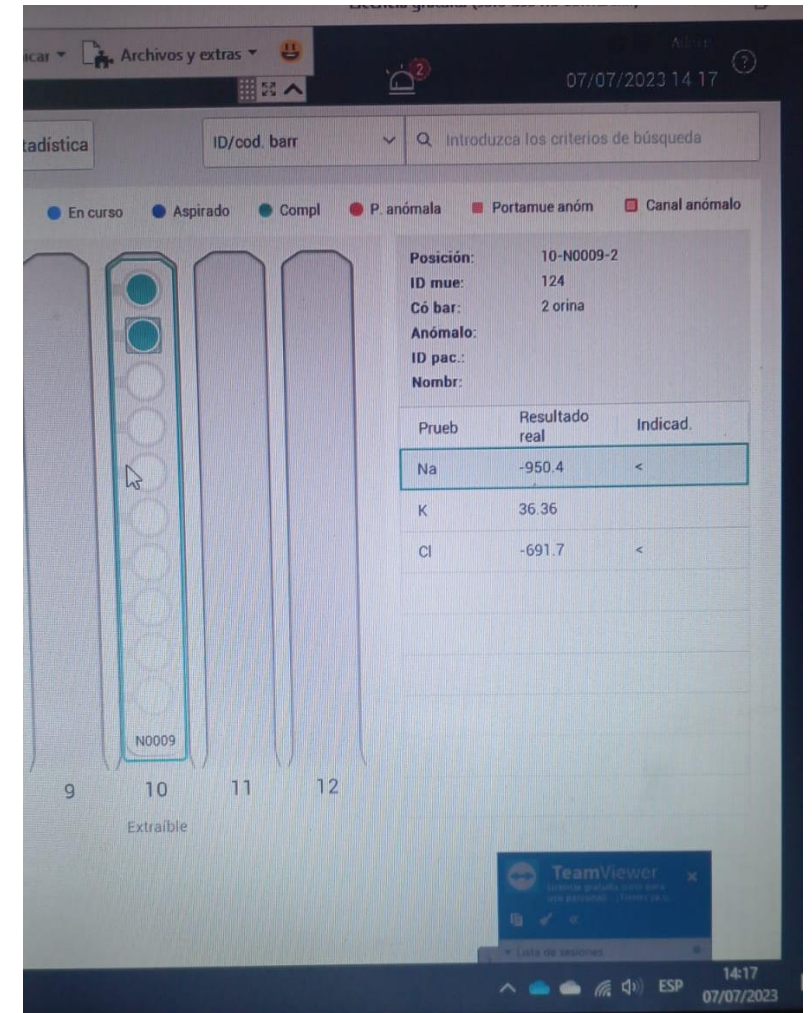
Analysis

Solution

Summary

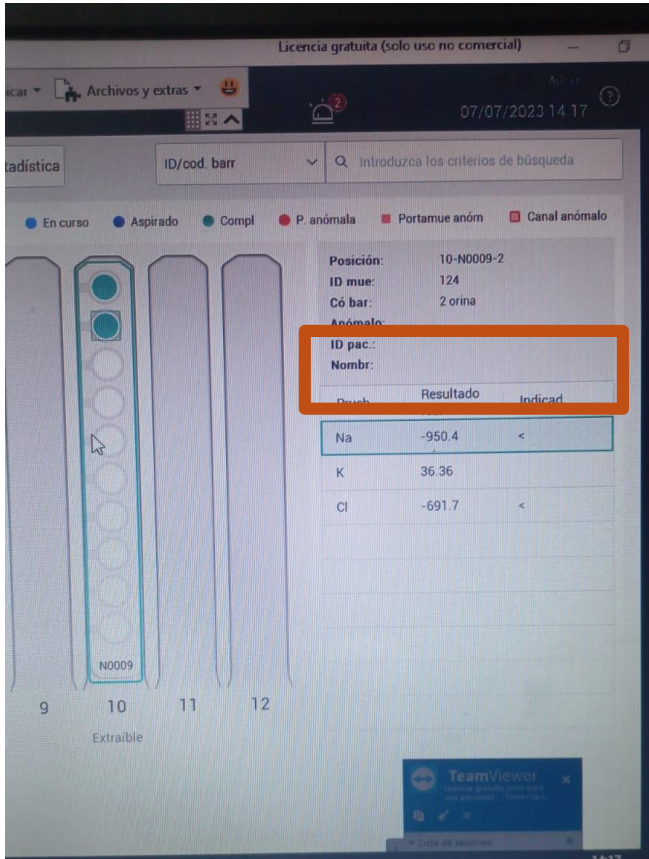
This case is reported by the cas of our distributor

The principal problem was negative results in NA and CL in all the samples

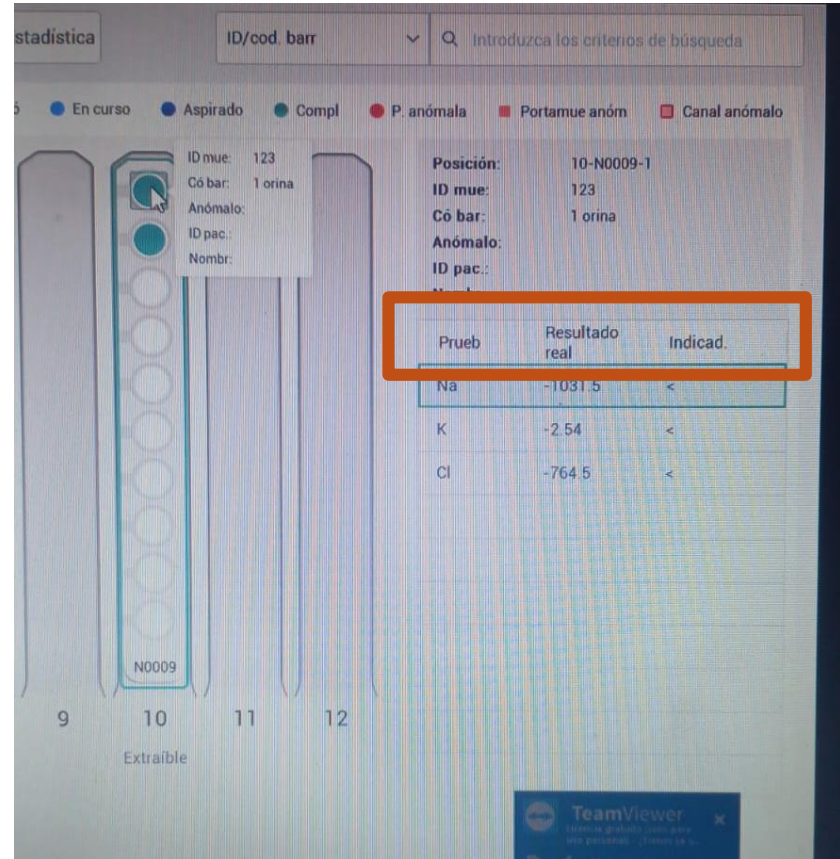


# Interpretation

1.



2.



1. All patients' results were negative only for electrolytes.

2. In the first case results for NA and CL are negative

3. In the second case results for NA, K and CL also are negative

4. The samples was Urine but in serum the results are normal



# Solution for this case

1. First, the results of all the patients were reviewed, it was observed that they all had the same behavior, negative results.
2. The stability of the electrodes and the reagent package were checked, all on time.
3. The calibration results and control results were reviewed and all results were correct.
4. When comparing the results of the urine samples with the serum results, I observed that only the problem of negative results was with urine samples.
5. We evaluate the sample treaty procedure
6. The insert indicates that a 1/9 dilution of the sample must be carried out with the caretium brand diluent for urine samples prior to processing the sample.

Assay procedure		
Parameters	Item	BS-600M chemistry analyzer
Sample types	Serum, plasma	Urine: Dilution First Mix sample with Urine Diluent with a proportion of 1:9.
Sample	Serum, plasma Urine	70μL 140μL

For information on viewing and editing assay parameters or for a detailed description of system procedures, refer to the Mindray Chemistry Analyzer Operator's Manual.

# Solution for this case

7. The users were asked if they had previously diluted the sample with the diluent recommended by Mindray, the user indicated that they had.
8. For this, the elements that had been used were requested.
9. We found that the diluent used was from another brand and not the one needed by the BS-600M
10. It was recommended to repeat the dilution with the correct caretium diluent and reprocess the samples.
11. The correct result was obtained when the dilution was carried out again with the correct diluent.

1. It is recommended to emphasize to users the correct consumables to use.
2. know the correct procedure for samples before being processed
3. check stability of electrodes, reagents, review the results of calibrations and quality controls
4. perform a repeatability test for both types of serum and urine samples
5. In case of negative results, previously review everything mentioned above, since it may be due to contamination or poor pretreatment of the sample.



Thanks!  
Gracias!  
谢谢!

**mindray** 迈瑞