

SOTOXA ORIENTATION, TRAINING, SETUP

Intoximeters
— EXPERIENCE SERVICE INTEGRITY —



SOTOXA™ MOBILE TEST SYSTEM
INITIAL SETUP

INSTRUMENT UNBOXING & FIRST USE

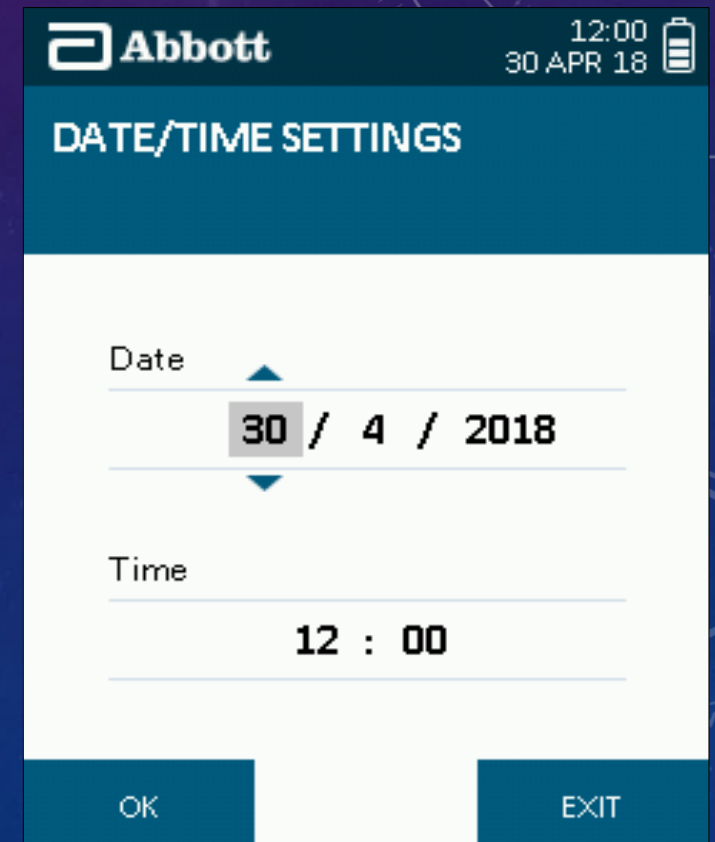
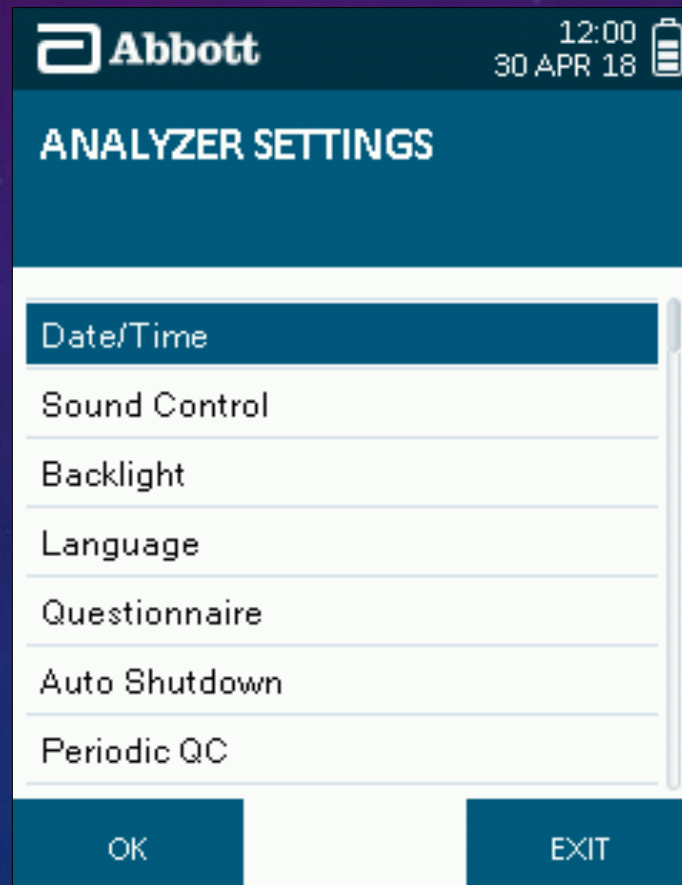
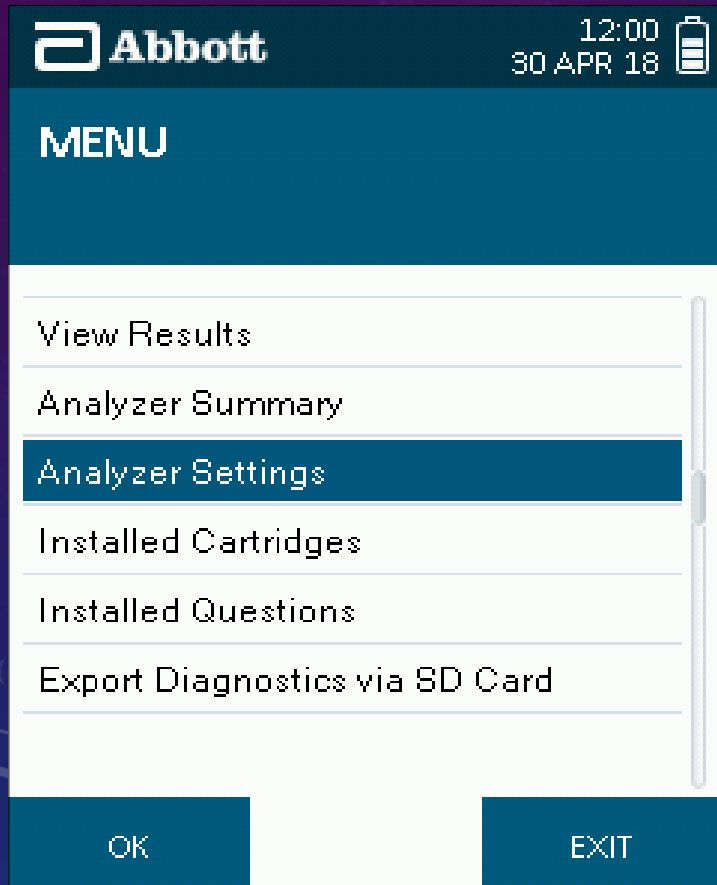
- Charge SoToxa for up to 8 hours with Printer plugged in prior to first use
 - The LED Light will change from Red to Green when Complete
- Set Date, Time, Questionnaire Status, and QC Frequency under Analyzer Settings
- Complete a QC Test and print results to confirm printer operation
- Add a small number of Test Kits to SoToxa case and spare collectors.

SOTOXA™ MOBILE TEST SYSTEM OVERVIEW



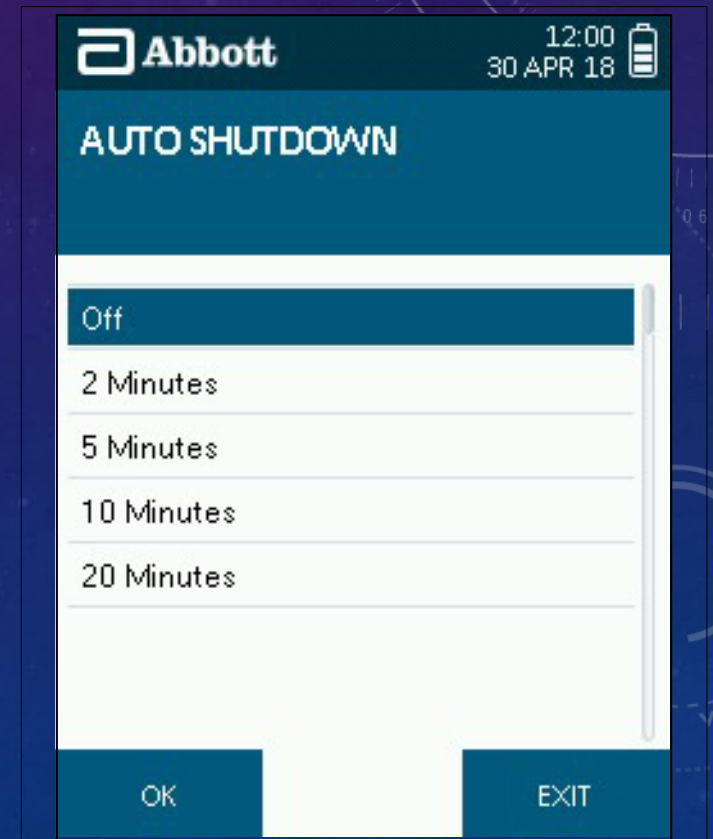
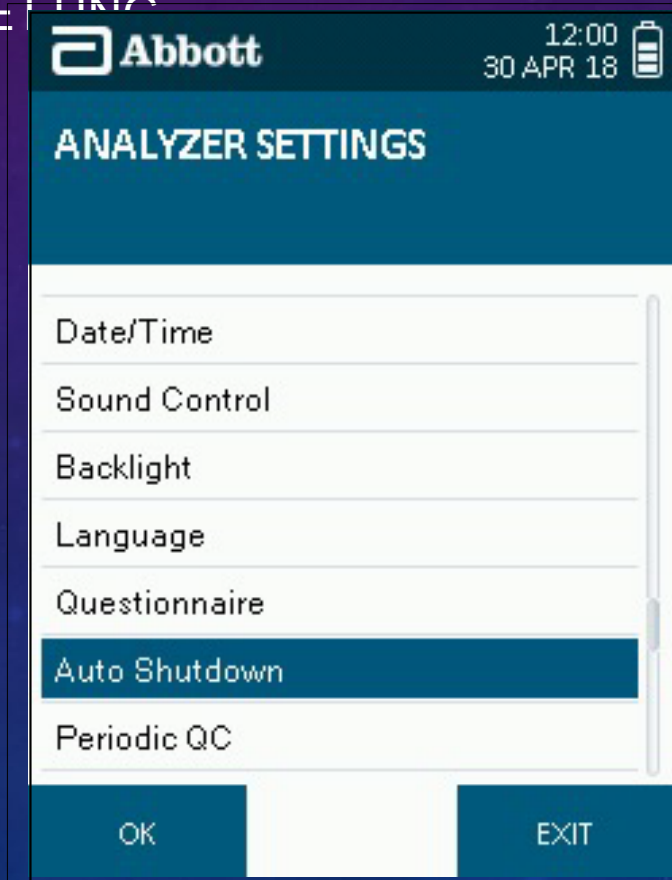
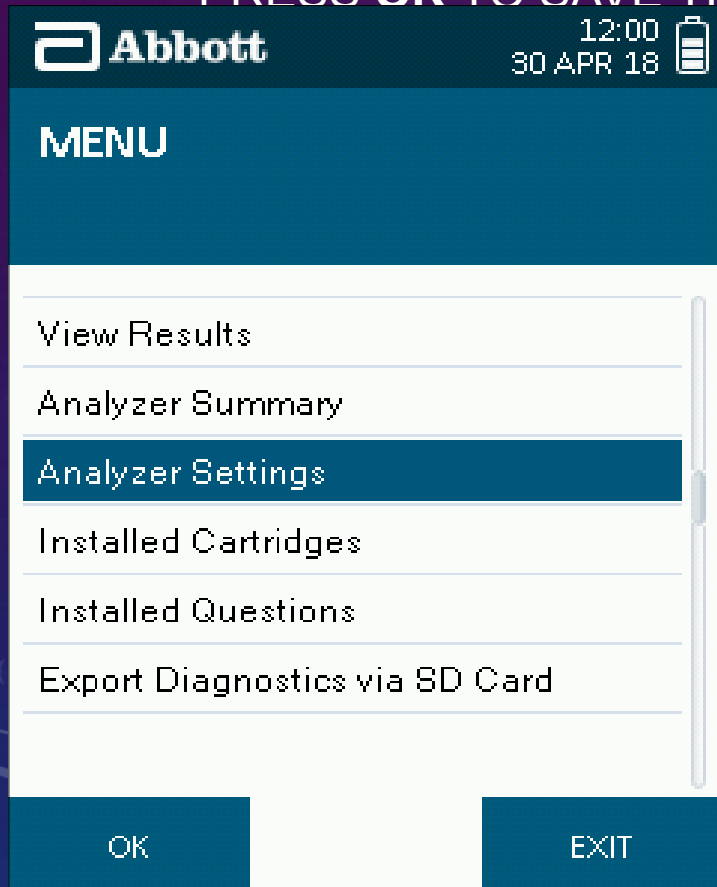
SET DATE AND TIME

- TURN SOTOXA ON AND PRESS THE LEFT BUTTON TO SELECT MENU. UTILIZE THE UP/DOWN ARROWS TO ANALYZER SETTINGS AND PRESS CENTER BUTTON TO SELECT.



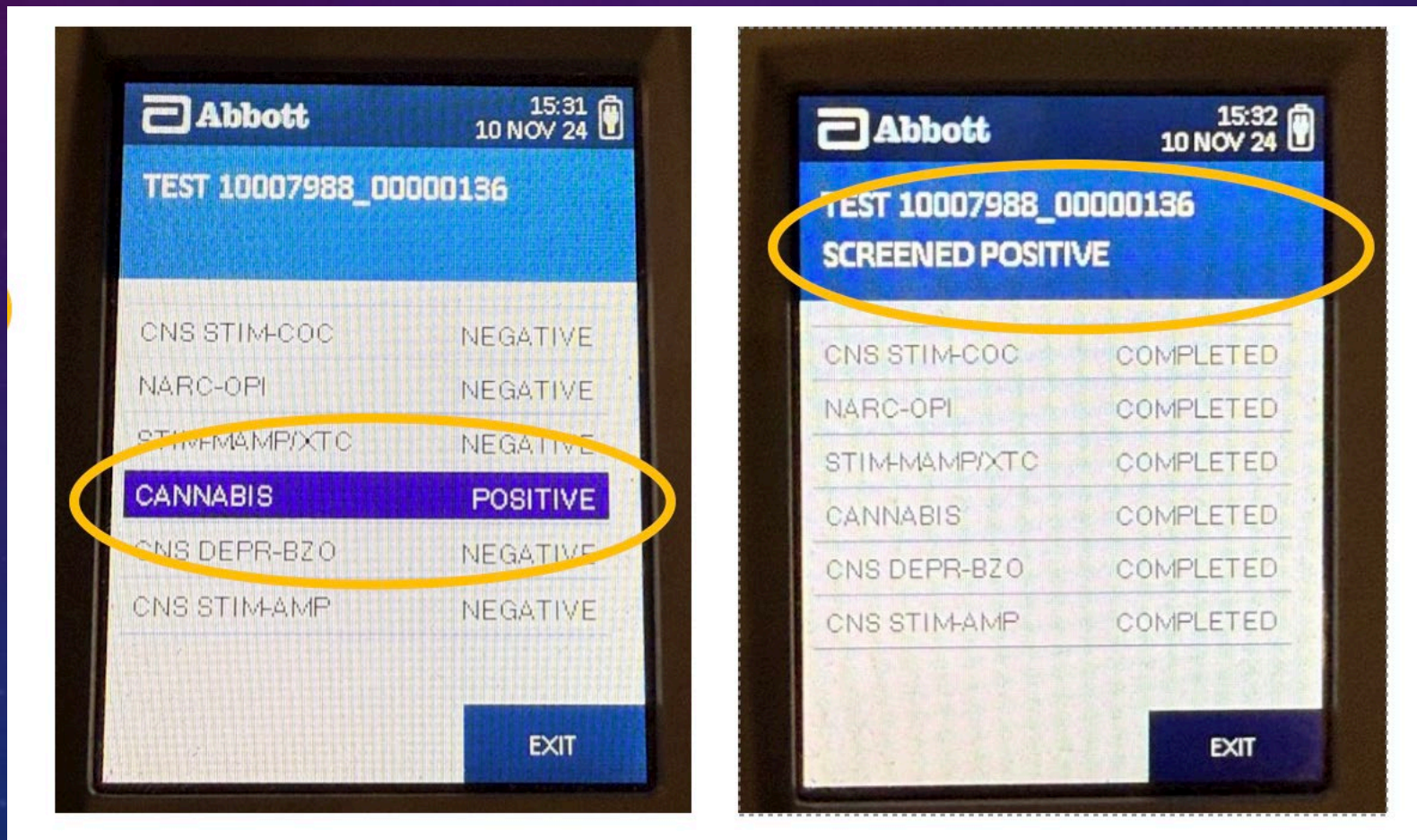
AUTO SHUTDOWN

SELECT **ANALYZER SETTINGS** FROM THE MAIN MENU, THEN IN THE ANALYZER SETTINGS SCREEN, SELECT **AUTO SHUTDOWN**. IN THE AUTO SHUTDOWN SCREEN, USE THE FIVE WAY NAVIGATION KEY TO HIGHLIGHT THE REQUIRED SETTING AND PRESS **OK** TO SAVE THE SETTING.



INSTRUMENT UNBOXING & FIRST USE

- Set preferred mode for displaying results under analyzer settings



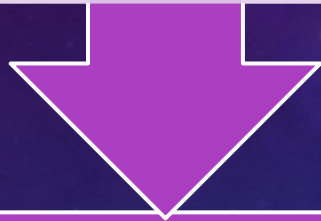
QUALITY CONTROL OR QC TESTING

QC cartridges act as a tool to confirm:

Camera in the analyzer is aligned.

Internal lighting is correct.

Analyzer is able to correctly interpret the test results.



It is recommended that QC testing is conducted at least once on each day of testing using the NQC and PQC cartridges.



ONLINE USER TRAINING

Online User Training is available from Abbott

REGISTRATION LINK:

Use the link below to create a **new** login.

The password is **welcome**

<http://learningxchange.aleretoxicology.com/group/login/roadside>

You may utilize this link after registering with your username and password.



SOTOXA™ MOBILE TEST SYSTEM

The background features a dark blue gradient with several circular patterns. Some are solid lines, while others are dashed. There are also degree markings (140, 150, 160, 170, 180, 240, 250, 260) and arrows indicating directions. A large white circle is on the right side of the image.

SOTOXA SETUP AND ORIENTATION

Intoximeters
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TRAINING OBJECTIVES



Gain an understanding of oral fluid testing principles and the proper operation of oral fluid testing instruments.



Understand the use and function of the SoToxa[®] Mobile Test System.



Demonstrate proper collection of an oral fluid sample via use of a SoToxa Collector.

WHEN TO USE SOTOXA



- Similar to a Preliminary Breath Test (PBT).
- After Standard Field Sobriety Test (SFST).
- When impairment is identified, and reasonable suspicion exists that the driver is impaired on drugs other than alcohol.

WHAT IS ORAL FLUID?

- ORAL FLUID IS COMPOSED OF THE FOLLOWING

- Saliva
- Bacteria
- Blood
- Gingival fluid
- Epithelial cells
- Food debris

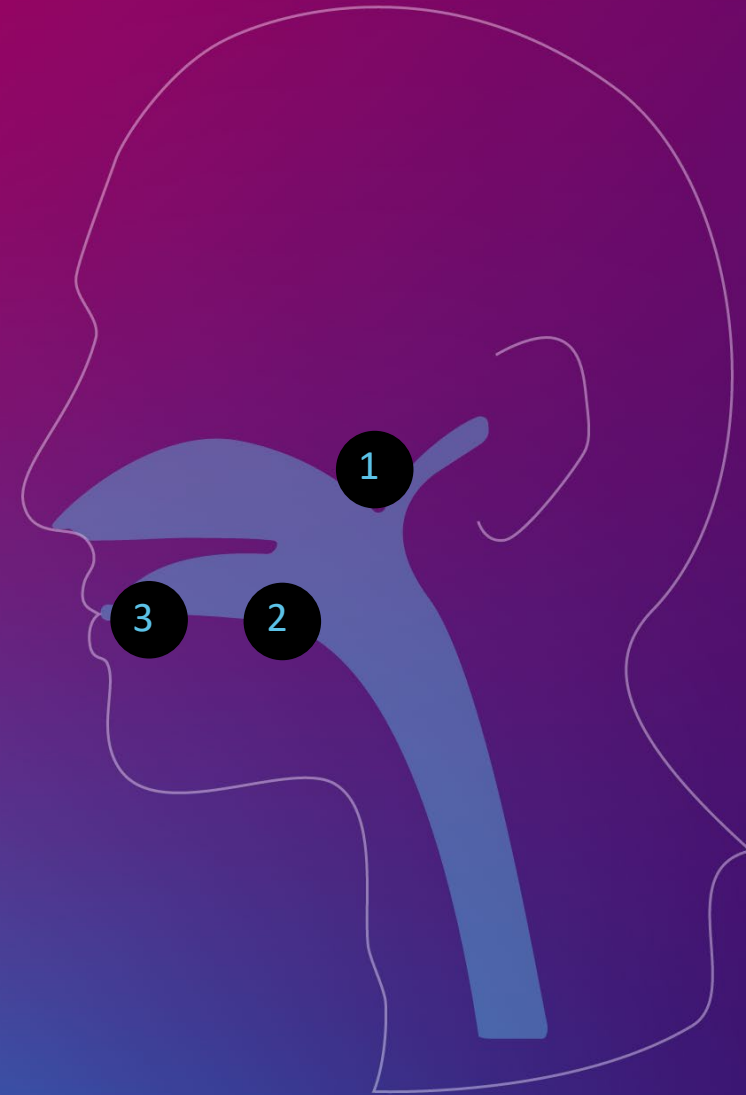
Saliva itself is a clear, odourless and viscous fluid formed in the salivary gland.

- SALIVA IS PRINCIPALLY PRODUCED BY THE 3 MAIN SALIVARY GLANDS

1. Glandular parotis (parotid gland)
2. Glandular submandibularis (submandibular gland)
3. Glandular sublingualis (sublingual gland)

- BETWEEN 0.5 L–1.5 L OF SALIVA IS PRODUCED PER DAY

Variations due to smoking, drug use, climate and hydration



WINDOWS OF DETECTION

- **DEPENDENT ON:**
 - Amount of drug and frequency that the drug is taken.
 - The nature of the drug itself.
 - An individual's metabolism and general health.
 - The amount of fluids taken and exercise performed.
 - Genetic variations that affect the response to drugs.

Oral fluid provides the shortest window of detection for drugs.

Drug Group	Detection Window
Amphetamine	Up to 1–2 days
Benzodiazepines	Up to 24 hours
Buprenorphine	Up to 1–2 days
Cannabinoids (THC)	Up to 24 hours
Cocaine	Up to 24 hours
Codeine	Up to 1–2 days
Ketamine	Up to 1–2 days
Methadone	Up to 1–2 days
Methamphetamines	Up to 24 hours
Morphine	Up to 24 hours
Opiates (general)	Up to 1–2 days

SOTOXA™ MOBILE TEST SYSTEM OVERVIEW



QUALITY CONTROL OR QC TESTING

QC cartridges act as a tool to confirm:

Camera in the analyzer is aligned.

Internal lighting is correct.

Analyzer is able to correctly interpret the cartridges (i.e., no dirt or dust is present on the optics).

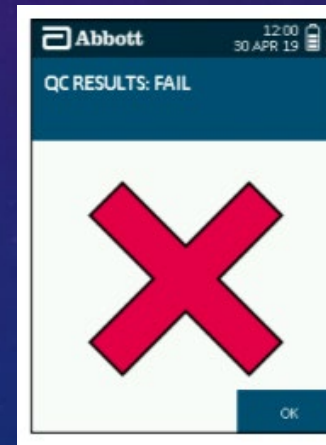
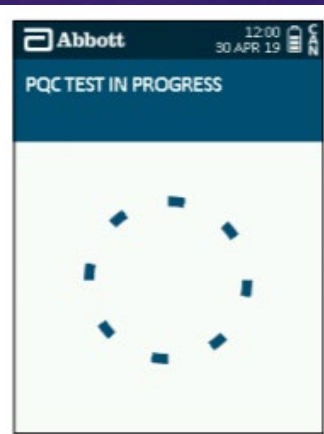
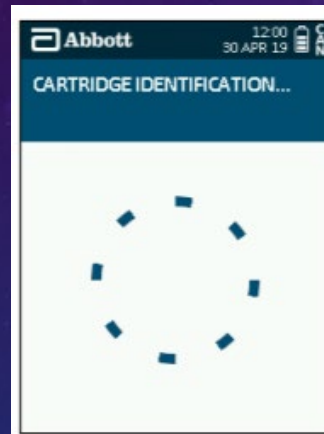


It is recommended that QC testing is conducted at least once on each day of testing using the NQC and PQC cartridges.



RUNNING A QC TEST

- The analyser allows for QC lockout that notifies the user when a QC test needs to be performed.





SOTOXA™ MOBILE TEST SYSTEM

HOW TO RUN A TEST

ORAL FLUID ANALYZERS VS VISUALLY READ:

ANALYZERS



VISUALLY READ



LATERAL FLOW IMMUNOASSAY(LFIA) TECHNOLOGY

NOT NEW

Pregnancy Testing








Covid Testing



Urine Drug Testing



LATERAL FLOW ASSAY: HOW DOES IT WORK?

- ❖ Right Fluid Sample  Diesel in a Gasoline Motor??
- ❖ Right Volume  Too little, does it work?
- ❖ Right Temperature  Cold Start vs Warm Start
- ❖ Right Timing  Too Soon: Flooded
Too Late: Battery is Dead
- ❖ Right Position for Lateral Flow  Flow of fuel to reach the engine

CONTENTS OF SOTOXA™ CARTRIDGE KIT

- TEST CARTRIDGE

- Fully integrated test cartridge containing dried reagents and assay buffer.
- QR code identifies the drug panel, records the lot number and checks the test cartridge validity.

- ORAL FLUID COLLECTION DEVICE

- Designed to be robust for active sample collection.
- Sample volume adequacy indicator eliminates the need for timed collections.



The background features a dark blue gradient with several technical diagrams. On the left, there are circular gauges with numerical scales ranging from 140 to 260. Some gauges have arrows indicating rotation. The overall aesthetic is technical and scientific.

SOTOXA TESTING PROCEDURES

Quality control (QC) at beginning of shift

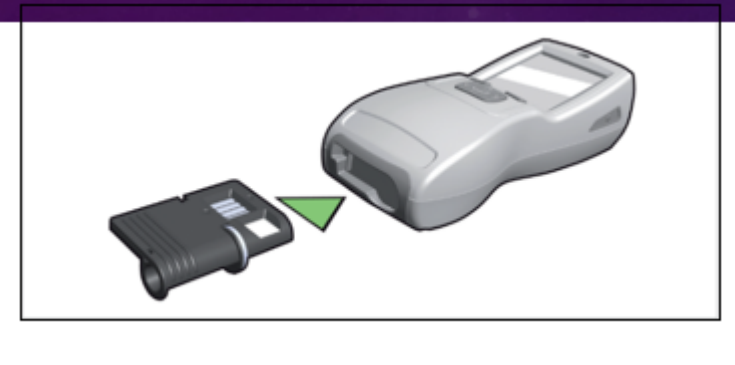
No foreign substances in subject's mouth

If foreign substance is detected, subject shall remove object

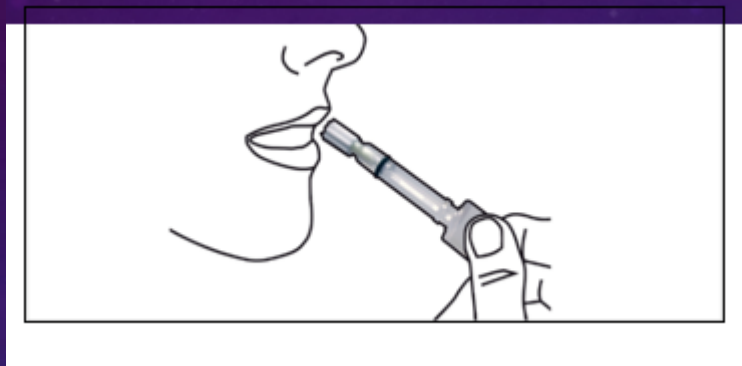
Operator powers on instrument

Operator follows instrument prompts

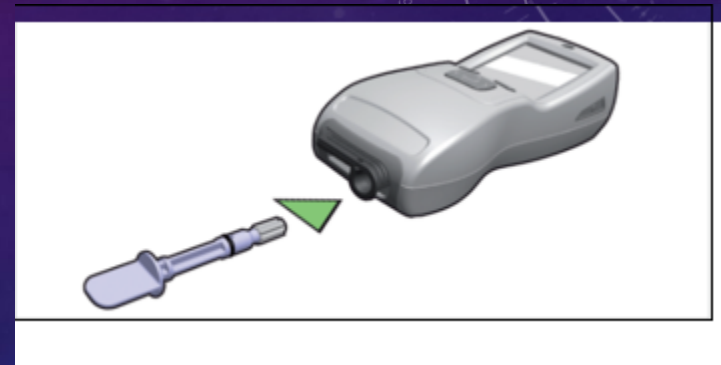
Our 3-step testing process makes drug testing as easy as **1-2-3**.



1. Insert test cartridge into analyzer.



2. Collect oral fluid sample.



3. Insert collection device into test cartridge.

CARTRIDGE WILL BE INVALID IF COLLECTOR INSERTED INTO CARTRIDGE PRIOR TO CARTRIDGE BEING INSERTED INTO SOTOXA

1 — INSERT TEST CARTRIDGE INTO ANALYSER

1

Remove a new test cartridge from its foil packaging

2

Check that the silica gel pack is present, intact and yellow. If the silica gel is missing, open or green, discard the test cartridge and start again with a new test cartridge

3

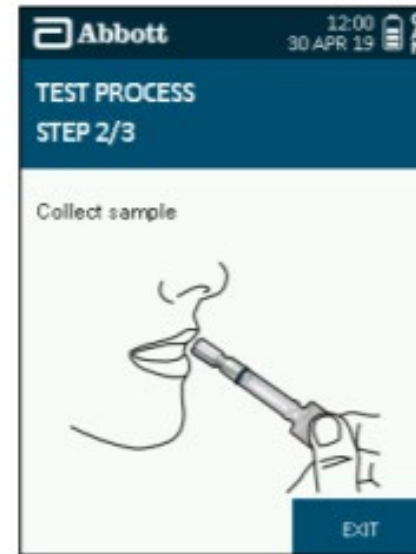
Insert into the analyzer



Using a QR code, the analyser identifies the drug panel, records the lot number and checks the test cartridge validity.

2 — COLLECT ORAL FLUID SAMPLE

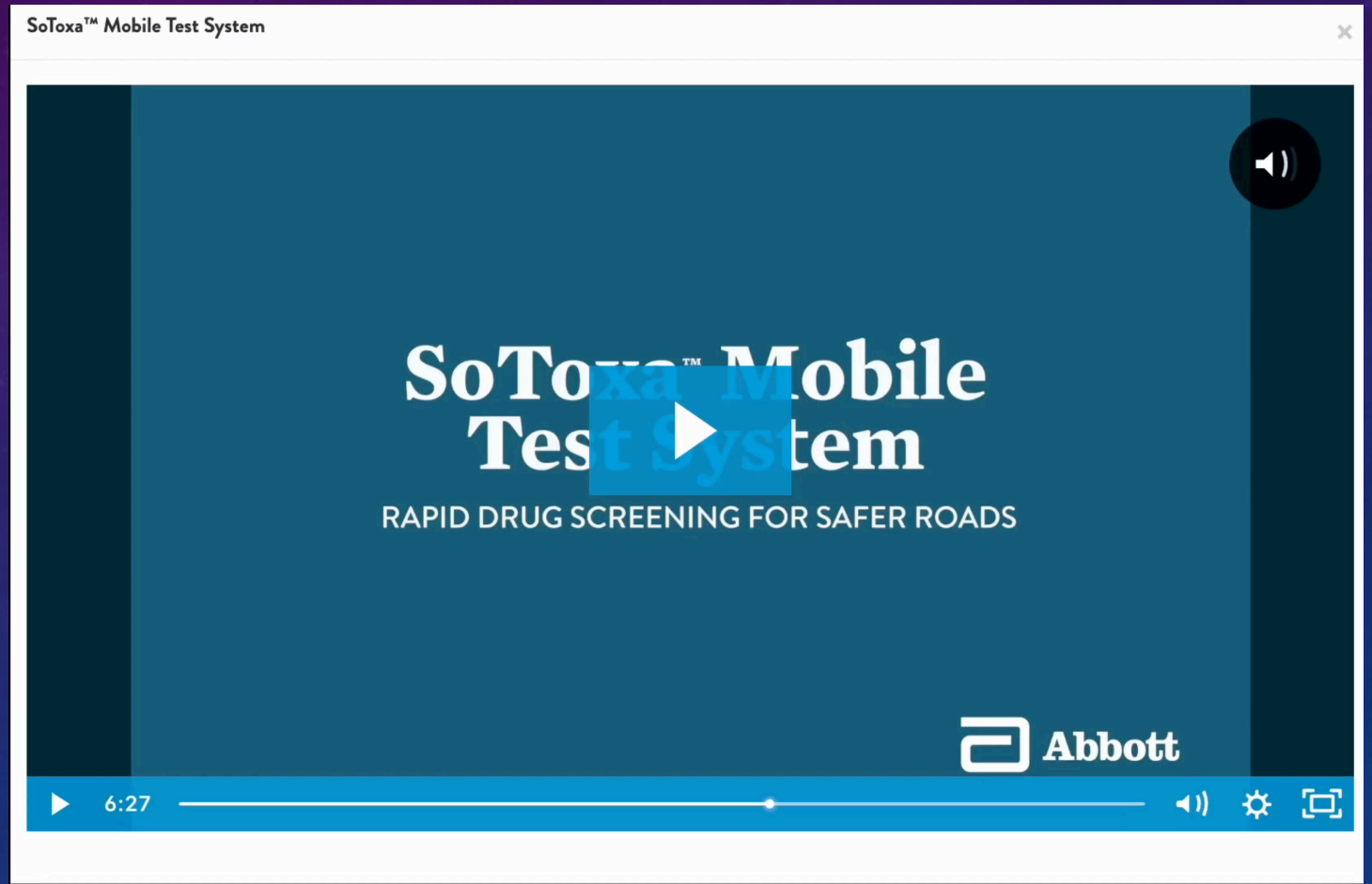
- Unwrap a new oral fluid COLLECTOR and offer it to the donor.
- Instruct subject to hold COLLECTOR by its plastic stem.
- Instruct donor to actively swab the COLLECTOR around the mouth until the **sample volume adequacy indicator** has started to turn **blue**.
- On average, this takes **about a minute or less**



**If you don't see BLUE,
It will NOT do!**

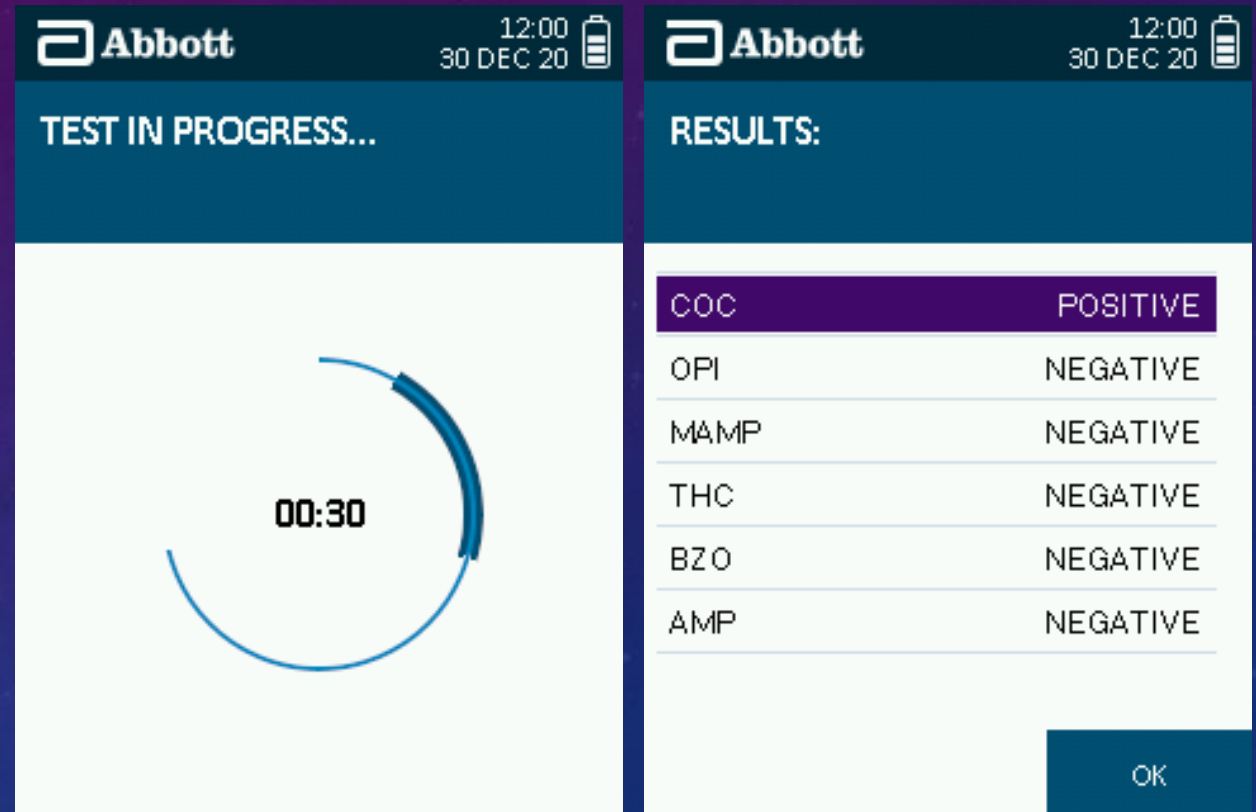
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3 — INSERT COLLECTOR INTO TEST CARTRIDGE

- Insert the oral fluid collector into the test cartridge and ensure the analyser is kept horizontal.
- The analyser will display the test result on-screen as **positive, negative or invalid**.



An “INVALID” result for a drug does not invalidate the result for the other drugs.

PRINTING RESULTS

IS PRINTING TEST RESULTS REQUIRED?

The results will be stored in the memory and can be printed later if required.

- An option to print will be displayed.
- Ensure that the printer is connected to the analyzer and has been switched on before printing.
- To skip this step, press **no**.



4 - REMOVAL OF THE TEST CARTRIDGE

- Once you have recorded the results, the test cartridge and collector can be removed from the analyser.
- Remove cartridge and collector together.
- Dispose of waste properly.



SOTOXA TEST STEP-BY-STEP

- Operator will explain collection process thoroughly.
- Operator will remove swab from packaging and hand it to the subject.
- **OPERATOR WILL NOT HOLD COLLECTION SWAB DURING COLLECTION PROCESS.**
- Operator will encourage subject to continually move collection swab around inside of the mouth.
- Operator will insert collection swab into cartridge which has already been inserted into the instrument.

SOTOXA RESULTS

Invalids:

- Invalid results can occur for many reasons including insufficient oral fluid, viscous oral fluid, insufficient buffer solution, broken seal for the buffer solution, and the instrument not being level
- As a result, the control line is not produced. If the control line is not detected, the result is invalid
- *If any positives are displayed no follow up is needed. Simply document the results*
- *If some of the drugs are invalid, but the others have results, the drugs with results are still valid*

An “INVALID” result for a drug does not invalidate the result for the other drugs.

INSTRUMENT STORAGE

All instruments will be stored in concurrence with manufacturer's guidelines.

- Immediately report any lost or stolen items
- Do not store instruments or testing test cartridges in extremely hot or cold temperatures
- Same storage guidelines as PBTs and portable evidential instruments
- The instrument must be removed from patrol vehicles at the end of each shift or transferred to another operator
- **Each test cartridge contains a buffer solution which must be protected from freezing and extreme heat**

OPTIMUM TEMPERATURE FOR ANALYSIS

- Sensors within the analyser monitor the temperature of the test cartridge as well as the ambient temperature once the cartridge has been inserted.

AMBIENT TEMPERATURE

- If the analyser detects a temperature outside of the range of 5°C to 35°C (41°F to 95°F), an error code will result.

CARTRIDGE TEMPERATURE

- The analyser will heat the test cartridge to ensure the test runs at the optimum temperature of 35°C (95°F).

PRACTICAL EXERCISE

Each Operator must demonstrate proper coaching and collection of an oral fluid sample with a SoToxa Collector



SOTOXA™ MOBILE TEST SYSTEM

PROBLEM SOLVING

INSTRUMENT ISSUES

- Restart the instrument by turning off then turning back on
- QC Fail: Blow off the QC cartridge of any dust or hair affecting the optical reader, re-run QC Test
- Printer will not print, Turn Off, disconnect and reconnect cable to printer and SoToxa, turn on and attempt to reprint
- If problem persists, contact your agency coordinator

DO'S AND DON'TS...OBSERVATIONS FROM THE FIELD

- Set protocol to charge system weekly – this will prevent the potential for not being able to print test results
 - If printer doesn't have enough power to print, printouts can be retrieved after the printer is fully charged
- Firmly press printer power button to turn on – Solid green light indicates full charge; flashing or no green light indicates printer needs to be charged
- Printer uses Rechargeable Batteries ONLY; do **NOT** put everyday heavy-duty AA alkaline batteries in the printer...serious damage can occur
- Do NOT remove cartridge from SoToxa by pulling the Collector stem. Grab the right corner of the cartridge and remove both the cartridge and collector together; once paired, collector/cartridge should remain paired
- If SoToxa provides an error when downloading the Micro SD Card, ensure that at least one test has been performed on the instruments. An error will result during download when no tests are on instrument

REVIEW OF KEY POINTS

The Instrument should be utilized in the same manner as a PBT, specifically after SFST's or ARIDE tests are administered?

- A) True
- B) False

The background features a dark blue gradient with a pattern of small white stars. Overlaid on this are several technical diagrams, including circular gauges with numerical scales (0, 80, 100, 110, 120, 140, 160, 170, 180, 190, 200, 210) and arrows, and circular flow diagrams with dashed lines and arrows.

The collector SHALL be blue in color to indicate enough oral fluid was collected to run the sample?

A) True

B) False

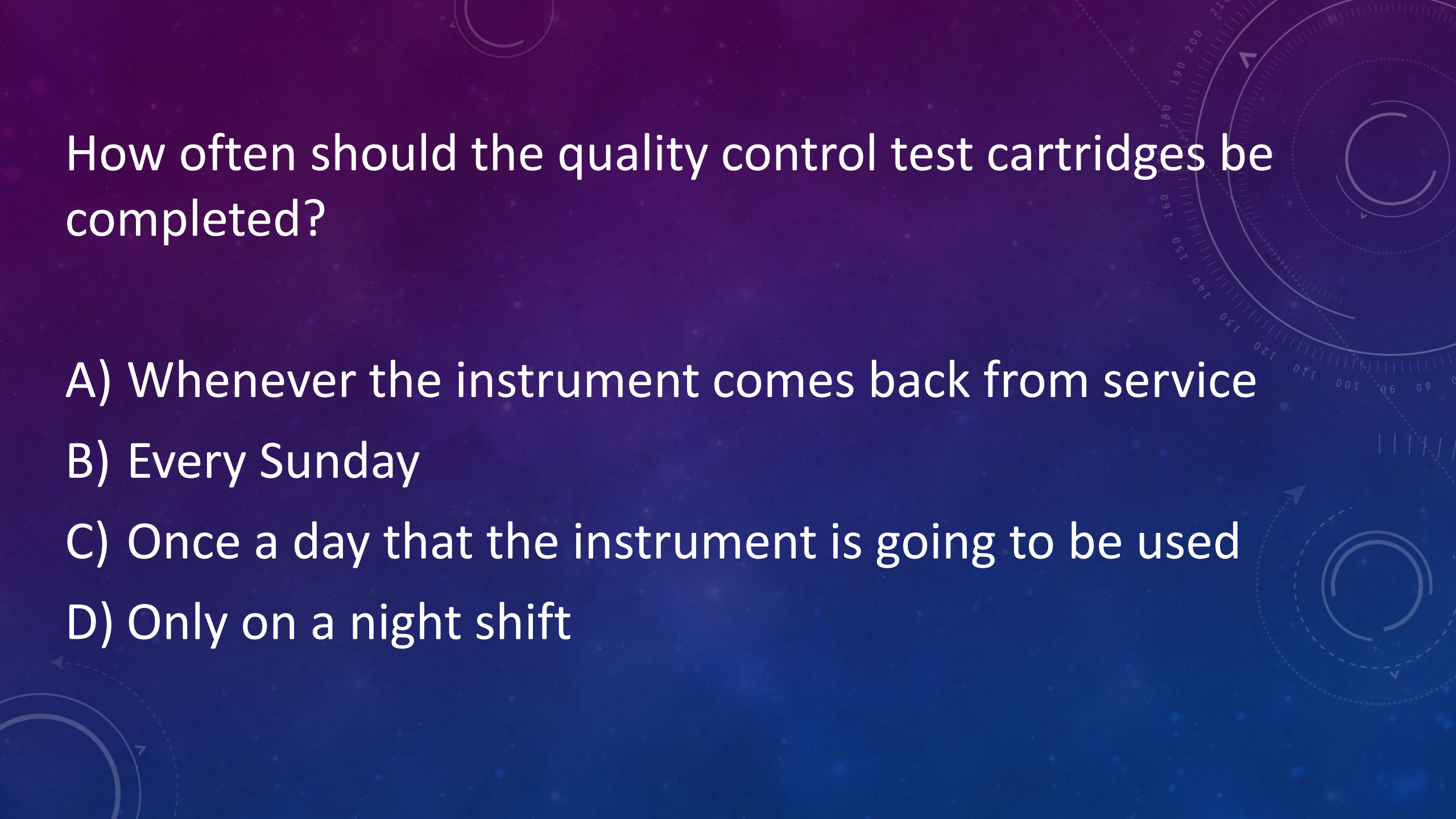
If the collector does not turn blue during the collection?

- A) Coach the subject to continue to collect oral fluid
- B) Encourage the subject to tilt their head down
- C) Run the test anyway
- D) Give them a new collector and start over

The silica gel pack in the cartridge pack should be _____ in color?

A) Green

B) Yellow

The background features a dark blue gradient with a starry space pattern. Overlaid on this are several technical diagrams, including circular gauges with numerical scales (e.g., 100, 110, 120, 130, 140, 150, 160, 180, 190, 200) and arrows, suggesting a scientific or engineering context.

How often should the quality control test cartridges be completed?

- A) Whenever the instrument comes back from service
- B) Every Sunday
- C) Once a day that the instrument is going to be used
- D) Only on a night shift

What is the purpose of running the NQC and PQC cartridges?

- A) To be a nuisance to the operator
- B) To ensure the instrument can interpret negative and positive test results
- C) To make sure the instrument is turned on
- D) To test for cocaine only

How is the printer battery charged?

- A) By plugging the printer into the instrument while the instrument is connected to a power supply
- B) With six D cell batteries
- C) With AAA rechargeable batteries
- D) With a cell phone charger

How should the oral fluid sample be collected?

A) The officer should swab all around their mouth

B) The officer should swab all around the suspects' mouth

C) The subject should actively swab around their mouth to include under the tongue

D) With a warrant after the blood draw is complete

How should the cartridge be removed from the instrument?

A) Yanking on the collector

B) With evidence gloves as to not contaminate the evidence

C) With pliers

D) By grabbing the cartridge firmly at the ridges and pulling out of the instrument gently

The collector should be inserted into the cartridge *AFTER* the cartridge has been inserted into the instrument.

- A) True
- B) False

Which drugs will the instrument test for?

- A) Amphetamines
- B) Methamphetamines
- C) Cocaine
- D) Opiates (natural)
- E) THC (Cannabis)
- F) Benzodiazepines

The instrument will collect data for thousands of tests to be downloaded at another time.

A) True

B) False

How is impairment determined?

- A) The instrument will notify you when someone is impaired
- B) By blood draw only
- C) By breath test only
- D) By administering standardized field sobriety tests, ARIDE tests, utilization of the Three Phases of Detection

Need assistance or have questions?

Contact our team

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[HTTPS://WWW.INTOX.COM/PRODUCT/SOTOX
A-MOBILE-TEST-SYSTEM/](https://www.intox.com/product/sotox-a-mobile-test-system/)

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