MiBX SOLUTIONS

PATENT PENDING

FuelX

SECOND GENERATION ATP

COMPLETE SYSTEM FOR UP TO 3 FUEL TESTS

ASTM-D7687 COMPLIANT

ATP Express

Advanced ATP Test System

Guided Test Procedure

swipe to proceed…

MiBX SOLUTIONS

ATPX3GP-GuidedTest-vAA

MiBX SOLUTIONS PATENT PENDING

FuelX

SECOND GENERATION ATP

COMPLETE SYSTEM FOR UP TO 3 FUEL TESTS

ASTM-D7687 COMPLIANT

ATP Express

Guided Test Procedure

This is an interactive, guided, Step-By-Step instruction manual that will guide you through the use of the **FuelX ATP*Express* GP Series** microbial fuel-test system

Are you ready to begin ?

Swipe Left or Right to step Forward or Backwards through the procedure.

(you can also use the navigation arrows and/or simply click the image if you only need to move forward)

To return to the main Product Resource page, click the button below, or use the ← ‘Back’ button on your browser.

MiBX SOLUTIONS

SECTION-1

Introducing the ATP*Express* Test System.

Sample-Collection Tube Module (x3)

These modules contain all of the components that are needed to collect, and process a fuel or fuel/water sample.

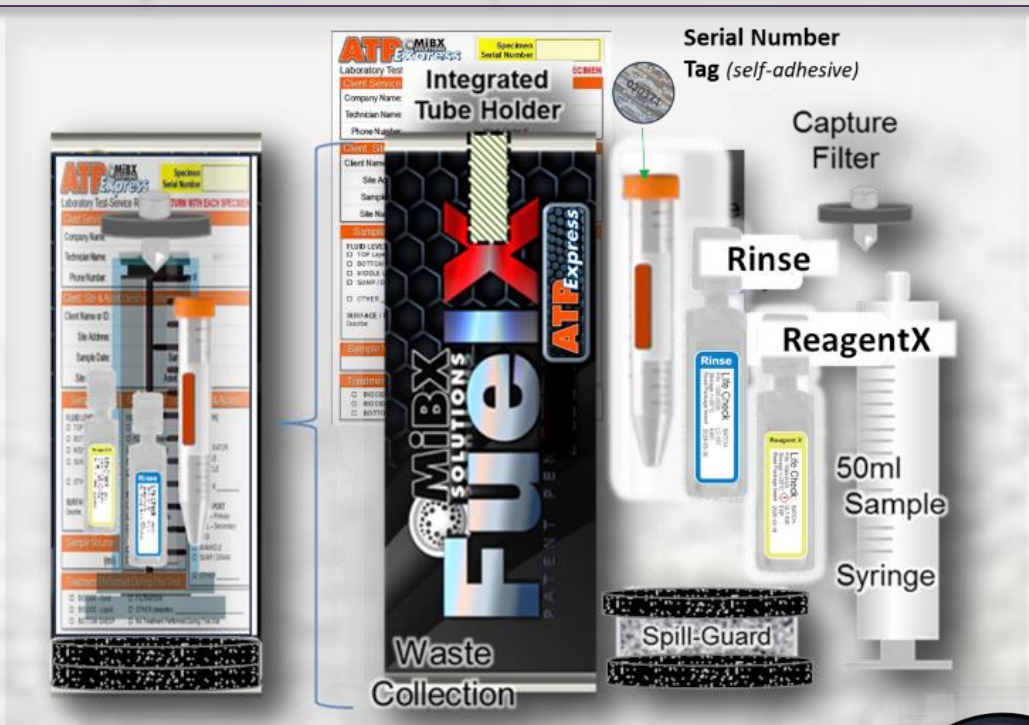
Three complete modules are included and can be used independently or as a group as needed for your particular site-under-test, installation or other testing needs.

Specimen Transport Pack

This module contains everything that you need to pack and Xpress-mail your Sample-Specimens to the laboratory of your choice, or to the nearest MiBX Authorized Laboratory for final ATP Analysis.

SECTION-1.1

ATP-Express Sample Collection Detail



ATP Express

MiBX SOLUTIONS FuelX AVIATION SERIES

Sample-Collection Tube Module

Each module contains all of the components that you need to collect, and process a fuel sample, including:

- ✓ 50ml/60ml Fuel Sample Collection Syringe
- ✓ Microbe Capture Filter
- ✓ Serial-Numbered Specimen Capture Tube
- ✓ Microbe Rinse & Purification Fluid
- ✓ Microbe Extract & Suspend Fluid: ReagentX
- ✓ Laboratory Test-Request & Information card

The FuelX Tube itself is part of the test-system and is designed so that it can be used as a workstation. In addition, the tube can capture & contain all liquid & solid waste – enabling more convenient and proper disposal procedures of such wastes.

If you are going into the field to collect a sample, you only need to bring one Tube Module per test with you. The **Fuel*Xpress* Transport Pack** can then be packed & shipped when, and where, it is most convenient for you.

SECTION-1.2

ATP*Express* Transport Pack Detail

Return Shipping Box, Courier Envelope, and pre-paid shipping label(s)*

ATP Express

Sample Express-Mail Pack

This module contains all of the components that you need in order to package and ship from one to three specimen samples, including:

- ✓ Return Shipping Box
- ✓ Pre-Paid Shipping Label(s)*
- ✓ Express Mail-Pack Courier Envelope (shipping-carrier specific)

* Various shipping label arrangements are supported. Check your kit for the contents and/or additional instructions

MiBX SOLUTIONS FuelX AVIATION SERIES ATP Express

ATP Express

SAMPLE COLLECTION PROCEDURE

MiBX SOLUTIONS

SECTION-2

The Sample Collection & Processing

The Procedure Summary:

Here is what we are going to do…

(2.0) **Un-Pack** the FuelX Tube Components

(2.1) **Collect** a Fuel Sample from the Asset

(2.2) **Capture** all Microbes from the Fuel Sample

(2.3) **Rinse & Purify** the Captured Microbes

(2.4) **Extract & Preserve** the Microbes

(2.5) **Label, Pack & Ship** the Specimen

(2.6) **Cleanup** Workspace & Component Disposal

(2.7) **Getting Laboratory Analysis Results**

SECTION-2

Unpack the FuelX Tube Module

1. Remove the plastic Top-Cap from the FuelX Tube Module, and take out the contents.

NOTE: DO NOT Remove the metal Bottom-Cap, or the nano-carbon discs from inside the tube.

ATP Express

Capture Filter

Specimen Tube

Lab Test-Request Card

Purify

Extract

50ml Sample Syringe

2. Replace the plastic Top-Cap

3. Ready to Proceed!

MiBX SOLUTIONS
FuelX
SECOND GENERATION ATP
COMPLETE SYSTEM FOR UP TO 3 FUEL TESTS
ATP Express

SECTION-2.1

Collect a Fuel Sample

1. Using the proper tools and procedures as specified by your equipment manufacturer, access each sample port and collect a separate sample of at least **500 ml from each location.**

Collect this sample into a clean container that is suitable and compatible with your fuel-type, and large enough to avoid spilling fuel.

Take a close look at your fluid sample, while you go to the next steps…

MiBX SOLUTIONS
FuelX
SECOND GENERATION ATP
COMPLETE SYSTEM FOR UP TO 3 FUEL TESTS
ATP Express

SECTION-2.1

Collect a Fuel Sample

Examine Your Fuel Sample

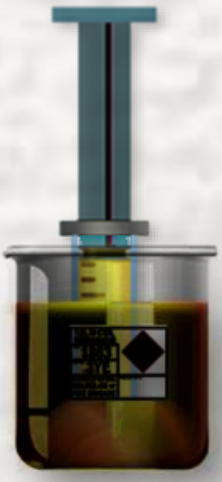
The Sample is Bright & Clear

Draw 50ml of fluid from near the bottom of your sample.

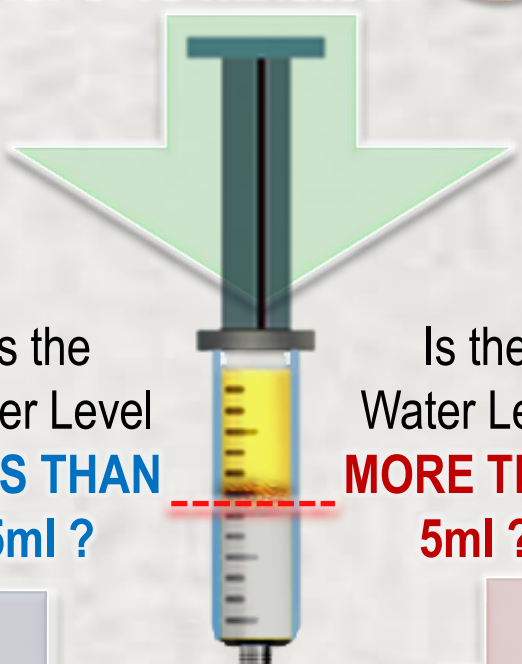
Go To **Fuel Test F1**

The Sample is Dark & Cloudy

Draw 50ml of fluid from the bottom of your sample



Allow the fluid sample to settle for 5-10 minutes.



Is the Water Level **LESS THAN 5ml ?**

Is the Water Level **MORE THAN 5ml ?**

Go To **Fuel Test F2**

SECTION-2.2

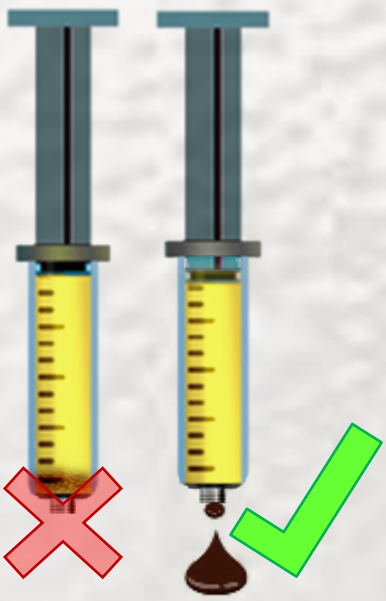
Capture Microbes from the Fuel

Pro-Tips

Before going forward with the procedure, here are a few tips to help you get the best results.

Pro-Tip #1

Check to see if you notice any heavy sediment settling at the bottom of the Sample Syringe. If you DO see some sediment collecting, bump-down the plunger slightly a few time to push out the sediment **BEFORE** attaching the filter. Then, continue with the appropriate procedure bellow.

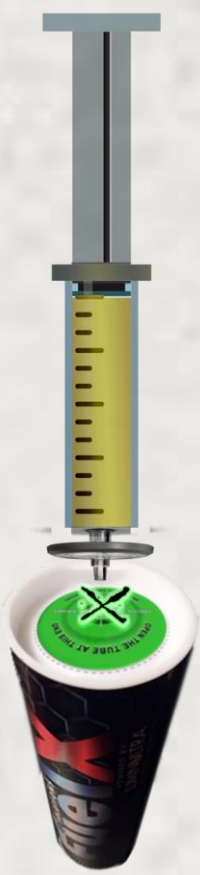


Pro-Tip #2

The FuelX tube is designed to hold the Capture-Filter during the procedure, and to to safely catch all pass-through fluids.

Place the exit tip of the Capture Filter against the FuelX Tube top-cap center and push down to perforate the green seal-decal.

You can now push down against the FuelX Tube and allow the fluids to pass-through the Capture Filter to be retained within the FuelX Tube itself for later disposal



SECTION-2.2

Capture Microbes from the Fuel

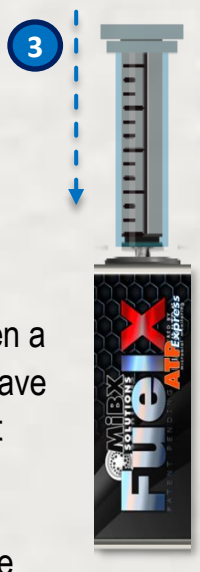
Fuel Test F1

For Clean & Clear Fluid Samples,
or Water Content LESS THAN 5ml.

1. Screw the Capture-Filter firmly onto the end of the Sample Syringe

2. Place the Sample Syringe on top of the FuelX Tube – to prepare for microbe capture.

3. Firmly push the syringe plunger down to push all 50ml of the fuel-sample though the Capture Filter. Allow the FuelX Tube to capture the pass-through waste.



NOTE: Sometime even a clean-looking sample can have small suspended solids that clog the Capture Filter.

If you cannot push the entire 50ml of fluid through the filter, push as much as you reasonably can.

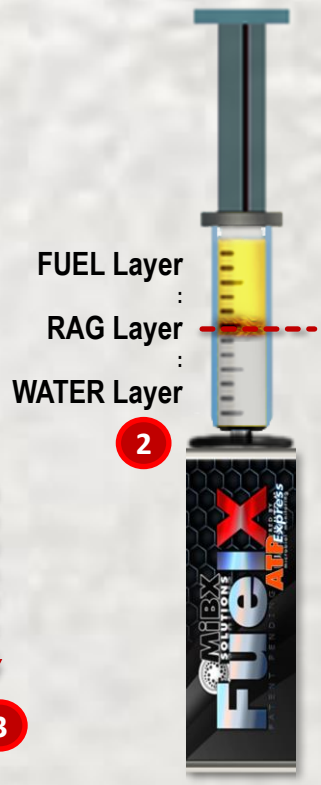
Take note of the EXACT amount that was pushed through the Capture Filter so that it can be recorded later in the procedure.

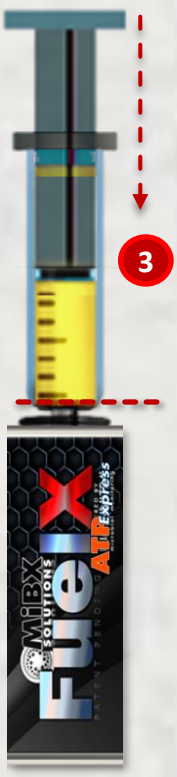
Fuel Test F2

For Fluid Samples with Contaminants
or Water-Content GREATER THAN 5ml.

1. Screw the Capture-Filter firmly onto the end of the Sample Syringe

2. Place the Sample Syringe on top of the FuelX Tube – to prepare for microbe capture.



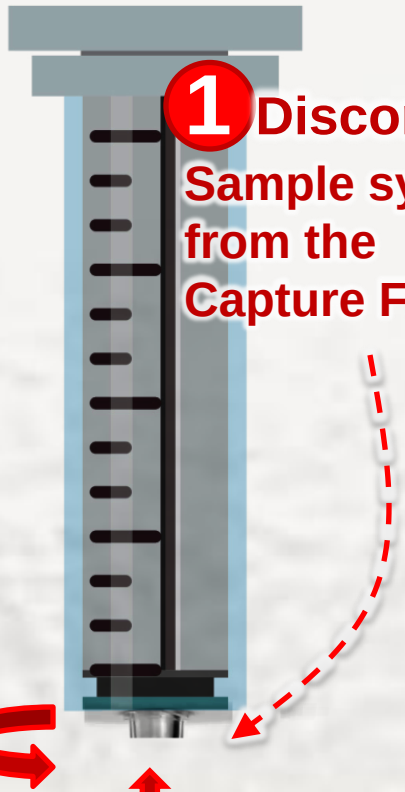


3. Firmly push the syringe plunger down to push all of the WATER Layer AND the RAG Layer (if possible) though the Capture Filter. Allow the FuelX Tube to capture the pass-through waste.

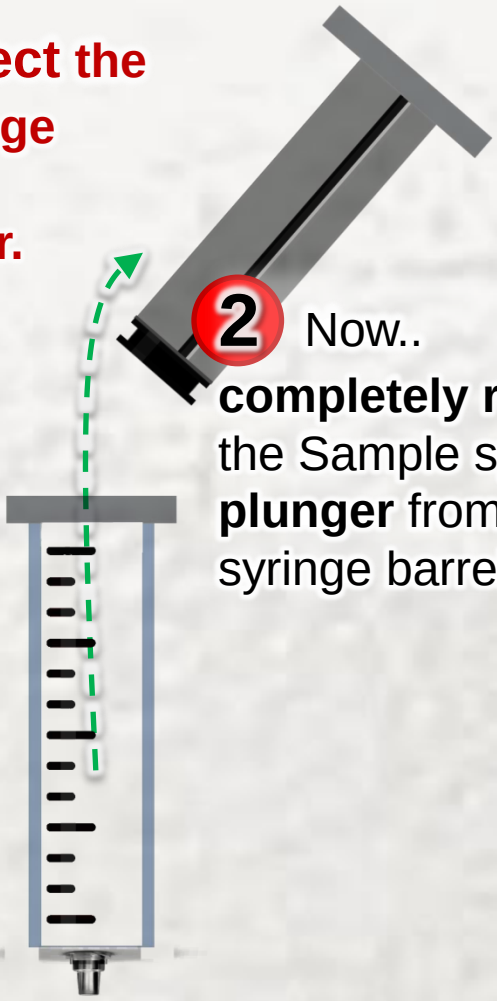
Take note of the EXACT amount that was pushed through the Capture Filter so that it can be recorded later in the procedure.

SECTION-2.2.1

Reset for the Next Step: PURIFY



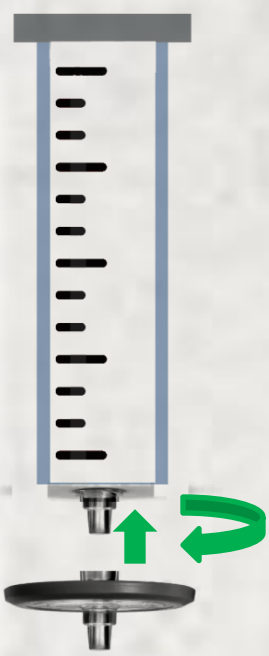
1 **Disconnect the Sample syringe from the Capture Filter.**



2 Now.. **completely remove** the Sample syringe **plunger** from the syringe barrel.

Your microbes are now Captured here !

3. **With the Sample syringe plunger still removed**, take the Capture Filter from the top-cap of the FuelX tube, and re-attach it to the Sample syringe barrel.

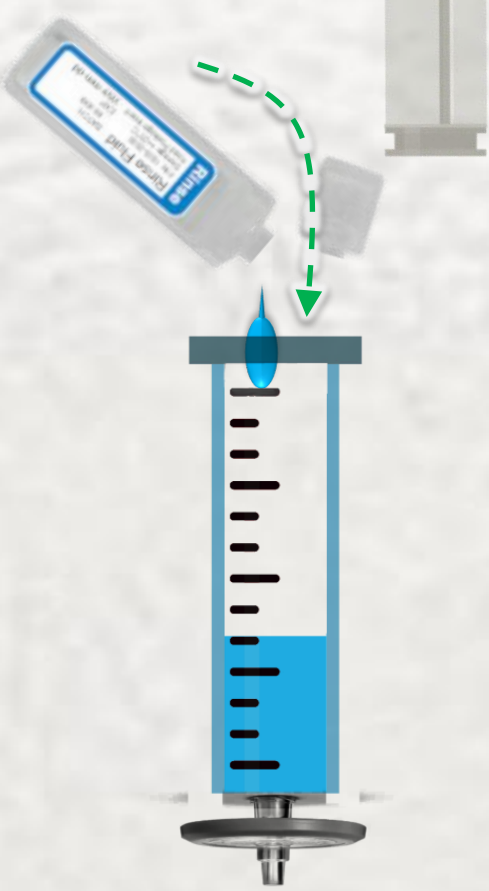


SECTION-2.3

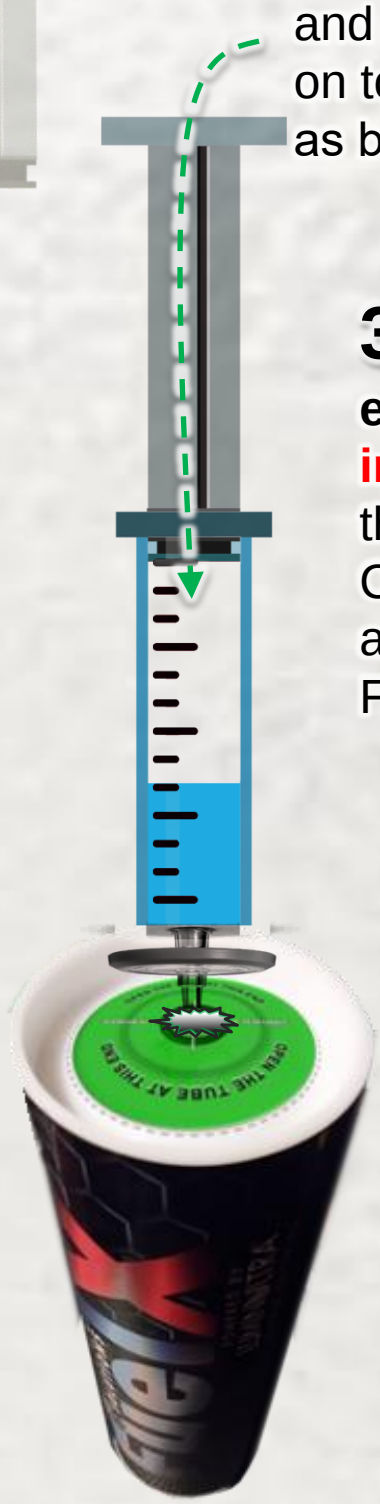
PURIFY & DRY the Captured Microbes

1. With the Sample Syringe plunger **still removed** (from previous step), locate the **BLUE label Rinse Fluid** from the FuelX tube components.

Uncap it, and pour the **entire contents** into the syringe barrel.



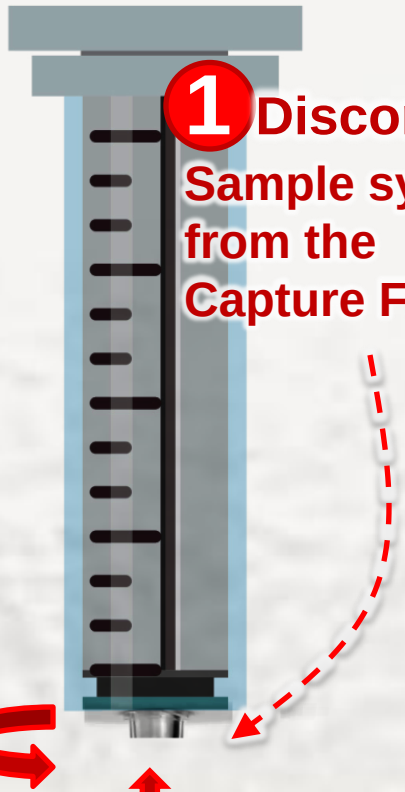
2. Now, Insert the Sample Syringe plunger, and position the assembly on top of the FuelX tube as before, and….



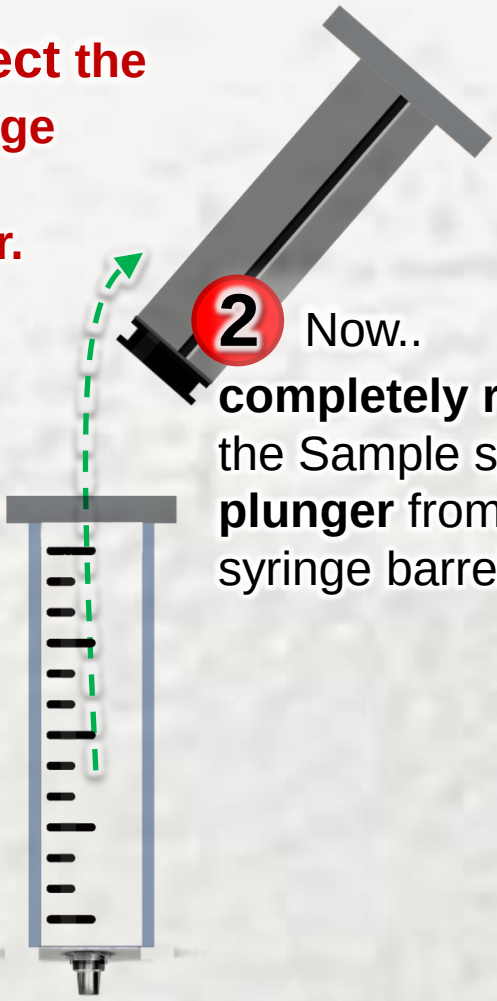
3. Push the **entire contents including all air,** through the Capture Filter, and into the FuelX tube.

SECTION-2.3.1

Reset for the Next Step: EXTRACT



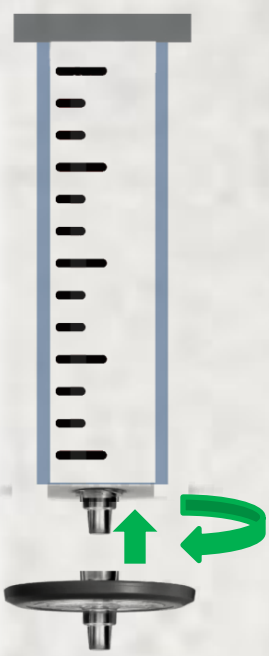
1 **Disconnect the Sample syringe from the Capture Filter.**



2 Now.. **completely remove** the Sample syringe **plunger** from the syringe barrel.

Your microbes are still Captured here !

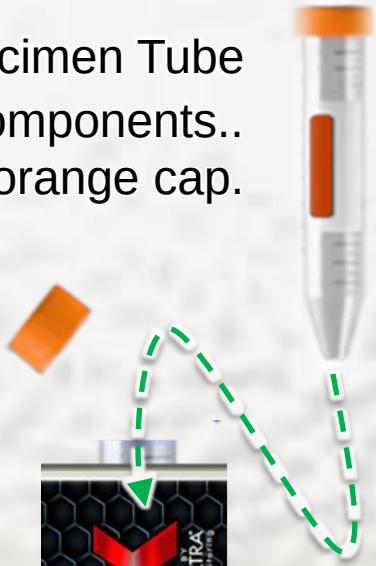
3. With the Sample syringe plunger still removed, take the Capture Filter from the top-cap of the FuelX tube, and re-attach it to the Sample syringe barrel.



SECTION-2.4

Prep: Extract & Preserve the Microbes

1. Locate the **ORANGE cap** Specimen Tube that was included in the FuelX Tube components.. Completely remove the orange cap.



Tip: Keep the cap close-by!

. . .we will need it soon to reseal the Specimen Tube

2. Insert the Specimen Tube into the FuelX Tube-Top to hold your Specimen Tube during the next steps.

3. Locate the **YELLOW label** **ReagentX** Extraction fluid vial from the FuelX Tube components.

4. With the Sample Syringe plunger **still removed** (from previous step), and the Capture Filter re-attached, un-cap the **ReagentX** and pour the **entire contents** into the syringe.

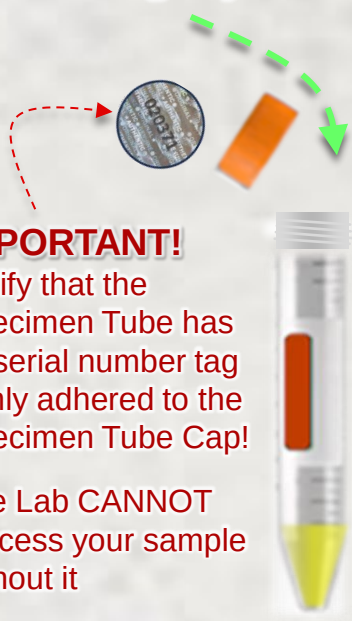
SECTION-2.4.1

Go! Extract & Preserve the Microbes

1. While holding the Sample Syringe and Capture Filter assembly above the Sample Cup, carefully Re-Insert the Sample Syringe plunger

2. Push the **entire contents including all air** of the Sample Syringe including the air through the capture Filter and into the Specimen Tube

3. Replace the orange cap of the Specimen Tube and make sure that it is closed tightly



IMPORTANT!
Verify that the Specimen Tube has its serial number tag firmly adhered to the Specimen Tube Cap!

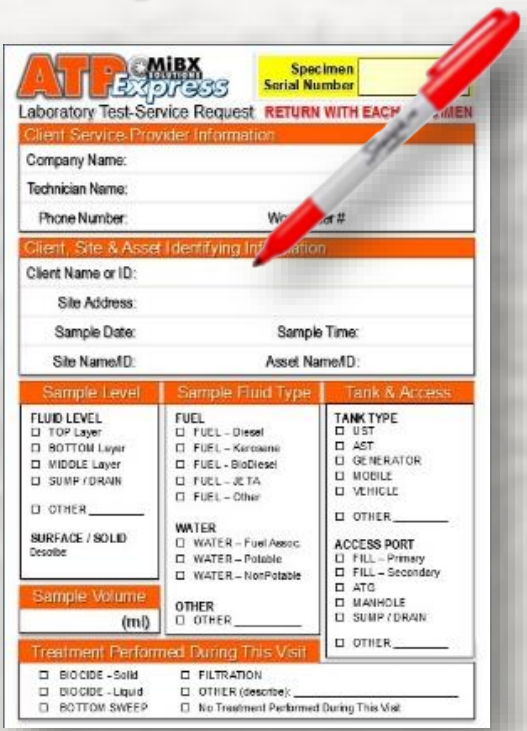
The Lab CANNOT process your sample without it

SECTION-2.5

Label & Pack the Microbe Samples

The Extracted & Captured microbes are now safely in the Specimen Tube and ready for testing at the Analysis Lab !

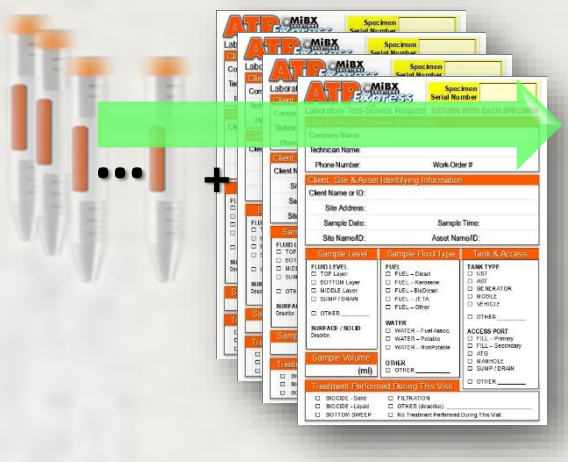
1. Complete the "Laboratory Test-Request" card that was included in the FuelX Tube.



IMPORTANT!

Be sure to complete a separate Lab Test-Request card for each and every specimen that you have prepared and will send to the laboratory for analysis.

2. Complete a Lab Test-Request card for all of your remaining fuel samples. Place the Specimen Tubes, along with their completed test-request card, in the FuelX Specimen Transport Pack for return shipment. You can include as many Specimen Tubes in the Transport Pack box as you can fit (generally 1-6 specimens will easily fit)



MiBX SOLUTIONS FuelXpress SPECIMEN TRANSPORT PACK

Congratulations!

Sample Collection & Processing is now complete!

Repeat the procedure for each of the systems, sites, and/or assets that are in need of ATP microbial testing.

OR... If you have all of your samples prepared and packed, you can now drop-off the FuelXpress Transport Pack for immediate shipping to the lab for final ATP analysis.

SECTION-2.6

Clean-Up the Workspace & Disposables

Whether using the FuelX tube for waste containment, or not…Always dispose of any liquid & solid waste in a responsible manner, and in compliance with environmental regulations and company requirements.

MiBX SOLUTIONS
FuelX
SECOND GENERATION ATP
COMPLETE SYSTEM FOR UP TO 3 FUEL TESTS
ASTM-D7687 COMPLIANT
ATP Express

Advanced ATP

SAMPLE ANALYSIS RESULTS

SECTION-2.7

Getting the Laboratory Analysis Results

ATP Express

Your Preferred Laboratory

MiBX SOLUTIONS

MBX LabServices

Your laboratory ATP Analysis results will be made available to you through our encrypted & secured web-based **Private Client Portal.**

This Client Portal can be configured as needed in order that you can receive test results & reports in specific formats, and to specific Team members.

Your **MiBX Solutions Representative** will provide detailed information & training to setup and access your Private Client Portal.

MiBX SOLUTIONS

END of GUIDE

Thank you for using FuelX!

Join Our User-Group Live-Chat Hotline on Telegram

t.me/FuelXperts

Main Website:
https://MiBXSolutions.com