





Shell Water Detector

Procedure in 8 basic Steps




1 **Check the equipment**

- Detector capsule: examine the bottom of the tube to ensure the capsules have not passed their expiry date.
- 5 ml syringe (0.2 fl oz) – the syringe operates freely and the nozzle is not damaged
- Glass jar or closed circuit sample: ensure the sample jar is clean and free from water



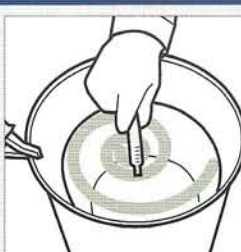
2 **Fit the capsule**

- Remove a capsule from the tube. Handle carefully and do not touch or allow any moisture onto the yellow paper of the capsule
- Close the tube to avoid contamination of other capsules at ambient humidity.
- Check that paper is uniformly yellow, if it is not, discard and use another capsule
- Fit the capsule to the syringe with the plunger in the depressed position



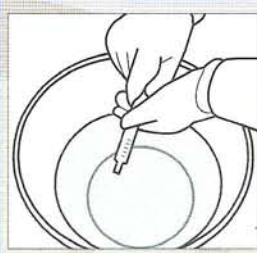
3 **Draw a sample**

- Use the sample from the visual check you have just completed
- If you do not already have the sample, follow the task breakdown procedures from the Visual Clear and Bright Procedure



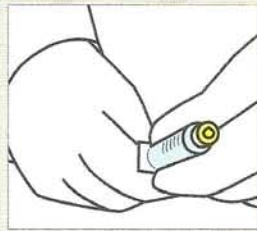
4 **Immerse the capsule in the sample**

- Immerse the capsule and approximately half of the syringe using a circular motion into the sample
- Ensure you are using gloves that are impervious to fuel



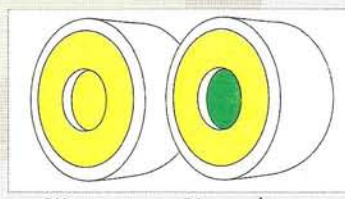
5 **Extract sample**

- Pull the plunger to draw 5 ml of fuel sample into the syringe



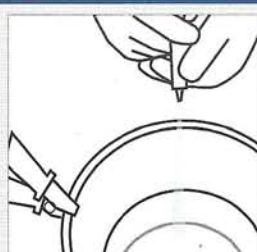
6 **Withdraw the syringe & examine**

- Withdraw the syringe from the fuel and examine the capsule immediately for any change of color in the centre wetted area of the capsule



7 **Results**

- If there is no color change, the sample is acceptable
- The color of the centre can change to slight yellow/green at very low dispersed water concentrations with the change to green becoming progressively more noticeable with increasing water content
- A few green speckles or a slight change in color would be recorder as a "trace", a distinct color change would be recorder as "suspended water".
- If there is any color change in the capsule, re-sample and re-test until a negative water result is obtained.



8 **After sampling**

- Dispose of the used capsule safely. It can only be used ONCE.
- Empty the contents of the syringe back into the sample container and return into recovery tank
- Complete the documentation