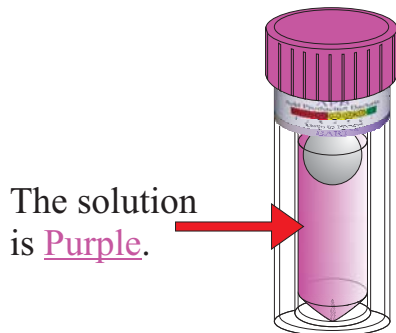


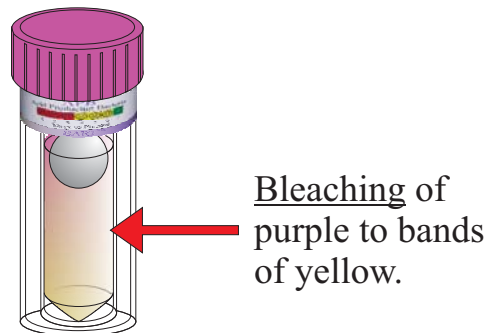
# BART™ TEST FOR APB ACID PRODUCING BACTERIA

**Present/Absent - observe daily for 8 days.**

**ABSENT**  
(Negative - Non-aggressive)



**PRESENT**  
(Positive - Aggressive)



1. View test each day for 8 days.
2. Observe for a discolored yellow color in the lower section of test vial.
3. Aggressivity can be determined using the chart below.

\*Note: Refer to page bottom for approximate population

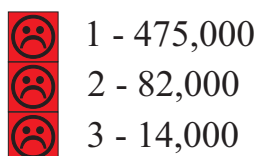
## Advanced test information.

Dominant Bacteria - gRAM negative fermenting bacteria.

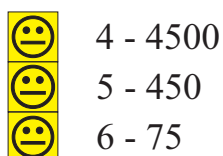


Determination of Potential APB Population - observe daily for reaction.

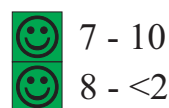
Days to reaction - Approximate APB Population (cfu/mL)



Aggressive



Moderate

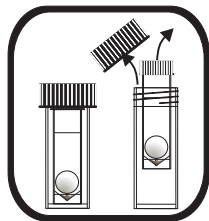


Not Aggressive

# APB-BART™

For water and wastewater

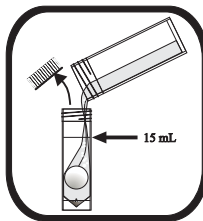
Acid producing bacteria (APB) are formed by a variety of heterotrophic bacteria that share the common ability to produce organic acidic products when growing under reductive conditions. These APB cause the pH to drop significantly from neutral to acidic conditions ranging from terminal pH levels from 3.5 to 5.5. These mildly acidic conditions are sufficiently corrosive to be significant to the integrity of any metallic structure. Because of these acid-producing activities occur in the absence of oxygen, it has been found that the APB are very likely to be significant partners in corrosion associated with the sulfate reducing bacteria (SRB) particularly in the oil and gas industry. As a result the management and control of corrosion frequently involves assessing the aggressivity of both the APB as well as the well-recognized SRB.



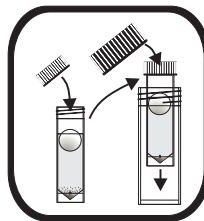
1. Remove the inner tube from the outer tube.



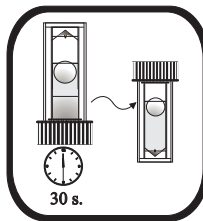
2. Using the outer tube from the BART, or a different sterile container, collect at least 20 mL of sample.  
*Note: Do not touch or contaminate the inside of the tube or lid. Use aseptic technique.*



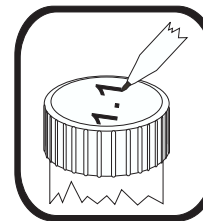
3. Fill the inner tube with sample until the level reaches the fill line.  
*Note: After removing the cap from the inner tube, set it down directly on a clean surface. To avoid contamination, do not invert the cap.*



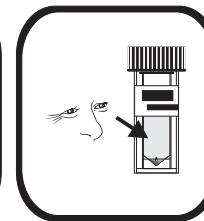
4. Tightly screw the cap back on the inner tube. Return the inner tube to the outer tube and screw the outer cap on tightly. Allow the medium to dissolve slowly, and the ball to rise at its own speed. **DO NOT SHAKE OR SWIRL THE TUBE.**



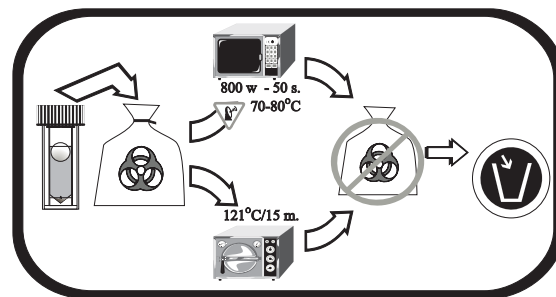
5. Invert tube for 30 seconds to dissolve the dye under the cap. Set tube upright for media to dissolve slowly.



6. Label the outer tube with the date and sample origin.



7. Place the BART tube away from direct sunlight and allow to incubate at room temperature. Check the BART visually for reaction daily.



8. Safely dispose using a dedicated microwave oven or by autoclave.

## Certificate of Analysis

This certificate confirms that the BART™ product listed by name, lot number, and batch number has been subjected to the full range of Quality Control procedures as outlined in "User Quality Control Manual in support of the BART Biodetection Technologies" published in 2004 by Droycon Bioconcepts Inc.

BART™ Type: APB-BART

Batch #:

Release date\*:

Lot#:

Shipment date:

Expiry date:

\* Approval for release includes the following criteria: 1. confirmation of sterility for the vials and caps, 2. approval of the medium as being appropriately formed and acceptable, 3. is sterile, and 4. responds in a typical way to inoculation and incubation using selected defined microbial cultures. Details of these criteria are included in our Web Site.

This certificate confirms that the batch of the BART™ biodetectors listed have satisfactorily passed the QC screening procedures and were approved for release on the date given above

*Certificate Number:*

This certificate was issued by Droycon Bioconcepts Inc., 315 Dewdney Ave., Regina, SK., Canada, S4N 0E7 as an assurance that the product listed above has passed through the quality control procedures considered essential to the successful use of the testing device.