# LAB-BART TEST FOR DN DENITRIFYING BACTERIA

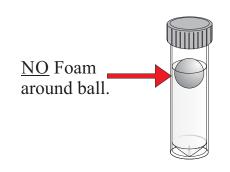
Present/Absent - observe daily for 4 days.

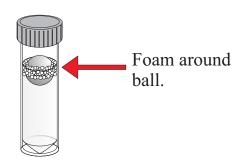
#### **ABSENT**

(Negative - Non-aggressive)

### **PRESENT**

(Positive - Aggressive)

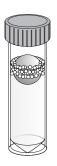




- 1. View test each day for 4 days.
- 2. Observe for foam around ball.
- 3. Compare with descriptions below.

\*Note: Refer to page bottom for approximate population

#### Advanced test information.



Determination of Dominant Bacteria

FOAM around ball (**FO**) - Denitrifying Bacteria.

Determination of Potential DN Population - observe daily for reaction.

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



1 - 1,800,000

2 - 215,000



3 - 25,000

4 - 3000



5 - 350

6 - <50

Aggressive

Moderate

Not Aggressive

#### **DN-BART**<sup>TM</sup>

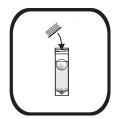
For water and wastewater

Denitrifying bacteria indicate the decomposition of waste organic nitrogenous materials. These bacteria reduce nitrate to nitrite and some continue nitrification to gaseous nitrogen (complete denitrification). In water, aggressive denitrifiers can indicate high concentrations of nitrates, and that the sample is probably anaerobic and relatively rich in organic matter. The presence of denitrifying bacteria can indicate that the water has been polluted by nitrogen-rich organics from sources such as compromised septic tanks, sewage systems, industrial and hazardous waste sites. If highly aggressive bacteria are detected, the water should be tested for the presence of coliform bacteria.

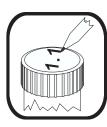


1. Aeseptically pipette 15 ml of sample into the inner tube until the level reaches the fill line.

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.



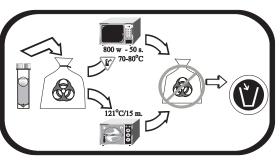
2. Tightly screw the cap back on the inner tube. Allow the ball to rise at its own. DO NOT SHAKE OR SWIRL THE TUBE.



3. Label the inner tube with the date and sample origin.



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



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

## Certificate of Analysis

This certificate confirms that the BART<sup>™</sup> 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<sup>TM</sup> Type: DN-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 $^{\text{TM}}$  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.

