

## Major Concerns With MIC

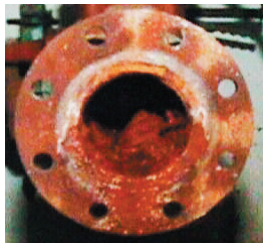


- tubercles formation
- nodules formation
- bioconcretions
- pitting
- embrittlement
- premature failure
- reducing production
- catastrophic failure



### Distribution Lines can:

- plug
- reduce flow
- corrode



### Corrosion causes:

- capital costs to replace failed equipment
- scale build up in pipes
- operational challenges
- accelerating operating costs

## Available in a MIC Combo box consisting of:

- 2 SRB-BARTs
- 2 APB-BARTs
- 2 HAB-BARTs
- 2 SLYM-BARTs
- 2 IRB-BARTs



BART™ testers are patented products manufactured by:

Droycon Bioconcepts Inc.  
315 Dewdney Ave.  
Regina, Saskatchewan, Canada  
S4N 0E7

Phone: (306) 585-1762  
Fax: (306) 585-3000  
E-Mail: [sales@DBI.ca](mailto:sales@DBI.ca)  
WWW: <http://www.DBI.ca>  
U.S. Patent #4,906,566



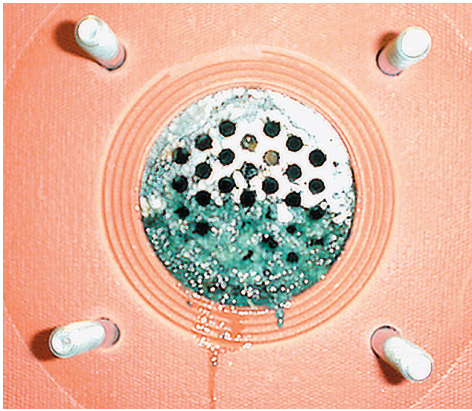
**DBI**  
Droycon Bioconcepts Inc.

**BART™**  
Biological  
Activity  
Reaction  
Tests

A simple yet effective method for monitoring the population size and/or activity of specific groups of bacteria.

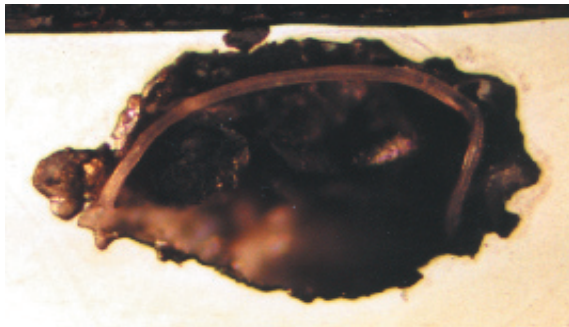


**MIC**  
**Microbiologically**  
**Induced**  
**Corrosion**



### Common Experiences:

- lost production capacity
- extensive slime growth
- formation of plugs
- odors
- pump failures

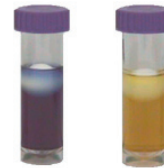


Cavity in an 8mm stainless steel pipe.

- EASY TO READ
- CAN DO THE TESTS IN THE FIELD
- GIVES BACTERIAL AGGRESSIVITY



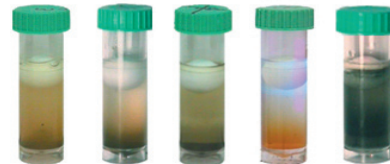
SRB - H<sub>2</sub>S corrosion



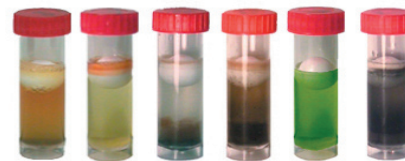
APB - organic acid production



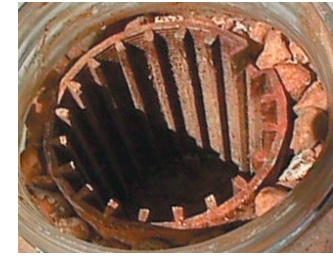
HAB - ORP condition



SLYM - slime and sludges



IRB - plugging lines



### Understanding Microbially Induced Corrosion Problems

Corrosion is more common under reductive conditions where sulfates are present (generating hydrogen sulfide) and organics are present (generating acids). Under oxidative conditioning sulfide and sulfur can be oxidized to sulfuric acid which can also be corrosive. Cathodic protection functions partly by preventing microbial activity.



### Corrosion Causes:

- Drill through the Steels electrically
- Dissolves the Steels acidically
- Pits the Steels dramatically
- Splits the Steels rapidly
- Weakens the Steels for Failure