Sulphate Reducing Bacteria Test

The Sulphate Reducing Bacteria (SRB) test is designed to assess the contamination of water samples with sulphate reducing bacteria. The test contains a straw coloured medium which reacts to the production of hydrogen sulphide to give a semi-quantitative result after 5 days. The SRB test is used specifically to indicate the presence of bacteria, which under the correct conditions, are able to produce hydrogen sulphide. Hydrogen sulphide is a colourless gas which is extremely corrosive to ferrous and no ferrous metals. This can lead to holes in water systems and leaks in tankers by dissolving the surrounding metal.

SAMPLING

Pipette 2ml of the sample into the tube and immediately replace cap and place upright in incubation. For testing corrosion pits swab them with a sterile swap, pierce the gel with the swab and place into incubation. Contamination is defined by blackening around the swab.

INCUBATION

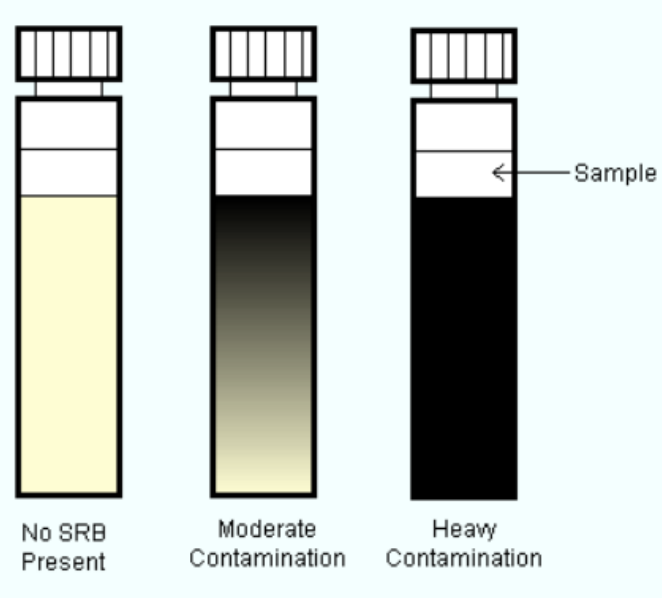
Incubate at 35oC for up to 5 Days, check daily to determine the level of contamination. DISPOSAL Used tests should be incinerated or autoclaved. Alternatively, open and immerse in a 10% bleach solution for 24 hours.

CLASSIFICATION OF RESULTS

Results are determined by the spreading black precipitation from the inoculation point though the agar. When testing samples already high in sulphide there may be a sudden blackening and of the medium, in which case, contamination can be judged by the advancement of the blackening further into the medium.

	Days in Incubation						
% Blackening		0	1	2	3	4	5
	20	10^6	10^5	10^4	10^3	10^3	10^2
	40	10^6	10^6	10^5	10^4	10^4	10^3
	60	10^6	10^6	10^6	10^4	10^4	10^3
	80	10^6	10^6	10^6	10^5	10^4	10^4
	100	10^6	10^6	10^6	10^5	10^4	10^4

Bacterial counts in CFUs/ml



Please note – it is difficult to assess the absolute number and nature of contamination and corrosion using a single test. The validity of the sample and the sample point can affect the test results obtained. We can accept no liability on any action taken as a consequence of the information gained through the use of these tests. All accompanying information provided is in good faith and based on the experience of the manufacturers in the water treatment industry.