



TEST REPORT

Report No: AWRCL/PRTR/ 11055 /16-17

Date : 17.11.2016

CUSTOMER DETAILS	SAMPLE DETAILS	TEST DETAILS
Name & Address : Mr. ASHOK M/s YORK BIOSCIENCES CHENNAI	Sample received: 24.10.2016	Method: As agreed between the testing Laboratory and the Customer. Protocol: Standard Methods
	Sample code no:-AWRCL/11055 /16-17	
	Sample Description: AQSOL-BENQUAT.	
	Sample Quantity for Testing : 500 ml	
	Submitted by : M/s YORK BIOSCIENCES	
	Date of Analysis started : 07.11.2016	
	Date of Analysis Completed : 17.11.2016	
	Subcontract : Not Applicable	
Sample condition when received : Intact		


TEST DATA : MICROBIAL REDUCTION - FLAT SURFACE ASSAY : At room temperature 24 - 26 °C, Dilution of the Liquid : 10 ml dissolved in 200 ml of sterile DM water. Inhibitory zone was tested by AGAR WELL DIFFUSION METHOD.

SAMPLE CODE No & CUSTOMER CODE	TESTED MICROORGANISM & RESULT				
	Name of the Microorganism	Presence of Inhibitory Zone by Agar well method	REDUCTION TEST		
Microbial counts Before treatment			Microbial counts After treatment for 5min.	% Reduction	
AWRCL/11055/ 16-17 AQSOL - LIQUID	BACTERIA				
	E.Coli MTCC68	Clear Zone	6x10 ⁵ cfu/ml	2x10 ² cfu/ml	99.96
	Klebsiella terrigena MTCC2271	Clear Zone	8X10 ⁵ cfu/ml	1x10 ² CFU/ml	99.98
	Salmonella typhimurium MTCC 98	Clear Zone	8x10 ⁵ cfu/ml	4x10 ² Cfu /ml	99.95
	Shigella flexneri MTCC1457	Clear Zone	4x10 ⁵ cfu/ml	4x10 ² cfu /ml	99.90
	Pseudomonas aeruginosa MTCC424	Clear Zone	6x10 ⁵ cfu/ml	1x10 ² cfu/ml	99.99
	Enterococcus faecalisMTCC439	Clear Zone	4x10 ⁵ cfu/ml	2x10 ² cfu /ml	99.95
	Staphylococcus aureus MTCC87	Clear Zone	3x10 ⁵ cfu/ml	2x10 ³ cfu /ml	99.33
	Clostridium perfringens MTCC450	Clear Zone	3x10 ⁵ cfu/ml	2x10 ³ cfu/ml	99.33
	Vibrio cholera MTCC3906	Clear Zone	4x10 ⁵ cfu/ml	2x10 ³ cfu/ml	99.95
	Vibrio parahaemolyticus MTCC451	Clear Zone	7x10 ⁵ cfu/ml	2x10 ² cfu/ml	99.97
	YEAST				
	Saccharomyces cerviseae MTCC 2569	Clear Zone	8x10 ⁵ cfu/ml	3x10 ¹ cfu/ml	99.996
	MOLD				
	Aspergillus niger MTCC282	Clear Zone	6x10 ⁵ cfu/ml	1x10 ¹ cfu/ml	99.98

Note: Pictures of clear zones against each test organism can be seen in the other pages. Cfu: Colony forming units

E.Coli MTCC68 culture was also tested with Aqsol - Benquat at 3 different temperatures to study the effect on efficacy of performance.	Temperature of Aqsol Liquid °C	Microbial counts Before treatment	Microbial counts After treatment for 5min.	% Reduction
	15	2.5 x10 ⁵ cfu/ml	2 x 10 ¹ cfu/ml	99.992
	26	8.0 x10 ⁵ cfu/ml	2 x 10 ² cfu/ml	99.975
	44	8.0 x10 ⁵ cfu/ml	2.5 x10 ² cfu/ml	99.968

INFERENCE: Tested Aqsol-Benquat solution has antimicrobial property against all the tested microorganisms as listed above. Performance of Aqsol is found to be marginally different at 3 different temperatures tested.


 Dr S. MURALIDHARA RAO
 Head - Laboratory

WE UNDER TAKE ANALYTICAL JOBS FOR WATER, FOOD, BIOCIDAL RESINS, DETERGENTS & SANITIZERS AND SOIL. WE CARRY OUT PERFORMANCE EVALUATION OF DRINKING WATER TREATMENT UNITS AS PER NSF/ANSI SPECIFICATIONS. BASED ON PERFORMANCE WE CAN ARRANGE FOR GOLD SEAL CERTIFICATION FROM WQA - USA

- Note:**
- The Results pertain only to the tested samples and applicable parameters.
 - Samples will be disposed after 15 days from the issue of test certificate unless otherwise specified, In case of bacteriological tests, the samples will be disposed after 7 days itself from the date of issuing the certificate.
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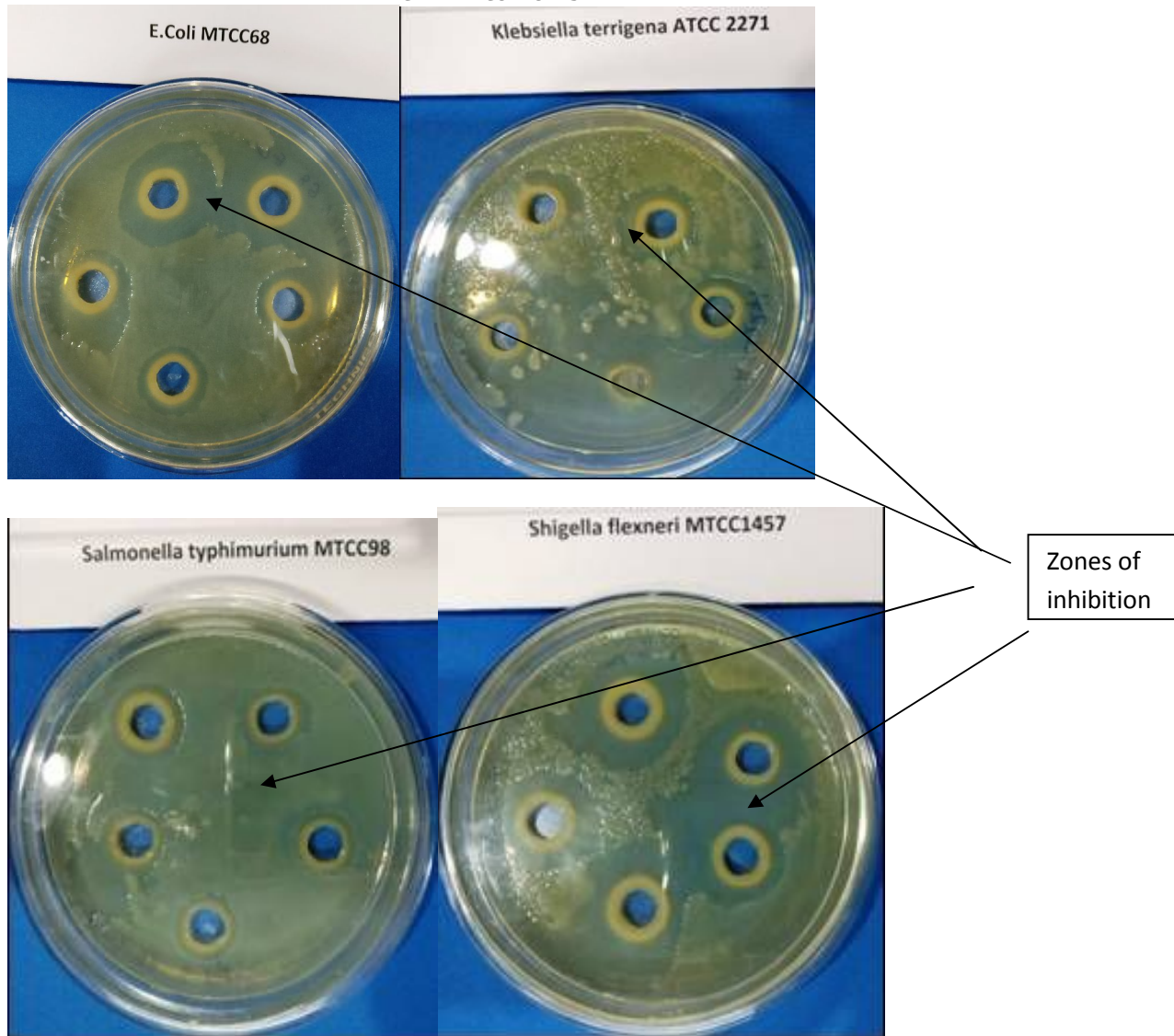
Mailing Address:

AQUADIAGNOSTICS WATER RESEARCH & TECHNOLOGY CENTRE LIMITED.
 No. 57, Om shakthi Complex, 1st Floor, G.B. Palya, Hosur Main Road, Bangalore - 560 068, INDIA, Tel: +91 - 80 - 25731142/81, Fax: +91 - 80 - 25731173.
 email: smr@aquadiagnostics.com, aquadiagnostics@gmail.com, website: www.aquadiagnostics.com
Registered Office : No. 143 C-4, Bommasandra Layout Area, Hosur Road, Anekal Taluk, Bangalore - 560 099, Karnataka




AGAR WELL ZONE OF INHIBITION TEST : Diffusion assay
ZONE OF INHIBITION OBSERVED IN CASE OF VARIOUS BACTERIAL , YEAST & MOLD CULTURES (Dilution 10 ml in 200 ml)

BACTERIAL CULTURES



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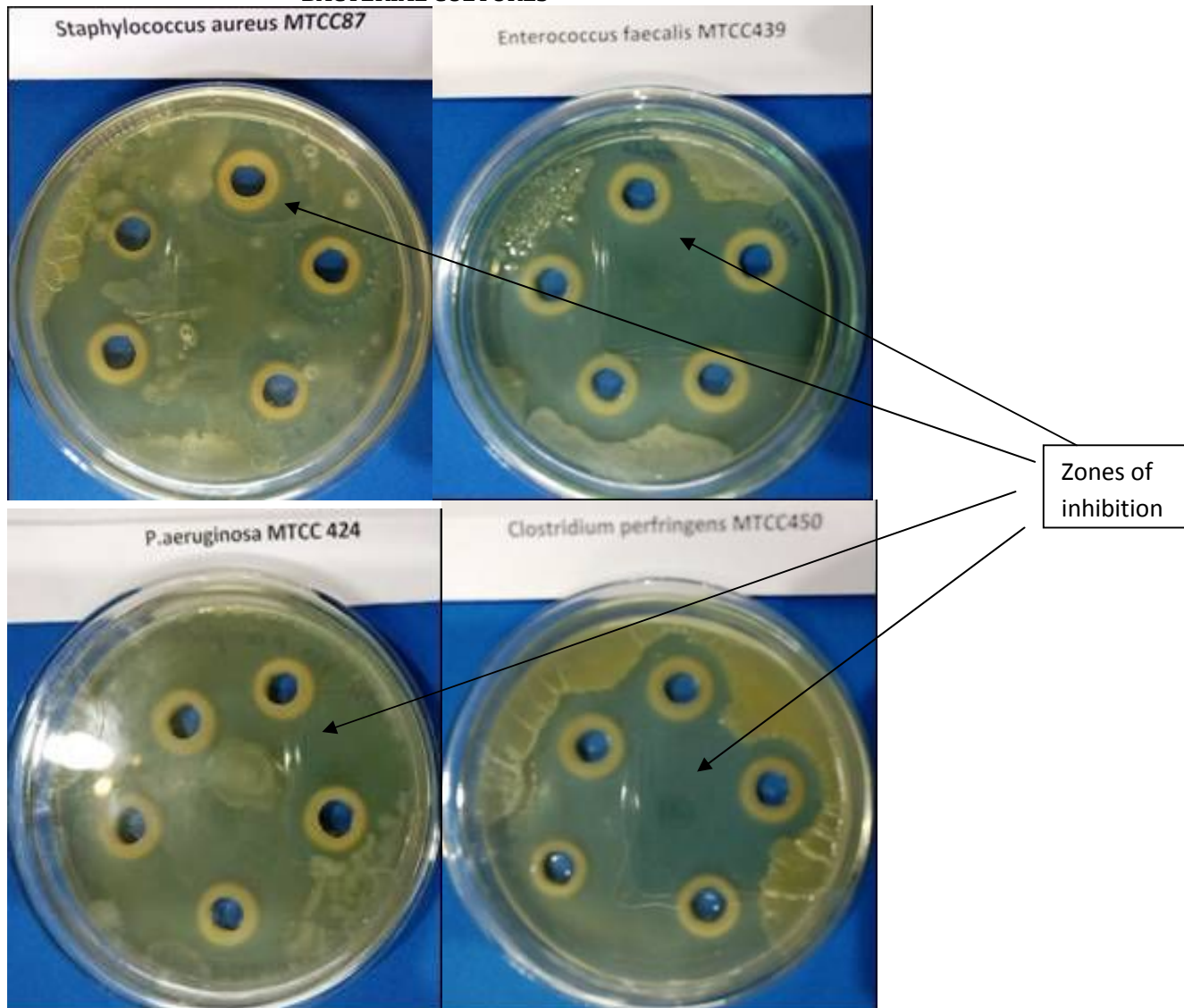
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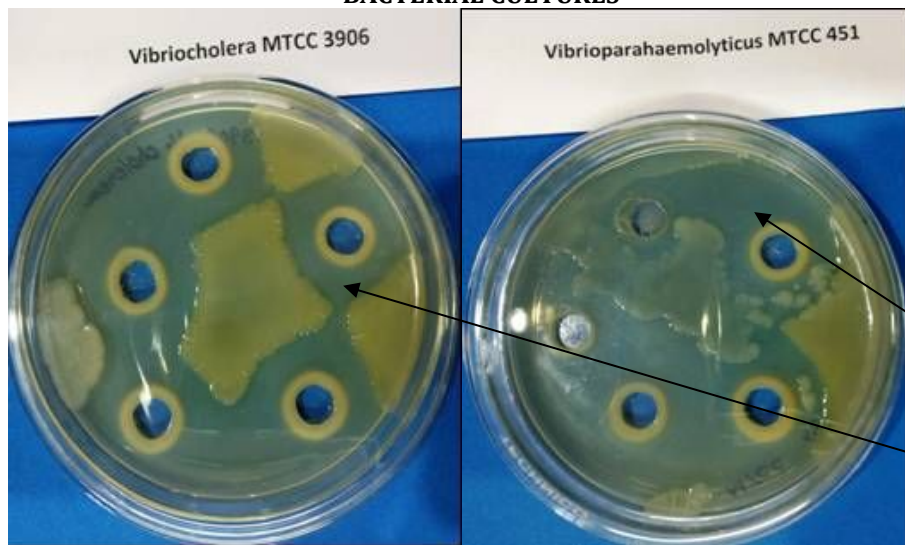
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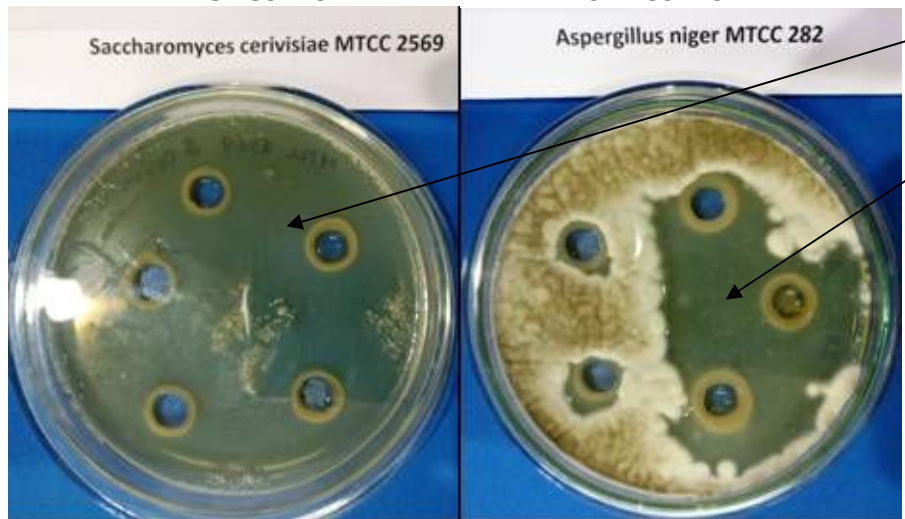


BACTERIAL CULTURES




YEAST CULTURE

MOLD CULTURE



Zones of inhibition

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