METHOD SUMMARY – QWI-FM0040

Method Title	E.COLI AND COLIFORM - PETRIFILM		
Document number	**QWI-FM0040**	**Date Issued**	28th March 2018

Method External References	AOAC 991.14, AOAC 998.08, AFNOR Validated Method 3M 01/4-09/92
Matrix	As listed on NATA Scope.
ALS Department	□ Pharmaceutical Chemistry □ Water Microbiology ✓ Food Microbiology □ Pharmaceutical Microbiology □ Food Chemistry
Accreditation Status	✓ NATA □ NON-NATA □ N/A
Analysis technique	□ HPLC □ GC □ Wet Chemistry □ Physical □ Gravimetric □ Qualitative □ Pour Plate □ Spread Plate □ MPN □ Filtration ✓ Petrifilm □ EHS □ ELISA □ VIDAS UP □ VIDAS □ TEMPO
Method Principle	This method describes a procedure for the enumeration of bacteria by using a diagnostic rapid method designed for the food and dairy industries including environmental samples. This method uses bacterial culture plates of dry medium and cold H_2O soluble gel. 1 mL of test suspension is added to the plate and when pressure is applied to the overlay the test portion is spread over 20 cm^2. The gelling agent is allowed to solidify and plates are incubated at 35 °C and then counted. Petrifilm Coliform Count Plates contain Violet Red Bile (VRB) nutrients, a cold water gelling agent, an indicator of ß-glucuronidase activity and a tetrazolium indicator that facilitates colony enumeration. The top film traps gas produced by the lactose fermenting Coliforms. Typical coliform colony morphology is blue to blue-red colonies with gas regardless of the size or intensity of colour or red colonies with gas. Typical *E.coli* colony morphology is blue to blue-red colonies with gas regardless of size or intensity of colour.
Reporting Unit	*E.coli* cfu/gm or cfu/mL or cfu/swab Coliforms cfu/gm or cfu/mL or cfu/swab
LOR/LOQ	<10

Minimum amount of sample required for analysis	10 g	Turnaround time	48 hrs

Author:	Document Controller	**Date:**	1st May 2018
Authorised By:	National Quality Manager	**Date:**	1st May 2018