

METHOD SUMMARY – QWI-FM0079

Method Title	Faecal Coliforms Presence/Absence Triplicate Tube - AS		
Document number	QWI-FM0079	Date Issued	15 th March 2018

Method External References	Based on AS 5013.15-2006 Microbiology of food and animal feeding stuffs Horizontal method for the detection and enumeration of presumptive <i>Escherichia coli</i> – Most probable number technique		
Matrix	As listed on NATA Scope.		
ALS Department	<input type="checkbox"/> Pharmaceutical Chemistry <input type="checkbox"/> Water Microbiology <input checked="" type="checkbox"/> Food Microbiology <input type="checkbox"/> Pharmaceutical Microbiology <input type="checkbox"/> Food Chemistry		
Accreditation Status	<input type="checkbox"/> NATA <input checked="" type="checkbox"/> NON-NATA <input type="checkbox"/> N/A		
Analysis technique	<input type="checkbox"/> HPLC <input type="checkbox"/> GC <input type="checkbox"/> Wet Chemistry <input type="checkbox"/> Physical <input type="checkbox"/> Gravimetric <input checked="" type="checkbox"/> Qualitative <input type="checkbox"/> Pour Plate <input type="checkbox"/> Spread Plate <input type="checkbox"/> MPN <input type="checkbox"/> Filtration <input type="checkbox"/> Petrifilm <input type="checkbox"/> EHS <input type="checkbox"/> ELISA <input type="checkbox"/> VIDAS UP <input type="checkbox"/> VIDAS <input type="checkbox"/> TEMPO		
Method Principle	<p>A liquid selective enrichment medium is inoculated with a specific quantity of the initial suspension of the test sample. The tube is incubated at 37 °C for up to 48 hours. The tube is examined for gas production after 24 hours and 48 hours. If the tube has given rise to opacity, cloudiness or gaseous emission, it is subcultured to a tube containing a liquid selective medium (EC broth). The EC broth tube is then incubated at 44 – 44.5 °C for up to 48 hours. The tube is examined for gas production after 24 hours and 48 hours. If the tube of medium EC broth has given rise to gaseous emission, it is subcultured to a tube containing indole-free peptone water. It is then incubated at 44 – 44.5 °C for 48 hours and examined for indole production resulting from degradation of tryptophan in the peptone constituent.</p>		
Reporting Unit	<i>Faecal Coliforms</i> detected or not detected per gram, per mL or in the amount of sample tested.		
LOR/LOQ	<1		

Minimum amount of sample required for analysis	10 g or 10 mL	Turnaround time	2 days
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Author:	Document Controller	Date:	20 th March 2018
Authorised By:	National Quality Manager	Date:	20 th March 2018