

METHOD SUMMARY – QWI-FM0013

Method Title	E.COLI, COLIFORMS & FAECAL COLIFORMS – MPN (3 TUBE/5 TUBE)-AS		
Document number	QWI-FM0013	Date Issued	23 rd May 2018

Method External References	AS 5013.3:2009		
	AS 5013.15:2006		
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 checked="" type="checkbox"/> NATA <input 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 type="checkbox"/> Qualitative <input type="checkbox"/> Pour Plate <input type="checkbox"/> Spread Plate <input checked="" 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>This method describes a procedure for the enumeration of coliforms, presumptive <i>Escherichia coli</i> and presumptive faecal coliforms by means of the liquid medium culture technique and calculation of the most probable number (MPN) after incubation at 37 °C, then at 37 °C for Coliforms and respectively at 37 °C, then at 44 °C for <i>E.coli</i> and Faecal coliforms determination.</p> <p>Inoculate three/or five tubes of either double or single strength liquid selective enrichment medium with a specified quantity of the test sample followed by inoculation of further sets of tubes with decimal dilutions of the test sample. Tubes are incubated at 37 °C for 24 and 48 hours and presumptive tubes are further subcultured onto secondary confirmatory media for determination of final results.</p>		
Reporting Unit	Coliforms (MPN) / g or mL or swab Presumptive <i>Escherichia coli</i> (MPN)/ g or mL or swab Presumptive faecal coliforms (MPN)/ g or mL or swab		
LOR/LOQ	<3.0 MPN/g or <3.0 MPN/mL or <3.0 MPN/swab		

Minimum amount of sample required for analysis	20 g	Turnaround time	2 days
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