



## WATER SAMPLE ANALYSIS REPORT

**Report Number:** 10939.01.WATR  
**Report Date:** 27 March 2019

### 1. CLIENT DETAILS

**Client Company:** Conjola Community Association Incorporated  
**Client Contact:** Robyn Kerves  
**Client Address:** Lot 7025, Lake Conjola Entrance Road  
LAKE CONJOLA NSW 2539

### 2. SAMPLING DETAILS

**Sample Address:** Multiple Locations along Lake Conjola  
LAKE CONJOLA NSW 2539  
**Sampling Date:** 11 March 2019  
**Sampled By:** Justin Thompson-Laing BSc (Hons), CEnvP (SC) of Getex

### 3. SCOPE

GETEX PTY LTD was requested by Robyn Kerves of Conjola Community Association Incorporated to attend selected locations along Lake Conjola, LAKE CONJOLA NSW 2539 to collect surface water samples from each location. The objective was to conduct a water quality test of the of the water collected from each location.

The samples were analysed for the following:

- Faecal Coliforms (FC);
- Enterococci (E);
- Total Nitrogen (TN);
- Total Phosphorus (TP);
- Chlorophyll a (CHa); and
- Dissolved Oxygen (DO).

#### GETEX PTY LIMITED

ABN 99 116 287 471

Suite 2.02, Level 2, Waterloo Business Park  
35 Waterloo Road, Macquarie Park NSW 2113  
Phone: (02) 98892488 Fax: (02) 98892499  
Email: [help@getex.com.au](mailto:help@getex.com.au) Web: [www.getex.com.au](http://www.getex.com.au)



## 4. SAMPLING SCHEME

Justin Thompson-Laing of Getex Pty Ltd attended the Sample Address on the 11<sup>th</sup> of March 2019 to collect surface water samples from selected locations.

A summary of the sample details is shown in the table below.

Client Location Code	Description	Latitude	Longitude	Getex Sample No.
E-54	Conjola Creek Downstream From Fishermans Paradise (Between Piles WK031 and WK023)	-35.231827	150.450195	10939/W1
E-748	Patimores Lagoon accessed off Conley Avenue (Adjacent bend on track)	-35.271908	150.483414	10939/W2
E-47	Cottee Close Stormwater Drain	-35.261108	150.440613	10939/W3
E-40	Opposite Cabin 43 within Lake Conjola Deepwater Resort	-35.266869	150.489075	10939/W4
E-39	Boat Ramp at Lake Inlet	-35.269474	150.500671	10939/W5
-	Blind of 10939/W5	-	-	10939/W5a
-	Split of 10939/W5	-	-	10939/W5b

**Table 4-1: Sample Description Summary**

Dissolved Oxygen was tested in the field using a YSI - Pro Optical DO Digital Handheld Water Probe (See Appendix II for Calibration Certificate).

Water samples to be analysed for Faecal Coliforms and Enterococci were collected in sterile 250mL plastic bottle. Water samples to be analysed for Chlorophyll a were collected in 500mL amber glass bottle with no preservatives. Water samples to be analysed for Total Nitrogen were collected in a 120mL plastic bottle with no preservatives. Water samples to be analysed for Total Phosphorous were collected in a 125mL plastic bottle preserved with Nitric Acid.

The chain of custody process involved writing the Getex unique reference number on the sample jar/bottle/vial at the time of sampling and on the chain of custody form. The chain of custody form remained with the sample until it was delivered to the laboratory. Once delivered to the laboratory the officer at the sample receipt signed the chain of custody form taking responsibility for the sample. A copy of the chain of custody showing the time of delivery, condition of sample (cold etc) and the unique laboratory number was emailed to Getex by the laboratory. On receipt, Getex checked that the laboratory details were correct.

## 5. REFERENCE CRITERIA

The analysis results were assessed against the adopted criteria from the Australian and New Zealand Guidelines for Fresh and Marine Water Quality – Revised 2018.

Adopted acceptance criteria levels are given within Section 6.

## 6. RESULTS

The table below presents the analysis results for the water sample collected. Refer to Appendix I for Laboratory Analysis Reports.

Sample Number	Location Code	Faecal Coliforms	Enterococci	Total Nitrogen (mg/L)	Total Phosphorous (mg/L)	Chlorophyll a (mg/m <sup>3</sup> )	Dissolved Oxygen (%)
10939/W1	E-54	<10	30 Approx	0.7	<0.05	5	49.5
10939/W2	E-748	<10	50	3.3	0.1	20	37.1
10939/W3	E-47	<10	40 Approx	0.6	<0.05	2	61.0
10939/W4	E-40	<10	<10	0.5	<0.05	1	76.4
10939/W5	E-39	<10	<10	0.5	<0.05	3	79.1
10939/W5a	Blind of 10939/W5	-	-	0.5	<0.05	-	-
10939/W5b	Split of 10939/W5	-	-	0.5	0.01	-	-
<b>Adopted Criteria – Recreational and Aesthetics – Primary Contact</b>		<b>150</b>	<b>35</b>	<b>-</b>	<b>-</b>	<b>100 mg/m<sup>2</sup></b>	<b>&gt;80</b>
<b>Adopted Criteria – Aquatic Ecosystems</b>		<b>-</b>	<b>-</b>	<b>0.3</b>	<b>0.03</b>	<b>4</b>	<b>80-110</b>

Table 6-1: Sample Results

## 7. LIMITATIONS

GETEX PTY LTD and its staff members are professionally qualified and trained to achieve a suitable level of competency for the tasks undertaken.

Although all work is performed to a professional and diligent standard, the potential variance between the practical limitations of the scope of work undertaken, the cost of our services, all possible issues of concern, and any loss or damages which may be associated with our work are such that we cannot warrant that all issues of concern/contaminants have been identified. We therefore limit any potential liability associated with our work to the cost of our services.

It is noted that GETEX is not an expert medical/health or building consultancy. As such, we cannot guarantee that any/all potential or actual illnesses or associated causes have been identified. Specialist advice from qualified professionals should also be sought for the treatment of any reported/potential illnesses or health effects related to contaminants.

All work conducted and/or reports/information produced by GETEX are prepared for a specific objective and within a specified scope of work as agreed between the Client and GETEX Pty Ltd. As such this document is only for the use of the Client for the intended objective and may not be suitable for any other purpose. No parties other than the client may use this document without first conferring with GETEX. Before passing onto a third party this document, the third party must be informed by the client of any relevant information relating to this document. It is the responsibility of any party using this report to check fully to their satisfaction if this report is suitable for their intended use.

All information and/or report(s) prepared by Getex should not be reproduced and/or presented/reviewed except in full.

The distribution of contaminants may vary with location and there can be no guarantee that a particular sample is typical of an extended area/system.

Kind Regards,

QA/QC check by:

Justin Thompson-Laing BSc (Hons), CEnvP (SC)  
Environment Manager

Anthony Camus BE (Chem) (Hons)  
General Manager





## **APPENDIX I**

# **LABORATORY ANALYSIS REPORT**

## CERTIFICATE OF ANALYSIS 213317

### Client Details

<b>Client</b>	Getex Pty Ltd
<b>Attention</b>	Justin Thompson-Laing
<b>Address</b>	2.02, Building 2 Waterloo Business Park, 35 Waterloo Rd, North Ryde, NSW, 2113

### Sample Details

<b>Your Reference</b>	<b>10939</b>
<b>Number of Samples</b>	6 water
<b>Date samples received</b>	12/03/2019
<b>Date completed instructions received</b>	12/03/2019

### Analysis Details

Please refer to the following pages for results, methodology summary and quality control data.  
 Samples were analysed as received from the client. Results relate specifically to the samples as received.  
 Results are reported on a dry weight basis for solids and on an as received basis for other matrices.  
**Please refer to the last page of this report for any comments relating to the results.**

### Report Details

<b>Date results requested by</b>	19/03/2019
<b>Date of Issue</b>	22/03/2019
NATA Accreditation Number 2901. This document shall not be reproduced except in full.	
Accredited for compliance with ISO/IEC 17025 - Testing. <b>Tests not covered by NATA are denoted with *</b>	

#### Results Approved By

Giovanni Agosti, Group Technical Manager  
 Jacinta Hurst, Group Operations Manager  
 Nick Sarlamis, Inorganics Supervisor

#### Authorised By



Jacinta Hurst, Laboratory Manager

**Miscellaneous Inorganics**

Our Reference		213317-1	213317-2	213317-3	213317-4	213317-5
Your Reference	UNITS	10939/W1	10939/W2	10939/W3	10939/W4	10939/W5
Type of sample		water	water	water	water	water
Date prepared	-	14/03/2019	14/03/2019	14/03/2019	14/03/2019	14/03/2019
Date analysed	-	14/03/2019	14/03/2019	14/03/2019	14/03/2019	14/03/2019
Chlorophyll a	mg/m <sup>3</sup>	5	20	2	1	3
Total Nitrogen in water	mg/L	0.7	3.3	0.6	0.5	0.5

**Miscellaneous Inorganics**

Our Reference		213317-6
Your Reference	UNITS	10939/W5a
Type of sample		water
Date prepared	-	14/03/2019
Date analysed	-	14/03/2019
Total Nitrogen in water	mg/L	0.5

Metals in Waters - Total						
Our Reference		213317-1	213317-2	213317-3	213317-4	213317-5
Your Reference	UNITS	10939/W1	10939/W2	10939/W3	10939/W4	10939/W5
Type of sample		water	water	water	water	water
Date prepared	-	13/03/2019	13/03/2019	13/03/2019	13/03/2019	13/03/2019
Date analysed	-	13/03/2019	13/03/2019	13/03/2019	13/03/2019	13/03/2019
Phosphorus - Total	mg/L	<0.05	0.1	<0.05	<0.05	<0.05

Metals in Waters - Total		
Our Reference		213317-6
Your Reference	UNITS	10939/W5a
Type of sample		water
Date prepared	-	13/03/2019
Date analysed	-	13/03/2019
Phosphorus - Total	mg/L	<0.05



Microbiological Testing						
Our Reference		213317-1	213317-2	213317-3	213317-4	213317-5
Your Reference	UNITS	10939/W1	10939/W2	10939/W3	10939/W4	10939/W5
Type of sample		water	water	water	water	water
Date of testing	-	13/03/2019	13/03/2019	13/03/2019	13/03/2019	13/03/2019
Enterococci	cfu/100mL	30 Approx	50	40 Approx	<10	<10
Faecal Coliforms	cfu/100mL	<10	<10	<10	<10	<10

Method ID	Methodology Summary
<b>Ext-008</b>	Subcontracted to Sonic Food & Water Testing. NATA Accreditation No. 4034.
<b>Inorg-055/062</b>	Total Nitrogen - Calculation sum of TKN and oxidised Nitrogen.
<b>INORG-119</b>	Chlorophyll A based on APHA 10200 H latest edition.
<b>Metals-020</b>	Determination of various metals by ICP-AES.

QUALITY CONTROL: Miscellaneous Inorganics						Duplicate		Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-W1	213317-2
Date prepared	-			14/03/2019	1	14/03/2019	14/03/2019		14/03/2019	14/03/2019
Date analysed	-			14/03/2019	1	14/03/2019	14/03/2019		14/03/2019	14/03/2019
Chlorophyll a	mg/m³	1	INORG-119	<5	1	5	[NT]		94	[NT]
Total Nitrogen in water	mg/L	0.1	Inorg-055/062	<0.1	1	0.7	0.7	0	112	110

QUALITY CONTROL: Metals in Waters - Total						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-W1	[NT]
Date prepared	-			13/03/2019	[NT]	[NT]	[NT]	[NT]	13/03/2019	[NT]
Date analysed	-			13/03/2019	[NT]	[NT]	[NT]	[NT]	13/03/2019	[NT]
Phosphorus - Total	mg/L	0.05	Metals-020	<0.05	[NT]	[NT]	[NT]	[NT]	101	[NT]

QUALITY CONTROL: Microbiological Testing						Duplicate		Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Enterococci	cfu/100mL	0	Ext-008	<0	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Faecal Coliforms	cfu/100mL	1	Ext-008	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]

## Result Definitions

<b>NT</b>	Not tested
<b>NA</b>	Test not required
<b>INS</b>	Insufficient sample for this test
<b>PQL</b>	Practical Quantitation Limit
<b>&lt;</b>	Less than
<b>&gt;</b>	Greater than
<b>RPD</b>	Relative Percent Difference
<b>LCS</b>	Laboratory Control Sample
<b>NS</b>	Not specified
<b>NEPM</b>	National Environmental Protection Measure
<b>NR</b>	Not Reported

## Quality Control Definitions

<b>Blank</b>	This is the component of the analytical signal which is not derived from the sample but from reagents, glassware etc, can be determined by processing solvents and reagents in exactly the same manner as for samples.
<b>Duplicate</b>	This is the complete duplicate analysis of a sample from the process batch. If possible, the sample selected should be one where the analyte concentration is easily measurable.
<b>Matrix Spike</b>	A portion of the sample is spiked with a known concentration of target analyte. The purpose of the matrix spike is to monitor the performance of the analytical method used and to determine whether matrix interferences exist.
<b>LCS (Laboratory Control Sample)</b>	This comprises either a standard reference material or a control matrix (such as a blank sand or water) fortified with analytes representative of the analyte class. It is simply a check sample.
<b>Surrogate Spike</b>	Surrogates are known additions to each sample, blank, matrix spike and LCS in a batch, of compounds which are similar to the analyte of interest, however are not expected to be found in real samples.
Australian Drinking Water Guidelines recommend that Thermotolerant Coliform, Faecal Enterococci, & E.Coli levels are less than 1cfu/100mL. The recommended maximums are taken from "Australian Drinking Water Guidelines", published by NHMRC & ARMC 2011.	

## Laboratory Acceptance Criteria

Duplicate sample and matrix spike recoveries may not be reported on smaller jobs, however, were analysed at a frequency to meet or exceed NEPM requirements. All samples are tested in batches of 20. The duplicate sample RPD and matrix spike recoveries for the batch were within the laboratory acceptance criteria.

Filters, swabs, wipes, tubes and badges will not have duplicate data as the whole sample is generally extracted during sample extraction.

Spikes for Physical and Aggregate Tests are not applicable.

For VOCs in water samples, three vials are required for duplicate or spike analysis.

Duplicates: >10xPQL - RPD acceptance criteria will vary depending on the analytes and the analytical techniques but is typically in the range 20%-50% – see ELN-P05 QA/QC tables for details; <10xPQL - RPD are higher as the results approach PQL and the estimated measurement uncertainty will statistically increase.

Matrix Spikes, LCS and Surrogate recoveries: Generally 70-130% for inorganics/metals; 60-140% for organics (+/-50% surrogates) and 10-140% for labile SVOCs (including labile surrogates), ultra trace organics and speciated phenols is acceptable.

In circumstances where no duplicate and/or sample spike has been reported at 1 in 10 and/or 1 in 20 samples respectively, the sample volume submitted was insufficient in order to satisfy laboratory QA/QC protocols.

When samples are received where certain analytes are outside of recommended technical holding times (THTs), the analysis has proceeded. Where analytes are on the verge of breaching THTs, every effort will be made to analyse within the THT or as soon as practicable.

Where sampling dates are not provided, Envirolab are not in a position to comment on the validity of the analysis where recommended technical holding times may have been breached.

Measurement Uncertainty estimates are available for most tests upon request.

## Report Comments

Micro was analysed by Sonic Healthcare report W1905572



## SAMPLE RECEIPT ADVICE

### Client Details

<b>Client</b>	Getex Pty Ltd
<b>Attention</b>	Justin Thompson-Laing

### Sample Login Details

<b>Your reference</b>	10939
<b>Envirolab Reference</b>	213317
<b>Date Sample Received</b>	12/03/2019
<b>Date Instructions Received</b>	12/03/2019
<b>Date Results Expected to be Reported</b>	19/03/2019

### Sample Condition

<b>Samples received in appropriate condition for analysis</b>	
<b>No. of Samples Provided</b>	6 water
<b>Turnaround Time Requested</b>	Standard
<b>Temperature on Receipt (°C)</b>	12.3
<b>Cooling Method</b>	Ice
<b>Sampling Date Provided</b>	Not Provided on the COC

### Comments

Nil

Please direct any queries to:

<b>Aileen Hie</b>	<b>Jacinta Hurst</b>
<b>Phone:</b> 02 9910 6200	<b>Phone:</b> 02 9910 6200
<b>Fax:</b> 02 9910 6201	<b>Fax:</b> 02 9910 6201
<b>Email:</b> ahie@envirolab.com.au	<b>Email:</b> jhurst@envirolab.com.au

Analysis Underway, details on the following page:

**Envirolab Services Pty Ltd**

ABN 37 112 535 645

12 Ashley St Chatswood NSW 2067

ph 02 9910 6200 fax 02 9910 6201

customerservice@envirolab.com.au

www.envirolab.com.au

Sample ID	Chlorophyll a	Total Nitrogen in water	Metals in Waters -Total	Microbiological Testing
10939/W1	✓	✓	✓	✓
10939/W2	✓	✓	✓	✓
10939/W3	✓	✓	✓	✓
10939/W4	✓	✓	✓	✓
10939/W5	✓	✓	✓	✓
10939/W5a		✓	✓	

The '✓' indicates the testing you have requested. **THIS IS NOT A REPORT OF THE RESULTS.**

**Additional Info**

Sample storage - Waters are routinely disposed of approximately 1 month and soils approximately 2 months from receipt.

Requests for longer term sample storage must be received in writing.



From: Getex Pty Ltd  
Address: 2.02, Building 2, Macquarie Business Park  
35 Waterloo Road  
MACQUARIE PARK NSW 2113  
Phone: (02) 9889 2488  
Facsimile: (02) 9889 2499  
Email: [help@getex.com.au](mailto:help@getex.com.au)  
Attention: **Justin Thompson-Laing**

## Chain of Custody

To: Envirolab Services Pty Ltd  
Address: 12 Ashley Street  
CHATSWOOD NSW 2067  
Phone: (02) 9910 6200  
Facsimile: (02) 9910 6299

Date: 12/03/2019  
Order Number: 6719  
Project Number: 10939

**TAT: 5 Day**

☐ Samples Received at Ambient Temp.

☒ Samples Recieved Chilled

Received By: James Date: 12/3/19

Notes:																																
Envirolab Barcode Number	Getex Sample Number	Container  Plastic Tube – PT Bag – B Petri Dish – PD Plastic Bottle – PB Glass Jar – GJ Glass Bottle – GB Glass Vial - GV	Water																													
			Single Analytes													Combos and Non-Standard Analytes																
			Faecal Coliforms	Enterococci	TN & TP	Chlorophyll a	OPP	PCB	Lead	4 - 17 Metals	Phenolics	Cyanide	Lab Filtration	Faecal Coliforms																		
1	10939/W1	GB, 3x PB	1	1	1	1																										
2	10939/W2	GB, 3x PB	1	1	1	1																										
3	10939/W3	GB, 3x PB	1	1	1	1																										
4	10939/W4	GB, 3x PB	1	1	1	1																										
5	10939/W5	GB, 3x PB	1	1	1	1																										
6	10939/W5a	2x PB			1																											

**EnviroLab Services**  
12 Ashley St  
Chatswood NSW 2067  
Ph: (02) 9910 5200

**Job No:** 213317

**Date Received:** 12/13

**Time Received:** 14:22

**Received by:** JAL

**Temp/ Cool/ Ambient**

**Cooling/ Ice/ Icepack**

**Security: intact/ Broken/ None**

Getex Pty Ltd  
Suite 2.02 Building 2 Waterloo Business Park 35  
Macquarie Park  
NSW 2113



NATA Accredited  
Accreditation Number 1261  
Site Number 18217

Accredited for compliance with ISO/IEC 17025 – Testing  
The results of the tests, calibrations and/or  
measurements included in this document are traceable  
to Australian/national standards.

Attention: Justin Thompson-Laing

Report 644896-W  
Project name 10939  
Project ID WATER ANALYSIS  
Received Date Mar 12, 2019

Client Sample ID			10939/W5B
Sample Matrix			Water
Eurofins   mgt Sample No.			S19-Ma13625
Date Sampled			Not Provided
Test/Reference	LOR	Unit	
Nitrate & Nitrite (as N)	0.05	mg/L	< 0.05
Phosphate total (as P)	0.01	mg/L	0.01
Total Kjeldahl Nitrogen (as N)	0.2	mg/L	0.5
Total Nitrogen (as N)	0.2	mg/L	0.5

### Sample History

Where samples are submitted/analysed over several days, the last date of extraction and analysis is reported.  
 A recent review of our LIMS has resulted in the correction or clarification of some method identifications. Due to this, some of the method reference information on reports has changed. However, no substantive change has been made to our laboratory methods, and as such there is no change in the validity of current or previous results (regarding both quality and NATA accreditation).  
 If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

Description	Testing Site	Extracted	Holding Time
Total Nitrogen Set (as N)			
Nitrate & Nitrite (as N)	Melbourne	Mar 13, 2019	28 Day
- Method: APHA 4500-NO3/NO2 Nitrate-Nitrite Nitrogen by FIA			
Total Kjeldahl Nitrogen (as N)	Melbourne	Mar 13, 2019	7 Day
- Method: LTM-INO-4040 Phosphate and Nitrogen in waters by Continuous Flow Analysis (CFA)			
Phosphate total (as P)	Melbourne	Mar 13, 2019	28 Day
- Method: APHA 4500-P E. Phosphorus			

**Company Name:** Getex Pty Ltd  
**Address:** Suite 2.02 Building 2 Waterloo Business Park 35  
Macquarie Park  
NSW 2113  
**Project Name:** 10939  
**Project ID:** WATER ANALYSIS

**Order No.:** 6720  
**Report #:** 644896  
**Phone:** 02 9889 2488  
**Fax:** 02 9889 2499

**Received:** Mar 12, 2019 3:40 PM  
**Due:** Mar 19, 2019  
**Priority:** 5 Day  
**Contact Name:** Justin Thompson-Laing

**Eurofins | mgt Analytical Services Manager : Asim Khan**

Sample Detail						Phosphate total (as P)	Total Nitrogen Set (as N)
Melbourne Laboratory - NATA Site # 1254 & 14271						X	X
Sydney Laboratory - NATA Site # 18217							
Brisbane Laboratory - NATA Site # 20794							
Perth Laboratory - NATA Site # 23736							
External Laboratory							
No	Sample ID	Sample Date	Sampling Time	Matrix	LAB ID		
1	10939/W5B	Not Provided		Water	S19-Ma13625	X	X
Test Counts						1	1

## Internal Quality Control Review and Glossary

### General

1. Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples follows guidelines delineated in the National Environment Protection (Assessment of Site Contamination) Measure, April 2011 and are included in this QC report where applicable. Additional QC data may be available on request.
2. All soil/sediment/solid results are reported on a dry basis, unless otherwise stated.
3. All biota/food results are reported on a wet weight basis on the edible portion, unless otherwise stated.
4. Actual LORs are matrix dependant. Quoted LORs may be raised where sample extracts are diluted due to interferences.
5. Results are uncorrected for matrix spikes or surrogate recoveries except for PFAS compounds.
6. SVOC analysis on waters are performed on homogenised, unfiltered samples, unless noted otherwise.
7. Samples were analysed on an 'as received' basis.
8. This report replaces any interim results previously issued.

### Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the SRA.

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

For VOCs containing vinyl chloride, styrene and 2-chloroethyl vinyl ether the holding time is 7 days however for all other VOCs such as BTEX or C6-10 TRH then the holding time is 14 days.

**\*\*NOTE:** pH duplicates are reported as a range NOT as RPD

### Units

**mg/kg:** milligrams per kilogram

**mg/L:** milligrams per litre

**ug/L:** micrograms per litre

**ppm:** Parts per million

**ppb:** Parts per billion

**%:** Percentage

**org/100mL:** Organisms per 100 millilitres

**NTU:** Nephelometric Turbidity Units

**MPN/100mL:** Most Probable Number of organisms per 100 millilitres

### Terms

<b>Dry</b>	Where a moisture has been determined on a solid sample the result is expressed on a dry basis.
<b>LOR</b>	Limit of Reporting.
<b>SPIKE</b>	Addition of the analyte to the sample and reported as percentage recovery.
<b>RPD</b>	Relative Percent Difference between two Duplicate pieces of analysis.
<b>LCS</b>	Laboratory Control Sample - reported as percent recovery.
<b>CRM</b>	Certified Reference Material - reported as percent recovery.
<b>Method Blank</b>	In the case of solid samples these are performed on laboratory certified clean sands and in the case of water samples these are performed on de-ionised water.
<b>Surr - Surrogate</b>	The addition of a like compound to the analyte target and reported as percentage recovery.
<b>Duplicate</b>	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
<b>USEPA</b>	United States Environmental Protection Agency
<b>APHA</b>	American Public Health Association
<b>TCLP</b>	Toxicity Characteristic Leaching Procedure
<b>COC</b>	Chain of Custody
<b>SRA</b>	Sample Receipt Advice
<b>QSM</b>	US Department of Defense Quality Systems Manual Version 5.2 2018
<b>CP</b>	Client Parent - QC was performed on samples pertaining to this report
<b>NCP</b>	Non-Client Parent - QC performed on samples not pertaining to this report, QC is representative of the sequence or batch that client samples were analysed within.
<b>TEQ</b>	Toxic Equivalency Quotient

### QC - Acceptance Criteria

RPD Duplicates: Global RPD Duplicates Acceptance Criteria is 30% however the following acceptance guidelines are equally applicable:

Results <10 times the LOR : No Limit

Results between 10-20 times the LOR : RPD must lie between 0-50%

Results >20 times the LOR : RPD must lie between 0-30%

Surrogate Recoveries: Recoveries must lie between 50-150%-Phenols & PFASs

PFAS field samples that contain surrogate recoveries in excess of the QC limit designated in QSM 5.2 where no positive PFAS results have been reported have been reviewed and no data was affected.

WA DWER (n=10): PFBA, PFPeA, PFHxA, PFHpA, PFOA, PFBS, PFHxS, PFOS, 6:2 FTSA, 8:2 FTSA

### QC Data General Comments

1. Where a result is reported as a less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
2. Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch, but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown is not data from your samples.
3. Organochlorine Pesticide analysis - where reporting LCS data, Toxaphene & Chlordane are not added to the LCS.
4. Organochlorine Pesticide analysis - where reporting Spike data, Toxaphene is not added to the Spike.
5. Total Recoverable Hydrocarbons - where reporting Spike & LCS data, a single spike of commercial Hydrocarbon products in the range of C12-C30 is added and it's Total Recovery is reported in the C10-C14 cell of the Report.
6. pH and Free Chlorine analysed in the laboratory - Analysis on this test must begin within 30 minutes of sampling. Therefore laboratory analysis is unlikely to be completed within holding time. Analysis will begin as soon as possible after sample receipt.
7. Recovery Data (Spikes & Surrogates) - where chromatographic interference does not allow the determination of Recovery the term "INT" appears against that analyte.
8. Polychlorinated Biphenyls are spiked only using Aroclor 1260 in Matrix Spikes and LCS.
9. For Matrix Spikes and LCS results a dash " - " in the report means that the specific analyte was not added to the QC sample.
10. Duplicate RPDs are calculated from raw analytical data thus it is possible to have two sets of data.

**Quality Control Results**

Test				Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
<b>Method Blank</b>										
Nitrate & Nitrite (as N)				mg/L	< 0.05			0.05	Pass	
Phosphate total (as P)				mg/L	< 0.01			0.01	Pass	
Total Kjeldahl Nitrogen (as N)				mg/L	< 0.2			0.2	Pass	
Total Nitrogen (as N)				mg/L	< 0.2			0.2	Pass	
<b>LCS - % Recovery</b>										
Nitrate & Nitrite (as N)				%	102			70-130	Pass	
Phosphate total (as P)				%	112			70-130	Pass	
Total Kjeldahl Nitrogen (as N)				%	115			70-130	Pass	
Total Nitrogen (as N)				%	115			70-130	Pass	
Test	Lab Sample ID	QA Source		Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
<b>Spike - % Recovery</b>										
					Result 1					
Nitrate & Nitrite (as N)	B19-Ma10273	NCP		%	102			70-130	Pass	
Test	Lab Sample ID	QA Source		Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
<b>Duplicate</b>										
					Result 1	Result 2	RPD			
Nitrate & Nitrite (as N)	M19-Ma11902	NCP		mg/L	0.30	0.29	5.0	30%	Pass	
Phosphate total (as P)	S19-Ma10513	NCP		mg/L	0.63	0.64	2.0	30%	Pass	
Total Kjeldahl Nitrogen (as N)	S19-Ma10513	NCP		mg/L	1.2	1.3	7.0	30%	Pass	
Total Nitrogen (as N)	S19-Ma10513	NCP		mg/L	1.3	1.4	7.0	30%	Pass	



## Comments

### Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	Yes
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

## Authorised By

Asim Khan	Analytical Services Manager
Julie Kay	Senior Analyst-Inorganic (VIC)



### Glenn Jackson General Manager

Final report - this Report replaces any previously issued Report

- Indicates Not Requested

\* Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please [click here](#).

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## Sample Receipt Advice

Company name: **Getex Pty Ltd**  
Contact name: **Justin Thompson-Laing**  
Project name: **10939**  
Project ID: **WATER ANALYSIS**  
COC number: **Not provided**  
Turn around time: **5 Day**  
Date/Time received: **Mar 12, 2019 3:40 PM**  
Eurofins | mgt reference: **644896**

### Sample information

- ☒ A detailed list of analytes logged into our LIMS, is included in the attached summary table.
- ☒ All samples have been received as described on the above COC.
- ☒ COC has been completed correctly.
- ☒ Attempt to chill was evident.
- ☒ Appropriately preserved sample containers have been used.
- ☒ All samples were received in good condition.
- ☒ Samples have been provided with adequate time to commence analysis in accordance with the relevant holding times.
- ☒ Appropriate sample containers have been used.
- ☒ Sample containers for volatile analysis received with zero headspace.
- ☒ Split sample sent to requested external lab.
- ☒ Some samples have been subcontracted.

N/A Custody Seals intact (if used).

### Contact notes

If you have any questions with respect to these samples please contact:

Asim Khan on Phone : or by e.mail: AsimKhan@eurofins.com

Results will be delivered electronically via e.mail to Justin Thompson-Laing - Justin.Thompson-Laing@getex.com.au.

*Note: A copy of these results will also be delivered to the general Getex Pty Ltd email address.*





Attention: **Justin Thompson-Laing**

To: Eurofins | mgt

16 Mars Road

Email: [EnviroSampleNSW@eurofins.com.au](mailto:EnviroSampleNSW@eurofins.com.au)

Order Number: 6720

**TAT: 5 Day**

Samples Received Chilled

Signature: Dr. [Signature]

Date: 12/3

☒ Samples Received Chilled

Signature: Dr. [Signature]

Date: 12/3

<b>Total</b>	<b>1</b>	<b>1</b>
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## **APPENDIX II**

# **CALIBRATION CERTIFICATE**

## Multi Parameter Water Meter

Instrument **YSI Pro Optical DO Digital**  
 Serial No. **12A101576**



Air-Met Scientific Pty Ltd  
 1300 137 067

Item	Test	Pass	Comments
Battery	Charge Condition	✓	
	Fuses	✓	
	Capacity	✓	
Switch/keypad	Operation	✓	
Display	Intensity	✓	
	Operation (segments)	✓	
Grill Filter	Condition	✓	
	Seal	✓	
PCB	Condition	✓	
Connectors	Condition	✓	
Sensor	D.O	✓	
Alarms	Beeper	✓	
	Settings	✓	
Software	Version	✓	
Data logger	Operation	✓	
Download	Operation	✓	
Other tests:			

## Certificate of Calibration

This is to certify that the above instrument has been calibrated to the following specifications:

Sensor	Serial no	Standard Solutions	Solution Bottle Number	Instrument Reading
Dissolved Oxygen		Zero DO Sodium Sulphite	10175	0.00ppm
Dissolved Oxygen		Saturated Air		8.76ppm

**Calibrated by:** Sophie Boler

**Calibration date:** **8/03/2019**

**Next calibration due:** **7/04/2019**