



30 September 2019
Water Quality Report

The Jersey New Waterworks Company Limited

Contents

Executive Summary	01
Supply Points and Supply Zone Regulatory Results	02
Consumer Contacts and Enquiries	04
Raw Water Quality	06
Understanding Test Results	07
Appendix 1: 2019 Treatment Works Performance - Check Monitoring	08
Appendix 2: 2019 Treatment Works Performance - Audit Monitoring	09
Appendix 3: 2019 Treatment Works Pesticide Analysis - Audit Monitoring	11
Appendix 4: 2019 Service Reservoir Performance – Check Monitoring	12
Appendix 5: 2019 Water Quality in the Supply Zone – Check Monitoring	13
Appendix 6: 2019 Water Quality in the Supply Zone – Audit Monitoring	15

Executive Summary

Water supplied by Jersey Water during the nine-month period ended 30 September 2019 was of a very high quality with an overall compliance rate of 99.97% (31 December 2018: 99.99%) and 100% compliance with water quality standards for nitrates and pesticides (31 December 2018: 100%). Bacteriological compliance of water supplied was 100% for E.coli (31 December 2018: 100%) and 99.51% for total coliforms (31 December 2018: 99.88%).

During the period, the Company completed 11,083 analyses on treated water samples and of these, only 3 were outside of their respective regulatory water quality parameter but posed no threat to health.

The maximum concentration of nitrates detected in treated water was the lowest level ever recorded at 34.5mg/l (31 December 2018: 45.7mg/l); significantly below the regulatory limit of 50mg/l. This was the 6th consecutive year of full compliance with regulatory limits for nitrates. The reduction in concentrations during the period was due to a combination of the effects of a dry winter, enabling automated potato planting and lower fertiliser application rates, and the reduced run off and ground water discharge caused by lower rainfall and depleted ground water levels.

During the first nine months of 2019, Jersey Water continued to test raw water sources for pesticides on a weekly basis during the growing season and completed 45,243 analyses. The number of pesticide detections during the 2019 growing season totalled 240; 9% lower than the 275 during the same period in 2018. This year's figure also includes the results of a survey on glyphosate and its breakdown product aminomethylphosphonic acid (AMPA) which was not monitored in 2018 (both are totally removed by the treatment processes at the treatment works).

Change of reporting period

The Company has changed its financial year end from 31 December to 30 September in order to align its reporting timetable with that of Jersey Water's majority shareholder. For the purposes of consistency, the water quality reporting period has also been changed to 30 September. Accordingly, this Water Quality Report covers the period from 1 January 2019 to 30 September 2019. Comparatives are referenced from the previous 2018 water quality report (which covers the full 12 month period) unless otherwise stated.

If these results were excluded so a direct comparison could be made, there were 144 detections above 0.1 µg/l during the first three quarters of 2019, a 48% reduction compared to the same period in 2018. The reduction in detections was, despite greater use of "broad sweep" analysis of raw water quality, capable of identifying the presence of wide variety of different pesticides. The change in the rate of detections can be attributed to both the drier growing season and the work of the Action for Cleaner Water Group aimed at curbing the effect of farming pesticides on raw water quality.

Fewer of our consumers contacted Jersey Water either with water quality enquiries or water quality concerns compared to the England and Wales (E&W) industry averages. However, there was a modest increase during 2019 in the total number of consumer's contacts regarding the acceptability of water to 87 from 67 for the same nine-month period in 2018.

Supply Points and Supply Zone Regulatory Results

Jersey Water adopts a risk-based water quality monitoring programme consistent with other water suppliers in Europe and elsewhere. This approach is consistent with the Company's Water Safety Plan where potential risks are evaluated and water quality testing is designed to help manage those risks.

The Company examined samples from supply points which comprised our two treatment works at Handois and Augres, service reservoirs at Westmount and Les Platons and the supply zone (also known as the distribution network) for compliance purposes at regular intervals throughout the period.

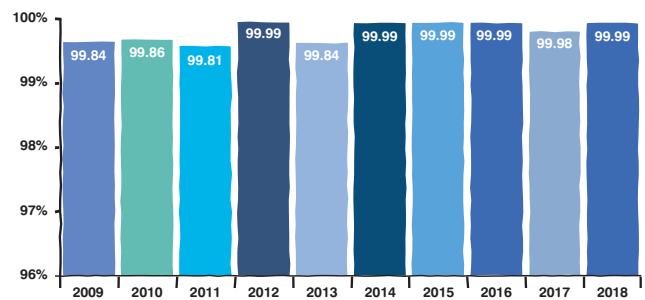
The company is required to undertake two kinds of regulatory water quality monitoring - check and audit monitoring.

Check monitoring is more frequent and is designed to ensure the treatment works are operating as expected and that the water in distribution is suitable for supply. Audit monitoring is performed less frequently and is designed to test the quality of the water supplied against the full requirements of the Water (Jersey) Law 1972.

Overall compliance

Due to alignment with the change in financial year end reporting for Jersey Water, the 2019 report is based on the nine month period 1st January to 30th September 2019. Water quality in 2019 was high with only three non-compliant regulatory analyses identified out of 11,083 analyses taken for compliance purposes. The three non-compliant analyses, upon investigation, were found to pose no threat to public health. Overall water quality compliance for the first nine months of 2019 was 99.97% which was slightly down when compared with the result for 2018 which had a compliance rate of 99.99%.

Percentage compliance



Treatment works performance (supply points)

The Company samples water leaving the treatment works to ensure that it complies with regulatory parameters before it enters the mains network. During the 2019 reporting period the Company undertook 320 samples resulting in 9,007 analyses covering 150 physical, bacteriological and chemical parameters. All of the analyses were compliant with the regulatory limits.

Detailed supply point results are set out in Appendix 1, 2 and 3.

Service reservoir performance

To comply with regulations, weekly microbiological and residual disinfection samples are taken from the service reservoirs to ensure there has been no deterioration in the water quality during storage. During the 2019 reporting period 468 analyses were undertaken on 117 samples all of which complied with the regulations except for a single failure for coliform bacteria.

- The analysis outside the permitted range was for a coliform bacteria, detected in a sample taken from the outlet to Westmount Service Reservoir. Investigations showed all the disinfection processes and turbidity were satisfactory and repeat samples taken were negative for coliform bacteria.

For water to be deemed wholesome leaving a service reservoir there has to be a 95% or greater compliance with the coliform bacteria regulatory limit. Even with the smaller number of samples taken in the 2019 reporting period, the Company achieved 97.4% compliance with the regulatory limit for coliform bacteria and therefore demonstrably supplied wholesome water.

Detailed service reservoir results are set out in Appendix 4.

Parameter	Date	Analysis type	Concentration recorded	Regulatory limit
Coliform	21/08/19	Check analysis	1 MPN per 100ml	0 MPN per 100ml (in 95% of samples)

Water quality in the distribution system (supply zone)

185 water samples were taken at randomly selected customer properties from all parts of the distribution system, all but two of the 1,608 analyses were compliant with regulatory limits in the 2019 reporting period.

- The two analyses outside the permitted range were for coliform bacteria, detected in samples taken from the kitchen tap at randomly selected properties. Investigations showed all the disinfection processes and turbidity were satisfactory at the treatment works and repeat samples taken from the company stopcock, the kitchen tap and from another tap within the property were negative for coliforms.

Detailed supply zone results are set out in Appendix 5 and 6.

Parameter	Date	Analysis type	Concentration recorded	Regulatory limit
Coliform	26/06/19	Check analysis	1 MPN per 100ml	0 MPN per 100ml
Coliform	02/07/19	Check analysis	1 MPN per 100ml	0 MPN per 100ml

Consumer Contacts and Enquiries

Every contact and enquiry received by Jersey Water is recorded and categorised whether or not they require a visit to rectify an issue. The contacts for the 2019 reporting period are listed on the table below:

Informing consumers

	Total	Consumer enquiries - sub categories (section 4.2)				
		Fluoride	Water hardness	Water quality report	Other information	
Total consumer enquiries (definition 3.1.1)	5	0	1	2	2	
		Consumer contact (drinking water quality concern) - sub categories (section 4.6)				
		Pets & other animals	Lead & other analysis	Incident related	Campaigns	Lifestyle
Total contacts drinking water quality concern (definition 3.1.5)	7	2	4	0		1
Zone total	12					
Zone rate (contact per 1,000 population)	0.17					

E&W Industry average 2018: 0.45

Acceptability of water to consumers

	Total	Consumer contact (appearance) - sub categories (section 4.3)						
		Discoloured - black/brown/orange	Discoloured - blue/green	Particles	White - air	White - chalk	Animalcules	General condition
Total contacts appearance (definition 3.1.2)	63	25	0	4	8	0		26
		Consumer contact (taste and odour) - sub categories (section 4.4)						
		Chlorine	Earthy/musty	Petrol/diesel	Other taste or odour			
Total contacts taste and odour (definition 3.1.3)	33	4	4		9			
		Consumer contact (illness) - sub categories (section 4.5)						
		Gastroenteritis	Oral	Skin	Medical opinion			
Total contacts illness (3.1.4)	7	0	0	6	1			
Zone total	87							
Zone rate (contact per 1,000 population)	1.29							

E&W Industry average 2018: 1.31



To be able to directly compare with previous years the zone rate (contact per 1,000 population) has been increased by 33% to represent a 12 month period. Fewer consumers contacted Jersey Water on both enquiries and water quality issues, compared to the England and Wales (E&W) industry averages.

As in previous years the appearance of the water is the most common issue why consumers contact the Company, with 64% of all contacts being in this category. This is a slight increase compared to 2018, when 51% of contacts were about appearance.

There has been a significant decrease in the number of contacts regarding the taste or odour of the water supplied by Jersey Water from 33 in 2018 to 17 in the 2019 reporting period. Even allowing for the shorter time period this is a 31% reduction in contacts.

There were 12 contacts for water quality information in the 2019 reporting period - a slight decrease in consumer enquiries. They covered a range of topics including:

- dishwasher settings related to water hardness (typically 120 – 150 mg/l as CaCO₃). More information can be found on the Company website <https://www.jerseywater.je/water-quality/water-quality-faq/> under the appliance settings (dishwashers) tab).

and

- fluoride dosing - Jersey Water do not add fluoride to the water but there is a small amount of natural fluoride in drinking water coming from our streams and reservoirs, typically 0.1mg/l.

Bacteriological and chemical samples were taken where the consumer had suspected the water supply to be causing illness. 68 bacteriological samples were taken during the investigation of consumer contacts that the Jersey Water inspectors visited; all were found to be compliant with the regulations.

Raw Water Quality

For operational and monitoring purposes Jersey Water takes samples of water from streams, reservoirs and the inlet to the treatment works. This enables our operational staff to select the most suitable waters to be taken for treatment.

Nitrates

Whilst nitrates in treated water reached a peak of 34.5mg/l in April 2019, well below the regulatory limit of 50mg/l, this was only possible through the careful selection and blending of raw water during the potato growing season and the availability of low nitrate water collected in the reservoirs before the growing season began.

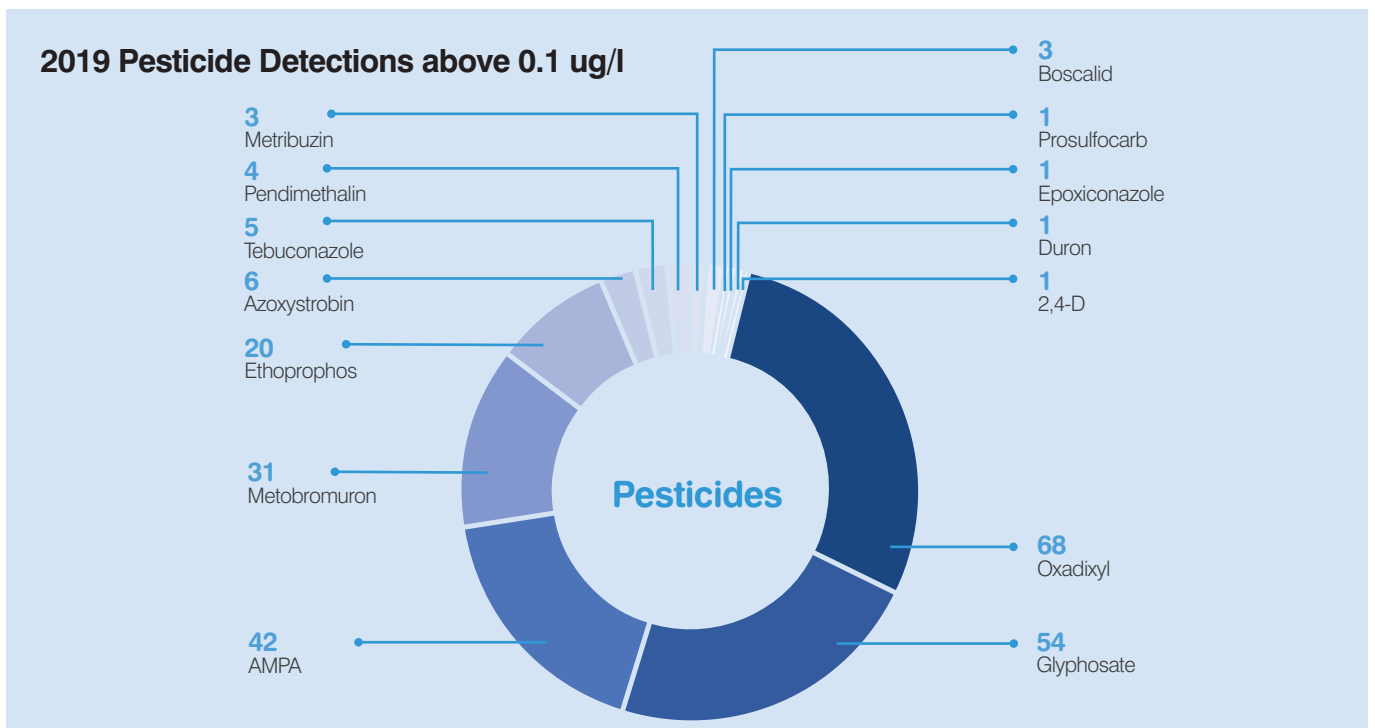
Concentrations of nitrates in raw water peaked at 142.6 mg/l in February 2019 in the Queen's Valley Side Stream catchment and averaged 46.1 mg/l throughout the Island during the year, down from 50.4 mg/l in 2018.

Pesticides

In the 2019 reporting period over 45,000 analyses were undertaken for 129 different pesticides in the streams that feed our reservoirs and reservoir outlets sending water for treatment to our treatment works. Of these 240 were above the 0.1 µg/l operational limit imposed by Jersey Water on itself. This result compares very favorably to the 264 analyses in 2018 that exceeded that limit.

This year's figure also includes the results of a survey on glyphosate and its breakdown product aminomethylphosphonic acid (AMPA) which was not monitored in 2018 (both are totally removed by the treatment processes at the treatment works). If these results are excluded, a direct comparison indicates that there were 144 detections above 0.1 µg/l which is a 45% reduction compared to 2018.

By careful selection of which reservoir to use and PAC dosing, there were no breaches of the pesticide limit in treated water.



Understanding Test Results

Regulatory Analyses

The Water (Jersey) Law 1972 as amended requires two types of monitoring at the treatment works and service reservoir outlets and in the distribution system:

- **Check monitoring**
Tests performed on a frequent basis to ensure that the treatment works and the water in distribution is suitable for supply.
- **Audit monitoring**
Testing performed less frequently than check monitoring and which is designed to test the quality of the water supplied against the full requirements of the Water (Jersey) Law 1972.

Glossary

Term	Description
Substances and parameters	The item we are testing for.
Specific concentration or value (maximum) or state	The maximum or range of values allowed by law in the water supply (regulatory limit).
mg/l	milligrams per litre or parts per million, equivalent to 1p in £10,000.
µg/l	micrograms per litre or parts per billion, equivalent to 1p in £10,000,000.
µS/cm	The unit of measure commonly used for electrical conductivity in water, microSiemens/cm.
Sample Point	The location where the sample was taken.
Min	The minimum or lowest result produced for that test.
Mean	The average value of all the results produced for that test.
Max	The maximum or highest result produced for that test.
% Compliance	The percentage of the results that comply with the regulatory limit.
MPN	The most probable number (MPN) is a statistical method used to estimate the viable numbers of bacteria in a sample.
CFU	Colony forming units (CFU), a physical count of the number of colonies of bacteria visible on a membrane or an agar plate.

Appendix 1: 2019 Treatment Works Performance – Check Monitoring

Substances and parameters	Specific concentration or value (maximum) or state	Sample Point	Min	Mean	Max	% compliance	What it means
<i>E.coli</i>	0 MPN per 100ml	Augres Tank	0	0	0	100	Primary indicator of faecal contamination of treated water.
		Handois PS	0	0	0	100	
Coliform bacteria	0 MPN per 100ml	Augres Tank	0	0	0	100	Detection of coliform bacteria may indicate sub-optimal operation of the treatment process or ingress of contamination from breaches in the integrity of the distribution system.
		Handois PS	0	0	0	100	
Colony counts	No abnormal change	Augres Tank	No abnormal change			100	Monitoring water supplies for colony count bacteria can be useful for monitoring trends in water quality or detecting sudden changes in quality.
		Handois PS				100	
Nitrite	0.1 mg NO ₂ /l	Augres Tank	<0.003	0.004	0.017	100	Nitrite may be associated with nitrate or with the use of ammonia in water disinfection.
		Handois PS	<0.003	0.005	0.016	100	
Residual disinfectant	No value mg Cl ₂ /l	Augres Tank	0.37	0.45	0.52		Sufficient chlorine is added to all supplies to ensure the absence of harmful microorganisms.
		Handois PS	0.37	0.51	0.65		
Turbidity	1 NTU	Augres Tank	0.05	0.09	0.15	100	The Standard requires that there should be no haziness caused by fine particles.
		Handois PS	0.06	0.10	0.22	100	
Conductivity	2500 µS/cm at 20°C	Augres Tank	472	511	548	100	A measure of the ability of the water to conduct an electric current and therefore a measurement of the mineral salts dissolved in the water.
		Handois PS	489	521	558	100	

Appendix 2: 2019 Treatment Works Performance - Audit Monitoring

Substances and parameters	Specific concentration or value (maximum) or state	Sample Point	Min	Mean	Max	% compliance	What it means
<i>Clostridium Perfringens</i>	0 CFU per 100 ml	Augres Tank	0	0	0	100	The presence of <i>Clostridium perfringens</i> in filtered water and/or final water may indicate deficiencies in the filtration process (e.g. filter breakthrough) or in the disinfection process.
		Handois PS	0	0	0	100	
Benzene Bromate 1,2 dichloroethane Trichloroethene & Tetrachloroethene	1.0 µg/l 10 µg BrO ₃ /l 3.0 µg/l 10 µg/l	Augres Tank	All results were below limit of detection from all the sample points.			100 100 100 100	Benzene may be introduced into source water by industrial effluents or atmospheric pollution. Bromate can be associated with industrial pollution or can occur as a by-product of the disinfection process. The other compounds are all organic solvents, their presence is an indication of industrial pollution.
		Handois PS					
Tetrachloromethane	3 µg/l	Augres Tank	<0.04	<0.04	<0.04	100	This substance is an organic solvent, its presence is an indication of industrial pollution.
		Handois PS	<0.04	<0.04	<0.04	100	
Boron	1.0 mg B/l	Augres Tank	0.071	0.099	0.173	100	Very low levels of these substances may occur naturally, but higher amounts could be associated with industrial pollution. The standards are health related but have a large built-in safety factor.
		Handois PS	0.081	0.114	0.187	100	
Cyanide	50 µg CN/l	Augres Tank	<2.0	<2.0	<2.0	100	
		Handois PS	<2.0	<2.0	<2.0	100	

Substances and parameters	Specific concentration or value (maximum) or state	Sample Point	Min	Mean	Max	% compliance	What it means
Fluoride	1.5 mg F/l	Augres Tank	<0.030	0.040	0.190	100	Occurs naturally in many water sources. The standard is set to ensure no adverse effects. Jersey Water does not artificially fluoridate the water supplies.
		Handois PS	<0.030	0.043	0.140	100	
Chloride	250 mg Cl/l	Augres Tank	52	58	65	100	Occurs naturally in most water sources. Levels above the standard could give rise to taste issues and contribute to corrosion.
		Handois PS	58	61	68	100	
Sulfate	250 mg SO ₄ /l	Augres Tank	81	86	95	100	Dissolves in water after contact with certain mineral deposits. Excess levels can contribute to corrosion.
		Handois PS	81	88	92	100	
Total Organic Carbon	No abnormal change	Augres Tank	1.4	1.6	1.8	100	This parameter assesses the organic content of the water.
		Handois PS	1.3	1.5	1.7	100	
Gross Alpha	0.1 Bq/l	Augres Tank	<0.020	<0.020	<0.020	100	These parameters are measured as part of screening for radioactivity.
		Handois PS	<0.020	<0.020	<0.020	100	
Gross Beta	1.0 Bq/l	Augres Tank	<0.28	<0.28	<0.28	100	
		Handois PS	<0.28	<0.28	<0.28	100	

Appendix 3 - 2019 Treatment Works Pesticide Analysis – Audit Monitoring

A suite of 129 pesticides have been analysed during the 2019 reporting period at the treatment works outlets, the following table shows the ones that were detected above 0.004 µg/l – there were 118 substances that were not.

Substances and parameters	Specific concentration or value (maximum) or state	Sample Point	Min	Mean	Max	% compliance
2,4-D	0.1 µg/l	Augres Tank	<0.005	<0.005	<0.005	100
		Handois PS	<0.005	<0.005	0.009	100
Atrazine Desisopropyl	0.1 µg/l	Augres Tank	<0.005	<0.005	0.005	100
		Handois PS	<0.005	<0.005	0.005	100
Azoxystrobin	0.1 µg/l	Augres Tank	<0.005	<0.005	<0.005	100
		Handois PS	<0.005	<0.005	0.007	100
Bentazone	0.1 µg/l	Augres Tank	<0.005	<0.005	<0.005	100
		Handois PS	<0.005	<0.005	0.008	100
Clopyralid	0.1 µg/l	Augres Tank	<0.005	<0.005	0.010	100
		Handois PS	<0.005	<0.005	0.013	100
Dichlorvos	0.1 µg/l	Augres Tank	<0.005	<0.005	0.014	100
		Handois PS	<0.005	<0.005	0.059	100
Ethoprophos	0.1 µg/l	Augres Tank	<0.005	<0.005	0.005	100
		Handois PS	<0.005	<0.005	0.009	100
Fluroxypyr	0.1 µg/l	Augres Tank	<0.005	<0.005	<0.005	100
		Handois PS	<0.005	<0.005	0.005	100
Mecoprop	0.1 µg/l	Augres Tank	<0.005	<0.005	0.007	100
		Handois PS	<0.005	<0.005	0.006	100
Oxadixyl	0.1 µg/l	Augres Tank	0.007	0.021	0.033	100
		Handois PS	0.015	0.034	0.046	100
Propiconazole	0.1 µg/l	Augres Tank	<0.005	<0.005	<0.005	100
		Handois PS	<0.005	<0.005	0.005	100
Total Pesticides	0.5 µg/l	Augres Tank	0.007	0.022	0.046	100
		Handois PS	0.016	0.041	0.094	100

Appendix 4: 2019 Service Reservoir Performance – Check Monitoring

Substances and parameters	Specific concentration or value (maximum) or state	Sample Point	Min	Mean	Max	% compliance	What it means
<i>E. coli</i>	0 MPN per 100ml	Les Platons East SR	0	0	0	100	Primary indicator of faecal contamination of treated water.
		Les Platons West SR	0	0	0	100	
		Westmount SR	0	0	0	100	
Coliform bacteria	0 MPN per 100ml (95% of samples)	Les Platons East SR	0	0	0	100	Detection of coliform bacteria may indicate sub-optimal operation of the treatment process or ingress of contamination from breaches in the integrity of the distribution system. For water to be deemed wholesome leaving a service reservoir there has to be a 95% or greater compliance with the coliform bacteria regulatory limit.
		Les Platons West SR	0	0	0	100	
		Westmount SR	0	0	1	97.4	
Colony counts	No abnormal change	Les Platons East SR	No abnormal change	No abnormal change	No abnormal change	100	Monitoring water supplies for colony count bacteria can be useful for monitoring trends in water quality or detecting sudden changes in quality.
		Les Platons West SR				100	
		Westmount SR				100	
Residual disinfectant	No value mg Cl ₂ /l	Les Platons East SR	0.05	0.19	0.37	100	Sufficient chlorine is added to all supplies to ensure the absence of harmful microorganisms.
		Les Platons West SR	0.06	0.20	0.37	100	
		Westmount SR	0.05	0.12	0.21	100	

Appendix 5: 2019 Water Quality in the Supply Zone – Check Monitoring

Substances and parameters	Specific concentration or value (maximum) or state	Min	Mean	Max	% compliance	What it means
<i>E.coli</i>	0 MPN per 100ml	0	0	0	100	Primary indicator of faecal contamination of treated water.
Coliform bacteria	0 MPN per 100ml	0	0	1	98.9	Detection of coliform bacteria may indicate sub-optimal operation of the treatment process or ingress of contamination from breaches in the integrity of the distribution system.
Residual disinfectant	No value mg Cl ₂ /l	0.03	0.18	0.61		Chlorine is added to our water along with ammonia to form a stable chloramine disinfectant compound, to ensure that there are no harmful bacteria in the water we supply.
Aluminium	200 µg Al/l	<5.0	15.9	174.3	100	Occurs naturally in many water resources. Aluminium compounds are also used at some water treatment works to remove impurities, but are themselves removed in the process.
Ammonium	0.50 mg NH ₄ /l	<0.01	0.03	0.10	100	May be naturally present in some waters and is not harmful.
Colony counts	No abnormal change	No abnormal change	No abnormal change	No abnormal change	100	Monitoring water supplies for colony count bacteria can be useful for monitoring trends in water quality or detecting sudden changes in quality.
Colour	20 mg/l Pt/Co	<0.30	1.26	15.7	100	Water should be clear and bright but natural organic matter or pipework corrosion products may occasionally impart a slight tint.
Conductivity	2500 µS/cm at 20°C	483	522	550	100	A measure of the ability of the water to conduct an electric current and therefore a measurement of the mineral salts dissolved in the water.
<i>Clostridium Perfringens</i>	0 CFU per 100ml	0	0	0	100	The presence of <i>Clostridium perfringens</i> in filtered water and/or final water may indicate deficiencies in the filtration process (e.g. filter breakthrough) or in the disinfection process.

Substances and parameters	Specific concentration or value (maximum) or state	Min	Mean	Max	% compliance	What it means
Hydrogen ion	10.0 pH value 6.5 (min)	7.31	7.63	8.01	100	A measure of acidity or alkalinity. Excessively acidic or alkaline water can contribute to corrosion of pipes and fittings.
Iron	200 µg Fe/l	<3.0	8.5	47.0	100	Iron may be associated with the corrosion of old iron mains. The standard has been set for aesthetic reasons as levels persistently above the standard can give rise to discoloured water.
Manganese	50 µg Mn/l	<0.9	4.2	22.3	100	Occurs naturally in many water sources. The standard is set for aesthetic reasons as black deposits of manganese dioxide can give rise to discoloured water.
Nitrate	50 mg NO ₃ /l	15.4	25.5	34.5	100	Nitrate arises from the use of fertilisers in agriculture and may be minimised by good practices and appropriate controls.
Nitrite	0.5 mg NO ₂ /l	<0.003	0.036	0.193	100	Nitrite may be associated with nitrate or with the use of ammonia in water disinfection.
Nitrate/Nitrite ratio	1.000	0.322	0.521	0.713	100	The regulations specify that the ratio according to the following formula must not exceed 1, [nitrate]/50 + [nitrite]/3, where the square brackets signify the concentrations in mg/l for nitrate (NO ₃) and nitrite (NO ₂) respectively.
Taste & Odour	3 at 25 °C Dilution number	0	0	0	100	The water is examined the water for unpleasant taste or odour. These are set for aesthetic reasons.
Turbidity	4 NTU	0.07	0.12	0.33	100	The Standard requires that there should be no haziness caused by fine particles.
Cyanide	50 µg CN/l	<2.0	<2.0	<2.0	100	Very low levels may occur naturally, but higher amounts could be associated with industrial pollution. The standards are health related but have a large built-in safety factor.

Appendix 6 - 2019 Water Quality in the Supply Zone – Audit Monitoring

Substances and parameters	Specific concentration or value (maximum) or state	Min	Mean	Max	% compliance	What it means
Antimony	5.0 µg Sb/l		0.30		100	Very low levels may occur naturally, but higher amounts could be associated with industrial pollution. The standards are health related but have a large built-in safety factor.
Arsenic	10 µg As/l		<0.5		100	
Benzene	1.0 µg/l		<0.01		100	Benzene may be introduced into source water by industrial effluents or atmospheric pollution.
Boron	1.0 mg B/l	0.086	0.120	0.204	100	Very low levels may occur naturally, but higher amounts could be associated with industrial pollution. The standards are health related but have a large built-in safety factor.
Cadmium	5.0 µg Cd/l		<0.06		100	Very low levels may occur naturally, but higher amounts could be associated with industrial pollution. The standards are health related but have a large built-in safety factor.
Chromium	50 µg Cr/l		0.60		100	
Copper	2000 µg Cu/l	<4	13	31	100	Any significant amount of copper is likely to come from corrosion of customers' pipes or fittings. Excess amounts can cause a metallic taste.
1,2 dichloroethane	3.0 µg/l	<0.04	<0.04	<0.04	100	The presence of this organic solvent is an indication of industrial pollution.
<i>Enterococci</i>	0 MPN per 100 ml	0	0	0	100	Used to assess the significance of the presence of coliform bacteria in the absence of <i>E.coli</i> or to provide additional information when assessing the extent of possible faecal contamination. They are regarded as secondary indicators of faecal pollution.

Substances and parameters	Specific concentration or value (maximum) or state	Min	Mean	Max	% compliance	What it means
Fluoride	1.5 mg F/l	<0.030	0.07	0.14	100	Occurs naturally in many water sources. The standard is set to ensure no adverse effects. Jersey Water does not artificially fluoridate the water supplies.
Gross Alpha	0.1 Bq/l	<0.020	<0.020	<0.020	100	These parameters are measured as part of screening for radioactivity.
Gross Beta	1.0 Bq/l	<0.28	<0.28	<0.28	100	
Lead	10 µg Pb/l	<0.5	<0.5	1.2	100	Absent in water entering supply but variable concentrations of lead may be found in water at the customer's tap in older properties built at a time when lead was commonly used in domestic plumbing systems. The standard recognises that the intake of lead should be minimised for health reasons.
Nickel	20 µg Ni/l	0.6	1.9	6.8	100	Very low levels may occur naturally, but higher amounts could be associated with industrial pollution. The standards are health related but have a large built-in safety factor.
Selenium	10 µg Se/l		0.5		100	Low levels of selenium may occur naturally in water after it has passed through various mineral deposits and rock strata. Selenium is an essential element and is required as part of the diet.
Sodium	200 mg Na/l		60.5		100	Sodium occurs naturally in water after passing through certain mineral deposits and rock strata or in brackish groundwater. Sodium salts are used extensively in the home and in industrial processes. Domestic water softeners regenerated with brine produce water containing an increased concentration of sodium. Always use unsoftened mains water for drinking, cooking and for preparing babies' feeds.

Substances and parameters	Specific concentration or value (maximum) or state	Min	Mean	Max	% compliance	What it means
Sum of Trichloroethene & Tetrachloroethene	10 µg/l	<0.10	<0.10	<0.10	100	These substances are organic solvents, their presence is an indication of industrial pollution.
		<0.04	<0.04	<0.04	100	
Tetrachloromethane	3 µg/l	<0.04	<0.04	<0.04	100	
Total Trihalomethanes (THM's)	100 µg/l	3.90	12.91	21.83	100	THM's are formed by the reaction of chlorine added as a disinfectant with naturally occurring organic compounds in the water.
Chloride	250 mg Cl/l	58	61	70	100	Chloride can occur naturally in source water and is a component of common salt. The standard is not health-related, but set to avoid taste and corrosion potential.
Sulfate	250 mg SO ₄ /l	82	87	96	100	Occurs naturally in many source waters after contact with particular mineral deposits and rock strata. The concentrations normally found in drinking water do not represent a risk to health.
Total organic carbon	No abnormal change mg/l	1.4	1.5	1.7	100	This parameter provides a measure of the total amount of organic matter in water.



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Jersey Water is the trading name of The Jersey New Waterworks Company Limited.

