


Chemical Tests	Microbiological Tests
Ammonia	E. coli
Chloride	Coliforms
Conductivity	
Hardness	
Nitrates	
Nitrites	
PH	
Iron*	
Manganese*	
<b>€90.00</b>	
<b>Full Analysis €120.00</b>	

**\*Tests are INAB accredited except for Iron & Manganese**

### Water Sampling Instructions

1. Clean and disinfect the mouth of your cold water tap.
2. Run water in cold tap for 2 minutes at a steady flow.
3. Remove the sample bottle lids and fill the bottles to the top. (Remove lids without touching the mouth of the bottle).
4. Fill the bottles to the top without interrupting the flow of water.
5. Replace the lids on the bottles.

*Note- Keep samples refrigerated and deliver to the laboratory within 6 hours of taking.*

### Customer Details

**Payment to accompany sample. (Cash, card or cheque).**

Please make cheques out to **Advanced Laboratory Testing Ltd**

Name: \_\_\_\_\_

Address: \_\_\_\_\_  
 \_\_\_\_\_

Contact No: \_\_\_\_\_

Email: \_\_\_\_\_

## Explanation of Tests:

### **MTM025 ENUMERATION AND CONFIRMATION OF COLIFORMS AND *E. COLI* IN WATER**

Tests for coliform bacteria and *Escherichia coli* (*E. coli*) are the most important routine microbiological examinations carried out on drinking water. These tests provide a sensitive means for detecting faecal contamination, for assessing raw water quality, the effectiveness of water treatment and disinfection, and for monitoring water quality in distribution. Where present, treatment should be undertaken to remove the bacteria and water should be boiled for drinking purposes until then.

**Maximum Limit 0 cfu/100ml**

### **pH**

pH is a measure of the intensity of the acidity/alkalinity of water on a scale of 0-14 with 7 being neutral. Low pH results may lead to corrosion of metal pipes and surfaces and a green/blue off colour on ceramic tiles and sinks.

**Acceptable Range - 6.5 - 9.5**

### **Total Hardness**

Hard water is water that has high minerals content (in contrast with "soft water"). Hard water is generally not harmful to one's health.

**Levels below 60 ppm = soft water, 60-120 ppm = moderately hard, 121 - 180 = hard water and above = >180ppm.** Problems occur where the water is too hard and deposits on pipes leaving a white lime scale. This can build up over time leading to appliances burning out and pipes being blocked.

### **Nitrite / Nitrates / Ammonia**

Nitrates/ Nitrites /Ammonia are found in nature from many sources, primarily from fertilisers and effluents. For Nitrates where a child is taking water with **levels above 50 mg/l** for a prolonged period of time a condition known as 'Blue baby syndrome' may occur where the child is unable to carry enough blood around its body.

**Maximum Limit – Nitrite 0.5mg/l**

**Maximum Limit – Nitrates 50mg/l**

**Maximum Limit – Ammonia 0.3mg/l**

### **Iron**

Iron is a metal widely found in rocks and soils. Water with iron may look clear at first, however upon exposure to air the iron is oxidized to form orange/red insoluble particles. Iron stains plumbing fixtures and laundry a light red/ brown colour and causes undesirable tastes. **Maximum Limit – 200ug/l.**

### **Manganese**

Manganese is a metal widely found in rocks and soils. At **levels exceeding 150ug/l** manganese stains plumbing fixtures and laundry a dark brown colour and causes undesirable tastes. Its presence in water may lead to microbial growths in the pipe system. Manganese is essentially nontoxic at levels normally found and only causes health problems at levels where there is a very undesirable taste. **Maximum Limit – 50ug/l.**

### **Chlorides**

They are usually associated with the salt content and the amount of dissolved minerals in water. The recommended limit for chlorides is **250 milligrams per litre (mg/l).**

### **Conductivity**

Conductivity in water is affected by the presence of inorganic dissolved solids such as chloride, nitrate, sulfate, and phosphate anions (ions that carry a negative charge) or sodium, magnesium, calcium, iron, and aluminum cations (ions that carry a positive charge). **Maximum Limit – 2500 µScm.**

## Drinking Water Legislation

### EU Legislation

- [Council Directive 98/83/EC](#) (OJ L330, p32, 5/12/1998) of 3 November 1998 on the quality of water intended for human consumption.
- [Directive 2000/60/EC](#) (OJ L327, p1, 22/12/2000) of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy.
- [Commission Recommendation 2001/928/Euratom](#) (OJ L344, p85, 28/12/2001) of 20 December 2001 on the protection of the public against exposure to radon in drinking water supplies.

### National Legislation

- European Union (Drinking Water) Regulations 2014 ([S.I. No. 122 of 2014](#)).

The basic standards governing the quality of drinking water intended for human consumption are set out in [EU Directive 98/83/EC](#). Water for human consumption, whether in its original state or after treatment, regardless of origin is covered by [Directive 98/83/EC](#). It includes water used in the food industry.

This legislation defines "water intended for human consumption" as:

- *all water, whether in its original state or after treatment, intended for drinking, cooking, food preparation or other domestic type purposes, regardless of its origin and whether it is supplied from a distribution network, from a private source or by tanker or similar means;*
- *all water used in any food production undertaking for the manufacture, processing, preservation or marketing of products or substances intended for human consumption, unless the supervisory authority is satisfied that the quality of the water cannot affect the wholesomeness of the foodstuff in its finished form.*

other than

- *natural mineral waters recognized as such by the responsible authorities, as defined in the European Communities (Natural Mineral Waters, Spring Waters and Other Waters in Bottles or Containers) Regulations 2007 ([S.I. No. 225 of 2007](#)),*
- *water supplied in bottles or containers*
- *waters which are medicinal products within the meaning of [Council Directive 2001/83/EC](#) of 6 November 2001 on the Community code relating to medicinal products for human use*
- *an exempted supply.*

An exempted supply means a supply of water which -

- *constitutes an individual supply of less than 10 cubic meters a day on average or serves fewer than 50 persons,*  
and  
(ii) *is not supplied as part of a commercial or public activity,*  
or
- *is used exclusively for purposes in respect of which the relevant supervisory authority is satisfied that the quality of the water has not influence, either directly or indirectly, on the health of the consumers concerned.*

**S.I. 122 of 2014** prescribes the quality standards to be applied, and related supervision and enforcement procedures in relation to supplies of drinking water, including requirements as to sampling frequency, methods of analysis, the provision of information to consumers and related matters.

The [Environmental Protection Agency](#) prepares and publishes annual reports on the results of the monitoring programmes carried out.

In EU food law, where there is a reference to potable water, it is usually defined as water which meets the standards of this Directive.

Where the water quality does not meet the specified standards, remedial measures are outlined in S.I. No.122 of 2014 for public and private water supplies.

## Directions – Wexford Office

### Coming from Enniscorthy:

On the outskirts of Wexford Town, you'll pass the Ferrycarrig Hotel on your left.

You'll enter 3 roundabouts. The 1<sup>st</sup> & 2<sup>nd</sup> roundabouts take the 2<sup>nd</sup> exit (straight through – signposted Rosslare). The 3<sup>rd</sup> roundabout take the 1<sup>st</sup> exit (left – signposted Wexford). You'll pass the Omniplex Cinema on your right. You'll see an Industrial Estate (Strandfield Business Park, just before the Volkswagen garage). We're located in the Wexford Enterprise Centre in this Industrial Estate. We're in Unit H – along the right hand corridor as you enter the building.

### Coming from New Ross

Take the 3<sup>rd</sup> exit at the roundabout as you approach Wexford (at the Maldron Hotel- signposted Rosslare) The next roundabout take the 2<sup>nd</sup> exit (straight through - signposted Rosslare). The 3<sup>rd</sup> roundabout take the 1<sup>st</sup> exit (left – signposted Wexford). You'll pass the Omniplex Cinema on your right. You'll see an Industrial Estate (Strandfield Business Park, just before the Volkswagen garage). We're located in the Wexford Enterprise Centre in this Industrial Estate. We're in Unit H – along the right hand corridor as you enter the building.

### Coming the Old Dublin Road (over the bridge in Wexford)

As you cross the bridge in Wexford take the left hand road. Keep driving along the quays passing The Talbot Hotel on your right. Continue driving until you pass the Volkswagen garage on your left hand side. Just after the garage you'll see an Industrial Estate ((Strandfield Business Park). We're located in the Wexford Enterprise Centre in this Industrial Estate. We're in Unit H – along the right hand corridor as you enter the building.

## Directions – Newbridge Facility

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Newbridge  
Co. Kildare