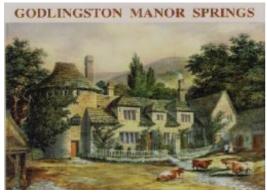
Aquaid Water from Godlingston Manor



Godlingston Manor, near Swanage in the Isle of Purbeck, has stood at the foot of the Purbeck Hills in various forms for many centuries. The name Godlingston is of Saxon origin, but the buildings have undergone many changes since three Saxon thanes are believed to have lived here, including fortification and Medieval hall house. The chapel has long since gone, the last remains of it being burnt down in a fire in 1871 which destroyed a complete East wing of the house. "The many persons hurrying to the spot" (19 Feb 1871), must have been grateful for such a plentiful supply of water to help put out the fire. The picture on our label is taken from an original painting done just before the fire.

The earliest written record of anyone living here is 1166. The ancient tower at the West end of the house is the only remaining part of the fortified building. The walls are over 5 feet thick in places and the original arched doorway stands halfway up the existing structure. The tower has seen considerable damage in the past, and judging by a canon ball found in the vicinity, withstood attack from time to time.

Research has also revealed early maps showing the house partly surrounded by water. The remains of the old moat have subsequently been found along with old workings showing how ancient dwellers at Godlingston utilised this natural resource for both defence and domestic use.

Today, after taking the water for bottling, the springs supply the surrounding farm and cottages and overflow into a sizeable lake. Apart from providing countless hours of fun for children who have grown up here (including the Managing Director), it is host to many species of fish and wild fowl, plants and insects.



Godlingston Manor Springs Ltd was set up to market the water from the natural springs in 1990 and started trading in 1991. We are one of the few original independent spring sources left, and through our association with Aquaid Franchising we have grown considerably. The 2007 Zenith report put us as the third largest producer of water cooler bottles in the country.



The Source of the water is directly related to the catchment area. The reason why the water is so free from contaminates is due to the fact that the catchment area is small and in the middle of the Isle of Purbeck. We directly control most of this catchment area, and what we don't is situated in the middle of thousands of acres of conservation and low intensity farmland, much of it controlled by the National Trust, Natural England and the RSPB. The local coastline has also recently been designated a World Heritage Site. These factors all come together to make the Isle of Purbeck a truly special place and an ideal area to base a water business.

We decided long ago that our whole farming system should change to accommodate the very specific requirements of the water business and banned all sprays and fertilizers from the areas around the springs. Furthermore, we have several hundred acres of conservation and SSSI land over which we lightly graze cattle and mow hay as we try to recreate the old hay meadows. Not only has this helped preserve the purity of the water supply, but we have both rare butterflies on the hills and an extremely rare bat found right at the source in the woods. We have various birds of prey and it is not unusual to have a kestrel hovering above the front wheel of a tractor waiting for mice to run out as we mow the grass. The farm is owned by the National Trust and they receive a royalty payment based on our sales each year.

The strata here is also very unusual in that it slopes down at approximately 60 degrees, so when the water falls as rain on the hills it percolates straight down through the chalk until it hits an impermeable layer of clay. This clay is also at 60 degrees. Because the water continues to seep through the chalk, the water at the bottom of the aquifer has nowhere to go and the hydraulic pressure forces the water up the clay layer and it flows out of the ground where the clay layer reaches the surface forming a natural spring. Because of the strata angle we have the added benefit that the water goes very deep but rises within a short distance of the catchment area. In the process of preparing the first spring issue for production we removed the old brickwork and the accumulated spoil that had built up over many years to reveal the base of the well some 14 feet below the present ground level. Here we employed a specialist company to seal a pipe into the rock from where the spring issued. It was here that we found a Mesolithic axe head and hammer stone which had been left in the spring 8000 years previously

The process of getting the water from the ground into the bottle is not a complex one, but nevertheless has to been done to certain standards to maintain the hygiene of the product. By its very nature spring water has its origin in the ground. Therefore great care has to be taken to abstract that water without contaminating it as it rises to the surface. The springs are carefully capped to avoid surface contamination and the water enters pipes whilst still underground. We have also drilled a borehole to allow extra water to be pumped at peak times. This is constructed to industry standards with the well head above ground level to avoid surface contamination.

Filtration occurs naturally as the water percolates through the chalk. Indeed, until we started selling the water there was no artificial filtration at all and we drank the water direct from the well. However, due to health and safety restraints we pass the water through various filters to ensure that the thousands of people who now drink it on a daily basis have an unimpeachable product. These consist of units to take out any clay or sediment in the water. It then passes through a multiple UV filter to guard against any microbiological contamination. Finally it has ozone (Activated Oxygen) bubbled into it just prior to filling. This is a natural non-chemical purification process.



Bottling is a multi stage process involving inspection, leak testing, washing, rinsing, filling, capping, batch identification and palletising.

Traceability is of major importance, as we need to identify where each bottle has come from before we wash and re-fill it. We then need to identify the time and date of bottling and also mark the pallet with the date. In this way we can keep a record of the condition the bottles are returned in and identify a batch should there ever be the requirement to recall bottles in the future





All bottles that are returned for re-filling are recorded on a returns form which is faxed to the plant. This is then matched to what is on the lorry before it is unloaded. The source of these bottles is marked on the pallet so we can identify them when they are processed, at which time any bottles in an unsuitable condition are taken out for hand cleaning or recycling. Each bottle is inspected manually before passing through an electronic leak detector. Only then does it go through the wall into the bottling room. There is no one in this room and the whole process is done automatically to avoid contamination, even though the machine is classified as the high risk area and the room as low risk. However, one person is always on hand watching several CCTV cameras to make sure the process runs smoothly. In the event of a jam they are in a clean area so can simply enter the plant and sort out any problems that might occur. Upon entering the bottling room the bottles are loaded onto the machine conveyor which takes them through a series of enclosed wash and rinse nozzles, ensuring that the bottles are thoroughly free from contaminates when they reach the filling section, also enclosed. Here the bottles are filled to a prescribed level and capped. Only then do they emerge onto an exit conveyor which takes them out of the bottling room where time, date and bottle number are sprayed onto the cap. They are then stacked, wrapped and the pallet marked with the date before being placed in storage ready for dispatch.



Quality control is of paramount importance to us. In addition to our daily microbiological testing, we send samples to an independent external laboratory on a weekly basis. This is not a checking process, more a confirmation of the control measures that we have put in place all the way down the line from the spring source to the bottling plant.

We also get an outside laboratory to analyse the chemical composition of the water.

A typical analysis of the water in the bottle is as follows;

Conductivity	654	μS/cm
pН	7.8	pH Units
Iron	0.01	mg/l
Manganese	0.006	mg/l
Aluminium	< 0.005	mg/l
Nitrate	7.86	mg/l as N03
Lead	< 1	μg/l
Copper	< 4	μg/l
Zinc	< 6	μg/l
Chloride	30.4	mg/l
Sulphate	30.2	mg/l
Calcium	124	mg/l
Sodium	22.2	mg/l
Magnesium	4.9	mg/l
Potassium	1.8	mg/l
Hardness (Total)	324	mg/l as CaC03

Godlingston Manor Springs Ltd Godlingston Manor Farm Wash Pond Lane Swanage BH19 3DJ





Report Number:	R 47608/1		Page 1 of 1	
Your reference:	Best before: Time bottled: Bottle No:	21.4.09 06:08 2669	Our reference:	47608
Description:	19 litre plastic sa	le bottle of clear colourless liquid	Date received: Date examined: Date reported:	21.4.08 21.4.08 24.4.08

TEST REPORT

Method Number *	TEST	RESULT (colony forming units)	
A:2a	Aerobic Plate Count /ml (37°C/44hrs)	<1 (Not detected)	
A:2a	Aerobic Plate Count /ml (22°C/68hrs)	<1 (Not detected)	
A:4f	Coliforms in 250 ml	<1 (Not detected)	
A:4f	Escherichia coli in 250 ml	<1 (Not detected)	
A:22	Pseudomonas aeruginosa in 250 ml	<1 (Not detected)	
A:9d	Enterococcus spp. in 250 ml	<1 (Not detected)	
	Enterococcus settle plate	<1 (Not detected)	

Comment[#]

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* From Microtech Services (Wessex) Ltd Methods Manual. Methods available on request #Opinions and interpretations expressed herein are outside the scope of our UKAS accreditation.

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Security has become a major issue these days and we have spent over £50,000 on CCTV and security devices. As an important water source in the area we also get frequent visits and advice from specialist police units. All aspects of the process from the springs down to the storage yard are closely monitored and digitally recorded.

Waste management and recycling has also taken on a much greater importance in the past few years with over 90% of our waste now being recycled. The plastic wrap is baled and the old bottles and caps are granulated and bagged before being sent for recycling. The water coolers are repaired where possible and disposed of through a registered waste agent at the end of their working life. Very little waste goes to land fill sites.



Much is made of carbon footprints and global warming, but sometimes it is easy to forget the symbiotic relationship that can exist between big business and environmental concerns. It is true that we send water all over the country using fossil fuel in the lorries. However, without the financial support of the water business, the farm would not have had the luxury of being able to resist bowing to the commercial realities of increasing food prices, but instead opt for a policy of low intensity farming based on environmental conservation. I would like to think that the thousands of hedge plants and hundreds of acres of conservation grassland thriving with wildlife, that we have planted, go some way to offsetting any damage that we may inflict on the environment by bottling one of Nature's naturally replenishing resources and transporting it from this environment to yours.

