



Water as nature intended it.....

Aquapulse™ Water Technology

www.clearworldwater.co.uk



Case Summary – Dairy Herd, Holstein Cows (Bos Taurus)

Location: Sludge Hall Farm, Cold Newton, Billesdon, Leicester LE7 9DA United Kingdom

Project Manager: Peter Reeves – Dairy Specialist – Clear World Water Technology Limited, and John Hill, farm owner/manager.

Background:

Sludge Hall Farm is a substantial UK dairy farm with a fluctuating herd of between 600 and 750 cows. They supply milk through the UK wholesale market to supermarket chains Tesco, Sainsbury, and Waitrose. The farm has experienced long term problems with both availability and quality of drinking water for their herd. Water delivered by tanker is over chlorinated and contains high levels of fluoride. In 2018 the farm management invested in the drilling of a bore hole well within the farm. The water sourced by way of the borehole was pink, as it contained iron ore particles because the farm is sited on a bedrock of iron. The water also has a sulphuric smell and taste and the cows visibly moved away from the drink troughs resisting the poor quality water.

Aquapulse water technology cartridges were introduced to one of the 10,000 litre capacity drinking water storage tanks. This natural, non-chemical water treatment





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separated the iron ore particles from the water, causing them to fall to the bottom of the water tank. This enabled the farm workers to flush them from the tank using just water, with no chemicals. The Sulphur smell and taste previously observed in the water was also no longer present after the introduction of Aquapulse.

Milk Productivity

For many years the farm has utilised the industry standard software Smart Dairy Herd Matrix for the purpose of the analysis of both milk productivity and herd fertility. During the course of the evaluation, the

impact of Aquapulse with the water infrastructure was carefully measured and monitored.



[3.1] Fertility Analysis (Overview)
01/07/2019 up to 10/06/2020

	Jul 19	Aug 19	Sep 19	Oct 19	Nov 19	Dec 19	Jan 20	Feb 20	Mar 20
Milking Herd									
Total cows in herd	644	678	675	649	640	624	620	629	
Total cows in milk	541	580	580	565	557	520	543	550	
0 - 60 DIM	101	117	149	115	86	85	93	93	
61 - 120 DIM	79	107	94	113	144	107	80	83	
121 - 200 DIM	162	147	104	128	120	139	159	173	
201 - 305 DIM	138	155	183	180	160	147	146	137	
> 305 DIM	61	54	50	29	47	42	65	64	
Average DIM	176	174	165	164	162	161	168	176	
Average 305 days production milk	10013	9931	9846	9695	9768	9905	9944	9956	

The flowing conclusions were noted:

- Milk yield increased when Aquapulse units were installed by an average of 11%. (Aquapulse present over a two year period on a three months in, three months out basis to monitor fluctuation). **N.B.** This included an increase in yield during the winter months of November – February when milk output traditionally reduces by a significant amount.
- Naturally clean water lines requiring reduced maintenance.
- Fertility rates improved.
- Water storage tanks clean requiring no chemical cleansing, no bio film present.
- Cows' health improved with reduced medical intervention.