QUICK SCAN REPORT	**Product name:** MDA Arsenic Reduction

Test centre		**Vendor**	
Name:	DHI DANETV Water Centre	Name:	MicroDrop Aqua ApS
Contact:	Gerald Heinicke	Contact:	Andreas Guldager
Address:	Agern Allé 5	Address:	Hovedgaden 501 B
	2970 Hørsholm		2640 Hedehusene
	Denmark		Denmark
Telephone:	+45 4516 9200 Direct +45 4516 9268	Telephone:	+45 4371 2641 Mob. +45 5358 2641
E-mail	ghe@dhigroup.com	E-mail	ag@microdrop.dk

Quick scan		Previous quick scan					
Date:	2010.10.18	Yes		Date:		No	x

Product description - *The following text was supplied by MicroDrop Aqua and edited by DHI.*

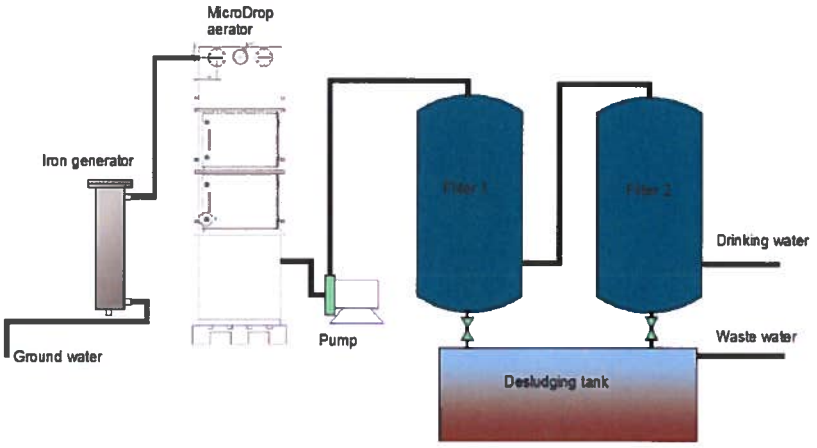
The MicroDrop plant for removal of arsenic in ground water, is built as follows:

Well water is pumped from the well by the ground water pump and flows through a container filled with iron in the form of shavings, wool or a rod. In this iron generator, some of the iron will be dissolved as Fe(II)ions, thus raising the iron content in the water.

In a pressure less MicroDrop aerator, the Fe(II)ions are oxidized to Fe(III)ions, and form iron insoluble hydroxide. Arsenic is co-precipitated, or adsorbs to the surface of the iron hydroxide. Some of the precipitate settles in the bottom of the aerator.

The water is pumped through a first (sand) media filter, where the bulk of the iron hydroxide and the arsenic are held back. A subsequent second filter is reducing the iron and arsenic to below the WHO recommendations. This also ensures adequate water quality when the first filter is back-washed. Instead of media filters, membrane filters may be used for separation.

The back-wash water is allowed to settle in a storage tank, and the water drained to waste. The small quantities of precipitated iron hydroxide sludge have a high content of arsenic, and need to be disposed off as toxic waste.



Product ready to market				Product in last development phase			
Yes	x	No		Yes	(x)	No	
Performance claims							
Matrices:	Ground water						
Targets:	Dissolved and particle-bound arsenic (=total arsenic)						
Effects:	Removal of total arsenic to a concentration below WHO's provisional guideline value (10 µg/l)						

Product description clear				**Performance claims clear**			
Yes		No		Yes		No	

Existing test data							
Tests performed				Test body qualified			
Yes	x	No		Yes		No	x
Test report available				Test report qualified			
Yes		No	x	Yes		No	
Test methods available				Test methods adequate			
Yes		No	x	Yes		No	
Raw data available				QA of raw data adequate			
Yes	x	No		Yes		No	x
Performance claims sustained				Performance claims relevant			
Yes	x	No		Yes	x	No	

Conclusions quick scan
The water treatment equipment consists of MicroDrop Aqua's proprietary iron generator and aerator, combined with subsequent automated filtration equipment. Alternative filtration methods may be included in the verification protocol, in parallel with MicroDrop Aqua's standard filtration solution, *i.e.* two pressurised rapid sand filters in series. This will be regarded as different versions of the same product. Data from previous tests exist, but are not sufficiently documented for inclusion in the verification. It is concluded that the product is ready to market, although optimisation is ongoing regarding the iron generator. The optimisation needs to be completed by Microdrop Aqua before the finalisation of the verification protocol and test plan documents.

Date	Name	Signature
2010.10.18	Gerald Heinicke