AQUA SENTRY

Operating Manual

Battery Powered Separator Alarms

IS 065 Series

Installation, Operation & Maintenance

darcy group

darcy spillcare AQUA SENTRY AYLES FERNIE

Working today for a cleaner tomorrow

Contents

Separators and alarms should be serviced and maintained in accordance with BS EN 858-2

Declaration of Conformity

This product meets all the essential safety requirements of the referenced European Directives listed below and is issued under the sole responsibility of the manufacturer.

Equipment Name and Type		**IS 065 Battery Separator Alarm**
Manufacturer		**Darcy Products Ltd.** **Brook House** **Larkfield Trading Estate** **New Hythe Lane** **Larkfield** **Kent** **ME20 6GN**
Applicable European Directives:		2014/30/EU – Electromagnetic Compatibility Directive (EMC) 2014/35/EU – Low Voltage Directive (LVD) 2014/34/EU – Equipment for Potentially Explosive Atmospheres (ATEX) 2014/53/EU – Radio Equipment Directive 2011/65/EU – Restriction of Hazardous Substances Directive (RoHS)
Certificate Number		Baseefa10ATEX0128
Specific Marking of Explosion Protection		Ex II (1) G [Ex ia Ga] IIC (-20°C ≤ Ta ≤ +50°C)
Notified Body Number		SGS Fimko Oy, Finland 0598
EU Harmonised Standards	EMC	EN IEC 61326-1:2013 (Emissions Class B)
	LVD	EN 61010-1:2010/A1:2019
	ATEX	EN 60079-0:2013 EN 60079-11:2012
	RED	EN 301 511 v12.5.1 EN 301 908-1 v13.1.1 EN 301 908-2 v13.1.1
	RoHS	EN IEC 63000:2018
Serial Number and Year of Manufacture		Displayed on the side of the control unit
On behalf of the above-named company, I declare that, on the date the equipment accompanied by this declaration is placed on the market, the equipment conforms with all technical and regulatory requirements of the above listed directives and standards. Jurgen Fenney – Quality Manager		
		DATED: 05/04/2023 Larkfield

IMPORTANT

Note: In all cases good, standard electrical practice should be followed, and the installation must conform to the appropriate local code of practice – e.g. BS EN 60079-25 in the UK. The installation must be such that the intrinsic safety is not compromised by: - exposure to risk of mechanical damage, unauthorised modification or interference, exposure to moisture, dust and foreign bodies, excessive heat, invasion of intrinsically safe circuit by other electrical equipment or circuitry. (See Note in installation section)

Please contact Aquasentry for any advice on 0800 0370 899 (UK) or +44 (0) 1732 762388 (rest of the world).

General Description

The unit is designed to monitor up to two oil/water separator tanks for build-up of oil, silt or excessive liquid and notify designated users by text message and/or email. The current status of the unit and all settings can be made by visiting the Aquasentry Monitoring Service web site.

General Operation

The control unit automatically checks the condition of the probes and battery every 15 minutes. Any probe condition changes, or a low battery condition are sent back to the Aquasentry Monitoring Service web site. Text messages and/or emails are then sent to the list of notified users for the unit. A probe check can also be initiated manually at any time by pressing the button on the front of the unit.

Probes to be monitored can be enabled or disabled by internal DIP switches.

In order to save battery power, the LCD is only powered up during a probe check that was initiated by pressing the button on the front of the unit. The automatic 15-minute interval checks will not power up the LCD.

The unit contacts the Aquasentry Monitoring Service every ten days to report its continued presence and correct operation.

Applicable Firmware

Firmware ID	Description	Version
PCP-7400	Beacon-only	All versions
PCP-7437	GPRS to monitoring service	All versions
PCP-7457	High foam alarm	All versions
PCP-7462	Check valve (GPRS to monitoring service)	All versions
PCP-7482	SMS text to monitoring service	All versions
PCP-7484	“High level” label on input 1 (GPRS to monitoring service)	All versions

Installation

This product has been designed and certified as being intrinsically safe. It is of paramount importance, that the unit should not be modified in any way and the installation be carried out by an approved installer, in accordance with the Environment Agency guidelines (PPG3, EN 858-1 and EN 858-2). Any deviation from this could invalidate the certification warranty and render the unit unsafe for its intended use.

Control Unit

Refer to Table 3 on page 7 for required cable specifications.

The control unit must be positioned in a non-hazardous area. For all wiring details, refer to Table 4 on page 7 and Table 5 on page 7.

The unit must be installed using a peak or similar cover to protect from direct sunlight.

Connection to Control Unit

The Probe cable(s) should be fed through the appropriate glands, as shown in Figure 1. This also applies to the beacon and opto output cables, if used.

All cables must be secured to the PCB with cable ties as shown.

IMPORTANT NOTE: Under NO circumstances must the control unit casing be drilled to allow cable entry in any area(s) other than those already provided, as this would infringe the certification and therefore safety of the product.

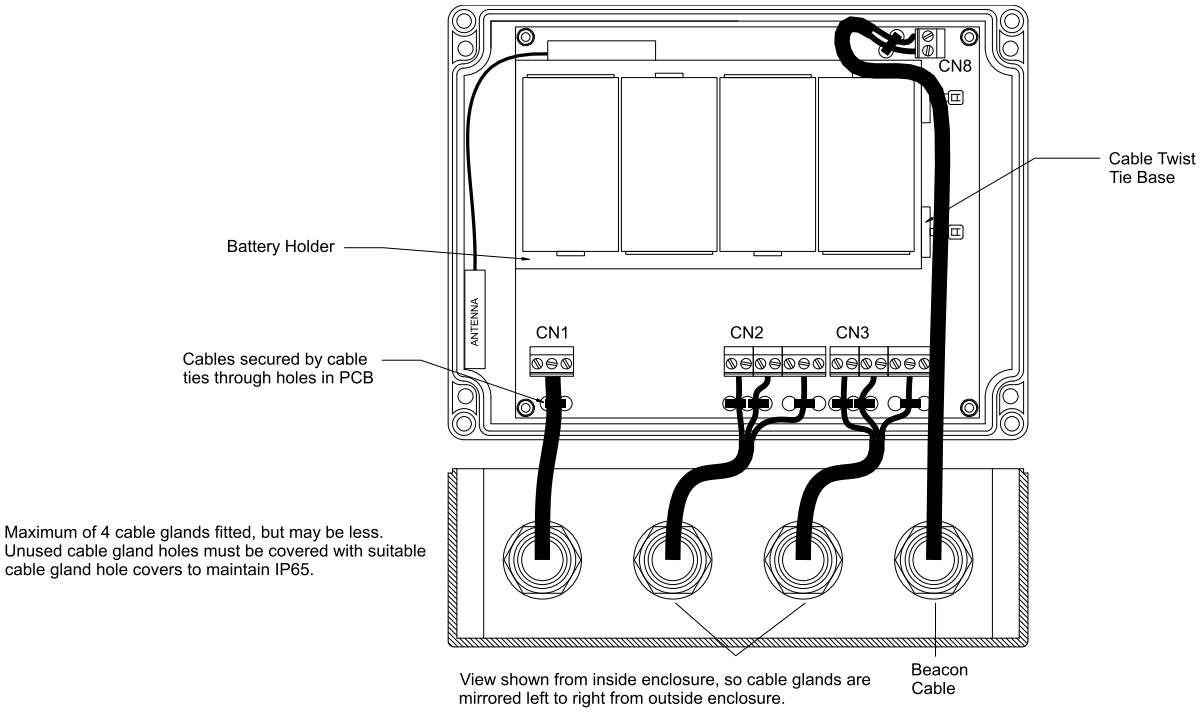

Figure 1 - Connection to control unit

Using a junction box

An intrinsically safe junction box should be used where incoming cable sizes must be reduced to gain entry through the cable glands in the base of the control unit.

Maintenance and Repair

Due to the harsh environments which the probes can be subjected to, it is advised that they are inspected and cleaned with a damp cloth at regular intervals. Except for the batteries and SIM, the control unit does not contain user serviceable parts. For all repairs, contact Aquasentry on 0800 0370 899 (UK) or +44 (0) 1732 762388 (rest of the world).

Technical Information

Electrical

Enclosure	200mm(W) 150mm(H) 76mm(D) IP65 polycarbonate	
Unit weight	5.5 kg (with batteries)	
Supply voltage		6V DC battery (4 x 1.5V alkaline 'D' cells)
Current consumption	Sleep Mode	Typically 106µA
	LCD active	Typically 323µA
	Checking probes	Average 4mA
	GSM transmit	200mA max.
Typical battery life	> 2 years	
Low battery threshold	4.5V	
Fusing	FS1	100mA resettable fuse
	FS2	F 100mA H 250V 1500A breaking capacity
	FS3,4	Littelfuse 0242.050UAT1 50mA 250V 4000A breaking capacity
	FS5	Littelfuse 0242.100UAT1 100mA 250V 4000A breaking capacity
	FS6	T 3.15A H 250V 1500A breaking capacity
Max probe cable length		200m (less is values in Table 3 would be exceeded)
Opto-isolated output (CN1)		U_m = 253Vrms. This output is designed to switch DC signals of up to 12V, 100mA
Beacon output (CN8)		11.2V DC, 100mA maximum

Table 1 - Electrical Specifications

Beacon Output

The beacon operates for 2 minutes every half hour when an alarm occurs. This unit is only certified for use with a beacon on this output. Do not connect any other device, such as a relay, as this would void the certification and potentially render the unit unsafe.

Notes on the beacon output:

1. U_m = 0, i.e. no other source of power must ever be connected directly or indirectly to this output.

2. Cable used must have ≥ 1mm insulation and be ≤ 2m length.

3. Must only be connected to a beacon which is powered entirely from this unit, i.e. this output must not be used as a control signal to a beacon that has its own power supply.

4. The beacon must be isolated from earth.

I/O Parameters

U_o	7.88V
I_o	53mA
P_o	104mW
C_i	0
L_i	0

Table 2 – Hazardous area terminals (CN2,3)

NOTE: The parameters in Table 2 apply separately to CN2 and CN3, which are separate I.S. circuits.

The capacitance and either the inductance or inductance to resistance ratio (L/R) of the load connected to hazardous area terminals CN2, 3 must not exceed the following values:

Group	Capacitance (µF)	Inductance (mH)	OR	L/R Ratio (µH/Ω)
IIC	8.8	12.8		98
IIB	115	51.4		392
IIA	1,000	102		784

Table 3 – CN2, 3 load parameters

Probe Cables

The total capacitance and inductance of the cable used between the control unit and the probe must not exceed that shown in Table 3.

Mechanical

Protection and/or screening of the cable should also be considered. The maximum length of cable between probe and control unit must not exceed 200 metres or less if the values in Table 3 would be exceeded.

Probe Terminals

Probe Type	A	B	C	D	E	F	G
High Oil	RED (or BROWN)	BLUE					
High Liquid			RED	BLUE (or BLACK)			
Silt (PP/14220)					BROWN	GREEN/ YELLOW	BLUE
Silt (PP/PROBE/ SILT-1)					1	4	2, 3, 5

Table 4 – Probe cable connection details (CN2, 3)

Beacon Terminals

CN8 Terminal	Connect To
+	Beacon positive terminal
-	Beacon negative terminal

Table 5 – Beacon cable connection details (CN8)

Opto-Isolated Output Terminals

The opto-isolated output is intended to be used to simulate a switch press to an arbitrary piece of external equipment. The output replaces the mechanical switch on the equipment's switch input. It is typically operated for around 20 seconds when a high oil alarm occurs on zone 1. This may be used to operate a piece of external equipment that closes a drain valve to prevent pollution, for example. The output can be used either to connect to a switch input on an external piece of equipment, or to operate an external relay if an external power supply is used. See Figure 2 for connection details for both modes of operation.

Additional Resistor

For PCB revisions earlier than V2.00, it has been found that under some circumstances when the opto output is used to drive a relay that there is excessive leakage current when the output is off. This is alleviated by fitting an external 4.7KΩ resistor between CN1 terminals B and C, as shown in Figure 2. This resistor should always be fitted. Do not solder the resistor to the board as this would invalidate the ATEX certification. Always connect it to the screw terminals.

The resistor has been fitted to the PCB as standard from PCB V2.00 onwards.

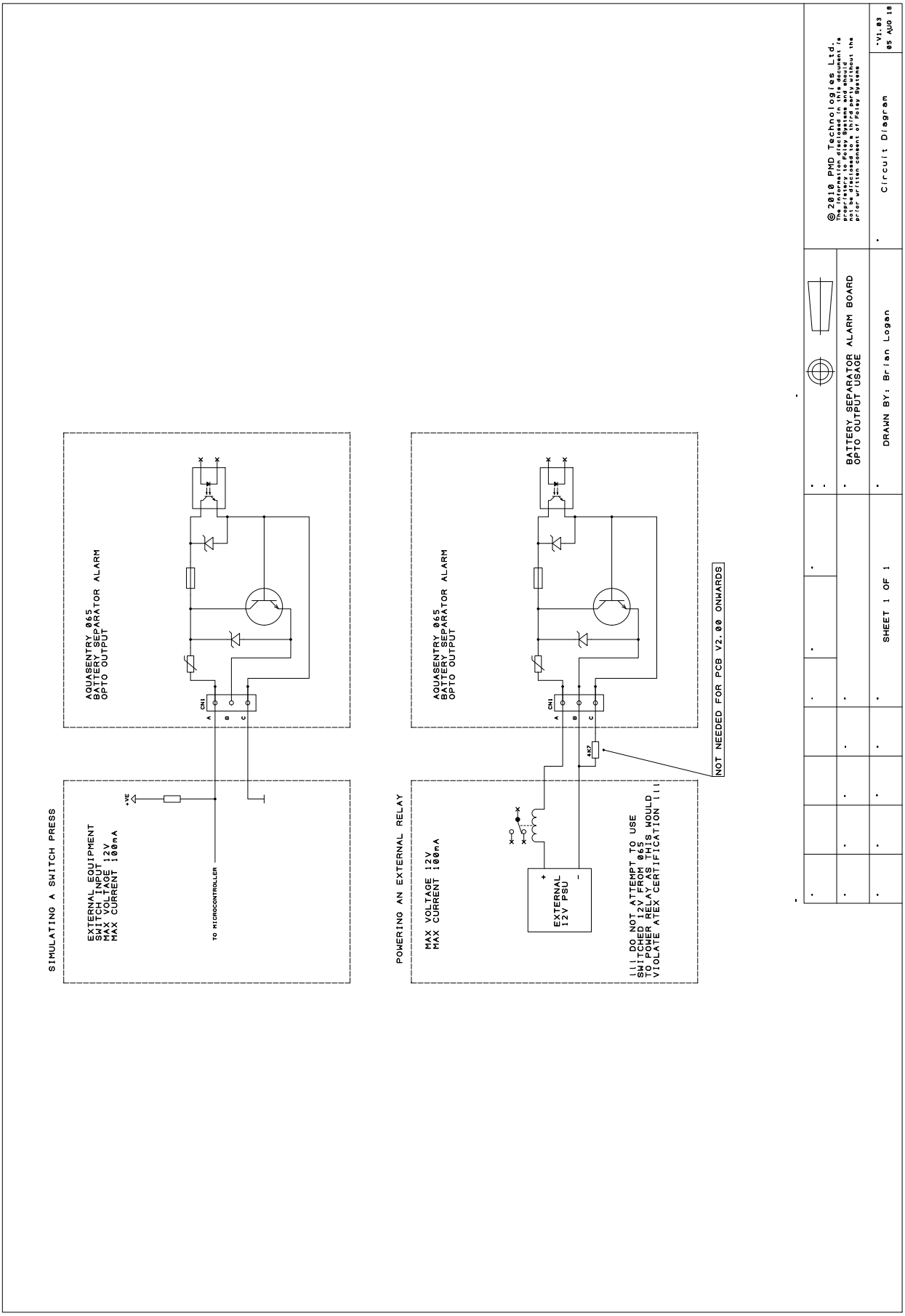

Figure 2 - Wiring of opto output to trigger external equipment

SIM

The SIM provided by Darcy with the control unit has credit maintained by Darcy and is paid for by the end customer by an annual charge or as part of a service contract on the system. The type of SIM used means the SIM will continue to work, unlike pre-paid SIMs which may stop working if not used for a period of time.

The 065 uses the cellular GSM network to connect to the Aquasentry Monitoring Service. This uses GPRS for data transfer. Each cellular network provider has different login credentials for the GPRS APN on their network. This would mean the 065's firmware must detect which SIM is fitted and provide the correct login credentials. This takes space in the firmware and can change over time. Also, some customers have asked for their own company's preferred SIM provider's SIM to be used, which may have non-standard login credentials, which are not in the 065's firmware. For these reasons, Darcy provides our own SIMs which we can be confident will always work.

As mentioned, customer's own SIMs will not work with the 065 for the above reasons.

Battery Installation

The unit is supplied with batteries, but they are not installed in the battery holder to prevent damage to the unit during transit due to the weight of the batteries.

Install the batteries, observing the polarity marked in the battery holder, add the cover plate over the batteries and secure in place using the two supplied cable ties. Ensure friction between the cover plate and the batteries does not prevent the batteries properly contacting the battery holder contacts.

Batteries will normally be replaced by Aquasentry once a year for end users with a service contract. Any replacement batteries fitted by the end user themselves must be alkaline to preserve the long battery life.

Test Mode

Test mode can be used during installation to show the instantaneous state of all the probes as well as the battery state. Once the batteries have been inserted and the LCD is powered up, one of the following methods can be used to enter test mode. Older firmware versions only support some of these methods, so experimentation may be necessary.

- If the unit's lid is secured in place so no access to the internal board is possible without removing the lid, press and hold the button on the front of the unit for about 5 seconds until the LCD shows "TEST MODE", then release the button.
- With the lid removed and the board inside accessible, press and hold the button on the front of the unit whilst pressing and releasing the reset switch on the board inside the unit. Continue to hold the button on the front of the unit until the display shows "Test Mode". This may take up to 10 seconds or so to display.

- With the lid removed and the board inside accessible, press and release the TEST button on the board.

To exit test mode, simply press the reset switch on the board inside the unit without pressing the front of unit button.

If no action is taken, normal operation will resume when the button has not been pressed for 10 minutes (5 minutes on older firmware versions) to prevent the unit being left in test mode and causing excessive battery drain.

Detailed Operation

Test Mode

A test mode can be entered which allows the instantaneous state of the probes to be seen along with the battery voltage. See the *Test Mode* section for details on entering test mode.

- Link block LK1 inside the unit must have a jumper link installed across positions 2 and 3 for the probe inputs to work correctly.
- To save power, the display will go blank after 3 minutes. On later firmware versions the unit will reset after 10 minutes to ensure it is not accidentally left in test mode.
- Probes that have been disabled by the DIP switches on the board are shown with a '-' symbol.
- When enabled, probes show an 'F' or 'C' for fail (alarm) or clear, respectively.
- Setting the "HIGH OIL 1" DIP switch to the ON position will also power up the beacon output terminal block at CN8 for testing purposes.
- Setting the "HIGH LIQUID 1" DIP switch to the ON position will also switch on the opto output at terminal block CN1 for testing purposes.
- Batteries are considered low and in need of replacement below about 4.500V.
- Battery voltage is typically 6.400V for new batteries.

A typical screen layout in test mode is shown in Figure 3.

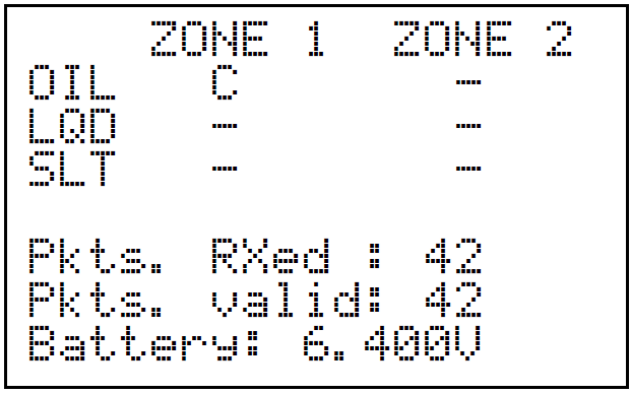

Figure 3 - Typical test mode screen layout

Normal Operation

After the batteries have been installed and the startup display has been shown, the unit will check the probes 6 times, 8 seconds apart. This is to prevent false alarms.

NOTE: The silt probe must be in the alarm state for 64 consecutive 15-minute probe check intervals before it registers an alarm is raised. This is to prevent false triggering due to silt cloud stirred up during a heavy downpour.

Once the checks are complete, any probes that enter alarm state or low battery condition will cause the unit to contact the Aquasentry Monitoring Service web site to report the condition. The unit switches off the LCD and enters a low power state for 15 minutes until the next probe check is due.

In order to save battery power, the LCD is only powered up during a probe check that was initiated by pressing the button on the front of the unit. The automatic 15-minute interval checks will not power up the LCD.

The unit contacts the Aquasentry Monitoring Service every ten days to report its continued presence and correct operation.

Aquasentry Monitoring Service

The Aquasentry Monitoring Service allows the current state of the separator to be monitored via the web site. It can also send text messages to a mobile phone and emails when an alarm condition is detected or when a service is due, if a service contract option was taken.

An account username and password are required to access the monitoring service. Contact Aquasentry on 0800 0370 899 (UK) or +44 (0) 1732 762388 (rest of the world) to setup an account. Once an account is setup, an email should be received containing the login details.

To access the monitoring service, a Windows PC with Microsoft Edge in Internet Explorer mode must be used. As the Microsoft Silverlight browser plugin has been discontinued, by default Microsoft Edge will prompt to install the Silverlight plugin but attempting to do so will fail. Instead, the Silverlight Developer installer can be downloaded from our web site at the link below. This Windows installer will install the Silverlight plugin. Once installed, restart the PC and open Edge again.

Silverlight Developer

To setup Edge in Internet Explorer mode, click the ellipsis at the top right of Edge and then Settings:

Figure 4 - Accessing Settings in Microsoft Edge

Referring to Figure 5:

• Select Default Browser on the left and ensure "Allow sites to be reloaded in Internet Explorer mode" is set to Allow, as shown.

• Click Add and enter the URL of the monitoring service, which is https://aquasentry.interceptormgt.co.uk/

• Restart the browser when prompted.

• Note the URL expires after 30 days and so will need to be re-entered after then.

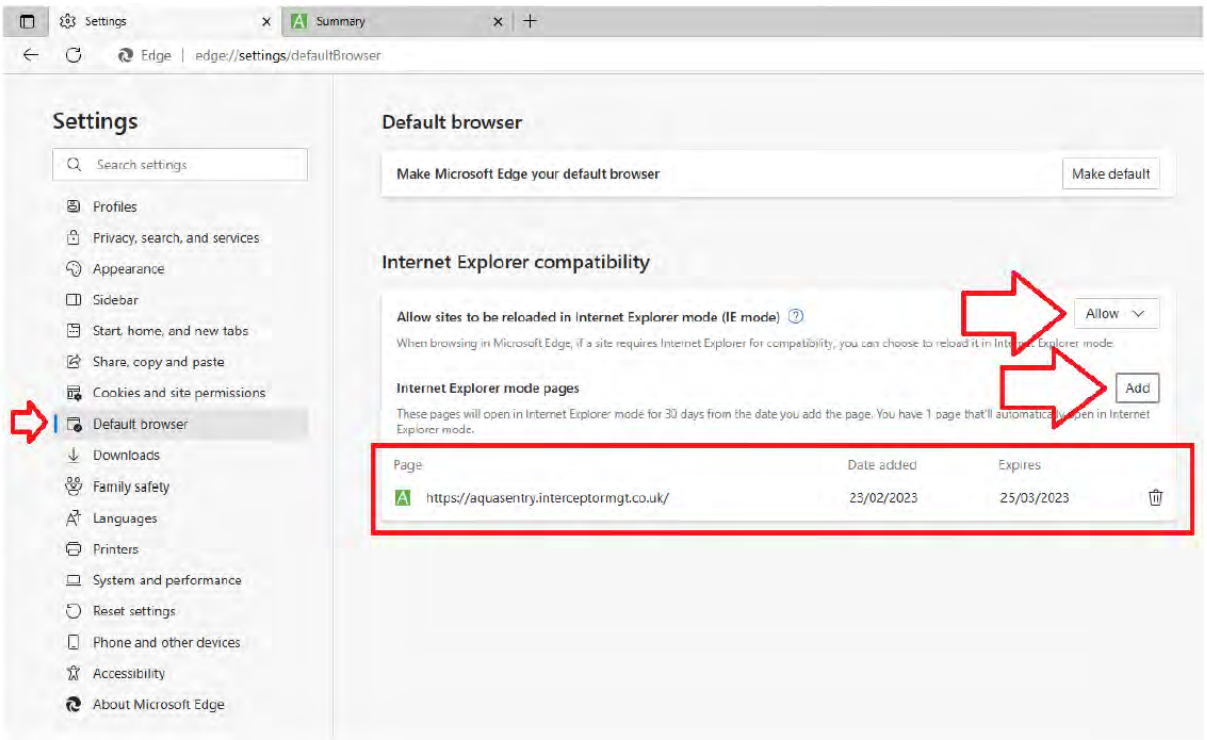

Figure 5 - Settings for running the Monitoring Service in Internet Explorer Compatibility mode

Cookies must be allowed to store an ASP.NET authorisation token that is sent to identify your login each time a web page is accessed.

The monitoring service can be found at https://aquasentry.interceptormgt.co.uk/. The screenshot in Figure 6 shows the monitoring service login page in Microsoft Edge.

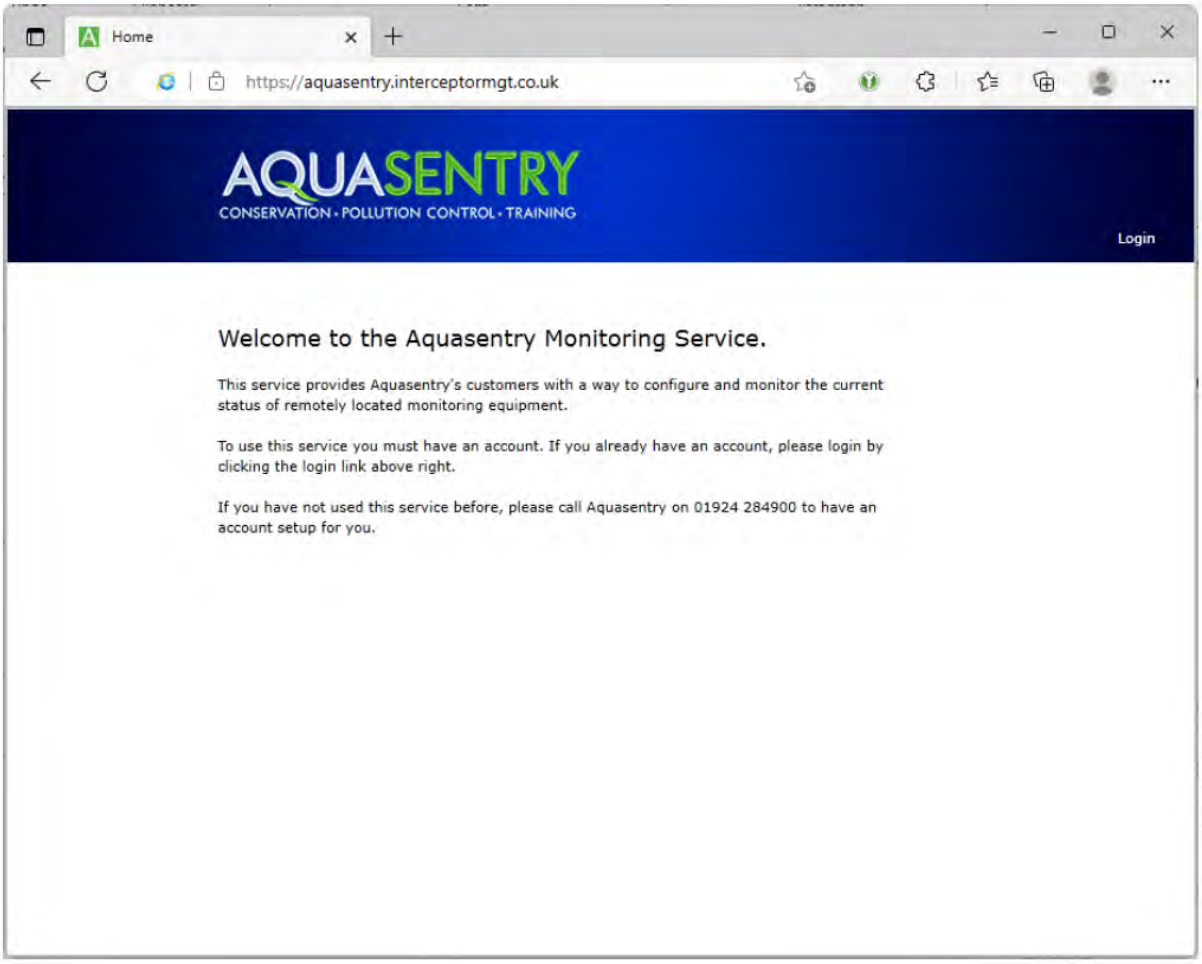

Figure 6 - Login page

Click the Login link in the top right corner and you will be presented with a user/password dialogue box, shown in Figure 7. Enter your username and password as provided to you. If the "Keep me signed in" check box is checked you won't need to re-enter your username and password each time, though this only lasts for a set number of days before re-entry is enforced.

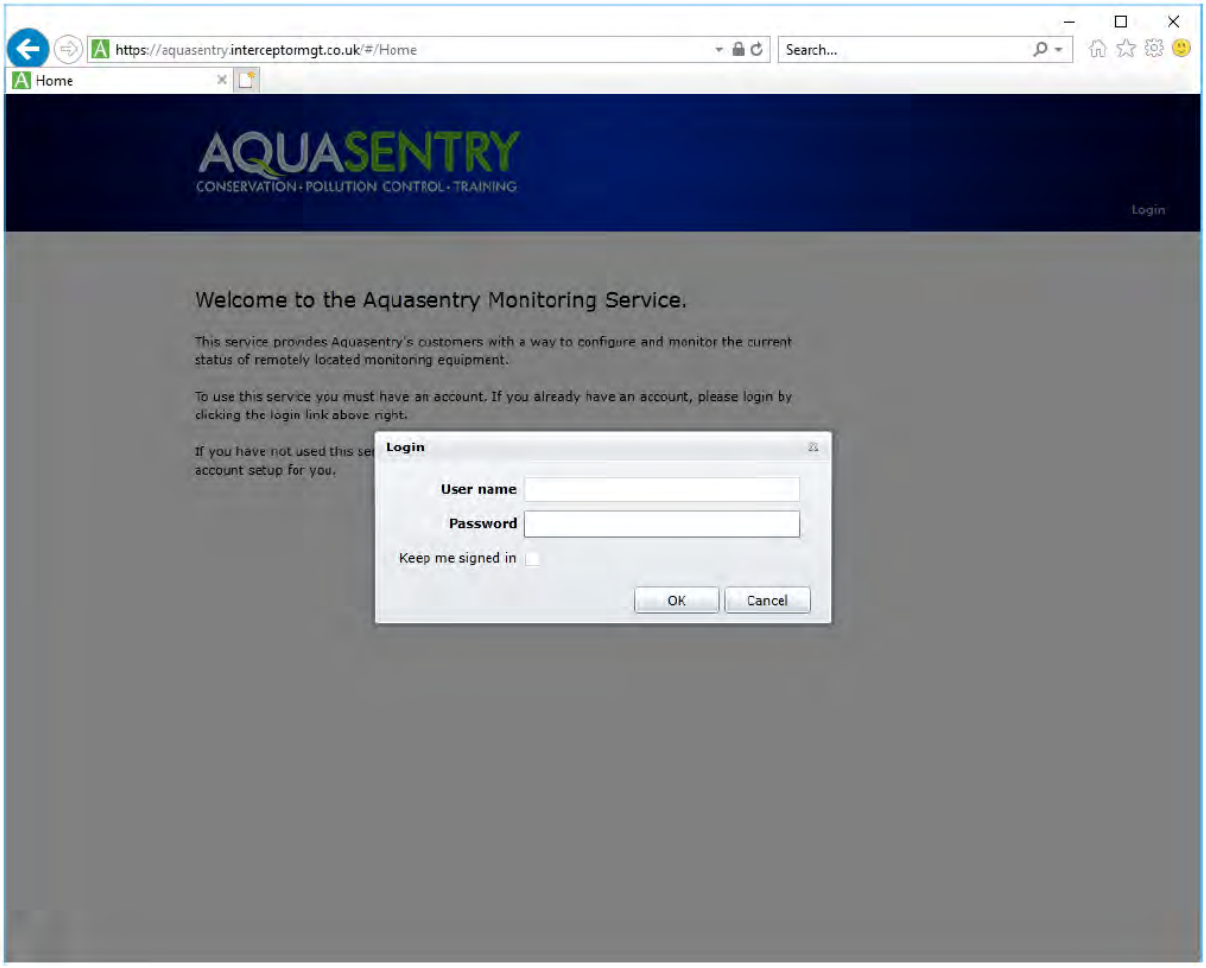

Figure 7 - Login page showing login dialogue

Summary Page

After logging in, the web page display will be like that in Figure 8. The central portion displays a list of all units owned by your company. Just one in this example. As you click on each unit its details are displayed in the lower portion.

The size of the lower portion of the display can be changed by moving the pale blue horizontal bar just above the Summary tab. Hover the mouse over it until the cursor changes to a double-ended arrow then drag the mouse up or down.

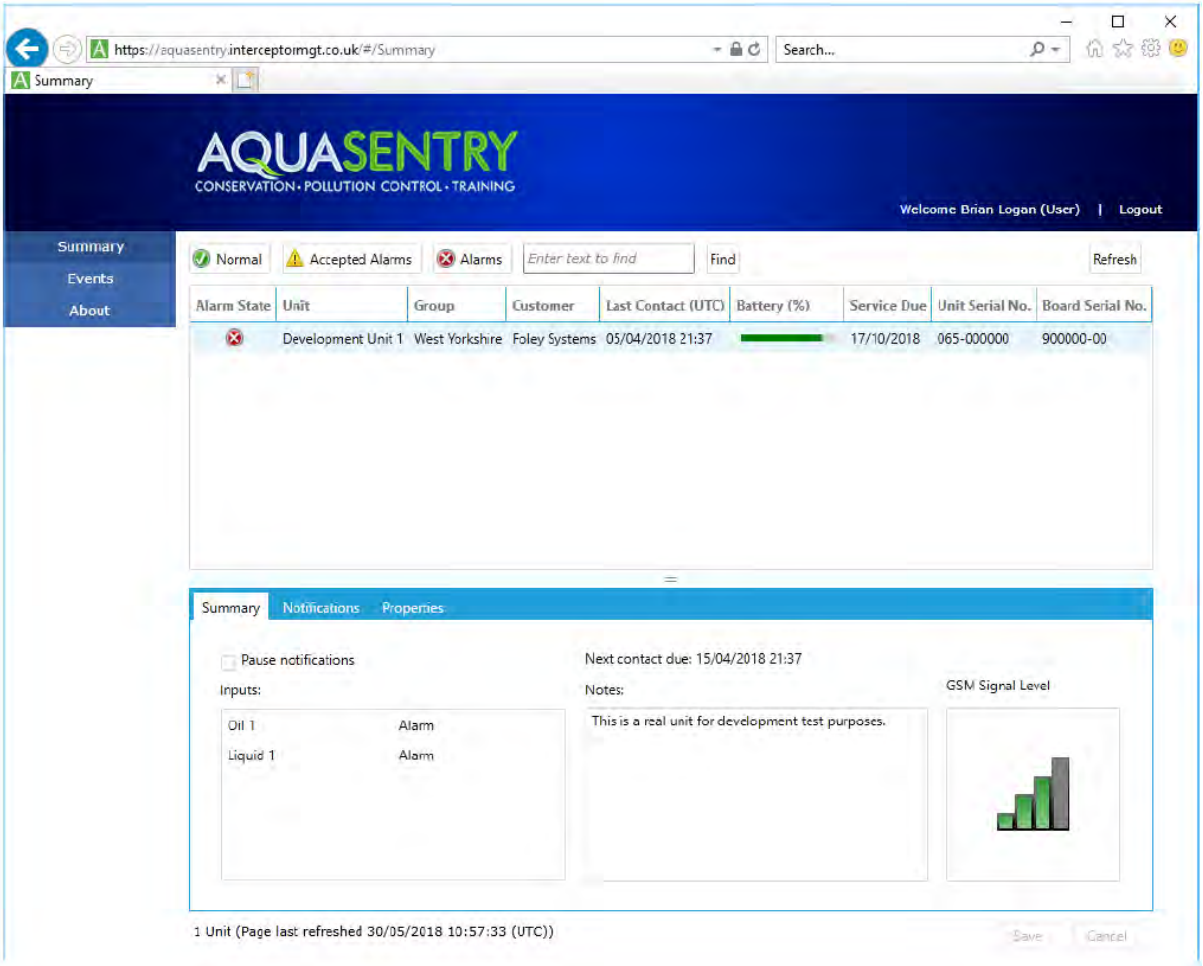

Figure 8 - Initial summary display after logging into monitoring service

- The Normal toggle button when pressed in will filter the units and show those which are in a normal state. Click it again to change it to the unpressed state and stop filtering by normal state.
- The Accepted Alarms toggle button when pressed in will filter the units and show those which are in an accepted alarm state. Click it again to change it to the unpressed state and stop filtering by accepted alarm state.
- The Alarms toggle button when pressed in will filter the units and show those which are in an alarm state. Click it again to change it to the unpressed state and stop filtering by alarm state.
- The search box Enter text to find Find can be used to search for and display a single unit from the list. Enter one of the following:
    - Unit or group name.
    - A firmware serial number in the format B65-1234.
    - A board serial number in the format 123456-12.
    - A unit serial number in the format 065-123456.
- The *Alarm State* column indicates the alarm state of the unit in that row as follows:
- All probes clear.

-  One or more probes in alarm state or low battery. Alarm has not yet been accepted.
-  One or more probes in alarm state or low battery. Alarm accepted on the remote unit.
- The *Unit* column shows the name assigned to the unit this row refers to. It is advisable to limit the length of the unit's name so that the other columns to the right aren't pushed out of display.
- The Group column shows the name of the group this unit is assigned to.
- The *Last Contact (UTC)* column shows the last date and time that the unit contacted the monitoring service. This is stored in UTC (GMT) to avoid any issues caused as the clocks are shifted at the beginning and end of Daylight-Saving Time.
- The *Battery (%)* column shows the estimated battery life remaining.
- The actual battery voltage can be shown by hovering your mouse over the percentage bar.
- A unit with new batteries will typically show a battery voltage in the region of 6.3 – 6.4V.
- Low battery is when the battery goes below 4.5V, though there is some margin below this voltage before the unit will fail to operate.
- Though the battery voltage generally trends downwards with successive contacts with the monitoring service, it may on the odd occasion rise slightly from one contact to the next. This can be caused by changes in temperature of the batteries.
- The *Service Due* column shows the next date when text and/or email notifications will be sent to recipients that a service is due for this installation, assuming any recipients have been set.
- The *Unit Serial Number* column shows the unit serial number that is positioned on the side of the outside of the unit enclosure.
- The *Board Serial Number* column shows the board serial number that is positioned inside the enclosure on the board.
- The GSM Signal Level shows the received signal strength on the unit just prior to contacting the monitoring service. Hovering your mouse cursor over the bars will display the signal strength in dBm.
    - Signal strength is quoted in dBm. This is so many dBs relative to 1mV, so readings will be negative as signals are generally much weaker than the reference 1mV.
    - Each time a reading is 6dBm higher is equivalent to a doubling in signal strength as the dB scale is logarithmic.
    - -100dBm or lower is a low signal strength and lower may cause intermittent contact with the monitoring service.
    - -80dBm could be considered a reasonably strong signal.

Summary Details

The summary details for the selected unit are shown in Figure 9.

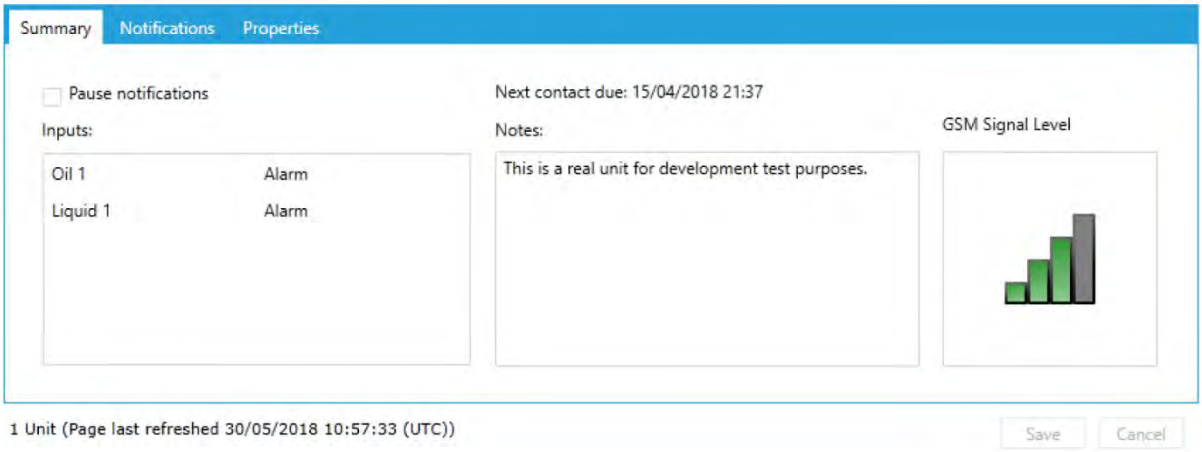

Figure 9 - Summary details

- Top left is the pause notifications checkbox. This is described in the section *Pausing Notifications*.
- *Inputs* shows the state of the probes on the unit. Note, only enabled probes are shown to avoid confusion.
- *Next contact due* shows the date and time the unit should next contact the monitoring service to ensure the unit is still operational. If there is a change in probe states or battery level, the unit will contact the monitoring service before that date and time.
- The *notes* section displays any arbitrary text that may be useful and relevant to this unit. Remember to press the Save button after making changes to ensure they are saved to the database.
- The *GSM Signal Level* shows the received signal strength on the unit just prior to the last time it contacted the monitoring service. Hovering your mouse cursor over the bars will display the signal strength in dBm.
    - Signal strength is quoted in dBm. This is so many dBs relative to 1mV, so readings will be negative as signals are generally much weaker than the reference 1mV.
    - Each time a reading is 6dBm higher is equivalent to a doubling in signal strength as the dB scale is logarithmic.
    - -100dBm or lower is a low signal strength and lower may cause intermittent contact with the monitoring service.
    - -80dBm could be considered a reasonably strong signal.

Pausing Notifications

If the unit stays in alarm mode for an extended period, for example when the unit is being used to monitor a river level and is high for more than 10 days, it may be desirable to suspend the sending of further notifications to prevent annoyance. This can be achieved by checking the Pause notifications checkbox and pressing the Save button. The unit will still contact the monitoring service when the probe states or battery state change, and every 10 days, but notifications will not be sent. It is therefore important to remember to uncheck the Pause notifications checkbox and press the Save button once again when the alarms on the unit have been cleared so that future email/text notifications will be sent.

Notifications

The notifications entries list text message and/or email recipients for when an alarm is raised on a remote unit. There are three levels of notifications; company (all units), group and unit. See Figure 10.

Notes:

- The size of the bottom half of the display can be changed by moving the pale blue horizontal bar just above the Notifications tab. Hover the mouse over it until the cursor changes to a double-ended arrow then drag the mouse up or down.
- Press Save to commit changes.

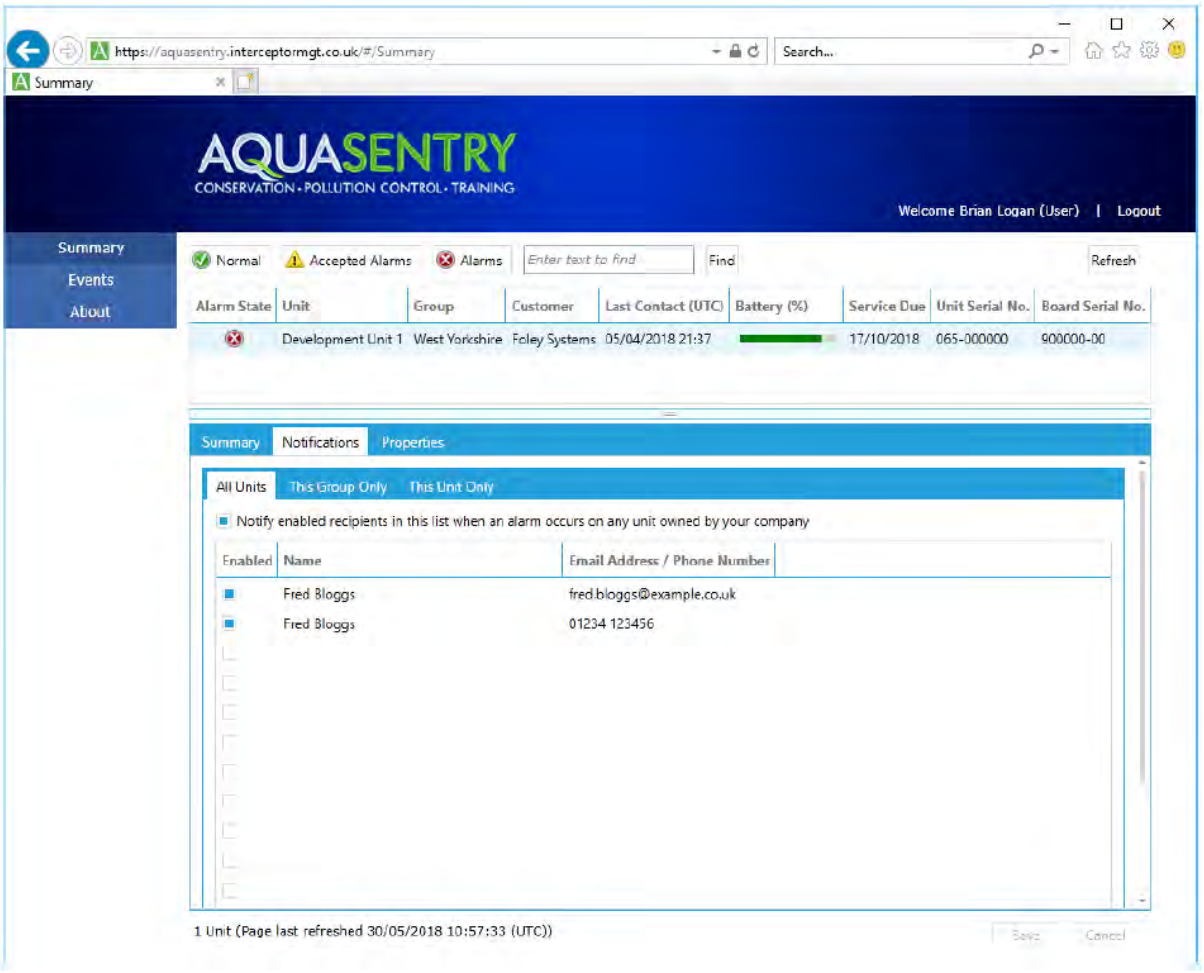

Figure 10 - Lists of recipients notified when an alarm or service due occurs

All Units

Typically, only the All Units tab is used to enter the recipients. This will cause any unit belonging to your company that goes into alarm to notify recipients in this list.

This Group Only

If you need a group of units to only notify certain people, create a group and put the units in that group then select one of the units and enter the recipients for that group into the list on the This Group Only tab. Note, currently groups can only be created by contacting Aquasentry.

This Unit Only

If you need just this one specific unit to only notify certain recipients, then enter the recipients for that unit on the This Unit Only tab.

Events Page

The historical log of contact events from the remote units can be seen on the Events page as shown in Figure 11.

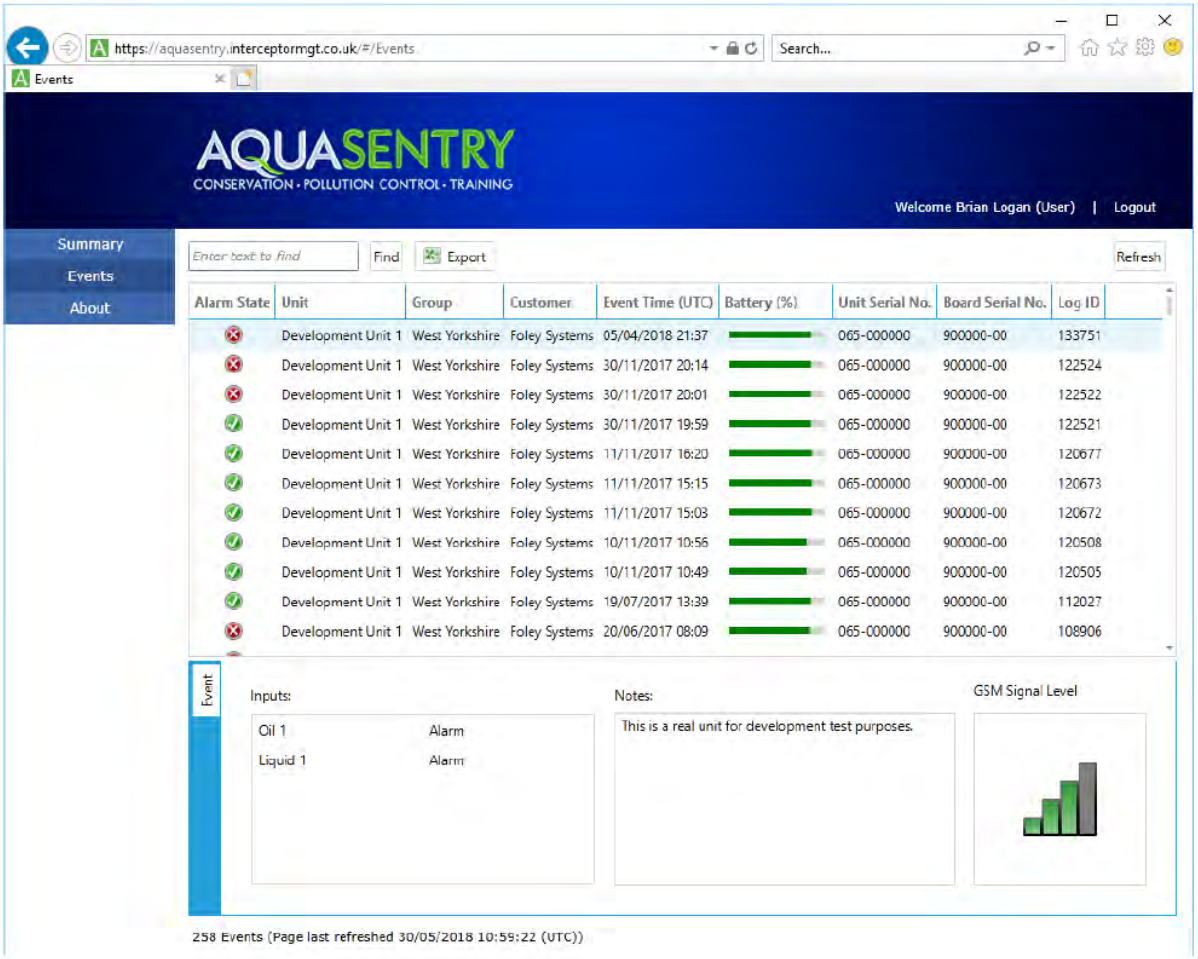

Figure 11 - Events page

- The search box Enter text to find Find can be used to search for and display a single unit from the list. Enter one of the following:
  - Unit or group name.
  - A firmware serial number in the format B65-1234.
  - A board serial number in the format 123456-12.
  - A unit serial number in the format 065-123456.
- Clicking the Export button generates an Excel spreadsheet (.xlsx format) containing all the events for units for your company that are in the database.
- The *Alarm State* column indicates the alarm state of the unit in that row as follows:
  - All probes clear.

-  One or more probes in alarm state or low battery. Alarm has not yet been accepted.
-  One or more probes in alarm state or low battery. Alarm accepted on the remote unit.

- The *Unit* column shows the name assigned to the unit this row refers to. It is advisable to limit the length of the unit's name so that the other columns to the right aren't pushed out of display.
- The *Group* column shows the name of the group this unit is assigned to.
- The *Event Time (UTC)* column shows the date and time that the unit contacted the monitoring service and generated this event. This is stored in UTC (GMT) to avoid any issues caused as the clocks are shifted at the beginning and end of Daylight-Saving Time.
- The *Battery (%)* column shows the estimated battery life remaining.
  - The actual battery voltage can be shown by hovering your mouse over the percentage bar.
  - A unit with new batteries will typically show a battery voltage in the region of 6.3 – 6.4V.
  - Low battery is when the battery goes below 4.5V, though there is some margin below this voltage before the unit will fail to operate.
  - Though the battery voltage generally trends downwards with successive contacts with the monitoring service, it may on the odd occasion rise slightly from one contact to the next. This can be caused by changes in temperature of the batteries.
- The *Unit Serial Number* column shows the unit serial number that is positioned on the side of the outside of the unit enclosure.
- The *Board Serial Number* column shows the board serial number that is positioned inside the enclosure on the board.
- The *Log ID* column is for ease of reference when referring someone else to events in the list. They will always ascend but may not be contiguous.
- The *GSM Signal Level* shows the received signal strength on the unit just prior to contacting the monitoring service. Hovering your mouse cursor over the bars will display the signal strength in dBm.
  - Signal strength is quoted in dBm. This is so many dBs relative to 1mV, so readings will be negative as signals are generally much weaker than the reference 1mV.
  - Each time a reading is 6dBm higher is equivalent to a doubling in signal strength as the dB scale is logarithmic.
  - -100dBm or lower is a low signal strength and lower may cause intermittent contact with the monitoring service.
  - -80dBm could be considered a reasonably strong signal.

Accessories

Probe Cable

Whilst many different cables can be suitable for use with the probes, some customers feel more comfortable with some guidance. A typical example of a suitable cable is shown in Table 6. It can be ordered from Aquasentry or from Farnell (https://www.farnell.com/) as order code 1503980.

Manufacturer	Lapp Kabel
Manufacturer Part No.	0012640
Inductance	0.65mH/km
Capacitance	Core-core: approx. 135nF/km
	Core-screen: approx. 185nF/km

Table 6 – Typical probe cable

Beacon

Choosing a 12V xenon beacon that consumes a suitably low current for battery operation results in a limited range. A suitable beacon is detailed in Table 7. It can be ordered from Aquasentry as PP/GCT-4056 or RS Components (https://www.rs-online.com/) as order code 309-5944.

Manufacturer	Klaxon
Manufacturer Part No.	45-713121
Voltage	12V
Current	60mA (average)
Colour	Amber
IP Rating	IP65

Table 7 – Typical beacon

Operating Manual

Battery Powered Separator Alarms

IS 065 Series