



## 1. INTRODUCTION

---

The Remora is a low-profile, rugged 2G or 3G (NextG) GPS tracking device that has been designed for tracking containers, trailers, skip bins, and other assets where super long battery life is required without sacrificing the frequency of updates and performance.

## 2. IN THE BOX

---



You'll get a compact box containing the Remora. The 10 housing screws will be in a small packet inside the housing.

### 3. SIM, BATTERY AND SEALING

---

When handling the Remora be careful not to touch the GPS antenna, to minimise the risk of damaging the sensitive GPS amplifiers with static discharge.

The SIM card is preinstalled and activated.

#### 3.1. Insert the batteries

---



The Remora uses 4 x C-Cell batteries.

Take care to insert the batteries with the correct polarity. The springs are the negative terminals.

Once inserted, the LED next to the GPS antenna should flash briefly. If it does not, it means the unit has not yet reset. In this case, remove the batteries for a minute or two to allow any residual charge to drain, and then reinsert them. Failure to reset the unit will prevent automatic APN detection, and proper resetting of the battery life statistics. For extreme temperatures and high capacity use Lithium-Thionyl-Chloride batteries. Note: battery life statistics do not work with lithium batteries, however a low battery **Alert** will be activated at 7% of battery life if the **Alert** is set up.

#### 3.2. Online

---

Once the batteries are inserted, log in to [Westcoastgps.com](http://Westcoastgps.com) or open the telematics guru app on your smart device to determine if you can see the device.

#### 3.3. Closing and opening the housing

---



Once online, all that remains is to seal the housing. Seal the device carefully to achieve the IP67 rating.

1. Ensure that the clear silicon seal is in good condition, is lying flat, and is not fouled by any plastic swarf or by protruding connector cables.
2. Place the lid on the base, and gently squeeze it shut. Foam in the lid will compress against the batteries, holding them firmly in place when the unit is turned over.
3. Tighten the 10 screws to a uniform tightness. On the first assembly the screws may be quite stiff. An electric screwdriver with a torque limiting clutch is recommended.
4. The screws used are a thermoplastic screw: 3.5mm x 12mm (BN82428).

If you wish to replace the batteries and open the housing, be sure to check that the silicon seal is in good condition before closing the housing again. Seals should be replaced every 3 years to ensure reliable performance. Contact WestcoastGPS to obtain extra seals.

## 4. DEFAULT SETTINGS

---

By default, the Remora is setup for trip tracking. The following default settings apply:

1. Out of Trip:
  - a. 12 hour heartbeats. This is a GPS point and an upload every 12 hours.
2. In Trip:
  - a. Start trip threshold of 250m
  - b. Upload on trip start.
  - c. GPS points every 2 minutes
  - d. Upload every 30 minutes.
  - e. End a trip after 5 minutes of no movement.
  - f. Upload on trip end.

These settings and many more are configurable in the OEM Admin Interface.

The defaults provide a good starting point. It is important to monitor and tweak your settings to ensure the battery life is acceptable. Incorrect settings can flatten the batteries quickly. Contact Support for help with this.

## 5. DEVICE INSTALLATION

---

The Remora can be mounted on the asset to be tracked using screws, bolts, cable ties, or industrial adhesives. When choosing a mounting point, you have two competing goals:

1. To minimise the chances of the device being accidentally crushed or dislodged.
2. To maximise the GPS and mobile reception, and provide adequate ventilation.

Since the Remora is a battery powered device, reception is critical to its performance. While other members of the DM product family rely on their high quality GPS receivers for enhanced accuracy and the ability to operate in very low signal, the primary concern for the Remora is the battery used during each GPS fix.

When Alkaline batteries are being used, it is important to choose a mounting point that will not result in elevated temperatures. For instance, mounting the Remora in direct sunlight on the dash of an unventilated cabin may cook the batteries, leading to abnormally short service life.

If your Remora is fitted with the magnetic tamper detection option, ensure that the magnet firmly adheres to the surface of the mount point, and aligns with the circular recess on the

underside of the Remora. If it is not stuck strongly to the mount point, either magnetically or with the aid of adhesives, it may instead stick to the Remora. Ensure that it will reliably separate from the Remora during tampering, so that the alarm will be triggered.

## 6. BATTERY RECOMMENDATIONS

---

The quality of the C-Cell batteries used has a significant impact on the reliability of the product. A single cell failure can render the device useless. If good quality industrial C-Cells are used, the device will be exceptionally reliable.

The following alkaline batteries are recommended, with the first suggestion being the most reliable:

1. Panasonic LR14XW Industrial type
2. Fujitsu LR14FH High Power
3. Duracell Procell PC1400
4. Energizer EN93

For extreme temperatures and high capacity, use Lithium-Thionyl-Chloride batteries. These cells are significantly more expensive and harder to dispose. Recommended LTC cells:

1. SAFT LSH14

## 7. TRACKING YOUR ASSET

---

There are two methods for tracking your assets, using the Telematics Guru app on your Android or Apple devices and/or by logging into the westcoastgps.com website with the credentials provided to you by Westcoast GPS. The App provides basic tracking information including the ability to set up a one-time only "Movement Alert" and to put the asset into "Recovery Mode" should the asset go missing or is stolen. The website provides more robust tracking features including geofencing, alerts, and reports.

## 8. RECOVERY MODE

---

Should your asset be lost or removed without your authorization you can immediately start tracking your asset in regular intervals by activating "Recovery Mode" in the Telematic guru app or by logging in to Westcoastgps.com.

When using the app **Recovery Mode** is a one-touch feature designed to set the device into "live tracking" where it reports every 10 seconds. Logging into the website involves a few more steps to activate this feature. **Recovery Mode** is useful when recovering a missing or stolen asset. Two **important** things to note:

- a) your data usage will increase dramatically until the Recovery mode is deactivated
- b) battery life on the Remora will reduce quickly until the batteries are flat (up to 7 days depending where they are in the usage cycle), or until the Recovery Mode is deactivated.

How to activate on the www.westcoastgps.com website:

First login then select **Assets**, then **Manage Assets**, select your asset, then go to **Settings** (the cog on the far right). Then select **Enter Recovery Mode**. See below:

The screenshot shows the WestcoastGPS web interface. The browser address bar displays "https://westcoastgps.telematics.guru/Asset". The page header includes navigation links for "Live", "History", "Assets", "Odo/Hours", "Reports", and "Admin". Below the header is a search bar and buttons for "Create New Asset", "Set I/O Mappings", "Track Asset in Geofence", and "View in OEM".

Assets (3)	Type	Code	Device Type	Device Serial	Last Connected	Department	Est Odometer	Est Run Hours
Dart	Vehicle	Personal Car	Dart	124160	10 mins, 46 secs		9 929.8 km	254.2 hrs
Oyster 1	Vehicle		OysterGSM	133103	7 mins, 2 secs		280.0 km	10.6 hrs
oyster 3	Vehicle		OysterGSM	140493	4 weeks, 1 day		386.8 km	13.2 hrs

A settings menu is open for the 'oyster 3' asset, showing options: View Timeline, Add Odo/Hours, View Odo/Hours, Edit, Enable Asset, and Enter Recovery Mode (highlighted in yellow).

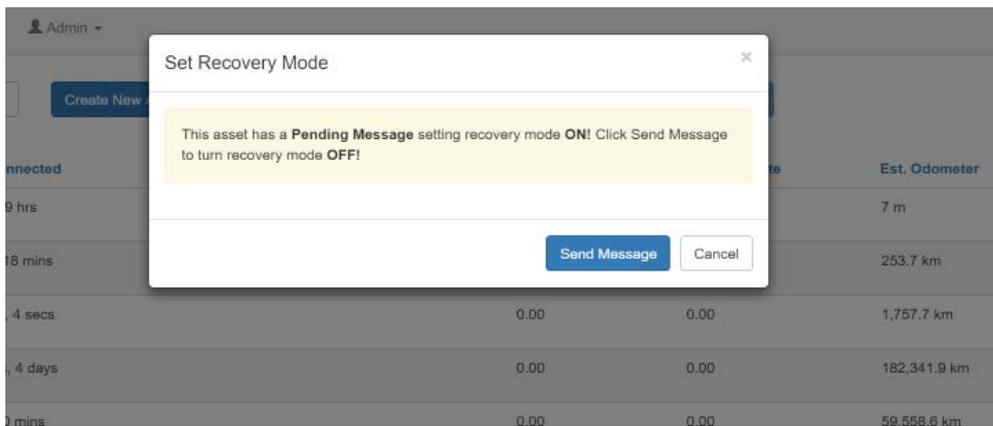
You will be asked to verify to be certain:

The screenshot shows the WestcoastGPS web interface with a "Set Recovery Mode" dialog box open. The dialog box contains the following text: "Recovery mode is currently off. Click Send Message to turn recovery mode **ON!** This is only recommended for advanced users." Below the text are two buttons: "Send Message" and "Cancel".

In the Asset column, you will now see it is active and offers **Leave Recovery Mode** if you would like to deactivate:

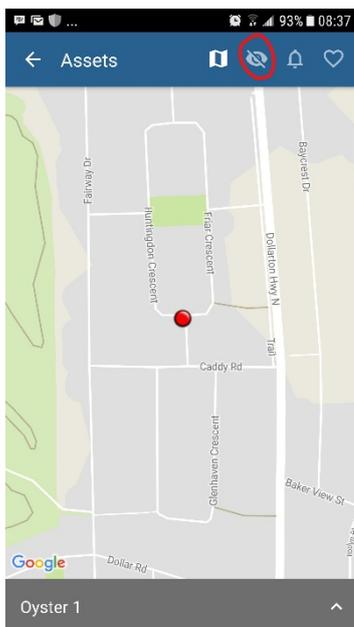
The screenshot shows the settings menu for an asset. The menu items are: View Live, View History, View Timeline, View Telemetry, View IO Telemetry, Add Odo/Hours, View Odo/Hours, Edit, Disable Asset, Leave Recovery Mode (circled in red), Immobilise, Clear Asset Data, and Delete.

If the request has been accepted or is pending, you will see this message:

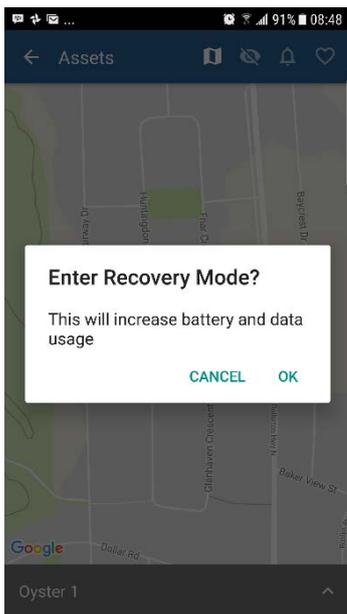


### Activating **Recovery Mode** on the App

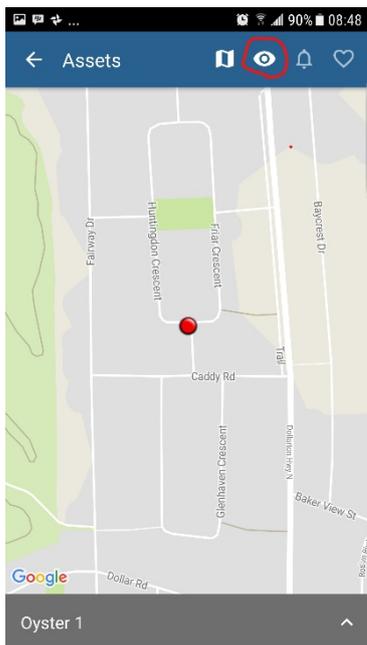
Select the eye on the top right:



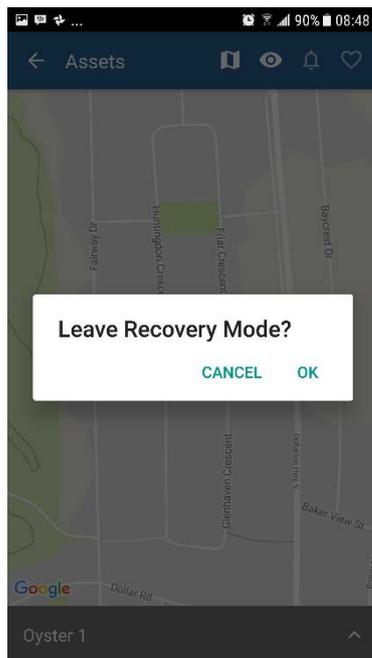
When the window below open click OK



And it shows as active with the line no longer through the "eye" on the top right:



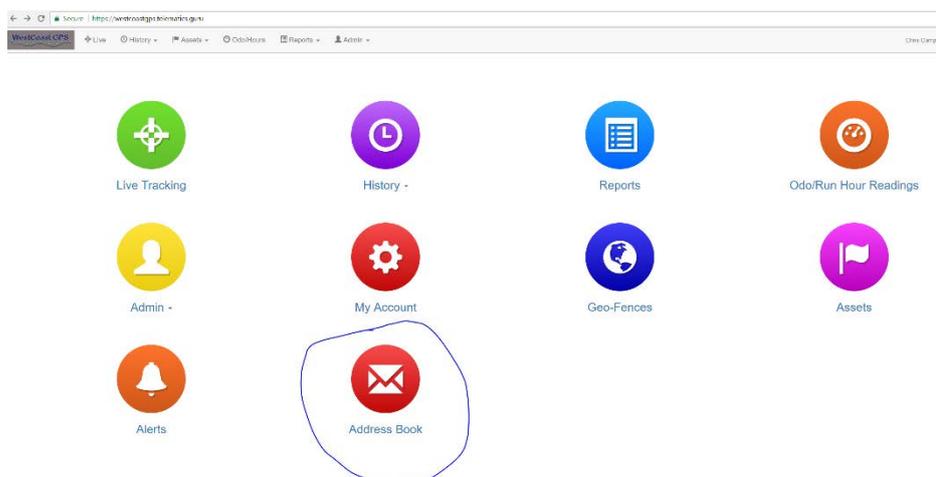
If you want to reverse it, and **Leave Recovery Mode**, just click on the eye again:



Click on OK

## 9. ADDRESS BOOK

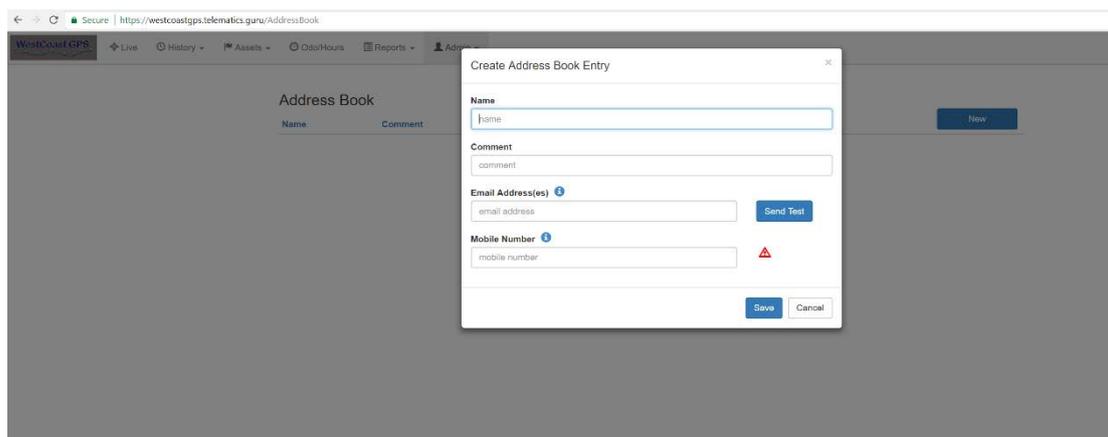
**Alerts** are an important component of managing your assets and to take advantage of **Alerts** you first have to do a few things, the most important being to set up your address book. From the main menu (which you can reach by clicking the WestCoast GPS logo on the top left corner) click on the “Address Button” which is circled in blue below:



Then click on the “New” button



Enter the email addresses you anticipate you will use for ALERTS. You can use whichever email addresses you want for each ALERT that you set up and you choose which emails to use when you create ALERTS.



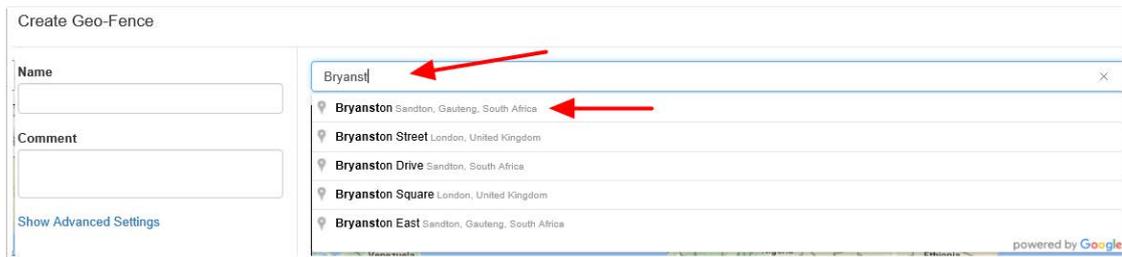
Once you have entered your first email address click “Save” and repeat the process until you have all of the email addresses entered. You can go back at any time and add or delete email addresses.

## 10. GEOFENCES

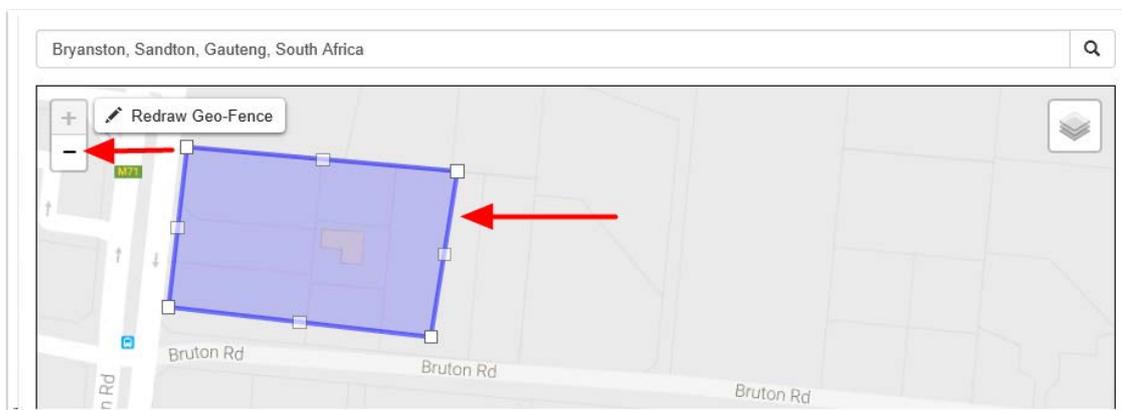
Setting up a Geo-fence is easy. From the main menu (which you can reach by clicking the WestCoast GPS logo on the top left corner) select Geo-fences as shown below:



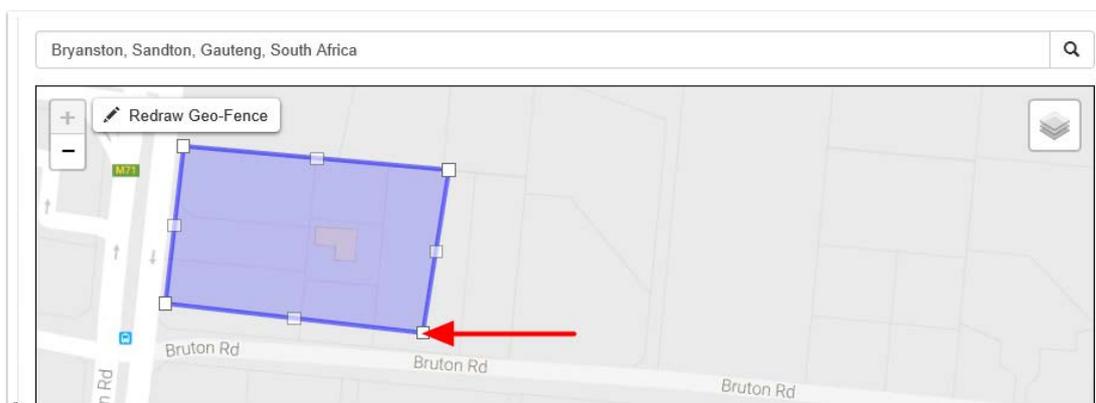
Begin typing an address and matching options will appear. Select the correct one as shown:



You can now adjust the zoom level using the plus(+) and (-) functions on the bottom right corner of the map, and once you see the area that you wish to create a zone for, use your cursor to click points outlining the shape, ensuring that your last point meets the first point you created, as show below:



Once you have clicked on your starting point the geo-fence shape will appear and you can adjust the shape by dragging any of the nodes shown by arrows below:



Remember that at least three points must be defined to create an area. Be sure to click the starting point to close the shape. A common stumbling block is not completing or closing the area. The Geo Fence will not save until it is closed.

Lastly, name your geo-fence and then click SAVE. The name given to your geo-fence will now appear in all of your trip history and reports.

For advanced options click on Show advanced options.

Name  
Test

Comment  
Bryanston, Sandton, 2191, South Africa

Show Advanced Settings

These are the advanced settings:

Priority 50

Exclude From Trip Assignment

Track asset activity in Geo-Fence

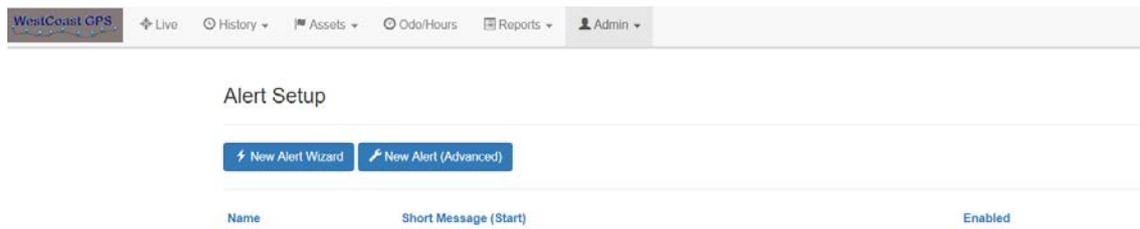
1. Priority: Geo Fences with a Higher priority are shown preference over those with a Lower priority. Where two Geo-Fences overlap with the same priority, the fence with the smallest area will be shown preference.
2. Exclude from trip assignment: If selected the Geo-Fence will only be used for setting up location based alerts. It will not be used when looking up trip start and end locations
3. Track asset activity in Geo-Fence: If selected, the system will record statistics for the asset activity inside this Geo-Fence.

## 11.ALERTS

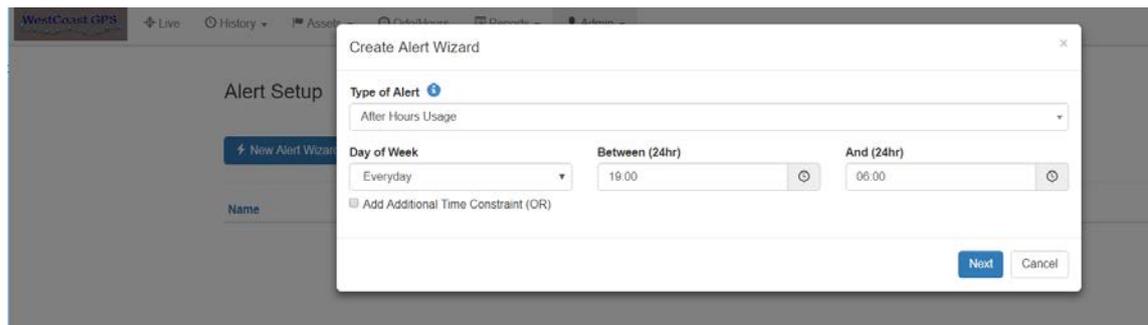
Setting up an **Alert** is easy. From the main menu (which you can reach by clicking the WestCoast GPS logo on the top left corner) select **Alerts** as shown below:



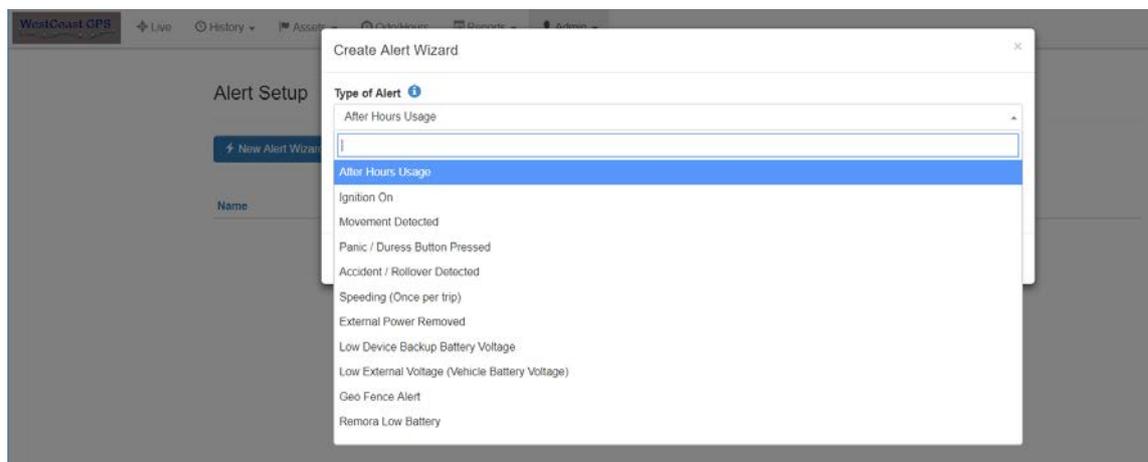
Alerts



Click on “New Alert Wizard”



Select the Alert you want to set up:



Follow the prompts to set up which asset (device) you want to use for the **Alert** – in this case the **Remora** and the email address or addresses you want the **Alert** to be sent to. If you have any problems or questions related to setting up alerts please contact WestcoastGPS at [info@westcoastgps.com](mailto:info@westcoastgps.com).