

A FARMER FRIENDLY WAY OF ORDERING FERTILISER APPLICATION USING GOOGLE EARTH

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Introduction

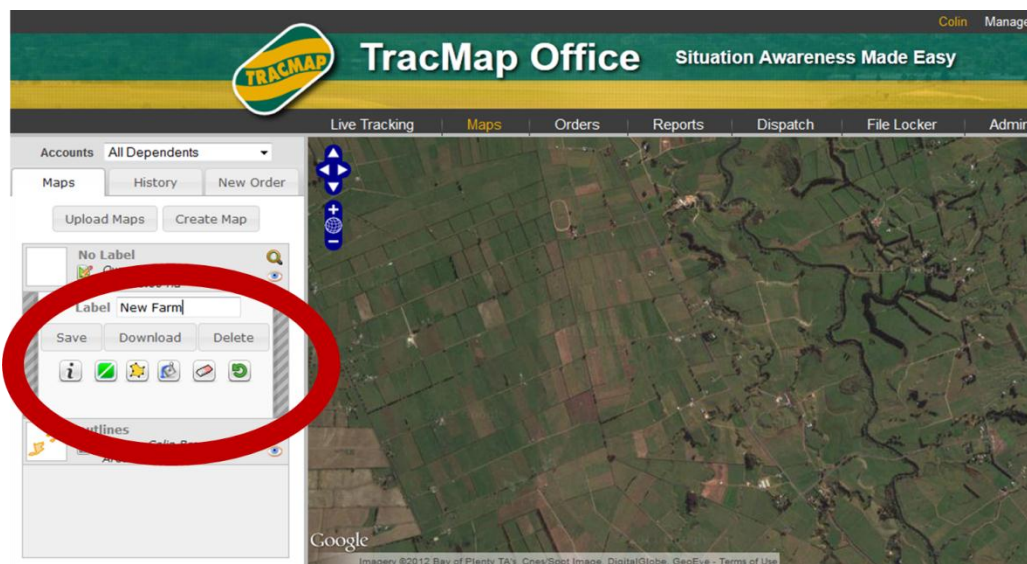
There is increasing need for farmers to apply fertilizer to match pasture requirements, as calculated by nutrient modeling programs such as OVERSEER. However, one of the biggest constraints to ensuring fertilizer application matches requirements is the time and effort required to convey the location information from the farmer to the spreading contractor (or staff member), and transferring back and storing the resulting coverage information.

The feedback from those involved is to have systems which are both easy and quick to use, and effective.

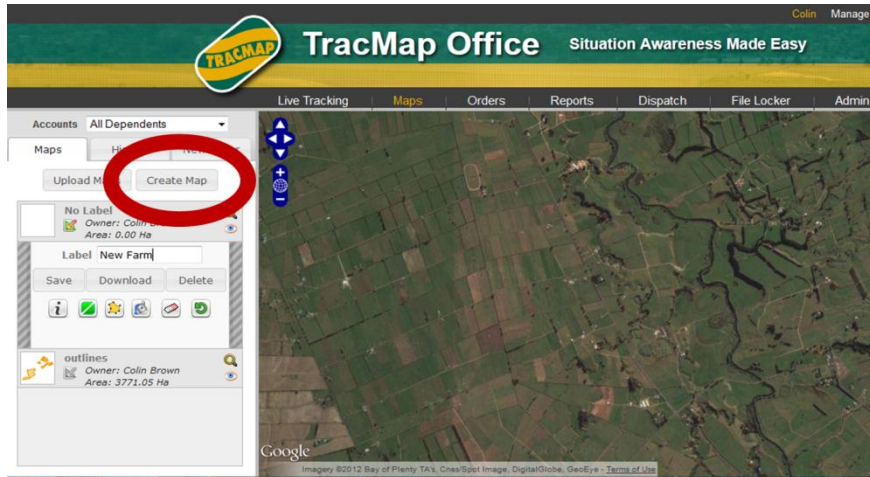
Given the improvement in quality of Google Earth imagery in recent times, TracMap have developed a Google Earth based system for transferring data to and from the TracMap GPS guidance system used by the majority of New Zealand's fertilizer spreading trucks. How it works is demonstrated by the following screen shots.

Farmer actions to create a requirement map

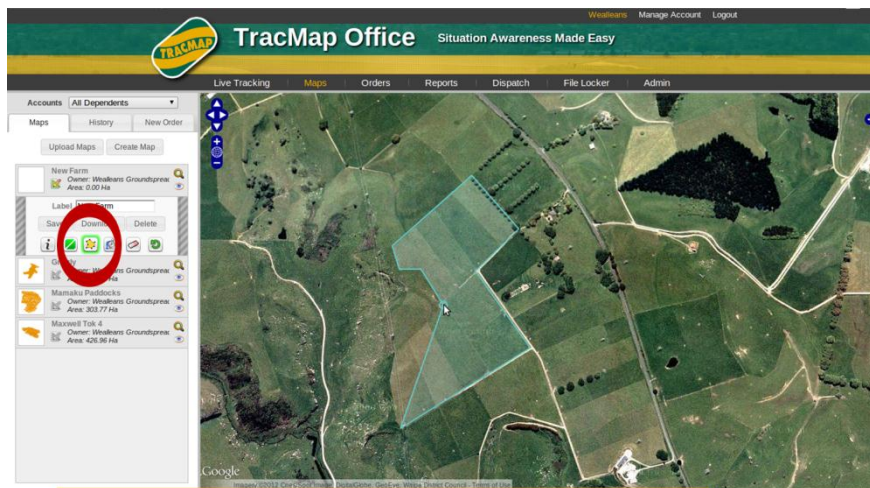
Use a log in supplied by the spreading contractor to log into the TracMap website.



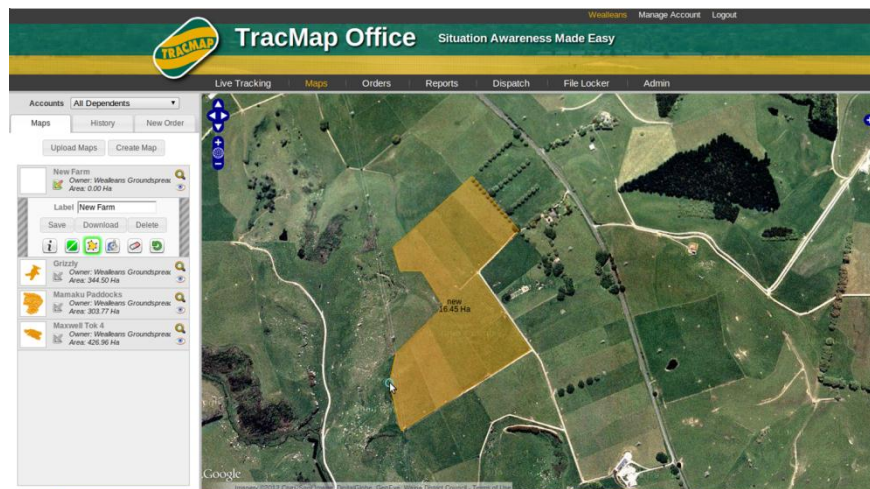
All processes use Google Earth imagery, and icon based wizards in left panel



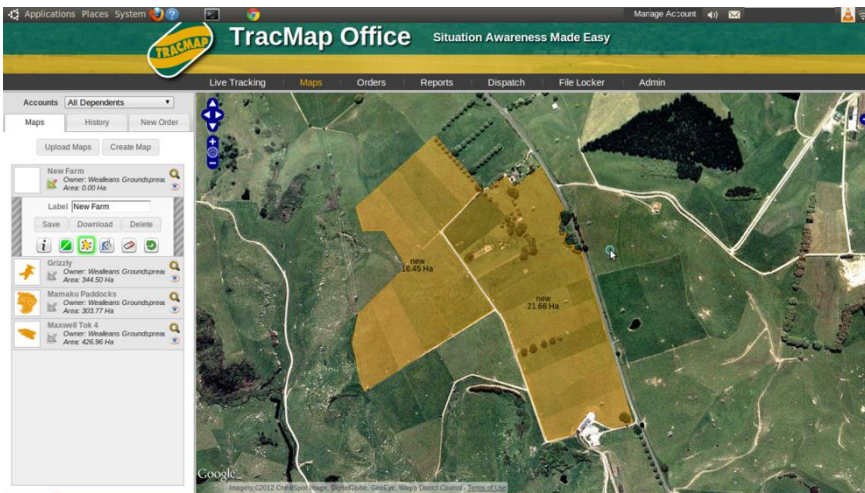
Scroll the map to the area of your farm and select *Create Map*



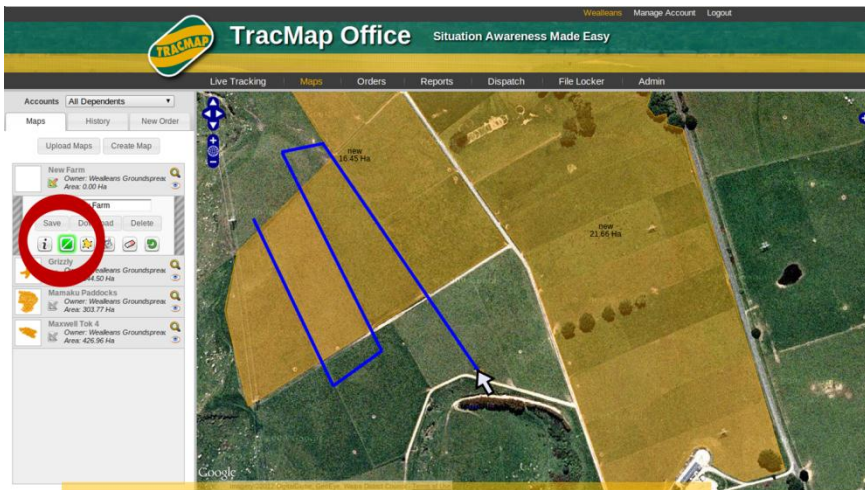
Zoom in and outline a farm block



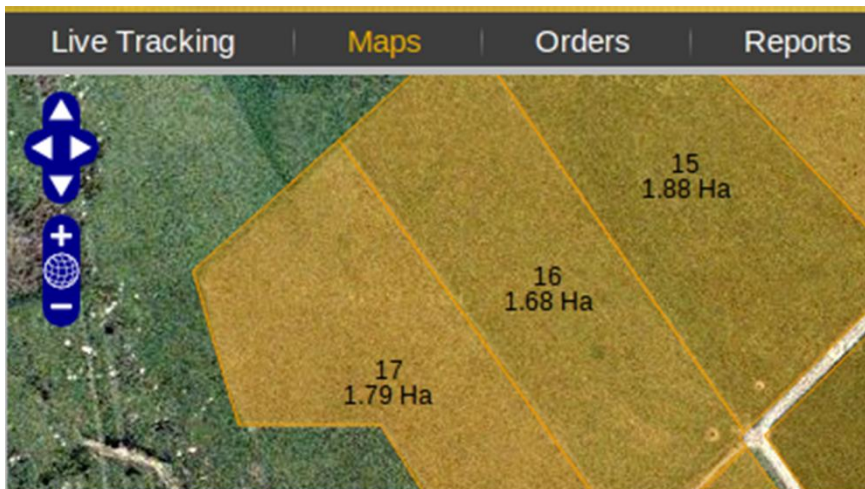
Double click to save



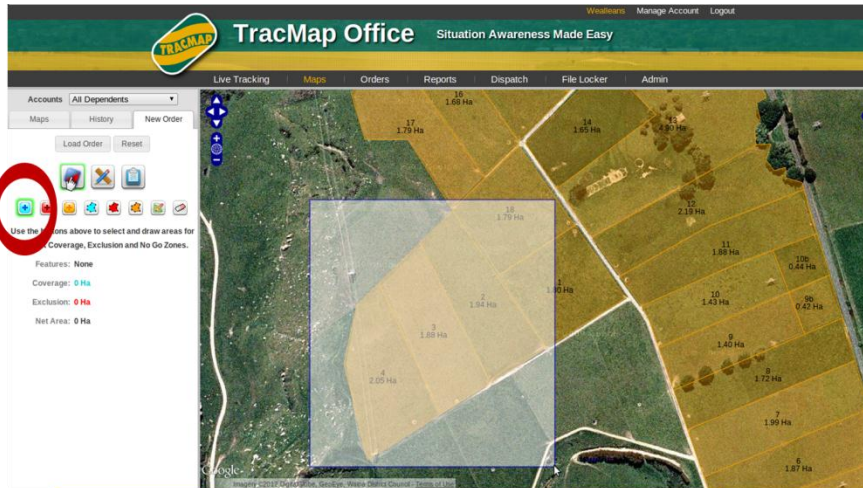
Repeat for other farm areas



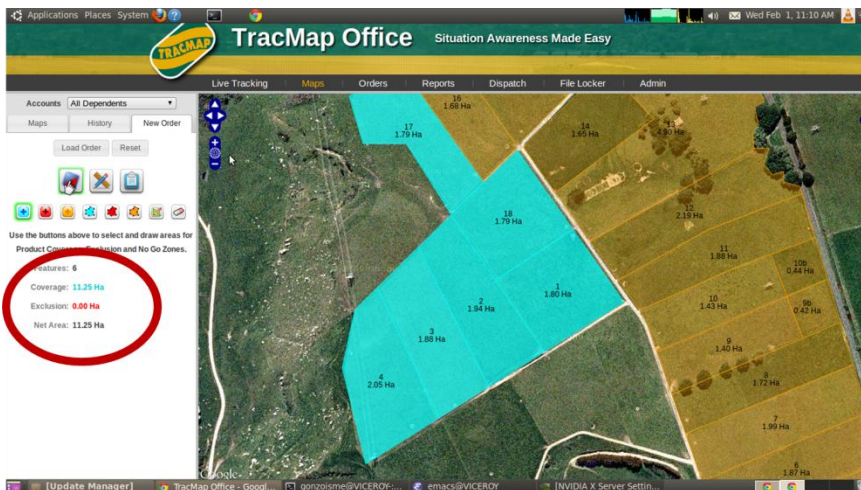
Trace paddock boundaries.
Double click to save



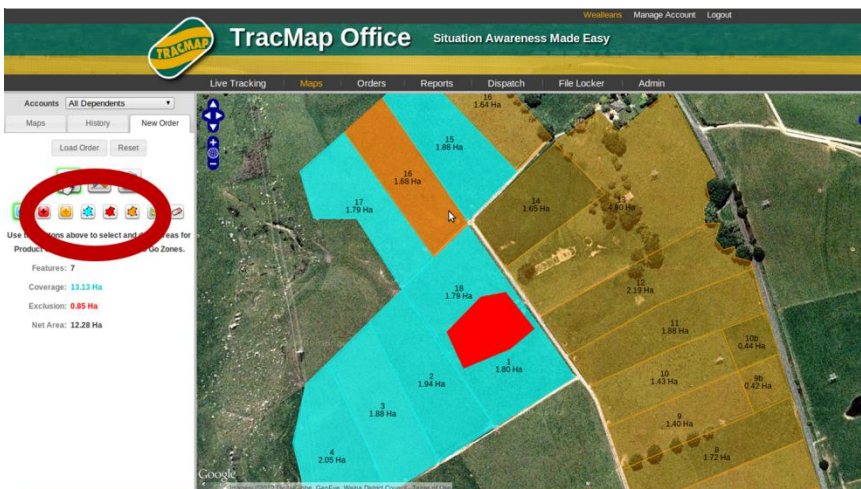
(Optional) – click on each field to
give it a name



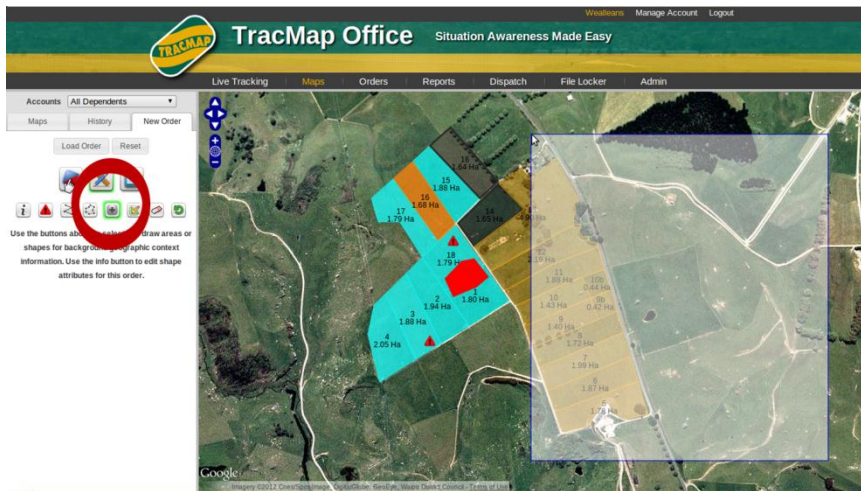
Select areas to be treated by clicking, or dragging a selection box



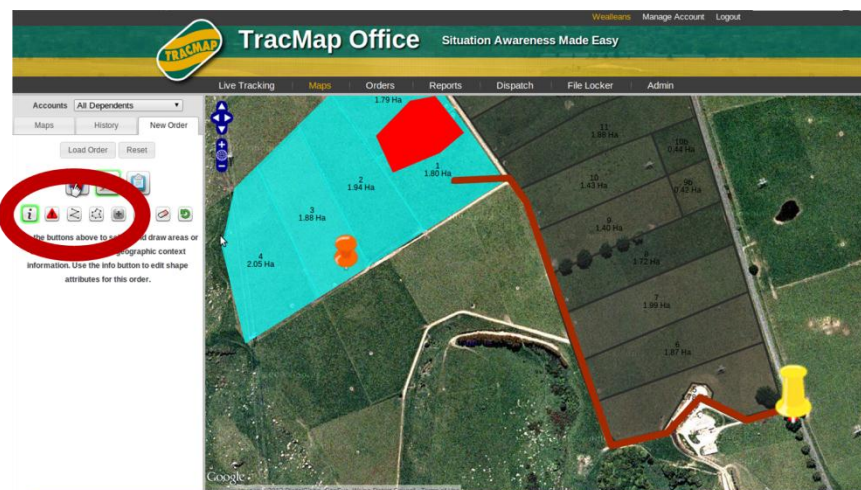
Cumulative area will show on left



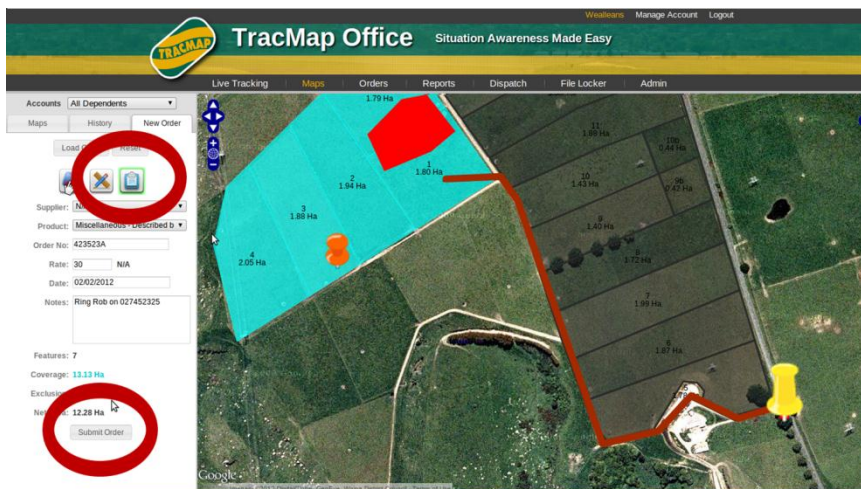
Draw or select areas for exclusion and “no go” by using appropriate icons



Select other parts of map to include for reference

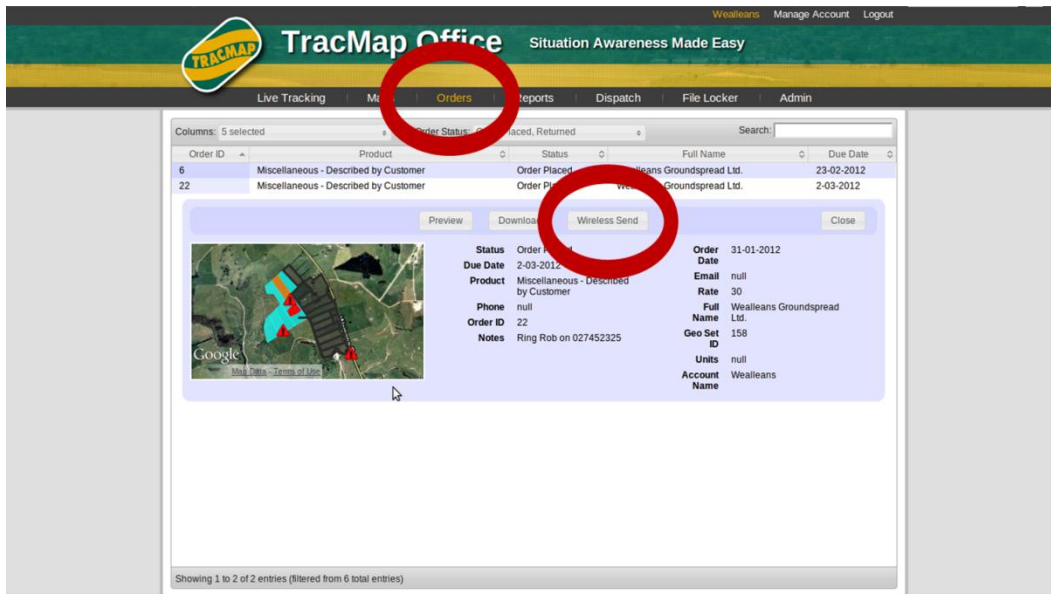


Add lines and marks



Click on the order icon to add instructions
Click "Submit Order"

Contractor Process



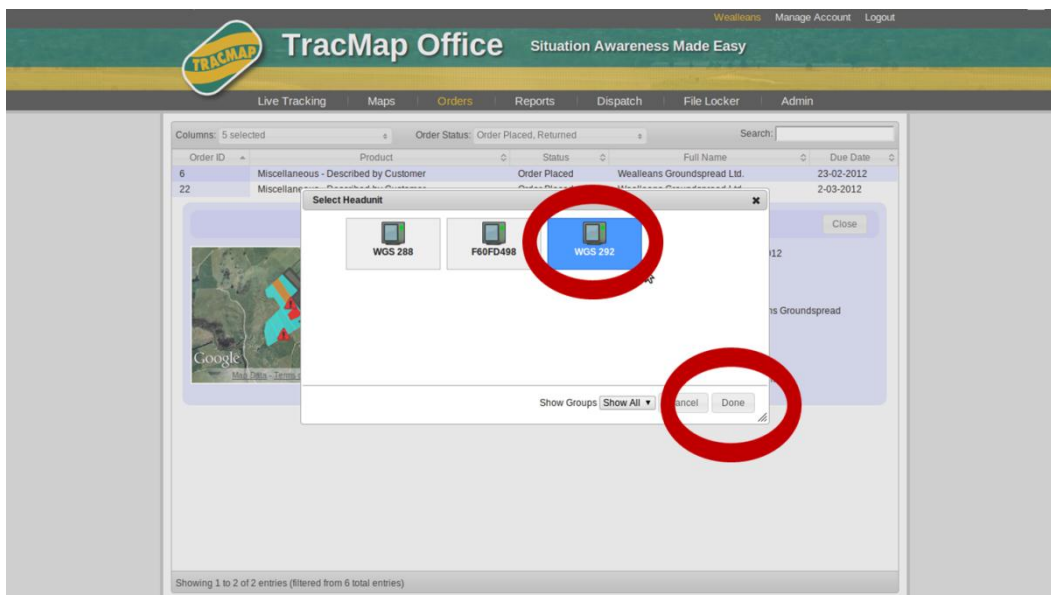
The screenshot shows the TracMap Office interface. The 'Orders' tab is selected and circled in red. Below the navigation bar, there is a table of orders. The first order is selected, and a preview window is open. In the preview window, the 'Wireless Send' button is circled in red. The preview window also displays a map and order details.

Order ID	Product	Status	Full Name	Due Date
6	Miscellaneous - Described by Customer	Order Placed	Wealleans Groundspread Ltd.	23-02-2012
22	Miscellaneous - Described by Customer	Order Placed	Wealleans Groundspread Ltd.	2-03-2012

Order Details:

Status	Order Placed	Order Date	31-01-2012
Due Date	2-03-2012	Email	null
Product	Miscellaneous - Described by Customer	Rate	30
Phone	null	Full Name	Wealleans Groundspread Ltd.
Order ID	22	Geo Set ID	158
Notes	Ring Rob on 027452325	Units	null
		Account Name	Wealleans

Preview on *Orders* page
Click on *Wireless Send*



The screenshot shows the TracMap Office interface. The 'Orders' tab is selected. A 'Select Headunit' dialog box is open, showing three vehicle options: WGS 288, F60FD498, and WGS 292. The 'WGS 292' option is selected and circled in red. The 'Done' button at the bottom right of the dialog box is also circled in red.

Select vehicle (or vehicles)
and click *Done*

Driver Process



- Press **MENU**
- Select **WIRELESS**
- The job appears on screen



- Press **MENU**
- Select **Resume**

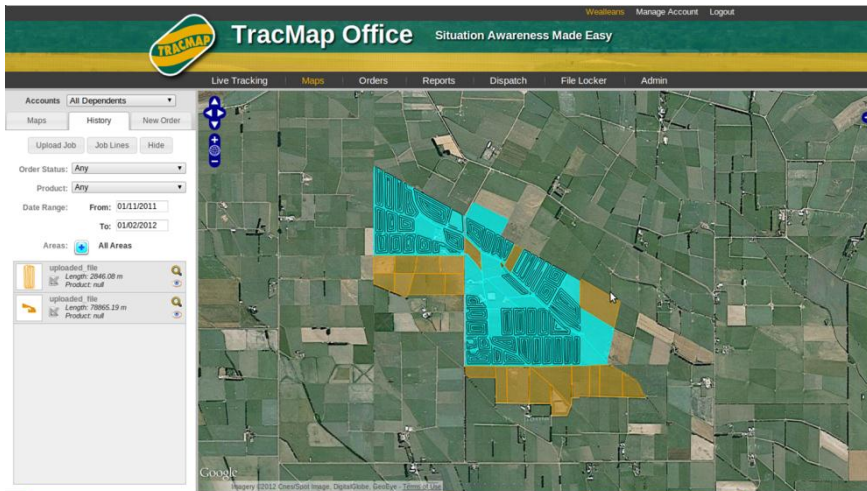


- The Map is on screen ready to drive

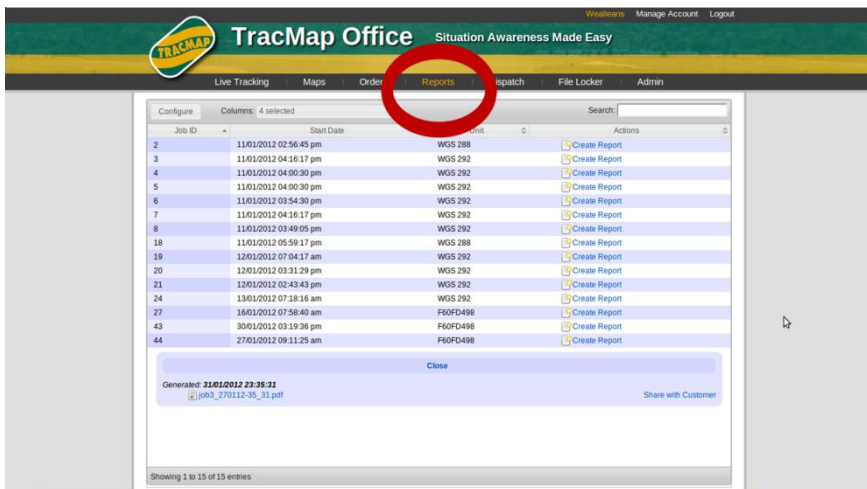


- The driver carries out the job.
- Once complete, press **MENU** – **Export Wireless**
- The job will queue, waiting for cellular coverage

Contractor Steps once data received back into completed jobs



When job received, preview on screen



And create weblink to report

UNKNOWN

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Reference: tmo

Coverage overview

Covered area: 40.16 ha
Visual area: 157.11 ha (distance working times spread width)

As a PDF



Or various formats in Google Earth

TracMap **office** Situation Awareness Made Easy

Live Tracking Maps Orders Reports Dispatch File Locker Admin

Order ID	Product	Status	Full Name	Due Date
1	Miscellaneous - Described by Customer	Job Complete	Wealleans Groundspread Ltd.	12-02-2012
2	Miscellaneous - Described by Customer	Job Complete	Wealleans Groundspread Ltd.	12-02-2012
3	Miscellaneous - Described by Customer	Job Complete	Wealleans Groundspread Ltd.	12-02-2012

Showing 1 to 5 of 5 entries (filtered from 6 total entries)

OR, save back to **Orders** for sending to a different vehicle