3000H On Combine Analyser

… Push your paddock to its fullest potential

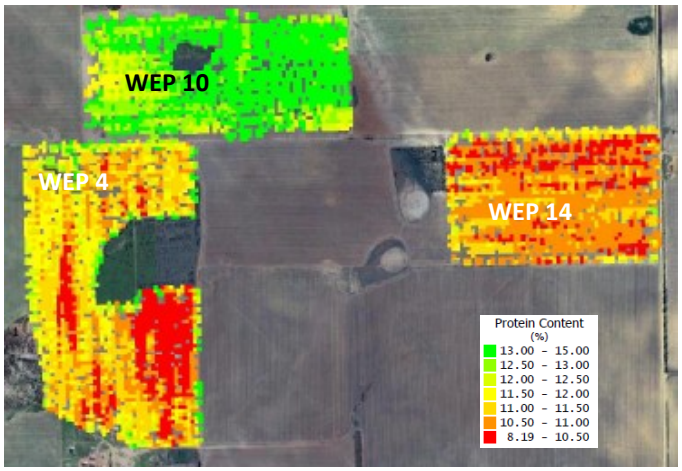
Case Study 20: Evaluating the Economics of In Field Blending by a WA Farmer.

Introduction:

Ben Crips, Wepowie, WA, installed a CropScan 3000H into his new CASE 7240 in 2017. As it turned out the year turned into a dry one and the yields were low across his farm. Nonetheless Ben found that it gave them time to experiment with In Field Blending. Based on the results of the 2017 harvest he has devised a couple of strategies in order to optimize his crop payments for 2018 where the yield are expected to be significantly higher than 2017.

Description:

With the yields being low in 2017 there was an emphasis on maximising the return from the grain they had. This meant that when they would move the combine into surrounding paddocks to get an idea of the protein content of each paddock before they harvested the entire paddock.
Figure 1 shows three wheat fields. WEP10 is 70ha from which was produced approximately 95 tonnes of grain, i.e., 2 truck loads of H1 grade. In the neighbouring paddocks the tonnages and protein contents were:
Wep 4 – 153 tonne @ 11.17% protein
Wep 14 – 93 tonne @ 10.8% protein
Using the CropScan 3000H grain analyser they were able to blend from grain the neighbouring paddocks and upgrade all the grain into higher grade thus increasing their crop payments.



The protein readings off the CropScan allowed them to blend ASW quality wheat up to APW1 and the APW1 to H2 grade. It is an important point to note that with screenings of between 3.5 – 4% it was very hard to use the CBH optimisation system in 2017 to improve crop payments.

2018 Strategy and Projections:

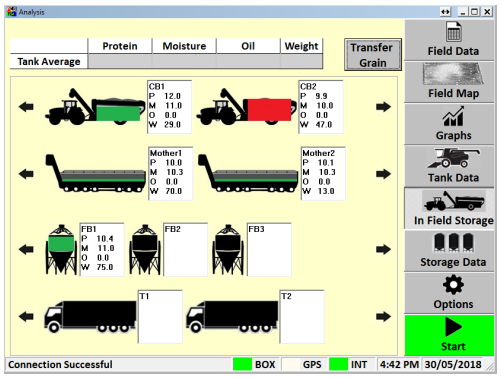
With elevated prices on offer in 2018, In Field Blending is expected to provide a substantially greater return as compared with 2017 The following figures are based off paddock averages but it does not reflect the way the grain comes off the paddock so the savings could be greater.

	Tonnes	Grade	Price $/T	Revenue
Scenario 1 No Blending				
	95	H1	356	$33,820
	246	APW1	336	$82,656
Total	341			$116,476
Scenario 2 Blending				
	341	H2	348	$118,668
Added Profit				$2,192

Extrapolating across 3000 ha, if 50% of loads are not blended and 50% are blended, then the additional income could be 1500 tonne @ $8.36 = $12540 in one year.

Grain Data Management from the Combine:

A new feature in the CropScan software, i.e., logistics menu, provides farmers with means of managing the grain directly from the combine. The farmer sets up a virtual farm storage map that includes all trucks, field bins, chaser bins, silo, sheds, bunkers or bags where grain is stored or held. As the grain is moved from one storage unit to another the average for protein moisture and oil along with the weight are recorded and displayed on the CropScan's screen. The data is sent to the Cloud and any remote PC running CropNet software can be automatically propagated.



Conclusion:

Farmers always think about he cost of fertilizer and chemicals rather than crop payments. At harvest there is nothing that the farmer can do to change these costs, however they can better manage the harvesting of their product, i.e., the grain. The CropScan 3000H On Combine Analyser allowed this farmer to detect the variation in protein across his fields and then to blend grain to increase his crop payments. Considering that all the costs associated with producing the crop have been spent, then increasing the payments adds directly to the bottom line.

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