

Economics in the Vineyard – do gross margins stack up?

What makes Villa Maria special?


- NZ's isolated location, maritime climate and Villa Maria's careful selection of vineyard sites
- An unrelenting commitment to producing quality wine
- Innovative: Villa Maria was the first major winery to commit 100% to screw caps internationally & domestically
- First NZ wine company to appoint a Viticulturist, to produce a Reserve level of wine of higher quality and to reward growers with higher prices per tonne based on quality.
- Sustainable - founding member of Sustainable Winegrowing NZ since its inception in 1995
 - In 2009 gained full Bio-Gro certification
 - Villa Maria now has 30% of company owned vineyard producing organic fruit

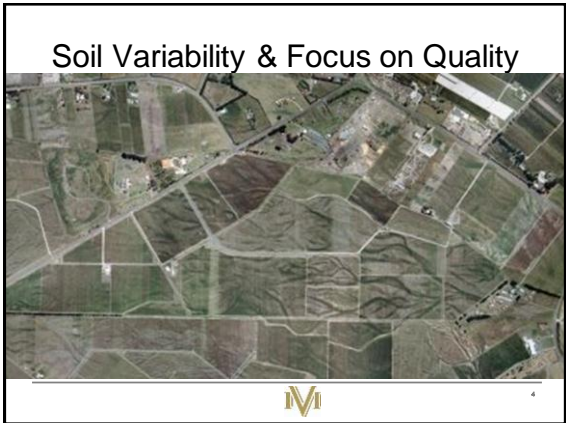
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Villa Maria Wines

The Villa Maria portfolio consists of 4 tiers:

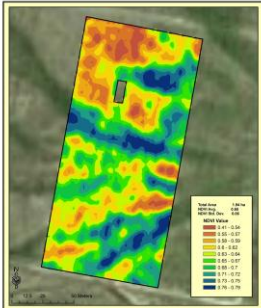
- PRIVATE BIN**
Approachable, consistent quality wine representing excellent value. Blended from variety of vineyards across a region.
- CELLAR SELECTION**
Intensely flavored, food-friendly wines crafted from exceptional quality fruit.
- RESERVE**
The most distinguished of Villa Maria's wines displaying ultimate finesse. Award-winning blends of a particular region's most outstanding vineyards.
- SINGLE VINEYARD**
Each wine displays its own distinct characteristics, which result from the unique terroir of the vineyard site. Produced in very exclusive quantities.

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PV – first steps for Villa Maria

- 2007 – 08 Growing Season
- Zonal Management – competitive sward
- Irrigation work – double lines and taps in high vigour zones



Petra King (EIT)

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Differential Machine Harvesting

- Harvest 2009
- Good results
- Combined with new harvester technology



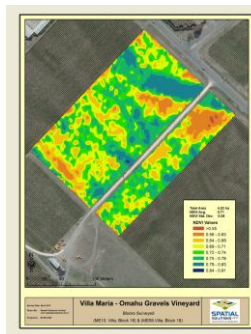
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Trial – Site Specific Vineyard Management

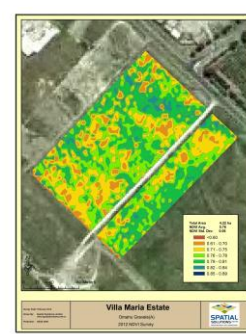
- 2011 – 2012 Growing season
- Zonal management based on EM38 and NDVI, trthing
- Irrigation changes
- Pruning changes
- Canopy Management
- Thinning regimes
- Harvest dates



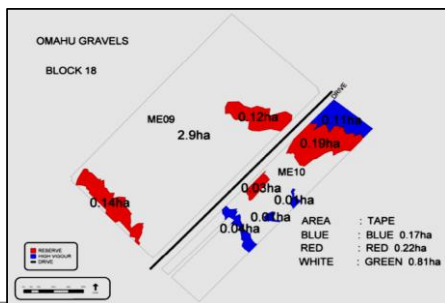
Omahu Vineyard 2010 - NDVI



Omahu Vineyard 2012 - NDVI



Management Zones



Map Colour	Blue	White	Red	
Block/Tape Colour	Blue	Green	Red	
Vigour	High	Low	Moderate	
Area ha	0.17	0.23	0.84	
Irrigation applied	None	As req	As req	
Pruning cost	35 c/v	35 c/v	35 c/v	Walking to each zone
Pruned	2 bud spur	1 bud spur	2 bud spur	
Shoots at bud burst	39.6	38.8		
Shoot thin	13 c/v	13 c/v	13 c/v	6 Nov
Shoot No. Target	25	20	20	
Leaf strip	110 c/v	0 c/v	0 c/v	11 Dec
Leaf pluck (Hand)	20 c/v	58 c/v *	58 c/v *	1x8, 3xG+R
Machine Leaf pluck	7 c/v	7 c/v	7 c/v	Mid Jan
Bunch thinning	60 cents	50 cents	50 cents	23 Feb
Bunches pre thin	36	23.5	37.5	/40 vines
Bunches post thin	22	14.5	18	/40 vines
TOTAL	\$2.45	\$1.76	\$1.83	

Benefits from zonal management

- Mapping is key
- Staff engagement and buy-in
- Reduced variability (esp reds)
- Reduced irrigation use
- Harvest sampling and walks in defined zones
- Harvest operation and planning
- Quality and costs?



Future Plans

- Harvester fleet – GPS, mapping, auto – differential harvesting, field tracking
- Yield tracking
- Zonal management & further zonal mapping
- Further trials – incl microvins

