

# P&D Monitoring Report Tunnel Hill 2020-21

## Summary

**Date**  
04/01/2021

**Monitored By**  
John Chellew

### Vineyard Summary

*The vineyard is progressing well, vine health is good and canopies are lush and green. Fruit set has been good across the vineyard with bunches filling out with the potential for a good crop.*



*Vineyard from Block 8 Pinot Noir*



*Vineyard from Block 4 Shiraz*



*Vineyard from Block 5 Shiraz*

### GPS Location

Author of this report is Group Logistics Pty Limited and its employees.

Disclaimer: Any suggestions provided are advise only. As no control can be exercised over weather, plant or soil conditions before, during or after the publishing of this report (all of which may affect the seasonal outcome) no responsibility for, or liability for any failure in performance, losses, damages, injuries (consequential or otherwise) arising will be accepted under any circumstances whatsoever. All program suggestions are based on previous experience with similar crops and soil conditions and are made in good faith.

## Block 1 Merlot

### Vine Growth / Canopy & Crop

**EL Stage**  
32

**Tip Growth**  
Vigorous growing tip growth

**Canopy Height x Width (av. - cm)**  
170 x 170

**Canopy Lifting**  
Sprawling canopy

**Canopy & Crown Density (thinning requirements)**  
Big canopy however no thinning required

**Leaf Colour**  
Great healthy colour

**Leaf Loss (shading or stress)**  
Minor yellowing in places with dense canopy

**Watershoot Growth**  
Watershoots require removal

**Fruit / Inflorescence Density, Overcropping, Bunch Size & Condition**  
Big healthy bunches

**Frost or Cold Damage**  
N/A

**Notes**  
Vines are growing vigorously. Regulate irrigation to stop vegetative growth. Crop level appear to be high with big bunches along the cordon.

### Pest, Disease & Nutrition

**Powdery Mildew**  
0

**Downy Mildew (oil spots or active infection)**  
0

**Downy Mildew (old infection)**  
0

**Botrytis (leaf or bunch)**  
Nil

**LBAM (webbing / moths / eggs / caterpillars)**  
No LIght Brown Apple Moth seen.

**Scale (adults, eggs, crawlers)**  
Nil

**Snails**  
Nil

**Mites**  
Nil

**Weevils**  
Nil

**Nutrient Deficiency / Toxicity**  
No nutrient deficiencies or toxicity observed

**Beneficials**  
No beneficial insects observed

**Notes**  
Block remains disease free

### Soil, Irrigation, Sward, Trellis, Other

**Soil Moisture / Cracks, Recent Irrigation / Precipitation**  
Top soil is dry however vines are growing vigorously. No irrigation required at the moment.

**Irrigation System (Leaks, blocked emitters etc.)**  
No leaks observed

**Weed Growth (vine rows)**  
Minimal weed growth under vine

**Weed Growth (mid rows)**  
N/A

**Sward Length (rows / headlands)**  
30cm

**Broken Posts (intermediate, strainers)**  
Broken and missing posts require replacement in winter

**Broken Wires**  
No broken wires observed

## Block 3 Sangiovese

### Vine Growth / Canopy & Crop

**EL Stage**

32

**Tip Growth**

No growing tip growth. Vines have been trimmed.

**Canopy Height x Width (av. - cm)**

120 x 70

**Canopy Lifting**

Foliage wires lifted

**Canopy & Crown Density (thinning requirements)**

Canopy is open, no thinning required.

**Leaf Colour**

Moderate leaf colour.

**Leaf Loss (shading or stress)**

Some leaf loss on rows 1 & 2 due to close trees along fence line.

**Watershoot Growth**

Some watershoot growth but does not require a removal pass

**Fruit / Inflorescence Density, Overcropping, Bunch Size & Condition**

Yield varies across vines due to Eutypa. Some dead cordons throughout block. Healthy strong vines have larger bunches. Overall yield looks good despite the variation.

**Frost or Cold Damage**

N/A

### Pest, Disease & Nutrition

**Powdery Mildew**

0

**Downy Mildew (oil spots or active infection)**

0

**Downy Mildew (old infection)**

0

**Botrytis (leaf or bunch)**

Nil

**LBAM (webbing / moths / eggs / caterpillars)**

Nil

**Scale (adults, eggs, crawlers)**

Nil

**Snails**

Nil

**Mites**

Nil

**Weevils**

Nil

**Eutypa**

Eutypa is evident with dead cordons and sections with stunted shoots and low yield.

**Nutrient Deficiency / Toxicity**

No deficiencies or toxicities noted.

**Beneficials**

No beneficial sighted

**Notes**

Apart from Eutypa, vine remain disease free.

### Soil, Irrigation, Sward, Trellis, Other

**Soil Moisture / Cracks, Recent Irrigation / Precipitation**

Top soil is dry. Irrigation turned on. **Irrigation System (Leaks, blocked emitters etc.)**

Possible drip tube leak in row 16, green grass patch noted in midrow.

**Weed Growth (vine rows)**

Weed control has been good. Some weeds starting to grow under drippers but should not require spraying. Blackberries noted at top of rows 5, 6 & 7 which have recently been spot sprayed with herbicide.

**Weed Growth (mid rows)**

Active blackberry noted at top of row 6.

**Sward Length (rows / headlands)**

10-20cm

**Broken Posts (intermediate, strainers)**

One broken post sighted. Check and replace as required in winter.

**Broken Wires**

No broken wires sighted

## Blocks 2 & 4a Cabernet Sauvignon

### Vine Growth / Canopy & Crop

**EL Stage**

31

**Tip Growth**

Strong vigorous growing tips

**Canopy Height x Width (av. - cm)**

180 x 140

**Canopy Lifting**

Wires lifted, canopy sprawling

**Canopy & Crown Density (thinning requirements)**

Canopy is big, lush and sprawling.

Consider thinning small shoots to

open up canopy

**Leaf Colour**

Great healthy leaf colour

**Leaf Loss (shading or stress)**

Minimal leaf loss.

**Watershoot Growth**

Consider removing watershoots

**Fruit / Inflorescence Density, Overcropping, Bunch Size & Condition**

Large number of big bunches.

Consider thinning to ensure ripening and high quality.

**Frost or Cold Damage**

N/A

**Notes**

Vines are quite vigorous, control water application to reduce shoot growth at bottom half of blocks, particularly Block 2.

### Pest, Disease & Nutrition

**Powdery Mildew**

0

**Downy Mildew (oil spots or active infection)**

0

**Downy Mildew (old infection)**

0

**Botrytis (leaf or bunch)**

Nil

**LBAM (webbing / moths / eggs / caterpillars)**

Nil

**Scale (adults, eggs, crawlers)**

Nil

**Snails**

Nil

**Mites**

Nil

**Weevils**

Nil

**Eutypa**

No symptoms noted.

**Nutrient Deficiency / Toxicity**

No deficiencies or toxicity seen

**Beneficials**

Wasps

**Notes**

Blocks look vigorous and healthy. Bottom half of block has more vigour. Regulate irrigation to reduce shoot growth to focus vines on ripening the large bunches. May require some bunch reduction to ensure quality and fully ripen fruit.

### Soil, Irrigation, Sward, Trellis, Other

**Soil Moisture / Cracks, Recent Irrigation / Precipitation**

Soil is moist under the surface below drippers at bottom of Block 2, other areas are dry. Irrigate top of blocks for short period prior to hot conditions.

**Irrigation System (Leaks, blocked emitters etc.)**

No leaks found. Check blocks for green patches in midrows for leaks after irrigation.

**Weed Growth (vine rows)**

Weed control under vine has been good. Minimal growth observed.

Some couch grass noted.

**Weed Growth (mid rows)**

N/A

**Sward Length (rows / headlands)**

30cm

**Broken Posts (intermediate, strainers)**

Replace broken posts during winter

**Broken Wires**

No broken wire seen

**Notes / Other**

Spot spray couch as required

## Block 4b Shiraz

### Vine Growth / Canopy & Crop

**EL Stage**

32

**Tip Growth**

Strong growing tip growth

**Canopy Height x Width (av. - cm)**

200 x 180

**Canopy Lifting**

Wires lifted, canopy sprawling

**Canopy & Crown Density (thinning requirements)**

No thinning required

**Leaf Colour**

Great healthy leaf colour

**Leaf Loss (shading or stress)**

Slight yellowing basal leaves inside denser canopy

**Fruit / Inflorescence Density, Overcropping, Bunch Size & Condition**

Bunches are of good size and are well spread out along the vines.

Berries are developing well and are of even size.

**Frost or Cold Damage**

N/A

**Notes**

Canopies are large and are supporting a good sized crop of healthy bunches. Vigour is still quite active despite the minimal water input.

### Pest, Disease & Nutrition

**Powdery Mildew**

0

**Downy Mildew (oil spots or active infection)**

0

**Downy Mildew (old infection)**

0

**Botrytis (leaf or bunch)**

Nil

**LBAM (webbing / moths / eggs / caterpillars)**

No LBAM sighted

**Scale (adults, eggs, crawlers)**

Nil

**Snails**

Nil

**Mites**

Nil

**Weevils**

Nil

**Nutrient Deficiency / Toxicity**

No deficiencies or toxicity

**Beneficials**

No beneficial sighted

**Notes**

Block remains disease free.

### Soil, Irrigation, Sward, Trellis, Other

**Soil Moisture / Cracks, Recent Irrigation / Precipitation**

Dry surface soil. Consider small irrigation's if hot weather forecast to keep canopies healthy, particularly top of block

**Irrigation System (Leaks, blocked emitters etc.)**

Check for leaks when irrigation commences

**Weed Growth (vine rows)**

Weed control has been good, some weeds starting to grow but does not require control. Blackberry noted under some vines.

**Weed Growth (mid rows)**

N/A

**Sward Length (rows / headlands)**

20cm

**Broken Posts (intermediate, strainers)**

Replace missing and broken posts in winter

**Broken Wires**

No broken wires sighted

**Notes**

Spot spray couch and blackberry as required.

## Block 5a Sauvignon Blanc

### Vine Growth / Canopy & Crop

**EL Stage**  
32

**Tip Growth**  
Active growing tips

**Canopy Height x Width (av. - cm)**  
160 x 80

**Canopy Lifting**  
Foliage wires lifted

**Canopy & Crown Density (thinning requirements)**  
Canopy is dense in areas but thinning is not required.

**Leaf Colour**  
Healthy leaf colour

**Leaf Loss (shading or stress)**  
Slight yellowing basal leaves inside canopy

**Watershoot Growth**  
Consider removing watershoots

**Fruit / Inflorescence Density, Overcropping, Bunch Size & Condition**  
Good size bunches, berries are filling out well.

**Frost or Cold Damage**  
N/A

**Notes**  
Block looks healthy and vigorous, bunches are filling out.

### Pest, Disease & Nutrition

**Powdery Mildew**  
0

**Downy Mildew (oil spots or active infection)**  
0

**Downy Mildew (old infection)**  
0

**Botrytis (leaf or bunch)**  
Nil

**LBAM (webbing / moths / eggs / caterpillars)**  
No light brown Apple moth sighted

**Scale (adults, eggs, crawlers)**  
Nil

**Snails**  
Nil

**Mites**  
Nil

**Weevils**  
Nil

**Nutrient Deficiency / Toxicity**  
No nutrient deficiencies or toxicity

**Beneficials**  
No beneficial sighted

**Notes**  
Vine canopy is healthy, block remain disease free.

### Soil, Irrigation, Sward, Trellis, Other

**Soil Moisture / Cracks, Recent Irrigation / Precipitation**  
Surface soil is dry.

**Irrigation System (Leaks, blocked emitters etc.)**  
Check for leaks during irrigation

**Weed Growth (vine rows)**  
Weed control has been good. Some weed growth under drippers and dense weed growth through middle of block where water from dam flows when full. Consider spot spray.

**Weed Growth (mid rows)**  
N/A

**Sward Length (rows / headlands)**  
20-30cm

**Broken Posts (intermediate, strainers)**  
Broken and missing posts require replacement in winter

**Broken Wires**  
No broken wire seen

**Notes / Other**  
Consider spot spray herbicide under vine in middle of block to control weeds. Irrigate for short period prior to hot weather.

## Blocks 5b & 5c Shiraz

### Vine Growth / Canopy & Crop

**EL Stage**

31

**Tip Growth**

Growing tips are still active but slowed. Block 5B has less active growing tips.

**Canopy Height x Width (av. - cm)**

120 x 160

**Canopy Lifting**

First foliage wire lift completed.

Canopy sprawling, second wire lift required.

**Canopy & Crown Density (thinning requirements)**

Short non-fruitful shoots have been thinned out.

**Leaf Colour**

Leaf colour is moderate to light.

Recommend applying Foliar nutrient in next foliar spray

**Leaf Loss (shading or stress)**

Some basal leaf yellowing on end vines at northern end of Block 5C.

Some basal leaf yellowing in Block 5B

**Watershoot Growth**

Minimal watershoot growth

**Fruit / Inflorescence Density, Overcropping, Bunch Size & Condition**

Bunches

**Frost or Cold Damage**

N/A

**Notes**

Fertilise and irrigate block to increase shoot growth and improve leaf colour.

### Pest, Disease & Nutrition

**Powdery Mildew**

0

**Downy Mildew (oil spots or active infection)**

0

**Downy Mildew (old infection)**

0

**Botrytis (leaf or bunch)**

Nil

**LBAM (webbing / moths / eggs / caterpillars)**

No light brown Apple moth sighted

**Scale (adults, eggs, crawlers)**

No scale sighted

**Snails**

Nil

**Mites**

Nil

**Weevils**

Nil

**Eutypa**

Nil

**Nutrient Deficiency / Toxicity**

Apply nutrients to improve leaf colour

**Beneficials**

No beneficial sighted

**Notes**

Blocks remain disease free. Apply nutrients to improve leaf colour and vigour.

### Soil, Irrigation, Sward, Trellis, Other

**Soil Moisture / Cracks, Recent Irrigation / Precipitation**

Block 5B recently irrigated. Block 5C irrigation scheduled.

**Irrigation System (Leaks, blocked emitters etc.)**

Check middle of blocks for leaks.

Water laying through middle section of block 5B

**Weed Growth (vine rows)**

Early weed control has been effective. Spot spraying couch grass should be considered. Some new weed growth below drippers. Tree saplings require control at northern end of block

**Weed Growth (mid rows)**

N/A

**Sward Length (rows / headlands)**

20-30cm

**Broken Posts (intermediate, strainers)**

Replace broken and missing posts in winter

**Broken Wires**

No broken wires sighted

**Notes / Other**

Consider spot spraying herbicide to control couch grass.

## Block 6 Merlot

### Vine Growth / Canopy & Crop

**EL Stage**

32

**Tip Growth**

Vigorous growing tips

**Canopy Height x Width (av. - cm)**

110 x 180

**Canopy Lifting**

Consider lifting second foliage wire

**Canopy & Crown Density (thinning requirements)**

Canopy is quite dense. Consider thinning non-fruitful shoots to open up canopy.

**Leaf Colour**

Good leaf colour. Lighter colour on rapidly growing shoots.

**Leaf Loss (shading or stress)**

Yellowing and dead leaves inside dense canopy

**Watershoot Growth**

Watershoots require removal

**Fruit / Inflorescence Density, Overcropping, Bunch Size & Condition**

Fruit density is quite high, bunch size varies from large full bunches, small bunches and large bunches with lower berry number.

**Frost or Cold Damage**

N/A

**Notes**

Vine canopies are quite vigorous, shoots look healthy and green. Appears to be carrying a heavy crop however bunch sizes vary shoot to shoot. Consider removing watershoots.

### Pest, Disease & Nutrition

**Powdery Mildew**

0

**Downy Mildew (oil spots or active infection)**

0

**Downy Mildew (old infection)**

0

**Botrytis (leaf or bunch)**

Nil

**LBAM (webbing / moths / eggs / caterpillars)**

Nil

**Scale (adults, eggs, crawlers)**

Nil

**Snails**

Nil

**Mites**

Nil

**Weevils**

Nil

**Nutrient Deficiency / Toxicity**

No nutrient deficiencies or toxicity seen

**Beneficials**

No beneficial seen

**Notes**

Vines continue to be disease free.

### Soil, Irrigation, Sward, Trellis, Other

**Soil Moisture / Cracks, Recent Irrigation / Precipitation**

Soil is moist under the surface from recent irrigation

**Irrigation System (Leaks, blocked emitters etc.)**

No leaks noted

**Weed Growth (vine rows)**

Weed control under vine is good.

**Weed Growth (mid rows)**

N/A

**Sward Length (rows / headlands)**

20-30cm

**Broken Posts (intermediate, strainers)**

No broken posts noted, replace any missing posts in winter.

**Broken Wires**

No broken wires noted.

**Notes / Other**

Reduce irrigation briefly to halt shoot growth.



## Blocks 7, 8 & 9 Pinot Noir

### Vine Growth / Canopy & Crop

#### EL Stage

32

#### Tip Growth

Active growing tips

#### Canopy Height x Width (av. - cm)

120 x 80

#### Canopy Lifting

Foliage wires have been lifted

#### Canopy & Crown Density (thinning requirements)

Canopy and crown are dense.

Consider thinning short non-fruitful shoots.

#### Leaf Colour

Good leaf colour, lighter colour leaves on new growth.

#### Leaf Loss (shading or stress)

Yellowing and dead leaves inside dense canopy.

#### Watershoot Growth

Watershoots are being trained up vine trunk.

#### Fruit / Inflorescence Density, Overcropping, Bunch Size & Condition

Bunch size varies throughout blocks with a mix of smaller bunches, moderately sized bunches and bunches with hen and chicken berries. Eutypa has affected yield with sections of cordon without bunches or small bunches.

#### Frost or Cold Damage

N/A

#### Notes

Canopies are quite dense in places with leaf loss and yellowing leaves inside the canopy. Yield varies across the blocks due to Eutypa affected vines.

### Pest, Disease & Nutrition

#### Powdery Mildew

0

#### Downy Mildew (oil spots or active infection)

0

#### Downy Mildew (old infection)

0

#### Botrytis (leaf or bunch)

Nil

#### LBAM (webbing / moths / eggs / caterpillars)

No LBAM sighted

#### Scale (adults, eggs, crawlers)

No scale sighted

#### Snails

No snails sighted

#### Mites

No mites sighted

#### Weevils

No weevils sighted

#### Eutypa

Eutypa is prevalent and is affecting vine health and yield.

#### Nutrient Deficiency / Toxicity

No nutrient deficiencies or toxicity noted

#### Beneficials

Predatory wasp sighted

#### Notes

Vine canopies look lush and healthy however a closer look shows healthy shoots covering Eutypa affected cordons.

### Soil, Irrigation, Sward, Trellis, Other

#### Soil Moisture / Cracks, Recent Irrigation / Precipitation

Topsoil is moist under droppers from recent irrigation.

#### Irrigation System (Leaks, blocked emitters etc.)

Broken elbow on riser in Block 8 row 54 and a leak in Row 53 is evident by green grass down row. Check blocks for green patches of grass.

#### Weed Growth (vine rows)

Some weed growth under vine.

#### Weed Growth (mid rows)

NA

#### Sward Length (rows / headlands)

20-30cm

#### Broken Posts (intermediate, strainers)

Broken and missing posts will require replacement in winter

#### Broken Wires

Broken foliage wires noted in Block 9.

#### Notes / Other

Consider careful under vine herbicide application. Check all rows for broken foliage wires and repair.

## Images



*Block 9 Pinot Noir*



*Block 9 Pinot Noir bunch zone.*



*Block 9 Pinot Noir bunch zone with Eutypa affected cordon. Note the single small bunch in this section of cordon.*



*Block 1 Merlot*



*Block 1 Merlot bunch zone*



*Block 1 Merlot broken post.*



*Block 2 Cabernet Sauvignon vigorous canopy at bottom of block*



*Block 2 Cabernet Sauvignon canopy at top of block*



*Block 2 Cabernet Sauvignon bunch zone*



*Block 3 Sangiovese*



*Block 3 Sangiovese bunch zone*



*Block 3 Sangiovese Eutypa affected cordon.*



*Block 4B Shiraz*



*Block 4 B Shiraz bunch zone*



*Block 5A Sauvignon Blanc*



*Block 5A Sauvignon Blanc bunch zone*



*Block 5A Sauvignon Blanc weed growth in wet middle section of block.*



*Block 5C Shiraz*

## Tunnel Hill Vineyard Map

