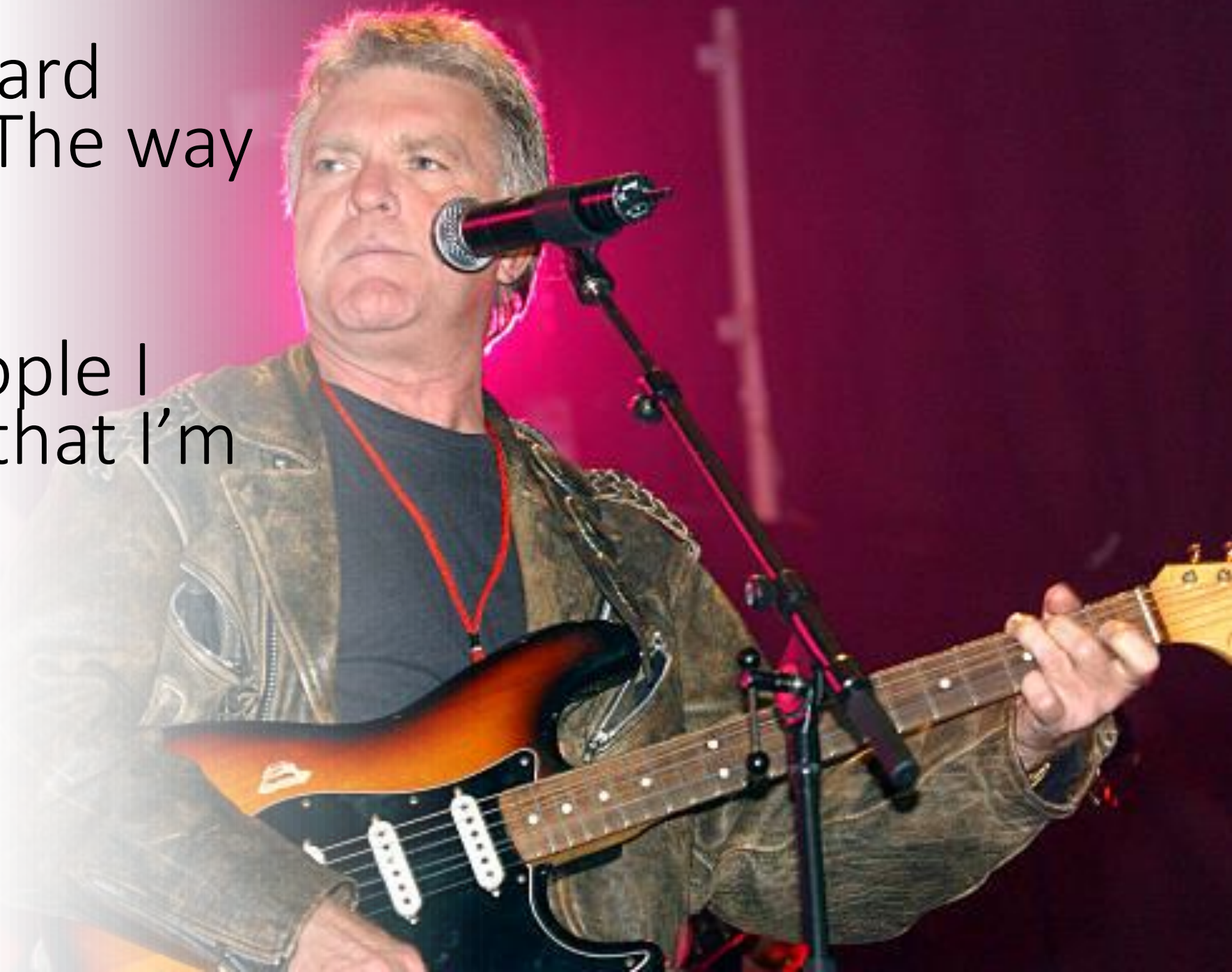


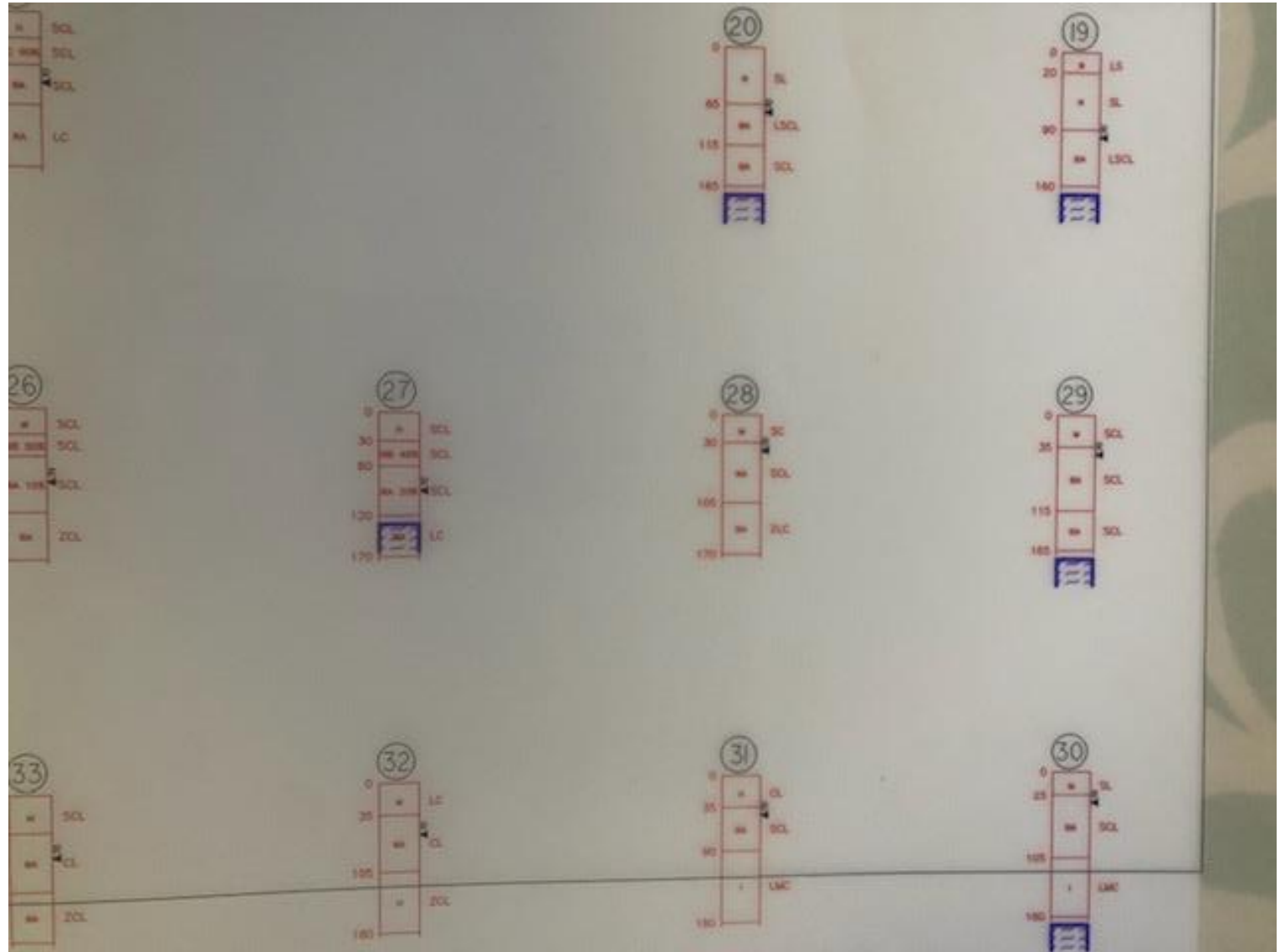
Whole Orchard  
Recycling – The way  
forward

Or Most People I  
know think that I'm  
crazy!!!



# Topsoil Depths

Varies from 25cm – 90 cm  
of Sandy Loam over 2.5  
hectares



# Soil Maps – Readily Available Water



## Benefits of Whole Orchard Recycling



**+19%**

Yield



**+58%**

Soil Carbon



**+17%**

Soil Nitrogen



**+42%**

Organic Matter



**+19%**

Soil Aggregation



**+32%**

Water Holding  
Capacity

# History

- Water turned off trees after harvest 2021.
- Replaced Non Pareil, Carmel and Price planted 1992 6.1m x 7m on Nemaguard
- 1992 plantings were interplanted between vines and then vines removed. Vines were 40years old. No ripping or base material put down pre planting.
- Planted August 3<sup>rd</sup> 2022 – Non Pareil, Shasta and Pyrenees on Cornerstone
- Spacing of 7.25m x 4.5m
- Ground was ripped, disced and mounded.





November  
19 2022





November  
29 2022







December  
28 2022





# First year - 2022

- Good initial growth. Problems with earwigs attacking some trees initially. Baiting fixed this problem.
- Growth slowed in November on trees attacked by earwigs. Also restricted growth where heavy concentration of bark chips.
- Added 2<sup>nd</sup> Dripline last week of November.
- After talking with Brent at ABC Conference gave struggling trees 25grams of Multi Complex fertiliser every 2 weeks over 4 applications.
- Used 6ML over the 2.5ha trial patch.

# Products Applied 2022:

Ammonium Nitrate

Calcium Nitrate

Potassium Nitrate

Stoller Root Feed (N, Ca, Mg)

Tech Map

MKP

| N    | P | K  | Ca | Mg |
|------|---|----|----|----|
| 81.5 | 8 | 26 | 19 | 3  |
|      |   |    |    |    |



## Second Year – 2023

- Pruned in winter and made a heading cut.
- Made a second heading cut in November.
- Tried to control growth. Cut down fertiliser so far.
- Set a crop of almonds, which were picked off.
- Storms on Christmas Day and January 7 have seen trees lost by blowing over. Have lost approximately 30 Non Pareil trees.

# Products used so far in 2023:

Ammonium Nitrate

Potassium Nitrate

Stoller Root Feed (N, Ca, Mg)

Tech Map

MKP

| N  | P    | K  | Ca | Mg |
|----|------|----|----|----|
| 28 | 13.5 | 23 | 0  | 1  |
|    |      |    |    |    |



# January 9 2024 – Non Pareil





January 9<sup>th</sup> 2024



December 28<sup>th</sup> 2022





# Would I do it again? – Absolutely!!!

- Pull trees, grind up, spread and work into the ground.
- Make sure that the chips are smaller size by having grinder with the correct screen installed.
- Spread base layer of Nitrogen over area to be planted to help break down the chips.
- Install irrigation over the top of planting area.
- Leave the ground for a year, then plant trees.
- Weeds – Extra nitrogen & Humidity = Big Problem!!!

# Wishlist

- Hoping to a good news story for Industry
- The scientific findings duplicate what was found in the Californian trials.
- Access to funding to help subsidise cost of doing this.
- Possible Carbon Credits for sequestration of carbon
- Price per hectare to do this type of work to come down.