

NATURE'S
SOURCE®



Pinot Noir Premium Vineyard

Nature's Source Organic Plant Food 3-1-1

MAIN OBJECTIVE

To evaluate the effect of 3-1-1 on Yield on both varieties

- Pinot Noir
- Chardonnay



TREATMENTS

TREATMENT	RATE/ACRE GPA	TIME OF APPLICATION	APPLICATION METHOD
3-1-1	10	Early Spring	Drip Irrigation System
CONTROL	-----	-----	-----

"CONTROL" was the Grower Standard Program



ADDITIONAL NOTES



Premium WineGrape Vineyard Pinot Noir

- All cultural practices were carried out by the grower in all varieties and clones
- The IPM program was the same for both treatments: 3-1-1 & Control
- C) The grower standard fertilization program was the same for all treatments in this trial
- Irrigation management and scheduling was done by the grower



SOIL & TISSUE ANALYSIS RESULTS



Precision Agri Lab

24730 Avenue 13

Madera, CA

93637

Phone: 559-661-6386

FAX: 559-661-6135



SOIL ANALYSIS REPORT

And Pre-Plant Recommendation For

CHULA VINA

BRANCH NAME GREENFIELD

3/16/2013

TEST ID #

2656

DATE SAMPLED:

FIELDMAN JOHN COSSEBOOM

DATE SUBMITTED: 3/21/2013

CROP GRAPES

4/12/2013

LOG IN #

333646

DATE REPORTED:

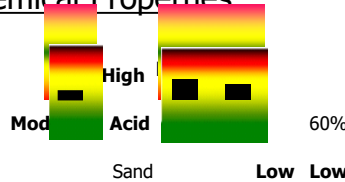
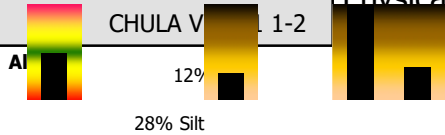
ID# 2

DESCRIPTION

CHULA VINA 1-2

Physical And Chemical Properties

Soil Nutrition



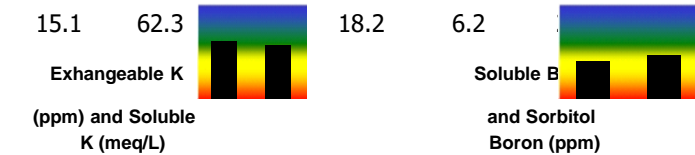
Methods S-1.10 S-14.10 S-1.00 9.30 Sum



Methods S-1.20 S-1.60



Methods S-3.10 S-4.10 S-11.10 S-6.11



Ca **Mg K** **NaH**

Methods ----- Calc -----

%BS	70	20	8	2
	0.6	1.2		
ppm	1671	289	364	68
	----- S-5.10 -----			

Ca Mg Na **Cl**

Methods ----- S-1.60 ----- S-1.70

0	3.8	2.1	3.0
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K **Ks** **B Sorb B**

Methods S-5.10 S-1.60 S-1.50 S-6.11

364	1.2	0.39	0.9
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Results approved by: _____

Date: _____

BRANCH NAME: SALINAS
TEST ID #: 1155
CROP: GRAPES



24730 Avenue 13
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 Phone: 559-661-6386
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LOG IN #: 365921
DATE SAMPLED: 5/13/2016
DATE SUBMITTED: 5/16/2016
DATE REPORTED: 5/18/2016

GROWER/CLIENT:
CHULA VINA

FIELDMAN:
HENRY CARRASCO

REPORT OF TISSUE ANALYSIS

SAMPLE #:	DESCRIPTION:	Methods P-2.20 ----- P-4.20 Nitric Acid/Hydrogen Peroxide -----								----- P-4.20 Nitric Acid/Hydrogen Peroxide -----				----- P-3.10 -----	
		-----nutrients reported in percent(%)-----								-----nutrients reported in parts per million(ppm)-----					
		%N:	%P:	%K:	%S:	%Ca:	%Mg:	%Na:	%Cl:	B:				Zn:	
1	CHULA	3.02	0.27	3.26	0.11	0.97	0.40	0.01	0.33	39	41	45	48	6	Mn 869
2	777	3.12	0.41	3.20	0.11	0.95	0.34	0.01	0.13	37	43	42	40	8	Fe 102
3	POM	3.33	0.39	3.58	0.10	0.93	0.31	0.01	0.24	39	31	37	43	6	Cu: 98
4	115	3.19	0.49	3.08	0.10	1.14	0.30	0.02	0.23	39	48	46	42	8	NO3-N 54 PO4-P:

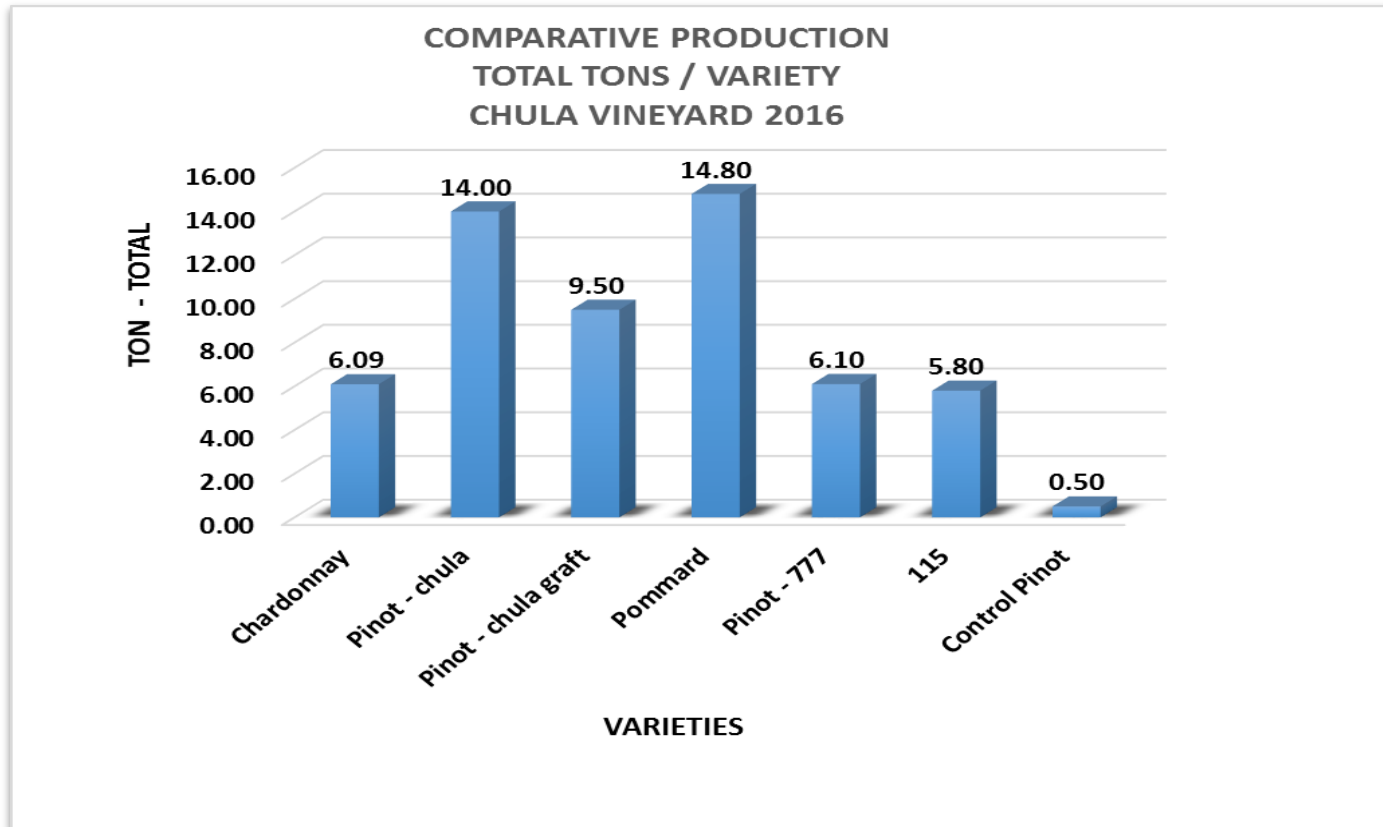
YIELD DATA

Chula Vineyard 3-1-1 Trial Results 2016

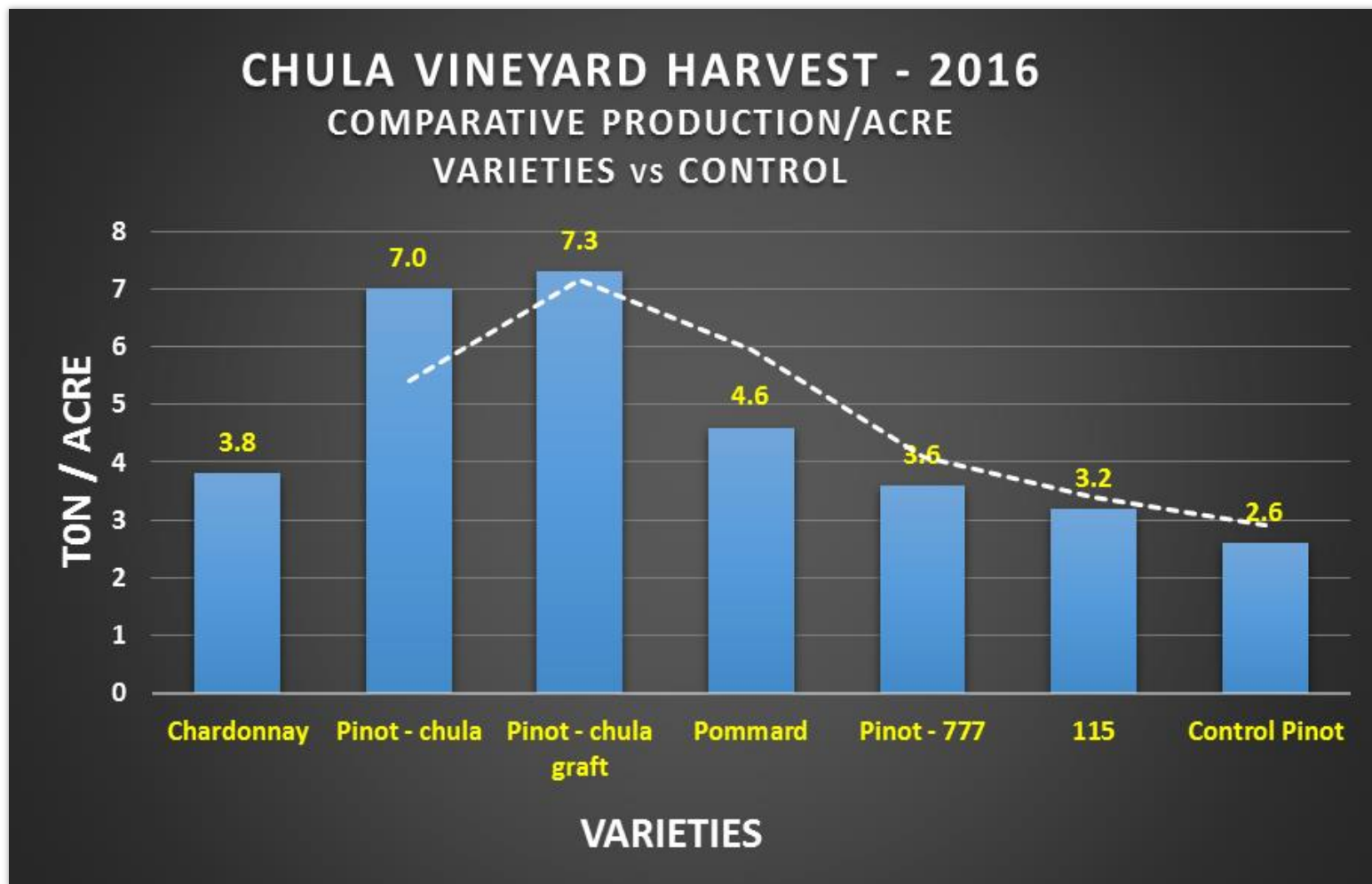
VARIETY	ACRES	TONS	TONS/ACRE
Chardonnay	1.60	6.09	3.8
Pinot-Chula	2.00	14.00	7.0
Pino-Chula Graft	1.30	9.5	7.3
Pommard	3.20	14.8	4.6
Pinot-777	1.70	6.10	3.6
115	1.78	5.80	3.2
Control	0.19	0.50	2.6
TOTALS	11.77	56.34	4.26



YIELD DATA



YIELD DATA





Premium WineGrape Vineyard Pinot Noir

Nature's Source Organic Plant Food 3-1-1 applied at 10 gallons per acre through a drip irrigation system in early Spring increased yield tonnage up to 58%

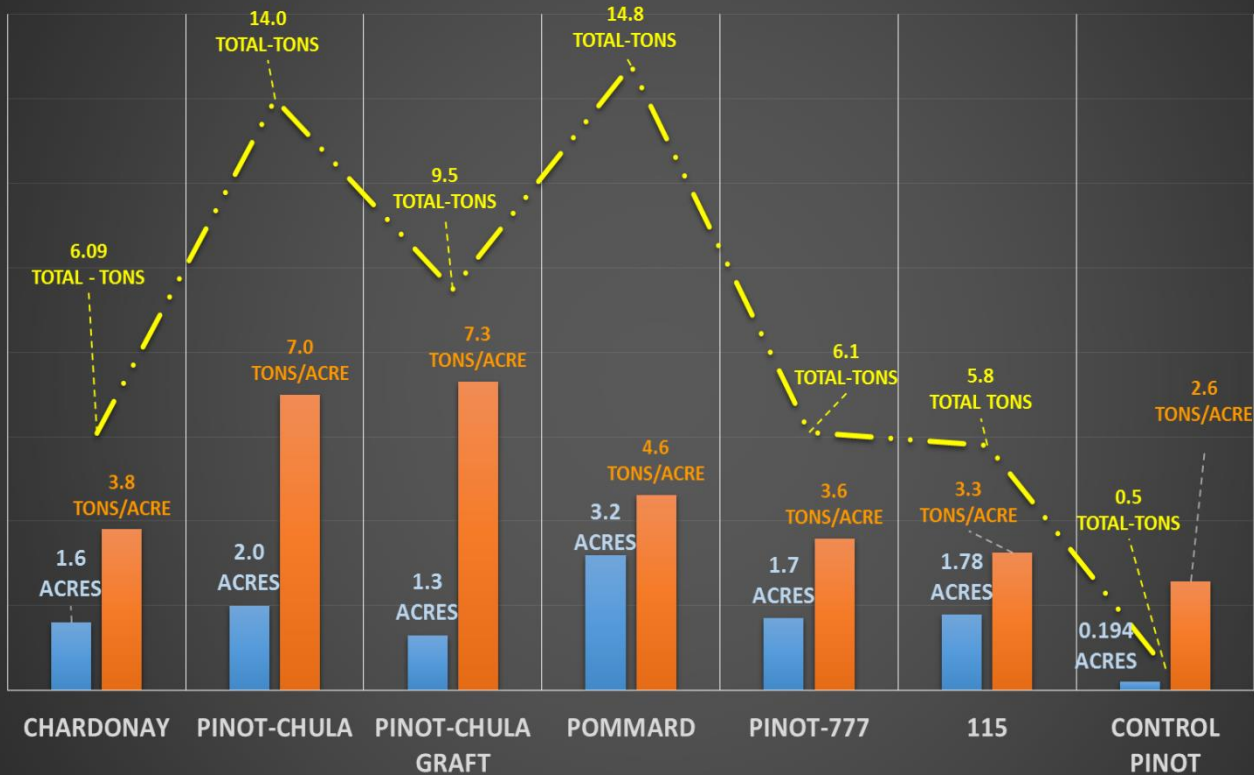


TRIAL RESULTS: 2014 vs. 2016

VARIETY	ACRES	TONS 2016	TONS 2014	TONS/ACRE 2016	TONS/ACRE 2014
Chardonnay	1.60	6.09	4.0	3.8	2.5
Pinot-Chula	2.00	14.00	6.8	7.0	3.4
Pino-Chula Graft	1.30	9.5	4.4	7.3	3.4
Pommard	3.20	14.8	10.9	4.6	4.6
Pinot-777	1.70	6.10	5.8	3.6	3.6
115	1.78	5.80	6.0	3.2	3.2
Control	0.19	0.50	---	2.6	2.6
TOTALS	11.77	56.79	37.9	4.26 (avg)	3.14 (avg)



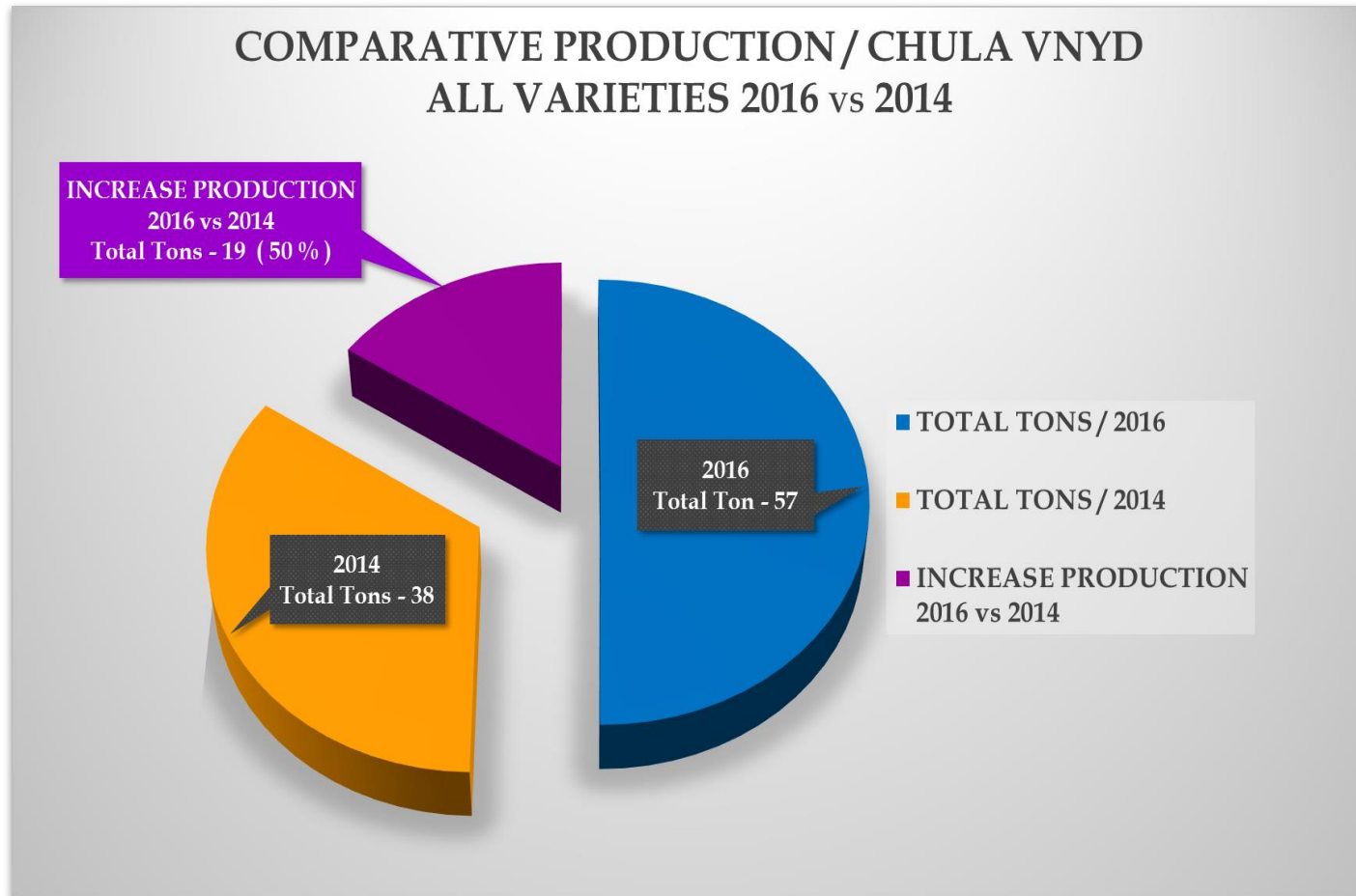
CHULA VINEYARDS 2016 (Acres, Tons/Acre & Total - Tons/Variety)



VARIETIES & TREATMENTS
(3-1-1)



COMPARATIVE PRODUCTION



2015 production was 50-70% below normal in the industry; therefore, 2014 was used for Yield comparison



CONCLUSIONS



- Nature's Source Organic Plant Food 3-1-1 (10 GPA rate) Increased Yield
- Plant nutrients were not impacted by 3-1-1 application
- C) Wine quality was not changed by 3-1-1 in the treated area vs. control



Nature's Source Organic Plant Food 3-1-1

RECOMMENDED FERTILIZATION PROGRAM



**NATURE'S
SOURCE®**

PRODUCING PREMIUM VINEYARD

PRODUCT	RATE /ACRE GPA	TIME OF APPLICATION	METHOD APPLICATION
Nature's Source Organic Plant Food 3-1-1	10	POST-HARVEST	DRIP
Nature's Source Foliar BioNutrition 10-4-3	3	POST-HARVEST	GROUND RIG
Nature's Source Organic Plant Food 3-1-1	5	SPRING	DRIP
Nature's Source Foliar BioNutrition 10-4-3	3	SPRING	GROUND RIG
Nature's Source Foliar BioNutrition 10-4-3	3	SUMMER/JUNE	GROUND RIG
Nature's Source Foliar BioNutrition 10-4-3	3	SUMMER/AUGUST	GROUND RIG

Use at least 50 GPA of water/acre for ground rig applications



NEW VINEYARD ESTABLISHED

PRODUCT	RATE /ACRE GPA	TIME OF APPLICATION	METHOD APPLICATION
Nature's Source Organic Plant Food 3-1-1	3	FALL	DRIP
Nature's Source Foliar BioNutrition 10-4-3	3	FALL	GROUND RIG
Nature's Source Organic Plant Food 3-1-1	3	SPRING	DRIP
Nature's Source Foliar BioNutrition 10-4-3	3	SPRING	GROUND RIG
Nature's Source Foliar BioNutrition 10-4-3	3	SUMMER/JUNE	GROUND RIG
Nature's Source Foliar BioNutrition 10-4-3	3	SUMMER/AUGUST	GROUND RIG

Use at least 50 GPA of water/acre for ground rig applications



NATURE'S SOURCE TEAM



Premium WineGrape Vineyard
Central Coast - California

