

ANAL. CONSULTANTS
APPROVED WATER LABORATORY

PHONE 684-1881
AREA CODE 714

LABORATORIES
3215 CHICAGO AVE.

ESTABLISHED 1906

EDWARD S. BABCOCK & SONS

P. O. BOX 432
RIVERSIDE, CALIFORNIA 92503



#20

See 21

TO: Riviera Farms Inc.
P.O. Box 1127
Borrego, Springs, CA. 92004

SAMPLE MARKED
Dec. 31, 1975

Di Giorgio Corp.
Well #20 Sample run 6 hr

Laboratory No. 35218-27

Cations	Milligrams per liter (ppm)	Milli equivalents per liter	Anions	Milligrams per liter (ppm)	Milli equivalents per liter
Calcium (Ca)	280	14.00	Alkalinity as Hydroxide (OH) Carbonate (CO ₃) Bicarbonate (HCO ₃)		
Magnesium (Mg)	46	3.80			
Sodium (Na)	250	10.87			
Potassium (K)	19	0.49	Sulfate (SO ₄)	875	18.23
			Chloride (Cl)	163	4.60
			Nitrate (NO ₃)	240	3.87
			Phosphate (PO ₄)		
		2916			2916
Activity, ECx10 ⁶ @ 25 ° C.		2560			2560
Sodium		37			
Hydrogen-ion activity (pH)		7.5	Total Hardness calculated as CaCO ₃		890
			Total Dissolved Residue (180° C)		2020
			Fluoride (F)		
			Boron (B)		
			Iron (Fe)		0.6
			Manganese (Mn)		

2132

Well No. 20Location BORRERO FARMS

DATE	May 31 1960	June 1961	April 1962	Sept 1962	JUNE 1964	MARCH 1965	MAY 1965
Total Soluble Salts (ECx10 ³)	1.77	1.66	1.90	1.68	1.67	2.5	2.1
pH (1-7 Acid; 7-14 Basic)	7.44	7.4	7.7	7.5	7.6	7.3	7.7
Boron (parts per million)	-	0.15	0.63	-	-	-	0.25
Nitrogen (pounds per acre ft.)	81.1	62	65	64.2	74.8	114.2	99.5
Sodium percentage (%)	48.2	46.2	41.4	45.7	48.6	38.4	49.9
<u>CATIONS -</u>							
Calcium (meq./liter)	7.34	4.80	4.12	8.15	8.34	17.28	11.20
Magnesium "		5.04	7.87				15.28
Sodium "	7.10	8.70	8.70	7.60	8.22	11.04	11.52
Potassium "	0.30	0.70	0.35	0.32	0.35	0.42	0.36
TOTAL	14.7	18.8	21.0	16.6	16.91	28.7	23.0
<u>ANIONS -</u>							
Carbonate (meq./liter)	0	0	0	0	0	0	0
Bicarbonate "	2.31	2.30	3.00	2.33	2.28	2.28	2.18
Chloride "	2.97	3.00	3.25	1.48	2.90	3.18	3.00
Nitrate "	2.19	1.68	1.75	1.67	2.01	3.07	2.62
Sulfate *	7.22	11.82	12.4	11.12	9.72	19.7	15.28
TOTAL	14.7	18.8	21.0	16.6	16.91	28.7	23.0

* Sulfate determined by difference.

HORNKOHL LABORATORIES

21B2

CHEMICAL AND TESTING ENGINEERS

714 TRUXTON AVENUE

BAKERSFIELD, CALIFORNIA

Laboratory No. 79502

October 8, 1954

Sample Water

Marked Well #20

Received September 29, 1954

Submitted by A. F. Peterson

1603 California Avenue * * * * *

Bakersfield, California

IRRIGATION WATER ANALYSIS

CONSTITUENTS	PARTS PER MILLION	GRAINS PER GALLON	IRRIGATION WATER CLASSIFICATION
CARBONATES (ALKALI) (CO ₃)	7.2	0.45	Good
BICARBONATES (HCO ₃)	142.7	8.35	Good
CHLORIDES (SALT) (Cl)	106.4	6.22	Good
SULPHATES (SO ₄)	460.8	26.95	Good
SULPHIDES (S)	0.0	0.00	Good
NITRATES (NO ₃)	10.0		Good
CALCIUM (LIME) (Ca)	152.0	8.09	Good
MAGNESIUM (Mg)	21.0	1.23	Good
SODIUM (Na)	5.86	134.8	Good
BORON (B)	.02		Good
IRON (Fe)	.1		Good
HARDNESS AS CaCO ₃	466.0	27.25	Good
TOTAL SOLIDS @ 105°C	963.6	56.35	Good
TOTAL SOLIDS @ RED HEAT	905.6	52.96	
pH (HYDROGEN ION CONCENTRATION)	8.3		
SODIUM PERCENTAGE	37.4%		
COLOR	Water White		
ODOR	None		
TURBIDITY	Clear		
CONDUCTIVITY, MHOS/CM X 10 ³ @ 25°C.	143.4		

THEORETICAL ANALYSIS

Calcium Carbonate	12.0	0.70
Calcium Bicarbonate	189.7	11.09
Calcium Sulfate	341.7	19.98
Magnesium Sulfate	103.5	6.05
Sodium Sulfate	203.1	11.88
Sodium Chloride	175.4	10.26

Remarks:

As noted by the last column above this sample would be classified as excellent for irrigation use.

WILLARD G. BASCOCK
ARTHUR L. BASCOCK
SHERMAN G. BASCOCK

CERTIFICATE OF ANALYSIS

ESTABLISHED 1908

EDWARD S. BASCOCK & SONS

P. O. BOX 432
RIVERSIDE, CALIFORNIA

AGRICULTURAL
APPRAISALS
SUPERVISION
MANAGEMENT

LABORATORIES
2445 FIRST ST.

105/6E-21B2

to DiGiorgio Fruit Corp.
Box A
Borrego Springs, Calif.

October 3, 1956

SAMPLE MARKED Well 20

Laboratory No. 560921-R

Cations	Parts per million	Milligram equivalents per liter	Anions	Parts per million	Milligram equivalents per liter
Calcium (Ca)	140	7.00	Carbonate (CO ₃)	none	---
Magnesium (Mg)	49	4.08	Bicarbonate (HCO ₃)	95	1.55
Sodium (Na)	172	7.48	Sulfate (SO ₄)	600	12.50
Potassium (K)			Chloride (Cl)	110	3.10
			Nitrate (NO ₃)	44	.71
Conductivity, ECx10 ⁶ @ 25° C.		1743	Total Hardness calculated as CaCO ₃		554
Percent Sodium		40.3	Fluoride (F)		
Hydrogen-ion activity (pH)			Boron (B)		.3

EDWARD S. BASCOCK & SONS

Sherman G. Bascock