

# HORNKOHL LABORATORIES

CHEMICAL AND TESTING ENGINEERS

714 TRUXTON AVENUE  
BAKERSFIELD, CALIFORNIA

21M1

Laboratory No. 79508

October 8, 1954

Sample Water

Marked Well #3

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 <sub>3</sub> )	0.0	0.00	Good
BICARBONATES		(HCO <sub>3</sub> )	92.7	5.42	Good
CHLORIDES	(SALT)	(Cl)	122.0	7.13	Good
SULPHATES		(SO <sub>4</sub> )	668.0	39.06	Good
SULPHIDES		(S)	0.0	0.00	Good
NITRATES		(NO <sub>3</sub> )	9.2		Good
CALCIUM	(LIME)	(Ca)	190.4	11.13	Good
MAGNESIUM		(Mg)	12.2	0.71	Good
SODIUM		(Na)	192.1	11.23	Good
BORON		(B)	.05		Good
IRON		(Fe)	.1		Good
HARDNESS AS CaCO <sub>3</sub>			526.0	30.76	Good
TOTAL SOLIDS @ 105°C			1240.3	72.53	
TOTAL SOLIDS @ RED HEAT			1206.1	70.53	
pH (HYDROGEN ION CONCENTRATION)			7.9		
SODIUM PERCENTAGE			44.3%		
COLOR			Water White		
ODOR			None		
TURBIDITY			Clear		
CONDUCTIVITY, MHOS/CM <sup>3</sup> X10 <sup>5</sup> @25°C.			191.2		

### Theoretical Analysis

Calcium Bicarbonate	123.2	7.20
Calcium Sulfate	544.6	31.85
Magnesium Sulfate	60.2	3.52
Sodium Sulfate	348.8	20.40
Sodium Chloride	201.1	11.76

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