

**HORNBKOHLE LABORATORIES**

105/6E-28D1

CHEMICAL AND TESTING ENGINEERS

714 TRUXTON AVENUE

BAKERSFIELD, CALIFORNIA

Laboratory No. 79505

October 8, 1954

Sample Water

Marked Well #6

Received September 29, 1954

Submitted by A. F. Peterson

1603 California Avenue \* \* \* \* \*

Bakersfield, California

IRRIGATION WATER ANALYSIS

<u>CONSTITUENTS</u>			<u>PARTS PER MILLION</u>	<u>GRAINS PER GALLON</u>	<u>IRRIGATION WATER CLASSIFICATION</u>
CARBONATES	(ALKALI)	(CO <sub>3</sub> )	7.2	0.45	Good
BICARBONATES		(HCO <sub>3</sub> )	114.7	6.71	Good
CHLORIDES	(SALT)	(Cl)	92.2	5.39	Good
SULPHATES		(SO <sub>4</sub> )	451.8	26.42	Good
SULPHIDES		(S)	0.0	0.00	Good
NITRATES		(NO <sub>3</sub> )	3.4		Good
CALCIUM	(LIME)	(Ca)	140.8	8.23	Good
MAGNESIUM		(Mg)	16.1	0.94	Good
SODIUM		(Na)	132.5	7.75	Good
BORON		(B)	.05		Good
IRON		(Fe)	.1		Good
HARDNESS AS CaCO <sub>3</sub>			418.0	24.44	Good
TOTAL SOLIDS @ 105°C			906.4	53.01	
TOTAL SOLIDS @ RED HEAT			858.7	50.22	
pH (HYDROGEN ION CONCENTRATION)			8.3		
SODIUM PERCENTAGE			40.8		
COLOR			Water	White	
ODOR			None		
TURBIDITY			Clear		
CONDUCTIVITY, MHOS/CM <sup>2</sup> X10 <sup>5</sup> @25°C.			136.2		

Theoretical Analysis

Calcium Carbonate	12.0	0.70
Calcium Bicarbonate	152.4	8.91
Calcium Sulfate	334.9	19.58
Magnesium Sulfate	79.5	4.65
Sodium Sulfate	224.5	13.13
Sodium Chloride	152.0	8.89

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