

105/6E-21N1

Well No. 18Location BORRICO FARMS

DATE	June 1961	April 1962	Sept 1963	Sept 1962	JUNE 1964	MAY 1965
Total Soluble Salts (ECx10 ³)	1.18	1.70	1.46	1.95	1.45	2.6
pH (1-7 Acid; 7-14 Basic)	7.1	7.9	7.7	7.5	7.8	7.5
Boron (parts per million)	0.05	0.63	-	-	-	0.14
Nitrogen (pounds per acre ft.)	44	96	33.5	88.2	47.6	112
Sodium percentage (%)	51%	49%	42%	48%	49.7	50.6
<u>CATIONS</u> -						
Calcium (meq./liter)	5.20	5.26	5.71	10.1	7.74	^{14.92} 14.92
Magnesium "	1.96	3.43	2.56			
Sodium "	7.80	8.70	6.10	9.80	7.92	15.7
Potassium "	0.24	0.27	0.21	0.33	0.27	0.39
TOTAL	15.2	17.7	14.6	20.2	15.93	31.03
<u>ANIONS</u> -						
Carbonate (meq./liter)	0	TR	TR	0	0	0
Bicarbonate "	1.41	1.60	1.22	1.46	1.02	1.40
Chloride "	0.65	2.90	2.32	3.16	2.30	2.34
Nitrate "	1.18	2.59	0.906	2.29	1.28	2.95
Sulfate *	10.16	10.16	10.1	13.29	11.32	23.5
TOTAL	15.2	17.7	14.6	20.2	15.93	31.0

* Sulfate determined by difference.

HORNKOHL LABORATORIES

CHEMICAL AND TESTING ENGINEERS

714 TRUXTON AVENUE

BAKERSFIELD, CALIFORNIA

October 8, 1954

Laboratory No. 79493

Sample Water

Marked 9/25, Well #18

Received September 29, 1954

Submitted by A. F. Peterson
1603 California Ave.
Bakersfield, Calif.

IRRIGATION WATER ANALYSIS

<u>CONSTITUENTS</u>	<u>PARTS PER MILLION</u>	<u>GRAINS PER GALLON</u>	<u>IRRIGATION WATER CLASSIFICATION</u>
CARBONATES (ALKALI) (CO ₂)	0.0	0.00	Good
BICARBONATES (HCO ₃)	101.3	5.92	Good
CHLORIDES (SALT) (Cl)	164.6	9.63	Good
SULPHATES (SO ₄)	803.7	47.00	Good
SULPHIDES (S)	0.0	0.00	Good
NITRATES (NO ₃)	5.4		Good
CALCIUM (LIME) (Ca)	258.4	15.11	Good
MAGNESIUM (Mg)	27.3	1.60	Good
SODIUM (Na)	181.2	10.60	Good
BORON (B)	.05		Good
IRON (Fe)	.1		Good
HARDNESS AS CaCO ₃	758.0	44.33	Good
TOTAL SOLIDS @ 105°C	1491.3	87.21	
TOTAL SOLIDS @ RED HEAT	1453.9	85.02	
pH (HYDROGEN ION CONCENTRATION)	7.7		
SODIUM PERCENTAGE 34.2%			Good
COLOR Water White			Good
ODOR None			
TURBIDITY Clear			
CONDUCTIVITY, MHOS/CM ² X10 ⁵ @25°C.	237.0		

THEORETICAL ANALYSIS

Calcium Bicarbonate	134.5	7.87
Calcium Sulfate	766.5	44.83
Magnesium Sulfate	134.8	7.88
Sodium Sulfate	230.1	13.46
Sodium Chloride	271.3	15.87

REMARKS: As noted by the classification column above, this sample would be classified as excellent for irrigation use.