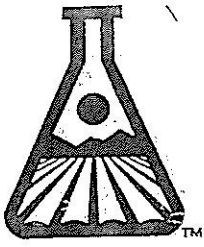


APPENDIX C

CAP WATER SALINITY DATA



IAS Laboratories

2515 East University Drive
 Phoenix, Arizona 85034
 (602) 273-7248
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COMPLETE WATER TEST W4: Irrigation Suitability & Evaluation

Report # 6615101 Page 1 Lab # 991 Date: 10/12/2001 Crop: Alfalfa
 Grower: Bureau of Reclamation
 Sender Sample ID: Canal
 Submitted By:
 Send Report To: Bureau of Reclamation

Received: 10/4/2001

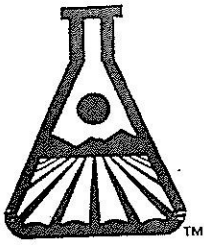
ION TESTED	PARTS PER MILLION	MILLI-EQUIVALENTS PER LITER	POUNDS APPLIED PER ACRE-FT.
Calcium	68.0	3.40	185.0
Magnesium	35.0	2.87	95.2
Sodium	91.0	3.96	247.5
Potassium	4.8	.12	13.1
Carbonate	.0	.00	.0
Bicarbonate	165.9	2.72	451.3
Chloride	80.0	2.25	217.6
Sulfate-S	77.0	4.81	209.4
Nitrate-N	.9	.07	2.6
Phosphate-P	.09	.00	.24
Boron	.19	.00	.52

Electrical conductivity, dS/m: .90
 pH, units: 8.30
 Cation/Anion ratio: 1.05
 Sodium adsorbtion ratio (SAR): 2.23
 SAR adjusted: 4.51
 Adjusted RNA: 2.42
 Soluble sodium percentage (SSP): 38.23
 Soluble sodium percentage possible (SSP pos): 52.72
 Total soluble salts, ppm: 522.94
 Salt applied per acre-foot, lbs: 1422.40
 Sulfuric acid required (gal 95% acid/ac-ft to neutralize 90% carbonate + bicarbonate): 22.52
 Calcium + Magnesium hardness (meq/l): 6.27
 Gypsum required (lb of 100% gypsum/ac-ft) to reach a desired SAR of 2.23: .00
 Leaching required (% additional irrigation) for leaching of salts: 11.25
 Salinity hazard is high, sodium hazard is low.
 U.S.D.A. classification of this water is C3 - S1

COMMENTS

This water should be used only on soils with no restricting layers so the leaching of salts can be accomplished. Plants with low salt tolerance, such as citrus and beans, should be avoided in the higher ranges of C3.

Both water tests are basically the same. Follow sulfuric acid requirement.



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COMPLETE WATER TEST W4: Irrigation Suitability & Evaluation

Received: 10/4/2001

Report # 6615101 Page 2 Lab # 992 Date: 10/12/2001 Crop: Alfalfa
 Grower: Bureau of Reclamation
 Sender Sample ID: Reservoir
 Submitted By:
 Send Report To: Bureau of Reclamation

ION TESTED	PARTS PER MILLION	MILLI-EQUIVALENTS PER LITER	POUNDS APPLIED PER ACRE-FT.
Calcium	69.0	3.45	187.7
Magnesium	35.0	2.87	95.2
Sodium	90.0	3.91	244.8
Potassium	4.7	.12	12.8
Carbonate	.0	.00	.0
Bicarbonate	170.8	2.80	464.6
Chloride	80.0	2.25	217.6
Sulfate-S	76.0	4.75	206.7
Nitrate-N	.6	.04	1.6
Phosphate-P	.09	.00	.24
Boron	.19	.00	.52

Electrical conductivity, dS/m: .90
 pH, units: 8.20
 Cation/Anion ratio: 1.05
 Sodium adsorption ratio (SAR): 2.20
 SAR adjusted: 4.48
 Adjusted RNA: 2.39
 Soluble sodium percentage (SSP): 37.80
 Soluble sodium percentage possible (SSP pos): 52.65
 Total soluble salts, ppm: 526.35
 Salt applied per acre-foot, lbs: 1431.67
 Sulfuric acid required (gal 95% acid/ac-ft to neutralize 90% carbonate + bicarbonate): 23.20
 Calcium + Magnesium hardness (meq/l): 6.32
 Gypsum required (lb of 100% gypsum/ac-ft) to reach a desired SAR of 2.20: .00
 Leaching required (% additional irrigation) for leaching of salts: 11.25
 Salinity hazard is high, sodium hazard is low.
 U.S.D.A. classification of this water is C3 - S1

COMMENTS

This water should be used only on soils with no restricting layers so the leaching of salts can be accomplished. Plants with low salt tolerance, such as citrus and beans, should be avoided in the higher ranges of C3.