

**AGRICULTURAL SPRAY WATER SUITABILITY**

Send to :	Project :	Report No :
		Cust No :
		Date Printed :
		Date Received :
		Page : 1 of 2
		Lab Number : <b>95502</b>

Sample Id : **1**

CATIONS		mg/L	meq/L
Sodium	Na	196	8.53
Calcium	Ca	23.3	1.16
Magnesium	Mg	8.66	0.71
Potassium	K	2.64	0.07
Ammonium	NH <sub>4</sub>	1	0.04
	NH <sub>4</sub> - N	0.532	
<b>SUM OF CATIONS</b>			<b>10.51</b>

ANIONS		mg/L	meq/L
Chloride	Cl	89.0	2.51
Sulfate	SO <sub>4</sub>	4.39	0.09
	S	1	
Bicarbonate	HCO <sub>3</sub>	466	7.64
Carbonate	CO <sub>3</sub>	0	0.00
Nitrate	NO <sub>3</sub>	0	0.00
	NO <sub>3</sub> - N	0.110	
Phosphate	PO <sub>4</sub>	0.306	0.01
	P	0.100	
<b>SUM OF ANIONS</b>			<b>10.25</b>

Hydrogen Ion Activity	pH	7.35
Electrical Conductivity	ECw	1.09 dS/m
Total Dissolved Solids	TDS	
Adj Na Adsorption Ratio	SARadj	10.48
Sodium Adsorption Ratio	SAR	8.82
Hardness		93.8 ppm

Copper	Cu	0.005 mg/L
Zinc	Zn	1.98 mg/L
Manganese	Mn	0.010 mg/L
Iron	Fe	0.118 mg/L
Boron	B	0.123 mg/L
Fluoride	F	
Aluminum	Al	0.100 mg/L
Molybdenum	Mo	0.010 mg/L

mg/L = parts per million parts water      meq/L - milliequivalents per liter      mg/L = ppm  
 Hardness is determined from calculations using the calcium and magnesium concentrations in the water.  
 TDS calculated by ECw \* 640

### AGRICULTURAL SPRAY WATER SUITABILITY

Send to :	Project :	Report No :
		Cust No :
		Date Printed :
		Date Received :
		Page : 2 of 2
		Lab Number : 95502

Sample Id : 1

### SPRAY WATER ANALYSIS INTERPRETATION

Potential Problem	pH	Hardness	Iron	Carbonate	Bicarbonate	Sodium	Chloride
<b>Test Result</b>	7.35	93.8	0.118	0	466	196	89.0
<b>Units</b>	s.u	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
<b>Severe</b>	> 7.9	> 180	> 1.5	> 8.5	> 8.5	> 6	> 5
<b>Slight to Moderate</b>	< 5.8 ; 7.1 - 7.9	60 - 180	0.3 - 1.5	2 - 8.5	2 - 8.5	3 - 6	3 - 5
<b>None</b>	5.8 - 7	< 60	< 0.3	< 2	< 2	< 3	< 3
<b>Severe</b>							
<b>Moderate</b>							
<b>Slight</b>							
<b>None</b>							
	pH	Hardness	Fe	CO <sub>3</sub>	HCO <sub>3</sub>	Na	Cl

One or more potential problems are moderate to severe. Consider the use of a water conditioner or a different water source.

Water Hardness indicates low potential.

For insecticide/fungicide active ingredients that are subject to decomposition by alkaline hydrolysis, buffer addition is recommended when pH exceeds 7.0. Optimum range is pH between 3.0 and 5.0 depending on active ingredient.

For glyphosate, buffering is recommended when pH exceeds 5.0. Optimum range is pH between 3.0 and 4.5.

Bicarbonates at this level indicate potential for negative impacts on glyphosate, clethodim, ACHIEVE, and sethoxydim.