



## Standard Soil Tests

<i>Parameter</i>	<i>Standard Soil</i>
pH	6.2 - 6.8
OM%	1.0 - 4.0
Sulfur	< 40 ppm
Phosphorous	> 200 lb / ac
Calcium / Base Saturation	> 2000 lb / ac (65%)
Magnesium / Base Saturation	> 200 lb / ac (15%)
Potassium / Base Saturation	350 lb / ac (3 - 6%)
Sodium / Base Saturation	< 50 lb / ac (0.5 - 3%)
Hydrogen / Base Saturation	10 - 15 %
Iron	90 - 150 ppm
Boron	1.0 ppm
Manganese	30.0 - 50.0 ppm
Copper	3.0 - 10.0 ppm
Zinc	5.0 - 10.0 ppm

PPM = mg/l (for liquid matrices)

These numbers will vary based on pH, levels of compaction and other stress factors. lb / ac levels are assuming 6" depth. These numbers are to be used only as a guide.

## Water Soluble / Paste Extract Tests

<i>Parameter</i>	<i>Water Soluble / Paste Extract Analysis</i>
pH	slightly acidic
Bicarbonates	< 50 ppm
Soluble Salts	< 950 ppm
Sulfur	5.0 ppm
Phosphorous	1 - 2 ppm
Calcium / Base Saturation	35 - 60 ppm (60%)
Magnesium / Base Saturation	6 - 13 ppm (20%)
Potassium / Base Saturation	13 - 20 ppm (13%)
Sodium / Base Saturation	< 18 ppm (2 - 6 %)
Boron	0.08 ppm
Manganese	0.10 ppm < 0.25 ppm
Copper	0.07 ppm
Zinc	0.10 ppm

PPM = mg/l (for liquid matrices)

These numbers will vary based on water source used at the lab and should only be used as a guide.



**VERDE-CAL®**  
Enhanced Calclitic Limestone

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**AcidipHy**



## Irrigation Water Tests

Range

<b>Parameter</b>	<b>Low</b>	<b>Medium</b>	<b>High</b>	<b>Problematic</b>
pH	5.5 - 6.5	6.5 - 7.5	7.5 - 8.5	8.6 +
Carbonate (CO <sub>3</sub> ), ppm	< 10	11 - 25	26 - 39	40 +
Bicarbonate (HCO <sub>3</sub> ), ppm	< 20	20 - 70	71 - 119	120 +
Calcium, ppm	25 - 50	50 - 75	75 - 100	100 +
Magnesium, ppm	< 5	6 - 15	16 - 24	25 +
Potassium, ppm	< 2	3 - 6	7 - 10	11 +
Sodium, ppm	< 1	2 - 26	27 - 50	51 +
Nitrate - N, ppm	< 1	2 - 3	4 - 5	6 +
Sulphate - S, ppm	0 - 125	126 - 250	251 - 375	376 +
Phosphate - P, ppm	< 1	1.0 - 2.9	3.0 - 4.9	5.0 +
Zinc, ppm	0.10 - 0.20	0.21 - 0.40	0.41 - 0.80	0.81 +
Copper, ppm	0.05 - 0.10	0.11 - 0.20	0.21 - 0.30	0.31 +
Manganese, ppm	< 0.25	0.25 - 0.65	0.66 - 0.99	1.0 +
Iron, ppm	< 0.5	0.51 - 1.25	1.26 - 1.99	2.0 +
Boron, ppm	0.05 - 0.10	0.10 - 0.20	0.20 - 1.00	1.0 +
Chloride, ppm	10 - 25	25 - 50	50 - 250	250 +
Fluoride, ppm	0.30 - 0.70	0.70 - 1.20	1.20 - 1.99	2.0 +
Alkalinity, ppm	< 33	34 - 66	67 - 99	100 +
EC	< .50	0.51 - 1.25	1.26 - 1.99	2.0 +
Total Dissolved Solids, ppm	150 - 300	300 - 500	500 - 700	700 +
Sodium Adsorption Ration (SAR)	< 1	1.1 - 3.3	3.4 - 5.9	6.0 +

PPM = mg/l (for liquid matrices)

These numbers have been categorized into low, medium, high and very high.

They are to be used only as a guide.

General Guidelines



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