

Introduction to Section 16 (16g - Field Examples of Soil Nutrients Analyzed for Select Crops)

Nutrients in the Soil		Pecan East El Paso, Tx	Apples Shiprock, NM	Chile Sena, NM	Pumpkins Lordsburg, NM	Blue Corn Isleta, NM	Sorghum Clovis, NM	Alfalfa Animas, NM	Pasture(Tierra Amarilla, NM)
		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
1	Nitrate-Nitrogen	4.5 (L)	14.35 (M)	50 (H)	41.3 (H)	1.5 (VL)	10.05 (M)	4 (VL)	5.0 (L)
2	Phosphorus	5.0 (VL)	2.7 (VL)	26.5 (H)	16.2 (M)	4.01 (VL)	19.8 (M)	15 (M)	2.0 (VL)
3	Potassium	25 (L)	57.0 (M)	91.0 (VH)	36.0 (M)	37.0 (M)	69.0 (H)	99 (VH)	17.0 (L)
4	Sulfate-Sulfur	20.7 (H)	not analyzed	not analyzed	87.0 (H)	not analyzed	not analyzed	22 (H)	not analyzed
5	Calcium	745 (H)	729.5 (H)	55.0 (VL)	63.0 (VL)	113.0 (L)	45.3 (VL)	820 (VH)	16.0 (VL)
6	Magnesium	28.0 (L)	70.4 (H)	21.0 (L)	10.2 (VL)	16.0 (L)	14.0 (VL)	99 (VH)	3.65 (VL)
7	Zinc	0.4 (L)	1.02 (H)	not analyzed	not analyzed	not analyzed	1.26 (H)	0.3 (L)	1.10 (H)
8	Iron	2.2 (L)	5.42 (H)	not analyzed	not analyzed	not analyzed	8.32 (H)	7.0 (H)	12.0 (VH)
9	Manganese	0.9 (L)	3.29 (H)	not analyzed	not analyzed	not analyzed	8.56 (H)	13.0 (VH)	11.3 (VH)
10	Copper	0.6 (M)	0.6 (M)	not analyzed	not analyzed	not analyzed	1.02 (H)	1.0 (H)	1.61 (H)
11	Boron	0.4 (L)	not analyzed	not analyzed	not analyzed	not analyzed	not analyzed	not analyzed	not analyzed
12	Molybdenum	not analyzed	not analyzed	not analyzed	not analyzed	not analyzed	not analyzed	not analyzed	not analyzed
13	Sodium	Refer to SAR	Refer to SAR	Refer to SAR	Refer to SAR	Refer to SAR	Refer to SAR	Refer to SAR	Refer to SAR
14	Organic Matter	0.6%	1.32%	1.1%	0.94%	1.55%	0.86%	1.2%	3.5%
15	N mineralized	12.0 lbs.	30.0 lbs.	25.0 lbs.	17.6 lbs.	34.5 lbs.	21.0 lbs.	30.0 lbs.	72.0 lbs.
16	ECe	0.36 dS/m	3.7 dS/m	2.49 dS/m	2.09 dS/m	0.67 dS/m	0.57 dS/m	0.46 dS/m	0.15 dS/m
17	pH	8.7	7.5	7.5	8.0	7.6	6.5	7.7	6.06
18	SAR	2.6	1.72	0.9	12.59	1.17	1.74	1.1	0.52

ppm = parts per million, which is equal to milligrams/Kilograms (mg/Kg). VL = Very Low. L = Low. M = Moderate. H = High & VH = Very High. N = Nitrogen (N mineralized: is the approximate amount of soil organic N to be transformed into a mineral form by soil microorganisms; calculation is for the top 0 - 6 inch depth). ECe = Electrical Conductivity of the soil saturation extract (units are in decisiemens/meter (dS/m), which is equal to millimhos/centimeter (mmhos/cm)); it is used to evaluate soil salinity levels. SAR = Sodium Adsorption Ratio (used to evaluate potential water infiltration problems and the effects of elevated sodium to sensitive crops, e.g., pecans).