

WALLACE LABORATORIES, LLC

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El Segundo, CA 90245
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July 17, 2023

Adam Rulifson, adam@PacificLandscapeSupply.com
Pacific Landscape Supply
PO Box 15809
San Luis Obispo, CA 93406

RE: Eco Topsoil
Received July 13, 2023, Our ID No. 23-195-36

Dear Adam,

The pH is neutral at 7.03. Salinity is modestly elevated at 2.75 millimho/cm. Chloride is 275 parts per million in the saturation extract. Salt-sensitive plants need chloride below about 150 parts per million.

Nitrate nitrogen and sulfur are modest. Phosphorus, potassium, magnesium, iron, manganese, zinc, copper, sulfur and magnesium are high.

Sodium is moderate. SAR (sodium adsorption ratio) is 1.3. The concentrations of common non-essential heavy metals are low.

The soil texture is sandy loam. Based on the non-gravel fraction, it contains 75.1% sand, 16.4% silt and 8.6% clay. The gravel fraction is 18.4%.

Recommendations

Irrigate deeply initially. Reduce chloride to less than 150 parts per million in the saturation extract for salt-sensitive plants. Afterwards, apply calcium ammonium nitrate (27-0-0) at 4 pounds per 1,000 square feet.

For site maintenance, apply calcium ammonium nitrate (27-0-0) at 4 pounds per 1,000 square feet about once per quarter.

Monitor the plantings with periodic soil and leaf tissue testing. Adjust the maintenance program as needed.

Sincerely,

Garn A. Wallace, Ph. D.
GAW:n

WALLACE LABS
365 Coral Circle
El Segundo, CA 90245
(310) 615-0116

SOILS REPORT

Print Date Jul. 14, 2023

Receive Date 7/13/23

Location Pacific Landscape Supply
 Requester Adam Rulifson

graphic interpretation: * very low, ** low, *** moderate

ammonium bicarbonate/DTPA

**** high, ***** very high

extractable - mg/kg soil

Sample ID Number 23-195-36
 Sample Description Eco Topsoil

Interpretation of data
 low medium high

elements

0 - 7 8-15 over 15
 0-60 60 -120 121-180
 0 - 4 4 - 10 over 10
 0- 0.5 0.6- 1 over 1
 0 - 1 1 - 1.5 over 1.5
 0- 0.2 0.3- 0.5 over 0.5
 0- 0.2 0.2- 0.5 over 1

phosphorus	17.29	*****	graphic
potassium	750.00	*****	
iron	29.84	*****	
manganese	32.41	*****	
zinc	7.63	****	
copper	3.20	*****	
boron	0.56	****	
calcium	376.37	***	
magnesium	162.07	*****	
sodium	100.97	***	
sulfur	38.85	**	
molybdenum	0.09	***	
nickel	1.18	**	
aluminum	n d	*	
arsenic	0.12	*	
barium	0.93	*	
cadmium	0.07	*	
chromium	n d	*	
cobalt	0.40	*	
lead	2.73	**	
lithium	0.03	*	
mercury	n d	*	
selenium	n d	*	
silver	n d	*	
strontium	1.71	*	
tin	n d	*	
vanadium	0.22	*	

The following trace elements may be toxic
 The degree of toxicity depends upon the pH of the soil, soil texture, organic matter, and the concentrations of the individual elements as well as to their interactions.

The pH optimum depends upon soil organic matter and clay content- for clay and loam soils: under 5.2 is too acidic 6.5 to 7 is ideal

over 9 is too alkaline

The ECe is a measure of the soil salinity:

1-2 affects a few plants
 2-4 affects some plants,
 > 4 affects many plants.

Saturation Extract

pH value	7.03	***	
ECe (milli-mho/cm)	2.75	*****	
calcium	287.2		14.4
magnesium	79.3		6.5
sodium	98.0		4.3
potassium	274.4		7.0
cation sum			32.2
chloride	275		7.8
nitrate as N	9		0.6
phosphorus as P	3.8		0.1
sulfate as S	273.3		17.1
anion sum			25.6
boron as B	0.25	**	
SAR	1.3	*	
est. gypsum requirement-lbs./per 1,000 square feet	17		

problems over 150 ppm

toxic over 800

toxic over 1 for many plants

increasing problems start at 3

est. gypsum requirement-lbs./per 1,000 square feet

infiltration rate inches/hour	fair	
soil texture	sandy loam	gravel > 2 mm
sand	75.1%	18.4%
silt	16.4%	gravel > 1/4 inch
clay	8.6%	0.0%
lime (calcium carbonate)	no	gravel > 1/2 inch
organic matter	fair/good	0.0%
moisture content of soil	3.8%	
half saturation percentage	25.8%	

Elements are expressed as mg/kg dry soil or mg/l for saturation extract.
 pH and ECe are measured in a saturation paste extract. nd means not detected.
 Analytical data determined on soil fraction passing a 2 mm sieve.