

**WALLACE LABORATORIES, LLC**  
**365 Coral Circle**  
**El Segundo, CA 90245**  
**phone (310) 615-0116 fax (310) 640-6863**

October 20, 2021

Conor Davis, conor@CaliforniaSoils.com  
California Soils, Inc.  
PO Box 345  
Westley, CA 95387

RE: Sample received Oct. 18, 2021  
1/8" top soil, Our ID No. 21-292-23

Dear Conor,

The pH is alkaline at 7.39. Salinity is 6.77 millimho/cm. Chloride is 1,059 parts per million in the saturation extract. Boron is 0.75 part per million in the saturation extract.

Nitrogen is modest, about 95% of the soluble mineral nitrogen is nitrate. Phosphorus, potassium, magnesium, sulfur and micronutrients are high except for moderate boron. Gypsum is present. The concentrations of common non-essential heavy metals are low.

Sodium is modest. SAR (sodium adsorption ratio) is 3.1.

Organic matter is 12.2% on a dry weight basis. The carbon:nitrogen ratio is 14.3.

The cation exchange capacity is 22.2 milliequivalents per 100 grams. Exchangeable potassium is high. Exchangeable magnesium is moderate. Exchangeable calcium is good. Exchangeable hydrogen is low. Exchangeable sodium is modest.

The rate of water percolation is 7.23 inches per hour.

Sincerely,

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

Paid \$345.00, check No. 3998

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

**MEDIA REPORT**

Print Date Oct. 19, 2021

Receive Date 10/18/21

Location California Soils, Inc.

Requester Conor Davis

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

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

**ammonium bicarbonate/DTPA**

extractable - mg/kg soil

Interpretation of data

low medium high

0 - 12 16 - 28 32 - 44

0-240 240-500 500-700

0- 12 12- 20 over 20

0 - 2 3 - 4 over 5

0 - 4 4 - 6 over 6

0- 0.5 0.6 - 1 over 1

0 - 1 1 - 2 over 2

Sample ID Number  
 Sample Description

21-292-23

1/8" Top Soil

**elements**

phosphorus

potassium

iron

manganese

zinc

copper

boron

calcium

magnesium

sodium

sulfur

molybdenum

nickel

aluminum

arsenic

barium

cadmium

chromium

cobalt

lead

lithium

mercury

selenium

silver

strontium

tin

vanadium

133.69 \*\*\*\*\*

1,618.31 \*\*\*\*\*

75.11 \*\*\*\*\*

35.45 \*\*\*\*

29.59 \*\*\*\*

5.88 \*\*\*\*

1.71 \*\*\*

963.93 \*\*\*

360.20 \*\*\*

374.95 \*\*

2,312.48 \*\*\*\*

0.10 \*\*\*

0.90 \*

nd \*

0.52 \*\*

0.99 \*

0.10 \*

nd \*

0.32 \*

5.00 \*\*

0.39 \*

nd \*

nd \*

nd \*

3.20 \*

nd \*

1.12 \*

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 soil content- under 5 may be too acidic

6 to 7 may be good

over 8.0 is too alkaline

The ECe is a measure of the media salinity:

good at 200 ppm  
 good at 25 ppm

good at 25 ppm  
 good at 150 ppm

problems over 150 ppm  
 good at 100 ppm  
 good at 40 ppm  
 toxic over 800

toxic over 1 for many plants

increasing problems start at 3

est. gypsum requirement-lbs/cubic yard

**Saturation Extract**

pH value

7.39 \*\*\*

ECe (milli-mho/cm)

6.77 \*\*\*\*\*

millieq/l

calcium

561.6 28.1

magnesium

200.3 16.6

sodium

339.1 14.7

ammonium as N

0.5 0.0

potassium

836.7 21.4

cation sum

80.8

chloride

1,059 29.8

nitrate as N

16.4 1.2

phosphorus as P

1.6 0.1

sulfate as S

936.8 58.6

anion sum

89.6

boron as B

0.75 \*\*\*

SAR

3.1 \*\*\*

5

infiltration rate inches/hour

7.23

Total Nitrogen, dry weight basis

0.43%

Total Carbon, dry weight basis

6.09%

Carbon:Nitrogen Ratio

14.3

lime (calcium carbonate)

no

organic matter, dry weight basis

12.18%

moisture content of media

18.8%

half saturation percentage

39.2%

ideal percentages of cations

% saturation

abt 5 % potassium

millieq K

2.30

10%

< 3% sodium

millieq Na

0.46

2%

abt 70% calcium

millieq Ca

15.25

69%

10 - 15% magnesium

millieq Mg

3.23

15%

5-10% hydrogen

millieq H

0.96

4%

total millieq/100 grams

22.21

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.