Sunland Analytical



11419 Sunrise Gold Circle, #10 Rancho Cordova, CA 95742 (916) 852-8557

> Date Reported 07/15/20: Date Submitted 07/12/20:

To: Sam Sensational

Sensational Residence

8765 Home Way

Everywhare, CA

99999

From: Gene Oliphant, Ph.D. \ Randy Horney
General Manager \ Lab Manager

The reported analysis was requested for the following:
Location: GARDEN Site ID: REAR.
Thank you for your business.

* For future reference to this analysis please use SUN # 555438-2111264.

SOIL ANALYSIS

Saturation Percent (SP) pH E.C. Tot.Dissolved Salts Infiltration Rate (0% Slope) % Organic Matter C.E.C. Sodium Absorption Ratio (SAR) Exchangable Sodium Percent (ESP) Gypsum Req. (CaSO4*2H2O) est. Nitrogen Release	50 7.65 0.88 563.2 0.54 5.0 21.4 5.3 6.2 21.	Soil mmho/cm ppm in/hr meq/100g #/1000 sq.ft. #/1000 sq.ft.	Texture	Loam
	1. 1	Ĺ	1	1

Nitrate	0.83	ppm
Phosphorus	19.79	ppm
Potassium	93.08	ppm
Sulfur	38.40	ppm
Chloride	60.99	ppm
Carbonates	364.78	ppm
Sodium	304.29	ppm
Calcium	3050.02	ppm
Magnesium	558.00	ppm
Boron	0.70	ppm
Copper	5.38	mqq
Iron	44.23	ppm
Manganese	9.64	ppm
Zinc	11.25	ppm

							-	•							-																				
				1									1																						
*																																			
*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*																				
*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*														
*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*									
*	*	*	*	*	*	*	*	*	*	*	*	*	*																						
*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*							
*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*														
*	*	*	*	*	*	*	*	*	*	*	*	*	*	*																					
*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	•														
*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	* *	*	*	*	•													
*	*	*	*	*	*	*	*	*	* *	*	*	*	*	*	*	*																			
*	*	*	*	*	*	* *	* *	: 3	: 1	* *	*	*	*	*																					
*	*	*	*	*	*	. 4	*	. 4	. 4	*	*	*	*	*	*	*	*	4	. 4	*	4 3	* *	+ 1	4	k d	+ *	*	*	* *	* *					
				١									1																						
V	e	r	У	- 1	_		I		ΣV	7			- !		5 54	7	ZĊ	le	20	Įυ	16	at	:6	9			- '	E:	ЖC	36	28	s	i	V 6	2
I	ıC	W.	7																																

Sunland Analytical



11419 Sunrise Gold Circle, #10 Rancho Cordova, CA 95742 (916) 852-8557

DATE 07/15/20 ...
SUN NUMBER 2111264

Information requested by: Sam Sensational Sensational Residence Information for: GARDEN Sample ID: REAR

SOIL RECOMMENDATIONS FOR LANDSCAPE GARDENING

SOIL pH (Acidity and Alkalinity)

The pH of this sample indicates the soil is moderately alkaline, a condition negatively affecting some plants. Apply 12 pounds of soil sulfur per 1000 sq.ft. Spread evenly and work into the top six inches. Recall that sulfur alteration of pH is a slow process. For more rapid effect Sulfuric Acid may be used.

DISSOLVED SALTS (Indicated by E.C. & TDS)

These conditions are in the normal range for plant growth.

SOIL TEXTURE AND RATE OF WATER INFILTRATION

The infiltration rate for all soil textures decreases with increasing ground slope. At 0 to 4%, 5 to 8%, 9 to 12%, 13 to 16% and above 16% the infiltration rate of this sample decreases from 0.54 to 0.43, 0.32, 0.22, 0.14, respectively. Infiltration rate also decreases with percent of ground cover and by compaction.

WATER PENETRATION OF SOIL DUE TO CHEMICAL CHARACTERISTICS

When exchangable Sodium increases in the soil, water penetration decreases. Based on SAR and ESP values this sample will have increasing problems with water penetration. Apply 21 pounds of Gypsum per 1000 sq.ft., work into soil, and leach with good quality water. Have the water analyzed before use to insure that the water is not the cause of the high Sodium in the soil. Leaching requires good quality water and adequate drainage through the root zone.

ORGANIC MATTER

Organic matter provides a slow nitrogen release and aids water retention. This sample has a moderate Organic Matter content.

To maintain moisture and provide sustained nitrogen release a level of 10% organic matter is recommended. Use amending material that is approximately 75% organic matter (i.e. many ground fir barks). Based on the analysis of this soil sample apply 3 yards per 1000 sq.ft. Spread evenly and blend into the top six inches of soil. It is a reasonable practice to apply a top dressing of 3 inches of organic mulches to aid water penetration and retention.

SOIL BORON

Boron concentations are in a range allowing normal plant growth.

SOIL MICRONUTRIENTS

Micronutrients, Copper, Iron, Manganese and Zinc, in soil are present in small amounts. However, they play a necessary role in plant metabolism. Without appropriate amounts plants will not thrive. Soil has adequate amounts - no application needed.

Sunland Analytical

11419 Sunrise Gold Circle, #10 Rancho Cordova, CA 95742 (916) 852-8557

PAGE #2

DATE 07/15/20

2111264 SUN NUMBER

Information requested by: Sam Sensational Sensational Residence

Information for:

GARDEN

Sample ID: REAR

SOIL RECOMMENDATIONS FOR LANDSCAPE GARDENING

SOIL MACRONUTRIENTS : NITROGEN-PHOSPHORUS-POTASSIUM (N-P-K) GENERAL N-P-K RECOMMENDATION

Use ONE of these NPK preparations for the first fertilizer application.

Standard NPK							Customer
Fertilizer							Choice
Preparations	6-20-20	5-20-10	16-16-16	0-10-10	28-3-4	21-0-0	None
#/1000 sq.ft.	20	24	8	N/A	N/A	N/A	**

GRASS OR SOD PREPARATION

Till in organic matter, N,P,K and micro nutrients in addition to any lime gypsum or sulfur as directed above. Smooth soil surface and follow seed or sod producers direction for moisture and product application.

TREES AND SHRUBS

Excavate holes for planting shrubs and trees to at least twice the volume of the container. Prepare backfull for tree and shrub planting holes by mixing three parts of native soil (or imported top soil) with one part organic amendment (preferably nitrogen and iron fortified) and 2.5 pounds of 6-20-20 per yard of mix. For extended fertilization, place slow release fertilizer tablets in each hole per manufacturer's instructions. If 6-20-20 was not directly added to backfill mix, during backfill apply uniformly 1/2 oz of 6-20-20 per gallon containers, 2.5 oz per 5 gallons, 6 oz per 24 inch boxes.

Summary and Suggested Sequence of Soil Improvements (#/1000 Sq.Ft.) _____

Gypsum

21 # - leach soil

Soil Sulfur

12.0 #

Organic Amendment

for pH modification, repeat as above

Yd./1000 Sq.Ft. Bulk organic amendment (nitrofied). 3

N-P-K Fertilizer See above chart

Maintenance Fertilization

Apply 5 pounds of Ammonium sulfate (21-0-0) per 1000 sq.ft.every month until plants become established. After established, apply 28-3-4 (or similar preparation) to provide desired growth rate and color.