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

SOILS REPORT

Print Date Sep. 17, 2010 Receive Date 9/16/10

Location site
Requester customer

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

ammonium bicarbonate/DTPA

extractable - mg/kg soil
Interpretation of data
low medium high

	Sample ID Number	10-259-22	
	Sample Description	Sample #2 Soil 9-14-10	
	elements		graphic
0 - 7 8-15 over 15	**phosphorus**	12.78	****
0-60 60 -120 121-180	**potassium**	357.56	*****
0 - 4 4 - 10 over 10	**iron**	22.85	*****
0- 0.5 0.6- 1 over 1	**manganese**	6.35	****
0 - 1 1 - 1.5 over 1.5	**zinc**	10.04	*****
0- 0.2 0.3- 0.5 over 0.5	**copper**	9.18	*****
0- 0.2 0.2- 0.5 over 1	**boron**	0.20	***
ratio of calcium to magnesium	**calcium**	340.35	***
needs to be more than 2 or 3	**magnesium**	363.25	*****
should be less than potassium	**sodium**	374.10	*****
	sulfur	367.09	***
	molybdenum	0.09	***
	nickel	1.05	**
The following trace	**aluminum**	n d	*
elements may be toxic	**arsenic**	0.03	*
The degree of toxicity	**barium**	0.31	*
depends upon the pH of	**cadmium**	0.11	*
the soil, soil texture,	**chromium**	0.05	*
organic matter, and the	**cobalt**	0.14	*
concentrations of the	**lead**	3.78	**
individual elements as	**lithium**	0.13	*
well as to their interactions.	**mercury**	n d	*
	selenium	0.51	**
The pH optimum depends	**silver**	n d	*
upon soil organic	**strontium**	1.47	*
matter and clay content-	**tin**	n d	*
for clay and loam soils:	**vanadium**	1.15	**
under 5.2 is too acidic			
6.5 to 7 is ideal	**Saturation Extract**		
over 9 is too alkaline	**pH value**	7.62	****
The ECe is a measure of	**ECe (milli-mho/cm)**	2.42	****
the soil salinity:			millieq/l
1-2 affects a few plants	**calcium**	161.5	8.1
2-4 affects some plants,	**magnesium**	70.1	5.8
> 4 affects many plants.	**sodium**	254.4	11.1
	potassium	38.7	1.0
	cation sum		26.0
problems over 150 ppm	**chloride**	479	13.5
	nitrate as N	35	2.5
	phosphorus as P	0.7	0.0
toxic over 800	**sulfate as S**	152.2	9.5
	anion sum		25.5
toxic over 1 for many plants	**boron as B**	0.12	*
increasing problems start at 6	**SAR**	3.5	***
est. gypsum requirement-lbs./per 1,000 square feet		101	
	infiltration rate inches/hour	2.99	
	soil texture	clay	gravel > 2 mm
	sand	16.5%	9.9%
	silt	29.6%	
	clay	53.9%	
	lime (calcium carbonate)	yes	
	Total nitrogen	0.092%	
	Total carbon	1.161%	
	carbon:nitrogen ratio	12.6	
	organic matter based on carbon	2.32%	
	moisture content of soil	21.7%	
	half saturation percentage	45.0%	

ideal percentages of cations				% saturation
abt 5 %	potassium	millieq K	0.81	4%
< 3%	sodium	millieq Na	0.85	5%
abt 70%	calcium	millieq Ca	10.46	57%
15 - 20%	magnesium	millieq Mg	4.46	24%
5-10%	hydrogen	millieq H	1.68	9%
		total millieq/100 grams	18.26	

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.
Sand, silt, clay and mineral content based on fraction passing a 2 mm screen.