

**WALLACE LABS COMPOST REPORT** DATE: 05.02.18

365 Coral Circle Location SRFC - Sultan, WA  
 El Segundo, CA 90245 Requester Peter Moon  
 (310) 615-0161 Material Fish / Horse Manure Compost

ammonium bicarbonate/DTPA extractable - mg/kg soil	graphic interpretation: * very low, ** low, *** moderate, **** high, ***** very high				
Sample ID No.	18-244-01	<b>Total</b>	<b>Percent</b>	<b>Total</b>	
Interpretation as media	<b>extractable (available)</b>	<b>Content</b>	<b>Available</b>	<b>pounds</b>	
low medium high	<b>elements</b>	<b>mg/kg</b>	<b>nutrients</b>	<b>per cubic yard</b>	
0- 12 16 -28 32 -44	phosphorus	208.55 *****	2,416.74	8.6%	1.2374
0-240 240-500 500-700	potassium	13,745.31 *****	20,473.73	67.1%	10.4824
0- 12 12- 20 over 20	iron	54.71 *****	3,660.94	1.5%	1.8744
0 - 2 3 - 4 over 5	manganese	35.27 *****	194.94	18.1%	0.0998
0 - 4 4 - 6 over 6	zinc	22.82 *****	80.79	28.2%	0.0414
0-0.5 0.6 - 1 over 1	copper	1.68 *****	20.45	8.2%	0.0105
0 - 1 1 - 2 over 2	boron	6.62 *****	26.69	24.8%	0.0137

ratio of calcium to magnesium needs to be more than 2 or 3	calcium	1,884.63 ****	13,115.97	14.4%	6.7153
should be less than potassium	magnesium	420.99 ***	3,600.71	11.7%	1.8435
	sodium	1,640.54 *****	1,953.43	84.0%	1.0001
	sulfur	1,383.74 *****	4,579.80	30.2%	2.3448
	molybdenum	0.68 ****	1.31	52.1%	0.0007

The following trace elements may be toxic	aluminum	n d *	3,807.89	0.0%	1.9496
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.	arsenic	0.26 *	0.79	32.6%	0.0004
	barium	1.37 *	53.99	2.5%	0.0276
	cadmium	0.14 *	0.30	48.5%	0.0002
	chromium	0.15 *	5.47	2.8%	0.0028
	cobalt	0.16 *	1.48	11.0%	0.0008
	lead	0.72 *	7.81	9.2%	0.0040
	lithium	3.73 ***	17.93	20.8%	0.0092
	mercury	0.19 *	n d		0.0000
	nickel	0.14 *	3.51	4.1%	0.0018

Generally, the pH optimum depends upon the organic matter and mineral content- under 5.2 is too acidic 6.5 to 7 is ideal over 9 is too alkaline	selenium	n d *	n d		0.0000
	silicon	38.99	n d		0.0000
	silver	n d *	n d		0.0000
	strontium	15.79 **	150.29	10.5%	0.0769
	tin	n d *	0.12	0.0%	0.0001
	titanium	0.18	146.56		0.0750
	vanadium	0.35 *	128.87	0.3%	0.0660

The ECe is a measure of the compost salinity:	<b>Saturation Extract</b>				
	pH value	6.90 ***			

ideal 200 ppm	calcium	90.2	4.5	308.2	16.4%
ideal 25 ppm	magnesium	22.8	1.9	77.9	18.5%
ideal 25 ppm	sodium	247.9	10.8	847.1	51.6%
ideal 150 ppm	ammonium as N	26.6	1.9	90.9	48.1%
	potassium	2,245.1	57.4	7,670.6	55.8%
	cation sum		76.5		
problems over 150 ppm	chloride	1,066.4	30.0		
ideal 100 ppm	nitrate as N	46.1	3.3	157.5	
toxic over 800	sulfate as S	324.2	20.3	1,107.8	80.1%
ideal 40 ppm	phosphorus	11.4	0.8	39.0	18.7%
	anion sum		54.4		
toxic over 1 for many plants	boron as B	1.32 *****		4.5	67.9%

increasing problems start at 4 - 6 SAR		3.0 **			
est. gypsum requirement-lbs./cubic yard		3.5			
relative infiltration rate		good			
percent organic matter-dry wt. basis		85.21%			
percent total nitrogen-dry wt. basis		1.34%			
percent total carbon-dry wt. basis		30.54%			
carbon:nitrogen ratio		22.8			
lime (calcium carbonate)		no			
percent water/total basis		46.2%			
percent water on a dry weight basis		64.3%			
half saturation percentage		170.8%			
bulk density - pounds per cubic yard		841			
exchangeable ammonium - mg/kg dry wt. b		189			

<b>TOTAL Content</b>	
pounds per cubic yard:	
carbon	156.35
nitrogen	6.30
P2O5	2.84
K2O	12.63
chloride	1.87
boron	0.01
sodium	1.00

Percent passing	
1/2 inch	100.0%
1/4 inch	100.0%
2 millimeters	81.8%

As is basis:	
Total Nitrogen	0.75%
nitrate N	Total P2O5
0.01%	0.34%
ammonium N	Total K2O
0.01%	1.50%
Organic N	0.73%

acid-soluble ash	6.8%
acid-insoluble ash	8.0%

Elements are expressed as mg/kg dry weight or mg/l for saturation extract. pH and ECe are measured in a saturated extract. n d means not detectable.