

WALLACE LABS
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SOILS REPORT

Print Date

August 14, 2007

Receive Date

8/14/07

Requester Golden Earth Distributors
 graphic interpretation: * very low, ** low, *** moderate

ammonium bicarbonate/DTPA

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

extractable - mg/kg soil	Sample ID Number	07-226-20	07-226-21	07-226-22
Interpretation of data		Higromite Pozzolan Fine	Higromite Pozzolan Coarse	Higromite Pozzolan 1/4 x 3/4
low medium high		graphic	graphic	graphic
0 - 7 8-15 over 15		phosphorus 23.61 *****	31.09 *****	16.19 *****
0-60 60 -120 121-180		potassium 521.94 *****	753.92 *****	238.19 *****
0 - 3 3 - 5 over 5		iron 66.83 *****	124.70 *****	40.03 *****
0-0.5 0.6- 1 over 1		manganese 39.89 *****	43.35 *****	5.15 *****
0 - 1 1 - 1.5 over 1.5		zinc 5.05 *****	4.91 *****	0.80 **
0- 0.2 0.3- 0.5 over 0.5		copper 3.14 *****	2.39 *****	0.14 *
0- 0.2 0.2- 0.5 over 1		boron 0.08 *	0.15 **	0.12 **
ratio of calcium to magnesium		calcium 219.79 ***	250.53 ***	175.41 ***
needs to be more than 2 or 3		magnesium 227.64 *****	176.19 *****	21.21 *
should be less than potassium		sodium 538.65 *****	422.89 *****	62.72 **
		sulfur 646.24 *****	1,279.75 *****	424.93 *****
		molybdenum 0.27 *****	1.10 *****	0.73 *****
		nickel 1.01 **	0.76 *	0.06 *
		aluminum n d *	n d *	7.02 *****
		arsenic 0.34 *	0.97 **	0.77 **
		barium 0.15 *	0.81 *	11.60 ***
		cadmium 0.03 *	0.03 *	n d *
		chromium 0.07 *	0.08 *	0.02 *
		cobalt 0.87 **	0.75 **	0.08 *
		lead 0.34 *	0.79 *	0.59 *
		lithium 1.67 **	2.42 ***	0.95 *
		mercury n d *	n d *	n d *
		selenium 0.17 *	0.03 *	n d *
		silver n d *	n d *	n d *
		strontium 1.38 *	4.55 *	8.70 **
		tin n d *	n d *	n d *
		vanadium 0.24 *	1.04 **	1.10 **
		Saturation Extract		
		pH value 5.25 **	4.54 *	4.52 *
		ECe (milli-mho/cm) 2.39 *****	3.32 *****	2.02 *****
		calcium 154.9 7.7	342.8 17.1	188.2 9.4
		magnesium 43.7 3.6	83.1 6.9	41.6 3.4
		sodium 265.6 11.5	235.6 10.2	88.4 3.8
		ammonium as N 0.0 0.0	0.0 0.0	0.0 0.0
		potassium 42.8 1.1	94.6 2.4	100.9 2.6
		cation sum 24.0	36.7	19.3
		chloride 34 1.0	30 0.8	7 0.2
		nitrate as N 2 0.1	2 0.2	1 0.1
		phosphorus as P 0.1 0.0	0.0 0.0	0.0 0.0
		sulfate as S 389.9 24.4	677.4 42.3	360.8 22.6
		anion sum 25.5	43.3	22.8
		boron as B 0.09 *	0.22 **	0.19 *
		SAR 4.9 ***	3.0 **	1.5 **
		lbs of nitrate as nitrogen in top 12 inches/acre 10	12	7
		est. gypsum requirement-lbs./acre 3,714	2,916	432
		relative infiltration rate fair	fair/good	good
		soil type/bulk density, pounds/cubic foot pozzolan 46.2	pozzolan 39.6	pozzolan 37.8
		lime (calcium carbonate) no	no	no
		organic matter low	low	low
		moisture content of soil 4.4%	1.9%	3.0%
		half saturation percentage 65.6%	60.9%	64.7%

ideal percentages of cations		% saturation		% saturation		% saturation	
2% - 5 % potassium	millieq K	1.45	7%	1.80	8%	0.20	3%
< 3% sodium	millieq Na	1.26	6%	0.72	3%	0.16	2%
abt 70% calcium	millieq Ca	6.70	34%	4.31	18%	0.78	11%
10 - 15% magnesium	millieq Mg	2.70	14%	1.19	5%	0.02	0%
10 - 15% hydrogen	Millieq H	7.52	38%	15.76	66%	6.24	84%
	total millieq/100 grams	19.63		23.78		7.39	

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.