COMPOST ANALYSIS

Analysis provided by the Soil Control Laboratory (Watsonville, CA) 2005

	Units	STA Sample 1		STA Sample 2		STA Sample 3		STA Sample 4		STA Sample 5	
		Wet Weight	Dry Weight	Wet Weight	Dry Weight	Wet Weight	Dry Weight	Wet Weight	Dry Weight	Wet Weight	Dry Weight
Nutrients (primary & secondary											
Total N	%	0.67	0.91	0.49	0.70	0.67	0.90	0.52	0.69	0.54	0.75
Ammonia	mg/kg	138	189	93	133	22	30	36	49	339	470
Nitrate	mg/kg	270	369	296	423	305	408	348	468	72	100
Organic Nitrogen	%	0.63	0.86	0.45	0.65	0.64	0.86	0.48	0.64	0.50	0.69
Phosphorus as P2O5	%	0.64	0.88	0.33	0.48	0.59	0.79	0.60	0.80	0.66	0.91
Phosphorus	mg/kg	2824	3860	1467	2099	2587	3460	2619	3521	2885	3998
Potassium as K2O	%	0.88	1.20	0.59	0.84	1.30	1.80	0.86	1.20	1.10	1.50
Potassium	mg/kg	7327	10017	4876	6980	11074	14814	7133	9589	9042	12531
Calcium	%	8.8	12.0	3.1	4.4	9.50	13.00	5.30	7.10	6.10	8.50
Magnesium	%	0.37	0.50	0.24	0.34	0.51	0.68	0.42	0.57	0.47	0.65
Sulfate (SO4)	mg/kg	1403	1919	1783	2553	1607	2150	1466	1971	1512	2096
Nutrients (trace elements)											
Copper	mg/kg	20	27	20	28	23	31	22	30	20	28
Zinc	mg/kg	54	73	44	64	74	98	81	109	78	108
Iron	mg/kg	3460	4729	3093	4428	5288	7074	3999	5376	4067	5637
Manganese	mg/kg	107	146	72	103	145	194	154	207	142	197
Boron	mg/kg	9	13	1	2	17	22	11	15	13	18
Salts, pH, bulk density, carbonates											
Sodium	%	0.23	0.32	0.10	0.14	0.2	0.26	0.18	0.24	0.22	0.31
Chloride	%	0.24	0.32	0.16	0.22	0.15	0.2	0.11	0.15	0.15	0.21
pH	units	8.64	NA	8.81	NA	8.55	NA	8.36	NA	8.4	N/A
EC (Soluble Salts)	mmhos/cm	4.36	5.96	3.297	4.72	2.542	3.4	2.358	3.17	8.053	11.16
Bulk Density	lb/cu ft	63	46	68	48	60	45	68	51	62	44
Carbonates as CaCO3	lb/ton	414	566	192	274	352	471	200	269	1210	1677
Organic matter	%	14.4	19.7	13	18.6	14.8	19.8	12.2	16.4	12.5	17.3
Organic Carbon	%	8.5	11.6	5.6	8.1	8.6	11.5	6.2	8.3	6.5	9.1
Ash	%	58.8	80.3	56.9	81.4	60	80.2	62.2	83.6	59.7	82.7
C:N Ratio	ratio	13	13	11	11	13	13	12	12	12	12
Moisture	%	26.8	0	30.1	0	25.2	0	25.6	0	27.8	0

COMPOST ANALYSIS

Analysis provided by the Soil Control Laboratory (Watsonville, CA) 2005

	Units	STA Sample 1		STA Sample 2		STA Sample 3		STA Sample 4		STA Sample 5	
		Wet Weight	Dry Weight	Wet Weight	Dry Weight	Wet Weight	Dry Weight	Wet Weight	Dry Weight	Wet Weight	Dry Weight
Metals											
Arsenic	mg/kg dw	2		1		4		3		2	
Cadmium	mg/kg dw	less than 1		less than 1		less than 1		less than 1		less than 1	
Chromium	mg/kg dw	5		4		6		5		6	
Copper	mg/kg dw	27		28		31		30		28	
Lead	mg/kg dw	1		5		2		6		3	
Mercury	mg/kg dw	less than 1		less than 1		less than 1		less than 1		less than 1	
Molybdenum	mg/kg dw	less than 1		less than 1		2		1		1	
Nickel	mg/kg dw	4		3		5		4		4	
Selenium	mg/kg dw	less than 1		less than 1		less than 1		less than 1		2	
Zinc	mg/kg dw	73		64		98		109		108	
Cobalt	mg/kg dw	2		2		2		2		2	
Total Solids	%	73.2		69.9		74.8		74.4		72.2	
Bacteria											
Fecal Coliform	mpn/g dw	less than 2		less than 2		70		4		less than 2	
Salmonella	mpn/4 g dw	less than 3		less than 3		less than 3		less than 3		less than 3	
Stability											
Respiration	mg CO2-C/g OM/day	1.5		1.2		1.7		2.3		2	
Biological Avail. Carbon	mg CO2-C/g OM/day	5.5		7.5		4.7		4.2		5.4	
Maturity											
Emergence	%	80		100		100		70		100	
Relative Seedling Vigor	%	75		100		100		57		100	
Description of plants	NA	stunted		healthy		healthy		fungus		healthy	
Sieve Size & Volume Distribution, Bulk Density and Inerts											
0.38" to 0.64"	% by weight	0.0		0.0		0		7.7		14.1	
	% by volume	0.0		0.0		0		9.9		14	
	Bulk Density (g/cc)	0.00		0.00		0		0.67		0.86	
0.25" to 0.38"	% by weight	0.0		0.0		6.8		12.6		13.2	
	% by volume	0.0		0.0		8.6		14.8		14	
	Bulk Density (g/cc)	0.00		0.00		0.67		0.73		0.81	
0.16" to 0.25"	% by weight	4.7		0.0		9.1		13.3		17.8	
	% by volume	7.1		0.0		10		14.8		19.1	
	Bulk Density (g/cc)	0.68		0.00		0.77		0.77		0.8	
0.08" to 0.16"	% by weight	13.6		11.7		18		18.9		22	
	% by volume	17.9		19.6		19.5		20.2		23.3	
	Bulk Density (g/cc)	0.78		0.59		0.78		0.8		0.81	
<0.08"	% by weight	81.7		88.3		66.1		47.5		33	
	% by volume	75.0		80.4		61.9		40.4		29.8	
	Bulk Density (g/cc)	1.12		1.08		0.9		1		0.95	

COMPOST ANALYSIS

Analysis provided by the Soil Control Laboratory (Watsonville, CA) 2005

	Units	STA Sample 6		STA Sample 7		STA Sample 8		STA Sample 9	
		Wet Weight	Dry Weight	Wet Weight	Dry Weight	Wet Weight	Dry Weight	Wet Weight	Dry Weight
Nutrients (primary & secondary									
Total N	%	0.91	1.20	0.97	1.20	0.88	1.10	0.87	2.00
Ammonia	mg/kg	171	224	543	665	617	785	196	441
Nitrate	mg/kg	202	264	32	39	16	20	18	39
Organic Nitrogen	%	0.88	1.10	0.91	1.10	0.82	1.00	0.85	1.90
Phosphorus as P2O5	%	0.63	0.83	0.66	0.81	0.66	0.84	0.36	0.81
Phosphorus	mg/kg	2791	3641	2896	3548	2910	3704	1590	3573
Potassium as K2O	%	1.60	2.00	1.70	2.10	1.70	2.20	0.53	1.20
Potassium	mg/kg	12890	16815	14017	17173	14347	18560	4441	9981
Calcium	%	12.00	16.00	10.00	12.00	9.00	11.00	2.9	6.4
Magnesium	%	0.54	0.71	0.58	0.71	0.64	0.81	0.24	0.54
Sulfate (SO4)	mg/kg	1840	2400	1087	1331	1143	1455	291	651
Nutrients (trace elements)									
Copper	mg/kg	25	32	27	33	27	34	28	63
Zinc	mg/kg	74	96	79	96	80	102	52	116
Iron	mg/kg	4493	5862	5280	6469	6182	1869	2317	5209
Manganese	mg/kg	151	197	162	199	170	217	74	165
Boron	mg/kg	17	22	19	23	19	24	8	17
Salts, pH, bulk density, carbonates									
Sodium	%	0.24	0.31	0.25	0.31	0.25	0.32	0.11	0.25
Chloride	%	0.2	0.26	0.2	0.24	0.19	0.24	0.11	0.24
pH	units	8.85	NA	8.67	NA	8.83	NA	8.56	NA
EC (Soluble Salts)	mmhos/cm	3.074	4.01	3.983	4.88	4.329	5.51	1.824	4.1
Bulk Density	lb/cu ft	56	43	53	43	53	42	38	17
Carbonates as CaCO3	lb/ton	378	493	405	496	111	142	86	194
Organic matter	%	16.8	21.9	15.5	18.9	17.5	22.3	21.2	47.7
Organic Carbon	%	12.8	16.7	13.8	17	12.1	15.4	14	31.4
Ash	%	59.8	78.1	66.2	81.1	61	77.7	23.3	52.3
C:N Ratio	ratio	14	14	14	14	14	14	16	16
Moisture	%	23.3	0	18.4	0	21.4	0	55.5	0

COMPOST ANALYSIS

Analysis provided by the Soil Control Laboratory (Watsonville, CA) 2005

	Units	STA Sample 6		STA Sample 7		STA Sample 8		STA Sample 9	
		Wet Weight	Dry Weight	Wet Weight	Dry Weight	Wet Weight	Dry Weight	Wet Weight	Dry Weight
Metals									
Arsenic	mg/kg dw	3		3		3		3	
Cadmium	mg/kg dw	less than 1		less than 1		less than 1		less than 1	
Chromium	mg/kg dw	6		6		8		6	
Copper	mg/kg dw	32		33		34		63	
Lead	mg/kg dw	4		3		4		4	
Mercury	mg/kg dw	less than 1		less than 1		less than 1		less than 1	
Molybdenum	mg/kg dw	2		2		2		2	
Nickel	mg/kg dw	5		5		6		5	
Selenium	mg/kg dw	less than 1		less than 1		less than 1		less than 1	
Zinc	mg/kg dw	96		96		102		116	
Cobalt	mg/kg dw	2		2		3		3	
Total Solids	%	76.7		81.6		78.6		44.5	
Bacteria									
Fecal Coliform	mpn/g dw	less than 2		less than 2		2		110	
Salmonella	mpn/4 g dw	less than 3		less than 3		less than 3		less than 3	
Stability									
Respiration	mg CO2-C/g OM/day	2.3		6.4		5.8		5.9	
Biological Avail. Carbon	mg CO2-C/g OM/day	4.9		9		7.5		10	
Maturity									
Emergence	%	100		100		100		100	
Relative Seedling Vigor	%	100		100		100		100	
Description of plants	NA	stunted		healthy		healthy		healthy	
Sieve Size & Volume Distribution, Bulk Density ar									
0.38" to 0.64"	% by weight	15.7		9.4		3.6		0.0	
	% by volume	13.9		7.8		2.5		0.0	
	Bulk Density (g/cc)	0.85		0.79		0.91		0.00	
0.25" to 0.38"	% by weight	9.8		11.9		8.9		0.0	
	% by volume	10.9		11.9		9.1		0.0	
	Bulk Density (g/cc)	0.68		0.66		0.63		0.00	
0.16" to 0.25"	% by weight	11.3		11.2		14.3		4.2	
	% by volume	12.2		11.5		14.2		6.5	
	Bulk Density (g/cc)	0.7		0.64		0.65		0.25	
0.08" to 0.16"	% by weight	17.1		17.9		19.6		19.1	
	% by volume	19.6		19.3		19.6		21.7	
	Bulk Density (g/cc)	0.66		0.61		0.64		0.35	
<0.08"	% by weight	46.2		49.6		53.6		76.7	
	% by volume	43.5		49.4		54.5		71.7	
	Bulk Density (g/cc)	0.8		0.66		0.63		0.42	