

Client: West Ranch Worms and Vermicompost Attn: Bob Westendorf 4645 Broadway RD Springfield, OH 45502 937-207-5421	Product: Vermicompost Date Sampled: 03/29/19 Date Received: 04/02/19 Invoice #: C19-269	Date Reported: 04/16/19 Laboratory # C19-269 Revisited by Brent Thyssen, CPSSc PO#: Amount: \$300.00
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Nutrients

Method	As Received	Dry Wt.	Units	Low	Normal	High	Typical Range
Moisture	70 C	45		*****			15 to 40
Solids	70 C	55		*****			60 to 85
pH	1:5	7.4	NA	*****			5.5 to 8.5
E. C. (Sol. Salts)	1:5	5.90	10.75	*****			below 5.0
Total N	TMECC 04.02D	0.69	1.26	*****			1 to 5
Organic C	TMECC 04.01A	10.0	18.3	*****			18 to 45
Organic Matter	TMECC 05.07A	45.4	82.7	*****			40 to 60
Ash	550 C	9.5	17.3	**			40 to 60
Ammonium -N	TMECC 05.02C	12	21	***			90 to 450
Nitrate-N	TMECC 04.02B	1978.0	3602.0	*****			50 to 250
Chloride	TMECC 04.12D	1563	2846	*****			500 to 5000
Sulfate-S	TMECC 04.12D	398	725	*****			
CaCO₃	TMECC 04.08A	88	160	*****			20 to 80
Phosphorous	TMECC 04.12B/04.14A	0.14	0.25	*****			
P₂O₅	calculation	0.31	0.57	*****			1 to 8
Potassium	TMECC 04.12B/04.14A	0.94	1.72	*****			
K₂O	calculation	1.13	2.06	*****			3 to 12
Calcium	TMECC 04.12B/04.14A	0.21	0.4	*****			0.5 to 10
Magnesium	TMECC 04.12B/04.14A	0.18	0.32	*****			0.05 to 0.7
Sodium	TMECC 04.12B/04.14A	0.09	0.17	*****			0.05 to 0.7
Sulfur	TMECC 04.12B/04.14A	0.11	0.21	*****			0.1 to 1.0
Boron	TMECC 04.12B/04.14A	14.8	27.0	*****			25 to 150
Zinc	TMECC 04.12B/04.14A	27	49	***			100 to 600
Manganese	TMECC 04.12B/04.14A	47	85	***			250 to 750
Copper	TMECC 04.12B/04.14A	6	11	***			100 to 500
Iron	TMECC 04.12B/04.14A	742	1351	***			1000 to 25000
C/N ratio			15	*****			18 to 24
C/P Ratio			73	*****			80 to 140
Ag Index			7	*****			3 to 10

Respiration & Stability

Method	Units	Low	Normal	High	Normal
CO2 Evolution	TMECC 05.08	0.1	mg CO ₂ -C/g OM/day	**	
	TMECC 05.08	0.7	mg CO ₂ -C/g TS/day	*****	
Stability Rating	Stable				



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Cucumber Bioassay

Method	Units	Low	Normal	Normal
Emergence TMECC 05.05A	80 %	*****		80 to 100
Vigor TMECC 05.05A	89 %	*****		85 to 100
Maturity Mature: safe for use on gardens and fields				

Pathogens

Method	Date Tested	units	Low	Normal	High	Normal
Fecal Coliforms TMECC 07.01AB	4/2/2019	< 4.2 MPN/g				Less than 1000
Salmonella TMECC 07.02A		Not Tested MPN/4g	*			Less than 3

ND = None Detected Fecal Coliforms MDL 4.2 MPN/g Salmonella MDL 1 MPN/4g

EPA 503 Metals

Method	Dry Wt.	Units	Low	Normal	High	MDL	EPA Limit
Arsenic TMECC 04.12B/04.14A	1.6	mg/kg	****			0.34	41
Cadmium TMECC 04.12B/04.14A	0.10	mg/kg	****			0.05	39
Chromium TMECC 04.12B/04.14A	3.4	mg/kg				0.07	-
Cobalt TMECC 04.12B/04.14A	0.8	mg/kg	****			0.02	1200
Copper TMECC 04.12B/04.14A	11.0	mg/kg	****			0.21	1500
Mercury TMECC 04.12B/04.14A	0.02	mg/kg	****			0.006	17
Molybdenum TMECC 04.12B/04.14A	1.8	mg/kg	****			0.70	75
Nickel TMECC 04.12B/04.14A	2.5	mg/kg	****			0.10	420
Lead TMECC 04.12B/04.14A	1.7	mg/kg	****			0.11	300
Selenium TMECC 04.12B/04.14A	0.80	mg/kg	****			0.53	36
Zinc TMECC 04.12B/04.14A	49	mg/kg	****			0.11	2800
Metals Assay		Pass					

Particle Size Distribution TMECC 2.02 B & C

inches	mm	% Passing	Inerts	% by wt.
3	76.2	100		
2	50	100	Total Plastic	0.00
1	25	100	Film Plastic	0.00
3/4	19.1	100	Glass	0.00
5/8	16	100	Metal	0.00
1/2	12.5	100	Sharps	0.00
3/8	9.5	100		
1/4	6.3	100		

Sample was received, handled and tested in accordance with TMECC procedures



West Ranch Worms and Vermicompost
Attn: Bob Westendorf
4645 Broadway RD
Springfield, OH 45502
937-207-5421

DATE REC 2-Apr-19
 INVOICE # 2-Apr-19
 LAB # C19-269
 Date Reported: 04/16/19

NUTRIENT REPORT

SAMPLE I.D.: Vermicompost

	<u>%SOLIDS</u>	<u>%WATER</u>
As Received:	54.91	45.09

TOTAL ELEMENTS	-----100%DRY-----		----AS RECEIVED-----	
	%	lbs/ton	%	lbs/ton
TN	1.26	25.20	0.69	13.8
P	0.25	4.99	0.14	2.7
P205	0.57	11.47	0.31	6.3
K	1.72	34.34	0.94	18.9
K20	2.06	41.21	1.13	22.6
S	0.21	4.13	0.11	2.3
Ca	0.39	7.8	0.21	4.3
Mg	0.32	6.42	0.18	3.5
Na	0.17	3.43	0.09	1.9
C	18.30	366	10.0	201
	<u>mg/kg</u>	<u>lbs/ton</u>	<u>mg/kg</u>	<u>lbs/ton</u>
Zn	49	0.10	27	0.05
Mn	85	0.17	47	0.09
Cu	11	0.02	6	0.01
Fe	1351	2.70	742	1.48
B	27	0.05	14.83	0.03
Nitrate N	3602	7.20	1978.0	3.956
Ammonium N	21	0.04	12	0.02
C:N Ratio			15	
pH			7.4	
E.C.	10.75		5.90	