



Analysis Report for Use of Biosolids on Cropland

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| <p>Jason Brown University Area Joint Auth 1576 Spring Valley Rd State College PA 16801</p> | <p>Lab Sample ID: E19004 Date Received: 6/4/2018 Date Sampled: 6/4/2018 Report Date: 7/6/2018 Sample type: Composite County: Centre Customer Sample ID: Compost</p> |
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RESULTS

| pH | Solids | Volatile | Tot-N | Org-N | NH ₄ N | P | K | Mg | Ca | Na | Fe | Al |
|--------------------------|--------|----------|-------|-------|-------------------|----------------------|------|------|--------|-------|------------------|-----------------------------|
| @ 22.8 C | — % — | | | | | % (dry weight basis) | | | | | | |
| 7.5 | 73.37 | 79.69 | 2.39 | 1.98 | 0.41 | 1.44 | 0.39 | 0.40 | 5.06 | 0.06 | 0.34 | 1.84 |
| Mn | As | Cd | Cr | Cu | Pb | Hg | Mo | Ni | Se | Zn | PCB ¹ | Reactive ¹ CN |
| mg/kg (dry weight basis) | | | | | | | | | | | | |
| 266.1 | < 2.05 | < 0.68 | 8.5 | 184.3 | 8.8 | 0.26 | 3.3 | 8.2 | < 3.42 | 196.7 | < .01 | < 1.1 |

NR-Not Requested One dry ton of this material is equivalent to 327 gallons of wet material or 1.4 tons of wet material

PRIMARY NUTRIENT CONTENT

| % (dry wt basis) | | | |
|-------------------------------|------|------|---|
| Total N | 2.39 | 2.10 | dry tons of this biosolid will supply 100 lbs of total N. |
| P ₂ O ₅ | 3.30 | 3.47 | dry tons of this biosolid will supply 100 lbs of P |
| K ₂ O | 0.47 | | |

ANALYSIS INFORMATION FOR EPA 503 POLLUTANTS

| Analyte | EPA SW-846 Method | Analyst | Date | Time |
|--------------------|-------------------|---------|----------|-------------|
| Cd,Cu,Mo,Pb,Ni, Zn | 3050B + 6010 | Stecko | 6/7/2018 | 10:50:19 |
| As | 3050B + 6010 | Stecko | 6/7/2018 | 10:50:19 |
| Se | 3050B + 6010 | Stecko | 6/7/2018 | 10:50:19 |
| Hg | 7473 | Rishel | 6/5/2018 | 11:38:12 AM |
| PCB ¹ | 8082 | | | |

¹Subcontracted to Fairway Laboratories, Inc. (ID 7-00062)

RAW LABORATORY BENCH DATA FOR EPA 503 POLLUTANTS

| | As | Cd | Cu | Hg | Mo | Ni | Pb | Se | Zn |
|--|-------|-------|-------|-----------|-------|-------|-------|-------|-------|
| Wet Wt. aliquot (g) | 0.498 | 0.498 | 0.498 | 0.248 | 0.498 | 0.498 | 0.498 | 0.498 | 0.498 |
| Analyte conc. in sample/ digest (mg/L except Hg) | 0.015 | 0.002 | 1.347 | 0.048 ug | 0.024 | 0.060 | 0.064 | 0.012 | 1.438 |
| Method limit (mg/L except Hg) | 0.015 | 0.005 | 0.015 | 0.0010 ug | 0.015 | 0.010 | 0.025 | 0.025 | 0.050 |

| Optional Analyses: Results (except soluble salts) on dry weight basis | | | | | | Sample Receipt |
|---|------------------|--------------------------------------|--------------------------|--------|-------------------|-------------------------------|
| Nitrate-N (mg/kg) | Total Carbon (%) | CCE Calcium Carbonate Equivalent (%) | Soluble Salts (mmhos/cm) | Other: | Ba = 119.98 mg/kg | Hand-delivered after sampling |
| 0.27 | 38.5 | | 1.85 | | | |

**EPA REGULATIONS FOR LAND APPLICATION OF BIOSOLIDS (40 CFR Part 503) and
DEP GUIDELINES FOR USE OF BIOSOLIDS FOR AGRICULTURAL UTILIZATION**

