



Eden Research Laboratory

To: bioaqualife

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From: Thomas Poth

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Regarding: ASTM D5511 study update for samples - 1130 days

# Update

2111 Menaul NE, Suite A  
Albuquerque, NM 87107  
T 505.508.3994  
M 505.550.9316

thomas.poth@edenresearchlab.com

|                                    | Inoculum | Negative | Positive | 3983 - 7.5 Mil shrinkwrap plastic |
|------------------------------------|----------|----------|----------|-----------------------------------|
| Cumulative Gas Volume (mL)         | 2847.3   | 2844.3   | 11352.3  | 27993.7                           |
| Percent CH <sub>4</sub> (%)        | 45.7     | 45.2     | 32.5     | 53.5                              |
| Volume CH <sub>4</sub> (mL)        | 1301.3   | 1284.6   | 3692.6   | 14969.6                           |
| Mass CH <sub>4</sub> (g)           | 0.93     | 0.92     | 2.64     | 10.69                             |
| Percent CO <sub>2</sub> (%)        | 39.3     | 37.1     | 46.6     | 35.4                              |
| Volume CO <sub>2</sub> (mL)        | 1118.8   | 1056.1   | 5290.4   | 9909.5                            |
| Mass CO <sub>2</sub> (g)           | 2.20     | 2.07     | 10.39    | 19.47                             |
| Sample Mass (g)                    | 10       | 10       | 10       | 20.0                              |
| Theoretical Sample Mass (g)        | 0.0      | 8.6      | 4.2      | 15.0                              |
| Biodegraded Mass (g)               | 1.30     | 1.25     | 4.81     | 13.33                             |
| Percent Biodegraded (%)            |          | -0.5     | 83.3     | 80.2                              |
| * Adjusted Percent Biodegraded (%) |          | -0.6     | 100.0    | 96.3                              |

\* Outside of the ASTM D5511 method and on the assumption that the positive control (Cellulose) will fully biodegrade, all value have been proportionally adjusted. This will not appear on a final report. For internal use only.

## Biodegradation

