**Developing Inoculum to Increase Anaerobic Digestion Efficiency in Winter Months.**

**NESARE Project (GNE11-030) Annual Report 2011**

**Appendix C**

Table 3: Chemical and physical characteristics of landfill leachates.

|  |  |  |  |
| --- | --- | --- | --- |
| **Sample Name** | **Total Solids (g/L)** | **Volatile Solids (g/L)** | **pH** |
| Parkton | 1.40 ± 0.11 | 0.22 ± 0.03 | 6.85 ± 0.17 |
| White Marsh | 3.50 ± 0.03 | 0.52 ± 0.00 | 7.04 ± 0.00 |
| Charles County | 4.42 ± 0.08 | 1.22 ± 0.08 | 7.23 ± 0.01 |
| Corral Farm | 3.50 ± 0.03 | 0.80 ± 0.17 | 7.97 ± 0.00 |
| Stafford County | 6.02 ± 0.03 | 1.58 ± 0.03 | 7.61 ± 0.01 |

Figure 3: Specific methanogenic activity (SMA) tests for landfill leachates.

Figure 4: Methane production of specific methanogenic activity test bottles which were incubated for approximately five weeks.

Table 4: pH readings of the specific methanogenic activity test bottles after approximately five weeks of incubation.

|  |  |  |
| --- | --- | --- |
| **Sample Name** | **pH, with acetate** | **pH, without acetate** |
| Parkton | 6.03 ± 0.00 | 5.97 ± 0.01 |
| White Marsh | 6.27 ± 0.06 | 6.09 ± 0.03 |
| Charles County | 6.37 ± 0.07 | 6.21 ± 0.01 |
| Corral Farm | 6.10 ± 0.00 | 6.01 ± 0.01 |
| Stafford County | 6.60± 0.07 | 6.29 ± 0.04 |