



Eden Research Laboratory

Update

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To: ENSO

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Regarding: ASTM D5526 ENSO 140 & 141 Samples (202 days)

	Inoculum			Negative			Positive		
	60%	45%	35%	60%	45%	35%	60%	45%	35%
Percent Solid	60%	45%	35%	60%	45%	35%	60%	45%	35%
Cumulative Atmos	3.62	3.86	4.89	3.35	3.74	4.84	7.80	8.97	9.17
Converted Gas Volume (mL)	5586	5958	7551	5178	5785	7483	12046	13852	14175
Percent CH ₄ (%)	50.2	51.1	60.4	48.4	52.5	54.4	51.9	52.2	57.3
Volume CH ₄ (mL)	2804	3044	4561	2506	3037	4071	6252	7231	8122
Mass CH ₄ (g)	2.00	2.17	3.26	1.79	2.17	2.91	4.47	5.16	5.80
Percent CO ₂ (%)	30.7	31.5	39.7	27.8	33.5	39.5	36.7	40.2	45.4
Volume CO ₂ (mL)	1715	1877	2998	1439	1938	2956	4421	5568	6435
Mass CO ₂ (g)	3.37	3.69	5.89	2.83	3.81	5.81	8.68	10.94	12.64
Sample Mass (g)	1000	1000	1000	20	20	20	10	10	10
Theoretical Sample Mass (g)	0.0	0.0	0.00	17.14	17.14	17.14	4.42	4.42	4.42
Biodegraded Mass (g)	2.42	2.64	4.05	2.11	2.67	3.76	5.72	6.86	7.80
Percent Biodegraded (%)				-1.8	0.2	-1.7	74.6	95.5	84.8

	Inoculum			140- - Pharmacy Lite Amber Vial PP -Untreated			141 - Pharmacy Lite Amber Vial PP -Treated		
	60%	45%	35%	60%	45%	35%	60%	45%	35%
Percent Solid	60%	45%	35%	60%	45%	35%	60%	45%	35%
Cumulative Atmos	3.62	3.86	4.89	3.8	3.8	3.7	4.5	5.2	5.3
Converted Gas Volume (mL)	5586	5958	7551	5815	5883	5747	7008	8030	8247
Percent CH ₄ (%)	50.2	51.1	60.4	33.9	34.3	36.2	34	33.8	39.1
Volume CH ₄ (mL)	2804	3044	4561	1971	2018	2081	2383	2714	3224
Mass CH ₄ (g)	2.00	2.17	3.26	1.41	1.44	1.49	1.70	1.94	2.30
Percent CO ₂ (%)	30.7	31.5	39.7	38.7	36.2	39.1	32.4	37.2	46.1
Volume CO ₂ (mL)	1715	1877	2998	2250	2130	2247	2271	2987	3802
Mass CO ₂ (g)	3.37	3.69	5.89	4.42	4.18	4.41	4.46	5.87	7.47
Sample Mass (g)	1000	1000	1000	10	10	10	10	10	10
Theoretical Sample Mass (g)	0.0	0.0	0.00	6.23	6.23	6.23	6.23	6.23	6.23
Biodegraded Mass (g)	2.42	2.64	4.05	2.26	2.22	2.32	2.49	3.05	3.76
Percent Biodegraded (%)				-2.6	-3.2	-1.6	1.1	10.2	21.6