

Report

Regarding: 159 week study of the Green Packaging Technology Co., Ltd. Clear Film Sample - ERL#2229.

RESULTS

Thermophilic study for biodegradation, during a 159 week period, of two TekPak BioFoil Clear samples resulted in 94.1% biodegradation.

METHOD

The degree and rate of anaerobic biodegradability of a plastic type material may be predictive of the period required to reduce the proposed plastic from the environment depending on the given conditions. Where disposal is considered a major issue, this method may be useful to estimate the degree and persistence of biodegradable plastic in a biologically active anaerobic disposal situation. As stated in ASTM D5511, this method may also resemble some conditions in biologically active landfills where the gas generated is recovered and biogas production is actively promoted by inoculation (for example, of anaerobic sewage sludge, anaerobic leachate recirculation), moisture control (for example, leachate recirculation), and temperature control (for example, short-term injection of oxygen, heating of recirculated leachate)

ASTM method D5511-12 determines the degree of anaerobic biodegradation of plastic materials in a high-solids anaerobic conditions. The sample is exposed to methanogenic inoculum cultivated from a wastewater treatment facility's anaerobic digesters and post consumer pretreated household waste. Anaerobic decomposition in this case employs a high solids environment. High solids conditions are usually considered to be greater than 20% solids. The sample conditions remain static.

This method is designed to yield a percentage of conversion of carbon in the sample to carbon in the gaseous form under conditions found in high-solids anaerobic digesters, treating municipal solid waste. This can be validated using change in mass of the original sample. This method is also designed to resemble many conditions in a biologically active landfill. This method is applicable to all plastic materials that are not toxic to microorganisms present in wastewater treatment facility's anaerobic digesters that are operating on household waste.

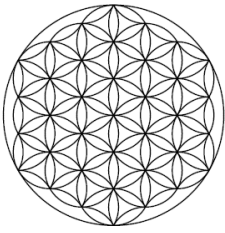
ASTM Method D5511 determines the rate and degree of anaerobic biodegradation by measuring the volume of carbon dioxide (CO₂) and methane (CH₄), or change in mass as a function of time (days) of exposure to anaerobic-digester sludge. This method is considered an accelerated representation with respect to anaerobic environments. Landfill sites that plastics encounter in usual disposal methods are a prime example of this environment.

INOCULUM

1. Inoculum Characteristics and Preparation
 1. Sludge from Organic Compost – Bernalillo Municipal Compost Facility & Albuquerque Municipal Wastewater Facility
 1. Fifteen day hold period observed @ 53 ± 2°C
 2. Solid Content - 44.8% - The method allows anything greater than 20%.
 3. pH - 7.6 - 7.9
 4. Volatile Fatty Acids - 1.1 g/kg
 5. Ammonium Nitrogen 1.0 mg/kg

THEORETICAL CARBON

Sample	Percent Resin	Percent Carbon	Percent Additive	Percent Carbon	Total
2229	99.0	85.6	1.0	74.2	85.5



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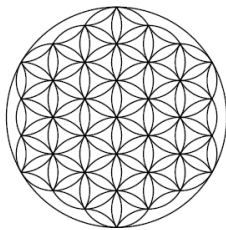
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ASTM D5511-12 - Anaerobic High Solids Biodegradability - 0526220722A

Weekly GAS VOLUMES - CONTROLS (mL) @ STP

Date	IA	IB	IC	NA	NB	NC	PA	PB	PC
May 7, 2019	365.6	240.6	305.4	615.4	263.8	120.3	3211.4	3067.9	3299.3
May 14, 2019	263.8	259.1	282.3	286.9	273.0	791.3	2855.0	2600.5	2605.2
May 21, 2019	78.7	69.4	78.7	115.7	83.3	78.7	967.1	883.8	791.3
May 28, 2019	152.7	162.0	162.0	32.4	152.7	162.0	911.6	1082.8	874.6
Jun 4, 2019	157.3	143.4	148.1	259.1	148.1	13.9	411.8	735.7	703.4
Jun 11, 2019	120.3	157.3	157.3	32.4	194.3	41.6	120.3	185.1	712.6
Jun 18, 2019	92.5	189.7	55.5	-9.3	55.5	27.8	231.4	208.2	476.6
Jun 25, 2019	13.9	18.5	37.0	13.9	13.9	18.5	254.5	166.6	27.8
Jul 2, 2019	23.1	18.5	9.3	23.1	18.5	13.9	41.6	162.0	18.5
Jul 9, 2019	23.1	13.9	13.9	0.0	9.3	9.3	74.0	171.2	18.5
Jul 16, 2019	9.3	23.1	9.3	18.5	18.5	23.1	101.8	148.1	27.8
Jul 23, 2019	13.9	13.9	18.5	27.8	23.1	18.5	32.4	41.6	13.9
Jul 30, 2019	13.9	13.9	13.9	9.3	27.8	37.0	254.5	-9.3	18.5
Aug 6, 2019	13.9	9.3	18.5	18.5	27.8	9.3	78.7	9.3	27.8
Aug 13, 2019	27.8	23.1	18.5	4.6	27.8	18.5	199.0	0.0	41.6
Aug 20, 2019	13.9	13.9	13.9	4.6	13.9	23.1	-13.9	0.0	9.3
Aug 27, 2019	13.9	9.3	13.9	18.5	18.5	9.3	180.5	13.9	23.1
Sep 3, 2019	9.3	18.5	13.9	13.9	4.6	13.9	-208.2	-4.6	13.9
Sep 10, 2019	23.1	13.9	9.3	23.1	13.9	9.3	13.9	9.3	46.3
Sep 17, 2019	18.5	18.5	13.9	13.9	18.5	9.3	23.1	0.0	32.4
Sep 24, 2019	4.6	13.9	23.1	18.5	13.9	18.5	18.5	-4.6	69.4
Oct 1, 2019	18.5	13.9	18.5	23.1	23.1	18.5	157.3	9.3	212.9
Oct 8, 2019	13.9	18.5	18.5	9.3	18.5	13.9	-9.3	-4.6	18.5
Oct 15, 2019	27.8	13.9	13.9	13.9	9.3	9.3	92.5	4.6	111.1
Oct 22, 2019	23.1	18.5	0.0	23.1	13.9	18.5	23.1	-4.6	41.6
Oct 29, 2019	13.9	18.5	18.5	13.9	27.8	13.9	74.0	0.0	106.4
Nov 5, 2019	9.3	27.8	13.9	18.5	4.6	18.5	4.6	0.0	64.8
Nov 12, 2019	18.5	13.9	18.5	18.5	4.6	13.9	32.4	4.6	32.4
Nov 19, 2019	13.9	9.3	27.8	9.3	9.3	9.3	32.4	4.6	-13.9
Nov 26, 2019	4.6	9.3	18.5	23.1	23.1	9.3	0.0	0.0	0.0
Dec 3, 2019	23.1	27.8	18.5	37.0	13.9	23.1	0.0	0.0	4.6
Dec 10, 2019	13.9	18.5	18.5	4.6	13.9	4.6	18.5	9.3	13.9
Dec 17, 2019	9.3	4.6	4.6	0.0	0.0	4.6	4.6	9.3	4.6
Dec 24, 2019	4.6	4.6	4.6	4.6	0.0	4.6	9.3	0.0	4.6
Dec 31, 2019	0.0	4.6	4.6	0.0	4.6	4.6	0.0	4.6	0.0
Jan 7, 2020	4.6	9.3	4.6	9.3	0.0	0.0	0.0	4.6	0.0
Jan 14, 2020	0.0	0.0	9.3	4.6	4.6	0.0	4.6	0.0	0.0
Jan 21, 2020	0.0	9.3	0.0	0.0	4.6	4.6	4.6	0.0	9.3
Jan 28, 2020	4.6	4.6	4.6	9.3	4.6	4.6	4.6	4.6	4.6
Feb 4, 2020	0.0	4.6	9.3	0.0	4.6	0.0	0.0	4.6	4.6
Feb 11, 2020	4.6	0.0	4.6	4.6	4.6	4.6	0.0	9.3	0.0
Feb 18, 2020	0.0	4.6	4.6	0.0	4.6	0.0	0.0	4.6	4.6

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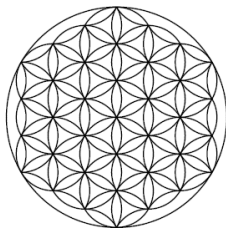
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Date	IA	IB	IC	NA	NB	NC	PA	PB	PC
Feb 25, 2020	0.0	4.6	4.6	0.0	4.6	9.3	4.6	0.0	4.6
Mar 3, 2020	4.6	0.0	4.6	4.6	0.0	0.0	0.0	9.3	4.6
Mar 10, 2020	0.0	0.0	4.6	0.0	4.6	4.6	0.0	4.6	4.6
Mar 17, 2020	4.6	0.0	4.6	4.6	0.0	4.6	0.0	4.6	4.6
Mar 24, 2020	4.6	4.6	0.0	4.6	4.6	0.0	4.6	4.6	0.0
Mar 31, 2020	0.0	9.3	9.3	4.6	0.0	4.6	4.6	4.6	4.6
Apr 7, 2020	0.0	4.6	4.6	9.3	0.0	0.0	9.3	0.0	4.6
Apr 14, 2020	4.6	0.0	0.0	4.6	4.6	9.3	4.6	0.0	4.6
Apr 21, 2020	0.0	4.6	0.0	4.6	9.3	0.0	4.6	4.6	4.6
Apr 28, 2020	4.6	4.6	0.0	4.6	4.6	0.0	4.6	9.3	4.6
May 5, 2020	4.6	4.6	4.6	4.6	4.6	0.0	4.6	4.6	4.6
May 12, 2020	4.6	4.6	4.6	4.6	9.3	4.6	0.0	4.6	0.0
May 19, 2020	9.3	0.0	4.6	4.6	4.6	4.6	4.6	0.0	0.0
May 26, 2020	4.6	4.6	0.0	9.3	4.6	4.6	0.0	4.6	4.6
Jun 2, 2020	4.6	0.0	0.0	4.6	0.0	4.6	4.6	9.3	4.6
Jun 9, 2020	4.6	4.6	4.6	0.0	0.0	4.6	4.6	0.0	0.0
Jun 16, 2020	9.3	4.6	0.0	0.0	0.0	0.0	0.0	0.0	4.6
Jun 23, 2020	4.6	4.6	4.6	0.0	4.6	4.6	0.0	9.3	4.6
Jun 30, 2020	4.6	0.0	0.0	4.6	4.6	4.6	4.6	9.3	0.0
Jul 7, 2020	0.0	0.0	0.0	9.3	0.0	4.6	0.0	4.6	4.6
Jul 14, 2020	0.0	0.0	9.3	4.6	0.0	4.6	0.0	4.6	4.6
Jul 21, 2020	4.6	4.6	0.0	4.6	4.6	4.6	4.6	9.3	9.3
Jul 28, 2020	4.6	0.0	4.6	0.0	0.0	4.6	4.6	0.0	4.6
Aug 4, 2020	9.3	0.0	0.0	9.3	0.0	4.6	4.6	9.3	9.3
Aug 11, 2020	4.6	0.0	0.0	0.0	4.6	4.6	0.0	0.0	4.6
Aug 18, 2020	4.6	4.6	4.6	0.0	9.3	0.0	4.6	4.6	9.3
Aug 25, 2020	0.0	0.0	4.6	4.6	4.6	4.6	4.6	4.6	4.6
Sep 1, 2020	4.6	4.6	0.0	9.3	4.6	0.0	4.6	9.3	9.3
Sep 8, 2020	4.6	0.0	4.6	0.0	4.6	4.6	4.6	0.0	4.6
Sep 15, 2020	4.6	4.6	4.6	0.0	4.6	0.0	4.6	0.0	4.6
Sep 22, 2020	4.6	0.0	4.6	4.6	0.0	4.6	4.6	9.3	4.6
Sep 29, 2020	0.0	0.0	9.3	0.0	9.3	0.0	4.6	4.6	0.0
Oct 6, 2020	4.6	4.6	4.6	4.6	4.6	9.3	4.6	4.6	0.0
Oct 13, 2020	4.6	0.0	4.6	4.6	4.6	9.3	4.6	4.6	4.6
Oct 20, 2020	4.6	4.6	4.6	0.0	4.6	4.6	0.0	4.6	4.6
Oct 27, 2020	0.0	0.0	0.0	9.3	0.0	0.0	4.6	4.6	0.0
Nov 3, 2020	0.0	4.6	4.6	0.0	4.6	0.0	9.3	0.0	4.6
Nov 10, 2020	0.0	4.6	4.6	9.3	4.6	4.6	4.6	0.0	4.6
Nov 17, 2020	0.0	4.6	0.0	4.6	4.6	0.0	0.0	4.6	0.0
Nov 24, 2020	0.0	0.0	4.6	4.6	4.6	9.3	4.6	4.6	4.6
Dec 1, 2020	9.3	9.3	0.0	4.6	0.0	0.0	0.0	4.6	9.3
Dec 8, 2020	9.3	9.3	9.3	4.6	4.6	4.6	4.6	4.6	0.0
Dec 15, 2020	4.6	0.0	0.0	4.6	4.6	0.0	9.3	0.0	9.3

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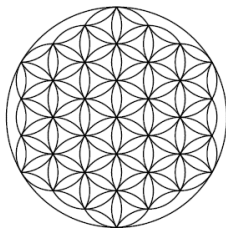
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Date	IA	IB	IC	NA	NB	NC	PA	PB	PC
Dec 22, 2020	4.6	0.0	0.0	0.0	0.0	4.6	0.0	4.6	4.6
Dec 29, 2020	4.6	0.0	4.6	0.0	4.6	0.0	0.0	9.3	4.6
Jan 5, 2021	4.6	9.3	4.6	0.0	4.6	4.6	4.6	0.0	4.6
Jan 12, 2021	4.6	4.6	9.3	4.6	4.6	4.6	0.0	4.6	9.3
Jan 19, 2021	0.0	4.6	0.0	0.0	9.3	4.6	4.6	9.3	0.0
Jan 26, 2021	0.0	4.6	4.6	4.6	0.0	0.0	4.6	4.6	4.6
Feb 2, 2021	4.6	9.3	4.6	4.6	4.6	4.6	4.6	4.6	4.6
Feb 9, 2021	9.3	4.6	4.6	9.3	4.6	4.6	0.0	4.6	0.0
Feb 16, 2021	4.6	4.6	4.6	0.0	4.6	4.6	0.0	4.6	4.6
Feb 23, 2021	4.6	0.0	0.0	4.6	4.6	4.6	4.6	0.0	4.6
Mar 2, 2021	0.0	0.0	4.6	4.6	0.0	0.0	0.0	0.0	0.0
Mar 9, 2021	4.6	4.6	0.0	4.6	4.6	4.6	4.6	9.3	0.0
Mar 16, 2021	4.6	0.0	0.0	4.6	9.3	4.6	4.6	0.0	4.6
Mar 23, 2021	0.0	9.3	4.6	9.3	9.3	0.0	4.6	4.6	0.0
Mar 30, 2021	4.6	4.6	9.3	4.6	4.6	4.6	4.6	0.0	0.0
Apr 6, 2021	4.6	9.3	4.6	4.6	0.0	4.6	0.0	9.3	4.6
Apr 13, 2021	4.6	4.6	0.0	0.0	0.0	0.0	9.3	4.6	4.6
Apr 20, 2021	0.0	4.6	4.6	4.6	4.6	4.6	4.6	9.3	9.3
Apr 27, 2021	9.3	0.0	9.3	4.6	0.0	4.6	4.6	4.6	4.6
May 4, 2021	0.0	0.0	4.6	0.0	4.6	4.6	4.6	4.6	0.0
May 11, 2021	4.6	4.6	4.6	4.6	4.6	4.6	4.6	0.0	4.6
May 18, 2021	4.6	0.0	4.6	4.6	9.3	0.0	4.6	4.6	4.6
May 25, 2021	4.6	4.6	4.6	4.6	0.0	0.0	4.6	4.6	0.0
Jun 1, 2021	0.0	4.6	4.6	0.0	4.6	4.6	4.6	4.6	0.0
Jun 8, 2021	4.6	4.6	0.0	4.6	9.3	0.0	4.6	0.0	4.6
Jun 15, 2021	0.0	4.6	0.0	4.6	0.0	0.0	4.6	0.0	0.0
Jun 22, 2021	0.0	0.0	0.0	0.0	4.6	4.6	0.0	0.0	0.0
Jun 29, 2021	0.0	9.3	4.6	4.6	4.6	0.0	4.6	0.0	4.6
Jul 6, 2021	0.0	4.6	0.0	4.6	4.6	0.0	0.0	0.0	4.6
Jul 13, 2021	4.6	4.6	4.6	4.6	0.0	4.6	4.6	0.0	4.6
Jul 20, 2021	4.6	9.3	0.0	4.6	9.3	0.0	9.3	0.0	4.6
Jul 27, 2021	9.3	4.6	0.0	4.6	4.6	0.0	0.0	0.0	0.0
Aug 3, 2021	4.6	4.6	4.6	0.0	4.6	4.6	0.0	0.0	4.6
Aug 10, 2021	4.6	4.6	9.3	4.6	0.0	4.6	0.0	0.0	4.6
Aug 17, 2021	4.6	9.3	9.3	0.0	0.0	4.6	4.6	4.6	4.6
Aug 24, 2021	4.6	0.0	0.0	4.6	4.6	0.0	4.6	4.6	4.6
Aug 31, 2021	0.0	9.3	4.6	4.6	0.0	0.0	0.0	4.6	9.3
Sep 7, 2021	4.6	9.3	4.6	4.6	4.6	0.0	0.0	0.0	0.0
Sep 14, 2021	4.6	4.6	0.0	0.0	0.0	4.6	9.3	0.0	0.0
Sep 21, 2021	0.0	4.6	0.0	0.0	0.0	9.3	4.6	4.6	4.6
Sep 28, 2021	0.0	9.3	0.0	0.0	4.6	4.6	0.0	9.3	4.6
Oct 5, 2021	4.6	0.0	0.0	4.6	4.6	0.0	4.6	0.0	4.6
Oct 12, 2021	9.3	4.6	0.0	4.6	9.3	4.6	0.0	0.0	9.3

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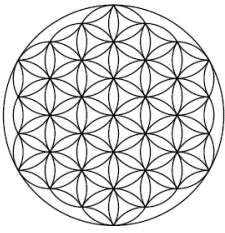
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Date	IA	IB	IC	NA	NB	NC	PA	PB	PC
Oct 19, 2021	4.6	4.6	4.6	4.6	0.0	4.6	9.3	4.6	9.3
Oct 26, 2021	4.6	9.3	0.0	4.6	4.6	4.6	4.6	0.0	4.6
Nov 2, 2021	0.0	4.6	4.6	0.0	4.6	4.6	4.6	9.3	0.0
Nov 9, 2021	4.6	4.6	9.3	4.6	4.6	0.0	4.6	4.6	4.6
Nov 16, 2021	4.6	4.6	4.6	0.0	0.0	4.6	4.6	4.6	0.0
Nov 23, 2021	4.6	0.0	4.6	9.3	4.6	4.6	0.0	4.6	4.6
Nov 30, 2021	0.0	4.6	4.6	9.3	4.6	9.3	0.0	4.6	4.6
Dec 7, 2021	4.6	0.0	0.0	9.3	4.6	4.6	0.0	4.6	0.0
Dec 14, 2021	0.0	4.6	0.0	4.6	0.0	0.0	4.6	4.6	4.6
Dec 21, 2021	0.0	4.6	9.3	4.6	9.3	0.0	4.6	0.0	4.6
Dec 28, 2021	4.6	0.0	9.3	9.3	4.6	9.3	4.6	4.6	0.0
Jan 4, 2022	4.6	4.6	4.6	4.6	0.0	0.0	9.3	4.6	0.0
Jan 11, 2022	0.0	0.0	9.3	4.6	9.3	4.6	4.6	4.6	4.6
Jan 18, 2022	4.6	0.0	0.0	4.6	4.6	4.6	0.0	4.6	4.6
Jan 25, 2022	0.0	4.6	4.6	4.6	0.0	4.6	4.6	4.6	0.0
Feb 1, 2022	4.6	0.0	4.6	4.6	0.0	4.6	4.6	4.6	0.0
Feb 8, 2022	4.6	4.6	4.6	4.6	4.6	0.0	4.6	0.0	0.0
Feb 15, 2022	4.6	0.0	4.6	4.6	4.6	0.0	4.6	4.6	4.6
Feb 22, 2022	4.6	0.0	0.0	4.6	9.3	4.6	4.6	4.6	4.6
Mar 1, 2022	0.0	4.6	4.6	0.0	0.0	4.6	4.6	4.6	4.6
Mar 8, 2022	4.6	4.6	4.6	0.0	0.0	4.6	9.3	4.6	0.0
Mar 15, 2022	4.6	9.3	4.6	0.0	0.0	4.6	4.6	4.6	4.6
Mar 22, 2022	0.0	9.3	4.6	4.6	4.6	4.6	9.3	4.6	4.6
Mar 29, 2022	4.6	0.0	4.6	0.0	4.6	0.0	0.0	0.0	0.0
Apr 5, 2022	4.6	0.0	4.6	4.6	0.0	4.6	4.6	4.6	4.6
Apr 12, 2022	4.6	4.6	0.0	0.0	4.6	4.6	0.0	0.0	0.0
Apr 19, 2022	4.6	4.6	0.0	4.6	4.6	4.6	0.0	4.6	0.0
Apr 26, 2022	0.0	4.6	0.0	4.6	0.0	4.6	4.6	0.0	0.0
May 3, 2022	0.0	4.6	9.3	0.0	4.6	0.0	4.6	4.6	0.0
May 10, 2022	4.6	4.6	4.6	4.6	4.6	4.6	0.0	4.6	4.6
May 17, 2022	4.6	4.6	0.0	4.6	4.6	4.6	4.6	9.3	4.6

Weekly GAS VOLUMES - Samples (mL) @ STP

Date	2229A	2229B	2229C
May 7, 2019	92.5	1374.3	2031.4
May 14, 2019	282.3	444.2	1434.5
May 21, 2019	78.7	101.8	527.5
May 28, 2019	162.0	268.4	1050.4
Jun 4, 2019	171.2	435.0	1018.0
Jun 11, 2019	194.3	1267.9	1119.8
Jun 18, 2019	180.5	1314.2	337.8
Jun 25, 2019	162.0	1022.6	254.5
Jul 2, 2019	162.0	1022.6	620.1

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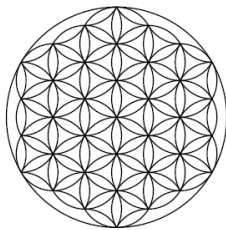
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Date	2229A	2229B	2229C
Jul 9, 2019	175.8	953.2	967.1
Jul 16, 2019	217.5	518.3	1230.9
Jul 23, 2019	203.6	277.6	1254.0
Jul 30, 2019	203.6	1055.0	856.1
Aug 6, 2019	180.5	1295.6	314.7
Aug 13, 2019	277.6	948.6	1369.7
Aug 20, 2019	259.1	203.6	990.2
Aug 27, 2019	282.3	217.5	1068.9
Sep 3, 2019	259.1	259.1	555.3
Sep 10, 2019	273.0	1036.5	203.6
Sep 17, 2019	939.3	587.7	425.7
Sep 24, 2019	879.2	273.0	967.1
Oct 1, 2019	837.5	268.4	1073.5
Oct 8, 2019	1031.9	458.1	185.1
Oct 15, 2019	981.0	421.1	319.3
Oct 22, 2019	726.5	462.7	476.6
Oct 29, 2019	1022.6	416.5	485.9
Nov 5, 2019	671.0	462.7	435.0
Nov 12, 2019	240.6	481.2	536.8
Nov 19, 2019	226.7	513.6	472.0
Nov 26, 2019	217.5	467.4	495.1
Dec 3, 2019	698.7	809.8	546.0
Dec 10, 2019	323.9	300.8	333.2
Dec 17, 2019	171.2	208.2	236.0
Dec 24, 2019	157.3	194.3	249.9
Dec 31, 2019	152.7	194.3	277.6
Jan 7, 2020	143.4	199.0	273.0
Jan 14, 2020	138.8	189.7	277.6
Jan 21, 2020	148.1	189.7	138.8
Jan 28, 2020	185.1	185.1	120.3
Feb 4, 2020	171.2	199.0	92.5
Feb 11, 2020	162.0	194.3	115.7
Feb 18, 2020	171.2	194.3	115.7
Feb 25, 2020	171.2	111.1	115.7
Mar 3, 2020	171.2	124.9	92.5
Mar 10, 2020	171.2	101.8	134.2
Mar 17, 2020	148.1	124.9	134.2
Mar 24, 2020	152.7	120.3	129.6
Mar 31, 2020	185.1	134.2	111.1
Apr 7, 2020	175.8	120.3	115.7
Apr 14, 2020	152.7	129.6	124.9
Apr 21, 2020	152.7	111.1	120.3
Apr 28, 2020	138.8	111.1	97.2

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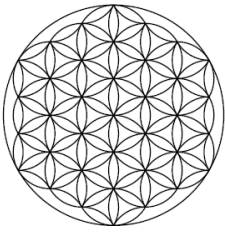
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Date	2229A	2229B	2229C
May 5, 2020	97.2	120.3	97.2
May 12, 2020	97.2	138.8	97.2
May 19, 2020	111.1	106.4	134.2
May 26, 2020	129.6	111.1	97.2
Jun 2, 2020	134.2	124.9	101.8
Jun 9, 2020	92.5	134.2	138.8
Jun 16, 2020	92.5	115.7	101.8
Jun 23, 2020	106.4	124.9	124.9
Jun 30, 2020	1540.9	134.2	138.8
Jul 7, 2020	485.9	134.2	115.7
Jul 14, 2020	522.9	101.8	101.8
Jul 21, 2020	587.7	129.6	124.9
Jul 28, 2020	236.0	97.2	124.9
Aug 4, 2020	485.9	124.9	129.6
Aug 11, 2020	393.3	120.3	115.7
Aug 18, 2020	319.3	120.3	166.6
Aug 25, 2020	138.8	129.6	129.6
Sep 1, 2020	467.4	115.7	115.7
Sep 8, 2020	435.0	120.3	124.9
Sep 15, 2020	92.5	111.1	124.9
Sep 22, 2020	92.5	124.9	138.8
Sep 29, 2020	115.7	78.7	129.6
Oct 6, 2020	162.0	69.4	129.6
Oct 13, 2020	328.5	134.2	124.9
Oct 20, 2020	175.8	101.8	115.7
Oct 27, 2020	286.9	97.2	134.2
Nov 3, 2020	222.1	134.2	111.1
Nov 10, 2020	263.8	134.2	129.6
Nov 17, 2020	305.4	111.1	129.6
Nov 24, 2020	226.7	101.8	111.1
Dec 1, 2020	222.1	129.6	129.6
Dec 8, 2020	435.0	115.7	134.2
Dec 15, 2020	384.1	111.1	138.8
Dec 22, 2020	698.7	129.6	129.6
Dec 29, 2020	64.8	101.8	134.2
Jan 5, 2021	55.5	134.2	115.7
Jan 12, 2021	4.6	106.4	115.7
Jan 19, 2021	0.0	101.8	138.8
Jan 26, 2021	78.7	120.3	138.8
Feb 2, 2021	13.9	97.2	129.6
Feb 9, 2021	0.0	97.2	120.3
Feb 16, 2021	1744.5	134.2	120.3
Feb 23, 2021	328.5	111.1	111.1

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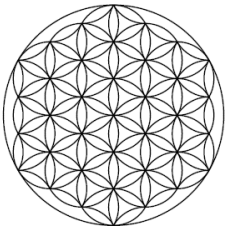
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Date	2229A	2229B	2229C
Mar 2, 2021	675.6	129.6	120.3
Mar 9, 2021	0.0	115.7	120.3
Mar 16, 2021	828.3	120.3	138.8
Mar 23, 2021	273.0	111.1	111.1
Mar 30, 2021	365.6	111.1	134.2
Apr 6, 2021	-37.0	97.2	115.7
Apr 13, 2021	13.9	97.2	111.1
Apr 20, 2021	-23.1	97.2	124.9
Apr 27, 2021	50.9	138.8	111.1
May 4, 2021	555.3	111.1	124.9
May 11, 2021	846.8	124.9	129.6
May 18, 2021	78.7	129.6	138.8
May 25, 2021	236.0	370.2	115.7
Jun 1, 2021	185.1	370.2	120.3
Jun 8, 2021	134.2	277.6	120.3
Jun 15, 2021	124.9	236.0	120.3
Jun 22, 2021	148.1	356.3	111.1
Jun 29, 2021	37.0	208.2	115.7
Jul 6, 2021	37.0	171.2	37.0
Jul 13, 2021	46.3	263.8	41.6
Jul 20, 2021	41.6	388.7	41.6
Jul 27, 2021	46.3	120.3	37.0
Aug 3, 2021	37.0	87.9	41.6
Aug 10, 2021	41.6	120.3	41.6
Aug 17, 2021	32.4	124.9	41.6
Aug 24, 2021	46.3	115.7	37.0
Aug 31, 2021	37.0	120.3	46.3
Sep 7, 2021	37.0	124.9	41.6
Sep 14, 2021	41.6	120.3	46.3
Sep 21, 2021	41.6	37.0	32.4
Sep 28, 2021	46.3	41.6	41.6
Oct 5, 2021	23.1	46.3	46.3
Oct 12, 2021	23.1	37.0	37.0
Oct 19, 2021	23.1	37.0	41.6
Oct 26, 2021	18.5	41.6	32.4
Nov 2, 2021	32.4	41.6	37.0
Nov 9, 2021	9.3	41.6	41.6
Nov 16, 2021	4.6	46.3	32.4
Nov 23, 2021	0.0	41.6	41.6
Nov 30, 2021	0.0	46.3	92.5
Dec 7, 2021	4.6	37.0	115.7
Dec 14, 2021	-4.6	46.3	46.3
Dec 21, 2021	0.0	46.3	32.4



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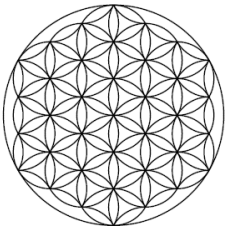
Date	2229A	2229B	2229C
Dec 28, 2021	-4.6	37.0	23.1
Jan 4, 2022	4.6	69.4	0.0
Jan 11, 2022	27.8	46.3	0.0
Jan 18, 2022	4.6	18.5	0.0
Jan 25, 2022	18.5	18.5	4.6
Feb 1, 2022	4.6	-4.6	0.0
Feb 8, 2022	13.9	4.6	0.0
Feb 15, 2022	4.6	0.0	9.3
Feb 22, 2022	0.0	0.0	9.3
Mar 1, 2022	4.6	4.6	0.0
Mar 8, 2022	0.0	0.0	0.0
Mar 15, 2022	4.6	0.0	4.6
Mar 22, 2022	0.0	0.0	4.6
Mar 29, 2022	0.0	4.6	4.6
Apr 5, 2022	0.0	4.6	0.0
Apr 12, 2022	0.0	9.3	9.3
Apr 19, 2022	4.6	0.0	9.3
Apr 26, 2022	0.0	9.3	0.0
May 3, 2022	4.6	0.0	0.0
May 10, 2022	4.6	4.6	0.0
May 17, 2022	4.6	4.6	0.0

Weekly GAS QUALITY - CONTROLS (mL) METHANE VOLUME

Date	IA	IB	IC	NA	NB	NC	PA	PB	PC
May 7, 2019	26.7	20.2	16.2	21.5	10.0	4.9	308.3	260.8	250.7
May 14, 2019	72.3	62.2	93.7	106.2	92.8	280.9	1244.8	1159.8	1008.2
May 21, 2019	26.6	23.2	28.7	42.3	28.7	27.9	534.8	505.5	449.4
May 28, 2019	77.7	91.2	92.0	19.2	84.9	96.5	543.3	643.2	489.8
Jun 4, 2019	79.6	81.9	84.3	155.2	83.1	8.3	233.1	439.2	377.0
Jun 11, 2019	62.0	88.4	89.7	19.3	112.5	25.1	67.9	115.5	386.2
Jun 18, 2019	46.5	112.1	32.2	-5.4	31.5	16.2	137.7	127.4	252.6
Jun 25, 2019	7.5	11.1	21.0	8.6	7.9	11.3	145.8	101.3	15.4
Jul 2, 2019	12.1	11.0	5.3	13.5	11.0	8.5	23.3	98.1	10.1
Jul 9, 2019	11.6	8.0	8.1	0.0	5.2	5.4	43.0	108.7	10.5
Jul 16, 2019	4.7	13.2	5.3	10.7	10.3	13.6	58.7	90.0	15.2
Jul 23, 2019	7.3	8.1	10.8	17.2	13.6	11.5	18.4	26.1	7.8
Jul 30, 2019	7.0	8.0	8.4	5.7	15.7	22.0	145.3	-5.7	10.0
Aug 6, 2019	6.9	5.4	10.8	11.1	16.5	5.6	46.3	5.7	15.2
Aug 13, 2019	13.5	12.8	11.2	2.9	15.7	11.0	113.2	0.0	22.6
Aug 20, 2019	7.1	7.9	8.3	2.8	7.6	14.3	-8.2	0.0	5.0
Aug 27, 2019	7.0	5.4	8.2	10.8	10.1	5.7	102.7	8.2	12.5
Sep 3, 2019	5.0	10.6	8.1	8.7	2.6	8.3	-121.4	-2.9	7.6
Sep 10, 2019	12.1	7.9	5.3	14.3	8.0	5.5	8.0	5.6	25.4

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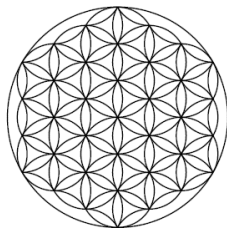
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Date	IA	IB	IC	NA	NB	NC	PA	PB	PC
Sep 17, 2019	9.4	10.9	8.0	8.6	10.7	5.6	13.3	0.0	17.6
Sep 24, 2019	2.3	7.8	13.0	11.3	7.7	11.2	10.6	-2.9	38.9
Oct 1, 2019	9.3	8.3	10.5	14.2	12.9	11.3	88.4	5.6	121.5
Oct 8, 2019	7.1	10.3	10.2	5.6	10.6	8.0	-5.1	-2.9	10.3
Oct 15, 2019	14.9	7.7	8.2	8.5	5.3	5.6	54.6	2.8	62.2
Oct 22, 2019	11.9	10.9	0.0	13.9	7.6	11.4	13.2	-2.8	23.3
Oct 29, 2019	7.2	10.5	11.0	8.5	15.6	8.2	42.7	0.0	58.1
Nov 5, 2019	4.7	15.8	7.8	11.3	2.5	11.5	2.7	0.0	36.2
Nov 12, 2019	9.5	8.3	10.2	11.2	2.6	8.3	18.8	2.7	17.8
Nov 19, 2019	7.2	5.5	16.6	5.6	5.3	5.6	19.0	2.8	-7.5
Nov 26, 2019	2.3	5.5	10.3	14.2	12.6	5.5	0.0	0.0	0.0
Dec 3, 2019	11.7	15.8	10.6	21.8	7.6	13.8	0.0	0.0	2.5
Dec 10, 2019	7.1	10.4	10.6	2.8	7.8	2.8	10.7	5.7	7.6
Dec 17, 2019	4.8	2.8	2.7	0.0	0.0	2.7	2.5	5.6	2.6
Dec 24, 2019	2.3	2.7	2.6	2.9	0.0	2.8	5.2	0.0	2.6
Dec 31, 2019	0.0	2.5	2.8	0.0	2.6	2.9	0.0	2.9	0.0
Jan 7, 2020	2.5	5.4	2.7	5.8	0.0	0.0	0.0	2.8	0.0
Jan 14, 2020	0.0	0.0	5.5	2.8	2.6	0.0	2.6	0.0	0.0
Jan 21, 2020	0.0	5.5	0.0	0.0	2.5	2.8	2.7	0.0	5.0
Jan 28, 2020	2.3	2.7	2.7	5.9	2.7	2.8	2.6	2.9	2.6
Feb 4, 2020	0.0	2.8	5.4	0.0	2.6	0.0	0.0	2.8	2.6
Feb 11, 2020	2.3	0.0	2.7	2.8	2.7	2.8	0.0	5.5	0.0
Feb 18, 2020	0.0	2.6	2.6	0.0	2.6	0.0	0.0	2.8	2.6
Feb 25, 2020	0.0	2.7	2.7	0.0	2.6	5.6	2.6	0.0	2.4
Mar 3, 2020	2.4	0.0	2.7	2.8	0.0	0.0	0.0	5.9	2.6
Mar 10, 2020	0.0	0.0	2.7	0.0	2.6	2.9	0.0	2.9	2.5
Mar 17, 2020	2.3	0.0	2.7	2.8	0.0	2.8	0.0	2.9	2.6
Mar 24, 2020	2.3	2.6	0.0	2.9	2.7	0.0	2.7	2.9	0.0
Mar 31, 2020	0.0	5.3	5.5	2.9	0.0	2.8	2.7	2.8	2.5
Apr 7, 2020	0.0	2.7	2.8	5.6	0.0	0.0	5.2	0.0	2.5
Apr 14, 2020	2.4	0.0	0.0	2.9	2.6	5.7	2.6	0.0	2.5
Apr 21, 2020	0.0	2.7	0.0	2.9	5.2	0.0	2.7	2.8	2.4
Apr 28, 2020	2.3	2.7	0.0	2.8	2.7	0.0	2.6	5.5	2.5
May 5, 2020	2.4	2.7	2.8	2.8	2.7	0.0	2.7	2.8	2.5
May 12, 2020	2.4	2.7	2.6	2.7	5.2	2.8	0.0	2.8	0.0
May 19, 2020	4.8	0.0	2.7	2.9	2.5	2.8	2.6	0.0	0.0
May 26, 2020	2.5	2.7	0.0	5.7	2.6	2.8	0.0	2.9	2.5
Jun 2, 2020	2.3	0.0	0.0	2.8	0.0	2.8	2.7	5.6	2.6
Jun 9, 2020	2.4	2.6	2.7	0.0	0.0	2.8	2.7	0.0	0.0
Jun 16, 2020	4.8	2.6	0.0	0.0	0.0	0.0	0.0	0.0	2.6
Jun 23, 2020	2.4	2.6	2.6	0.0	2.7	2.8	0.0	5.8	2.4
Jun 30, 2020	2.4	0.0	0.0	2.9	2.6	2.8	2.6	5.8	0.0
Jul 7, 2020	0.0	0.0	0.0	5.7	0.0	2.8	0.0	2.8	2.5

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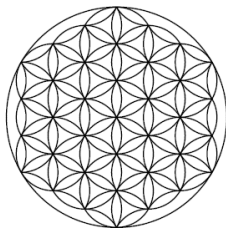
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Date	IA	IB	IC	NA	NB	NC	PA	PB	PC
Jul 14, 2020	0.0	0.0	5.5	2.8	0.0	2.8	0.0	2.9	2.5
Jul 21, 2020	2.4	2.6	0.0	2.8	2.6	2.9	2.7	5.6	5.2
Jul 28, 2020	2.4	0.0	2.7	0.0	0.0	2.8	2.6	0.0	2.5
Aug 4, 2020	4.7	0.0	0.0	5.6	0.0	2.8	2.6	5.7	5.2
Aug 11, 2020	2.3	0.0	0.0	0.0	2.6	2.8	0.0	0.0	2.6
Aug 18, 2020	2.3	2.7	2.8	0.0	5.4	0.0	2.5	2.8	5.1
Aug 25, 2020	0.0	0.0	2.7	2.7	2.7	2.8	2.6	2.8	2.5
Sep 1, 2020	2.3	2.6	0.0	5.7	2.5	0.0	2.6	5.6	5.1
Sep 8, 2020	2.5	0.0	2.6	0.0	2.7	2.8	2.6	0.0	2.6
Sep 15, 2020	2.5	2.7	2.7	0.0	2.6	0.0	2.7	0.0	2.6
Sep 22, 2020	2.4	0.0	2.6	2.9	0.0	2.8	2.6	5.6	2.5
Sep 29, 2020	0.0	0.0	5.4	0.0	5.2	0.0	2.5	2.8	0.0
Oct 6, 2020	2.3	2.6	2.7	2.7	2.5	5.7	2.7	2.9	0.0
Oct 13, 2020	2.3	0.0	2.7	2.7	2.6	5.6	2.7	2.9	2.6
Oct 20, 2020	2.4	2.7	2.6	0.0	2.7	2.8	0.0	2.8	2.4
Oct 27, 2020	0.0	0.0	0.0	5.5	0.0	0.0	2.6	2.8	0.0
Nov 3, 2020	0.0	2.6	2.6	0.0	2.5	0.0	5.3	0.0	2.4
Nov 10, 2020	0.0	2.6	2.6	5.7	2.5	2.9	2.7	0.0	2.4
Nov 17, 2020	0.0	2.6	0.0	2.9	2.5	0.0	0.0	2.8	0.0
Nov 24, 2020	0.0	0.0	2.6	2.9	2.5	5.7	2.7	2.8	2.4
Dec 1, 2020	4.9	5.2	0.0	2.9	0.0	0.0	0.0	2.8	4.8
Dec 8, 2020	4.9	5.2	5.3	2.9	2.5	2.9	2.7	2.8	0.0
Dec 15, 2020	2.4	0.0	0.0	2.9	2.5	0.0	5.3	0.0	4.8
Dec 22, 2020	2.4	0.0	0.0	0.0	0.0	2.9	0.0	2.8	2.4
Dec 29, 2020	2.4	0.0	2.6	0.0	2.5	0.0	0.0	5.5	2.4
Jan 5, 2021	2.4	5.2	2.6	0.0	2.5	2.9	2.7	0.0	2.4
Jan 12, 2021	2.4	2.6	5.3	2.9	2.5	2.9	0.0	2.8	4.8
Jan 19, 2021	0.0	2.6	0.0	0.0	5.1	2.9	2.7	5.5	0.0
Jan 26, 2021	0.0	2.6	2.6	2.9	0.0	0.0	2.7	2.8	2.4
Feb 2, 2021	2.4	5.2	2.6	2.9	2.5	2.9	2.7	2.8	2.4
Feb 9, 2021	4.9	2.6	2.6	5.7	2.5	2.9	0.0	2.8	0.0
Feb 16, 2021	2.4	2.6	2.6	0.0	2.5	2.9	0.0	2.8	2.4
Feb 23, 2021	2.4	0.0	0.0	2.9	2.5	2.9	2.7	0.0	2.4
Mar 2, 2021	0.0	0.0	2.6	2.9	0.0	0.0	0.0	0.0	0.0
Mar 9, 2021	2.4	2.6	0.0	2.9	2.5	2.9	2.7	5.5	0.0
Mar 16, 2021	2.4	0.0	0.0	2.9	5.1	2.9	2.7	0.0	2.4
Mar 23, 2021	0.0	5.2	2.6	5.7	5.1	0.0	2.7	2.8	0.0
Mar 30, 2021	2.4	2.6	5.3	2.9	2.5	2.9	2.7	0.0	0.0
Apr 6, 2021	2.4	5.2	2.6	2.9	0.0	2.9	0.0	5.5	2.4
Apr 13, 2021	2.4	2.6	0.0	0.0	0.0	0.0	5.3	2.8	2.4
Apr 20, 2021	0.0	2.6	2.6	2.9	2.5	2.9	2.7	5.5	4.8
Apr 27, 2021	4.9	0.0	5.3	2.9	0.0	2.9	2.7	2.8	2.4
May 4, 2021	0.0	0.0	2.6	0.0	2.5	2.9	2.7	2.8	0.0

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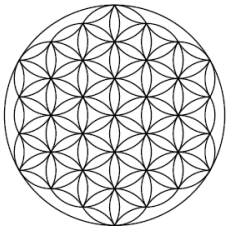
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Date	IA	IB	IC	NA	NB	NC	PA	PB	PC
May 11, 2021	2.4	2.6	2.6	2.9	2.5	2.9	2.7	0.0	2.4
May 18, 2021	2.4	0.0	2.6	2.9	5.1	0.0	2.7	2.8	2.4
May 25, 2021	2.4	2.6	2.6	2.9	0.0	0.0	2.7	2.8	0.0
Jun 1, 2021	0.0	2.6	2.6	0.0	2.5	2.9	2.7	2.8	0.0
Jun 8, 2021	2.4	2.6	0.0	2.9	5.1	0.0	2.7	0.0	2.4
Jun 15, 2021	0.0	2.6	0.0	2.9	0.0	0.0	2.7	0.0	0.0
Jun 22, 2021	0.0	0.0	0.0	0.0	2.5	2.9	0.0	0.0	0.0
Jun 29, 2021	0.0	5.2	2.6	2.9	2.5	0.0	2.7	0.0	2.4
Jul 6, 2021	0.0	2.6	0.0	2.9	2.5	0.0	0.0	0.0	2.4
Jul 13, 2021	2.4	2.6	2.6	2.9	0.0	2.9	2.7	0.0	2.4
Jul 20, 2021	2.4	5.2	0.0	2.9	5.1	0.0	5.3	0.0	2.4
Jul 27, 2021	4.9	2.6	0.0	2.9	2.5	0.0	0.0	0.0	0.0
Aug 3, 2021	2.4	2.6	2.6	0.0	2.5	2.9	0.0	0.0	2.4
Aug 10, 2021	2.4	2.6	5.3	2.9	0.0	2.9	0.0	0.0	2.4
Aug 17, 2021	2.4	5.2	5.3	0.0	0.0	2.9	2.7	2.8	2.4
Aug 24, 2021	2.4	0.0	0.0	2.9	2.5	0.0	2.7	2.8	2.4
Aug 31, 2021	0.0	5.2	2.6	2.9	0.0	0.0	0.0	2.8	4.8
Sep 7, 2021	2.4	5.2	2.6	2.9	2.5	0.0	0.0	0.0	0.0
Sep 14, 2021	2.4	2.6	0.0	0.0	0.0	2.9	5.3	0.0	0.0
Sep 21, 2021	0.0	2.6	0.0	0.0	0.0	5.7	2.7	2.8	2.4
Sep 28, 2021	0.0	5.2	0.0	0.0	2.5	2.9	0.0	5.5	2.4
Oct 5, 2021	2.4	0.0	0.0	2.9	2.5	0.0	2.7	0.0	2.4
Oct 12, 2021	4.9	2.6	0.0	2.9	5.1	2.9	0.0	0.0	4.8
Oct 19, 2021	2.4	2.6	2.6	2.9	0.0	2.9	5.3	2.8	4.8
Oct 26, 2021	2.4	5.2	0.0	2.9	2.5	2.9	2.7	0.0	2.4
Nov 2, 2021	0.0	2.6	2.6	0.0	2.5	2.9	2.7	5.5	0.0
Nov 9, 2021	2.4	2.6	5.3	2.9	2.5	0.0	2.7	2.8	2.4
Nov 16, 2021	2.4	2.6	2.6	0.0	0.0	2.9	2.7	2.8	0.0
Nov 23, 2021	2.4	0.0	2.6	5.7	2.5	2.9	0.0	2.8	2.4
Nov 30, 2021	0.0	2.6	2.6	5.7	2.5	5.7	0.0	2.8	2.4
Dec 7, 2021	2.4	0.0	0.0	5.7	2.5	2.9	0.0	2.8	0.0
Dec 14, 2021	0.0	2.6	0.0	2.9	0.0	0.0	2.7	2.8	2.4
Dec 21, 2021	0.0	2.6	5.3	2.9	5.1	0.0	2.7	0.0	2.4
Dec 28, 2021	2.4	0.0	5.3	5.7	2.5	5.7	2.7	2.8	0.0
Jan 4, 2022	2.4	2.6	2.6	2.9	0.0	0.0	5.3	2.8	0.0
Jan 11, 2022	0.0	0.0	5.3	2.9	5.1	2.9	2.7	2.8	2.4
Jan 18, 2022	2.4	0.0	0.0	2.9	2.5	2.9	0.0	2.8	2.4
Jan 25, 2022	0.0	2.6	2.6	2.9	0.0	2.9	2.7	2.8	0.0
Feb 1, 2022	2.4	0.0	2.6	2.9	0.0	2.9	2.7	2.8	0.0
Feb 8, 2022	2.4	2.6	2.6	2.9	2.5	0.0	2.7	0.0	0.0
Feb 15, 2022	2.4	0.0	2.6	2.9	2.5	0.0	2.7	2.8	2.4
Feb 22, 2022	2.4	0.0	0.0	2.9	5.1	2.9	2.7	2.8	2.4
Mar 1, 2022	0.0	2.6	2.6	0.0	0.0	2.9	2.7	2.8	2.4



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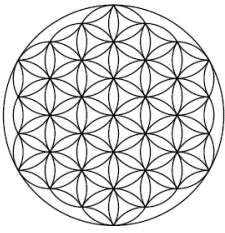
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Date	IA	IB	IC	NA	NB	NC	PA	PB	PC
Mar 8, 2022	2.4	2.6	2.6	0.0	0.0	2.9	5.3	2.8	0.0
Mar 15, 2022	2.4	5.2	2.6	0.0	0.0	2.9	2.7	2.8	2.4
Mar 22, 2022	0.0	5.2	2.6	2.9	2.5	2.9	5.3	2.8	2.4
Mar 29, 2022	2.4	0.0	2.6	0.0	2.5	0.0	0.0	0.0	0.0
Apr 5, 2022	2.4	0.0	2.6	2.9	0.0	2.9	2.7	2.8	2.4
Apr 12, 2022	2.4	2.6	0.0	0.0	2.5	2.9	0.0	0.0	0.0
Apr 19, 2022	2.4	2.6	0.0	2.9	2.5	2.9	0.0	2.8	0.0
Apr 26, 2022	0.0	2.6	0.0	2.9	0.0	2.9	2.7	0.0	0.0
May 3, 2022	0.0	2.6	5.3	0.0	2.5	0.0	2.7	2.8	0.0
May 10, 2022	2.4	2.6	2.6	2.9	2.5	2.9	0.0	2.8	2.4
May 17, 2022	2.4	2.6	0.0	2.9	2.5	2.9	2.7	5.5	2.4

Weekly GAS QUALITY - SAMPLES (mL) METHANE VOLUME

Date	2229A	2229B	2229C
May 7, 2019	5.9	63.2	219.4
May 14, 2019	90.3	160.4	562.3
May 21, 2019	29.3	33.9	237.4
May 28, 2019	48.1	87.2	347.7
Jun 4, 2019	90.1	240.1	593.5
Jun 11, 2019	105.1	685.9	669.6
Jun 18, 2019	93.8	705.7	194.9
Jun 25, 2019	83.2	569.6	150.7
Jul 2, 2019	85.8	576.8	353.4
Jul 9, 2019	93.5	509.0	574.5
Jul 16, 2019	111.4	295.9	753.3
Jul 23, 2019	104.7	150.2	738.6
Jul 30, 2019	107.1	559.2	505.1
Aug 6, 2019	96.9	695.8	183.8
Aug 13, 2019	150.8	508.4	817.7
Aug 20, 2019	130.9	108.1	578.3
Aug 27, 2019	152.1	115.9	627.4
Sep 3, 2019	132.2	139.2	326.5
Sep 10, 2019	143.6	546.2	119.3
Sep 17, 2019	496.9	323.8	252.0
Sep 24, 2019	459.8	149.9	559.0
Oct 1, 2019	441.4	145.7	635.5
Oct 8, 2019	568.6	248.3	107.0
Oct 15, 2019	544.4	227.8	189.0
Oct 22, 2019	392.3	242.9	269.8
Oct 29, 2019	532.8	225.7	296.9
Nov 5, 2019	355.6	259.1	251.0
Nov 12, 2019	124.9	256.0	315.1
Nov 19, 2019	117.7	287.1	282.2

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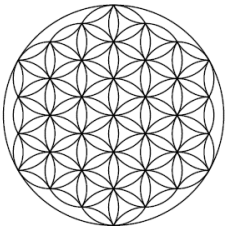
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Date	2229A	2229B	2229C
Nov 26, 2019	117.9	258.4	287.7
Dec 3, 2019	359.1	439.7	320.0
Dec 10, 2019	175.2	163.9	190.6
Dec 17, 2019	90.6	116.0	132.6
Dec 24, 2019	82.0	106.1	152.4
Dec 31, 2019	84.0	102.4	163.5
Jan 7, 2020	75.3	112.2	154.5
Jan 14, 2020	72.3	105.1	169.6
Jan 21, 2020	77.7	106.4	79.8
Jan 28, 2020	97.9	99.9	69.2
Feb 4, 2020	93.7	106.5	53.5
Feb 11, 2020	82.1	107.7	68.0
Feb 18, 2020	87.7	103.6	67.7
Feb 25, 2020	93.0	60.1	70.5
Mar 3, 2020	87.8	68.0	51.5
Mar 10, 2020	88.3	55.8	75.7
Mar 17, 2020	80.1	68.0	82.1
Mar 24, 2020	81.4	64.5	75.1
Mar 31, 2020	99.6	73.7	65.1
Apr 7, 2020	91.8	64.1	67.3
Apr 14, 2020	80.5	70.6	73.6
Apr 21, 2020	79.7	62.4	70.9
Apr 28, 2020	73.0	62.9	58.1
May 5, 2020	50.7	67.7	56.7
May 12, 2020	53.3	73.9	56.7
May 19, 2020	59.9	57.6	79.2
May 26, 2020	65.8	62.9	55.4
Jun 2, 2020	68.7	67.8	57.4
Jun 9, 2020	47.7	71.7	80.5
Jun 16, 2020	49.9	64.6	59.0
Jun 23, 2020	54.2	68.3	74.6
Jun 30, 2020	847.5	73.0	81.9
Jul 7, 2020	261.4	73.5	70.7
Jul 14, 2020	281.8	54.3	61.5
Jul 21, 2020	323.2	68.4	70.6
Jul 28, 2020	125.1	53.6	72.6
Aug 4, 2020	252.2	66.8	76.3
Aug 11, 2020	202.2	63.8	68.4
Aug 18, 2020	174.3	66.7	100.1
Aug 25, 2020	73.7	68.3	76.4
Sep 1, 2020	252.8	60.6	64.2
Sep 8, 2020	226.6	65.6	73.1
Sep 15, 2020	49.0	58.9	69.8

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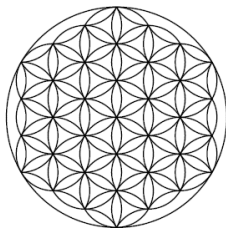
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Date	2229A	2229B	2229C
Sep 22, 2020	48.1	68.6	79.8
Sep 29, 2020	60.3	42.3	76.1
Oct 6, 2020	84.2	37.8	74.0
Oct 13, 2020	165.6	74.9	72.5
Oct 20, 2020	95.0	57.7	68.5
Oct 27, 2020	147.5	53.8	80.9
Nov 3, 2020	113.3	72.2	63.7
Nov 10, 2020	134.5	72.2	74.4
Nov 17, 2020	155.8	59.7	74.4
Nov 24, 2020	115.6	54.8	63.7
Dec 1, 2020	113.3	69.7	74.4
Dec 8, 2020	221.8	62.2	77.0
Dec 15, 2020	195.9	59.7	79.7
Dec 22, 2020	356.3	69.7	74.4
Dec 29, 2020	33.0	54.8	77.0
Jan 5, 2021	28.3	72.2	66.4
Jan 12, 2021	2.4	57.3	66.4
Jan 19, 2021	0.0	54.8	79.7
Jan 26, 2021	40.1	64.7	79.7
Feb 2, 2021	7.1	52.3	74.4
Feb 9, 2021	0.0	52.3	69.1
Feb 16, 2021	889.7	72.2	69.1
Feb 23, 2021	167.6	59.7	63.7
Mar 2, 2021	344.5	69.7	69.1
Mar 9, 2021	0.0	62.2	69.1
Mar 16, 2021	422.4	64.7	79.7
Mar 23, 2021	139.2	59.7	63.7
Mar 30, 2021	186.4	59.7	77.0
Apr 6, 2021	-18.9	52.3	66.4
Apr 13, 2021	7.1	52.3	63.7
Apr 20, 2021	-11.8	52.3	71.7
Apr 27, 2021	26.0	74.7	63.7
May 4, 2021	283.2	59.7	71.7
May 11, 2021	431.9	67.2	74.4
May 18, 2021	40.1	69.7	79.7
May 25, 2021	120.4	199.2	66.4
Jun 1, 2021	94.4	199.2	69.1
Jun 8, 2021	68.4	149.4	69.1
Jun 15, 2021	63.7	127.0	69.1
Jun 22, 2021	75.5	191.7	63.7
Jun 29, 2021	18.9	112.0	66.4
Jul 6, 2021	18.9	92.1	21.2
Jul 13, 2021	23.6	141.9	23.9

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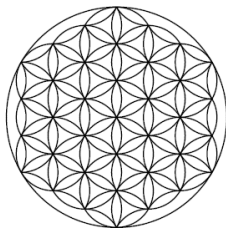
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Date	2229A	2229B	2229C
Jul 20, 2021	21.2	209.1	23.9
Jul 27, 2021	23.6	64.7	21.2
Aug 3, 2021	18.9	47.3	23.9
Aug 10, 2021	21.2	64.7	23.9
Aug 17, 2021	16.5	67.2	23.9
Aug 24, 2021	23.6	62.2	21.2
Aug 31, 2021	18.9	64.7	26.6
Sep 7, 2021	18.9	67.2	23.9
Sep 14, 2021	21.2	64.7	26.6
Sep 21, 2021	21.2	19.9	18.6
Sep 28, 2021	23.6	22.4	23.9
Oct 5, 2021	11.8	24.9	26.6
Oct 12, 2021	11.8	19.9	21.2
Oct 19, 2021	11.8	19.9	23.9
Oct 26, 2021	9.4	22.4	18.6
Nov 2, 2021	16.5	22.4	21.2
Nov 9, 2021	4.7	22.4	23.9
Nov 16, 2021	2.4	24.9	18.6
Nov 23, 2021	0.0	22.4	23.9
Nov 30, 2021	0.0	24.9	53.1
Dec 7, 2021	2.4	19.9	66.4
Dec 14, 2021	-2.4	24.9	26.6
Dec 21, 2021	0.0	24.9	18.6
Dec 28, 2021	-2.4	19.9	13.3
Jan 4, 2022	2.4	37.3	0.0
Jan 11, 2022	14.2	24.9	0.0
Jan 18, 2022	2.4	10.0	0.0
Jan 25, 2022	9.4	10.0	2.7
Feb 1, 2022	2.4	-2.5	0.0
Feb 8, 2022	7.1	2.5	0.0
Feb 15, 2022	2.4	0.0	5.3
Feb 22, 2022	0.0	0.0	5.3
Mar 1, 2022	2.4	2.5	0.0
Mar 8, 2022	0.0	0.0	0.0
Mar 15, 2022	2.4	0.0	2.7
Mar 22, 2022	0.0	0.0	2.7
Mar 29, 2022	0.0	2.5	2.7
Apr 5, 2022	0.0	2.5	0.0
Apr 12, 2022	0.0	5.0	5.3
Apr 19, 2022	2.4	0.0	5.3
Apr 26, 2022	0.0	5.0	0.0
May 3, 2022	2.4	0.0	0.0
May 10, 2022	2.4	2.5	0.0

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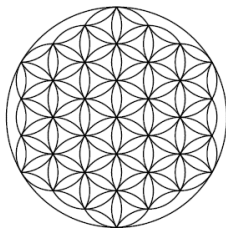
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Date	2229A	2229B	2229C
May 17, 2022	2.4	2.5	0.0

Weekly GAS QUALITY (mL)
CARBON DIOXIDE VOLUME

Date	IA	IB	IC	NA	NB	NC	PA	PB	PC
May 7, 2019	201.4	135.2	131.6	241.2	126.6	53.1	2036.0	1874.5	1900.4
May 14, 2019	117.1	130.1	126.2	125.7	106.2	315.7	1513.2	1300.3	1240.1
May 21, 2019	35.5	34.3	31.2	51.1	33.2	34.1	441.0	395.9	337.1
May 28, 2019	49.8	52.0	52.0	10.4	53.8	52.3	327.3	369.2	300.0
Jun 4, 2019	52.7	42.6	52.9	85.5	53.0	4.8	143.3	234.7	241.2
Jun 11, 2019	37.5	50.7	56.5	10.9	71.1	13.6	42.2	60.0	226.6
Jun 18, 2019	31.2	59.0	20.2	-3.0	18.9	8.8	81.2	64.1	168.2
Jun 25, 2019	4.4	5.8	12.1	4.7	4.9	6.0	96.2	52.3	9.3
Jul 2, 2019	7.2	6.2	3.4	7.6	6.9	4.4	15.2	53.8	5.8
Jul 9, 2019	7.3	4.4	4.7	0.0	3.2	3.1	25.3	55.8	6.2
Jul 16, 2019	3.1	7.4	3.0	5.9	6.9	7.8	36.8	47.7	9.0
Jul 23, 2019	4.5	4.8	5.9	8.9	7.8	5.7	11.5	13.7	4.7
Jul 30, 2019	4.5	4.3	4.6	3.2	10.4	12.1	83.5	-3.1	6.0
Aug 6, 2019	4.9	2.8	6.5	5.8	10.2	3.0	27.8	2.8	8.5
Aug 13, 2019	9.4	7.7	6.2	1.5	10.1	6.5	70.6	0.0	14.8
Aug 20, 2019	4.5	4.6	5.2	1.6	5.0	7.2	-5.0	0.0	3.0
Aug 27, 2019	4.4	3.0	4.6	6.0	6.6	2.9	64.8	4.6	8.2
Sep 3, 2019	2.9	6.1	4.7	4.4	1.6	4.3	-74.5	-1.5	4.4
Sep 10, 2019	8.1	4.8	3.2	7.7	4.9	3.1	5.1	2.9	15.2
Sep 17, 2019	6.2	6.1	4.6	4.7	6.3	3.1	8.2	0.0	11.0
Sep 24, 2019	1.4	4.5	7.9	6.4	4.8	5.9	6.1	-1.5	23.5
Oct 1, 2019	6.2	4.4	6.2	8.0	8.3	6.0	52.9	3.0	72.4
Oct 8, 2019	4.6	5.6	6.8	2.9	6.8	4.5	-3.3	-1.4	6.3
Oct 15, 2019	9.1	4.8	4.8	4.8	3.3	3.0	33.1	1.5	36.1
Oct 22, 2019	7.1	5.7	0.0	7.7	4.9	6.1	8.1	-1.5	13.2
Oct 29, 2019	4.8	5.9	6.0	4.8	9.7	4.4	25.5	0.0	32.9
Nov 5, 2019	3.1	8.6	4.6	6.5	1.7	5.6	1.6	0.0	21.3
Nov 12, 2019	6.4	4.9	6.5	6.2	1.7	4.5	11.4	1.4	10.2
Nov 19, 2019	4.5	3.2	9.4	3.0	3.2	2.8	10.8	1.4	-4.7
Nov 26, 2019	1.6	3.0	6.2	7.2	8.4	3.0	0.0	0.0	0.0
Dec 3, 2019	7.2	9.3	6.8	11.8	5.2	7.3	0.0	0.0	1.5
Dec 10, 2019	4.9	6.0	6.5	1.6	5.2	1.6	6.7	3.2	4.6
Dec 17, 2019	3.0	1.4	1.7	0.0	0.0	1.6	1.6	3.0	1.5
Dec 24, 2019	1.5	1.5	1.7	1.5	0.0	1.6	3.2	0.0	1.6
Dec 31, 2019	0.0	1.6	1.7	0.0	1.7	1.4	0.0	1.4	0.0
Jan 7, 2020	1.6	3.0	1.5	2.9	0.0	0.0	0.0	1.5	0.0
Jan 14, 2020	0.0	0.0	3.1	1.5	1.7	0.0	1.6	0.0	0.0
Jan 21, 2020	0.0	3.0	0.0	0.0	1.7	1.6	1.7	0.0	2.9
Jan 28, 2020	1.5	1.5	1.6	3.1	1.8	1.5	1.5	1.5	1.5

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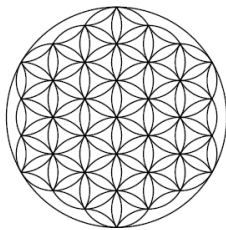
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Date	IA	IB	IC	NA	NB	NC	PA	PB	PC
Feb 4, 2020	0.0	1.5	3.3	0.0	1.6	0.0	0.0	1.5	1.6
Feb 11, 2020	1.5	0.0	1.5	1.5	1.6	1.5	0.0	3.0	0.0
Feb 18, 2020	0.0	1.5	1.7	0.0	1.6	0.0	0.0	1.4	1.5
Feb 25, 2020	0.0	1.4	1.6	0.0	1.6	3.1	1.7	0.0	1.5
Mar 3, 2020	1.6	0.0	1.6	1.6	0.0	0.0	0.0	3.1	1.5
Mar 10, 2020	0.0	0.0	1.7	0.0	1.7	1.5	0.0	1.5	1.6
Mar 17, 2020	1.6	0.0	1.6	1.5	0.0	1.5	0.0	1.5	1.4
Mar 24, 2020	1.5	1.6	0.0	1.6	1.7	0.0	1.7	1.6	0.0
Mar 31, 2020	0.0	3.1	3.1	1.6	0.0	1.6	1.6	1.4	1.5
Apr 7, 2020	0.0	1.5	1.6	3.0	0.0	0.0	3.5	0.0	1.5
Apr 14, 2020	1.5	0.0	0.0	1.5	1.7	3.3	1.7	0.0	1.6
Apr 21, 2020	0.0	1.5	0.0	1.5	3.2	0.0	1.7	1.5	1.6
Apr 28, 2020	1.6	1.5	0.0	1.5	1.6	0.0	1.7	2.9	1.5
May 5, 2020	1.6	1.4	1.6	1.5	1.7	0.0	1.7	1.5	1.6
May 12, 2020	1.4	1.4	1.6	1.5	3.2	1.5	0.0	1.6	0.0
May 19, 2020	3.2	0.0	1.5	1.6	1.6	1.5	1.6	0.0	0.0
May 26, 2020	1.6	1.6	0.0	3.2	1.6	1.5	0.0	1.6	1.5
Jun 2, 2020	1.6	0.0	0.0	1.5	0.0	1.5	1.6	3.0	1.5
Jun 9, 2020	1.5	1.5	1.6	0.0	0.0	1.4	1.6	0.0	0.0
Jun 16, 2020	3.0	1.6	0.0	0.0	0.0	0.0	0.0	0.0	1.4
Jun 23, 2020	1.5	1.5	1.6	0.0	1.6	1.5	0.0	3.0	1.6
Jun 30, 2020	1.5	0.0	0.0	1.5	1.6	1.5	1.7	2.9	0.0
Jul 7, 2020	0.0	0.0	0.0	3.0	0.0	1.5	0.0	1.4	1.6
Jul 14, 2020	0.0	0.0	3.2	1.6	0.0	1.6	0.0	1.6	1.6
Jul 21, 2020	1.4	1.4	0.0	1.5	1.7	1.5	1.7	3.1	3.0
Jul 28, 2020	1.6	0.0	1.6	0.0	0.0	1.6	1.6	0.0	1.6
Aug 4, 2020	2.9	0.0	0.0	2.9	0.0	1.6	1.7	3.1	3.0
Aug 11, 2020	1.5	0.0	0.0	0.0	1.6	1.6	0.0	0.0	1.5
Aug 18, 2020	1.5	1.5	1.7	0.0	3.3	0.0	1.6	1.6	2.9
Aug 25, 2020	0.0	0.0	1.6	1.6	1.6	1.5	1.6	1.4	1.5
Sep 1, 2020	1.5	1.5	0.0	3.3	1.7	0.0	1.6	2.8	3.1
Sep 8, 2020	1.5	0.0	1.6	0.0	1.6	1.5	1.7	0.0	1.5
Sep 15, 2020	1.5	1.5	1.5	0.0	1.6	0.0	1.7	0.0	1.6
Sep 22, 2020	1.5	0.0	1.6	1.5	0.0	1.5	1.6	2.9	1.6
Sep 29, 2020	0.0	0.0	3.2	0.0	3.5	0.0	1.6	1.5	0.0
Oct 6, 2020	1.6	1.5	1.6	1.6	1.6	3.2	1.7	1.5	0.0
Oct 13, 2020	1.5	0.0	1.5	1.6	1.6	3.2	1.7	1.6	1.6
Oct 20, 2020	1.5	1.5	1.6	0.0	1.6	1.6	0.0	1.5	1.5
Oct 27, 2020	0.0	0.0	0.0	2.9	0.0	0.0	1.7	1.4	0.0
Nov 3, 2020	0.0	1.6	1.6	0.0	1.6	0.0	3.4	0.0	1.4
Nov 10, 2020	0.0	1.6	1.6	3.0	1.6	1.6	1.7	0.0	1.4
Nov 17, 2020	0.0	1.6	0.0	1.5	1.6	0.0	0.0	1.6	0.0
Nov 24, 2020	0.0	0.0	1.6	1.5	1.6	3.2	1.7	1.6	1.4

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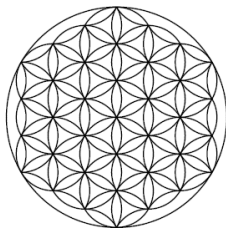
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Date	IA	IB	IC	NA	NB	NC	PA	PB	PC
Dec 1, 2020	3.1	3.1	0.0	1.5	0.0	0.0	0.0	1.6	2.9
Dec 8, 2020	3.1	3.1	3.2	1.5	1.6	1.6	1.7	1.6	0.0
Dec 15, 2020	1.6	0.0	0.0	1.5	1.6	0.0	3.4	0.0	2.9
Dec 22, 2020	1.6	0.0	0.0	0.0	0.0	1.6	0.0	1.6	1.4
Dec 29, 2020	1.6	0.0	1.6	0.0	1.6	0.0	0.0	3.2	1.4
Jan 5, 2021	1.6	3.1	1.6	0.0	1.6	1.6	1.7	0.0	1.4
Jan 12, 2021	1.6	1.6	3.2	1.5	1.6	1.6	0.0	1.6	2.9
Jan 19, 2021	0.0	1.6	0.0	0.0	3.2	1.6	1.7	3.2	0.0
Jan 26, 2021	0.0	1.6	1.6	1.5	0.0	0.0	1.7	1.6	1.4
Feb 2, 2021	1.6	3.1	1.6	1.5	1.6	1.6	1.7	1.6	1.4
Feb 9, 2021	3.1	1.6	1.6	3.0	1.6	1.6	0.0	1.6	0.0
Feb 16, 2021	1.6	1.6	1.6	0.0	1.6	1.6	0.0	1.6	1.4
Feb 23, 2021	1.6	0.0	0.0	1.5	1.6	1.6	1.7	0.0	1.4
Mar 2, 2021	0.0	0.0	1.6	1.5	0.0	0.0	0.0	0.0	0.0
Mar 9, 2021	1.6	1.6	0.0	1.5	1.6	1.6	1.7	3.2	0.0
Mar 16, 2021	1.6	0.0	0.0	1.5	3.2	1.6	1.7	0.0	1.4
Mar 23, 2021	0.0	3.1	1.6	3.0	3.2	0.0	1.7	1.6	0.0
Mar 30, 2021	1.6	1.6	3.2	1.5	1.6	1.6	1.7	0.0	0.0
Apr 6, 2021	1.6	3.1	1.6	1.5	0.0	1.6	0.0	3.2	1.4
Apr 13, 2021	1.6	1.6	0.0	0.0	0.0	0.0	3.4	1.6	1.4
Apr 20, 2021	0.0	1.6	1.6	1.5	1.6	1.6	1.7	3.2	2.9
Apr 27, 2021	3.1	0.0	3.2	1.5	0.0	1.6	1.7	1.6	1.4
May 4, 2021	0.0	0.0	1.6	0.0	1.6	1.6	1.7	1.6	0.0
May 11, 2021	1.6	1.6	1.6	1.5	1.6	1.6	1.7	0.0	1.4
May 18, 2021	1.6	0.0	1.6	1.5	3.2	0.0	1.7	1.6	1.4
May 25, 2021	1.6	1.6	1.6	1.5	0.0	0.0	1.7	1.6	0.0
Jun 1, 2021	0.0	1.6	1.6	0.0	1.6	1.6	1.7	1.6	0.0
Jun 8, 2021	1.6	1.6	0.0	1.5	3.2	0.0	1.7	0.0	1.4
Jun 15, 2021	0.0	1.6	0.0	1.5	0.0	0.0	1.7	0.0	0.0
Jun 22, 2021	0.0	0.0	0.0	0.0	1.6	1.6	0.0	0.0	0.0
Jun 29, 2021	0.0	3.1	1.6	1.5	1.6	0.0	1.7	0.0	1.4
Jul 6, 2021	0.0	1.6	0.0	1.5	1.6	0.0	0.0	0.0	1.4
Jul 13, 2021	1.6	1.6	1.6	1.5	0.0	1.6	1.7	0.0	1.4
Jul 20, 2021	1.6	3.1	0.0	1.5	3.2	0.0	3.4	0.0	1.4
Jul 27, 2021	3.1	1.6	0.0	1.5	1.6	0.0	0.0	0.0	0.0
Aug 3, 2021	1.6	1.6	1.6	0.0	1.6	1.6	0.0	0.0	1.4
Aug 10, 2021	1.6	1.6	3.2	1.5	0.0	1.6	0.0	0.0	1.4
Aug 17, 2021	1.6	3.1	3.2	0.0	0.0	1.6	1.7	1.6	1.4
Aug 24, 2021	1.6	0.0	0.0	1.5	1.6	0.0	1.7	1.6	1.4
Aug 31, 2021	0.0	3.1	1.6	1.5	0.0	0.0	0.0	1.6	2.9
Sep 7, 2021	1.6	3.1	1.6	1.5	1.6	0.0	0.0	0.0	0.0
Sep 14, 2021	1.6	1.6	0.0	0.0	0.0	1.6	3.4	0.0	0.0
Sep 21, 2021	0.0	1.6	0.0	0.0	0.0	3.2	1.7	1.6	1.4

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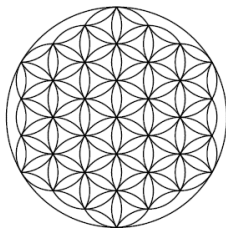
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Date	IA	IB	IC	NA	NB	NC	PA	PB	PC
Sep 28, 2021	0.0	3.1	0.0	0.0	1.6	1.6	0.0	3.2	1.4
Oct 5, 2021	1.6	0.0	0.0	1.5	1.6	0.0	1.7	0.0	1.4
Oct 12, 2021	3.1	1.6	0.0	1.5	3.2	1.6	0.0	0.0	2.9
Oct 19, 2021	1.6	1.6	1.6	1.5	0.0	1.6	3.4	1.6	2.9
Oct 26, 2021	1.6	3.1	0.0	1.5	1.6	1.6	1.7	0.0	1.4
Nov 2, 2021	0.0	1.6	1.6	0.0	1.6	1.6	1.7	3.2	0.0
Nov 9, 2021	1.6	1.6	3.2	1.5	1.6	0.0	1.7	1.6	1.4
Nov 16, 2021	1.6	1.6	1.6	0.0	0.0	1.6	1.7	1.6	0.0
Nov 23, 2021	1.6	0.0	1.6	3.0	1.6	1.6	0.0	1.6	1.4
Nov 30, 2021	0.0	1.6	1.6	3.0	1.6	3.2	0.0	1.6	1.4
Dec 7, 2021	1.6	0.0	0.0	3.0	1.6	1.6	0.0	1.6	0.0
Dec 14, 2021	0.0	1.6	0.0	1.5	0.0	0.0	1.7	1.6	1.4
Dec 21, 2021	0.0	1.6	3.2	1.5	3.2	0.0	1.7	0.0	1.4
Dec 28, 2021	1.6	0.0	3.2	3.0	1.6	3.2	1.7	1.6	0.0
Jan 4, 2022	1.6	1.6	1.6	1.5	0.0	0.0	3.4	1.6	0.0
Jan 11, 2022	0.0	0.0	3.2	1.5	3.2	1.6	1.7	1.6	1.4
Jan 18, 2022	1.6	0.0	0.0	1.5	1.6	1.6	0.0	1.6	1.4
Jan 25, 2022	0.0	1.6	1.6	1.5	0.0	1.6	1.7	1.6	0.0
Feb 1, 2022	1.6	0.0	1.6	1.5	0.0	1.6	1.7	1.6	0.0
Feb 8, 2022	1.6	1.6	1.6	1.5	1.6	0.0	1.7	0.0	0.0
Feb 15, 2022	1.6	0.0	1.6	1.5	1.6	0.0	1.7	1.6	1.4
Feb 22, 2022	1.6	0.0	0.0	1.5	3.2	1.6	1.7	1.6	1.4
Mar 1, 2022	0.0	1.6	1.6	0.0	0.0	1.6	1.7	1.6	1.4
Mar 8, 2022	1.6	1.6	1.6	0.0	0.0	1.6	3.4	1.6	0.0
Mar 15, 2022	1.6	3.1	1.6	0.0	0.0	1.6	1.7	1.6	1.4
Mar 22, 2022	0.0	3.1	1.6	1.5	1.6	1.6	3.4	1.6	1.4
Mar 29, 2022	1.6	0.0	1.6	0.0	1.6	0.0	0.0	0.0	0.0
Apr 5, 2022	1.6	0.0	1.6	1.5	0.0	1.6	1.7	1.6	1.4
Apr 12, 2022	1.6	1.6	0.0	0.0	1.6	1.6	0.0	0.0	0.0
Apr 19, 2022	1.6	1.6	0.0	1.5	1.6	1.6	0.0	1.6	0.0
Apr 26, 2022	0.0	1.6	0.0	1.5	0.0	1.6	1.7	0.0	0.0
May 3, 2022	0.0	1.6	3.2	0.0	1.6	0.0	1.7	1.6	0.0
May 10, 2022	1.6	1.6	1.6	1.5	1.6	1.6	0.0	1.6	1.4
May 17, 2022	1.6	1.6	0.0	1.5	1.6	1.6	1.7	3.2	1.4

Weekly GAS QUALITY (mL)
CARBON DIOXIDE VOLUME

Date	2229A	2229B	2229C
May 7, 2019	40.8	545.6	904.0
May 14, 2019	114.9	200.8	636.9
May 21, 2019	31.5	45.0	239.5
May 28, 2019	49.9	89.1	362.4
Jun 4, 2019	65.1	198.8	474.4
Jun 11, 2019	78.7	569.3	501.7

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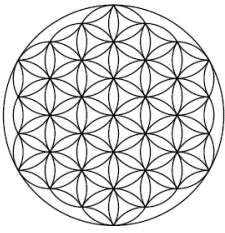
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Date	2229A	2229B	2229C
Jun 18, 2019	70.9	571.7	147.6
Jun 25, 2019	66.2	443.8	108.7
Jul 2, 2019	67.9	461.2	265.4
Jul 9, 2019	70.7	417.5	431.3
Jul 16, 2019	87.0	241.5	562.5
Jul 23, 2019	78.6	122.7	583.1
Jul 30, 2019	79.4	486.4	380.9
Aug 6, 2019	71.5	584.3	134.0
Aug 13, 2019	106.3	420.2	587.6
Aug 20, 2019	107.0	91.0	441.6
Aug 27, 2019	117.4	95.9	494.9
Sep 3, 2019	104.2	110.1	256.5
Sep 10, 2019	115.8	464.4	87.8
Sep 17, 2019	374.8	254.5	196.3
Sep 24, 2019	360.5	120.9	436.2
Oct 1, 2019	329.2	115.1	502.4
Oct 8, 2019	416.9	196.5	82.9
Oct 15, 2019	402.2	179.8	139.8
Oct 22, 2019	287.7	202.7	204.0
Oct 29, 2019	408.0	174.5	218.6
Nov 5, 2019	273.1	204.1	196.2
Nov 12, 2019	101.1	208.4	238.9
Nov 19, 2019	91.6	223.4	210.5
Nov 26, 2019	88.5	210.3	213.9
Dec 3, 2019	299.1	345.0	245.7
Dec 10, 2019	121.8	127.5	151.6
Dec 17, 2019	69.9	92.0	108.8
Dec 24, 2019	64.2	85.3	112.9
Dec 31, 2019	60.3	85.1	126.3
Jan 7, 2020	60.4	87.9	126.7
Jan 14, 2020	56.6	83.1	120.5
Jan 21, 2020	61.7	85.0	60.4
Jan 28, 2020	77.6	85.7	54.6
Feb 4, 2020	72.8	86.2	40.3
Feb 11, 2020	61.2	89.0	52.9
Feb 18, 2020	69.5	80.7	51.6
Feb 25, 2020	70.9	47.3	51.0
Mar 3, 2020	68.0	54.1	42.7
Mar 10, 2020	70.4	47.7	57.3
Mar 17, 2020	61.0	55.3	60.1
Mar 24, 2020	63.1	49.9	57.0
Mar 31, 2020	74.6	61.7	47.8
Apr 7, 2020	75.8	53.4	51.7

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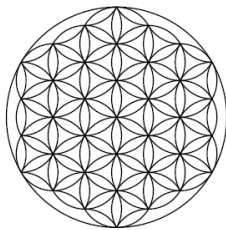
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Date	2229A	2229B	2229C
Apr 14, 2020	58.9	57.3	58.0
Apr 21, 2020	64.1	51.1	52.6
Apr 28, 2020	56.5	50.8	42.2
May 5, 2020	37.9	54.9	43.3
May 12, 2020	38.8	62.6	42.1
May 19, 2020	32.4	35.0	44.4
May 26, 2020	40.7	36.1	33.9
Jun 2, 2020	41.6	40.7	35.8
Jun 9, 2020	28.4	49.0	47.2
Jun 16, 2020	29.4	39.0	37.5
Jun 23, 2020	31.9	42.4	43.5
Jun 30, 2020	440.7	45.4	49.3
Jul 7, 2020	146.7	46.8	41.2
Jul 14, 2020	154.3	37.1	35.3
Jul 21, 2020	166.3	44.8	44.6
Jul 28, 2020	66.1	31.5	45.5
Aug 4, 2020	144.3	42.6	43.9
Aug 11, 2020	120.0	38.4	42.1
Aug 18, 2020	96.7	40.7	59.1
Aug 25, 2020	40.3	46.6	45.0
Sep 1, 2020	140.7	39.4	40.5
Sep 8, 2020	130.5	43.4	46.0
Sep 15, 2020	27.3	35.6	41.0
Sep 22, 2020	27.5	44.6	50.3
Sep 29, 2020	34.6	26.5	43.0
Oct 6, 2020	47.9	24.6	46.4
Oct 13, 2020	104.5	47.1	43.6
Oct 20, 2020	54.9	37.6	41.5
Oct 27, 2020	89.2	34.0	48.6
Nov 3, 2020	65.7	46.2	40.6
Nov 10, 2020	78.1	46.2	47.4
Nov 17, 2020	90.4	38.2	47.4
Nov 24, 2020	67.1	35.0	40.6
Dec 1, 2020	65.7	44.6	47.4
Dec 8, 2020	128.8	39.8	49.1
Dec 15, 2020	113.7	38.2	50.8
Dec 22, 2020	206.8	44.6	47.4
Dec 29, 2020	19.2	35.0	49.1
Jan 5, 2021	16.4	46.2	42.3
Jan 12, 2021	1.4	36.6	42.3
Jan 19, 2021	0.0	35.0	50.8
Jan 26, 2021	23.3	41.4	50.8
Feb 2, 2021	4.1	33.4	47.4

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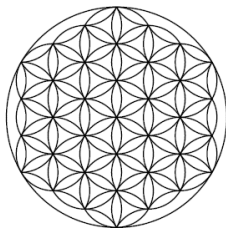
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Date	2229A	2229B	2229C
Feb 9, 2021	0.0	33.4	44.0
Feb 16, 2021	516.4	46.2	44.0
Feb 23, 2021	97.2	38.2	40.6
Mar 2, 2021	200.0	44.6	44.0
Mar 9, 2021	0.0	39.8	44.0
Mar 16, 2021	245.2	41.4	50.8
Mar 23, 2021	80.8	38.2	40.6
Mar 30, 2021	108.2	38.2	49.1
Apr 6, 2021	-11.0	33.4	42.3
Apr 13, 2021	4.1	33.4	40.6
Apr 20, 2021	-6.8	33.4	45.7
Apr 27, 2021	15.1	47.8	40.6
May 4, 2021	164.4	38.2	45.7
May 11, 2021	250.7	43.0	47.4
May 18, 2021	23.3	44.6	50.8
May 25, 2021	69.9	127.3	42.3
Jun 1, 2021	54.8	127.3	44.0
Jun 8, 2021	39.7	95.5	44.0
Jun 15, 2021	37.0	81.2	44.0
Jun 22, 2021	43.8	122.6	40.6
Jun 29, 2021	11.0	71.6	42.3
Jul 6, 2021	11.0	58.9	13.5
Jul 13, 2021	13.7	90.7	15.2
Jul 20, 2021	12.3	133.7	15.2
Jul 27, 2021	13.7	41.4	13.5
Aug 3, 2021	11.0	30.2	15.2
Aug 10, 2021	12.3	41.4	15.2
Aug 17, 2021	9.6	43.0	15.2
Aug 24, 2021	13.7	39.8	13.5
Aug 31, 2021	11.0	41.4	16.9
Sep 7, 2021	11.0	43.0	15.2
Sep 14, 2021	12.3	41.4	16.9
Sep 21, 2021	12.3	12.7	11.9
Sep 28, 2021	13.7	14.3	15.2
Oct 5, 2021	6.8	15.9	16.9
Oct 12, 2021	6.8	12.7	13.5
Oct 19, 2021	6.8	12.7	15.2
Oct 26, 2021	5.5	14.3	11.9
Nov 2, 2021	9.6	14.3	13.5
Nov 9, 2021	2.7	14.3	15.2
Nov 16, 2021	1.4	15.9	11.9
Nov 23, 2021	0.0	14.3	15.2
Nov 30, 2021	0.0	15.9	33.9

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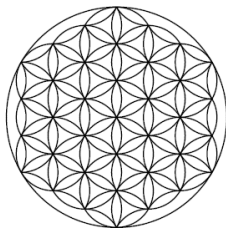
Date	2229A	2229B	2229C
Dec 7, 2021	1.4	12.7	42.3
Dec 14, 2021	-1.4	15.9	16.9
Dec 21, 2021	0.0	15.9	11.9
Dec 28, 2021	-1.4	12.7	8.5
Jan 4, 2022	1.4	23.9	0.0
Jan 11, 2022	8.2	15.9	0.0
Jan 18, 2022	1.4	6.4	0.0
Jan 25, 2022	5.5	6.4	1.7
Feb 1, 2022	1.4	-1.6	0.0
Feb 8, 2022	4.1	1.6	0.0
Feb 15, 2022	1.4	0.0	3.4
Feb 22, 2022	0.0	0.0	3.4
Mar 1, 2022	1.4	1.6	0.0
Mar 8, 2022	0.0	0.0	0.0
Mar 15, 2022	1.4	0.0	1.7
Mar 22, 2022	0.0	0.0	1.7
Mar 29, 2022	0.0	1.6	1.7
Apr 5, 2022	0.0	1.6	0.0
Apr 12, 2022	0.0	3.2	3.4
Apr 19, 2022	1.4	0.0	3.4
Apr 26, 2022	0.0	3.2	0.0
May 3, 2022	1.4	0.0	0.0
May 10, 2022	1.4	1.6	0.0
May 17, 2022	1.4	1.6	0.0

DATA ANALYSIS

	Inoculum	Negative	Positive	2229 - CLEAR FILM
Cumulative Gas Volume (mL)	2076.1	2094.6	10497.8	34484.2
Percent CH ₄ (%)	44.1	44.1	38.6	52.6
Volume CH ₄ (mL)	914.7	924.0	4051.9	18154.9
Mass CH ₄ (g)	0.65	0.66	2.89	12.97
Percent CO ₂ (%)	38.0	37.0	47.1	39.4
Volume CO ₂ (mL)	788.5	775.7	4946.8	13591.2
Mass CO ₂ (g)	1.55	1.52	9.72	26.70
Sample Mass (g)	10	10	10	20.0
Theoretical Sample Mass (g)	0.0	8.6	4.2	17.1
Biodegraded Mass (g)	0.91	0.91	4.82	17.01
Percent Biodegraded (%)		-0.0	92.6	94.1

CONCLUSION

Upon consideration of gas production, it becomes obvious that biodegradation has occurred Green Packaging Technology sample (ERL# 2229). It appears that the sample is exhausted. Considering the characteristics of the sample in this study, the performance and results are good.



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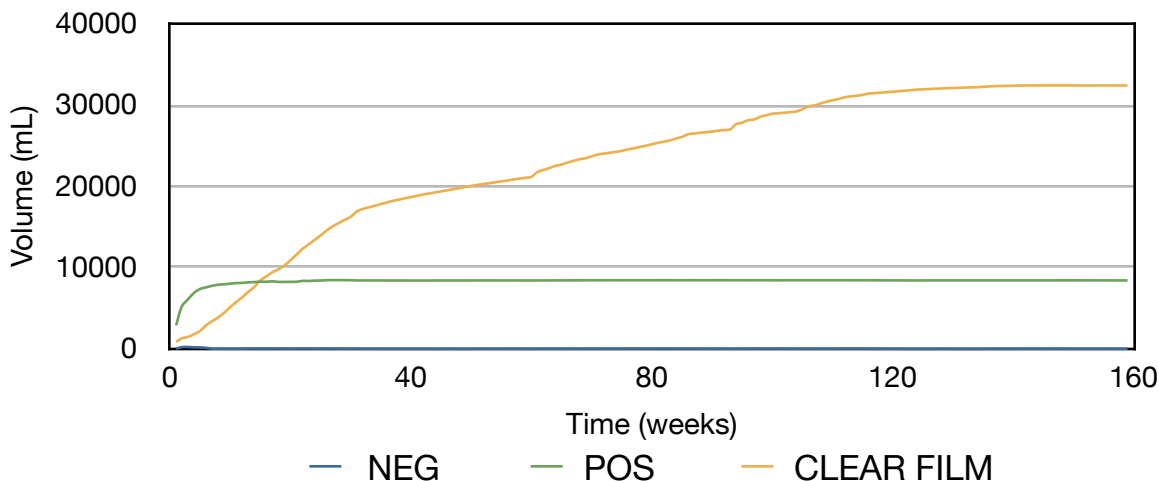
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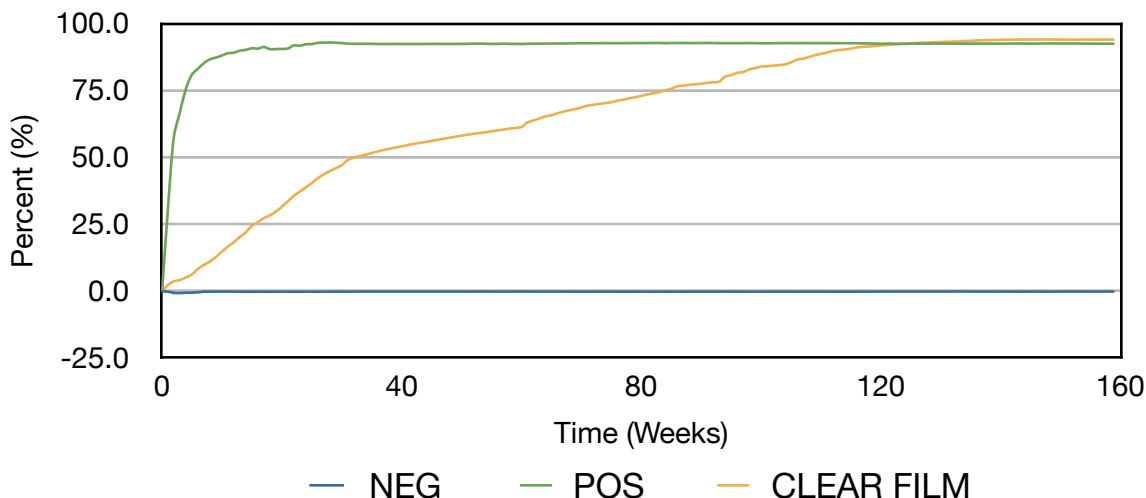
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Cumulative Gas Volume (Background Corrected)



Biodegradation



Over a 159 week period the Green Packaging Technology Sample indicates about 94% biodegradation. These samples easily surmounted the let down rate of the additive. It is important to note that negative movement in biodegradation is the result of the inoculum outperforming the sample or control or barometric pressure changes creating a vacuum on the inverted water column.

The positive control has achieved the required 70%+ biodegradation. These samples will go through many biological cycles as they biodegrade. It seems the syntrophic effect of the microbes has been fulfilled for this sample. It is not uncommon for this to take up to 90+ days before the microbial colonies reach a quorum. In this method, temperature and moisture are optimized and these results are not expected in all landfills.

Thomas Poth
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