



**BIO-ORGANIC CATALYST**  
THE POWER IN NATURE®

**CASE STUDY**  
bio-organic.com

## Successful Cases with Bio-Organic Catalyst in the Country of Colombia

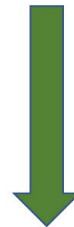
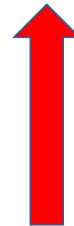
### Sanitary Landfill - NONTOX

Organic Load Decrease - Continuous Dosage BOC.

AFLUENTES 2012			EFLUENTE 2012		
PARÁMETRO	CONCENTRACIÓN (mg/L)	CARGA (Kg/día)	PARÁMETRO	CONCENTRACIÓN (mg/L)	CARGA (Kg/día)
DQO	4229	766,21	DQO	1850	258,7
DBO <sub>5</sub>	3041	550,97	DBO <sub>5</sub>	1145	160,11
G y A	14	2,54	G y A	14	1,96
SST	630	114,1	SST	127	17,76
FENOLES	0.79		FENOLES	0.28	

AFLUENTES 2015			EFLUENTE 2015		
PARÁMETRO	CONCENTRACIÓN (mg/L)	CARGA (Kg/día)	PARÁMETRO	CONCENTRACIÓN (mg/L)	CARGA (Kg/día)
DQO	4756	1627.24	DQO	61	6.18
DBO <sub>5</sub>	2850	975.11	DBO <sub>5</sub>	15	1.52
G y A	39	13.34	G y A	22	2.23
SST	245	83.83	SST	13	1.32
FENOLES	0.56		FENOLES	<0.07	



### Odor Control - Continuous Dosage BOC

Significant Drop In Odor From 3000 To 35 Units (Uoe/m3)



## Dairy - Eco-Cat

Organic Load Decrease - Continuous Dosage BOC.

Monitoring of process variables.

PROMEDIOS POR MES	ENTRADA GEM		SALIDA GEM		SALIDA PTAR		% REM.
	OD (P.P.M.)	TBDAD	OD (P.P.M.)	TBDAD	OD (P.P.M.)	TBDAD	
PROM. NOV SIN BOC	0,48	1442,64	0,59	38,84	0,99	107,51	93%
PROM. DIC SIN BOC	0,44	1559,22	0,58	42,07	0,84	124,44	92%
PROM. DIC CON BOC	0,92	1926,60	1,07	53,75	0,69	41,50	98%
PROM. ENE 12/2012 CON BOC	1,37	1416,85	1,43	24,54	1,15	67,60	95%

No Catalyst



12 Days with Catalyst



## Liquefied Petroleum Gas - NONTOX

Parámetro	Datos iniciales	Datos Finales	Concentración BOC	Remoción
FENOLES	0,66 mg/L	<0,04 mg/L	≈ 76 ppm (10L/132m <sup>3</sup> )	94.0%
HIDROCARBUROS	1,6 mg/L	<0,01 mg/L		99,4%
TEMPERATURA		22 ° C		
pH	5 - 9	8,39		

## Grease Trap - Eco-Cat

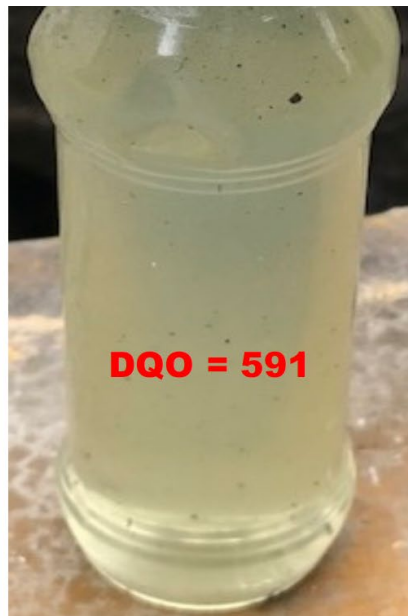
No Catalyst



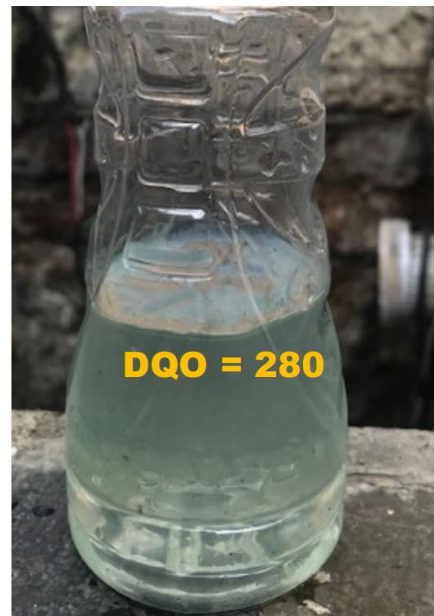
15 Days with Catalyst



No Catalyst



15 Days with Catalyst



Decrease in COD



## Production of Biogas Dosing NONTOX in an Anaerobic Lagoon

Before



1 Month later with  
Catalyst



## Odor Control in Composting – Ecosystem Plus



Before ammonia  
concentration



15 Days later with  
Catalyst

## **Cleaning on Floors Contaminated with Hydrocarbons - NONTOX**

NONTOX solution prepared at 5%



## **Treating A Lagoon in a Corn Starch Industry – Ecosystem Plus**

Ecosystem Plus Spray Dosing at 2% Concentration - Results in Two Months

