ALCHEM
ALTOL CHEMICAL ENVIRONMENTAL LABORATORY INC.

SABANETAS INDUSTRIAL PARK · BLD. M-1380 · PONCE, PR 00731
P.O. BOX 359 · MERCEDITA, PR 00715-0359
TELS. (787) 835-4242 · (787) 848-6050 · FAX (787) 848-6299 · (787) 835-2004
www.altolenterprises.com · info@altolenterprises.com

REPORT OF ANALYSIS

Certificate Number: CERT - 32632

July 18, 2019

Customer Name:	PAN AMERICAN FERTILIZER	**Custody Number:**	97680
Contact:	ANGEL ALVAREZ	**Sampled Date:**	See below
Customer Address:	P O BOX 787	**Sampled Time:**	See below
	GUANICA PR 00653	**Received Date:**	Monday, July 8, 2019
Phone/Fax:	787-821-2200	**Sample Received Time:**	1425 hrs
Contact Email:	aalvarez@panamericangrain.com	**Sample Matrix:**	Liquid
Sampled By:	A.R Alvarez	**Sample Type:**	Grab
Sample Received By:	J. Rivera	**Temp Received at Lab:**	Room Temperature
Sample Delivered By:	R.Ayala	**Lab. Sample Number:**	See below

ESTADO LIBRE ASOCIADO DE PUERTO RICO
Josean Mangual Santiago
Lic# 6064
QUIMICO LICENCIADO

Project Description: Storm Water (Sample Date: July 08, 2018)

Parameter	Units	Result	Discharge Limit	Method	Method Detection Limit	Analysis Date	Analysis Time	Analyst
AT-19-7120 -- Punto # 1 (Time: 0857 Hrs.)								
Hardness, Total	mg/L	322	---	Calculated	---	July 17, 2019	1700	MV
Iron	mg/L	0.012	1.0	EPA 200.7	0.0060	July 15, 2019	1722	MV
Lead	mg/L	ND	0.262	EPA 200.7	0.0030	July 15, 2019	1722	MV
Nitrate Plus Nitrite	mg/L	2.36	0.68	SM 4500-NO2 / EPA 352.1	0.20	July 15, 2019	1500	GM
Total Phosphorous	mg/L	3.48	2.0	EPA 200.7	0.77	July 10, 2019	1440	MV
Zinc	mg/L	0.651	0.26	EPA 200.7	0.0060	July 15, 2019	1722	MV
AT-19-7121 -- Punto # 2 (Time: 0909 Hrs.)								
Hardness, Total	mg/L	420	---	SM 2340B	---	July 17, 2019	1700	MV
Iron	mg/L	0.413	1.0	EPA 200.7	0.0060	July 15, 2019	1729	MV
Lead	mg/L	ND	0.262	EPA 200.7	0.0030	July 15, 2019	1729	MV
Nitrate Plus Nitrite	mg/L	2.62	0.68	SM 4500-NO2 / EPA 352.1	0.20	July 15, 2019	1500	GM
Total Phosphorous	mg/L	5.73	2.0	EPA 200.7	0.77	July 10, 2019	1449	MV
Zinc	mg/L	1.78	0.26	EPA 200.7	0.030	July 15, 2019	1738	MV

CERTIFIED BY PUERTO RICO DEPARTMENT OF HEALTH FOR DRINKING WATER- CERTIFICATION NUMBER PR 00947

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Certificate Number: CERT - 32632

July 18, 2019

Parameter	Units	Result	Discharge Limit	Method	Method Detection Limit	Analysis Date	Analysis Time	Analyst
AT-19-7122 -- Punto # 3 (Time: 0921 Hrs.)								
Hardness, Total	mg/L	248	---	SM 2340B	---	July 17, 2019	1700	MV
Iron	mg/L	0.230	1.0	EPA 200.7	0.0060	July 15, 2019	1755	MV
Lead	mg/L	ND	0.246	EPA 200.7	0.0030	July 15, 2019	1755	MV
Nitrate Plus Nitrite	mg/L	0.390	0.68	SM 4500-NO2 / EPA 352.1	0.10	July 15, 2019	1500	MV
Total Phosphorous	mg/L	3.96	2.0	EPA 200.7	0.77	July 10, 2019	1535	MV
Zinc	mg/L	1.18	0.25	EPA 200.7	0.0060	July 15, 2019	1755	MV
AT-19-7123 -- Punto # 4 (Time: 0930 Hrs.)								
Hardness, Total	mg/L	306	---	SM 2340B	---	July 17, 2019	1700	MV
Iron	mg/L	0.237	1.0	EPA 200.7	0.0060	July 15, 2019	1800	MV
Lead	mg/L	ND	0.262	EPA 200.7	0.0030	July 15, 2019	1800	MV
Nitrate Plus Nitrite	mg/L	4.10	0.68	SM 4500-NO2 / EPA 352.1	0.33	July 15, 2019	1500	MV
Total Phosphorous	mg/L	3.40	2.0	EPA 200.7	0.77	July 10, 2019	1548	MV
Zinc	mg/L	1.07	0.26	EPA 200.7	0.0060	July 15, 2019	1806	MV

ND=Not Detected

Josean Mangual Santiago
Laboratory Operations Supervisor
Licensed Chemist # 6064

ESTADO LIBRE ASOCIADO DE PUERTO RICO
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Lic# 6064
QUIMICO LICENCIADO

$100 $100
A 1739952

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IAR International Accreditation Registry

CUSTODY # 97680

13280

Customer Company Name & Address: Pan American Fertilizer

Customer Contact (Print name & sign): Raymond Ayala Montalo

Project Name: Water test

Project Address: Guánica

Phone:

TURN AROUND TIME: Rush | Days | Normal | Invoice to sample | Owner | Consultant

ANALYSIS TYPE		SAMPLE TYPE Stormwater		SAMPLE MATRIX	# CONTAINERS
X Chemical	Microbiology	Source Water	Drinking Water	X Liquid	Sterile
ENVIRONMENTAL CONDITION		Waste Water	Food	Solid	X Plastic
Sunny	Cloudy	Ground Water	Solid Waste	Oil	Glass
X Rainy	Windy	Soil	Composite HRS	Sludge	Vials
Fugitive Dust	Other	Seawater	X Grab	Other	Other

LAB. SAMPLE # (LAB USE)	DATE	TIME	SAMPLE DESCRIPTION OR SAMPLING POINT NUMBER
1	8-VII-19	8:57 am	Punto # 1 (A719-7120)
2	8-VII-19	9:09 am	Punto # 2 (A719-7121)
3	8-VII-19	9:21 am	Punto # 3 (A719-7122)
4	8-VII-19	9:30 am	Punto # 4 (A719-7123)

Comments & Special Instructions:

METALS	WET CHEMISTRY		CHROMATOGRAPHY
Aluminum (A,C)	Acidity (A)	Phenol (A)	BTEX (A,E)
Antimony (A,C)	Alkalinity (A)	X P. Total (A, B)	BTEX (A)
Arsenic (A,C)	Ammonia (A,B)	Res. Chlorine (A)	Chloroform as TTO (A),(E)
Barium (A,C)	Asbestos (A)	Set. Solids mg/L (A)	Dioxin (A)
Berrilium (A,C)	Bicarbonate (A)	Set. Solids ml/L (A)	MIBK(A)
Bismuth (A,C)	BOD-5 (A)	Silica (A)	MTBE(A)
Boron (A,C)	Bromide (A)	Solids Total (A)	PCB'S(A) 8082 608 (A)
Cadmium (A,C)	CaO MgO (1)	Sulfate(A)	Pesticide - TTO (A)
Calcium (A,C)	Carbonate (A)	Sulfide UND (D,H,A)	Phenols by GC (A)
Chromium (A,C)	Chloride (A)	Sulfite (A)	TBA (A)
Chromium VI (A,C)	COD (A,B)	Surfactant (A)	TPH D G O (A)
Cobalt (A,C)	Color ADMI (A)	Suspended Solids (A)	TTO (A,E)
Cooper (A,C)	Color Pt-Co (A)	TDS (A)	TTO Semi-Volatile (A)
Gold (A)	Conductivity (A)	TKN (A,B)	VOC's - TTO (A,)
X Hardness (A,C)	Cyanide (A,D,G)	TOC (A,B)	MICROBIOLOGY
X Iron (A,C)	D.O (A)	Turbidity (A)	Total Coliform (A,F)
X Lead (A,C)	Fluoride (A)		Fecal Coliform (A,F)
Lead (A)	Iodide (A)	RCRA	HPC (A,F)
Lithium (A,C)	Iodine (A)	Reactivity (A)	Enterococcus (A,F)
Magnesium (A,C)	MLVSS (A)	Corrosivity (A)	E. Coli 0157 MPN (A,F)
Manganese (A,C)	Moisture (A)	Ignitability (A)	Mold & Yeast (A,F)
Mercury (A,C)	X Nitrato & Nitrite (A)	Metals - TCLP (A)	Salmonella (A,F)
Molybdenum (A,C)	Nitrate (A)	Volatile - TCLP (A)	Campylobacter(A,F)
Nickel (A,C)	Nitrite (A)	Semi-Volatile-TCLP (A)	Listeria (A,F)
Potassium (A,C)	O&G Total (A,B)	Pesticide - TCLP (A)	FOOD ANALYSES
Selenium (A,C)	O&G TPH (A,B)	Herbicide - TCLP (A)	% Collagen
Silicon (A,C)	Ortho Phosphate (A,B)	TOX (A)	% FAT
Silver (A,C)			% Protein
Sodium (A,C)	O_2 mg/l		Water Activity - Aw
Strontium (A,C)			LEGEND PRESERVATION USED
Thallium (A,C)	pH su	A Ice (Cool,4 °C)	E HCL
Tin (A,C)		B H_2SO_4	F Sodium Thiosfulfate
Titanium (A,C)	Temp °C	C HNO_3	G Ascorbic Acid
Vanadium (A,C)		D Na OH	H Zinc Acetate
X Zinc (A,C)	Cl_2 mg/l	I Other:	

CONDITIONS OF SAMPLES UPON RECEIPT	TEMPERATURE OF SAMPLE	CONDITION SAMPLE	LABORATORY ACTION
	X Room Temperature	X Sample Intact	X Sample Accepted
Thermometer Serial # ~~[illegible]~~ N/A	Frozen	X Properly Preserved	Sample Rejected
	RECEIVED AT °C	Sample Compromised	

Sample Collected & Relinquished by (Print name & sign): A.R. Alvarez	Date: 8/7/19 Time: 2:19 pm	Received by (Print name & sign): J. Rivera	Date: 7-8-2019 Time: 1425	Delivery to Lab. by (Print name & sign): Raymond Ayala	
Company: Pan American Fertilizer	Collector ID#	Company: Alchem	Collector ID#	Date: 07/08/19	Time: 1425
Relinquished by (Print name & sign):	Date: Time:	Received by (Print name & sign): N/A	Date: Time:	Received at Lab. by (Print name & sign): Juan Rivera	
Company:	Collector ID#	Company: 07-08-19	Collector ID#	Date: 07/08/19	Time: 1425

PROCEDURE NO: ALGAP003

All development of our analysis methods meet government regulatory agencies.