

GEOANALYTICS, INC.

CIVIL ENGINEERING LABORATORY
 PGA TECHNICAL CENTER BLDG.
 No. 85 Kamuning Road Quezon City
 Tel. Nos.: 929-3352, 929-3354, 929-3355, 929-1786, 411-3180
 Telefax: 929-3353
 E-mail: pgamain.laboratory@gmail.com - website: www.pgatesh.com.ph

PROJECT : The Proposed Sewage Treatment Plant for Zamboanga Water District
 LOCATION : Magay, Zamboanga City
 CUSTOMER : AGES
 ADDRESS : AGES, 103 Dunhill St. Fairview Quezon City
 JOB NO. : 15-08823
 SAMPLE : Soil
 DESIRED TEST : Moisture content, Ash & Organic matter of peat & other organic soils
 REFERENCE : ASTM D-2974-00 (2006 Edition)

TEST REPORT

Borehole No.	Sample No.	Depth (m)	Moisture Content (%)	Ash Content (%)	Organic Matter (%)
1	SS-13	19.50-19.95	33.6	96.5	3.5
2	SS-2	2.00-2.45	19.4	96.1	3.9

This laboratory is responsible for test only.

Note :

- 1) Date Tested : October 14, 2015
- 2) Date Released : OCT 17 2015
- 3) Tested by : Verna G. Barcilla *Navallo*
- 4) Furnace Temperature used for ash content determination was 440°C

Checked by: *Maricar K. Linga*
Maricar K. Linga

Approved by :
J.E. Villaviray
J.E. Villaviray
 Laboratory Manager

Page 1 of 1

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PIPAC

ADVANCED GEOTECHNICAL ENGINEERING
SERVICES, INC. (AGES)
103 Dunhill Street
Fairview, Quezon City

20 October 2015
2015-2432-01
Page 1 of 1

REPORT OF ANALYSIS

SAMPLE(S) : Soil (SPT)
Project Title: The Proposed Sewage Treatment Plant
for Zamboanga Water District, Magay,
Zamboanga City

1.	BH-1 SS-7, (Depth: 9.00 -9.45m)
2.	BH-1 SS-11, (Depth: 16.50 -16.95m)
3.	BH-2 SS-4, (Depth: 4.50 -4.95m)
4.	BH-2 SS-17, (Depth: 24.00 -24.45m)

DATE SAMPLE(S) RECEIVED : 08 October 2015


DATE ANALYSIS STARTED : 13 October 2015

DATE ANALYSIS FINISHED : 20 October 2015

ANALYZED FOR : 1. Sulfate
2. Chloride

RESULT(S):

Samples	Sulfate, mg/kg	Chloride, mg/kg
1. BH-1 SS-7, (Depth: 9.00 -9.45m)	3,500	34
2. BH-1 SS-11, (Depth: 16.50 -16.95m)	68	130
3. BH-2 SS-4, (Depth: 4.50 -4.95m)	1,500	80
4. BH-2 SS-17, (Depth: 24.00 -24.45m)	73	170
Analytical Method(s)	Water Extraction/Ion Chromatography	


THELMA JANE F. PARREÑAS
Laboratory Manager
Chem. Reg. No.: 0005144


DR. MODESTO T. CHUA
Institute Director
Chem. Reg. No.: 0004325

/mnb, SA #54224

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**PROPOSED SEWAGE TREATMENT PLANT FOR
ZAMBOANGA WATER DISTRICT,
MAGAY. ZAMBOANGA CITY**



**PROPOSED SEWAGE TREATMENT PLANT FOR
ZAMBOANGA WATER DISTRICT,
MAGAY, ZAMBOANGA CITY**

12. SEWAGE ANALYSIS

RSTL FORM C
Date of 3rd revision:
January 08, 2004
Effectivity Date:
January 08, 2004



Republic of the Philippines
DEPARTMENT OF SCIENCE AND TECHNOLOGY IX
Regional Standards and Testing Laboratories
Pettit Barracks, Zamboanga City

Tel. No. 991-1024 loc. 12 Telefax: 992-1114 e-mail: bnazarethmanzano@yahoo.com

Request Reference No. : R9-022017-CHE-0082
Date Submitted : February 02, 2017
Date Analyzed : February 02-07, 2017
Sample Submitted : Wastewater
Sample Description : Source: West Pumping Station
 Date and Time of Sampling: 02/02/2017 @ 12:45 PM
 Approx. 2 L, turbid, in PET bottle, with head space and 800 ml sample
 in wide mouth glass jar, turbid

Submitted by : **ZAMBOANGA CITY WATER DISTRICT**
 Pasonanca, Zamboanga City

RESULT OF CHEMICAL/PHYSICAL ANALYSES

PARAMETER	METHOD	RESULTS
Biochemical Oxygen Demand, ppm	Incubation (Dilution Technique) Method, SMEWW 5210 B., 22 nd ed., 2012	221
Oil and Grease, ppm	Liquid-Liquid, Partition-Gravimetric Method, SMEWW 5520 B., 22 nd ed., 2012	4
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	XXXXXXXXXX

REMARKS:

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O. B.
JANICE T. ONG
 DENR Recognized Signatory

Noel S. Arquiza
NOEL S. ARQUIZA
 Laboratory Analyst

NOTED BY:

Rosemarie S. Salazar
ROSEMARIE S. SALAZAR
 Laboratory Head

APPROVED FOR RELEASE:

Martin A. Wee
MARTIN A. WEE
 OIC-Regional Director

Report No. : 02082017-CHE-0167
DATE RELEASED : 2/13/17 g



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 DEPARTMENT OF SCIENCE AND TECHNOLOGY IX
 Regional Standards and Testing Laboratories

Pettit Barracks, Zamboanga City
 Tel. No. 991-1024 loc. 12 Telefax: 992-1114 e-mail: bnazarethmanzano@yahoo.com

Request Reference No. : R9-022017-CHE-0082
Date Submitted : February 02, 2017
Date Analyzed : February 02-07, 2017
Sample Submitted : Wastewater
Sample Description : Source: East Pumping Station
 Date and Time of Sampling: 02/02/2017 @ 1:00 PM
 Approx. 2 L, turbid, in PET bottle, with head space and 800 ml sample
 in wide mouth glass jar, turbid

Submitted by : ZAMBOANGA CITY WATER DISTRICT
 Pasonanca, Zamboanga City

RESULT OF CHEMICAL/PHYSICAL ANALYSES

PARAMETER	METHOD	RESULTS
Biochemical Oxygen Demand, ppm	Incubation (Dilution Technique) Method, SMEWW 5210 B., 22 nd ed., 2012	200
Oil and Grease, ppm	Liquid-Liquid, Partition-Gravimetric Method, SMEWW 5520 B., 22 nd ed., 2012	17
XXXXXXXXXXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXXXXXXXXXX	XXXXXXXXXX

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NOEL T. ARQUIZA
 Laboratory Analyst

NOTED BY:
Rosalie S. Salazar
ROSEMARIE S. SALAZAR
 Laboratory Head

APPROVED FOR RELEASE:
Martin A. Wee
MARTIN A. WEE
 OIC-Regional Director

Report No. : 02082017-CHE-0166
DATE RELEASED : 2/13/17



Request Reference No. : R9-022017-CHE-0082
Date Submitted : February 02, 2017
Date Analyzed : February 02-07, 2017
Sample Submitted : Wastewater
Sample Description : Source: Magay Creek
 Date and Time of Sampling: 02/02/2017 @ 11:40 AM
 Approx. 2 L, turbid, in PET bottle, with head space and 800 ml sample
 in wide mouth glass jar, turbid

Submitted by : **ZAMBOANGA CITY WATER DISTRICT**
 Pasonanca, Zamboanga City

RESULT OF CHEMICAL/PHYSICAL ANALYSES

PARAMETER	METHOD	RESULTS
Biochemical Oxygen Demand, ppm	Incubation (Dilution Technique) Method, SMEWW 5210 B., 22 nd ed., 2012	73
Oil and Grease, ppm	Liquid-Liquid, Partition-Gravimetric Method, SMEWW 5520 B., 22 nd ed., 2012	3
XXXXXXXXXXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXXXXXXXXXX	XXXXXXXXXX

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JANICE T. ONG
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Noel T. Arquiza
NOEL T. ARQUIZA
 Laboratory Analyst

NOTED BY:
Rosemarie S. Salazar
ROSEMARIE S. SALAZAR
 Laboratory Head

APPROVED FOR RELEASE:
Martin A. Wee
MARTIN A. WEE
 OIC-Regional Director

Report No. : 02082017-CHE-0165
DATE RELEASED : 2/12/17



Request Reference No. : R9-032017-CHE-0176
Date Submitted : March 22, 2017
Date Analyzed : March 23-24, 2017
Sample Submitted : Wastewater
Sample Description : Source: Magay Creek; date and time of sampling: 03/22/2017 @ 9:00 AM, approx. 1.5 L in PET bottle and approx. 1 L in wide mouth glass container, turbid
Submitted by : ZAMBOANGA CITY WATER DISTRICT
Pasonanca, Zamboanga City

RESULT OF CHEMICAL / PHYSICAL ANALYSES

PARAMETER	METHOD	RESULTS
Oil and Grease, ppm	Soxhlet Extraction Method, SMEWW 5520 D., 22 nd ed., 2012	10
Phosphate, ppm	Vanadomolybdophosphoric Acid Colorimetric Method, SMEWW 4500-P C., 22 nd ed., 2012	13.97
Nothing Follows		

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JANICE T. ONG
Laboratory Analyst

NOTED BY:


ROSEMARIE S. SALAZAR
Laboratory Head

APPROVED FOR RELEASE:


MARTIN A. WEE
OIC-Regional Director

Report No. : 03262017-CHE-0324
Date Released : 03/29/17 PM

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Request Reference No. : R9-032017-CHE-0176
Date Submitted : March 23, 2017
Date Analyzed : March 23-24, 2017
Sample Submitted : Wastewater
Sample Description : Source: East Pumping Station; date and time of sampling: 3/22/2017 @ 9:00 AM, approx. 1.5 L in PET bottle and approx. 1 L in wide mouth glass container, turbid
Submitted by : ZAMBOANGA CITY WATER DISTRICT
Pasonanca, Zamboanga City

RESULT OF CHEMICAL / PHYSICAL ANALYSES


PARAMETER	METHOD	RESULTS
Oil and Grease, ppm	Soxhlet Extraction Method, SMEWW 5520 D., 22 nd ed., 2012	38
Phosphate, ppm	Vanadomolybdophosphoric Acid Colorimetric Method, SMEWW 4500-P C., 22 nd ed., 2012	19.69
Nothing Follows		

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JANICE Y. ONG
Laboratory Analyst

NOTED BY:


ROSEMARIE S. SALAZAR
Laboratory Head

APPROVED FOR RELEASE:


MARTIN A. WEE
OIC-Regional Director

Report No. : 03262017-CHE-0325
Date Released : 03/29/17 Puy

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Regional Standards and Testing Laboratories

Petit Barracks, Zamboanga City
Tel. No.: 991-1024 / Fax No.: 992-1114 / E-mail: dost9ordsecretariat@gmail.com

Request Reference No. : R9-032017-CHE-0176
Date Submitted : March 23, 2017
Date Analyzed : March 23-24, 2017
Sample Submitted : Wastewater
Sample Description : Source: West Pumping Station, date and time of sampling: 3/22/2017 @ 9:00 AM, approx. 1.5 L in PET bottle and approx. 1 L in wide mouth glass container, turbid
Submitted by : **ZAMBOANGA CITY WATER DISTRICT**
Pasonanca, Zamboanga City

RESULT OF CHEMICAL / PHYSICAL ANALYSES

PARAMETER	METHOD	RESULTS
Oil and Grease, ppm	Soxhlet Extraction Method, SMEWW 5520 D, 22 nd ed., 2012	60
Phosphate, ppm	Vanadomolybdophosphoric Acid Colorimetric Method, SMEWW 4500-P C, 22 nd ed., 2012	21.86
Nothing Follows		

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JANICE T. ONG
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NOTED BY:


ROSEMARIE S. SALAZAR
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APPROVED FOR RELEASE:


MARTIN A. WEE
OIC-Regional Director

Report No. : 03262017-CHE-0326
Date Released : 13.03.2017



Request Reference No. : R9-042017-CHE-0212
Date Submitted : April 05, 2017
Date Analyzed : April 05-10 2017
Sample Submitted : Wastewater
Sample Description : East Pumping Station , Date and Time of Sampling: 04/05/2017 @ 9:30 AM
Approx: 1.5 L, turbid, in PET bottle
West Pumping Station , Date and Time of Sampling: 04/05/2017 @ 9:45 AM
Approx: 1.5 L, turbid, in PET bottle
Magay Creek , Date and Time of Sampling: 04/05/2017 @ 10:00 AM
Approx: 1.5 L, turbid, in PET bottle

Submitted by : ZAMBOANGA CITY WATER DISTRICT
Pasananca, Zamboanga City

RESULT OF CHEMICAL / PHYSICAL ANALYSES

PARAMETER	METHOD	RESULTS		
		East Pumping Station	West Pumping Station	Magay Creek
Biochemical Oxygen Demand, ppm	Incubation (Dilution Technique) Method, SMEVWV 5210 B., 22 nd ed., 2012	322	233	170
Nothing Follows				

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On leave
JANICE T. ONG
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NOEL T. ARQUIZA
Laboratory Analyst

NOTED BY:


ROSEMARIE S. SALAZAR
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APPROVED FOR RELEASE:


MARTIN A. WEE
OIC-Regional Director

Report No. : 04112017-CHE-0405
Date Released : 5/14/17 ASH

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