



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

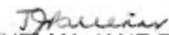
SAMPLE(S) : Soil (SPT)  
Project Title: The Proposed Sewage Treatment Plant  
for Zamboanga Water District, Magay,  
Zamboanga City

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	

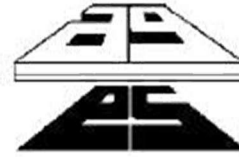
  
THELMA JANE F. PARREÑAS  
Laboratory Manager  
Chem. Reg. No.: 0005144

  
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**

## 12. SEWAGE ANALYSIS

RSTL FORM C11  
Revision: 3  
Effectivity Date:  
March 01, 2015



Republic of the Philippines  
DEPARTMENT OF SCIENCE AND TECHNOLOGY IX  
Regional Standards and Testing Laboratories

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

### TEST REPORT

Request Reference Number : R9-112019-CHE-0840  
Date Submitted : November 20, 2019  
Date Analyzed : November 20 – 25, 2019  
Sample Submitted : Wastewater  
Sample Descriptions : West Pumping Station  
Date & Time of Sampling: 11/20/2019 @ 08:00 AM  
Approx. 3 L sample, slightly turbid, in PET bottle and  
800 mL (2 samples) in wide mouth glass jar.

Submitted by : Zamboanga City Water District  
Address : Pasonanca, Zamboanga City


#### CHEMICAL / PHYSICAL TEST RESULT/S:


PARAMETER	TEST METHOD	RESULT
pH	Electrometric Method, SMEWW 4500-H* B., 22 <sup>nd</sup> ed., 2012	6.80 @ 25 °C
Biochemical Oxygen Demand, mg/L	Incubation (Dilution Technique) Method, SMEWW 5210 B., 22 <sup>nd</sup> ed., 2012	114
Phosphate, mg/L	Vanadomolybdophosphoric Acid Colorimetric Method, SMEWW 4500-P C., 22 <sup>nd</sup> ed., 2012	0.685*
Nitrate, mg/L	Cadmium Reduction Method, Hach Method 8192	21.0*
Ammonia Nitrogen, mg/L	Salicylate Colorimetric Method, Hach Method 8155	7.75
Oil and Grease, mg/L	Liquid-Liquid, Partition-Gravimetric Method, SMEWW 5520 B., 22 <sup>nd</sup> ed., 2012	6.50
***** Nothing Follows *****		

#### REMARKS:


- This report is based on the samples received by this office and should not be used for advertising purposes or sales promotion nor as basis for tariff or customs classification of imported commodity.
- This report shall not be reproduced except in full, without the written approval of the laboratory.

Analyzed By:

  
NOEL T. ARQUIZA, RCT  
PRC Reg. No.: 0001440  
Laboratory Analyst

  
JANICE T. ONG, RCh  
PRC Reg. No.: 0010271  
Laboratory Analyst

Certified By:

  
SHADAME SUGANOB, RCh  
PRC Reg. No.: 0011422  
Laboratory Analyst

Noted By:

  
ROSEMARIE S. SALAZAR  
Laboratory Head

Approved for Release:

  
MARTIN A. WEE  
Regional Director

Report Number : 11262019-CHE-1779  
Date Released : 25 NOV 2019

Page 1 of 1



## 13. SAMPLE DEED OF UNDERTAKING

### UNDERTAKING TO INDEMNIFY

KNOW ALL MEN BY THESE PRESENTS:

This Undertaking to Indemnify (the "Undertaking") is being executed this \_\_\_ day of \_\_\_\_\_ 20\_\_\_, in \_\_\_\_\_ City by \_\_\_\_\_, a corporation duly established under Philippine Laws, with principal office address at \_\_\_\_\_, represented herein by its (position), (name), hereinafter referred to as the "Bidder" in favour of **AECOM INTERNATIONAL DEVELOPMENT, INC.**, a foreign corporation duly organized and existing under the laws of the U.S.A., with principal office address at Wilson Boulevard, Suite 700, Arlington, VA 22201, U.S.A., hereinafter referred to as "AECOM".

WITNESSETH:

WHEREAS, AECOM is providing technical assistance to the Zamboanga City Water District ("ZCWD") in connection with the bidding being conducted by ZCWD for the construction of an underground sewage septage treatment plant in \_\_\_\_\_ (the "Construction Project");

WHEREAS, AECOM, as technical consultant of ZCWD, developed a schematic design of the treatment plant (the "Schematic Design") that will serve as a reference design for the Bidder in relation to the Construction Project;

WHEREAS, the Schematic Design is being provided by AECOM for reference purposes only and the Bidder acknowledges and understands that it should develop its own design for the Construction Project;

NOW, THEREFORE, for and in consideration of the foregoing premises, the Bidder acknowledges that the Schematic Design is being provided strictly for reference purposes only and, in this connection, undertakes to hold free and harmless and indemnify ZCWD, AECOM, and its respective directors, officers, agents, employees and authorized representatives, against any and all losses, liabilities, responsibilities, damages, costs and/or expenses, including attorney's fees, arising out of or relating to any claim, demand, suit, judgment or any other cause of action brought by any party in connection with the Schematic Design, such as, but not limited to, damages to persons or properties arising from, or out of, any occurrence relating to the use of the Schematic Design.

The Bidder further waives all causes of action it may have, arising from the use of the Schematic Design, and undertakes that it shall not institute, commence any step, action or proceeding (whether legal, arbitral, administrative, criminal, civil, regulatory or otherwise), nor participate in any such step, action or proceeding in connection with, or relating to, the Schematic Design, against ZCWD, AECOM, and its respective directors, officers, agents, employees and authorized representatives, whether past, present or future, and shall take such steps as may be necessary to ensure that no such steps, actions, proceedings are instituted or commenced, but rather immediately dismissed.

This Undertaking by the Bidder will survive any adjudication and/or voluntary settlement of any underlying third party claim.

IN WITNESS WHEREOF, we have hereunto set our hands this \_\_\_\_ day of  
\_\_\_\_ 20\_\_, at \_\_\_\_\_, Philippines.

(BIDDER)

By:

\_\_\_\_\_  
[NAME]  
[Position]

Signed in the Presence of:

\_\_\_\_\_

**ACKNOWLEDGMENT**

REPUBLIC OF THE PHILIPPINES)  
\_\_\_\_\_) CITY ) S.S.

BEFORE ME, a Notary Public in and for \_\_\_\_\_ City, this \_\_\_\_ day of  
\_\_\_\_ 20\_\_, appeared the following person who exhibited to me his/her  
government-issued identification document/s, as follows:

	Government Issued I.D.	Date/Place Issued
[Name]	_____	_____
	_____	_____

known to me to be the same person who executed the foregoing instrument, and  
acknowledged to me that the same is his/her free act and voluntary deed as well as that of  
the corporation he/she represents.

This document, which pertains to an Undertaking to Indemnify, consisting of two  
(2) pages, including the page on which this Acknowledgment is written, has been signed by  
the party herein and his/her witnesses on each and every page thereof, and sealed with my  
notarial seal.

WITNESS MY HAND AND SEAL, on the date and at the place first above written.

Doc No. \_\_\_\_;  
Page No. \_\_\_\_;  
Book No. \_\_\_\_;  
Series of 20\_\_.

\_\_\_\_\_ { } \_\_\_\_\_