



Republic of the Philippines  
**SAN FRANCISCO WATER DISTRICT**  
San Francisco Agusan del Sur

Water Facility Construction Maintenance & Quality Water Production Division

**SAN FRANCISCO WATER DISTRICT LABORATORY**  
(DOH Accreditation Number: 16-01-19-LW-1)

Requesting Party	: LIANGA WATER DISTRICT	Environmental Condition	: Normal
Contact Person	: Wilfredo G. Sanchez	Type of Analyte	: Raw water
Contact Number	: 09299752591	Treatment	: None
Date & Time of Sample Collection	: June 09, 2020 / 5:15AM	Disinfection	: None
Address (collected sample)	: Simulao Source, Diatagon, Lianga, Surigao del Sur	Preservation	: Chilled
Source of Water	: Developed spring	Date of Sample Received	: June 09, 2020
Sampling Point	: Spring source	Date of Analysis	: June 09 to August 20, 2020
Type of Sample Bottle Used	: PET bottle	Date Paid/O.R Number	: June 09, 2020 / OR No. 534547
		Laboratory Sample No	: PC20-06-171

**LABORATORY TEST RESULTS**

Parameters	Method	*PNSDW 2017 (Maximum Allowable Level)	Test Results
<b>Mandatory</b>			
Arsenic	ICP-OES	0.01 mg/L	0.014
Cadmium	ICP-OES	0.003 mg/L	0.001
Lead	ICP-OES	0.01 mg/L	<0.005
Nitrate	Cadmium Reduction	50.00 mg/L	1.5
Color, apparent	APHA PtCo	10 units	4
Turbidity	NTU	5 NTU	1.7
pH	pH meter	6.5 - 8.5 5.0 - 7.0 undergo R.O. or distillation	7.7
Total Dissolved Solids	Electrical Conductance	600 mg/L <10mg/L undergo R.O. or distillation	139
<b>Primary</b>			
Barium	ICP-OES	0.70 mg/L	<0.005
Boron	ICP-OES	2.00 mg/L	0.030
Chromium	ICP-OES	0.05 mg/L	<0.005
Manganese	ICP-OES	0.4 mg/L	<0.005
Nickel	ICP-OES	0.07 mg/L	0.013
Selenium	ICP-OES	0.04 mg/L	0.031
Sulfate	SulfaVer	250mg/L	4
<b>Secondary</b>			
Aluminum	ICP-OES	0.2 mg/L	0.008
Copper	ICP-OES	1.0 mg/L	<0.005
Iron	ICP-OES	1.0 mg/L	<0.005
Zinc	ICP-OES	5.0 mg/L	<0.005
Chloride	Digital Titration	250mg/L	<10
Total Hardness	Digital Titration	300mg/L	145
Odor	Sensory Test	Unobjectionable	Unobjectionable
<b>Other Parameters</b>			
Appearance	Sensory Test	Clear	Not Clear
Temperature	Electrode	°C	23.6
Specific Conductance	Electrode	µS/cm	264
Salinity	Electrode	ppt	0.1
Molybdenum	ICP-OES	mg/L	<0.005
Beryllium	ICP-OES	mg/L	<0.005
Cobalt	ICP-OES	mg/L	<0.005
Silver	ICP-OES	mg/L	<0.005

1 mg/L = 1,000 µg/L = 1 ppm

1 µg/L = 1 ppb

ppt - parts per thousand; ppm - parts per million; ppb - parts per billion

\*PNSDW: Philippine National Standards for Drinking Water.

Remarks: Results relate only to sample as submitted and tested.  
Test results show that appearance of the submitted water sample is not clear from visible particles.  
All other parameters tested on the water sample are within the allowable limits prescribed in PNSDW 2017.  
I hereby certify that the above presented test results are true and correct.

Prepared and Certified Correct:

RUBEN M. ARABATA JR., RCH.  
Senior Chemist/Laboratory Head

Approved:

MAMIE B. PAYLANGCO  
Division Manager C

Noted:

ELMER T. LUZON  
General Manager C

Released by: \_\_\_\_\_  
Name and Signature

Date: \_\_\_\_\_

Received by: \_\_\_\_\_  
Name and Signature

Date: 9/11/20

P-2-2019-07-16  
Revision No. 01, 2019



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Contact Person	: Wilfredo G. Sanchez	Type of Analyte	: Raw water
Contact Number	: 09299752591	Treatment	: None
Date & Time of Sample Collection	: June 09, 2020 / 5:00AM	Disinfection	: None
Address (collected sample)	: Camangahan Source, Ban-as, Lianga, Surigao del Sur	Preservation	: Chilled
Source of Water	: Surface Water	Date of Sample Received	: June 09, 2020
Sampling Point	: Water Surface	Date of Analysis	: June 09 to August 20, 2020
Type of Sample Bottle Used	: PET bottle	Date Paid/O.R Number	: June 09, 2020 / OR No. 534547
		Laboratory Sample No	: PC20-06-172

**LABORATORY TEST RESULTS**

Parameters	Method	*PNSDW 2017 (Maximum Allowable Level)	Test Results
<b>Mandatory</b>			
Arsenic	ICP-OES	0.01 mg/L	0.009
Cadmium	ICP-OES	0.003 mg/L	<0.005
Lead	ICP-OES	0.01 mg/L	0.005
Nitrate	Cadmium Reduction	50.00 mg/L	1.5
Color, apparent	APHA PtCo	10 units	1
Turbidity	NTU	5 NTU	0.3
pH	pH meter	6.5 - 8.5 5.0 - 7.0 undergo R.O. or distillation	7.8
Total Dissolved Solids	Electrical Conductance	600 mg/L <10mg/L undergo R.O. or distillation	205
<b>Primary</b>			
Barium	ICP-OES	0.70 mg/L	0.018
Boron	ICP-OES	2.00 mg/L	0.030
Chromium	ICP-OES	0.05 mg/L	<0.005
Manganese	ICP-OES	0.4 mg/L	<0.005
Nickel	ICP-OES	0.07 mg/L	0.039
Selenium	ICP-OES	0.04 mg/L	0.008
Sulfate	SulfaVer	250mg/L	1
<b>Secondary</b>			
Aluminum	ICP-OES	0.2 mg/L	0.012
Copper	ICP-OES	1.0 mg/L	<0.005
Iron	ICP-OES	1.0 mg/L	0.006
Zinc	ICP-OES	5.0 mg/L	<0.005
Chloride	Digital Titration	250mg/L	10
Total Hardness	Digital Titration	300mg/L	214
Odor	Sensory Test	Unobjectionable	Unobjectionable
<b>Other Parameters</b>			
Appearance	Sensory Test	Clear	Not clear
Temperature	Electrode	°C	25.1
Specific Conductance	Electrode	µS/cm	410
Salinity	Electrode	ppt	0.2
Molybdenum	ICP-OES	mg/L	<0.005
Beryllium	ICP-OES	mg/L	<0.005
Cobalt	ICP-OES	mg/L	<0.005
Silver	ICP-OES	mg/L	<0.005

1 mg/L = 1,000 µg/L = 1 ppm

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