



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	: 0929 975 7591	Treatment	: None
Date & Time of Sample Collection	: December 01, 2020 / 5:30 AM	Disinfection	: None
Address (collected sample)	: Simulao Source, Diatagon, Lianga, Surigao del Sur	Preservation	: Chilled
Source of Water	: Water District	Date of Sample Received	: December 01, 2020
Sampling Point	: Other (Source)	Date of Analysis	: December 01 to March 25, 2021
Type of Sample Bottle Used	: PET Bottle	Date Paid/O.R Number	: December 01, 2020/O.R. No. 573783
		Laboratory Sample No	: PC20-12-433

LABORATORY TEST RESULTS

Parameters	Method	*PNSDW 2017 (Maximum Allowable Level)	Test Results
Mandatory			
Arsenic	ICP-OES	0.01 mg/L	<0.005
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	0.2
Color, apparent	APHA PtCo	10 units	6
Turbidity	NTU	5 NTU	0.64
pH	pH meter	6.5 - 8.5	7.69
		5.0 - 7.0 undergo R.O. or distillation	
Total Dissolved Solids	Electrical Conductance	600 mg/L	161
		<10mg/L undergo R.O. or distillation	
Primary			
Barium	ICP-OES	0.70 mg/L	<0.005
Boron	ICP-OES	2.00 mg/L	<0.005
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	<0.005
Selenium	ICP-OES	0.04 mg/L	<0.005
Sulfate	SulfaVer	250mg/L	1
Secondary			
Aluminum	ICP-OES	0.2 mg/L	<0.005
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	4
Total Hardness	Digital Titration	300mg/L	184
Odor	Sensory Test	Unobjectionable	Unobjectionable
Other Parameters			
Appearance	Sensory Test	Clear	Not Clear
Temperature	Electrode	_oC	26.5
Specific Conductance	Electrode	_μS/cm	333
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

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.
The 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. JARABATA JR., RCH.
Senior Chemist/Laboratory Head

Approved:

MAMRY B. PAYLANGCO
Division Manager C

Noted:

ELMER T. LUZON
General Manager C

Released by:

Name and Signature

Date:

Received by:

Name and Signature

Date:

P-2-2019-07-16

Revision No. 01, 2019



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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	: 0929 975 7591	Treatment	: None
Date & Time of Sample Collection	: December 01, 2020 / 5:45 AM	Disinfection	: None
Address (collected sample)	: Camangahan Source, Ban-as, Lianga, Surigao del Sur	Preservation	: Chilled
Source of Water	: Water District	Date of Sample Received	: December 01, 2020
Sampling Point	: Other (Source)	Date of Analysis	: December 01 to March 25, 2021
Type of Sample Bottle Used	: PET Bottle	Date Paid/O.R Number	: December 01, 2020/O.R. No. 573783
		Laboratory Sample No	: PC20-12-434

LABORATORY TEST RESULTS

Parameters	Method	*PNSDW 2017 (Maximum Allowable Level)	Test Results
Mandatory			
Arsenic	ICP-OES	0.01 mg/L	<0.005
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	0.5
Color, apparent	APHA PtCo	10 units	10
Turbidity	NTU	5 NTU	1.85
pH	pH meter	6.5 - 8.5	7.50
		5.0 - 7.0 undergo R.O. or distillation	
Total Dissolved Solids	Electrical Conductance	600 mg/L	208
		<10mg/L undergo R.O. or distillation	
Primary			
Barium	ICP-OES	0.70 mg/L	0.019
Boron	ICP-OES	2.00 mg/L	<0.005
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	<0.005
Selenium	ICP-OES	0.04 mg/L	<0.005
Sulfate	SulfaVer	250mg/L	2
Secondary			
Aluminum	ICP-OES	0.2 mg/L	<0.005
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	4
Total Hardness	Digital Titration	300mg/L	242
Odor	Sensory Test	Unobjectionable	Unobjectionable
Other Parameters			
Appearance	Sensory Test	Clear	Not Clear
Temperature	Electrode	°C	26.6
Specific Conductance	Electrode	µS/cm	430
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 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.

The appearance of the submitted water sample is not clear from visible particles.

Test results show that the color level of the submitted water sample exceeded the maximum allowable limit prescribed in PNSDW 2017.

I hereby certify that the above presented test results are true and correct.

Prepared and Certified Correct:

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

Released by:
Name and Signature
Date: 4/5/21

Approved:

MAIMRY B. PAYLANGCO
Division Manager C

Received by: _____
Name and Signature
Date: _____

Noted:

ELMER T. LUZON
General Manager C

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