



LAGUNA AAAWATER CORPORATION  
OPERATIONS DEPARTMENT  
LABORATORY SERVICES

CHEMICAL ANALYSIS OF SAMPLES FROM SOURCE AND CONSUMER'S TAPS - PROVINCE OF LAGUNA

CITY/MUNICIPALITY : BIÑAN  
DOH ACCREDITATION NO : 04A-001-1820-LW-2

MONTH : NOVEMBER  
VALIDITY : December 31, 2020

YEAR : 2019  
DOCUMENT NO : TR-19-3435

NO	SAMPLE LOCATION			DATE COLLECTED	SAMPLE CODE	PHYSICAL/ CHEMICAL PARAMETERS																				
	ADDRESS	TYPE				*pH <sup>1</sup>	*Residual Chlorine <sup>2</sup> (mg/L)	Color apparent <sup>3</sup> (ACU)	Turbidity <sup>4</sup> (NTU)	Odor <sup>5</sup>	Taste <sup>6</sup>	TDS <sup>7</sup> (mg/L)	Total Hardness <sup>8</sup> (mg/L)	Fluoride <sup>9</sup> (mg/L)	Chloride <sup>9</sup> (mg/L)	Nitrate <sup>9</sup> (mg/L)	Sulfate <sup>9</sup> (mg/L)	Chromium <sup>10</sup> (mg/L)	Manganese <sup>10</sup> (mg/L)	Iron <sup>10</sup> (mg/L)	Copper <sup>10</sup> (mg/L)	Zinc <sup>10</sup> (mg/L)	Arsenic <sup>10</sup> (mg/L)	Cadmium <sup>10</sup> (mg/L)	Lead <sup>10</sup> (mg/L)	
<b>Brgy. Poblacion</b>																										
1	Langkiwa National High School	D	11-Nov	S19-6606	7.63/28.1	1.04	< 2	0.25	UO	UO	273	133	0.387	4.95	4.00	6.82	0.000508	0.0213	0.00489	0.000688	0.0000587	0.0000316	0.00000417	0.0000325		
2	Langkiwa Elementary School	D	11-Nov	S19-6607	7.71/ 29.3	1.15	< 2	< 0.13	UO	UO	253	130	0.302	4.59	3.88	6.75	0.0000496	0.0118	0.00463	0.000714	0.0000682	0.0000286	0.00000319	0.0000410		
3	Biñan Integrated National High School	D	11-Nov	S19-6608	7.68/ 28.6	0.71	< 2	1.1	UO	UO	300	136	0.382	6.55	1.45	< 0.669	0.0000489	0.0167	0.00425	0.000616	0.0000593	0.0000323	0.00000428	0.0000339		
<b>Brgy. Santo Tomas</b>																										
4	Block 11 Lot 2 South Plains Subd.	D	12-Nov	S19-6651	7.47/ 29.5	0.48	< 2	< 0.13	UO	UO	277	159	0.258	4.74	< 1.14	5.35	0.0000431	0.0254	0.00318	0.000546	0.0000538	0.0000349	0.00000417	0.0000342		
5	Water Pump, south Plains II Subdivision	D	12-Nov	S19-6652	7.45/ 29.2	0.39	< 2	0.15	UO	UO	273	177	0.404	4.76	< 1.14	5.29	0.0000485	0.0265	0.00259	0.000675	0.0000657	0.0000234	0.00000487	0.0000378		
6	Water Pump, Amsterdam St., Southville Town and Country	S	12-Nov	S19-6659	7.10/ 28.3	1.17	5	0.20	UO	UO	213	158	0.461	5.03	< 1.14	5.14	0.0000554	0.0236	0.00465	0.000676	0.0000596	0.0000367	0.00000454	0.0000327		
7	Block 35 Lot 21, Southville Town and Country	D	12-Nov	S19-6660	7.12/ 28.5	0.92	5	0.25	UO	UO	397	155	0.464	5.00	< 1.14	5.12	0.0000511	0.0267	0.00457	0.000686	0.0000585	0.0000313	0.00000415	0.0000323		
8	Block 2 Lot 5, Pennsylvania St., Southville Town and Country	D	12-Nov	S19-6661	7.15/ 28.6	0.80	< 2	0.25	UO	UO	423	155	0.461	4.95	< 1.14	5.08	0.0000487	0.0265	0.00492	0.000656	0.0000586	0.0000324	0.00000486	0.0000356		
9	Block 1 Lot 16, Phase 4 Olivarez Homes South	D	12-Nov	S19-6662	7.21/ 30.1	0.45	< 2	0.25	UO	UO	490	154	0.394	4.85	< 1.14	5.06	0.0000587	0.0244	0.00495	0.000664	0.0000587	0.0000323	0.00000476	0.0000335		
10	Water Pump Pragmatic Subd.	S	12-Nov	S19-6663	7.28/ 29.4	0.32	< 2	0.20	UO	UO	377	154	0.448	4.92	< 1.14	5.10	0.0000519	0.0287	0.00409	0.000645	0.0000526	0.0000375	0.00000487	0.0000367		
11	Block 1 Lot 5 Bais Street Pragmatic Subd.	D	12-Nov	S19-6664	7.30/ 29.5	0.40	< 2	< 0.13	UO	UO	380	152	0.468	5.17	< 1.14	5.62	0.0000586	0.0236	0.00429	0.000789	0.0000587	0.0000399	0.00000476	0.0000334		
<b>Brgy. Tubigan</b>																										
12	Tawi Tawi St. South City Homes Subd.	D	12-Nov	S19-6653	7.12/ 28.3	0.32	< 2	< 0.13	UO	UO	267	156	0.408	4.82	< 1.14	5.34	0.0000516	0.0245	0.00476	0.000678	0.0000566	0.0000376	0.00000423	0.0000398		
13	#60 Florida Compound	D	12-Nov	S19-6654	7.14/ 28.4	0.30	< 2	0.15	UO	UO	240	155	0.423	4.62	< 1.14	5.40	0.0000543	0.0226	0.00474	0.000685	0.0000593	0.0000365	0.00000447	0.0000387		
<b>Brgy. Langkiwa</b>																										
14	Block 3 Lot 9 Phase II Southville	D	12-Nov	S19-6655	7.21/ 28.6	0.31	< 2	< 0.13	UO	UO	263	160	0.393	4.65	< 1.14	5.29	0.0000576	0.0224	0.00478	0.000686	0.0000567	0.0000386	0.00000465	0.0000397		
<b>Brgy. San Vicente</b>																										
15	Drinking Fountain San Vicente Elementary School	D	12-Nov	S19-6656	7.30/ 28.9	0.38	< 2	< 0.13	UO	UO	263	155	0.443	4.96	< 1.14	6.10	0.0000565	0.0287	0.00465	0.000698	0.0000518	0.0000335	0.00000496	0.0000386		
16	Block 12 Lot 5 Papaya St. Phase VII, Olivarez Homes Subd.	D	12-Nov	S19-6657	7.16/ 28.6	0.60	< 2	0.25	UO	UO	240	168	0.470	5.19	< 1.14	6.15	0.0000517	0.0248	0.00475	0.000677	0.0000561	0.0000379	0.00000425	0.0000392		
17	Cistern Tank Central Mall Binan Gen. Malvar Street	D	12-Nov	S19-6658	7.37/ 29.8	0.35	< 2	0.20	UO	UO	240	153	0.462	5.03	< 1.14	5.18	0.0000519	0.0265	0.00474	0.000675	0.0000534	0.0000375	0.00000427	0.0000356		
<b>Brgy. San Antonio</b>																										
18	Jacobo National High School	D	20-Nov	S19-6977	7.36/ 28.9	0.32	< 2	0.15	UO	UO	253	127	0.425	6.87	2.70	7.64	0.0000565	0.0218	0.00456	0.000678	0.0000559	0.0000393	0.00000472	0.0000365		
TOTAL SAMPLES ANALYZED		18	PNSDW LIMIT (MAL)		6.5 – 8.5	0.30 – 1.50	10	5	UO	UO	600	300	1.50	250	50	250	0.05	0.4	1.0	1.0	5.0	0.01	0.003	0.01		

REMARKS: Samples analyzed as submitted

LEGEND: S - Source, D - Distribution, MAL - Maximum Allowable Limit, NT - Not Tested, NTU - Nephelometric Turbidity Unit, UO - Unobjectionable, NFF - Not Fit to Taste, ACU - Apparent Color Unit, na - no set limit, \*tested on-site, < - less than detection limit

METHODS USED: <sup>1</sup>4500-H+ Electrometric, <sup>2</sup>4500-Cl-G-DPD Colorimetric, <sup>3</sup>2120B. Visual Comparison (Pt-Co), <sup>4</sup>2130. Nephelometric, <sup>5</sup>2150. Sensory, <sup>6</sup>2160. Sensory, <sup>7</sup>2540C. Total Dissolved Solids (TDS) dried @ 180°C, <sup>8</sup>2340C. EDTA Titrimetric, <sup>9</sup>4110B. Ion Chromatography, <sup>10</sup>SAMPLE PREPARATION: 3030K. Microwave-Assisted Nitric Acid Digestion ANALYSIS: 3125. Metals by Inductively-Coupled Plasma - Mass Spectrometer (ICP-MS)

CERTIFIED CORRECT BY:

*Dianne D. Dasmariñas*  
DIANNE D. DASMARIÑAS, RCh  
Analytical Services Manager  
PRC License No. 0011960

NOTED BY:

*Anna Karla S. Gutierrez*  
ANNA KARLA S. GUTIERREZ, RMT  
Laboratory Services Manager  
PRC License No. RC 0060988