Fecha de Muestrero	Codigo	Hora muestreo		T. Amb	T. Agua	COND	SDT	Turb	pH	O. D.	SST	Color	S.S.V	S.T	Alcali	S.SED	DBO5	DQO	P T	Orto	Nitra	Nitri	TKN	N. A	NT	Sulfa	Coli. T	Coli. F
				° C	° C	uc/cm	mg/l	NTU		mg/l	mg/l		mg/l	mg/l		mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l			
8-4-21	RA-201A	8:00 a. m.	REACTOR A	18	17,5			200	7,7	0,02	405																	
8-4-21	RA-201A	9:00 a. m.	REACTOR A	18	17			185			360																	
8-4-21	RA-201A	10:00 a. m.	REACTOR A	18,5	17			164		0,03	305																	
8-4-21	RA-201A	11:00 a. m.	REACTOR A	19	18			185		0,03	360																	
10-4-21	RA-201A	10:00 a. m.	REACTOR A	19	17			174	7,6	4,06																		
10-4-21	RA-201A	11:00 a. m.	REACTOR A	19	17			184	7,5		318																	
10-4-21	RA-201A	12:00 p. m.	REACTOR A	19	18			177	7,5		320																	
10-4-21	RA-201A	2:00 a. m.	REACTOR A	22	21			187			344																	
17-4-21	RA-201A	11:00 a. m.	REACTOR A	22	21,3	716	542	104	7,172	0	***	0					148,2	333										
17-4-21	RA-201A	11:30 a. m.	REACTOR A	22	21,1	668	507	104	7,052	0	***	0					146,5	287										
19-4-21	RA-201A	5:00 p. m.	REACTOR A	24	24,4	***	***	***	***	6,54 -4,92	***	0					***	0										
20-4-21	RA-201A	8:40 a. m.	REACTOR A	19	19,7	***	***	***	***	6,78-4,25	0	0					***	0										
21-4-21	RA-201A	5:00 a. m.	REACTOR A	20	21,3	***	***	***	***	5,94-5,07	***	***					***	0										
21-4-21	RA-201A	8:00 a. m.	REACTOR A	20	21,3	***	***	***	***	6,65-5,11	***	***					***	238										
21-4-21	RA-201A	2:30 p. m.	REACTOR A	24	21,3	***	***	***	***	6,46-6,26	***	***					***	***										
21-4-21	RA-201A	2:30 p. m.	REACTOR A	24	22,7	628	314	37,4	7,089	0,011	0,1	17					***	***										
21-4-21	RA-201A	10:10 p. m.	REACTOR A	20	19	***	***	***	***	6,52-1,47	***	***					***	***										
22-4-21	RA-201A	1:00 a. m.	REACTOR A	***	**	***	***	***	***	6,78-3,97	***	***					***	***										
22-4-21	RA-201A	5:00 a. m.	REACTOR A	***	***	***	***	***	***	6,85-5,61	***	***					***	***										
22-4-21	RA-201A	12:00 a. m.	REACTOR A	***	***	***	***	***	***	6,95-6,51	***	***					***	***										
23-4-21	RA-201A	2:00 a. m.	REACTOR A	16	20,2	***	***	***	***	6,74-6,39	***	***					***	***										
23-4-21	RA-201A	6:00 a. m.	REACTOR A	17	20,2	***	***	***	***	7,02-6,92	***	***					***	***										
23-4-21	RA-201A	7:30 a. m.	REACTOR A	17,5	20,2	***	***	***	***	7,12-6,98	***	***					***	***										
23-4-21	RA-201A	11:00 p. m.	REACTOR A	17	18	***	***	***	***	6,33-6,21	***	***					***	***										
24-4-21	RA-201A	5:00 a. m.	REACTOR A	17	17,9	***	***	***	***	6,70-6,66	***	***					***	***										
24-4-21	RA-201A	3:33 p. m.	REACTOR A	19	16,2	***	***	***	***	7,55-7,46	***	***					***	***										
25-4-21	RA-201A	10:30 a. m.	REACTOR A	17	16,2	***	***	***	***	7,34-6,57	***	***		***		0	***	***			***	***		***	***			
25-4-21	RA-201A	12:30 a. m.	REACTOR A	17	16,2	***	***	***	***	7,55-7,32	***	***		***		0	***	***			***	***		***	***			
25-4-21	RA-201A	2:00 p. m.	REACTOR A	17,5	16,9	***	***	***	***	7,44-7,41	***	***		***		0	***	***			***	***		***	***			
25-4-21	RA-201A	6:00 p. m.	REACTOR A	17	17	***	***	***	***	7,61-7,37	***	***		***		0	***	***			***	***		***	***			
26-4-21	RA-201A	8:30 a. m.	REACTOR A	17	20,6	592	297	103	7,306	5,74	625	21		***		0	***	***			***	***		***	***			
26-4-21	C.R-201A	8:45 a. m.	C. RECIRCULACION	17	20,4	603	302	46,4	7,072	3,52	77	23		***		0	***	***			***	***		***	***			

8-5-21	RA-201A	9:30 a. m.	REACTOR A	13	16	***	***	***	***	***	20	***	***			***	***	***	***		***	***		***				
8-5-21	RA-201B	8:00 a. m.	REACTOR B	13	16	***	***	***	***	***	50	***	***			***	***	***	***		***	***		***				
20-5-21	RA-201A	9:30 a. m.	REACTOR A	16,0	21,0	307	156	303	7,3	0,59	1620	***	***	***		450	***	***	***		>30	***	***				***	***
20-5-21	RA-201B	9:30 a. m.	REACTOR B	16,0	21,0	584	291	329	7,3	0,04	1810	***	***	***		800	***	***	***		>30	0,054	***				***	***
22-5-21	CR-201A	9:00 a. m.	C. RECIRCULADO	16,0	20,4	565	282	2880	7,6	0,01	7070	***	***	***		***	***	***	***		***	***	***				***	***
24-5-21	CR-201B	6:30 a. m.	C. RECIRCUL. B	12,0	15,5	699	350	90,4	7,3	0,03	3600	***	***	***		***	***	***	***		***	***	***				***	***
24-5-21	CR-201A	6:30 a. m.	C. RECIRCUL. A	12,0	14,9	643	321	68,5	7,2	0,02	12900	***	***	***		***	***	***	***		***	***	***				***	***
24-5-21	RA-201B	6:30 a. m.	REACTOR B	12,0	15,8	659	330	261	7,6	***	1970	***	***	***		***	***	***	28		5	0,086	***				***	***
24-5-21	RA-201A	6:30 a. m.	REACTOR A	12,0	15,9	538	270	261	7	***	1720	***	***	***		***	***	***	28		27	5,5	***				***	***
31-5-21	RA-201A	9:30 a. m.	REACTOR A	12,0	18,6	581	291	60	7,2	0,83	115	***	***	***		***	***	***	150		12,8	2,9		34	76,7		***	***
31-5-21	RA-201B	9:30 a. m.	REACTOR B	12,0	18,3	661	331	307	7,4	0,01	1630	***	***	***		***	***	***	150		7,7	0,34		61,1	87		***	***
4-1-00	RA-201A	7:30 a. m.	REACTOR A	6	17,5	609	302	411	7,3	0,178	1350	0	0	0		900*	0	0	0	0	2	0,03	32,6	0	0	0	0	
4-6-21	RA-201B	7:30 a. m.	REACTOR B	6	17,5	649	324	344	7,1	0,017	1190	0	0	0		900*	0	0	0	0	2	0,07	39,5	0	0	0	0	
10-6-21	RA-201A	9:30 a. m.	REACTOR A	10	17,4	687	344	358	6,6	0	1670	0	1608	2004		950*	0	0	0	0	5	0,017	39,8	0	0	0	0	
10-6-21	RA-201B	9:30 a. m.	REACTOR B	10	17,3	648	324	311	6,9	0	1220*	0	0	1544		950**	0	0	0	0	4	0,011	43,8	0	0	0	0	
14-6-21	RA-201A	9:30 a. m.	REACTOR A	10	17,3	728	364	282	7,4	0,052	1800	0	1728	2164		960*	0	0	0	0	0	0	58**	0	0	0	0	
14-6-21	RA-201B	10:30 a. m.	REACTOR B	10	17,1	689	345	293	7,5	0,03	1350	0	1352	1692		950**	0	0	0	0	0	0	62*	0	0	0	0	
17-6-21	RA-201A	9:30 a. m.	REACTOR A	6	17,8	561	281	274	7	1,8	2050	0	0	2330		990*	0	0	0	0	0	0	0	0	0	0	0	
14-6-21	RA-201B	10:30 a. m.	REACTOR B	6	17,5	583	292	315	7,2	2,1	1760	0	0	2050		930	0	0	0	0	0	0	0	0	0	0	0	
22-6-21	RA-201A	9:30 a. m.	REACTOR A	6	15,2	574	287	288	7	0	1875	0	0	0		910*	0	0	0	0	0	0	0	0	0	0	0	
22-6-21	RA-201B	10:30 a. m.	REACTOR B	6	15,2	584	292	241	7,3	0	1899	0	0	0		460	0	0	0	0	0	0	0	0	0	0	0	
24-6-21	RA-201A	9:30 a. m.	REACTOR A	10	19,4	679	338	337	7	0	1690	0	1417	2028		850*	0	0	0	0	6	0,42	0	0	0	0	0	
24-6-21	RA-201B	9:30 a. m.	REACTOR B	10	20	613	308	340	7,2	0	1660	0	1444	1970		800	0	0	0	0	1	0,06	0	0	0	0	0	
29-6-21	RA-201A	9:30 a. m.	REACTOR A	2	13,6	679	335	335	7,2	0	1700	0	0	0		840	0	0	0	0	1	0,9	0	0	49	0	0	
29-6-21	RA-201B	9:30 a. m.	REACTOR B	2	13,8	669	333	363	7,2	0	1490	0	0	0		780	0	0	0	0	1,5	0,29	0	0	45	0	0	
6-jul.-21	RA-201A	9:30 a. m.	REACTOR A	10,0	16,3	699	350	374	7,1	0,09	1870					850												
6-jul.-21	RA-201B	9:30 a. m.	REACTOR B	10,0	16,3	688	344	375	7,2	0,08	1800					790												
12-jul.-21	RA-201A	9:40 a. m.	REACTOR A	19,0	20,1						1430					900												
12-jul.-21	RA-201B	9:40 a. m.	REACTOR B	19,0	20,1						1720					850												
20-jul.-21	RA-201A	9:40 a. m.	REACTOR A	7	20,1	640	320	1350	7,3		1600					900						0,38						
20-jul.-21	RA-201B	9:40 a. m.	REACTOR B	7	16,6	651	326	1390	7,2		1200					790						0,13						
5-ago.-21	RA-201A	8:15 a. m.	REACTOR A	6,0	17,0					1120,00						750					0,9	0,01		103,8				
5-ago.-21	RA-201B	8:15 a. m.	REACTOR B	6,0	17,0					1210,00						720					1,1	0,008		87,1				
9-ago.-21	RA-201A	9:30 a. m.	REACTOR A	13,0	18,0			246	7,24		1460					780												

9-ago.-21	RA-201B	9:30 a. m.	REACTOR B	13,0	18,0			294	7,24		1740					730													
10-ago.-21	RA-201AE	8:00 a. m.	Reactor A entrada	8,0	17,5	708	353		7,09		2895		2615																
10-ago.-21	RA-201AM	8:00 a. m.	Reactor A medio	8,0	17,8	750	374		7,25		1250		1135																
10-ago.-21	RA-201AS	8:00 a. m.	Reactor A salida	8,0	17,7	749	374		7,26		1315		1260																
10-ago.-21	RA-201BE	8:00 a. m.	Reactor B entrada	8,0	17,7	804	402		7,01		5245		4170																
10-ago.-21	RA-201BM	8:00 a. m.	Reactor B medio	8,0	17,6	733	366		7,23		1685		1330																
10-ago.-21	RA-201BS	8:00 a. m.	Reactor B salida	8,0	17,8	730	365		7,26		1735		1300																
16-ago.-21	RA-201A	8:15 a. m.	Reactor A	8	17,6			9,54	7,28		2500					810					1,7	0,017				64			
16-ago.-21	RA-201B	8:15 a. m.	Reactor A	8	17,6			30,5	7,25		2330					790					2,9	0,024				53			
30-ago.-21	RA-201A	9:00 a. m.	REACTOR A	15	18,1	723	359	11,9*	7,64	0,027	2240		1886	2641		900					0,2	0,013							
30-ago.-21	RA-201B	9:00 a. m.	REACTOR B	15	18,3	746	373	21,1*	7	0,045	2150		1808	2699		850					3,5	0,12							
6-sep.-21	RA-201A	8:00 a. m.	REACTOR A	18,0	20,0				7,2		1400						710						1,2	0,096						
6-sep.-21	RA-201A	8:00 a. m.	REACTOR B	18,0	20,0				7,3		1130						580													
10-sep.-21	RA-201A	8:00 a. m.	REACTOR A	7,0	18,0						1980						900							4,7		50,11				
10-sep.-21	RA-201B	8:00 a. m.	REACTOR B	7,0	18,0						1550						800							2,1		60,21				
23-sep.-21	RA-201A	4:30 p. m.	REACTOR A	16	20,6			18,1	7,3	1,28	2730		2150				140				226					231			
23-sep.-21	RA-201AB	4:30 p. m.	REACTOR B	16	20,6			33,8	7,4	1,42	2330		1780				120				243					238			
24-sep.-21	RA-201A	4:30 p. m.	REACTOR A	10	16						1125		875				90													
24-sep.-21	RA-201B	4:30 p. m.	REACTOR AB	10	16						1160		1430				88													
14-oct.-21	RA-201A	7:40 a. m.	REACTOR A	23	22	752	377	20	7,2		1300					110														
14-oct.-21	RA-201B	7:40 a. m.	REACTOR B	23	22	760	390	8	7,4		1020					190														
20-oct.-21	RA-201A	7:40 a. m.	REACTOR A	18	19			21,3	7,1							210														
20-oct.-21	RA-201B	7:40 a. m.	REACTOR B	18	19			7,61	7,2							280														

RESUMEN DE ANALISIS FISICOQUIMICO Y BACTERIOLOGICO PTAR SAN BLASS - MES DE FEBRERO

DATOS GENERALES				ANALISIS FISICO -QUIMICO																									BACTERIOLOGICO	
Fecha Muestreo	Codigo	Hora A	DESCRIPCION	T. Am	T. Ag	COND	SDT	TURB	pH	OD	SST	Color V	ST	SSv	SED	DBO5	DQO	PT	OrtoP	TKN	NT	NA	Nitra	Nitri	SO4	Acd.V	Alca	M.O	COLI.T	COLI.F
				(C°)	(C°)	µs/cm	mg/l	NTU		mg/l	mg/l	Pt/Co	mg/l	mg/l	ml/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	NMP/100ml	
				Potenciometrico							gravimetrico - espectrofotometrico - volumetrico																			Tubos multiples	
1/2/2023	SP101A	8:00 AM	Sedimentador 1rio 101A	16	20,0						38,0																			
1/2/2023	SP101B	8:00 AM	Sedimentador 1rio 101B	16	20,0						33,0																			
1/2/2023	RA201A	8:00 AM	Reactor A	16	20,0				7,03		219,0				180,0															
1/2/2023	RA201B	8:00 AM	Reactor B	16	20,0				7,28		75,0				100,0															
1/2/2023	CR 201 A	8:00 AM	C. Recirculacion 201A	16	20,0						8000,0																			
1/2/2023	CR 201 B	8:00 AM	C. Recirculación 201B	16	20,0						5000,0																			
1/2/2023	CENT	10:00 AM	Canal de entrada	21	22,0	699,0	349,0	76,1	7,67	0,0	155,0	1170,0				208,1	332,0													
1/2/2023	CP301 A	10:00 AM	Canal Parschall	21	22,0	530,0	265,0	6,0	7,38	5,3	16,0	146,0				13,8	90,0													
1/2/2023	CENT	20:00PM	Canal de entrada	21	21,3	589,0	294,0	99,8	7,37	0,1	120,0																			
1/2/2023	CP301 A	20:00 PM	Canal Parschall	19	21,3	511,0	255,0	5,0	7,50	4,0	12,0																			
2/2/2023	SP101B	8:00 AM	Sedimentador 1rio 101A	19							53,0																			
2/2/2023	SP101B	8:00 AM	Sedimentador 1rio 101B	19							46,0																			
2/2/2023	RA201A	8:00 AM	Reactor A	20	22,0				7,47		150,0				180,0															
2/2/2023	RA201B	8:00 AM	Reactor B	20	22,0				7,44		105,0				170,0															
2/2/2023	CR 201 A	8:00 AM	C. Recirculación 201A	20							6500,0																			
2/2/2023	CR 201 B	8:00 AM	C. Recirculación 201B	20							1900,0																			
2/2/2023	CENT	10:00 AM	Canal de entrada	22	21,3	759,0	379,0	84,1	7,72	0,04	179,0						575,0	21,4	51,9		87,3		6,0	0,2	53,0					
2/2/2023	CP301 A	10:00 AM	Canal Parschall	22	21,3	536,0	268,0	4,7	7,58	5,4	13,1						106,0	4,6	9,8	48,3	22,2		12,0	0,3	65,0					
2/2/2023	RA201A	15:30	Reactor A	26	26,0										180,0															
2/2/2023	RA201B	15:30	Reactor B	26	26,0										180,0															
2/2/2023	CENT	20:00PM	Canal de entrada	21	21,2	551,0	275,0	81,3	6,89	0,0	140,0																			
2/2/2023	CP301 A	20:00 PM	Canal Parschall	21	21,3	583,0	292,0	9,1	7,10	3,0	26,0																			
3/2/2023	SP101A	8:00 AM	Sedimentador 1rio 101A	16							82,0																			
3/2/2023	SP101B	8:00 AM	Sedimentador 1rio 101B	16							87,0																			
3/2/2023	RA201A	8:00 AM	Reactor A	16	22,3				7,03		188,0				200,0															
3/2/2023	RA201B	8:00 AM	Reactor B	16	22,3				7,07		128,0				200,0															
3/2/2023	CR 201 A	8:00 AM	C. Recirculación 201A	16	22,0						10100,0																			
3/2/2023	CR 201 B	8:00 AM	C. Recirculación 201B	16	22,0						3700,0																			
3/2/2023	CENT	10:00 AM	Canal de entrada	18	22,2	607,0	303,0	63,3	7,43	0,1	160,0	1220,0				207,8	319,0													
3/2/2023	CP301 A	10:00 AM	Canal Parschall	18	22,6	579,0	289,0	7,0	7,35	5,0	24,0	222,0				14,0	89,0													
5/2/2023	CENT	20:00PM	Canal de entrada	15	22,9	618,0	310,0	78,5	6,89	0,0	117,0																			
5/2/2023	CP301 A	20:00 PM	Canal Parschall	15	22,7	674,0	337,0	6,5	7,02	4,2	17,0																			
6/2/2023	SP101A	8:00 AM	Sedimentador 1rio 101A	19							57,0																			
6/2/2023	SP101B	8:00 AM	Sedimentador 1rio 101B	19							54,0																			
6/2/2023	RA201A	8:00 AM	Reactor A	19	22,7				6,74		356,0				200,0															
6/2/2023	RA201B	8:00 AM	Reactor B	19	22,7				6,85		290,0				205,0															
6/2/2023	CR 201 A	8:00 AM	C. Recirculación 201A	19							3100,0																			
6/2/2023	CR 201 B	8:00 AM	C. Recirculación 201B	19							1900,0																			
6/2/2023	CENT	10:00 AM	Canal de entrada	20	22,7	800,0	400,0	108,0	7,38	0,0	223,0	2170,0					556,0													
6/2/2023	CP301 A	10:00 AM	Canal Parschal	20	23,4	646,0	321,0	4,7	7,19	5,4	5,0	99,0					83,0													
6/2/2023	CENT	20:00PM	Canal de entrada	18	21,2	328,0	164,0	49,9	7,03	0,4	83,0																			

6/2/2023	CP301 A	20:00 PM	Canal Parschall	18	21,4	631,0	315,0	3,5	7,43	5,6	12,0																			
7/2/2023	SP101A	8:00 AM	Sedimentador 1rio 101A	17							49,0																			
7/2/2023	SP101B	8:00 AM	Sedimentador 1rio 101B	17							40,0																			
7/2/2023	RA201A	8:00 AM	Reactor A	17	22,0				6,95		437,0				270,0															
7/2/2023	RA201B	8:00 AM	Reactor B	17	22,0				6,71		386,0				350,0															
7/2/2023	CR 201 A	8:00 AM	C. Recirculación 201A	17							1200,0																			
7/2/2023	CR 201 B	8:00 AM	C. Recirculación 201B	17							2300,0																			
7/2/2023	CENT	10:00 AM	Canal de entrada	18	22,0	821,0	410,0	70,9	7,73	0,0	148,0	2210,0					1491,0													
7/2/2023	CP301 A	10:00 AM	Canal Parschall	18	21,9	559,0	278,0	2,8	7,30	5,9	12,0	95,0					72,0													
7/2/2023	CENT	11:07 AM	Canal de entrada	18	22,0	785,0	392,0		7,47	0,1	207,0																			
7/2/2023	CENT	2:30 PM	Canal de entrada	21	23,0	676,0	338,0		6,96	0,0	414,0																			
7/2/2023	CENT	20:00PM	Canal de entrada	18	20,0	571,0	286,0	137,0	7,02	0,0	268,0																			
7/2/2023	CP301 A	20:00 PM	Canal Parschall	18	20,0	537,0	271,0	5,3	6,98	5,9	14,0																			
8/2/2023	SP101A	8:00 AM	Sedimentador 1rio 101A	17							70,0																			
8/2/2023	SP101B	8:00 AM	Sedimentador 1rio 101B	17							71,0																			
8/2/2023	RA201A	8:00 AM	Reactor A	17	21,0				6,89		413,0				260,0															
8/2/2023	RA201B	8:00 AM	Reactor B	17	21,0				7,01		366,0				250,0															
8/2/2023	CR 201 A	8:00 AM	C. Recirculación 201A	17							2520,0																			
8/2/2023	CR 201 B	8:00 AM	C. Recirculación 201B	17							3790,0																			
8/2/2023	CENT	10:00 AM	Canal de entrada	21	22,0	786,0	392,0	140,0	7,48	0,1	252,0	1470,0				202,0	609,0													
8/2/2023	CP301 A A	10:00 AM	Canal Parchall Ant UV	21	22,0	525,0	263,0	4,2	6,95	4,9	13,0																		8,00E+05	4,00E+05
8/2/2023	CP301 D A	10:00 AM	Canal Parchall Desp UV	21	22,0	523,0	261,0	4,2	6,97	5,8	11,0	108,0				5,4	91,0												4,00E+05	4,00E+05
8/2/2023	CENT	20:00PM	Canal de entrada	20	22,4	605,0	303,0	128,00	6,9	0,0	256,0																		<1000	<1000
8/2/2023	CP301 A	20:00 PM	Canal Parschall	20	22,4	531,0	266,0	4,98	6,7	5,6	15,0																			
9/2/2023	SP101A	8:00 AM	Sedimentador 1rio 101A	18							72,0																			
9/2/2023	SP101B	8:00 AM	Sedimentador 1rio 101B	18							73,0																			
9/2/2023	RA201A	8:00 AM	Reactor A	18	23,2				6,5		251,0				200,0															
9/2/2023	RA201B	8:00 AM	Reactor B	18	23,3				6,47		226,0				200,0															
9/2/2023	CR 201 A	8:00 AM	C. Recirculación 201A	18							2930,0																			
9/2/2023	CR 201 B	8:00 AM	C. Recirculación 201B	18							6900,0																			
9/2/2023	CENT	10:30 AM	Canal de entrada	22	23,0	760,0	379,0	137,0	7,31	0,0	242,0	1800,0					484,0	23,8	62,36	28	86,3		13	0,23	20					
9/2/2023	CP301	10:30 AM	Canal Parchall Desp UV	22	23,0	568,0	284,0	4,1	6,92	5,1	11,0	122,0					80,0	7,96	17,04	19,3	30,13		10	0,83	63					
9/2/2023	CENT	20:00PM	Canal de entrada	20	21,0	366,0	182,0	27,00	7,1	0,7	42,0																			
9/2/2023	CP301 A	20:00 PM	Canal Parschall	20	21,0	599,0	299,0	4,8	7,27	5,1	12,0																			
10/2/2023	SP101A	8:00 AM	Sedimentador 1rio 101A	18							69,0																			
10/2/2023	SP101B	8:00 AM	Sedimentador 1rio 101B	18							69,0																			
10/2/2023	RA201A	8:00 AM	Reactor A	18	22,4				6,91		363,0				290,0															
10/2/2023	RA201B	8:00 AM	Reactor B	18	23,0				6,97		546,0				340,0															
10/2/2023	CR 201 A	8:00 AM	C. Recirculación 201A	18							5640,0																			
10/2/2023	CR 201 B	8:00 AM	C. Recirculación 201B	18							2940,0																			
10/2/2023	CENT	10:00 AM	Canal de entrada	22	23,0	639,0	318,0	68,8	7,25	0,0	140,0	990,0				148,3	284,0													
10/2/2023	CP301	10:00 AM	Canal Parchall Desp UV	22	23,0	566,0	283,0	4,7	7,02	5,4	8,0	81,0				5,2	76,0													
12/2/2023	CENT	20:00PM	Canal de entrada	24	21,7	578,0	289,0	71,2	7,01	0,0	119,0																			
12/2/2023	CP301 A	20:00 PM	Canal Parchall	24	21,7	595,0	297,0	3,6	6,93	4,7	8,0																			
13/2/2023	SP101A	8:00 AM	Sedimentador 1rio 101A	22							49,0																			
13/2/2023	SP101B	8:00 AM	Sedimentador 1rio 101B	22							50,0																			
13/2/2023	RA201A	8:00 AM	Reactor A	22	22,0				6,65		181,0																			
13/2/2023	RA201B	8:00 AM	Reactor B	22	22,0				6,84		177,0																			
13/2/2023	CR 201 A	8:00 AM	C. Recirculación 201A	22							21000,0																			
13/2/2023	CR 201 B	8:00 AM	C. Recirculación 201B	22							24400,0																			
13/2/2023	CENT	10:00 AM	Canal de entrada	23	22,7	800,0	400,0	81,1	7,17	0,0	173,0	183,0					477,0													
13/2/2023	CP301	10:00 AM	Canal Parchall Desp UV	23	23,4	603,0	302,0	4,01	6,9	4,7	5,0	62					104,0													
13/2/2023	CENT	20:00PM	Canal de entrada	20	21,0	285,0	142,0	70,2	6,05	0,6	106,0																			
13/2/2023	CP301 A	20:00 PM	Canal Parschall	20	21,0	627,0	312,0	5,3	6,36	3,4	14,0																			

14/2/2023	SP101A	8:30 AM	Sedimentador 1rio 101A	18							47,0																					
14/2/2023	SP101B	8:30 AM	Sedimentador 1rio 101B	18							44,0																					
14/2/2023	RA201A	8:30 AM	Reactor A	18	23,0				6,10		403,0				220,0																	
14/2/2023	RA201B	8:30 AM	Reactor B	18	23,0				6,23		349,0				230,0																	
14/2/2023	CR 201 A	8:30 AM	C. Recirculación 201A	18							3140,0																					
14/2/2023	CR 201 B	8:30 AM	C. Recirculación 201B	18							3370,0																					
14/2/2023	CENT	10:00 AM	Canal de entrada	20	22,0	579,0	290,0	73,9	7,65	2,0	131,0	900,0					281,0															
14/2/2023	CP301	10:00 AM	Canal Parchall Desp UV	20	22,0	575,0	287,0	3,4	7,47	4,2	11,0	80,0					103,0															
14/2/2023	CENT	20:00PM	Canal de entrada	22	23,0	550,0	275,0	59,0	6,83	0,00	98,0																					
14/2/2023	CP301 A	20:00 PM	Canal Parschall	22	23,0	551,0	276,0	3,6	6,95	3,1	9,0																					
15/2/2023	SP101A	8:00 AM	Sedimentador 1rio 101A	18							92,0																					
15/2/2023	SP101B	8:00 AM	Sedimentador 1rio 101B	18							86,0																					
15/2/2023	RA201A	8:00 AM	Reactor A	18	23,0				5,73		425,0				240,0																	
15/2/2023	RA201B	8:00 AM	Reactor B	18	23,0				6,56		399,0				260,0																	
15/2/2023	CR 201 A	8:00 AM	C. Recirculación 201A	18							10100,0																					
15/2/2023	CR 201 B	8:00 AM	C. Recirculación 201B	18							8200,0																					
15/2/2023	CENT	10:00 AM	Canal de entrada	19	23,2	644,0	322,0	44,5	7,64	0,1	97,0	6400,0				112,1	273,0															
15/2/2023	CP301	10:00 AM	Canal Parchall Desp UV	19	23,2	542,0	271,0	3,0	7,30	5,4	10,0	78,0				5,4	102,0															
15/2/2023	CENT	20:00PM	Canal de entrada	19	22,2	578,0	289,0	49,2	6,70	0,1	89,0																					
15/2/2023	CP301 A	20:00 PM	Canal Parschall	19	22,2	559,0	280,0	7,3	6,63	3,7	13,0																					
16/2/2023	SP101A	8:00 AM	Sedimentador 1rio 101A	19							43,0																					
16/2/2023	SP101B	8:00 AM	Sedimentador 1rio 101B	19							41,0																					
16/2/2023	RA201A	8:00 AM	Reactor A	19	22,3				6,30		288,0				200,0																	
16/2/2023	RA201B	8:00 AM	Reactor B	19	22,3				6,52		279,0				180,0																	
16/2/2023	CR 201 A	8:00 AM	C. Recirculación 201A	19							8000,0																					
16/2/2023	CR 201 B	8:00 AM	C. Recirculación 201B	19							6500,0																					
16/2/2023	CENT	10:00 AM	Canal de entrada	23	22,2	771,0	385,0	71,9	7,13	0,0	142,0						392,0	23,6	66,1	38	87,4	9	0,01	58								
16/2/2023	CP301	10:00 AM	Canal Parchall Desp UV	23	22,5	546,0	273,0	4,1	6,65	5,2	10,0						85,0	4,23	12,73	14,4	29,84	10	1,07	74								
16/2/2023	CENT	20:00PM	Canal de entrada	19	19,8	404,0	202,0	64,3	6,94	0,39	86,0																					
16/2/2023	CP301 A	20:00 PM	Canal Parchall	19	19,8	516,0	271,0	15,3	6,85	4,95	17,0																					
17/2/2023	SP101A	8:00 AM	Sedimentador 1rio 101A	13							49,0																					
17/2/2023	SP101B	8:00 AM	Sedimentador 1rio 101B	13							48,0																					
17/2/2023	RA201A	8:00 AM	Reactor A	13	18,0				6,66		214,0				110,0																	
17/2/2023	RA201B	8:00 AM	Reactor B	13	18,0				6,70		157,0				100,0																	
17/2/2023	CR 201 A	8:00 AM	C. Recirculación 201A	13							5260,0																					
17/2/2023	CR 201 B	8:00 AM	C. Recirculación 201B	13							5380,0																					
17/2/2023	CENT	10:30 AM	Canal de entrada	17	22,4	540,0	270,0	57,4	7,16	0,58	122,0	900,0				97,1	204,0															
17/2/2023	CP301	10:30 AM	Canal Parchall Desp UV	17	22,5	484,0	243,0	19,8	6,62	4,75	19,8	337,0				3,2	79,0															
20/2/2023	RA201A	8:45 AM	Reactor A	22											180,0																	
20/2/2023	RA201B	8:45 AM	Reactor B	22											130,0																	
21/2/2023	CENT	20:00PM	Canal de entrada	18	21,0	621,0	310,0	61,9	7,73	0,03	104,0																					
21/2/2023	CP301 A	20:00 PM	Canal Parschall	18	21,0	583,0	291,0	7,1	7,48	2,39	17,0																					
22/2/2023	SP101A	8:00 AM	Sedimentador 1rio 101A	17							50,0																					
22/2/2023	SP101B	8:00 AM	Sedimentador 1rio 101B	17							48,0																					
22/2/2023	RA201A	8:00 AM	Reactor A	17	21,0				6,44		340,0				210,0																	
22/2/2023	RA201B	8:00 AM	Reactor B	17	21,0				6,24		463,0				240,0																	
22/2/2023	CR 201 A	8:00 AM	C. Recirculación 201A	17							2600,0																					
22/2/2023	CR 201 B	8:00 AM	C. Recirculación 201B	17							2100,0																					
22/2/2023	CENT	10:00 AM	Canal de entrada	21	22,3	774,0	387,0	54,8	7,92	0,05	127,0	890,0				179,6	367,0														1,10E+05	7,00E+05
22/2/2023	CP301	10:00 AM	Canal Parchall an. UV	21	22,3	545,0	279,0	6,9	7,35	4,80	22,0																				<10000	<10000
22/2/2023	CP301	10:00 AM	Canal Parchall Desp UV	21	22,3	527,0	264,0	5,8	7,14	4,65	12,0	75,0				10,6	108,0														<100	<100
22/2/2023	CENT	20:00PM	Canal de entrada	18	20,7	286,0	143,0	86,9	7,23	1,80	210,0																					
22/2/2023	CP301 A	20:00 PM	Canal Parschall	18	20,6	529,0	265,0	26,6	6,90	3,95	52,0																					
23/2/2023	SP101A	8:00 AM	Sedimentador 1rio 101A	18							140,0																					

23/2/2023	SP101B	8:00 AM	Sedimentador 1rio 101B	18							70,0																						
23/2/2023	RA201A	8:00 AM	Reactor A	18					6,44		252,0				180,0																		
23/2/2023	RA201B	8:00 AM	Reactor B	18					6,52		292,0				140,0																		
23/2/2023	CR 201 A	8:00 AM	C. Recirculación 201A	18							13100,0																						
23/2/2023	CR 201 B	8:00 AM	C. Recirculación 201B	18							6100,0																						
23/2/2023	CENT	10:00 AM	Canal de entrada	20	21,9	735,0	368,0	57,5	8,54	0,06	127,0	1060,0					354,0	19,2	55	40	61,1		16	0,12	58								
23/2/2023	CP301	10:00 AM	Canal Parchall Desp UV	20	22,1	497,0	248,0	8,5	7,16	4,68	19,0	136,0					126,0	12,66	17,83	25	30,15		18	2,34	64								
23/2/2023	CENT	20:00PM	Canal de entrada	19	20,9	589,0	294,0	40,7	7,58	0,10	60,0																						
23/2/2023	CP301 A	20:00 PM	Canal Parschall	19	20,9	517,0	256,0	15,7	6,80	3,95	28,0																						
24/2/2023	SP101A	8:00 AM	Sedimentador 1rio 101A	18						54,00																							
24/2/2023	SP101B	8:00 AM	Sedimentador 1rio 101B	18						51,00																							
24/2/2023	RA201A	8:00 AM	Reactor A	18	21,8				6,51	238,00					200,0																		
24/2/2023	RA201B	8:00 AM	Reactor B	18	21,8				6,38	283,00					150,0																		
24/2/2023	CR 201 A	8:00 AM	C. Recirculación 201A	18						3090,00																							
24/2/2023	CR 201 B	8:00 AM	C. Recirculación 201B	18						2300,00																							
24/2/2023	CENT	10:00 AM	Canal de entrada	20	21,9	791,0	396,0	56,9	7,72	0,06	138,0	1030,0				430,2	989,0																
24/2/2023	CP301	10:00 AM	Canal Parchall Desp UV	20	22,0	490,0	247,0	6,1	7,88	3,86	15,0	107,0				11,8	114,0																
26/2/2023	CENT	20:00PM	Canal de entrada	18	20,3	615,0	308,0	65,2	8,07	0,02	109,0																						
26/2/2023	CP301 A	20:00 PM	Canal Parschall	18	20,5	504,0	252,0	6,9	7,72	5,29	15,0																						
27/2/2023	SP101A	8:00 AM	Sedimentador 1rio 101A	18							51,0																						
27/2/2023	SP101B	8:00 AM	Sedimentador 1rio 101B	18							46,0																						
27/2/2023	RA201A	8:00 AM	Reactor A	18	21,0				6,80		451,0				280,0																		
27/2/2023	RA201B	8:00 AM	Reactor B	18	21,0				6,70		346,0				220,0																		
27/2/2023	CR 201 A	8:00 AM	C. Recirculación 201A	18							2000,0																						
27/2/2023	CR 201 B	8:00 AM	C. Recirculación 201B	18							1500,0																						
27/2/2023	CENT	10:00 AM	Canal de entrada	20	21,9	673,0	337,0	71,5	8,30	0,05	150,0	750,0					383,0																
27/2/2023	CP301	10:00 AM	Canal Parchall Desp UV	20	22,3	439,0	220,0	6,2	7,31	4,93	16,0	145,0					106,0																
27/2/2023	RA201A	15:00 PM	Reactor A	21											200,0																		
27/2/2023	RA201B	15:00 PM	Reactor B	21											150,0																		
27/2/2023	CENT	20:00PM	Canal de entrada	20	22,1	658,0	329,0	42,4	7,70	0,03	62,0																						
27/2/2023	CP301 A	20:00 PM	Canal Parschall	20	22,0	480,0	240,0	9,6	7,36	4,19	21,0																						
28/2/2023	SP101A	8:30 AM	Sedimentador 1rio 101A	18							51,0																						
28/2/2023	SP101B	8:30 AM	Sedimentador 1rio 101B	18							48,0																						
28/2/2023	RA201A	8:30 AM	Reactor A	18					6,97		349,0				280,0																		
28/2/2023	RA201B	8:30 AM	Reactor B	18					6,79		417,0				210,0																		
28/2/2023	CR 201 A	8:30 AM	C. Recirculación 201A	18							3000,0																						
28/2/2023	CR 201 B	8:30 AM	C. Recirculación 201B	18							13500,0																						
28/2/2023	CENT	10:00 AM	Canal de entrada	21	22,0	699,0	349,0	94,6	8,01	0,02	168,0	1490,0					393,0																
28/2/2023	CP301	10:00 AM	Canal Parchall Desp UV	21	22,0	451,0	225,0	4,5	7,06	5,11	12,0	88,0					78,0																
28/2/2023	CENT	20:00PM	Canal de entrada	17	23,0	525,0	262,0	82,9	7,47	0,01	106,0																						
28/2/2023	CP301 A	20:00 PM	Canal Parschall	17	23,0	469,0	234,0	9,5	7,11	4,47	23,0																						

RESUMEN DE ANALISIS FISICOQUIMICO Y BACTERIOLOGICO PTAR SAN BLAS

DATOS GENERALES				ANALISIS FISICO-QUIMICO																								BACTERIOLOGICO	
Fecha Muestreo	Codigo	Hora A	DESCRIPCION	T. Am	T. Ag	COND	SDT	TURB	pH	OD	SST	Color V	ST	SSV	SED	DBO5	DQO	PT	OrtoP	TKN	NT	NA	Nitra	Nitri	SO4	Acid.V	Alca	M.O	COLIT	COLIF
				(C°)	(C°)	µs/cm	mg/l	NTU		mg/l	mg/l	Pt/Co	mg/l	mg/l	ml/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	NMP/100ml	
				Potenciometrico							gravimetrico - espectrofotometrico- volumetrico																		Tubos multiples	
1/6/2023	SP101A	7:30 AM	Sedimentador 1rio 101A	10							88,0																		
1/6/2023	SP101B	7:30 AM	Sedimentador 1rio 101B	10							81,0																		
1/6/2023	RA201A	7:30 AM	Reactor A	10	18,0				7,5		367,0				800,0														
1/6/2023	RA201B	7:30 AM	Reactor B	10	17,2				7,4		414,0				690,0														
1/6/2023	CR 201 A	7:30 AM	C. Recirculación 201A	10							1200,0																		
1/6/2023	CR 201 B	7:30 AM	C. Recirculación 201B	10							1300,0																		
1/6/2023	CENT	10:00 AM	Canal de entrada	12	20,0	948,0	474,0	143,0	8,0	0,0	288,0	76,0					634,0	21,7	98,9		109,7	160,5	3,0	0,1	48,0				
1/6/2023	CP301	10:00 AM	Canal Parchall Desp UV	12	20,4	701,0	350,0	18,0	7,5	4,2	48,0	50,0					162,0	20,4	29,3	52,3	74,9	29,1	4,0	0,1	64,0				
1/6/2023	RA201A	14:00PM	Reactor A	24							346,0				590,0														
1/6/2023	RA201B	14:00PM	Reactor B	24							384,0				550,0														
1/6/2023	CR 201 A	14:00PM	C. Recirculación 201A	24							1300,0																		
1/6/2023	CR 201 B	14:00PM	C. Recirculación 201B	24							1500,0																		
1/6/2023	CENT	20:00PM	Canal de entrada	10	17,0	695,0	346,0	145,0	7,4	0,1	215,0																		
1/6/2023	CP301	20:00 PM	Canal Parchall Desp UV	10	17,0	746,0	373,0	44,6	7,6	2,8	94,0																		
2/6/2023	SP101A	8:00 AM	Sedimentador 1rio 101A	7							89,0																		
2/6/2023	SP101B	7:30 AM	Sedimentador 1rio 101B	7							77,0																		
2/6/2023	RA201A	8:00 AM	Reactor A	7	17,4				7,5		424,0				980,0														
2/6/2023	RA201B	8:00 AM	Reactor B	7	17,8				7,5		464,0				800,0														
2/6/2023	CR 201 A	8:00 AM	C. Recirculación 201A	7							1440,0																		
2/6/2023	CR 201 B	7:30 AM	C. Recirculación 201B	7							1550,0																		
2/6/2023	CENT	10:00 AM	Canal de entrada	13	20,3	1009,0	505,0	136,0	8,0	0,0	286,0	67,0					491,0												
2/6/2023	CP301	10:00 AM	Canal Parchall Desp UV	13	20,3	715,0	360,0	5,5	7,7	5,1	18,0	51,0					112,0												
2/6/2023	RA201A	14:45PM	Reactor A	24							391,0				650,0														
2/6/2023	RA201B	14:45PM	Reactor B	24							408,0				500,0														
2/6/2023	CR 201 A	14:45PM	C. Recirculación 201A	24							1000,0																		
2/6/2023	CR 201 B	14:45PM	C. Recirculación 201B	24							1400,0																		
4/6/2023	CENT	20:00PM	Canal de entrada	15	18,3	739,0	371,0	104,0	7,4	0,0	181,0																		
4/6/2023	CP301	20:00 PM	Canal Parchall Desp UV	15	18,2	773,0	386,0	7,8	7,6	3,1	21,0																		
5/6/2023	SP101A	8:00 AM	Sedimentador 1rio 101A	12							101,0																		
5/6/2023	SP101B	8:00 AM	Sedimentador 1rio 101B	12							93,0																		
5/6/2023	RA201A	8:00 AM	Reactor A	12	18,6				7,4		531,0				530,0														
5/6/2023	RA201B	8:00 AM	Reactor B	12	18,7				7,5		676,0				770,0														
5/6/2023	CR 201 A	8:00 AM	C. Recirculación 201A	12							2200,0																		
5/6/2023	CR 201 B	8:00 AM	C. Recirculación 201B	12							2600,0																		
5/6/2023	CENT	10:00 AM	Canal de entrada	16	19,0	1109,0	552,0	136,0	8,3	0,0	295,0	88,0					482,0												
5/6/2023	CP301	10:00 AM	Canal Parchall Desp UV	16	19,0	769,0	384,0	4,5	7,6	3,6	20,0	38,0					93,0												
5/6/2023	RA201A	14:00PM	Reactor A	21							451,0				350,0														
5/6/2023	RA201B	14:00PM	Reactor B	21							515,0				450,0														
5/6/2023	CR 201 A	14:50PM	C. Recirculación 201A	21							1900,0																		
5/6/2023	CR 201 B	14:50PM	C. Recirculación 201B	21							2400,0																		
5/6/2023	CENT	20:00PM	Canal de entrada	10	18,0	699,0	350,0	108,0	7,2	0,1	175,0																		
5/6/2023	CP301	20:00 PM	Canal Parchall Desp UV	10	18,0	762,0	381,0	5,2	7,7	5,0	11,0																		
6/6/2023	SP101A	8:00 AM	Sedimentador 1rio 101A	7							83,0																		
6/6/2023	SP101B	8:00 AM	Sedimentador 1rio 101B	7							74,0																		
6/6/2023	RA201A	8:00 AM	Reactor A	7	18,0				7,4		533,0				550,0														
6/6/2023	RA201B	8:00 AM	Reactor B	7	18,0				7,5		566,0				760,0														
6/6/2023	CR 201 A	8:00 AM	C. Recirculación 201A	7							1400,0																		
6/6/2023	CR 201 B	8:00 AM	C. Recirculación 201B	7							3200,0																		

6/6/2023	CENT	10:00 AM	Canal de entrada	16	20,4	978,0	489,0	183,0	7,9	0,0	362,0	49,0					747,0													
6/6/2023	CP301	10:00 AM	Canal Parchall Desp UV	16	20,8	739,0	370,0	5,0	7,6	5,4	11,0	22,0					101,0													
6/6/2023	RA201A	15:00PM	Reactor A	27							444,0				380,0															
6/6/2023	RA201B	15:00PM	Reactor B	27							617,0				600,0															
6/6/2023	CR 201 A	15:00PM	C. Recirculación 201A	27							2000,0																			
6/6/2023	CR 201 B	15:00PM	C. Recirculación 201B	27							2900,0																			
6/6/2023	CENT	20:00PM	Canal de entrada	20	17,6	644,0	321,0	88,8	7,4	0,1	149,0																			
6/6/2023	CP301	20:00 PM	Canal Parchall Desp UV	20	17,7	747,0	374,0	9,6	7,6	3,0	29,0																			
7/6/2023	SP101A	8:00 AM	Sedimentador 1rio 101A	7							86,0																			
7/6/2023	SP101B	8:00 AM	Sedimentador 1rio 101B	7							86,0																			
7/6/2023	RA201A	8:00 AM	Reactor A	7	18,5				7,4		330,0				370,0															
7/6/2023	RA201B	8:00 AM	Reactor B	7	18,5				7,4		371,0				450,0															
7/6/2023	CR 201 A	8:00 AM	C. Recirculación 201A	7							3900,0																			
7/6/2023	CR 201 B	8:00 AM	C. Recirculación 201B	7							4000,0																			
7/6/2023	CENT	10:00 AM	Canal de entrada	16	19,2	985,0	492,0	138,0	7,8	0,0	282,0	52,0					1001,0													
7/6/2023	CP301	10:00 AM	Canal Parchall Desp UV	16	19,2	708,0	354,0	6,1	7,8	4,6	16,0	47,0					96,0													
7/6/2023	RA201A	15:00PM	Reactor A	24							469,0				570,0															
7/6/2023	RA201B	15:00PM	Reactor B	24							538,0				750,0															
7/6/2023	CR 201 A	15:00PM	C. Recirculación 201A	24							1800,0																			
7/6/2023	CR 201 B	15:00PM	C. Recirculación 201B	24							2100,0																			
7/6/2023	CENT	20:00PM	Canal de entrada	16	16,0	716,0	359,0	104,0	7,2	0,0	197,0																			
7/6/2023	CP301	20:00 PM	Canal Parchall Desp UV	16	16,0	704,0	352,0	6,8	7,5	4,5	25,0																			
8/6/2023	SP101A	8:00 AM	Sedimentador 1rio 101A	11							116,0																			
8/6/2023	SP101B	8:00 AM	Sedimentador 1rio 101B	11							118,0																			
8/6/2023	RA201A	8:00 AM	Reactor A	11	17,5				7,4		404,0				760,0															
8/6/2023	RA201B	8:00 AM	Reactor B	11	17,5				7,5		462,0				700,0															
8/6/2023	CR 201 A	8:00 AM	C. Recirculación 201A	11							2800,0																			
8/6/2023	CR 201 B	8:00 AM	C. Recirculación 201B	11							4400,0																			
8/6/2023	CENT	20:00PM	Canal de entrada	19	19,0	710,0	355,0	123,0	7,4	0,0	218,0																			
8/6/2023	CP301	20:00 PM	Canal Parchall Desp UV	19	19,0	715,0	358,0	11,3	7,6	4,2	31,0																			
9/6/2023	SP101A	7:40 AM	Sedimentador 1rio 101A	4							123,0																			
9/6/2023	SP101B	7:40 AM	Sedimentador 1rio 101B	4							118,0																			
9/6/2023	RA201A	7:40 AM	Reactor A	4					7,5		493,0				850,0															
9/6/2023	RA201B	7:40 AM	Reactor B	4					7,5		530,0				810,0															
9/6/2023	CR 201 A	7:40 AM	C. Recirculación 201A	4							2300,0																			
9/6/2023	CR 201 B	7:40 AM	C. Recirculación 201B	4							2400,0																			
9/6/2023	CENT	10:00 AM	Canal de entrada	8	18,4	695,0	348,0	47,4	7,4	0,1	110,0	42,0				150,6	282,0													
9/6/2023	CP301	10:00 AM	Canal Parchall Desp UV	8	18,5	743,0	371,0	7,0	7,5	3,3	25,0	35,0				13,2	95,0													
9/6/2023	RA201A	15:00PM	Reactor A	27							323,0				500,0															
9/6/2023	RA201B	15:00PM	Reactor B	27							349,0				510,0															
9/6/2023	CR 201 A	15:00PM	C. Recirculación 201A	27							2200,0																			
9/6/2023	CR 201 B	15:00PM	C. Recirculación 201B	27							2400,0																			
9/6/2023	RA201A	17:20PM	Reactor A	28											650,0															
9/6/2023	RA201B	17:20PM	Reactor B	28											600,0															
11/6/2023	RA201A	8:00 AM	Reactor A	11							461,0				800,0															
11/6/2023	RA201B	8:00 AM	Reactor B	11							581,0				810,0															
11/6/2023	CR 201 A	8:00 AM	C. Recirculación 201A	11							2000,0																			
11/6/2023	CR 201 B	8:00 AM	C. Recirculación 201B	11							2400,0																			
11/6/2023	CENT	20:00PM	Canal de entrada	6	18,0	780,0	389,0	108,0	7,3	0,0	193,0																			
11/6/2023	CP301	20:00 PM	Canal Parchall Desp UV	6	18,0	753,0	377,0	10,8	7,6	3,0	32,0																			
12/6/2023	SP101A	8:00 AM	Sedimentador 1rio 101A	6							140,0																			
12/6/2023	SP101B	8:00 AM	Sedimentador 1rio 101B	6							134,0																			
12/6/2023	RA201A	8:00 AM	Reactor A	6					7,5		379,0				600,0															

12/6/2023	RA201B	8:00 AM	Reactor B	6					7,5		399,0				700,0																
12/6/2023	CR 201 A	8:00 AM	C. Recirculación 201A	6							2600,0																				
12/6/2023	CR 201 B	8:00 AM	C. Recirculación 201B	6							3800,0																				
12/6/2023	CENT	10:00 AM	Canal de entrada	8	18,0	1173,0	586,0	125,0	8,3	0,0	257,0	71,0					586,0														
12/6/2023	CP301	10:00 AM	Canal Parchall Desp UV	8	18,0	764,0	382,0	12,0	7,6	5,6	32,0	65,0					124,0														
12/6/2023	RA201A	15:00PM	Reactor A	10							474,0				750,0																
12/6/2023	RA201B	15:00PM	Reactor B	10							526,0				730,0																
12/6/2023	CR 201 A	15:00PM	C. Recirculación 201A	10							2300,0																				
12/6/2023	CR 201 B	15:00PM	C. Recirculación 201B	10							2900,0																				
12/6/2023	CENT	20:00PM	Canal de entrada	6	14,9	711,0	353,0	92,7	7,4	0,0	167,0																				
12/6/2023	CP301	20:00 PM	Canal Parchall Desp UV	6	14,9	768,0	384,0	10,5	7,7	4,3	28,0																				
13/6/2023	SP101A	7:40 AM	Sedimentador 1rio 101A	2							83,0																				
13/6/2023	SP101B	7:40 AM	Sedimentador 1rio 101B	2							78,0																				
13/6/2023	RA201A	7:40 AM	Reactor A	2	16,5				7,4		492,0				810,0																
13/6/2023	RA201B	7:40 AM	Reactor B	2	16,7				7,3		622,0				850,0																
13/6/2023	CR 201 A	7:40 AM	C. Recirculación 201A	2							2300,0																				
13/6/2023	CR 201 B	7:40 AM	C. Recirculación 201B	2							2000,0																				
13/6/2023	CENT	10:00 AM	Canal de entrada	3	15,2	1024,0	512,0	138,0	7,6	0,0	301,0																				
13/6/2023	CP301	10:00 AM	Canal Parchall Desp UV	3	15,2	728,0	364,0	9,9	7,5	4,7	24,0																				
13/6/2023	RA201A	15:30PM	Reactor A	10							452,0				700,0																
13/6/2023	RA201B	15:30PM	Reactor B	10							580,0				800,0																
13/6/2023	CR 201 A	15:30PM	C. Recirculación 201A	10							2000,0																				
13/6/2023	CR 201 B	15:30PM	C. Recirculación 201B	10							3300,0																				
13/6/2023	CENT	20:00PM	Canal de entrada	1	15,0	693,0	346,0	93,1	7,1	0,1	177,0																				
13/6/2023	CP301	20:00 PM	Canal Parchall Desp UV	1	15,0	738,0	369,0	19,0	7,5	4,4	46,0																				
14/6/2023	SP101A	8:00 AM	Sedimentador 1rio 101A	-4							77,0																				
14/6/2023	SP101B	8:00 AM	Sedimentador 1rio 101B	-4							92,0																				
14/6/2023	RA201A	8:00 AM	Reactor A	-4					7,4		532,0				800,0																
14/6/2023	RA201B	8:00 AM	Reactor B	-4					3,3		503,0				700,0																
14/6/2023	CR 201 A	8:00 AM	C. Recirculación 201A	-4							2600,0																				
14/6/2023	CR 201 B	8:00 AM	C. Recirculación 201B	-4							3200,0																				
14/6/2023	CENT	10:00 AM	Canal de entrada	1	18,6	990,0	494,0	171,0	8,0	0,0	348,0	68,0					676,0														
14/6/2023	CP301	10:00 AM	Canal Parchall Desp UV	1	18,7	692,0	345,0	137,0	7,4	0,4	259,0	74,0					241,0														
14/6/2023	RA201A	15:00PM	Reactor A	14							433,0				800,0																
14/6/2023	RA201B	15:00PM	Reactor B	14							624,0				800,0																
14/6/2023	CR 201 A	15:00PM	C. Recirculación 201A	14							1700,0																				
14/6/2023	CR 201 B	15:00PM	C. Recirculación 201B	14							2100,0																				
14/6/2023	CENT	20:00PM	Canal de entrada	7	15,0	660,0	333,0	103,0	7,4	0,0	184,0																				
14/6/2023	CP301	20:00 PM	Canal Parchall Desp UV	7	15,0	708,0	354,0	54,3	7,5	3,6	97,0																				
15/6/2023	SP101A	8:00 AM	Sedimentador 1rio 101A	1	12,8				7,5		77,0																				
15/6/2023	SP101B	8:00 AM	Sedimentador 2rio 101B	1	14,5				7,4		83,0																				
15/6/2023	RA201A	8:00 AM	Reactor A	1	14,6				7,4		373,0				680,0																
15/6/2023	RA201B	8:00 AM	Reactor B	1	14,6				7,4		345,0				540,0																
15/6/2023	CR 201 A	8:00 AM	C. Recirculación 201A	1							3300,0																				
15/6/2023	CR 201 B	8:00 AM	C. Recirculación 201B	1							4000,0																				
15/6/2023	CENT	10:00 AM	Canal de entrada	6	16,3	1008,0	501,0	134,0	8,7	0,0	250,0	64,0					624,0														
15/6/2023	CP301	10:00 AM	Canal Parchall Desp UV	6	16,8	690,0	345,0	10,8	7,6	5,6	37,0	58,0					138,0														
15/6/2023	CENT	20:00PM	Canal de entrada	9	19,0	658,0	329,0	86,5	7,5	0,0	165,0																				
15/6/2023	CP301	20:00 PM	Canal Parchall Desp UV	9	19,1	699,0	350,0	20,6	7,3	4,1	65,0																				
15/6/2023	SP101B	8:00 AM	Sedimentador 1rio 101B	10	19,1	921,0	460,0	165,0	7,6	0,0	265,0						842,0														
16/6/2023	SP101A	8:00 AM	Sedimentador 1rio 101A	1							144,0																				
16/6/2023	SP101B	8:00 AM	Sedimentador 1rio 101B	1							141,0																				
16/6/2023	RA201A	8:00 AM	Reactor A	1					7,5		322,0				640,0																

16/6/2023	RA201B	8:00 AM	Reactor B	1					7,5		403,0				610,0		
16/6/2023	CR 201 A	8:00 AM	C. Recirculación 201A	1							2800,0						
16/6/2023	CR 201 B	8:00 AM	C. Recirculación 201B	1							2500,0						
16/6/2023	CENT	10:00 AM	Canal de entrada	1	19,0	1126,0	563,0	133,0	7,6	0,0	322,0	84,0				346,9	912,0
16/6/2023	CP301	10:00 AM	Canal Parchall Desp UV	1	19,0	699,0	349,0	11,0	7,5	3,7	38,0	49,0				34,6	170,0
16/6/2023	RA201A	15:20PM	Reactor A	20							380,0				710,0		
16/6/2023	RA201B	15:20PM	Reactor B	20							462,0				700,0		
16/6/2023	CR 201 A	15:20PM	C. Recirculación 201A	20							3100,0						
16/6/2023	CR 201 B	15:20PM	C. Recirculación 201B	20							3600,0						
16/6/2023	CENT	20:00PM	Canal de entrada	11	15,0	674,0	337,0	115,0	7,4	0,0	186,0						
16/6/2023	CP301	20:00 PM	Canal Parchall Desp UV	11	15,0	712,0	356,0	27,8	7,6	3,3	71,0						
17/6/2023	SP101A	8:00 AM	Sedimentador 1rio 101A	1							88,0						
17/6/2023	SP101B	8:00 AM	Sedimentador 1rio 101B	1							75,0						
17/6/2023	RA201A	8:00 AM	Reactor A	1							317,0				850,0		
17/6/2023	RA201B	8:00 AM	Reactor B	1							307,0				700,0		
17/6/2023	CR 201 A	8:00 AM	C. Recirculación 201A	1							1800,0						
17/6/2023	CR 201 B	8:00 AM	C. Recirculación 201B	1							2700,0						
19/6/2023	CENT	20:00PM	Canal de entrada	16	17,0	653,0	325,0	193,0	7,3	0,0	298,0						
19/6/2023	CP301	20:00 PM	Canal Parchall Desp UV	16	17,0	758,0	378,0	17,5	7,6	3,2	46,0						
20/6/2023	SP101A	8:00 AM	Sedimentador 1rio 101A	8							139,0						
20/6/2023	SP101B	8:00 AM	Sedimentador 1rio 101B	8							118,0						
20/6/2023	RA201A	8:00 AM	Reactor A	8					7,4		300,0				750,0		
20/6/2023	RA201B	8:00 AM	Reactor B	8					7,4		489,0				700,0		
20/6/2023	CR 201 A	8:00 AM	C. Recirculación 201A	8							3000,0						
20/6/2023	CR 201 B	8:00 AM	C. Recirculación 201B	8							4050,0						
20/6/2023	CENT	10:00 AM	Canal de entrada	11	17,3	1147,0	574,0	156,0	8,3	0,1	307,0	70,0					515,0
20/6/2023	CP301	10:00 AM	Canal Parchall Desp UV	11	17,8	721,0	361,0	10,2	7,5	3,9	34,0	50,0					83,0
21/6/2023	CENT	20:00PM	Canal de entrada	9	18,0	704,0	351,0	138,0	7,4	0,1	222,0						
21/6/2023	CP301	20:00 PM	Canal Parchall Desp UV	9	18,0	700,0	350,0	37,5	7,5	2,4	58,0						
22/6/2023	SP101A	8:00 AM	Sedimentador 1rio 101A	3							84,0						
22/6/2023	SP101B	8:00 AM	Sedimentador 1rio 101B	3							75,0						
22/6/2023	RA201A	8:00 AM	Reactor A	3					7,4		529,0				900,0		
22/6/2023	RA201B	8:00 AM	Reactor B	3					7,5		614,0				830,0		
22/6/2023	CR 201 A	8:00 AM	C. Recirculación 201A	3							2110,0						
22/6/2023	CR 201 B	8:00 AM	C. Recirculación 201B	3							2990,0						
22/6/2023	CENT	10:00 AM	Canal de entrada	4	17,8	1063,0	532,0	131,0	8,5	0,1	271,0	57,0					850,0
22/6/2023	CP301	10:00 AM	Canal Parchall Desp UV	4	18,0	691,0	349,0	103,0	7,6	3,4	35,0	17,0					101,3
22/6/2023	CENT	20:00PM	Canal de entrada	5	19,7	655,0	328,0	304,0	7,1	0,0	741,0						1711,5
22/6/2023	CP301	20:00 PM	Canal Parchall Desp UV		19,0	713,0	357,0	15,5	7,5	2,8	43,0						134,9
22/6/2023	CENT	21:00PM	Canal de entrada	15	20,0	716,0	358,0	148,0	7,3	0,0	295,0						687,9
22/6/2023	CENT	23:00PM	Canal de entrada	14	20,0	839,0	420,0	823,0	6,9	0,0	2510,0					3291,8	5161,5
23/6/2023	SP101A	8:00 AM	Sedimentador 1rio 101A	9							262,0						
23/6/2023	SP101B	8:00 AM	Sedimentador 1rio 101B	9							239,0						
23/6/2023	RA201A	8:00 AM	Reactor A	9	19,3				7,5		521,0				880,0		
23/6/2023	RA201B	8:00 AM	Reactor B	9	19,3				7,5		524,0				800,0		
23/6/2023	CR 201 A	8:00 AM	C. Recirculación 201A	9							2300,0						
23/6/2023	CR 201 B	8:00 AM	C. Recirculación 201B	9							3100,0						
23/6/2023	CENT	10:55 AM	Canal de entrada	26	21,9	899,0	450,0	129,0	7,7	0,0	247,0	45,0				283,6	936,6
23/6/2023	CP301	10:55 AM	Canal Parchall Desp UV	26	22,3	673,0	336,0	18,4	7,5	4,2	72,0	27,0				24,8	131,3
23/6/2023	RA201A	15:00PM	Reactor A	29							379,0				400,0		
23/6/2023	RA201B	15:00PM	Reactor B	29							392,0				330,0		
23/6/2023	CR 201 A	15:00PM	C. Recirculación 201A	29							3000,0						
23/6/2023	CR 201 B	15:00PM	C. Recirculación 201B	29							3000,0						

25/6/2023	CENT	20:00PM	Canal de entrada	10	18,0	725,0	363,0	113,0	7,5	0,0	187,0																						
25/6/2023	CP301	20:00 PM	Canal Parchall Desp UV	10	18,0	719,0	360,0	23,5	7,5	2,4	54,0																						
23/6/2023	SP101A	8:00 AM	Sedimentador 1rio 101A	14							85,0																						
26/6/2023	SP101B	8:00 AM	Sedimentador 1rio 101B	14							73,0																						
26/6/2023	RA201A	8:00 AM	Reactor A	14							449,0																						
26/6/2023	RA201B	8:00 AM	Reactor B	14							399,0																						
26/6/2023	CR 201 A	8:00 AM	C. Recirculación 201A	14							2900,0																						
26/6/2023	CR 201 B	8:00 AM	C. Recirculación 201B	14							2900,0																						
26/6/2023	CENT	10:00 AM	Canal de entrada	10	16,0	685,0	341,0	117,0	7,4	0,0	188,0						800,0																
26/6/2023	CP301	10:00 AM	Canal Parchall Desp UV	10	16,0	705,0	352,0	13,2	7,6	3,2	36,0						105,0																
27/6/2023	SP101A	8:00 AM	Sedimentador 1rio 101A	9							80,0																						
27/6/2023	SP101B	8:00 AM	Sedimentador 1rio 101B	9							71,0																						
27/6/2023	RA201A	8:00 AM	Reactor A	9					7,5		431,0				900,0																		
27/6/2023	RA201B	8:00 AM	Reactor B	9					7,4		404,0				550,0																		
27/6/2023	CR 201 A	8:00 AM	C. Recirculación 201A	9							3610,0																						
27/6/2023	CR 201 B	8:00 AM	C. Recirculación 201B	9							4120,0																						
27/6/2023	CENT	10:00 AM	Canal de entrada	16	19,0	1044,0	520,0	196,0	7,9	0,0	401,0	26,0																					
27/6/2023	CP301	10:00 AM	Canal Parchall Desp UV	16	19,0	685,0	343,0	6,9	7,5	6,0	20,0	15,0																					
27/6/2023	RA201A	11:00 AM	Reactor A	21							511,0																						
27/6/2023	RA201B	11:00 AM	Reactor B	21							556,0																						
27/6/2023	CR 201 A	11:00 AM	C. Recirculación 201A	21							3440,0																						
27/6/2023	CR 201 B	11:00 AM	C. Recirculación 201B	21							3960,0																						
27/6/2023	CENT	20:00PM	Canal de entrada	10	16,0	720,0	358,0	103,0	7,3	0,0	166,0																						
27/6/2023	CP301	20:00 PM	Canal Parchall Desp UV	10	16,0	674,0	337,0	18,0	7,5	3,5	30,0																						
28/6/2023	SP101A	8:00 AM	Sedimentador 1rio 101A	12							110,0																						
28/6/2023	SP101B	8:00 AM	Sedimentador 1rio 101B	12							109,0																						
28/6/2023	RA201A	8:00 AM	Reactor A	12					7,3		495,0				900,0																		
28/6/2023	RA201B	8:00 AM	Reactor B	12					7,3		496,0				880,0																		
28/6/2023	CR 201 A	8:00 AM	C. Recirculación 201A	12							4400,0																						
28/6/2023	CR 201 B	8:00 AM	C. Recirculación 201B	12							4710,0																						
28/6/2023	CENT	10:00 AM	Canal de entrada	9	21,7	714,0	357,0	131,0	7,1	0,0	190,0					353,6	720,0																
28/6/2023	CP301	10:00 AM	Canal Parchall Desp UV	9	21,6	681,0	341,0	11,0	7,5	4,5	28,0					12,3	105,0																
29/6/2023	SP101A	8:00 AM	Sedimentador 1rio 101A	12							130,0																						
29/6/2023	SP101B	8:00 AM	Sedimentador 1rio 101B	12							129,0																						
29/6/2023	RA201A	8:00 AM	Reactor A	12	20,8				7,5		412,0				900,0																		
29/6/2023	RA201B	8:00 AM	Reactor B	12	20,7				7,3		577,0				850,0																		
29/6/2023	CR 201 A	8:00 AM	C. Recirculación 201A	12							2800,0																						
29/6/2023	CR 201 B	8:00 AM	C. Recirculación 201B	12							3200,0																						
29/6/2023	CENT	10:00 AM	Canal de entrada	16	20,6	962,0	481,0	117,0	7,9	0,0	239,0	69,0					774,4																
29/6/2023	CP301	10:00 AM	Canal Parchall Desp UV	16	20,8	698,0	349,0	7,2	7,5	3,9	24,0	59,0					87,8																
29/6/2023	RA201A	15:00PM	Reactor A	24							490,0				750,0																		
29/6/2023	RA201B	15:00PM	Reactor B	24							315,0				390,0																		
29/6/2023	CR 201 A	15:00PM	C. Recirculación 201A	24							3700,0																						
29/6/2023	CR 201 B	15:00PM	C. Recirculación 201B	24							2500,0																						
29/6/2023	CENT	20:00PM	Canal de entrada	9	17,9	720,0	360,0	195,0	7,3	0,0	343,0																						
29/6/2023	CP301	20:00 PM	Canal Parchall Desp UV	9	18,1	744,0	372,0	69,2	7,5	1,8	56,0																						
30/6/2023	SP101A	8:00 AM	Sedimentador 1rio 101A	4							106,0																						
30/6/2023	SP101B	8:00 AM	Sedimentador 1rio 101B	4							97,0																						
30/6/2023	RA201A	8:00 AM	Reactor A	4	17,5				7,5		376,0				850,0																		
30/6/2023	RA201B	8:00 AM	Reactor B	4	17,5				7,6		545,0				800,0																		
30/6/2023	CR 201 A	8:00 AM	C. Recirculación 201A	4							4400,0																						
30/6/2023	CR 201 B	8:00 AM	C. Recirculación 201B	4							4900,0																						
30/6/2023	CENT	10:00 AM	Canal de entrada	8	18,8	1077,0	540,0	130,0	8,1	0,0	283,0	84,0				224,8	488,9																

30/6/2023	CP301	10:00 AM	Canal Parshall Desp UV	7	18,7	726,0	364,0	10,7	7,5	4,5	33,0	36,0				15,6	116,2																
30/6/2023	RA201A	15:00PM	Reactor A	25							399,0				850,0																		
30/6/2023	RA201B	15:00PM	Reactor B	25							625,0				790,0																		
30/6/2023	CR 201 A	15:00PM	C. Recirculación 201A	25							1700,0																						
30/6/2023	CR 201 B	15:00PM	C. Recirculación 201B	25							3000,0																						

ANEXO 2

INFORMACIÓN OBTENIDA DE LA PLANTA DE TRATAMIENTO DE SAN BLAS

(CAUDALES DEL AFLUENTE)

CAUDAL MAX. AFLUENTE GESTIÓN 2022 (l/s)			
HORA	MES		
	OCT	NOV	DIC
00:00	35,398	28,199	28,935
01:00	29,514	20,231	28,839
02:00	19,214	17,920	27,970
03:00	18,888	14,829	25,561
04:00	21,181	16,500	29,180
05:00	18,496	14,660	26,662
06:00	20,698	27,510	23,547
07:00	27,541	28,550	30,330
08:00	36,180	35,279	34,827
09:00	36,921	34,753	38,837
10:00	38,530	36,316	40,969
11:00	38,957	38,147	38,439
12:00	38,514	34,500	42,346
13:00	50,888	35,861	38,535
14:00	38,500	36,766	36,883
15:00	37,188	38,376	40,839
16:00	37,875	39,641	42,872
17:00	36,317	36,464	37,482
18:00	37,355	32,994	37,123
19:00	32,085	29,323	36,385
20:00	33,948	31,983	36,502
21:00	37,973	31,614	29,748
22:00	38,486	30,003	29,385
23:00	36,074	27,910	30,793

Fuente. Planta de Tratamiento de Aguas Residuales de San Blas

CAUDAL MAX. AFLUENTE GESTIÓN 2023 (L/s)												
HORA	MES											
	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SEP	OCT	NOV	DIC
00:00	31,91	47,76	41,02	36,85	35,29	28,81	30,25	27,00	26,06	30,31	30,92	32,69
01:00	30,80	51,11	33,66	35,80	30,50	25,94	28,07	22,95	24,28	43,19	29,94	30,05
02:00	29,80	40,93	33,16	32,30	24,90	23,83	26,33	18,99	20,47	22,70	23,90	31,02
03:00	30,28	36,50	28,54	32,96	23,56	25,11	19,53	19,10	18,02	20,54	21,24	25,34
04:00	27,18	33,64	29,66	32,08	23,84	21,58	19,50	18,46	16,42	18,66	22,04	29,81
05:00	37,93	35,56	31,44	31,75	23,63	22,65	19,50	18,73	26,53	22,46	20,01	26,23
06:00	35,54	36,48	32,96	31,65	25,81	21,60	20,35	25,74	18,41	24,78	20,84	30,32
07:00	32,65	36,18	38,73	35,74	29,07	26,20	30,14	24,26	26,87	45,55	39,10	32,84
08:00	38,64	40,83	52,65	43,94	38,53	40,49	34,74	34,05	34,27	37,89	39,78	50,05
09:00	40,31	43,88	48,91	50,43	38,70	42,36	37,14	37,10	37,65	35,23	40,24	44,31
10:00	42,61	53,43	54,48	50,50	39,86	36,25	39,81	36,89	39,71	38,48	40,01	45,15
11:00	51,50	42,86	51,00	54,99	43,64	41,27	45,40	37,94	37,54	36,01	35,25	44,86
12:00	43,54	44,93	50,59	52,14	45,75	41,86	44,97	38,11	37,36	37,55	35,33	47,41
13:00	39,54	44,93	49,85	50,65	42,88	41,35	45,75	43,02	36,36	36,24	37,30	42,34
14:00	40,13	45,31	47,26	49,20	41,40	40,09	43,71	39,53	34,88	34,91	45,72	45,71
15:00	38,49	44,67	52,05	51,92	40,15	40,75	39,42	38,06	35,68	39,43	33,89	42,08
16:00	38,16	40,64	60,16	53,13	37,50	40,06	40,32	35,85	37,26	36,22	77,28	40,72
17:00	46,01	39,83	51,02	51,39	38,23	39,59	39,65	36,66	35,39	33,73	35,80	41,75
18:00	46,73	39,61	47,72	51,35	37,52	38,38	37,50	34,80	34,18	33,43	33,03	42,05
19:00	36,02	37,88	44,93	44,29	36,52	37,86	36,17	33,51	34,64	31,75	31,56	40,40
20:00	35,46	38,81	43,18	42,37	36,03	35,69	33,54	34,74	34,50	32,78	32,06	40,19
21:00	33,10	38,65	39,56	44,76	32,03	34,47	35,31	33,57	32,68	29,35	30,85	39,66
22:00	32,66	36,50	50,59	40,32	36,14	33,39	31,87	33,67	30,61	29,84	32,54	33,53
23:00	34,41	36,70	47,00	41,53	37,04	33,33	31,24	31,02	29,39	33,48	34,93	32,69

Fuente. Planta de Tratamiento de Aguas Residuales de San Blas

CAUDAL MAX. AFLUENTE GESTIÓN 2024 (L/s)					
HORA	MES				
	ENE	FEB	MAR	ABR	MAY
00:00	32,083	37,154	31,543	34,771	28,188
01:00	30,818	36,502	27,684	29,398	27,044
02:00	26,728	36,497	27,079	24,242	23,754
03:00	35,698	38,000	26,270	23,571	21,123
04:00	29,684	34,621	27,665	24,810	22,048
05:00	27,009	39,808	38,127	28,871	22,081
06:00	40,238	37,696	30,914	27,957	27,474
07:00	46,599	42,548	32,514	28,505	30,559
08:00	37,420	44,400	41,730	44,281	43,874
09:00	42,061	47,537	44,306	39,726	44,101
10:00	40,713	48,761	40,815	48,206	42,132
11:00	43,415	47,870	42,141	43,645	42,890
12:00	43,113	48,636	40,570	46,800	42,036
13:00	40,886	48,476	40,360	46,096	43,740
14:00	41,758	45,146	35,500	42,606	41,577
15:00	41,085	45,920	34,597	42,239	39,877
16:00	39,280	43,091	36,466	45,792	38,265
17:00	37,753	43,129	35,735	40,198	38,205
18:00	46,000	42,956	43,627	38,949	35,826
19:00	44,816	42,308	36,716	35,190	32,340
20:00	35,456	39,825	36,659	35,828	31,937
21:00	34,292	38,401	33,799	33,240	30,215
22:00	33,857	41,717	31,122	33,466	29,971
23:00	33,903	38,500	32,467	38,603	29,555

Fuente. Planta de Tratamiento de Aguas Residuales de San Blas.

ANEXO 3

INFORMACIÓN OBTENIDA DE LA PLANTA DE TRATAMIENTO DE SAN BLAS

(CAUDALES DE RECIRCULACIÓN)

CAUDALES DE RECIRCULACIÓN DE LA GESTIÓN 2022 (L/S)			
HORA	MES		
	OCT	NOV	DIC
00:00	11,068	11,068	11,068
01:00	11,068	11,068	11,068
02:00	11,068	11,068	11,068
03:00	11,068	11,068	11,068
04:00	11,068	11,068	11,068
05:00	11,068	11,068	11,068
06:00	11,068	11,068	11,068
07:00	11,068	11,068	11,068
08:00	11,068	11,068	11,068
09:00	11,068	11,068	11,068
10:00	11,068	11,068	11,068
11:00	11,068	11,068	11,068
12:00	11,068	11,068	11,068
13:00	11,068	11,068	11,068
14:00	11,068	11,068	11,068
15:00	11,068	11,068	11,068
16:00	11,068	11,068	11,068
17:00	11,068	11,068	11,068
18:00	11,068	11,068	11,068
19:00	11,068	11,068	11,068
20:00	11,068	11,068	11,068
21:00	11,068	11,068	11,068
22:00	11,068	11,068	11,068
23:00	11,068	11,068	11,068

Fuente. Planta de Tratamiento de Aguas Residuales de San Blas

CAUDALES DE RECIRCULACIÓN DE LA GESTIÓN 2023 (L/S)												
HORA	MES											
	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SEP	OCT	NOV	DIC
00:00	11,068	11,068	11,068	11,068	11,068	11,068	11,068	11,068	11,068	11,068	11,068	11,068
01:00	11,068	11,068	11,068	11,068	11,068	11,068	11,068	11,068	11,068	11,068	11,068	11,068
02:00	11,068	11,068	11,068	11,068	11,068	11,068	11,068	11,068	11,068	11,068	11,068	11,068
03:00	11,068	11,068	11,068	11,068	11,068	11,068	11,068	11,068	11,068	11,068	11,068	11,068
04:00	11,068	11,068	11,068	11,068	11,068	11,068	11,068	11,068	11,068	11,068	11,068	11,068
05:00	11,068	11,068	11,068	11,068	11,068	11,068	11,068	11,068	11,068	11,068	11,068	11,068
06:00	11,068	11,068	11,068	11,068	11,068	11,068	11,068	11,068	11,068	11,068	11,068	11,068
07:00	11,068	11,068	11,068	11,068	11,068	11,068	11,068	11,068	11,068	11,068	11,068	11,068
08:00	11,068	11,068	11,068	11,068	11,068	11,068	11,068	11,068	11,068	11,068	11,068	11,068
09:00	11,068	11,068	11,068	11,068	11,068	11,068	11,068	11,068	11,068	11,068	11,068	11,068
10:00	11,068	11,068	11,068	11,068	11,068	11,068	11,068	11,068	11,068	11,068	11,068	11,068
11:00	11,068	11,068	11,068	11,068	11,068	11,068	11,068	11,068	11,068	11,068	11,068	11,068
12:00	11,068	11,068	11,068	11,068	11,068	11,068	11,068	11,068	11,068	11,068	11,068	11,068
13:00	11,068	11,068	11,068	11,068	11,068	11,068	11,068	11,068	11,068	11,068	11,068	11,068
14:00	11,068	11,068	11,068	11,068	11,068	11,068	11,068	11,068	11,068	11,068	11,068	11,068
15:00	11,068	11,068	11,068	11,068	11,068	11,068	11,068	11,068	11,068	11,068	11,068	11,068
16:00	11,068	11,068	11,068	11,068	11,068	11,068	11,068	11,068	11,068	11,068	11,068	11,068
17:00	11,068	11,068	11,068	11,068	11,068	11,068	11,068	11,068	11,068	11,068	11,068	11,068
18:00	11,068	11,068	11,068	11,068	11,068	11,068	11,068	11,068	11,068	11,068	11,068	11,068
19:00	11,068	11,068	11,068	11,068	11,068	11,068	11,068	11,068	11,068	11,068	11,068	11,068
20:00	11,068	11,068	11,068	11,068	11,068	11,068	11,068	11,068	11,068	11,068	11,068	11,068
21:00	11,068	11,068	11,068	11,068	11,068	11,068	11,068	11,068	11,068	11,068	11,068	11,068
22:00	11,068	11,068	11,068	11,068	11,068	11,068	11,068	11,068	11,068	11,068	11,068	11,068
23:00	11,068	11,068	11,068	11,068	11,068	11,068	11,068	11,068	11,068	11,068	11,068	11,068

Fuente. Planta de Tratamiento de Aguas Residuales de San Blas

CAUDALES DE RECIRCULACIÓN DE LA GESTIÓN 2024 (L/S)					
HORA	MES				
	ENE	FEB	MAR	ABR	MAY
00:00	11,068	11,068	11,068	11,068	11,068
01:00	11,068	11,068	11,068	11,068	11,068
02:00	11,068	11,068	11,068	11,068	11,068
03:00	11,068	11,068	11,068	11,068	11,068
04:00	11,068	11,068	11,068	11,068	11,068
05:00	11,068	11,068	11,068	11,068	11,068
06:00	11,068	11,068	11,068	11,068	11,068
07:00	11,068	11,068	11,068	11,068	11,068
08:00	11,068	11,068	11,068	11,068	11,068
09:00	11,068	11,068	11,068	11,068	11,068
10:00	11,068	11,068	11,068	11,068	11,068
11:00	11,068	11,068	11,068	11,068	11,068
12:00	11,068	11,068	11,068	11,068	11,068
13:00	11,068	11,068	11,068	11,068	11,068
14:00	11,068	11,068	11,068	11,068	11,068
15:00	11,068	11,068	11,068	11,068	11,068
16:00	11,068	11,068	11,068	11,068	11,068
17:00	11,068	11,068	11,068	11,068	11,068
18:00	11,068	11,068	11,068	11,068	11,068
19:00	11,068	11,068	11,068	11,068	11,068
20:00	11,068	11,068	11,068	11,068	11,068
21:00	11,068	11,068	11,068	11,068	11,068
22:00	11,068	11,068	11,068	11,068	11,068
23:00	11,068	11,068	11,068	11,068	11,068

Fuente. Planta de Tratamiento de Aguas Residuales de San Blas.

ANEXO 4

ESTADISTICA DESCRIPTIVA DE LOS DATOS RECOPILADOS DEL SISTEMA DE MONITOREO DE LA PTAR DE SAN BLAS

AFLUENTE			
ESTADISTICO	**GESTION 2022**	**GESTION 2023**	**GESTION 2024**
Máximo	50,888237	77,27572	48,761063
Mínimo	1	1,375	1
Promedio	23,95793056	27,59300953	27,70753606
Desv. Estándar	7,872350425	8,161338762	7,935472754
Numero de Datos	2048	8702	3224
CV (%)	32,85905853	29,57755932	28,64012425

Fuente: Elaboración propia.

RECIRCULACION			
ESTADISTICO	**GESTION 2022**	**GESTION 2023**	**GESTION 2024**
Máximo	11,06787	11,06787	11,06787
Mínimo	11,06787	11,06787	11,06787
Promedio	11,06787	11,06787	11,06787
Desv. Estándar	0,00	0,00	0,00
Numero de Datos	1184	6303	2845
CV (%)	0,00	0,00	0,00

Fuente: Elaboración propia.

ANEXO 5

VALORES DE VELOCIDADES A DIFERENTES NIVELES DE ALTURAS

VELOCIDAD (m/s)					
LONGITUD (m)	**H= 0.28m**	**H= 1m**	**H= 2m**	**H= 3m**	**H= 4m**
0,00000000	0,47383102	0,26739160	0,25108904	0,50714216	1,24709565
0,50853479	0,10927367	0,26063385	0,21149985	0,39089357	1,06025531
1,01706958	0,35388572	0,35880544	0,33015868	0,45575691	0,58044974
1,52560436	0,32126330	0,29499275	0,29139869	0,56260148	0,46806999
2,03413915	0,35876040	0,43343415	0,15637849	0,55069975	0,31384877
2,54267394	0,43989767	0,39268038	0,16496572	0,51877369	0,78332438
3,05120873	0,57782684	0,29387980	0,20282265	0,42568126	0,69947186
3,55974351	0,13100262	0,29457978	0,19730568	0,30328156	0,40578694
4,06827830	0,13478477	0,12182051	0,14601195	0,21617469	0,37500051
4,57681309	0,23292273	0,03570916	0,10685911	0,15468956	0,31382350
5,08534788	0,29575720	0,12562923	0,16244668	0,12458053	0,29218896
5,59388266	0,11047297	0,22407786	0,16061878	0,11797120	0,23466893
6,10241745	0,21491852	0,22292808	0,16387838	0,17395137	0,18283781
6,61095224	0,37835495	0,14186761	0,15136553	0,22752700	0,18804534
7,11948703	0,20251195	0,04202407	0,17765579	0,29072476	0,21048040
7,62802182	0,26953552	0,07068186	0,17934316	0,28268943	0,17030134
8,13655660	0,25028340	0,06389327	0,19473216	0,29396908	0,31199397
8,64509139	0,29449443	0,19186715	0,19530721	0,31243150	0,32940801
9,15362618	0,18539670	0,28012948	0,19105973	0,33193314	0,30553758
9,66216097	0,29865249	0,21963486	0,17559012	0,34583001	0,28972862
10,17069575	0,29416441	0,13069210	0,23272806	0,35810258	0,23173164
10,67923054	0,23397142	0,35765688	0,33041429	0,34334135	0,23607330
11,18776533	0,34631443	0,39867150	0,32885646	0,29804341	0,31661217
11,69630012	0,23108205	0,20264410	0,15730941	0,27283195	0,34249737
12,20483491	0,22534814	0,17870756	0,18012080	0,25232794	0,27024410
12,71336969	0,26763862	0,16095100	0,13744246	0,24885963	0,28918064
13,22190448	0,33902810	0,13944274	0,16523658	0,24294701	0,23765032
13,73043927	0,13670189	0,14605483	0,21007232	0,24409108	0,19568068
14,23897406	0,11953660	0,13923500	0,17158794	0,16943328	0,16125712
14,74750884	0,26511516	0,19138525	0,12447084	0,11316971	0,23519955
15,25604363	0,32754516	0,26260307	0,07822360	0,09485483	0,21509266
15,76457842	0,25521418	0,26768157	0,04238977	0,16888020	0,50717100
16,27311321	0,17812095	0,22405612	0,06132599	0,28885301	0,62423470
16,78164799	0,18981905	0,17467434	0,11005011	0,42327432	0,62811606
17,29018278	0,13684801	0,20405010	0,15793172	0,54048583	0,62305843
17,79871757	0,27173354	0,29463552	0,20467888	0,62390093	0,50317515
18,30725236	0,24742003	0,26929565	0,24501728	0,67724922	0,58054703
18,81578715	0,27447298	0,27899103	0,32324713	0,64989735	0,87204671
19,32432193	0,18010439	0,17648966	0,46216695	0,48682337	2,04430433
19,93285672	0,30840442	0,47311709	0,62388405	0,77417176	2,56629398

ANEXO 6

VALORES DE VELOCIDADES DEL PERFIL DE LA TUBERIA DEL AFLUENTE Y EFLUENTE Y CALCULO DE CAUDAL

LONGITUD	AFLUENTE	EFLUENTE
[m]	VELOCIDAD [m/s]	VELOCIDAD [m/s]
0	1,04466496	1,03535314
0,05294033	1,04443412	1,1300408
0,10588067	1,04905458	1,15628224
0,158821	1,0470781	1,19439047
0,21176134	1,05081339	1,27528436
0,26470167	1,04906045	1,27556023
0,31764201	1,04866655	1,26677783
0,37058234	1,04737374	1,25853611
0,42352267	0,99011998	1,26841487
0,47646301	0,96428121	1,25441252
0,52940334	0,89014864	1,25411212
0,58234368	0,84236003	1,30805806
PROMEDIO	1,00567131	1,2231019
DIAMETRO NOMINAL (mm)	315	315
AREA DE TUBERIA (m2)	0,077893	0,077893
CAUDAL (m3/s)	0,07833476	0,09527108
CAUDAL (L/s)	78,3347556	95,2710759

Fuente. Elaboración propia

ANEXO 7

SIMULACIÓN DE FLUJO DE SOLIDWORKS INFORME DEL PROYECTO

FULL REPORT

System Info

Product	Flow Simulation 2022 SP5.0. Build: 5815
Computer name	DESKTOP-BCGCFI8
User name	FOR
Processors	Intel(R) Core (TM) i5-10400F CPU @ 2.90GHz
Memory	16302 MB / 8430 MB
Operating system	Windows 10 (or higher) (Version 10.0.19045)
CAD version	SOLIDWORKS 2022 SP5.0
CPU speed	2904 MHz

General Info

Model	REACTOR.SLDPRT
Project name	REACTOR BIOLOGICO DE LODOS ACTIVADOS
Project comment	
Project path	D:\TESIS\MODELACION DEFENSA FINAL\ARCHIVOS\1
Units' system	SI (m-kg-s)
Analysis type	Internal
Exclude cavities without flow conditions	On
Coordinate system	Global Coordinate System
Reference axis	X

INPUT DATA

Mesh

Global Mesh Settings

Automatic initial mesh: On

Result resolution level: 5

Advanced narrow channel refinement: On

Geometry Resolution

Evaluation of minimum gap size: Automatic

Evaluation of minimum wall thickness: Automatic

Computational Domain

Size

X min	-10.497 m
X max	10.497 m
Y min	0.076 m
Y max	4.094 m
Z min	-5.932 m
Z max	5.932 m
X size	20.994 m
Y size	4.018 m
Z size	11.864 m

Boundary Conditions

2D plane flow	None
At X min	Default
At X max	Default
At Y min	Default
At Y max	Default
At Z min	Default
At Z max	Default

EM Domain

Definition: Automatic

Physical Features

Heat conduction in solids: Off

Structural: Off

Electromagnetics: Off

Time dependent: On

Gravitational effects: On

Rotation: Off

Flow type: Laminar and turbulent

High Mach number flow: Off

Free surface: On

Default roughness: 0 micrometer

Gravitational Settings

X component	0 m/s^2
Y component	-9.81 m/s^2
Z component	0 m/s^2

Default wall conditions: Adiabatic wall

Initial Conditions

Thermodynamic parameters	Static Pressure: 10.33 m.c.a. Temperature: 20.05 °C
Velocity parameters	Velocity vector Velocity in X direction: 0 m/s Velocity in Y direction: 0 m/s Velocity in Z direction: 0 m/s
Concentrations	Initial fluid Water
Turbulence parameters	Turbulence intensity and length Intensity: 5 % Length: 0.048 m

Material Settings

Fluids

Air

Water

Boundary Conditions

AFLUENTE

Type	Inlet Volume Flow
Faces	Cara<1>
Coordinate system	Face Coordinate System
Reference axis	X
Flow parameters	Flow vectors direction: Normal to face Volume flow rate: 77.0000 l/s Fully developed flow: Yes
Thermodynamic parameters	Approximate pressure: 10.33 m.c.a. Temperature type: Temperature of initial components Temperature: 20.05 °C
Concentrations	Initial fluid Water

RECIRCULACION

Type	Inlet Volume Flow
Faces	Cara<1>
Coordinate system	Face Coordinate System
Reference axis	X
Flow parameters	Flow vectors direction: Normal to face Volume flow rate: 12.0000 l/s Fully developed flow: Yes
Thermodynamic parameters	Approximate pressure: 10.33 m.c.a. Temperature type: Temperature of initial components Temperature: 20.05 °C
Concentrations	Initial fluid Water

EFLUENTE

Type	Environment Pressure
Faces	Cara<1>
Coordinate system	Face Coordinate System
Reference axis	X
Thermodynamic parameters	Environment pressure: 10.33 m.c.a. Temperature type: Temperature of initial components Temperature: 20.05 °C
Concentrations	Initial fluid Water
Turbulence parameters	Turbulence intensity and length Intensity: 5.00 % Length: 0.048 m
Boundary layer parameters	Boundary layer type: Turbulent

DIFUSORES

Type	Inlet Velocity
Faces	Cara<1> Cara<2> Cara<3> Cara<4> Cara<5> Cara<6> Cara<7> Cara<8> Cara<9> Cara<10> Cara<11> Cara<12> Cara<13> Cara<14> Cara<15> Cara<16> Cara<17> Cara<18> Cara<19> Cara<20> Cara<21> Cara<22> Cara<23> Cara<24> Cara<25> Cara<26> Cara<27> Cara<28> Cara<29> Cara<30> Cara<31> Cara<32> Cara<33> Cara<34> Cara<35> Cara<36> Cara<37> Cara<38> Cara<39> Cara<40> Cara<41> Cara<42> Cara<43> Cara<44> Cara<45> Cara<46> Cara<47> Cara<48> Cara<49> Cara<50>

Coordinate system	Global Coordinate System
Reference axis	Y
Flow parameters	Flow vectors direction: Swirl Velocity normal to face: 2.0e-02 m/s Angular velocity: 0 rad/s Radial velocity: 0 m/s
Thermodynamic parameters	Approximate pressure: 10.33 m.c.a. Temperature type: Temperature of initial components Temperature: 20.05 °C
Concentrations	Initial fluid Air
Turbulence parameters	Turbulence intensity and length Intensity: 5.00 % Length: 0.048 m
Boundary layer parameters	Boundary layer type: Turbulent

SUPERFICIE LIBRE

Type	Environment Pressure
Faces	Cara<2>
Coordinate system	Face Coordinate System
Reference axis	X
Thermodynamic parameters	Environment pressure: 10.33 m.c.a. Temperature type: Temperature of initial components Temperature: 20.05 °C
Concentrations	Initial fluid Water
Turbulence parameters	Turbulence intensity and length Intensity: 5 %

	Length: 0.048 m
Boundary layer parameters	Boundary layer type: Turbulent

Ideal Wall 6

Type	Ideal wall
Faces	Cara<2> Cara<5> Cara<7> Cara<6> Cara<1> Cara<4> Cara<8> Cara<3> Cara<9>
Coordinate system	Global Coordinate System
Reference axis	X

Goals

Global Goals

GG Average Total Pressure 1

Type	Global Goal
Goal type	Total Pressure
Calculate	Average value
Coordinate system	Global Coordinate System
Criteria	1.02e-04 m.c.a.
Use in convergence	On

GG Average Velocity 2

Type	Global Goal
Goal type	Velocity
Calculate	Average value
Coordinate system	Global Coordinate System
Criteria	1.0 m/s
Use in convergence	On

GG Average Turbulence Intensity 4

Type	Global Goal

Goal type	Turbulence Intensity
Calculate	Average value
Coordinate system	Global Coordinate System
Criteria	1.00 %
Use in convergence	On

GG Average Volume Fraction of Air 5

Type	Global Goal
Goal type	Volume Fraction of
Calculate	Average value
Coordinate system	Global Coordinate System
Criteria	1.0000
Use in convergence	On

GG Average Volume Fraction of Water 6

Type	Global Goal
Goal type	Volume Fraction of
Calculate	Average value
Coordinate system	Global Coordinate System
Criteria	1.0000
Use in convergence	On

Calculation Control Options

Finish Conditions

Finish Conditions	If one is satisfied
Maximum physical time	5.000 s

Solver Refinement

Refinement: Disabled

Solving

Electromagnetic Settings

Change material type to be linear	No
Non - linear convergence method	Newton - Raphson
Maximum Newton iteration	900
Newton tolerance	1.00 %
CG tolerance	0.01 %
EM-Thermal synchronization	Periodic
Periodicity	25
Maximum number of synchronizations	15
Time step	0.100 s
Total time	1.000 s

Results Saving

Save before refinement	On
Periodic Saving	Units: Physical time Period: 0.500 s

Advanced Control Options

Flow Freezing

Flow freezing strategy	Disabled

Manual time step (Freezing): Off

Manual time step: Off

RESULTS

General Info

Run at: DESKTOP-BCGCFI8

Number of cores: 11

Iterations: 997

Physical time: 5.000 s

CPU time: 1080 s

Calculation Mesh

Basic Mesh Dimensions

Number of cells in X	56
Number of cells in Y	10
Number of cells in Z	32

Number Of Cells

Cells	3544100
Fluid cells	3544100
Irregular cells	0
Trimmed cells	0

Maximum refinement level: 5

Goals

Name	Unit	Value	Progress	Criteria	Delta	Use in convergence
GG Average Total Pressure 1	m.c.a.	10.33	100%	0	0.063587555	On
GG Average Velocity 2	m/s	0.1	100%	0	0.0954756318	On
GG Average Turbulence Intensity 4	%	66.13	100%	0	663.799185	On
GG Average Volume Fraction of Air 5		0.0040	-	0	0.00201038916	On

GG Average Volume Fraction of Water 6		0.9960	-	0	0.00201038916	On

Min/Max Table

Name	Minimum	Maximum
Density (Fluid) [kg/m^3]	1.63	997.56
Immiscible Air [ ]	0.5000000	1.0000000
Immiscible Water [ ]	0.5000000	1.0000000
Mass Fraction of Air [ ]	0	1.0000
Mass Fraction of Water [ ]	0	1.0000
Pressure [m.c.a.]	10.332	14.33
Temperature [°C]	20.04	20.05
Temperature (Fluid) [°C]	20.04	20.05
Velocity [m/s]	0	2.8
Velocity (X) [m/s]	-1.0	1.4
Velocity (Y) [m/s]	-2.8	1.3
Velocity (Z) [m/s]	-1.1	1.0
Volume Fraction of Air [ ]	0	1.0000
Volume Fraction of Water [ ]	0	1.0000
Aspect Ratio CV [ ]	1.0006955	157723.5455601
Brick Quality [ ]	0	0
Cell Volume [m^3]	1.594744e-14	0.055877
Curvature Criteria [rad]	0	3.142
Domain Index [ ]	0	1
Domain Index (Fluid) [ ]	0	0
Geometry Index [ ]	0	1
Phi (cylindrical) [rad]	0.007	3.134

Phi (spherical) [rad]	0.007	3.134
Position Vector R (spherical) [m]	0.100	12.658
Radius r (cylindrical) [m]	0.089	11.249
Refinement level [ ]	0	4
Theta (spherical) [rad]	-1.556	1.556
Tolerance Criteria [m]	0	0.052
Wall Distance [m]	0.012	4.108
X (cartesian) [m]	-10.497	10.497
Y (cartesian) [m]	0.076	4.094
Z (cartesian) [m]	-5.932	5.932
Z-axis (cylindrical) [m]	-5.932	5.932
Velocity RRF [m/s]	0	2.8
Velocity RRF (X) [m/s]	-1.0	1.4
Velocity RRF (Y) [m/s]	-2.8	1.3
Velocity RRF (Z) [m/s]	-1.1	1.0
Vorticity [1/s]	1.75e-04	56.75
Relative Pressure [m.c.a.]	0.28	4.3
Shear Stress [m.c.a.]	0	2.66e-03
Dynamic Viscosity [Pa*s]	1.8146e-05	0.0010
Bottleneck Number [ ]	1.3096736e-08	1.0000000
Heat Transfer Coefficient [W/m^2/K]	0	0
ShortCut Number [ ]	1.7996472e-07	1.0000000
Surface Heat Flux [W/m^2]	0	0
Surface Heat Flux (Convective) [W/m^2]	0	0
Total Enthalpy Flux [W/m^2]	-1.712e+09	1.482e+09
Acoustic Power [W/m^3]	0	6.348e-17
Acoustic Power Level [dB]	0	0