

Anexo 7 Resultados de Laboratorio

PARAMETROS	RIO ZAHUAPAN CONFLUENCIA BCA LA LADERA	BCA TEXOPA	BCA. ANALCO	BCA. SIN NOMBRE AGUAS ABAJO BCA. ANALCO	RIO ZAHUAPAN AG. ARR. BCA. S/N (A) XALTOCAN	BCA. SIN NOMBRE (A) XALOCAN
CONDUCTIVIDAD (M rhos)	270	255	395	265	520	310
pH (UNIDADES DE pH)	7.3	7.4	7.5	7.55	7.5	7.55
TEMPERATURA (°C)	16	21/18.5	21/18.5	21/18	21/20	16
S.A.A.M. (mg/L)	0.4	0.76	0.5	1.6	1.8	0.4
SOL. SEDIMENTABLES ML/L	0	0	0	0.5	0	0
SOLIDOS TOTALES TOTALES(mg/L)	584	637	604	383	850	535
SOL. SUSPENDIDOS TOTALES(mg/L)	307.5	232.5	246.5	260	380	180
SOL. DISUELTOS TOTALES(mg/L)	276.5	404.5	378.5	178	470	490
FOSFATOS TOTALES (mg/L)	1.17	0.97	0.83	1.22	1.63	2.11
ORTOFOSFATOS (mg/L)	0.34	0.31	0.3	0.663	0.41	1.13
SULFATOS (mg/L)	6.9	11.4	4.5	43.1	8.3	23.4
FIERRO (mg/L)	3.45	3.32	2.4	2.67	2.1	3.55
MANGANESO (mg/L)	ND	ND	ND	ND	ND	ND
CROMO HEXAVALENTE (mg/L)	ND	ND	ND	ND	ND	ND
NITROGENO TOTAL (mg/L)	2.3	4.6	3.9	19.3	4.5	2.9
NITROGENO AMONICAL (mg/L)	0.2	2.6	2.4	4.3	0.9	0.2
NITROGENO ORGANICO (mg/L)	2.1	2	1.9	15	3.7	2.7
NITRATOS (mg/L)		-	-	-	-	-
NITRITOS (mg/L)		-	-	-	-	-
GRASAS Y ACEITES (mg/L)	5.875	6.2	2.15	20	14.3	3.855
CLORUROS (mg/L)	5.1	32.25	9.95	4.8	7.8	42.8
D B O AL 5° DIA (mg/L)	29.45	14.75	23.4	53.8	22.42	106
D.Q.O (mg/L)	69	29	39.4	159	44	256
OXIGENO DISUELTO (mg/L)	5.4	4.9	3.2	3.75	4.3	3.93
COLIF. TOTALES UFC/100 ML		>2 E5	NEG	2500	NEG	90.0E+6
COLIF. FECALES UFC/100 ML		2 E5	NEG	500	NEG	200.5E+3

PARAMETROS	DESCARGA KALTOCAN	BCA S/N (B) KALTOCAN	RIO ZAHUAPAN A AB BCA S/N (B) KALTOCAN	RIO ZAHUAPAN A ARR BCA ZACATEPEC	BCA ZACATEPEC	MANANTIALES SN UJONICIO	RIO ZAHUAPAN A ARR DESC PTA. TRAT APIZACO B
CONDUCTIVIDAD (M mhos)	715.00	575	480	450	280	360	210
pH (UNIDADES DE pH)	7.50	7.5	8.1	7.7	7.75	7.95	7.75
TEMPERATURA (°C)	21/18	21/17	16	21/20	21/19	21/20	15
S.A.M. (mg/L)	18.00	3.2		5.3	0.244	0.1365	0.314
SOL. SEDIMENTABLES ML/L	0.90	0	0	0	0	0	0.05
SOLIDOS TOTALES TOTALES(mg/L)	570.00	611	398	753	845	335	967
SOL. SUSPENDIDOS TOTALES(mg/L)	100.00	280		280	337.5	5	415
SOL. DISUELTOS TOTALES(mg/L)	486.00	426		477	507.5	330	552
ACIDEZ TOTAL(mg CaCO3/L)	77.00	59.4	30.8		26	22	26.4
ALC. TOTAL(mg CaCO3/L)	600.60	171.6	325.6		290	206	145.2
FOSFATOS TOTALES (mg/L)	5.97	4.73	2.37	2.87	1.835	0.825	0.9315
ORTOFOSFATOS (mg/L)	4.06	2.615	1.73	1.11	0.34	0.265	0.57
SULFATOS (mg/L)	76.00	26.6		14.4	16	8.07	15.4
FIERRO (mg/L)	2.00	3.5		2.13	3.65	0.76	4.57
MANGANESO (mg/L)	ND	ND		ND	ND	ND	ND
CROMO HEXAVALENTE (mg/L)	ND	ND		ND	ND	ND	ND
NITROGENO TOTAL (mg/L)	19.60	9.1		4.8	1.045	1.46	1.985
NITROGENO AMONIACAL (mg/L)	11.70	6.5		1	0.15	0.49	0.555
NITROGENO ORGANICO (mg/L)	7.90	1.6		0.7	0.895	0.99	1.43
GRASAS Y ACEITES (mg/L)	19.05	4.92	3	14.2	3.6	6.1	24
CLORUROS (mg/L)	23.80	2.4		8	8	10.35	8
D.B.O. AL 5º DIA (mg/L)	252.70	290	51.98	51.9	38.9	9.52	45.38
D.Q.O. (mg/L)	376.50	528	176	63	49.7	13.3	115.3
OXIGENO DISUELTO (mg/L)	0.85	0.5	6.93	4.2	4.42	6.3	5.87
COUF. TOTALES UFC/100 ML	41.0E+6	100.1E+6	2.0E+6	<1 E3	2.0E+6	830.0E+3	400.0E+3
COUF. FECALES UFC/100 ML	21.0E+6	90.1E+6	1.0E+6	<1 E3	1.0E+6	156.5E+3	63.5E+3

PARAMETROS	DESAGUAM PLANTA DE TRAT APIZACO B	DESAGUAM PLANTA DE TRAT APIZACO B	ARROYO ATLHUETZIA	RIO ZAHUAPAN A ARR ARROYO HUACALTZINGO	ARROYO HUACALTZINGO	DRENAJE RIEGO ATLHUETZIA	RIO ZAHUAPAN A ARR DERIV ATLHUETZIA	RIO ZAHUAPAN A ARR PRESA METECATLAN
CONDUCTIVIDAD (µ mhos)	585	915	1035	580	700	533	580	430
pH (UNIDADES DE pH)	7.6	7.5	7.4	7.4	7.5	7.4	7.6	7.3
TEMPERATURA (°C)	21/21.5	21/21	21	17	21/18.5	21/18	17	21/14
S.A.A.M (mg/L)	0.5655	4.199	1.194	1.38	2.725	0.3		0.13
SOL. SEDIMENTABLES MUL	0.05	0.9	0.05	0	0.05	0	0.3	0
SOLIDOS TOTALES TOTALES(mg/L)	1710	975	836	396	583	433	410	1238
SOL. SUSPENDIDOS TOTALES(mg/L)	72.5	200	92.5	105	115	156	95	645
SOL. DISUELTOS TOTALES(mg/L)	1637.5	875	525.5	291	468	277	315	593
FOSFATOS TOTALES (mg/L)	5.995	9.38	2.075	2.85	8.07	1.21	2.51	1.3
ORTOFOSFATOS (mg/L)	4.03	6.31	1.36	2.2	6.26	0.9	2.19	0.33
SULFATOS (mg/L)	31.1	48.9	101.3		24.1	14.25		16.4
FERRO (mg/L)	0.9	0.98	0.27		4.47	0.35		3.47
MANGANESE (mg/L)	ND	ND	ND		ND	ND		ND
CROMO HEXAVALENTE (mg/L)	ND	ND	ND		ND	ND		ND
NITROGENO TOTAL (mg/L)	12.97	34.69	5.76					
NITROGENO AMONIACAL (mg/L)	10.99	30.01	4.49					
NITROGENO ORGANICO (mg/L)	1.88	4.68	1.27					
NITRATOS (mg/L)				0.17			0.21	
NITRITOS (mg/L)								
GRASAS Y ACEITES (mg/L)	10.6	21.8	11.7		9.4	5.1		22.3
CLORUROS (mg/L)	32.25	47.3	4.44	24.3	31.5	47	25.3	5.4
D.B.O. AL 5° DIA (mg/L)	99	251.85	52.8	74.7	274	724	98.7	47.7
D.Q.O. (mg/L)	197.5	421.7	87.4	98.8	486.4	83	117.6	50.3
OXIGENO DISUELTO (mg/L)	5.405	0.496	2.645	3.28	2.85	3.4	2.75	6.5
COLIF. TOTALES UFC/100 ML	2.0E+6	470.0E+3	40.0E+3		2.9E+6	10.0E+3		400.0E+3
COLIF. FECALES UFC/100 ML	2.0E+6	380.0E+3	30.0E+3	3.5E+6	100.0E+3	10.0E+3	120.0E+6	80.0E+3

PARAMETROS	FOSA SEPTICA ATLIHUETZIA	RIO ZAHUAPAN A ARR DESC ATLIHUETZIA	RIO ZAHUAPAN A ARR CASCADA ATLIHUETZIA	DESCARGA HOTEL MISION	RIO OCCOTOCO TLATLAHUQUI- TEPEC	RIO ZAHUAPAN A ARR MANANT P. HUERFANO	MANANTIALES PALO HUERFANO	ARROYO EXCED RIEGO MANANTIAL PALO HUERFANO
CONDUCTIVIDAD (M mhos)	1 005 00	580 00	580	450	390	367 5	403 33	416 50
pH (UNIDADES DE pH)	7 45	7 50	7 7	7 8	7 65	7 85	7 97	7 70
TEMPERATURA (°C)	21 0 / 21 5	21 00	21	20 / 21 5	20 / 19 5	18	20 / 19 3	20 / 17 5
S.A.A.M. (mg/L)	12 90	0 90	0 558	4 45	0 1		0 40	0 55
SOL. SEDIMENTABLES ML/L	0 75	0 00	0	0 35	0	0 1	0 07	0 00
SOLIDOS TOTALES TOTALES(mg/L)	959 00	375 00	384	622	557	342	264 67	456 50
SOL. SUSPENDIDOS TOTALES(mg/L)	145 50	75 00	60	77 5	207 5	223	110 33	82 50
SOL. DISUELTOS TOTALES(mg/L)	714 00	301 00	324	544 5	349 5	119	154 33	374 00
FOSFATOS TOTALES (mg/L)	13 90	2 65	2 64	7 605	2 131	0 32	0 18	0 80
ORTOFOSFATOS (mg/L)	12 32	2 31	2 33	1 74	1 215	ND	0 15	0 35
SULFATOS (mg/L)	32 90			12 3	11 4	ND	10 30	13 40
FIERRO (mg/L)	0 98			0 55	4 4	ND	1 15	1 22
MANGANESO (mg/L)	ND			ND	ND	ND	ND	ND
CROMO HEXAVALENTE (mg/L)	ND			ND	ND	ND	ND	ND
NITROGENO TOTAL (mg/L)				6 6	1 28			
NITROGENO AMONICAL (mg/L)				4 1	0 3			
NITROGENO ORGANICO (mg/L)				2 5	0 98			
NITRATOS (mg/L)		0 12	0 3		0 41	1 885	0 26	
NITRITOS (mg/L)	0 14							
GRASAS Y ACEITES (mg/L)	37 10			7 7	4 6		6 00	5 40
CLORUROS (mg/L)	40 50	28 10	28 1	68 3	67	5 8	8 50	16 55
D.B.O. AL 5º DIA (mg/L)	280 75	92 80	75	286	69 1	73 83	9 76	20 25
D.Q.O. (mg/L)	941 00	98 00	98	415 5	89 6	109 7	17 00	23 60
OXIGENO DISUELTO (mg/L)	0 30	2 75	5 56	3 13	6 4	5 2	5 91	6 06
COUFL. TOTALES UFC/100 ML	10 0E+3			210 0E+3	200 0E+3		10 0E+3	10 0E+3
COUFL. FECALES UFC/100 ML	10 0E+3	15 0E+3	17 0E+3	10 0E+3	62 0E+3	813 0E+3	10 0E+3	5 7E+3

PARAMETROS	RIO ZAHUAPAN AGUAS ABAJO EXCEDENCIAS	RIO ZAHUAPAN AGUAS ARRIBA RIO ATENCO	RIO ATENCO	DERIVACION BELEN	DOS ARROYOS	RIO ZAHUAPAN A ABAJO DOS ARROYOS	RIO ZAHUAPAN A ARR. MANAT. BELEN	MANANTIALES BELEN
CONDUCTIVIDAD (M mhos)	640	620	543.33	550.00	303.33	490.00	490.00	416.67
pH (UNIDADES DE pH)	7.5	7.4	7.77	8.05	7.83	7.60	7.95	7.90
TEMPERATURA (°C)	21/20	21/20	21 / 17.3	18.50	21 / 17.3	18.00	21.00	21 / 16.3
S A A M (mg/L)	0.20	0.21	1.29		0.71		0.48	0.35
SOL. SEDIMENTABLES ML/L	0	0	0.30	0.00	0.05	0.00	0.00	0.00
SOLIDOS TOTALES TOTALES(mg/L)	1143	1150	484.67	372.00	225.33	240.00	347.00	333.33
SOL. SUSPENDIDOS TOTALES(mg/L)	523	535	203.47	139.50	23.33	88.00	70.00	51.67
SOL. DISUELTOS TOTALES(mg/L)	620	615	281.20	232.50	202.00	152.00	277.00	281.67
FOSFATOS TOTALES (mg/L)	0.95	0.83	1.82	0.40	0.84	0.67	1.33	1.17
ORTOFOSFATOS (mg/L)	0.20	0.23	1.45	ND	0.63	0.66	1.18	0.83
SULFATOS (mg/L)	17.1	16.5	59.40		13.00			7.60
FERRO (mg/L)	3.3	3.1	3.97		0.21			0.38
MANGANESO (mg/L)	ND	ND	ND		ND			ND
CROMO HEXAVALENTE (mg/L)	ND	ND	ND		ND			ND
NITROGENO TOTAL (mg/L)	-	-	12.20					-
NITROGENO AMONIACAL (mg/L)	-	-	9.30					-
NITROGENO ORGANICO (mg/L)	-	-	2.90					-
NITRATOS (mg/L)	-	-		1.23	0.80	0.87	0.42	1.04
NITRITOS (mg/L)	-	-						-
GRASAS Y ACEITES (mg/L)	19.6	18.3	1.60		ND			ND
CLORUROS (mg/L)	5.8	6.3	72.77	22.30	25.50	15.55	22.95	32.37
D B O AL 5º DIA (mg/L)	74.2	71.83	26.98	42.47	17.73	40.30	40.65	9.33
D Q O (mg/L)	98.9	155.7	49.20	68.80	33.40	55.35	60.40	53.67
OXIGENO DISUELTO (mg/L)	5.8	5.9	5.25	6.88	6.23	5.39	6.70	5.70
COLIF. TOTALES UFC/100 ML	5 E5	36 E4	2.0E+6		2.0E+6			1.2E+6
COLIF. FECALES UFC/100 ML	4 E4	3 E4	2.0E+6	2.0E+6	934.9E+3	600.0E+3	650.5E+3	630.4E+3

PARAMETROS	ARROYO METLAHUAPAN	MANANTIALES EL MOLINITO	ARROYO SIN NOMBRE	RIO ZAHUAPAN A ARR DESC CONTLA	DESC CONTLA	DESC LAG OXIDA- CION SN PABLO APETATITLAN	BCA EL CRISTO
CONDUCTIVIDAD (M mhos)	180.00	320	390.00	410.00	525.00	570.00	390.00
pH (UNIDADES DE pH)	7.70	7.35	7.25	7.70	7.35	7.30	7.20
TEMPERATURA (°C)	21/18	21/16.5	21/16.5	17.00	21/17.5	21/19	21/18.5
S.A.A.M (mg/L)	0.40	0.173	0.32		10.48	2.07	0.16
SOL SEDIMENTABLES ML/L	0.00	0.5	0.00	0.10	1.25	0.10	0.05
SOLIDOS TOTALES TOTALES(mg/L)	173.00	243	253.00	378.00	1,505.50	585.00	316.00
SOL SUSPENDIDOS TOTALES(mg/L)	32.50	50	27.50	13.60	926.50	271.65	28.75
SOL DISUELTOS TOTALES(mg/L)	140.50	193	225.50	364.40	579.00	313.35	287.25
FOSFATOS TOTALES (mg/L)	0.85	0.295	0.33		7.98	3.74	0.16
ORTOFOSFATOS (mg/L)	0.43	0.44	0.27		4.19	3.15	0.09
SULFATOS (mg/L)	10.70	5.4	10.00		10.50	8.60	15.10
hierro (mg/L)	ND	ND	ND		0.47	0.35	2.70
MANGANESO (mg/L)	ND	ND	ND		ND	ND	ND
CROMO HEXAVALENTE (mg/L)	ND	ND	ND		ND	ND	ND
NITROGENO TOTAL (mg/L)	-	-	-		-	15.50	3.72
NITROGENO AMONIACAL (mg/L)	-	-	-		-	10.40	0.29
NITROGENO ORGANICO (mg/L)	-	-	-		-	5.10	3.43
NITRATOS (mg/L)	-	-	-	0.40	-	-	-
NITRITOS (mg/L)	-	-	-	-	-	-	-
GRASAS Y ACEITES (mg/L)	ND	2.6	15.70		20.50	9.80	10.00
CLORUROS (mg/L)	26.50	10.35	8.45		31.60	23.80	9.50
D B O AL 5° DIA (mg/L)	12.26	6.5	10.93	39.26	234.75	341.78	5.79
D Q O (mg/L)	50.80	23.1	14.80	50.00	473.20	445.00	36.65
OXIGENO DISUELTO (mg/L)	5.51	3.12	4.76	4.30	0.00	0.45	7.65
COLIF. TOTALES UFC/100 ML	870.0E+3	12.7E+3	112.0E+3		2.0E+6	9.8E+6	22.0E+3
COLIF. FECALES UFC/100 ML	796.2E+3	12.1E+3	52.0E+3	10.0E+3	2.0E+6	6.5E+6	18.5E+3

PARAMETROS	RIO DE LOS NEGROS	RIO ZAHUAP A AB RIO DE LOS NEGROS	RIO ZAHUAP A ARR DESCARGAS TLAXCALA	DESCARGA CRUDA 1 TLAXCALA	DESCARGA CRUDA 2 TLAXCALA	DESCARGA CRUDA 3 TLAXCALA	DESCARGA CRUDA 4 TLAXCALA
CONDUCTIVIDAD (M mhos)	715	400	390	825	815	870	825
pH (UNIDADES DE pH)	7.65	9.6	8.2	7.45	7.6	7	6.4
TEMPERATURA (°C)	21 / 19.5	17	16	21 / 22	21 / 18	21 / 18.5	21 / 18.5
S.A.A.M. (mg/L)	4.1			14	12.9	11.4	1.6
SOL SEDIMENTABLES ML/L	0.6	0.1	6	3.55	0.4	3	3.8
SOLIDOS TOTALES TOTALES (mg/L)	458	398	278	998	650	980	1438
SOL SUSPENDIDOS TOTALES (mg/L)	215	102	10.52	510	161.65	562.85	445
SOL DISUELTOS TOTALES (mg/L)	243	286	267.4	488	488.35	417.15	993
FOSFATOS TOTALES (mg/L)	3.37			1.75	16.47	8.47	5.305
ORTOFOSFATOS (mg/L)	1.975			1.38	14.26	6.51	2.505
SULFATOS (mg/L)	19.4			37.7	44.9	68.6	16.6
FIERRO (mg/L)	0.23			0.55	1.1	5.1	2.6
MANGANESO (mg/L)	ND			ND	ND	ND	ND
CROMO HEXAVALENTE (mg/L)	ND			ND	ND	ND	ND
NITROGENO TOTAL (mg/L)	22.85			-	-	-	-
NITROGENO AMONICAL (mg/L)	20.4			-	-	-	-
NITROGENO ORGANICO (mg/L)	2.45			-	-	-	-
NITRATOS (mg/L)	-	0.24		-	-	-	-
NITRITOS (mg/L)	-			-	-	-	-
GRASAS Y ACEITES (mg/L)	5.4			12.1	6.9	152.7	49.2
CLORUROS (mg/L)	33.05	14.1	11.3	51.55	45.8	55.4	60.1
D.B.O. AL 5º DIA (mg/L)	136.12	43.68	40	870	300.54	685.75	614.24
D.Q.O. (mg/L)	280	80	60	1200	1035	1125	2105
OXIGENO DISUELTO (mg/L)	2.82	16.54	4.3	0	0.3	0.3	0.2
COLIF. TOTALES UFC/100 ML	2.0E+6			21.0E+6	200.0E+6	131.0E+6	180.0E+6
COLIF. FECALES UFC/100 ML	2.0E+6		1.0E+3	19.0E+6	80.0E+6	121.0E+6	180.0E+6

PARAMETROS	RIO ZAHUAPAN A AB DESCARGA CRUDA TLAXCALA	RIO ZAHUAPAN A ARR BARRANCA TOTOLAC	BARRANCA TOTOLAC	DESC 01 ECCAET TLAXCALA	DESC 02 ECCAET TLAXCALA	DESC 03 ECCAET TLAXCALA
CONDUCTIVIDAD (M mhos)	893	550	560	990	935	895
pH (UNIDADES DE pH)	7.1	7.6	7.75	7.4	7.4	8.05
TEMPERATURA (°C)	21/21	21	22/15.5	21/19.5	21/18	21/20.5
S.A.M (mg/L)	3.4	3.4	ND	14.9	12.3	0.8
SOL. SEDIMENTABLES M/L	0	0.25	4.55	4.25	1.4	0.1
SOLIDOS TOTALES TOTALES(mg/L)	937	624	1372	1110	929	732
SOL. SUSPENDIDOS TOTALES(mg/L)	431	241.15	705	396.9	150.7	130
SOL. DISUELTOS TOTALES(mg/L)	506	382.85	667	713.1	778.3	602
FOSFATOS TOTALES (mg/L)	1.14	0.92	0.66	9.4	5.615	8.99
ORTÓFOSFATOS (mg/L)	0.83	0.6	0.65	9.71	4.38	4.39
SULFATOS (mg/L)	17.7	15.4	11.7	82.3	48.3	39.7
FIERRO (mg/L)	1.93	1.8	3.5	0.33	0.5	0.23
MANGANESO (mg/L)	ND	ND	ND	ND	ND	ND
CROMO HEXAVALENTE (mg/L)	ND	ND	ND	ND	ND	ND
NITROGENO TOTAL (mg/L)	-	-	-	-	-	-
NITROGENO AMONIACAL (mg/L)	-	-	-	-	-	-
NITROGENO ORGANICO (mg/L)	-	-	-	-	-	-
NITRATOS (mg/L)	-	-	-	-	-	-
NITRITOS (mg/L)	-	-	-	-	-	-
GRASAS Y ACEITES (mg/L)	13.5	12.9	1	24.8	14.1	6.8
CLORUROS (mg/L)	9.6	9.9	32.6	38.2	62.95	79.25
D.B.O. AL 5º DIA (mg/L)	63.98	63.58	818.78	511.8	573	246
D.Q.O. (mg/L)	89.7	97.7	1340	830	750	380
OXIGENO DISUELTO (mg/L)	2.7	2.5	3.5	0	0	4.31
COLIF. TOTALES UFC/100 ML	17 E6	1.6E+6	150.0E+9	125.0E+6	77.0E+6	1.0E+6
COLIF. FECALES UFC/100 ML	23 E5	20.0E+3	100.0E+9	120.0E+6	71.0E+6	1.0E+6

PARAMETROS	DESCARGA TOTOLAC	RIO ZAHUAPAN AGUAS ARR PRESA PANOTLA	C LATERAL DERECHO PRESA PANOTLA	C LATERAL IZQUIERDO PRESA PANOTLA	RIO ZAHUAPAN A. AB. PRESA PANOTLA
CONDUCTIVIDAD (M mhos)	1525	500	460	450	460
pH (UNIDADES DE pH)	8.05	7.65	7.9	7.7	7.8
TEMPERATURA (°C)	22 / 18.5	18	16	16	16
S A A M (mg/L)	33.1	1.4			
SOL. SEDIMENTABLES ML/L	0.85	0.75	0	0	0
SOLIDOS TOTALES TOTALES (mg/L)	1198	629	376	384	398
SOL. SUSPENDIDOS TOTALES (mg/L)	535	192.5	45.7	62.5	41.3
SOL. DISUELTOS TOTALES (mg/L)	663	436.5	330.3	321.5	356.7
FOSFATOS TOTALES (mg/L)	2.71	1.215		1.58	ND
ORTOFOSFATOS (mg/L)	0.62	1.12		1.4	ND
SULFATOS (mg/L)	90.3	44			
FIERRO (mg/L)	2.08	2.59			
MANGANESO (mg/L)	ND	ND			
CROMO HEXAVALENTE (mg/L)	ND	ND			
NITROGENO TOTAL (mg/L)		11.66			
NITROGENO AMONIACAL (mg/L)		3.04			
NITROGENO ORGANICO (mg/L)		8.62			
NITRATOS (mg/L)		4.85	ND	ND	ND
GRASAS Y ACEITES (mg/L)	14.7	5.3			
CLORUROS (mg/L)	295.15	23.7	22.6	10.4	21.7
D B O AL 5° DIA (mg/L)	369.6	188.68	185.63	180.4	186.75
D Q O (mg/L)	495	305	270	270	270
OXIGENO DISUELTO (mg/L)	0	2.9	3.58	3.58	5.17
COLIF. TOTALES UFC/100 ML	127.0E+6	2.0E+9			
COLIF. FECALES UFC/100 ML	120.0E+6	106.8E+6	400.0E+6	270.0E+6	200.0E+6

PARAMETROS	RIO ZAHUAPAN PUENTE SAN LUCAS CUAUHTELLUPAN	DESCARGA LAGUNA DE OXIDAC PANOTLA	RIO ZAHUAPAN A ARR BARRANCA MONTERREY	BARRANCA MONTERREY	RIO ZAHUAPAN AGUAS ARR RIO TOTOLAC	RIO TOTOLAC
CONDUCTIVIDAD (M mhas)	302	733.5		1940	640	960
pH (UNIDADES DE pH)	7.1	7.4		7.6	7.6	7.4
TEMPERATURA (°C)	18	22/19.5	18	22/19	18	22/19
S A A M (mg/L)		30.4		19.6	1.9	3.8
SOL SEDIMENTABLES ML/L	0	0.5	0	0.5	1	3
SOLIDOS TOTALES TOTALES (mg/L)	492	925	546	859	1236	2228
SOL SUSPENDIDOS TOTALES (mg/L)	108	57	110	28	534	1690
SOL DISUELTOS TOTALES (mg/L)	384	768	436	831	702	538
FOSFATOS TOTALES (mg/L)	0.24	4.875	0.53	10.11	2.57	1.57
ORTOFOSFATOS (mg/L)	ND	4.815	0.45	8.71	1.96	0
SULFATOS (mg/L)		31.7		14.9	33	22.9
FIERRO (mg/L)		0.11		3.1	2.67	3.2
MANGANESO (mg/L)		0		ND	ND	ND
CROMO HEXAVALENTE (mg/L)		0		ND	ND	ND
NITROGENO TOTAL (mg/L)		-		-	-	-
NITROGENO AMONICAL (mg/L)		-		-	-	-
NITROGENO ORGANICO (mg/L)		-		-	-	-
NITRATOS (mg/L)	ND	ND	0.23	ND	-	-
GRASAS Y ACEITES (mg/L)		2.3		1	4.7	1.5
CLORUROS (mg/L)		40.4		116.4	37.4	42.8
D B O AL 5º DIA (mg/L)	170.97	120.58	184.5	301.5	168.76	155.6
D Q O (mg/L)	183.3	571.1	288.5	556.95	333	440
OXIGENO DISUELTO (mg/L)	3.3	0.91	3.85	1.185	2.1	2.5
COLIF TOTALES UFC/100 ML		1.12E+6		2.0E+6	1.31E6	8.1E4
COLIF FECALES UFC/100 ML		9.9E+6		2.0E+6	1.19E5	6.7E4

PARAMETROS Y	RIO ZAHUAPAN A ARR. REPRESA EJ STA APOLONA	REPRESA EJIDO STA APOLONA	DESCARGA QUES TETLATLAHUCA 1	DESCARGA QUES TETLATLAHUCA 2	DESCARGA TETLATLAHUCA	RIO ZAHUAPAN A AB DESC TETLATLAHUCA	RIO ZAHUAPAN A ARR. REPRESA EJ TETLATLAHUCA
CONDUCTIVIDAD (M mhos)	600	660	1000	1960	2030		610
PH (UNIDADES DE PH)	7.5	7.02	6.6	5.8	7.1		7.5
TEMPERATURA (°C)	21/19	19	21/25	21/21	21/25		21/22
S.A.A.M. (mg/L)	8.7		10.9	2.5	2.2		2.3
SOL. SEDIMENTABLES ML/L	0.5	0.1	24	4.5	14	0	0.5
SOLIDOS TOTALES TOTALES(mg/L)	596	578	1500	1914	1744	656	678
SOL. SUSPENDIDOS TOTALES(mg/L)	290	50	760	160	300	130	240
SOL. DISUELTOS TOTALES(mg/L)	306	528	740	1754	1444	526	438
FOSFATOS TOTALES (mg/L)	1.64	1.6	4.1	19.8	22.29	0.97	11.4
ORTOFOSFATOS (mg/L)	1.13	1.4	4.56	7.3	19.58	0.91	3.4
SULFATOS (mg/L)	59.7		47.4	31.7	41.1		47.1
FIERRO (mg/L)	0.28		1.08	2.12	1.87		2.3
MANGANESO (mg/L)	ND		ND	ND	ND		ND
CROMO HEXAVALENTE (mg/L)	ND		ND	ND	ND		ND
NITROGENO TOTAL (mg/L)							
NITROGENO AMONIACAL (mg/L)							
NITROGENO ORGANICO (mg/L)							
NITRATOS (mg/L)	ND	ND				ND	ND
NITRITOS (mg/L)							
GRASAS Y ACEITES (mg/L)	7.9		175.6	34.9	44.3		40.4
CLORUROS (mg/L)	30.9	39	71.3	318.3	149.6		33.3
D.B.O. AL 5º DIA (mg/L)	150.7	162.5	603	583.6	943	173.58	168.7
D.Q.O. (mg/L)	240		933.3	1466.7	1066.7	372.4	302.85
OXIGENO DISUELTO (mg/L)	3.7		0.8	1.2	0	1.82	1.82
COLIF. TOTALES UFC/100 ML	2.00E+05		125 E5	58 E5	95 E6		1.24E+06
COLIF. FECALES UFC/100 ML	2.00E+05	2.00E+05	121 E5	53 E5	72 E6		1.23E+06

PARAMETROS	REPRESA 1 EJIDO TETLATLAHUCA	REPRESA 1 EJIDO LA CONCORDIA	REP 2 EJ TETLATLAHUCA	REPR 3 EJ TETLATLAHUCA	AG AB REP 3 EJ TETATLAHUCA	REP 2 EJ ST TOMAS LA C.
CONDUCTIVIDAD (M mhos)	790	650	660	700	660	790
pH (UNIDADES DE pH)	6.6	7.2	7.1	7.16	7.4	7.3
TEMPERATURA (°C)	19	19	19	19	21	21
S A A M (mg/L)						
SOL SEDIMENTABLES ML/L	4	0	0.2	2	1.3	1.5
SOLIDOS TOTALES TOTALES(mg/L)	1076	806	834	802	694	4864
SOL SUSPENDIDOS TOTALES(mg/L)	340	30	30	390	290	260
SOL DISUELTOS TOTALES(mg/L)	736	576	604	412		
ACIDEZ TOTAL(mg CaCO3/L)	48	22.4	29	29	29	29
ALC TOTAL(mg CaCO3/L)	432	343	343	345	348	367
DUREZA TOTAL (mg/L)	268	223	216	223	223	218
DUREZA DE CALCIO (mg/L)	127	120	121	120	112	114
DUREZA DE MAGNESIO (mg/L)	141	103			111	104
FOSFATOS TOTALES (mg/L)	1.5	1.8	0.99	1.08	1.71	1.8
ORTOFOSFATOS (mg/L)	1.2	1.12	0.79	1.06	1.16	0.4
SULFATOS (mg/L)						
FIERRO (mg/L)						
MANGANESO (mg/L)						
CPOMO HEXAVALENTE (mg/L)						
NITRATOS (mg/L)	ND	ND	ND	ND	ND	ND
NITRITOS (mg/L)						
CLORUROS (mg/L)	38	40	47	38	37	88
D B O AL 5º DIA (mg/L)	188.3	153.5	145.3	50.7	160.8	6.8
D Q O (mg/L)						
OXIGENO DISUELTO (mg/L)	0.84	3.17	3.7	1.35	1.35	6.4
COLIF TOTALES UFC/100 ML						
COLIF FECALES UFC/100 ML	2.00E+05	2.00E+05	3.E3	18.E6	5.E6	NEG

PARAMETROS	AG. AB. REP. 2 ST. TOM. LA C.	A. ARR. PRESA STA. AGUEDA	LAT. DER. PR. STA AGUEDA	AG. AB. PRESA EJ. STA. AGUEDA	RIO ZAHUAPAN AG. ARR. CONFL. RIO VIEJO
CONDUCTIVIDAD (M mhos)	760	700	700	690	820
pH (UNIDADES DE pH)	7.3	7.1	7.1	7.2	8
TEMPERATURA (°C)	21	23	23	23	22
S.A.A.M (mg/L)					3.6
SOL. SEDIMENTABLES ML/L	2	0.4	1.4	0.7	0.1
SOLIDOS TOTALES TOTALES (mg/L)	718	644	648	648	498
SOL. SUSPENDIDOS TOTALES (mg/L)	260	440	200	170	20
SOL. DISUELTOS TOTALES (mg/L)					478
ACIDEZ TOTAL (mg CaCO ₃ /L)	32	26	29	26	
ALC. TOTAL (mg CaCO ₃ /L)	348	350	350	360	
DUREZA TOTAL (mg/L)	219	243	227	221	
DUREZA DE CALCIO (mg/L)	116	118	116	121	
DUREZA DE MAGNESIO (mg/L)	103	125	111	100	
FOSFATOS TOTALES (mg/L)	1.6	0.9	1.17	1.1	1.75
ORTOFOSFATOS (mg/L)	1.19	0.4	0.94	1.1	1.69
SULFATOS (mg/L)					47.1
FERRO (mg/L)					0.98
MANGANESO (mg/L)					ND
CROMO HEXAVALENTE (mg/L)					ND
NITRATOS (mg/L)	0.016	ND	ND	ND	-
NITRITOS (mg/L)					-
CLORUROS (mg/L)	36	63	37	51	52.3
D.B.O AL 5º DIA (mg/L)	157.6	156.1	30.4	148.7	119.45
D.Q.O (mg/L)					180
OXIGENO DISUELTO (mg/L)	1.28	3.7	1.48	2.7	3.9
COLIF. TOTALES UFC/100 ML					1.31E+06
COLIF. FECALES UFC/100 ML	>2 E7	NEG	13 E6	>2 E7	1.27E+06

PARAMETROS	RIO VIEJO	RIO ZAHUAPAN A AB RIO VIEJO	RIO ZAHUAPAN A ARR BCA GUARDIA	BARRANCA GUARDIA	BCA CORAZON DE JESUS	DRENAJE DE RIEGO BCA SIN NOMBRE
CONDUCTIVIDAD (M mhos)	590	640	560	850	655	580
pH (UNIDADES DE pH)	7.4	7.6	7.8	7.6	7.45	8
TEMPERATURA (°C)	21/20	20	20	22 / 20	22 / 20.5	22 / 19.5
S.A.A.M (mg/L)	2.7			8.1	22.6	1.1
SOL SEDIMENTABLES M/L	2	0	0.1	0.15	2.75	0.15
SOLIDOS TOTALES TOTALES(mg/L)	600	530	432	533	803	444
SOL SUSPENDIDOS TOTALES(mg/L)	460	175	140	212.5	325	85
SOL DISUELTOS TOTALES(mg/L)	140	355	292	320.5	478	359
FOSFATOS TOTALES (mg/L)	7.31			5.3	10.14	0.75
ORTOFOSFATOS (mg/L)	2.63			4.96	5.87	0.73
SULFATOS (mg/L)	34.6			38.9	59.4	15.71
FIERRO (mg/L)	0.18			3.12	2.55	2.91
MANGANESO (mg/L)	ND			ND	ND	ND
CROMO HEXAVALENTE (mg/L)	ND			ND	ND	ND
NITROGENO TOTAL (mg/L)	-			40.67	29.3	-
NITROGENO AMONICAL (mg/L)	-			25.97	15.48	-
NITROGENO ORGANICO (mg/L)	-			14.5	13.8	-
NITRATOS (mg/L)	-			-	-	-
NITRITOS (mg/L)	-			-	-	-
GRASAS Y ACEITES (mg/L)	2.8			9.1	21.8	10
CLORUROS (mg/L)	42.8	41.7	39	38.2	48.15	22.95
D.B.O AL 5º DIA (mg/L)	58.3	102.5	92.8	87	194.5	136.2
D.Q.O. (mg/L)	200	180	160	330	456.65	180
OXIGENO DISUELTO (mg/L)	0.6	4.72	3.3	0	0	3.23
COLIF TOTALES UFC/100 ML	>2 E5			9.70E+05	8.10E+05	9.30E+05
COLIF FECALES UFC/100 ML	>2 E5			8.90E+05	7.60E+05	7.70E+05

PARAMETROS	RIO ZAHUAPAN A ARR DESC SAN BUENAVENTURA	DESCARGA MUNICIPAL SN BUENAVENTURA	DESCARGA CORREDOR IND XICOHTZINCO	RIO ZAHUAPAN A ARR CONFLUEN- CIA RIO ATOYAC
CONDUCTIVIDAD (M mhos)	640	530	6100	695
pH (UNIDADES DE pH)	7.6	7.3	5.4	7.85
TEMPERATURA (°C)	20	21/17	22 / 20.5	22 / 21.5
S A A M (mg/L)	0.44	7.71	2.5	3.38
SOL SEDIMENTABLES ML/L	0.05	2	1.3	0.25
SOLIDOS TOTALES TOTALES (mg/L)	518	658	3125	444
SOL SUSPENDIDOS TOTALES (mg/L)	60	520	82.5	67.5
SOL DISUELTOS TOTALES (mg/L)	458	138	3042.5	376.5
FOSFATOS TOTALES (mg/L)	7	4.46	2.75	3.45
ORTOFOSFATOS (mg/L)	5	3.56	1.94	1.94
SULFATOS (mg/L)	ND	56.3	232.6	41.14
FIERRO (mg/L)		0.82	0.88	3.4
MANGANESO (mg/L)	ND	ND	ND	ND
CROMO HEXAVALENTE (mg/L)	ND	ND	ND	ND
NITROGENO TOTAL (mg/L)	7.5	18.23	-	-
NITROGENO AMONIA CAL (mg/L)	6	2.35	-	-
NITROGENO ORGANICO (mg/L)	1.5	15.88	-	-
NITRATOS (mg/L)	1.45	-	-	-
NITRITOS (mg/L)	0.1	-	-	-
GRASAS Y ACEITES (mg/L)	4.8	-	16.1	15.9
CLORUROS (mg/L)	35.2	33.3	62.45	40.45
D B O AL 5º DIA (mg/L)	101.3	442	49.45	92.36
D Q O (mg/L)	140	800	320	120
OXIGENO DISUELTO (mg/L)	3.71	0	0.2	1.88
COLIF TOTALES UFC/100 ML	4.20E+06	-	SC	2.00E+06
COLIF FECALES UFC/100 ML	1.10E+06	-	SC	1.97E+06