# AN OVERVIEW OF WATER QUALITY IN FRANK LAKE 1990-1993

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## INTRODUCTION

Frank Lake is a restored lake and wetland area east of High River, Alberta. It was designed to treat wastewaters from the High River Wastewater Treatment Plant (WWTP) and the Cargill Foods Limited meat packing plant, and to provide habitat for waterfowl production. It also provides an alternative to municipal wastewater discharge to the Highwood River. Prior to the restoration of Frank Lake in 1989, High River WWTP effluent was discharged directly to the river, and prolific weed growth and fish kills had occurred (summarized in Alberta Environment 1990).

The Frank Lake restoration project was initiated by Ducks Unlimited Canada, which built storage works in 1989 to stabilize the lake level. The existing Frank Lake basin was thereby divided into three main basins. Ducks Unlimited was also licensed to divert Highwood River water to Frank Lake to compensate for evaporation. At the same time, the Municipal District of Foothills was licensed to construct works and divert High River WWTP and Cargill effluent to Frank Lake.

Alberta Environmental Protection (AEP) began a water quality monitoring program at Frank Lake in 1990. This program was designed to provide a very basic characterization of the combined effluents and treatment efficiency in the first basin. At the time of implementation, water quality data were available for the individual High River WWTP and Cargill effluents, but not for their combined discharge into Frank Lake.

#### **METHODS**

The Frank Lake water quality program consisted of grab sampling of the combined Cargill and High River WWTP effluents (hereafter referred to as the "influent") in the channel to Frank Lake, and the outfall from basin 1 (Figure 1). The period of sampling extended from October 23, 1990 to January 14, 1993, and occurred at a frequency of four times per year (once each season).

The first basin was shallow and too difficult to access with a boat in 1990. Therefore, the decision was made to sample the outfall from this basin, instead of collecting a euphotic zone composite sample, which is the standard lake sampling procedure employed by AEP. The sampling design for this program also specified that each basin outfall should be sampled as the three basins filled. However, no flow was observed at either the basin 2 or 3 control structures (Figure 1) during this survey.

The variable list for this monitoring program included all the licensed variables for the High River WWTP and Cargill plant. Samples were also analyzed for organic compounds at the Alberta Environmental Centre (extractable and volatile priority pollutants and PCBs). Chlorine, dissolved oxygen, pH, conductivity and temperature were measured on site.

## RESULTS AND DISCUSSION

Results for inorganic and biological variables are in Appendix I. Organic compounds occurring over the method detection limit are in Appendix II. The basin 1 outfall was not flowing on three of the 10 routine sampling dates. A limited range of variables was sampled on August 24, 1990 at the influent channel only. Medians in Appendix I were calculated using only those dates when there was flow at both the sites.

## The key findings were as follows:

(1) The concentrations of all variables in the combined influent which were specified on the Cargill and High River WWTP plant licences were at or below the maximum daily limits for each licence, on all the sampling days except August 24, 1990. On that date total suspended solids (TSS) was 265 mg/L, compared to 25 mg/L on the Cargill license. This high influent TSS may have been caused by algal biomass in the High River WWTP effluent, which does not have a TSS limit in summer.

The influent to Frank Lake had very high levels of dissolved phosphorus, nitrite/nitrate and ammonia. With such high nutrient levels, one would expect a very high level of aquatic plant biomass to result. Maximum summer chlorophyll a at the basin 1 outfall was indeed in the hyper-eutrophic range of productivity (OECD 1982) in 1991 and 1992, indicating extremely high levels of phytoplankton biomass. There was also relatively high chlorophyll a in the influent on some dates, which suggests algal growth in the treatment system. Perhaps as a result of the high algal biomass in basin 1, there were also higher levels of dissolved organic carbon and turbidity at the basin 1 outfall than in the influent (Appendix I).

(2) Basin 1 provided treatment for some of the phosphorus and nitrogen in the influent, but nitrite and ammonia levels at the basin 1 outfall were still usually over the guidelines for the protection of aquatic life. Of variables specified on the Cargill licence, ammonia, pH and total residual chlorine (TRC) (licensed as free residual chlorine) regularly exceeded one of the Canadian Water Quality Guidelines (CWQG) in the basin 1 outfall (CCME 1994)(Appendix I).

Influent total ammonia and TRC were usually within the acutely toxic range of concentration for invertebrate and fish species, as defined in CCME (1994). At least the mixing zone in Frank Lake would likely be toxic to sensitive aquatic invertebrate and fish species.

Chloride exceeded the CWQG guideline for irrigation of sensitive crops (100 mg/L), in both the influent and the basin 1 outfall.

(3) Certain constituents were apparently retained by basin 1. Calcium and zinc were lower at the basin 1 outfall than in the influent. The decrease in calcium may have been caused by aquatic plant uptake of carbon dioxide, and precipitation of calcium carbonate.

Mercury, which is rarely detected in surface water, occasionally exceeded the CWQG guideline in the basin 1 outfall.

There was surprisingly little settling of suspended sediment, and fixed nonfilterable residue (ashed suspended sediment) was similar in the basin 1 outfall and influent. A mass balance analysis could be used to provide an estimate of the proportion of each constituent retained in basin 1, but would likely be relatively crude given the frequency of measurement in this study.

- (4) Frank Lake apparently acts as an evaporative basin and concentrates various other constituents. Alkalinity, dissolved solids, pH, sodium, sulphate and dissolved arsenic were higher at the outfall than in the influent. As a result, the sodium absorption ratio (SAR) of the basin 1 outfall was higher than in the influent and both exhibited a slight restriction for irrigation based on the CWQG. SAR is a measure of the effects of excess sodium on soil structure and water movement. It is expressed as a ratio of the concentration of sodium, calcium and magnesium ions.
- (5) Chlorine was used in the Cargill plant as an anti-fouling agent. Early in the program high levels of total residual chlorine were detected in the influent and the plant was asked to adjust their treatment rates (D. Spink, personal communication). The chlorine levels maintained in the influent were apparently high enough to eliminate most fecal coliform bacteria, which were only detected in the influent on one sampling date (2 per 100 mL on July 6, 1992). Fecal coliform counts were higher in the basin 1 outfall than in the influent on four dates. This small increase in coliforms at the outfall could be caused by warm blooded animals in or near Frank Lake, for example waterfowl or livestock.

Note: although chlorine levels exceeded the CWQG guideline for the protection of aquatic life (0.002 mg/L TRC) at the basin 1 outfall (Appendix I), this guideline specifies use of ampirometric titration or its equivalent. A less precise Hach kit was used in the Frank Lake study.

(6) Trace and low levels of some chlorinated organic compounds were detected in both the influent and basin 1 outfall (Appendix II). Various other organic compounds were also detected, including some unusual (tentatively identified) compounds such as caffeine, which was detected in each of the three winter samples from the influent. Appendix II contains all results over the method detection limits, plus compounds less than the detection limit but present at trace levels. All positively identified organic compounds were at levels lower than the available CCME and USEPA (USEPA 1986) guidelines. The environmental significance of the tentatively identified compounds is unknown. The other 80 compounds included in each scan and PCBs were not detected in the basin 1 outfall.

## **SUMMARY**

Except for total suspended solids on one occasion, all the variables in the combined effluent were at or below the maximum daily limits specified for the High River WWTP and Cargill plant licences. The influent to Frank Lake had very high levels of aquatic plant nutrients, and the lake itself was in the hyper-eutrophic category based on phytoplankton chlorophyll *a*.

Frank Lake and the associated wetland area provide good treatment for most of the variables included in this sampling program. However, nitrite, ammonia and total residual chlorine often exceeded the Canadian Water Quality Guidelines for the protection of aquatic life in the basin 1 outfall. Although generally less than the detection limit, mercury was sometimes detected in the outfall effluent. The source of mercury should be ascertained, and residues in aquatic organisms should be determined in future sampling programs.

Frank Lake acts as an evaporative basin and concentrates various salts. As a result, the sodium absorption ratio of the basin 1 outfall exceeded the slight restriction guideline for irrigation in the Canadian Water Quality Guidelines. Chloride also exceeded the guideline for the irrigation of sensitive crops, in both the influent and basin 1 outfall.

## **FUTURE SAMPLING**

This sampling program was designed to provide basic characterization of combined influent quality and treatment in basin 1. Sampling was infrequent and only two sites were sampled. Future sampling should document spatial variation and better define temporal trends in water quality. More frequent sampling would allow a better resolution of mass flux through the system and allow more insight into processes. It would appear important to quantify the true assimilative capacity of Frank Lake, so that the effects of additional municipal wastewater or industrial effluents can be determined.

The following issues should be addressed by future sampling programs at Frank Lake:

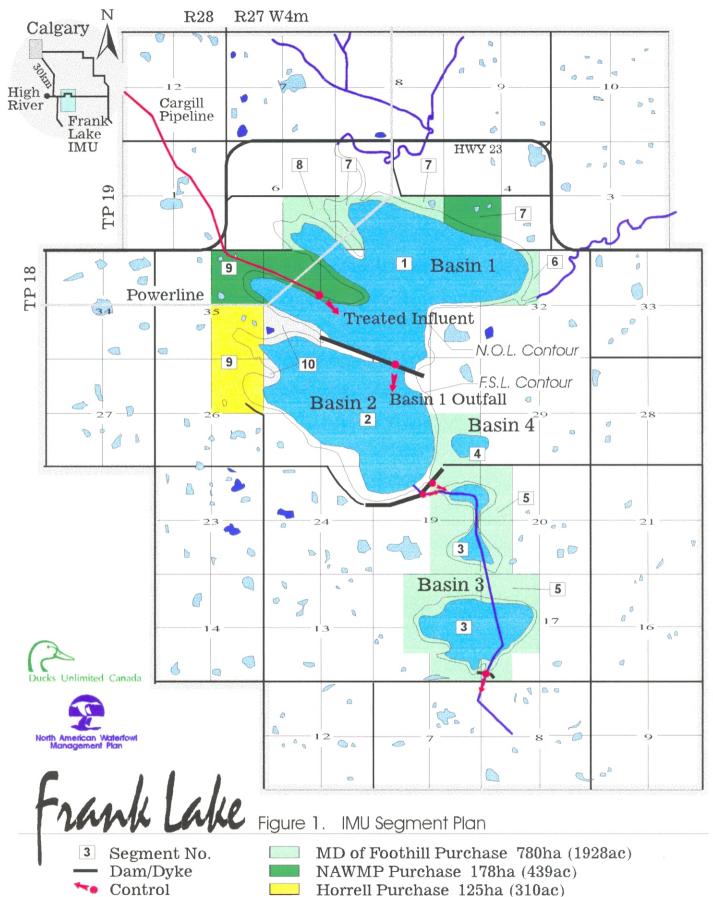
- (a) Ammonia and TRC were at levels that are likely toxic to aquatic invertebrates, at least in the mixing zone. Since this could affect the food supply of some waterfowl, invertebrate monitoring would be useful;
- (b) Low levels of mercury were sometimes found in the influent and basin 1 outfall. Since mercury can readily enter the food chain and bio-concentrate, sediment and animal mercury residues should be measured, and the source of the mercury in the influent should be determined;
- (c) Mixing patterns in Frank Lake are not documented. Some constituents may be at high, potentially toxic levels in the mixing zone for the influent but acceptable in other areas.

If higher lake levels cause significant discharge from basin 3 to the Little Bow River, each of the three basin outfalls should be sampled to assess their respective treatment effects. Downstream impacts on water quality should also be assessed, in particular the following:

- (a) The effects of SAR in Frank Lake on the suitability of the Little Bow River for irrigation use;
- (b) The effects of dissolved phosphorus and nitrogen loading from Frank Lake on primary production in the Little Bow River.

## LITERATURE CITED

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- United States Environmental Protection Agency. 1986. Quality criteria for water. Office of Water Regulations and Standards, EPA 440/5-86-001.



Ditch/Canal

Appendix I. Grab sample results for influent entering Frank Lake and basin 1 outfall, 1990-93. Outfall values over CCME guidelines are marked as follows: (1) Protection of Aquatic Life (bold italics); (2) Irrigation (dashed outlines); (3) Contact Recreation (shaded). Inorganic variables analyzed at Chemex Labs Alberta Inc., except for August 24, 1990 when they were done by the Alberta Environmental Centre. Coliform counts were made at the Provincial Laboratory of Public Health for Southern Alberta and chlorophyll a was analyzed at the Surface Water Monitoring Branch laboratory.

······································				COLOUR	COND	COND	TEMP	TEMP	TIIDD	CARBON	CARBON	HCO3	CO3	OIL	TOTAL	CULODO		11000100
				TRUE	COND	COND	I LIVIT	AIR	IOND	DISS	DISS	LAB	LAB	AND	PHENOLS	CHLORO PHYLL a	N TKN	NO2/NO3 DISS
STATION	DAY I	MON	YR	REL UN	US/CM	US/CM	DEG.C	DEG.C	NTU	ORG	INORG	CALCD	CALCD	GREASE	MG/L	MG/M3	MG/L	MG/L
2				02021L	02041L	02041F	02061F	02066F	02074L	06104L	06152L	06202L	06302L	065**L	06537L	06715L	070**L	07110L
								<u></u>	0207.2	001012		002022	000022	000 L	0000712	007132	070 L	OTTIOL
TREATED INFLUENT	24	8	90		1590					MG/L	MG/L	650	MG/L	MG/L			84.5	
TREATED INFLUENT	23	10	90	10	1357	1562	5.5	4	7.1	17.5	52.2	335.2	L0.5	0.4	L0.001	0.4	38	28.4
TREATED INFLUENT	15	1	91	30	1283	1310	3.9	6	6.2	20	58.5	258.4	L0.5	0.5	0.009	3.1	23.2	19.6
TREATED INFLUENT	16	4	91	20	801	850	5.2	9	13	7.7	34.2	190.2	L0.5	L0.2	L0.001	11	5.6	18.2
TREATED INFLUENT	18	7	91	50	1540	1600	20.7	19	17	27.1	42	263.3	L0.5	0.9	0.006	5.1	20.4	61.5
TREATED INFLUENT	17	10	91	20	1080	1141	10.2	-3	5	11.3	57.2	299.9	L0.5	0.3	L0.001	7.6	6.4	3.1
TREATED INFLUENT	20	1	92	40	1380	1437	6	8	1.9	16.7	47.5	249.9	L0.5	1.4	L0.001	21.6	12	42
TREATED INFLUENT	22	4	92	50	1240	1189	11.4	16	7	11.7	53	293.8	L0.5	0.5	L0.001	48.9	8.12	21.4
TREATED INFLUENT	6	7	92	40	1010	1031	16	16	157	12.1	31.2	193.8	L0.5	L0.2	L0.001	1.6	5.44	33.7
TREATED INFLUENT	7	10	92	40	1950	1940	14.4	10	2.3	12.8	29	192.6	L0.5	0.8	L0.001	0.8	9.8	77.5
TREATED INFLUENT	14	1	93	80	2120	2070	3.6	-20	7.3	18	79.5	441.3	L0.5	L0.2	0.002	8	43.5	57
INFLUENT DUPLICATE	14	1	93	80	2110				7.5	18.1	79.5	443.7	L0.5	L0.2	L0.001	J	39.5	56.5
MEDIAN(90-92), outfall fl	owing		- 1	40	1240	1189	10.2	9	7.1	12.1	47.5	263.3	L0.5	0.4	L0.001	7.6	8.12	28.4
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BASIN 1 OUTFALL	23	10	90	30	1697	1850	1.4	4	30	36.1	104	477.4	54.8	L0.2	L0.001	10.7	10.4	6.6
BASIN 1 OUTFALL	16	4	91	60	955	919	9.3	5	80	19.3	34	173.6	20.8	L0.2	0.002	119.2	5.2	3.6
BASIN 1 OUTFALL	18	7	91	30	759	791	18.4	20	10	17.9	27.5	91.7	94.7	0.6	0.007	1.7	2.6	0.134
BASIN 1 OUTFALL	17	10	91	30	1060	1093	5.3	-3	15	27.5	34	171.6	57.7	0.3	L0.001	11.4	3.76	0.535
BASIN 1 OUTFALL	20	1	92	30	1620	1831	3	8	2	15	61.5	396.2	L0.5	L0.2	L0.001	103.5	12	34.8
BASIN 1 OUTFALL	22	4	92	100	1350	1227	12.8	16	65	20.9	84	275.7	43.7	0.6	L0.001	345.1	3.6	0.013
BASIN 1 OUTFALL	6	7	92	30	1030	895	18.2	17	8.4	17.2	40.8	121.7	90.7	L0.2	L0.001	2.7	5.84	1.99
MEDIAN(90-92)				30	1060	1093	9.3	8	15	19.3	40.8	173.6	54.8	L0.2	L0.001	11.4	5.2	1.99
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				BOD	COD	F	ALK	PPALK	PH	PH	NFR	FILT		HARDNESS		Na	Mg	SILICA
STATION				5 DAY	TOTAL	DISS	TOTAL	MG/L	PH	PH	NFR MG/L	RES	FIXED	TOTAL	SURFACT- ANTS	DISS	DISS	REACT
STATION	DAY	MON.	YR.	5 DAY MG/L	TOTAL MG/L	DISS MG/L	TOTAL CaCO3	MG/L CaCO3			MG/L	RES MG/L	FIXED MG/L	TOTAL CaCO3	ANTS	DISS MG/L	DISS MG/L	REACT SIO2
STATION	DAY	MON.	YR.	5 DAY	TOTAL	DISS	TOTAL	MG/L	PH 10301L	PH 10301F		RES	FIXED	TOTAL		DISS	DISS	REACT
			***************************************	5 DAY MG/L	TOTAL MG/L	DISS MG/L 091**L	TOTAL CaCO3 101**L	MG/L CaCO3	10301L		MG/L 10401L	RES MG/L 104**L	FIXED MG/L	TOTAL CaCO3 10605L	10701L	DISS MG/L 11103L	DISS MG/L 121**L	REACT SIO2
TREATED INFLUENT	24	8	90	5 DAY MG/L 08202L	TOTAL MG/L 08301L	DISS MG/L 091**L	TOTAL CaCO3 101**L	MG/L CaCO3 10151L	10301L 7.78	10301F	MG/L 10401L 265	RES MG/L 104**L	FIXED MG/L 10501L	TOTAL CaCO3 10605L	ANTS 10701L MG/L	DISS MG/L 11103L	DISS MG/L 121**L	REACT SIO2 141**L
TREATED INFLUENT TREATED INFLUENT	24 23	8 10	90 90	5 DAY MG/L 08202L	TOTAL MG/L 08301L	DISS MG/L 091**L 0.29 0.31	TOTAL CaCO3 101**L 533 275	MG/L CaCO3 10151L	10301L 7.78 8.08	10301F 8.1	MG/L 10401L 265 17	RES MG/L 104**L 1026 722	FIXED MG/L 10501L 9.4	TOTAL CaCO3 10605L 312 302.2	ANTS 10701L MG/L 0.75	DISS MG/L 11103L 125 132	DISS MG/L 121**L 31 30.9	REACT SIO2 141**L
TREATED INFLUENT TREATED INFLUENT TREATED INFLUENT	24 23 15	8 10 1	90 90 91	5 DAY MG/L 08202L 0.3 4.5	TOTAL MG/L 08301L 49 29	DISS MG/L 091**L 0.29 0.31 0.27	TOTAL CaCO3 101**L 533 275 212	MG/L CaCO3 10151L L0.1 L0.1	7.78 8.08 7.25	10301F 8.1 6.8	MG/L 10401L 265 17 18.2	RES MG/L 104**L 1026 722 623	FIXED MG/L 10501L 9.4 5.4	TOTAL CaCO3 10605L 312 302.2 316.4	ANTS 10701L MG/L 0.75 0.57	DISS MG/L 11103L 125 132 108	DISŠ MG/L 121**L 31 30.9 29.8	REACT SIO2 141**L 11.2 12.2
TREATED INFLUENT TREATED INFLUENT TREATED INFLUENT TREATED INFLUENT	24 23 15 16	8 10 1 4	90 90 91 91	5 DAY MG/L 08202L 0.3 4.5 1.9	TOTAL MG/L 08301L 49 29 25	DISS MG/L 091**L 0.29 0.31 0.27 0.21	TOTAL CaCO3 101**L 533 275 212 156	MG/L CaCO3 10151L L0.1 L0.1 L0.1	7.78 8.08 7.25 8.04	10301F 8.1 6.8 7.4	MG/L 10401L 265 17 18.2 14	RES MG/L 104**L 1026 722 623 358	FIXED MG/L 10501L 9.4 5.4 8.6	TOTAL CaCO3 10605L 312 302.2 316.4 210.7	ANTS 10701L MG/L 0.75 0.57 1.05	DISS MG/L 11103L 125 132 108 63	DISS MG/L 121**L 31 30.9 29.8 19	REACT SIO2 141**L 11.2 12.2 5.3
TREATED INFLUENT TREATED INFLUENT TREATED INFLUENT	24 23 15 16 18	8 10 1 4 7	90 90 91 91 91	5 DAY MG/L 08202L 0.3 4.5 1.9 9.7	TOTAL MG/L 08301L 49 29 25 120	DISS MG/L 091**L 0.29 0.31 0.27 0.21 0.27	TOTAL CaCO3 101**L 533 275 212 156 216	MG/L CaCO3 10151L L0.1 L0.1 L0.1 L0.1	7.78 8.08 7.25 8.04 7.58	10301F 8.1 6.8 7.4 7.6	MG/L 10401L 265 17 18.2 14 26	RES MG/L 104**L 1026 722 623 358 701	FIXED MG/L 10501L 9.4 5.4 8.6 6	TOTAL CaCO3 10605L 312 302.2 316.4 210.7 322.1	ANTS 10701L MG/L 0.75 0.57 1.05 2.3	DISS MG/L 11103L 125 132 108 63 170	DISŠ MG/L 121**L 31 30.9 29.8 19 33	REACT SIO2 141**L 11.2 12.2 5.3 13.3
TREATED INFLUENT TREATED INFLUENT TREATED INFLUENT TREATED INFLUENT TREATED INFLUENT TREATED INFLUENT	24 23 15 16 18 17	8 10 1 4	90 90 91 91 91 91	5 DAY MG/L 08202L 0.3 4.5 1.9 9.7 7.4	TOTAL MG/L 08301L 49 29 25 120 40	DISS MG/L 091**L 0.29 0.31 0.27 0.21 0.27 0.25	TOTAL CaCO3 101**L 533 275 212 156 216 246	MG/L CaCO3 10151L L0.1 L0.1 L0.1 L0.1 L0.1 L0.1	7.78 8.08 7.25 8.04 7.58 7.51	8.1 6.8 7.4 7.6 7.1	MG/L 10401L 265 17 18.2 14 26 6.8	RES MG/L 104**L 1026 722 623 358 701 600	FIXED MG/L 10501L 9.4 5.4 8.6 6 3.6	TOTAL CaCO3 10605L 312 302.2 316.4 210.7 322.1 277.4	MG/L 0.75 0.57 1.05 2.3 0.47	DISS MG/L 11103L 125 132 108 63 170 105	DISŠ MG/L 121**L 31 30.9 29.8 19 33 27	REACT SIO2 141**L 11.2 12.2 5.3 13.3 9.65
TREATED INFLUENT	24 23 15 16 18 17 20	8 10 1 4 7 10 1	90 90 91 91 91 91 91	5 DAY MG/L 08202L 0.3 4.5 1.9 9.7 7.4 3.6	TOTAL MG/L 08301L 49 29 25 120 40 40	DISS MG/L 091**L 0.29 0.31 0.27 0.21 0.27 0.25 0.25	TOTAL CaCO3 101**L 533 275 212 156 216 246 205	MG/L CaCO3 10151L L0.1 L0.1 L0.1 L0.1 L0.1 L0.1 L0.1	7.78 8.08 7.25 8.04 7.58 7.51 7.75	10301F 8.1 6.8 7.4 7.6 7.1 7.6	MG/L 10401L 265 17 18.2 14 26 6.8 17	RES MG/L 104**L 1026 722 623 358 701 600 660	9.4 5.4 8.6 6 3.6 2.4	TOTAL CaCO3 10605L 312 302.2 316.4 210.7 322.1 277.4 314.8	MG/L 0.75 0.57 1.05 2.3 0.47 1.81	DISS MG/L 11103L 125 132 108 63 170 105 155	DISS MG/L 121**L 31 30.9 29.8 19 33 27 28.5	REACT SIO2 141**L 11.2 12.2 5.3 13.3 9.65 10.9
TREATED INFLUENT	24 23 15 16 18 17 20 22	8 10 1 4 7 10 1 4	90 90 91 91 91 91 92 92	5 DAY MG/L 08202L 0.3 4.5 1.9 9.7 7.4 3.6 6.8	TOTAL MG/L 08301L 49 29 25 120 40 40 40	DISS MG/L 091**L 0.29 0.31 0.27 0.21 0.27 0.25 0.25 0.21	TOTAL CaCO3 101**L 533 275 212 156 216 246 205 241	MG/L CaCO3 10151L L0.1 L0.1 L0.1 L0.1 L0.1 L0.1 L0.1	7.78 8.08 7.25 8.04 7.58 7.51 7.75 7.99	10301F  8.1 6.8 7.4 7.6 7.1 7.6 8.1	MG/L 10401L 265 17 18.2 14 26 6.8 17 11	RES MG/L 104**L 1026 722 623 358 701 600 660 632	FIXED MG/L 10501L 9.4 5.4 8.6 6 3.6 2.4 3.2	TOTAL CaCO3 10605L 312 302.2 316.4 210.7 322.1 277.4 314.8 269.7	MG/L 0.75 0.57 1.05 2.3 0.47 1.81 0.4	DISS MG/L 11103L 125 132 108 63 170 105 155 133	DISS MG/L 121**L 31 30.9 29.8 19 33 27 28.5 22.4	REACT SIO2 141**L 11.2 12.2 5.3 13.3 9.65 10.9 10.4
TREATED INFLUENT	24 23 15 16 18 17 20 22 6	8 10 1 4 7 10 1 4 7	90 90 91 91 91 91 92 92 92	5 DAY MG/L 08202L 0.3 4.5 1.9 9.7 7.4 3.6 6.8 40	TOTAL MG/L 08301L 49 29 25 120 40 40 40 30	DISS MG/L 091**L 0.29 0.31 0.27 0.21 0.27 0.25 0.25 0.21 0.21	TOTAL CaCO3 101**L 533 275 212 156 216 246 205 241 159	MG/L CaCO3 10151L L0.1 L0.1 L0.1 L0.1 L0.1 L0.1 L0.1 L0	7.78 8.08 7.25 8.04 7.58 7.51 7.75 7.99 7.16	10301F  8.1 6.8 7.4 7.6 7.1 7.6 8.1 7.6	MG/L 10401L 265 17 18.2 14 26 6.8 17 11 28	RES MG/L 104**L 1026 722 623 358 701 600 660 632 502	FIXED MG/L 10501L 9.4 5.4 8.6 6 3.6 2.4 3.2 22	TOTAL CaCO3 10605L 312 302.2 316.4 210.7 322.1 277.4 314.8 269.7 259.7	ANTS 10701L MG/L 0.75 0.57 1.05 2.3 0.47 1.81 0.4 0.55	DISS MG/L 11103L 125 132 108 63 170 105 155 133 94.3	DISS MG/L 121**L 31 30.9 29.8 19 33 27 28.5 22.4 21.8	REACT SIO2 141**L 11.2 12.2 5.3 13.3 9.65 10.9 10.4 10
TREATED INFLUENT	24 23 15 16 18 17 20 22	8 10 1 4 7 10 1 4	90 90 91 91 91 91 92 92	5 DAY MG/L 08202L 0.3 4.5 1.9 9.7 7.4 3.6 6.8 40 13.4	TOTAL MG/L 08301L 49 29 25 120 40 40 40	DISS MG/L 091**L 0.29 0.31 0.27 0.21 0.27 0.25 0.25 0.21 0.21 0.23	TOTAL CaCO3 101**L 533 275 212 156 216 246 205 241 159 158	MG/L CaCO3 10151L L0.1 L0.1 L0.1 L0.1 L0.1 L0.1 L0.1 L0	7.78 8.08 7.25 8.04 7.58 7.51 7.75 7.99 7.16 6.91	8.1 6.8 7.4 7.6 7.1 7.6 8.1 7.6	MG/L 10401L 265 17 18.2 14 26 6.8 17 11 28 2.8	RES MG/L 104**L 1026 722 623 358 701 600 660 632 502 874	9.4 5.4 8.6 6 3.6 2.4 3.2 22 0.8	TOTAL CaCO3 10605L 312 302.2 316.4 210.7 322.1 277.4 314.8 269.7 259.7 390.3	MG/L 0.75 0.57 1.05 2.3 0.47 1.81 0.4 0.55 1.38	DISS MG/L 11103L 125 132 108 63 170 105 155 133 94.3 184	DISS MG/L 121**L 31 30.9 29.8 19 33 27 28.5 22.4 21.8 38.2	REACT SIO2 141**L 11.2 12.2 5.3 13.3 9.65 10.9 10.4 10 13.7
TREATED INFLUENT	24 23 15 16 18 17 20 22 6 7	8 10 1 4 7 10 1 4 7	90 90 91 91 91 91 92 92 92	5 DAY MG/L 08202L 0.3 4.5 1.9 9.7 7.4 3.6 6.8 40	TOTAL MG/L 08301L 49 29 25 120 40 40 40 30 40	DISS MG/L 091**L 0.29 0.31 0.27 0.21 0.27 0.25 0.25 0.21 0.21	TOTAL CaCO3 101**L 533 275 212 156 216 246 205 241 159 158 362	MG/L CaCO3 10151L L0.1 L0.1 L0.1 L0.1 L0.1 L0.1 L0.1 L0	7.78 8.08 7.25 8.04 7.58 7.51 7.75 7.99 7.16 6.91 7.88	10301F  8.1 6.8 7.4 7.6 7.1 7.6 8.1 7.6	MG/L 10401L 265 17 18.2 14 26 6.8 17 11 28 2.8 11	RES MG/L 104**L 1026 722 623 358 701 600 660 632 502 874 1095	9.4 5.4 8.6 6 3.6 2.4 3.2 22 0.8 1.3	TOTAL CaCO3 10605L 312 302.2 316.4 210.7 322.1 277.4 314.8 269.7 259.7 390.3 407.4	MG/L 0.75 0.57 1.05 2.3 0.47 1.81 0.4 0.55 1.38	DISS MG/L 11103L 125 132 108 63 170 105 155 133 94.3 184 228	DISS MG/L 121**L 31 30.9 29.8 19 33 27 28.5 22.4 21.8 38.2 38.2	REACT SIO2 141**L 11.2 12.2 5.3 13.3 9.65 10.9 10.4 10 13.7 12.2
TREATED INFLUENT	24 23 15 16 18 17 20 22 6 7 14	8 10 1 4 7 10 1 4 7 10 1	90 90 91 91 91 92 92 92 92 93	5 DAY MG/L 08202L 0.3 4.5 1.9 9.7 7.4 3.6 6.8 40 13.4 3.7	TOTAL MG/L 08301L 49 29 25 120 40 40 40 40 40 40	DISS MG/L 091**L 0.29 0.31 0.27 0.21 0.25 0.25 0.21 0.21 0.23 0.23	TOTAL CaCO3 101**L 533 275 212 156 216 246 205 241 159 158	MG/L CaCO3 10151L L0.1 L0.1 L0.1 L0.1 L0.1 L0.1 L0.1 L0	7.78 8.08 7.25 8.04 7.58 7.51 7.75 7.99 7.16 6.91	8.1 6.8 7.4 7.6 7.1 7.6 8.1 7.6	MG/L 10401L 265 17 18.2 14 26 6.8 17 11 28 2.8	RES MG/L 104**L 1026 722 623 358 701 600 660 632 502 874	9.4 5.4 8.6 6 3.6 2.4 3.2 22 0.8	TOTAL CaCO3 10605L 312 302.2 316.4 210.7 322.1 277.4 314.8 269.7 259.7 390.3	MG/L 0.75 0.57 1.05 2.3 0.47 1.81 0.4 0.55 1.38	DISS MG/L 11103L 125 132 108 63 170 105 155 133 94.3 184	DISS MG/L 121**L 31 30.9 29.8 19 33 27 28.5 22.4 21.8 38.2	REACT SIO2 141**L 11.2 12.2 5.3 13.3 9.65 10.9 10.4 10 13.7 12.2 12.75
TREATED INFLUENT INFLUENT UPPLICATE MEDIAN(90-92), outfall for	24 23 15 16 18 17 20 22 6 7 14 14 dowing	8 10 1 4 7 10 1 4 7 10 1	90 90 91 91 91 92 92 92 92 93 93	5 DAY MG/L 08202L 0.3 4.5 1.9 9.7 7.4 3.6 6.8 40 13.4 3.7 3 6.8	TOTAL MG/L 08301L 49 29 25 120 40 40 40 40 50 40	DISS MG/L 091**L 0.29 0.31 0.27 0.21 0.27 0.25 0.25 0.21 0.21 0.23 0.23 0.23	TOTAL CaCO3 101**L  533 275 212 156 216 246 205 241 159 158 362 364 216	MG/L CaCO3 10151L L0.1 L0.1 L0.1 L0.1 L0.1 L0.1 L0.1 L0	7.78 8.08 7.25 8.04 7.58 7.51 7.75 7.99 7.16 6.91 7.88 7.88 7.75	8.1 6.8 7.4 7.6 7.1 7.6 8.1 7.6 7	MG/L 10401L 265 17 18.2 14 26 6.8 17 11 28 2.8 11 10 17	RES MG/L 104**L 1026 722 623 358 701 600 660 632 502 874 1095 1101 632	9.4 5.4 8.6 6 3.6 2.4 3.2 22 0.8 1.3 L0.4 6	TOTAL CaCO3 10605L 312 302.2 316.4 210.7 322.1 277.4 314.8 269.7 259.7 390.3 407.4 404.8 277.4	MG/L 0.75 0.57 1.05 2.3 0.47 1.81 0.4 0.55 1.38 1.6 1.4	DISS MG/L 11103L 125 132 108 63 170 105 155 133 94.3 184 228 228	DISS MG/L 121**L 31 30.9 29.8 19 33 27 28.5 22.4 21.8 38.2 38.1 38.7	REACT SIO2 141**L 11.2 12.2 5.3 13.3 9.65 10.9 10.4 10 13.7 12.2
TREATED INFLUENT INFLUENT DUPLICATE MEDIAN(90-92), outfall for	24 23 15 16 18 17 20 22 6 7 14 10wing	8 10 1 4 7 10 1 4 7 10 1 1	90 90 91 91 91 92 92 92 92 93 93	5 DAY MG/L 08202L 0.3 4.5 1.9 9.7 7.4 3.6 6.8 40 13.4 3.7 3 6.8	TOTAL MG/L 08301L 49 29 25 120 40 40 40 40 50 40	DISS MG/L 091**L 0.29 0.31 0.27 0.21 0.27 0.25 0.25 0.21 0.23 0.23 0.23 0.25	TOTAL CaCO3 101**L  533 275 212 156 216 246 205 241 159 158 362 364 216  483	MG/L CaCO3 10151L L0.1 L0.1 L0.1 L0.1 L0.1 L0.1 L0.1 L0	7.78 8.08 7.25 8.04 7.51 7.75 7.99 7.16 6.91 7.88 7.75 8.64	10301F  8.1 6.8 7.4 7.6 7.1 7.6 8.1 7.6 7 7.6 7.6	MG/L 10401L 265 17 18.2 14 26 6.8 17 11 28 2.8 11 10 17	RES MG/L 104**L 1026 722 623 358 701 600 660 632 502 874 1095 1101 632	9.4 5.4 8.6 6 3.6 2.4 3.2 22 0.8 1.3 L0.4	TOTAL CaCO3 10605L 312 302.2 316.4 210.7 322.1 277.4 314.8 269.7 259.7 390.3 407.4 404.8 277.4	ANTS 10701L  MG/L 0.75 0.57 1.05 2.3 0.47 1.81 0.4 0.55 1.38 1.6 1.4 0.75	DISS MG/L 11103L 125 132 108 63 170 105 155 133 94.3 184 228 228 132	DISS MG/L 121**L 31 30.9 29.8 19 33 27 28.5 22.4 21.8 38.2 38.1 38.7 27	REACT SIO2 141**L 11.2 12.2 5.3 13.3 9.65 10.9 10.4 10 13.7 12.2 12.75 10.4
TREATED INFLUENT INFLUENT DUPLICATE MEDIAN(90-92), outfall for the company of the compa	24 23 15 16 18 17 20 22 6 7 14 14 dowing	8 10 1 4 7 10 1 4 7 10 1 1 1 1 1 1 1 4 7	90 90 91 91 91 92 92 92 92 93 93 93	5 DAY MG/L 08202L 0.3 4.5 1.9 9.7 7.4 3.6 6.8 40 13.4 3.7 3 6.8	TOTAL MG/L 08301L 49 29 25 120 40 40 40 40 50 40	DISS MG/L 091**L 0.29 0.31 0.27 0.21 0.27 0.25 0.25 0.21 0.23 0.23 0.23 0.23	TOTAL CaCO3 101**L  533 275 212 156 216 246 205 241 159 158 362 364 216  483 177	MG/L CaCO3 10151L L0.1 L0.1 L0.1 L0.1 L0.1 L0.1 L0.1 L0	7.78 8.08 7.25 8.04 7.51 7.75 7.99 7.16 6.91 7.88 7.88 7.75	10301F  8.1 6.8 7.4 7.6 7.1 7.6 8.1 7.6 7.6 7.6 7.9 9	MG/L 10401L 265 17 18.2 14 26 6.8 17 11 28 2.8 11 10 17 48.5 59	RES MG/L 104**L 1026 722 623 358 701 600 660 632 502 874 1095 1101 632	9.4 5.4 8.6 6 3.6 2.4 3.2 22 0.8 1.3 L0.4 6	TOTAL CaCO3 10605L 312 302.2 316.4 210.7 322.1 277.4 314.8 269.7 259.7 390.3 407.4 404.8 277.4	ANTS 10701L  MG/L 0.75 0.57 1.05 2.3 0.47 1.81 0.4 0.55 1.38 1.6 1.4 0.75	DISS MG/L 11103L 125 132 108 63 170 105 155 133 94.3 184 228 228 132	DISS MG/L 121**L 31 30.9 29.8 19 33 27 28.5 22.4 21.8 38.2 38.1 38.7 27	REACT SIO2 141**L 11.2 12.2 5.3 13.3 9.65 10.9 10.4 10 13.7 12.2 12.75 10.4
TREATED INFLUENT INFLUENT DUPLICATE MEDIAN(90-92), outfall fil BASIN 1 OUTFALL BASIN 1 OUTFALL BASIN 1 OUTFALL	24 23 15 16 18 17 20 22 6 7 14 14 14 dowing 23 16 18	8 10 1 4 7 10 1 4 7 10 1 1 1 1 1 1 4 7	90 90 91 91 91 92 92 92 93 93 93	5 DAY MG/L 08202L 0.3 4.5 1.9 9.7 7.4 3.6 6.8 40 13.4 3.7 3 6.8	TOTAL MG/L 08301L 49 29 25 120 40 40 40 40 50 40 50 40	DISS MG/L 091**L 0.29 0.31 0.27 0.25 0.25 0.25 0.21 0.23 0.23 0.23 0.23 0.25 0.25	TOTAL CaCO3 101**L  533 275 212 156 216 246 205 241 159 158 362 364 216  483 177 233	MG/L CaCO3 10151L L0.1 L0.1 L0.1 L0.1 L0.1 L0.1 L0.1 L0	7.78 8.08 7.25 8.04 7.58 7.51 7.75 7.99 7.16 6.91 7.88 7.88 7.75 8.64 8.81 9.84	10301F  8.1 6.8 7.4 7.6 7.1 7.6 8.1 7.6 7.6 7.6 7.6 7.6	MG/L 10401L  265 17 18.2 14 26 6.8 17 11 28 2.8 11 10 17  48.5 7.6	RES MG/L 104**L 1026 722 623 358 701 600 660 632 502 874 1095 1101 632	9.4 5.4 8.6 6 3.6 2.4 3.2 22 0.8 1.3 L0.4 6	TOTAL CaCO3 10605L 312 302.2 316.4 210.7 322.1 277.4 314.8 269.7 259.7 390.3 407.4 404.8 277.4 456.5 247.7 182.9	MG/L 0.75 0.57 1.05 2.3 0.47 1.81 0.4 0.55 1.38 1.6 1.4 0.75	DISS MG/L 11103L 125 132 108 63 170 105 155 133 94.3 184 228 228 132	DISS MG/L 121**L 31 30.9 29.8 19 33 27 28.5 22.4 21.8 38.2 38.1 38.7 27	REACT SIO2 141**L 11.2 12.2 5.3 13.3 9.65 10.9 10.4 10 13.7 12.2 12.75 10.4 16.2 11.6
TREATED INFLUENT INFLUENT DUPLICATE MEDIAN(90-92), outfall fill BASIN 1 OUTFALL BASIN 1 OUTFALL BASIN 1 OUTFALL BASIN 1 OUTFALL	24 23 15 16 18 17 20 22 6 7 14 14 14 lowing 23 16 18 17	8 10 1 4 7 10 1 4 7 10 1 1 1	90 90 91 91 91 92 92 92 93 93 93 91 91	5 DAY MG/L 08202L 0.3 4.5 1.9 9.7 7.4 3.6 6.8 40 13.4 3.7 3 6.8	TOTAL MG/L 08301L 49 29 25 120 40 40 40 40 50 40 50 40	DISS MG/L 091**L 0.29 0.31 0.27 0.25 0.25 0.21 0.23 0.23 0.23 0.23 0.25 0.23	TOTAL CaCO3 101**L  533 275 212 156 216 246 205 241 159 158 362 364 216  483 177 233 237	MG/L CaCO3 10151L L0.1 L0.1 L0.1 L0.1 L0.1 L0.1 L0.1 L0	7.78 8.08 7.25 8.04 7.58 7.51 7.75 7.99 7.16 6.91 7.88 7.88 7.75 8.64 8.81 9.84	10301F  8.1 6.8 7.4 7.6 7.1 7.6 8.1 7.6 7.6 7.6 7.6 7.6 7.6 7.0	MG/L  10401L  265 17 18.2 14 26 6.8 17 11 28 2.8 11 10 17  48.5 7 7.6 8.8	RES MG/L 104**L 1026 722 623 358 701 600 660 632 502 874 1095 1101 632	9.4 5.4 8.6 6 3.6 2.4 3.2 22 0.8 1.3 L0.4 6	TOTAL CaCO3 10605L 312 302.2 316.4 210.7 322.1 277.4 314.8 269.7 259.7 390.3 407.4 404.8 277.4 456.5 247.7 182.9 171.5	ANTS 10701L  MG/L 0.75 0.57 1.05 2.3 0.47 1.81 0.4 0.55 1.38 1.6 1.4 0.75  0.4 [ 0.6 0.17 0.33 [	DISS MG/L 11103L 125 132 108 63 170 105 155 133 94.3 184 228 228 132	DISS MG/L 121**L 31 30.9 29.8 19 33 27 28.5 22.4 21.8 38.2 38.1 38.7 27	REACT SIO2 141**L 11.2 12.2 5.3 13.3 9.65 10.9 10.4 10 13.7 12.2 12.75 10.4 16.2 11.6 13 7.25
TREATED INFLUENT INFLUENT DUPLICATE MEDIAN(90-92), outfall fl BASIN 1 OUTFALL	24 23 15 16 18 17 20 22 6 7 14 14 14 dowing 23 16 18 17 20	8 10 1 4 7 10 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	90 90 91 91 91 92 92 92 93 93 93 91 91 91 92	5 DAY MG/L 08202L 0.3 4.5 1.9 9.7 7.4 3.6 6.8 40 13.4 3.7 3 6.8	TOTAL MG/L 08301L 49 29 25 120 40 40 40 50 40 40 50 60	DISS MG/L 091**L 0.29 0.31 0.27 0.25 0.25 0.21 0.23 0.23 0.23 0.23 0.23 0.23 0.23	TOTAL CaCO3 101**L  533 275 212 156 216 246 205 241 159 158 362 364 216  483 177 233 237 325	MG/L CaCO3 10151L L0.1 L0.1 L0.1 L0.1 L0.1 L0.1 L0.1 L0	10301L 7.78 8.08 7.25 8.04 7.58 7.51 7.75 7.99 7.16 6.91 7.88 7.88 7.75  8.64 8.81 9.84 9.35 8.05	10301F  8.1 6.8 7.4 7.6 7.1 7.6 8.1 7.6 7.6 7.6 7.6 7.6 7.8	MG/L  10401L  265 17 18.2 14 26 6.8 17 11 28 2.8 11 10 17  48.5 59 7.6 8.8 19	RES MG/L 104**L  1026 722 623 358 701 600 660 632 502 874 1095 1101 632	9.4 5.4 8.6 6 3.6 2.4 3.2 22 0.8 1.3 L0.4 6	TOTAL CaCO3 10605L 312 302.2 316.4 210.7 322.1 277.4 314.8 269.7 259.7 390.3 407.4 404.8 277.4 456.5 247.7 182.9 171.5 376.5	ANTS 10701L  MG/L 0.75 0.57 1.05 2.3 0.47 1.81 0.4 0.55 1.38 1.6 1.4 0.75  0.4 [ 0.6 0.17 0.33 [ 1.26 [	DISS MG/L 11103L 125 132 108 63 170 105 155 133 94.3 184 228 228 132 176 87 93 159 174	DISS MG/L 121**L 31 30.9 29.8 19 33 27 28.5 22.4 21.8 38.2 38.1 38.7 27 52 28 20.2 21.5 36.5	REACT SIO2 141**L 11.2 12.2 5.3 13.3 9.65 10.9 10.4 10 13.7 12.2 12.75 10.4 16.2 11.6 13 7.25 14.7
TREATED INFLUENT INFLUENT DUPLICATE MEDIAN(90-92), outfall fil BASIN 1 OUTFALL	24 23 15 16 18 17 20 22 6 7 14 14 14 dowing 23 16 18 17 20 22 22	8 10 1 4 7 10 1 4 7 10 1 1 1 1 1	90 90 91 91 91 92 92 92 92 93 93 93 91 91 91 91 92	5 DAY MG/L 08202L 0.3 4.5 1.9 9.7 7.4 3.6 6.8 40 13.4 3.7 3 6.8 11.9 21.1 2 4.3 6.2 42.6	TOTAL MG/L 08301L 49 29 25 120 40 40 40 40 50 40 40 50 40 110	DISS MG/L 091**L 0.29 0.31 0.27 0.25 0.25 0.21 0.23 0.23 0.23 0.23 0.23 0.23 0.23	TOTAL CaCO3 101**L  533 275 212 156 216 246 205 241 159 158 362 364 216  483 177 233 237 325 299	MG/L CaCO3 10151L L0.1 L0.1 L0.1 L0.1 L0.1 L0.1 L0.1 L0	7.78 8.08 7.25 8.04 7.58 7.51 7.75 7.99 7.16 6.91 7.88 7.88 7.75	10301F  8.1 6.8 7.4 7.6 7.1 7.6 8.1 7.6 7.6 7.6 7.9 9 10 10.2 8.5 9.1	MG/L  10401L  265 17 18.2 14 26 6.8 17 11 28 2.8 11 10 17  48.5 59 1 7.6 8.8 19 135	RES MG/L 104**L  1026 722 623 358 701 600 660 632 502 874 1095 1101 632	9.4 5.4 8.6 6 3.6 2.4 3.2 22 0.8 1.3 L0.4 6	TOTAL CaCO3 10605L 312 302.2 316.4 210.7 322.1 277.4 314.8 269.7 259.7 390.3 407.4 404.8 277.4 456.5 247.7 182.9 171.5 376.5 298.1	ANTS  10701L  MG/L 0.75 0.57 1.05 2.3 0.47 1.81 0.4 0.55 1.38 1.6 1.4 0.75  0.4 [ 0.6 0.17 0.33 [ 1.26 [ 0.22 [	DISS MG/L 11103L 125 132 108 63 170 105 155 133 94.3 184 228 228 132 176 87 93 159 174 152 1752	DISS MG/L 121**L 31 30.9 29.8 19 33 27 28.5 22.4 21.8 38.2 38.1 38.7 27 52 28 20.2 21.5 36.5 34.9	REACT SIO2 141**L 11.2 12.2 5.3 13.3 9.65 10.9 10.4 10 13.7 12.2 12.75 10.4 16.2 11.6 13 7.25 14.7 2.39
TREATED INFLUENT INFLUENT DUPLICATE MEDIAN(90-92), outfall fl BASIN 1 OUTFALL	24 23 15 16 18 17 20 22 6 7 14 14 14 lowing 23 16 18 17 20	8 10 1 4 7 10 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	90 90 91 91 91 92 92 92 93 93 93 91 91 91 92	5 DAY MG/L 08202L 0.3 4.5 1.9 9.7 7.4 3.6 6.8 40 13.4 3.7 3 6.8	TOTAL MG/L 08301L 49 29 25 120 40 40 40 50 40 40 50 60	DISS MG/L 091**L 0.29 0.31 0.27 0.25 0.25 0.21 0.23 0.23 0.23 0.23 0.23 0.23 0.23	TOTAL CaCO3 101**L  533 275 212 156 216 246 205 241 159 158 362 364 216  483 177 233 237 325	MG/L CaCO3 10151L L0.1 L0.1 L0.1 L0.1 L0.1 L0.1 L0.1 L0	10301L 7.78 8.08 7.25 8.04 7.58 7.51 7.75 7.99 7.16 6.91 7.88 7.88 7.75  8.64 8.81 9.84 9.35 8.05	10301F  8.1 6.8 7.4 7.6 7.1 7.6 8.1 7.6 7.6 7.6 7.6 7.6 7.8	MG/L  10401L  265 17 18.2 14 26 6.8 17 11 28 2.8 11 10 17  48.5 59 7.6 8.8 19	RES MG/L 104**L  1026 722 623 358 701 600 660 632 502 874 1095 1101 632	9.4 5.4 8.6 6 3.6 2.4 3.2 22 0.8 1.3 L0.4 6	TOTAL CaCO3 10605L 312 302.2 316.4 210.7 322.1 277.4 314.8 269.7 259.7 390.3 407.4 404.8 277.4 456.5 247.7 182.9 171.5 376.5	ANTS 10701L  MG/L 0.75 0.57 1.05 2.3 0.47 1.81 0.4 0.55 1.38 1.6 1.4 0.75  0.4 [ 0.6 0.17 0.33 [ 1.26 [	DISS MG/L 11103L 125 132 108 63 170 105 155 133 94.3 184 228 228 132 176 87 93 159 174	DISS MG/L 121**L 31 30.9 29.8 19 33 27 28.5 22.4 21.8 38.2 38.1 38.7 27 52 28 20.2 21.5 36.5	REACT SIO2 141**L 11.2 12.2 5.3 13.3 9.65 10.9 10.4 10 13.7 12.2 12.75 10.4 16.2 11.6 13 7.25 14.7

STATION DAY MON. P. 10.10S. TOTAL TOTAL METER DBS. TOTAL FECAL DBS. EXT BLYTB EXT EXT EXT EXT EXT EXT MGGL MGGL MGGL MGGL MGGL MGGL MGGL MGG	····				NITRITE	AMMONIA	N	OXYGEN	Ca	COLI	COLI	 В	Al	Al	Mn	Fe	Ni	Cu	Zn
STATION   DAY MON.   F.   Mod.   O7750L   O775																			
THEATED INFLUENT	STATION	DAY M	ION.	YR.															
TREATED INFLUENT   23								081**F				05107L	13303L						
TREATED INFLUENT   23							***											<del></del>	<del></del>
THEATED INFLUENT   16																			
THEATED INFLUENT 18 7 91 0.4 17.8 81.9 7.3 745 200 1.10. 0.05 0.04 0.034 0.21 0.002 0.002 0.005 0.108																			
THEATED INFLUENT   18   7   91   0.4   17.8   81.9   7.3   74.5   200   1.10   0.14   0.07   0.098   0.27   0.002   0.005   0.100   0.006   0.22   1.001   0.006   0.006   0.22   0.001   0.006   0.																			
TREATED INFLUENT 7 10 91 29 5.04 9.5 4.5 66.5 L10. L10. 0.07 L0.01 0.06 0.02 L0.001 0.006 0.007 TREATED INFLUENT 22 4 92 14 66.7 29.92 8.6 71 4 L1. 0.09 L0.01 0.006 0.007 0.0						•													
TREATED INFLUENT 20 1 92 1 92 0.059 7.01 54 10.8 79 L2 L1. 0.1 0.05 0.091 0.04 0.1 0.002 0.003 0.015   TREATED INFLUENT 6 7 92 11.2 5.36 39.14 3.5 68 500 2 0.06 10.00   TREATED INFLUENT 7 10 82 13 9.67 88.3 31.4 3.5 68 500 2 0.06 10.01   TREATED INFLUENT 7 10 82 13 9.67 88.3 31.4 3.5 68 500 2 0.06 10.01   TREATED INFLUENT 7 10 82 13 9.67 88.3 31.4 3.5 68 500 2 0.06 10.01   TREATED INFLUENT 7 10 82 10.00 1																			
TREATED INFLUENT 22 4 8 92 14 67 28.52 9.6 71 4 1.1 0.09 L0.01 0.04 0.1 0.002 0.03 0.015 TREATED INFLUENT 6 7 82 10.2 5.36 39.14 3.5 68 800 2.2 0.08 0.22 0.016 0.5 0.004 0.015 TREATED INFLUENT 7 10 82 13 9.67 87.3 3.5 68 800 2.2 0.03 0.015 TREATED INFLUENT 14 1 83 18.5 9.8 10.5 10.9 10.2 10.0 10.0 1.0 0.1 0.01 0.04 0.022 1.0 10.0 10.0 10.0 10.0 10.0 10.0																			
TREATED INFLUENT 6 7 92 10.2 5.36 39.14 3.5 68 50.0 2 0.08 0.22 0.061 0.5 0.004 0.07 0.07 1 1 1 1 1 2 1 3 9.67 87.3 5.5 95 1.10 0.1 0.1 0.01 0.04 0.09 1.0001 0.03 0.02 1 1 1 1 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1																			
TREATED INFLUENT 7 10 92 13 96.7 87.3 3.5 95 L1.0 0.1 L0.01 0.64 0.09 L0.001 0.003 0.022 1 INFLUENT 10 1 93 185 39 100.5 10.9 102 182 L1.0 0.1 L0.01 3 0.14 L0.001 0.004 0.022 1.002														0.22					
IMPLIENT DUPLICATE   1		-							95		L1.0	0.1		L0.01	0.64	0.09	L0.001	0.003	0.022
MeDiany (190-92), outfall flowing   1.9   1.4   5   1.7   9.9   9.7   36   30   0.08   0.3   0.08   0.3   0.09   0.00   0.00   0.003   0.003   0.004	TREATED INFLUENT	14	1	93	18.5	39	100.5	10.9	102	182	L2.	0.13		0.01	0.13	0.14	L0.001	0.004	0.022
BASIN 1 OUTFALL   23   10   90   1.4   5   17   9.9   97   36   30   0.08   0.3   0.01   0.75   0.003   0.004	INFLUENT DUPLICATE	14	1	93															
BASIN   OUTFALL   16	MEDIAN(90-92), outfall	flowing		_	2.9	6.7	39.14	9.6	70	L10.	L10.	0.09	0	0	0.061	0.22	0.002	0.003	0.015
BASIN   OUTFALL   16	BASIN 1 OUTFALL	23	10	90	1.4	5	17	9.9	97	36	30	0.08	0.3		0.19	0.75	0.003	0.003	0.004
BASIN   OUTFALL   18																			
BASIN 1 OUTFALL   77   10   91   0.088   0.27   4.295   11.3   33.2   26										100	77	0.06	0.07		0.02	0.16	0.004	0.003	L0.001
BASIN 1 OUTFALL   Fig.   Fig							4.295		33.2	26	L4.	0.04	0.07		0.044	0.07	0.003	0.003	0.006
BASINI OUTFALL   Face	BASIN 1 OUTFALL	20	1	92	0.4	6.97	46.8	7.1	90.5	200		0.1	0.08			0.18	0.003	0.006	0.079
Name													0.31						
STATION   DAY MON. YR.   DISS   TOTAL   DISS   TOTAL   DISS   D		6	7	92 _															
STATION   DAY MON. YR.   DISS   DISS   DISS   DISS   DISS   ABSORP-   DISS   TOTAL   TOTAL   TOTAL   EXTR   TOTAL   MG/L   MG/	MEDIAN(90-92)				0.4	0.27	7.83	9.9	53	34	2	0.06	0.075	0.1	0.085	0.18	0.004	0.003	0.006
STATION   DAY MON. YR.   DISS   DISS   DISS   DISS   DISS   ABSORP-   DISS   TOTAL   TOTAL   TOTAL   EXTR   TOTAL   MG/L   MG/																			
DAY MON. YE.   NG/L   151"L   15406L   16101L   16200L   16306L   17206L   NG/L   NG																			
TREATED INFLUENT 24 8 90 7.1 7.2 L0.1 1620L 1630EL 1720EL RATIO 331**L 3401L 4209L 5631L 8001L 8230L 17102F 17103F																			
TREATED INFLUENT 24 8 90 TREATED INFLUENT 23 10 90 7.1 7.2 L0.1 162 124 3.31 0.0014 L0.05 L0.002 0.4 3.4 TREATED INFLUENT 15 1 91 5.5 7.5 L0.2 149 101 2.64 0.006 L0.05 L0.002 0.2 0.4 TREATED INFLUENT 16 4 91 2.74 2.98 L0.02 75 42.2 1.89 0.0004 L0.05 L0.002 0.2 0.8 TREATED INFLUENT 17 10 91 3.05 3.4 L0.02 142 112 4.12 0.001 L0.05 L0.002 0.2 0.8 TREATED INFLUENT 17 10 91 3.05 3.4 L0.02 136 99 2.74 0.0012 L0.05 L0.002 0.2 0.2 TREATED INFLUENT 22 4 92 7.58 8.3 L0.02 123 124 3.80 0.0005 TREATED INFLUENT 22 4 92 7.85 8.15 L0.02 90.6 144 3.53 0.0003 L0.05 L0.002 0.1 0.6 TREATED INFLUENT 7 10 92 1.4 4.2 0.12 TREATED INFLUENT 7 10 92 1.4 4.2 0.12 TREATED INFLUENT 7 10 92 1.4 12.4 L0.01 TREATED INFLUENT 7 10 92 1.4 12.4 L0.01 TREATED INFLUENT 7 10 92 1.4 12.4 L0.01 TREATED INFLUENT 14 1 93 9.6 9.8 L0.01  BASIN 1 OUTFALL  23 10 90 2.05 2.4 L0.05 L0.002 0.1 L0.05 L0.002 0.0 L0.05 L0.002 0.1	STATION	DAVI	40NI	VD	DISS	TOTAL	DISS	DISS	DISS	DISS	ABSORP-	DISS	TOTAL	TOTAL	EXTRB	TOTAL	EXT	FREE	TOTAL
TREATED INFLUENT 23 10 90 7.1 7.2 L0.1 162 124 3.31 0.0014 L0.05 L0.002 0.4 3.4 TREATED INFLUENT 15 1 91 5.5 7.5 L.02 149 101 2.64 0.006 0.13 0.004 0.1 1 TREATED INFLUENT 16 4 91 2.74 2.98 L0.02 75 42.2 1.89 0.0004 L0.05 L0.002 0.2 0.8 TREATED INFLUENT 17 10 91 3.05 3.4 L0.02 142 112 4.12 0.001 L0.05 L0.002 0.2 0.2 TREATED INFLUENT 17 10 91 3.05 3.4 L0.02 136 99 2.74 0.0012 L0.05 L0.002 0.2 0.2 TREATED INFLUENT 20 1 92 7.58 8.3 L0.02 123 124 3.80 0.0005 0.38 L0.002 0.1 0.6 TREATED INFLUENT 20 1 92 7.58 8.15 L0.02 193 124 3.80 0.0005 0.38 L0.002 0.1 0.6 TREATED INFLUENT 7 10 92 11.4 12.4 L0.01 184 176 4.03 0.0006 0.1 0.14 0.003 0.06 0.06 TREATED INFLUENT 7 10 92 11.4 12.4 L0.01 184 176 4.03 0.0005 0.1 0.1 L0.05 L0.002 0.1 0.4 TREATED INFLUENT 14 1 93 9.4 9.8 L0.01 188 1 243 4.89 0.0003 0.1 L0.05 L0.002 0.1 0.4 TREATED INFLUENT 14 1 93 9.6 9.8 L0.01 188 1 243 4.89 0.0003 0.1 L0.05 L0.002 0.1 0.4 TREATED INFLUENT 14 1 93 9.6 9.8 L0.01 188 1 243 4.89 0.0003 0.1 L0.05 L0.002 0.1 0.4 TREATED INFLUENT 14 1 93 9.6 9.8 L0.01 188 1 244 4.9 0.0004 0.1 L0.05 L0.002 0.1 0.5 L0.002 0.1 0.4 TREATED INFLUENT 14 1 93 9.6 9.8 L0.01 188 1 243 4.89 0.0003 0.1 L0.05 L0.002 0.03 0.18 L0.05 L0.002 0.1 0.4 L0.05 L0.002 0.1 0.4 L0.05 L0.002 0.1 0.4 L0.05 L0.002 0.1 0.5 L0.002 0.1 0.1 0.5 L0.002 0.1 0.1 0.5 L0.002 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1	STATION	DAY N	MON.	YR.	DISS MG/L	TOTAL MG/L	DISS MG/L	DISS MG/L	DISS MG/L	DISS MG/L	ABSORP- TION	DISS MG/L	TOTAL MG/L	TOTAL MG/L	EXTRB MG/L	TOTAĽ UG/L	EXT MG/L	FREE MG/L	TOTAL MG/L
TREATED INFLUENT 15 1 91 5.5 7.5 L.02 149 101 2.64 0.0006 0.13 0.004 0.1 1 TREATED INFLUENT 16 4 91 2.74 2.98 L.002 75 42.2 1.89 0.0004 L.0.05 L0.002 0.2 0.8 TREATED INFLUENT 18 7 91 10.7 11.4 L.0.02 142 112 4.12 0.001 L.0.05 0.004 0.1 0.5 TREATED INFLUENT 17 10 91 3.05 3.4 L.0.02 136 99 2.74 0.0012 L.0.05 L0.002 0.2 0.2 TREATED INFLUENT 20 1 92 7.58 8.3 L.0.02 136 99 2.74 0.0012 L.0.05 L0.002 0.1 0.6 TREATED INFLUENT 22 4 92 7.58 8.15 L.0.02 123 124 3.80 0.0005 L.0.038 L0.002 0.1 0.6 TREATED INFLUENT 6 7 92 4 4 4.2 0.12 95.8 80.8 2.55 0.0006 0.1 0.14 0.03 0.06 0.06 TREATED INFLUENT 7 10 92 11.4 12.4 L.0.01 184 176 4.03 0.0005 0.1 L.0.05 L0.002 0.1 0.4 TREATED INFLUENT 1 4 1 93 9.4 9.8 L.0.01 184 176 4.03 0.0005 0.1 L.0.05 L0.002 0.1 0.4 INFLUENT DUPLICATE 14 1 93 9.6 9.8 L.0.01 188 243 4.89 0.0003 0.1 L.0.05 L0.002 0.1 0.5  BASIN 1 OUTFALL 23 10 90 2.05 2.4 L.0.1 244 1 123 112 3.31 0.0006 0 L.0.05 L0.002 0.1 0.5  BASIN 1 OUTFALL 18 7 91 0.667 0.537 L.0.02 175 55.8 2.41 0.014 1.0.05 L0.002 0.1 0.1  BASIN 1 OUTFALL 18 7 91 0.667 0.537 L.0.02 149 1 1.2 1 5.8 0.011  BASIN 1 OUTFALL 20 1 92 0.58 7.4 L.0.02 166 141 3.90 0.0055 0.052  BASIN 1 OUTFALL 20 1 92 0.58 1.56 L.0.02 166 141 3.90 0.0055 0.052  BASIN 1 OUTFALL 20 4 92 0.58 1.56 L.0.02 166 141 3.90 0.0055 0.052  BASIN 1 OUTFALL 20 4 92 0.58 1.56 L.0.02 166 141 3.90 0.0055 0.052  BASIN 1 OUTFALL 20 4 92 0.58 1.56 L.0.02 177 1.2 2 0.002  BASIN 1 OUTFALL 20 4 92 0.58 0.55 0.52 L.0.01 1.2 1.2 1.2 1.0.05 1.0.002 0.1 0.1  BASIN 1 OUTFALL 20 4 92 0.58 1.56 L.0.02 177 1.2 2 0.002  BASIN 1 OUTFALL 20 4 92 0.58 0.55 0.52 L.0.01 1.2 1.2 1.2 1.0.00 1.2 1.2 1.2 1.0.001 1.2 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	STATION	DAY N	MON.	YR.	DISS MG/L	TOTAL MG/L	DISS MG/L	DISS MG/L	DISS MG/L	DISS MG/L	ABSORP- TION	DISS MG/L	TOTAL MG/L	TOTAL MG/L	EXTRB MG/L	TOTAĽ UG/L	EXT MG/L	FREE MG/L	TOTAL MG/L
TREATED INFLUENT   16					DISS MG/L	TOTAL MG/L	DISS MG/L	DISS MG/L	DISS MG/L 16306L	DISS MG/L 17206L	ABSORP- TION RATIO	DISS MG/L	TOTAL MG/L 34011L	TOTAL MG/L 42009L	EXTRB MG/L	TOTAĽ UG/L	EXT MG/L 82302L	FREE MG/L 17102F	TOTAL MG/L 17103F
TREATED INFLUENT 18 7 91 10.7 11.4 L0.02 142 112 4.12 0.001 L0.05 0.004 0.1 0.5 TREATED INFLUENT 17 10 91 3.05 3.4 L0.02 136 99 2.74 0.0012 L0.05 L0.002 0.2 0.2 TREATED INFLUENT 20 1 92 7.58 8.3 L0.002 123 124 3.80 0.0005 L0.005 L0.002 0.1 0.6 TREATED INFLUENT 22 4 92 7.85 8.15 L0.02 90.6 144 3.53 0.0003 L0.05 L0.002 0.1 0.4 TREATED INFLUENT 6 7 92 4 4.2 0.12 95.8 80.8 2.55 0.0006 0.1 0.14 0.003 0.06 0.06 TREATED INFLUENT 7 10 92 11.4 12.4 L0.01 184 176 4.03 0.0005 0.1 L0.05 L0.002 0.1 0.4 TREATED INFLUENT 14 1 93 9.4 9.8 L0.01 182 243 4.89 0.0003 0.1 L0.05 L0.002 0.03 0.18 INFLUENT DUPLICATE 14 1 93 9.6 9.8 L0.01 188 1 244 4.91 0.0004 0.1 L0.05 L0.002 0.0 0.00 0.18 INFLUENT DUPLICATE 14 1 93 9.6 9.8 L0.01 188 1 244 4.91 0.0004 0.1 L0.05 L0.002 0.1 0.5 L0.002 0.1 0.1 0.5 L0.002 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1	TREATED INFLUENT	24	8	90	DISS MG/L 151**L	TOTAL MG/L 15406L	DISS MG/L	DISS MG/L 16200L	DISS MG/L 16306L	DISS MG/L 17206L	ABSORP- TION RATIO 4.81	DISS MG/L 331**L	TOTAL MG/L 34011L	TOTAL MG/L 42009L	EXTRB MG/L	TOTAĽ UG/L 80011L	EXT MG/L 82302L 0.004	FREE MG/L 17102F Hach kit	TOTAL MG/L 17103F Hach kit
TREATED INFLUENT 17 10 91 3.05 3.4 L0.02 136 99 2.74 0.0012 L0.05 L0.002 0.2 0.2 TREATED INFLUENT 20 1 92 7.58 8.3 L0.02 90.6 144 3.53 0.0003 0.38 L0.002 0.1 0.6 TREATED INFLUENT 22 4 92 7.85 8.15 L0.02 90.6 144 3.53 0.0003 L0.05 L0.002 0.1 0.4 TREATED INFLUENT 6 7 92 4 4.2 0.12 95.8 80.8 2.55 0.0006 0.1 0.14 0.003 0.06 0.06 TREATED INFLUENT 7 10 92 11.4 12.4 L0.01 184 176 4.03 0.0005 0.1 L0.05 L0.002 0.1 0.4 TREATED INFLUENT 14 1 93 9.4 9.8 L0.01 182 243 4.89 0.0003 0.1 L0.05 L0.002 0.03 0.18 INFLUENT DUPLICATE 14 1 93 9.6 9.8 L0.01 188 1 244 1 4.91 0.0004 0.1 L0.05 L0.002 0.03 0.18 INFLUENT 0.014 II	TREATED INFLUENT	24 23 15	8 10 1	90 90 91	DISS MG/L 151**L 7.1 5.5	TOTAL MG/L 15406L 7.2 7.5	DISS MG/L	DISS MG/L 16200L L0.1 L.02	DISS MG/L 16306L 127 162 149	DISS MG/L 17206L 106.5 124 101	ABSORPTION RATIO 4.81 3.31 2.64	DISS MG/L 331**L 0.0014 0.0006	TOTAL MG/L 34011L	TOTAL MG/L 42009L	EXTRB MG/L	TOTAL UG/L 80011L L0.05 0.13	EXT MG/L 82302L 0.004 L0.002 0.004	FREE MG/L 17102F Hach kit 0.4 0.1	TOTAL MG/L 17103F Hach kit 3.4
TREATED INFLUENT 20 1 92 7.58 8.3 L0.02 123 124 3.80 0.0005 TREATED INFLUENT 22 4 92 7.85 8.15 L0.02 90.6 144 3.53 0.0003 L0.05 L0.002 0.1 0.4 TREATED INFLUENT 6 7 92 4 4.2 0.12 95.8 80.8 2.55 0.0006 TREATED INFLUENT 7 10 92 11.4 12.4 L0.01 184 176 4.03 0.0005 TREATED INFLUENT 14 1 93 9.4 9.8 L0.01 182 243 4.89 0.0003 INFLUENT DUPLICATE 14 1 93 9.6 9.8 L0.01 188 243 4.91 0.0004 MEDIAN(90-92), outfall flowing  BASIN 1 OUTFALL 23 10 90 2.05 2.4 L0.1 244 1 123 1.12 3.31 0.0006  BASIN 1 OUTFALL 16 4 91 1.21 1.66 L0.02 175 55.8 2.41 0.014 BASIN 1 OUTFALL 18 7 91 0.467 0.537 L0.02 104 55.5 2.99 0.015  BASIN 1 OUTFALL 17 10 91 0.7 0.8 L0.02 149 1 112 5.28 0.011  BASIN 1 OUTFALL 20 1 92 6.95 7.4 L0.02 149 1 112 5.28 0.011  BASIN 1 OUTFALL 22 4 92 0.58 1.56 L0.02 166 141 3.90 0.0055  BASIN 1 OUTFALL 22 4 92 0.58 1.56 L0.02 166 141 3.90 0.0055  BASIN 1 OUTFALL 22 4 92 0.58 1.56 L0.02 167 122 100 3.78 0.0077  0.03 0.13 L0.002 0.0 0.002  D.0000000000000000000000000000000	TREATED INFLUENT TREATED INFLUENT TREATED INFLUENT TREATED INFLUENT	24 23 15 16	8 10 1 4	90 90 91 91	DISS MG/L 151**L 7.1 5.5 2.74	TOTAL MG/L 15406L 7.2 7.5 2.98	DISS MG/L	DISS MG/L 16200L L0.1 L.02 L0.02	DISS MG/L 16306L 127 162 149 75	DISS MG/L 17206L 106.5 124 101 42.2	ABSORP- TION RATIO 4.81 3.31 2.64 1.89	DISS MG/L 331**L 0.0014 0.0006 0.0004	TOTAL MG/L 34011L	TOTAL MG/L 42009L	EXTRB MG/L	TOTAL UG/L 80011L L0.05 0.13 L0.05	EXT MG/L 82302L 0.004 L0.002 0.004 L0.002	FREE MG/L 17102F Hach kit 0.4 0.1 0.2	TOTAL MG/L 17103F Hach kit 3.4 1 0.8
TREATED INFLUENT 22 4 92 7.85 8.15 L0.02 90.6 144 3.53 0.0003 L0.05 L0.002 0.1 0.4  TREATED INFLUENT 6 7 92 4 4.2 0.12 95.8 80.8 2.55 0.0006 0.1 0.14 0.003 0.06 0.06  TREATED INFLUENT 7 10 92 11.4 12.4 L0.01 184 176 4.03 0.0005 0.1 L0.05 L0.002 0.1 0.4  TREATED INFLUENT 14 1 93 9.4 9.8 L0.01 182 243 4.89 0.0003 0.1 L0.05 L0.002 0.1 0.4  INFLUENT DUPLICATE 14 1 93 9.6 9.8 L0.01 1881 244 4.91 0.0004 0.1 L0.05 L0.002 0.0 0.18  INFLUENT DUPLICATE 14 1 93 9.6 9.8 L0.01 1881 244 4.91 0.0004 0.1 L0.05 L0.002  MEDIAN(90-92), outfall flowing 7.1 7.2 0 L0.02 123 112 3.31 0.0006 0 L0.05 L0.002 0.1 0.5  BASIN 1 OUTFALL 23 10 90 2.05 2.4 L0.1 244 1 159 3.59 0.018  BASIN 1 OUTFALL 16 4 91 1.21 1.66 L0.02 175 55.8 2.41 0.014 L0.05 L0.002 0.1 0.1  BASIN 1 OUTFALL 18 7 91 0.467 0.537 L0.02 104 55.5 2.99 0.015 L0.05 L0.002 0.1 0.2  BASIN 1 OUTFALL 17 10 91 0.7 0.8 L0.02 149 122 120 120 120 120 120 120 120 120 120	TREATED INFLUENT TREATED INFLUENT TREATED INFLUENT TREATED INFLUENT TREATED INFLUENT	24 23 15 16 18	8 10 1 4 7	90 90 91 91 91	DISS MG/L 151**L 7.1 5.5 2.74 10.7	TOTAL MG/L 15406L 7.2 7.5 2.98 11.4	DISS MG/L	DISS MG/L 16200L L0.1 L.02 L0.02 L0.02	DISS MG/L 16306L 127 162 149 75 142	DISS MG/L 17206L 106.5 124 101 42.2 112	ABSORP- TION RATIO 4.81 3.31 2.64 1.89 4.12	DISS MG/L 331**L 0.0014 0.0006 0.0004 0.001	TOTAL MG/L 34011L	TOTAL MG/L 42009L	EXTRB MG/L	TOTAL UG/L 80011L L0.05 0.13 L0.05 L0.05	EXT MG/L 82302L 0.004 L0.002 0.004 L0.002 0.004	FREE MG/L 17102F Hach kit 0.4 0.1 0.2 0.1	TOTAL MG/L 17103F Hach kit 3.4 1 0.8 0.5
TREATED INFLUENT 6 7 92 4 4.2 0.12 95.8 80.8 2.55 0.0006 0.1 0.14 0.003 0.06 0.06 TREATED INFLUENT 7 10 92 11.4 12.4 L0.01 184 176 4.03 0.0005 0.1 L0.05 L0.002 0.1 0.4 TREATED INFLUENT 14 1 93 9.4 9.8 L0.01 182 243 4.89 0.0003 0.1 L0.05 L0.002 0.03 0.18 INFLUENT DUPLICATE 14 1 93 9.6 9.8 L0.01 1881 244 4.91 0.0004 0.1 L0.05 L0.002 0.03 0.18 INFLUENT DUPLICATE 14 1 93 9.6 9.8 L0.01 1881 244 4.91 0.0004 0.1 L0.05 L0.002 0.03 0.18 INFLUENT DUPLICATE 14 1 93 9.6 9.8 L0.01 1881 244 4.91 0.0004 0.1 L0.05 L0.002 0.0 0.03 0.18 INFLUENT DUPLICATE 14 1 93 9.6 9.8 L0.01 1881 244 4.91 0.0004 0.1 L0.05 L0.002 0.1 0.5 L0.002 0.1 0.5 ID.002 0.1 0.5 L0.002 0.1 0.1 0.1 L0.05 L0.002 0.0 0.005 L0.002 0.1 0.1 0.1 L0.05 L0.002 0.0 0.005 L0.002 0.1 0.1 0.1 L0.05 L0.002 0.0 0.005 L0.002 0.	TREATED INFLUENT TREATED INFLUENT TREATED INFLUENT TREATED INFLUENT TREATED INFLUENT TREATED INFLUENT	24 23 15 16 18 17	8 10 1 4 7 10	90 90 91 91 91	DISS MG/L 151**L 7.1 5.5 2.74 10.7 3.05	TOTAL MG/L 15406L 7.2 7.5 2.98 11.4 3.4	DISS MG/L	DISS MG/L 16200L L0.1 L.02 L0.02 L0.02 L0.02	DISS MG/L 16306L 127 162 149 75 142 136	DISS MG/L 17206L 106.5 124 101 42.2 112 99	ABSORP- TION RATIO 4.81 3.31 2.64 1.89 4.12 2.74	DISS MG/L 331**L 0.0014 0.0006 0.0004 0.001 0.0012	TOTAL MG/L 34011L	TOTAL MG/L 42009L	EXTRB MG/L	TOTAL UG/L 80011L L0.05 0.13 L0.05 L0.05 L0.05	EXT MG/L 82302L 0.004 L0.002 0.004 L0.002 0.004 L0.002	FREE MG/L 17102F Hach kit 0.4 0.1 0.2 0.1	TOTAL MG/L 17103F Hach kit 3.4 1 0.8 0.5 0.2
TREATED INFLUENT 7 10 92 11.4 12.4 L0.01 184 176 4.03 0.005 0.1 L0.05 L0.002 0.1 0.4 TREATED INFLUENT 14 1 93 9.4 9.8 L0.01 182 243 4.89 0.0003 0.1 L0.05 L0.002 0.03 0.18 INFLUENT DUPLICATE 14 1 93 9.6 9.8 L0.01 188 244 4.91 0.0004 0.1 L0.05 L0.002 0.03 0.18 INFLUENT DUPLICATE 14 1 93 9.6 9.8 L0.01 188 244 4.91 0.0004 0.1 L0.05 L0.002 0.1 0.5 L0.002 0.1 0.1 0.1 L0.05 L0.002 0.1 0.1 L0.05 L0.002 0.1 0.1 0.1 L0.05 L0.002 0.0 0.02 L0.1 0.1 L0.05 L0.002 0.0 0.02 L0.1 0.1 0.1 L0.05 L0.002 0.0 0.002 L0.1 0.1 L0.05 L0.002 0.0 0.02 L	TREATED INFLUENT	24 23 15 16 18 17 20	8 10 1 4 7 10 1	90 90 91 91 91 91 91	DISS MG/L 151**L 7.1 5.5 2.74 10.7 3.05 7.58	TOTAL MG/L 15406L 7.2 7.5 2.98 11.4 3.4 8.3	DISS MG/L	DISS MG/L 16200L L0.1 L.02 L0.02 L0.02 L0.02 L0.02 L0.02	DISS MG/L 16306L 127 162 149 75 142 136 123	DISS MG/L 17206L 106.5 124 101 42.2 112 99 124	ABSORP- TION RATIO 4.81 3.31 2.64 1.89 4.12 2.74 3.80	DISS MG/L 331**L 0.0014 0.0006 0.0004 0.001 0.0012 0.0005	TOTAL MG/L 34011L	TOTAL MG/L 42009L	EXTRB MG/L	LO.05 0.13 LO.05 LO.05 LO.05 LO.05 LO.05 0.38	EXT MG/L 82302L 0.004 L0.002 0.004 L0.002 0.004 L0.002 L0.002	FREE MG/L 17102F Hach kit 0.4 0.1 0.2 0.1 0.2	TOTAL MG/L 17103F Hach kit 3.4 1 0.8 0.5 0.2 0.6
TREATED INFLUENT 14 1 93 9.4 9.8 L0.01 182 243 4.89 0.0003 0.1 L0.05 L0.002 0.03 0.18 INFLUENT DUPLICATE 14 1 93 9.6 9.8 L0.01 188	TREATED INFLUENT	24 23 15 16 18 17 20 22	8 10 1 4 7 10 1 4	90 90 91 91 91 91 92 92	DISS MG/L 151**L 7.1 5.5 2.74 10.7 3.05 7.58 7.85	TOTAL MG/L 15406L 7.2 7.5 2.98 11.4 3.4 8.3 8.15	DISS MG/L 16101L	DISS MG/L 16200L L0.1 L.02 L0.02 L0.02 L0.02 L0.02 L0.02	DISS MG/L 16306L 127 162 149 75 142 136 123 90.6	DISS MG/L 17206L 106.5 124 101 42.2 112 99 124 144	ABSORP- TION RATIO 4.81 3.31 2.64 1.89 4.12 2.74 3.80 3.53	DISS MG/L 331**L 0.0014 0.0006 0.0004 0.0012 0.0005 0.0003	TOTAL MG/L 34011L	TOTAL MG/L 42009L	EXTRB MG/L 56311L	TOTAL UG/L 80011L L0.05 0.13 L0.05 L0.05 L0.05 0.38 L0.05	EXT MG/L 82302L 0.004 L0.002 0.004 L0.002 L0.002 L0.002 L0.002	FREE MG/L 17102F Hach kit 0.4 0.1 0.2 0.1 0.2 0.1	TOTAL MG/L 17103F Hach kit 3.4 1 0.8 0.5 0.2 0.6 0.4
NFLUENT DUPLICATE 14 1 93   9.6   9.8   L0.01   188   244   4.91   0.0004   0.1   L0.05   L0.002	TREATED INFLUENT	24 23 15 16 18 17 20 22 6	8 10 1 4 7 10 1 4 7	90 90 91 91 91 91 92 92	7.1 5.5 2.74 10.7 3.05 7.88 7.85	TOTAL MG/L 15406L 7.2 7.5 2.98 11.4 3.4 8.3 8.15 4.2	DISS MG/L 16101L	DISS MG/L 16200L L0.1 L.02 L0.02 L0.02 L0.02 L0.02 L0.02	DISS MG/L 16306L 127 162 149 75 142 136 123 90.6 95.8	DISS MG/L 17206L 106.5 124 101 42.2 112 99 124 144 80.8	ABSORP- TION RATIO 4.81 3.31 2.64 1.89 4.12 2.74 3.80 3.53 2.55	DISS MG/L 331**L 0.0014 0.0006 0.0004 0.0012 0.0005 0.0003 0.0006	TOTAL MG/L 34011L	TOTAL MG/L 42009L	EXTRB MG/L 56311L	TOTAL UG/L 80011L L0.05 0.13 L0.05 L0.05 0.05 0.38 L0.05 0.14	EXT MG/L 82302L 0.004 L0.002 0.004 L0.002 L0.002 L0.002 L0.002 0.003	FREE MG/L 17102F Hach kit 0.4 0.1 0.2 0.1 0.2 0.1 0.1 0.06	TOTAL MG/L 17103F Hach kit 3.4 1 0.8 0.5 0.2 0.6 0.4 0.06
BASIN 1 OUTFALL         23         10         90         2.05         2.4         L0.1         244 [159]         3.59         0.018         L0.05         L0.002         0.2         0.2           BASIN 1 OUTFALL         16         4         91         1.21         1.66         L0.02         175         55.8         2.41         0.014         L0.05         L0.002         0.1         0.1           BASIN 1 OUTFALL         18         7         91         0.467         0.537         L0.02         104         55.5         2.99         0.015         L0.05         L0.002         0.1         0.2           BASIN 1 OUTFALL         17         10         91         0.7         0.8         L0.02         149 [112]         5.28         0.011         L0.05         L0.002         0.1         0.1           BASIN 1 OUTFALL         20         1         92         6.95         7.4         L0.02         166 [-141]         3.90         0.0055         0.17         L0.002         L0.1         0.1           BASIN 1 OUTFALL         22         4         92         0.58         1.56         L0.02         197 [-122]         3.83         0.013         L0.05         L0.002         0.09	TREATED INFLUENT	24 23 15 16 18 17 20 22 6 7	8 10 1 4 7 10 1 4 7	90 90 91 91 91 92 92 92	7.1 5.5 2.74 10.7 3.05 7.58 7.85 4 11.4	7.2 7.5 2.98 11.4 3.4 8.3 8.15 4.2 12.4	DISS MG/L 16101L 0.12 L0.01	DISS MG/L 16200L L0.1 L.02 L0.02 L0.02 L0.02 L0.02 L0.02	DISS MG/L 16306L 127 162 149 75 142 136 123 90.6 95.8 184	DISS MG/L 17206L 106.5 124 101 42.2 112 99 124 144 80.8 176	ABSORP- TION RATIO 4.81 3.31 2.64 1.89 4.12 2.74 3.80 3.53 2.55 4.03	DISS MG/L 331**L 0.0014 0.0006 0.0004 0.0012 0.0005 0.0003 0.0006 0.0005	TOTAL MG/L 34011L	TOTAL MG/L 42009L	EXTRB MG/L 56311L 0.1 0.1	TOTAL UG/L 80011L L0.05 0.13 L0.05 L0.05 0.38 L0.05 0.14 L0.05	EXT MG/L 82302L 0.004 L0.002 0.004 L0.002 0.004 L0.002 L0.002 L0.002 0.003 L0.002	FREE MG/L 17102F Hach kit 0.4 0.1 0.2 0.1 0.2 0.1 0.1 0.06 0.1	TOTAL MG/L 17103F Hach kit 3.4 1 0.8 0.5 0.2 0.6 0.4 0.06 0.4
BASIN 1 OUTFALL 16 4 91 1.21 1.66 L0.02 175 55.8 2.41 0.014 L0.05 L0.002 0.1 0.1 BASIN 1 OUTFALL 18 7 91 0.467 0.537 L0.02 104 55.5 2.99 0.015 L0.05 L0.002 0.1 0.2 BASIN 1 OUTFALL 17 10 91 0.7 0.8 L0.02 149 112 5.28 0.011 L0.05 L0.002 0.1 0.1 BASIN 1 OUTFALL 20 1 92 6.95 7.4 L0.02 166 141 3.90 0.0055 0.17 L0.002 L0.1 0.1 BASIN 1 OUTFALL 22 4 92 0.58 1.56 L0.02 197 122 3.83 0.013 L0.05 L0.002 0.09 0.2 BASIN 1 OUTFALL 6 7 92 0.5 0.52 L0.01 122 100 3.78 0.007 0.03 0.13 L0.002 0 0.002	TREATED INFLUENT	24 23 15 16 18 17 20 22 6 7	8 10 1 4 7 10 1 4 7 10	90 90 91 91 91 92 92 92 92 93	DISS MG/L 151**L 7.1 5.5 2.74 10.7 3.05 7.58 7.85 4 11.4 9.4	TOTAL MG/L 15406L 7.2 7.5 2.98 11.4 3.4 8.3 8.15 4.2 12.4 9.8	DISS MG/L 16101L 0.12 L0.01 L0.01	DISS MG/L 16200L L0.1 L.02 L0.02 L0.02 L0.02 L0.02 L0.02	DISS MG/L 16306L 127 162 149 75 142 136 123 90.6 95.8 184 182	DISS MG/L 17206L 106.5 124 101 42.2 112 99 124 144 80.8 176 243	ABSORP- TION RATIO 4.81 3.31 2.64 1.89 4.12 2.74 3.80 3.53 2.55 4.03 4.89	DISS MG/L 331**L 0.0014 0.0006 0.0004 0.0012 0.0005 0.0003 0.0006 0.0005 0.0003	TOTAL MG/L 34011L	TOTAL MG/L 42009L	EXTRB MG/L 56311L 0.1 0.1 0.1	LO.05 0.13 LO.05 LO.05 LO.05 LO.05 LO.05 0.38 LO.05 0.14 LO.05 LO.05	EXT MG/L 82302L 0.004 L0.002 0.004 L0.002 L0.002 L0.002 L0.002 L0.003 L0.002 L0.002	FREE MG/L 17102F Hach kit 0.4 0.1 0.2 0.1 0.2 0.1 0.1 0.06 0.1	TOTAL MG/L 17103F Hach kit 3.4 1 0.8 0.5 0.2 0.6 0.4 0.06 0.4
BASIN 1 OUTFALL 16 4 91 1.21 1.66 L0.02 175 55.8 2.41 0.014 L0.05 L0.002 0.1 0.1 BASIN 1 OUTFALL 18 7 91 0.467 0.537 L0.02 104 55.5 2.99 0.015 L0.05 L0.002 0.1 0.2 BASIN 1 OUTFALL 17 10 91 0.7 0.8 L0.02 149 112 5.28 0.011 L0.05 L0.002 0.1 0.1 BASIN 1 OUTFALL 20 1 92 6.95 7.4 L0.02 166 141 3.90 0.0055 0.17 L0.002 L0.1 0.1 BASIN 1 OUTFALL 22 4 92 0.58 1.56 L0.02 197 122 3.83 0.013 L0.05 L0.002 0.09 0.2 BASIN 1 OUTFALL 6 7 92 0.5 0.52 L0.01 122 100 3.78 0.0077 0.03 0.13 L0.002 0 0.002	TREATED INFLUENT	24 23 15 16 18 17 20 22 6 7 14	8 10 1 4 7 10 1 4 7 10	90 90 91 91 91 92 92 92 92 93	7.1 5.5 2.74 10.7 3.05 7.58 7.85 4 11.4 9.4	7.2 7.5 2.98 11.4 3.4 8.3 8.15 4.2 12.4 9.8 9.8	DISS MG/L 16101L 0.12 L0.01 L0.01 L0.01	DISS MG/L 16200L L0.1 L.02 L0.02 L0.02 L0.02 L0.02 L0.02	DISS MG/L 16306L 127 162 149 75 142 136 123 90.6 95.8 184 182	DISS MG/L 17206L 106.5 124 101 42.2 112 99 124 144 80.8 176 243	ABSORP- TION RATIO 4.81 3.31 2.64 1.89 4.12 2.74 3.80 3.53 2.55 4.03 4.89 4.91	DISS MG/L 331**L 0.0014 0.0006 0.0004 0.0012 0.0005 0.0003 0.0006 0.0003 0.0003	TOTAL MG/L 34011L	TOTAL MG/L 42009L	EXTRB MG/L 56311L 0.1 0.1 0.1 0.1	LO.05 0.13 LO.05 LO.05 LO.05 LO.05 LO.05 0.38 LO.05 0.14 LO.05 LO.05 LO.05	EXT MG/L 82302L 0.004 L0.002 0.004 L0.002 L0.002 L0.002 L0.002 L0.003 L0.002 L0.002 L0.002 L0.002	FREE MG/L 17102F  Hach kit 0.4 0.1 0.2 0.1 0.2 0.1 0.1 0.0 0.1 0.06 0.1 0.03	TOTAL MG/L 17103F Hach kit 3.4 1 0.8 0.5 0.2 0.6 0.4 0.06 0.4 0.18
BASIN 1 OUTFALL         18         7         91         0.467         0.537         L0.02         104         55.5         2.99         0.015         L0.05         L0.002         0.1         0.2           BASIN 1 OUTFALL         17         10         91         0.7         0.8         L0.02         149         112         5.28         0.011         L0.05         L0.002         0.1         0.1           BASIN 1 OUTFALL         20         1         92         6.95         7.4         L0.02         166         141         3.90         0.0055         0.17         L0.002         L0.1         0.1           BASIN 1 OUTFALL         22         4         92         0.58         1.56         L0.02         197         122         3.83         0.013         0.03         0.13         L0.002         0.09         0.2           BASIN 1 OUTFALL         6         7         92         0.5         0.52         L0.01         122         100         3.78         0.0077         0.03         0.13         L0.002         0         0.02	TREATED INFLUENT INFLUENT DUPLICATI MEDIAN(90-92), outfall	24 23 15 16 18 17 20 22 6 7 14 = 14 flowing	8 10 1 4 7 10 1 4 7 10 1	90 90 91 91 91 92 92 92 93 93	7.1 5.5 2.74 10.7 3.05 7.58 7.85 4 11.4 9.4 9.6 7.1	7.2 7.5 2.98 11.4 3.4 8.3 8.15 4.2 12.4 9.8 9.8 7.2	DISS MG/L 16101L 0.12 L0.01 L0.01 L0.01	DISS MG/L 16200L L0.1 L.02 L0.02 L0.02 L0.02 L0.02 L0.02 L0.02	DISS MG/L 16306L 127 162 149 75 142 136 123 90.6 95.8 184 182 188 !	DISS MG/L 17206L 106.5 124 101 42.2 112 99 124 144 80.8 176 243 244 1 112	ABSORP- TION RATIO  4.81 3.31 2.64 1.89 4.12 2.74 3.80 3.53 2.55 4.03 4.89 4.91 3.31	DISS MG/L 331**L 0.0014 0.0006 0.0004 0.0012 0.0005 0.0003 0.0006 0.0005 0.0003 0.0004 0.0006	TOTAL MG/L 34011L	TOTAL MG/L 42009L	EXTRB MG/L 56311L 0.1 0.1 0.1 0.1	LO.05 0.13 LO.05 LO.05 LO.05 LO.05 LO.05 LO.05 LO.05 LO.05 LO.05 LO.05 LO.05	EXT MG/L 82302L 0.004 L0.002 0.004 L0.002 L0.002 L0.002 L0.002 L0.002 L0.002 L0.002 L0.002 L0.002	FREE MG/L 17102F  Hach kit 0.4 0.1 0.2 0.1 0.2 0.1 0.1 0.06 0.1 0.03	TOTAL MG/L 17103F Hach kit 3.4 1 0.8 0.5 0.2 0.6 0.4 0.06 0.4 0.18
BASIN 1 OUTFALL       17       10       91       0.7       0.8       L0.02       149   112   5.28       0.011       L0.05       L0.002       0.1       0.1         BASIN 1 OUTFALL       20       1       92       6.95       7.4       L0.02       166   141   3.90       0.005       0.17       L0.002       L0.1       0.1         BASIN 1 OUTFALL       22       4       92       0.58       1.56       L0.02       197   122   3.83       0.013       0.013       L0.05       L0.002       0.09       0.2         BASIN 1 OUTFALL       6       7       92       0.5       0.52       L0.01       122   100       3.78       0.0077       0.03       0.13       L0.002       0       0.02	TREATED INFLUENT INFLUENT DUPLICATI MEDIAN(90-92), outfall BASIN 1 OUTFALL	24 23 15 16 18 17 20 22 6 7 7 14 E 14 flowing	8 10 1 4 7 10 1 4 7 10 1 1	90 90 91 91 91 91 92 92 92 93 93 90	7.1 5.5 2.74 10.7 3.05 7.58 7.85 4 11.4 9.6 7.1	TOTAL MG/L 15406L 7.2 7.5 2.98 11.4 3.4 8.3 8.15 4.2 12.4 9.8 9.8 7.2	DISS MG/L 16101L 0.12 L0.01 L0.01 L0.01	DISS MG/L 16200L L0.1 L.02 L0.02 L0.02 L0.02 L0.02 L0.02 L0.02	DISS MG/L 16306L 127 162 149 75 142 136 123 90.6 95.8 184 182 188 123	DISS MG/L 17206L 106.5 124 101 42.2 112 99 124 144 80.8 176 243 244 112	ABSORP- TION RATIO  4.81 3.31 2.64 1.89 4.12 2.74 3.80 3.53 2.55 4.03 4.89 4.91 3.31	DISS MG/L 331**L 0.0014 0.0006 0.0004 0.0012 0.0005 0.0003 0.0006 0.0003 0.0004 0.0006	TOTAL MG/L 34011L	TOTAL MG/L 42009L	EXTRB MG/L 56311L 0.1 0.1 0.1 0.1	LO.05 LO.05 LO.05 LO.05 LO.05 LO.05 LO.05 LO.05 LO.05 LO.05 LO.05 LO.05 LO.05 LO.05 LO.05	EXT MG/L 82302L 0.004 L0.002 0.004 L0.002 L0.002 L0.002 L0.002 L0.002 L0.002 L0.002 L0.002	FREE MG/L 17102F  Hach kit 0.4 0.1 0.2 0.1 0.2 0.1 0.06 0.1 0.03	TOTAL MG/L 17103F Hach kit 3.4 1 0.8 0.5 0.2 0.6 0.4 0.06 0.4 0.18
BASIN 1 OUTFALL       20       1       92       6.95       7.4       L0.02       166       141       3.90       0.0055       0.17       L0.002       L0.1       0.1         BASIN 1 OUTFALL       22       4       92       0.58       1.56       L0.02       197       122       3.83       0.013       L0.05       L0.002       0.09       0.2         BASIN 1 OUTFALL       6       7       92       0.5       0.52       L0.01       122       100       3.78       0.0077       0.03       0.13       L0.002       0       0.02	TREATED INFLUENT INFLUENT DUPLICATI MEDIAN(90-92), outfall BASIN 1 OUTFALL BASIN 1 OUTFALL	24 23 15 16 18 17 20 22 6 7 14 5 14 flowing	8 10 1 4 7 10 1 4 7 10 1 1 1	90 90 91 91 91 92 92 92 93 93 93	7.1 5.5 2.74 10.7 3.05 7.58 7.85 4 11.4 9.6 7.1	TOTAL MG/L 15406L 7.2 7.5 2.98 11.4 3.4 8.3 8.15 4.2 12.4 9.8 9.8 7.2	DISS MG/L 16101L 0.12 L0.01 L0.01 L0.01	DISS MG/L 16200L L0.1 L.02 L0.02 L0.02 L0.02 L0.02 L0.02 L0.02	DISS MG/L 16306L 127 162 149 75 142 136 123 90.6 95.8 184 182 188 I 123	DISS MG/L 17206L 106.5 124 101 42.2 112 99 124 144 80.8 176 243 244 112	ABSORP- TION RATIO  4.81 3.31 2.64 1.89 4.12 2.74 3.80 3.53 2.55 4.03 4.89 4.91 3.31  3.59 2.41	DISS MG/L 331**L 0.0014 0.0006 0.0004 0.0012 0.0005 0.0003 0.0006 0.0005 0.0003 0.0004 0.0006	TOTAL MG/L 34011L	TOTAL MG/L 42009L	EXTRB MG/L 56311L 0.1 0.1 0.1 0.1	LO.05 LO.05 LO.05 LO.05 LO.05 LO.05 LO.05 LO.05 LO.05 LO.05 LO.05 LO.05 LO.05 LO.05	EXT MG/L 82302L 0.004 L0.002 0.004 L0.002 L0.002 L0.002 L0.002 L0.002 L0.002 L0.002 L0.002 L0.002	FREE MG/L 17102F  Hach kit 0.4 0.1 0.2 0.1 0.06 0.1 0.03 0.1 0.2 0.1	TOTAL MG/L 17103F Hach kit 3.4 1 0.8 0.5 0.2 0.6 0.4 0.06 0.4 0.18
BASIN 1 OUTFALL       22       4       92       0.58       1.56       L0.02       197	TREATED INFLUENT INFLUENT DUPLICATI MEDIAN(90-92), outfall BASIN 1 OUTFALL BASIN 1 OUTFALL BASIN 1 OUTFALL	24 23 15 16 18 17 20 22 6 7 14 E 14 flowing	8 10 1 4 7 10 1 4 7 10 1 1 1 1 1 4 7	90 90 91 91 91 92 92 92 93 93 93	DISS MG/L 151**L 7.1 5.5 2.74 10.7 3.05 7.58 7.85 4 11.4 9.4 9.6 7.1	7.2 7.5 2.98 11.4 3.4 8.3 8.15 4.2 12.4 9.8 9.8 7.2 2.4 1.66 0.537	DISS MG/L 16101L 0.12 L0.01 L0.01 L0.01	L.02 L0.02 L0.02 L0.02 L0.02 L0.02 L0.02 L0.02 L0.02	DISS MG/L 16306L 127 162 149 75 142 136 123 90.6 95.8 184 182 188 1 123	DISS MG/L 17206L 106.5 124 101 42.2 112 99 124 144 80.8 176 243 244 1 112	ABSORP- TION RATIO  4.81 3.31 2.64 1.89 4.12 2.74 3.80 3.53 2.55 4.03 4.89 4.91 3.31  3.59 2.41 2.99	DISS MG/L 331**L 0.0014 0.0006 0.0004 0.0012 0.0005 0.0003 0.0006 0.0005 0.0003 0.0004 0.0006	TOTAL MG/L 34011L	TOTAL MG/L 42009L	EXTRB MG/L 56311L 0.1 0.1 0.1 0.1	LO.05 LO.05 LO.05 LO.05 LO.05 LO.05 LO.05 LO.05 LO.05 LO.05 LO.05 LO.05 LO.05 LO.05 LO.05	EXT MG/L 82302L 0.004 L0.002 0.004 L0.002 L0.002 L0.002 L0.002 L0.002 L0.002 L0.002 L0.002 L0.002 L0.002	FREE MG/L 17102F  Hach kit 0.4 0.1 0.2 0.1 0.2 0.1 0.1 0.06 0.1 0.03 0.1 0.2 0.1 0.1 0.0 0.1 0.0 0.1 0.0 0.1 0.0 0.1 0.0 0.1 0.1	TOTAL MG/L 17103F  Hach kitt 3.4 1 0.8 0.5 0.2 0.6 0.4 0.18 0.5 0.2 0.1 0.2
BASIN 1 OUTFALL 6 7 92 0.5 0.52 L0.01 122 100 3.78 0.0077 0.03 0.13 L0.002 0 0.02	TREATED INFLUENT INFLUENT DUPLICATI MEDIAN(90-92), outfall BASIN 1 OUTFALL BASIN 1 OUTFALL BASIN 1 OUTFALL BASIN 1 OUTFALL	24 23 15 16 18 17 20 22 6 7 14 E 14 flowing	8 10 1 4 7 10 1 4 7 10 1 1 1 1 10 4 7 10	90 90 91 91 91 92 92 92 93 93 93 91 91 91	DISS MG/L 151**L 7.1 5.5 2.74 10.7 3.05 7.58 7.85 4 11.4 9.6 7.1	7.2 7.5 2.98 11.4 3.4 8.3 8.15 4.2 12.4 9.8 9.8 7.2 2.4 1.66 0.537 0.8	DISS MG/L 16101L 0.12 L0.01 L0.01 L0.01	DISS MG/L 16200L L0.1 L.02 L0.02 L0.02 L0.02 L0.02 L0.02 L0.02 L0.02 L0.02	DISS MG/L 16306L 127 162 149 75 142 136 123 90.6 95.8 184 182 188 1 123	DISS MG/L 17206L 106.5 124 101 42.2 112 99 124 144 80.8 176 243 244 112 55.8 55.5	ABSORP- TION RATIO  4.81 3.31 2.64 1.89 4.12 2.74 3.80 3.53 2.55 4.03 4.89 4.91 3.31 3.59 2.41 2.99 5.28	DISS MG/L 331**L 0.0014 0.0006 0.0004 0.0012 0.0005 0.0003 0.0006 0.0005 0.0003 0.0004 0.018 0.014 0.015 0.011	TOTAL MG/L 34011L	TOTAL MG/L 42009L	EXTRB MG/L 56311L 0.1 0.1 0.1 0.1	LO.05 LO.05 LO.05 LO.05 LO.05 LO.05 LO.05 LO.05 LO.05 LO.05 LO.05 LO.05 LO.05 LO.05 LO.05	EXT MG/L 82302L 0.004 L0.002 0.004 L0.002 L0.002 L0.002 L0.002 L0.002 L0.002 L0.002 L0.002 L0.002 L0.002 L0.002	FREE MG/L 17102F  Hach kit 0.4 0.1 0.2 0.1 0.2 0.1 0.06 0.1 0.03 0.1 0.2 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1	TOTAL MG/L 17103F  Hach kit 3.4 1 0.8 0.5 0.2 0.6 0.4 0.06 0.4 0.18  0.5 0.2 0.1 0.2 0.1
	TREATED INFLUENT INFLUENT DUPLICATI MEDIAN(90-92), outfall BASIN 1 OUTFALL	24 23 15 16 18 17 20 22 6 7 14 14 flowing 23 16 18 17 20	8 10 1 4 7 10 1 4 7 10 1 1 1 1	90 90 91 91 91 92 92 92 93 93 91 91 91 91 91	7.1 5.5 2.74 10.7 3.05 7.58 7.85 4 11.4 9.6 7.1 2.05 1.21 0.467 0.7 6.95	7.2 7.5 2.98 11.4 3.4 8.3 8.15 4.2 12.4 9.8 9.8 7.2 2.4 1.66 0.537 0.8 7.4	DISS MG/L 16101L 0.12 L0.01 L0.01 L0.01	L0.1 L0.02 L0.02 L0.02 L0.02 L0.02 L0.02 L0.02 L0.02 L0.02	DISS MG/L 16306L 127 162 149 75 142 136 123 90.6 95.8 184 182 188 175 104 149 1	DISS MG/L 17206L 106.5 124 101 42.2 112 99 124 144 80.8 176 243 244 112 55.8 55.5 112 141	ABSORP- TION RATIO  4.81 3.31 2.64 1.89 4.12 2.74 3.80 3.53 2.55 4.03 4.89 4.91 3.31 3.59 2.41 2.99 5.28 3.90	DISS MG/L 331**L 0.0014 0.0006 0.0004 0.0012 0.0005 0.0003 0.0006 0.0003 0.0004 0.018 0.014 0.015 0.011 0.0055	TOTAL MG/L 34011L	TOTAL MG/L 42009L	EXTRB MG/L 56311L 0.1 0.1 0.1 0.1	LO.05 LO.05 LO.05 LO.05 LO.05 LO.05 LO.05 LO.05 LO.05 LO.05 LO.05 LO.05 LO.05 LO.05 LO.05	EXT MG/L 82302L 0.004 L0.002 0.004 L0.002 L0.002 L0.002 L0.002 L0.002 L0.002 L0.002 L0.002 L0.002 L0.002 L0.002 L0.002 L0.002 L0.002 L0.002 L0.002 L0.002	FREE MG/L 17102F  Hach kit 0.4 0.1 0.2 0.1 0.2 0.1 0.06 0.1 0.03  0.1 0.2 0.1 0.03	TOTAL MG/L 17103F  Hach kit 3.4 1 0.8 0.5 0.2 0.6 0.4 0.06 0.4 0.18  0.5 0.2 0.1 0.2 0.1 0.1
0.1 1.00 0 20.02 100 112 0.10 0.010	TREATED INFLUENT INFLUENT DUPLICATI MEDIAN(90-92), outfall BASIN 1 OUTFALL	24 23 15 16 18 17 20 22 6 7 14 14 flowing 23 16 18 17 20 22	8 10 1 4 7 10 1 4 7 10 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	90 90 91 91 91 92 92 92 93 93 93 91 91 91 91 91 92	7.1 5.5 2.74 10.7 3.05 7.58 7.85 4 11.4 9.6 7.1 2.05 1.21 0.467 0.7 6.95 0.58	7.2 7.5 2.98 11.4 3.4 8.3 8.15 4.2 12.4 9.8 9.8 7.2 2.4 1.66 0.537 0.8 7.4	DISS MG/L 16101L 0.12 L0.01 L0.01 L0.01	L0.1 L0.02 L0.02 L0.02 L0.02 L0.02 L0.02 L0.02 L0.02 L0.02	DISS MG/L 16306L 127 162 149 75 142 136 123 90.6 95.8 184 182 188 123 244 175 104 149 [	DISS MG/L 17206L 106.5 124 101 42.2 112 99 124 144 80.8 176 243 244 112 159, 55.8 55.5	ABSORP- TION RATIO  4.81 3.31 2.64 1.89 4.12 2.74 3.80 3.53 2.55 4.03 4.89 4.91 3.31 3.59 2.41 2.99 5.28 3.90 3.83	DISS MG/L 331**L 0.0014 0.0006 0.0004 0.0012 0.0005 0.0003 0.0006 0.0003 0.0004 0.0006 0.018 0.014 0.015 0.011 0.0055 0.013	TOTAL MG/L 34011L	TOTAL MG/L 42009L	0.1 0.1 0.1 0.1 0.1 0.1	L0.05 L0.05 L0.05 L0.05 L0.05 L0.05 L0.05 L0.05 L0.05 L0.05 L0.05 L0.05 L0.05 L0.05 L0.05 L0.05 L0.05	EXT MG/L 82302L 0.004 L0.002 0.004 L0.002	FREE MG/L 17102F  Hach kit 0.4 0.1 0.2 0.1 0.2 0.1 0.0 0.1 0.03  0.1 0.2 0.1 0.03	TOTAL MG/L 17103F  Hach kit 3.4 1 0.8 0.5 0.2 0.6 0.4 0.06 0.4 0.18  0.5 0.2 0.1 0.2 0.1 0.1 0.2

Appendix II. Extractable and volatile priority pollutants at trace levels (in some cases with trace levels estimated) or over the method detection limit (all compounds reported as µg/L). All organic analyses were done at the Alberta Environmental Centre.

	DIETHYL- PHTHALATE	BUTYLBENZYL- PHTHALATE	CHLOR- OFORM	TOLUENE	YR	MON	DAY	STATION
	95052L	95050L	95208L	95226L	,,,,	WOI	DAT	OTATION
	L1.	L1.		Section 2 days of the section of the	90	11	1	TREATED INFLUENT
	L1.	TRACE	TRACE	L1.	91	1	15	TREATED INFLUENT
	L10.	L10.	L1.	L1.	91	4	16	TREATED INFLUENT
	L10.	L10.	L1.	L1.	91	7	18	TREATED INFLUENT
	L10.	L10.	TRACE	L1.	92	1	20	TREATED INFLUENT
	L10.	L10.			92	4	22	TREATED INFLUENT
	L1.	L1.	L1.	L1.	92	7	6	TREATED INFLUENT
	L10.	L10.	2	L1.	92	10	7	TREATED INFLUENT
	1	L10.	1	L1.	93	1	14	TREATED INFLUENT
	L1.	L1.		1.4	90	11	1	BASIN 1 OUTFALL
	L10.	L10.	L1.	L1.	91	4	16	BASIN 1 OUTFALL
	L1.	L1.	L1.	L1.	91	7	18	BASIN 1 OUTFALL
	L10.	L10.	1	L1.	92	1	20	BASIN 1 OUTFALL
	L10.	L10.	, ,	TD405	92	4	22	BASIN 1 OUTFALL
	L1.	L1.	L1.	TRACE	92	7	6	BASIN 1 OUTFALL
HEXADEC- ANOIC	ETHYL- BENZENE	M,P-XYLENE	O- XYLENE	CARBON TETRA-				
ACID				CHLORIDE	YR	MON	DAY	STATION
95007L	95221L	95234L	95233L	95204L				
1		······································	······································		90	11	1	TREATED INFLUENT
1	L1.	L1.	L1.	L1.	91	1	15	TREATED INFLUENT
L30.	L1.	L1.	L1.	L1.	91	4	16	TREATED INFLUENT
L30.	TRACE	TRACE	TRACE	L1.	91	7	18	TREATED INFLUENT
10	L1.	L1.	L1.	L1.	92	1	20	TREATED INFLUENT
9	21.	<b>L</b> 1.	_,.		92	4	22	TREATED INFLUENT
L3.	L1.	L1.	L1.	L1.	92	7	6	TREATED INFLUENT
L30.	L1.	L1.	L1.	L1.	92	10	7	TREATED INFLUENT
L30.	L1.	L1.	L1.	L1.	93	1	14	TREATED INFLUENT
L3.					90	11	1	BASIN 1 OUTFALL
L30.	L1.	L1.	L1.	1	91	4	16	BASIN 1 OUTFALL
L3.	L1.	L1.	TRACE	L1.	91	7	18	BASIN 1 OUTFALL
12	L1.	L1.	L1.	L1.	92	1	20	BASIN 1 OUTFALL
5		<b>L</b>			92	4	22	BASIN 1 OUTFALL
L3.	L1.	L1.	L1.	L1.	92	7	6	BASIN 1 OUTFALL
OLEIC ACID	STEARIC ACID	ALIPHATIC ALCOHOLS	SULPHUR (S8)	CAFFEINE	YR	MON	DAY	STATION
.,			(00)					
	1				90	11	1	TREATED INFLUENT
				_	91	1	15	
10	5			5			20.0	
10				10	92	1	20	
10			5				20 14	