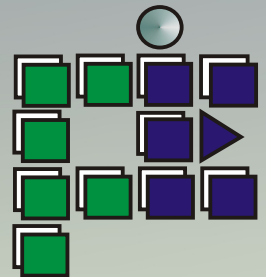




Appendix G

Water Quality



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Appendix G Forbes Creek Baseline Dry Weather Sampling				Forbes Creek Baseline Wet Weather Sampling		
Parameters	Recording Level	Provincial Water Quality Objectives	October 3 rd , 2001	October 16 th 2001		
			Location Rail Culvert	Location Rail Culvert	Location Sewer Outlet	
Phosphorus (mg/L)	0.05		<0.05	0.06	0.2	
Total Suspended Solids (mg/L)	1		7.7	5.6	13.2	
4-Bromofluorobenzene (%)	0		92	99	99	
D4-1,2-Dichloroethane (%)	0		97	117	119	
D8-Toluene (%)	0		95	100	99	
1,1,1-Trichloroethane (ug/L)	0.5	10	<0.5	<0.5	<0.5	
1,1,2,2-Tetrachloroethane (ug/L)	0.5	70	<0.5	<0.5	<0.5	
1,1,2-Trichloroethane (ug/L)	0.5	800	<0.5	<0.5	<0.5	
1,1-Dichloroethane (ug/L)	0.5	200	<0.5	<0.5	<0.5	
1,1-Dichloroethylene (ug/L)	0.5	40	<0.5	<0.5	<0.5	
1,2-Dichlorobenzene (ug/L)	0.5	2.5	<0.5	<0.5	<0.5	
1,2-Dichloroethane (ug/L)	0.5	100	<0.5	<0.5	<0.5	
1,2-Dichloropropane (ug/L)	0.5	0.7	<0.5	<0.5	<0.5	
1,3-Dichlorobenzene (ug/L)	0.5	2.5	<0.5	<0.5	<0.5	
1,4-Dichlorobenzene (ug/L)	0.5	4	<0.5	<0.5	<0.5	
2-Chloroethylvinyl ether (ug/L)	0.5		<0.5	<0.5	<0.5	
2-Hexanone (ug/L)	20		<20	<20	<20	
Acetone (ug/L)	20		<20	<20	<20	
Benzene (ug/L)	0.5	100	<0.5	<0.5	<0.5	
Bromodichloromethane (ug/L)	0.5	200	<0.5	<0.5	<0.5	
Bromoform (ug/L)	0.5	60	<0.5	<0.5	<0.5	
Bromomethane (ug/L)	1	0.9	<1	<1	<1	
Carbon Disulfide (ug/L)	0.5		<0.5	<0.5	<0.5	
Carbon Tetrachloride (ug/L)	0.5		<0.5	<0.5	<0.5	
Chlorobenzene (ug/L)	0.5	15	<0.5	<0.5	<0.5	
Chloroethane (ug/L)	1		<1	<1	<1	
Chloroform (ug/L)	0.5		<0.5	<0.5	<0.5	
Chloromethane (ug/L)	1	700	<1	<1	<1	
cis-1,2-Dichloroethylene (ug/L)	0.5		<0.5	<0.5	<0.5	
cis-1,3-Dichloropropene (ug/L)	0.5		<0.5	<0.5	<0.5	
Dibromochloromethane (ug/L)	0.5	40	<0.5	<0.5	<0.5	
Dichlorodifluoromethane (ug/L)	1		<1	<1	<1	
Dichloromethane (ug/L)	0.5	100	<0.5	<0.5	<0.5	
Ethyl Benzene (ug/L)	0.5	8	<0.5	<0.5	<0.5	
Ethylene dibromide (ug/L)	0.5	5	<0.5	<0.5	<0.5	
m&p-Xylene (ug/L)	0.5		<0.5	<0.5	<0.5	
Methyl ethyl ketone (ug/L)	20	400	<20	<20	<20	
Methyl isobutyl ketone (ug/L)	20	600	<20	<20	<20	
o-Xylene (ug/L)	0.5	40	<0.5	<0.5	<0.5	
Styrene (ug/L)	0.5	4	<0.5	<0.5	<0.5	
Tetrachloroethylene (ug/L)	0.5	50	<0.5	<0.5	<0.5	
Toluene (ug/L)	0.5	0.8	<0.5	<0.5	<0.5	
trans-1,2-Dichloroethylene (ug/L)	0.5		<0.5	<0.5	<0.5	
trans-1,3-Dichloropropene (ug/L)	0.5	7	<0.5	<0.5	<0.5	
Trichloroethylene (ug/L)	0.5	20	<0.5	<0.5	<0.5	
Trichlorofluoromethane (ug/L)	1		<1	<1	<1	
Vinyl Chloride (ug/L)	0.5	600	<0.5	<0.5	<0.5	
2,4-Dichlorophenylacetic Acid (%)	0		84	66	64	
2,4,5-T (ug/L)	0.2		<0.2	<0.2	<0.2	
2,4-D (ug/L)	0.2		<0.2	0.5	0.4	
Bromoxynil (ug/L)	0.2		<0.2	<0.2	<0.2	
Dicamba (ug/L)	0.2	200	<0.2	<0.2	<0.2	
Dinoseb (ug/L)	0.2		<0.2	<0.2	<0.2	
Picloram (ug/L)	0.2		<0.2	<0.2	<0.2	
Aldrin (ug/L)	0.02		<0.02	<0.02	<0.02	
alpha-BHC (ug/L)	0.1		<0.1	<0.1	<0.1	
alpha-Chlordane (ug/L)	0.1		<0.1	<0.1	<0.1	
alpha-Endosulfan (ug/L)	0.1		<0.1	<0.1	<0.1	
Atrazine & Metabolites (ug/L)	0.1		<0.1	<0.2	<0.2	
beta-BHC (ug/L)	0.1		<0.1	<0.1	<0.1	
beta-Endosulfan (ug/L)	0.1		<0.1	<0.1	<0.1	
delta BHC (ug/L)	0.1		<0.1	<0.1	<0.1	
Dieldrin (ug/L)	0.02		<0.02	<0.02	<0.02	
Endosulfan Sulfate (ug/L)	0.1		<0.1	<0.1	<0.1	
Endrin (ug/L)	0.1	0.002	<0.1	<0.1	<0.1	
Endrin Aldehyde (ug/L)	0.1		<0.1	<0.1	<0.1	
gamma-Chlordane (ug/L)	0.1		<0.1	<0.1	<0.1	
Heptachlor (ug/L)	0.1		<0.1	<0.1	<0.1	
Heptachlor epoxide (ug/L)	0.1		<0.1	<0.1	<0.1	
Lindane (ug/L)	0.1	0.01	<0.1	<0.1	<0.1	
Mehtoxychlor (ug/L)	0.1	0.04	<0.1	<0.1	<0.1	
Mirex (ug/L)	0.1	0.001	<0.1	<0.1	<0.1	
o,p DDT (ug/L)	0.1		<0.1	<0.1	<0.1	
o,p DDD (ug/L)	0.1		<0.1	<0.1	<0.1	
o,p DDE (ug/L)	0.1		<0.1	<0.1	<0.1	
Oxychlordane (ug/L)	0.1		<0.1	<0.1	<0.1	
pp-DDD (ug/L)	0.1		<0.1	<0.1	<0.1	
pp-DDE (ug/L)	0.1		<0.1	<0.1	<0.1	
pp-DDT (ug/L)	0.1		<0.1	<0.1	<0.1	
2-Fluorobiphenyl (%)	0		82	83	85	
D14-Terphenyl (%)	0		75	114	88	
Alachlor (ug/L)	0.1		<0.1	<0.1	<0.1	
Atrazine (ug/L)	0.1		0.1	<0.1	<0.1	
Atrazine Desethyl (ug/L)	0.1		<0.1	<0.1	<0.1	
Azinphos-Methyl (ug/L)	0.1	0.005	<0.1	<0.1	<0.1	
Bendiocarb (ug/L)	0.1		<0.1	<0.1	<0.1	
Benzo(a)pyrene (ug/L)	0.01		<0.01	<0.01	<0.01	
Carbaryl (ug/L)	0.1	0.2	<0.1	<0.1	<0.1	
Carbofuran (ug/L)	0.1		<0.1	<0.1	<0.1	
Chlorpyrifos (ug/L)	0.1	0.001	<0.1	<0.1	<0.1	
Cyanazine (ug/L)	0.1		<0.1	<0.1	<0.1	
Diazinon (ug/L)	0.1	0.08	<0.1	0.78	0.8	
Diclofop-methyl (ug/L)	0.1		<0.1	<0.1	<0.1	
Dimethoate (ug/L)	0.1		<0.1	<0.1	<0.1	
Malathion (ug/L)	0.1	0.1	<0.1	<0.1	<0.1	
Metolachlor (ug/L)	0.1	3	<0.1	<0.1	<0.1	
Metribuzin (ug/L)	0.1		<0.1	<0.1	<0.1	
Parathion (ug/L)	0.1	0.008	<0.1	<0.1	<0.1	
Phorate (ug/L)	0.1		<0.1	<0.1	<0.1	
Prometryn (ug/L)	0.1		<0.1	<0.1	<0.1	
Simazine (ug/L)	0.1	10	<0.1	<0.1	<0.1	
Temephos (ug/L)	0.1		<0.1	<0.1	<0.1	
Terbufos (ug/L)	0.1		<0.1	<0.1	<0.1	
Triallate (ug/L)	0.1		<0.1	<0.1	<0.1	
Trifluralin (ug/L)	0.1		<0.1	<0.1	<0.1	
Fecal Coliforms (cfu/100mL)	0		20	3700	3400	
Total Coliforms (cfu/100mL)	0		1360	16000	8900	
Aluminum (mg/L)	0.02	0.075	0.07	0.17	0.18	

Appendix G Forbes Creek Baseline Dry Weather Sampling			Forbes Creek Baseline Wet Weather Sampling		
Parameters	Recording Level	Provincial Water Quality Objectives	October 16 th 2001		
			Location Rail Culvert	Location Rail Culvert	Location Sewer Outlet
Barium (mg/L)	0.01		0.07	0.1	0.03
Beryllium (mg/L)	0.001	0.011	<0.001	<0.001	<0.001
Boron (mg/L)	0.05	0.2	0.07	<0.05	<0.05
Cadmium (mg/L)	0.002	0.0002	<0.002	<0.002	<0.002
Calcium (mg/L)	0.5		181	30.2	83.2
Chromium (mg/L)	0.01		<0.01	<0.01	<0.01
Cobalt (mg/L)	0.01	0.0009	<0.01	<0.01	<0.01
Copper (mg/L)	0.005	0.005	0.01	<0.005	0.009
Iron (mg/L)	0.05	0.3	0.29	0.19	0.3
Lead (mg/L)	0.01	0.005	<0.01	<0.01	<0.01
Magnesium (mg/L)	0.5		40.3	5.1	16.7
Manganese (mg/L)	0.01		0.19	0.04	0.07
Molybdenum (mg/L)	0.01	0.04	<0.01	<0.01	<0.01
Nickel (mg/L)	0.01	0.025	<0.01	<0.01	<0.01
Potassium (mg/L)	0.5		4.2	1.78	4.9
Silicon (mg/L)	0.1		6.5	1.55	4.1
Silver (mg/L)	0.001	0.0001	<0.001	<0.001	<0.001
Sodium (mg/L)	0.5		102	14.7	44
Strontium (mg/L)	0.01		0.23	0.04	0.11
Thallium (mg/L)	0.002	0.003	<0.002	<0.002	<0.002
Titanium (mg/L)	0.01		<0.01	<0.01	<0.01
Vanadium (mg/L)	0.01	0.006	<0.01	<0.01	<0.01
Zinc (mg/L)	0.01	0.02	<0.01	0.02	0.03
Zirconium (mg/L)	0.01	0.004	<0.01	<0.01	<0.01
Bromide (mg/L)	0.1		0.13	<0.10	<0.10
Chloride (mg/L)	2		180	16	65
Fluoride (mg/L)	0.1		0.14	<0.10	0.16
Nitrate as N (mg/L)	0.1		10	0.91	2.6
Nitrite as N (mg/L)	0.1		<0.10	<0.10	<0.10
Phosphate-P (mg/L)	0.3	0.01	<0.30	<0.30	<0.30
Sulphate (mg/L)	2		42	6.9	16