

DIOXIN AND FURAN RESIDUES IN FISH AND SHELLFISH FROM THE VICINITY OF GOLD RIVER PULP MILL (BC) - PARTS PER TRILLION

NO.	SITE	LAB ID NO	% LIPID	SPECIES/TISSUE	IND. PER COM	2,3,7,8 SUBST. TCDD		2,3,7,8 SUBST. PCDD		2,3,7,8 SUBST. H6CDD		2,3,7,8 SUBST. H7CDD		OCDD	2,3,7,8 SUBST. TCDF		1,2,3,7,8 PCDF		2,3,4,7,8 SUBST. PCDF		2,3,7,8 SUBST. H6CDF		2,3,7,8 SUBST. H7CDF		
						TOTAL	TCDD	TOTAL	PCDD	TOTAL	H6CDD	TOTAL	H7CDD		TOTAL	TCDF	TOTAL	PCDF	TOTAL	PCDF	TOTAL	H6CDF	TOTAL	H7CDF	TOTAL
1	MATCHLEE BAY AREA 1-S1 (C) 9.1 KM SE of OUTFALL	1125-11	0.30	Dungeness Crab - leg muscle	1	<0.2	<0.2	<0.5	<0.5	<0.6	10.0	<0.6	<0.6	<1.1	130.0	170.0	0.7	1.0	1.7	2.5	<0.3	<0.3	<0.2	<0.2	<0.5
2	MATCHLEE BAY AREA 1-S1 9.1 KM SE of OUTFALL Feb 22, 1992	2590-12	0.30	Dungeness Crab - leg muscle	1	0.9	1.5	0.6	1.6	0.5	7.8	<0.4	<0.4	<0.9	83.0	110.0	0.5	0.6	1.1	2.1	NDR(0.4)	<0.2	NDR(0.4)	<0.3	<0.6
3	MATCHLEE BAY AREA 1-S1 9.1 KM SE of OUTFALL Feb 22, 1992	2590-13	0.20	Dungeness Crab - leg muscle	1	0.5	0.9	0.4	1.5	1.3	6.6	<0.3	<0.3	<0.7	46.0	62.0	0.3	0.4	0.7	1.2	<0.1	<0.1	<0.2	<0.2	<0.4
4	MATCHLEE BAY AREA 1-S1 9.1 KM SE of OUTFALL Feb 22, 1992	2590-13I	0.20	Dungeness Crab - leg muscle (duplicate)	1	0.4	0.8	0.3	1.5	1.7	6.8	<0.2	<0.2	<0.3	49.0	66.0	0.4	0.3	0.7	1.1	<0.1	<0.1	<0.1	<0.1	<0.3
	AVERAGE OF SAMPLES 3 & 4			Dungeness Crab - leg muscle		0.5	0.9	0.4	1.5	1.5	6.7	<0.3	<0.3	<0.7	47.5	64.0	0.4	0.4	0.7	1.2	<0.1	<0.1	<0.2	<0.2	<0.4
5	MATCHLEE BAY AREA 1-S1 9.1 KM SE of OUTFALL Feb 22, 1992	2590-14	0.30	Dungeness Crab - leg muscle	1	0.6	1.1	0.4	1.1	1.5	7.4	<0.2	<0.2	<0.6	60.0	84.0	0.5	NDR(0.4)	0.5	0.4	<0.1	<0.1	<0.2	<0.2	<0.6
	AVERAGE OF SAMPLES 2, 3 & 4, 5			Dungeness Crab - leg muscle		0.7	1.2	0.5	1.4	1.2	7.3	<0.4	<0.4	<0.9	63.5	86.0	0.5	0.3	0.8	1.2	<0.1	<0.1	<0.2	<0.3	<0.6
6	MATCHLEE BAY AREA 1-S1 (C) 9.1 KM SE of OUTFALL Feb 22, 1992	2590-18	2.30	Dungeness Crab - hepatopancreas	4	2.6	4.5	2.6	10.0	11.2	43.0	<0.3	<0.3	<0.4	300.0	370.0	2.3	2.7	5.0	9.6	NDR(0.1)	0.4	<0.1	<0.1	<0.4
7	MATCHLEE BAY AREA 1-S1 (C) 9.1 KM SE of OUTFALL	1125-21	3.10	Dungeness Crab - hepatopancreas	6	13.0	14.0	8.9	21.0	41.9	140.0	<1.6	<1.6	<2.7	1200.0	1500.0	7.8	13.0	20.8	38.0	<1.2	<1.2	<1.4	<1.4	<2.1
8	GOLD RIVER MOUTH AREA 2-S3 (P) 3.0 KM E of OUTFALL	1125-08	0.36	Prawn - tail muscle	11	1.6	1.6	<0.6	1.0	7.4	18.0	<0.5	<0.5	<0.3	83.0	97.0	<0.2	<0.2	<0.2	0.6	<0.3	<0.3	<0.2	<0.2	<0.2
9	GOLD RIVER MOUTH AREA 2-S3 3.0 KM E of OUTFALL Feb 21, 1992	2590-15	0.20	Prawn Tail - tail muscle	12	0.5	0.7	0.6	1.4	5.6	12.0	<0.3	<0.3	<0.6	34.0	42.0	0.6	<0.1	0.6	0.6	<0.1	<0.1	<0.1	<0.1	<0.2
10	McCURDY CREEK AREA 4-S8 (P) 2.0 KM W of OUTFALL	1125-10	0.39	Prawn - tail muscle	11	<0.2	<0.2	<0.6	<0.6	<0.5	<0.5	<0.3	<0.3	<0.2	57.0	66.0	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2
11	McCURDY CREEK AREA 4-S8 2.0 KM W of OUTFALL Feb 18, 1992	2590-16	0.20	Prawn Tail Muscle	12	0.3	0.4	0.3	0.3	3.5	6.9	<0.3	<0.3	<0.8	19.0	25.0	NDR(0.3)	NDR(0.1)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.4

DIOXIN AND FURAN RESIDUES IN FISH AND SHELLFISH FROM THE VICINITY OF GOLD RIVER PULP MILL (BC) - PARTS PER TRILLION

NO.	SITE	LAB ID NO	% LIPID	SPECIES/TISSUE	IND. PER COM	2,3,7,8		TOTAL TCDD	2,3,7,8		TOTAL H6CDD	2,3,7,8		TOTAL H7CDD	OCDD	2,3,7,8		2,3,4,7,8		2,3,7,8		2,3,7,8		2,3,7,8	
						TCDD	PCDD		H6CDD	H7CDD		TCDF	PCDF			TCDF	PCDF	TCDF	H6CDF	H6CDF	H7CDF	H7CDF			
12	GOLD RIVER MOUTH AREA 2-S3 (C) 3.0 KM E of OUTFALL	1125-12	0.29	Dungeness Crab - leg muscle	1	<0.1	<0.1	<0.2	<0.2	1.4	7.3	<0.2	<0.2	<0.7	26.0	40.0	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.2
13	GOLD RIVER-INNER HARBOUR AREA 2-S4 (C) 0.7 KM ENE of OUTFALL	1125-13	0.14	Dungeness Crab - leg muscle	1	4.8	4.8	<3.5	<3.5	6.8	24.0	<5.7	<5.7	<9.4	290.0	420.0	<1.7	<1.7	<1.7	<1.7	<3.0	<3.0	<5.0	<5.0	<7.2
14	GOLD RIVER-OUTFALL AREA 2-S5 (C) 0.4 KM W of OUTFALL	1125-14	0.35	Dungeness Crab - leg muscle	1	0.7	0.7	<0.5	<0.5	<1.0	12.0	<0.6	<0.6	<0.7	110.0	160.0	<0.6	0.8	0.8	0.8	<0.4	<0.4	<0.6	<0.6	<0.7
15	GOLD RIVER-OUTFALL AREA 2-S5 (C) 0.4 KM W of OUTFALL	1125-14	0.41	Dungeness Crab - leg muscle (duplicate)	1	<0.1	<0.1	<0.3	<0.3	<0.7	11.0	<0.9	<0.9	<0.7	120.0	180.0	<0.2	1.2	1.2	2.7	<0.3	<0.3	<0.8	<0.8	<0.8
	AVERAGE OF SAMPLES 14 & 15			Dungeness Crab - leg muscle		0.4	0.4	<0.5	<0.5	<1.0	11.5	<0.9	<0.9	<0.7	115.0	170.0	<0.6	1.0	1.0	1.8	<0.4	<0.4	<0.8	<0.8	<0.8
16	OUTFALL AREA 2-S5 Feb 17, 1992	2590-06	0.20	Dungeness Crab - leg muscle	1	0.6	1.4	0.7	1.6	7.2	28.0	NDR(0.4)	<0.3	NDR(0.8)	53.0	84.0	0.5	0.9	1.4	3.9	<0.2	0.9	<0.4	<0.4	<0.5
17	OUTFALL AREA 2-S5 Feb 17, 1992	2590-06	0.20	Dungeness Crab - leg muscle (duplicate)	1	0.5	0.8	0.6	1.7	6.1	25.0	<0.3	0.5	NDR(0.4)	50.0	78.0	0.6	0.6	1.2	4.2	<0.2	1.0	<0.5	<0.5	<0.4
	AVERAGE OF SAMPLES 16 & 17			Dungeness Crab - leg muscle		0.6	1.1	0.7	1.7	6.7	26.5	<0.3	0.3	<0.4	51.5	81.0	0.6	0.8	1.3	4.1	<0.2	1.0	<0.5	<0.5	<0.5
18	OUTFALL AREA 2-S5 Feb 17, 1992	2590-07	0.30	Dungeness Crab - leg muscle	1	0.2	0.4	0.3	1.1	2.8	11.0	<0.2	<0.2	<0.7	20.0	34.0	0.3	0.2	0.5	1.3	<0.2	<0.2	<0.4	<0.4	<0.5
19	OUTFALL AREA 2-S5 Feb 17, 1992	2590-08	0.30	Dungeness Crab - leg muscle	1	0.4	0.8	0.5	1.8	5.9	22.0	0.4	0.6	1.0	36.0	54.0	0.6	0.5	1.1	3.0	NDR(0.2)	0.3	<0.3	<0.3	<0.2
	AVERAGE OF SAMPLES 16 & 17, 18, 19			Dungeness Crab - leg muscle		0.4	0.8	0.5	1.5	5.1	19.8	0.1	0.3	0.3	35.8	56.3	0.5	0.5	1.0	2.8	<0.2	0.2	<0.5	<0.5	<0.5
20	McCURDY CREEK AREA 3-S6 (C) 3.4 KM W of OUTFALL	1125-15	0.47	Dungeness Crab - leg muscle	1	3.3	3.4	3.7	5.7	14.0	38.0	<0.3	<0.3	<0.6	230.0	330.0	2.9	3.4	6.3	9.1	<0.2	<0.2	<0.3	<0.3	<0.6
21	GOLD RIVER MOUTH AREA 2-S3 (C) 3.0 KM E of OUTFALL	1125-22	4.40	Dungeness Crab - hepatopancreas	6	28.0	32.0	14.0	32.0	91.0	250.0	5.2	8.7	<1.7	2600.0	3300.0	19.0	33.0	52.0	84.0	<0.7	<0.7	<0.8	<0.8	<1.3
22	GOLD RIVER-INNER HARBOUR AREA 2-S4 Feb 19, 1992	2590-21	11.00	Dungeness Crab Hepatopancreas	6	20.0	31.0	17.0	53.0	115.0	420.0	9.6	24.0	9.2	2300.0	2900.0	17.0	31.0	48.0	91.0	3.1	26.0	2.8	4.1	<0.4
23	GOLD RIVER-INNER HARBOUR AREA 2-S4 (C) 0.7 KM ENE of OUTFALL	1125-23	3.10	Dungeness Crab - hepatopancreas	6	22.0	22.0	12.0	36.0	76.0	230.0	5.2	10.0	<0.9	1800.0	2400.0	15.0	24.0	39.0	72.0	<0.4	3.0	1.3	1.1	<0.8
24	Outfall AREA 2-S5 Feb 17, 1992	2590-20	8.00	Dungeness Crab - hepatopancreas	6	10.0	17.0	12.0	47.0	124.0	460.0	5.9	11.0	3.4	1300.0	1800.0	15.0	25.0	40.0	86.0	3.1	13.0	2.0	2.7	<0.5

DIOXIN AND FURAN RESIDUES IN FISH AND SHELLFISH FROM THE VICINITY OF GOLD RIVER PULP MILL (BC) - PARTS PER TRILLION

NO.	SITE	LAB ID NO	% LIPID	SPECIES/TISSUE	IND. 2,3,7,8		TOTAL TCDD	2,3,7,8 SUBST.		TOTAL H6CDD	2,3,7,8 SUBST.		TOTAL H7CDD	OCDD	2,3,7,8 SUBST. TCDF		1,2,3,7,8 PCDF		2,3,4,7,8 SUBST. PCDF		TOTAL PCDF	2,3,7,8 SUBST. H6CDF		TOTAL H6CDF	2,3,7,8 SUBST. H7CDF		TOTAL H7CDF	OCDF
					PER COM	TCDD		PCDD	PCDD		H6CDD	H7CDD			TCDF	TCDF	PCDF	PCDF	H6CDF	H6CDF		H7CDF	H7CDF					
25	GOLD RIVER-OUTFALL AREA 2-S5 (C) 0.4 KM W of OUTFALL	1125-24	3.00	Dungeness Crab - hepatopancreas	6	32.0	43.0	28.0	64.0	172.0	480.0	7.6	12.0	<1.1	4100.0	5500.0	27.0	43.0	70.0	130.0	<0.4	6.2	<0.7	<0.7	<0.8			
26	McCURDY CREEK AREA 3-S6 (C) 3.4 KM W of OUTFALL	1125-25	3.50	Dungeness Crab - hepatopancreas	6	34.0	42.0	29.0	82.0	157.0	480.0	6.2	10.0	<2.5	2400.0	3400.0	36.0	59.0	95.0	170.0	<0.9	<0.9	<1.5	<1.5	<2.0			
27	McCURDY CREEK AREA 3-S6 Feb 18, 1992	2590-22	12.00	Dungeness Crab - hepatopancreas	6	41.0	58.0	40.0	140.0	297.7	960.0	7.8	16.0	3.9	4800.0	6000.0	35.0	75.0	110.0	180.0	3.5	13.0	NDR(1.2)	1.2	<0.2			
28	JACKLAH BAY AREA 3-S7 (C) 3.5 KM SW of OUTFALL	1125-16	0.36	Dungeness Crab - leg muscle	1	1.8	1.8	<0.4	<0.4	<0.4	15.0	<0.4	<0.4	<0.4	230.0	310.0	1.7	1.9	3.6	3.7	<0.2	<0.2	<0.3	<0.3	<0.4			
29	JACKLAH BAY AREA 3-S7 (C) 3.5 KM SW of OUTFALL	1125-26	3.60	Dungeness Crab - hepatopancreas	4	43.0	48.0	83.0	130.0	258.0	440.0	4.4	4.4	<1.5	2000.0	2500.0	23.0	47.0	70.0	120.0	<0.5	0.8	<1.0	<1.0	<1.3			
30	JACKLAH BAY AREA 3-S7 (P) 3.5 KM SW of OUTFALL	1125-09	0.30	Prawn - tail muscle	12	1.3	1.3	<0.4	<0.4	<0.7	<0.7	<0.4	<0.4	<0.2	55.0	66.0	<0.1	<0.1	<0.1	0.6	<0.2	<0.2	<0.2	<0.2	<0.3			
31	MOOYAH BAY AREA 5-S9 (C) 23.7 KM WSW of OUTFALL	1125-17	0.40	Dungeness Crab - leg muscle	1	1.4	1.4	2.4	2.4	2.6	6.8	<0.9	<0.9	<1.1	100.0	140.0	0.4	0.9	1.3	1.3	<0.5	<0.5	<0.8	<0.8	<1.1			
32	MOOYAH BAY AREA 5-S9 Feb 17, 1992	2590-09	0.30	Dungeness Crab - leg muscle	1	0.1	0.2	0.3	0.7	1.2	3.4	NDR(0.7)	<0.4	<1.0	12.0	16.0	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.8			
33	MOOYAH BAY AREA 5-S9 Feb 17, 1992	2590-10	0.30	Dungeness Crab - leg muscle	1	0.1	0.1	NDR(0.2)	<0.1	0.7	2.1	0.5	0.9	NDR(1.9)	6.4	9.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.3	<0.3	<0.4			
34	MOOYAH BAY AREA 5-S9 Feb 17, 1992	2590-11	0.30	Dungeness Crab - leg muscle	1	0.5	0.5	0.9	2.2	4.2	11.0	0.9	0.9	NDR(1.7)	30.0	37.0	NDR(0.4)	NDR(0.5)	<0.3	0.3	<0.3	<0.3	<0.7	<0.7	<1.0			
	AVERAGE OF SAMPLES 32, 33, 34			Dungeness Crab - leg muscle		0.2	0.2	0.4	1.0	1.8	4.8	0.3	0.3	<1.0	14.0	17.7	<0.3	<0.3	<0.3	0.1	<0.3	<0.3	<0.7	<0.7	<1.0			
35	MOOYAH BAY AREA 5-S9 Feb 17, 1992	2590-19	5.40	Dungeness Crab - hepatopancreas	6	2.8	4.8	5.8	18.0	20.7	72.0	1.0	2.2	<1.2	260.0	320.0	2.3	3.5	5.8	12.0	NDR(0.6)	1.6	<0.7	<0.7	<0.3			
36	MOOYAH BAY AREA 5-S9 (C) 23.7 KM WSW of OUTFALL	1125-27	3.10	Dungeness Crab - hepatopancreas	6	11.0	16.0	22.0	59.0	59.8	150.0	2.1	2.1	<1.6	940.0	1200.0	5.3	11.0	16.3	30.0	<0.8	<0.8	<0.9	<0.9	<1.5			
37	HOUSTON RIVER AREA 5-S12 (C) 12.1 KM WSW of OUTFALL	1125-18	0.43	Dungeness Crab - leg muscle	1	1.2	1.2	<0.6	<0.6	<0.8	19.0	<0.9	<0.9	<0.9	110.0	150.0	<0.2	<0.2	<0.2	<0.2	<0.3	<0.3	<0.4	<0.4	<0.6			
38	HOUSTON RIVER AREA 5-S12 Feb 18, 1992	2590-17	0.20	Prawn - tail muscle	12	0.3	0.5	0.4	0.9	2.4	5.7	<0.2	<0.2	<0.3	22.0	26.0	0.3	0.07	0.37	0.4	<0.1	<0.1	<0.1	<0.1	NDR(0.4)			

DIOXIN AND FURAN RESIDUES IN FISH AND SHELLFISH FROM THE VICINITY OF GOLD RIVER PULP MILL (BC) - PARTS PER TRILLION

NO.	SITE	LAB ID NO	% LIPID	SPECIES/TISSUE	IND. PER COMI	2,3,7,8 SUBST. TCDD		2,3,7,8 SUBST. PCDD		2,3,7,8 SUBST. H6CDD		2,3,7,8 SUBST. H7CDD		OCDD	2,3,7,8 SUBST. TCDF		1,2,3,7,8 PCDF		2,3,4,7,8 SUBST. PCDF		2,3,7,8 SUBST. H6CDF		2,3,7,8 SUBST. H7CDF		TOTAL OCDF
						TOTAL	TCDD	TOTAL	PCDD	TOTAL	H6CDD	TOTAL	H7CDD		TOTAL	TCDF	TOTAL	PCDF	TOTAL	PCDF	TOTAL	H6CDF	TOTAL	H7CDF	
39	HOUSTON RIVER AREA 5-S12 Feb 17, 1992	2590-23	8.60	Dungeness Crab - hepatopancreas	6	14.0	22.0	20.0	71.0	108.0	340.0	2.8	5.5	NDR(2.0)	1200.0	1500.0	12.0	22.0	34.0	56.0	1.7	4.8	<1.0	<1.0	<0.7
40	HOUSTON RIVER AREA 5-S12 (C) 12.1 KM WSW of OUTFALL	1125-28	1.90	Dungeness Crab - hepatopancreas	6	15.0	18.0	18.0	54.0	80.0	230.0	<0.8	<0.8	<0.8	1800.0	2100.0	12.0	23.0	35.0	56.0	<0.4	<0.4	<0.5	<0.5	<0.8
41	HOUSTON RIVER AREA 5-S12 (C) 12.1 KM WSW of OUTFALL	1125-28I	2.00	Dungeness Crab - hepatopancreas (duplicate)	6	16.0	21.0	18.0	49.0	74.0	220.0	2.3	2.3	<2.0	2000.0	2600.0	11.0	23.0	34.0	57.0	<0.4	1.3	<0.7	<0.7	<1.4
	AVERAGE OF SAMPLES 40 & 41			Dungeness Crab - hepatopancreas		15.5	19.5	18.0	51.5	77.0	225.0	1.2	1.2	<2.0	1900.0	2350.0	11.5	23.0	34.5	56.5	<0.4	0.7	<0.7	<0.7	<1.4
42	HISNIT INLET AREA 6-S13 (C) 37.8 KM WNW of OUTFALL	1125-19	0.10	Dungeness Crab - leg muscle	1	<0.2	<0.2	<0.4	<0.4	<0.5	<0.5	<0.5	<0.5	<0.6	4.5	5.8	<0.2	<0.2	<0.2	<0.2	<0.3	<0.3	<0.6	<0.6	<0.6
43	HISNIT INLET AREA 6-S13 (C) 37.8 KM WNW of OUTFALL	1125-29	5.90	Dungeness Crab - hepatopancreas	6	3.0	4.0	4.7	13.0	12.0	55.0	<0.8	<0.8	<0.7	190.0	240.0	1.3	2.8	4.1	9.0	<0.4	0.6	<0.5	<0.5	<0.5
44	HISNIT INLET AREA 6-S13 Feb 18, 1992	2590-24	13.00	Dungeness Crab Hepatopancreas	6	4.6	9.4	14.0	53.0	77.0	260.0	2.6	5.0	NDR(1.2)	420.0	570.0	4.6	7.5	12.1	26.0	2.1	18.0	2.8	3.4	<0.4
45	MARVINAS BAY AREA 6-S14 (C) 38.6 KM W of OUTFALL	1125-20	0.14	Dungeness Crab - leg muscle	1	<0.5	<0.5	<0.8	<0.8	<1.0	<1.0	<1.9	<1.9	<2.3	6.2	6.2	<0.3	<0.3	<0.3	<0.3	<1.0	<1.0	<1.3	<1.3	<2.1
46	MARVINAS BAY AREA 6-S14 (C) 38.6 KM W of OUTFALL	1125-30	6.40	Dungeness Crab - hepatopancreas	6	<0.2	<0.2	2.2	<0.5	6.4	28.0	1.1	<0.2	<0.4	89.0	110.0	1.0	1.4	2.4	6.7	<0.5	3.6	<0.4	<0.4	<0.3
47	NESOOK BAY AREA 6-S15 37 KM NW of OUTFALL Feb 18, 1992	2590-25	11.0	Dungeness Crab - hepatopancreas	6	1.3	2.5	2.3	6.3	8.7	26.0	1.1	2.0	NDR(1.0)	100.0	130.0	0.9	1.6	2.5	4.2	<0.4	3.5	NDR(0.8)	<0.2	<0.3